CODE / AGENCIES CONFORMANCES:

ALL CONSTRUCTION SHALL CONFORM TO ALL GOVERNING LAWS, CODES AND ORDINANCES INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

- 2022 California Building Code
- 2022 California Electrical Code
- 2022 California Mechanical Code
- 2022 California Plumbing Code
- 2022 California Energy Code
- 2022 California Fire Code
- 2022 California Green Building Standards Code
- Anaheim Municipal Code

PROJECT TEAM:

OWNER:
KHOA NGUYEN
1019 N CAMBRIA PL,
ANAHEIM, CA 92801
knnguyen174@gmail.com
714 - 409 - 9999

PREPARED:
AP DESIGN CONSULTING, INC
CONTACT: ANH PHAN
9636 GARDEN GROVE BLVD, #7
GARDEN GROVE, CA 92844
anhtuanxd04@gmail.com
714-487-7926

GENERAL NOTES:

1. Contractor shall verify all dimensions on site prior to start construction and notify the engineer of any discrepancies.
2. Prior to framing, framing contractor shall verify rough-in dimensions required for bath tubs, showers stalls, fireplaces, window heights, door locations, etc.
3. Provide approved plan box. Provide temporary sanitary facilities.
4. On site verification of all dimensions and conditions shall be the responsibility of each contractor. Noted dimensions take precedent over scale.
5. All work shall be performed by licensed contractors.
6. Finish grade around the new structure shall be sloped away from the building for drainage purposes." (CRC R401.3; R403.1.7.3)
7. Shall be notified immediately by contractor or sub-contractor should any discrepancy or other question arise pertaining to the working drawings and/or specifications. The contractor shall be held responsible for the results of any errors, discrepancies, or omissions which the contractor failed to notify the architect or engineer of before construction and / or fabrication of the work.

ABBREVIATIONS:

A.C.	ANCHOR BOLT	LB./LBS	POUND/POUNDS
A.F.F.	ARCHITECTURAL	L.L.	LIVE LOAD
B.L.	BUILDING LINE	LLH	LONG LEG HORIZ.
B/BM	BOTTOM OF BEAM	LLV	LONG LEG VERTICAL
B/F	BOTTOM OF FOOTING	LT. WT.	LIGHT WEIGHT
BLDG.	BUILDING	M.O.	MASONRY OPENING
BM.	BEAM	MAT'L.	MATERIAL
BRG.	BEARING	MAX.	MAXIMUM
C.J.	CEILING JOIST	MIN.	MINIMUM
CLR.	CLEAR	MISC.	MISCELLANEOUS
CMU	CONCRETE MASONRY UNIT	N.	NEW/PROPOSED
CONC.	CONCRETE	N.I.C.	NOT IN CONTRACT
CONNX.	CONNECTION	N.T.S.	NOT TO SCALE
CONST.	CONSTRUCTION	NO.	NUMBER
CONT.	CONTINUOUS	O.C.	ON CENTER
CONTR.	CONTRACTOR	O.D.	OVERFLOW DRAIN
D.L.	DEAD LOAD	OSF	OUTSIDE FACE
DBL.	DOUBLE	OPP.	OPPOSITE
DET.	DETAIL	P.E.M.B	PRE ENGINEERED METAL BUILDING
DIA.	DIAMETER	P.C.	PRECAST CONCRETE
DWG.	DRAWING	PL	PLATE
DWL.	DOWEL	PSF	POUNDS/SQUARE FT.
DW	DISH WASHER	R.D.	ROOF DRAIN
DM	DIMMABLE LIGHT SWITCH	REINF.	REINFORCED
EA.	EACH	REQ'D.	REQUIRED
E.E.	EACH END	REV.	REVISION/REVISED
E.E.	EACH FACE	R.R.	ROOF RAFTER
E.W.	EACH WAY	SF.	SQUARE FEET
E.J.	EACH EXPANSION JOINT	SH	SHEET
EQ.	EQUAL	SHT.	SHEET
E.	EXISTING	SIM.	SIMILAR
EXP.	EXPANSION	SPA.	SPACES/SPACING
EXPAN.	EXPANSION	SPECS	SPECIFICATIONS
F.D.	FLOOR DRAIN	STL	STEEL
FIN.	FINISH	STD	STANDARD
F.S.	FAR SIDE	SW	SLIDE WINDOW
FDN.	FOUNDATION	T&B	TOP AND BOTTOM
FTG.	FOOTING	T/B	TOP OF BEAM OR TRUSS BEARING
FT.	FOOT OR FEET	T/F	TOP OF FOOTING
GA.	GAGE	TEMP.	TEMPORARY/TEMPERATURE
GALV.	GALVANIZED	TYP.	TYPICAL
GRAN.	GRANUIAR	U.N.O.	UNLESS NOTED OTHERWISE
GYP.	GYPSUM BOARD	UNI.	UNISEX BATHROOM
H.	HORIZONTAL	V.	VERTICAL
HK.	HOOK	VERT.	VERTICAL
HORIZ.	HORIZONTAL	W.W.R.	WELDED WIRE REINFORCED
INSF	INSIDE FACE	W/	WITH
IN.	INCH	W/D	WASHER & DRYER
INSUL.	INSULATION	WH	WATER HEATER
J/B	JOIST BEARING	W.I.C.	WALK-IN CLOSET
JST.	JOIST		
JT.	JOINT		

SCOPE OF WORK:

THE PROJECT SCOPE CONSISTS OF
- LEGALIZE REMODEL KITCHEN, AND ALL BATHROOMS: REPLACE ALL FIXTURES AND CABINETS.
- LEGALIZE NEW ISLAND
- LEGALIZE NEW 2 MINI-SPLITS.
- LEGALIZE NEW ELECTRIC METER 200A.
- LEGALIZE NEW LIGHTING.
- LEGALIZE NEW BATHROOM #1, #2 & MASTER BATHROOM.
- LEGALIZE CONVERT DEN TO MASTER BEDROOM.
- LEGALIZE LAUNDRY CONVERT TO WALK-IN CLOSET.
- INVESTIGATION REPORT: NV2025-00188
- LEGALIZE REMOVING LOAD BEARING KITCHEN WALL.
- EXISTING UNPERMITTED PATIO COVER TO BE REMOVED 327 SQ.FT.

PROJECT INFORMATION:

PROJECT ADDRESS:	1019 N Cambria Pl, Anaheim, CA 92801
ASSESSOR'S PARCEL NO.:	071-391-12
ZONING:	RS-2
OCCUPANCY GROUP:	R3
TYPE OF CONSTRUCTION:	VB
NUMBER OF STORIES:	ONE
FIRE SPRINKLER:	NO (EXISTING MAIN HOUSE)

PROJECT STATISTIC:

MAIN HOUSE FLOOR AREA:
EXISTING LIVING: 2,275 SQ.FT.
EXISTING GARAGE: 369 SQ.FT.
2,644 SQ.FT.

LOT SIZE: 6,645 SQ.FT.
LOT COVERAGE: (2,275 + 369) / 6,645 = 39.8%

SHEET INDEX:

ARCHITECTURAL

A0	COVER SHEET
A1	EXISTING & PROPOSED SITE PLAN
A2	EXISTING PERMITTED FLOOR PLAN, DEMOLITION FLOOR PLAN
A2.1	EXISTING UNPERMITTED FLOOR PLAN
A3	PROPOSED FLOOR PLAN & EXISTING ROOF PLAN, ELEVATION
A4	PROPOSED ELEVATION
E1	UTILITY PLAN
AD1	ARCHITECTURAL DETAILS
N1	CAL GREEN REQUIREMENTS

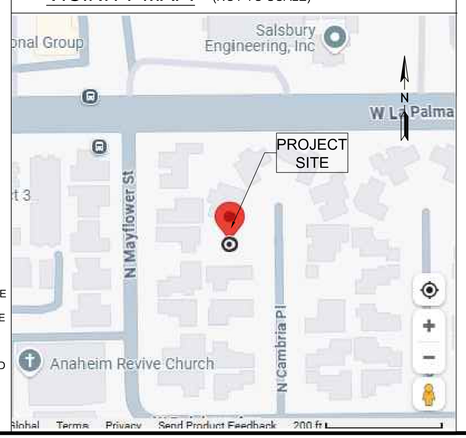
STRUCTURAL

S1	FOUNDATION PLAN & ROOF FRAMING PLAN

ENERGY EFFICIENCY

T24.1	TITLE 24
T24.2	TITLE 24 CONT.

VICINITY MAP: (NOT TO SCALE)



PLANNING DEPARTMENT
ANAHEIM
BUILDING DIVISION

WORK PRIOR TO A BUILDING PERMIT

Purpose: This policy describes the steps for obtaining approval by the City of Anaheim for work that has been done without the benefit of a building permit

Policy: 2016 California Building Code/Appendix Chapter 1/Administration/Section 108.4 states:

108.4 Work commencing before permit issuance. Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits shall be subject to a fee established by the building official that shall be in addition to the required permit fees

Procedure: In order to properly process and verify all requirements of the City of Anaheim and the State of California the following must be adhered to:

1) The property owner or applicant must submit a plot plan showing the location of the remodel/addition as it exists on the property. This plan will be reviewed by Planning Services for approval. An **Investigation Processing Fee** will be assessed and an investigation inspection by the Building Division will be scheduled for the following Tuesday, Wednesday, or Thursday.
   - ***$167.00 for Single-Family Property***
   - ***$334.00 for Multi-Family or Commercial Property***
2) During the inspection, the Building Inspector will make the determination if plans are needed. Should plans be deemed necessary, they must be prepared, sealed and wet-stamped by a Licensed California Architect or Structural /Civil Engineer. If plans are not required, the inspector may request the property owner/applicant to open any concealed work necessary to verify compliance. The Building Inspector will obtain the necessary information (square footage, fixtures, outlets, etc...) to properly assess valuation for the permit, issue a correction notice and review it with the property owner. The property owner/applicant shall then be directed to the Building Division office to obtain the required permits. The fees for the permit shall be tabulated in accordance with C.B.C. Section 108. At permit issuance, the property owner/applicant will be informed to request additional inspection(s) to review compliance through the normal inspection process.
3) Plans must reflect all work done and all corrections and changes needed to bring the structure in compliance with the current or applicable California Building Codes. **Plans must include an Investigation Requirement form signed by the engineer/architect and property owner; plans will not be accepted without this form.**

(Continued on back page)

PLANNING DEPARTMENT
ANAHEIM
BUILDING DIVISION

Note: Any corrections or changes deemed necessary by the design professional or plan review process must be made upon the issuance of the permit and prior to requesting the applicable inspection as required by Code.

4) If plans are required, the property owner/applicant must have plans prepared and submitted for a permit application and plan review. A plan review fee will be due and payable at the time of submittal.
5) The property owner/applicant must obtain approval of plans and issuance of any necessary permits. Permit fees will be due and payable at the time of issuance.
6) Should the Building Inspector, Architect/Engineer and/ or Property Owner determine that the structure must be demolished; a follow up investigation inspection will be required and will need to be scheduled with the Investigating Building Inspector to verify all violations have been eliminated and areas affected have been restored to original condition. Based on the extent and complexity of the work or demolition done, the Investigating Inspector may require the submittal of a basic plot plan and/or floor plan of the affected area(s), and a permit obtained for required inspection(s), documenting and finalization of the case.
7) The following statement will be stamped on the permit, signed and finalized by the inspector upon completion and approval of the prescribed case(s):

"Work for the described construction has been completed without the benefit of the normal inspection process. An inspection of the construction described on this permit has been made as completely as deemed practical to assure compliance with the applicable building codes at the time of the investigation/legalization process. There may have been areas of construction that were not exposed for inspection. Based on empirical judgment and visual observation, the construction for which this permit was obtained appears to meet applicable building codes at the time of construction."

Failure to comply may result in the matter being turned over to the City's Code Enforcement Division in order to obtain Code compliance which includes but is not limited to proper legal and/or enforcement action, re-inspection fees and/or civil citation fines.

CITY OF ANAHEIM BUILDING DIVISION

INVESTIGATION PLAN CHECK REQUIREMENTS FORM

Should plans be deemed necessary for work done prior to permit, they must be prepared, sealed and wet-stamped by a Licensed Design professional: California Architect or Structural /Civil Engineer. Proposed plans are to be submitted with the Building Division's Plan Review Section. Plans must reflect all work done and areas affected in their "As-built" condition and shall include in the drawings any applicable changes or modifications necessary to bring the as-built work/ or structure into compliance with current and/or applicable California Building Codes. Plan drawings shall include any construction deficiencies revealed by the customer/ designer and related code violations and the methods to correct them. It shall be the responsibility of the Owner/ Designer of record to verify all existing conditions on site to serve as guide for accurate assessment, plans preparation and understanding of the full scope of work involved.

Examples of applicable, details, sections, information and illustrations to be Included on the initial submittal plans are:

a) Full description of scope of work
b) Submittal of (3) sets of plans: 18"X24" minimum
c) Address and legal description of the property; owner's name, address, and phone number.
d) Site plan showing the location of building/addition in relation to property lines, and any other existing structure(s), i.e. pool, shed, etc. Including eave overhang projections, fire separation distances to property lines and center lines of streets, alleys, public way.
e) Dimensioned floor plans showing room layout/use, windows, doors, smoke detectors, light fixtures, and electrical switches and outlet locations. For room additions, provide existing building floor plan and the size and location of the existing window that adjoins the proposed addition. Use different legends for new versus existing construction. Roof plan with roofing material specified and roof pitch called out.
f) Building elevations and at least one longitudinal and one transverse building section.
g) On floor plans, show location of electrical outlets, plumbing fixtures, and mechanical units if used. For room additions, show method of providing heat to the addition.
h) Energy compliance forms CF-1R and MF-1R shall be made a part of the plan.
i) Structural foundation plan showing slab, footings and vapor barrier. Provide foundation details and cross-reference them to the foundation plan.
j) Structural floor and roof framing plans showing floor/roof/ceiling member sizes and direction of span. Provide structural details and cross-reference them to floor and roof framing plans.
k) On foundation and floor framing plans, clearly show braced wall panels, its construction, nailing, and hold-down sizes.
l) Architectural / life safety general notes

Additionally, a print of this document "Investigation Plan Check Requirements Form," duly signed by the engineer/architect and property owner must be included with the investigation plans. Plans will not be accepted without this form!

Once plans are approved, obtain the required permit(s) and expose all already concealed work. It shall be the responsibility of the Contractor and/or responsible Person(s) performing the work to verify all existing conditions on the site prior to commencing work and they are to notify the owner at once upon discovering any omission or conflict in the drawings. Any corrections or changes deemed necessary by the design professional or plan review process, and included as part of the approved plans conditions of approval, must be made upon the issuance of the permit and prior to requesting applicable inspection(s) as required by Code.

Property Address: 1019 N Cambria Pl, Anaheim, CA 92801

Property Owner's Signature: Khoa Date: 06/27/2025
I declare under penalty of perjury that I am the property owner of the address listed above and I personally acknowledge that I have read the information provided in this document and fully understand the stipulations and certify the accuracy of plans.

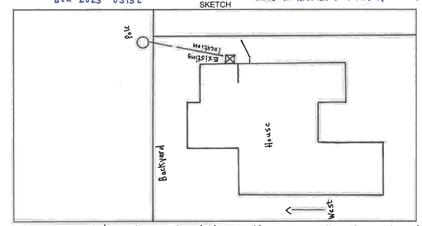
Registered Engineer/Architect: Date: 6/16/2025
I declare under penalty of perjury that I am the property registered Engineering/Architect of the address listed above and I personally acknowledge that I have read the information provided in this document and fully understand the stipulations and certify the accuracy of plans.

