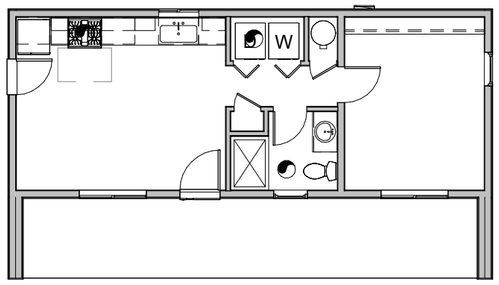
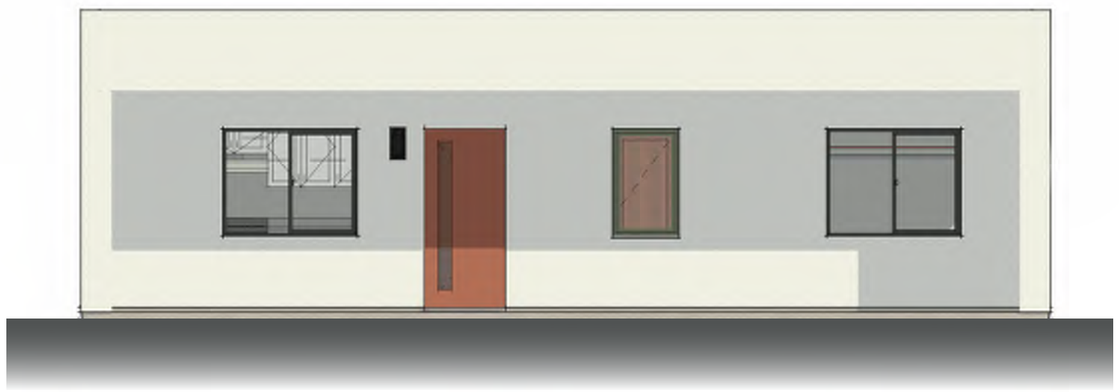
PLAN 2 | STYLE B



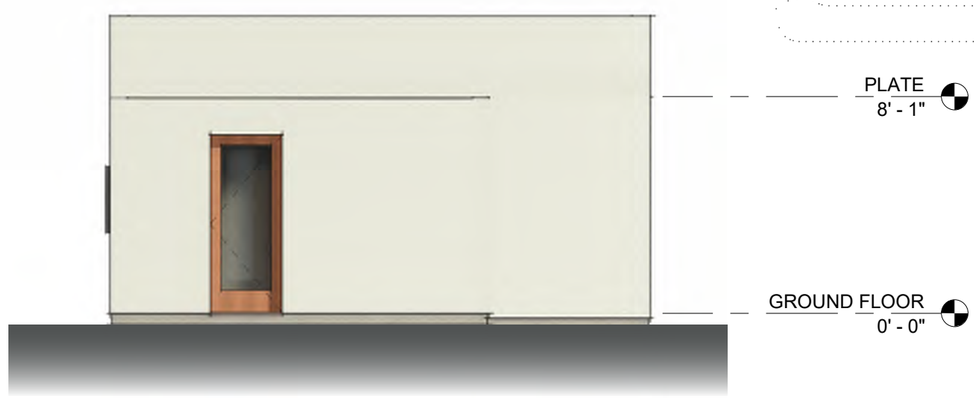


2 **PLAN 2 | STYLE B | 504 FT²**
3/32" = 1'-0" (12 X 18 SHEET)

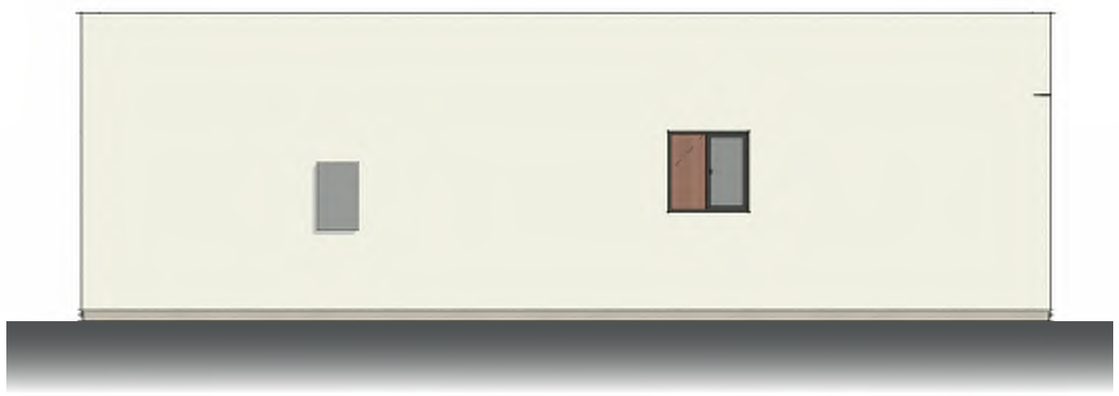
PLAN 2 | STYLE B



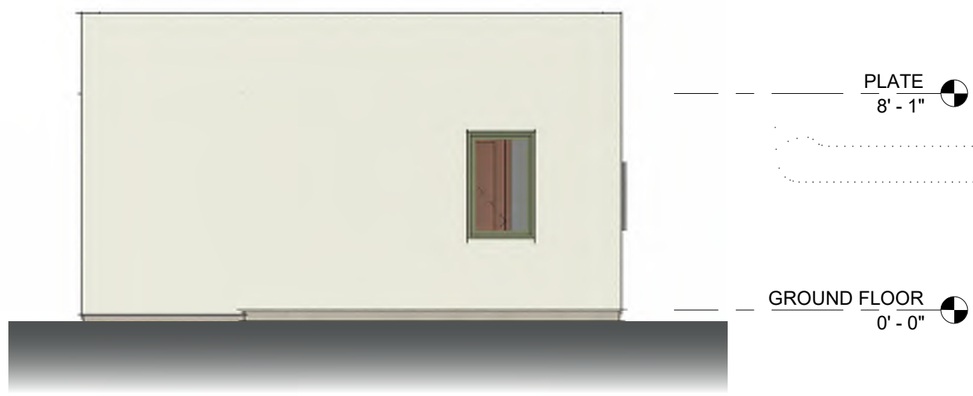
1 **FRONT ELEVATION**
3/16" = 1'-0" (12 X 18 SHEET)



2 **LEFT ELEVATION**
3/16" = 1'-0" (12 X 18 SHEET)



3 **REAR ELEVATION**
3/16" = 1'-0" (12 X 18 SHEET)



4 **RIGHT ELEVATION**
3/16" = 1'-0" (12 X 18 SHEET)

City of COACHELLA

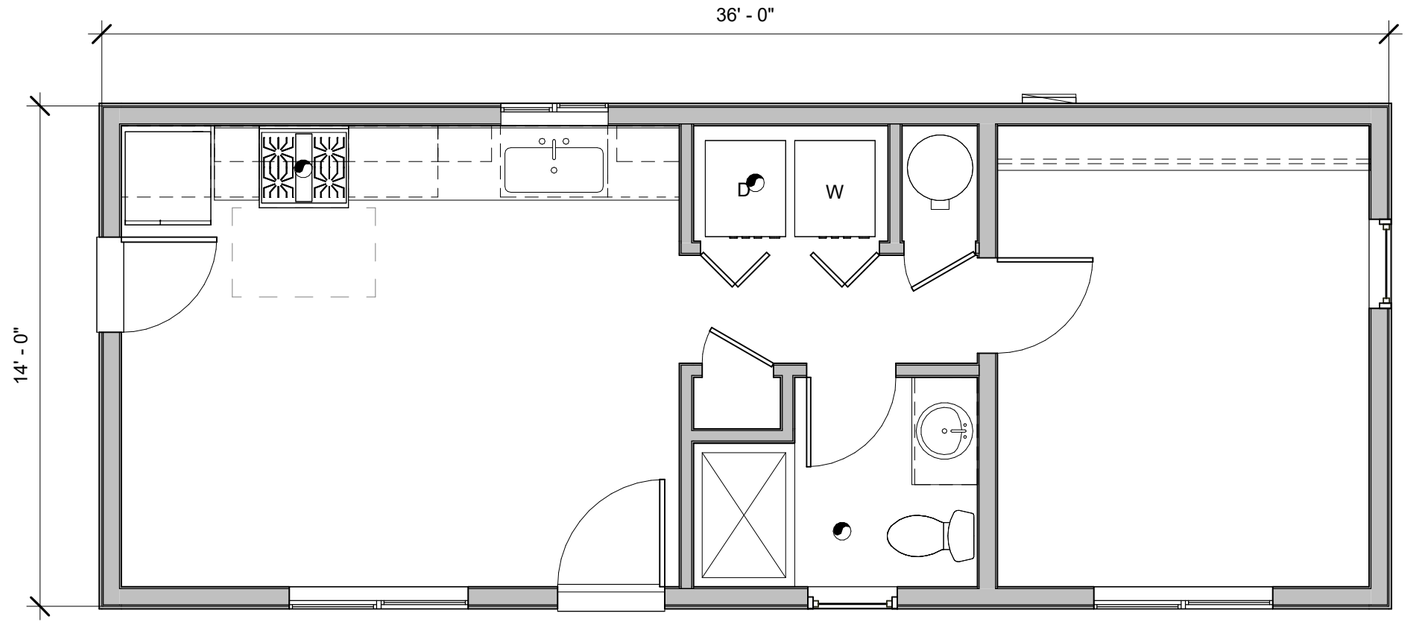
rrm design group

PLAN 2 | STYLE B - DESERT MODERN ELEVATIONS
COACHELLA ADU PROTOTYPES

ISSUE DATE: 11/08/2023
2939-01-CU22

A2-15

PLAN 2 | SCHEMATIC DESIGN



2 504 FT² | 1 BED / 1 BATH
1/4" = 1'-0"







GENERAL RELEASE AND AGREEMENT TO HOLD HARMLESS CLAUSE

BY USING OR IN ANY WAY RELYING UPON THESE PERMIT READY ACCESSORY DWELLING UNIT CONSTRUCTION DOCUMENTS, THE USER AGREES TO RELEASE, INDEMNIFY, DEFEND AND HOLD HARMLESS THE CITY OF COACHELLA, ITS ELECTED OFFICIALS, BOARDS AND COMMISSIONS, OFFICERS, AGENTS, VOLUNTEERS AND EMPLOYEES, RRM DESIGN GROUP, AND THE ARCHITECT OR ENGINEER WHO PREPARED THESE CONSTRUCTION DOCUMENTS FROM AND AGAINST ANY AND ALL CLAIMS (INCLUDING, WITHOUT LIMITATION, CLAIMS FOR BODILY INJURY, DEATH, OR DAMAGE TO PROPERTY), DEMANDS, OBLIGATIONS, DAMAGES, ACTIONS, CAUSES OF ACTION, LIABILITIES, SUITS, LOSSES, JUDGMENTS, FINES, PENALTIES, COSTS AND EXPENSES (INCLUDING, WIHTOUT LIMITATION, ATTORNEYS' FEES, DISBURSEMENTS, AND COURT COSTS) OF EVERY KIND AND NATURE WHATSOEVER, WHICH MAY ARISE FROM OR IN ANY WAY RELATE TO THE USE OF THESE CONSTRUCTION DOCUMENTS. THE USE OF THESE PLANS DOES NOT ELIMINATE OR REDUCE THE USER'S RESPONSIBILITY TO VERIFY ANY AND ALL INFORMATION.

SIGNATURE _____ DATE _____

City of COACHELLA est 1946

THESE PLANS ARE PROVIDED BY THE CITY OF AGOURA HILLS AS PART OF THE PRE-APPROVED ADU PROGRAM AND ARE PUBLIC DOMAIN. THERE CANNOT BE A CHARGE TO PROVIDE THESE PLANS. NO ALTERATIONS TO THESE PLANS ARE ALLOWED. ALL ALTERATIONS MUST BE DONE UNDER A SEPARATE PERMIT ONCE THE BUILDING PERMIT FOR THE ADU HAS BEEN ISSUED AND FINAL INSPECTION COMPLETED. IF YOU DO NOT HAVE THE CONSTRUCTION KNOWLEDGE AND EXPERIENCE TO CONTRUCT THESE PLANS WITHOUT FURTHER DETAILS, IT IS RECOMMENDED YOU HIRE A CONTRACTOR TO DO THE CONSTRUCTION. THE CITY WILL NOT PROVIDE FURTHER INFORMATION OR DETAILS AND BUILDING INSPECTORS WILL NOT PROVIDE STEP BY STEP INSTRUCTIONS IN THE FIELD.

COACHELLA PROTOTYPE ACCESSORY DWELLING UNIT - PLAN 2

STREET ADDRESS (TO BE PROVIDED BY OWNER)

CITY OF COACHELLA, CA

SHEET INDEX

*FOR PLANNING STAFF ONLY

INITIAL WHEN SECTION HAS BEEN REVIEWED. STAFF INITIALS: _____

G-002	TITLE SHEET - PLAN 2
G-101	GENERAL NOTES
G-102	GENERAL NOTES
T24-200	ENERGY COMPLIANCE - PLAN 2
T24-201	ENERGY COMPLIANCE - PLAN 2
T24-202	ENERGY COMPLIANCE - PLAN 2
AS-100	ARCHITECTURAL SITE PLAN SHEET - EXAMPLE & INSTRUCTIONS
A2-101	FLOOR PLANS - PLAN 2
A2-111	MECHANICAL & ELECTRICAL PLANS - PLAN 2

*STRIKETHROUGH SHEETS THAT ARE NOT APPLICABLE TO CHOSEN STYLE

A2-121	ROOF PLAN & REFLECTED CEILING PLAN - PLAN 2 - MISSION REVIVAL
A2-122	ROOF PLAN & REFLECTED CEILING PLAN - PLAN 2 - DESERT MODERN
A2-123	ROOF PLAN & REFLECTED CEILING PLAN - PLAN 2 - SPANISH COLONIAL
A2-201	EXT. ELEVATIONS & SECTIONS - PLAN 2 - MISSION REVIVAL
A2-202	EXT. ELEVATIONS & SECTIONS - PLAN 2 - DESERT MODERN
A2-203	EXT. ELEVATIONS & SECTIONS - PLAN 2 - SPANISH COLONIAL
AD-901	ARCHITECTURAL DETAILS - COMMON
AD-902	ARCHITECTURAL DETAILS - COMMON
AD-903	ARCHITECTURAL DETAILS - MISSION REVIVAL
AD-904	ARCHITECTURAL DETAILS - DESERT MODERN
AD-905	ARCHITECTURAL DETAILS - DESERT MODERN
AD-906	ARCHITECTURAL DETAILS - SPANISH COLONIAL
S-101	SHEET INDEX, ABBREVIATION & SYMBOLS
S-102	GENERAL NOTES
S-103	GENERAL NOTES. SPECIAL INSPECTION & TESTS
S-201	FOUNDATION & ROOF FRAMING PLAN - MISSION REVIVAL
S-211	FOUNDATION & ROOF FRAMING PLAN - DESERT MODERN
S-221	FOUDNATION & ROOF FRAMING PLAN - SPANISH COLONIAL
S-301	TYPICAL CONCRETE DETAILS
S-311	CONCRETE DETAILS
S-401	TYPICAL WOOD DETAILS
S-402	TYPICAL WOOD DETAILS
S-403	TYPICAL WOOD DETAILS
S-421	ROOF FRAMING DETAILS
S-422	ROOF FRAMING DETAILS

Grand total: 34

PROJECT DIRECTORY

*FOR PLANNING STAFF ONLY

INITIAL WHEN SECTION HAS BEEN REVIEWED. STAFF INITIALS: _____

APPLICANT

ADDRESS: _____

CONTACT: _____

EMAIL: _____

PHONE: _____

ARCHITECT (MODIFICATION TO PROTOTYPE) RRM DESIGN GROUP

ADDRESS: 3765 S HIGUERA ST, SUITE 102
SAN LUIS OBISPO, CA 93401

CONTACT: _____

EMAIL: _____

PHONE: P:(805) 543-1794

CIVIL ENGINEER

ADDRESS: _____

CONTACT: _____

EMAIL: _____

PHONE: _____

LANDSCAPE ARCHITECT

ADDRESS: _____

CONTACT: _____

EMAIL: _____

PHONE: _____

STRUCTURAL ENGINEER RRM DESIGN GROUP

ADDRESS: 3765 S HIGUERA ST, SUITE 102
SAN LUIS OBISPO, CA 93401

CONTACT: _____

EMAIL: _____

PHONE: P:(805) 543-1794

UTILITIES

WATER AND SEWER SERVICE	COACHELLA WATER AUTHORITY
ELECTRICAL SERVICE	SOUTHERN CALIFORNIA EDISON
GAS SERVICE	SOCAL GAS
TELEPHONE SERVICE	AT&T
GARBAGE SERVICE	BURRTEC WASTER & RECYCLING SERVICES
CABLE/INTERNET SERVICE	SPECTRUM

SUPPORTING DOCUMENTS

STRUCTURAL CALCULATIONS
PREPARED BY: RRM DESIGN GROUP
DATE PREPARED:
JOB NUMBER:

ENERGY COMPLIANCE
PREPARED BY: TIMOTHY CARSTAIRS
DATE PREPARED:
JOB NUMBER:

TRUSS CALCULATIONS
PREPARED BY:
DATE PREPARED:
JOB NUMBER:

PROJECT INFORMATION

*FOR PLANNING STAFF ONLY

INITIAL WHEN SECTION HAS BEEN REVIEWED. STAFF INITIALS: _____

PROJECT SCOPE:

1. CONSTRUCTION OF A NEW DETACHED ONE STORY 448 SF ACCESSORY DWELLING UNIT WITH ONE BEDROOM AND ONE BATH(S).
2. ALL SITE WORK WITHIN THE PROPERTY LINE.
3. ALL THE WORK SHOWN IN THE DRAWINGS AND SPECIFICATIONS.

SITE INFORMATION: (TO BE PROVIDED BY CITY OF COACHELLA)

APN: _____
ZONING: _____
LOT SIZE: _____

FLOOR AREA LIMIT (TO BE PROVIDED BY CITY OF COACHELLA)
MAXIMUM FAL: _____
PROPOSED FAL: _____

LOT COVERAGE (TO BE PROVIDED BY OWNER)
INCLUDING ALL AREAS UNDER SOLID ROOF, INCLUDING EAVES.
BUILDING: _____
HARDSCAPE/PAVING: _____
LANDSCAPE: _____
(TO BE PROVIDED BY CITY OF COACHELLA)

SETBACKS

	REQUIRED	*PROPOSED*
FRONT:		
REAR:		
SIDES:		

BUILDING INFORMATION:

NUMBER OF STORIES:	1
OCCUPANCY GROUP:	R-3
CONSTRUCTION TYPE:	VB
MAX. HEIGHT PROPOSED:	
ROOF RATING:	

BUILDING AREAS

AREAS - PLAN 2	
CONDITIONED	
PLAN 2 FLOOR	504 SF
UNCONDITIONED	
PLAN 2 FRONT PORCH - MISSION & MODERN	84 SF

PROJECT CHECKLIST

*FOR PLANNING STAFF ONLY

INITIAL WHEN SECTION HAS BEEN REVIEWED. STAFF INITIALS: _____

STYLE SELECTION

☐ MISSION REVIVAL
*STRIKE THROUGH SHEETS A2-122/123, & A2-202/203 & AD-904/905/906

☐ DESERT MODERN
*STRIKE THROUGH SHEETS A2-121/123, & A2-201/203 & AD-903/906

☐ SPANISH COLONIAL
*STRIKE THROUGH SHEETS A2-121/122, & A2-201/202 & AD-903/904/905

SELECT PATIO OPTIONS ON FLOOR PLAN SHEET. CHOOSE OPTION CONSISTENT WITH STYLE SELECTION. CROSS OUT OPTIONS NOT CHOSEN FOR CLARITY.

WINDOW MATERIAL

COLOR AND STYLE TO MATCH EXISTING HOME.

☐ VINYL
☐ FIBERGLASS
☐ WOOD
☐ ALUMINUM CLAD WOOD

WASTE WATER

☐ SEWER

ONSITE PARKING REQUIRED

☐ NONE

EXCEPTION USED:

☐ THE ADU IS LOCATED WITHIN 1/2 MILE OF PUBLIC TRANSIT.
☐ THE ADU IS LOCATED WITHIN A ARCHITECTURALLY AND HISTORICALLY SIGNIFICANT STRUCTURE.
☐ OFF STREET PARKING PERMITS ARE REQUIRED BUT NOT OFFERED TO THE OCCUPANT OF THE ADU.
☐ WHEN THERE IS A CAR SHARE VEHICLE LOCATED WITHIN ONE BLOCK OF THE ADU.

☐ ONE PARKING SPACE

ELECTRICAL PLAN

(SEE SITE PLAN FOR LOCATION)

☐ **OPTION 1** NEW ELECTRICAL MAIN PANEL OF 200 AMP WITH 225 AMP MINIMUM BUSBAR RATING

☐ **OPTION 2** A NEW ELECTRICAL SUBPANEL CONNECTS TO THE ELECTRICAL MAIN PANEL OF THE PRIMARY HOME. A SEPARATE ELECTRICAL PERMIT SHALL BE PULLED FOR THE ELECTRICAL MAIN PANEL OF THE PRIMARY HOME, ELECTRICAL LOAD CALCULATIONS ARE REQUIRED.

DEFERRED SUBMITTALS

1. ROOF TRUSS CALCULATIONS
2. FIRE SPRINKLER (YES / NO) (SEPARATE PLAN CHECK / PERMIT)
3. SOLAR PV (-KW) (SEPARATE PLAN CHECK / PERMIT)

VERY HIGH FIRE SEVERITY ZONE

☐ NO

☐ YES

IF THE PROPERTY THAT WILL CONTAIN THE ADU IS IN THE VERY HIGH FIRE HAZARD SEVERITY ZONE SEE NOTES BELOW:

1. AN ADU IN THE VERY HIGH FIRE SEVERITY ZONE SHALL COMPLY WITH CHAPTER 7A OF THE CURRENT CALIFORNIA BUILDING CODE.
2. STRUCTURES IN THE VERY HIGH FIRE HAZARD SEVERITY ZONE SHALL PROVIDE & MAINTAIN A FUEL MODIFICATION ZONE. FUEL MODIFICATION ZONES: THE APPLICANT SHALL PROVIDE & MAINTAIN FIRE/FUEL BREAKS TO THE SATISFACTION OF THE LOCAL FIRE DEPARTMENT. FIRE/FUEL BREAKS SHALL BE SHOWN ON THE GRADING, MAP, AND BUILDING PLANS.
3. USE FIRE RATED ASSEMBLY ALTERNATIVE AS SHOWN IN ROOF FRAMING DETAILS AS REFERENCED ON PLANS.
4. USE RATED WALL ASSEMBLIES (34/AD-902, 24/AD-10\902)
5. *THE INTENSITY OF FUELS MANAGEMENT MAY VARY WITHIN THE 100-FOOT PERIMETER OF THE STRUCTURE, WITH MORE INTENSE FUEL REDUCTIONS BEING USED BETWEEN 5 AND 30 FEET AROUND THE STRUCTURE, AND AN EMBER-RESISTANT ZONE BEING REQUIRED WITHIN 5 FEET OF THE STRUCTURE ACCORDING TO GOVERNMENT CODE 51182. THE EMBER RESISTANT ZONE FOR THE ADU SHALL BE SEPARATE FROM THE 5-FOOT EMBER RESISTANCE ZONE OF THE EXISTING STRUCTURE. THE DEFENSIBLE SPACE PLAN AND VEGETATION MANAGEMENT SHALL BE REVIEWED BY THE CITY OF NEWPORT BEACH FIRE DEPARTMENT.*
6. *VERIFY COMPLIANCE WITH YOUR INSURANCE UNDERWRITER PRIOR TO CONSTRUCTION OF THE ADU.*

FIRE SPRINKLERS

DOES THE PRIMARY RESIDNENCE HAVE NFPA 13D SPRINKLERS?

☐ **NO**

☐ **YES**

REQUIRED AT PROPOSED ADU:

☐ **NO** (NOT REQUIRED IF THE PRIMARY RESIDENCE IS UNSPRINKLERED)

☐ **YES** (REQUIRED IF THE PRIMARY RESIDENCE IS SPRINKLERED)

FIRE SPRINKLERS NOTES

1. FIRE SPRINKLER SHOP DRAWINGS & CALCULATIONS SHALL BE SUBMITTED TO BUILDING DEPT. & APPROVED BY FIRE DEPT. PRIOR TO INSTALLATION.
2. IF FIRE SPRINKLERS ARE REQUIRED AT PROPOSED ADU THEN THE FOLLOWING NOTES APPLY.
3. DEFERRED SUBMITTAL: OBTAIN FIRE SPRINKLER PERMIT PRIOR TO CALLING FOR ROOF SHEATHING INSPECTION.
4. AUTOMATIC FIRE SPRINKLER SYSTEM - AN AUTOMATIC FIRE SPRINKLER SYSTEM SHALL BE INSTALLED AS PER NFPA 13D THE MOST CURRENT EDITION. DETAILED SPRINKLER PLANS SHALL BE SUBMITTED TO THE FIRE PREVENTION BUREAU AND APPROVED PRIOR TO INSTALLATION. PLANS AND INSTALLATION MUST BE BY A C16 LICENSED SPRINKLER CONTRACTOR.
5. LOCATION AND SIZE OF WATER SERVICE UNDERGROUND SHALL BE INSTALLED AS SHOWN ON APPROVED FIRE SPRINKLER PLANS.
6. A FIRE UNDERGROUND FLUSH CERTIFICATION SHALL BE REQUIRED AT FINAL INSPECTION.
7. A HYDRO INSPECTION OF THE FIRE SPRINKLER SYSTEM IS REQUIRED PRIOR TO FRAME INSPECTION.

LIQUIFICATION AREA

THE PRIMARY RESIDENCE LOCATED WITHIN A DESIGNATED LIQUIFICTION ZONE?

☐ NO

☐ YES

APPROVED FOR USE IN THE CITY OF COACHELLA

COACHELLA ADUs
COACHELLA, CA

TITLE SHEET - PLAN 2

PUBLIC SET

DATE 01/11/24

SHEET G-002

1/19/2024 8:36:17 AM
Autodesk Docs://2939_Coachella ADUs/2939-01_Coachella ADUs.rvt

FLOOR PLAN NOTES

1. **WEATHER BARRIERS.**
   a. NOT FEWER THAN ONE-LAYER WATER-RESISTIVE BARRIER SHALL BE APPLIED OVER STUDS OR SHEATHING OF ALL EXTERIOR WALLS CONTINUOUS FROM TOP OF WALS AND TERMINATED AT PENETRATIONS AND BUILDING APPENDAGES WITH FLASHING. MINIMUM NO. 15 FELT COMPLYING WITH ASTM D226, TYPE 1.
   b. PROVIDE (2) LAYERS OF GRADE D PAPER OR EQUAL WHEN PLASTER IS INSTALLED OVER WOOD BASED SHEATHING. *(2022 CRC R703.7.3)*
2. **DOMESTIC RANGE** VENTILATION DUCTS SHALL HAVE SMOOTH INTERIOR SURFACES. (2022 CMC 504.3)
3. **CLOTHES DRYER** MOISTURE EXHAUST DUCTS SHALL TERMINATE OUTSIDE THE BUILDING AND HAVE A BACK-DRAFT DAMPER. EXHAUST DUCT IS LIMITED TO 14'-0" W/ TWO ELBOWS. THIS SHALL BE REDUCED 2'-0" FOR EVERY ELBOW IN EXCESS OF TWO. MIN. DIA. 4", SMOOTH, METAL DUCT *(2022 CMC 504.4)*
4. **ALL MANUFACTURED EQUIPMENT** SHALL BE INSTALLED AS PER MANUFACTURER'S SPECIFICATION AND DIMENSIONS VERIFIED WITH INSTALLATION REQUIREMENTS. ALL MANUFACTURER'S INSTALLATION INSTRUCTIONS SHOULD BE ON SITE AND SHALL BE SEISMICALLY ANCHORED FOR INSPECTIONS.
5. **SHOWERS AND TUB-SHOWER COMBINATIONS:** CONTROL VALVES MUST BE PRESSURE BALANCED OR THERMOSTATIC MIXING VALVES. *(2022 CPC 417.0.)*
6. **WET-ROOM GLAZING.** PROVIDE TEMPERED GLAZING IN DOORS AND ENCLOSURES FOR SHOWERS, BATHTUBS, SAUNAS, STEAM ROOMS, HOT TUBS & SIMILAR USES WHERE THE BOTTOM EXPOSED EDGE IS LESS THAN 60-INCHES ABOVE A STANDING SURFACE. *(2022 CRC R308.4.5)*
7. **HEATING AND AIR-CONDITIONING SYSTEM DESIGN** SHALL CONFORM TO CALGREEN SEC. 4.507, ENVIRONMENTAL COMFORT.
8. **WATER CLOSETS.**
   a. CLEARANCES: 24" MIN. FRONT, 30" MIN COMPARTMENT WIDTH.
   b. PROVIDE A MIN 3 SF WINDOW, 1/2 OF WHICH SHALL BE OPENABLE OR AN EXHAUST FAN 50 CFM FOR INTERMITTENT OR 20 CFM FOR CONTINUOUS. DIRECT VENT TO OUTSIDE WITH BACKDRAFT DAMPER. *(2022 CRC R303.3)*
   c. NEW WATER CLOSETS AND ASSOCIATED FLUSHOMETER VALVES, IF ANY SHALL USE NO MORE THAN 1.28 GALLONS PER FLUSH AND SHALL MEET PERFORMANCE STANDARDS ESTABLISHED BY THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS STANDARD A112.19.2. H & S CODE, SECTION 17921.3(B).
9. **BATH ACCESSORIES:** PROVIDE MINIMUM 1 TOILET PAPER HOLDER AND 1 TOWEL BAR PER BATHROOM. PROVIDE NECESSARY BLOCKNG FOR TOILET PAPER HOLDER AND TOWEL BARS.
10. **WHOLE-BUILDING MECHANICAL VENTILATION SYSTE**M PER ASHRAE STANDARD 62.2. PROVIDE THE INSPECTOR WITH THE FOLLOWING INFORMATION AT OR BEFORE THE TIME OF INSPECTION:
    a. CALCULATIONS FOR REQUIRED VENTING RATES.
    b. CALCULATION ADJUSTMENTS FOR INTERMITTENT SYSTEMS IF APPLICABLE.
    c. DUCT DIAMETER AND MAXIMUM DUCT LENGTH PER ASHRAE 62.2 TABLE 7.1.
    d. TYPE OF SYSTEM USED AND PROVIDE COMPLETED CF-6R-MECH-05 FORM.
    e. FANS SHALL BE A MAXIMUM OF 1 SONE.
    f. FANS SHALL BE PROVIDED A COVER OF R-4.2 WHEN OFF.
11. **ATTIC ACCESS:**
    a. WHERE REQUIRED, PROVIDE 30" MIN. HEADROOM IN THE ATTIC SPACE *(2022 CRC R807.1)*
    b. BUILDINGS WITH COMBUSTIBLE CEILING OR ROOF CONSTRUCTION SHALL HAVE AN ATTIC ACCESS OPENING TO ATTIC AREAS THAT EXCEED 30 SQUARE FEET AND HAVE A VERTICAL HEIGHT OF 30-INCHES OR GREATER. THE VERTICAL HEIGHT SHALL BE MEASURED FROM TOP OF THE CEILING FRAMING MEMBERS TO THE UNDERSIDE OF THE ROOF FRAMING MEMBERS.
    c. THE ROUGH-FRAMED OPENING SHALL NOT BE LESS THAN 22" X 30" AND SHALL BE LOCATED NOT OVER 20 FEET FROM THE EQUIPMENT. (2022 CRC R807.1)
    d. IN ATTIC, PROVIDE LIGHT AND SWITCH, AND ALL NECESSARY ELECTRICAL. PROVIDE UNOBSTRUCTED PASSAGEWAY 24" WIDE OF SOLID CONTINUOUS FLOORING FROM ACCESS TO EQUIPMENT AND IT'S CONTROLS. ALSO PROVIDE UNOBSTRUCTED WORK SPACE IN FRONT OF EQUIPMENT 30" DEPTH MINIMUM. PROVIDE COMBUSTION AIR AND CONDENSATE LINE TO OUTSIDE OR AN APPROVED DRAIN FOR OPTIONAL AIR CONDITIONING.
    e. PROVIDE A 120V RECEPTACLE AND A LIGHT NEAR THE EQUIPMENT WITH LIGHT SWITCH LOCATED AT THE ATTIC ACCESS.
12. BATHTUB AND SHOWER FLOORS AND WALLS ABOVE BATHTUBS WITH INSTALLED SHOWER HEADS AND IN SHOWER COMPARTMENTS SHALL BE FINISHED WITH A NONABSORBENT SURFACE. SUCH WALL SURFACES SHALL EXTEND TO A HEIGHT OF NOT LESS THAN 6 FEET ABOVE THE FLOOR PER 2022 CRC, SECTION R307.2.

SITE NOTES

1. **CALL BEFORE YOU DIG!** CONTACT UNDERGROUND SERVICE ALERT (USA) AT 1-800-227-2600 AT LEAST 2 WORKING DAYS BEFORE EXCAVATING.
2. UNLESS OTHERWISE NOTED ON THE PLANS, FINISHED GROUND SURFACES SHALL BE GRADED TO DRAIN THE FINISHED SITE PROPERLY WITHIN 10-FEET OF ANY BUILDING FOUNDATION WITH A SLOPE OF 5% AWAY FROM ANY BUILDING OR STRUCTURE. ALL EXTERIOR HARDSCAPE WITHIN 10-FEET OF A BUILDING FOUNDATION SHALL BE INSTALLED WITH A 2% MINIMUM SLOPE AWAY FROM ANY BUILDING OR STRUCTURE. DRAINAGE SWALES SHALL BE A 1.5% MINIMUM SLOPE. ALL GRADED SLOPES SHALL HAVE A MAXIMUM SLOPE OF 3H TO 1V (33%), UNLESS SHOWN OTHERWISE ON THE PLANS.
3. LOT GRADING SHALL CONFORM AT THE PROPERTY LINES AND SHALL NOT SLOPE TOWARD PROPERTY LINES IN A MANNER WHICH WOULD CAUSE STORM WATER TO FLOW ONTO NEIGHBORING PROPERTY. HISTORIC DRAINAGE PATTERNS SHALL NOT BE ALTERED IN A MANNER TO CAUSE DRAINAGE PROBLEMS TO NEIGHBORING PROPERTY.
4. NEW RAINWATER DOWNSPOUTS SHALL BE DISCONNECTED AND DIRECT RUNOFF TO A LANDSCAPED AREA. DOWNSPOUTS MAY BE CONNECTED TO A POP-UP DRAINAGE EMITTER IN THE LANDSCAPED AREA OR MAY DRAIN TO SPLASH BLOCKS OR COBBLESTONES THAT DIRECT WATER AWAY FROM THE BUILDING.
5. CONTRACTOR TO FIELD VERIFY EXISTING DRAINAGE. IF THE EXISTING DRAINAGE SYSTEM IS DAMAGED DURING EXCAVATION, CONTRACTOR SHALL REPAIR AND/OR REROUTE DRAINAGE SYSTEM AND CONNECT TO EXISTING DRAINAGE FACILITY AS NECESSARY.
6. EXISTING PUBLIC IMPROVEMENTS THAT ARE DAMAGED BY THE PROJECT CONSTRUCTION SHALL BE REPAIRED OR REPLACED. EXISTING DAMAGED PUBLIC IMPROVEMENTS WITHIN THE PROJECT LIMITS SHALL BE REPAIRED OR REPLACED EVEN IF THE DAMAGE OCCURRED PRIOR TO THE START OF CONSTRUCTION.
7. EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE INSTALLED PRIOR TO OCTOBER 1 AND SHALL BE MAINTAINED DAILY UNTIL APRIL 30. THESE FACILITIES SHALL CONTROL AND CONTAIN EROSION-CAUSED SILT DEPOSITS AND PROVIDE FOR THE SAFE DISCHARGE OF SILT-FREE STORM WATERS INTO EXISTING STORM DRAIN FACILITIES. EROSION AND SEDIMENT CONTROL SUPPLIES MUST BE KEPT ON-SITE DURING THE DRY SEASON AND EMPLOYED, AS NECESSARY PRIOR TO AND DURING RAIN EVENTS.
8. SEASONALLY APPROPRIATE BEST MANAGEMENT PRACTICES FOR THE FOLLOWING SITE MANAGEMENT CATEGORIES MUST BE IMPLEMENTED YEAR-ROUND: 1) EROSION CONTROL; 2) RUN-ON AND RUN-OFF CONTROL; 3) SEDIMENT CONTROL; 4) GOOD SITE MANAGEMENT; AND 5) NON-STORMWATER MANAGEMENT.
9. AN ENCROACHMENT PERMIT WILL BE REQUIRED FOR ANY CONSTRUCTION ACTIVITY WITHIN A PUBLIC STREET RIGHT OF WAY THAT HAS BEEN ACCEPTED BY THE CITY.

ELECTRICAL NOTES

1. CONFORM WITH CURRENT CEC, NFPA, MFR'S, AND LOCAL REQUIREMENTS.
2. ELECTRICAL SYSTEM GROUND TO BE PROVIDED PER NEC ARTICLE 250-81.
3. ALL MATERIALS TO BE U.L. LABELED.
4. METER: "SQUARE D", 120 VOLT/ 240 VOLT, 1 AND 3 WIRE GROUND OR EQUAL.
5. ELECTRICAL SUB PANEL: FLUSH MOUNT, 30" CLEARANCE. 100 AMP.
6. CONDUCTORS: TW, THW, COPPER, MINIMUM 14 AT LIGHTING, 12 AT OTHER CIRCUITS.
7. ALL LUMINARIES SHALL COMPLY WITH 2022 CENC SECTION 150.0 (K) AND TABLE 150.0-A AS REFERENCED IN ENERGY NOTES, LUMINAIRE REQUIREMENTS SHEET G-101.
8. ALL ELECTRICAL OUTLETS INSTALLED IN BATHROOMS, GARAGES, BASEMENTS, CRAWL SPACES, OUTDOORS, KITCHEN COUNTERS, AND AT WET BAR SINKS SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION IN COMPLIANCE WITH NEC Art. 210-8, CONSISTING OF 125 VOLT, SINGLE-PHASE, 15- AND 20- AMPERE RECEPTACLES.
9. ALL BATHROOM RECEPTACLE OUTLETS SHALL BE SUPPLIED BY A MINIMUM OF ONE 120-VOLT, 20-AMPERE BRANCH CIRCUIT. SUCH CIRCUITS SHALL HAVE NO OTHER OUTLETS. THIS DEDICATED CIRCUIT MAY SERVE MORE THAN ONE BATHROOM. (2022 CEC 210.11(C))
10. THERMOSTAT SHALL BE A PROGRAMMABLE TYPE, HONEYWELL TH8320 OR EQUAL.
11. CEILING-SUSPENDED (PADDLE) FANS SHALL BE SUPPORTED INDEPENDENTLY OF AN OUTLET BOX OR BY LISTED OUTLET BOX OR OUTLET BOX SYSTEMS IDENTIFIED FOR THE USE AND INSTALLED IN ACCORDANCE WITH 2022 CEC 314.27(C) (2022 CEC 422.18).
12. ALL LUMINARIES, LAMPHOLDERS, AND RETROFIT KITS SHALL BE LISTED (2022 CEC 410.6).
13. ALL 120-VOLT, SINGLE PHASE 15- AND 20- AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS INSTALLED IN DWELLING UNIT KITCHENS, FAMILY ROOMS, LIVING ROOMS, DINING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT. (2022 CEC 210-12(A)).
14. ALL NON-LOCKING TYPE 125-VOLT, 15 AND 20 AMPERE RECEPTACLES IN A DWELLING UNIT SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES. EXCEPTIONS: (1) RECEPTACLES MORE THAN 5'6" ABOVE THE FLOOR, (2) RECEPTACLES PART OF A LUMINAIRE OR APPLIANCE, (3) A SINGLE RECEPTACLE OR A DUPLEX RECEPTACLE FOR TWO APPLIANCES THAT ARE NOT EASILY MOVED AND LOCATED WITHIN DEDICATED SPACE AND ARE CHORD-AND-PLUG CONNECTED AS PER CEC 400.10, AND (4) NON-GROUNDING RECEPTACLES USED FOR REPLACEMNETS AS PERMITTED IN CEC 406.4(D)(2)(A).
15. HIGH EFFICACY LUMINAIRES OTHER THAN OUTDOOR HID LIGHTING CONTAIN ONLY ONLY HIGH EFFICACY LAMPS AS OUTLINED IN TABLE 150-C OF THE RESIDENTIAL ENERGY CODE AND NOT CONTAIN A MEDIUM SCREW BASE SOCKET.
16. BALLAST FOR LAMPS 13 WATTS OR GREATER SHALL BE ELECTRONIC AND HAVE AN OUTPUT FREQUENCY NO LESS THAT 20 kHz.
17. SMOKE DETECTORS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING AND PROVIDED WITH A BATTERY BACK-UP. ALL SMOKE DETECTORS SHALL BE INTERCONNECTEED. ALL SMOKE DETECTORS SHALL MAINTAIN A MINIMUM 3 FOOT CLEARANCE TO HVAC SUPPLY OR RETURN AIR REGISTERS.
18. CARBON MONOXIDE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING AND PROVIDED WITH A BATTERY BACK-UP. ALL CARBON MONOXIDE ALARAMS SHALL BE INTERCONNECTEED.
19. EXHAUST FANS WILL BE CONTROLLED BY A HUMIDISTAT PER THE GREEN BUILDING STANDARDS CODE SECTION 4.506. EXHAUST FANS MUST BE SWITCHED SEPARATELY FROM LIGHTS *(2022 CEnC 150.0(k)2G)*.
20. IN ADDITION TO THE NUMBER OF BRANCH CIRCUTS REQUIRED BY OTHER PARTS OF THE CODE, TWO OR MORE 20-AMPERE SMALL-APPLIANCE BRANCH CIRCUITS SHALL BE PROVIDED FOR ALL RECEPTACLE OUTLETS IN THE KITCHEN, PANTRY, BREAKFAST ROOM, DINING ROOM, OR SIMILAR AREA PER 2022 CEC, ARTICLE 210.11 (C)(1). THE CIRCUTS SHALL HAVE NO OTHER OUTLETS PER 2022 CEC, ARTICLE 210.52(B).
21. IN ADDITION TO THE NUMBER OF BRANCH CIRCUTS REQUIRED BY OTHER PARTS OF THE CODE, AT LEAST ONE ADDITIONAL 20-AMPERE BRANCH CIRCUT SHALL BE PROVIDED TO SUPPLY THE LAUNDRY RECEPTACLE OUTLET(S) REQUIRED BY 2022 CEC, ARTICLE 210.52 (F). THIS CIRCUT SHALL HAVE NO OTHER OUTLETS PER 2022 CEC, ARTICLE 201.11(C)(2).

ENERGY NOTES

1. THE BUILDER MUST PROVIDE NEW HOMEWONERS WITH A LUMINAIRE SCHEDULE THAT INCLUDES A LIST OF INSTALLED LAMPS AND LUMINARIES.

LUMINAIRE REQUIREMENTS *(2022 CEnC 150.0(k)1).*

A. **LUMINAIRE EFFICACY.** ALL INSTALLED LUMINAIRES SHALL MEET THE REQUIREMENTS IN TABLE 150.0-A.
   EXCEPT: *INTEGRATED DEVICE LIGHTING. LIGHTING INTEGRAL TO EXHAUST FANS, KITCHEN RANGE HOODS, BATH VANITY MIRRORS AND GARAGE DOOR OPENERS. NAVIGATION LIGHTING: SUCH AS NIGHT LIGHTS, STEP LIGHTS, AND PATH LIGHTS LESS THAN 5 WATTS. CABINET LIGHTING: LIGHTING INTERNAL TO DRAWERS, CABINETRY AND LINEN CLOSETS WITH AN EFFICACY OF 45 LUMENS PER WATT OR GREATER.*
   THE FOLLOWING ARE HIGH-EFFICACY LIGHT SOURCES PER TABLE 150.0-A: THE FOLLOWING LIGHT SOURCES, OTHER THAN THOSE INSTALLED IN CEILING RECESSED DOWNLIGHT LUMINAIRES, ARE NOT REQUIRED TO COMPLY WITH REFERENCE JOINT APPENDIX JA8:
   1. *LED LIGHT SOURCES INSTALLED OUTDOORS.*
   2. *INSEPARABLE SOLID STATE LIGHTING (SSL) LUMINAIRES CONTAINING COLORED LIGHT SOURCES THAT ARE INSTALLED TO PROVIDE DECORATIVE LIGHTING.*
   3. *PIN-BASED LINEAR FLUORESCENT OR COMPACT FLUORESCENT LIGHT SOURCES USING ELECTRONIC BALLASTS.*
   4. *HIGH INTENSITY DISCHARGE (HID) LIGHT SOURCES INCLUDING PULSE START METAL HALIDE AND HIGH PRESSURE SODIUM LIGHT SOURCES.*
   5. *LUMINAIRES WITH HARDWIRED HIGH FREQUENCY GENERATOR AND INDUCTION LAMP.*
   6. *CEILING FAN LIGHT KITS SUBJECT TO FEDERAL APPLIANCE REGULATIONS.*

   THE FOLLOWING LIGHT SOURCES ARE ONLY CONSIDERED TO BE HIGH EFFICACY IF THEY ARE CERTIFIED TO THE COMMISSION AS HIGH EFFICACY LIGHT SOURCES IN ACCORDANCE WITH REFERENCE JOINT APPENDIX JA8 AND MARKED AS REQUIRED BY JA8:
   1. *ALL LIGHT SOURCES INSTALLED IN CEILING RECESSED DOWNLIGHT LUMINAIRES. NOTE THAT CEILING RECESSED DOWNLIGHT LUMINAIRES SHALL NOT HAVE SCREW BASES REGARDLESS OF LAMP TYPE AS DESCRIBED IN SECTION 150.0(K)1C.*
   2. *ANY LIGHT SOURCE NOT OTHERWISE LISTED.*

B. **SCREW-BASED LUMINAIRES.** SCREW-BASED LUMINAIRES SHALL CONTAIN LAMPS THAT COMPLY WITH REFERENCE JOINT APPENDIX JA8.
C. **RECESSED DOWNLIGHT LUMINAIRES IN CEILINGS.** LUMINAIRES RECESSED INTO CEILINGS SHALL MEET ALL OF THE FOLLOWING REQUIREMENTS:
   1. SHALL NOT CONTAIN SCREW BASE LAMP SOCKETS; AND
   2. HAVE A LABEL THAT CERTIFIES THE LUMINAIRE IS AIRTIGHT WITH AIR LEAKAGE LESS THAN 2.0 CFM AT 75 PASCALS WHEN TESTED IN ACCORDANCE WITH ASTM E283. AN EXHAUST FAN HOUSING WITH INTEGRAL LIGHT SHALL NOT BE REQUIRED TO BE CERTIFIED AIRTIGHT; AND
   3. BE SEALED WITH A GASKET OR CAULK BETWEEN THE LUMINAIRE HOUSING AND CEILING, AND HAVE ALL AIR LEAK PATHS BETWEEN CONDITIONED AND UNCONDITIONED SPACES SEALED WITH A GASKET OR CAULK, OR BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS TO MAINTAIN AIRTIGHTNESS BETWEEN THE LUMINAIRE HOUSING AND CEILING; AND
   4. MEET THE CLEARANCE AND INSTALLATION REQUIREMENTS OF CALIFORNIA ELECTRICAL CODE SECTION 410.116 FOR RECESSED LUMINAIRES.
      EXCEPT: *RECESSED LUMINAIRES MARKED FOR USE IN FIRE-RATED INSTALLATIONS EXTRUDED INTO CEILING SPACE AND RECESSED LUMINAIRES INSTALLED IN NONINSULATED CEILINGS.*

ENERGY NOTES CONTINUED

D. **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, SHALL NOT BE INSTALLED IN ENCLOSED OR RECESSED LUMINAIRES.
E. **BLANK ELECTRICAL BOXES.** THE NUMBER OF ELECTRICAL BOXES THAT ARE MORE THAN 5 FEET ABOVE THE FINISHED FLOOR AND DO NOT CONTAIN A LUMINAIRE OR OTHER DEVICE SHALL BE NO GREATER THAN THE NUMBER OF BEDROOMS. THESE ELECTRICAL BOXES MUST BE SERVED BY A DIMMER, VACANCY SENSOR CONTROL, LOW VOLTAGE WIRING OR FAN SPEED CONTROL.

