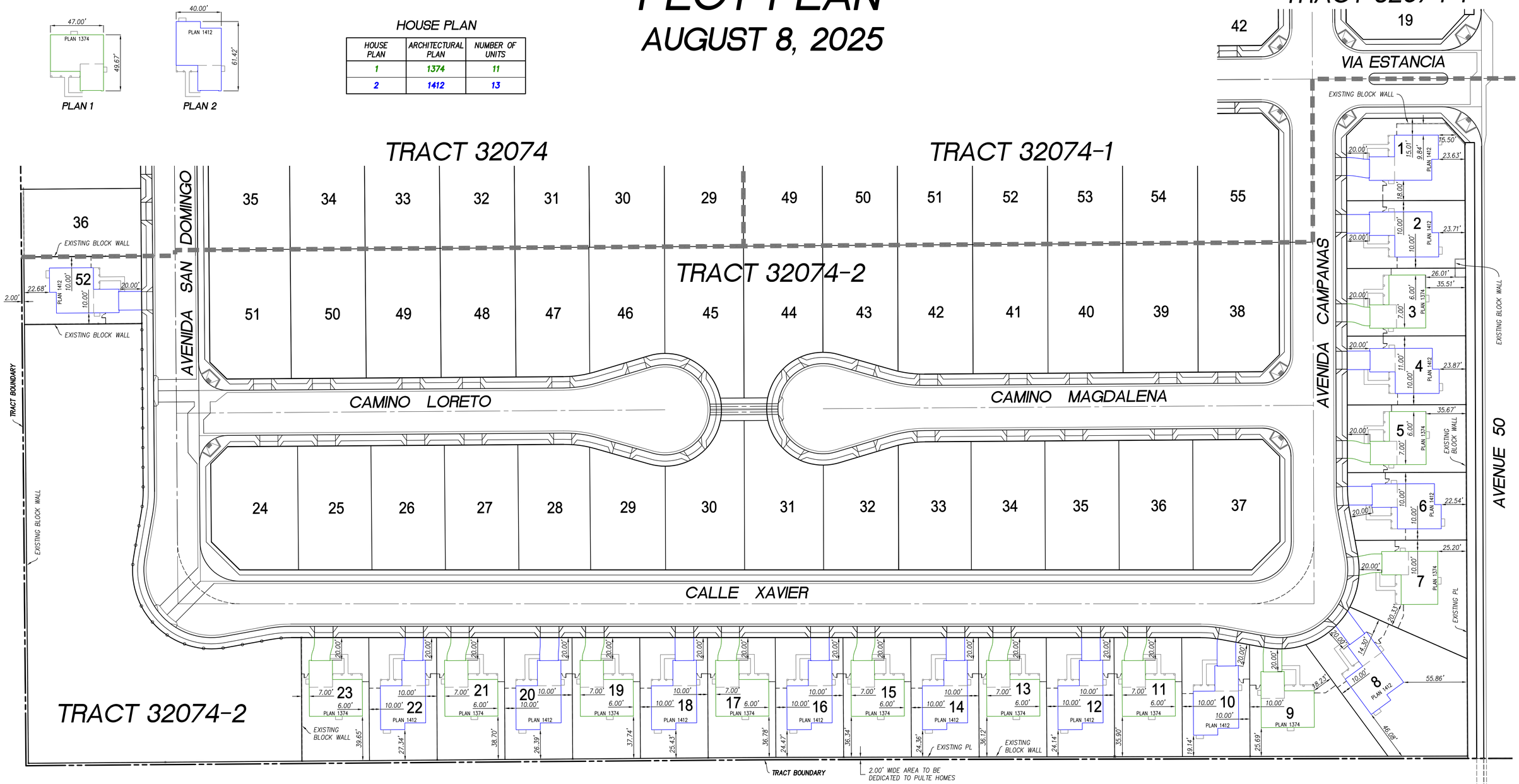
CITY OF COACHELLA
TRACT 32074-2 (LOTS 1 THRU 23 AND 52)
PLOT PLAN
AUGUST 8, 2025

PLAN 1

PLAN 2

HOUSE PLAN

HOUSE PLAN	ARCHITECTURAL PLAN	NUMBER OF UNITS
1	1374	11
2	1412	13



PREPARED FOR:
COACHELLA VALLEY HOUSING COALITION
45701 MONROE STREET, SUITE G,
INDIO, CALIFORNIA 92201
PH: (760) 347-3157

AGUILAR CONSULTING INC.
231 E. ALESSANDRO BLVD. #6A393
RIVERSIDE, CA 92508
PH: (909) 709-4393

FOUR BEDROOM
ONE-STORY SINGLE FAMILY RESIDENCE

COACHELLA HOMES
MARIPOSA POINT
1374

FOR THE

COACHELLA VALLEY HOUSING COALITION

LOCATED IN THE
CITY OF

COACHELLA, CA

AT VARIOUS PROJECT PARCELS

83566 AVENIDA CAMPANAS	779-272-003	LOT 3
83578 AVENIDA CAMPANAS	779-272-005	LOT 5
83590 AVENIDA CAMPANAS	779-272-007	LOT 7
50352 CALLE XAVIER	779-272-009	LOT 9
50364 CALLE XAVIER	779-272-011	LOT 11
50376 CALLE XAVIER	779-272-013	LOT 13
50388 CALLE XAVIER	779-272-015	LOT 15
50400 CALLE XAVIER	779-301-001	LOT 17
50412 CALLE XAVIER	779-301-003	LOT 19
50424 CALLE XAVIER	779-301-005	LOT 21
50436 CALLE XAVIER	779-301-007	LOT 23

GENERAL NOTES (CONTINUED)

12. The Contractor shall provide all materials and work required to provide a finish to all new work exposed to the interior or exterior provided in this contract. This shall include two finish coats of paint over base coat at all paintable surfaces. Entire surface of existing surfaces shall be painted when any portion is disturbed by work.

13. SIMPSON A35 SHALL BE SUBSTITUDED WITH SIMPSON LTP4 AT LOCATIONS NECESSITATING A FLAT APPLICATION.

14. The design, timing, implementation and construction of the temporary bracing of the structure and its elements during construction is the responsibility of the general contractor

SPECIFIC NOTES AND INFORMATION

The Project shall comply with California's Green Building Code (Part 11 of Title 24, California Code of Regulations, effective 1.1,2020 with any Supplement(s) in effect . Provide and maintain a copy of said code and Residential checklist on jobsite during construction.

ENERGY REQUIREMENTS:

The Project shall be constructed using materials, equipment and/or systems that comply with the energy efficiency standards of the State of California Title 24 .

ENVIRONMENTAL REQUIREMENTS:

The Project shall be constructed using materials, equipment and/or systems that comply with the environmental standards of the City of COACHELLA, RIVERSIDE County, the State of California, and the US Federal government (EPA).

The Project shall comply with all regulatory guidelines and code requirements pertaining to outgassing of materials such as, but not limited to, VOC and formaldahyde.

GENERAL NOTES

1. The Contactor shall provide temporary barricades and all other means required to maintain a safe environment during construction.
2. All work, materials, equipment, and furnishings indicated and or noted within the Construction Documents shall be new and constructed, provided and installed by the Contractor unless noted otherwise.
3. The General Contractor is responsible for furnishing all subcontractors with a complete set of Contract Documents.
4. If there is a conflict between disciplines within the Contract Documents, the Architect shall be notified in writing prior to work. If there is a conflict between the Contract documents and the conditions in the field, the Architect shall be notified in writing prior to work.
5. Modifications to the construction work as described within the Construction Documents shall not be made without the prior written approval of the Architect.
6. All information shown/identified in the Contract Documents relative to existing conditions is shown as a general representation. Contractor shall verify actual field conditions prior to submitting bid.
7. If there is a conflict between disciplines within the Contract Documents, the Contractor and Subcontractor shall provide in His or Her bid the more expensive option.
8. NO SUBSTITUTIONS or DEVIATIONS from the Construction Documents will be acepted unless prior written authorization is obtained from the Architect. Submittals and requests for substitutions shall be made at least 14 business days prior to the commencement of the work. A letter, drafted and signed by each subcontractor, affirming his/her understanding of this requirement, shall be submitted to the owner's representitive and the Architect at least 14 calandar days prior of the commencement of work of that trade.
9. All egress doors shall comply with CBC Sec. 1003.3.1.8 for proper door hardware.
10. All demolished items, debris, trash, excavated earth that is not to be used on site, and any extra material that is not needed for the completion of the job shall be hauled away and legally disposed of off-site at the Contractor's expense.
11. It is the responsiblity of the Contractor to provide and install all required items and perform all work necessary to ensure a complete job, such that all electrical and lighting systems, access control systems, plumbing and mechanical systems, irrigation systems and controller, data, cable t.v. and phone systems shall be made operational by the completion of the construction period as set by the Contract.

CONSULTANTS

STRUCTURAL ENGINEER

PETRA STRUCTURAL ENGINEERS
17981 SKY PARK CIRCLE SUITE O,
IRVINE, CA 92614
(949) 748-7170

ENERGY CONSULTANT

CALIFORNIA LIVING & ENERGY
3015 DALE COURT, CERES, CA 95307
(209) 538-2879

PLANNING DATA

ZONING DISTRICT DESIGNATION — RESIDENTIAL PLANNED DEVELOPMENT

4 BEDROOM RESIDENCE
LIVING AREA 1374.0 SQ. FT.
GARAGE AREA 470 SQ. FT.
TOTAL - 1844.0 SQ. FT.

ATTIC VENTILATION REQUIREMENT	ATTIC VENTILATION PROVIDED
1844 SQ. FT / 150 (FACTOR) = 12.3 SQ. FT TOTAL	1 1/2" X 12" EAVE VENTS (56) @ .125 SQ. FT = 7.0 SQ. FT. (6) 15"X 24" GABLE END VENTS @ 2.5 SQ. FT. = 15.0 SQ. FT. (1) 12" X 18" GABLE END VENT @ 1.5 SQ. FT. = 1.5 SQ. FT. 23.5 SQ. FT. PROVIDED > 12.3 REQUIRED THERFORE O.K.

CONDITIONS OF APPROVAL OF PLANS

1. CIVIL AND STRUCTURAL SHEETS SHALL BE SIGNED BY RESPONSIBLE DESIGN PROFESSIONAL.
2. TRUSS CALCULATIONS SHALL BE REVIEWED AND APPROVED BY ENGINEER OF RECORD.

DEFERRED SUBMITTALS

1. MANUFACTURED ROOF TRUSSES DESIGNED AND INSTALLED IN ACCORDANCE WITH THE 2019 CRC.
2. AN AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEM DESIGNED AND INSTALLED IN ACCORDANCE WITH THE 2019 CRC SECTION R313.3 OR NFPA 13D.
3. A ROOFTOP PHOTO-VOLTAIC SOLAR SYSTEM AS REQUIRED BY THE ENERGY CALCULATIONS.

INDEX OF DRAWINGS

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE FOLLOWING:
- 2022 CALIFORNIA BUILDING CODE.
- 2022 CALIFORNIA RESIDENTIAL CODE.
- 2022 CALIFORNIA PLUMBING CODE
- 2022 CALIFORNIA MECHANICAL CODE
- 2022 CALIFORNIA ELECTRICAL CODE
- 2022 CALIFORNIA ENERGY CODE
- 2022 CALIFORNIA GREEN CODE
- CITY OF COACHELLA MUNICIPAL CODE

CODE NOTES

1. ALL WORK SHALL COMPLY WITH THE CALIFORNIA BUILDING STANDARDS CODE FOUND IN STATE OF CALIFORNIA TITLE 24 CCR AS AMENDED AND ADOPTED BY THE COUNTY OF RIVERSIDE CA. AND THE CITY OF COACHELLA, CA.
2. ALL CONSTRUCTION SHALL CONFORM TO STATE AND MUNICIPAL LAWS, CODES AND ORDINANCES, ETC. FOR MIN. STRUCTURAL DESIGN,MATERIALS USED, AND METHODS OF CONSTRUCTION, REFER TO APPLICABLE STATE AND MUNICIPAL BUILDING CODES. PROJECT SHALL BE CONSTRUCTED UNDER ALL APPICABLE LOCAL BUILDING PERMITS AND INSPECTION PROCEDURES.

BUILDING DATA

CONSTRUCTION TYPE	STORIES	OCCUPANCY GROUP
TYPE V-B WITH AUTOMATIC FIRE SPRINKLERS (DEFERRED SUBMITTAL)	ONE	RESIDENCE GROUP R DIVISION 3 GARAGE GROUP U

SCOPE OF WORK

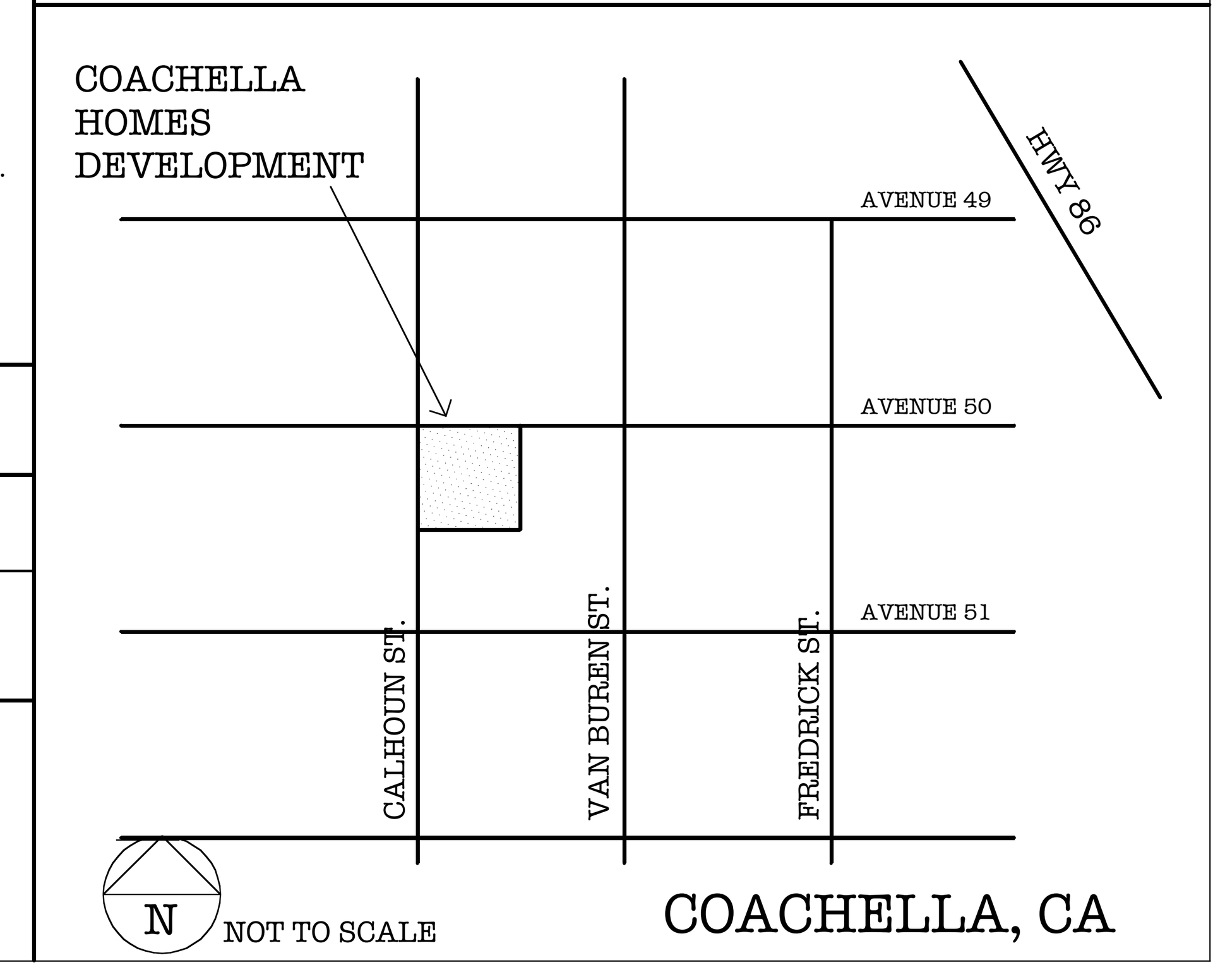
CONSTRUCT A FINISHED SINGLE FAMILY, ONE-STORY, HOUSE WITH ATTACHED GARAGE WITH PLUMBING, MECHANICAL, ELECTRICAL, LANSCAPING AND SITEWORK.

PERMITS

SEPERATE PERMITS SHALL BE REQUIRED FOR SIGNS, FENCES, RETAINING WALLS, TRASH ENCLOSURES, FLAGPOLES, POLE MOUNTED YARD LIGHT FOUNDATIONS, AND PLANTERS.

LICENSED ARCHITECT
C - 23697
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027
STATE OF CALIFORNIA

VICINITY MAP



NO	DATE	REVISION
1	6.12.24	CITY SUBMITTAL
2	4.5.25	CITY RE-SUBMITTAL
3	8.11.25	CITY SUBMITTAL
4		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

G A R O N D A R L I N G
A R C H I T E C T
2259 W PASEO DEL MAR
SAN PEDRO, CA. 90732 (310) 619-9540

SHEET TITLE
4 BEDROOM SFR
TYPE MORN 1
INDEX, CODE & PLANNING DATA
VICINITY MAP & GENERAL NOTES

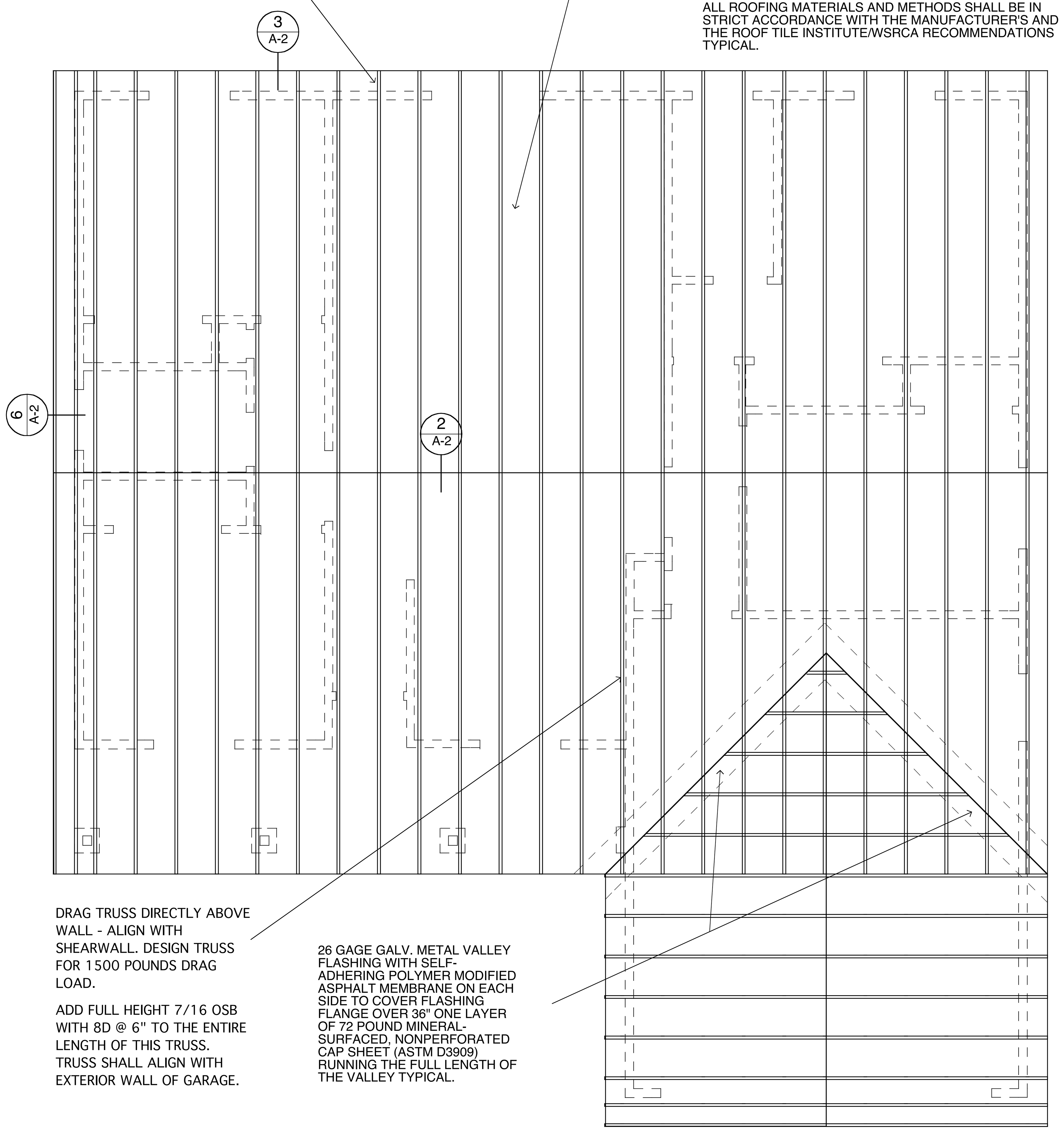
DATE 8/10/25 | JOB
SHEET T-1 OF DWGS

ROOFING: CONCRETE ROOF TILE BY EAGLE IAPMO ER 1900 - VALID THROUGH 01/31/2023 "CAPISTRANO" OR "MALIBU", "BELL AIR", "GOLDEN EAGLE", "PONDEROSA" OR APPROVED EQUAL NOT TO EXCEED 9.7 PSF. TILE MUST MEET TITLE 24, PART 6 COOL ROOF REQUIREMENTS FOR CLIMATE ZONE 15 (SOLAR REFLECTANCE AND THERMAL EMITTANCE) APPLY PER THE MANUFACTURER'S RECOMMENDATIONS AND ALSO, ALL OF THE FOLLOWING, TYPICAL: PROVIDE COUNTERBATTEN INSTALLATION OVER ONE LAYER OF 72 POUND MINERAL-SURFACED, NONPERFORATED CAP SHEET (ASTM D3909) OVER ONE LAYER NO. 30 ASPHALT-SATURATED FELT COMPLYING WITH ASTM D-226 (ASTM D4869 TYPE IV). USE 36" ROLLS AND LAP 19" TYPICAL. TURN DOWN OVER RAKE EDGE 1" MINIMUM. EXTEND 4" MINIMUM UP A VERTICAL (BLOCKING, NAILER OR WALL). END LAPS SHALL BE A MINIMUM OF 6" VERTICAL LAP.

ROOF COVERING SHALL BE CLASS A.

ALL ROOFING MATERIALS AND METHODS SHALL BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S AND THE ROOF TILE INSTITUTE/WSRCA RECOMMENDATIONS TYPICAL.

ENGINEERED WOOD TRUSSES TYPICAL (DEFERRED SUBMITTAL)



DRAG TRUSS DIRECTLY ABOVE WALL - ALIGN WITH SHEARWALL. DESIGN TRUSS FOR 1500 POUNDS DRAG LOAD.

ADD FULL HEIGHT 7/16 OSB WITH 8D @ 6" TO THE ENTIRE LENGTH OF THIS TRUSS. TRUSS SHALL ALIGN WITH EXTERIOR WALL OF GARAGE.

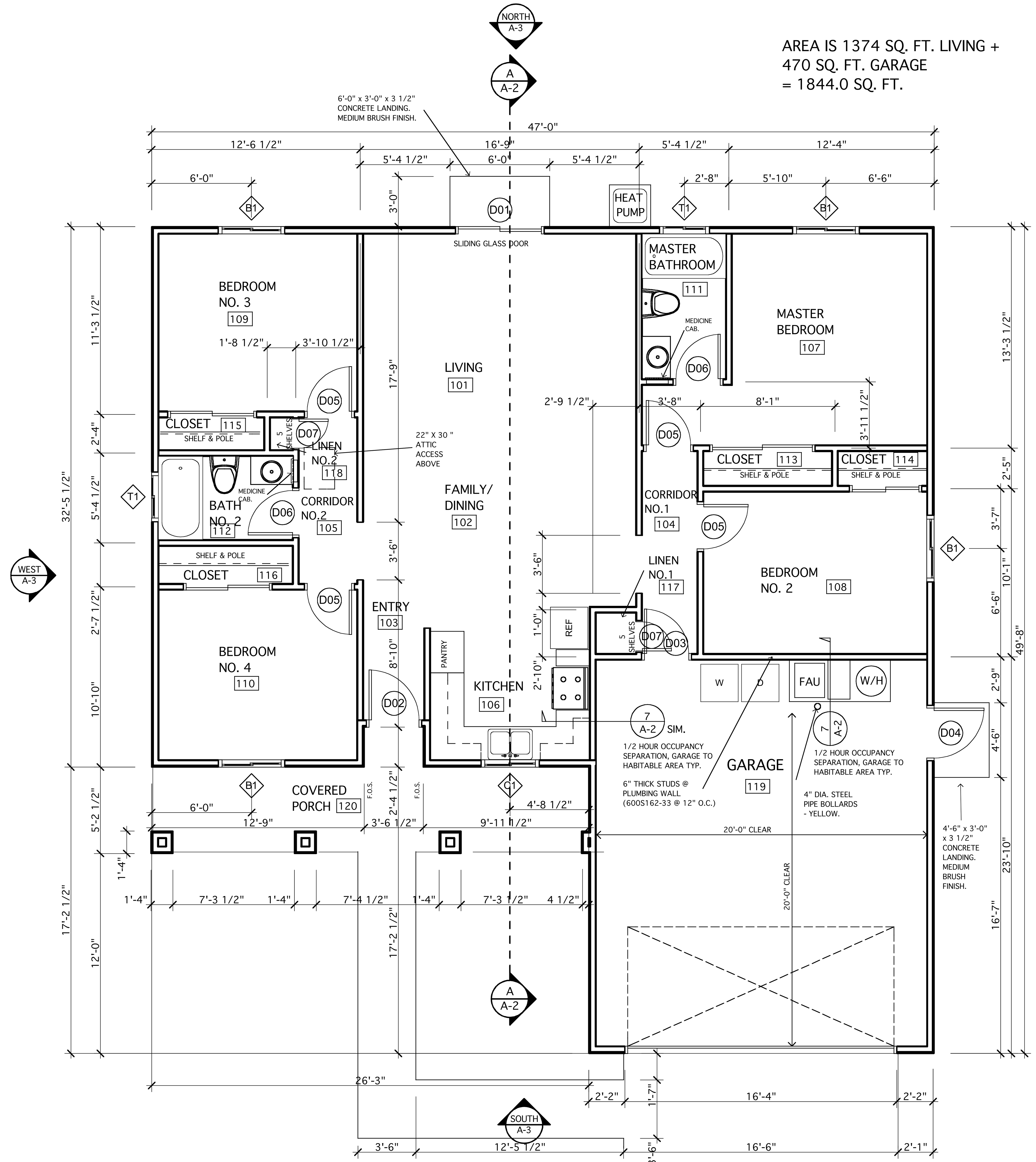
26 GAGE GALV. METAL VALLEY FLASHING WITH SELF-ADHERING POLYMER MODIFIED ASPHALT MEMBRANE ON EACH SIDE TO COVER FLASHING FLANGE OVER 36" ONE LAYER OF 72 POUND MINERAL-SURFACED, NONPERFORATED CAP SHEET (ASTM D3909) RUNNING THE FULL LENGTH OF THE VALLEY TYPICAL.

ROOF PLAN AND TRUSS LAYOUT

1/4"= 1'-0" SCALE

C - 23697
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027

AREA IS 1374 SQ. FT. LIVING + 470 SQ. FT. GARAGE = 1844.0 SQ. FT.



FIRST FLOOR PLAN

1/4"= 1'-0" SCALE

NO	DATE	REVISION
1	5.24.24	CITY SUBMITTAL
2	4.5.25	SHIFT BEDROOM WINDOW LOCATION
3	8.11.25	CITY SUBMITTAL
4		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

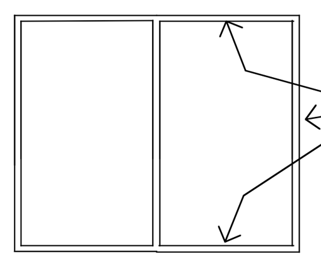
GARON DARLING
ARCHITECT
2259 W PASEO DEL MAR
SAN PEDRO, CA. 90732 (310) 619-9540

SHEET TITLE
MODEL 1374
4 BEDROOM
FLOOR PLAN
ROOF PLAN & TRUSS LAYOUT

DATE	JOB
8/10/25	

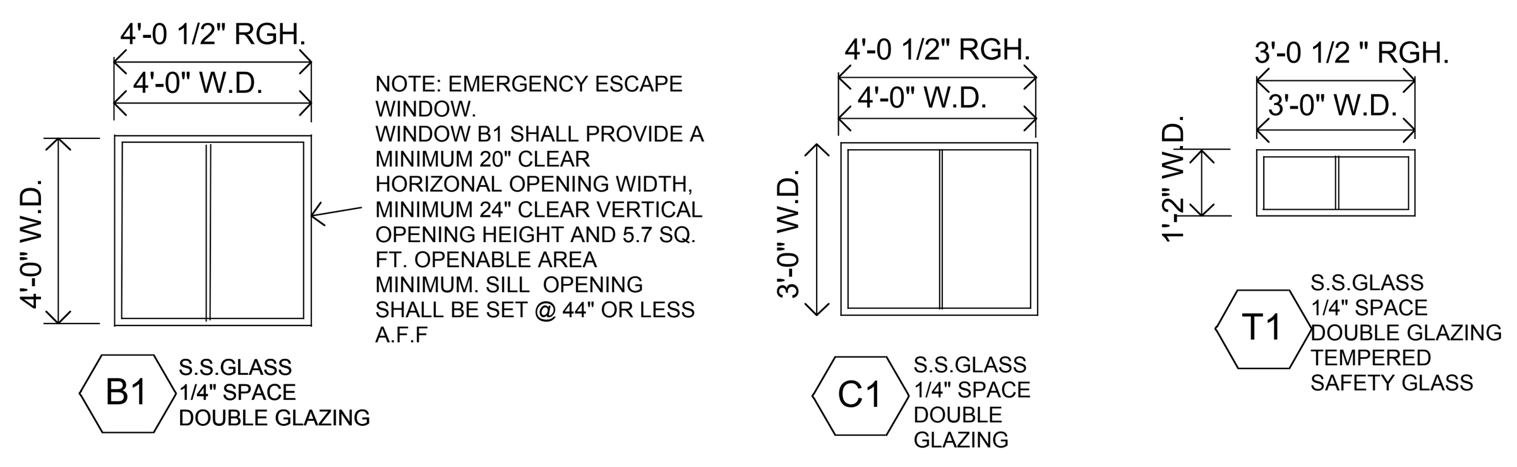
SHEET
A-1
OF DWGS

WINDOW SCHEDULE



NOTES:

1. LOW E GLASS & U VALUE 0.35 TYPICAL UNLESS NOTED OTHERWISE.
2. PROVIDE OBSCURE GLASS AT TOILETS.
3. ALL ROOM WINDOWS SHALL HAVE "LOUVER-DRAPE" VINYL BLINDS.
4. ALL WINDOWS ARE HORIZONTAL SLIDERS UNLESS NOTED OTHERWISE.

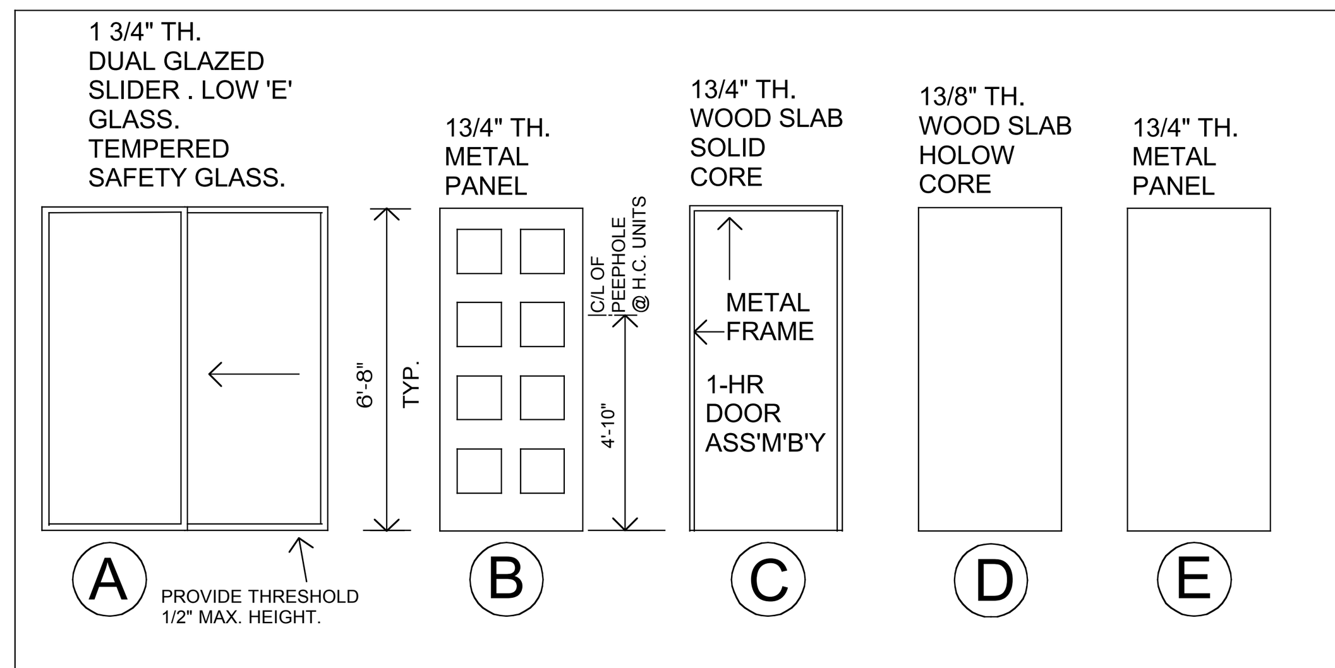


INTERIOR FINISH SCHEDULE

ROOM NAME		FLOOR: CARPET AND PAD.	FLOOR: VCT.	FLOOR: CERAMIC TILE	FLOOR: CONC. SLAB MEDIUM BRUSH FINISH.	FLOOR: CONC. SLAB SMOOTH FINISH.	BASE: 4" RUBBER	BASE: WOOD	WALLS: 1/2" GYPSUM BOARD.	WALLS: 1/2" TYPE 'X' GYPSUM BOARD.	WALLS: 1/2" GREEN GYPSUM BOARD.	WALLS: PAINT SEMI-GLOSS	WALLS: PAINT GLOSS	CEILINGS: 1/2" GYPSUM BOARD.	CEILINGS: (2) LAYERS 5/8" TYPE 'X' GYPSUM BOARD.	CEILINGS: 1/2" GREEN GYPSUM BOARD.	CEILINGS: PAINT SEMI-GLOSS	CEILINGS: PAINT GLOSS		REMARKS: ● ENTIRE ROOM ◑ PARTIAL ROOM
LIVING	101			●				●	●			●		●			●			
FAMILY/DINING	102			●				●	●			●		●			●			
ENTRY	103			●				●	●			●		●			●			
CORRIDOR NO. 1	104			●				●	◑	◑		●		●			●			
CORRIDOR NO. 2	105			●				●	●			●		●			●			
KITCHEN	106			●				●		◑	◑		●	●		◑		●		
MASTER BEDROOM	107	●						●	●			●		●			●			
BEDROOM NO.2	108	●						●	◑	◑		●		●			●			
BEDROOM NO.3	109	●						●	●			●		●			●			
BEDROOM NO.4	110	●						●	●			●		●			●			
MASTER BATHROOM	111		●				●				●		●			●		●		
BATHROOM NO.2	112		●				●				●		●			●		●		
CLOSET	113	●						●	●			●		●			●			
CLOSET	114	●						●	●			●		●			●			
CLOSET	115	●						●	●			●		●			●			
CLOSET	116	●						●	●			●		●			●			
LINEN NO.1	117			●				●	◑	◑		●		●			●			
LINEN NO.2	118			●				●	●			●		●			●			
GARAGE	119					●			◑	◑		●			●		●			
COVERED PORCH	120				●															

INTERIOR FINISH SCHEDULE NOTES

1. AREAS SHOWN TO RECEIVE CARPET SHALL INCLUDE: CARPET, PAD, TACK STRIPS. AND CARPET TRANSITIONS AND ARE TO BE PROVIDED AND INSTALLED BY CONTRACTOR. CONTRACTOR SHALL PROVIDE A FLOOR SURFACE THAT FOLLOWS THE CARPET MANUFACTURER'S RECOMMENDATIONS.
2. WOOD BASE SHALL BE PAINT GRADE - DIMENSIONS AND PROFILE TO MATCH EXISTING. SUBMIT SAMPLE TO ARCHITECT PRIOR TO ORDERING OR MILLING.
3. INTERIOR WOODWORK AND TRIM SHALL BE PAINT GRADE WITH DIMENSIONS AND PROFILES AS APPROVED BY OWNER. SUBMIT SAMPLE TO ARCHITECT PRIOR TO ORDERING.
4. INTERIOR WALLS AND CEILINGS CALLED OUT TO BE PAINTED AND WHERE ANY PRIOR PAINTED SURFACE HAS BEEN DISTRUBED BY WORK DONE AFTER PAINTING, SHALL BE PAINTED WITH TWO COATS OVER BASE COAT. TRIM SHALL BE PAINTED WITH TWO COATS OF SEMIGLOSS OVER BASE COAT.



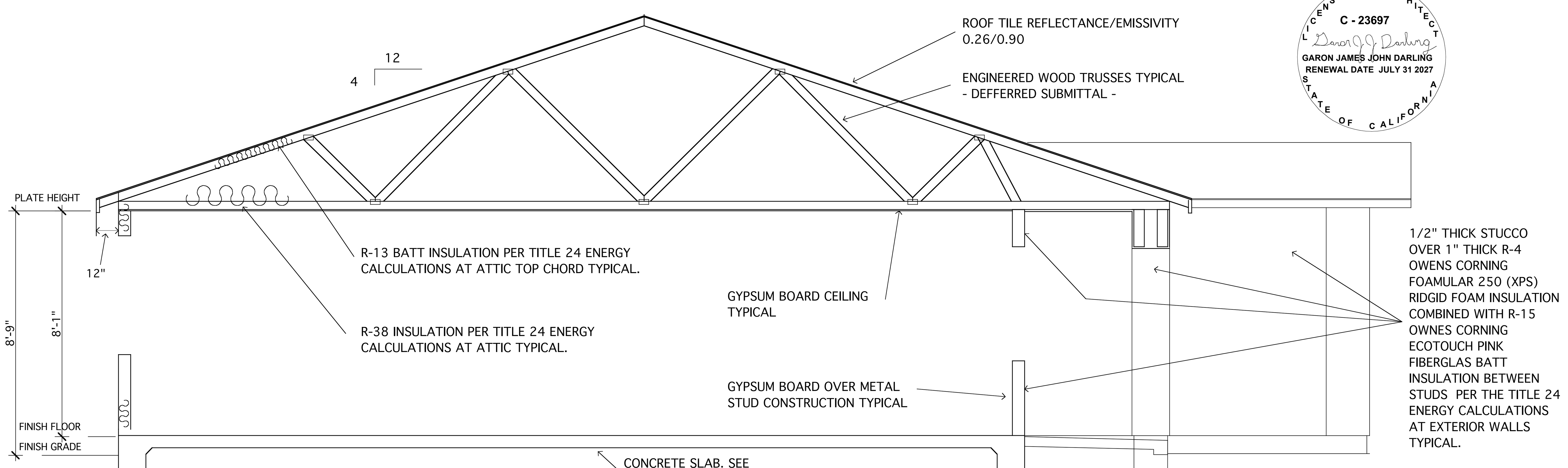
DOOR SCHEDULE

QUANTITY	DOOR NUMBER	SIZE: W X H	SIZE: THK.	TYPE	DETAILS: HEAD	DETAILS: JAMB	DETAILS: SILL	REMARKS: ALL DOOR GLAZING SHALL BE DUAL PANE, TEMPERED SAFETY GLASS . EXTERIOR OUTSWINGING DOORS SHALL HAVE THE FOLLOWING: NON-REMOVABLE BUTTS, 20 GAUGE GALV. FLASHING/DRIP AT FRAME HEAD AND AT DOOR BOTTOM. SOLID HARDWOOD THRESHOLD, KEYED DEADBOLT WITH INTERIOR THUMBTURN.
1	D01	5'-0" X 6'-8"	1 3/4"	A				GLIDING DUAL GLAZED PATIO DOOR.
1	D02	3'-0" X 6'-8"	1 3/4"	B				
1	D03	3'-0" X 6'-8"	1 3/4"	C				SELF-CLOSING HARDWARE.
1	D04	3'-0" X 6'-8"	1 3/4"	E				
4	D05	2'-8" X 6'-8"	1 3/8"	D				UNDERCUT DOOR 1" FOR RETURN AIR.
2	D06	2'-8" X 6'-8"	1 3/8"	D				UNDERCUT DOOR 1" FOR RETURN AIR.
2	D07	2'-0" X 6'-8"	1 3/8"	D				

DOOR NOTES

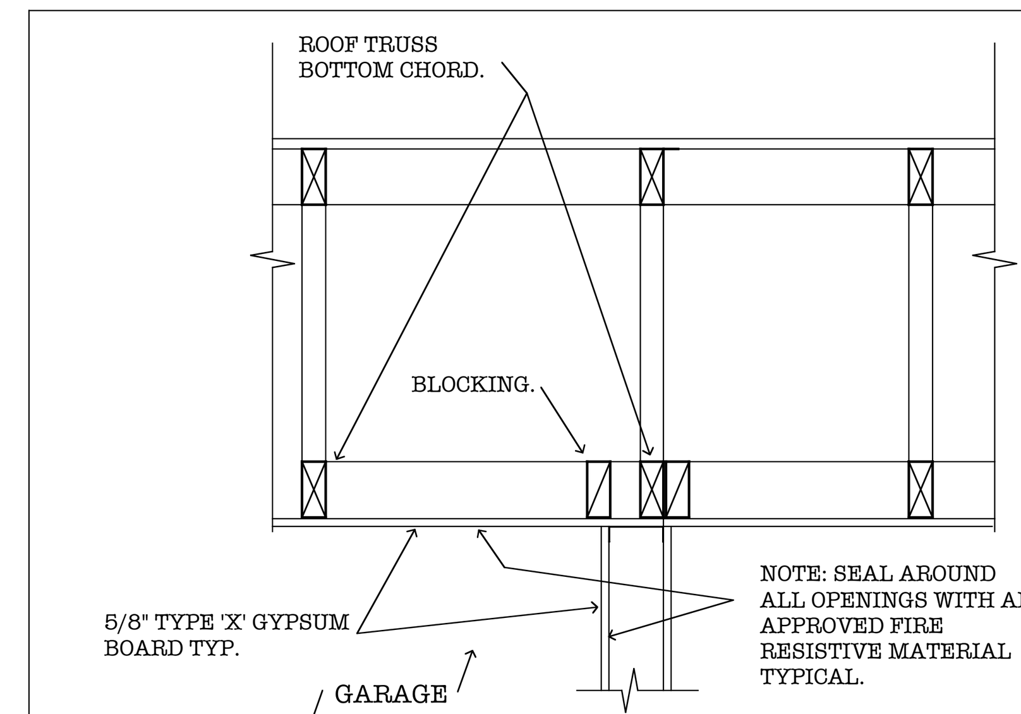
EXTERIOR DOORS SHALL MEET ONE OF THE FOLLOWING:

NONCOMBUSTABLE CONSTRUCTION -OR-
MINIMUM 20-MIN RATED -OR-
MEET SFM 12-7A-1

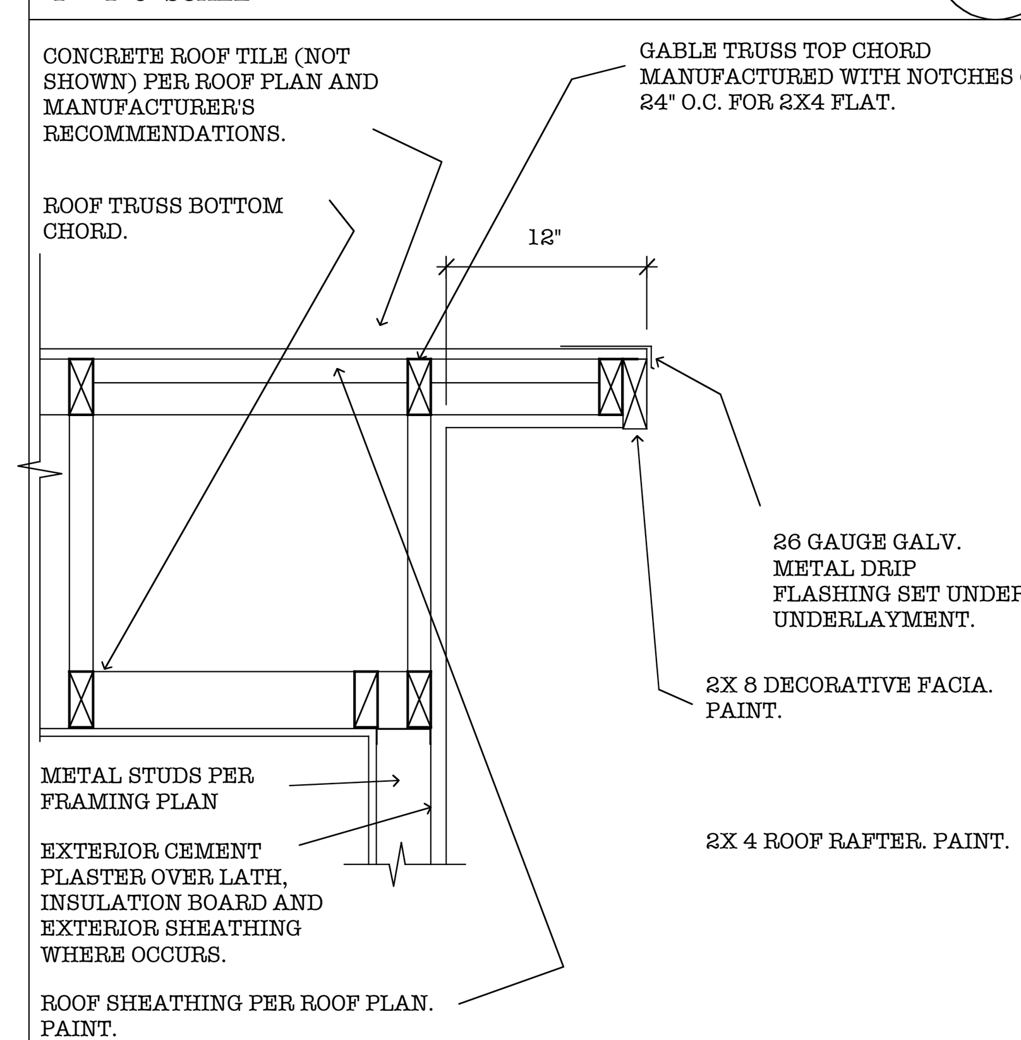


LICENSED ARCHITECT
C - 23697
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027
STATE OF CALIFORNIA

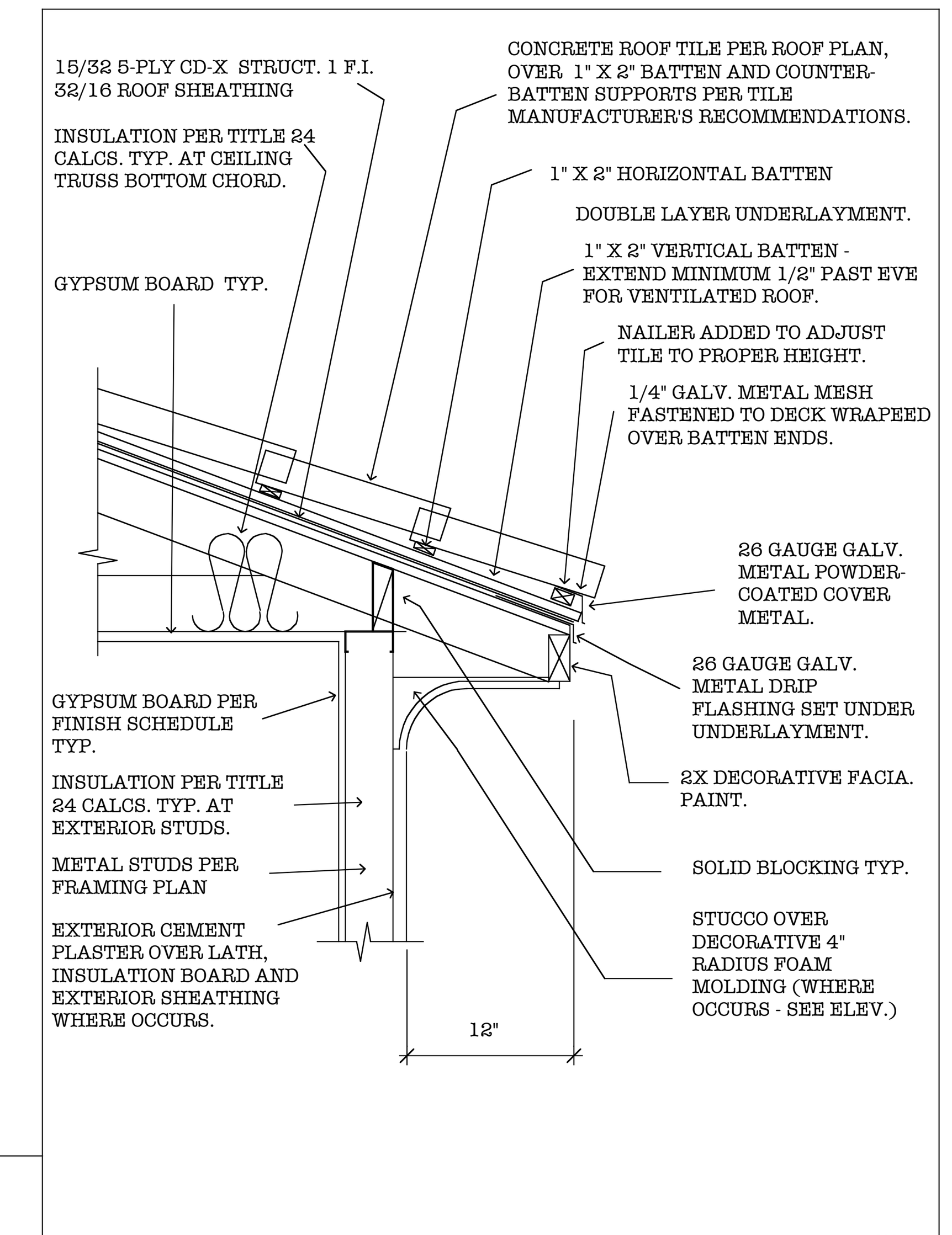
SECTION A
3/8"= 1'-0" SCALE



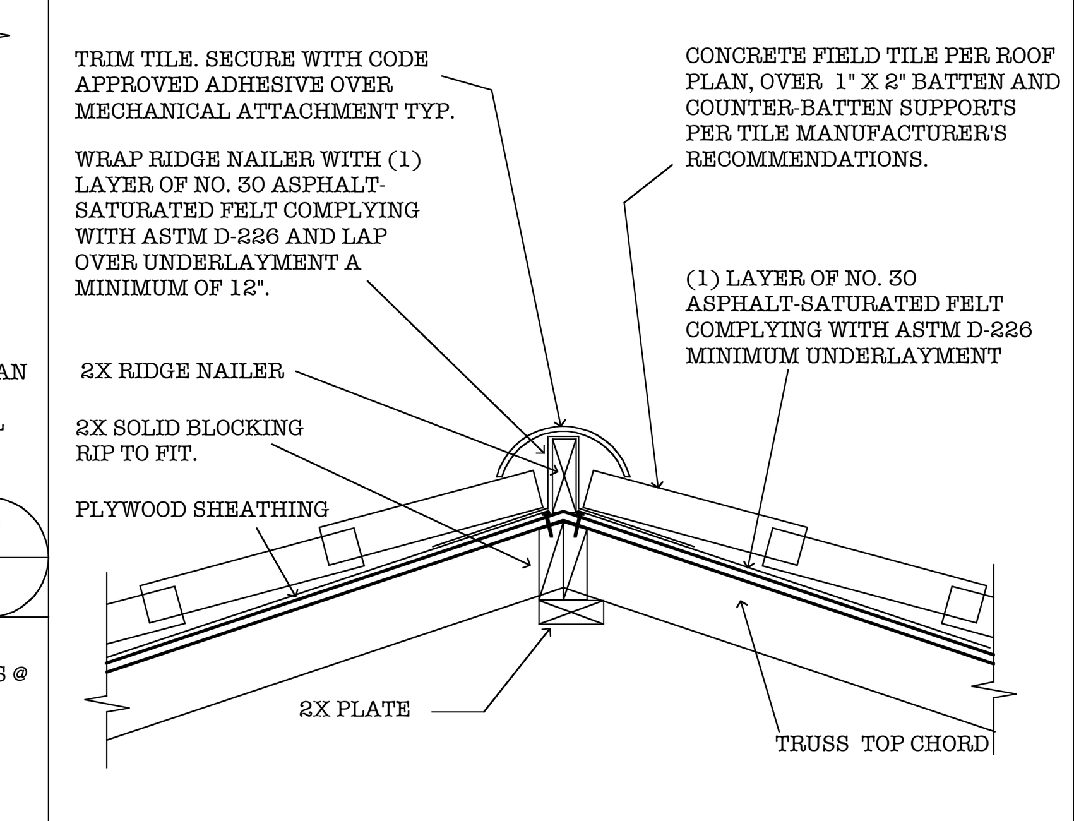
1/2 HOUR SEPARATION @ GARAGE/DWELLING TYPICAL — 7
1" = 1'-0" SCALE



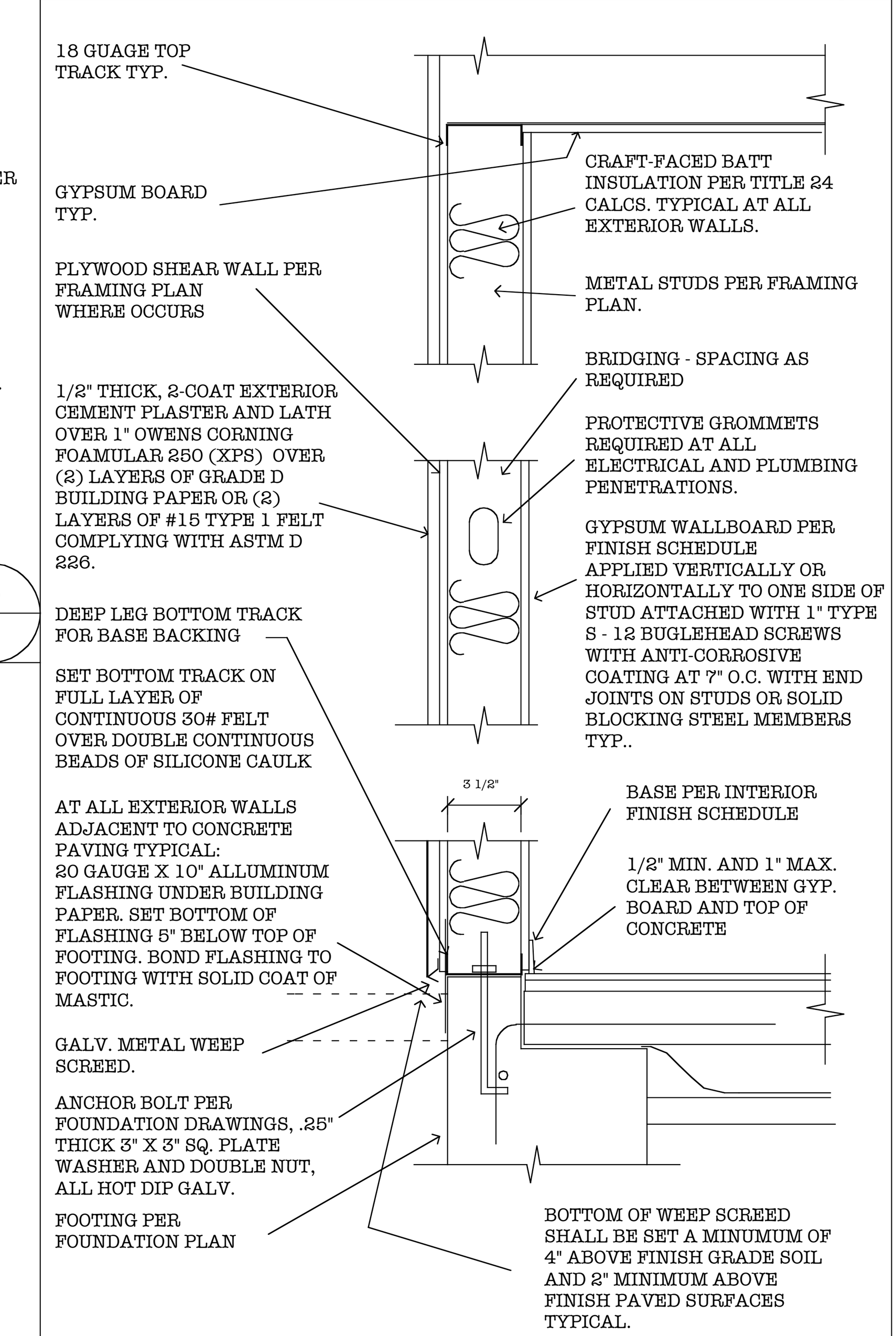
ROOF EAVE AT GABLE END TYPICAL — 6
1" = 1'-0" SCALE



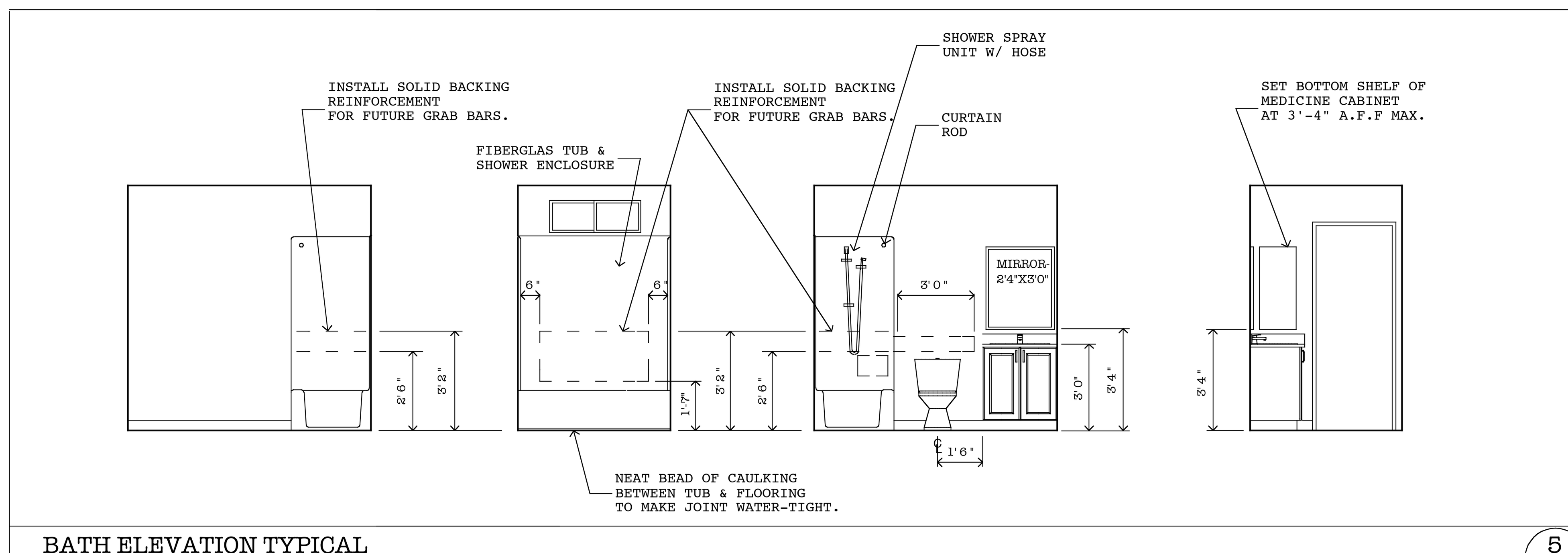
ROOF EAVE TYPICAL — 3
1" = 1'-0" SCALE



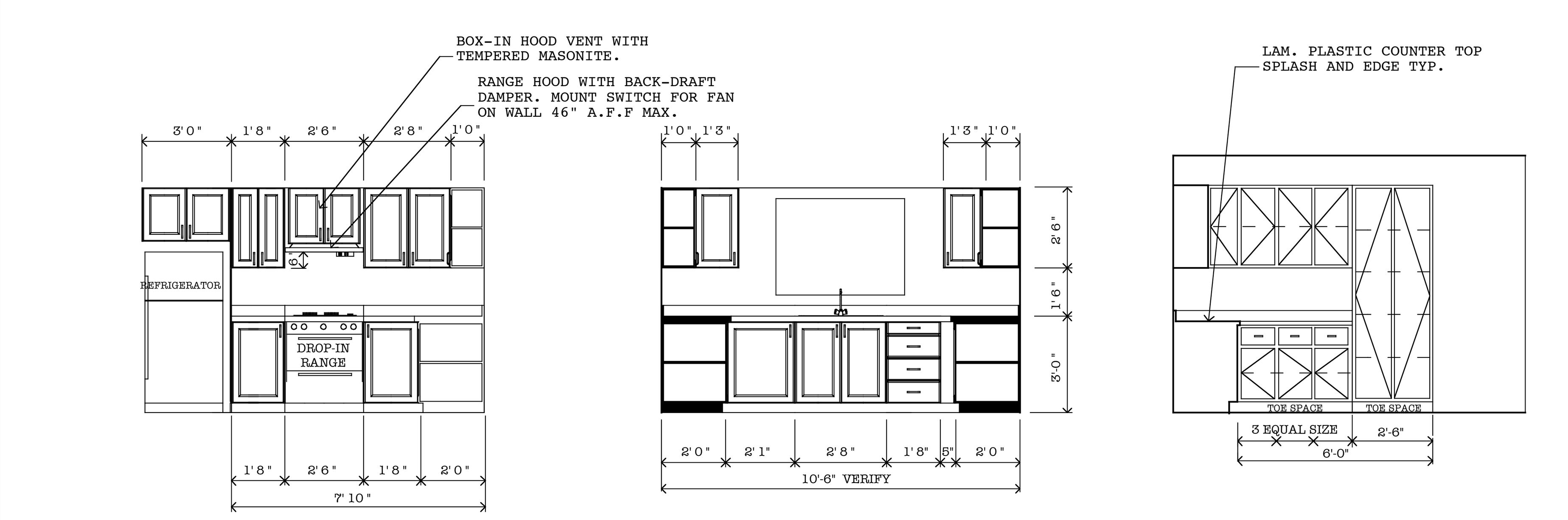
ROOF RIDGE TYPICAL — 2
1" = 1'-0" SCALE



EXTERIOR WALL TYPICAL — 1
1" = 1'-0" SCALE



BATH ELEVATION TYPICAL — 5
SCALE: 1/4" = 1'0"



KITCHEN ELEVATION — 4
SCALE: 1/4" = 1'0"

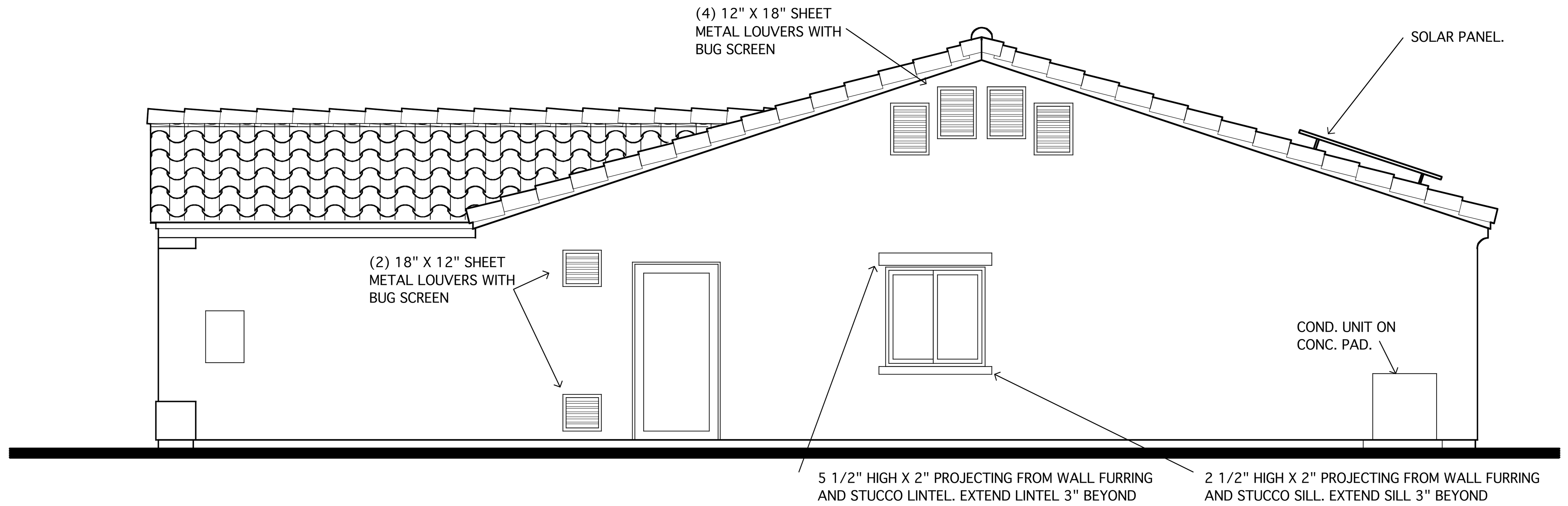
NO.	DATE	REVISION
1	6.24.24	CITY SUBMITTAL
2	4.5.25	EAVE AND RAKE CHANGE TO 12"
3	8.11.25	CITY SUBMITTAL
4		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON DARLING
ARCHITECT
2259 W PASEO DEL MAR
SAN PEDRO, CA. 90732 (310) 619-9540

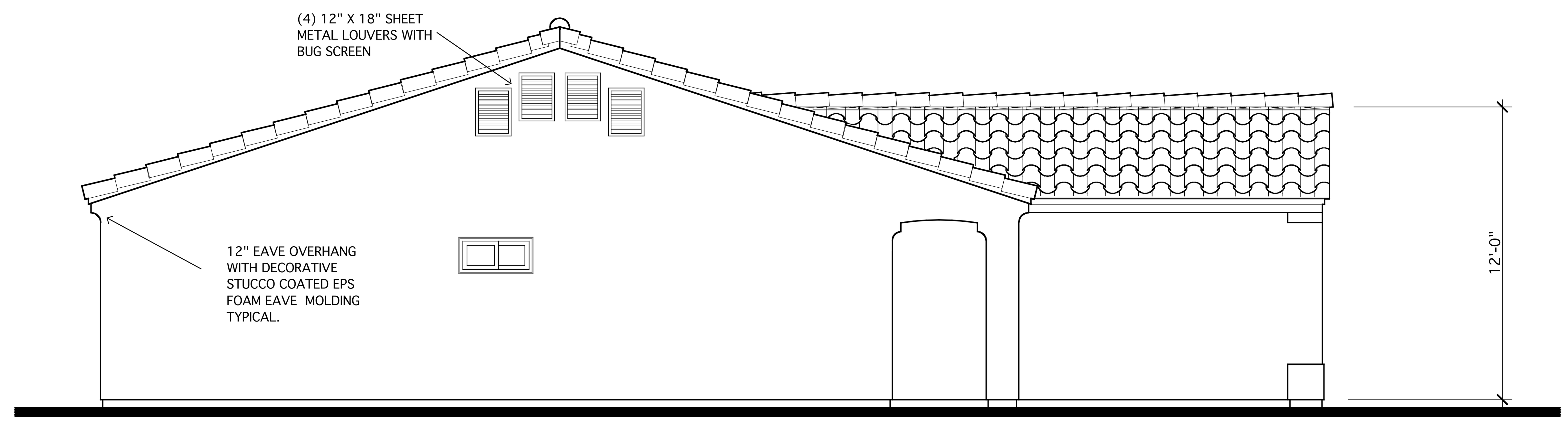
SHEET TITLE
MODEL 1374
4 BEDROOM
INT. FINISH SCHED., DOOR & WINDOW SCHED., INT. ELEVS. SECT. A AND DETAILS

DATE: 8/11/25
JOB:
SHEET: A-2
OF DWGS



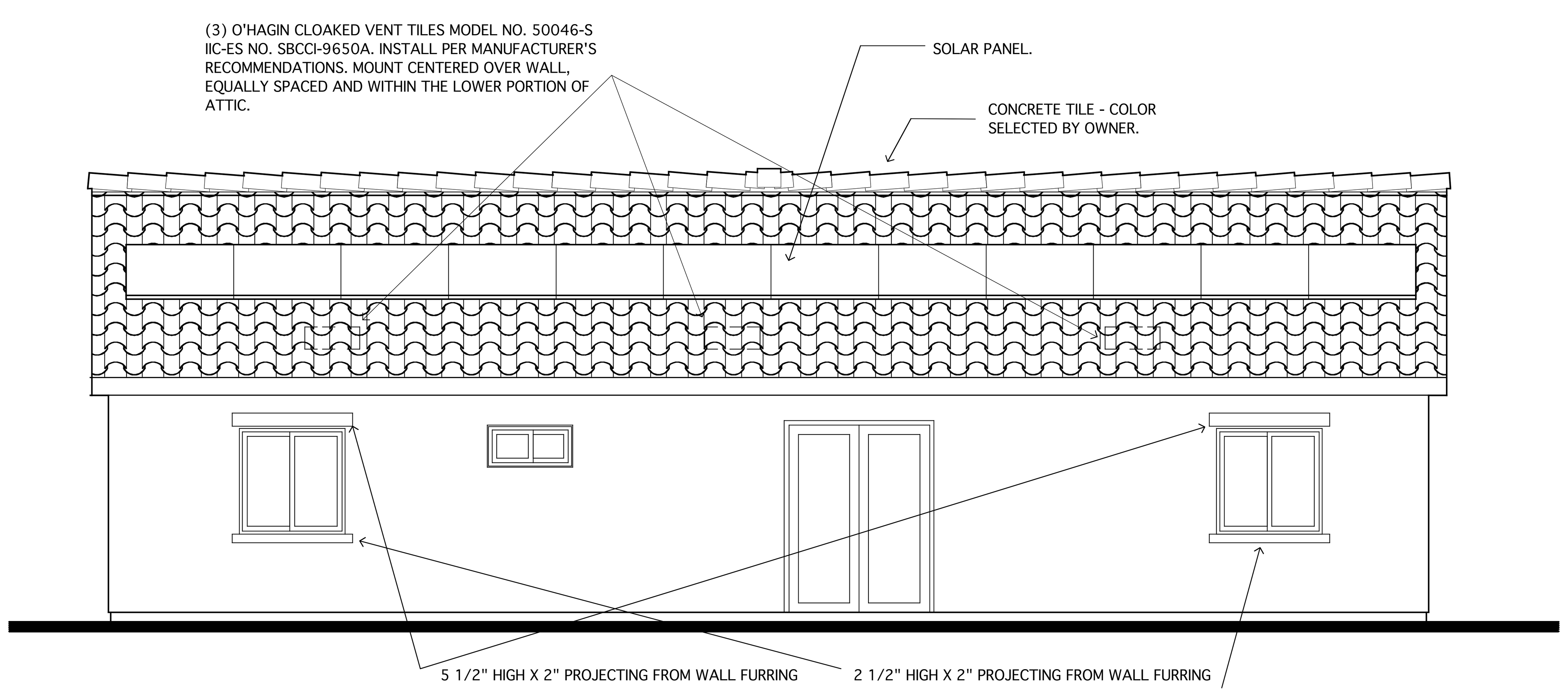
RIGHT SIDE - EAST ELEVATION - 4 BEDROOM TYPE MORN 1

1/4"= 1'-0" SCALE



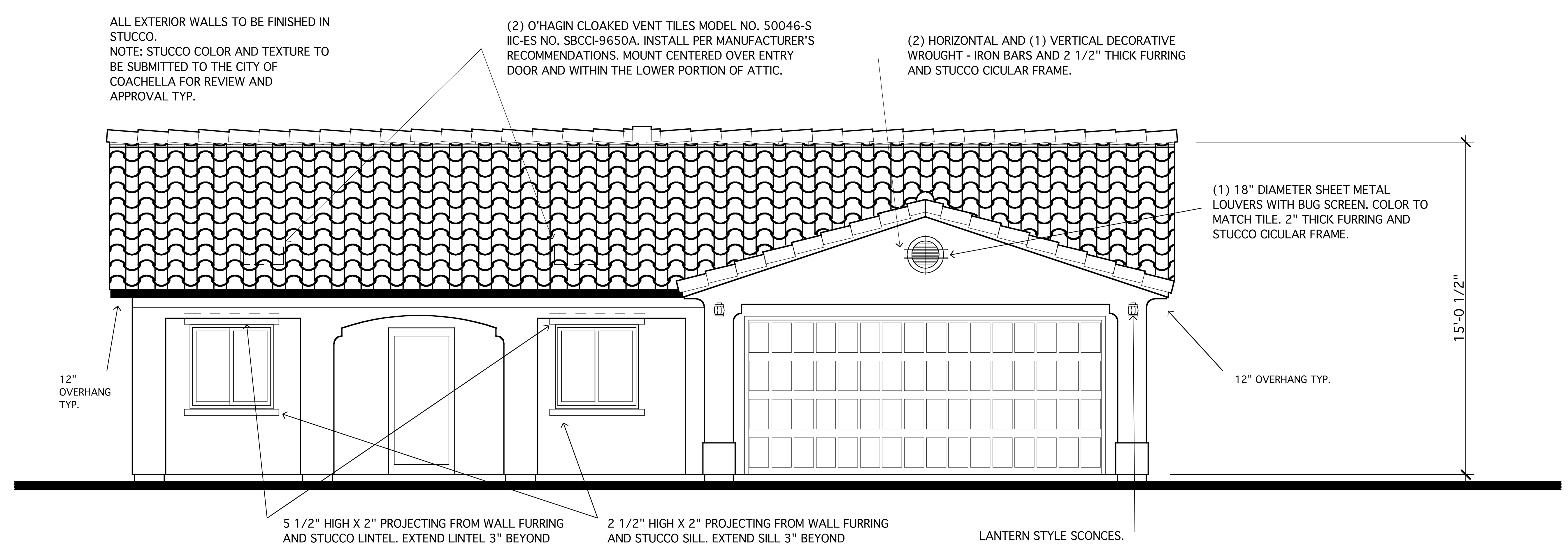
LEFT SIDE - WEST ELEVATION - 4 BEDROOM TYPE MORN 1

1/4"= 1'-0" SCALE



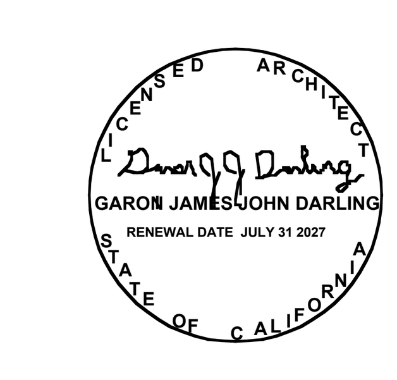
BACK - NORTH ELEVATION - 4 BEDROOM TYPE MORN 1

1/4"= 1'-0" SCALE



FRONT - SOUTH ELEVATION - 4 BEDROOM TYPE MORN 1

1/4"= 1'-0" SCALE



NO	DATE	REVISION
1	5.24.24	CITY SUBMITTAL
2	4.5.25	REVISE EAVE AND RAKE TO 12"
3	8.11.25	CITY SUBMITTAL
4	9.29.25	REVISE WINDOW TRIM ADD SOLAR

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON J. J. DARLING
ARCHITECT
2259 PASEO DEL MAR
SAN PEDRO, CA. 90732 (310)619-9540

SHEET TITLE
MODEL 1374
4 BEDROOM
ELEVATIONS

DATE 9/29/25
JOB
SHEET
A-3
OF DWGS

CORROSION CONTROL MEASURES

ANIONS	ACI-318 SOIL CLASSIFICATION	SOIL CONTENT	CATEGORY
SULFATE CONCENTRATION	S2	4900 MG/KG	SEVERE
CHLORIDE CONCENTRATION		2020 MG/KG	AGGRESSIVE

MATERIAL	CLASSIFICATION
FERROUS METALS	SEVERELY CORROSIVE
COPPER	AGGRESSIVELY CORROSIVE
CONCRETE	SEVERELY CORROSIVE
REINFORCING STEEL	AGGRESSIVELY CORROSIVE

CONCRETE STRUCTURES CONTINUED:

EXPOSED SLAB EDGE AND EXTERIOR FOUNDATION FACES SHALL BE COATED WITH A PERMANENT WATERPROOFING MEMBRANE.

PROVIDE 10 MIL POLYETHYLENE VAPOR BARRIER - SEAL MINIMUM 8" LAP AT VAPOR BARRIER JOINTS WITH STEGO TAPE OR APPROVED EQUAL. THE VAPOR BARRIER SHALL BE PROTECTED FROM PUNCTURE. TURN DOWN VAPOR BARRIER AT FOOTING TO EXTEND UNDER FOOTING AND BACK UP AT EXTERIOR FACE TO FINISH GRADE LEVEL PER THE WIRE REINFORCEMENT INSTITUTE (WRI) RECOMMENDATIONS. THE VAPOR BARRIER SHALL BE PLACED DIRECTLY UNDER THE CONCRETE.

THE CONCRETE SHALL BE PLACED DIRECTLY ON THE VAPOR BARRIER. THE VAPOR BARRIER SHALL BE PLACED DIRECTLY ON A 4" THICK LAYER OF 1/2" CLEAN AGGREGATE BASE AS REQUIRED TO PEOVIDE A CAPILLARY BREAK PER ACI 302.2R-06.

STEEL REINFORCING SHALL BE SET SO AS TO PROVIDE A MINIMUM 3" COVER OF DENSELY CONSOLIDATED CONCRETE (BY USE OF A VIBRATOR) TO SOIL CLEARANCE TYPICAL.

ALL WALL ANCHOR BOLTS AND ALL HOLD DOWN ANCHOR BOLTS SHALL BE HOT DIP GALV. TYP.

'STRAP-TYPE' HOLD DOWN ANCHORS ARE NOT ALLOWED. ONLY SOLID ROUND BAR STEEL, HOT-DIP GALV. ANCHORS ARE PERMITTED.

NO METALIC WATER PIPES OR CONDUITS SHALL BE PLACED BEFLOW FOUNDATIONS.

COPPER WATER PIPING (EXCEPT FOR TRAP PRIMERS) SHALL NOT BE PLACED UNDER FLOOR SLABS. ALL COPPER PIPING WITHIN 18 INCHES OF THE GROUND SURFACE SHALL BE SLEEVED WITH PVC PIPING TO PREVENT CONTACT WITH SOIL. THE TRAP PRIMER SHALL BE COMPLETELY ENCAPSULATED IN A PVC SLEEVE.

PRESSURIZED WATERLINES SHALL NOT BE PLACED UNDER THE FLOOR SLAB.

COPPER TUBING:

1. USE TYPE K OR TYPE L COPPER TUBING AS REQUIRED BY THE APPLICABLE LOCAL PLUMBING CODE. TYPE M TUBING SHALL NOT BE USED FOR BURIED APPLICATIONS.
2. ELECTRICALLY INSULATE UNDERGROUND COPPER PIPE FROM DISSIMILAR METALS AND FROM ABOVE GROUND COPPER PIPE WITH INSULATING DEVICE PER NACE SP0286.
3. ELECTRICALLY INSULATE COLD WATER PIPING FROM HOT WATER PIPING SYSTEMS.
4. PROTECT BURIED COPPER TUBING BY ONE OF THE FOLLOWING MEASURES.
   - A. PREVENT SOIL CONTACT. SOIL CONTACT SHALL BE PREVENTED BY PLACING THE TUBING ABOVE GROUND OR BY ENCASING THE TUBING USING PVC PIPE WITH SOLVENT-WELDED JOINTS. EITHER SEAL THE PVC PIPE AT BOTH ENDS OR TERMINATE BOTH ENDS ABOVE-GRADE IN A MANNER THAT DOESN'T ALLOW WATER TO INFILTRATE.
   - B. INSTALL COPPER PIPE WITH A FACTORY-APPLIED COATING THAT IS AT LEAST 25 MILS IN THICKNESS. USE KAMCO'S AQUA SHIELD, MUELLER STEAMLINE'S PLUMBSHIELD, OR EQUAL. THE COATING MUST BE CONTINOUS WITH NO CUTS OR DEFECTS.
   - C. INSULATE THE PIPE BY INSTALLING 12-MIL POLYETHYLENE PIPE WRAPPING TAPE WITH BUTYL RUBBER MASTIC OVER A SUITABLE PRIMER. PROTECT WRAPPED COPPER TUBING BY APPLYING CATHODIC PROETCTION PER NACE SP0169.

PLASTIC AND VITRIFIED CLAY PIPE:

1. NO SPECIAL CORROSION CONTROL MEASURES ARE REQUIRED FOR PLASTIC AND VITRIFIED CLAY PIPING.
2. PROTECT ALL METALLIC FITTINGS AND VALVES WITH WAX TAPE PER AWWA C217, OR WITH EPOXY AND APPROPRIATELY DESIGNED CATHODIC PROTECTION SYSTEM PER NACE SP0169.

CONCRETE STRUCTURES AND PIPE:

1. PROTECT CONCRETE STRUCTURES AND PIPE FROM SULFATE ATTACK IN SOIL WITH A SEVERE SULFATE CONCENTRATION (S2), FROM 0.20 TO 2.0 PERCENT. USE ASTM C150 TYPE V CEMENT, A MAXIMUM WATER/ CEMENT RATIO OF 0.40, AND A MINIMUM STRENGTH OF 5000 P.S.I.
2. CHLORIDE CONCENTRATIONS ARE AT LEVELS WHERE ADDITIONAL PROTECTIVE MEASURES ARE REQUIRED TO PROTECT STEEL AND IRON EMBEDDED IN CONCRETE FROM CHLORIDE ATTACK. THIS APPLIES TO SUCH ITEMS AS REINFORCING STEEL AND ANCHOR BOLTS, (BUT NOT POST-TENSIONING STRANDS AND ANCHORS WHICH HAVE SEPERATE REQUIRMENTS).
   - A. INSTALL PROTECTIVE CONCRETE USING A CONCRETE MIX DESIGNED TO PROTECT EMBEDDED STEEL AND IRON WITH THE INCLUSION OF CORROSION INHIBITOR ADMIXTURE AND/OR SUPPLEMENTARY CEMENTIOUS MATERIALS (SUCH AS FLY ASH AND SILICA FUME) BASED ON THE FOLLOWING PARAMETERS:
     - I. CHLORIDE ION CONTENT.
     - II. SERVICE LIFE OF 40 YEARS MINIMUM.
     - III. CONCRETE COVER OF 3" CLEAR FOR FOOTINGS AND 2" CLEAR FOR SLAB.
     - IV. THE CURRENT BUILDING CODE.
   - B. INSTALL WATERPROOF CONCRETE. WATERPROOFING FOR CONCRETE SHALL BE THE FOLLOWING:
     - I. A 4" LAYER OF 1/2" CLEAN AGGREGAE GRAVEL CAPILARY BREAK UNDER THE CONCRETE.

GENERAL:

SITE SOIL IS NOT SUITABLE FOR USE AS BACKFILL DUE TO CORROSION POTENTIAL PER CALTRANS.

ALL PIPE:

ALL PIPES, APPURTENANCES, AND FITTINGS NOT PROTECTED BY CATHODIC PROTECTION, COAT BARE METAL SUCH AS VALVES, BOLTS. FLANGE JOINTS, JOINT HARNESSES, AND FLEXIBLE COUPLINGS WITH WAX TAPE PER AWWA C217 AFTER ASSEMBLY.

WHERE METALIC PIPELINES PENETRATE CONCRETE STRUCTURES SUCH AS BUILDING FLOORS, VAULT WALLS, AND THRUST BLOCKS, USE PLASTIC SLEEVES, RUBBER SEALS, OR OTHER DIELECTRIC MATERIAL TO PREVENT PIPE CONTACT WITH THE CONCRETE AND REINFORCING STEEL.

PREVENT DIFFERENTIAL AERATION CORROSION CELLS BY PROVIDING AT LEAST 2 INCHES OF PIPE BEDDING OR CLEAN NON-CORROSIVE BACKFILL MATERIAL ALL AROUND METALIC PIPING, INCLUDING THE BOTTOM. DO NOT LAY PIPE DIRECTLY ON UNDISTURBED SOIL.

STEEL PIPE:

1. UNDERGROUND STEEL PIPE WITH RUBBER GASKETED, MECHANICAL, GROOVED END, OR OTHER NONCONDUCTIVE TYPE JOINTS SHOULD BE BONDED FOR ELECTRICAL CONTINUITY. ELECTRICAL CONTINUITY IS NECESSARY FOR CORROSION MONITORING AND CATHODIC PROTECTION.
2. INSTALL CORROSION MONITORING TEST STATIONS TO FACILITATE CORROSION MONITORING AND THE APPLICATION OF CATHODIC PROTECTION:
   - A. AT EACH END OF THE PIPELINE.
   - B. AT EACH END OF ALL CASINGS.
   - C. OTHER LOCATIONS AS NECESSARY SO THE INTERVAL BETWEEN TEST STATIONS DOES NOT EXCEED 1,200. FEET.
3. TO PREVENT DISSIMILAR METAL CORROSION CELLS AND TO FACILITATE THE APPLICATION OF CATHODIC PROTECTION, ELECTRICALLY ISOLATE EACH BURIED STEEL PIPELINE PER NACE SP0286 FROM:
   - A. DISSIMILAR METALS.
   - B. DISSIMILARLY COATED PIPING (CEMENT-MORTAR VS. DIELECTIC).
   - C. ABOVE GROUND STEEL PIPE.
   - D. ALL EXISTING PIPING.
4. APPLY A SUITABLE DIELECTRIC COATING INTENDED FOR UNDERGROUND USE SUCH AS:
   - A. POLYURETHENE PER AWWA C222 OR,
   - B. EXTRUDED POLYETHYLENE PER AWWA C215 OR,
   - C. A TAPE COATING SYSTEM PER AWWA C214 OR,
   - D. HOT APPLIED COAL TAR ENAMEL PER AWWA C203 OR,
   - E. FUSION BONDED EPOXY PER AWWA C213.
5. APPLY CATHODIC PROTECTION TO STEEL PIPING AS PER NACE SP0169.

CAST IRONSOIL PIPE (IF USED IN LIEU OF PVC/ABS):

1. PROTECT CAST IRON SOIL PIPE WITH EITHER A DOUBLE WRAP 4-MIL OR SINGLE WRAP 8-MIL POLYETHYLENE ENCASEMENT PER AWWA C105.
2. IT IS NOT NECESSARY TO BOND THE PIPE JOINTS OR APPLY CATHODIC PROTECTION.
3. PROVIDE 6 INCHES OF CLEAN SAND BACKFILL ALL AROUND THE PIPE. USE THE FOLLOWING PARAMETERS FOR CLEAN SAND BACKFILL:
   - A. A MINIMUM SATURATED RESISTIVITY OF NO LESS THAN 3,000 OHM-CM; AND,
   - B. PH BETWEEN 6.0.AND 8.0.
   - C. ALL BACKFILL TESTING SHOULD BE PERFORMED BY A CORROSION ENGINEERING COMPANY.

LICENSED ARCHITECT
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027
STATE OF CALIFORNIA

NO	DATE	REVISION
1	6.24.24	CITY SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		
4		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
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2259 PASEO DEL MAR
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SHEET TITLE
GENERAL NOTES

DATE	JOB
8/10/25	

SHEET
A-4
OF DWGS

METAL STUD AND WOOD STRUCTURAL PANEL SHEAR WALL SCHEDULE

TYPE	PANEL MATERIAL	STUD AND TRACK MATERIAL***	FASTENER AT PANEL EDGES	FASTENER IN THE FIELD	ANCHOR BOLTS	FRAMING ANCHOR @ TOP	NOMINAL SHEAR*	SEISMIC ALLOWABLE SHEAR**	(ASD) WIND ALLOWABLE SHEAR****
1	7/16" OSB ONE SIDE	33 MILS	#8 X 1" @ 6" O.C.	#8 X 1" @ 12" O.C.	5/8" DIA. @ 36" O.C. MAX. & 12" MAX. FROM END HOLDDOWNS	L50 @ 20" O.C.	700 PLF	280 PLF	350 PLF
2	7/16" OSB ONE SIDE	33 MILS	#8 X 1" @ 4" O.C.	#8 X 1" @ 12" O.C.	5/8" DIA. @ 32" O.C. MAX. & 12" MAX. FROM END HOLDDOWNS	L50 @ 14" O.C.	915 PLF	366 PLF	457 PLF
3	7/16" OSB TWO SIDES	43 MILS	#8 X 1" @ 2" O.C.	#8 X 1" @ 12" O.C.	5/8" DIA. @ 12" O.C. MAX. & 12" MAX. FROM END HOLDDOWNS	L50 @ 9" O.C.	2060 PLF	824 PLF	1030 PLF

*** TOP TRACK SHALL BE 43 MILS (18 GAUGE).

* PRIOR TO REDUCTION FACTOR

** AFTER OMEGA 2.5 REDUCTION FACTOR

**** AFTER OMEGA 2.5 REDUCTION FACTOR

LEGEND

1 — SHEAR WALL TYPE

8' — SHEAR WALL LENGTH

NOTES:

1. ALL WOOD PANEL SHEAR WALLS SHALL BE IN ACCORDANCE WITH AISI S213.
2. WALL STUDS SHALL BE IN ACCORDANCE WITH AISI S200, AISI S211 OR ANSI S100.
3. SHEAR VALUES FOR STEL SHEETS OR COLD-FORMED STEEL FRAMED WALLS SHEATHED WITH WOOD STRUCTURAL PANELS SHALL CONFORM WITH THE REQUIREMENTS IN AISI-LATERAL C2.2.1 AND C2.2, RESPECTIVELY.
4. ALLOWABLE VALUES SHALL BE IN ACCORDANCE WITH TABLE C2.1-3, TAKING IN TO ACCOUNT THE CORRESPONDING REDUCTIONS PER C2.1 (ANSI-LATERAL).
5. SCREW EDGE DISTANCE SHALL BE 1/2" TYPICAL.
6. ALL SHEAR WALL SILL PLATE BOLTS SHALL HAVE 8" MINIMUM EMBEDMENT IN FOOTING UNLESS NOTED OTHERWISE.
7. SHEAR PANELS LESS THAN 6' LONG SHALL HAVE A MINIMUM OF 3 ANCHOR BOLTS IN ADDITION TO HOLDDOWNS.
8. STUD AND TRACK MATERIAL SHALL BE OF ASTM A1003 GRADE 33 TYPE H STEEL FOR MEMBERS WITH A DESIGNATION THICKNESS OF 33 AND 43 MIL.
9. #8 FASTENERS = SIMPSON 'X METAL SCREWS' #8 X 1" LONG (ICC ESR-3006).

STRUCTURAL DESIGN CRITERIA

Ss=	1.878g	Sds	1.252g
S1=	0.783g	Sd1	0.887g
Fa=	1.0	DESIGN CATEGORY	E
Fv=	1.7	SITE CLASS	D
Ie=	1	Vs=	CsW
R=	6.5	Cs=	0.193W
Cd=	3	OMEGA=	2.5

DESIGN LOADS

1. ROOF LIVE LOAD = 20 PSF
   FLOOR LIVE LOAD = 40 PSF
2. WIND ANALYSIS PER CHAPTER 16 OF THE CODE.
   RISK CATEGORY = II
   BASIC WIND SPEED, V = 97 MPH
   EXPOSURE = C
3. SEISMIC ANALYSIS PER CHAPTER 16 OF THE CODE UTILIZING THE FOLLOWING:
   A. PROCEDURE - EQUILIVANT LATERAL FORCE ANALYSIS (Rho = 1.0)
   B. SYSTEM - LIGHT-FRAMED WOOD SHEAR WALLS WITH RATED SHEATHING.

LICENSED ARCHITECT
C - 23697
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027
STATE OF CALIFORNIA

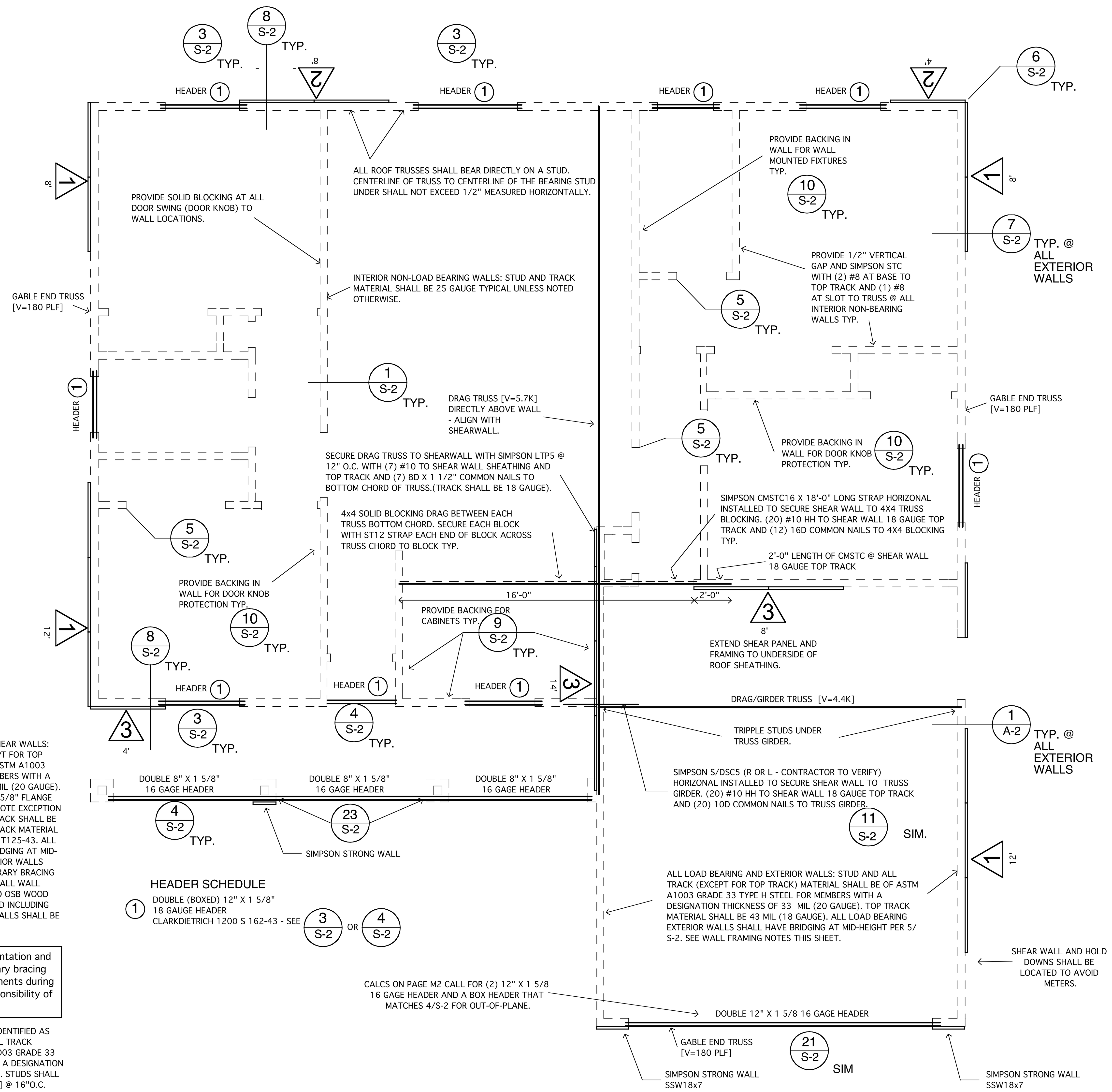
1. SIMPSON STHD14 AND S/HDU6 AS CALLED OUT. 5/8 DIAMETER HOT-DIP GALV, ANCHOR BOLT WITH 10" MINIMUM EMBEDMENT INTO FOOTING. INSTALL PER MANUFACTURERS RECOMMENDATIONS INTO MONOLITHIC POUR ONLY (NO HORIZONTAL COLD JOINT IS ALLOWED WITHIN THE EMBEDMENT DEPTH). SECURE PLACEMENT WITH SIMPSON SM1 OR SIMPSON ANCHORMATE PRIOR TO POUR TYPICAL.
2. VERIFY LOCATIONS OF ALL HOLDDOWNS AND ALL ANCHOR BOLTS FOR HOLDOWNS WITH SHEAR WALL PLAN AND DIMENSIONS ON FLOOR PLAN TYPICAL.

WALL FRAMING NOTES

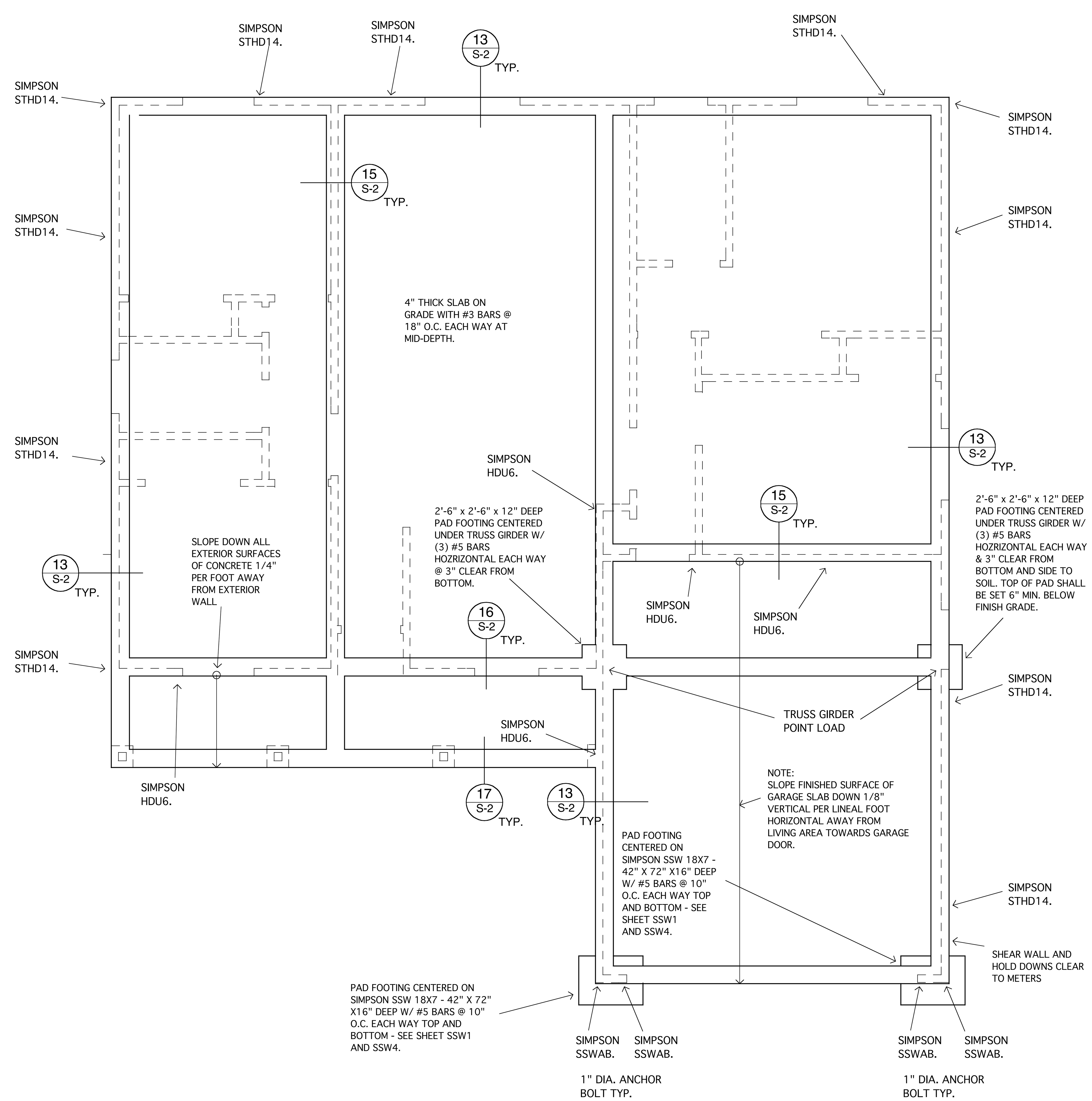
ALL EXTERIOR WALLS AND ALL SHEAR WALLS: ALL STUD AND ALL TRACK (EXCEPT FOR TOP TRACK) MATERIAL SHALL BE OF ASTM A1003 GRADE 33 TYPE H STEEL FOR MEMBERS WITH A DESIGNATION THICKNESS OF 33 MIL (20 GAUGE). STUDS SHALL BE 3 5/8" WEB X 1 5/8" FLANGE [362S162-33] @ 24"O.C. MAX. (NOTE EXCEPTION @ PLUMBING WALLS). BOTTOM TRACK SHALL BE 362T125-33 (20 GAUGE). TOP TRACK MATERIAL SHALL BE 43 MIL (18 GAUGE) 362T125-43. ALL EXTERIOR WALLS SHALL HAVE BRIDGING AT MID-HEIGHT PER 5/S-2 -OR- ALL EXTERIOR WALLS SHALL BE PROVIDED WITH TEMPORARY BRACING TO REMAIN UNTILL AT A MINIMUM ALL WALL SHEATHINGS (GYPSUM BOARD AND OSB WOOD PANELS) ARE SECURELY INSTALLED INCLUDING ALL REQUIRED FASTENERS. ALL WALLS SHALL BE SHEATHED ON BOTH SIDES TYP.

> The design, timing, implementation and construction of the temporary bracing of the structure and its elements during construction are all the responsibility of the general contractor.