CITY OF ANAHEIM
METER - SPOT REPORT

Date: 5-13-25

CUSTOMER/CONTRACTOR NAME: Anh Le
SERVICE ADDRESS: 1019 N Cambria Pl
EMAIL: ah.apdesignca@gmail.com PHONE: (714) 487-7926
REASON FOR REQUEST:
100 AMP____ 200 AMP ✓ 400 AMP____ ROOM ADDITION____ PATIO ENCLOSURE____
OTHER: Unpermitted panel upgrade, Residential Remodel; Remove non load bearing walls in Kitchen to create open concept
Bld 2025-03152

SKETCH



NOTES: Upgraded panel ok at existing location. The pull section will need to opened when the utility inspection is worked to verify the line side feeders.

Specific Utility Requirements:

OVERHEAD SERVICE
1. Weatherhead must be 24" minimum above roof.
2. Mast must not extend more than 36" above roof.
3. Meter socket: 4' to 6' maximum from finish grade.

UNDERGROUND SERVICE
1. No splicing permitted in panel pull section.
2. Busbars are allowed.
3. Meter socket: 4' to 6' maximum from finish grade.

Refer to City of Anaheim Building Decartment for further information. → (714) 765-5153

TO HAVE METER RING UNLOCKED PLEASE CALL (714) 765-3300

CUSTOMER/CONTRACTOR SIGNATURE: _____

ELECTRICAL UTILITY INSPECTOR: Joel Diaz PHONE: **(714) 765-6847**

WHITE - INSPECTOR YELLOW - CUSTOMER

AP DESIGN CONSULTING, INC
9636 GARDEN GROVE BLVD, #7
GARDEN GROVE, CA 92844
TEL: 714 - 487 - 7926
APDESIGNCA@GMAIL.COM

OWNER:

KHOA NGUYEN
1019 N CAMBRIA PL,
ANAHEIM, CA 92801
714 - 409 - 9999

REVISIONS

NO:	DATE	REVISIONS

Project for:

LEGALIZE REMODEL

1019 N CAMBRIA PL,
ANAHEIM, CA 92801

SEAL:

LICENSED PROFESSIONAL ENGINEER
MICHAEL MALCOLM PHILLIPS
C 68338
STATE OF CALIFORNIA

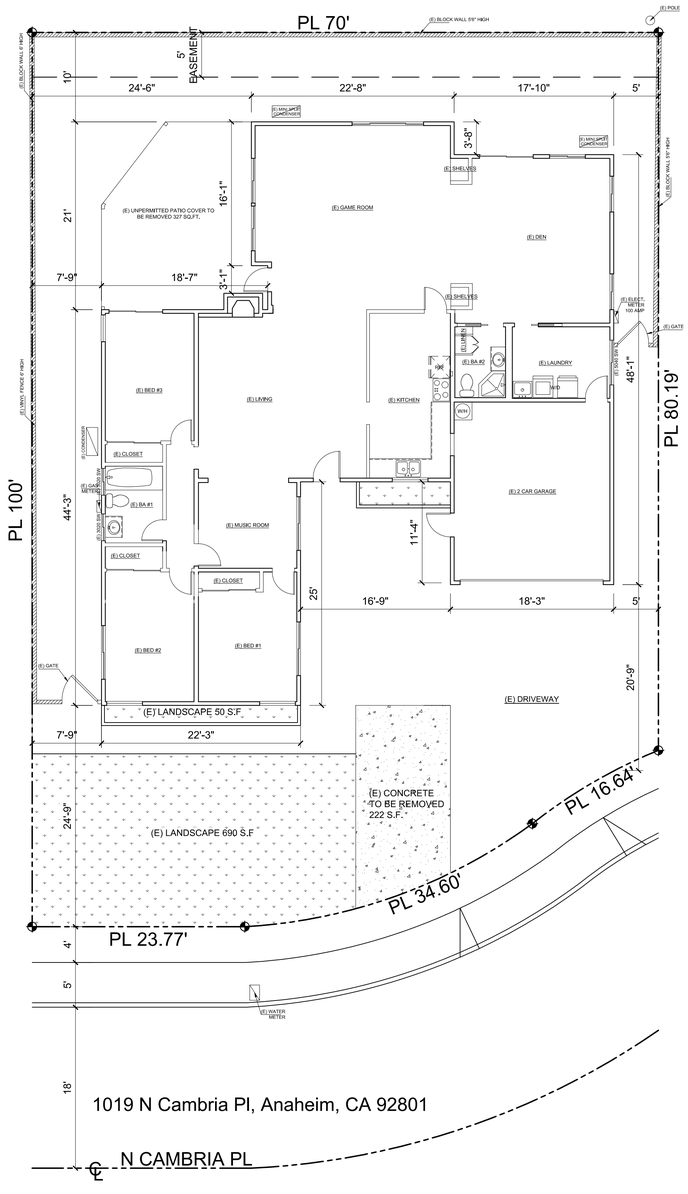
SHEET DESCRIPTION :

COVER SHEET

Date	10/1/25
Job #	25070
Scale	

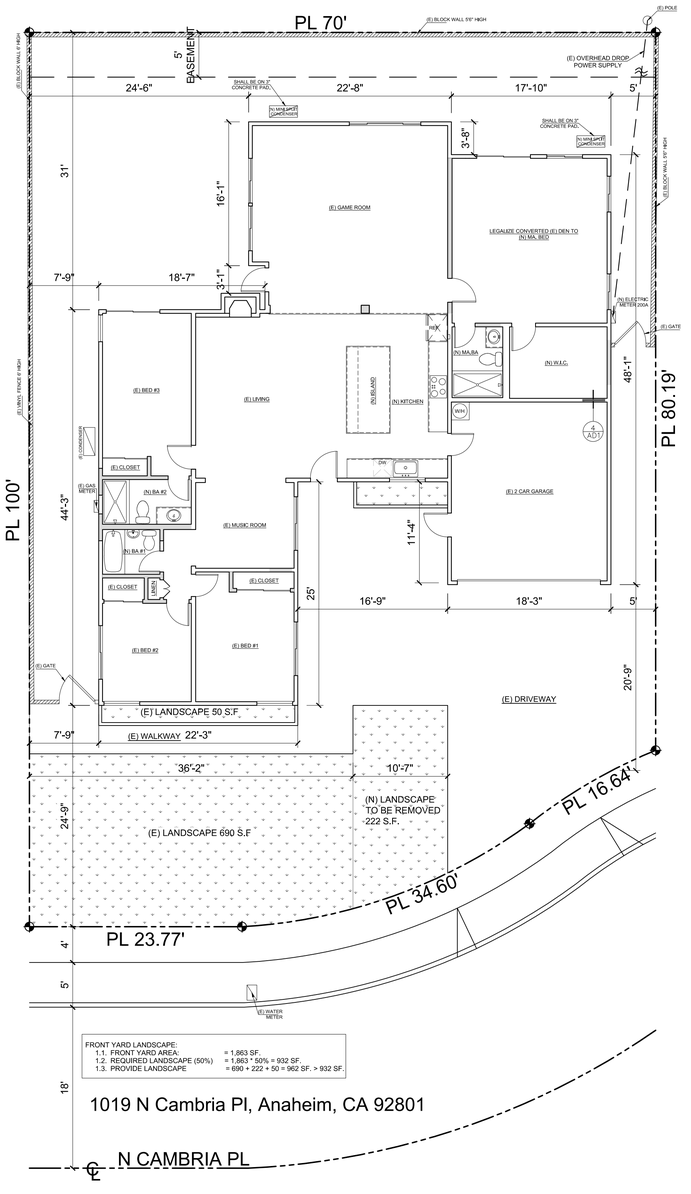
Sheet No.:

A0



(E) SITE PLAN

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



FRONT YARD LANDSCAPE:
1.1. FRONT YARD AREA; = 1,863 SF.
1.2. REQUIRED LANDSCAPE (50%) = 1,863 * 50% = 932 SF.
1.3. PROVIDE LANDSCAPE = 690 + 222 + 50 = 962 SF. > 932 SF.

(N) SITE PLAN

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

NOTE:
THE SUBJECT PROPERTY WAS GRANTED VARIANCE (VAR3769) FOR WAIVER OF MINIMUM PARKING STALL DIMENSION AND GARAGE DOOR SETBACK TO PROPERTY LINE.

LEGEND:

- (E) WALLS TO BE REMAIN
- (E) WALLS TO BE REMOVED
- (E) DOORS TO BE REMOVED
- (E) WINDOWS TO BE REMOVED
- PROPOSED 2X4 STUD WALL, @ 16" O.C. TYP.
- PROPOSED 2X6 STUD WALL, @ 16" O.C. TYP.
- PROPOSED 1HR FIRED WALLS

AP DESIGN CONSULTING, INC

9636 GARDEN GROVE BLVD, #7
GARDEN GROVE, CA 92844
TEL: 714 - 487 - 7926
APDESIGNCA@GMAIL.COM

OWNER:

KHOA NGUYEN

1019 N CAMBRIA PL,
ANAHEIM, CA 92801
714 - 409 - 9999

REVISIONS

NO:	DATE	REVISIONS

Project for:

LEGALIZE REMODEL

1019 N CAMBRIA PL,
ANAHEIM, CA 92801

SEAL:

LICENSED PROFESSIONAL ENGINEER
MICHAEL MALCOLM PHILLIPS
C 68338
STATE OF CALIFORNIA

SHEET DESCRIPTION :

SITE PLAN

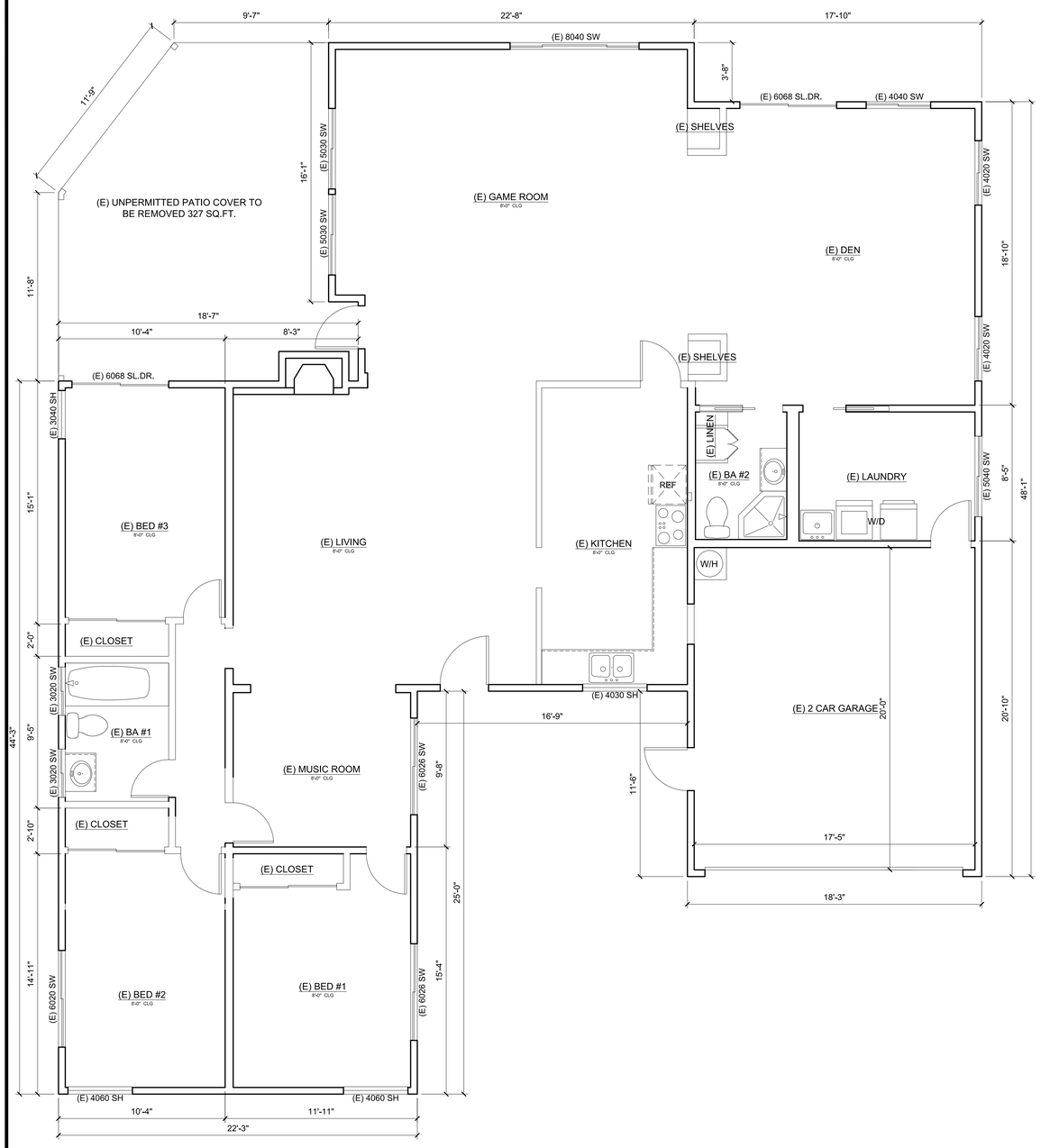
Date	10/1/25
Job #	25070
Scale	

Sheet No.:

A1

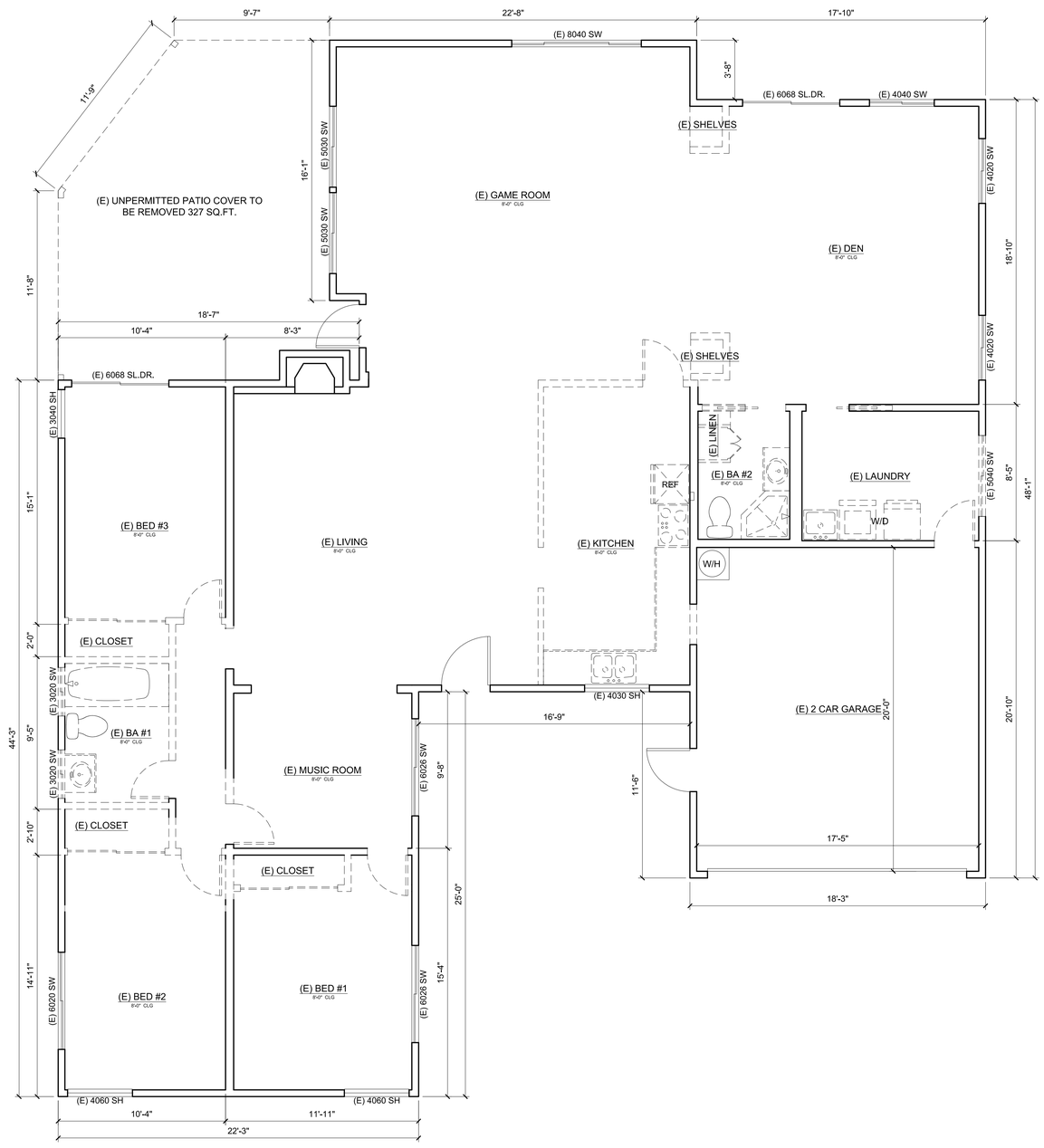
LEGEND:

