CONTRA COSTA COUNTY
DEPARTMENT OF CONSERVATION AND DEVELOPMENT
COMMUNITY DEVELOPMENT DIVISION
30 Muir Road
Martinez, CA 94553-4601
Phone: 925-655-2700
Fax: 925-655-2758

CONTRA COSTA
CONSERVATION & DEVELOPMENT

AGENCY COMMENT REQUEST

Date 10/31/2025

We request your comments regarding the attached application currently under review.

DISTRIBUTION

INTERNAL

- ✔ Building Inspection
- Grading Inspection
- Advance Planning
- Housing Programs
- Trans. Planning
- Telecom Planner
- ALUC Staff
- ✔ HCP/NCCP Staff
- ✔ County Geologist

HEALTH SERVICES DEPARTMENT

- ✔ Environmental Health
- Hazardous Materials

PUBLIC WORKS DEPARTMENT

- ✔ Engineering Services
- Special Districts
- Traffic
- Flood Control (Full-size)

LOCAL

- ✔ Fire District _____
  - San Ramon Valley – (email) rwendel@srvfire.ca.gov
  - ✔ Consolidated – (email) fire@cccfpd.org
- Sanitary District _____
- Water District _____
- City of _____
- School District(s) _____
- LAFCO
- Reclamation District #_____
- East Bay Regional Park District
- Diablo/Discovery Bay/Crockett CSD
- ✔ MAC/TAC Knightsen TAC
- Improvement/Community Association
- ✔ CC Mosquito & Vector Control Dist (email)

OTHERS/NON-LOCAL

- ✔ CHRIS (email only: nwic@sonoma.edu)
- CA Fish and Wildlife, Region 3 – Bay Delta
- Native American Tribes

ADDITIONAL RECIPIENTS

East Contra Costa Irrigation District GSA

_____

Please submit your comments to:

Project Planner Syd Sotoodeh
Phone # 925-655-2877
E-mail syd.sotoodeh@dcd.cccounty.us
County File # CDLP25-02039

Prior to 11/26/2025

* * * * *

We have found the following special programs apply to this application:

- Landslide
- Active Fault Zone (A-P)
- ✔ Liquefaction
- Flood Hazard Area
- ✔ 60-dBA Noise Control
- CA EPA Hazardous Waste Site
- High or Very High FHSZ

* * * * *

AGENCIES: Please indicate the applicable code section for any recommendation required by law or ordinance. Please send copies of your response to the Applicant and Owner.

Comments: None Below ___ Attached

Print Name _____

_____
Signature DATE

Agency phone # _____

CONTRA COSTA
CONSERVATION & DEVELOPMENT

Planning Application Summary

County File Number: CDLP25-02039 **File Date: 10/31/2025**

Applicant:
JOSE ANGEL & MA PENA PENA JOSE ANGEL & MARIA ELENA
656 ALLBROOK DR
BRENTWOOD, CA 94513 185
daisyjazmine@yahoo.com
(925) 642-8688

Property Owner:
JOSE ANGEL & MA PENA
656 ALLBROOK DR
BRENTWOOD, CA 94513 185
daisyjazmine@yahoo.com
(925) 642-8688

Project Description:
The applicant requests a Land Use Permit to establish a second residence in an agriculturally zoning parcel. The project also includes a tree permit for the removal of five code-protected trees for the new residence and associated access improvements.

Project Location: (Address: 9255 BYRON HWY, BRENTWOOD, CA 94513 524), (APN: 015110001)

Additional APNs:

General Plan Designation(s): AL

Flood Hazard Areas: X

60-dBA Noise Control: YES

Sphere of Influence: N/A

Sanitary District: N/A

Specific Plan: N/A

Zoning District(s): A-3

AP Fault Zone: NO

MAC/TAC: Knightsen TAC

Fire District: CONSOLIDATED FIRE Former ECC

Housing Inventory Site: NO

Fees:

Fee Item	Description	Account Code	Total Fee	Paid
048F	Fish & Wildlife Fee ($75)	002606-9660-REV-000-5B048F	75.00	75.00
052B	Notification Fee ($30)	002606-9660-REV-000-5B052B	30.00	30.00
83PW	Planning Application Requiring PW Review and Comment	000651-9660-REV-000-6L83PW	1000.00	1000.00
HSDR	Environmental Health Fee ($57)	002606-9660-REV-000-5BHSDR| $5.00	57.00	57.00
LPS027B	Land Use Permit - Other	000350-9665-REV-000-5B027B	5500.00	5500.00
		Total:	**6662.00**	**6662.00**

PB 20

POR N 1/2 SEC 10 T1N R3E MDB&M

1" = 400'

2- 116PM38 6-26-85
3- 121PM28 6-27-86
4- 122PM44 6-19-86
5- 123PM47 8-28-86
6- 127PM3 3-16-87
8- 152PM30 5-21-91
9- 152PM37 5-24-91
10- 160PM17 11-20-92
11- 168PM21 12-04-95
12- 169PM24 7-24-96
13- 172PM28 10-8-97
14- 172PM31 10-8-97
15- 172PM34 10-8-97
16- 186PM7 12-30-02
17- 205PM43 11-23-10
18- 215PM23 08-29-19

12

110

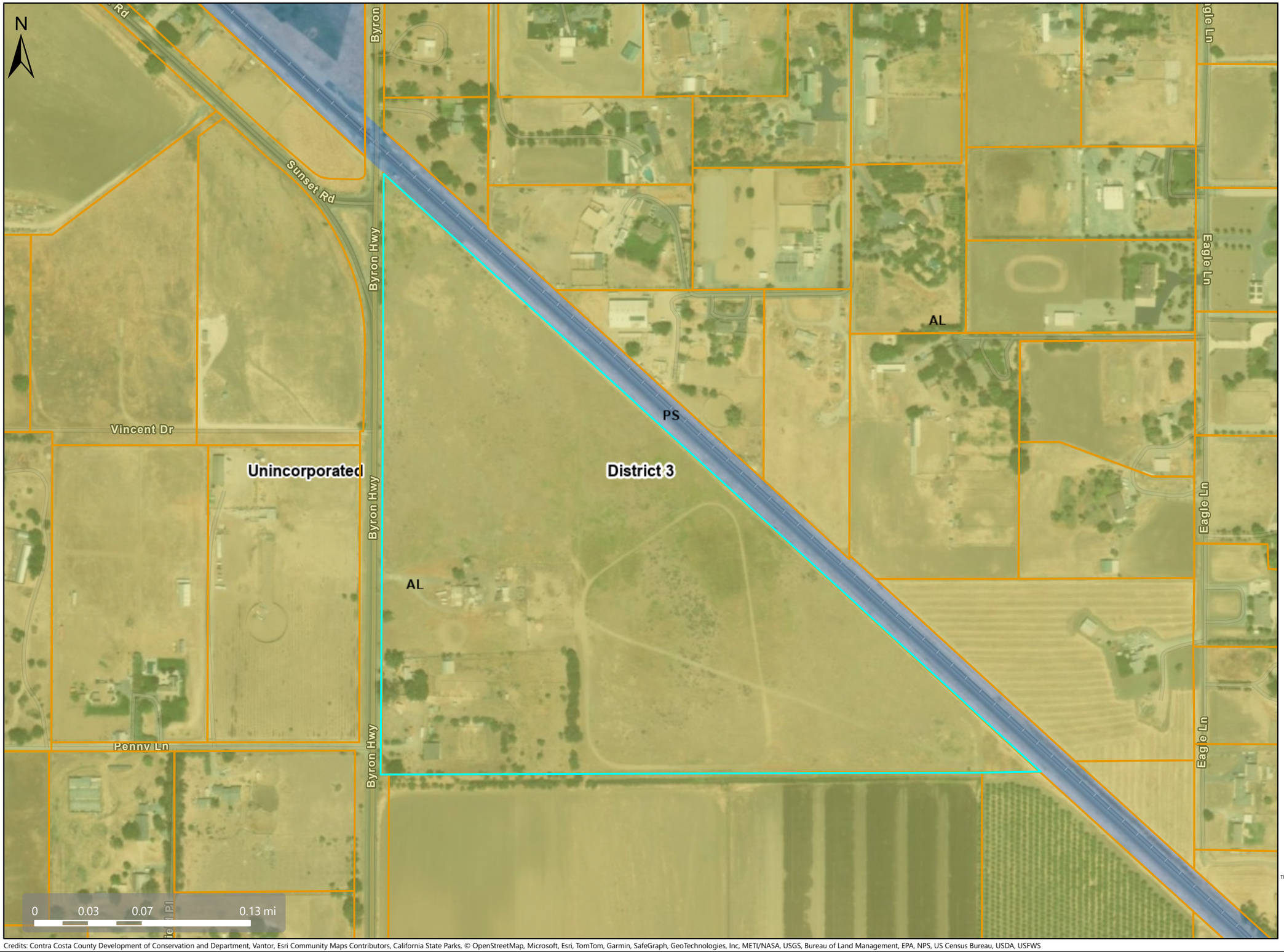
215 PM23 9/3/19

NOTE: THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE INFORMATION DELINEATED HEREON. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL LOT SPLIT OR BUILDING SITE ORDINANCES.

Fm.38-34

ASSESSOR'S MAP
BOOK 15 PAGE 11
CONTRA COSTA COUNTY, CALIF.

General Plan



Map Legend

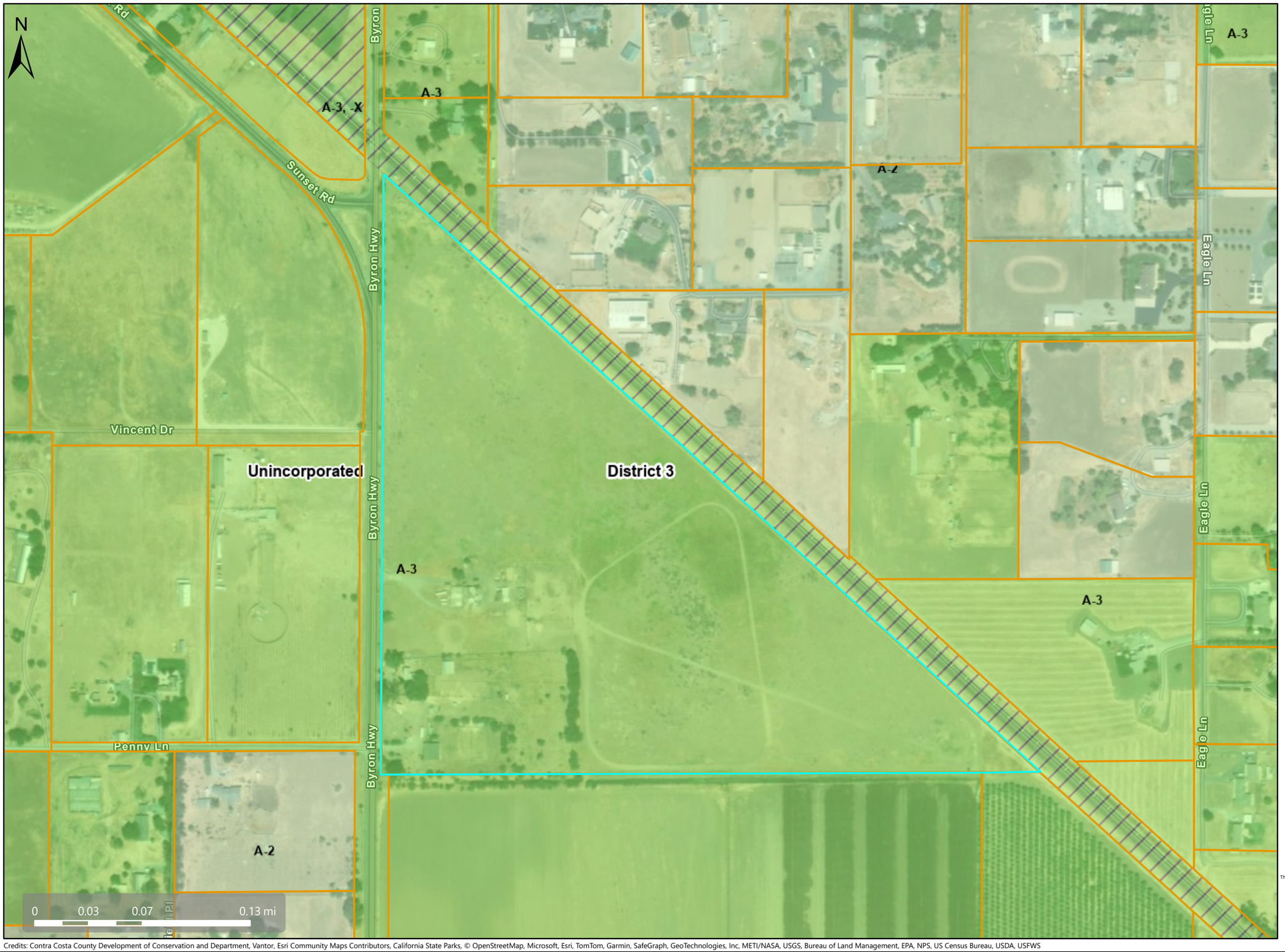
- Assessment Parcels

General Plan

- PS (Public and Semi-Public)
- AL (Agricultural Lands) (1 du/10 ac) (1 du/20 ac in DPZ)
- Unincorporated
- Board of Supervisors' Districts

Spatial Reference
PCS: WGS 1984 Web Mercator Auxiliary Sphere
Datum: WGS 1984

Zoning

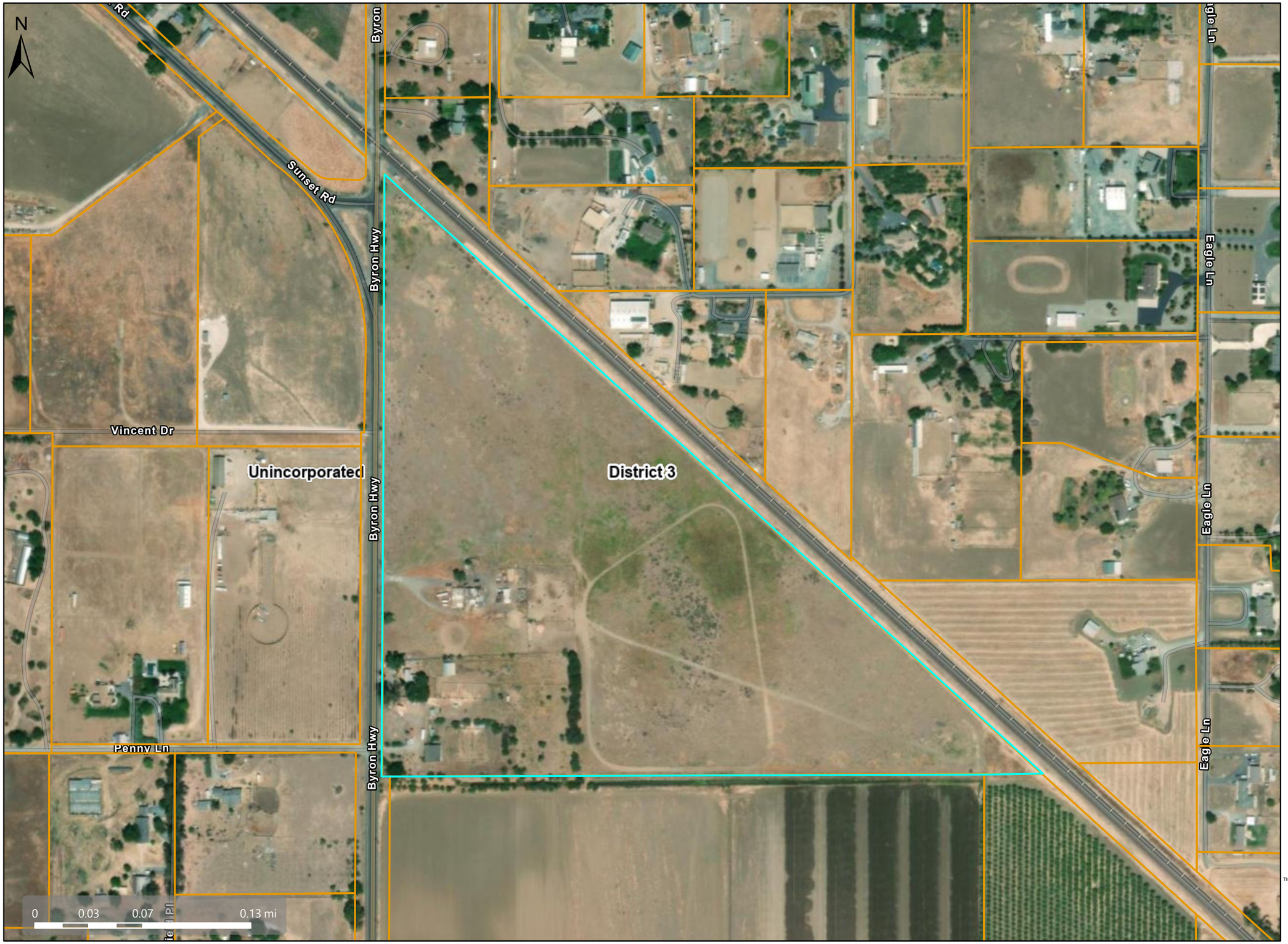


Map Legend

- Assessment Parcels
- Zoning
- ZONE_OVER
- A-2 (General Agriculture)
- A-3 (Heavy Agriculture)
- A-3 -X (Railroad Corridor Combining District)
- Unincorporated
- Board of Supervisors' Districts

Spatial Reference
PCS: WGS 1984 Web Mercator Auxiliary Sphere
Datum: WGS 1984

Orthophotography

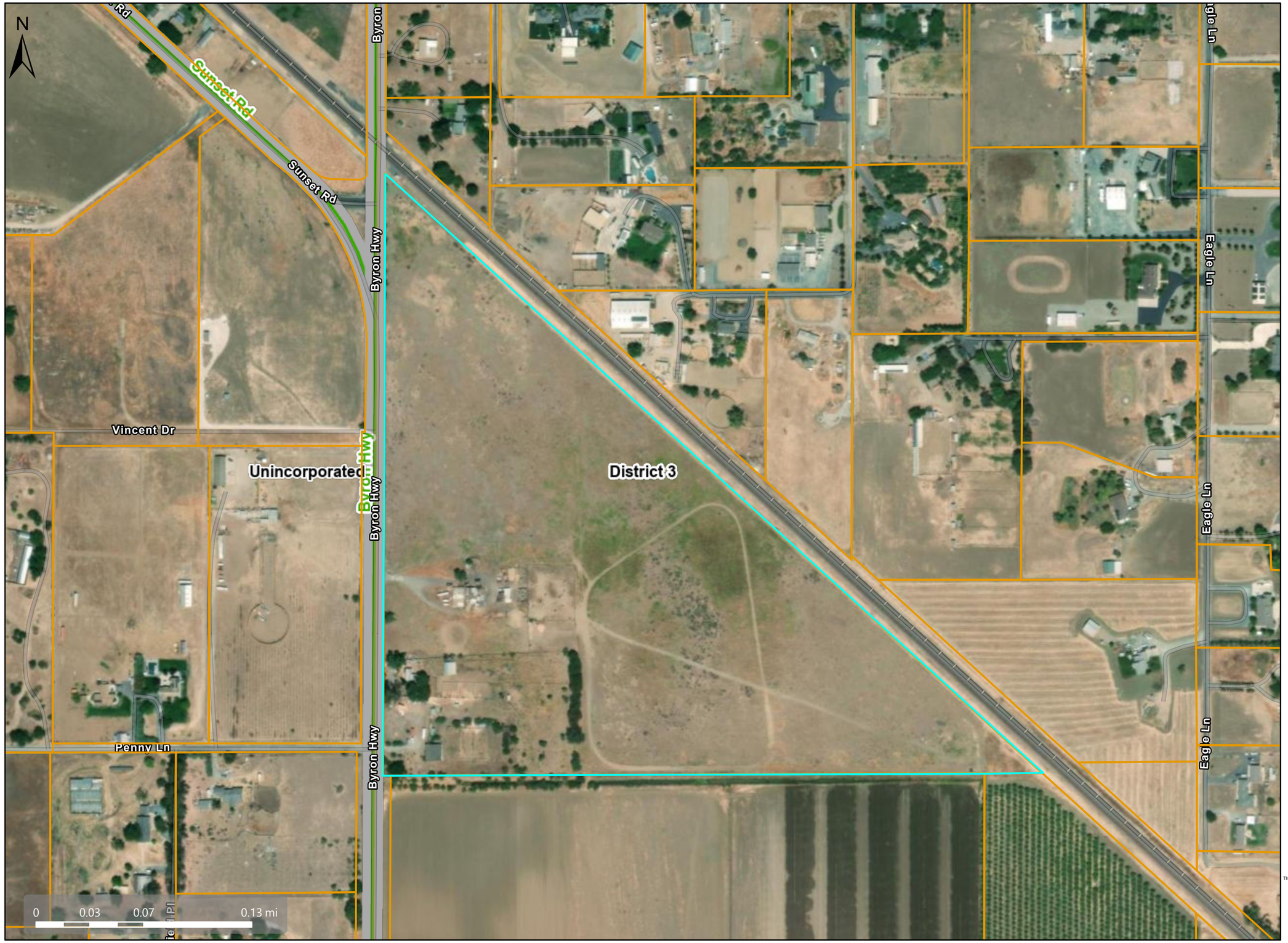


Map Legend

- Assessment Parcels
- Unincorporated
- Board of Supervisors' Districts

Spatial Reference
PCS: WGS 1984 Web Mercator Auxiliary Sphere
Datum: WGS 1984

PWD Maintained Roads



Map Legend

- Assessment Parcels
- Unincorporated
- Board of Supervisors' Districts
- Maintained Roads

Spatial Reference
PCS: WGS 1984 Web Mercator Auxiliary Sphere
Datum: WGS 1984

RECEIVED on 10/30/2025 CDLP25-02039
By Contra Costa County
Department of Conservation and Development

PEÑA RESIDENCE CUSTOM HOME

GENERAL NOTES

1. ALL WORK SHALL COMPLY TO THE FOLLOWING CODES: 2022 CALIFORNIA BUILDING , (CBC), 2022 CALIFORNIA RESIDENTIAL CODE ("CRC"), 2022 CALIFORNIA ELECTRICAL CODE ("CEC"), 2022 CALIFORNIA MECHANICAL CODE ("CMC"), CALIFORNIA PLUMBING CODE ("CPC") 2022 CALIFORNIA GREEN BUILDING (CGB) AND 2022 CALIFORNIA ENERGY CODE (CEC.) AND WITH THE CONTRA COSTA COUNTY BUILDING DEPARTMENT.
2. DIMENSIONS ARE TO FACE OF STUD, U.O.N.
3. DO NOT SCALE DIMENSIONS; WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
4. ALIGN THE WINDOW HEADS WITH TOP OF DOORS AT 6'-8" A.F.F., U.O.N.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL WORK AND MATERIAL IN ACCORDANCE WITH ALL LOCAL AND/OR CITY BUILDING CODES AND REQUIREMENTS.
6. CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS AND CONDITIONS AND REPORT DISCREPANCIES TO THE DESIGNER.
7. DIMENSIONS ARE NOT ADJUSTABLE WITHOUT APPROVAL OF THE DESIGNER.
8. CONTRACTOR SHALL THOROUGHLY EXAMINE THE PREMISE AND SHALL BASE HIS BID ON THE EXISTING CONDITIONS, NOT WITHSTANDING ANY INFORMATION SHOWN OR NOT SHOWN ON DRAWING.
9. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CHECKING CONTRACT DOCUMENTS. FIELD VERIFY CONDITIONS AND DIMENSIONS FOR ACCURACY. CONFIRM THE WORK CAN BE BUILT AS SHOWN BEFORE PROCEEDING WITH THE WORK. IF THERE ARE ANY QUESTIONS REGARDING THESE OR OTHER COORDINATION QUESTIONS, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CLARIFICATIONS FROM THE ARCHITECT BEFORE PROCEEDING WITH THE RELATED WORK IN QUESTION.
10. "SIMILAR" MEANS COMPARABLE CHARACTERISTICS FOR ITEMS NOTED. VERIFY DIMENSIONS AND ORIENTATION ON PLAN.
11. "TYPICAL" OR "TYP" MEANS IDENTICAL FOR ALL SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
12. DIMENSIONS NOTED "CLEAR" OR "CLR" ARE MINIMUM REQUIRED DIMENSIONS AND CLEARANCES AND MUST BE ACCURATELY MAINTAINED.
13. GENERAL CONTRACTOR TO COORDINATE INSTALLATION OF N.I.C. (NOT IN CONTRACT) ITEMS WITH OTHER TRADES.
14. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE; INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
15. THE CONTRACTOR SHALL PROVIDE EVERYTHING NECESSARY AND REASONABLY INCIDENTAL FOR THE PROPER AND WORKMANLIKE EXECUTION OF THE INTENT OF THE DRAWINGS, WHETHER SPECIFICALLY MENTIONED OR NOT.
16. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL WINDOW SIZES PRIOR TO ORDERING. PROVIDE TEMPERED GLASS WHERE APPLICABLE AND COMPLY W/ ALL APPLICABLE CODES.
17. THE SITE SHALL BE KEPT IN A NEAT AND ORDERLY MANNER DURING THE COURSE OF CONSTRUCTION.
18. COORDINATE WITH THE OWNERS ALL UTILITY SHUT-DOWNS AS REQUIRED FOR UTILITY TIE-INS ETC.

ABBREVIATIONS

O/	OVER
W/	WITH
&	AND
∠	ANGLE
@	AT
℄	CENTERLINE
Ø	DIAMETER OR ROUND
#	POUND OR NUMBER
(E)	EXISTING
A.B.	ANCHOR BOLT
ACC.	ACCESSIBLE
ACOUS.	ACOUSTICAL
A.D.	AREA DRAIN
ADJ.	ADJUSTABLE
AGGR.	AGGREGATE
AL.	ALUMINUM
APPROX.	APPROXIMATE
ARCH.	ARCHITECTURAL
ASPH.	ASPHALT
A.F.F.	ABOVE FINISH FLOOR
BD.	BOARD
BITUM.	BITUMINOUS
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLOCKING
BM.	BEAM
BOT.	BOTTOM
CEM.	CEMENT
B.U.R.	BUILT UP ROOFING
CAB.	CABINET
H.M.	HOLLOW METAL
HOR.	HORIZONTAL
HR.	HOUR
HT.	HEIGHT
I.D.	INSIDE DIAMETER (DIM.)
INSUL.	INSULATION
INT.	INTERIOR
JAN.	JANITOR
JT.	JOINT
JST.	JOIST
KIT.	KITCHEN
LAB.	LABORATORY
LAM.	LAMINATE
LAV.	LAVATORY
LIN.	LINEN
LKR.	LOCKER
LT.	LIGHT
MAX.	MAXIMUM
MDF.	MEDIUM DENSITY FIBERBOARD
M.C.	MEDICINE CABINET
MECH.	MECHANICAL
MEMB.	MEMBRANE
MET.	METAL
MFR.	MANUFACTURER
MH.	MANHOLE
M.O.	MASONRY OPENING
MICRO.	MICROWAVE OVEN
MIN.	MINIMUM
MIR.	MIRROR
MISC.	MISCELLANEOUS
M.P.	MOISTURE PROOF
UNF.	UNFINISHED
U.O.N.	UNLESS OTHERWISE NOTED
UR.	URINAL
V.C.T.	VINYL COMPOSITION TILE
V.I.F.	VERIFY IN FIELD
VERT.	VERTICAL
VEST.	VESTIBULE
V.W.C.	VINYL WALL COVERING
V.W.M.	VERIFY WITH MANUFACTURER
W.H.	WATER HEATER
W.I.	WROUGHT IRON
W.	WEST
W/	WITH
W.C.	WATER CLOSET
WD.	WOOD
W.M.	WALL MOUNTED
W/O	WITHOUT
WP.	WATERPROOF
WSCT.	WAINSCOT
WT.	WEIGHT
WDW.	WINDOW
CER.	CERAMIC
C.I.	CAST IRON
C.J.	CONTROL JOINT
C.L.	CENTER LINE
CLG.	CEILING
CLKG.	CALKING
CLO.	CLOSET
CLR.	CLEAR
C.O.	CASED OPENING
COL.	COLUMN
CONC.	CONCRETE
C.M.U.	CONCRETE MASONRY UNIT
CONN.	CONNECTION
CONSTR.	CONSTRUCTION
CONT.	CONTINUOUS
C.T.	CERAMIC TILE
CLSG.	CLOSING
CTSK.	COUNTERSUNK
CNTR.	COUNTER
CTR.	CENTER
CPT.	CARPET
DEG.	DEGREE
DBL.	DOUBLE
DEPT.	DEPARTMENT
D.F.	DRINKING FOUNTAIN
DET.	DETAIL
DIA.	DIAMETER
DIM.	DIMENSION
D.O.	DOOR OPENING
DISP.	DISPENSER
MDO	MEDIUM DENSITY OVERLAY
MND.	MOUNTED
MUL.	MULLION
N.	NORTH
N.I.C.	NOT IN CONTRACT
NO or #	NUMBER
NOM.	NOMINAL
N.T.S.	NOT TO SCALE
O.A.	OVERALL
OBS.	OBSCURE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER (DIM.)
O.F.C.I.	OWNER FURNISH, CONTRACTOR INSTALL
OFF.	OFFICE
OPNG.	OPENING
OPP.	OPPOSITE
O.H.	OPPOSITE HAND
O/	OVER
PED.	PEDESTAL
PRECST.	PRE-CAST
PL.	PLATE
P.LAM.	PLASTIC LAMINATE
PLAS.	PLASTER
PLYWD.	PLYWOOD
PR.	PAIR
P.T.	PAPER TOWEL
PT.	POINT
Q.T.	QUARRY TILE
PTD	PAINTED
PTN.	PARTITION
DR.	DOOR
DWR.	DRAWER
DS.	DOWNSPOUT
D.S.P.	DRY STANDPIPE
DWG.	DRAWING
DW.	DISHWASHER
E.	EAST
EA.	EACH
E.J.	EXPANSION JOINT
EL.	ELEVATION
ELEC.	ELECTRICAL
ELEV.	ELEVATOR
EMER.	EMERGENCY
ENCL.	ENCLOSURE
E.P.	ELECTRICAL PANELBOARD
EQ.	EQUAL
EQPT.	EQUIPMENT
E.W.C.	ELECTRIC WATER COOLER
EXST.	EXISTING
EXPO.	EXPOSED
EXP.	EXPANSION
EXT.	EXTERIOR
F.A.	FIRE ALARM
F.A.U.	FORCED AIR UNIT
F.B.	FLAT BAR
F.D.	FLOOR DRAIN AND CABINET
FDN.	FOUNDATION
F.E.	FIRE EXTINGUISHER
F.F.	FACE FRAME
F.FL.	FINISH FLOOR
R.	RISER
RAD.	RADIUS
R.D.	ROOF DRAIN
REF.	REFRIGERATOR
REFN.	REFERENCE
REINF.	REINFORCED
REQ.	REQUIRED
RESIL.	RESILIENT
RM.	ROOM
R.O.	ROUGH OPENING
R.H.M.S.	ROUND HEAD MACHINE SCREW
R.H.W.S.	ROUND HEAD WOOD SCREW
RWD.	REDWOOD
R.W.L.	RAIN WATER LEADER
S.	SOUTH
SBFLR.	SUBFLOOR
S.C.	SOLID CORE
S.C.D.	SEAT COVER DISPENSER
SCHED.	SCHEDULE
S.D.	SOAP DISPENSER
SECT.	SECTION
SH.	SHELF
SHWR.	SHOWER
SHT.	SHEET
SHTG.	SHEATHING
SIM.	SIMILAR
SPEC.	SPECIFICATION DISPENSER
S.N.D.	SANITARY NAPKIN
F.H.C.	FIRE HOSE CABINET
FIN.	FINISH
F.H.M.S.	FLAT HEAD MACHINE SCREW
F.H.W.S.	FLAT HEAD WOOD SCREW
FL.	FLOOR
FLASH.	FLASHING
FLUOR.	FLUORESCENT
F.O.C.	FACE OF CONCRETE
F.O.F.	FACE OF FINISH
F.O.S.	FACE OF STUDS
FRMG.	FRAMING
FRP.	FIREPROOF
F.S.	FULL SIZE
FT.	FOOT OR FEET
FTG.	FOOTING
FURR.	FURRING
FUT.	FUTURE
G.I.	GALVANIZED IRON
GA.	GAUGE
GALV.	GALVANIZED
G.S.M.	GALVANIZED SHEET METAL
G.B.	GRAB BAR
GL.	GLASS
GLAZ.	GLAZING
GND.	GROUND
GR.	GRADE
GYP.	GYPSUM
HDWE.	HARDWARE
H.B.	HOSE BIBB
H.C.	HOLLOW CORE
SQ.	SQUARE
S.S.	STAINLESS STEEL
S.S.D.	SEE STRUCT. DWGS.
SLD.	SOLID
STA.	STATION
STD.	STANDARD
STL.	STEEL
STOR.	STORAGE
STRL.	STRUCTURAL
SUSP.	SUSPENDED
SYM.	SYMMETRICAL
T.	TREAD
T.B.	TOWEL BAR
T.C.	TOP OF CURB
TEL.	TELEPHONE
TEMP.	TEMPERED
TER.	TERRAZZO
T.G.	TEMPERED GLASS
T. & G.	TONGUE AND GROOVE
THK.	THICK
T.P.	TOP OF PAVEMENT
T.P.D.	TOILET PAPER DISPENSER
T.V.	TELEVISION
T.O.; T/	TOP OF
T.O.F.	TOP OF FRAMING
T.O.S.	TOP OF SHEATHING
T.W.	TOP OF WALL
TYP.	TYPICAL
U.B.C.	UNIFORM BUILDING CODE

CONSULTANTS

DESIGN:
Gil Dominguez
Custom Home & Addition Remodel Design
321 Village Drive
Brentwood, CA 94513
Tel: (925) 382-6938
email: gil@4dda.com

STRUCTURAL ENGINEER:
LM CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING - CIVIL ENGINEERING
25 - A CRESCENT DRIVE, #710
PLEASANT HILL, CA 94523
T: 925-672-6828

TITLE-24 :
CompuCalc
Computer Calculations for Title 24
10556 Combie Road, PMB 6335
Auburn, CA 95602
(530) 268-8722

MATERIALS

- ACOUSTIC TILE OR BOARD
- BITUMINOUS CONCRETE SHOW PROFILE ONLY
- CERAMIC TILE
- CONCRETE CAST IN PLACE OR PRECAST
- CONCRETE BLOCK
- EARTH
- GLASS OMIT INDICATION IN THIN MATERIAL
- GYPSUM BOARD OMIT DOUBLE LINES AT SMALL SCALE
- GYPSUM SHEATHING
- HARDBOARD
- INSULATION, BATT
- METAL OMIT INDICATION IN THIN MATERIAL
- MORTAR
- PLASTER ON METAL LATH
- PLASTIC LAMINATE
- PLYWOOD
- RIGID INSULATION
- ROCK FILL
- SAND
- WOOD, FINISH
- WOOD, FRAMING THROUGH MEMBER
- WOOD, FRAMING INTERRUPTED MEMBER

BUILDING DATA

LEGAL OWNER:
Angel & Maria Pena
9255 Byron Hwy.
Brentwood, CA 94513

PROJECT ADDRESS:
9255 Byron Hwy.
Brentwood, CA 94513

APN & ZONING:
APN: 015-110-001
A-3

FIRE SPRINKLERS
REQUIRED

OCCUPANCY & CONST. TYPE :
Dwelling:
Group R3
CONSTRUCTION TYPE: V - B & U
TWO STORY

PROJECT SCOPE:
A. Build a new two story single family residence.

SETBACKS:

FRONT	25'-0"
REAR	25-0"
SIDES	50'-0" EACH SIDE

AREA CALCULATIONS:

FIRST FLOOR	= 15,516 S.F.
SECOND FLOOR	= 5,005 S.F.
TOTAL LIVING AREA	= 20,521 S.F.
GARAGE AREA:	= 1,891 S.F.
FRONT PORCH AREA	= 280 S.F.
SIDE PORCH AREA	= 445 S.F.
REAR PORCH AREA	= 3,053 S.F.
TOTAL PORCH AREA	= 3,778 S.F.
FRONT BALCONY AREA	= 254 S.F.
REAR BALCONY AREA	= 652 S.F.
TOTAL BALCONY AREA	= 906 S.F.
TOTAL BUILDING AREA	= 27,096 S.F.

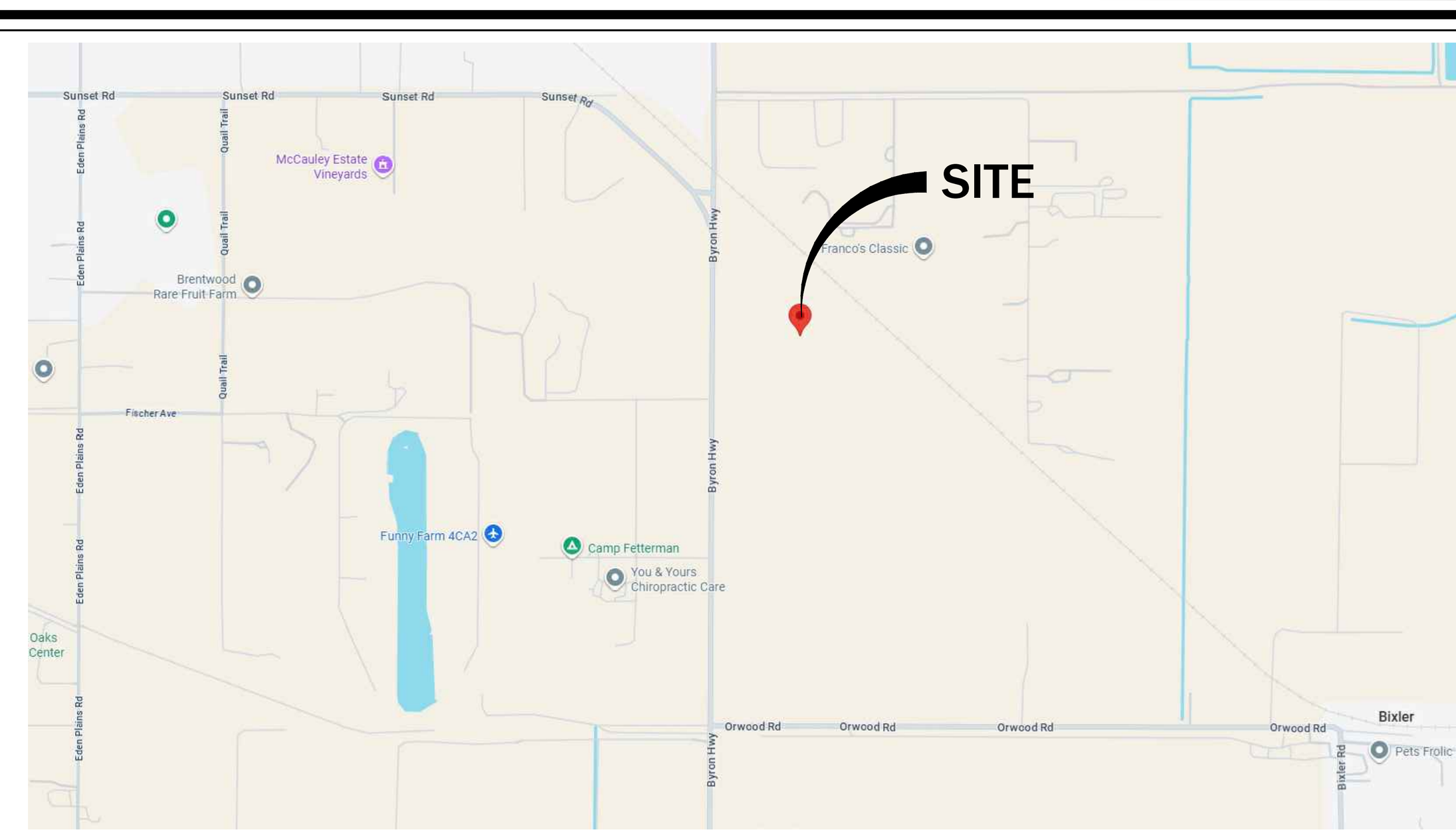
LOT AREA = 9.59 ACRES = 433,422 S.F.

LOT COVERAGE - 27,096 / **433,422 = .06% (TOTAL BUILDING FOOT-PRINT AREA)**

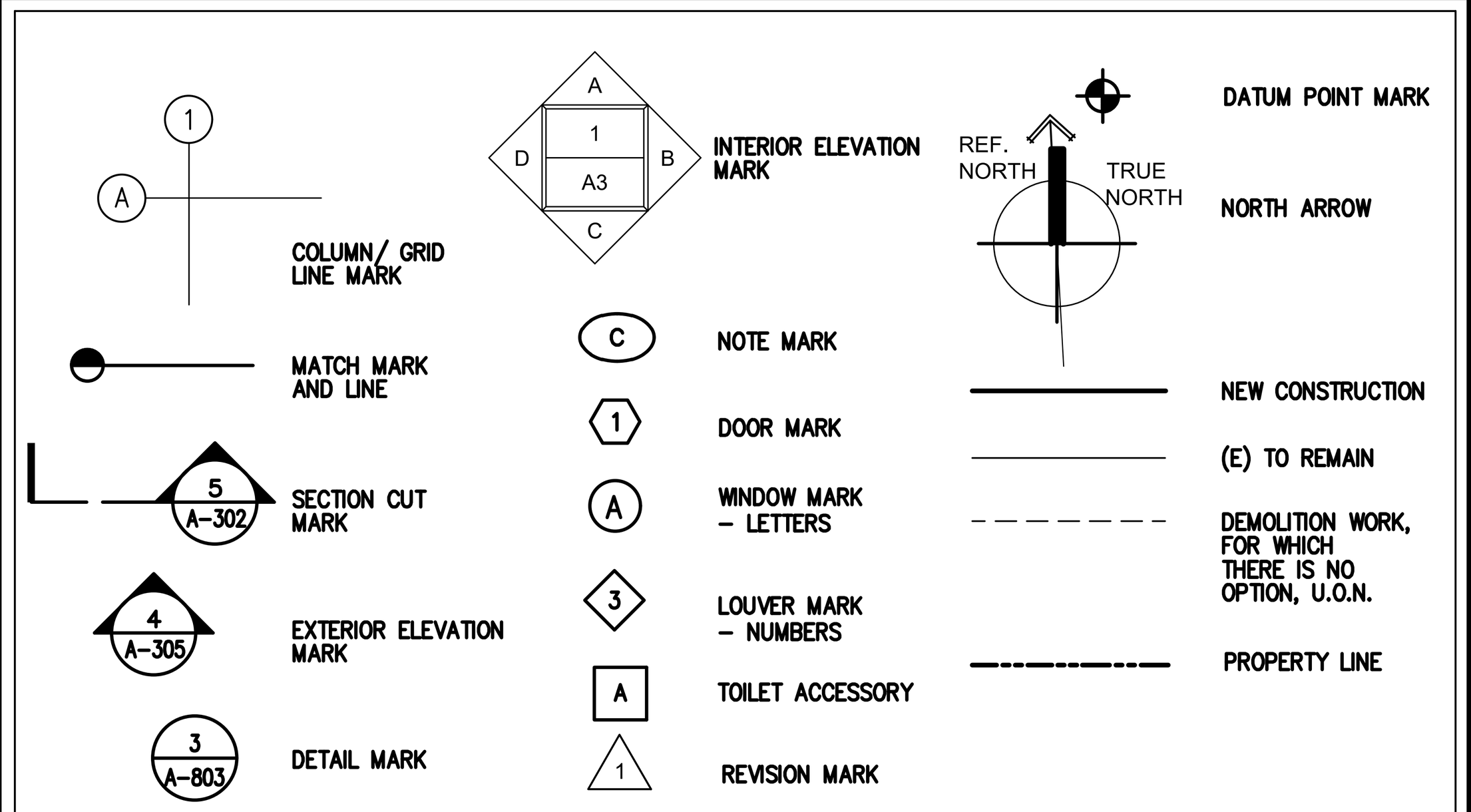
INDEX TO DRAWINGS

DEFERRED SUBMITTAL

VICINITY MAP



SYMBOLS



Custom Home & Addition Remodel Design
321 Village Drive, Brentwood, CA 94513
PH: 925-382-6938 Email: gil@4dda.com
American Institute of Building Design
The Residential Specialist

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL DATE

ISSUE DATE

Gil Dominguez

COVER SHEET

PEÑA RESIDENCE
CUSTOM TWO STORY RESIDENCE
9255 BYRON HWY.
BRENTWOOD, CA 94513
APN: 015-110-011

DRAWN BY : GD
DATE: 09/02/2021
SCALE : NOTED
JOB NUM : 0421

SHEET
G1.0
OF

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 2 (July 2024 Supplement)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

Y | N/A | RESPON. PARTY

MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base Reactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundredths of a gram (g O^3/g ROC).
Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701.

MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood.

PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).
Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a).

REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.

VOC. A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a).

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.

4.504 POLLUTANT CONTROL

4.504.1 COVERING OF DUCT OPENINGS & 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, sheet metal or other methods acceptable to the enforcing agency to reduce the amount of water, dust or 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, sealant 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 tricloroethylene), 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(e)(1) and (f)(1) of *California Code of Regulations*, Title 17, commencing with Section 94520; 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 ADHESIVES	100
RUBBER FLOOR ADHESIVES	60
SUBFLOOR ADHESIVES	50
CERAMIC TILE ADHESIVES	65
VCT & ASPHALT TILE ADHESIVES	50
DRYWALL & PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVE	70
STRUCTURAL GLAZING ADHESIVES	100
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250
OTHER ADHESIVES NOT 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 & 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	
NON-POROUS	250
POROUS	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 & LESS EXEMPT COMPOUNDS

COATING CATEGORY	VOC LIMIT
FLAT COATINGS	50
NON-FLAT 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
PRETREATMENT WASH PRIMERS	420
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS	
CLEAR	730
OPAQUE	550
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & 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 & 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, FEB. 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD.

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
PARTICLE BOARD	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 CALIF. AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIF. CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.

2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16" (8 MM).

DIVISION 4.5 ENVIRONMENTAL QUALITY (continued)

4.504.3 CARPET SYSTEMS. All carpet installed in the building interior shall meet the requirements of 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 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

4.504.3.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of 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 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

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% of floor area receiving resilient flooring shall meet the requirements of 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 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

hhttps://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

4.504.5 COMPOSITE WOOD PRODUCTS. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the buildings 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 standards, and Canadian CSA 0121, CSA 0151, CSA 0153 and CSA 0325 standards.
5. Other methods acceptable to the enforcing agency.

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 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 (101.6 mm) thick base of 1/2 inch (12.7mm) or larger clean aggregate shall be provided with a vapor barrier 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 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.

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 less than or equal to 50% to a maximum of 80%. 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*.

4.507 ENVIRONMENTAL COMFORT

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 - 2011 (Residential Load Calculation), ASHRAE handbooks or other equivalent design software or methods.
2. Duct systems are sized according to ANSI/ACCA 1 Manual D - 2014 (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 system functions are acceptable.

CHAPTER 7
INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702 QUALIFICATIONS

702.1 INSTALLER TRAINING. HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

1. State certified apprenticeship programs.
2. Public utility training programs.
3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
4. Programs sponsored by manufacturing organizations.
5. Other programs acceptable to the enforcing agency.

702.2 SPECIAL INSPECTION [HCD]. When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a special inspector:

1. Certification by a national or regional green building program or standard publisher.
2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors.
3. Successful completion of a third party apprentice training program in the appropriate trade.
4. Other programs acceptable to the enforcing agency.

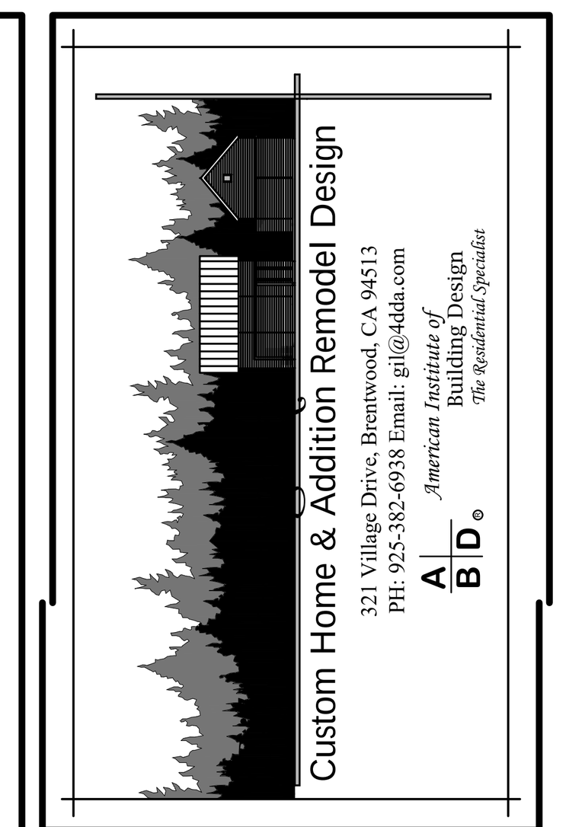
Notes:
1. Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.
2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

[BSC] When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency.

Note: Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

703 VERIFICATIONS

703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist.



SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL DATE

ISSUE DATE

Gil Dominguez

CAL GREEN MANDATORY MEASURES

PEÑA RESIDENCE
CUSTOM TWO STORY RESIDENCE
9255 BYRON HWY,
BRENTWOOD, CA 94513
APN: 015-110-011

DRAWN BY : GD
DATE: 09/02/2021
SCALE : NOTED
JOB NUM : 0421

SHEET
G1.2
OF

AGING-IN-PLACE DESIGN AND FALL PROTECTION

At least one bathroom on the entry level shall be provided with grab bar reinforcement. Reinforcement shall be nominal 2x8 lumber and shall be located between 32 inches and 39.5 inches above the finished floor. Water closet reinforcement shall be installed on both side walls of the fixture, or on the side wall and the back wall. Shower reinforcement shall be continuous where wall framing is provided. Bathtub and combination bathtub/shower reinforcement shall be continuous on each ed of the bathtub and the back wall. Back wall reinforcement for a lower grab bar shall be provided with the bottom edge located no more than 6 inches above the bathtub rim. Information identifying the location of the reinforcement shall be placed in the operations and maintenance manual. (CRC R327.1.1)

Electrical receptacles outlets, switches and controls shall be located not more than 48 inches measured from the top of the outlet box and not less than 15 inches measured from the bottom of the outlet box above the finished floor. (CRC R327.1.2)

Effective July 1st, 2024, at least one bathroom and one bedroom on the entry level shall provide a doorway with a net clear opening of not less than 32 inches measured with the door open at a 90-degree angle. (CRC R327.1.3)

Doorbell buttons shall be installed not more than 48" above the finished floor measured to the top of the button. (CRC R327.1.4)

GENERAL

Provide each bedroom, basement, and habitable attics with a minimum of one exterior window with a 44" maximum clear opening height, 5.7 sq. ft. minimum clear openable area (minimum 5.0 sq. ft. at grade floor openings), 24" minimum clear openable height and 20" minimum clear width, or an openable exterior exit door. (CRC R310.2.1 and CRC R310.2.2) Window wells, ladders, and steps shall comply with CRC R310.2.3. Bars, grilles, covers, ands screens shall be releasable or removable from the inside without the use of a key, tool, special knowledge, or force greater than 15lbs to operate the emergency escape and rescue openings. (CRC R310.4.4) Photovoltaic panels & modules shall not be below an emergency escape and rescue opening within 36". (R324.6.3)

Each bathroom containing a bathtub, shower or tub/shower combination shall be mechanically ventilated with Energy Star approved equipment (minimum 50cfm) with an integral humidistat installed. (CRC R303.3.1)

Provide attic cross ventilation: 1/150 of attic area or 1/300 with at least 40% but not more than 50% of vents are a maximum 3 ft. below the ridge or highest space in the attic and the balance is provided in the lower third of the attic space (not limited to eaves or cornice vents). As an alternative in Climate Zone 16 (Truckee region), the net area may be reduced to 1/300 when a Class I or II vapor barrier is installed on the warm-in-winter side of the ceiling. Baffles are required at vents for insulation. Provide minimum of 1" inch of air space between insulation and roof sheathing. (CRC R806)

Enclosed rafter spaces shall have a 1-inch clear cross ventilation. (Properly sized rafters for insulation) (CRC R806.3)

Under floor cross ventilation: minimum 1.0 sq. ft. for each 150 sq. ft. of under floor area. When a class 1 vapor retarder is installed on the ground surface the minimum area of ventilation may be limited to 1sq.ft for each 1,500 square feet of under-floor space. One ventilation opening shall be within three (3) feet of each corner of the building (CRC R408.1). Unvented crawl spaces shall comply with CRC R408.2. Unvented crawl space added option for dehumidification of 70 pints moisture per day per 1,000 sf to requirement for exemption. (R408.3)

Exterior balconies and elevated walking surfaces exposed to water, where structural framing is protected by an impervious moisture barrier require construction documents with manufacturer's installation instructions. (R106.1.5) Must be inspected and approved before concealing barrier. (R109.1.5.3)

Enclosed framing in exterior balconies and elevated walking surfaces exposed to rain, snow or drainage from irrigation shall be provided with cross-ventilation area of at least 1/150. (R317.1.3)

Provide landings and a porch light at all exterior doors. Landings are to be minimum 3 ft deep x width of door. Landings at required egress doors may step down a maximum of 7.75 inches when the door does not swing over the landing and 1.5 inches when door swings onto the landing. Other than required exterior exit doors may have a threshold of 7.75 inches maximum; a landing is not required if a stair with two or fewer risers is located on the exterior side and the door does not swing over the stairway. (CRC R311.3-R311.3.2)

Mezzanines shall not be greater than 1/3 of the story unless fire sprinklers are installed then the area can be ½ of the story. (R325.3)

At least one egress door shall be provided for each dwelling unit, the egress door shall be side hinged with a minimum openable width of 32 inches; the minimum clear openable height shall be 78 inches minimum (other doors shall not be required to comply with these dimensions). Egress doors shall be readily openable from the inside without the use of a key, special knowledge, or effort. (CRC R311.2)

Operable windows more than 72" above finish grade with a **clear opening** height less than 24" shall have openings not more than 4" apart or needs a compliant guard. (R312.2)

FOUNDATIONS & CONCRETE SLABS

Slope drainage 6" within the first 10ft. from the foundation wall. If physical obstructions or lot lines prohibit the 10ft distance, a 2-5 percent slope shall be provided to an approved alternative method of diverting the water away from the foundation. Impervious surfaces shall also be sloped a minimum of 2 percent for 10ft away from structures to an approved drainage way. (CRC R401.3)

Footings shall extend at least 12 inches into the undisturbed ground surface. (CRC R403.1.4) Unless erected on solid rock, to protect against frost and freezing, the minimum foundation depth is 18 inches below grade if between 4,000-7,000 foot elevation and 24 inches below grade for 7,000 foot elevation and above. Exception: Interior footings shall be a minimum of 12 inches below grade. (L-V 3.14)

Stepped footings shall be used when slope of footing bottom is greater than 1 in 10 (V: H). Step footing detail shall be shown on building elevations and foundation plan. (CRC R403.1.5)

Concrete slabs: 3 ½" minimum (CRC R506.1). Slabs under living areas and garages shall be reinforced with wire 6" x 6", 10 gauge x 10 gauge welded mesh or equivalent steel reinforcement and 4" thickness of 3/8 minimum gravel under the concrete slab. Separate from soil with a 6 mil polyethylene vapor retarder with joints lapped not less than 6 inches in living areas. A capillary break shall be installed when a vapor retarder is required.

Site excavation and grading shall comply with Chapter V, Article 13 of the Nevada County Land-Use Code.

A minimum 18" x 24" under-floor access, unobstructed by pipes or ducts and within 5' of each under-floor plumbing cleanout and not located under a door to the residence, is required. Provide a solid cover or screen. (CRC 408.4 & CPC 707.9)

Minimum sill bolting: ½" anchor bolts or approved anchors at 6 ft. o.c. maximum for one-story. (CRC R403.1.6) Use anchor bolts at 4 ft. o.c. maximum for three story construction. Embed bolts 7" minimum. The anchor bolts shall be placed in the middle third of the width of the plate. Locate end bolts not less than 7 bolt diameters, nor more than 12" from ends of sill members. In SDC D0 and above: Provide 3"X3"X0.229 plate washers on each bolt at braced or shear wall locations, standard cut washers shall be permitted for anchor bolts not located in braced/shear wall lines. The hole in the plate washer is permitted to be diagonally slotted with a width of up to 3/16" larger than the bolt diameter; the slot length shall not exceed 1 ¾", provided a standard cut washer is placed between the plate washer and the nut. (CRC R403.1.6.1 & R602.11.1)

CLEARANCES AND TREATMENT FOR WOOD FRAMING

All joists, girders, ledgers, structural blocking and support posts/column shall be wood of natural resistance to decay or pressure-treated lumber when exposed to the weather. (CRC R317.1(8))

Columns in basements when supported on concrete pier or metal pedestals shall be pressure treated or natural resistance to decay unless the pier/pedestals project 1" above concrete or 6" above earth and the earth is covered by an approved impervious moisture barrier. (CRC R317.1 (9))

Columns in enclosed crawl spaces or unexcavated areas located within the periphery of the building shall be pressure treated or natural resistance to decay unless the column is supported by a concrete pier or metal pedestal of a height 8" or more and the earth is covered by an impervious moisture barrier. (CRC R317.1(9))

FLOORS

Under-floor areas with storage, fuel-fired equipment or electric-powered equipment with less than 2x10 solid joists shall be protected on the underside by half-inch sheetrock or a sprinkler system. (R302.13)

Balconies must be designed for a minimum live load of 60lbs per square foot. (CRC T-R301.5)

WALLS

Specify post to beam connections. Positive connection shall be provided to ensure against uplift and lateral displacement. (CRC R502.9 & CBC 2304.10.7)

All fasteners used for attachment of siding & into pressure treated lumber shall be of a corrosion resistant type. (CRC R317.3)

Fire-block in concealed spaces of stud walls/partitions, vertically at ceiling/floor levels, & horizontally at 10ft. intervals. Fire-block at soffits, drop ceilings/similar locations & in concealed spaces at the top/bottom of stair stringers. (CRC R302.11)

Provide approved building paper under the building siding and approved flashing at exterior openings. (CRC R703.2) Specify a minimum of 2 layers of Grade D paper under stucco and 2 layers of 15lb felt (or equivalent) under stone veneer.

Stucco shall have a minimum clearance to earth of 4 inches and 2 inches to paved surfaces with an approved weep screed. (CRC R703.7.2.1) Masonry stone veneer shall be flashed beneath the first course of masonry and provided with weep holes immediately above the flashing. (CRC R703.8.5 and R703.8.6)

ROOF

Show minimum 22" x 30" access opening to attic (CRC R807); may be required to be 30"x30" to remove the largest piece of mechanical equipment per the California Mechanical Code.

Roof drains/gutters required to be installed per the California Plumbing Code with leaf/debris protection also installed.

Roof construction and coverings shall comply with CRC Chapters 8, 9 and local ordinance. All roofing shall be tested/listed Class A minimum.

Asphalt shingles with sloped roofs 2/12 to <4/12 shall have two layers of underlayment applied per CRC R905.2.2.

GARAGE AND CARPORT

Garage shall be separated from the dwelling unit & attic area by ½ inch gypsum board applied to the garage side. Garage beneath habitable rooms shall be separated by not less than 5/8" type X gypsum board. Structure supporting floor/ceiling assemblies used for required separations shall have ½" gypsum board installed minimum. Door openings from the garage to the dwelling shall be solid wood/steel doors or honeycomb steel doors not less than 1 3/8" thick or a 20-minute rated fire door. Doors shall be self-closing & self-latching. No openings directly into a sleeping room from the garage. When the dwelling and garage have fire sprinklers installed per R309.6 and R313, doors into the dwelling unit from the garage only need to be self-closing and self-latching. (CRC R302.5.1 & T-R302.6)

Ducts penetrating the garage to dwelling separation shall be a minimum of 26 gauge with no openings into the garage. (CRC R302.5.2)

Penetrations through the garage to dwelling separation wall (other than ducts as listed above) shall be fire-blocked per CRC section R302.11, item #4.

Garage and carport floor surfaces shall be non-combustible material and slope to drain towards the garage door opening. (CRC R309.1)

Appliances and receptacles installed in garage generating a glow, spark or flame shall be located 18" above floor unless it is listed as flammable vapor ignition resistant. (CMC 305.1) Provide protective post or other impact barrier from vehicles. (CMC 305.1.1)

Appliances in private garages and carports shall be installed with a minimum clearance of 6ft above the floor unless they are protected from vehicular impact. (CBC 406.2.9.3)

STAIRWAYS & RAMPS

Stair landings required every 12'7" of vertical rise. (CRC R311.7.3)

Exterior stair stringers must be naturally resistant to decay or pressure treated. (CRC R317.1)

Rise shall be maximum 7.75"; Run shall be 10" minimum; headroom 6'-8" minimum; width 36" minimum, 31.5" between a handrail on one side and 27" with handrails on two sides. Variation between riser heights 3/8" maximum. A nosing not less than .75 inches but not more than 1.25 inches shall be provided on stairways with solid risers where the tread depth is less than 11 inches. The leading edge of treads shall project not more than 1.25 inches beyond the tread below. Open risers are permitted, provided the opening between the treads does not permit the passage of a 4" sphere. (Openings are not limited when the stair has a rise of 30" or less). (CRC R311.7)

Stairways with 4 or more risers shall have a handrail on one side 34" to 38" above the tread nosing. Circular handrails shall have an outside diameter of 1.25"-2"; if not circular, it shall have a perimeter dimension of 4"-6.25" with a maximum cross-sectional dimension of 2.25". See R311.7.8.3 item# 2 for type II handrails with a parameter over 6.25". A minimum clearance of 1.5" shall be maintained from the wall or other surface. Handrails shall be returned, terminate in newel posts, or safety terminals. (CRC R311.7.8.2)

Guards shall be 42" minimum height (unless acting as a handrail/guard for a stairway; the guard height may be 34"-38" in height), with openings less than 4" inches clear (guards on the open sides of stairs may have 4 3/8" openings). (CRC R312)

Provide landings at the top/bottom of the stairway the width of the stairway. The depth of the landing shall be 36" minimum. (CRC R311.7.6)

Usable spaces underneath enclosed/unenclosed stairways shall be protected by a minimum of ½" gypsum board. (CRC R302.7)

Ramps serving the egress door shall have a slope of not more than 1 unit vertical in 12 units horizontal (8.3-percent slope). All other ramps shall have a maximum slope of 1 unit vertical in 8 units horizontal (12.5-percent slope). Exception: Where it is technically infeasible to comply because of site constraints, ramps shall have a slope of not more than 1 unit vertical in 8 units horizontal (12.5-percent slope) (CRC R311.8.1). Provide 3'X3' landings at the top and bottom of ramps, where doors open onto ramps, and where ramps change directions. (CRC R311.8.2)

DECKS

Guards are required if deck or floor is over 30" above grade, minimum 42" high, with openings less than 4". (CRC R312) Guardrails shall be designed and detailed for lateral forces according to CRC Table 301.5.

Provide deck lateral load connections at each end of the deck and at deck intersections per CRC R507.9.2. Specify connectors with a minimum allowable stress design capacity of 1,500lbs and install with 24" of the end of the deck. 750lb rated devices are allowed (DTT1Z as example) if located at 4 points along the deck.

Posts/columns shall be retrained at the bottom end to prevent lateral displacement; clearly show approved post bases, straps, etc to achieve this per CRC R407.3

Joists, girders, structural blocking and support posts shall be wood of natural resistance to decay or pressure-treated lumber when exposed to the weather. (CRC R317.1(8))

ELECTRICAL

Never install electrical panels in closets of bathrooms. Maintain a clearance of 36" inches in front of panels, 30" wide or width of equipment and 6'-6" high for headroom. (CEC 110.26)

Provide a minimum 3 lug intersystem bonding busbar at the main electrical service. (CEC 250.94)

Provide a four-wire feed (two ungrounded conductors, one grounded conductor and an equipment grounding conductor) to all detached structures.

Provide electrical service load calculations for dwellings over 3,000 sq. ft, services 400 amperes or greater or as determined by the Plans Examiner.

All automatic garage door openers that are installed in a residence shall have a battery backup function that is designed to operate when activated because of an electrical outage. (CBC 406.2.1)

A concrete-encased electrode (ufer) consisting of 20' of rebar or #4 copper wire placed in the bottom of a footing is required for all new construction. (CEC 250.52(A)(3)) Bond all metal gas and water pipes to ground. All ground clamps shall be accessible and of an approved type. (CEC 250.104)

All 15/20 ampere receptacles installed per CEC 210.52 **including attached and detached garages and accessory buildings** shall be listed tamper-resistant receptacles. (CEC 406.12)

All branch circuits supplying 15/20 ampere outlets in family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, kitchens, laundry room or similar rooms/areas shall be protected by a listed combination type arc-fault circuit interrupter. (CEC 210.12)

Provide a minimum of one 20A circuit to be used for the laundry receptacle. (CEC 210.11(C)(2))

Provide a minimum of one 20A circuit for bathroom receptacle outlets. (CEC 210.11(C)(3)

Provide at least 1 outlet in basements, garages, laundry rooms, decks, balconies, porches and within 3' of the outside of each bathroom basin. (CEC 210.52 (D), (F) & (G))

Furnaces installed in attics and crawl spaces shall have an access platform (catwalk in attics), light switch and receptacle in the space. Provide a service receptacle for the furnace. (CEC 210.63)

All dwellings must have one exterior outlet at the front and the back of the dwelling. (CEC 210.52(E))

Provide a minimum of one 20A circuit for attached and detached garage outlets. The circuit shall supply no other receptacle outlet. Exception: Garage circuit may serve readily accessible outdoor receptacle outlets. ((CEC 210.11 (C)(4))

A minimum of 1 receptacle shall be provided for each car space. (210.52(G)(1))

At least one wall switched lighting outlet or fixture shall be installed in every habitable room, bathroom, hallways, stairways, attached garages and detached garages with electrical power, equipment spaces (attics, basements, etc). (CEC 210.70).

Kitchens, dining rooms, pantries, breakfast nooks, and similar areas must have a minimum of two 20A circuits. Kitchen, pantry, breakfast nooks, dining rooms, work surfaces and similar areas counter outlets must be installed in every counter space 12" inches or wider, not greater than 4' o.c., within 24" inches of the end of any counter space and not higher than 20" above counter. (CEC 210.52 (C)) A minimum of 1 receptacle is required at each kitchen island as follows: one receptacle is required for first 9 ft^2 two receptacles required from 10 ft^2 – 27 ft^2 three receptacles required for 28 ft^2 – 47 ft^2 and four receptacles required for 48 ft^2 or more. (CEC 210.52(C)(1)) Island counter spaces shall have at least 1 receptacle outlet unless a range top or sink is installed than 2 receptacles may be required. 1 receptacle is required for peninsular counter spaces. Receptacles shall be located behind kitchen sinks if the counter area depth behind the sink is more than 12" for straight counters and 18" for corner installations. (CEC Figure 210.52(C)(1))

Receptacles shall be installed at 12' o.c. maximum in walls starting at 6' maximum from the wall end. Walls longer than two feet shall have a receptacle. Hallway walls longer than 10 ft shall have a receptacle in hallways. (CEC 210.52(A))

Stairways with 6 or more risers shall have wall switch at each floor level at the stair landings. (CEC 210.70(A)(2))

Receptacles shall not be installed within or directly over a bathtub or shower stall. (CEC 406.9 (C)) Light pendants, ceiling fans, lighting tracks, etc shall not be located within 3ft horizontally and 8ft vertically above a shower and/or bathtub threshold. (CEC 410.10(D))

All lighting/fan fixtures located in wet or damp locations shall be rated for the application. (CEC 410.10)

GFCI outlets are required: for all kitchen receptacles that are designed to serve countertop surfaces, dishwashers, bathrooms, in under-floor spaces or below grade level, in unfinished basements, crawl space lighting outlets, in exterior outlets, within 6' of a laundry/utility/wet bar sinks**, indoor damp locations, mud rooms, finished basements, laundry areas,** and in all garage outlets including outlets dedicated to a single device or garage door opener. (CEC 210.8).

Carbon-monoxide alarms shall be installed in dwelling units with fuel-burning appliances or with attached garages (CRC R315):

- Outside of each separate sleeping area in the immediate vicinity of bedrooms
- On every level of a dwelling unit including basements
- Alterations, repairs, or additions exceeding 1,000 dollars (May be battery operated)

Smoke alarms shall be installed (CRC R314):

- In each room used for sleeping purposes.
- Outside of each separate sleeping area in the immediate vicinity of bedrooms.
- In each story, including basements.
- At the top of stairways between habitable floors where an intervening door or obstruction prevents smoke from reaching the smoke detector.
- Shall not be installed within 20ft horizontally of cooking appliances and no closer than 3ft to mechanical registers, ceiling fans and bathroom doors with a bathtub or shower unless this would prevent placement of a smoke detector (R314.3(4)).
- Alterations, repairs, or additions exceeding 1,000 dollars. (May be battery operated.)
- All smoke and carbon-monoxide alarms shall be hardwired with a battery backup (smoke alarms shall have a 10-year sealed battery). (CRC R314.4 & R315.1.2)
- Smoke detectors within 10 feet to 20 feet of the stove shall be ionization type with alarm silencing switch. (CRC R314.3.3)

All 15/20 ampere receptacles in wet locations shall have in-use (bubble) covers installed. All receptacles in wet locations shall also be listed weather-resistant type. (CEC 406.9(B)(1))

ENERGY STORAGE SYSTEMS

Energy storage systems shall only be installed in detached garages and accessory structures, attached garages, outdoor not less than 3' from door and windows and enclosed utility closets, basements, storage or utility closets within dwelling units with finished or noncombustible walls and ceiling. (CRC R328.4)

Individual ESS units shall have a maximum rating of 20 kWh. The aggregate rating of the ESS shall not exceed 40 kWh within utility closets, basements and storage or utility spaces, 80 kWh in attached or detached garages or detached accessory structures, 80 kWh on exterior walls and 80 kWh outdoors on the ground. (CRC R328.5)

Rooms and areas within structures in which ESS are installed shall be protected by smoke alarms. A heat detector shall be installed in locations within structures where smoke alarms cannot be installed based on their listing. (CRC R328.7)

ESS installed in locations subject to vehicle damage shall be provided with impact protection. (CRC R328.8)

PLUMBING

Underfloor cleanouts shall not be more than 5' from an underfloor access, access door or trap door. (CPC 707.9)

Kitchen sinks require a cleanout above the floor level of the lowest floor of the building.

ABS piping shall not be exposed to direct sunlight unless protected by water based synthetic latex paints. (CPC 312.13)

PVC piping shall not be exposed to direct sunlight unless protected by water based synthetic latex paint, .04" thick wrap or otherwise protected from UV degradation. (CPC 312.14)

Underground water supply lines shall have a 14 awg blue tracer wire. (CPC 604.10.1)

The entire floor space in a room containing a shower without thresholds shall be considered a "wet location" when using the CRC, CBC, and the CEC. (CPC 408.5)

Shower compartments, regardless of shape, shall have a minimum finished interior of 1024 square inches (32" by 32") and shall also be capable of encompassing a 30" circle. The required area and dimensions shall be measured at a height equal to the top of the threshold and shall be maintained to a point of not less than 70" above the shower drain outlet. (CPC 408.6) Provide curtain rod or door a minimum of 22" in width (CPC 408.5). Showers and tubs with showers require a non-absorbent surface up to 6' above the floor. (CRC R307.2) Minimum shower receptor slope is 1/8" per foot. (CPC 408.5)

Show location and size of the water heater on plans. Provide pressure relief valve with drain to outside for water heater. (CPC 504.6) Provide seismic strapping in the upper & lower third of the water heater a minimum of 4" above controls. (CPC 507.2)

Water heaters using gas or propane shall designate a space 2.5 feet by 2.5 feet and 7 feet tall suitable for future installation of a heat pump water heater. Additional features are required. (California Energy Code 150.0(n))

Domestic hot water lines shall be insulated. Insulation shall be the thickness of the pipe diameter up to 2" in size and minimum 2" thickness for pipes larger than 2" in diameter. (CPC 609.12)

A 3-inch gravity drain shall be provided at the low point of the space, installed which provides 1/4-inch per foot grade and terminate at an exterior point of the building protected from blockage. The opening shall be screened with a corrosion-resistant wire mesh with mesh openings of 1/4-inch in dimension. Lengths of the gravity drains over 10 feet in length shall be first approved by the Building Official. (L-V 8.8)

Water heaters located in attics, ceiling assemblies and raised floor assemblies shall show a water-tight corrosion resistant minimum 1 ½" deep pan under the water heater with a minimum ¾ inch drain to the exterior of the building. (CPC 507.5)

Water closets shall be located in a space not less than 30" in width (15" on each side) and 24" minimum clearance in front. (CPC 402.5)

Indicate on the plans that the maximum hot water temperature discharging from a bathtub or whirlpool bathtub filler shall not exceed 120 degrees F. (CPC 408.3.2)

Provide anti-siphon valves on all hose bibs. (CPC 603.5.7)

Floor drains shall be provided with a trap primer. (CPC 1007)

Clearly label on the plans the maximum water flow rates per the (CGBSC 4.303.1):

- Water Closets: 1.28gpf
- Urinals: .125gpf
- Kitchen Faucets: 1.8gpm @ 60psi
- Lavatory Faucets: 1.2gpm @ 60psi
- Showerheads: 1.8gpm

MECHANICAL

All newly installed gas fireplaces shall be direct vent and sealed-combustion type. (CMC 912.2)

Any installed wood stove or pellet stove shall meet the U.S. EPA New Source Performance Standard emission limits and shall have a permanent label certifying emission limits.

Top of chimney must extend a minimum of 2 ft. above any part of the building within 10 ft. (CMC 802.5.4)

Fireplaces shall have closable metal or glass doors, have combustion air intake drawn from the outside and have a readily accessible flue dampener control. Continuous burning pilot lights are prohibited. (California Energy Code 150.0(e))

Provide combustion air for all gas fired appliances per CMC Chapter 7.

Roof top equipment on roofs with over 4/12 slope shall have a level 30"x30" working platform. (CMC 304.2)

Exhaust openings terminating to the outdoors shall be covered with a corrosion resistant screen ¼"-1/2" in opening size (not required for clothes dryers). (CMC 502.1)

Vent dryer to outside of building (not to under-floor area). Vent length shall be 14 ft. maximum. Shall terminate a minimum of 3' from the property line and any opening into the building. (CMC 504.4.2)

Environmental Air Ducts shall not terminate less than 3' to a property line, 10' to a forced air inlet, 3' to openings into the building and shall not discharge on to a public way. (CMC 502.2.1)

Provide minimum 100 square inches make-up air for clothes dryers installed in closets. (CMC 504.4.1(1))

Heating system is required to maintain 68 degrees at 3 ft. above floor level and 2ft from exterior walls in all habitable rooms. (CRC R303.10)

TITLE 24 ENERGY

Provide compliance documentation for mandatory measures to shown throughout the plans. All ducts in conditioned spaces must include R-4.2 insulation. (California Energy Code 150.1(c)9) Minimum heating and cooling filter ratings shall be MRV 13. (California Energy Code 150.0(m) 12)

Isolation water valves required for instantaneous water heaters 6.8kBTU/hr and above. Valves shall be installed on both cold and hot water lines. Each valve will need a hose bib or other fitting allowing for flushing the water heater when the valves are closed. (California Energy Code 110.3(c)6)

Energy storage system (ESS) ready. At least one of the following shall be provided:

- **ESS ready interconnection equipment with a minimum backed-up capacity of 60 amps and a minimum of four ESS-supplied branch circuits, or**
- **A dedicated raceway from the main service panel to a panelboard (subpanel) that supplies the following branch circuits: refrigerator, lighting circuit near primary egress door, sleeping room receptacle and one additional.**

The main panelboard shall have a minimum busbar rating of 225 amps. Space shall be reserved to allow future installation of a system isolation equipment/transfer switch within 3 feet of the main panelboard. Raceways shall be installed between the panelboard and the system isolation equipment to allow the connection of backup power source.

Heat pump space heater ready. Systems using a gas or propane furnace shall include a dedicated 240 volt branch circuit with 3 feet of the furnace. The branch circuit shall be rated at 30 amps minimum. The main electrical service shall have a reserved space to allow for the installation of a double pole circuit breaker. The reserved space shall be permanently marked as "For future 240V use". (California Energy Code 150.0(t))

Electric cooktop ready. Systems using a gas or propane cooktop shall include a dedicated 240 volt branch circuit with 3 feet of the cooktop. The branch circuit shall be rated at 50 amps minimum. The main electrical service shall have a reserved space to allow for the installation of a double pole circuit breaker. The reserved space shall be permanently marked as "For future 240V use". (California Energy Code 150.0(u))

Electrical clothes dryer ready. Systems using a gas or propane dryer shall include a dedicated 240 volt branch circuit with 3 feet of the clothes dryer. The branch circuit shall be rated at 30 amps minimum. The main electrical service shall have a reserved space to allow for the installation of a double pole circuit breaker. The reserved space shall be permanently marked as "For future 240V use". (California Energy Code 150.0(v))

ALL luminaires must be high efficacy. (California Energy Code 150.0(k)1A)

Luminaries recessed in insulated ceilings must meet five requirements (California Energy Code 150.0(k)1C):

- They must be rated for direct insulation contact (IC).
- They must be certified as airtight (AT) construction.
- They must have a sealed gasket or caulking between the housing and ceiling to prevent flow of heated or cooled air out of living areas and into the ceiling cavity.
- They may not contain a screw base sockets
- They shall contain a JA8 compliant light source

In bathrooms, garages, **walk-in closet,** laundry rooms, and utility rooms, at least on luminaire in each of these spaces shall be controlled by a vacancy sensor or occupant sensor provided the occupant sensor is initially programmed like a vacancy sensor (manual-on operation). (California Energy Code 150.0(k)2I)

Lighting in habitable spaces, including but not limited to living rooms, dining rooms, kitchens and bedrooms, shall have readily accessible dimming controls. (California Energy Code 150(k) 2F)

All exterior lighting shall be high efficacy, be controlled by a manual on/off switch and have one of the following controls (the manual switch shall not override the automatic control device) (150.0(k)3A):

- Photo-control and motion sensor
- Photo-control and automatic time switch control
- Astronomical time clock control turning lights off during the day

All high efficacy light fixtures shall be certified as "high-efficacy" light fixtures by the California Energy Commission.

Contractor shall provide the homeowner with a luminaire schedule giving the lamps used in the luminaires installed. (CGBSC 10-103(b))

The number of blank electrical boxes more than 5 feet above the finished floor shall not be greater than the number of bedrooms. These electrical boxes must be served by a dimmer, vacancy sensor, or fan speed control. (California Energy Code 150(k)1B)

General notes based on the 2022 California Building Standard Codes. This is not an all inclusive list of code requirements specific to the project. Reference applicable sheets and specific areas of the plans for locations of fixtures/equipment, structural components, structural design criteria, building finishes and other components specific to the project construction.

Radiant barrier shall be installed, and it shall also be installed on all gable ends per the manufacture's specifications.

WILDLAND URBAN INTERFACE (WUI)

Exterior wall coverings shall be noncombustible, ignition resistant, heavy timber, log wall or fire resistive construction. (CRC R337.7)

Exterior wall coverings shall extend from the foundation to the roof and terminate at 2 inch nominal solid blocking between rafters and overhangs. (CRC R337.7.3.2)

Open/enclosed roof eaves and soffits, exterior porch ceilings, floor projections, under-floor areas and undersides of appendages to comply with ignition resistant construction requirements. (CRC R337.5-9)

Spaces created between roof coverings and roof decking shall be fire stopped by approved materials or have one layer of minimum 72lb mineral surfaced non-perforated cap sheet complying with ASTM D 3909. (CRC R337.5.2)

Indicate on the plans where valley flashing is installed, the flashing shall be not less than 26awg and installed over not less than one layer of minimum 72lb mineral surfaced non-perforated cap sheet complying with ASTM D 3909 and at least 36 inches wide running the full length. (CRC R337.5.3)

All vents are required to resist building ignition from the intrusion of flame and burning embers through the ventilation openings including crawlspace vents, gable end vents, eave vents, etc. Exception: Ridge vents and vents installed in a sloped roof.

Indicate on plans exterior glazing shall have a minimum of one-tempered pane, glass block, have a fire resistive rating of 20 minutes or be tested to meet performance requirements of SFM Standard 12-7A-2. (CRC R337.8.2)

Operable skylights shall be protected by a noncombustible mesh screen **1/8"** max openings (R337.8.2.2)

Exterior doors including garage doors shall be noncombustible, ignition resistant material, minimum 1 3/8 inch solid core, minimum 20 minute fire resistive rating or shall be tested to meet the performance requirements of SFM Standard 12-7A-1. (CRC R337.8.3)

Garage door perimeter gap maximum **1/8"**. Metal flashing, jamb and header overlap, and weather-stripping meeting section requirements are permitted. (R337.8.4)

The walking surface material of decks, porches, balconies and stairs within 10ft of grade level shall be ignition resistant material, exterior fire-retardant treated wood or noncombustible material. (CRC R337.9)

GREEN BUILDING

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, 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 (CGBSC 4.106.2):

Retention basins of sufficient size shall be utilized to retain storm water on site

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.

All new residential construction with attached private garages shall have the following for electric vehicle (EV) charging stations (CGBSC 4.106.4):

- Install a minimum 1-inch conduit capable of supplying a 208/240V branch circuit to a suitable box location for EV charging. The other end shall terminate to the main service and/or subpanel.
- The main panel and/or subpanel shall be of sufficient size to install a 40-ampere dedicated branch circuit. The dedicated overcurrent protection space shall be labeled "EV CAPABLE".

Multiple shower heads serving a single shower shall have a combined flow rate of 1.8 gpm or the shower shall be designed to allow only one shower outlet to be in operation at a time. (CGBSC 4.303.1.3.2)

Residential projects with an aggregate landscape area equal to or greater than 500 square feet shall comply with either a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent. Automatic irrigation system controllers installed at time of final inspection shall have weather or soil based controllers and/or weather based controllers with rain sensors. Soil moisture based controllers are not required to have rain sensor input. (CGBSC 4.304)

Recycle and/or reuse a minimum of **65 percent** of nonhazardous construction and demolition waste. (CGBSC 4.408.2)

At time of final inspection, a building operation and maintenance manual, compact disc, etc shall be provided containing the following: (CGBSC 4.410)

- Directions that manual shall remain onsite for the life of the building
- Operation and maintenance instructions for equipment, appliances, roof/yard drainage, irrigation systems, etc
- Information from local utility, water and waste recovery providers
- Public transportation and carpool options
- Material regarding importance of keeping humidity levels between 30-60 percent
- Information regarding routine maintenance procedures
- State solar energy incentive program information
- A copy of any required special inspection verifications that were required (if any)

Clearly note on the plans how the project will meet minimum pollutant control requirements for adhesives, sealants, caulks, paints, carpet, resilient flooring systems, etc. (CGBSC 4.504)

Duct openings related to HVAC systems shall be covered with tape, plastic, sheet metal or other methods to reduce the amount of water, dust and debris which may enter the system. (CGBSC 4.504.1)

Custom Home & Addition Remodel Design
321 Village Drive, Brentwood, CA 94513
PH: 925-382-6938 Email: gil@4dda.com
American Institute of Building Design
The Residential Specialist

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL	DATE

ISSUE	DATE

Gil Dominguez

2022 CALIFORNIA RESIDENTIAL CODE GENERAL NOTES

PEÑA RESIDENCE
CUSTOM TWO STORY RESIDENCE
9255 BYRON HWY.
BRENTWOOD, CA 94513
APN: 015-110-011

DRAWN BY :	DATE:
GD	09/02/2021
SCALE :	JOB NUM :
NOTED	0421

SHEET

G1.3

OF

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 1 (July 2024 Supplement)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

CHAPTER 3
GREEN BUILDING
SECTION 301 GENERAL

301.1 SCOPE. Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.

301.1.1 Additions and alterations. [HCD] The mandatory provisions of Chapter 4 shall be applied to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the specific area of the addition or alteration.

The mandatory provision of Section 4.106.4.2 may apply to additions or alterations of existing parking facilities or the addition of new parking facilities serving existing multifamily buildings. See Section 4.106.4.3 for application.

Note: Repairs including, but not limited to, resurfacing, restriping and repairing or maintaining existing lighting fixtures are not considered alterations for the purpose of this section.

Note: On and after January 1, 2014, residential buildings undergoing permitted alterations, additions, or improvements shall replace noncompliant plumbing fixtures 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.

301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD] The provisions of individual sections of CALGreen may apply to either low-rise residential buildings high-rise residential buildings, or both. Individual sections will be designated by banners to indicate where the section applies specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and high-rise buildings, no banner will be used.

SECTION 302 MIXED OCCUPANCY BUILDINGS

302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy.

Exceptions:
1. [HCD] Accessory structures and accessory occupancies serving residential buildings shall comply with Chapter 4 and Appendix A4, as applicable.
2. [HCD] For purposes of *CAL*Green, live/work units, complying with Section 419 of the *California Building Code*, shall not be considered mixed occupancies. Live/Work units shall comply with Chapter 4 and Appendix A4, as applicable.

DIVISION 4.1 PLANNING AND DESIGN

ABBREVIATION DEFINITIONS:

HCD	Department of Housing and Community Development
BSC	California Building Standards Commission
DSA-SS	Division of the State Architect, Structural Safety
OSHPD	Office of Statewide Health Planning and Development
LR	Low Rise
HR	High Rise
AA	Additions and Alterations
N	New

CHAPTER 4
RESIDENTIAL MANDATORY MEASURES

Y

SECTION 4.102 DEFINITIONS
4.102.1 DEFINITIONS
The following terms are defined in Chapter 2 *(and are included here for reference)*

FRENCH DRAIN. A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar pervious material used to collect or channel drainage or runoff water.

WATTLES. Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials such as hay, straw or similar material shaped in the form of tubes and placed on a downflow slope. Wattles are also used for perimeter and inlet controls.

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 or 4.106.4.2. Electric vehicle supply equipment (EVSE) shall comply with the *California Electrical Code*.

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 local utility power supply or the local utility is unable to supply adequate power.
   1.2 Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 4.106.4, may adversely impact the construction cost of the project.
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 other 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 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

Exemption: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the proposed location of an EV charger at the time of original construction in accordance with the *California Electrical Code*.

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, hotels and motels and new residential parking facilities.
When parking is provided, parking spaces for new multifamily dwellings, hotels and motels shall meet the requirements of Section 4.106.4.2.2. Calculations for spaces shall be rounded up to the nearest whole number. A parking space served by electric vehicle supply equipment or designed as an EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2 for further details.

4.106.4.2.1 Reserved.

4.106.4.2.2 Multifamily dwellings, hotels and motels

1. EV ready parking spaces with receptacles.

a. Hotels and motels. Forty (40) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles.

b. Multifamily parking facilities. Forty (40) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. EV charging receptacles required by this section shall be located in at least one assigned parking space per dwelling unit where assigned parking is provided but need not exceed forty (40) percent of the total number of assigned parking spaces provided on the site.

Exception: Areas of parking facilities served by parking lifts, including but not limited to automated mechanical-access open parking garages as defined in the *California Building Code*; or parking facilities otherwise incapable of supporting electric vehicle charging.

c. Receptacle power source. EV charging receptacles in multifamily parking facilities shall be provided with a dedicated branch circuit connected to the dwelling unit's electrical panel, unless determined as infeasible by the project builder or designer and subject to concurrence of the local enforcing agency.

Exception: Areas of parking facilities served by parking lifts, including but not limited to automated mechanical-access open parking garages as defined in the *California Building Code*; or parking facilities otherwise incapable of supporting electric vehicle charging.

d. Receptacle configurations. 208/240V EV charging receptacles shall comply with one of the following configurations:

1. For 20-ampere receptacles, NEMA 6-20R
2. For 30-ampere receptacles, NEMA 14-30R
3. For 50-ampere receptacles, NEMA 14-50R

2. EV ready parking spaces with EV chargers.

a. Hotels and motels. Ten (10) percent of the total number of parking spaces shall be equipped with Level 2 EV chargers. At least fifty (50) percent of the required EV chargers shall be equipped with J1772 connectors.

b. Multifamily parking facilities. Ten (10) percent of the total number of parking spaces shall be equipped with Level 2 EV chargers. At least fifty (50) percent of the required EV chargers shall be equipped with J1772 connectors. Where common use parking or unassigned parking is provided, EV chargers shall be located in common use or unassigned parking areas and shall be available for use by all residents or guests.

Where low power Level 2 EV charging receptacles or Level 2 EV chargers are installed beyond the minimum required, an automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EV chargers shall have a capacity of not less than 30 amperes.

4.106.4.2.2.1 Electric vehicle charging stations (EVCS).
Electric vehicle charging stations required by Section 4.106.4.2.2, Item 2, with EV chargers installed shall comply with Section 4.106.4.2.2.1.1.

Exception: Electric vehicle charging stations serving public accommodations, public housing, motels and hotels shall not be required to comply with this section. See *California Building Code*, Chapter 11B, for applicable requirements.

4.106.4.2.2.1.1 Electric vehicle charging stations (EVCS) spaces with EV chargers installed; dimensions and location.

EVCS spaces shall be designed to comply with the following:

1. The minimum length of each EVCS space shall be 18 feet (5486 mm).
2. The minimum width of each EVCS space shall be 9 feet (2743 mm).
3. One in every 25 EVCS 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 EVCS space is 12 feet (3658 mm). Surface slope for this EVCS space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction. These EVCS spaces shall also comply with at least one of the following:

   a. The EVCS 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.
   b. The EVCS 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 4.106.4.2.2.1.1.

4.106.4.2.2.1.2 Accessible electric vehicle charging station spaces.
In addition to the requirements in Section 4.106.4.2.2.1.1, all EV chargers, where installed, shall comply with the accessibility provisions for EV chargers in the *California Building Code*, Chapter 11B. EV ready spaces and EVCS in multifamily developments shall comply with *California Building Code*, Chapter 11A, Section 1109A.

4.106.4.2.3 Reserved.

4.106.4.2.4 Reserved.

4.106.4.2.5 Electric vehicle ready space signage.
Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing multi-family buildings.
Where new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered shall be EV capable spaces to support future Level 2 electric vehicle supply equipment. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE."

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.

DIVISION 4.2 ENERGY EFFICIENCY

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

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 the sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.4.4.

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 the 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 only allow 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.

4.303.1.4.5 Pre-rinse spray valves.
When installed, shall meet the requirements in the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations), Sections 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 (d)(7) and shall be equipped with an integral automatic shutoff.

FOR REFERENCE ONLY: The following table and code section have been reprinted from the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations),Section 1605.1 (h)(4) and Section 1605.3 (h)(4)(A).

TABLE H-2

STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VALUES MANUFACTURED ON OR AFTER JANUARY 28, 2019

PRODUCT CLASS [spray force in ounce force (ozf)]	MAXIMUM FLOW RATE (gpm)
Product Class 1 (≤ 5.0 ozf)	1.00
Product Class 2 (> 5.0 ozf and ≤ 8.0 ozf)	1.20
Product Class 3 (> 8.0 ozf)	1.28

Title 20 Section 1605.3 (h)(4)(A): Commercial prerinse spray values manufactured on or after January 1, 2006, shall have a minimum spray force of not less than 4.0 ounces-force (ozf)[113 grams-force(gf)]

4.303.2 Submeters for multifamily buildings and dwelling units in mixed-used residential/commercial buildings.
Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the *California Plumbing Code*.

4.303.3 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*.

NOTE:
THIS TABLE COMPILES THE DATA IN SECTION 4.303.1, AND IS INCLUDED AS A CONVENIENCE FOR THE USER.

TABLE - MAXIMUM FIXTURE WATER USE

FIXTURE TYPE	FLOW RATE
SHOWER HEADS (RESIDENTIAL)	1.8 GMP @ 80 PSI
LAVATORY FAUCETS (RESIDENTIAL)	MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 PSI
LAVATORY FAUCETS IN COMMON & PUBLIC USE AREAS	0.5 GPM @ 60 PSI
KITCHEN FAUCETS	1.8 GPM @ 60 PSI
METERING FAUCETS	0.2 GAL/CYCLE
WATER CLOSET	1.28 GAL/FLUSH
URINALS	0.125 GAL/FLUSH

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 Regulations,* Title 23, Chapter 2.7, Division 2. MWELO and supporting documents, including water budget calculator, are available at: https://www.water.ca.gov/

DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

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.

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 non-hazardous 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 collected 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 lbs./sq.ft. of the building area shall meet the minimum 65% 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% 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 www.hcd.ca.gov/CALGreen.html 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).

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 inspections verifications required by the enforcing agency or this code.
11. Information from the Department of Forestry and Fire Protection on maintenance of defensible space around residential structures.
12. Information and/or drawings identifying the location of grab bar reinforcements.

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 non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waster, 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 note 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 quality 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
5.102.1 DEFINITIONS
The following terms are defined in Chapter 2 *(and are included here for reference)*

AGRIFIBER PRODUCTS. Agrifiber products include wheatboard, strawboard, panel substrates and door cores, not including furniture, fixtures and equipment (FF&E) not considered base building elements.

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, prefabricated wood I-joists or finger-jointed lumber, all as specified in California Code of regulations (CCR), title 17, Section 93120.1.

DIRECT-VENT APPLIANCE. A fuel-burning appliance with a sealed combustion system that draws all air for combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.

DISCLAIMER: *THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.*

Custom Home & Addition Remodel Design
321 Village Drive, Brentwood, CA 94513
PH: 925-382-6938 Email: gil@4dda.com
American Institute of Building Design
The Residential Specialist

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL DATE

ISSUE DATE

Gil Dominguez

CAL GREEN MANDATORY MEASURES

PEÑA RESIDENCE
CUSTOM TWO STORY RESIDENCE
9255 BYRON HWY, BRENTWOOD, CA 94513
APN: 015-110-011

DRAWN BY: GD
DATE: 09/02/2021
SCALE: NOTED
JOB NUM: 0421

SHEET
G1.1
OF

SITE & GRADING NOTES

1. Work to comply with Contra Coast County ordinance for setbacks and grading requirements as shown on the site plan.
2. All down spouts shall drain onto concrete splash blocks sloping a minimum of 5% away from the structure.
3. SURFACE DRAINAGE CRC R401.3

A positive gradient shall be provided away from the foundation in order to provide rapid removal of the surface water runoff away from the foundation to an adequate discharge point. Slope shall not be less than 5% for a distance of 10 feet from the structure. The grade shall have fall a minimum of 6 inches within the first 10 feet. No ponding of water shall be allowed on the pad or adjacent to the foundation.