INTERIOR WALLS THAT ARE NOT IDENTIFIED AS SHEAR WALLS: ALL STUD AND ALL TRACK MATERIAL SHALL BE OF ASTM A1003 GRADE 33 TYPE H STEEL FOR MEMBERS WITH A DESIGNATION THICKNESS OF 18 MIL (25 GAUGE). STUDS SHALL BE 3 5/8" X 1 1/4" [350S125-18] @ 16"O.C. TYP. UNLESS NOTED OTHERWISE



WALL FRAMING AND SHEAR WALL PLAN - 4 BEDROOM UNIT
1/4"= 1'-0" SCALE



FOUNDATION PLAN - 4 BEDROOM UNIT
1/4"= 1'-0" SCALE

NO	DATE	REVISION
1	6.10.24	CITY SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		
4		

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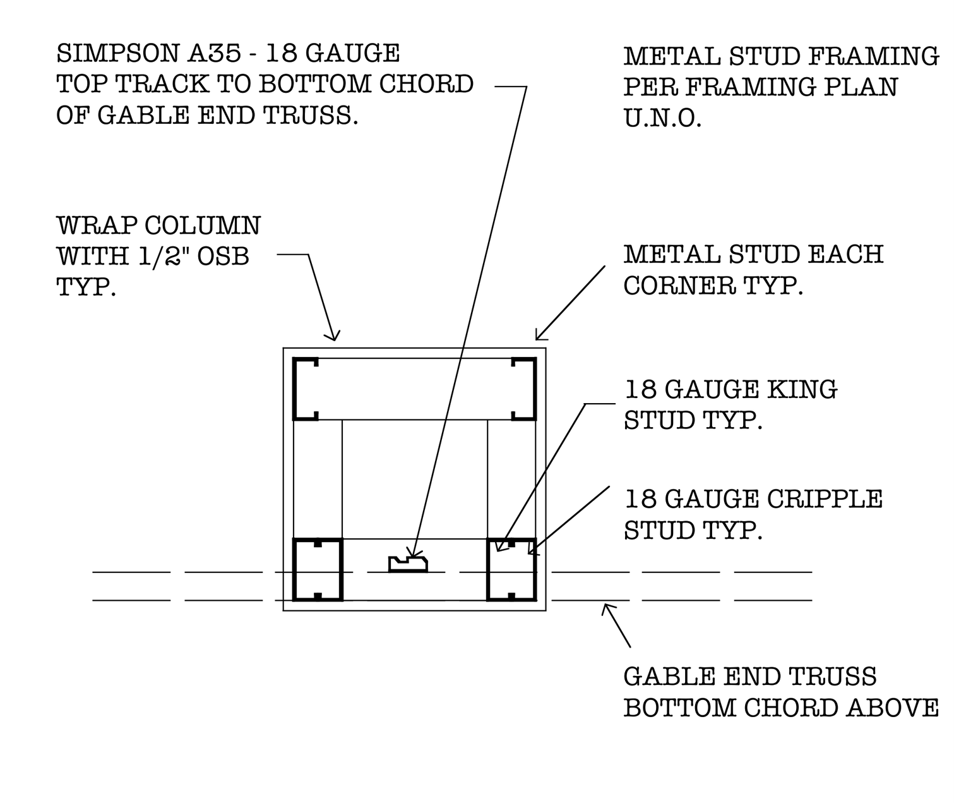
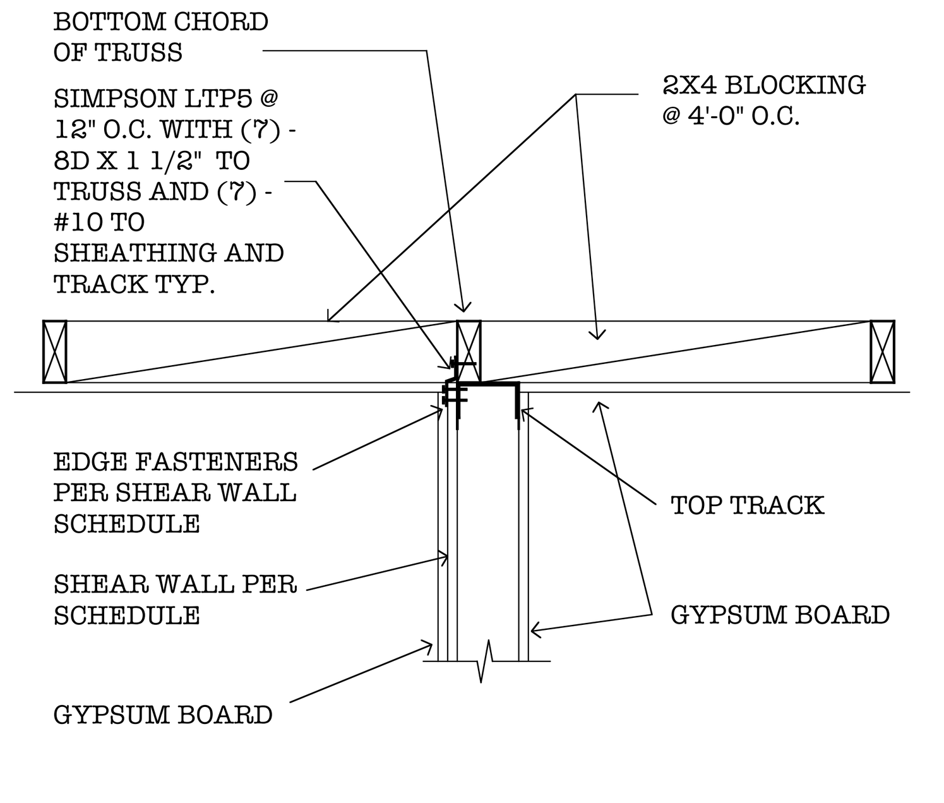
SHEET TITLE
MODEL 1374
4 BEDROOM
FOUNDATION PLAN, WALL FRAMING AND SHEAR WALL PLAN, SHEAR WALL SCHEDULE, DESIGN CRITERIA

DATE 8/10/25
JOB
SHEET
S-1
OF DWGS



PLAN VIEW
BOX COLUMN @ GABLE END TRUSS
CONNECTION DETAIL TYPICAL
23



TRUSS/SHEARWALL
CONNECTION DETAIL TYPICAL
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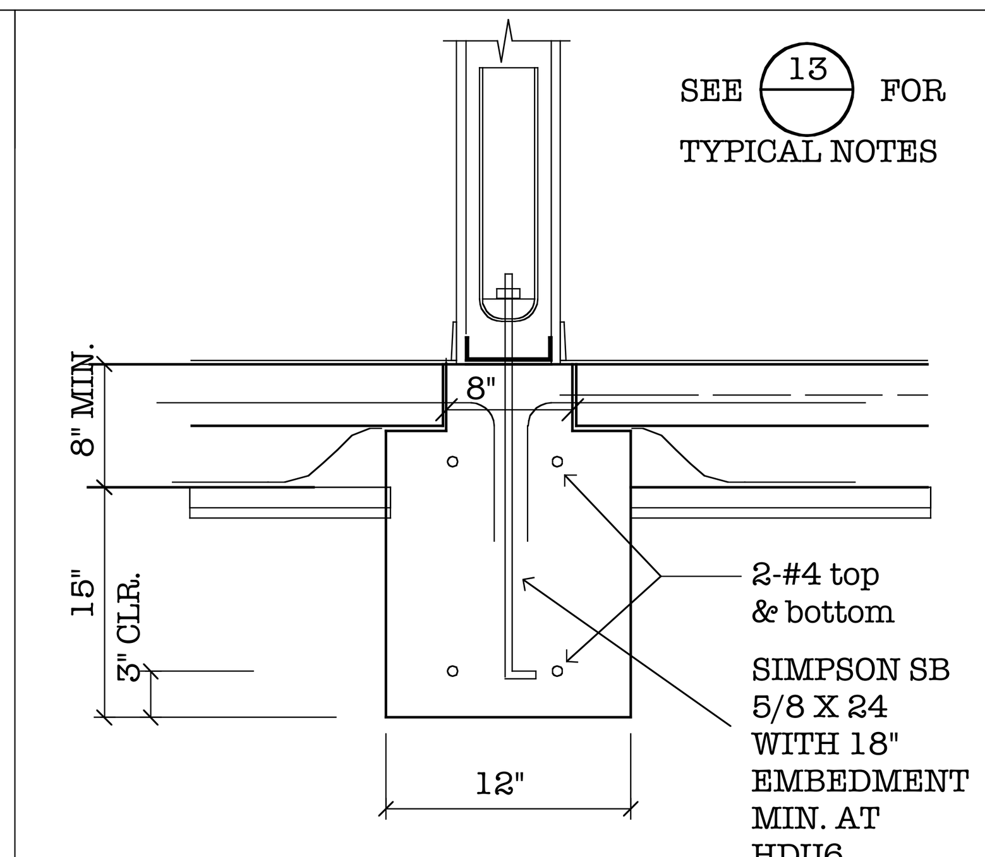
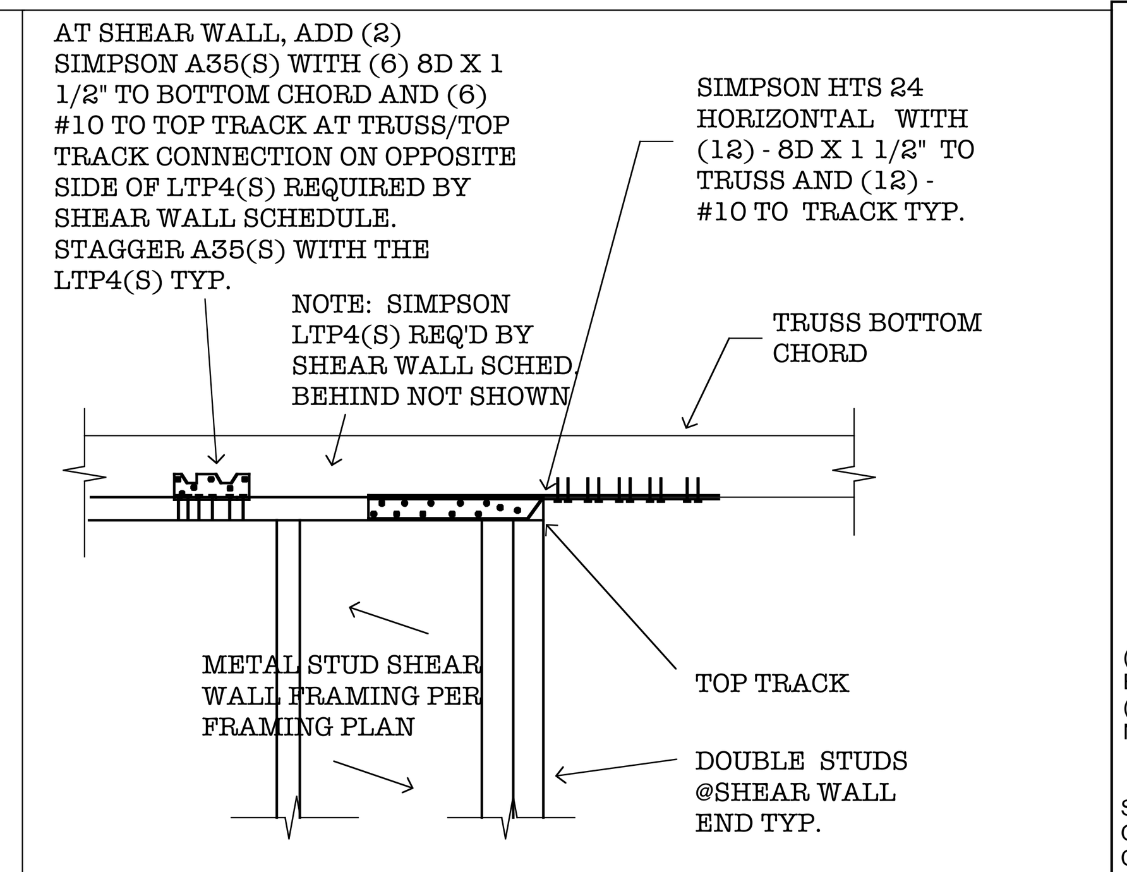
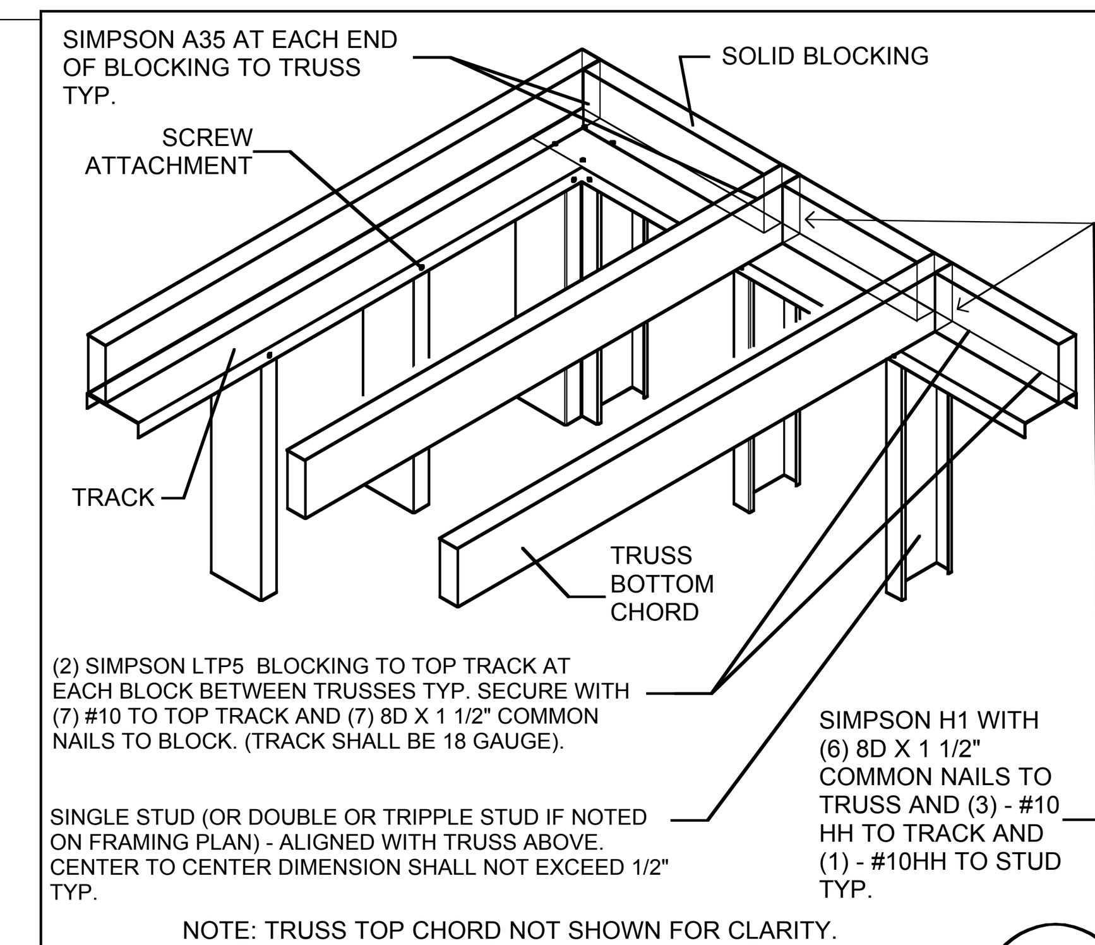


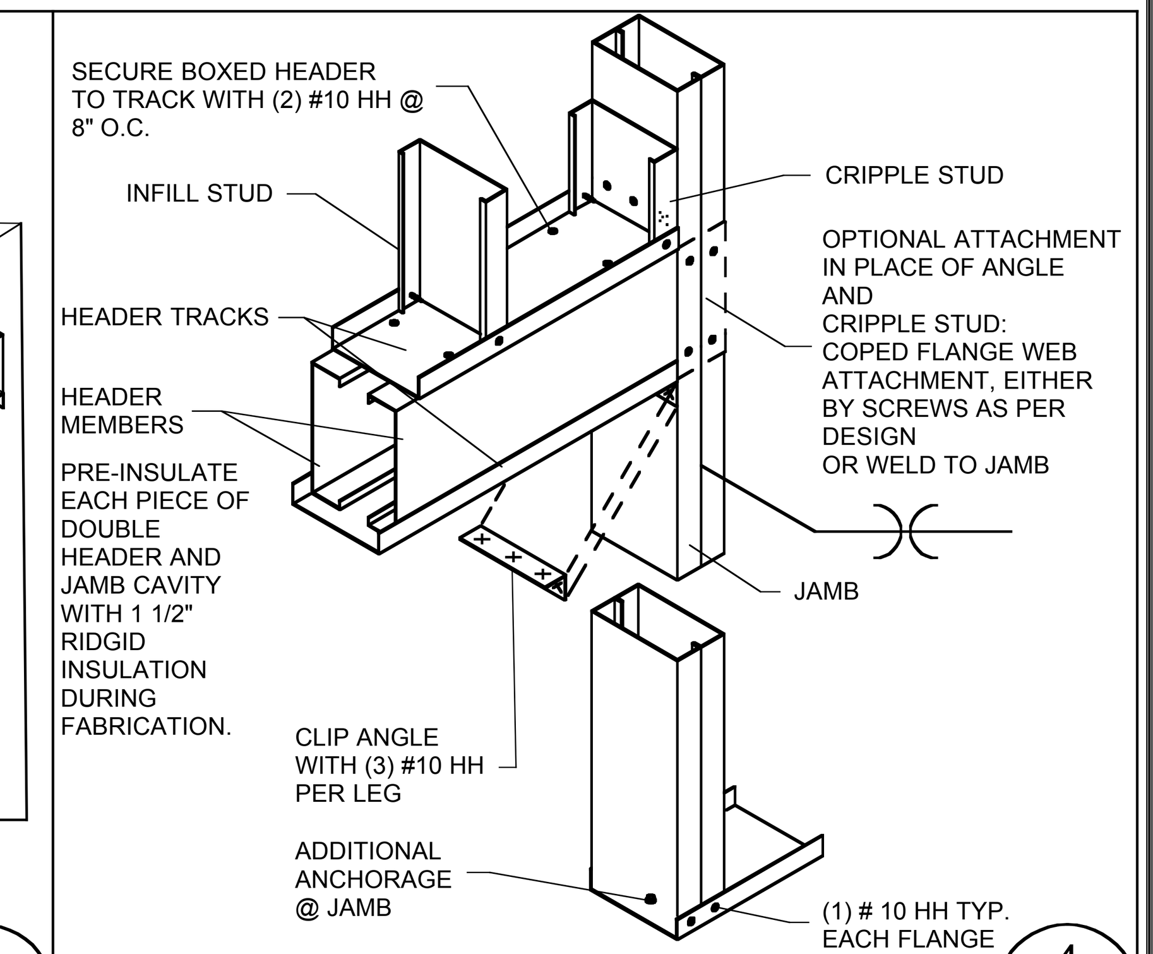
INTERIOR FOOTING DEEPENED @ SHEAR WALL HOLD DOWN ANCHOR BOLT
16



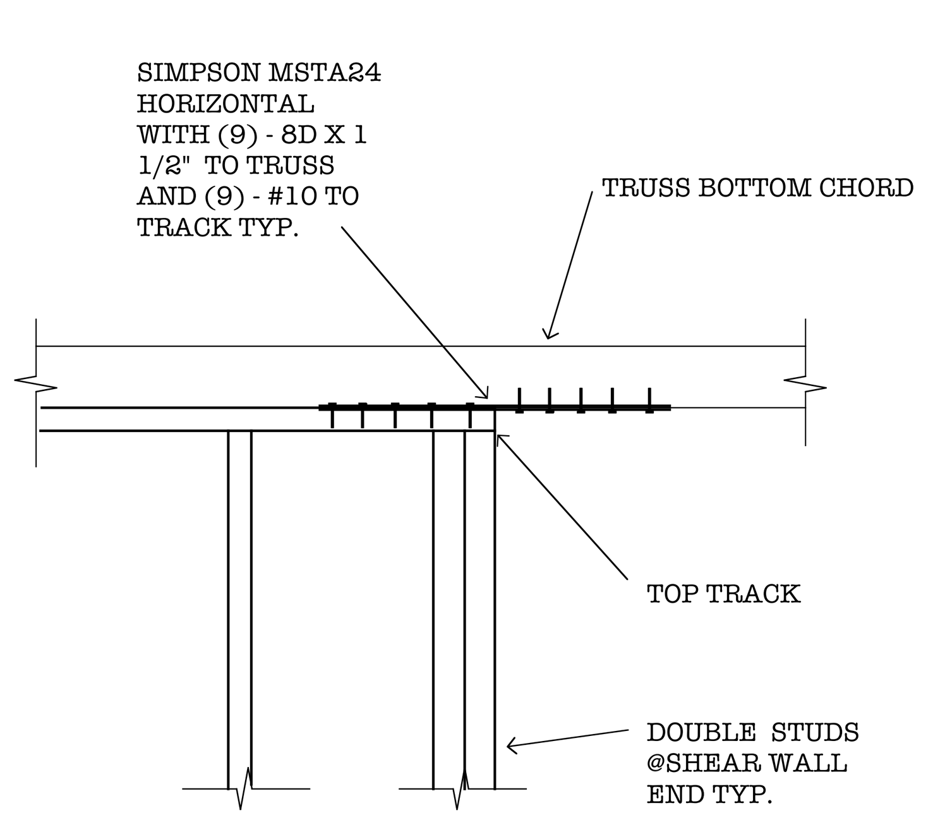
TRUSS/SHEARWALL DRAG CONNECTION
DETAIL TYPICAL - ALTERNATE B
12



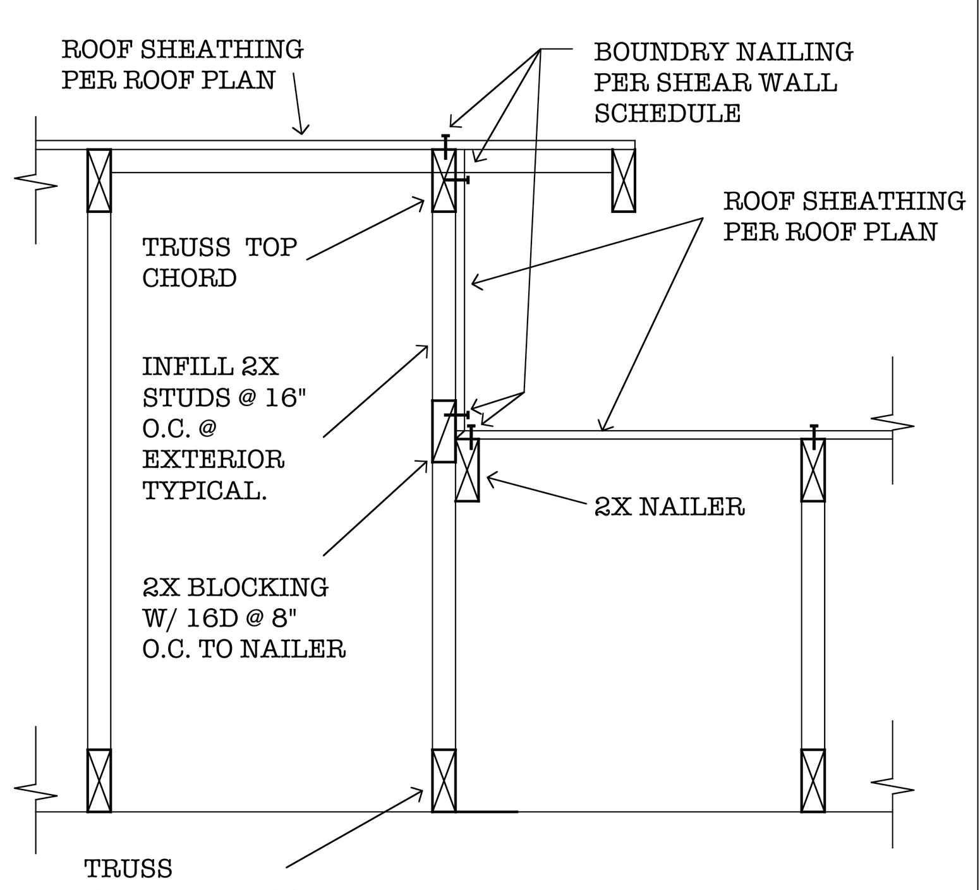
TRUSS TO BEARING WALL CONNECTION TYP.
NTS
8



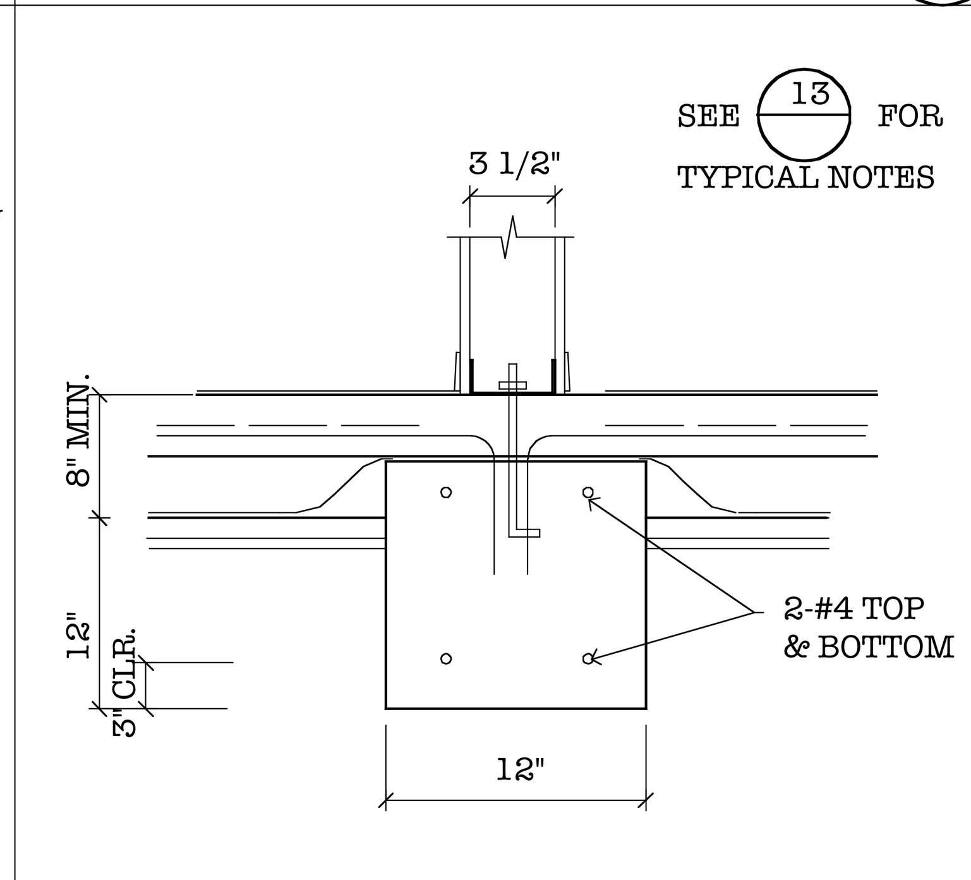
Door Load Bearing Boxed Header Boxed Jamb
NTS
4



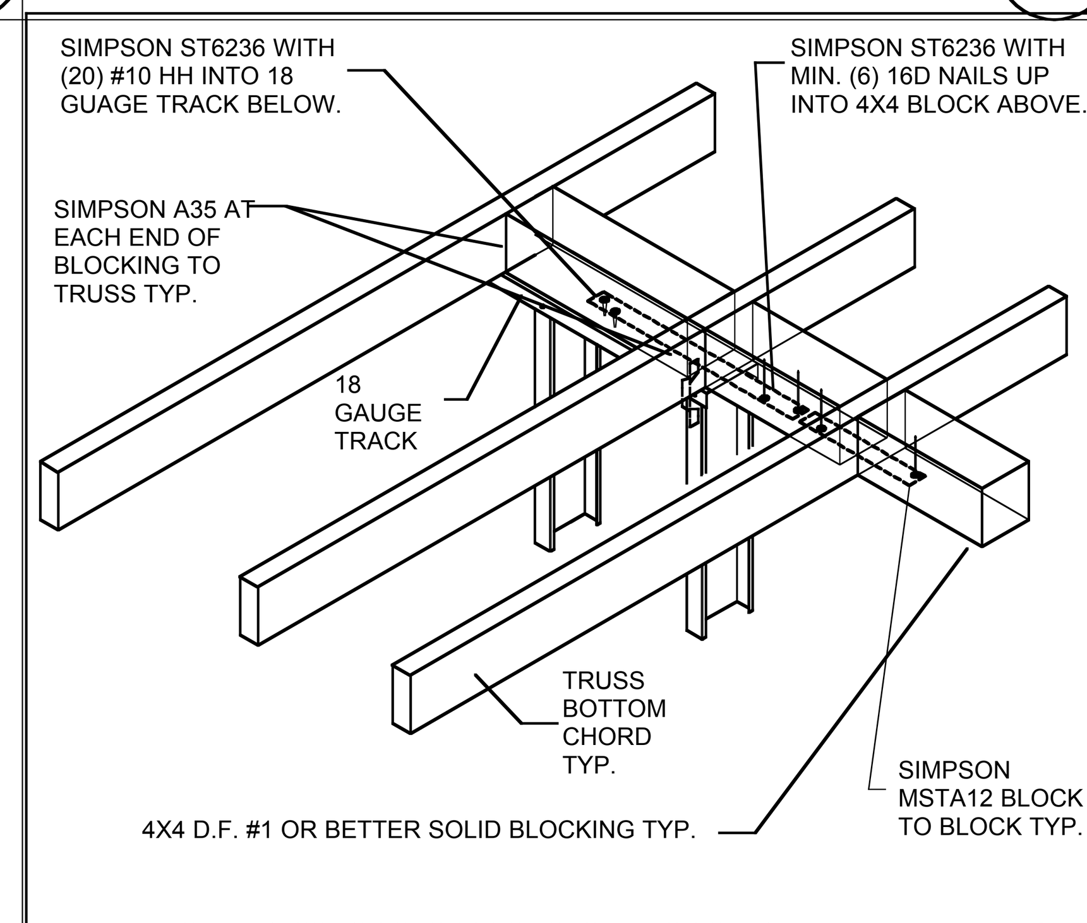
TRUSS/SHEARWALL DRAG
CONNECTION DETAIL TYPICAL
22



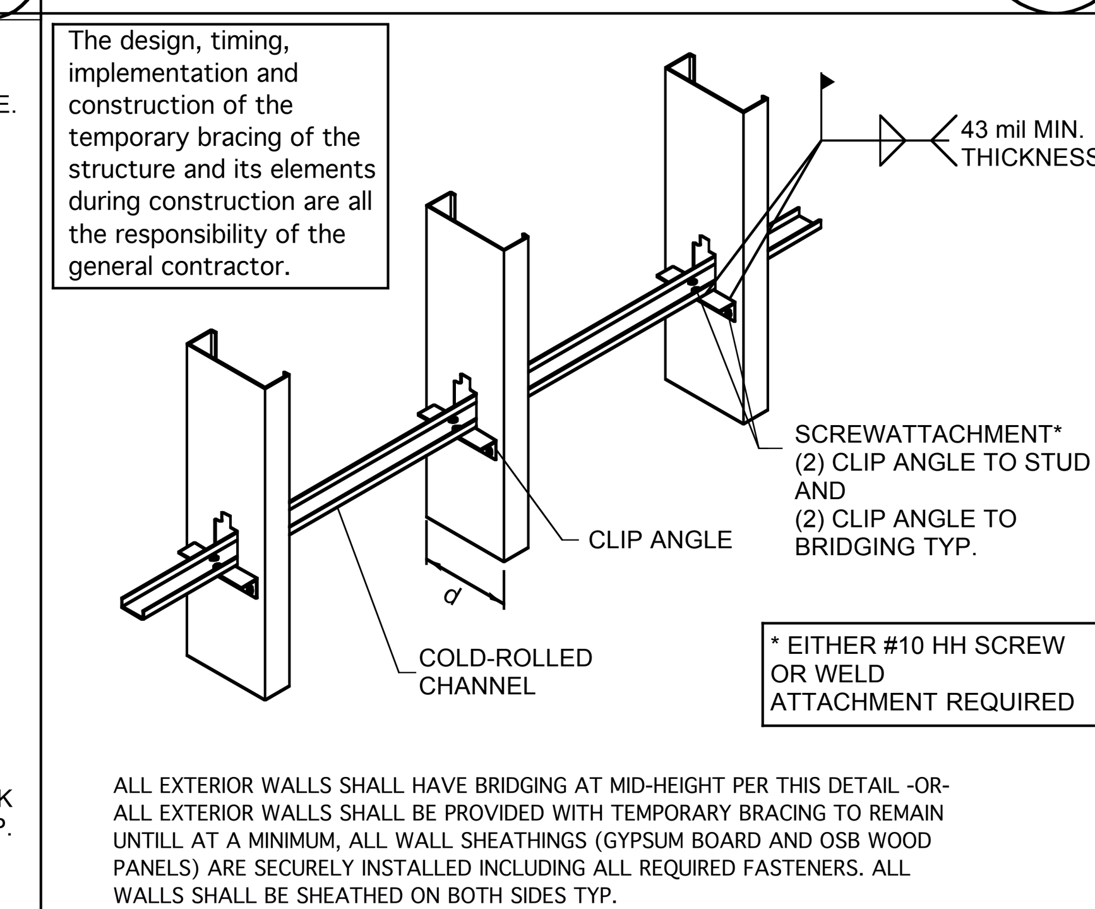
GABLE END TRUSS STEP TYPICAL
18



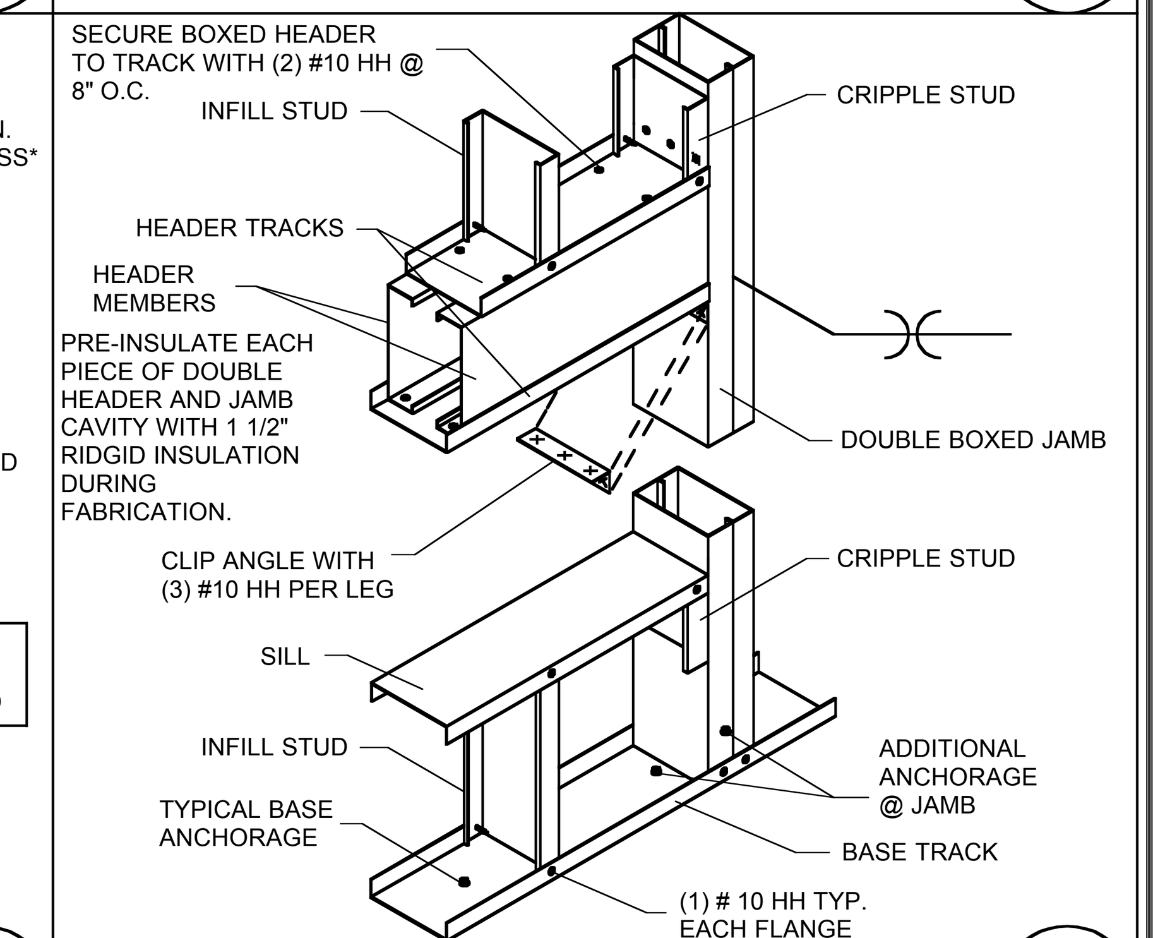
INTERIOR FOOTING
15



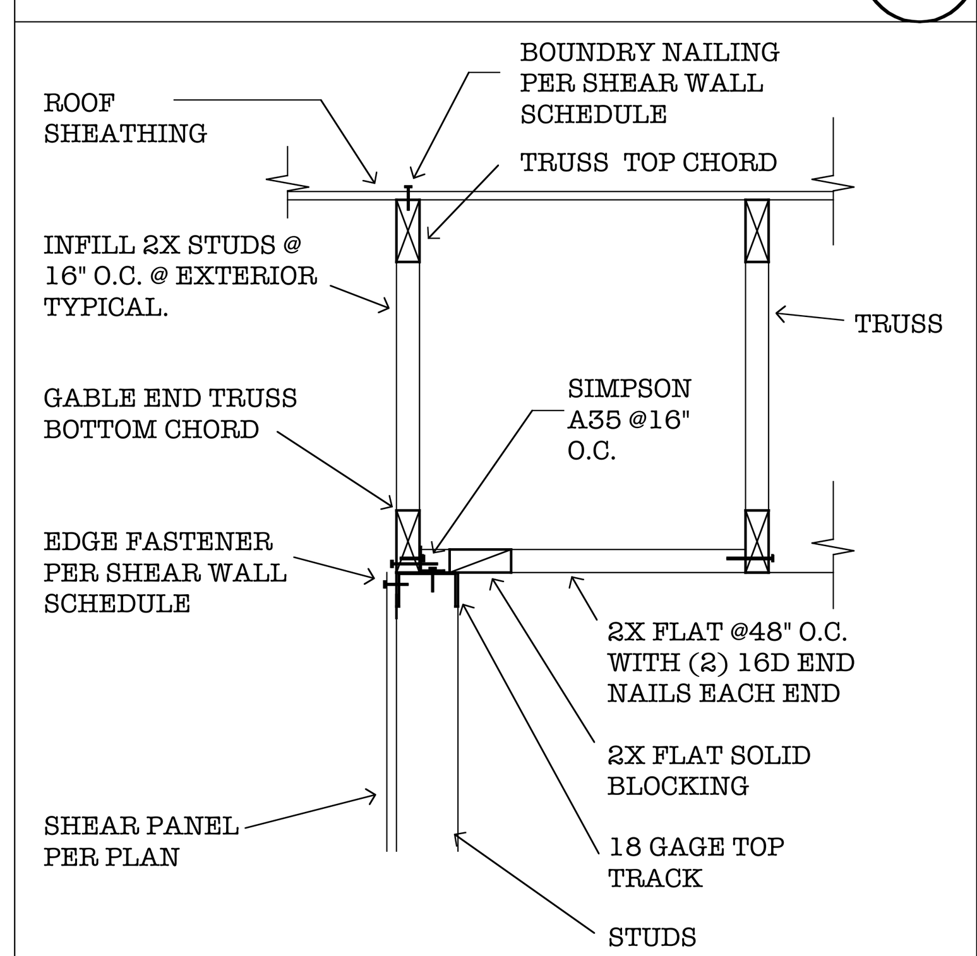
DRAG BLOCKING AND STRAPS
NTS
11



Bridging Cold-Rolled Channel With Clip Angle
NTS
7



Window Load Bearing Boxed Header Boxed Jamb
NTS
3



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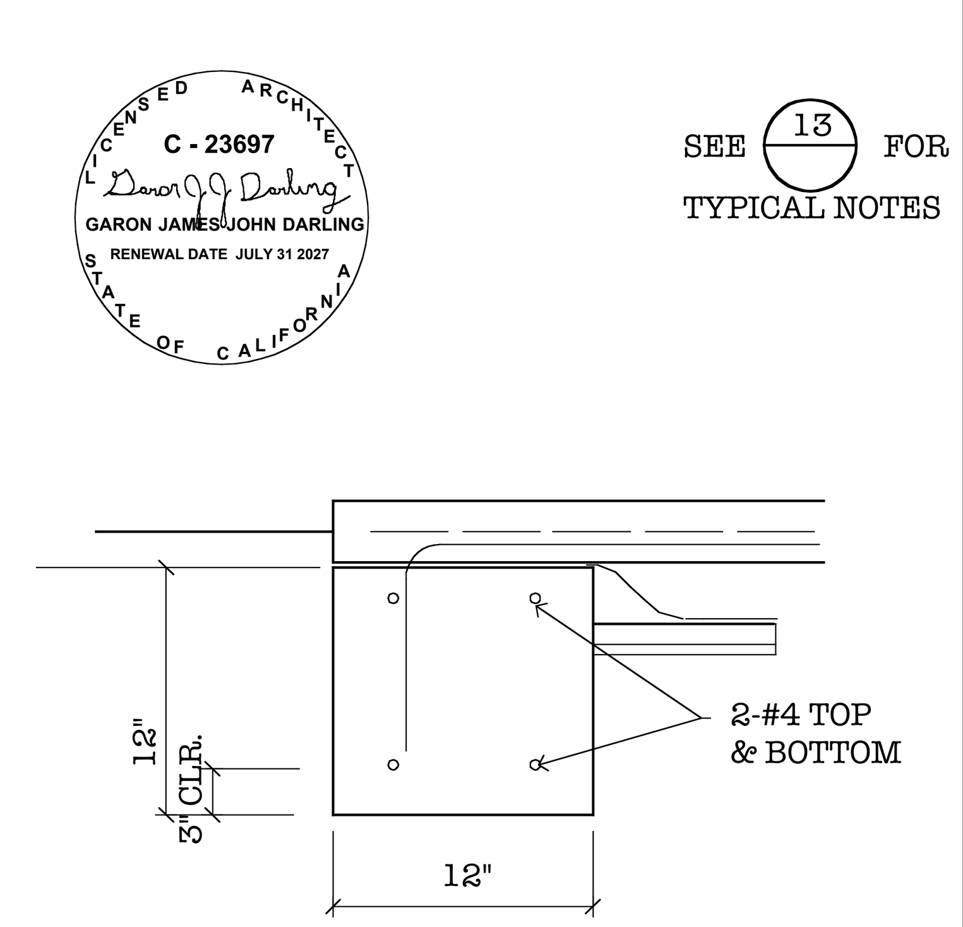
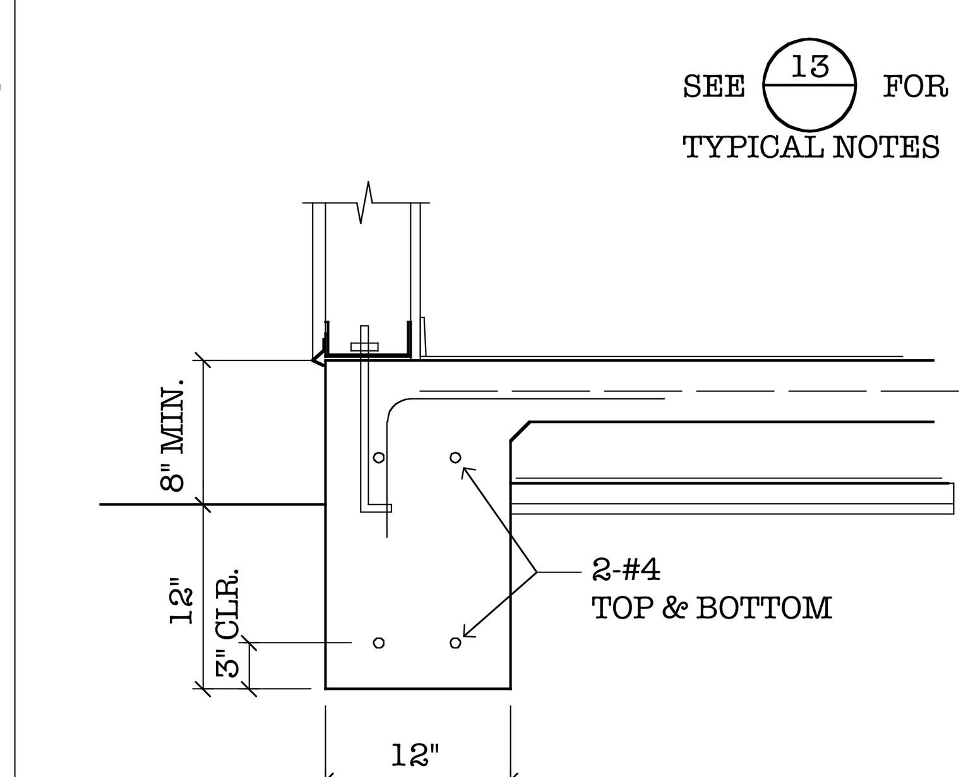
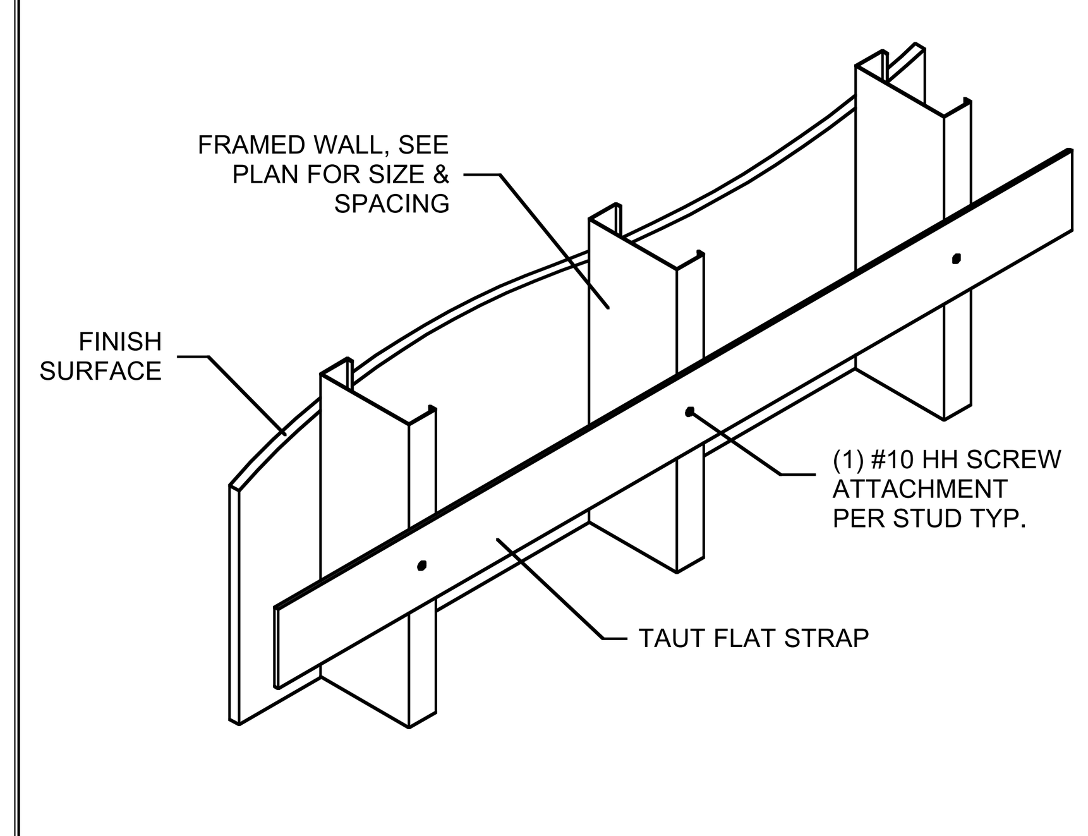


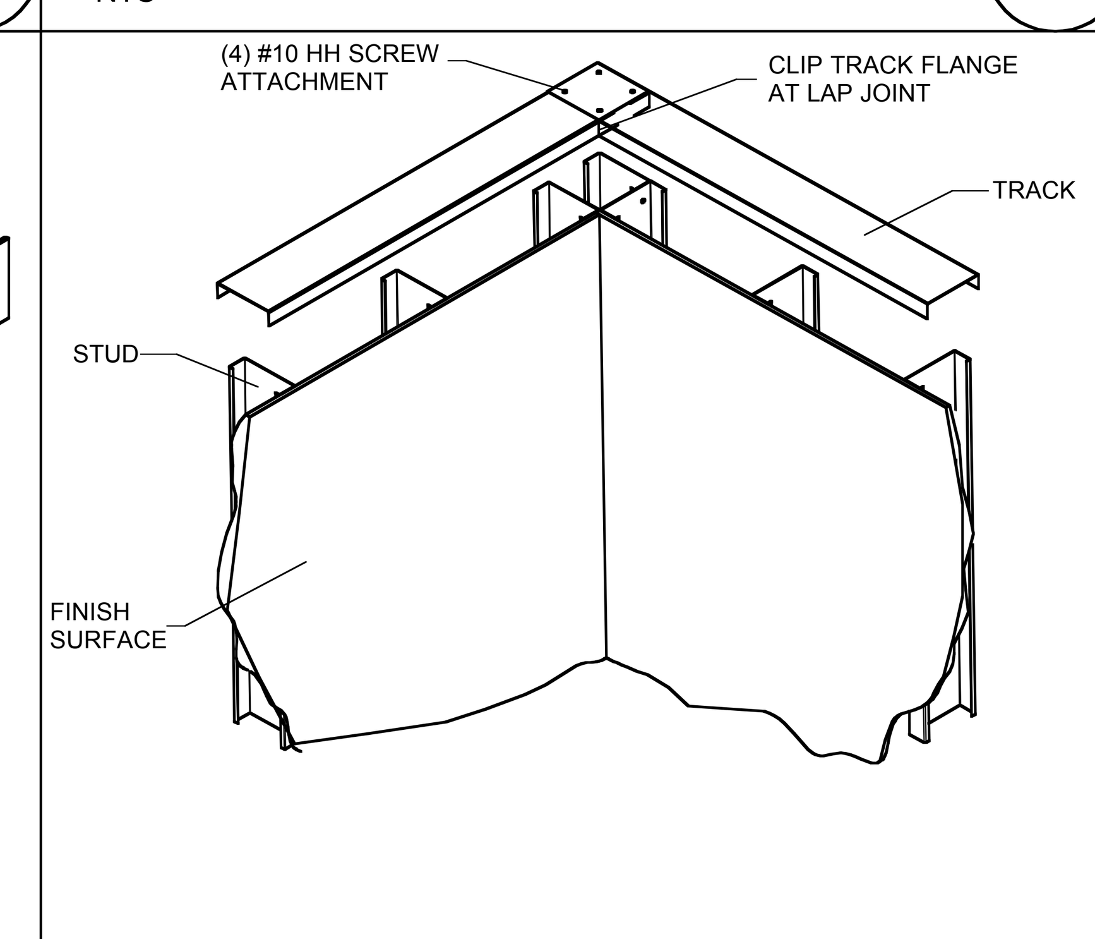
EXTERIOR FOOTING
17



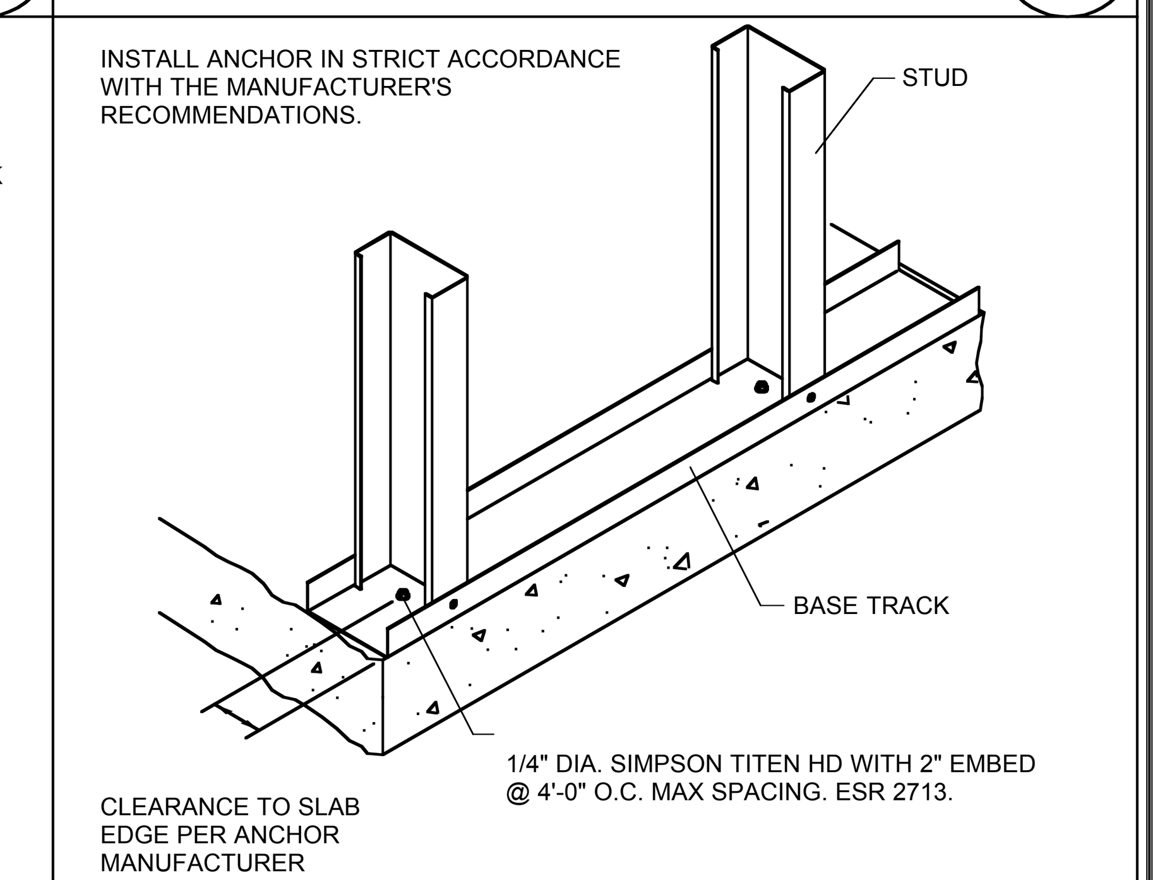
ALTERNATIVE MONOLITHIC POUR
EXTERIOR FOOTING AT 1 STORY TYPICAL.
14



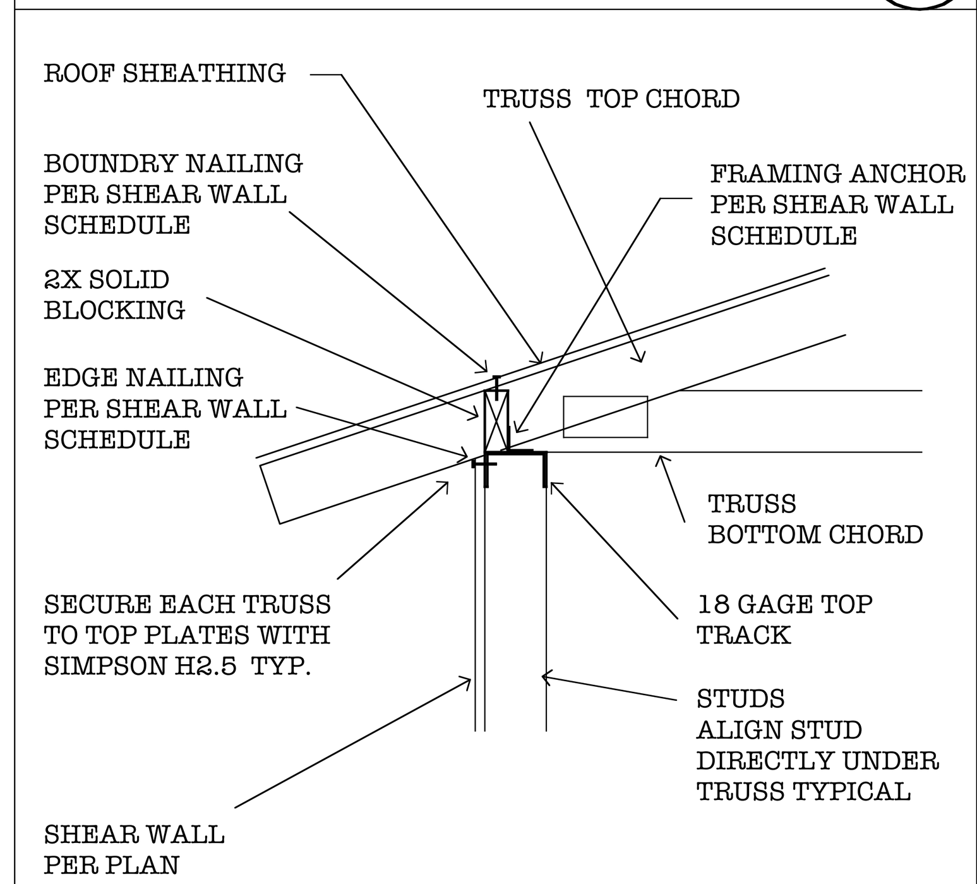
Backing Flat Strap Lightly Loaded
NTS
10



Wall Framing at Corner Track Lap Connection
NTS
6



Bottom Track Anchorage Wedge Anchor
NTS
2



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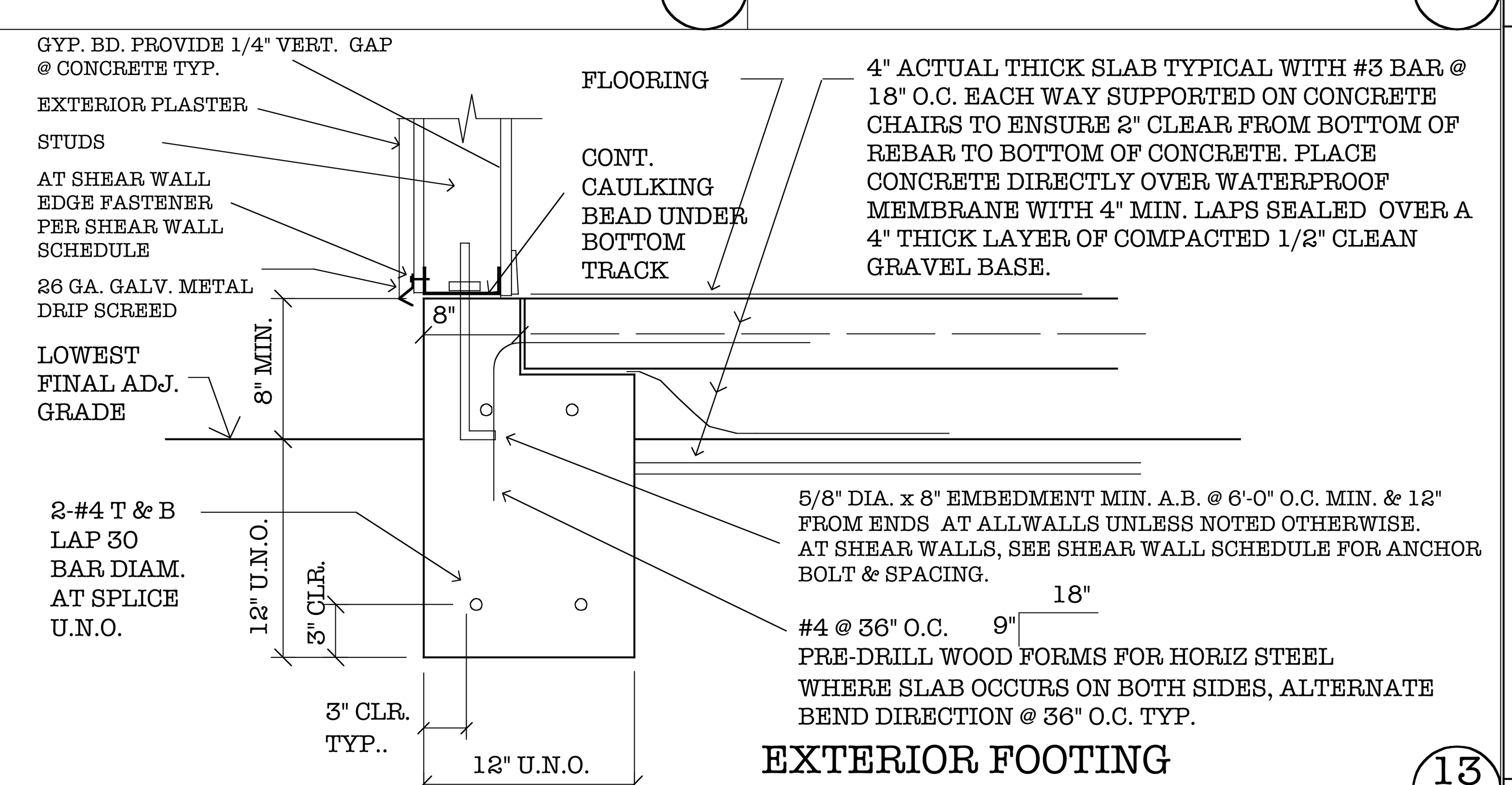
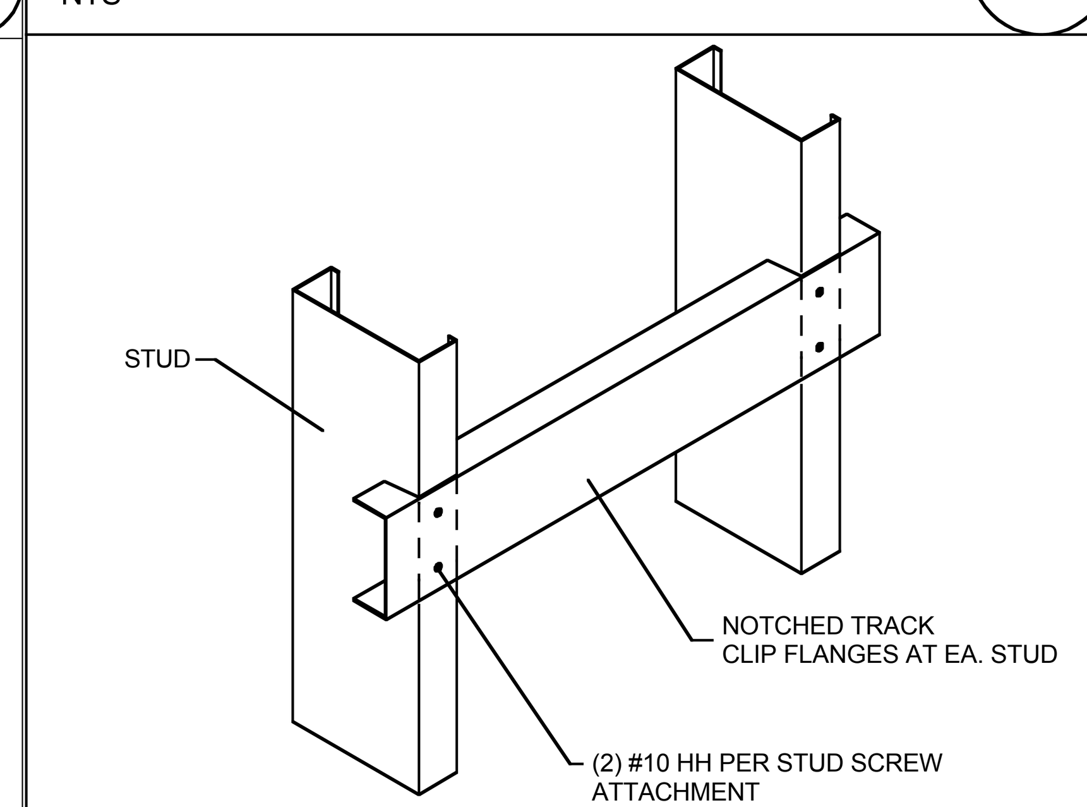
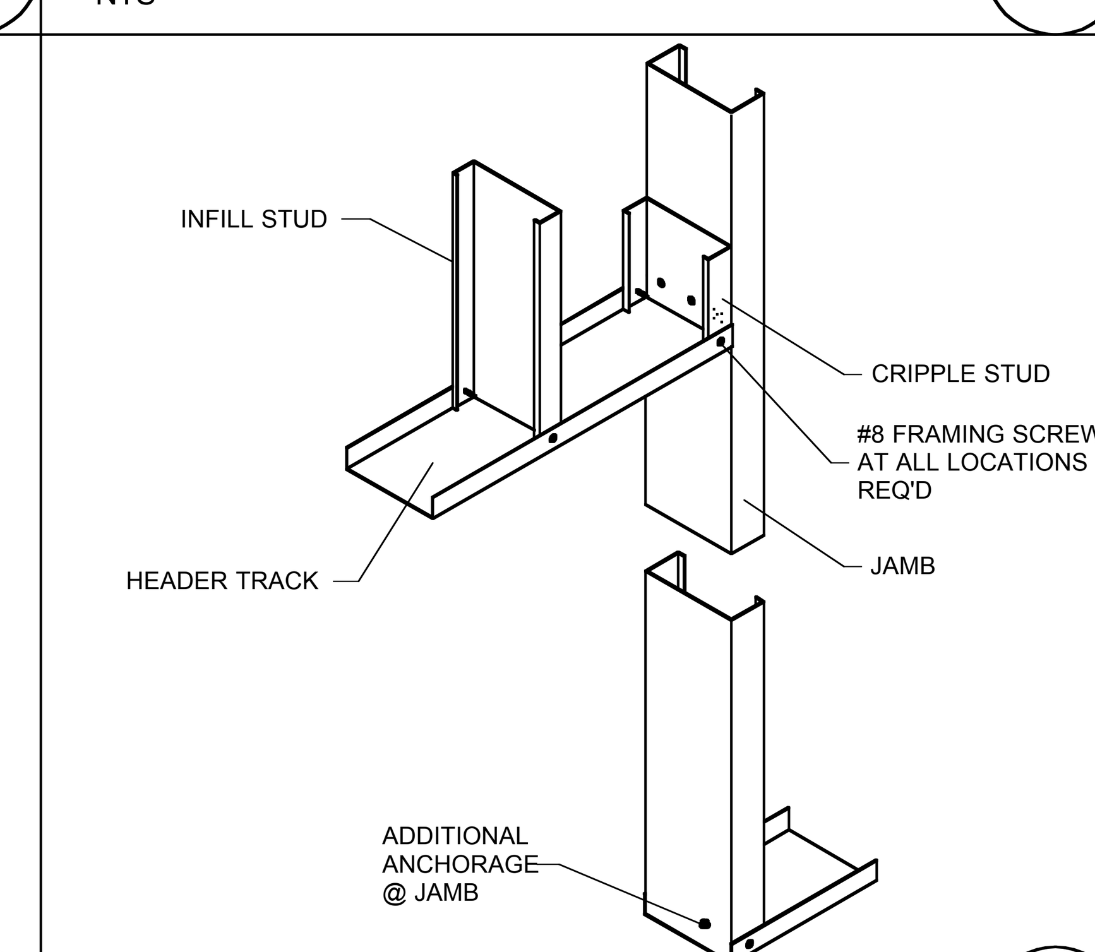


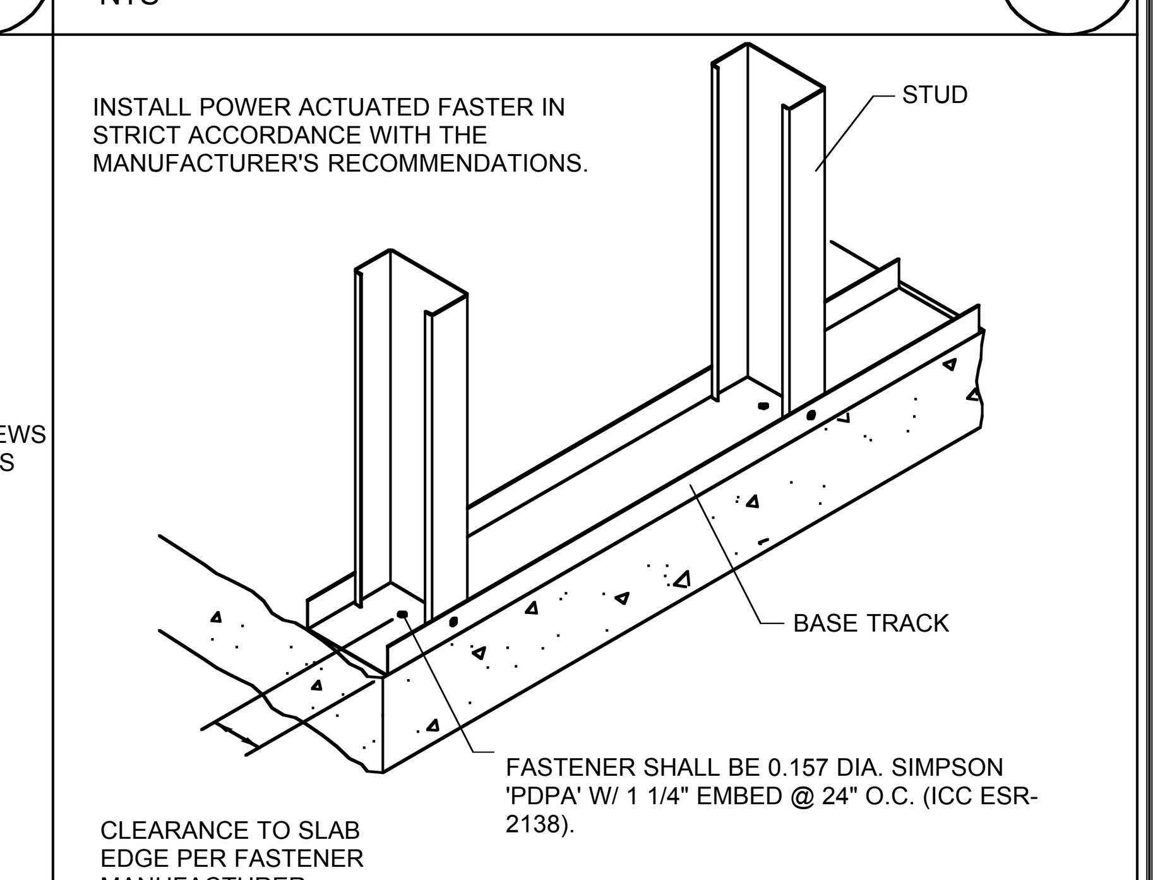
EXTERIOR FOOTING
13



Backing Clipped Track Heavily Loaded
NTS
9



Door Non-Load Bearing Single Track Header Single Jamb
NTS
5



Bottom Track Anchorage Low Velocity Fastener
NTS
1

NO	DATE	REVISION
1	6.24.24	CITY SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		
4		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON J. J. DARLING
ARCHITECT
2259 PASEO DEL MAR
SAN PEDRO, CA. 90732 (310)619-9540

SHEET TITLE
4 BEDROOM
DETAILS

DATE 8/10/25
JOB
SHEET
S-2
OF DWGS

GENERAL NOTES

THIS SHEET
REVISED 6.12.24

MATERIAL SPECIFICATIONS AND NOTES FOR CONCRETE TYPICAL.

FOOTING AND SLAB SHALL BE POURED WITH 4500 P.S.I. CONCRETE AT 28 DAYS CURE MIN. OF TYPE V PORTLAND CEMENT WITH A MAXIMUM WATER/CEMENT RATIO OF 0.45 (BY WEIGHT) CONFORMING TO ACI 304. ONLY TYPE V CEMENT SHALL BE PLACED.

ADMIXTURES MAY BE USED AS REQUIRED TO ALLOW PLACEMENT OF THE REQUIRED LOW WATER/CEMENT RATIO CONCRETE.

TOP OF SLAB SHALL BE SHALLOWLY (1" DEEP) SAWCUT AT 10'-0" O.C. WITHIN 6 TO 8 HOURS OF CONCRETE PLACEMENT PER THE RECOMMENDATIONS OF THE AMERICAN CONCRETE INSTITUTE (ACI) - EACH WAY FORMING A SQUARE PATTERN GRID TO PROVIDE SHRINKAGE CRACK CONTROL.

EXPOSED SLAB EDGE AND EXTERIOR FOUNDATION FACES SHALL BE COATED WITH A PERMANENT WATERPROOFING MEMBRANE.

PROVIDE WATERPROOF MEMBRANE AND ALL REQUIRED ANCILLARY COMPONENTS. TURN DOWN VAPOR BARRIER AT FOOTING TO EXTEND UNDER FOOTING, UNDER SLAB AND BACK UP AT EXTERIOR FACE TO FINISH GRADE LEVEL PER THE WIRE REINFORCEMENT INSTITUTE (WRI) RECOMMENDATIONS. UNDER THE SLAB PORTION OF THE BUILDING FOUNDATION, THE VAPOR BARRIER SHALL BE COVERED BY 4 INCHES OF CLEAN SAND.

WATERPROOF MEMBRANE AND ALL ANCILLARY COMPONENTS SHALL BE PREPRUFE 300R/160R PLUS BY GRACE. INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

SLAB REINFORCING SHALL BE SET ON CHAIRS AT CENTER OF SLAB.

REINFORCING STEEL AT BOTTOM OF FOOTINGS/BEAMS SHALL BE SET ON CHAIRS.

STEEL REINFORCING SHALL BE SET SO AS TO PROVIDE A MINIMUM 3" COVER OF DENSELY CONSOLIDATED CONCRETE (BY USE OF A VIBRATOR) TO SOIL CLEARANCE TYPICAL.

ALL WALL ANCHOR BOLTS AND ALL HOLD DOWN ANCHOR BOLTS SHALL BE HOT DIP GALV. TYP.

REBAR SHALL BE ASTM A615 OR ASTM A706 DEFORMED GRADE 40 OR GRADE 60 BILLET STEEL AS CALLED OUT.

NO METALLIC WATER PIPES OR CONDUITS SHALL BE PLACED BELOW FOUNDATIONS.

'STRAP-TYPE' HOLD DOWN ANCHORS ARE NOT ALLOWED. ANCHORS SHALL BE SOLID ROUND BAR STEEL, HOT-DIP GALV. ANCHORS WITH HOT-DIP GALV. WASHER AND TWO HOT-DIP GALV. NUTS UNLESS NOTED OTHERWISE.

INSPECTION AND CERTIFICATE:
PROVIDE SPECIAL (DEPUTY) INSPECTION FOR THE FOLLOWING ITEMS:

ALL DRILLED ADHESIVE ANCHORS FOR STRUCTURAL WORK.
ALL SITE WELDS ON STRUCTURAL MEMBERS EXCEPT METAL STUDS AND FURRING, AND WHERE OTHERWISE NOTED.
FOUNDATION ANCHOR BOLT TEMPLATES FOR MANUFACTURED SHEAR PANEL/FRAME SYSTEMS.

THE OWNER OR OWNER'S REPRESENTATIVE SHALL SELECT A QUALIFIED DEPUTY OR SPECIAL INSPECTOR, TO INSPECT THE PORTIONS OF WORK SHOWN ON PLANS AS REQUIRING SPECIAL INSPECTION. INSPECTOR SHALL BE LICENSED OR OTHERWISE APPROVED, BY THE GOVERNING BUILDING OFFICIAL OR AGENCY, TO PERFORM THE REQUIRED INSPECTIONS. INSPECTOR SHALL PREPARE WRITTEN REPORTS OR FORMS FOR ALL INSPECTIONS PERFORMED, AND SHALL FURNISH COPIES OF ALL INSPECTION REPORTS TO THE ENGINEER OF RECORD AND THE OWNER OR OWNER'S REPRESENTATIVE, IN A TIMELY MANNER, AND PRIOR TO NEXT PLANNED FIELD VISIT OF THE BUILDING OFFICIAL.

PLAN NOTES:

SEE ARCHITECTURAL PLANS FOR BUILDING PAD DIMENSIONS, FLOOR ELEVATIONS, AND FINISHES.

THE FINAL MANUFACTURED ROOF FRAMING PLANS MUST BE REVIEWED, SIGNED AND WET STAMPED BY ENGINEER OF RECORD.

THE FINAL FOUNDATION PLANS MUST BE REVIEWED, SIGNED AND WET STAMPED BY ENGINEER OF RECORD AND PROJECT GEOTECHNICAL CONSULTANT.

FASTENERS IN CONTACT WITH PRESERVATIVE TREATED WOOD OR FIRE-RETARDANT WOOD, INCLUDING NUTS, BOLTS, ANCHOR BOLTS, LAG BOLTS, PLATE WASHERS, CUT WASHERS, NAILS, ETC., SHALL BE HOT DIPPED GALVANIZED STEEL OR STAINLESS STEEL.

ROOF SHEATHING: 1/2" OR 5/8" CDX PLYWOOD, OR OSB, (PANEL I.D. 24:0), W/8d @ 6:12, MINIMUM, U.N.O. UNBLOCKED.

NOTE: HORIZONTAL WALL ANCHOR, DRAG, AND CROSSTIE BOLTS SHALL BE RE-TIGHTENED JUST PRIOR TO FINISH CLOSURE.

HOLDOWNS SHALL BE INSTALLED PER THE STRICT RECOMMENDATIONS OF THE MANUFACTURER.

SIMPSON 'S/HDU6' HOLDOWN ON MINIMUM DOUBLE STUD, AT BASE OF SHEARWALL SHOWN.

NUTS OF HOLDOWNS AND ALL BOLTED CONNECTIONS WITH PLATE WASHERS SHALL BE WRENCH TIGHTENED 'SNUG' PRIOR TO INSPECTION AND COVERING. DO NOT OVERTIGHTEN.

POWER-DRIVEN FASTENERS SHALL NOT BE USED TO ANCHOR SILL PLATES EXCEPT AT INTERIOR NONBEARING WALLS NOT DESIGNED AS SHEAR WALLS. VERIFY SUITABILITY OF POWER-DRIVEN FASTENERS FOR GENERAL USE ON SLAB.

EXTERIOR ANCHOR BOLTS AND POST BASES SHALL BE HOT-DIPPED GALVANIZED AND EACH ANCHOR BOLT SHALL HAVE AT LEAST TWO HOT DIPPED GALVANIZED NUTS ABOVE THE BASE PLATE.

BUILDER TO VERIFY ALL CONDITIONS IN THE FIELD. PLANS ARE A GUIDELINE FOR CONSTRUCTION AND FIELD CONDITIONS MAY VARY AND TAKE PRECEDENCE. ENGINEER OF RECORD IS NOT HELD RESPONSIBLE UNDER ANY CONDITION FOR BUILDER'S PERFORMANCE IN THE CONSTRUCTION AND/OR MANAGEMENT OF THIS PROJECT AND FOR ANY DISCREPANCIES THAT MAY ARISE FROM THESE PLANS.

GARAGE: PROVIDE POSITIVE WHEEL STOP PROTECTION AT GARAGE PARKING SPACES TO PROTECT WALL & UTILITIES FROM IMPACT.

STRUCTURAL STEEL:
ALL STRUCTURAL AND MISCELLANEOUS STEEL SHALL CONFORM TO A.S.T.M. SPECIFICATIOIN A-36 AND SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE A.I.S.C. SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS. FABRICATION SHALL BE DONE IN THE SHOP OF A LICENSED FABRICATOR. SUBMIT SHOP DRAWINGS FOR REVIEW BY THE ENGINEER PRIOR TO FABRICATION.

MACHINE BOLTS SHALL CONFORM TO A.S.T.M. A-307 WITH WASHERS UNLESS OTHERWISE NOTED. WHERE HIGH-STRENGTH BOLTS ARE SPECIFIED, BOLTS SHALL CONFORM TO A.S.T.M. A-325, WITH DEPUTY INSPECTION REQUIRED. BOLT HOLES IN STEEL SHALL BE 1/16" LARGER DIAMETER THAN NOMINAL SIZE OF BOLT USED, EXCEPT AS NOTED.

COLD FORMED STEEL MEMBERS SHALL CONFORM TO A.S.T.M A-446 GRADE A, U.N.O. ON PLANS.

WELDING IS TO COMPLY WITH A.W.S. SPECIFICATION D-1.1 AND IS TO BE DONE BY CERTIFIED WELDERS AS REQUIRED BY THE DEPARTMENT OF BUILDING AND SAFETY. ALL WELDING IS TO BE DONE BY ELECTRIC ARC PROCESS AND SHALL BE PERFORMED WITH APPROVED LOW-HYDROGEN ELECTRODES (TYPE E-70). SHOP WELDS ARE DESIGNED AT FULL STRESS.

WELDED ANCHORS (THREADED STUDS OR HEADED STUDS, ETC.) SHALL BE APPROVED 'NELSON' OR EQUAL, MADE FROM C-1015 COLD ROLLED STEEL AND SHALL CONFORM TO A.S.T.M. A-108 GRADES 1015-1020, WITH A MINIMUM TENSILE STRENGTH OF 60,000 psi. STUD WELDING SHALL CONFORM TO A.W.S D1.1.

FIELD WELDS ARE DESIGNED AT HALF STRESS. DEPUTY INSPECTION NOT REQUIRED FOR FIELD WELDS UNLESS OTHERWISE NOTED. PROVIDE CERTIFICATION AND INSPECTION AS REQUIRED BY THE BUILDING DEPARTMENT.

STRUCTURAL STEEL SHALL HAVE, AS A MINIMUM, A SHOP COAT OF RED-OXIDE PRIMER; OTHER COATINGS MAY BE SPECIFIED ON ARCHITECTURAL OR STRUCTURAL DRAWINGS FOR SPECIFIC STRUCTURAL ELEMENTS. FIELD CONNECTIONS AND ABRASIONS SHALL BE CLEANED AND TOUCHED UP WITH THE SAME TYPE OF PAINT AS THE SHOP COAT.

MANUFACTURED ROOF FRAMING:
FABRICATOR SHALL SUBMIT CERTIFICATE OF INSPECTION TO BUILDING DEPARTMENT AND ENGINEER, PRIOR TO INSTALLATION. FABRICATOR SHALL BE LICENSED AS REQUIRED BY BUILDING DEPARTMENT.

FABRICATOR SHALL SUBMIT SHOP DRAWINGS, ERECTION PLANS AND DESIGN CALCULATIONS (SEALED BY AN ENGINEER REGISTERED IN THE STATE) TO THIS OFFICE FOR REVIEW PRIOR TO FABRICATION.

NOTCHING OR DRILLING OF FABRICATED FRAMING IS PERMITTED ONLY AT LOCATIONS SPECIFIED ON MANUFACTURER'S ERECTION PLANS.

FRAMING SHALL BE ERECTED AND INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS. APPROVED ERECTION DRAWINGS SHALL BEAR AN ENGINEER'S SEAL AND BE KEPT ON THE JOBSITE AS PART OF THE APPROVED PLAN SET. FABRICATED FRAMING SHALL BE TRANSPORTED, STORED, ERECTED AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL PERMANENT AND TEMPORARY BRACING AND FASTENING SHALL BE BY THE MANUFACTURER, U.N.O. ON PLANS.

LIGHT-GAUGE STRUCTURAL STEEL FRAMING:
ALL 18 AND 20 GAUGE STUDS AND JOISTS SHALL BE 33,000 psi MINIMUM YIELD STRESS STEEL. FRAMING OF 16 GAUGE AND HEAVIER SHALL BE 50,000 psi MINIMUM YIELD STRESS. ALL STRUCTURAL FRAMING SPECIFIED IS TO BE MANUFACTURED BY APPROVED MANUFACTURERS UNDER SSMA STANDARD AND ICC-ES REPORT NUMBER ESR-3064P, AND STAMPED AS SUCH.

FASTENERS FOR LIGHT-GAUGE FRAMING SPECIFIED ARE "DARTS" BRAND SELF-DRILLING/SELF-TAPPING STEEL SCREWS, MANUFACTURED BY PRIMESOURCE BUILDING PRODUCTS (ICC ESR-1408), OR EQUAL. SUBMIT ICC REPORT FOR REVIEW.

BRIDGING SHALL BE COLD ROLLED CHANNEL, MINIMUM 1-1/2" DEEP WITH 9/16" FLANGE WIDTH. SPACE BRIDGING AT 4'-0" MAXIMUM o.c. VERTICALLY. DOUBLE STUDS AT ALL JAMBS. ALL CONNECTIONS SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.

LUMBER:
ALL FRAMING MEMBERS SHALL BE DOUGLAS FIR-LARCH (W.C.D.F.) PER WEST COAST LUMBER INSPECTION BUREAU. EXCEPTIONS TO THE ABOVE SHALL BE NOTED ON PLANS. ALL LUMBER SHALL BE GRADE MARKED. MAXIMUM MOISTURE CONTENT FOR ALL STRUCTURAL MEMBERS SHALL NOT EXCEED 19 PERCENT.

RAFTERS (2x, 4x OR LARGER).. (NO 1)
JOISTS (2x, 4x OR LARGER).. (NO 1)
OTHER HORIZONTAL (BEAMS, PURLINS, HEADERS, ETC) (NO 1)
LEDGERS AND NAILERS.. (NO 2)
STUDS (2x4 AND LARGER).. (NO 2 OR STUD)
POSTS (4x4 AND LARGER.. (NO 1)
SILLS, PLATES AND BLOCKING.. (NO 2)

PLYWOOD SHALL BE PS 1-09, DOUGLAS FIR-LARCH, STRUCTURAL I . O.S.B. SHEATHING SHALL BE PS 02-10. PROTECT FROM MOISTURE AT ALL TIMES. STUCCO AND/OR STUCCO WITH VENEER OVER A PLYWOOD SHEAR WALL SHALL BE WATERPROOFED WITH A MINIMUM OF (2) 15# UNDERLAYMENTS.

ALL BOLT HEADS AND NUTS BEARING ON WOOD SHALL HAVE WASHERS. HOLES IN WOOD FOR BOLTS SHALL BE DRILLED 1/32" TO 1/16" LARGER THAN NOMINAL BOLT SIZE. ALL BOLTS, SILL ANCHOR NUTS AND HOLDOWN ANCHOR NUTS SHALL BE RETIGHTENED PRIOR TO CLOSING IN. INSPECTOR TO VERIFY.

MACHINE BOLTS SHALL CONFORM TO A.S.T.M A-307

UNLESS OTHERWISE NOTED ON FRAMING PLANS, OR FABRICATOR'S FRAMING/ERECTION PLANS, MINIMUM PLYWOOD ROOF SHEATHING SHALL BE 1/2" STANDARD (C-D) WITH EXTERIOR GLUE, PANEL I.D. 24/0, NAILED WITH 8d NAILS AT 6:12. PLYWOOD SHEETS SHALL BE LAID WITH THE LONG DIMENSION AND FACE GRAIN PERPENDICULAR TO THE RAFTERS AND THE SHEETS SHALL BE STAGGERED AS SHOWN. EACH SHEET CHALL CONTAIN A MINIMUM OF 8 SQUARE FEET AND EXTEND TO 3 BEARINGS. PLYWOOD DIAPHRAGM SHALL BE INSPECTED AND APPROVED BEFORE COVERING IS LAID.

DO NOT NOTCH OR DRILL JOISTS, BEAMS OR LOAD-BEARING STUDS WITHOUT PRIOR APPROVAL OF ENGINEER, UNLESS SPECIFIED ON PLANS OR DETAILS. HOLES THROUGH SILL, PLATES, STUDS AND DOUBLE PLATES IN INTERIOR, BEARING AND SHEAR WALLS SHALL NOT EXCEED 1/3 THE PLATE WIDTH. USE BORED HOLES LOCATED ON THE CENTER LINE OF THE STUD OR PLATE.

ALL HANGERS, CONNECTORS AND STANDARD FRAMING HARDWARE UNLESS OTHERWISE NOTED ON DRAWINGS SHALL BE AS MANUFACTURED BY THE SIMPSON 'STRONG-TIE' COMPANY AND IDENTIFIED BY NUMBERS AS SHOWN IN THEIR LATEST CATALOG. SUBSTITUTIONS SHALL NOT BE USED UNLESS APPROVED BY THE ENGINEER. ALL MANUFACTURED HARDWARE SHALL COMPLY WITH A SPECIFIC ICC / IAPMO AND/ OR LARR RESEARCH REPORT.

GROUT OR DRYPACK:
DRYPACK UNDER BASE PLATES, SILL PLATES AND WHERE OTHERWISE NOTED ON DRAWINGS SHALL CONSIST OF 1 PART PORTLAND CEMENT AND 2.5 PARTS OF FINE AGGREGATE CONFORMING TO A.S.T.M. C-33, WITH ENOUGH WATER TO FORM A BALL WHEN SQUEEZED IN THE HAND. THE SPACE BETWEEN TWO SURFACES REQUIRING DRYPACK SHALL BE PACKED WITH THE DRYPACK MATERIAL BY TAMPING OR RAMMING WITH A BAR OR ROD, UNTIL THE VOID IS COMPLETELY FILLED. MINIMUM 28 DAY STRENGTH SHALL BE 5000 psi.

IN LIEU OF DRYPACK, NON-SHRINK GROUT SHALL BE A READY-TO-USE NON-METALLIC AGGREGATE PRODUCT REQUIRING ONLY THE ADDITION OF WATER AT THE JOB SITE, AND SHOULD BE CAPABLE OF PRODUCING A FLOWABLE GROUTING MATERIAL HAVING NO DRYING SHRINKAGE OR SETTLEMENT AT ANY AGE. THE COMPRESSIVE STRENGTH OF THE GROUT SHALL BE NOT LESS THAN 5000 psi AT SEVEN (7) DAYS, AND 7500 psi AT 28 DAYS.

GENERAL:
WORK SHALL CONFORM TO THE REQUIREMENTS, AS AMENDED TO DATE, OF THE 2022 CALIFORNIA BUILDING CODE (CBC/22) AND ALL LOCAL, STATE AND FEDERAL ORDINANCES AND REQUIREMENTS.

ALL MATERIALS AND WORKMANSHIP SHALL COMFORM TO THE DRAWINGS AND SPECIFICATIONS. THE APPROVED DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE BUILDING. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING, BRACING AND GUYS IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY ORDINANCES. BRACING AND SHORING SHALL BE MAINTAINED IN PLACE UNTIL ALL PROTECTED WORK HAS BEEN SUITABLY COMPLETED.

OBSERVATION VISITS TO THE SITE BY THE ENGINEER SHALL NOT INCLUDE INSPECTIONS OF THE PROTECTIVE MEASURES OR THE CONSTRUCTION PROCEDURES. ANY SUPPORT SERVICES PERFORMED BY THE ENGINEER DURING THE CONSTRUCTION SHALL BE DISTINGUISED FROM CONTINUOUS AND DETAILED INSPECTION SERVICES, WHICH ARE FUNRISHED BY OTHERS. THESE SUPPORT SERVICES PERFORMED BY THE ENGINEER, WHETHER MATERIAL OR WORK, AND WHETHER PERFORMED PRIOR TO, DURING, OR AFTER COMPLETION OF CONSTRUCTION, ARE PERFORMED SOLELY FOR THE PURPOSE OF ASSISTING IN QUALITY CONTROL AND IN ACHIEVING GENERAL CONFORMANCE WITH CONTRACT DOCUMENTS, BUT DO NOT GUARANTEE CONTRACTOR'S PERFORMANCE AND SHALL NOT BE CONSTRUED AS SUPERVISION OF CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES.

ANY ENGINEERING DESIGN PROVIDED BY OTHERS (MANUFACTURED ROOF FRAMING; FOUNDATION & SLAB) AND SUBMITTED FOR REVIEW SHALL BEAR THE SEAL OF AN ENGINEER REGISTERED IN THE STATE.

DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED.

OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE APPROVED STRUCTURAL DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH ANY WORK INVOLVED.

DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE ON DRAWINGS. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.

THE APPROVED SET OF PLANS, INCLUDING ALL APPROVED REVISIONS AND ADDENDA, SHALL BE ON THE JOB SITE AT ALL TIMES.

PROVIDE OPENINGS AND SUPPORTS, AS REQUIRED PER STANDARD DETAILS FOR HEATERS, MECHANICAL EQUIPMENT, VENTS, DUCTS, PIPING, ETC. ALL SUSPENDED MECHANICAL EQUIPMENT SHALL BE SWAY OR LATERALLY BRACED.

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, STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED ROOF. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. PROVIDE ADEQUATE SHORING AND/ OR BRACING WHERE STRUCTURE HAS NOT ATTAINED DESIGN STRENGTH.

THE DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THE DRAWINGS AND SPECIFICATIONS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE AND ANY ON-SITE PERSONS DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING, SAFE PLACEMENT OF CONSTRUCTION EQUIPMENT, BARRICADES, SAFE PLACEMENT OF CONSTRUCTION MATERIAL, ETC. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT OR STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OR OBSERVATION SERVICES OF THE ABOVE OR SIMILAR TYPE ITEMS.

LICENSED ARCHITECT
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027
STATE OF CALIFORNIA

NO	DATE	REVISION
1	12.28.23	CITY SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		
4		

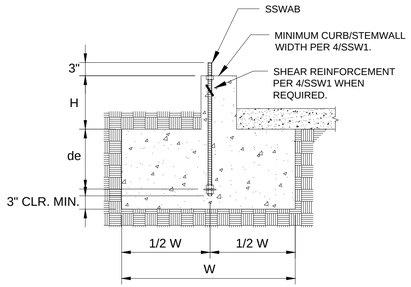
PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON J. J. DARLING
ARCHITECT
2259 PASEO DEL MAR
SAN PEDRO, CA 90732 (310)619-9540

SHEET TITLE
4 BEDROOM TYPE DHS UNIT
GENERAL NOTES

DATE 8/10/25
JOB

SHEET
S-3
OF DWGS



CURB OR STEMWALL FOUNDATION

NOTES:
1. SEE 2/SSW1 AND 3/SSW1 FOR DIMENSIONS AND ADDITIONAL NOTES.
2. SEE 4/SSW1 FOR SHEAR REINFORCEMENT WHEN REQUIRED.
3. MAXIMUM H = le - de. SEE 5/SSW1 AND 6/SSW1 FOR le.

STEEL STRONG-WALL ANCHORAGE - TYPICAL SECTIONS 1

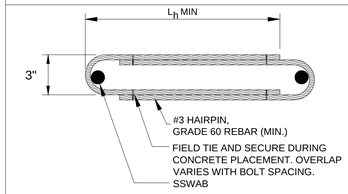
SSWAB TENSION ANCHORAGE SCHEDULE 2500 PSI 2

STEEL STRONG-WALL ANCHORAGE SOLUTIONS FOR4500 PSI CONCRETE

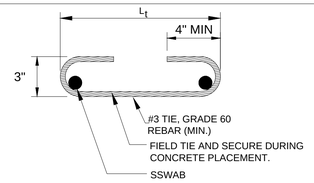
DESIGN CRITERIA	CONCRETE CONDITION	ANCHOR STRENGTH	SSWAB 3/4" ANCHOR BOLT ASD ALLOWABLE UPLIFT (lbs)	SSWAB 3/4" ANCHOR BOLT W (in)	SSWAB 3/4" ANCHOR BOLT de (in)	SSWAB 1" ANCHOR BOLT ASD ALLOWABLE UPLIFT (lbs)	SSWAB 1" ANCHOR BOLT W (in)	SSWAB 1" ANCHOR BOLT de (in)
SEISMIC	CRACKED	STANDARD				16,000	27	9
WIND	CRACKED	STANDARD				11,600	20	7

NOTES:
1. ANCHORAGE DESIGNS CONFORM TO ACI 318-14 AND ACI 318-11 APPENDIX D WITH NO SUPPLEMENTARY REINFORCEMENT FOR CRACKED OR UNCRACKED CONCRETE AS NOTED.
2. ANCHOR STRENGTH INDICATES REQUIRED GRADE OF SSWAB ANCHOR BOLT. STANDARD (ASTM FI554 GRADE 36) OR HIGH STRENGTH (HS) (ASTM A449).
3. SEISMIC INDICATES SEISMIC DESIGN CATEGORY C THROUGH F. DETACHED 1 AND 2 FAMILY DWELLINGS IN SDC C MAY USE WIND ANCHORAGE SOLUTIONS. SEISMIC ANCHORAGE DESIGNS CONFORM TO ACI 318-14 SECTION 17.2.3.4.3 AND ACI 318-11 SECTION D.3.3.4.
4. WIND INCLUDES SEISMIC DESIGN CATEGORY A AND B AND DETACHED 1 AND 2 FAMILY DWELLINGS IN SDC C.
5. FOUNDATION DIMENSIONS ARE FOR ANCHORAGE ONLY. FOUNDATION DESIGN (SIZE AND REINFORCEMENT) BY OTHERS. THE REGISTERED DESIGN PROFESSIONAL MAY SPECIFY ALTERNATE EMBEDMENT, FOOTING SIZE OR ANCHOR BOLT.
6. SEE 1/SSW1 AND 2/SSW1 FOR W AND de.

SSWAB TENSION ANCHORAGE SCHEDULE 3500/4500 PSI 3



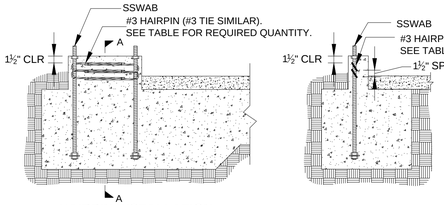
HAIRPIN SHEAR REINFORCEMENT



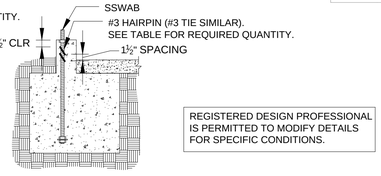
TIE SHEAR REINFORCEMENT

STEEL STRONG-WALL SHEAR ANCHORAGE

MODEL	SEISMIC[3] L_t OR L_h (in.)	SEISMIC[3] SHEAR REINFORCEMENT	SEISMIC[3] MIN. CURB / STEMWALL WIDTH (in.)	WIND[4] SHEAR REINFORCEMENT	WIND[4] MIN. CURB / STEMWALL WIDTH (in.)	WIND[4] ASD ALLOWABLE SHEAR LOAD V (lbs.)[6] 6" MIN CURB / STEMWALL UNCRACKED	6" MIN CURB / STEMWALL CRACKED	8" MIN CURB / STEMWALL UNCRACKED	8" MIN CURB / STEMWALL CRACKED
SSW18	14	(1) #3 HAIRPIN	8[5]	(1) #3 HAIRPIN	6	HAIRPIN REINFORCEMENT ACHIEVES MAXIMUM ALLOWABLE SHEAR LOAD OF THE STEEL STRONG-WALL PANEL			



HAIRPIN INSTALLATION
(GARAGE CURB SHOWN. OTHER FOOTING TYPES SIMILAR.)



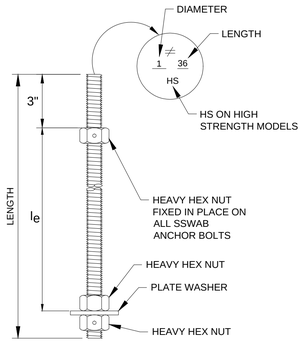
SECTION A-A

REGISTERED DESIGN PROFESSIONAL IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.

NOTES:
1. SHEAR ANCHORAGE DESIGNS CONFORM TO ACI 318-14 AND ACI 318-11 AND ASSUME MINIMUM f'c=2,500 PSI CONCRETE. SEE DETAILS 1/SSW1 TO 3/SSW1 FOR TENSION ANCHORAGE.
2. SHEAR REINFORCEMENT IS NOT REQUIRED FOR PANELS INSTALLED ON A WOOD FLOOR, INTERIOR FOUNDATION APPLICATIONS (PANEL INSTALLED AWAY FROM EDGE OF CONCRETE), OR BRACED WALL PANEL APPLICATIONS.
3. SEISMIC INDICATES SEISMIC DESIGN CATEGORY C THROUGH F. DETACHED 1 AND 2 FAMILY DWELLINGS IN SDC C MAY USE WIND ANCHORAGE SOLUTIONS.
4. WIND INCLUDES SEISMIC DESIGN CATEGORY A AND B.
5. MINIMUM CURB/STEMWALL WIDTH IS 6" WHEN STANDARD STRENGTH SSWAB IS USED.
6. USE (1) #3 TIE FOR SSW12 AND SSW15 WHEN THE STEEL STRONG-WALL PANEL DESIGN SHEAR FORCE EXCEEDS THE TABULATED ANCHORAGE ALLOWABLE SHEAR LOAD.
7. CONCRETE EDGE DISTANCE FOR ANCHORS MUST COMPLY WITH ACI 318-14 SECTION 17.7.2 AND ACI 318-11 D.8.2.

STEEL STRONG-WALL ANCHOR BOLT SHEAR ANCHORAGE 4

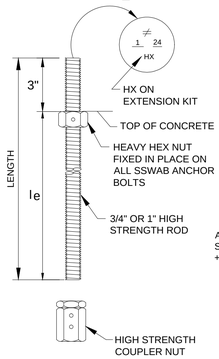
SSW ANCHOR BOLTS 5



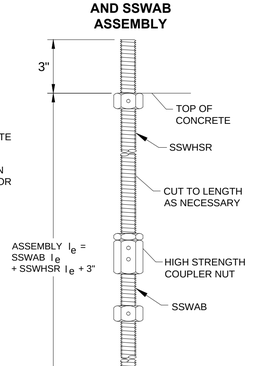
STEEL STRONG-WALL WIDTH	MODEL NO.	DIAMETER	LENGTH	l_e
12" MODEL	SSWAB3/4x24	3/4"	24"	19"
	SSWAB3/4x24HS	3/4"	24"	19"
	SSWAB3/4x30	3/4"	30"	25"
	SSWAB3/4x30HS	3/4"	30"	25"
	SSWAB3/4x36HS	3/4"	36"	31"
15", 18", 21 AND 24" MODELS	SSWAB1x24	1"	24"	19"
	SSWAB1x24HS	1"	24"	19"
	SSWAB1x30	1"	30"	25"
	SSWAB1x30HS	1"	30"	25"
	SSWAB1x36HS	1"	36"	31"

SSW ANCHOR BOLT EXTENSION 6

SSWHSR_KT



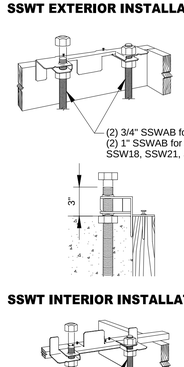
SSWHSR AND SSWAB ASSEMBLY



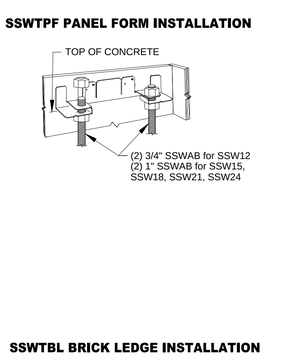
SSW WIDTH	MODEL NO.	DIAMETER	TOTAL LENGTH	l_e
12" MODEL	SSWHSR3/4-2KT	3/4"	24"	21"
	SSWHSR3/4-3KT	3/4"	36"	33"
15", 18", 21 AND 24" MODELS	SSWHSR1-2KT	1"	24"	21"
	SSWHSR1-3KT	1"	36"	33"

SSW ANCHOR BOLT TEMPLATES 7

SSWT EXTERIOR INSTALLATION



SSWTPF PANEL FORM INSTALLATION



SSWT INTERIOR INSTALLATION

SSWTBL BRICK LEDGE INSTALLATION

NO.	DATE	REVISIONS
1	9/21/2009	2006 IBC REVISIONS
2	4/16/2014	2012 IBC REVISIONS
3	8/08/2016	2015 IBC REVISIONS

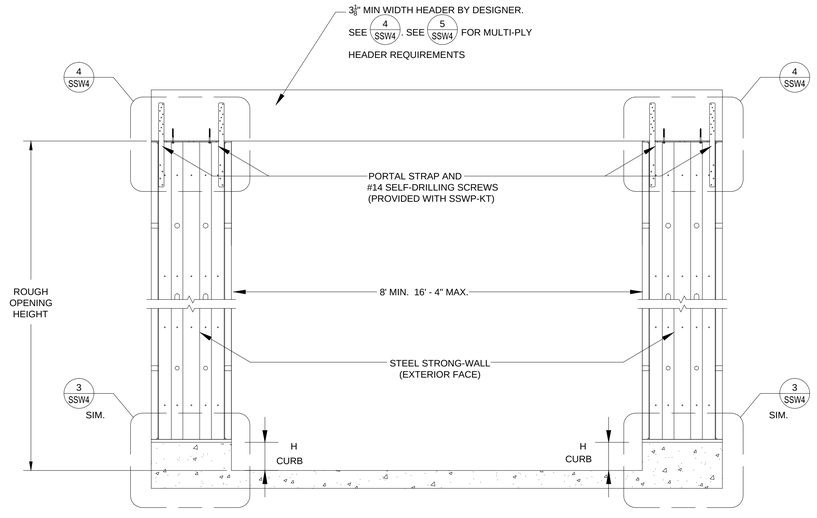
REGISTERED PROFESSIONAL ENGINEER PETER SAKATA No. 5938 Exp. 6/30/19 STRUCTURAL STATE OF CALIFORNIA

SIMPSON STRONG-TIE COMPANY, INC.
HOME OFFICE: POSITAS BLVD.
5956 W. LAS
PLEASANTON, CA 94588
TEL: (800) 999-5099

SIMPSON Strong-Tie THERE IS NO EQUAL

STEEL STRONG-WALL
ANCHORAGE DETAILS
ENGINEERED DESIGNS

NAME	
DATE	8-8-2016
SCALE	N.T.S.
CHECKED	
SHEET	SSW1
OF	SHEETS
JOB NO.	



STEEL STRONG-WALL DOUBLE WALL PORTAL | 2

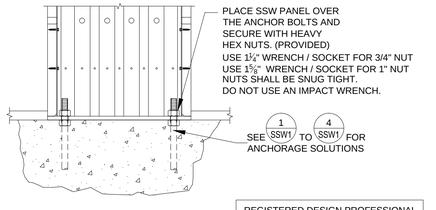
GARAGE HEADER
ROUGH OPENING HEIGHT

MODEL No.	H CURB	ROUGH OPENING HEIGHT
SSW12x7 SSW15x7 SSW18x7	5½"	7' - 1½"
	6"	7' - 2"
SSW12x7.4 SSW15x7.4 SSW18x7.4	0"	7' - 1½"
SSW12x8 SSW15x8 SSW18x8	5½"	8' - 2¾"
	6"	8' - 3¼"

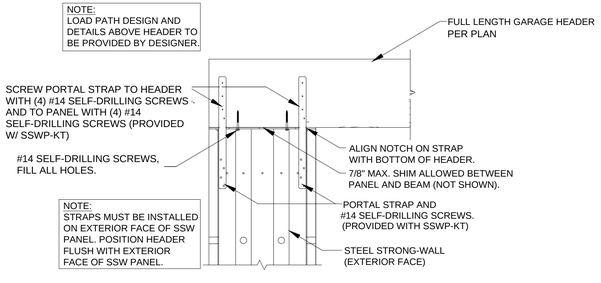
1. THE HEIGHT OF THE GARAGE CURB ABOVE THE GARAGE SLAB IS CRITICAL FOR THE ROUGH HEADER OPENING AT GARAGE RETURN WALLS.
2. SHIMS ARE NOT PROVIDED WITH STEEL STRONG-WALL.
3. FURRING DOWN GARAGE HEADER MAY BE NECESSARY FOR CORRECT ROUGH OPENING HEIGHT.