- (E) WALLS TO BE REMAIN
- (E) WALLS TO BE REMOVED
- (E) DOORS TO BE REMOVED
- (E) WINDOWS TO BE REMOVED
- PROPOSED 2X4 STUD WALL, @ 16" O.C. TYP.
- PROPOSED 2X6 STUD WALL, @ 16" O.C. TYP.
- PROPOSED 1HR FIRED WALLS



EXISTING PERMITTED FLOOR PLAN

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



DEMOLITION FLOOR PLAN

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

AP DESIGN CONSULTING, INC

9636 GARDEN GROVE BLVD, #7
GARDEN GROVE, CA 92844
TEL: 714 - 487 - 7926
APDESIGNCA@GMAIL.COM

OWNER:

KHOA NGUYEN

1019 N CAMBRIA PL,
ANAHEIM, CA 92801
714 - 409 - 9999

REVISIONS

NO:	DATE	REVISIONS

LEGALIZE REMODEL

Project for:

1019 N CAMBRIA PL,
ANAHEIM, CA 92801

SEAL:

LICENSED PROFESSIONAL ENGINEER
MICHAEL MALCOLM PHILLIPS
C 68338
STATE OF CALIFORNIA

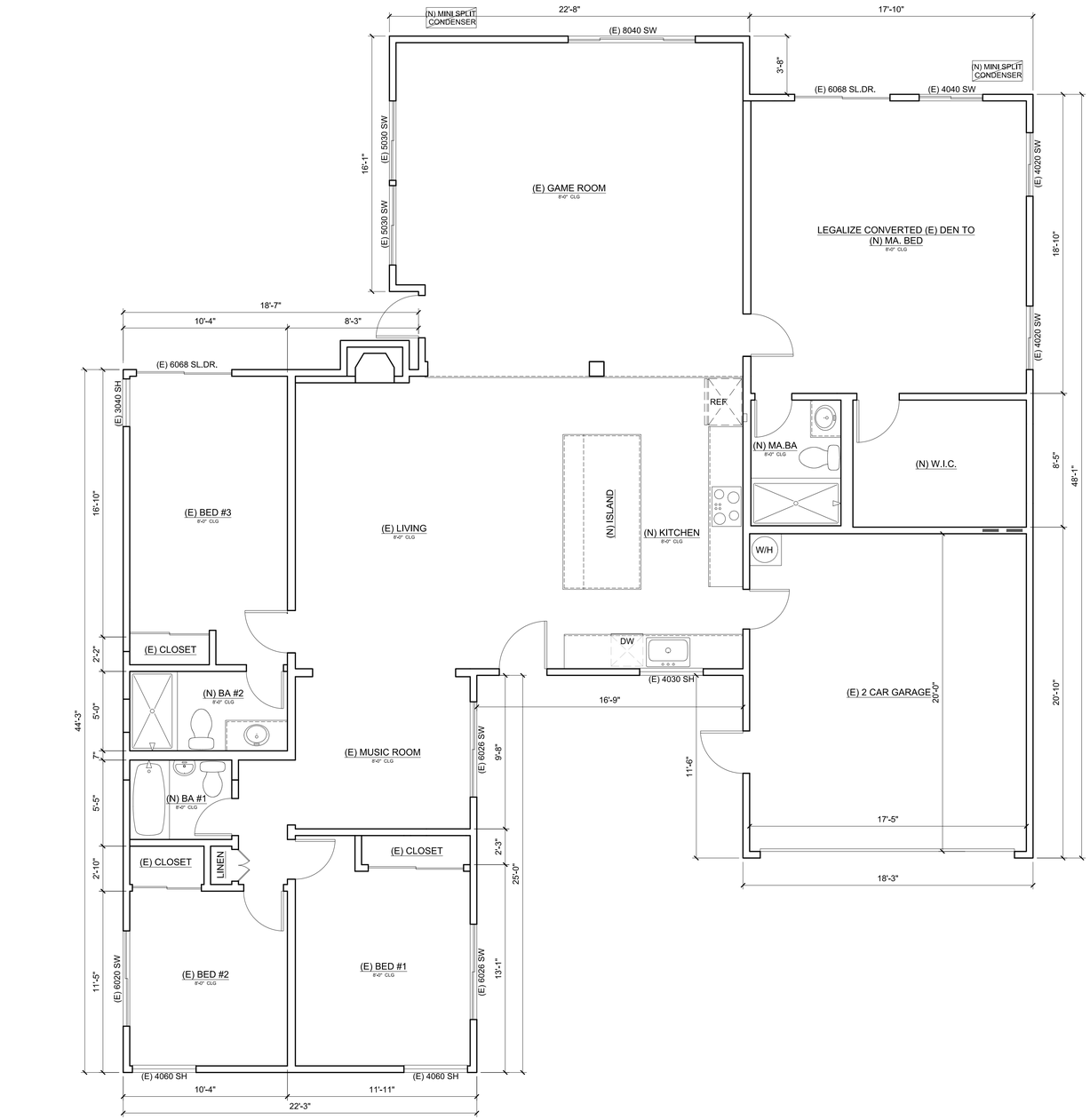
SHEET DESCRIPTION :

EXISTING PERMITTED & DEMOLITION FLOOR PLAN

Date	10/1/25
Job #	*25070*
Scale	

Sheet No.:

A2



EXISTING UNPERMITTED FLOOR PLAN

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

LEGEND:

- (E) WALLS TO BE REMAIN
- (E) WALLS TO BE REMOVED
- (E) DOORS TO BE REMOVED
- (E) WINDOWS TO BE REMOVED
- PROPOSED 2X4 STUD WALL, @ 16" O.C. TYP.
- PROPOSED 2X6 STUD WALL, @ 16" O.C. TYP.
- PROPOSED 1HR FIRED WALLS

AP DESIGN CONSULTING, INC

9636 GARDEN GROVE BLVD, #7
GARDEN GROVE, CA 92844
TEL: 714 - 487 - 7926
APDESIGNCA@GMAIL.COM

OWNER:

KHOA NGUYEN

1019 N CAMBRIA PL,
ANAHEIM, CA 92801
714 - 409 - 9999

REVISIONS

NO:	DATE	REVISIONS

Project for:

LEGALIZE REMODEL

1019 N CAMBRIA PL,
ANAHEIM, CA 92801

SEAL:

LICENSED PROFESSIONAL ENGINEER
MICHAEL MALCOLM PHILLIPS
C 68338
STATE OF CALIFORNIA

SHEET DESCRIPTION :

UNPERMITTED FLOOR PLAN

Date	10/1/25
Job #	25070
Scale	

Sheet No.:

A2.1

FLOOR PLAN KEY NOTES: x

1. Shower and walls above bathtubs with shower heads shall be finished with a smooth, nonabsorbent surface to a height not less than 72 inch above the drain inlet. [§1210.2.3 CBC] (R307.2 CRC).
   - Shower pan shall have a minimum area of 1024 sq. inches and a minimum finish dimension of 30 inches in any directions. Shower doors shall open so as to maintain not less than a 22" unobstructed opening for egress. (CPC 408.6)
   - Showers and shower-tubs shall be provided with individual control valves of the pressure balance, thermostatic, or combination pressure balance/thermostatic mixing valve type that provide scald and thermal shock protection. [§408.3 CPC]
2. [§2406.3 CBC] Safety glazing in the following locations:
   - Where the nearest edge of glazing is within a 24-inch are of either side of a door in a closed position (unless there is an intervening wall between the door and the glazing or if the glazing is 5 feet or higher above the walking surface).
   - Glazing greater than 9 square feet with the bottom edge less than 18 inches above the floor and the top edge greater than 36 inches above the floor (unless the glazing is more than 36 inches horizontally away from walking surfaces or if a complying protective bar is installed)
   - Glazing in shower and tub enclosures (less than 60 inches above standing surface)
   - Glazing in swinging and sliding doors.
   - Glazing adjacent to stairways, landings and ramps within 36 inches horizontally of a walking surface when the glazing is less than 60 inches above the plane of the adjacent walking surface.
   - Glazing less than 5 feet horizontally from swimming pools and less than 5 feet above adjoining grade
3. Provide an exhaust fan in the bathroom of 4 air changes per hour minimum with humidity control sensor. [§1203.5.2.1 CBC] (R303.3.1 CRC)
4. Bedroom emergency egress: Each bedroom shall have a door directly to the exterior or a window that will provide a clear space opening of at least 5.7 square feet in the open position (5 sq. ft. at grade floor openings), and a minimum clear opening width of 20 inches and clear opening height of 24 inches and a maximum sill height of 44 inches above the floor. [§1030 CBC] (R310 CRC)
5. Room natural ventilation requirement. Provide exterior opening with an area equal to 4 percent of the floor area. [§1203.5 CBC] (R303.1 CRC)
6. At least one egress door shall be provided for each dwelling unit that has a minimum clear width of 32 inches between the face of the door and the stop with the door opened 90°, and a minimum clear height of 78 inches measured from the top of the threshold to the bottom of the stop. (R311.2 CRC)
7. A landing, with a width not less than the width of door and length in the direction of travel of not less than 36 inches, will be provided on each side of doors. The slope at exterior landings shall not exceed ¼" in vertical in 12" in horizontal, 2%. The elevation of landing shall not exceed 1½ inch difference than the threshold of the doorway (7 3/4 inch if door does not swing over the landing or steps). [CRC R311.3]
8. Minimum 1 inch clearance shall be provided between the attic insulation and the roof sheathing where cave or cornice vents are installed. (R806.3 CRC)
9. Dishwasher with drain to garbage disposal.
10. Sink with garbage disposal.
11. Cook top to be selected by owner. Vent to outside with backdraft damper.
12. Toilet and bidet require a minimum 15 inches of clearance from the center line of the bowl to each side, and 24 inches from the front edge of the bowl. Per 2022 [CPC 402.5]
13. Door from garage to living area shall be a 1-3/8 thick solid wood door, solid or honeycomb core steel door, or 20 minute rated fire door. Doors shall be a self-latching and self-closing door per R302.5.1.

DOOR & WINDOW SCHEDULE (X)

MARK		W	H	SILL HGHT	QUANTITY	REMARK / MATERIAL
DOOR	A	2'-8"	6'-8"	0	3	INTERIOR HOLLOW WOOD
	B	2'-6"	6'-8"	0	2	INTERIOR HOLLOW WOOD
	C	2'-4"	6'-8"	0	3	INTERIOR HOLLOW WOOD
	D	2'-6"	6'-8"	0	1	20 MINUTE FIRE-RATED DOOR

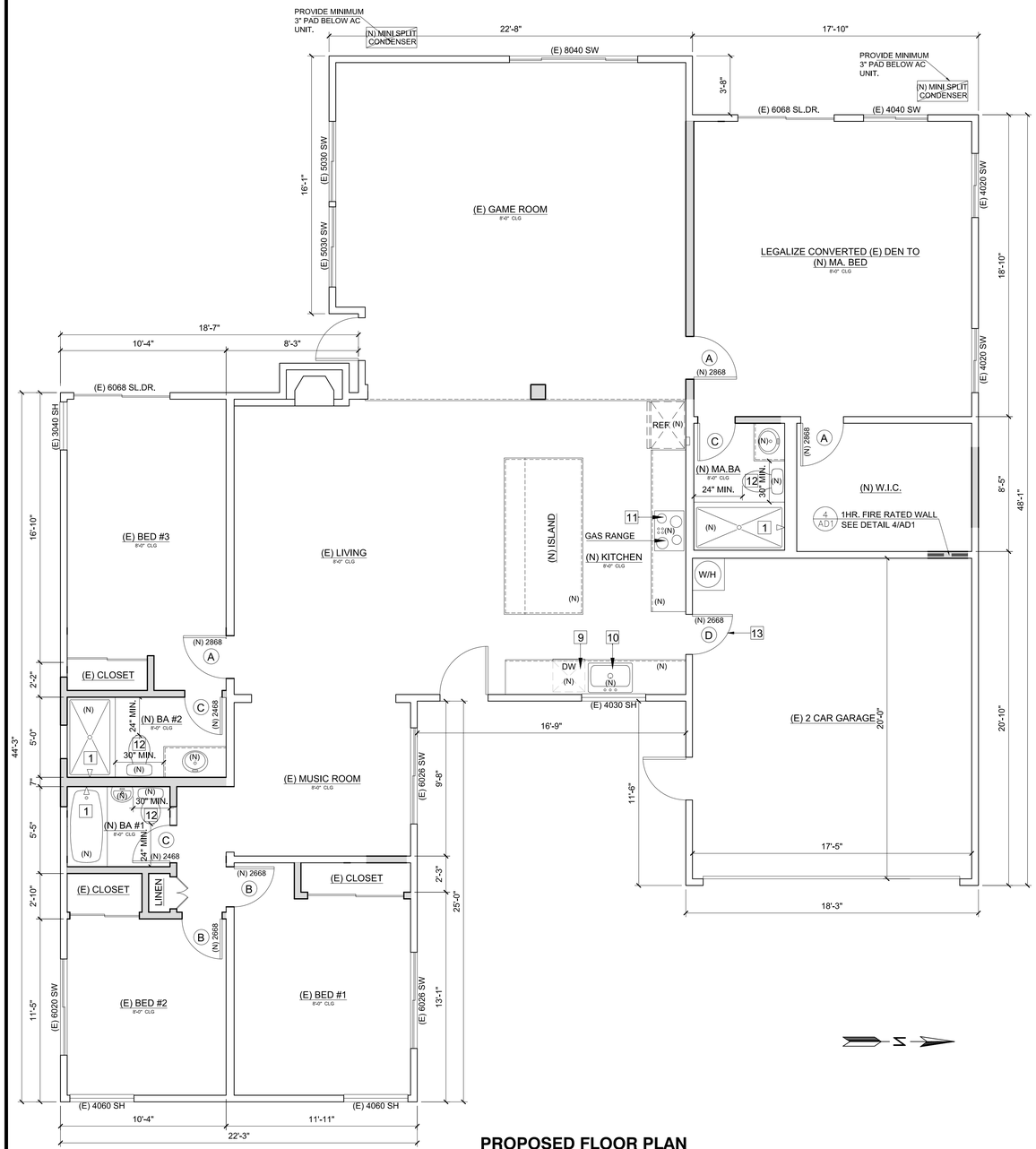
* ALL (N)WINDOW U-FACTOR = 0.30 & SHGC = 0.23