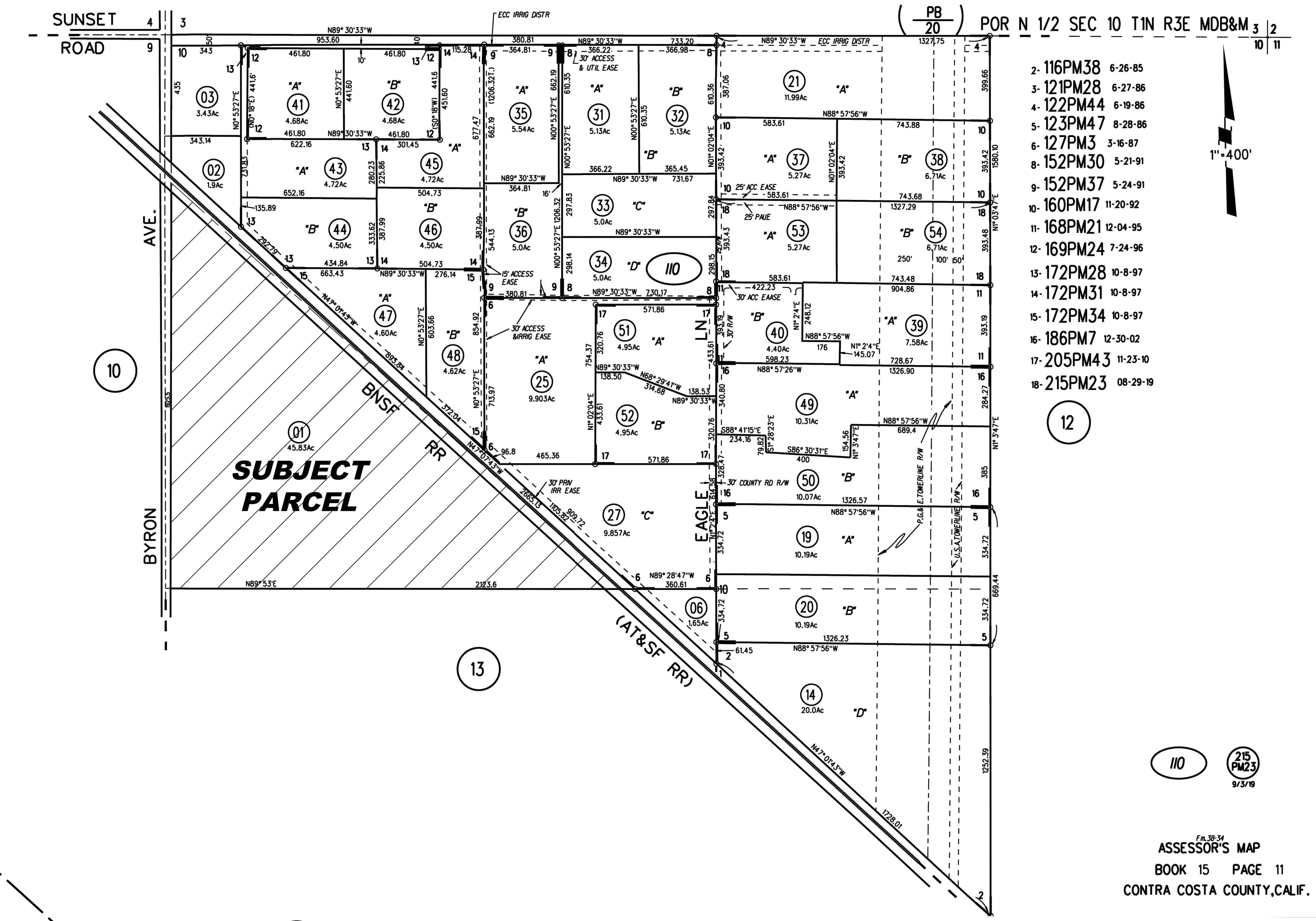
Exception: Where lot line, walls, slopes or other physical barriers prohibit 6 inches of fall within 10 feet, drains or swales shall be constructed to ensure drainage away from the structure. Impervious surfaces within 10 feet of the building foundation shall be sloped a minimum of 2% away from the building.

CONTRA COSTA STORM WATER CONTROL PLAN

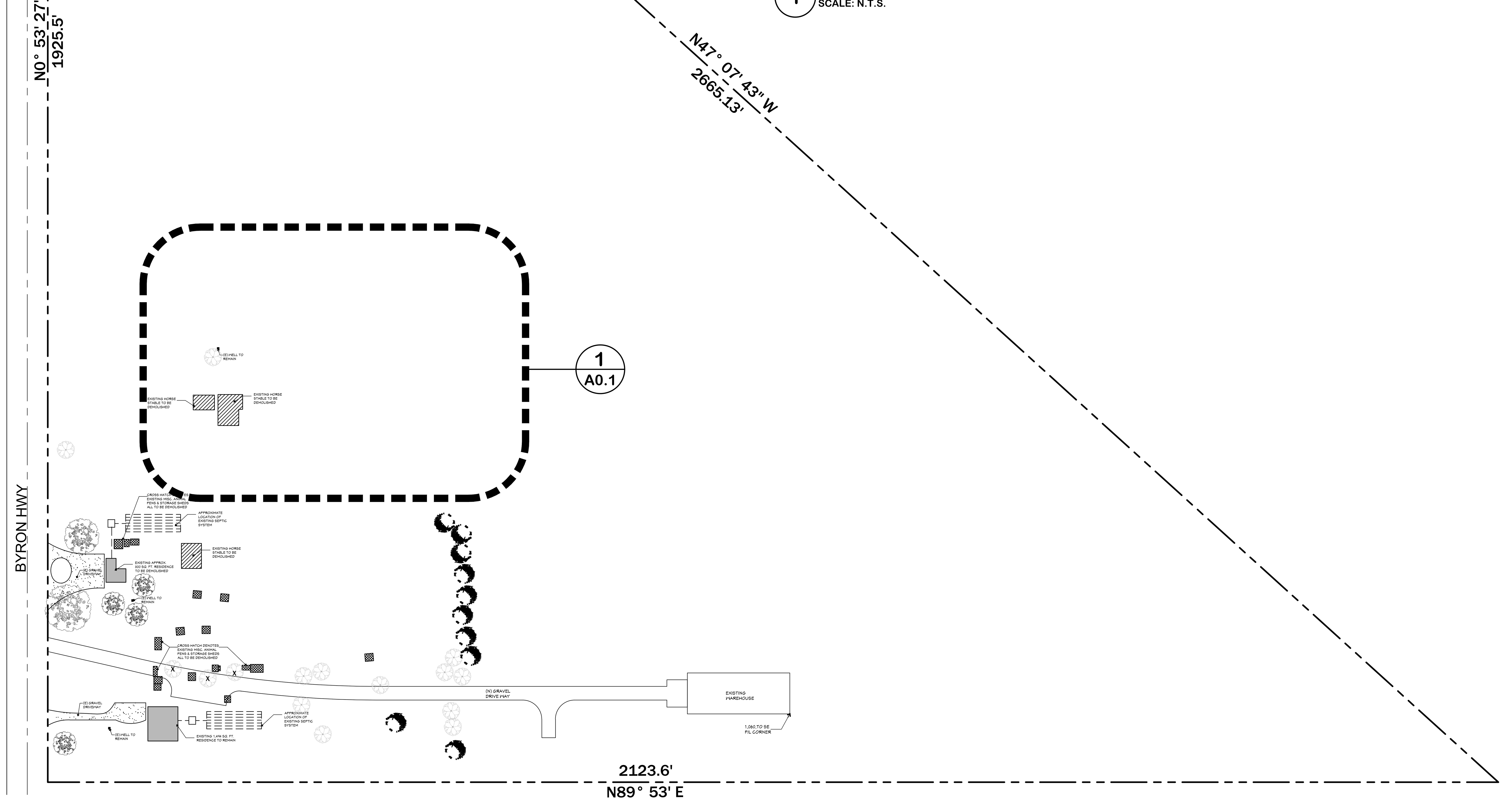
Direct and disperse water runoff across surrounding pervious areas. use gutters, splash blocks and down spouts as needed. any drain inlets within vegetated area to be 3, inches above surrounding grade.

EMERGENCY APPARATUS ACCESS NOTES:

1. Emergency apparatus access roadway shall have an all-weather (pave) driving surface of not less that 20 feet unobstructed width and shall be provide to within150 feet of travel distance to all portions of the exterior walls of the: proposed structure. access shall have a minimum outside turning turning radius of 45 feet/and must be capable of supporting the imposed fire apparatus loading of 22 tons. (503) cfc
2. dead-end emergency apparatus access roadways in excess of 150 feet in length shall be provided with approval provisions for the turning around of fire district apparatus. contact the fire district for approved designs. (503.2.5)cfc
3. access gates for fire district apparatus shall be a minimum of 20 feet wide. access gates shall slide horizontally or swing inward and shall be located a minimum of 50 feet from the street. electrically operated gates shall be equipped with a knox company key-operated switch. manually operated gates shall be equipped with a non-casehardened lock or approved fire district lock. contact the fire department for information on ordering the key-operated SWITCH. (D103.5) CFC



1 ASSESSOR'S PARCEL MAP
SCALE: N.T.S.



2 OVERALL SITE PLAN / EXISTING CONDITIONS
SCALE: N.T.S.

THIS IS AN ORIGINAL, UNPUBLISHED WORK, AND MAY NOT BE DUPLICATED, PUBLISHED, OR OTHERWISE USED WITHOUT WRITTEN CONSENT OF GIL DOMINGUEZ Copyright © GIL DOMINGUEZ 2019

SYM.	REVISIONS	DATE

SUBMITTAL	DATE

ISSUE	DATE

Gil Dominguez

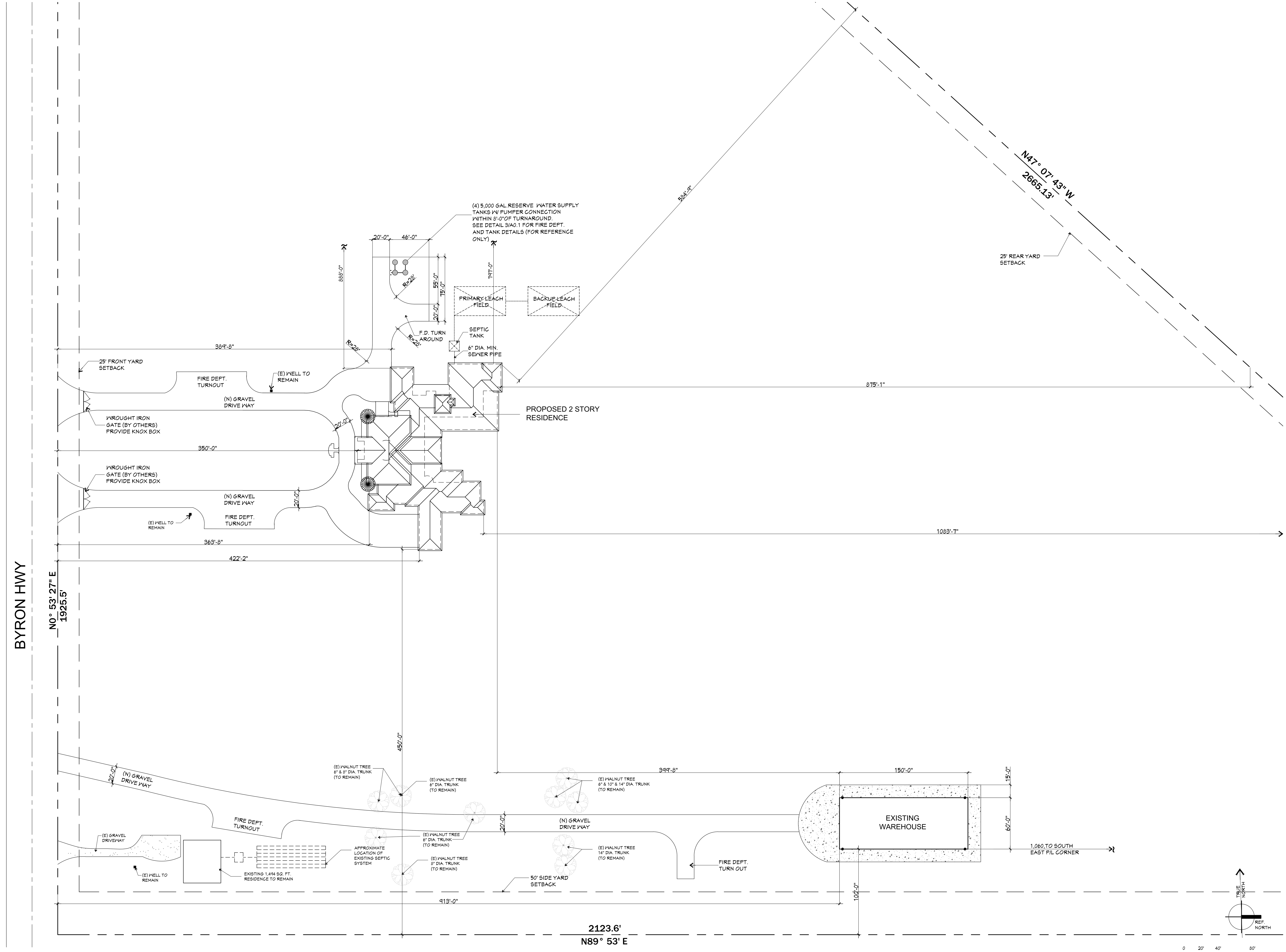
OVERALL SITE PLAN AND EXISTING BUILDINGS

PEÑA
RESIDENCE
CUSTOM TWO STORY RESIDENCE

9255 BYRON HWY.
BRENTWOOD, CA 94513
APN: 015-110-011

DRAWN BY :	DATE:
GD	09/02/2025
SCALE :	JOB NUM :
NOTED	0421

SHEET
A0.0
OF



1 **PARTIAL SITE PLAN OF EXISTING & PROPOSED BUIDLINGS**
SCALE: 40.00' = 1'-0"

Custom Home & Addition Remodel Design
321 Village Drive, Brentwood, CA 94513
PH: 925-382-6938 Email: gil@4dda.com
American Institute of Building Design
The Residential Specialist

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL	DATE

ISSUE	DATE

Gil Dominguez

PARTIAL SITE PLAN OF EXISTING & PROPOSED BUIDLINGS

PEÑA
RESIDENCE
CUSTOM TWO STORY RESIDENCE

9255 BYRON HWY.
BRENTWOOD, CA 94513
APN: 015-110-011

DRAWN BY :	DATE:
GD	04/26/2024
SCALE :	JOB NUM :
NOTED	0421

SHEET
A0.1
OF

EMERGENCY APPARATUS ACCESS NOTES:

1. Emergency apparatus access roadway shall have an all-weather (pave) driving surface of not less that 20 feet unobstructed width and shall be provide to within150 feet of travel distance to all portions of the exterior walls of the: proposed structure. access shall have a minimum outside turning turning radius of 45 feet/and must be capable of supporting the The fire apparatus access roadway shall be capable of supporting the imposed load of fire apparatus weighing up to 75,000lbs. Supporting engineering documentation shall be available to the fire inspector.

2. Dead-end emergency apparatus access roadways in excess of 150 feet in length shall be provided with approval provisions for the turning around of fire district apparatus. contact the fire district for approved designs. (503.2.5)cfc

3. Access gates for fire district apparatus shall be a minimum of 20 feet wide. access gates shall slide horizontally or swing inward and shall be located a minimum of 50 feet from the street. electrically operated gates shall be equipped with a knox company key-operated switch. manually operated gates shall be equipped with a non-casehardened lock or approved fire district lock. contact the fire department for information on ordering the key-operated SWITCH. (D103.5) CFC

RURAL WATER SUPPLY REQUIREMENTS

TANKS:

1. THESE PLANS PROVIDE THE INFORMATION REQUESTED FOR COMPLIANCE
2. THE INSTALLED SHUT OFF VALVE WILL HAVE THE UL/FM LISTING.
3. THIS SITE PLAN IS PROPOERLY SCALED AND ORINETED WITH THE LOCATION OF TANK AND PUMBER CONNECTION.
4. TANKS WILL HAVE A 1 - INCH OVER FLOW PIPE.

5. ONE TANK HAS PUMPER CONNECTION ATTACHED DIRECTLY TO THE TANK AND WILL NOT BE ANY FURTHER THAN 250 FEET (MAXIMUM) AND NOT ANY CLOSER THAN 40 FEET FROM THE STRUCTURE BEING PROTECTED.

SYSTEM PIPING:

6. TANK WILL HAVE PUMPER CONNECTION ATTACHED DIRECTLY TO TANK AND WILL HAVE PLUMBING WITH A MINIMUM INTERNAL DIAMETER OF 4-INCHES. DISCHARGE OUTLET PIPE WILL HAVE A MINIMUM 4-INCH INTERNAL DIAMETER AND WILL BE A MAXIMUM OF 4-INCHES FROM THE BOTTOM OF THE TANK. A 8-INCH DIAMETER ANTI - VORTEX PLATE WILL BE PROVIDED ON THE DISCHARGE OUTLET WITHIN THE TANK.

7. ALL UNSUPERVISED ISOLATION VALVES CONTROLLING WATER SUPPLY TO THE PUMPER CONNECTION AND SPRINKLER SYSTEM WILL BE ACCESSIBLE AND NOT LOCKED.

8. ALL EXPOSED PIPE WILL BE LISTED FOR UV EXPOSURE OR PROTECTED BY APPROVED UV PROTECTIVE COATING.

PUMPER CONNECTION:

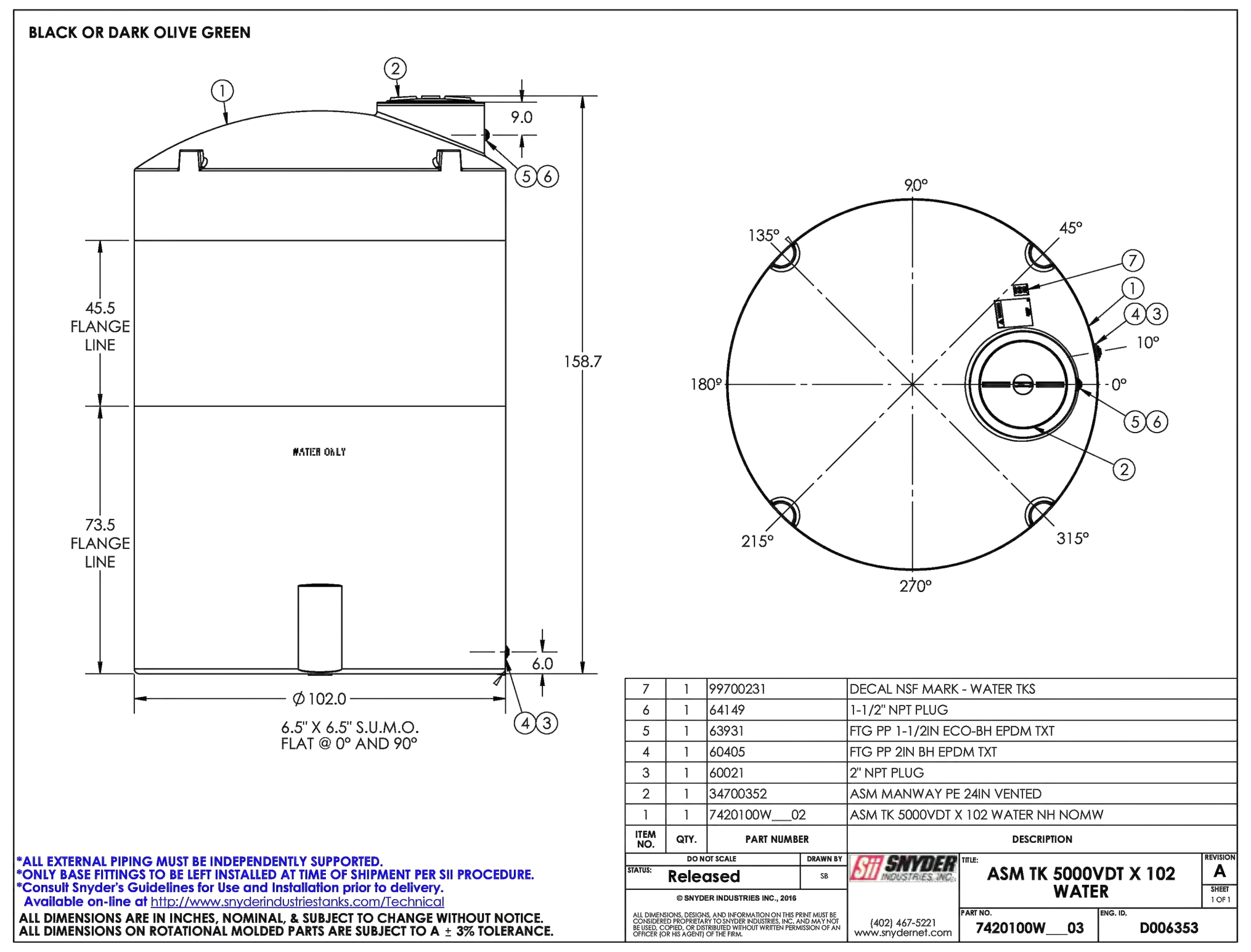
9. THE PUMPER CONNECTION ATTACHED TO THE TANK WILL HAVE A 4-1/2 INCH DIAMETER COUPLING WITH NATIONAL STANDARD MALE THREADS AND PROVIDED WITH A UL/FM LISTED SHUT OFF VALVE. THE MALE HOSE THREADS OF THE PUMPER CONNECTION WILL BE PROTECTED WITH A THREADED CAP.

10. THE PUMPER CONNECTION WILL BE WITHIN 8 FEET OF AN APPROVED FIRE DEPARTMENT ACCESS ROADWAY AND LOCATED ON THE ACCESS TO THE STRUCTURE NO FURTHER THAN 250 FEET AND NO CLOSER THAN 40 FEET FROM THE STRUCTURE BEING PROTECTED.

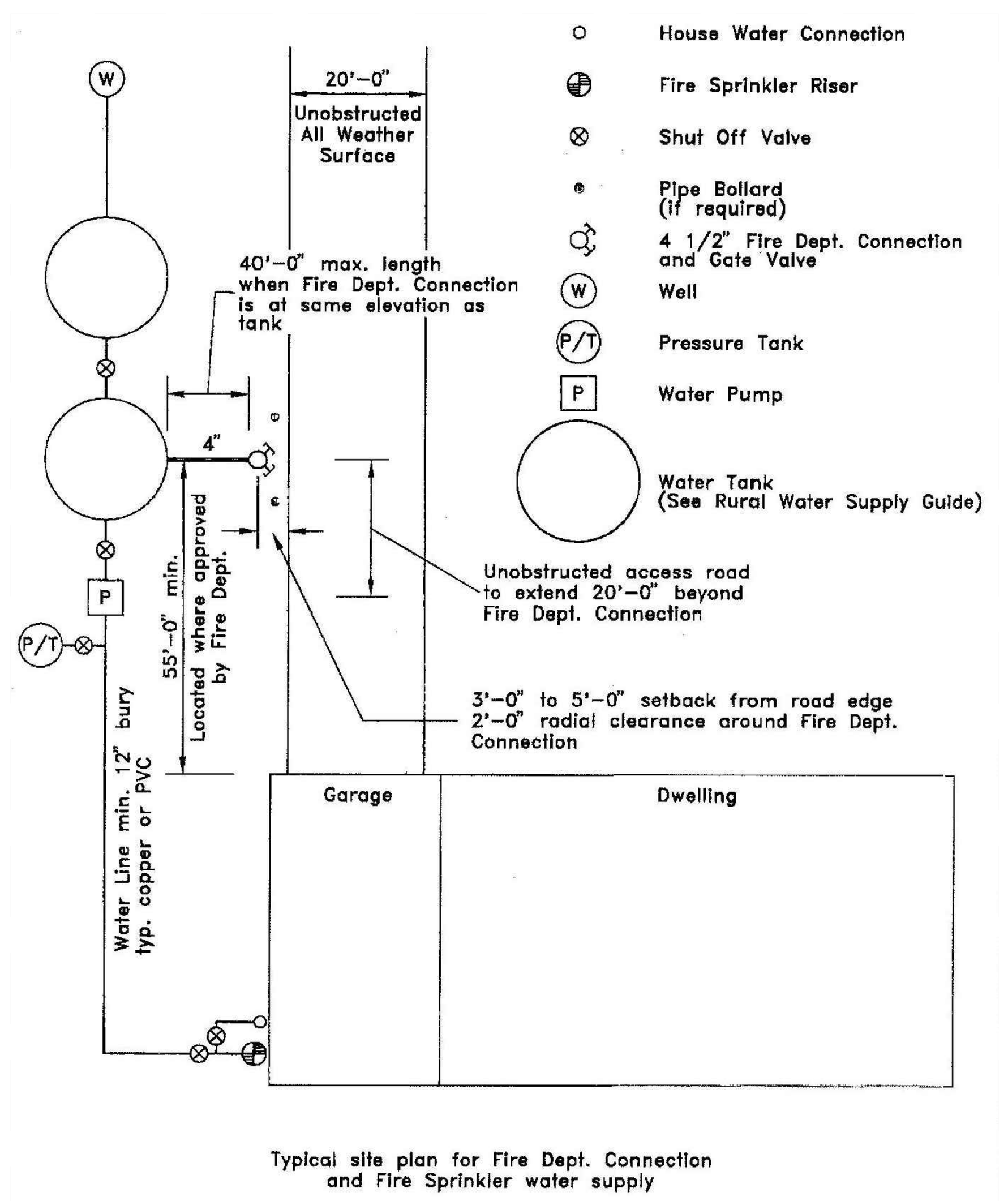
11. THE CENTERLINE OF THE PUMPER CONNECTION WILL BE BETWEEN 24 - 36 INCHES ABOVE FINISHED GRADE OF FIRE APPARATUS ACCESS.

12. THE PUMPER CONNECTION (HYDRANT) WILL BE PROPERLY SUPPORTED AND PROTECTED FROM MECHANICAL DAMAGE.

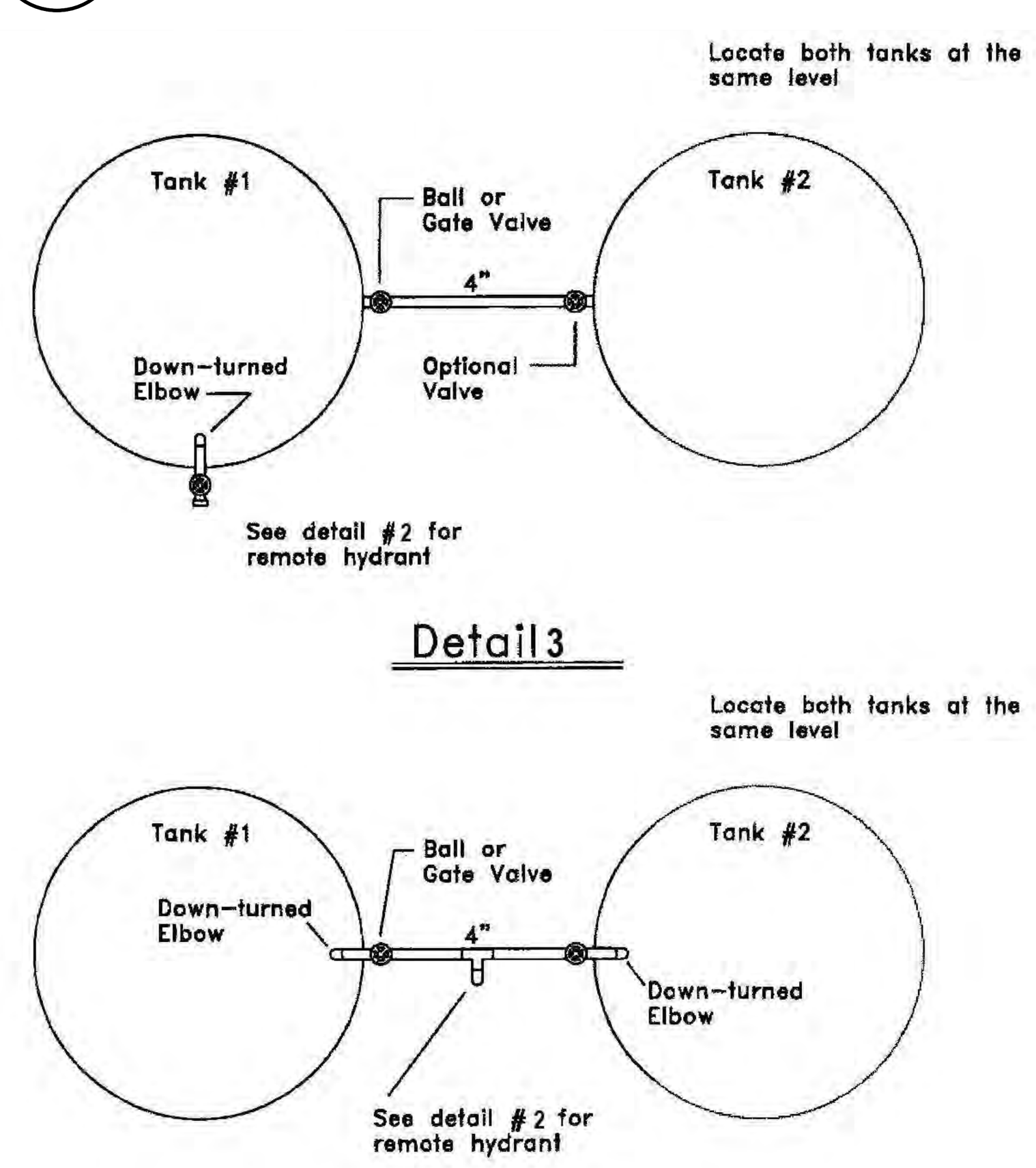
13. THE PUMPER CONNECTION WILL BE PAINTED RED AND WILL HAVE A SIGN POSTED WITH THE WORDS "DRAFTING HYDRANT ONLY" - CLEARLY MARKED. THE SIGN WILL ALSO INCLUDE THE TANK CAPACITY IN GALLONS.



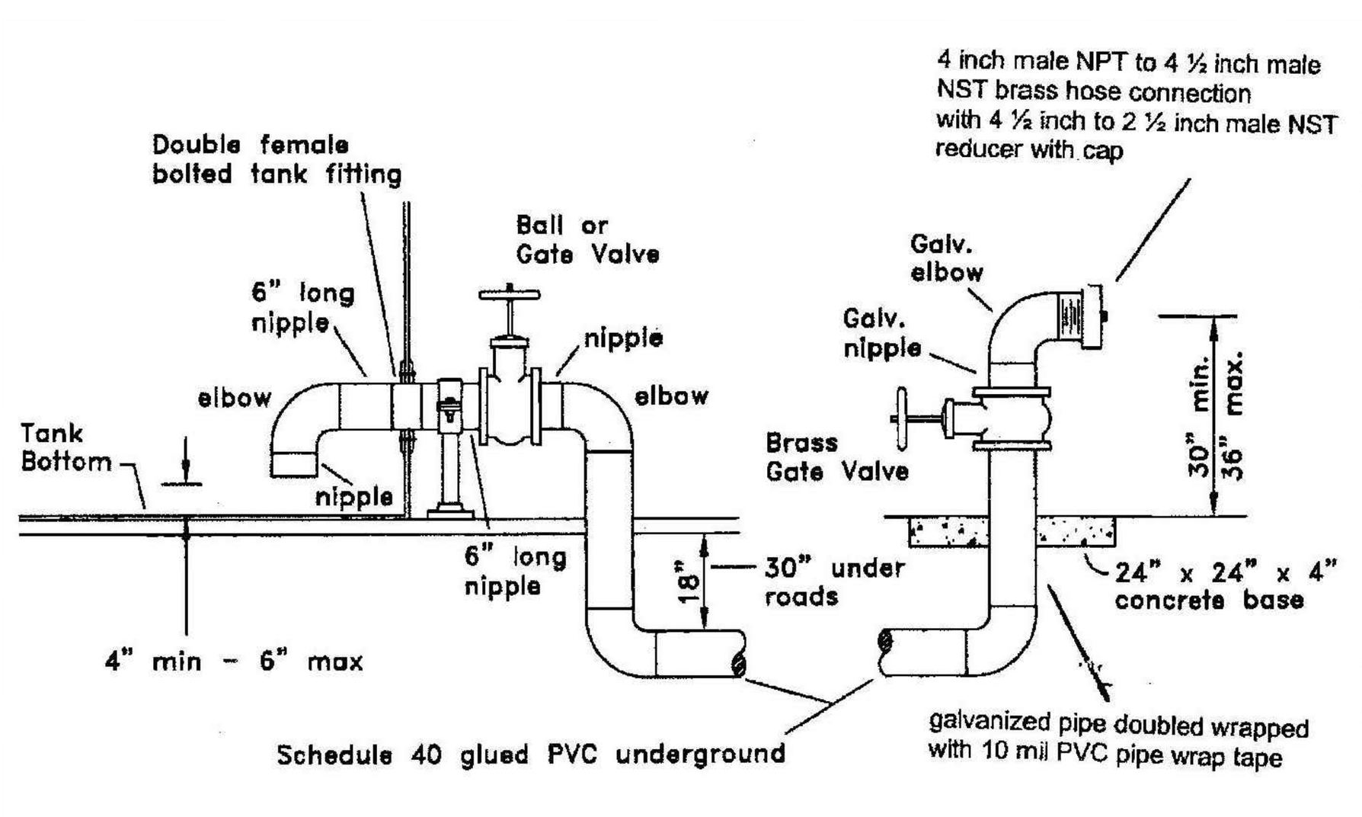
6 TANK MANUFACTURE SPECIFICATIONS
SCALE: NONE



5 TYP. FIRE DEPT. CONNECTION & FIRE SPRINKLER SUPPLY
SCALE: NONE



4 TANK TO TANK CONNECTION
SCALE: NONE

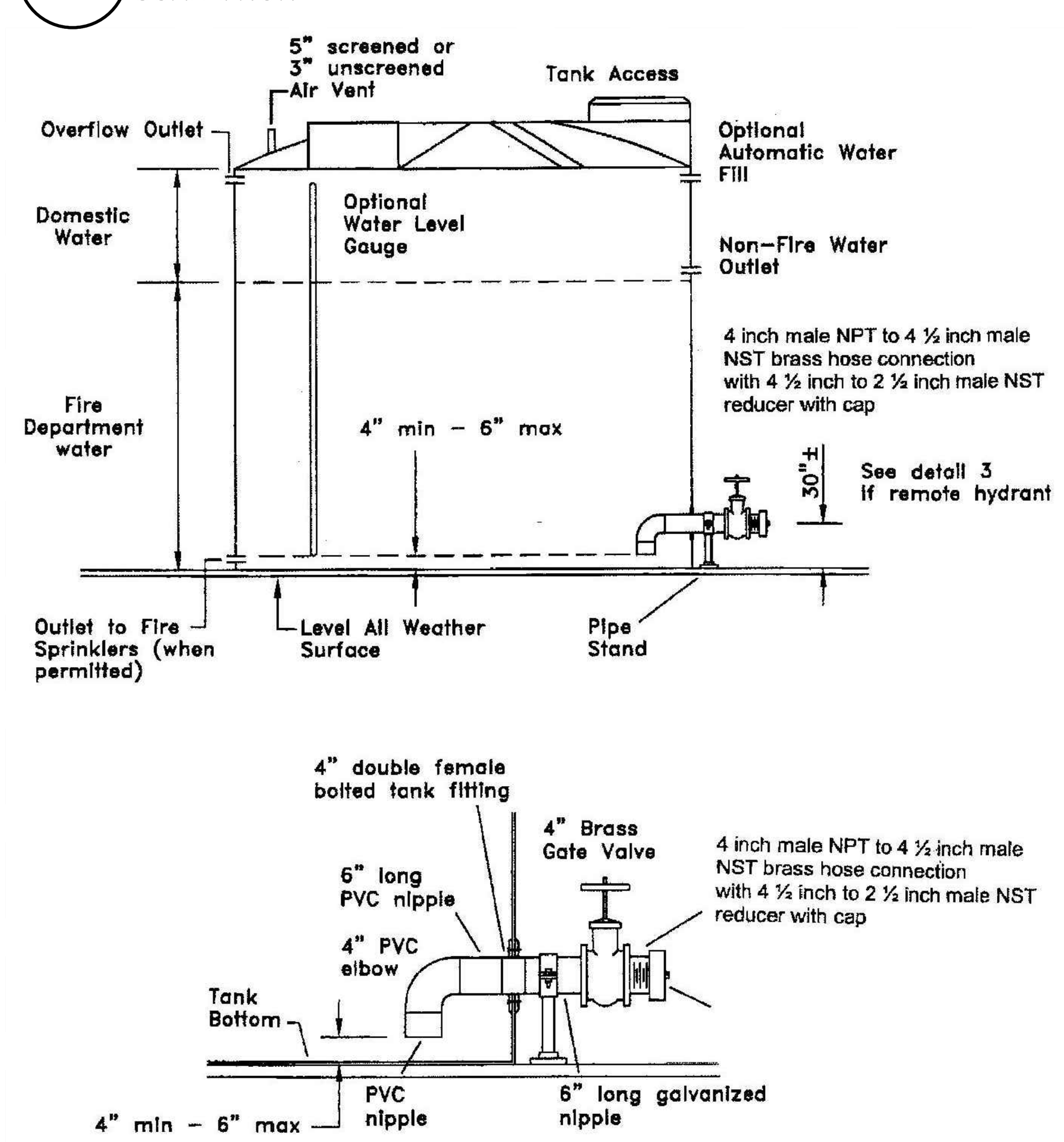


Note: Tank piping shall be a minimum 4" in size. Underground piping shall be 4" or 6" depending on system design requirements. Schedule 40 PVC pipe may be used for tank and underground piping. All vertical pipe runs can be either schedule 80 PVC or schedule 40 galvanized steel.

Hydrant piping shall be a minimum 4" in size. Galvanized piping shall be used and piping shall be double wrapped with 10 mil (or greater) PVC tape where ground contact occurs.

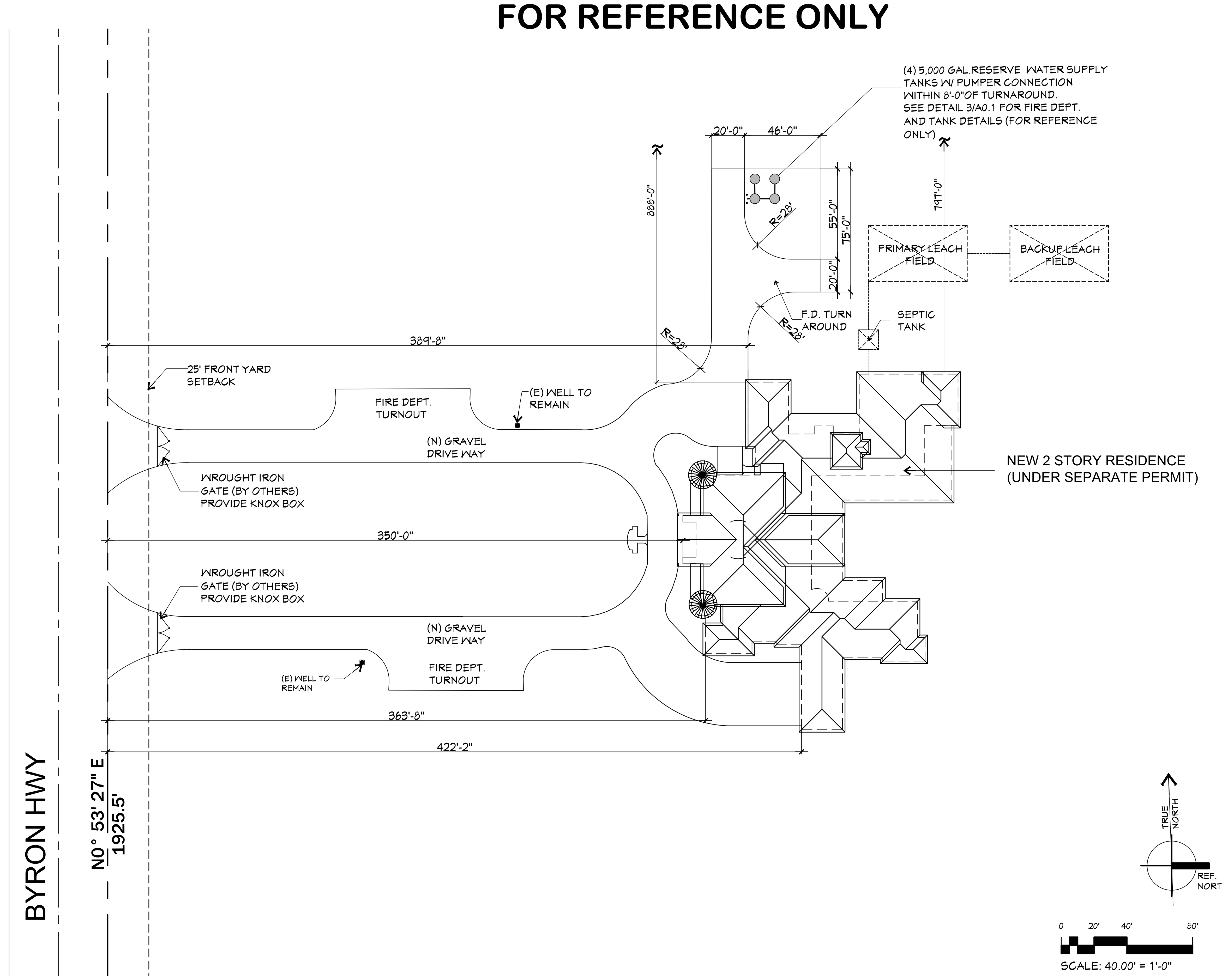
The remote outlet shall have vehicle access per detail 7 and be maintained with a 3 foot clearance around the outlet.

3 REMOTE HYDRANT DETAIL
SCALE: NONE



2 APPARATUS CONNECTION DETAIL
SCALE: NONE

FOR REFERENCE ONLY



1 RURAL FIRE WATER SUPPLY SITE PLAN
SCALE: 40.00' = 1'-0"

Custom Home & Addition Remodel Design
321 Village Drive, Brentwood, CA 94513
PH: 925-382-6938 Email: gil@4dda.com
American Institute of Building Design
The Residential Specialist

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL DATE

ISSUE DATE

Gil Dominguez

RURAL FIRE WATER SUPPLY SITE PLAN

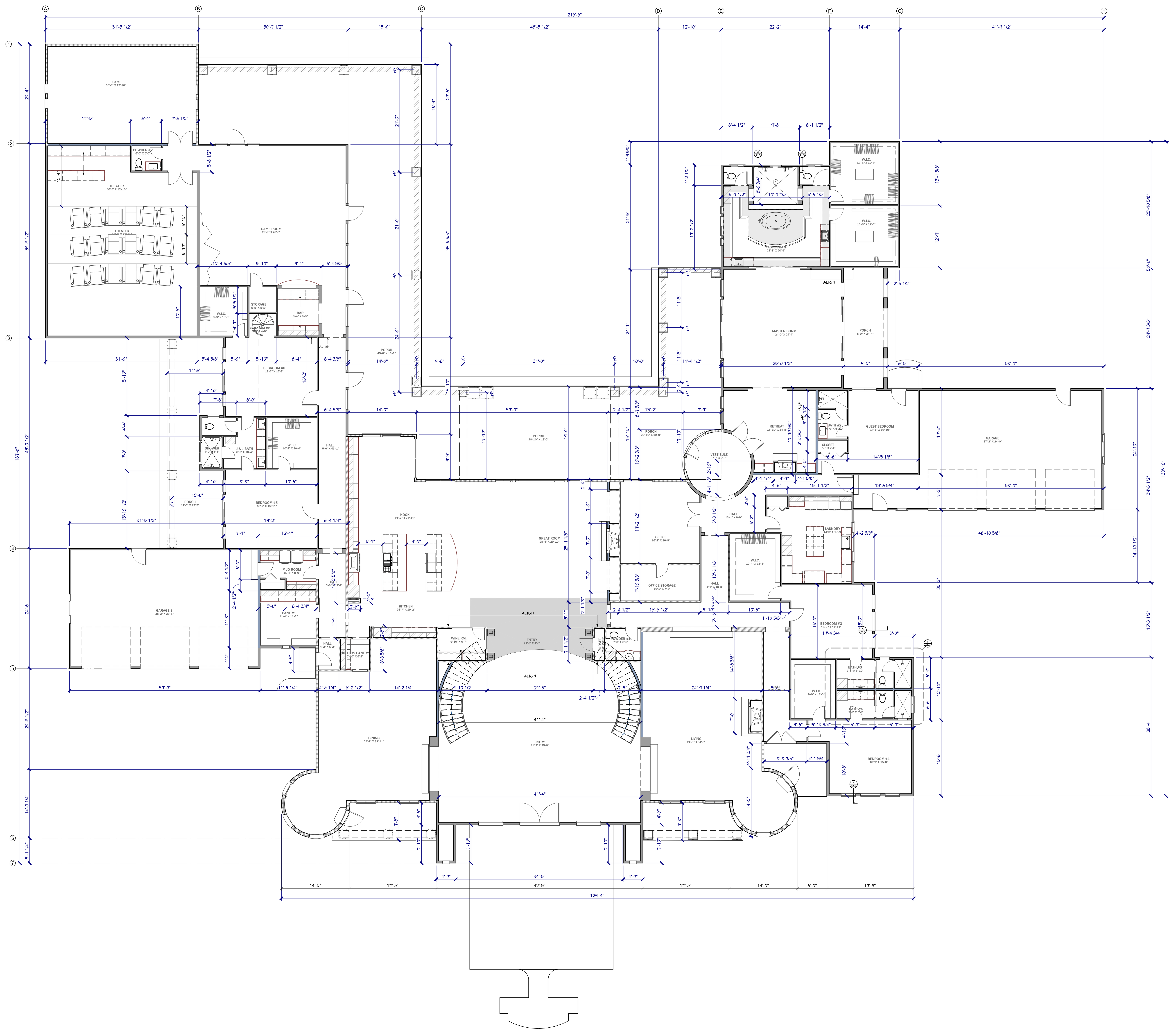
PEÑA RESIDENCE
CUSTOM TWO STORY RESIDENCE
9255 BYRON HWY. BRENTWOOD, CA 94513
APN: 015-110-011

DRAWN BY :	DATE:
GD	04/26/2024
SCALE :	JOB NUM :
NOTED	0421

SHEET

A0.2

OF



1 DIMENSION FIRST LEVEL FLOOR PLAN
SCALE: 1/8" = 1'-0"

TRUE NORTH
REFERENCE NORTH

Gil Dominguez
Custom Home & Addition Remodel Design

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL DATE

ISSUE DATE

Gil Dominguez

DIMENSION FIRST LEVEL FLOOR PLAN

PEÑA RESIDENCE

CUSTOM HOME

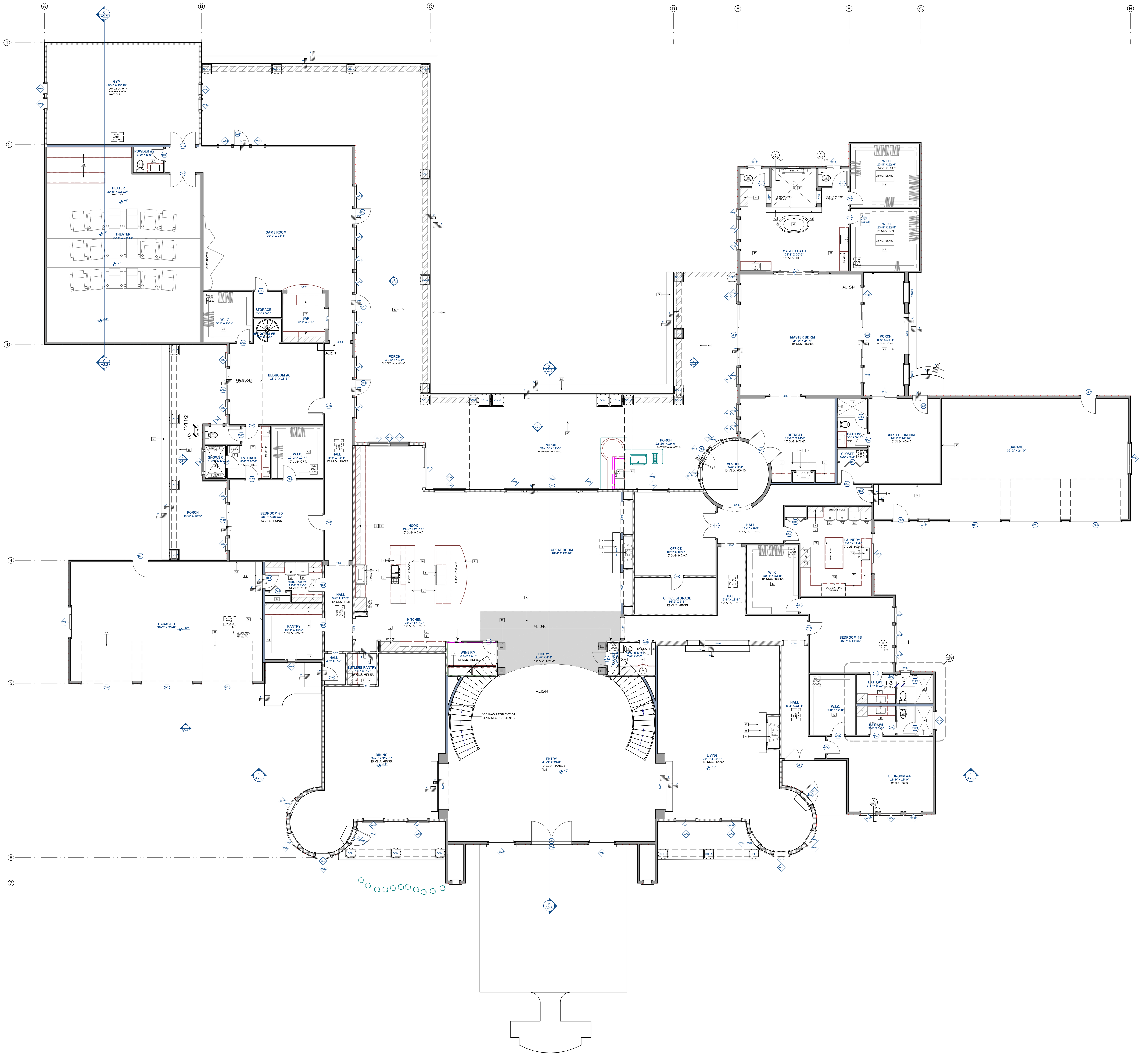
303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

DRAWN BY :	DATE:
GD	10/28/2025 04/29/2019
SCALE :	JOB NUM :
1/4" = 1'-0"	0421

SHEET

A1.0

OF



1 FIRST LEVEL OVERALL FLOOR PLAN

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

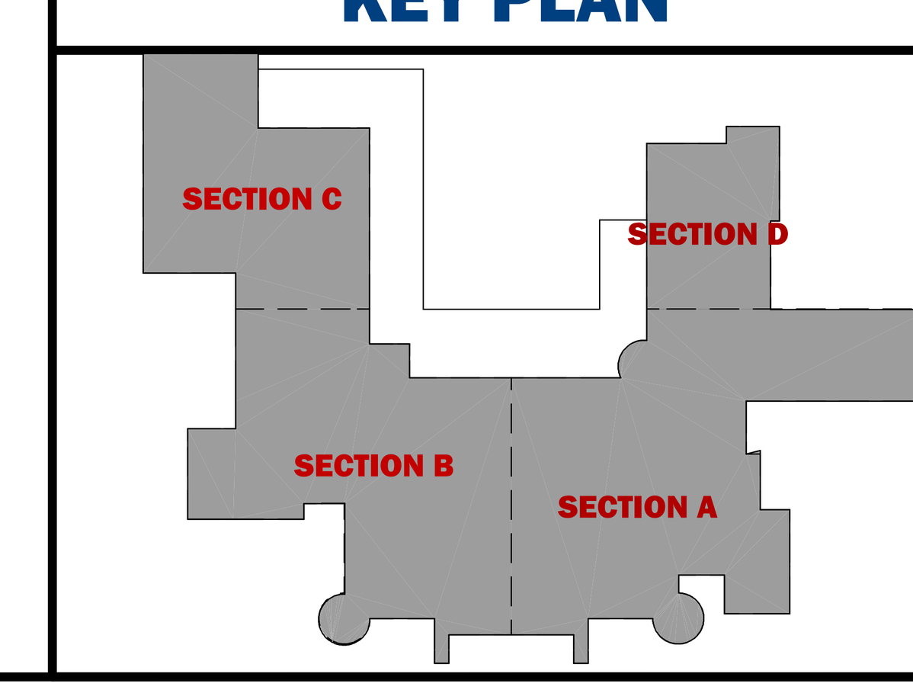
BUILDING AREA:

FIRST FLOOR	= 14,685 S.F.
SECOND FLOOR	= 3,461S.F.
TOTAL LIVING AREA	= 18,146 S.F.
GARAGE AREA:	= 1,891 S.F.
FRONT PORCH AREA	= 280 S.F.
SIDE PORCH AREA	= 445 S.F.
REAR PORCH AREA	= 3,053 S.F.
TOTAL PORCH AREA	= 3,778 S.F.
FRONT BALCONY AREA	= 254 S.F.
REAR BALCONY AREA	= 652 S.F.
TOTAL BALCONY AREA	= 906 S.F.
TOTAL BUILDING AREA	= 29,405 S.F.

COLUMN LEGEND

COL-1	24" DIAMETER x 12'-0" PRECAST - CONCRETE DORIC COLUMNS
COL-2	24" DIAMETER x 8'-0" PRECAST - CONCRETE DORIC COLUMNS
COL-3	30" DIAMETER x 18'-0" PRECAST - CONCRETE DORIC COLUMNS

KEY PLAN



Gil Dominguez
Custom Home & Addition Remodel Design
321 Village Drive, Brentwood, CA 94513
PH: 925-382-6938 Email: gil@4dda.com
American Institute of Building Design
The Residential Specialist

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL	DATE

ISSUE	DATE

Gil Dominguez

DIMENSION FIRST LEVEL FLOOR PLAN

PEÑA RESIDENCE

CUSTOM HOME

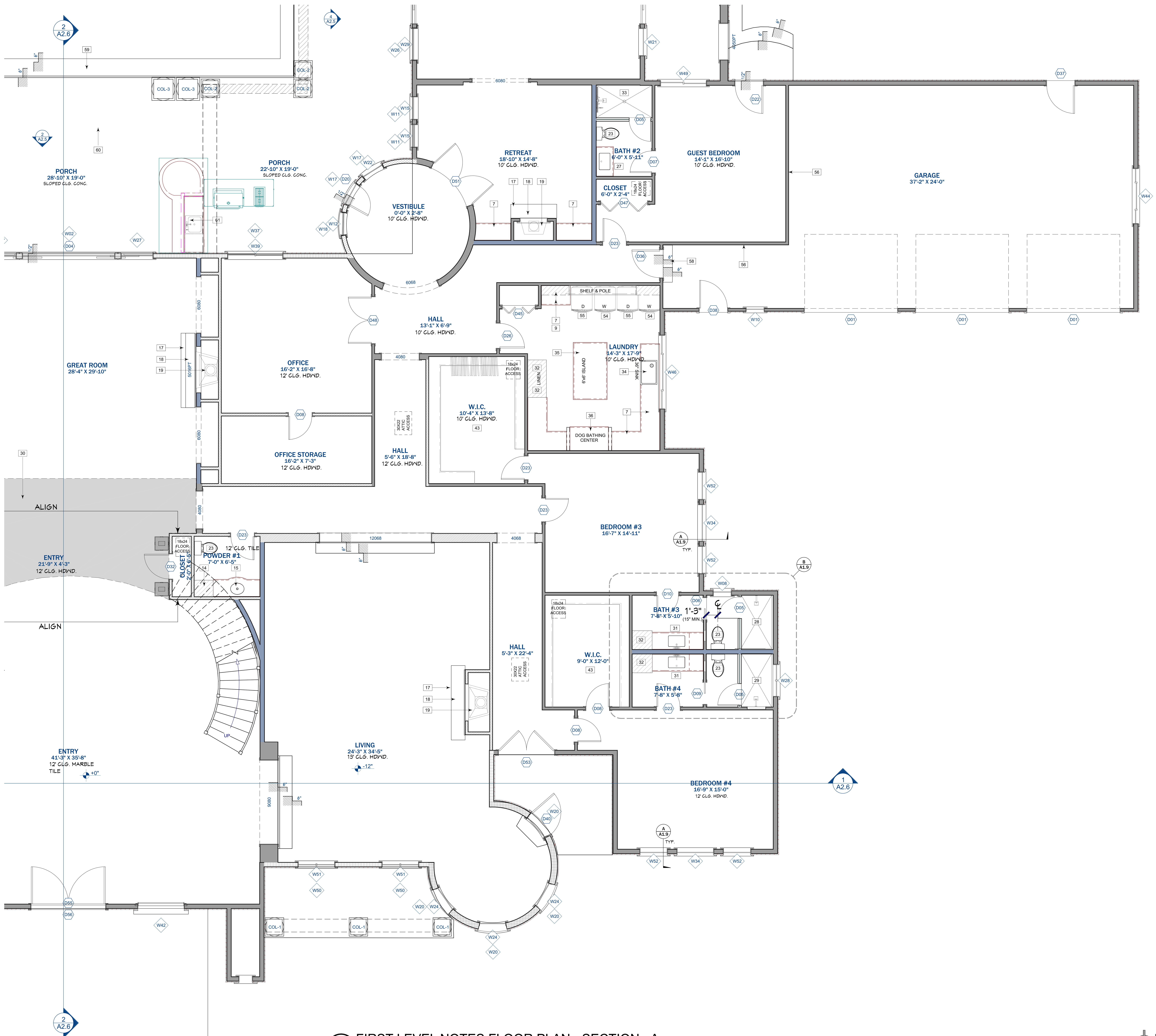
303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

DRAWN BY :	DATE:
GD	04/29/2019 10/28/2025
SCALE :	JOB NUM :
1/4" = 1'-0"	0421

SHEET

A1.1

OF

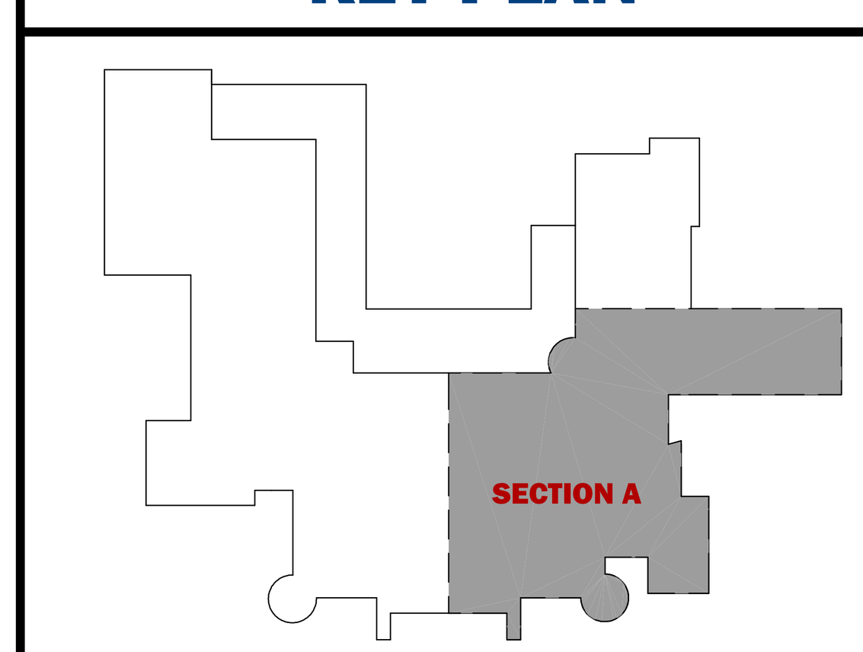


FIRST LEVEL NOTES FLOOR PLAN - SECTION A

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

FLOOR PLAN NOTES	
1	48" GAS RANGE WITH STAINLESS STEEL CANOPY HOOD
2	48" COUNTER DEPTH STAINLESS STEEL REFRIGERATOR
3	42 INCH STAINLESS STEEL SINK WITH A KITCHEN FAUCET, FLOW RATE NOT EXCEED 1.5 GPM AT 60 PSI.
4	DISH WASHER
5	24" BEVERAGE REFRIGERATORS
6	30 INCH DOUBLE OVEN WITH STORAGE ABOVE WITH PULL OUT SHELVES AND POT STORAGE DRAWER BELOW
7	BASE CABINETS WITH SOLID SURFACE COUNTER TOP 36" A.F.F.
8	CUSTOM WALL CABINETS - 34" HIGH CABINET WITH TEMP. GLASS DOORS STACKED ON 48" CABINETS (HATCHED)
9	42" HIGH WALL CABINETS (HATCHED)
10	60"X140" SOLID SURFACE ISLAND COUNTER TOP 36" A.F.F.
11	76"X140" SOLID SURFACE ISLAND COUNTER TOP 36" A.F.F.
12	16" ADJUSTABLE SHELVES
13	FLOOR TO CEILING GLASS WINE CABINETS
14	12"X27"X54" WALL CABINET ON BASE CABINET, PROVIDE 3 15-AMP. -120V DUPLEX RECEPTACLES, ONE AT REAR AND ONE ON EACH SIDE OF LOWER CABINET
15	21"X57" BOWED FRONT VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
16	18" DIA. X 126" FIBERGLASS DORIC COLUMNS WITH POST IN CENTER, SEE STRUCTURAL DRAWINGS FOR POST. (S.S.D.), TYPICAL OF 4
17	8" HIGH X 18" PRECAST CONCRETE HEARTH
18	8"X12" PRECAST CONC. MANTEL
19	ELECTRIC FACTORY BUILT FIREPLACE SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE CONDITIONS OF THE LISTING. FACTORY-BUILT FIREPLACES SHALL BE TESTED IN ACCORDANCE WITH UL 127.
20	FULL WALL VANITY WITH MAKEUP AREA, SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
21	18"X24"X90" LINEN CAB
22	48"X78" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH 2- FLOATING TILE BENCHES, STRIP DRAINS AND TILE NICHE BELOW WINDOW. (CG4.303.1.3.1 DUAL SHOWERHEADS WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
23	K-10493 MEMOIRS, CLASSIC COMFORT HEIGHT, THE COMPLETE SOLUTION ELONGATED TOILET (SHALL NOT EXCEED 1.28 GALLONS PER FLUSH, CG 4.303.1.1)
24	WROUGHT IRON SPIRAL STAIRS PER 2022 CRC R311.7.10.1
25	CUSTOM BAR CABINETS WITH SOLID SURFACE COUNTER TOPS
26	CUSTOM CABINETS WITH SOLID SURFACE COUNTER TOPS
27	21"X36" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
28	42"X70" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
29	42"X68" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
30	DROPPED SOFFIT. 10'-8" +/- FROM FINISHED FLOOR
31	21"X66" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
32	24"X24"X90" FULL HEIGHT CABINET
33	42"X72" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
34	21"X36" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL, WITH FARM HOUSE SINK. 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.) (CG 4.303.1.4.1 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.)
35	72"X72" ISLAND WITH STORAGE CABINETS ON EACH SIDE WITH SOLID SURFACE COUNTER 36" A.F.F.
36	30"X48" TILE DOG BATHING AREA 30" ABOVE FINISH FLOOR. PROVIDE SOLID SURFACE SURROUND ON ALL THREE SIDES. SURROUND SHALL EXTEND 48" ABOVE SHOWER CURD.
37	KOHLER KELSTON (K-24050-4-0) 23-3/4" RECTANGULAR PEDESTAL BATHROOM SINK (CG 4.303.1.4.1 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.)
38	92"X108"" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUNDE, WITH FLOATING TILE BENCH, STRIP DRAINS AND TILE NICHE. (CG4.303.1.3.1 DUAL SHOWERHEADS AND FIXED RAIN SHOWER HEAD WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
39	21"X102" VANITY WITH MAKEUP AREA, SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
40	21"X72" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
41	18"X42"X90" LINEN CABINET
42	12" SQ. X 66" HIGH COLUMNS ON 24" HIGH X 14" WIDE WALL, SEE INT. ELEV. A2.3
43	W.I.C. WITH CUSTOM CLOSET ORGANIZER
44	21"X30" BOWED FRONT VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
45	33"X24"X90" LINEN CAB
46	48"X72" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
47	21"X60" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
48	21"X66" VANITY WITH MAKE UP AREA AND SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL.
49	60"X88" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH 2- FLOATING TILE BENCHES, STRIP DRAINS AND TILE NICHE BELOW WINDOW. (CG4.303.1.3.1 DUAL SHOWERHEADS WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
50	21"X93" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
51	21"X33X18" HIGH BENCH CABINET WITH UPHOLSTERED CUSHION WITH STORAGE DRAWER BELOW.
52	36"X24"X90" LINEN CAB
53	20"X24" DEEP LAUNDRY SINK
54	ELECTRIC WASHING MASHING.
55	ELECTRIC OR GAS DRYER. PROVIDE SMOOTH METAL DUCT VENT TO OUTSIDE AIR PER, CMC 504.4
56	PROVIDE 5/8" TYPE - "X" 1-HR. RATED GYP. BD. ON ALL WALLS AND CEILINGS ADJACENT TO LIVING AREAS. PROVIDE R-21 INSULATION.
57	CONC. GARAGE SLAB, SLOPE TO DRAIN DECK MIN, 1/4" / 1FT.
58	CONC. STEP MIN. 10" TREAD W/ 7-3/4" MAX. RISER
59	CONC. STEP MIN. 18" TREAD W/ 7-3/4" MAX. RISER
60	CONC. PORCH, SLOPE TO DRAIN DECK MIN, 1/4" / 1FT.
61	OUTDOOR BBQ - BY OTHERS

KEY PLAN



Gil Dominguez
Custom Home & Addition Remodel Design
321 Village Drive, Brentwood, CA 94513
PH: 925-382-6938 Email: gil@4dda.com
American Institute of Building Design
The Residential Specialist

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL	DATE

ISSUE	DATE

Gil Dominguez

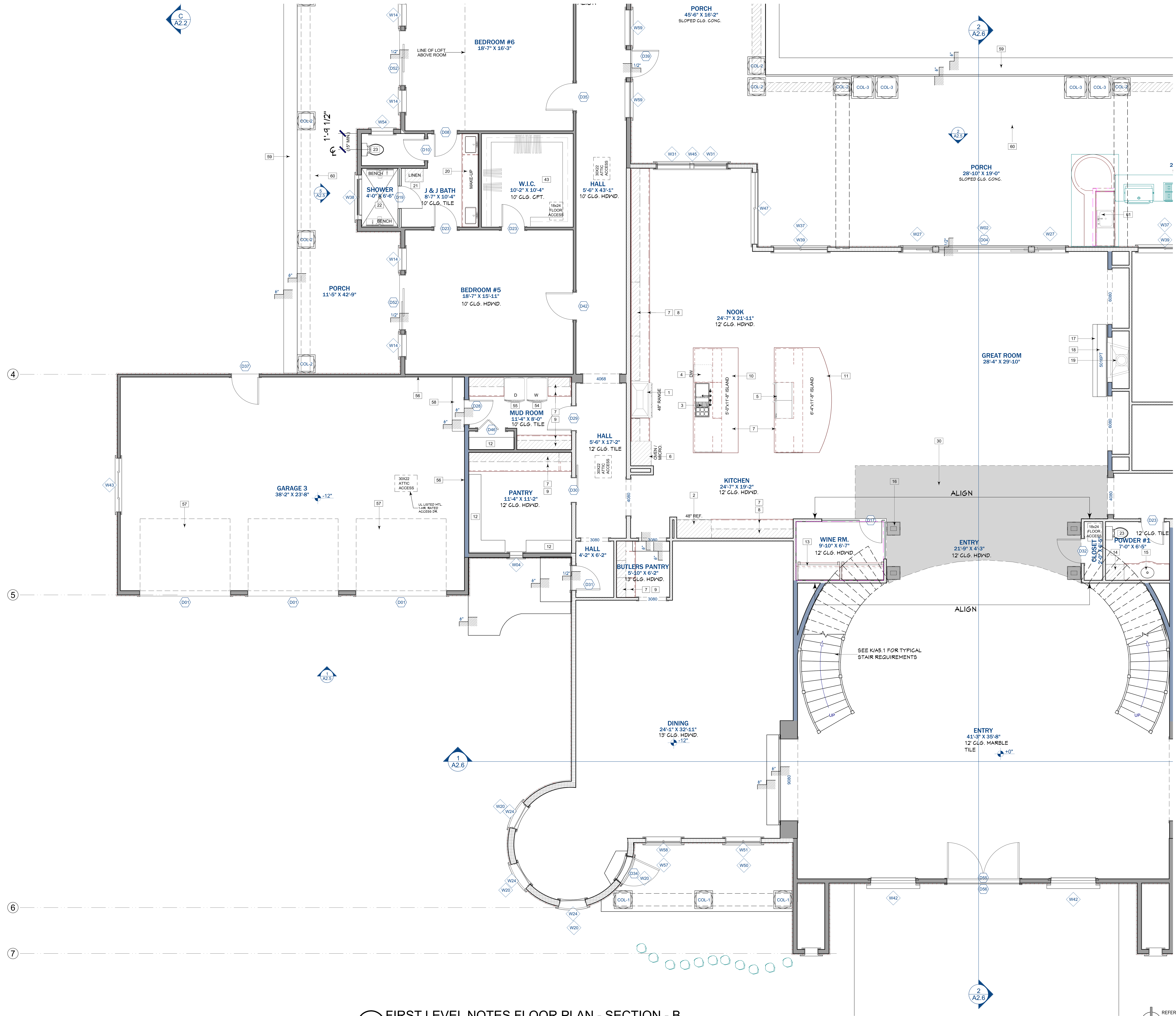
FIRST LEVEL NOTES FLOOR PLAN - SECTION - A

PEÑA RESIDENCE
CUSTOM HOME

303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

DRAWN BY :	DATE:
GD	10/28/2025
SCALE :	JOB NUM :
NOTED	0421

SHEET
A1.2
OF



PORCH
45'-6" X 16'-2"
SLOPED CLG. CONC.
BEDROOM #6
18'-7" X 16'-3"
LINE OF LOFT ABOVE ROOM
SHOWER
4'-0" X 6'-6"
BENCH
LINEN
J & J BATH
8'-7" X 10'-4"
10' CLG. TILE
MAKE-UP
W.I.C.
10'-2" X 10'-4"
10' CLG. CPT.
18x24 FLOOR ACCESS
HALL
5'-6" X 43'-1"
10' CLG. HDWD.
30X22 ATTIC ACCESS
PORCH
28'-10" X 19'-0"
SLOPED CLG. CONC.
PORCH
11'-5" X 42'-9"
BEDROOM #5
18'-7" X 15'-11"
10' CLG. HDWD.
NOOK
24'-7" X 21'-11"
12' CLG. HDWD.
GREAT ROOM
28'-4" X 29'-10"
48" RANGE
5'-0"X11'-8" ISLAND
6'-4"X11'-8" ISLAND
OVEN / MICRO.
DW
MUD ROOM
11'-4" X 8'-0"
10' CLG. TILE
HALL
5'-6" X 17'-2"
12' CLG. TILE
GARAGE 3
38'-2" X 23'-8"
30X22 ATTIC ACCESS
UL LISTED MTL. 1-HR. RATED ACCESS DR.
PANTRY
11'-4" X 11'-2"
12' CLG. HDWD.
KITCHEN
24'-7" X 19'-2"
12' CLG. HDWD.
48" REF.
ALIGN
WINE RM.
9'-10" X 6'-7"
12' CLG. HDWD
ENTRY
21'-9" X 4'-3"
12' CLG. HDWD.
CLOSET
2'-0" X 6'-5"
POWDER #1
7'-0" X 6'-5"
12' CLG. TILE
HALL
4'-2" X 6'-2"
BUTLERS PANTRY
5'-10" X 6'-2"
13' CLG. HDWD.
SEE K/A5.1 FOR TYPICAL STAIR REQUIREMENTS
DINING
24'-1" X 32'-11"
13' CLG. HDWD.
ENTRY
41'-3" X 35'-8"
12' CLG. MARBLE TILE
TRUE NORTH
REFERENCE NORTH

1 FIRST LEVEL NOTES FLOOR PLAN - SECTION - B

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

FLOOR PLAN NOTES

1	48" GAS RANGE WITH STAINLESS STEEL CANOPY HOOD
2	48" COUNTER DEPTH STAINLESS STEEL REFRIGERATOR
3	42 INCH STAINLESS STEEL SINK WITH A KITCHEN FAUCET, FLOW RATE NOT EXCEED 1.5 GPM AT 60 PSI.
4	DISH WASHER
5	24" BEVERAGE REFRIGERATORS
6	30 INCH DOUBLE OVEN WITH STORAGE ABOVE WITH PULL OUT SHELVES AND POT STORAGE DRAWER BELOW
7	BASE CABINETS WITH SOLID SURFACE COUNTER TOP 36" A.F.F.
8	CUSTOM WALL CABINETS - 34" HIGH CABINET WITH TEMP. GLASS DOORS STACKED ON 48" CABINETS (HATCHED)
9	42" HIGH WALL CABINETS (HATCHED)
10	60"X140" SOLID SURFACE ISLAND COUNTER TOP 36" A.F.F.
11	76"X140" SOLID SURFACE ISLAND COUNTER TOP 36" A.F.F.
12	16" ADJUSTABLE SHELVES
13	FLOOR TO CEILING GLASS WINE CABINETS
14	12"X27"X54" WALL CABINET ON BASE CABINET, PROVIDE 3 15-AMP. -120V DUPLEX RECEPTACLES, ONE AT REAR AND ONE ON EACH SIDE OF LOWER CABINET
15	21"X57" BOWED FRONT VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
16	18" DIA. X 126" FIBERGLASS DORIC COLUMNS WITH POST IN CENTER, SEE STRUCTURAL DRAWINGS FOR POST. (S.S.D.), TYPICAL OF 4
17	8" HIGH X 18" PRECAST CONCRETE HEARTH
18	8"X12" PRECAST CONC. MANTEL
19	ELECTRIC FACTORY BUILT FIREPLACE SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE CONDITIONS OF THE LISTING. FACTORY-BUILT FIREPLACES SHALL BE TESTED IN ACCORDANCE WITH UL 127.
20	FULL WALL VANITY WITH MAKEUP AREA, SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
21	18"X24"X90" LINEN CAB
22	48"X78" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH 2- FLOATING TILE BENCHES, STRIP DRAINS AND TILE NICHE BELOW WINDOW. (CG4.303.1.3.1 DUAL SHOWERHEADS WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
23	K-10493 MEMOIRS, CLASSIC COMFORT HEIGHT, THE COMPLETE SOLUTION ELONGATED TOILET (SHALL NOT EXCEED 1.28 GALLONS PER FLUSH, CG 4.303.1.1)
24	WROUGHT IRON SPIRAL STAIRS PER 2022 CRC R311.7.10.1
25	CUSTOM BAR CABINETS WITH SOLID SURFACE COUNTER TOPS
26	CUSTOM CABINETS WITH SOLID SURFACE COUNTER TOPS
27	21"X36" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
28	42"X70" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
29	42"X68" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
30	DROPPED SOFFIT. 10'-8" +/- FROM FINISHED FLOOR
31	21"X66" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
32	24"X24"X90" FULL HEIGHT CABINET
33	42"X72" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
34	21"X36" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL, WITH FARM HOUSE SINK. 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.) (CG 4.303.1.4.1 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.)
35	72"X72" ISLAND WITH STORAGE CABINETS ON EACH SIDE WITH SOLID SURFACE COUNTER 36" A.F.F.
36	30"X48" TILE DOG BATHING AREA 30" ABOVE FINISH FLOOR. PROVIDE SOLID SURFACE SURROUND ON ALL THREE SIDES. SURROUND SHALL EXTEND 48" ABOVE SHOWER CURD.
37	KOHLER KELSTON (K-24050-4-0) 23-3/4" RECTANGULAR PEDESTAL BATHROOM SINK (CG 4.303.1.4.1 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.)
38	92"X108"" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUNDE, WITH FLOATING TILE BENCH, STRIP DRAINS AND TILE NICHE. (CG4.303.1.3.1 DUAL SHOWERHEADS AND FIXED RAIN SHOWER HEAD WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
39	21"X102" VANITY WITH MAKEUP AREA, SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
40	21"X72" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
41	18"X42"X90" LINEN CABINET
42	12" SQ. X 66" HIGH COLUMNS ON 24" HIGH X 14" WIDE WALL, SEE INT. ELEV. A2.3
43	W.I.C. WITH CUSTOM CLOSET ORGANIZER
44	21"X30" BOWED FRONT VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
45	33"X24"X90" LINEN CAB
46	48"X72" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
47	21"X60" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
48	21"X66" VANITY WITH MAKE UP AREA AND SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL.
49	60"X88" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH 2- FLOATING TILE BENCHES, STRIP DRAINS AND TILE NICHE BELOW WINDOW. (CG4.303.1.3.1 DUAL SHOWERHEADS WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
50	21"X93" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
51	21"X33X18" HIGH BENCH CABINET WITH UPHOLSTERED CUSHION WITH STORAGE DRAWER BELOW.
52	36"X24"X90" LINEN CAB
53	20"X24" DEEP LAUNDRY SINK
54	ELECTRIC WASHING MASHING.
55	ELECTRIC OR GAS DRYER. PROVIDE SMOOTH METAL DUCT VENT TO OUTSIDE AIR PER, CMC 504.4
56	PROVIDE 5/8" TYPE - "X" 1-HR. RATED GYP. BD. ON ALL WALLS AND CEILINGS ADJACENT TO LIVING AREAS. PROVIDE R-21 INSULATION.
57	CONC. GARAGE SLAB, SLOPE TO DRAIN DECK MIN, 1/4" / 1FT.
58	CONC. STEP MIN. 10" TREAD W/ 7-3/4" MAX. RISER
59	CONC. STEP MIN. 18" TREAD W/ 7-3/4" MAX. RISER
60	CONC. PORCH, SLOPE TO DRAIN DECK MIN, 1/4" / 1FT.
61	OUTDOOR BBQ - BY OTHERS

Gil Dominguez
Custom Home & Addition Remodel Design

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL — DATE

ISSUE — DATE

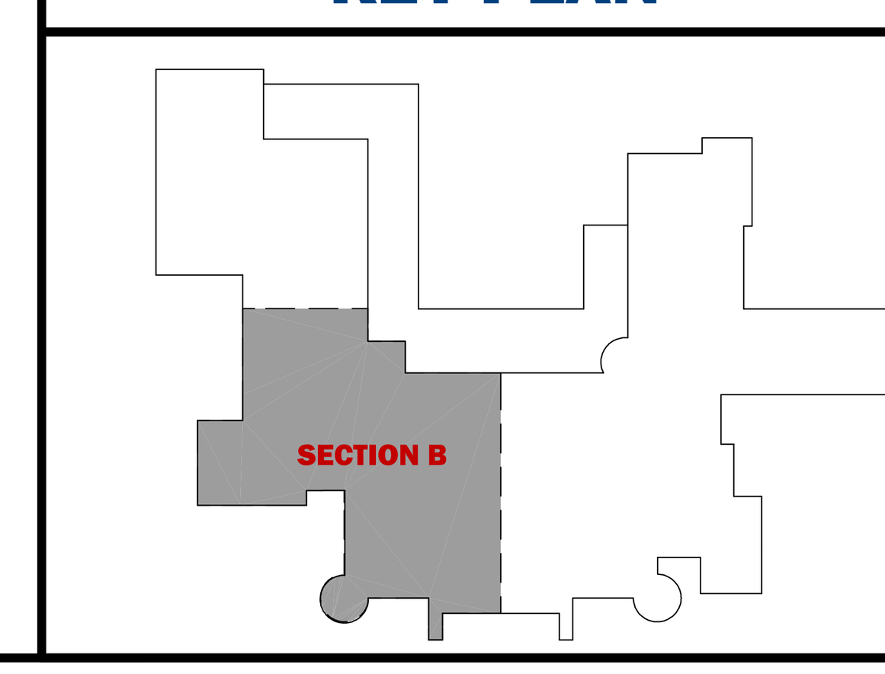
Gil Dominguez

FIRST LEVEL NOTES FLOOR PLAN - SECTION - B

PEÑA RESIDENCE
CUSTOM HOME

303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

KEY PLAN

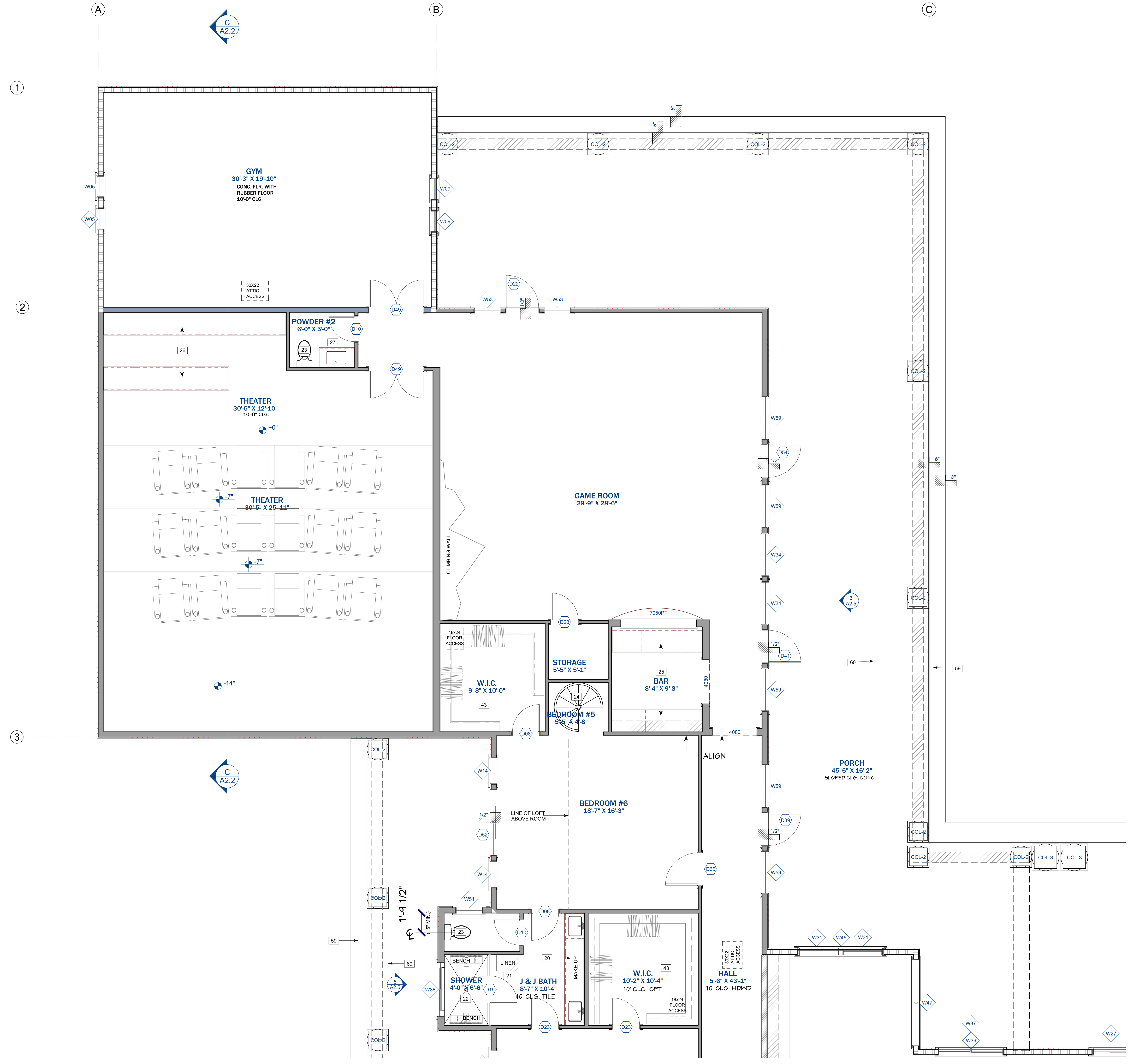


DRAWN BY : GD	DATE: 10/28/2025
SCALE : NOTED	JOB NUM : 0421

SHEET

A1.3

OF



FIRST LEVEL NOTES FLOOR PLAN - SECTION - C
SCALE: 1/4" = 1'-0"

FLOOR PLAN NOTES	
1	48" GAS RANGE WITH STAINLESS STEEL CANOPY HOOD
2	48" COUNTER DEPTH STAINLESS STEEL REFRIGERATOR
3	42 INCH STAINLESS STEEL SINK WITH A KITCHEN FAUCET, FLOW RATE NOT EXCEED 1.5 GPM AT 60 PSI.
4	DISH WASHER
5	24" BEVERAGE REFRIGERATORS
6	30 INCH DOUBLE OVEN WITH STORAGE ABOVE WITH PULL OUT SHELVES AND POT STORAGE DRAWER BELOW
7	BASE CABINETS WITH SOLID SURFACE COUNTER TOP 36" A.F.F.
8	CUSTOM WALL CABINETS - 34" HIGH CABINET WITH TEMP. GLASS DOORS STACKED ON 48" CABINETS (HATCHED)
9	42" HIGH WALL CABINETS (HATCHED)
10	60"X140" SOLID SURFACE ISLAND COUNTER TOP 36" A.F.F.
11	76"X140" SOLID SURFACE ISLAND COUNTER TOP 36" A.F.F.
12	16" ADJUSTABLE SHELVES
13	FLOOR TO CEILING GLASS WINE CABINETS
14	12"X27"X54" WALL CABINET ON BASE CABINET, PROVIDE 3 15-AMP. -120V DUPLEX RECEPTACLES, ONE AT REAR AND ONE ON EACH SIDE OF LOWER CABINET
15	21"X57" BOWED FRONT VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
16	18" DIA. X 126" FIBERGLASS DORIC COLUMNS WITH POST IN CENTER, SEE STRUCTURAL DRAWINGS FOR POST. (S.S.D.), TYPICAL OF 4
17	8" HIGH X 18" PRECAST CONCRETE HEARTH
18	8"X12" PRECAST CONC. MANTEL
19	ELECTRIC FACTORY BUILT FIREPLACE SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE CONDITIONS OF THE LISTING. FACTORY-BUILT FIREPLACES SHALL BE TESTED IN ACCORDANCE WITH UL 127.
20	FULL WALL VANITY WITH MAKEUP AREA, SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
21	18"X24"X90" LINEN CAB
22	48"X78" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH 2- FLOATING TILE BENCHES, STRIP DRAINS AND TILE NICHE BELOW WINDOW. (CG4.303.1.3.1 DUAL SHOWERHEADS WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
23	K-10493 MEMOIRS, CLASSIC COMFORT HEIGHT, THE COMPLETE SOLUTION ELONGATED TOILET (SHALL NOT EXCEED 1.28 GALLONS PER FLUSH, CG 4.303.1.1)
24	WROUGHT IRON SPIRAL STAIRS PER 2022 CRC R311.7.10.1
25	CUSTOM BAR CABINETS WITH SOLID SURFACE COUNTER TOPS
26	CUSTOM CABINETS WITH SOLID SURFACE COUNTER TOPS
27	21"X36" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
28	42"X70" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
29	42"X68" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
30	DROPPED SOFFIT. 10'-8" +/- FROM FINISHED FLOOR
31	21"X66" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
32	24"X24"X90" FULL HEIGHT CABINET
33	42"X72" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
34	21"X36" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL, WITH FARM HOUSE SINK. 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.) (CG 4.303.1.4.1 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.)
35	72"X72" ISLAND WITH STORAGE CABINETS ON EACH SIDE WITH SOLID SURFACE COUNTER 36" A.F.F.
36	30"X48" TILE DOG BATHING AREA 30" ABOVE FINISH FLOOR. PROVIDE SOLID SURFACE SURROUND ON ALL THREE SIDES. SURROUND SHALL EXTEND 48" ABOVE SHOWER CURD.
37	KOHLER KELSTON (K-24050-4-0) 23-3/4" RECTANGULAR PEDESTAL BATHROOM SINK (CG 4.303.1.4.1 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.)
38	92"X108"" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUNDE, WITH FLOATING TILE BENCH, STRIP DRAINS AND TILE NICHE. (CG4.303.1.3.1 DUAL SHOWERHEADS AND FIXED RAIN SHOWER HEAD WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
39	21"X102" VANITY WITH MAKEUP AREA, SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
40	21"X72" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
41	18"X42"X90" LINEN CABINET
42	12" SQ. X 66" HIGH COLUMNS ON 24" HIGH X 14" WIDE WALL, SEE INT. ELEV. A2.3
43	W.I.C. WITH CUSTOM CLOSET ORGANIZER
44	21"X30" BOWED FRONT VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
45	33"X24"X90" LINEN CAB
46	48"X72" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
47	21"X60" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
48	21"X66" VANITY WITH MAKE UP AREA AND SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL.
49	60"X88" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH 2- FLOATING TILE BENCHES, STRIP DRAINS AND TILE NICHE BELOW WINDOW. (CG4.303.1.3.1 DUAL SHOWERHEADS WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
50	21"X93" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
51	21"X33X18" HIGH BENCH CABINET WITH UPHOLSTERED CUSHION WITH STORAGE DRAWER BELOW.
52	36"X24"X90" LINEN CAB
53	20"X24" DEEP LAUNDRY SINK
54	ELECTRIC WASHING MASHING.
55	ELECTRIC OR GAS DRYER. PROVIDE SMOOTH METAL DUCT VENT TO OUTSIDE AIR PER, CMC 504.4
56	PROVIDE 5/8" TYPE - "X" 1-HR. RATED GYP. BD. ON ALL WALLS AND CEILINGS ADJACENT TO LIVING AREAS. PROVIDE R-21 INSULATION.
57	CONC. GARAGE SLAB, SLOPE TO DRAIN DECK MIN, 1/4" / 1FT.
58	CONC. STEP MIN. 10" TREAD W/ 7-3/4" MAX. RISER
59	CONC. STEP MIN. 18" TREAD W/ 7-3/4" MAX. RISER
60	CONC. PORCH, SLOPE TO DRAIN DECK MIN, 1/4" / 1FT.
61	OUTDOOR BBQ - BY OTHERS

Gil Dominguez
Custom Home & Addition Remodel Design
321 Village Drive, Brentwood, CA 94513
PH: 925-382-6938 Email: gil@4dda.com
American Institute of Building Design
The Residential Specialist

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

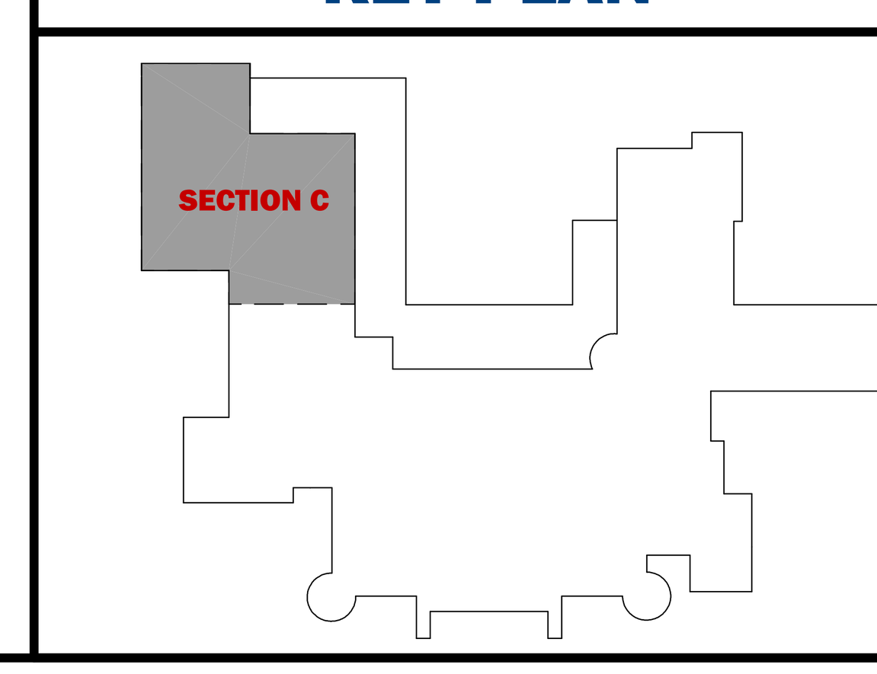
SUBMITTAL	DATE

ISSUE	DATE

Gil Dominguez

FIRST LEVEL NOTES FLOOR PLAN - SECTION - C

KEY PLAN



REFERENCE NORTH
TRUE NORTH

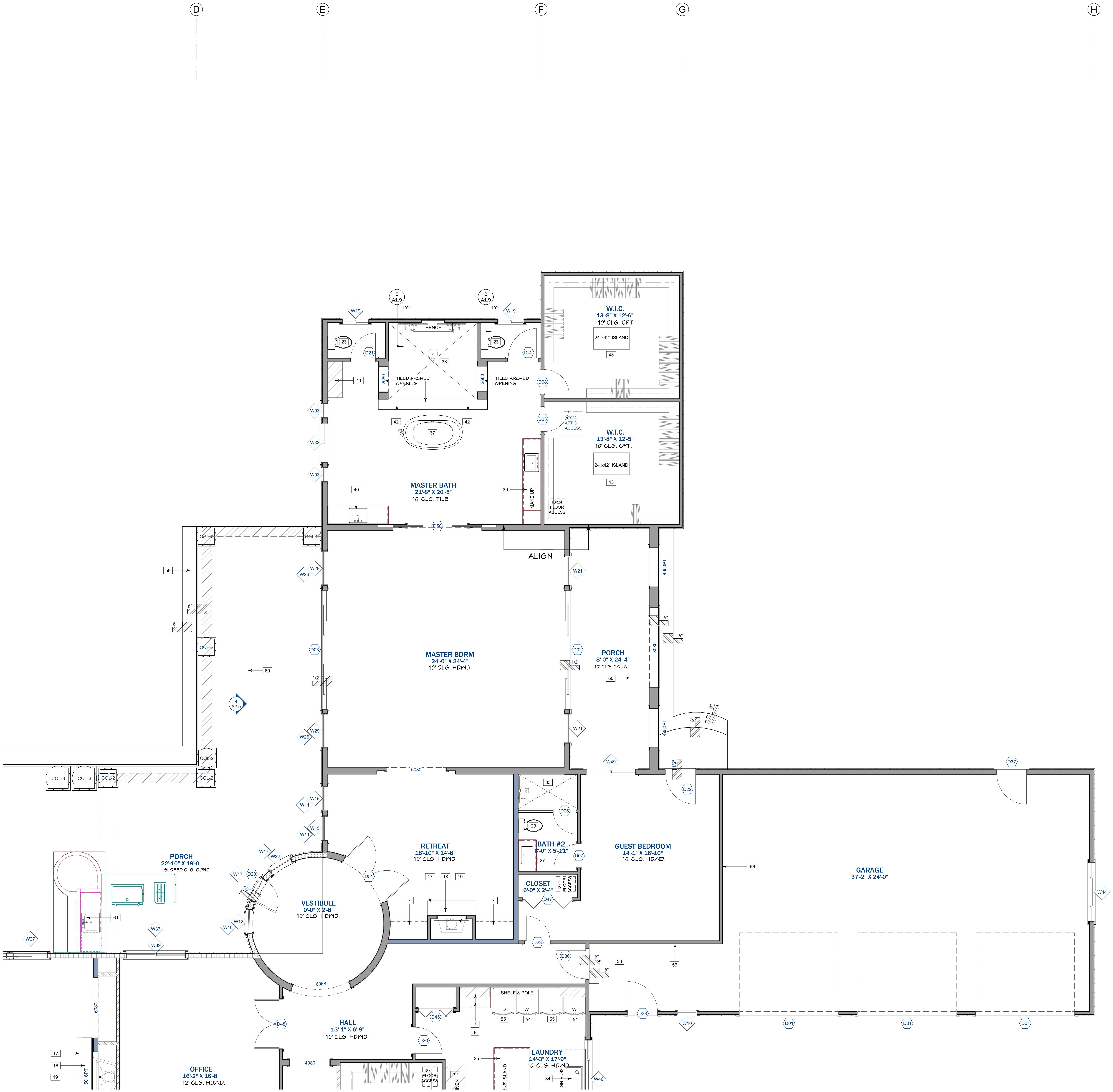
PEÑA RESIDENCE
CUSTOM HOME

303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

DRAWN BY :	DATE:
GD	10/28/2025
SCALE :	JOB NUM :
NOTED	0421

SHEET
A1.4
OF

2019



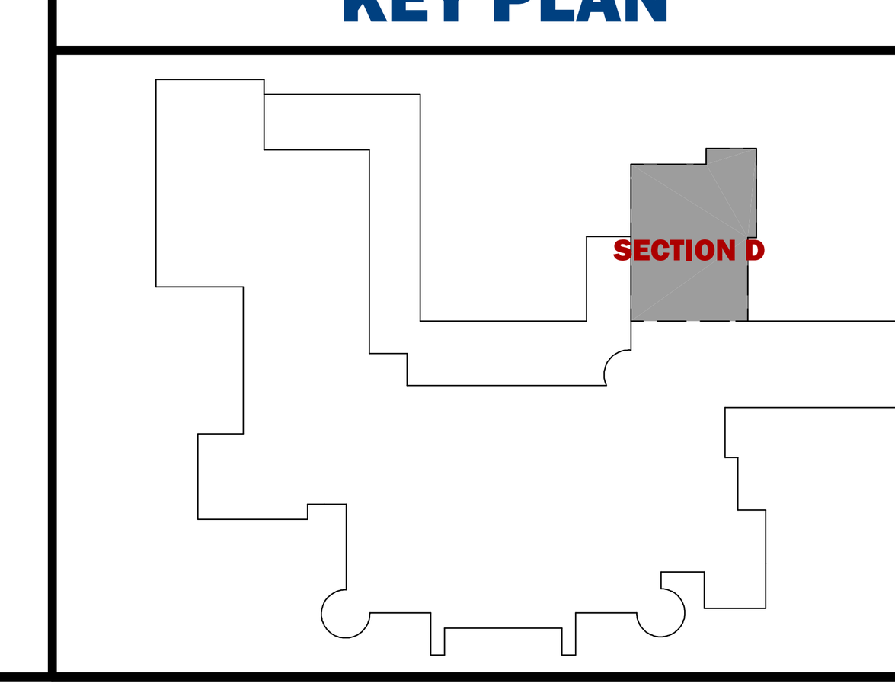
FIRST LEVEL NOTES FLOOR PLAN - SECTION - D