INDOOR LIGHTING CONTROLS *(2022 CEnC 150.0(k)2).*

A. LIGHTING SHALL HAVE READILY ACCESSIBLE WALL-MOUNTED CONTROLS THAT ALLOW THE LIGHTING TO BE MANUALLY TURNED ON AND OFF.
   EXCEPT: *CEILING FANS MAY PROVIDE CONTROL OF INTEGRATED LIGHTING VIA A REMOTE CONTROL.*
A. NO CONTROLS SHALL BYPASS A DIMMER, OCCUPANT SENSOR OR VACANCY SENSOR FUNCTION WHERE THAT DIMMER OR SENSOR HAS BEEN INSTALLED TO COMPLY WITH SECTION 150.0(K).
B. LIGHTING CONTROLS SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF SECTION 110.9.
C. AN ENERGY MANAGEMENT CONTROL SYSTEM (EMCS) OR A MULTISCENE PROGRAMMABLE CONTROL MAY BE USED TO COMPLY WITH DIMMING, OCCUPANCY AND LIGHTING CONTROL REQUIREMENTS IN SECTION 150.0(K)2 IF IT PROVIDES THE FUNCTIONALITY OF THE SPECIFIED CONTROLS IN ACCORDANCE WITH SECTION 110.9, AND THE PHYSICAL CONTROLS SPECIFIED IN SECTION 150.0(K)2A.
D. **AUTOMATIC-OFF CONTROLS.**
   1. IN BATHROOMS, GARAGES, LAUNDRY ROOMS, UTILITY ROOMS AND WALK-IN CLOSETS, AT LEAST ONE INSTALLED LUMINAIRE SHALL BE CONTROLLED BY AN OCCUPANCY OR VACANCY SENSOR PROVIDING AUTOMATIC-OFF FUNCTIONALITY.
   2. FOR LIGHTING INTERNAL TO DRAWERS AND CABINETRY WITH OPAQUE FRONTS OR DOORS, CONTROLS THAT TURN THE LIGHT OFF WHEN THE DRAWER OR DOOR IS CLOSED SHALL BE PROVIDED.
E. **DIMMING CONTROLS.** LIGHTING IN HABITABLE SPACES, INCLUDING BUT NOT LIMITED TO LIVING ROOMS, DINING ROOMS, KITCHENS AND BEDROOMS, SHALL HAVE READILY ACCESSIBLE DIMMING CONTROLS THAT ALLOW THE LIGHTING TO BE MANUALLY ADJUSTED UP AND DOWN. FORWARD PHASE CUT DIMMERS CONTROLLING LED LIGHT SOURCES IN THESE SPACES SHALL COMPLY WITH NEMA SSL 7A.
   EXCEPT: *CEILING FANS MAY PROVIDE CONTROL OF INTEGRATED LIGHTING VIA A REMOTE CONTROL. LUMINAIRES CONNECTED TO A CIRCUIT WITH CONTROLLED LIGHTING POWER LESS THAN 20 WATTS OR CONTROLLED BY AN OCCUPANCY OR VACANCY SENSOR PROVIDING AUTOMATIC-OFF FUNCTIONALITY. NAVIGATION LIGHTING SUCH AS NIGHT LIGHTS, STEP LIGHTS, AND PATH LIGHTS LESS THAN 5 WATTS, AND LIGHTING INTERNAL TO DRAWERS AND CABINETRY WITH OPAQUE FRONTS OR DOORS OR WITH AUTOMATIC-OFF CONTROLS.*
F. **INDEPENDENT CONTROLS.** INTEGRATED LIGHTING OF EXHAUST FANS SHALL BE CONTROLLED INDEPENDENTLY FROM THE FANS. THE FOLLOWING SHALL BE CONTROLLED SEPARATELY FROM CEILING-INSTALLED LIGHTING SUCH THAT ONE CAN BE TURNED ON WITHOUT TURNING ON THE OTHER:
   1. UNDERCABINET LIGHTING, UNDERSHELF LIGHTING, INTERIOR LIGHTING OF DISPLAY CABINETS, AND SWITCHED OUTLETS.

RESIDENTIAL OUTDOOR LIGHTING *(2022 CEnC 150.0(k)3).* IN ADDITION TO MEETING THE REQUIREMENTS OF SECTION 150.0(K)1A, LUMINAIRES PROVIDING RESIDENTIAL OUTDOOR LIGHTING SHALL MEET THE FOLLOWING REQUIREMENTS, AS APPLICABLE:

A. FOR SINGLE-FAMILY RESIDENTIAL BUILDINGS, OUTDOOR LIGHTING PERMANENTLY MOUNTED TO A RESIDENTIAL BUILDING OR TO OTHER BUILDINGS ON THE SAME LOT SHALL MEET THE REQUIREMENT IN ITEM I AND THE REQUIREMENTS IN EITHER ITEM II OR ITEM III:
   1. CONTROLLED BY A MANUAL ON AND OFF CONTROL SWITCH THAT PERMITS THE AUTOMATIC ACTIONS OF ITEMS II OR III BELOW; AND
   2. CONTROLLED BY A PHOTOCELL AND EITHER A MOTION SENSOR OR AN AUTOMATIC TIME SWITCH CONTROL; OR
   3. CONTROLLED BY AN ASTRONOMICAL TIME CLOCK CONTROL.
      NOTE: CONTROLS THAT OVERRIDE TO ON SHALL NOT BE ALLOWED UNLESS THE OVERRIDE AUTOMATICALLY RETURNS THE AUTOMATIC CONTROL TO ITS NORMAL OPERATION WITHIN 6 HOURS. AN ENERGY MANAGEMENT CONTROL SYSTEM THAT PROVIDES THE SPECIFIED LIGHTING CONTROL FUNCTIONALITY AND COMPLIES WITH ALL REQUIREMENTS APPLICABLE TO THE SPECIFIED CONTROLS MAY BE USED TO MEET THESE REQUIREMENTS.

1. ALL JOINTS, PENETRATIONS AND OTHER OPENINGS IN THE BUILDING ENVELOPE THAT ARE POTENTIAL SOURCES OF AIR LEAKAGE SHALL BE CAULKED, GASKETED, WEATHER-STRIPPED OR OTHERWISE SEALED TO LIMIT INFILTRATION AND EXFILTRATION (2022 CEnC 110.7).
2. ATTIC ACCESS DOORS SHALL HAVE PERMANENTLY ATTACHED INSULATION USING ADHESIVE OR MECHANICAL FASTENERS. THE ATTIC ACCESS SHALL BE GASKETED TO PREVENT AIR LEAKAGE (2022 CEnC 150.0(a)2)

ENERGY STORAGE READINESS

1. **ENERGY STORAGE SYSTEM (ESS) REQUIREMENTS:**
   - IN SINGLE-FAMILY RESIDENTIAL BUILDINGS THAT INCLUDE ONE OR TWO DWELLINGS, EACH DWELLING UNIT SHALL BE PROVIDED WITH DEDICATED RACEWAYS, DESIGNATED BRANCH CIRCUITS AND ISOLATION DEVICES FOR ENERGY STORAGE SYSTEMS AS SPECIFIED IN CALIFORNIA ENERGY CODE SECTION 150.0(S). ADDITIONALLY, THE PANELBOARDS SHALL BE PROVIDED WITH THE MINIMUM BUSBAR RATING AS SPECIFIED IN CALIFORNIA ENERGY CODE SECTION 150.0(S). (2022 CEC SECTION 706.10)

CALIFORNIA ENERGY CODE SECTION 150.0(S)

1. AT LEAST ONE OF THE FOLLOWING SHALL BE PROVIDED:
   A. ESS READY INTERCONNECTION EQUIPMENT WITH A MINIMUM BACKED-UP CAPACITY OF 60 AMPS AND A MINIMUM OF FOUR ESS-SUPPLIED BRANCH CIRCUITS, OR
   B. A DEDICATED RACEWAY FROM THE MAIN SERVICE TO A PANELBOARD (SUBPANEL) THAT SUPPLIES THE BRANCH CIRCUITS IN SECTION 150.0(S)(2). ALL BRANCH CIRCUITS ARE PERMITTED TO BE SUPPLIED BY THE MAIN SERVICE PANEL PRIOR TO THE INSTALLATION OF AN ESS. THE TRADE SIZE OF THE RACEWAY SHALL BE NOT LESS THAN 1 INCH. THE PANELBOARD THAT SUPPLIES THE BRANCH CIRCUITS (SUBPANEL) MUST BE LABELED "SUBPANEL SHALL INCLUDE ALL BACKEDUP LOAD CIRCUITS."
2. A MINIMUM OF FOUR BRANCH CIRCUITS SHALL BE IDENTIFIED AND HAVE THEIR SOURCE OF SUPPLY COLLOCATED AT A SINGLE PANELBOARD SUITABLE TO BE SUPPLIED BY THE ESS. AT LEAST ONE CIRCUIT SHALL SUPPLY THE REFRIGERATOR, ONE LIGHTING CIRCUIT SHALL BE LOCATED NEAR THE PRIMARY EGRESS AND AT LEAST ONE CIRCUIT SHALL SUPPLY A SLEEPING ROOM RECEPTACLE OUTLET.
3. THE MAIN PANELBOARD SHALL HAVE A MINIMUM BUSBAR RATING OF 225 AMPS.
4. SUFFICIENT SPACE SHALL BE RESERVED TO ALLOW FUTURE INSTALLATION OF A SYSTEM ISOLATION EQUIPMENT/TRANSFER SWITCH WITHIN 3 FEET OF THE MAIN PANELBOARD. RACEWAYS SHALL BE INSTALLED BETWEEN THE PANELBOARD AND THE SYSTEM ISOLATION EQUIPMENT/TRANSFER SWITCH LOCATION TO ALLOW THE CONNECTION OF BACKUP POWER SOURCE.

PLUMBING NOTES

1. CONFORM WITH CURRENT CPC AND LOCAL REQUIREMENTS.

PIPING:

2. DOMESTIC WATER (WITHIN BUILDING): COPPER OR PEX PIPE OR APPROVED EQUAL.
3. AIR CHAMBERS: 12" LONG CAPPED NIPPLE AT END OF EACH BRANCH TO EACH FIXTURE.
4. DIELECTRIC UNIONS "F.P.C.O." REQUIREMENT AT ALL DISSIMILAR MATERIAL CONNECTIONS.
5. WHEN "OPTIONAL" SOFT-WATER LOOP INTALLED, PROVIDE WITH 2 GATE VALVES.
6. WATER SERVICE PIPE SHALL BE PER CIVIL PLANS OR AS REQUIRED BY THE JURISDICTION.
7. WATER METER: PER WATER DISTRICT (REFER SIZE W/ FIRE SPRINKLER PLANS IF APPLICABLE)
8. SHOWER HEADS AND FAUCETS: FLOW RATES PER 2022 *CGBSC SECTION 4.303.*
9. **WATER HEATER** (REFER TO BUILDING ENERGY ANALYSIS REPORT):
   A. ALL DOMESTIC HOT WATER PIPING SHALL BE INSULATED. *(2022 CPC 609.12.1)*
      1. PIPES UP TO 2 INCHES IN DIAMETER: INSULATION WALL THICKNESS NOT LESS THAN DIAMETER OF PIPE. *(2022 CPC 609.12.2)*
      2. PIPES GREATER THAN 2 INCHES IN DIAMETER: INSULATION WALL THICKNESS NOT LESS THAN 2 INCHES. *(2022 CPC 609.12.2)*

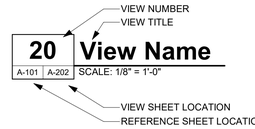
      EXCEPTIONS:
      1. PIPING THAT PENETRATES FRAMING MEMBERS SHALL NOT BE REQUIRED TO HAVE PIPE INSULATION FOR THE DISTANCE OF THE FRAMING PENETRATION. *(2022 CPC 609.12.2)*
      2. HOT WATER PIPING BETWEEN THE FIXTURE CONTROL VALVE OR SUPPLY STOP AND THE FIXTURE OR APPLIANCE SHALL NOT BE REQUIRED TO BE INSULATED *(2022 CPC 609.12.2)*

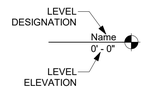
   B. PROVIDE A TEMPERATURE AND PRESSURE RELIEF VALVE WITH A FULL SIZE DRAIN OF GALVANIZED STEEL OR HARD DRAWN COPPER TO THE OUTSIDE OF THE BUILDING WITH THE END OF THE PIPE PROTRUDING 6" MINIMUM @ 2' MAX. ABOVE GRADE POINTING DOWNWARD TO THE TERMINATION - UNTHREADED.
   C. COMBUSTION AIR PER MANUFACTURE REQUIREMENTS.
   D. CLEARANCES PER MANUFACTURE REQUIREMENTS.
10. **PLUMBING INSULATION** PER 2022 CENC 150.0 (J) AND CBC 609.11
   A. DOMESTIC HOT WATER PIPING SHALL BE INSULATED.
   B. HOT WATER PIPE INSULATION SHALL HAVE A MINIMUM WALL THICKNESS OF NOT LESS THAN THE DIAMETER OF THE PIPE FOR A PIPE UP TO 2 INCHES (50 MM) IN DIAMETER. INSULATION WALL THICKNESS SHALL BE NOT LESS THAN 2 INCHES (51 MM) FOR A PIPE OF 2 INCHES (50 MM) OR MORE IN DIAMETER.
      1. PIPING THAT PENETRATES FRAMING MEMBERS SHALL NOT BE REQUIRED TO HAVE PIPE INSULATION FOR THE DISTANCE OF THE FRAMING PENETRATION.
      2. HOT WATER PIPING BETWEEN THE FIXTURE CONTROL VALVE OR SUPPLY STOP AND THE FIXTURE OR APPLIANCE SHALL NOT BE REQUIRED TO BE INSULATED.
   C. SERVICE WATER HEATING SYSTEMS PIPING TO INCLUDE.
      1. RECIRCULATING SYSTEM PIPING, INCLUDING THE SUPPLY AND RETURN PIPING TO THE WATER HEATER.
      2. THE FIRST 8 FEET OF HOT AND COLD OUTLET PIPING, INCLUDING PIPING BETWEEN A STORAGE TANK AND A HEAT TRAP, FOR A NON-RECIRCULATING STORAGE SYSTEM.
      3. PIPES THAT ARE EXTERNALLY HEATED.
         SHALL BE INSULATED AS FOLLOWS:
         UP TO 1" PIPE DIAMETER TO HAVE 1.0 MIN THICKNESS OR R7/7 RATING PER CENC TABLE 120.3A
         EXCEPTIONS:
         1. FACTORY INSTALLED PIPING WITHIN SPACE-CONDITIONING EQUIPMENT CERTIFIED UNDER SECTION 110.1 OR 110.2.
         2. PIPING THAT PENETRATES FRAMING MEMBERS SHALL NOT BE REQUIRED TO HAVE PIPE INSULATION FOR THE DISTANCE OF THE FRAMING PENETRATION. METAL PIPING THAT ENETRATES METAL FRAMING SHALL USE GROMMET

ABBREVIATIONS

A/C	AIR CONDITIONING
ABV	ABOVE
ACOUS	ACOUSTICAL
ACT	ACOUSTICAL CEILING TILE
ADA	AMERICANS WITH DISABILITIES ACT
AFCI	ARC FAULT CIRCUIT INTERRUPTER
AFF	ABOVE FINISH FLOOR
AL	ALUMINUM
ALT	ALTERNATE
ARCH	ARCHITECT(URAL)
BD	BOARD
BDRM	BEDROOM
BET	BETWEEN
BIT	BITUMINOUS
BLDG	BUILDNG
BLKG	BLOCKING
BLW	BELOW
BM	BEAM
BOT	BOTTOM
BUR	BUILT UP ROOF
CB	CATCH BASIN
CBC	CALIFORNIA BUILDING CODE
CEM	CEMENT
CFM	CUBIC FEET PER MINUTE
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLO	CLOSET
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CPT	CARPET
CT	CERAMIC TILE
CTR	CENTER
DBL	DOUBLE
DF	DRINKING FOUNTAIN
DIA	DIAMETER, DIAPHRAGM
DIM	DIMENSION
DN	DOWN
DR	DOOR
DS	DOWN SPOUT
DTL	DETAIL
DW	DISHWASHER
DWG	DRAWING
(E)	EXISTING
E	EAST
EA	EACH
EJ	EXPANSION JOINT
EL, ELEV	ELEVATION
ELEC	ELECTRIC
ENCL	ENCLOSURE
EQ	EQUAL
EQUIP	EQUIPMENT
EXH	EXHAUST
EXP	EXPANSION
EXT	EXTERIOR
FACP	FIRE ALARM CONTROL PANEL
FAU	FORCED AIR UNIT
FAWP	FLUID APPLIED WATERPROOFING
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FHC	FIRE HOSE CABINET
FIN	FINISH
FIXT	FIXTURE
FLR	FLOOR
FLUOR	FLOURESCENT
FND	FOUNDATION
FO	FACE OF
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOIC	FURNISHED BY OWNER INSTALLED BY CONTRACTOR
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FRP	FIBERGLASS REINFORCED PANELS
FT	FOOT OR FEET
FTG	FOOTING
GA	GAUGE, GAGE
GALV	GALVANIZED
GB	GRAB BAR
GC	GENERAL CONTRACTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GWB	GYPSUM BOARD
GYP	GYPSUM
HB	HOSE BIBB
HC	HOLLOW CORE
HDWD	HARDWOOD
HDWR	HARDWARE
HGT	HEIGHT
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HVAC	HEATING, VENTILATION, A/C
ID	INSIDE DIAMETER
IIC	IMPACT INSULATION CLASS
IN	INCH
INCAND	INCANDESCENT
INSUL	INSULATION, INSULATED
INT	INTERIOR
JC	JANITORS CLOSET
JT	JOINT
LAM	LAMINATE
LAV	LAVATORY
LBS	POUNDS
LEED	LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN
LF	LINEAR FEET
LIN	LINEN CLOSET
LINO	LINOLEUM
LT(G)	LIGHT(ING)
LVL	LAMINATED VENEER LUMBER
LVT	LUXURY VINYL TILE
LW	LIGHTWEIGHT
MAX	MAXIMUM
MDF	MEDIUM DENSITY FIBERBOARD
MECH	MECHANICAL
MEMB	MEMBRANE
MEP	MECHANICAL, ELECTRICAL, PLUMBING
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MTD	MOUNTED
MTL	METAL
N	NORTH
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O.P.	OVERFLOW PIPE
OC	ON CENTER
OD	OVERFLOW DRAIN
OFF	OFFICE
OH	OPPOSITE HAND
OPG	OPENING
OPP	OPPOSITE
(P)	PROPOSED
PERM	PERIMETER
PERP	PERPENDICULAR
PG	PAINT GRADE
PL	PLATE, PROPERTY LINE
PLAM	PLASTIC LAMINATE
PLBG	PLUMBING
PLYWD	PLYWOOD
PNL	PANEL
PP	POWER POLE
PR	PAIR
PRTN	PARTITION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PARALLEL STRAND LUMBER
PT	PRESSURE TREATED
PTD	PAINTED
PV	PHOTO VOLTAIC
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
QTY	QUANTITY
R	RADIUS, RISER
RB	RUBBER BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REF	REFRIGERATOR
REINF	REINFORCED
REQD	REQUIRED
RH	RIGHT HAND
RM	ROOM
RO	ROUGH OPENING
RTU	ROOF TOP UNIT (MECH)
S	SOUTH
SAFB	SOUND ATTENUATION FIBER BATT
SAWP	SELF ADHEREING WATERPROOFING
SC	SCUPPER/SOLID CORE
SCHED	SCHEDULE
SEAL	SEALANT
SECT	SECTION
SF	SQUARE FOOT
SHT	SHEET
SHTHG	SHEATHING
SIM	SIMILAR
SM	SHEET METAL
SPEC	SPECIFICATION
SQ	SQURE
SS	SOLID SURFACE
SSTL	STAINLESS STEEL
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUPSPENDED
SV	SHEET VINYL
SYM	SYMMMETRICAL
T	TREAD
T&G	TONGUE & GROOVE
TEL	TELEPHONE
TEMP	TEMPERED
TER	TERRAZZO
THK	THICK
THR	THRESHOLD
TJI	TRUSS JOIST I-JOIST
TO	TOP OF
TOS	TOP OF SLAB
TOW	TOP OF WALL
TRANS	TRANSFORMER
TV	TELEVISION
TYP	TYPICAL
UFAS	UNIFORM FEDERAL ACCESSIBILITY STANDARDS
UG	UNDERGROUND
UNFIN	UNFINISHED
UNO	ULNESS NOTED OTHERWISE
UV	UTRAVIOLET
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VIF	VERIFY IN FIELD
VTR	VENT TERMINATION PIPE
VWC	VINYL WALL COVERING
W	WEST
W/	WITH
W/D	WASHER DRYER
W/O	WITHOUT
WC	WATERCLOSET
WD	WOOD
WDW	WINDOW
WH	WATER HEATER
WI	WROUGHT IRON
WIN	WINDOW
WP	WATERPROOF(ING)
WR	WEATHER RESISTIVE
WRB	WATER RESISTIVE BARRIER
WSCT	WAINSCOT
WT	WEIGHT
WWF	WELDED WIRE FABRIC
YD	YARD

SYMBOLS





BUILDING LEVELS



NORTH ARROW



GRID REFERENCE



DOOR W/CLOSER



BUILDING ELEVATION



SECTION REFERENCE



DOOR TAG

WINDOW TAG



INTERIOR ELEVATIONS



DETAIL REFERENCE



WALL TAG

STOREFRONT TAG



REVISION TAG



CENTERLINE



MATERIAL TAG

APPROVED FOR USE IN THE CITY OF COACHELLA ONLY

City of COACHELLA est 1946

THESE PLANS ARE PROVIDED BY THE CITY OF AGOURA HILLS AS PART OF THE PRE-APPROVED ADU PROGRAM AND ARE PUBLIC DOMAIN. THERE CANNOT BE A CHARGE TO PROVIDE THESE PLANS. NO ALTERATIONS TO THESE PLANS ARE ALLOWED. ALL ALTERATIONS MUST BE DONE UNDER A SEPARATE PERMIT ONCE THE BUILDING PERMIT FOR THE ADU HAS BEEN ISSUED AND FINAL INSPECTION COMPLETED. IF YOU DO NOT HAVE THE CONSTRUCTION KNOWLEDGE AND EXPERIENCE TO CONTRUCT THESE PLANS WITHOUT FURTHER DETAILS, IT IS RECOMMENDED YOU HIRE A CONTRACTOR TO DO THE CONSTRUCTION. THE CITY WILL NOT PROVIDE FURTHER INFORMATION OR DETAILS AND BUILDING INSPECTORS WILL NOT PROVIDE STEP BY STEP INSTRUCTIONS IN THE FIELD.

COACHELLA ADUs

COACHELLA, CA

GENERAL NOTES

PUBLIC SET

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BUILDING ENERGY ANALYSIS REPORT

PROJECT:
Coachella ADUs (Plan 2)
Coachella, CA

Project Designer:
RRM Design Group
3765 South Higuera St. Suite 102
San Luis Obispo, CA 93401
(805) 543-1794

Report Prepared by:
Timothy Carstairs, CEA, HERS, GPR
Carstairs Energy Inc.
2238 Bayview Heights Drive, Suite E
Los Osos, CA 93402
805-904-9048

CARSTAIRS ENERGY

Job Number:
23-082810

Date:
8/28/2023

The EnergyPro computer program has been used to perform the calculations summarized in this compliance report. This program has approval and is authorized by the California Energy Commission for use with both the Residential and Nonresidential 2022 Building Energy Efficiency Standards.

This program developed by EnergySoft, LLC – www.energysoft.com.

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GENERAL INFORMATION					
01	Project Name	Coachella ADUs (Plan 2)			
02	Run Title	Title 24 Analysis			
03	Project Location	_			
04	City	Coachella	05	Standards Version	2022
06	Zip code		07	Software Version	EnergyPro 9.2
08	Climate Zone	15	09	Front Orientation (deg/ Cardinal)	All orientations
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	Newly Constructed	13	Number of Bedrooms	1
14	Addition Cond. Floor Area (ft^2)	0	15	Number of Stories	1
16	Existing Cond. Floor Area (ft^2)	n/a	17	Fenestration Average U-factor	0.3
18	Total Cond. Floor Area (ft^2)	504	19	Glazing Percentage (%)	12.10%
20	ADU Bedroom Count	n/a	21	ADU Conditioned Floor Area	n/a
22	Fuel Type	All electric	23	Occupancy U:	No

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

ENERGY DESIGN RATINGS

	Energy Design Ratings			Compliance Margins		
	Source Energy (EDR1)	Efficiency[1] EDR (EDR2efficiency)	Total[2] EDR (EDR2total)	Source Energy (EDR1)	Efficiency[1] EDR (EDR2efficiency)	Total[2] EDR (EDR2total)
Standard Design	39.5	34.2	48.9			
Proposed Design						
North Facing	37.6	31.5	47	1.9	2.7	1.9
East Facing	38.1	33.2	48.1	1.4	1	0.8
South Facing	37.5	31.7	47.2	2	2.5	1.7
West Facing	38.1	33.7	48.5	1.4	0.5	0.4
RESULT[3]: PASS						

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

- Standard Design PV Capacity: 0.00 kWdc
- Proposed PV Capacity Scaling: North (0.00 kWdc) East (0.00 kWdc) South (0.00 kWdc) West (0.00 kWdc)

ENERGY USE SUMMARY

Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft^2 -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft^2 -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft^2 -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft^2 -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	0.05	0.32	0.59	4.43	-0.54	-4.11
Space Cooling	6.39	110.16	5.53	101.7	0.86	8.46
IAQ Ventilation	0.46	4.8	0.46	4.8	0	0
Water Heating	2.38	25.13	1.55	18.28	0.83	6.85
Self Utilization/Flexibility Credit				0		0
North Facing Efficiency Compliance Total	**9.28**	**140.41**	**8.13**	**129.21**	**1.15**	**11.2**
Space Heating	0.05	0.32	0.56	4.14	-0.51	-3.82
Space Cooling	6.39	110.16	5.86	109.07	0.53	1.09
IAQ Ventilation	0.46	4.8	0.46	4.8	0	0
Water Heating	2.38	25.13	1.55	18.25	0.83	6.88
Self Utilization/Flexibility Credit				0		0
East Facing Efficiency Compliance Total	**9.28**	**140.41**	**8.43**	**136.26**	**0.85**	**4.15**

ENERGY USE SUMMARY

Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft^2 -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft^2 -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft^2 -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft^2 -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	0.05	0.32	0.43	3.21	-0.38	-2.89
Space Cooling	6.39	110.16	5.61	103.85	0.78	6.31
IAQ Ventilation	0.46	4.8	0.46	4.8	0	0
Water Heating	2.38	25.13	1.54	18.2	0.84	6.93
Self Utilization/Flexibility Credit				0		0
South Facing Efficiency Compliance Total	**9.28**	**140.41**	**8.04**	**130.06**	**1.24**	**10.35**
Space Heating	0.05	0.32	0.58	4.37	-0.53	-4.05
Space Cooling	6.39	110.16	5.88	110.96	0.51	-0.8
IAQ Ventilation	0.46	4.8	0.46	4.8	0	0
Water Heating	2.38	25.13	1.55	18.27	0.83	6.86
Self Utilization/Flexibility Credit				0		0
West Facing Efficiency Compliance Total	**9.28**	**140.41**	**8.47**	**138.4**	**0.81**	**2.01**

ENERGY USE INTENSITY

	Standard Design (kBtu/ft^2 - yr)	Proposed Design (kBtu/ft^2 - yr)	Compliance Margin (kBtu/ft^2 - yr)	Margin Percentage
North Facing				
Gross EUI[1]	36.48	34.44	2.04	5.59
Net EUI[2]	36.48	34.44	2.04	5.59
East Facing				
Gross EUI[1]	36.48	35.55	0.93	2.55
Net EUI[2]	36.48	35.55	0.93	2.55
South Facing				
Gross EUI[1]	36.48	34.74	1.74	4.77
Net EUI[2]	36.48	34.74	1.74	4.77
West Facing				
Gross EUI[1]	36.48	35.48	1	2.74
Net EUI[2]	36.48	35.48	1	2.74

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

REQUIRED PV SYSTEMS

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

REQUIRED SPECIAL FEATURES

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

- PV exception 2: No PV required when minimum PV size (Section 150.1(c)14) < 1.8 kWdc (0 kW)
- Variable capacity heat pump compliance option (verification details from VCHP Staff report, Appendix B, and RA3)
- Northwest Energy Efficiency Alliance (NEEA) rated heat pump water heater; specific brand/model, or equivalent, must be installed

HERS FEATURE SUMMARY

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

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

BUILDING - FEATURES INFORMATION

01	02	03	04	05	06	07
Project Name	**Conditioned Floor Area (ft^2)**	**Number of Dwelling Units**	**Number of Bedrooms**	**Number of Zones**	**Number of Ventilation Cooling Systems**	**Number of Water Heating Systems**
Coachella ADUs (Plan 2)	504	1	1	1	0	1

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	**Zone Type**	**HVAC System Name**	**Zone Floor Area (ft^2)**	**Avg. Ceiling Height**	**Water Heating System 1**	**Status**
Living Area	Conditioned	HVAC System1	504	8	DHW Sys 1	New

OPAQUE SURFACES

01	02	03	04	05	06	07	08
Name	**Zone**	**Construction**	**Azimuth**	**Orientation**	**Gross Area (ft^2)**	**Window and Door Area (ft2)**	**Tilt (deg)**
Front Wall	Living Area	R21 Wall	0	Front	288	66	90
Left Wall	Living Area	R21 Wall	90	Left	112	20	90
Rear Wall	Living Area	R21 Wall	180	Back	288	9	90
Right Wall	Living Area	R21 Wall	270	Right	112	6	90
Roof	Living Area	R-30 Roof Attic	n/a	n/a	504	n/a	n/a

ATTIC

01	02	03	04	05	06	07	08
Name	**Construction**	**Type**	**Roof Rise (x in 12)**	**Roof Reflectance**	**Roof Emittance**	**Radiant Barrier**	**Cool Roof**
Attic Living Area	Attic RoofLiving Area	Ventilated	6	0.1	0.85	No	No

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	**Type**	**Surface**	**Orientation**	**Azimuth**	**Width (ft)**	**Height (ft)**	**Mult.**	**Area (ft^2)**	**U-factor**	**U-factor Source**	**SHGC**	**SHGC Source**	**Exterior Shading**
B.1	Window	Front Wall	Front	0			1	20	0.3	NFRC	0.23	NFRC	Bug Screen
B.1 2	Window	Front Wall	Front	0			1	20	0.3	NFRC	0.23	NFRC	Bug Screen
B.3	Window	Front Wall	Front	0			1	6	0.3	NFRC	0.23	NFRC	Bug Screen

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COACHELLA ADUs
COACHELLA, CA

ENERGY COMPLIANCE - PLAN 2

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FENESTRATION / GLAZING

01 Name	02 Type	03 Surface	04 Orientation	05 Azimuth	06 Width (ft)	07 Height (ft)	08 Mult.	09 Area (ft²)	10 U-factor	11 U-factor Source	12 SHGC	13 SHGC Source	14 Exterior Shading
B.2	Window	Rear Wall	Back	180			1	9	0.3	NFRC	0.23	NFRC	Bug Screen
B.3 2	Window	Right Wall	Right	270			1	6	0.3	NFRC	0.23	NFRC	Bug Screen

OPAQUE DOORS

01 Name	02 Side of Building	03 Area (ft²)	04 U-factor
D1	Front Wall	20	0.2
D1 2	Left Wall	20	0.2

SLAB FLOORS

01 Name	02 Zone	03 Area (ft²)	04 Perimeter (ft)	05 Edge Insul. R-value and Depth	06 Edge Insul. R-value and Depth	07 Carpeted Fraction	08 Heated
Slab	Living Area	504	100	none	0	80%	No

OPAQUE SURFACE CONSTRUCTIONS

01 Construction Name	02 Surface Type	03 Construction Type	04 Framing	05 Total Cavity R-value	06 Interior / Exterior Continuous R-value	07 U-factor	08 Assembly Layers
R21 Wall	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.069	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Exterior Finish: 3 Coat Stucco

Registration Number: 223-P01010753 7A-000-000-0000000-0000 Registration Date/Time: 2023-08-28 11:08:50 HERS Provider: CalCERTS inc.
CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Schema Version: rev 20220901 Report Generated: 2023-08-28 10:19:07

VARIABLE CAPACITY HEAT PUMP COMPLIANCE OPTION - HERS VERIFICATION

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

INDOOR AIR QUALITY (IAQ) FANS

01 Dwelling Unit	02 Airflow (CFM)	03 Fan Efficacy (W/CFM)	04 IAQ Fan Type	05 Includes Heat/Energy Recovery?	06 IAQ Recovery Effectiveness - SRE	07 Includes Fault Indicator Display?	08 HERS Verification	09 Status
SFam IAQVentRpt	30	0.35	Exhaust	No	n/a / n/a	No	Yes	

OPAQUE SURFACE CONSTRUCTIONS

01 Construction Name	02 Surface Type	03 Construction Type	04 Framing	05 Total Cavity R-value	06 Interior / Exterior Continuous R-value	07 U-factor	08 Assembly Layers
Attic RoofLiving Area	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / 0	0.644	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4
R-30 Roof Attic	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-30	None / None	0.032	Over Ceiling Joists: R-20.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board

BUILDING ENVELOPE - HERS VERIFICATION

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

WATER HEATING SYSTEMS

01 Name	02 System Type	03 Distribution Type	04 Water Heater Name	05 Number of Units	06 Solar Heating System	07 Compact Distribution	08 HERS Verification	09 Water Heater Name (#)
DHW Sys 1	Domestic Hot Water (DHW)	Standard	DHW Heater 1	1	n/a	None	n/a	DHW Heater 1 (1)

WATER HEATERS - NEEA HEAT PUMP

01 Name	02 # of Units	03 Tank Vol. (gal)	04 NEEA Heat Pump Brand	05 NEEA Heat Pump Model	06 Tank Location	07 Duct Inlet Air Source	08 Duct Outlet Air Source
DHW Heater 1	1	50	Rheem	XE50T10H22U0 (50 gal, JA13)	Outside	Living Area	Living Area

Registration Number: 223-P01010753 7A-000-000-0000000-0000 Registration Date/Time: 2023-08-28 11:08:50 HERS Provider: CalCERTS inc.

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	Documentation Author Signature:
Timothy Carstairs	Timothy Carstairs
Company: Carstairs Energy Inc.	Signature Date: 2023-08-28 11:01:53
Address: 2238 Bayview Heights Drive, Suite E	CEA/ HERS Certification Identification (If applicable): r160610042
City/State/Zip: Los Osos, CA 93402	Phone: 805-904-9048

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

Responsible Designer Name:	Responsible Designer Signature:
Randy Russom	
Company: RRM Design Group	Date Signed: 2023-08-28 11:08:50
Address: 3765 S. Higuera Street, Suite 102	License: na
City/State/Zip: San Luis Obispo, CA 94301	Phone: 805-543-1794

Digitally signed by CalCERTS. 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.

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Registration Number: 223-P01010753 7A-000-000-0000000-0000 Registration Date/Time: 2023-08-28 11:08:50 HERS Provider: CalCERTS inc.
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WATER HEATING - HERS VERIFICATION

01 Name	02 Pipe Insulation	03 Parallel Piping	04 Compact Distribution	05 Compact Distribution Type	06 Recirculation Control	07 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 Name	02 System Type	03 Heating Unit Name	04 Heating Equipment Count	05 Cooling Unit Name	06 Cooling Equipment Count	07 Fan Name	08 Distribution Name	09 Required Thermostat Type
HVAC System1	Heat pump heating cooling	Heat Pump System 1	1	Heat Pump System 1	1	n/a	n/a	Setback

HVAC - HEAT PUMPS

01 Name	02 System Type	03 Number of Units	04 Heating Efficiency Type	05 Heating HSPF / HSPF2 / COP	06 Cooling Cap 47	07 Cooling Cap 17	08 Cooling Efficiency Type	09 Cooling SEER / SEER2	10 Cooling EER / EER / CEER	11 Zonally Controlled	12 Compressor Type	13 HERS Verification
Heat Pump System 1	VCHP-ductless	1	HSPF	8.2	25000	20000	EERSEER	14	11	Not Zonal	Single Speed	Heat Pump System 1-hers-htpump

HVAC HEAT PUMPS - HERS VERIFICATION

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

Registration Number: 223-P01010753 7A-000-000-0000000-0000 Registration Date/Time: 2023-08-28 11:08:50 HERS Provider: CalCERTS inc.

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2022 Single-Family Residential Mandatory Requirements Summary

NOTE- Single-family residential buildings subject to the Energy Codes must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information.

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)2: **Labeling.** Fenestration products and exterior doors must have a label meeting requirements in § 10-111(a).

§ 110.6(b): **Leakage Descriptions.** Swinging doors and fixed windows shall be certified to have an air leakage rate not exceeding 0.3 cfm per square foot of door area when tested according to NFRC 400 or ASTM E283 at a pressure differential of 1.57 psf (75 Pa). 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, weatherstripped, or sealed. *

§ 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(h): **Roofing Material.** Roofing products must be certified cool roofs if 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(i): **Radiant Barrier.** When required, radiant barriers must have an emittance of 0.05 or less and be tested for the lifetime of the product.

§ 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 ceilings or area-weighted average U-factor not exceeding U-0.034. Insulation in direct contact with a roof or ceiling which is sealed to limit infiltration and exfiltration, as specified in § 110.7, and which is either air-permeable insulation or insulation that does not have a vapor retarder installed directly above the insulation, shall be covered by a Class I or II vapor retarder. *

§ 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 R-value of 10 for 24 inches or full depth, whichever is less. For the insulation material above grade and must be protected. Slab edge insulation is not required for unheated slabs. *

§ 150.0(g)1: **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-control device.

§ 150.0(g)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:

§ 110.4 § 110.3: **Certification.** Heating, ventilation, and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified to the California Energy Commission (CEC). *

§ 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 shall include controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone during both steady-state operation 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. *

§ 150.0(j)1: **Pool and Spa Heating System and Equipment Installation.** Residential pool systems or equipment must have a pool heating system or equipment that is 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 have a continuous pilot light. *

§ 150.0(j)2: **Insulation.** Unfired service water heater storage tanks and solar water-heating backup tanks must have adequate insulation, or tank surface heat loss rating.

§ 150.0(j)3: **Heat Traps.** Storage service 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.

§ 150.0(j)4: **Pipe Insulation.** Hot water pipes that are 1 inch or larger in diameter, all hot water pipes that are operated at temperatures greater than 120°F, and all hot water pipes that are located in unconditioned spaces must be insulated. *

§ 150.0(j)5: **Circulating Hot Water Systems.** Circulating hot water systems must include automatic or accessible manual controls capable of turning off the system or shutting off the circulating pump when hot water is not needed. *

§ 150.0(j)6: **Shower Drain Water Heat Recovery.** Showers must have a shower drain water heat recovery unit that is tested and rated in accordance with NFRC 701 and certified to the Energy Commission. *

§ 150.0(j)7: **Pool Covers.** Outdoor pools or spas that have a heater or a pump with a capacity greater than 1 hp must have a cover. *

§ 150.0(j)8: **Pool and Spa Heating Systems and Equipment.** Pools and spas must have a heating system or equipment that conforms to the efficiency requirements in § 110.4 and § 110.5. *

§ 150.0(j)9: **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, 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, dark rated fixtures, and garage door openers. Inwegligible lighting less than 5-watts; and lighting internal to drawers, cabinets, and linen closets shall not be counted.

§ 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: **Blank Electrical Boxes.** The number of electrical boxes that are more than 5 feet above the finished floor and 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 5 feet above the finished floor and are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in kitchen exhaust hoods.

§ 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).

2022 Single-Family Residential Mandatory Requirements Summary

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 Codes (CMC); if a duct is insulated with gaskets, the gaskets must be certified by the manufacturer to comply with § 604.0 of the California Mechanical Code.

CMC Compliance. All air-distribution system ducts and plenums must meet CMC §§ 601.0-A/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 are confirmed through field verification and diagnostic testing (RA3.1.4.3.8). 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 and support platforms may not contain ducts; ducts installed in these spaces must not be compressed. Ducts and plenums must be insulated to a minimum installed level of R-4.2 or higher. 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)1: **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(m)2: **Factory-Fabricated Duct Systems.** Factory-fabricated duct systems must comply with applicable requirements for duct construction, mechanical integrity, and leakage performance. Factory-fabricated duct systems must not be sealed with cloth backed rubber adhesive duct tapes unless such tape is used in accordance with mastic and strap 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 aerosol sealant that meets UL 723.

§ 150.0(m)7: **Backdraft Damper.** For 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 spaces must have automatic or readily accessible, manually operated dampers in all openings to the outside except combustion inlets and outlets for combustion heating appliances.

§ 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). Insulation protected from damage due to equipment maintenance and wind must be protected by a durable sheet metal, fiberboard, or plywood jacket or equivalent.

§ 150.0(m)10: **Pool Heater Cover Flex Duct.** Pools heated more than 90°F must have a cover. Pools heated with a solar collector must have a cover if an external or continuous exhaust meeting §150.0(p)10Giv. Airflow must be measured by the installer per §150.0(p)10Gv and rated for sound per §150.0(p)10Gvi. *

§ 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, all ducts and plenums must be sealed. Duct sealing must be 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. Space conditioning systems must be designed to accommodate these filters. Systems without ducts, such as ductless systems and packaged terminal 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. *

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 ≤ 0.62 watts per CFM for all other air handlers. Airflow must be ≥ 300 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3. *

Ventilation and Indoor Air Quality:

§ 150.0(o)1: **Requirements for Ventilation and Indoor Air Quality.** All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.

§ 150.0(o)1B: **Central Fan Integrated (CFI) Ventilation Systems.** Continuous operation of CFI air handlers is not allowed to provide the whole-dwelling unit ventilation airflow required per § 150.0(o)1C. A mechanical damper(s) must be installed on the return ducts that automatically close during periods when the central fan is not operating to prevent backdrafting and unintended air movement. 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: **Local Mechanical Ventilation for Single-Family Detached and Townhouses.** Single-family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow specified in § 150.0(o)1Ci-Ciii.

§ 150.0(o)1G: **Local Mechanical Exhaust.** Kitchens and bathrooms must have local mechanical exhaust, nonexcused kitchens must have demand-control ventilation, and bathrooms must have humidity control. Local mechanical exhaust must be ducted to the outside and have a continuous exhaust meeting §150.0(o)1Givv. 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 meet minimum airflow rate required by § 150.0(o)1C. 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): **Pool and Spa Heating Systems and Equipment.** 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 have a continuous pilot light. *

§ 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.** Pools must be designed with 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:

§ 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, dark rated fixtures, and garage door openers. Inwegligible lighting less than 5-watts; and lighting internal to drawers, cabinets, and linen closets shall not be counted.

§ 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: **Blank Electrical Boxes.** The number of electrical boxes that are more than 5 feet above the finished floor and 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 5 feet above the finished floor and are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in kitchen exhaust hoods.

§ 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).

RESIDENTIAL MEASURES SUMMARY — RMS-1

Project Name	Coachella ADUs (Plan 2)	Date	8/28/2023
Project Address	Coachella	# of Units	1
	CA	Addition/Alteration	Addition n/a
		California Energy Climate Zone	15
		Total Cond. Floor Area	504

Building Type: ☑ Single Family ☐ Multi Family ☐ Addition Alone ☐ Existing+ Addition/Alteration

INSULATION

Construction	Type	Cavity Area (ft²)	Status
Wall	Wood Framed	R-21	New
Door	Opaque Door	R-5	New
Roof	Wood Framed Attic	R-30	New
Slab	Unheated Slab-on-Grade	- no insulation	New

FENESTRATION — Total Area: 61 | Glazing Percentage: 12.1 % | New/Altered Average U-Factor: 0.30

Orientation	Area (ft²)	U-Fac	SHGC	Overhang	Sidefins	Exterior Shades	Status
Front (N)	45.0	0.300	0.23	none	none	N/A	New
Rear (S)	9.0	0.300	0.23	none	none	N/A	New
Right (W)	6.0	0.300	0.23	none	none	N/A	New

Notes: Points = 100'

HVAC SYSTEMS

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

HVAC DISTRIBUTION

Location	Heating	Duct Location	Duct R-Value	Status
HVAC System	Ductless with Fan	Ductless	n/a	New

WATER HEATING

Qty.	Type	Gallons	Min. Eff	Distribution	Status
1	Heat Pump	50	3.20	Standard	New

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ID: 23-082810

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Registration Number: 223-P01010753 7A-000-000-0000000-0000 Registration Date/Time: 2023-08-28 11:08:50 HERS Provider: CalCERTS inc.
CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Schema Version: rev 20220901 Report Generated: 2023-08-28 10:19:07

City of COACHELLA est 1946

THESE PLANS ARE PROVIDED BY THE CITY OF AGOURA HILLS AS PART OF THE PRE-APPROVED ADU PROGRAM AND ARE PUBLIC DOMAIN. THERE CANNOT BE A CHARGE TO PROVIDE THESE PLANS. NO ALTERATIONS TO THESE PLANS ARE ALLOWED. ALL ALTERATIONS MUST BE DONE UNDER A SEPARATE PERMIT ONCE THE BUILDING PERMIT FOR THE ADU HAS BEEN ISSUED AND FINAL INSPECTION COMPLETED. IF YOU DO NOT HAVE THE CONSTRUCTION KNOWLEDGE AND EXPERIENCE TO CONTRUCT THESE PLANS WITHOUT FURTHER DETAILS, IT IS RECOMMENDED YOU HIRE A CONTRACTOR TO DO THE CONSTRUCTION. THE CITY WILL NOT PROVIDE FURTHER INFORMATION OR DETAILS AND BUILDING INSPECTORS WILL NOT PROVIDE STEP BY STEP INSTRUCTIONS IN THE FIELD.

COACHELLA ADUs
COACHELLA, CA

ENERGY COMPLIANCE - PLAN 2

DATE 01/11/24

SHEET T24-201

PUBLIC SET

1/11/2024 4:12:04 PM
Autodesk Docs://2939_Coachella ADUs/2939-01_Coachella ADUs.rvt

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 sleep-sloped roofs must have an azimuth between 90-300° of true north.
§ 110.10(b)3A:	**Shading.** The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment.
§ 110.10(b)3B:	**Shading.** Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the horizontal distance of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane. *
§ 110.10(b)4:	**Structural Design Loads on Construction Documents.** For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(c):	**Interconnection Pathways.** The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single-family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.
§ 110.10(d):	**Documentation.** A copy of the construction documents or a comparable document indicating the information from § 110.10(b)-(c) must be provided to the occupant.
§ 110.10(e)1:	**Main Electrical Service Panel.** The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2:	**Main Electrical Service Panel.** The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric."

Electric and Energy Storage Ready:

5/6/22

2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(s)	**Energy Storage System (ESS) Ready.** All single-family residences must meet all of the following: Either ESS-ready interconnection equipment with backed up capacity of 60 amps or more and four or more ESS supplied branch circuits, or a dedicated raceway from the main service to a subpanel that supplies the branch circuits in § 150.0(s); at least four branch circuits must be identified and have their source collocated at a single panelboard suitable to be supplied by the ESS, with one circuit supplying the refrigerator, one lighting circuit near the primary exit, and one circuit supplying a sleeping room receptacle outlet; main panelboard must have a minimum busbar rating of 225 amps; sufficient space must be reserved to allow future installation of a system isolation equipment/transfer switch within 3' of the main panelboard, with raceways installed between the panelboard and the switch location to allow the connection of backup power source.
§ 150.0(t)	**Heat Pump Space Heater Ready.** Systems using gas or propane furnaces to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(u)	**Electric Cooktop Ready.** Systems using gas or propane cooktop to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors rated at least 50 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."
§ 150.0(v)	**Electric Clothes Dryer Ready.** Clothes dryer locations with gas or propane plumbing to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer location with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready;" and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."