LEGEND:

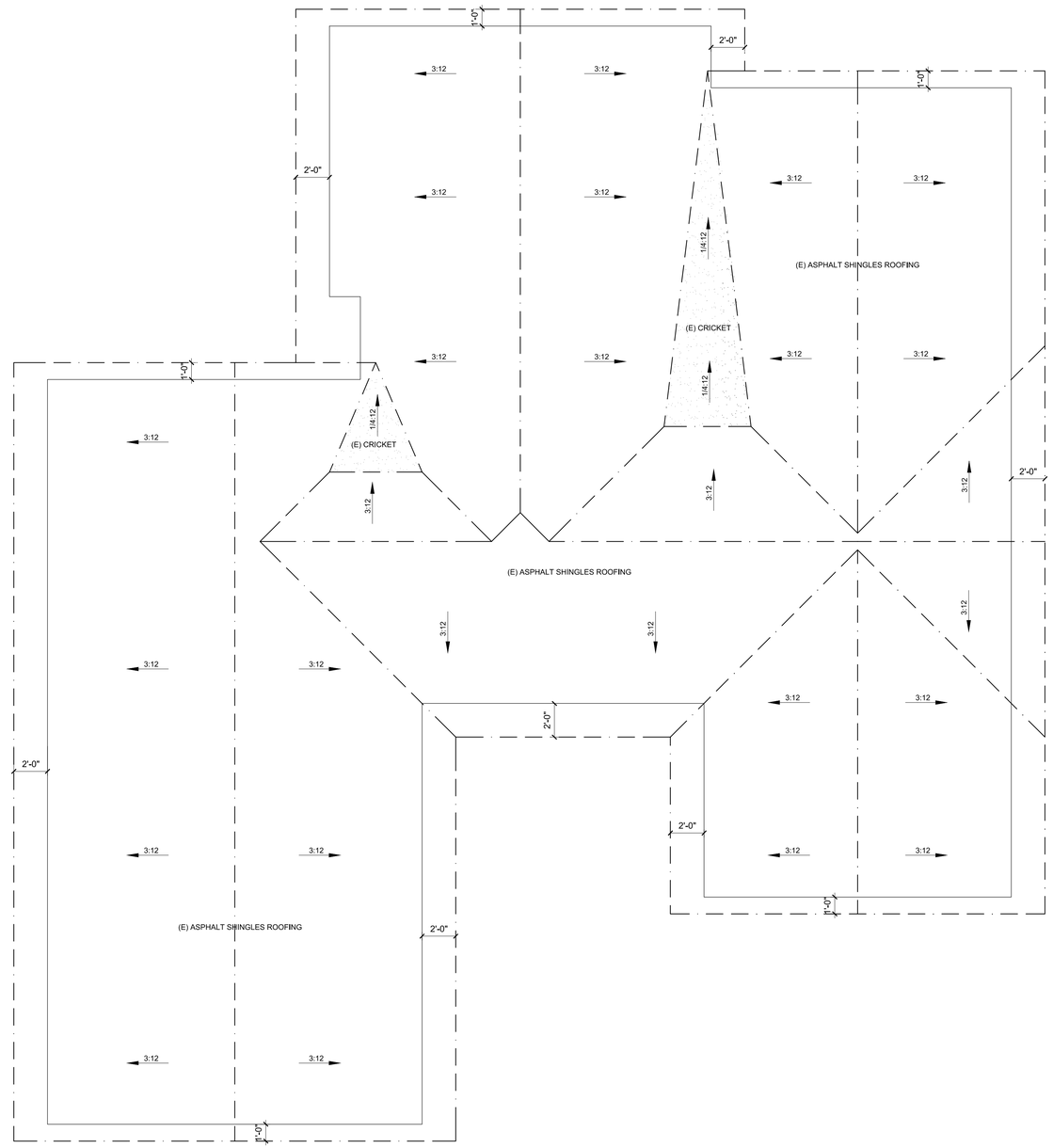
LINE OF WALL	────
LINE OF ROOF	— — · — — · —

LEGEND:

(E) WALLS TO BE REMAIN	▭
(E) WALLS TO BE REMOVED	┅
(E) DOORS TO BE REMOVED	◜
(E) WINDOWS TO BE REMOVED	☰
PROPOSED 2X4 STUD WALL, @ 16" O.C. TYP.	▭
PROPOSED 2X6 STUD WALL, @ 16" O.C. TYP.	▨
PROPOSED 1HR FIRED WALLS	┅



PROPOSED FLOOR PLAN
SCALE: 1/4" = 1'-0"



EXISTING ROOF PLAN - (NO CHANGE)
SCALE: 1/4" = 1'-0"

AP DESIGN CONSULTING, INC

9636 GARDEN GROVE BLVD, #7
GARDEN GROVE, CA 92844
TEL: 714 - 487 - 7926
APDESIGNCA@GMAIL.COM

OWNER:

KHOA NGUYEN
1019 N CAMBRIA PL,
ANAHEIM, CA 92801
714 - 409 - 9999

REVISIONS

NO:	DATE	REVISIONS

Project for:

LEGALIZE REMODEL

1019 N CAMBRIA PL,
ANAHEIM, CA 92801

SEAL:

MICHAEL MALCOLM PHILLIPS
C 68338

SHEET DESCRIPTION :

PROPOSED FLOOR PLAN
EXISTING ROOF PLAN,
ELEVATION

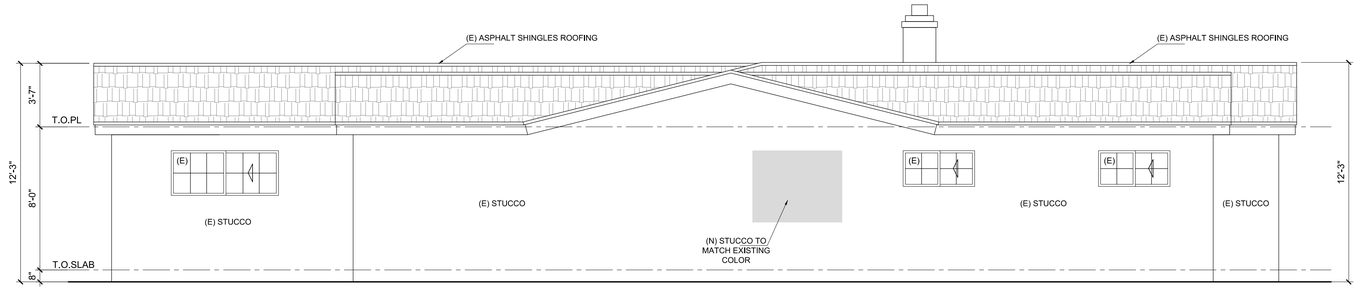
Date	10/1/25
Job #	25070
Scale	

Sheet No.:

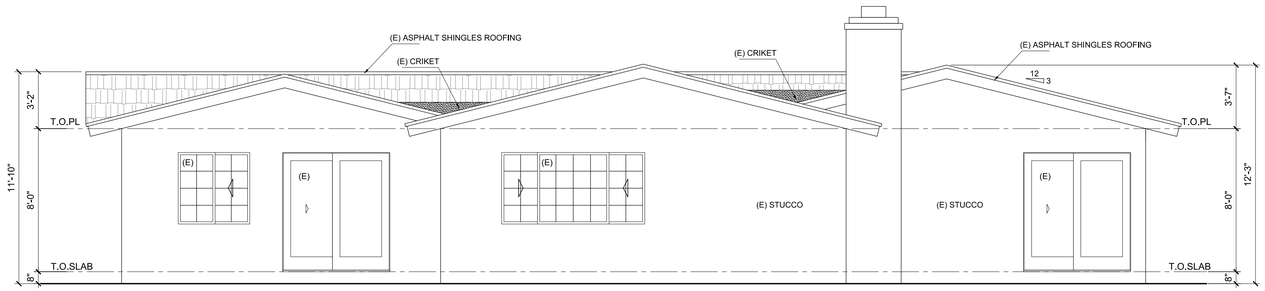
A3

NOTE:

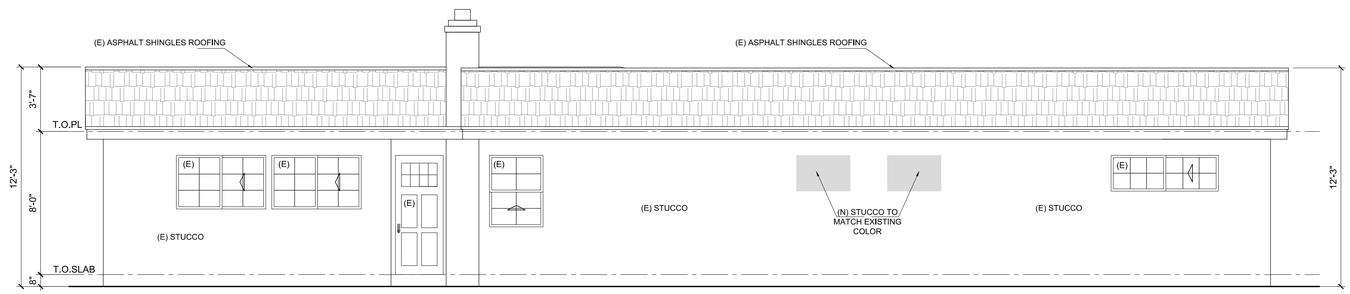
1. ALL EXTERIOR FINISHES TO MATCH EXISTING DWELLING, INCLUDES BUT NOT LIMITED TO: WINDOWS, TRIMS, MULLIONS, STUCCO/SIDING STYLE AND COLOR, ROOF SLOPES AND COLOR/STYLES .
2. BUILDING SHALL HAVE APPROVED ADDRESS NUMBERS (CRC R3I9.1) IN A POSITION THAT IS PLAINLY VISIBLE FROM THE STREET FRONTING THE PROPERTY. NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND. ADDRESS NUMBERS SHALL BE A MINIMUM 4 INCHES HIGH AND 1/2 INCH STROKE WIDTH. SHOW ON ELEVATION FOR EACH UNIT.
   a. IF ILLUMINATED; COMPLY WITH CALIFORNIA ENERGY CODE SECTION 140.8; OR
   b. SIGN SHALL CONSUME NO MORE THAN 5 WATTS OF POWER AS DETERMINED ACCORDING TO SECTION 130.0(C).



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



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



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

AP DESIGN CONSULTING, INC

9636 GARDEN GROVE BLVD, #7
GARDEN GROVE, CA 92844
TEL: 714 - 487 - 7926
APDESIGNCA@GMAIL.COM

OWNER:

KHOA NGUYEN

1019 N CAMBRIA PL,
ANAHEIM, CA 92801
714 - 409 - 9999

REVISIONS

NO:	DATE	REVISIONS

LEGALIZE REMODEL

Project for:

1019 N CAMBRIA PL,
ANAHEIM, CA 92801

SEAL:

LICENSED PROFESSIONAL ENGINEER
MICHAEL MALCOLM PHILLIPS
C 68338
STATE OF CALIFORNIA

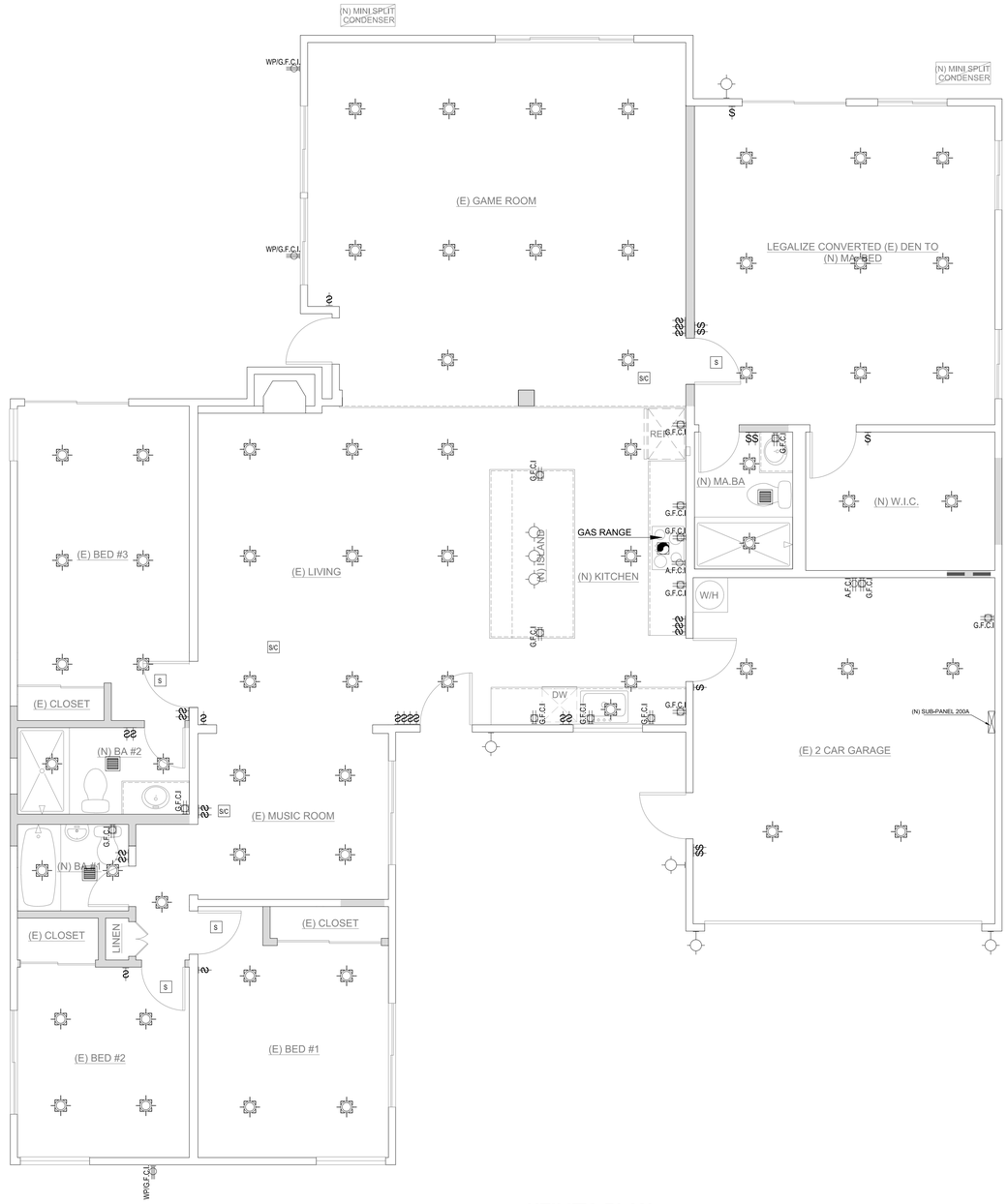
SHEET DESCRIPTION :

ELEVATION

Date	10/1/25
Job #	*25070*
Scale	

Sheet No.:

A4



UTILITY PLAN

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

UTILITY SYMBOLS

OUTLET

- A.F.C.I 110 V DUPLEX OUTLET
- G.F.C.I 110 V G.F.C.I. DUPLEX OUTLET
- G.F.C.I /W.P. 110 V WEATHERPROOF G.F.C.I. OUTLET 220 V OUTLET

SWITCHES

- 2- WAY SWITCH
- DIMMER SWITCH
- 3- WAY SWITCH
- 3- WAY DIMMER
- 4- WAY SWITCH
- 4- WAY DIMMER
- V.S. VACANCY SENSOR
- M.S. MOTION SENSOR AND PHOTO-SENSOR COMBINATIONS

S/C INTERCONNECTED, HARD-WIRED CARBON MONOXIDE ALARMS WITH BATTERY BACK-UP SHALL BE INSTALLED PER CRC R315.