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

FLOOR PLAN NOTES

1	48" GAS RANGE WITH STAINLESS STEEL CANOPY HOOD
2	48" COUNTER DEPTH STAINLESS STEEL REFRIGERATOR
3	42 INCH STAINLESS STEEL SINK WITH A KITCHEN FAUCET, FLOW RATE NOT EXCEED 1.5 GPM AT 60 PSI.
4	DISH WASHER
5	24" BEVERAGE REFRIGERATORS
6	30 INCH DOUBLE OVEN WITH STORAGE ABOVE WITH PULL OUT SHELVES AND POT STORAGE DRAWER BELOW
7	BASE CABINETS WITH SOLID SURFACE COUNTER TOP 36" A.F.F.
8	CUSTOM WALL CABINETS - 34" HIGH CABINET WITH TEMP. GLASS DOORS STACKED ON 48" CABINETS (HATCHED)
9	42" HIGH WALL CABINETS (HATCHED)
10	60"X140" SOLID SURFACE ISLAND COUNTER TOP 36" A.F.F.
11	76"X140" SOLID SURFACE ISLAND COUNTER TOP 36" A.F.F.
12	16" ADJUSTABLE SHELVES
13	FLOOR TO CEILING GLASS WINE CABINETS
14	12"X27"X54" WALL CABINET ON BASE CABINET, PROVIDE 3 15-AMP. -120V DUPLEX RECEPTACLES, ONE AT REAR AND ONE ON EACH SIDE OF LOWER CABINET
15	21"X57" BOWED FRONT VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
16	18" DIA. X 126" FIBERGLASS DORIC COLUMNS WITH POST IN CENTER, SEE STRUCTURAL DRAWINGS FOR POST. (S.S.D.), TYPICAL OF 4
17	8" HIGH X 18" PRECAST CONCRETE HEARTH
18	8"X12" PRECAST CONC. MANTEL
19	ELECTRIC FACTORY BUILT FIREPLACE SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE CONDITIONS OF THE LISTING. FACTORY-BUILT FIREPLACES SHALL BE TESTED IN ACCORDANCE WITH UL 127.
20	FULL WALL VANITY WITH MAKEUP AREA, SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
21	18"X24"X90" LINEN CAB
22	48"X78" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH 2- FLOATING TILE BENCHES, STRIP DRAINS AND TILE NICHE BELOW WINDOW. (CG4.303.1.3.1 DUAL SHOWERHEADS WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
23	K-10493 MEMOIRS, CLASSIC COMFORT HEIGHT, THE COMPLETE SOLUTION ELONGATED TOILET (SHALL NOT EXCEED 1.28 GALLONS PER FLUSH, CG 4.303.1.1)
24	WROUGHT IRON SPIRAL STAIRS PER 2022 CRC R311.7.10.1
25	CUSTOM BAR CABINETS WITH SOLID SURFACE COUNTER TOPS
26	CUSTOM CABINETS WITH SOLID SURFACE COUNTER TOPS
27	21"X36" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
28	42"X70" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
29	42"X68" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
30	DROPPED SOFFIT. 10'-8" +/- FROM FINISHED FLOOR
31	21"X66" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
32	24"X24"X90" FULL HEIGHT CABINET
33	42"X72" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
34	21"X36" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL, WITH FARM HOUSE SINK. 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.) (CG 4.303.1.4.1 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.)
35	72"X72" ISLAND WITH STORAGE CABINETS ON EACH SIDE WITH SOLID SURFACE COUNTER 36" A.F.F.
36	30"X48" TILE DOG BATHING AREA 30" ABOVE FINISH FLOOR. PROVIDE SOLID SURFACE SURROUND ON ALL THREE SIDES. SURROUND SHALL EXTEND 48" ABOVE SHOWER CURD.
37	KOHLER KELSTON (K-24050-4-0) 23-3/4" RECTANGULAR PEDESTAL BATHROOM SINK (CG 4.303.1.4.1 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.)
38	92"X108"" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUNDE, WITH FLOATING TILE BENCH, STRIP DRAINS AND TILE NICHE. (CG4.303.1.3.1 DUAL SHOWERHEADS AND FIXED RAIN SHOWER HEAD WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
39	21"X102" VANITY WITH MAKEUP AREA, SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
40	21"X72" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
41	18"X42"X90" LINEN CABINET
42	12" SQ. X 66" HIGH COLUMNS ON 24" HIGH X 14" WIDE WALL, SEE INT. ELEV. A2.3
43	W.I.C. WITH CUSTOM CLOSET ORGANIZER
44	21"X30" BOWED FRONT VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
45	33"X24"X90" LINEN CAB
46	48"X72" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
47	21"X60" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
48	21"X66" VANITY WITH MAKE UP AREA AND SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL.
49	60"X88" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH 2- FLOATING TILE BENCHES, STRIP DRAINS AND TILE NICHE BELOW WINDOW. (CG4.303.1.3.1 DUAL SHOWERHEADS WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
50	21"X93" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
51	21"X33X18" HIGH BENCH CABINET WITH UPHOLSTERED CUSHION WITH STORAGE DRAWER BELOW.
52	36"X24"X90" LINEN CAB
53	20"X24" DEEP LAUNDRY SINK
54	ELECTRIC WASHING MASHING.
55	ELECTRIC OR GAS DRYER. PROVIDE SMOOTH METAL DUCT VENT TO OUTSIDE AIR PER, CMC 504.4
56	PROVIDE 5/8" TYPE - "X" 1-HR. RATED GYP. BD. ON ALL WALLS AND CEILINGS ADJACENT TO LIVING AREAS. PROVIDE R-21 INSULATION.
57	CONC. GARAGE SLAB, SLOPE TO DRAIN DECK MIN, 1/4" / 1FT.
58	CONC. STEP MIN. 10" TREAD W/ 7-3/4" MAX. RISER
59	CONC. STEP MIN. 18" TREAD W/ 7-3/4" MAX. RISER
60	CONC. PORCH, SLOPE TO DRAIN DECK MIN, 1/4" / 1FT.
61	OUTDOOR BBQ - BY OTHERS

KEY PLAN



Gil Dominguez
Custom Home & Addition Remodel Design

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL	DATE

ISSUE	DATE

Gil Dominguez

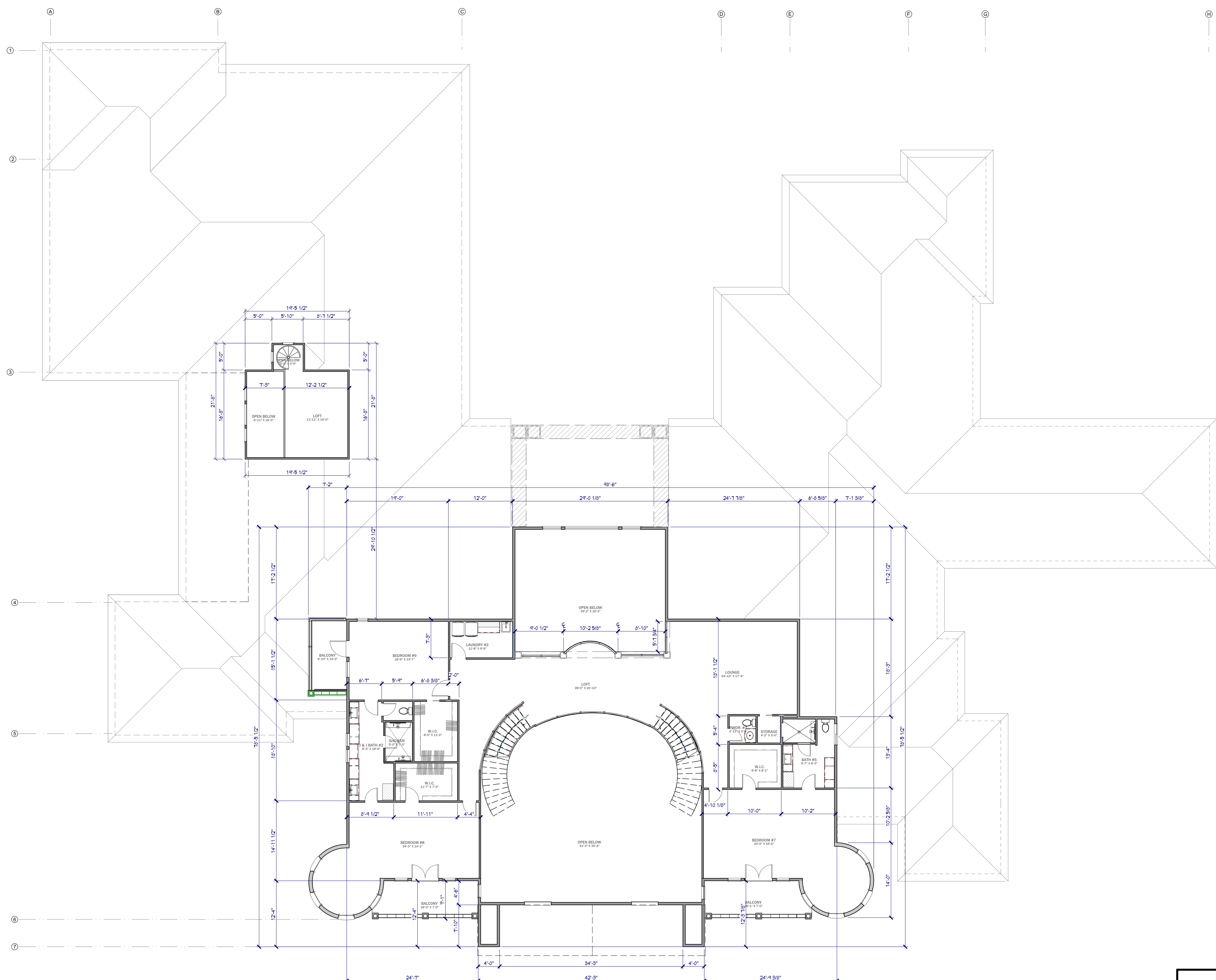
FIRST LEVEL NOTES FLOOR PLAN - SECTION - D

PEÑA RESIDENCE
CUSTOM HOME

303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

DRAWN BY :	DATE:
GD	10/28/2025
SCALE :	JOB NUM :
NOTED	0421

SHEET
A1.5
OF



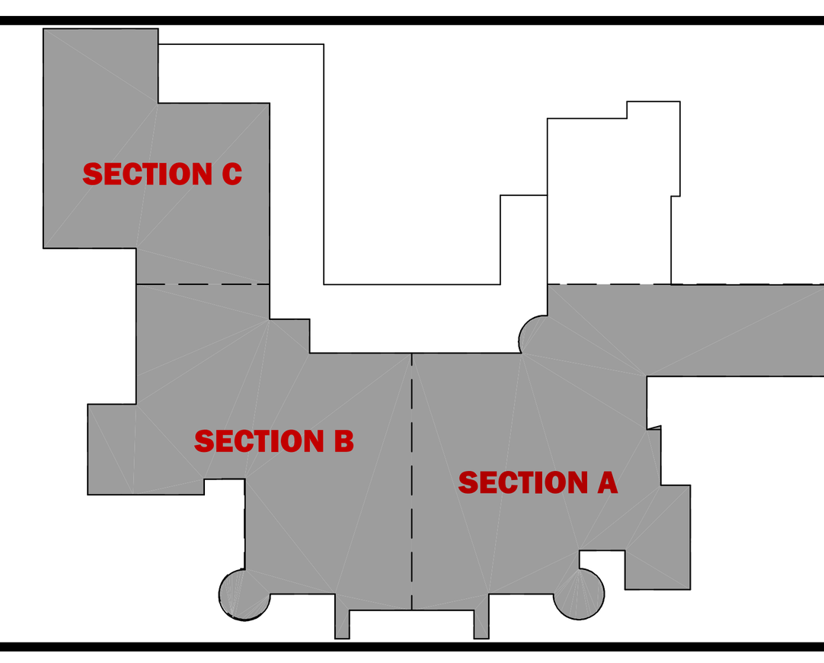
1 DIMENSION SECOND LEVEL FLOOR PLAN

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

TRUE NORTH

REFERENCE NORTH

KEY PLAN



Gil Dominguez
Custom Home & Addition Remodel Design

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL	DATE

ISSUE	DATE

Gil Dominguez

DIMENSION SECOND LEVEL FLOOR PLAN

PEÑA RESIDENCE

CUSTOM HOME

303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

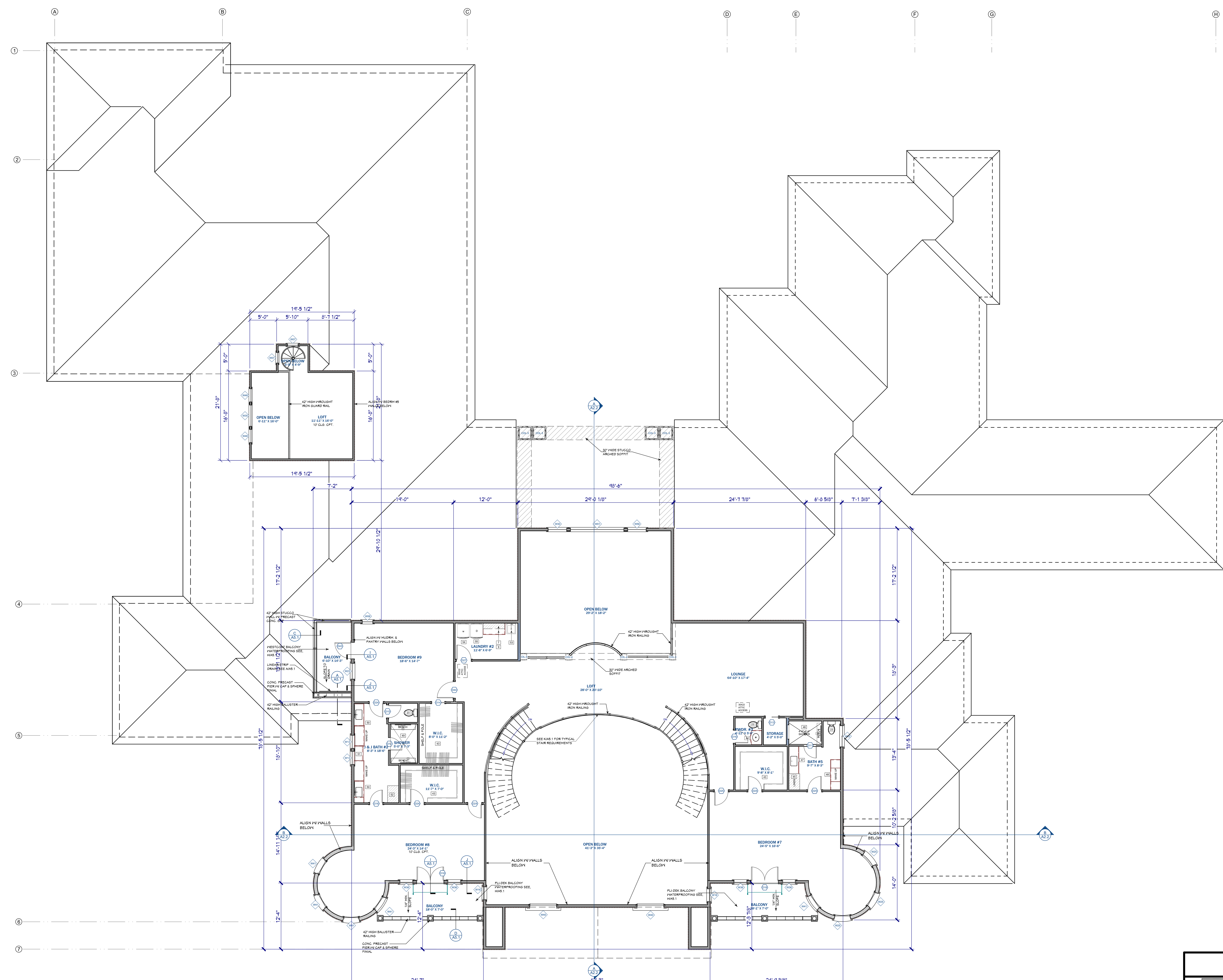
DRAWN BY :	DATE:
GD	10/28/2025
SCALE :	JOB NUM :
NOTED	0421

SHEET

A1.6

OF

2019



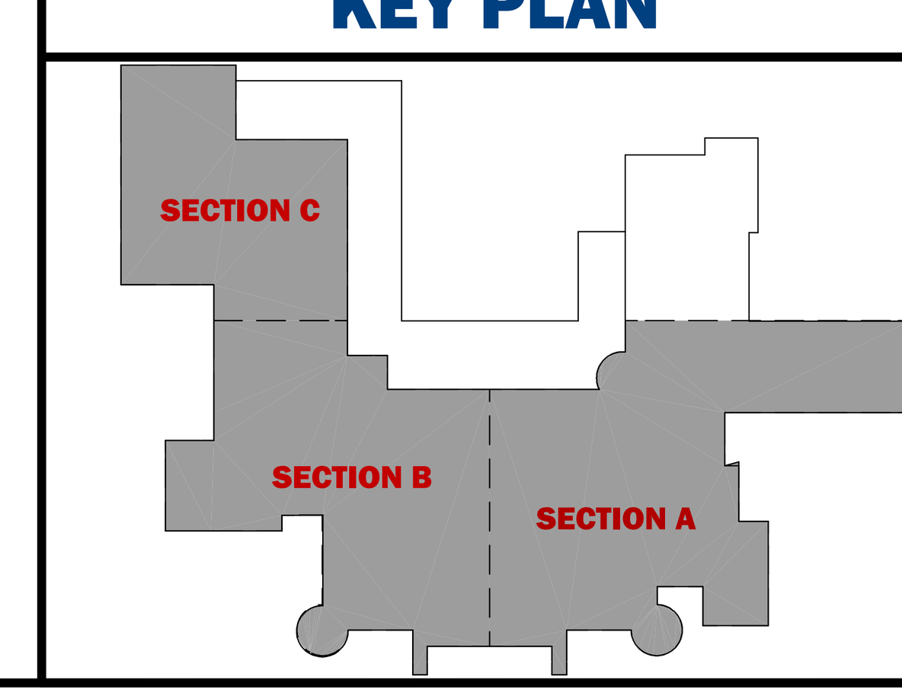
1 SECOND LEVEL OVERALL FLOOR PLAN

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

TRUE NORTH

REFERENCE NORTH

KEY PLAN



Gil Dominguez

Custom Home & Addition Remodel Design

321 Village Drive, Brentwood, CA 94513
PH: 925-382-6938 Email: gil@4dda.com

AIBD American Institute of Building Design The Residential Specialist

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL	DATE

ISSUE	DATE

Gil Dominguez

DIMENSION SECOND LEVEL FLOOR PLAN

PEÑA RESIDENCE

CUSTOM HOME

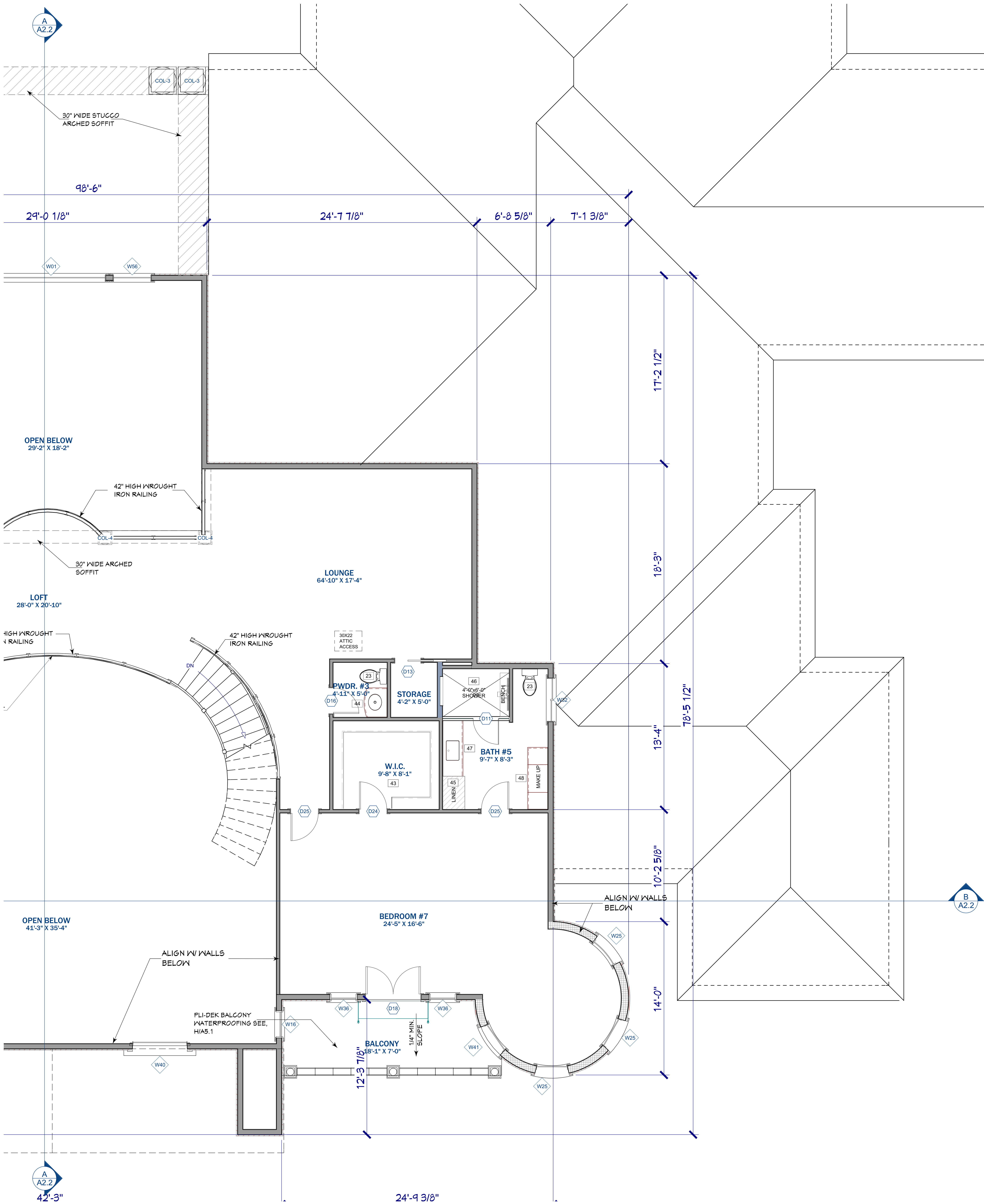
303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

DRAWN BY :	DATE:
GD	10/28/2025
SCALE :	JOB NUM :
NOTED	0421

SHEET

A1.7

OF



1 SECOND LEVEL NOTES FLOOR PLAN - SECTION - A

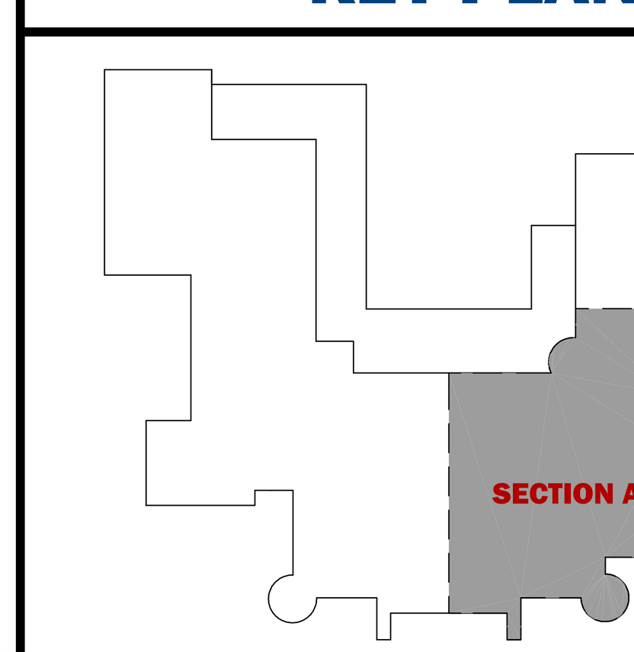
SCALE: 1/4" = 1'-0"

TRUE NORTH
REFERENCE NORTH

FLOOR PLAN NOTES

1	48" GAS RANGE WITH STAINLESS STEEL CANOPY HOOD
2	48" COUNTER DEPTH STAINLESS STEEL REFRIGERATOR
3	42 INCH STAINLESS STEEL SINK WITH A KITCHEN FAUCET, FLOW RATE NOT EXCEED 1.5 GPM AT 60 PSI.
4	DISH WASHER
5	24" BEVERAGE REFRIGERATORS
6	30 INCH DOUBLE OVEN WITH STORAGE ABOVE WITH PULL OUT SHELVES AND POT STORAGE DRAWER BELOW
7	BASE CABINETS WITH SOLID SURFACE COUNTER TOP 36" A.F.F.
8	CUSTOM WALL CABINETS - 34" HIGH CABINET WITH TEMP. GLASS DOORS STACKED ON 48" CABINETS (HATCHED)
9	42" HIGH WALL CABINETS (HATCHED)
10	60"X140" SOLID SURFACE ISLAND COUNTER TOP 36" A.F.F.
11	76"X140" SOLID SURFACE ISLAND COUNTER TOP 36" A.F.F.
12	16" ADJUSTABLE SHELVES
13	FLOOR TO CEILING GLASS WINE CABINETS
14	12"X27"X54" WALL CABINET ON BASE CABINET, PROVIDE 3 15-AMP. -120V DUPLEX RECEPTACLES, ONE AT REAR AND ONE ON EACH SIDE OF LOWER CABINET
15	21"X57" BOWED FRONT VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
16	18" DIA. X 126" FIBERGLASS DORIC COLUMNS WITH POST IN CENTER, SEE STRUCTURAL DRAWINGS FOR POST. (S.S.D.), TYPICAL OF 4
17	8" HIGH X 18" PRECAST CONCRETE HEARTH
18	8"X12" PRECAST CONC. MANTEL
19	ELECTRIC FACTORY BUILT FIREPLACE SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE CONDITIONS OF THE LISTING. FACTORY-BUILT FIREPLACES SHALL BE TESTED IN ACCORDANCE WITH UL 127.
20	FULL WALL VANITY WITH MAKEUP AREA, SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
21	18"X24"X90" LINEN CAB
22	48"X78" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH 2- FLOATING TILE BENCHES, STRIP DRAINS AND TILE NICHE BELOW WINDOW. (CG4.303.1.3.1 DUAL SHOWERHEADS WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
23	K-10493 MEMOIRS, CLASSIC COMFORT HEIGHT, THE COMPLETE SOLUTION ELONGATED TOILET (SHALL NOT EXCEED 1.28 GALLONS PER FLUSH, CG 4.303.1.1)
24	WROUGHT IRON SPIRAL STAIRS PER 2022 CRC R311.7.10.1
25	CUSTOM BAR CABINETS WITH SOLID SURFACE COUNTER TOPS
26	CUSTOM CABINETS WITH SOLID SURFACE COUNTER TOPS
27	21"X36" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
28	42"X70" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
29	42"X68" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
30	DROPPED SOFFIT. 10'-8" +/- FROM FINISHED FLOOR
31	21"X66" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
32	24"X24"X90" FULL HEIGHT CABINET
33	42"X72" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
34	21"X36" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL, WITH FARM HOUSE SINK. 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.) (CG 4.303.1.4.1 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.)
35	72"X72" ISLAND WITH STORAGE CABINETS ON EACH SIDE WITH SOLID SURFACE COUNTER 36" A.F.F.
36	30"X48" TILE DOG BATHING AREA 30" ABOVE FINISH FLOOR. PROVIDE SOLID SURFACE SURROUND ON ALL THREE SIDES. SURROUND SHALL EXTEND 48" ABOVE SHOWER CURD.
37	KOHLER KELSTON (K-24050-4-0) 23-3/4" RECTANGULAR PEDESTAL BATHROOM SINK (CG 4.303.1.4.1 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.)
38	92"X108"" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUNDE, WITH FLOATING TILE BENCH, STRIP DRAINS AND TILE NICHE. (CG4.303.1.3.1 DUAL SHOWERHEADS AND FIXED RAIN SHOWER HEAD WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
39	21"X102" VANITY WITH MAKEUP AREA, SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
40	21"X72" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
41	18"X42"X90" LINEN CABINET
42	12" SQ. X 66" HIGH COLUMNS ON 24" HIGH X 14" WIDE WALL, SEE INT. ELEV. A2.3
43	W.I.C. WITH CUSTOM CLOSET ORGANIZER
44	21"X30" BOWED FRONT VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
45	33"X24"X90" LINEN CAB
46	48"X72" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
47	21"X60" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
48	21"X66" VANITY WITH MAKE UP AREA AND SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL.
49	60"X88" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH 2- FLOATING TILE BENCHES, STRIP DRAINS AND TILE NICHE BELOW WINDOW. (CG4.303.1.3.1 DUAL SHOWERHEADS WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
50	21"X93" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
51	21"X33X18" HIGH BENCH CABINET WITH UPHOLSTERED CUSHION WITH STORAGE DRAWER BELOW.
52	36"X24"X90" LINEN CAB
53	20"X24" DEEP LAUNDRY SINK
54	ELECTRIC WASHING MASHING.
55	ELECTRIC OR GAS DRYER. PROVIDE SMOOTH METAL DUCT VENT TO OUTSIDE AIR PER, CMC 504.4
56	PROVIDE 5/8" TYPE - "X" 1-HR. RATED GYP. BD. ON ALL WALLS AND CEILINGS ADJACENT TO LIVING AREAS. PROVIDE R-21 INSULATION.
57	CONC. GARAGE SLAB, SLOPE TO DRAIN DECK MIN, 1/4" / 1FT.
58	CONC. STEP MIN. 10" TREAD W/ 7-3/4" MAX. RISER
59	CONC. STEP MIN. 18" TREAD W/ 7-3/4" MAX. RISER
60	CONC. PORCH, SLOPE TO DRAIN DECK MIN, 1/4" / 1FT.
61	OUTDOOR BBQ - BY OTHERS

KEY PLAN



Gil Dominguez
Custom Home & Addition Remodel Design

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL	DATE

ISSUE	DATE

Gil Dominguez

SCHEDULES, EGRESS & MINIMUM BATHROOM REQUIREMENTS DETAIL AND AGING IN PLACE REQUIREMENTS

PEÑA RESIDENCE

CUSTOM HOME

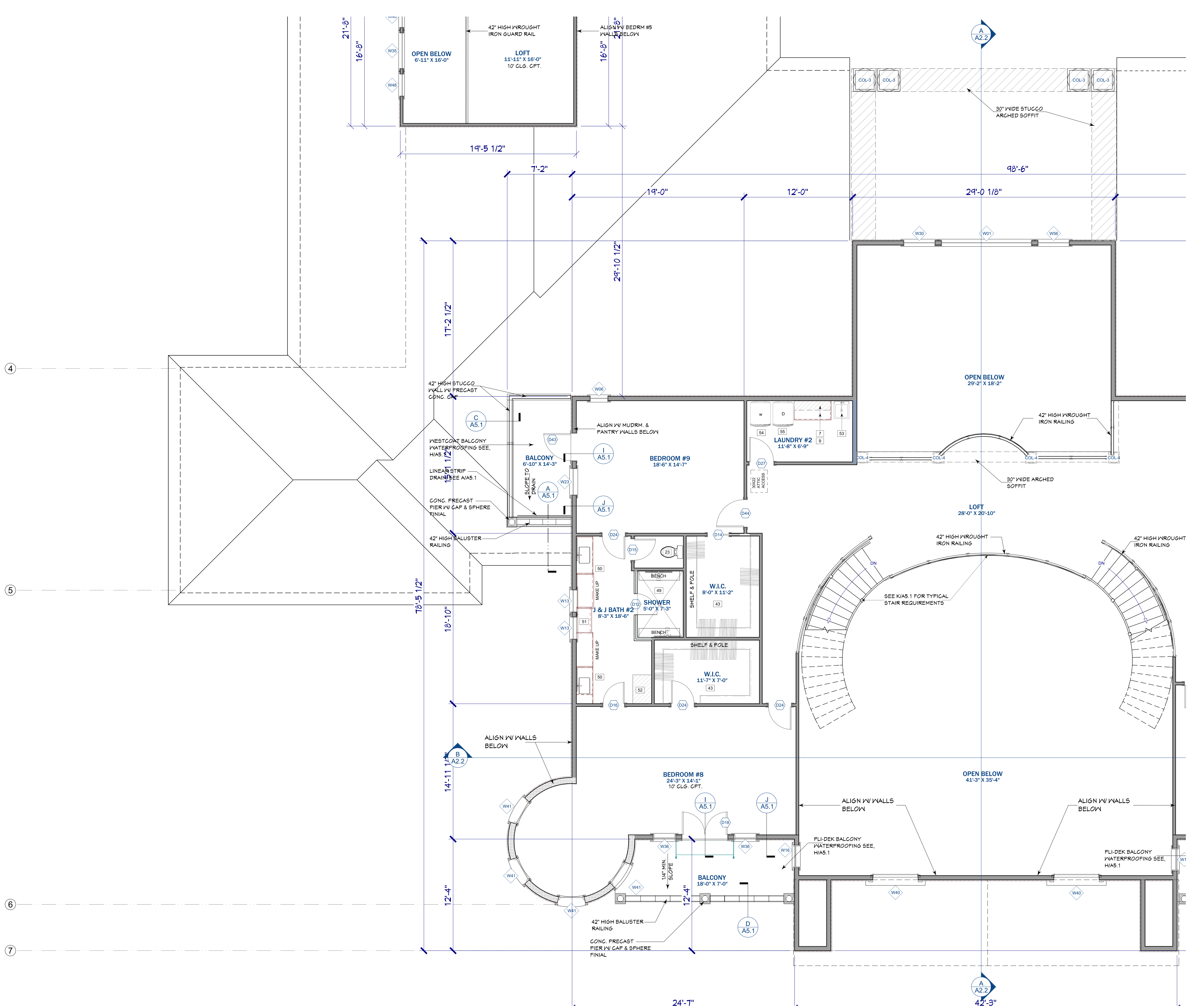
303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

DRAWN BY :	DATE:
GD	10/28/2025
SCALE :	JOB NUM :
NOTED	0421

SHEET

A1.8

OF


OPEN BELOW
6'-11" X 16'-0"
LOFT
11'-11" X 16'-0"
10' CLG. CPT.
42" HIGH WROUGHT IRON GUARD RAIL
ALIGN W/ BEDRM #5 WALL BELOW
19'-5 1/2"
7'-2"
19'-0"
12'-0"
29'-0 1/8"
98'-6"
29'-10 1/2"
17'-2 1/2"
18'-10"
14'-11 1/2"
12'-4"
78'-5 1/2"
24'-7"
42'-3"
30" WIDE STUCCO ARCHED SOFFIT
42" HIGH STUCCO WALL W/ PRECAST CONC. CAP
WESTCOAT BALCONY WATERPROOFING SEE, H/A5.1
LINEAR STRIP DRAIN SEE A/A5.1
CONC. PRECAST PIER W/ CAP & SPHERE FINIAL
42" HIGH BALUSTER RAILING
BALCONY
6'-10" X 14'-3"
SLOPE TO DRAIN
ALIGN W/ MUDRM. & PANTRY WALLS BELOW
BEDROOM #9
18'-6" X 14'-7"
LAUNDRY #2
11'-8" X 6'-9"
OPEN BELOW
29'-2" X 18'-2"
42" HIGH WROUGHT IRON RAILING
30" WIDE ARCHED SOFFIT
LOFT
28'-0" X 20'-10"
J & J BATH #2
8'-3" X 18'-6"
SHOWER
5'-0" X 7'-3"
BENCH
MAKE UP
SHELF & POLE
W.I.C.
8'-0" X 11'-2"
W.I.C.
11'-7" X 7'-0"
SEE K/A5.1 FOR TYPICAL STAIR REQUIREMENTS
DN
ALIGN W/ WALLS BELOW
BEDROOM #8
24'-3" X 14'-1"
10' CLG. CPT.
OPEN BELOW
41'-3" X 35'-4"
PLI-DEK BALCONY WATERPROOFING SEE, H/A5.1
BALCONY
18'-0" X 7'-0"
1/4" MIN. SLOPE
42" HIGH BALUSTER RAILING
CONC. PRECAST PIER W/ CAP & SPHERE FINIAL
TRUE NORTH
REFERENCE NORTH

1 SECOND LEVEL NOTES FLOOR PLAN - SECTION - B
SCALE: 1/4" = 1'-0"

FLOOR PLAN NOTES

1	48" GAS RANGE WITH STAINLESS STEEL CANOPY HOOD
2	48" COUNTER DEPTH STAINLESS STEEL REFRIGERATOR
3	42 INCH STAINLESS STEEL SINK WITH A KITCHEN FAUCET, FLOW RATE NOT EXCEED 1.5 GPM AT 60 PSI.
4	DISH WASHER
5	24" BEVERAGE REFRIGERATORS
6	30 INCH DOUBLE OVEN WITH STORAGE ABOVE WITH PULL OUT SHELVES AND POT STORAGE DRAWER BELOW
7	BASE CABINETS WITH SOLID SURFACE COUNTER TOP 36" A.F.F.
8	CUSTOM WALL CABINETS - 34" HIGH CABINET WITH TEMP. GLASS DOORS STACKED ON 48" CABINETS (HATCHED)
9	42" HIGH WALL CABINETS (HATCHED)
10	60"X140" SOLID SURFACE ISLAND COUNTER TOP 36" A.F.F.
11	76"X140" SOLID SURFACE ISLAND COUNTER TOP 36" A.F.F.
12	16" ADJUSTABLE SHELVES
13	FLOOR TO CEILING GLASS WINE CABINETS
14	12"X27"X54" WALL CABINET ON BASE CABINET, PROVIDE 3 15-AMP. -120V DUPLEX RECEPTACLES, ONE AT REAR AND ONE ON EACH SIDE OF LOWER CABINET
15	21"X57" BOWED FRONT VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
16	18" DIA. X 126" FIBERGLASS DORIC COLUMNS WITH POST IN CENTER, SEE STRUCTURAL DRAWINGS FOR POST. (S.S.D.), TYPICAL OF 4
17	8" HIGH X 18" PRECAST CONCRETE HEARTH
18	8"X12" PRECAST CONC. MANTEL
19	ELECTRIC FACTORY BUILT FIREPLACE SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE CONDITIONS OF THE LISTING. FACTORY-BUILT FIREPLACES SHALL BE TESTED IN ACCORDANCE WITH UL 127.
20	FULL WALL VANITY WITH MAKEUP AREA, SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
21	18"X24"X90" LINEN CAB
22	48"X78" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH 2- FLOATING TILE BENCHES, STRIP DRAINS AND TILE NICHE BELOW WINDOW. (CG4.303.1.3.1 DUAL SHOWERHEADS WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
23	K-10493 MEMOIRS, CLASSIC COMFORT HEIGHT, THE COMPLETE SOLUTION ELONGATED TOILET (SHALL NOT EXCEED 1.28 GALLONS PER FLUSH, CG 4.303.1.1)
24	WROUGHT IRON SPIRAL STAIRS PER 2022 CRC R311.7.10.1
25	CUSTOM BAR CABINETS WITH SOLID SURFACE COUNTER TOPS
26	CUSTOM CABINETS WITH SOLID SURFACE COUNTER TOPS
27	21"X36" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
28	42"X70" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
29	42"X68" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
30	DROPPED SOFFIT. 10'-8" +/- FROM FINISHED FLOOR
31	21"X66" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
32	24"X24"X90" FULL HEIGHT CABINET
33	42"X72" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
34	21"X36" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL, WITH FARM HOUSE SINK. 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.) (CG 4.303.1.4.1 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.)
35	72"X72" ISLAND WITH STORAGE CABINETS ON EACH SIDE WITH SOLID SURFACE COUNTER 36" A.F.F.
36	30"X48" TILE DOG BATHING AREA 30" ABOVE FINISH FLOOR. PROVIDE SOLID SURFACE SURROUND ON ALL THREE SIDES. SURROUND SHALL EXTEND 48" ABOVE SHOWER CURD.
37	KOHLER KELSTON (K-24050-4-0) 23-3/4" RECTANGULAR PEDESTAL BATHROOM SINK (CG 4.303.1.4.1 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.)
38	92"X108"" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUNDE, WITH FLOATING TILE BENCH, STRIP DRAINS AND TILE NICHE. (CG4.303.1.3.1 DUAL SHOWERHEADS AND FIXED RAIN SHOWER HEAD WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
39	21"X102" VANITY WITH MAKEUP AREA, SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
40	21"X72" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
41	18"X42"X90" LINEN CABINET
42	12" SQ. X 66" HIGH COLUMNS ON 24" HIGH X 14" WIDE WALL, SEE INT. ELEV. A2.3
43	W.I.C. WITH CUSTOM CLOSET ORGANIZER
44	21"X30" BOWED FRONT VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
45	33"X24"X90" LINEN CAB
46	48"X72" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
47	21"X60" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
48	21"X66" VANITY WITH MAKE UP AREA AND SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL.
49	60"X88" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH 2- FLOATING TILE BENCHES, STRIP DRAINS AND TILE NICHE BELOW WINDOW. (CG4.303.1.3.1 DUAL SHOWERHEADS WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
50	21"X93" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
51	21"X33X18" HIGH BENCH CABINET WITH UPHOLSTERED CUSHION WITH STORAGE DRAWER BELOW.
52	36"X24"X90" LINEN CAB
53	20"X24" DEEP LAUNDRY SINK
54	ELECTRIC WASHING MASHING.
55	ELECTRIC OR GAS DRYER. PROVIDE SMOOTH METAL DUCT VENT TO OUTSIDE AIR PER, CMC 504.4
56	PROVIDE 5/8" TYPE - "X" 1-HR. RATED GYP. BD. ON ALL WALLS AND CEILINGS ADJACENT TO LIVING AREAS. PROVIDE R-21 INSULATION.
57	CONC. GARAGE SLAB, SLOPE TO DRAIN DECK MIN, 1/4" / 1FT.
58	CONC. STEP MIN. 10" TREAD W/ 7-3/4" MAX. RISER
59	CONC. STEP MIN. 18" TREAD W/ 7-3/4" MAX. RISER
60	CONC. PORCH, SLOPE TO DRAIN DECK MIN, 1/4" / 1FT.
61	OUTDOOR BBQ - BY OTHERS

Gil Dominguez
Custom Home & Addition Remodel Design

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL — DATE

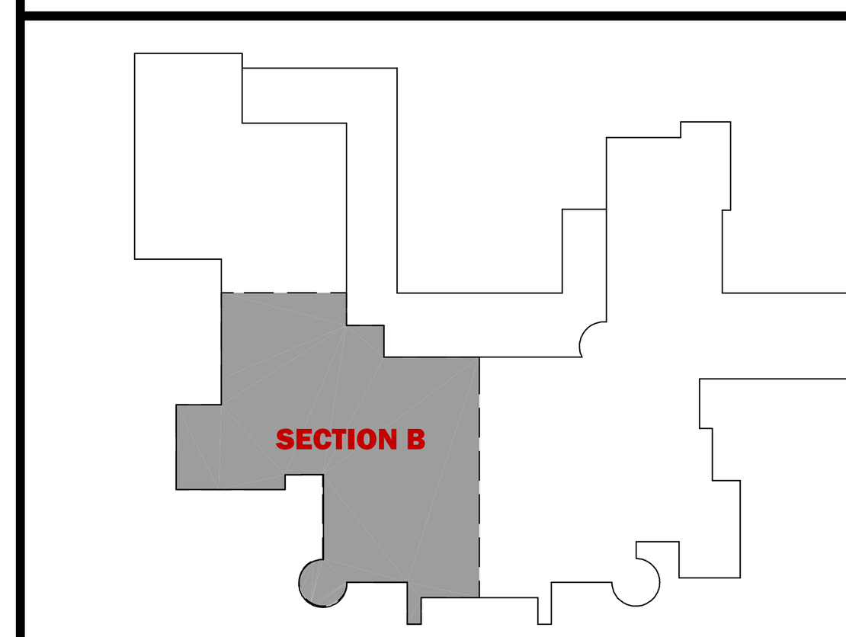
ISSUE — DATE

SCHEDULES, EGRESS & MINIMUM BATHROOM REQUIREMENTS DETAIL AND AGING IN PLACE REQUIREMENTS

PEÑA RESIDENCE
CUSTOM HOME

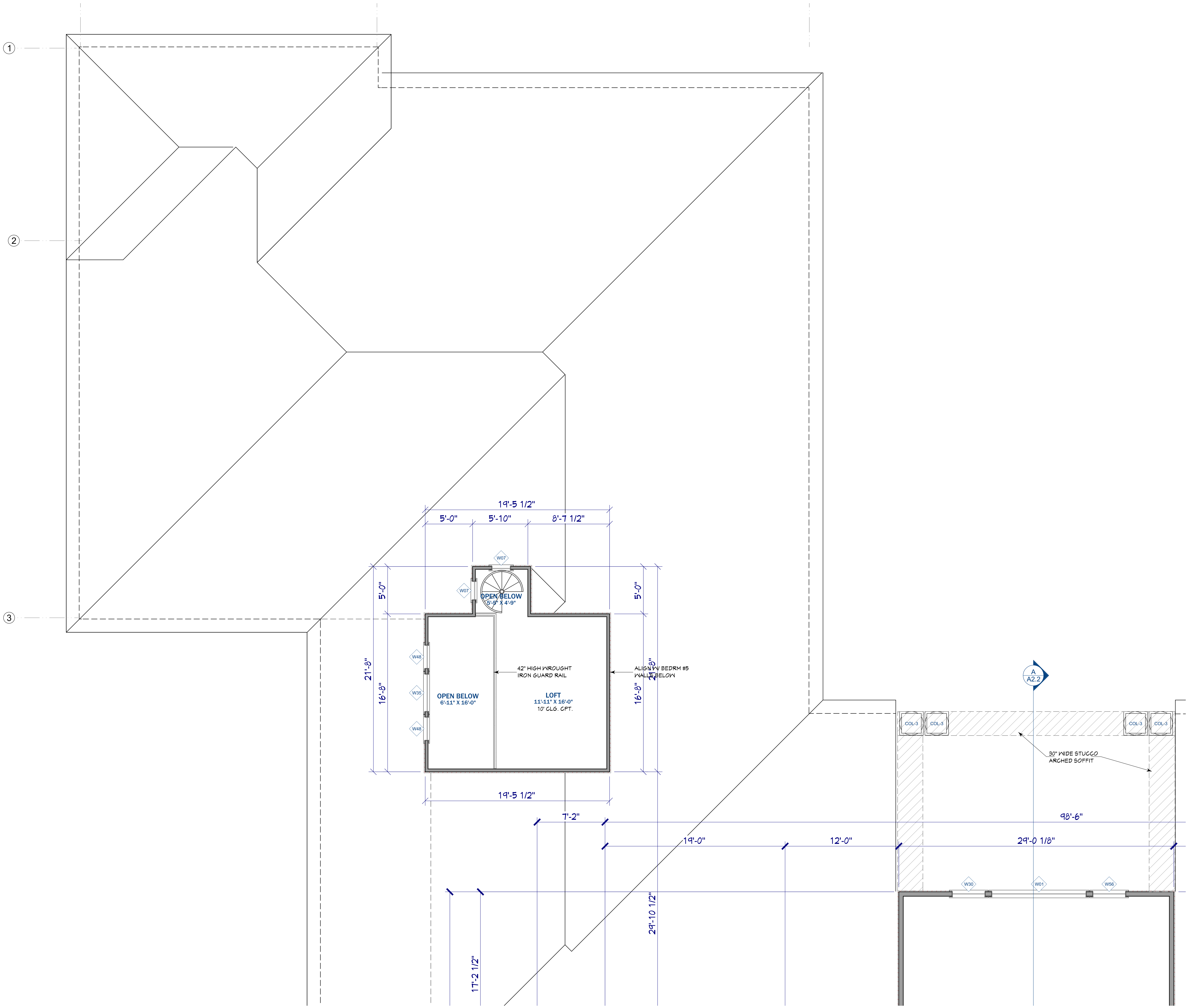
303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

KEY PLAN



DRAWN BY : GD
DATE: 10/28/2025
SCALE : NOTED
JOB NUM : 0421

SHEET
A1.9
OF



1 SECOND LEVEL NOTES FLOOR PLAN - SECTION - C

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

FLOOR PLAN NOTES

1	48" GAS RANGE WITH STAINLESS STEEL CANOPY HOOD
2	48" COUNTER DEPTH STAINLESS STEEL REFRIGERATOR
3	42 INCH STAINLESS STEEL SINK WITH A KITCHEN FAUCET, FLOW RATE NOT EXCEED 1.5 GPM AT 60 PSI.
4	DISH WASHER
5	24" BEVERAGE REFRIGERATORS
6	30 INCH DOUBLE OVEN WITH STORAGE ABOVE WITH PULL OUT SHELVES AND POT STORAGE DRAWER BELOW
7	BASE CABINETS WITH SOLID SURFACE COUNTER TOP 36" A.F.F.
8	CUSTOM WALL CABINETS - 34" HIGH CABINET WITH TEMP. GLASS DOORS STACKED ON 48" CABINETS (HATCHED)
9	42" HIGH WALL CABINETS (HATCHED)
10	60"X140" SOLID SURFACE ISLAND COUNTER TOP 36" A.F.F.
11	76"X140" SOLID SURFACE ISLAND COUNTER TOP 36" A.F.F.
12	16" ADJUSTABLE SHELVES
13	FLOOR TO CEILING GLASS WINE CABINETS
14	12"X27"X54" WALL CABINET ON BASE CABINET, PROVIDE 3 15-AMP. -120V DUPLEX RECEPTACLES, ONE AT REAR AND ONE ON EACH SIDE OF LOWER CABINET
15	21"X57" BOWED FRONT VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
16	18" DIA. X 126" FIBERGLASS DORIC COLUMNS WITH POST IN CENTER, SEE STRUCTURAL DRAWINGS FOR POST. (S.S.D.), TYPICAL OF 4
17	8" HIGH X 18" PRECAST CONCRETE HEARTH
18	8"X12" PRECAST CONC. MANTEL
19	ELECTRIC FACTORY BUILT FIREPLACE SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE CONDITIONS OF THE LISTING. FACTORY-BUILT FIREPLACES SHALL BE TESTED IN ACCORDANCE WITH UL 127.
20	FULL WALL VANITY WITH MAKEUP AREA, SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
21	18"X24"X90" LINEN CAB
22	48"X78" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH 2- FLOATING TILE BENCHES, STRIP DRAINS AND TILE NICHE BELOW WINDOW. (CG4.303.1.3.1 DUAL SHOWERHEADS WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
23	K-10493 MEMOIRS, CLASSIC COMFORT HEIGHT, THE COMPLETE SOLUTION ELONGATED TOILET (SHALL NOT EXCEED 1.28 GALLONS PER FLUSH, CG 4.303.1.1)
24	WROUGHT IRON SPIRAL STAIRS PER 2022 CRC R311.7.10.1
25	CUSTOM BAR CABINETS WITH SOLID SURFACE COUNTER TOPS
26	CUSTOM CABINETS WITH SOLID SURFACE COUNTER TOPS
27	21"X36" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
28	42"X70" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
29	42"X68" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
30	DROPPED SOFFIT. 10'-8" +/- FROM FINISHED FLOOR
31	21"X66" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
32	24"X24"X90" FULL HEIGHT CABINET
33	42"X72" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
34	21"X36" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL, WITH FARM HOUSE SINK. 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.) (CG 4.303.1.4.1 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.)
35	72"X72" ISLAND WITH STORAGE CABINETS ON EACH SIDE WITH SOLID SURFACE COUNTER 36" A.F.F.
36	30"X48" TILE DOG BATHING AREA 30" ABOVE FINISH FLOOR. PROVIDE SOLID SURFACE SURROUND ON ALL THREE SIDES. SURROUND SHALL EXTEND 48" ABOVE SHOWER CURD.
37	KOHLER KELSTON (K-24050-4-0) 23-3/4" RECTANGULAR PEDESTAL BATHROOM SINK (CG 4.303.1.4.1 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.)
38	92"X108"" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUNDE, WITH FLOATING TILE BENCH, STRIP DRAINS AND TILE NICHE. (CG4.303.1.3.1 DUAL SHOWERHEADS AND FIXED RAIN SHOWER HEAD WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
39	21"X102" VANITY WITH MAKEUP AREA, SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
40	21"X72" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY'S (CG 4.303.1.4.1 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.)
41	18"X42"X90" LINEN CABINET
42	12" SQ. X 66" HIGH COLUMNS ON 24" HIGH X 14" WIDE WALL, SEE INT. ELEV. A2.3
43	W.I.C. WITH CUSTOM CLOSET ORGANIZER
44	21"X30" BOWED FRONT VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
45	33"X24"X90" LINEN CAB
46	48"X72" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH FLOATING TILE BENCH, STRIP DRAIN AND TILE NICHE (CG4.303.1.3.1 SHOWERHEAD SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
47	21"X60" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
48	21"X66" VANITY WITH MAKE UP AREA AND SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL.
49	60"X88" TILE SHOWER WITH FLOOR TO CEILING SOLID TILE SURROUND AND TEMP. GLAZ. ENCLOSURE, WITH 2- FLOATING TILE BENCHES, STRIP DRAINS AND TILE NICHE BELOW WINDOW. (CG4.303.1.3.1 DUAL SHOWERHEADS WITH DIVERTER. SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI)
50	21"X93" VANITY WITH SOLID SURFACE COUNTER TOP 36" A.F.F. PROVIDE MIN. 1" FILLER AT WALL. USE UNDER MOUNT LAVATORY (CG 4.303.1.4.1 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.)
51	21"X33X18" HIGH BENCH CABINET WITH UPHOLSTERED CUSHION WITH STORAGE DRAWER BELOW.
52	36"X24"X90" LINEN CAB
53	20"X24" DEEP LAUNDRY SINK
54	ELECTRIC WASHING MASHING.
55	ELECTRIC OR GAS DRYER. PROVIDE SMOOTH METAL DUCT VENT TO OUTSIDE AIR PER, CMC 504.4
56	PROVIDE 5/8" TYPE - "X" 1-HR. RATED GYP. BD. ON ALL WALLS AND CEILINGS ADJACENT TO LIVING AREAS. PROVIDE R-21 INSULATION.
57	CONC. GARAGE SLAB, SLOPE TO DRAIN DECK MIN, 1/4" / 1FT.
58	CONC. STEP MIN. 10" TREAD W/ 7-3/4" MAX. RISER
59	CONC. STEP MIN. 18" TREAD W/ 7-3/4" MAX. RISER
60	CONC. PORCH, SLOPE TO DRAIN DECK MIN, 1/4" / 1FT.
61	OUTDOOR BBQ - BY OTHERS

Gil Dominguez
Custom Home & Addition Remodel Design
321 Village Drive, Brentwood, CA 94513
PH: 925-382-6938 Email: gil@4dda.com
American Institute of Building Design
The Residential Specialist

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL — DATE

ISSUE — DATE

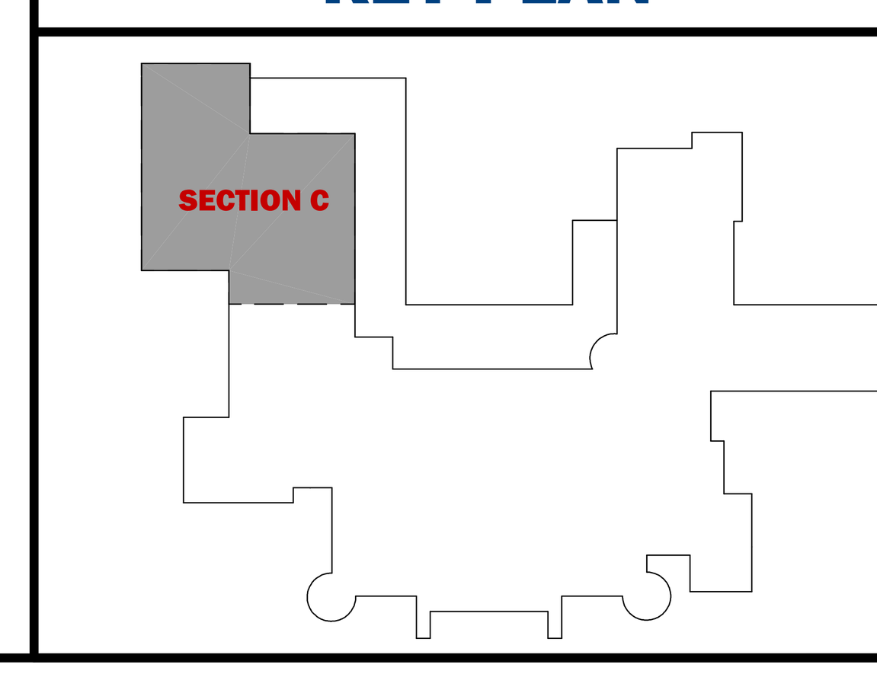
Gil Dominguez

SCHEDULES, EGRESS & MINIMUM BATHROOM REQUIREMENTS DETAIL AND AGING IN PLACE REQUIREMENTS

PEÑA RESIDENCE
CUSTOM HOME

303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

KEY PLAN



DRAWN BY : GD
DATE: 10/28/2025
SCALE : NOTED
JOB NUM : 0421

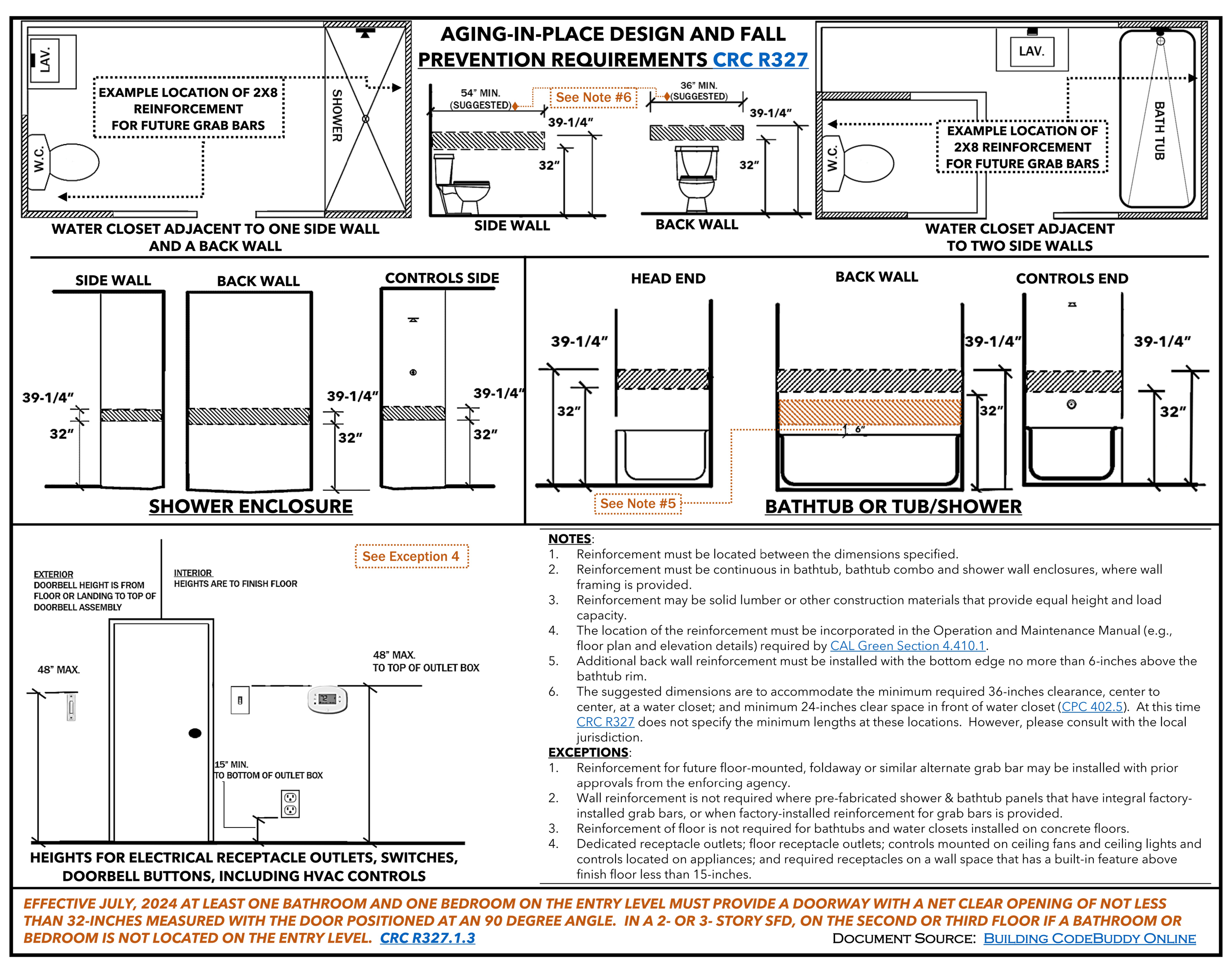
SHEET
A1.10
OF

WINDOW SCHEDULE

NUMBER	LABEL	QTY	FLOOR	SIZE	WIDTH	HEIGHT	SILL HT.	EGRESS	DESCRIPTION	TEMPERED	COMMENTS
W01	100114FX	1	2	100114FX	120"	136"	-18 15/16"		FIXED GLASS-AT		
W02	10020FX	1	1	10020FX	120"	24"	98 3/4"		FIXED GLASS		
W03	1640DH	2	1	1640DH	18"	48"	32"		DOUBLE HUNG	YES	
W04	1646DH	1	1	1646DH	18"	54"	42"		DOUBLE HUNG		
W05	2020AW	2	1	2020AW	24"	24"	84"		SINGLE AWNING		
W06	2020AW	1	2	2020AW	24"	24"	72"		SINGLE AWNING		
W07	2026DH	2	2	2026DH	24"	30"	79"		DOUBLE HUNG		
W08	2040SH	1	1	2040SH	24"	48"	48"		SINGLE HUNG	YES	
W09	2050AW	2	1	2050AW	24"	60"	48"		SINGLE AWNING		
W10	2050FX	1	1	2050FX	24"	60"	36"		FIXED GLASS		
W11	2616FX	2	1	2616FX	30"	18"	84"		FIXED GLASS		
W12	2640DH	1	1	2640DH	30"	48"	32"		DOUBLE HUNG		
W13	2640DH	2	2	2640DH	30"	48"	48"		DOUBLE HUNG	YES	
W14	2646DH	4	1	2646DH	30"	54"	42"		DOUBLE HUNG	YES	
W15	2650DH	2	1	2650DH	30"	60"	20"		DOUBLE HUNG		
W16	2650DH	2	2	2650DH	30"	60"	36"		DOUBLE HUNG		
W17	2616FX	2	1	2616FX	30"	18"	90"		FIXED GLASS		
W18	2616FX	1	1	2616FX	30"	18"	90"		FIXED GLASS	YES	
W19	2840LS	2	1	2840LS	32"	48"	32"		LEFT SLIDING		
W20	3020FX	8	1	3020FX	36"	24"	96"		FIXED GLASS		
W21	3050DH	2	1	3050DH	36"	60"	36"		DOUBLE HUNG	YES	
W22	2640DH	1	1	2640DH	30"	48"	32"		DOUBLE HUNG	YES	
W23	3050SH	1	2	3050SH	36"	60"	36"		SINGLE HUNG	YES	
W24	3056SH	6	1	3056SH	36"	66"	28"		SINGLE HUNG		
W25	3080SH	3	2	3080SH	36"	96"	24"		SINGLE HUNG-RT		
W26	3616FX	2	1	3616FX	42"	18"	84"		FIXED GLASS		
W27	3620FX	2	1	3620FX	42"	24"	98 3/4"		FIXED GLASS		
W28	3630DC	1	1	3630DC	42"	36"	60"		DOUBLE CASEMENT-LHL/RHR	YES	
W29	3650DH	2	1	3650DH	42"	60"	20"		DOUBLE HUNG	YES	
W30	3680FX	1	2	3680FX	42"	96"	-18 1/2"		FIXED GLASS		
W31	3870FX	2	1	3870FX	44"	84"	0"		FIXED GLASS		
W32	4030LS	1	2	4030LS	48"	36"	60"		LEFT SLIDING	YES	
W33	4040LS	1	1	4040LS	48"	48"	32"		LEFT SLIDING	YES	
W34	4050FX	4	1	4050FX	48"	60"	36"		FIXED GLASS		
W35	4050FX	1	2	4050FX	48"	60"	49"		FIXED GLASS		
W36	2650DH	4	2	2650DH	30"	60"	36"		DOUBLE HUNG	YES	
W37	6020FX	2	1	6020FX	72"	24"	98 3/4"		FIXED GLASS		
W38	5020LS	1	1	5020LS	60"	24"	72"		LEFT SLIDING	YES	
W39	6040LS	2	1	6040LS	72"	48"	36"		LEFT SLIDING		
W40	5046FX	2	2	5046FX	60"	54"	24"		FIXED GLASS		RECCESS WINDOWS 4 INCHES IN 2X8 FRAMED WALLS
W41	3086SH	5	2	3086SH	36"	102"	18"		SINGLE HUNG-RT		
W42	5080FX	2	1	5080FX	60"	96"	42"		FIXED GLASS		RECCESS WINDOWS 4 INCHES IN 2X8 FRAMED WALLS
W43	6040TS	1	1	6040TS	72"	48"	48"		TRIPLE SLIDING		
W44	6050TS	1	1	6050TS	72"	60"	36"		TRIPLE SLIDING		
W45	8020FX	1	1	8020FX	96"	24"	98 3/4"		FIXED GLASS		
W46	8050TS	1	1	8050TS	96"	60"	36"		TRIPLE SLIDING		
W47	8056LS	1	1	8056LS	96"	66"	30"		LEFT SLIDING		
W48	2650FX	2	2	2650FX	30"	60"	49"		FIXED GLASS		
W49	5050LS	1	1	5050LS	60"	60"	36"		LEFT SLIDING		
W50	4020FX	3	1	4020FX	48"	24"	96"		FIXED GLASS		
W51	4056DC	3	1	4056DC	48"	66"	28"		DOUBLE CASEMENT-LHL/RHR		
W52	3050DH	4	1	3050DH	36"	60"	36"	YES	DOUBLE HUNG		
W53	2650DH	2	1	2650DH	30"	60"	36"		DOUBLE HUNG	YES	
W54	2640DH	1	1	2640DH	30"	48"	48"		DOUBLE HUNG		
W56	3680FX	1	2	3680FX	42"	96"	-18 15/16"		FIXED GLASS		
W57	4020FX	1	1	4020FX	48"	24"	96"		FIXED GLASS	YES	
W58	4056DC	1	1	4056DC	48"	66"	28"		DOUBLE CASEMENT-LHL/RHR	YES	
W59	4050FX	5	1	4050FX	48"	60"	36"		FIXED GLASS	YES	

DOOR SCHEDULE

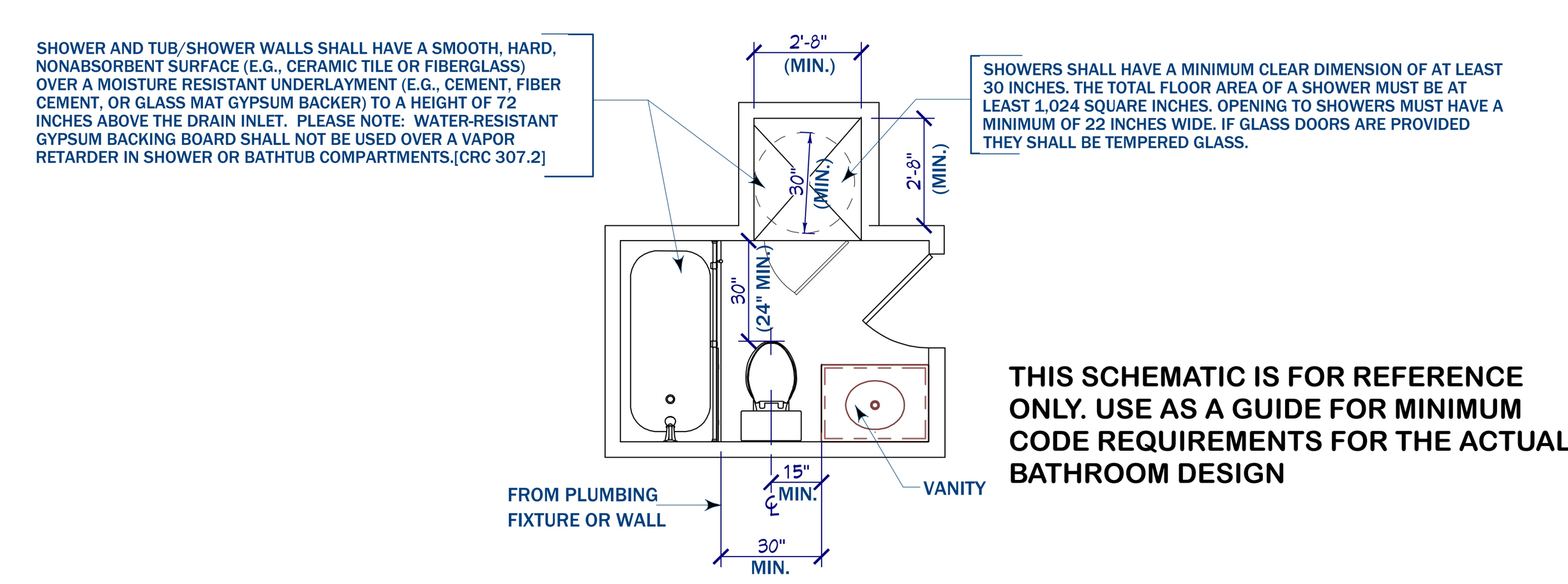
NUMBER	LABEL	QTY	FLOOR	SIZE	WIDTH	HEIGHT	DESCRIPTION	THICKNESS	TEMPERED	MANUFACTURER	COMMENTS
D01	10080	6	1	10080	120"	96"	GARAGE-GARAGE DOOR CHD07	1 3/4"			
D02	12080	1	1	12080 L/R EX	144"	96"	EXT. QUAD SLIDER-GLASS PANEL	1 3/4"	YES		
D03	12086	1	1	12086 L/R EX	144"	101 3/4"	EXT. QUAD SLIDER-GLASS PANEL	1 3/4"	YES		CUSTOM HEIGHT - MATCH HEIGHT OF TRANSOM WINDOWS
D04	18070	1	1	18070 L/R EX	216"	84"	EXT. 3+3-PANEL SLIDER-GLASS PANEL	1 3/4"	YES		
D05	2468	3	1	2468 L	28"	80"	SHOWER-GLASS SLAB	1/2"	YES		
D06	2480	1	1	2480 L	28"	96"	POCKET-DOOR P03	1 3/8"			
D07	2480	1	1	2480 L IN	28"	96"	HINGED-DOOR P03	1 3/8"			
D08	2680	6	1	2680 R IN	30"	96"	HINGED-DOOR P03	1 3/8"			
D09	2480	1	1	2480 R	28"	96"	POCKET-DOOR P03	1 3/8"			
D10	2480	3	1	2480 R IN	28"	96"	HINGED-DOOR P03	1 3/8"			
D11	2468	1	2	2468 L	28"	80"	SHOWER-GLASS SLAB	1/2"	YES		
D12	2468	1	2	2468 R	28"	80"	SHOWER-GLASS SLAB	1/2"	YES		
D13	2480	1	2	2480 R	28"	96"	POCKET-DOOR P03	1 3/8"			
D14	2480	1	2	2480 L	28"	96"	POCKET-DOOR P03	1 3/8"			
D15	2480	1	2	2480 L IN	28"	96"	HINGED-DOOR P03	1 3/8"			
D16	2480	2	2	2480 R IN	28"	96"	HINGED-DOOR P03	1 3/8"			
D17	2680	1	1	2680 L	30"	96"	SHOWER-GLASS SLAB	1/2"	YES		
D18	5080	2	2	5080 L/R EX	60"	96"	EXT. DOUBLE HINGED-GLASS PANEL	1 3/4"	YES		
D19	2668	1	1	2668 R	30"	80"	SHOWER-GLASS SLAB	1/2"	YES		
D20	2668	1	1	2668 R EX	30"	80"	EXT. HINGED-GLASS PANEL	1 3/4"	YES		MULL DOOR TO TRANSOM WINDOW
D21	2680	1	1	2680 R IN	30"	96"	HINGED-DOOR P03	1 3/4"			
D22	3080	2	1	3080 L EX	36"	96"	EXT. HINGED-GLASS PANEL	1 3/4"	YES		
D23	2680	9	1	2680 L IN	30"	96"	HINGED-DOOR P03	1 3/8"			
D24	2680	4	2	2680 L IN	30"	96"	HINGED-DOOR P03	1 3/8"			
D25	2680	2	2	2680 R IN	30"	96"	HINGED-DOOR P03	1 3/8"			
D26	2868	1	1	2868 R IN	32"	80"	HINGED-DOOR P03	1 3/4"			
D27	2880	1	2	2880 L IN	32"	96"	HINGED-DOOR P03	1 3/8"			
D28	2880	1	1	2880 L EX	32"	96"	EXT. HINGED-DOOR E21	1 3/8"			SOLID CORE WOOD DOOR NOT LESS THAN 1-3/8 INCHES OR STEEL DOOR NOT LESS THAN 1-3/8 INCHES THICK, OR 20-MINUTE FIRE-RATED DOORS. DOORS SHALL BE SELF-LATCHING AND EQUIPPED WITH A SELF-CLOSING OR AUTOMATIC-CLOSING DEVICE.
D29	2880	1	1	2880 L IN	32"	96"	HINGED-DOOR P03	1 3/8"			
D30	2880	1	1	2880 R	32"	96"	BARN-GLASS PANEL	1 3/8"	YES		
D31	2880	1	1	2880 R EX	32"	96"	EXT. HINGED-6464 VENETIA	1 3/4"	YES		
D32	2880	1	1	2880 R IN	32"	96"	HINGED-DOOR P03	1 3/8"			
D34	3070	1	1	3070 L EX	36"	84"	EXT. HINGED-GLASS PANEL	1 3/4"	YES		MULL TRANSOM WINDOW TO DOOR
D35	3068	1	1	3068 L IN	36"	80"	HINGED-DOOR P03	1 3/4"			
D36	3080	1	1	3080 R EX	36"	96"	EXT. HINGED-PANEL	1 3/4"			SOLID CORE WOOD DOOR NOT LESS THAN 1-3/8 INCHES OR STEEL DOOR NOT LESS THAN 1-3/8 INCHES THICK, OR 20-MINUTE FIRE-RATED DOORS. DOORS SHALL BE SELF-LATCHING AND EQUIPPED WITH A SELF-CLOSING OR AUTOMATIC-CLOSING DEVICE.
D37	3080	2	1	3080 L EX	36"	96"	EXT. HINGED-DOOR E21	1 3/4"			
D38	3080	1	1	3080 L EX	36"	96"	EXT. HINGED-DOOR E21	1 3/8"			
D39	3080	1	1	3080 L EX	36"	96"	EXT. HINGED-GLASS PANEL	1 3/8"			
D40	3070	1	1	3070 L EX	36"	84"	EXT. HINGED-GLASS PANEL	1 3/4"			MULL TRANSOM WINDOW TO DOOR
D41	3080	1	1	3080 R EX	36"	96"	EXT. HINGED-GLASS PANEL	1 3/8"	YES		
D42	3080	2	1	3080 R IN	36"	96"	HINGED-DOOR P03	1 3/4"			
D43	3080	1	2	3080 R EX	36"	96"	EXT. HINGED-GLASS PANEL	1 3/4"	YES		
D44	3080	1	2	3080 L IN	36"	96"	HINGED-DOOR P03	1 3/8"			
D45	3680	1	1	3680 L/R EX	42"	96"	EXT. 4 DR. BIFOLD-LOUVERED	1 3/8"			
D46	3080	1	1	3080 L	36"	96"	2 DR. BIFOLD-LOUVERED	1 3/8"			
D47	5080	1	1	5080 L/R	60"	96"	4 DR. BIFOLD-LOUVERED	1 3/8"			
D48	5068	1	1	5068 L/R IN	60"	80"	DOUBLE HINGED-DOOR P03	1 3/8"			
D49	5080	2	1	5080 L/R IN	60"	96"	DOUBLE HINGED-DOOR P03	1 3/8"			
D50	6080	1	1	6080 L/R	72"	96"	DOUBLE POCKET-AT-GLASS PANEL	1 3/8"			
D51	6068	1	1	6068 L/R IN	72"	80"	DOUBLE HINGED-DOOR P03	1 3/8"			
D52	6080	2	1	6080 L EX	72"	96"	EXT. SLIDER-GLASS PANEL	1 3/4"	YES		
D53	6080	1	1	6080 L/R EX	72"	96"	EXT. DOUBLE HINGED-GLASS PANEL	1 3/4"			
D54	3080	1	1	3080 L EX	36"	96"	EXT. HINGED-GLASS PANEL	1 3/8"	YES		
D55	80120	1	1	80120	96"	144"	EXT. DOUBLE HINGED-JOHN'S CORRECT DOOR	1 3/4"			
D56	8038	1	1	8038	96"	44"	EXT. FIXED-JOHN'S WINDOW	1 3/4"			



AGING-IN-PLACE DESIGN AND FALL PREVENTION REQUIREMENTS CRC R327
LAV.
EXAMPLE LOCATION OF 2X8 REINFORCEMENT FOR FUTURE GRAB BARS
SHOWER
W.C.
See Note #6
39-1/4"
32"
WATER CLOSET ADJACENT TO ONE SIDE WALL AND A BACK WALL
SIDE WALL
BACK WALL
EXAMPLE LOCATION OF 2X8 REINFORCEMENT FOR FUTURE GRAB BARS
BATH TUB
WATER CLOSET ADJACENT TO TWO SIDE WALLS
CONTROLS SIDE
HEAD END
CONTROLS END
SHOWER ENCLOSURE
See Note #5
BATHTUB OR TUB/SHOWER
See Exception 4
EXTERIOR
DOORBELL HEIGHT IS FROM FLOOR OR LANDING TO TOP OF DOORBELL ASSEMBLY
INTERIOR
HEIGHTS ARE TO FINISH FLOOR
48" MAX.
48" MAX. TO TOP OF OUTLET BOX
15" MIN. TO BOTTOM OF OUTLET BOX
HEIGHTS FOR ELECTRICAL RECEPTACLE OUTLETS, SWITCHES, DOORBELL BUTTONS, INCLUDING HVAC CONTROLS
NOTES:
1. Reinforcement must be located between the dimensions specified.
2. Reinforcement must be continuous in bathtub, bathtub combo and shower wall enclosures, where wall framing is provided.
3. Reinforcement may be solid lumber or other construction materials that provide equal height and load capacity.
4. The location of the reinforcement must be incorporated in the Operation and Maintenance Manual (e.g., floor plan and elevation details) required by CAL Green Section 4.410.1.
5. Additional back wall reinforcement must be installed with the bottom edge no more than 6-inches above the bathtub rim.
6. The suggested dimensions are to accommodate the minimum required 36-inches clearance, center to center, at a water closet; and minimum 24-inches clear space in front of water closet (CPC 402.5). At this time CRC R327 does not specify the minimum lengths at these locations. However, please consult with the local jurisdiction.
EXCEPTIONS:
1. Reinforcement for future floor-mounted, foldaway or similar alternate grab bar may be installed with prior approvals from the enforcing agency.
2. Wall reinforcement is not required where pre-fabricated shower & bathtub panels that have integral factory-installed grab bars, or when factory-installed reinforcement for grab bars is provided.
3. Reinforcement of floor is not required for bathtubs and water closets installed on concrete floors.
4. Dedicated receptacle outlets; floor receptacle outlets; controls mounted on ceiling fans and ceiling lights and controls located on appliances; and required receptacles on a wall space that has a built-in feature above finish floor less than 15-inches.
EFFECTIVE JULY, 2024 AT LEAST ONE BATHROOM AND ONE BEDROOM ON THE ENTRY LEVEL MUST PROVIDE A DOORWAY WITH A NET CLEAR OPENING OF NOT LESS THAN 32-INCHES MEASURED WITH THE DOOR POSITIONED AT AN 90 DEGREE ANGLE. IN A 2- OR 3- STORY SFD, ON THE SECOND OR THIRD FLOOR IF A BATHROOM OR BEDROOM IS NOT LOCATED ON THE ENTRY LEVEL. CRC R327.1.3
DOCUMENT SOURCE: BUILDING CODEBUDDY ONLINE

C AGING IN PLACE REQUIREMENTS

SCALE: NONE

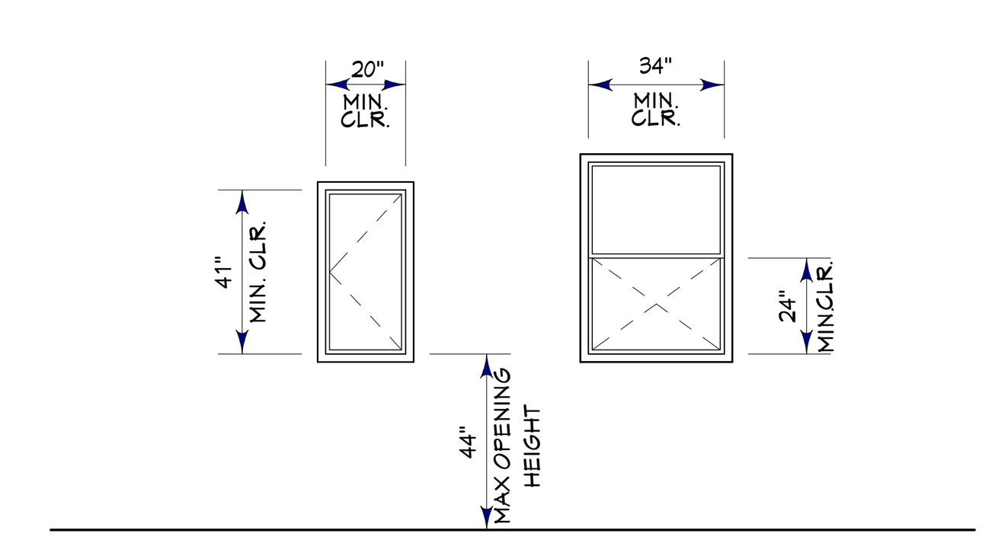


SHOWER AND TUB/SHOWER WALLS SHALL HAVE A SMOOTH, HARD, NONABSORBENT SURFACE (E.G., CERAMIC TILE OR FIBERGLASS) OVER A MOISTURE RESISTANT UNDERLAYMENT (E.G., CEMENT, FIBER CEMENT, OR GLASS MAT GYPSUM BACKER) TO A HEIGHT OF 72 INCHES ABOVE THE DRAIN INLET. PLEASE NOTE: WATER-RESISTANT GYPSUM BACKING BOARD SHALL NOT BE USED OVER A VAPOR RETARDER IN SHOWER OR BATHTUB COMPARTMENTS.[CRC 307.2]
2'-8" (MIN.)
SHOWERS SHALL HAVE A MINIMUM CLEAR DIMENSION OF AT LEAST 30 INCHES. THE TOTAL FLOOR AREA OF A SHOWER MUST BE AT LEAST 1,024 SQUARE INCHES. OPENING TO SHOWERS MUST HAVE A MINIMUM OF 22 INCHES WIDE. IF GLASS DOORS ARE PROVIDED THEY SHALL BE TEMPERED GLASS.
30" (MIN.)
2'-8" (MIN.)
30" (24" MIN.)
FROM PLUMBING FIXTURE OR WALL
15" MIN.
30" MIN.
VANITY

THIS SCHEMATIC IS FOR REFERENCE ONLY. USE AS A GUIDE FOR MINIMUM CODE REQUIREMENTS FOR THE ACTUAL BATHROOM DESIGN

B MINIMUM BATH ROOM REQUIREMENTS

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



A EGRESS DETAIL

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

Gil Dominguez
Custom Home & Addition Remodel Design
321 Village Drive, Brentwood, CA 94513
PH: 925-382-6938 Email: gil@4dda.com
American Institute of Building Design
The Residential Specialist

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL	DATE

ISSUE	DATE

Gil Dominguez

SCHEDULES, EGRESS & MINIMUM BATHROOM REQUIREMENTS DETAIL AND AGING IN PLACE REQUIREMENTS

PEÑA RESIDENCE

CUSTOM HOME

303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

DRAWN BY:	DATE:
GD	10/28/2025
SCALE:	JOB NUM:
NOTED	0421

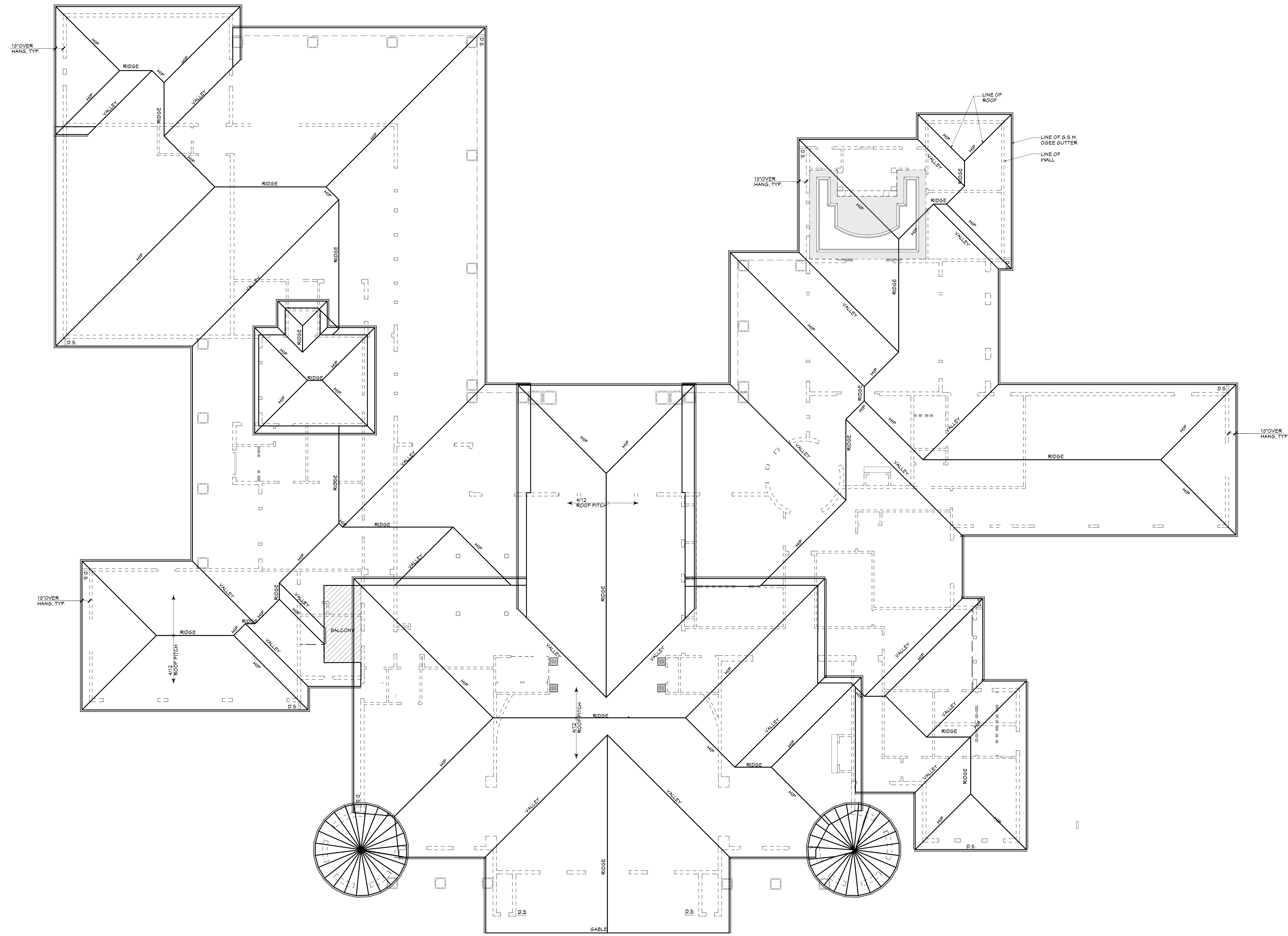
SHEET

A1.11

OF

ROOF PLAN NOTES

1. TERRA COTTA TILE ROOFING, OVER 1x2 BATTENS, OVER: 30 LB. FELT, OVER: ROOF SHEATHING - (S.S.D.).
2. PROVIDE EAVE, DORMER, AND GABLE VENTS AS PER 2022 CRC. SECTION R806.2 AND PER VENTILATION TABLE ABOVE.
3. USE 4:12 ROOF SLOPE
4. USE 18" OVER HANGS.
5. PROVIDE GSM. ROOF TO WALL, AND RAKE FLASHING AS PER CRC 2022 SECTION R905.2.8
6. SEE STRUCTURAL DRAWINGS FOR ROOF FRAMING PLAN AND ROOF FRAMING DETAILS.
7. PROVIDE DOWN SPOUTS AT EACH CORNER, CONNECT TO LANDSCAPE DRAINAGE SYSTEM.
8. THE ROOF WILL BE FRAMED USING PRE-MANUFACTURED ROOF TRUSSES. THE BUILDER IS RESPONSIBLE FOR VERIFYING THE EXISTING ROOF PITCH PRIOR TO ORDERING TRUSSES. THE TRUSS MANUFACTURE SHALL PROVIDE TRUSS CALCS, AND LAYOUT PLANS FOR REVIEW PRIOR TO FABRICATING THE TRUSSES.