*Exceptions may apply.

5/6/22

ROOM LOAD SUMMARY

Project Name	Date
Coachella ADUs (Plan 2)	*8/28/2023*
System Name	Floor Area
HVAC System	*504*

ROOM LOAD SUMMARY

			ROOM COOLING PEAK			COIL COOLING PEAK			COIL HTG. PEAK	
Zone Name	Room Name	Mult.	CFM	Sensible	Latent	CFM	Sensible	Latent	CFM	Sensible
Living Area	*1st Floor*	*1*	*262*	*5,669*	*208*	*262*	*5,669*	*208*	*205*	*8,211*

SITE PLAN TO BE PROVIDED BY APPLICANT

SITE PLAN LEGEND

PROPERTY LINE

SETBACK

EASTMENT

(E) FENCE

(E) WALLS/RETAINING WALLS

SITE PLAN GENERAL NOTES

1. REFER TO GENERAL NOTES SHEET G-101 FOR ADDITIONAL REQUIREMENTS
2. REFER TO STRUCTURAL PLANS FOR FURTHER INFORMATION
3. EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL OPEN DIRECTLY INTO A PUBLIC WAY PER 2022 CRC, SECTION 310.1.
4. NOT LESS THAN 30" OF CLEARANCE IN WIDTH, DEPTH, & HEIGHT SHALL BE PROVIDED TO ACCESS EXTERIOR MECHANICAL EQUIPMENT. SHOW LOCATION ON SITE PLAN & LABEL (2022 CMC SECTION 304.1 & 2022 CPC 504.3).

SITE PLAN CHECKLIST

IF (N) ADU IS 5' - 0" OR LESS TO ANY PROPERTY LINE AND/OR ADU IS 10' - 0" OR LESS FROM ANY ADJACENT BUILDING OR STRUCTURE:

☐ **NO** ☐ **YES;** IF YES, FIRE RATED WALL & ROOF REQUIRED PER 2022 CBC, CHAPTER 2. **SEE DETAILS**: **52/A-901 & 32/A-903**

ELECTRICAL PANEL:

☐ **OPTION 1 -** NEW ELECTRICAL MAIN PANEL WITH 225 AMP MINIMUM BUSBAR RATING

☐ **OPTION 2 -** A NEW ELECTRICAL SUBPANEL CONNECTS TO THE ELECTRICAL MAIN PANEL OF THE PRIMARY HOME WITH A 225 AMP MINIMUM BUSBAR RATING. A SEPARATE ELECTRICAL PERMIT SHALL BE PULLED FOR THE ELECTRICAL MAIN PANEL OF THE PRIMARY HOME, ELECTRICAL LOAD CALCULATIONS IS REQUIRED.

☐ **FOOTPRINT OF ALL EXISTING AND PROPOSED BUILDINGS**
PLOT THE PROPOSED ADU BUILDING FOOTPRINT ALONG WITH ANY OTHER EXISTING BUILDINGS ONSITE. THIS INCLUDES ALL STRUCUTRES / PORCHES / GAZEBOS. IF AN OPTIONAL COVERED PATIO IS SELECTED, PLEASE PLOT THAT AS WELL.

☐ **AREA OF EXISTING BUILDING**
INDICATE THE SQUARE FOOTAGE OF THE EXISTING HOUSE.

☐ **FOOTPRINT OF PROPOSED ADU**
REFER TO LEGEND FOR FOOTPRINT AT 10'=1" SCALE

☐ **DRAWING SCALE**
SITE PLAN SHOULD BE DRAWN TO A MEASURABLE SCALE.

☐ **PROPERTY LINES**
SHOW OUTLINE OF PROPERTY USING DASHED LINE IN LEGEND. INDICATE THE BEARING AND DISTANCE OF THE PROPERTY LINE.

☐ **LABEL YARDS**
LABEL FRONT, REAR, SIDE YARDS, AS WELL AS DRIVEWAYS, PATHWAYS AND ANY OTHER HARDSCAPE.

☐ **SETBACKS**
DIMENSION THE DISTANCE BETWEEN BUILDINGS AND PROPOERTY LINES, AS WELL AS BUILIDNGS TO OTHER STRUCTURES. SETBACKS TO SIDE AND REAR PROPERTY SIDE SHALL BE A MINIMUM OF (4' - 0").

☐ **EASEMENTS**
REFER TO LEGEND. MUST INCLUDE ALL APPLICABLE EASEMENTS. PROPOSED STRUCTURE SHALL COMPLY WITH EASEMENT REQUIREMENTS.

☐ **LOCATION OF RAIN WATER LEADERS**
THE ROOF DRAINS SHOULD DRAIN AWAY FROM THE PROPERTY LINES AND INTO THE LANDSCAPE AREA.

☐ **LABEL STREETS & SIDEWALKS**

☐ **DIMENSION BUILDING SEPARATION**
DIMENSION THE DISTANCE BETWEEN THE PROPOSED ADU AND ANY EXISTING STRUCTURES

☐ **LOT COVERAGE CALCULATION**
TOTAL FOOTPRINT AREA FOR STRUCTURES ON SITE / LOT AREA

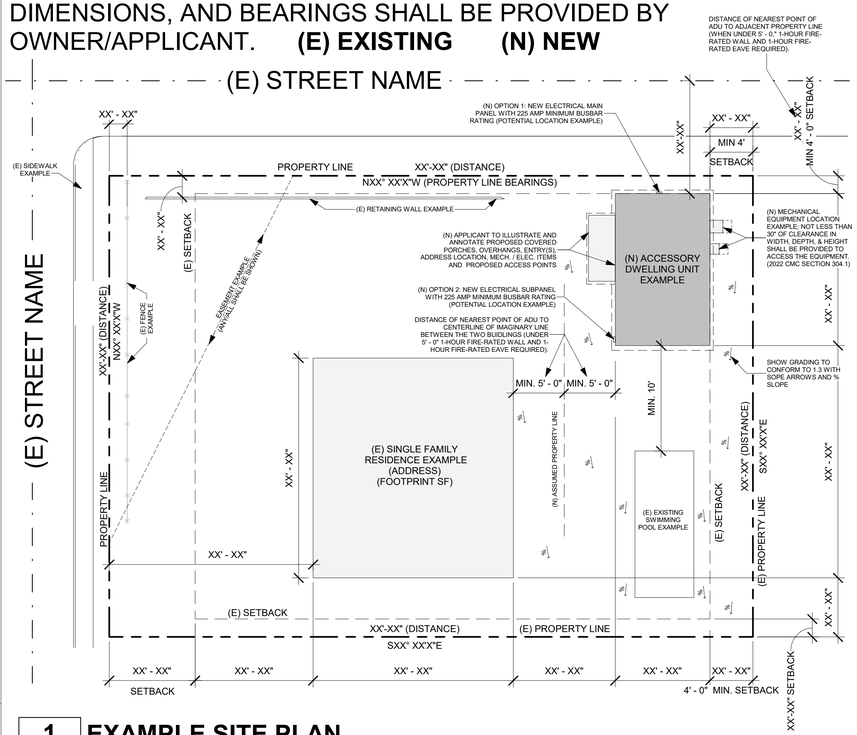
☐ **SWIMMING POOLS**
ALL EXISTING SWIMMING POOLS SHALL BE SHOWN ON THE SITE PLAN AND SHALL HAVE 10' MINIMUM SETBACK TO THE NEW ADU STRUCTURE.

☐ **PORCHES**
THERE SHALL BE NO MORE THAN 30 INCHES MEASURED VERITCALLY TO THE FLOOR OR GRADE BELOW (INCLUDING FLOORS, STAIRS, RAMPS, AND LANDINGS) ANYWHERE MEASURED LESS THAN 36 INCHES HORIZONTALLY TO THE EDGE OF THE PORCH/SLAB/SURFACE OF THE RAIL. INSECT SCREENING SHALL NOT BE CONSIDERED AS A GUARD.

☐ **LOCATION OF EXISTING UTILITIES**
UTILITIES, POLES, SEWER, DRAINS, ELECTRICAL, GAS METERS AND LINES AND ANY PHOTOVOLTATIC.

☐ **LOCATION OF PROPOSED UTILITIES**
PROPOSED UTILITIES SHALL CONFORM TO REQUIREMENTS OF CONTRA COSTA COUNTY SANITARY DISTRICT. SANITARY SEWER FROM ADU TO EXISTING SEWER. SEWER LINE TO THE PROPOSED ADU SHALL BE CONNECTED TO THE MAIN LATERAL AT THE PROPERTY LINE OR BEHIND THE SIDEWALK. LATERAL POINT OF CONNECTION INCLUDING REQUIRED CLEANOUTS, WATER LINE TO ADU, ELECTRIC TO ADU INCLUDING ANY NEW METERS OR SUBPANELS.

NOTE: THIS IS AN EXAMPLE SITE PLAN. EXACT LAYOUT, DIMENSIONS, AND BEARINGS SHALL BE PROVIDED BY OWNER/APPLICANT. **(E) EXISTING** **(N) NEW**



1 **EXAMPLE SITE PLAN**
1A.2 | AS-100 SCALE: 1" = 20'-0"

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SITE PLAN

SCALE:

NORTH ARROW

PUBLIC SET

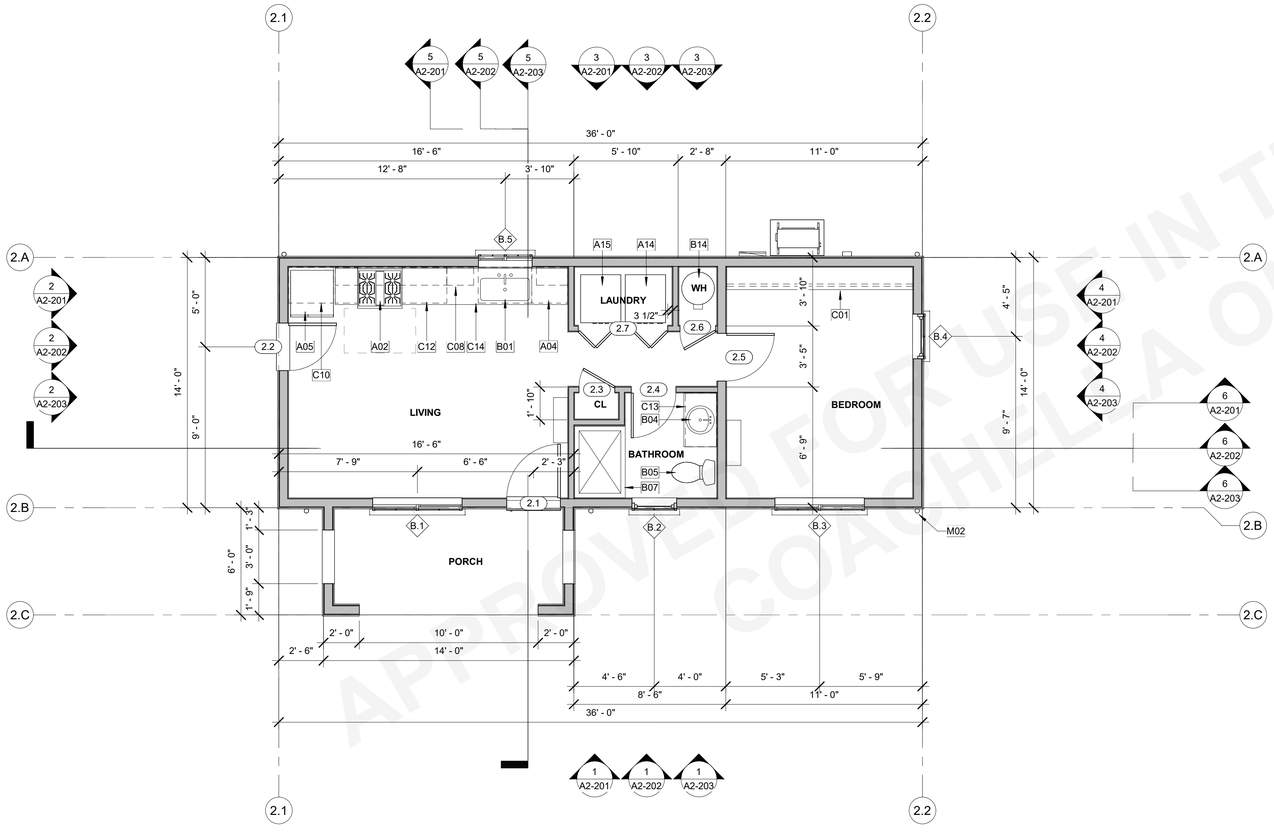
COACHELLA ADUs
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ARCHITECTURAL SITE PLAN SHEET - EXAMPLE & INSTRUCTIONS

DATE
01/11/24

SHEET
AS-100

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1 A1- FLOOR PLAN

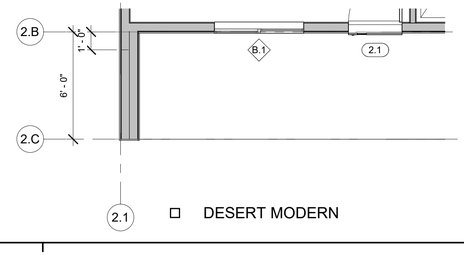
1A.2 | A2-101 SCALE: 1/4" = 1'-0"

PORCH STYLE

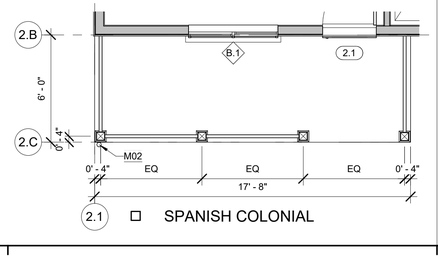
CHECK APPROPRIATE STYLE OPTION BELOW

SHOWN IN FLOOR PLAN

☐ MISSION REVIVAL



2.1 ☐ DESERT MODERN



2.1 ☐ SPANISH COLONIAL

FINISH SCHEDULE

FINISH SCHEDULE - PLAN 2

ROOM NAME	FLOOR	WALL	CEILING	NOTES
BATHROOM	CT	WR GWB	WR GWB	
BEDROOM	LVT	GWB	GWB	
CL	LVT	GWB	GWB	
KITCHEN	LVT	GWB	GWB	WR GWB BEHIND COUNTER
LAUNDRY	LVT	GWB	GWB	
LIVING	LVT	GWB	GWB	
PORCH	CONC			
WH	LVT	WR GWB	WR GWB	

KEYNOTES

A02	30" SLIDE ELECTRIC SINGLE OVEN, STAINLESS STEEL.
A04	24" WIDE FRONT CONTROL UNDERCOUNTER DISHWASHER.
A05	REFRIGERATOR LOCATION. PROVIDE 37" SPACE WITH ROUGH PLUMBING FOR ICE MAKER (RECESS IN WALL).
A14	WASHING MACHINE LOCATION. PROVIDE WASTE AND WATER IN RECESSED WALL BOX.
A15	DRYER LOCATION. PROVIDE DRYER VENT. VENT TO OUTSIDE AIR THROUGH EXTERIOR WALL. DRYER VENT 4" MIN DIAMETER TO EXTERIOR WITH SCREENED AND ONE DIRECTIONAL VENT GATE. MAX LENGTH TO NOT EXCEED 14' WITH A MAX OF 2 90-DEGREE BENDS. TERMINATION SHALL BE 3' MINIMUM FROM OPERABLE OPENING IN EXTERIOR WALL.
B01	SINGLE COMPARTMENT UNDER-MOUNT KITCHEN SINK W/ GARBAGE DISPOSAL. REFER TO WATER EFFICIENCY REQUIREMENTS ON CALGREEN CODE NOTES SHEET.
B04	LAVATORY SINK. REFER TO WATER EFFICIENCY REQUIREMENTS ON CALGREEN CODE NOTES SHEETS.
B05	WATER CLOSET. REFER TO WATER EFFICIENCY REQUIREMENTS ON CALGREEN CODE NOTES SHEETS.
B07	36" X 48" SHOWER. TILE FLOOR. TILE WALLS AT 84" AFS. PROVIDE GLASS SHOWER ENCLOSURE
B14	50 GALLON TANK TYPE ELECTRIC WATER HEATER. REFER TO TITLE 24 FOR ADDITIONAL INFORMATION. PROVIDE CONCRETE PAD MIN. 6" LARGER THAN UNIT IN EACH DIRECTION. 3" MIN. ABOVE GRADE. STRAPPING DETAIL 51/AD-902.
C01	SINGLE WOOD SHELF AND POLE.
C08	12" DEEP UPPER CABINET
C10	24" DEEP UPPER CABINET.
C12	BASE CABINET."
C13	SINK BASE CABINET AND COUNTERTOP."
C14	36" A.F.F. COUNTERTOP
M02	DOWNSPOUT. CONNECT TO STORM DRAIN SYSTEM

WINDOW GENERAL NOTES

1. REFER TO GENERAL NOTES ON SHEET G-101 FOR ADDITIONAL REQUIREMENTS
2. REFER TO FLOOR PLANS FOR WINDOW LOCATIONS.
3. CONTRACTOR TO VERIFY EXACT ROUGH OPENING SIZES WITH WINDOW MANUFACTURER SPECIFICATIONS PRIOR TO FABRICATION OF ROUGH OPENINGS.
4. CONTRACTOR TO VERIFY ACTUAL WINDOW SIZES TO FIT FINISH OPENING PRIOR TO FABRICATION OF WINDOW AND FINISH OPENING.
5. HEAD HEIGHT MEASURED FROM FF UNLESS NOTED OTHERWISE.
6. REFER TO ENERGY COMPLIANCE REPORTS FOR U-FACTOR, SHGC AND ADDITIONAL WINDOW REQUIREMENTS.
7. ALL GLAZING IS DOUBLE PANE UNLESS OTHERWISE NOTED.
8. PROVIDE SHOP DRAWINGS FOR ALL WINDOW UNITS
9. REFER TO WINDOW TYPES LEGEND FOR GLAZING.
10. REFER TO WINDOW SCHEDULE AND WINDOW TYPES LEGEND FOR FURTHER INFORMATION.
11. WINDOWS BETWEEN CONDITIONED AND UNCONDITIONED SPACES SHALL BE CAULKED, GASKETED, WEATHER-STRIPPED OR OTHERWISE SEALED.
12. SAFETY GLAZING NOTATED WITH "T"

WINDOW SCHEDULE

NO.	TYPE	SIZE WIDTH	SIZE HEIGHT	HEAD HEIGHT	REMARKS
B.1	A	5' - 0"	4' - 0"	6' - 8"	2,3
B.2	B	2' - 6"	4' - 0"	6' - 8"	
B.3	A	5' - 0"	4' - 0"	6' - 8"	1, 2
B.4	B	2' - 6"	4' - 0"	6' - 8"	
B.5	A	3' - 0"	3' - 0"	6' - 8"	3

WINDOW REMARKS

1. THE MINIMUM NET CLEAR OPENING HEIGHT DIMENSION SHALL BE 24 INCHES. THE MINIMUM NET CLEAR OPENING WIDTH DIMENSION SHALL BE 20 INCHES . THE NET CLEAR OPENING DIMENSIONS SHALL BE THE RESULT OF NORMAL OPERATION OF THE OPENING. PER **CRC 2022 SEC. 312.2**
2. SHALL HAVE THE BOTTOM OF THE CLEAR OPENING NOT GREATER THAN 44 INCHES MEASURED FROM THE FLOOR. PER **CRC 2022 SEC. 310.2.3**
3. TEMPERED / SAFETY GLAZING.

WINDOW LEGEND



A.
HORIZONTAL SLIDER



B.
CASEMENT

FLOOR PLAN GENERAL NOTES

1. REFER TO GENERAL NOTES SHEET G-101 AND G-102 FOR ADDITIONAL REQUIREMENTS.
2. REFER TO STRUCTURAL PLANS FOR FURTHER INFORMATION.
3. REFER TO ELECTRICAL PLANS FOR FURTHER INFORMATION IF PROVIDED.
4. REFER TO MECHANICAL PLANS, DRAWINGS OR REPORTS FOR FURTHER INFORMATION.
5. REFER TO PLUMBING PLANS OR DRAWINGS FOR FURTHER INFORMATION IF PROVIDED.
6. ALL FURNITURE AND EQUIPMENT IS BY OWNER AND IS SHOWN FOR COORDINATION PURPOSES ONLY.
7. DIMENSIONS ARE TO FACE OF FRAMING UNLESS SPECIFICALLY NOTED OTHERWISE.
8. PROVIDE ADEQUATE BLOCKING IN WALLS FOR CABINETS AND OTHER WALL MOUNTED ACCESSORIES INCLUDING BUT NOT LIMITED TO HANDRAILS, SHELVING AND BATHROOM FIXTURES.
9. PROVIDE FIREBLOCKING FOR WALL CAVITIES THAT EXCEED 2019 CBC HEIGHT LIMITATIONS
10. DOOR AND WINDOW DIMENSIONS ARE CENTERED AT OPENINGS
11. WHERE DOOR IS LOCATED WITHOUT DIMENSION AT THE CORNER OF A ROOM IT SHALL BE 4" FROM FACE OF FRAMING OF ADJACENT WALL TO ROUGH DOOR OPENING. WHERE 4" CANNOT BE ACCOMODATED ON EITHER SIDE, DOOR SHALL BE CENTERED.
12. SEE CODE ANALYSIS FOR LOCATIONS OF FIRE PARTITIONS AND FIRE BARRIERS
13. WHERE RECESSED FIXTURES OCCUR IN WALLS OR HORIZONTAL ASSEMBLIES, THE FIRE RATING OF THOSE ASSEMBLIES SHALL BE MAINTAINED
14. AT ALL PENETRATIONS AND INTERSECTIONS OF FIRE-RATED PARTITIONS, PROVIDE FIRE SEALANT AND/OR FIRE STOPPING TO MAINTAIN CONTINUITY OF PARTITION RATING

WALL TYPES LEGEND

EXTERIOR - 5 1/2" WOOD STUD W/ PLYWOOD SHEATHING AND STUCCO, ONE LAYER GYPSUM WALL BOARD INTERIOR.

EXTERIOR - 5 1/2" WOOD DOUBLE STUD W/ PLYWOOD SHEATHING AND STUCCO EACH SIDE. (MODERN ONLY)

INTERIOR - 3 1/2" WOOD STUD W/ONE LAYER GYPSUM WALL BOARD EACH SIDE.

DOOR GENERAL NOTES

1. REFER TO GENERAL NOTES ON SHEET G-101 FOR ADDITIONAL REQUIREMENTS
2. REFER TO FLOOR PLANS FOR DOOR LOCATIONS.
3. CONTRACTOR TO VERIFY EXACT ROUGH OPENING SIZES WITH DOOR MANUFACTURER SPECIFICATIONS PRIOR TO FABRICATION OF ROUGH OPENINGS.
4. CONTRACTOR TO VERIFY ACTUAL DOOR SIZES TO FIT FINISH OPENING PRIOR TO FABRICATION OF DOOR AND FINISH OPENING.
5. REFER TO DOOR TYPES LEGEND FOR GLAZING.
6. REFER TO T24 REPORT FOR GLAZING ENERGY REQUIREMENTS
7. INSTALL PER MANUFACTURERS WRITTEN INSTRUCTIONS

DOOR SCHEDULE

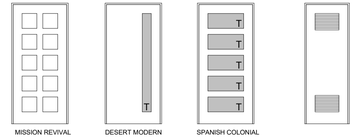
MARK	TYPE	DOOR WIDTH	DOOR HEIGHT	REMARKS
2.1	A	3' - 0"	6' - 8"	1, 2
2.2	D	2' - 8"	6' - 8"	2
2.3	B	2' - 0"	6' - 8"	
2.4	C	2' - 6"	6' - 8"	
2.5	C	2' - 8"	6' - 8"	
2.6	B	2' - 0"	6' - 8"	
2.7	E	5' - 0"	6' - 8"	

DOOR REMARKS

1. FIRE RATED DOOR. REFER TO GENERAL DOOR NOTE #5
2. GLAZING IN DOOR. TEMPERED (BOTH PANES)
3. PROVIDE 100 SQ INCHES OF VENTING IN DOOR OR BY OTHER APPROVED MEANS.
4. OPTIONAL DOOR.

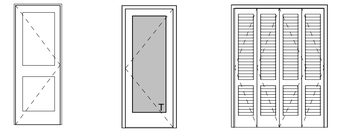
DOOR LEGEND

T = TEMPERED GLAZING



A.
SOLID CORE
WOOD EXTERIOR

B.
VENTED WATER
CLOSET INTERIOR



C.
SINGLE HOLLOW
CORE INTERIOR

D.
SOLID CORE
WOOD EXTERIOR.

E.
BI-FOLD - LOUVERED
INTERIOR

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FLOOR PLANS - PLAN 2

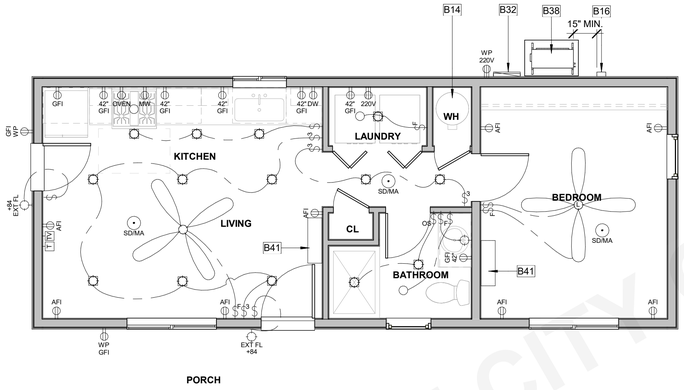
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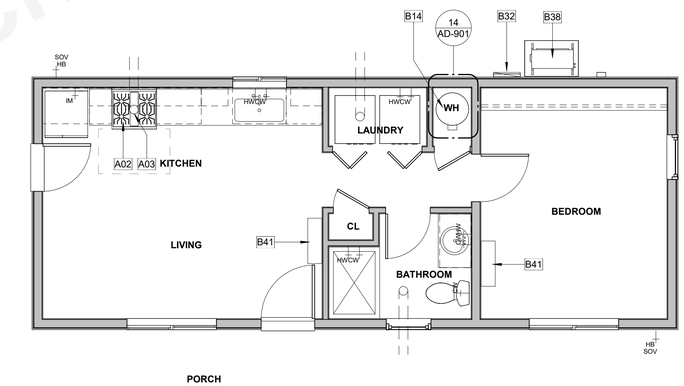
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1 PLAN 2 - ELECTRICAL

1A.2 | A2-111 SCALE: 1/4" = 1'-0"



2 PLAN 2 - MECHANICAL

1A.2 | A2-111 SCALE: 1/4" = 1'-0"

PLUMBING FIXTURES

4.303.2 STANDARDS FOR PLUMBING FIXTURES AND FITTINGS
PLUMBING FIXTURES AND FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA PLUMBING CODE, AND SHALL MEET THE APPLICABLE STANDARDS REFERENCED IN TABLE 1701.1 OF THE CALIFORNIA PLUMBING CODE.

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

TABLE - MAXIMUM FIXTURE WATER USE	
FIXTURE TYPE	**FLOW RATE**
SHOWER HEADS (RESIDENTIAL)	1.8 GMP @ 80 PSI
LAVATORY FAUCETS (RESIDENTIAL)	MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 PSI
LAVATORY FAUCETS IN COMMON & PUBLIC USE AREAS	0.5 GPM @ 60 PSI
KITCHEN FAUCETS	1.8 GPM @ 60 PSI
METERING FAUCETS	0.25 GAL/CYCLE
WATER CLOSET	1.28 GAL/FLUSH
URINALS	0.125 GAL/FLUSH

GENERAL MEP NOTES

1. REFER TO ELECTRICAL NOTES ON SHEET G-101.
2. REFER TO MECHANICAL NOTES ON SHEET G-101.
3. REFER TO PLUMBING NOTES ON SHEET G-101.
4. REFER TO TITLE 24 COMPLIANCE NOTES ON SHEET G-101.
5. EXTERNALLY MOUNTED HEATING/COOLING UNITS SHALL BE SCREENED IF THEY ARE VISIBLE FROM A PUBLIC STREET.

LEGEND

- ELECTRICAL SWITCH
- ELECTRICAL SWITCH-THREE WAY
- ELECTRICAL SWITCH-FAN
- EXHAUST FAN W/HUMIDISTAT
- PENDANT LIGHT
- WALL MOUNTED LIGHT
- RECESSED DOWNLIGHT
- ELECTRICAL WIRING
- SMOKE DETECTOR/ALARM
- COMBINATION SMOKE/CARBON MONOXIDE
- TELEPHONE LOCATION
- CABLE TELEVISION LOCATION
- CEILING FAN WITH LIGHT FIXTURE (LIGHT NOT REQUIRED IN LIVING ROOM)
- 22"X30" MIN. CEILING ACCESS PANEL
- DUPLEX OUTLET ARC-FAULT CIRCUIT INTERRUPTER
- DUPLEX OUTLET 220 VOLTS
- WATER PROOF DUPLEX OUTLET 220 VOLTS
- DUPLEX OUTLET GROUND FAULT INTERRUPTER
- WATER PROOF DUPLEX OUTLET GROUND FAULT INTERRUPTER
- DUPLEX OUTLET GROUND FAULT INTERRUPTER 42" HIGH
- DUPLEX OUTLET AFCI-HALF HOT
- DUPLEX OUTLET DISH WASHER
- COLD WATER STUB OUT
- HOT WATER STUB OUT
- WATER HOSE BIBB WITH SHUT OF VALVE

KEYNOTES

A02	30" SLIDE ELECTRIC SINGLE OVEN, STAINLESS STEEL.
A03	30" WIDE BUILT-IN MICROWAVE WITH RANGE VENT.
B14	50 GALLON TANK TYPE ELECTRIC WATER HEATER. REFER TO TITLE 24 FOR ADDITIONAL INFORMATION. PROVIDE CONCRETE PAD MIN. 6" LARGER THAN UNIT IN EACH DIRECTION. 3" MIN. ABOVE GRADE. STRAPPING DETAIL 51/AD-902.
B16	220V AIR GAP DISCONNECT, 30" CLEAR WORKING SPACE REQUIRED IN FRONT OF ELECTRICAL EQUIPMENT
B32	100 AMP SERVICE, CONFIRM WITH EXISTING SERVICE.
B38	MULTI-ZONE HEAT PUMP CONDENSING UNIT. REFER TO PLANS FOR LOCATION OF INDOOR FAN FAN COIL UNITS. REFER TO TITLE 24 FOR ADDITIONAL INFORMATION. PROVIDE CONCRETE PAD MIN. 6" LARGER THAN UNIT IN EACH DIRECTION, 3" MIN. ABOVE GRADE.
B41	FAN COIL. REFER TO PLANS FOR LOCATION OF OUTDOOR CONDENSING UNIT. REFER TO TITLE 24 FOR ADDITIONAL INFORMATION. PROVIDE OUTLET.

VENTILATION SUMMARIES

1) LOCAL EXHAUST VENTILATION

BATHROOM	OPTION A	OPTION B
BATHROOM FAN FLOW (cfm)	50 CFM	50 CFM
DUCT TYPE	FLEX DUCT	SMOOTH DUCT
DUCT SIZE (in)	4"	4"
MAX. ALLOWABLE DUCT LENGTH (ft)	70'	105'

THIS EXHAUST FAN IS REQUIRED TO BE RATED FOR SOUND AT A MAX. OF 3 SONES.

KITCHEN	OPTION A	OPTION B
KITCHEN FAN FLOW (cfm)	100 CFM	50 CFM
DUCT TYPE	FLEX DUCT	SMOOTH DUCT
DUCT SIZE (in)	5"	5"
MAX. ALLOWABLE DUCT LENGTH (ft)	35'	85'

THIS EXHAUST FAN IS REQUIRED TO BE RATED FOR SOUND AT A MAX. OF 3 SONES.

2) WHOLE BUILDING VENTILATION	OPTION A	OPTION B
PER ASHRAE STANDARD 62.2, CEC EQUATION 150.0-B		
BUILDING FAN FLOW (cfm)	50 CFM	50 CFM
DUCT TYPE	FLEX DUCT	SMOOTH DUCT
DUCT SIZE (in)	4"	4"
MAX. ALLOWABLE DUCT LENGTH (ft)	70'	105"

THIS EXHAUST FAN IS REQUIRED TO BE RATED FOR SOUND AT A MAX. OF 1 SONE.
THIS EXHAUST FAN IS REQUIRED TO OPERATE CONTINUOUSLY TO ENSURE CONTINUOUSLY TO ENSURE INDOOR AIR QUALITY.

TOTAL (MINIMUM) REQUIRED VENTILATION RATE
PER ASHRAE STANDARD 62.2, CEC EQUATION 150.0-B
QCFM= .03(FLOOR AREA) + 7.5 (# OF BEDROOMS + 1)

WHOLE DWELLING UNIT MECHANICAL VENTILATION
PER SECTION 150.0(O)(C)(i) [ASHRAE 62.2:4.1.2]
1 BED - MINIUM CUBIC FEET PER MINUTE (CFM) (Equation 150.0-B)
Qtot = 0.03Afloor + 7.5(Nbr + 1) **.03(504 sf) + 7.5 (1+1) = 30.12 CFM**
< 50 CFM

EFFECTIVE ANNUAL AVERAGE INFILTRATION RATE
PER SECTION 150.0(O)(C)(iii)
a. (Equation 150.0-C) Q50 = Vdu (x) 2 ACH50 / 60minutes
a. (Equation 150.0-D) Q50 = Vdu (x) Verified ACH50 / 60minutes
b. (Equation 150.0-E) Qtot = 0.052 (x) Q50 x wsf x [H/Hr]^z [ASHRAE 62.2:4.1.2.1]

REQUIRED MECHANICAL VENTILATION RATE
AND REQUIRED MECHANICAL VENTILATION RATE PER 150.0(O)(C)(iii) [ASHRAE 62.2:4.1.2]
(Equation 150.0-F) **Qfan = Qtot (-) ϕ (Qinf (x) Aext)**

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COACHELLA ADUs
COACHELLA, CA
MECHANICAL & ELECTRICAL PLANS - PLAN 2

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ROOF VENTING CALCULATIONS

UPPER VENTS: *FLASHVENT TPO/PVC SQUARE TOP ROOF VENT 10X10 WHITE*
30 SQ.IN OF AIR MOVEMENT PER VENT = 30 SQ.IN./144 = 0.21 SF

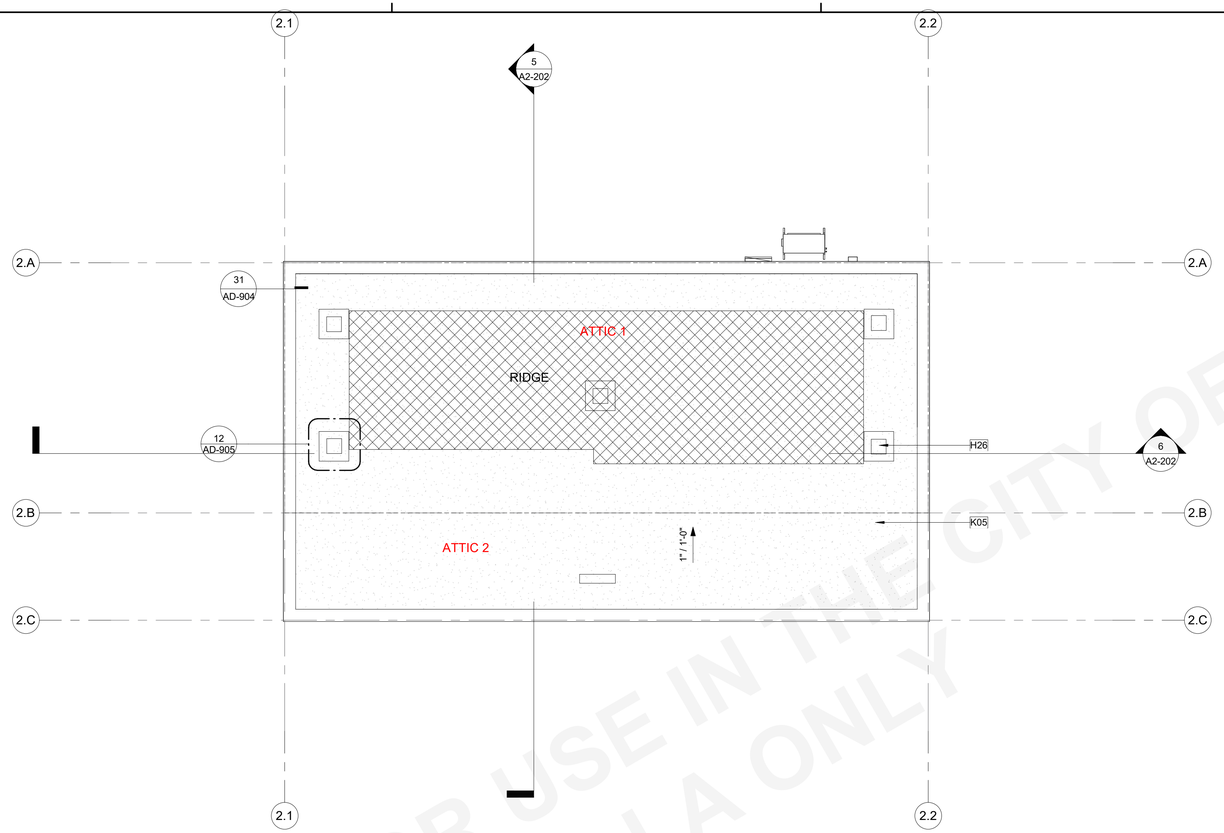
LOWER VENTS: *GIBRALTAR RECTANGULAR SOFFIT VENT 22-5/8" X 3 1/2"*
39 SQ.IN OF AIR MOVEMENT PER VENT = 39 SQ.IN. / 144 = 0.27 SF

"UPPER VENTS PROVIDED" = (TOTAL ATTIC AREA/300) * (0.5) / (0.21 SF)

"LOWER VENTS PROVIDED" = (TOTAL ATTIC AREA/300) * (0.5) / (0.27 SF)

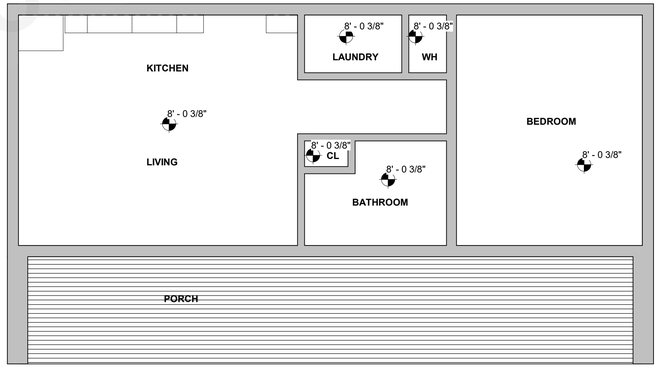
ATTIC	AREA	REQUIRED ATTIC VENTING (NFA)	UPPER VENTING REQUIRED (NFA)	LOWER VENTING REQUIRED (NFA)
PLAN 2 - ATTIC 1	450 SF	1.50 SF	0.75 SF	0.75 SF
PLAN 2 - ATTIC 2	73 SF	0.24 SF	0.12 SF	0.12 SF

VENT TYPE	COUNT	VENT LENGTH	NET FREE AREA PER VENT	PROVIDED NET FREE AREA
LOWER.				
GIBRALTAR BUILDING PRODUCTS SOFFIT VENT (LOWER)	1	2' - 0"	0.27 SF	0.27 SF
				0.27 SF
UPPER				
MUSHROOM VENT (UPPER)	5	1' - 8"	0.21 SF	1.05 SF
				1.05 SF



1 PLAN 2 - ROOF PLAN - DESERT MODERN

A2-122 SCALE: 1/4" = 1'-0"



2 PLAN 2 - RCP - DESERT MODERN

1A.2 A2-122 SCALE: 1/4" = 1'-0"

ROOF PLAN GENERAL NOTES

1. REFER TO GENERAL NOTES SHEET G-102 FOR ADDITIONAL REQUIREMENTS
2. REFER TO STRUCTURAL PLANS FOR ROOF FRAMING INFORMATION INCLUDING MEMBER SIZES AND CONNECTION HARDWARE.
3. PROVIDE A MINIMUM OF 1 INCH OF AIRSPACE BETWEEN THE INSULATION AND ROOF SHEATHING.
4. WHERE THE ROOF PROFILE ALLOWS A SPACE BETWEEN THE ROOF COVERING AND DECKING, THE SPACES SHALL BE CONSTRUCTED TO PREVENT THE INTRUSION OF FLAMES AND EMBERS, BE FIRESTOPPED WITH APPROVED MATERIALS OR HAVE ONE LAYER OF MINIMUM 72 POUND MINERAL-SURFACED NONPERFORATED CAP SHEET OVER THE COMBUSTIBLE DECKING.
5. ALL ROOFING MATERIALS TO BE INSTALLED PER MANUFACTURER'S SPECS.
6. OVERHANG DIMENSIONS ARE FROM FACE OF EXTERIOR WALL FRAMING TO ROOF EDGE.
7. ROOF VENTS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ADJUST AS NEEDED TO ACCOMMODATE TRUSS LOCATIONS, PLUMBING VENTS, AND SOLAR COLLECTORS.

KEYNOTES

H26	ROUND-TOP LOUVER STATIC VENT
K05	TPO SINGLE PLY MEMBRANE SYSTEM. ESR REPORT TO BE PROVIDED BY OWNER

ROOF LEGEND

- 2" / 12" — ROOF SLOPE (REFER TO PLANS FOR ACTUAL SLOPE)
- O'HAGIN ATTIC VENT, PAINT TO MATCH ROOF COLOR. (REFER TO EXTERIOR ELEVATIONS FOR COLORS AND MATERIALS.)
- WALL BELOW
- GUTTER, CONNECT TO DOWNSPOUT
  DOWNSPOUT, TO ROOF OR SPLASHBLOCK BELOW U.N.O.
- FUTURE SOLAR ZONE. REFER TO SOLAR READY NOTES ON SHEET G-101.
- ATTIC # — ATTIC SPACE. REFER TO ROOF VENTING CALCULATIONS FOR AREA AND VENTING METHOD

RCP GENERAL NOTES

1. REFER TO GENERAL NOTES SHEET G-101 FOR ADDITIONAL REQUIREMENTS.
2. HEIGHT OF CEILINGS SHALL BE MEASURED FROM TOP OF SLAB OR FLOOR TO FINISH FACE OF GWB, U.N.O.
3. REFER TO DETAILS FOR FLOOR/CEILING ASSEMBLIES.
4. REFER TO ELECTRICAL PLANS FOR LIGHT FIXTURE LOCATIONS.
5. DIMENSIONS ARE TO THE FACE OF FRAMING UNLESS OTHERWISE NOTED.
6. SOFFITS ARE TO BE HELD TIGHT TO UNDERSIDE OF MECHANICAL EQUIPMENT.

RCP LEGEND

- 8'-1" — HEIGHT OF CEILING SURFACE (SEE PLAN FOR ACTUAL HEIGHTS)
- 2" / 12" — CEILING SLOPE (SEE PLAN FOR ACTUAL HEIGHTS)
- **INTERIOR CEILING FINISH,** REFER TO FINISH SCHEDULE.
- **EXTERIOR STUCCO CEILING FINISH**
- **EXTERIOR FIBER CEMENT BOARD CEILING**
  HARDIE SOFFIT PANELS - BEADED PORCH PANEL OR EQ.

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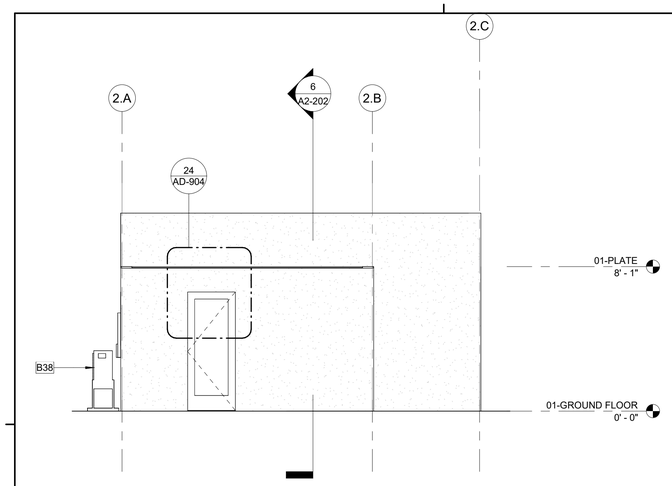
COACHELLA ADUs
COACHELLA, CA
ROOF PLAN & REFLECTED CEILING PLAN - PLAN 2 - DESERT MODERN

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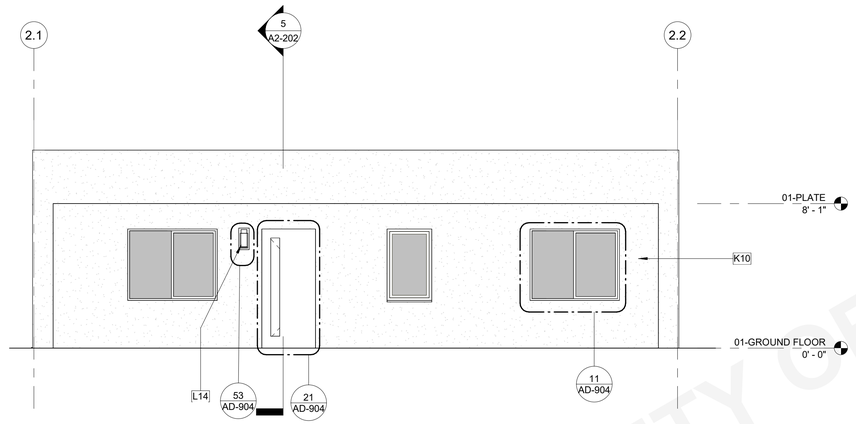
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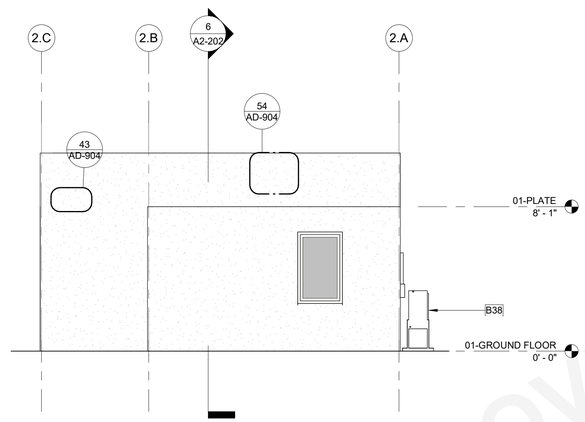
2 PLAN 2 - DESERT MODERN - LEFT ELEVATION

A2-101 | A2-202 SCALE: 1/4" = 1'-0"



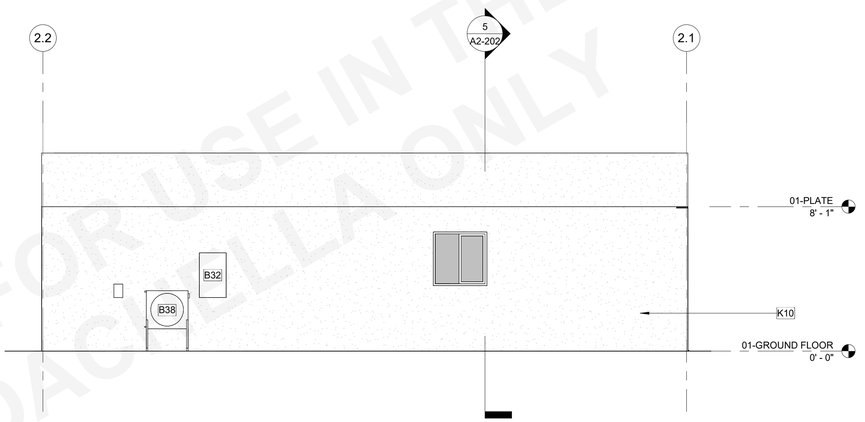
1 PLAN 2 - DESERT MODERN - FRONT ELEVATION

A2-101 | A2-202 SCALE: 1/4" = 1'-0"



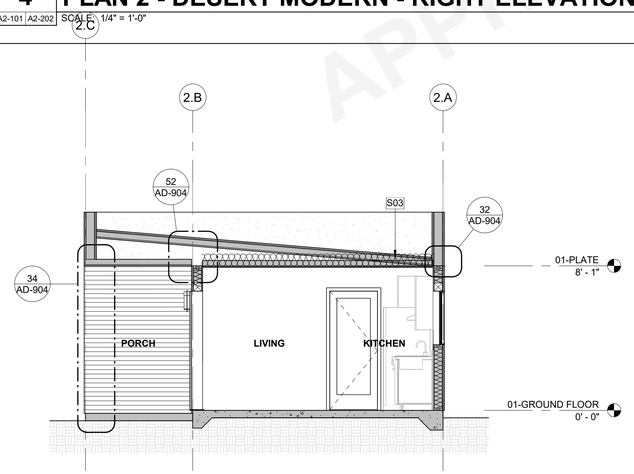
4 PLAN 2 - DESERT MODERN - RIGHT ELEVATION

A2-101 | A2-202 SCALE: 1/4" = 1'-0"



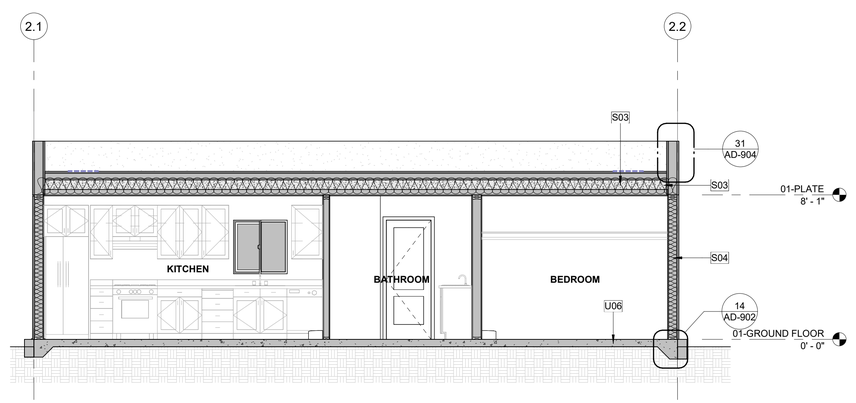
3 PLAN 2 - DESERT MODERN - REAR ELEVATION

A2-101 | A2-202 SCALE: 1/4" = 1'-0"



5 PLAN 2 - DESERT MODERN - SECTION 2

A2-101 | A2-202 SCALE: 1/4" = 1'-0"



6 PLAN 2 - DESERT MODERN - SECTION 1

A2-101 | A2-202 SCALE: 1/4" = 1'-0"

ELEVATION GENERAL NOTES

1. REFER TO GENERAL NOTES SHEET G-101 FOR ADDITIONAL REQUIREMENTS.
2. FRAMING ELEVATIONS, INCLUDING FLOOR PLATES AND FLOOR LEVEL ELEVATIONS ARE MEASURED FROM BUILDING FINISH FLOOR, U.N.O.
3. SEE DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
4. REFER TO ROOF PLAN FOR ROOF PITCH AND OVERHANGS. FASCIA PER DETAILS.
5. SEE ROOF PLAN FOR APPROXIMATE DOWNSPOUT LOCATIONS, U.N.O.
6. REFER TO DOOR AND WINDOW SCHEDULES AND TYPES FOR DOOR AND WINDOW INFORMATION.
7. SEE ELECTRICAL DRAWINGS FOR EXTERIOR LIGHTING
8. SEE MECHANICAL DRAWINGS FOR GRILLES AND LOUVERS. PAINT TO MATCH ADJACENT FINISH.
9. CONTRACTOR TO VERIFY COLOR SCHEME WITH OWNER BEFORE PERFORMING THE WORK.