S SMOKE DETECTOR, INTERCONNECTED HARD WIRED AND W/ BATTERY BACK UP.ICC APPROVED (INSTALL AS PER 2022 CBC) INTERCONNECTED

NOTE:
CARBON MONOXIDE DETECTOR SHALL BE UL2034 LISTED AND SMOKE DETECTOR SHALL BE UL 217 LISTED. (PER CRC CHAPTER 3)

LIGHTING/EXHAUST FANS

- WALL MOUNT LIGHT: LED LIGHT FIXTURE
- CEILING RECESSED LED LIGHT FIXTURE - IC RATED AND AIR TIGHT
- BATH ROOM EXHAUST FAN - 50 CFM MIN.: VENT TO OUTSIDE AIR. EQUIPPED WITH A HUMIDISTAT. ENERGY STAR, 3 SONE MAX.
- KITCHEN EXHAUST FAN - 280 CFM MIN.: VENT TO OUTSIDE AIR.

AP DESIGN CONSULTING, INC

9636 GARDEN GROVE BLVD, #7
GARDEN GROVE, CA 92844
TEL: 714 - 487 - 7926
APDESIGNCA@GMAIL.COM

OWNER:

KHOA NGUYEN

1019 N CAMBRIA PL,
ANAHEIM, CA 92801
714 - 409 - 9999

REVISIONS

NO:	DATE	REVISIONS

LEGALIZE REMODEL

Project for:

1019 N CAMBRIA PL,
ANAHEIM, CA 92801

SEAL:

LICENSED PROFESSIONAL ENGINEER
MICHAEL MALCOLM PHILLIPS
C 68338
STATE OF CALIFORNIA

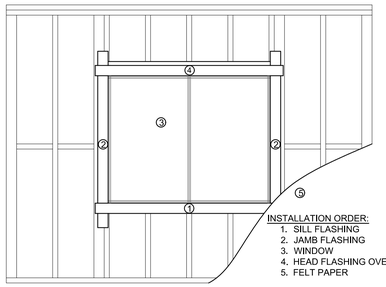
SHEET DESCRIPTION :

UTILITY PLAN

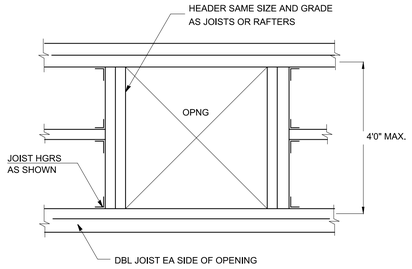
Date	10/1/25
Job #	25070
Scale	

Sheet No.:

E1

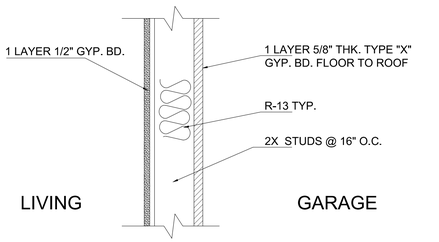


① EXTERIOR WALL WATER PROOFING



② ROOF OR FLOOR OPENING

③



④ 1 HOUR FIRE RATED DETAIL

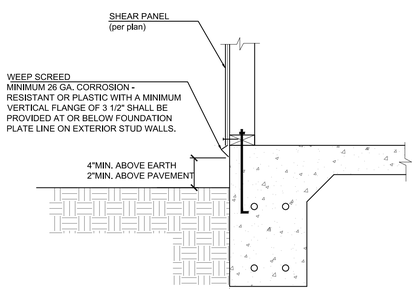
⑤

⑥

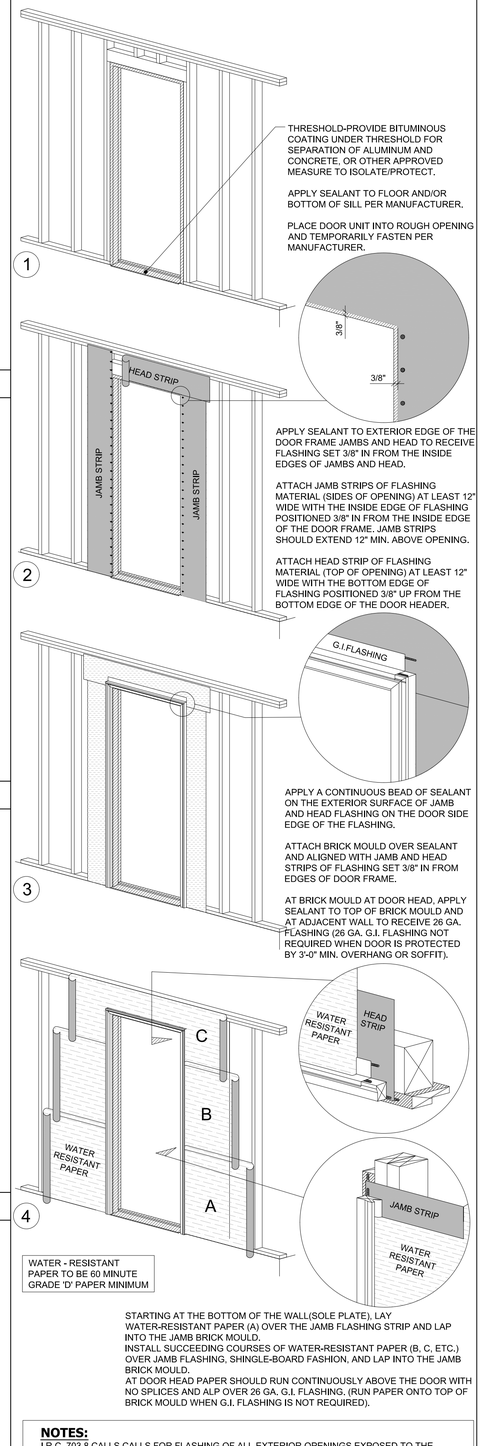
⑨ THRESHOLD AT SWING-IN DOOR

⑦

⑧



⑫ STUCCO WEEP SCREED



WATER - RESISTANT PAPER TO BE 60 MINUTE GRADE 'D' PAPER MINIMUM

STARTING AT THE BOTTOM OF THE WALL(SOLE PLATE), LAY WATER-RESISTANT PAPER (A) OVER THE JAMB FLASHING STRIP AND LAP INTO THE JAMB BRICK MOULD.
INSTALL SUCCEEDING COURSES OF WATER-RESISTANT PAPER (B, C, ETC.) OVER JAMB FLASHING, SHINGLE-BOARD FASHION, AND LAP INTO THE JAMB BRICK MOULD.
AT DOOR HEAD PAPER SHOULD RUN CONTINUOUSLY ABOVE THE DOOR WITH NO SPLICES AND ALP OVER 26 GA. G.I. FLASHING, (RUN PAPER ONTO TOP OF BRICK MOULD WHEN G.I. FLASHING IS NOT REQUIRED).

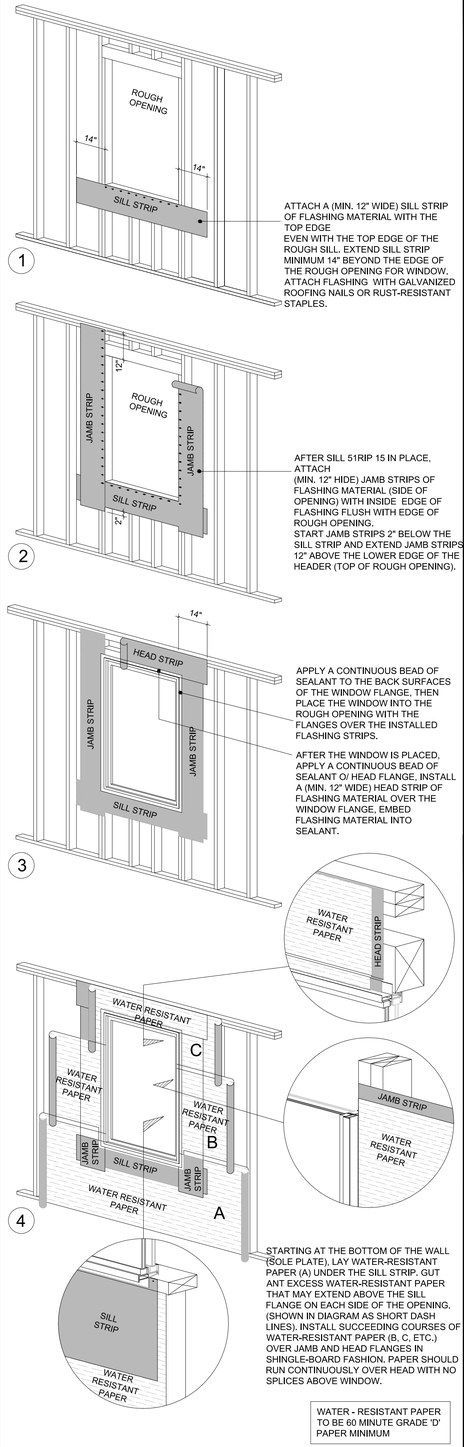
NOTES:

I.R.C. 703.8 CALLS CALLS FOR FLASHING OF ALL EXTERIOR OPENINGS EXPOSED TO THE WEATHER TO MAKE THEM WEATHER PROOF. SINCE C.R.C. DOES NOT OUTLINE PROCEDURES FOR DOOR FLASHING, TECHNIQUES SHOWN HERE ARE RECOMMENDED. USE APPROVED 12" WIDE SELF-SEALING FLASHING, CAULK BACK OF DOOR FRAMES BEFORE SETTING. USE DOORS THAT ARE WATER TIGHT.

26 GA. G.I. FLASHING REQUIRED AS SHOWN IN OTHER DOOR DETAILS TO BE INSTALLED BY SHEET METAL CONTRACTOR.

LINE WIRE, WHEN USED AS BACKING TO SUPPORT WATER-RESISTANT BUILDING PAPER OR FELT BENEATH LATH FOR STUCCO SHOULD BE INSTALLED ACCORDING TO INDUSTRY STANDARDS AND PRACTICE NO ATTACHMENT DEVICE NOR THE WIRE BACKING SHOULD COVER OR PENETRATE FLASHING MATERIAL. PERIPHERAL FLASHING AT ALL EDGES OF WALL OPENINGS MUST COVER WIRE BACKING.

⑬ DOOR FLASHING



STARTING AT THE BOTTOM OF THE WALL (SOLE PLATE), LAY WATER-RESISTANT PAPER (A) UNDER THE SILL STRIP. GUT ANT EXCESS WATER-RESISTANT PAPER THAT MAY EXTEND ABOVE THE SILL FLANGE ON EACH SIDE OF THE OPENING. (SHOWN IN DIAGRAM AS SHORT DASH LINES). INSTALL SUCCEEDING COURSES OF WATER-RESISTANT PAPER (B, C, ETC.) OVER JAMB AND HEAD FLANGES IN SHINGLE-BOARD FASHION. PAPER SHOULD RUN CONTINUOUSLY OVER HEAD WITH NO SPLICES ABOVE WINDOW.

WATER - RESISTANT PAPER TO BE 60 MINUTE GRADE 'D' PAPER MINIMUM

NOTES:

I.R.C. 703.5 CALLS FOR FLASHING OF ALL EXTERIOR OPENINGS EXPOSED TO THE HEATHER TO MAKE THEM WEATHER PROOF. SINCE C.R.C. DOES NOT OUTLINE PROCEDURES FOR WINDOW FLASHING, TECHNIQUES SHOWN HERE ARE RECOMMENDED. USE APPROVED 12" HIDE SELF-SEALING FLASHING. CAULK BACK OF WINDOW FRAMES BEFORE SETTING. USE WINDOW THAT ARE WATER TIGHT.
26 GA. G.I. FLASHING REQUIRED AS SHOWN IN OTHER WINDOW DETAILS TO BE INSTALLED BY SHEET METAL CONTRACTOR.
LINE WIRE, WHEN USED AS BACKING TO SUPPORT HATER-RESISTANT BUILDING PAPER OR FELT BENEATH LATH FOR STUCCO SHOULD BE INSTALLED ACCORDING TO INDUSTRY STANDARDS AND PRACTICE NO ATTACHMENT DEVICE NOR THE WIRE BACKING SHOULD COVER OR PENETRATE FLASHING MATERIAL. PERIPHERAL FLASHING AT ALL EDGES OF WALL OPENINGS MUST COVER WIRE BACKING.

⑭ WINDOW FLASHING

AP DESIGN CONSULTING, INC

9636 GARDEN GROVE BLVD, #7
GARDEN GROVE, CA 92844
TEL: 714 - 487 - 7926
APDESIGNCA@GMAIL.COM

OWNER:

KHOA NGUYEN

1019 N CAMBRIA PL,
ANAHEIM, CA 92801
714 - 409 - 9999

REVISIONS

NO:	DATE	REVISIONS

LEGALIZE REMODEL

Project for:

1019 N CAMBRIA PL,
ANAHEIM, CA 92801

SEAL:

LICENSED PROFESSIONAL ENGINEER
MICHAEL MALCOLM PHILLIPS
C 68338
STATE OF CALIFORNIA

SHEET DESCRIPTION :

ARCHITECTURAL DETAILS

Date	10/1/25
Job #	*25070*
Scale	

Sheet No.:

AD1

2022 CALGREEN RESIDENTIAL MANDATORY MEASURES
EFFECTIVE JANUARY 1, 2023
HCD SHL 620 (Rev 03/23)

See specific referenced sections for complete details on CALGreen mandatory requirements.

2022 CALGREEN CODE

CHAPTER 1 – ADMINISTRATION

SECTION	REQUIREMENTS
	Scope
101.3.1	Applies to ALL newly constructed residential buildings: low-rise, high-rise, and hotels/motels.
102.3	Requires a completed Residential Occupancies Application Checklist or alternate method acceptable to the enforcing agency to be used for documentation of conformance.

CHAPTER 3 – GREEN BUILDING

SECTION	REQUIREMENTS
	Additions and alterations
301.1.1	• Applies to additions or alterations of residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. • Requirements only apply within the specific area of the addition or alteration. • Requirements for electric vehicle charging may apply to additions to or alterations of parking facilities for multifamily buildings
	Low-rise and high-rise residential buildings
301.2	Banners identify provisions applying to low-rise only [LR] or high-rise only [HR].
	Mixed occupancy buildings
302.1	Requires each portion of mixed occupancy buildings to comply with CALGreen measures applicable for the specific occupancy. **Exceptions:** • Accessory structures and accessory occupancies serving residential buildings to comply with Chapter 4 and Appendix A4, as applicable. • Live/work units complying with the California Building Code Section 508.5 shall not be considered a mixed occupancy. Live/work units are required to comply with Chapter 4 and Appendix A4, as applicable.