1. STEEL STRONG-WALL SHEARWALL IS MANUFACTURED AND TRADEMARKED BY "SIMPSON STRONG-TIE COMPANY, INC. "HOME OFFICE: 5956 W. LAS POSITAS BLVD., PLEASANTON, CA 94588 TEL: (800) 999-5099, FAX: (925) 847-1597. "SIMPSON STRONG-TIE COMPANY, INC." IS AN ISO 9001 REGISTERED COMPANY.
2. USE OF THIS PRODUCT IS SUBJECT TO THE APPROVAL OF THE LOCAL BUILDING DEPARTMENT.
3. THIS PRODUCT IS PART OF THE OVERALL LATERAL FORCE RESISTING SYSTEM OF THE STRUCTURE. DESIGN OF THE BUILDING'S LATERAL FORCE RESISTING SYSTEM, INCLUDING THE LOAD PATH TO TRANSFER LATERAL FORCES FROM THE STRUCTURE TO THE GROUND, IS THE RESPONSIBILITY OF THE SPECIFIER.
4. ENGINEER OF RECORD IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.
5. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, CONDITIONS, ELEVATIONS, ETC. PRIOR TO INSTALLATION OF ANY COMPONENTS FOR THE STEEL STRONG-WALL SYSTEM. IF ANY DISCREPANCIES ARE FOUND, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE SPECIFIER FOR CLARIFICATION PRIOR TO CONSTRUCTION.
6. INSTALLATION OF PRODUCT SHALL BE DONE IN CONFORMANCE TO THESE DRAWINGS. THE PERFORMANCE OF MODIFIED PRODUCTS OR ALTERED INSTALLATION PROCEDURES ARE THE SOLE RESPONSIBILITY OF THE SPECIFIER.
7. SIMPSON STRONG-TIE COMPANY, INC. RESERVES THE RIGHT TO CHANGE SPECIFICATIONS, DESIGNS, AND MODELS WITHOUT NOTICE OR LIABILITY FOR SUCH CHANGES.
8. ALL HARDWARE CALLED OUT IS SIMPSON STRONG-TIE.

NOTES | 6



BASE PLATE CONNECTION | 3



TOP OF WALL CONNECTION | 4

NO.	DATE	REVISIONS
0	9/21/2009	FIRST RELEASE
1	4/16/2014	2012 IBC REVISIONS
2	8/08/2016	2015 IBC REVISIONS

SIMPSON STRONG-TIE COMPANY, INC.
HOME OFFICE:
5956 W. LAS POSITAS BLVD.
PLEASANTON, CA 94588
TEL: (800) 999-5099

SIMPSON Strong-Tie THERE IS NO EQUAL

STEEL STRONG-WALL
PORTAL SYSTEM FRAMING DETAILS
ENGINEERED DESIGNS

SIMPSON Strong-Tie THERE IS NO EQUAL

NAME
DATE 8-8-2016
SCALE N.T.S.
CHECKED
SHEET SSW4
OF SHEETS
JOB NO.

CONCRETE (TABLE 1705A.3)

REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD[a]	CBC REFERENCE
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	-	X	ACI 318 Ch. 20, 25.2, 25.3, 26.5.1-26.5.3	1908.4
2. REINFORCING BAR WELDING:				
a. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706;	-	X	AWS D1.4 ACI 318: 26.5.4	-
b. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16".	-	X		
c. INSPECT ALL OTHER WELDS	X	-		
3. INSPECT ANCHORS CAST IN CONCRETE.	-	X	ACI 318: 17.8.2	-
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS. b, c				
a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	X	-	ACI 318: 17.8.2.4	-
b. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.a.	-	X	ACI 318: 17.8.2	
5. VERIFY USE OF REQUIRED DESIGN MIX.	-	X	ACI 318: Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	-	ASTM C172, ASTM C31, ACI 318: 26.4.5, 26.12	1908.10
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	-	ACI 318: 26.4.5	1908.6, 1908.7, 1908.8
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	-	X	ACI 318: 26.4.7-26.4.9	1908.9
9. INSPECT PRESTRESSED CONRETE FOR:				
a. APPLICATION OF PRESTRESSING FORCES.	X	-	ACI 318: 26.9.1	-
b. GROUTING OF BONDED PRESTRESSING TENDONS.	X	-	ACI 318: 26.9.3	
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	-	X	ACI 318: 26.8	-
11. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	-	X	ACI 318: 26.10.2	-
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED	-	X	ACI 318: 26.10.1(b)	-

a. WHERE APPLICABLE, SEE ALSO SECTION 1705A.12, SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE.

b. SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH 17.8.2 IN ACI 318, OR OTHER QUALIFICATION PROCEDURES. WHERE SPECIFIC REQUIREMENTS ARE NOT PROVIDED, SPECIAL INSPECTION REQUIREMENTS SHALL BE SPECIFIED BY THE REGISTERED DESIGN PROFESSIONAL AND SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO THE COMMENCEMENT OF THE WORK.

c. INSTALLATION OF ALL ADHESIVE ANCHORS IN HORIZONTAL AND UPWARDLY INCLINED POSITIONS SHALL BE PERFORMED BY AN ACI/CRSI CERTIFIED ADHESIVE ANCHOR INSTALLER, EXCEPT WHERE THE FACTORED DESIGN TENSION ON THE ANCHORS IS LESS THAN 100 LBS AND THOSE ANCHORS ARE CLEARLY NOTED ON THE APPROVED CONSTRUCTION DOCUMENTS OR WHERE THE ANCHORS ARE SHEAR DOWELS ACROSS COLD JOINTS IN SLABS ON GRADE WHERE THE SLAB IS NOT PART OF THE LATERAL FORCE-RESISTING SYSTEM.

WOOD

REQUIRED VERIFICATION AND INSPECTION OF STRUCTURAL WOOD SEISMIC-RESISTING ELEMENTS

VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED	REFERENCE STANDARD	CBC REFERENCE
1. FIELD GLUEING OR EPOXING OPERATIONS	X	-	-	1705.12.2
2. NAILING, BOLTING, ANCHORING, & OTHER FASTENING OF WOOD SHEAR WALLS, DIAPHRAGMS DRAGS, BRACES, SHEAR PANELS, & HOLDOWNS	-	X	-	1705.12.2
3. FABRICATED ITEMS IN SHOP	X	-	-	1704.2.5
4. VERIFY THAT NUTS ON ANCHOR BOLTS, HOLDOWNS, & FABRICATED ITEMS ARE SNUG-TIGHT OR TORQUED PER PLAN	-	X	-	1705.5

NOTE:

FOR ANCHORS IN CONCRETE & MASONRY, SEE THOSE TABLES.

SPECIAL INSPECTION

1. ALL SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 1704 OF THE CODE AND ANY ADDITIONAL REQUIREMENTS STATED IN THESE DRAWINGS AND/OR THE PROJECT SPECIFICATIONS AND DSA FORM 103.

2. CONTINUOUS SPECIAL INSPECTION BY A REGISTERED DEPUTY INSPECTOR IS REQUIRED FOR FIELD WELDING, CONCRETE STRENGTH f'c>2500 psi, AND SPRAYED-ON FIREPROOFING.

3. FIELD WELDING TO BE DONE BY WELDERS CERTIFIED BY THE LADBS FOR STRUCTURAL STEEL. CONTINUOUS INSPECTION BY A DEPUTY INSPECTOR IS REQUIRED.

4. SHOP WELDS MUST BE PERMORMED IN A LICENSED FABRICATOR SHOP.

LOADING

1. DESIGN LOADS
   - FLOOR LIVE LOAD = 40 PSF
   - ROOF LIVE LOAD = 20 PSF
2. WIND ANALYSIS PER CHAPTER 16A OF THE CODE
   - RISK CATEGORY = II
   - BASIC WIND SPEED, V = 97 mph
   - EXPOSURE = C
3. SEISMIC ANALYSIS PER CHAPTER 16 OF THE CODE UTILIZING THE FOLLOWING:
   - A. PROCEDURE - EQUIVALENT LATERAL FORCE ANALYSIS (Rho = 1.0)
   - B. SYSTEM - LIGHT - FRAME CFS WALLS w/ RATED WOOD SHTG

SEISMIC PARAMETERS			
S_S =	1.878g	S_{DS} =	1.252g
S_1 =	0.783g	S_{D1} =	0.887g
F_a =	1.0	DESIGN CATEGORY =	E
F_v =	1.7	SITE CLASS =	D
I_e =	1	V_S =	CS * W
R =	6.5	C_S =	0.193W
C_d =	3	OMEGA =	2.5

STRUCTURAL OBSERVATIONS

1. PERIODIC STRUCTURAL OBSERVATION SHALL BE PERFORMED BY THE ENGINEER OF RECORD AT CRITICAL STAGES OF CONSTRUCTION IN ACCORDANCE WITH CBC 1704A. STRUCTURAL OBSERVATION DOES NOT RELIEVE THE CONTRACTOR FROM THE REQUIREMENTS OF SPECIAL INSPECTION. SEE 'SPECIAL INSPECTION NOTES' FOR ITEMS REQUIRING INSPECTION.
2. NOTIFY THE ENGINEER AT SIGNIFICANT CONSTRUCTION STAGES 72 HOURS IN ADVANCE AND PROVIDE ACCESS FOR THE FOLLOWING STRUCTURAL OBSERVATIONS:
   - A. FOUNDATIONS
     - a. REINFORCEMENT
     - b. OTHER EMBEDDED ELEMENTS
   - B. STEEL FRAMING
     - a. GENERAL
   - C. CONCRETE
     - a. REINFORCING LAYOUT
     - b. PREPARATION OF SHOTCRETE PANEL (IF SHOTCRETE IS USED)
     - c. OPENING OF SHOTCRETE TEST PANEL
     - d. POST-TENSIONING LAYOUT
   - D. MASONRY
     - a. REINFORCING LAYOUT
   - E. WOOD
     - a. DIAPHRAGMS & SHEAR WALLS
     - b. PROPRIETARY HOLDOWN SYSTEM
   - F. DEMOLITION WORK

SPECIAL INSPECTIONS

1. ALL SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF CBC CH 17A AND ANY ADDITIONAL REQUIREMENTS STATED IN THESE DRAWINGS AND/OR THE PROJECT SPECIFICATIONS.
2. THE OWNER SHALL PROVIDE FOR A SPECIAL INSPECTOR(S) WHO WILL PROVIDE SPECIAL INSPECTIONS OF THE CONSTRUCTION AS PRESCRIBED BY THE CODE AND THE CONSTRUCTION DOCUMENTS. IN NO CASE SHALL THE REQUIREMENTS IN THE CONSTRUCTION DOCUMENTS PROVIDE FOR ANY LESS THAN THE MINIMUM REQUIREMENTS OF THE CODE OR ANY OTHER GOVERNING AUTHORITY. ANY SUCH DISCREPANCY SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER.
3. THE SPECIAL INSPECTOR SHALL BE QUALIFIED BY THE JURISDICTION TO PROVIDE INSPECTIONS OF THE SPECIFIC CONSTRUCTION OR OPERATION REQUIRED. PROOF OF SUCH QUALIFICATION SHALL BE PROVIDED TO THE ENGINEER PRIOR TO THE START OF INSPECTIONS.
4. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, THE ENGINEER, ARCHITECT AND THE CONTRACTOR IN A TIMELY MANNER. ALL DISCREPANCIES BETWEEN THE INSPECTORS WORK AND THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF NOT CORRECTED, TO THE ENGINEER, ARCHITECT AND THE BUILDING OFFICIAL. THE SPECIAL INSPECTOR SHALL KEEP RECORDS SUCH THAT ALL CONCERNED PARTIES CAN IDENTIFY THE OUTSTANDING WORK THAT NEEDS CORRECTION AND SUCH THAT CORRECTED WORK IS RECORDED IN A TIMELY MANNER.
5. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING THAT THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN GENERAL CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE CODE. IF NON-CONFORMING WORK REMAINS, THEN THIS WORK SHALL BE ITEMIZED AND NOTED IN THE REPORT.
6. THE CONTRACTOR SHALL PROVIDE ACCESS TO THE WORK REQUIRING SPECIAL INSPECTION. THE CONTRACTOR SHALL PROVIDE A DESIGNATED AREA, ON SITE, FOR THE SPECIAL INSPECTOR TO RECEIVE CORRESPONDENCE AND AN AREA TO LEAVE CORRESPONDENCE FOR THE BUILDING OFFICIAL AND THE CONTRACTOR. THE CONTRACTOR SHALL DESIGNATE A QUALITY CONTROL INDIVIDUAL THAT SHALL ACT AS THE MAIN POINT OF CONTACT FOR THE INSPECTOR, ENGINEER AND ARCHITECT REGARDING INSPECTIONS ISSUES.
7. A PRE-INSPECTION MEETING SHALL BE HELD AND ORGANIZED BY THE CONTRACTOR ONCE INSPECTION HAS STARTED. AS A MINIMUM, THE ENGINEER, SPECIAL INSPECTOR, ARCHITECT, BUILDING OFFICIAL, OWNER'S REPRESENTATIVE AND THE CONTRACTOR'S QUALITY CONTROL INDIVIDUAL SHALL BE INVITED TO ATTEND. THE PURPOSE OF THE MEETING WILL BE TO MEET EACH OTHER, CONFIRM THE SCOPE OF WORK FOR EACH DISCIPLINE, ESTABLISH COMMUNICATION PROTOCOLS AND ANSWER ANY QUESTIONS.

LICENSED ARCHITECT
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027
STATE OF CALIFORNIA

NO.	DATE	REVISION
1	6.11.24	CITY SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		
4		

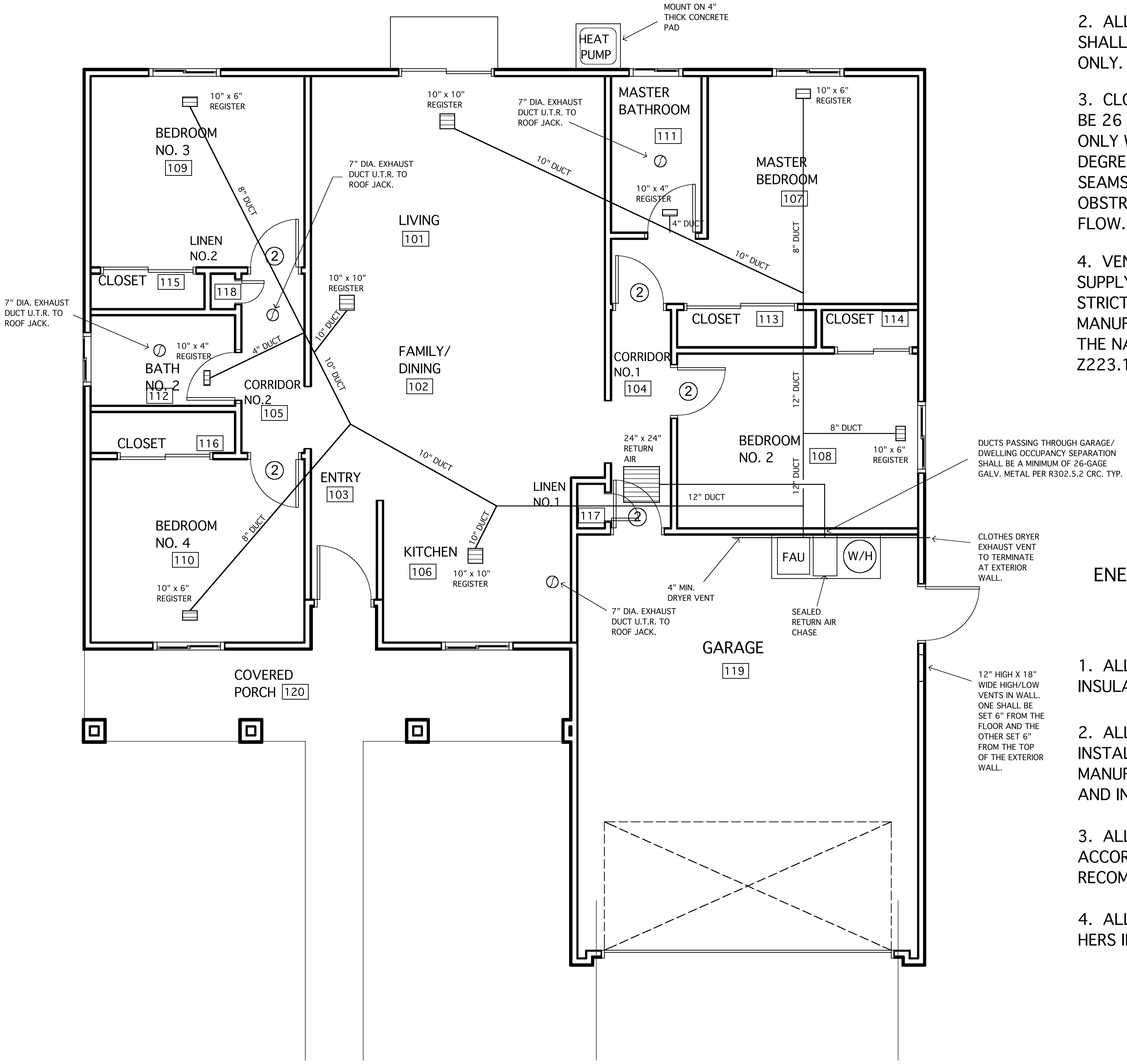
PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON J. J. DARLING
ARCHITECT
2259 PASEO DEL MAR
SAN PEDRO, CA. 90732 (310)619-9540

SHEET TITLE
SPECIAL INSPECTION, NOTES, TABLES & REQUIREMENTS

DATE 8/10/25
JOB

SHEET
SI-1
OF DWGS



N

MECHANICAL FLOOR PLAN - 4 BEDROOM UNIT

1/4"= 1'-0" SCALE

GENERAL NOTES (MECHANICAL)

1. ALL DUCT PENETRATIONS THROUGH WALLS SEPARATING GARAGE FROM THE REST OF THE RESIDENCE SHALL BE INSTALLED WITH 26 GAGE GALV. SHEET METAL ONLY.

2. ALL DUCTS OCCURRING IN THE GARAGE SHALL BE 26 GAGE GALV. SHEET METAL ONLY.

3. CLOTHES DRYER EXHAUST DUCT SHALL BE 26 GAGE GALV. SMOOTH SHEET METAL ONLY WITH A MAXIMUM OF TWO 90 DEGREE BENDS AND 15 FEET LENGTH. SEAMS AND JOINTS SHALL NOT CREATE OBSTRUCTIONS OR POCKETS TO RESTRICT FLOW.

4. VENTING OF EXHAUST GASSES AND THE SUPPLY OF COMBUSTION AIR SHALL BE IN STRICT ACCORDANCE WITH THE MANUFATURERS RECOMMENDATIONS AND THE NATIONAL FUEL GAS CODE ANSI Z223.1/NFPA 54.

ENERGY NOTES (MECHANICAL)

1. ALL DUCTING SHALL PROVIDE AN INSULATION VALUE OF R-6.

2. ALL DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMEDATIONS AND INSTRUCTIONS.

3. ALL DUCTWORK SHALL BE SEALED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMEDATIONS AND INSTRUCTIONS.

4. ALL DUCTWORK SHALL BE TESTED FOR HERS INDEX.

HVAC GENERAL NOTES

1. THE MECHANICAL CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR, EQUIPMENT, APPURTENANCES, AND ALL CONTRACTURAL EXPENSES REQUIRED FOR THE COMPLETE INSTALLATION OF THE MECHANICAL SYSTEM TO THE SATISFACTION OF THE OWNER AND ARCHITECT.

2. THE INSTALLATION SHALL COMPLY WITH AND BE INSTALLED IN ACCORDANCE WITH ALL LEGALLY CONSTITUTED AUTHORITIES & CODES HAVING JURISDICTION.

3. THE MECHANICAL CONTRACTOR SHALL GUARANTEE ALL EQUIPMENT, APPARATUS, ACCESSORIES (I.E., THE ENTIRE INSTALLATION) AS FURNISHED BY HIM OR HER FOR A PERIOD OF ONE YEAR.

4. THE MECHANICAL CONTRACTOR SHALL OBTAIN & PAY FOR ALL PERMITS, LICENSES & INSPECTIONS REQUIRED TO COMPLETE THIS JOB.

5. THE MECHANICAL CONTRACTOR SHALL COORDINATE THE SIZE, LOCATION, & SERVICE REQUIRMENTS OF ALL MECHANICAL EQUIPMENT & DUCTWORK WITH THE GENERAL, PLUMBING, ELECTRICAL, FIRE SPRINKLER CONTRACTORS PRIOR TO THE START OF CONSTRUCTION. ARCHITECT SHALL BE NOTIFIED OF ANY CONFLICTS PRIOR TO THE START OF CONSTRUCTION.

6. ALL SHEET METAL DUCTWORK SHALL BE NEW GALVANIZED SHEET METAL. DUCT GAUGES, CONSTRUCTION, SUPPORT AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE CALIFORNIA BUILDING CODE, CALIFORNIA MECHANICAL CODE AND 'SMACNA BEST TRADE PRACTICES'.

7. LINED DUCT WORK SIZE SHOWN ON DRAWINGS ARE INSIDE DIMENSIONS. DUCT LINER SHALL BE JOHNS-MANVILLE 'LINACOUSTIC' TYPE FIBER GLASS DUCT LINER 1.0" THICK, 1.5 LBS./CU. FT. DENSITY OR APPROVED ALTERNATIVE.

8. ALL TRANSVERSE JOINTS IN SUPPLY AIR DUCT SHALL BE SEALED AIR TIGHT 4 OZ. CANVAS AND AIRBOL. THE CANVAS SHALL EXTEND 1" ON BOTH SIDES OF SEAM AND JOINT.

9. FLEXIBLE CONNECTIONS SHALL BE PROVIDED FOR ALL DUCTWORK ATTACHED TO AIR MOVING EQUIPMENT MOUNTED ON OR SUSPENDED FROM VIBRATION ISOLATORS. FLEXIBLE CONNECTIONS SHALL BE CODE APPROVED NEOPRENE COATED GLASS TYPE FABRIC.

10. FLEXIBLE CONNECTIONS SHALL BE PROVIDED AT ALL MECHANICAL EQUIPMENT MOUNTED ON OR SUSPENDED FROM VIBRATION ISOLATORS. FLEXIBLE CONNECTIONS SHALL BE CODE APPROVED AND IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

11. FLEXIBLE CONNECTIONS (MECHANICAL, PLUMBING AND ELECTRICAL) SHALL BE PROVIDED AT ALL MECHANICAL EQUIPMENT MOUNTED ON OR SUSPENDED FROM VIBRATION ISOLATORS. FLEXIBLE CONNECTIONS SHALL BE CODE APPROVED AND IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

12. ALL CONDENSATE DRAIN LINES RUNNING INSIDE BUILDINGS SPACES SHALL BE INSULATED WITH JOHNS-MANVILLE 'AEROTUBE' TYPE PREFORMED SNAP-ON PLASTIC INSULATION.

13. PROVIDE ALL FIRE AND SMOKE DAMPERS AS REQUIRED BY LEGALLY CONSTITUTED AUTHORITIES AND CODES HAVING JURISDICTION.

14. PAINT PLENUM BEHIND EACH GRILLE OR REGISTER WITH FLAT BLACK PAINT.

15. TEST, BALANCE AND ADJUST ALL DIFFUSERS, REGISTERS, ETC, FOR OPTIMUM AIR DISTRIBUTION AND MINIMUM NOISE.

16. ALL WALL SUPPLY REGISTERS (W.S.R.) SHALL BE KRUEGER AL 5880V DOUBLE DEFLECTION WITH O.B.D. FRAMES TO SUIT WALL OR CEILING.

17. ALL MODULAR CEILING DIFFUSERS (C.D.) SHALL BE KRUEGER SERIES 1200 CONSTRUCTED OF ALUMINUM WITH O.B.D. FRAMES TO SUIT CEILING. FINISH SHALL MATCH CEILING PAINT. CONSULT OWNER FOR COLOR.

18. RETURN AIR GRILLES SHALL BE KRUEGER SERIES EGC. ALL ALUMINUM. FRAME TO SUIT CEILING. FINISH SHALL MATCH CEILING PAINT. CONSULT OWNER FOR COLOR.

19. REFRIGERANT LINES SHALL BE TYPE 'L' COPPER WITH SILVER SOLDER JOINTS. PROVIDE AND INSTALL ALL NECESSARY MATERIALS INCLUDING WIDE ELBOWS ONLY AND ALL REQUIRED APPURTNANCES FOR A COMPLETE JOB.

20. ALL REFRIGERANT LINES SHALL BE INSULATED WITH 3/4" FOAMED PLASTIC PIPE INSULATION J.M. 'AEROTUBE' OR EQUAL. WEATHER SEAL AND UV PROOF COVERING SHALL BE INSTALLED AT ALL PIPING EXPOSED TO SUN AND WEATHER TYPICAL.

22. FLEXIBLE DUCT SHALL BE JOHNS-MANVILLE 'MICRO-AIRE J-FLX' TYPE INSULATED FIBER GLASS DUCT, LENGTH NOT TO EXCEED 60".

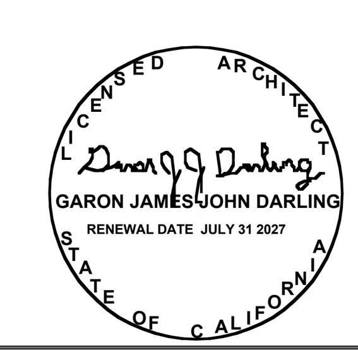
23. ALL SUPPLY, RETURN AND OUTSIDE AIR INTAKE DUCTS SHALL BE WRAPPED WITH JOHNS-MANVILLE 'R-SERIES MICRO-LITE WITH FSKL' TYPE FIBER GLASS DUCT INSULATION WITH ALUMINUM FOIL FACING; 2" THICK, 0.75 LBS./CU. FT. DENSITY.

AIR HANDLER SCHEDULE

MANUFACTURER	HEATING CAPACITY	COOLING CAPACITY	FLA	ELECTRICAL		
				VOLT	PH	HZ.
ALLIED - AC PRO	42,000	3.5 TON	40	230	1	60

HEAT PUMP SCHEDULE

MANUFACTURER	COOLING CAPACITY	SEER	EER2	HSPF2	FLA	WEIGHT	ELECTRICAL		
	TOTAL						VOLT	PH	HZ.
ALLIED - AC PRO	42,000	14.3	11.7	7.5	40.0	262	230	1	60



NO	DATE	REVISION
1	6.24.24	CITY SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		

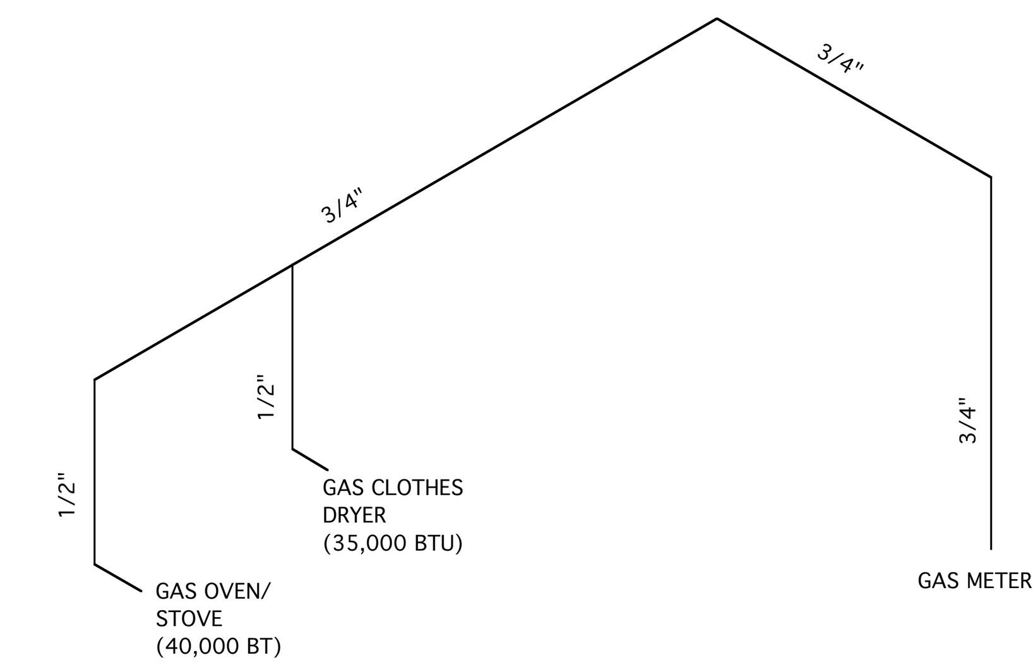
PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

G A R O N D A R L I N G
A R C H I T E C T
2259 W PASEO DEL MAR
SAN PEDRO, CA. 90732 (310) 619-9540

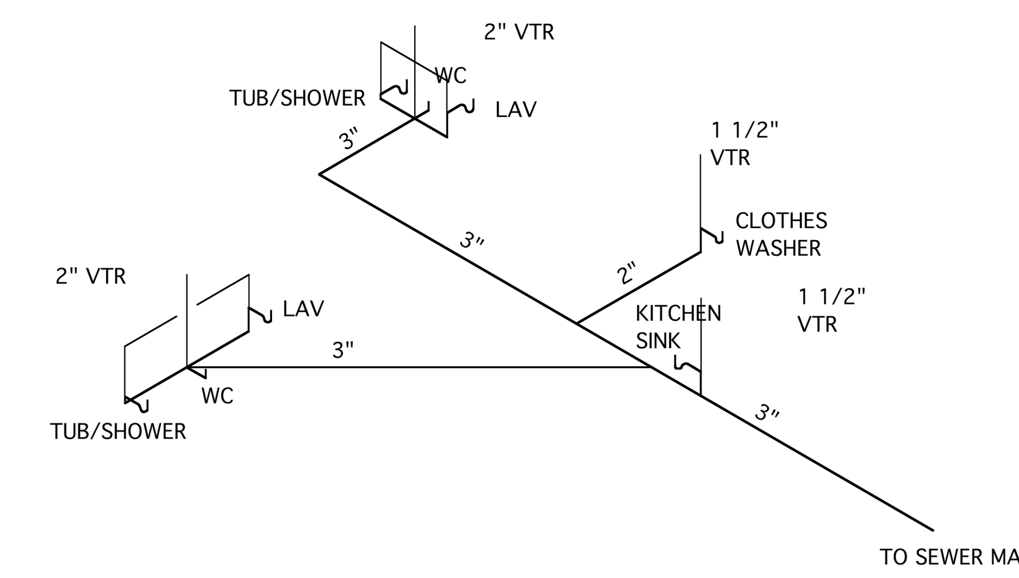
SHEET TITLE
MODEL 1374
4 BEDROOM
MECHANICAL FLOOR PLAN
SCHEDULE, LEGEND
& NOTES

DATE 8/11/25
JOB

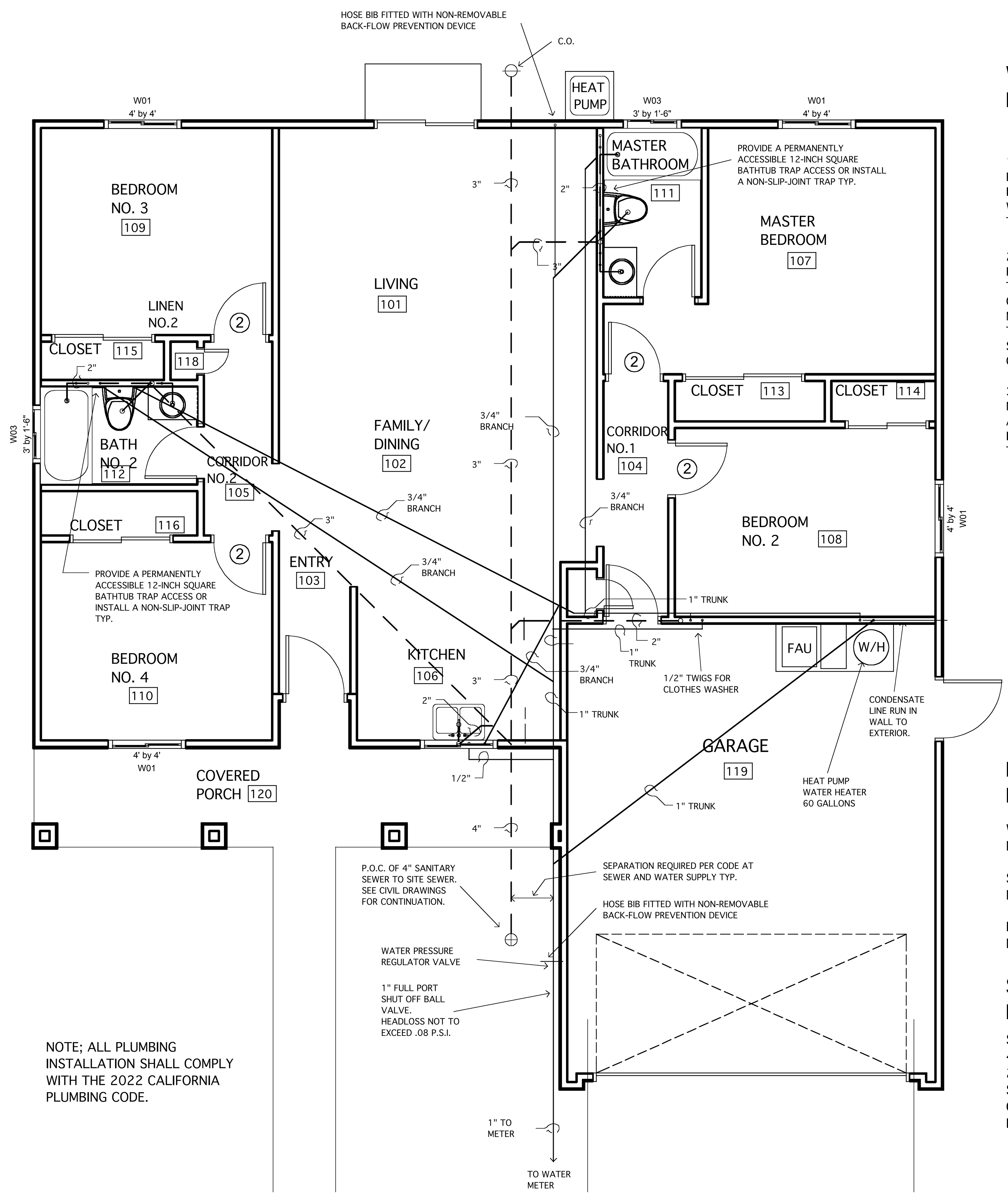
SHEET
M-1
OF DWGS



GAS - ISO



PLUMBING - ISO



NOTE; ALL PLUMBING INSTALLATION SHALL COMPLY WITH THE 2022 CALIFORNIA PLUMBING CODE.

PLUMBING (SEWER & WATER) FLOOR PLAN - 4 BEDROOM UNIT

1/4"= 1'-0" SCALE

WATER SUPPLY LAYOUT PLAN NOTES

1. WATER SUPPLY PIPE MATERIAL SHALL BE PEX OR PVC SCHEDULE 40 PIPE AT EXTERIOR, PEX AT INTERIOR.
WATER SUPPLY INSTALLATION SHALL COMPLY WITH THE CALIFORNIA PLUMBING CODE.

2. SHOWERS AND SHOWER-TUBS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE, THERMOSTATIC, OR COMBINATION PRESSURE BALANCE/THERMOSTATIC MIXING VALVE TYPE THAT PROVIDE SCALD AND THERMAL SHOCK PROTECTION. INSTALLATION SHALL COMPLY WITH THE CALIFORNIA PLUMBING CODE.

3. HEAT PUMP WATER HEATER SHALL BE NATIONALLY LISTED AND BE INSTALLED IN ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS THAT WERE APPROVED AS PART OF THEIR LISTING.

PLUMBING FIXTURE FLOW RATES AND NOTES

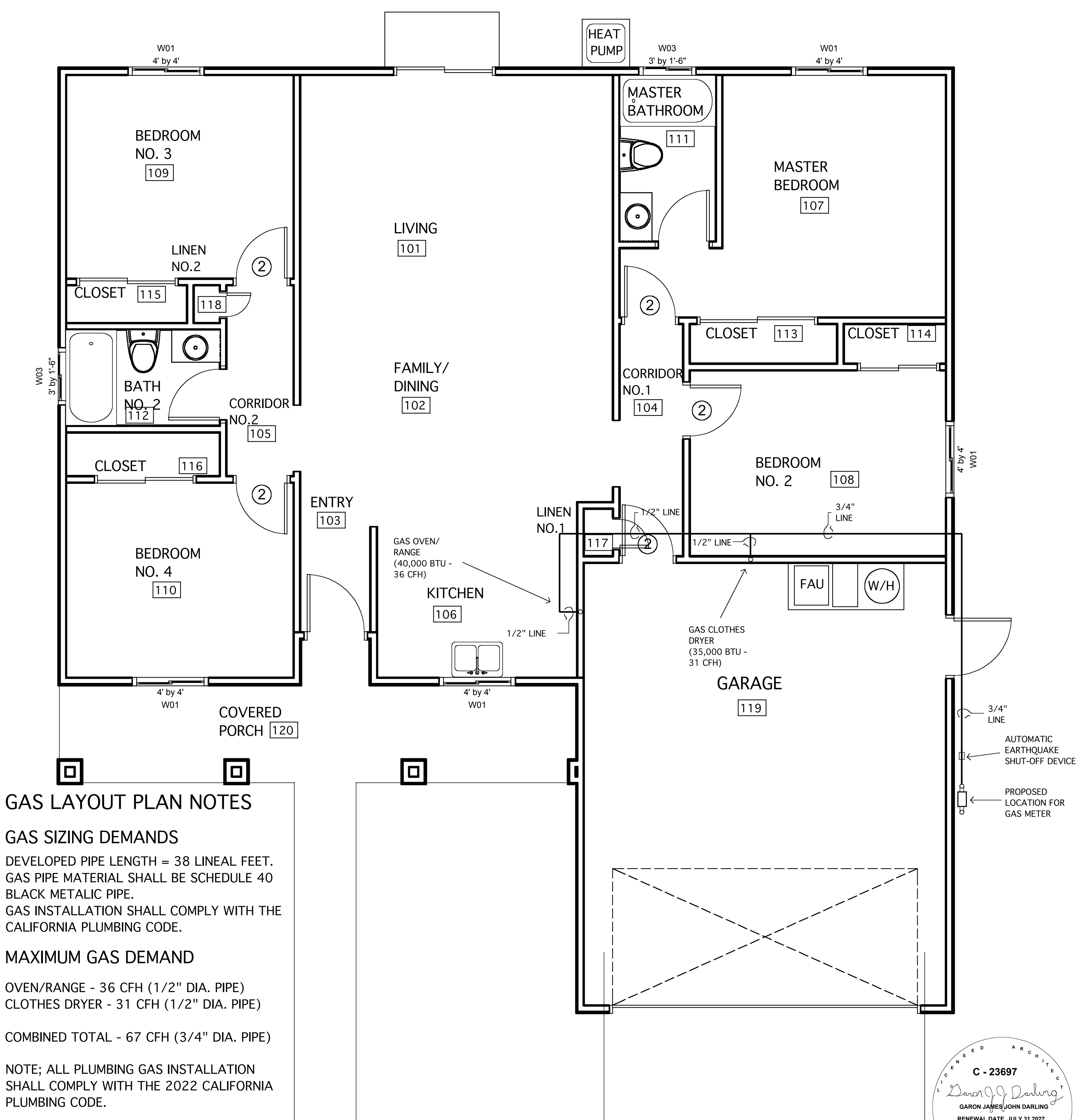
WATER CLOSET - 1.28 GALLONS PER FLUSH MAXIMUM.

SHOWER HEADS - 2.0 GALLONS PER MINUTE MAXIMUM.

FAUCETS- 1.2 GALLONS PER MINUTE MAXIMUM.

SANITARY SEWER LAYOUT PLAN NOTES

SEWER PIPE MATERIAL SHALL BE SCHEDULE 40 ABS-DWV PIPE AND FITTINGS PER ASTM D 2661
SANITARY SEWER INSTALLATION SHALL COMPLY WITH THE 2022 CALIFORNIA PLUMBING CODE.



GAS LAYOUT PLAN NOTES

GAS SIZING DEMANDS

DEVELOPED PIPE LENGTH = 38 LINEAL FEET.
GAS PIPE MATERIAL SHALL BE SCHEDULE 40 BLACK METALIC PIPE.
GAS INSTALLATION SHALL COMPLY WITH THE CALIFORNIA PLUMBING CODE.

MAXIMUM GAS DEMAND

OVEN/RANGE - 36 CFH (1/2" DIA. PIPE)
CLOTHES DRYER - 31 CFH (1/2" DIA. PIPE)

COMBINED TOTAL - 67 CFH (3/4" DIA. PIPE)

NOTE; ALL PLUMBING GAS INSTALLATION SHALL COMPLY WITH THE 2022 CALIFORNIA PLUMBING CODE.

C - 23697
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027

PLUMBING (GAS) FLOOR PLAN - 4 BEDROOM UNIT

1/4"= 1'-0" SCALE

NO.	DATE	REVISION
1	6.24.24	CITY SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON DARLING
ARCHITECT
2259 W PASEO DEL MAR
SAN PEDRO, CA. 90732 (310) 619-9540

SHEET TITLE
MODEL 1374
4 BEDROOM
PLUMBING FLOOR PLAN
SCHEDULE, LEGEND & NOTES

DATE 8/10/25
JOB

SHEET
P-1
OF DWGS

GENERAL INFORMATION					
01	Project Name	Mariposa Point			
02	Run Title	Plan 1374			
03	Project Location	Plan 1374			
04	City	Coachella, CA	05	Standards Version	2022
06	Zip code	92203	07	Software Version	CBECC-Res 2022.3.1
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	4
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)	1374	19	Glazing Percentage (%)	8.47%
20	ADU Bedroom Count	n/a	21	ADU Conditioned Floor Area	n/a
22	Fuel Type	Natural gas	23	No Dwelling Unit:	No

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

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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	38.9	44.5	26.1			
Proposed Design						
North Facing	38.5	43.1	25.5	0.4	1.4	0.6
East Facing	38.7	43.6	25.9	0.2	0.9	0.2
South Facing	38.3	42.1	25	0.6	2.4	1.1
West Facing	38.6	43.5	25.8	0.3	1	0.3

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: 4.35 kWdc

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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	0.12	0.6	0.03	0.23	0.09	0.37
Space Cooling	4.15	74.1	4.18	72.14	-0.03	1.96
IAQ Ventilation	0.8	8.39	1.01	10.55	-0.21	-2.16
Water Heating	1.19	12.63	0.86	9.76	0.33	2.87
Self Utilization/Flexibility Credit			0	0	0	0
North Facing Efficiency Compliance Total	**6.26**	**95.72**	**6.08**	**92.68**	**0.18**	**3.04**
Space Heating	0.12	0.6	0.04	0.26	0.08	0.34
Space Cooling	4.15	74.1	4.25	73.54	-0.1	0.56
IAQ Ventilation	0.8	8.39	1.01	10.55	-0.21	-2.16
Water Heating	1.19	12.63	0.84	9.5	0.35	3.13
Self Utilization/Flexibility Credit			0	0	0	0
East Facing Efficiency Compliance Total	**6.26**	**95.72**	**6.14**	**93.85**	**0.12**	**1.87**

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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	0.12	0.6	0.03	0.23	0.09	0.37
Space Cooling	4.15	74.1	4.12	70.35	0.03	3.75
IAQ Ventilation	0.8	8.39	1.01	10.55	-0.21	-2.16
Water Heating	1.19	12.63	0.82	9.36	0.37	3.27
Self Utilization/Flexibility Credit			0	0	0	0
South Facing Efficiency Compliance Total	**6.26**	**95.72**	**5.98**	**90.49**	**0.28**	**5.23**
Space Heating	0.12	0.6	0.03	0.23	0.09	0.37
Space Cooling	4.15	74.1	4.24	73.17	-0.09	0.93
IAQ Ventilation	0.8	8.39	1.01	10.55	-0.21	-2.16
Water Heating	1.19	12.63	0.84	9.6	0.35	3.03
Self Utilization/Flexibility Credit			0	0	0	0
West Facing Efficiency Compliance Total	**6.26**	**95.72**	**6.12**	**93.55**	**0.14**	**2.17**

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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]	23.41	23.13	0.28	1.2
Net EUI[2]	4.97	4.94	0.03	0.6
East Facing				
Gross EUI[1]	23.41	23.15	0.26	1.11
Net EUI[2]	4.97	4.96	0.01	0.2
South Facing				
Gross EUI[1]	23.41	22.81	0.6	2.56
Net EUI[2]	4.97	4.61	0.36	7.24
West Facing				
Gross EUI[1]	23.41	23.33	0.08	0.34
Net EUI[2]	4.97	5.14	-0.17	-3.42

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.

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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 (%)
5.15	NA	Standard (14-17%)	Fixed	none	true	105-300	n/a	n/a	<=7:12	96	94

REQUIRED SPECIAL FEATURES

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

- PV System: 5.15 kWdc
- Indoor air quality, balanced fan
- IAQ Ventilation System Heat Recovery: minimum 69 SRE and 75 ASRE
- IAQ Ventilation System: supply outside air inlet, filter, and H/ERV cores accessible per RACM Reference Manual
- IAQ Ventilation System: fault indicator display
- Cool roof
- Insulation below roof deck
- Window overhangs and/or fins
- 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

- Quality insulation installation (QII)
- Indoor air quality ventilation
- Kitchen range hood
- Minimum Airflow
- Verified Refrigerant Charge
- Fan Efficacy Watts/CFM
- Verified heat pump rated heating capacity
- Duct leakage testing

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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
Mariposa Point	1374	1	4	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
Conditioned	Conditioned	HVAC	1374	8.1	DHW	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	Conditioned	R-15 w/1 Foam Wall	0	Front	220.05	48.1	90
Left Wall	Conditioned	R-15 w/1 Foam Wall	90	Left	280.8	3.50001	90
Back Wall	Conditioned	R-15 w/1 Foam Wall	180	Back	380.7	68.8334	90
Right Wall	Conditioned	R-15 w/1 Foam Wall	270	Right	229.5	16	90
Garage Wall	Conditioned>>Garage	R-15 Wall - Interior	n/a	n/a	214.65	20.1	n/a
Roof	Conditioned	R-38 Attic Roof	n/a	n/a	1324	n/a	n/a
FAU Platform	Conditioned	R-19 Attic Roof	n/a	n/a	50	n/a	n/a
Roof - Garage	Garage	R-0 Attic Roof	n/a	n/a	470	n/a	n/a
Front Wall - Garage	Garage	R-0 Stucco	0	Front	160.65	112	90
Left Wall - Garage	Garage	R-0 Stucco	90	Left	139.05	0	90
Right Wall - Garage	Garage	R-0 Stucco	270	Right	193.05	0	90

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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 House	Tile HPA	Ventilated	4	0.26	0.9	No	Yes
Attic Garage	Tile	Ventilated	4	0.26	0.9	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
4030 Oper	Window	Front Wall	Front	0	4	3	1	12	0.3	NFRC	0.2	NFRC	Bug Screen
4040 Oper	Window	Front Wall	Front	0	4	4	1	16	0.3	NFRC	0.2	NFRC	Bug Screen
3012 Oper	Window	Left Wall	Left	90	3	1.16667	1	3.5	0.3	NFRC	0.2	NFRC	Bug Screen
4040 Oper 2	Window	Back Wall	Back	180	4	4	1	16	0.3	NFRC	0.2	NFRC	Bug Screen
5068 SGD	Window	Back Wall	Back	180	5	6.66667	1	33.33	0.3	NFRC	0.2	NFRC	Bug Screen
3012 Oper 2	Window	Back Wall	Back	180	3	1.16667	1	3.5	0.3	NFRC	0.2	NFRC	Bug Screen
4040 Oper 3	Window	Back Wall	Back	180	4	4	1	16	0.3	NFRC	0.2	NFRC	Bug Screen
4040 Oper 4	Window	Right Wall	Right	270	4	4	1	16	0.3	NFRC	0.2	NFRC	Bug Screen

OPAQUE DOORS

01	02	03	04
Name	Side of Building	Area (ft^2)	U-factor
Entry	Front Wall	20.1	0.2
Garage Entry	Garage Wall	20.1	0.2

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OPAQUE DOORS

01	02	03	04
Name	Side of Building	Area (ft^2)	U-factor
Car Door	Front Wall - Garage	112	1

OVERHANGS AND FINS

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Window	Overhang					Left Fin				Right Fin			
	Depth	Dist Up	Left Extent	Right Extent	Flap Ht.	Depth	Top Up	Dist L	Bot Up	Depth	Top Up	Dist R	Bot Up
4030 Oper	5	0.5	0	0	0	0	0	0	0	0	0	0	0
4040 Oper	5	0.5	0	0	0	0	0	0	0	0	0	0	0
3012 Oper	0.5	7	0	0	0	0	0	0	0	0	0	0	0
4040 Oper 2	0.5	1	0	0	0	0	0	0	0	0	0	0	0
5068 SGD	0.5	1	0	0	0	0	0	0	0	0	0	0	0
3012 Oper 2	0.5	1	0	0	0	0	0	0	0	0	0	0	0
4040 Oper 3	0.5	1	0	0	0	0	0	0	0	0	0	0	0
4040 Oper 4	0.5	7	0	0	0	0	0	0	0	0	0	0	0

SLAB FLOORS

01	02	03	04	05	06	07	08
Name	Zone	Area (ft^2)	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted Fraction	Heated
Slab-on-Grade	Conditioned	1374	137.167	none	0	80%	No
Slab-on-Grade - Garage	Garage	470	59	none	0	0%	No

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OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-0 Stucco	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-0	None / None	0.361	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4 Exterior Finish: 3 Coat Stucco
R-15 w/1 Foam Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-15	None / 4	0.064	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Sheathing / Insulation: R-4 Sheathing Exterior Finish: Synthetic Stucco
R-15 Wall - Interior	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-15	None / None	0.086	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Other Side Finish: Gypsum Board
Tile	Attic Roofs	Wood Framed Ceiling	2x4 Top Chord of Roof Truss @ 24 in. O. C.	R-0	None / None	0.4	Roofing: 10 PSF (RoofTileAirGap) Tile Gap: present Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4 Top Chrd
Tile HPA	Attic Roofs	Wood Framed Ceiling	2x4 Top Chord of Roof Truss @ 24 in. O. C.	R-13	None / None	0.072	Roofing: 10 PSF (RoofTileAirGap) Tile Gap: present Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-13.0 / 2x4 Top Chrd Around Roof Joists: R-0.0 insul.
R-0 Attic Roof	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / None	0.481	Cavity / Frame: no insul. / 2x4 Inside Finish: Gypsum Board
R-38 Attic Roof	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-38	None / None	0.025	Over Ceiling Joists: R-28.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board

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OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-19 Attic Roof	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-19	None / None	0.049	Over Ceiling Joists: R-9.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board

BUILDING ENVELOPE - HERS VERIFICATION

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

WATER HEATING SYSTEMS

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

WATER HEATERS - NEEA HEAT PUMP

01	02	03	04	05	06	07	08
Name	# of Units	Tank Vol. (gal)	NEEA Heat Pump Brand	NEEA Heat Pump Model	Tank Location	Duct Inlet Air Source	Duct Outlet Air Source
Water Heater	1	50	Rheem	PROPH50 T2 RH37530 (50 gal, JA13)	TankZone	Garage	Garage

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WATER HEATING - HERS VERIFICATION

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

SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06	07	08	09
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Required Thermostat Type
HVAC	Heat pump heating cooling	Heat Pump	1	Heat Pump	1	HVAC Fan 1	Ducts	Setback

HVAC - HEAT PUMPS

01	02	03	04	05	06	07	08	09	10	11	12	13
Name	System Type	Number of Units	Heating				Cooling			Zonally Controlled	Compressor Type	HERS Verification
			Heating Efficiency Type	HSPF/HSPF2/COP	Cap 47	Cap 17	Cooling Efficiency Type	SEER/SEER2	EER/EER2/CEER			
Heat Pump	Central split HP	1	HSPF2	7.5	12000	6840	EER2SEER2	14.3	11.7	Not Zonal	Single Speed	Heat Pump-hers-htpump

HVAC HEAT PUMPS - HERS VERIFICATION

01	02	03	04	05	06	07	08	09
Name	Verified Airflow	Airflow Target	Verified EER/EER2	Verified SEER/SEER2	Verified Refrigerant Charge	Verified HSPF/HSPF2	Verified Heating Cap 47	Verified Heating Cap 17
Heat Pump-hers-htpump	Required	350	Not Required	Not Required	Yes	No	Yes	Yes

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HVAC - DISTRIBUTION SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
Name	Type	Design Type	Duct Ins. R-value		Duct Location		Surface Area		Bypass Duct	Duct Leakage	HERS Verification
			Supply	Return	Supply	Return	Supply	Return			
Ducts	Unconditioned attic	Non-Verified	R-6	R-6	Attic	Attic	n/a	n/a	No Bypass Duct	Sealed and Tested	Ducts-hers-dist

HVAC DISTRIBUTION - HERS VERIFICATION

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

HVAC - FAN SYSTEMS

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

HVAC FAN SYSTEMS - HERS VERIFICATION

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

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INDOOR AIR QUALITY (IAQ) FANS

01	02	03	04	05	06	07	08	09
Dwelling Unit	Airflow (CFM)	Fan Efficacy (W/CFM)	IAQ Fan Type	Includes Heat/Energy Recovery?	IAQ Recovery Effectiveness - SRE/ASRE	Includes Fault Indicator Display?	HERS Verification	Status
SFam IAQVentRpt 1-1	71	0.88	Balanced	Yes	69 / 75	Yes	Yes	

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DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: James Hernandez	Documentation Author Signature: James Hernandez
Company: Builder Services Network	Signature Date: 05/24/2024
Address: 2937 Veneman Avenue	CEA/ HERS Certification Identification (If applicable): R22-18-40006
City/State/Zip: Modesto, CA 95356	Phone: 209-538-2879

CABEC
California Association of Building Energy Consultants
CERTIFIED ENERGY ANALYST

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: Angelica O'Malley	Responsible Designer Signature: Angelica O'Malley
Company: Coachella Valley Housing Coalition	Date Signed: 05/30/2024
Address: 45-701 Monroe Street	License: 820319
City/State/Zip: Indio, CA 92201	Phone: 800-689-4663

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

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5/24/24 Job# 32565 JH

Slawomir Rutkowski
Coachella Valley Housing Coalition
45-701 Monroe Street, Suite G
Indio, CA 92201
760-347-3157
CBECC v3.1
Re: Mariposa Point in Coachella, CA

CONSERVATION FOR THE CALIFORNIA LIFESTYLE
CL&E
A Division of Builder Services Network
Title 24 Compliance-Residential/Non-Residential
2937 Veneman Ave, Suite C275
Modesto, CA 95356
Ph: 209-618-4462 Fx: 209-846-9796

Climate Zone 15 **2022 Code Compliance**

	EDR Efficiency / EDR Total	**0.9 / 0.2**
	EDR Source	**0.2**
	Photovoltaic	5.15 kW
	Plan Name	**1374**
	File Name	CV1374MP
	Square Footage	**1374**
	Number of Stories	1
	Glazing Percentage	8.47%
Envelope	Roofing Material	Tile
	Reflectance/Emittance	0.26 / 0.90
	Attic Floor*	R-38
	Attic Below Roof Deck	R-13
	Radiant Barrier	-
	Exterior Wall 2x4 Stucco	R-15 + R-4
	Exterior Wall 2x4 Siding	-
	Exterior Wall 2x6 Stucco	-
	Exterior Wall 2x6 Siding	-
	Knee Wall	-
	Floor Over Garage/Exterior	-
	Sub Floor/Slab	Slab
HVAC	Minimum SEER2/EER2 Value	14.3 / 11.7
	Minimum HSPF2	7.5
	Duct Insulation	R-6.0
	Whole House Fan (CFM)	-
HERS Inspections	Fan Wattage (W/CFM)	Yes (0.45)
	Airflow (CFM)	Yes (350)
	Duct Testing Required	Yes (5.0%)
	Indoor Air Quality (CFM)	Yes (71) Balanced
	HRV/ERV W/CFM	0.88
	HRV/ERV SRE	69%
	HRV/ERV ASRE	75%
	HRV/ERV Fault Indicator Display	Yes
	Kitchen Exhaust	Yes
	Refrigerant Charge	Yes
	SEER2 Verification	-
	EER2 Verification	-
	Heat Capacity Verification	Yes
	Infiltration (CFM)	-
	Low Leakage Air Handler	-
	Insulation Inspection**	Yes
H_2O	Fuel Type	Heat Pump
	Uniform Energy Factor (Tank Size)	PROPH50 T2 RH375-30
	Distribution	Standard

Windows	U-Value	SHGC
Operable	0.30	0.20
Sliding Glass Door	0.30	0.20

Date of Plans: 4/30/24

* Due to the stringencies of the California Energy Commission for approved methods of quality insulation inspection. California Living & Energy recommends to not install batt-insulation in the attic and ceiling areas due to the risk of not meeting the quality insulation inspection requirements.
****Builders are strongly encouraged to enforce strict Title 24 compliance with all subcontractor scopes of work. Modifications to Title 24 specifications during construction may result in complications including but not limited to sampling protocol, CF-3R closing delays, state registry errors, and/or loss of rebates plus no CF-3R at final.**
***This document is for communication purposes only. CF-1R compliance certificate(s) will be issued after approval of this document, and after HERS registration has been completed, if needed. Upon receipt of the final CF-1R form(s), please distribute to corresponding subcontractors.

Z:\Projects\Coachella Valley Housing Coalition\Mariposa Point\T-24\Datasheets\Mariposa Point - Datasheet.docx

NOTE: The loads shown are only one of the criteria affecting the selection of HVAC equipment. Other relevant design factors such as airflow requirements, outdoor design temperatures, coil sizing, availability of equipment, oversizing safety margin, etc, must also be considered. It is the HVAC designer's responsibility to consider all factors when selecting the HVAC equipment. Mechanical Contractor must warrant the installed system to meet all Energy Star requirements if applicable. The minimum size of the residential heating systems is regulated by the California Building Code (CBC), Section 310.11. The CBC requires that the heating system be capable of maintaining a temperature of 70° at a distance three feet above the floor throughout the conditioned space of the building. California Living & Energy does not warrant or assume responsibility for performance or installation of any equipment labeled or alluded to on any calculation produced by California Living & Energy. Builder and all sub-contractors working on the project involving Title-24 understand and accept all aspects of the Title-24 submitted to building department pertaining to their work. All sub-contractors are responsible to contact the builder and California Living & Energy before beginning work if there is any error in any calculation that would prevent the Sub-Contractor from warranting the performance of his product which includes any Energy Star procedures.

CONSERVATION FOR THE CALIFORNIA LIFESTYLE
CALIFORNIA LIVING & ENERGY
Title 24 Compliance - Residential/Non Residential
A Division of Builder Services Network
Modesto, CA 209-618-4462 Fax: 209-846-9796
www.califliving.com

If a Builder and/or Subcontractor deviates in anyway from any design produced by California Living & Energy without the expressed written consent of California Living & Energy then all warranties become null and void.

Coachella Valley Housing Coalition
45-701 Monroe Street, Suite G
Indio, CA 92201
760-347-3157

Mariposa Point
Coachella, CA

REVISIONS

no.	date	remarks
△	-	-
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△	-	-

AUTHOR: ***JH***
DATE: ***5/30/24***
JOB NO: ***32565***

SHEET TITLE
PLAN 1374 ENERGY CALCULATIONS

SHEET
EN-1

SECTION SCOPE REQUIREMENT | SHEET # | COMMENT

CHAPTER 7 INSTALLER & SPECIAL INSPECTOR QUALIFICATION (QUALIFICATIONS, VERIFICATIONS)

702.1
Installer training
HVAC system installers shall be trained and certified in the proper installation of HVAC systems and equipment by a recognized training or certification program.
Examples of acceptable HVAC training and certification programs include but are not limited to the following:
1. State certified apprenticeship programs.
2. Public utility training programs.
3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
4. Programs sponsored by manufacturing organizations. 5. Other programs acceptable to the enforcing agency.

702.2
Special inspection
Special inspectors must be qualified and able to demonstrate competence to the enforcing agency in the discipline in which they are inspecting.

703.1
Documentation
Documentation of compliance shall include, but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the local enforcing agency. Other specific documentation or special

SECTION SCOPE REQUIREMENT | SHEET # | COMMENT

4.504.4
Resilient flooring systems
Where resilient flooring is installed, at least 80% of floor area receiving resilient flooring shall comply with one or more of the following:
1. Products compliant with the California Department of Public Health, Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, Version 1.1, February 2010 (also known as Specification 01350), certified as a CHPS Low-Emitting Material in the Collaborative for High Performance Schools (CHPS) High Performance Products Database
2. Products certified under UL GREENGUARD Gold (formerly the Greenguard Children & Schools Program)
3. Certification under the Resilient Floor Covering Institute (RFCI) FloorScore program
4. Meet the California Department of Public Health, Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers,Version 1.1, February 2010 (also known as Specification 01350)

4.504.5
Composite wood products
Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified in the Air Resources Board, Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.), as shown in Table 4.504.5. Documentation is required per Section 4.504.5.1.
Definition of Composite Wood Products: Composite wood products include hardwood plywood, particleboard, and medium density fiberboard. ,Composite wood products, do not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, prefabricated wood I-joists, or finger-joined lumber, all as specified in CCR, Title 17, Section 93120.1(a).

4.504.5.1
Documentation
Verification of compliance shall be provided as requested by the enforcing agency, and as required in Section 4.504.5.1.

Division 4.5 ENVIRONMENTAL QUALITY (INTERIOR MOISTURE CONTROL)

4.505.2
Concrete slab foundations
Concrete slab foundations or concrete slab-on-ground floors required to have a vapor retarder by the California Building Code, Chapter 19, or the California Residential Code, Chapter 5, respectively, shall also comply with this section.

4.505.2.1
Capillary break
A capillary break shall be installed in compliance with at least 1 of the following:
1. A 4-inch thick base of 1/2-inch or larger clean aggregate shall be provided with a vapor retarder in direct contact with concreate and a concrete mix design which will address bleeding, shrinkage and curling shall be used. For additional information, see American Concrete Institute, ACI 302.2R-06.
2. Other equivalent methods approved by the enforcing agency.
3. A slab design specified by a licensed design professional.

4.505.3
Moisture content of building materials
Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19% moisture content. Moisture content shall be verified in compliance with the following:
1. Moisture content shall be determined with either a probe-type or a contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements in Section 101.8.
2. Moisture readings shall be taken at a point 2 feet to 4 feet from the grade-stamped end of each piece to be verified.
3. At least 3 random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.
Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Manufacturers drying recommendations shall be followed for wet-applied insulation products prior to enclosure.

Division 4.5 ENVIRONMENTAL QUALITY (INDOOR AIR QUALITY & EXHAUST)

4.506.1
Bathroom exhaust fans
Each bathroom shall be mechanically ventilated and shall comply with the following: 1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building.
2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control.
a) Humidity controls shall be capable of manual or automatic adjustment between a relative humidity range of less than 50% to a maximum of 80%.
b) A humidity control may be a separate component to the exhaust fan and is not required to be integral or built-in.
Note: For CALGreen a "bathroom" is a room which contains a bathtub, shower, or tub/shower combination. Fans or mechanical ventilation is required in each bathroom.

Division 4.5 ENVIRONMENTAL QUALITY (ENVIRONMENTAL COMFORT)

4.507.2
Heating and air conditioning system design
Heating and air conditioning systems shall be sized, designed, and equipment selected using the following methods:
1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J 2011 (Residential Load Calculation), ASHRAE handbooks or other equivalent design software or methods.
2. Duct systems are sized according to ANSI/ACCA 1 Manual D, 2014 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods.
3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S - 2014 (Residential Equipment Selection) or other equivalent design software or methods. Exception: Use of alternate design temperatures necessary to ensure the systems functions are acceptable.

SECTION SCOPE REQUIREMENT | SHEET # | COMMENT

4.408.5 Documentation
documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, items 1 through 5, Section 4.408.3 or Section 4.408.4.

4.408.4 4.408.4.1
Division 4.4 - BUILDING MAINTENANCE & OPERATION
Operation and maintenance manual
At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which covers 10 specific subject areas shall be placed in the building.

4.410.2 Recyling by Occupants
Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible area(s) that serves all buildings on the site and is identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive. Exception: Rural jurisdictions that meet and apply for the exemption in Public Resourses Code Section 42649.82 (a)(2)(A) et. seq. are not required to comply with the organic waste portion of this section.

Division 4.5 ENVIRONMENTAL QUALITY (FIREPLACES)

4.503.1
General
Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with all applicable local ordinances.

Division 4.5 ENVIRONMENTAL QUALITY (POLLUTANT CONTROL)

4.504.1
Protection during construction
At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air intake and distribution component openings shall be covered. Tape, plastic, sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of water, dust and debris entering the system may be used.

4.504.2.1
Adhesives, sealants and caulks
Adhesives, sealants and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules apply:
1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers,and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable, or SCAQMD Rule 1168 VOC limits, as shown in Tables 4.504.1 or 4.504.2, as applicable. Such products shall also comply with Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products as specified in Subsection 2 below.
2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than1 pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of the California Code of Regulations (CCR), Title 17, commencing with Section 94507.

4.504.2.2
Paints and coatings
Architectural paints and coatings shall comply with VOC limits in Table 1 of the Air Resources Board Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply.
The VOC content limit for coatings that do not meet the definitions for the specialty coatings catergories listed in Table 4.504.3 shall be determined by classifying the coating as Flat, Nonflat, or Nonflat-High Gloss coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37, of the 2007 California Air Resources Board, Suggested Control Measure, and the corresponding Flat, Nonflat, or Nonflat-High Gloss VOC limit in Table 4.504.3 shall apply.

4.504.2.3
Aerosol paints and coatings
Aerosol paints and coatings shall meet the Product-Weighted MIR Limits for ROC in Section 94522(a)(2) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Section 94522(e)(1) and (f)(1) of the CCR, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District shall additionally comply with the percent VOC by weight of product limits of Regulation 8, Rule 49.

4.504.3
Carpet systems
Carpet installed in the building interior shall meet the testing and product requirements of 1 of the following:
1. Carpet and Rug Institute, Green Label Plus Program
2. California Department of Public Health, ‚ÄúStandard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers,Version 1.1, February 2010 (also known as Specification 01350)
3. NSF/ANSI 140 at the Gold level
4. Scientific Certifications Systems Indoor AdvantageTM Gold

4.504.3.1
Carpet cushion
Carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute Green Label Plus Program.

4.504.3.2
Carpet adhesive
Carpet adhesives shall meet the requirements of Table 4.504.1.

LICENSED ARCHITECT
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027
STATE OF CALIFORNIA

SECTION SCOPE REQUIREMENT | SHEET # | COMMENT

4.106.4.2.5
Identification
The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as ,"EV CAPABLE" in accordance with the California Electrical Code.
Notes:
1. The California Department of Transportation adopts and publishes the California Manual on Uniform Traffic Control Devices (California MUTCD), to provide uniform standards and specifications for all official traffic control devices in Californ ia. Zero Emission Vehicle Signs and Pavement Markings can be found in the New Policies & Directives Number 12-01. Website: http://www.dot.ca.gov/hq/traffops/policy/13-01.pdf
2. See Vehicle Code Section 22511 for EV charging space signage in off-parking facilities and for use of EV charging spaces.
3. The Govenor's office of Planning and Research (OPR) published a "Zero Emission Vehicle Community Readiness Guidebook" which provides helpful information for local governments, residents and businesses. Website; http://opr.ca.gov/docs/ZEV_Guidebook.pdf

Division 4.2- ENERGY EFFICIENCY

4.201.1 & 5.201.1
Scope
Energy efficiency requirements for low-rise residential (Section 4.201.1) and high- rise residential/hotels/motels (Section 5.201.1) are now in both residential and nonresidential chapters of CALGreen.
Standards for residential buildings do not require compliance with levels of minimum energy efficiency beyond those required by the 2016 California Energy Code.

Division 4.3 WATER EFFICIENCY AND CONSERVATION (INDOOR WATER USE)

4.303.1
Water conserving plumbing fixtures and fittings
Plumbing fixtures and fittings shall comply with the following: 4.303.1.1, 4.303.1.2, 4.303.1.3.1, 4.303.1.3.2, 4.303.1.4.1, 4.303.1.4.2, 4.303.1.4.3, & 4.303.1.4.4
Water Closets: ≤ 1.28 gal/flush
Wall Mounted Urinals: ≤ 0.125 gal/flush; all other urinals ≤ 0.5 gal/flush Single Showerheads: ≤ 2.0 gpm @ 80 psi
Multiple Showerheads: combined flow rate of all showerheads controlled by a single valve shall not exceed 2.0 gpm @ 80 psi, or only one shower outlet is to be in operation at a time
Residential Lavatory Faucets: Maximum Flow Rate 1.2 gpm @ 60 psi; Minimum Flow Rate ≥ 0.8 gpm @ 20 psi
Lavatory Faucets in Common and Public Use Areas of Residential Buildings: ≤ 0.5 gpm @ 60 psi
Metering Faucets: ≤ 0.25 gallons per cycle
Kitchen Faucets: ≤ 1.8 gpm @ 60 psi; temporary increase to 2.2 gpm allowed but shall default to ≤1.8 gpm

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 applicable standards referenced in Table 1701.1 of the California Plumbing Code.

Division 4.3 WATER EFFICIENCY AND CONSERVATION (OUTDOOR WATER USE)

4.304.1
Outdoor potable water use in landscape areas
After December 1, 2015, new residential developments with an aggregate landscape area equal to or greater than 500 square feet shall comply with one of the following:
1. A local water efficient landscape ordinance or the current California Department of Water Resources, Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent, or
2. Projects with aggregate landscape areas less than 2500 square feet may comply with the MWELO's Apendix D Prescriptive Compliance Option.

Division 4.4 MATERIAL CONSERVATION & RESOURCE EFFICIENCY (ENHANCED DURABILITY & REDUCED MAINTENANCE)

4.406.1
Rodent proofing
Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be closed with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency to prevent passage of rodents.

Division 4.4 MATERIAL CONSERVATION & RESOURCE EFFICIENCY (CONSTRUCTION WASTE REDUCTION, DISPOSAL & RECYCLING)

4.408.1
Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4; OR meet a more stringent local construction and demolition waste management ordinance.
Documentation is required per Section 4.408.5.
Exceptions:
1. Excavated soil and land-clearing debris.
2. Alternative waste reduction methods developed by working with local enforcing agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite.
3. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the haul boundaries of the diversion facility.

Construction waste management plan
4.408.2
Submit a construction waste management plan meeting Items 1 through 5 in Section 4.408.2. Plans shall be updated as necessary and shall be available for examination during construction.

Waste management company
4.408.3
Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that diverted construction and demolition waste materials meet the requirements in Section 4.408.1.

4.408.4 4.408.4.1
Waste stream reduction alternative
Low-rise residential Projects that generate a total combined weight of construction and demolition waste disposed in landfills, which do not exceed 3.4 pounds per square foot of the building area shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1.
Projects that generate a total combined weight of construction and demolition waste disposed in landfills, which do not exceed 2 pounds per square foot of the building area, shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1.

City Of Coachella, CA 2022 CALGreen Notes
Residential New Construction

These requirements are effective January 1, 2022, for newly constructed residential buildings: low-rise, high rise, and hotels/motels.

Project Address: VARIOUS - SEE SHEET T-1
Project Name: SINGLE FAMILY RESIDENCE FOR COACHELLA, CA
Project Description: SINGLE FAMILY RESIDENCE WITH ATTACHED GARAGE

SECTION SCOPE REQUIREMENT | SHEET # | COMMENT

Division 4.1 - PLANNING AND DESIGN (SITE DEVELOPMENT)

4.106.2
Storm water drainage and retention during construction
Projects which disturb less than 1 acre of soil and are not part of a larger common plan of development shall manage storm water drainage during construction.

4.106.3
Grading and paving
Site shall be planned and developed to keep surface water from entering buildings. Exceptions: Additions and alterations which do not alter the existing drainage path.

4.106.4
Electric vehicle (EV) charging for new construction
Comply with Section 4.106.4.1 and 4.106.4.2 for future installation and use of EV chargers.
Electric vehicle supply equipment (EVSE) shall be installed in accordance with the California Electrical Code, Article 625.
Exceptions on a case-by-case basis as determined by the AHJ:
1. Where there is no commercial power supply.
2. Verification that meeting requirements will alter the local utility infrastructure design requirements on the utility side of the meter increasing costs to the homeowner/developer by more than $400.00 per dwelling unit.
3. ADU.

4.106.4.1 & 4.106.4.1.1
EV charging: 1- & 2-family dwellings/townhouses with attached private garages
Install a listed raceway to accommodate a dedicated 208/240-volt branch circuit for each dwelling unit.
Raceway shall not be less than trade size 1 (nominal 1-inch inside diameter).
Raceway shall originate at the main service or subpanel and terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger.
Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces.
Service panel and/or subpanel shall provide capacity to install a 40-ampere
minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device. Service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as ,"EV CAPABLE,". The raceway termination location shall be permanently and visibly marked as ,"EV CAPABLE."

4.106.4.2
EV charging for multifamily dwellings
If residential parking is available, ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future EVSE. Calculations for the number of EV spaces shall be rounded up to the nearest whole number.
Note: Construction documents are intended to demonstrate the project, capability and capacity for facilitating future EV charging. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

4.106.4.2.1
EV charging space (EV space) locations
Construction documents shall indicate the location of proposed EV spaces. At least 1 EV space shall be located in common use areas and available for use by all residents.
When EV chargers are installed, EV spaces required by Section 4.106.4.2.2,
Item 3, shall comply with at least 1 of the following options:
1. The EV space shall be located adjacent to an accessible parking space meeting the requirements of the California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space.
2. The EV space shall be located on an accessible route to the building,as defined in the California Building Code, Chapter 2.

4.106.4.2.2
EV charging space (EV space) dimensions
EV spaces shall be designed to comply with the following:
1. The minimum length of each EV space shall be 18 feet.
2. The minimum width of each EV space shall be 9 feet.
3. One in every 25 EV spaces, but not less than 1, shall also have an 8-foot wide minimum aisle. A 5-foot wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet.
a) Surface slope for this EV space and aisle shall not exceed 1 unit vertical in
48 units horizontal (2.083% slope) in any direction.

4.106.4.2.3
Single EV space required
Install listed raceway capable of accommodating a 208/240-volt dedicated branch circuit.
1. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter).
2. The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the proposed location of the EV space.
3. Construction documents shall identify the raceway termination point.
4. The service panel and/or subpanel shall provide capacity to install a 40-ampere
minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

4.106.4.2.4
Multiple EV spaces required
Construction documents shall indicate raceway termination point and proposed location of future EV spaces and EV chargers. Construction documents shall also provide information on amperage of future EVSE, raceway method(s), wiring schematics and electrical load calculations to verify electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at full rated amperage of the EVSE.
Plan design shall be based upon a 40-ampere minimum branch circuit.
Raceways and related components planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.

Table 4.504.4.1
ADHESIVE VOC LIMIT1,2

Less Water and Less Exempt Compounds in Grams per Liter

Architectural Applications	VOC Limit
Indoor carpet adhesives	50
Carpet pad adhesives	50
Outdoor carpet adhesives	150
Wood flooring adhesives	100
Rubber floor adhesives	60
Subfloor adhesives	50
Ceramic tile adhesives	65
VCT and asphalt tile adhesives	50
Drywall and panel adhesives	50
Cove base adhesives	50
Multipurpose construction adhesives	70
Structural glazing adhesives	100
Single-ply roof membrane adhesives	250
Other adhesive not specifically listed	50
Specialty Applications	
PVC welding	510
CPVC welding	490
ABS welding	325
Plastic cement welding	250
Adhesive primer for plastic	550
Contact adhesive	80
Special purpose contact adhesive	250
Structural wood member adhesive	140
Top and trim adhesive	250
Substrate Specific Applications	
Metal to metal	30
Plastic foams	50
Porous material (except wood)	50
Wood	30
Fiberglass	80

1. If an adhesive is used to bond dissimilar substrates together, the adhesive with the highest VOC content shall be allowed.

2. For additional information regarding methods to measure the VOC content specified in this table, see South Coast Air Quality Management District Rule 1168.

Table 4.504.4.2
SEALANT VOC LIMIT

Less Water and Less Exempt Compounds in Grams per Liter

Sealants	VOC Limit
Architectural	250
Marine deck	760
Non-membrane roof	300
Roadway	250
Single-ply roof membrane	450
Other	420
Sealant Primers	
Architectural: Nonporous	250
Porous	775
Modified bituminous	500
Marine deck	760
Other	750

Note: For additional information regarding methods to measure the VOC content specified in these tables, see South Coast Air Quality Management District Rule 1168.

Table 4.504.4.5
FORMALDEHYDE LIMITS1
Maximum Formaldehyde Emissions in Parts per Million

Product	Current Limit
Hardwood plywood veneer core	0.05
Hardwood plywood composite core	0.08
Particle board	0.09
Medium density fiberboard	0.11
Thin medium density fiberboard2	0.13

1. Values in this table are derived from those specified by the California Air Resources Board, Air Toxics Control Measure for Composite Wood as tested in accordance with ASTM E1333. For additional information, see California Code of Regulations, Title 17, Sections 93120 through 93120.12.

2. Thin medium density fiberboard has a maximum thickness of 5/16 inch (8 mm).

NO	DATE	REVISION
1	5.28.24	CITY SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON J. J. DARLING
ARCHITECT
2259 PASEO DEL MAR
SAN PEDRO, CA. 90732 (310)619-9540

SHEET TITLE
CAL GREEN, NOTES, TABLES & REQUIREMENTS

DATE 8/10/25 | JOB

SHEET
CG-1
OF DWGS

ELECTRICAL FIXTURE LIST

TYPE	DESCRIPTION	LAMP	WATTS	REMARKS
C	CEILING MOUNTED LIGHT FIXTURE WITH HIGH-EFFICIENCY LUMINAIRES	LED	13	CONTROLLED BY SWITCH AND LED DIMMER.
D	WALL MOUNTED SCONCE LIGHT FIXTURE WITH HIGH-EFFICIENCY LUMINAIRES	LED	13	CONTROLLED BY SWITCH AND LED DIMMER.
E	VANITY WALL MOUNTED BRACKET LIGHT FIXTURE WITH HIGH-EFFICIENCY LUMINAIRES	LED	13	CONTROLLED BY A DIMMER AND VACANCY SENSOR.
F	OUTDOOR WALL MOUNTED LIGHT FIXTURE WITH HIGH-EFFICIENCY LUMINAIRES	LED	13	CONTROLLED BY A MOTION SENSOR WITH PHOTO CONTROL
A	RECESSED CAN (IC-AT RATED -ASTM E283) CEILING LIGHT FIXTURE WITH HIGH-EFFICIENCY LUMINAIRES	LED	13	SHALL COMPLY WITH ALL THE REQUIREMENTS OF CEnC 150.0(K)C. CONTROLLED BY A DIMMER AND VACANCY SENSOR.
B	CEILING MOUNTED LIGHT FIXTURE WITH HIGH-EFFICIENCY LUMINAIRES	PIN-BASED LINEAR FLUORESCENT 32 WATT T8	(2)32	CONTROLLED BY A VACANCY SENSOR.
H	6" DIA. RECESSED CAN (IC-AT RATED -ASTM E283) CEILING LIGHT FIXTURE WITH HIGH-EFFICIENCY LUMINAIRES	LED	13	SHALL COMPLY WITH ALL THE REQUIREMENTS OF CEnC 150.0(K)C. CONTROLLED BY A DIMMER AND VACANCY SENSOR.
J	OUTDOOR WALL MOUNTED LIGHT FIXTURE WITH HIGH-EFFICIENCY LUMINAIRES	LED	13	CONTROLLED BY A MOTION SENSOR WITH PHOTO CONTROL
K	CEILING MOUNTED FAN & LIGHT FIXTURE COMBO WITH HIGH-EFFICIENCY LUMINAIRES	COMPACT FLUORESCENT	26	

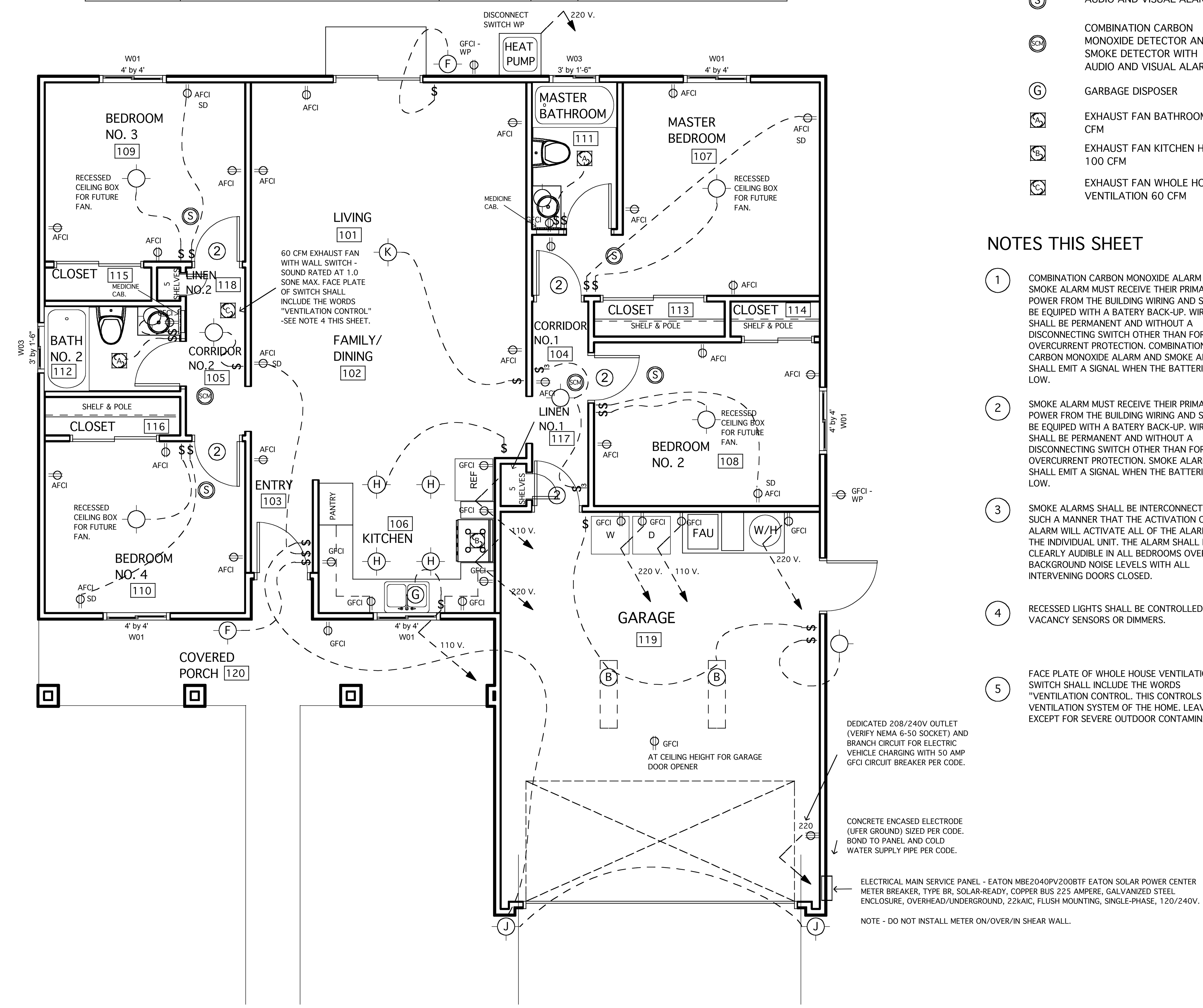
C - 23697
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027

ELECTRICAL SYMBOL LIST

- AFCI — ARC FAULT CIRCUIT INTERUTPTER DUPLEX OUTLET
- AFCI SD — ARC FAULT CIRCUIT INTERUTPTER DUPLEX OUTLET SPLIT OUTLET
- GFI — GROUND FAULT CIRCUIT INTERUTPTER DUPLEX OUTLET
- GFCI - WP — GROUND FAULT CIRCUIT INTERUTPTER DUPLEX OUTLET IN WEATHERPROOF BOX
- $ — SINGLE POLE SWITCH
- $3 — THREE WAY SWITCH
- S — SMOKE DETECTOR WITH AUDIO AND VISUAL ALARM
- SCM — COMBINATION CARBON MONOXIDE DETECTOR AND SMOKE DETECTOR WITH AUDIO AND VISUAL ALARM
- G — GARBAGE DISPOSER
- EXHAUST FAN BATHROOM 50 CFM
- EXHAUST FAN KITCHEN HOOD 100 CFM
- EXHAUST FAN WHOLE HOUSE VENTILATION 60 CFM

NOTES THIS SHEET

1. COMBINATION CARBON MONOXIDE ALARM AND SMOKE ALARM MUST RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING AND SHALL BE EQUIPED WITH A BATERY BACK-UP. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN FOR OVERCURRENT PROTECTION. COMBINATION CARBON MONOXIDE ALARM AND SMOKE ALARM SHALL EMIT A SIGNAL WHEN THE BATTERIES ARE LOW.
2. SMOKE ALARMS MUST RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING AND SHALL BE EQUIPED WITH A BATERY BACK-UP. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN FOR OVERCURRENT PROTECTION. SMOKE ALARMS SHALL EMIT A SIGNAL WHEN THE BATTERIES ARE LOW.
3. SMOKE ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BEDROOMS OVER BACKGROUND NOISE LEVELS WITH ALL INTERVENING DOORS CLOSED.
4. RECESSED LIGHTS SHALL BE CONTROLLED BY VACANCY SENSORS OR DIMMERS.
5. FACE PLATE OF WHOLE HOUSE VENTILATION SWITCH SHALL INCLUDE THE WORDS "VENTILATION CONTROL. THIS CONTROLS THE VENTILATION SYSTEM OF THE HOME. LEAVE ON EXCEPT FOR SEVERE OUTDOOR CONTAMINATION."



ELECTRICAL FLOOR PLAN - 4 BEDROOM UNIT

1/4"= 1'-0" SCALE

NO.	DATE	REVISION
1	6.24.24	CITY SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		

PROJECT: SINGLE FAMILY RESIDENCE - COACHELLA HOMES FOR COACHELLA VALLEY HOUSING COALITION 45-701 MONROE ST. INDIO, CA 92201

GARON DARLING ARCHITECT
2259 W PASEO DEL MAR SAN PEDRO, CA 90732 (310) 619-9540

SHEET TITLE: MODEL 1374 4 BEDROOM — ELECTRICAL PLAN SCHEDULE, LEGEND & NOTES

DATE: 8/10/25 JOB

SHEET E-1 OF DWGS

GENERAL NOTES AND SPECIFICATIONS

1. ALL ELECTRICAL EQUIPMENT AND INSTALLATION SHALL COMPLY WITH THE LATEST EDITION OF THE 2022 CALIFORNIA ELECTRICAL CODE AND ALL APPLICABLE LOCAL ELECTRICAL CODES. SUBMIT, OBTAIN AND PAY FOR ALL BUILDING PERMITS, PLAN CHECKS, AND FEES.

2. PROVIDE A CLEAN SET OF BLUEPRINTS "AS-BUILT" DRAWINGS TO THE OWNER WITH ALL REGULAR DAILY CHANGES CLEARLY NOTED THEREON IN RED INK AND SUBMITTED AT THE COMPLETION OF THE PROJECT. RED MARKS THAT ARE NOT LEGIBLE, UNINTELLIGIBLE OR CANNOT BE INTERPRETED SHALL BE REJECTED BY THE OWNERS REPRESENTATIVE AND RETURNED TO THE CONTRACTOR FOR RE-SUBMITAL TO THE COMPLETE SATISFACTION OF THE OWNERS REPRESENTATIVE.

3. UNCONDITIONALLY GUARANTEE ALL LABOR AND MATERIALS AGAINST DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE OF THE PROJECT.

4. VERIFY EXACT LOCATION OF ALL OUTLETS WITH OWNER PRIOR TO INSTALLATION. OWNER RESERVES THE RIGHT TO RELOCATE ANY OUTLET IN ANY DIRECTION UP TO 10 FT. WITHOUT CHANGE IN CONTRACT PRICE PRIOR TO INSTALLATION. ALL NEW OUTLETS INSTALLED ON NEW WALLS, OR EXISTING WALLS TO BE REFINISHED, SHALL BE FLUSH MOUNTED, WITH CONDUITS CONCEALED IN CEILING OR WALLS.

5. SWITCHES SHALL BE "LEVITON" #CSB1-20W (1 POLE), #CSB2-20W (2 POLE) AND #CSB3-20W (3 WAY) #CSB4-20W (4 WAY). DUPLEX RECEPTACLES SHALL BE "LEVITON" #BR20W (20A.) AND #6899W (20A. GFCI), DIMMERS SHALL BE "LEVITON" #80800 (800 W.) AND 81500W (1500 W.). COVER PLATES SHALL BE PLASTIC TO MATCH DEVICES AND COLOR TO MATCH DEVICES.

6. ALL TELEPHONE, JUNCTION BOX, INTERCOM, TELEVISION, ALARM, ETC., OUTLETS SHALL BE MINIMUM 4" SQUARE X 2-1/8" DEEP WITH COVER PLATES.

7. ALL CONDUITS IN PROTECTED LOCATIONS SHALL BE "EMT", EXCEPT FLEXIBLE CONDUIT MAY BE USED IN SHORT RUNS TO LIGHT FIXTURES MAXIMUM 6 FT. FLEXIBLE STEEL CONDUITS MAY BE USED ON SPECIAL CONDITIONS ONLY AND WITH THE WRITTEN APPROVAL OF THE ENGINEER. GALVANIZED RIGID STEEL CONDUIT SHALL BE INSTALLED IN CONCRETE AND IN AREAS SUBJECTED TO MECHANICAL INJURY SUCH AS MECHANICAL AND EQUIPMENT ROOMS. CONDUIT BELOW GRADE SHALL BE SCH. 40 PVC OR PVCCOATED GALVANIZED RIGID STEEL. LIQUID TIGHT FLEXIBLE CONDUIT SHALL BE USED IN DAMP OR WET LOCATIONS AND FINAL CONNECTIONS TO MOTORS OR VIBRATING EQUIPMENT. ALL CONDUITS SHALL BEAR THE U.L. LABEL.

8. ALL LINE VOLTAGE WIRING SHALL BE IN CONDUIT OR RACEWAY. PRE-ASSEMBLED FLEXIBLE LINE VOLTAGE WIRING SYSTEMS SUCH AS TYPE "AC, MC, NM, NMC, NMS" CABLES WILL NOT BE ALLOWED.

9. ALL CONDUCTORS SHALL BE COPPER, 600 VOLT RATED WITH TYPE "THWN/THHN" INSULATION, AND BEAR THE U.L. LABEL. CONDUCTORS SMALLER THAN NO.8 SHALL BE SOLID AND NO.8 AND LARGER SHALL BE STRANDED. ALUMINUM CONDUCTORS WILL NOT BE ALLOWED.

10. PROVIDE A 3/32" POLYPROPYLENE PULL LINE IN EACH EMPTY CONDUIT, SUITABLY TIED AT EACH END, TAGGED AND LABELED.

11. ALL JUNCTION, SPLICE, AND PULL BOXES SHALL BE MINIMUM SIZED IN ACCORDANCE WITH CODE WITH RESPECT TO THE NUMBER AND SIZE OF CONDUITS & CONDUCTORS.

12. CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMISSION OF BID AND BE COMPLETELY FAMILIARIZED WITH THE SCOPE OF WORK TO BE PERFORMED AND ALL LOCAL CONDITIONS. CONTRACTOR SHALL BRING TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE ANY DIFFERENCE FOUND BETWEEN THE DRAWINGS AND EXISTING CONDITIONS AT THAT TIME. NO EXTRAS WILL BE ALLOWED LATER FOR WORK NOT INCLUDED IN THE BID FOR CONTRACTOR'S FAILURE TO DO SO.

13. WORK SHALL BE DONE ONLY BY EXPERIENCED WORKERS USING APPROPRIATE TOOLS AND EQUIPMENT PROVIDED WITH ALL NECESSARY SAFEGUARDS TO PROTECT PERSONNEL, WORK, MATERIALS AND EQUIPMENT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE AND/OR RELOCATE ALL ELECTRICAL EQUIPMENT WHERE WALLS, FLOORS, CEILINGS, ETC. ARE BEING DEMOLISHED IF REQUIRED DURING CONSTRUCTION AND TO ENSURE ALL ELECTRICAL IS IN A STATE OF "SAFETY OFF" CONDITION - NO LIVE ELECTRICAL SYSTEM PRESENT.

14. CONTRACTOR SHALL DO ALL CUTTING, CORE DRILLING AND PATCHING OF FLOORS, WALLS, CEILINGS, ETC. TO MATCH ADJACENT FINISH FOR THE INSTALLATION OF ALL ELECTRICAL WORK. VERIFY WITH OWNERS REPRESENTATIVE OR STRUCTURAL ENGINEER PRIOR TO ANY CORE DRILLING OR CUTTING.

15. ALL LIGHTING FIXTURES SHALL BE COMPLETE WITH ALL NECESSARY LAMPS AND MOUNTING HARDWARE. VERIFY TYPE OF CEILING TO BE INSTALLED WITH GENERAL CONTRACTOR AND COORDINATE MOUNTING METHOD. COMPLY WITH ALL LOCAL AND STATE REQUIREMENTS FOR SEISMIC SUPPORT.

16. CONTRACTOR SHALL FURNISH THE NECESSARY EQUIPMENT AND PERSONNEL TO PERFORM ALL REQUIRED TESTS OF THE WORK FOR APPROVAL. ALL WIRING DEVICES AND CONNECTIONS SHALL BE TESTED FOR CONTINUITY, SHORT CIRCUITS AND IMPROPER GROUNDS PER CODE.

17. COORDINATE WITH OTHER TRADES FOR THE EXACT ROUTING OF CONDUITS AND VERIFY EQUIPMENT LOCATIONS AND REQUIREMENTS THEREOF PRIOR TO INSTALLATION OF CONDUITS AND SUPPORTS.

18. ALL ELECTRICAL EQUIPMENT EXPOSED TO WEATHER SHALL BE WEATHERPROOF TYPE.

19. N/A

20. SUBMIT SIX SETS OF COPIES OF COMPLETE SHOP DRAWINGS FOR APPROVAL FOR ALL SWITCHGEAR, LIGHTING FIXTURES, TRANSFORMERS, PANELBOARDS, ETC. SUBSTITUTIONS MUST BE CLEARLY NOTED, WITH COMPLETE DETAILED DATA, CREDIT FOR OWNER SO STATED, AND MUST BE AUTHORIZED IN WRITING PRIOR TO ORDERING AND INSTALLATION.

21. ALL SWITCHGEAR, CONTROLS, PANELBOARDS, DISCONNECT SWITCHES AND TERMINAL CABINETS SHALL BE IDENTIFIED WITH ENGRAVED MICARTA NAMEPLATES ATTACHED WITH SCREWS.

22. ALL PANELBOARDS SHALL HAVE TYPEWRITTEN DIRECTORIES MOUNTED UNDER CLEAR PLASTIC SHEETS INDICATING BRANCH CIRCUITS. SEE PANEL SCHEDULES FOR DESCRIPTIONS.

23. PROVIDE ALL KEYS, MANUFACTURERS' WARRANTIES, OPERATING MANUALS, ONE SET OF SPARE FUSES, REPLACEMENT INSTRUCTIONS FOR BALLASTS, DIFFUSERS, ETC., TO OWNER PRIOR TO FINAL ACCEPTANCE.

24. ALL RECESSED FLUORESCENT LIGHTING FIXTURES SHALL BE INDEPENDENTLY SECURED TO THE BUILDING STRUCTURE.

25. ALL FLUORESCENT LAMPS SHALL BE T8 ENERGY SAVINGS TYPE AND BALLASTS SHALL BE ELECTRONIC ENERGY SAVING TYPE.

26. ALL SWITCHGEAR, MOTOR CONTROLS, AND PANELBOARDS SHALL BE "SQUARE "D", EATON (CUTTLER HAMMER), GENERAL ELECTRIC OR WESTINGHOUSE", WITH MATCHING CIRCUIT BREAKERS OF MINIMUM INTERRUPTING CURRENT RATED FOR, AND BRACED FOR, THE MAXIMUM AVAILABLE SHORT CIRCUIT CURRENT.

27. FURNISH AND INSTALL ALL NECESSARY ELECTRICAL EQUIPMENT INCLUDING TIME SWITCHES REQUIRED AND MAKE ALL THE NECESSARY CONNECTIONS TO EQUIPMENT FURNISHED BY OTHERS, SUCH AS KITCHEN EQUIPMENT, ALARM SYSTEMS, WATER HEATERS, AIR CONDITIONING, REFRIGERATION AND CONTROLS. COORDINATE WITH MECHANICAL PLANS AND CONTROL WIRING DIAGRAMS FOR EACH ELECTRICAL ITEM THAT THE ELECTRICAL CONTRACTOR MUST PROVIDE AND IF SUCH INFORMATION IS NOT AVAILABLE AT TIME OF BID, SO STATE THAT THESE ITEMS ARE NOT INCLUDED IN THE BID.

28. THE ENTIRE WORK AREA SHALL BE LEFT CLEAN AND FREE OF DEBRIS ON A DAILY BASIS AND AT THE COMPLETION OF THE PROJECT.

29. ALL MATERIALS USED IN FABRICATION OF CONSTRUCTION OR THE VARIOUS PARTS OF THE ELECTRICAL INSTALLATION INCLUDED IN THIS CONTRACT SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS WHERE APPLICABLE, AND SHALL BEAR THE UL LABEL. INSTALLATION OF LIGHT FIXTURES, BOXES, PANELS OR OTHER ELECTRICAL MATERIALS IN ANY FIRE RATED ENCLOSURE SHALL NOT VOID THE FIRE RATING OF THAT ENCLOSURE.

MECHANICAL SYSTEM

1. ELECTRICAL CONTRACTOR SHALL REFER TO MECHANICAL CONTROL DIAGRAM SHOWN ON MECHANICAL DRAWINGS. COORDINATE WITH MECHANICAL CONTRACTOR AND PROVIDE ALL LINE AND LOW VOLTAGE CONDUITS AND WIRING AND ALL CONTROL COMPONENTS SUCH AS TIME CLOCK, RELAYS, CONTACTORS, ETC. AS REQUIRED BY MECHANICAL SECTION FOR A COMPLETE "HVAC" SYSTEM INSTALLATION.

2. ALL OUTDOOR ELECTRICAL EQUIPMENT SHALL BE WEATHERPROOF.

3. ALL FINAL CONNECTIONS TO MOTORS SHALL BE WITH LIQUID TIGHT FLEXIBLE CONDUITS. INSTALLATION SHALL COMPLY WITH THE LATEST N.E.C., AND SHALL BE PER LOCAL ELECTRICAL INSPECTOR'S SATISFACTION.

4. ELECTRICAL CONTRACTOR SHALL VERIFY WITH MECHANICAL CONTRACTOR THE EXACT LOCATION AND ELECTRICAL RATINGS OF ALL A/C UNITS PRIOR TO ROUGH-IN WORK AND ORDERING ELECTRICAL EQUIPMENT. REFER TO A/C UNITS NAMEPLATES AND PROVIDE PROPER FUSES AND WEATHERPROOF DISCONNECT SWITCHES.

5. ELECTRICAL CONTRACTOR SHALL VERIFY WITH MECHANICAL CONTRACTOR THE EXACT LOCATION FOR POINTS OF CONNECTIONS OF FEEDERS AND/OR BRANCH CIRCUITS STUB-OUTS FOR ALL MECHANICAL EQUIPMENT.

LIGHTING FIXTURES

1. ALL BALLASTS SHALL BE ELECTRONIC TYPE, HIGH PERFORMANCE, C.B.M.-E.T.L. CERTIFIED SERIES OF QUIETEST RATING AVAILABLE. PROVIDE LOW TEMPERATURE BALLASTS FOR OUTDOOR MOUNTED FIXTURES.

2. ELECTRICAL CONTRACTOR SHALL VERIFY THE TYPE OF CEILING BEFORE ORDERING ANY FIXTURES. CONTRACTOR IS FULLY RESPONSIBLE TO PROVIDE ALL MOUNTING BRACKETS TO FIT CEILING CONDITIONS AT NO EXTRA CHARGE TO THE OWNER.

3. ALL FIXTURES SHALL BE U.L. LISTED AND SHALL BE LISTED FOR THERMAL BARRIER WHERE IN CONTACT WITH INSULATION.

4. ALL LIGHTING FIXTURES SHALL BE INSTALLED AS PER MANUFACTURER'S REQUIREMENTS.

5. ALL FIXTURES SHALL BE HIGH EFFICACY TYPE.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR ORDERING PROPER TYPE OF TRIMS FOR ALL RECESSED TYPE FIXTURES TO FIT THE CEILING BEING INSTALLED. FINISH OF TRIMS SHALL MATCH CEILING FINISH AS DIRECTED BY ARCHITECT.

7. ALL LINEAR FLUORESCENT LAMPS SHALL BE T8, ENERGY SAVING TYPE, (4100K), EQUAL TO SYLVANIA "OCTRON".

8. CONTRACTOR SHALL PROVIDE ALL NECESSARY HARDWARE FOR PROPER INSTALLATION TO COMPLY WITH ALL LOCAL AND STATE REQUIREMENT'S FOR SEISMIC SUPPORT

PANEL "A"

VOLTS: 120/240V, 1PHASE, 3W — BUS: 200A
MOUNTING: SURFACE — MAIN: 200A

CIR. No.	DESCRIPTION	C.B. AMP.	C.B. POLE	LOAD (VA) A	LOAD (VA) B	C.B. AMP.	C.B. POLE	DESCRIPTION	CIR. No.
1	KITCHEN	20	1	1500 / 750		20	1	BEDROOM 2	2
3	LIGHTING				750 / 750			BEDROOM 1	4
5	BATHROOM 2			1080 / 1080				BATHROOM 1	6
7	LIVING/DINING				1080 / 750			BEDROOM 3	8
9	OUTDOOR RECEPTACLES			360 / 275				KITCHEN - GD	10
11	KITCHEN				1500 / 750			BEDROOM 4	12
13	KITCHEN - RANGE	50	2	2200 / 1500				LAUNDRY	14
15		50	2		2200 / 4500	50	2	HEAT PUMP	16
17	DRYER	30	2	2500 / 4500		30	2		18
19		30	2		2500 / 2500	30	2	WATERHEATER	20
21	EV CHARGING OUTLET*	50	2	3500 / 2500		30	2		22
23		50	2		3500 / 1275	20	1	GARAGE	24
25	AIR HANDLER	20	1	345				SPACE	26
27	SPACE							SPACE	28
29	SPACE							SPACE	30
				22240	22055				

TOTAL CONNECTED LOAD: 44,295VA
CONNECTED AMPS : 184.0

*: DEDICATED 208/240V OUTLET (VERIFY NEMA 6-50 SOCKET) AND BRANCH CIRCUIT FOR ELECTRIC VEHICLE CHARGING WITH 50 AMP GFCI CIRCUIT BREAKER PER CODE.

ELECTRICAL LEGEND

	CONDUIT HOMERUN		CONDUIT CONCEALED IN FLOOR OR BELOW GRADE
	CONDUIT CONCEALED IN CEILING OR WALL, 1/2"C-2#12 U.O.N. *		
	CONDUIT EXPOSED, 1/2"C-2#12 U.O.N. *		
T	TELEPHONE CONDUIT, 3/4" C.O. U.O.N.		
	3 NO. 12-1/2"C *	A	AMPERES
	4 NO. 12-3/4"C *	C	CONDUIT
	5 NO. 12-3/4"C *	CKT	CIRCUIT
	6 NO. 12-1"C *	C.O.	CONDUIT ONLY W/ PULL LINE
	7 NO. 12-1"C *	G	EQUIPMENT GROUND, GREEN INSULATED
	8 NO. 12-1"C *	IG	INSULATED/ISOLATED GROUND
	CONDUIT UP	N.F.	NON-FUSED
	CONDUIT DOWN	T.B.S.	TO BE SELECTED BY ARCHITECT
	CONDUIT STUB OUT & CAP	U.O.N.	UNLESS OTHERWISE NOTED
	DATA CONDUIT, 3/4" C.O., UNLESS NOTED	V	VOLTS
	GROUND (GND)	VL	VERIFY EXACT LOCATION
#	REFERENCE NOTE	WP	WEATHERPROOF

FLOOR	WALL	CEIL.	DESCRIPTION	
			DUPLEX RECEPTACLE, 20A-125V	+15"
			LIGHT FIXTURE, T.B.S.	
	S a		SINGLE POLE SWITCH,"a" CONTROLLED OUTLET REFERENCE	+48"
	S 3		THREE WAY SWITCH	+48"
	S TO		TOGGLE MOTOR CONTROLLER WITH THERMAL OVERLOAD	
			DISCONNECT SWITCH	

* PROVIDE SEPARATE #12 "GREEN" GROUND WIRE IN CONDUIT (E.G.)