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

TRUE NORTH
REFERENCE NORTH

Gil Dominguez
Custom Home & Addition Remodel Design
321 Village Drive, Brentwood, CA 94513
PH: 925-382-6938 Email: gil@4dda.com
American Institute of Building Design
The Residential Specialist

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL	DATE

ISSUE	DATE

Gil Dominguez

ROOF PLAN

PEÑA RESIDENCE
CUSTOM HOME

303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

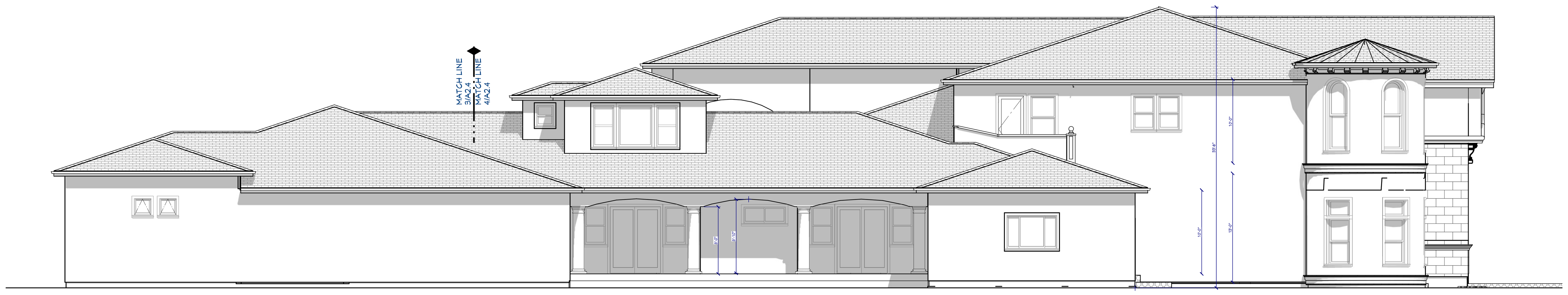
DRAWN BY :	DATE:
GD	10/28/2025
SCALE :	JOB NUM :
1/8" = 1'-0"	0421

SHEET

A1.12

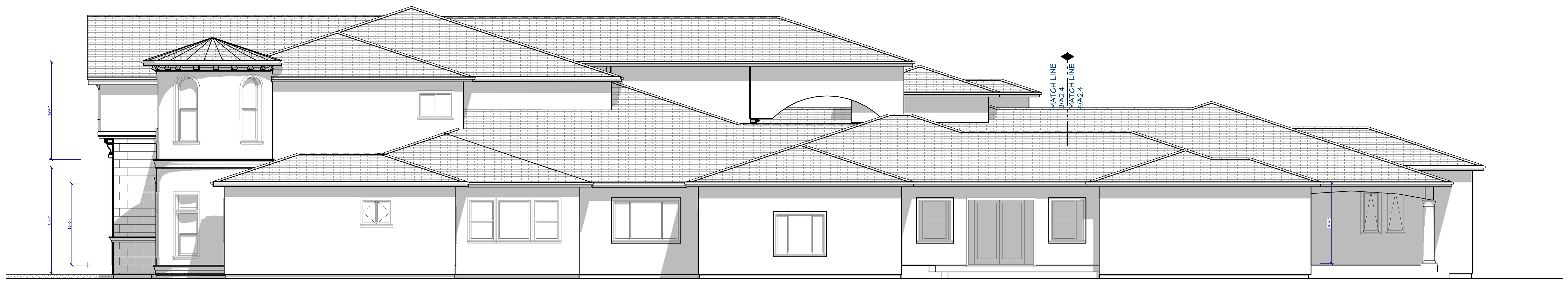
OF

2019



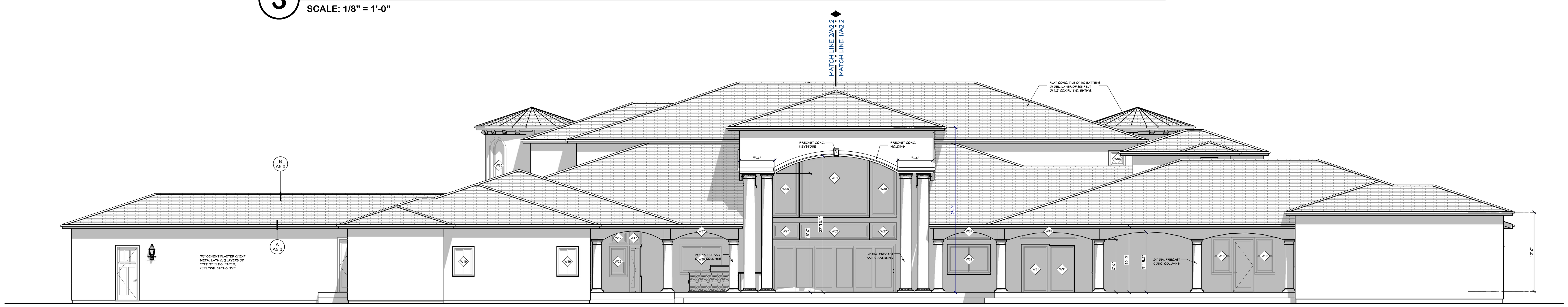
4 LEFT SIDE ELEVATION (EAST)

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



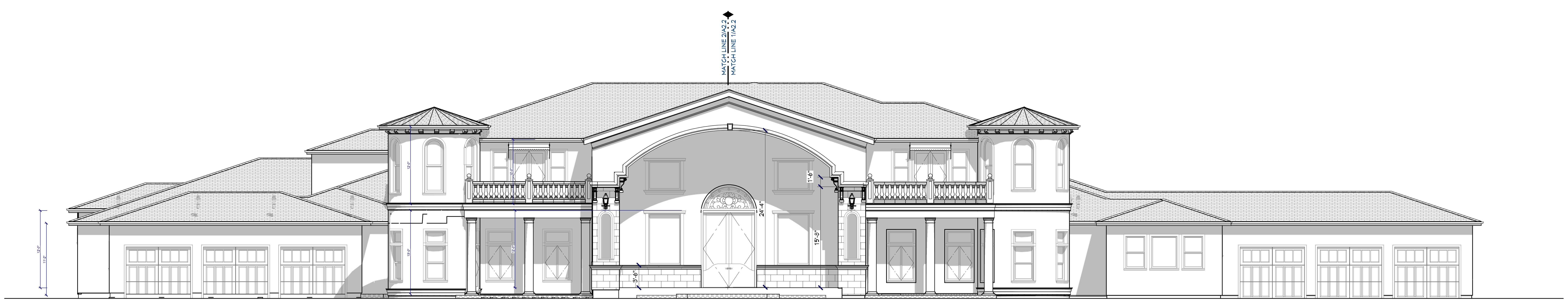
3 RIGHT SIDE ELEVATION (WEST)

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



2 REAR ELEVATION (SOUTH)

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



1 FRONT ELEVATION (NORTH)

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

Gil Dominguez
Custom Home & Addition Remodel Design

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL	DATE

ISSUE	DATE

Gil Dominguez

EXTERIOR ELEVATIONS

PEÑA RESIDENCE
CUSTOM HOME

303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

DRAWN BY :	DATE:
GD	10/28/2025
SCALE :	JOB NUM :
NONE	0421

SHEET
A2.1
OF

2019

2 FRONT ELEVATION (WEST)

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

1 FRONT ELEVATION (WEST)

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

Gil Dominguez
Custom Home & Addition Remodel Design
321 Village Drive, Brentwood, CA 94513
PH: 925-382-6938 Email: gil@4dda.com
American Institute of Building Design
The Residential Specialist

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL	DATE

ISSUE	DATE

Gil Dominguez

FRONT ELEVATION

PEÑA RESIDENCE
CUSTOM HOME

303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

DRAWN BY :	DATE:
GD	10/28/2025
SCALE :	JOB NUM :
NONE	0421

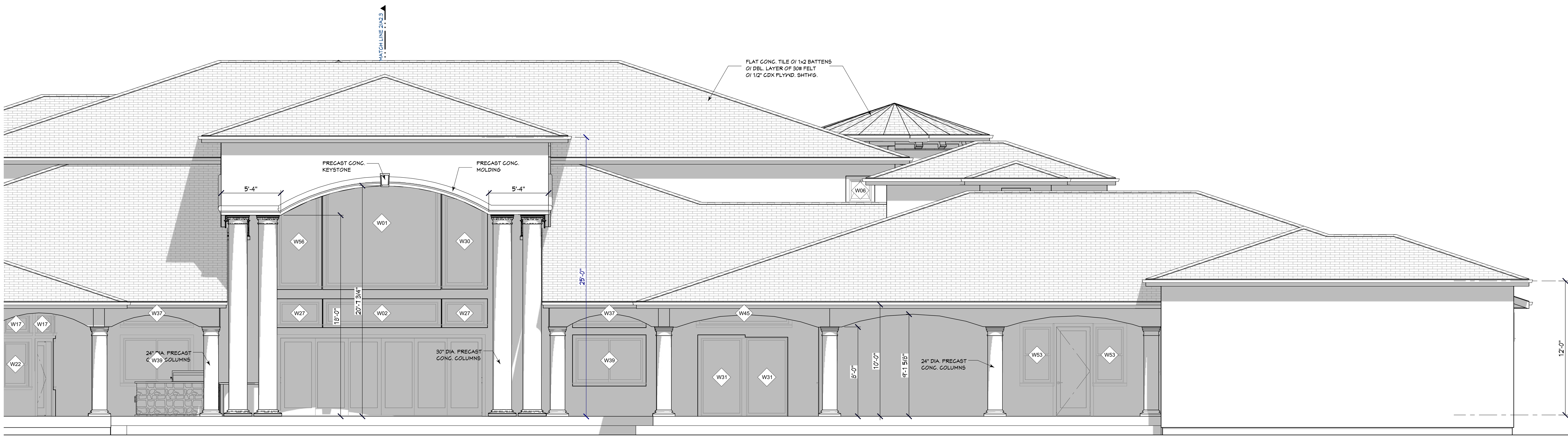
SHEET

A2.2

OF

2 REAR ELEVATION (EAST)

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



1 REAR ELEVATION (EAST)

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

Gil Dominguez
Custom Home & Addition Remodel Design

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL	DATE

ISSUE	DATE

Gil Dominguez

REAR ELEVATION (EAST)

PEÑA RESIDENCE

CUSTOM HOME

303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

DRAWN BY :	DATE:
GD	10/28/2025
SCALE :	JOB NUM :
NONE	0421

SHEET

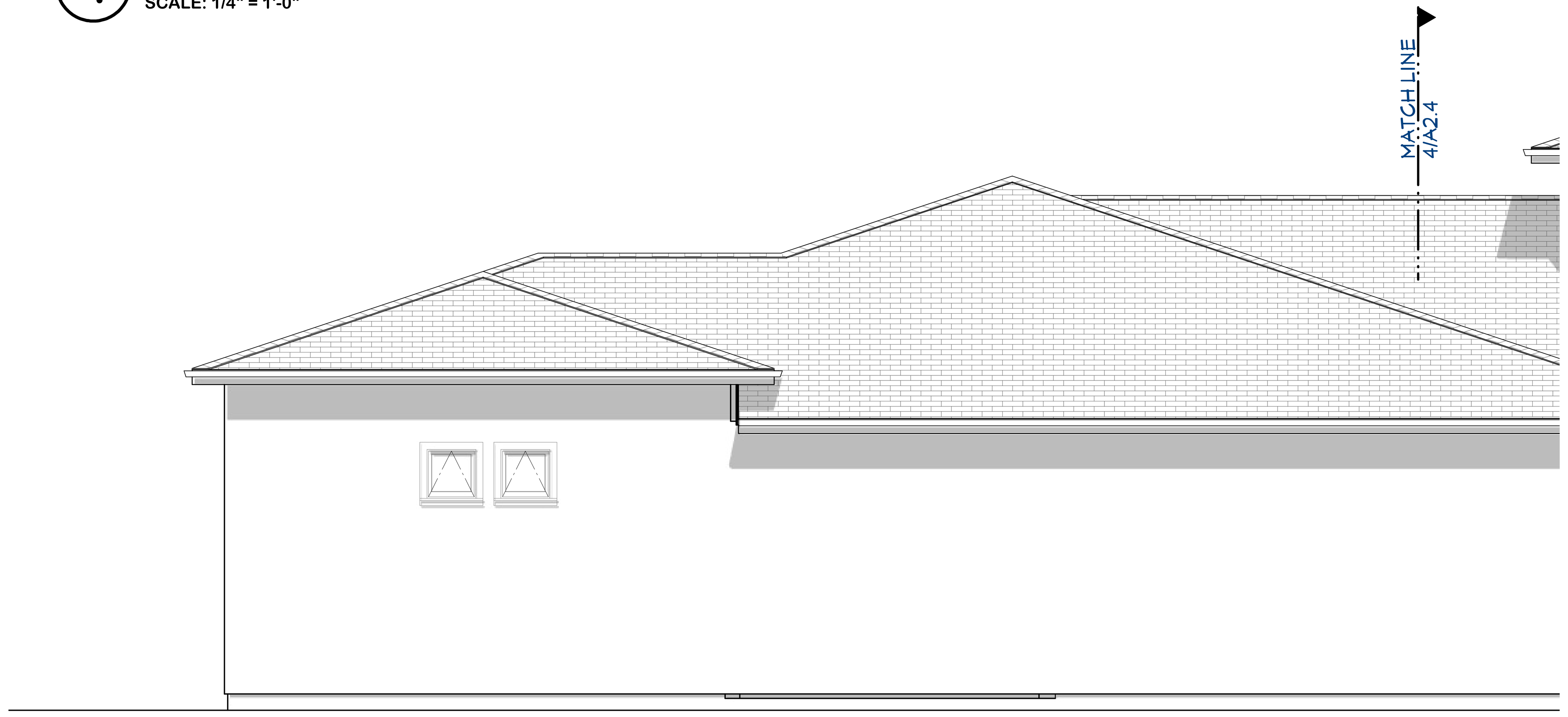
A2.3

OF

2019

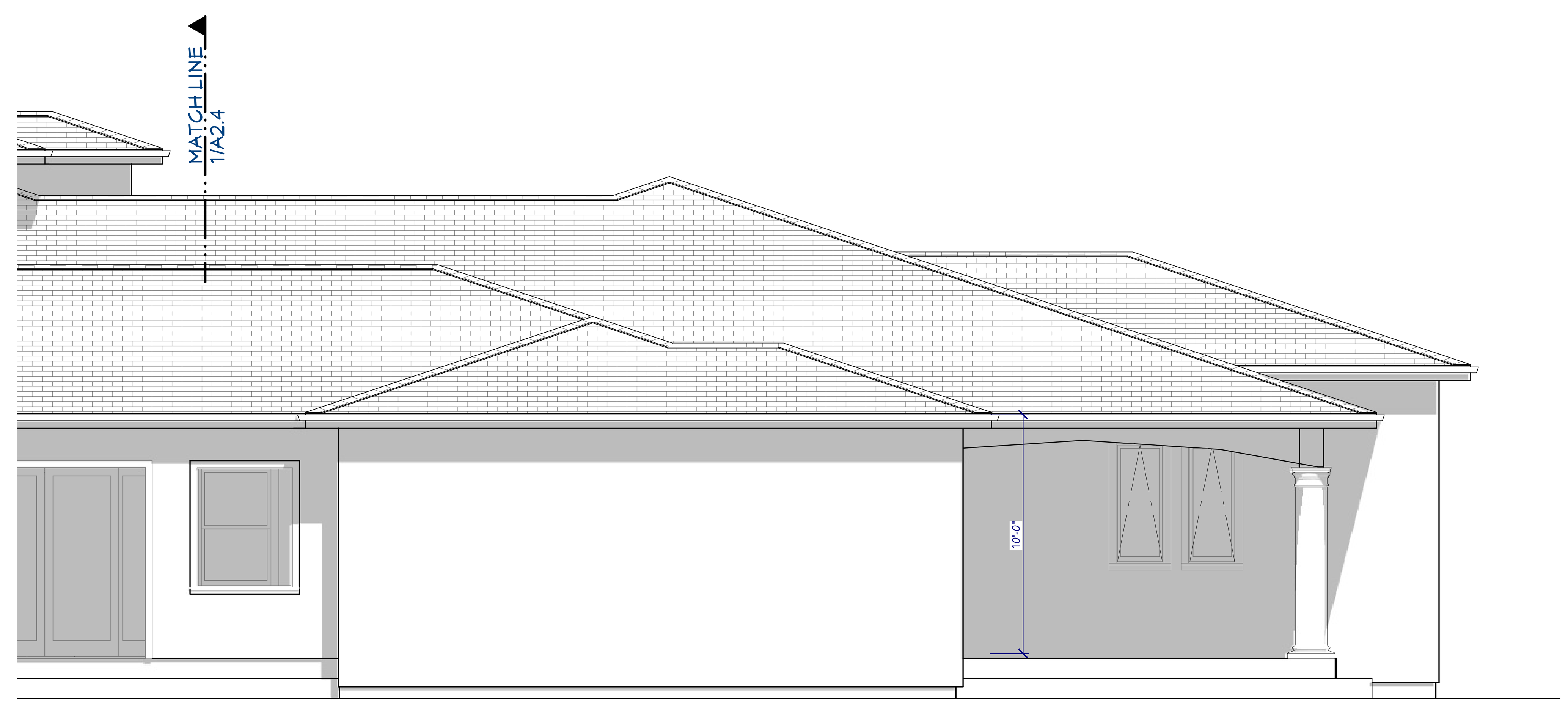
4 **LEFT ELEVATION (NORTH)**

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



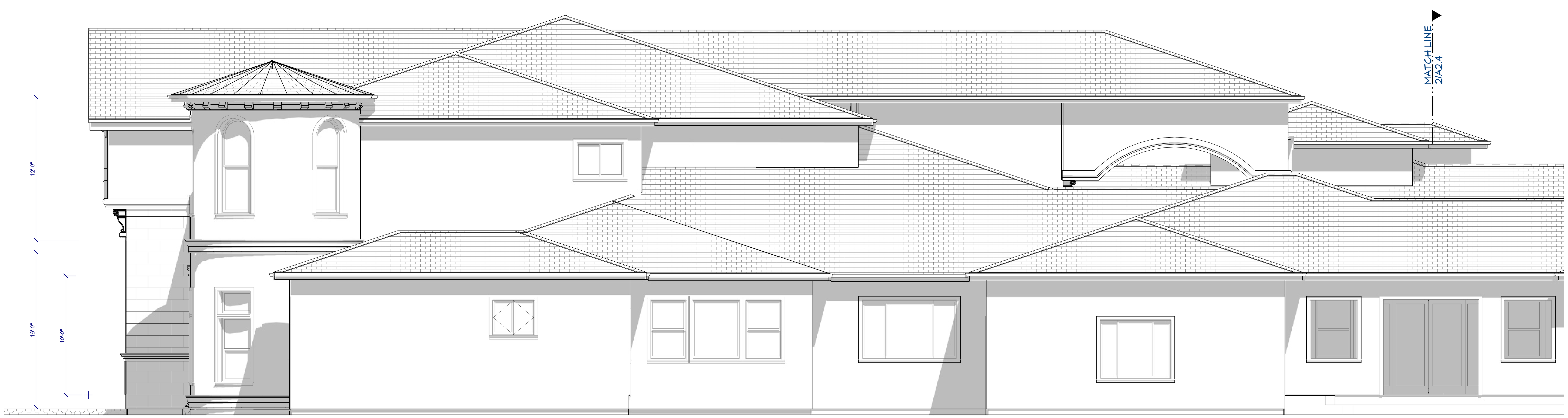
3 **LEFT ELEVATION (NORTH)**

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



2 **RIGHT SIDE ELEVATION (SOUTH)**

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



1 **RIGHT SIDE ELEVATION (SOUTH)**

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

Gil Dominguez
Custom Home & Addition Remodel Design
321 Village Drive, Brentwood, CA 94513
PH: 925-382-6938 Email: gil@4dda.com
American Institute of Building Design
The Residential Specialist

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL	DATE

ISSUE	DATE

Gil Dominguez

SIDE ELEVATIONS

PEÑA RESIDENCE
CUSTOM HOME

303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

DRAWN BY :	DATE:
GD	10/28/2025
SCALE :	JOB NUM :
NONE	0421

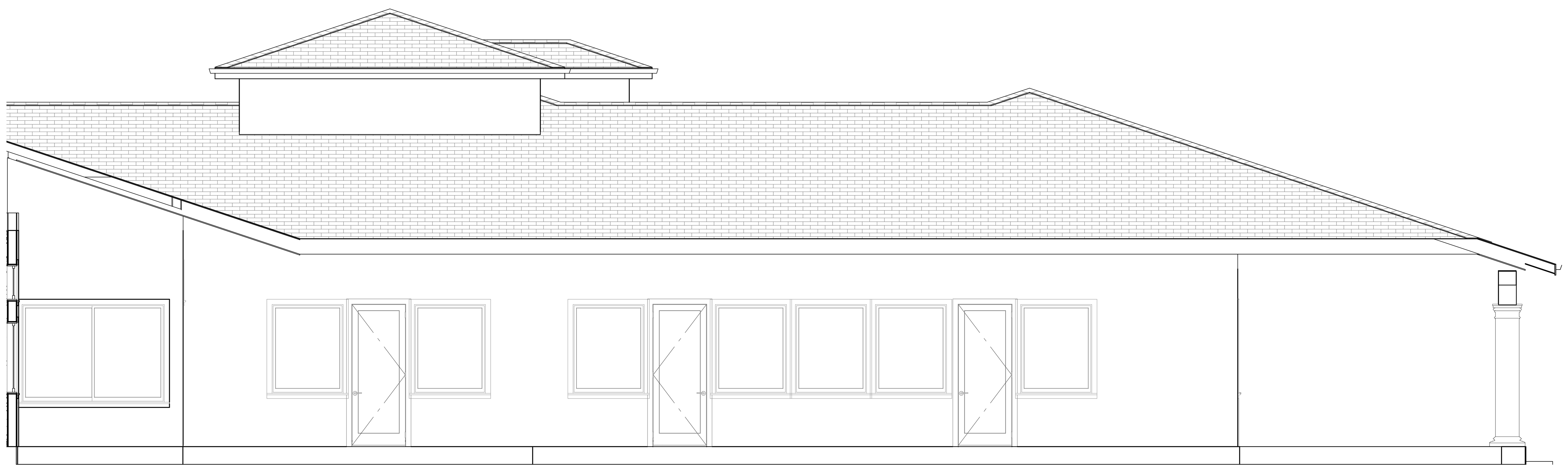
SHEET

A2.4

OF

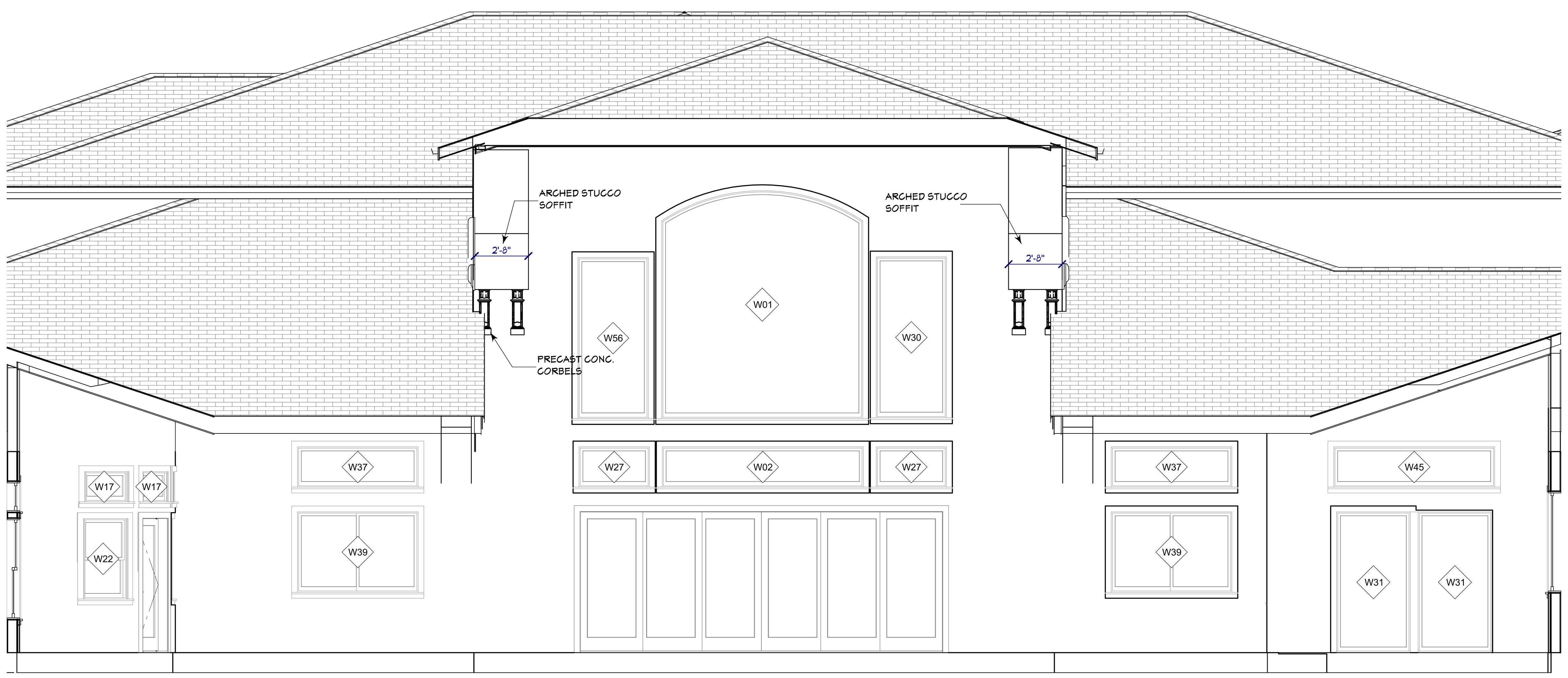
4 RIGHT SIDE PORCH ELEVATION

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



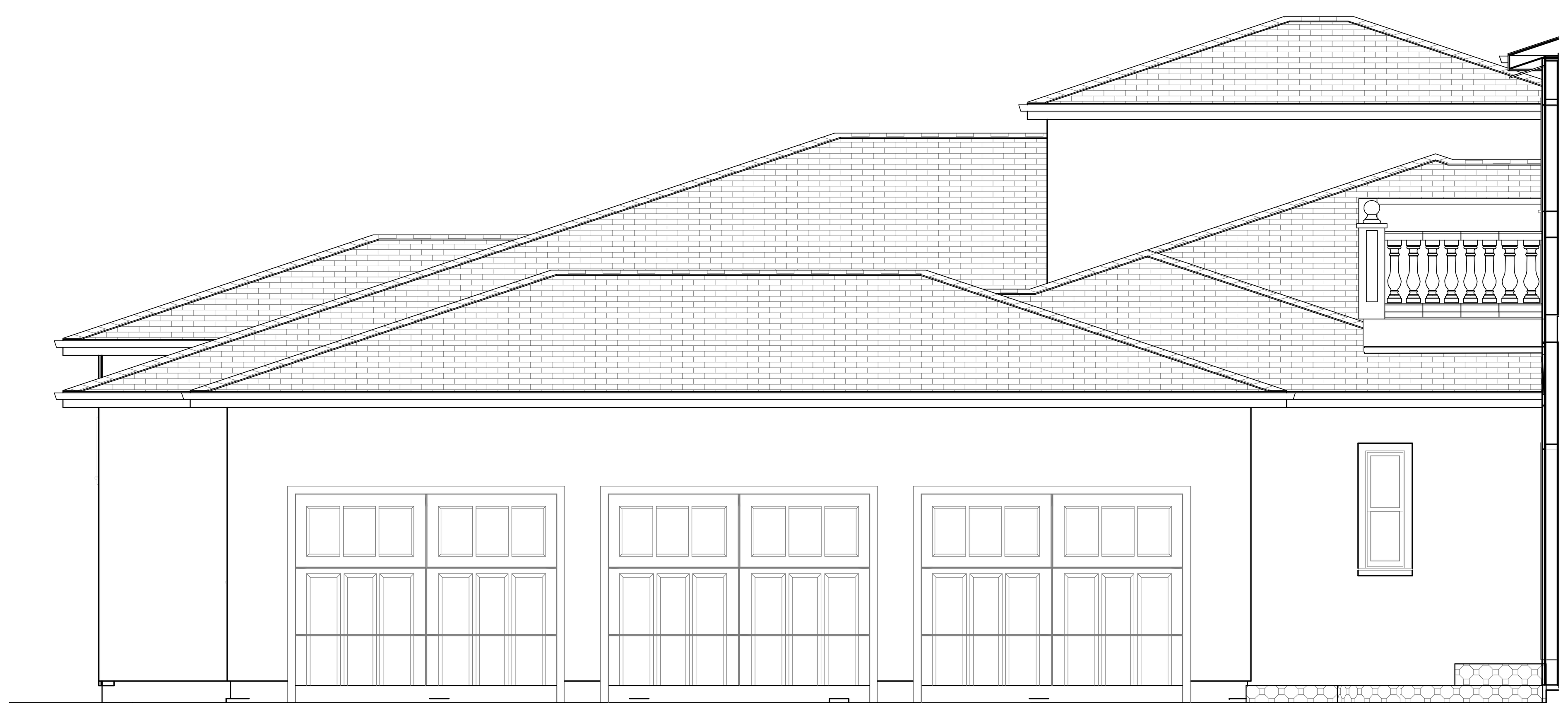
3 LEFT SIDE PORCH ELEVATION

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



2 REAR PORCH ELEVATION

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



1 FRONT GARAGE ELEVATION

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

Gil Dominguez
Custom Home & Addition Remodel Design
321 Village Drive, Brentwood, CA 94513
PH: 925-382-6938 Email: gil@4dda.com
American Institute of Building Design
The Residential Specialist

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL	DATE

ISSUE	DATE

Gil Dominguez

PORCH ELEVATIONS AND LEFT SIDE GARAGE ELEVATION

PEÑA RESIDENCE

CUSTOM HOME

303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

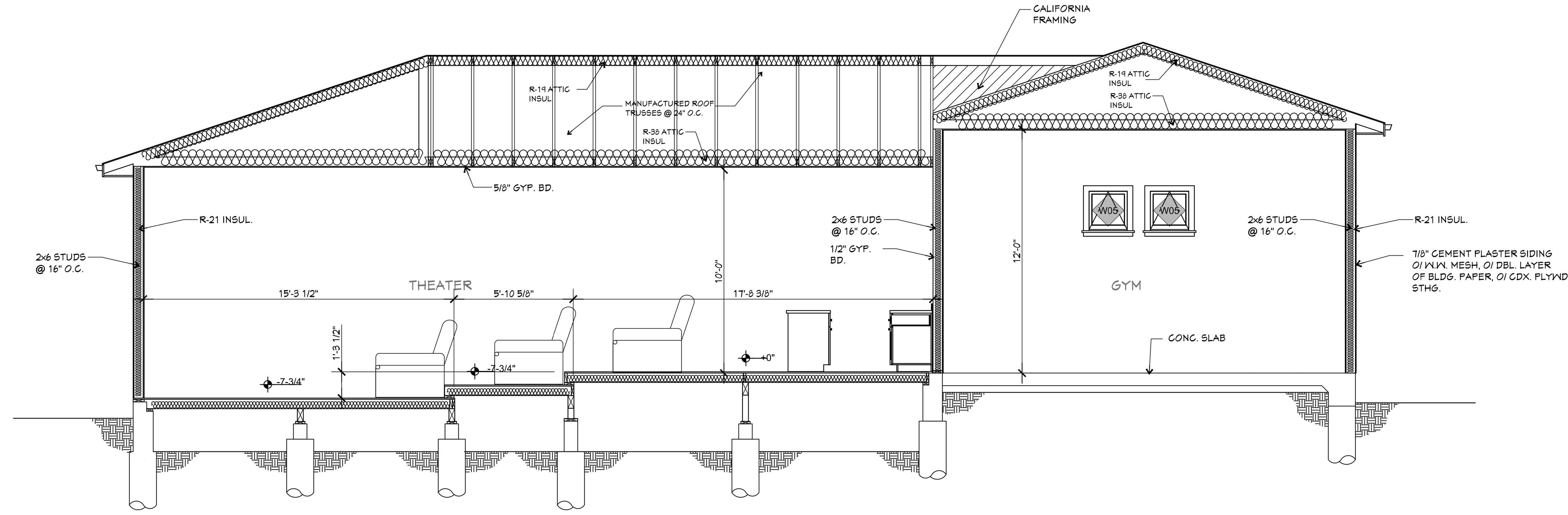
DRAWN BY :	DATE:
GD	10/28/2025
SCALE :	JOB NUM :
NONE	0421

SHEET

A2.5

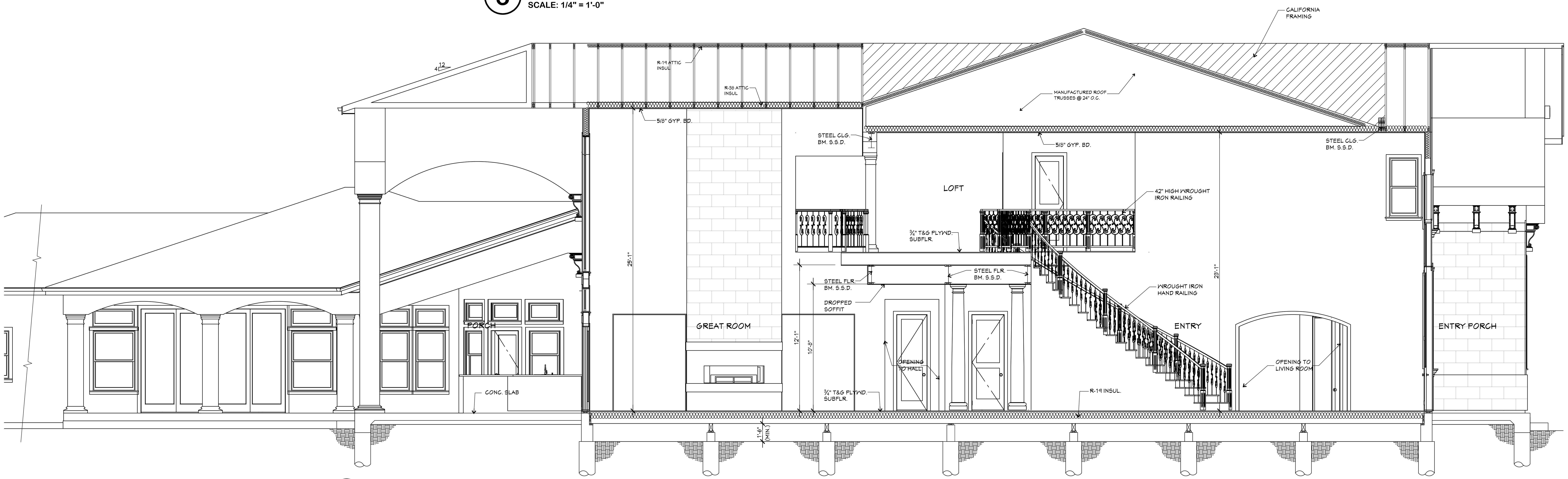
OF

2019



3 **BUILDING SECTION**

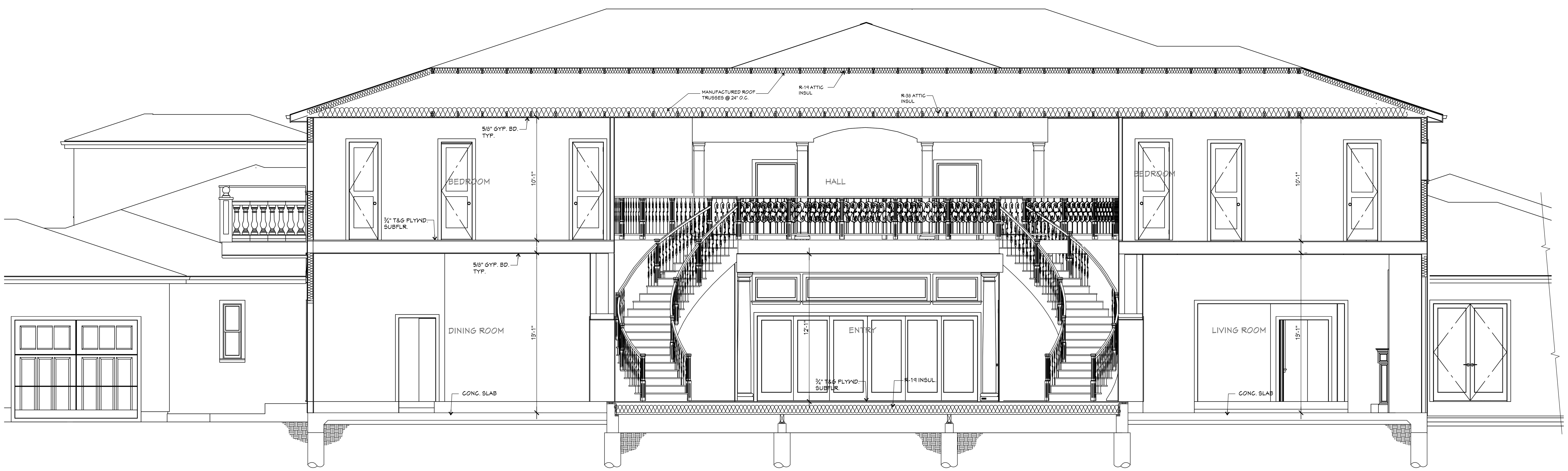
SCALE: 1/4" = 1'-0"



CALIFORNIA FRAMING
R-14 ATTIC INSUL
R-30 ATTIC INSUL
MANUFACTURED ROOF TRUSSES @ 24" O.C.
5/8" GYP. BD.
STEEL CLG. BM. S.S.D.
LOFT
42" HIGH WROUGHT IRON RAILING
3/4" T&G PLYWD. SUBFLR.
STEEL FLR. BM. S.S.D.
DROPPED SOFFIT
WROUGHT IRON HAND RAILING
PORCH
GREAT ROOM
ENTRY
ENTRY PORCH
OPENING TO HALL
OPENING TO LIVING ROOM
CONC. SLAB
R-19 INSUL.

2 **BUILDING SECTION**

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



1 **BUILDING SECTION**

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

Gil Dominguez
Custom Home & Addition Remodel Design

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL	DATE

ISSUE	DATE

Gil Dominguez

BUILDING SECTIONS

PEÑA RESIDENCE
CUSTOM HOME

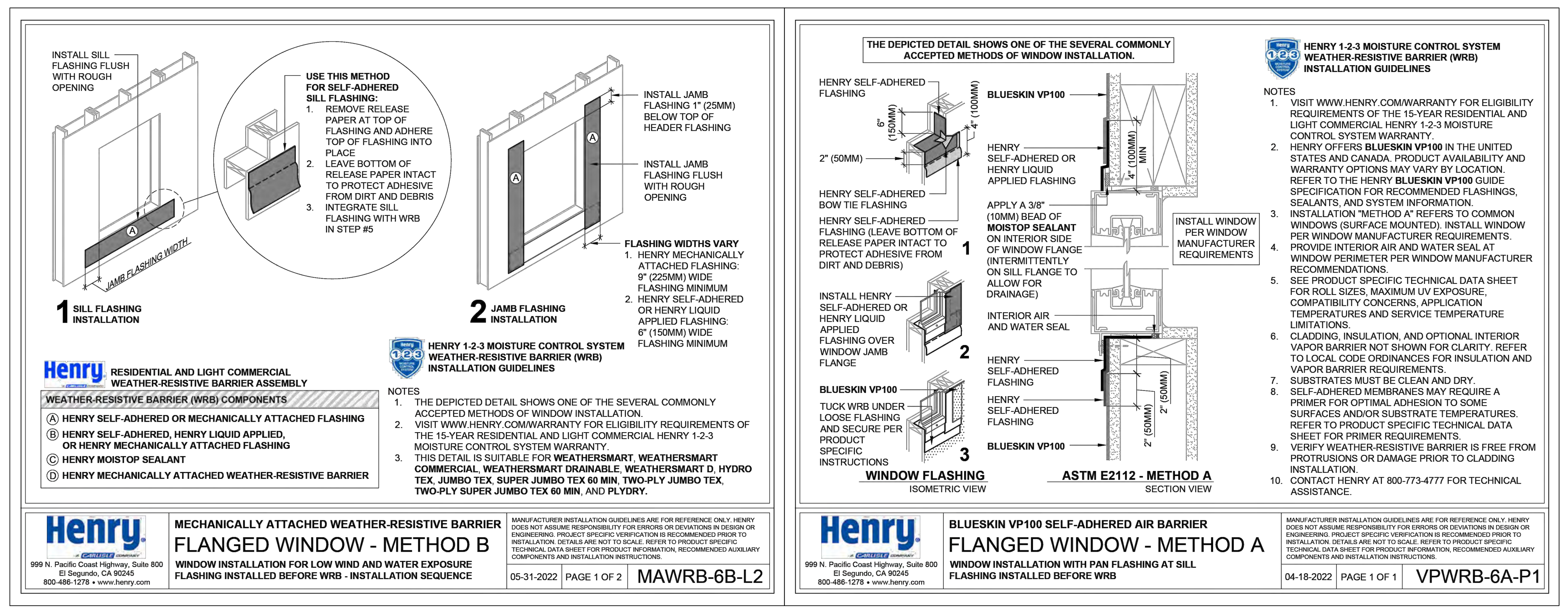
303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

DRAWN BY :	DATE:
GD	10/28/2025
SCALE :	JOB NUM :
NONE	0421

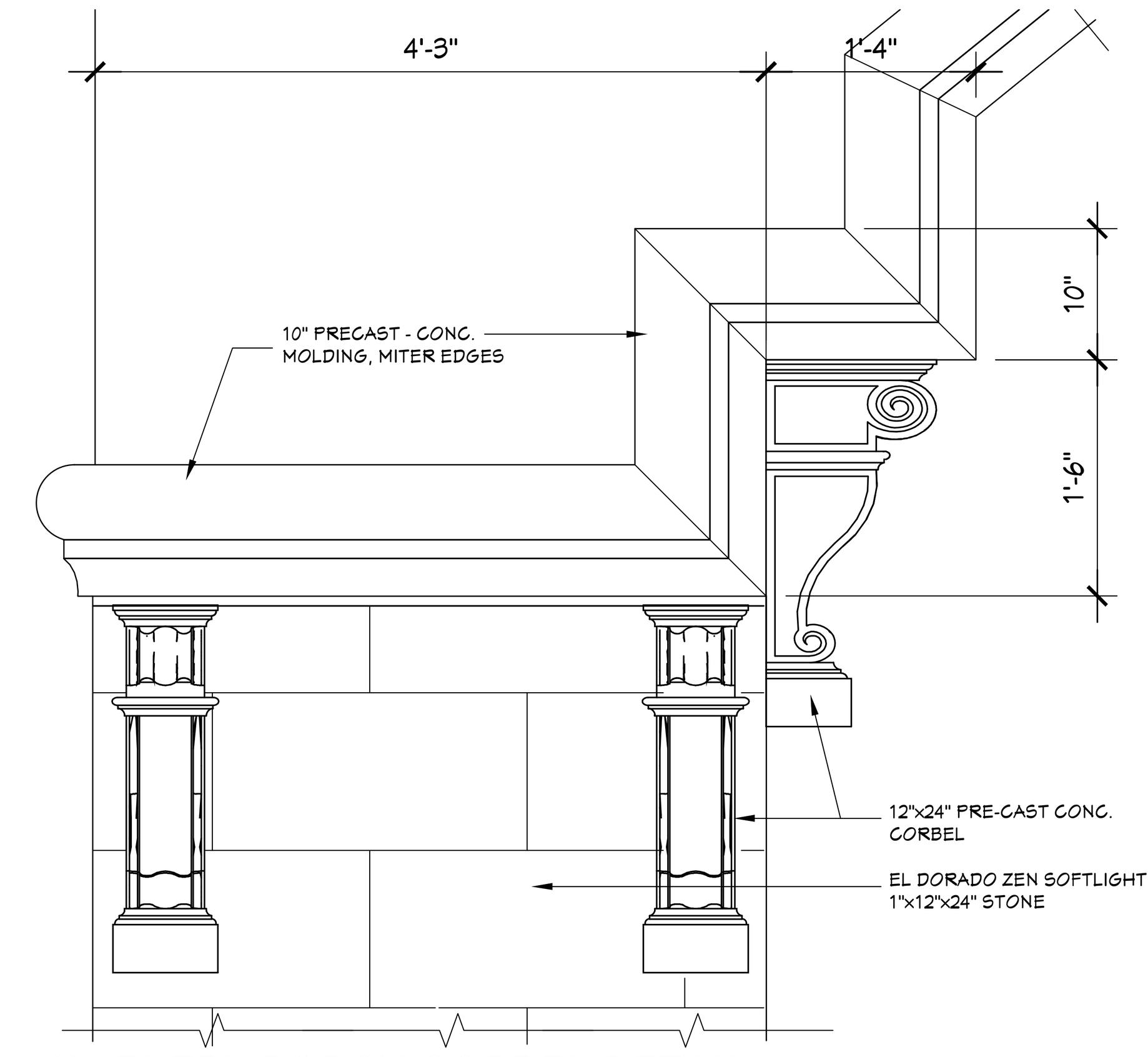
SHEET
A2.6
OF

2019

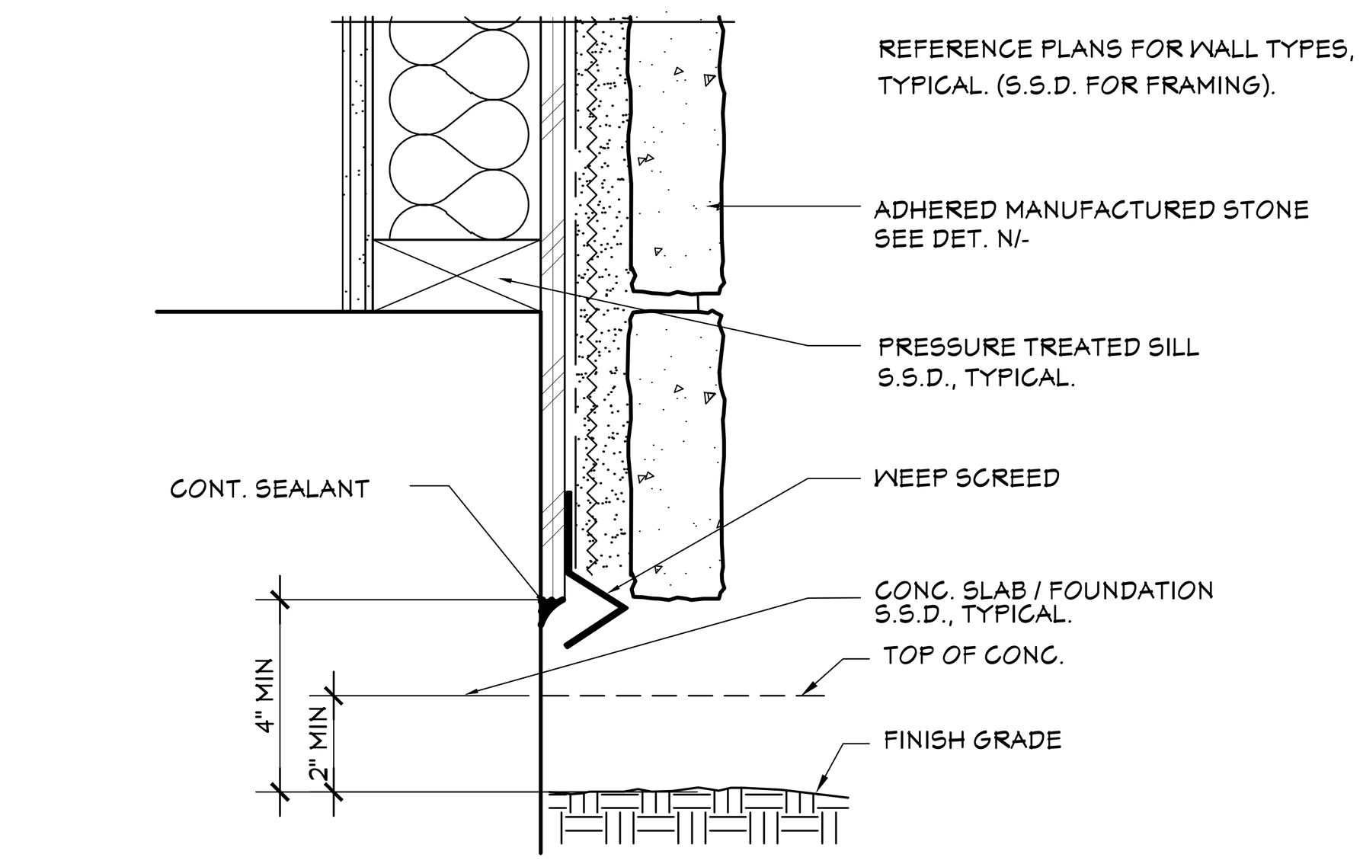
R NOT USED
SCALE: NONE



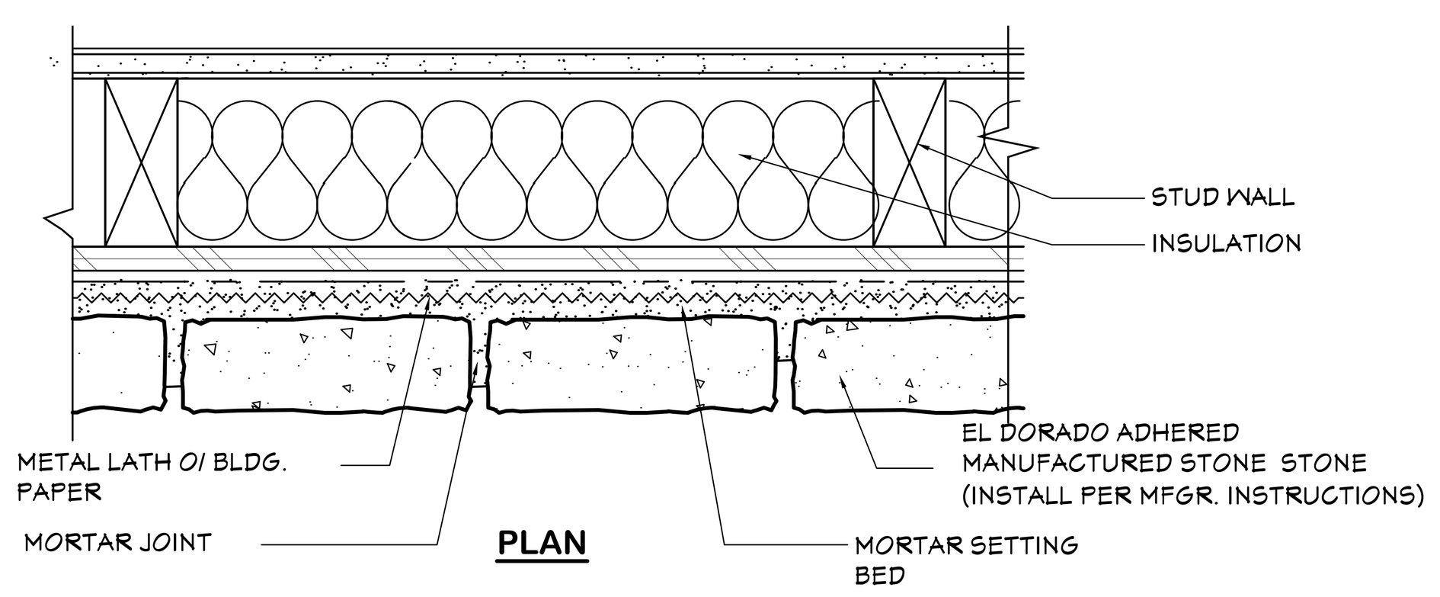
Q TYPICAL DOOR AND WINDOW FLASHING DETAIL
SCALE: NONE



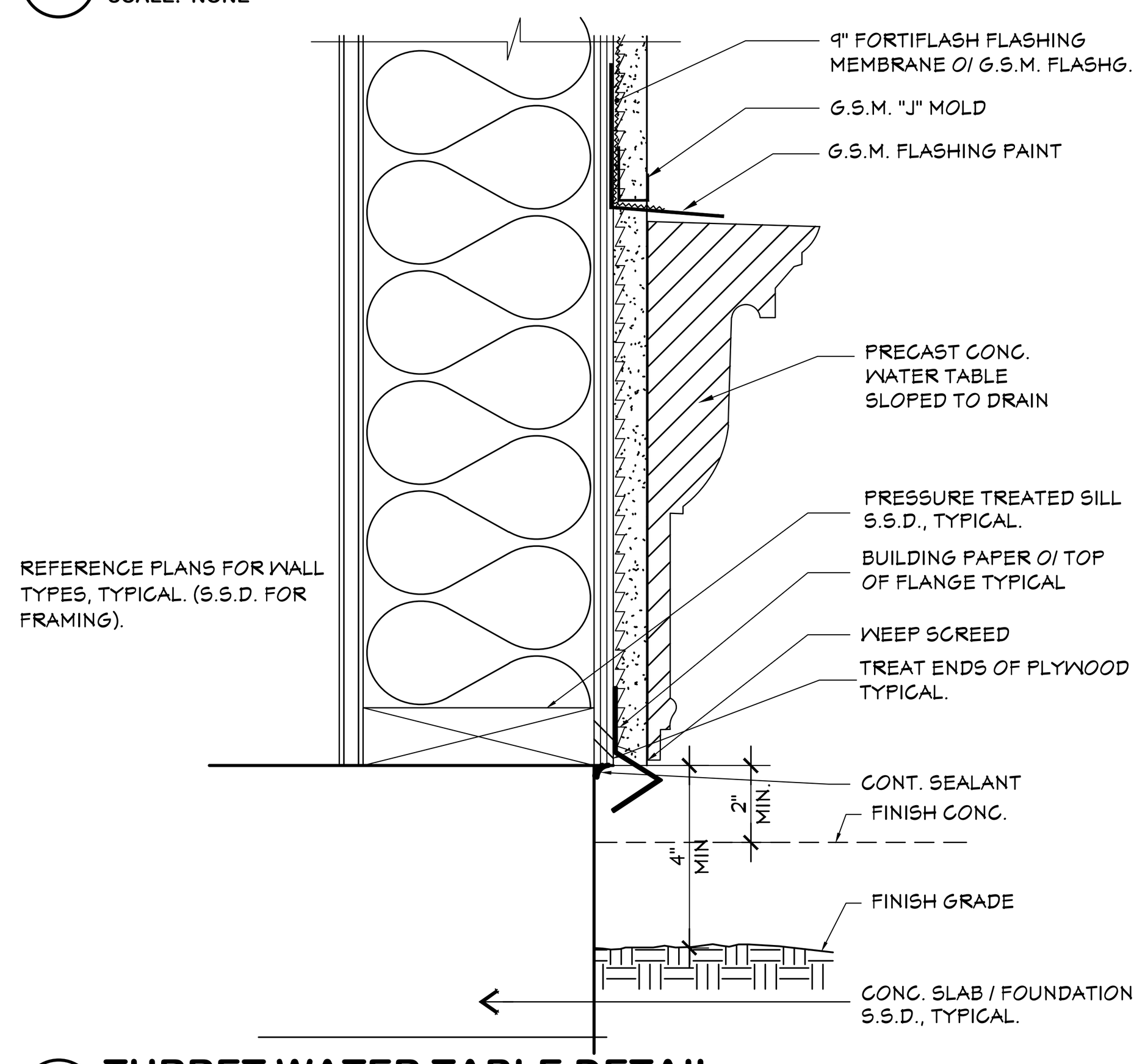
P ENTRY PORCH CORBEL DETAIL
SCALE: 3" = 1'-0"



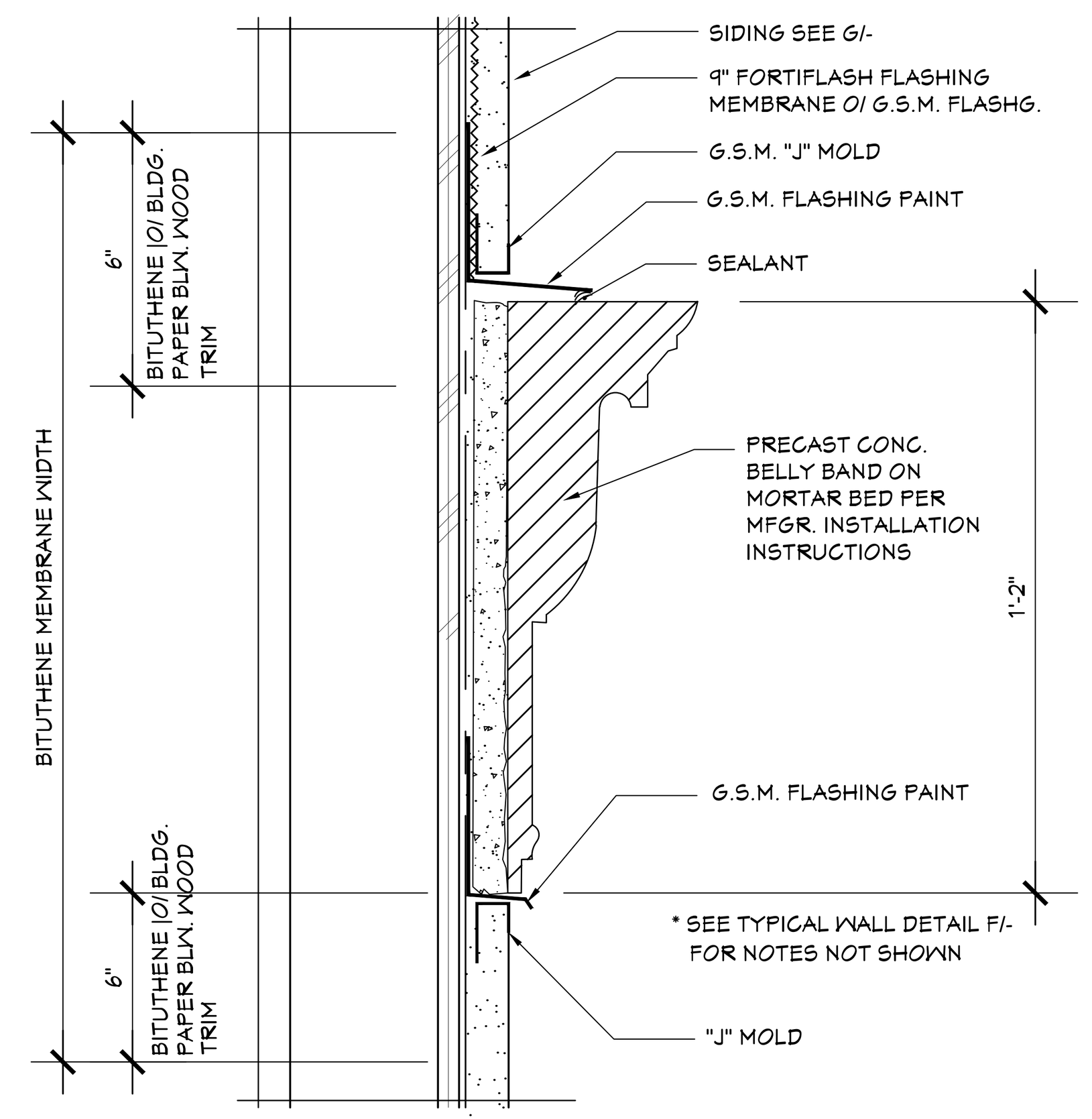
O STONE WEEP SCREED DETAIL
SCALE: 3" = 1'-0"



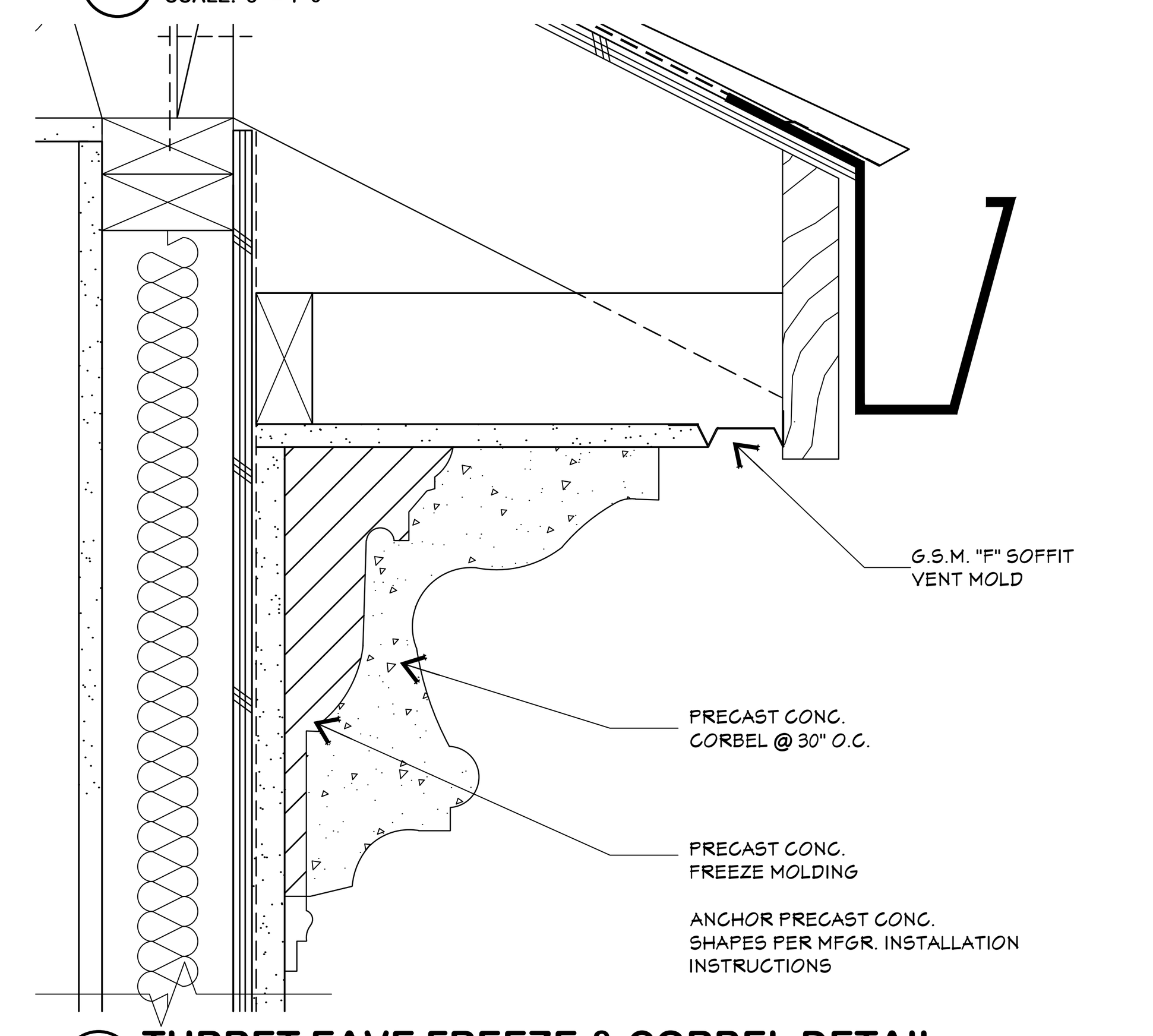
N STONE VENEER DETAIL
SCALE: 3" = 1'-0"



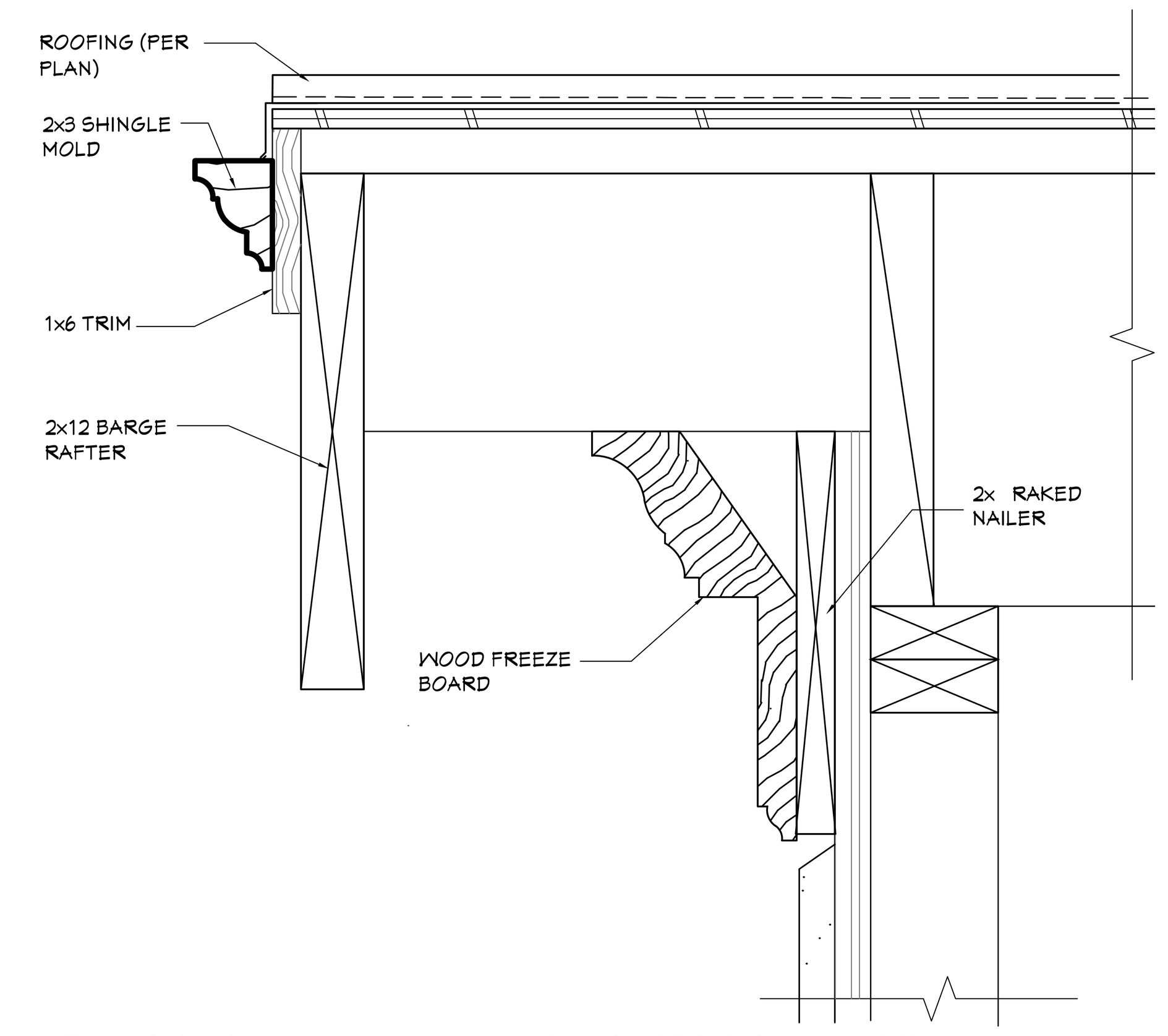
M TURRET WATER TABLE DETAIL
SCALE: 3" = 1'-0"



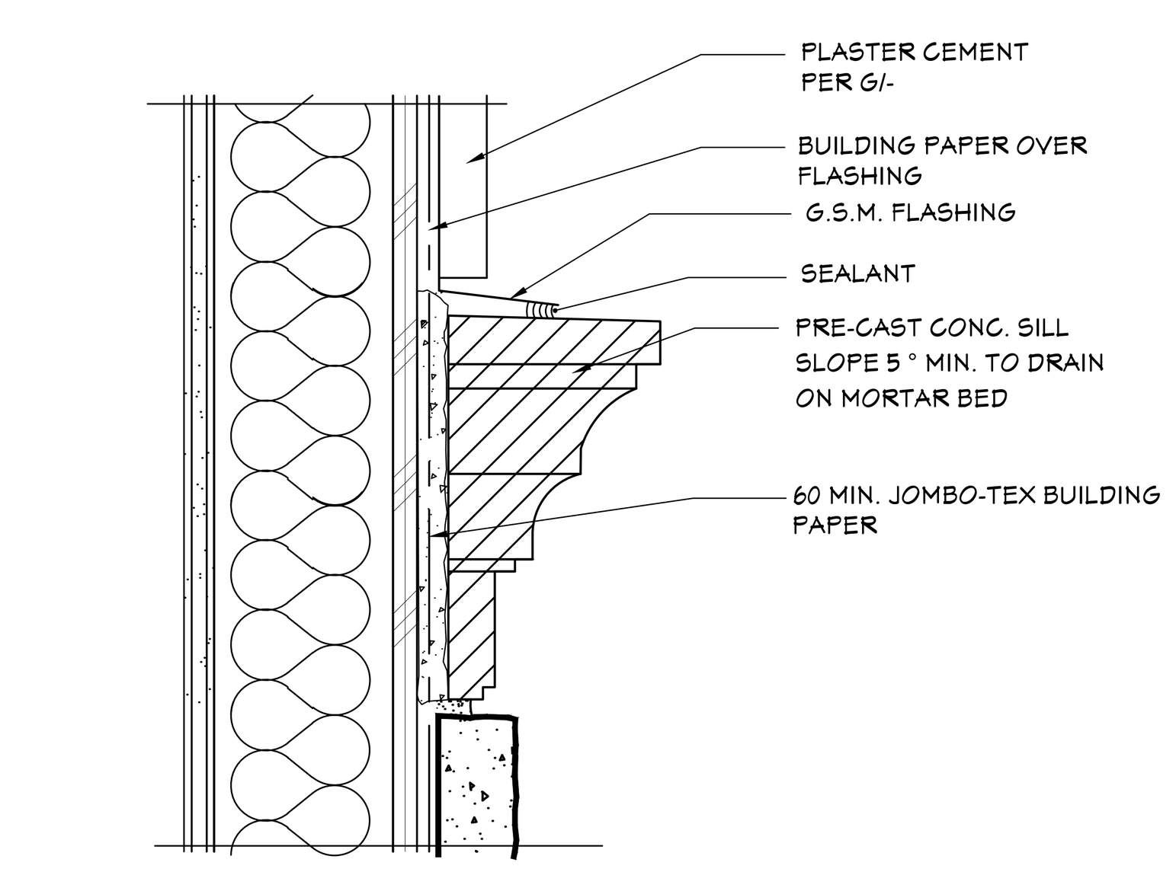
L TURRET BELLY BAND DETAIL
SCALE: 3" = 1'-0"



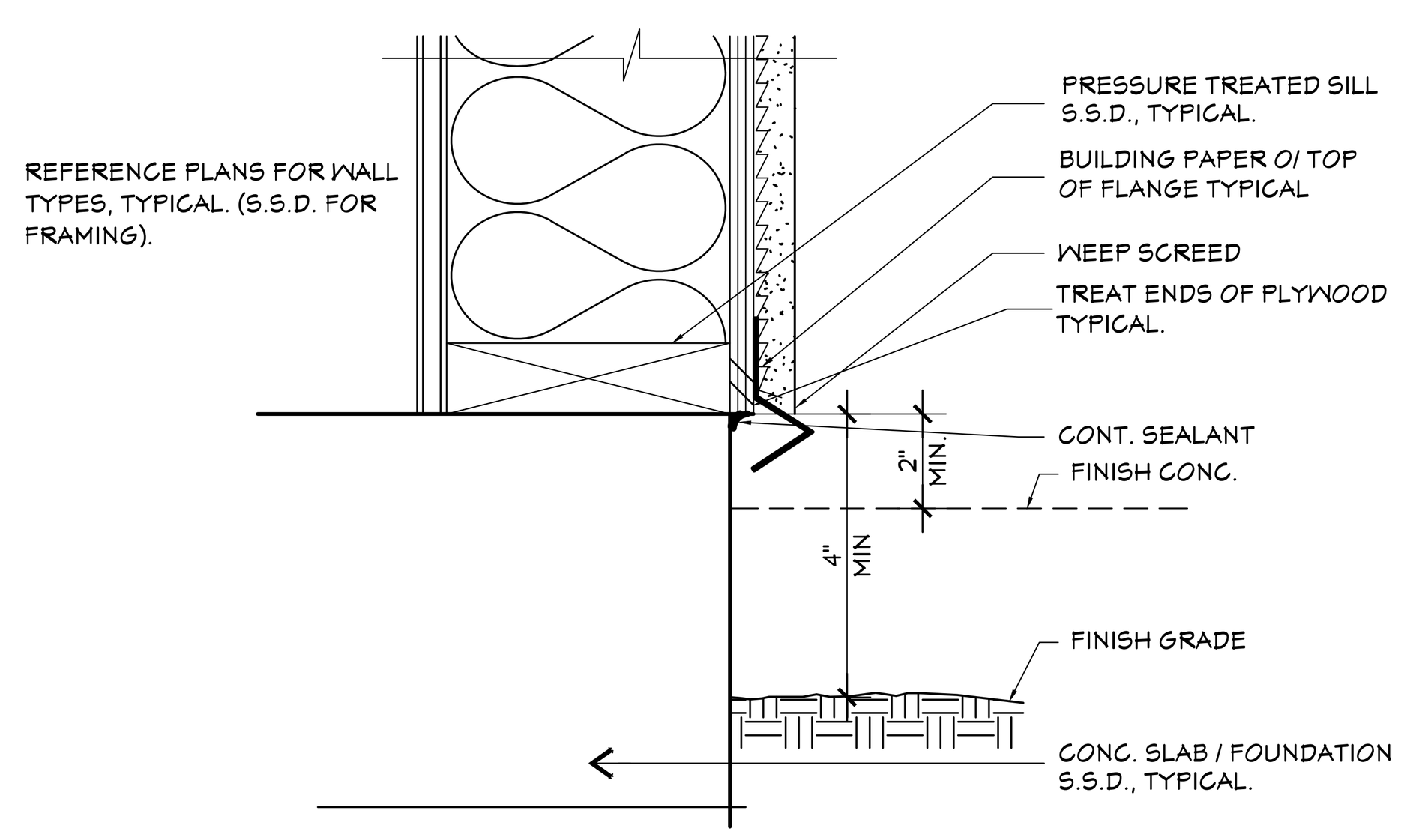
K TURRET EAVE FREEZE & CORBEL DETAIL
SCALE: 3" = 1'-0"



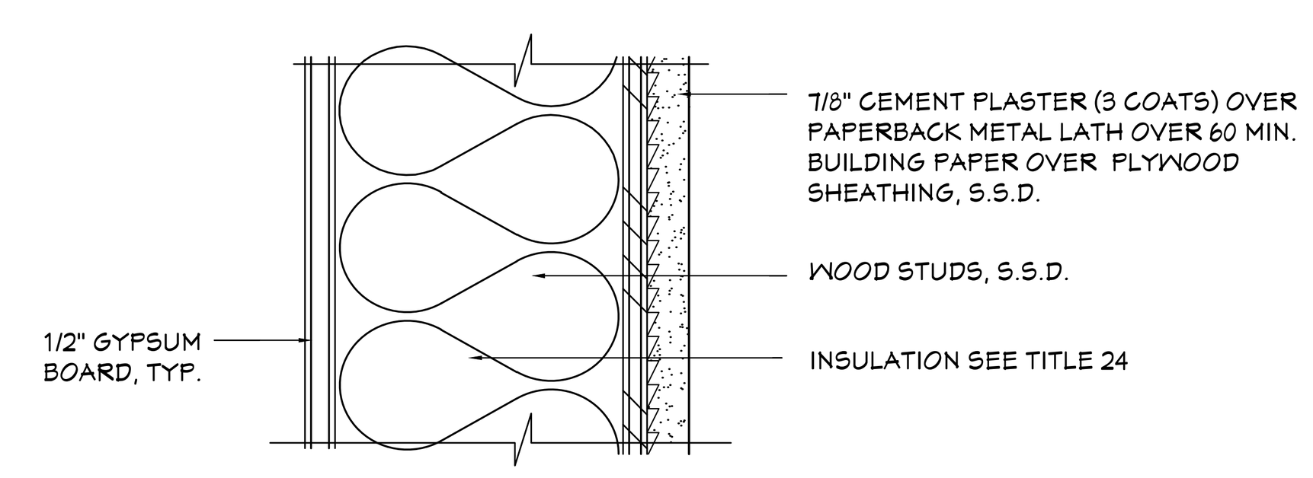
J GABLE FREEZE BD. AT STUCCO DETAIL
SCALE: 3" = 1'-0"



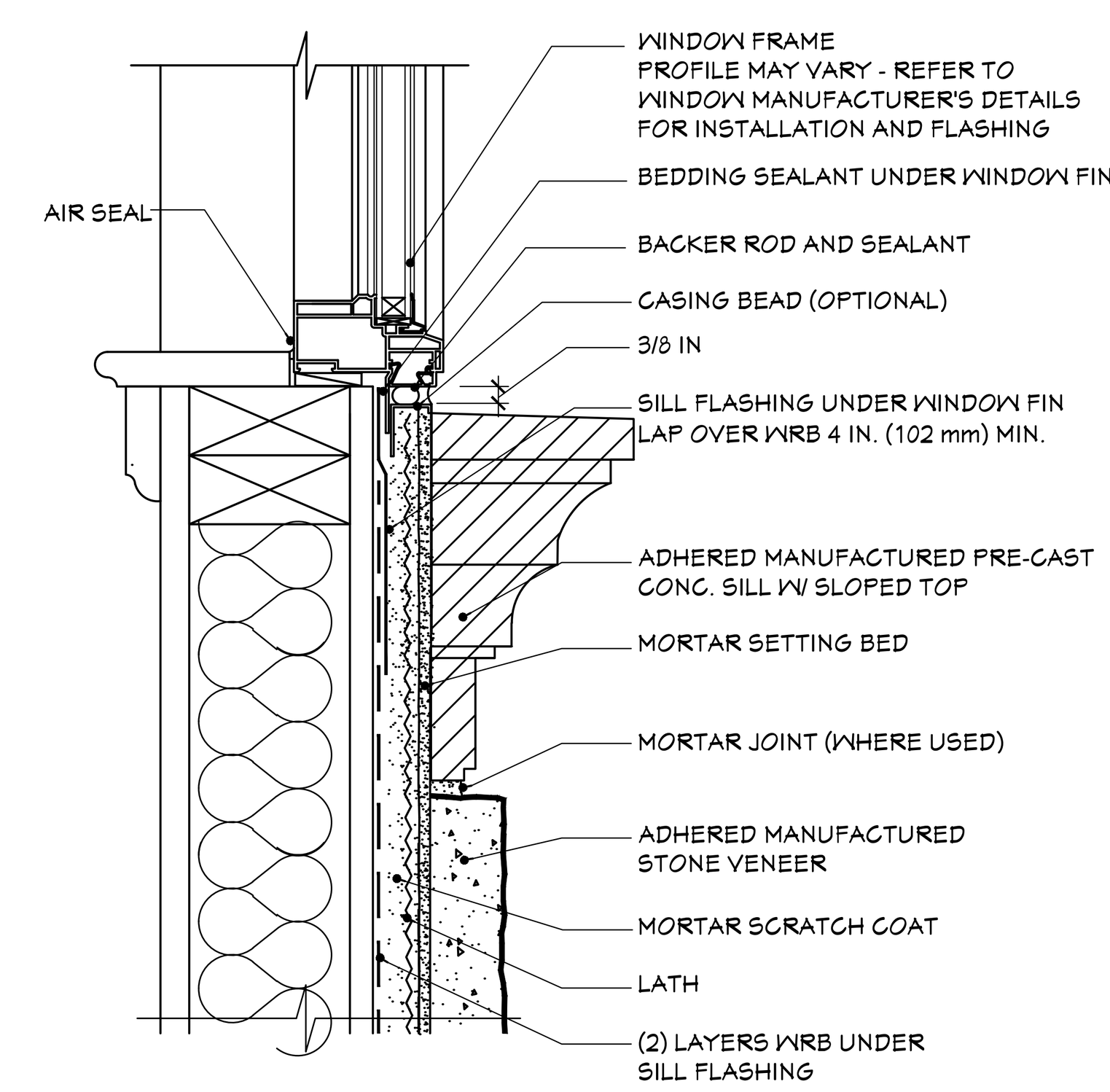
I TYPICAL PRE-CAST CONC. SILL DETAIL
SCALE: 3" = 1'-0"



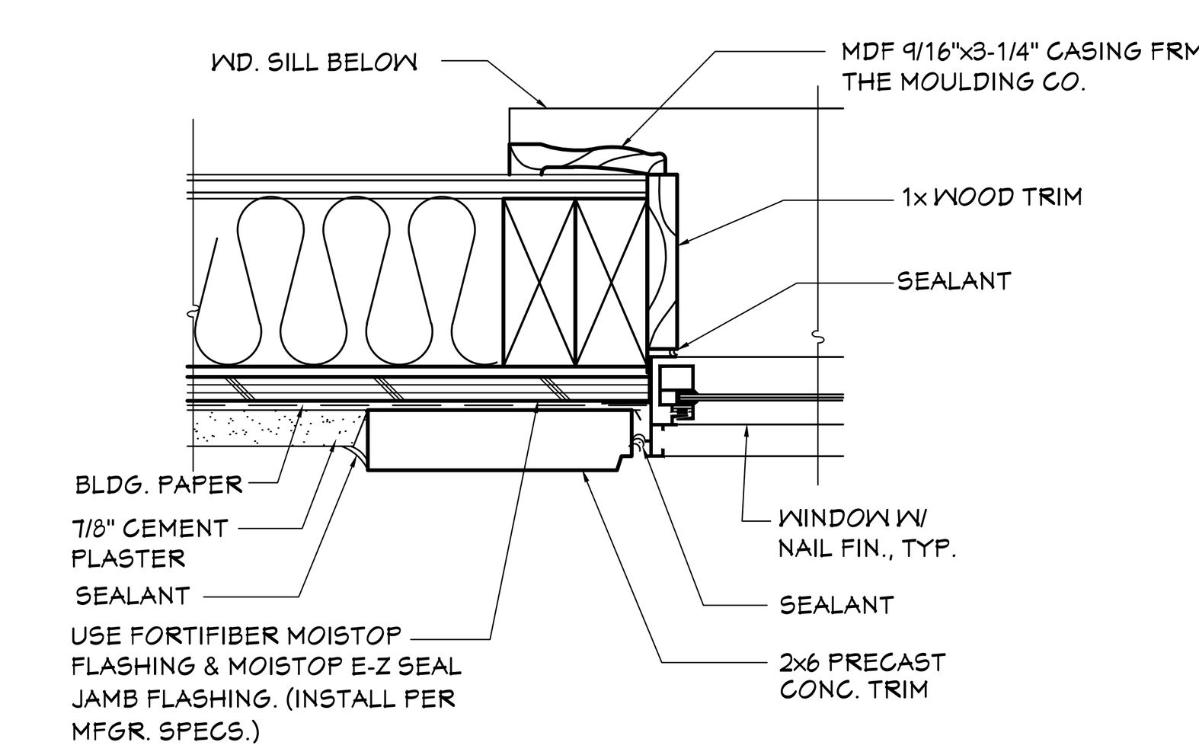
H WEEP SCREED DETAIL
SCALE: 3" = 1'-0"



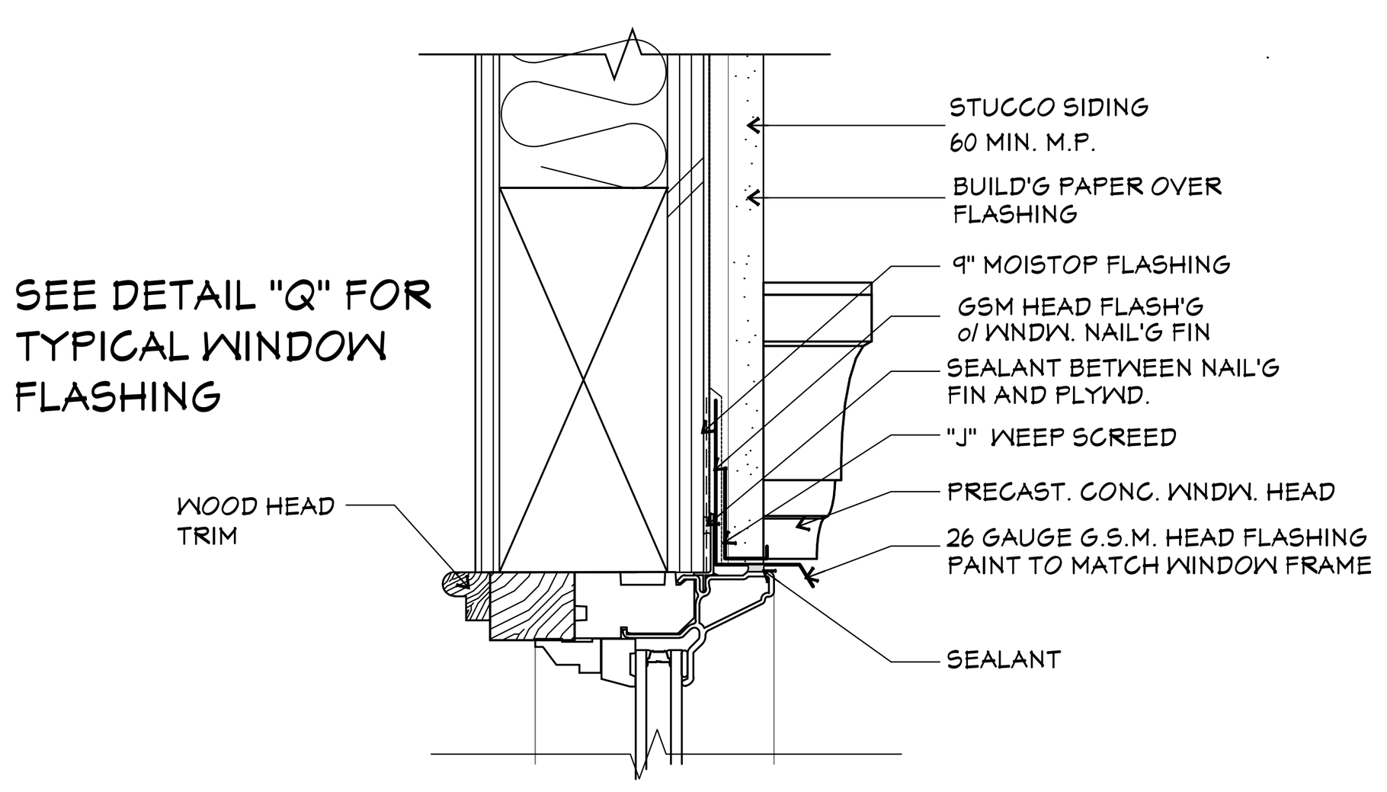
G CEMENT PLASTER
SCALE: 3" = 1'-0"



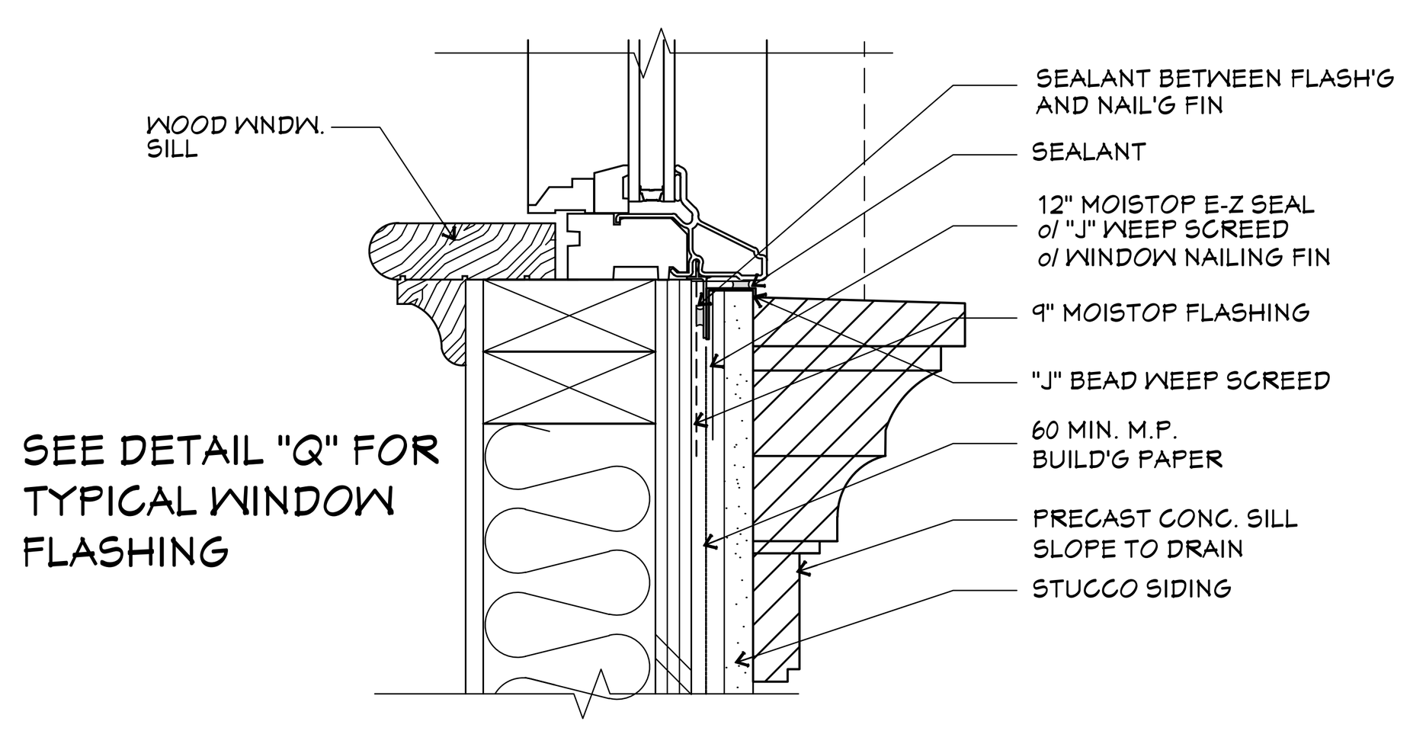
F WINDOW SILL @ PRE-CAST CONC. SILL DETAIL
SCALE: 3" = 1'-0"



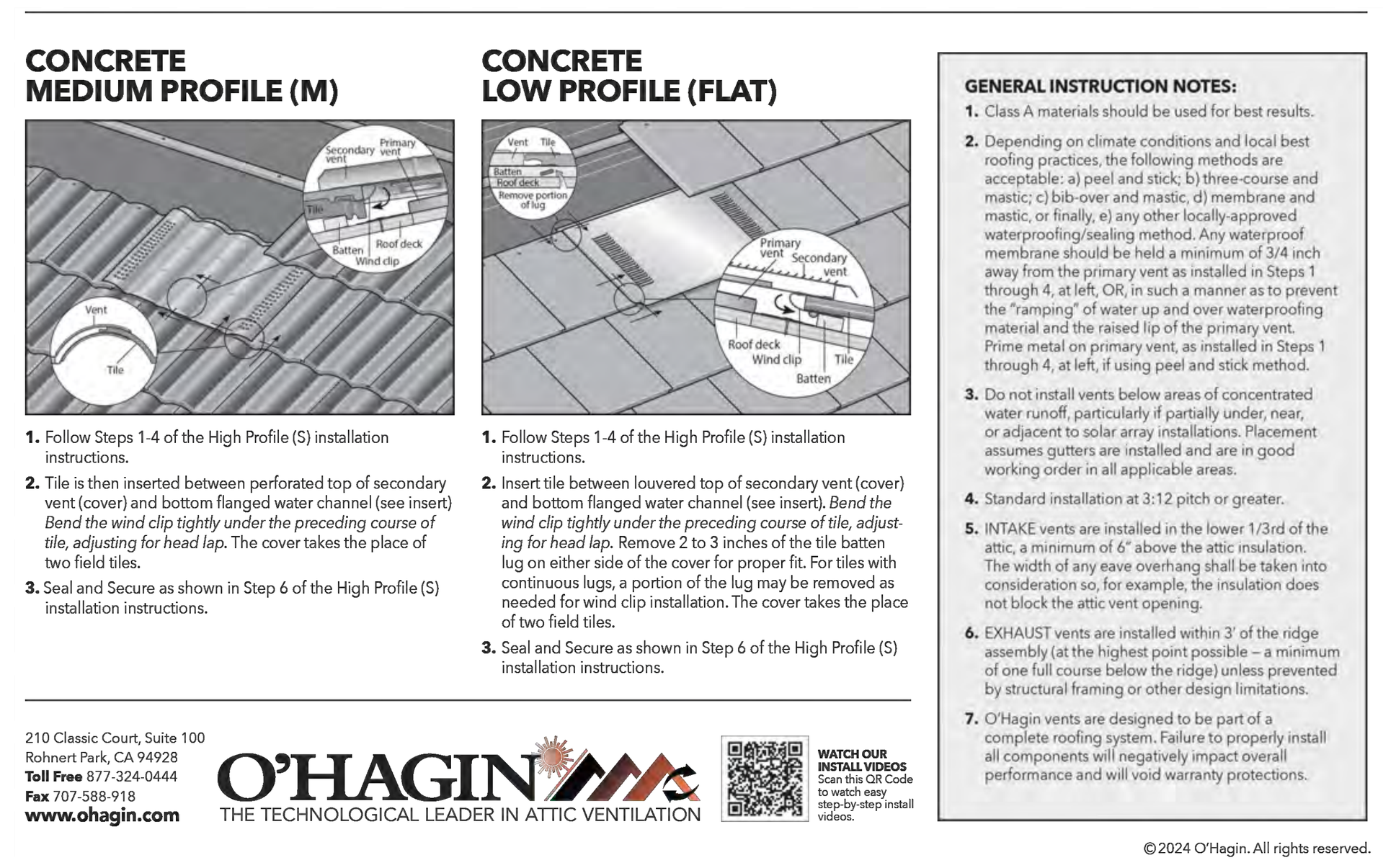
E TYPICAL WINDOW JAMB DETAIL
SCALE: 3" = 1'-0"

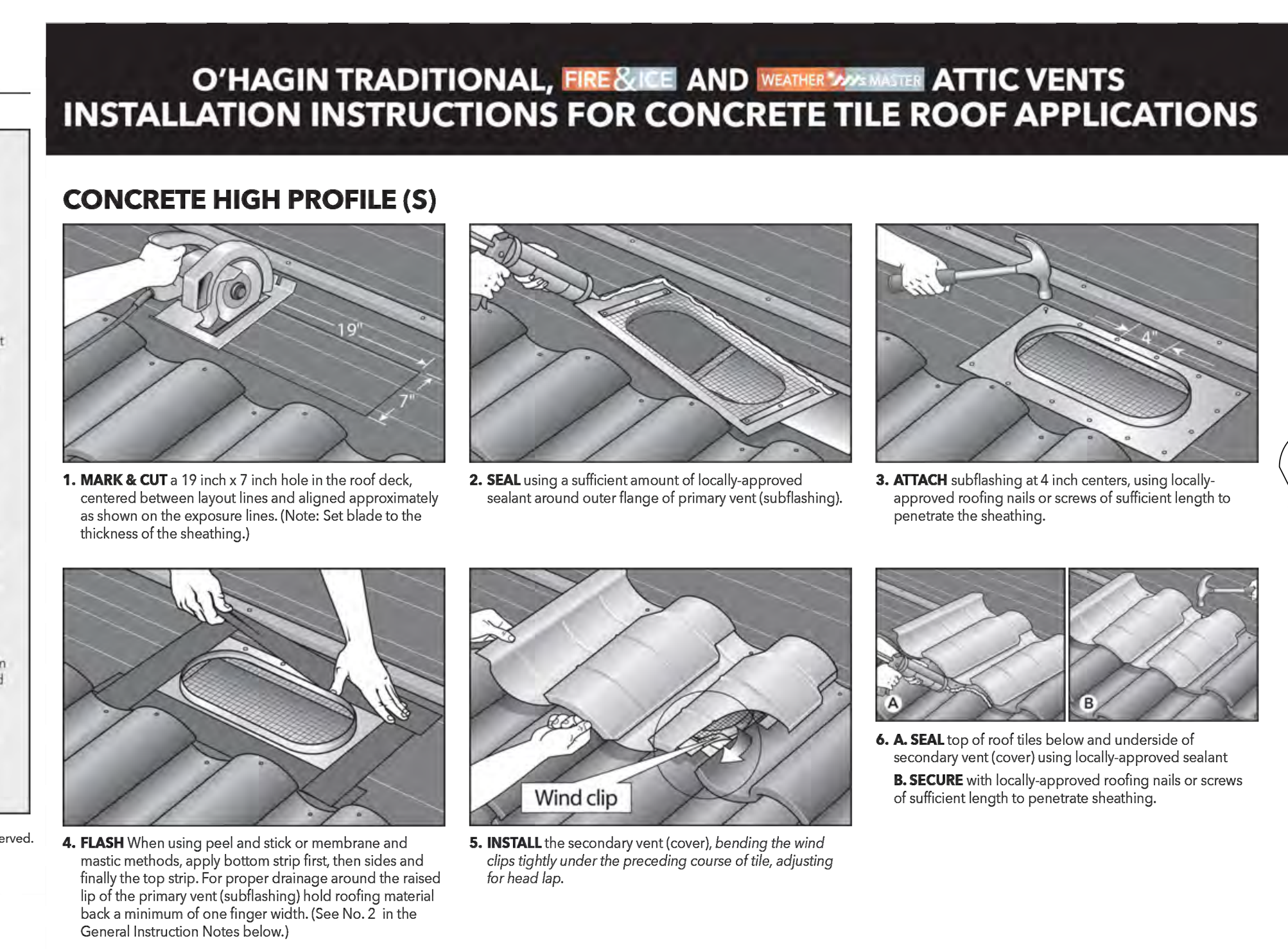


D TYPICAL WINDOW HEAD DETAIL
SCALE: 3" = 1'-0"

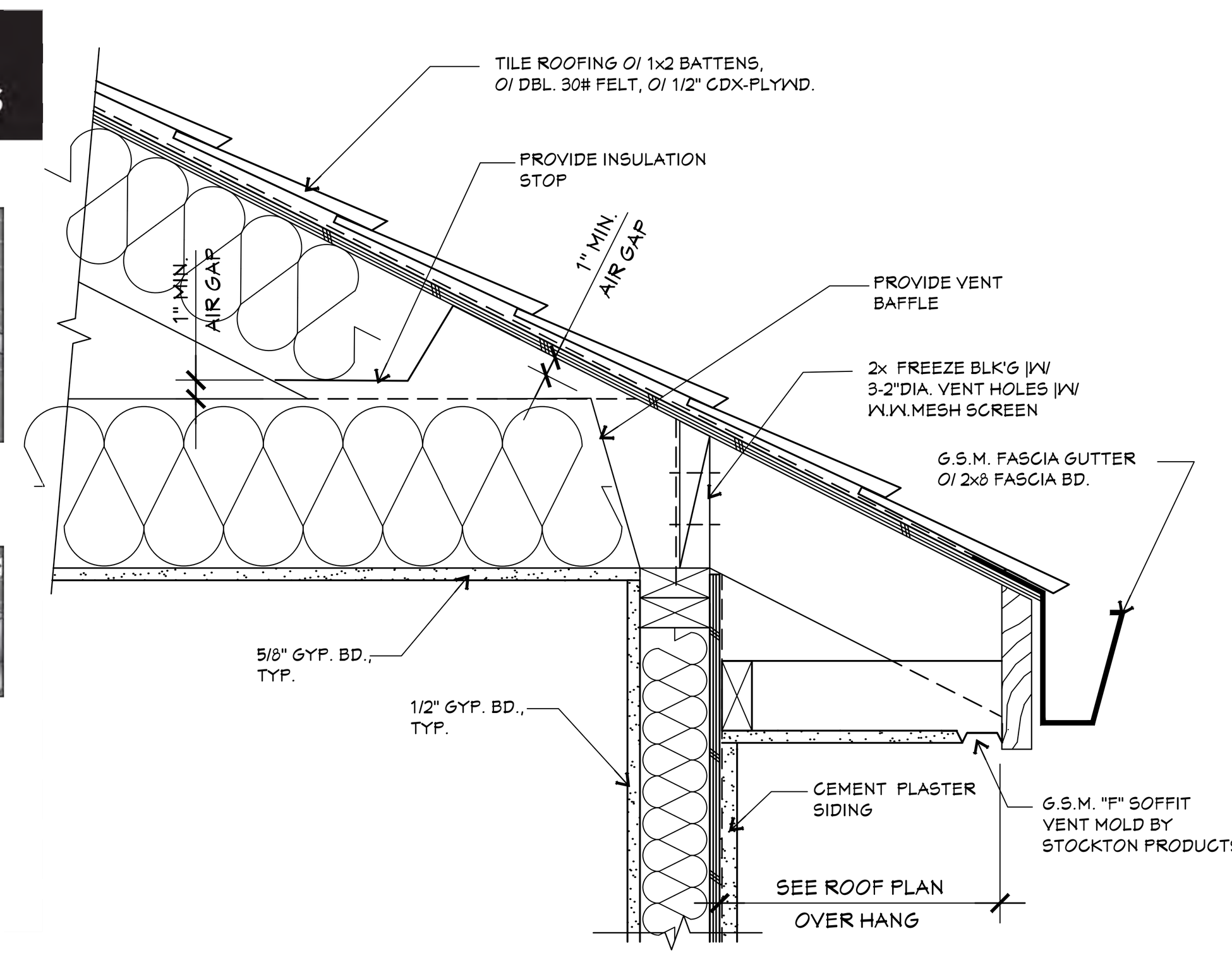


C TYPICAL WINDOW SILL DETAIL
SCALE: 3" = 1'-0"





B TYPICAL HIGH ATTIC VENT DETAIL
SCALE: NONE



A EAVE DETAIL AT FLAT CEILING
SCALE: 1-1/2" = 1'-0"

Custom Home & Addition Remodel Design
American Institute of Building Design
A|B|D

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL	DATE

ISSUE	DATE

Gil Dominguez

EXTERIOR DESIGN DETAILS

PEÑA RESIDENCE
CUSTOM HOME

303 BLAINE LANE
BRENTWOOD, CA 94548
APN: 020-110-011

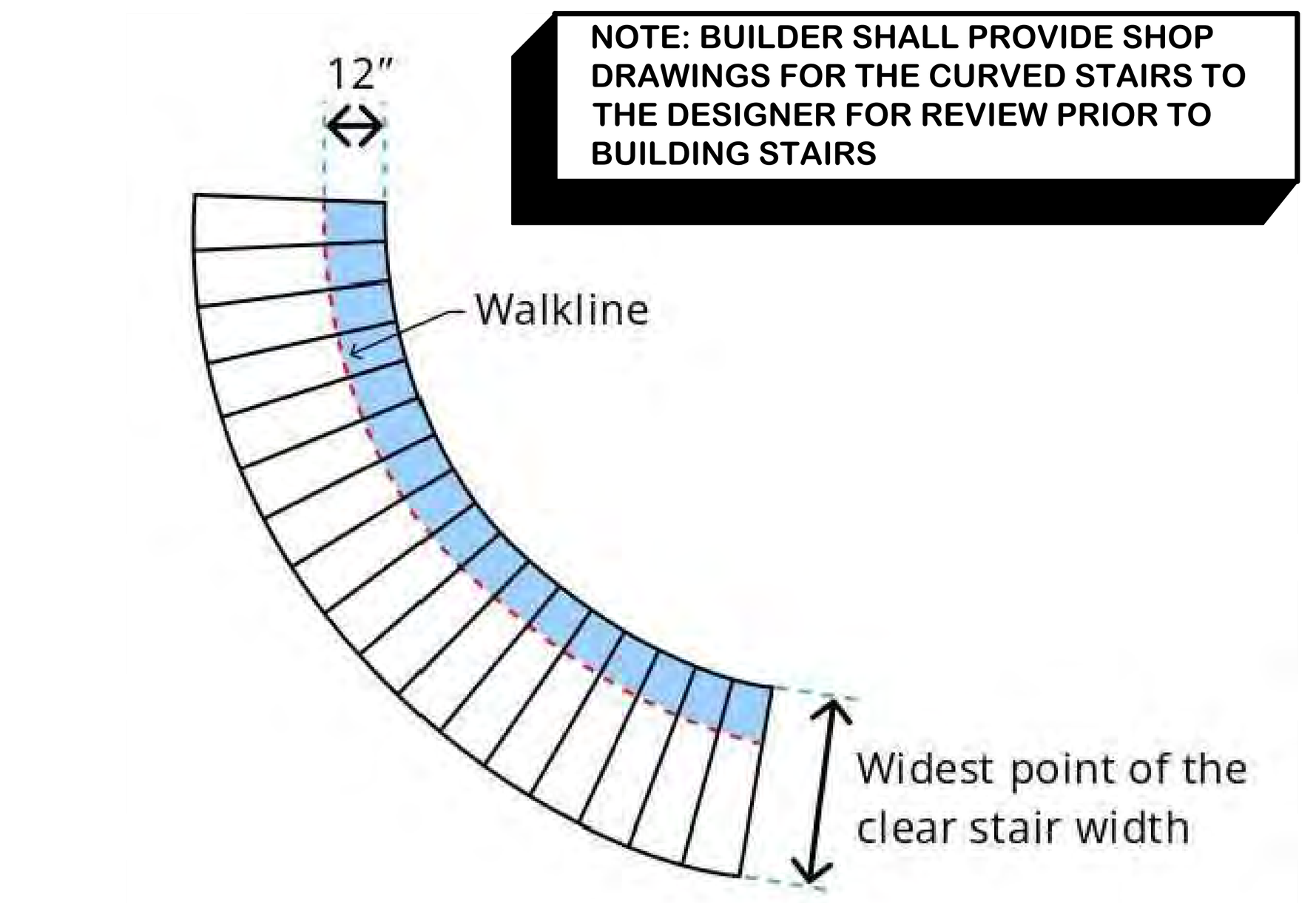
DRAWN BY: GD | DATE: 06/12/2025
SCALE: NOTED | JOB NUM:

SHEET
A5.0
OF

T
SCALE: NONE

S
SCALE: 1" = 1'-0"

NOTE: BUILDER SHALL PROVIDE SHOP DRAWINGS FOR THE CURVED STAIRS TO BE SUBMITTED TO THE DESIGNER FOR REVIEW PRIOR TO BUILDING STAIRS



R
SCALE: 1" = 1'-0"

Q
SCALE: 3" = 1'-0"

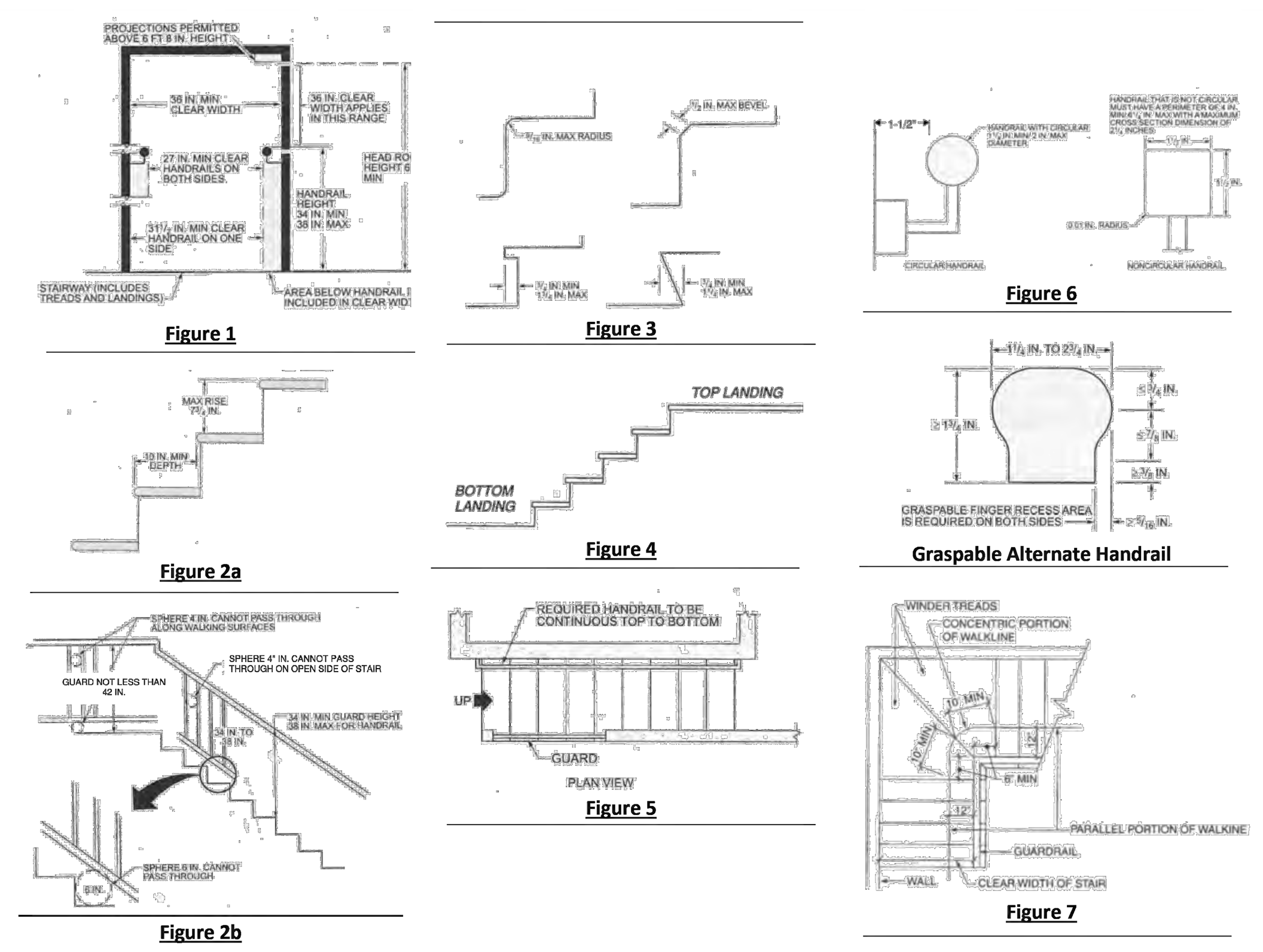
P
SCALE: 3" = 1'-0"

Opening limitations.
Required guards shall not have openings from the walking surface to the required guard height that allow passage of a sphere 4 inches in diameter (Figure 2b).