2022 CALGREEN RESIDENTIAL MANDATORY MEASURES
EFFECTIVE JANUARY 1, 2023
HCD SHL 620 (Rev 03/23)

See specific referenced sections for complete details on CALGreen mandatory requirements.

2022 CALGREEN CODE

CHAPTER 4 – RESIDENTIAL MANDATORY MEASURES
DIVISION 4.1 – PLANNING AND DESIGN

SECTION	REQUIREMENTS
	Storm water drainage and retention during construction
4.106.2	Projects which disturb less than 1 acre of soil and are not part of a larger common plan of development shall manage storm water drainage during construction.
	Grading and paving
4.106.3	Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. **Exception:** Additions and alterations which do not alter the existing drainage path.
	Electric vehicle (EV) charging for new construction and existing multifamily parking facilities
4.106.4	• Comply with Section 4.106.4.1 or 4.106.4.2 for installation and use of EV chargers and receptacles. • 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: 1.1. Where there is no local utility power supply, or the local utility is unable to supply adequate power. 1.2. Where local enforcing agency determines additional local utility infrastructure design requirements for implementation of Section 4.106.4, may adversely impact the construction cost of the project. 2. Accessory Dwelling Units and Junior Accessory Dwelling Units without additional parking facilities.

2022 CALGREEN RESIDENTIAL MANDATORY MEASURES
EFFECTIVE JANUARY 1, 2023
HCD SHL 620 (Rev 03/23)

See specific referenced sections for complete details on CALGreen mandatory requirements.

2022 CALGREEN CODE

	EV charging: New 1- & 2-family dwellings/townhouses with attached private garages
4.106.4.1	• Install a listed raceway to accommodate a dedicated 208/240-volt branch circuit for each dwelling unit. • Raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). • Raceway shall originate at the main service or subpanel and 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. • 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. **Exception:** 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*.
	Identification
4.106.4.1.1	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."
	EV charging for new multifamily dwellings, hotels and motels and new residential parking facilities
4.106.4.2	• Applies to all new multifamily dwelling units, hotels and motels and new residential parking facilities. • Shall meet the requirements of Sections 4.106.4.2.1 or 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 (EVSE) or designed as a future EV charging space shall count as at least one standard parking space in order to comply with minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2.

2022 CALGREEN RESIDENTIAL MANDATORY MEASURES
EFFECTIVE JANUARY 1, 2023
HCD SHL 620 (Rev 03/23)

See specific referenced sections for complete details on CALGreen mandatory requirements.

2022 CALGREEN CODE

	Multifamily development projects, hotels, and motels with less than 20 units
4.106.4.2.1	The number of dwelling units, sleeping units or guest rooms shall be based on all building on a project site. 1. **EV Capable.** 10% of the total number of parking spaces on a building site shall be EV spaces capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate electrical panel service capacity, electrical system, and any on-site distribution transformer(s) have sufficient capacity to charge all EVs at a minimum of 40 amps. The service panel/subpanel shall identify overcurrent protective device spaces reserved for future EV charging as "EV CAPABLE." **Exceptions:** 1. When EV chargers (Level 2 EVSE) are installed in a number equal to or greater than the required number of EV capable spaces. 2. When EV chargers (Level 2 EVSE) are installed in a number less than the required number of EV capable spaces, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed. 2. **EV Ready.** 25% of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit. **Exception:** Areas of parking facilities by parking lifts.

2022 CALGREEN RESIDENTIAL MANDATORY MEASURES
EFFECTIVE JANUARY 1, 2023
HCD SHL 620 (Rev 03/23)

See specific referenced sections for complete details on CALGreen mandatory requirements.

2022 CALGREEN CODE

	Multifamily development projects, hotels and motels with 20 or more units
4.106.4.2.2	The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site. 1. **EV Capable.** 10% of the total number of parking spaces on a building site shall be EV spaces capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate electrical panel service capacity, electrical system, and any on-site distribution transformer(s) have sufficient capacity to charge all EVs at a minimum of 40 amperes. The service panel/subpanel shall identify future EV spaces as "EV CAPABLE." **Exception:** When EV chargers (Level 2 EVSE) are installed in a number greater than 5% of parking spaces required by Section 4.106.4.2.2, Item 3, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed over the 5% required. 2. **EV Ready.** 25% of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit. **Exception:** Areas of parking facilities served by parking lifts. 3. **EV Chargers.** 5% of the total number of parking spaces shall be equipped with Level 2 EVSE. Where common use parking is provided, at least one EV charger shall be located in the common use parking area and shall be available for use by all residents or guests. When low power Level 2 EV charging receptacles or EVSE are installed beyond the minimum required, automatic load management systems (ALMS) may be used to reduce 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 EVSE shall have a capacity of not less than 30 amperes. ALMS shall not be used to reduce the minimum required electrical capacity to the required EVCS.

2022 CALGREEN RESIDENTIAL MANDATORY MEASURES
EFFECTIVE JANUARY 1, 2023
HCD SHL 620 (Rev 03/23)

See specific referenced sections for complete details on CALGreen mandatory requirements.

2022 CALGREEN CODE

	EV charging stations (EVCS)
4.106.4.2.2	EVCS required by Section 4.106.4.2.2.2, Item 3 (1 in 25 EVCS with chargers) shall comply with Section 4.106.4.2.2.1.1. **Exception:** EVCS serving public accommodations, public housing motels and hotel shall not be required to comply with this section. See *California Building Code*, Chapter 11B, for applicable requirements.
	Location
4.106.4.2.2.1.1	When EV chargers are installed, EVCS shall comply with at least one of the following options: 1. The EV space shall be located adjacent to an accessible parking space meeting the requirements of the *California Building Code*, Chapter 11A, to allow use of the EV charger from the accessible parking space. 2. The EV space shall be located on an accessible route to the building, as defined in the *California Building Code*, Chapter 2. **Exception:** EVCS designed and constructed in compliance with the *California Building Code*, Chapter 11B, are not required to comply with Section 4.106.4.2.1.1 and Section 4.106.4.2.2, Item 3.
	EV charging stations (EVCS) dimensions
4.106.4.2.2.1.2	EV charging spaces shall be designed to comply with the following: • Minimum length of each EV space shall be 18 feet. • Minimum width of each EV space shall be 9 feet. • One in every 25 charging spaces, but not less than one, shall have an 8-foot minimum aisle. A 5-foot minimum aisle shall be permitted if the minimum width of the EV space is 12 feet. a. Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083% slope) in any direction.

2022 CALGREEN RESIDENTIAL MANDATORY MEASURES
EFFECTIVE JANUARY 1, 2023
HCD SHL 620 (Rev 03/23)

See specific referenced sections for complete details on CALGreen mandatory requirements.

2022 CALGREEN CODE

	Accessible EV spaces
4.106.4.2.2.1.3	In addition to the requirements in Sections 4.106.4.2.2.1.1 and 4.106.4.2.2.1.2, all EVSE, when 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.
	EV space requirements
4.106.4.2.3	**Single EV space required** • Install a listed raceway capable of accommodating a 208/240-volt dedicated branch circuit. • Raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). • Raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the proposed location of the EV space. • Construction documents shall identify the raceway termination point, receptacle or charger location, as applicable. • Service panel and/or subpanel shall have a 40-ampere minimum dedicated branch circuit including an installed branch circuit overcurrent protective device; or spaces reserved to install a branch circuit overcurrent protective device. **Multiple EV spaces required** • Construction documents shall indicate the raceway termination point and proposed location of future EV spaces and EV chargers. Construction documents shall also provide information on amperage of future EVSE, raceway method(s), wiring schematics and electrical load calculations. • Plan design shall be based upon a 40-ampere minimum branch circuit. • Required raceways and related components planned to be installed underground, enclosed, inaccessible or, in concealed areas and spaces shall be installed at the time of original construction. **Exception (applies to both single and multiple EV spaces):** A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the location or the proposed location of the EV space at the time of original construction in accordance with the *California Electrical Code*.

2022 CALGREEN RESIDENTIAL MANDATORY MEASURES
EFFECTIVE JANUARY 1, 2023
HCD SHL 620 (Rev 03/23)

See specific referenced sections for complete details on CALGreen mandatory requirements.

2022 CALGREEN CODE

	Identification
4.106.4.2.4	The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the *California Electrical Code*.
	EV ready space signage
4.106.4.2.5	EV 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.
	EV charging for additions and alterations of parking facilities serving existing multifamily buildings
4.106.4.3	When 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, 10% of the total number of parking spaces added or altered shall be EV spaces capable of supporting future Level 2 EVSE.

DIVISION 4.2 – ENERGY EFFICIENCY

SECTION	REQUIREMENTS
	Scope
4.201.1 & 5.201.1	• Energy efficiency requirements for low-rise residential (single-family) (Section 4.201.1); and high-rise residential (multifamily) and hotels/motels (Section 5.201.1) are now in both residential and nonresidential chapters of CALGreen. • Standards for residential buildings do not require compliance with levels of minimum energy efficiency beyond those required by the 2022 *California Energy Code*.

2022 CALGREEN RESIDENTIAL MANDATORY MEASURES
EFFECTIVE JANUARY 1, 2023
HCD SHL 620 (Rev 03/23)

See specific referenced sections for complete details on CALGreen mandatory requirements.

2022 CALGREEN CODE

DIVISION 4.3 – WATER EFFICIENCY AND CONSERVATION

SECTION	REQUIREMENTS
	Water conserving plumbing fixtures and fittings
4.303.1	Plumbing fixtures and fittings shall comply with the following: **4.303.1.1** – Water closets: ≤ 1.28 gal/flush. **4.303.1.2** – Wall mounted urinals: ≤ 0.125 gal/flush; all other urinals ≤ 0.5 gal/flush. **4.303.1.3.1** – Single showerheads: ≤ 1.8 gpm @ 80 psi. **4.303.1.3.2** – Multiple showerheads: combined flow rate of all showerheads controlled by a single valve shall not exceed 1.8 gpm @ 80 psi, or only 1 shower outlet is to be in operation at a time. **4.303.1.4.1** – Residential lavatory faucets: maximum flow rate ≤ 1.2 gpm @ 60 psi; minimum flow rate ≥ 0.8 gpm @ 20 psi. **4.303.1.4.2** – Lavatory faucets in common and public use areas of residential buildings: ≤ 0.5 gpm @ 60 psi. **4.303.1.4.3** – Metering faucets: ≤ 0.2 gallons per cycle. **4.303.1.4.4** – Kitchen faucets: ≤ 1.8 gpm @ 60 psi; temporary increase to 2.2 gpm allowed but shall default to 1.8 gpm. **4.303.1.4.5** – Pre-rinse spray valves: comply with California Code of Regulations (CCR), Title 20, Appliance Efficiency Regulations, Sections 1605.1(h)(4) Table H-2, Section 1605.3(h)(4)(A), and Section 1607(d)(7). Shall be equipped with an integral automatic shutoff.
	Submeters for multifamily buildings and dwelling units in mixed-use residential/commercial buildings
4.303.2	Submeters shall be installed to measure water usage on individual dwelling units in accordance with the *California Plumbing Code*.
	Standards for plumbing fixtures and fittings
4.303.3	Plumbing fixtures and fittings shall be installed in accordance with the *California Plumbing Code* and shall meet applicable standards referenced in Table 1701.1 of the *California Plumbing Code*.

2022 CALGREEN RESIDENTIAL MANDATORY MEASURES
EFFECTIVE JANUARY 1, 2023
HCD SHL 620 (Rev 03/23)

See specific referenced sections for complete details on CALGreen mandatory requirements.

2022 CALGREEN CODE

	Outdoor potable water use in landscape areas
4.304.1	New 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.

DIVISION 4.4 – MATERIAL CONSERVATION & RESOURCE EFFICIENCY

SECTION	REQUIREMENTS
	Rodent proofing
4.406.1	Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be closed with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency to prevent passage of rodents.
	Construction waste management
4.408.1	• Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance. Provide documentation to the enforcing agency per Section 4.408.5. **Exceptions:** 1. Excavated soil and land-clearing debris. 2. Alternative waste reduction methods developed by working with local enforcing 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.
	Construction waste management plan
4.408.2	Submit a construction waste management plan that meets Items 1 through 5.

2022 CALGREEN RESIDENTIAL MANDATORY MEASURES
EFFECTIVE JANUARY 1, 2023
HCD SHL 620 (Rev 03/23)

See specific referenced sections for complete details on CALGreen mandatory requirements.

2022 CALGREEN CODE

	Waste management company
4.408.3	Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that diverted construction and demolition waste materials meet the requirements in Section 4.408.1.
	Waste stream reduction alternative
4.408.4 & 4.408.4.1	• Low-rise residential projects that generate a total combined weight of construction and demolition waste disposed in landfills, which do not exceed 3.4 pounds per square foot of the building area shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1. • Projects that generate a total combined weight of construction and demolition waste disposed 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.
	Operation and maintenance manual
4.410.1	At the time of final inspection, a manual, compact disc, web-based reference, or other media acceptable to the enforcing agency which covers 12 specific subject areas shall be placed in the building.
	Recycling by occupants
4.410.2	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 is identified for the depositing, storage, and collection of nonhazardous materials for recycling, including (at minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive. **Exception:** Rural jurisdictions that meet and apply for the exemption in *Public Resources Code* Section 42649.82 (a)(2)(A) et seq. are not required to comply with the organic waste portion of this section.

2022 CALGREEN RESIDENTIAL MANDATORY MEASURES
EFFECTIVE JANUARY 1, 2023
HCD SHL 620 (Rev 03/23)

See specific referenced sections for complete details on CALGreen mandatory requirements.

2022 CALGREEN CODE

DIVISION 4.5 – ENVIRONMENTAL QUALITY

SECTION	REQUIREMENTS
	Fireplaces – General
4.503.1	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 all applicable local ordinances.
	Protection of mechanical equipment during construction
4.504.1	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 intake and distribution component openings shall be covered. Tape, plastic, Sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of water, dust and debris entering the system may be used.
	Adhesives, sealants and caulks
4.504.2.1	Adhesives, sealants and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules apply: 1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCAQMD Rule 1168 VOC limits, as shown in Table 4.504.1 or 4.504.2, as applicable. Such products shall also comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products, as specified in Subsection 2. 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 CCR, Title 17, commencing with Section 94507.

2022 CALGREEN RESIDENTIAL MANDATORY MEASURES
EFFECTIVE JANUARY 1, 2023
HCD SHL 620 (Rev 03/23)

See specific referenced sections for complete details on CALGreen mandatory requirements.

2022 CALGREEN CODE

	Paints and coatings
4.504.2.2	Architectural paints and coatings shall comply with VOC limits in Table 1 of the Air Resources Board 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.
	Aerosol paints and coatings
4.504.2.3 & 4.504.2.4	• 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 CCR, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District shall additionally comply with the percent VOC by weight of product limits of Regulation 8, Rule 49. • Documentation is required per Section 4.504.2.4.
	Carpet systems
4.504.3	Carpet installed in the building interior shall meet the testing and product 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 (also known as Specification 01350).
	Carpet cushion
4.504.3.1	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 (also known as Specification 01350).
	Carpet adhesive
4.504.3.2	Carpet adhesives shall meet the requirements of Table 4.504.1.