DEMAND CALCULATION SCHEDULE

1. GENERAL LIGHTING & RECEPTACLE LOADS	3 VA	1374 SQ. FT.	4122 VA
2. SMALL APPLIANCE BRANCH CIRCUITS.	1500 VA	2.	3000 VA
3. LAUNDRY BRANCH CIRCUITS.	1500 VA	1.	1500 VA
4. ADD LINES 1,2, &3			8622 VA
5. 8370 VA (LINE 4) - 3000 VA			5622 VA
6. 5370 VA (LINE 5) X 0.35 =		0.35	1967.7 VA
7. TOTAL GENERAL LIGHTING & RECEPTICLE LOAD. 3000 VA + 1879.5 VA (LINE 6) =			4967.7 VA
8. FASTENED-IN-PLACE APPLIANCES			
GARBAGE DISPOSER	1127 VA		
EVSV	7200 VA		
TOTAL	8327 VA		8327 VA
9. CLOTHES DRYERS. USE 5000 VA OR NAMEPLATE			5000 VA
10. RANGES, OVENS, COOKTOPS AND OTHER COOKING APPLIANCES OVER 1750 WATTS			
COOKTOP/RANGE	1750 VA		
TOTAL	1750 VA	0.65	1137.5 VA
11. HEATING AND AIR CONDITIONING. HEATING: = 0 VA + [2A X 115V= 230 VA] (AIR HANDLER BLOWER) = 230.0 VA COOLING: 3090 VA + [2A X 115V= 230 VA] (AIR HANDLER BLOWER) + SWAMP COOLER 400VA = 3,710.0 VA			
COOLING GOVERNS			3,710 VA
12. LARGEST MOTOR			
GARBAGE DISPOSER			275 VA
13. TOTAL VOLT-AMP DEMAND LOAD			23,417.2 VA
14. MINIMUM AMPERAGE FOR SERVICE			97.57A

LIGHT FIXTURE SCHEDULE

	DESCRIPTION	MANUFACTURER	MODEL	REMARKS
A	RECESSED CEILING CAN	COOPER	HALO 300TBZ H7ICATNB	
B	SURFACE MOUNTED CEILING	COOPER		GARAGE FLUORESCENT
C	CEILING DOME			
D	SURFACE MOUNTED CEILING			BULB GUARD
E	VANITY LIGHT		#17063-34	3-LIGHT VICTORIAN VANITY
F	RECESSED BOX - WALL SCONCE			EXTERIOR - WEATHERPROOF
G	RECESSED BOX - WALL SCONCE			EXTERIOR - WEATHERPROOF

EXHAUST FAN SCHEDULE

	DESCRIPTION	MANUFACTURER	MODEL	REMARKS
A	EXHAUST FAN	NUTONE	AEN50	
B	EXHAUST FAN	NUTONE	RL6330WH	
C	EXHAUST FAN	NUTONE	AEN80	HOUSE VENTILATION

C - 23697
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027

NO	DATE	REVISION
1	6.24.24	CITY SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		

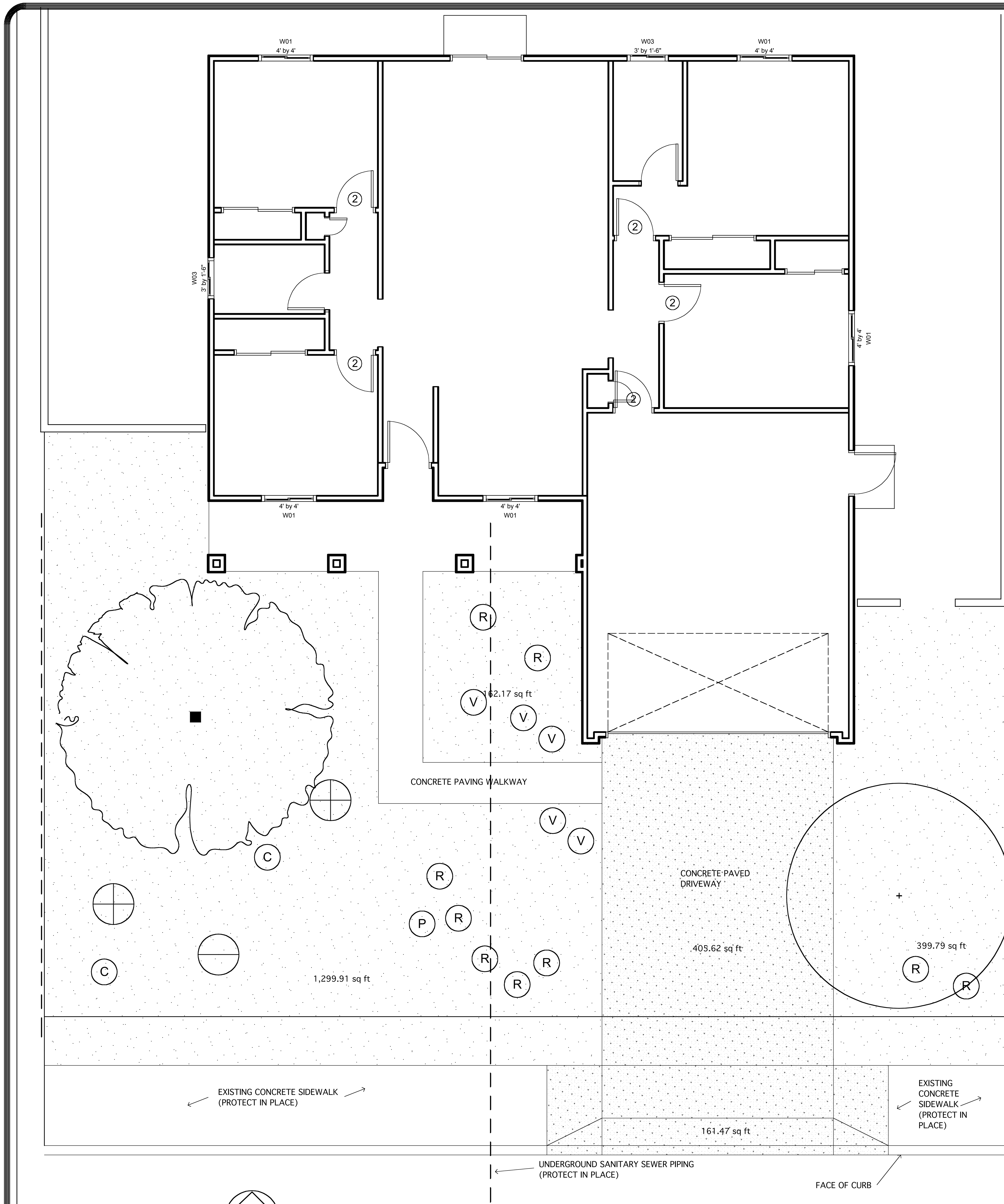
PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

G A R O N D A R L I N G
A R C H I T E C T
2259 W PASEO DEL MAR
SAN PEDRO, CA. 90732 (310) 619-9540

SHEET TITLE
MODEL 1374
4 BEDROOM
SCHEDULE, LEGEND & NOTES

DATE 8/10/25 JOB

SHEET
E-2
OF DWGS



LANDSCAPE PLAN - 4 BEDROOM PARTIAL PLAN SHOWING FRONT YARD

1/4"= 1'-0" SCALE

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE NOTES

A. THE FOLLOWING PRESCRIPTIVE COMPLIANCE OPTION (APPENDIX D) OF THE CALIFORNIA CODE OF REGULATIONS, TITLE 23, DIVISION 2, CHAPTER 2.7, SECTION 490 SHALL BE FOLLOWED.

B. COMPLIANCE WITH THE FOLLOWING ITEMS IS MANDATORY AND MUST BE DOCUMENTED ON A LANDSCAPE PLAN IN ORDER TO USE THE PRESCRIPTIVE COMPLIANCE OPTION.

1. SUBMIT A LANDSCAPE DOCUMENTATION PACKAGE WHICH INCLUDES THE FOLLOWING ELEMENTS:
   (A) DATE
   (B) PROJECT APPLICANT
   (C) PROJECT ADDRESS
   (D) TOTAL LANDCAPE AREA: 2124.5 SQ. FT.
   TURF AREA = ZERO SQ. FT.
   PLANT MATERIAL = 175.0 SQ. FT.
   DECOMPOSED GRANITE MULCH = 2124.5 SQ. FT.
   (E) PROJECT TYPE: NEW PROJECT
   (F) WATER SUPPLY: POTABLE - COACHELLA VALLEY WATER DISTRICT
   (G) CONTACT INFORMATION FOR THE APPLICANT:

   CONTACT INFORMATION FOR THE PROPERTY OWNER:

   (H) APPLICANT SIGNATURE AND DATE WITH THE FOLLOWING STATEMENT: "I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE PERSCRIPTIVE COMPLIANCE OPTION TO THE MWELO" SIGNED __________________ . DATE 3.16.2022

2. INCORPORATE COMPOST AT A RATE OF AT LEAST FOUR CUBIC YARDS PER 1000 SQUARE FEET TO A DEPTH OF SIX INCHED INTO LANDSCAPE AREA (UNLESS CONTRA-INDICATED BY A SOIL TEST).

3. PLANT MATERIAL SHALL COMPLY WITH ALL OF THE FOLLOWING:
   (A) FOR RESIDENTIAL AREAS, INSTALL CLIMATE ADAPTED PLANTS THAT REQUIRE OCCASIONAL, LITTLE OR NO SUMMER WATER (AVERAGE WUCOLS PLANT FACTOR 0.3) FOR 75% OF THE PLANT AREA EXCLUDING EDIBLES AND AREAS USING RECYCLED WATER.
   (B) A MINIMUM THREE INCH (3") LAYER OF MULCH SHALL BE APPLIED ON ALL EXPOSED SOIL SURFACES OF PLANTING AREAS EXCEPT IN CREEPING OR ROOTING GROUNDCOVERS, OR DIRECT SEEDING APPLICATIONS WHERE MULCH IS CONTRAINDICATED.

4. NOTE: TURF IS NOT INSTALLED IN THIS PROJECT.

5. SEE SHEET IR-1 FOR IRRIGATION NOTES.

6. N/A

C AT THE TIME OF FINAL INSPECTION, THE PERMIT APPLICANT MUST PROVIDE THE OWNER OF THE PROPERTY WITH A CERTIFICATE OF COMPLETION, CERTIFICATE OF INSTALLATION, IRRIGATION SCHEDULE AND A SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE.

UTILITIES NOTES

UTILITIES SHOWN ARE GENERAL LOCATIONS. REFER TO PRECISE GRADING PLANS. OBTAIN THE SERVICES OF DIG ALERT- CALL 811 AT LEAST TWO DAYS BEFORE YOU DIG. CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS, MEASURES AND MEANS AS NECESSARY TO ENSURE SAFETY.
UNKNOWN AND BURRIED/HIDDEN UTILITIES MAY EXIST. EXERCISE EXTREME CAUTION.

C - 23697
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027

6"
0 1' 5' 10' 20'
GRAPHIC SCALE

LANDSCAPE LEGEND

GROUND COVER

SYMBOL	BOTANICAL/COMMON NAME	SIZE	WUCOLS	COMMENTS
R	ACACIA REDOLENS ' DESERT CARPET' PROSTRATE ACACIA	1 GAL	LOW	3'-0" O.C. PLANT 36" FROM EDGE OF CURB OR WALK.
V	VERBENA PULCHELLA GRACILLIOR / MOSS VERBENA	1 GAL	LOW	30" O.C. PLANT 30" FROM EDGE OF CURB OR WALK.

SHRUB

SYMBOL	BOTANICAL/COMMON NAME	SIZE		COMMENTS
⊕	LEUCOPHYLLUM F. 'GREEN CLOUD' / GREEN CLOUD TEXAS RANGER	1 GAL	LOW	4'-0" O.C.
⊖	LEUCOPHYLLUM FR 'COMPACTA' / DWARF TEXAS RANGER	1 GAL	LOW	4'-0" O.C.
△	SENNA ARTEMISIOIDES / FEATHERY CASSIA	5 GAL	LOW	4'-0" O.C.
C	CASSIA NEMOPHILA / CASSIA	5 GAL	LOW	4'-0" O.C.
P	CAESALPINIA PULCHERRIMA / RED BIRD OF PARADISE	5 GAL	LOW	4'-0" O.C.

TREE

SYMBOL	BOTANICAL/COMMON NAME	SIZE		COMMENTS
+	PROSOPIS CHILENSIS / PHOENIX THORNLESS CHILEAN MESQUITE	15 GAL	LOW	HIGH MULTI-BRANCHES
■	CERCIDIUM HYBRID/ DESERT MUSEUM PALO VERDE	24" BOX	LOW	STANDARD / D.S.

NOTE:
ALL PLANTING AREAS SHALL RECIEVE 2" LAYER OF 3/4" SIZE MOJAVE GOLD CRUSHED ROCK TO MATCH EXISTING LANDSCAPING IN ADJACENT DEVELOPMENT.

LANDSCAPING & IRRIGATION NOTES

LANDSCAPING:
REQUIRED LANDSCAPING AREA: ENTIRE FRONT YARD SHALL BE LANDSCAPED (PLANTS AND OR ROCK MULCH AS REQUIRED) EXCEPT FOR NECESSARY DRIVEWAYS AND WALKWAYS.

IRRIGATION: SEE SHEET IR-1 FOR IRRIGATION.

SOIL:
AMMENDMENTS: INCORPORATE COMPOST AT A RATE OF AT LEAST FOUR CUBIC YARDS PER 1000 SQUARE FEET TO A DEPTH OF 6" INTO LANDSCAPE AREA.

NO	DATE	REVISION
1	6.30.24	CVWD SUBMITTAL
2	4.3.25	CORRECTIONS - 24" BOX TREE & MULCH
3	8.11.25	CITY SUBMITTAL
4	9.29.25	CORRECTIONS - ROCK MULCH

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON DARLING
ARCHITECT
2259 W PASEO DEL MAR
SAN PEDRO, CA. 90732 (310) 619-9540

SHEET TITLE
MODEL 1374
4 BEDROOM SFR TYPE MORN 1
LANDSCAPE PLAN, SCHEDULE, LEGEND & NOTES.

DATE 9/29/25
JOB
SHEET
L-1
OF DWGS

PLANTING
PART 1 – GENERAL
1.01 SUMMARY
A. Provide all labor, material, equipment, and appliances necessary to provide trees, plants, and ground cover as indicated on Drawings, specified herein and as required for a complete installation.
B. Related Sections:
3. Section 02810: Irrigation System.
1.02 SUBMITTALS
A.
B. Submit complete lists of landscape materials and equipment to be used, including manufacturers name and address, specific trade names, catalog numbers complete with illustrations and descriptive literature and clearly mark or underline proposed items; list sources of landscape topsoil.
C. Shop Drawings: Required for any landscape structure.
D. Material List: Plant materials list.
E. Certification: In addition to other required certification, furnish a certificate with each delivery of bulk material, including topsoil, planter mix soil, bark mulch, stating its source, quantity, type of material furnished and that such item or material conforms to requirements of this section.
F. Sample: Submit topsoil Sample and soil amendments with analysis.
G. Fertilizer analysis: Provide labels of each fertilizer used and quantities used at each applications recommended in Soil Analysis Report.
H. Soil Test: After completing soil rough grading, Contractor shall have soil tested for fertility and agricultural suitability. Soil shall be tested from minimum of (3-4) locations per acre of planted area. Contractor shall record locations where samples were taken. A copy of soil test results shall be submitted to Architect before landscape work begins. Contractor shall pay cost of soil test.

1.03 QUALITY ASSURANCE
A. Workers: Furnish skilled workers thoroughly trained and experienced in required crafts and familiar with specified requirements for proper performance of Work of this section.
B. Codes and Regulations: All materials and workmanship in this section shall comply with all applicable City, County, Federal and State Codes and Regulations. Deliver all permits and testing certifications to IOR.
C. Quality and Size: Comply with current edition of "Horticultural Standards" for number one nursery stock as adopted by "American Association of Nurserymen".
D. All Plants:
1. True to name, with name of plants in accordance with standards of practice of "American Association of Nurserymen."
2. In all cases, botanical names take precedence over common names.
1.04 GENERAL REQUIREMENTS
A. IOR shall verify that all irrigation systems are operating before starting Work of this section.
B. Inspection: Notify Architect at least 72 hours in advance to schedule following inspections:
1. All plant material at time of delivery to Project site.
2. Final location of plants prior to preparation of planting pits.
3. All trees of 24" box size and larger at their source before delivery to Project site.
4. Finish grades prior to sodding or seeding areas.
5. All landscape construction items prior to start of maintenance of plant establishment period.
6. Final inspection.
C. Existing Utilities and Plant Materials:
1. Protect utilities and plant materials from damage.
a. Perform modifications only as permitted by Architect, in accordance with applicable provisions noted or specified on Drawings, or in other sections of these Specifications.
2. Replace damaged plant material with like type and size material. Architect shall determine cost of irreplaceable plant material according to "square inch" method as described by Council of Tree and Landscape Appraisers' "Manual for Plant Appraisers" handbook, Current Edition, and "Guide for Establishing Values of Trees and Other Plants".
D. Verification of Dimensions and Quantities:
1. Verify all scaled dimensions and quantities before starting landscaping Work.
2. Promptly notify Architect of any discrepancies between Drawings, Specifications or actual Project site conditions.
E. Tree Tagging: Architect will tag 24" box and larger trees at nursery. Request tree tagging from Architect by providing 3 days advance notice.
F. Pest Management Method and Products:
1. Contractor shall ensure that all plants provided are clean, healthy, free of physical damage, and show no symptoms of abiotic injury. Plants must also be free of diseases, arthropod pests, and any other type of plant pests. Before applying pesticides to plants, the following criteria must be met:
a Individuals who apply pesticides on behalf of contractor's company must have a Qualified Applicator License in appropriate category of pest control issued by California Department of Pesticide Regulation and registered to conduct pest control for hire as a business by RIVERSIDE County Agricultural Commissioner's Office.

1.05 DELIVERY, STORAGE AND HANDLING
A. Plants shall be protected in transit and after delivery to Project site. Plants in broken containers and plants with broken branches or injured trunks will be deemed defective Work.
B. Plant materials damaged in planting operations shall be replaced.
1.06 WARRANTY
A. Shrubs and groundcover shall be growth and health guaranteed by installer for a period of 90 days after completion of maintenance period. Trees shall be installer guaranteed to live and grow in upright position for a period of one year after completion of maintenance period.
B. Within 15 days after notification by Owner, remove and replace failed plantings. Replacement plantings shall be guaranteed as specified for original plantings.

PART 2 - PRODUCTS
2.01 MATERIALS
A. Topsoil: Designated as imported topsoil as specified herein. Soil test will determine suitability of topsoil before installation. Transport topsoil from source to its final position unless stockpiling is specified.
1. Imported Soil:
a. Shall be from a source outside Project site and in compliance with this section.
b. Architect may make such inspections and perform such tests as deemed necessary to determine material meets all requirements.
c. At least 30 days before scheduled installation, submit proposed source of topsoil and a sample to Architect. Submit a written request for review, accompanied by a written report stating that proposed source complies with these specifications by a testing laboratory registered by State of California for agricultural soil evaluation.
d. Comply with all recommendations of soils testing laboratory and provide any soil amendments necessary to achieve proper nutrient levels to support healthy plant growth.
e. Imported topsoil shall be of a uniform composition and structure, fertile and friable sandy loam soil, and be free of roots, decay, subsoil, clods and stones larger than 1/4" in greatest dimension, pockets of coarse sand, noxious weeds, sticks, brush and other litter and not be infested with nematodes or other undesirable insects and plant disease organisms. Imported topsoil shall meet following additional requirements:
1) Gradation Limits: Sand – 50-80%, clay – 20% maximum, and silt – 30% maximum. Sand, clay and silt gradation limits shall be as defined in ASTM D 422.
2) Agricultural Suitability and Fertility: Topsoil shall be fertile and friable garden soil suitable for sustaining and promoting growth of specified plants.
3) Electrical conductivity less than 2.0 milliohms/centimeter or DS/m.
4) Boron content maximum of 1.0 part per million.
B. Fertilizers and Conditioning Materials: Comply with applicable requirements of State of California Agricultural Code:
General:
a. All fertilizing materials shall be packaged, first grade, commercial quality products identified as to source, type of material, weight and manufacturer's guaranteed analysis.
b. Fertilizing material shall not contain toxic ingredients and fillers in quantities harmful to animal, human or plant life.
c. Submit a certificate of compliance stating material substantially meets Specifications in accordance with provisions of Article 1.03B.
2. Materials:
a. Bone Meal: Commercial raw bone mean shall be finely ground, steamed dry material with a minimum analysis of 2.5% nitrogen and 22% phosphoric acid.
b. Gypsum: Hydrated calcium sulfate produce containing 23% calcium and 18% sulfur with a guarantee analysis of 84% calcium sulfate.
c. Soil Sulfur: Guarantee analysis of 99% sulfur.
d. Superphosphates: First grade finely ground phosphate rock used for agricultural purpose, containing minimum 18% phosphoric acid by volume.
e. Commercial Fertilizer: Pellets or granular product having a chemical analysis of 14-14-14, with a minimum of 68% of nitrogen from slow release nitrogen unless otherwise specified in Soil Analysis Report: it should be a free flowing material delivered in unopened bags, do not install material which becomes caked or otherwise damaged.PART 2 - PRODUCTS
2.01 MATERIALS
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1. Imported Soil:
a. Shall be from a source outside Project site and in compliance with this section.
b. Architect may make such inspections and perform such tests as deemed necessary to determine material meets all requirements.
c. At least 30 days before scheduled installation, submit proposed source of topsoil and a sample to Architect. Submit a written request for review, accompanied by a written report stating that proposed source complies with these specifications by a testing laboratory registered by State of California for agricultural soil evaluation.
d. Comply with all recommendations of soils testing laboratory and provide any soil amendments necessary to achieve proper nutrient levels to support healthy plant growth.
e. Imported topsoil shall be of a uniform composition and structure, fertile and friable sandy loam soil, and be free of roots, decay, subsoil, clods and stones larger than 1/4" in greatest dimension, pockets of coarse sand, noxious weeds, sticks, brush and other litter and not be infested with nematodes or other undesirable insects and plant disease organisms. Imported topsoil shall meet following additional requirements:
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b. Fertilizing material shall not contain toxic ingredients and fillers in quantities harmful to animal, human or plant life.
c. Submit a certificate of compliance stating material substantially meets Specifications in accordance with provisions of Article 1.03B.
2. Materials:
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c. Soil Sulfur: Guarantee analysis of 99% sulfur.
d. Superphosphates: First grade finely ground phosphate rock used for agricultural purpose, containing minimum 18% phosphoric acid by volume.
e. Commercial Fertilizer: Pellets or granular product having a chemical analysis of 14-14-14, with a minimum of 68% of nitrogen from slow release nitrogen unless otherwise specified in Soil Analysis Report: it should be a free flowing material delivered in unopened bags, do not install material which becomes caked or otherwise damaged.

f. Nitrogen Fortified Wood Product: Derived from redwood, fir or cedar sawdust or from bark of fir or pine treated with a non-toxic agent to quickly absorb water and comply with following requirements:
1). Gradation:
SIEVE SIZE
PERCENT PASSING
?-inch
95% minimum
#8
80% minimum
#35
30% minimum
Nitrogen Content:
NITROGEN CONTENT
% DRY WEIGHT
Redwood
0.4 – 0.6%
Fir
0.56 – 0.84%
Cedar
0.56 – 0.84%
Fir Bark
0.8 – 1.2%
Pine Bark
0.8% - 1.2%
3) Salinity: Maximum saturation extract conductivity 2.5 milliohms/ centimeter at 25 degrees Celsius.
4) Absorption: When one teaspoon of water is applied to 4 cubic inches of air-dried products, material shall be become completely damp in a period of less than 2 minutes. Kellogg KRA, Sequoia Redwood/Cedar Blend or White Fir, Long Beach Soil Preparation, Bandini #101 Redwood Soil Builder of nitrogenized wood amendment.
g. Organic Fertilizer: Treated, relatively dry friable organic compost derived from sewage sludge processed for agricultural use; containing at least 1% nitrogen by dry weight, 2% phosphoric acid and comply substantially with gradation noted in sub-section 2.1, B6. Milorganic, Kellogg's Nitrohumus, or equal.
C. Prepared Backfill mix:
1. To be based upon recommendations from soils test performed by a certified laboratory
2. Mix (for bidding purposes)
a. 70% by volume clean excavated topsoil/import soil.
b. 30% by volume nitrogen stabilizer wood residual
c. 1 lb. per cu. yd. gypsum
d. 2 lbs. fertilizer per cu. yd. (14-14-14 with a minimum 68% of nitrogen from slow release nitrogen. Additional secondary and micronutrients preferred)
3. Mix (acid plants)
a. 30% by volume clean excavated soil/imported soil
b. 70% by volume nitrogen stabilized wood residual
c. 2 lb .per cu yd. soil sulfur
d. 2 lbs. fertilizer per cu. yd. (14-14-14 with a minimum 68% of nitrogen from slow release nitrogen. Additional secondary and micronutrients preferred)
D. Plants (General): Plant names indicated or listed on Drawings shall conform with Sunset, Western Garden Book, latest edition.
1. Type and Size: Plant materials shall be listed on Drawings.
2. All plants shall be true name, and one of each bundle or lot shall be tagged with Botanical/Common name and size of each plant in accordance with standards of practice recommended by American Association of Nurseryman
3. Tag one plant of each variety for identifying purposes.
4. All plantings shall be inspected before installation.
5. Substitutions: When plants of a specified kind or size are not available, substitution may be requested in accordance with General Conditions.
6. All plants shall have a growth habit normal to species in accordance with USA Standards for Nursery Stock, latest editions; shall be sound, healthy, vigorous, and free from insect pests, plant disease, sun scalds, fresh bark abrasions, excessive abrasions or other objectionable disfigurements. Tree trunks shall have normal well developed branch systems and vigorous and fibrous root systems, not root bound and shall be free of kinked or girding roots.
7. No pruning shall be performed before inspection at nursery by Architect. (Other than normal pruning during growth period).
8. Plantings specified for adverse conditions shall be Project site acclimated before planting. Purchase from local nurseries or store on Site for a period of 10 weeks for autumn planting and 6 weeks for spring planting.
E. Plant Material:
1. Trees: All trees shall conform to type and size noted on Drawings. Measure height from root crown to last division of terminal leader and measure diameter 1 ft. above root crown. Measure height of palm trees from ground line to base of growing bud. Palms shall stand reasonably erect without support.
2. Shrubs: Specified type and size selected from high quality well shaped nursery stock.
3. Flatted Plants: Grown and remain in flat until transplanted at Project site. Soil and spacing of plants in flat shall insure minimum disturbance of root system at time of transplanting. Maximum plants per flat to be 64 to 100 plants, or as indicated in Drawings.
H. General Materials:
1. Pipe: Galvanized steel, standard weight (schedule 40) complying with ASTM A120.
2. Nails, fasteners, etc.: Galvanized and commercial quality materials.
3. Fabricated metal items: Steel conforming to ASTM A36.
4. Concrete items: Standard 2000 psi concrete.
I. Concrete headers: 6-inch x 8-inch size, complete with pre-molded expansion joint material 10 ft. apart or as indicated on Drawings.
J. Composite Headers: Headers and stakes shall be composite material sizes as indicated on Drawings. Screws shall be plated deck screws. Stakes shall be 1" x 2" x 12" in length and headers shall be furnished in 2" x 4" x 20'-0" in length and shall be of uniform width and thickness.
K. Tree Stakes: Steel stakes shall be the Reddy Stake System manufactured by Decorations for Generations, Inc. or equal. Provide two Reddy Stake per each new tree.
L. Tree Ties:
1. Wire Type: No. 10 ga. BMG galvanized soft steel wire covered with garden hose.
2. Cinch Tie: Flexible vinyl with adjustable interlocking capability.
M. Tree-Root Control Barrier: Shall be fabricated from a high density and high impact plastic such as polyvinyl chloride, ABS or polyethylene, and have a minimum thickness of 0.06". Plastic shall be furnished with ?" to ?" high raised vertical ribs on inner surface spaced at least 6" but not more than 8" apart. Install a plastic root control barrier with each new tree planted within a tree well. Deep Root Corp., 7354 Bolsa Avenue, Westminster, CA 92683, 714 898-0563, or equal.
N. Pest Management Methods and Products: Refer to section 1.04 F in this specification for details pertaining to Contractor applying pesticides.
O. Jute matting shall be of a uniform open plain weave, single jute yarn, not varying in thickness by more than one half its normal diameter. Jute matting shall be furnished in rolled strips as follows: Length, approximately 50 to 75 yards, width, 45 inches to 50 inches. Ludlow Soil Saver No. 48, or equal.

PART 3 – EXECUTION
3.01 SURFACE CONDITIONS
A. Examine areas and conditions under which Work of this Section will be performed. Correct detrimental conditions before commencing Work of this section.
3.02 GRADING AND SOIL PREPARATION
A. Initial Rough Grading: Specified in Division 02.
B. Earthwork and Topsoil Placement: Shall include excavation and backfilling for irrigation system and preparation for spreading, densification, cultivation, and raking of topsoil, including fertilization and conditioning.
C. Preliminary Grading: Scarify existing soil to a depth of 6 inches before backfilling with topsoil. During preliminary grading operation, remove all stones over ? inch.
D. In Previously Paved Areas: Remove top 6 inches of existing soil and legally dispose of off Project site. Replace with approved imported topsoil to indicated finish grade.
E. Topsoil Preparation and Conditioning:
1. Type and Thickness: Topsoil shall have a minimum depth of 6 inches above subgrade or as indicated on Drawings, whichever is greater.
2. Before installing topsoil, subgrade shall be cleared of all weeds, rock ?" and larger and other extraneous materials from designated planting areas to a depth of 6 inches. The tools acceptable for this cleaning process are a Rock Picker by Harley Enterprise, Track Screener by Cherrington, Screen USA Inc. or other tools or machines designed for the purpose. The finished planting bed preparation is subject to the approval of the Architect and/or Owner's representative. OAR shall coordinate with the Owner's Landscape Office for a site visit and approval prior to plant/lawn installation.
3. Do not process topsoil when it is so wet or dry as to cause excessive compaction or forming of hard clods or dust.
4. Existing soil can be used as topsoil only if it meets the requirements of Article 2.01.A of this specification.
F. Fertilizing and Conditioning: Provide planting areas to finish grades, including mounds, before installation of specified fertilizer or soil conditioning materials.
1. Mechanically install following amount of fertilizer or soil conditioning materials at a uniform rate per 1,000 sq. ft. of planting area:
a. 3 cubic yards of nitrogen fortified wood compost.
b. 2 cubic yards of organic fertilizer.
c. 100 lbs. of gypsum.
d. 30 lbs. of commercial fertilizer.
2. Quantities of required materials for planting areas shall be at Project site. Furnish IOR with delivery tickets before installation to verify source, kind, and quantities delivered.
3. After installation of fertilizer and soil conditioning materials, uniformly cultivate materials into upper 6 inches of soil with suitable equipment operated in at least two directions at approximate at right angles. Process soil until friable.
G. Finish Grading:
1. Provide a finish grade, smooth, uniform, and free of abrupt grade changes and depressions to insure proper surface drainage.
2. Finish grades adjacent to paving curbs or headers shall be 1 inch lower in sod areas and 2 inches lower in shrub or ground cover areas.
3. Irrigate soil after installation of fertilizer and soil conditioning materials. Allow soil to settle. Provide a stable surface. After soil has dried out to a workable condition, re-grade, rake, and smooth to required grades and contours. Finished surfaces to be left clean and suitable for planting.
4. Areas to be planted shall be graded and floated to provide complete surface drainage; all water holding depressions and pockets shall be eliminated. Undulations and unsightly variations in grade which will not permit the use of normal mowing equipment without scalping or missing shall be removed so that proper use of mowing equipment can be performed.
5. Areas to be planted shall also be finished graded to meet any walks, paths or other adjoining surfaces so that, after compaction, no water pockets or ridges remain.
6. Areas where sod will interface with other modes of planting at catch basins and paved areas shall be finish shaped so as to counter sink the sod one inch (1") such that once sod is placed, it shall be at grade with adjacent planting bed.
H. Contour mounds: Construct with imported topsoil and specified soil amendments. Install and shape mounds to minimize settlement or erosion and to provide adequate footing for placement of boulders. Referenced dimensions of mound contours refer to height above finish grade.
I. Trenching: After completion of soil conditioning or finish grading operations, backfill upper portion of trench so specified topsoil thickness in trench is restored.
J. Weeding: Once site has been cleared, grubbed and rough graded, all landscape areas shall be maintained free of vegetation growth until start of irrigation and planting phase of work.

3.04 PLANTING
A. General: All planting materials shall be inspected before planting, including those tagged at nursery.
1. Perform planting with material, equipment and according to procedures favorable to optimum growth of plant. Do not plant during windy conditions.
2. Except as noted for specimen planting in sub-section 3.04D, commence all planting operations immediately following completion of irrigation system.
B. Protection and Storage:
1. Maintain all plantings delivered to Project site in a healthy condition.
2. Do not allow plantings to dry out.
3. Separate bare root stock and "heal in" in moist earth or other suitable material.
4. Cover root ball of bailed or burlap wrapped plantings with moist sawdust, wood chips, or other permitted materials.
C. Layout and Plant Locations:
1. Plant locations indicated on Drawings are approximate.
2. Plants may be re-spotted before planting as required by Architect.
3. Provide a detailed layout of plants, etc., in planting areas and obtain review of Architect before actual planting operations.
4. Locate first row of plantings in areas designated for on center spacing at one-half the designated spacing from edge of area.
D. Specimen Planting: Plantings in boxes 24 inches or larger shall be installed before installation of lateral irrigation lines. Re-route irrigation lines in conflict with specimen locations to clear root ball.
E. Tree and Shrub Installation:
1. Excavate planting holes approximately square with vertical sides shall be twice the width of plant container or root ball; larger if necessary to permit handling and installation without damage to root ball system. Bottom of plant container or root ball shall be placed on existing undisturbed soil.
2. Do not install plantings having a broken or cracked root ball.
3. Containers should be opened and removed in such a manner not to damage root system.
4. Remove balled plant wrappings after plant is positioned in hole.
5. Scarify native soil at bottom half of holes to a depth of 6 inches.
6. Backfill bottom half of hole with specified backfill mix minus fertilizers. Settle with water.
7. After water settling bottom half of hole, set planting approximately in center of hole and adjust root flush to finish grade.
8. Backfill balance of hole with specified backfill mix and fertilizer and water settle.
9. Prune or remove any broken or damaged limbs.
10. Form a circular watering basin slightly larger than hole; 4 inches high for trees and 2 inches high for shrubs. Shape bottom of basin to be slightly lower than finish grade.
11. Restore area around plantings to finish grade.
12. After installation, plantings shall be plumb with root crown at its natural depth with respect to finish grade.
13. All new trees in sod areas to be installed with tree trunk protector.
F. Backfill Planting Mix: Consists of 70% specified topsoil, and 30% nitrogen fortified sawdust mulch plus the amendments indicated in soil analysis report.
G. Raised Planter Mix: Backfill mix for raised planters and tree pits in raised planters shall be of following materials.
1. Planter Mix by B.D. White Topsoil Co., Culver City, LAUSD Mix by AE Schmidt Co, Planter Mix by Gale Materials or equal.
2. Weights shall be 45 lbs. per cubic ft.
3. All raised planters shall be backfilled with finish grade at 2" below planter top.
4. Required system for draining planters shall be in place prior to placing backfill.
H. Ground Cover Planting:
1. Complete soil preparation and fine grading before installation of ground cover plantings.
2. Install ground cover in moist soil, spaced as indicated on Drawings.
3. Install each plant with its proportionate amount of flat soil to minimize root disturbance.
4. The degree of soil moisture in flat shall be such that soil does not crumble when removing planting.
5. Following installation of ground cover, restore finish grade to insure proper surface draining.

3.06 MAINTENANCE AND PLANT ESTABLISHMENT
A. Required: Maintain all areas on a continuous basis as they are completed during progress of Work and during establishment period. Maintenance shall include continuous operations of watering, weeding, trimming, rodent control, reseeding, planting replacement irrespective of cause or any other operations necessary to assure normal plant growth.
B. Keep all planting areas free of debris and weeds. Cultivate at intervals not to exceed 10 days.
D. Pruning: Required pruning of plants at start of plant establishment period shall be as required by Architect.
E. Plant Establishment Inspection:
1. Request an inspection to begin plant establishment period after all plantings and related Work has been completed in accordance with Contract Documents.
2. Upon successful completion of inspection, effective commencement date of plant establishment period shall begin.
3. Plant establishment period for shrubs and ground cover, shall be 90 calendar days and for trees shall be one year or as otherwise indicated in Contract Documents.
4. Architect may recommend extension of plant establishment period if planting areas are improperly maintained, appreciable plant replacement is required, or other defective Work.
F. Damage:
1. Immediately replace failed or damaged plantings.
2. Provide replacement plantings of same type and size to match adjacent plantings. Furnish plantings and fertilizer as specified. New plantings shall be subject to a 30 day establishment period.
3. Damage to planting areas shall be repaired immediately. Depressions caused by vehicles or foot traffic shall be filled with topsoil and leveled.
G. Final Inspection:
1. Upon completion of plant establishment period, Architect will perform a final inspection.
2. If plant establishment period is completed before Substantial Completion, planting areas shall be maintained until Final Completion.
3.07 PESTICIDE APPLICATION
A. Contractor must comply with specifications outlined in Article 1.04 F.
3.08 PROTECTION
A. Unless noted otherwise, protect Work of this section until Substantial Completion.
3.09 CLEANUP
A. Remove rubbish, debris and waste materials and legally dispose of off Project site.

END OF SECTION

IRRIGATION SPECIFICATIONS CONTINUED

(CONTINUED FROM SHEET IR-2)

RECORD DOCUMENTS

Before Contract Completion, provide project record documents as follows:

a. Control Diagrams: Submit three controller charts, with one copy laminated in plastic, for each controller.

b. Controller chart shall be a reduced drawing of the section of the record drawings that pertain to each individual controller and shall fit inside the controller housing with a maximum size for readability.

c. Controller chart shall be a C.A.D. print with differentiating pastel or transparent colors applied to indicate area of coverage for each numbered station.

d. Indicate the location of each numbered sprinkler controlled valves and quick coupling valves with legible dimensions from two permanent points of reference such as building corners or sidewalks.

e. The controller charts shall indicate all remote control valves, quick couplers, controllers, flow sensors and master valves, backflow devices, point of connections, and sprinkler head manufacturer and type of sprinklers for each zone. Each zone shall be colored differently.

2. Closeout Submittals-As Built:

a. Submit three (3) copies of as built including complete list of materials, manufacturer's name, and product installation literatures.

b. Record drawings: Submit dimensioned drawings and details, before Contract Completion.

c. Record Drawings shall contain the following:

1) As-Built shall be computer generated (C.A.D.)

2) Print shall show the locations of the numbered remote control valves, manual control valves, locations and size of all supply and lateral lines, location and type of all sprinkler heads, quick coupling valves, gate valves, backflow devices, point of connections, controllers and all other related equipment.

c. Dimensions shall be legible from two permanent points of reference such as buildings and sidewalks.

3. Operation and Maintenance Manuals:

a. Provide complete operating and maintenance instruction manuals for all equipment.

3.12 COVERAGE TEST

A. When sprinkler system has been completed, perform a coverage test to determine if coverage of water to turf and planting areas is complete and adequate.

B. Make adjustments, add heads, change heads, nozzles or orifices as may be required to provide complete coverage and provide layout indicated on Drawings.

3.13 PRESSURE TEST

A. After welded joints have cured at least 24 hours and before sprinkler heads are installed, flush out lines and cap all outlets. Test system under normal street water pressure, in presence of the IOR.

B. Joints shall remain exposed for examination during pressure test. Center load pipe with small amount of sand to prevent arching or slipping under pressure. Use normal street water pressure for test. Maintain pressure on plastic pipe for not less than four hours.

C. Replace or repair system, including joints that fail during pressure test. Repeat pressure testing until entire system passes the test period without leaks.

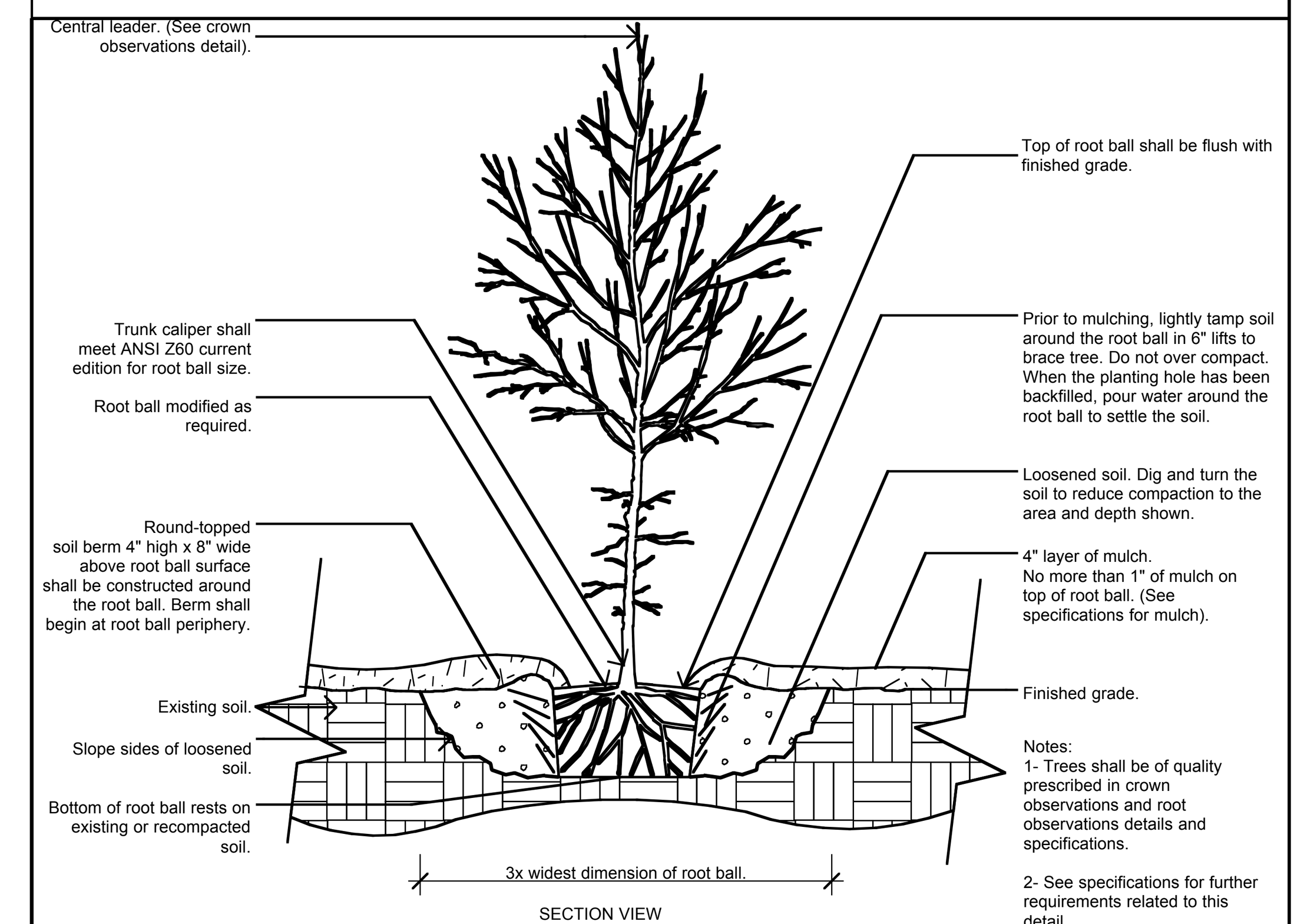
3.15 PROTECTION

Protect the Work of this section until Substantial Completion.

CLEANUP

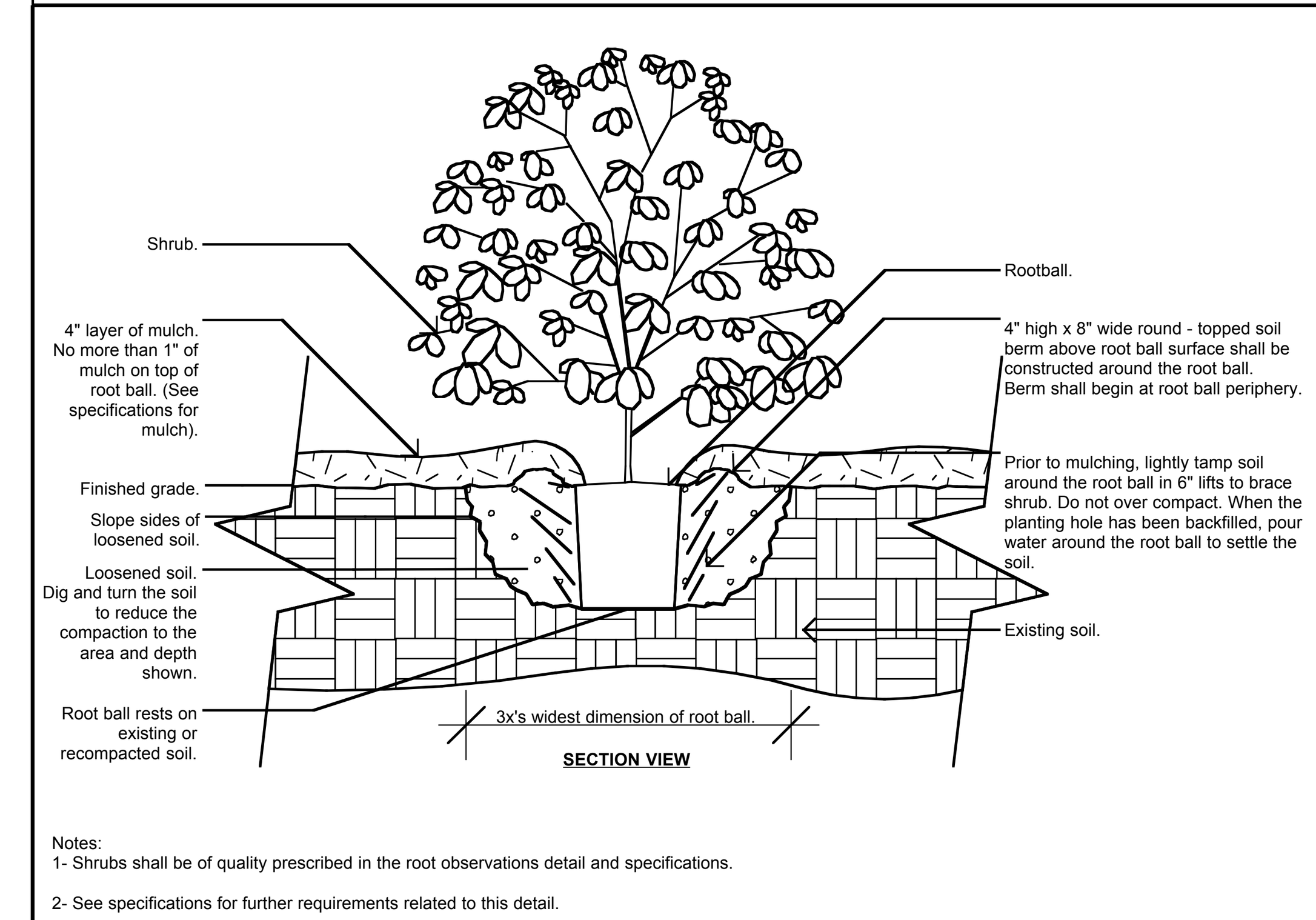
Remove rubbish, debris, and waste materials and legally dispose of off the Project site. All hard surfaces shall be washed clean. Daily clean up shall be required on all areas used for circulation, parking, or other use.

END OF SECTION



P-S TREE w/ BERM (EXISTING SOIL NOT MODIFIED)
N.T.S

L_tree planting_single berm_existing



Notes:
1- Shrubs shall be of quality prescribed in the root observations detail and specifications.
2- See specifications for further requirements related to this detail.

P-T SHRUB - UNMODIFIED SOIL
N.T.S

pdet_shrub_unmodified soil

NO	DATE	REVISION
1	5.28.24	CITY SUBMITTAL
2	4.5.25	LOGO FIX
3	8.11.25	CITY SUBMITTAL
4		

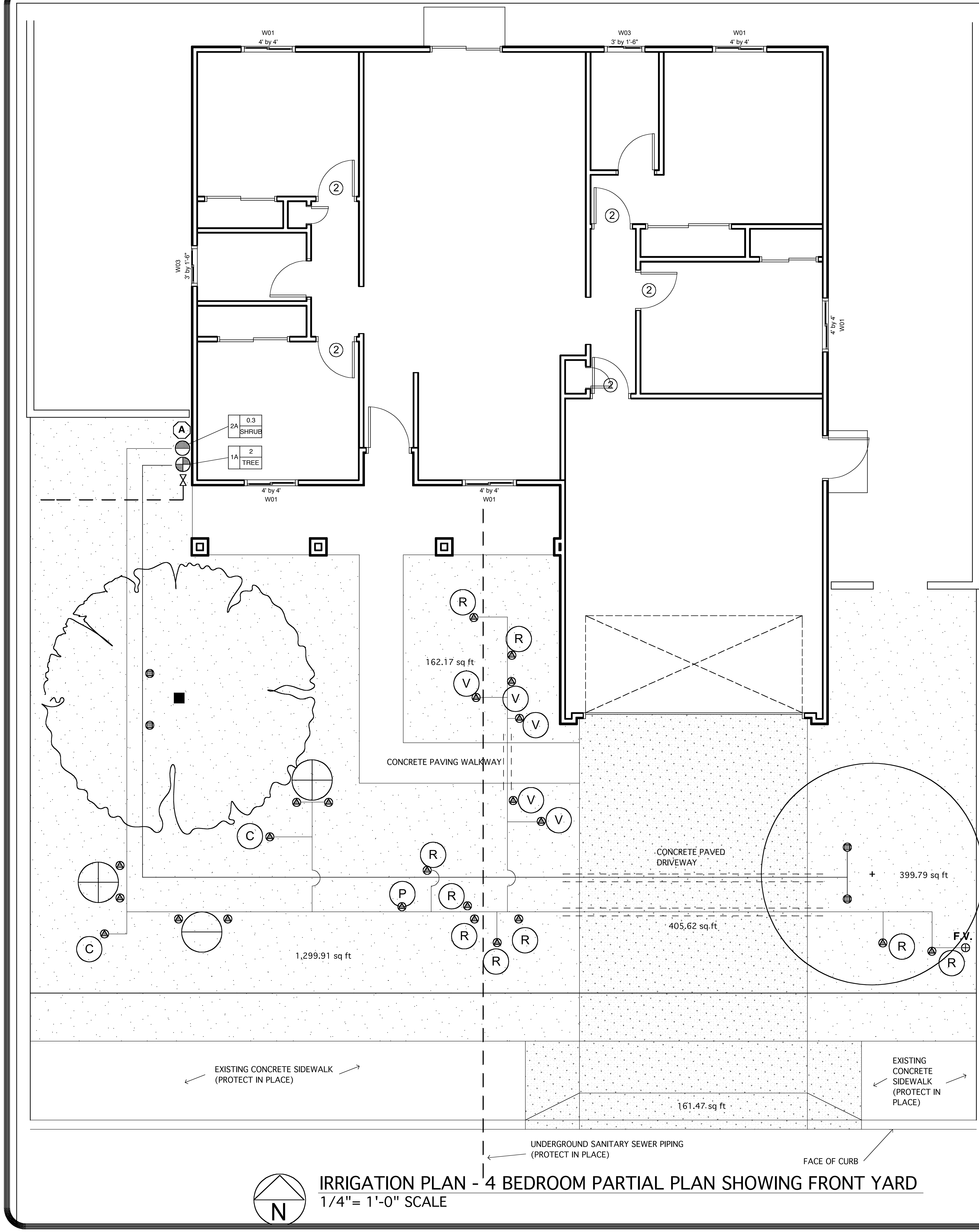
PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON J. J. DARLING
ARCHITECT
2259 PASEO DEL MAR
SAN PEDRO, CA. 90732 (310)619-9540

SHEET TITLE
PLANTING DETAILS AND SPECIFICATIONS
IRRIGATION SPECIFICATIONS (CONTINUED)

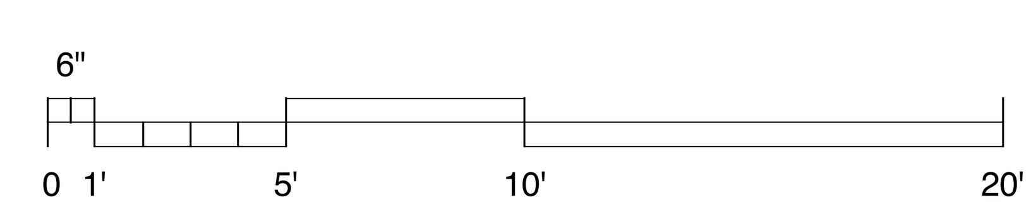
C - 23697
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027

DATE 8/10/25
JOB
SHEET
L-2
OF DWGS



IRRIGATION PLAN - 4 BEDROOM PARTIAL PLAN SHOWING FRONT YARD

1/4"= 1'-0" SCALE



LANDSCAPING & IRRIGATION NOTES

DRIPPERS, EMITTERS, TUBING, FITTINGS, STAKES, CONNECTORS, FILTERS, VALVES AND PRESSURE REGULATORS SHALL BE MANUFACTURERED BY RAINBIRD OR APPROVED EQUAL OR AS OTHERWISE NOTED. SEE NOTE 5 (E) THIS SHEET BELOW.

PROVIDE COMPLETE LOW VOLUME IRRIGATION SYSTEM INSTALLED IN STICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

PROVIDE BACKFLOW PREVENTER AS REQUIRED IN UNDERGROUND BOX PER MANUFACTURER'S RECOMMENDATIONS (NCS OR APPROVED EQUAL).

BACKFLOW PREVENTER SHALL BE INSTALLED BY PRIVATE CONTRACTOR AND INSPECTED AND TESTED AS REQUIRED BY THE LOCAL JURISDICTION.

PROVIDE AND INSTALL CONTROL WIRING PER MANUFACTURER'S RECOMMENDATIONS.

ALL IRRIGATION LATERAL PIPING SHALL BE SUBSURFACE.

ALL IRRIGATION LATERAL PIPING SHALL BE THREADED OR GLUED CONNECTIONS.

5. IRRIGATION SYSTEMS SHALL COMPLY WITH THE FOLLOWING:

(A) AUTOMATIC IRRIGATION CONTROLLERS ARE REQUIRED AND MUST USE EVAPOTRANSPIRATION OR SOIL MOISTURE SENSOR DATA AND UTILIZE A RAIN SENSOR.

(B) IRRIGATION CONTROLLERS SHALL BE OF A TYPE WHICH DOES NOT LOSE PROGRAMMING DATA IN THE EVENT THE PRIMARY POWER SOURCE IS INTERRUPTED.

(C) PRESSURE REGULATORS SHALL BE INSTALLED ON THE IRRIGATION SYSTEM TO ENSURE THE DYNAMIC PRESSURE OF THE SYSTEM IS WITHIN THE MANUFACTURERS RECOMMENDED PRESSURE RANGE.

(D) MANUAL SHUT-OFF VALVES (SUCH AS A GATE VALVE, BALL VALVE, OR BUTTERFLY VALVE) SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THE POINT OF CONNECTIONOF THE WATER SUPPLY.

(E) ALL IRRIGATION EMISSION DEVICES MUST MEET THE REQUIREMENTS SET IN THE ANSI STANDARD ASABE/ ICC802-2014. "LANDSCAPE IRRIGATION SPRINKLER AND EMITTER STANDARD", ALL SPRINKLER HEADS INSTALLED IN THE LANDSCAPE MUST DOCUMENT A DISTRIBUTION UNIFORMITY LOW QUARTER OF 0.65 OR HIGHER USING THE PROTOCOL DEFINED IN ASABE/ ICC802-2014.

(F) AREAS LESS THAN TEN (10) FEET IN WIDTH IN ANY DIRECTION SHALL BE IRRIGATED WITH SUBSURFACE IRRIGATION OR OTHER MEANS THAT PRODUCES NO RUNOFF OR OVERSPRAY.

C AT THE TIME OF FINAL INSPECTION, THE PERMIT APPLICANT MUST PROVIDE THE OWNER OF THE PROPERTY WITH A CERTIFICATE OF COMPLETION, CERTIFICATE OF INSTALLATION, IRRIGATION SCHEDULE AND A SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE.

UTILITIES NOTES

UTILITIES SHOWN ARE GENERAL LOCATIONS. REFER TO PRECISE GRADING PLANS. OBTAIN THE SERVICES OF DIG ALERT- CALL 811 AT LEAST TWO DAYS BEFORE YOU DIG. CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS, MEASURES AND MEANS AS NECESSARY TO ENSURE SAFETY.
UNKNOWN AND BURRIED/HIDDEN UTILITIES MAY EXIST. EXERCISE EXTREME CAUTION.

C - 23697
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027

IRRIGATION LEGEND

SYMBOL	MANUFACTURER	MODEL NUMBER	TYPE	NOZZLE	FLOW RATE	PRESSURE	PATTERN
(drip emitter symbol)	RAINBIRD	XB-SERIES	DRIP EMITTER	XB-10PC-1032	1 G.P.H.	30	
(tree bubbler symbol)	RAINBIRD	1400 SERIES	TREE BUBBLER	XB-10PC-1032	0.5 G.P.M.	25	FULL
A	HUNTER	X-CORE	(6) STATION CONTROLER - WALL MOUNTED RESIDENTIAL CONTROLER - (OUTDOOR MODEL WITH SOLAR SYNC ET SENSOR/RAIN CLICK SENSOR				
(valve kit symbol)	RAINBIRD	XACZ-075-PRF	XERIGATION CONTROL VALVE KIT FOR DRIP AREAS - 3/4" LOW FLOW ANTI-SIPHON WITH 3/4" PR RBY FILTER				
(control valve symbol)	RAINBIRD	ASVF-075	ELECTRONIC CONTROL VALVE WITH ATMOSPHERIC BACKFLOW PREVENTION FOR TREE BUBLERS - 3/4"				
(ball valve symbol)	KBI	#MIP-100-T	BALL VALVE (FULL PORT).				
⊕F.V.	HUNTER	AFV-T	AUTOMATIC FLUSH VALVE WITH 1/2" MPT CONNECTION - INSTALL IN BUBBLER BOX				

SUPPLY LINE - PRESSURE MAINLINE PIPING

LATERAL LINE - IRRIGATION SUPPLY PIPING FOR TREES- SCHEDULE 40 PVC

LATERAL LINE - IRRIGATION SUPPLY PIPING FOR SHRUBS- SCHEDULE 40 PVC

PVC PIPE SLEEVE - INSTALL UNDER ALL HARDSCAPE - 2X DIAMETER OF IRRIGATION PIPE

M — WATER METER - INSTALLED BY CVWD.

CONTROLLER NUMBER
FLOW RATE IN GALLONS PER MINUTE
INDICATES ZONE TYPE

HYDROZONE INFORMATION TABLE:

WATER METER IRRIGATION POINT OF CONNECTION

CONTROLLER NO.	VALVE CIRCUIT NO.	PLANT TYPES	IRRIGATION METHOD	AREA	PERCENTAGE O LANDSCAPE AREA
A	1A	LOW	BUBBLER	400.0 SQ. FT.	19%
A	2A	LOW	DRIP	1724.5 SQ. FT.	81%
				2124.5 SQ. FT.	100%

CVWD WATER CALCULATIONS:

ZONE: 3 ETo = 64"

LA = 2124.5 SQ. FT.

100 CUBIC FEET = 748 GALLONS

MAWA = ETo • 0.62 • 0.45 • LA / 748 GALLONS

MAWA = 64" • 0.62 • 0.45 • 2124.5 SQ.FT. / 748 GALLONS = **50.72 CCF**

ETWU = [(ETo) • (PF) • (LA) • (0.62)] / 748 GALLONS / (IE)

ETWU = [(64") • (0.2) • (2124.5 SQ.FT.) • (0.62)] / 748 GALLONS / (0.9) = **25.0 CCF**

TOTAL ESTIMATED WATER USE: **25.0 CCF**

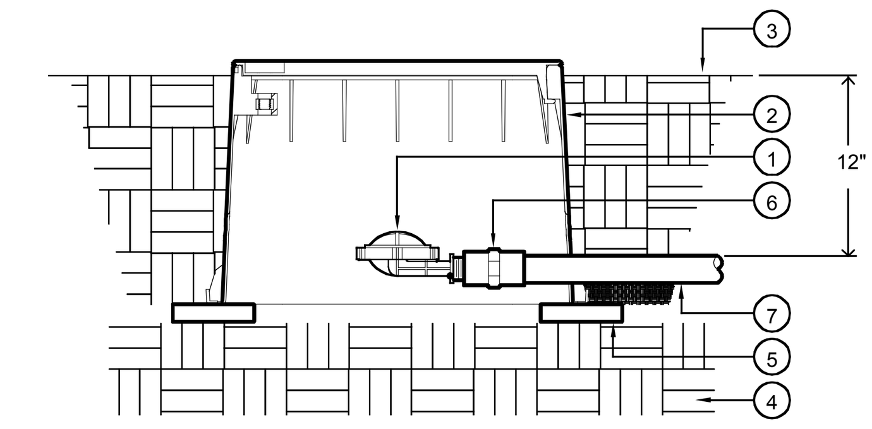
NO	DATE	REVISION
1	6.30.24	CVWD SUBMITTAL
2	4.3.25	CORRECTIONS - 24" BOX TREE & MULCH
3	8.11.25	CITY SUBMITTAL
4	9.29.25	CORRECTIONS - ROCK MULCH

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON DARLING
ARCHITECT
2259 W PASEO DEL MAR
SAN PEDRO, CA. 90732 (310) 619-9540

SHEET TITLE
MODEL 1374
4 BEDROOM SFR TYPE MORN 1
IRRIGATION PLAN, SCHEDULE, LEGEND & NOTES.

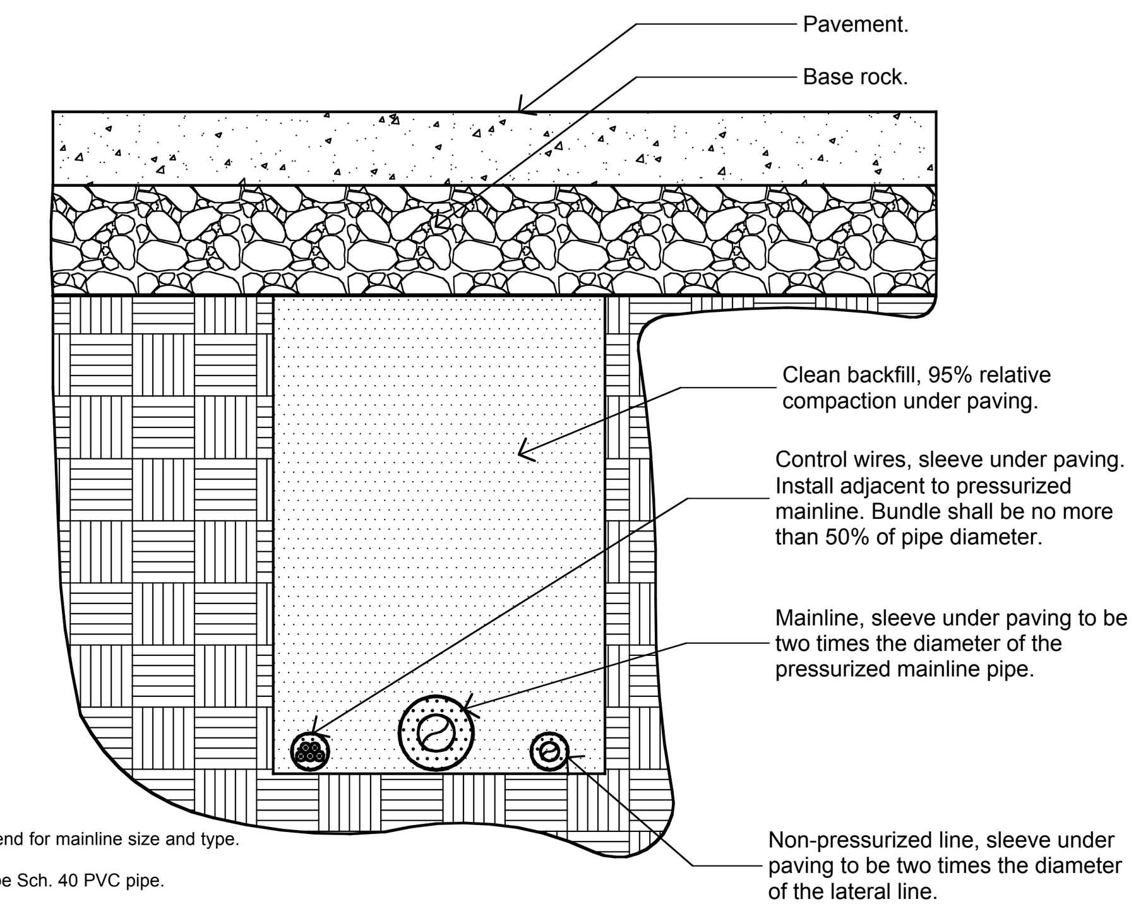
DATE 9/29/25
JOB
SHEET IR-1
OF DWGS



DETAIL LEGEND:

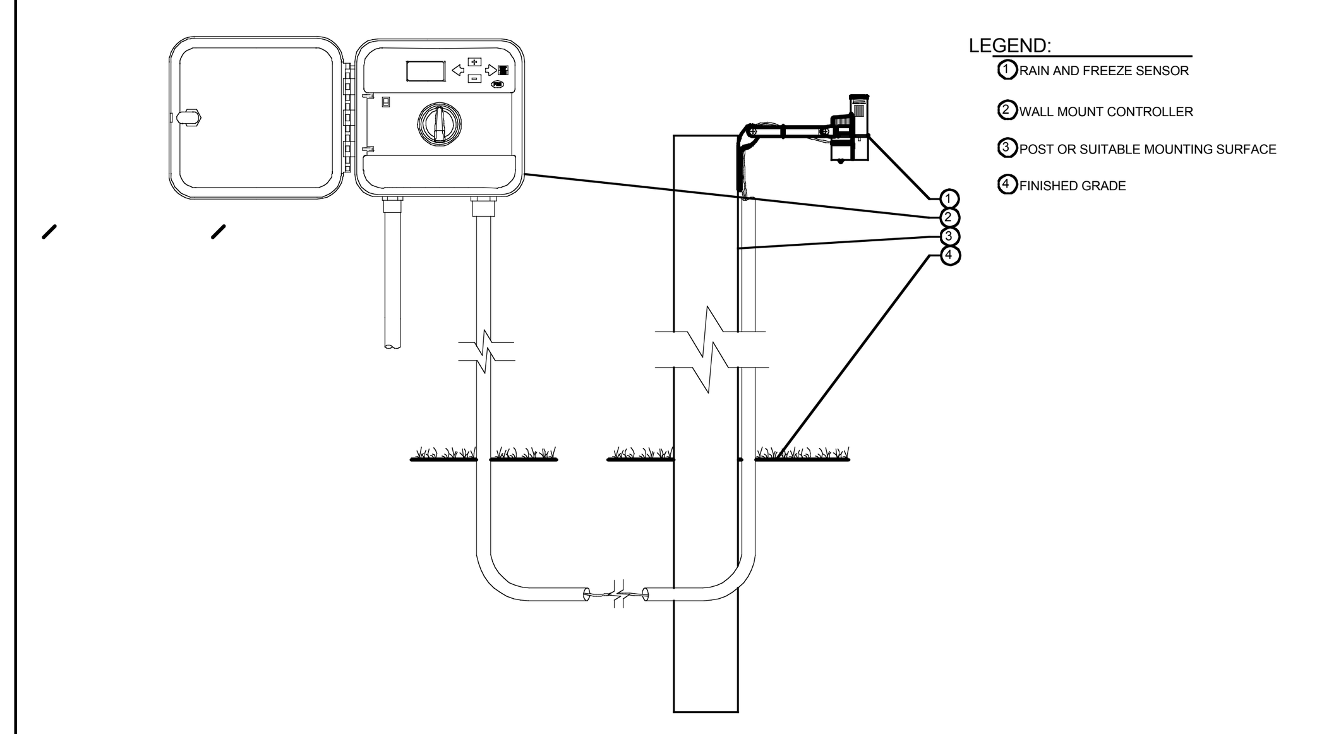
1. HUNTER AUTOMATIC FLUSH VALVE WITH 5/8" [17 mm] BARB CONNECTION, MODEL AFV-T.
2. HUNTER RECTANGULAR PLASTIC VALVE BOX AND LID (MB-0811). LID COLORS: STANDARD BLACK, PURPLE FOR RECYCLED WATER USE, AND OTHER COLORS AVAILABLE, SEE HUNTER CATALOG.
3. FINISHED GRADE
4. GRAVEL BASE, DEPTH AS SPECIFIED
5. COMMON HALF BRICK, 2 TOTAL, INSTALL ONE ON EACH SHORT SIDE OF BOX.
6. FEMALE ADAPTER PER PLAN, SLIP X FPT
7. LATERAL LINE PER PLAN

L — EMITTER ZONE AUTOMATIC FLUSH VALVE WITH MPT CONNECTION
N.T.S.

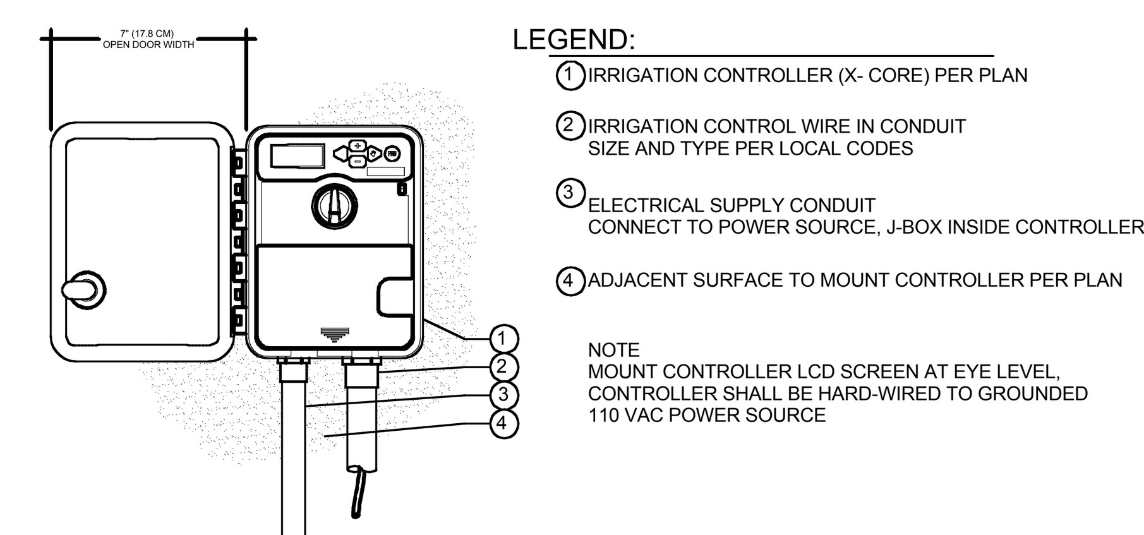


Notes:
1- See irrigation legend for mainline size and type.
2- All sleeves shall be Sch. 40 PVC pipe.
3- All sleeves shall extend 12" beyond the edge of pavement.
4- End of sleeves shall be located with a wooden stake or PVC pipe. Locators shall run continuously from the end of the sleeve to finished grade.

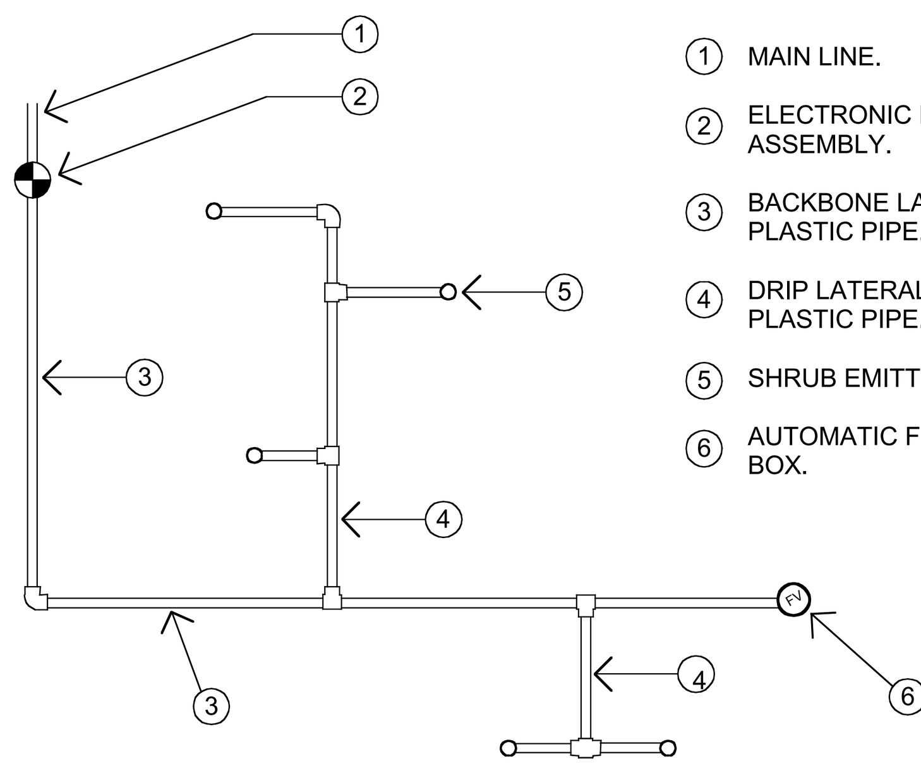
H — PIPE BENEATH PAVEMENT
N.T.S.



D — RFC WITH GENERIC WALL MOUNT CONTROLLER
Hunter NOT TO SCALE



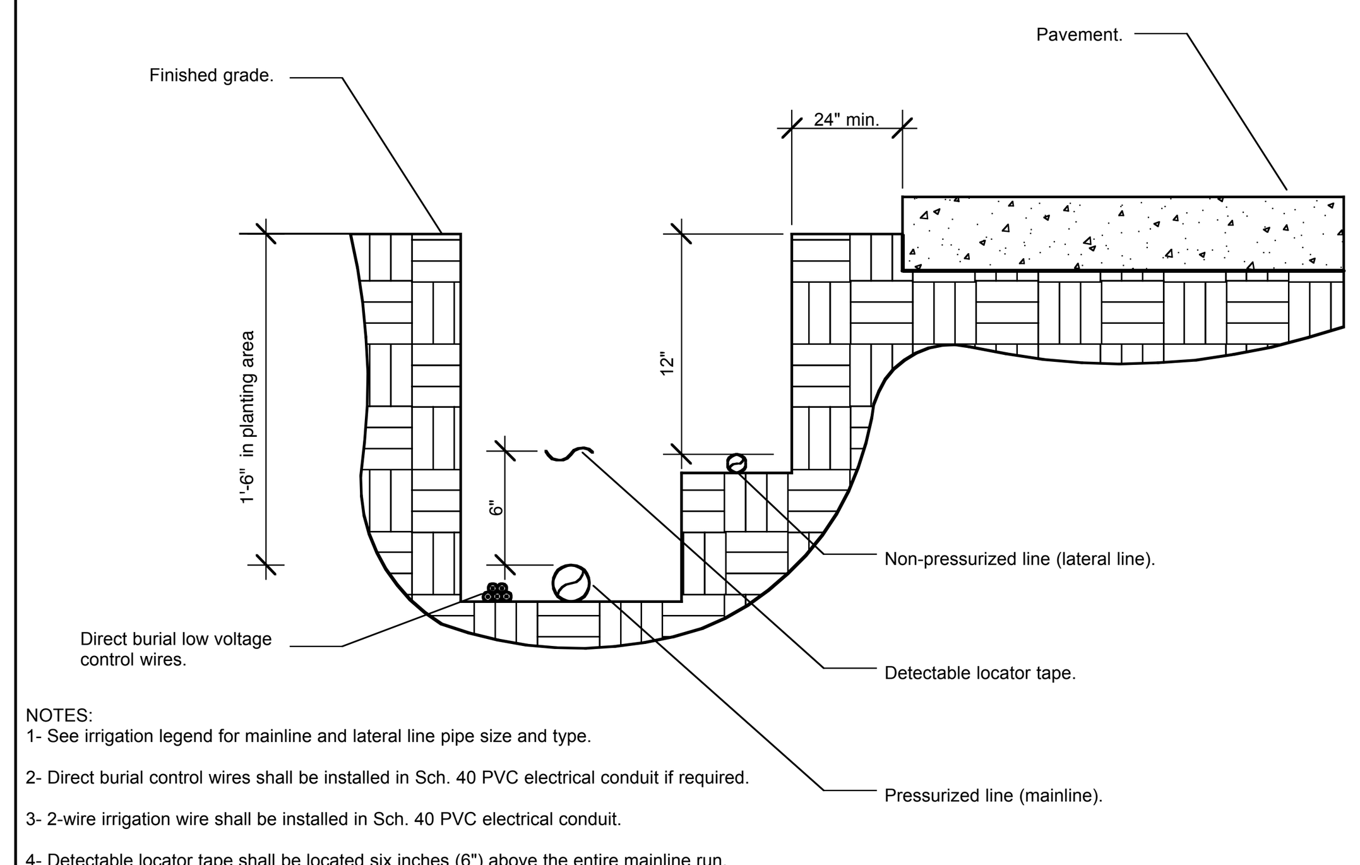
C — X-CORE - WALL MOUNT
Hunter NOT TO SCALE



1. MAIN LINE.
2. ELECTRONIC EMITTER CONTROL VALVE ASSEMBLY.
3. BACKBONE LATERAL - PVC CLASS 200 IPS PLASTIC PIPE.
4. DRIP LATERAL - PVC CLASS 315 IPS PLASTIC PIPE.
5. SHRUB EMITTER (TYPICAL).
6. AUTOMATIC FLUSH VALVE IN BUBBLER BOX.

NOTES:
1. RECOMMENDED MINIMUM FILTRATION: 120 MESH
2. PRESSURE AT FLUSH VALVE SHALL BE MIN 15 PSI

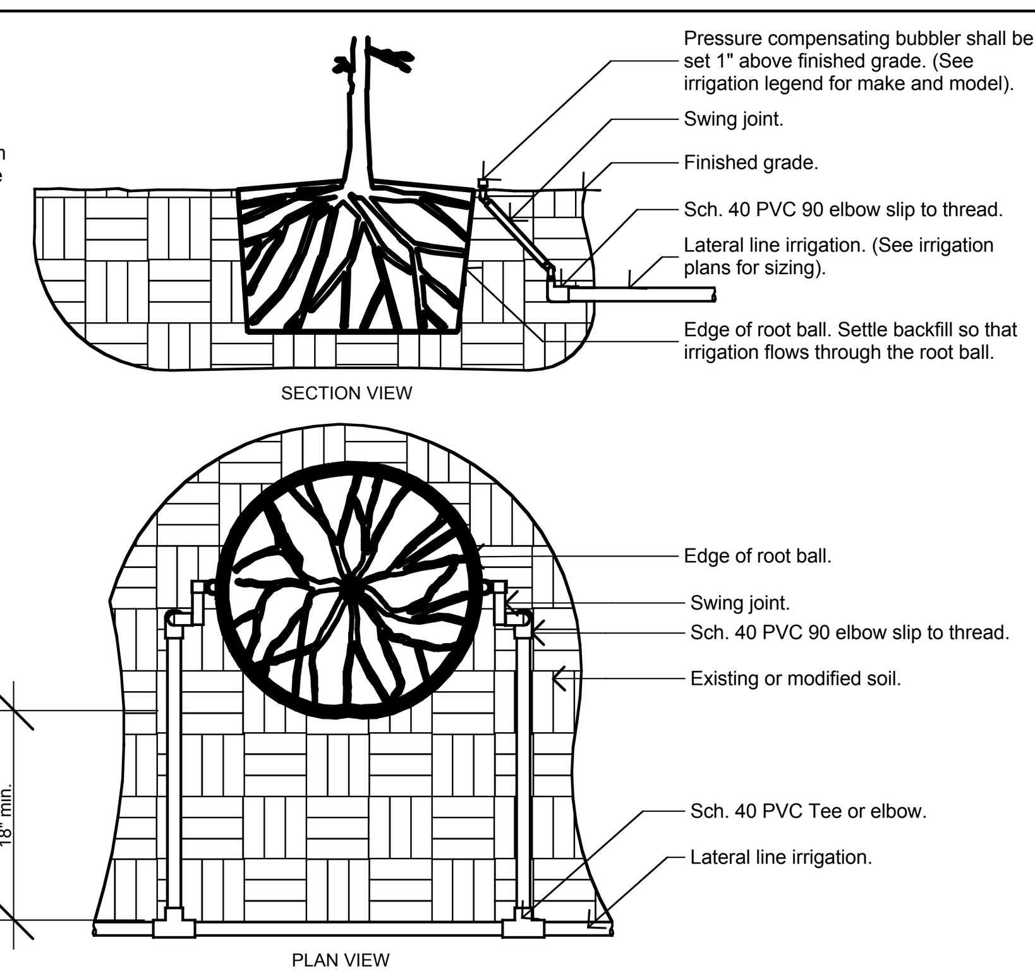
K — DRIP LAYOUT SCHEMATIC
N.T.S.



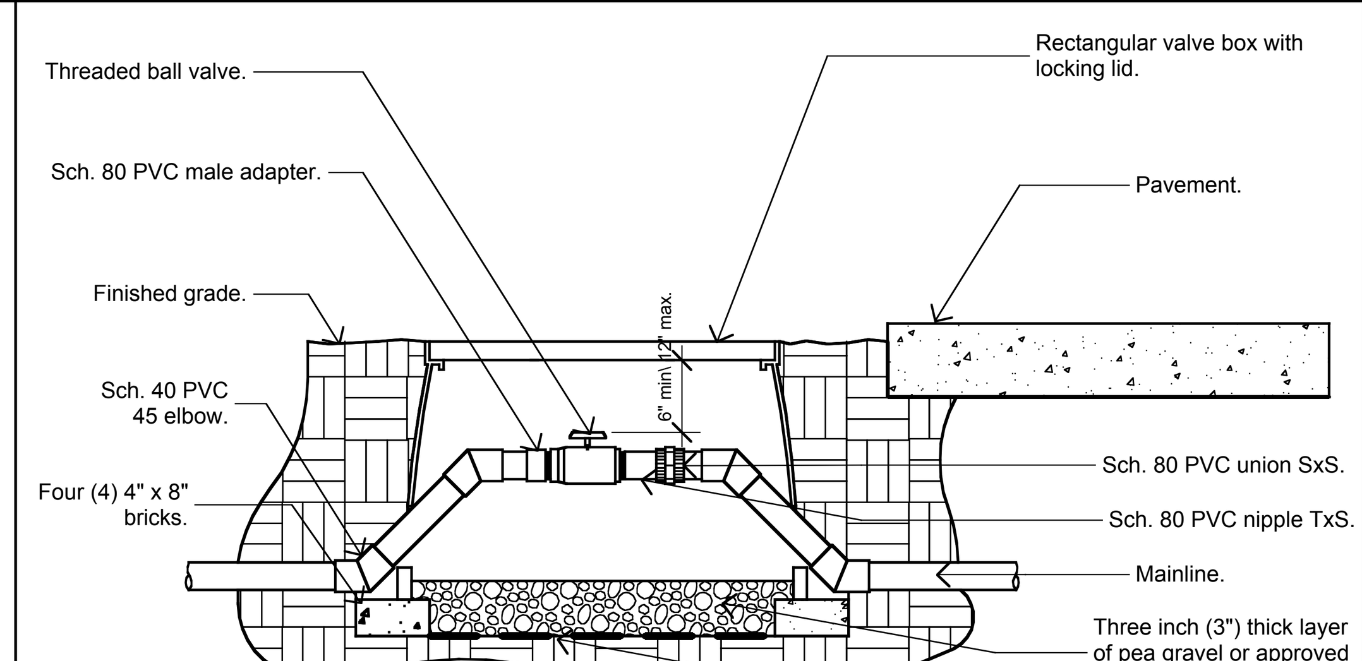
NOTES:
1- See irrigation legend for mainline and lateral line pipe size and type.
2- Direct burial control wires shall be installed in Sch. 40 PVC electrical conduit if required.
3- 2-wire irrigation wire shall be installed in Sch. 40 PVC electrical conduit.
4- Detectable locator tape shall be located six inches (6") above the entire mainline run.

G — IRRIGATION TRENCHING
N.T.S.

Notes:
1- All irrigation fittings shall be Sch. 40 PVC unless specified otherwise.
2- All threaded connections from Sch. 40 to Sch. 80 PVC shall be madeusing teflon tape.
3- Contractor shall settle the area around the bubbler and edge of the root ball so that all irrigation flows through the root ball.

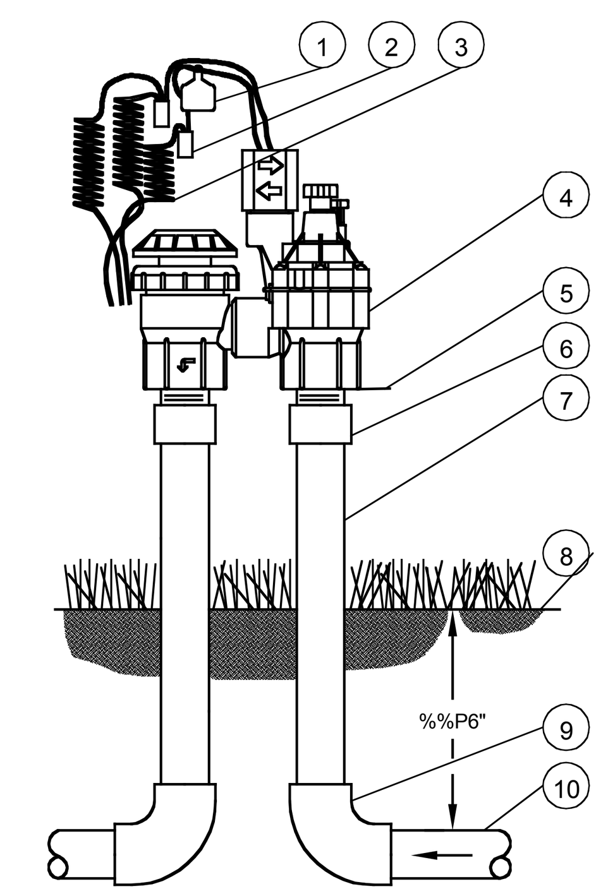


J — IRRIGATION BUBBLER (2) W/ LAYOUT
N.T.S.



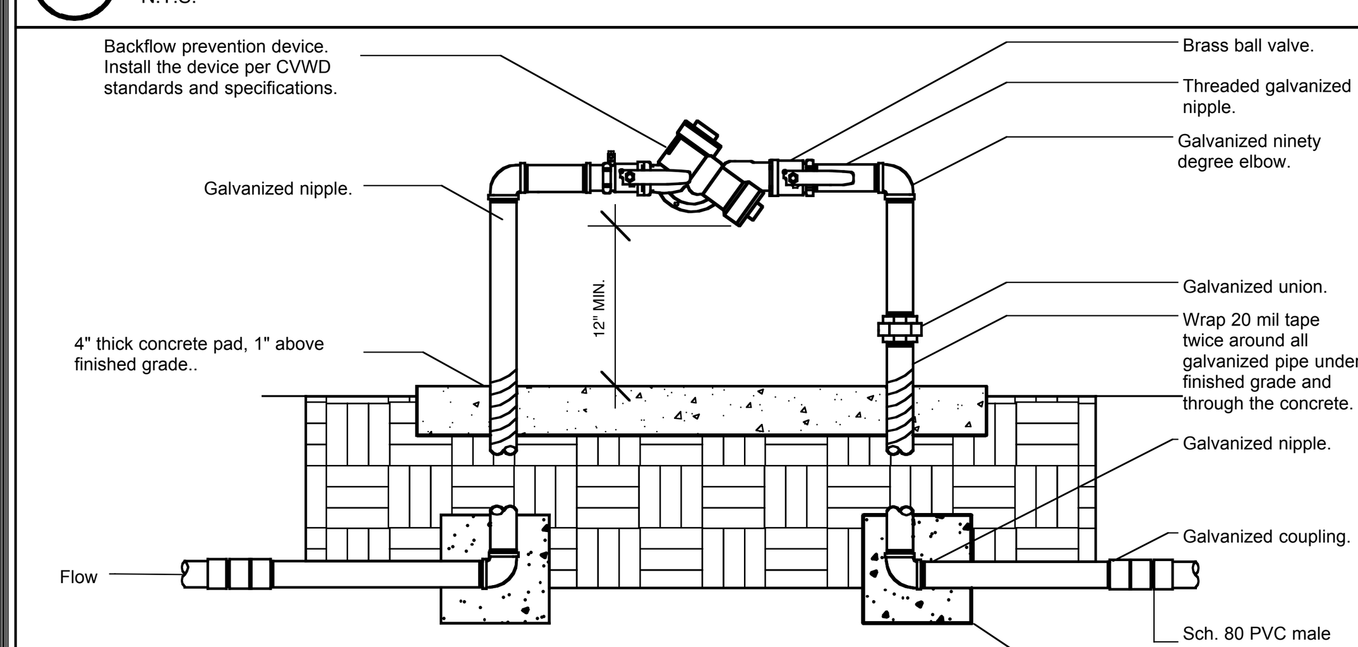
Notes:
1- Locate valve boxes in planting areas.
2- Wrap valve box with a minimum of 3 mil thick plastic and secure it using duct tape or electrical tape.
3- All threaded connection to be made using teflon tape.
4- All changes in elevation shall be made using Sch. 40 PVC 45%%D elbows.

F — BALL VALVE - 3" AND SMALLER
N.T.S.



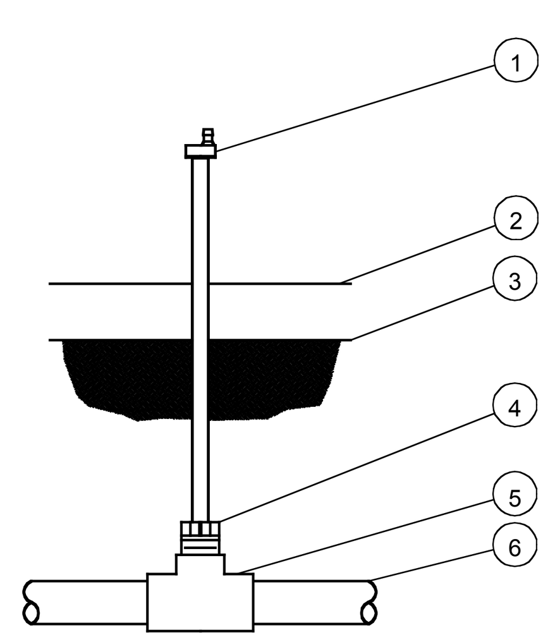
1. ID TAG: RAIN BIRD VID SERIES
2. WATERPROOF CONNECTION: RAIN BIRD SPLICE-1 (1 OF 2)
3. 30-INCH LINEAR LENGTH OF WIRE, COILED
4. REMOTE CONTROL VALVE: RAIN BIRD 100-ASVF
5. INSTALL 6-INCH MIN. ABOVE HIGHEST POINT OF DISCHARGE
6. UV RADIATION RESISTANT PVC SCH 40 MALE ADAPTER (1 OF 2)
7. UV RADIATION RESISTANT PVC SCH 40 PIPE (1 OF 2)
8. FINISH GRADE/TOP OF MULCH
9. PVC SCH 40 ELL (1 OF 2)
10. PVC LATERAL PIPE (1 OF 2)

B — ELECTRIC REMOTE-CONTROL VALVE ASVF Series
N.T.S.



Note:
1- All assembly parts (threaded nipples, fittings, etc.) shall be galvanized or brass per local codes and requirements.
2- Galvanized nipple shall extend 12" past the edge of the concrete footing.
3- Sch. 80 PVC male adapter shall be used in connection from galvanize to the mainline.
4- Backflow prevention device shall be located as close as possible to the landscape meter.
5- Backflow prevention device shall be located in planting area unless approved by Owner's Representative.
7- All backflow prevention devices shall have freeze blanket included upon installation.
8- All galvanized connections shall to be made using pipe thread sealant. All Sch. 80 PVC to galvanized connections to be made using teflon tape.

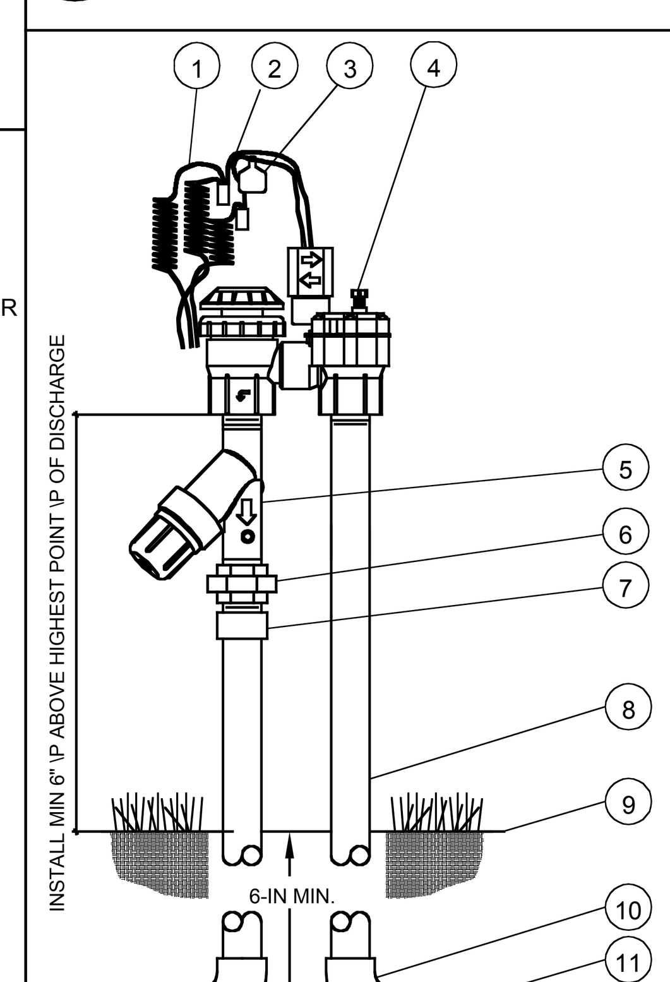
I — BACKFLOW PREVENTION DEVICE
N.T.S.



1. SINGLE-OUTLET 10-32 THREADED INLET X BARB OUTLET EMITTER: RAIN BIRD XERI-BUG 1032 EMITTER
2. TOP OF MULCH
3. FINISH GRADE
4. POLYFLEX RISER AND ADAPTER ASSEMBLY: RAIN BIRD PFR-FRA
5. PVC SCH 40 TEE OR ELL
6. PVC LATERAL PIPE

NOTE:
1. RAIN BIRD XERI-BUG 10-32 THREADED INLET X BARB OUTLET EMITTERS ARE AVAILABLE IN THE FOLLOWING MODELS: XB-05PC-1032 0.5 GPH XB-10PC-1032 1.0 GPH XB-20PC-1032 2.0 GPH

E — XERI-BUG 1032 THREADED EMITTER ON POLYFLEX RISER INTO PVC
N.T.S.



1. 30-INCH LINEAR LENGTH OF WIRE, COILED
2. WATERPROOF CONNECTION: RAIN BIRD DB SERIES (1 OF 2)
3. ID TAG
4. LOW FLOW ANTI-SIPHON VALVE: RAIN BIRD ASV-LF-075 VALVE (INCLUDED IN XACZ-075-PRF KIT)
5. PRESSURE REGULATING FILTER: RAIN BIRD PRF-075-RBY (INCLUDED IN XACZ-075-PRF KIT)
6. PVC SCH 80 UNION
7. PVC SCH 40 MALE ADAPTER
8. UV RADIATION RESISTANT PVC SCH 40 PIPE (1 OF2)
9. FINISH GRADE/TOP OF MULCH
10. PVC SCH 40 ELL (1 OF 2)
11. PVC LATERAL PIPE (1 OF 2)

A — XACZ-075-PRF 3/4" LOW FLOW CONTROL ZONE KIT
N.T.S.

SECTION 02810 IRRIGATION SYSTEMS
PART 1 - GENERAL
1.01 SUMMARY
B. Section Includes:
1. Irrigation system.
2. Line voltage connection of irrigation controller.
C. Related Sections:
4. Section 02900: Planting.

1.04 QUALITY ASSURANCE
A. Regulatory Requirements:

Comply with local, municipal and state laws, rules, and regulations governing or relating to this Work. Wiring shall conform to National Electrical Code and local codes.

B. Best Management Practices: Conform to "Handbook Five: A Guide for Implementing Large Scale Irrigation Projects" as required by The California Water Conservation in Landscaping Act (Assembly Bill 325).

1. AB 325 California Calculation of Estimated Applied Water Use (EWU).

2. AB 325 California Calculation of Maximum Applied Water Allowance (MAWA).

C. Conform to California Code of Regulations, Division 2, Chapter 2.7, Model Water Efficient Landscape Ordinance.

D. Manufacturers Instructions: The manufacturer's instructions and detailed drawings shall be followed in all cases where the manufacturers of products and/or materials furnish installation details not indicated in the Drawings and Specifications.

E. Qualifications: Work shall be performed by skilled workers with a minimum of 5 years experience in work of similar scope and complexity.

PROJECT CONDITIONS
A. Before excavation, contact the "Underground Service Alert of Southern California" (USASC) for information on buried utilities and pipelines.

1.07 TESTING AND INSPECTION
Notify the IOR 24 hours in advance of the pressure side piping inspection.
1. Pressure Side Piping: After all welded joints have cured for at least 24 hours, all lines flushed and outlets are capped, the system shall be tested under normal street water pressure for a minimum of 4 hours. All joints shall remain exposed for inspection during the pressure test. Center loading of piping with small loads of sand backfill to prevent arching or slipping under pressure is permitted.

2. Correct all defective Work and repeat tests until the entire system is tested watertight.

Submit a request for a final inspection 48 hours in advance. Perform a coverage test to determine if the coverage of water to planting areas is complete and adequate as required.

Final Inspection: The following items shall be considered part of the final inspection:
All specified products and materials.
2. Irrigation coverage test, providing 100% head to head coverage.
3. Soils compacted in trenches and around sprinkler heads, level with existing grades.
4. Controller and cabinet installation. Sprinkler control valves and boxes.
Backflow devices, pressure regulators, pumps.Automatic sensors.
Final site review shall include operating each system in its entirety in the presence of the Landscape Architect or IOR. Provide any required adjustments and correct defective Work as required.

PART 2 - PRODUCTS 2.01 IRRIGATION SYSTEM

A. All systems shall be automatic with electrically operated control valves.

B. Point of connection (POC) for all irrigation systems: Provide a single POC on a designated irrigation meter, with flow monitoring, unless otherwise indicated on the Drawings.

Flow Sensor and Master Valve Installation: Provide all required protection for main and lateral lines with flow sensors and master valve per each zone controller. Do not install manual control valves to actuate an irrigation zone when using a flow monitoring system.

Full meter protection is required for all irrigation systems by installing reduced pressure principle backflow prevention devices.

Install isolation valves in order to avoid a total system shutdown for maintenance and repairs. Include valves to isolate loop system and major branch lines.

Irrigation System shall incorporate the following requirements:

The flow velocity shall not exceed five (5) feet per second for pressure/lateral lines based on industry standard friction pressure loss values.

Pressure line pipe size shall be sufficient to support a minimum of two control valves operating at the same time, one valve opening while another is closing.

G.P.M. demand and sprinkler head coverage shall follow the manufacturer's requirements.

Remote valves shall be sized no smaller than the piping it serves unless piping is increased in size to reduce friction loss. Remote valves shall then be sized no less than one pipe size smaller than the piping it serves.

2.02 MATERIALS

Provide only new materials, of brands and types noted on Drawings and in the Specifications.

B. Plastic Pipe and Fittings:

1. Plastic Pipe: Schedule 40, class 200 IPS and class 315 IPS, as called out on drawings, extruded from 100 percent Virgin Polyvinyl Chloride (PVC) Compound, meeting requirements of Class 12454-B of ASTM D1784.

a. Plastic pipe shall be continuously and permanently marked with the following information: Manufacturer's name, nominal pipe size, Schedule or Class, SDR (Standard Dimension Ratio, or pressure rating in psi) National Sanitation Foundation (NSF).

2. Plastic fittings: Schedule 40 molded from PVC Type I Compound, conforming to the requirements of specification ASTM D2466.
a. Plastic Nipples: PVC schedule 80 conforming to ASTM D2467.

b. PVC male threaded fittings are not allowed.

3. PVC primer and solvent for chemical weld of pipe and fittings shall be as recommended by pipe manufacturer. Containers for solvent and primer shall be clearly marked with manufacturer's data. Solvent and primer shall not be more than one year old. Blue or red hot glue is not permitted.

RAIN SWITCH SENSOR

1. Rain Switch Sensor shall be 24-volt for wiring to one 110 volt or 220 volt A.C. All electrical devices and wiring shall comply with the National Electrical Code, Specifications, and local codes. Hunter Mini-Click, or equal.

M. Ground Rod

1. Ground rod shall be 5/8 inch X 8 foot copper clad.

N. Back Flow Protection Device:

To operate on a reduced pressure principle furnished with a full port shut off valve up stream and down stream of the backflow device. Provide enclosure to house backflow device.

2. Wye strainers at back flow device shall be 125 pounds class customer brass with 40 mesh Monel screen.

O. Tracer Wires: A No. 14, Green, Type TW plastic-coated copper tracer wire shall be installed with non-metallic irrigation main lines.

P. Control Wires to Control Valves: Control wires to electrically operated solenoid valves shall be direct burial type UF#14 AWG copper, 3/64 inch thick PVC coating. UL approved for Class 2 wiring for 24 volts, 60 cycle AC use UL recognized waterproof connectors to connect control wires to solenoids.

Q. Valve Boxes:

1. Rectangular valve boxes shall be green plastic 12 inch wide, 18 inch long, and 12 inch deep (outside dimensions) or larger as may be required to provide specified clearances.

2. Round valve boxes shall be green, 7 inches diameter by 10 inches high with locking cover.

3. All covers on valve boxes shall be vandal resistant, locking, and marked "Water". Tops of boxes shall be set flush with finished turf grade or 2 inch above grade in shrubbery or groundcover areas.
The cover shall be identified with 3 inch high stenciled letters "RCV (with Station No.) GV, QC, etc."

R. Remote Control Valve Boxes: Automatic control valves shall be enclosed in green rectangular plastic boxes with locking covers.

PART 3 - EXECUTION

3.01 CONNECTIONS TO SUPPLY

A. Source of water supply shall be as indicated on the Drawings.

B. Connection to piping shall be provided with proper fittings:

1. When connecting to point of connection (POC) above grade all pipes shall be brass or copper with required fittings unless otherwise indicated.

2. POC from above to below grade transition shall be brass or copper pipe to a depth of 18 inches from top of pipe.

3. No steel pipe or fitting shall be installed below grade.

4. When connecting plastic pipe to copper, brass, or steel material, provide a schedule 80 PVC nipple.

5. All exposed copper or brass material above grade shall be painted green in color.

6. Connect steel and copper pipe or tube with a 6-inch brass nipple.

3.02 PIPE INSTALLATION

A. Excavate trenches deep enough to provide earth coverage of 12 inches for non-pressure lines and 18 inches for pressure lines, from finished grades to top of pipe. Bottom of trenches shall be free of rocks, clods and other sharp-edged objects. Below grade piping shall be installed on a firm sand bed for its entire length.

B. Plastic pipe and fittings shall be solvent welded. PVC pipe ends shall be cut ninety (90) degrees and cleaned of all cutting burrs prior to cementing. Use approved reaming tool. Pipe ends shall be wiped clean with a rag and lightly wetted with PVC primer. Cement shall be applied with a light coat on the inside of the fitting and a heavier coat on the outside of the pipe. Pipe shall be inserted into the fitting and given a quarter turn to seat the cement. Excess cement shall be wiped from the outside of the pipe. The pipe will be tested as indicated in article 1.07.

C. Cure welded joints at least 15 minutes before moving or handling, and at least 24 hours before applying pressure to system, unless otherwise recommended by joint solvent manufacturer.

Pressure piping installed under a driveway or sidewalk shall be sleeved. The sleeves shall be two pipe sizes larger than the pressure piping.

Piping through cement and asphalt pavement shall be L type copper with ? inch of foam wrap or other required material around the pipe to allow for expansion.

All holes cored through walls shall be two pipe sizes larger to allow for foam wrap around pipe.

PVC pipes shall not be installed above grade unless reviewed by the Architect.

H. Lettering shall be face up on all below grade PVC piping. Pipe serving tree areas shall be located not less than 30 inch from center of tree area.

3.04 VALVE BOX INSTALLATION

A. Automatic control valves shall be enclosed in valve boxes of HDPE or pololefin fibrous material, with locking lids.

B. Valve boxes shall be of sufficient size to provide no less than 1-1/2 inch of clearance on all sides of equipment installed within. The bottom section shall be slotted so as to extend below the pipe. Extensions shall be added as required to meet grade requirements.

C. Valve boxes installed in concrete or asphalt shall be set one inch below pipe and extensions shall be added as required to meet grade requirements. A homogeneous finished material shall surround valve boxes 4 inches below finished grade and match existing grade conditions.

D. All valve boxes shall be installed level to finish grade except in ground cover areas which shall extend 2 inches above finish grade.

E. Bottom of valve boxes shall be set level on 4 full size corner bricks on 2 inches of gravel bed..

F. Pea gravel shall be filled up to the bottom of the manual and remote valve and at least 4 inches of gravel inside of the valve box.

3.10 CONTROL WIRE

A. Mainline control wires shall be taped together at five (5) foot intervals with black electrical tape, then laid parallel to pressure line with 18 inches minimum cover to finish grade.