Exceptions:
The triangular openings at the open side of stair, formed by the riser, tread and bottom rail of a guard, shall not allow passage of a sphere 6 inches in diameter.

Guards on the open side of stairs shall not have openings that allow passage of a sphere 4 inches in diameter (Figure 2b).

Winder Treads.
Winder treads shall have a tread depth of not less than 10 inches measured between the vertical planes of the foremost projection of adjacent treads at the intersections with the walkline.
Winder treads shall have a tread depth of not less than 6 inches at any point within the clear width of the stair. Within any flight of stairs, the largest winder tread depth at the walkline shall not exceed the smallest winder tread by more than 3/8 inch.
Consistently shaped winders at the walkline shall be allowed within the same flight of stairs as rectangular treads and shall not be required to be within 3/8 inch of the rectangular tread depth (Figure 7).



MINMUM STAIR REQUIREMENTS BASED ON THE 2022 CALIFORNIA RESIDENTAIL CODE (2022 CRC)

DEFINITIONS

GUARD OR GUARDRAIL: A building component or a system of building components located near the open sides of elevated walking surface that minimizes the possibility of a fall from the walking surface to the lower level.

HANDRAIL: A horizontal or sloping rail intended for grasping by the hand for guidance or support.

STAIRWAY: One or more flights of stairs, either interior or exterior, with the necessary landings and connecting platforms to form a continuous and uninterrupted passage from one level to another.

MINIMUM REQUIREMENTS FOR STAIRWAY

Width.
- Stairways shall be not less than 36 inches in clear width at all points above the permitted handrail height.
- When handrails are present, the clear width of stairways at and below the handrail height shall be:
  - a). Handrail installed on one side; stairway width shall not be less than 31.5 inches clear.
  - b). When handrails are installed on both sides, stairway width shall not be less than 27 inches clear. (Figure 1)

Risers Height.
The riser height shall be not more than 7-3/4 inches (figure 2a).
At open risers, openings located more than 30 inches, as measured vertically, to the floor or grade below shall not permit the passage of a 4-inch diameter sphere (Figure 2b).

Tread Depth.
The tread depth shall be not less than 10 inches. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (Figure 2a).

Nosing's.
Nosings at treads, landings and floors of stairways shall have a radius of curvature at the nosing not greater than 9/16 inch or a bevel not greater than 1/2 inch. A nosing projection not less than 3/4 inch and not more than 1-1/4 inches.
The greatest nosing projection shall not exceed the smallest nosing projection by more than3/8 inch within a stairway (Figure 3).

Exception: A nosing projection is not required where the tread depth is not less than 11 inches.

Landings for stairways.
There shall be a floor or landing at the top and bottom of each stairway, The width perpendicular to the direction of travel shall be not less than the width of the flight served (Figure 4), For landings of shapes other than square or rectangular, the depth at the walk line and the total area shall be not less than that of a quarter circle with a radius equal to the required landing width(Figure 7). Where the stairway has a straight run, the depth in the direction of travel shall be not less than 36 inches

Exception: A floor or landing is not required at the top of an interior flight of stairs, including stairs in an enclosed garage, provided that a door does not swing over the stairs.

Handrails.
Handrails shall be provided on not less than one side of each flight of stairs with four or more risers.

Height.
Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, shall be not less than 34 inches and not more than 38 inches (Figure 1 and 2b)

Handrails shall not project more than 4-1/2 inches on either side of the stairway.

Handrail clearance.
Handrails adjacent to a wall shall have a space of not less than 1-1 /2 inches between the wall and the handrails (Figure 6).

Continuity.
Handrails shall be continuous for the full length of the flight, from a point directly above the top riser of the flight to a point directly above the lowest riser of the flight. Handrail ends shall be returned toward a wall, guard walking surface continuous to itself, or terminate to a post (Figure 5).

Grip size.
Required handrails shall be of one of the following types or provide equivalent graspability (Figure 6).

Handrails with a circular cross section shall have an outside diameter of not less than 1 -1/4 inches and not greater than 2 inches. If the handrail is not circular, it shall have a perimeter of not less than 4 inches and not greater than 6-1/4 inches and a cross section of not more than 2 -1/4 inches. Edges shall have a radius of not less than 0.01 inch.

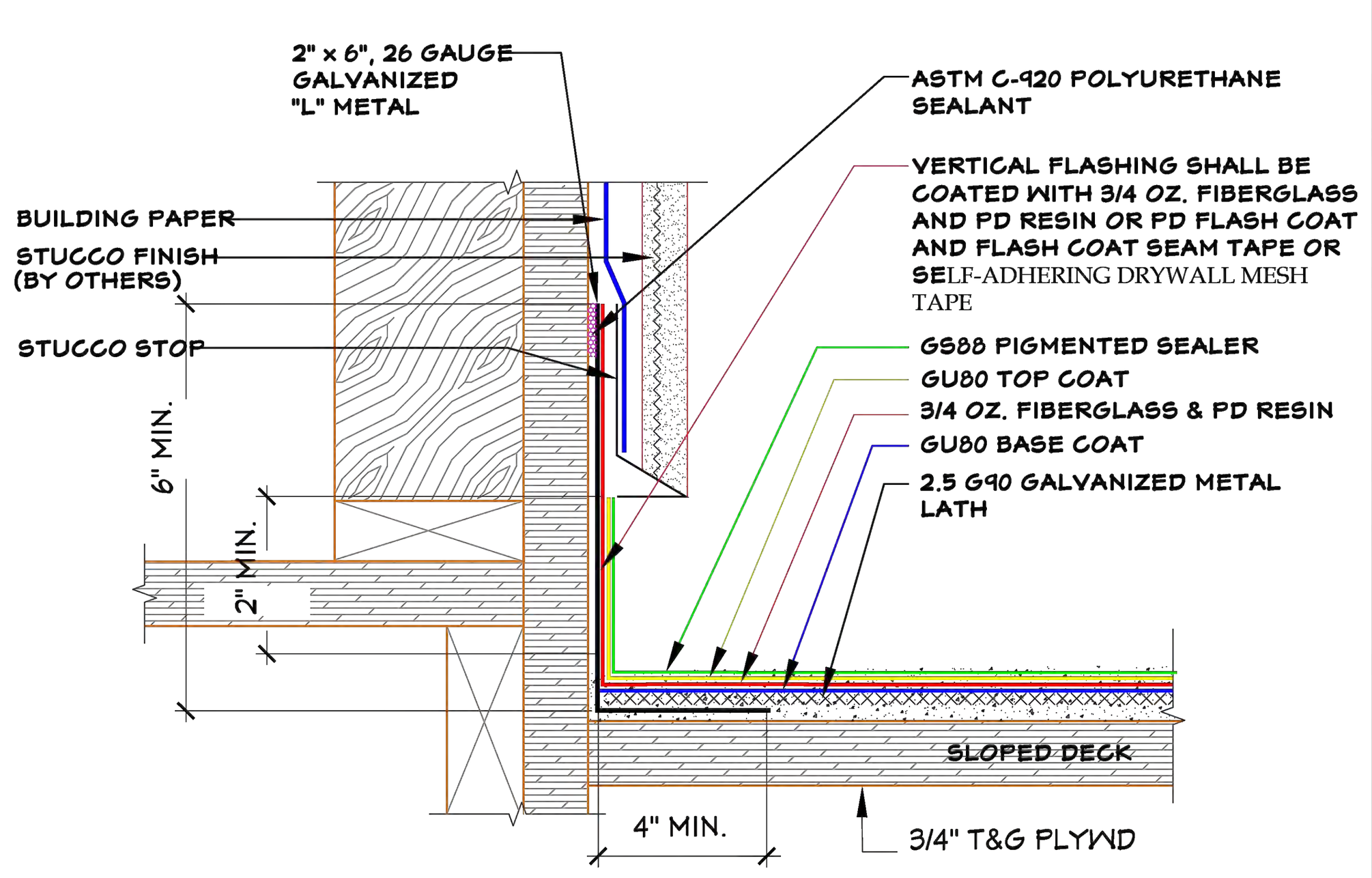
Guards.
Where required.
Guards shall be provided for those portions of open-sided walking surfaces, including floors, stairs, ramps, and landings that are located more than 30 inches measured vertically to the floor or grade below at any point within 36 inches horizontally to the edge of the open side (Figure 2b).

Height.
Required guards at open-sided walking surfaces, including stairs, porches, balconies, or landings, shall be not less than 42 inches in height as measured vertically above the adjacent walking surface or the line connecting the nosings.

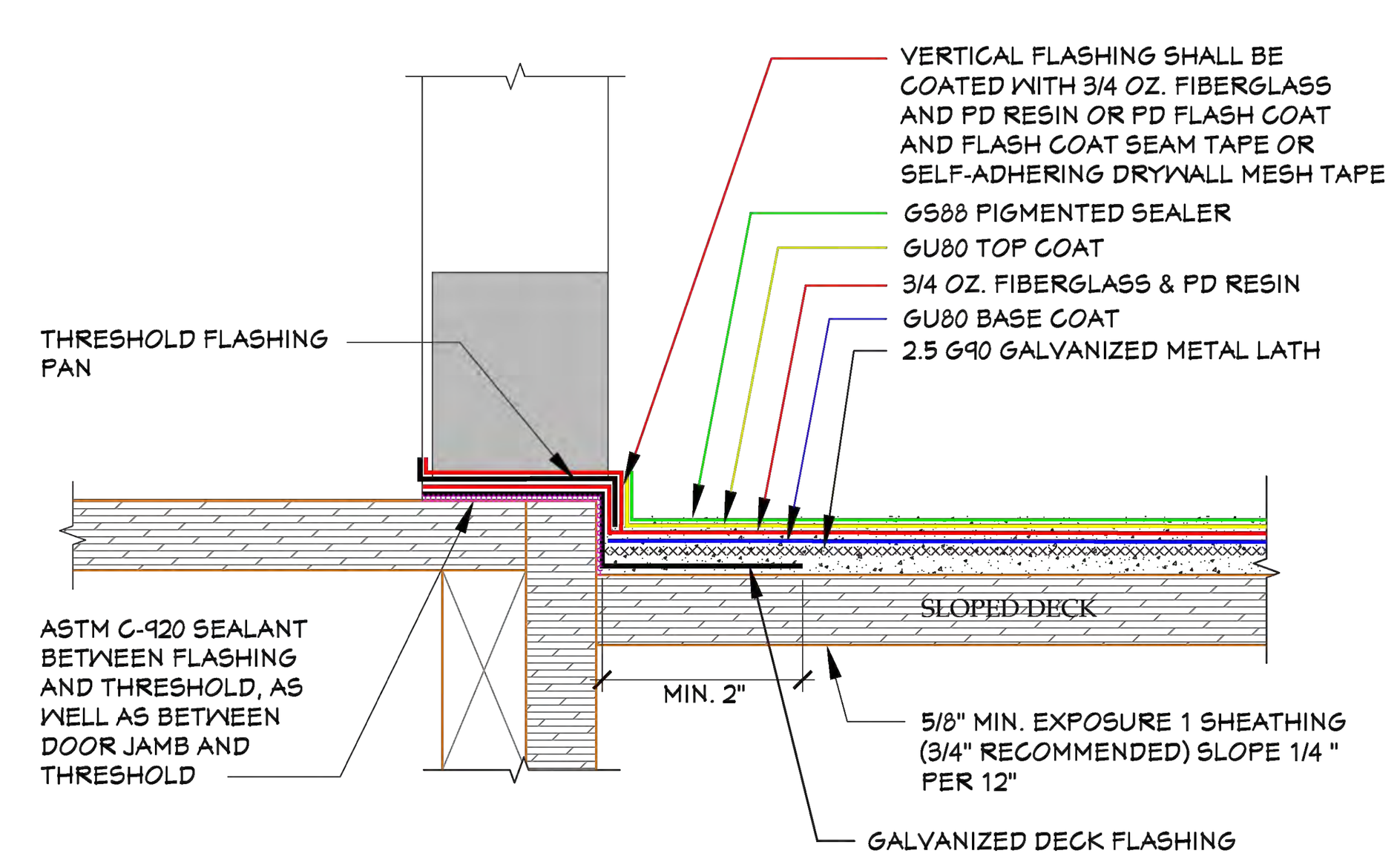
Where the top of the guard serves as a handrail on the open sides of stairs, the top of the guard shall be not less than 34 inches and not more than 38 inches as measured vertically from a line connecting the nosings (Figure 2b).

O
SCALE: 3" = 1'-0"

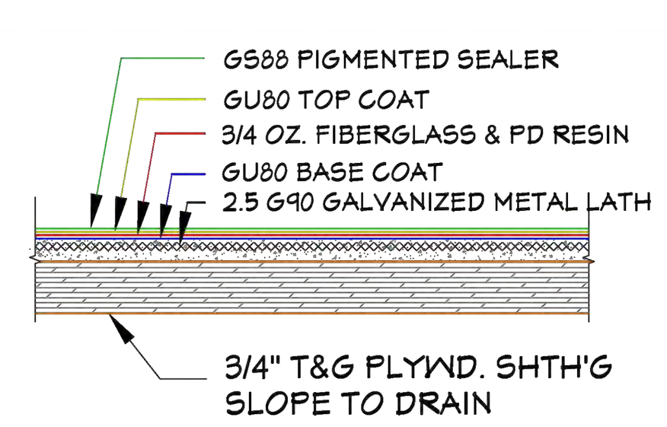
K
MINIMUM STAIR REQUIREMENTS
SCALE: N.T.S.



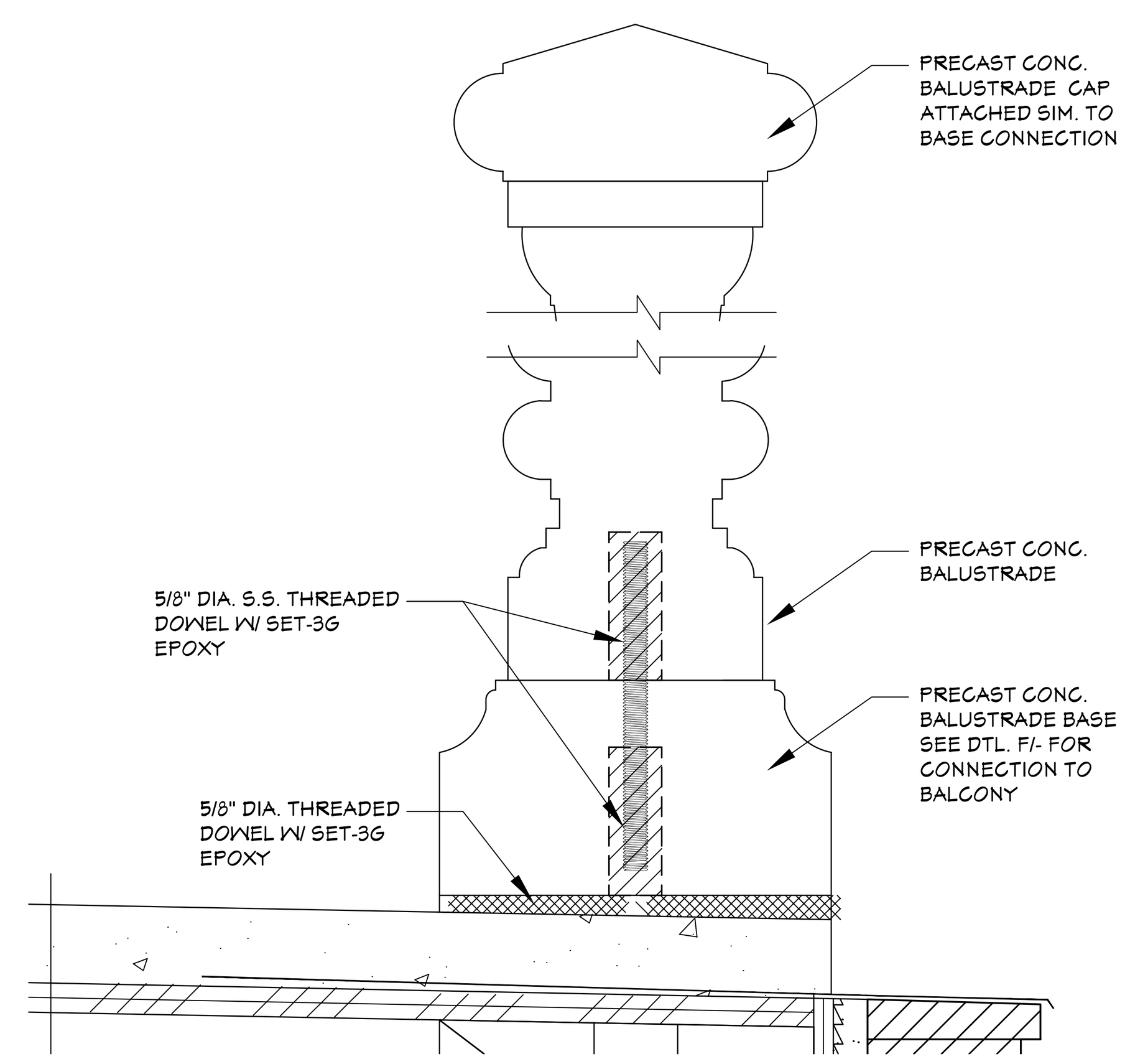
J
PLI-DEK DECK TO WALL DETAIL
SCALE: N.T.S.



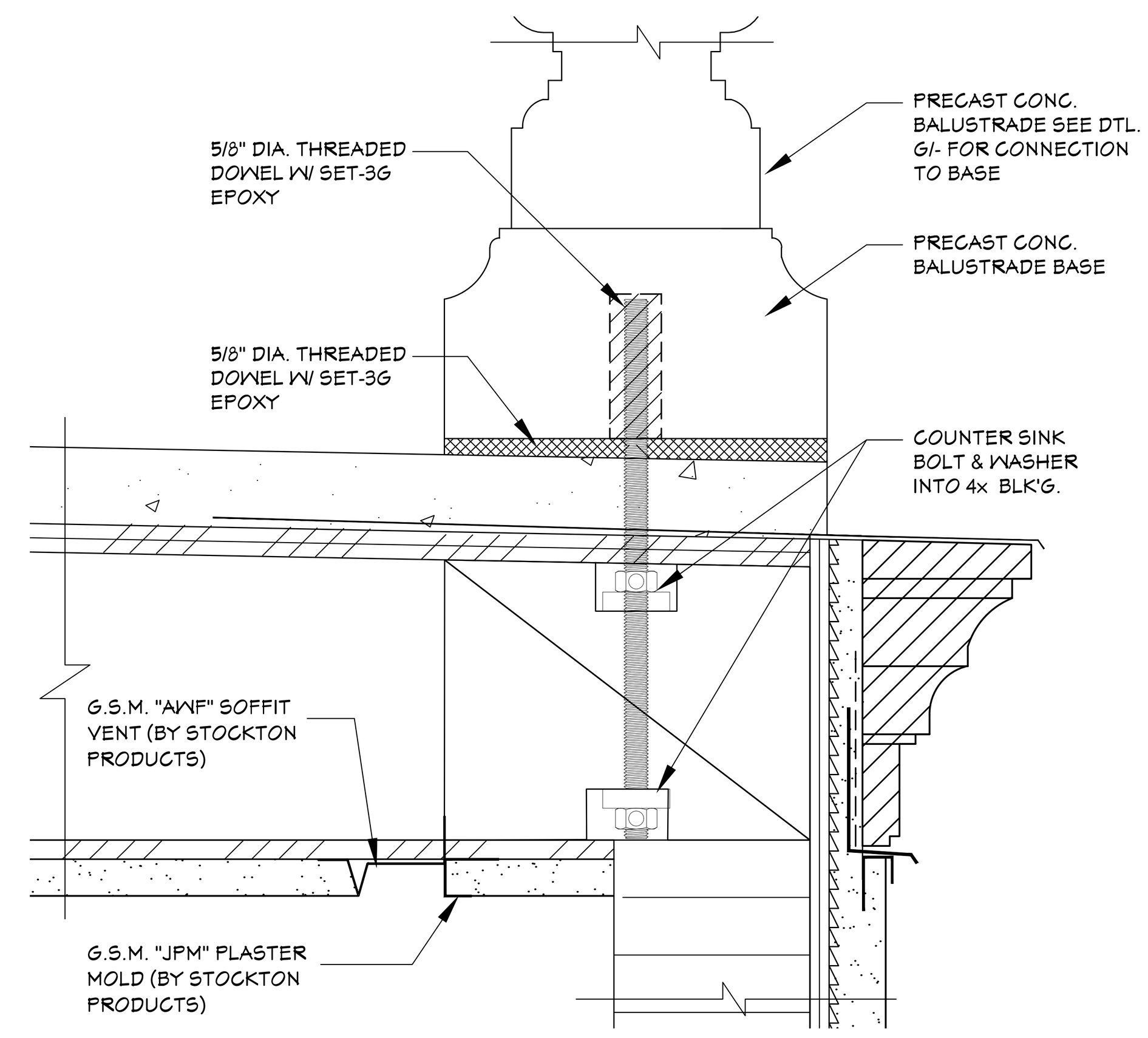
I
PLI-DEK THERSHOLD DOOR PAN FLASHING DETAIL
SCALE: N.T.S.



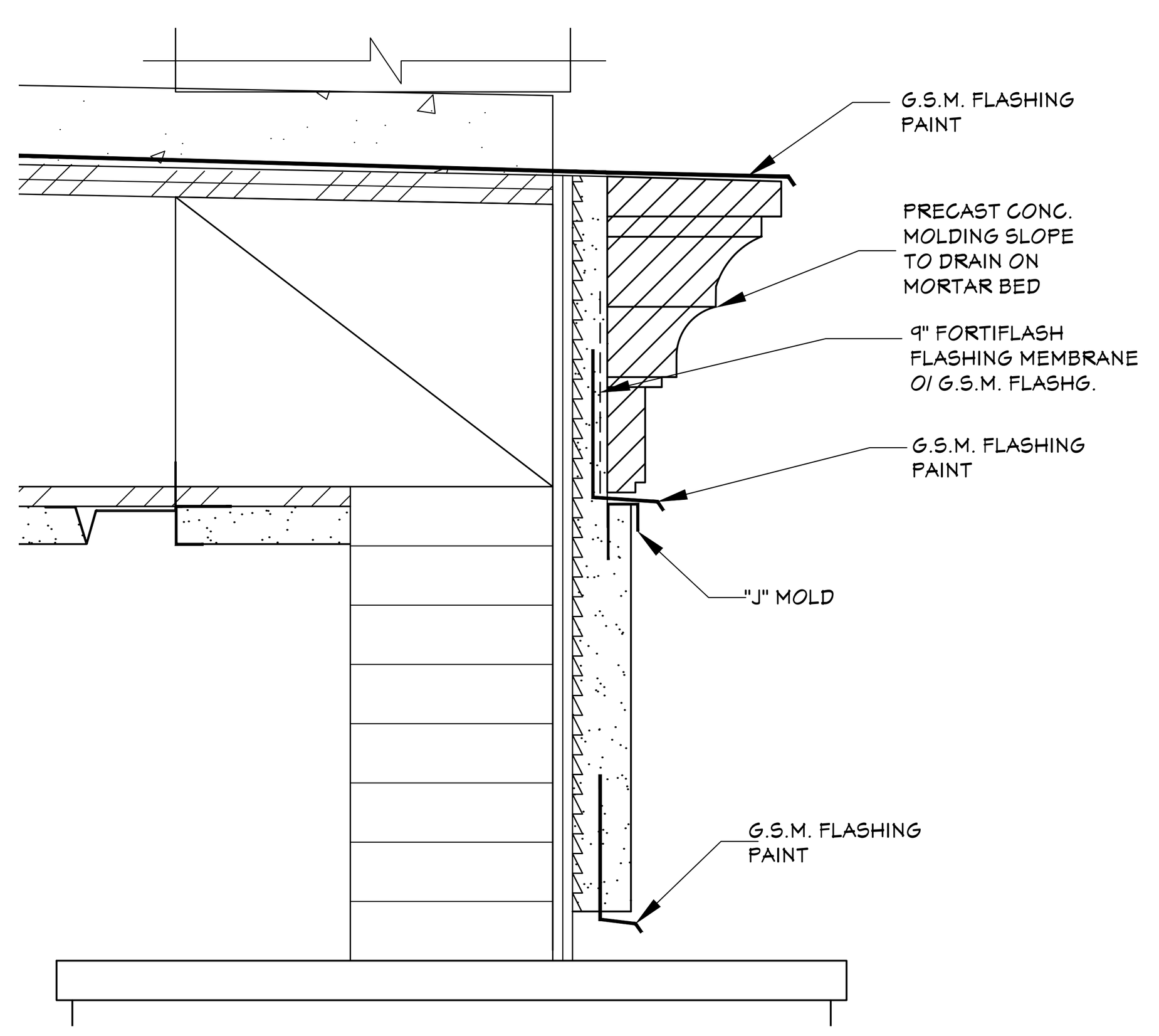
H
PLI-DEK INSTALLATION
SCALE: N.T.S.



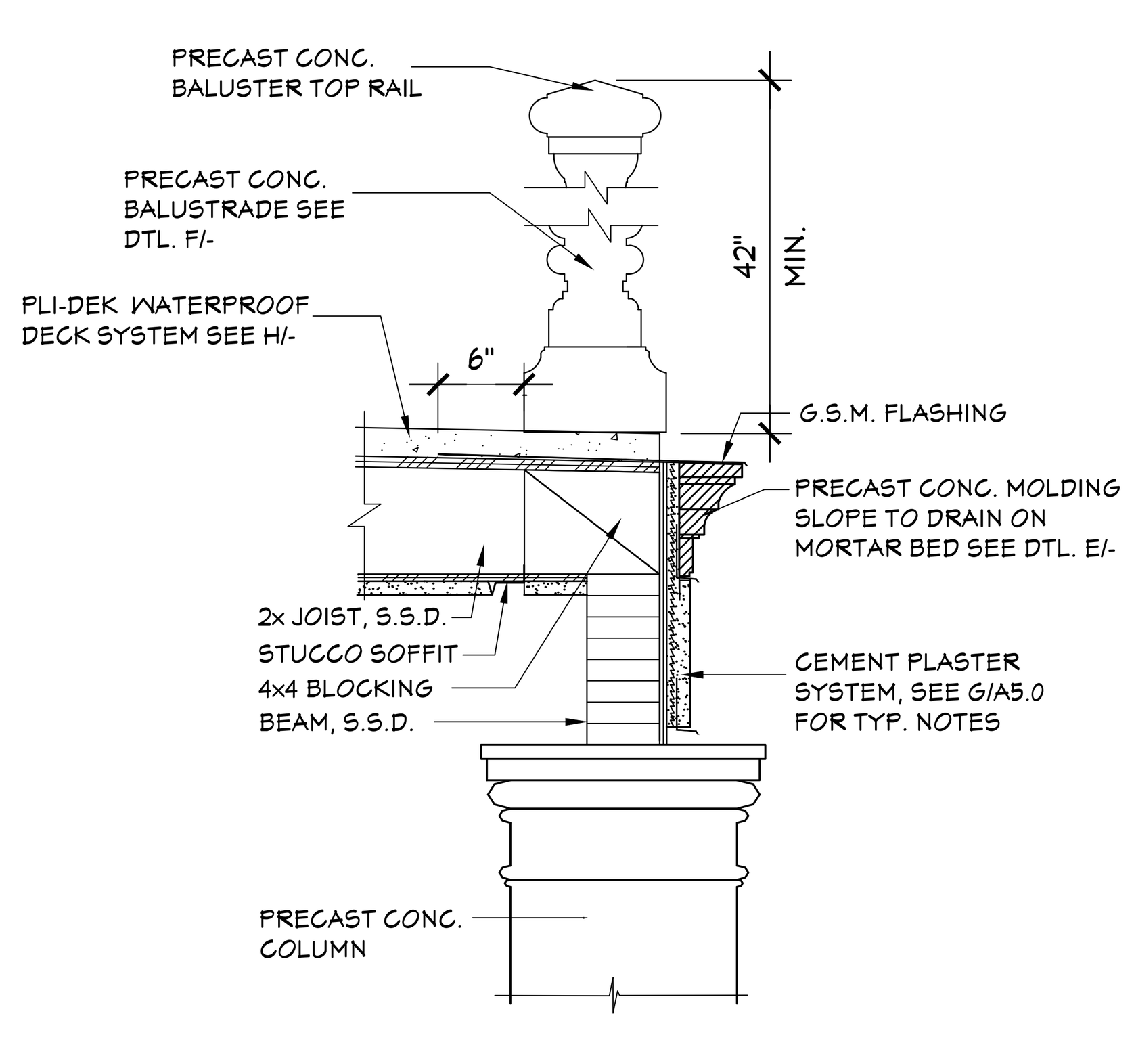
G
BALUSTRADE TO BASE CONNECTION DETAIL
SCALE: 3" = 1'-0"



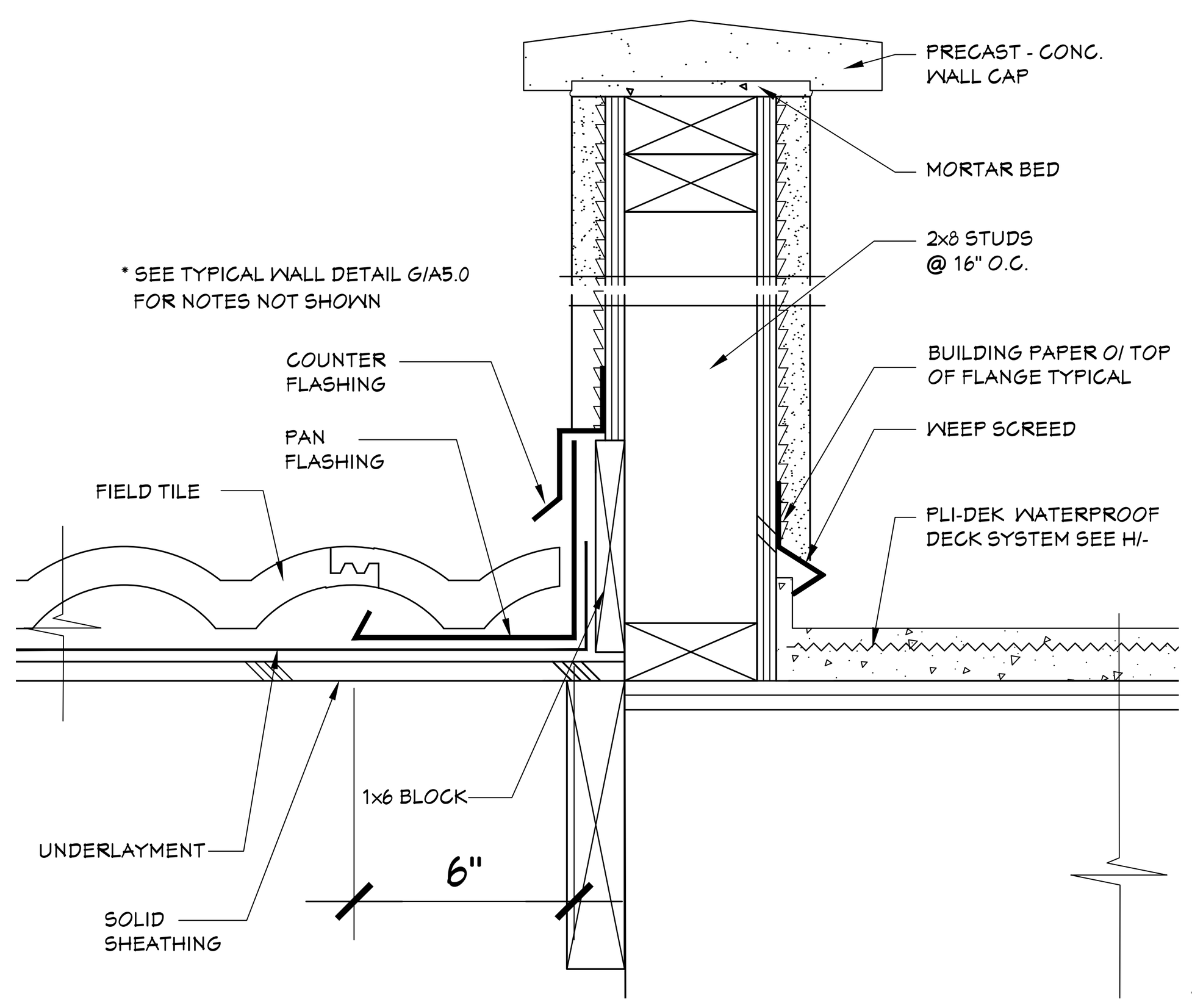
F
BALUSTRADE BASE TO BALCONY DETAIL
SCALE: 3" = 1'-0"



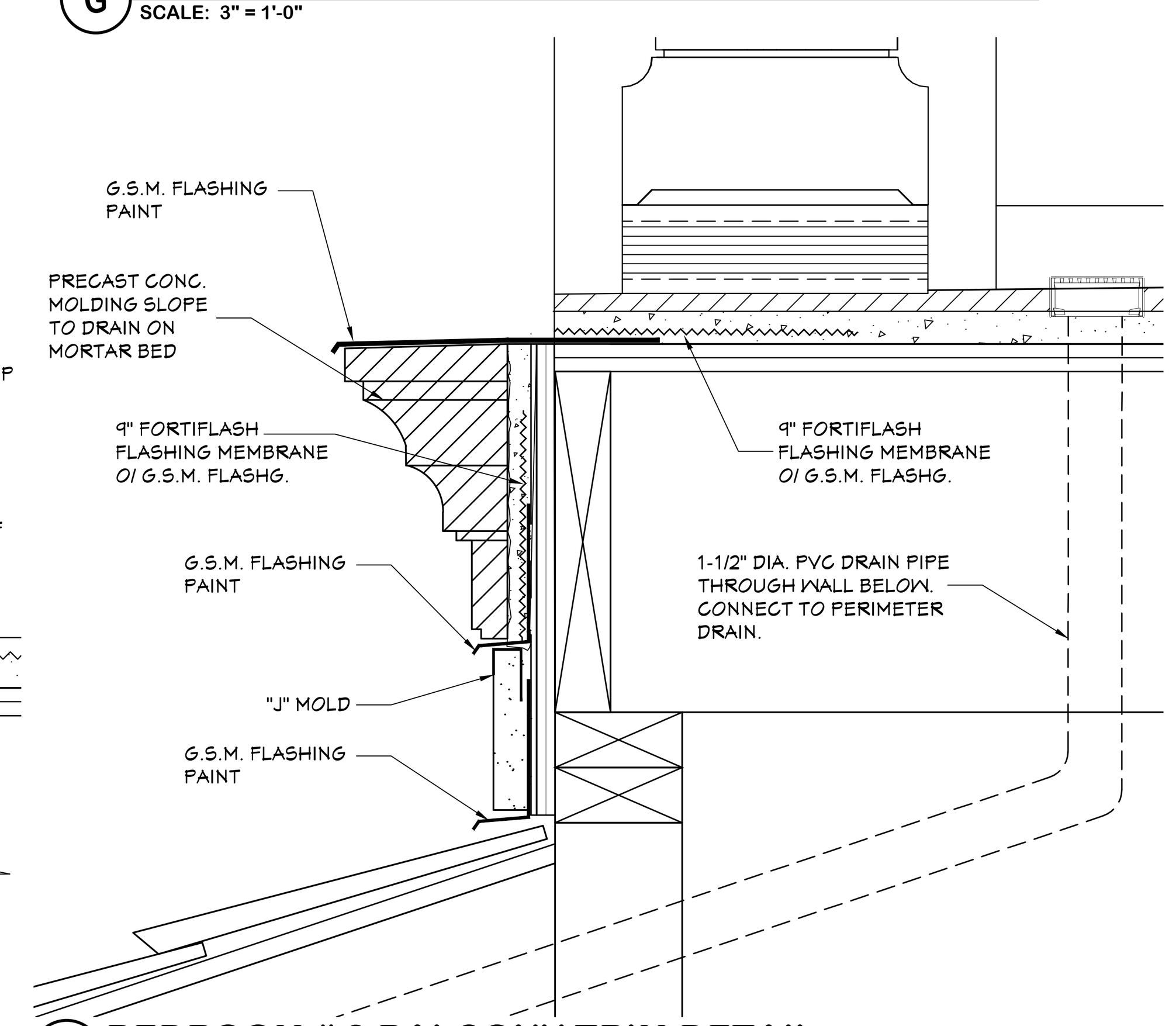
E
BALCONY EDGE MOLDING DETAIL
SCALE: 3" = 1'-0"



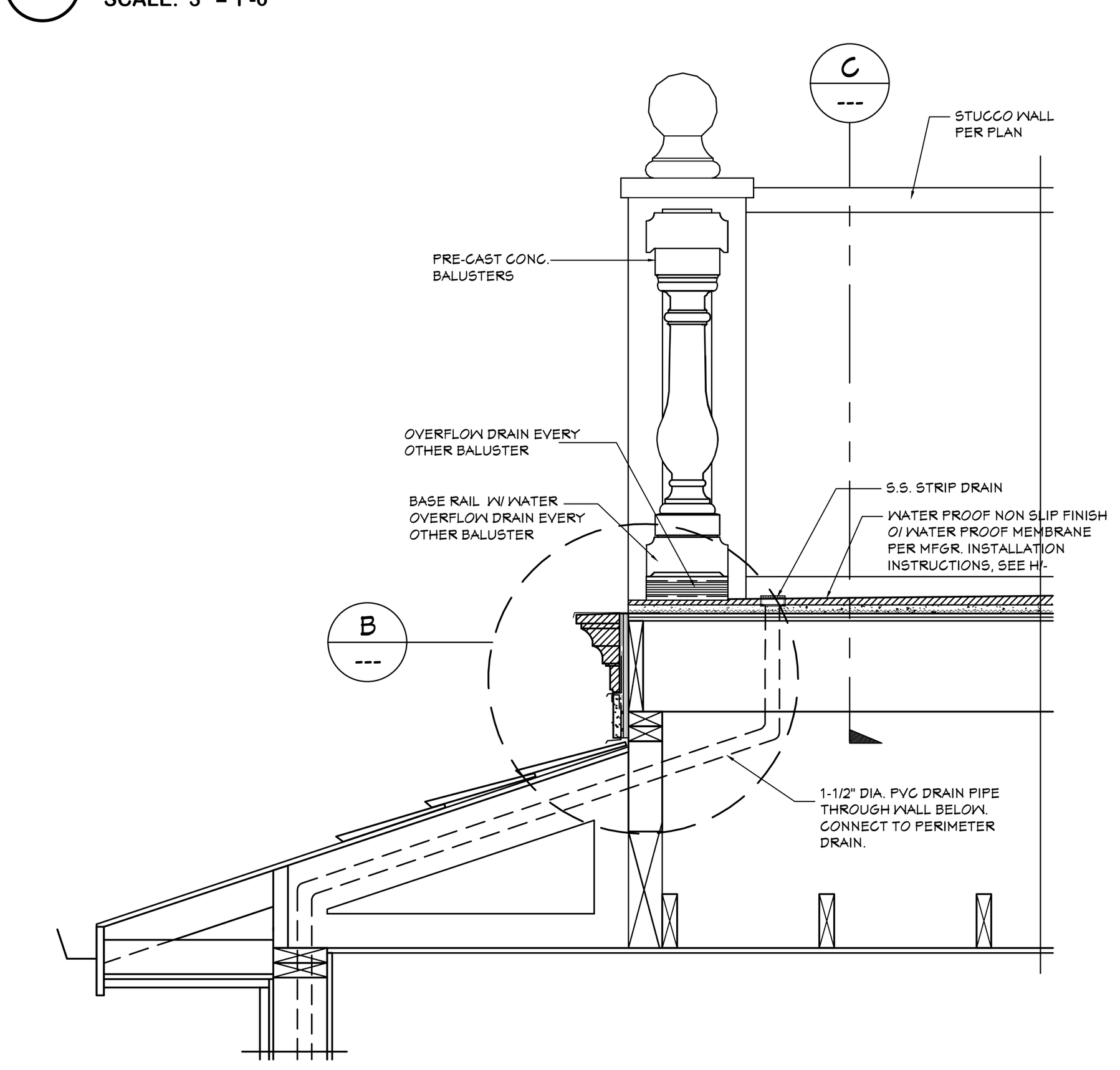
D
BALCONY BALUSTRADE DETAIL
SCALE: 1" = 1'-0"



C
42" HIGH STUCCO HALF WALL @ BEDROOM #8
SCALE: 3" = 1'-0"



B
BEDROOM # 8 BALCONY TRIM DETAIL
SCALE: 3" = 1'-0"



A
BALUSTRADE DETAIL @ BEDROOM # 8 BALCONY
SCALE: 1-1/2" = 1'-0"

Custom Home & Addition Remodel Design
American Institute of Building Design

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL | DATE

ISSUE | DATE

Gil Dominguez

EXTERIOR DESIGN DETAILS

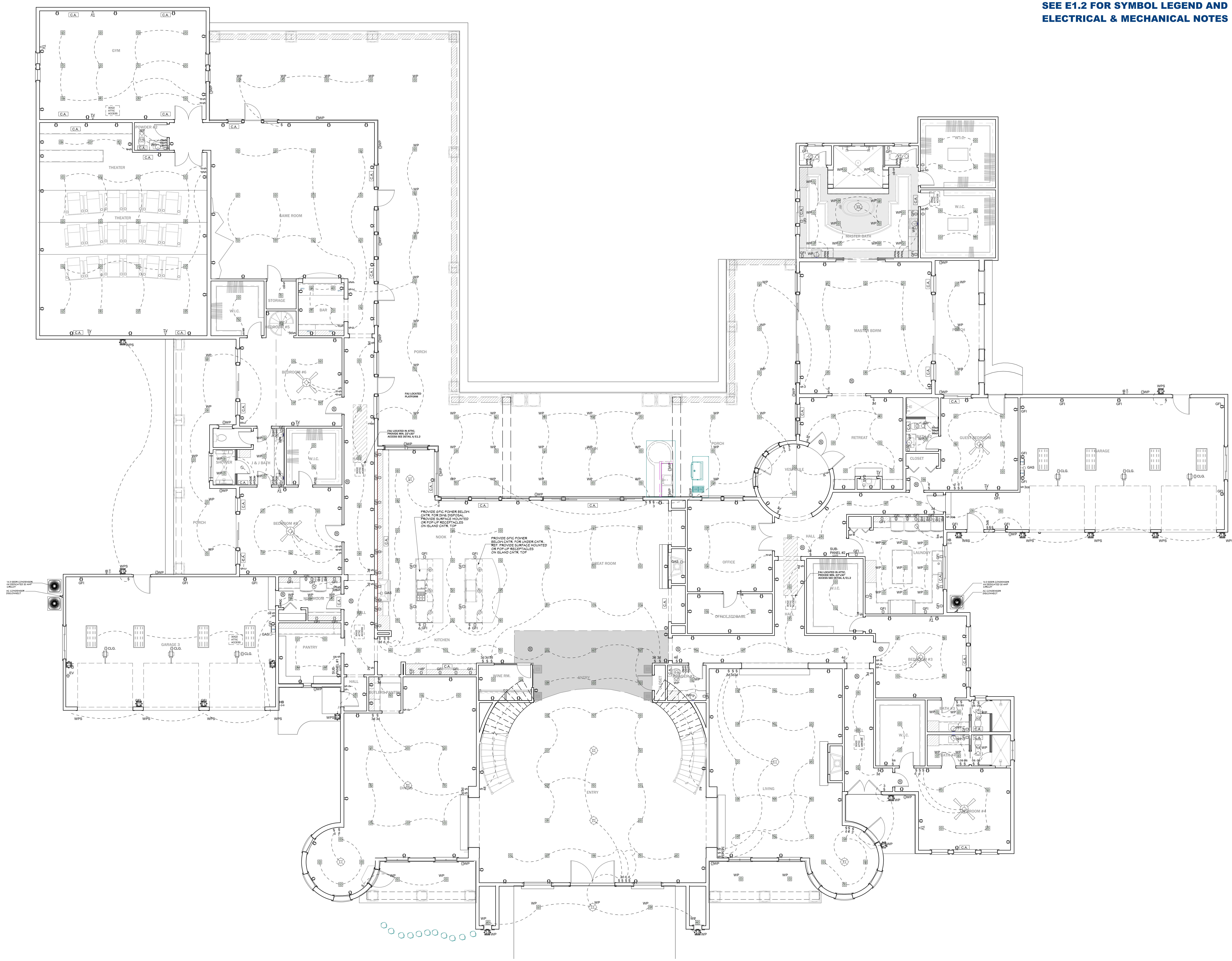
PEÑA
RESIDENCE
CUSTOM HOME

303 BLAINE LANE
BRENTWOOD, CA 94548
APN: 020-110-011

DRAWN BY: GD
DATE: 06/12/2025
SCALE: NOTED
JOB NUM:

SHEET
A5.1
OF

SEE E1.2 FOR SYMBOL LEGEND AND ELECTRICAL & MECHANICAL NOTES



FIRST LEVEL ELECTRICAL PLAN

SCALE: NOT TO SCALE

Gil Dominguez
Custom Home & Addition Remodel Design
321 Village Drive, Brentwood, CA 94513
PH: 925-382-6938 Email: gil@4dda.com
American Institute of Building Design
The Residential Specialist

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL	DATE

ISSUE	DATE

Gil Dominguez

FIRST LEVEL ELECTRICAL PLAN

PEÑA RESIDENCE
CUSTOM HOME

303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

DRAWN BY :	DATE:
GD	10/28/2025
SCALE :	JOB NUM :
NONE	0421

SHEET

E1.1

OF

2019

ELECTRICAL / MECHANICAL NOTES:

1. All installation instructions for all listed equipment shall be provided to the field inspector at the time of inspection. Such as vacuum breaker for sprinkler, back water valve at lower end of the building drain, etc.. per CMC 303.1
2. At least one receptacle outlet shall be installed in bathroom within 3'-0" from basin. At least one 20-ampere branch circuit shall be provided to supply bathroom receptacle outlet(s). Bathroom outlets shall have GFCI protection. CEC 210.8, 210.11, 406.12
3. Thermostat, air register, and return air locations shall be located y the HVAC designer
4. Showers and tub shower combinations shall be provided with individual control valves of the pressure balance, thermostatic, or combination pressure balance and thermostatic types that provide scald and thermal shock protection. [CPC 408.3]
5. Control valves and showerheads shall be located on the sidewall of shower compartments, arranged so that the showerhead does not discharge directly at the entrance to the compartment so that the bather can adjust the valves prior to stepping into the shower spray. [CPC 408.9]
6. Fixture water consumption:
7. Plumbing fixtures:
   a. All new plumbing fixtures shall comply with the maximum flow rates for Conserving Fixtures in the table below. [CalGreen 4.303] [CPC 411.2]

(E)

Fixture Type	Non-Compliant (Flow rate over)	Conserving Fixtures (Max flow rate)
Kitchen Faucet	2.2 Gal/min	1.8 Gal/min @ 60 psi
Other Faucets	2.2 Gal/min	1.2 Gal/min @ 60 psi
Shower*	2.5 Gal/min	1.8 Gal/min @ 80 psi
Water Closet	1.6 Gal/flush	1.28 Gal/flush

8. Both new and modified branch wiring circuits shall have Arc-fault circuit protection for 120-volt, single phase, 15 and 20-ampere branch circuits supplying outlets in dwellings. [CEC 210.12(A)]
9. Bath and toilet rooms shall have an exhaust rate of 50 cfm intermittent or 25 cfm continuous. [CMC Table 403.7]
10. Each bathroom, or room containing a bathtub, shower, or tub shower combination, shall be mechanically ventilated. Unless functioning as a part of a whole house ventilation system, fans must be controlled by a humidity control capable of adjustment between a relative humidity range of < 50 percent to a maximum of 80 percent. The control may utilize manual or automatic means of adjustment. The control may be a separate component or integral to the exhaust fan. [CMC 402.5, CalGreen 4.506]
11. A bath exhaust fan, with back draft damper and humidity control, is required regardless of the presence of a window (room containing a bathtub, shower, spa or other similar source of moisture). [CRC R303.3]
12. Install hard-wired interconnected "SMOKE ALARM" with battery backup in the following: [R314]

a. In each sleeping room.
b. Outside of each separate sleeping area in the immediate vicinity of the bedrooms
c. On each additional story of the dwelling, including basements and habitable attics, but not including crawl spaces and uninhabitable attics.
d. Battery operated ok only where no access for wiring in attic or crawlspace.For buildings with fuel-burning appliances and/or attached garages, provide an approved CARBON MONOXIDE ALARM at: [R315.1]

13. New shower compartments shall have a finished interior of 1,024 square inches (7.1 square feet) and shall be capable of encompassing a 30 inch circle. The clearance shall be maintained up to 70 inches of height above shower drain. Shower door to be tempered, and provide a min 22" clear unobstructed opening. [CPC 408.6]
14. All 125volt, 15-ampere and 20-ampere receptacles shall be listed tamper resistant. [CEC 406.12] Both new and modified branch wiring circuits shall have Arc-fault circuit protection for 120-volt, single phase, 15 and 20- ampere branch circuits supplying outlets in dwellings. [CEC 210.12(A)]
15. Per 2022 California Energy Code, all permanently newly installed light fixtures shall be high efficacy, including screw-based which must contain JA8 complaint lamps.
16. All new outdoor permanent lighting must be high-efficacy and include a manual on/off switch as well as one of the following: photocontrol and motion sensor, photocontrol and automatic time switch control, or, energy management control system.
17. All new and exposed hot water pipes from the heating source to the kitchen fixtures shall be insulated. CBEES Section 150.0 (j)2vi
18. Luminaires recessed into ceilings shall meet all of the following per Listed for zero clearance insulation, labelled that certifies the luminaire is airtight with a leakage less than 2.0CFM at 75 pascals, sealed with a gasket or caulk, allow replacement and maintenance to be readily accessible from below the ceiling without cutting holes in the ceiling, shall not contain screw base sockets; and shall contain light sources that comply with JA8.
19. Outdoor Lighting: All outdoor lighting shall be controlled by a manual ON and OFF switch that does not override to ON and one of the following: Controlled by photocell and motion sensor, Photo control and automatic switch control, Astronomical time clock, or Energy management control system. CBEES 150(k)3
20. Vacancy sensors are required on at least one luminaire in bathrooms, garages, and laundry rooms per (CEES 150.0(k) and CEC 410.16)
21. All 125-volt, 15- and 20- ampere receptacle outlets shall be listed tamper-resistant receptacles per CEC 406.12.
22. Fan and Light combination fixtures shall be switched separately per CEC 150.0(k)(2)(B).
23. Provide a dedicated 20 amp circuit for the laundry and two dedicated 20 amp circuits for the kitchen [CEC 210.11].
24. Provide a dedicated 125 volt, 20 amp electrical receptacle within 3' of the water heater [CEC 150.0(n)1]. Both ends of the unused conductor shall be labeled with the word "spare". A reserved single pole breaker space in the electrical panel adjacent to the 20 amp circuit breaker previously mentioned should be labeled "Future 240V Use"
25. Domestic dryer moisture exhaust ducts shall not exceed a total combined horizontal and vertical length of 14'-0", including two 90 degree elbows. A length of 2 feet shall be deducted for each 90 degree elbow in excess of two per CMC 504.4.2.1.
26. Provide a minimum of 36" x 30" working clearance in front of the subpanel per article 110.26 CEC.
27. Provide **GFCI protection** for receptacles at the following locations per article 210.8 CEC:

a) Dishwasher location
b) Dryer 240v, article 210.8 (A) CEC
c) Mini-Splits HVAC, article 210.8 (F) CEC
d) Exterior receptacles with waterproof covers

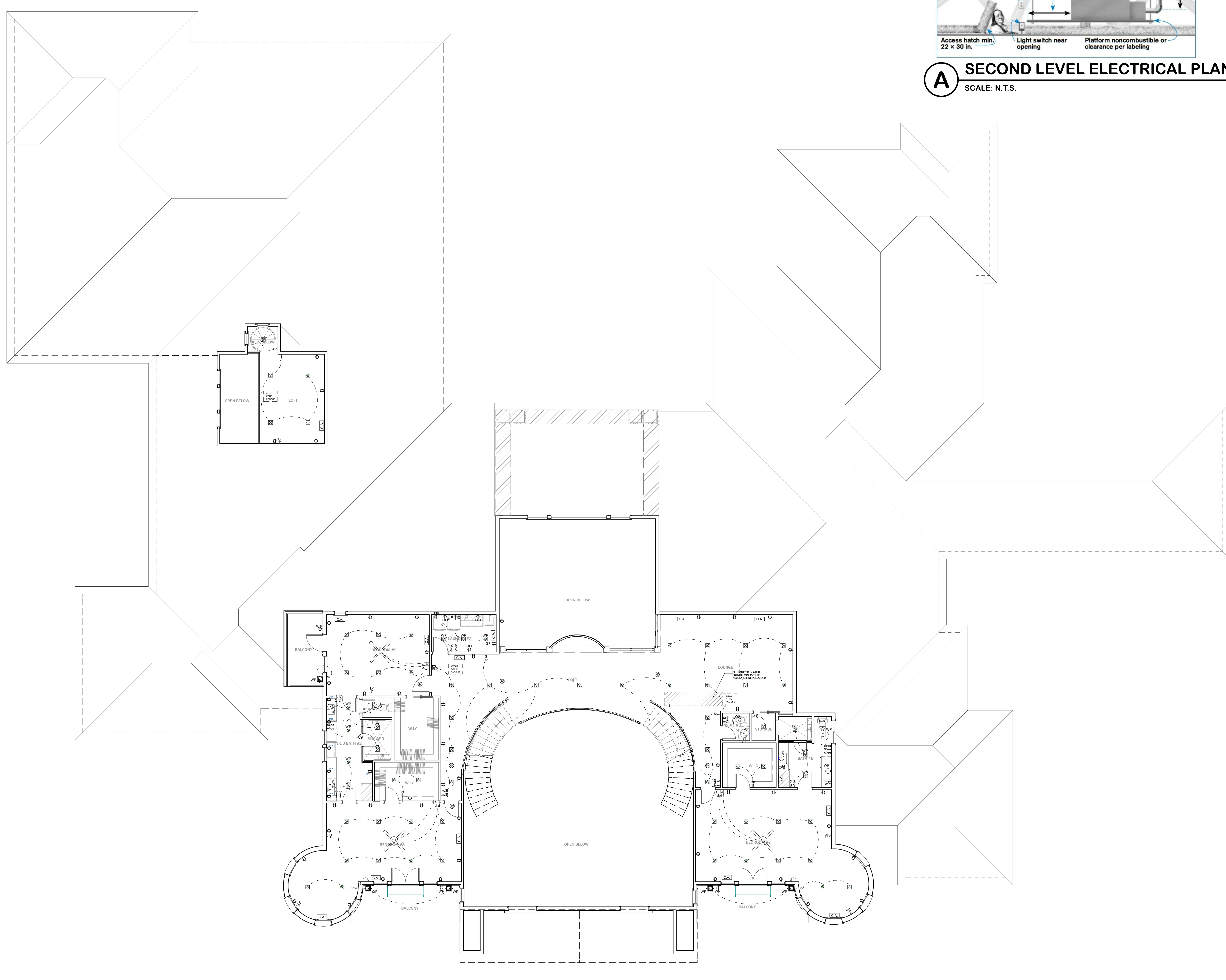
28. For 125amp electrical service provide a required UFER ground, the GEC to be a minimum number 6 connected to the UFER and cold-water piping. The connection to the cold-water piping shall be within 5' of the water piping entering the building.
29. Feeder schedule for the proposed sub-panel:
   a) 125amp provided a min (4) #1 cable or for conduit use 1-1
/2"
30. Pressure relief piping serving the water heater to be piped to the exterior of the building per sections 504.6 & 608.5 CPC. The termination of such pipe shall be at a minimum 6" AFF and maximum of 24" AFF.
31. Water piping and cooling system line insulation thickness and conductivity Piping shall be insulated to the thicknesses as follows per 150.0 (j) CEC:
   a) All domestic hot water system piping conditions listed below, whether buried or unburied,
   - must be insulated and the insulation thickness shall be selected based on the conductivity range in
   - TABLE 120.3-A and the insulation level shall be selected from the fluid temperature range based on the
   - thickness requirements in TABLE 120.3A
   b) The first 5 feet of hot and cold-water pipes from the storage tank.
   c) All piping with a nominal diameter of 3/4 inch (19 millimeter) or larger.
   d) All hot water piping from the heat source to the kitchen fixtures
32. Bathroom: All lighting located in a tub/shower location shall be WP per article 410.10 (A) & (B) CEC.
33. Provide separate electrical circuits for:

a) Dishwasher
b) Garbage disposal
c) Dryer 30amp minimum 220v
d) Motor (heating & cooling)

34. Filters shall provide a minimum of MERV-13 as required by section 150.0 (m) 12. C CEC.
35. Heat-pumps AC Split unit heat pump shall not exceed 26 lbs. R410 refrigerant per 1000cf of room area per table 1102.2 CMC.
36. Range hood is be ducted to the exterior of the building per table 402 CMC.
37. Dryer duct shall be a minimum of 36" to openings into the building section 502.2.1 CMC.
38. Anchor AC unit to 3" slab.
39. Condensate serving the interior portion of the heat pump to drain to the exterior of the building.
40. For the 125amp electrical service add the GEC to be a minimum number 6 connected to the UFER and cold-water piping. The connect to the cold-water piping shall be within 5' of the water piping entering the building.

ELECTRICAL / MECHANICAL KEY

- DUPLEX RECEPTACLE OUTLET @ 15" U.N.O. 120 VOLT W/ ARC FAULT INTERRUPTER
- DUPLEX 120 VOLT RECEPTACLE OUTLET LOCATED IN FLOOR W/ ARC FAULT INTERRUPTER
- 4-PLEX RECEPTACLE OUTLET @ 15" U.N.O. 120 VOLT
- GFI — DUPLEX RECEPTACLE OUTLET W/ GROUND FAULT CIRCUIT INTERRUPTER
- WP — WEATHER PROOF GFCI DUPLEX RECEPTACLE OUTLET (CEC 210.8 and 406.8)
- 220 — DUPLEX RECEPTACLE OUTLET - 220 VOLT
- EV — DEDICATED OUTLET FOR ELECTRIC VEHICLE CHARGING
- CLG. — CEILING MOUNTED DUPLEX RECEPTACLE OUTLET
- RECESSED CAN LED LIGHT FIXTURE
- HANGING CEILING MOUNTED LIGHT FIXTURE
- LED PENDANT LIGHT FIXTURE
- WALL MOUNTED LIGHT FIXTURE
- WP — WALL MOUNTED LIGHT FIXTURE - SHALL BE SUITABLE FOR DAMP LOCATIONS
- WPS — WALL MOUNTED LIGHT FIXTURE - SHALL BE SUITABLE FOR DAMP LOCATIONS W/ PHOTO SENSOR
- WP — LIGHT FIXTURE - SHALL BE LABELED SUITABLE FOR DAMP LOCATIONS
- WP — RECESSED LED LIGHT FIXTURE - SHALL BE LABELED SUITABLE FOR DAMP LOCATIONS
- WP — INCANDESCENT LIGHT FIXTURE, HEAT LAMP AND EXHAUST FAN SHALL BE LABELED SUITABLE FOR DAMP LOCATIONS
- UNDER CABINET LIGHTING
- 2x4 LED SURFACE MOUNTED LIGHT
- CEILING PADDLE FAN AND LIGHT COMBO.
- S^{os} — SINGLE POLE SWITCH W/ MANUAL ON OFF OCCUPANCY SENSOR
- $ — SINGLE POLE SWITCH @ 48" U.N.O.
- S^3 — THREE-WAY SWITCH
- S^4 — FOUR-WAY SWITCH
- $d — SWITCH W/ DIMMER
- S^{3d} — THREE-WAY SWITCH W/ DIMMER
- S^{4d} — FOUR-WAY SWITCH W/ DIMMER
- $WP — SINGLE POLE WEATHER PROOF SWITCH
- WIRE
- C.A. — CEILING AIR SUPPLY REGISTER
- R.A. — COLD AIR RETURN @ WALL
- TV — TELEVISION OUTLET
- PH — TELEPHONE JACK
- D — CAT5 DATA JACK
- SMOKE / CO DETECTOR - (110V W/ BATTERY BACK-UP) HARD WIRED & INTERCONNECTED
- PANASONIC FV-11VK3 WhisperGreen® 110 CFM Ceiling Mounted Ventilation EXHAUST FAN - label switch to state: "fan should be on whenever the home is occupied."
- INDOOR AIR QUALITY FAN. MIN. 72 CFM & MAX 1-SONES
- HB — HOSE BIBB W/ VACUUM BREAKER
- ICE — ICE MAKER WATER SUPPLY BIB
- GAS — GAS OUTLET
- ELECTRICAL SUB - PANEL
- GAS & ELECTRIC METERS
- GARAGE DOOR OPENER



1 SECOND LEVEL ELECTRICAL PLAN

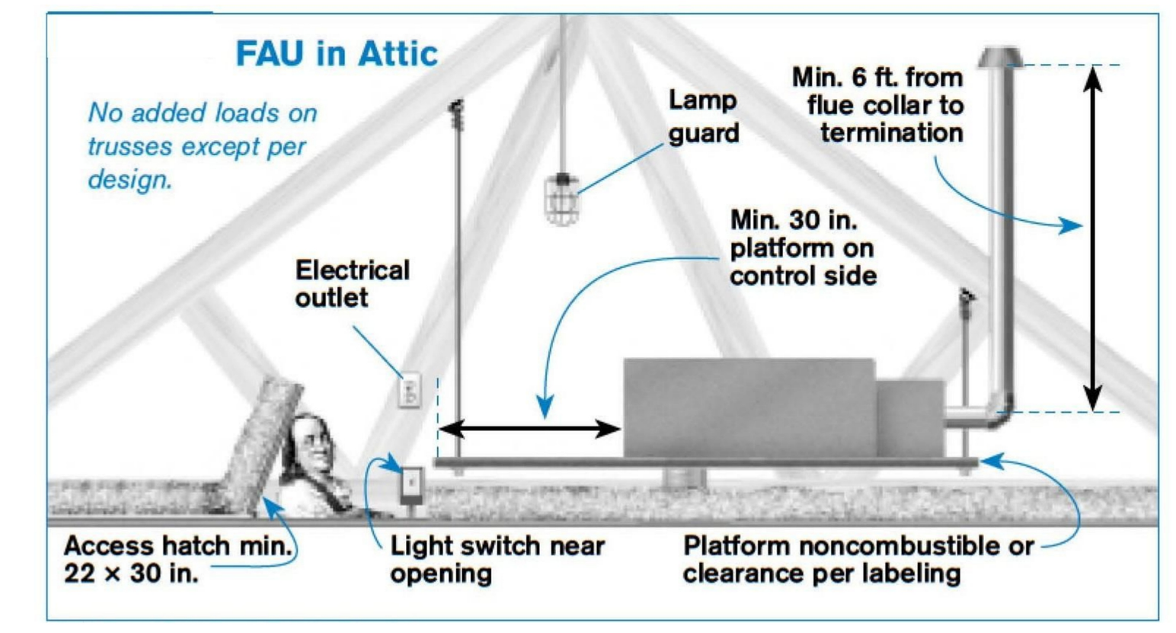
SCALE: 1/4" = 1'-0"

TRUE NORTH
REFERENCE NORTH

2022 California Mechanical Code:

Central warm-air furnaces installed in an attic must be accessible for routine inspection and maintenance by the owner/occupant and for service and repair as needed. Adequate light, an electrical outlet, safe access way and sufficient working space on the control side all encourage and facilitate maintenance and also enable rapid egress in an emergency.

- Required attic access opening size is 22" x 30" minimum
- Recommended attic opening size is 30" x 30" (not less than the largest component of the appliance)
- A sediment trap of 3" long is required as close to the appliance as possible
- Overflow pans must be clear of all debris
- Condensate drain must be sloped 1/8" per foot and drain to the outside, must be secured a minimum of every 4' if PVC and minimum of every 3' if CPVC. Condensate shall not drain over a public right of way.



A SECOND LEVEL ELECTRICAL PLAN

SCALE: N.T.S.

Gil Dominguez
Custom Home & Addition Remodel Design
321 Village Drive, Brentwood, CA 94513
PH: 925-382-6938 Email: gil@4dda.com
American Institute of Building Design
The Residential Specialist

SYM.	REVISIONS	DATE
△		
△		
△		
△		
△		
△		

SUBMITTAL DATE

ISSUE DATE

Gil Dominguez

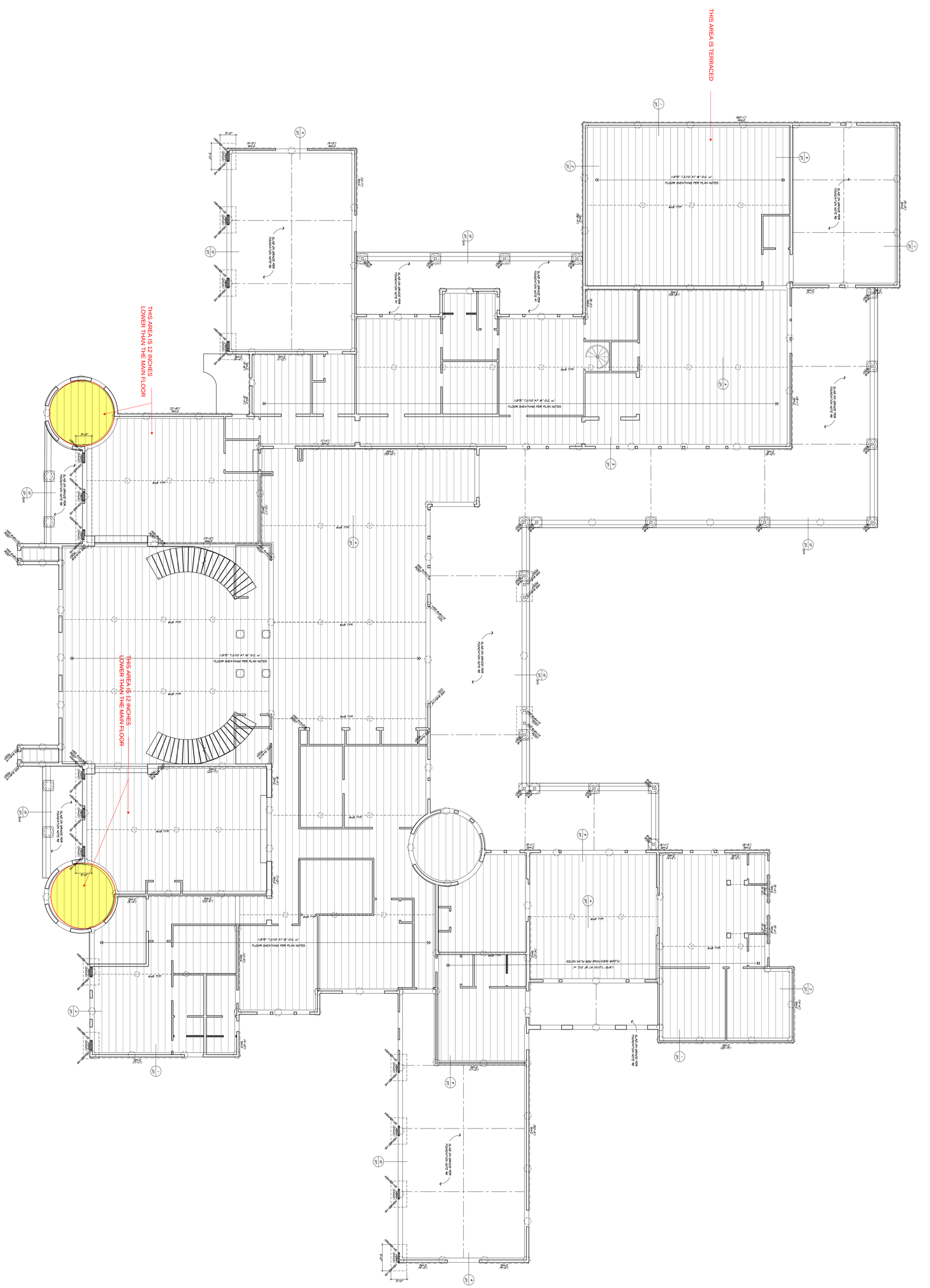
SECOND LEVEL ELECTRICAL PLAN

PEÑA RESIDENCE
CUSTOM HOME

303 BLAINE LANE
KNIGHTSEN, CA 94548
APN: 020-110-011

DRAWN BY :
DATE: 10/28/2025
SCALE : NONE
JOB NUM : 0421

SHEET
E1.2
OF



SHEET
S1.0
OF SHEETS
JOB 2024-65

SHEET TITLE
Overall Foundation Plan

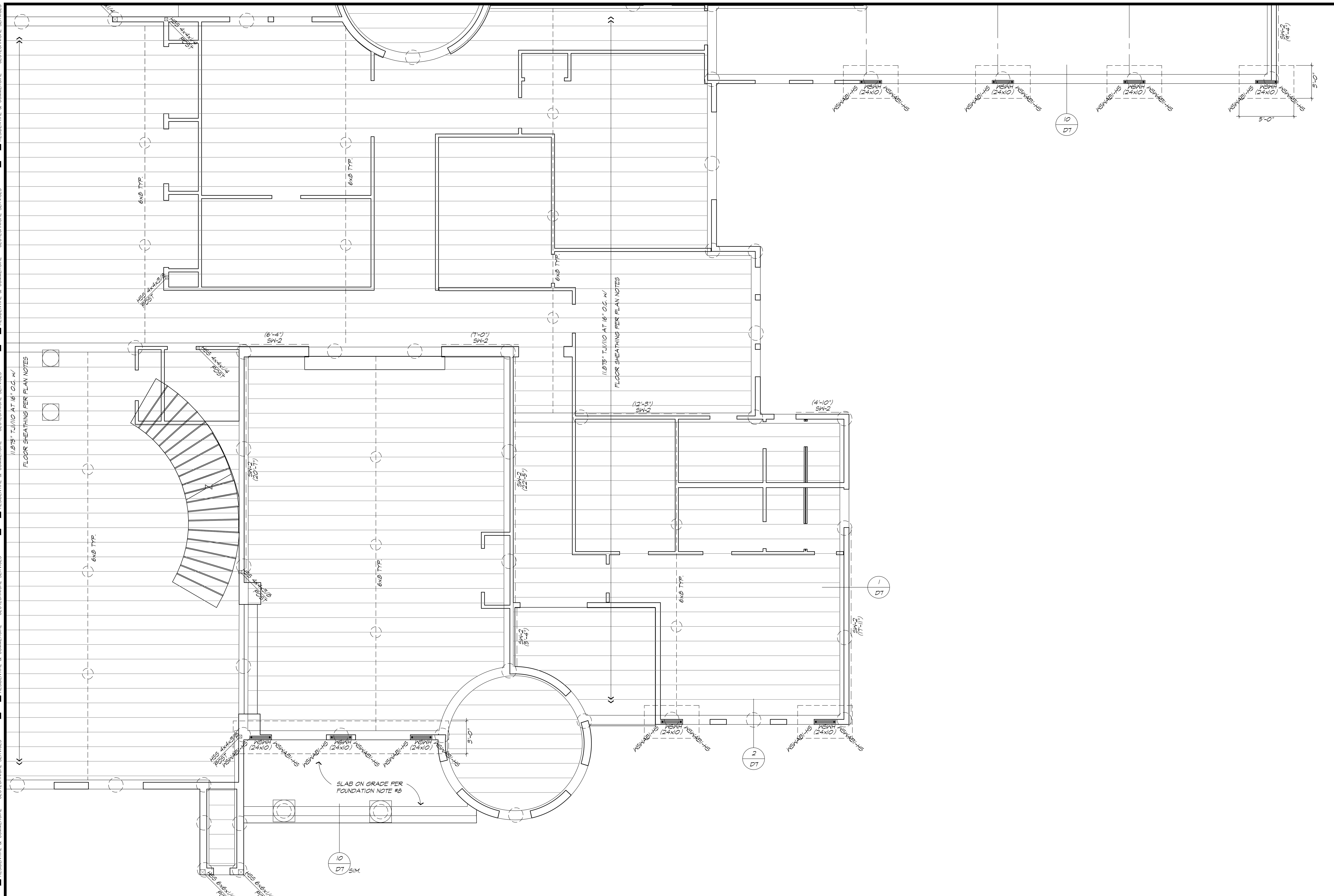
DATE August 16, 2025
DRAWN M. Manning
SCALE N.T.S.
CHECKED B. Manning

Pena Residence

9255 Byron Hwy.
Brentwood, California

CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING – CIVIL ENGINEERING –
RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
25-A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672-6828
FAX (925) 889-4465

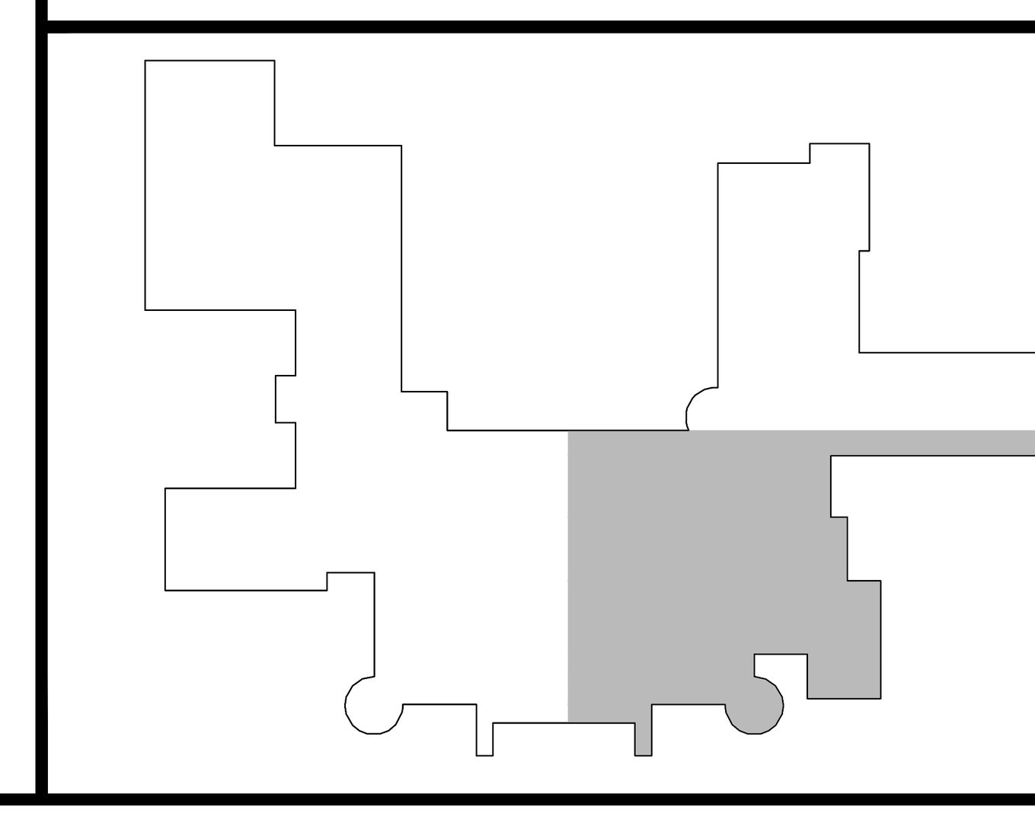
SYM.	DATE	ISSUE/REVISIONS	BY



FOUNDATION NOTES

1. WALLS SHOWN AS HIDDEN ARE ABOVE FOUNDATION AND/OR FRAMING. SEE SECOND FLOOR FRAMING NOTES FOR STUD FRAMING REQUIREMENTS.
2. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS, ETC.
3. DETAIL KEYS AND OTHER INFORMATION ARE TYPICAL.
4. **TYPICAL FLOOR FRAMING:** TJI FLOOR JOISTS PER PLAN WITH 3/4" (48/24) C-DX T+G PLYWOOD, NAILED WITH 10d AT 6" O.C. AT ALL EDGES, AND AT 12" O.C. IN FIELD. PLYWOOD SHALL BE GLUED AND NAILED TO TOP OF TJI FLOOR JOISTS AT 16" O.C. AS SHOWN ON THE PLAN.
5. **COLLECTORS:** FRAMING MEMBERS NOTED AS "COLLECTORS" SHALL HAVE PLYWOOD EDGE NAILING TO (EACH) COLLECTOR, FOR THE FULL LENGTH OF THE COLLECTOR.
6. **TYPICAL GRADE BEAM:** TYPICAL GRADE BEAM SHALL BE 10" MIN. WIDE x 26" MIN. DEEP, REINFORCED WITH (2) #5 CONTINUOUS REBAR TOP AND BOTTOM. SEE DETAILS FOR OTHER INFORMATION.
7. **DRILLED PIER NOTES:** TYPICAL DRILLED CONCRETE PIER SHALL BE 16" MIN. DIAMETER x DEPTH BELOW PAD GRADE PER SCHEDULE BELOW. MAXIMUM SPACING OF PIERS SHALL BE 10'-0" O.C., U.N.O. SPACE PIERS AS SHOWN ON THE FOUNDATION PLAN, WITH EQUAL SPACING BETWEEN CORNERS, POST LOCATIONS, OR OTHERWISE ESTABLISHED LOCATIONS, TYPICAL UNLESS NOTED OTHERWISE. MINIMUM DISTANCE BETWEEN PIERS SHALL BE THE DISTANCE OF THREE PIER DIAMETERS. PIERS SHALL BE AS NOTED IN DRILLED PIER SCHEDULE BELOW:
   - 16" DIA. x 14'-0" MIN. DEEP CONCRETE PIER REINFORCED WITH (4) #5 VERTICAL BARS. PROVIDE #3 TIES IN GRADE BEAM PER A/D7
   - 12" DIA. x 8'-0" MIN. DEEP CONCRETE PIER REINFORCED WITH (2) #5 VERTICAL BARS. PROVIDE #3 TIES IN GRADE BEAM PER A/D7
8. **CONCRETE SLABS:** CONCRETE SLABS ON GRADE SHALL CONFORM TO THE FOLLOWING:
   A. **CONCRETE SLAB TYP. AT INTERIOR:** 6" THICK CONCRETE SLAB REINFORCED WITH #4 AT 12" O.C., CHAIRED AT MID-DEPTH OF SLAB OVER 10 MIL VAPOR BARRIER, OVER 6" DRAIN ROCK PER DETAIL B/D7
   B. **CONCRETE SLAB AT ELEVATOR:** CONCRETE SLAB AT ELEVATOR SHALL BE PER DETAIL B/D6
   C. **TYPICAL EXTERIOR CONCRETE SLAB:** TYPICAL EXTERIOR SLAB-ON-GRADE SHALL BE 5" MIN. THICK CONCRETE SLAB, REINFORCED WITH #4 AT 12" O.C. EACH WAY, CHAIRED AT SLAB CENTERLINE, OVER 6" DRAIN ROCK.
9. **HOLDOWNS:** HOLDOWNS NOTED OCCUR AT THE LEVEL OF FRAMING SHOWN FOR CONNECTION OF WALLS ABOVE TO FOOTING OR FRAMING BELOW.
10. **STUD FRAMING:** STUD WALL FRAMING SHALL SHALL CONFORM TO THE WALL FRAMING NOTES, SHEET D1, AND STUD FRAMING NOTES ON SHEET S2, UNLESS NOTED OTHERWISE ON THE PLAN.
11. **MFRD STRONG-WALL NOTES:** CONTRACTOR TO PROVIDE RAISED CONCRETE STEM WALL AS DETERMINED FOR PROPER INSTALLATION OF STRONGWALLS TO TOP PLATES OF WALL ABOVE. FOR MORE INFORMATION, SEE DETAIL 1/D3 AND SHEET D3
12. **SHEARWALL LENGTHS:** LENGTH OF SHEARWALLS SHOWN ABOVE OR BELOW SHEARWALL NUMBER (SEE PLAN). THE NUMBERS INDICATE THE MINIMUM DESIGN LENGTH OF THE SHEARWALL.

KEY PLAN



SYM.	DATE	ISSUE/REVISIONS	BY

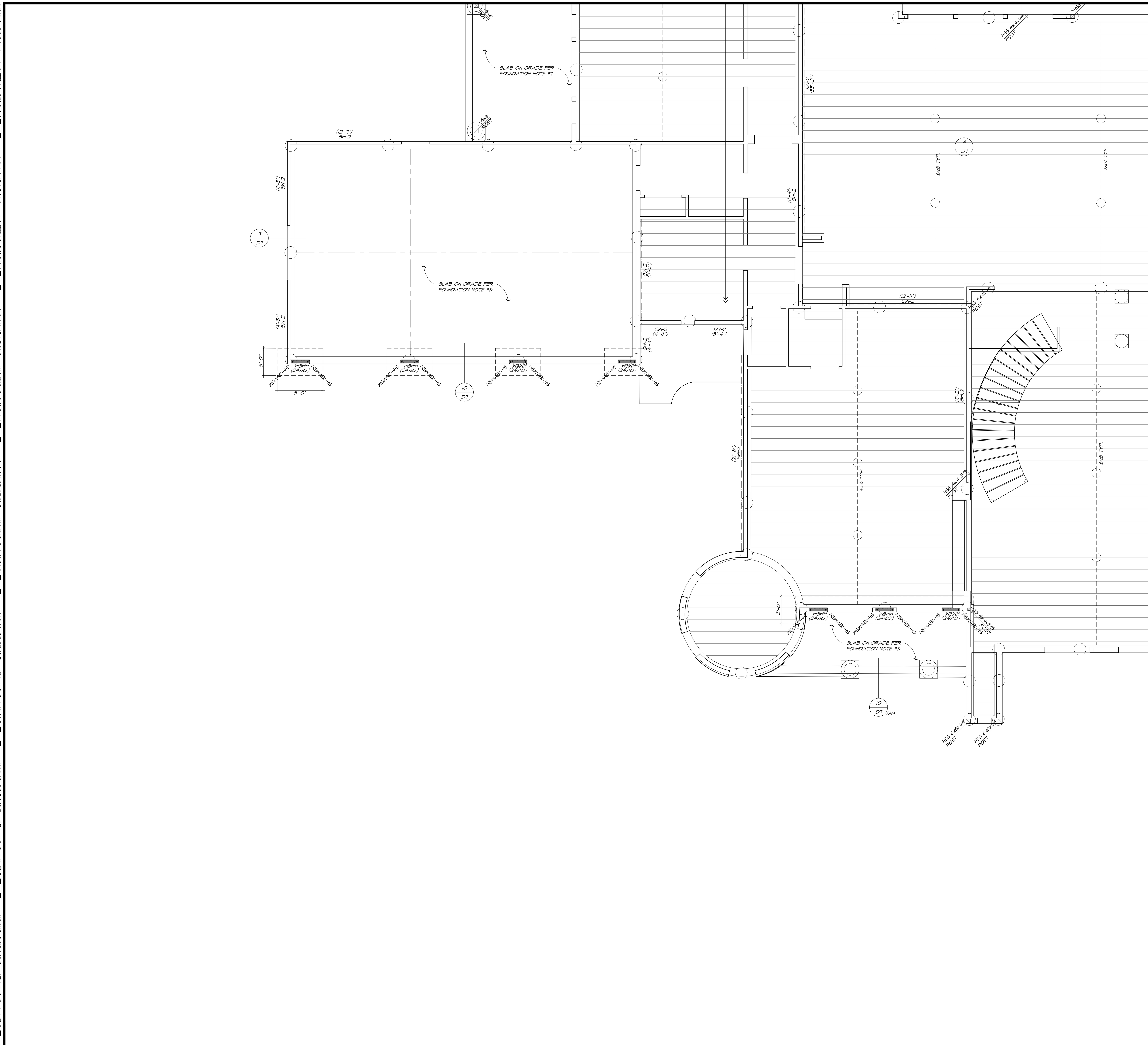
CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING – CIVIL ENGINEERING – RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
25-A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672-6828
FAX (925) 889-4465

Pena Residence

9255 Byron Hwy.
Brentwood, California

SHEET TITLE: Foundation Plan

DATE: August 16, 2025
SCALE: 1/4" = 1'-0"
DRAWN: M. Manning
CHECKED: B. Manning
SHEET: S1.1
OF SHEETS
JOB: 2024-65



FOUNDATION NOTES

1. WALLS SHOWN AS HIDDEN ARE ABOVE FOUNDATION AND/OR FRAMING. SEE SECOND FLOOR FRAMING NOTES FOR STUD FRAMING REQUIREMENTS.

2. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS, ETC.

3. DETAIL KEYS AND OTHER INFORMATION ARE TYPICAL.

4. **TYPICAL FLOOR FRAMING:**
TJI FLOOR JOISTS PER PLAN WITH 3/4" (48/24) C-DX T+G PLYWOOD, NAILED WITH 10d AT 6" O.C. AT ALL EDGES, AND AT 12" O.C. IN FIELD. PLYWOOD SHALL BE GLUED AND NAILED TO TOP OF TJI FLOOR JOISTS AT 16" O.C. AS SHOWN ON THE PLAN.

5. **COLLECTORS:**
FRAMING MEMBERS NOTED AS "COLLECTORS" SHALL HAVE PLYWOOD EDGE NAILING TO (EACH) COLLECTOR, FOR THE FULL LENGTH OF THE COLLECTOR.

6. **TYPICAL GRADE BEAM:**
TYPICAL GRADE BEAM SHALL BE 10" MIN. WIDE x 26" MIN. DEEP, REINFORCED WITH (2) #5 CONTINUOUS REBAR TOP AND BOTTOM. SEE DETAILS FOR OTHER INFORMATION.

7. **DRILLED PIER NOTES:**
TYPICAL DRILLED CONCRETE PIER SHALL BE 16" MIN. DIAMETER x DEPTH BELOW PAD GRADE PER SCHEDULE BELOW. MAXIMUM SPACING OF PIERS SHALL BE 10'-0" O.C., U.N.O. SPACE PIERS AS SHOWN ON THE FOUNDATION PLAN, WITH EQUAL SPACING BETWEEN CORNERS, POST LOCATIONS, OR OTHERWISE ESTABLISHED LOCATIONS, TYPICAL UNLESS NOTED OTHERWISE. MINIMUM DISTANCE BETWEEN PIERS SHALL BE THE DISTANCE OF THREE PIER DIAMETERS. PIERS SHALL BE AS NOTED IN DRILLED PIER SCHEDULE BELOW:
   - 16" DIA. x 14'-0" MIN. DEEP CONCRETE PIER REINFORCED WITH (4) #5 VERTICAL BARS. PROVIDE #3 TIES IN GRADE BEAM PER A/D7
   - 12" DIA. x 8'-0" MIN. DEEP CONCRETE PIER REINFORCED WITH (2) #5 VERTICAL BARS. PROVIDE #3 TIES IN GRADE BEAM PER A/D7

8. **CONCRETE SLABS:**
CONCRETE SLABS ON GRADE SHALL CONFORM TO THE FOLLOWING:
   A. **CONCRETE SLAB TYP. AT INTERIOR:**
   6" THICK CONCRETE SLAB REINFORCED WITH #4 AT 12" O.C., CHAIRED AT MID-DEPTH OF SLAB OVER 10 MIL VAPOR BARRIER, OVER 6" DRAIN ROCK PER DETAIL B/D7
   B. **CONCRETE SLAB AT ELEVATOR:**
   CONCRETE SLAB AT ELEVATOR SHALL BE PER DETAIL B/D6
   C. **TYPICAL EXTERIOR CONCRETE SLAB:**
   TYPICAL EXTERIOR SLAB-ON-GRADE SHALL BE 5" MIN. THICK CONCRETE SLAB, REINFORCED WITH #4 AT 12" O.C. EACH WAY, CHAIRED AT SLAB CENTERLINE, OVER 6" DRAIN ROCK.

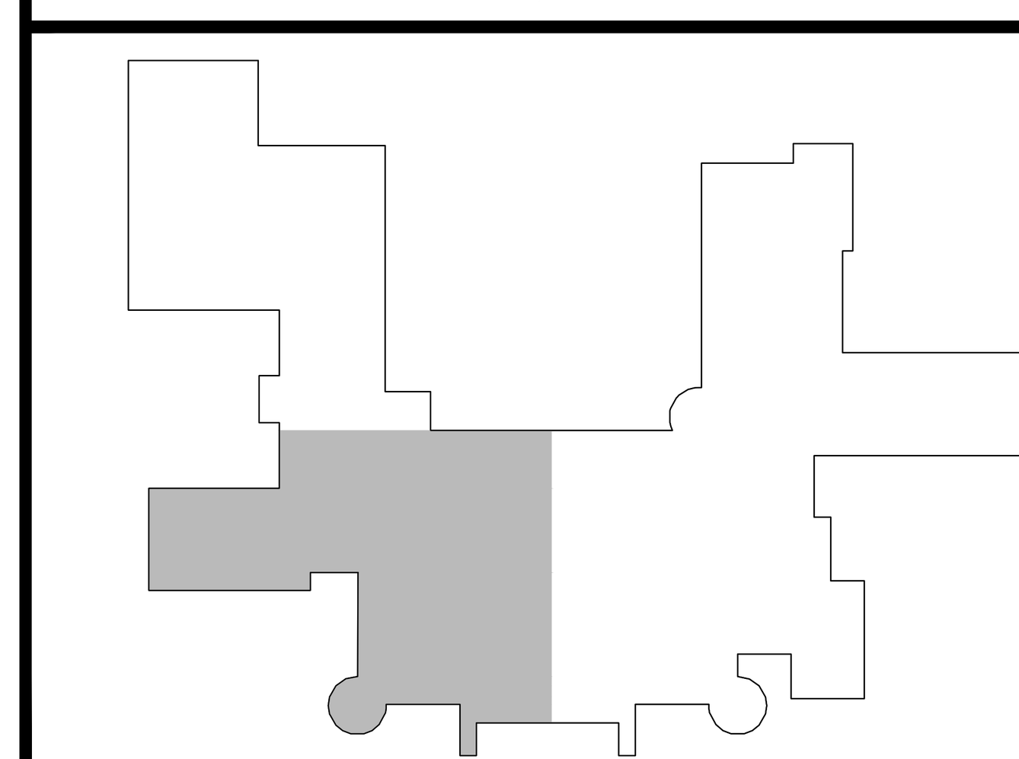
9. **HOLDOWNS:**
HOLDOWNS NOTED OCCUR AT THE LEVEL OF FRAMING SHOWN FOR CONNECTION OF WALLS ABOVE TO FOOTING OR FRAMING BELOW.

10. **STUD FRAMING:**
STUD WALL FRAMING SHALL SHALL CONFORM TO THE WALL FRAMING NOTES, SHEET D1, AND STUD FRAMING NOTES ON SHEET S2, UNLESS NOTED OTHERWISE ON THE PLAN.

11. **MFRD STRONG-WALL NOTES:**
CONTRACTOR TO PROVIDE RAISED CONCRETE STEM WALL AS DETERMINED FOR PROPER INSTALLATION OF STRONGWALLS TO TOP PLATES OF WALL ABOVE.
FOR MORE INFORMATION, SEE DETAIL 1/D3 AND SHEET D3

12. **SHEARWALL LENGTHS:**
LENGTH OF SHEARWALLS SHOWN ABOVE OR BELOW SHEARWALL NUMBER (SEE PLAN). THE NUMBERS INDICATE THE MINIMUM DESIGN LENGTH OF THE SHEARWALL.

KEY PLAN

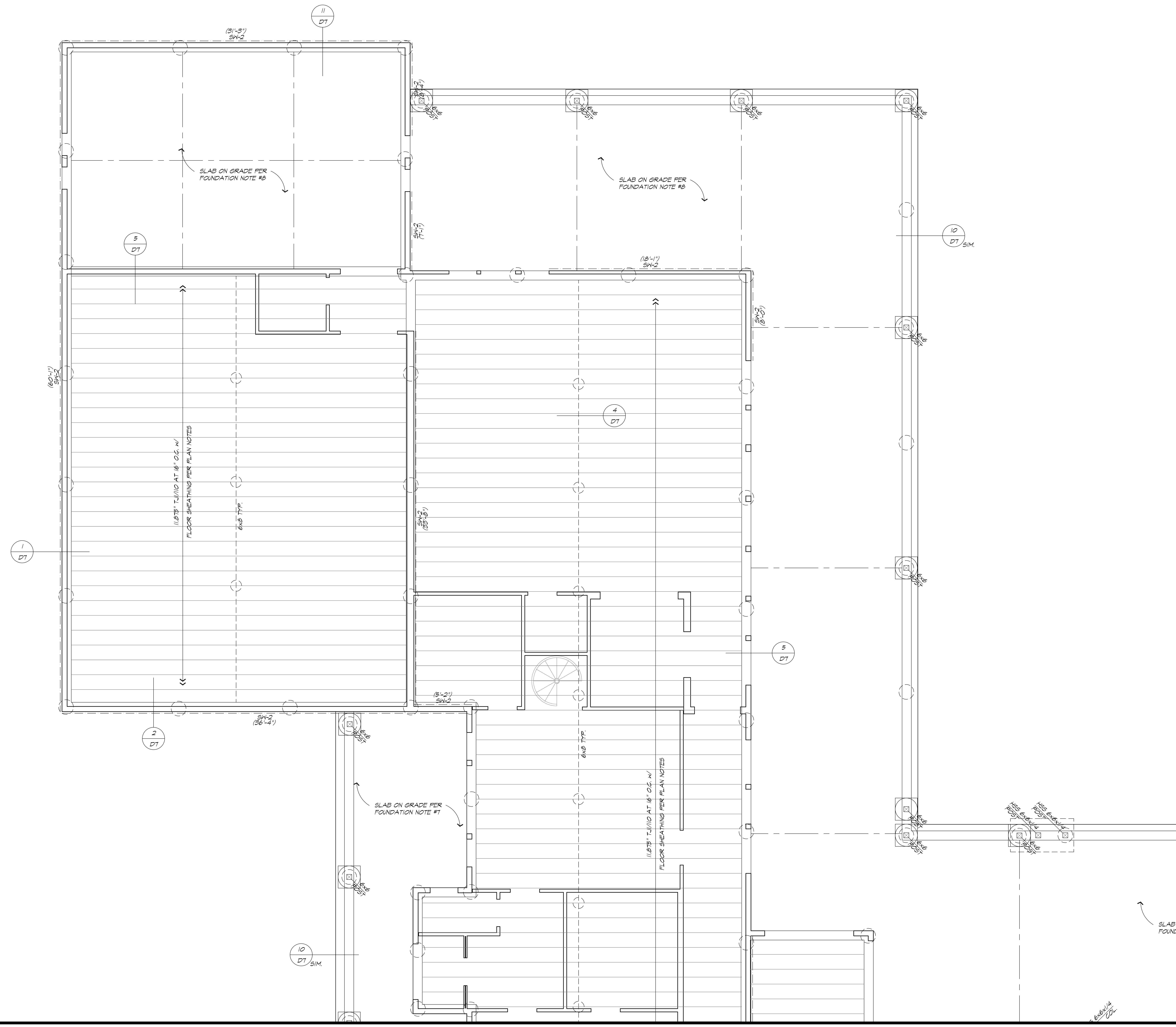


SYM.	DATE	ISSUE/REVISIONS	BY

LMI CONSULTING ENGINEERS, INC
STRUCTURAL ENGINEERING – CIVIL ENGINEERING
RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
21-A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672-6828
FAX (925) 889-4465

Pena Residence
9255 Byron Hwy.
Brentwood, California

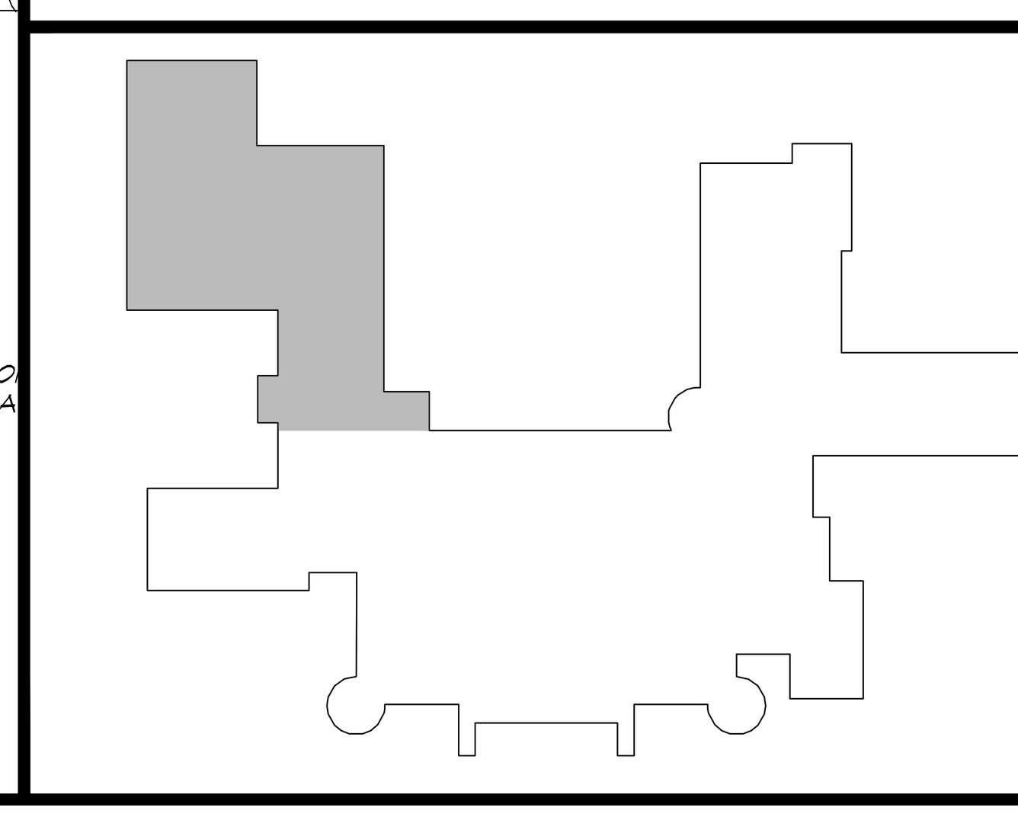
SHEET TITLE	Foundation Plan
DATE	August 16, 2025
SCALE	1/4" = 1'-0"
DRAWN	M. Manning
CHECKED	B. Manning
SHEET	S1.2
OF SHEETS	
JOB	2024-65



FOUNDATION NOTES

1. WALLS SHOWN AS HIDDEN ARE ABOVE FOUNDATION AND/OR FRAMING. SEE SECOND FLOOR FRAMING NOTES FOR STUD FRAMING REQUIREMENTS.
2. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS, ETC.
3. DETAIL KEYS AND OTHER INFORMATION ARE TYPICAL.
4. <u>TYPICAL FLOOR FRAMING:</u>
   TJI FLOOR JOISTS PER PLAN WITH 3/4" (48/24) C-DX T+G PLYWOOD, NAILED WITH 10d AT 6" O.C. AT ALL EDGES, AND AT 12" O.C. IN FIELD. PLYWOOD SHALL BE GLUED AND NAILED TO TOP OF TJI FLOOR JOISTS AT 16" O.C. AS SHOWN ON THE PLAN.
5. <u>COLLECTORS:</u>
   FRAMING MEMBERS NOTED AS "COLLECTORS" SHALL HAVE PLYWOOD EDGE NAILING TO (EACH) COLLECTOR, FOR THE FULL LENGTH OF THE COLLECTOR.
6. <u>TYPICAL GRADE BEAM:</u>
   TYPICAL GRADE BEAM SHALL BE 10" MIN. WIDE x 26" MIN. DEEP, REINFORCED WITH (2) #5 CONTINUOUS REBAR TOP AND BOTTOM. SEE DETAILS FOR OTHER INFORMATION.
7. <u>DRILLED PIER NOTES:</u>
   TYPICAL DRILLED CONCRETE PIER SHALL BE 16" MIN. DIAMETER x DEPTH BELOW PAD GRADE PER SCHEDULE BELOW. MAXIMUM SPACING OF PIERS SHALL BE 10'-0" O.C., U.N.O. SPACE PIERS AS SHOWN ON THE FOUNDATION PLAN, WITH EQUAL SPACING BETWEEN CORNERS, POST LOCATIONS, OR OTHERWISE ESTABLISHED LOCATIONS, TYPICAL UNLESS NOTED OTHERWISE. MINIMUM DISTANCE BETWEEN PIERS SHALL BE THE DISTANCE OF THREE PIER DIAMETERS. PIERS SHALL BE AS NOTED IN DRILLED PIER SCHEDULE BELOW:
   - 16" DIA. x 14'-0" MIN. DEEP CONCRETE PIER REINFORCED WITH (4) #5 VERTICAL BARS. PROVIDE #3 TIES IN GRADE BEAM PER A/D7
   - 12" DIA. x 8'-0" MIN. DEEP CONCRETE PIER REINFORCED WITH (2) #5 VERTICAL BARS. PROVIDE #3 TIES IN GRADE BEAM PER A/D7
8. <u>CONCRETE SLABS:</u>
   CONCRETE SLABS ON GRADE SHALL CONFORM TO THE FOLLOWING:
   A. <u>CONCRETE SLAB TYP. AT INTERIOR:</u>
      6" THICK CONCRETE SLAB REINFORCED WITH #4 AT 12" O.C., CHAIRED AT MID-DEPTH OF SLAB OVER 10 MIL VAPOR BARRIER, OVER 6" DRAIN ROCK PER DETAIL B/D7
   B. <u>CONCRETE SLAB AT ELEVATOR:</u>
      CONCRETE SLAB AT ELEVATOR SHALL BE PER DETAIL B/D6
   C. <u>TYPICAL EXTERIOR CONCRETE SLAB:</u>
      TYPICAL EXTERIOR SLAB-ON-GRADE SHALL BE 5" MIN. THICK CONCRETE SLAB, REINFORCED WITH #4 AT 12" O.C. EACH WAY, CHAIRED AT SLAB CENTERLINE, OVER 6" DRAIN ROCK.
9. <u>HOLDOWNS:</u>
   HOLDOWNS NOTED OCCUR AT THE LEVEL OF FRAMING SHOWN FOR CONNECTION OF WALLS ABOVE TO FOOTING OR FRAMING BELOW.
10. <u>STUD FRAMING:</u>
    STUD WALL FRAMING SHALL SHALL CONFORM TO THE WALL FRAMING NOTES, SHEET D1, AND STUD FRAMING NOTES ON SHEET S2, UNLESS NOTED OTHERWISE ON THE PLAN.
11. <u>MFRD STRONG-WALL NOTES:</u>
    CONTRACTOR TO PROVIDE RAISED CONCRETE STEM WALL AS DETERMINED FOR PROPER INSTALLATION OF STRONGWALLS TO TOP PLATES OF WALL ABOVE.
    FOR MORE INFORMATION, SEE DETAIL 1/D3 AND SHEET D3
12. <u>SHEARWALL LENGTHS:</u>
    LENGTH OF SHEARWALLS SHOWN ABOVE OR BELOW SHEARWALL NUMBER (SEE PLAN). THE NUMBERS INDICATE THE MINIMUM DESIGN LENGTH OF THE SHEARWALL.

KEY PLAN



SYM.	DATE	ISSUE/REVISIONS	BY

CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING – CIVIL ENGINEERING – RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
25–A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672–6828
FAX (925) 889–4465

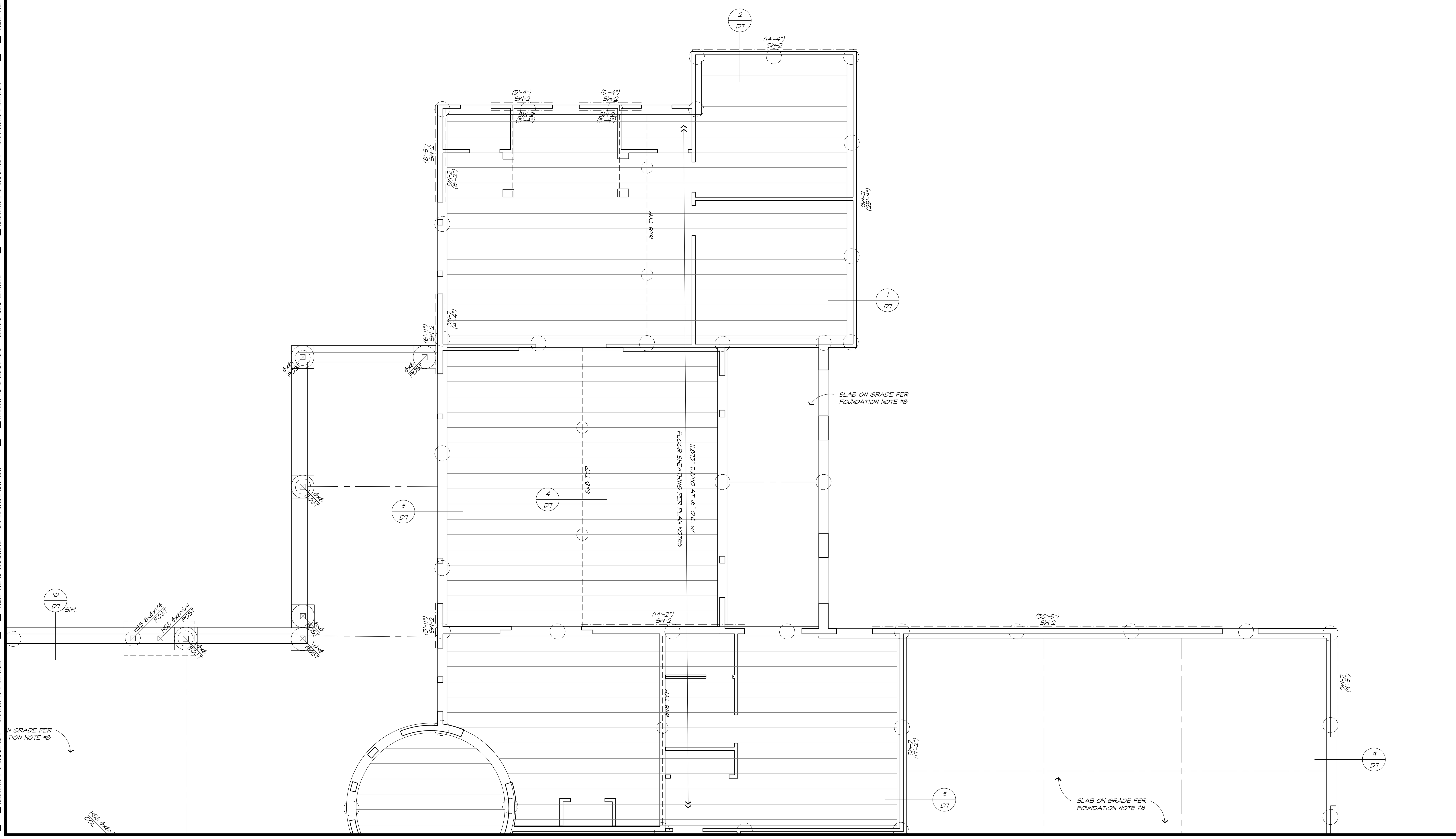
Pena Residence

9255 Byron Hwy.
Brentwood, California

SHEET TITLE: Foundation Plan
DATE: August 16, 2025
SCALE: 1/4" = 1'-0"
DRAWN: M. Manning
CHECKED: B. Manning
SHEET: S1.3
OF SHEETS
JOB: 2024-65

CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING – CIVIL ENGINEERING –
RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES

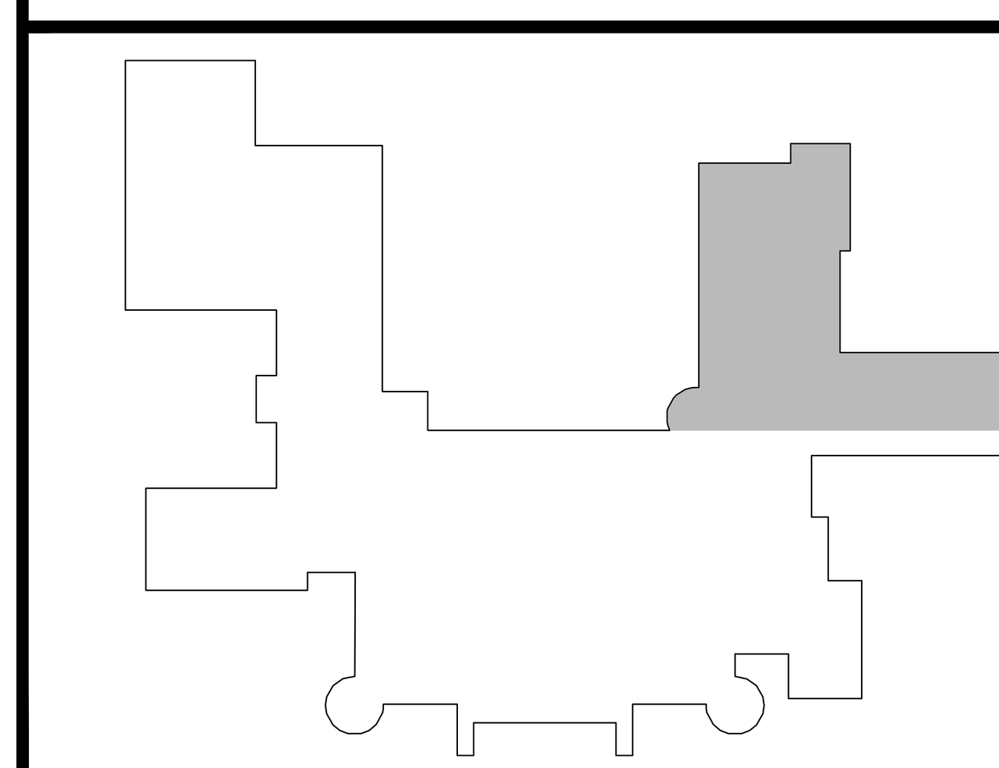
CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING – CIVIL ENGINEERING –
RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING – CIVIL ENGINEERING –
RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING – CIVIL ENGINEERING –
RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING – CIVIL ENGINEERING –
RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING – CIVIL ENGINEERING –
RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING – CIVIL ENGINEERING –
RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES



FOUNDATION NOTES

1. WALLS SHOWN AS HIDDEN ARE ABOVE FOUNDATION AND/OR FRAMING. SEE SECOND FLOOR FRAMING NOTES FOR STUD FRAMING REQUIREMENTS.
2. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS, ETC.
3. DETAIL KEYS AND OTHER INFORMATION ARE TYPICAL.
4. **TYPICAL FLOOR FRAMING:**
   TJI FLOOR JOISTS PER PLAN WITH 3/4" (48/24) C-DX T+G PLYWOOD, NAILED WITH 10d AT 6" O.C. AT ALL EDGES, AND AT 12" O.C. IN FIELD. PLYWOOD SHALL BE GLUED AND NAILED TO TOP OF TJI FLOOR JOISTS AT 16" O.C. AS SHOWN ON THE PLAN.
5. **COLLECTORS:**
   FRAMING MEMBERS NOTED AS "COLLECTORS" SHALL HAVE PLYWOOD EDGE NAILING TO (EACH) COLLECTOR, FOR THE FULL LENGTH OF THE COLLECTOR.
6. **TYPICAL GRADE BEAM:**
   TYPICAL GRADE BEAM SHALL BE 10" MIN. WIDE x 26" MIN. DEEP, REINFORCED WITH (2) #5 CONTINUOUS REBAR TOP AND BOTTOM. SEE DETAILS FOR OTHER INFORMATION.
7. **DRILLED PIER NOTES:**
   TYPICAL DRILLED CONCRETE PIER SHALL BE 16" MIN. DIAMETER x DEPTH BELOW PAD GRADE PER SCHEDULE BELOW. MAXIMUM SPACING OF PIERS SHALL BE 10'-0" O.C., U.N.O. SPACE PIERS AS SHOWN ON THE FOUNDATION PLAN, WITH EQUAL SPACING BETWEEN CORNERS, POST LOCATIONS, OR OTHERWISE ESTABLISHED LOCATIONS, TYPICAL UNLESS NOTED OTHERWISE. MINIMUM DISTANCE BETWEEN PIERS SHALL BE THE DISTANCE OF THREE PIER DIAMETERS. PIERS SHALL BE AS NOTED IN DRILLED PIER SCHEDULE BELOW:
   - 16" DIA. x 14'-0" MIN. DEEP CONCRETE PIER REINFORCED WITH (4) #5 VERTICAL BARS. PROVIDE #3 TIES IN GRADE BEAM PER A/D7
   - 12" DIA. x 8'-0" MIN. DEEP CONCRETE PIER REINFORCED WITH (2) #5 VERTICAL BARS. PROVIDE #3 TIES IN GRADE BEAM PER A/D7
8. **CONCRETE SLABS:**
   CONCRETE SLABS ON GRADE SHALL CONFORM TO THE FOLLOWING:
   A. **CONCRETE SLAB TYP. AT INTERIOR:**
   6" THICK CONCRETE SLAB REINFORCED WITH #4 AT 12" O.C., CHAIRED AT MID-DEPTH OF SLAB OVER 10 MIL VAPOR BARRIER, OVER 6" DRAIN ROCK PER DETAIL B/D7
   B. **CONCRETE SLAB AT ELEVATOR:**
   CONCRETE SLAB AT ELEVATOR SHALL BE PER DETAIL B/D6
   C. **TYPICAL EXTERIOR CONCRETE SLAB:**
   TYPICAL EXTERIOR SLAB-ON-GRADE SHALL BE 5" MIN. THICK CONCRETE SLAB, REINFORCED WITH #4 AT 12" O.C. EACH WAY, CHAIRED AT SLAB CENTERLINE, OVER 6" DRAIN ROCK.
9. **HOLDOWNS:**
   HOLDOWNS NOTED OCCUR AT THE LEVEL OF FRAMING SHOWN FOR CONNECTION OF WALLS ABOVE TO FOOTING OR FRAMING BELOW.
10. **STUD FRAMING:**
    STUD WALL FRAMING SHALL SHALL CONFORM TO THE WALL FRAMING NOTES, SHEET D1, AND STUD FRAMING NOTES ON SHEET S2, UNLESS NOTED OTHERWISE ON THE PLAN.
11. **MFRD STRONG-WALL NOTES:**
    CONTRACTOR TO PROVIDE RAISED CONCRETE STEM WALL AS DETERMINED FOR PROPER INSTALLATION OF STRONGWALLS TO TOP PLATES OF WALL ABOVE.
    FOR MORE INFORMATION, SEE DETAIL 1/D3 AND SHEET D3
12. **SHEARWALL LENGTHS:**
    LENGTH OF SHEARWALLS SHOWN ABOVE OR BELOW SHEARWALL NUMBER (SEE PLAN). THE NUMBERS INDICATE THE MINIMUM DESIGN LENGTH OF THE SHEARWALL.

KEY PLAN



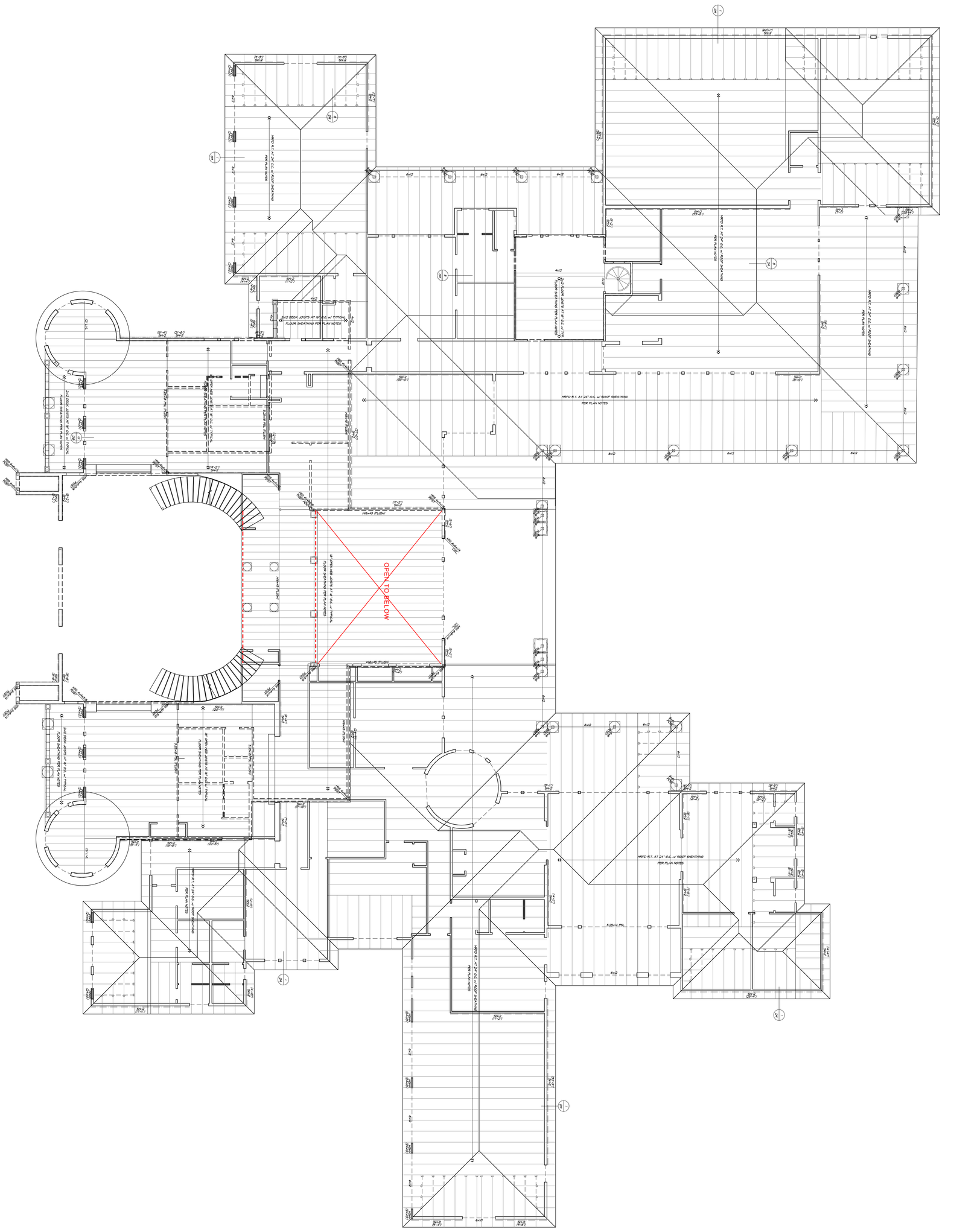
SYM.	DATE	ISSUE/REVISIONS	BY

CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING – CIVIL ENGINEERING –
RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
25-A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672-6828
FAX (925) 889-4465

Pena Residence

9255 Byron Hwy.
Brentwood, California

SHEET TITLE: Foundation Plan
DRAWN: M. Manning
CHECKED: B. Manning
DATE: August 16, 2025
SCALE: 1/4" = 1'-0"
SHEET: S1.4
OF SHEETS
JOB: 2024-65



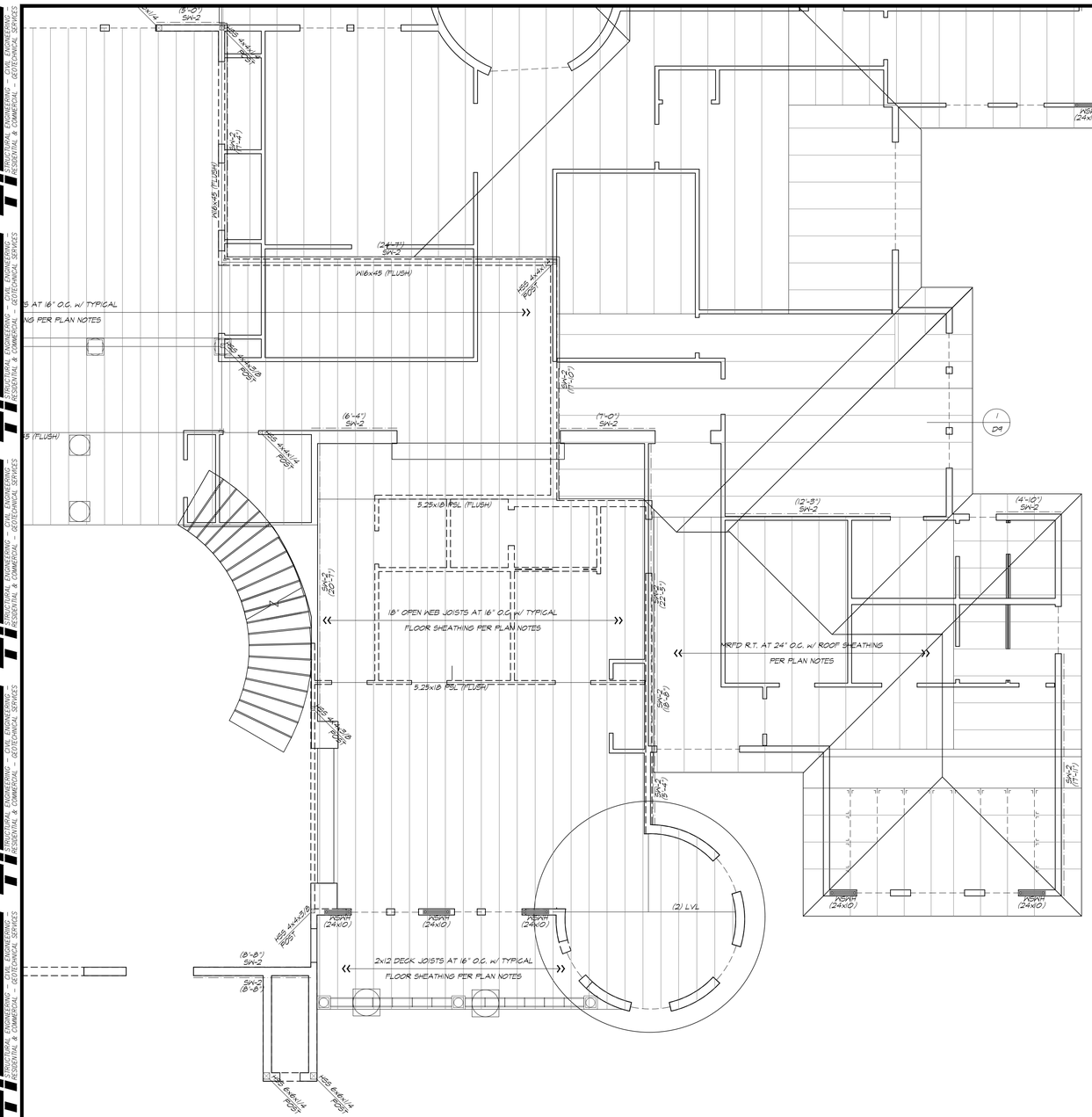
SHEET	SHEET TITLE		
S2.0	Overall Floor Plan		
OF SHEETS	DATE: August 16, 2025	DRAWN: M. Manning	
JOB 2024-65	SCALE: N.T.S.	CHECKED: B. Manning	

Pena Residence

9255 Byron Hwy.
Brentwood, California

CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING – CIVIL ENGINEERING –
RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
25-A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672-6828
FAX (925) 889-4465

SYM.	DATE	ISSUE/REVISIONS	BY



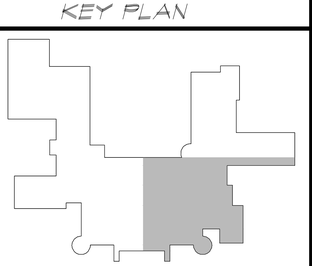
FLOOR FRAMING NOTES

1. SEE SHEET D1 FOR STRUCTURAL NOTES AND LEGEND.
2. WALLS SHOWN AS SOLID ARE BELOW FRAMING. WALLS SHOWN AS HIDDEN ARE ABOVE FRAMING.
3. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS, ETC.
4. DETAIL KEYS AND OTHER INFORMATION ARE TYPICAL.
5. **TYPICAL FLOOR FRAMING:**
   FLOOR JOISTS ARE AS NOTED ON THE PLANS. SEE FRAMING PLAN FOR DEPTH, LOCATIONS AND SPACING REQUIREMENTS. PROVIDE EXTRA JOIST UNDER ALL BEARING/SHEAR WALLS PARALLEL TO FRAMING. PROVIDE SOLID BLOCKING UNDER ALL BEARING/SHEAR WALLS PERPENDICULAR TO FRAMING, PER DETAILS.
6. **FLOOR SHEATHING:**
   TYPICAL FLOOR SHEATHING SHALL BE 3/4" T & G PLYWOOD OR STRUCT. I O.S.B., GLUED AND NAILED WITH 10d AT 6" O.C. (EDGES) AND 12" O.C. (FIELD). ORIENT SHEATHING WITH FACE GRAIN PERPENDICULAR TO FRAMING MEMBERS, AND STAGGER END JOINTS.
   NAIL FLOOR SHEATHING BEFORE GLUE DRIES. INSTALL PER 11/D4
7. **EXTERIOR DECK FRAMING OVER LIVING SPACES:**
   TOPPING OR FINISH PER ARCHITECTURAL DRAWINGS, PLACED OVER WATERPROOFING MEMBRANE, PLACED DIRECTLY ON 3/4" (48/24) TIG APA-RATED SHEATHING, GLUED AND NAILED WITH 10d AT 6" O.C. (EDGES) AND 12" O.C. (FIELD) TYPICAL U.N.O.. ORIENT SHEATHING WITH FACE GRAIN PERPENDICULAR TO FRAMING MEMBERS, AND STAGGER END JOINTS. NAIL FLOOR SHEATHING BEFORE GLUE DRIES.
8. **COLLECTORS:**
   FRAMING MEMBERS NOTED AS 'COLLECTORS' SHALL HAVE PLYWOOD EDGE NAILING TO (EACH) COLLECTOR, FOR THE FULL LENGTH OF THE COLLECTOR. COLLECTORS SHALL BE CONTINUOUS OR SPLICED WITH 'MSTA36' STRAP.
9. **HOLDOWNS:**
   HOLDOWNS NOTED OCCUR AT THE LEVEL OF FRAMING SHOWN FOR CONNECTION OF WALLS ABOVE TO WALLS OR FRAMING BELOW. SEE DETAILS ON SHEET D2.
10. **WALL FRAMING:**
    STUD WALL FRAMING SHALL SHALL CONFORM TO THE WALL FRAMING NOTES, SHEET D1, U.N.O. ON THE PLAN. TYPICAL EXTERIOR WALL SHALL BE 2x6 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE. TYPICAL INTERIOR WALLS SHALL BE 2x4 STUDS AT 16" O.C. (TO 10'-0") AND 2x6 STUDS AT 16" O.C. (TO 14'-0"). INTERIOR NON-BEARING WALLS SHALL BE 2x4 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE ON THE ARCHITECTURAL DRAWINGS.
11. **LOW ROOF FRAMING:**
    SEE ROOF FRAMING PLAN FOR TYPICAL ROOF FRAMING NOTES FOR LOW ROOF FRAMING AREAS (IF OCCURS AT THIS LEVEL).
12. **HEADERS:**
    ALL HEADERS AT THIS LEVEL SHALL BE 4x10 DF #1 IN 2x4 WALLS AND 6x10 DF #1 IN 2x6 WALLS, UNLESS NOTED OTHERWISE ON THE PLAN. EXISTING HEADERS TO REMAIN U.N.O.
13. **TOP PLATE SPLICES:**
    TOP PLATE SPLICES OF ALL WALLS SHALL CONFORM TO 6/D2
14. **SHEARWALL LENGTHS:**
    LENGTH OF SHEARWALLS SHOWN ABOVE OR BELOW SHEARWALL NUMBER (SEE PLAN). THE NUMBERS INDICATE THE MINIMUM DESIGN LENGTH OF THE SHEARWALL.
15. **LEGEND:**

    INDICATES AREAS OF FLOOR REQUIRING BLOCKED EDGES. PROVIDE EDGE NAILING AT ALL EDGES AND BLOCKING.

    INDICATES STEEL MOMENT FRAME SEE SHEET M1

KEY PLAN



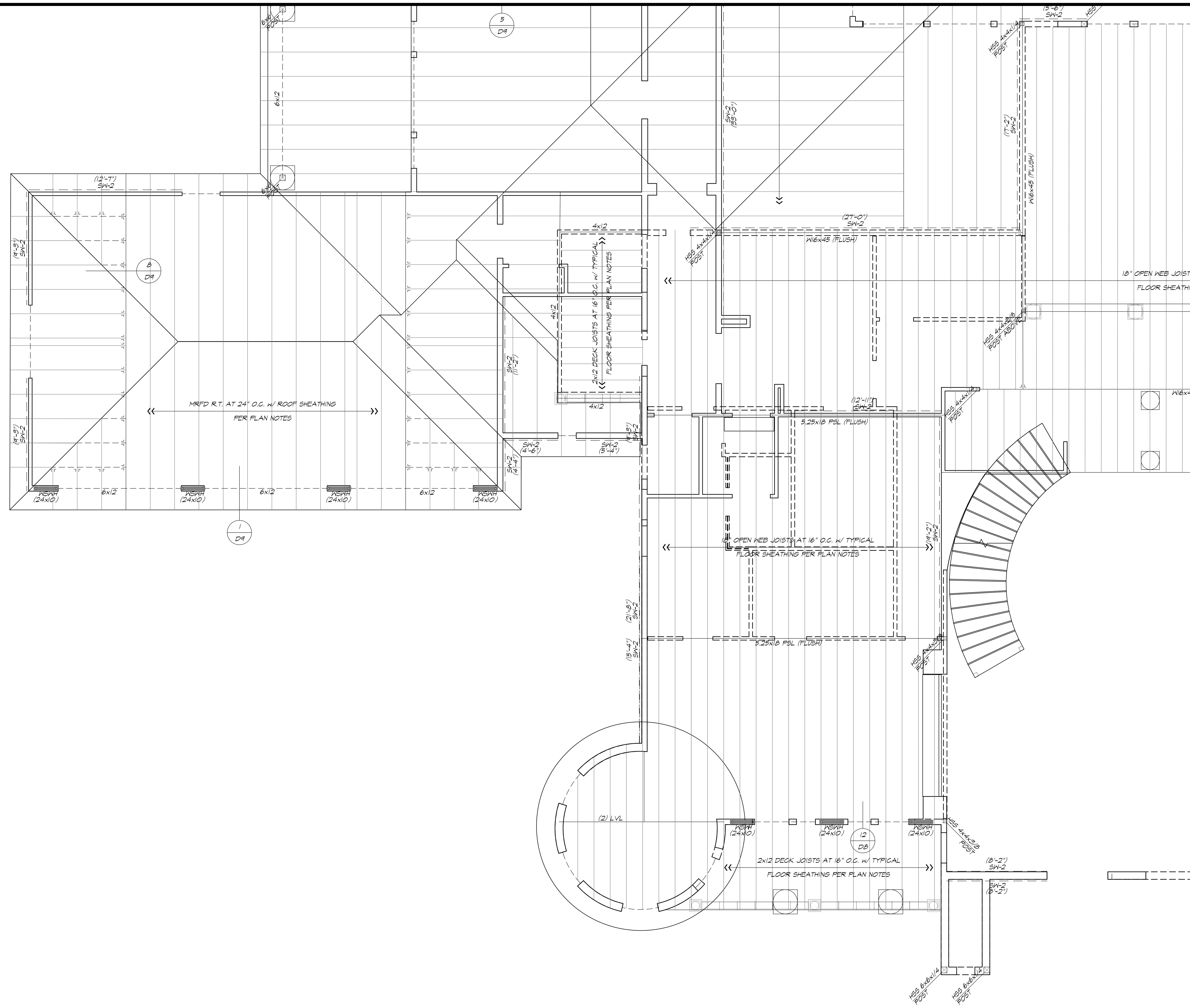
CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING - CIVIL ENGINEERING
RESIDENTIAL & COMMERCIAL - GEOTECHNICAL SERVICES
25-A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672-6828
FAX (925) 889-4465

BY	ISSUE/REVISIONS	DATE

Pena Residence

9255 Byron Hwy.
Brentwood, California

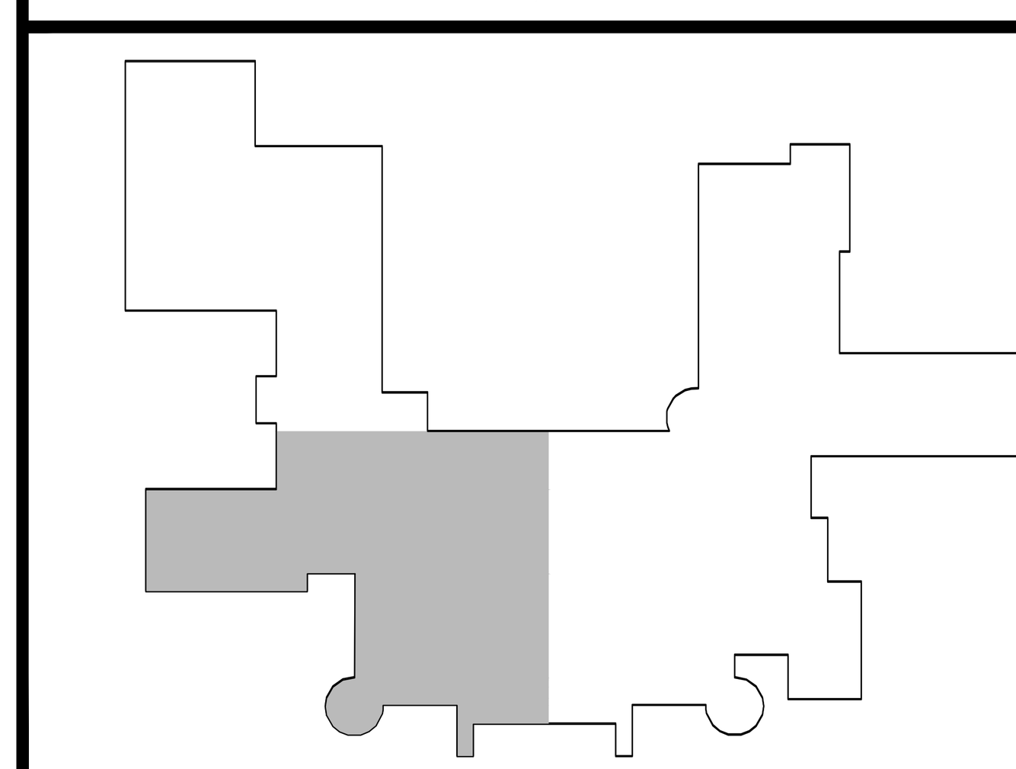
SHEET TITLE: Floor Framing Plan
DATE: August 16, 2025
SCALE: 1/4" = 1'-0"
DRAWN: M. Manning
CHECKED: B. Manning
SHEET: S2.1
OF SHEETS
JOB: 2024-65



FLOOR FRAMING NOTES

1. SEE SHEET D1 FOR STRUCTURAL NOTES AND LEGEND.
2. WALLS SHOWN AS SOLID ARE BELOW FRAMING. WALLS SHOWN AS HIDDEN ARE ABOVE FRAMING.
3. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS, ETC.
4. DETAIL KEYS AND OTHER INFORMATION ARE TYPICAL.
5. TYPICAL FLOOR FRAMING:
   FLOOR JOISTS ARE AS NOTED ON THE PLANS. SEE FRAMING PLAN FOR DEPTH, LOCATIONS AND SPACING REQUIREMENTS. PROVIDE EXTRA JOIST UNDER ALL BEARING/SHEAR WALLS PARALLEL TO FRAMING. PROVIDE SOLID BLOCKING UNDER ALL BEARING/SHEAR WALLS PERPENDICULAR TO FRAMING, PER DETAILS.
6. FLOOR SHEATHING:
   TYPICAL FLOOR SHEATHING SHALL BE 3/4" T & G PLYWOOD OR STRUCT. I O.S.B., GLUED AND NAILED WITH 10d AT 6" O.C. (EDGES) AND 12" O.C. (FIELD). ORIENT SHEATHING WITH FACE GRAIN PERPENDICULAR TO FRAMING MEMBERS, AND STAGGER END JOINTS.
   NAIL FLOOR SHEATHING BEFORE GLUE DRIES. INSTALL PER 11/D4
7. EXTERIOR DECK FRAMING OVER LIVING SPACES:
   TOPPING OR FINISH PER ARCHITECTURAL DRAWINGS, PLACED OVER WATERPROOFING MEMBRANE, PLACED DIRECTLY ON 3/4" (48/24) T+G APA-RATED SHEATHING, GLUED AND NAILED WITH 10d AT 6" O.C. (EDGES) AND 12" O.C. (FIELD) TYPICAL, U.N.O.. ORIENT SHEATHING WITH FACE GRAIN PERPENDICULAR TO FRAMING MEMBERS, AND STAGGER END JOINTS. NAIL FLOOR SHEATHING BEFORE GLUE DRIES.
8. COLLECTORS:
   FRAMING MEMBERS NOTED AS "COLLECTORS" SHALL HAVE PLYWOOD EDGE NAILING TO (EACH) COLLECTOR, FOR THE FULL LENGTH OF THE COLLECTOR. COLLECTORS SHALL BE CONTINUOUS OR SPLICED WITH "MSTA36" STRAP.
9. HOLDOWNS:
   HOLDOWNS NOTED OCCUR AT THE LEVEL OF FRAMING SHOWN FOR CONNECTION OF WALLS ABOVE TO WALLS OR FRAMING BELOW. SEE DETAILS ON SHEET D2.
10. WALL FRAMING:
    STUD WALL FRAMING SHALL SHALL CONFORM TO THE WALL FRAMING NOTES, SHEET D1, U.N.O. ON THE PLAN. TYPICAL EXTERIOR WALL SHALL BE 2x6 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE. TYPICAL INTERIOR WALLS SHALL BE 2x4 STUDS AT 16" O.C. (TO 10'-0") AND 2x6 STUDS AT 16" O.C. (TO 14'-0"). INTERIOR NON-BEARING WALLS SHALL BE 2x4 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE ON THE ARCHITECTURAL DRAWINGS.
11. LOW ROOF FRAMING:
    SEE ROOF FRAMING PLAN FOR TYPICAL ROOF FRAMING NOTES FOR LOW ROOF FRAMING AREAS (IF OCCURS AT THIS LEVEL).
12. HEADERS:
    ALL HEADERS AT THIS LEVEL SHALL BE 4x10 DF #1 IN 2x4 WALLS AND 6x10 DF #1 IN 2x6 WALLS, UNLESS NOTED OTHERWISE ON THE PLAN. EXISTING HEADERS TO REMAIN. U.N.O.
13. TOP PLATE SPLICES:
    TOP PLATE SPLICES OF ALL WALLS SHALL CONFORM TO 6/D2
14. SHEARWALL LENGTHS:
    LENGTH OF SHEARWALLS SHOWN ABOVE OR BELOW SHEARWALL NUMBER (SEE PLAN). THE NUMBERS INDICATE THE MINIMUM DESIGN LENGTH OF THE SHEARWALL.
15. LEGEND:
    INDICATES AREAS OF FLOOR REQUIRING BLOCKED EDGES. PROVIDE EDGE NAILING AT ALL EDGES AND BLOCKING.
    INDICATES STEEL MOMENT FRAME SEE SHEET MF1

KEY PLAN



SYM.	DATE	ISSUE/REVISIONS	BY

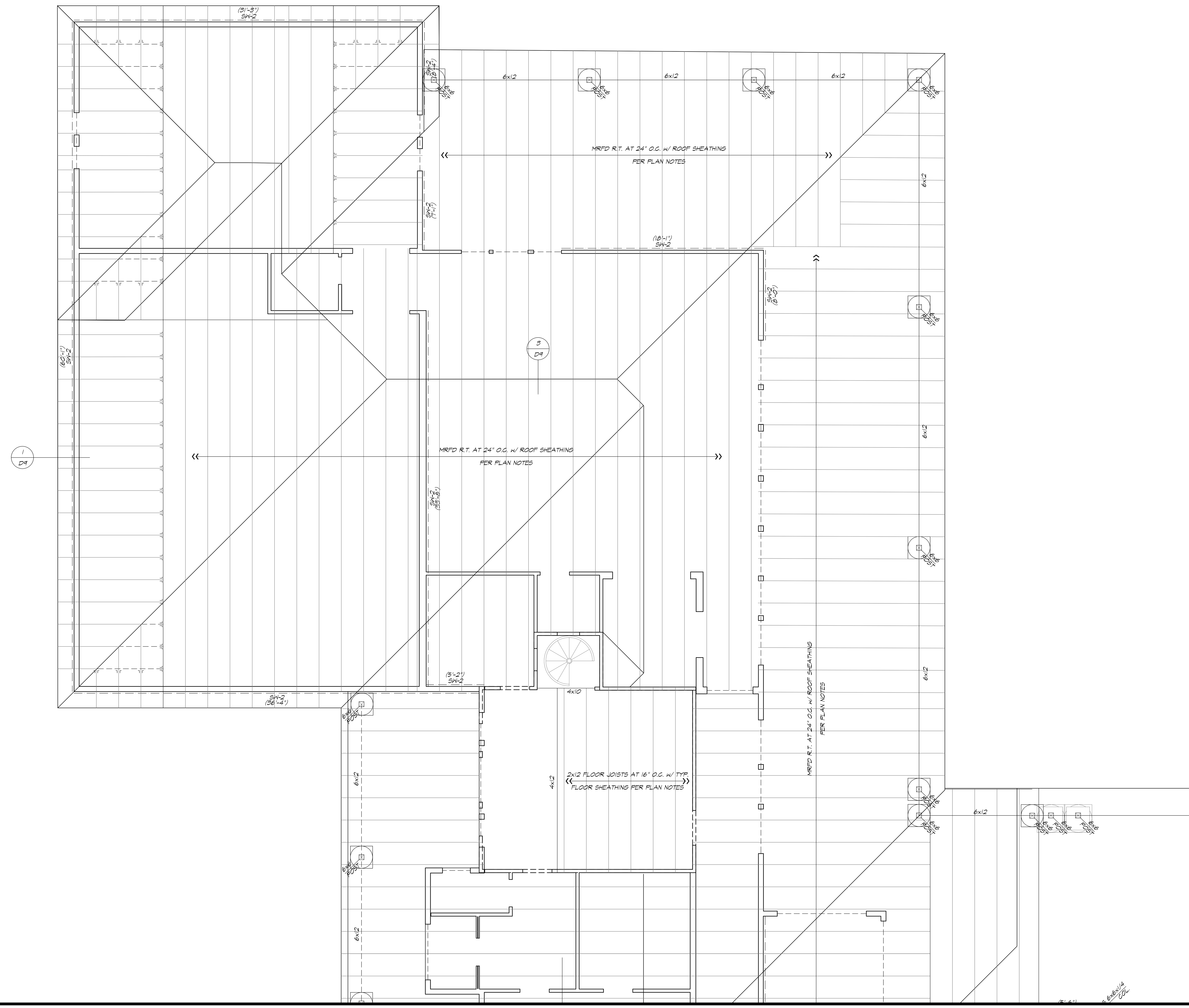
CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING – CIVIL ENGINEERING – RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
25-A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672-6828
FAX (925) 889-4465

Pena Residence

9255 Byron Hwy.
Brentwood, California

SHEET TITLE: Floor Framing Plan

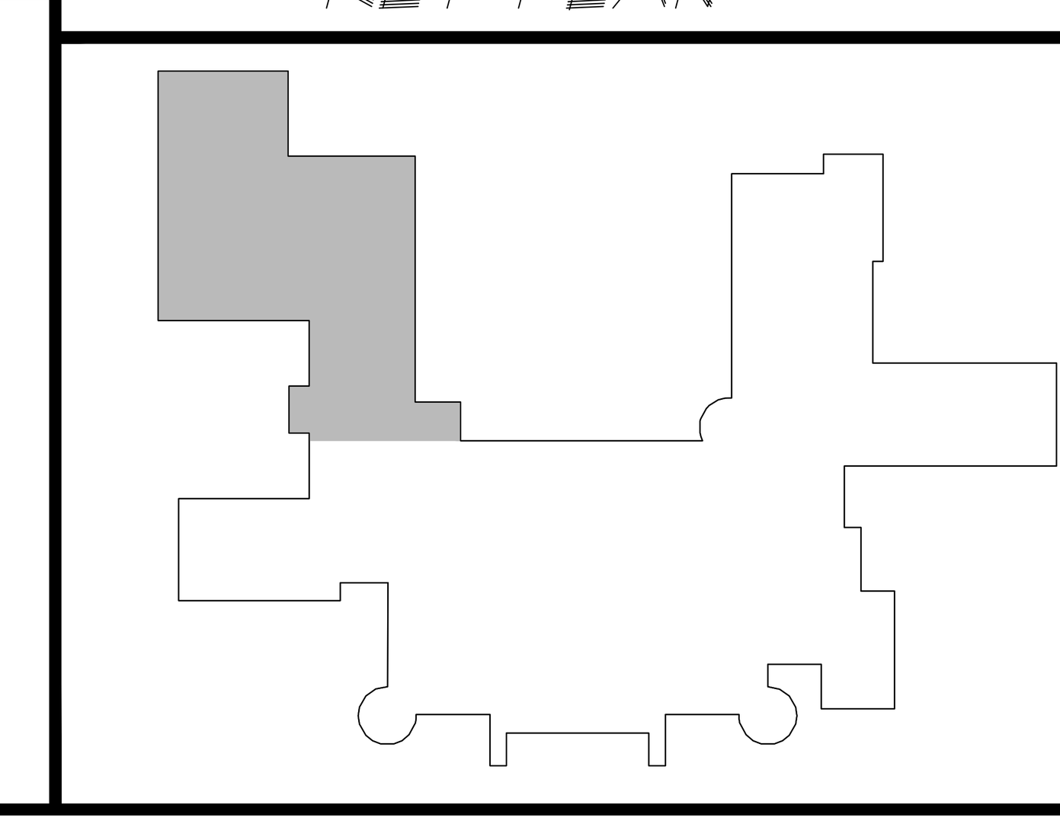
DRAWN: M. Manning
CHECKED: B. Manning
DATE: August 16, 2025
SCALE: 1/4" = 1'-0"
SHEET: S2.2
OF SHEETS
JOB: 2024-65



FLOOR FRAMING NOTES

1. SEE SHEET D1 FOR STRUCTURAL NOTES AND LEGEND.
2. WALLS SHOWN AS SOLID ARE BELOW FRAMING. WALLS SHOWN AS HIDDEN ARE ABOVE FRAMING.
3. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS, ETC.
4. DETAIL KEYS AND OTHER INFORMATION ARE TYPICAL.
5. **TYPICAL FLOOR FRAMING:**
   FLOOR JOISTS ARE AS NOTED ON THE PLANS. SEE FRAMING PLAN FOR DEPTH, LOCATIONS AND SPACING REQUIREMENTS. PROVIDE EXTRA JOIST UNDER ALL BEARING/SHEAR WALLS PARALLEL TO FRAMING. PROVIDE SOLID BLOCKING UNDER ALL BEARING/SHEAR WALLS PERPENDICULAR TO FRAMING, PER DETAILS.
6. **FLOOR SHEATHING:**
   TYPICAL FLOOR SHEATHING SHALL BE 3/4" T & G PLYWOOD OR STRUCT. I O.S.B., GLUED AND NAILED WITH 10d AT 6" O.C. (EDGES) AND 12" O.C. (FIELD). ORIENT SHEATHING WITH FACE GRAIN PERPENDICULAR TO FRAMING MEMBERS, AND STAGGER END JOINTS.
   NAIL FLOOR SHEATHING BEFORE GLUE DRIES. INSTALL PER 11/D4
7. **EXTERIOR DECK FRAMING OVER LIVING SPACES:**
   TOPPING OR FINISH PER ARCHITECTURAL DRAWINGS, PLACED OVER WATERPROOFING MEMBRANE, PLACED DIRECTLY ON 3/4" (48/24) T+G APA-RATED SHEATHING, GLUED AND NAILED WITH 10d AT 6" O.C. (EDGES) AND 12" O.C. (FIELD) TYPICAL, U.N.O.. ORIENT SHEATHING WITH FACE GRAIN PERPENDICULAR TO FRAMING MEMBERS, AND STAGGER END JOINTS. NAIL FLOOR SHEATHING BEFORE GLUE DRIES.
8. **COLLECTORS:**
   FRAMING MEMBERS NOTED AS "COLLECTORS" SHALL HAVE PLYWOOD EDGE NAILING TO (EACH) COLLECTOR, FOR THE FULL LENGTH OF THE COLLECTOR. COLLECTORS SHALL BE CONTINUOUS OR SPLICED WITH "MSTA36" STRAP.
9. **HOLDOWNS:**
   HOLDOWNS NOTED OCCUR AT THE LEVEL OF FRAMING SHOWN FOR CONNECTION OF WALLS ABOVE TO WALLS OR FRAMING BELOW. SEE DETAILS ON SHEET D2.
10. **WALL FRAMING:**
    STUD WALL FRAMING SHALL SHALL CONFORM TO THE WALL FRAMING NOTES, SHEET D1, U.N.O. ON THE PLAN. TYPICAL EXTERIOR WALL SHALL BE 2x6 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE. TYPICAL INTERIOR WALLS SHALL BE 2x4 STUDS AT 16" O.C. (TO 10'-0") AND 2x6 STUDS AT 16" O.C. (TO 14'-0"). INTERIOR NON-BEARING WALLS SHALL BE 2x4 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE ON THE ARCHITECTURAL DRAWINGS.
11. **LOW ROOF FRAMING:**
    SEE ROOF FRAMING PLAN FOR TYPICAL ROOF FRAMING NOTES FOR LOW ROOF FRAMING AREAS (IF OCCURS AT THIS LEVEL).
12. **HEADERS:**
    ALL HEADERS AT THIS LEVEL SHALL BE 4x10 DF #1 IN 2x4 WALLS AND 6x10 DF #1 IN 2x6 WALLS, UNLESS NOTED OTHERWISE ON THE PLAN. EXISTING HEADERS TO REMAIN. U.N.O.
13. **TOP PLATE SPLICES:**
    TOP PLATE SPLICES OF ALL WALLS SHALL CONFORM TO 6/D2
14. **SHEARWALL LENGTHS:**
    LENGTH OF SHEARWALLS SHOWN ABOVE OR BELOW SHEARWALL NUMBER (SEE PLAN). THE NUMBERS INDICATE THE MINIMUM DESIGN LENGTH OF THE SHEARWALL.
15. **LEGEND:**
    INDICATES AREAS OF FLOOR REQUIRING BLOCKED EDGES. PROVIDE EDGE NAILING AT ALL EDGES AND BLOCKING.
    INDICATES STEEL MOMENT FRAME SEE SHEET MF1

KEY PLAN

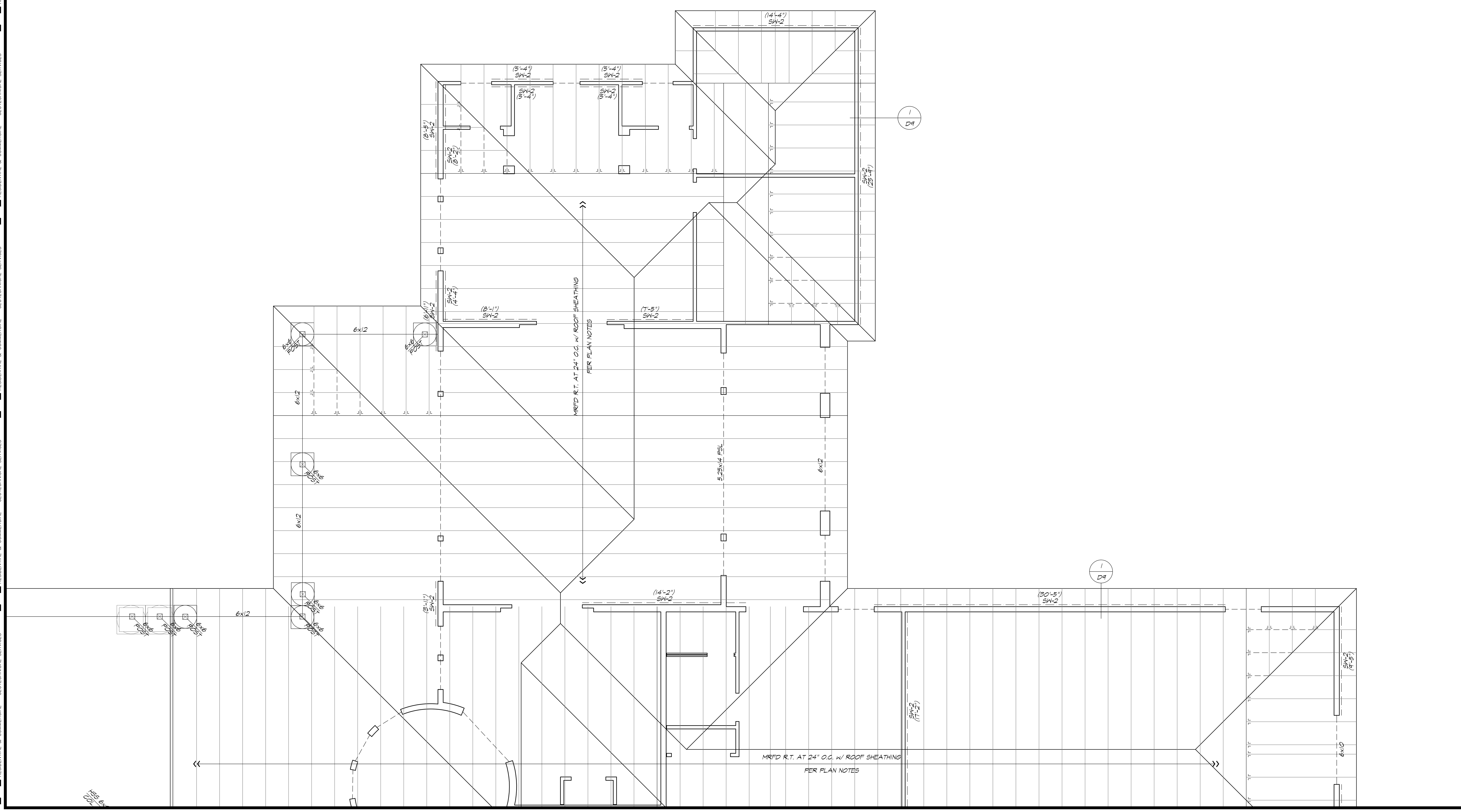


SYM.	DATE	ISSUE/REVISIONS	BY

CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING – CIVIL ENGINEERING – RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
25-A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672-6828
FAX (925) 889-4465

Pena Residence
9255 Byron Hwy.
Brentwood, California

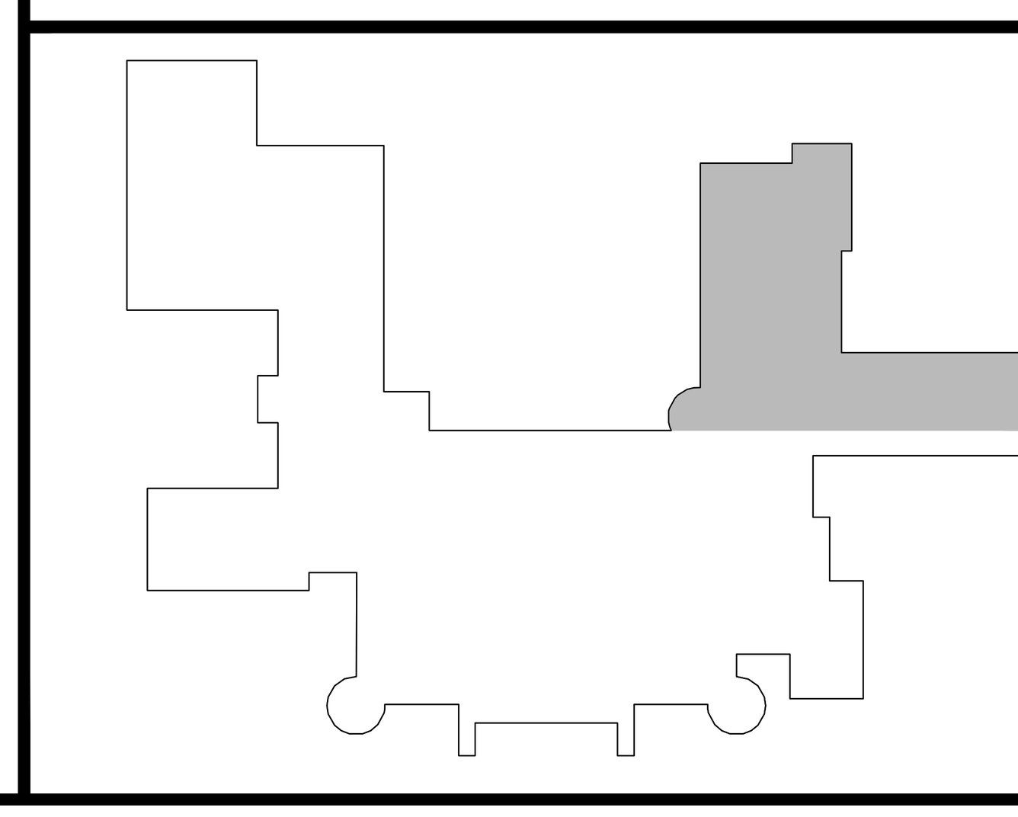
SHEET TITLE: Floor Framing Plan
DATE: August 16, 2025
DRAWN: M. Manning
SCALE: 1/4" = 1'-0"
CHECKED: B. Manning
SHEET: S2.3
OF SHEETS
JOB: 2024-65



FLOOR FRAMING NOTES

1. SEE SHEET D1 FOR STRUCTURAL NOTES AND LEGEND.
2. WALLS SHOWN AS SOLID ARE BELOW FRAMING. WALLS SHOWN AS HIDDEN ARE ABOVE FRAMING.
3. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS, ETC.
4. DETAIL KEYS AND OTHER INFORMATION ARE TYPICAL.
5. TYPICAL FLOOR FRAMING:
FLOOR JOISTS ARE AS NOTED ON THE PLANS. SEE FRAMING PLAN FOR DEPTH, LOCATIONS AND SPACING REQUIREMENTS. PROVIDE EXTRA JOIST UNDER ALL BEARING/SHEAR WALLS PARALLEL TO FRAMING. PROVIDE SOLID BLOCKING UNDER ALL BEARING/SHEAR WALLS PERPENDICULAR TO FRAMING, PER DETAILS.
6. FLOOR SHEATHING:
TYPICAL FLOOR SHEATHING SHALL BE 3/4" T & G PLYWOOD OR STRUCT. 1 O.S.B., GLUED AND NAILED WITH 10d AT 6" O.C. (EDGES) AND 12" O.C. (FIELD). ORIENT SHEATHING WITH FACE GRAIN PERPENDICULAR TO FRAMING MEMBERS, AND STAGGER END JOINTS.
NAIL FLOOR SHEATHING BEFORE GLUE DRIES. INSTALL PER 11/D4
7. EXTERIOR DECK FRAMING OVER LIVING SPACES:
TOPPING OR FINISH PER ARCHITECTURAL DRAWINGS, PLACED OVER WATERPROOFING MEMBRANE, PLACED DIRECTLY ON 3/4" (48/24) T+G APA-RATED SHEATHING, GLUED AND NAILED WITH 10d AT 6" O.C. (EDGES) AND 12" O.C. (FIELD) TYPICAL, U.N.O.. ORIENT SHEATHING WITH FACE GRAIN PERPENDICULAR TO FRAMING MEMBERS, AND STAGGER END JOINTS. NAIL FLOOR SHEATHING BEFORE GLUE DRIES.
8. COLLECTORS:
FRAMING MEMBERS NOTED AS "COLLECTORS" SHALL HAVE PLYWOOD EDGE NAILING TO (EACH) COLLECTOR, FOR THE FULL LENGTH OF THE COLLECTOR. COLLECTORS SHALL BE CONTINUOUS OR SPLICED WITH "MSTA36" STRAP.
9. HOLDOWNS:
HOLDOWNS NOTED OCCUR AT THE LEVEL OF FRAMING SHOWN FOR CONNECTION OF WALLS ABOVE TO WALLS OR FRAMING BELOW. SEE DETAILS ON SHEET D2.
10. WALL FRAMING:
STUD WALL FRAMING SHALL SHALL CONFORM TO THE WALL FRAMING NOTES, SHEET D1, U.N.O. ON THE PLAN. TYPICAL EXTERIOR WALL SHALL BE 2x6 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE. TYPICAL INTERIOR WALLS SHALL BE 2x4 STUDS AT 16" O.C. (TO 10'-0") AND 2x6 STUDS AT 16" O.C. (TO 14'-0"). INTERIOR NON-BEARING WALLS SHALL BE 2x4 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE ON THE ARCHITECTURAL DRAWINGS.
11. LOW ROOF FRAMING:
SEE ROOF FRAMING PLAN FOR TYPICAL ROOF FRAMING NOTES FOR LOW ROOF FRAMING AREAS (IF OCCURS AT THIS LEVEL).
12. HEADERS:
ALL HEADERS AT THIS LEVEL SHALL BE 4x10 DF #1 IN 2x4 WALLS AND 6x10 DF #1 IN 2x6 WALLS, UNLESS NOTED OTHERWISE ON THE PLAN. EXISTING HEADERS TO REMAIN. U.N.O.
13. TOP PLATE SPLICES:
TOP PLATE SPLICES OF ALL WALLS SHALL CONFORM TO 6/D2
14. SHEARWALL LENGTHS:
LENGTH OF SHEARWALLS SHOWN ABOVE OR BELOW SHEARWALL NUMBER (SEE PLAN). THE NUMBERS INDICATE THE MINIMUM DESIGN LENGTH OF THE SHEARWALL.
15. LEGEND:
INDICATES AREAS OF FLOOR REQUIRING BLOCKED EDGES. PROVIDE EDGE NAILING AT ALL EDGES AND BLOCKING.
INDICATES STEEL MOMENT FRAME SEE SHEET MF1

KEY PLAN



SYM.	DATE	ISSUE/REVISIONS	BY

CONSULTING ENGINEERS, INC
STRUCTURAL ENGINEERING – CIVIL ENGINEERING – RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
25–A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672–6828
FAX (925) 889–4465

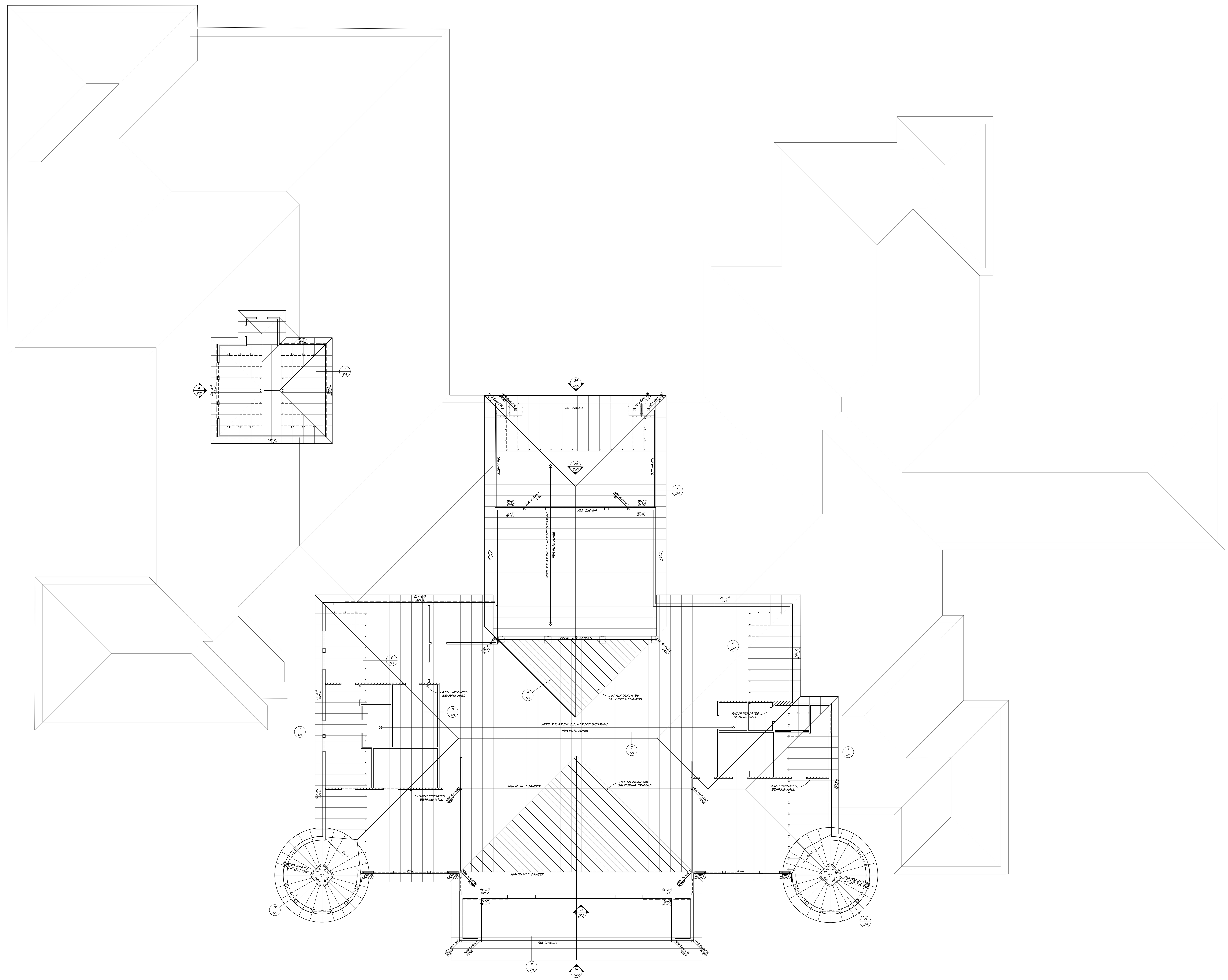
Pena Residence

9255 Byron Hwy.
Brentwood, California

SHEET TITLE: Floor Framing Plan

DATE: August 16, 2025
DRAWN: M. Manning
SCALE: 1/4" = 1'-0"
CHECKED: B. Manning

SHEET: S2.4
OF SHEETS
JOB: 2024-65



SYM.	DATE	ISSUE/REVISIONS	BY

CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING – CIVIL ENGINEERING – RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
25–A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672–6828
FAX (925) 889–4465

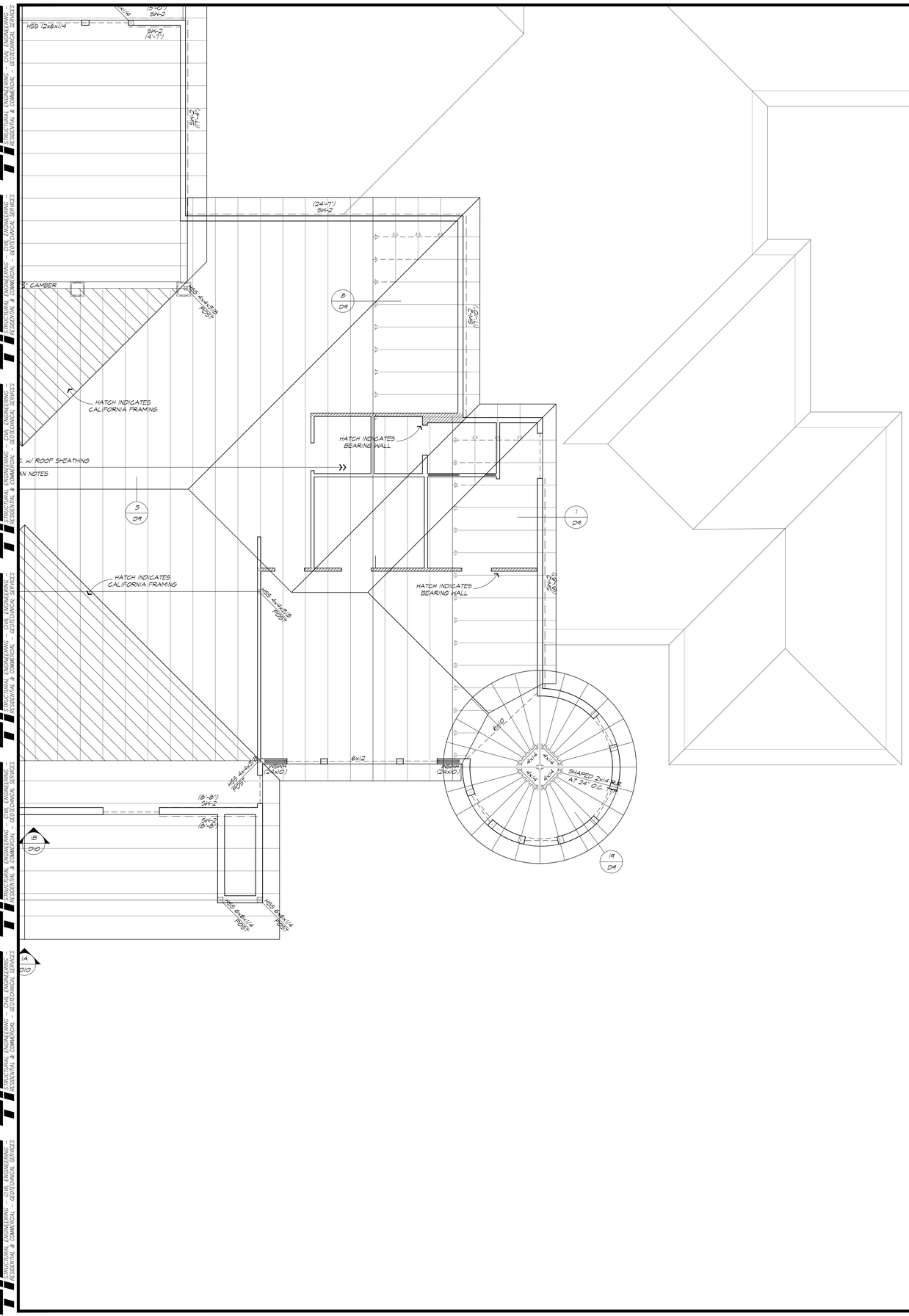
Pena Residence

9255 Byron Hwy.
Brentwood, California

SHEET TITLE: Overall Roof Plan

DATE: August 16, 2025
DRAWN: M. Manning
SCALE: N.T.S.
CHECKED: B. Manning

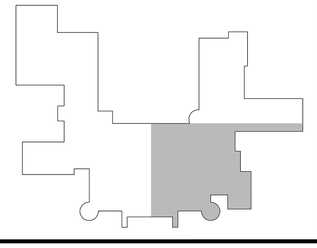
SHEET: S3.0
OF SHEETS
JOB: 2024-65



ROOF FRAMING NOTES

1. SEE SHEET D1 FOR STRUCTURAL NOTES AND LEGEND.
2. WALLS SHOWN AS SOLID ARE BELOW FRAMING.
3. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS, ETC.
4. DETAIL KEYS AND OTHER INFORMATION ARE TYPICAL.
5. **ROOF FRAMING:**
   - A. **ROOF TRUSS FRAMING:** ROOF TRUSS FRAMING SHALL BE AS NOTED ON THE PLANS. WHERE TRUSSES ARE DOUBLED, INTER-NAIL WITH 16d AT 12" O.C., STAGGERED. SEE TRUSS SHOP DRAWINGS FOR ADDITIONAL REQUIREMENTS.
   - B. **RAFTER FRAMING:** RAFTER FRAMING SHALL BE AS NOTED ON THE PLANS. WHERE RAFTERS ARE DOUBLED, INTER-NAIL WITH 16d AT 12" O.C., STAGGERED. WOOD OR METAL CROSS-BRIDGING IS REQUIRED AT 8'-0" O.C. TO RAFTERS WITHOUT GYPSUM BOARD APPLIED TO BOTTOM FACE.
6. **ROOF SHEATHING:** TYPICAL ROOF SHEATHING SHALL BE 5/8" (32/16) T+G APA-RATED SHEATHING, NAILED WITH 8d AT 6" O.C. (SHEATHING EDGES) AND 12" O.C. (FIELD) OR NO. 14 GA. x 1-1/2" MIN. STAPLES AT 6" O.C. OR NO. 16 GA. x 1-1/2" MIN. STAPLES AT 4" O.C. STAPLES SHALL HAVE A MINIMUM CROWN WIDTH 7/16" O.D.. ORIENT SHEATHING WITH FACE GRAIN PERPENDICULAR TO FRAMING MEMBERS AND STAGGER END JOINTS. SHEATHING AT OVERHANGS TO BE C-CX EXTERIOR GRADE (32/16) SHEATHING. INSTALL PER 4/D6
7. **SUPPORT OF ROOF BEAMS, GIRDERS, ETC.:** PROVIDE MINIMUM OF 4x (BEAM WIDTH) POST OR SOLID STUDS UNDER ALL ROOF BEAMS, HIPS, ETC., TYPICAL UNLESS NOTED OTHERWISE ON THE PLANS. MAINTAIN SAME POST SIZE AT ALL OTHER LEVELS OF WALL FRAMING WHICH OCCUR BELOW. PROVIDE SOLID FILLER (OF POST SIZE) OR EXTRA JOISTS AT EACH FLOOR LEVEL IN JOIST SPACE BELOW BEARING POSTS ABOVE.
8. **COLLECTORS:** FRAMING MEMBERS NOTED AS 'COLLECTORS' SHALL HAVE PLYWOOD EDGE NAILING TO (EACH) COLLECTOR, FOR THE FULL LENGTH OF THE COLLECTOR. COLLECTORS SHALL BE CONTINUOUS OR SPLICED WITH "MSTA36" STRAP.
9. **WALL FRAMING:** STUD WALL FRAMING SHALL SHALL CONFORM TO THE WALL FRAMING NOTES, SHEET D1 U.N.O. ON THE PLAN. TYPICAL EXTERIOR WALL SHALL BE 2x6 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE. TYPICAL INTERIOR WALLS SHALL BE 2x4 STUDS AT 16" O.C. (TO 10'-0") AND 2x6 STUDS AT 16" O.C. (TO 14'-0"). INTERIOR NON-BEARING WALLS SHALL BE 2x4 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE ON THE ARCHITECTURAL DRAWINGS.
10. **HEADERS:** ALL HEADERS AT THIS LEVEL SHALL BE 4x10 #1 DF IN 2x4 WALLS, AND 6x10 DF #1 IN 2x6 WALLS UNLESS NOTED OTHERWISE ON THE PLAN. EXISTING HEADERS TO REMAIN, U.N.O.
11. **TOP PLATE SPLICES:** TOP PLATE SPLICES OF ALL WALLS SHALL CONFORM TO 6/D2
12. **SHEARWALL LENGTHS:** LENGTH OF SHEARWALLS SHOWN ABOVE OR BELOW SHEARWALL NUMBER (SEE PLAN). THE NUMBERS INDICATE THE MINIMUM DESIGN LENGTH OF THE SHEARWALL.