KEYNOTES

B32	100 AMP SERVICE, CONFIRM WITH EXISTING SERVICE.
B38	MULTI-ZONE HEAT PUMP CONDENSING UNIT. REFER TO PLANS FOR LOCATION OF INDOOR FAN FAN COIL UNITS. REFER TO TITLE 24 FOR ADDITIONAL INFORMATION. PROVIDE CONCRETE PAD MIN. 6" LARGER THAN UNIT IN EACH DIRECTION, 3" MIN. ABOVE GRADE.
K10	3-COAT CEMENT PLASTER SYSTEM O/ LATH O/ WATER RESISTIVE BARRIER PER CRC 703.7.3. EXTERIOR BUILDING FINISH SHALL BE IN COMPLIANCE WITH 2019 CRC R337.
L14	EXTERIOR LIGHT SCHEME B. DARK SKY AND TITLE 24 COMPLIANT.
S03	ROOF INSULATION. REFER TO TITLE 24 (R-19 MIN.).
S04	2X6 WALL INSULATION. REFER TO TITLE 24 (R-21 MIN.)
U06	CONCRETE SLAB FOUNDATION PER STRUCTURAL. 10 MIL VAPOR RETARDER CONFORMING TO ASTM E1745 CLASS A REQUIREMENTS.

EXTERIOR MATERIALS LEGEND

BARREL TILE ROOF

STUCCO FINISH

City of COACHELLA est 1946

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EXT. ELEVATIONS & SECTIONS - PLAN 2 - DESERT MODERN

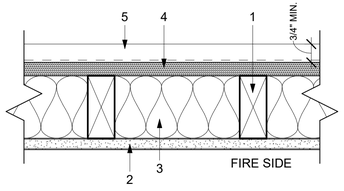
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WOOD STUDS, GYPSUM BOARD AND CEMENT STUCCO

1. WOOD STUDS
NOMINAL 2X4 SPACED 16" O.C. WITH (2) 2X4 TOP PLATES (1) 2X4 BOTTOM PLATE. STUDS LATERALLY-BRACED BY WOOD STRUCTURAL PANEL SHEATHING (ITEM 5) AND EFFECECTIVELY FIRE STOPPED AT TOP AND BOTTOM OF WALL.

2. GYPSUM BOARD
ANY CLASSIFIED 5/8" THICK, 48" WIDE, APPLIED VERTICALLY AND NAILED TO STUDS AND BEARING PLATES 7" O.C. WITH 6D CEMENT-COATED NAILS, 1 7/8" LONG WITH 1/4" DIAM. HEAD.

JOINTS AND NAILHEADS (NOT SHOWN) - WALLBOARD JOINTS COVERED WITH TAPE AND JOINT COMPOUND. NAIL HEADS COVERED WITH JOINT COMPOUND.

3. BATTS AND BLANKETS
MINERAL FIBER OR GLASS INSULATION, 3 1/2" THICK. PRESSURE FIT TO FILL WALL CAVITIES BETWEEN STUDS AND PLATES. MINERAL FIBER INSULATION TO BE UNFACED AND TO HAVE A MIN. DENSITY OF 3 PCF. GLASS FIBER INSULATION TO BE FACED WITH ALUMIUM FOIL OR FRAFT PAPER AND TO HAVE A MIN. DENSITY OF 0.9 PCF (MIN. R-13 THERMAL INSULATION RATING).FIBER SPRAYED - AS AN ALTERNATE TO BATTS AND BLANKETS (ITEM 4) - SPRAY APPLIED CELLULOSE INSULATION MATERIAL. THE FIBER IS APPLLIED WITH WATER TO COMPLETELY FILL THE ENCLOSED CAVITY IN ACCORDANCE WITH THE APPLICATION INSTRUCTIONS SUPPLIED WITH THE PRODUCT. NOMINAL DRY DENSITY OF 3.0 LB/CU.FT.

4. WOOD STRUCTURAL PANEL SHEATHING
MIN 7/16" THICK, 4 FT. WIDE WOOD STRUCTURAL PANELS, MIN. GRADE "C-D" OR "SHEATHING". INSTALLED WITH LONG DIMENSION OF SHEET (STRENGTH AXIS) OR FACE GRAIN OF PLYWOOD PARALLEL WITH OR PERPENDICULAR TO STUDS. VERTICAL JOINTS CENTERED ON STUDS. HORIZONTAL JOINTS BACKED WITH NOMINAL 2X4 WOOD BLOCKING. ATTACHED TO STUDS ON EXTERIOR SIDE OF WALL WITH 6D CEMENT COATED BOX NAILS SPACED 6" O.C. AT PERIMETER OF PANELS AND 12" O.C. ALONG INTERIOR STUDS.

5. EXTERIOR FACING
INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTION. ONE OF THE FOLLOWING EXTERIOR FACINGS IS TO BE APPLIED OVER THE SHEATHING. REFER TO PLAN FOR INFOEMATION:

D. CEMENTITIOUS STUCCO - PORTLAND CEMENT OR SYNTHETIC STUCCO SYSTEM WITH SELF-FURRING METAL LATH OR ADHESIVE BASE COAT. THICKNESS FROM 3/8" TO 3/4", DEPENDING ON SYSTEM.

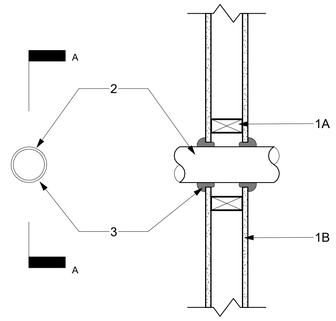
H. FIBER-CEMENT SIDING - FIBER-CEMENT EXTERIOR SIDING INCLUDING SMOOTH AND PATTERNED PANEL OR LAP SIDING.

UL DES U305

NOTE:
AT INTERIOR WALL USE:
5/8" SHEETROCKFIRECODE CORE PANELS,
5/8" SHEETROCK ULTRALIGHT PANELS FIRE CODE X OR
5/8" FIBEROCK PANELS –
2 X 4 WOOD STUD 16" OR 24" O.C.

53 1-HR EXT. RATED WALL ASSEMBLY
AD-901 SCALE: 3" = 1'-0"

XHEZ.W-L-1166



WALL SYSTEM PENENTRATION
F RATING - 1 AND 2 HR (SEE ITEM 1B)
T RATING - 0 HR

1. WALL ASSEMBLY
THE 1 OR 2 HR. FIRE RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

A. STUDS-
WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM. 2 IN. BY 4 IN. LUMBER SPACED 16 IN. O.C. STEEL STUDS TO BE MIN. 3 1/2 IN. WIDE AND SPACED MAX. 24 IN. O.C.

B. GYPSUM BOARD (BEARING THE UL CLASSIFICATION MARKING)-
THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS AS REQUIRED IN THE INDIVIDUAL WALL AND PARTITION DESIGN. MAX. DIAM. OF OPENING IS 5 IN.

THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS EQUAL TO THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED.

2. THROUGH- PENETRANTS
ONE METALLIC PIPE, CONDUIT OR TUBING INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN THE PIPE, CONDUIT OR TUBING AND PERIPHERY OF THE OPENING SHALL BE MIN. OF 0 IN. (POINT CONTACT) TO A MAX. 1/8 IN. PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:

A. COPPER TUBING-
NOM. 4 IN. DIAM. (OR SMALLER) TYPE M (OR HEAVIER) COPPER TUBING.

B. COPPER PIPE-
NOM. 4 IN. DIAM. (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.

C. STEEL PIPE-
NOM. 4 IN. DIAM. (OR SMALLER) SCHEDULE 5 (OR HEAVIER) STEEL PIPE.

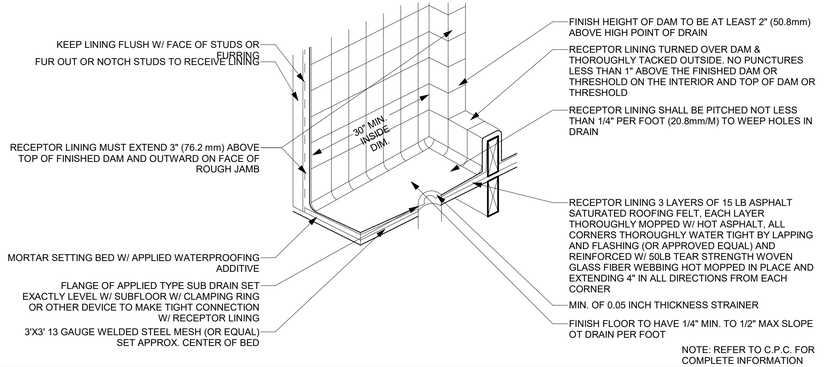
D. CONDUIT-
NOM. 4 IN. DIAM. (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR RIGID STEEL CONDUIT

E. IRON PIPE-
NOM. 4 IN. DIAM. (OR SMALLER) CAST OR DUCTILE IRON PIPE.

3. FILL, VOID OR CAVITY MATERIALS (BEARING THE UL CLASSIFICATION MARKING) - CAULK OR PUTTY.MIN. 1/2 IN. DIAMETER BEAD CAULK OR PUTTY APPLIED CONTINUOUSLY AROUND THE PENETRANT ON THE WALL SURFACES ON BOTH SIDES OF THE WALL.

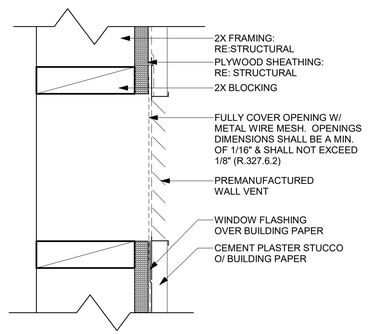
3M COMPANY - CP 25WB+ CAULK OR MPS-2+ PUTTY

43 THROUGH PENETRATION @ WALL
AD-901 SCALE: 1 1/2" = 1'-0"

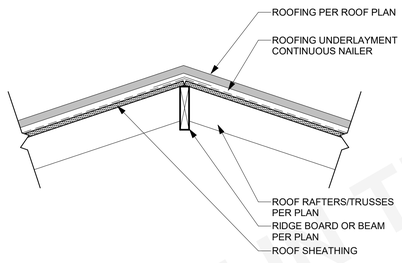


NOTE: REFER TO C.P.C. FOR COMPLETE INFORMATION

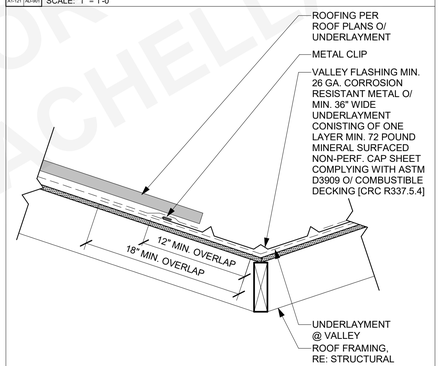
54 SHOWER - RECEPTOR
AD-901 SCALE: 12" = 1'-0"



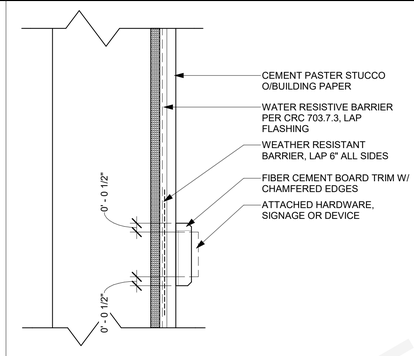
31 WALL VENT
AD-901 SCALE: 3" = 1'-0"



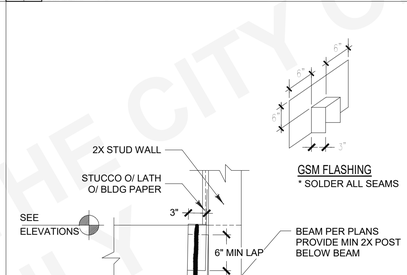
32 HIP/RIDGE
A3-121 AD-901 SCALE: 1" = 1'-0"



33 VALLEY FLASHING
A3-121 AD-901 SCALE: 1 1/2" = 1'-0"

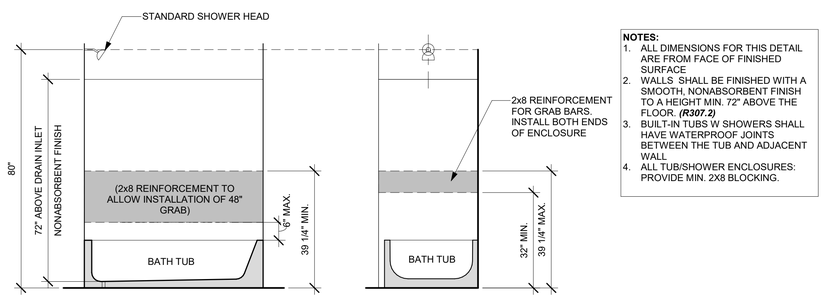


21 MOUNTING PAD
AD-901 SCALE: 3" = 1'-0"



NOTE:
* NO NAILS THROUGH GSM INTO BEAM
* NO NAILS SHALL PENETRATE GSM WITHIN 2" OF BEAM

23 BEAM TO WALL FLASHING
AD-901 SCALE: 1" = 1'-0"



NOTES:
1. ALL DIMENSIONS FOR THIS DETAIL ARE FROM FACE OF FINISHED SURFACE
2. WALLS SHALL BE FINISHED WITH A SMOOTH, NONABSORBENT FINISH TO A HEIGHT MIN. 72" ABOVE THE FLOOR. ***(R307.2)***
3. BUILT-IN TUBS W SHOWERS SHALL HAVE WATERPROOF JOINTS BETWEEN THE TUB AND ADJACENT WALL
4. ALL TUB/SHOWER ENCLOSURES: PROVIDE MIN. 2X8 BLOCKING.

LOCATIONS FOR GRAB BAR REINFORCEMENT - PER 2022 R327.1.1

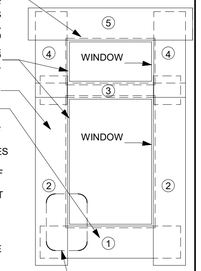
34 AGING-IN-PLACE TUB COMPLIANCE
AD-901 SCALE: 1/2" = 1'-0"

FLASH'G PAPER, MOISTOP FLASHING OR EQUAL, (9" WIDE MIN.) O/ NAIL'G FIN @ TOP OF WINDOWS (HEAD) TYP. TWO CONTINUOUS BEADS OF MOISTOP SEALANT OR EQUAL UNDER FLASH'G PAPER (1) O/ NAIL'G FIN AND (1) AT TOP OF FLSH'G PAPER TYP.

NAIL'G FIN

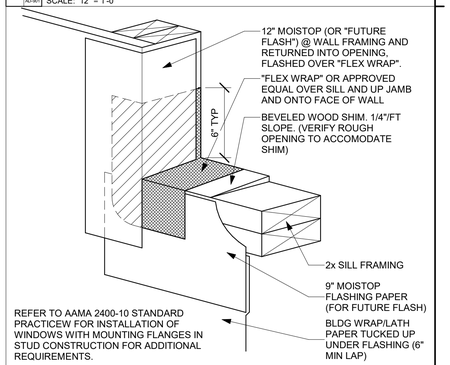
FLASH'G PAPER, MOISTOP FLASHING OR EQUAL, (9" WIDE MIN.) O/ WOOD FRM'G & UNDER NAIL'G FIN @ SIDE OF WINDOWS (JAMB) TYP.

- (1) = INDICATES SEQUENCE FOR INSTALLATION.
- 9" MOIST STOP FLASHING PAPER TYP. OF FLASH'G PAPER
- THE ACTUAL NUMBER OF FLASH'G. PIECES REQUIRED IS DETERMINED BY THE RADIUS OF THE OPEN'G AND THE SIZE OF THE FLASH'G. (9" WIDE FLASH'G MIN.)
- APPLY A CONTINUOUS BEAD OF SEALANT COMPLYING WITH AAMA 800 TO THE BACKSIDE (INTERIOR) OF THE WINDOW MOUNTING FLANGES
- AT WINDOW HEAD, JAMBS AND SILL ALL CORROSIVE RESISTANT FASTENERS ARE TO BE NAILED THROUGH FIN NO CLOSER THAN 3" O.C. AND NOT MORE THAN 16" O.C. FASTENERS SHALL BE WITHIN 10" FROM CORNERS.
- NO NAILS SHALL BE BENT OVER THE NAILING FIN TO SECURE WINDOW



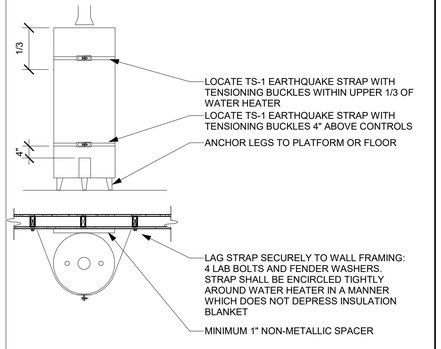
REFER TO AAMA 2400-10 STANDARD PRACTICEW FOR INSTALLATION OF WINDOWS WITH MOUNTING FLANGES IN STUD CONSTRUCTION FOR ADDITIONAL REQUIREMENTS.

12 TYPICAL WIN FLASHING
AD-901 SCALE: 12" = 1'-0"



REFER TO AAMA 2400-10 STANDARD PRACTICEW FOR INSTALLATION OF WINDOWS WITH MOUNTING FLANGES IN STUD CONSTRUCTION FOR ADDITIONAL REQUIREMENTS.

13 TYPICAL CORNER WIN FLASHING
AD-901 SCALE: 12" = 1'-0"



14 WATER HEATER MOUNTING
A3-111 AD-901 SCALE: 1/2" = 1'-0"

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COACHELLA ADUs
COACHELLA, CA

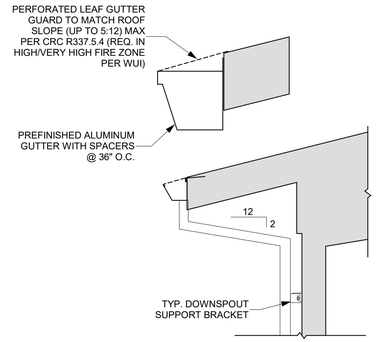
ARCHITECTURAL DETAILS - COMMON

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DATE
01/11/24

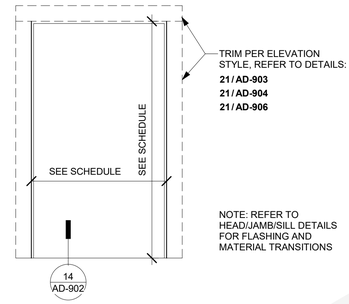
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AD-901

1/11/2024, 4:11:57 PM
Autodesk Docs://2939_Coachella ADUs/2939-01_Coachella ADUs.rvt



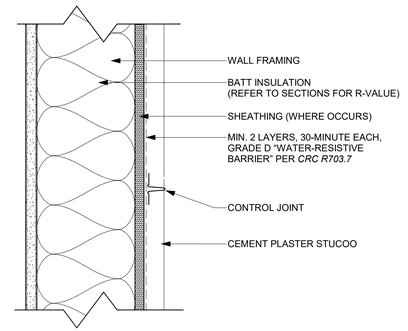
41 TYP. GUTTER TO EXT. DOWNSPOUT

AD-902 SCALE: 1/2" = 1'-0"



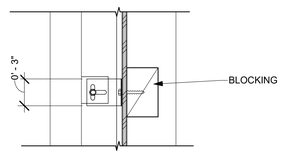
21 DOOR TRIM - SLIDING GLASS

A1-203 AD-902 SCALE: 3/4" = 1'-0"



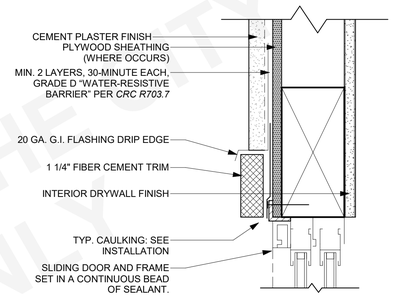
11 PLASTER - CONTROL JOINT

AD-902 SCALE: 3" = 1'-0"



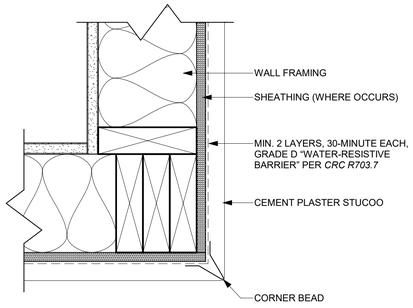
42 DOWNSPOUT ATTACHMENT

AD-902 SCALE: 1 1/2" = 1'-0"



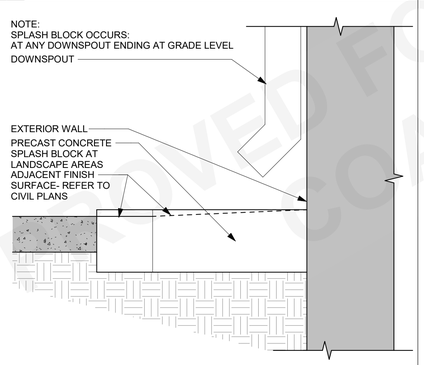
22 TYP. HEAD SLIDING GLASS DOOR

A1-201 AD-902 SCALE: 3" = 1'-0"



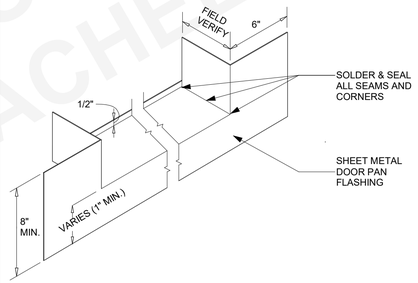
12 PLASTER - OUTSIDE CORNER

AD-902 SCALE: 3" = 1'-0"



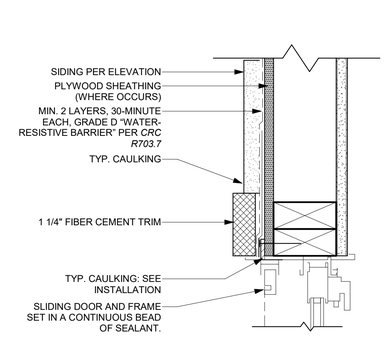
43 DOWNSPOUT TO SPLASH BLOCK

AD-902 SCALE: 1 1/2" = 1'-0"



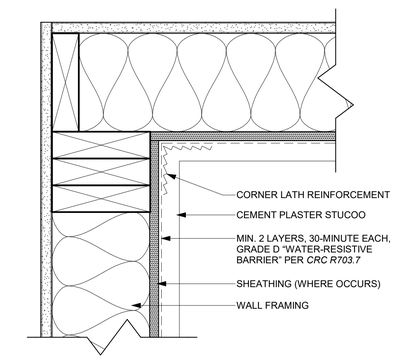
33 DOOR SILL PAN FLASHING

AD-902 SCALE: 1 1/2" = 1'-0"



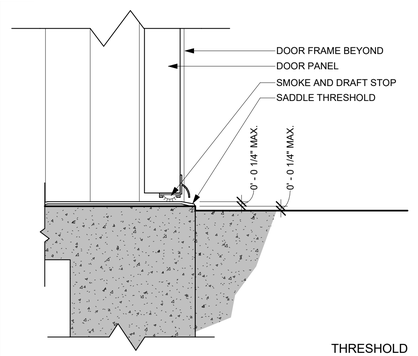
23 TYP. JAMB AT SLIDING GLASS DOOR

AD-902 SCALE: 3" = 1'-0"



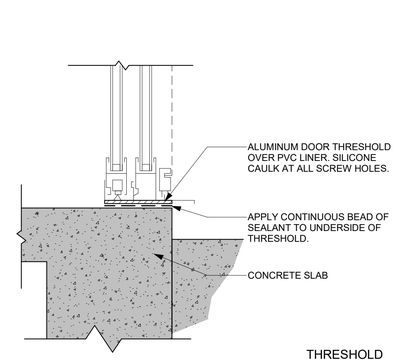
13 PLASTER - INSIDE CORNER

AD-902 SCALE: 3" = 1'-0"



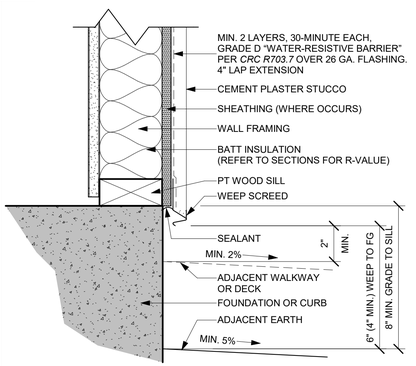
34 EXT. VINYL DOOR THRESHOLD

AD-902 SCALE: 3" = 1'-0"



24 DOOR-SLIDING GLASS - THRESHOLD

A1-201 AD-902 SCALE: 3" = 1'-0"



14 PLASTER - FOUNDATION

A1-201 AD-902 SCALE: 3" = 1'-0"

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COACHELLA, CA

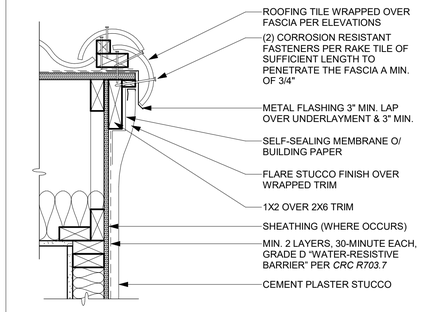
ARCHITECTURAL DETAILS - COMMON

PUBLIC SET

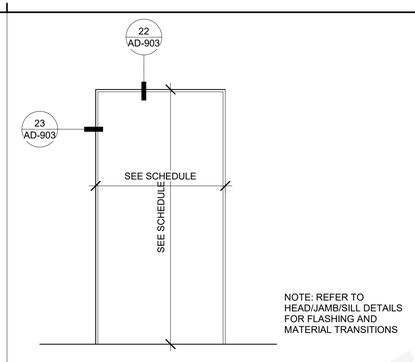
DATE
01/11/24

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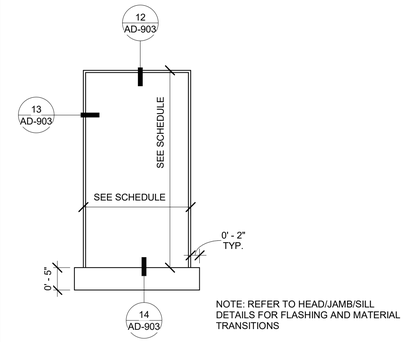
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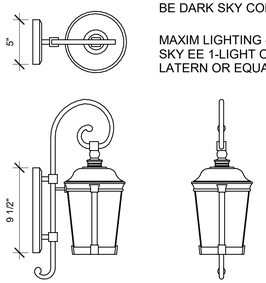
31 RAKE @ PLASTER - MISSION
A1-121 AD-903 SCALE: 1 1/2" = 1'-0"



21 DOOR TRIM - MISSION REVIVAL
A1-201 AD-903 SCALE: 3/4" = 1'-0"



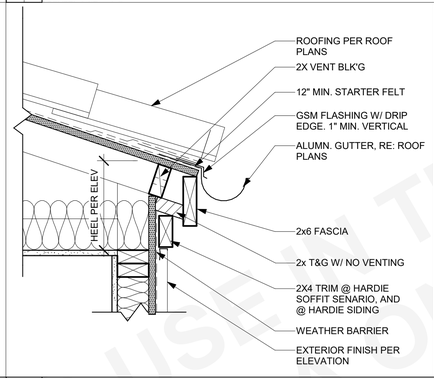
11 WINDOW TRIM - MISSION REVIVAL
A1-201 AD-903 SCALE: 3/4" = 1'-0"



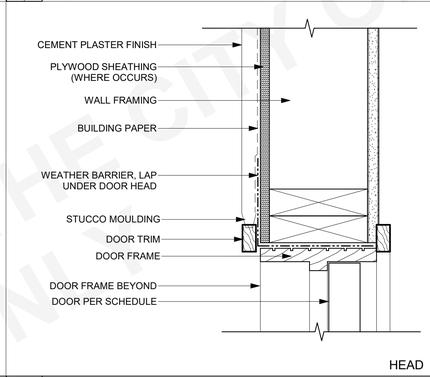
*ALL EXTERIOR LIGHTING MUST BE DARK SKY COMPLIANT

MAXIM LIGHTING - WHISPER DARK SKY EE 1-LIGHT OUTDOOR WALL LATERN OR EQUAL (8639BZ)

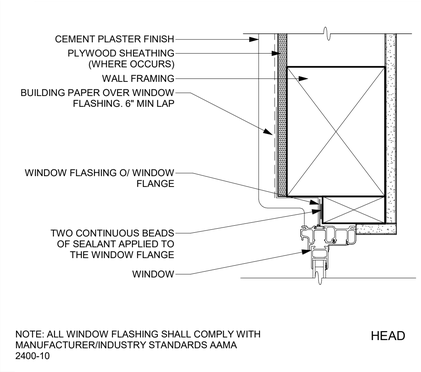
42 LIGHT FIXTURE - MISSION REVIVAL
A1-201 AD-903 SCALE: 1 1/2" = 1'-0"



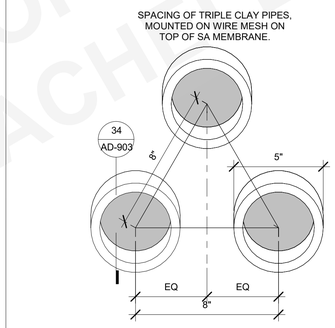
32 EAVE @ PLASTER - MISSION
A1-121 AD-903 SCALE: 1 1/2" = 1'-0"



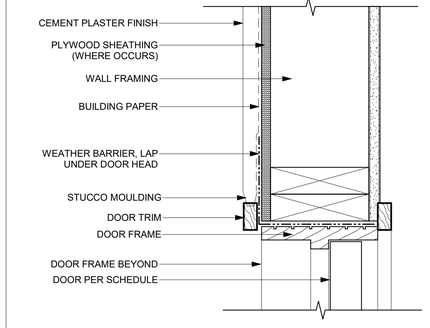
22 DOOR HEAD - MISSION
AD-903 SCALE: 3" = 1'-0"



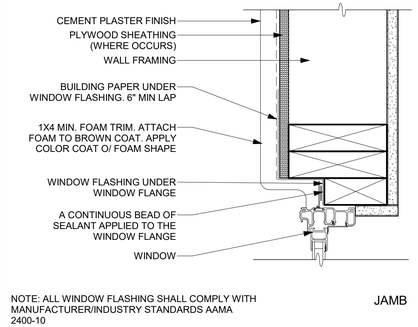
12 TYP. WINDOW HEAD
AD-903 SCALE: 3" = 1'-0"



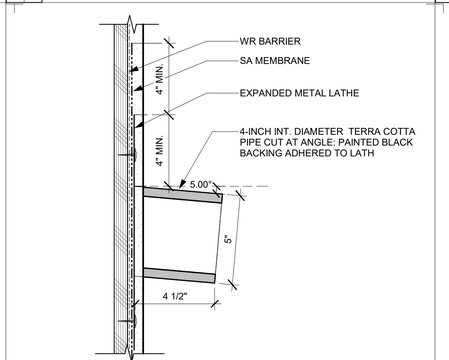
33 DECORATIVE VENT SPACING
A1-201 AD-903 SCALE: 3" = 1'-0"



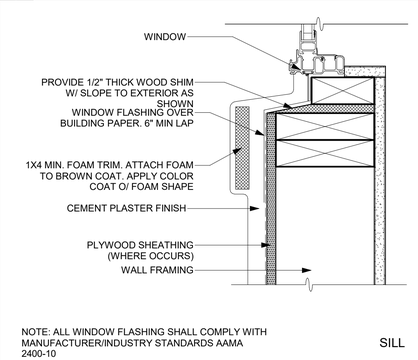
23 DOOR JAMB - MISSION
AD-903 SCALE: 3" = 1'-0"



13 TYP. WINDOW JAMB
AD-903 SCALE: 3" = 1'-0"



34 DECORATIVE VENT ATTACHMENT
AD201 AD-903 SCALE: 3" = 1'-0"



14 TYP. WINDOW SILL
AD-903 SCALE: 3" = 1'-0"

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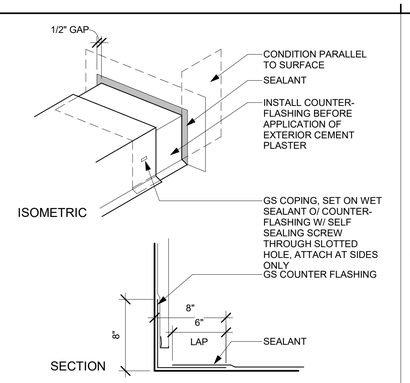
ARCHITECTURAL DETAILS - MISSION REVIVAL

PUBLIC SET

DATE
01/11/24

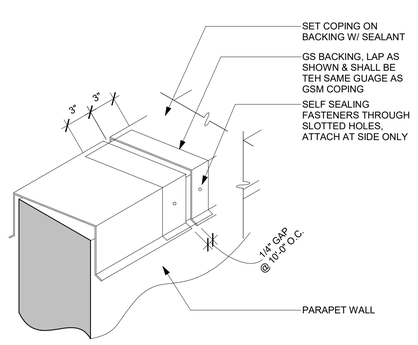
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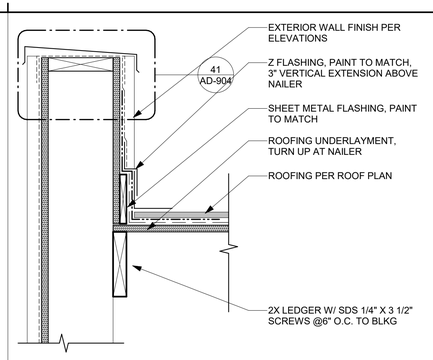
51 PARAPET COPING FLASHING

AD-904 SCALE: 1 1/2" = 1'-0"



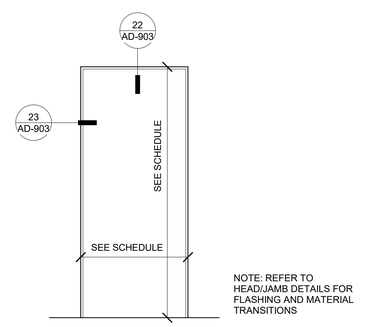
41 PARAPET FLASHING DETAIL

AD-904 AD-904 SCALE: 1 1/2" = 1'-0"



31 COUNTERFLASHING AT PARAPET

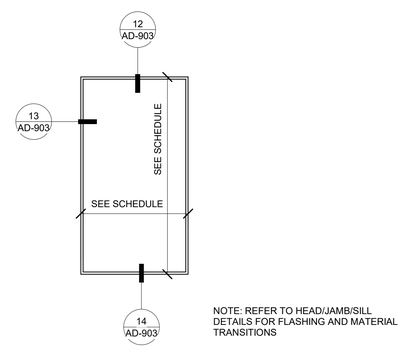
A1-122 AD-904 SCALE: 1 1/2" = 1'-0"



NOTE: REFER TO HEAD/JAMB DETAILS FOR FLASHING AND MATERIAL TRANSITIONS

21 DOOR TRIM - DESERT MODERN

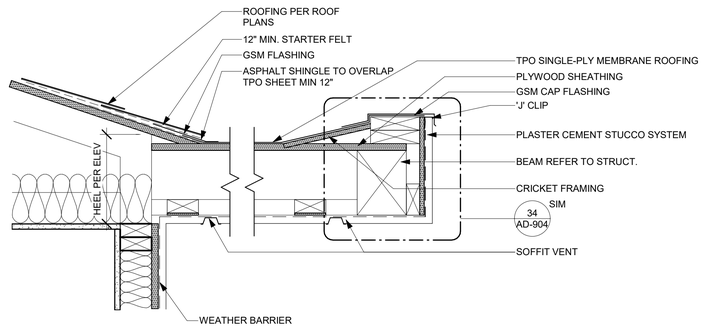
A1-222 AD-904 SCALE: 3/4" = 1'-0"



NOTE: REFER TO HEAD/JAMB/SILL DETAILS FOR FLASHING AND MATERIAL TRANSITIONS

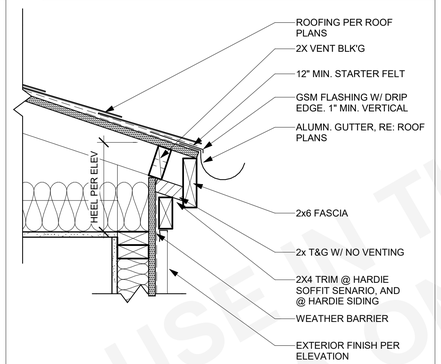
11 WINDOW TRIM - DESERT MODERN

A1-222 AD-904 SCALE: 3/4" = 1'-0"



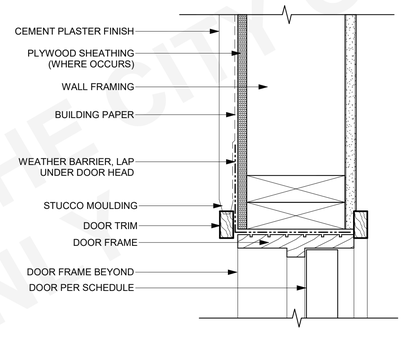
52 ROOF TO PORCH - DESERT MODERN

A1-222 AD-904 SCALE: 1 1/2" = 1'-0"



32 EAVE @ PLASTER - MODERN

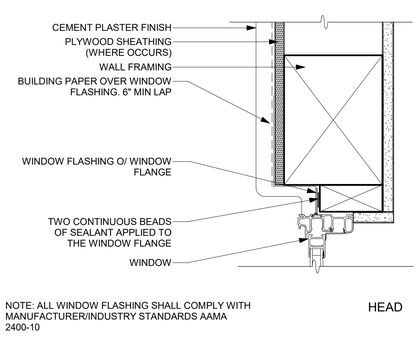
A1-122 AD-904 SCALE: 1 1/2" = 1'-0"



HEAD

22 DOOR HEAD - MODERN

AD-904 SCALE: 3" = 1'-0"

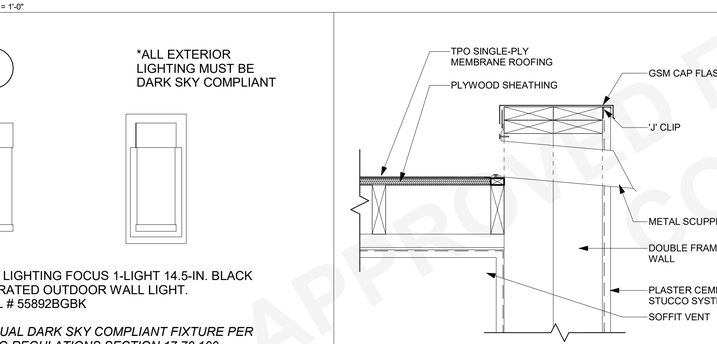


NOTE: ALL WINDOW FLASHING SHALL COMPLY WITH MANUFACTURER/INDUSTRY STANDARDS AAMA 2400-10

HEAD

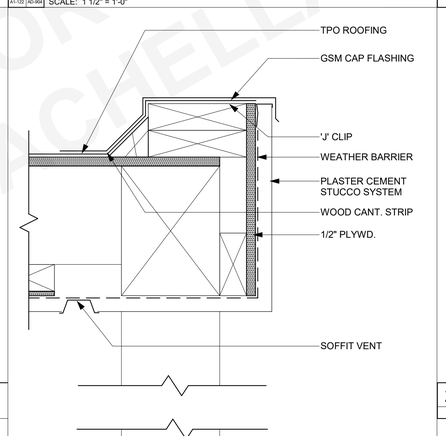
12 TYP. WINDOW HEAD

AD-904 SCALE: 3" = 1'-0"



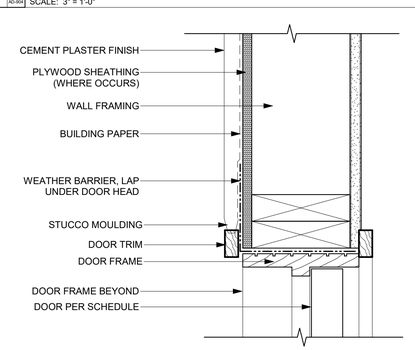
43 ROOF SCUPPER - DESERT MODERN

A1-122 AD-904 SCALE: 1 1/2" = 1'-0"



34 POST CAP AND BASE - MODERN

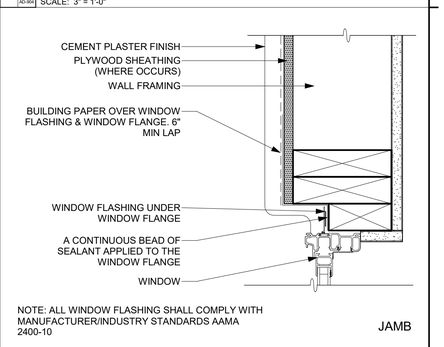
A1-202 AD-904 SCALE: 3" = 1'-0"



JAMB

23 DOOR JAMB - MODERN

AD-904 SCALE: 3" = 1'-0"

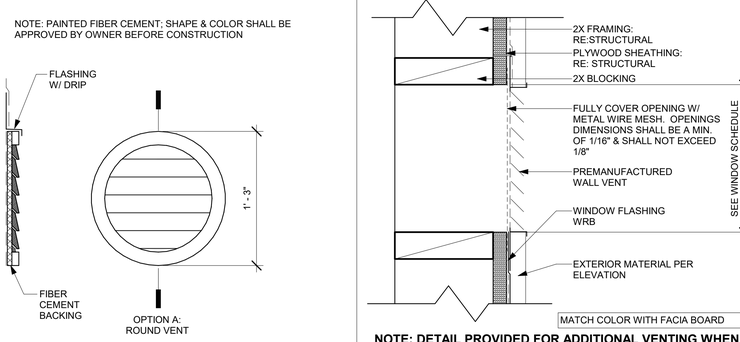


NOTE: ALL WINDOW FLASHING SHALL COMPLY WITH MANUFACTURER/INDUSTRY STANDARDS AAMA 2400-10

JAMB

13 TYP. WINDOW JAMB

AD-904 SCALE: 3" = 1'-0"



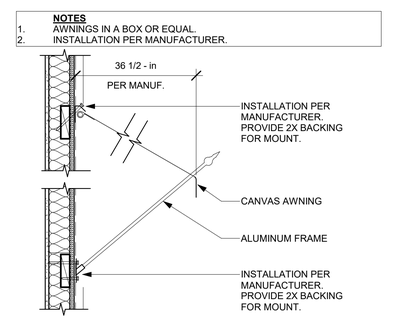
54 CIRCLE VENT

A1-222 AD-904 SCALE: 1 1/2" = 1'-0"

NOTE: DETAIL PROVIDED FOR ADDITIONAL VENTING WHEN REQUIRED BY SPECIAL CIRCUMSTANCES

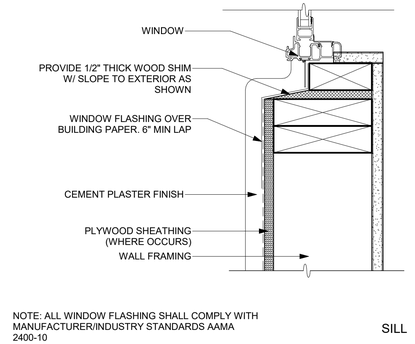
44 WALL VENT

AD-904 SCALE: 3" = 1'-0"



24 AWNING - MODERN

A2-202 AD-904 SCALE: 1" = 1'-0"



NOTE: ALL WINDOW FLASHING SHALL COMPLY WITH MANUFACTURER/INDUSTRY STANDARDS AAMA 2400-10

SILL

14 TYP. WINDOW SILL

AD-904 SCALE: 3" = 1'-0"

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COACHELLA, CA

ARCHITECTURAL DETAILS - DESERT MODERN

PUBLIC SET

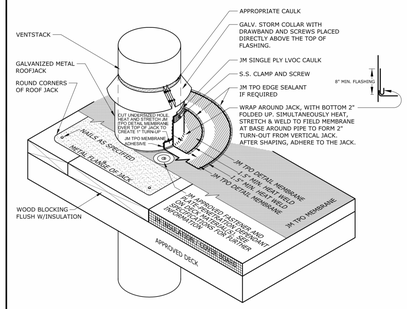
DATE

01/11/24

SHEET

AD-904

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Autodesk Docs://2939_Coachella ADUs/2939-01_Coachella ADUs.rvt



NOTES:

1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
4. JM TPO EDGE SEALANT IS REQUIRED ON ALL CUT OR NON-ENCAPSULATED EDGES OF REINFORCED MEMBRANE. THIS INCLUDES FACTORY CUT MEMBRANE (SEE DETAIL T-MS-01)

DRAWING NO.		VENT PIPE	
T-DV-01			
REPLACES TF-52		REINFORCE TYPE: JM TPO	Johns Manville is a manufacturer of commercial roofing products and offers this general conceptual information to you as a courtesy. This complimentary assistance is not to be used or relied upon by anyone as a substitute for competent professional services. Because of the site-specific nature of roofs, contract, or applicable law. By accepting these comments you agree they do not constitute any representations, endorsements of, or an assumption by Johns Manville of any liability for either the adequacy of the design of the building or any other material not supplied by Johns Manville.
SCALE: N.T.S	ISSUE DATE: 11-17-16	MINIMUM GUARANTEE TERM: 20 YEAR.	