B. Control wiring located under paved areas shall be encased in Schedule 40 PVC pipe and shall extend a minimum of 12 inches beyond pavement.

C. Wires shall be color coded, white for common ground wire, red or black for valve control wires.

D. Wire splicing shall only be performed in controller cabinet and at remote control valve boxes. Splices shall be made with a mechanical connector equal to "Scotch-lok" and encased in epoxy resin to provide a permanent watertight connection.

E. Stubbed out control wires shall terminate in concrete yard boxes.

F. Wire passing under future or existing paving or structures shall be encased in Schedule 40 PVC pipe extending at least 12 inch beyond edges of the paving or structure.

3.11 TRACER WIRES

A. Tracer wire #14 or greater shall be installed on bottom of trench, adjacent to vertical pipe projections, carefully installed to avoid stress from backfilling, and shall be continuous throughout length of pipe with spliced joints soldered and covered with insulation type tape.

B. Tracer wire shall follow main line pipe and branch lines and terminate in yard box with gate valve controlling these main irrigation lines. Provide sufficient length of wire to reach finish grade, bend back end of wire to make a loop and attach a Dymo-Tape type plastic label with designation "Tracer Wire."

C. Record locations of tracer wires and their terminations on project record documents.

SEE SHEET L-2 FOR CONTINUATION

C - 23697
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027

NO	DATE	REVISION
1	5.29.24	CVWD SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		
4		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON DARLING
ARCHITECT
2259 W.PASEO DEL MAR
SAN PEDRO, CA. 90732 (310) 619-9540

SHEET TITLE
MODEL 1374
IRRIGATION DETAILS
IRRIGATION SPECIFICATIONS
PART ONE

DATE 8/10/25 JOB
SHEET
IR-2
OF DWGS

FOUR BEDROOM
ONE-STORY SINGLE FAMILY RESIDENCE

COACHELLA HOMES
MARIPOSA POINT
1412

FOR THE

COACHELLA VALLEY HOUSING COALITION

LOCATED IN THE
CITY OF

COACHELLA, CA

AT VARIOUS PROJECT PARCELS

83554 AVENIDA CAMPANAS	779-272-001	LOT 1
83560 AVENIDA CAMPANAS	779-272-002	LOT 2
83572 AVENIDA CAMPANAS	779-272-004	LOT 4
83584 AVENIDA CAMPANAS	779-272-006	LOT 6
83596 AVENIDA CAMPANAS	779-272-008	LOT 8
50358 CALLE XAVIER	779-272-010	LOT 10
50370 CALLE XAVIER	779-272-012	LOT 12
50382 CALLE XAVIER	779-272-014	LOT 14
50394 CALLE XAVIER	779-272-016	LOT 16
50406 CALLE XAVIER	779-301-002	LOT 18
50418 CALLE XAVIER	779-301-004	LOT 20
50430 CALLE XAVIER	779-301-006	LOT 22
83579 AVENIDA SAN DOMINGO	779-301-008	LOT 52

GENERAL NOTES (CONTINUED)

12. The Contractor shall provide all materials and work required to provide a finish to all new work exposed to the interior or exterior provided in this contract. This shall include two finish coats of paint over base coat at all paintable surfaces. Entire surface of existing surfaces shall be painted when any portion is disturbed by work.

13. SIMPSON A35 SHALL BE SUBSTITUDED WITH SIMPSON LTP4 AT LOCATIONS NECESSITATING A FLAT APPLICATION.

14. The design, timing, implementation and construction of the temporary bracing of the structure and its elements during construction is the responsibility of the general contractor

SPECIFIC NOTES AND INFORMATION

The Project shall comply with California's Green Building Code (Part 11 of Title 24, California Code of Regulations, effective 1.1,2020 with any Supplement(s) in effect . Provide and maintain a copy of said code and Residential checklist on jobsite during construction.

ENERGY REQUIREMENTS:

The Project shall be constructed using materials, equipment and/or systems that comply with the energy efficiency standards of the State of California Title 24 .

ENVIRONMENTAL REQUIREMENTS:

The Project shall be constructed using materials, equipment and/or systems that comply with the environmental standards of the City of COACHELLA, RIVERSIDE County, the State of California, and the US Federal government (EPA).

The Project shall comply with all regulatory guidelines and code requirements pertaining to outgassing of materials such as, but not limited to, VOC and formaldahyde.

GENERAL NOTES

1. The Contactor shall provide temporary barricades and all other means required to maintain a safe environment during construction.
2. All work, materials, equipment, and furnishings indicated and or noted within the Construction Documents shall be new and constructed, provided and installed by the Contractor unless noted otherwise.
3. The General Contractor is responsible for furnishing all subcontractors with a complete set of Contract Documents.
4. If there is a conflict between disciplines within the Contract Documents, the Architect shall be notified in writing prior to work. If there is a conflict between the Contract documents and the conditions in the field, the Architect shall be notified in writing prior to work.
5. Modifications to the construction work as described within the Construction Documents shall not be made without the prior written approval of the Architect.
6. All information shown/identified in the Contract Documents relative to existing conditions is shown as a general representation. Contractor shall verify actual field conditions prior to submitting bid.
7. If there is a conflict between disciplines within the Contract Documents, the Contractor and Subcontractor shall provide in His or Her bid the more expensive option.
8. NO SUBSTITUTIONS or DEVIATIONS from the Construction Documents will be acepted unless prior written authorization is obtained from the Architect. Submittals and requests for substitutions shall be made at least 14 business days prior to the commencement of the work. A letter, drafted and signed by each subcontractor, affirming his/her understanding of this requirement, shall be submitted to the owner's representitive and the Architect at least 14 calandar days prior of the commencement of work of that trade.
9. All egress doors shall comply with CBC Sec. 1003.3.1.8 for proper door hardware.
10. All demolished items, debris, trash, excavated earth that is not to be used on site, and any extra material that is not needed for the completion of the job shall be hauled away and legally disposed of off-site at the Contractor's expense.
11. It is the responsiblity of the Contractor to provide and install all required items and perform all work necessary to ensure a complete job, such that all electrical and lighting systems, access control systems, plumbing and mechanical systems, irrigation systems and controller, data, cable t.v. and phone systems shall be made operational by the completion of the construction period as set by the Contract.

CONSULTANTS

STRUCTURAL ENGINEER

PETRA STRUCTURAL ENGINEERS

17981 SKY PARK CIRCLE SUITE O,
IRVINE, CA 92614
(949) 748-7170

ENERGY CONSULTANT

CALIFORNIA LIVING & ENERGY

3015 DALE COURT, CERES, CA 95307
(209) 538-2879

PLANNING DATA

ZONING DISTRICT DESIGNATION — RESIDENTIAL PLANNED DEVELOPMENT

4 BEDROOM RESIDENCE
LIVING AREA 1412.0 SQ. FT.
GARAGE AREA 470 SQ. FT.
TOTAL - 1882.0 SQ. FT.

ATTIC VENTILATION REQUIREMENT	ATTIC VENTILATION PROVIDED
1882 SQ. FT / 150 (FACTOR) = 12.5 SQ. FT TOTAL	1 1/2" X 12" EAVE VENTS (56) @ .125 SQ. FT = 7.0 SQ. FT. (6) 15"X 24" GABLE END VENTS @ 2.5 SQ. FT. = 15.0 SQ. FT. (1) 12" X 18" GABLE END VENT @ 1.5 SQ. FT. = 1.5 SQ. FT. 23.5 SQ. FT. PROVIDED > 12.5 REQUIRED THERFORE O.K.

CONDITIONS OF APPROVAL OF PLANS

1. CIVIL AND STRUCTURAL SHEETS SHALL BE SIGNED BY RESPONSIBLE DESIGN PROFESSIONAL.
2. TRUSS CALCULATIONS SHALL BE REVIEWED AND APPROVED BY ENGINEER OF RECORD.

DEFERRED SUBMITTALS

1. MANUFACTURED ROOF TRUSSES DESIGNED AND INSTALLED IN ACCORDANCE WITH THE 2019 CRC.
2. AN AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEM DESIGNED AND INSTALLED IN ACCORDANCE WITH THE 2019 CRC SECTION R313.3 OR NFPA 13D.
3. A ROOFTOP PHOTO-VOLTAIC SOLAR SYSTEM AS REQUIRED BY THE ENERGY CALCULATIONS.

INDEX OF DRAWINGS

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE FOLLOWING:

- 2022 CALIFORNIA BUILDING CODE.
- 2022 CALIFORNIA RESIDENTIAL CODE.
- 2022 CALIFORNIA PLUMBING CODE
- 2022 CALIFORNIA MECHANICAL CODE
- 2022 CALIFORNIA ELECTRICAL CODE
- 2022 CALIFORNIA ENERGY CODE
- 2022 CALIFORNIA GREEN CODE
- CITY OF COACHELLA MUNICIPAL CODE

CODE NOTES

1. ALL WORK SHALL COMPLY WITH THE CALIFORNIA BUILDING STANDARDS CODE FOUND IN STATE OF CALIFORNIA TITLE 24 CCR AS AMENDED AND ADOPTED BY THE COUNTY OF RIVERSIDE CA. AND THE CITY OF COACHELLA, CA.
2. ALL CONSTRUCTION SHALL CONFORM TO STATE AND MUNICIPAL LAWS, CODES AND ORDINANCES, ETC. FOR MIN. STRUCTURAL DESIGN,MATERIALS USED, AND METHODS OF CONSTRUCTION, REFER TO APPLICABLE STATE AND MUNICIPAL BUILDING CODES. PROJECT SHALL BE CONSTRUCTED UNDER ALL APPLICABLE LOCAL BUILDING PERMITS AND INSPECTION PROCEDURES.

BUILDING DATA

CONSTRUCTION TYPE	STORIES	OCCUPANCY GROUP	
TYPE V-B WITH AUTOMATIC FIRE SPRINKLERS (DEFERRED SUBMITTAL)	ONE	RESIDENCE GARAGE	GROUP R DIVISION 3 GROUP U

SCOPE OF WORK

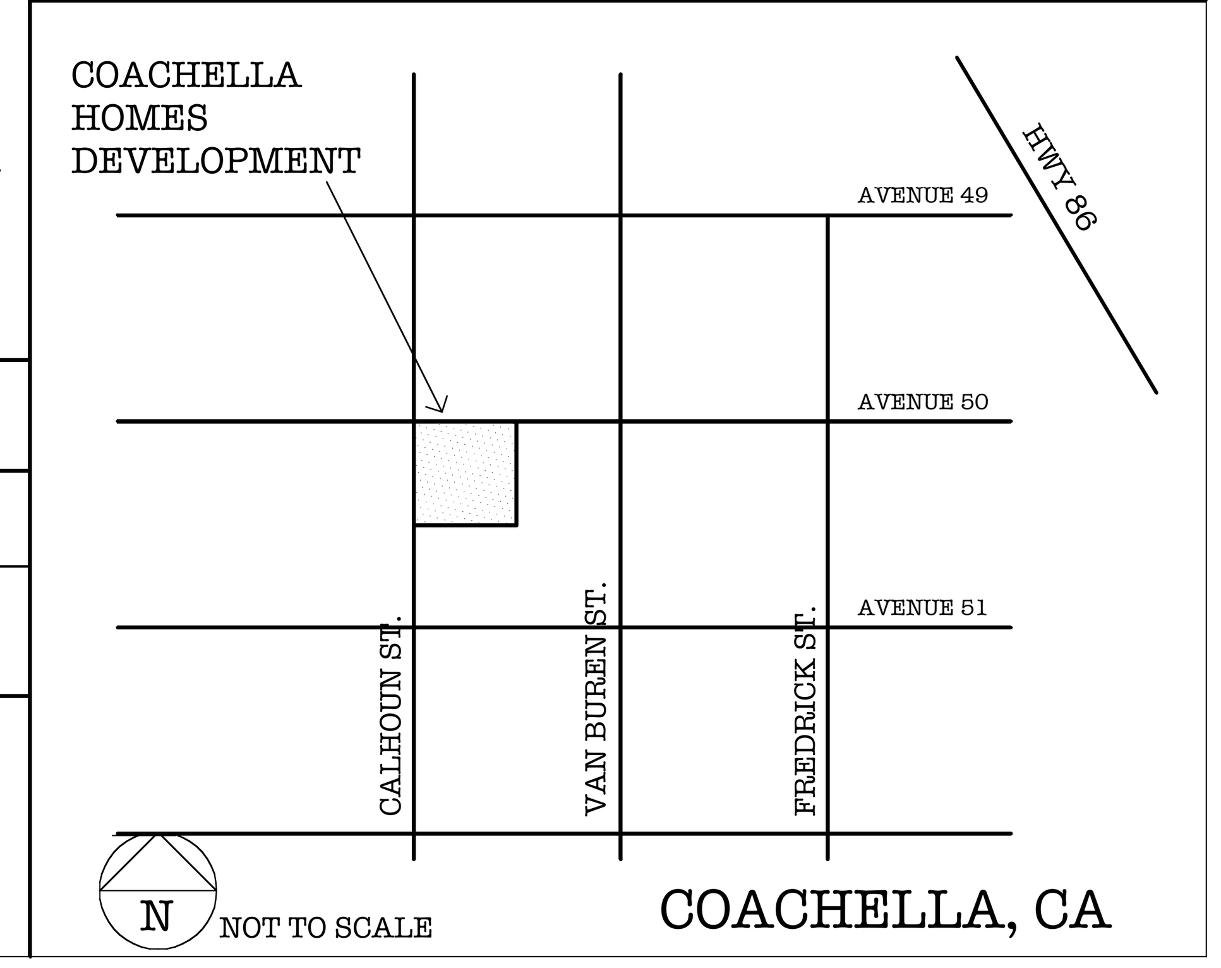
CONSTRUCT A FINISHED SINGLE FAMILY, ONE-STORY, HOUSE WITH ATTACHED GARAGE WITH PLUMBING, MECHANICAL, ELECTRICAL, LANSCAPING AND SITEWORK.

PERMITS

SEPERATE PERMITS SHALL BE REQUIRED FOR SIGNS, FENCES, RETAINING WALLS, TRASH ENCLOSURES, FLAGPOLES, POLE MOUNTED YARD LIGHT FOUNDATIONS, AND PLANTERS.

LICENSED ARCHITECT C - 23697 GARON JAMES JOHN DARLING RENEWAL DATE JULY 31 2027 STATE OF CALIFORNIA

VICINITY MAP



NO	DATE	REVISION
1	6.7.24	CITY SUBMITTAL
2	4.5.25	CITY RE-SUBMITTAL
3	8.11.25	CITY RE-SUBMITTAL
4		
5		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON J. J. DARLING
ARCHITECT
2259 PASEO DEL MAR
SAN PEDRO, CA 90732 (310)619-9540

SHEET TITLE
4 BEDROOM
INDEX, CODE & PLANNING DATA
VICINITY MAP & GENERAL NOTES

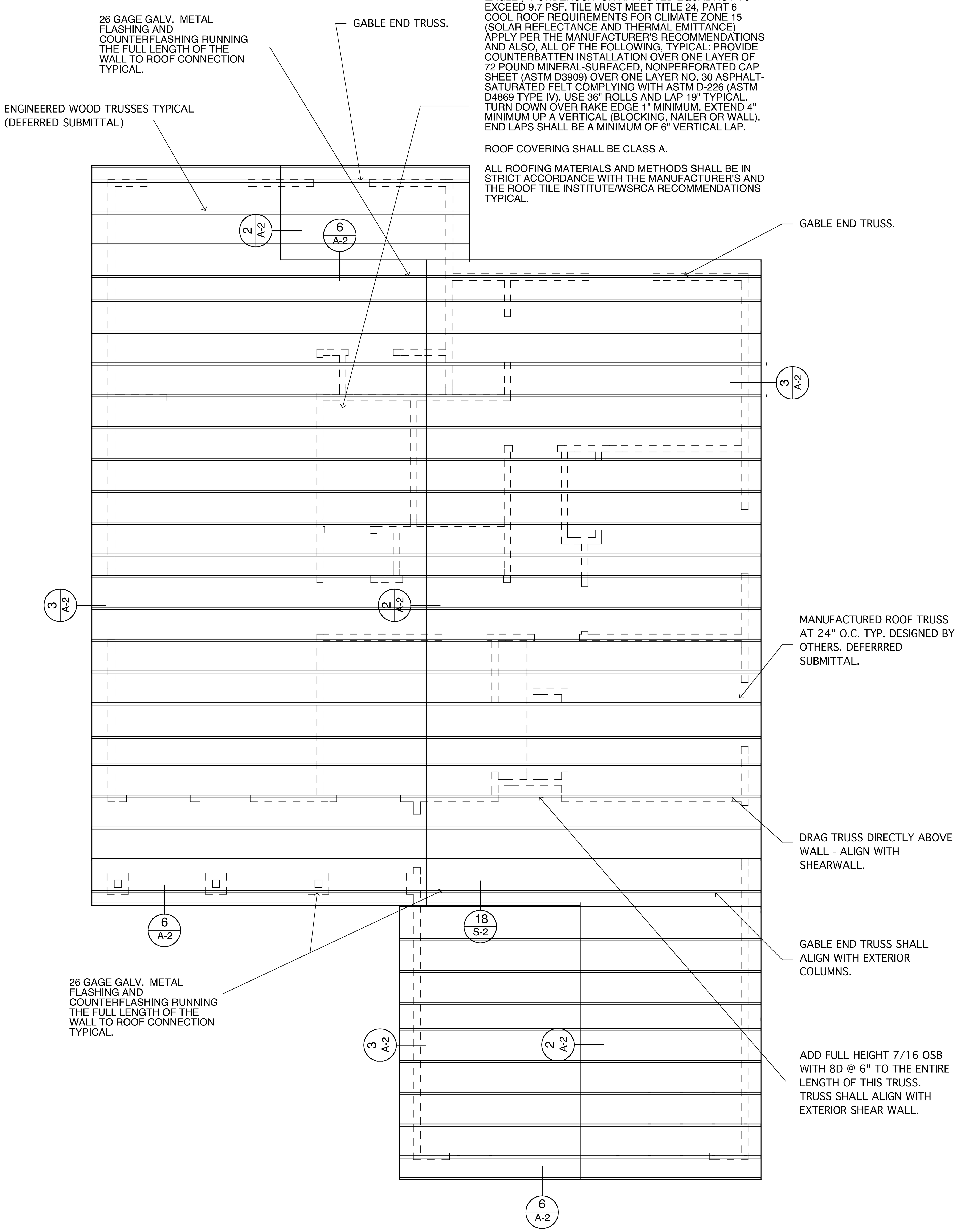
DATE 8/10/25 | JOB

SHEET T-1 OF DWGS

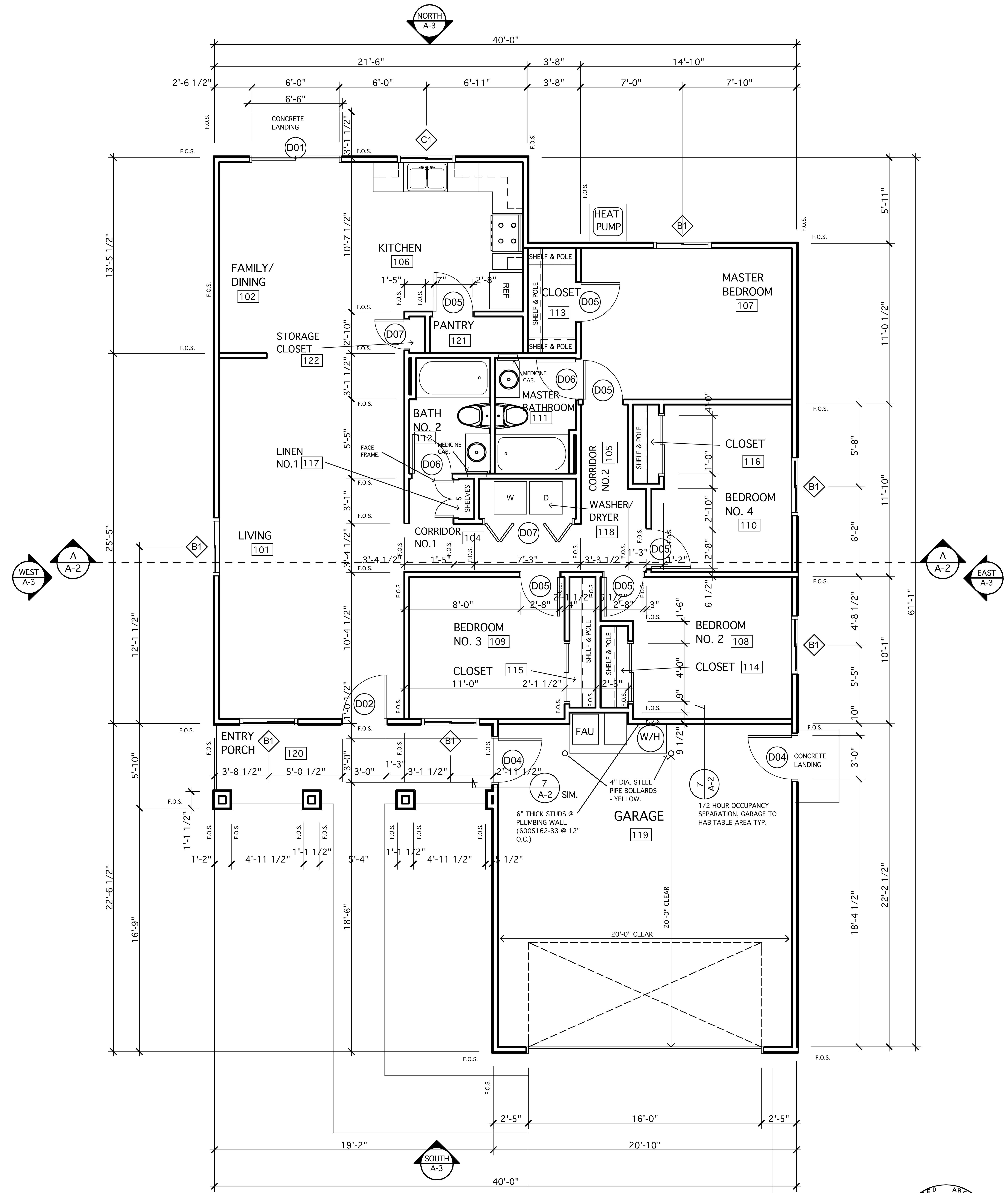
ROOFING: CONCRETE ROOF TILE BY EAGLE IAPMO ER 1900 - VALID THROUGH 01/31/2023 "CAPISTRANO" OR "MALIBU", "BELL AIR", "GOLDEN EAGLE", "PONDEROSA" OR APPROVED EQUAL NOT TO EXCEED 9.7 PSF. TILE MUST MEET TITLE 24, PART 6 COOL ROOF REQUIREMENTS FOR CLIMATE ZONE 15 (SOLAR REFLECTANCE AND THERMAL EMITTANCE) APPLY PER THE MANUFACTURER'S RECOMMENDATIONS AND ALSO, ALL OF THE FOLLOWING, TYPICAL: PROVIDE COUNTERBATTEN INSTALLATION OVER ONE LAYER OF 72 POUND MINERAL-SURFACED, NONPERFORATED CAP SHEET (ASTM D3909) OVER ONE LAYER NO. 30 ASPHALT-SATURATED FELT COMPLYING WITH ASTM D-226 (ASTM D4869 TYPE IV). USE 36" ROLLS AND LAP 19" TYPICAL. TURN DOWN OVER RAKE EDGE 1" MINIMUM. EXTEND 4" MINIMUM UP A VERTICAL (BLOCKING, NAILER OR WALL). END LAPS SHALL BE A MINIMUM OF 6" VERTICAL LAP.

ROOF COVERING SHALL BE CLASS A.

ALL ROOFING MATERIALS AND METHODS SHALL BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S AND THE ROOF TILE INSTITUTE/WSRCA RECOMMENDATIONS TYPICAL.



ROOF PLAN AND TRUSS LAYOUT
1/4"= 1'-0" SCALE



FIRST FLOOR PLAN
1/4"= 1'-0" SCALE

GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027
LICENSED ARCHITECT
STATE OF CALIFORNIA

NO	DATE	REVISION
1	5.24.24	CITY SUBMITTAL
2	4.5.25	SHIFT BEDROOM 2 WINDOW LOCATION
3	8.11.25	CITY SUBMITTAL
4		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON J. J. DARLING
ARCHITECT
2259 PASEO DEL MAR
SAN PEDRO, CA. 90732 (310)619-9540

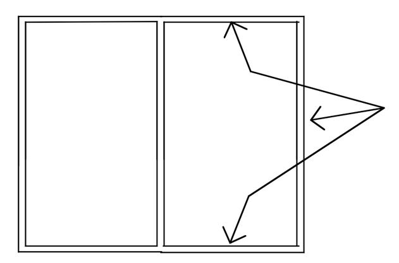
SHEET TITLE
MODEL 1412
4 BEDROOM
FLOOR PLAN
ROOF PLAN & TRUSS LAYOUT

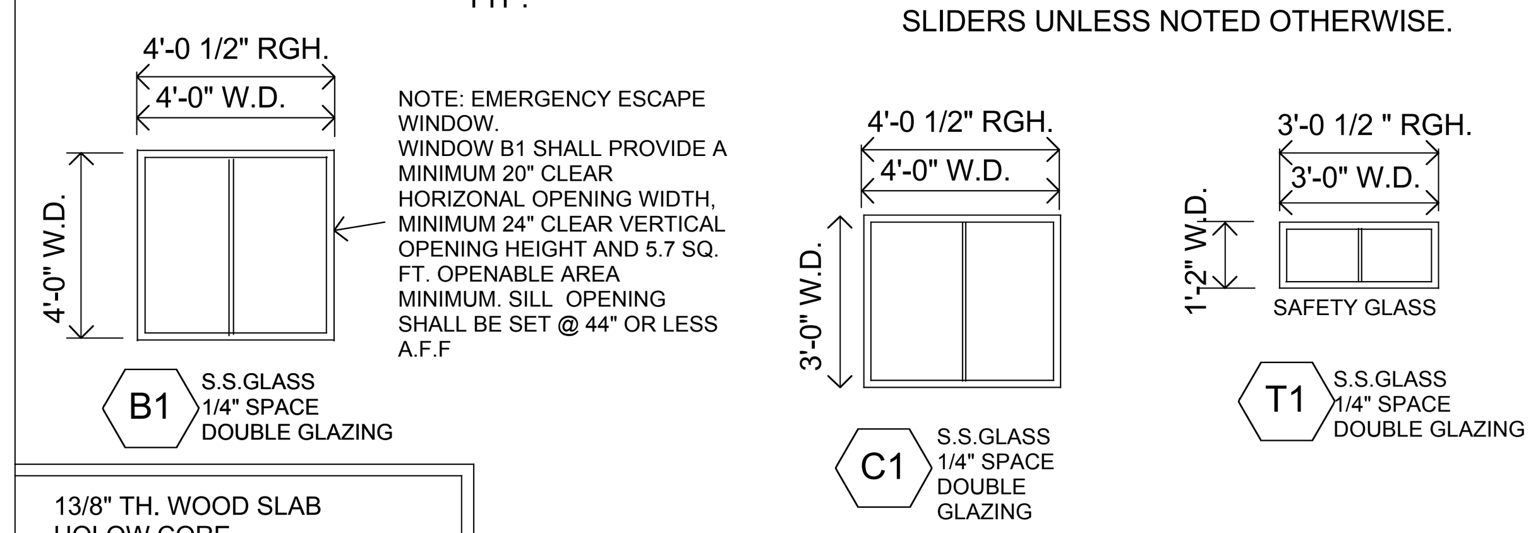
DATE 8/10/25
JOB
SHEET A-1
OF DWGS

WINDOW SCHEDULE

NOTES:

1. LOW E GLASS & U VALUE 0.35 TYPICAL UNLESS NOTED OTHERWISE.
2. PROVIDE OBSCURE GLASS AT TOILETS.
3. ALL ROOM WINDOWS SHALL HAVE "LOUVER-DRAPE" VINYL BLINDS.
4. ALL WINDOWS ARE HORIZONTAL SLIDERS UNLESS NOTED OTHERWISE.





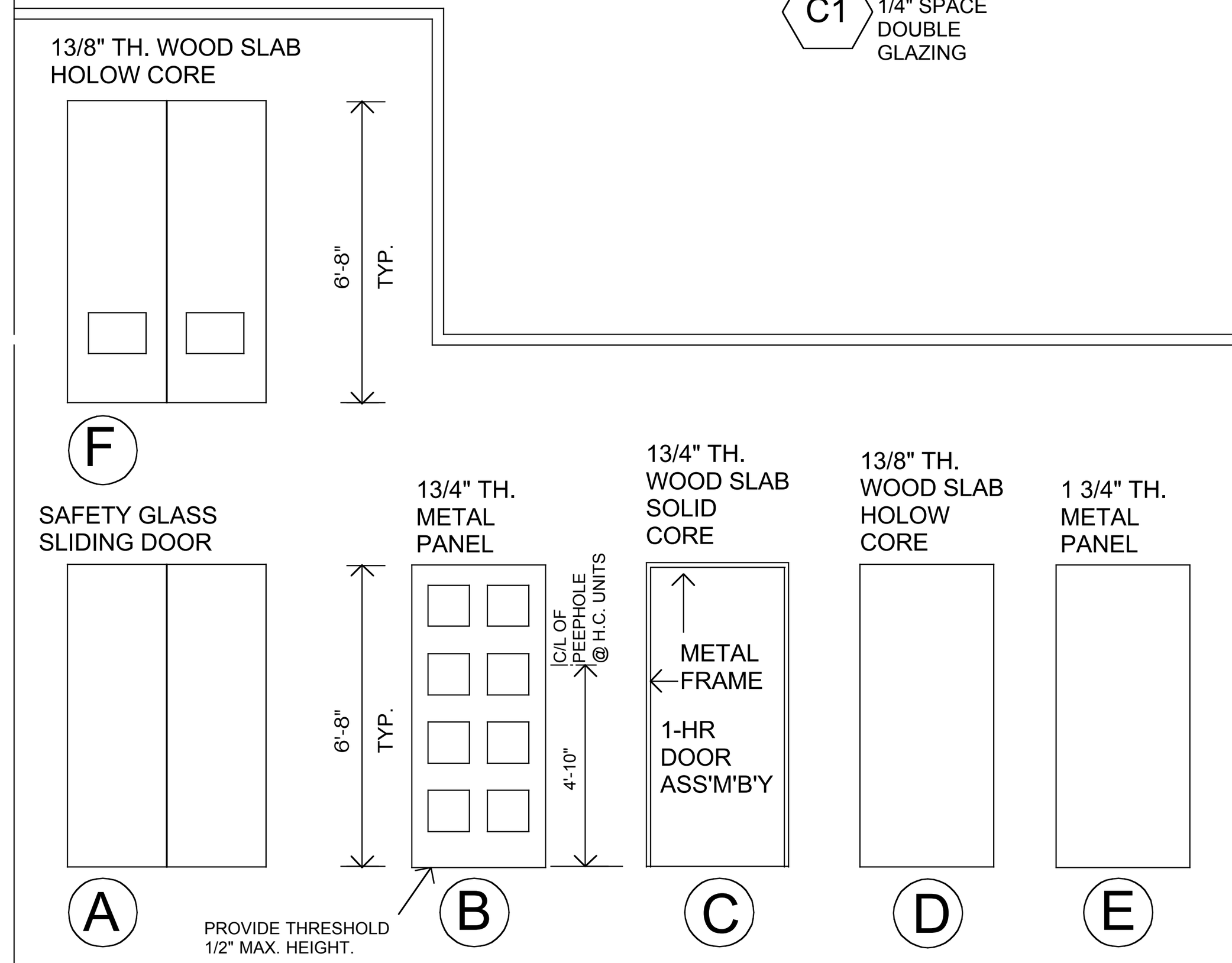
INTERIOR FINISH SCHEDULE

● ENTIRE ROOM ◑ PARTIAL ROOM

ROOM NAME		FLOOR: CARPET AND PAD.	FLOOR: CERAMIC TILE.	FLOOR: CONC. SLAB MEDIUM BRUSH FINISH.	FLOOR: CONC. SLAB SMOOTH FINISH.	BASE: 4" RUBBER	BASE: WOOD	WALLS: 1/2" GYPSUM BOARD.	WALLS: 5/8" TYPE 'X' GYPSUM BOARD.	WALLS: MOISTURE RESISTANT BOARD AT PLUMBING.	WALLS: MOISTURE RESISTANT BOARD AT TUB/SHOWER ENCLOSURE	WALLS: PAINT SEMI-GLOSS	WALLS: PAINT GLOSS	CEILINGS: 5/8" GYPSUM BOARD.	CEILINGS: 5/8" TYPE 'X' GYPSUM BOARD.	CEILINGS: MOISTURE RESISTANT BOARD AT TUB/SHOWER ENCLOSURE	CEILINGS: PAINT SEMI-GLOSS	CEILINGS: PAINT GLOSS		REMARKS
LIVING	101		●				●	●				●		●			●			
FAMILY/DINING	102		●				●	●				●		●			●			
ENTRY	103		●				●	●				●		●			●			
CORRIDOR NO. 1	104		●				●	●				●		●			●			
CORRIDOR NO. 2	105		●				●	●				●		●			●			
KITCHEN	106		●				●	◑		◑			●	●				●		ROOM WALL AT SINK: MOISTURE RESISTANT BOARD SHALL BE SHEETROCK MOLD TOUGH GYSUM PANELS.
MASTER BEDROOM	107	●					●	●				●		●			●			
BEDROOM NO.2	108	●					●	●				●		●			●			
BEDROOM NO.3	109	●					●	●				●		●			●			
BEDROOM NO.4	110	●					●	●				●		●			●			
MASTER BATHROOM	111		●				●	◑		◑	◑		●			●		●		ROOM WALLS AND CEILINGS: MOISTURE RESISTANT BOARD SHALL BE SHEETROCK MOLD TOUGH GYSUM PANELS. AT TUB/SHOWER WALLS/CEILING: FIBEROCK AQUA-TOUGH INTERIOR PANEL.
BATHROOM NO.2	112		●				●	◑		◑	◑		●			●		●		ROOM WALLS AND CEILINGS: MOISTURE RESISTANT BOARD SHALL BE SHEETROCK MOLD TOUGH GYSUM PANELS. AT TUB/SHOWER WALLS/CEILING: FIBEROCK AQUA-TOUGH INTERIOR PANEL.
CLOSET	113	●					●	●				●		●			●			
CLOSET	114	●					●	●				●		●			●			
CLOSET	115	●					●	●				●		●			●			
CLOSET	116	●					●	●				●		●			●			
LINEN NO.1	117						●	●				●		●			●			
WASHER/DRYER	118		●				●	◑		◑	◑		●			●		●		ROOM WALLS AND CEILINGS: MOISTURE RESISTANT BOARD SHALL BE SHEETROCK MOLD TOUGH GYSUM PANELS. AT TUB/SHOWER WALLS/CEILING: FIBEROCK AQUA-TOUGH INTERIOR PANEL.
GARAGE	119				●				●			●			●		●			
COVERED PORCH	120			●																
PANTRY	121		●				●	●				●		●			●			
STORAGE CLOSET	122		●				●	●				●		●			●			

INTERIOR FINISH SCHEDULE NOTES

1. AREAS SHOWN TO RECEIVE CARPET SHALL INCLUDE: CARPET, PAD, TACK STRIPS, AND CARPET TRANSITIONS AND ARE TO BE PROVIDED AND INSTALLED BY CONTRACTOR. CONTRACTOR SHALL PROVIDE A FLOOR SURFACE THAT FOLLOWS THE CARPET MANUFACTURER'S RECOMMENDATIONS.
2. WOOD BASE SHALL BE PAINT GRADE - DIMENSIONS AND PROFILE TO MATCH EXISTING. SUBMIT SAMPLE TO ARCHITECT PRIOR TO ORDERING OR MILLING.
3. INTERIOR WOODWORK AND TRIM SHALL BE PAINT GRADE WITH DIMENSIONS AND PROFILES AS APPROVED BY OWNER. SUBMIT SAMPLE TO ARCHITECT PRIOR TO ORDERING.
4. INTERIOR WALLS AND CEILINGS CALLED OUT TO BE PAINTED AND WHERE ANY PRIOR PAINTED SURFACE HAS BEEN DISTRUBED BY WORK DONE AFTER PAINTING, SHALL BE PAINTED WITH TWO COATS OVER BASE COAT. TRIM SHALL BE PAINTED WITH TWO COATS OF SEMIGLOSS OVER BASE COAT.



DOOR SCHEDULE

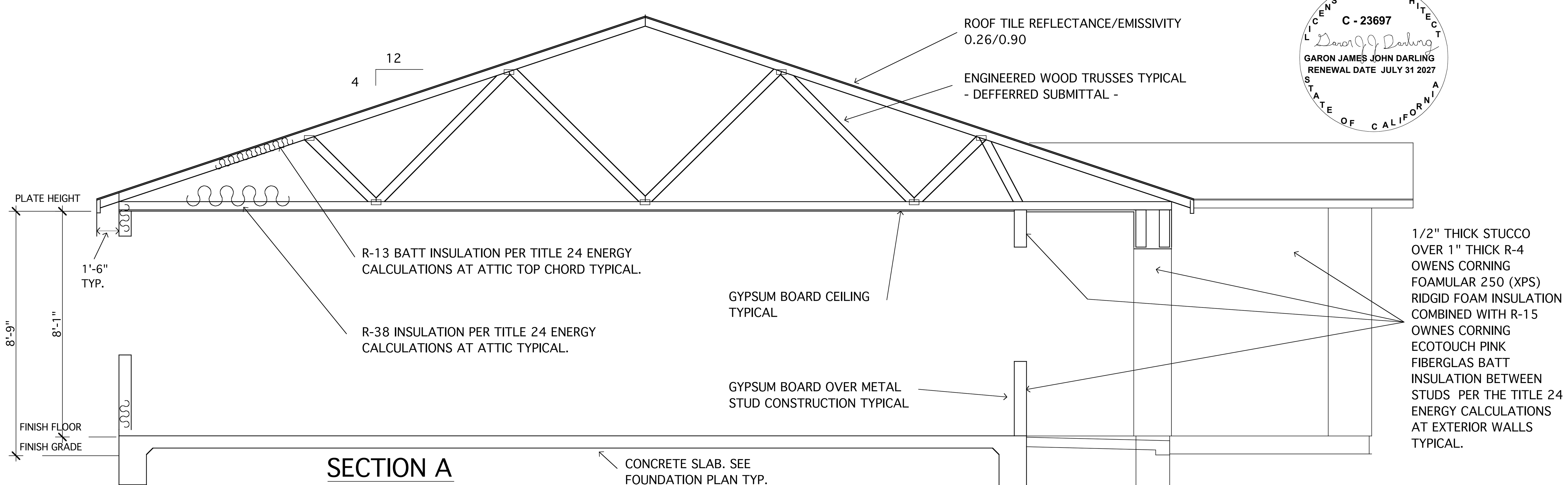
QUANTITY	DOOR NUMBER	SIZE: W X H	SIZE: THK.	TYPE	DETAILS: HEAD	DETAILS: JAMB	DETAILS: SILL	REMARKS
								EXTERIOR OUTSWINGING DOORS SHALL HAVE THE FOLLOWING: NON-REMOVABLE BUTTS, 20 GAUGE GALV. FLASHING/DRIP AT FRAME HEAD AND AT DOOR BOTTOM. SOLID HARDWOOD THRESHOLD, KEYED DEADBOLT WITH INTERIOR THUMBTURN.
1	D01	6'-0" X 6'-8"	1 3/4"	A				GLIDING DUAL GLAZED PATIO DOOR. SAFETY GLASS.
1	D02	3'-0" X 6'-8"	1 3/4"	B				
1	D03	3'-0" X 6'-8"	1 3/4"	C				SELF-CLOSING HARDWARE.
2	D04	3'-0" X 6'-8"	1 3/4"	E				
4	D05	2'-8" X 6'-8"	1 3/8"	D				UNDERCUT DOOR 1" FOR RETURN AIR.
2	D06	2'-8" X 6'-8"	1 3/8"	D				UNDERCUT DOOR 1" FOR RETURN AIR.
1	D07	2'-0" X 6'-8"	1 3/8"	F				PAIR. PROVIDE (1) 10" X 18" LOUVER IN EACH DOOR TYP.

DOOR NOTES

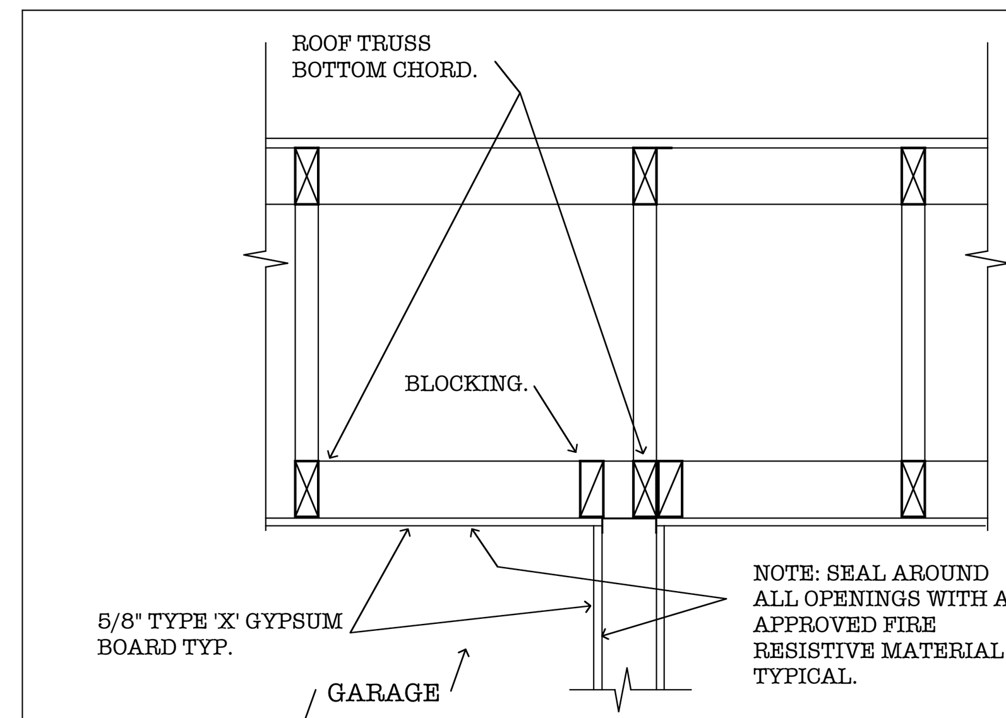
EXTERIOR DOORS SHALL MEET ONE OF THE FOLLOWING:

NONCOMBUSTABLE CONSTRUCTION -OR-
MINIMUM 20-MIN RATED -OR-
MEET SFM 12-7A-1

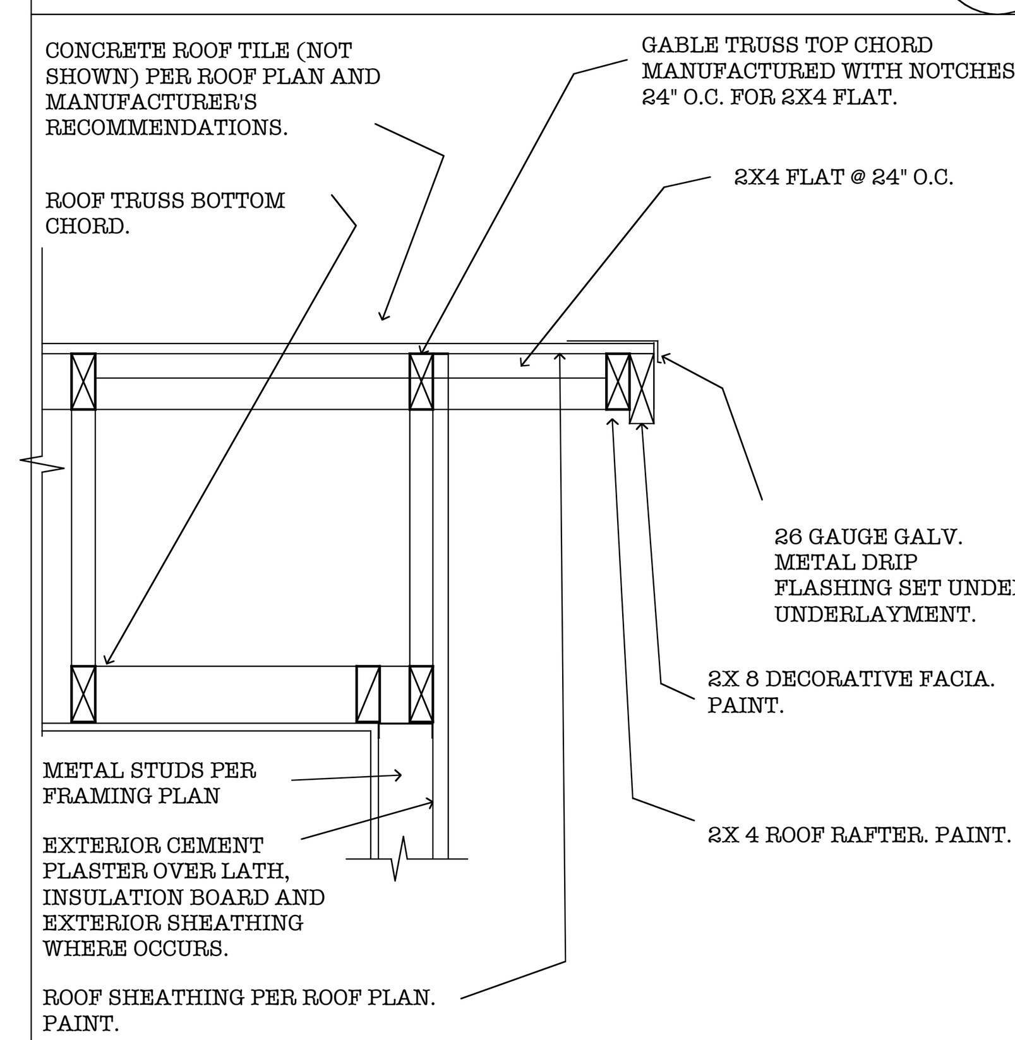
LICENSED ARCHITECT
C - 23697
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027
STATE OF CALIFORNIA



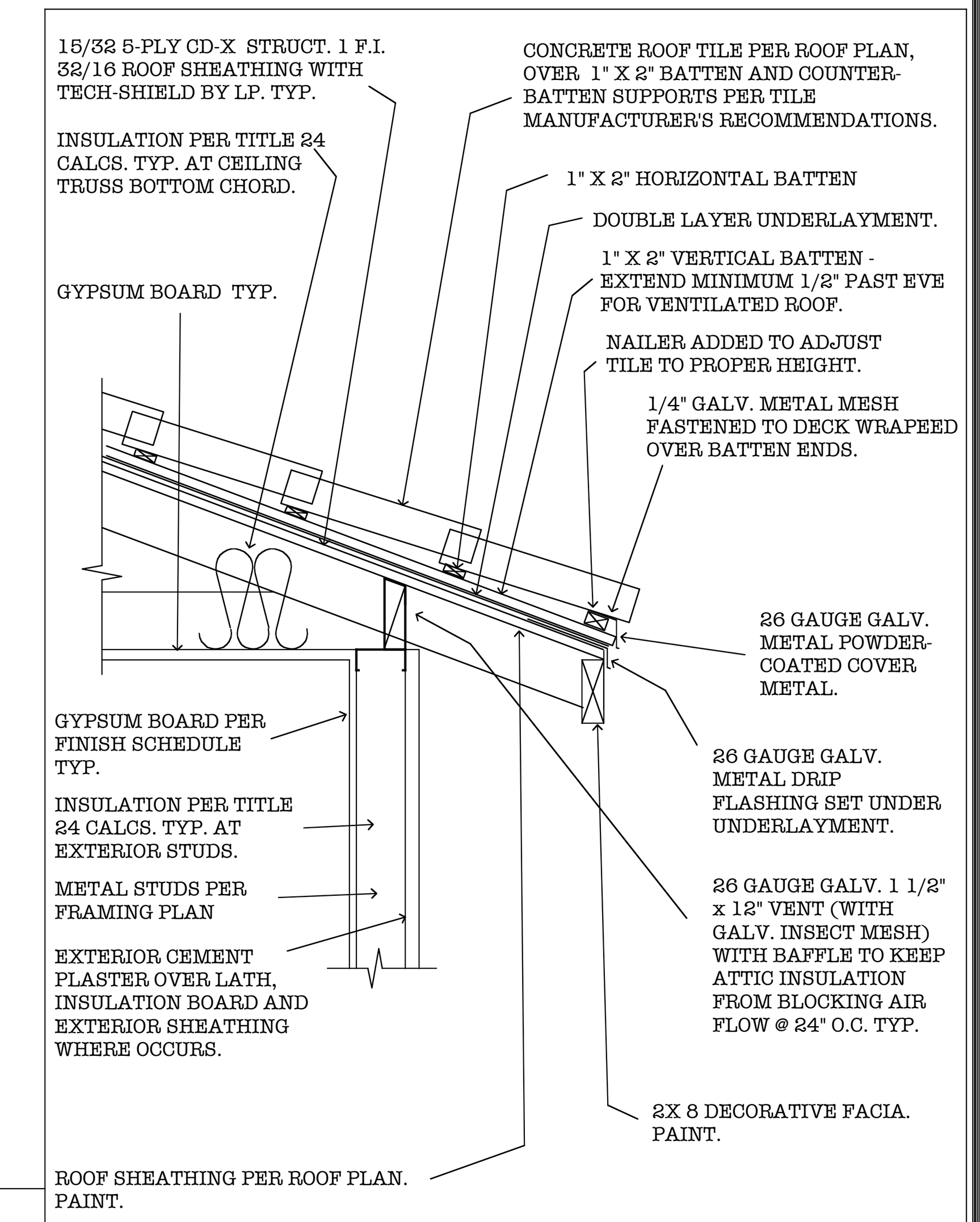
SECTION A
3/8"= 1'-0" SCALE



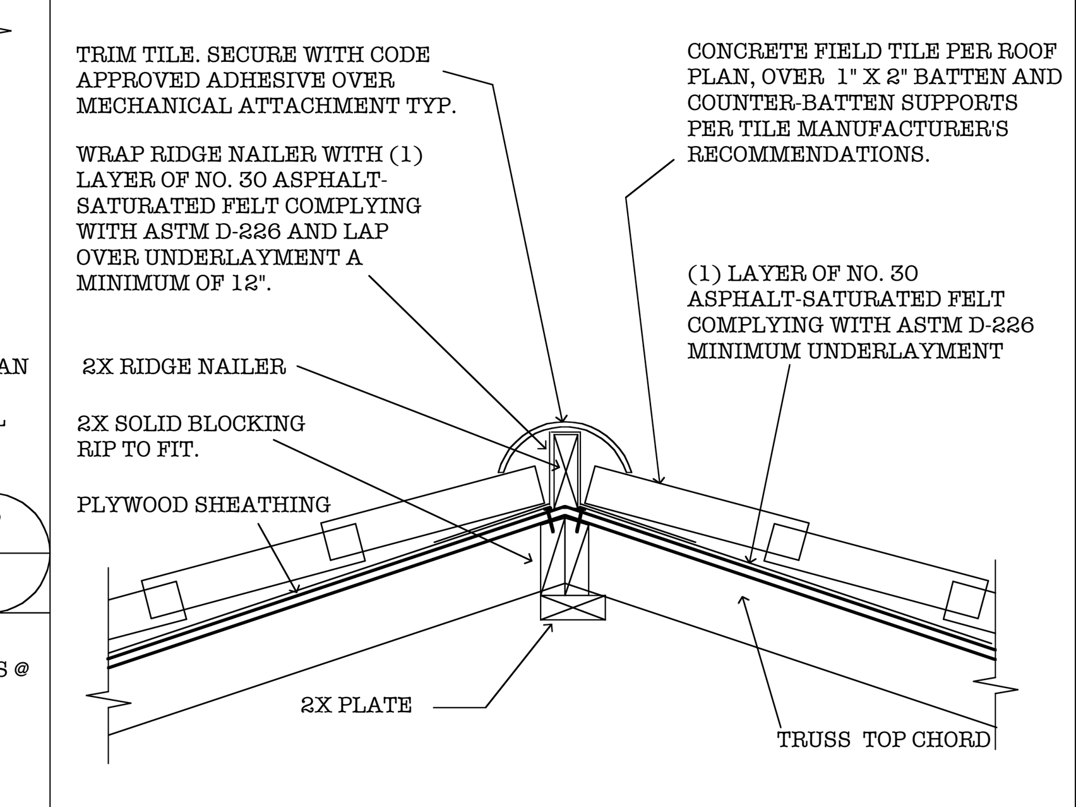
1/2 HOUR SEPARATION @ GARAGE/DWELLING TYPICAL 7
1" = 1'-0" SCALE



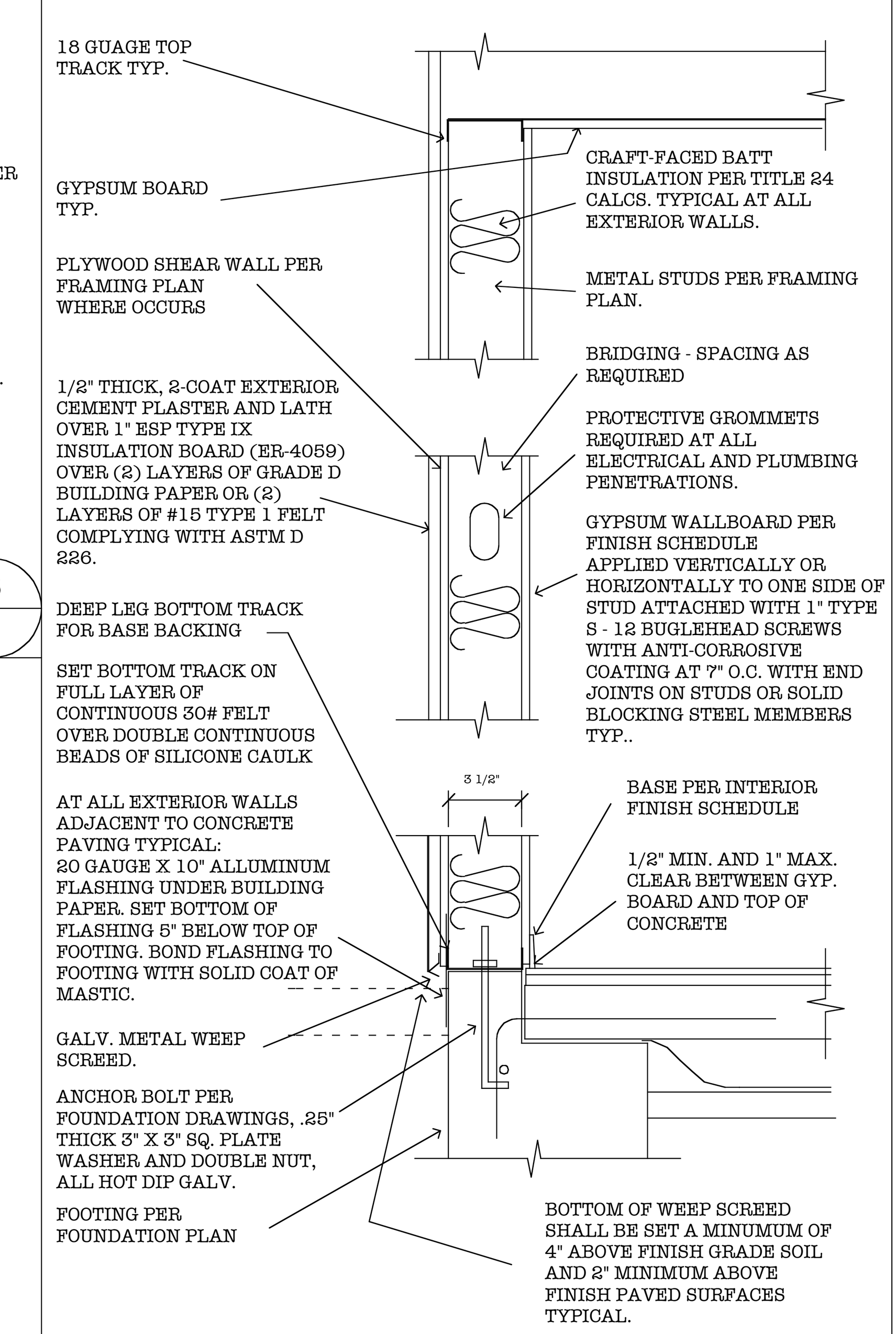
ROOF EAVE AT GABLE END TYPICAL 6
1" = 1'-0" SCALE



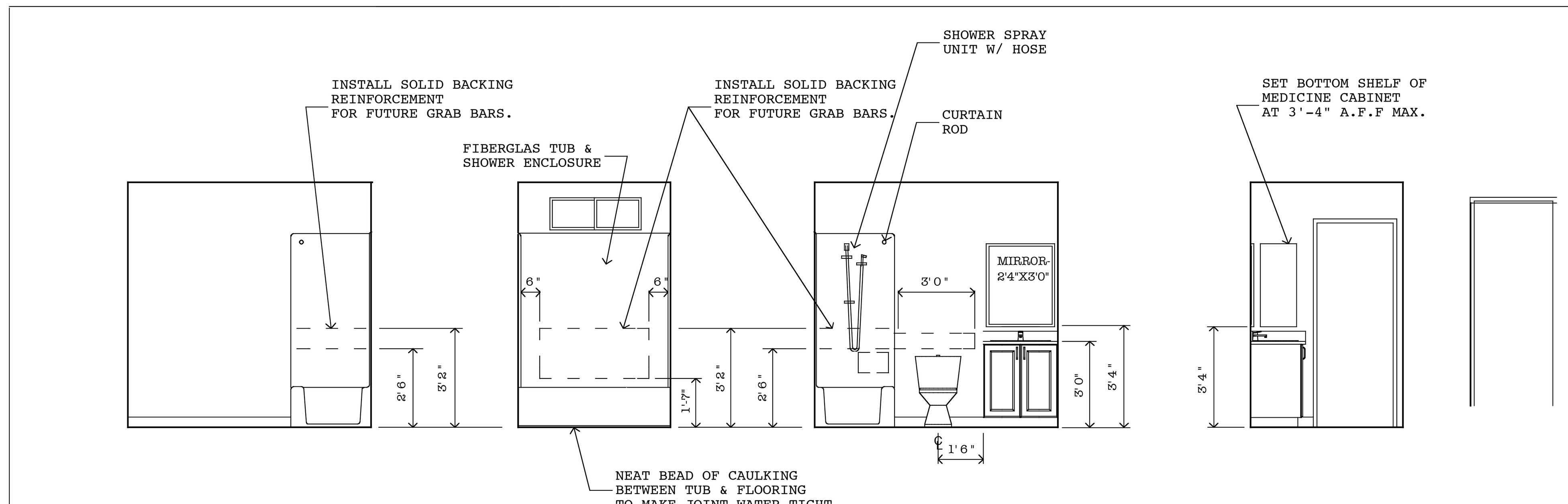
ROOF EAVE TYPICAL 3
1" = 1'-0" SCALE



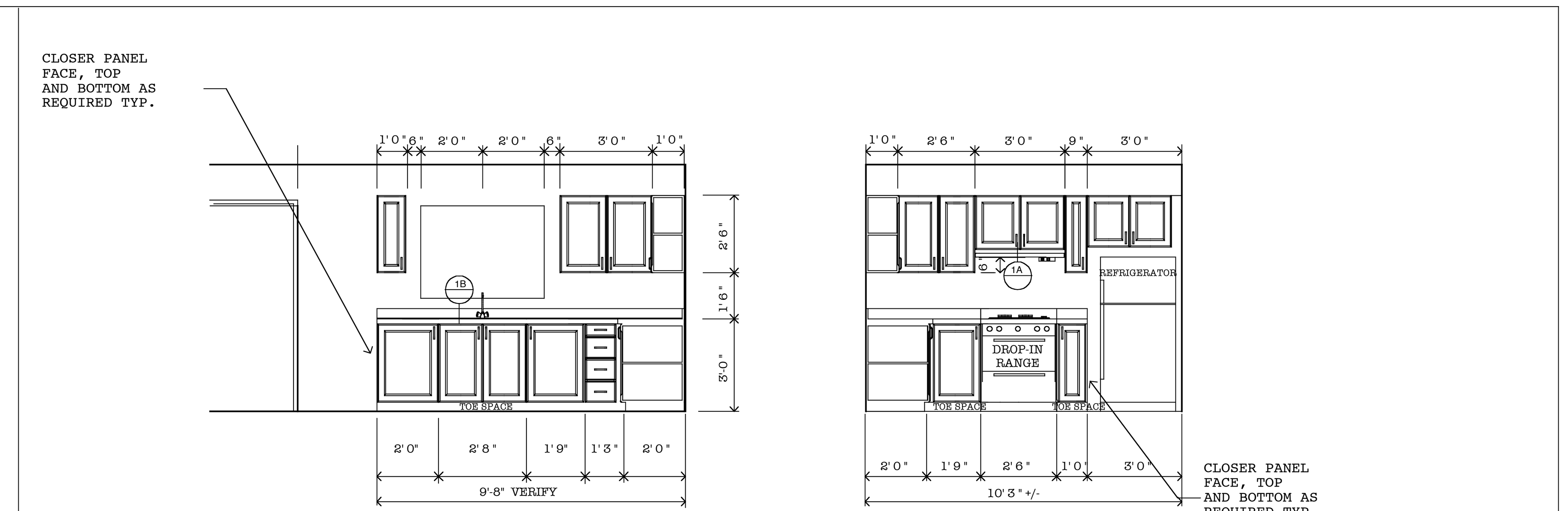
ROOF RIDGE TYPICAL 2
1" = 1'-0" SCALE



EXTERIOR WALL TYPICAL 1
1" = 1'-0" SCALE



BATH ELEVATION TYPICAL 5
SCALE 1/4" = 1'0"



KITCHEN ELEVATION 4
SCALE 1/4" = 1'0"

NO.	DATE	REVISION
1	5.24.24	CITY SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		
4		

PROJECT
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FOR
COACHELLA VALLEY HOUSING COALITION
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INDIO, CA 92201

GARON J. J. DARLING
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2259 PASEO DEL MAR
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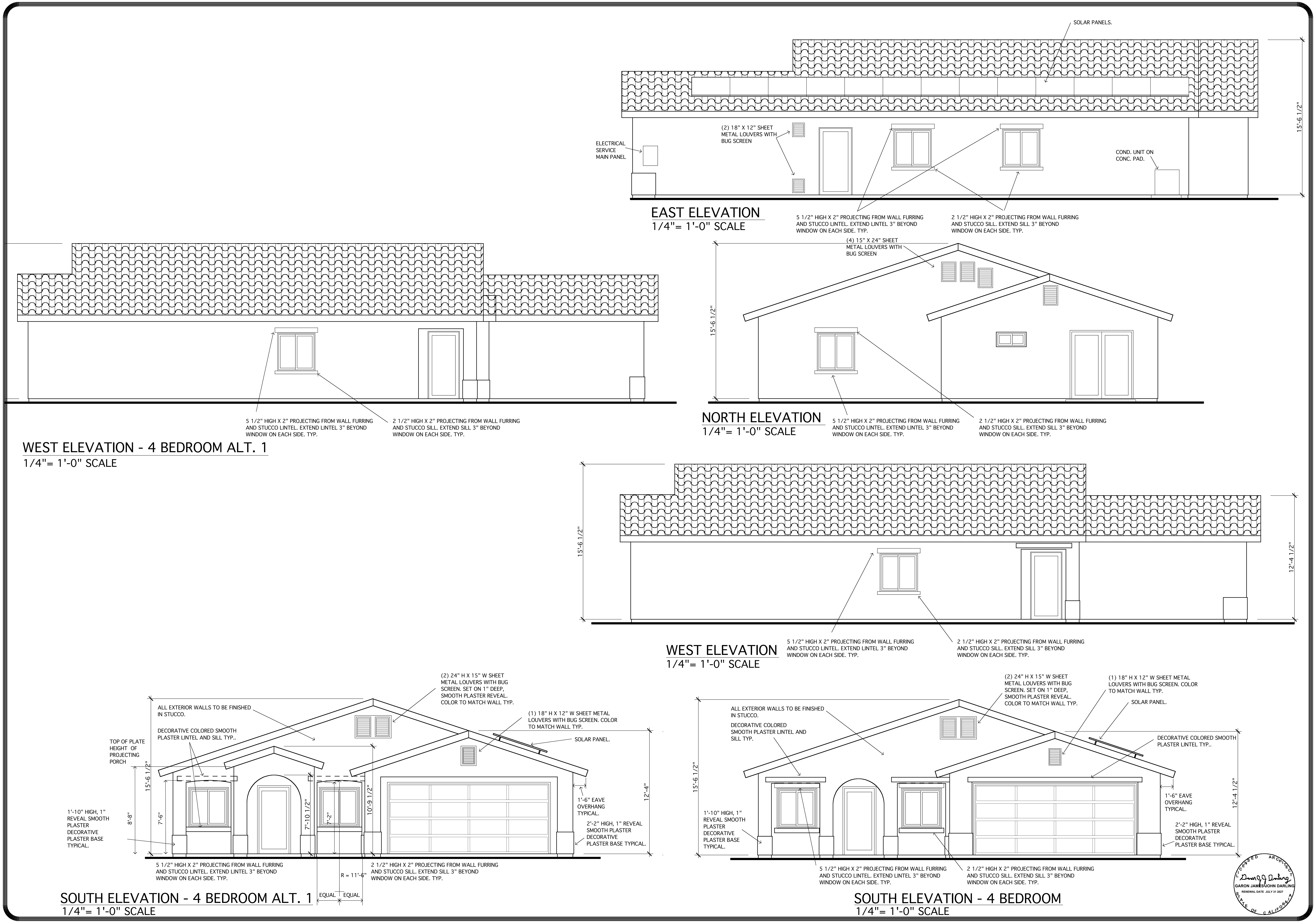
SHEET TITLE
MODEL 1412
4 BEDROOM
INTERIOR FINISH SCHEDULE
DOOR & WINDOW SCHEDULE
INTERIOR ELEVATIONS
SECTION A AND DETAILS

DATE 8/11/25
JOB
SHEET
A-2
OF DWGS


SOLAR PANELS.
(2) 18" X 12" SHEET METAL LOUVERS WITH BUG SCREEN
ELECTRICAL SERVICE MAIN PANEL
COND. UNIT ON CONC. PAD.
15'-6 1/2"
EAST ELEVATION
1/4"= 1'-0" SCALE
5 1/2" HIGH X 2" PROJECTING FROM WALL FURRING AND STUCCO LINTEL. EXTEND LINTEL 3" BEYOND WINDOW ON EACH SIDE. TYP.
2 1/2" HIGH X 2" PROJECTING FROM WALL FURRING AND STUCCO SILL. EXTEND SILL 3" BEYOND WINDOW ON EACH SIDE. TYP.
(4) 15" X 24" SHEET METAL LOUVERS WITH BUG SCREEN
15'-6 1/2"
NORTH ELEVATION
1/4"= 1'-0" SCALE
5 1/2" HIGH X 2" PROJECTING FROM WALL FURRING AND STUCCO LINTEL. EXTEND LINTEL 3" BEYOND WINDOW ON EACH SIDE. TYP.
2 1/2" HIGH X 2" PROJECTING FROM WALL FURRING AND STUCCO SILL. EXTEND SILL 3" BEYOND WINDOW ON EACH SIDE. TYP.
5 1/2" HIGH X 2" PROJECTING FROM WALL FURRING AND STUCCO LINTEL. EXTEND LINTEL 3" BEYOND WINDOW ON EACH SIDE. TYP.
2 1/2" HIGH X 2" PROJECTING FROM WALL FURRING AND STUCCO SILL. EXTEND SILL 3" BEYOND WINDOW ON EACH SIDE. TYP.
WEST ELEVATION - 4 BEDROOM ALT. 1
1/4"= 1'-0" SCALE
15'-6 1/2"
12'-4 1/2"
5 1/2" HIGH X 2" PROJECTING FROM WALL FURRING AND STUCCO LINTEL. EXTEND LINTEL 3" BEYOND WINDOW ON EACH SIDE. TYP.
2 1/2" HIGH X 2" PROJECTING FROM WALL FURRING AND STUCCO SILL. EXTEND SILL 3" BEYOND WINDOW ON EACH SIDE. TYP.
WEST ELEVATION
1/4"= 1'-0" SCALE
(2) 24" H X 15" W SHEET METAL LOUVERS WITH BUG SCREEN. SET ON 1" DEEP, SMOOTH PLASTER REVEAL. COLOR TO MATCH WALL TYP.
ALL EXTERIOR WALLS TO BE FINISHED IN STUCCO.
(1) 18" H X 12" W SHEET METAL LOUVERS WITH BUG SCREEN. COLOR TO MATCH WALL TYP.
DECORATIVE COLORED SMOOTH PLASTER LINTEL AND SILL TYP..
SOLAR PANEL.
TOP OF PLATE HEIGHT OF PROJECTING PORCH
15'-6 1/2"
8'-8"
7'-6"
7'-10 1/2"
7'-2"
10'-9 1/2"
12'-4"
1'-6" EAVE OVERHANG TYPICAL.
1'-10" HIGH, 1" REVEAL SMOOTH PLASTER DECORATIVE PLASTER BASE TYPICAL.
2'-2" HIGH, 1" REVEAL SMOOTH PLASTER DECORATIVE PLASTER BASE TYPICAL.
5 1/2" HIGH X 2" PROJECTING FROM WALL FURRING AND STUCCO LINTEL. EXTEND LINTEL 3" BEYOND WINDOW ON EACH SIDE. TYP.
2 1/2" HIGH X 2" PROJECTING FROM WALL FURRING AND STUCCO SILL. EXTEND SILL 3" BEYOND WINDOW ON EACH SIDE. TYP.
R = 11'-6"
EQUAL
EQUAL
SOUTH ELEVATION - 4 BEDROOM ALT. 1
1/4"= 1'-0" SCALE
(2) 24" H X 15" W SHEET METAL LOUVERS WITH BUG SCREEN. SET ON 1" DEEP, SMOOTH PLASTER REVEAL. COLOR TO MATCH WALL TYP.
(1) 18" H X 12" W SHEET METAL LOUVERS WITH BUG SCREEN. COLOR TO MATCH WALL TYP.
ALL EXTERIOR WALLS TO BE FINISHED IN STUCCO.
SOLAR PANEL.
DECORATIVE COLORED SMOOTH PLASTER LINTEL AND SILL TYP.
DECORATIVE COLORED SMOOTH PLASTER LINTEL TYP..
15'-6 1/2"
12'-4 1/2"
1'-6" EAVE OVERHANG TYPICAL.
1'-10" HIGH, 1" REVEAL SMOOTH PLASTER DECORATIVE PLASTER BASE TYPICAL.
2'-2" HIGH, 1" REVEAL SMOOTH PLASTER DECORATIVE PLASTER BASE TYPICAL.
5 1/2" HIGH X 2" PROJECTING FROM WALL FURRING AND STUCCO LINTEL. EXTEND LINTEL 3" BEYOND WINDOW ON EACH SIDE. TYP.
2 1/2" HIGH X 2" PROJECTING FROM WALL FURRING AND STUCCO SILL. EXTEND SILL 3" BEYOND WINDOW ON EACH SIDE. TYP.
SOUTH ELEVATION - 4 BEDROOM
1/4"= 1'-0" SCALE
LICENSED ARCHITECT
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027
STATE OF CALIFORNIA

NO	DATE	REVISION
1	5.24.24	CITY SUBMITTAL
2	5.15.25	ADD ALT 1
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SHEET TITLE
MODEL 1412
4 BEDROOM
ELEVATIONS

DATE 9/29/25
JOB
SHEET A-3
OF DWGS

CONCRETE STRUCTURES CONTINUED:

EXPOSED SLAB EDGE AND EXTERIOR FOUNDATION FACES SHALL BE COATED WITH A PERMANENT WATERPROOFING MEMBRANE.

PROVIDE 10 MIL POLYETHYLENE VAPOR BARRIER - SEAL MINIMUM 8" LAP AT VAPOR BARRIER JOINTS WITH STEGO TAPE OR APPROVED EQUAL. THE VAPOR BARRIER SHALL BE PROTECTED FROM PUNCTURE. TURN DOWN VAPOR BARRIER AT FOOTING TO EXTEND UNDER FOOTING AND BACK UP AT EXTERIOR FACE TO FINISH GRADE LEVEL PER THE WIRE REINFORCEMENT INSTITUTE (WRI) RECOMMENDATIONS. THE VAPOR BARRIER SHALL BE PLACED DIRECTLY UNDER THE CONCRETE.

THE CONCRETE SHALL BE PLACED DIRECTLY ON THE VAPOR BARRIER. THE VAPOR BARRIER SHALL BE PLACED DIRECTLY ON A 4" THICK LAYER OF 1/2" CLEAN AGGREGATE BASE AS REQUIRED TO PEOVIDE A CAPILLARY BREAK PER ACI 302.2R-06.

STEEL REINFORCING SHALL BE SET SO AS TO PROVIDE A MINIMUM 3" COVER OF DENSELY CONSOLIDATED CONCRETE (BY USE OF A VIBRATOR) TO SOIL CLEARANCE TYPICAL.

ALL WALL ANCHOR BOLTS AND ALL HOLD DOWN ANCHOR BOLTS SHALL BE HOT DIP GALV. TYP.

'STRAP-TYPE' HOLD DOWN ANCHORS ARE NOT ALLOWED. ONLY SOLID ROUND BAR STEEL, HOT-DIP GALV. ANCHORS ARE PERMITTED.

NO METALIC WATER PIPES OR CONDUITS SHALL BE PLACED BEFLOW FOUNDATIONS.

COPPER WATER PIPING (EXCEPT FOR TRAP PRIMERS) SHALL NOT BE PLACED UNDER FLOOR SLABS. ALL COPPER PIPING WITHIN 18 INCHES OF THE GROUND SURFACE SHALL BE SLEEVED WITH PVC PIPING TO PREVENT CONTACT WITH SOIL. THE TRAP PRIMER SHALL BE COMPLETELY ENCAPSULATED IN A PVC SLEEVE.

PRESSURIZED WATERLINES SHALL NOT BE PLACED UNDER THE FLOOR SLAB.

COPPER TUBING:

1. USE TYPE K OR TYPE L COPPER TUBING AS REQUIRED BY THE APPLICABLE LOCAL PLUMBING CODE. TYPE M TUBING SHALL NOT BE USED FOR BURIED APPLICATIONS.
2. ELECTRICALLY INSULATE UNDERGROUND COPPER PIPE FROM DISSIMILAR METALS AND FROM ABOVE GROUND COPPER PIPE WITH INSULATING DEVICE PER NACE SP0286.
3. ELECTRICALLY INSULATE COLD WATER PIPING FROM HOT WATER PIPING SYSTEMS.
4. PROTECT BURIED COPPER TUBING BY ONE OF THE FOLLOWING MEASURES.
   A. PREVENT SOIL CONTACT. SOIL CONTACT SHALL BE PREVENTED BY PLACING THE TUBING ABOVE GROUND OR BY ENCASING THE TUBING USING PVC PIPE WITH SOLVENT-WELDED JOINTS. EITHER SEAL THE PVC PIPE AT BOTH ENDS OR TERMINATE BOTH ENDS ABOVE-GRADE IN A MANNER THAT DOESN'T ALLOW WATER TO INFILTRATE.
   B. INSTALL COPPER PIPE WITH A FACTORY-APPLIED COATING THAT IS AT LEAST 25 MILS IN THICKNESS. USE KAMCO'S AQUA SHIELD, MUELLER STEAMLINE'S PLUMBSHIELD, OR EQUAL. THE COATING MUST BE CONTINOUS WITH NO CUTS OR DEFECTS.
   C. INSULATE THE PIPE BY INSTALLING 12-MIL POLYETHYLENE PIPE WRAPPING TAPE WITH BUTYL RUBBER MASTIC OVER A SUITABLE PRIMER. PROTECT WRAPPED COPPER TUBING BY APPLYING CATHODIC PROETCTION PER NACE SP0169.

PLASTIC AND VITRIFIED CLAY PIPE:

1. NO SPECIAL CORROSION CONTROL MEASURES ARE REQUIRED FOR PLASTIC AND VITRIFIED CLAY PIPING.
2. PROTECT ALL METALLIC FITTINGS AND VALVES WITH WAX TAPE PER AWWA C217, OR WITH EPOXY AND APPROPRIATELY DESIGNED CATHODIC PROTECTION SYSTEM PER NACE SP0169.

CONCRETE STRUCTURES AND PIPE:

1. PROTECT CONCRETE STRUCTURES AND PIPE FROM SULFATE ATTACK IN SOIL WITH A SEVERE SULFATE CONCENTRATION (S2), FROM 0.20 TO 2.0 PERCENT. USE ASTM C150 TYPE V CEMENT, A MAXIMUM WATER/ CEMENT RATIO OF 0.40, AND A MINIMUM STRENGTH OF 5000 P.S.I.
2. CHLORIDE CONCENTRATIONS ARE AT LEVELS WHERE ADDITIONAL PROTECTIVE MEASURES ARE REQUIRED TO PROTECT STEEL AND IRON EMBEDDED IN CONCRETE FROM CHLORIDE ATTACK. THIS APPLIES TO SUCH ITEMS AS REINFORCING STEEL AND ANCHOR BOLTS, (BUT NOT POST-TENSIONING STRANDS AND ANCHORS WHICH HAVE SEPERATE REQUIRMENTS).
   A. INSTALL PROTECTIVE CONCRETE USING A CONCRETE MIX DESIGNED TO PROTECT EMBEDDED STEEL AND IRON WITH THE INCLUSION OF CORROSION INHIBITOR ADMIXTURE AND/OR SUPPLEMENTARY CEMENTIOUS MATERIALS (SUCH AS FLY ASH AND SILICA FUME) BASED ON THE FOLLOWING PARAMETERS:
      I. CHLORIDE ION CONTENT.
      II. SERVICE LIFE OF 40 YEARS MINIMUM.
      III. CONCRETE COVER OF 3" CLEAR FOR FOOTINGS AND 2" CLEAR FOR SLAB.
      IV. THE CURRENT BUILDING CODE.
   B. INSTALL WATERPROOF CONCRETE. WATERPROOFING FOR CONCRETE SHALL BE THE FOLLOWING:
      I. A 4" LAYER OF 1/2" CLEAN AGGREGAE GRAVEL CAPILARY BREAK UNDER THE CONCRETE.

CORROSION CONTROL MEASURES

ANIONS	ACI-318 SOIL CLASSIFICATION	SOIL CONTENT	CATEGORY
SULFATE CONCENTRATION	S2	4900 MG/KG	SEVERE
CHLORIDE CONCENTRATION		2020 MG/KG	AGGRESSIVE

MATERIAL	CLASSIFICATION
FERROUS METALS	SEVERELY CORROSIVE
COPPER	AGGRESSIVELY CORROSIVE
CONCRETE	SEVERELY CORROSIVE
REINFORCING STEEL	AGGRESSIVELY CORROSIVE

GENERAL:

SITE SOIL IS NOT SUITABLE FOR USE AS BACKFILL DUE TO CORROSION POTENTIAL PER CALTRANS.

ALL PIPE:

ALL PIPES, APPURTENANCES, AND FITTINGS NOT PROTECTED BY CATHODIC PROTECTION, COAT BARE METAL SUCH AS VALVES, BOLTS. FLANGE JOINTS, JOINT HARNESSES, AND FLEXIBLE COUPLINGS WITH WAX TAPE PER AWWA C217 AFTER ASSEMBLY.

WHERE METALIC PIPELINES PENETRATE CONCRETE STRUCTURES SUCH AS BUILDING FLOORS, VAULT WALLS, AND THRUST BLOCKS, USE PLASTIC SLEEVES, RUBBER SEALS, OR OTHER DIELECTRIC MATERIAL TO PREVENT PIPE CONTACT WITH THE CONCRETE AND REINFORCING STEEL.

PREVENT DIFFERENTIAL AERATION CORROSION CELLS BY PROVIDING AT LEAST 2 INCHES OF PIPE BEDDING OR CLEAN NON-CORROSIVE BACKFILL MATERIAL ALL AROUND METALIC PIPING, INCLUDING THE BOTTOM. DO NOT LAY PIPE DIRECTLY ON UNDISTURBED SOIL.

STEEL PIPE:

1. UNDERGROUND STEEL PIPE WITH RUBBER GASKETED, MECHANICAL, GROOVED END, OR OTHER NONCONDUCTIVE TYPE JOINTS SHOULD BE BONDED FOR ELECTRICAL CONTINUITY. ELECTRICAL CONTINUITY IS NECESSARY FOR CORROSION MONITORING AND CATHODIC PROTECTION.
2. INSTALL CORROSION MONITORING TEST STATIONS TO FACILITATE CORROSION MONITORING AND THE APPLICATION OF CATHODIC PROTECTION:
   A. AT EACH END OF THE PIPELINE.
   B. AT EACH END OF ALL CASINGS.
   C. OTHER LOCATIONS AS NECESSARY SO THE INTERVAL BETWEEN TEST STATIONS DOES NOT EXCEED 1,200. FEET.
3. TO PREVENT DISSIMILAR METAL CORROSION CELLS AND TO FACILITATE THE APPLICATION OF CATHODIC PROTECTION, ELECTRICALLY ISOLATE EACH BURIED STEEL PIPELINE PER NACE SP0286 FROM:
   A. DISSIMILAR METALS.
   B. DISSIMILARLY COATED PIPING (CEMENT-MORTAR VS. DIELECTIC).
   C. ABOVE GROUND STEEL PIPE.
   D. ALL EXISTING PIPING.
4. APPLY A SUITABLE DIELECTRIC COATING INTENDED FOR UNDERGROUND USE SUCH AS:
   A. POLYURETHENE PER AWWA C222 OR,
   B. EXTRUDED POLYETHYLENE PER AWWA C215 OR,
   C. A TAPE COATING SYSTEM PER AWWA C214 OR,
   D. HOT APPLIED COAL TAR ENAMEL PER AWWA C203 OR,
   E. FUSION BONDED EPOXY PER AWWA C213.
5. APPLY CATHODIC PROTECTION TO STEEL PIPING AS PER NACE SP0169.

CAST IRONSOIL PIPE (IF USED IN LIEU OF PVC/ABS):

1. PROTECT CAST IRON SOIL PIPE WITH EITHER A DOUBLE WRAP 4-MIL OR SINGLE WRAP 8-MIL POLYETHYLENE ENCASEMENT PER AWWA C105.
2. IT IS NOT NECESSARY TO BOND THE PIPE JOINTS OR APPLY CATHODIC PROTECTION.
3. PROVIDE 6 INCHES OF CLEAN SAND BACKFILL ALL AROUND THE PIPE. USE THE FOLLOWING PARAMETERS FOR CLEAN SAND BACKFILL:
   A. A MINIMUM SATURATED RESISTIVITY OF NO LESS THAN 3,000 OHM-CM; AND,
   B. PH BETWEEN 6.0.AND 8.0.
   C. ALL BACKFILL TESTING SHOULD BE PERFORMED BY A CORROSION ENGINEERING COMPANY.

LICENSED ARCHITECT
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027
STATE OF CALIFORNIA

NO	DATE	REVISION
1	6.24.24	CITY SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		
4		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON J. J. DARLING
ARCHITECT
2259 PASEO DEL MAR
SAN PEDRO, CA. 90732 (310)619-9540

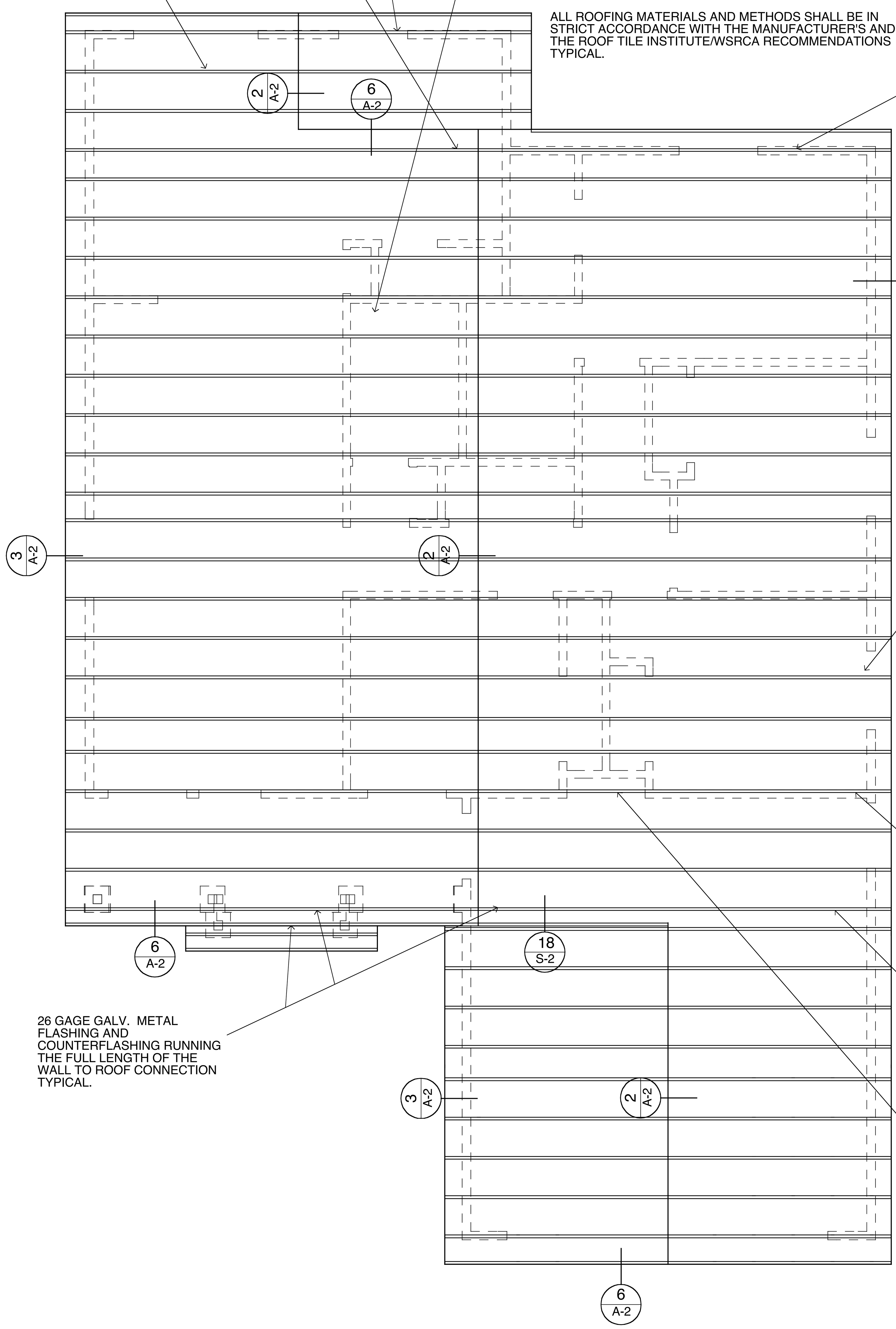
SHEET TITLE
GENERAL NOTES

DATE 8/10/25
JOB
SHEET
A-4
OF DWGS

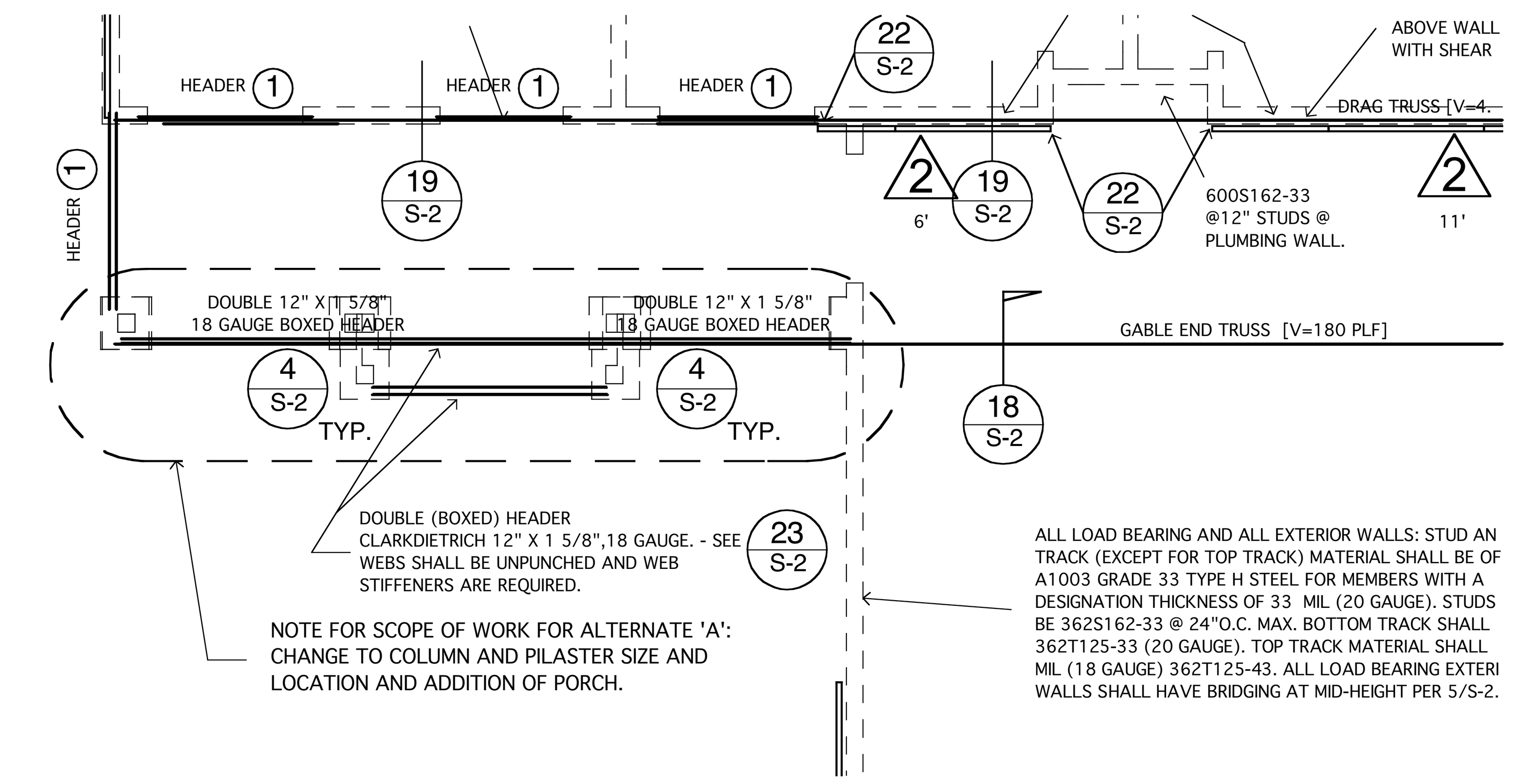
ROOFING: CONCRETE ROOF TILE BY EAGLE IAPMO ER 1900 - VALID THROUGH 01/31/2023 "CAPISTRANO" OR "MALIBU", "BELL AIR", "GOLDEN EAGLE", "PONDEROSA" OR APPROVED EQUAL NOT TO EXCEED 9.7 PSF. TILE MUST MEET TITLE 24, PART 6 COOL ROOF REQUIREMENTS FOR CLIMATE ZONE 15 (SOLAR REFLECTANCE AND THERMAL EMITTANCE) APPLY PER THE MANUFACTURER'S RECOMMENDATIONS AND ALSO, ALL OF THE FOLLOWING, TYPICAL: PROVIDE COUNTERBATTEN INSTALLATION OVER ONE LAYER OF 72 POUND MINERAL-SURFACED, NONPERFORATED CAP SHEET (ASTM D3909) OVER ONE LAYER NO. 30 ASPHALT-SATURATED FELT COMPLYING WITH ASTM D-226 (ASTM D4869 TYPE IV). USE 36" ROLLS AND LAP 19" TYPICAL. TURN DOWN OVER RAKE EDGE 1" MINIMUM. EXTEND 4" MINIMUM UP A VERTICAL (BLOCKING, NAILER OR WALL). END LAPS SHALL BE A MINIMUM OF 6" VERTICAL LAP.

ROOF COVERING SHALL BE CLASS A.

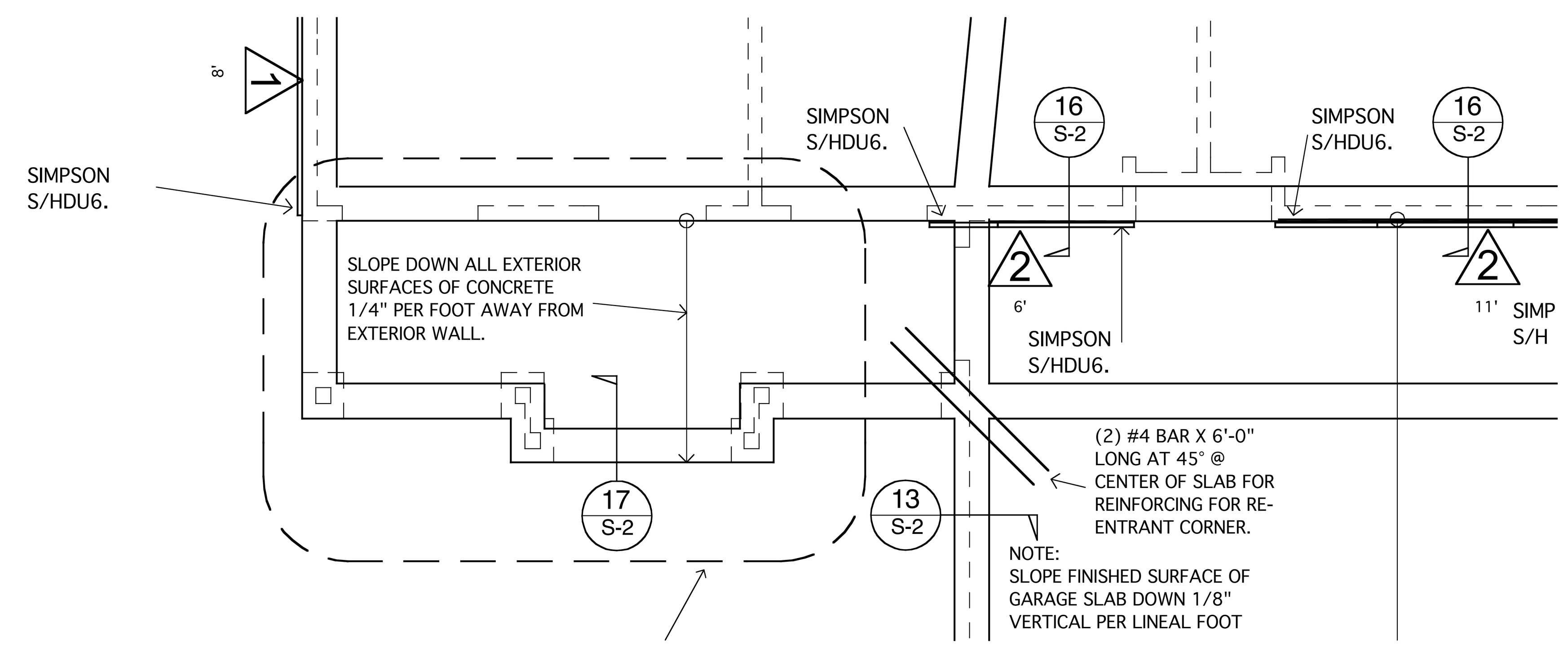
ALL ROOFING MATERIALS AND METHODS SHALL BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S AND THE ROOF TILE INSTITUTE/WSRCA RECOMMENDATIONS TYPICAL.



N
ROOF PLAN AND TRUSS LAYOUT
1/4"= 1'-0" SCALE



N
PARTIAL FRAMING PLAN - ALT 1
1/4"= 1'-0" SCALE



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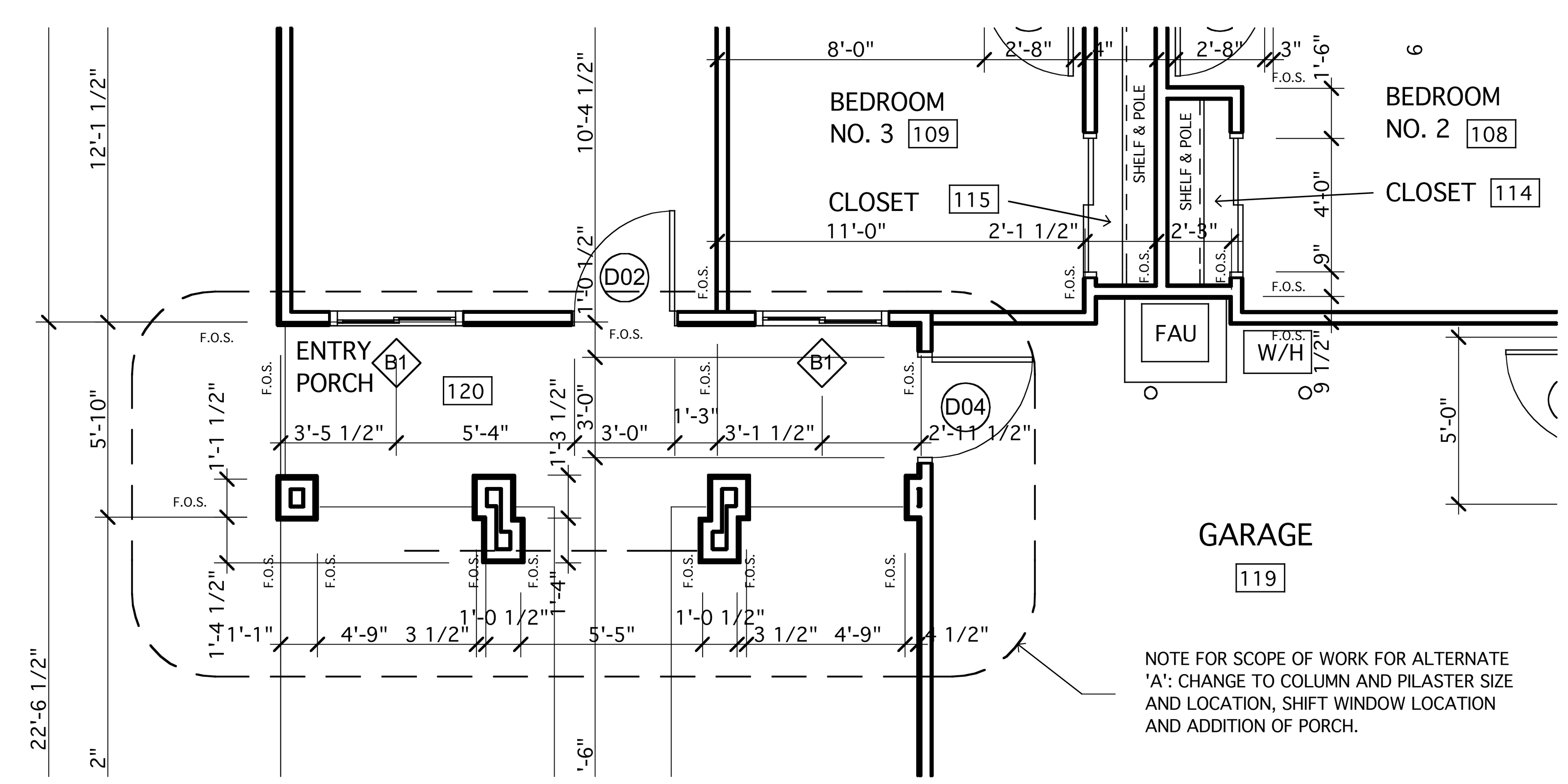
PARTIAL FOUNDATION PLAN - ALT 1
1/4"= 1'-0" SCALE



N
FIRST FLOOR PLAN - ALT 1
1/4"= 1'-0" SCALE

GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027

NO.	DATE	REVISION
1	5.24.24	CITY SUBMITTAL
2	4.5.25	ALT 1 FIRST SUBMITTAL
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SHEET TITLE
MODEL 1412
4 BEDROOM
FLOOR PLAN
ROOF PLAN & TRUSS LAYOUT

DATE 8/10/25
JOB
SHEET
A-5

METAL STUD AND WOOD STRUCTURAL PANEL SHEAR WALL SCHEDULE

TYPE	PANEL MATERIAL	STUD AND TRACK MATERIAL***	FASTENER AT PANEL EDGES	FASTENER IN THE FIELD	ANCHOR BOLTS	FRAMING ANCHOR @ TOP	NOMINAL SHEAR*	SEISMIC ALLOWABLE SHEAR**	(ASD) WIND ALLOWABLE SHEAR****
1	7/16" OSB ONE SIDE	33 MILS	#8 X 1" @ 6" O.C.	#8 X 1" @ 12" O.C.	5/8" DIA. @ 36" O.C. MAX. & 12" MAX. FROM END HOLDDOWNS	L50 @ 20" O.C.	700 PLF	280 PLF	350 PLF
2	7/16" OSB ONE SIDE	33 MILS	#8 X 1" @ 4" O.C.	#8 X 1" @ 12" O.C.	5/8" DIA. @ 32" O.C. MAX. & 12" MAX. FROM END HOLDDOWNS	L50 @ 14" O.C.	915 PLF	366 PLF	457 PLF
3	7/16" OSB ONE SIDE	43 MILS	#8 X 1" @ 2" O.C.	#8 X 1" @ 12" O.C.	5/8" DIA. @ 12" O.C. MAX. & 12" MAX. FROM END HOLDDOWNS	L50 @ 9" O.C.	2060 PLF	824 PLF	1030 PLF

*** TOP TRACK SHALL BE 43 MILS (18 GAUGE).

* PRIOR TO REDUCTION FACTOR ** AFTER OMEGA 2.5 REDUCTION FACTOR **** AFTER OMEGA 2.0 REDUCTION FACTOR

LEGEND

1 — SHEAR WALL TYPE
8' — SHEAR WALL LENGTH

NOTES:

1. ALL WOOD PANEL SHEAR WALLS SHALL BE IN ACCORDANCE WITH AISI S213.
2. WALL STUDS SHALL BE IN ACCORDANCE WITH AISI S200, AISI S211 OR ANSI S100.
3. SHEAR VALUES FOR STEL SHEETS OR COLD-FORMED STEEL FRAMED WALLS SHEATHED WITH WOOD STRUCTURAL PANELS SHALL CONFORM WITH THE REQUIREMENTS IN AISI-LATERAL C2.2.1 AND C2.2, RESPECTIVELY.
4. ALLOWABLE VALUES SHALL BE IN ACCORDANCE WITH TABLE C2.1-3, TAKING IN TO ACCOUNT THE CORRESPONDING REDUCTIONS PER C2.1 (ANSI-LATERAL).
5. SCREW EDGE DISTANCE SHALL BE 1/2" TYPICAL.
6. ALL SHEAR WALL SILL PLATE BOLTS SHALL HAVE 8" MINIMUM EMBEDMENT IN FOOTING UNLESS NOTED OTHERWISE.
7. SHEAR PANELS LESS THAN 6' LONG SHALL HAVE A MINIMUM OF 3 ANCHOR BOLTS IN ADDITION TO HOLDDOWNS.
8. STUD AND TRACK MATERIAL SHALL BE OF ASTM A1003 GRADE 33 TYPE H STEEL FOR MEMBERS WITH A DESIGNATION THICKNESS OF 33 AND 43 MIL.
9. #8 FASTENERS = SIMPSON 'X METAL SCREWS' #8 X 1" LONG (ICC ESR-3006).