KEY PLAN



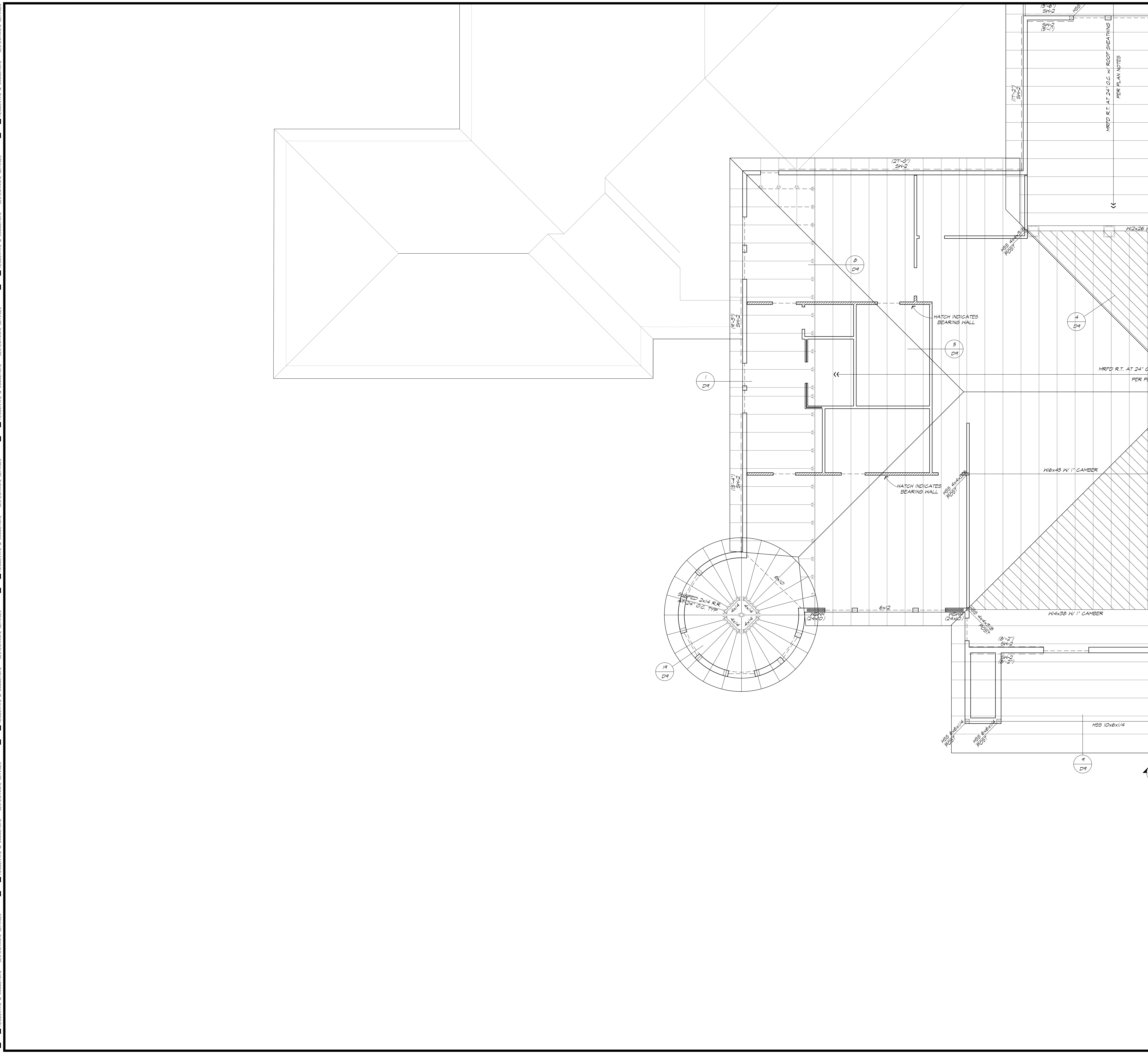
CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING - CIVIL ENGINEERING
RESIDENTIAL & COMMERCIAL - GEOTECHNICAL SERVICES
25-A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672-6828
FAX (925) 889-4465

BY	ISSUE/REVISIONS	DATE

Pena Residence

9255 Byron Hwy.
Brentwood, California

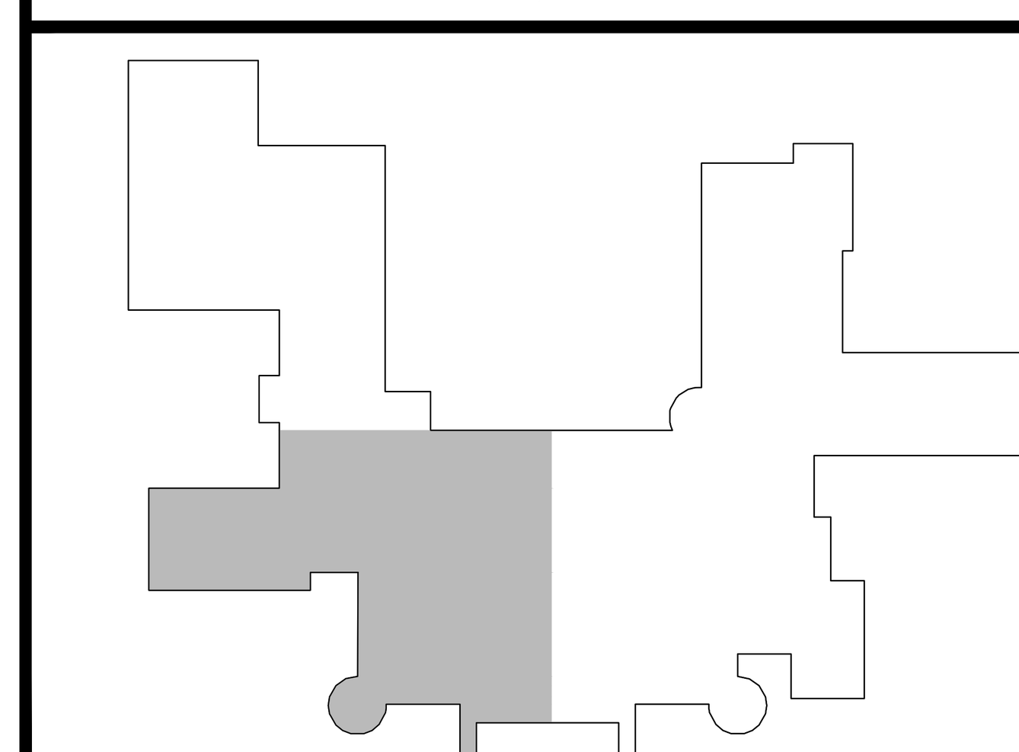
SHEET TITLE: Roof Framing Plan
SHEET: S3.1
OF SHEETS:
JOB: 2024-65
DATE: August 16, 2025
SCALE: 1/4" = 1'-0"
DRAWN: M. Manning
CHECKED: B. Manning



ROOF FRAMING NOTES

1. SEE SHEET D1 FOR STRUCTURAL NOTES AND LEGEND.
2. WALLS SHOWN AS SOLID ARE BELOW FRAMING.
3. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS, ETC.
4. DETAIL KEYS AND OTHER INFORMATION ARE TYPICAL.
5. **ROOF FRAMING:**
   A. **ROOF TRUSS FRAMING:** ROOF TRUSS FRAMING SHALL BE AS NOTED ON THE PLANS. WHERE TRUSSES ARE DOUBLED, INTER-NAIL WITH 16d AT 12" O.C., STAGGERED. SEE TRUSS SHOP DRAWINGS FOR ADDITIONAL REQUIREMENTS.
   B. **RAFTER FRAMING:** RAFTER FRAMING SHALL BE AS NOTED ON THE PLANS. WHERE RAFTERS ARE DOUBLED, INTER-NAIL WITH 16d AT 12" O.C., STAGGERED. WOOD OR METAL CROSS-BRIDGING IS REQUIRED AT 8'-0" O.C. TO RAFTERS WITHOUT GYPSUM BOARD APPLIED TO BOTTOM FACE.
6. **ROOF SHEATHING:** TYPICAL ROOF SHEATHING SHALL BE 5/8" (32/16) T+G APA-RATED SHEATHING, NAILED WITH 8d AT 6" O.C. (SHEATHING EDGES) AND 12" O.C. (FIELD) OR NO. 14 GA. x 1-1/2" MIN. STAPLES AT 6" O.C. OR NO. 16 GA. x 1-1/2" MIN. STAPLES AT 4" O.C. STAPLES SHALL HAVE A MINIMUM CROWN WIDTH OF 7/16" O.D.. ORIENT SHEATHING WITH FACE GRAIN PERPENDICULAR TO FRAMING MEMBERS AND STAGGER END JOINTS. SHEATHING AT OVERHANGS TO BE C-CX EXTERIOR GRADE (32/16) SHEATHING. INSTALL PER 4/D6
7. **SUPPORT OF ROOF BEAMS, GIRDERS, ETC.:** PROVIDE MINIMUM OF 4x (BEAM WIDTH) POST OR SOLID STUDS UNDER ALL ROOF BEAMS, HIPS, ETC., TYPICAL UNLESS NOTED OTHERWISE ON THE PLANS. MAINTAIN SAME POST SIZE AT ALL OTHER LEVELS OF WALL FRAMING WHICH OCCUR BELOW. PROVIDE SOLID FILLER (OF POST SIZE) OR EXTRA JOISTS AT EACH FLOOR LEVEL IN JOIST SPACE BELOW BEARING POSTS ABOVE.
8. **COLLECTORS:** FRAMING MEMBERS NOTED AS "COLLECTORS" SHALL HAVE PLYWOOD EDGE NAILING TO (EACH) COLLECTOR, FOR THE FULL LENGTH OF THE COLLECTOR. COLLECTORS SHALL BE CONTINUOUS OR SPLICED WITH "MSTA36" STRAP.
9. **WALL FRAMING:** STUD WALL FRAMING SHALL SHALL CONFORM TO THE WALL FRAMING NOTES, SHEET D1, U.N.O. ON THE PLAN. TYPICAL EXTERIOR WALL SHALL BE 2x6 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE. TYPICAL INTERIOR WALLS SHALL BE 2x4 STUDS AT 16" O.C. (TO 10'-0") AND 2x6 STUDS AT 16" O.C. (TO 14'-0"). INTERIOR NON-BEARING WALLS SHALL BE 2x4 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE ON THE ARCHITECTURAL DRAWINGS.
10. **HEADERS:** ALL HEADERS AT THIS LEVEL SHALL BE 4x10 #1 DF IN 2x4 WALLS, AND 6x10 DF #1 IN 2x6 WALLS, UNLESS NOTED OTHERWISE ON THE PLAN. EXISTING HEADERS TO REMAIN. U.N.O.
11. **TOP PLATE SPLICES:** TOP PLATE SPLICES OF ALL WALLS SHALL CONFORM TO 6/D2
12. **SHEARWALL LENGTHS:** LENGTH OF SHEARWALLS SHOWN ABOVE OR BELOW SHEARWALL NUMBER (SEE PLAN). THE NUMBERS INDICATE THE MINIMUM DESIGN LENGTH OF THE SHEARWALL.

KEY PLAN



SYM.	DATE	ISSUE/REVISIONS	BY

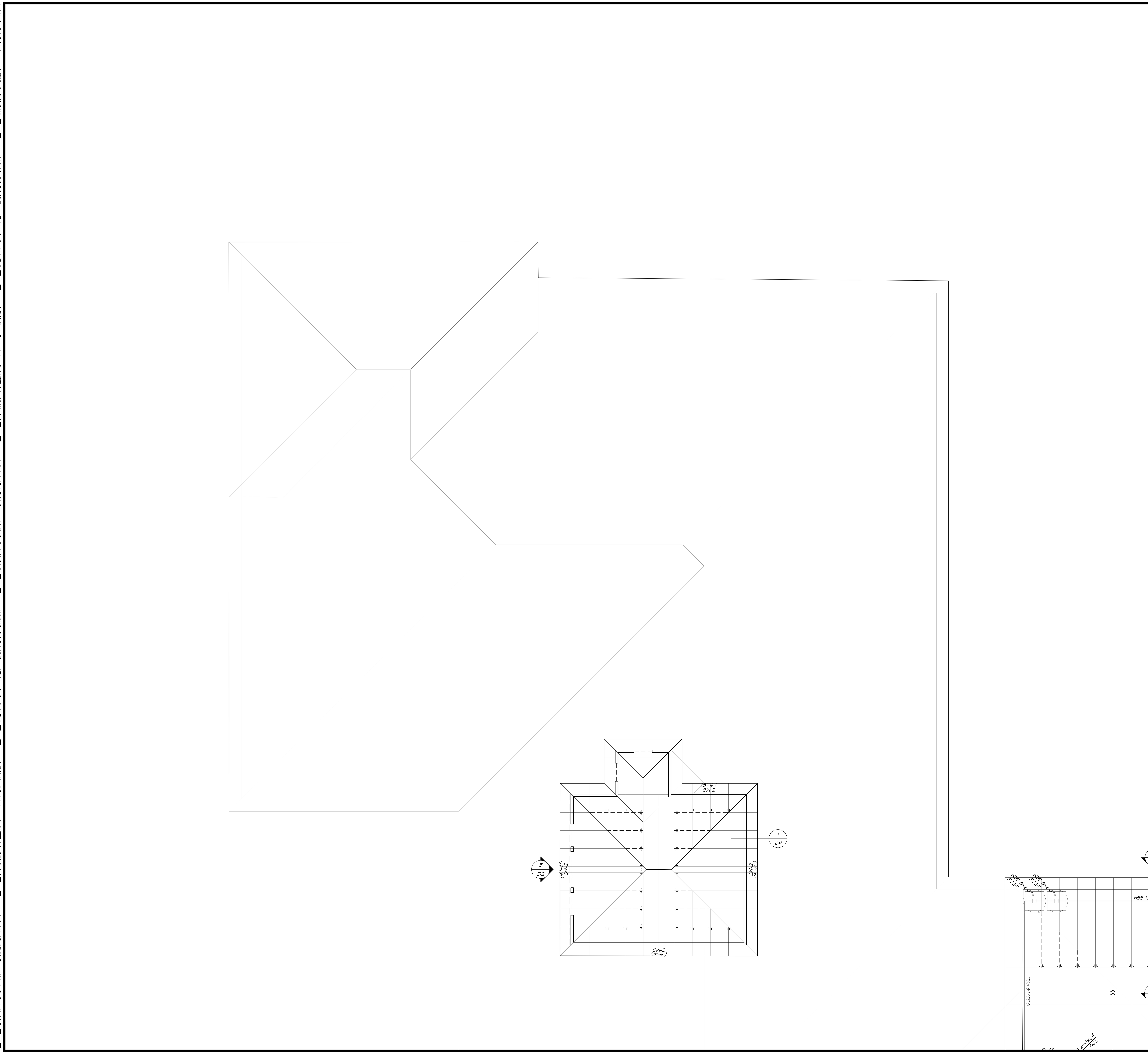
CONSULTING ENGINEERS, INC
STRUCTURAL ENGINEERING – CIVIL ENGINEERING –
RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
25-A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672-6828
FAX (925) 889-4465

Pena Residence
9255 Byron Hwy,
Brentwood, California

SHEET TITLE: Roof Framing Plan

DATE: August 16, 2025
DRAWN: M. Manning
SCALE: 1/4" = 1'-0"
CHECKED: B. Manning

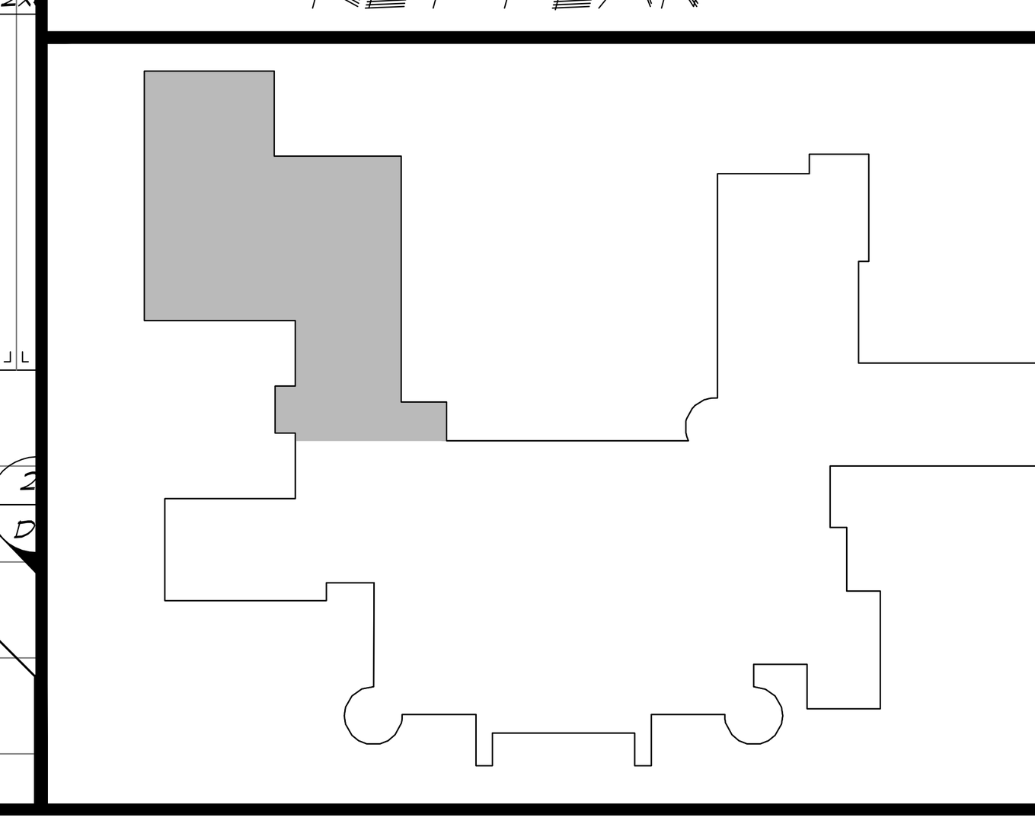
SHEET: S3.2
OF SHEETS
JOB: 2024-65



ROOF FRAMING NOTES

1. SEE SHEET D1 FOR STRUCTURAL NOTES AND LEGEND.
2. WALLS SHOWN AS SOLID ARE BELOW FRAMING.
3. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS, ETC.
4. DETAIL KEYS AND OTHER INFORMATION ARE TYPICAL.
5. **ROOF FRAMING:**
   A. **ROOF TRUSS FRAMING:** ROOF TRUSS FRAMING SHALL BE AS NOTED ON THE PLANS. WHERE TRUSSES ARE DOUBLED, INTER-NAIL WITH 16d AT 12" O.C., STAGGERED. SEE TRUSS SHOP DRAWINGS FOR ADDITIONAL REQUIREMENTS.
   B. **RAFTER FRAMING:** RAFTER FRAMING SHALL BE AS NOTED ON THE PLANS. WHERE RAFTERS ARE DOUBLED, INTER-NAIL WITH 16d AT 12" O.C., STAGGERED. WOOD OR METAL CROSS-BRIDGING IS REQUIRED AT 8'-0" O.C. TO RAFTERS WITHOUT GYPSUM BOARD APPLIED TO BOTTOM FACE.
6. **ROOF SHEATHING:** TYPICAL ROOF SHEATHING SHALL BE 5/8" (32/16) T+G APA-RATED SHEATHING, NAILED WITH 8d AT 6" O.C. (SHEATHING EDGES) AND 12" O.C. (FIELD) OR NO. 14 GA. x 1-1/2" MIN. STAPLES AT 6" O.C. OR NO. 16 GA. x 1-1/2" MIN. STAPLES AT 4" O.C. STAPLES SHALL HAVE A MINIMUM CROWN WIDTH OF 7/16" O.D.. ORIENT SHEATHING WITH FACE GRAIN PERPENDICULAR TO FRAMING MEMBERS AND STAGGER END JOINTS. SHEATHING AT OVERHANGS TO BE C-CX EXTERIOR GRADE (32/16) SHEATHING. INSTALL PER 4/D6
7. **SUPPORT OF ROOF BEAMS, GIRDERS, ETC.:** PROVIDE MINIMUM OF 4x (BEAM WIDTH) POST OR SOLID STUDS UNDER ALL ROOF BEAMS, HIPS, ETC., TYPICAL UNLESS NOTED OTHERWISE ON THE PLANS. MAINTAIN SAME POST SIZE AT ALL OTHER LEVELS OF WALL FRAMING WHICH OCCUR BELOW. PROVIDE SOLID FILLER (OF POST SIZE) OR EXTRA JOISTS AT EACH FLOOR LEVEL IN JOIST SPACE BELOW BEARING POSTS ABOVE.
8. **COLLECTORS:** FRAMING MEMBERS NOTED AS "COLLECTORS" SHALL HAVE PLYWOOD EDGE NAILING TO (EACH) COLLECTOR, FOR THE FULL LENGTH OF THE COLLECTOR. COLLECTORS SHALL BE CONTINUOUS OR SPLICED WITH "MSTA36" STRAP.
9. **WALL FRAMING:** STUD WALL FRAMING SHALL SHALL CONFORM TO THE WALL FRAMING NOTES, SHEET D1, U.N.O. ON THE PLAN. TYPICAL EXTERIOR WALL SHALL BE 2x6 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE. TYPICAL INTERIOR WALLS SHALL BE 2x4 STUDS AT 16" O.C. (TO 10'-0") AND 2x6 STUDS AT 16" O.C. (TO 14'-0"). INTERIOR NON-BEARING WALLS SHALL BE 2x4 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE ON THE ARCHITECTURAL DRAWINGS.
10. **HEADERS:** ALL HEADERS AT THIS LEVEL SHALL BE 4x10 #1 DF IN 2x4 WALLS, AND 6x10 DF #1 IN 2x6 WALLS, UNLESS NOTED OTHERWISE ON THE PLAN. EXISTING HEADERS TO REMAIN. U.N.O.
11. **TOP PLATE SPLICES:** TOP PLATE SPLICES OF ALL WALLS SHALL CONFORM TO 6/D2
12. **SHEARWALL LENGTHS:** LENGTH OF SHEARWALLS SHOWN ABOVE OR BELOW SHEARWALL NUMBER (SEE PLAN). THE NUMBERS INDICATE THE MINIMUM DESIGN LENGTH OF THE SHEARWALL.

KEY PLAN



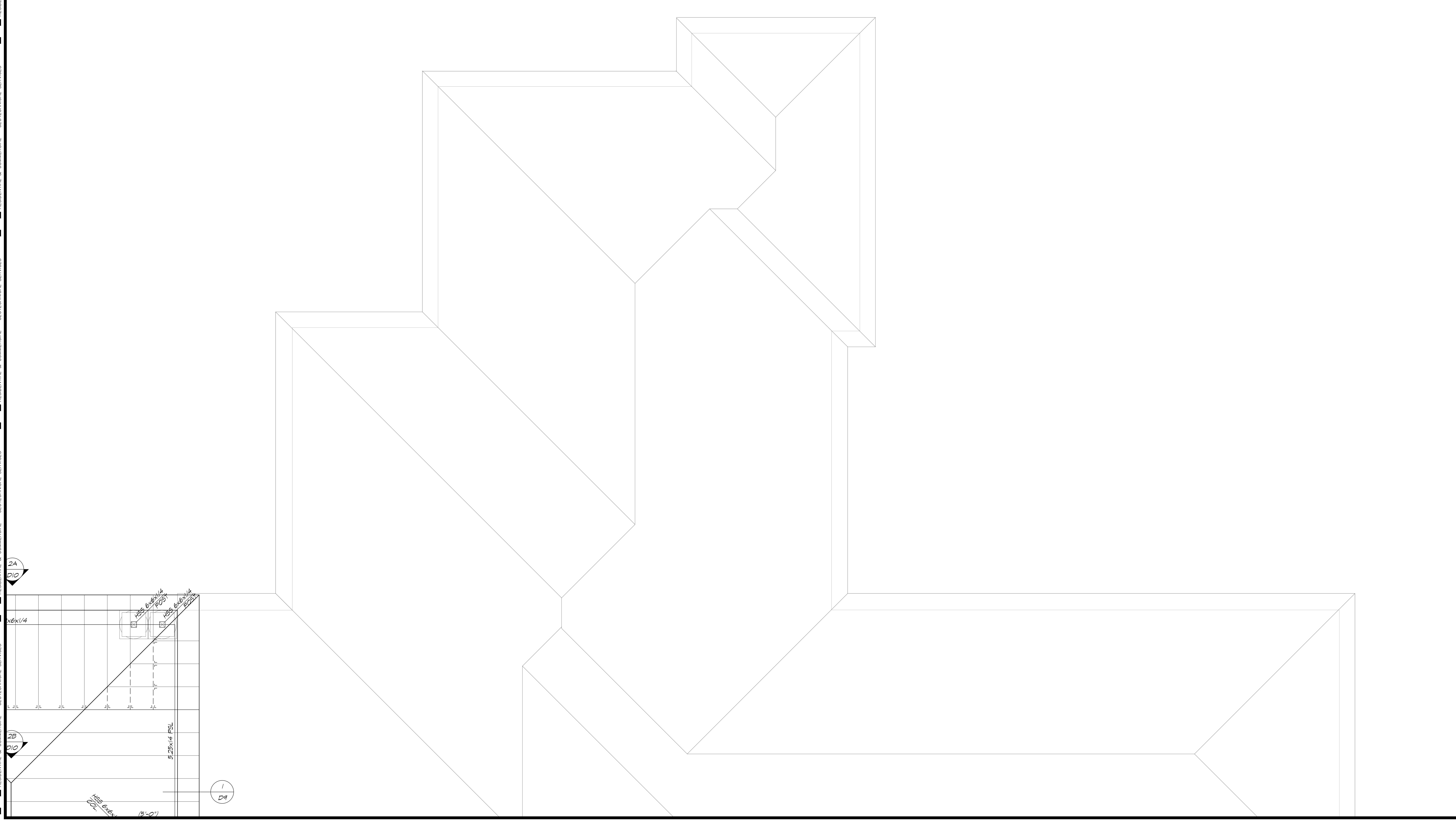
SYM. | DATE | ISSUE/REVISIONS | BY

CONSULTING ENGINEERS, INC
STRUCTURAL ENGINEERING – CIVIL ENGINEERING
RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
25-A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672-6828
FAX (925) 889-4465

Pena Residence

9255 Byron Hwy.
Brentwood, California

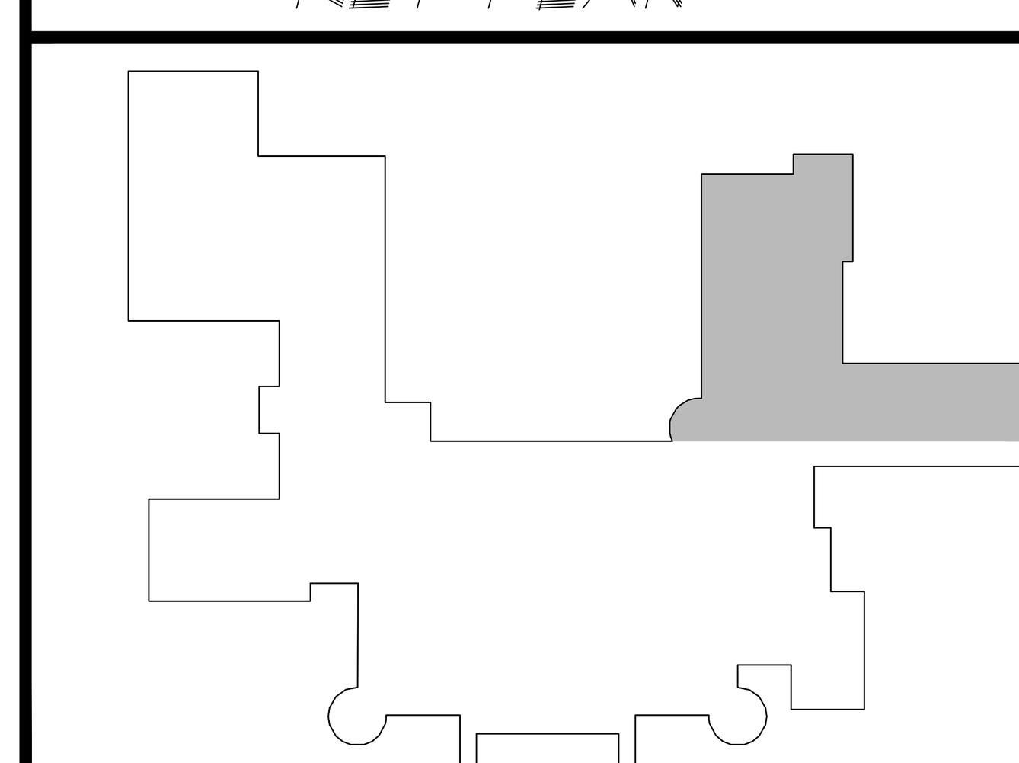
SHEET TITLE	Roof Framing Plan
DATE	August 16, 2025
DRAWN	M. Manning
SCALE	1/4" = 1'-0"
CHECKED	B. Manning
SHEET	S3.3
OF SHEETS	
JOB	2024-65



ROOF FRAMING NOTES

1. SEE SHEET D1 FOR STRUCTURAL NOTES AND LEGEND.
2. WALLS SHOWN AS SOLID ARE BELOW FRAMING.
3. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS, ETC.
4. DETAIL KEYS AND OTHER INFORMATION ARE TYPICAL.
5. ROOF FRAMING:
   - A. ROOF TRUSS FRAMING: ROOF TRUSS FRAMING SHALL BE AS NOTED ON THE PLANS. WHERE TRUSSES ARE DOUBLED, INTER-NAIL WITH 16d AT 12" O.C., STAGGERED. SEE TRUSS SHOP DRAWINGS FOR ADDITIONAL REQUIREMENTS.
   - B. RAFTER FRAMING: RAFTER FRAMING SHALL BE AS NOTED ON THE PLANS. WHERE RAFTERS ARE DOUBLED, INTER-NAIL WITH 16d AT 12" O.C., STAGGERED. WOOD OR METAL CROSS-BRIDGING IS REQUIRED AT 8'-0" O.C. TO RAFTERS WITHOUT GYPSUM BOARD APPLIED TO BOTTOM FACE.
6. ROOF SHEATHING: TYPICAL ROOF SHEATHING SHALL BE 5/8" (32/16) T+G APA-RATED SHEATHING, NAILED WITH 8d AT 6" O.C. (SHEATHING EDGES) AND 12" O.C. (FIELD) OR NO. 14 GA. x 1-1/2" MIN. STAPLES AT 6" O.C. OR NO. 16 GA. x 1-1/2" MIN. STAPLES AT 4" O.C. STAPLES SHALL HAVE A MINIMUM CROWN WIDTH OF 7/16" O.D.. ORIENT SHEATHING WITH FACE GRAIN PERPENDICULAR TO FRAMING MEMBERS AND STAGGER END JOINTS. SHEATHING AT OVERHANGS TO BE C-CX EXTERIOR GRADE (32/16) SHEATHING. INSTALL PER 4/D6
7. SUPPORT OF ROOF BEAMS, GIRDERS, ETC.: PROVIDE MINIMUM OF 4x (BEAM WIDTH) POST OR SOLID STUDS UNDER ALL ROOF BEAMS, HIPS, ETC., TYPICAL UNLESS NOTED OTHERWISE ON THE PLANS. MAINTAIN SAME POST SIZE AT ALL OTHER LEVELS OF WALL FRAMING WHICH OCCUR BELOW. PROVIDE SOLID FILLER (OF POST SIZE) OR EXTRA JOISTS AT EACH FLOOR LEVEL IN JOIST SPACE BELOW BEARING POSTS ABOVE.
8. COLLECTORS: FRAMING MEMBERS NOTED AS "COLLECTORS" SHALL HAVE PLYWOOD EDGE NAILING TO (EACH) COLLECTOR, FOR THE FULL LENGTH OF THE COLLECTOR. COLLECTORS SHALL BE CONTINUOUS OR SPLICED WITH "MSTA36" STRAP.
9. WALL FRAMING: STUD WALL FRAMING SHALL SHALL CONFORM TO THE WALL FRAMING NOTES, SHEET D1, U.N.O. ON THE PLAN. TYPICAL EXTERIOR WALL SHALL BE 2x6 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE. TYPICAL INTERIOR WALLS SHALL BE 2x4 STUDS AT 16" O.C. (TO 10'-0") AND 2x6 STUDS AT 16" O.C. (TO 14'-0"). INTERIOR NON-BEARING WALLS SHALL BE 2x4 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE ON THE ARCHITECTURAL DRAWINGS.
10. HEADERS: ALL HEADERS AT THIS LEVEL SHALL BE 4x10 #1 DF IN 2x4 WALLS, AND 6x10 DF #1 IN 2x6 WALLS, UNLESS NOTED OTHERWISE ON THE PLAN. EXISTING HEADERS TO REMAIN. U.N.O.
11. TOP PLATE SPLICES: TOP PLATE SPLICES OF ALL WALLS SHALL CONFORM TO 6/D2
12. SHEARWALL LENGTHS: LENGTH OF SHEARWALLS SHOWN ABOVE OR BELOW SHEARWALL NUMBER (SEE PLAN). THE NUMBERS INDICATE THE MINIMUM DESIGN LENGTH OF THE SHEARWALL.

KEY PLAN



SYM.	DATE	ISSUE/REVISIONS	BY

CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING – CIVIL ENGINEERING – RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
25–A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672–6828
FAX (925) 889–4465

Pena Residence
9255 Byron Hwy.
Brentwood, California

SHEET TITLE: Roof Framing Plan

DATE: August 16, 2025
DRAWN: M. Manning
SCALE: 1/4" = 1'-0"
CHECKED: B. Manning

SHEET: S3.4
OF SHEETS
JOB: 2024-65

GENERAL NOTES

1. GENERAL: THE INTENT OF THESE DRAWINGS IS TO SHOW ALL ITEMS NECESSARY TO COMPLETE THE STRUCTURE. TYPICAL DETAILS AND NOTES ON THESE SHEETS SHALL APPLY TO SIMILAR CONDITIONS, UNLESS SPECIFICALLY NOTED OTHERWISE. ALL WORK AND CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES, REGULATIONS AND SAFETY REQUIREMENTS. FOR ITEMS, METHODS AND/OR MATERIALS NOT SHOWN, THE MINIMUM REQUIREMENTS OF THE 2022 CALIFORNIA BUILDING CODE SHALL GOVERN.
2. JOB SAFETY: THE ENGINEER IS NOT RESPONSIBLE FOR THE FABRICATION, ERECTION AND/OR JOB SAFETY. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED SAFETY REGULATIONS.
   A. THE CONTRACTOR SHALL SOLELY BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL SHORING, BRACING, FORMWORK, ETC., AS REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY DURING THE CONSTRUCTION OF THIS BUILDING IN ACCORDANCE WITH ALL APPLICABLE SAFETY ORDINANCES.
   B. THE CONTRACTOR SHALL SOLELY BE RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING AND THE PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS AND UTILITIES IN ACCORDANCE WITH ALL APPLICABLE SAFETY ORDINANCES.
3. SHOP DRAWINGS: SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT AND ARE SUPERSEDED BY THE STRUCTURAL DRAWINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE CERTAIN THAT THE SHOP DRAWINGS ARE IN COMPLIANCE WITH THE LATEST DRAWINGS.
4. SITE OBSERVATIONS: THE CONTRACTOR SHALL GIVE THE ENGINEER 48 HOURS MINIMUM NOTICE PRIOR TO THE TIME OF ANY SITE OBSERVATION.
5. SPECIAL INSPECTIONS: SPECIAL INSPECTIONS, WHERE REQUIRED IN THE STRUCTURAL DRAWINGS, SHALL BE BY AN INDEPENDENT TESTING LABORATORY, AS APPROVED BY THE LOCAL BUILDING DEPARTMENT, AND RETAINED BY THE OWNER.
6. L+M CONSULTING ENGINEERS DOES NOT ASSUME ANY LIABILITY FOR CURRENT AND/OR FUTURE GROUND SETTLEMENT OR MOTION DUE TO EXISTING OR FUTURE GROUNDWATER SATURATION, SOIL CREEPING, UNSTABLE SOIL, ETC. THAT MAY CAUSE STRUCTURAL DAMAGE TO EXISTING AND PROPOSED STRUCTURES.
7. EXISTING CONDITIONS: THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS AT THE JOB SITE, AND BRING TO THE ATTENTION OF THE ARCHITECT OR ENGINEER OF ANY DISCREPANCIES. DETAILS AND DIMENSIONS OF EXISTING CONDITIONS, WHICH IS TO BE COORDINATED WITH THE NEW WORK SHALL BE FIELD-VERIFIED BY THE CONTRACTOR. ANY DISCREPANCIES NOTED SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR FINAL DETERMINATION.

FOUNDATIONS NOTES

1. A GEOTECHNICAL REPORT HAS BEEN PREPARED FOR THIS SITE.

   GEOTECH. FIRM: Q'TERRA GEOTECH GROUP, INC.
   PROJECT NO.: APN 013-110-001
   DATED: 11/01/24

   A. THE RECOMMENDATIONS OF THIS REPORT AND ALL ADDENDA ARE TO BE CONSIDERED AS PART OF THESE DRAWINGS.
   B. FINAL PLANS TO BE REVIEWED AND APPROVED BY GEOTECHNICAL ENGINEER OF RECORD.

SPECIAL DESIGN FACTORS

FLOOR AND ROOF DESIGN LIVE LOADS (psf)	40/20
WIND DESIGN - 110 mph	EXP. B
RISK CATEGORY	II
SEISMIC IMPORTANCE FACTOR (Ie)	1.0
0.2 SECOND SPECTRAL RESPONSE ACCELERATION (Ss)	1.23
1.0 SECOND SPECTRAL RESPONSE AGGELERATION (S1)	0.44
SITE CLASS	DEFAULT
SEISMIC DESIGN CATEGORY	D
RESPONSE MODIFICATION COEFFICIENT(S), (R)	6.5

STRUCTURAL STEEL NOTES

1. THE FOLLOWING SECTION APPLIES TO ALL STRUCTURAL STEEL.
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2022 C.B.C. CHAPTER 22, AISC EDITION - ALLOWABLE STRESS DESIGN, AND THE 2020 A.N.S. D1.1.
3. STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING:
   A. WIDE FLANGE COLUMNS: ASTM A992 (F_y = 50 ksi)
   B. OTHER WIDE FLANGE SHAPES AND PLATES IN BRACED FRAMES, AND FLOOR & ROOF WIDE FLANGE BMS: ASTM A992 OR A572 (F_y = 50 ksi)
   C. PIPE COLUMNS: ASTM A53, TYPE E OR S, GRADE B.
   D. STRUCTURAL TUBE COLUMNS: ASTM A500, GRADE B.
   E. OTHER SHAPES AND PLATES: ASTM A36 (F_y = 36 ksi)
4. FASTENERS:
   A. ANCHOR BOLTS: ASTM A307, U.N.O.
   B. STEEL TO STEEL CONNECTIONS: ASTM A325-SC HIGH-STRENGTH BOLTS, UNLESS NOTED OTHERWISE.
   C. STEEL TO WOOD CONNECTIONS: ASTM A307, U.N.O. USE CUT WASHERS (IF CONCEALED) AND MALLEABLE IRON WASHERS (IF EXPOSED).
5. WELDING ELECTRODES SHALL CONFORM TO 2020 A.N.S. D1.1 AND SHALL BE LOW HYDROGEN MATCHING FILLER METAL. IN ADDITION, ELECTRODES USED TO WELD BEAM FLANGE TO COLUMN COMPLETE PENETRATION WELDS SHALL HAVE NOTCH TOUGH FILLER METAL CONFORMING TO 20 ft lbs AT 0 DEGREE FAHRENHEIT PER C.V.N. AS A MINIMUM.
6. ALL WELD TABS AND BACKING BARS SHALL BE REMOVED AND THE JOINTS SHALL BE GROUND OR FINISHED FLUSH.
7. SURFACES OF STEEL TO BE FIELD WELDED SHALL BE FREE AND CLEAR OF ALL PAINT, DIRT, GREASE, OR OTHER DELETERIOUS COATINGS.
8. STEEL FRAMING, EXCEPT THOSE PORTIONS TO BE EMBEDDED IN CONCRETE, FIELD WELDED, OR CONNECTIONS WITH HIGH-STRENGTH, SLIP CRITICAL BOLTS SHALL BE SHOP-PAINTED. PROVIDE AS A MINIMUM, ONE COAT OF RED-OXIDE PRIMER WITH 2 MIL THICKNESS. DO NOT PAINT ANY STEEL THAT RECEIVES SPRAY APPLIED FIREPROOFING.
9. FIELD PAINT ALL EXPOSED, UNPAINTED STEEL SURFACES AFTER INSTALLATION.
10. ALL WELDERS SHALL BE QUALIFIED BY A.N.S. PROCEDURES FOR THE REQUIRED WELDING.
11. SUBMIT CERTIFICATION OF COMPLIANCE FOR ALL STEEL MATERIALS.
12. SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION.

CONCRETE NOTES

1. SPECIAL INSPECTION OF CONCRETE WORK IS REQUIRED WHERE NOTED BELOW. WHEN REQUIRED, SPECIAL INSPECTION SHALL INCLUDE THE INSPECTION OF THE PLACEMENT OF REINFORCEMENT, AND THE INSPECTION OF THE CONCRETE PLACEMENT OPERATIONS, PER C.B.C. SECTION 1705.
2. IF SPECIAL INSPECTION IS REQUIRED, TAKE CONCRETE CYLINDER TESTS. TESTING SHALL BE PERFORMED BY AN APPROVED LABORATORY. SHALL SUBMIT FOUR (4) TEST CYLINDERS FROM EACH CLASS OF CONCRETE USED IN EACH DAYS OPERATIONS, BUT AT LEAST ONE (1) SAMPLE FROM EACH 100 CUBIC YARDS OF CONCRETE.
3. SPLICES OF CONTINUOUS REINFORCEMENT SHALL HAVE A MINIMUM LAP OF 48 BAR DIAMETERS, BUT NOT LESS THAN 2'-0", UNLESS NOTED OTHERWISE. ALL REINFORCING STEEL SHALL BE SECURELY WIRED AND PROPERLY SUPPORTED ABOVE GROUND, AND AWAY FROM FORMS. REINFORCING BAR FABRICATION, LAPS AND PLACEMENT SHALL CONFORM TO THE MANUAL OF STANDARD PRACTICE OF THE CONCRETE REINFORCING STEEL INSTITUTE.
4. CONCRETE REQUIREMENTS: BASED ON NORMAL WEIGHT CONCRETE (UNIT HEIGHT OF 145 TO 150 pcf).

	MINIMUM COMPRESSIVE STRENGTH (psi) (AT 28 DAYS) *	SLUMP (+/- 1/2")	AIR ENTRAIN	MAX. AGGREG. SIZE	SPECIAL INSP. REQUIRED
FOOTINGS, GRADE BEAMS AND PIERS:	3000	4"	N/A	3/4"	NO
INT. SLAB ON GRADE AND CURBS:	3000	4"	N/A	3/4"	NO
EXT. SLAB ON GRADE AND CURBS:	3000	4"	2% TO 4%	3/4"	NO

   * SPECIAL INSPECTION IS NOT REQUIRED, DESIGN COMPRESSIVE STRENGTH IS 2500 psi, HIGHER STRENGTHS HAVE BEEN SPECIFIED FOR QUALITY CONTROL.
   A. THE CONCRETE SHALL HAVE HARD ROCK AGGREGATE PER ASTM C-33.
   B. ALL CONCRETE SHALL HAVE A MINIMUM OF 5 SACKS OF CEMENT (94 lb) PER CUBIC YARD, PORTLAND TYPE II, ASTM C-150. MAXIMUM WATER TO CEMENT RATIO SHALL BE PER TABLE 5.4 OF ACI 318-95.
   C. TRANSIT MIX SHALL BE PER ASTM C-94.
   D. ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED.
   E. SUBMIT MIX DESIGNS TO THE ENGINEER AT LEAST TWO DAYS PRIOR TO THE PLACING OF CONCRETE.
5. CONCRETE SHALL CONFORM TO ASTM C44, AND SHALL BE PLACED WITHIN 90 MINUTES AFTER ADDITION OF WATER TO CEMENT.
6. REINFORCING SHALL BE NEW STOCK, DEFORMED BARS, CONFORMING TO ASTM A-615 AS FOLLOWS (U.N.O.): No. 3 AND SMALLER: GRADE 40; No. 4 AND LARGER: GRADE 60
   A. ALL BARS TO BE WELDED SHALL MEET THE REQUIREMENTS OF ASTM A706.
   B. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185, FLAT SHEETS ONLY. LAP FABRIC 6" MINIMUM.
   C. REINFORCEMENT PLACEMENT SHALL CONFORM TO 1/D5, 2/D5 AND 3/D5
7. REINFORCEMENT COVER: ALL DIMENSIONS SHOWING THE LOCATIONS OF REINFORCEMENT STEEL NOT NOTED AS "CLEAR", ARE TO THE CENTER OF THE STEEL. MINIMUM CLEAR COVERAGE OF REINFORCEMENT SHALL BE AS FOLLOWS:

A. SLABS ON GRADE:		1-1/2" U.N.O.
B. CONCRETE CAST AGAINST EARTH, EXCEPT SLABS ON GRADE:		3"
C. CONCRETE CAST IN FORMS, BUT EXPOSED TO EARTH OR WEATHER:	No. 5 REINFORCING AND SMALLER:	1-1/2"
	No. 4 REINFORCING AND LARGER:	2"
D. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND:	SLABS, WALLS AND JOISTS:	3/4"
	BEAMS AND COLUMNS:	1-1/2"

8. UNFORMED CONCRETE SURFACE CURING:
   A. CURE FOR ONE TO SEVEN DAYS BY MAINTAINING TEMPERATURE ABOVE 50 DEGREES FAHRENHEIT, AND IN A MOIST CONDITION.
   B. APPLY MEMBRANE-FORMING CURING COMPOUND TO DAMP CONCRETE IMMEDIATELY AFTER COMPLETION OF THE MOIST-CURING PERIOD.
9. GROUT: PROVIDE EPOXY GROUT WHERE NOTED ON THE DRAWINGS WITH AN I.C.B.O. REPORT THAT IS TO BE SUBMITTED TO THE ENGINEER FOR REVIEW. GROUT SHALL BE NON-METALLIC, NON-SHRINK, AND HAVE 5000 psi MINIMUM COMPRESSIVE STRENGTH.
10. THE CONTRACTOR SHALL INFORM THE ENGINEER AT LEAST TWO DAYS PRIOR TO POURING ANY STRUCTURAL CONCRETE SO THAT OBSERVATION OF THE WORK MAY BE PERFORMED AS REQUIRED BY THE ENGINEER'S CONTRACT OR THE CODE.
11. FOOTING/GRADE BEAM CONSTRUCTION JOINTS SHALL CONFORM TO DETAIL 5/D5
12. CRACK CONTROL JOINTS SHALL BE PLACED IN CONCRETE SLABS ON GRADE AT A SPACING OF 12'-0" MAX. O.C. EACH WAY (U.N.O. ON PLAN) PER DETAIL 4A/D5. LOCATION OF SLAB ON GRADE CONSTRUCTION JOINTS SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION. SLAB ON GRADE CONSTRUCTION JOINTS SHALL CONFORM TO DTL 4B/D5
13. EPOXY ANCHOR BOLTS: IF USED, USE THE EPOXY ANCHORS NOTED IN THE "EPOXY-GROUTED ANCHOR NOTES" ON THIS SHEET.
14. INSTALLATION OF EPOXY ANCHORS AT SHEARWALL TIEDOWNS REQUIRES FULL-TIME SPECIAL INSPECTION BY AN INDEPENDENT TESTING AGENCY, AS APPROVED BY THE LOCAL BUILDING DEPARTMENT.

EPOXY-GROUTED ANCHOR NOTES

1. EPOXY-GROUTED ANCHOR BOLTS SHALL BE ASTM A307 THREADED ROD, OR DEFORMED REINFORCING ROD (ASTM A615, GRADE 60) PER THE DRAWINGS. EPOXY ANCHOR SYSTEMS (OR APPROVED EQUAL) SHALL BE:
   A. HILTI HY-100 MAX, ICC ES (ESR 3574)
   B. SIMPSON SET XP, ICC ES (ESR 2508)
2. INSTALLATION OF EPOXY-GROUTED ANCHORS REQUIRES FULL-TIME SPECIAL INSPECTION BY AN INDEPENDENT TESTING AGENCY, AS APPROVED BY THE LOCAL BUILDING DEPT.
3. INSTALL ANCHOR BOLTS PER MANUFACTURER'S RECOMMENDATIONS:
   A. INSTALL AND CLEAN OUT DRILLED HOMES PER MANUFACTURER'S RECOMMENDATIONS. AS A MINIMUM, BRUSH OUT DRILLED HOLES WITH A WIRE BRUSH, FOLLOWED BY BLOWING OUT HOLES (OF DUST) WITH COMPRESSED AIR INTRODUCED AT THE REAR OF THE HOLE. REPEAT THIS PROCEDURE A MINIMUM OF TWO TIMES.

CARPENTRY NOTES

1. ALL FRAMING LUMBER SHALL BE DOUGLAS FIR/LARCH AS FOLLOWS, UNLESS NOTED OTHERWISE:
   A. STUDS: 2x4: CONSTRUCTION OR STANDARD; 2x6 OR LARGER: No. 2
   B. 2x JOISTS and RAFTERS: No. 2 (KILN-DRIED WHEN USED w/ FLOOR TRUSSES OR TJI'S)
   C. HEADERS and BEAMS: 4x4: STANDARD; 4x6 OR LARGER: No. 2 EX OR LARGER: No. 1
   D. POSTS: 4x4: STANDARD; 4x6 OR LARGER: No. 1
   E. PLATES, BLOCKS AND MISCELLANEOUS: CONSTRUCTION OR No. 2
   F. EXPOSED BEAMS: APPEARANCE GRADE, DF/DC
   G. SILL PLATES: PRESSURE TREATED DOUGLAS FIR OR HEM FIR
2. ALL FRAMING LUMBER SHALL BE GRADE-STAMPED "S-DRY", OR MAY BE SURFACED AND FURNISHED AT A HIGHER MOISTURE CONTENT PROVIDED THAT THE LUMBER IS ALLOWED TO REACH APPROXIMATE EQUILIBRIUM WITH THE ATMOSPHERIC CONDITION (19 PERCENT OR LESS MOISTURE CONTENT) BEFORE FINISHES ARE INSTALLED.
3. SHEATHING:
   A. ROOF AND FLOOR: AS NOTED ON THE FRAMING PLAN NOTES. GLUE FOR GLUED FLOOR CONSTRUCTION SHALL BE PER APA PERFORMANCE SPEC. AFG-01. INSTALL PER DETAIL 4/D6
   B. SHEARWALLS: AS NOTED ON THE SHEARWALL SCHEDULE. INSTALL PER D2
   C. ALL SHEATHING SHALL BE APA RATED, EXPOSURE 1, CONFORMING TO PRODUCT STANDARD PS 1-95 OR PS 2-92, U.N.O.
4. HANGERS, AND CONNECTORS: FRAMING HARDWARE SHALL BE SIMPSON STRONG-TIE (AS NOTED ON DRAWINGS) OR APPROVED EQUAL. ALL CONNECTORS FOR EXTERIOR EXPOSURE SHALL BE GALVANIZED. INSTALL PER MANUFACTURER'S INSTRUCTIONS, UNLESS NOTED OTHERWISE. FILL ALL NAIL HOLES, TYPICAL.
5. HANGER REQUIREMENTS U.N.O.:

2x LUMBER:	"U" OR "LB"	TJI JOISTS:	"IUT"
MULTIPLE JOISTS:	"HUS" OR "HUTF"	LVL BEAMS:	"HU"
GIULAMS = "HN"	"HV"	MULT. LVL BEAMS:	"HGUS"
HEADERS:	"HH" OR "HJC"	MTRD TRUSSES:	PER TRUSS MANUFACTURER
FLOOR GIRDERS:	"GH"		

6. NAILING: NAILING IS AS NOTED ON DRAWINGS. IF NOT SHOWN ON THE DRAWINGS, NAILING OF FRAMING COMPONENTS SHALL CONFORM TO CRC TABLE R602.3(1), AS A MINIMUM. ALL NAILS SHALL BE COMMON WIRE GAGE, UNLESS NOTED OTHERWISE. IF POWER DRIVEN NAILS ARE TO BE USED, SUBMIT WIRE GAGE, LENGTH AND HEAD DIAMETER FOR REVIEW. IF THEY ARE NOT EQUAL TO COMMON WIRE SPECIFICATIONS. NAILS SHALL CONFORM TO I.C.B.O. AC116. NAILS OR OTHER CONNECTORS FOR PRESSURE-TREATED LUMBER SHALL BE HOT-DIPPED GALVANIZED.
7. BOLTS: HOLES IN WOOD SHALL BE 1/16" OVERSIZE MAXIMUM. USE MALLEABLE IRON WASHERS AGAINST WOOD EXCEPT FOR SILL PLATES. RE-TIGHTEN ALL BOLTS PRIOR TO CLOSING IN. PRE-DRILL HOLES FOR LAG BOLTS, AND TURN BOLTS INTO HOLES, DO NOT DRIVE IN.
8. POWDER-AGUATED FASTENERS (P.A.F.) SHALL BE EITHER ITW RAMSET/REDHEAD (I.C.B.O. #1639) OR HILTI (I.C.B.O. #2398) OR APPROVED EQUAL.
9. MANUFACTURED FLOOR JOISTS (WHERE USED): FLOOR JOISTS SHALL BE "TJI/250" FLYWOOD-WEB JOISTS AS MANUFACTURED BY THE "TRUS-JOIST MacMILLAN" CORPORATION. SEE FRAMING PLAN FOR DEPTH, LOCATIONS AND SPACING REQUIREMENTS. TRUSS MANUFACTURER SHALL SUPPLY WRITTEN INSTRUCTIONS FOR INSTALLATION AND WEB PENETRATIONS PER I.C.B.O. APPROVALS.
10. GLULAMS SHALL BE MANUFACTURED IN ACCORDANCE WITH AITC 117, INDUSTRIAL GRADE IF CONCEALED, AND ARCHITECTURAL GRADE IF EXPOSED, AND SHALL HAVE NO CAMBER FOR FLUSH FLOOR CONDITIONS, AND SHALL HAVE A 2000' RADIUS CAMBER FOR ALL OTHER CONDITIONS, U.N.O. ON THE PLANS.
    A. GLULAMS SHALL BE DOUGLAS FIR WITH COMBINATION SYMBOLS: 24F-V4 FOR SIMPLE SPAN BEAMS; 24F-V8 FOR CANTILEVER AND MULTIPLE SPAN BEAMS
    B. SHOP DRAWINGS SHALL SUBMITTED TO THE ENGINEER PRIOR TO FABRICATION. PROVIDE AITC CERTIFICATION WITH ALL BEAMS.
    C. GLULAM DIAGRAM: C = +____" (INDICATES CAMBER); INDICATES LENGTH
11. LAMINATED VENEER LUMBER (LVL): LAMINATED VENEER JOISTS AND BEAMS SHALL BE 1-3/4" x DEPTH AS NOTED ON THE PLANS OR PLAN NOTES. LVL'S SHALL BE MICRO-LAMS, AS MANUFACTURED BY THE "TRUS-JOIST MacMILLAN" CORPORATION, OR EQUAL. LVL'S SHALL CONFORM TO THE FOLLOWING MINIMUM REQUIREMENTS:

    Fb = 2600 psi E = 1,900,000 psi Fv = 285 psi Fc (PERP.) = 750 psi

    A. MULTIPLE LVL BEAMS: (2) LVL BEAMS SHALL BE INTER-NAILED WITH (2) ROWS OF 16d AT 12" O.C. (3) AND (4) LVL BEAMS SHALL BE BOLTED TOGETHER WITH 5/8" DIA. M.B. AT 2'-0" O.C., STAGG.
12. LAMINATED STRAND LUMBER (LSL): TIMBERSTRAND LSL RIM JOIST AND BEAMS SHALL BE AS NOTED ON PLANS AND PLAN NOTES. LSL SHALL BE 1-3/4" WIDE AND THE DEPTH SHALL MATCH THE FLOOR JOIST (U.N.O.). SOLID LSL MATERIAL OF THE SAME WIDTH MAY BE USED IN LIEU OF MULTIPLE MEMBERS. SPECIFIED ON PLAN. LVL OR PSL MAY BE SUBSTITUTED FOR LSL PROVIDING WIDTH AND DEPTH ARE EQUAL. LSL'S SHALL BE MANUFACTURED BY THE "TRUS-JOIST MacMILLAN" CORPORATION, OR EQUAL OR EQUAL WITH THE FOLLOWING MINIMUM PROPERTIES:

DEPTH 7-1/4" OR LESS		9-1/2" DEPTH OR GREATER	
Fb = 1700 psi	E = 1,300,000 psi	Fb = 2250 psi	E = 1,500,000 psi
Fv = 285 psi	Fc (PERP.) = 650 psi	Fv = 285 psi	Fc (PERP.) = 650 psi

13. PARALLEL STRAND LUMBER (PSL): PARALLEL STRAND JOISTS AND BEAMS SHALL BE AS NOTED ON THE PLANS OR PLAN NOTES. PSL'S SHALL BE "PARALLAM" AS MANUFACTURED BY THE "TRUS-JOIST MacMILLAN" CORPORATION, OR EQUAL. PSL'S MAY BE SUBSTITUTED FOR LVL'S OF EQUAL SIZE. PSL'S SHALL CONFORM TO THE FOLLOWING MINIMUM REQUIREMENTS:

    Fb = 2400 psi E = 2,000,000 psi Fv = 290 psi Fc (PERP.) = 650 psi

14. FIRE STOPPING, BACKING FOR INTERIOR FINISHES, NON-BEARING WALLS, AND OTHER NON-STRUCTURAL FRAMING MAY NOT NECESSARILY BE SHOWN ON THE STRUCTURAL PLANS.
15. ALL CONVENTIONAL FRAMED PORTIONS OF THE STRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT C.B.C., UNLESS NOTED OTHERWISE ON THE PLANS.

STRUCT. OBSERVATION NOTES

1. THE CONTRACTOR SHALL PROVIDE STRUCTURAL OBSERVATION BY THE ENGINEER OF RECORD (OR HIS REPRESENTATIVE) AFTER INSTALLATION OF THE FOLLOWING TYPES OF CONSTRUCTION:
   A. REINFORCEMENT FOR FOUNDATION FOOTINGS, GRADE BEAMS AND WALLS
   B. ROOF FRAMING CONNECTION HARDWARE AND ALL PLYWOOD SHEATHING.
2. THE CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER OF RECORD AT LEAST 72 HOURS PRIOR TO THE TIME OF ANY STRUCTURAL OBSERVATION.

SPECIAL INSPECTION NOTES

1. THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION PER THE CURRENT EDITION OF THE C.B.C.
   A. EPOXY BOLTS AND DOWELS
   B. DRILLED PIERS

TYPICAL PLAN NOTES

1. ALL EXTERIOR WALLS SHALL BE BEARING WALLS. SEE TYPICAL PLAN LEGEND FOR WALL TYPES.
2. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
3. SEE ARCHITECTURAL DRAWINGS FOR WALL LOCATIONS AND DIMENSIONS NOT SHOWN OR NOTED, FOR WALKS, RAMPS, PATIOS, AND FOR ROOF SLOPES, ELEVATIONS AND DRAINAGE.
4. VERIFY PLATE AND FRAMING ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS.
5. GRIPPLE STUDS SHALL HAVE A MINIMUM HEIGHT OF 14" (EXCLUDING TOP AND BOTTOM PLATES). FOR LESSER HEIGHTS, STACK 2x KILN-DRIED PLATES AND SHIM AS REQUIRED.
5. LET-IN BRACES SHALL NOT BE USED FOR TEMPORARY OR PERMANENT BRACING OF ANY WALL FRAME. STEEL STRAPS, WHICH DO NOT REQUIRE CUTTING OF THE STUDS ARE ACCEPTABLE FOR TEMPORARY BRACING.
6. FOR ADDITIONAL NOTES, SEE SHEARWALL AND TIEDOWN SCHEDULES ON SHEETS D2, D3 AND D4.
7. ARCHITECTURAL DRAWINGS ARE PREPARED BY GIL DOMINGUEZ CUSTOM HOME & ADDITION REMODEL DESIGN

WALL FRAMING NOTES

1. ALL EXTERIOR AND SHEAR WALLS ARE CONSIDERED AS BEARING. INTERIOR BEARING WALLS ARE SHOWN ON THE PLANS AS SHADED.
2. SEE PLAN NOTES ON SHEET S2 FOR WALL CONSTRUCTION. IF WALLS ARE NOT SPECIFIED, PROVIDE BEARING WALLS PER THE FOLLOWING SCHEDULE, U.N.O. (S.A.D.).

MAX. WALL HEIGHT	EXTERIOR WALL	INTERIOR WALL
10'-0"	2x6 AT 16" O.C.	2x4 AT 16" O.C.
12'-0"	2x6 AT 16" O.C.	2x6 AT 16" O.C.
14'-6"	2x8 AT 16" O.C.	2x6 AT 16" O.C.

3. TWO STORY BALLOON-FRAMED WALLS THAT ARE NOT CONNECTED TO A SECOND FLOOR OR LOW ROOF SHALL BE PER SCHEDULE, UNLESS NOTED OTHERWISE.
4. IN BALLOON-FRAMED WALLS, PROVIDE DOUBLE KING STUDS AT EACH END OF ALL EXTERIOR DOOR, WINDOW, AND CLERESTORY WINDOW OPENINGS, TYPICAL.
5. INTERIOR NON-BEARING WALLS SHALL BE AS FOLLOWS:
   UPPER FLOOR: 2x4 STUDS AT 16" O.C., TYPICAL, U.N.O. ON THE ARCHITECTURAL DRAWINGS.
   LOWER FLOOR: 2x4 STUDS AT 16" O.C., TYPICAL, U.N.O. ON THE ARCHITECTURAL DRAWINGS.
6. SHEARWALL SHEATHING SHALL BE PER THE PLANS AND THE SHEARWALL SCHEDULE. SEE THE PLANS FOR LOCATIONS, AND SIDE OF WALL OF SHEARWALL SHEATHING.
7. SEE FRAMING PLANS AND ARCHITECTURAL DRAWINGS FOR CONDITIONS NOT NOTED ABOVE.
8. SEE SHEET D6 FOR TYPICAL WALL CONSTRUCTION DETAILS.

MANUFACTURED TRUSSES

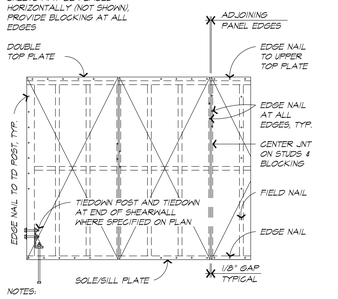
1. TRUSSES SHALL BE DESIGNED AND FABRICATED WITH I.C.B.O. APPROVED PLATE FASTENERS. TRUSSES SHALL BE DESIGNED BY A REGISTERED CIVIL OR STRUCTURAL ENGINEER LICENSED IN CALIFORNIA. DESIGN CALCULATIONS AND SHOP DRAWINGS SHALL BE PROVIDED FOR REVIEW BY THE STRUCTURAL ENGINEER OF RECORD, THEN SUBMITTED TO THE BUILDING DEPARTMENT FOR APPROVAL. THE DESIGN SHALL CONTAIN A LAYOUT DRAWING IDENTIFYING EACH TRUSS AND INDIVIDUAL TRUSS CALCULATIONS WITH INFORMATION INCLUDING, BUT NOT LIMITED TO LOADINGS, REACTIONS, DEFLECTIONS, DESIGN CRITERIA, MEMBER STRESSES, SIZES AND GRADES, PLATE SIZES AND GRADES, HANGER SIZES, AND ANY OTHER SPECIAL REQUIREMENTS. THE LAYOUT AND INDIVIDUAL TRUSS CALCULATIONS SHALL BE WET SIGNED BY THE DESIGN ENGINEER.
2. TRUSSES SHALL CONFORM TO THE FOLLOWING:
   TOP CHORD LOADING: D.L. = 10 psf; FLOOR D.L. = 20 psf; L.L. = 20 psf; FLOOR L.L. = 40 psf
   BTM CHORD LOADING: D.L. = 5 psf; L.L. = 10 psf (*) (**); TOTAL = 40 psf; TOTAL = 60 psf
   MAXIMUM TOTAL LOAD DEFLECTION (ROOF) = SPAN / 360 OR 1/2", WHICHEVER IS LESS.
   (*) NOT SIMULTANEOUS WITH TOP CHORD LIVE LOAD.
   (**) AT CEILING-SUPPORTED HVAC UNITS DESIGN BOTTOM CHORDS FOR 20 psf (WHERE APPLICABLE). TRUSS FABRICATOR TO COORDINATE WITH ARCHITECTURAL AND HVAC DRAWINGS FOR CLEARANCE AND SUPPORT REQUIREMENTS AT ALL MECHANICAL UNITS.
3. SPECIAL LOAD TRUSSES: WHERE SPECIAL LOADS ARE SPECIFIED ON THE FRAMING PLANS, DESIGN TRUSSES FOR THESE LOADS.
4. MINIMUM MEMBER SIZES (FLOOR/ROOF TRUSSES):
   TOP CHORD MEMBERS: 2x4; Fv = 285 psi
   BOTTOM CHORD MEMBERS: 2x4
   WEB MEMBERS: 2x4
5. TRUSS MANUFACTURER SHALL SUPPLY ALL HANGERS, CLIPS, PLATES, BLOCKS, BRIDGING, AND ALL OTHER ITEMS RELATED TO THEIR PRODUCT.
6. ALL TRUSSES SHALL BE DELIVERED TO THE SITE BUNDLE-WRAPPED AND PIECE-MARKED FOR LOCATION. TRUSSES SHALL NOT BE FIELD CUT.
7. GIRDER AND CARRIER TRUSSES: DESIGN SPECIAL TRUSSES FOR THE SAME CRITERIA AS STANDARD TRUSSES INCLUDING THE TRIBUTARY LOADS FROM IN-FRAMING MEMBERS. SEE THE FRAMING PLAN FOR TRUSS LAYOUTS. THE TRUSS MANUFACTURER SHALL SUBMIT THE DESIGN AND DETAIL OF ALL CONNECTORS REQUIRED TO TRANSFER LOADS TO THE SPECIAL TRUSSES. FOR TRUSSES SUPPORTING HVAC EQUIP. SEE DETAIL 15/D4 U.N.O. ON PLANS.
8. PROVIDE MINIMUM OF (2) STUDS BELOW THE BEARING POINTS OF ALL GIRDER, CARRIER, AND HIP TRUSSES AND CARRY DOWN TO FOUNDATION LEVEL, TYPICAL.
9. COLLECTOR LOADING: TRUSSES NOTED AS "COLLECTORS" SHALL BE DESIGNED FOR A MINIMUM OF 100 plf OR 3000 lbs, WHICHEVER RESULTS IN A GREATER LOAD, U.N.O. ON THE DRAWINGS. LOAD SHALL BE ASSUMED TO BE APPLIED CONTINUOUSLY ALONG THE TOP AND RESTRAINED AT THE BOTTOM CHORD EITHER CONTINUOUSLY ALONG THE SHEARWALL BELOW THE TRUSS, OR TO THE STRAPS AT END(S). SEE PLANS FOR CONDITION.
10. ALL TRUSSES ARE TO BE DESIGNED TO CARRY THE WEIGHT OF MECHANICAL UNITS AND/OR EQUIPMENT OR PROVIDE ADDITIONAL TRUSSES NECESSARY TO CARRY THE MECHANICAL UNITS AND/OR EQUIPMENT LOAD. COORDINATE THE WEIGHT OF THE MECHANICAL UNITS UNITS AND/OR EQUIPMENT WITH THE MECHANICAL DRAWINGS, THE GENERAL CONTRACTOR, THE ARCHITECTURAL DRAWINGS AND THE EQUIPMENT SUPPLIER/ INSTALLER.
11. TRUSS TO TRUSS CONNECTIONS:
    A. IT IS THE RESPONSIBILITY OF THE TRUSS DESIGN ENGINEER AND THE TRUSS MANUFACTURER TO SPECIFY ALL TRUSS TO TRUSS CONNECTIONS PERP C.B.C. SECTION 2303.4.1. THE TRUSS TO TRUSS CONNECTIONS ARE TO BE SIMPSON STRONG-TIE AS SPECIFIED IN THE CARPENTRY NOTES.
    B. THE TRUSS TO TRUSS CONNECTORS ARE TO BE CLEARLY SPECIFIED IN THE TRUSS CALCULATIONS AND TRUSS LAYOUT PACKAGE.

L+M CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING - CIVIL ENGINEERING
RESIDENTIAL & COMMERCIAL - GEOTECHNICAL SERVICES
25-A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH: (925) 672-6828
FAX: (925) 889-4465

BY	ISSUE/REVISIONS	DATE

Pena Residence
9255 Byron Hwy.
Brentwood, California

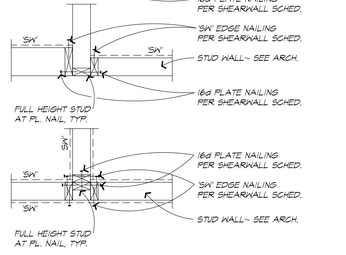
SHEET D1 OF SHEETS
SHEET TITLE: Structural Notes, Typical Plan Notes
DATE: August 16, 2025
SCALE: 1" = 1'-0"
DRAWN: M. Manning
CHECKED: B. Manning
JOB: 2024-65



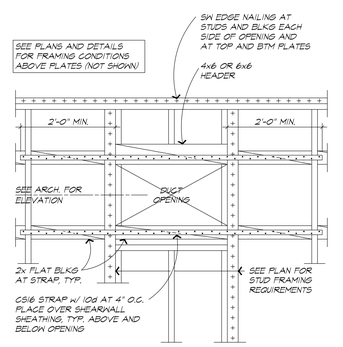
NOTES:

1. SEE SHEARWALL SCHEDULE FOR REQUIRED SHEATHING, NAILING, AND SILL CONNECTIONS.
2. FOR LOCATION OF TIEDOWNS AND TD POSTS, SEE (4 / D4)

1 SHEARWALL ELEVATION



2 SHEARWALL CONSTR. PLAN VIEWS



3 HOLE IN SHEARWALL ELEVATION

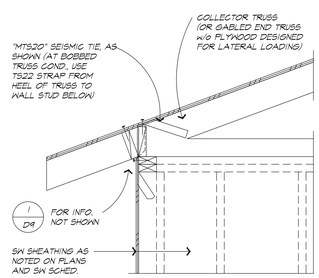
SHEARWALL SCHEDULE

SHEARWALL MARK AND CAPACITY	SHEARWALL SHEATHING (NOTE 1, 2)	SHEARWALL EDGE NAIL	SHEARWALL FIELD NAIL	PLATE NAILING	METAL CLIPS (PL. NAIL ALT.)	SILL PLATE CONNECTION TO CONCRETE FOOTING OR SLAB (NOTE 7.)
SW-1	3/8" APA-RATED STRUCT. 1 PLYWOOD	8d AT 6" O.C.	8d AT 12" O.C.	16d AT 6" O.C.	A34 AT 16" O.C.	5/8" DIA. A.B. AT AT 32" O.C.
SW-2	3/8" APA-RATED STRUCT. 1 PLYWOOD	8d AT 4" O.C. (NOTE 4A.)	8d AT 12" O.C.	16d AT 4" O.C.	A34 AT 12" O.C.	5/8" DIA. A.B. AT AT 20" O.C.
SW-3	3/8" APA-RATED STRUCT. 1 PLYWOOD	8d AT 3" O.C. (NOTE 4A.)	8d AT 12" O.C.	16d AT 3" O.C.	A34 AT 8" O.C.	5/8" DIA. A.B. AT AT 16" O.C.
SW-4	15/32" APA-RATED STRUCT. 1 PLYWOOD	10d AT 6" O.C.	10d AT 12" O.C.	16d AT 5" O.C.	A34 AT 16" O.C.	5/8" DIA. A.B. AT AT 24" O.C.
SW-5	15/32" APA-RATED STRUCT. 1 PLYWOOD	10d AT 4" O.C. (NOTE 4A.)	10d AT 12" O.C.	16d AT 3" O.C.	A34 AT 8" O.C.	5/8" DIA. A.B. AT AT 16" O.C.
SW-6	15/32" APA-RATED STRUCT. 1 PLYWOOD	10d AT 3" O.C. (NOTE 4A.)	10d AT 12" O.C.	16d AT 2" O.C. STAGGERED	A34 AT 8" O.C.	5/8" DIA. A.B. AT AT 12" O.C.
VARIES	SIMPSON "STRONGWALL"	PER SIMPSON		PER SIMPSON	PER SIMPSON	(1 / D3)
ALL NON-SHEARWALL CONDITIONS	GYP. BOARD AS REQUIRED BY ARCHITECT	5d COOLER NAILS AT 7" O.C.	5d COOLER NAILS AT 7" O.C.	16d AT 8" O.C.	A34 AT 6'-0" O.C.	5/8" DIA. A.B. AT AT 48" O.C.

1. PROVIDE APA TRADE-MARKED STRUCTURAL I, C-D OR BETTER PLYWOOD, CONFORMING WITH NATIONAL RESEARCH BOARD REPORT No. NER-108, WITH EXTERIOR GLUE, AND THICKNESS AS SPECIFIED. ALL STUD FRAMING IS TO BE DOUGLAS FIR-LARCH.
2. ALL EDGES SHALL BE BLOCKED AND NAILED, TYPICAL. CENTER ALL PARTICLEBOARD JOINTS ON FRAMING MEMBER OR BLOCKING. SPACE PANELS 1/8" ON ALL SIDES. PROVIDE A MINIMUM OF TWO SILL BOLTS PER SHEAR WALL PANEL.
3. ALL NAILS USED IN SHEAR WALLS ARE TO BE COMMON WIRE GAGE OR GALVANIZED BOX NAILS. PROVIDE SHEAR WALL EDGE NAILING FULL HEIGHT AT ALL POSTS WHICH HAVE TIEDOWNS.
4. WHERE PLYWOOD IS INSTALLED ON BOTH SIDES AND NAIL SPACING IS LESS THAN 6 INCHES ON CENTER, PROVIDE 3x SILLS, STUDS AND BLOCKING AT ALL PANEL JOINTS, AND STAGGER NAILS. STAGGER NAILS AT TOP PLATES. PROVIDE DOUBLE THE NUMBER OF PLATE NAILS, CLIPS AND SILL BOLTS.

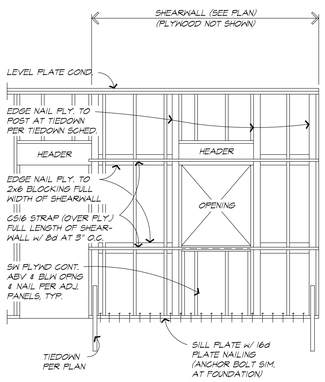
4A. PROVIDE 3x (NOM.) FRAMING MEMBERS AT FOUNDATION SILL PLATES (WITH LET-IN SILL BOLTS) AND AT FRAMING MEMBERS RECEIVING EDGE NAILING FROM ADJOINING PANELS.

5. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3x OR WIDER AND NAILS SHALL BE STAGGERED WHERE 10d NAILS HAVING PENETRATION INTO FRAMING OF MORE THAN 1-5/8" ARE SPACED 3" O.C. OR LESS ON CENTER.
6. STUCCO SHALL BE APPLIED OVER METAL OR WOVEN WIRE LATH. USE 16 GA. GALVANIZED STAPLES WITH 7/8" LEGS AT 6" O.C. TO ALL STUDS, BLOCKING AND PLATES.
7. ANCHOR BOLTS SHALL BE A307 WITH HEX HEAD NUT, EMBEDDED 7" MIN. INTO CONCRETE, PROVIDE 1/4" x 3" SQ. WASHER PLATE OVER MUDSILL. SEE DTL (1 / D6)
8. FOR TYP. SHEARWALL INTERSECTIONS, SEE (2 / -)
9. SEE DETAILS FOR APPLICATION OF PLATE NAILING AND/OR CLIPS.
10. INSTALL SIMPSON STRONGWALLS IN ACCORDANCE WITH INSTALLATION INSTRUCTIONS BY SIMPSON. SEE SHEET D3.

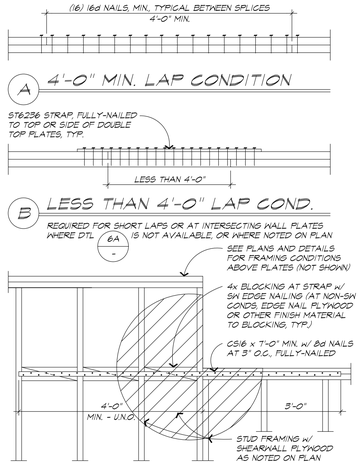


TYPICAL AT ENDS OF COLLECTOR AND GABLED END TRUSSES WHERE SW SHEATHING DOES NOT EXTEND UP TO TOP CHORD.

4 COLLECTOR TRUSS UPLIFT ANCHORAGE



5 SHEARWALL FRAME

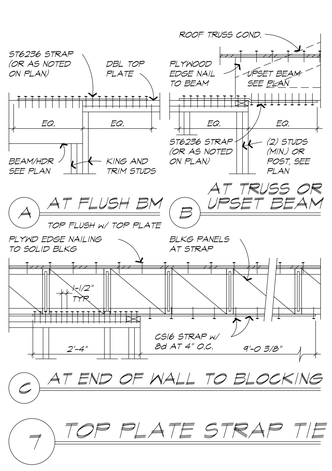


A 4'-0" MIN. LAP CONDITION

B LESS THAN 4'-0" LAP COND.

C AT STEPPED TOP PLATE

6 TOP PLATE SPLICE

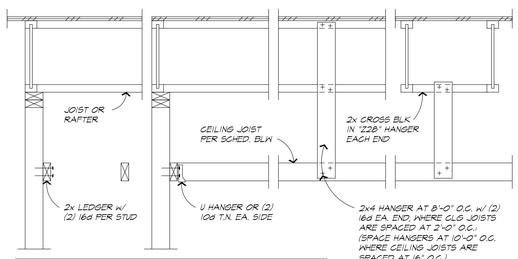


A AT FLUSH BM

B AT TRUSS OR UPSET BEAM

C AT END OF WALL TO BLOCKING

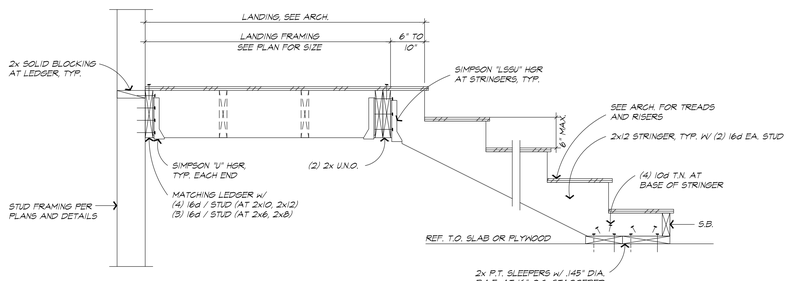
7 TOP PLATE STRAP TIE



CEILING JOIST SCHEDULE

MAXIMUM SPAN	JOIST AND SPACING
8'-0"	2x4 AT 2'-0" O.C.
10'-0"	2x4 AT 16" O.C.
12'-0"	2x6 AT 2'-0" O.C.
14'-0"	2x6 AT 16" O.C.
OVER 14'-0"	USE 2x4 HANGERS PER ABOVE

8 SUSPENDED WOOD CEILING USE THIS SCHEDULE U.N.O.



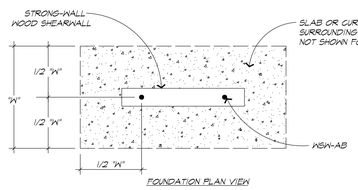
9 TYPICAL INTERIOR WOOD STAIRS

CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING – CIVIL ENGINEERING
RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
25-A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672-1828
FAX (925) 889-4465

BY | DATE | ISSUE/REVISIONS

Pena Residence
9255 Byron Hwy.
Brentwood, California

SHEET TITLE: Shearwall Schedule & Typical Details
DRAWN: M. Manning
CHECKED: B. Manning
DATE: August 16, 2025
SCALE: 1" = 1'-0"
SHEET: D2
OF SHEETS
JOB: 2024-65

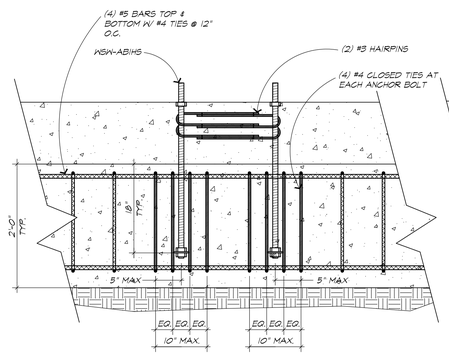


FOUNDATION PLAN VIEW

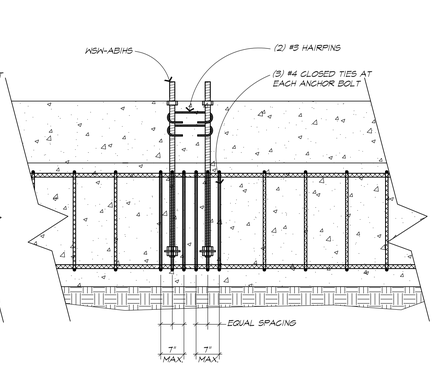
WSW ANCHORAGE SOLUTIONS FOR 2500 PSI CONCRETE								
DESIGN CRITERIA	CONCRETE CONDITION	ANCHOR STRENGTH	WSW-AB7/8 ANCHOR BOLT			WSW-AB1 ANCHOR BOLT		
			ASD ALLOWABLE TENSION (lb.)	W (in.)	a_e (in.)	ASD ALLOWABLE TENSION (lb.)	W (in.)	a_e (in.)
SEISMIC	CRACKED	STANDARD	11,900	27	9	16,100	33	11
			13,100	29	10	17,100	35	12
		HIGH STRENGTH	24,900	43	15	33,000	51	17
			27,100	46	16	35,300	54	18
	UNCRACKED	STANDARD	12,500	24	8	15,700	28	10
			13,100	25	9	17,100	30	10
		HIGH STRENGTH	25,300	38	13	32,300	44	15
			27,100	40	14	35,300	47	16
WIND	CRACKED	STANDARD	5,100	14	6	6,200	16	6
			8,700	20	7	11,400	24	8
			13,100	27	9	17,100	32	11
		HIGH STRENGTH	15,900	30	10	21,100	36	12
			18,400	33	11	27,300	42	14
			25,100	38	13	31,800	46	16
			27,100	42	14	35,300	50	17
	UNCRACKED	STANDARD	9,000	12	6	6,400	14	6
			9,300	18	6	12,300	22	8
			13,100	23	8	17,100	28	10
		HIGH STRENGTH	15,200	25	9	21,900	32	11
			19,900	30	10	26,400	36	12
			24,000	34	12	31,300	40	14
			27,100	37	13	35,300	43	15

NOTES:
1. ANCHORAGE DESIGNS CONFORM TO ACI 318-11 APPENDIX D AND ACI 318-14 WITH NO SUPPLEMENTARY REINFORCEMENT FOR CRACKED OR UNCRACKED CONCRETE AS NOTED.
2. ANCHOR STRENGTH INDICATES REQUIRED GRADE OF WSW-AB ANCHOR BOLT. STANDARD (ASTM F1554 GRADE 36) OR HIGH STRENGTH (HS) (ASTM A449).
3. SEISMIC INDICATES SEISMIC DESIGN CATEGORY C - F. DETACHED 1 AND 2 FAMILY DWELLINGS IN SDC C MAY USE WIND ANCHORAGE SOLUTIONS. SEISMIC ANCHORAGE DESIGNS CONFORM TO ACI 318-11 SECTION D.3.3.4.3 AND ACI 318-14 SECTION 17.2.3.4.3.
4. WIND INCLUDES SEISMIC DESIGN GATEGORY A AND B AND DETACHED 1 AND 2 FAMILY DWELLINGS IN SDC C.
5. FOUNDATION DIMENSIONS ARE FOR ANCHORAGE ONLY. FOUNDATION DESIGN (SIZE AND REINFORCEMENT) BY OTHERS. THE REGISTERED DESIGN PROFESSIONAL MAY SPECIFY ALTERNATE EMBEDMENT, FOOTING SIZE OR ANCHOR BOLT.
6. REFER TO I/WSN1 FOR a_e.

1 SIMPSON WOOD STRONG-WALL AND SCHEDULE 2500 PSI



2 GRADE BEAM ELEVATION AT 24" WALL MODEL



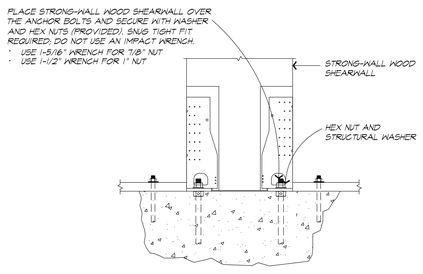
3 GRADE BEAM ELEVATION AT 12" AND 18" WALL MODELS

STRONG-WALL WOOD SHEARWALL MODELS

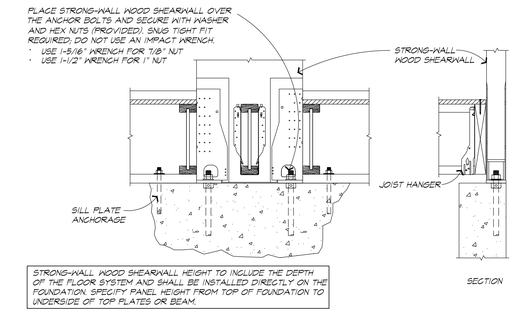
MODEL NO.	W (in.)	H (in.)	ANCHOR BOLTS		TOTAL WALL WEIGHT (lb.)
			QUANTITY	DIA. (in.)	
WSW12x7	12	78	2	7/8	100
WSW18x7	18	78	2	7/8	145
WSW12x7.5	12	85 1/2	2	7/8	110
WSW18x7.5	18	85 1/2	2	7/8	155
WSW12x8	12	93 1/4	2	7/8	115
WSW18x8	18	93 1/4	2	7/8	165
WSW24x8	24	93 1/4	2	1	225
WSW12x9	12	105 1/4	2	7/8	130
WSW18x9	18	105 1/4	2	7/8	185
WSW24x9	24	105 1/4	2	1	245
WSW12x10	12	117 1/4	2	7/8	140
WSW18x10	18	117 1/4	2	7/8	205
WSW24x10	24	117 1/4	2	1	270
WSW12x11	12	129 1/4	2	7/8	150
WSW18x11	18	129 1/4	2	7/8	220
WSW24x11	24	129 1/4	2	1	295
WSW12x12	12	141 1/4	2	7/8	165
WSW18x12	18	141 1/4	2	7/8	240
WSW24x12	24	141 1/4	2	1	320
WSW18x13	18	153 1/4	2	7/8	255
WSW24x13	24	153 1/4	2	1	345
WSW24x14	24	168	2	1	375
WSW24x16	24	192	2	1	425
WSW18x20	18	240	2	7/8	385
WSW24x20	24	240	2	1	520

NOTES:
1. FOR HEIGHTS NOT LISTED, ORDER THE NEXT TALLEST PANEL AND TRIM TO FIT. MINIMUM TRIMMED HEIGHT FOR ALL PANELS IS 74-1/2".
2. ALL PANELS COME WITH TWO PRE-ATTACHED HOLDOWNS, TWO STANDARD HEX NUTS, TWO STRUCTURAL WASHERS, TWO WSW-TOW PLATES AND INSTALLATION INSTRUCTIONS.
3. ALL PANELS ARE 3-1/2" THICK.

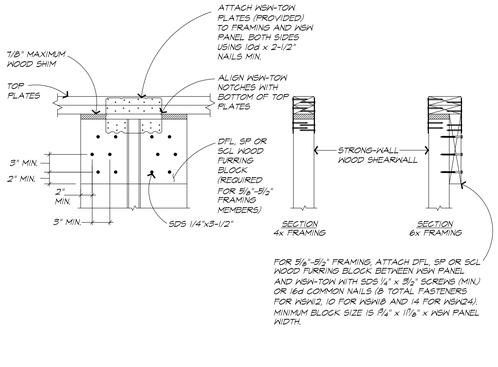
4 STRONG-WALL WSW MODELS



5 STANDARD INSTALLATION BASE CONNECTION



6 STANDARD INSTALLATION BASE CONNECTION

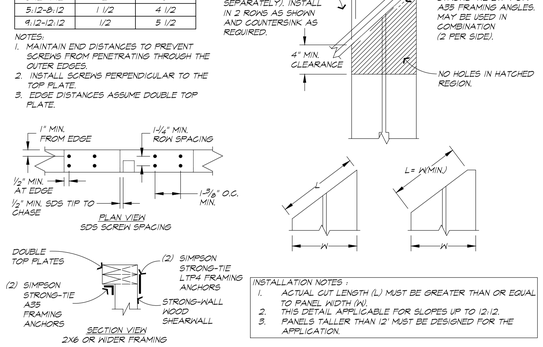


7 STANDARD TOP CONNECTION

QTY. OF SDS 1/4"x6" SCREWS REQ'D.	
WSW12	4
WSW18	8
WSW24	12

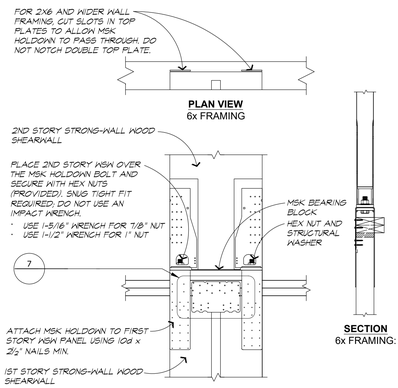
EDGE DISTANCE FOR SCREWS		
SLOPE	A (in.)	B (in.)
0:12-4:12	2	3
5:12-8:12	1 1/2	4 1/2
9:12-12:12	1/2	5 1/2

NOTES:
1. MAINTAIN END DISTANCES TO PREVENT SCREWS FROM PENETRATING THROUGH THE OUTER EDGES.
2. INSTALL SCREWS PERPENDICULAR TO THE TOP PLATE.
3. EDGE DISTANCES ASSUME DOUBLE TOP PLATE.

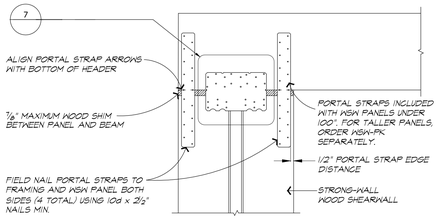


INSTALLATION NOTES :
1. ACTUAL CUT LENGTH (L) MUST BE GREATER THAN OR EQUAL TO PANEL WIDTH (W).
2. THIS DETAIL APPLICABLE FOR SLOPES UP TO 12:12.
3. PANELS TALLER THAN 12' MUST BE DESIGNED FOR THE APPLICATION.

8 RAKE WALL CONNECTION



9 TWO-STORY STACKED WSW



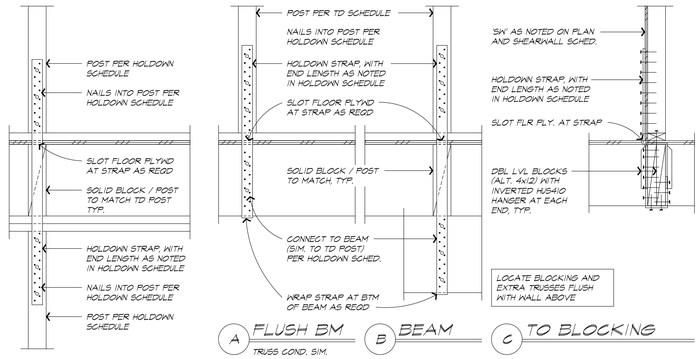
10 PORTAL TOP CONNECTION

CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING - CIVIL ENGINEERING
RESIDENTIAL & COMMERCIAL - GEOTECHNICAL SERVICES
25-A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672-6828
FAX (925) 889-4465

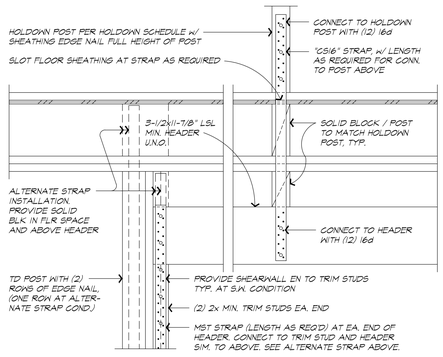
BY	ISSUE/REVISIONS	DATE

Pena Residence
9255 Byron Hwy.
Brentwood, California

SHEET TITLE: Tedown Schedule & Typical Details
DRAWN: M. Manning
CHECKED: B. Manning
DATE: August 16, 2025
SCALE: 1" = 1'-0"
SHEET: D3
OF SHEETS
JOB: 2024-65

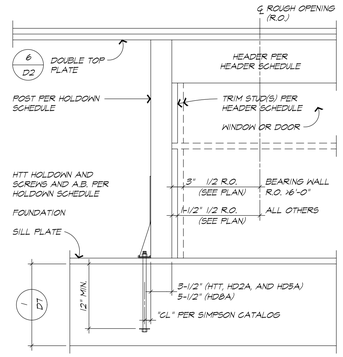


1 HOLDOWN
POST TO POST

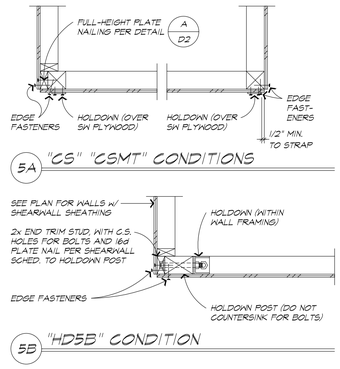


2 HOLDOWN CONNECTION
POST TO FLOOR FRAMING BELOW

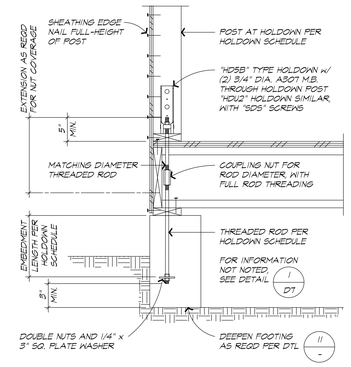
3 HOLDOWN CONNECTION
POST ABOVE HEADER



4 TYP. HOLDOWN LOCATION
AT WINDOW OR DOOR



5 HOLDOWN AT CORNER
PLAN VIEWS



6 HOLDOWN DETAIL
"HD5B" AT EXTERIOR

7 HOLDOWN DETAIL
"HD5B" AT INTERIOR

SPECIAL INSPECTION IS REQUIRED

8 RETROFIT HOLDOWN
AT EXTERIOR GRADE BEAM

SPECIAL INSPECTION IS REQUIRED

9 RETROFIT HOLDOWN
AT INTERIOR GRADE BEAM

10A CORNER COND.
PLAN VIEW

10B CONTINUOUS COND.
PLAN VIEW

10C SECTION THROUGH FOOTING / G.B.

10 EXTRA REINFORCING AT HOLDOWN
REQUIRED AT ALL HOLDOWN TYPES "7", "8" AND "9"

11 DEEPENED FOUNDATION
AT ANCHOR (IF REQD BY BOLT LENGTH)

HOLDOWN MARK	HOLDOWN HARDWARE	MINIMUM POST SIZE	ANCHOR BOLT	FASTENERS INTO HOLDOWN POST	CAPACITY	COMMENTS
CS16 ▼	CS16 STRAP	(2) 2x	N/A	(28) 8d COMMON (1/4" END LENGTH)	1235 lbs	FULLY-NAILED TO (2) 2x STUD ABV SILL PL., AND TO (2) 2x STUD OR BEAM BLW FRAMING (1 -) (2 -) (3 -)
HTT4 ▼	HTT4 TENSION TIE (NOTE 7.)	(2) 2x	5/8" DIA. A36 ALL-THREAD ROD	(18) 16d COMMONS	3480 lbs	FULLY-BOLT TO (2) 2x STUD ABV MUDSILL, AND EMBED A.B. IN FOOTING PER DETAIL (4 -)
HDU2 ▼	HDU2 HOLDOWN	4x	5/8" DIA. A36 ALL-THREAD ROD 12" MIN. EMBED.	(6) "SDS25212" SCREWS	3075 lbs	FULLY SCREW TO POST ABOVE MUDSILL, AND EMBED A.B. IN FOOTING PER DETAILS (6 -) (7 -)
HD5B ▼	HD5B HOLDOWN	4x	5/8" DIA. A36 ALL-THREAD ROD 12" MIN. EMBED.	(2) 3/4" DIA. A307 MACHINE BOLTS	4935 lbs	FULLY BOLT TO POST ABOVE MUDSILL, AND EMBED A.B. IN FOOTING PER DETAILS (6 -) (7 -)
HD7B ▼	HD7B HOLDOWN	4x	7/8" DIA. A36 ALL-THREAD ROD 15" MIN. EMBED.	(3) 3/4" DIA. A307 MACHINE BOLTS	7310 lbs	FULLY BOLT TO POST ABOVE MUDSILL, AND EMBED A.B. IN FOOTING PER DETAILS (6 -) (7 -)

1. ALL HOLDOWN HARDWARE SHALL BE SIMSON STRONG-TIE PRODUCTS OR APPROVED EQUAL WITH I.C.B.O. APPROVALS.
2. LOCATE HOLDOWNS IN WALLS PER DETAILS (4 -) (5 -)
3. INSTALL ALL HOLDOWN HARDWARE PER THE MANUFACTURER'S INSTRUCTIONS.
4. ONLY FULL-HEIGHT (TOP TO BOTTOM PLATE) POSTS SHALL BE USED FOR HOLDOWN CONNECTIONS.
5. USE COMMON WIRE GAGE NAILS FOR ALL NAILED HOLDOWN CONNECTIONS.
6. PROVIDE SHEARWALL EDGE NAILING (AS NOTED IN THE SHEARWALL SCHEDULE) TO ALL POSTS WITH HOLDOWNS AT THE TOP OR BOTTOM OF POST.
7. RETROFIT ANCHORAGE PER DETAIL (8 -) (9 -)

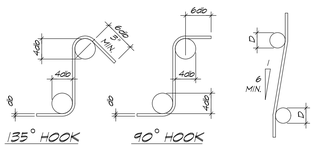
A HOLDOWN SCHEDULE

CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING - CIVIL ENGINEERING
RESIDENTIAL & COMMERCIAL - GEOTECHNICAL SERVICES
25-A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672-6828
FAX (925) 889-4465

BY | DATE | ISSUE/REVISIONS

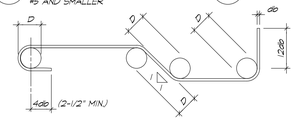
Pena Residence
9255 Byron Hwy.
Brentwood, California

SHEET TITLE: Typical Details
DRAWN: M. Manning
CHECKED: B. Manning
DATE: August 16, 2025
SCALE: 1" = 1'-0"
SHEET: D4
SHEETS:
JOB: 2024-65



1A TIES AND STIRRUPS

#5 AND SMALLER

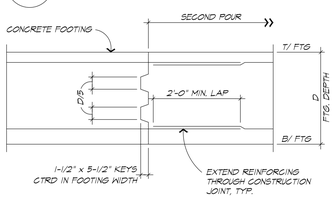


1B OFFSET

1C STANDARD REINFORCEMENT

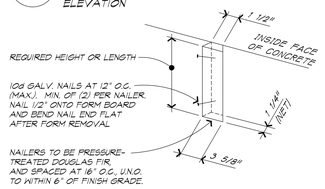
1. db = NOMINAL BAR DIAMETER
2. D = FINISHED INSIDE BEND DIAMETER; 6db FOR #3 THROUGH #8,

1 STANDARD BAR BENDS



5 FOOTING CONSTR. JOINT

ELEVATION



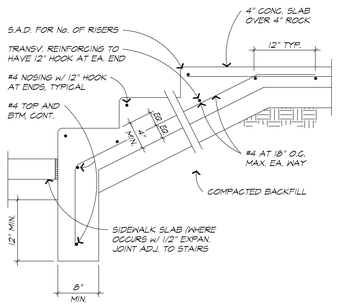
6 EMBEDDED NAILER

BAR SIZE	MIN. SPLICE LENGTH
#3	2'-0"
#4	2'-8"
#5	3'-3"
#6	4'-0"
#7	5'-8"
#8	6'-6"
#9	7'-4"
#10	8'-2"
#11	9'-0"

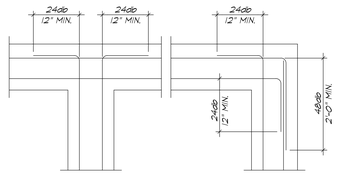
NOTES:

1. SPLICE LENGTHS ARE TYPICAL UNLESS OTHERWISE SHOWN OR NOTED ON PLANS AND DETAILS.
2. SPLICES SHALL BE STAGGERED WHERE POSSIBLE AND BARS SHALL BE LAPPED ONLY WHERE INDICATED ON THE DRAWINGS WHERE SPECIFICALLY PERMITTED BY THE STRUCTURAL ENGINEER.
3. VERTICAL WALL REINFORCING SHALL LAP A MINIMUM OF 48 BAR DIAMETERS AT HORIZ. CONSTRUCTION JOINTS.