12 **VENT STACK**
A1-122 AD-905 SCALE: 3/4" = 1'-0"

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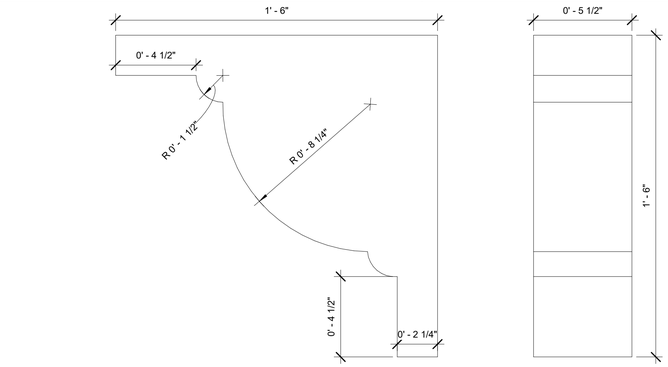
PUBLIC SET

COACHELLA ADUs
COACHELLA, CA

ARCHITECTURAL DETAILS - DESERT MODERN

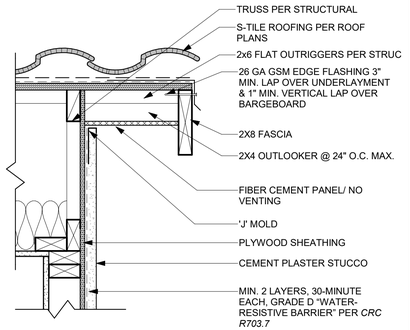
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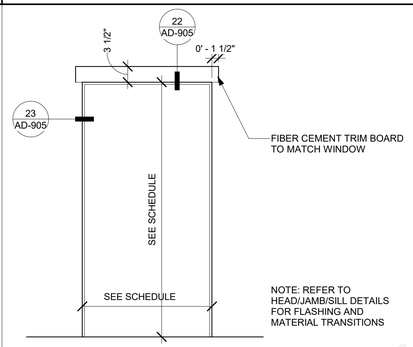
51 DECORATIVE CORBEL - SPANISH LARGE

A1-203 AD-906 SCALE: 3" = 1'-0"



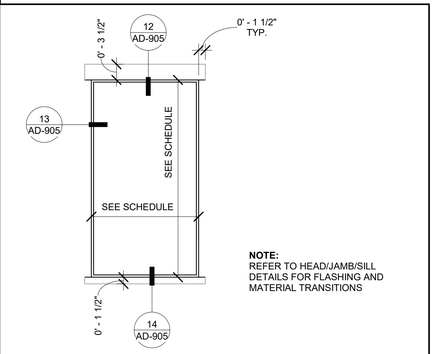
31 RAKE @ PLASTER - SPANISH COLONIAL

A1-123 AD-906 SCALE: 1 1/2" = 1'-0"



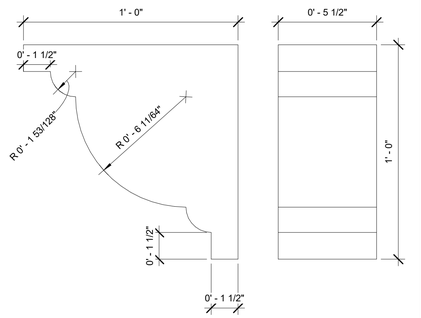
21 DOOR TRIM - SPANISH COLONIAL

A1-203 AD-906 SCALE: 3/4" = 1'-0"



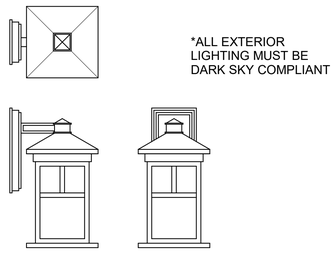
11 WINDOW TRIM - SPANISH COLONIAL

A1-203 AD-906 SCALE: 3/4" = 1'-0"



52 DECORATIVE CORBEL - SPANISH PORCH

A1-203 AD-906 SCALE: 3" = 1'-0"



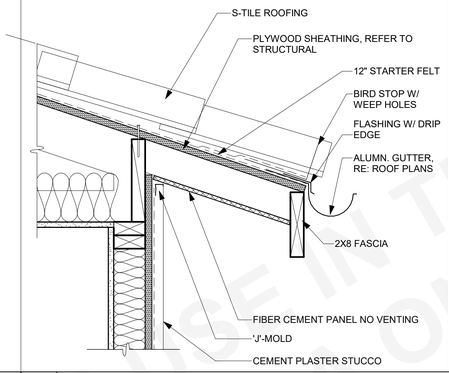
*ALL EXTERIOR LIGHTING MUST BE DARK SKY COMPLIANT

FORTE LIGHTING - BLACK FINISH WITH HONEY GLASS PANELS

OR EQUAL DARK SKY COMPLIANT FIXTURE PER ZONING REGULATIONS SECTION 17.70.100.

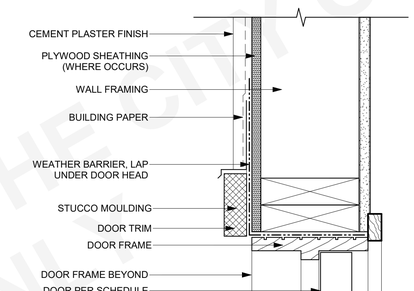
42 TYP. LIGHT FIXTURE - SPANISH

A1-203 AD-906 SCALE: 1 1/2" = 1'-0"



32 EAVE @ PLASTER - SPANISH COLONIAL

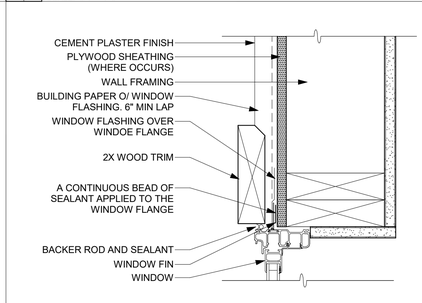
A1-123 AD-906 SCALE: 1 1/2" = 1'-0"



HEAD

22 DOOR HEAD - SPANISH

AD-906 SCALE: 3" = 1'-0"

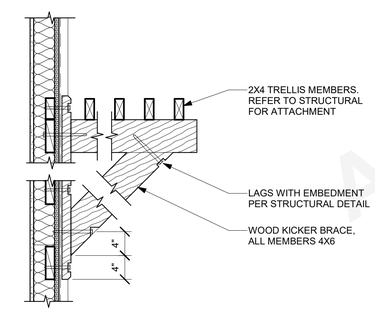


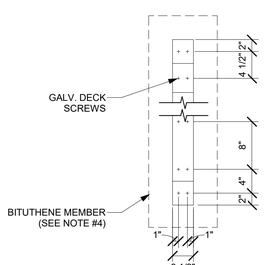
NOTE: ALL WINDOW FLASHING SHALL COMPLY WITH MANUFACTURER/INDUSTRY STANDARDS AAMA 2400-02

HEAD

12 TYP. WINDOW HEAD

AD-906 SCALE: 3" = 1'-0"



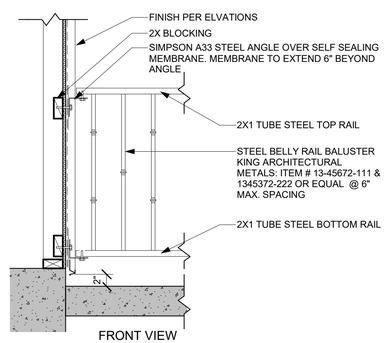


NOTES

1. PRE-PRIME ALL SIDES OF BRACE FRAMING PRIOR TO INSTALLATION. TYPICAL
2. A SELF SEALING MEMBRANE SHALL BE INSTALLED BEHIND WALL TRIM & EXTEND 6" BEYOND WALL TRIM AND 4" MIN. LAP O/WEATHER BARRIER
3. CAULK AROUND TOP & SIDES OF 4X AT WALL PENETRATION.
4. A BITUTHENE MEMBRANE SHALL BE INSTALLED BEHIND 4X6 BRACE W/ 4" LAP MIN.

54 BRACE W/ KICKER - TRELLIS

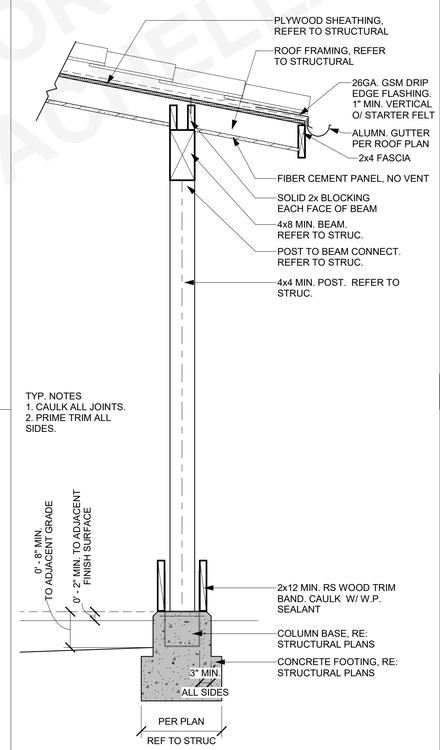
A1-203 AD-906 SCALE: 1" = 1'-0"



FRONT VIEW

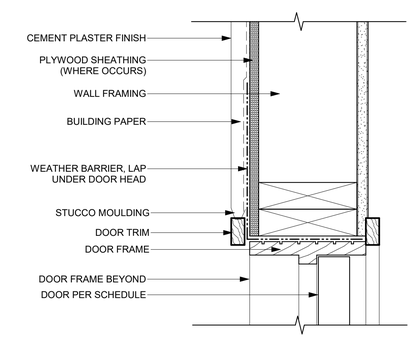
44 RAILING - METAL

A1-203 AD-906 SCALE: 1" = 1'-0"



34 POST W/ ROOF - SPANISH

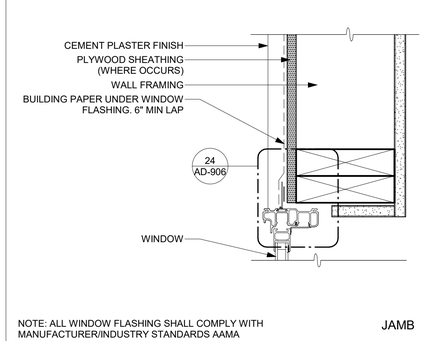
A1-203 AD-906 SCALE: 3/4" = 1'-0"



JAMB

23 DOOR JAMB - SPANISH

AD-906 SCALE: 3" = 1'-0"

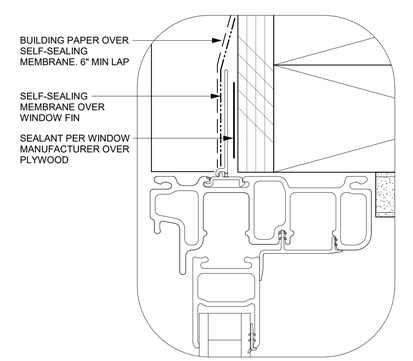


NOTE: ALL WINDOW FLASHING SHALL COMPLY WITH MANUFACTURER/INDUSTRY STANDARDS AAMA 2400-10

JAMB

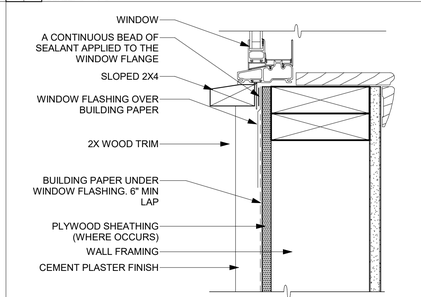
13 TYP. WINDOW JAMB

AD-906 SCALE: 3" = 1'-0"



24 DETAILED JAMB FLASHING

AD-906 AD-906 SCALE: 12" = 1'-0"



NOTE: ALL WINDOW FLASHING SHALL COMPLY WITH MANUFACTURER/INDUSTRY STANDARDS AAMA 2400-02

SILL

14 TYP. WINDOW SILL

AD-906 SCALE: 3" = 1'-0"

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City of COACHELLA est 1946

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COACHELLA ADUs

COACHELLA, CA

ARCHITECTURAL DETAILS - SPANISH COLONIAL

PUBLIC SET

DATE 01/11/24

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SYMBOLS

DETAIL REFERENCE BUBBLE WITH LEADER

DETAIL REFERENCE BUBBLE

FULL HEIGHT SECTION INDICATOR

ELEVATION OF WALL OR FRAME

NORTH ARROW

BOT OF
EL = (-X'-X")

TOP/BOTTOM OF ELEVATIONS

SLOPE

WELDED WIRE FABRIC
(WWF LAYER)

STEPPED SURFACE; FLOOR DEPRESSION

SLOPED SURFACE

STEPPED FOOTING

BOTTOM STEPPED FOOTING

XX"-X"
X

INDICATES SHEAR WALL TYPE AND LENGTH, PER SHEAR WALL SCHEDULE

INDICATES SPAN AND DIRECTION OF PREFABRICATED ROOF TRUSS (BY OTHERS)

XX

INDICATES SPAN AND DIRECTION OF ROOF RAFTER OR FLOOR JOIST WITH WEB STIFFENER

XX

INDICATES SPAN AND DIRECTION OF ROOF RAFTER OR FLOOR JOIST

INDICATES EXTENTS OF FRAMING OR OTHER STRUCTURAL ELEMENT

INDICATES HEADER @ OPENING PER HEADER SCHEDULE

EARTH LAYER

INDICATES SAND OR GROUT

INDICATES GRAVEL

STEEL IN CROSS SECTION

INDICATES BEARING WALL

SHADED AREA INDICATES CALIFORNIA FRAMING

SHADED AREA INDICATES FOOTPRINT OF FLOOR ABOVE

STEEL HSS TUBE COLUMN

STEEL HSS OR PIPE COLUMN

WIDE FLANGE STEEL COLUMN

WOOD POST

X

INDICATES TOP PLATE SPLICE NAILING PER SCHEDULE

Ix

INDICATES SHEAR WALL STRAP / HOLDOWN TYPE PER SCHEDULE

F1

INDICATES PAD FOOTING TYPE PER SCHEDULE

C1

INDICATES CONTINUOUS FOOTING TYPE PER SCHEDULE

ANGLE BRACE

(2L)

DOUBLE ANGLE BRACE

DRAG STRUT CONNECTION

FULL HEIGHT STIFFENER CONNECTION

MOMENT CONNECTION

MEMBER SPLICE

(+3")

TOP OF STEEL ± ELEVATION

[X]

NUMBER OF EVENLY SPACED
SHEAR STUDS

[X–Y–Z]

SPECIAL STUD SPACING SEE TYPICAL
STEEL DETAILS

<3/4>

BEAM CAMBER AT MID-SPAN

WALL TYPES

INDICATES PLYWOOD SIDE FOR SHEARWALL

INDICATES BEARING WOOD WALL BELOW

INDICATES BEARING WOOD WALL ABOVE

INDICATES NON-BEARING WOOD WALL BELOW

INDICATES NON-BEARING WOOD WALL ABOVE

INDICATES EXISTING BEARING WOOD WALL

INDICATES EXISTING NON-BEARING WOOD WALL

INDICATES BEARING CMU WALL BELOW

INDICATES BEARING CMU WALL ABOVE

INDICATES NON-BEARING CMU WALL BELOW

INDICATES NON-BEARING CMU WALL ABOVE

INDICATES EXISTING BEARING CMU WALL

INDICATES EXISTING NON-BEARING CMU WALL

INDICATES BEARING CONCRETE WALL BELOW

INDICATES BEARING CONCRETE WALL ABOVE

INDICATES NON-BEARING CONCRETE WALL BELOW

INDICATES NON-BEARING CONCRETE WALL ABOVE

INDICATES EXISTING BEARING CONCRETE WALL

INDICATES EXISTING NON-BEARING CONCRETE WALL

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S-421	ROOF FRAMING DETAILS
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City of COACHELLA EST 1946

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ABBREVIATIONS

A & B	ABOVE AND BELOW
AB	ANCHOR BOLT
ABV	ABOVE
ACI	AMERICAN CONCRETE INSTITUTE
ADDL	ADDITIONAL
ADJ	ADJACENT
AESS	ARCHITECTURAL EXPOSED STRUCTURAL STEEL
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT	ALTERNATE
ALUM	ALUMINUM
ANCH	ANCHOR
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APA	ENGINEERED WOOD ASSOCIATION (FORMERLY THE AMERICAN PLYWOOD ASSOCIATION)
APPVD	APPROVED
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL; ARCHITECT
AWPA	AMERICAN WOOD PRESERVERS ASSOCIATION
AWS	AMERICAN WELDING SOCIETY
AITC	AMERICAN INSTITUTE OF TIMBER CONSTRUCTION
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
BEL	BELOW
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BN	BOUNDARY NAIL
BOT OR B	BOTTOM
BRC	BRACE
BRG	BEARING
BTWN	BETWEEN
CANT	CANTILEVER
CAM OR C	CAMBER
CC	CENTER TO CENTER
CG	CENTER OF GRAVITY
CIP	CAST-IN-PLACE
CJ	CONSTRUCTION JOINT; CONTROL JOINT
CL	CENTER LINE
CLR	CLEARANCE; CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
COMP	COMPRESSION
CONC	CONCRETE
CONN	CONNECTION; CONNECT
CONSTR	CONSTRUCTION
CONT	CONTINUE; CONTINUOUS
CONTR	CONTRACTOR
CJP	COMPLETE JOINT PENETRATION WELD
CTR	CENTER
CTSK	COUNTERSINK; COUNTERSUNK
CU FT	CUBIC FOOT
d	PENNY (NAIL OR BAR DIA)
DBL	DOUBLE
DEPT	DEPARTMENT
DET	DETAIL
DF	DOUGLAS FIR/LARCH
DIA OR Ø	DIAMETER
DIAG	DIAGONAL
DIAPH	DIAPHRAGM
DIM	DIMENSION
DN	DOWN
DO	DO OVER
DWG	DRAWING
DWL	DOWEL
EA	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
EMBED	EMBEDMENT
EN	EDGE NAIL
ENGR	ENGINEER
EQ	EQUAL OR EQUIVALENT
EQUIP	EQUIPMENT
ES	EACH SIDE
EW	EACH WAY
EXIST or (E)	EXISTING
EXT	EXTERIOR
FDN	FOUNDATION
FIN	FINISH
FJ	FLOOR JOIST
FLG	FLANGE
FLR	FLOOR
FN	FIELD NAIL
FOC	FACE OF CONCRETE
FOM	FACE OF MASONARY
FOS	FACE OF STUD
FOW	FACE OF WALL
FRMG	FRAMING
FT	FOOT; FEET
FTA	FLOOR TIE ABOVE
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GB	GRADE BEAM
GLB	GLUED LAMINATED BEAM
GR	GRADE
GRND	GROUND
H or HORIZ	HORIZONTAL
HDR	HEADER
HGR	HANGER
HP	HIGH POINT
HSH	HORIZONTALLY SLOTTED HOLES
HT	HEIGHT
ID	INSIDE DIAMETER
IF	INSIDE FACE
I-JST	I-JOIST
IN	INCH
INCL	INCLUDE
INFO	INFORMATION
INSP	INSPECTION
INT	INTERIOR
JST	JOIST
JT	JOINT
K	KIPS
KS	KING STUD
KP	KING POST
KSI	KIPS PER SQUARE INCH
LB(S) OR #	POUND(S)
LF	LINEAL FOOT
LIN	LINEAL; LINEAR
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LP	LOW POINT
LSH	LONG SLOTTED HOLES
LSL	LAMINATED STRAND LUMBER
LT WT	LIGHTWEIGHT
LVL	LEVEL OR LAMINATED VENEER LUMBER
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM; MINUTE
MISC	MISCELLANEOUS
(N)	NEW
N	NORTH
NO or #	NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
ORIG	ORIGINAL
OSB	ORIENTED STRAND BOARD
PA	POST ABOVE
PARA OR //	PARALLEL
PC	PRECAST; PIECE
PERP	PERPENDICULAR
PI	PLYWOOD INDEX
℄ OR PL.	PLATE
PL	PROPERTY LINE
PLF	POUNDS PER LINEAL FOOT
PLCS	PLACES
PLY	PLYWOOD
PROP	PROPERTY
PT	PRESSURE TREATED
PW	PLATE WASHER
PJP	PARTIAL JOINT PENETRATION WELD
PREFAB	PREFABRICATED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PARALLEL STRAND LUMBER
PVMT	PAVEMENT
#	POUND; NUMBER
REF	REFERENCE
REINF	REINFORCE; REINFORCING
REQD	REQUIRED
RF	ROOF
RR	ROOF RAFTER
Ø	ROUND; DIAMETER
SCHED	SCHEDULE
SECT	SECTION
SEP	SEPARATION
SHT	SHEET
SHTG	SHEATHING
SIM	SIMILAR
SOG	SLAB ON GRADE
SN	SHEAR NAIL
SPCG	SPACING
SPECS	SPECIFICATIONS
SQ	SQUARE
SS	STAINLESS STEEL
SSL	SHORT SLOTTED HOLES
STD	STANDARD
STGR	STAGGER
STIFF	STIFFENERS
STIRR	STIRRUP
STL	STEEL
STRUCT	STRUCTURAL
SW	SHEAR WALL
SYM	SYMMETRICAL
TB	TIE BEAM
T & B	TOP AND BOTTOM
T & G	TONGUE & GROOVE
TO	TOP OF
TOC	TOP OF CURB; TOP OF CONCRETE
TOF	TOP OF FOOTING
TEMP	TEMPERATURE; TEMPORARY
THRU	THROUGH
THK	THICKNESS/THICK
THR	THREADED
TOP or T	TOP
TOS	TOP OF STEEL/TOP OF SLAB
TOW	TOP OF WALL
TS	TRIMMER STUD
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UT	ULTRA-SONIC TEST
VERT	VERTICAL
VSH	VERTICAL SLOTTED HOLES
W/	WITH
W/O	WITHOUT
WO	WHERE OCCURS
WD	WOOD
WP	WORK POINT; WATERPROOF
WWF	WELDED WIRE FABRIC

STRUCTURAL STEEL SHAPES

W	W SHAPE
C	AMERICAN STD CHANNEL SHAPE
MC	MISC CHANNEL SHAPE
L	ANGLE SHAPE
WT, ST, MT	STRUCT TEE SHAPE
PIPE	STANDARD PIPE SHAPE
PIPE-X	EXTRA STRONG PIPE SHAPE
PIPE-XX	DBL EXTRA STRONG PIPE SHAPE
HSS	HOLLOW STRUCTURAL SECTION

APPROVED FOR USE IN THE CITY OF COACHELLA ONLY

PUBLIC SET

COACHELLA ADUs

COACHELLA, CA

SHEET INDEX, ABBREVIATION & SYMBOLS

DATE
JANUARY 11, 2024

SHEET
S-101

H:\2800\2959-01-CUZZ\Coachella-Design-Services\ADU-Plans\Structural\ConDocs\Sheet Files\Plan 2\2959-01-CUZZ - Plan 2 - S101.dwg, S101, Jan 16, 2024, 5:01pm, Alopez

REINFORCING STEEL

1. REINFORCING BARS SHALL CONFORM TO THE REQUIREMENTS OF CHAPTER 19 OF THE CODE AND WITH THE PROVISIONS OF ACI 318-19, ASTM A706, GRADE 60 UNO. ASTM A615 GR 60 STEEL MAY BE SUBSTITUTED FOR ASTM A706 GR60 STEEL PER ACI 318-19 SECTION 20.2.2.5 PROVIDED THE FOLLOWING CONDITIONS ARE MET:
   A. THE ACTUAL YIELD STRENGTH BASED ON MILL TESTS DOES NOT EXCEED THE SPECIFIED YIELD STRENGTH BY MORE THAN 18,000 PSI.
   B. THE RATIO OF THE ACTUAL ULTIMATE TENSILE STRESS TO THE ACTUAL YIELD STRENGTH IS NOT LESS THAN 1.25.
   C. WHERE REINFORCEMENT COMPLYING WITH ASTM A615 IS TO BE WELDED, CHEMICAL TESTS SHALL BE PERFORMED TO DETERMINE WELDABILITY IN ACCORDANCE WITH SECTION 26.6.4 OF ACI 318-19.
2. BARS SHALL BE CLEAN OF RUST, GREASE, OR OTHER MATERIALS LIKELY TO IMPAIR BOND. ALL REINFORCING BAR BENDS SHALL BE MADE COLD.
3. WELDED WIRE REINFORCEMENT (WWR), PLAIN OR DEFORMED, SHALL CONFORM TO ASTM A185. WELDED DEFORMED WIRE REINFORCEMENT (WWR) SHALL CONFORM TO ASTM A1064. ALL WWR FOR STAIR PANS AND ALL WWR FOR CONCRETE FILL ON METAL DECK TO BE PLAIN WWR. PROVIDE LAPS PER ACI 318-19 SECTION 25.5.3 OR 25.5.4 MINIMUM. WWR SHALL BE SUPPORTED ON APPROVED CHAIRS.
4. REINFORCING BAR LAP SPLICES SHALL BE MADE AS INDICATED ON THE DRAWINGS. LAP ALL HORIZONTAL BARS AT CORNERS AND INTERSECTIONS. STAGGER ALL SPLICES UNLESS NOTED OTHERWISE ON PLANS.
   A. MINIMUM LAP SPLICE LENGTH FOR REINFORCING STEEL BARS IN CONCRETE SHALL BE PER ACI 318-19 SECTION 25.5.2 AND THE REINFORCING SCHEDULE ON THE DRAWINGS.
   B. MINIMUM LAP SPLICE LENGTH FOR REINFORCING STEEL BARS IN MASONRY SHALL BE PER TMS 042-16 SECTION 6.1.6.1.1 AND THE REINFORCING SCHEDULE ON THE DRAWINGS.
5. ALL BARS SHALL BE MARKED SO THEIR IDENTIFICATION CAN BE MADE WHEN THE FINAL IN-PLACE INSPECTION IS MADE. ALL REINFORCING CONFORMING TO DIFFERING ASTM SPECIFICATIONS AND/OR OF DIFFERING GRADES SHALL BE CLEARLY MARKED TO DIFFERENTIATE THEM FROM OTHER REINFORCING STEEL IF CONCURRENTLY PRESENT ON SITE.
6. WHERE WELDING OF REINFORCING IS APPROVED BY THE STRUCTURAL ENGINEER, IT SHALL BE DONE BY AWS CERTIFIED WELDERS USING E80XX OR APPROVED ELECTRODES. WELDING PROCEDURES SHALL CONFORM TO THE REQUIREMENTS OF STRUCTURAL WELDING CODE- REINFORCING STEEL", AWS-D1.4-15. REINFORCING BARS TO BE WELDED SHALL CONFORM TO THE REQUIREMENTS OF ASTM A706.
7. REINFORCING STEEL SHALL BE ACCURATELY PLACED AND ADEQUATELY SUPPORTED BEFORE THE CONCRETE IS PLACED AND SHALL BE SECURED AGAINST DISPLACEMENT DURING CONSTRUCTION WITHIN PERMITTED TOLERANCES. ADEQUATE SUPPORTS ARE ALSO NECESSARY TO KEEP THE REINFORCING STEEL AT THE PROPER DISTANCE FROM THE FORMS. USE WIRE BAR SUPPORTS, PRECAST CONCRETE SUPPORTS, SPACERS, BOLSTERS, REINFORCEMENT OR OTHER MEANS OF SUPPORT PER THE "CRSI MANUAL OF STANDARD PRACTICE", LATEST EDITION.
8. REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH THE "CRSI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", LATEST EDITION.
9. COMPLETE AND DETAILED REINFORCING PLACEMENT DRAWINGS SHALL BE PREPARED AND SUBMITTED TO THE ARCHITECT FOR APPROVAL BY THE SEOR PRIOR TO FABRICATION IN ACCORDANCE WITH THE SPECIFICATIONS AND APPLICABLE CODES. THESE DRAWINGS SHALL BE AVAILABLE ON THE JOB SITE PRIOR TO PLACING OF CONCRETE. THE REINFORCING PLACEMENT DRAWINGS SHALL INCLUDE ALL PRIMARY REINFOREMENT, LAP SPLICES, TIES, DOWELS, HEADED U-DOWELS, EMBED PLATES, ANCHOR BOLTS, ETC. AREAS OF CONGESTION SHALL BE DETAILED SUFFICINTLY TO DEMONSTRATE THAT PLACEMENT OF REBAR MEETS SPACING REQUIREMENTS OF ACI 318-19.
10. MILL TEST REPORTS FOR GRADE 60 BARS SHALL BE SUBMITTED TO THE INSPECTOR OF RECORD PRIOR TO PLACEMENT OF CONCRETE PER ACI 318-19 SECTION 26.13.2.3 OF THE CODE.
11. WHEN REQ'D, INSPECTION OF CONCRETE SHALL INCLUDE INSPECTION DURING INSTALLATION OF REINFORCING STEEL. INSPECTION SHALL BE SCHEDULED SO THAT PLACEMENT OF REINFORCING STEEL, CONDUIT, SLEEVES, AND EMBEDDED ITEMS MAY BE CORRECTED PRIOR TO PLACEMENT OF OVERLYING GRIDS OR REINFORCING STEEL.
12. CONCRETE PROTECTION FOR REINFORCEMENT

THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT IN CAST-IN-PLACE CONCRETE (NON-PRESTRESSED):	MINIMUM COVER, IN.
A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3
B. CONCRETE EXPOSED TO EARTH OR WEATHER: NO.6 THROUGH NO. 18 BAR NO.5 BAR, W31 OR D31 WIRE & SMALLER	2 1½"
C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND: SLABS, WALLS, JOISTS: NO.14 AND NO.18 BARS NO.11 BAR & SMALLER BEAMS, COLUMNS: PRIMARY REINFORCEMENT TIES, STIRRUPS, SPIRALS	 1½" ¾" 1½"

13. MECHANICAL BAR SPLICE CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ACI 318-19 SECTION 25.5.7 USE OF MECHANICAL CONNECTIONS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER. SPLICES MUST BE TESTED AS INDICATED IN THE CONCRETE REINFORCEMENT SPECIFICATION. ACCEPTABLE PRODUCTS INCLUDE:

    LENTON STANDARD COUPLERS (IAPMO-ES 0129)
    LENTON FORM SAVERS, TYPE SA (IAPMO-ES 0129)
    LENTON WELDABLE HALF COUPLERS (IAPMO-ES 0129)
    LENTON LOCK COUPLERS PER (IAPMO-ES 0129)

    NOTE THAT REBAR ATTACHED TO PLATE USING LENTON WELDABLE HALF COUPLERS SHALL BE ASTM A706 PER IAPMO-ES 0129.

    ALL MECHANICAL BAR SPLICE CONNECTIONS IN SPECIAL STRUCTURAL WALLS, SPECIAL MOMENT FRAMES AND CONCRETE DIAPHRAGMS SHALL BE TYPE 2 CONFORMING TO THE REQUIREMENTS OF ACI 318-19 SECTION 18.2.7 & 18.12.7.4

CONCRETE

1. ALL CONCRETE CONSTRUCTION SHALL CONFORM WITH CHAPTER 19 OF THE CODE AND WITH THE PROVISIONS OF ACI 318-19.
2. CONCRETE MATERIALS SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:

MATERIAL	ASTM STANDARD
PORTLAND CEMENT (TYPE II)[A]	C150
CONCRETE AGGREGATES (HARDROCK)	C33
CONCRETE AGGREGATES (LIGHTWEIGHT)[C]	C330
WATER[B]	C1602
COAL FLY ASH OR POZOLLAN (CLASS F)	C618
NATURAL OR MANUFACTURED SAND	C33
SLAG	C989

   A. FOR SOILS WITH HIGH CONCENTRATIONS OF SULFATES (EXPOSURES S2 OR S3 PER ACI 318-19 TABLE 19.3.2.1) PORTLAND CEMENT SHALL BE TYPE V. VERIFY WITH PROJECT GEOTECHNICAL REPORT.
   B. WATER SHOULD ONLY BE ADDED AT THE BATCH PLANT. IN NO CASE SHALL THE DESIGN WATER/ CEMENT RATIO BE EXCEEDED.
   C. PUMICE AGGREGATE SHALL NOT BE USED.
3. CONCRETE MIXES SHALL BE PROPORTIONED BASED ON SECTION 26.4.3 OF ACI 318-19 , WHICH REFERENCES ACI 301-20 ARTICLE 4.2.3. MIX DESIGNS SHALL INCLUDE DOCUMENTATION OF MIX AVERAGE COMPRESSIVE STRENGTH THROUGH FIELD TEST DATA OR TRAIL MIXTURES IN ACCORDANCE WITH ACI 301-20 ARTICLE 4.2.3.4. SCHEDULE OF STRUCTURAL CONCRETE STRENGTHS AND LOCATIONS (UNO):

LOCATION IN STRUCTURE	MINIMUM STRENGTH (PSI)	DENSITY (PCF)	MAX SLUMP (IN±1)	MAX WATER/CEMENT RATIO	SLAG/ FLY ASH[A] (MAX)
CONCRETE FOUNDATIONS, GRADE BEAMS, TIE BEAMS	5,000	150	4	0.4	0.15
CONCRETE SLAB ON GRADE	5,000	150	4	0.4	0.15

   A. AS MEASURED BY CEMENTITIOUS WEIGHT
4. READY MIXED CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM C94 OR C685.
5. DEPOSITING AND CONVEYING OF CONCRETE SHALL CONFORM TO SECTION 26.5 OF ACI 318-19 AND PROJECT SPECIFICATIONS.
6. ALL CONCRETE SURFACES AGAINST WHICH NEW CONCRETE IS TO BE PLACED SHALL BE CLEANED AND ROUGHENED TO 1/4" AMPLITUDE.
7. ALL REINFORCING BARS, ANCHOR BOLTS AND OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.
8. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT. CORING IN CONCRETE IS NOT PERMITTED WITHOUT SEOR APPROVAL. NOTIFY THE SEOR IN ADVANCE OF CONDITIONS NOT SHOWN ON THE DRAWINGS. SEE THE DRAWINGS FOR ADDITIONAL RESTRICTIONS ON THE PLACEMENT OF OPENINGS IN SLABS AND WALLS.
9. PIPES EMBEDDED IN CONCRETE:
   A. CONCRETE
      a. PIPES LARGER THAN 1-1/2" DIAMETER SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE EXCEPT WHERE SPECIFICALLY APPROVED BY SEOR.
      b. NO CONDUITS SHALL BE PLACED IN CONCRETE FILL OVER METAL DECK.
      c. PIPES SHALL NOT DISPLACE OR INTERRUPT REINFORCING BARS.
      d. DO NOT STACK CONDUITS, SPACE EMBEDDED PIPES AND CONDUITS AT A MINIMUM OF 3 DIAMETERS CLEAR FROM OTHER EMBEDDED PIPES/CONDUITS AND REBAR.

FOUNDATION

1. GEOTECHNICAL INFORMATION AND FOUNDATION DESIGN IS BASED ON THE FOLLOWING:
   A. DESIGN LATERAL SOIL LOADS ARE IN ACCORDANCE WITH 2022 CBC TABLE 1610.1
   B. ALLOWABLE FOUNDATION BEARING AND LATERAL PRESSURES ARE IN ACCORDANCE WITH 2022 CBC TABLE 1806.2
   C. VALUES LISTED SHALL BE VERIFIED BY A LICENSED GEOTECHNICAL ENGINEER
2. SPREAD OR CONTINUOUS FOOTINGS:

ELEMENT	ALLOWABLE BEARING CAPACITY (PSF)[A]	ALLOWABLE LATERAL RESISTANCE[B]	
		PASSIVE RESISTANCE (PSF/FT BELOW GRADE)[E]	COHESION (PSF)
CONT FOOTING	1,500	100	120

   NOTES:
   A. THE ALLOWABLE CAPACITY MAY BE INCREASED BY ONE-THIRD WHEN CONSIDERING LOADS OF SHORT DURATION SUCH AS WIND OR SEISMIC FORCES.
   B. THE ALLOWABLE LATERAL RESISTANCE CAN BE TAKEN AS THE SUM OF THE FRICTIONAL RESISTANCE AND PASSIVE RESISTANCE .
   C. THE UPPER 0 FOOT OF SOIL NOT PROTECTED BY PAVEMENT SHALL BE NEGLECTED WHEN CALCULATING PASSIVE RESISTANCE.
   D. COMPACTED FILL SHOULD BE PREPARED AS FOLLOWS; A MIN OF 12" OF COMPACTED FILL SHALL BE PROVIDED. COMPACTED TO A MIN OF 90 PERCENT MODIFIED PROCTOR IN ACCORDANCE WITH ASTM D 1557 (2022 CBC 1804.6)
   E. MAY BE DOUBLED FOR ISOLATED POLES PER 2022 CBC 1806.3.4
4. WHERE NOT SHOWN ON THE DRAWINGS, CONTRACTOR TO PROVIDE FOR DESIGN AND INSTALLATION OF ALL CRIBBING, SHEATHING AND SHORING REQUIRED AND SHALL BE SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING, AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS, AND UTILITIES IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY ORDINANCES.
5. CONTRACTOR TO PROVIDE FOR DE-WATERING OF EXCAVATIONS FROM SURFACE WATER, GROUND WATER AND/OR SEEPAGE.
6. EXCAVATION FOR FOOTINGS SHALL BE APPROVED BY THE INSPECTOR OR GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE AND REINFORCING.
7. ALL EXCAVATIONS SHALL BE PROPERLY BACKFILLED. DO NOT PLACE BACKFILL BEHIND RETAINING WALLS BEFORE CONCRETE OR GROUT HAS ATTAINED FULL DESIGN STRENGTH. CONTRACTOR SHALL PROVIDE FOR DESIGN, PERMITS AND INSTALLATION OF SUCH BRACING.
8. EXCAVATIONS SHALL BE CUT SQUARE AND SMOOTH, WITH LEVEL BOTTOMS.
9. FOOTING BACKFILL AND UTILITY TRENCH BACKFILL WITHIN BUILDING AREA SHALL BE MECHANICALLY COMPACTED IN LAYERS IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION REPORT AND APPROVED BY THE GEOTECHNICAL ENGINEER. FLOODING WILL NOT BE PERMITTED. ALL FILLS USED TO SUPPORT FOUNDATIONS SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER REPRESENTATIVE PER SECTION 1705.6 OF THE CODE.
10. ALL ABANDONED FOOTINGS, UTILITIES, ETC. SHALL BE REMOVED. NEW FOOTINGS MUST EXTEND INTO UNDISTURBED SOILS.
11. PIPES WITHIN THE ZONE OF INFLUENCE OF BUILDING OR SITE ELEMENT FOUNDATIONS SHALL BE ENCASED IN LEAN CONCRETE AT THE DIRECTION OF THE GEOTECHNICAL ENGINEER OF RECORD.

DEMOLITION

1. ALL DEMOLITION SHALL BE CARRIED ON IN SUCH A WAY AS NOT TO DAMAGE EXISTING ELEMENTS, WHICH ARE TO REMAIN IN THE FINISHED STRUCTURE.
2. ALL ELEMENTS OF THE STRUCTURE, WHICH ARE TO REMAIN, AND WHICH ARE DAMAGED DURING DEMOLITION WORK SHALL BE REPLACED AT NO ADDITIONAL COST. EXISTING ELEMENTS SHALL BE PROTECTED TO THE FULLEST EXTENT POSSIBLE, IN ORDER TO MITIGATE DAMAGE.
3. CONTRACTOR IS REPONSIBLE FOR REMOVAL AND REPLACEMENT OF ALL EXISTING ELEMENTS THAT ARE NECESSARY FOR THE INSTALLATION OF ALL NEW WORK.
4. WHERE EXISTING PARTITION WALLS ARE TO BE DEMOLISHED, CONTRACTOR SHALL VERIFY WALLS ARE NON-BEARING PRIOR TO DEMOLITION. IF WALLS ARE FOUND TO BE BEARING, CONTRACTOR SHALL NOTIFY ARCHITECT IMMEDIATELY

DESIGN INFORMATION

1. DEAD LOADS:

DEAD LOADS		
LOCATIONS		UNIFORM (PSF)
ROOF:	CLAY TILE OVER PRE-FAB TRUSS	25
EXTERIOR BEARING WALLS:	2x6 STUDS W/STUCCO EXT FINISH + INT GYP BOARD	18
INTERIOR BEARING WALLS:	2x6 STUDS W/GYP BOARD EACH FACE	8.7
INTERIOR NON BEARING WALLS:	2x4 STUDS W/GYP BOARD EACH FACE	8.7

2. ROOF LIVE LOADS (2022 CBC SECTION 1603.1.2)

ROOF LIVE LOADS			
OCCUPANCY OR USE	UNIFORM (PSF)	CONC. (LBS)	REFERENCE
ROOF ORDINARY FLAT, PITCHED AND CURVED ROOFS (THAT ARE NOT OCCUPIABLE)	20	—	2022 CBC TABLE 1607.1

3. ROOF SNOW LOADS (2022 CBC SECTION 1603.1.3):

SNOW DESIGN DATA		
PARAMETER	VALUE	REFERENCE
GROUND SNOW LOAD	Pg = 0 PSF	ASCE 7-16 7.2

4. WIND DESIGN DATA (2022 CBC SECTION 1603.1.4) :

WIND DESIGN DATA		
PARAMETER	VALUE	REFERENCE
ULTIMATE DESIGN WIND SPEED (3-SEC GUST)	V_{ULT} = 109 MPH	2022 CBC FIG. 1609.3
NOMINAL DESIGN WIND SPEED (3-SEC GUST)	V_{ASD} = 85 MPH	2022 CBC 1609.3.1
EXPOSURE CATEGORY	C	2022 CBC 1609.4.3
INTERNAL PRESSURE COEFFICIENT:	GCpi = ± 0.18	ASCE 7-16 TABLE 26.13-1

COMPONENTS & CLADDING WIND PRESSURES (PSF)				
LOCATION		COMPONENT TRIBUTARY AREA (SQ FT)		
		10	100	500
ROOF	ZONE 1	-36.9	-28.1	-21.5
	ZONE 2e	-36.9	-28.1	-21.5
	ZONE 2n	-58.8	-34.7	-30.3
	ZONE 2r	-58.8	-34.7	-30.3
	ZONE 3e	-58.8	-34.7	-30.3
	ZONE 3r	-83.0	-43.5	-43.5
	ALL ZONES	16.7	16.0	16.0
OVERHANG	ZONE 1	-47.8	-45.6	-43.5
	ZONE 2e	-47.8	-45.6	-43.5
	ZONE 2n	-69.8	-55.5	-52.2
	ZONE 2r	-69.8	-55.5	-52.2
	ZONE 3e	-83.0	-56.6	-56.6
	ZONE 3r	-83.0	-56.6	-56.6
WALL	ZONE 4	-28.1	-24.4	-21.5
	ZONE 5	-34.7	-27.0	-21.5
	POSITIVE	25.9	21.5	19.3

5. EARTHQUAKE DESIGN DATA (2022 CBC SECTION 1603.1.5):

SITE AND OCCUPANCY PARAMETERS		
PARAMETER	VALUE	REFERENCE
RISK CATEGORY	II	2022 CBC TABLE 1604.5
SEISMIC IMPORTANCE FACTOR	I = 1.0	ASCE 7-16 TABLE 1.5-2
MAPPED SPECTRAL RESPONSE ACCELERATIONS:	S_S = 2.508	2022 CBC 1613.2.1
	S_1 = 1.064	
SITE CLASS	D (DEFAULT)	2022 CBC 1613.2.2
SPECTRAL RESPONSE COEFFICIENTS:	S_{DS} = 2.006	2022 CBC 1613.2.4
	S_{D1} = 1.206	

BUILDING PARAMETERS		
PARAMETER	VALUE	REFERENCE
SEISMIC DESIGN CATEGORY	SDC = E	2022 CBC 1613.2.5
BASIC SEISMIC FORCE RESISTING SYSTEM	LIGHT FRAME (WOOD) WALLS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE	ASCE 7-16 TABLE 12.2-1
RESPONSE MODIFICATION FACTOR	R = 6½	
SYSTEM OVERSTRENGTH FACTOR	Ωo = 3	
DEFLECTION AMPLIFICATION FACTOR	Cd = 4	
DESIGN BASE SHEAR	V = 9.4 k	ASCE 7-16 12.8.1
SEISMIC RESPONSE COEFFICIENTS	Cs = 0.309	ASCE 7-16 12.8.1.1
ANALYSIS PROCEDURE USED	EQUIVALENT LATERAL FORCE PROCEDURE	ASCE 7-16 12.8

6. GEOTECHNICAL INFORMATION (2022 CBC SECTION 1603.1.6):
   REFER TO FOUNDATION GENERAL NOTES

EXISTING CONDITIONS

1. ALL INFORMATION SHOWN ON THE PLANS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS THE BEST PRESENT KNOWLEDGE FROM PLANS SUPPLIED BY THE OWNER, BUT WITHOUT GUARANTEE OF ACCURACY.
2. WHERE ACTUAL CONDITIONS ARE NOT IN ACCORDANCE WITH THE INFORMATION PRESENTED, THE ARCHITECT AND/OR STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY. NO MODIFICATIONS OF THE PLANS FOR NEW CONSTRUCTION SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT.

EXISTING UNDERGROUND UTILITIES

1. THE ARCHITECT AND ENGINEERS ARE NOT RESPONSIBLE FOR THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES WHETHER OR NOT SHOWN ON THE DRAWINGS. DRAWINGS, IF ANY, IS APPROXIMATE. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THE SITE. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND/OR STRUCTURAL ENGINEER SHOULD ANY SUCH UNIDENTIFIED CONDITIONS BE DISCOVERED.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES WHICH MAY RESULT FROM HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ALL EXISTING UNDERGROUND UTILITIES.
3. AN UNDERGROUND SERVICE ALERT INQUIRY IDENTIFICATION NUMBER MUST BE OBTAINED AT LEAST TWO WORKING DAYS BEFORE STARTING WORK WITH THIS PERMIT.
   A. FOR PROJECTS IN SOUTHERN CALIFORNIA TELEPHONE NO. 1-800-422-4133.
   B. FOR PROJECTS IN NORTHERN CALIFORNIA TELEPHONE NO. 1-800-227-2600.