2022 CALGREEN RESIDENTIAL MANDATORY MEASURES
EFFECTIVE JANUARY 1, 2023
HCD SHL 620 (Rev 03/23)

See specific referenced sections for complete details on CALGreen mandatory requirements.

2022 CALGREEN CODE

	Resilient flooring systems
4.504.4	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 (also known as Specification 01350).
	Composite wood products
4.504.5 & 4.504.5.1	• Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified in the Air Resources Board's Air Toxics Control Measure for Composite Wood (CCR, Title 17, Section 93120 et seq.) as shown in Table 4.504.5. • Documentation is required per Section 4.504.5.1. • Definition of Composite Wood Products: Composite wood products include hardwood plywood, particleboard, and medium density fiberboard. "Composite wood products" do 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 CCR, Title 17, Section 93120.1(a).
	Concrete slab foundations
4.505.2	Concrete slab foundations or concrete slab-on-ground floors required to have a vapor retarder by the *California Building Code*, Chapter 19, or the *California Residential Code*, Chapter 5, respectively, shall also comply with this section.
	Capillary break
4.505.2.1	A capillary break shall be installed in compliance with at least one of the following: 1. A 4-inch thick base of ½ inch or larger clean aggregate shall be provided with a vapor retarder in direct contact with concrete and a concrete mix design, which will address bleeding, shrinkage, and curling, shall be used. For additional information, see American Concrete Institute, ACI 302.2R-06. 2. Other equivalent methods approved by the enforcing agency. 3. A slab design specified by a licensed design professional.

2022 CALGREEN RESIDENTIAL MANDATORY MEASURES
EFFECTIVE JANUARY 1, 2023
HCD SHL 620 (Rev 03/23)

See specific referenced sections for complete details on CALGreen mandatory requirements.

2022 CALGREEN CODE

	Moisture content of building materials
4.505.3	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% moisture content. Moisture content shall be verified in compliance with the following: 1. Moisture content shall be determined with either a probe-type or a contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements in Section 101.8. 2. Moisture readings shall be taken at a point 2 feet to 4 feet from the grade stamped end of each piece to be verified. 3. At least 3 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. Manufacturers' drying recommendations shall be followed for wet-applied insulation products prior to enclosure.
	Bathroom exhaust fans
4.506.1	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 manual or automatic adjustment between a relative humidity range of ≤ 50% to a maximum of 80%. b. A humidity control may be a separate component to the exhaust fan and is not required to be integral or built-in. **Note:** For CALGreen, a bathroom is a room which contains a bathtub, shower, or tub/shower combination. Lighting integral to bathroom exhaust fans shall comply with *California Energy Code*.

2022 CALGREEN RESIDENTIAL MANDATORY MEASURES
EFFECTIVE JANUARY 1, 2023
HCD SHL 620 (Rev 03/23)

See specific referenced sections for complete details on CALGreen mandatory requirements.

2022 CALGREEN CODE

	Heating and air-conditioning system design
4.507.2	Heating and air-conditioning systems shall be sized, designed and equipment selected using the following methods: 1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J – 2016 (*Residential Load Calculation*), ASHRAE handbooks or other equivalent design software or methods. 2. Duct systems are sized according to ANSI/ACCA 1 Manual D – 2016 (*Residential Duct Systems*), ASHRAE handbooks or other equivalent design software or methods. 3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S – 2014 (*Residential Equipment Selection*) or other equivalent design software or methods. **Exception:** Use of alternate design temperatures necessary to ensure the systems function are acceptable.

CHAPTER 7 – INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

SECTION	REQUIREMENTS
	Installer training
702.1	Heating, ventilation, and air conditioning (HVAC) system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a recognized training or certification program. 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.

2022 CALGREEN RESIDENTIAL MANDATORY MEASURES
EFFECTIVE JANUARY 1, 2023
HCD SHL 620 (Rev 03/23)

See specific referenced sections for complete details on CALGreen mandatory requirements.

2022 CALGREEN CODE

	Special inspection
702.2	When required by the enforcing agency, special inspectors must be qualified and able to demonstrate competence to the enforcing agency in the discipline in which they are inspecting.
	Documentation
703.1	Documentation of compliance shall include, but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the local enforcing agency. Other specific documentation or special inspections necessary to verify compliance are specified in appropriate sections of CALGreen.

AP DESIGN CONSULTING, INC
9636 GARDEN GROVE BLVD, #7
GARDEN GROVE, CA 92844
TEL: 714 - 487 - 7926
APDESIGNCA@GMAIL.COM

OWNER:

KHOA NGUYEN
1019 N CAMBRIA PL,
ANAHEIM, CA 92801
714 - 409 - 9999

REVISIONS

NO:	DATE	REVISIONS

LEGALIZE REMODEL

Project for:

1019 N CAMBRIA PL,
ANAHEIM, CA 92801

SEAL:

LICENSED PROFESSIONAL ENGINEER
MICHAEL MALCOLM PHILLIPS
C 68338
STATE OF CALIFORNIA

SHEET DESCRIPTION :

CAL GREEN
REQUIREMENTS

Date	10/1/25
Job #	25070
Scale	

Sheet No.:

N1

DESIGN & MATERIAL SPECIFICATION:

BUILDING CODE: CBC 2022

LUMBER: ALL STRUCTURAL MEMBERS SHALL BE DOUGLAS FIR-LARCH UNLESS OTHERWISE NOTED

	Fb	Ft	Fv	E
BEAMS 5" OR MORE THICK- NO.1	1350	675	85	1.6
POSTS 5" OR MORE THICK- NO.1	1350	675	85	1.6
P.S.L BEAMS ERS-1387	2900	2025	290	1.6
DOUGLAS FIR-LARCH-NO.2	875	575	95	1.6

REINFORCING STEEL: ASTM A615, GRADE 40

STRUCTURAL STEEL: GRADE A36

FOUNDATION: ASSUME SOIL PRESSURE IS 1500 PSF WITHOUT SOILS TEST

CONCRETE: 2,500 PSI UNLESS OTHERWISE SPECIFIED

MASONRY: 1900 PSI

GROUT: TYPE M

FOUNDATION LEGENDS

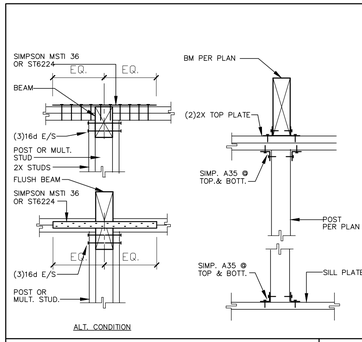
- FOOTING / SLAB
- (N) FOOTING / SLAB
- STUD WALL
- DETAIL NUMBER / DETAIL SHEET NUMBER
- :SHEAR WALLS / :SYMBOL / :APPROX. LENGTH
- CONCRETE PAD FOOTING SEE SCHEDULE

FRAMING SYMBOLS & LEGENDS

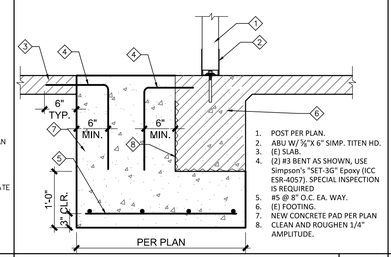
- :SHEAR WALLS / :SYMBOL / :APPROX. LENGTH
- BEAM NUMBER, REFER TO CALCULATIONS.
- DETAIL NUMBER / DETAIL SHEET NUMBER
- COLUMN OR TRIMMER AS NOTED
- SPAN AND DIRECTION OF JOIST FRAMING MEMBER PER PLAN
- CEILING JOIST
- ROOF RAFTER
- FLOOR JOIST
- STUD WALL
- BEARING WALL
- DRAG STRAP
- ALIGNED WITH POST ABOVE
- CALIFORNIA FRAMING
- INDICATES BEAM SIZE (DFL HEADER/DROP) U.N.O.

PAD FOOTING SCHEDULE

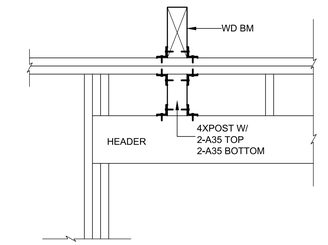
NO.	SIZE	MIN. THICKNESS	REINFORCEMENT EACH WAY
P2	2'-6" SQ.	24"	(3)-#4, BOTTOM



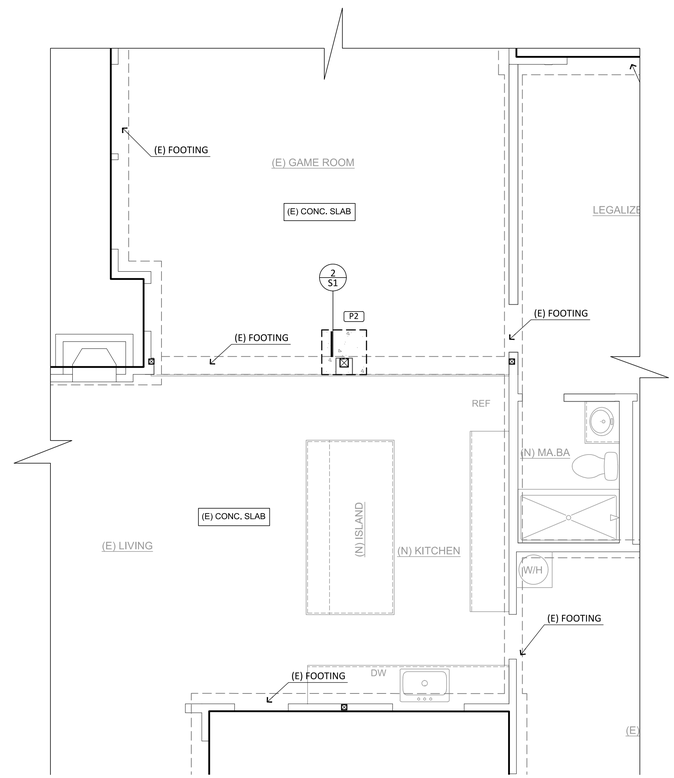
BEAM POCKET N.T.S. **1**



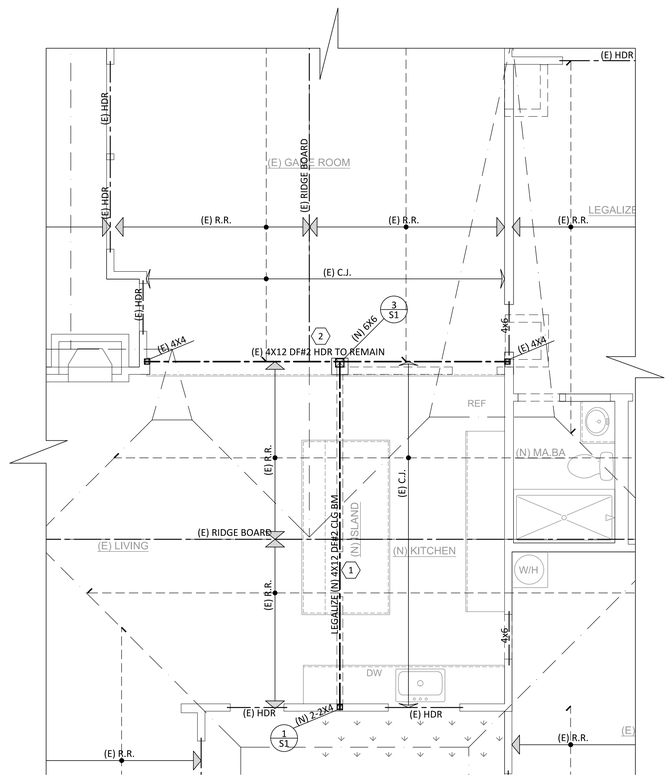
NEW PAD AT EXISTING FOOTING **2**



CONNECTION DETAIL N.T.S. **3**



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



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

AP DESIGN CONSULTING, INC

9636 GARDEN GROVE BLVD, #7
GARDEN GROVE, CA 92844
TEL: 714 - 487 - 7926
APDESIGNCA@GMAIL.COM

OWNER:

KHOA NGUYEN

1019 N CAMBRIA PL,
ANAHEIM, CA 92801
714 - 409 - 9999

REVISIONS

NO:	DATE	REVISIONS

Project for:

LEGALIZE REMODEL

1019 N CAMBRIA PL,
ANAHEIM, CA 92801

SEAL:

LICENSED PROFESSIONAL ENGINEER
MICHAEL MALCOLM PHILLIPS
C 68338
STATE OF CALIFORNIA

SHEET DESCRIPTION :

FOUNDATION & ROOF FRAMING PLAN

Date	10/1/25
Job #	25070
Scale	

Sheet No.:

S1

GENERAL INFORMATION

01	Project Name	REMODEL			
02	Run Title	Title 24 Analysis			
03	Project Location	1019 N Cambria Pl,			
04	City	Anaheim	05	Standards Version	2022
06	Zip code	92801	07	Software Version	EnergyPro 9.2
08	Climate Zone	8	09	Front Orientation (deg/ Cardinal)	90
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	Addition and/or Alteration	13	Number of Bedrooms	4
14	Addition Cond. Floor Area (ft²)	0	15	Number of Stories	1
16	Existing Cond. Floor Area (ft²)	2275	17	Fenestration Average U-factor	0
18	Total Cond. Floor Area (ft²)	2275	19	Glazing Percentage (%)	12.66%
20	ADU Bedroom Count	n/a	21	ADU Conditioned Floor Area	n/a
22	Fuel Type	Natural gas	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 USE SUMMARY

Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft² -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft² -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft² -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft² -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	0	14.07	0	11.02	0	3.05
Space Cooling	0	61.57	0	47.85	0	13.72
IAQ Ventilation	0	0	0	0	0	0
Water Heating	0	21.2	0	21.2	0	0
Self Utilization/Flexibility Credit						
Efficiency Compliance Total	**0**	**96.84**	**0**	**80.07**	**0**	**16.77**
Photovoltaics		0		0		
Battery				0		
Flexibility						
Indoor Lighting	0	6.43	0	6.43		
Appl. & Cooking	0	10.61	0	10.61		
Plug Loads	0	28.68	0	28.68		
Outdoor Lighting	0	1.62	0	1.62		
TOTAL COMPLIANCE	**0**	**144.18**	**0**	**127.41**		

Registration Number: 425-P010198866A-000-000-0000000-0000 Registration Date/Time: 06/27/2025 08:37 HERS Provider: CHEERS
NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.
CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2025-06-27 08:31:04
Schema Version: rev 20220901

ENERGY USE INTENSITY

	Standard Design (kBtu/ft² - yr)	Proposed Design (kBtu/ft² - yr)	Compliance Margin (kBtu/ft² - yr)	Margin Percentage
Gross EUI[1]	17.86	16.64	1.22	6.83
Net EUI[2]	17.86	16.64	1.22	6.83

Notes
1. Gross EUI is Energy Use Total (not including PV) / Total Building Area.
2. Net EUI is Energy Use Total (including PV) / Total Building Area.