STRUCTURAL DESIGN CRITERIA

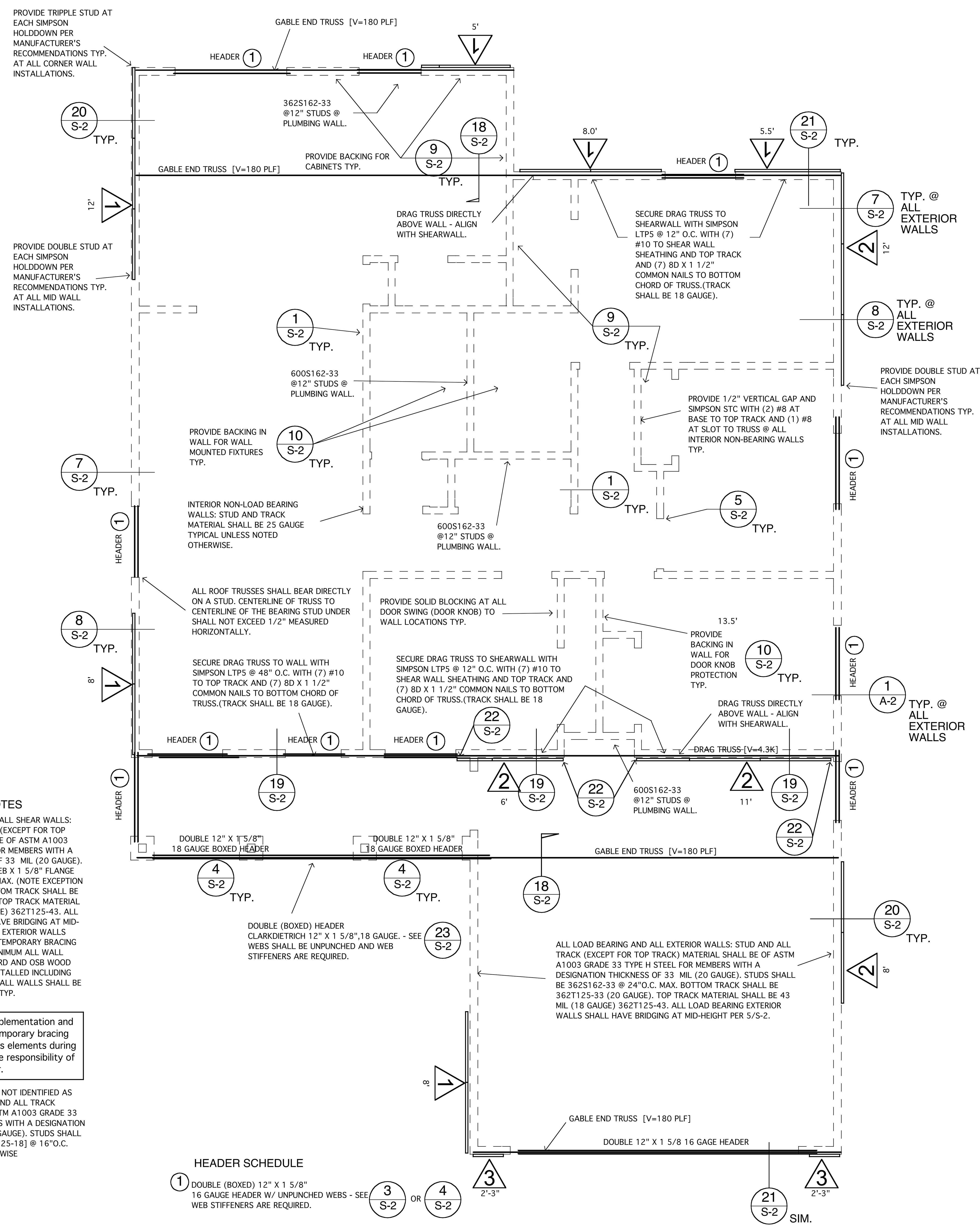
Ss=	1.878g	Sds	1.252g
S1=	0.783g	Sd1	0.887g
Fa=	1.0	DESIGN CATEGORY	E
Fv=	1.7	SITE CLASS	D
Ie=	1	Vs=	CsW
R=	6.5	Cs=	0.193W
Cd=	3	OMEGA=	2.5

DESIGN LOADS

1. ROOF LIVE LOAD = 20 PSF
   FLOOR LIVE LOAD = 40 PSF
2. WIND ANALYSIS PER CHAPTER 16 OF THE CODE.
   RISK CATEGORY = II
   BASIC WIND SPEED, V = 97 MPH
   EXPOSURE = C
3. SEISMIC ANALYSIS PER CHAPTER 16 OF THE CODE UTILIZING THE FOLLOWING:
   A. PROCEDURE - EQUILIVANT LATERAL FORCE ANALYSIS (Rho = 1.0)
   B. SYSTEM - LIGHT-FRAMED WOOD SHEAR WALLS WITH RATED SHEATHING.

HOLDDOWN SPECIFICATION AND LOCATION NOTES:

1. SIMPSON S/HDU6 AS CALLED OUT. INSTALL PER MANUFACTURERS RECOMMENDATIONS INTO MONOLITHIC POUR ONLY (NO HORIZONTAL COLD JOINT IS ALLOWED WITHIN THE EMBEDMENT DEPTH). SECURE PLACEMENT WITH SIMPSON SM1 OR SIMPSON ANCHORMATE PRIOR TO POUR TYPICAL.
2. VERIFY LOCATIONS OF ALL HOLDDOWNS AND ALL ANCHOR BOLTS FOR HOLDOWNS WITH SHEAR WALL PLAN AND DIMENSIONS ON FLOOR PLAN TYPICAL.
3. FOOTING SHALL BE DEEPENED AT SHEAR WALL HOLD DOWN ANCHOR BOLT AS REQUIRED.
4. STRAP-TYPE HOLDDOWN NOT ALLOWED.



WALL FRAMING NOTES

ALL EXTERIOR WALLS AND ALL SHEAR WALLS: ALL STUD AND ALL TRACK (EXCEPT FOR TOP TRACK) MATERIAL SHALL BE OF ASTM A1003 GRADE 33 TYPE H STEEL FOR MEMBERS WITH A DESIGNATION THICKNESS OF 33 MIL (20 GAUGE). STUDS SHALL BE 3 5/8" WEB X 1 5/8" FLANGE [362S162-33] @ 24"O.C. MAX. (NOTE EXCEPTION @ PLUMBING WALLS). BOTTOM TRACK SHALL BE 362T125-33 (20 GAUGE). TOP TRACK MATERIAL SHALL BE 43 MIL (18 GAUGE) 362T125-43. ALL EXTERIOR WALLS SHALL HAVE BRIDGING AT MID-HEIGHT PER 5/S-2 -OR- ALL EXTERIOR WALLS SHALL BE PROVIDED WITH TEMPORARY BRACING TO REMAIN UNTILL AT A MINIMUM ALL WALL SHEATHINGS (GYPSUM BOARD AND OSB WOOD PANELS) ARE SECURELY INSTALLED INCLUDING ALL REQUIRED FASTENERS. ALL WALLS SHALL BE SHEATHED ON BOTH SIDES TYP.

The design, timing, implementation and construction of the temporary bracing of the structure and its elements during construction are all the responsibility of the general contractor.

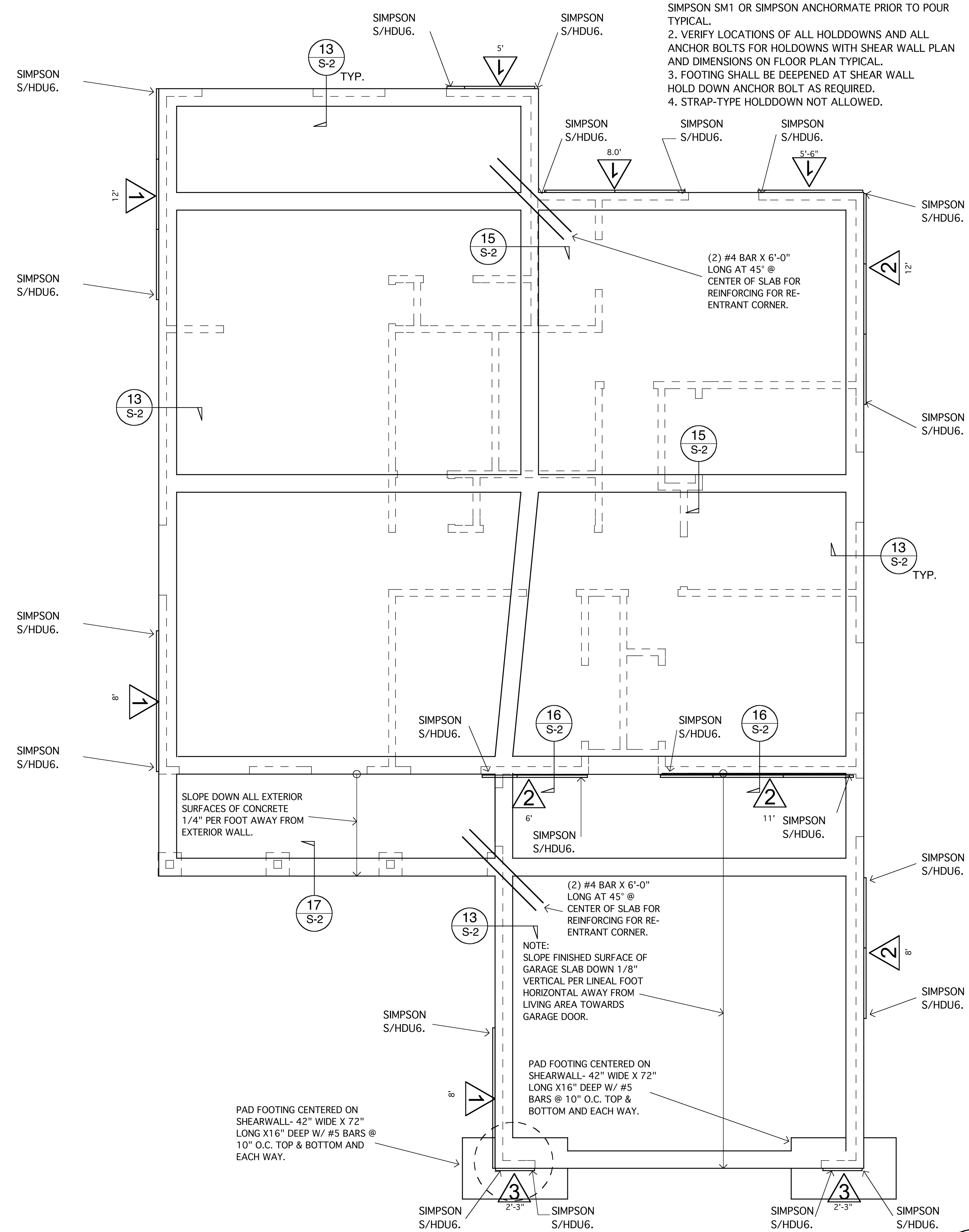
INTERIOR WALLS THAT ARE NOT IDENTIFIED AS SHEAR WALLS: ALL STUD AND ALL TRACK MATERIAL SHALL BE OF ASTM A1003 GRADE 33 TYPE H STEEL FOR MEMBERS WITH A DESIGNATION THICKNESS OF 18 MIL (25 GAUGE). STUDS SHALL BE 3 5/8" X 1 1/4" [350S125-18] @ 16"O.C. TYP. UNLESS NOTED OTHERWISE

HEADER SCHEDULE

1 DOUBLE (BOXED) 12" X 1 5/8" 16 GAUGE HEADER W/ UNPUNCHED WEBS - SEE 3/S-2 OR 4/S-2 WEB STIFFENERS ARE REQUIRED.

WALL FRAMING AND SHEAR WALL PLAN - 4 BEDROOM UNIT

1/4"= 1'-0" SCALE



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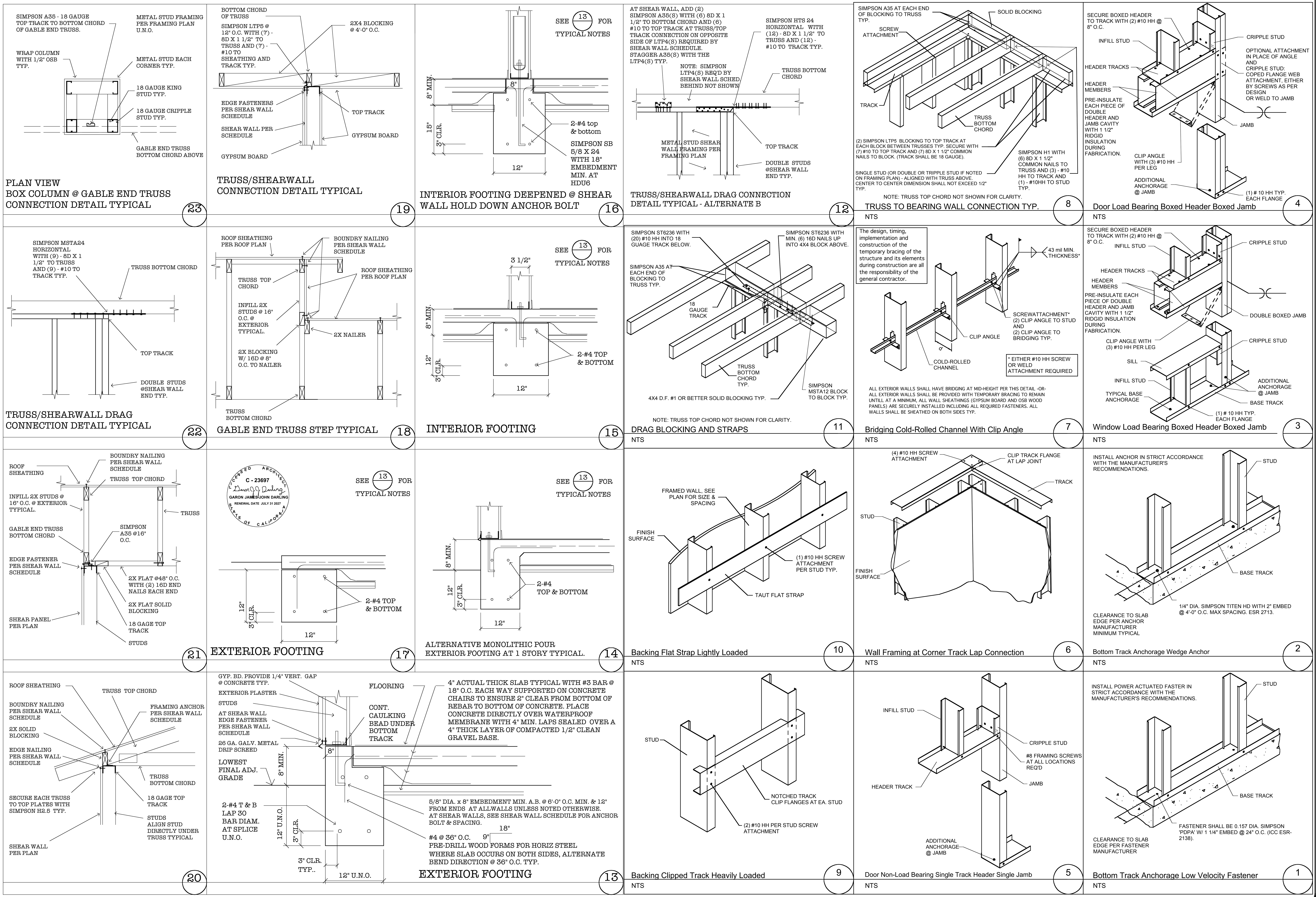
SHEET TITLE
MODEL 1412
FOUNDATION PLAN
WALL FRAMING
AND SHEAR WALL PLAN
SCHEDULE, LEGEND & NOTES

DATE 8/10/25 JOB

SHEET S-1 OF DWGS


SIMPSON A35 - 18 GAUGE TOP TRACK TO BOTTOM CHORD OF GABLE END TRUSS.
METAL STUD FRAMING PER FRAMING PLAN U.N.O.
WRAP COLUMN WITH 1/2" OSB TYP.
METAL STUD EACH CORNER TYP.
18 GAUGE KING STUD TYP.
18 GAUGE CRIPPLE STUD TYP.
GABLE END TRUSS BOTTOM CHORD ABOVE
PLAN VIEW BOX COLUMN @ GABLE END TRUSS CONNECTION DETAIL TYPICAL
23
BOTTOM CHORD OF TRUSS
SIMPSON LTP5 @ 12" O.C. WITH (7) - 8D X 1 1/2" TO TRUSS AND (7) - #10 TO SHEATHING AND TRACK TYP.
2X4 BLOCKING @ 4'-0" O.C.
EDGE FASTENERS PER SHEAR WALL SCHEDULE
TOP TRACK
SHEAR WALL PER SCHEDULE
GYPSUM BOARD
GYPSUM BOARD
TRUSS/SHEARWALL CONNECTION DETAIL TYPICAL
19
SEE 13 FOR TYPICAL NOTES
8" MIN.
8"
15"
3" CLR.
2-#4 top & bottom
SIMPSON SB 5/8 X 24 WITH 18" EMBEDMENT MIN. AT HDU6
12"
INTERIOR FOOTING DEEPENED @ SHEAR WALL HOLD DOWN ANCHOR BOLT
16
AT SHEAR WALL, ADD (2) SIMPSON A35(S) WITH (6) 8D X 1 1/2" TO BOTTOM CHORD AND (6) #10 TO TOP TRACK AT TRUSS/TOP TRACK CONNECTION ON OPPOSITE SIDE OF LTP4(S) REQUIRED BY SHEAR WALL SCHEDULE. STAGGER A35(S) WITH THE LTP4(S) TYP.
NOTE: SIMPSON LTP4(S) REQ'D BY SHEAR WALL SCHED. BEHIND NOT SHOWN
SIMPSON HTS 24 HORIZONTAL WITH (12) - 8D X 1 1/2" TO TRUSS AND (12) - #10 TO TRACK TYP.
TRUSS BOTTOM CHORD
METAL STUD SHEAR WALL FRAMING PER FRAMING PLAN
TOP TRACK
DOUBLE STUDS @SHEAR WALL END TYP.
TRUSS/SHEARWALL DRAG CONNECTION DETAIL TYPICAL - ALTERNATE B
12
SIMPSON A35 AT EACH END OF BLOCKING TO TRUSS TYP.
SOLID BLOCKING
SCREW ATTACHMENT
TRACK
TRUSS BOTTOM CHORD
(2) SIMPSON LTP5 BLOCKING TO TOP TRACK AT EACH BLOCK BETWEEN TRUSSES TYP. SECURE WITH (7) #10 TO TOP TRACK AND (7) 8D X 1 1/2" COMMON NAILS TO BLOCK. (TRACK SHALL BE 18 GAUGE).
SINGLE STUD (OR DOUBLE OR TRIPPLE STUD IF NOTED ON FRAMING PLAN) - ALIGNED WITH TRUSS ABOVE. CENTER TO CENTER DIMENSION SHALL NOT EXCEED 1/2" TYP.
SIMPSON H1 WITH (6) 8D X 1 1/2" COMMON NAILS TO TRUSS AND (3) - #10 HH TO TRACK AND (1) - #10HH TO STUD TYP.
NOTE: TRUSS TOP CHORD NOT SHOWN FOR CLARITY.
TRUSS TO BEARING WALL CONNECTION TYP.
8
NTS
SECURE BOXED HEADER TO TRACK WITH (2) #10 HH @ 8" O.C.
INFILL STUD
CRIPPLE STUD
OPTIONAL ATTACHMENT IN PLACE OF ANGLE AND CRIPPLE STUD: COPED FLANGE WEB ATTACHMENT, EITHER BY SCREWS AS PER DESIGN OR WELD TO JAMB
HEADER TRACKS
HEADER MEMBERS
PRE-INSULATE EACH PIECE OF DOUBLE HEADER AND JAMB CAVITY WITH 1 1/2" RIDGID INSULATION DURING FABRICATION.
JAMB
CLIP ANGLE WITH (3) #10 HH PER LEG
ADDITIONAL ANCHORAGE @ JAMB
(1) # 10 HH TYP. EACH FLANGE
Door Load Bearing Boxed Header Boxed Jamb
4
NTS
SIMPSON MSTA24 HORIZONTAL WITH (9) - 8D X 1 1/2" TO TRUSS AND (9) - #10 TO TRACK TYP.
TRUSS BOTTOM CHORD
TOP TRACK
DOUBLE STUDS @SHEAR WALL END TYP.
TRUSS/SHEARWALL DRAG CONNECTION DETAIL TYPICAL
22
ROOF SHEATHING PER ROOF PLAN
BOUNDRY NAILING PER SHEAR WALL SCHEDULE
ROOF SHEATHING PER ROOF PLAN
TRUSS TOP CHORD
INFILL 2X STUDS @ 16" O.C. @ EXTERIOR TYPICAL.
2X NAILER
2X BLOCKING W/ 16D @ 8" O.C. TO NAILER
TRUSS BOTTOM CHORD
GABLE END TRUSS STEP TYPICAL
18
SEE 13 FOR TYPICAL NOTES
3 1/2"
8" MIN.
12"
3" CLR.
2-#4 TOP & BOTTOM
12"
INTERIOR FOOTING
15
SIMPSON ST6236 WITH (20) #10 HH INTO 18 GUAGE TRACK BELOW.
SIMPSON ST6236 WITH MIN. (6) 16D NAILS UP INTO 4X4 BLOCK ABOVE.
SIMPSON A35 AT EACH END OF BLOCKING TO TRUSS TYP.
18 GAUGE TRACK
TRUSS BOTTOM CHORD TYP.
SIMPSON MSTA12 BLOCK TO BLOCK TYP.
4X4 D.F. #1 OR BETTER SOLID BLOCKING TYP.
NOTE: TRUSS TOP CHORD NOT SHOWN FOR CLARITY.
DRAG BLOCKING AND STRAPS
11
NTS
The design, timing, implementation and construction of the temporary bracing of the structure and its elements during construction are all the responsibility of the general contractor.
43 mil MIN. THICKNESS*
SCREWATTACHMENT* (2) CLIP ANGLE TO STUD AND (2) CLIP ANGLE TO BRIDGING TYP.
CLIP ANGLE
COLD-ROLLED CHANNEL
* EITHER #10 HH SCREW OR WELD ATTACHMENT REQUIRED
ALL EXTERIOR WALLS SHALL HAVE BRIDGING AT MID-HEIGHT PER THIS DETAIL -OR- ALL EXTERIOR WALLS SHALL BE PROVIDED WITH TEMPORARY BRACING TO REMAIN UNTILL AT A MINIMUM, ALL WALL SHEATHINGS (GYPSUM BOARD AND OSB WOOD PANELS) ARE SECURELY INSTALLED INCLUDING ALL REQUIRED FASTENERS. ALL WALLS SHALL BE SHEATHED ON BOTH SIDES TYP.
Bridging Cold-Rolled Channel With Clip Angle
7
NTS
SECURE BOXED HEADER TO TRACK WITH (2) #10 HH @ 8" O.C.
INFILL STUD
CRIPPLE STUD
HEADER TRACKS
HEADER MEMBERS
PRE-INSULATE EACH PIECE OF DOUBLE HEADER AND JAMB CAVITY WITH 1 1/2" RIDGID INSULATION DURING FABRICATION.
DOUBLE BOXED JAMB
CLIP ANGLE WITH (3) #10 HH PER LEG
CRIPPLE STUD
SILL
INFILL STUD
ADDITIONAL ANCHORAGE @ JAMB
TYPICAL BASE ANCHORAGE
BASE TRACK
(1) # 10 HH TYP. EACH FLANGE
Window Load Bearing Boxed Header Boxed Jamb
3
NTS
ROOF SHEATHING
BOUNDRY NAILING PER SHEAR WALL SCHEDULE
TRUSS TOP CHORD
INFILL 2X STUDS @ 16" O.C. @ EXTERIOR TYPICAL.
TRUSS
GABLE END TRUSS BOTTOM CHORD
SIMPSON A35 @16" O.C.
EDGE FASTENER PER SHEAR WALL SCHEDULE
2X FLAT @48" O.C. WITH (2) 16D END NAILS EACH END
2X FLAT SOLID BLOCKING
SHEAR PANEL PER PLAN
18 GAGE TOP TRACK
STUDS
21
SEE 13 FOR TYPICAL NOTES
12"
3" CLR.
2-#4 TOP & BOTTOM
12"
EXTERIOR FOOTING
17
SEE 13 FOR TYPICAL NOTES
8" MIN.
12"
3" CLR.
2-#4 TOP & BOTTOM
12"
ALTERNATIVE MONOLITHIC POUR EXTERIOR FOOTING AT 1 STORY TYPICAL.
14
FRAMED WALL, SEE PLAN FOR SIZE & SPACING
FINISH SURFACE
(1) #10 HH SCREW ATTACHMENT PER STUD TYP.
TAUT FLAT STRAP
Backing Flat Strap Lightly Loaded
10
NTS
(4) #10 HH SCREW ATTACHMENT
CLIP TRACK FLANGE AT LAP JOINT
TRACK
STUD
FINISH SURFACE
Wall Framing at Corner Track Lap Connection
6
NTS
INSTALL ANCHOR IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
STUD
BASE TRACK
1/4" DIA. SIMPSON TITEN HD WITH 2" EMBED @ 4'-0" O.C. MAX SPACING. ESR 2713.
CLEARANCE TO SLAB EDGE PER ANCHOR MANUFACTURER MINIMUM TYPICAL
Bottom Track Anchorage Wedge Anchor
2
NTS
ROOF SHEATHING
TRUSS TOP CHORD
BOUNDRY NAILING PER SHEAR WALL SCHEDULE
FRAMING ANCHOR PER SHEAR WALL SCHEDULE
2X SOLID BLOCKING
EDGE NAILING PER SHEAR WALL SCHEDULE
TRUSS BOTTOM CHORD
SECURE EACH TRUSS TO TOP PLATES WITH SIMPSON H2.5 TYP.
18 GAGE TOP TRACK
STUDS ALIGN STUD DIRECTLY UNDER TRUSS TYPICAL
SHEAR WALL PER PLAN
20
GYP. BD. PROVIDE 1/4" VERT. GAP @ CONCRETE TYP.
EXTERIOR PLASTER
STUDS
AT SHEAR WALL EDGE FASTENER PER SHEAR WALL SCHEDULE
26 GA. GALV. METAL DRIP SCREED
LOWEST FINAL ADJ. GRADE
FLOORING
CONT. CAULKING BEAD UNDER BOTTOM TRACK
4" ACTUAL THICK SLAB TYPICAL WITH #3 BAR @ 18" O.C. EACH WAY SUPPORTED ON CONCRETE CHAIRS TO ENSURE 2" CLEAR FROM BOTTOM OF REBAR TO BOTTOM OF CONCRETE. PLACE CONCRETE DIRECTLY OVER WATERPROOF MEMBRANE WITH 4" MIN. LAPS SEALED OVER A 4" THICK LAYER OF COMPACTED 1/2" CLEAN GRAVEL BASE.
8"
8" MIN.
2-#4 T & B LAP 30 BAR DIAM. AT SPLICE U.N.O.
12" U.N.O.
3" CLR.
3" CLR. TYP..
12" U.N.O.
5/8" DIA. x 8" EMBEDMENT MIN. A.B. @ 6'-0" O.C. MIN. & 12" FROM ENDS AT ALLWALLS UNLESS NOTED OTHERWISE. AT SHEAR WALLS, SEE SHEAR WALL SCHEDULE FOR ANCHOR BOLT & SPACING.
18"
#4 @ 36" O.C. 9"
PRE-DRILL WOOD FORMS FOR HORIZ STEEL WHERE SLAB OCCURS ON BOTH SIDES, ALTERNATE BEND DIRECTION @ 36" O.C. TYP.
EXTERIOR FOOTING
13
STUD
NOTCHED TRACK CLIP FLANGES AT EA. STUD
(2) #10 HH PER STUD SCREW ATTACHMENT
Backing Clipped Track Heavily Loaded
9
NTS
INFILL STUD
CRIPPLE STUD
#8 FRAMING SCREWS AT ALL LOCATIONS REQ'D
HEADER TRACK
JAMB
ADDITIONAL ANCHORAGE @ JAMB
Door Non-Load Bearing Single Track Header Single Jamb
5
NTS
INSTALL POWER ACTUATED FASTER IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
STUD
BASE TRACK
FASTENER SHALL BE 0.157 DIA. SIMPSON 'PDPA' W/ 1 1/4" EMBED @ 24" O.C. (ICC ESR-2138).
CLEARANCE TO SLAB EDGE PER FASTENER MANUFACTURER
Bottom Track Anchorage Low Velocity Fastener
1
NTS

NO	DATE	REVISION
1	6.24.24	CITY SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		
4		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON J. J. DARLING
ARCHITECT
2259 PASEO DEL MAR
SAN PEDRO, CA 90732 (310)619-9540

SHEET TITLE
4 BEDROOM
DETAILS

DATE 8/10/25
JOB
SHEET
S-2
OF DWGS

GENERAL NOTES

THIS SHEET
REVISED 6.12.24

MATERIAL SPECIFICATIONS AND NOTES FOR CONCRETE TYPICAL.

FOOTING AND SLAB SHALL BE POURED WITH 4500 P.S.I. CONCRETE AT 28 DAYS CURE MIN. OF TYPE V PORTLAND CEMENT WITH A MAXIMUM WATER/CEMENT RATIO OF 0.45 (BY WEIGHT) CONFORMING TO ACI 304. ONLY TYPE V CEMENT SHALL BE PLACED.

ADMIXTURES MAY BE USED AS REQUIRED TO ALLOW PLACEMENT OF THE REQUIRED LOW WATER/CEMENT RATIO CONCRETE.

TOP OF SLAB SHALL BE SHALLOWLY (1" DEEP) SAWCUT AT 10'-0" O.C. WITHIN 6 TO 8 HOURS OF CONCRETE PLACEMENT PER THE RECOMMENDATIONS OF THE AMERICAN CONCRETE INSTITUTE (ACI) - EACH WAY FORMING A SQUARE PATTERN GRID TO PROVIDE SHRINKAGE CRACK CONTROL.

EXPOSED SLAB EDGE AND EXTERIOR FOUNDATION FACES SHALL BE COATED WITH A PERMANENT WATERPROOFING MEMBRANE.

PROVIDE WATERPROOF MEMBRANE AND ALL REQUIRED ANCILLARY COMPONENTS. TURN DOWN VAPOR BARRIER AT FOOTING TO EXTEND UNDER FOOTING, UNDER SLAB AND BACK UP AT EXTERIOR FACE TO FINISH GRADE LEVEL PER THE WIRE REINFORCEMENT INSTITUTE (WRI) RECOMMENDATIONS. UNDER THE SLAB PORTION OF THE BUILDING FOUNDATION, THE VAPOR BARRIER SHALL BE COVERED BY 4 INCHES OF CLEAN SAND.

WATERPROOF MEMBRANE AND ALL ANCILLARY COMPONENTS SHALL BE PREPRUFE 300R/160R PLUS BY GRACE. INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

SLAB REINFORCING SHALL BE SET ON CHAIRS AT CENTER OF SLAB.

REINFORCING STEEL AT BOTTOM OF FOOTINGS/BEAMS SHALL BE SET ON CHAIRS.

STEEL REINFORCING SHALL BE SET SO AS TO PROVIDE A MINIMUM 3" COVER OF DENSELY CONSOLIDATED CONCRETE (BY USE OF A VIBRATOR) TO SOIL CLEARANCE TYPICAL.

ALL WALL ANCHOR BOLTS AND ALL HOLD DOWN ANCHOR BOLTS SHALL BE HOT DIP GALV. TYP.

REBAR SHALL BE ASTM A615 OR ASTM A706 DEFORMED GRADE 40 OR GRADE 60 BILLET STEEL AS CALLED OUT.

NO METALLIC WATER PIPES OR CONDUITS SHALL BE PLACED BELOW FOUNDATIONS.

'STRAP-TYPE' HOLD DOWN ANCHORS ARE NOT ALLOWED. ANCHORS SHALL BE SOLID ROUND BAR STEEL, HOT-DIP GALV. ANCHORS WITH HOT-DIP GALV. WASHER AND TWO HOT-DIP GALV. NUTS UNLESS NOTED OTHERWISE.

INSPECTION AND CERTIFICATE:
PROVIDE SPECIAL (DEPUTY) INSPECTION FOR THE FOLLOWING ITEMS:

ALL DRILLED ADHESIVE ANCHORS FOR STRUCTURAL WORK. ALL SITE WELDS ON STRUCTURAL MEMBERS EXCEPT METAL STUDS AND FURRING, AND WHERE OTHERWISE NOTED.
FOUNDATION ANCHOR BOLT TEMPLATES FOR MANUFACTURED SHEAR PANEL/FRAME SYSTEMS.

THE OWNER OR OWNER'S REPRESENTATIVE SHALL SELECT A QUALIFIED DEPUTY OR SPECIAL INSPECTOR, TO INSPECT THE PORTIONS OF WORK SHOWN ON PLANS AS REQUIRING SPECIAL INSPECTION. INSPECTOR SHALL BE LICENSED OR OTHERWISE APPROVED, BY THE GOVERNING BUILDING OFFICIAL OR AGENCY, TO PERFORM THE REQUIRED INSPECTIONS. INSPECTOR SHALL PREPARE WRITTEN REPORTS OR FORMS FOR ALL INSPECTIONS PERFORMED, AND SHALL FURNISH COPIES OF ALL INSPECTION REPORTS TO THE ENGINEER OF RECORD AND THE OWNER OR OWNER'S REPRESENTATIVE, IN A TIMELY MANNER, AND PRIOR TO NEXT PLANNED FIELD VISIT OF THE BUILDING OFFICIAL.

PLAN NOTES:

SEE ARCHITECTURAL PLANS FOR BUILDING PAD DIMENSIONS, FLOOR ELEVATIONS, AND FINISHES.

THE FINAL MANUFACTURED ROOF FRAMING PLANS MUST BE REVIEWED, SIGNED AND WET STAMPED BY ENGINEER OF RECORD.

THE FINAL FOUNDATION PLANS MUST BE REVIEWED, SIGNED AND WET STAMPED BY ENGINEER OF RECORD AND PROJECT GEOTECHNICAL CONSULTANT.

FASTENERS IN CONTACT WITH PRESERVATIVE TREATED WOOD OR FIRE-RETARDANT WOOD, INCLUDING NUTS, BOLTS, ANCHOR BOLTS, LAG BOLTS, PLATE WASHERS, CUT WASHERS, NAILS, ETC., SHALL BE HOT DIPPED GALVANIZED STEEL OR STAINLESS STEEL.

ROOF SHEATHING: 1/2" OR 5/8" CDX PLYWOOD, OR OSB, (PANEL I.D. 24:0), W/8d @ 6:12, MINIMUM, U.N.O. UNBLOCKED.

NOTE: HORIZONTAL WALL ANCHOR, DRAG, AND CROSSTIE BOLTS SHALL BE RE-TIGHTENED JUST PRIOR TO FINISH CLOSURE.

HOLDOWNS SHALL BE INSTALLED PER THE STRICT RECOMMENDATIONS OF THE MANUFACTURER.

SIMPSON 'S/HDU6' HOLDOWN ON MINIMUM DOUBLE STUD, AT BASE OF SHEARWALL SHOWN.

NUTS OF HOLDOWNS AND ALL BOLTED CONNECTIONS WITH PLATE WASHERS SHALL BE WRENCH TIGHTENED 'SNUG' PRIOR TO INSPECTION AND COVERING. DO NOT OVERTIGHTEN.

POWER-DRIVEN FASTENERS SHALL NOT BE USED TO ANCHOR SILL PLATES EXCEPT AT INTERIOR NONBEARING WALLS NOT DESIGNED AS SHEAR WALLS. VERIFY SUITABILITY OF POWER-DRIVEN FASTENERS FOR GENERAL USE ON SLAB.

EXTERIOR ANCHOR BOLTS AND POST BASES SHALL BE HOT-DIPPED GALVANIZED AND EACH ANCHOR BOLT SHALL HAVE AT LEAST TWO HOT DIPPED GALVANIZED NUTS ABOVE THE BASE PLATE.

BUILDER TO VERIFY ALL CONDITIONS IN THE FIELD. PLANS ARE A GUIDELINE FOR CONSTRUCTION AND FIELD CONDITIONS MAY VARY AND TAKE PRECEDENCE. ENGINEER OF RECORD IS NOT HELD RESPONSIBLE UNDER ANY CONDITION FOR BUILDER'S PERFORMANCE IN THE CONSTRUCTION AND/OR MANAGEMENT OF THIS PROJECT AND FOR ANY DISCREPANCIES THAT MAY ARISE FROM THESE PLANS.

GARAGE: PROVIDE POSITIVE WHEEL STOP PROTECTION AT GARAGE PARKING SPACES TO PROTECT WALL & UTILITIES FROM IMPACT.

STRUCTURAL STEEL:
ALL STRUCTURAL AND MISCELLANEOUS STEEL SHALL CONFORM TO A.S.T.M. SPECIFICATIOIN A-36 AND SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE A.I.S.C. SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS. FABRICATION SHALL BE DONE IN THE SHOP OF A LICENSED FABRICATOR. SUBMIT SHOP DRAWINGS FOR REVIEW BY THE ENGINEER PRIOR TO FABRICATION.

MACHINE BOLTS SHALL CONFORM TO A.S.T.M. A-307 WITH WASHERS UNLESS OTHERWISE NOTED. WHERE HIGH-STRENGTH BOLTS ARE SPECIFIED, BOLTS SHALL CONFORM TO A.S.T.M. A-325, WITH DEPUTY INSPECTION REQUIRED. BOLT HOLES IN STEEL SHALL BE 1/16" LARGER DIAMETER THAN NOMINAL SIZE OF BOLT USED, EXCEPT AS NOTED.

COLD FORMED STEEL MEMBERS SHALL CONFORM TO A.S.T.M A-446 GRADE A, U.N.O. ON PLANS.

WELDING IS TO COMPLY WITH A.W.S. SPECIFICATION D-1.1 AND IS TO BE DONE BY CERTIFIED WELDERS AS REQUIRED BY THE DEPARTMENT OF BUILDING AND SAFETY. ALL WELDING IS TO BE DONE BY ELECTRIC ARC PROCESS AND SHALL BE PERFORMED WITH APPROVED LOW-HYDROGEN ELECTRODES (TYPE E-70). SHOP WELDS ARE DESIGNED AT FULL STRESS.

WELDED ANCHORS (THREADED STUDS OR HEADED STUDS, ETC.) SHALL BE APPROVED 'NELSON' OR EQUAL, MADE FROM C-1015 COLD ROLLED STEEL AND SHALL CONFORM TO A.S.T.M. A-108 GRADES 1015-1020, WITH A MINIMUM TENSILE STRENGTH OF 60,000 psi. STUD WELDING SHALL CONFORM TO A.W.S D1.1.

FIELD WELDS ARE DESIGNED AT HALF STRESS. DEPUTY INSPECTION NOT REQUIRED FOR FIELD WELDS UNLESS OTHERWISE NOTED. PROVIDE CERTIFICATION AND INSPECTION AS REQUIRED BY THE BUILDING DEPARTMENT.

STRUCTURAL STEEL SHALL HAVE, AS A MINIMUM, A SHOP COAT OF RED-OXIDE PRIMER; OTHER COATINGS MAY BE SPECIFIED ON ARCHITECTURAL OR STRUCTURAL DRAWINGS FOR SPECIFIC STRUCTURAL ELEMENTS. FIELD CONNECTIONS AND ABRASIONS SHALL BE CLEANED AND TOUCHED UP WITH THE SAME TYPE OF PAINT AS THE SHOP COAT.

MANUFACTURED ROOF FRAMING:
FABRICATOR SHALL SUBMIT CERTIFICATE OF INSPECTION TO BUILDING DEPARTMENT AND ENGINEER, PRIOR TO INSTALLATION. FABRICATOR SHALL BE LICENSED AS REQUIRED BY BUILDING DEPARTMENT.

FABRICATOR SHALL SUBMIT SHOP DRAWINGS, ERECTION PLANS AND DESIGN CALCULATIONS (SEALED BY AN ENGINEER REGISTERED IN THE STATE) TO THIS OFFICE FOR REVIEW PRIOR TO FABRICATION.

NOTCHING OR DRILLING OF FABRICATED FRAMING IS PERMITTED ONLY AT LOCATIONS SPECIFIED ON MANUFACTURER'S ERECTION PLANS.

FRAMING SHALL BE ERECTED AND INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS. APPROVED ERECTION DRAWINGS SHALL BEAR AN ENGINEER'S SEAL AND BE KEPT ON THE JOBSITE AS PART OF THE APPROVED PLAN SET. FABRICATED FRAMING SHALL BE TRANSPORTED, STORED, ERECTED AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL PERMANENT AND TEMPORARY BRACING AND FASTENING SHALL BE BY THE MANUFACTURER, U.N.O. ON PLANS.

LIGHT-GAUGE STRUCTURAL STEEL FRAMING:
ALL 18 AND 20 GAUGE STUDS AND JOISTS SHALL BE 33,000 psi MINIMUM YIELD STRESS STEEL. FRAMING OF 16 GAUGE AND HEAVIER SHALL BE 50,000 psi MINIMUM YIELD STRESS. ALL STRUCTURAL FRAMING SPECIFIED IS TO BE MANUFACTURED BY APPROVED MANUFACTURERS UNDER SSMA STANDARD AND ICC-ES REPORT NUMBER ESR-3064P, AND STAMPED AS SUCH.

FASTENERS FOR LIGHT-GAUGE FRAMING SPECIFIED ARE "DARTS" BRAND SELF-DRILLING/SELF-TAPPING STEEL SCREWS, MANUFACTURED BY PRIMESOURCE BUILDING PRODUCTS (ICC ESR-1408), OR EQUAL. SUBMIT ICC REPORT FOR REVIEW.

BRIDGING SHALL BE COLD ROLLED CHANNEL, MINIMUM 1-1/2" DEEP WITH 9/16" FLANGE WIDTH. SPACE BRIDGING AT 4'-0" MAXIMUM o.c. VERTICALLY. DOUBLE STUDS AT ALL JAMBS. ALL CONNECTIONS SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.

LUMBER:
ALL FRAMING MEMBERS SHALL BE DOUGLAS FIR-LARCH (W.C.D.F.) PER WEST COAST LUMBER INSPECTION BUREAU. EXCEPTIONS TO THE ABOVE SHALL BE NOTED ON PLANS. ALL LUMBER SHALL BE GRADE MARKED. MAXIMUM MOISTURE CONTENT FOR ALL STRUCTURAL MEMBERS SHALL NOT EXCEED 19 PERCENT.

RAFTERS (2x, 4x OR LARGER).. (NO 1)
JOISTS (2x, 4x OR LARGER).. (NO 1)
OTHER HORIZONTAL (BEAMS, PURLINS, HEADERS, ETC) (NO 1)
LEDGERS AND NAILERS... (NO 2)
STUDS (2x4 AND LARGER)... (NO 2 OR STUD)
POSTS (4x4 AND LARGER.. (NO 1)
SILLS, PLATES AND BLOCKING.................................... (NO 2)

PLYWOOD SHALL BE PS 1-09, DOUGLAS FIR-LARCH, STRUCTURAL I . O.S.B. SHEATHING SHALL BE PS 02-10. PROTECT FROM MOISTURE AT ALL TIMES. STUCCO AND/OR STUCCO WITH VENEER OVER A PLYWOOD SHEAR WALL SHALL BE WATERPROOFED WITH A MINIMUM OF (2) 15# UNDERLAYMENTS.

ALL BOLT HEADS AND NUTS BEARING ON WOOD SHALL HAVE WASHERS. HOLES IN WOOD FOR BOLTS SHALL BE DRILLED 1/32" TO 1/16" LARGER THAN NOMINAL BOLT SIZE. ALL BOLTS, SILL ANCHOR NUTS AND HOLDOWN ANCHOR NUTS SHALL BE RETIGHTENED PRIOR TO CLOSING IN. INSPECTOR TO VERIFY.

MACHINE BOLTS SHALL CONFORM TO A.S.T.M A-307

UNLESS OTHERWISE NOTED ON FRAMING PLANS, OR FABRICATOR'S FRAMING/ERECTION PLANS, MINIMUM PLYWOOD ROOF SHEATHING SHALL BE 1/2" STANDARD (C-D) WITH EXTERIOR GLUE, PANEL I.D. 24/0, NAILED WITH 8d NAILS AT 6:12. PLYWOOD SHEETS SHALL BE LAID WITH THE LONG DIMENSION AND FACE GRAIN PERPENDICULAR TO THE RAFTERS AND THE SHEETS SHALL BE STAGGERED AS SHOWN. EACH SHEET CHALL CONTAIN A MINIMUM OF 8 SQUARE FEET AND EXTEND TO 3 BEARINGS. PLYWOOD DIAPHRAGM SHALL BE INSPECTED AND APPROVED BEFORE COVERING IS LAID.

DO NOT NOTCH OR DRILL JOISTS, BEAMS OR LOAD-BEARING STUDS WITHOUT PRIOR APPROVAL OF ENGINEER, UNLESS SPECIFIED ON PLANS OR DETAILS. HOLES THROUGH SILL, PLATES, STUDS AND DOUBLE PLATES IN INTERIOR, BEARING AND SHEAR WALLS SHALL NOT EXCEED 1/3 THE PLATE WIDTH. USE BORED HOLES LOCATED ON THE CENTER LINE OF THE STUD OR PLATE.

ALL HANGERS, CONNECTORS AND STANDARD FRAMING HARDWARE UNLESS OTHERWISE NOTED ON DRAWINGS SHALL BE AS MANUFACTURED BY THE SIMPSON 'STRONG-TIE' COMPANY AND IDENTIFIED BY NUMBERS AS SHOWN IN THEIR LATEST CATALOG. SUBSTITUTIONS SHALL NOT BE USED UNLESS APPROVED BY THE ENGINEER. ALL MANUFACTURED HARDWARE SHALL COMPLY WITH A SPECIFIC ICC / IAPMO AND/ OR LARR RESEARCH REPORT.

GROUT OR DRYPACK:
DRYPACK UNDER BASE PLATES, SILL PLATES AND WHERE OTHERWISE NOTED ON DRAWINGS SHALL CONSIST OF 1 PART PORTLAND CEMENT AND 2.5 PARTS OF FINE AGGREGATE CONFORMING TO A.S.T.M. C-33, WITH ENOUGH WATER TO FORM A BALL WHEN SQUEEZED IN THE HAND. THE SPACE BETWEEN TWO SURFACES REQUIRING DRYPACK SHALL BE PACKED WITH THE DRYPACK MATERIAL BY TAMPING OR RAMMING WITH A BAR OR ROD, UNTIL THE VOID IS COMPLETELY FILLED. MINIMUM 28 DAY STRENGTH SHALL BE 5000 psi.

IN LIEU OF DRYPACK, NON-SHRINK GROUT SHALL BE A READY-TO-USE NON-METALLIC AGGREGATE PRODUCT REQUIRING ONLY THE ADDITION OF WATER AT THE JOB SITE, AND SHOULD BE CAPABLE OF PRODUCING A FLOWABLE GROUTING MATERIAL HAVING NO DRYING SHRINKAGE OR SETTLEMENT AT ANY AGE. THE COMPRESSIVE STRENGTH OF THE GROUT SHALL BE NOT LESS THAN 5000 psi AT SEVEN (7) DAYS, AND 7500 psi AT 28 DAYS.

GENERAL:
WORK SHALL CONFORM TO THE REQUIREMENTS, AS AMENDED TO DATE, OF THE 2022 CALIFORNIA BUILDING CODE (CBC/22) AND ALL LOCAL, STATE AND FEDERAL ORDINANCES AND REQUIREMENTS.

ALL MATERIALS AND WORKMANSHIP SHALL COMFORM TO THE DRAWINGS AND SPECIFICATIONS. THE APPROVED DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE BUILDING. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING, BRACING AND GUYS IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY ORDINANCES. BRACING AND SHORING SHALL BE MAINTAINED IN PLACE UNTIL ALL PROTECTED WORK HAS BEEN SUITABLY COMPLETED.

OBSERVATION VISITS TO THE SITE BY THE ENGINEER SHALL NOT INCLUDE INSPECTIONS OF THE PROTECTIVE MEASURES OR THE CONSTRUCTION PROCEDURES. ANY SUPPORT SERVICES PERFORMED BY THE ENGINEER DURING THE CONSTRUCTION SHALL BE DISTINGUISED FROM CONTINUOUS AND DETAILED INSPECTION SERVICES, WHICH ARE FUNRISHED BY OTHERS. THESE SUPPORT SERVICES PERFORMED BY THE ENGINEER, WHETHER MATERIAL OR WORK, AND WHETHER PERFORMED PRIOR TO, DURING, OR AFTER COMPLETION OF CONSTRUCTION, ARE PERFORMED SOLELY FOR THE PURPOSE OF ASSISTING IN QUALITY CONTROL AND IN ACHIEVING GENERAL CONFORMANCE WITH CONTRACT DOCUMENTS, BUT DO NOT GUARANTEE CONTRACTOR'S PERFORMANCE AND SHALL NOT BE CONSTRUED AS SUPERVISION OF CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES.

ANY ENGINEERING DESIGN PROVIDED BY OTHERS (MANUFACTURED ROOF FRAMING; FOUNDATION & SLAB) AND SUBMITTED FOR REVIEW SHALL BEAR THE SEAL OF AN ENGINEER REGISTERED IN THE STATE.

DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED.

OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE APPROVED STRUCTURAL DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH ANY WORK INVOLVED.

DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE ON DRAWINGS. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.

THE APPROVED SET OF PLANS, INCLUDING ALL APPROVED REVISIONS AND ADDENDA, SHALL BE ON THE JOB SITE AT ALL TIMES.

PROVIDE OPENINGS AND SUPPORTS, AS REQUIRED PER STANDARD DETAILS FOR HEATERS, MECHANICAL EQUIPMENT, VENTS, DUCTS, PIPING, ETC. ALL SUSPENDED MECHANICAL EQUIPMENT SHALL BE SWAY OR LATERALLY BRACED.

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, STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED ROOF. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. PROVIDE ADEQUATE SHORING AND/ OR BRACING WHERE STRUCTURE HAS NOT ATTAINED DESIGN STRENGTH.

THE DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THE DRAWINGS AND SPECIFICATIONS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE AND ANY ON-SITE PERSONS DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING, SAFE PLACEMENT OF CONSTRUCTION EQUIPMENT, BARRICADES, SAFE PLACEMENT OF CONSTRUCTION MATERIAL, ETC. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT OR STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OR OBSERVATION SERVICES OF THE ABOVE OR SIMILAR TYPE ITEMS.

GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027
STATE OF CALIFORNIA

NO	DATE	REVISION
1	12.28.23	CITY SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		
4		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON J. J. DARLING
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2259 PASEO DEL MAR
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SHEET TITLE
4 BEDROOM TYPE DHS UNIT
GENERAL NOTES

DATE 8/10/25
JOB

SHEET
S-3
OF DWGS

WOOD

REQUIRED VERIFICATION AND INSPECTION OF STRUCTURAL WOOD SEISMIC-RESISTING ELEMENTS

VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED	REFERENCE STANDARD	CBC REFERENCE
1. FIELD GLUEING OR EPOXING OPERATIONS	X	-	-	1705.12.2
2. NAILING, BOLTING, ANCHORING, & OTHER FASTENING OF WOOD SHEAR WALLS, DIAPHRAGMS DRAGS, BRACES, SHEAR PANELS, & HOLDOWNS	-	X	-	1705.12.2
3. FABRICATED ITEMS IN SHOP	X	-	-	1704.2.5
4. VERIFY THAT NUTS ON ANCHOR BOLTS, HOLDOWNS, & FABRICATED ITEMS ARE SNUG-TIGHT OR TORQUED PER PLAN	-	X	-	1705.5

NOTE:

FOR ANCHORS IN CONCRETE & MASONRY, SEE THOSE TABLES.

CONCRETE (TABLE 1705A.3)

REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD[a]	CBC REFERENCE
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	-	X	ACI 318 Ch. 20, 25.2, 25.3, 26.5.1-26.5.3	1908.4
2. REINFORCING BAR WELDING:				
a. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706;	-	X	AWS D1.4 ACI 318: 26.5.4	-
b. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16".	-	X		
c. INSPECT ALL OTHER WELDS	X	-		
3. INSPECT ANCHORS CAST IN CONCRETE.	-	X	ACI 318: 17.8.2	-
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS. b, c				
a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	X	-	ACI 318: 17.8.2.4	-
b. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.a.	-	X	ACI 318: 17.8.2	
5. VERIFY USE OF REQUIRED DESIGN MIX.	-	X	ACI 318: Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	-	ASTM C172, ASTM C31, ACI 318: 26.4.5, 26.12	1908.10
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	-	ACI 318: 26.4.5	1908.6, 1908.7, 1908.8
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	-	X	ACI 318: 26.4.7-26.4.9	1908.9
9. INSPECT PRESTRESSED CONRETE FOR:				
a. APPLICATION OF PRESTRESSING FORCES.	X	-	ACI 318: 26.9.1	-
b. GROUTING OF BONDED PRESTRESSING TENDONS.	X	-	ACI 318: 26.9.3	
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	-	X	ACI 318: 26.8	-
11. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	-	X	ACI 318: 26.10.2	-
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED	-	X	ACI 318: 26.10.1(b)	-

a. WHERE APPLICABLE, SEE ALSO SECTION 1705A.12, SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE.

b. SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH 17.8.2 IN ACI 318, OR OTHER QUALIFICATION PROCEDURES. WHERE SPECIFIC REQUIREMENTS ARE NOT PROVIDED, SPECIAL INSPECTION REQUIREMENTS SHALL BE SPECIFIED BY THE REGISTERED DESIGN PROFESSIONAL AND SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO THE COMMENCEMENT OF THE WORK.

c. INSTALLATION OF ALL ADHESIVE ANCHORS IN HORIZONTAL AND UPWARDLY INCLINED POSITIONS SHALL BE PERFORMED BY AN ACI/CRSI CERTIFIED ADHESIVE ANCHOR INSTALLER, EXCEPT WHERE THE FACTORED DESIGN TENSION ON THE ANCHORS IS LESS THAN 100 LBS AND THOSE ANCHORS ARE CLEARLY NOTED ON THE APPROVED CONSTRUCTION DOCUMENTS OR WHERE THE ANCHORS ARE SHEAR DOWELS ACROSS COLD JOINTS IN SLABS ON GRADE WHERE THE SLAB IS NOT PART OF THE LATERAL FORCE-RESISTING SYSTEM.

SPECIAL INSPECTION

1. ALL SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 1704 OF THE CODE AND ANY ADDITIONAL REQUIREMENTS STATED IN THESE DRAWINGS AND/OR THE PROJECT SPECIFICATIONS AND DSA FORM 103.

2. CONTINUOUS SPECIAL INSPECTION BY A REGISTERED DEPUTY INSPECTOR IS REQUIRED FOR FIELD WELDING, CONCRETE STRENGTH f'c>2500 psi, AND SPRAYED-ON FIREPROOFING.

3. FIELD WELDING TO BE DONE BY WELDERS CERTIFIED BY THE LADBS FOR STRUCTURAL STEEL. CONTINUOUS INSPECTION BY A DEPUTY INSPECTOR IS REQUIRED.

4. SHOP WELDS MUST BE PERMORMED IN A LICENSED FABRICATOR SHOP.

LOADING

1. DESIGN LOADS
   - FLOOR LIVE LOAD = 40 PSF
   - ROOF LIVE LOAD = 20 PSF
2. WIND ANALYSIS PER CHAPTER 16A OF THE CODE
   - RISK CATEGORY = II
   - BASIC WIND SPEED, V = 97 mph
   - EXPOSURE = C
3. SEISMIC ANALYSIS PER CHAPTER 16 OF THE CODE UTILIZING THE FOLLOWING:
   - A. PROCEDURE - EQUIVALENT LATERAL FORCE ANALYSIS (Rho = 1.0)
   - B. SYSTEM - LIGHT - FRAME CFS WALLS w/ RATED WOOD SHTG

SEISMIC PARAMETERS

S_s =	1.878g	S_{DS} =	1.252g
S_1 =	0.783g	S_{D1} =	0.887g
F_a =	1.0	DESIGN CATEGORY =	E
F_v =	1.7	SITE CLASS =	D
I_e =	1	V_s =	CS * W
R =	6.5	C_s =	0.193W
C_d =	3	OMEGA =	2.5

STRUCTURAL OBSERVATIONS

1. PERIODIC STRUCTURAL OBSERVATION SHALL BE PERFORMED BY THE ENGINEER OF RECORD AT CRITICAL STAGES OF CONSTRUCTION IN ACCORDANCE WITH CBC 1704A. STRUCTURAL OBSERVATION DOES NOT RELIEVE THE CONTRACTOR FROM THE REQUIREMENTS OF SPECIAL INSPECTION. SEE 'SPECIAL INSPECTION NOTES' FOR ITEMS REQUIRING INSPECTION.
2. NOTIFY THE ENGINEER AT SIGNIFICANT CONSTRUCTION STAGES 72 HOURS IN ADVANCE AND PROVIDE ACCESS FOR THE FOLLOWING STRUCTURAL OBSERVATIONS:
   - A. FOUNDATIONS
     - a. REINFORCEMENT
     - b. OTHER EMBEDDED ELEMENTS
   - B. STEEL FRAMING
     - a. GENERAL
   - C. CONCRETE
     - a. REINFORCING LAYOUT
     - b. PREPARATION OF SHOTCRETE PANEL (IF SHOTCRETE IS USED)
     - c. OPENING OF SHOTCRETE TEST PANEL
     - d. POST-TENSIONING LAYOUT
   - D. MASONRY
     - a. REINFORCING LAYOUT
   - E. WOOD
     - a. DIAPHRAGMS & SHEAR WALLS
     - b. PROPRIETARY HOLDOWN SYSTEM
   - F. DEMOLITION WORK

SPECIAL INSPECTIONS

1. ALL SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF CBC CH 17A AND ANY ADDITIONAL REQUIREMENTS STATED IN THESE DRAWINGS AND/OR THE PROJECT SPECIFICATIONS.
2. THE OWNER SHALL PROVIDE FOR A SPECIAL INSPECTOR(S) WHO WILL PROVIDE SPECIAL INSPECTIONS OF THE CONSTRUCTION AS PRESCRIBED BY THE CODE AND THE CONSTRUCTION DOCUMENTS. IN NO CASE SHALL THE REQUIREMENTS IN THE CONSTRUCTION DOCUMENTS PROVIDE FOR ANY LESS THAN THE MINIMUM REQUIREMENTS OF THE CODE OR ANY OTHER GOVERNING AUTHORITY. ANY SUCH DISCREPANCY SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER.
3. THE SPECIAL INSPECTOR SHALL BE QUALIFIED BY THE JURISDICTION TO PROVIDE INSPECTIONS OF THE SPECIFIC CONSTRUCTION OR OPERATION REQUIRED. PROOF OF SUCH QUALIFICATION SHALL BE PROVIDED TO THE ENGINEER PRIOR TO THE START OF INSPECTIONS.
4. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, THE ENGINEER, ARCHITECT AND THE CONTRACTOR IN A TIMELY MANNER. ALL DISCREPANCIES BETWEEN THE INSPECTORS WORK AND THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF NOT CORRECTED, TO THE ENGINEER, ARCHITECT AND THE BUILDING OFFICIAL. THE SPECIAL INSPECTOR SHALL KEEP RECORDS SUCH THAT ALL CONCERNED PARTIES CAN IDENTIFY THE OUTSTANDING WORK THAT NEEDS CORRECTION AND SUCH THAT CORRECTED WORK IS RECORDED IN A TIMELY MANNER.
5. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING THAT THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN GENERAL CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE CODE. IF NON-CONFORMING WORK REMAINS, THEN THIS WORK SHALL BE ITEMIZED AND NOTED IN THE REPORT.
6. THE CONTRACTOR SHALL PROVIDE ACCESS TO THE WORK REQUIRING SPECIAL INSPECTION. THE CONTRACTOR SHALL PROVIDE A DESIGNATED AREA, ON SITE, FOR THE SPECIAL INSPECTOR TO RECEIVE CORRESPONDENCE AND AN AREA TO LEAVE CORRESPONDENCE FOR THE BUILDING OFFICIAL AND THE CONTRACTOR. THE CONTRACTOR SHALL DESIGNATE A QUALITY CONTROL INDIVIDUAL THAT SHALL ACT AS THE MAIN POINT OF CONTACT FOR THE INSPECTOR, ENGINEER AND ARCHITECT REGARDING INSPECTIONS ISSUES.
7. A PRE-INSPECTION MEETING SHALL BE HELD AND ORGANIZED BY THE CONTRACTOR ONCE INSPECTION HAS STARTED. AS A MINIMUM, THE ENGINEER, SPECIAL INSPECTOR, ARCHITECT, BUILDING OFFICIAL, OWNER'S REPRESENTATIVE AND THE CONTRACTOR'S QUALITY CONTROL INDIVIDUAL SHALL BE INVITED TO ATTEND. THE PURPOSE OF THE MEETING WILL BE TO MEET EACH OTHER, CONFIRM THE SCOPE OF WORK FOR EACH DISCIPLINE, ESTABLISH COMMUNICATION PROTOCOLS AND ANSWER ANY QUESTIONS.

LICENSED ARCHITECT
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027
STATE OF CALIFORNIA

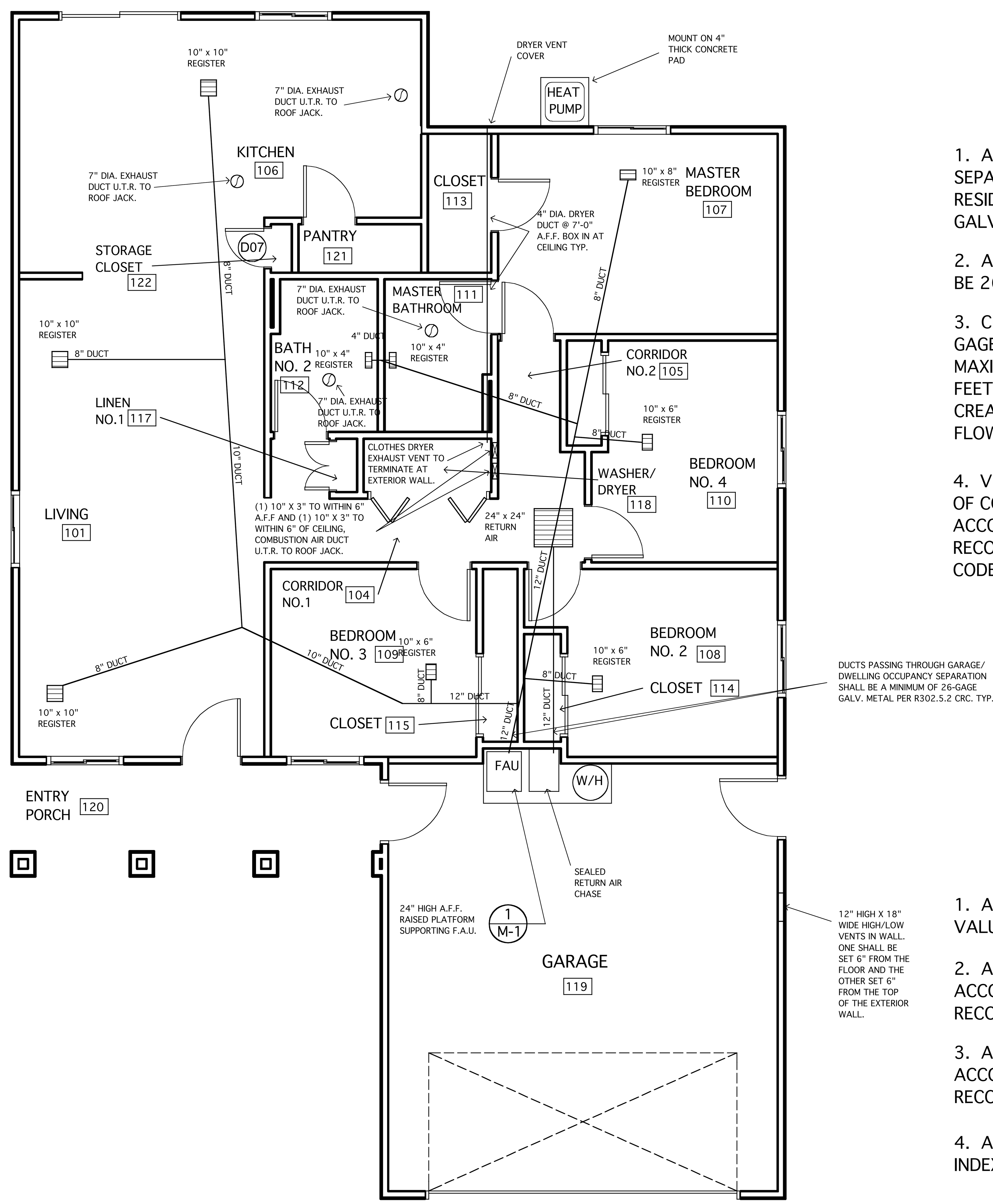
NO.	DATE	REVISION
1	6.11.24	CITY SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		
4		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON J. J. DARLING
ARCHITECT
2259 PASEO DEL MAR
SAN PEDRO, CA. 90732 (310)619-9540

SHEET TITLE
SPECIAL INSPECTION, NOTES, TABLES & REQUIREMENTS

DATE: 8/10/25
JOB:
SHEET: SI-1
OF DWGS



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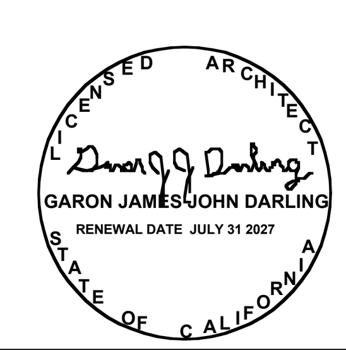
MECHANICAL FLOOR PLAN - 4 BEDROOM UNIT

1/4"= 1'-0" SCALE



GENERAL NOTES (MECHANICAL)

1. ALL DUCT PENETRATIONS THROUGH WALLS SEPARATING GARAGE FROM THE REST OF THE RESIDENCE SHALL BE INSTALLED WITH 26 GAGE GALV. SHEET METAL ONLY.

2. ALL DUCTS OCCURRING IN THE GARAGE SHALL BE 26 GAGE GALV. SHEET METAL ONLY.

3. CLOTHES DRYER EXHAUST DUCT SHALL BE 26 GAGE GALV. SMOOTH SHEET METAL ONLY WITH A MAXIMUM OF TWO 90 DEGREE BENDS AND 15 FEET LENGTH. SEAMS AND JOINTS SHALL NOT CREATE OBSTRUCTIONS OR POCKETS TO RESTRICT FLOW.

4. VENTING OF EXHAUST GASSES AND THE SUPPLY OF COMBUSTION AIR SHALL BE IN STRICT ACCORDANCE WITH THE MANUFATURERS RECOMMENDATIONS AND THE NATIONAL FUEL GAS CODE ANSI Z223.1/NFPA 54.

ENERGY NOTES (MECHANICAL)

1. ALL DUCTING SHALL PROVIDE AN INSULATION VALUE OF R-8.

2. ALL DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMEDATIONS AND INSTRUCTIONS.

3. ALL DUCTWORK SHALL BE SEALED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMEDATIONS AND INSTRUCTIONS.

4. ALL DUCTWORK SHALL BE TESTED FOR HERS INDEX.

HVAC GENERAL NOTES

1. THE MECHANICAL CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR, EQUIPMENT, APPURTENANCES, AND ALL CONTRACTURAL EXPENSES REQUIRED FOR THE COMPLETE INSTALLATION OF THE MECHANICAL SYSTEM TO THE SATISFACTION OF THE OWNER AND ARCHITECT.

2. THE INSTALLATION SHALL COMPLY WITH AND BE INSTALLED IN ACCORDANCE WITH ALL LEGALLY CONSTITUTED AUTHORITIES & CODES HAVING JURISDICTION.

3. THE MECHANICAL CONTRACTOR SHALL GUARANTEE ALL EQUIPMENT, APPARATUS, ACCESSORIES (I.E., THE ENTIRE INSTALLATION) AS FURNISHED BY HIM OR HER FOR A PERIOD OF ONE YEAR.

4. THE MECHANICAL CONTRACTOR SHALL OBTAIN & PAY FOR ALL PERMITS, LICENSES & INSPECTIONS REQUIRED TO COMPLETE THIS JOB.

5. THE MECHANICAL CONTRACTOR SHALL COORDINATE THE SIZE, LOCATION, & SERVICE REQUIRMENTS OF ALL MECHANICAL EQUIPMENT & DUCTWORK WITH THE GENERAL, PLUMBING, ELECTRICAL, FIRE SPRINKLER CONTRACTORS PRIOR TO THE START OF CONSTRUCTION. ARCHITECT SHALL BE NOTIFIED OF ANY CONFLICTS PRIOR TO THE START OF CONSTRUCTION.

6. ALL SHEET METAL DUCTWORK SHALL BE NEW GALVANIZED SHEET METAL. DUCT GAUGES, CONSTRUCTION, SUPPORT AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE CALIFORNIA BUILDING CODE, CALIFORNIA MECHANICAL CODE AND 'SMACNA BEST TRADE PRACTICES'.

7. LINED DUCT WORK SIZE SHOWN ON DRAWINGS ARE INSIDE DIMENSIONS. DUCT LINER SHALL BE JOHNS-MANVILLE 'LINACOUSTIC' TYPE FIBER GLASS DUCT LINER 1.0" THICK, 1.5 LBS./CU. FT. DENSITY OR APPROVED ALTERNATIVE.

8. ALL TRANSVERSE JOINTS IN SUPPLY AIR DUCT SHALL BE SEALED AIR TIGHT 4 OZ. CANVAS AND AIRBOL. THE CANVAS SHALL EXTEND 1" ON BOTH SIDES OF SEAM AND JOINT.

9. FLEXIBLE CONNECTIONS SHALL BE PROVIDED FOR ALL DUCTWORK ATTACHED TO AIR MOVING EQUIPMENT MOUNTED ON OR SUSPENDED FROM VIBRATION ISOLATORS. FLEXIBLE CONNECTIONS SHALL BE CODE APPROVED NEOPRENE COATED GLASS TYPE FABRIC.

10. FLEXIBLE CONNECTIONS SHALL BE PROVIDED AT ALL MECHANICAL EQUIPMENT MOUNTED ON OR SUSPENDED FROM VIBRATION ISOLATORS. FLEXIBLE CONNECTIONS SHALL BE CODE APPROVED AND IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

11. FLEXIBLE CONNECTIONS (MECHANICAL, PLUMBING AND ELECTRICAL) SHALL BE PROVIDED AT ALL MECHANICAL EQUIPMENT MOUNTED ON OR SUSPENDED FROM VIBRATION ISOLATORS. FLEXIBLE CONNECTIONS SHALL BE CODE APPROVED AND IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

12. ALL CONDENSATE DRAIN LINES RUNNING INSIDE BUILDINGS SPACES SHALL BE INSULATED WITH JOHNS-MANVILLE 'AEROTUBE' TYPE PREFORMED SNAP-ON PLASTIC INSULATION.

13. PROVIDE ALL FIRE AND SMOKE DAMPERS AS REQUIRED BY LEGALLY CONSTITUTED AUTHORITIES AND CODES HAVING JURISDICTION.

14. PAINT PLENUM BEHIND EACH GRILLE OR REGISTER WITH FLAT BLACK PAINT.

15. TEST, BALANCE AND ADJUST ALL DIFFUSERS, REGISTERS, ETC, FOR OPTIMUM AIR DISTRIBUTION AND MINIMUM NOISE.

16. ALL WALL SUPPLY REGISTERS (W.S.R.) SHALL BE KRUEGER AL 5880V DOUBLE DEFLECTION WITH O.B.D. FRAMES TO SUIT WALL OR CEILING.

17. ALL MODULAR CEILING DIFFUSERS (C.D.) SHALL BE KRUEGER SERIES 1200 CONSTRUCTED OF ALUMINUM WITH O.B.D. FRAMES TO SUIT CEILING. FINISH SHALL MATCH CEILING PAINT. CONSULT OWNER FOR COLOR.

18. RETURN AIR GRILLES SHALL BE KRUEGER SERIES EGC. ALL ALUMINUM. FRAME TO SUIT CEILING. FINISH SHALL MATCH CEILING PAINT. CONSULT OWNER FOR COLOR.

19. REFRIGERANT LINES SHALL BE TYPE 'L' COPPER WITH SILVER SOLDER JOINTS. PROVIDE AND INSTALL ALL NECESSARY MATERIALS INCLUDING WIDE ELBOWS ONLY AND ALL REQUIRED APPURTNANCES FOR A COMPLETE JOB.

20. ALL REFRIGERANT LINES SHALL BE INSULATED WITH 3/4" FOAMED PLASTIC PIPE INSULATION J.M. 'AEROTUBE' OR EQUAL. WEATHER SEAL AND UV PROOF COVERING SHALL BE INSTALLED AT ALL PIPING EXPOSED TO SUN AND WEATHER TYPICAL.

22. FLEXIBLE DUCT SHALL BE JOHNS-MANVILLE 'MICRO-AIRE J-FLX' TYPE INSULATED FIBER GLASS DUCT, LENGTH NOT TO EXCEED 60".

23. ALL SUPPLY, RETURN AND OUTSIDE AIR INTAKE DUCTS SHALL BE WRAPPED WITH JOHNS-MANVILLE 'R-SERIES MICRO-LITE WITH FSKL' TYPE FIBER GLASS DUCT INSULATION WITH ALUMINUM FOIL FACING; 2" THICK, 0.75 LBS./CU. FT. DENSITY.

AIR HANDLER SCHEDULE

MANUFACTURER	HEATING CAPACITY	COOLING CAPACITY	FLA	ELECTRICAL		
				VOLT	PH	HZ.
ALLIED - AC PRO	42,000	3.5 TON	40	230	1	60

HEAT PUMP SCHEDULE

MANUFACTURER	COOLING CAPACITY	SEER	EER2	HSPF2	FLA	WEIGHT	ELECTRICAL		
	TOTAL						VOLT	PH	HZ.
ALLIED - AC PRO	42,000	14.3	11.7	7.5	40.0	262	230	1	60

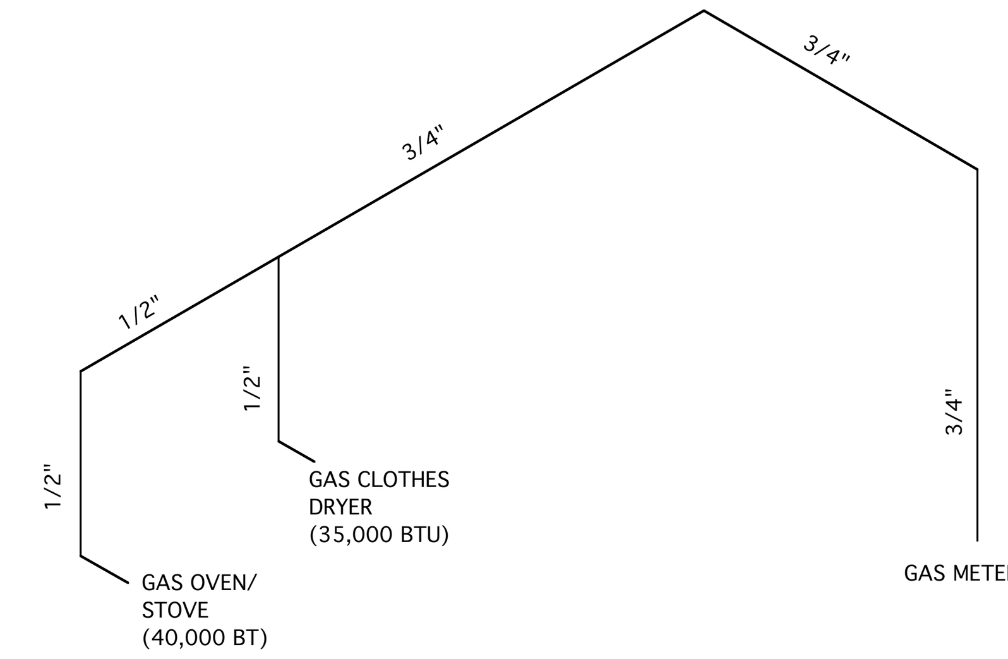
NO	DATE	REVISION
1	6.24.24	CITY SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

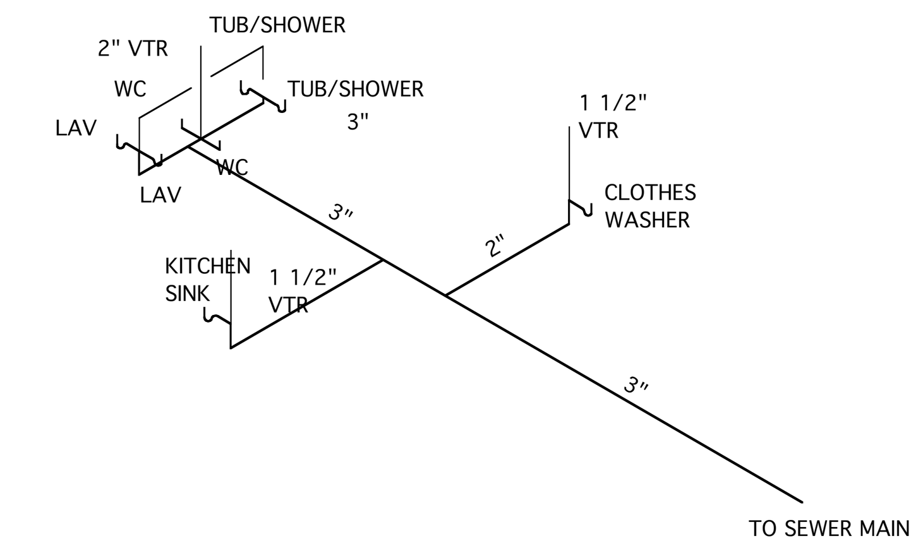
GARON J. J. DARLING
ARCHITECT
2259 PASEO DEL MAR
SAN PEDRO, CA. 90732 (310)619-9540

SHEET TITLE
MODEL 1412
MECHANICAL FLOOR PLAN SCHEDULE, LEGEND & NOTES

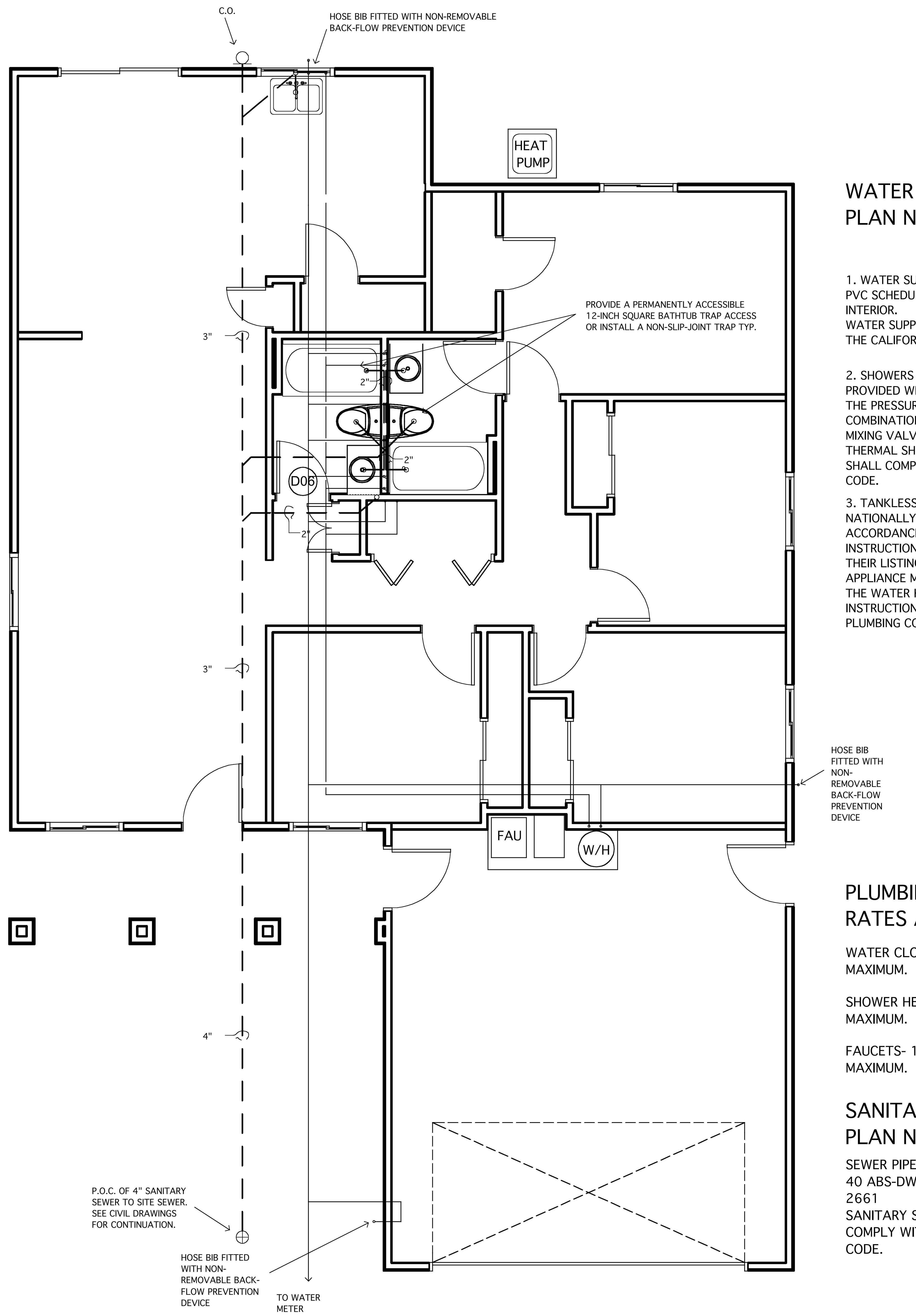
DATE 8/10/25
JOB
SHEET
M-1
OF DWGS



GAS - ISO



PLUMBING - ISO



WATER SUPPLY LAYOUT PLAN NOTES

1. WATER SUPPLY PIPE MATERIAL SHALL BE PEX OR PVC SCHEDULE 40 PIPE AT EXTERIOR, PEX AT INTERIOR.
WATER SUPPLY INSTALLATION SHALL COMPLY WITH THE CALIFORNIA PLUMBING CODE.

2. SHOWERS AND SHOWER-TUBS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE, THERMOSTATIC, OR COMBINATION PRESSURE BALANCE/THERMOSTATIC MIXING VALVE TYPE THAT PROVIDE SCALD AND THERMAL SHOCK PROTECTION. INSTALLATION SHALL COMPLY WITH THE CALIFORNIA PLUMBING CODE.

3. TANKLESS WATER HEATERS SHALL BE NATIONALLY LISTED AND BE INSTALLED IN ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS THAT WERE APPROVED AS PART OF THEIR LISTING. THE GAS PIPING SERVING THIS APPLIANCE MUST BE SIZED IN COMPLIANCE WITH THE WATER HEATER'S LISTED INSTALLATION INSTRUCTIONS AND THE 2016 CALIFORNIA PLUMBING CODE.

PLUMBING FIXTURE FLOW RATES AND NOTES

WATER CLOSET - 1.28 GALLONS PER FLUSH MAXIMUM.

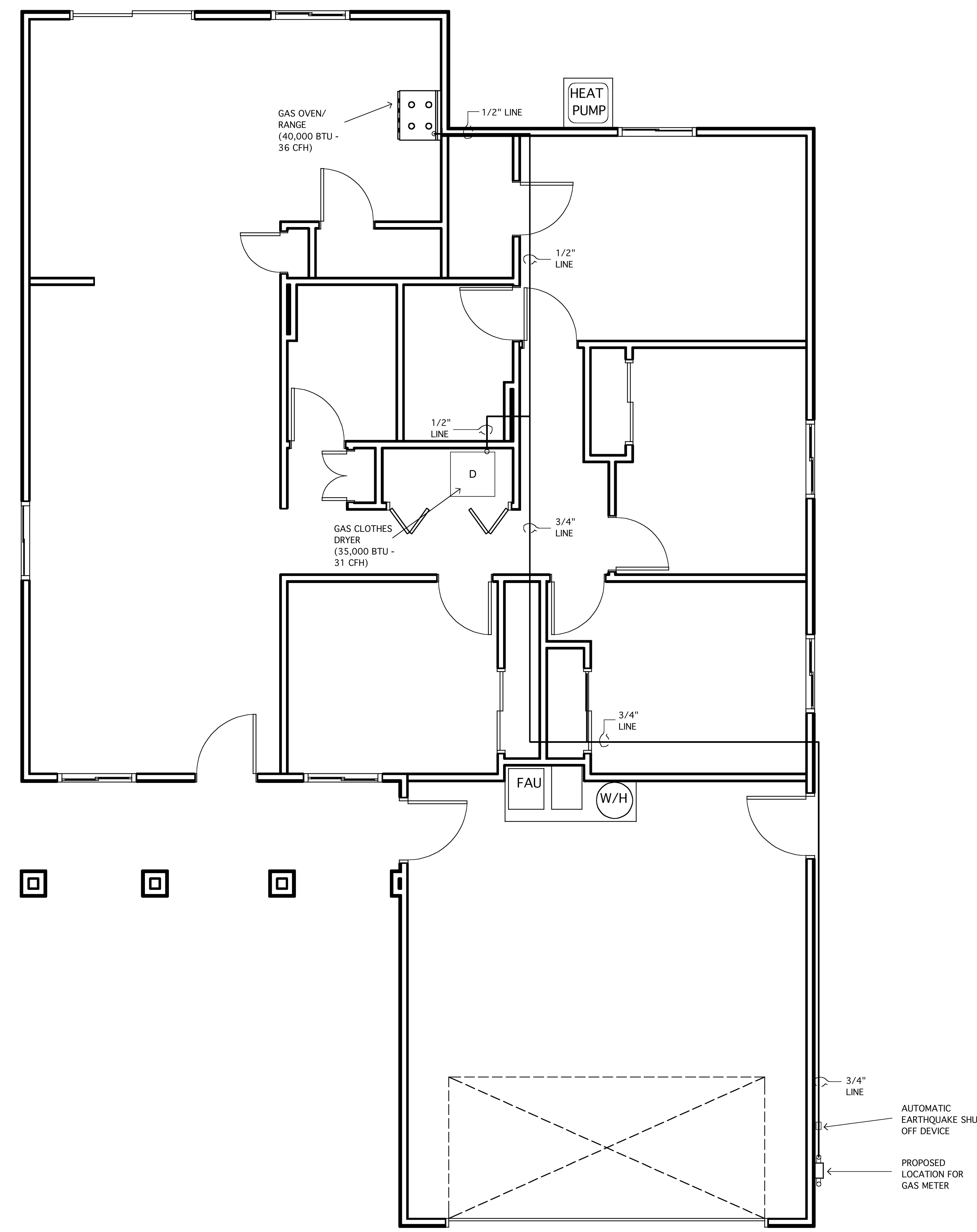
SHOWER HEADS - 2.0 GALLONS PER MINUTE MAXIMUM.

FAUCETS- 1.2 GALLONS PER MINUTE MAXIMUM.

SANITARY SEWER LAYOUT PLAN NOTES

SEWER PIPE MATERIAL SHALL BE SCHEDULE 40 ABS-DWV PIPE AND FITTINGS PER ASTM D 2661
SANITARY SEWER INSTALLATION SHALL COMPLY WITH THE CALIFORNIA PLUMBING CODE.

PLUMBING (SEWER & WATER) FLOOR PLAN - 4 BEDROOM UNIT
1/4"= 1'-0" SCALE



GAS LAYOUT PLAN NOTES

GAS SIZING DEMANDS

DEVELOPED PIPE LENGTH = 66 LINEAL FEET.
GAS PIPE MATERIAL SHALL BE SCHEDULE 40 BLACK METALIC PIPE.
GAS INSTALLATION SHALL COMPLY WITH THE CALIFORNIA PLUMBING CODE.

MAXIMUM GAS DEMAND

OVEN/RANGE - 36 CFH (1/2" DIA. PIPE)
CLOTHES DRYER - 31 CFH (1/2" DIA. PIPE)

COMBINED TOTAL - 67 CFH (3/4" DIA. PIPE)

NOTE; ALL PLUMBING GAS INSTALLATION SHALL COMPLY WITH THE 2022 CALIFORNIA PLUMBING CODE.

PLUMBING (GAS) FLOOR PLAN - 4 BEDROOM UNIT
1/4"= 1'-0" SCALE

GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027

NO.	DATE	REVISION
1	6.24.24	CITY SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON J. J. DARLING
ARCHITECT
2259 PASEO DEL MAR
SAN PEDRO, CA. 90732 (310)619-9540

SHEET TITLE
MODEL 1412
PLUMBING FLOOR PLAN SCHEDULE, LEGEND & NOTES

DATE: 8/10/25
JOB:
SHEET: P-1
OF DWGS

5/24/24 Job# 32565 JH

Slawomir Rutkowski
Coachella Valley Housing Coalition
45-701 Monroe Street, Suite G
Indio, CA 92201
760-347-3157
CBECC v3.1
Re: Mariposa Point in Coachella, CA

CONSERVATION FOR THE CALIFORNIA LIFESTYLE
CL&E
A Division of Builder Services Network
Title 24 Compliance-Residential/Non-Residential
2937 Veneman Ave, Suite C275
Modesto, CA 95356
Ph: 209-618-4462 Fx: 209-846-9796

Climate Zone 15 **2022 Code Compliance**

	EDR Efficiency / EDR Total	**1.5 / 0.1**
	EDR Source	**0.2**
	Photovoltaic	5.15 kW
	Plan Name	**1412**
	File Name	CV1412MP
	Square Footage	**1412**
	Number of Stories	1
	Glazing Percentage	10.48%
Envelope	Roofing Material	Tile
	Reflectance/Emittance	0.26 / 0.90
	Attic Floor*	R-38
	Attic Below Roof Deck	R-13
	Radiant Barrier	-
	Exterior Wall 2x4 Stucco	R-15 + R-4
	Exterior Wall 2x4 Siding	-
	Exterior Wall 2x6 Stucco	-
	Exterior Wall 2x6 Siding	-
	Knee Wall	-
	Floor Over Garage/Exterior	-
	Sub Floor/Slab	Slab
HVAC	Minimum SEER2/EER2 Value	14.3 / 11.7
	Minimum HSPF2	7.5
	Duct Insulation	R-6.0
	Whole House Fan (CFM)	-
HERS Inspections	Fan Wattage (W/CFM)	Yes (0.45)
	Airflow (CFM)	Yes (350)
	Duct Testing Required	Yes (5.0%)
	Indoor Air Quality (CFM)	Yes (72) Balanced
	HRV/ERV W/CFM	0.88
	HRV/ERV SRE	69%
	HRV/ERV ASRE	75%
	HRV/ERV Fault Indicator Display	Yes
	Kitchen Exhaust	Yes
	Refrigerant Charge	Yes
	SEER2 Verification	-
	EER2 Verification	-
	Heat Capacity Verification	Yes
	Infiltration (CFM)	-
	Low Leakage Air Handler	-
	Insulation Inspection**	Yes
H_2O	Fuel Type	Heat Pump
	Uniform Energy Factor (Tank Size)	PROPH50 T2 RH375-30
	Distribution	Standard

Windows	**U-Value**	**SHGC**
Operable	0.30	0.20
Sliding Glass Door	0.30	0.20

Date of Plans: 4/30/24

* Due to the stringencies of the California Energy Commission for approved methods of quality insulation inspection. California Living & Energy recommends to not install batt-insulation in the attic and ceiling areas due to the risk of not meeting the quality insulation inspection requirements.

****Builders are strongly encouraged to enforce strict Title 24 compliance with all subcontractor scopes of work. Modifications to Title 24 specifications during construction may result in complications including but not limited to sampling protocol, CF-3R closing delays, state registry errors, and/or loss of rebates plus no CF-3R at final.**

***This document is for communication purposes only. CF-1R compliance certificate(s) will be issued after approval of this document, and after HERS registration has been completed, if needed. Upon receipt of the final CF-1R form(s), please distribute to corresponding subcontractors.

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GENERAL INFORMATION

01	**Project Name**	Mariposa Point			
02	**Run Title**	Plan 1412			
03	**Project Location**	Plan 1412			
04	**City**	Coachella, CA	05	**Standards Version**	2022
06	**Zip code**	92203	07	**Software Version**	CBECC-Res 2022.3.1
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**	4
14	**Addition Cond. Floor Area (ft²)**	0	15	**Number of Stories**	1
16	**Existing Cond. Floor Area (ft²)**	n/a	17	**Fenestration Average U-factor**	0.3
18	**Total Cond. Floor Area (ft²)**	1412	19	**Glazing Percentage (%)**	10.48%
20	**ADU Bedroom Count**	n/a	21	**ADU Conditioned Floor Area**	n/a
22	**Fuel Type**	Natural gas	23	**No Dwelling Unit:**	No

COMPLIANCE RESULTS

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

Registration Number: 424-P010092796A-000-000-0000000-0000 Registration Date/Time: 05/30/2024 14:26 HERS Provider: CHEERS
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Schema Version: rev 20220901

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	38.6	44.4	25.8			
Proposed Design						
North Facing	38.4	43	25.6	0.2	1.4	0.2
East Facing	38.4	42.9	25.7	0.2	1.5	0.1
South Facing	38.2	42	25.1	0.4	2.4	0.7
West Facing	38.4	42.8	25.6	0.2	1.6	0.2

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: 4.41 kWdc

Registration Number: 424-P010092796A-000-000-0000000-0000 Registration Date/Time: 05/30/2024 14:26 HERS Provider: CHEERS
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CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2024-05-21 17:11:38
Schema Version: rev 20220901

ENERGY USE SUMMARY

Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft² -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft² -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft² -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft² -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	0.12	0.6	0.03	0.23	0.09	0.37
Space Cooling	4.08	74.09	4.11	72.12	-0.03	1.97
IAQ Ventilation	0.79	8.28	1	10.41	-0.21	-2.13
Water Heating	1.16	12.34	0.84	9.51	0.32	2.83
Self Utilization/Flexibility Credit			0	0	0	0
North Facing Efficiency Compliance Total	**6.15**	**95.31**	**5.98**	**92.27**	**0.17**	**3.04**
Space Heating	0.12	0.6	0.04	0.25	0.08	0.35
Space Cooling	4.08	74.09	4.12	72.14	-0.04	1.95
IAQ Ventilation	0.79	8.28	1	10.41	-0.21	-2.13
Water Heating	1.16	12.34	0.82	9.25	0.34	3.09
Self Utilization/Flexibility Credit			0	0	0	0
East Facing Efficiency Compliance Total	**6.15**	**95.31**	**5.98**	**92.05**	**0.17**	**3.26**

Registration Number: 424-P010092796A-000-000-0000000-0000 Registration Date/Time: 05/30/2024 14:26 HERS Provider: CHEERS
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ENERGY USE SUMMARY

Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft² -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft² -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft² -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft² -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	0.12	0.6	0.03	0.23	0.09	0.37
Space Cooling	4.08	74.09	4.06	70.53	0.02	3.56
IAQ Ventilation	0.79	8.28	1	10.41	-0.21	-2.13
Water Heating	1.16	12.34	0.8	9.14	0.36	3.2
Self Utilization/Flexibility Credit			0	0	0	0
South Facing Efficiency Compliance Total	**6.15**	**95.31**	**5.89**	**90.31**	**0.26**	**5**
Space Heating	0.12	0.6	0.03	0.22	0.09	0.38
Space Cooling	4.08	74.09	4.12	71.98	-0.04	2.11
IAQ Ventilation	0.79	8.28	1	10.41	-0.21	-2.13
Water Heating	1.16	12.34	0.82	9.4	0.34	2.94
Self Utilization/Flexibility Credit			0	0	0	0
West Facing Efficiency Compliance Total	**6.15**	**95.31**	**5.97**	**92.01**	**0.18**	**3.3**

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ENERGY USE INTENSITY

	Standard Design (kBtu/ft² - yr)	Proposed Design (kBtu/ft² - yr)	Compliance Margin (kBtu/ft² - yr)	Margin Percentage
North Facing				
Gross EUI[1]	23.03	22.74	0.29	1.26
Net EUI[2]	4.84	5.03	-0.19	-3.93
East Facing				
Gross EUI[1]	23.03	22.61	0.42	1.82
Net EUI[2]	4.84	4.91	-0.07	-1.45
South Facing				
Gross EUI[1]	23.03	22.47	0.56	2.43
Net EUI[2]	4.84	4.76	0.08	1.65
West Facing				
Gross EUI[1]	23.03	22.8	0.23	1
Net EUI[2]	4.84	5.1	-0.26	-5.37

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.

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Schema Version: rev 20220901

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 (%)
5.15	NA	Standard (14-17%)	Fixed	none	true	105-300	n/a	n/a	<=7:12	96	94

REQUIRED SPECIAL FEATURES

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

- PV System: 5.15 kWdc
- Indoor air quality, balanced fan
- IAQ Ventilation System Heat Recovery: minimum 69 SRE and 75 ASRE
- IAQ Ventilation System: supply outside air inlet, filter, and H/ERV cores accessible per RACM Reference Manual
- IAQ Ventilation System: fault indicator display
- Cool roof
- Insulation below roof deck
- Window overhangs and/or fins
- 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

- Quality insulation installation (QII)
- Indoor air quality ventilation
- Kitchen range hood
- Minimum Airflow
- Verified Refrigerant Charge
- Fan Efficacy Watts/CFM
- Verified heat pump rated heating capacity
- Duct leakage testing

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BUILDING - FEATURES INFORMATION

01	02	03	04	05	06	07
Project Name	Conditioned Floor Area (ft²)	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems
Mariposa Point	1412	1	4	1	0	1

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft²)	Avg. Ceiling Height	Water Heating System 1	Status
Conditioned	Conditioned	HVAC	1412	8.1	DHW	New

OPAQUE SURFACES

01	02	03	04	05	06	07	08
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window and Door Area (ft2)	Tilt (deg)
Front Wall	Conditioned	R-15 w/1 Foam Wall	0	Front	155.25	52.1	90
Left Wall	Conditioned	R-15 w/1 Foam Wall	90	Left	314.55	16	90
Back Wall	Conditioned	R-15 w/1 Foam Wall	180	Back	324	68	90
Right Wall	Conditioned	R-15 w/1 Foam Wall	270	Right	314.55	32	90
Garage Wall	Conditioned>>Garage	R-15 Wall - Interior	n/a	n/a	184.95	0	n/a
Roof	Conditioned	R-38 Attic Roof	n/a	n/a	1362	n/a	n/a
FAU Platform	Conditioned	R-19 Attic Roof	n/a	n/a	50	n/a	n/a
Roof - Garage	Garage	R-0 Attic Roof	n/a	n/a	462	n/a	n/a
Front Wall - Garage	Garage	R-0 Stucco	0	Front	168.75	112	90
Left Wall - Garage	Garage	R-0 Stucco	90	Left	179.55	0	90
Right Wall - Garage	Garage	R-0 Stucco	270	Right	179.55	0	90

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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 House	Tile HPA	Ventilated	4	0.26	0.9	No	Yes
Attic Garage	Tile	Ventilated	4	0.26	0.9	No	No

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft²)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
4040 Oper	Window	Front Wall	Front	0	4	4	1	16	0.3	NFRC	0.2	NFRC	Bug Screen
4040 Oper 2	Window	Front Wall	Front	0	4	4	1	16	0.3	NFRC	0.2	NFRC	Bug Screen
4040 Oper 3	Window	Left Wall	Left	90	4	4	1	16	0.3	NFRC	0.2	NFRC	Bug Screen
6068 SGD	Window	Back Wall	Back	180	6	6.66667	1	40	0.3	NFRC	0.2	NFRC	Bug Screen
4030 Oper	Window	Back Wall	Back	180	4	3	1	12	0.3	NFRC	0.2	NFRC	Bug Screen
4040 Oper 4	Window	Back Wall	Back	180	4	4	1	16	0.3	NFRC	0.2	NFRC	Bug Screen
4040 Oper 5	Window	Right Wall	Right	270	4	4	1	16	0.3	NFRC	0.2	NFRC	Bug Screen
4040 Oper 6	Window	Right Wall	Right	270	4	4	1	16	0.3	NFRC	0.2	NFRC	Bug Screen

OPAQUE DOORS

01	02	03	04
Name	Side of Building	Area (ft²)	U-factor
Entry	Front Wall	20.1	0.2
Car Door	Front Wall - Garage	112	1

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Schema Version: rev 20220901

OVERHANGS AND FINS

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Window	Overhang					Left Fin				Right Fin			
	Depth	Dist Up	Left Extent	Right Extent	Flap Ht.	Depth	Top Up	Dist L	Bot Up	Depth	Top Up	Dist R	Bot Up
4040 Oper	5	1	0	0	0	0	0	0	0	0	0	0	0
4040 Oper 2	5	1	0	0	0	0	0	0	0	0	0	0	0
4040 Oper 3	1.5	1	0	0	0	0	0	0	0	0	0	0	0
6068 SGD	1.5	3	0	0	0	0	0	0	0	0	0	0	0
4030 Oper	1.5	4	0	0	0	0	0	0	0	0	0	0	0
4040 Oper 4	1.5	4	0	0	0	0	0	0	0	0	0	0	0
4040 Oper 5	1.5	1	0	0	0	0	0	0	0	0	0	0	0
4040 Oper 6	1.5	1	0	0	0	0	0	0	0	0	0	0	0

SLAB FLOORS

01	02	03	04	05	06	07	08
Name	Zone	Area (ft²)	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted Fraction	Heated
Slab-on-Grade	Conditioned	1412	136.833	none	0	80%	No
Slab-on-Grade - Garage	Garage	462	64	none	0	0%	No

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Schema Version: rev 20220901

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-0 Stucco	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-0	None / None	0.361	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4 Exterior Finish: 3 Coat Stucco
R-15 w/1 Foam Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-15	None / 4	0.064	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Sheathing / Insulation: R-4 Sheathing Exterior Finish: Synthetic Stucco
R-15 Wall - Interior	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-15	None / None	0.086	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Other Side Finish: Gypsum Board
Tile	Attic Roofs	Wood Framed Ceiling	2x4 Top Chord of Roof Truss @ 24 in. O. C.	R-0	None / None	0.4	Roofing: 10 PSF (RoofTileAirGap) Tile Gap: present Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4 Top Chrd
Tile HPA	Attic Roofs	Wood Framed Ceiling	2x4 Top Chord of Roof Truss @ 24 in. O. C.	R-13	None / None	0.072	Roofing: 10 PSF (RoofTileAirGap) Tile Gap: present Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-13.0 / 2x4 Top Chrd Around Roof Joists: R-0.0 insul.
R-0 Attic Roof	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-0	None / None	0.481	Cavity / Frame: no insul. / 2x4 Inside Finish: Gypsum Board
R-38 Attic Roof	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-38	None / None	0.025	Over Ceiling Joists: R-28.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board

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OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-19 Attic Roof	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-19	None / None	0.049	Over Ceiling Joists: R-9.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board

BUILDING ENVELOPE - HERS VERIFICATION

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

WATER HEATING SYSTEMS

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

WATER HEATERS - NEEA HEAT PUMP

01	02	03	04	05	06	07	08
Name	# of Units	Tank Vol. (gal)	NEEA Heat Pump Brand	NEEA Heat Pump Model	Tank Location	Duct Inlet Air Source	Duct Outlet Air Source
Water Heater	1	50	Rheem	PROPH50 T2 RH37530 (50 gal, JA13)	TankZone	Garage	Garage

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Schema Version: rev 20220901

WATER HEATING - HERS VERIFICATION

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

SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06	07	08	09
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Required Thermostat Type
HVAC	Heat pump heating cooling	Heat Pump	1	Heat Pump	1	HVAC Fan 1	Ducts	Setback

HVAC - HEAT PUMPS

01	02	03	04	05	06	07	08	09	10	11	12	13
Name	System Type	Number of Units	Heating				Cooling			Zonally Controlled	Compressor Type	HERS Verification
			Heating Efficiency Type	HSPF/HSPF2/COP	Cap 47	Cap 17	Cooling Efficiency Type	SEER/SEER2	EER/EER2/CEER			
Heat Pump	Central split HP	1	HSPF2	7.5	24000	13680	EER2SEER2	14.3	11.7	Not Zonal	Single Speed	Heat Pump-hers-htpump

HVAC HEAT PUMPS - HERS VERIFICATION

01	02	03	04	05	06	07	08	09
Name	Verified Airflow	Airflow Target	Verified EER/EER2	Verified SEER/SEER2	Verified Refrigerant Charge	Verified HSPF/HSPF2	Verified Heating Cap 47	Verified Heating Cap 17
Heat Pump-hers-htpump	Required	350	Not Required	Not Required	Yes	No	Yes	Yes

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Schema Version: rev 20220901

HVAC - DISTRIBUTION SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
Name	Type	Design Type	Duct Ins. R-value		Duct Location		Surface Area		Bypass Duct	Duct Leakage	HERS Verification
			Supply	Return	Supply	Return	Supply	Return			
Ducts	Unconditioned attic	Non-Verified	R-6	R-6	Attic	Attic	n/a	n/a	No Bypass Duct	Sealed and Tested	Ducts-hers-dist

HVAC DISTRIBUTION - HERS VERIFICATION

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

HVAC - FAN SYSTEMS

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

HVAC FAN SYSTEMS - HERS VERIFICATION

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

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INDOOR AIR QUALITY (IAQ) FANS

01	02	03	04	05	06	07	08	09
Dwelling Unit	Airflow (CFM)	Fan Efficacy (W/CFM)	IAQ Fan Type	Includes Heat/Energy Recovery?	IAQ Recovery Effectiveness - SRE/ASRE	Includes Fault Indicator Display?	HERS Verification	Status
SFam IAQVentRpt 1-1	72	0.88	Balanced	Yes	69 / 75	Yes	Yes	

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DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: James Hernandez	Documentation Author Signature: James Hernandez
Company: Builder Services Network	Signature Date: 05/24/2024
Address: 2937 Veneman Avenue	CEA/ HERS Certification Identification (If applicable): R22-18-40006
City/State/Zip: Modesto, CA 95356	Phone: 209-538-2879

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: Angelica O'Malley	Responsible Designer Signature: Angelica O'Malley
Company: Coachella Valley Housing Coalition	Date Signed: 05/30/2024
Address: 45-701 Monroe Street	License: 820319
City/State/Zip: Indio, CA 92201	Phone: 800-689-4663

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

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Schema Version: rev 20220901

NOTE: The loads shown are only one of the criteria affecting the selection of HVAC equipment. Other relevant design factors such as airflow requirements, outdoor design temperatures, coil sizing, availability of equipment, oversizing safety margin, etc, must also be considered. It is the HVAC designer's responsibility to consider all factors when selecting the HVAC equipment. Mechanical Contractor must warrant the installed system to meet all Energy Star requirements if applicable. The minimum size of the residential heating systems is regulated by the California Building Code (CBC), Section 310.11. The CBC requires that the heating system be capable of maintaining a temperature of 70° at a distance three feet above the floor throughout the conditioned space of the building. California Living & Energy does not warrant or assume responsibility for performance or installation of any equipment labeled or alluded to on any calculation produced by California Living & Energy. Builder and all sub-contractors working on the project involving Title-24 understand and accept all aspects of the Title-24 submitted to building department pertaining to their work. All sub-contractors are responsible to contact the builder and California Living & Energy before beginning work if there is any error in any calculation that would prevent the Sub-Contractor from warranting the performance of his product which includes any Energy Star procedures.