GENERAL

1. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING CODES AND STANDARDS:
   A. 2022 CALIFORNIA BUILDING CODE, PART 2, VOLUME 2 OF 2, AND TITLE 24 C.C.R. 2022 EDITION AND LATEST REVISIONS (INCLUDING SUPPLEMENTS AND ERRATA) HEREIN REFERRED TO AS "THE CODE".
   B. ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK, INCLUDING THE STATE OF CALIFORNIA DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (CAL/OSHA).
   C. CODES & STANDARDS REFERENCED IN THE CODE OR LISTED IN THESE NOTES AND SPECIFICATIONS.
2. ALL DRAWINGS ARE CONSIDERED TO BE A PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO START OF CONSTRUCTION SO THAT A CLARIFICATION CAN BE ISSUED. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT THEIR OWN EXPENSE AND AT NO EXPENSE TO THE OWNER OR ARCHITECT.
3. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.
4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES. IN NO INSTANCE SHALL DIMENSIONS BE SCALED FROM THE DRAWINGS.
5. SEE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING:
   A. SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS, EXCEPT AS NOTED
   B. SIZE AND LOCATION OF ALL INTERIOR AND EXTERIOR NON-BEARING PARTITIONS UNLESS NOTED AND/OR DETAILED ON THE STRUCTURAL DRAWINGS
   C. SIZE AND LOCATION OF ALL CONCRETE CURBS, EQUIPMENT PADS, PITS, FLOOR DRAINS, SLOPES, DEPRESSED AREAS, CHANGE IN LEVEL, CHAMFERS, GROOVES, INSERTS, ETC
   D. SIZE AND LOCATION OF ALL FLOOR AND ROOF OPENINGS EXCEPT AS SHOWN
   E. FLOOR AND ROOF FINISHES
   F. MISCELLANEOUS DRAINAGE AND WATERPROOFING
   G. ALL FIREPROOFING REQUIREMENTS INCLUDING FIREPROOFING OF STRUCTURAL STEEL
   H. DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS
6. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR THE FOLLOWING:
   A. PIPE RUNS, SLEEVES, HANGERS, TRENCHES, WALL AND SLAB OPENINGS, ETC., EXCEPT AS SHOWN OR NOTED.
   B. ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS AND SLABS.
   C. CONCRETE INSERTS FOR ELECTRICAL, MECHANICAL OR PLUMBING FIXTURES.
   D. SIZE AND LOCATION OF MACHINE OR EQUIPMENT BASES, ANCHOR BOLTS FOR MOTOR MOUNTS.
8. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT ETC. THE CONTRACTOR IS RESPONSIBLE FOR PROVISION OF TEMPORARY SHORING AND OTHER CONSTRUCTION AIDS, INCLUDING ALL ENGINEERING OF SUCH SYSTEMS, FOR TEMPORARY SUPPORT OF NEW AND/OR EXISTING STRUCTURAL ELEMENTS AS REQUIRED FOR ERECTION AND OTHER CONTRACTOR'S MEANS AND METHODS OF CONSTRUCTION (UNO). OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS OR CONCERN CONSTRUCTION MEANS AND METHODS OR CONSTRUCTION SAFETY.
9. THE CONTRACT STRUCTURAL DRAWINGS SHOW THE BUILDING IN ITS FINAL INTENDED POSITION. CONTRACTOR SHALL MAKE PROVISIONS IN THE LAYOUT OF THE BUILDING TO TAKE INTO ACCOUNTS SHRINKAGE, CREEP, SHORTENING, ETC..
10. ASTM SPECIFICATIONS ON THE DRAWINGS SHALL BE THE VERSION REFERENCED IN CHAPTER 35 OF THE CODE OR AS REFERENCED IN THE APPLICABLE DESIGN STANDARD.
11. CONTRACTOR SHALL INVESTIGATE SITE DURING CLEARING AND EARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES, SUCH AS CESSPOOLS, CISTERNS, FOUNDATIONS, ETC. IF ANY SUCH STRUCTURES ARE FOUND, THE STRUCTURAL ENGINEER AND GEOTECHNICAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
12. CONSTRUCTION MATERIAL SHALL BE SPREAD OUT IF PLACED ON FRAMED ROOF OR FLOOR. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. THE CONTRACTOR TO DESIGN AND PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE STRUCTURE HAS NOT ATTAINED DESIGN STRENGTH.
13. CONTRACTOR SHALL COORDINATE SHORING WITH DRAWINGS OF RECORD TO INSURE PROVISIONS FOR POCKETS, BLOCKOUTS, OFFSETS, STEPPED FOOTINGS AND ANY OTHER ITEMS AFFECTED BY THE SHORING. SHORING IS NOT THE RESPONSIBILITY OF THE SEOR. CONTRACTOR TO SUBMIT ANY SHORING DESIGN AND DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
14. AN UNDERGROUND SERVICE ALERT INQUIRY IDENTIFICATION NUMBER MUST BE OBTAINED AT LEAST TWO WORKING DAYS BEFORE STARTING WORK WITH THIS PERMIT.
   G. FOR PROJECTS IN SOUTHERN CALIFORNIA TELEPHONE NO. 1-800-422-4133.
   H. FOR PROJECTS IN NORTHERN CALIFORNIA TELEPHONE NO. 1-800-227-2600.
17. EDGE OF SLAB DIMENSIONS TO BE COORDINATED AND VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO FABRICATION.

DIMENSIONS

1. DIMENSIONS SHALL BE DEFINED TO INCLUDE BOTH HORIZONTAL DIMENSIONS AND VERTICAL DIMENSIONS (ELEVATIONS).
2. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE. DRAWINGS SHALL NOT BE SCALED.
3. SEE ARCHITECTURAL DRAWINGS FOR DIMENSION NOT NOTED ON STRUCTURAL DRAWINGS.
4. SEE ARCHITECTURAL AND/OR CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS.
5. SEE ARCHITECTURAL DRAWINGS FOR ALL TOP OF SHEATHING AND/OR ROOF ELEVATIONS.
6. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES OR INCONSISTENCIES.

City of COACHELLA EST 1946

THESE PLANS ARE PROVIDED BY THE CITY OF AGOURA HILLS AS PART OF THE PRE-APPROVED ADU PROGRAM AND ARE PUBLIC DOMAIN. THERE CANNOT BE A CHARGE TO PROVIDE THESE PLANS. NO ALTERATIONS TO THESE PLANS ARE ALLOWED. ALL ALTERATIONS MUST BE DONE UNDER A SEPARATE PERMIT ONCE THE BUILDING PERMIT FOR THE ADU HAS BEEN ISSUED AND FINAL INSPECTION COMPLETED. IF YOU DO NOT HAVE THE CONSTRUCTION KNOWLEDGE AND EXPERIENCE TO CONTRUCT THESE PLANS WITHOUT FURTHER DETAILS, IT IS RECOMMENDED YOU HIRE A CONTRACTOR TO DO THE CONSTRUCTION. THE CITY WILL NOT PROVIDE FURTHER INFORMATION OR DETAILS AND BUILDING INSPECTORS WILL NOT PROVIDE STEP BY STEP INSTRUCTIONS IN THE FIELD.

APPROVED FOR PUBLIC USE
COACHELLA ONLY

COACHELLA ADUs

COACHELLA, CA

GENERAL NOTES

PUBLIC SET

DATE
JANUARY 11, 2024

SHEET
S-102

N:\2805\S939-01-C122-Coachella-Design-Services-ADU-Plans\Structural\CorrDocs\Sheet-Files\S939-01-C122 - S102.dwg, S102 Plan 2, Jan 16, 2024 3:01pm, Alcarez

REQUIRED VERIFICATION AND INSPECTIONS

WOOD
CODE CHAPTER 17 AND REFERENCED 2018 NDS AND AWC SDPWS-2015

SPECIAL INSPECTION OR TEST	CONTINUOUS	PERIODIC	CBC REFERENCE
1. HIGH LOAD DIAPHRAGM WOOD STRUCTURAL PANELS - VERIFY THE FOLLOWING: - GRADE - THICKNESS - NOMINAL SIZE OF FRAMING MEMBERS AT ADJOINING PANEL EDGES - NAIL DIAMETER AND LENGTH - NUMBER OF FASTENER LINES - SPACING BETWEEN FASTENERS IN EACH LINE - SPACING BETWEEN FASTENERS AT EDGE MARGINS	___	X	1705.5.1 2306.2
3. WOOD LATERAL FORCE-RESISTING SYSTEM WITH FASTENER SPACING OF THE SHEATHING LESS THAN OR EQUAL TO 4" OC. - WOOD SHEAR WALLS - WOOD DIPHRAGMS - DRAG STRUTS - SHEAR PANELS - HOLD-DOWNS	___	X	1705.12.2 1705.13.2
4. WOOD LATERAL FORCE-RESISTING SYSTEM WITH FASTENER SPACING OF THE SHEATHING GREATER THAN 4" OC (NOT REQUIRED) - WOOD SHEAR WALLS - WOOD DIAPHRAGMS - DRAG STRUTS - SHEAR PANELS - HOLD-DOWNS	___	___	1705.12.2 1705.13.2

SOILS
CODE TABLE 1705.6

SPECIAL INSPECTION OR TEST	CONTINUOUS	PERIODIC
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	___	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	___	X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS	___	X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	___
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	___	X

CONCRETE CONSTRUCTION
CODE TABLE 1705.3

SPECIAL INSPECTION OR TEST	CONTINUOUS	PERIODIC	REFERENCED STANDARD	CBC REFERENCE
3. INSPECT ANCHORS CAST IN CONCRETE	___	X	ACI 318: 26.7	___
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS [B] (a) ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS (b) MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.a.	X	X	ACI 318: 26.7.1 ACI 318: 26.7.1	___ ___

STATEMENT OF SPECIAL INSPECTIONS

1. THIS STATEMENT OF SPECIAL INSPECTIONS HAS BEEN PREPARED PURSUANT TO SECTION 1704.3 OF THE CODE . THIS SECTION DETAILS BOTH REQUIRED SPECIAL INSPECTIONS AND TESTS INCLUDING TESTING PER SECTION 1705 OF THE CODE. THE FOLLOWING SHALL BE OBSERVED DURING THEIR IMPLEMENTATION:

   A. GENERAL:
      a. STRUCTURAL VERIFICATIONS, INSPECTIONS AND TESTS SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 17 OF THE CODE AND/OR THE APPLICABLE REFERENCE STANDARD.

   B. OWNER REQUIREMENTS:
      a. THE OWNER OR OWNER'S AGENT SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN SECTION 1705 OF THE CODE AND IN THIS STATEMENT OF INSPECTIONS.

   C. SPECIAL INSPECTOR QUALIFICATIONS:
      a. THE SPECIAL INSPECTIONS SHALL PROVIDE WRITTEN DOCUMENTATION TO THE BUILDING OFFICIAL DEMONSTRATING HIS OR HER COMPETENCE AND RELEVANT EXPERIENCE OR TRAINING. THE EXPERIENCE OR TRAINING SHALL BE CONSIDERED RELEVANT WHEN THE DOCUMENTED EXPERIENCE OR TRAINING IS RELATED IN COMPLEXITY TO THE SAME TYPE OF SPECIAL INSPECTION ACTIVITIES FOR PROJECTS OF SIMILAR COMPLEXITY AND MATERIAL QUANTITIES.

   D. CONTRACTOR REQUIREMENTS:
      a. SPECIAL INSPECTION IS IN ADDITION TO THE CONTRACTOR'S QUALITY CONTROL INSPECTIONS AND TESTING. THE CONTRACTOR'S QUALITY CONTROL INSPECTIONS AND TESTING SHALL OCCUR PRIOR TO SPECIAL INSPECTION AND REPORTS SHALL BE AVAILABLE TO THE SPECIAL INSPECTOR.
      b. THE CONTRACTOR SHALL ENSURE THAT THE WORK FOR WHICH SPECIAL INSPECTION IS REQUIRED REMAINS ACCESSIBLE AND EXPOSED FOR SPECIAL INSPECTION PURPOSES UNTIL COMPLETION OF THE REQUIRED SPECIAL INSPECTION.
      c. ANY CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF THE MAIN WIND OR SEISMIC FORCE RESISTING SYSTEM SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND OWNER PRIOR TO COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT. THE STATEMENT OF RESPONSIBILITY SHALL CONTAIN ACKNOWLEDGEMENT OF AWARENESS OF THE SPECIAL INSPECTION REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS.

   E. SPECIAL INSPECTOR REPORT REQUIREMENTS:
      a. THE SPECIAL INSPECTOR SHALL KEEP RECORD OF INSPECTIONS
      b. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL AND TO THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD.
      c. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS OR WAS NOT COMPLETED IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS.
      d. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION.
      e. IF NOT CORRECTED DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD PRIOR TO THE COMPLETION OF THAT PHASE OF WORK.
      f. A FINAL REPORT DOCUMENTING SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED SHALL BE SUBMITTED TO THE BUILDING OFFICIAL.

SHOP FABRICATION

1. SHOP FABRICATION REQUIRES SPECIAL INSPECTION IN ACCORDANCE WITH CODE SECTION 1704.2.5. EXCEPTION: SHOP SPECIAL INSPECTIONS ARE NOT REQUIRED WHEN WORK IS DONE ON THE PREMISES OF FABRICATOR REGISTERED AND APPROVED TO PERFORM SUCH WORK IN ACCORDANCE WITH CODE SECTION 1704.2.5.1. THE FOLLOWING ACCREDITATIONS MEET THE REQUIREMENTS OF THIS EXCEPTION:
   A. STEEL BUILDINGS (OR STEEL ELEMENTS IN OTHER BUILDINGS)
      a. FOR GENERAL STEEL BUILDINGS OR ELEMENTS THE FABRICATOR SHALL BE AN AISC CERTIFIED FABRICATOR IN ACCORDANCE WITH THE AISC CERTIFICATION PROGRAM FOR STRUCTURAL STEEL FABRICATORS (AISC 201-06).
      b. OTHER ACCREDITATION DEEMED ACCEPTABLE BY THE AUTHORITY HAVING JURISDICTION.
      c. IF FABRICATION IS PERFORMED BY AN APPROVED FABRICATOR A CERTIFICATE OF COMPLIANCE MUST BE PROVIDED TO THE BUILDING INSPECTOR THAT THE MATERIALS SUPPLIED AND WORK PERFORMED BY THE FABRICATOR ARE IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS.
      d. IF FABRICATION IS NOT PERFORMED BY AN APPROVED FABRICATOR WELDING INSPECTION REPORTS MUST BE SUBMITTED TO THE BUILDING OFFICIAL BY AN APPROVED TESTING AGENCY.
         d.a. NONDESTRUCTIVE TESTING (NDT) MAY BE PERFORMED BY THE FABRICATOR, HOWEVER THE QA AGENCY SHALL REVIEW THE FABRICATOR'S NDT REPORTS.
   B. WOOD BUILDINGS
      a. PREFABRICATED WOOD TRUSSES
      b. STRUCTURAL GLUED LAMINATED TIMBER

PRE-FABRICATED WOOD TRUSS NOTES

1. THE DESIGN OF METAL PLATE CONNECTED WOOD TRUSSES SHALL BE IN ACCORDANCE WITH THE FOLLOWING
   A. CODES AND STANDARDS:
      a. THE GOVERNING CODE LISTED IN THE PROJECT GENERAL NOTES
      b. MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ASCE 7-16)
      c. NATIONAL DESIGN STANDARD FOR WOOD CONSTRUCTION AND SUPPLEMENT (ANSI/AWC NDS-2018)
      d. SPECIAL DESIGN PROVISIONS FOR WIND & SEISMIC (AWC SDPWS-2021)
      e. THE NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION (ANSI/TPI 1-2014)
   B. DESIGN CRITERIA:
      a. TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING MINIMUM VERTICAL LOADS AND OTHER LOADS INDICATED ON THE CONSTRUCTION DOCUMENTS (ATTIC MECHANICAL UNITS, ETC.)

         ROOF TRUSS LOADING:
         CLAY TILE W/ GYP CEILING:
         TOP-CHORD DEAD LOAD: 18.6 PSF * (17.3 PSF SUPERIMPOSED)
         BOT CHORD DEAD LOAD: 5.9 PSF (4.6 PSF SUPERIMPOSED)
         ROOF - LIVE LOAD: 20 PSF

         DEFLECTION CRITERIA:
         DEAD + LIVE LOAD L/240
         LIVE LOAD ONLY L/360

         *INCLUDES 4 PSF ALLOWANCE FOR PV PANELS

      b. (#-) EQUALS DRAG FORCE IN LBS. DRAG FORCE IS AT A FACTORED LEVEL (0.7E). DRAG FORCES CALCULATED IN ACCORDANCE WITH ASCE 7-16 12.10.1.1, IN STRUCTURES ENTIRELY BRACED BY LIGHT FRAME SHEAR WALLS, OR PORTIONS THEREOF, DRAG MEMBERS SHALL BE DESIGNED TO RESIST FORCES USING THE LOAD COMBINATIONS OF ASCE 7-16 SECTION 12.4.2.3. IN ALL OTHER STRUCTURES DRAGS SHALL INCLUDE THE EFFECT OF OVER STRENGTH PER ASCE 7-16 12.4.3.2. THE TRUSS DESIGNER SHALL DESIGN FOR THE TRUSSES FOR THE INDICATED HORIZONTAL LOAD ACTING IN BOTH THE TOP AND BOTTOM TRUSS CHORDS AND FOR THE TRANSFER OF THE FORCE TO THE CHORDS THROUGH THE WEB.

2. CONTRACTOR REQUIREMENTS:
   A. THE CONTRACTOR SHALL MEET ALL THE REQUIREMENTS LISTED IN SECTION 2.3.4 OF ANSI/TPI 1-2014 INCLUDING THE FOLLOWING:
      a. MEANS AND METHODS: THE CONTRACTOR IS RESPONSIBLE FOR ALL MEANS AND METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, PROGRAMS AND SAFETY IN CONNECTION WITH THE RECEIPT, STORAGE, HANDLING, INSTALLATION, RESTRAINING, AND BRACING OF THE TRUSSES. REFER TO THE GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES (BCSI-B1)
      b. TRUSS INSTALLATION SHALL COMPLY WITH INSTALLATION TOLERANCES SHOWN IN BCSI-B1
      c. TEMPORARY INSTALLATION RESTRAINT/BRACING FOR THE TRUSS SYSTEM AND THE PERMANENT TRUSS SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH BCSI-B2.
      d. CONSTRUCTION LOADING ON TRUSSES SHALL BE DONE IN ACCORDANCE WITH BCSI-B4.
      e. TRUSS DAMAGE, JOBSITE MODIFICATIONS & INSTALLATION ERRORS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE EOR AND THE TRUSS DESIGNER. REFERENCE BCSI-B5.
      f. SUBMIT THE DRAWINGS FROM THE TRUSS DESIGNER/MANUFACTURER TO THE BUILDING DEPARTMENT PRIOR TO FABRICATION FOR APPROVAL. A COPY OF THIS SUBMITTAL SHALL BE PROVIDED TO TEH ENGINEER OF RECORD FOR REVIEW OF GENERAL CONFORMANCE TO THE DESIGN INTENT. THE CONTRACTOR SHALL INCORPORATE THE TIME REQUIRED FOR THE SUBMITTAL TO BE REVIEWED, STAMPED AND APPROVED BY ALL PARTIES AND SHALL HAVE THE APPROVED TRUSS PLANS ON THE JOB SITE PRIOR TO FOUNDATION INSPECTION.
3. TRUSS DESIGNER REQUIREMENTS:
   A. THE TRUSS DESIGNER SHALL MEET ALL THE REQUIREMENTS LISTED IN SECTION 2.3.5 OF ANSI/TPI 1-2014 INCLUDING THE FOLLOWING:
      a. TRUSS DESIGNER SHALL SUPERVISE THE PREPARATION OF THE TRUSS DESIGN DRAWINGS WHICH SHALL CONTAIN THE INFORMATION LISTED IN SECTION 2.3.5.5 OF ANSI/TPI 1-2014. THIS INCLUDES ALL TRUSS TO TRUSS CONNECTIONS, AND DETAILS FOR THE "CALIFORNIA FILL" AREAS.
      b. TRUSS DESIGNER SHALL COMPLY WITH THE REFERENCED CODE AND DESIGN CRITERIA ABOVE.
      c. TRUSS DESIGNER SHALL SHOW ALL HANGERS, BRACING AND RESTRAINTS AS WELL AS METHOD OF RESTRAINT/BRACING ON THE TRUSS PLANS TO MEET ANY SEISMIC AND WIND REQUIREMENTS OF THE CODE.
      d. SUBMIT TRUSS DESIGN DRAWINGS INCLUDING ALL RELEVANT DETAILS FOR THE FABRICATION OF THE TRUSSES AND PREPARE CALCULATIONS. ALL PLANS,DETAILS AND CALCULATIONS FOR THE TRUSSES SHALL BE STAMPED AND SIGNED BY A LICENSED PROFESSIONAL ENGINEER (CIVIL OR STRUCTURAL), LICENSED TO PRACTICE IN THE STATE OF CALIFORNIA.

WOOD STRUCTURAL PANELS (SHEATHING)

1. WOOD STRUCTURAL PANELS SHALL MEET THE FOLLOWING MINIMUM STANDARDS EXCEPT WHERE OTHERWISE NOTED:

WOOD STRUCTURAL PANEL PROPERTIES							
USE	PLY	BOND CLASSIFICATION [C]	SHEATHING GRADE	PERFORMANCE RATING	SPAN RATING	RATING [B]	REFERENCE [A]
ROOF	5	EXPOSURE 1	REFER TO TYPICAL DIAPHRAGM SCHEDULE			APA	2022 CBC 2303.1.5 (DOC PS 1-19 OR PS 2-18)
FLOOR	5	EXPOSURE 1				APA	
WALL [D]	5	EXPOSURE 1	REFER TO TYPICAL SHEAR WALL SCHEDULE			APA	

TABLE NOTES:

A. WOOD STRUCTURAL PANELS SHALL CONFORM TO THE REQUIREMENTS FOR THEIR TYPE IN ACCORDANCE WITH THE FOLLOWING VOLUNTARY STANDARDS BY THE ENGINEERED WOOD ASSOCIATION (APA):
   a. VOLUNTARY PRODUCT STANDARD, STRUCTURAL PLYWOOD, PS 1-09
   b. VOLUNTARY PRODUCT STANDARD, PERFORMANCE STANDARD FOR WOOD-BASED STRUCTURAL-USE PANELS, PS 2-10

B. WOOD STRUCTURAL PANELS SHALL BE IDENTIFIED BY THE APA TRADEMARK INDICATING CONFORMANCE TO THE APPLICABLE VOLUNTARY STANDARD

C. WHERE PANELS ARE EXPOSED TO REPEATED WETTING AND REDRYING, LONG-TERM EXPOSURE TO WEATHER, OR CONDITIONS OF SIMILAR SEVERITY, "EXTERIOR" APA RATED PLYWOOD SHEATHING SHALL BE USED. C-D "EXPOSURE 1" APA RATED PLYWOOD SHEATHING (CDX) SHALL NOT BE USED FOR CONDITIONS INVOLVING LONG-TERM EXPOSURE TO WEATHER.
   a. EXCEPTION: WOOD STRUCTURAL PANEL ROOF SHEATHING EXPOSED TO THE OUTDOORS ON THE UNDERSIDE IS PERMITTED TO BE "EXPOSURE 1" TYPE.
   b. WOOD STRUCTURAL PANELS TO BE USED AS SIDING SHALL COMPLY WITH ANSI/APA PRP-210.

D. ORIENTED STRAND BOARD (OSB) WITH EQUIVALENT CLASSIFICATION AND RATINGS MAY BE USED IN LIEU OF PLYWOOD FOR WOOD STRUCTURAL PANEL WALL SHEATHING.

2. TRANSPORTATION, STORAGE, AND HANDLING:

   A. TRANSPORTATION
      a. IN TRANSPORTING PANELS ON OPEN TRUCK BEDS, COVER THE BUNDLES WITH A TARP.

   B. STORAGE
      a. ALWAYS STORE THE PANELS UNDER COVER WHENEVER POSSIBLE
      b. WHEN STORING PANELS OUTSIDE STACK THEM ON A LEVEL SURFACE ON TOP OF STRINGERS OR OTHER BLOCKING, THREE STRINGERS MINIMUM.
      c. NEVER LEAVE PANELS IN CONTACT WITH THE GROUND
      d. COVER THE STACK WITH A PLASTIC TARP, ENSURING THAT THE BUNDLE IS WELL VENTILATED TO PREVENT MILDEW.
      e. IF MOISTURE ABSORPTION IS EXPECTED, CUT THE STEEL BAND TO PREVENT DAMAGE
      f. KEEP SANDED OR OTHER APPEARANCE GRADE PANELS AWAY FROM HIGH TRAFFIC AREAS

   C. HANDLING
      a. ALWAYS PROTECT ENDS AND EDGES, ESPECIALLY TONGUE AND GROOVE PRODUCTS, FROM PHYSICAL DAMAGE.
      b. ACCLIMATIZE THE PANELS FOR 24 HOURS MINIMUM BEFORE INSTALLATION BY STANDING THE PANELS ON EDGE WITH A GAP BETWEEN EACH TO ALLOW FOR AIR CIRCULATION OR PER MANUFACTURER'S RECOMMENDATIONS.

3. PLYWOOD ORIENTATION

   A. ROOF AND FLOOR SHEATHING SHALL BE LAID WITH THE GRAIN OF THE OUTER PILES PERPENDICULAR TO THE FRAMING MEMBERS. SHALL BE CONTINUOUS OVER 2 JOIST BAYS MINIMUM AND END JOINTS SHALL BE JOINED OVER FRAMING AND STAGGERED. LEAVE A ⅛" GAP BETWEEN PANELS TO ALLOW FOR PANEL EXPANSION UNLESS RECOMMENDED OTHERWISE BY THE PANEL MANUF. REFER TO SPECIFIC DETAILS IN THE DRAWINGS FOR FURTHER PARAMETERS.

   B. PLYWOOD OR OSB WALL SHEATHING MAY BE APPLIED VERTICALLY OR HORIZONTALLY. ALL END JOINTS BE JOINED OVER FRAMING AND STAGGERED.

4. BLOCKING:

   A. ROOF: ALL ROOF SHEATHING SHALL BE BLOCKED UNLESS SPECIFICALLY ALLOWED ON PLANS. WHERE PERMITTED TO BE UNBLOCKED, ALL UNBLOCKED EDGES SHALL BE TONGUE AND GROOVE.

   B. ALL FLOOR SHEATHING SHALL BE BLOCKED UNLESS SPECIFICALLY ALLOWED ON PLANS. WHERE PERMITTED TO BE UNBLOCKED, ALL UNBLOCKED EDGES SHALL BE TONGUE AND GROOVE.

   C. WALLS: ALL SHEAR WALLS SHALL BE FULLY BLOCKED AT PLYWOOD EDGES.

5. FASTENERS

   A. USE SHEATHING NAILS SAME GAUGE AS COMMON WIRE NAILS WITH LENGTHS AT LEAST EQUAL TO SHEATHING THICKNESS PLUS REQUIRED PENETRATION PER AWS SDPWS TABLE 4.2A OR 4.3A (AS REQUIRED).

   B. EQUIVALENT PNEUMATIC DRIVE NAILS MAY BE USED IF FASTENER MANUFACTURER HAS RECEIVED ICC OR IAPMO APPROVAL FOR THE INTENDED US, FASTENERS TO BE SUBSTITUTED SHALL BE EQUIVALENT IN LATERAL AND WITHDRAWAL STRENGTH TO THE SIZE OF COMMON NAIL SPECIFIED.

   C. USE OF MACHINE NAILING IS SUBJECT TO A SATISFACTORY JOB SITE DEMONSTRATION FOR EACH PROJECT AND THE APPROVAL BY THE PROJECT ARCHITECT OR STRUCTURAL ENGINEER. THE APPROVAL IS SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE. MACHINE NAILING WILL NOT BE APPROVED IN 5/16" PLYWOOD OR OSB SHEATHING. IF NAIL HEADS PENETRATE THE OUTER PLY MORE T HAN WOULD BE NORMAL FOR A HAND HAMMER OR IF MINIMUM ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED, THE PERFORMANCE WILL BE DEEMED UNSATISFACTORY.

   D. TYPICAL NAILING SHALL BE 10d AT 6" O.C. AT ALL SUPPORTED EDGES AND OVER SHEAR WALLS, AND 10D AT 12" O.C. AT ALL INTERMEDIATE SUPPORTS, UNLESS OTHERWISE NOTED, SEE PLANS AND REFER TO SHEAR WALL SCHEDULE.

SAWN LUMBER

1. FRAMING LUMBER SHALL MEET THE FOLLOWING MINIMUM STANDARDS EXCEPT WHERE OTHERWISE NOTED:

SAWN LUMBER PROPERTIES				
USE	SIZE	SPECIES	GRADE	REFERENCE
MUDSILLS	2x4	D.F.	STANDARD OR BETTER PRESSURE TREATED	2022 CBC 2303.1.9
	2x6 AND LARGER	D.F.	NO. 2 OR BETTER PRESSURE TREATED	
	2x	REDWOOD	FOUNDATION GRADE	
HORIZONTAL FRAMING LUMBER				
ROOF JOISTS AND RAFTERS	2x	D.F.	NO. 2	WCLIB & WWPA
FLOOR JOISTS	2x	D.F.	NO. 2	
HEADERS AND BEAMS	4x	D.F.	NO. 2	
ANY OTHER HORIZONTAL	4x4 AND SMALLER	D.F.	NO. 2	
	6x6 AND LARGER	D.F.	NO. 1	
VERTICAL FRAMING LUMBER				
TOP PLATES	2x	D.F.	NO. 2	WCLIB & WWPA
STUDS	2x4 & 3x4	D.F.	STUD	
	2x6 & 2x8	D.F.	NO. 2	
POSTS	4x4 & 4x6 POSTS	D.F.	NO. 2	
	6x6 & LARGER POSTS	D.F.	NO. 1	
ALL OTHER FRAMING LUMBER				
ALL OTHER FRAMING LUMBER: UNO	ALL SIZES	D.F.	STANDARD & BETTER	WCLIB & WWPA

2. FLOOR JOISTS SHALL BE GRADE STAMPED "S-DRY" WHICH INDICATES A MOISTURE CONTENT NOT EXCEEDING 19 PERCENT.

3. ALL SOLE PLATES AND TOP PLATES SHALL BE GRADE STAMPED "KD" WHICH INDICATES KILN DRIED WITH A MOISTURE CONTENT NOT EXCEEDING 15 PERCENT AT BUILDINGS WITH 4 OR MORE STORIES.

4. STUD WALLS SHOWN ON PLANS ARE NONBEARING PARTITIONS WALLS, BEARING WALLS OR SHEAR WALLS BELOW THE FRAMING LEVEL, UNLESS NOTED OTHERWISE. STUDS SHALL BE SIZE AND SPACING AS NOTED IN THE DRAWINGS. SEE PLANS AND ARCHITECTURAL DRAWINGS, UNLESS OTHERWISE NOTED.

5. MINIMUM FRAMING NAILING SHALL CONFORM TO CBC TABLE 2304.10.2. ALL NAILS SHALL BE COMMON WIRE NAILS. PREDRILL NAIL HOLES TO 70% OF NAIL SHANK DIAMETER WHERE NAILING TENDS TO SPLIT WOOD.

6. UNLESS OTHERWISE NOTED, ALL WOOD SILL PLATES UNDER BEARING, EXTERIOR, OR SHEAR WALLS IN CONTACT WITH CONCRETE OR MASONRY SHALL BE BOLTED TO THE CONCRETE OR MASONRY WITH 5/8" Ø X 12" BOLTS W/ 0.229" X 3" X 3" PLATE WASHER (GALV) AT 4'-0" O.C. BEGINNING AT 9" O.C. MAXIMUM FROM EACH END OF THE PLATES. THE BOLTS SHALL EXTEND A MINIMUM OF 7" INTO THE CONCRETE OR MASONRY. (POWDER DRIVEN PINS AT 1/3 OF THE BOLT SPACING OR 24" O.C. MAXIMUM MAY BE SUBSTITUTED FOR THE ANCHOR BOLTS AT INTERIOR NON-SHEAR WALLS ONLY).

7. PRESERVATIVE TREATMENT:

   A. WOOD MEMBERS SHALL BE PRESERVATIVE TREATED IN ACCORDANCE WITH AITC 109-07, STANDARD FOR PRESERVATIVE TREATMENT, BASED ON THE SERVICE CONDITION PER THE USE CATEGORIES (UC#) SPECIFIED IN AWPA U1-20.
      a. UC1 - INTERIOR CONSTRUCTION, ABOVE GROUND, DRY - NO PRESERVATIVE TREATMENT REQUIRED.
      b. UC2 - INTERIOR CONSTRUCTION, ABOVE GROUND, WET - PRESERVATIVE TREATMENT REQUIRED IF THE HUMIDITY OR MOISTURE CONDENSATION IS 20% OR GREATER.
      c. UC3 - EXTERIOR CONSTRUCTION ABOVE GROUND - PRESERVATIVE TREATMENT REQUIRED.

   B. FOR ALL TREATED WOOD MEMBERS, ALL CUTS, HOLES OR INJURIES SUCH AS ABRASIONS OR HOLES FROM REMOVAL NAILS AND SPIKES WHICH MAY PENETRATE THE TREATED ZONE SHALL BE FIELD TREATED IN ACCORDANCE WITH AWPA M4-15. THE FOLLOWING FILED TREATMENTS SHALL BE USED:
      a. BORED HOLES: HOLES FOR CONNECTORS OR BOLTS MAY BE TREATED BY PUMPING COAL TAR ROOFING CEMENT MEETING ASTM D5643 INTO HOLES USING A GREASE GUN OR SIMILAR DEVICE.
      b. EXTERIOR: COPPER NAPHTHENATE.
      c. INTERIOR: INORGANIC BORON PRESSERVATIVES LIMITED TO USE IN APPLICATIONS NOT IN CONTACT WITH GROUND AND CONTINUOUSLY PROTECTED FROM LIQUID WATER.

   C. ALL LUMBER IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED LUMBER WITH AWPA TREATMENT C2 USING EITHER ALKALINE QUAT (ACQ TYPE B AND D), COPPER AZOLE (CBA-A, CA-B), OR SODIUM BORATES (SBX). ANCHOR BOLTS, FASTENERS, AND METAL FRAMING CONNECTORS IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE HOT-DIPPED GALVANIZED TO A RATING OF G-185 PER ASTM A653.

8. PROVIDE 2 STUDS UNDER ALL 4 X 10 AND LARGER BEAMS OR HEADERS AT SPANS 6 FEET OR LONGER. UNLESS OTHERWISE NOTED. WHERE POSTS OR MULTIPLE STUDS UNDER BEAMS OR HEADERS ARE CALLED FOR ON DRAWINGS THOSE POSTS OR MULTIPLE STUDS SHALL BE CARRIED TO THE FOUNDATION/PODIUM LEVEL.

9. PROVIDE THE FOLLOWING BLOCKING AS A MINIMUM, UNLESS SHOWN OTHERWISE:
   2x FULL DEPTH SOLID BLOCKING BETWEEN JOISTS OVER SUPPORT.
   2x FULL DEPTH SOLID BLOCKING BETWEEN JOISTS OVER AND BELOW PARTITION WALLS.

10. DOUBLE JOISTS UNDER PARTITIONS RUNNING PARALLEL TO JOISTS, UNLESS SUPPORTED BY A WALL BELOW OR SHOWN OTHERWISE. NAIL DOUBLED JOISTS WITH 16d AT 12" O.C., STAGGERED.

11. BRIDGING SHALL BE 2 X SOLID BLOCKS, INSTALLED AS FOLLOWS:
   ROOF JOISTS MORE THAN 10" DEPTH, 8'-0" O.C. MAXIMUM, NOT MORE THAN 8'-0" FROM SUPPORT.
   FLOOR JOISTS MORE THAN 10" DEPTH, 8'-0" O.C. MAXIMUM, NOT MORE THAN 8'-0" FROM SUPPORT.

12. JOIST HANGERS AND OTHER METAL FRAMING ACCESSORIES ARE REFERRED TO ON PLANS BY PARTICULAR TYPE AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, STOCKTON, CALIFORNIA. ACCESSORIES OF OTHER MANUFACTURES WITH EQUIVALENT LOAD CARRYING CHARACTERISTICS MAY BE USED WITH APPROVAL BY SEOR.

13. FIRE STOPPING, BACKING FOR INTERIOR FINISHES, NONBEARING WALLS, AND OTHER NON-STRUCTURAL FRAMING ARE NOT NECESSARILY SHOWN ON STRUCTURAL DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS.

HARDWARE AND CONNECTORS

GENERAL:
USE ALL SPECIFIED FASTENERS AS SPECIFIED ON PLANS. IF NOT INDICATED ON PLANS PROVIDE FASTENERS PER MFR'S APPROVED ICC-ESR REPORT OR PRODUCT LITERATURE

HOLDOWNS:
1. DO NOT OVER TIGHTEN NUTS ON TIE-DOWN ANCHOR RODS OR BOLTS. TIGHTEN ANCHOR ROD NUTS ONE-THIRD TO ONE HALF TURN BEYOND FINGER TIGHT
2. INSTALL ALL HOLDOWNS TIGHT TO END STUDS/POST. DO NOT USE FILLER BLOCKS. FOR MISALIGNED ANCHOR BOLTS, EXTEND THE ANCHOR ROD AT A 1:6 (HORIZ/VERT) USING A COUPLER WITH EQUIVALENT ANCHOR ROD AND INSTALL THE HOLDOWN HIGHER ON END STUD / POST
3. FOR HOLDOWNS THAT BOLT TO END POSTS, INSTALL THE HEAD OF THE BOLT TO THE BRACKET SIDE, AND ON THE SIDE OPPOSITE THE BRACKET, INSTALL A WASHER BETWEEN THE NUT AND THE STUD / POSTS

TIE DOWN & COLLECTOR STRAPS:
1. TIE DOWN AND COLLECTOR STRAPS SHALL BE INSTALLED STRAIGHT AND TRUE. DO NOT FOLD, BEND, KINK OR OTHERWISE ALTER CONNECTOR STRAPS
2. INSTALL TIE DOWN STRAPS DIRECT TO POST IN LIEU OF OVER SHEATHING. STRAPS MAY BE INSTALLED ON THE UNSHEATHED SIDE OF THE END STUDS / POSTS

City of COACHELLA EST 1946

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COACHELLA ADUs
COACHELLA, CA

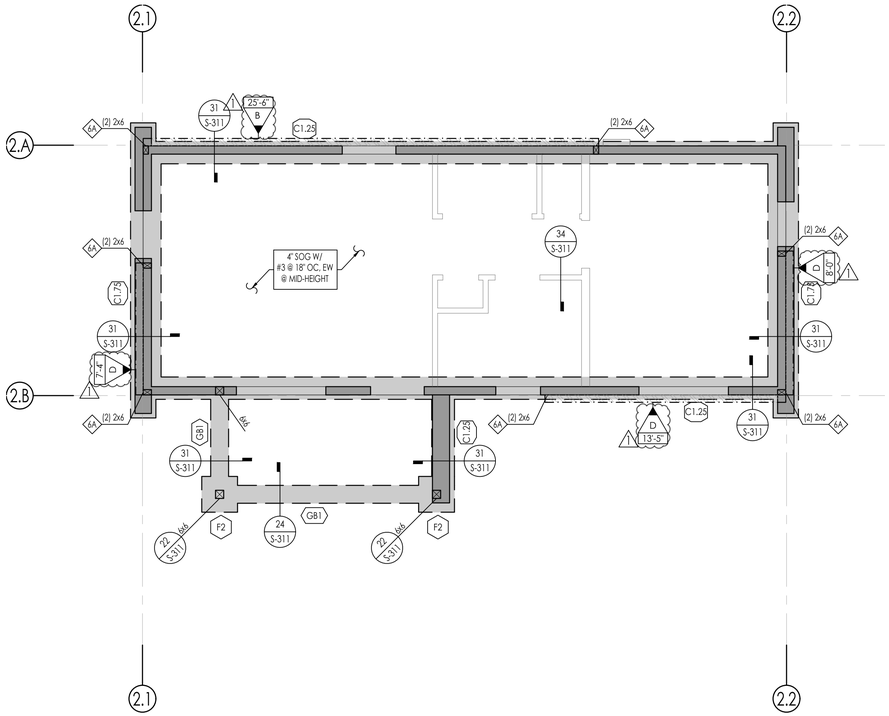
GENERAL NOTES, SPECIAL INSPECTIONS & TESTS

PUBLIC SET

DATE
JANUARY 11, 2024

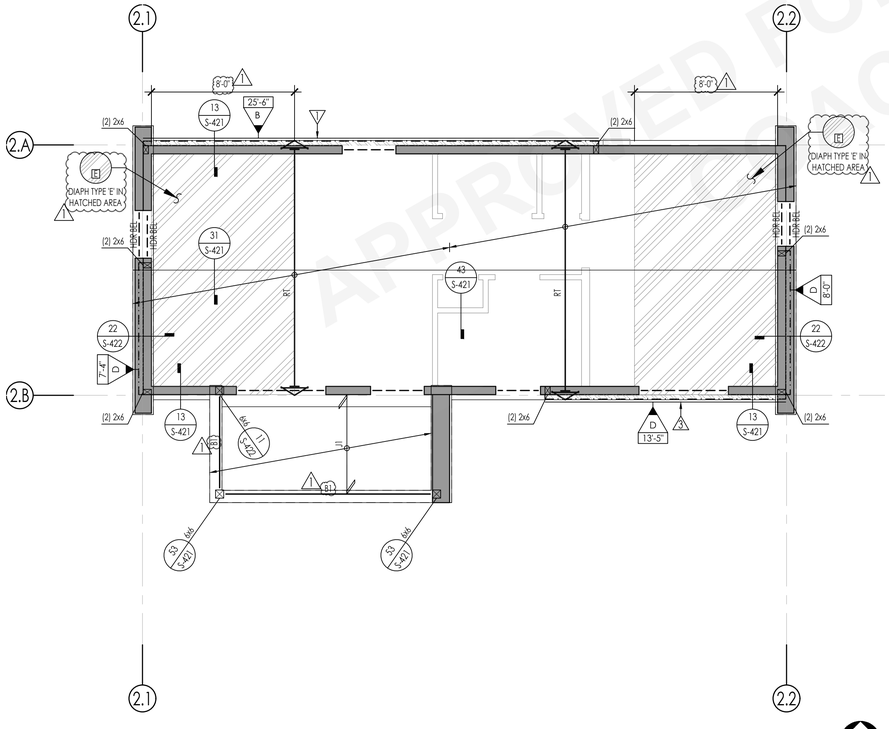
SHEET
S-103

APPROVED FOR CONSTRUCTION CITY OF COACHELLA



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

PLAN NORTH



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

PLAN NORTH

GENERAL PLAN NOTES

GENERAL

1. SEE THE FOLLOWING SHEETS FOR GENERAL NOTES AND TYPICAL DETAILS.

DESCRIPTION	SHEET(S)
SYMBOLS AND ABBREVIATIONS	S-101
STRUCTURAL GENERAL NOTES	S-102 - S-103
TESTING AND INSPECTION	S-103
TYPICAL CONCRETE DETAILS	S-301
TYPICAL WOOD DETAILS	S-401 - S-403

2. SEE ARCHITECTURAL DRAWINGS FOR FINISHED FLOOR ELEVATIONS. REFERENCE FINISHED FLOOR ELEVATION = 0'-0" CORRESPONDS TO FINISHED FLOOR ELEVATION.
3. SEE ARCHITECTURAL DRAWINGS FOR ALL EXTERIOR CONCRETE PAVING, SLABS, BASES, CURBS, ETC.
4. FOR ANY DIMENSIONAL INFORMATION NOT SHOWN, SEE ARCHITECTURAL DRAWINGS.
5. ALL DIMENSIONS SHOWN ARE FACE OF SHEATHING, OR CENTERLINE OF COLUMN, UNLESS NOTED OTHERWISE. ALL COLUMNS ARE CENTERED IN STUD WALLS.
6. SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS IN BEARING AND NON-BEARING WALLS.
7. SEE ARCHITECTURAL DRAWINGS FOR LOCATION OF INTERIOR NON-BEARING PARTITIONS.
8. ALL POSTS IN 6"x WALLS SHALL BE 6x6 UNLESS NOTED OTHERWISE
   ALL POSTS IN 4"x WALLS SHALL BE 4x4 UNLESS NOTED OTHERWISE
9. ALL POSTS IN 6" WALLS SHALL BE 6x6, UNLESS NOTED OTHERWISE.

   TYPICAL WALL FRAMING SHALL BE:
   2x6 @ 16" OC @ ALL EXTERIOR WALLS, UNO
   2x4 @ 16" OC @ ALL INTERIOR BEARING WALLS, UNO
   2x4 @ 16" @ ALL INTERIOR NON-BEARING WALLS, UNO

FOUNDATION

10. SEE PLANS AND ARCHITECTURAL DRAWINGS FOR DEPRESSIONS AND/OR SLOPES IN CONCRETE SLABS.
11. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL EMBEDDED ITEMS AND SLAB PENETRATIONS.
12. FOR TYPICAL SLAB-ON-GRADE REQUIREMENTS, INCLUDING SLAB JOINTS, SEE DETAIL 31/S-301
13. PLATE WASHERS ARE REQUIRED FOR ALL SILL PLATE ANCHOR BOLTS
14. ALL HOLDOWN ANCHOR NUTS SHALL BE TIGHTENED TO FINGER TIGHT PLUS ONE-HALF WRENCH TURN JUST PRIOR TO COVERING
15. ALL BOLT HOLES, IN WOOD MEMBERS, SHALL BE DRILLED A MAXIMUM OF 1/16" OVERSIZED. INSPECTOR TO VERIFY
16. THE BUILDING PAD SHALL BE PREPARED AS OUTLINED IN DETAIL 53/S-301. THE BUILDING OFFICIAL SHALL REQUIRE PAD CERTIFICATION BY A GEOTECHNICAL ENGINEER AT THEIR DISCRETION.
17. BOTTOM OF FOOTING SHALL BE, UNLESS DEEPER FOUNDATIONS ARE REQUIRED BY THE BUILDING OFFICIAL:
    A. 18" BELOW PAD OR ADJACENT GRADE AT PERIMETER, WHICHEVER IS DEEPER, UNO
    B. 18" BELOW PAD OR ADJACENT GRADE AT INTERIOR GRADE BEAMS, WHICHEVER IS DEEPER, UNO
    NOTE: FOOTING MUST BE DEEPENED LOCALLY PER DETAIL 32/S-301 TO ACCOMMODATE ANCHOR BOLT HOLDOWN EMBED DEPTHS
18. A MINIMUM 10-MIL (0.010 INCH; 0.254 MM) VAPOR RETARDER CONFORMING TO ASTM E1745 CLASS A REQUIREMENTS WITH JOIST LAPPED NOT LESS THAN 6 INCHES (152 MM) SHALL BE PLACED BETWEEN THE CONCRETE FLOOR SLAB AND THE BASE COURSE OR THE PREPARED SUBGRADE WHERE A BASE COURSE DOES NOT EXIST. WHEN A VAPOR RETARDER IS REQUIRED, A CAPILLARY BREAK SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS CODE, CHAPTER 4, DIVISION 4.5. A CAPILLARY BREAK SHALL BE INSTALLED IN COMPLIANCE WITH A 4-INCH-THICK (101.6 MM) BASE OF ½ INCH (12.7) 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.

FRAMING

19. SEE ARCHITECTURAL DRAWINGS FOR ALL TOP OF SHEATHING AND TOP OF WALL ELEVATIONS.
20. ALL LINES OR MEMBERS INDICATED AS "STRUT" SHALL RECEIVE (2) ROWS OF BOUNDARY NAILING (BN), STAGGERED.
21. ALL INTERIOR WALLS NOT SHOWN ON THE STRUCTURAL FRAMING PLANS BUT SHOWN ON THE ARCHITECTURAL DRAWINGS SHALL BE CONSTRUCTED PER NON-BEARING PARTITION WALL DETAIL 43/S-401, UNO.
22. PLYWOOD SHEATHED DIAPHRAGM TYPES:
    ALL ROOF DIAPHRAGMS SHALL BE TYPE A, UNO
    REFER TO 12/S-403
23. TRUSS MEMBERS AND COMPONENTS SHALL NOT BE CUT, NOTCHED, DRILLED OR OTHERWISE ALTERED IN ANY WAY WITHOUT WRITTEN CONCURRENCE AND APPROVAL OF A REGISTERED DESIGN PROFESSIONAL.
24. ALTERATIONS RESULTING IN THE ADDITION OF LOADS TO ANY MEMBER (E.G. HVAC EQUIPMENT, WATER HEATER) SHALL NOT BE PERMITTED WITHOUT VERIFICATION THAT THE TRUSS IS CAPABLE OF SUPPORTING SUCH ADDITIONAL LOADING.