REQUIRED SPECIAL FEATURES

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

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

HERS FEATURE SUMMARY

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

- Verified Refrigerant Charge
- Airflow in habitable rooms (SC3.1.4.1.7)
- Verified heat pump rated heating capacity
- Wall-mounted thermostat in zones greater than 150 ft2 (SC3.4.5)
- Ductless indoor units located entirely in conditioned space (SC3.1.4.1.8)

BUILDING - FEATURES INFORMATION

01	02	03	04	05	06	07
Project Name	Conditioned Floor Area (ft²)	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems
REMODEL	2275	1	4	1	0	1

Registration Number: 425-P010198866A-000-000-0000000-0000 Registration Date/Time: 06/27/2025 08:37 HERS Provider: CHEERS
NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.
CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2025-06-27 08:31:04
Schema Version: rev 20220901

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft²)	Avg. Ceiling Height	Water Heating System 1	Status
EXISTING	Conditioned	HVAC System1	2275	8	DHW Sys 1	Existing Unchanged

OPAQUE SURFACES

01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status	Verified Existing Condition
Front WALL remain	EXISTING	Default Wall Prior to 197	90	Front	458	80	90	none	Existing	No
REAR WALL remain	EXISTING	Default Wall Prior to 197	270	Back	458	128	90	none	Existing	No
RIGHT WALL remain	EXISTING	Default Wall Prior to 197	0	Right	522	62.67	90	none	Existing	No
LEFT WALL remain	EXISTING	Default Wall Prior to 197	180	Left	522	71.77	90	none	Existing	No
Roof REMAIN	EXISTING	Default Roof Prior to 197	n/a	n/a	2275	n/a	n/a		Existing	No

ATTIC

01	02	03	04	05	06	07	08	09	10
Name	Construction	Type	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Radiant Barrier	Cool Roof	Status	Verified Existing Condition
Attic EXISTING	Attic RoofEXISTING	Ventilated	3	0.1	0.85	No	No	Existing	No

Registration Number: 425-P010198866A-000-000-0000000-0000 Registration Date/Time: 06/27/2025 08:37 HERS Provider: CHEERS
NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.
CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2025-06-27 08:31:04
Schema Version: rev 20220901

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft²)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading	Status	Verified Existing Condition
WE4060	Window	Front WALL remain	Front	90			1	24	0.55	NFRC	0.67	NFRC	Bug Screen	Existing	No
WE4060 2	Window	Front WALL remain	Front	90			1	24	0.55	NFRC	0.67	NFRC	Bug Screen	Existing	No
WE4030	Window	Front WALL remain	Front	90			1	12	0.55	NFRC	0.67	NFRC	Bug Screen	Existing	No
SLDRE6068	Window	REAR WALL remain	Back	270			1	40	0.55	NFRC	0.67	NFRC	Bug Screen	Existing	No
SLDRE6068 2	Window	REAR WALL remain	Back	270			1	40	0.55	NFRC	0.67	NFRC	Bug Screen	Existing	No
WE8040	Window	REAR WALL remain	Back	270			1	32	0.55	NFRC	0.67	NFRC	Bug Screen	Existing	No
WE4040	Window	REAR WALL remain	Back	270			1	16	0.55	NFRC	0.67	NFRC	Bug Screen	Existing	No
WE6026	Window	RIGHT WALL remain	Right	0			1	15	0.55	NFRC	0.67	NFRC	Bug Screen	Existing	No
WE6026 2	Window	RIGHT WALL remain	Right	0			1	15	0.55	NFRC	0.67	NFRC	Bug Screen	Existing	No
WE4020	Window	RIGHT WALL remain	Right	0			1	8	0.55	NFRC	0.67	NFRC	Bug Screen	Existing	No
WE4020 2	Window	RIGHT WALL remain	Right	0			1	8	0.55	NFRC	0.67	NFRC	Bug Screen	Existing	No

Registration Number: 425-P010198866A-000-000-0000000-0000 Registration Date/Time: 06/27/2025 08:37 HERS Provider: CHEERS
NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.
CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2025-06-27 08:31:04
Schema Version: rev 20220901

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft²)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading	Status	Verified Existing Condition
WE6020	Window	LEFT WALL remain	Left	180			1	12	0.55	NFRC	0.67	NFRC	Bug Screen	Existing	No
WE3040	Window	LEFT WALL remain	Left	180			1	12	0.55	NFRC	0.67	NFRC	Bug Screen	Existing	No
WE5030	Window	LEFT WALL remain	Left	180			1	15	0.55	NFRC	0.67	NFRC	Bug Screen	Existing	No
WE5030 2	Window	LEFT WALL remain	Left	180			1	15	0.55	NFRC	0.67	NFRC	Bug Screen	Existing	No

OPAQUE DOORS

01	02	03	04	05	06
Name	Side of Building	Area (ft²)	U-factor	Status	Verified Existing Condition
DE3068	Front WALL remain	20	0.5	Existing	No
DE2668	RIGHT WALL remain	16.67	0.5	Existing	No
DE2868	LEFT WALL remain	17.77	0.5	Existing	No

SLAB FLOORS

01	02	03	04	05	06	07	08	09	10
Name	Zone	Area (ft²)	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted Fraction	Heated	Status	Verified Existing Condition
Slab-on-Grade	EXISTING	2275	248.75	none	0	80%	No	Existing	No

Registration Number: 425-P010198866A-000-000-0000000-0000 Registration Date/Time: 06/27/2025 08:37 HERS Provider: CHEERS
NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.
CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2025-06-27 08:31:04
Schema Version: rev 20220901

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
Default Wall Prior to 197	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-0	None / None	0.361	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4 Exterior Finish: 3 Coat Stucco
Attic RoofEXISTING	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
Default Roof Prior to 197	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 16 in. O. C.	R-11	None / None	0.083	Over Ceiling Joists: R-1.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board

BUILDING ENVELOPE - HERS VERIFICATION

01	02	03	04	05
Quality Insulation Installation (QII)	High R-value Spray Foam Insulation	Building Envelope Air Leakage	CFM50	CFM50
Not Required	Not Required	N/A	n/a	n/a

WATER HEATING SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	HERS Verification	Water Heater Name (#)	Status	Verified Existing Condition	Existing Water Heating System
DHW Sys 1	Domestic Hot Water (DHW)	Standard	DHW Heater 1	1	n/a	None	n/a	DHW Heater 1 (1)	Existing	No	

Registration Number: 425-P010198866A-000-000-0000000-0000 Registration Date/Time: 06/27/2025 08:37 HERS Provider: CHEERS
NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.
CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2025-06-27 08:31:04
Schema Version: rev 20220901

WATER HEATERS

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
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	Status	Verified Existing Condition
DHW Heater 1	Gas	Small Storage	1	40	EF	0.7	Btu/Hr	75000	0	70	n/a		Existing	No

WATER HEATING - HERS VERIFICATION

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

SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Required Thermostat Type	Status	Verified Existing Condition	Existing HVAC System
HVAC System1	Heat pump heating cooling	Heat Pump System 1	2	Heat Pump System 1	2	n/a	n/a	Setback	New	No	

Registration Number: 425-P010198866A-000-000-0000000-0000 Registration Date/Time: 06/27/2025 08:37 HERS Provider: CHEERS
NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.
CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2025-06-27 08:31:04
Schema Version: rev 20220901

HVAC - HEAT PUMPS

01	02	03	04	05	06	07	08	09	10	11	12	13
			Heating				Cooling					
Name	System Type	Number of Units	Heating Efficiency Type	HSPF/HSPF2/COP	Cap 47	Cap 17	Cooling Efficiency Type	SEER/SEER2	EER/EER2/CEER	Zonally Controlled	Compressor Type	HERS Verification
Heat Pump System 1	VCHP-ductless	2	HSPF	8	10000	8000	EERSEER	14	11.5	Not Zonal	Single Speed	Heat Pump System 1-hers-htpump

HVAC HEAT PUMPS - HERS VERIFICATION

01	02	03	04	05	06	07	08	09
Name	Verified Airflow	Airflow Target	Verified EER/EER2	Verified SEER/SEER2	Verified Refrigerant Charge	Verified HSPF/HSPF2	Verified Heating Cap 47	Verified Heating Cap 17
Heat Pump System 1-hers-htpump	Not Required	0	Not Required	Not Required	Yes	No	Yes	Yes

VARIABLE CAPACITY HEAT PUMP COMPLIANCE OPTION - HERS VERIFICATION

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

Registration Number: 425-P010198866A-000-000-0000000-0000 Registration Date/Time: 06/27/2025 08:37 HERS Provider: CHEERS
NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.
CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2025-06-27 08:31:04
Schema Version: rev 20220901

AP DESIGN CONSULTING, INC
9636 GARDEN GROVE BLVD, #7
GARDEN GROVE, CA 92844
TEL: 714 - 487 - 7926
APDESIGNCA@GMAIL.COM

OWNER:

KHOA NGUYEN
1019 N CAMBRIA PL,
ANAHEIM, CA 92801
714 - 409 - 9999

REVISIONS

NO:	DATE	REVISIONS

LEGALIZE REMODEL

Project for:
1019 N CAMBRIA PL,
ANAHEIM, CA 92801

SEAL:

LICENSED PROFESSIONAL ENGINEER
MICHAEL MALCOLM PHILLIPS
C 68338
STATE OF CALIFORNIA

SHEET DESCRIPTION :
TITLE 24
- ADU

Date	10/1/25
Job #	25070
Scale	

Sheet No.:
T24.1

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD CF1R-PRF-01-E

Project Name: REMODEL **Calculation Date/Time:** 2025-06-27T08:30:48-07:00 **(Page 10 of 10)**

Calculation Description: Title 24 Analysis **Input File Name:** 25070 - REMODEL.ribd22x

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
1. I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: Anh Phan	Documentation Author Signature: Anh Phan
Company: AP DESIGN CONSULTING, INC	Signature Date: 06/27/2025
Address: 9636 Garden Grove Blvd, Ste #7	CEA/ HERS Certification Identification (If applicable):
City/State/Zip: Garden Grove, CA 92844	Phone: 714-487-7926
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: Anh Phan	Responsible Designer Signature: Anh Phan
Company: AP DESIGN CONSULTING, INC	Date Signed: 06/27/2025
Address: 9636 Garden Grove Blvd, Ste #7	License: N/A
City/State/Zip: Garden Grove, CA 92844	Phone: 714-487-7926

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.

Registration Number: 425-P101988866A-000-000-0000000-0000 Registration Date/Time: 06/27/2025 08:37 HERS Provider: CHEERS

NOTICE: This document has been generated by California Home Energy Efficiency Rating Services (CHEERS) using information uploaded by third parties not affiliated with or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document.

CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2025-06-27 08:31:04

Schema Version: rev 20220901

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.(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(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.(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 endcontrolled per §150.0(o)1BiiiKiv. 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)1C i-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(k)1G:	**Screw based luminaires.** Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. *
§ 150.0(k)1H:	**Light Sources in Enclosed or Recessed Luminaires**. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1I:	**Light Sources in Drawers, Cabinets, and Linen Closets.** Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)2A:	**Interior Switches and Controls.** All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	**Interior Switches and Controls.** Exhaust fans must be controlled separately from lighting systems. *
§ 150.0(k)2A:	**Accessible Controls.** Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned on and off. *
§ 150.0(k)2B:	**Multiple Controls.** Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sensor is installed to comply with § 150.0(k).
§ 150.0(k)2C:	**Mandatory Requirements**. Lighting controls must comply with the applicable requirements of § 110.9.
§ 150.0(k)2D:	**Energy Management Control Systems.** An energy management control system (EMCS) may be used to comply with dimming, occupancy, and control requirements if it provides the functionality of the specified control per § 110.9 and the physical controls specified in § 150.0(k)2A.
§ 150.0(k)2E:	**Automatic Shutoff Controls.** In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed luminaire must be controlled by an occupancy or vacancy sensor providing automatic-off functionality. Lighting inside drawers and cabinets with opaque fronts or doors must have controls that turn the light off when the drawer or door is closed.
§ 150.0(k)2F:	**Dimmers.** Lighting in habitable spaces (e.g., living rooms, dining rooms, kitchens, and bedrooms) must have readily accessible wall-mounted dimming controls that allow the lighting to be manually adjusted up and down. Forward phase cut dimmers controlling LED light sources in these spaces must comply with NEMA SSL 7A.
§ 150.0(k)2K:	**Independent controls.** Integrated lighting of exhaust fans shall be controlled independently from the fans. Lighting under cabinets or shelves, lighting in display cabinets, and switched outlets must be controlled separately from ceiling-installed lighting.
§ 150.0(k)3A:	**Residential Outdoor Lighting.** For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must have a manual on/off switch and either a photocell and motion sensor or automatic time switch control) or an astronomical time clock. An energy management control system that provides the specified control functionality and meets all applicable requirements may be used to meet these requirements.
§ 150.0(k)4:	**Internally illuminated address signs.** Internally illuminated address signs must either comply with § 140.8 or consume no more than 5 watts of power.
§ 150.0(k)5:	**Residential Garages for Eight or More Vehicles.** Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in §§ 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.

Solar Readiness:

§ 110.10(a)1:	**Single-family Residences.** Single-family residences located in subdivisions with 10 or more single-family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b)-(e).
§110.10(b)1A:	**Minimum Solar Zone Area.** The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single-family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. *
§ 110.10(b)2:	**Azimuth.** All sections of the solar zone located on steep-sloped roofs must have an azimuth between 90-300° of true north.
§ 110.10(b)3A:	**Shading.** The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment.
§ 110.10(b)3B:	**Shading.** Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the horizontal distance of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane. *
§ 110.10(b)4:	**Structural Design Loads on Construction Documents.** For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(c):	**Interconnection Pathways.** The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single-family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.
§ 110.10(d):	**Documentation.** A copy of the construction documents or a comparable document indicating the information from § 110.10(b)-(c) must be provided to the occupant.
§ 110.10(e)1:	**Main Electrical Service Panel.** The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2:	**Main Electrical Service Panel.** The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric."

Electric and Energy Storage Ready:

5/6/22

2022 Single-Family Residential Mandatory Requirements Summary

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(q):	**Fenestration Products**. Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.45, or area-weighted average U-factor of all fenestration must not exceed 0.45. *

Fireplaces, Decorative Gas Appliances, and Gas Log:

§ 110.5(e)	**Pilot Light.** Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	**Closable Doors.** Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	**Combustion Intake**. Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device. *
§ 150.0(e)3:	**Flue Damper.** Masonry or factory-built fireplaces must have a flue damper with a readily accessible control. *

Space Conditioning, Water Heating, and Plumbing System:

§ 110.0-§ 110.3:	**Certification.** Heating, ventilation, and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission. *
§ 110.2(a):	**HVAC Efficiency.** Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-N. *
§ 110.2(b):	**Controls for Heat Pumps with Supplementary Electric Resistance Heaters.** Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone; and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating. *
§ 110.2(c):	**Thermostats.** All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat. *
§ 110.3(c)3:	**Insulation.** Unfired service water heater storage tanks and solar water-heating backup tanks must have adequate insulation, or tank surface heat loss rating.
§ 110.3(c)6:	**Isolation Valves.** Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.

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

AP DESIGN CONSULTING, INC

9636 GARDEN GROVE BLVD, #7
GARDEN GROVE, CA 92844
TEL: 714 - 487 - 7926
APDESIGNCA@GMAIL.COM

OWNER:

KHOA NGUYEN

1019 N CAMBRIA PL,
ANAHEIM, CA 92801
714 - 409 - 9999

REVISIONS

NO:	DATE	REVISIONS

LEGALIZE REMODEL

Project for:

1019 N CAMBRIA PL,
ANAHEIM, CA 92801

SEAL:

LICENSED PROFESSIONAL ENGINEER
MICHAEL MALCOLM PHILLIPS
C 68338
STATE OF CALIFORNIA

SHEET DESCRIPTION :

TITLE 24
CONT.

Date	10/1/25
Job #	25070
Scale	

Sheet No.:

T24.2