CONSERVATION FOR THE CALIFORNIA LIFESTYLE
CALIFORNIA LIVING & ENERGY
Title 24 Compliance - Residential/Non Residential
A Division of Builder Services Network
Modesto, CA 209-618-4462 Fax: 209-846-9796
www.califliving.com

If a Builder and/or Subcontractor deviates in anyway from any design produced by California Living & Energy without the expressed written consent of California Living & Energy then all warranties become null and void.

Coachella Valley Housing Coalition
45-701 Monroe Street, Suite G
Indio, CA 92201
760-347-3157

Mariposa Point
Coachella, CA

REVISIONS

no.	date	remarks
△	-	-
△	-	-
△	-	-
△	-	-
△	-	-
△	-	-
△	-	-
△	-	-
△	-	-
△	-	-

AUTHOR: JH
DATE: 5/30/24
JOB NO: 32565

SHEET TITLE
PLAN 1412 ENERGY CALCULATIONS

SHEET
EN-2

SECTION	SCOPE	REQUIREMENT	SHEET #	COMMENT

CHAPTER 7 INSTALLER & SPECIAL INSPECTOR QUALIFICATION (QUALIFICATIONS, VERIFICATIONS)

702.1
Installer training
HVAC system installers shall be trained and certified in the proper installation of HVAC systems and equipment by a recognized training or certification program.
Examples of acceptable HVAC training and certification programs include but are not limited to the following:
1. State certified apprenticeship programs.
2. Public utility training programs.
3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
4. Programs sponsored by manufacturing organizations. 5. Other programs acceptable to the enforcing agency.

702.2
Special inspection
Special inspectors must be qualified and able to demonstrate competence to the enforcing agency in the discipline in which they are inspecting.

703.1
Documentation
Documentation of compliance shall include, but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the local enforcing agency. Other specific documentation or special

SECTION	SCOPE	REQUIREMENT	SHEET #	COMMENT

4.504.4
Resilient flooring systems
Where resilient flooring is installed, at least 80% of floor area receiving resilient flooring shall comply with one or more of the following:
1. Products compliant with the California Department of Public Health, Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, Version 1.1, February 2010 (also known as Specification 01350), certified as a CHPS Low-Emitting Material in the Collaborative for High Performance Schools (CHPS) High Performance Products Database
2. Products certified under UL GREENGUARD Gold (formerly the Greenguard Children & Schools Program)
3. Certification under the Resilient Floor Covering Institute (RFCI) FloorScore program
4. Meet the California Department of Public Health, Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers,Version 1.1, February 2010 (also known as Specification 01350)

4.504.5
Composite wood products
Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified in the Air Resources Board, Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.), as shown in Table 4.504.5. Documentation is required per Section 4.504.5.1.
Definition of Composite Wood Products: Composite wood products include hardwood plywood, particleboard, and medium density fiberboard. ,Composite wood products, do not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, prefabricated wood I-joists, or finger-joined lumber, all as specified in CCR, Title 17, Section 93120.1(a).

4.504.5.1
Documentation
Verification of compliance shall be provided as requested by the enforcing agency, and as required in Section 4.504.5.1.

Division 4.5 ENVIRONMENTAL QUALITY (INTERIOR MOISTURE CONTROL)

4.505.2
Concrete slab foundations
Concrete slab foundations or concrete slab-on-ground floors required to have a vapor retarder by the California Building Code, Chapter 19, or the California Residential Code, Chapter 5, respectively, shall also comply with this section.

4.505.2.1
Capillary break
A capillary break shall be installed in compliance with at least 1 of the following:
1. A 4-inch thick base of 1/2-inch or larger clean aggregate shall be provided with a vapor retarder in direct contact with concreate and a concrete mix design which will address bleeding, shrinkage and curling shall be used. For additional information, see American Concrete Institute, ACI 302.2R-06.
2. Other equivalent methods approved by the enforcing agency.
3. A slab design specified by a licensed design professional.

4.505.3
Moisture content of building materials
Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19% moisture content. Moisture content shall be verified in compliance with the following:
1. Moisture content shall be determined with either a probe-type or a contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements in Section 101.8.
2. Moisture readings shall be taken at a point 2 feet to 4 feet from the grade-stamped end of each piece to be verified.
3. At least 3 random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.
Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Manufacturers drying recommendations shall be followed for wet-applied insulation products prior to enclosure.

Division 4.5 ENVIRONMENTAL QUALITY (INDOOR AIR QUALITY & EXHAUST)

4.506.1
Bathroom exhaust fans
Each bathroom shall be mechanically ventilated and shall comply with the following: 1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building.
2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control.
a) Humidity controls shall be capable of manual or automatic adjustment between a relative humidity range of less than 50% to a maximum of 80%.
b) A humidity control may be a separate component to the exhaust fan and is not required to be integral or built-in.
Note: For CALGreen a "bathroom" is a room which contains a bathtub, shower, or tub/shower combination. Fans or mechanical ventilation is required in each bathroom.

Division 4.5 ENVIRONMENTAL QUALITY (ENVIRONMENTAL COMFORT)

4.507.2
Heating and air conditioning system design
Heating and air conditioning systems shall be sized, designed, and equipment selected using the following methods:
1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J 2011 (Residential Load Calculation), ASHRAE handbooks or other equivalent design software or methods.
2. Duct systems are sized according to ANSI/ACCA 1 Manual D, 2014 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods.
3. Select heating and cooling equipment according to ANSI/ ACCA 3 Manual S - 2014 (Residential Equipment Selection) or other equivalent design software or methods. Exception: Use of alternate design temperatures necessary to ensure the systems functions are acceptable.

SECTION	SCOPE	REQUIREMENT	SHEET #	COMMENT

4.408.5 Documentation
documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, items 1 through 5, Section 4.408.3 or Section 4.408.4.

4.408.4 4.408.4.1
Division 4.4 - BUILDING MAINTENANCE & OPERATION
Operation and maintenance manual
At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which covers 10 specific subject areas shall be placed in the building.

4.410.2 Recyling by Occupants
Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible area(s) that serves all buildings on the site and is identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive. Exception: Rural jurisdictions that meet and apply for the exemption in Public Resourses Code Section 42649.82 (a)(2)(A) et. seq. are not required to comply with the organic waste portion of this section.

Division 4.5 ENVIRONMENTAL QUALITY (FIREPLACES)

4.503.1
General
Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with all applicable local ordinances.

Division 4.5 ENVIRONMENTAL QUALITY (POLLUTANT CONTROL)

4.504.1
Protection during construction
At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air intake and distribution component openings shall be covered. Tape, plastic, sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of water, dust and debris entering the system may be used.

4.504.2.1
Adhesives, sealants and caulks
Adhesives, sealants and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules apply:
1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers,and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable, or SCAQMD Rule 1168 VOC limits, as shown in Tables 4.504.1 or 4.504.2, as applicable. Such products shall also comply with Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroentylene), except for aerosol products as specified in Subsection 2 below.
2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than1 pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of the California Code of Regulations (CCR), Title 17, commencing with Section 94507.

4.504.2.2
Paints and coatings
Architectural paints and coatings shall comply with VOC limits in Table 1 of the Air Resources Board Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply.
The VOC content limit for coatings that do not meet the definitions for the specialty coatings catergories listed in Table 4.504.3 shall be determined by classifying the coating as Flat, Nonflat, or Nonflat-High Gloss coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37, of the 2007 California Air Resources Board, Suggested Control Measure, and the corresponding Flat, Nonflat, or Nonflat-High Gloss VOC limit in Table 4.504.3 shall apply.

4.504.2.3
Aerosol paints and coatings
Aerosol paints and coatings shall meet the Product-Weighted MIR Limits for ROC in Section 94522(a)(2) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Section 94522(e)(1) and (f)(1) of the CCR, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District shall additionally comply with the percent VOC by weight of product limits of Regulation 8, Rule 49.

4.504.3
Carpet systems
Carpet installed in the building interior shall meet the testing and product requirements of 1 of the following:
1. Carpet and Rug Institute, Green Label Plus Program
2. California Department of Public Health, ,ÄúStandard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers,Version 1.1, February 2010 (also known as Specification 01350)
3. NSF/ANSI 140 at the Gold level
4. Scientific Certifications Systems Indoor AdvantageTM Gold

4.504.3.1
Carpet cushion
Carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute Green Label Plus Program.

4.504.3.2
Carpet adhesive
Carpet adhesives shall meet the requirements of Table 4.504.1.

LICENSED ARCHITECT
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027
STATE OF CALIFORNIA

SECTION	SCOPE	REQUIREMENT	SHEET #	COMMENT

4.106.4.2.5
Identification
The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as ,"EV CAPABLE" in accordance with the California Electrical Code.
Notes:
1. The California Department of Transportation adopts and publishes the California Manual on Uniform Traffic Control Devices (California MUTCD), to provide uniform standards and specifications for all official traffic control devices in Californ ia. Zero Emission Vehicle Signs and Pavement Markings can be found in the New Policies & Directives Number 12-01. Website: http://www.dot.ca.gov/hq/traffops/policy/13-01.pdf
2. See Vehicle Code Section 22511 for EV charging space signage in off-parking facilities and for use of EV charging spaces.
3. The Govenor's office of Planning and Research (OPR) published a "Zero Emission Vehicle Community Readiness Guidebook" which provides helpful information for local governments, residents and businesses. Website; http:// opr.ca.gov/docs/ZEV_Guidebook.pdf

Division 4.2- ENERGY EFFICIENCY

4.201.1 & 5.201.1
Scope
Energy efficiency requirements for low-rise residential (Section 4.201.1) and high- rise residential/hotels/motels (Section 5.201.1) are now in both residential and nonresidential chapters of CALGreen.
Standards for residential buildings do not require compliance with levels of minimum energy efficiency beyond those required by the 2016 California Energy Code.

Division 4.3 WATER EFFICIENCY AND CONSERVATION (INDOOR WATER USE)

4.303.1
Water conserving plumbing fixtures and fittings
Plumbing fixtures and fittings shall comply with the following: 4.303.1.1, 4.303.1.2, 4.303.1.3.1, 4.303.1.3.2, 4.303.1.4.1, 4.303.1.4.2, 4.303.1.4.3, & 4.303.1.4.4
Water Closets: ≤ 1.28 gal/flush
Wall Mounted Urinals: ≤ 0.125 gal/flush; all other urinals ≤ 0.5 gal/flush Single Showerheads: ≤ 2.0 gpm @ 80 psi
Multiple Showerheads: combined flow rate of all showerheads controlled by a single valve shall not exceed 2.0 gpm @ 80 psi, or only one shower outlet is to be in operation at a time
Residential Lavatory Faucets: Maximum Flow Rate 1.2 gpm @ 60 psi; Minimum Flow Rate ≥ 0.8 gpm @ 20 psi
Lavatory Faucets in Common and Public Use Areas of Residential Buildings: ≤ 0.5 gpm @ 60 psi
Metering Faucets: ≤ 0.25 gallons per cycle
Kitchen Faucets: ≤ 1.8 gpm @ 60 psi; temporary increase to 2.2 gpm allowed but shall default to ≤1.8 gpm

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 applicable standards referenced in Table 1701.1 of the California Plumbing Code.

Division 4.3 WATER EFFICIENCY AND CONSERVATION (OUTDOOR WATER USE)

4.304.1
Outdoor potable water use in landscape areas
After December 1, 2015, new residential developments with an aggregate landscape area equal to or greater than 500 square feet shall comply with one of the following:
1. A local water efficient landscape ordinance or the current California Department of Water Resources, Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent, or
2. Projects with aggregate landscape areas less than 2500 square feet may comply with the MWELO's Apendix D Prescriptive Compliance Option.

Division 4.4 MATERIAL CONSERVATION & RESOURCE EFFICIENCY (ENHANCED DURABILITY & REDUCED MAINTENANCE)

4.406.1
Rodent proofing
Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be closed with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency to prevent passage of rodents.

Division 4.4 MATERIAL CONSERVATION & RESOURCE EFFICIENCY (CONSTRUCTION WASTE REDUCTION, DISPOSAL & RECYCLING)

4.408.1
Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4; OR meet a more stringent local construction and demolition waste management ordinance.
Documentation is required per Section 4.408.5.
Exceptions:
1. Excavated soil and land-clearing debris.
2. Alternative waste reduction methods developed by working with local enforcing agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite.
3. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the haul boundaries of the diversion facility.

Construction waste management plan
4.408.2
Submit a construction waste management plan meeting Items 1 through 5 in Section 4.408.2. Plans shall be updated as necessary and shall be available for examination during construction.

Waste management company
4.408.3
Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that diverted construction and demolition waste materials meet the requirements in Section 4.408.1.

4.408.4 4.408.4.1
Waste stream reduction alternative
Low-rise residential Projects that generate a total combined weight of construction and demolition waste disposed in landfills, which do not exceed 3.4 pounds per square foot of the building area shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1.
Projects that generate a total combined weight of construction and demolition waste disposed in landfills, which do not exceed 2 pounds per square foot of the building area, shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1.

City Of Coachella, CA 2022 CALGreen Notes
Residential New Construction

These requirements are effective January 1, 2022, for newly constructed residential buildings: low-rise, high rise, and hotels/motels.

Project Address: VARIOUS - SEE SHEET T-1
Project Name: SINGLE FAMILY RESIDENCE FOR COACHELLA, CA
Project Description: SINGLE FAMILY RESIDENCE WITH ATTACHED GARAGE

SECTION	SCOPE	REQUIREMENT	SHEET #	COMMENT

Division 4.1 - PLANNING AND DESIGN (SITE DEVELOPMENT)

4.106.2
Storm water drainage and retention during construction
Projects which disturb less than 1 acre of soil and are not part of a larger common plan of development shall manage storm water drainage during construction.

4.106.3
Grading and paving
Site shall be planned and developed to keep surface water from entering buildings. Exceptions: Additions and alterations which do not alter the existing drainage path.

4.106.4
Electric vehicle (EV) charging for new construction
Comply with Section 4.106.4.1 and 4.106.4.2 for future installation and use of EV chargers.
Electric vehicle supply equipment (EVSE) shall be installed in accordance with the California Electrical Code, Article 625.
Exceptions on a case-by-case basis as determined by the AHJ:
1. Where there is no commercial power supply.
2. Verification that meeting requirements will alter the local utility infrastructure design requirements on the utility side of the meter increasing costs to the homeowner/developer by more than $400.00 per dwelling unit.
3. ADU.

4.106.4.1 & 4.106.4.1.1
EV charging: 1- & 2-family dwellings/townhouses with attached private garages
Install a listed raceway to accommodate a dedicated 208/240-volt branch circuit for each dwelling unit.
Raceway shall not be less than trade size 1 (nominal 1-inch inside diameter).
Raceway shall originate at the main service or subpanel and terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger.
Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces.
Service panel and/or subpanel shall provide capacity to install a 40-ampere
minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device. Service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as ,"EV CAPABLE,". The raceway termination location shall be permanently and visibly marked as ,"EV CAPABLE."

4.106.4.2
EV charging for multifamily dwellings
If residential parking is available, ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future EVSE. Calculations for the number of EV spaces shall be rounded up to the nearest whole number.
Note: Construction documents are intended to demonstrate the project, capability and capacity for facilitating future EV charging. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

4.106.4.2.1
EV charging space (EV space) locations
Construction documents shall indicate the location of proposed EV spaces. At least 1 EV space shall be located in common use areas and available for use by all residents.
When EV chargers are installed, EV spaces required by Section 4.106.4.2.2,
Item 3, shall comply with at least 1 of the following options:
1. The EV space shall be located adjacent to an accessible parking space meeting the requirements of the California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space.
2. The EV space shall be located on an accessible route to the building,as defined in the California Building Code, Chapter 2.

4.106.4.2.2
EV charging space (EV space) dimensions
EV spaces shall be designed to comply with the following:
1. The minimum length of each EV space shall be 18 feet.
2. The minimum width of each EV space shall be 9 feet.
3. One in every 25 EV spaces, but not less than 1, shall also have an 8-foot wide minimum aisle. A 5-foot wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet.
a) Surface slope for this EV space and aisle shall not exceed 1 unit vertical in
48 units horizontal (2.083% slope) in any direction.

4.106.4.2.3
Single EV space required
Install listed raceway capable of accommodating a 208/240-volt dedicated branch circuit.
1. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter).
2. The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the proposed location of the EV space.
3. Construction documents shall identify the raceway termination point.
4. The service panel and/or subpanel shall provide capacity to install a 40-ampere
minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

4.106.4.2.4
Multiple EV spaces required
Construction documents shall indicate raceway termination point and proposed location of future EV spaces and EV chargers. Construction documents shall also provide information on amperage of future EVSE, raceway method(s), wiring schematics and electrical load calculations to verify electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at full rated amperage of the EVSE.
Plan design shall be based upon a 40-ampere minimum branch circuit.
Raceways and related components planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.

Table 4.504.4.1
ADHESIVE VOC LIMIT1,2
Less Water and Less Exempt Compounds in Grams per Liter

Architectural Applications	VOC Limit
Indoor carpet adhesives	50
Carpet pad adhesives	50
Outdoor carpet adhesives	150
Wood flooring adhesives	100
Rubber floor adhesives	60
Subfloor adhesives	50
Ceramic tile adhesives	65
VCT and asphalt tile adhesives	50
Drywall and panel adhesives	50
Cove base adhesives	50
Multipurpose construction adhesives	70
Structural glazing adhesives	100
Single-ply roof membrane adhesives	250
Other adhesive not specifically listed	50
Specialty Applications	
PVC welding	510
CPVC welding	490
ABS welding	325
Plastic cement welding	250
Adhesive primer for plastic	550
Contact adhesive	80
Special purpose contact adhesive	250
Structural wood member adhesive	140
Top and trim adhesive	250
Substrate Specific Applications	
Metal to metal	30
Plastic foams	50
Porous material (except wood)	50
Wood	30
Fiberglass	80

1. If an adhesive is used to bond dissimilar substrates together, the adhesive with the highest VOC content shall be allowed.

2. For additional information regarding methods to measure the VOC content specified in this table, see South Coast Air Quality Management District Rule 1168.

Table 4.504.4.2
SEALANT VOC LIMIT
Less Water and Less Exempt Compounds in Grams per Liter

Sealants	VOC Limit
Architectural	250
Marine deck	760
Non-membrane roof	300
Roadway	250
Single-ply roof membrane	450
Other	420
Sealant Primers	
Architectural: Nonporous	250
Porous	775
Modified bituminous	500
Marine deck	760
Other	750

Note: For additional information regarding methods to measure the VOC content specified in these tables, see South Coast Air Quality Management District Rule 1168.

Table 4.504.4.5
FORMALDEHYDE LIMITS1
Maximum Formaldehyde Emissions in Parts per Million

Product	Current Limit
Hardwood plywood veneer core	0.05
Hardwood plywood composite core	0.08
Particle board	0.09
Medium density fiberboard	0.11
Thin medium density fiberboard2	0.13

1. Values in this table are derived from those specified by the California Air Resources Board, Air Toxics Control Measure for Composite Wood as tested in accordance with ASTM E1333. For additional information, see California Code of Regulations, Title 17, Sections 93120 through 93120.12.

2. Thin medium density fiberboard has a maximum thickness of 5/16 inch (8 mm).

NO	DATE	REVISION
1	5.28.24	CITY SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON J. J. DARLING
ARCHITECT
2259 PASEO DEL MAR
SAN PEDRO, CA. 90732 (310)619-9540

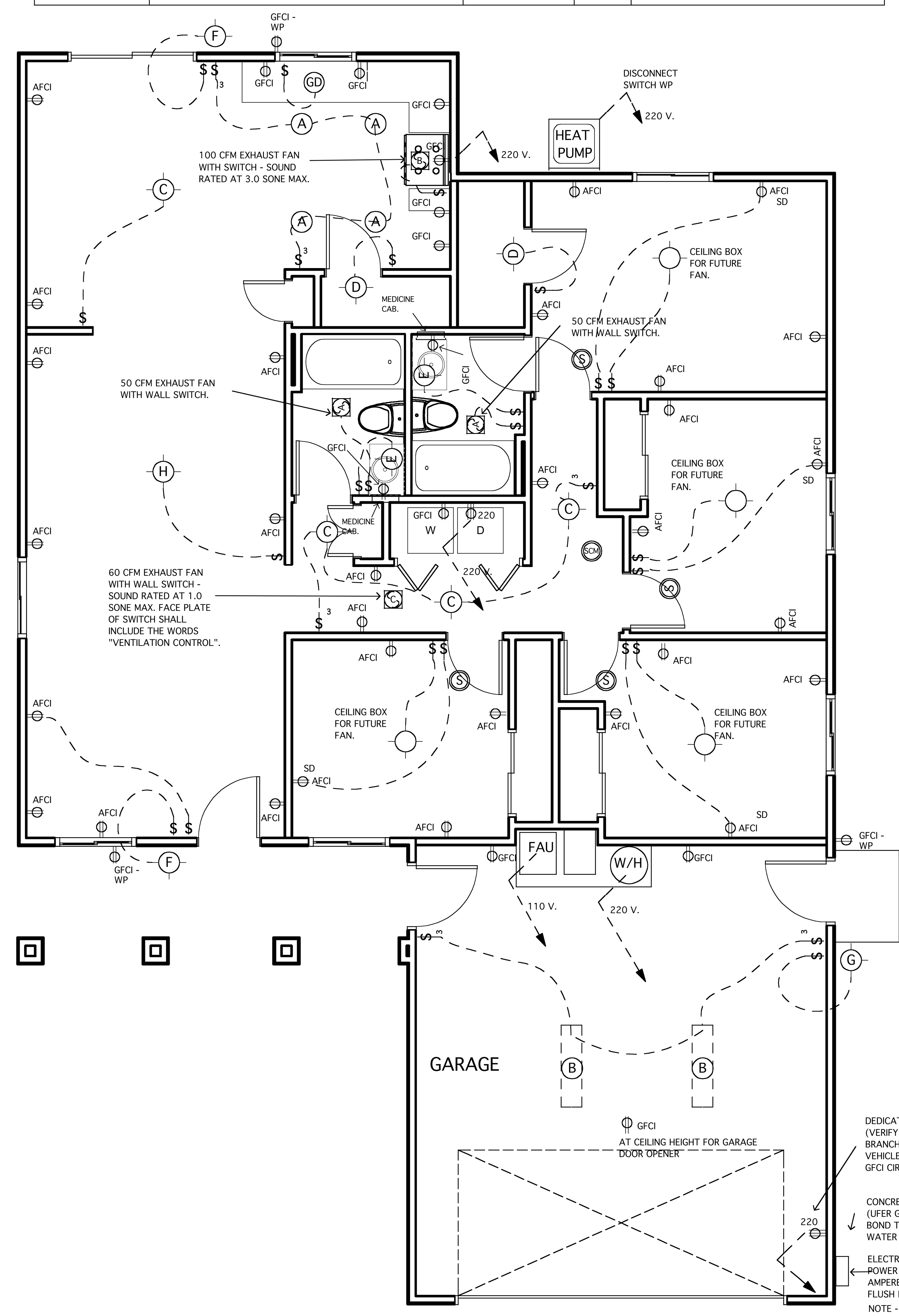
SHEET TITLE
CAL GREEN, NOTES, TABLES & REQUIREMENTS

DATE 8/10/25 JOB

SHEET
CG-1
OF DWGS

ELECTRICAL FIXTURE LIST

TYPE	DESCRIPTION	LAMP	WATTS	REMARKS
C	CEILING MOUNTED LIGHT FIXTURE WITH HIGH-EFFICIENCY LUMINAIRES	COMPACT FLUORESCENT	26	
D	WALL MOUNTED SCONCE LIGHT FIXTURE WITH HIGH-EFFICIENCY LUMINAIRES	COMPACT FLUORESCENT	26	CONTROLLED BY A VACANCY SENSOR.
E	VANITY WALL MOUNTED BRACKET LIGHT FIXTURE WITH HIGH-EFFICIENCY LUMINAIRES	COMPACT FLUORESCENT	17	CONTROLLED BY A VACANCY SENSOR.
F	OUTDOOR WALL MOUNTED LIGHT FIXTURE WITH HIGH-EFFICIENCY LUMINAIRES	COMPACT FLUORESCENT	26	CONTROLLED BY A MOTION SENSOR WITH PHOTO CONTROL
A	RECESSED CAN (IC-AT RATED -ASTM E283) CEILING LIGHT FIXTURE WITH HIGH-EFFICIENCY LUMINAIRES	NO SCREW BASE SOCKETS	26	SHALL COMPLY WITH ALL THE REQUIREMENTS OF CEnC 150.0(K)C. CONTROLLED BY A VACANCY SENSOR.
B	CEILING MOUNTED LIGHT FIXTURE WITH HIGH-EFFICIENCY LUMINAIRES	PIN-BASED LINEAR FLUORESCENT 32 WATT T8	(2)32	CONTROLLED BY A VACANCY SENSOR.
G	OUTDOOR WALL MOUNTED LIGHT FIXTURE WITH HIGH-EFFICIENCY LUMINAIRES	LED	13	CONTROLLED BY A MOTION SENSOR WITH PHOTO CONTROL
H	CEILING MOUNTED FAN & LIGHT FIXTURE COMBO WITH HIGH-EFFICIENCY LUMINAIRES	COMPACT FLUORESCENT	26	



DEDICATED 208/240V OUTLET (VERIFY NEMA 6-50 SOCKET) AND BRANCH CIRCUIT FOR ELECTRIC VEHICLE CHARGING WITH 50 AMP GFCI CIRCUIT BREAKER PER CODE.

CONCRETE ENCASED ELECTRODE (UFER GROUND) SIZED PER CODE. BOND TO PANEL AND COLD WATER SUPPLY PIPE PER CODE.

ELECTRICAL MAIN SERVICE PANEL - EATON MBE2040PV200BTF EATON SOLAR POWER CENTER METER BREAKER, TYPE BR, SOLAR-READY, COPPER BUS 225 AMPERE, GALVANIZED STEEL ENCLOSURE, OVERHEAD/UNDERGROUND, 22kAIC, FLUSH MOUNTING, SINGLE-PHASE, 120/240V.

NOTE - DO NOT INSTALL METER ON/OVER/IN SHEAR WALL.

ELECTRICAL FLOOR PLAN - 4 BEDROOM UNIT

1/4"= 1'-0" SCALE

ELECTRICAL SYMBOL LIST

SYMBOL	DESCRIPTION
AFCI	ARC FAULT CIRCUIT INTERUTPTER DUPLEX OUTLET
AFCI SD	ARC FAULT CIRCUIT INTERUTPTER DUPLEX OUTLET SPLIT OUTLET
GFCI	GROUND FAULT CIRCUIT INTERUTPTER DUPLEX OUTLET
GFCI - WP	GROUND FAULT CIRCUIT INTERUTPTER DUPLEX OUTLET IN WEATHERPROOF BOX
$	SINGLE POLE SWITCH
$3	THREE WAY SWITCH
S	SMOKE DETECTOR
SCM	COMBINATION CARBON MONOXIDE DETECTOR AND SMOKE DETECTOR
GD	GARBAGE DISPOSER
	EXHAUST FAN BATHROOM 50 CFM
	EXHAUST FAN KITCHEN HOOD 100 CFM
	EXHAUST FAN WHOLE HOUSE VENTILATION 60 CFM

NOTES THIS SHEET

1. COMBINATION CARBON MONOXIDE ALARM AND SMOKE ALARM MUST RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING AND SHALL BE EQUIPED WITH A BATERY BACK-UP. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN FOR OVERCURRENT PROTECTION. COMBINATION CARBON MONOXIDE ALARM AND SMOKE ALARM SHALL EMIT A SIGNAL WHEN THE BATTERIES ARE LOW.
2. SMOKE ALARM MUST RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING AND SHALL BE EQUIPED WITH A BATERY BACK-UP. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN FOR OVERCURRENT PROTECTION. SMOKE ALARMS SHALL EMIT A SIGNAL WHEN THE BATTERIES ARE LOW.
3. SMOKE ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BEDROOMS OVER BACKGROUND NOISE LEVELS WITH ALL INTERVENING DOORS CLOSED.
4. RECESSED LIGHTS SHALL BE CONTROLLED BY VACANCY SENSORS OR DIMMERS.

NO	DATE	REVISION
1	6.24.24	CITY SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		
4		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
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SHEET TITLE
MODEL 1412
ELECTRICAL FLOOR PLAN
SCHEDULE, LEGEND & NOTES

DATE 8/10/25
JOB
SHEET
E-1
OF DWGS

GENERAL NOTES AND SPECIFICATIONS

1. ALL ELECTRICAL EQUIPMENT AND INSTALLATION SHALL COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (N.E.C.) AND ALL APPLICABLE LOCAL ELECTRICAL CODES. SUBMIT, OBTAIN AND PAY FOR ALL BUILDING PERMITS, PLAN CHECKS, AND FEES.

2. PROVIDE A CLEAN SET OF BLUEPRINTS "AS-BUILT" DRAWINGS TO THE OWNER WITH ALL REGULAR DAILY CHANGES CLEARLY NOTED THEREON IN RED INK AND SUBMITTED AT THE COMPLETION OF THE PROJECT. RED MARKS THAT ARE NOT LEGIBLE, UNINTELLIGIBLE OR CANNOT BE INTERPRETED SHALL BE REJECTED BY THE OWNERS REPRESENTATIVE AND RETURNED TO THE CONTRACTOR FOR RE-SUBMITAL TO THE COMPLETE SATISFACTION OF THE OWNERS REPRESENTATIVE.

3. UNCONDITIONALLY GUARANTEE ALL LABOR AND MATERIALS AGAINST DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE OF THE PROJECT.

4. VERIFY EXACT LOCATION OF ALL OUTLETS WITH OWNER PRIOR TO INSTALLATION. OWNER RESERVES THE RIGHT TO RELOCATE ANY OUTLET IN ANY DIRECTION UP TO 10 FT. WITHOUT CHANGE IN CONTRACT PRICE PRIOR TO INSTALLATION. ALL NEW OUTLETS INSTALLED ON NEW WALLS, OR EXISTING WALLS TO BE REFINISHED, SHALL BE FLUSH MOUNTED, WITH CONDUITS CONCEALED IN CEILING OR WALLS.

5. SWITCHES SHALL BE "LEVITON" #CSB1-20W (1 POLE), #CSB2-20W (2 POLE) AND #CSB3-20W (3 WAY) #CSB4-20W (4 WAY). DUPLEX RECEPTACLES SHALL BE "LEVITON" #BR20W (20A.) AND #6899W (20A. GFCI), DIMMERS SHALL BE "LEVITON" #80800 (800 W.) AND 81500W (1500 W.). COVER PLATES SHALL BE PLASTIC TO MATCH DEVICES AND COLOR TO MATCH DEVICES.

6. ALL TELEPHONE, JUNCTION BOX, INTERCOM, TELEVISION, ALARM, ETC., OUTLETS SHALL BE MINIMUM 4" SQUARE X 2-1/8" DEEP WITH COVER PLATES.

7. ALL CONDUITS IN PROTECTED LOCATIONS SHALL BE "EMT", EXCEPT FLEXIBLE CONDUIT MAY BE USED IN SHORT RUNS TO LIGHT FIXTURES MAXIMUM 6 FT. FLEXIBLE STEEL CONDUITS MAY BE USED ON SPECIAL CONDITIONS ONLY AND WITH THE WRITTEN APPROVAL OF THE ENGINEER. GALVANIZED RIGID STEEL CONDUIT SHALL BE INSTALLED IN CONCRETE AND IN AREAS SUBJECTED TO MECHANICAL INJURY SUCH AS MECHANICAL AND EQUIPMENT ROOMS. CONDUIT BELOW GRADE SHALL BE SCH. 40 PVC OR PVCCOATED GALVANIZED RIGID STEEL. LIQUID TIGHT FLEXIBLE CONDUIT SHALL BE USED IN DAMP OR WET LOCATIONS AND FINAL CONNECTIONS TO MOTORS OR VIBRATING EQUIPMENT. ALL CONDUITS SHALL BEAR THE U.L. LABEL.

8. ALL LINE VOLTAGE WIRING SHALL BE IN CONDUIT OR RACEWAY. PRE-ASSEMBLED FLEXIBLE LINE VOLTAGE WIRING SYSTEMS SUCH AS TYPE "AC, MC, NM, NMC, NMS" CABLES WILL NOT BE ALLOWED.

9. ALL CONDUCTORS SHALL BE COPPER, 600 VOLT RATED WITH TYPE "THWN/THHN" INSULATION, AND BEAR THE U.L. LABEL. CONDUCTORS SMALLER THAN NO.8 SHALL BE SOLID AND NO.8 AND LARGER SHALL BE STRANDED. ALUMINUM CONDUCTORS WILL NOT BE ALLOWED.

10. PROVIDE A 3/32" POLYPROPYLENE PULL LINE IN EACH EMPTY CONDUIT, SUITABLY TIED AT EACH END, TAGGED AND LABELED.

11. ALL JUNCTION, SPLICE, AND PULL BOXES SHALL BE MINIMUM SIZED IN ACCORDANCE WITH CODE WITH RESPECT TO THE NUMBER AND SIZE OF CONDUITS & CONDUCTORS.

12. CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMISSION OF BID AND BE COMPLETELY FAMILIARIZED WITH THE SCOPE OF WORK TO BE PERFORMED AND ALL LOCAL CONDITIONS. CONTRACTOR SHALL BRING TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE ANY DIFFERENCE FOUND BETWEEN THE DRAWINGS AND EXISTING CONDITIONS AT THAT TIME. NO EXTRAS WILL BE ALLOWED LATER FOR WORK NOT INCLUDED IN THE BID FOR CONTRACTOR'S FAILURE TO DO SO.

13. WORK SHALL BE DONE ONLY BY EXPERIENCED WORKERS USING APPROPRIATE TOOLS AND EQUIPMENT PROVIDED WITH ALL NECESSARY SAFEGUARDS TO PROTECT PERSONNEL, WORK, MATERIALS AND EQUIPMENT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE AND/OR RELOCATE ALL ELECTRICAL EQUIPMENT WHERE WALLS, FLOORS, CEILINGS, ETC. ARE BEING DEMOLISHED IF REQUIRED DURING CONSTRUCTION AND TO ENSURE ALL ELECTRICAL IS IN A STATE OF "SAFETY OFF" CONDITION - NO LIVE ELECTRICAL SYSTEM PRESENT.

14. CONTRACTOR SHALL DO ALL CUTTING, CORE DRILLING AND PATCHING OF FLOORS, WALLS, CEILINGS, ETC. TO MATCH ADJACENT FINISH FOR THE INSTALLATION OF ALL ELECTRICAL WORK. VERIFY WITH OWNERS REPRESENTATIVE OR STRUCTURAL ENGINEER PRIOR TO ANY CORE DRILLING OR CUTTING.

15. ALL LIGHTING FIXTURES SHALL BE COMPLETE WITH ALL NECESSARY LAMPS AND MOUNTING HARDWARE. VERIFY TYPE OF CEILING TO BE INSTALLED WITH GENERAL CONTRACTOR AND COORDINATE MOUNTING METHOD. COMPLY WITH ALL LOCAL AND STATE REQUIREMENTS FOR SEISMIC SUPPORT.

16. CONTRACTOR SHALL FURNISH THE NECESSARY EQUIPMENT AND PERSONNEL TO PERFORM ALL REQUIRED TESTS OF THE WORK FOR APPROVAL. ALL WIRING DEVICES AND CONNECTIONS SHALL BE TESTED FOR CONTINUITY, SHORT CIRCUITS AND IMPROPER GROUNDS PER CODE.

17. COORDINATE WITH OTHER TRADES FOR THE EXACT ROUTING OF CONDUITS AND VERIFY EQUIPMENT LOCATIONS AND REQUIREMENTS THEREOF PRIOR TO INSTALLATION OF CONDUITS AND SUPPORTS.

18. ALL ELECTRICAL EQUIPMENT EXPOSED TO WEATHER SHALL BE WEATHERPROOF TYPE.

19. N/A

20. SUBMIT SIX SETS OF COPIES OF COMPLETE SHOP DRAWINGS FOR APPROVAL FOR ALL SWITCHGEAR, LIGHTING FIXTURES, TRANSFORMERS, PANELBOARDS, ETC. SUBSTITUTIONS MUST BE CLEARLY NOTED, WITH COMPLETE DETAILED DATA, CREDIT FOR OWNER SO STATED, AND MUST BE AUTHORIZED IN WRITING PRIOR TO ORDERING AND INSTALLATION.

21. ALL SWITCHGEAR, CONTROLS, PANELBOARDS, DISCONNECT SWITCHES AND TERMINAL CABINETS SHALL BE IDENTIFIED WITH ENGRAVED MICARTA NAMEPLATES ATTACHED WITH SCREWS.

22. ALL PANELBOARDS SHALL HAVE TYPEWRITTEN DIRECTORIES MOUNTED UNDER CLEAR PLASTIC SHEETS INDICATING BRANCH CIRCUITS. SEE PANEL SCHEDULES FOR DESCRIPTIONS.

23. PROVIDE ALL KEYS, MANUFACTURERS' WARRANTIES, OPERATING MANUALS, ONE SET OF SPARE FUSES, REPLACEMENT INSTRUCTIONS FOR BALLASTS, DIFFUSERS, ETC., TO OWNER PRIOR TO FINAL ACCEPTANCE.

24. ALL RECESSED FLUORESCENT LIGHTING FIXTURES SHALL BE INDEPENDENTLY SECURED TO THE BUILDING STRUCTURE.

25. ALL FLUORESCENT LAMPS SHALL BE T8 ENERGY SAVINGS TYPE AND BALLASTS SHALL BE ELECTRONIC ENERGY SAVING TYPE.

26. ALL SWITCHGEAR, MOTOR CONTROLS, AND PANELBOARDS SHALL BE "SQUARE "D", EATON (CUTTLER HAMMER), GENERAL ELECTRIC OR WESTINGHOUSE", WITH MATCHING CIRCUIT BREAKERS OF MINIMUM INTERRUPTING CURRENT RATED FOR, AND BRACED FOR, THE MAXIMUM AVAILABLE SHORT CIRCUIT CURRENT.

27. FURNISH AND INSTALL ALL NECESSARY ELECTRICAL EQUIPMENT INCLUDING TIME SWITCHES REQUIRED AND MAKE ALL THE NECESSARY CONNECTIONS TO EQUIPMENT FURNISHED BY OTHERS, SUCH AS KITCHEN EQUIPMENT, ALARM SYSTEMS, WATER HEATERS, AIR CONDITIONING, REFRIGERATION AND CONTROLS. COORDINATE WITH MECHANICAL PLANS AND CONTROL WIRING DIAGRAMS FOR EACH ELECTRICAL ITEM THAT THE ELECTRICAL CONTRACTOR MUST PROVIDE AND IF SUCH INFORMATION IS NOT AVAILABLE AT TIME OF BID, SO STATE THAT THESE ITEMS ARE NOT INCLUDED IN THE BID.

28. THE ENTIRE WORK AREA SHALL BE LEFT CLEAN AND FREE OF DEBRIS ON A DAILY BASIS AND AT THE COMPLETION OF THE PROJECT.

29. ALL MATERIALS USED IN FABRICATION OF CONSTRUCTION OR THE VARIOUS PARTS OF THE ELECTRICAL INSTALLATION INCLUDED IN THIS CONTRACT SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS WHERE APPLICABLE, AND SHALL BEAR THE UL LABEL. INSTALLATION OF LIGHT FIXTURES, BOXES, PANELS OR OTHER ELECTRICAL MATERIALS IN ANY FIRE RATED ENCLOSURE SHALL NOT VOID THE FIRE RATING OF THAT ENCLOSURE.

MECHANICAL SYSTEM

1. ELECTRICAL CONTRACTOR SHALL REFER TO MECHANICAL CONTROL DIAGRAM SHOWN ON MECHANICAL DRAWINGS. COORDINATE WITH MECHANICAL CONTRACTOR AND PROVIDE ALL LINE AND LOW VOLTAGE CONDUITS AND WIRING AND ALL CONTROL COMPONENTS SUCH AS TIME CLOCK, RELAYS, CONTACTORS, ETC. AS REQUIRED BY MECHANICAL SECTION FOR A COMPLETE "HVAC" SYSTEM INSTALLATION.

2. ALL OUTDOOR ELECTRICAL EQUIPMENT SHALL BE WEATHERPROOF.

3. ALL FINAL CONNECTIONS TO MOTORS SHALL BE WITH LIQUID TIGHT FLEXIBLE CONDUITS. INSTALLATION SHALL COMPLY WITH THE LATEST N.E.C., AND SHALL BE PER LOCAL ELECTRICAL INSPECTOR'S SATISFACTION.

4. ELECTRICAL CONTRACTOR SHALL VERIFY WITH MECHANICAL CONTRACTOR THE EXACT LOCATION AND ELECTRICAL RATINGS OF ALL A/C UNITS PRIOR TO ROUGH-IN WORK AND ORDERING ELECTRICAL EQUIPMENT. REFER TO A/C UNITS NAMEPLATES AND PROVIDE PROPER FUSES AND WEATHERPROOF DISCONNECT SWITCHES.

5. ELECTRICAL CONTRACTOR SHALL VERIFY WITH MECHANICAL CONTRACTOR THE EXACT LOCATION FOR POINTS OF CONNECTIONS OF FEEDERS AND/OR BRANCH CIRCUITS STUB-OUTS FOR ALL MECHANICAL EQUIPMENT.

LIGHTING FIXTURES

1. ALL BALLASTS SHALL BE ELECTRONIC TYPE, HIGH PERFORMANCE, C.B.M.-E.T.L. CERTIFIED SERIES OF QUIETEST RATING AVAILABLE. PROVIDE LOW TEMPERATURE BALLASTS FOR OUTDOOR MOUNTED FIXTURES.

2. ELECTRICAL CONTRACTOR SHALL VERIFY THE TYPE OF CEILING BEFORE ORDERING ANY FIXTURES. CONTRACTOR IS FULLY RESPONSIBLE TO PROVIDE ALL MOUNTING BRACKETS TO FIT CEILING CONDITIONS AT NO EXTRA CHARGE TO THE OWNER.

3. ALL FIXTURES SHALL BE U.L. LISTED AND SHALL BE LISTED FOR THERMAL BARRIER WHERE IN CONTACT WITH INSULATION.

4. ALL LIGHTING FIXTURES SHALL BE INSTALLED AS PER MANUFACTURER'S REQUIREMENTS.

5. ALL FIXTURES SHALL BE HIGH EFFICACY TYPE.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR ORDERING PROPER TYPE OF TRIMS FOR ALL RECESSED TYPE FIXTURES TO FIT THE CEILING BEING INSTALLED. FINISH OF TRIMS SHALL MATCH CEILING FINISH AS DIRECTED BY ARCHITECT.

7. ALL LINEAR FLUORESCENT LAMPS SHALL BE T8, ENERGY SAVING TYPE, (4100K), EQUAL TO SYLVANIA "OCTRON".

8. CONTRACTOR SHALL PROVIDE ALL NECESSARY HARDWARE FOR PROPER INSTALLATION TO COMPLY WITH ALL LOCAL AND STATE REQUIREMENT'S FOR SEISMIC SUPPORT

PANEL "A"

VOLTS: 120/240V, 1PHASE, 3W BUS: 200A
MOUNTING: SURFACE MAIN: 200A

CIR. No.	DESCRIPTION	C.B. AMP.	C.B. POLE	LOAD (VA) A	LOAD (VA) B	C.B. AMP.	C.B. POLE	DESCRIPTION	CIR. No.
1	KITCHEN	20	1	1500 / 750		20	1	BEDROOM 2	2
3	LIGHTING				750 / 750			BEDROOM 1	4
5	BATHROOM 2			1080 / 1080				BATHROOM 1	6
7	LIVING/DINING				1080 / 750			BEDROOM 3	8
9	OUTDOOR RECEPTACLES			360 / 275				KITCHEN - GD	10
11	KITCHEN				1500 / 750			BEDROOM 4	12
13	KITCHEN - RANGE	50	2	2200 / 1500				LAUNDRY	14
15		50	2		2200 / 4500	50	2	HEAT PUMP	16
17	DRYER	30	2	2500 / 4500		30	2		18
19		30	2		2500 / 2500	30	2	WATERHEATER	20
21	EV CHARGING OUTLET*	50	2	3500 / 2500		30	2		22
23		50	2		3500 / 1275	20	1	GARAGE	24
25	AIR HANDLER	20	1	345				SPACE	26
27	SPACE							SPACE	28
29	SPACE							SPACE	30
				22240	22055				

TOTAL CONNECTED LOAD: 44,295VA
CONNECTED AMPS : 184.0

*: DEDICATED 208/240V OUTLET (VERIFY NEMA 6-50 SOCKET) AND BRANCH CIRCUIT FOR ELECTRIC VEHICLE CHARGING WITH 50 AMP GFCI CIRCUIT BREAKER PER CODE.

ELECTRICAL LEGEND

(symbol)	CONDUIT HOMERUN	(symbol)	CONDUIT CONCEALED IN FLOOR OR BELOW GRADE
(symbol)	CONDUIT CONCEALED IN CEILING OR WALL, 1/2"C-2#12 U.O.N. *		
(symbol)	CONDUIT EXPOSED, 1/2"C-2#12 U.O.N. *		
T	TELEPHONE CONDUIT, 3/4" C.O. U.O.N.		
(symbol)	3 NO. 12-1/2"C *	A	AMPERES
(symbol)	4 NO. 12-3/4"C *	C	CONDUIT
(symbol)	5 NO. 12-3/4"C *	CKT	CIRCUIT
(symbol)	6 NO. 12-1"C *	C.O.	CONDUIT ONLY W/ PULL LINE
(symbol)	7 NO. 12-1"C *	G	EQUIPMENT GROUND, GREEN INSULATED
(symbol)	8 NO. 12-1"C *	IG	INSULATED/ISOLATED GROUND
(symbol)	CONDUIT UP	N.F.	NON-FUSED
(symbol)	CONDUIT DOWN	T.B.S.	TO BE SELECTED BY ARCHITECT
(symbol)	CONDUIT STUB OUT & CAP	U.O.N.	UNLESS OTHERWISE NOTED
(symbol)	DATA CONDUIT, 3/4" C.O., UNLESS NOTED	V	VOLTS
(symbol)	GROUND (GND)	VL	VERIFY EXACT LOCATION
#	REFERENCE NOTE	WP	WEATHERPROOF

FLOOR	WALL	CEIL.	DESCRIPTION	
(symbol)	(symbol)	(symbol)	DUPLEX RECEPTACLE, 20A-125V	+15"
	(symbol)	(symbol)	LIGHT FIXTURE, T.B.S.	
	S_a		SINGLE POLE SWITCH,"a" CONTROLLED OUTLET REFERENCE	+48"
	S_3		THREE WAY SWITCH	+48"
	S_{TO}		TOGGLE MOTOR CONTROLLER WITH THERMAL OVERLOAD	
	(symbol)		DISCONNECT SWITCH	

* PROVIDE SEPARATE #12 "GREEN" GROUND WIRE IN CONDUIT (E.G.)

DEMAND CALCULATION SCHEDULE

1. GENERAL LIGHTING & RECEPTACLE LOADS	3 VA	1412 SQ. FT.	4236 VA
2. SMALL APPLIANCE BRANCH CIRCUITS.	1500 VA	2.	3000 VA
3. LAUNDRY BRANCH CIRCUITS.	1500 VA	1.	1500 VA
4. ADD LINES 1,2, &3			8736 VA
5. (LINE 4) - 3000 VA			5736 VA
6. (LINE 5) X 0.35 =		0.35	2007.6 VA
7. TOTAL GENERAL LIGHTING & RECEPTICLE LOAD. 3000 VA + (LINE 6) =			5007.6 VA
8. FASTENED-IN-PLACE APPLIANCES			
GARBAGE DISPOSER	1127 VA		
EVSV	7200 VA		
TOTAL	8327 VA		8327 VA
9. CLOTHES DRYERS. USE 5000 VA OR NAMEPLATE			5000 VA
10. RANGES, OVENS, COOKTOPS AND OTHER COOKING APPLIANCES OVER 1750 WATTS			
COOKTOP/RANGE	1750 VA		
TOTAL	1750 VA	0.65	1137.5 VA
11. HEATING AND AIR CONDITIONING. HEATING: = 0 VA + [2A X 115V= 230 VA] (AIR HANDLER BLOWER) = 230.0 VA. COOLING: 3090 VA + [2A X 115V= 230 VA] (AIR HANDLER BLOWER) = 3,710.0 VA			
COOLING GOVERNS			3,710 VA
12. LARGEST MOTOR			
GARBAGE DISPOSER			275 VA
13. TOTAL VOLT-AMP DEMAND LOAD			23,457.1 VA
14. MINIMUM AMPERAGE FOR SERVICE			97.74A

LIGHT FIXTURE SCHEDULE

	DESCRIPTION	MANUFACTURER	MODEL	REMARKS
A	RECESSED CEILING CAN	COOPER	HALO 300TBZ H7ICATNB	
B	SURFACE MOUNTED CEILING	COOPER		GARAGE FLUORESCENT
C	CEILING DOME			
D	SURFACE MOUNTED CEILING			BULB GUARD
E	VANITY LIGHT		#17063-34	3-LIGHT VICTORIAN VANITY
F	RECESSED BOX - WALL SCONCE			EXTERIOR - WEATHERPROOF
G	RECESSED BOX - WALL SCONCE			EXTERIOR - WEATHERPROOF

EXHAUST FAN SCHEDULE

	DESCRIPTION	MANUFACTURER	MODEL	REMARKS
A	EXHAUST FAN	NUTONE	AEN50	
B	EXHAUST FAN	NUTONE	RL6330WH	
C	EXHAUST FAN	NUTONE	AEN80	HOUSE VENTILATION

LICENSED ARCHITECT
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2025
STATE OF CALIFORNIA

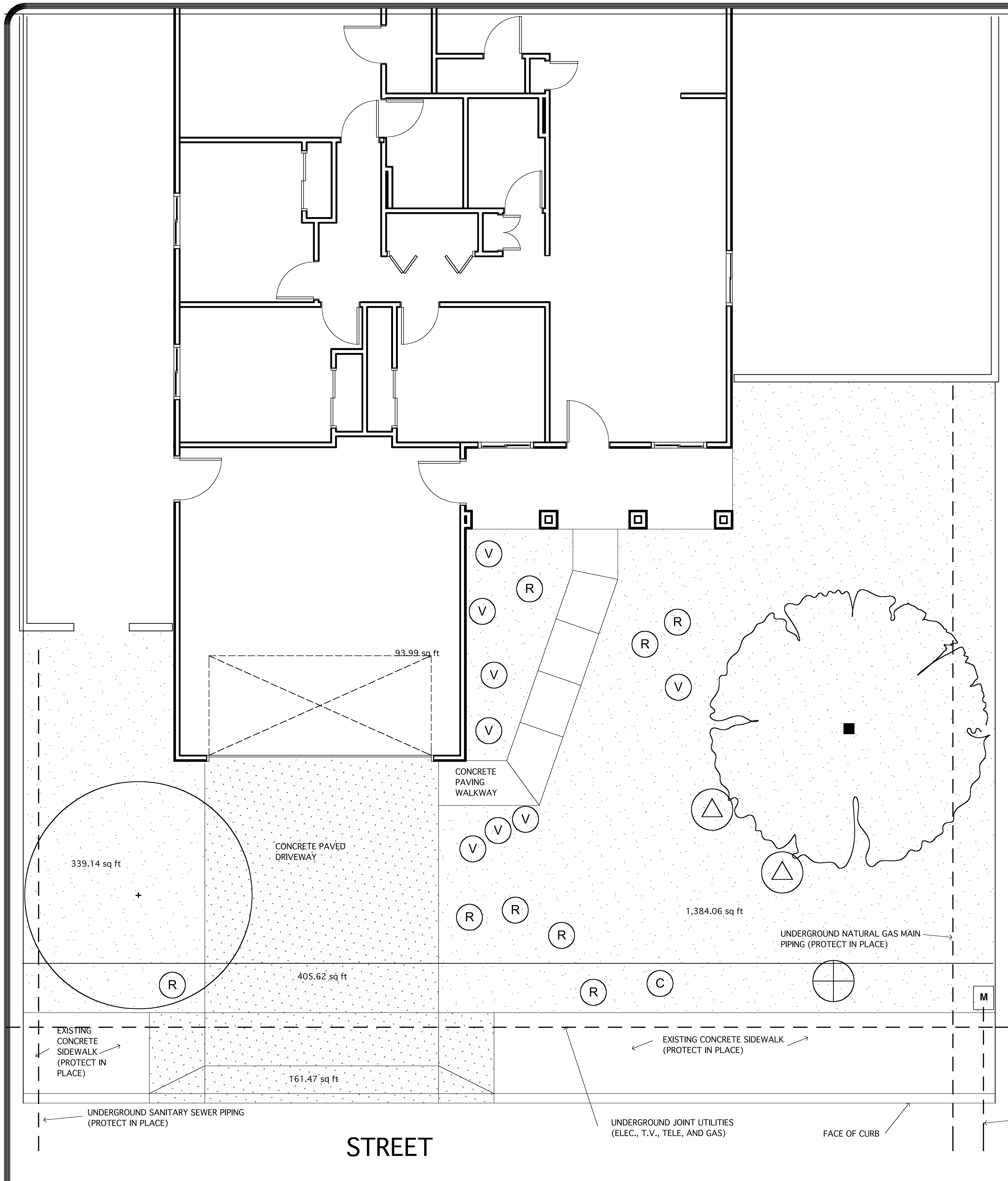
NO	DATE	REVISION
1	6.24.24	CITY SUBMITTAL
2	8.11.25	CITY SUBMITTAL
3		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON J. J. DARLING
ARCHITECT
2259 PASEO DEL MAR
SAN PEDRO, CA. 90732 (310)619-9540

SHEET TITLE
MODEL 1412
4 BEDROOM
SCHEDULE, LEGEND & NOTES

DATE 8/10/25
JOB
SHEET E-2
OF DWGS



LANDSCAPE PLAN - 4 BEDROOM PARTIAL PLAN SHOWING FRONT YARD

1/4"= 1'-0" SCALE

6"

0 1' 5' 10' 20'

GRAPHIC SCALE

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE NOTES

A. THE FOLLOWING PRESCRIPTIVE COMPLIANCE OPTION (APPENDIX D) OF THE CALIFORNIA CODE OF REGULATIONS, TITLE 23, DIVISION 2, CHAPTER 2.7, SECTION 490 SHALL BE FOLLOWED.

B. COMPLIANCE WITH THE FOLLOWING ITEMS IS MANDATORY AND MUST BE DOCUMENTED ON A LANDSCAPE PLAN IN ORDER TO USE THE PRESCRIPTIVE COMPLIANCE OPTION.

1. SUBMIT A LANDSCAPE DOCUMENTATION PACKAGE WHICH INCLUDES THE FOLLOWING ELEMENTS:
   - (A) DATE
   - (B) PROJECT APPLICANT
   - (C) PROJECT ADDRESS
   - (D) TOTAL LANDCAPE AREA: 2124.5 SQ. FT.
     - TURF AREA = ZERO SQ. FT.
     - PLANT MATERIAL = 175.0 SQ. FT.
     - DECOMPOSED GRANITE MULCH = 2124.5 SQ. FT.
   - (E) PROJECT TYPE: NEW PROJECT
   - (F) WATER SUPPLY: POTABLE - COACHELLA VALLEY WATER DISTRICT
   - (G) CONTACT INFORMATION FOR THE APPLICANT:

     CONTACT INFORMATION FOR THE PROPERTY OWNER:
   - (H) APPLICANT SIGNATURE AND DATE WITH THE FOLLOWING STATEMENT: "I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE PERSCRIPTIVE COMPLIANCE OPTION TO THE MWELO" SIGNED ____________________ . DATE 3.16.2022
2. INCORPORATE COMPOST AT A RATE OF AT LEAST FOUR CUBIC YARDS PER 1000 SQUARE FEET TO A DEPTH OF SIX INCHED INTO LANDSCAPE AREA (UNLESS CONTRA-INDICATED BY A SOIL TEST).
3. PLANT MATERIAL SHALL COMPLY WITH ALL OF THE FOLLOWING:
   - (A) FOR RESIDENTIAL AREAS, INSTALL CLIMATE ADAPTED PLANTS THAT REQUIRE OCCASIONAL, LITTLE OR NO SUMMER WATER (AVERAGE WUCOLS PLANT FACTOR 0.3) FOR 75% OF THE PLANT AREA EXCLUDING EDIBLES AND AREAS USING RECYCLED WATER.
   - (B) A MINIMUM THREE INCH (3") LAYER OF MULCH SHALL BE APPLIED ON ALL EXPOSED SOIL SURFACES OF PLANTING AREAS EXCEPT IN CREEPING OR ROOTING GROUNDCOVERS, OR DIRECT SEEDING APPLICATIONS WHERE MULCH IS CONTRAINDICATED.
4. NOTE: TURF IS NOT INSTALLED IN THIS PROJECT.
5. SEE SHEET IR-1 FOR IRRIGATION NOTES.
6. N/A

C AT THE TIME OF FINAL INSPECTION, THE PERMIT APPLICANT MUST PROVIDE THE OWNER OF THE PROPERTY WITH A CERTIFICATE OF COMPLETION, CERTIFICATE OF INSTALLATION, IRRIGATION SCHEDULE AND A SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE.

UTILITIES NOTES

UTILITIES SHOWN ARE GENERAL LOCATIONS. REFER TO PRECISE GRADING PLANS. OBTAIN THE SERVICES OF DIG ALERT- CALL 811 AT LEAST TWO DAYS BEFORE YOU DIG. CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS, MEASURES AND MEANS AS NECESSARY TO ENSURE SAFETY.
UNKNOWN AND BURRIED/HIDDEN UTILITIES MAY EXIST. EXERCISE EXTREME CAUTION.

LANDSCAPE LEGEND

GROUND COVER

SYMBOL	BOTANICAL/COMMON NAME	SIZE	WUCOLS	COMMENTS
R	ACACIA REDOLENS ' DESERT CARPET' PROSTRATE ACACIA	1 GAL	LOW	3'-0" O.C. PLANT 36" FROM EDGE OF CURB OR WALK.
V	VERBENA PULCHELLA GRACILLIOR / MOSS VERBENA	1 GAL	LOW	30" O.C. PLANT 30" FROM EDGE OF CURB OR WALK.

SHRUB

SYMBOL	BOTANICAL/COMMON NAME	SIZE		COMMENTS
⊕	LEUCOPHYLLUM F. 'GREEN CLOUD' / GREEN CLOUD TEXAS RANGER	1 GAL	LOW	4'-0" O.C.
⊖	LEUCOPHYLLUM FR 'COMPACTA' / DWARF TEXAS RANGER	1 GAL	LOW	4'-0" O.C.
△	SENNA ARTEMISIOIDES / FEATHERY CASSIA	5 GAL	LOW	4'-0" O.C.
C	CASSIA NEMOPHILA / CASSIA	5 GAL	LOW	4'-0" O.C.
P	CAESALPINIA PULCHERRIMA / RED BIRD OF PARADISE	5 GAL	LOW	4'-0" O.C.

TREE

SYMBOL	BOTANICAL/COMMON NAME	SIZE		COMMENTS
+	PROSOPIS CHILENSIS / PHOENIX THORNLESS CHILEAN MESQUITE	15 GAL	LOW	HIGH MULTI-BRANCHES
■	CERCIDIUM HYBRID/ DESERT MUSEUM PALO VERDE	24" BOX	LOW	STANDARD / D.S.

NOTE:

ALL PLANTING AREAS SHALL RECIEVE 2" LAYER OF 3/4" SIZE MOJAVE GOLD CRUSHED ROCK TO MATCH EXISTING LANDSCAPING IN ADJACENT DEVELOPMENT.

LANDSCAPING & IRRIGATION NOTES

LANDSCAPING:	REQUIRED LANDSCAPING AREA:	ENTIRE FRONT YARD SHALL BE LANDSCAPED (PLANTS AND OR ROCK MULCH AS REQUIRED)EXCEPT FOR NECESSARY DRIVEWAYS AND WALKWAYS.
IRRIGATION:		SEE SHEET IR-1 FOR IRRIGATION.
SOIL:	AMMENDMENTS:	INCORPORATE COMPOST AT A RATE OF AT LEAST FOUR CUBIC YARDS PER 1000 SQUARE FEET TO A DEPTH OF 6" INTO LANDSCAPE AREA.

C - 23697
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027

NO.	DATE	REVISION
1	5.24.24	CITY SUBMITTAL
2	4.5.25	CITY CORRECTIONS
3	8.11.25	CITY SUBMITTAL
4	9.29.25	CITY CORRECTIONS ROCK MULCH

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON J. J. DARLING
ARCHITECT
2259 PASEO DEL MAR
SAN PEDRO, CA 90732 (310)619-9540

SHEET TITLE
MODEL 1412
4 BEDROOM
LANDSCAPE PLAN, SCHEDULE, LEGEND & NOTES.

DATE 9/29/25
JOB
SHEET
L-1
OF DWGS

PLANTING
PART 1 – GENERAL
1.01 SUMMARY
A. Provide all labor, material, equipment, and appliances necessary to provide trees, plants, and ground cover as indicated on Drawings, specified herein and as required for a complete installation.
B. Related Sections:
3. Section 02810: Irrigation System.
1.02 SUBMITTALS
A.
B. Submit complete lists of landscape materials and equipment to be used, including manufacturers name and address, specific trade names, catalog numbers complete with illustrations and descriptive literature and clearly mark or underline proposed items; list sources of landscape topsoil.
C. Shop Drawings: Required for any landscape structure.
D. Material List: Plant materials list.
E. Certification: In addition to other required certification, furnish a certificate with each delivery of bulk material, including topsoil, planter mix soil, bark mulch, stating its source, quantity, type of material furnished and that such item or material conforms to requirements of this section.
F. Sample: Submit topsoil Sample and soil amendments with analysis.
G. Fertilizer analysis: Provide labels of each fertilizer used and quantities used at each applications recommended in Soil Analysis Report.
H. Soil Test: After completing soil rough grading, Contractor shall have soil tested for fertility and agricultural suitability. Soil shall be tested from minimum of (3-4) locations per acre of planted area. Contractor shall record locations where samples were taken. A copy of soil test results shall be submitted to Architect before landscape work begins. Contractor shall pay cost of soil test.

1.03 QUALITY ASSURANCE
A. Workers: Furnish skilled workers thoroughly trained and experienced in required crafts and familiar with specified requirements for proper performance of Work of this section.
B. Codes and Regulations: All materials and workmanship in this section shall comply with all applicable City, County, Federal and State Codes and Regulations. Deliver all permits and testing certifications to IOR.
C. Quality and Size: Comply with current edition of "Horticultural Standards" for number one nursery stock as adopted by "American Association of Nurserymen".
D. All Plants:
1. True to name, with name of plants in accordance with standards of practice of "American Association of Nurserymen."
2. In all cases, botanical names take precedence over common names.
1.04 GENERAL REQUIREMENTS
A. IOR shall verify that all irrigation systems are operating before starting Work of this section.
B. Inspection: Notify Architect at least 72 hours in advance to schedule following inspections:
1. All plant material at time of delivery to Project site.
2. Final location of plants prior to preparation of planting pits.
3. All trees of 24" box size and larger at their source before delivery to Project site.
4. Finish grades prior to sodding or seeding areas.
5. All landscape construction items prior to start of maintenance of plant establishment period.
6. Final inspection.
C. Existing Utilities and Plant Materials:
1. Protect utilities and plant materials from damage.
a. Perform modifications only as permitted by Architect, in accordance with applicable provisions noted or specified on Drawings, or in other sections of these Specifications.
2. Replace damaged plant material with like type and size material. Architect shall determine cost of irreplaceable plant material according to "square inch" method as described by Council of Tree and Landscape Appraisers' "Manual for Plant Appraisers" handbook, Current Edition, and "Guide for Establishing Values of Trees and Other Plants".
D. Verification of Dimensions and Quantities:
1. Verify all scaled dimensions and quantities before starting landscaping Work.
2. Promptly notify Architect of any discrepancies between Drawings, Specifications or actual Project site conditions.
E. Tree Tagging: Architect will tag 24" box and larger trees at nursery. Request tree tagging from Architect by providing 3 days advance notice.
F. Pest Management Method and Products:
1. Contractor shall ensure that all plants provided are clean, healthy, free of physical damage, and show no symptoms of abiotic injury. Plants must also be free of diseases, arthropod pests, and any other type of plant pests. Before applying pesticides to plants, the following criteria must be met:
a Individuals who apply pesticides on behalf of contractor's company must have a Qualified Applicator License in appropriate category of pest control issued by California Department of Pesticide Regulation and registered to conduct pest control for hire as a business by RIVERSIDE County Agricultural Commissioner's Office.

1.05 DELIVERY, STORAGE AND HANDLING
A. Plants shall be protected in transit and after delivery to Project site. Plants in broken containers and plants with broken branches or injured trunks will be deemed defective Work.
B. Plant materials damaged in planting operations shall be replaced.
1.06 WARRANTY
A. Shrubs and groundcover shall be growth and health guaranteed by installer for a period of 90 days after completion of maintenance period. Trees shall be installer guaranteed to live and grow in upright position for a period of one year after completion of maintenance period.
B. Within 15 days after notification by Owner, remove and replace failed plantings. Replacement plantings shall be guaranteed as specified for original plantings.

PART 2 - PRODUCTS
2.01 MATERIALS
A. Topsoil: Designated as imported topsoil as specified herein. Soil test will determine suitability of topsoil before installation. Transport topsoil from source to its final position unless stockpiling is specified.
1. Imported Soil:
a. Shall be from a source outside Project site and in compliance with this section.
b. Architect may make such inspections and perform such tests as deemed necessary to determine material meets all requirements.
c. At least 30 days before scheduled installation, submit proposed source of topsoil and a sample to Architect. Submit a written request for review, accompanied by a written report stating that proposed source complies with these specifications by a testing laboratory registered by State of California for agricultural soil evaluation.
d. Comply with all recommendations of soils testing laboratory and provide any soil amendments necessary to achieve proper nutrient levels to support healthy plant growth.
e. Imported topsoil shall be of a uniform composition and structure, fertile and friable sandy loam soil, and be free of roots, decay, subsoil, clods and stones larger than 1/4" in greatest dimension, pockets of coarse sand, noxious weeds, sticks, brush and other litter and not be infested with nematodes or other undesirable insects and plant disease organisms. Imported topsoil shall meet following additional requirements:
1) Gradation Limits: Sand – 50-80%, clay – 20% maximum, and silt – 30% maximum. Sand, clay and silt gradation limits shall be as defined in ASTM D 422.
2) Agricultural Suitability and Fertility: Topsoil shall be fertile and friable garden soil suitable for sustaining and promoting growth of specified plants.
3) Electrical conductivity less than 2.0 milliohms/centimeter or DS/m.
4) Boron content maximum of 1.0 part per million.
B. Fertilizers and Conditioning Materials: Comply with applicable requirements of State of California Agricultural Code:
General:
a. All fertilizing materials shall be packaged, first grade, commercial quality products identified as to source, type of material, weight and manufacturer's guaranteed analysis.
b. Fertilizing material shall not contain toxic ingredients and fillers in quantities harmful to animal, human or plant life.
c. Submit a certificate of compliance stating material substantially meets Specifications in accordance with provisions of Article 1.03B.
2. Materials:
a. Bone Meal: Commercial raw bone mean shall be finely ground, steamed dry material with a minimum analysis of 2.5% nitrogen and 22% phosphoric acid.
b. Gypsum: Hydrated calcium sulfate produce containing 23% calcium and 18% sulfur with a guarantee analysis of 84% calcium sulfate.
c. Soil Sulfur: Guarantee analysis of 99% sulfur.
d. Superphosphates: First grade finely ground phosphate rock used for agricultural purpose, containing minimum 18% phosphoric acid by volume.
e. Commercial Fertilizer: Pellets or granular product having a chemical analysis of 14-14-14, with a minimum of 68% of nitrogen from slow release nitrogen unless otherwise specified in Soil Analysis Report: it should be a free flowing material delivered in unopened bags, do not install material which becomes caked or otherwise damaged.PART 2 - PRODUCTS
2.01 MATERIALS
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a. Shall be from a source outside Project site and in compliance with this section.
b. Architect may make such inspections and perform such tests as deemed necessary to determine material meets all requirements.
c. At least 30 days before scheduled installation, submit proposed source of topsoil and a sample to Architect. Submit a written request for review, accompanied by a written report stating that proposed source complies with these specifications by a testing laboratory registered by State of California for agricultural soil evaluation.
d. Comply with all recommendations of soils testing laboratory and provide any soil amendments necessary to achieve proper nutrient levels to support healthy plant growth.
e. Imported topsoil shall be of a uniform composition and structure, fertile and friable sandy loam soil, and be free of roots, decay, subsoil, clods and stones larger than 1/4" in greatest dimension, pockets of coarse sand, noxious weeds, sticks, brush and other litter and not be infested with nematodes or other undesirable insects and plant disease organisms. Imported topsoil shall meet following additional requirements:
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General:
a. All fertilizing materials shall be packaged, first grade, commercial quality products identified as to source, type of material, weight and manufacturer's guaranteed analysis.
b. Fertilizing material shall not contain toxic ingredients and fillers in quantities harmful to animal, human or plant life.
c. Submit a certificate of compliance stating material substantially meets Specifications in accordance with provisions of Article 1.03B.
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c. Soil Sulfur: Guarantee analysis of 99% sulfur.
d. Superphosphates: First grade finely ground phosphate rock used for agricultural purpose, containing minimum 18% phosphoric acid by volume.
e. Commercial Fertilizer: Pellets or granular product having a chemical analysis of 14-14-14, with a minimum of 68% of nitrogen from slow release nitrogen unless otherwise specified in Soil Analysis Report: it should be a free flowing material delivered in unopened bags, do not install material which becomes caked or otherwise damaged.

f. Nitrogen Fortified Wood Product: Derived from redwood, fir or cedar sawdust or from bark of fir or pine treated with a non-toxic agent to quickly absorb water and comply with following requirements:
1). Gradation:
SIEVE SIZE
PERCENT PASSING
?-inch
95% minimum
#8
80% minimum
#35
30% minimum
Nitrogen Content:
NITROGEN CONTENT
% DRY WEIGHT
Redwood
0.4 – 0.6%
Fir
0.56 – 0.84%
Cedar
0.56 – 0.84%
Fir Bark
0.8 – 1.2%
Pine Bark
0.8% - 1.2%
3) Salinity: Maximum saturation extract conductivity 2.5 milliohms/ centimeter at 25 degrees Celsius.
4) Absorption: When one teaspoon of water is applied to 4 cubic inches of air-dried products, material shall be become completely damp in a period of less than 2 minutes. Kellogg KRA, Sequoia Redwood/Cedar Blend or White Fir, Long Beach Soil Preparation, Bandini #101 Redwood Soil Builder of nitrogenized wood amendment.
g. Organic Fertilizer: Treated, relatively dry friable organic compost derived from sewage sludge processed for agricultural use; containing at least 1% nitrogen by dry weight, 2% phosphoric acid and comply substantially with gradation noted in sub-section 2.1, B6. Milorganic, Kellogg's Nitrohumus, or equal.
C. Prepared Backfill mix:
1. To be based upon recommendations from soils test performed by a certified laboratory
2. Mix (for bidding purposes)
a. 70% by volume clean excavated topsoil/import soil.
b. 30% by volume nitrogen stabilizer wood residual
c. 1 lb. per cu. yd. gypsum
d. 2 lbs. fertilizer per cu. yd. (14-14-14 with a minimum 68% of nitrogen from slow release nitrogen. Additional secondary and micronutrients preferred)
3. Mix (acid plants)
a. 30% by volume clean excavated soil/imported soil
b. 70% by volume nitrogen stabilized wood residual
c. 2 lb .per cu yd. soil sulfur
d. 2 lbs. fertilizer per cu. yd. (14-14-14 with a minimum 68% of nitrogen from slow release nitrogen. Additional secondary and micronutrients preferred)
D. Plants (General): Plant names indicated or listed on Drawings shall conform with Sunset, Western Garden Book, latest edition.
1. Type and Size: Plant materials shall be listed on Drawings.
2. All plants shall be true name, and one of each bundle or lot shall be tagged with Botanical/Common name and size of each plant in accordance with standards of practice recommended by American Association of Nurseryman
3. Tag one plant of each variety for identifying purposes.
4. All plantings shall be inspected before installation.
5. Substitutions: When plants of a specified kind or size are not available, substitution may be requested in accordance with General Conditions.
6. All plants shall have a growth habit normal to species in accordance with USA Standards for Nursery Stock, latest editions; shall be sound, healthy, vigorous, and free from insect pests, plant disease, sun scalds, fresh bark abrasions, excessive abrasions or other objectionable disfigurements. Tree trunks shall have normal well developed branch systems and vigorous and fibrous root systems, not root bound and shall be free of kinked or girding roots.
7. No pruning shall be performed before inspection at nursery by Architect. (Other than normal pruning during growth period).
8. Plantings specified for adverse conditions shall be Project site acclimated before planting. Purchase from local nurseries or store on Site for a period of 10 weeks for autumn planting and 6 weeks for spring planting.
E. Plant Material:
1. Trees: All trees shall conform to type and size noted on Drawings. Measure height from root crown to last division of terminal leader and measure diameter 1 ft. above root crown. Measure height of palm trees from ground line to base of growing bud. Palms shall stand reasonably erect without support.
2. Shrubs: Specified type and size selected from high quality well shaped nursery stock.
3. Flatted Plants: Grown and remain in flat until transplanted at Project site. Soil and spacing of plants in flat shall insure minimum disturbance of root system at time of transplanting. Maximum plants per flat to be 64 to 100 plants, or as indicated in Drawings.
H. General Materials:
1. Pipe: Galvanized steel, standard weight (schedule 40) complying with ASTM A120.
2. Nails, fasteners, etc.: Galvanized and commercial quality materials.
3. Fabricated metal items: Steel conforming to ASTM A36.
4. Concrete items: Standard 2000 psi concrete.
I. Concrete headers: 6-inch x 8-inch size, complete with pre-molded expansion joint material 10 ft. apart or as indicated on Drawings.
J. Composite Headers: Headers and stakes shall be composite material sizes as indicated on Drawings. Screws shall be plated deck screws. Stakes shall be 1" x 2" x 12" in length and headers shall be furnished in 2" x 4" x 20'-0" in length and shall be of uniform width and thickness.
K. Tree Stakes: Steel stakes shall be the Reddy Stake System manufactured by Decorations for Generations, Inc. or equal. Provide two Reddy Stake per each new tree.
L. Tree Ties:
1. Wire Type: No. 10 ga. BMG galvanized soft steel wire covered with garden hose.
2. Cinch Tie: Flexible vinyl with adjustable interlocking capability.
M. Tree-Root Control Barrier: Shall be fabricated from a high density and high impact plastic such as polyvinyl chloride, ABS or polyethylene, and have a minimum thickness of 0.06". Plastic shall be furnished with ?" to ?" high raised vertical ribs on inner surface spaced at least 6" but not more than 8" apart. Install a plastic root control barrier with each new tree planted within a tree well. Deep Root Corp., 7354 Bolsa Avenue, Westminster, CA 92683, 714 898-0563, or equal.
N. Pest Management Methods and Products: Refer to section 1.04 F in this specification for details pertaining to Contractor applying pesticides.
O. Jute matting shall be of a uniform open plain weave, single jute yarn, not varying in thickness by more than one half its normal diameter. Jute matting shall be furnished in rolled strips as follows: Length, approximately 50 to 75 yards, width, 45 inches to 50 inches. Ludlow Soil Saver No. 48, or equal.

PART 3 – EXECUTION
3.01 SURFACE CONDITIONS
A. Examine areas and conditions under which Work of this Section will be performed. Correct detrimental conditions before commencing Work of this section.
3.02 GRADING AND SOIL PREPARATION
A. Initial Rough Grading: Specified in Division 02.
B. Earthwork and Topsoil Placement: Shall include excavation and backfilling for irrigation system and preparation for spreading, densification, cultivation, and raking of topsoil, including fertilization and conditioning.
C. Preliminary Grading: Scarify existing soil to a depth of 6 inches before backfilling with topsoil. During preliminary grading operation, remove all stones over ? inch.
D. In Previously Paved Areas: Remove top 6 inches of existing soil and legally dispose of off Project site. Replace with approved imported topsoil to indicated finish grade.
E. Topsoil Preparation and Conditioning:
1. Type and Thickness: Topsoil shall have a minimum depth of 6 inches above subgrade or as indicated on Drawings, whichever is greater.
2. Before installing topsoil, subgrade shall be cleared of all weeds, rock ?" and larger and other extraneous materials from designated planting areas to a depth of 6 inches. The tools acceptable for this cleaning process are a Rock Picker by Harley Enterprise, Track Screener by Cherrington, Screen USA Inc. or other tools or machines designed for the purpose. The finished planting bed preparation is subject to the approval of the Architect and/or Owner's representative. OAR shall coordinate with the Owner's Landscape Office for a site visit and approval prior to plant/lawn installation.
3. Do not process topsoil when it is so wet or dry as to cause excessive compaction or forming of hard clods or dust.
4. Existing soil can be used as topsoil only if it meets the requirements of Article 2.01.A of this specification.
F. Fertilizing and Conditioning: Provide planting areas to finish grades, including mounds, before installation of specified fertilizer or soil conditioning materials.
1. Mechanically install following amount of fertilizer or soil conditioning materials at a uniform rate per 1,000 sq. ft. of planting area:
a. 3 cubic yards of nitrogen fortified wood compost.
b. 2 cubic yards of organic fertilizer.
c. 100 lbs. of gypsum.
d. 30 lbs. of commercial fertilizer.
2. Quantities of required materials for planting areas shall be at Project site. Furnish IOR with delivery tickets before installation to verify source, kind, and quantities delivered.
3. After installation of fertilizer and soil conditioning materials, uniformly cultivate materials into upper 6 inches of soil with suitable equipment operated in at least two directions at approximate at right angles. Process soil until friable.
G. Finish Grading:
1. Provide a finish grade, smooth, uniform, and free of abrupt grade changes and depressions to insure proper surface drainage.
2. Finish grades adjacent to paving curbs or headers shall be 1 inch lower in sod areas and 2 inches lower in shrub or ground cover areas.
3. Irrigate soil after installation of fertilizer and soil conditioning materials. Allow soil to settle. Provide a stable surface. After soil has dried out to a workable condition, re-grade, rake, and smooth to required grades and contours. Finished surfaces to be left clean and suitable for planting.
4. Areas to be planted shall be graded and floated to provide complete surface drainage; all water holding depressions and pockets shall be eliminated. Undulations and unsightly variations in grade which will not permit the use of normal mowing equipment without scalping or missing shall be removed so that proper use of mowing equipment can be performed.
5. Areas to be planted shall also be finished graded to meet any walks, paths or other adjoining surfaces so that, after compaction, no water pockets or ridges remain.
6. Areas where sod will interface with other modes of planting at catch basins and paved areas shall be finish shaped so as to counter sink the sod one inch (1") such that once sod is placed, it shall be at grade with adjacent planting bed.
H. Contour mounds: Construct with imported topsoil and specified soil amendments. Install and shape mounds to minimize settlement or erosion and to provide adequate footing for placement of boulders. Referenced dimensions of mound contours refer to height above finish grade.
I. Trenching: After completion of soil conditioning or finish grading operations, backfill upper portion of trench so specified topsoil thickness in trench is restored.
J. Weeding: Once site has been cleared, grubbed and rough graded, all landscape areas shall be maintained free of vegetation growth until start of irrigation and planting phase of work.

3.04 PLANTING
A. General: All planting materials shall be inspected before planting, including those tagged at nursery.
1. Perform planting with material, equipment and according to procedures favorable to optimum growth of plant. Do not plant during windy conditions.
2. Except as noted for specimen planting in sub-section 3.04D, commence all planting operations immediately following completion of irrigation system.
B. Protection and Storage:
1. Maintain all plantings delivered to Project site in a healthy condition.
2. Do not allow plantings to dry out.
3. Separate bare root stock and "heal in" in moist earth or other suitable material.
4. Cover root ball of bailed or burlap wrapped plantings with moist sawdust, wood chips, or other permitted materials.
C. Layout and Plant Locations:
1. Plant locations indicated on Drawings are approximate.
2. Plants may be re-spotted before planting as required by Architect.
3. Provide a detailed layout of plants, etc., in planting areas and obtain review of Architect before actual planting operations.
4. Locate first row of plantings in areas designated for on center spacing at one-half the designated spacing from edge of area.
D. Specimen Planting: Plantings in boxes 24 inches or larger shall be installed before installation of lateral irrigation lines. Re-route irrigation lines in conflict with specimen locations to clear root ball.
E. Tree and Shrub Installation:
1. Excavate planting holes approximately square with vertical sides shall be twice the width of plant container or root ball; larger if necessary to permit handling and installation without damage to root ball system. Bottom of plant container or root ball shall be placed on existing undisturbed soil.
2. Do not install plantings having a broken or cracked root ball.
3. Containers should be opened and removed in such a manner not to damage root system.
4. Remove balled plant wrappings after plant is positioned in hole.
5. Scarify native soil at bottom half of holes to a depth of 6 inches.
6. Backfill bottom half of hole with specified backfill mix minus fertilizers. Settle with water.
7. After water settling bottom half of hole, set planting approximately in center of hole and adjust root flush to finish grade.
8. Backfill balance of hole with specified backfill mix and fertilizer and water settle.
9. Prune or remove any broken or damaged limbs.
10. Form a circular watering basin slightly larger than hole; 4 inches high for trees and 2 inches high for shrubs. Shape bottom of basin to be slightly lower than finish grade.
11. Restore area around plantings to finish grade.
12. After installation, plantings shall be plumb with root crown at its natural depth with respect to finish grade.
13. All new trees in sod areas to be installed with tree trunk protector.
F. Backfill Planting Mix: Consists of 70% specified topsoil, and 30% nitrogen fortified sawdust mulch plus the amendments indicated in soil analysis report.
G. Raised Planter Mix: Backfill mix for raised planters and tree pits in raised planters shall be of following materials.
1. Planter Mix by B.D. White Topsoil Co., Culver City, LAUSD Mix by AE Schmidt Co, Planter Mix by Gale Materials or equal.
2. Weights shall be 45 lbs. per cubic ft.
3. All raised planters shall be backfilled with finish grade at 2" below planter top.
4. Required system for draining planters shall be in place prior to placing backfill.
H. Ground Cover Planting:
1. Complete soil preparation and fine grading before installation of ground cover plantings.
2. Install ground cover in moist soil, spaced as indicated on Drawings.
3. Install each plant with its proportionate amount of flat soil to minimize root disturbance.
4. The degree of soil moisture in flat shall be such that soil does not crumble when removing planting.
5. Following installation of ground cover, restore finish grade to insure proper surface draining.

3.06 MAINTENANCE AND PLANT ESTABLISHMENT
A. Required: Maintain all areas on a continuous basis as they are completed during progress of Work and during establishment period. Maintenance shall include continuous operations of watering, weeding, trimming, rodent control, reseeding, planting replacement irrespective of cause or any other operations necessary to assure normal plant growth.
B. Keep all planting areas free of debris and weeds. Cultivate at intervals not to exceed 10 days.
D. Pruning: Required pruning of plants at start of plant establishment period shall be as required by Architect.
E. Plant Establishment Inspection:
1. Request an inspection to begin plant establishment period after all plantings and related Work has been completed in accordance with Contract Documents.
2. Upon successful completion of inspection, effective commencement date of plant establishment period shall begin.
3. Plant establishment period for shrubs and ground cover, shall be 90 calendar days and for trees shall be one year or as otherwise indicated in Contract Documents.
4. Architect may recommend extension of plant establishment period if planting areas are improperly maintained, appreciable plant replacement is required, or other defective Work.
F. Damage:
1. Immediately replace failed or damaged plantings.
2. Provide replacement plantings of same type and size to match adjacent plantings. Furnish plantings and fertilizer as specified. New plantings shall be subject to a 30 day establishment period.
3. Damage to planting areas shall be repaired immediately. Depressions caused by vehicles or foot traffic shall be filled with topsoil and leveled.
G. Final Inspection:
1. Upon completion of plant establishment period, Architect will perform a final inspection.
2. If plant establishment period is completed before Substantial Completion, planting areas shall be maintained until Final Completion.
3.07 PESTICIDE APPLICATION
A. Contractor must comply with specifications outlined in Article 1.04 F.
3.08 PROTECTION
A. Unless noted otherwise, protect Work of this section until Substantial Completion.
3.09 CLEANUP
A. Remove rubbish, debris and waste materials and legally dispose of off Project site.

END OF SECTION

C - 23697
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027

IRRIGATION SPECIFICATIONS CONTINUED

(CONTINUED FROM SHEET IR-2)

RECORD DOCUMENTS

Before Contract Completion, provide project record documents as follows:

a. Control Diagrams: Submit three controller charts, with one copy laminated in plastic, for each controller.

b. Controller chart shall be a reduced drawing of the section of the record drawings that pertain to each individual controller and shall fit inside the controller housing with a maximum size for readability.

c. Controller chart shall be a C.A.D. print with differentiating pastel or transparent colors applied to indicate area of coverage for each numbered station.

d. Indicate the location of each numbered sprinkler controlled valves and quick coupling valves with legible dimensions from two permanent points of reference such as building corners or sidewalks.

e. The controller charts shall indicate all remote control valves, quick couplers, controllers, flow sensors and master valves, backflow devices, point of connections, and sprinkler head manufacturer and type of sprinklers for each zone. Each zone shall be colored differently.

2. Closeout Submittals-As Built:

a. Submit three (3) copies of as built including complete list of materials, manufacturer's name, and product installation literatures.

b. Record drawings: Submit dimensioned drawings and details, before Contract Completion.

c. Record Drawings shall contain the following:

1) As-Built shall be computer generated (C.A.D.)

2) Print shall show the locations of the numbered remote control valves, manual control valves, locations and size of all supply and lateral lines, location and type of all sprinkler heads, quick coupling valves, gate valves, backflow devices, point of connections, controllers and all other related equipment.

c. Dimensions shall be legible from two permanent points of reference such as buildings and sidewalks.

3. Operation and Maintenance Manuals:

a. Provide complete operating and maintenance instruction manuals for all equipment.

3.12 COVERAGE TEST

A. When sprinkler system has been completed, perform a coverage test to determine if coverage of water to turf and planting areas is complete and adequate.

B. Make adjustments, add heads, change heads, nozzles or orifices as may be required to provide complete coverage and provide layout indicated on Drawings.

3.13 PRESSURE TEST

A. After welded joints have cured at least 24 hours and before sprinkler heads are installed, flush out lines and cap all outlets. Test system under normal street water pressure, in presence of the IOR.

B. Joints shall remain exposed for examination during pressure test. Center load pipe with small amount of sand to prevent arching or slipping under pressure. Use normal street water pressure for test. Maintain pressure on plastic pipe for not less than four hours.

C. Replace or repair system, including joints that fail during pressure test. Repeat pressure testing until entire system passes the test period without leaks.

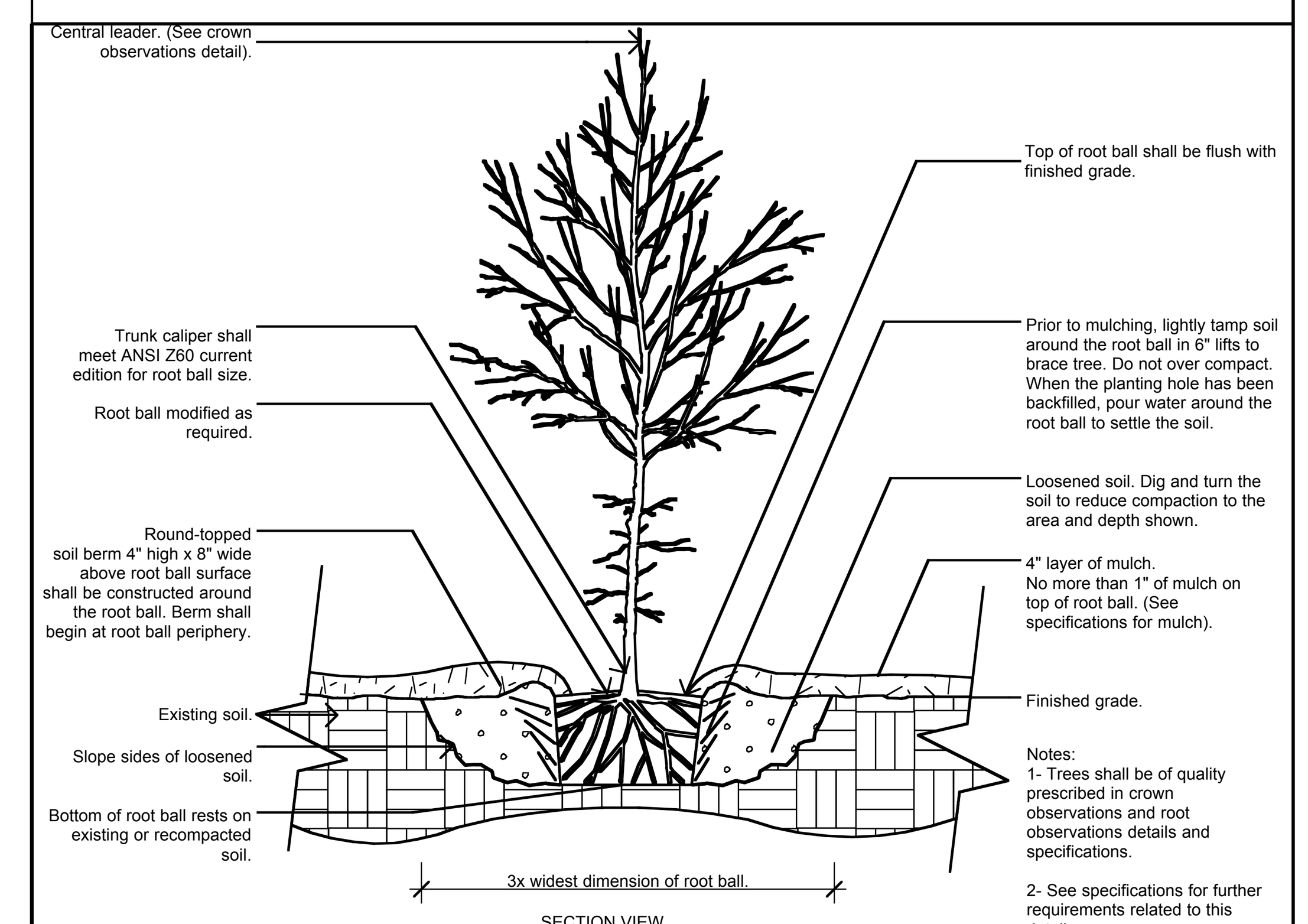
3.15 PROTECTION

Protect the Work of this section until Substantial Completion.

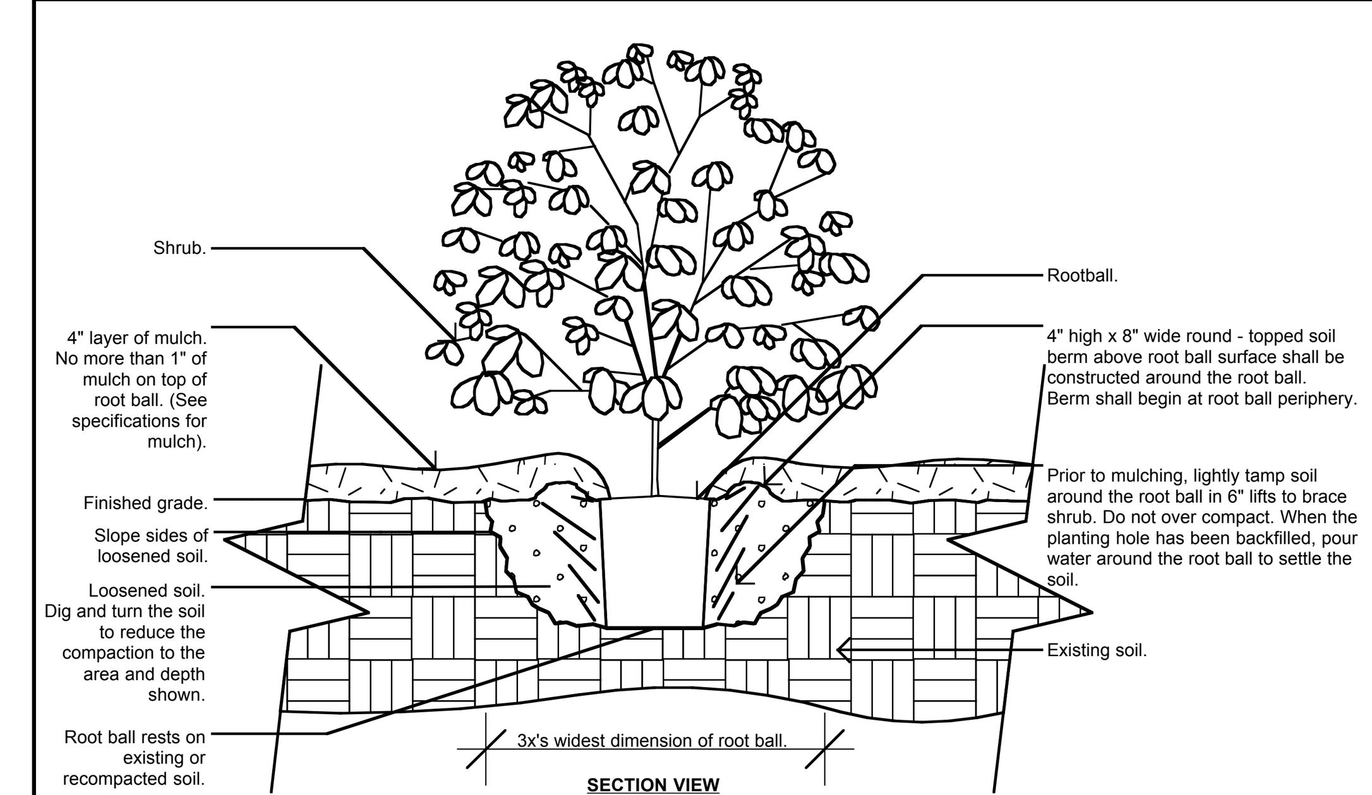
CLEANUP

Remove rubbish, debris, and waste materials and legally dispose of off the Project site. All hard surfaces shall be washed clean. Daily clean up shall be required on all areas used for circulation, parking, or other use.

END OF SECTION



P-S TREE w/ BERM (EXISTING SOIL NOT MODIFIED)
N.T.S
URBAN TREE FOUNDATION © 2014 OPEN SOURCE FREE TO USE
L_tree planting_single berm_existing



Notes:
1- Shrubs shall be of quality prescribed in the root observations detail and specifications.
2- See specifications for further requirements related to this detail.

P-T SHRUB - UNMODIFIED SOIL
N.T.S
URBAN TREE FOUNDATION © 2014 OPEN SOURCE FREE TO USE
pdet_shrub_unmodified soil

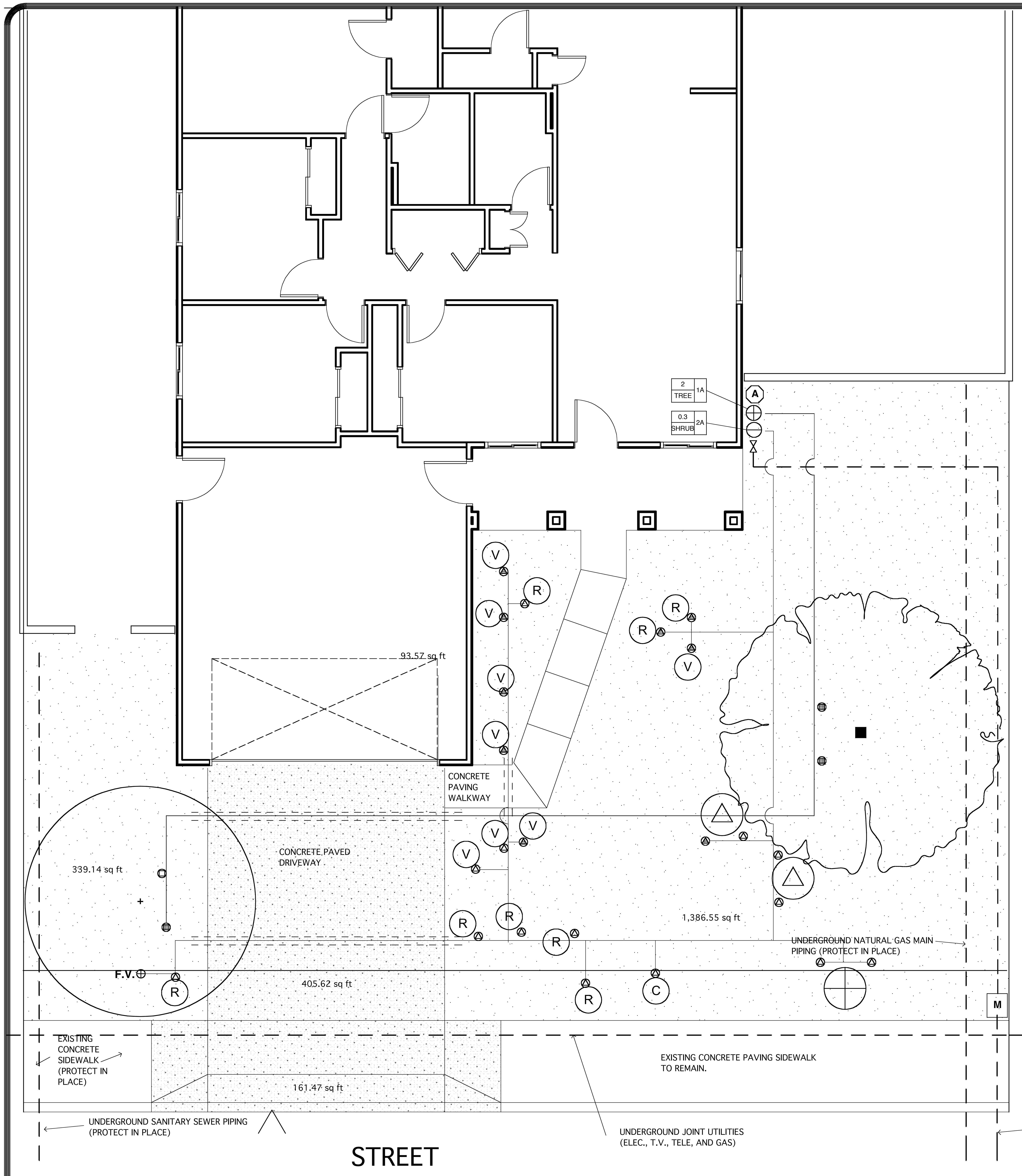
NO	DATE	REVISION
1	5.28.24	CITY SUBMITTAL
2	4.5.25	LOGO FIX
3	8.11.25	CITY SUBMITTAL
4		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON J. J. DARLING
ARCHITECT
2259 PASEO DEL MAR
SAN PEDRO, CA. 90732 (310)619-9540

SHEET TITLE
PLANTING DETAILS AND SPECIFICATIONS
IRRIGATION SPECIFICATIONS (CONTUNUED)

DATE 8/10/25
JOB
SHEET
L-2
OF DWGS



N

LANDSCAPE PLAN - 4 BEDROOM PARTIAL PLAN SHOWING FRONT YARD

1/4"= 1'-0" SCALE

LANDSCAPING & IRRIGATION NOTES

DRIPPERS, EMITTERS, TUBING, FITTINGS, STAKES, CONNECTORS, FILTERS, VALVES AND PRESSURE REGULATORS SHALL BE MANUFACTURERED BY RAINBIRD OR APPROVED EQUAL OR AS OTHERWISE NOTED. SEE NOTE 5 (E) THIS SHEET BELOW.

PROVIDE COMPLETE LOW VOLUME IRRIGATION SYSTEM INSTALLED IN STICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

PROVIDE BACKFLOW PREVENTER AS REQUIRED IN UNDERGROUND BOX PER MANUFACTURER'S RECOMMENDATIONS (NCS OR APPROVED EQUAL).

BACKFLOW PREVENTER SHALL BE INSTALLED BY PRIVATE CONTRACTOR AND INSPECTED AND TESTED AS REQUIRED BY THE LOCAL JURISDICTION.

PROVIDE AND INSTALL CONTROL WIRING PER MANUFACTURER'S RECOMMENDATIONS.

ALL IRRIGATION LATERAL PIPING SHALL BE SUBSURFACE.

ALL IRRIGATION LATERAL PIPING SHALL BE THREADED OR GLUED CONNECTIONS.

5. IRRIGATION SYSTEMS SHALL COMPLY WITH THE FOLLOWING:

(A) AUTOMATIC IRRIGATION CONTROLLERS ARE REQUIRED AND MUST USE EVAPOTRANSPIRATION OR SOIL MOISTURE SENSOR DATA AND UTILIZE A RAIN SENSOR.

(B) IRRIGATION CONTROLLERS SHALL BE OF A TYPE WHICH DOES NOT LOSE PROGRAMMING DATA IN THE EVENT THE PRIMARY POWER SOURCE IS INTERRUPTED.

(C) PRESSURE REGULATORS SHALL BE INSTALLED ON THE IRRIGATION SYSTEM TO ENSURE THE DYNAMIC PRESSURE OF THE SYSTEM IS WITHIN THE MANUFACTURERS RECOMMENDED PRESSURE RANGE.

(D) MANUAL SHUT-OFF VALVES (SUCH AS A GATE VALVE, BALL VALVE, OR BUTTERFLY VALVE) SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THE POINT OF CONNECTIONOF THE WATER SUPPLY.

(E) ALL IRRIGATION EMISSION DEVICES MUST MEET THE REQUIREMENTS SET IN THE ANSI STANDARD ASABE/ ICC802-2014. "LANDSCAPE IRRIGATION SPRINKLER AND EMITTER STANDARD", ALL SPRINKLER HEADS INSTALLED IN THE LANDSCAPE MUST DOCUMENT A DISTRIBUTION UNIFORMITY LOW QUARTER OF 0.65 OR HIGHER USING THE PROTOCOL DEFINED IN ASABE/ ICC802-2014.

(F) AREAS LESS THAN TEN (10) FEET IN WIDTH IN ANY DIRECTION SHALL BE IRRIGATED WITH SUBSURFACE IRRIGATION OR OTHER MEANS THAT PRODUCES NO RUNOFF OR OVERSPRAY.

C AT THE TIME OF FINAL INSPECTION, THE PERMIT APPLICANT MUST PROVIDE THE OWNER OF THE PROPERTY WITH A CERTIFICATE OF COMPLETION, CERTIFICATE OF INSTALLATION, IRRIGATION SCHEDULE AND A SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE.

UTILITIES NOTES

UTILITIES SHOWN ARE GENERAL LOCATIONS. REFER TO PRECISE GRADING PLANS. OBTAIN THE SERVICES OF DIG ALERT- CALL 811 AT LEAST TWO DAYS BEFORE YOU DIG. CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS, MEASURES AND MEANS AS NECESSARY TO ENSURE SAFETY.
UNKNOWN AND BURRIED/HIDDEN UTILITIES MAY EXIST. EXERCISE EXTREME CAUTION.

C - 23697
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027

6"
0 1' 5' 10' 20'
GRAPHIC SCALE

IRRIGATION LEGEND

SYMBOL	MANUFACTURER	MODEL NUMBER	TYPE	NOZZLE	FLOW RATE	PRESSURE	PATTERN
(drip emitter symbol)	RAINBIRD	XB-SERIES	DRIP EMITTER	XB-10PC-1032	1 G.P.H.	30	
(tree bubbler symbol)	RAINBIRD	1400 SERIES	TREE BUBBLER	XB-10PC-1032	0.5 G.P.M.	25	FULL
A	HUNTER	X-CORE	(6) STATION CONTROLER - WALL MOUNTED RESIDENTIAL CONTROLER - (OUTDOOR MODEL WITH SOLAR SYNC ET SENSOR/RAIN CLICK SENSOR				
(valve symbol)	RAINBIRD	XACZ-075-PRF	XERIGATION CONTROL VALVE KIT FOR DRIP AREAS - 3/4" LOW FLOW ANTI-SIPHON WITH 3/4" PR RBY FILTER				
(valve symbol)	RAINBIRD	ASVF-075	ELECTRONIC CONTROL VALVE WITH ATMOSPHERIC BACKFLOW PREVENTION FOR TREE BUBLERS - 3/4"				
(ball valve symbol)	KBI	#MIP-100-T	BALL VALVE (FULL PORT).				
⊕F.V.	HUNTER	AFV-T	AUTOMATIC FLUSH VALVE WITH 1/2" MPT CONNECTION - INSTALL IN BUBBLER BOX				

SUPPLY LINE - PRESSURE MAINLINE PIPING

LATERAL LINE - IRRIGATION SUPPLY PIPING FOR TREES- SCHEDULE 40 PVC

LATERAL LINE - IRRIGATION SUPPLY PIPING FOR SHRUBS- SCHEDULE 40 PVC

PVC PIPE SLEEVE - INSTALL UNDER ALL HARDSCAPE - 2X DIAMETER OF IRRIGATION PIPE

M — WATER METER - INSTALLED BY CVWD.