SYMBOL LEGEND

- XX'-"X" / X — INDICATES SHEAR WALL TYPE AND LENGTH, PER SCHEDULE ON DETAIL 13/S-402
- * — INDICATES BLOCKING & STRAPPING ABOVE & BELOW WINDOW OPENINGS PER DETAIL 44/S-402
- INDICATES HEADER @ OPENING. REFER TO 32/S-401 FOR HEADER SIZE, UNLESS NOTED OTHERWISE
- INDICATES BEARING STUD WALL PER PLAN
- (X) — INDICATES TOP PLATE SPLICE NAILING PER DETAILS 31/S-403. NAILING APPLIES TO ENTIRE LENGTH OF TOP PLATE. PROVIDE TYPE (C) SPLICE, ULESS NOTED OTHERWISE
- DSC # — INDICATES DSC CONNECTION PER 24/S-403
- CS_ / CMST_ — INDICATES STRAP PER 24/S-403 OR 34/S-403, UNO

FOUNDATION SCHEDULES

SHEARWALL HOLDOWN SCHEDULE

SPECIFIES HOLDOWN/ STRAP DETAIL	INDICATES HOLDOWN/ STRAP TYPE	DETAIL
6x	INDICATES SIMPSON HOLDOWN W/ SSTB TO: CONCRETE FOUNDATION:	12/S-311

CONTINUOUS FOOTING SCHEDULE

MARK	WIDTH	MIN EMBED BELOW LOWEST PAD GRADE	LONG REINF	TRANS REINF	DETAIL
C1.25	1'-3"	SEE NOTE 17	(2) #5 T&B	#3 @ 12" OC, BOT	31/S-311
C1.75	1'-9"	SEE NOTE 17	(3) #5 T&B	#3 @ 12" OC, BOT	31/S-311

GRADE BEAM SCHEDULE

TYPE	WIDTH	THICKNESS	MIN EMBED BELOW LOWEST PAD GRADE	LONG REINF	TRANS REINF	DETAIL
GB1	1'-0"	1'-0"	SEE NOTE 17	(2) #4 @ TOP (2) #4 @ BOT	#3 @ 24" OC	24/S-311

PAD FOOTING SCHEDULE

TYPE	WIDTH	LENGTH	THICKNESS	MIN EMBED BELOW LOWEST PAD GRADE	TOP REINF	BOT REINF	DETAIL
F2	2'-0"	2'-0"	1'-6"	SEE NOTE 17	(3) #5, EW	(3) #5, EW	22/S-311

NOTE: FOOTING MUST BE DEEPENED LOCALLY PER DETAIL 32/S-301 TO ACCOMMODATE AB HOLDOWN EMBED DEPTHS

ROOF FRAMING SCHEDULES

ROOF BEAM SCHEDULE

MARK	SIZE	REMARKS
B1	6x6	
B2	6x8	

FLOOR RAFTER SCHEDULE

MARK	SIZE	REMARKS
J1	2x6 @ 24" OC	

HEADER SCHEDULE

MARK	SIZE	REMARKS
H1	6x6	

PREFABRICATED ROOF TRUSS

1. FOR PREFABRICATED ROOF TRUSS NOTES SEE NOTES ON SHEET S-103

ROOF TRUSS SCHEDULE

MARK	DESCRIPTION	REMARKS
RT	ROOF TRUSS (COMMON)	24" OC MAX
SGT	STRUCTURAL GABLE TRUSS	
MT	MONO PITCH TRUSS	24" OC MAX
JT	JACK TRUSS	24" OC MAX
VJT	VALLEY JACK TRUSS	24" OC MAX
CJT	CORNER JACK TRUSS	
GT	GIRDER TRUSS	
MGT	MONO PITCH GIRDER TRUSS	
DT (#*)	DRAG TRUSS	
CGT	CALIFORNIA GIRDER TRUSS	
HR	HIP RAFTER / JACK RAFTER	
CHT	CALIFORNIA HIP TRUSS	24" OC MAX
SCT	SCISSOR TRUSS	24" OC MAX, CEILING SLOPE PER ARCH

(#*) - EQUALS DRAG FORCE IN LBS. DRAG FORCE IS AT A FACTORED LEVEL (0.7E) DRAG FORCES CALCULATED IN ACCORDANCE WITH ASCE 7-16 12.10.1.1, IN STRUCTURES ENTIRELY BRACED BY LIGHT FRAME SHEAR WALLS, OR PORTIONS THEREOF, DRAG MEMBERS SHALL BE DESIGNED TO RESIST FORCES USING THE LOAD COMBINATIONS OF ASCE 7-16 SECTION 12.4.2.3 IN ALL OTHER STRUCTURES DRAGS SHALL INCLUDE THE EFFECT OF OVER STRENGTH PER ASCE 7-16 12.4.3.2

APPROVED FOR USE IN THE CITY OF COACHELLA ONLY

City of COACHELLA EST 1946

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COACHELLA ADUs
COACHELLA, CA

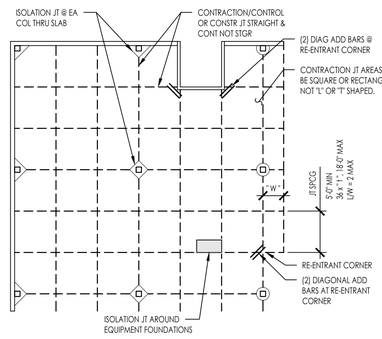
FOUNDATION & ROOF FRAMING PLAN - MODERN DESERT

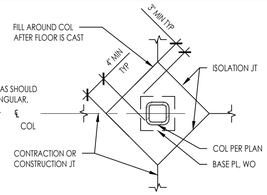
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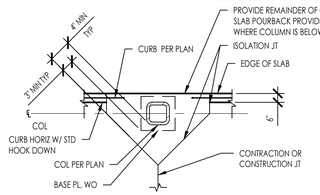
SHEET
S-211

N:\2800\2939-01 C1122-Coachella Design Services ADU\Plans\Structural\CorDoc\Sheet Files\Plan 2\2939-01 C1122 - Plan 2.dwg, S-211, Jan 16, 2024, 5:01pm, Alopez

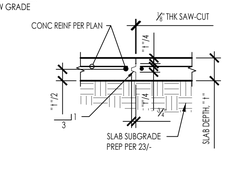




COLUMN ISOLATION JOINT



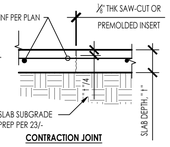
COLUMN ISOLATION JOINT



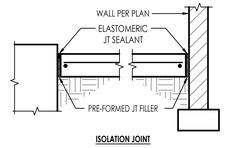
CONSTRUCTION JOINT (TYPICAL)

NOTES:

1. IF SAW CUT CONTRACTION OR CONTROL JOINT IS USED, SAW-CUT WITHIN 24 HOURS. EARLY ENTRY SAWS MAY BE USED WITHIN 1-4 HOURS OF POUR, AND CONVENTIONAL SAWS 4-12 HOURS OF POUR DEPENDING ON WEATHER.
2. FILL CONTRACTION JOINT WITH AN ELASTOMERIC JOINT COMPOUND RATED FOR ITS USE. FOR INDUSTRIAL FLOORS SUBJECTED TO HARD WHEELED TRAFFIC, USE SEALANTS RATED FOR SUCH APPLICATIONS BY THE MANUFACTURER.
3. DOWELS IN INDUSTRIAL FLOOR APPLICATIONS SHOULD BE SMOOTH ALIGNED, AND SUPPORTED SO THEY WILL REMAIN PARALLEL IN BOTH HORIZONTAL AND VERTICAL PLANES DURING PLACING AND FINISHING.
4. IN STEEL AND/OR CONC. BUILDINGS DO NOT POUR DIAMOND UNTIL STRUCTURAL STEEL AND CONCRETE ABOVE HAS BEEN INSTALLED.



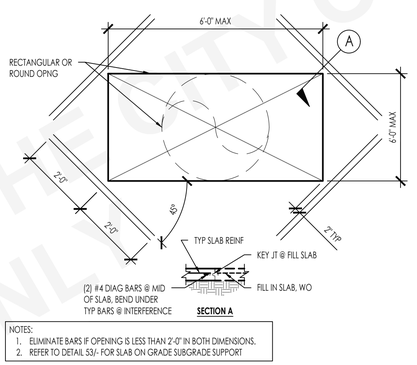
CONTRACTION JOINT



ISOLATION JOINT

SLAB ON GRADE JOINTS

2927-01-CU22 - S301 - 31 | NTS | 31



135 HOOK

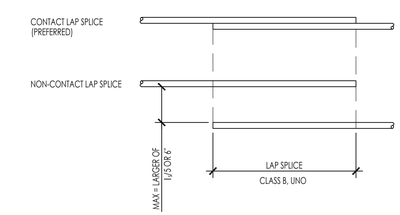
90 HOOK*

BAR SIZE	D
#3	1½"
#4	2"
#5	2½"

* PROVIDE $10d_b$ EXTENSIONS IN LIEU OF $6d_b$ AT ALL FRAME COLUMNS, GIRDERS, SHEAR WALLS AND SHEAR WALL BOUNDARY MEMBERS

REINF TIES AND STIRRUPS

2927-01-CU22 - S301 - 21 | NTS | 21



REINFORCING TENSION DEVELOPMENT LENGTH AND LAP SPLICE SCHEDULE

BAR SIZE	DEVELOPMENT LENGTH, l_d (CLASS A LAP SPLICE)			LAP SPLICE, l_s (CLASS B LAP SPLICE)		
	f'c (psi)			f'c (psi)		
	2,500	3,000	4,000	2,500	3,000	4,000
#3	1'-6"	1'-5"	1'-3"	2'-0"	1'-10"	1'-7"
#4	2'-0"	1'-10"	1'-7"	2'-8"	2'-5"	2'-1"
#5	2'-6"	2'-4"	2'-0"	3'-3"	3'-0"	2'-7"
#6	3'-0"	2'-9"	2'-5"	3'-11"	3'-7"	3'-2"
#7	4'-5"	4'-0"	3'-4"	5'-9"	5'-2"	4'-4"
#8	5'-0"	4'-7"	4'-0"	6'-6"	5'-11"	5'-2"
#9	5'-8"	5'-2"	4'-6"	7'-4"	6'-9"	5'-10"
#10	6'-5"	5'-10"	5'-1"	8'-3"	7'-7"	6'-7"
#11	7'-1"	6'-6"	5'-7"	9'-2"	8'-5"	7'-3"

NOTES:

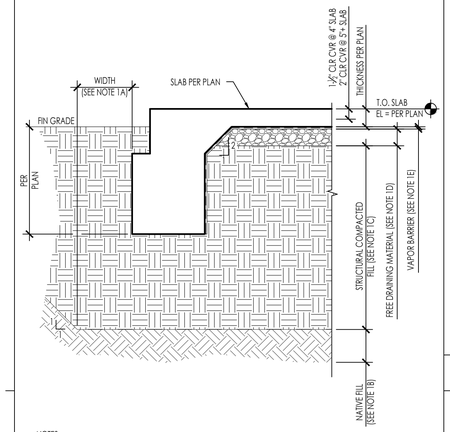
1. VALUES ABOVE ARE FOR REINFORCEMENT WITH THE FOLLOWING PARAMETERS:
   - A. GRADE 60 REINFORCEMENT
   - B. NORMAL WEIGHT CONCRETE
     - a. FOR LIGHTWEIGHT CONCRETE MULTIPLY THE VALUES ABOVE BY 1.3
   - C. NON-EPOXY COATED REINFORCEMENT
   - D. HORIZONTAL BARS WITHOUT 12" OF CONCRETE BELOW (BOTTOM BARS), AND VERTICAL BARS
     - a. FOR TOP BARS WITH 12" OR MORE OF CONCRETE BELOW THE BAR MULTIPLY THE VALUES ABOVE BY 1.3
   - E. CLEAR SPACING NOT LESS THAN d_b, CLEAR COVER NOT LESS THAN d_b AND STIRRUPS THROUGH L_0 NOT LESS THAN MIN

     OR

     CLEAR SPACING NO LESS THAN $2d_b$ AND CLEAR COVER NOT LESS THAN db
     - a. FOR OTHER SPACING AND COVER CONDITIONS MULTIPLY THE VALUES ABOVE BY 1.5
   - F. REINFORCEMENT NOT IN SHEAR WALLS
     - a. FOR REINFORCEMENT IN SHEAR WALLS MULTIPLY THE VALUES ABOVE BY 1.25
2. THE MULTIPLIERS LISTED IN NOTE 1 ABOVE ARE CUMULATIVE INCREASES IN DEVELOPMENT/LAP SPLICE LENGTH.
3. ALL LAP SPLICES REFERENCED IN THE PLANS SHALL BE CLASS B UNLESS NOTED OTHERWISE.
4. WHEN REINFORCING BARS OF TWO SIZES ARE LAP-SPLICED IN TENSION, USE THE LARGER OF THE TENSION CLASS B, LAP SPLICE LENGTH (l_s) OF THE SMALLER BAR, AND THE CLASS A, TENSION DEVELOPMENT LENGTH (l_d) OF THE LARGER BAR.

REINF DEVELOPMENT LENGTH AND SPLICES

2927-01-CU22 - S301 - 12 | NTS | 12

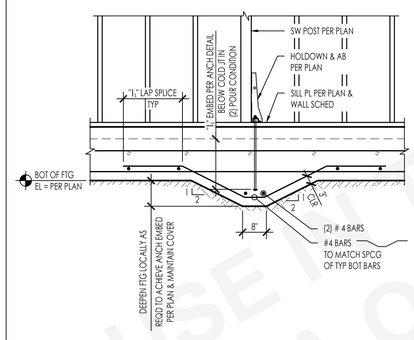


NOTES:

1. PREPARATION OF THE SLAB SUBGRADE SHALL BE AS FOLLOWS.
   - A. OVER-EXCAVATION SHALL EXTEND 5 FEET BEYOND PERIMETER FOUNDATION, TO PROPERTY LINES OR EXISTING IMPROVEMENTS, WHICHEVER IS LEAST.
   - B. NATIVE MATERIALS
     - a. SHALL BE OVER-EXCAVATED 36" BELOW (E) GRADE OR 18" BELOW BOTTOM OF FOOTINGS, WHICHEVER IS GREATEST.
     - b. THE EXPOSED SURFACE SHALL BE SCARIFIED TO A DEPTH OF 6". MOISTURE CONDITIONED TO 3 PERCENT OVER OPTIMUM MOISTURE CONTENT AND COMPACTED TO A MINIMUM RELATIVE DENSITY OF 90 PERCENT (ASTM D1557)
   - C. ENGINEERED COMPACTED FILL
     - a. STRUCTURAL FILL SHALL BE PLACED IN HORIZONTAL LAYERS, EACH APPROXIMATELY 8" THICK BEFORE COMPACTION, AND SHOULD BE CONDITIONS WITH WATER TO PRODUCE A SOIL WATER CONTENT NEAR OPTIMUM MOISTURE AND COMPACTED TO A MINIMUM RELATIVE DENSITY OF 90 PERCENT (ASTM D1557)
   - D. 4" THICK, CLEAN FREE-DRAINING MATERIAL SUCH AS ¾" COARSE AGGREGATE
   - E. REFER TO ARCH DRAWINGS FOR VAPOR BARRIER. INSTALL PER MANUFACTURER'S RECOMMENDATIONS FOR SEALING OF PENETRATIONS, JOINTS AND EDGES.
     - a. VAPOR BARRIER IS NOT TO BE PUNCTURED DURING CONSTRUCTION OF SLAB ON GRADE.
   - F. 2" THICK OPTIONAL SAND LAYER, SHALL BE LIGHTLY MOISTENED PRIOR TO PLACING CONCRETE.

SLAB ON GRADE EDGE AND SUBGRADE PREP

2927-01-CU22 - S301 - 53 | NTS | 53



DEEPENED FTG @ ANCHOR BOLT

2927-01-CU22 - S301 - 32 | NTS | 32

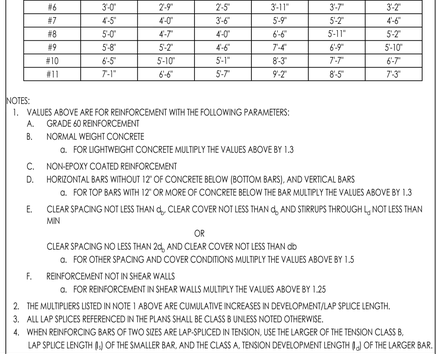
SECTION A

NOTES:

1. ELIMINATE BARS IF OPENING IS LESS THAN 2'-0" IN BOTH DIMENSIONS.
2. REFER TO DETAIL S3/- FOR SLAB ON GRADE SUBGRADE SUPPORT

SOG OPENING

2927-01-CU22 - S301 - 22 | NTS | 22



BAR SIZE	D
#3 THRU #8	6d
#9 THRU #11	8d

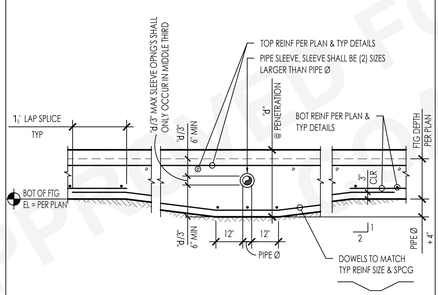
STANDARD HOOK DEVELOPMENT LENGTH l_{dh}"					
BAR SIZE	D	l_{dh}"	NORMAL WEIGHT		
			2,500	3,000	4,000
#3	2 1/4"	6"	0'-9"	0'-9"	0'-8"
#4	3"	8"	1'-0"	0'-11"	0'-10"
#5	3 3/4"	10"	1'-3"	1'-2"	1'-0"
#6	4 1/2"	12"	1'-6"	1'-5"	1'-3"
#7	5 1/4"	1'-2"	1'-9"	1'-8"	1'-5"
#8	6"	1'-4"	2'-0"	1'-10"	1'-7"
#9	9 1/2"	1'-7 1/2"	2'-3"	2'-1"	1'-10"
#10	10 3/4"	1'-10"	2'-7"	2'-4"	2'-1"
#11	12"	2'-0 1/2"	2'-10"	2'-7"	2'-3"

NOTES:

1. ALL HOOKED BARS SHALL EXTEND AS FAR AS POSSIBLE WITH A MINIMUM 2" END COVER AND WITH EMBEDMENT NOT LESS THAN SHOWN ON THE SCHEDULE UNLESS NOTED OTHERWISE ON PLANS.
2. MINIMUM SIDE COVER = 2½".
3. FOR LIGHTWEIGHT CONCRETE MULTIPLY LENGTHS IN SCHEDULE BY 1.3.

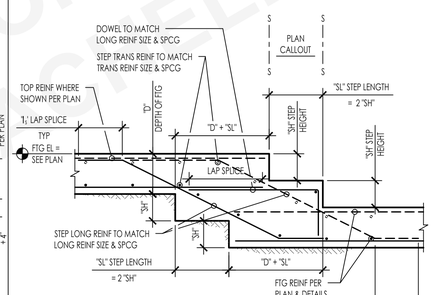
REINF HOOK DEVELOPMENT LENGTH AND BENDS

2927-01-CU22 - S301 - 14 | NTS | 14



SLEEVE THROUGH FOUNDATION (SLAB TURN-DOWN)

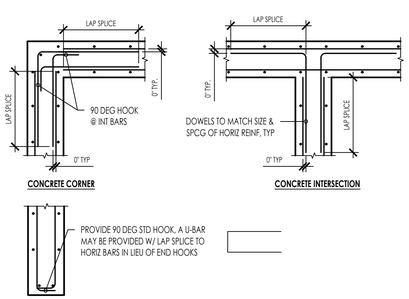
2927-01-CU22 - S301 - 43 | NTS | 43

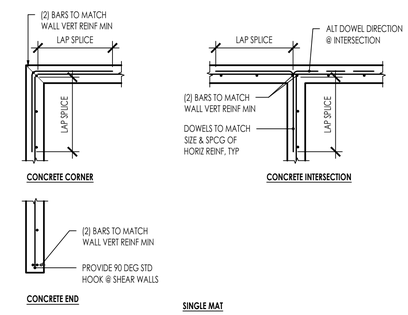


NOTE:
"SH" = 1'-6" MAX

STEP FOOTING

2927-01-CU22 - S301 - 33 | NTS | 33

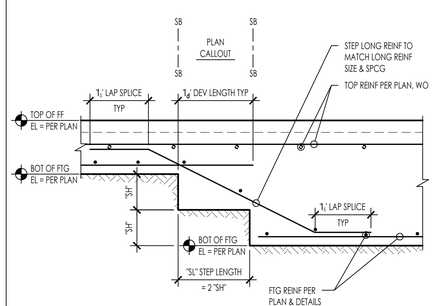




NOTE:
REINFORCEMENT SHOWN ON WALL ELEVATION(S), BOUNDARY REINFORCING DETAILS, AND OTHER SPECIFICALLY REFERENCED DETAILS SHALL TAKE PRECEDENCE OVER REINFORCEMENT SHOWN HERE.

CONC REINF @ INTERSECTION

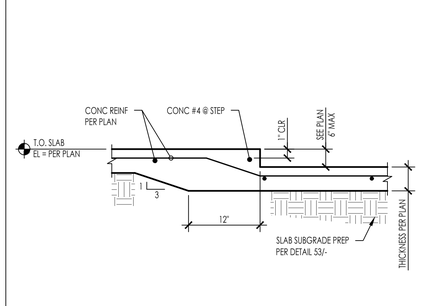
2927-01-CU22 - S301 - 24 | NTS | 24



NOTE:
"SH" = 1'-6" MAX

STEPPED FOOTING (BOTTOM ONLY)

2927-01-CU22 - S301 - 34 | NTS | 34



SLAB ON GRADE DEPRESSION

2927-01-CU22 - S301 - 44 | NTS | 44

APPROVED FOR USE IN THE CITY OF COACHELLA ONLY

City of COACHELLA EST 1946

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COACHELLA ADUs

COACHELLA, CA

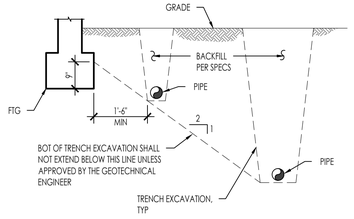
TYPICAL CONCRETE DETAILS

DATE
JANUARY 11, 2024

SHEET
S-301

PUBLIC SET

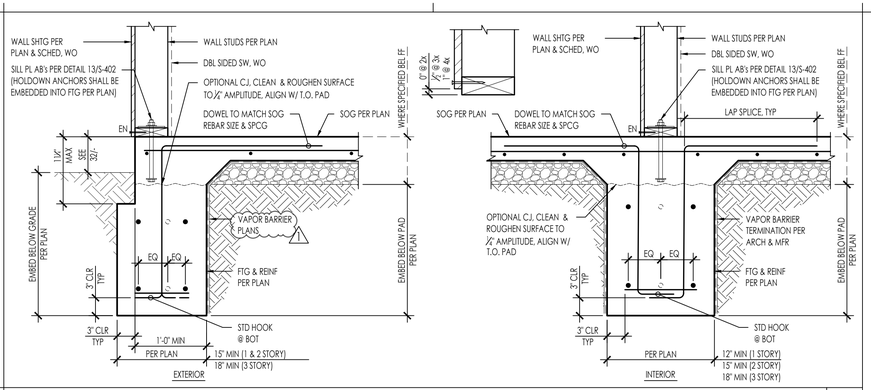
H:\2800\2939-01-CU22-Coachella-Design-Services-ADU-Plans\Structural\ConDocs\Sheet-Files\2939-01-CU22 - S301.dwg, S301 Plan 2, Jan 16, 2024 5:02pm, Alopez



NOTES:
1. CONTRACTOR SHALL COORDINATE ALL PIPE LOCATIONS WITH BUILDING FOUNDATION REQUIREMENTS.
2. IF REQUIREMENTS AS SHOWN CANNOT BE MET STEP FOOTING PER TYPICAL "STEPPED FOOTING" DETAILS (33 / S-301) (34 / S-301)

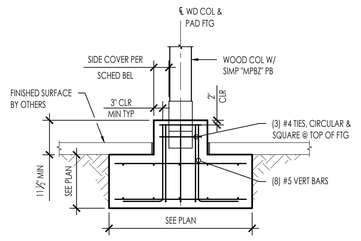
PIPES PARALLEL TO FOOTINGS

2927-01-CU22 - S311 - 51 | NTS | 51

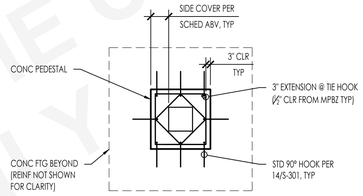


CONTINUOUS WALL FOOTING

2927-01-CU22 - S311 - 31 | NTS | 31

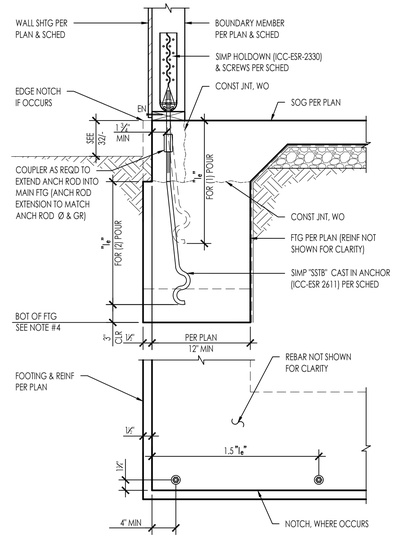


POST SIZE	MIN SIDE COVER
4x4	0'-4"
6x6	0'-5"
8x8	0'-6"



MOMENT BASE POST @ POLE FOOTING

2927-01-CU22 - S312 - 23 | 1/2" = 1'-0" | 22

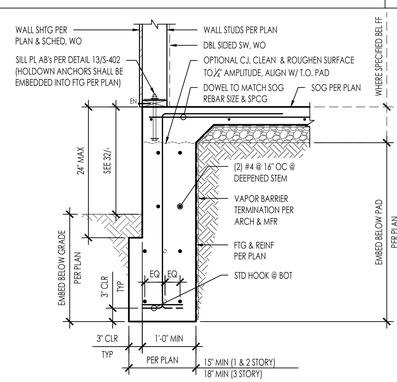


TYPE	HOLDOWN	ANCHOR	DIA (IN)	FASTENERS	BOUNDARY MEMBER MIN THICKNESS (IN)	MIN EMBED l_e" (IN)	ALLOWABLE LOADS (lbs)	
							CORNER	MIDWALL
6A	HDU4-SDS2.5	SSTB16	⅞	10-SDS¼" x 2½"	3	12⅝	3,780	3,780
6B	HDU5-SDS2.5	SSTB20	⅞	14-SDS¼" x 2½"	3	16⅝	4,785	4,785
6C	HDU5-SDS2.5	SSTB24	⅞	14-SDS¼" x 2½"	3	20⅝	5,645*	5,645*
6D	HDQ8-SDS3	SSTB28	⅞	20-SDS¼" x 3"	4½	24⅛	9,230*	9,230*

1. MINIMUM EDGE DISTANCE IS SHOWN ABOVE. ANCHOR LOCATIONS PER PLAN
2. MINIMUM ANCHOR TO ANCHOR SPACING IS 3l$_e$
3. * = CAPACITY LIMITED BY HOLDOWN
4. DEEPEN FOOTING AT HOLDOWN ANCHOR AS REQ'D PER DETAIL 32/-

SSTB ANCHOR & HOLDOWN @ FOUNDATION

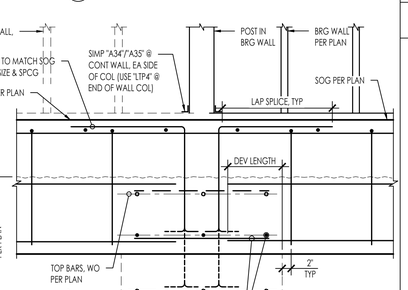
2927-01-CU22 - S311 - 12 | NTS | 12



NOTES:
1. FOOTINGS SHALL BE STEPPED PER DETAIL 33/ & 34/S-301 SO THAT THIS DIMENSION DOES NOT EXCEED 3'-0".
2. TRENCH BELOW FOOTING SHALL BE FILLED WITH CONCRETE OR 3-SACK SLURRY BEFORE POURING FOOTING. CONCRETE FILL SHALL BE SAME WIDTH AS FOOTING AND FULL WIDTH OF PIPE TRENCH.
3. PIPES MAY BE WRAPPED IN 1" THICK LOOSE FOAM IN LIEU OF SLEEVING.
4. CONDUIT MAY BE RUN THRU STEM OR ENCASEMENT UNDER FOOTING WITHOUT SLEEVES OR FOAM WRAP.

PIPES PERPENDICULAR TO FOOTINGS

2927-01-CU22 - S311 - 53 | NTS | 52



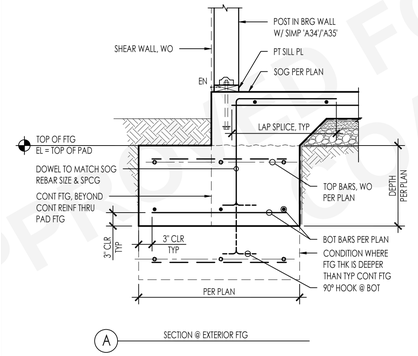
NOTES:
1. MIN DISTANCE TO EXPOSED EARTH APPLIES TO BOTH TURNED DOWN AND STEM WALL FOOTINGS
2. CONCRETE OR IMPERVIOUS SURFACE WITH ADEQUATE DRAINAGE AWAY FROM FOUNDATION (2% MIN SLOPE)
3. FOR BALANCE OF FOOTING INFO NOT SHOWN, SEE DETAIL 31/-
4. WHERE MINIMUM DISTANCE TO EXTERIOR FINISHED GRADE OR SURFACE CANNOT BE ACHIEVED, PROVIDE CONCRETE CURB PER DETAIL 33/-

MINIMUM DISTANCE FROM GRADE TO WOOD FRAMING

2927-01-CU22 - S311 - 32 | NTS | 32

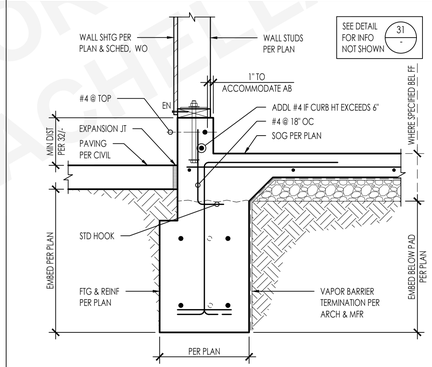
DEEPEND EXTERIOR FOOTING

2927-01-CU22 - S312 - 14 | 3/4" = 1'-0" | 54



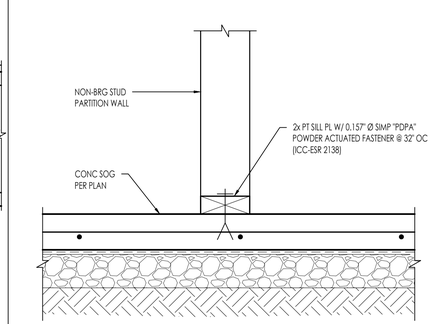
SPREAD FOOTING @ BEARING WALL POST

2927-01-CU22 - S311 - 44 | 3/4" = 1'-0" | 44



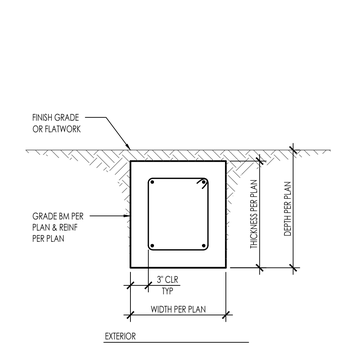
EXTERIOR CONTINUOUS WALL FTG W/ CURB

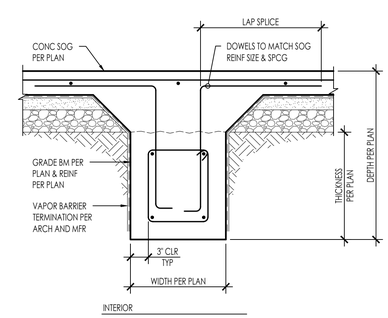
2927-01-CU22 - S311 - 33 | NTS | 33



NON-BEARING WALL ANCHORAGE @ SOG

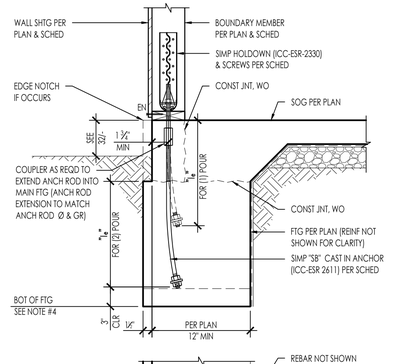
2927-01-CU22 - S311 - 34 | NTS | 34





GRADE BEAM

2927-01-CU22 - S312 - 13 | NTS | 24



TYPE	HOLDOWN	ANCHOR	DIA (IN)	FASTENERS	MIN MEMBER THICKNESS (IN)	MIN EMBED l_e" (IN)	ALLOWABLE LOADS (lbs)	
							CORNER	MIDWALL
7A	HDU5-SDS2.5	SB ⅜" x 24	⅛	14-SDS¼" x 2½"	3	18	5,645*	5,645*
7B	HDQ8-SDS3	SB ⅝" x 24	⅛	20-SDS¼" x 3"	4½	18	9,230*	9,230*
7C	HDU14-SDS2.5	SB 1" x 30	1	36-SDS¼" x 2½"	4x6	24	10,770*	10,770*
					5½		13,090*	14,445*

1. MINIMUM EDGE DISTANCE IS SHOWN ABOVE. ANCHOR LOCATIONS PER PLAN
2. MINIMUM ANCHOR TO ANCHOR SPACING IS 3l$_e$
3. * = CAPACITY LIMITED BY HOLDOWN
4. DEEPEN FOOTING AT HOLDOWN ANCHOR AS REQ'D PER DETAIL 32/S-301

SB ANCHOR & HOLDOWN @ FOUNDATION

2927-01-CU22 - S311 - 14 | NTS | 14

APPROVED FOR USE IN THE CITY OF COACHELLA ONLY

City of COACHELLA EST 1946

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COACHELLA ADUs

COACHELLA, CA

CONCRETE DETAILS

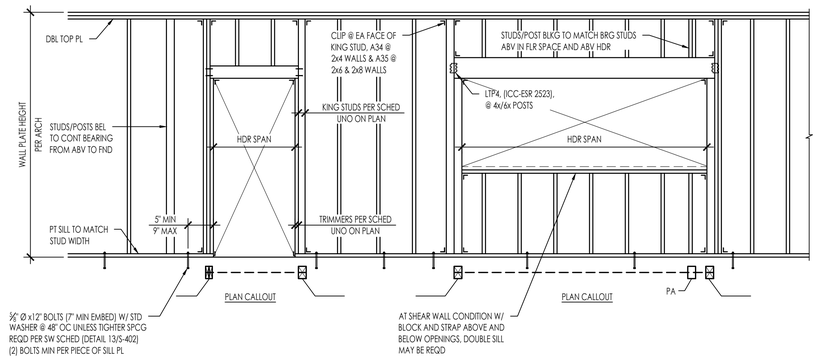
PUBLIC SET

DATE
JANUARY 11, 2024

SHEET
S-311

H:\2800\2939-01-CU22-Coachella-Design-Services\ADU-Plans\Structural\ConDocs\Sheet Files\2939-01-CU22 - S311.dwg, S311 Plan 2, Jan 16, 2024 - 5:02pm, ALopez

BEARING/SHEAR WALL HEADER SCHEDULE					
1-STORY		6 INCH WALLS			
1-STORY	OPENING WIDTH	6x HEADER	SILL AT WINDOW	POST / TRIMMER	KING STUDS
	UP TO 3'-0"	6x4	2x	2x6	2x6
	3'-0" - 5'-0"	6x6	2x	2x6	2x6
	5'-0" - 7'-0"	6x8	(2) 2x	2x6	(2) 2x6



NOTES:
1. THIS DETAIL APPLIES AT ALL EXT WALLS AND INT LOAD BEARING WALLS AND ALSO APPLIES TO SHEAR WALL FRAMING
   A. FOR SHEAR WALLS SEE 34/S-402 FOR ADDTL REQUIREMENTS.
   B. FOR INTERIOR NON-BEARING PARTITIONS SEE DETAIL 43/-
2. HEADERS, KING STUDS AND OTHER REFERENCES ON PLAN GOVERN OVER THIS TYPICAL SCHED/DETAILS
3. PROVIDE A34 @ 4" WALLS & A35 @ 6" OR GREATER WALLS (ICC-ESR 2353)

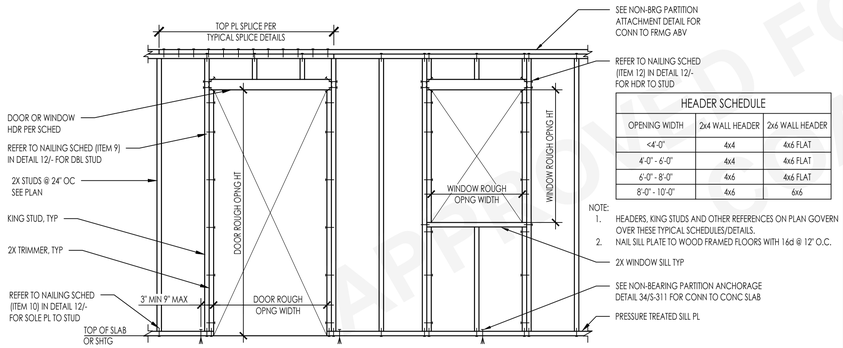
FASTENING SCHEDULE PER 2022 CBC 2304.10.2		
CONNECTION	FASTENING	LOCATION
1. BLOCKING BETWEEN CEILING JOISTS, RAFTERS OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW	3-8d COMMON	EACH END, TOENAIL
2. BLOCKING BETWEEN RAFTERS OR TRUSS NOT AT THE WALL TO TOP PLATE, TO RAFTER OR TRUSS	2-8d COMMON	EACH END, TOENAIL
	2-16d COMMON	END NAIL
3. FLAT BLOCKING TO TRUSS AND WEB FILLER	16d COMMON @ 6" OC	FACE NAIL
4. CEILING JOIST TO TOP PLATE	3-8d COMMON	EACH JOIST, TOENAIL
5. CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS	3-16d COMMON	FACE NAIL
6. CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT)	3-16d COMMON	FACE NAIL
7. COLLAR TIE TO RAFTER	3-10d COMMON	FACE NAIL
8. RAFTER OR ROOF TRUSS TO PLATE	3-10d COMMON	TOENAIL[b]
9. ROOF RAFTER TO RIDGE VALLEY OR HIP RAFTER; OR ROOF RAFTER TO 2-INCH RIDGE BEAM	2-16d COMMON	END NAIL
	3-10d COMMON	TOENAIL
10. STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS	16d COMMON	16" OC FACE NAIL
11. BUILT-UP HEADER (2" TO 2" HEADER)	16d COMMON	16" OC EACH EDGE, FACE NAIL
12. CONTINUOUS HEADER TO STUD	4-10d COMMON	TOENAIL
13. TOP PLATE TO TOP PLATE	16d COMMON	16" OC FACE NAIL
14. TOP PLATE TO TOP PLATE, AT END JOINTS	8-16d COMMON	EACH SIDE OF END JOINT, FACE NAIL (MINIMUM 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT)
15. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING	2-16d COMMON	16" OC FACE NAIL
16. STUD TO TOP OR BOTTOM PLATE	4-8d COMMON	TOENAIL
	2-16d COMMON	END NAIL
17. TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	2-16d COMMON	FACE NAIL
18. JOIST TO SILL, TOP PLATE, OR GIRDER	3-8d COMMON	TOENAIL
20. RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING BELOW	8d COMMON	6" OC, TOENAIL
21. 1"x6" SUBFLOOR OR LESS TO EACH JOIST	2-8d COMMON	FACE NAIL
22. 2" SUBFLOOR TO JOIST OR GIRDER	2-16d COMMON	FACE NAIL
23. BUILT-UP GIRDER AND BEAMS, 2" LUMBER LAYERS	20d COMMON (4" x 0.192")	32" OC FACE NAIL AT TOP AND BOTTOM STAGGERED ON APPOSITE SIDE
24. LEDGER STRIP SUPPORTING JOIST OR RAFTERS	3-16d COMMON	EACH JOIST OR RAFTER, FACE NAIL
26. JOIST TO BAND JOIST OR RIM JOIST	3-16d COMMON	END NAIL
27. BRIDGING OR BLOCKING TO JOIST, RAFTER OR TRUSS	2-8d COMMON	EACH END, TOENAIL

NOTES:
a. THIS NAILING SCHEDULE SHALL ONLY BE USED IF CONDITION IS NOT OTHERWISE DETAILED OR SPECIFIED ON THE CONSTRUCTION DOCUMENTS. COMMON NAILS SHALL BE USED EXCEPT WHERE OTHERWISE STATED
b. WHERE A RAFTER IS FASTENED TO AN ADJACENT PARALLEL CEILING JOIST IN ACCORDANCE WITH THIS SCHEDULE AND THE CEILING JOIST IS FASTENED TO THE TOP PLATE IN ACCORDANCE WITH THIS SCHEDULE, THE NUMBER OF TOENAILS IN THE RAFTER SHALL BE PERMITTED TO BE REDUCED BY ONE NAIL

City of COACHELLA EST 1946

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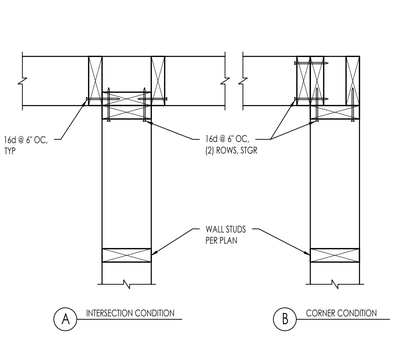
EXTERIOR WALL / INTERIOR WALL BEARING WALL FRAMING
2927-01-CU22 - S401 - 32 — NTS — 32

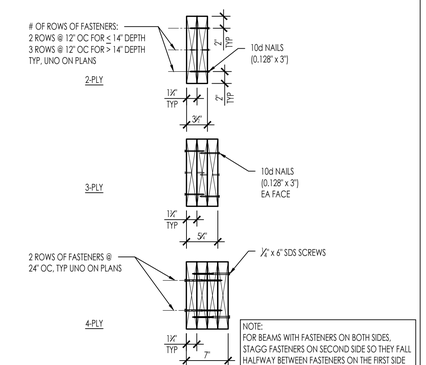


HEADER SCHEDULE		
OPENING WIDTH	2x4 WALL HEADER	2x6 WALL HEADER
<4'-0"	4x4	4x6 FLAT
4'-0" - 6'-0"	4x4	4x6 FLAT
6'-0" - 8'-0"	4x6	4x6 FLAT
8'-0" - 10'-0"	4x6	6x6

NOTE:
1. HEADERS, KING STUDS AND OTHER REFERENCES ON PLAN GOVERN OVER THESE TYPICAL SCHEDULES/DETAILS.
2. NAIL SILL PLATE TO WOOD FRAMED FLOORS WITH 16d @ 12" O.C.