2 TYP. REINF. LAP SPLICE



7 CONCRETE STAIRS



3A TEE COND.

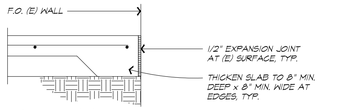
3B CORNER COND.

NOTES:

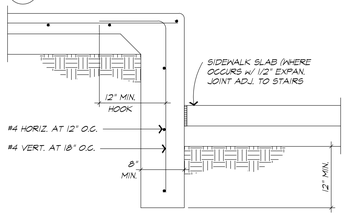
1. db = BAR DIAMETER
2. PLACE ALL BENDS HORIZONTALLY.
3. FOR SINGLE CURTAIN STEEL PROVIDE SIMILAR BENDS AT 3" CLEAR FROM FAR FACE OF FOOTING, U.N.O.

3 STD REINFORCING HOOKS

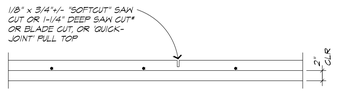
DOUBLE ROW OF REINFORCEMENT



7A AT (E) SURFACE

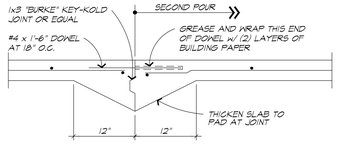


7B AT RAISED EDGE OF SLAB



4A CONTROL JOINT

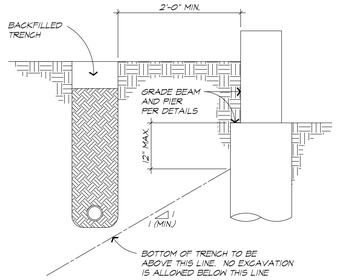
* JOINT TO BE CUT WITHIN 12 HRS OF POUR



4B CONSTRUCTION JOINT

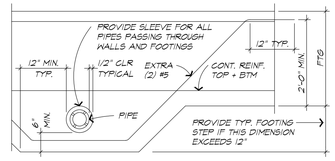
4 CRACK CONTROL JOINTS

SLAB-ON-GRADE

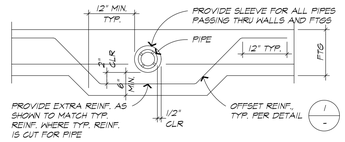


8 PIPE PARALLEL

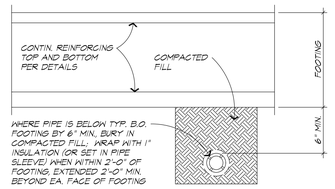
TO FOOTING / GRADE BEAM



9A PIPE BELOW FOOTING



9B PIPE THROUGH FOOTING



9C PIPE BELOW FOOTING

WHERE FOOTING NEED NOT BE DEEPENED

9 PIPE PERPENDICULAR

TO FOOTING / GRADE BEAM

CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING - CIVIL ENGINEERING
RESIDENTIAL & COMMERCIAL - GEOTECHNICAL SERVICES
25-A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672-1828
FAX (925) 889-4465

BY	ISSUE/REVISIONS	DATE

SHEET D5 OF SHEETS

SHEET TITLE: Structural Details

DATE: August 16, 2025

SCALE: 1" = 1'-0"

DRAWN: M. Manning

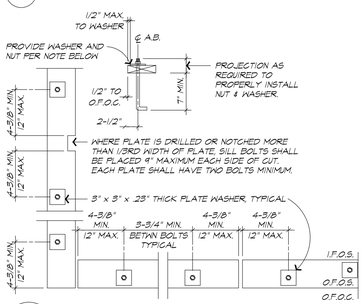
CHECKED: B. Manning

JOB 2024-65

Pena Residence

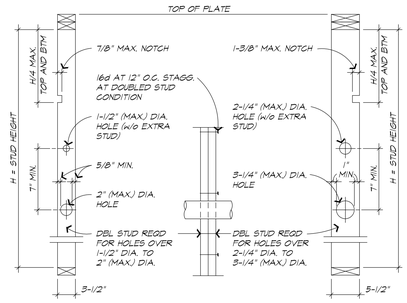
9255 Byron Hwy.
Brentwood, California

1A EXTRA A.B. IN 5-1/2" + 7-1/4" WIDE



1 A.B. PLACEMENT

(PER SHEARWALL SILL PLATE SCHED.)



2A 2x4 STUDS

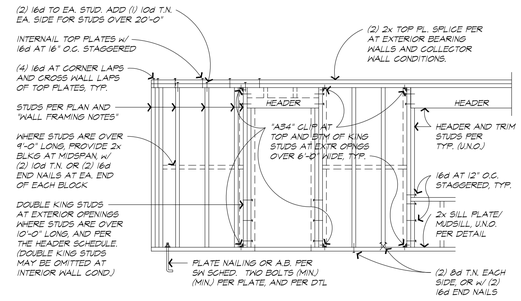
INTERIOR BEARING AND EXTERIOR WALLS

2B 2x6 STUDS

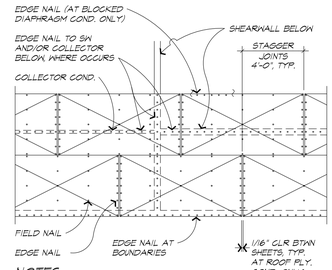
INTERIOR BEARING AND EXTERIOR WALLS

AT NON-BEARING WALLS: NOTCHES UP TO 40% OF STUD WIDTH AND HOLES UP TO 60% OF STUD WIDTH ARE PERMITTED WITHOUT ADDITIONAL STUD REINF.

2 ALLOWABLE NOTCHES AND DRILLED HOLES IN STUDS



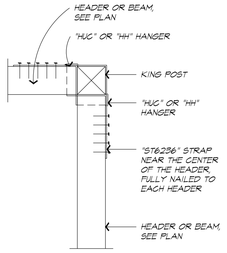
3 TYPICAL WALL FRAMING



NOTES:

1. GLUE AND NAIL FLOOR SHEATHING, NAIL COMPLETELY IMMEDIATELY AFTER GLUEING, IF FLOOR OCCURS ON THIS PROJECT..
2. ORIENT PLYWOOD WITH FACE GRAIN PERPENDICULAR TO FRAMING MEMBERS (OR EQUIVALENT "STRONG" ORIENTATION FOR OTHER SHEATHING).
3. ROOF SHEATHING TO BE BLOCKED DIAPHRAGMS (BLOCKING AT ALL PANEL EDGES) ONLY WHERE SHOWN ON PLANS.

4 TYP. PLYWOOD PLAN

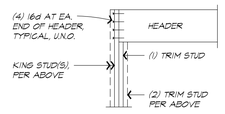


5 HEADER AT CORNER

	MAX. ROUGH OPENING	SAWN LUMBER HEADER SIZE (MINIMUM), U.N.O.		MANUFACTURED LUMBER LSL OR LVL HEADER SIZE (MIN.), U.N.O.		KING STUDS EACH END	TRIM STUDS EACH END NOTE 4.
		4" WALL	6" WALL	4" WALL	6" WALL NOTE 3.		
BEARING (ROOF)	TO 4'-6"	4x10	6x6	3-1/2 x 7-1/2	3-1/2 x 7-1/2	ONE	ONE
	TO 6'-6"	4x10	6x6	3-1/2 x 9-1/4	3-1/2 x 9-1/4	ONE	ONE
	TO 8'-6"	4x12	6x8	3-1/2 x 11-1/4	3-1/2 x 11-1/4	TWO	ONE
BEARING (FLOOR)	TO 4'-6"	4x10	6x6	3-1/2 x 7-1/2	3-1/2 x 7-1/2	ONE	ONE
	TO 6'-6"	4x12	6x10	3-1/2 x 9-1/4	3-1/2 x 9-1/4	ONE	TWO
	TO 8'-6"	5-1/8 x 12 GULAM OR (2) 1-3/4" x 11-7/8" LVLS	6x12	3-1/2 x 11-1/4	3-1/2 x 11-1/4	TWO	TWO
NON-BRG WALLS	TO 4'-6"	4x4	(2) 2x6	N/A	N/A	ONE	ONE
	TO 6'-6"	4x6	(2) 2x6	N/A	N/A	ONE	ONE

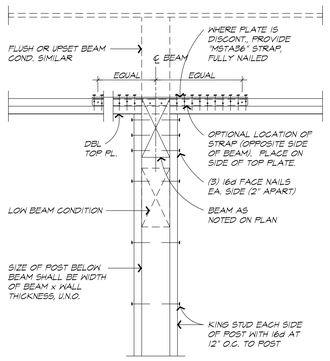
NOTES

1. TRIM STUDS SHALL BE CONTINUOUS FROM BOTTOM OF HEADER TO THE TOP OF THE SILL PLATE BELOW.
2. STACK ALL KING AND TRIM STUDS FROM LEVEL AT WHICH THEY OCCUR CONTINUOUS DOWN TO SILL PLATE AT FOUNDATION LEVEL. PROVIDE SOLID FILLER IN JOIST SPACE.
3. USE 1-3/4" LSL FILLER OF MATCHING DEPTH TO SHIM TO WALL WIDTH.
4. FOR (2) TRIM STUDS AT HEADER COND., SEE

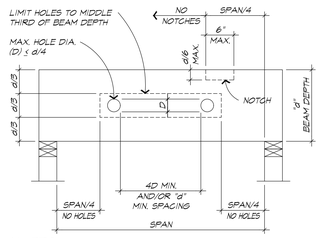


6 HEADER SCHEDULE

TYPICAL, U.N.O. ON THE PLANS



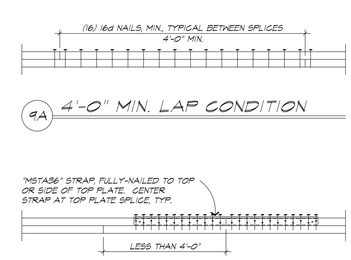
7 BEAM POCKET



NOTES:

1. NO NOTCHING IS PERMITTED ON THE BOTTOM OF THE BEAM, NOR NEAR TOP OF INTERIOR SUPPORT OF MULTI-SPAN BEAM.
2. NO HOLES OR NOTCHES IN GLULAM BEAMS WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
3. AT FABRICATED FLOOR JOISTS, SEE MANUFACTURER'S INSTRUCTIONS FOR ALLOWABLE HOLES IN WEBS. DO NOT CUT FLANGES.

8 ALLOWABLE PENETRATIONS IN JOISTS AND BEAMS



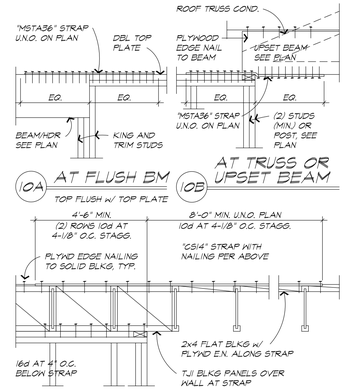
9A 4'-0" MIN. LAP CONDITION

9B LESS THAN 4'-0" LAP COND.

REQUIRED AT SHORT LAPS OR AT INTERSECTING WALL PLATES.

9 TOP PLATE SPLICE

AT ALL EXTERIOR, BEARING AND SHEARWALLS



10A AT FLUSH BM

TOP FLUSH w/ TOP PLATE

10B AT TRUSS OR UPSET BEAM

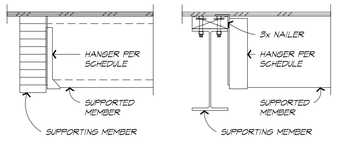
10C AT END OF WALL TO BLOCKING

10 TOP PLATE STRAP TIE

SUPPORTED MEMBER	SUPPORTING MEMBER	
	SOLID HOOD BM (GL., PSL, ETC.)	STEEL BEAM w/ 3x MIN. NAILER
(1) TJI JOIST	"IUS" HANGER	"ITT" HANGER
(2) TJI JOIST	"HU" HANGER	"WP" HANGER
(1) LVL	"HU" HANGER	"WPU" HANGER
(2) LVL OR 3-1/2 PSL	"HHUS" HANGER	"HH" HANGER
(3) LVL OR 5-1/4 PSL	"HGUS" HANGER	"GLTV" HANGER (NOTE 4.)
7" PSL	"HGUS" HANGER	"HGLTV" HANGER (NOTE 4.)
GLULAM	"HGUS" HANGER	"GLTV" HANGER (NOTE 4.)
2x SOLID SAWN	"U" HANGER	"LB" HANGER
(2) 2x SOLID SAWN	"HUS" HANGER	"HNP" HANGER
3x SOLID SAWN	"HU" HANGER	"B" HANGER
4x SOLID SAWN	"HUS" HANGER	"HH" HANGER
6x SOLID SAWN	"HU" HANGER	"B" OR "HH" HANGER

NOTES:

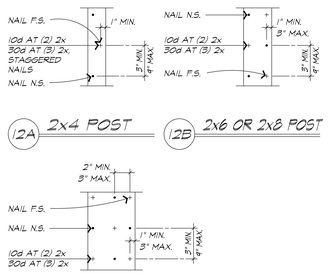
1. USE THIS SCHEDULE, UNLESS NOTED OTHERWISE ON THE PLANS AND DETAILS.
2. HANGERS ARE MANUFACTURED BY SIMPSON STRONG-TIE OR APPROVED EQUAL. INSTALL PER MANUFACTURERS INSTRUCTIONS, UNLESS NOTED OTHERWISE. USE HANGERS AS SCHEDULED, U.N.O. FILL ALL NAIL HOLES.
3. FOR MANUFACTURED FRAMING, (ie. TJI, FABRICATED HOOD TRUSSES, ETC.), HANGERS SHALL BE AS REQUIRED BY THE MANUFACTURER, UNLESS NOTED OTHERWISE.
4. HANGER SHALL BE DIRECTLY WELDED TO STEEL BEAM PER HANGER MANUFACTURER'S RECOMMENDATIONS.



11A FLUSH OR TOP MOUNTED HANGER ONLY

11B TOP MOUNTED HGR (TO 3x PL. ON STEEL BM)

11 JOIST / BEAM HANGER SCHEDULE

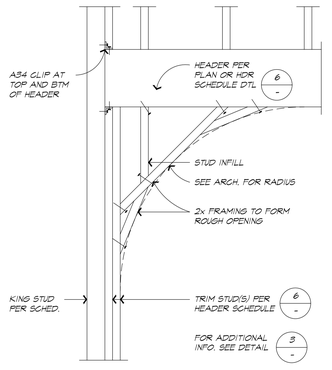


12A 2x4 POST

12B 2x6 OR 2x8 POST

12C 2x10 OR 2x12 POST

12 BUILT-UP POSTS



13 TYP. WALL FRAMING

AT ARCHED OPENING

CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING - CIVIL ENGINEERING
RESIDENTIAL & COMMERCIAL - GEOTECHNICAL SERVICES
25-A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672-6828
FAX (925) 889-4465

BY	ISSUE/REVISIONS	DATE

Pena Residence

9255 Byron Hwy.
Brentwood, California

SHEET TITLE: Structural Details

DRAWN: M. Manning
CHECKED: B. Manning
DATE: August 16, 2025
SCALE: 1" = 1'-0"
JOB: 202465
SHEET: D6
OF SHEETS

CONSULTING ENGINEERS, INC
STRUCTURAL ENGINEERING – CIVIL ENGINEERING –
RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
25-A CRESCENT DRIVE, #710 PH. (925) 672-6828
PLEASANT HILL, CALIFORNIA 94523 FAX (925) 889-4465

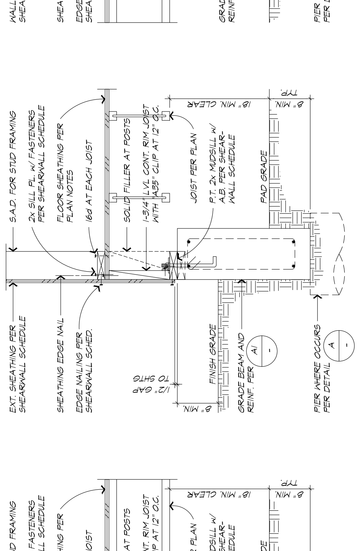
Pena Residence

4255 Byron Hwy.
Brentwood, California

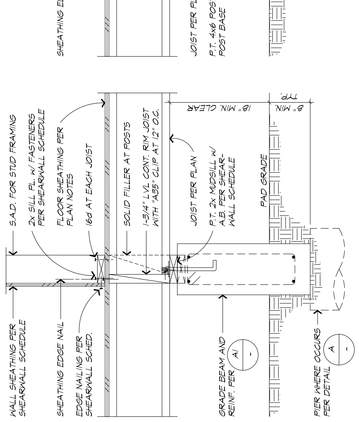
SHEET	SHEET TITLE
D7	Structural Details
OF SHEETS	DATE: August 16, 2023
JOB: 2024-65	SCALE: 1" = 1'-0"
	DRAWN: M. Nonning
	CHECKED: B. Nonning

SYM.	DATE	ISSUE/REVISIONS	BY

A TYPICAL GRADE BEAM AND PIER



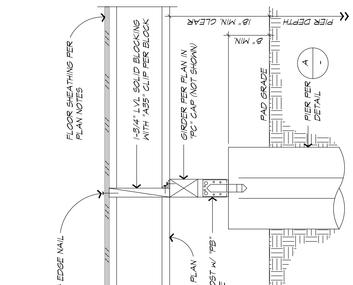
A1 TYP. GRADE BM



A2 GB w/ HIGH STEM

1 JOIST TO GRADE BM

JOIST PERPEND. LOW EXT. GRADE



2 JOIST TO GRADE BM

JOIST PARALLEL, LOW EXT. GRADE

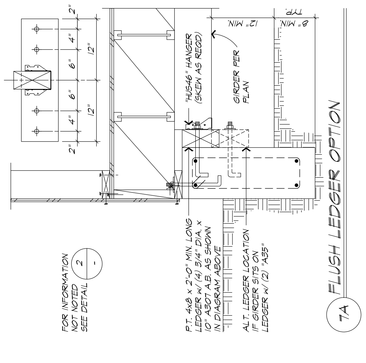
3 JOIST TO GRADE BM

INTERIOR CONDITION

4 JOIST TO GIRDER

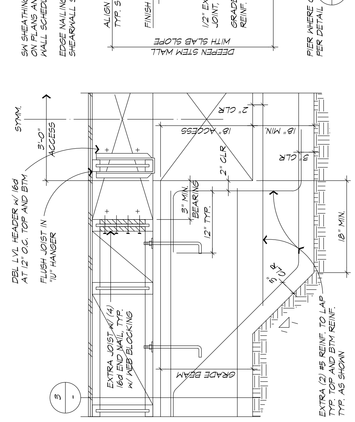
5 JOIST TO GRADE BM

HIGH ADJACENT SLAB

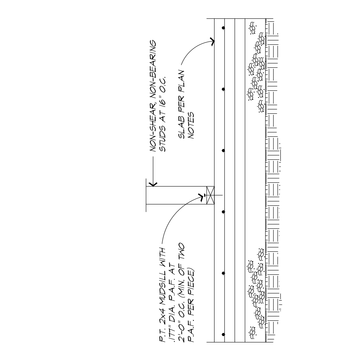


6 JOIST TO GRADE BM

AT BYPASS SLIDING DOOR



7 GIRDER TO GRADE BEAM



8 GRADE BEAM ACCESS

9 WALL TO GRADE BM

AT GARAGE

10 PERIMETER FOOTING

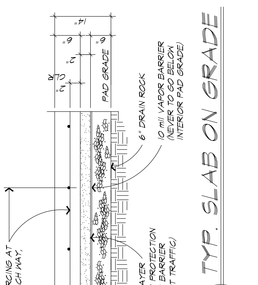
AT GARAGE OPENING

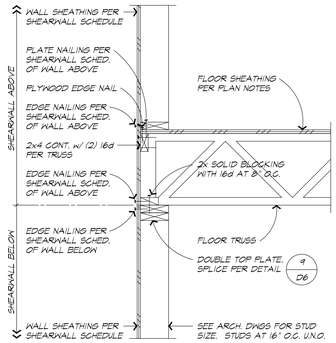
11 EDGE FOOTING

12 INTERIOR FOOTING

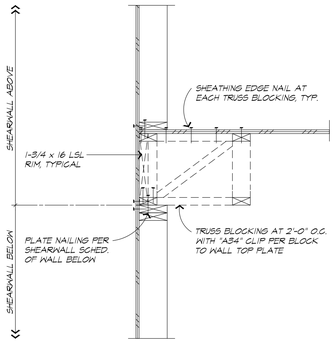
13 NON-BEARING WALL

B TYP. SLAB ON GRADE

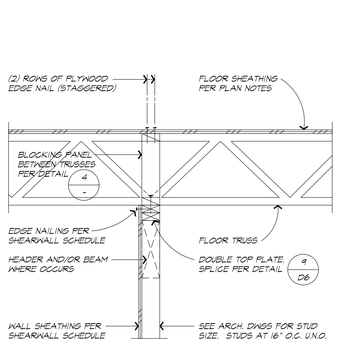




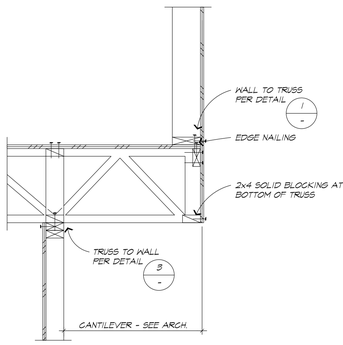
1 TRUSS TO WALL
TRUSS PERPENDICULAR



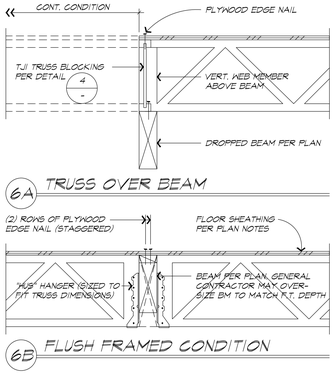
2 TRUSS TO WALL
TRUSS PARALLEL



3 TRUSS TO WALL
TRUSS PERPENDICULAR



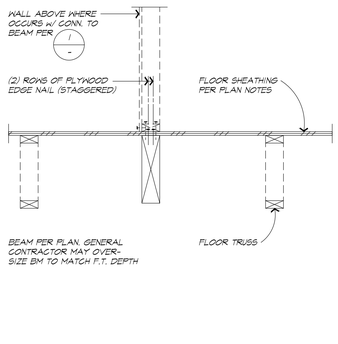
5 CANTILEVERED TRUSS



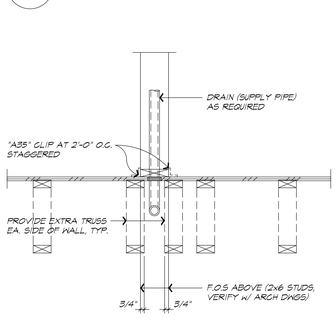
6A TRUSS OVER BEAM

6B FLUSH FRAMED CONDITION

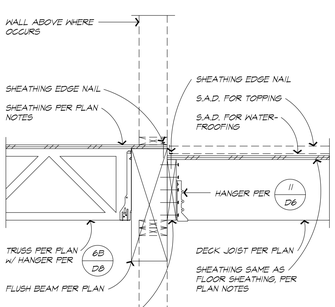
6 TRUSS TO BEAM



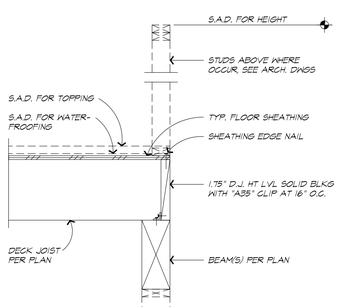
7 WALL TO BEAM



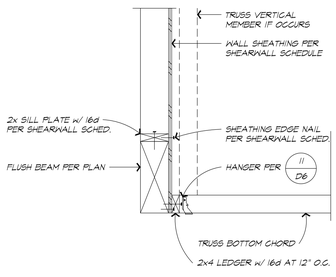
11 INT. PLUMBING WALL



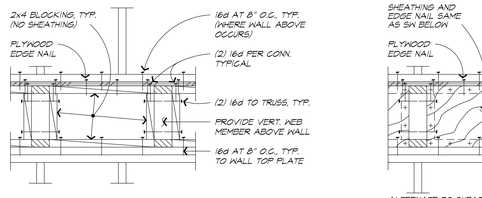
12 DECK JOIST TO RIM



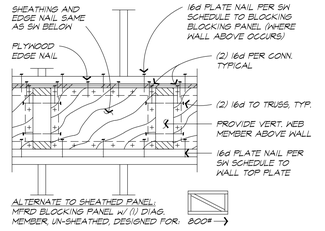
13 DECK JOIST TO RIM



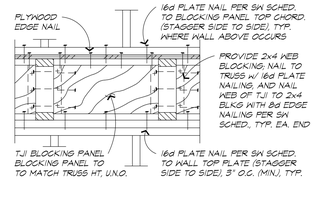
17 ROOF TRUSS TO BEAM



A INT. BEARING, NON-SW COND.
PANEL TO BE MADE OF 2x4 MEMBERS

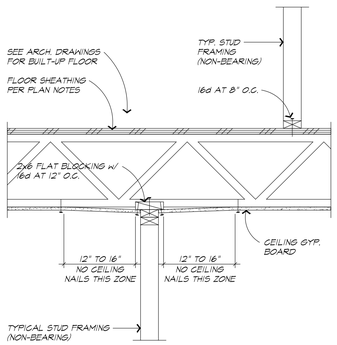


B INT. SHEARWALL COND.
PANEL TO BE MADE OF 2x4 MEMBERS

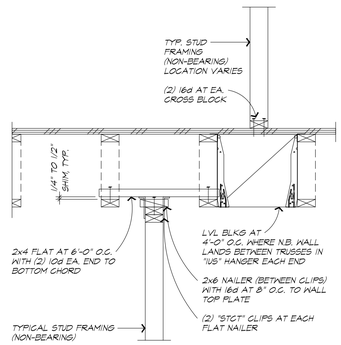


C PLYWOOD-WEB BLOCKING PANEL

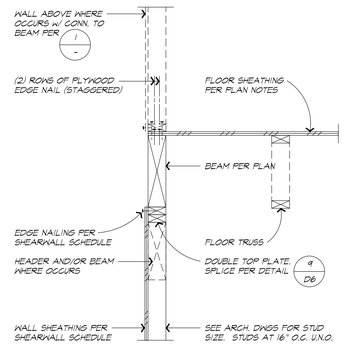
4 TYP. BLOCKING PANEL



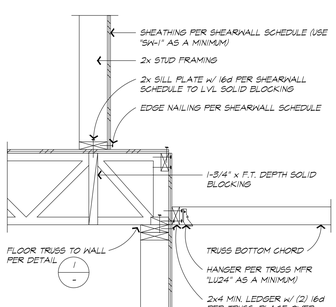
8 NON-BEARING WALLS
TRUSS PERPENDICULAR



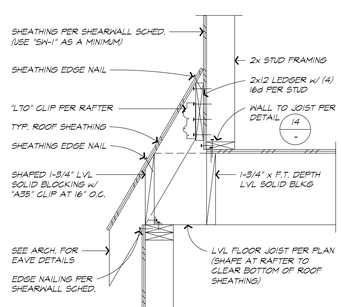
9 NON-BEARING WALLS
TRUSS PARALLEL



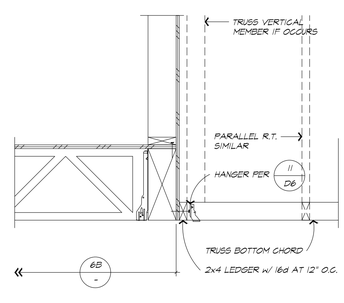
10 BEAM ABV SHEARWALL
NO WALL BELOW SIMILAR



14 TRUSSES TO WALL
AT RECESSED WALL ABOVE



15 RAFTER TO JOIST
AT RECESSED WALL ABOVE



16 ROOF TRUSS TO BEAM

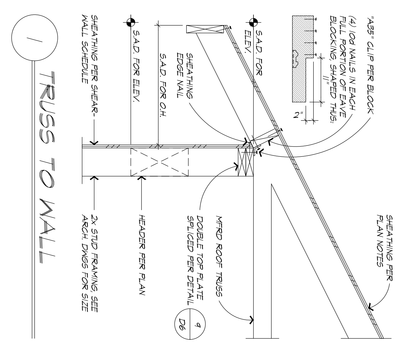
CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING - CIVIL ENGINEERING
RESIDENTIAL & COMMERCIAL - GEOTECHNICAL SERVICES
25-A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672-8828
FAX (925) 889-4465

BY	DATE	ISSUE/REVISIONS

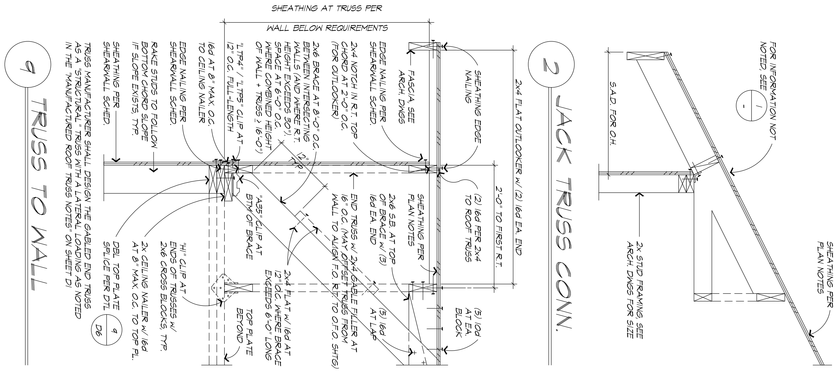
Pena Residence
9255 Byron Hwy.
Brentwood, California

SHEET: D8 OF SHEETS
SHEET TITLE: Structural Details
DATE: August 16, 2025
SCALE: 1" = 1'-0"
DRAWN: M. Manning
CHECKED: B. Manning
JOB: 2024-65

1 TRUSS TO WALL

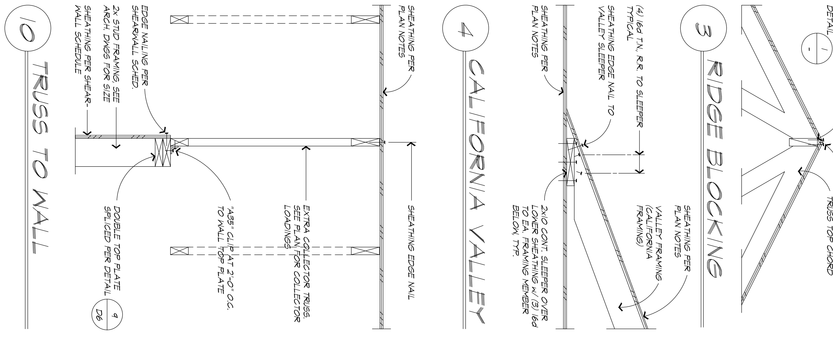


2 JACK TRUSS CONN.



3 RIDGE BLOCKING

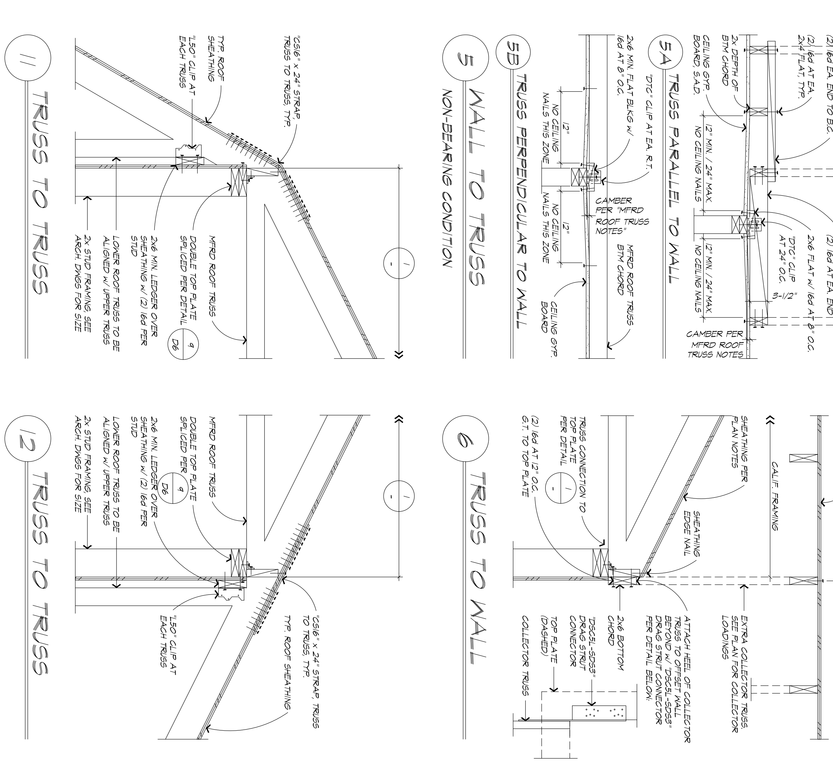
4 CALIFORNIA VALLEY



5 WALL TO TRUSS

NON-BEARING CONDITION

6 TRUSS TO WALL

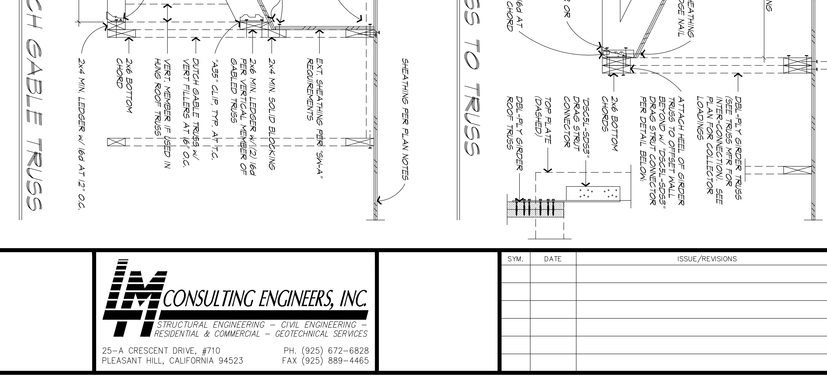


7 TRUSS TO TRUSS

8 CONN. AT SET-BACK TRUSS

9 TRUSS TO WALL

10 TRUSS TO WALL

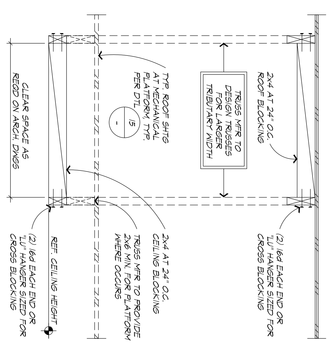


11 TRUSS TO TRUSS

12 TRUSS TO TRUSS

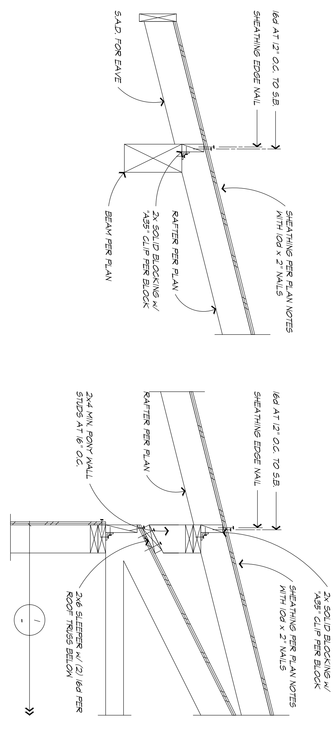
13 DUTCH GABLE TRUSS

14 ROOF TRUSSES AT SIDE TRUSS SPACE (ACCESSES)

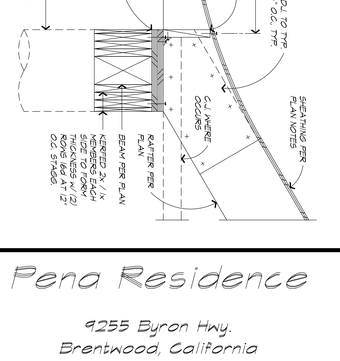


15 MECH. PLATFORM

FOR ATTIC-MOUNTED HVAC UNITS



16 OFFSET ROOF LINES

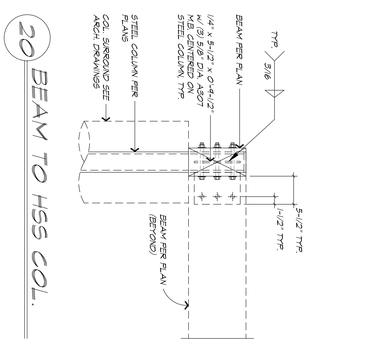


17 RAFTER TO BEAM

18 RAFTER TO WALL

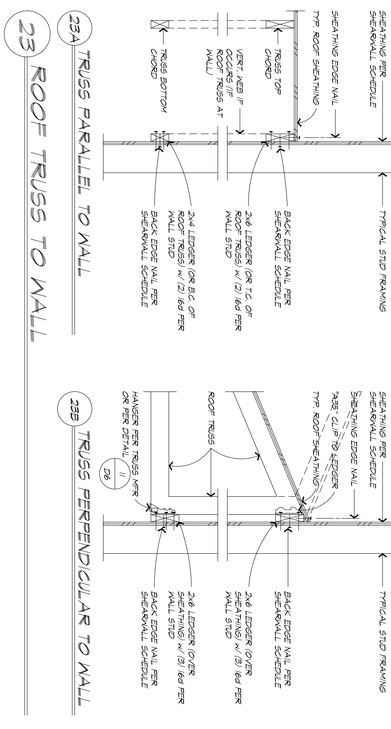
19 RAFTER AT CURVE

20 BEAM TO HSS COL.

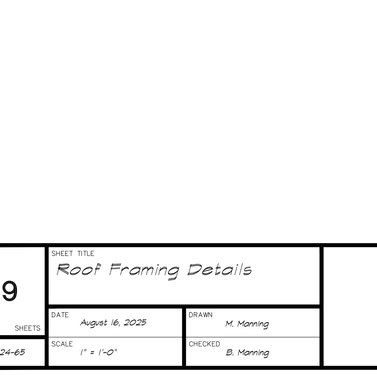


21 RAFTER TO WALL

RAKE CONDITION



22 RAFTER TO WALL



23 ROOF TRUSS TO WALL

23A TRUSS PARALLEL TO WALL

23B TRUSS PERPENDICULAR TO WALL

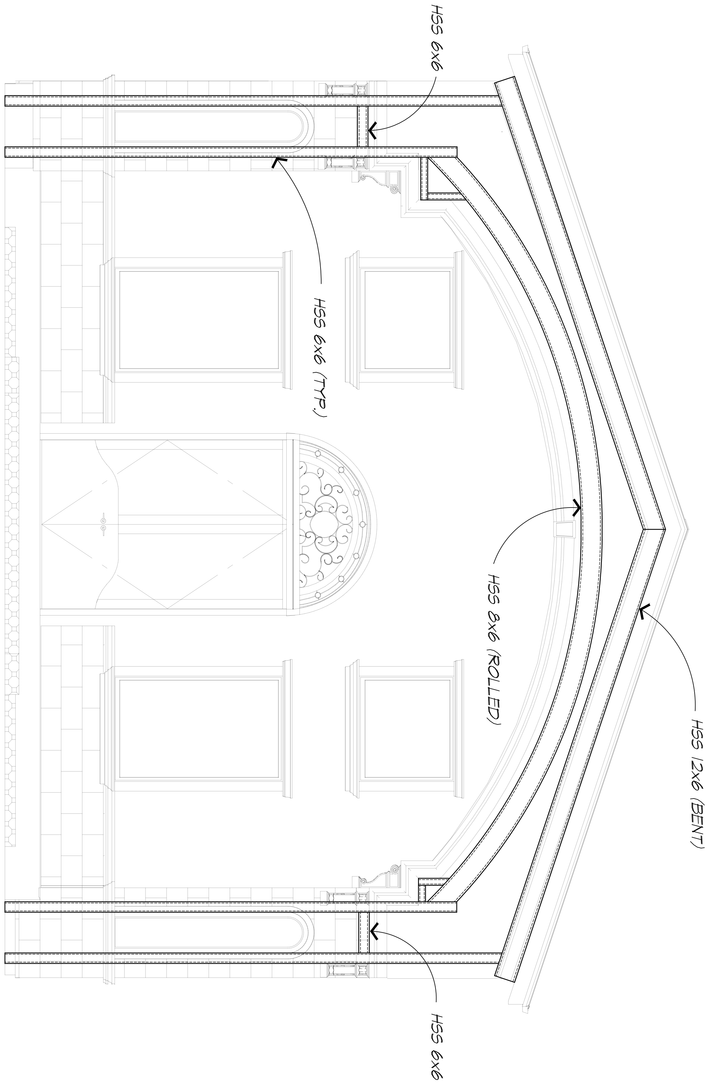
SHEET D9	SHEET TITLE: Roof Framing Details		
OF SHEETS	DATE: August 16, 2025	DRAWN: M. Manning	
JOB 2024-65	SCALE: 1" = 1'-0"	CHECKED: B. Manning	

Pena Residence

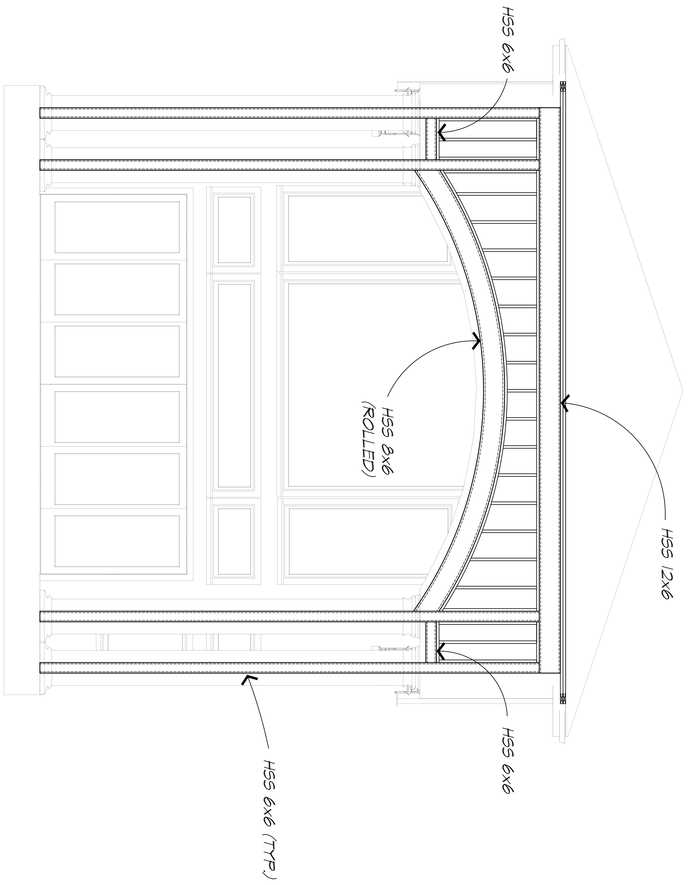
9255 Byron Hwy.
Brentwood, California

CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING – CIVIL ENGINEERING –
RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
25-A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672-6828
FAX (925) 889-4465

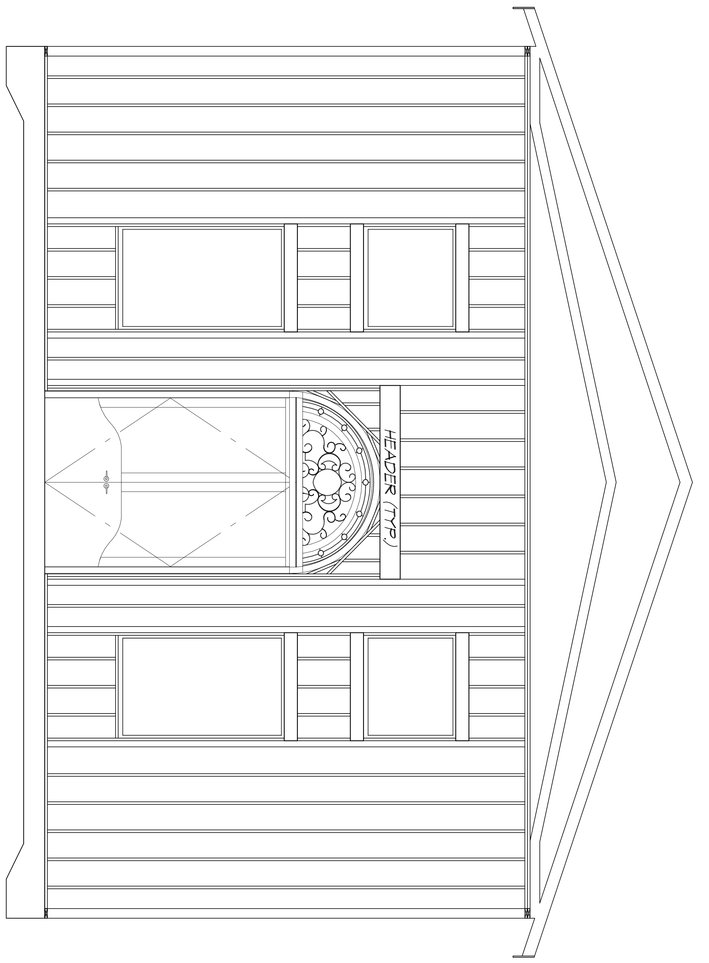
SYM.	DATE	ISSUE/REVISIONS	BY



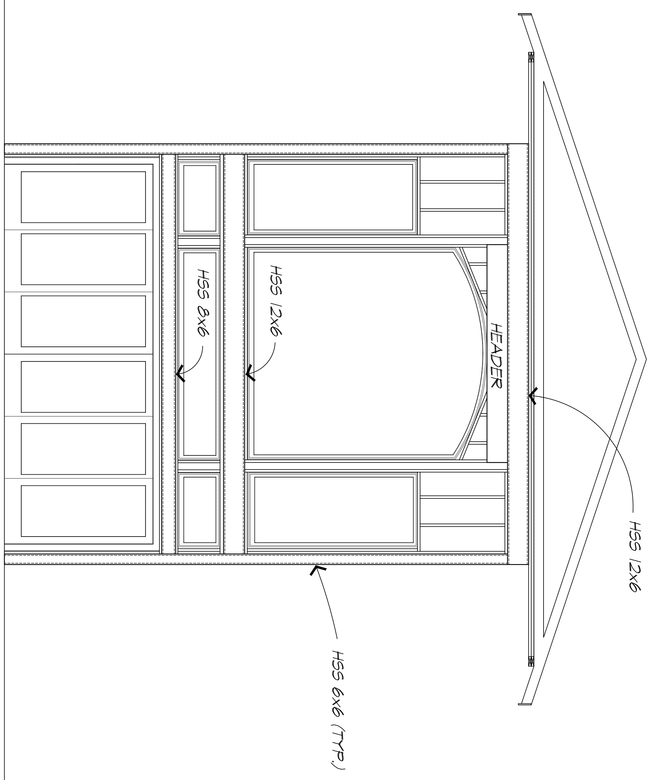
1A FRONT ELEVATION STEEL



2A REAR ELEVATION STEEL



1B FRONT ELEVATION STEEL



2B REAR ELEVATION STEEL

SHEET D10 OF SHEETS	SHEET TITLE: Strongwall Details		
JOB 2024-65	DATE: August 16, 2025	DRAWN: L. Manning	
	SCALE: No Scale	CHECKED: B. Manning	

Pena Residence
Custom Home
9255 Byron Highway, Brentwood, California

CONSULTING ENGINEERS, INC.
STRUCTURAL ENGINEERING – CIVIL ENGINEERING –
RESIDENTIAL & COMMERCIAL – GEOTECHNICAL SERVICES
25-A CRESCENT DRIVE, #710
PLEASANT HILL, CALIFORNIA 94523
PH. (925) 672-6828
FAX (925) 889-4465

SYM.	DATE	ISSUE/REVISIONS	BY

GENERAL INFORMATION

01	**Project Name**	Pena Home 9255 Byron Hwy			
02	**Run Title**	Title 24 Analysis			
03	**Project Location**	9255 Byron Hwy			
04	**City**	Brentwood	05	**Standards Version**	2022
06	**Zip code**	94513	07	**Software Version**	EnergyPro 9.4
08	**Climate Zone**	12	09	**Front Orientation (deg/ Cardinal)**	275
10	**Building Type**	Single family	11	**Number of Dwelling Units**	1
12	**Project Scope**	Newly Constructed	13	**Number of Bedrooms**	9
14	**Addition Cond. Floor Area (ft^2)**	0	15	**Number of Stories**	2
16	**Existing Cond. Floor Area (ft^2)**	n/a	17	**Fenestration Average U-factor**	0.29
18	**Total Cond. Floor Area (ft^2)**	18146	19	**Glazing Percentage (%)**	15.59%
20	**ADU Bedroom Count**	n/a	21	**ADU Conditioned Floor Area**	n/a
22	**Fuel Type**	Propane	23	**No Dwelling Unit:**	No

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 DESIGN RATINGS

	Energy Design Ratings			Compliance Margins		
	Source Energy (EDR1)	Efficiency[1] EDR (EDR2efficiency)	Total[2] EDR (EDR2total)	Source Energy (EDR1)	Efficiency[1] EDR (EDR2efficiency)	Total[2] EDR (EDR2total)
Standard Design	44.8	49.1	36.4			
Proposed Design	40.5	45.4	33.6	4.3	3.7	2.8

RESULT[3]: PASS

[1]Efficiency EDR includes improvements like a better building envelope and more efficient equipment
[2]Total EDR includes efficiency and demand response measures such as photovoltaic (PV) system and batteries
[3]Building complies when source energy, efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded

- Standard Design PV Capacity: 9.02 kWdc
- PV System resized to 9.02 kWdc (a factor of 9.019) to achieve 'Standard Design PV' PV scaling

ENERGY USE SUMMARY

Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft^2 -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft^2 -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft^2 -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft^2 -yr)	Margin (EDR1)	Margin (EDR2)
Space Heating	10.02	67.4	7.93	53.36	2.09	14.04
Space Cooling	0.4	16.96	0.44	18.42	-0.04	-1.46
IAQ Ventilation	0.38	4.12	0.58	6.17	-0.2	-2.05
Water Heating	0.21	2.28	0.91	5.96	-0.7	-3.68
Self Utilization/Flexibility Credit			0	0	0	0
Efficiency Compliance Total	**11.01**	**90.76**	**9.86**	**83.91**	**1.15**	**6.85**
Photovoltaics	-0.41	-13.55	-0.41	-13.56		
Battery			0	0		
Flexibility			0			
Indoor Lighting	0.15	1.5	0.15	1.5		
Appl. & Cooking	0.52	4.33	0.52	4.37		
Plug Loads	0.61	6.33	0.61	6.33		
Outdoor Lighting	0.04	0.38	0.04	0.38		
TOTAL COMPLIANCE	**11.92**	**89.75**	**10.77**	**82.93**		

ENERGY USE INTENSITY

	Standard Design (kBtu/ft^2 - yr)	Proposed Design (kBtu/ft^2 - yr)	Margin (kBtu/ft^2 - yr)	Margin Percentage
Gross EUI[1]	12.97	11.84	1.13	8.71
Net EUI[2]	10.31	9.19	1.12	10.86

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 PV SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
DC System Size (kWdc)	**Exception**	**Module Type**	**Array Type**	**Power Electronics**	**CFI**	**Azimuth (deg)**	**Tilt Input**	**Array Angle (deg)**	**Tilt: (x in 12)**	**Inverter Eff. (%)**	**Annual Solar Access (%)**
9.02	NA	Standard (14-17%)	Fixed	none	true	150-270	n/a	n/a	<=7:12	96	98

REQUIRED SPECIAL FEATURES

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

- Indoor air quality, balanced fan
- IAQ Ventilation System: as low as 0.570213 W/CFM
- IAQ Ventilation System Heat Recovery: minimum 79 SRE and 80 ASRE
- IAQ Ventilation System: supply outside air inlet, filter, and H/ERV cores accessible per RACM Reference Manual
- Insulation below roof deck
- Recirculating with demand control, push button

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

- Quality insulation installation (QII)
- Indoor air quality ventilation
- Kitchen range hood
- Minimum Airflow
- Verified EER/EER2
- Verified SEER/SEER2
- Verified Refrigerant Charge
- Fan Efficacy Watts/CFM
- Duct leakage testing

BUILDING - FEATURES INFORMATION

01	02	03	04	05	06	07
Project Name	**Conditioned Floor Area (ft^2)**	**Number of Dwelling Units**	**Number of Bedrooms**	**Number of Zones**	**Number of Ventilation Cooling Systems**	**Number of Water Heating Systems**
Pena Home 9255 Byron Hwy	18146	1	9	2	0	1

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	**Zone Type**	**HVAC System Name**	**Zone Floor Area (ft^2)**	**Avg. Ceiling Height**	**Water Heating System 1**	**Status**
1st Floor	Conditioned	1st Floor HVAC1	14685	12	DHW Sys 1	New
2nd Floor	Conditioned	2nd Floor HVAC2	3461	10	DHW Sys 1	New

OPAQUE SURFACES

01	02	03	04	05	06	07	08
Name	**Zone**	**Construction**	**Azimuth**	**Orientation**	**Gross Area (ft^2)**	**Window and Door Area (ft2)**	**Tilt (deg)**
Front Wall	1st Floor	R-21 Wall	275	Front	2631	549.61	90
320 Wall	1st Floor	R-21 Wall	320	n/a	120	45	90
230 Wall	1st Floor	R-21 Wall	230	n/a	120	42.5	90

OPAQUE SURFACES

01	02	03	04	05	06	07	08
Name	**Zone**	**Construction**	**Azimuth**	**Orientation**	**Gross Area (ft^2)**	**Window and Door Area (ft2)**	**Tilt (deg)**
Back Wall	1st Floor	R-21 Wall	95	Back	2447	494.78	90
50 Wall	1st Floor	R-21 Wall	50	n/a	240	70.43	90
140 Wall	1st Floor	R-21 Wall	140	n/a	127	30	90
Right Wall	1st Floor	R-21 Wall	185	Right	2461	498.25	90
Left Wall	1st Floor	R-21 Wall	5	Left	2696	394.4	90
Front Wall 2	2nd Floor	R-21 Wall	275	Front	718	207	90
320 Wall 2	2nd Floor	R-21 Wall	320	n/a	120	51	90
230 Wall 2	2nd Floor	R-21 Wall	230	n/a	120	51	90
Back Wall 2	2nd Floor	R-21 Wall	95	Back	1093	178.3	90
50 Wall 2	2nd Floor	R-21 Wall	50	n/a	240	25.5	90
140 Wall 2	2nd Floor	R-21 Wall	140	n/a	127	25.5	90
Right Wall 2	2nd Floor	R-21 Wall	185	Right	844	24.5	90
Left Wall 2	2nd Floor	R-21 Wall	5	Left	846	141.5	90
Walls to Garage	1st Floor>>__Garage__	Interior Wall to Garage	n/a	n/a	1697	41.4	n/a
Knee Wall	1st Floor>>Attic 1st Floor	Knee Walls	n/a	n/a	77	0	n/a
Attic	1st Floor	R-38 HP Attic	n/a	n/a	14685	n/a	n/a
Attic 2	2nd Floor	R-38 HP Attic	n/a	n/a	3461	n/a	n/a
GarageRoof	__Garage__	GarageAttic	n/a	n/a	1891	n/a	n/a
Raised Floor	1st Floor	R-19 Floor Crawlspace	n/a	n/a	14685	n/a	n/a
Floor o 1st	2nd Floor	Interior Floor	n/a	n/a	3461	n/a	n/a
Garage Front	__Garage__	Garage Ext Wall	275	Front	1074	504	90
Garage Back	__Garage__	Garage Ext Wall	95	Back	834	44	90
Garage Right	__Garage__	Garage Ext Wall	185	Right	350	0	90
Garage Left	__Garage__	Garage Ext Wall	5	Left	295	0	90

compucalc@title24energyreports.com
title24energyreports.com
(530) 268-8722

CompuCalc Title 24 Compliance

Elizabeth Smithwick
Certified Energy Analyst

2022 Title 24 Part 6 Energy Code

Sheet: T24-1

ATTIC

01	02	03	04	05	06	07	08
Name	Construction	Type	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Radiant Barrier	Cool Roof
Attic __Garage__	Attic Garage Roof Cons	Ventilated	4	0.1	0.85	No	No
Attic 1st Floor	Attic Roof1st Floor	Ventilated	4	0.1	0.85	No	No
Attic 2nd Floor	Attic Roof2nd 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 (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
F1 W4	Window	Front Wall	Front	275			1	6.75	0.29	NFRC	0.22	NFRC	Bug Screen
F2 W24/W20	Window	Front Wall	Front	275			1	22.5	0.29	NFRC	0.22	NFRC	Bug Screen
F3 (2) W41/W37	Window	Front Wall	Front	275			1	75	0.29	NFRC	0.22	NFRC	Bug Screen
F4 W42	Window	Front Wall	Front	275			1	40	0.29	NFRC	0.22	NFRC	Bug Screen
F5 D58/D59	Window	Front Wall	Front	275			1	125.36	0.29	NFRC	0.22	NFRC	Bug Screen
F6 W42	Window	Front Wall	Front	275			1	40	0.29	NFRC	0.22	NFRC	Bug Screen
F7 (2) W41/W37	Window	Front Wall	Front	275			1	75	0.29	NFRC	0.22	NFRC	Bug Screen
F8 W24/W20	Window	Front Wall	Front	275			1	22.5	0.29	NFRC	0.22	NFRC	Bug Screen
F9 D56	Window	Front Wall	Front	275			1	48	0.29	NFRC	0.22	NFRC	Bug Screen
F10 W18/W36/W18	Window	Front Wall	Front	275			1	49.5	0.29	NFRC	0.22	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 (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
F11 W40 Abv	Window	Front Wall	Front	275			1	22.5	0.29	NFRC	0.22	NFRC	Bug Screen
F12 W40 Abv	Window	Front Wall	Front	275			1	22.5	0.29	NFRC	0.22	NFRC	Bug Screen
320-1 W24/W20	Window	320 Wall		320			1	22.5	0.29	NFRC	0.22	NFRC	Bug Screen
320-2 W24/W20	Window	320 Wall		320			1	22.5	0.29	NFRC	0.22	NFRC	Bug Screen
230-1 D36/W20	Window	230 Wall		230			1	26	0.29	NFRC	0.22	NFRC	Bug Screen
230-2 W28/W20	Window	230 Wall		230			1	16.5	0.29	NFRC	0.22	NFRC	Bug Screen
B1 W15/D41/W15	Window	Back Wall	Back	95			1	49	0.29	NFRC	0.22	NFRC	Bug Screen
B2 W31/W45/W31	Window	Back Wall	Back	95			1	67.38	0.29	NFRC	0.22	NFRC	Bug Screen
B3 (3) W37/W39	Window	Back Wall	Back	95			1	90	0.29	NFRC	0.22	NFRC	Bug Screen
B4 W27	Window	Back Wall	Back	95			1	7	0.29	NFRC	0.22	NFRC	Bug Screen
B5 D4/W2	Window	Back Wall	Back	95			1	146	0.29	NFRC	0.22	NFRC	Bug Screen
B6 W27	Window	Back Wall	Back	95			1	7	0.29	NFRC	0.22	NFRC	Bug Screen
B7 (2) W27/W29	Window	Back Wall	Back	95			1	49	0.29	NFRC	0.22	NFRC	Bug Screen
B8 W19	Window	Back Wall	Back	95			1	10.7	0.29	NFRC	0.22	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 (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
B9 W19	Window	Back Wall	Back	95			1	10.7	0.29	NFRC	0.22	NFRC	Bug Screen
B10 W39	Window	Back Wall	Back	95			1	20	0.29	NFRC	0.22	NFRC	Bug Screen
B11 D35	Window	Back Wall	Back	95			1	20	0.29	NFRC	0.22	NFRC	Bug Screen
B12 W8	Window	Back Wall	Back	95			1	8	0.29	NFRC	0.22	NFRC	Bug Screen
B13 W12	Window	Back Wall	Back	95			1	10	0.29	NFRC	0.22	NFRC	Bug Screen
50-1 W20/W24	Window	50 Wall		50			1	22.5	0.29	NFRC	0.22	NFRC	Bug Screen
50-2 W11/W12	Window	50 Wall		50			1	13.75	0.29	NFRC	0.22	NFRC	Bug Screen
50-3 D21/W11	Window	50 Wall		50			1	20.43	0.29	NFRC	0.22	NFRC	Bug Screen
50-4 W11/W12	Window	50 Wall		50			1	13.75	0.29	NFRC	0.22	NFRC	Bug Screen
140-1 D43/W20	Window	140 Wall		140			1	30	0.29	NFRC	0.22	NFRC	Bug Screen
R1 W28	Window	Right Wall	Right	185			1	6.75	0.29	NFRC	0.22	NFRC	Bug Screen
R2 W18/W36/W18	Window	Right Wall	Right	185			1	49.5	0.29	NFRC	0.22	NFRC	Bug Screen
R3 W46	Window	Right Wall	Right	185			1	40	0.29	NFRC	0.22	NFRC	Bug Screen
R4 W21/D2/W21	Window	Right Wall	Right	185			1	126	0.29	NFRC	0.22	NFRC	Bug Screen
R5 W47	Window	Right Wall	Right	185			1	44	0.29	NFRC	0.22	NFRC	Bug Screen
R6 W34/D42/W34	Window	Right Wall	Right	185			1	64	0.29	NFRC	0.22	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 (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
R7 W34/D44/W34/W34/W34/D4	Window	Right Wall	Right	185			1	148	0.29	NFRC	0.22	NFRC	Bug Screen
R8 (2) W9	Window	Right Wall	Right	185			1	20	0.29	NFRC	0.22	NFRC	Bug Screen
L1 D33	Window	Left Wall	Left	5			1	21.4	0.29	NFRC	0.22	NFRC	Bug Screen
L2 W14/D55/W14	Window	Left Wall	Left	5			1	70.5	0.29	NFRC	0.22	NFRC	Bug Screen
L3 W38	Window	Left Wall	Left	5			1	10	0.29	NFRC	0.22	NFRC	Bug Screen
L4 W14/D55/W14	Window	Left Wall	Left	5			1	70.5	0.29	NFRC	0.22	NFRC	Bug Screen
L5 (2) W5	Window	Left Wall	Left	5			1	8	0.29	NFRC	0.22	NFRC	Bug Screen
L6 (2) W11/W15	Window	Left Wall	Left	5			1	32.5	0.29	NFRC	0.22	NFRC	Bug Screen
L7 W26/W29/D3/W26/W29	Window	Left Wall	Left	5			1	147.5	0.29	NFRC	0.22	NFRC	Bug Screen
L8 W3/W33/W3	Window	Left Wall	Left	5			1	34	0.29	NFRC	0.22	NFRC	Bug Screen
F1 W25	Window	Front Wall 2	Front	275			1	25.5	0.29	NFRC	0.22	NFRC	Bug Screen
F2 W22/D57/W22	Window	Front Wall 2	Front	275			1	78	0.29	NFRC	0.22	NFRC	Bug Screen
F3 W22/D57/W22	Window	Front Wall 2	Front	275			1	78	0.29	NFRC	0.22	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 (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
F4 W25	Window	Front Wall 2	Front	275			1	25.5	0.29	NFRC	0.22	NFRC	Bug Screen
320-1 W25	Window	320 Wall 2		320			1	25.5	0.29	NFRC	0.22	NFRC	Bug Screen
320-2 W25	Window	320 Wall 2		320			1	25.5	0.29	NFRC	0.22	NFRC	Bug Screen
230-1 W25	Window	230 Wall 2		230			1	25.5	0.29	NFRC	0.22	NFRC	Bug Screen
230-2 W25	Window	230 Wall 2		230			1	25.5	0.29	NFRC	0.22	NFRC	Bug Screen
B1 W7	Window	Back Wall 2	Back	95			1	5	0.29	NFRC	0.22	NFRC	Bug Screen
B2 W6	Window	Back Wall 2	Back	95			1	4	0.29	NFRC	0.22	NFRC	Bug Screen
B3 W30/W1/W30	Window	Back Wall 2	Back	95			1	169.3	0.29	NFRC	0.22	NFRC	Bug Screen
50-1 W25	Window	50 Wall 2		50			1	25.5	0.29	NFRC	0.22	NFRC	Bug Screen
140-1 W25	Window	140 Wall 2		140			1	25.5	0.29	NFRC	0.22	NFRC	Bug Screen
R1 W16	Window	Right Wall 2	Right	185			1	12.5	0.29	NFRC	0.22	NFRC	Bug Screen
R2 W32	Window	Right Wall 2	Right	185			1	12	0.29	NFRC	0.22	NFRC	Bug Screen
L1 W17	Window	Left Wall 2	Left	5			1	12.5	0.29	NFRC	0.22	NFRC	Bug Screen
L2 (2) W13	Window	Left Wall 2	Left	5			1	20	0.29	NFRC	0.22	NFRC	Bug Screen
L3 W23/D46	Window	Left Wall 2	Left	5			1	39	0.29	NFRC	0.22	NFRC	Bug Screen
L4 W17/W35/W17	Window	Left Wall 2	Left	5			1	65	0.29	NFRC	0.22	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 (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
L5 W7	Window	Left Wall 2	Left	5			1	5	0.29	NFRC	0.22	NFRC	Bug Screen

OPAQUE DOORS

01	02	03	04
Name	Side of Building	Area (ft^2)	U-factor
Door 30	Walls to Garage	21.4	0.2
Door 38	Walls to Garage	20	0.2
(3) D1	Garage Front	240	1
Door 40	Garage Front	24	0.5
(3) D1 2	Garage Front	240	1
Door 39	Garage Back	24	0.5
Door 35	Garage Back	20	0.5

SLAB FLOORS

01	02	03	04	05	06	07	08
Name	Zone	Area (ft^2)	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted Fraction	Heated
GarageSlab	__Garage__	1891	213	none	0	0%	No

compucalc@title24energyreports.com
title24energyreports.com
(530) 268-8722

CompuCalc Title 24 Compliance

Elizabeth Smithwick
Certified Energy Analyst

2022 Title 24 Part 6 Energy Code

Sheet: T24-2

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
Garage Ext Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-0	None / None	0.357	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4 Exterior Finish: All Other Siding
R-21 Wall	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.068	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Exterior Finish: All Other Siding
Interior Wall to Garage	Interior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.064	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Other Side Finish: Gypsum Board
Knee Walls	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-13	None / None	0.092	Inside Finish: Gypsum Board Cavity / Frame: R-13 / 2x4 Other Side Finish: Gypsum Board
Attic Garage Roof Cons	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
Attic Roof1st Floor	Attic Roofs	Wood Framed Ceiling	2x6 @ 24 in. O. C.	R-19	None / 0	0.052	Roofing: 10 PSF (RoofTileAirGap) Tile Gap: present Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2x6
Attic Roof2nd Floor	Attic Roofs	Wood Framed Ceiling	2x6 @ 24 in. O. C.	R-19	None / 0	0.052	Roofing: 10 PSF (RoofTileAirGap) Tile Gap: present Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2x6

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-19 Floor Crawlspace	Floors Over Crawlspace	Wood Framed Floor	2x10 @ 16 in. O. C.	R-19	None / None	0.046	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2x10
GarageAttic	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / None	0.481	Cavity / Frame: no insul. / 2x4 Inside Finish: Gypsum Board
R-38 HP Attic	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-38	None / None	0.025	Over Ceiling Joists: R-28.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board
Interior Floor	Interior Floors	Wood Framed Floor	2x12 @ 16 in. O. C.	R-0	None / None	0.196	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x12 Ceiling Below 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
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)	Demand Recirculation Manual Control	DHW Heater 1	3	n/a	None	n/a	DHW Heater 1 (3)

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	Propane	Consumer Instantaneous	3	0	UEF	0.96	Btu/Hr	200000	0	n/a	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 - 1/3	Not Required	Not Required	Not Required	None	Not Required	Not Required

SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06	07	08
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name
1st Floor HVAC1	Heating and cooling system other	Heating Component 1	2	Cooling Component 1	2	HVAC Fan 1	Air Distribution System 1
2nd Floor HVAC2	Heating and cooling system other	Heating Component 2	1	Cooling Component 2	1	HVAC Fan 2	Air Distribution System 2

HVAC - HEATING UNIT TYPES

01	02	03	04	05
Name	System Type	Number of Units	Heating Efficiency	Heating Unit Brand
Heating Component 1	Central gas furnace	2	AFUE - 94	n/a

HVAC - HEATING UNIT TYPES

01	02	03	04	05
Name	System Type	Number of Units	Heating Efficiency	Heating Unit Brand
Heating Component 2	Central gas furnace	1	AFUE - 94	n/a

HVAC - COOLING UNIT TYPES

01	02	03	04	05	06	07	08	09
Name	System Type	Number of Units	Efficiency Metric	Efficiency EER/EER2/CEER	Efficiency SEER/SEER2	Zonally Controlled	Mulit-speed Compressor	HERS Verification
Cooling Component 1	Central split AC	2	EER2/SEER2	12	15.5	Not Zonal	Single Speed	Cooling Component 1-hers-cool
Cooling Component 2	Central split AC	1	EER2/SEER2	12	15.5	Not Zonal	Single Speed	Cooling Component 2-hers-cool

HVAC COOLING - HERS VERIFICATION

01	02	03	04	05	06
Name	Verified Airflow	Airflow Target	Verified EER/EER2	Verified SEERSEER2	Verified Refrigerant Charge
Cooling Component 1-hers-cool	Required	350	Required	Required	Required
Cooling Component 2-hers-cool	Required	350	Required	Required	Required

HVAC - DISTRIBUTION SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
Name	Type	Design Type	Duct Ins. R-value		Duct Location		Surface Area		Bypass Duct	Duct Leakage	HERS Verification
			Supply	Return	Supply	Return	Supply	Return			
Air Distribution System 1	Unconditioned attic	Non-Verified	R-8	R-8	Attic	Attic	n/a	n/a	No Bypass Duct	Sealed and Tested	Air Distribution System 1-hers-dist

HVAC - DISTRIBUTION SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
Name	Type	Design Type	Duct Ins. R-value		Duct Location		Surface Area		Bypass Duct	Duct Leakage	HERS Verification
			Supply	Return	Supply	Return	Supply	Return			
Air Distribution System 2	Unconditioned attic	Non-Verified	R-8	R-8	Attic	Attic	n/a	n/a	No Bypass Duct	Sealed and Tested	Air Distribution System 2-hers-dist

HVAC DISTRIBUTION - HERS VERIFICATION

01	02	03	04	05	06	07	08	09
Name	Duct Leakage Verification	Duct Leakage Target (%)	Verified Duct Location	Verified Duct Design	Buried Ducts	Deeply Buried Ducts	Low-leakage Air Handler	Low Leakage Ducts Entirely in Conditioned Space
Air Distribution System 1-hers-dist	Yes	5.0	Not Required	Not Required	Not Required	Credit not taken	Not Required	No
Air Distribution System 2-hers-dist	Yes	5.0	Not Required	Not Required	Not Required	Credit not taken	Not Required	No

HVAC - FAN SYSTEMS

01	02	03	04
Name	Type	Fan Power (Watts/CFM)	Name
HVAC Fan 1	HVAC Fan	0.45	HVAC Fan 1-hers-fan
HVAC Fan 2	HVAC Fan	0.45	HVAC Fan 2-hers-fan

HVAC FAN SYSTEMS - HERS VERIFICATION

01	02	03
Name	Verified Fan Watt Draw	Required Fan Efficacy (Watts/CFM)
HVAC Fan 1-hers-fan	Required	0.45
HVAC Fan 2-hers-fan	Required	0.45

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/ASRE	Includes Fault Indicator Display?	HERS Verification	Status
SFam IAQVentRpt 1-1	305	0.970492	Balanced	Yes	79 / 80	No	Yes	
SFam IAQVentRpt 2-1	235	0.570213	Balanced	Yes	73 / 73	No	Yes	

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Jeff Travis	Documentation Author Signature: Jeff Travis
Company: CompuCalc	Signature Date: 06/27/2025
Address: 5201 Coventry Dr	CEA/ HERS Certification Identification (If applicable): R22-22-40100
City/State/Zip: Riverside, CA 92506	Phone: 530-268-8722

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: Gil Dominguez	Responsible Designer Signature: Gil Dominguez
Company: Dominguez Design Associates, L.L.C.	Date Signed: 06/28/2025
Address: 321 Village Dr.	License:
City/State/Zip: Brentwood, CA 94513	Phone: 9253826938

Digitally signed by California Home Energy Efficiency Rating Services (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.

compucalc@title24energyreports.com
title24energyreports.com
(530) 268-8722

CompuCalc Title 24 Compliance

Elizabeth Smithwick
Certified Energy Analyst

2022 Title 24 Part 6
Energy Code

Sheet:
T24-3

From Section 150.0(o) G. Local mechanical exhaust

Local mechanical exhaust. A local mechanical exhaust system shall be installed in each kitchen and bathroom. Systems shall be rated for airflow in accordance with ASHRAE 62.2 Section 7.1.

i. Nonenclosed kitchens shall have a demand-controlled mechanical exhaust system meeting the requirements of Section 150.0(o)1Giii.

ii. Enclosed kitchens and all bathrooms shall have either one of the following alternatives a or b:
   a. A demand-controlled mechanical exhaust system meeting the requirements of Section 150.0(o)1Giii.
   b. A continuous mechanical exhaust system meeting the requirements of Section 150.0(o)1Giv.

iii. Demand-controlled mechanical exhaust. A local mechanical exhaust system shall be designed to be operated as needed.
   a. Control and operation. Demand-controlled mechanical exhaust systems shall be provided with at least one of the following controls:
      1. A readily accessible occupant-controlled ON-OFF control.
      2. An automatic control that does not impede occupant ON control.
   b. Ventilation rate and capture efficiency. The system shall meet or exceed either the minimum airflow in accordance with Table 150.0-E or the minimum capture efficiency in accordance with Table 150.0-E, and Table 150.0-G. Capture efficiency ratings shall be determined in accordance with ASTM E3087 and listed in a product directory approved by the Energy Commission.

iv. Continuous mechanical exhaust. A mechanical exhaust system shall be installed to operate continuously. The system may be part of a balanced mechanical ventilation system.
   a. Control and operation. A manual ON-OFF control shall be provided for each continuous mechanical exhaust system. The system shall be designed to operate during all occupiable hours. The ON-OFF control shall be accessible to the dwelling unit occupant.
   b. Ventilation rate. The minimum delivered ventilation shall be at least the amount indicated in Table 150.0-F during each hour of operation.

v. Airflow measurement of local mechanical exhaust by the system installer. The airflow required by Section 150.0(o)1G is the quantity of indoor air exhausted by the ventilation system as installed in the dwelling unit. When a vented range hood utilizes a capture efficiency rating to demonstrate compliance with Section 150.0(o)1Giiib, the airflow listed in the approved directory corresponding to the compliant capture efficiency rating point shall be met by the installed system. The as-installed airflow shall be verified by the system installer to ensure compliance by use of either Subsection a or b below:
   a. The system installer shall measure the airflow by using a flow hood, flow grid or other airflow measuring device at the mechanical ventilation fan's inlet terminals/grilles or outlet terminals/grilles in accordance with the procedures in Reference Residential Appendix RA3.7.
   b. As an alternative to performing an airflow measurement of the system as installed in the dwelling unit, compliance may be demonstrated by installing an exhaust fan and duct system that conforms to the specifications of Table 150.0-H. Visual inspection shall verify the installed system conforms to the requirements of Table 150.0-H.

When using Table 150.0-H for demonstrating compliance, the airflow rating shall be greater than or equal to the value required by Section 150.0(o)1G at a static pressure greater than or equal to 0.25 in. of water (62.5 Pa). When a vented range hood utilizes a capture efficiency rating to demonstrate compliance with Section 150.0(o)1Giiib, a static pressure greater than or equal to 0.25 in. of water at the rating point shall not be required, and the airflow listed in the approved directory corresponding to the compliant capture efficiency rating point shall be applied to Table 150.0-H for determining compliance.

Use of Table 150.0-H is limited to ventilation systems that conform to all of the following three specifications:
1. Total duct length is less than or equal to 25 ft (8 m),
2. Duct system has not more than three elbows, and
3. Duct system has exterior termination fitting with a hydraulic diameter greater than or equal to the minimum duct diameter and not less than the hydraulic diameter of the fan outlet.

Table 150.0-G Kitchen Range Hood Airflow Rates (cfm) and ASTM E3087 Capture Efficiency (CE)Ratings According to Dwelling Unit Floor Area and Kitchen Range Fuel Type

Dwelling Unit Floor Area (ft²)	Hood Over Electric Range	Hood Over Natural Gas Range
>1500	50% CE or 110 CFM	70% CE or 180 CFM
>1000 to 1500	50% CE or 110 CFM	80% CE or 250 CFM
750 - 1000	55% CE or 110 CFM	85% CE or 280 CFM
<750	65% CE or 110 CFM	85% CE or 280 CFM

From Section 150.0 (n) (s)(t)(u)(v) – MANDATORY FEATURES AND DEVICES

(n) **Water heating system.**
1. Systems using gas or propane water heaters to serve individual dwelling units shall designate a space at least 2.5 feet by 2.5 feet wide and 7 feet tall suitable for the future installation of a heat pump water heater (HPWH) by meeting either A or B below. All electrical components shall be installed in accordance with the California Electrical Code:
   A. If the designated space is within 3 feet from the water heater, then this space shall include the following:
      i. A dedicated 125 volt, 20 amp electrical receptacle that is connected to the electric panel with a 120/240 volt 3 conductor, 10 AWG copper branch circuit, within 3 feet from the water heater and accessible to the water heater with no obstructions; and
      ii. Both ends of the unused conductor shall be labeled with the word "spare" and be electrically isolated; and
      iii. A reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit in A above and labeled with the words "Future 240V Use"; and
      iv. A condensate drain that is no more than 2 inches higher than the base of the installed water heater, and allows natural draining without pump assistance.
   B. If the designated space is more than 3 feet from the water heater, then this space shall include the following:
      i. A dedicated 240 volt branch circuit shall be installed within 3 feet from the designated space. The branch circuit shall be rated at 30 amps minimum. The blank cover shall be identified as "240V ready"; and
      ii. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future HPWH installation. The reserved space shall be permanently marked as "For Future 240V use"; and
      iii. Either a dedicated cold water supply, or the cold water supply shall pass through the designated HPWH location just before reaching the gas or propane water heater; and
      iv. The hot water supply pipe coming out of the gas or propane water heater shall be routed first through the designated HPWH location before serving any fixtures; and
      v. The hot and cold water piping at the designated HPWH location shall be exposed and readily accessible for future installation of an HPWH; and
      vi. A condensate drain that is no more than 2 inches higher than the base of the installed water heater, and allows natural draining without pump assistance.

(s) **Energy Storage Systems (ESS) ready.** All single-family residences that include one or two dwelling units shall meet the following. All electrical components shall be installed in accordance with the *California Electrical Code:*

1. At least one of the following shall be provided:
   A. ESS ready interconnection equipment with a minimum backed-up capacity of 60 amps and a minimum of four ESS-supplied branch circuits, or
   B. A dedicated raceway from the main service to a panelboard (subpanel) that supplies the branch circuits in Section 150.0(s)(2). All branch circuits are permitted to be supplied by the main service panel prior to the installation of an ESS. The trade size of the raceway shall be not less than one inch. The panelboard that supplies the branch circuits (subpanel) must be labeled "Subpanel shall include all backed-up load circuits."
2. A minimum of four branch circuits shall be identified and have their source of supply collocated at a single panelboard suitable to be supplied by the ESS. At least one circuit shall supply the refrigerator, one lighting circuit shall be located near the primary egress, and at least one circuit shall supply a sleeping room receptacle outlet.
3. The main panelboard shall have a minimum busbar rating of 225 amps.
4. Sufficient space shall be reserved to allow future installation of a system isolation equipment/transfer switch within 3 feet of the main panelboard. Raceways shall be installed between the panelboard and the system isolation equipment/transfer switch location to allow the connection of backup power source.

5/6/22

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.
(04/2022)

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(i):	**Fenestration on 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.

5/6/22

(t) **Heat pump space heater ready**. Systems using gas or propane furnace to serve individual dwelling units shall include the following:
1. A dedicated 240 volt branch circuit wiring shall be installed within 3 feet from the furnace and accessible to the furnace with no obstructions. The branch circuit conductors shall be rated at 30 amps minimum. The blank cover shall be identified as "240V ready." All electrical components shall be installed in accordance with the California Electrical Code.
2. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future heat pump space heater installation. The reserved space shall be permanently marked as "For Future 240V use."

(u) **Electric cooktop ready**. Systems using gas or propane cooktop to serve individual dwelling units shall include the following:
1. A dedicated 240 volt branch circuit wiring shall be installed within 3 feet from the cooktop and accessible to the cooktop with no obstructions. The branch circuit conductors shall be rated at 50 amps minimum. The blank cover shall be identified as "240V ready." All electrical components shall be installed in accordance with the California Electrical Code.
2. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future electric cooktop installation. The reserved space shall be permanently marked as "For Future 240V use."

(v) **Electric clothes dryer ready**. Clothes dryer locations with gas or propane plumbing to serve individual dwelling units shall include the following:
1. A dedicated 240 volt branch circuit wiring shall be installed within 3 feet from the clothes dryer location and accessible to the clothes dryer location with no obstructions. The branch circuit conductors shall be rated at 30 amps minimum. The blank cover shall be identified as "240V ready." All electrical components shall be installed in accordance with the California Electrical Code.
2. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future electric clothes dryer installation. The reserved space shall be permanently marked as "For Future 240V use

5/6/22

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.*

5/6/22

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.

olar 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."

lectric and Energy Storage Ready:

5/6/22

2022 Single-Family Residential Mandatory Requirements Summary

§ 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 andcontrolled per § 150.0(o) 1Biii&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; nonenclosed kitchens must have demand-controlled exhaust system meeting requirements of §150.0(o)1Giii,enclosed kitchens and bathrooms can use demand-controlled or continuous exhaust meeting§150.0(o)1Giii-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 by 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).*

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

compucalc@title24energyreports.com
title24energyreports.com
(530) 268-8722

CompuCalc
Title 24 Compliance

Elizabeth Smithwick
Certified Energy Analyst

2022 Title 24 Part 6
Energy Code

Sheet:
T24-4

IMPORTANT INFORMATION REGARDING QUALITY INSULATION INSPECTION REQUIREMENT

Carefully review the section of the energy documents entitled, "HERS FEATURES SUMMARY". This is generally page 2 or page 3 of the Title 24 Part 6 Energy Documents. If a Quality Insulation Inspection (QII) is required the requiment will be shown under this section "HERS FEATURES SUMMARY".

The requirement will also be shown under "BUILDING ENVELOPE – HERS VERIFICATIONS" section of the report.

If a Quality Insulation Inspection (QII) is required be certain to have a HERS Rater chosen BEFORE construction begins. The HERS Rater will advise as to the schedule and requirements for building to ensure this inspection is passed.

NOTE: PV Solar is designed to have a minimum of 9.02 kW with no shading over the solar panels. Azimuth 150–270 degrees, tilt is less than 7:12. If there parameters cannot be met, please advise by calling CompuCalc at (530) 268-8722.

2019 ENERGY CODE

Ace Resources | 2019 Title 24, Part 6 Note Blocks

Residential

Quality Insulation Installation (QII)

Residential Newly Constructed Buildings and Additions >700 ft²
Prescriptive and Performance Approach

PROJECT QII CONSTRUCTION SCHEDULE:

Design: QII is included as energy feature in CF1R-ADD or CF1R-PRF and supported in drawings as a design feature. Kickoff meeting including Architect, Builder, HERS Rater, and all subs (insulation, framer, drywall, plumbing, HVAC. Etc. installers) so that the QII inspection schedule and process can be explained and supported before design drawings are complete is recommended.

Building Permit: CF1R registered through HERS provider and incorporated into submittal set. HERS Rater to confirm verification procedure (sampling procedures is applicable) with team.

Grading: HERS Rater should set up inspection schedule with all subs off site and coordinate with insulation installer verification requirements and provide tools and resources to support inspection process.

Framing: To be coordinated by HERS Rater:

- Framer incorporating continuous air barrier requirements
- All hard covers and draft stops to meet air barrier requirements
- Set up inspection schedule with all other subs on site and coordinate with insulation installer for inspections

Rough-In: To be inspected and verified by HERS Rater and documented with CF2R/3R-ENV-21:

- Pre-Insulation inspection to confirm continuous air barrier w/insulation installer including all penetrations by various subs have been caulked and sealed

Insulation: To be inspected and verified by HERS Rater and documented with CF2R/3R-ENV-22:

- Batt insulation inspections to confirm direct contact with air barrier

Drywall: To be inspected and verified by HERS Rater and documented with CF2R/3R-ENV-22:

- Loose-fill insulation inspections to confirm direct contact with air barrier and meets R- value per manufacturer's instructions
- All penetrations caulked and sealed of all provided to maintain continuous air barrier in addition to sealing of drywall

Finish: All CF2R/CF3R forms to be finished up and registered through HERS provider so that final inspection can be scheduled which can be verified with Project Status Report (PSR)

Final Inspection: All registered CF2R (provided by the Contractors) and CF3R (provided by the HERS Rater) forms are to be provided to the building occupant.

NOTES REGARDING BALANCED INDOOR AIR QUALITY VENTILATION SYSTEM:

Indoor Air Quality (IAQ) met with balanced HRV/ERV System

HERS Verified IAQ ventilation system:

·Minimum CFM is stated on CF1R-PRF-01 under REQUIRED SPECIAL FEATURES

·Minimum SRE and ASRE are stated on CF1R-PRF-01 under REQUIRED SPECIAL FEATURES

·Supply outside air inlet, filter, and H/ERV cores accessible per RACM Reference Manual as stated on CF1R-PRF-01 under REQUIRED SPECIAL

COMMON THERMAL SPECIFICATIONS (RA3.5):

Materials shall comply with, and be installed in conformance with, all applicable building codes for building. California Building Code (including, but not limited to, California Electric Code Section 719) and installed to meet all applicable fire codes.

Materials shall meet California Quality Standards for Insulating Material, Title 24, Part 12, Chapter 4, Article 3, listed in the California Department of Consumer Affairs Consumer Guide and Directory of Certified Insulating Materials.

Materials shall comply with flame spread rating and smoke density requirements of Chapter 26 and Section 706 of the Title 24, Part 2: all installations with exposed facings must use fire retardant facings which have been tested and certified not to exceed a flame spread of 25 and a smoke development rating of 450. Insulation facings that do not touch a ceiling, wall, or floor surface, and faced batts on the undersides of roofs with an air space between the ceiling and facing are considered exposed applications.

Materials shall be installed according to manufacturer specifications and instructions.

Hard covers or draft stops shall be placed over all drop ceiling areas and interior wall cavities to keep insulation in place and stop air movement. If hard covers or draft stops are missing or incomplete, they shall be completed before insulation is installed.

Required eave ventilation shall not be obstructed - the net free-ventilation area of the eave vent shall be maintained.

Eave vent baffles shall be installed to prevent air movement under or into the batt.

Insulation shall cover all recessed lighting fixtures. If the fixtures are not rated for insulation cover (IC) and airtight, the fixtures shall be replaced. All recessed light fixtures that penetrate the ceiling shall be listed for zero clearance insulation contact (IC), have a label that certifies it as airtight with leakage less than 2.0 cfm @ 75 Pa when tested to ASTM E283, and shall be sealed with a gasket or caulk between the light's housing and the ceiling.

Insulation shall be installed so that they will be in contact with the air barrier.

Insulation shall fill the cavity. Sized to fit, no compression, fill voids etc.

R-VALUE MEASUREMENT (RA3.5.3.1):

The HERS rater shall verify the installed thickness of insulation in all assemblies and locations on walls, roof/ceilings, and floors, and to ensure that insulation levels and installation integrity meet the R-value specified on the Certificate of Compliance (CF1R), and all other required compliance documentation.

WALLS (RA3.5.3.2):

Bottom plates of framed and non-framed and other wall type assemblies shall be sealed to the ground subfloor or slab, and above ground subfloor.

Wall stud cavities shall be caulked or foamed to provide a substantially air-tight envelope to the outdoors, attic, garage and crawl space. All plumbing and wiring penetrations through the top and bottom plates and electrical boxes that penetrate the sheathing shall be sealed. All gaps in the air barrier shall be caulked, taped, or sealed with minimally expansive foam.

WINDOWS AND DOORS (RA3.5.3.2.1 AND RA3.5.3.2.9):

All gaps around windows and doors are sealed. The sealant used follows window manufacturer specifications. Coordinate between trades who is responsible.

All single-member window and door headers shall be insulated to a minimum of R-3 for a 2x4 framing, or equivalent width, and a minimum of R-5 for all other assemblies. Insulation is to be placed between the interior face of the header and inside surface of the interior wall finish. No header insulation is required for single-member headers that are the same width as the wall, provided that the entire wall has at least R-2 insulation.

RIM-JOISTS (RA 3.5.3.2.4):

All rim-joists shall be insulated to the same R-Value as the adjacent walls.

KNEEWALLS, SKYLIGHT SHAFTS, AND GABLE ENDS (RA3.5.3.2.5 AND RA3.5.3.2.10):

Framing for knee walls, skylight shafts and gable ends that separate conditioned from unconditioned space shall be insulated to meet or exceed the wall R-value specified on the Certificate of Compliance, and all other required compliance documentation.

The insulation shall be installed without gaps and with minimal compression.

For steel-framed knee walls, skylight shafts, and gable ends, external surfaces of steel studs shall be covered with insulation unless otherwise specified on the CF1R Certificate of Compliance.

The house side of the insulation shall be in contact with the drywall or other wall finish.

The insulation shall be supported so that it will not fall down by either friction fitting to the framing, inset or face stapling of flanges, or using other support such as netting.

Insulation for all knee wall and skylight shafts shall be completely enclosed by vertical and horizontal framing, including horizontal plates at top and bottom of the insulation.

In unvented attics, where insulation is applied directly to the underside of the roof deck, knee walls, skylight shafts, and gable ends shall be insulated to meet or exceed the wall R-value specified on the Certificate of Compliance, and all other required compliance documentation.

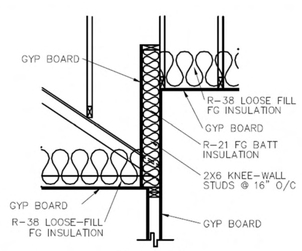
CF2R CERTIFICATE OF INSTALLATIONS FORMS:

The CF2R-ENV forms (Insulation Certificate of Installation) shall be signed by the SPF applicator stating that the installation is consistent with the plans and specifications for which the building permit was issued shall be provided. The certificate shall also state the installing company name, insulation manufacturer's name and material identification, and that the labeled installed nominal thickness, and installed R-value for SPF insulation meets those specified in Section 3, Thermal Specification. The SPF applicator shall also attach an R-value chart or an ICC ESR showing compliance with AC377 for each SPF insulation material used.

It is the installer's responsibility to ensure the products are installed properly, and it is the HERS rater's responsibility, as a Special Inspector to the Building Departments, to verify proper installation.

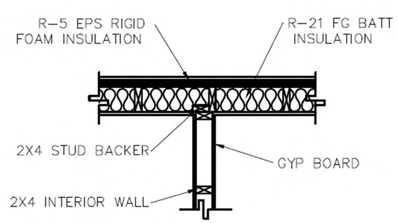
EXAMPLE DETAILS SUPPORTING QII:

Insulation shall be installed so that they will be in contact with the air barrier.



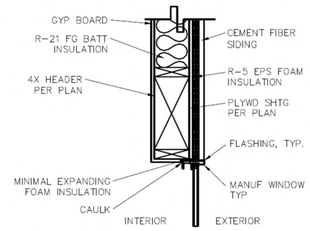
Attic Knee Wall

Insulation shall fill the cavity. Sized to fit, no compression, fill voids etc.



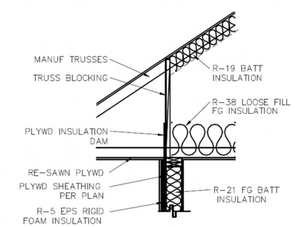
Interior Wall

All single-member window and door headers shall be insulated to a minimum of R-3 for a 2x4 framing, or equivalent width, and a minimum of R-5 for all other assemblies.



Window Header – Exterior insulation

Attic over conditioned and unconditioned space separated by an air barrier when unconditioned space not insulated (or insulate entire attic including attic over unconditioned spaces). (Blueprint Issue 121)



Air Barrier at Porch

compucalc@title24energyreports.com
title24energyreports.com
(530) 268-8722

CompuCalc Title 24 Compliance
Elizabeth Smithwick
Certified Energy Analyst

2022 Title 24 Part 6 Energy Code

Sheet: T24-5 QII Notes