NAILING SCHEDULE
2927-01-CU22 - S401 - 12 — 22 — NTS — 12

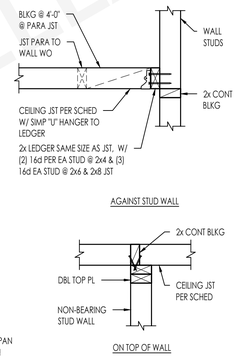




NOTE:
FOR BEAMS WITH FASTENERS ON BOTH SIDES, STAGG FASTENERS ON SECOND SIDE SO THEY FALL HALFWAY BETWEEN FASTENERS ON THE FIRST SIDE

INTERIOR NON-BEARING PARTITION WALL FRAMING
2927-01-CU22 - S401 - 43 — NTS — 43

CEILING JOIST SCHED & DETAILS
2927-01-CU22 - S401 - 33 — NTS — 33



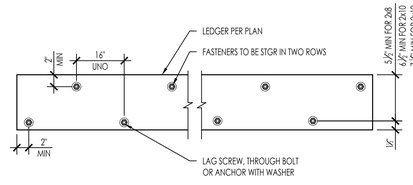
CEILING JOIST SCHED	
JOIST SIZE	MAX SPAN
2x4 @ 16" OC	9'-0"
2x6 @ 16" OC	14'-0"
2x8 @ 16" OC	18'-0"

NOTE:
THIS DETAIL IS INTENDED FOR CEILING JST THAT SPAN FROM WALL TO WALL @ CONTRACTORS OPTION

TYPICAL WOOD STUD INTERSECTIONS
2927-01-CU22 - S401 - 23 — NTS — 23

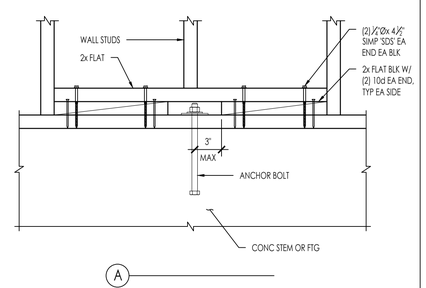
MULTI-PLY MEMBER CONNECTION
2927-01-CU22 - S401 - 13 — NTS — 13

LEDGER DETAIL
2927-01-CU22 - S401 - 24 — NTS — 24



NOTE:
THE TIP OF THE LAG SCREW SHALL FULLY EXTEND BEYOND THE INSIDE FACE OF THE BAND OR RIM JOIST

ANCHOR BOLT AT WOOD STUD
2927-01-CU22 - S401 - 14 — NTS — 14



COACHELLA ADUs
COACHELLA, CA

TYPICAL WOOD DETAILS

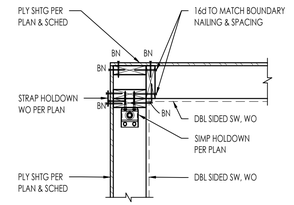
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DATE
JANUARY 11, 2024

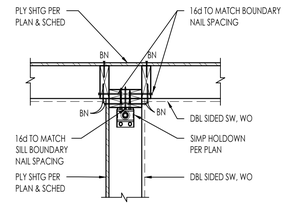
SHEET
S-401

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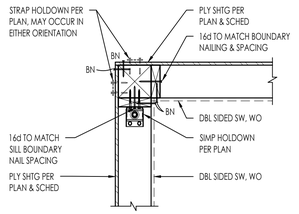
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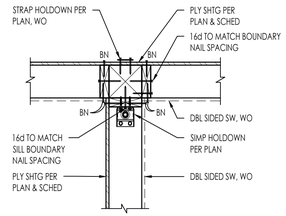
CORNER W/O POST



INTERSECTION W/O POST



CORNER W/ POST

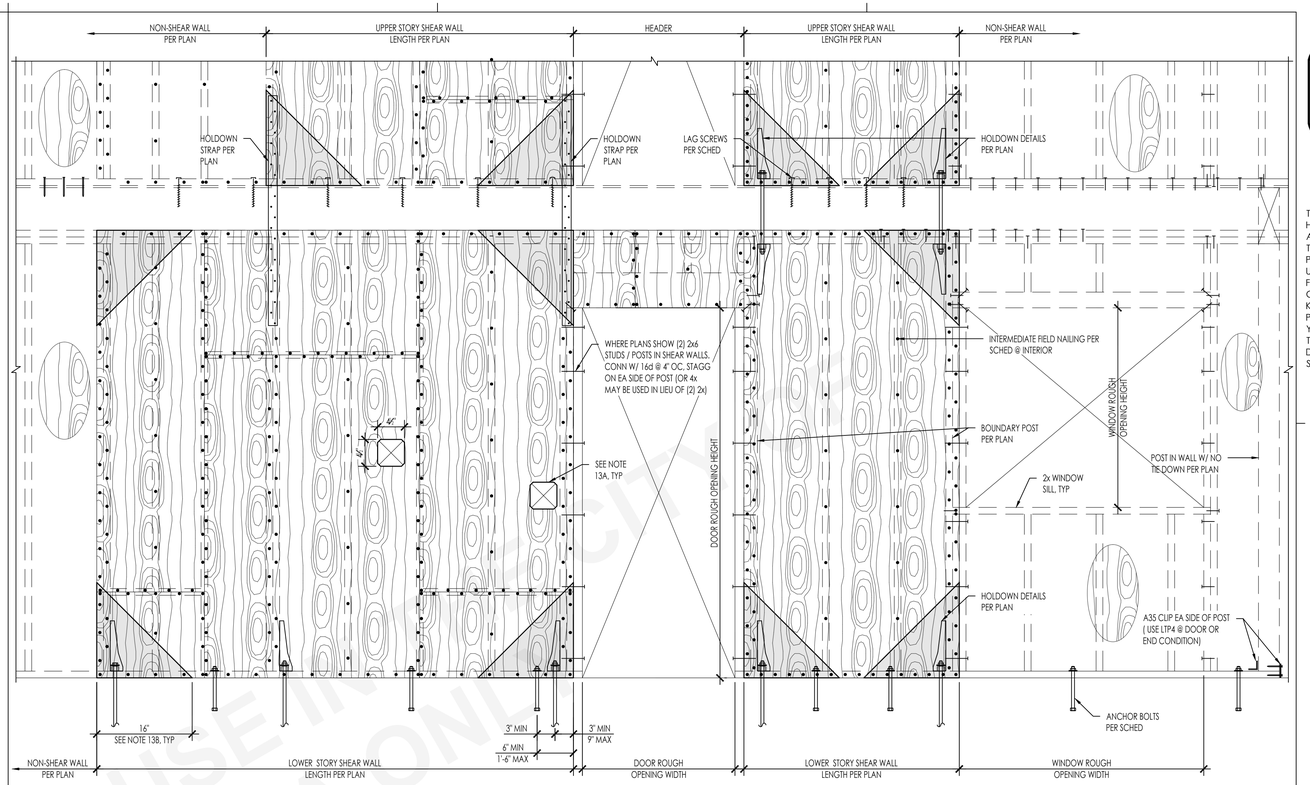


INTERSECTION W/ POST

SHEAR WALL INTERSECTION

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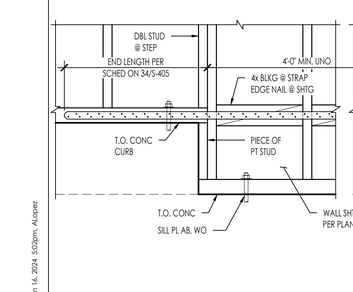
SHEAR WALL SHEATHING / NAILING SCHEDULE									
WALL SYMBOL	STRUCT SHEATHING [1,12]	FRAMING SIZE [6]	NAILING [2,3,4]			SILL NAILING [7]		A35s	ANCHOR BOLTING [10, 11]
			(2) 2x STUD	EDGE	INTERMEDIATE SUPPORTS	NAILS /LAG SCREWS [8]	SDS SCREWS OPTION [14]		
A	15/32" STRUCT 1 PLYWOOD	2x	10d @ 9" OC	8d @ 6" OC	8d @ 12" OC	16d @ 6" OC	12" OC	24" OC	5/8" DIA @ 48" OC
B	15/32" STRUCT 1 PLYWOOD	2x	10d @ 8" OC	10d @ 6" OC	10d @ 12" OC	5/8"Ø LAG SCREWS @ 16" OC	12" OC	16" OC	5/8" DIA @ 48" OC
C	15/32" STRUCT 1 PLYWOOD	2x	10d @ 5" OC	10d @ 4" OC	10d @ 12" OC	5/8"Ø LAG SCREWS @ 16" OC	8" OC	12" OC	5/8" DIA @ 32" OC
D	15/32" STRUCT 1 PLYWOOD	2x	10d @ 4" OC	10d @ 3" OC	10d @ 12" OC	5/8"Ø LAG SCREWS @ 16" OC	6" OC	8" OC	5/8" DIA @ 32" OC
E	15/32" STRUCT 1 PLYWOOD	2x	10d @ 3" OC	10d @ 2" OC	10d @ 12" OC	5/8"Ø LAG SCREWS @ 8" OC	4" OC	8" OC	5/8" DIA @ 24" OC
F	15/32" STRUCT 1 PLYWOOD (EACH FACE OF WALL)	3x	(2) 10d @ 5" OC	10d @ 4" OC	10d @ 12" OC	5/8"Ø LAG SCREWS @ 8" OC	(2) @ 8" OC *	6" OC	5/8" DIA @ 16" OC
G	15/32" STRUCT 1 PLYWOOD (EACH FACE OF WALL)	3x	(2) 10d @ 4" OC	10d @ 3" OC	10d @ 8" OC	5/8"Ø LAG SCREWS @ 8" OC	(2) @ 6" OC *	A34 @ 4" OC	5/8" DIA @ 16" OC
H	15/32" STRUCT 1 PLYWOOD (EACH FACE OF WALL)	3x	(2) 10d @ 3" OC	10d @ 2" OC	10d @ 6" OC	5/8"Ø LAG SCREWS @ 6" OC	(2) @ 4" OC *	LTP4 @ 4" OC [15]	5/8" DIA @ 8" OC

NOTES:
1. ALL PLYWOOD SHALL BE 5 PLY MINIMUM WITH A SPAN RATING OF 32/16 AND ALL PANEL EDGES SHALL BE BLOCKED. PROVIDE 1/8" GAP AT ALL PANEL JOINTS.
2. 8d NAIL DEFINED AS 0.131" DIAMETER SHANK x 2 1/2" LONG x 0.281 DIAMETER HEAD. 10d NAIL DEFINED AS 0.148" DIAMETER SHANK x 3" LONG x 0.312 DIAMETER HEAD.
3. PROVIDE E.N. AT ALL END STUDS. STUDS/POSTS WITH HOLDOWNS OR TIE DOWN STRAPS, SILL PLATES AND TOP PLATES.
4. WHERE 10d NAILS ARE 3 INCHES ON CENTER OR LESS, NAILS SHALL BE STAGGERED.
5. NAILS SHALL BE 1/2 INCH MINIMUM FROM PLYWOOD PANEL EDGE AND 3/8 INCH MINIMUM FROM CONNECTING MEMBER EDGE WHERE SHEAR EXCEEDS 300 PLF.
6. USE 3x FRAMING AT BOTTOM SILL PLATES, BLOCKING AND ALL STUDS AT ADJACENT PANEL EDGES WHERE SHEAR EXCEEDS 700 PLF. STRUCTURALLY ACCEPTABLE TO USE (2) 2x INSTEAD OF 3x FRAMING AT BOTTOM SILL PLATES.
7. WHERE SILL SHEAR TRANSFER IS THROUGH LAG SCREWS, SILL PLATE SHALL BE A MINIMUM OF 2 1/2" THICK.
8. LAG SCREWS SHALL BE 6 INCHES LONG AND HOLES ARE TO BE PRE-DRILLED AS TO NOT SPLIT BLOCKING/RIM.
9. SEE ELEVATION ABOVE FOR TYPICAL CONSTRUCTION.
10. REFER TO PLATE WASHER DETAIL FOR REQUIREMENTS
11. LENGTHEN ANCHOR BOLTS AS REQUIRED FOR EMBEDMENT AND SILL PLATE THICKNESS.
12. ORIENTED STRAND BOARD (OSB) MAY BE SUBSTITUTED FOR PLYWOOD NOTED ABOVE PROVIDED IT IS RATED BY APA'S PERFORMANCE STANDARD RATING AND IS OF THE SAME NUMBER OF LAYERS AS PLYWOOD PLY INDICATED.
13. LIMITATIONS OF MECHANICAL PENETRATIONS IN SHEAR WALLS:
    A. 4 1/2" MAX PENETRATION
    B. NO CUTS OR HOLES IN SHEATHING WITHIN 16" OF CORNERS, SQUARE PENETRATIONS SHALL RADIUS EDGES. DO NOT OVER CUT HOLE WITH SAW
14. ASSUMES A 1 1/4" MIN LSL RIM BOARD. FASTENER EDGE DIST IS 5/8" MIN & 6" END DISTANCE MIN. 2" MIN PENETRATION INTO RIM BOARD.
    * WALL W/ DOUBLE SIDED PLYWOOD REQUIRE (2) RIM BOARDS.
15. SIMPSON 'LTP4' CLIP SHALL BE INSTALLED IN A HORIZONTAL ORIENTATION. IF CLIP IS INSTALLED OVER THE SHEATHING, O.131" x 2 1/2" NAILS SHALL BE USED.

TYPICAL SHEAR WALL ELEVATION AND SCHEDULE

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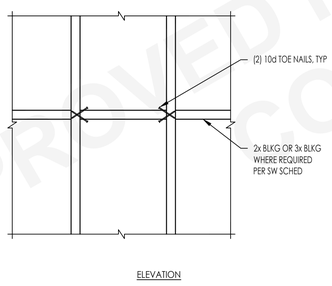
NTS | 13



STRAP AT STEP IN SHEAR WALL SILL PLATE

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ELEVATION

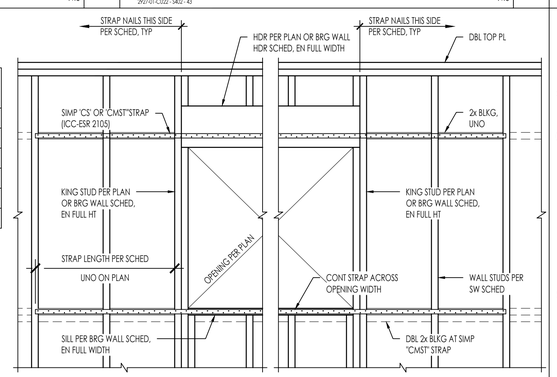
TYPICAL BLOCKING DETAIL

2927-01-CU22 - S402 - 43

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MARK	# OF BLKG	SIMPSON STRAP	NAILS EA SIDE OF OPENING	STRAP LENGTH (IN)	ALLOWABLE TENSION LOADS (LBS)
▽	1	CS20	(12) 10d x 2½"	32[1]	1,030
▽	1	CS16	(20) 10d x 2½"		1,705
▽	1	CS14	(26) 10d x 2½"		2,490
▽	2	CMSTC16	(50) 10d x 3¼"		4,690
▽	2	CMST14	(66) 10d x 2½"		6,475
▽	2	CMST12	(86) 10d x 2½"	39	9,215

NOTES:
1. 2 BAYS OR 32" MIN STRAP LENGTH
2. EDGE NAILING FROM PLYWOOD TO STUDS / FRAMING SHALL OCCUR ALL AROUND OPENINGS AT THIS CONDITION
3. SEE TYPICAL SHEAR WALL ELEVATION FOR BALANCE OF INFO NOT SHOWN



FORCE TRANSFER AROUND OPENINGS

2927-01-CU22 - S402 - 44

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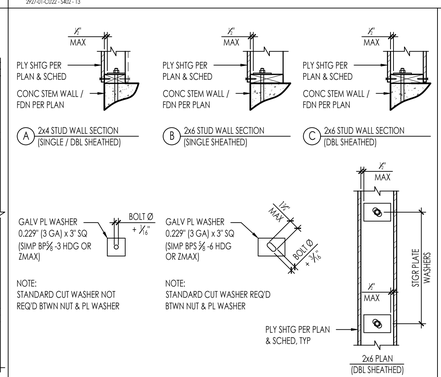
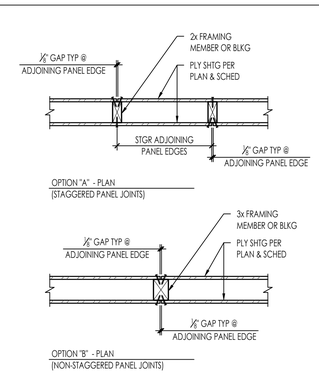


PLATE WASHER DETAIL

2927-01-CU22 - S402 - 34

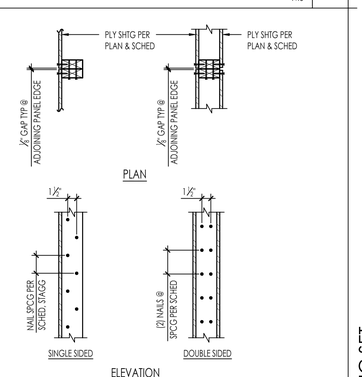
NTS | 34



DOUBLE SIDED SHEAR WALL

2927-01-CU22 - S402 - 24

NTS | 24



2x STUD NAILING @ ADJOINING PANEL EDGES

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City of COACHELLA EST 1946

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COACHELLA ADUs

COACHELLA, CA

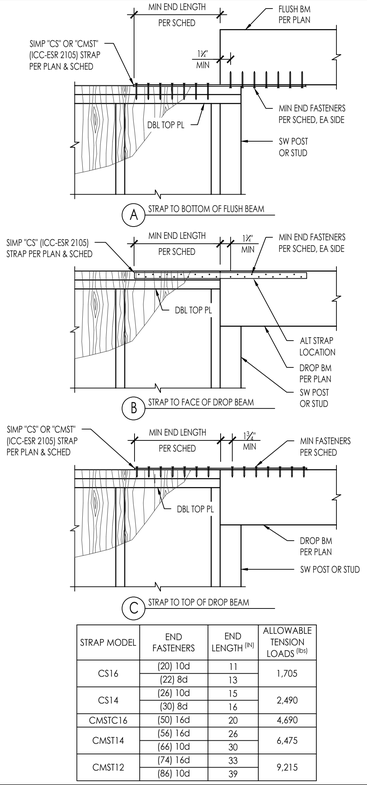
TYPICAL WOOD DETAILS

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JANUARY 11, 2024

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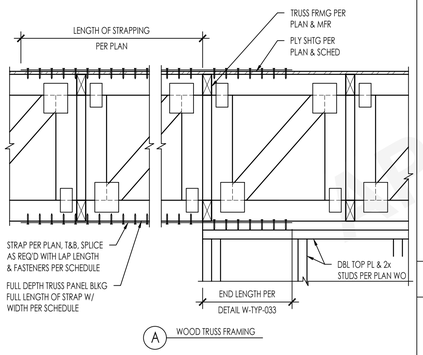
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STRAP MODEL	END FASTENERS	END LENGTH (IN)	ALLOWABLE TENSION LOADS (lbs)
CS16	(20) 10d	11	1,705
	(22) 8d	13	
CS14	(26) 10d	15	2,490
	(30) 8d	16	
CMSTC16	(50) 16d	20	4,690
CMST14	(56) 16d	26	6,475
	(66) 10d	30	
CMST12	(74) 16d	33	9,215
	(86) 10d	39	

DRAG STRAP AT BEAM-TO-WALL

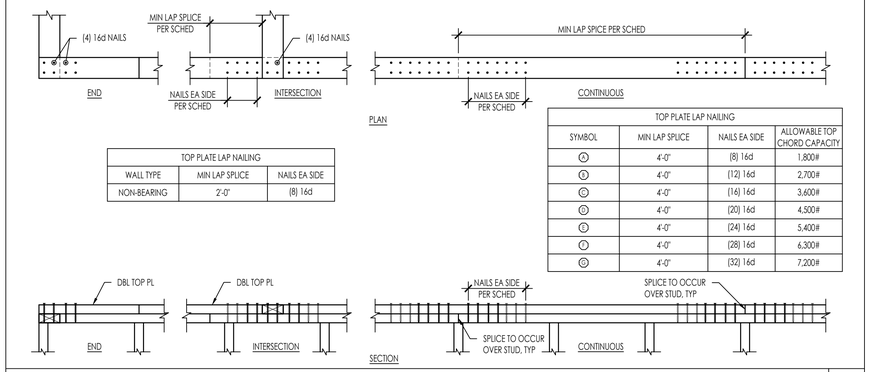
2927-01-CU22 - S403 - 52 | NTS | 52



STRAP MODEL	FASTENERS PER SPLICE	SPLICE LENGTH (IN)	MIN BLKG WIDTH	ALLOWABLE TENSION LOADS (lbs)
CS16	(5) 10d	8	1½"	1,705
	(6) 8d	9		
CS14	(6) 10d	9	1½"	2,490
	(7) 8d	10		
CMSTC16	(11) 16d	10	3½"	4,690
	(11) 16d	10		
CMST14	(13) 16d	14	3½"	6,475
	(15) 10d	15		
CMST12	(18) 16d	18	3½"	9,215
	(22) 10d	21		

BLOCK & STRAP PERP TO FRMG

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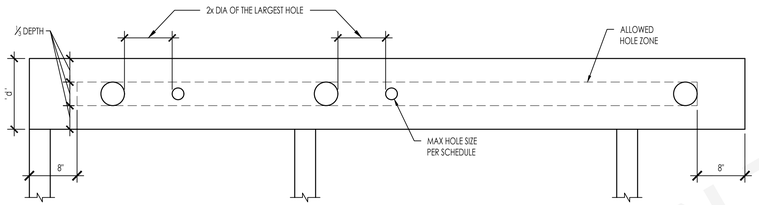


TOP PLATE LAP NAILING		
WALL TYPE	MIN LAP SPLICE	NAILS EA SIDE
NON-BEARING	2'-0"	(8) 16d

TOP PLATE LAP NAILING			
SYMBOL	MIN LAP SPLICE	NAILS EA SIDE	ALLOWABLE TOP CHORD CAPACITY
A	4'-0"	(8) 16d	1,800#
B	4'-0"	(12) 16d	2,700#
C	4'-0"	(16) 16d	3,600#
D	4'-0"	(20) 16d	4,500#
E	4'-0"	(24) 16d	5,400#
F	4'-0"	(28) 16d	6,300#
G	4'-0"	(32) 16d	7,200#

DBL TOP PLATE SPLICE NAILING

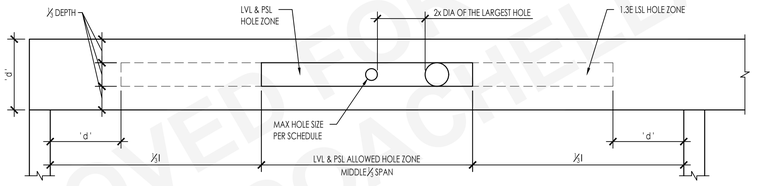
2927-01-CU22 - S403 - 31 | NTS | 31



1.55E LSL BEAMS & HEADERS	
HEADER OR BEAM DEPTH	MAX ROUND HOLE SIZE
9¼"	3"
11⅞"	3⅜"
14" - 16"	4⅜"

1.55E LSL NOTES:
1. ALLOWED HOLE ZONE SUITABLE FOR HEADERS AND BEAMS WITH UNIFORM AND/OR CONCENTRATED LOADS ANYWHERE ALONG THE MEMBER.
2. ROUND HOLES ONLY.
3. NO HOLES IN HEAERS OR BEAMS IN PLANK ORIENTATION.

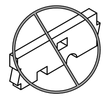
A 1.55E LSL HEADERS & BEAMS



LVL, PSL, & 1.3E LSL BEAMS & HEADERS	
HEADER OR BEAM DEPTH	MAX ROUND HOLE SIZE
4⅜"	1"
5¼"	1 ¾"
7¼" - 20"	2"

LVL/PSL/1.3E LSL:
1. ALLOWED HOLE ZONE SUITABLE FOR HEADERS AND BEAMS WITH UNIFORM LOADS ONLY.
2. ROUND HOLES ONLY.
3. NO HOLES IN CANTILEVERS.
4. NO HOLES IN HEADERS OR BEAMS IN PLANK ORIENTATION.

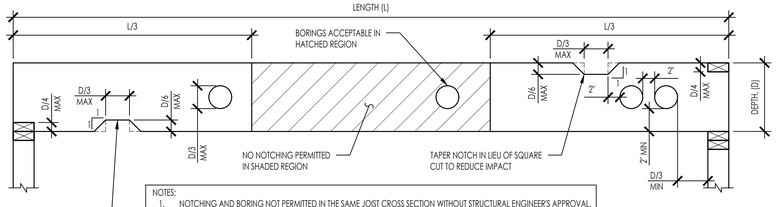
B LVL, PSL, & 1.3E LSL HEADERS & BEAMS



DO NOT CUT, NOTCH, OR DRILL HOLES IN HEADERS OR BEAMS EXCEPT AS INDICATED IN THE ILLUSTRATIONS AND TABLES

ALLOWABLE HOLES THRU ENGINEERED LUMBER HEADERS & BEAMS

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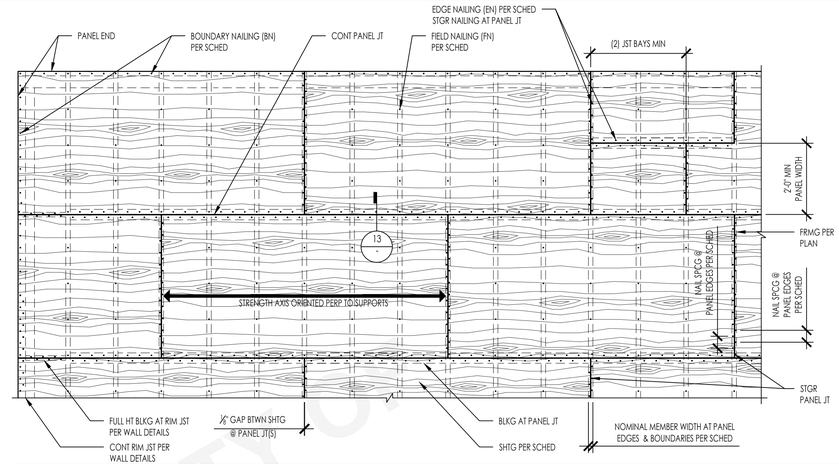


NOTES:
1. NOTCHING AND BORING NOT PERMITTED IN THE SAME JOIST CROSS SECTION WITHOUT STRUCTURAL ENGINEER'S APPROVAL.
2. NOTCH WIDTHS GREATER THAN SHOWN IN TABLE NOT PERMITTED WITHOUT STRUCTURAL ENGINEER'S APPROVAL.
3. NO NOTCHES OR HOLES PERMITTED ANYWHERE IN CANTILEVERED ELEMENTS WITHOUT STRUCTURAL ENGINEER'S APPROVAL

NOTCH AND HOLE LIMITATIONS					
JOIST SIZE	MAX HOLE	MAX NOTCH DEPTH	MAX END NOTCH	MAX NOTCH LENGTH	
2X4	NONE	NONE	NONE	NONE	
2X6	1⅜"	⅝"	1 ⅜"	1½"	
2X8	2 ⅜"	1⅛"	1 ⅜"	2 ⅜"	
2X10	3"	1⅜"	2 ⅜"	3"	
2X12	3 ⅜"	1⅝"	2⅞"	3 ⅜"	

SAWN LUMBER AND RAFTER JOIST NOTCHING AND BORING LIMITATIONS

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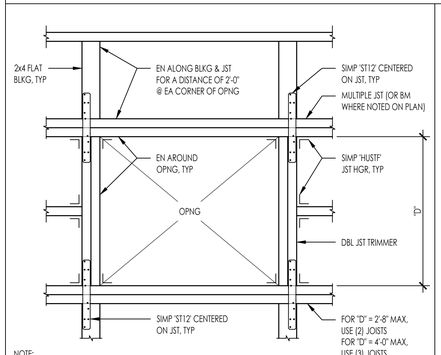


DIAPHRAGM SCHEDULE												
TYPE	LOCATION	SHEATHING THICKNESS	SHEATHING GRADE [4]	SPAN RATING	BLOCKING	NAILS	BOUNDARY NAILING (BN)	EDGE NAILING AT CONT. PANEL EDGES (EN)	EDGE NAILING AT OTHER PANEL EDGES (EN)	FIELD NAILING (FN)	PANEL EDGE SUPPORT OR NOMINAL MEMBER WIDTH AT PANEL EDGES	LINES OF FASTENERS
A	ROOF	SEE NOTE 5	STRUCT 1	32 / 16	NO	10d	6	-	6	12	H-CLIPS	1
B	ROOF	SEE NOTE 5	STRUCT 1	32 / 16	YES	10d	4	6	6	12	2x4 FLAT	1
C	ROOF	SEE NOTE 5	STRUCT 1	32 / 16	YES	10d	4	6	6	12	2x	1
D	ROOF	SEE NOTE 5	STRUCT 1	32 / 16	YES	10d	2.5	4	4	12	2x	1
E	ROOF	SEE NOTE 5	STRUCT 1	32 / 16	YES	10d	6	6	6	12	3x	1

NOTES:
1. DIAPHRAGM SHALL BE GLUED TO FLOOR FRAMING PRIOR TO NAILING. REFER TO PROJECT GENERAL NOTES.
2. MINIMUM EDGE DISTANCE FOR NAILS SHALL BE ⅜" FROM SHEATHING EDGE AND ⅜" FROM LUMBER EDGE.
3. NAILS SHALL BE DRIVEN TIGHT TO TOP OF PLYWOOD SURFACE AND SHALL NOT PENETRATE THE TOP OF PLYWOOD MORE THAN COMMONLY EXPECTED WITH HAMMER DRIVEN NAILS.
4. WHERE H-CLIPS ARE SPECIFIED, THEY SHOULD BE INSTALLED AS FOLLOWS:
   A. ONE H-CLIP SHALL BE PLACED BETWEEN ABUTTING PANELS AT A LOCATION MIDWAY BETWEEN EACH PAIR OF TRUSSES, RAFTERS OR JOISTS. HOWEVER, (2) H-CLIPS ARE REQUIRED BETWEEN SUPPORTS WHEN SPACED 48 INCHES ON CENTER
   B. USE THE SAME SIZE PANEL EDGE CLIP AS THE PANEL THICKNESS. H-CLIPS MUST FIT SNUGLY
   C. ABUTTING WOOD STRUCTURAL PANELS BE FITTED AS CLOSELY AS CLIPS PERMIT. OCCASIONAL MISFIT OF ABUTTING SHEETS MAY BE TOLERATED PROVIDING THAT GAPS DO NOT EXCEED MAXIMUM OPENING OF ⅛".
5. ROOF SHEATHING THICKNESS SHALL BE INSTALLED AS FOLLOWS:
   A. ⅜" @ SINGLE PLY OR ASPHALT SHINGLES
   B. ½" @ TILE
   C. ⅝" @ TILE WITH MORTAR
6. STRUCTURALLY ACCEPTABLE TO USE "SHEATHING" SHEATHING GRADE @ FLOOR LOCATIONS WITHOUT GYPCRETE TOPPING

PLYWOOD DIAPHRAGM SHEATHING

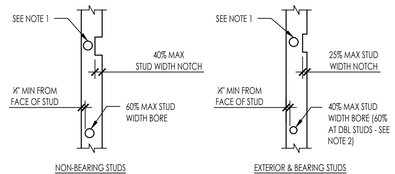
2927-01-CU22 - S403 - 12 | NTS | 12



NOTE:
FOR LARGER OPENINGS REFER TO FRAMING PLAN

OPENING AT FRAMING

2927-01-CU22 - S403 - 23 | NTS | 23

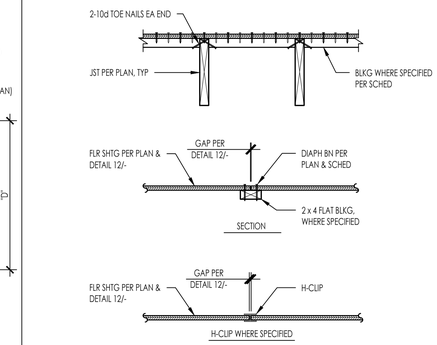


MAXIMUM BORED HOLE DIAMETER/NOTCH DEPTH			
STUD SIZE (IN)	APPLICATION	MAX HOLE DIAMETER (IN)	MAX NOTCH DEPTH (IN)
2X4	NON-BEARING	2⅛"	1⅜"
	EXTERIOR/BEARING	1 ¾"	⅞"
2X6	NON-BEARING	3¼"	2 ¾16"
	EXTERIOR/BEARING	2 ¾16"	1⅜"

NOTES:
1. NOTCHING AND BORING NOT PERMITTED IN THE SAME STUD SECTION.
2. NO MORE THAN 2 SUCCESSIVE DBL. STUDS ARE PERMITTED TO HAVE 60% MAX BORED HOLES.

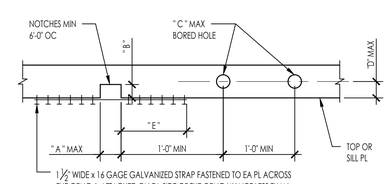
TYP WALL NOTCH AND BORING LIMITATIONS

2927-01-CU22 - S403 - 24 | NTS | 24



DIAPHRAGM PANEL JOINTS

2927-01-CU22 - S403 - 13 | NTS | 13



1½" WIDE x 16 GAGE GALVANIZED STRAP FASTENED TO EA PL ACROSS THE OPNG & ATTACHED ON EA SIDE OF THE OPNG W/ NOT LESS THAN " F " 16d COMMON NAILS

NOTCH AND HOLE LIMITATIONS						
TOP PL OR SILL PL	A	B	C	D	E	F
2X4	3½"	1½"	1¼"	1½"	5¾"	6
2X6	4½"	2¼"	2¼"	2½"	8¼"	9
2X8	5½"	3"	3¼"	3½"	12¼"	12

TOP PL AND SILL NOTCH AND BORING LIMITATIONS

2927-01-CU22 - S403 - 14 | NTS | 14

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COACHELLA ADUs

COACHELLA, CA

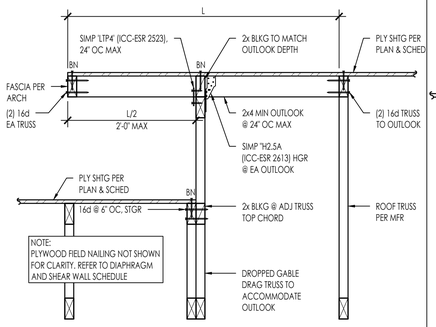
TYPICAL WOOD DETAILS

PUBLIC SET

DATE
JANUARY 11, 2024

SHEET
S-403

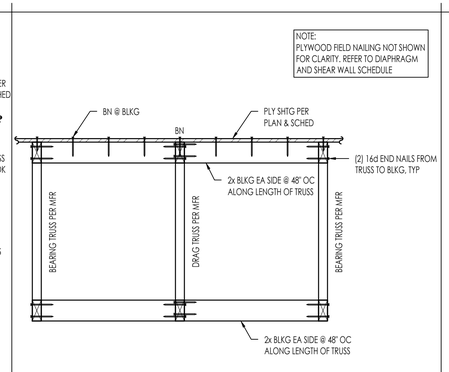
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DIAPH TRANSITION W/ OVERHANG

2927-01-CU22 - 5421 - 51

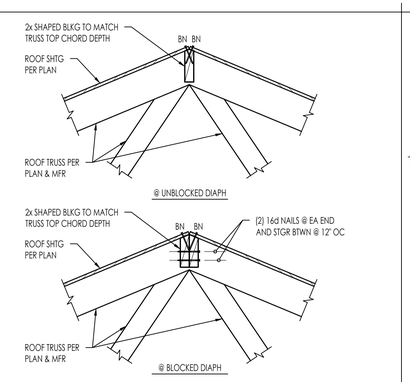
1" = 1'-0" | 51



INTERIOR DRAG TRUSS

2927-01-CU22 - 5421 - 41

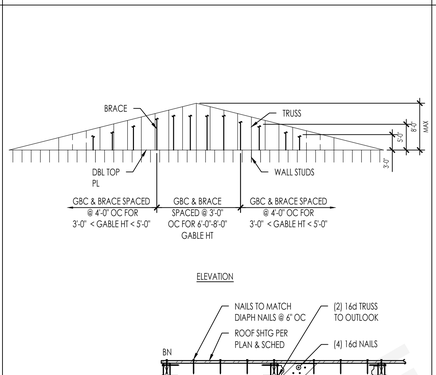
1" = 1'-0" | 41



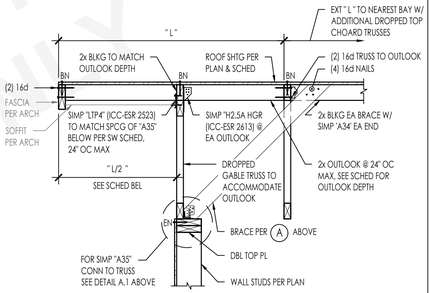
SHEATHING OVER ROOF RIDGE

2927-01-CU22 - 5421 - 31

1" = 1'-0" | 31



A GABLE END TRUSS W/O LOOKOUT



B GABLE END TRUSS W/ LOOKOUT

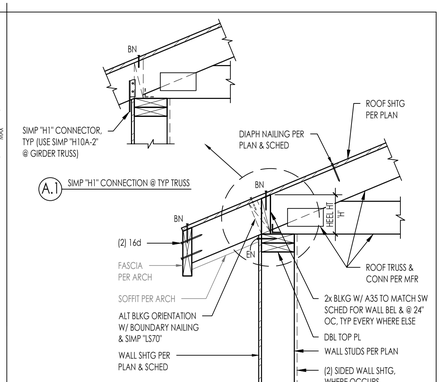
OUTLOOK DEPTH SCHEDULE		
ROOFING	DEPTH	L/2
SINGLE PLY OR ASPHALT SHINGLES	2x4	2'-0"
	2x6	4'-0"
ALL OTHERS	2x4	2'-0"
	2x6	3'-0"

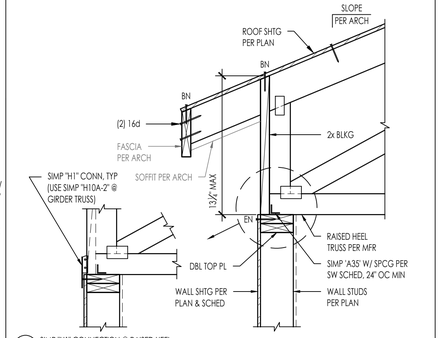
NOTE: "L/2" ASSUMES NO STUCCO @ UNDERSIDE OF EAVE IF "L/2" > 2'-0", ADDITIONAL TRUSS TOP CHORDS SHALL BE DROPPED, EXTEND TO NEAREST FULL BAY

GABLE END TRUSS

2927-01-CU22 - 5421 - 23

NTS | 23

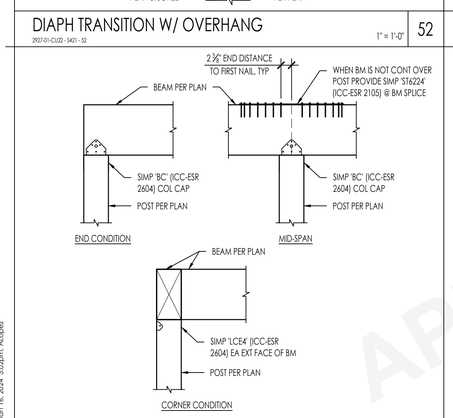




ROOF TRUSS PERP TO EXTERIOR WALL

2927-01-CU22 - 5421 - 13

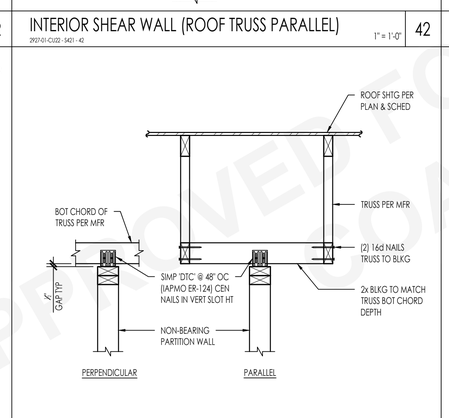
NTS | 13



DIAPH TRANSITION W/ OVERHANG

2927-01-CU22 - 5421 - 52

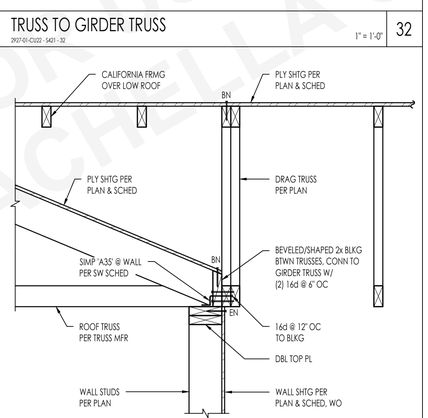
1" = 1'-0" | 52



INTERIOR SHEAR WALL (ROOF TRUSS PARALLEL)

2927-01-CU22 - 5421 - 42

1" = 1'-0" | 42



TRUSS TO GIRDER TRUSS

2927-01-CU22 - 5421 - 32

1" = 1'-0" | 32

BEAM TO POST CONNECTION

2939-01-CU22 - 5421

3/4" = 1'-0" | 53

TRUSS OVER NON-BEARING PARTITION

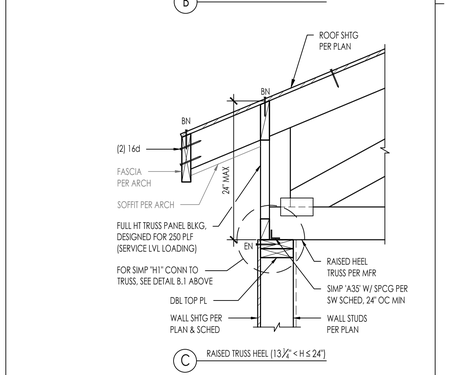
2927-01-CU22 - 5421 - 43

1" = 1'-0" | 43

TRUSS TO GIRDER TRUSS W/ WALL BELOW

2927-01-CU22 - 5421 - 33

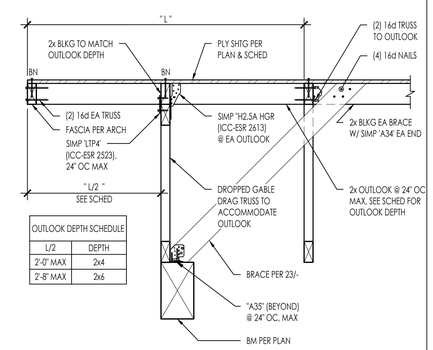
1" = 1'-0" | 33



CALIFORNIA FRAMING SLEEPER

2927-01-CU22 - 5421 - 24

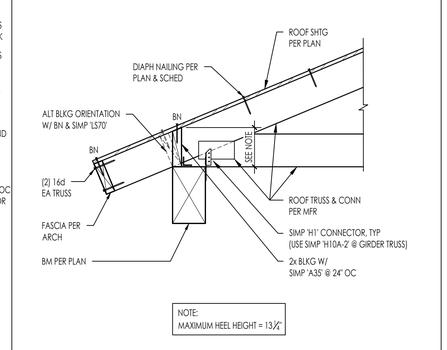
NTS | 24



GABLE END TRUSS W/ LOOKOUT @ BEAM

2939-01-CU22 - 5421 - 54

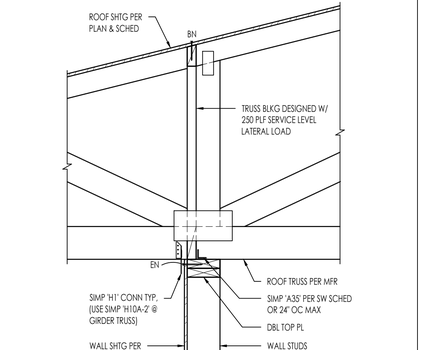
1" = 1'-0" | 54



ROOF TRUSS PERP TO BEAM

2927-01-CU22 - 5421 - 44

1" = 1'-0" | 44



TRUSS INTERIOR BEARING WALL

2927-01-CU22 - 5421 - 34

1" = 1'-0" | 34

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COACHELLA ADUs

COACHELLA, CA

ROOF FRAMING DETAILS

PUBLIC SET

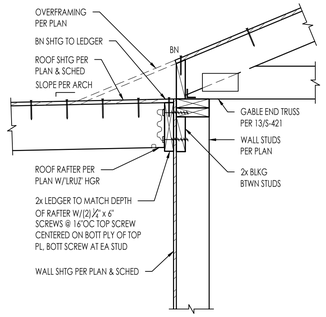
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JANUARY 11, 2024

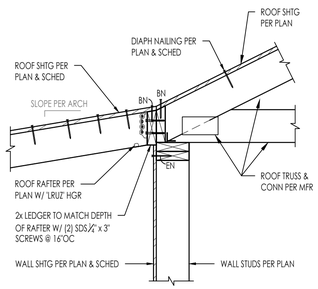
SHEET

S-421

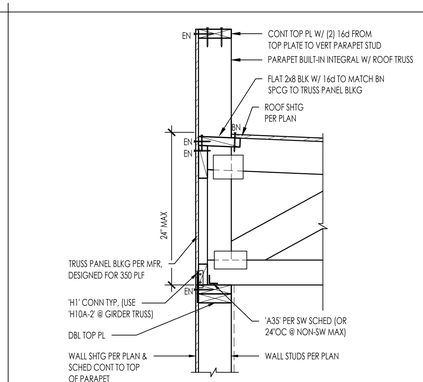
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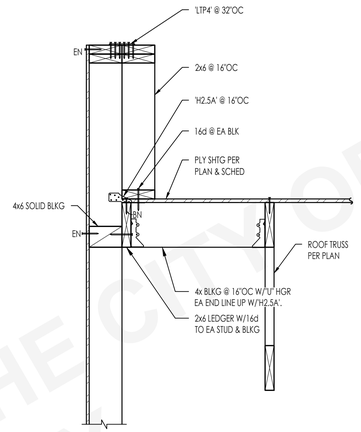
ROOF RAFTER TO EXTERIOR WALL — 1" = 1'-0" — 51
2939-01-CU22 - S422 - 51



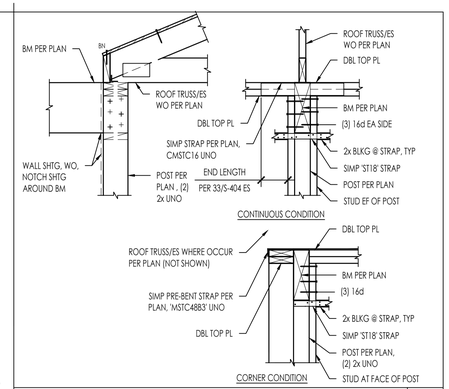
PITCH BREAK AT EXTERIOR WALL — 1" = 1'-0" — 41
2927-01-CU22 - S422 - 13



ROOF TRUSS PERP TO EXT WALL — NTS — 31
2939-01-CU22 - 422 - 31

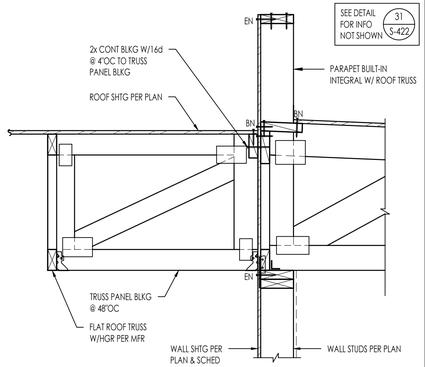


PARAPET AT EXTERIOR WALL — 1" = 1'-0" — 22
2927-01-CU22 - S422 - 22

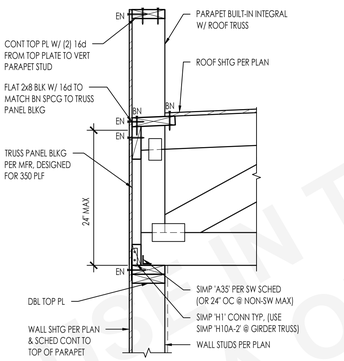


BEAM POCKET THROUGH EXTERIOR WALL — NTS — 11
2927-01-CU22 - S422 - 11

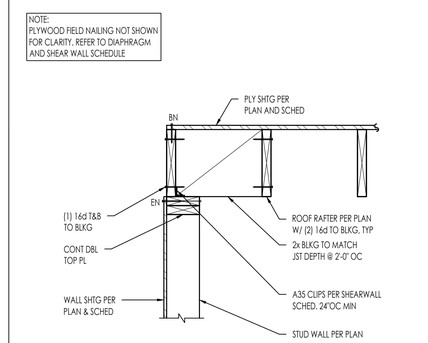
52



ROOF TRUSS PERP TO EXTERIOR WALL — NTS — 42
2939-01-CU22 - S422 - 42

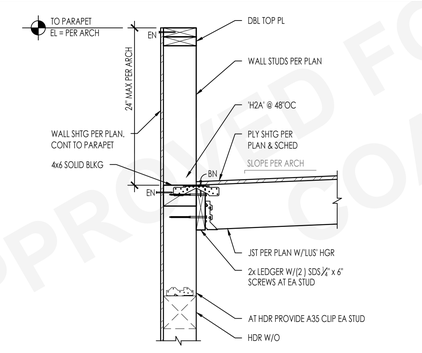


ROOF TRUSS PERP TO EXTERIOR WALL — NTS — 32
2939-01-CU22 - S422 - 32

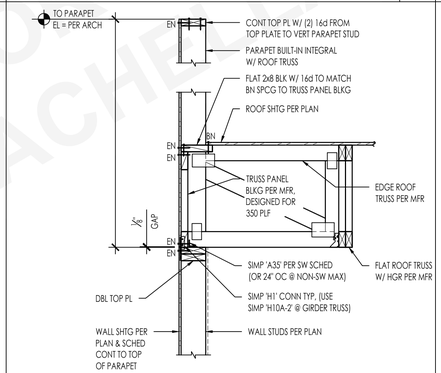


RAFTERS PARALLEL TO EXT WALL — 1" = 1'-0" — 12
2927-01-CU22 - S422 - 12

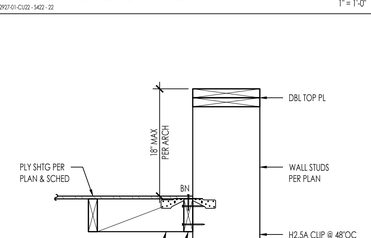
53



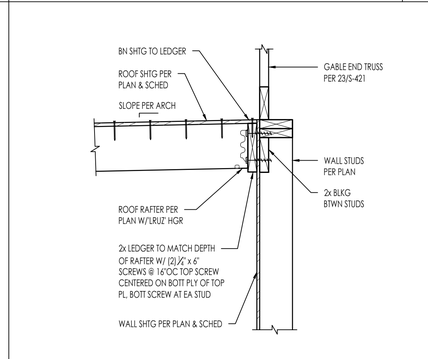
PARAPET AT EXTERIOR WALL — 1" = 1'-0" — 43
2939-01-CU22 - S422 - 22



TRUSS @ EXTERIOR WALL — 3/4" = 1'-0" — 33
2939-01-CU22 - S422 - 33

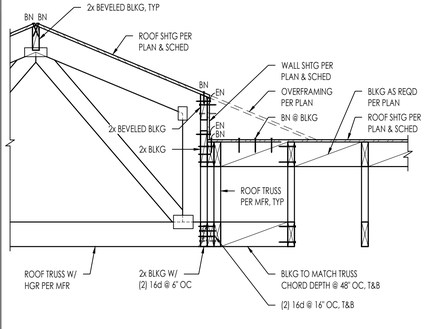


ROOF RAFTER TO EXTERIOR WALL (PARA) — 1" = 1'-0" — 23
2939-01-CU22 - S422 - 34

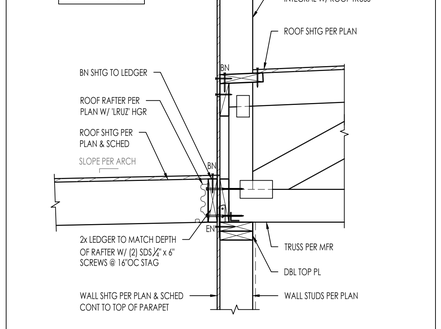


ROOF RAFTER TO EXTERIOR WALL (PERP) — 1" = 1'-0" — 13
2927-01-CU22 - S422 - 13

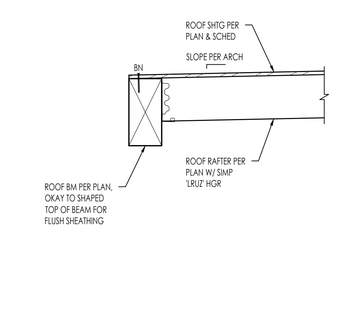
54



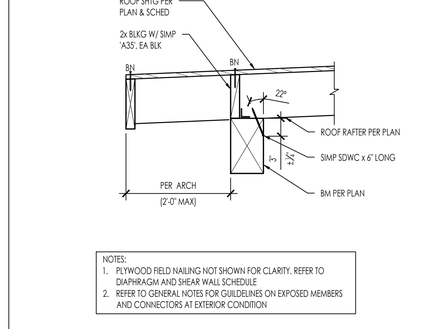
TRUSS GIRDER MID SLOPE — 3/4" = 1'-0" — 44
2939-01-CU22 - S422 - 44



ROOF TRUSS PERP TO EXTERIOR WALL AT PORCH — NTS — 34
2939-01-CU22 - S422 - 34



RAFTER TO FLUSH BEAM — 1" = 1'-0" — 24
2927-01-CU22 - S422 - 24



ROOF RAFTER TO BEAM — 1" = 1'-0" — 14
2927-01-CU22 - S422 - 14

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COACHELLA ADUs

COACHELLA, CA

ROOF FRAMING DETAILS

PUBLIC SET

DATE
JANUARY 11, 2024

SHEET
S-422

N:\2800\2939-01.CU22-Coachella-Design-Services-ADU-Plans\Structural\ConDocs\Sheet-Files\2939-01-CU22 - S422.dwg, S422 Plan 2, Jan 16, 2024 - 5:02pm, AJasper