CONTROLLER NUMBER
FLOW RATE IN GALLONS PER MINUTE
INDICATES ZONE TYPE

HYDROZONE INFORMATION TABLE:

WATER METER IRRIGATION POINT OF CONNECTION

CONTROLLER NO.	VALVE CIRCUIT NO.	PLANT TYPES	IRRIGATION METHOD	AREA	PERCENTAGE O LANDSCAPE AREA
A	1A	LOW	BUBBLER	400.0 SQ. FT.	21.95%
A	2A	LOW	DRIP	1422.4 SQ. FT.	78.05%
				1822.4 SQ. FT.	100%

CVWD WATER CALCULATIONS:

ZONE: 3 ETo = 64"
LA = 1822.4 SQ. FT.
100 CUBIC FEET = 748 GALLONS

MAWA = ETo • 0.62 • 0.45 • LA / 748 GALLONS

MAWA = 64" • 0.62 • 0.45 • 1822.4 SQ.FT. / 748 GALLONS = 45.50 CCF

ETWU = [(ETo) • (PF) • (LA) • (0.62)] / 748 GALLONS / (IE)

ETWU = [(64") • (0.2) • (1822.4 SQ.FT.) • (0.62)] / 748 GALLONS / (0.9) = 21.5 CCF

TOTAL ESTIMATED WATER USE: 21.5 CCF

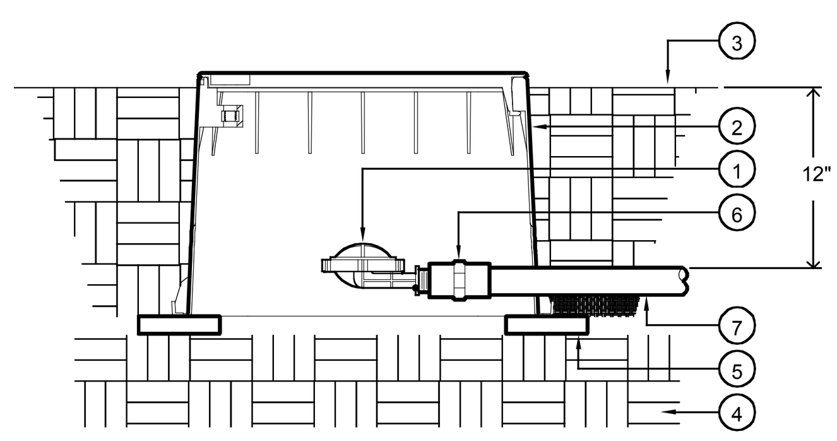
NO.	DATE	REVISION
1	5.24.24	CITY SUBMITTAL
2	4.5.25	CITY CORRECTIONS
3	8.11.25	CITY SUBMITTAL
4	9.29.25	CITY CORRECTIONS ROCK MULCH

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON J. J. DARLING
ARCHITECT
2259 PASEO DEL MAR
SAN PEDRO, CA. 90732 (310)619-9540

SHEET TITLE
MODEL 1412
4 BEDROOM
IRRIGATION PLAN, SCHEDULE, LEGEND & NOTES.

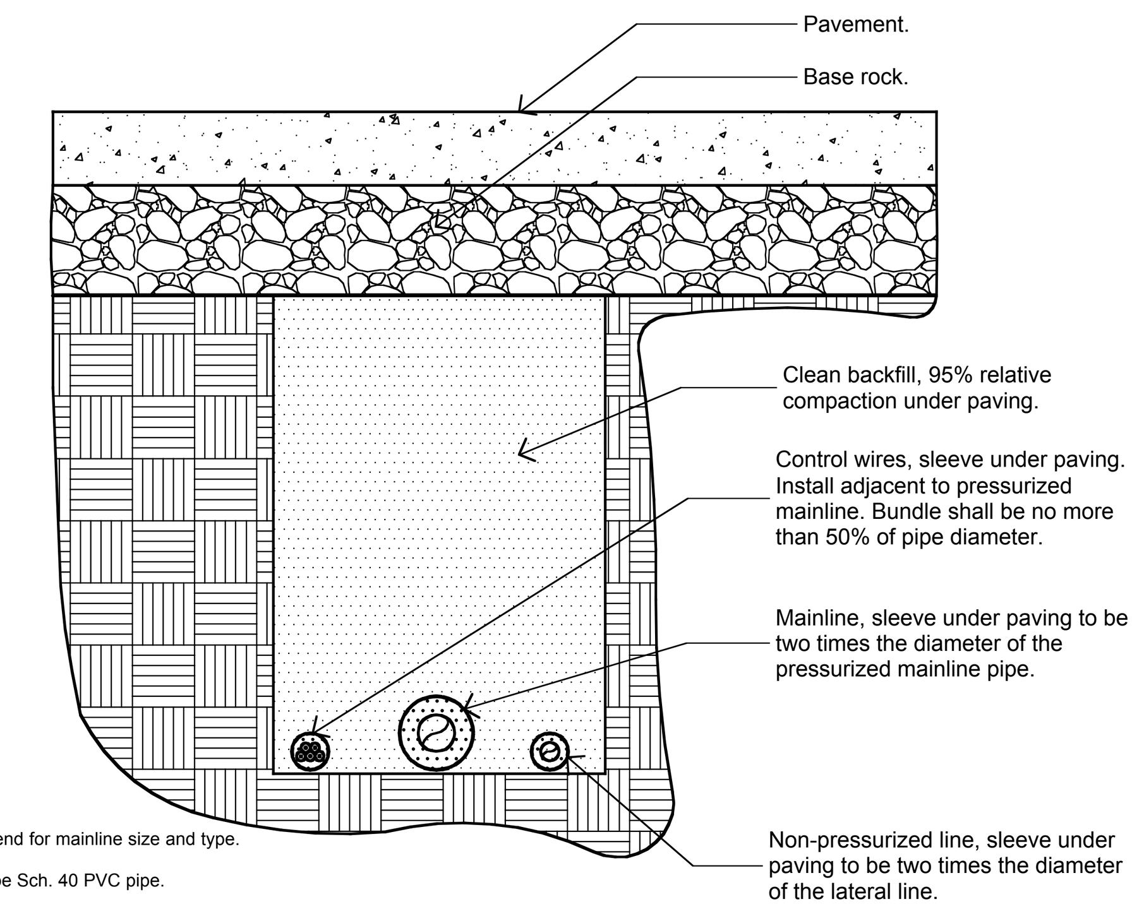
DATE 9/29/25
JOB
SHEET
IR-1
OF DWGS



DETAIL LEGEND:

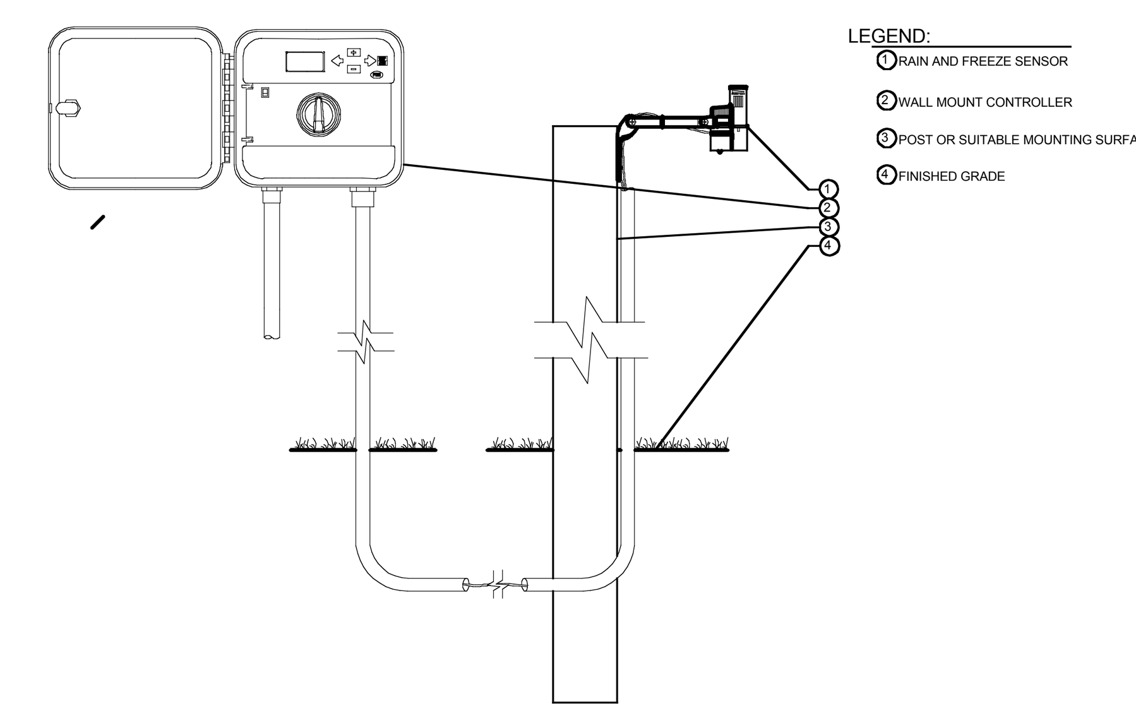
1. HUNTER AUTOMATIC FLUSH VALVE WITH 5/8" [17 mm] BARB CONNECTION, MODEL AFV-T.
2. HUNTER RECTANGULAR PLASTIC VALVE BOX AND LID (MB-0811). LID COLORS: STANDARD BLACK, PURPLE FOR RECYCLED WATER USE, AND OTHER COLORS AVAILABLE, SEE HUNTER CATALOG.
3. FINISHED GRADE
4. GRAVEL BASE, DEPTH AS SPECIFIED
5. COMMON HALF BRICK, 2 TOTAL, INSTALL ONE ON EACH SHORT SIDE OF BOX.
6. FEMALE ADAPTER PER PLAN, SLIP X FPT
7. LATERAL LINE PER PLAN

L — EMITTER ZONE AUTOMATIC FLUSH VALVE WITH MPT CONNECTION
N.T.S.

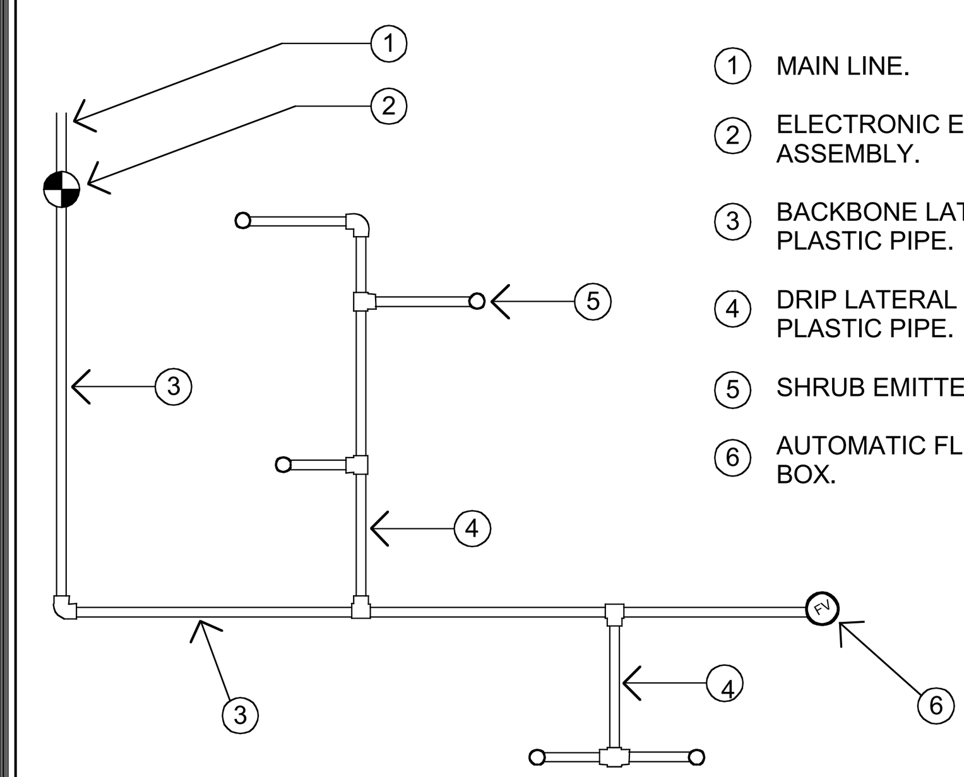


Notes:
1- See irrigation legend for mainline size and type.
2- All sleeves shall be Sch. 40 PVC pipe.
3- All sleeves shall extend 12" beyond the edge of pavement.
4- End of sleeves shall be located with a wooden stake or PVC pipe. Locators shall run continuously from the end of the sleeve to finished grade.

H — PIPE BENEATH PAVEMENT
N.T.S.



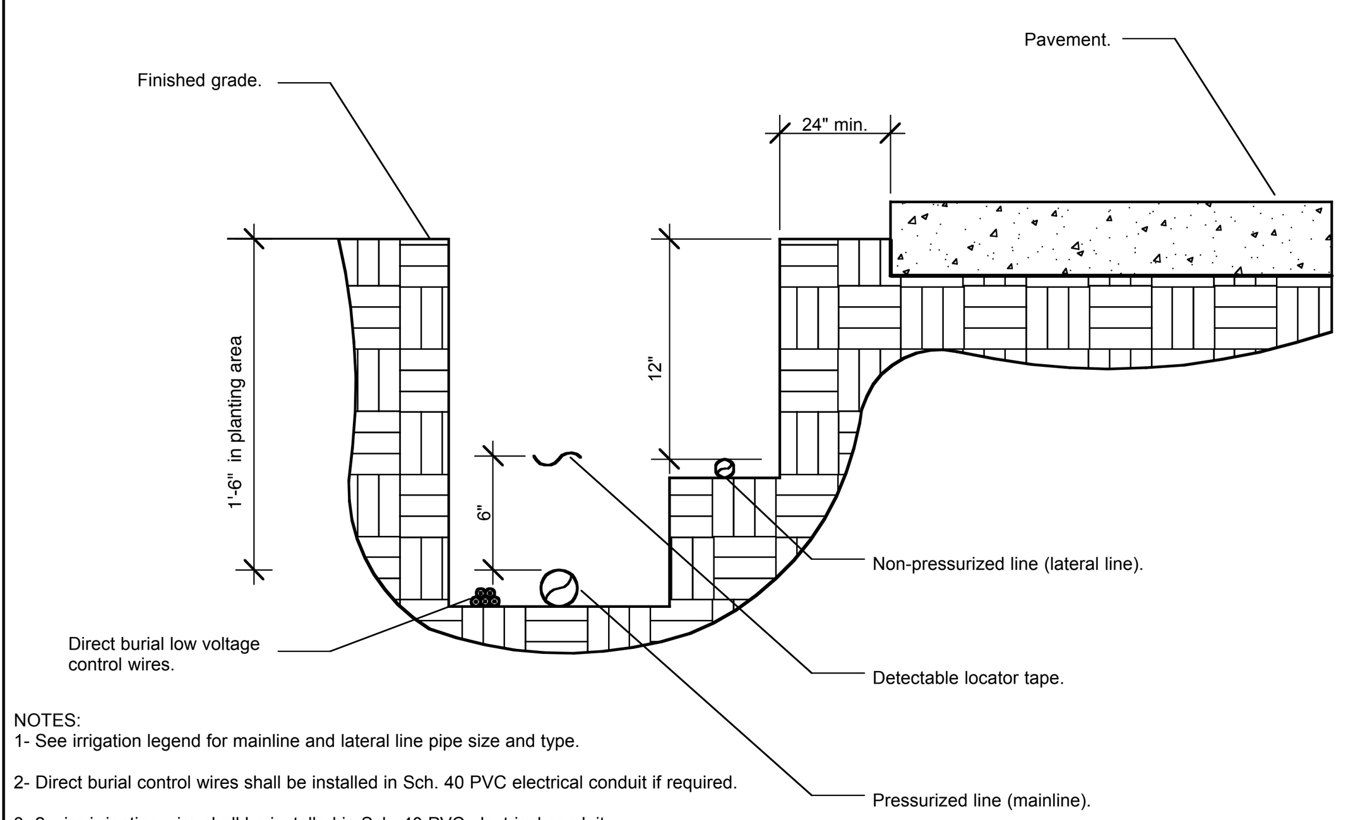
D — RFC WITH GENERIC WALL MOUNT CONTROLLER
Hunter NOT TO SCALE



1. MAIN LINE.
2. ELECTRONIC EMITTER CONTROL VALVE ASSEMBLY.
3. BACKBONE LATERAL - PVC CLASS 200 IPS PLASTIC PIPE.
4. DRIP LATERAL - PVC CLASS 315 IPS PLASTIC PIPE.
5. SHRUB EMITTER (TYPICAL).
6. AUTOMATIC FLUSH VALVE IN BUBBLER BOX.

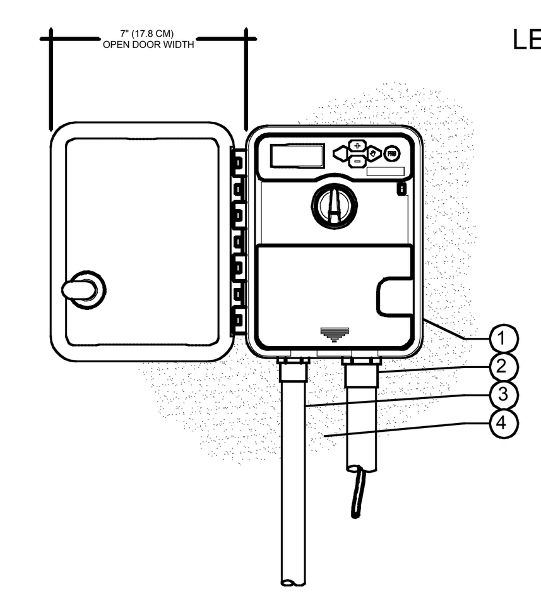
NOTES:
1. RECOMMENDED MINIMUM FILTRATION: 120 MESH
2. PRESSURE AT FLUSH VALVE SHALL BE MIN 15 PSI

K — DRIP LAYOUT SCHEMATIC
N.T.S.



NOTES:
1- See irrigation legend for mainline and lateral line pipe size and type.
2- Direct burial control wires shall be installed in Sch. 40 PVC electrical conduit if required.
3- 2-wire irrigation wire shall be installed in Sch. 40 PVC electrical conduit.
4- Detectable locator tape shall be located six inches (6") above the entire mainline run.

G — IRRIGATION TRENCHING
N.T.S.

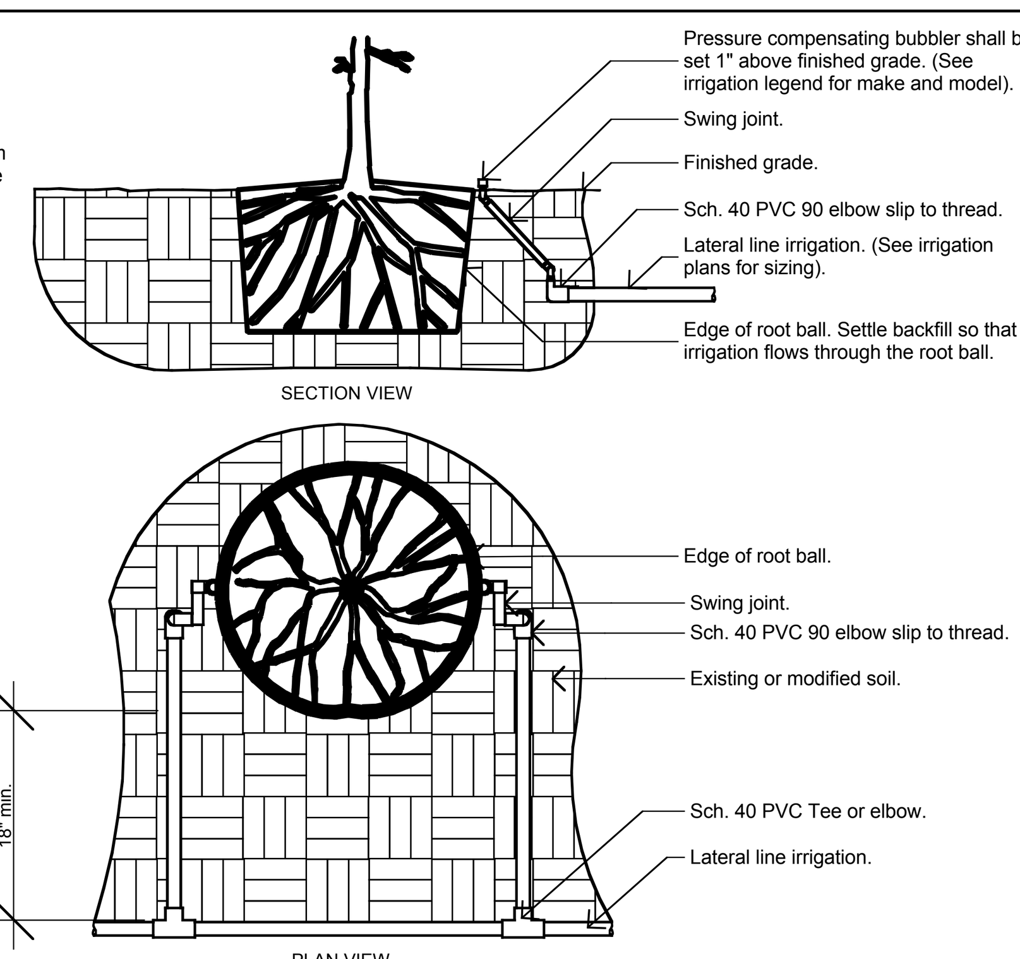


LEGEND:
1. IRRIGATION CONTROLLER (X- CORE) PER PLAN
2. IRRIGATION CONTROL WIRE IN CONDUIT SIZE AND TYPE PER LOCAL CODES
3. ELECTRICAL SUPPLY CONDUIT CONNECT TO POWER SOURCE, J-BOX INSIDE CONTROLLER
4. ADJACENT SURFACE TO MOUNT CONTROLLER PER PLAN

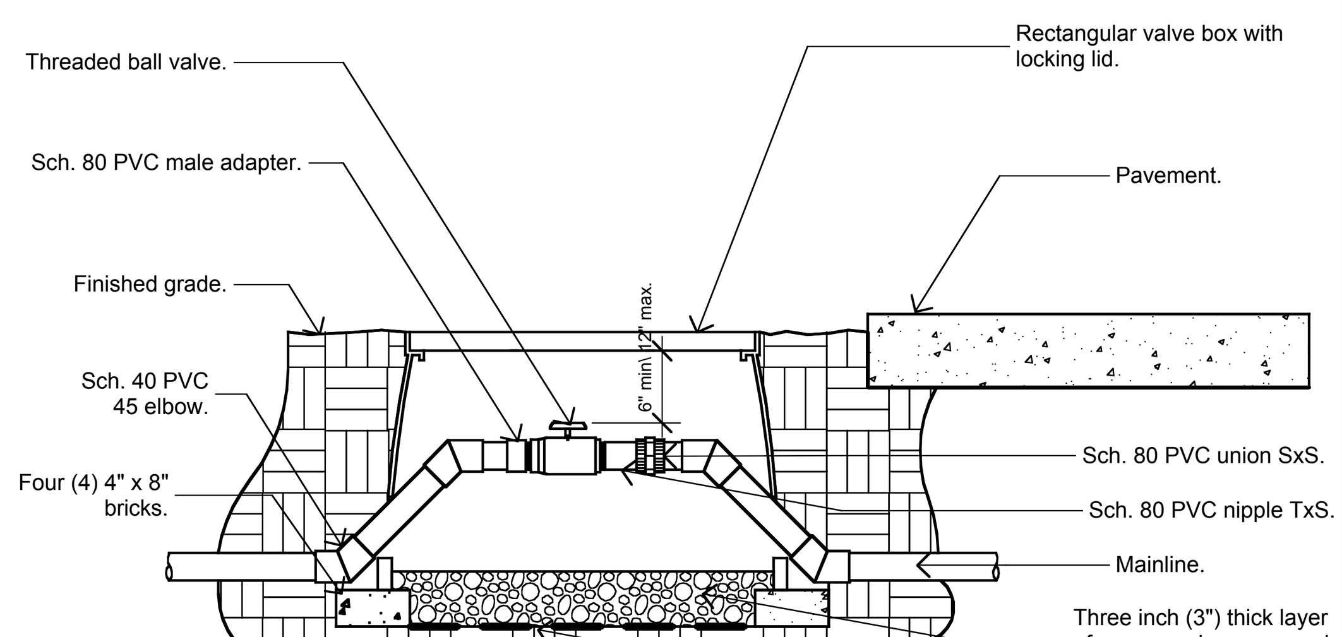
NOTE
MOUNT CONTROLLER LCD SCREEN AT EYE LEVEL.
CONTROLLER SHALL BE HARD-WIRED TO GROUNDED 110 VAC POWER SOURCE

C — X-CORE - WALL MOUNT
Hunter NOT TO SCALE

Notes:
1- All irrigation fittings shall be Sch. 40 PVC unless specified otherwise.
2- All threaded connections from Sch. 40 to Sch. 80 PVC shall be madeusing teflon tape.
3- Contractor shall settle the area around the bubbler and edge of the root ball so that all irrigation flows through the root ball.

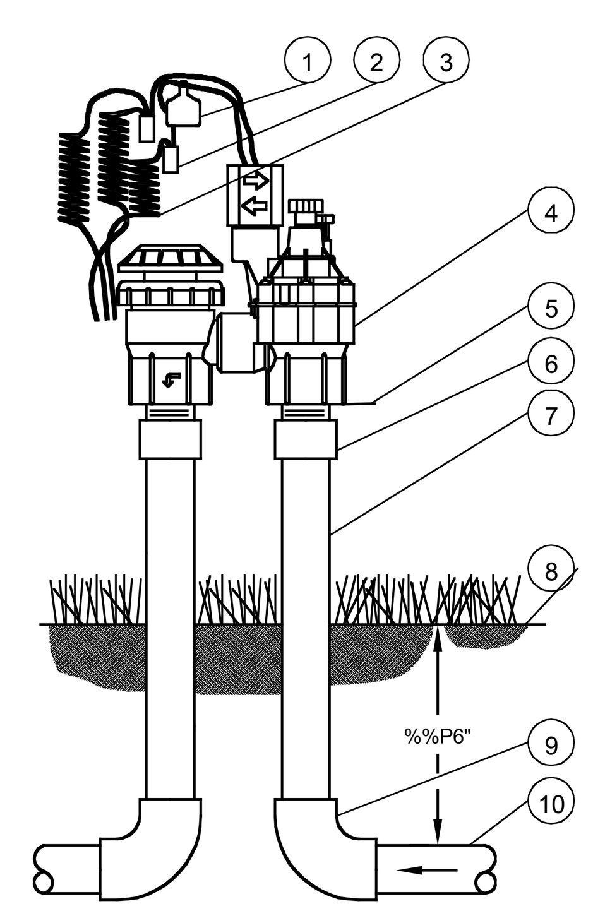


J — IRRIGATION BUBBLER (2) W/ LAYOUT
N.T.S.



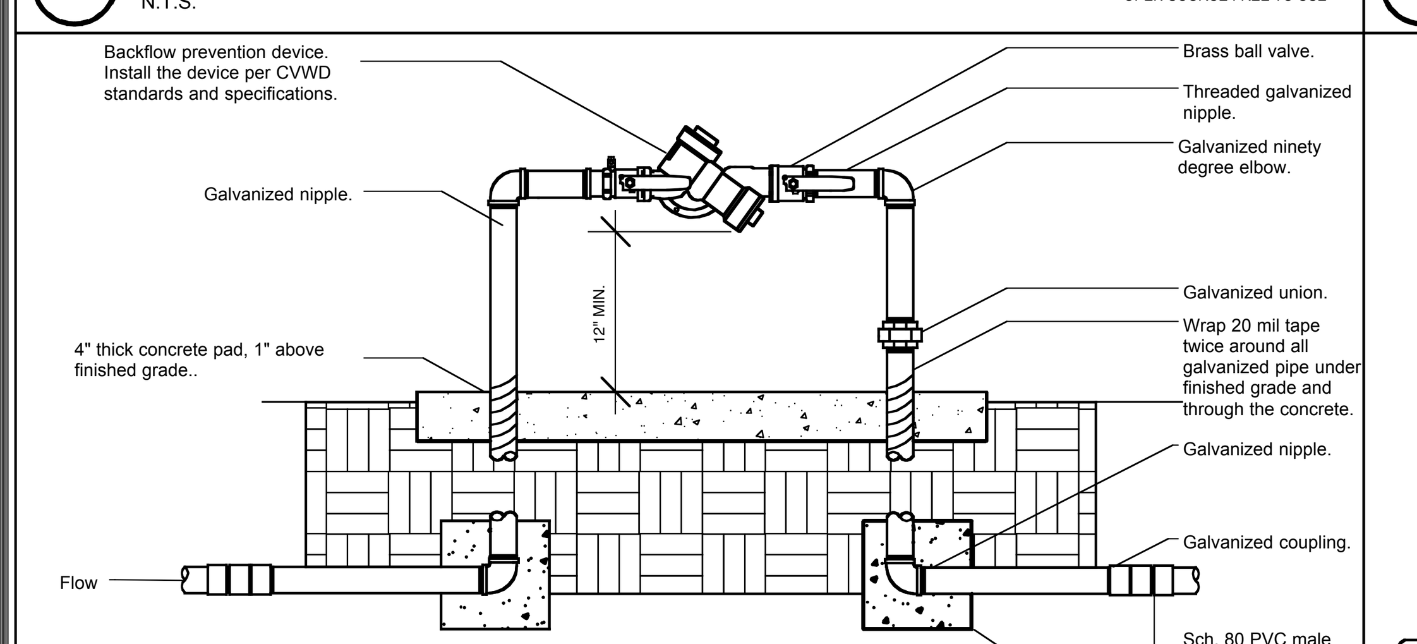
Notes:
1- Locate valve boxes in planting areas.
2- Wrap valve box with a minimum of 3 mil thick plastic and secure it using duct tape or electrical tape.
3- All threaded connection to be made using teflon tape.
4- All changes in elevation shall be made using Sch. 40 PVC 45%%D elbows.

F — BALL VALVE - 3" AND SMALLER
N.T.S.



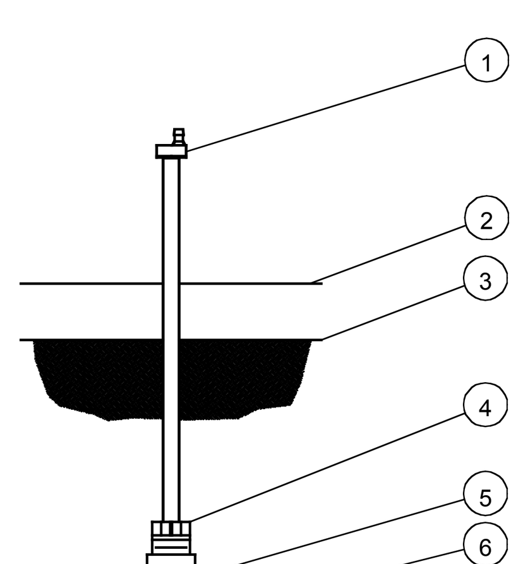
1. ID TAG: RAIN BIRD VID SERIES
2. WATERPROOF CONNECTION: RAIN BIRD SPLICE-1 (1 OF 2)
3. 30-INCH LINEAR LENGTH OF WIRE, COILED
4. REMOTE CONTROL VALVE: RAIN BIRD 100-ASVF
5. INSTALL 6-INCH MIN. ABOVE HIGHEST POINT OF DISCHARGE
6. UV RADIATION RESISTANT PVC SCH 40 MALE ADAPTER (1 OF 2)
7. UV RADIATION RESISTANT PVC SCH 40 PIPE (1 OF 2)
8. FINISH GRADE/TOP OF MULCH
9. PVC SCH 40 ELL (1 OF 2)
10. PVC LATERAL PIPE (1 OF 2)

B — ELECTRIC REMOTE-CONTROL VALVE ASVF Series
N.T.S.



Note:
1- All assembly parts (threaded nipples, fittings, etc.) shall be galvanized or brass per local codes and requirements.
2- Galvanized nipple shall extend 12" past the edge of the concrete footing.
3- Sch. 80 PVC male adapter shall be used in connection from galvanize to the mainline.
4- Backflow prevention device shall be located as close as possible to the landscape meter.
5- Backflow prevention device shall be located in planting area unless approved by Owner's Representative.
7- All backflow prevention devices shall have freeze blanket included upon installation.
8- All galvanized connections shall to be made using pipe thread sealant. All Sch. 80 PVC to galvanized connections to be made using teflon tape.

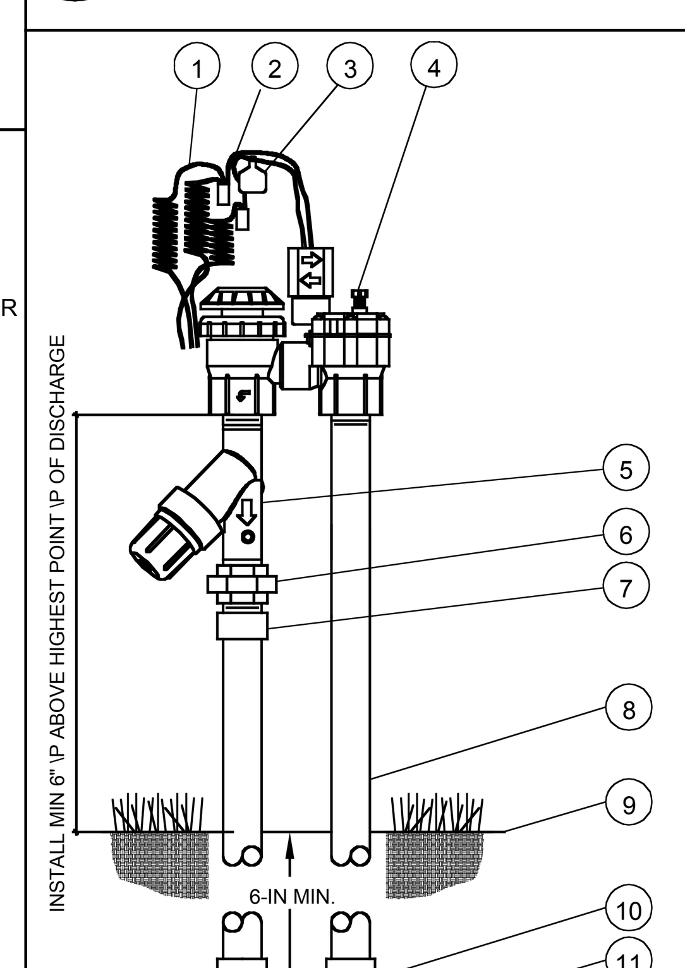
I — BACKFLOW PREVENTION DEVICE
N.T.S.



1. SINGLE-OUTLET 10-32 THREADED INLET X BARB OUTLET EMITTER: RAIN BIRD XERI-BUG 1032 EMITTER
2. TOP OF MULCH
3. FINISH GRADE
4. POLYFLEX RISER AND ADAPTER ASSEMBLY: RAIN BIRD PFR-FRA
5. PVC SCH 40 TEE OR ELL
6. PVC LATERAL PIPE

NOTE:
1. RAIN BIRD XERI-BUG 10-32 THREADED INLET X BARB OUTLET EMITTERS ARE AVAILABLE IN THE FOLLOWING MODELS: XB-05PC-1032 0.5 GPH XB-10PC-1032 1.0 GPH XB-20PC-1032 2.0 GPH

E — XERI-BUG 1032 THREADED EMITTER ON POLYFLEX RISER INTO PVC
N.T.S.



1. 30-INCH LINEAR LENGTH OF WIRE, COILED
2. WATERPROOF CONNECTION: RAIN BIRD DB SERIES (1 OF 2)
3. ID TAG
4. LOW FLOW ANTI-SIPHON VALVE: RAIN BIRD ASV-LF-075 VALVE (INCLUDED IN XACZ-075-PRF KIT)
5. PRESSURE REGULATING FILTER: RAIN BIRD PRF-075-RBY (INCLUDED IN XACZ-075-PRF KIT)
6. PVC SCH 80 UNION
7. PVC SCH 40 MALE ADAPTER
8. UV RADIATION RESISTANT PVC SCH 40 PIPE (1 OF2)
9. FINISH GRADE/TOP OF MULCH
10. PVC SCH 40 ELL (1 OF 2)
11. PVC LATERAL PIPE (1 OF 2)

A — XACZ-075-PRF 3/4" LOW FLOW CONTROL ZONE KIT
N.T.S.

SECTION 02810 IRRIGATION SYSTEMS
PART 1 - GENERAL
1.01 SUMMARY
B. Section Includes:
1. Irrigation system.
2. Line voltage connection of irrigation controller.
C. Related Sections:
4. Section 02900: Planting.
1.04 QUALITY ASSURANCE
A. Regulatory Requirements:

Comply with local, municipal and state laws, rules, and regulations governing or relating to this Work. Wiring shall conform to National Electrical Code and local codes.

B. Best Management Practices: Conform to "Handbook Five: A Guide for Implementing Large Scale Irrigation Projects" as required by The California Water Conservation in Landscaping Act (Assembly Bill 325).

1. AB 325 California Calculation of Estimated Applied Water Use (EWU).

2. AB 325 California Calculation of Maximum Applied Water Allowance (MAWA).

C. Conform to California Code of Regulations, Division 2, Chapter 2.7, Model Water Efficient Landscape Ordinance.

D. Manufacturers Instructions: The manufacturer's instructions and detailed drawings shall be followed in all cases where the manufacturers of products and/or materials furnish installation details not indicated in the Drawings and Specifications.

E. Qualifications: Work shall be performed by skilled workers with a minimum of 5 years experience in work of similar scope and complexity.
PROJECT CONDITIONS
A. Before excavation, contact the "Underground Service Alert of Southern California" (USASC) for information on buried utilities and pipelines.

1.07 TESTING AND INSPECTION
Notify the IOR 24 hours in advance of the pressure side piping inspection.
1. Pressure Side Piping: After all welded joints have cured for at least 24 hours, all lines flushed and outlets are capped, the system shall be tested under normal street water pressure for a minimum of 4 hours. All joints shall remain exposed for inspection during the pressure test. Center loading of piping with small loads of sand backfill to prevent arching or slipping under pressure is permitted.

2. Correct all defective Work and repeat tests until the entire system is tested watertight.

Submit a request for a final inspection 48 hours in advance. Perform a coverage test to determine if the coverage of water to planting areas is complete and adequate as required.

Final Inspection: The following items shall be considered part of the final inspection:
All specified products and materials.
2. Irrigation coverage test, providing 100% head to head coverage.
3. Soils compacted in trenches and around sprinkler heads, level with existing grades.
4. Controller and cabinet installation. Sprinkler control valves and boxes.
Backflow devices, pressure regulators, pumps.Automatic sensors.
Final site review shall include operating each system in its entirety in the presence of the Landscape Architect or IOR. Provide any required adjustments and correct defective Work as required.
PART 2 - PRODUCTS 2.01 IRRIGATION SYSTEM

A. All systems shall be automatic with electrically operated control valves.

B. Point of connection (POC) for all irrigation systems: Provide a single POC on a designated irrigation meter, with flow monitoring, unless otherwise indicated on the Drawings.

Flow Sensor and Master Valve Installation: Provide all required protection for main and lateral lines with flow sensors and master valve per each zone controller. Do not install manual control valves to actuate an irrigation zone when using a flow monitoring system.

Full meter protection is required for all irrigation systems by installing reduced pressure principle backflow prevention devices.

Install isolation valves in order to avoid a total system shutdown for maintenance and repairs. Include valves to isolate loop system and major branch lines.

Irrigation System shall incorporate the following requirements:

The flow velocity shall not exceed five (5) feet per second for pressure/lateral lines based on industry standard friction pressure loss values.

Pressure line pipe size shall be sufficient to support a minimum of two control valves operating at the same time, one valve opening while another is closing.

G.P.M. demand and sprinkler head coverage shall follow the manufacturer's requirements.

Remote valves shall be sized no smaller than the piping it serves unless piping is increased in size to reduce friction loss. Remote valves shall then be sized no less than one pipe size smaller than the piping it serves.

2.02 MATERIALS

Provide only new materials, of brands and types noted on Drawings and in the Specifications.

B. Plastic Pipe and Fittings:

1. Plastic Pipe: Schedule 40, class 200 IPS and class 315 IPS, as called out on drawings, extruded from 100 percent Virgin Polyvinyl Chloride (PVC) Compound, meeting requirements of Class 12454-B of ASTM D1784.

a. Plastic pipe shall be continuously and permanently marked with the following information: Manufacturer's name, nominal pipe size, Schedule or Class, SDR (Standard Dimension Ratio, or pressure rating in psi) National Sanitation Foundation (NSF).

2. Plastic fittings: Schedule 40 molded from PVC Type I Compound, conforming to the requirements of specification ASTM D2466.
a. Plastic Nipples: PVC schedule 80 conforming to ASTM D2467.

b. PVC male threaded fittings are not allowed.

3. PVC primer and solvent for chemical weld of pipe and fittings shall be as recommended by pipe manufacturer. Containers for solvent and primer shall be clearly marked with manufacturer's. Solvent and primer shall not be more than one year old. Blue or red hot glue is not permitted.
RAIN SWITCH SENSOR

1. Rain Switch Sensor shall be 24-volt for wiring to one 110 volt or 220 volt A.C. All electrical devices and wiring shall comply with the National Electrical Code, Specifications, and local codes. Hunter Mini-Click, or equal.
M. Ground Rod

1. Ground rod shall be 5/8 inch X 8 foot copper clad.

N. Back Flow Protection Device:

To operate on a reduced pressure principle furnished with a full port shut off valve up stream and down stream of the backflow device, Provide enclosure to house backflow device.

2. Wye strainers at back flow device shall be 125 pounds class customer brass with 40 mesh Monel screen.

O. Tracer Wires: A No. 14, Green, Type TW plastic-coated copper tracer wire shall be installed with non-metallic irrigation main lines.

P. Control Wires to Control Valves: Control wires to electrically operated solenoid valves shall be direct burial type UF#14 AWG copper, 3/64 inch thick PVC coating, UL approved for Class 2 wiring for 24 volts, 60 cycle AC use UL recognized waterproof connectors to connect control wires to solenoids.

Q. Valve Boxes:

1. Rectangular valve boxes shall be green plastic 12 inch wide, 18 inch long, and 12 inch deep (outside dimensions) or larger as may be required to provide specified clearances.

2. Round valve boxes shall be green, 7 inches diameter by 10 inches high with locking cover.

3. All covers on valve boxes shall be vandal resistant, locking, and marked "Water". Tops of boxes shall be set flush with finished turf grade or 2 inch above grade in shrubbery or groundcover areas.
The cover shall be identified with 3 inch high stenciled letters "RCV (with Station No.) GV, QC, etc."

R. Remote Control Valve Boxes: Automatic control valves shall be enclosed in green rectangular plastic boxes with locking covers.

PART 3 - EXECUTION

3.01 CONNECTIONS TO SUPPLY

A. Source of water supply shall be as indicated on the Drawings.

B. Connection to piping shall be provided with proper fittings:

1. When connecting to point of connection (POC) above grade all pipes shall be brass or copper with required fittings unless otherwise indicated.

2. POC from above to below grade transition shall be brass or copper pipe to a depth of 18 inches from top of pipe.

3. No steel pipe or fitting shall be installed below grade.

4. When connecting plastic pipe to copper, brass, or steel material, provide a schedule 80 PVC nipple.

5. All exposed copper or brass material above grade shall be painted green in color.

6. Connect steel and copper pipe or tube with a 6-inch brass nipple.

3.02 PIPE INSTALLATION

A. Excavate trenches deep enough to provide earth coverage of 12 inches for non-pressure lines and 18 inches for pressure lines, from finished grades to top of pipe. Bottom of trenches shall be free of rocks, clods and other sharp-edged objects. Below grade piping shall be installed on a firm sand bed for its entire length.

B. Plastic pipe and fittings shall be solvent welded. PVC pipe ends shall be cut ninety (90) degrees and cleaned of all cutting burrs prior to cementing. Use approved reaming tool. Pipe ends shall be wiped clean with a rag and lightly wetted with PVC primer. Cement shall be applied with a light coat on the inside of the fitting and a heavier coat on the outside of the pipe. Pipe shall be inserted into the fitting and given a quarter turn to seat the cement. Excess cement shall be wiped from the outside of the pipe. The pipe will be tested as indicated in article 1.07.

C. Cure welded joints at least 15 minutes before moving or handling, and at least 24 hours before applying pressure to system, unless otherwise recommended by joint solvent manufacturer.

Pressure piping installed under a driveway or sidewalk shall be sleeved. The sleeves shall be two pipe sizes larger than the pressure piping.

Piping through cement and asphalt pavement shall be L type copper with ? inch of foam wrap or other required material around the pipe to allow for expansion.

All holes cored through walls shall be two pipe sizes larger to allow for foam wrap around pipe.

PVC pipes shall not be installed above grade unless reviewed by the Architect.

H. Lettering shall be face up on all below grade PVC piping. Pipe serving tree areas shall be located not less than 30 inch from center of tree area.
3.04 VALVE BOX INSTALLATION

A. Automatic control valves shall be enclosed in valve boxes of HDPE or pololefin fibrous material, with locking lids.

B. Valve boxes shall be of sufficient size to provide no less than 1-1/2 inch of clearance on all sides of equipment installed within. The bottom section shall be slotted so as to extend below the pipe. Extensions shall be added as required to meet grade requirements.

C. Valve boxes installed in concrete or asphalt shall be set one inch below pipe and extensions shall be added as required to meet grade requirements. A homogeneous finished material shall surround valve boxes 4 inches below finished grade and match existing grade conditions.

D. All valve boxes shall be installed level to finish grade except in ground cover areas which shall extend 2 inches above finish grade.

E. Bottom of valve boxes shall be set level on 4 full size corner bricks on 2 inches of gravel bed..

F. Pea gravel shall be filled up to the bottom of the manual and remote valve and at least 4 inches of gravel inside of the valve box.
3.10 CONTROL WIRE

A. Mainline control wires shall be taped together at five (5) foot intervals with black electrical tape, then laid parallel to pressure line with 18 inches minimum cover to finish grade.

B. Control wiring located under paved areas shall be encased in Schedule 40 PVC pipe and shall extend a minimum of 12 inches beyond pavement.

C. Wires shall be color coded, white for common ground wire, red or black for valve control wires.

D. Wire splicing shall only be performed in controller cabinet and at remote control valve boxes. Splices shall be made with a mechanical connector equal to "Scotch-lok" and encased in epoxy resin to provide a permanent watertight connection.

E. Stubbed out control wires shall terminate in concrete yard boxes.

F. Wire passing under future or existing paving or structures shall be encased in Schedule 40 PVC pipe extending at least 12 inch beyond edges of the paving or structure.

3.11 TRACER WIRES

A. Tracer wire #14 or greater shall be installed on bottom of trench, adjacent to vertical pipe projections, carefully installed to avoid stress from backfilling, and shall be continuous throughout length of pipe with spliced joints soldered and covered with insulation type tape.

B. Tracer wire shall follow main line pipe and branch lines and terminate in yard box with gate valve controlling these main irrigation lines. Provide sufficient length of wire to reach finish grade, bend back end of wire to make a loop and attach a Dymo-Tape type plastic label with designation "Tracer Wire."

C. Record locations of tracer wires and their terminations on project record documents.

SEE SHEET L-2 FOR CONTINUATION

C - 23697
GARON JAMES JOHN DARLING
RENEWAL DATE JULY 31 2027

NO	DATE	REVISION
1	5.29.24	CVWD SUBMITTAL
2	8.1.25	CITY SUBMITTAL
3		
4		

PROJECT
SINGLE FAMILY RESIDENCE - COACHELLA HOMES
FOR
COACHELLA VALLEY HOUSING COALITION
45-701 MONROE ST.
INDIO, CA 92201

GARON DARLING
ARCHITECT
2259 W PASEO DEL MAR
SAN PEDRO, CA. 90732 (310) 619-9540

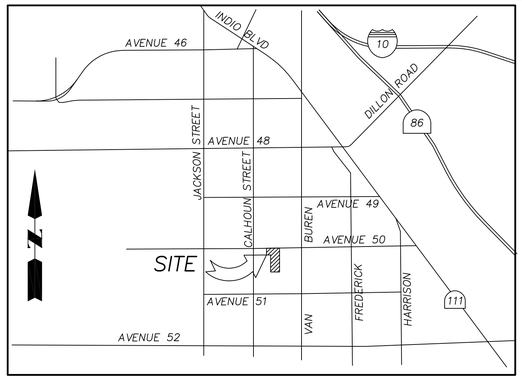
SHEET TITLE
MODEL 1374
IRRIGATION DETAILS
IRRIGATION SPECIFICATIONS
PART ONE

DATE 8/10/25
JOB
SHEET
IR-2
OF DWGS

IN THE CITY OF COACHELLA, STATE OF CALIFORNIA

WALL PLANS
TRACT 32074-2
LOTS 1 THRU 23 AND 52

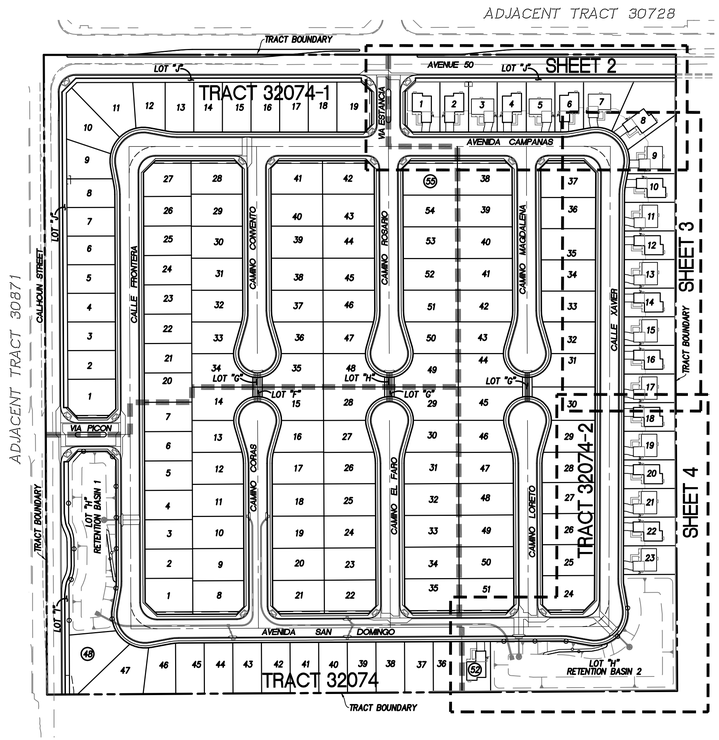
BEING A PORTION OF THE NORTH HALF OF THE NORTHEAST QUARTER OF SECTION 1, T.6S., R.7E., SAN BERNARDINO MERIDIAN



VICINITY MAP
N.T.S.

GENERAL CONSTRUCTION NOTES

1. ALL DESIGN, MATERIALS, AND CONSTRUCTION WORK SHALL CONFORM TO THE CITY OF COACHELLA STANDARD SPECIFICATIONS AND PROCEDURES AND THE CITY OF COACHELLA STANDARD DRAWINGS AND TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK), MOST CURRENT EDITIONS AND THESE APPROVED PLANS.
2. THE CONTRACTOR SHALL, AT NO EXPENSE TO THE CITY, PROVIDE ALL NECESSARY SAMPLES AND TESTS REQUIRED BY THE CITY TO ASSURE THAT THE QUALITY OF THE MATERIALS AND WORKMANSHIP ARE IN ACCORDANCE WITH THESE PLANS AND SAID SPECIFICATIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK AND SHALL MAINTAIN ALL FACILITIES COMPLETE AND UNCOMPLETED UNTIL ACCEPTED BY THE CITY.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAR THE RIGHT-OF-WAY IN ACCORDANCE WITH THE PROVISIONS OF LAW AS IT AFFECTS EACH UTIILTY INCLUDING IRRIGATION LINES AND APPURTENANCES AT NO COST TO THE CITY.
5. THE CONTRACTOR SHALL OBTAIN AND REVIEW ALL NECESSARY STANDARDS, PLANS, AND SPECIFICATIONS IN DETAIL PRIOR TO START OF CONSTRUCTION. ALL DOCUMENTS, INCLUDING APPROVED PLANS AND REFERENCED STANDARDS SHALL BE ON-SITE AT ALL TIMES. CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE CITY INSPECTOR PRIOR TO WORK IN THAT AREA.
6. ALL ELEVATIONS SHOWN TO BE EXISTING ARE FROM A RECENT SURVEY OF THE ENGINEER AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
7. PRIOR TO BEGINNING ANY WORK, CONTRACTOR SHALL SECURE A CITY OF COACHELLA PERMIT FOR CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE CITY OF COACHELLA (760) 398-5744, 72 HOURS PRIOR TO STARTING ANY WORK. A PRE-CONSTRUCTION MEETING SHALL BE SET UP WITH THE CITY OF COACHELLA ENGINEERING DEPARTMENT AND ALL AFFECTED UTILITY COMPANIES SHALL BE PRESENT.
8. CONTRACTOR SHALL CALL U.S.A., UNDERGROUND SERVICE ALERT, AT 811 AND SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES 24 HOURS IN ADVANCE OF THE COMMENCEMENT OF CONSTRUCTION. DIG ALERT TICKET SHALL BE SUBMITTED TO THE CITY OF COACHELLA ENGINEERING DEPARTMENT.
9. OSHA SAFETY ORDERS AND OSHA CONFINED SPACE ENTRY REQUIREMENTS SHALL BE FOLLOWED AT ALL TIMES WITHOUT EXCEPTION.
10. THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR AFTER THE DATE OF FINAL ACCEPTANCE BY CITY OF COACHELLA IN ACCORDANCE WITH THE CITY OF COACHELLA STANDARD SPECIFICATIONS.
11. QUANTITIES SHOWN HEREON ARE FOR ESTIMATE PURPOSES ONLY. NEITHER THE DESIGN ENGINEER NOR THE CITY OF COACHELLA GUARANTEE THE ACCURACY OR COMPLETENESS OF THE CONSTRUCTION QUANTITIES.
12. CONTRACTOR SHALL CONFORM TO LABOR CODE SECTION 6705 BY SUBMITTING A DETAIL PLAN TO THE CITY ENGINEER SHOWING THE DESIGN OF SHORING, BRACING, SLOPING, OR OTHER PROVISIONS TO BE MADE FOR PROTECTION OF WORKERS FROM THE HAZARD OF CAVING GROUND DURING TRENCH EXCAVATION AND PIPE INSTALLATION THEREIN. THIS PLAN MUST BE PREPARED FOR ALL TRENCHES FIVE FEET OR MORE IN DEPTH. IF THE PLAN VARIES FROM THE SHORING SYSTEM STANDARDS ESTABLISHED BY THE CONSTRUCTION SAFETY ORDERS, TITLE 8, CALIFORNIA ADMINISTRATIVE CODE, THE PLAN SHALL BE PREPARED BY A REGISTERED ENGINEER. A COPY OF THE OSHA EXCAVATION PERMIT MUST BE SUBMITTED TO THE CITY OF COACHELLA INSPECTOR PRIOR TO EXCAVATION.
13. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES SHOWN ON THESE PLANS WAS OBTAINED BY AVAILABLE RECORDS SEARCH BY THE DESIGN ENGINEER. TO THE BEST OF THE DESIGN ENGINEER'S KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT THOSE SHOWN ON THESE PLANS. ATTENTION IS CALLED TO THE POSSIBLE EXISTENCE OF OTHER UTILITIES OR STRUCTURES NOT SHOWN, OR IN A DIFFERENT LOCATION FROM THAT SHOWN ON THE PLANS. THE CONTRACTOR SHALL TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN ON THE PLANS AND OTHER EXISTING FACILITIES OR STRUCTURES NOT SHOWN.
14. APPROVAL OF THIS PLAN BY THE CITY OF COACHELLA DOES NOT CONSTITUTE A REPRESENTATION OF THE ACCURACY OF THE LOCATION OF, OR THE EXISTENCE OR NON-EXISTENCE OF, ANY UNDERGROUND UTILITY, PIPE, OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT.
15. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL LOCAL, STATE, AND FEDERAL SAFETY REGULATIONS INCLUDING, BUT NOT LIMITED TO, TRENCH SAFETY AND CONFINED SPACE ENTRY.
16. SOILS REPORTS SHALL BE SUBMITTED TO THE CITY OF COACHELLA BY A QUALIFIED SOILS ENGINEER WHICH CERTIFIES THAT TRENCH BACKFILL WAS COMPACTED AS DIRECTED BY THE SOILS ENGINEER IN ACCORDANCE WITH ON SITE EARTHWORK SPECIFICATIONS AND THE CITY OF COACHELLA STANDARD SPECIFICATIONS.
17. ALL REVISIONS TO DRAWINGS SHALL BE APPROVED BY THE CITY ENGINEER IN WRITING PRIOR TO CONSTRUCTION.
18. CONTRACTOR IS RESPONSIBLE FOR KEEPING COMPLETE RECORD OF CHANGES AND SHALL MAKE SUCH RECORD AVAILABLE TO THE DESIGN ENGINEER. THE PRIVATE ENGINEER SHALL PROVIDE AS-BUILT DRAWINGS TO THE CITY OF COACHELLA FOR REVIEW AND APPROVAL PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. APPROVED AS-BUILT DRAWINGS SHALL BE SUBMITTED TO THE CITY OF COACHELLA ENGINEERING DEPARTMENT IN AUTOCAD FORMAT.
19. THE CONTRACTOR SHALL PROTECT ALL SURVEY MONUMENTATION. IF ANY SURVEY MONUMENTS ARE DISTURBED OR DESTROYED, THE CONTRACTOR SHALL RETAIN A LICENSED SURVEYOR TO RE-ESTABLISH AND RECORD THE MONUMENT CHANGE PER STATE LAW.
20. CONTRACTOR SHALL NOT INTERRUPT OR DISTURB ANY UTILITY FACILITY WITHOUT AUTHORITY FROM THE UTILITY COMPANIES. WHERE PROTECTION IS REQUIRED TO ENSURE INTEGRITY OF UTILITY FACILITIES (INCLUDING CITY-OWNED UTILITIES). CONTRACTOR SHALL FURNISH AND PLACE ALL NECESSARY PROTECTION.



INDEX MAP
1"=150'

LEGEND

(460)	– INDICATES EXISTING CONTOUR
	– INDICATES STREET CENTERLINE
	– INDICATES CURB LINE
	– INDICATES TRACT BOUNDARY
	– INDICATES FLOW LINE
	– INDICATES 2:1 MAX SLOPE
	– INDICATES RETAINING WALL
	– INDICATES SCREENING WALL
	– INDICATES WROUGHT IRON FENCE
	– INDICATES BASIN FLOOR
XXX.XX P.E.	– INDICATES PAD ELEVATION
BO	– BUILD-OUT
BW	– BACK OF WALK
EG	– EXISTING GROUND
EP	– EDGE OF PAVEMENT
ESMT	– EASEMENT
F.F.	– FINISH FLOOR
FG	– FINISH GRADE
FL	– FLOW LINE
FS	– FINISH SURFACE
GB	– GRADE BREAK
G.F.F.	– GARAGE FINISH FLOOR
G.S.L.	– GRADING SETBACK LINE
HP	– HIGH POINT
IE	– INVERT ELEVATION
LP	– LOW POINT
MIN.	– MINIMUM
PI	– POINT OF VERTICAL INTERSECTION
P/L	– PROPERTY LINE
R/W	– RIGHT OF WAY
RET. HT.	– HEIGHT TO BE RETAINED
S/W	– SIDEWALK
TC	– TOP OF CURB
TF	– TOP OF FOOTING
TRW	– TOP OF RETAINING WALL
TW	– TOP OF WALL
SD	– STORM DRAIN

OWNER/APPLICANT:

COACHELLA VALLEY HOUSING COALITION
45701 MONROE STREET, SUITE G,
INDIO, CALIFORNIA 92201
PH: (760) 347-3157

ASSESSOR'S PARCEL NO.

765-140-007

ENGINEER/MAP PREPARER:

AGUILAR CONSULTING INC.
231 E. ALESSANDRO BLVD. #6A393
RIVERSIDE, CA 92508
PH: (909) 709-4393

UNDERGROUND STRUCTURES

THE LOCATION IF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDRGROUND UTILITIES.

UNAUTHORIZED CHANGES AND USES

CAUTION: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR , OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

NOTICE TO CONTRACTOR

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

PRODUCTION WALL MATRIX

ANGELUS BLOCK WALL		
DESCRIPTION	BLOCK WALL	
	BLOCK	COLOR
FRONT WALLS WHERE VISIBLE FROM THE PUBLIC	SLUMP STONE	TAN
WALLS BETWEEN LOTS	PRECISION	TAN
BLOCK WALL GROUT COLOR: TO MATCH BLOCK		

SHEET INDEX

CONSTRUCTION NOTES

(1)	CONSTRUCT ANGELUS BLOCK MASONRY FENCE WALL PER S-1.0 DETAIL ON SHEET 5.	1,930 L.F.
(2)	CONSTRUCT 3' WIDE SIDE YARD GATE PER DETAIL ON SHEET 5.	24 EA.
(3)	CONSTRUCT ANGELUS DRAINAGE BLOCK-OUT PER S-5.1 DETAIL ON SHEET 5.	38 EA.

QUANTITY ESTIMATES

W.D.I.D. NUMBER - 733C395364

Underground Service Alert
Call: TOLL FREE 811
TWO WORKING DAYS BEFORE YOU DIG

BASIS OF BEARINGS:
THE CENTERLINE OF CALHOUN STREET BEING N 00°18'22" W, PER MB 363/74-78.

BENCHMARK: BENCHMARK NO. 1003
3 1/2" BRONZE DISK STAMPED "CITY OF COACHELLA BENCHMARK PLS. 7786" IN CONCRETE SURFACE THE LOCATION OF WHICH BEING MORE PARTICULARLY DESCRIBED BELOW.
ESTABLISHED BY: ADVANCED SURVEY CONCEPTS INC. IN JUNE 2012.
THE STATION IS LOCATED AT AVENUE 50 AND VAN BUREN STREET.
THE STATION IS A 3 1/2" BRASS DISC SET IN THE TOP OF CURB AT THE NORTHEAST CURB RETURN. IT IS 32' NORTH OF THE CENTERLINE OF AVENUE 50, 75' EAST OF THE CENTERLINE OF VAN BUREN AND 2' EAST OF THE B.C.R. OF THE NORTHEAST CURB RETURN.
ELEVATION = 457.027' NAVD 29 (US. SURVEY FEET)
ELEVATION = 459.227' NAVD 88 + 500' FEET (US. SURVEY FEET)
THE ELEVATION LISTED ABOVE IS ACTUAL ELEVATION PLUS (+) 500'. TO OBTAIN ACTUAL ELEVATION SUBTRACT 500.00 FEET FROM ELEVATION LISTED ABOVE.
YEAR LEVELED: JUNE 2012

NO.	DATE	BY		APPV'D	DATE
			REVISIONS		

REGISTERED PROFESSIONAL ENGINEER ANDREW R. SIMMONS C72868 CIVIL STATE OF CALIFORNIA

RECOMMENDED FOR APPROVAL: _____ DATE: _____
TKE ENGINEERING INC.

CITY OF COACHELLA

APPROVED FOR CONSTRUCTION: _____ DATE: _____
CITY ENGINEER: ANDREW R. SIMMONS
R.C.E. C72868 EXP. DATE: 6-30-26

_____ DATE: _____
GABRIEL PEREZ – DEVELOPMENT SERVICES DIRECTOR

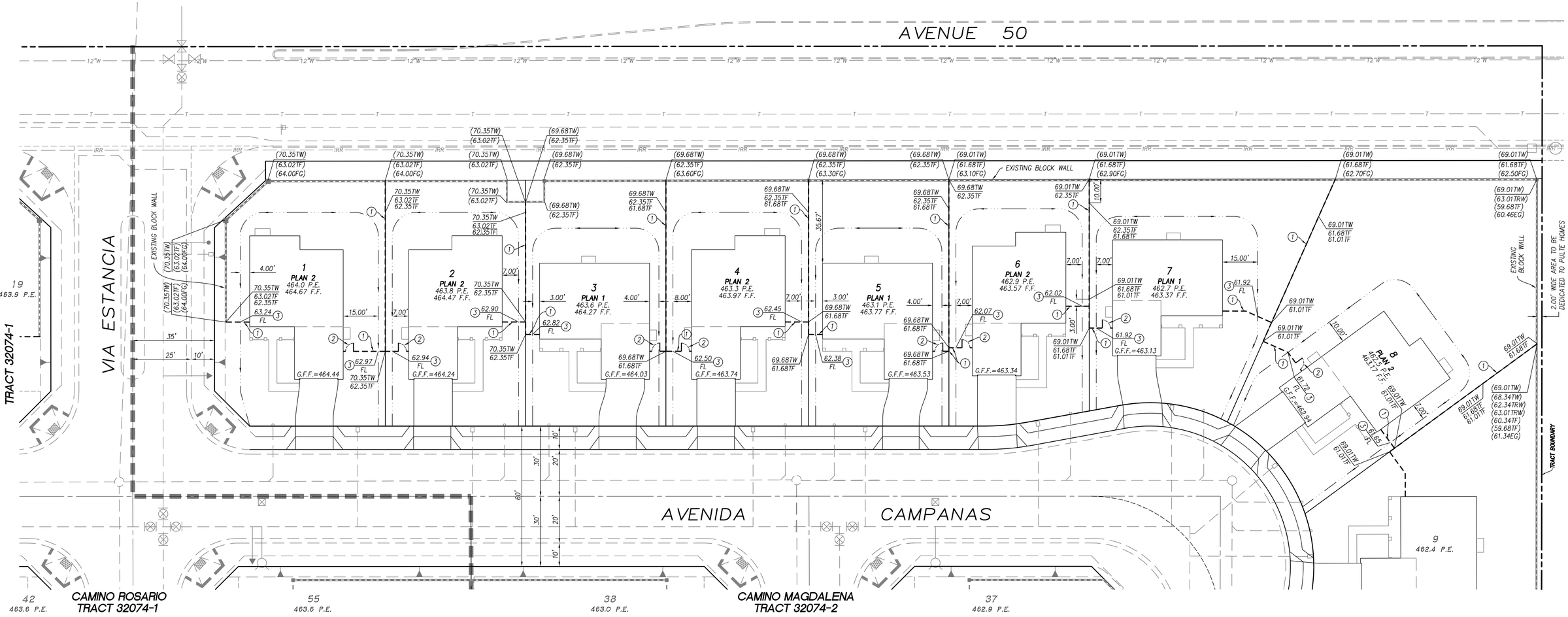
SEAL:
REGISTERED PROFESSIONAL ENGINEER CEAZAR V. AGUILAR No. 41679 EXP. 03/31/26 CIVIL STATE OF CALIFORNIA

PLANS PREPARED UNDER THE SUPERVISION OF:
ACI AGUILAR CONSULTING INC.
231 E. ALESSANDRO BLVD. #6A393
RIVERSIDE, CA 92508
PH: (909) 709-4393

_____
CEAZAR V. AGUILAR DATE
R.C.E. NO. 41679
EXP. 03-31-26

CITY OF COACHELLA
WALL PLANS
TRACT NO. 32074-2
TITLE SHEET
IN A PORTION OF SECTION 1, T.6 S., R. 7 E., S.B. & M
FOR: COACHELLA VALLEY HOUSING COALITION

SHEET NO. 1 OF 6
FILE NO.



NOTE:
ADD 400' TO ALL TRW, TW, TF, FG, FL & EG ELEVATIONS SHOWN ON PLAN.

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GRAPHIC SCALE
20 0 10 20 40
1" = 20'

W.D.I.D. NUMBER - 733C395364

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RIVERSIDE, CA 92508
PH: (909) 709-4393
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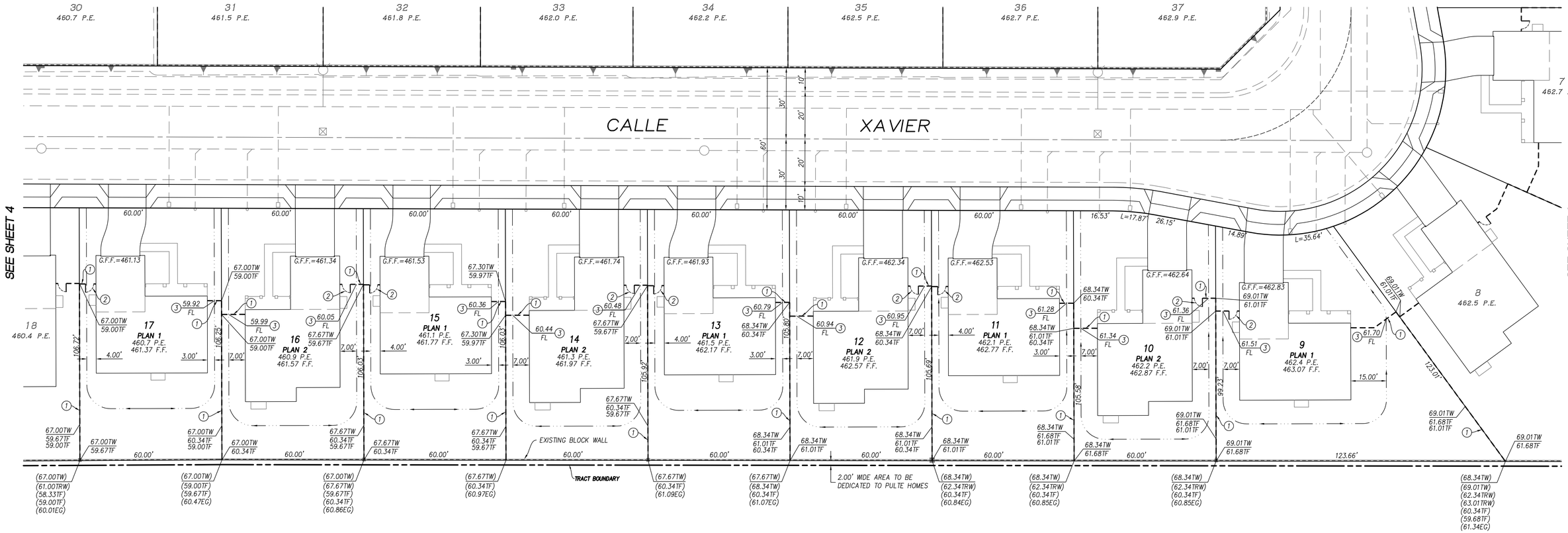
CEAZAR V. AGUILAR
R.C.E. NO. 41679
EXP. 03-31-26

CITY OF COACHELLA
WALL PLANS
TRACT NO. 32074-2
LOTS 1 THRU 8
IN A PORTION OF SECTION 1, T.6 S., R. 7 E., S.B. & M
FOR: COACHELLA VALLEY HOUSING COALITION

SHEET NO. 2 OF 6
FILE NO.

TRACT 32074-2



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GRAPHIC SCALE
20 0 10 20 40
1" = 20'

W.D.I.D. NUMBER - 733C395364

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811
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ANDREW R. SIMMONS
C72868
CIVIL
STATE OF CALIFORNIA

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CITY OF COACHELLA
WALL PLANS
TRACT NO. 32074-2
LOTS 9 THRU 17
IN A PORTION OF SECTION 1, T.6 S., R. 7 E., S.B. & M

FOR: COACHELLA VALLEY HOUSING COALITION

SHEET NO. 3 OF 6
FILE NO.

TRACT 32074

36
459.4 P.E.

35
459.6 P.E.

51
459.2 P.E.

EXISTING BLOCK WALL

AVENIDA SAN DOMINGO

52
PLAN 2
459.3 P.E.
459.97 F.F.

G.F.F.=459.74

LOT "H"
RETENTION BASIN 2

CONSTRUCTION NOTES

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NOTE:
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24 459.3 P.E. | 25 459.5 P.E. | 26 459.8 P.E. | 27 459.9 P.E. | 28 460.2 P.E. | 29 460.4 P.E. | 30 460.7 P.E.

TRACT 32074-2

CALLE ☒ XAVIER

LOT "H"
RETENTION BASIN 2

23 PLAN 1 459.4 P.E. 460.07 F.F.
22 PLAN 2 459.5 P.E. 460.17 F.F.
21 PLAN 1 459.9 P.E. 460.57 F.F.
20 PLAN 2 460.0 P.E. 460.67 F.F.
19 PLAN 1 460.3 P.E. 460.97 F.F.
18 PLAN 2 460.4 P.E. 461.07 F.F.
17 460.7 P.E.

TRACT BOUNDARY

EXISTING BLOCK WALL

2.00' WIDE AREA TO BE DEDICATED TO PULTE HOMES

GRAPHIC SCALE
20 0 10 20 40
1" = 20'

SEE SHEET 3

W.D.I.D. NUMBER - 733C395364

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811
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CITY OF COACHELLA
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TRACT NO. 32074-2
LOTS 18 THRU 23 AND 52
IN A PORTION OF SECTION 1, T.6 S., R. 7 E., S.B. & M
FOR: COACHELLA VALLEY HOUSING COALITION

SHEET NO. 4 OF 6 FILE NO.

CITY OF COACHELLA, CA

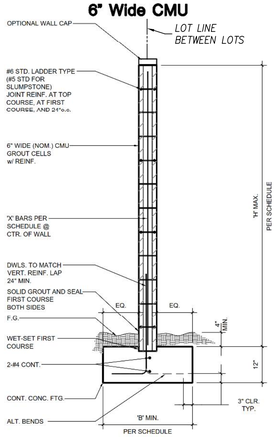
6' to 8' High Site Wall
Concentric Spread Footing
C ⊕ 123mph (ult.)
Risk Category I
6" Wide CMU

Angelus BLOCK CO., INC. Since 1946

ANGELUS BLOCK MASONRY FENCE WALL SYSTEM

DESIGN CRITERIA:
1. DESIGN CRITERIA PER 2022 CBC
2. ALLOWABLE SOIL BEARING PRESSURE = 1500psf
3. ALLOWABLE SOIL PASSIVE PRESSURE = 150pcf
4. COEFFICIENT OF FRICTION = 0.25, COHESION = 0psf
5. CANTILEVER ACTIVE = 30pcf
6. MASONRY COMPRESSIVE STRENGTH, f'm = 2000psi. SPECIAL INSPECTION NOT REQUIRED PER CBC SECTION 1704.2, EXCEPTION 2, 'U' OCCUPANCY.
7. USER TO VERIFY APPLICABILITY OF THE DEFINED DESIGN CRITERIA FOR THE PROJECT SPECIFIC SITE.
8. THIS DESIGN IS BASED ON SEISMIC PARAMETERS AS FOLLOWS:
   S_S ≤ 2.1*g* & S_{D1} ≤ 1.40*g*
   SITE SPECIFIC PARAMETERS ARE TO BE INVESTIGATED PRIOR TO COMMENCEMENT OF WORK. FOR S_S & S_{D1} GREATER THAN WHAT IS SHOWN, THIS DESIGN SHALL REQUIRE FURTHER ENGINEERING.

NOTES:
1. REINFORCING STEEL SHALL BE DEFORMED AND CONFORM TO ASTM A615 GRADE 60. PROVIDE SPLICES (LAPS) OF 48 BAR DIAMETERS OR 24 INCHES, WHICHEVER IS GREATER. CENTER VERTICAL BARS IN CELLS.
2. JOINT REINFORCEMENT ("LADDER" TYPE) SHALL BE COLD-DRAWN STEEL WIRE CONFORMING TO ASTM A951. PROVIDE MINIMUM 6 INCH LAP SPLICES.
3. STRENGTH OF CONCRETE FOR FOOTINGS = 4500psi @ 28 DAYS, UNLESS OTHERWISE REQUIRED BY SOILS REPORT.
4. CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90. ANGELUS BLOCK PRECISION, SPLIT FACE, BURNISHED, OR SHOTBLAST, WITH OR WITHOUT MORTARLESS HEAD JOINTS (TONGUE-AND-GROOVE), OR ANGELUS BLOCK SLUMPSTONE SHALL BE USED. NO SUBSTITUTIONS.
5. MORTAR SHALL BE SPEC MIX TYPE S PREBLENDED MASONRY MORTAR AS MANUFACTURED BY E-Z MIX INC., CONFORMING TO ASTM C270, OR SPEC MIX WR MASONRY MORTAR AS MANUFACTURED BY E-Z MIX INC., CONFORMING TO PROPERTY REQUIREMENTS OF ASTM C270. NO SUBSTITUTIONS.
6. GROUT SHALL CONFORM TO ASTM C476, WITH AN 8-11 INCH SLUMP, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 2000psi.
7. FIRST COURSE MAY BE WET-SET 1 1/2 INCHES MAX. WHILE CONCRETE IS PLASTIC.
8. CONCRETE BLOCK SHALL BE LAID IN RUNNING BOND PATTERN WITH VERTICAL CONTINUITY OF THE CELLS.
9. VERTICAL CONTROL JOINTS SHALL BE SPACED AT A MAXIMUM OF 40'-0"o.c., OR 20'-0"o.c. IF WALL IS TO BE STUCCO COATED OR MORTAR WASHED
10. GROUT ALL CELLS WITH REINFORCEMENT.
11. INSPECTIONS: A. AFTER FOOTING IS READY FOR CONCRETE AND ALL FOOTING REINFORCING IS TIED IN PLACE.
    B. AFTER VERTICAL REINFORCEMENT IS IN PLACE AND CELLS ARE READY FOR GROUT.
12. FOR TYPICAL FOOTING STEP AND DRAINAGE BLOCK-OUT DETAILS SEE DETAIL SHEET S-5.1.
13. EXCAVATION FOR WALL/FOUNDATION SHALL NOT UNDERMINE ANY ADJACENT STRUCTURES. TEMPORARY SHORING AND STABILIZATION OF ADJACENT STRUCTURES SHALL BE PROVIDED BY THE CONTRACTOR AS REQUIRED.
14. THIS DESIGN IS NOT TO BE USED FOR GATE WALLS.
15. WALL SHALL BE FOUNDED ON PROPERLY COMPACTED SOIL.
16. BACKFILL SHALL BE PROPERLY COMPACTED.



WIND LOAD CONVERSION TABLE					
V	100	110	120	123	130
V_{asd}	78	85	93	96	101

V = BASIC DESIGN WIND SPEED
V_{asd} = ALLOWABLE STRESS DESIGN WIND SPEED

MASONRY FENCE WALL SCHEDULE				
'H' MAX.	DESIGN WIND EXP / cat.	'X' BARS	'B' MIN.
6'-0"	C @ 123	#4@48"o.c.	2'-2"
6'-8"	C @ 123	#4@32"o.c.	2'-5"
7'-4"	C @ 123	#4@24"o.c.	2'-8"
8'-0"	C @ 123	#4@24"o.c.	2'-10"

APPROVED
Coachella Building Division
Approval of these plans shall not be construed as a permit for, or approval of, any violation of any of the provisions of the state or local laws. One set of approved plans must be kept on the job site until completion.
By: L.Diaz DATE08/01/2023

DATE SIGNED 07-12-2023

S-1.0

#23-090

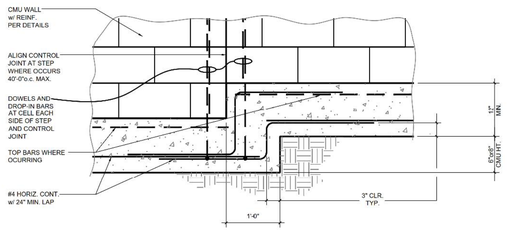
GSE
GHANIM STRUCTURAL ENGINEERING
998 N. FAIR OAKS AVE., STE. F, PASADENA, CA 91103
T: 626.407.2224 ● www.ghanimSE.com

This detail is designed exclusively for Angelus Block Co., Inc. concrete masonry units and E-Z Mix Inc. products as specified herein. No substitutions allowed.

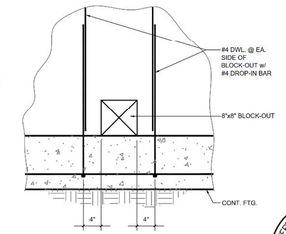
CITY OF COACHELLA, CA

TYPICAL DETAILS

Angelus BLOCK CO., INC. Since 1946



FOOTING STEP DETAIL



DRAINAGE BLOCK-OUT DETAIL

APPROVED
Coachella Building Division
Approval of these plans shall not be construed as a permit for, or approval of, any violation of any of the provisions of the state or local laws. One set of approved plans must be kept on the job site until completion.
By: L.Diaz DATE08/01/2023

DATE SIGNED 07-12-2023

S-5.1

#23-090

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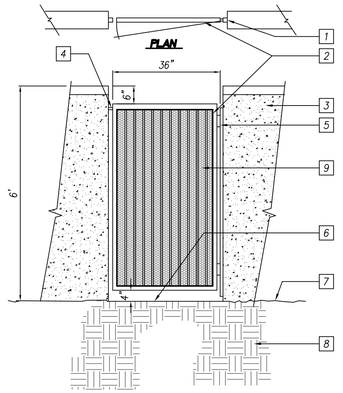


LEGEND

1. 2" SQ. X .125 T.S. POST.
2. 2" SQ. X .125 TUB. STL. GATE FRAME.
3. CMU WALL.
4. STANDARD STAINLESS STEEL GATE LATCH.
5. (2) HEAVY DUTY HINGES.
6. FINISH GRADE.
7. FINISH GRADE.
8. 90% COMPACTED SUBGRADE.
9. 70% OBSCURED PERPORATED METAL–TACK WELDED TO BACK SIDE OF GATE.

STRUCTURAL NOTES:

A REINFORCEMENT AND FOOTING PER STRUCTURAL ENGINEER.

B SUB BASE INFORMATION AND DRAINAGE REQUIREMENTS PER SOILS REPORT.

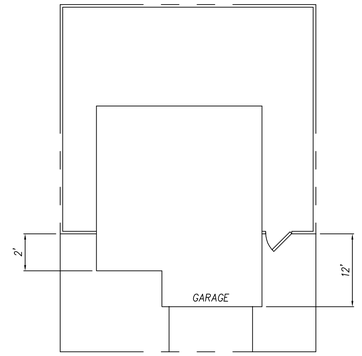
(2) **SIDE YARD GATE**

GATE LOCATION – SEE DETAIL THIS SHEET

ADJUST TO SITE CONDITIONS AS NEEDED WITH WRITTEN APPROVAL FROM SITE SUPERINTENDENT

LOCATION OF RETURN TO BE 3' BEHIND UTILITIES – ALLOW AMPLE CLEARANCE

FENCE RETURN ADJUST TO SITE CONDITIONS AS NEEDED WITH WRITTEN APPROVAL FROM SITE SUPERINTENDENT



NOTE

LOCATE SIDEYARD FENCING OUTSIDE OF P.U.E. ON CORNER LOTS. CONTRACTOR TO VERIFY LOCATION OF ALL FENCING WITH SUPERINTENDENT BEFORE PROCEEDING

WALL RETURNS

W.D.I.D. NUMBER – 733C395364

Underground Service Alert
Call: TOLL FREE
811
TWO WORKING DAYS BEFORE YOU DIG

BASIS OF BEARINGS:
THE CENTERLINE OF CALHOUN STREET BEING N 00°18'22" W, PER MB 363/74–78.

BENCHMARK: BENCHMARK NO. 1003
3 1/2" BRONZE DISK STAMPED "CITY OF COACHELLA BENCHMARK PLS. 7766" IN CONCRETE SURFACE THE LOCATION OF WHICH BEING MORE PARTICULARLY DESCRIBED BELOW.
ESTABLISHED BY: ADVANCED SURVEY CONCEPTS INC. IN JUNE 2012.
THE STATION IS LOCATED AT AVENUE 50 AND VAN BUREN STREET.
THE STATION IS A 3 1/2" BRASS DISC SET IN THE TOP OF CURB AT THE NORTHEAST CURB RETURN. IT IS 13' NORTH OF THE CENTERLINE OF AVENUE 50, 75' EAST OF THE CENTERLINE OF VAN BUREN AND 2' EAST OF THE B.C.R. OF THE NORTHEAST CURB RETURN.
ELEVATION = 457.027' NGVD 29 (US. SURVEY FEET)
ELEVATION = 459.227' NAVD 88 + 500' FEET (US. SURVEY FEET)
THE ELEVATION LISTED ABOVE IS ACTUAL ELEVATION PLUS (+) 500'. TO OBTAIN ACTUAL ELEVATION SUBTRACT 500.00 FEET FROM ELEVATION LISTED ABOVE.
YEAR LEVELED: JUNE 2012

NO.	DATE	BY	REVISIONS	APPV'D	DATE

REGISTERED PROFESSIONAL ENGINEER ANDREW R. SIMMONS C72868 CIVIL STATE OF CALIFORNIA

RECOMMENDED FOR APPROVAL: _____ DATE: _____
TKE ENGINEERING INC.

CITY OF COACHELLA

APPROVED FOR CONSTRUCTION: _____ DATE: _____
CITY ENGINEER: ANDREW R. SIMMONS
R.C.E. C72868 EXP. DATE: 6–30–26

_____ DATE: _____
GABRIEL PEREZ – DEVELOPMENT SERVICES DIRECTOR

SEAL:
REGISTERED PROFESSIONAL ENGINEER CEAZAR V. AGUILAR No. 41679 Exp. 03/31/26 CIVIL STATE OF CALIFORNIA

PLANS PREPARED UNDER THE SUPERVISION OF:
ACI AGUILAR CONSULTING INC.
231 E. ALESSANDRO BLVD. #6A393
RIVERSIDE, CA 92508
PH: (909) 709–4393

_____ DATE
CEAZAR V. AGUILAR
R.C.E. NO. 41679
EXP. 03–31–26

CITY OF COACHELLA
WALL PLANS
TRACT NO. 32074-2
DETAILS AND SECTIONS
IN A PORTION OF SECTION 1, T.6 S., R. 7 E., S.B. & M
FOR: COACHELLA VALLEY HOUSING COALITION

SHEET NO. 5 OF 6 FILE NO.

GENERAL NOTES

1.0 BIDS, CONTRACTS AND INSURANCE

A. EACH BIDDER SHALL INSPECT THE SITE BEFORE SUBMITTING HIS BID.
B. THE OWNER RESERVES THE RIGHT TO REJECT ANY OR ALL BIDS.
C. SEPARATE CONTRACTS: THE OWNER RESERVES THE RIGHT TO LET OTHER CONTRACTS IN CONNECTION WITH HIS WORK. THE CONTRACTOR SHALL AFFORD OTHER CONTRACTORS REASONABLE OPPORTUNITY FOR THE EXECUTION OF THEIR WORK, AND SHALL PROPERLY COORDINATE HIS WORK WITH THEIRS.
D. LIABILITY AND COMPENSATION INSURANCE: THE CONTRACTOR SHALL CARRY AND PAY FOR ADEQUATE LIABILITY AND COMPENSATION INSURANCE AND SHALL, IF REQUIRED, FURNISH THE OWNER WITH EVIDENCE TO THIS EFFECT.
E. GUARANTEE BONDS: THE OWNER SHALL HAVE THE RIGHT, PRIOR TO THE SIGNING OF THE CONTRACT TO REQUIRE THE CONTRACTOR TO FURNISH BOND COVERING OF THE FAITHFUL PERFORMANCE OF THE CONTRACT AND THE PAYMENT OF ALL OBLIGATIONS ARISING THEREUNDER, IN SUCH FORM AS THE OWNER MAY PRESCRIBE AND WITH SUCH SURETIES AS HE MAY APPROVE. IF SUCH BOND IS REQUIRED, THE PREMIUM SHALL BE PAID BY THE OWNER.

2.0 PLANS AND PERMITS

A. ALL CONSTRUCTION SHALL BE ACCORDING TO CONSTRUCTION DOCUMENTS AND SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE U.B.C.
B. CORRELATION OF DRAWINGS AND SPECIFICATIONS: ANY WORK NOT ACCORDING TO DRAWINGS AND SPECIFICATIONS OR ORDINANCES AND LAWS SHALL BE REMOVED.
C. DO NOT SCALE DRAWINGS. USE DIMENSIONS INDICATED.
D. ANY DISCREPANCY IN THE DRAWINGS OR SPECIFICATIONS SHALL BE CALLED TO THE IMMEDIATE ATTENTION OF THE LANDSCAPE ARCHITECT. FAILURE TO DO SO WILL PLACE RESPONSIBILITY ON THE CONTRACTOR.
E. PERMITS, FEES, ETC.: THE CONTRACTOR SHALL ARRANGE AND PAY FOR THE BUILDING PERMIT AND EACH SUBCONTRACTOR SHALL ARRANGE AND PAY FOR PERMITS FOR THEIR RESPECTIVE WORK.

3.0 EXECUTION

A. CONTRACTOR TO VERIFY ON SITE, ALL DIMENSIONS AND LOCATION OF ANY UNDERGROUND UTILITIES.
B. DEMOLITION AND REMOVALS SHALL PROCEED ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT/OWNER.
C. CUT, CAP, OR PLUG, AS REQUIRED, THOSE UTILITY LINES SERVING THE AREA WITHIN THE PROJECT LIMITS SHALL REMAIN UNINTERRUPTED DURING THE WORK PROGRESS.
D. CARE IS TO BE TAKEN NOT TO DEFACE, CRACK OR DAMAGE ANY EXISTING STRUCTURES, FENCES OR CONCRETE WORK. ALL DAMAGES TO BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
E. CUTTING AND PATCHING: THE CONTRACTOR SHALL DO ALL CUTTING, FITTING OR PATCHING OF HIS WORK THAT MAY BE REQUIRED TO MAKE IT COMPLETE AS SHOWN BY DRAWINGS AND SPECIFICATIONS. ANY COST CAUSED BY DEFECTIVE OR ILL-TIMED WORK SHALL BE BORNE BY THE PARTY RESPONSIBLE THEREFORE.
F. CLEANING: IT SHALL BE THE DUTY OF EACH SUBCONTRACTOR TO REMOVE HIS OWN RUBBISH FROM THE PREMISES AND KEEP THE JOB CLEAN AT ALL TIMES. HE SHALL PROTECT WORK OF ALL OTHER CONTRACTORS.
G. CONTRACTOR SHALL THOROUGHLY CLEAN UP SITE AND REMOVE ALL DEBRIS AND EXTRANEOUS MATERIAL FROM THE SITE PRIOR TO FINAL APPROVAL.
H. CONDUCT OF THE WORK: THE CONTRACTOR SHALL, AT ALL TIMES, KEEP A COMPETENT FOREMAN ON THE JOB WHO SHALL BE IN CHARGE OF THE ENTIRE WORK INCLUDING THE WORK OF HIS SUBCONTRACTORS. HE SHALL BE RESPONSIBLE FOR ITS ACCURACY.

4.0 EXTRAS AND SUBSTITUTIONS

A. ANY EXTRAS TO BE APPROVED IN WRITING BY THE OWNER PRIOR TO ANY CONSTRUCTION.
B. THERE ARE TO BE NO SUBSTITUTIONS WITHOUT THE PRIOR APPROVAL OF THE LANDSCAPE ARCHITECT.

5.0 PAYMENT

LIEN RELEASES FOR THE COMPLETED WORK SHALL BE SUBMITTED PRIOR TO PAYMENT FOR SAID WORK.

MASONRY SPECIFICATIONS

1.0 SCOPE OF WORK

A. GENERAL: THIS WORK SHALL CONSIST OF FURNISHING ALL LABOR AND MATERIALS FOR CONSTRUCTION OR INSTALLATION OF ALL LABOR AND STRUCTURES, AND BRICK OR TILE AS DETAILED ON THE PLANS.
B. WORK INCLUDES THE INSTALLATION OF ANCHORS AND INSERTS FURNISHED BY OTHER REQUIRED FOR OTHER TRADES, REINFORCEMENT STEEL, CONCRETE BASES OR FOOTINGS, AND STUCCO FINISHES.

2.0 MATERIALS

A. REFER TO PLANS FOR SPECIFIC MATERIAL TYPES, COLORS FINISHES, ETC.
B. CONCRETE MASONRY UNITS: CONFORM TO ASTM C90, GRADE N-II AND THE REQUIREMENTS OF THE QUALITY CONTROL STANDARDS OF THE CONCRETE MASONRY ASSOCIATION; AS MANUFACTURED BY ORCO BLOCK CO., OR EQUAL.
C. PORTLAND CEMENT: CONFORM TO ASTM C150, TYPE I OR TYPE II, TYPE, LOW ALKALI. USE ONLY ONE BRAND THROUGHOUT WORK. PROVIDE WHITE CEMENT AS REQUIRED FOR USE IN COLORED MORTAR.
D. HYDRATED LIME: CONFORM TO ASTM C207, TYPE S, AND CONTAINING 95% BY WEIGHT OF CALCIUM OXIDE.
E. AGGREGATES: CONFORM TO ASTM C144.
  E.1. SAND: CONSIST OF FINE GRANULAR MATERIALS, (NOT LESS THAN 5% PASSING NO. 8 SIEVE), COMPOSED OF HARD, STRONG DURABLE MINERAL PARTICLES, FREE FROM INJURIOUS AMOUNTS OF SALINE, ALKALINE, ORGANIC OR OTHER DELETERIOUS SUBSTANCES.
  E.2. PEA GRAVEL: GRADED WITH NO MORE THAN 5% PASSING THE NO. 8 SIEVE AND WITH 100% PASSING THE 3/8" SIEVE.
F. REINFORCING STEEL: NEW, TESTED DEFORMED BARS OF DOMESTIC MANUFACTURE CONFORMING TO ASTM 1615.
G. WATER: CLEAN, POTABLE, FROM DOMESTIC SUPPLY.
H. ADMIXTURE FOR MORTAR: "RED LABEL" USED IN ACCORDANCE WITH THE SPECIFICATIONS.
I. MORTAR: FRESHLY PREPARED AND UNIFORMLY MIXED IN THE RATIO BY VOLUMES OF 1 PART CEMENT, 1/2 PART LIME PUTTY, 4 1/2 PARTS SAND. PUTTY SHALL BE OMITTED. MORTAR SHALL MATCH COLOR OF BLOCK, UNLESS OTHERWISE SPECIFIED.
J. GROUT: FLUID CONSISTENCY AND MIXED IN THE RATIO BY PARTS SAND, 2 PARTS PEA GRAVEL.
K. LIME PUTTY: ASTM C5, HIGH CALCIUM LIME, COMPLETELY SLAKED BEFORE USING.

3.0 EXECUTION

A. EXECUTE WORK IN BEST WORKMANSHIP LIKE MANNER IN FULL COMPLIANCE WITH APPLICABLE BUILDING ORDINANCES.
B. CONCRETE BLOCK SHALL BE LAID AS REINFORCED FILL CELL UNIT MASONRY. BLOCK SHALL BE LAID ON 3/8" THICK FULL MORTAR BED ON ALL WEBS AND FACE SHELLS. VERTICAL FACES OF HEAD JOINTS SHALL BE WELL BUTTERED TO A DEPTH OF 1 1/2" FROM EXTERIOR FACES AND ALL JOINTS SHALL BE SHOVED INTO PLACE, SO THE MORTAR BONDS WELL WITH BOTH BLOCKS. FURROWING OF THE MORTAR IS NOT PERMITTED. INTERSECTING MASONRY SHALL BE GROUTED IN 4'-0" MAXIMUM POURS. UNLESS OTHERWISE NOTED ON PLANS, ALL CELLS CONTAINING REINFORCING SHALL BE SOLID GROUTED. PUDDLE THE GROUT WITH A STICK IN EACH CELL, EACH TIME IT IS POURED, TO OBTAIN A COMPLETE FILLING OF THE VOIDS. RECONSOLIDATE ALL GROUT. RUN ALL HORIZONTAL BARS IN BOND BEAM BLOCK AND LAP AROUND CORNER AND AT ALL SPLICE 2'-0" MINIMUM. RUN ALL VERTICAL BARS IN OPEN END BLOCK.
C. DO NOT START MASONRY IF THE HORIZONTAL OR VERTICAL ALIGNMENT OF THE FOUNDATION IS A MAXIMUM OF 1" TOTAL IN ERROR.
D. ALL UNITS SHALL BE CLEAN WHERE LAID. CONCRETE UNITS SHALL BE DRY. BRICK SHALL BE WETTED BUT HAVE NO FREE MOVING WATER WHEN LAID. E. WHERE NO BOND PATTERN IS SHOWN ON THE PLANS, THE WALL SHALL BE RUNNING BOND.
F. WHERE MASONRY UNIT CUTTING IS NECESSARY, MAKE ALL CUTS NEAT AND REGULAR, EDGES EXPOSED IN THE FINISHED WORK SHALL BE CUT WITH A POWER DRIVEN ABRASIVE SAW.
G. MORTAR JOINTS SHALL BE STRAIGHT, CLEAN AND UNIFORM IN THICKNESS. UNLESS OTHERWISE SPECIFIED OR DETAILED, HORIZONTAL AND VERTICAL JOINTS SHALL BE APPROXIMATELY 3/8" THICK FOR PRECISION BLOCS. BRICK JOINTS TO BE 1/2" - 3/8" THICK WITH A MAXIMUM DEPTH OF 3/8" RAKE.
H. UNLESS OTHERWISE SHOWN ON PLANS, EXPOSED WALLS SHALL HAVE DENSE, SLIGHTLY CONCAVE SURFACE WELL BONDED TO THE BLOCK AT THE EDGES. PERFORM TOOLING WHEN THE MORTAR IS PARTIALLY SET BUT STILL SUFFICIENTLY PLASTIC TO BOND. DO ALL TOOLING WITH A TOOL WHICH COMPACTS THE MORTAR, PRESSING THE EXCESS MORTAR OUT OF IT RATHER THAN DRAGGING IT OUT. WHERE WALL SURFACE IS TO BE PLASTERED, MAKE MORTAR JOINTS FLUSH WITH BLOCK FACE.
I. IF IT IS NOT NECESSARY TO MOVE A BLOCK SO AS TO OPEN A JOINT, REMOVE THE BLOCK FROM THE WALL, CLEAN AND SET IN FRESH MORTAR.
J. CONCRETE FOOTINGS TO ATTAIN 2800 PSI AT 28 DAYS (MAX. 4 1/2" SLUMP).
K. THE OWNER'S REPRESENTATIVE IS TO BE NOTIFIED 24 HOURS PRIOR TO CONCRETE POUR IN ORDER THAT THE FORMS AND REINFORCEMENT MAY BE INSPECTED.
L. CO-ORDINATE PLACEMENT OF WATER AND ELECTRICAL LINES PRIOR TO CONCRETE POUR. VERIFY LOCATION OF ALL P.V.C. SLEEVES AND ELECTRIC SOURCE FOR IRRIGATION CLOCK WITH LANDSCAPE CONTRACTOR.
M. MASON TO BE RESPONSIBLE FOR SETTING ALL S.P.O.'S SWITCHES, AND J-BOXES FLUSH WITH STRUCTURE, AND FOR SETTING BOLTS, ANCHORS, AND INSERTS FOR ATTACHMENTS BY OTHER TRADES.
N. PLACING REINFORCING STEEL:
  N.1. WHERE HORIZONTAL COURSES ARE TO BE FILLED, USE METAL STOPS. USE OF PAPER STOPS WILL NOT BE PERMITTED. ALL HORIZONTAL REINFORCING STEEL SHALL BE LAID IN A COURSE OF BOND BEAM BLOCK FILLED WITH MORTAR.
  N.2. CUT BRICK WITH POWER DRIVEN ABRASIVE SAW ONLY. CUT NEAT TRUE LINE WITHOUT CHIPS ON EXPOSED FACES, CONCEAL CUT FACES WHERE POSSIBLE, DO NOT LAY BRICKS LESS THAN 1/4 LENGTH IN EXPOSED WORK. IF ANY BRICK MUST BE REMOVED OR SHIFTED AFTER IT HAS BEEN LAID, REMOVE SETTING MORTAR, CLEAN BRICK THOROUGHLY, APPLY FRESH MORTAR AND RE-LAY.
  N.3. LAY MASONRY TRUE, LEVEL, AND PLUMB WITH ANGLE SQUARE IN ACCORDANCE WITH PLANS.
O. SEAL BACK OF PLANTER WALLS WITH APPROVED ELASTOMERIC WATERPROOF MEMBRANE.
P. BACKFILL BEHIND ALL WALLS AND MASONRY STRUCTURES, AS REQUIRED AND AS PER DETAILS. BACKFILL IN PLANTERS TO BE TOP GRADE SANDY LOAM TOPSOIL. SWALE EARTH FOR PROPER DRAINAGE. WHERE CONCRETE SLABS OCCUR NEXT TO WALLS, BACKFILL SHALL BE COMPACTED TO 90%.

4.0 CLEANING

A. SPECIAL CARE SHALL BE USED TO PREVENT STAINING OF EXPOSED AND GROUT. ANY MORTAR OR GROUT WHICH COMES IN SUCH FACES SHALL BE PROMPTLY AND THOROUGHLY REMOVED BY AFFECTIVE AND APPROVED MEANS.
B. ENTIRE SITE TO BE CLEANED AND ALL DEBRIS REMOVED PRIOR TO FINAL INSPECTION.

WOODWORKING SPECIFICATIONS

1.0 SCOPE OF WORK

A. GENERAL: THIS WORK SHALL CONSIST OF FURNISHING ALL LABOR AND MATERIAL FOR CONSTRUCTION OF OVERHEAD WOOD TRELLIS, FENCES, AND SCREENS, AS DETAILED ON THE PLANS. THE WORK DOES NOT INCLUDE POST FOOTINGS AND HARDWARE SET IN PAVED AREAS.
B. COORDINATION: WOOD WORK CONTRACTOR SHALL LOCATE AND STAKE POST LOCATIONS FOR CONCRETE AND/OR MASONRY CONTRACTOR BEFORE PAVING OR MASONRY WORK IS BEGUN.
C. SITE CONDITIONS: VERIFY ALL DIMENSIONS AND SITE CONDITIONS ON THE SITE PRIOR TO BEGINNING WORK. ANY DISCREPANCIES SHALL BE CALLED TO THE IMMEDIATE ATTENTION OF THE LANDSCAPE ARCHITECT.
D. PERMITS: CONTRACTOR SHALL OBTAIN ALL BUILDING PERMITS AND APPROVALS. (REFER TO GENERAL NOTES).

2.0 MATERIALS

A. GENERAL: ALL MATERIALS SHALL BE NEW AND PROPERLY GRADE-MARKED OR CERTIFIED. ONLY LUMBER CONSISTING OF SOUND WOOD, FREE OF DECAY, WARPING, SPLITS OR CHECKS WILL BE ACCEPTABLE.
B. LUMBER:
  B.1. ALL LUMBER SIZES SHOWN ON THE PLANS OR SPECIFIED REFER TO NOMINAL SIZES AND THE AMERICAN STANDARD ROUGH AND DRESSED SIZES WILL BE ACCEPTED AS CONFORMING THERETO.
  B.2. DOUGLAS FIR SHALL BE OF THE SPECIES "PSEUDOTSUGA MENZIESII" AND SHALL BE GRADED IN ACCORDANCE WITH THE CURRENT STANDARD GRADING AND DRESSING RULES FOR DOUGLAS FIR ADOPTED BY THE WEST COAST BUREAU OF LUMBER GRADES AND INSPECTION.
  B.3. CEDAR SHALL BE OF THE SPECIES "CHAMAECYPARIS LAWSONIANA" AND SHALL BE GRADED IN ACCORDANCE WITH THE CURRENT GRADING AND DRESSING RULES.
  B.4. ALL WOOD BEARING ON CONCRETE OR MASONRY LESS THAN 4'-0" ABOVE GRADE SHALL BE PRESSURE TREATED. WOOD JOINTS OR THE BOTTOM OF WOOD FLOORS LESS THAN 18" ABOVE GRADE SHALL ALSO B PRESSURE TREATED.
  B.5. ALL STRUCTURAL MEMBER (I.E., BEAMS, RAFTERS, POSTS, JOINTS) TO BE DOUGLAS FIR NO. 1 OR BETTER UNLESS OTHERWISE NOTED. ALL LATH AND DECKING AS SPECIFIED.
C. HARDWARE:
  C.1. NAILS TO BE GENERAL FRAMING COMMON OF STANDARD SIZE AND FORM, HOT DIPPED GALVANIZED OR ALUMINUM, UNLESS SPECIFICALLY NOTED. BOX NAILS WILL BE ACCEPTED.
  C.2. WASHERS TO BE REINFORCED MALLEABLE IRON, GALVANIZED.
  C.3. ALL BRACKETS AND HANGERS TO BE SIMPSON OR APPROVED EQUAL.

3.0 EXECUTION

A. WORKMANSHIP: ALL WOODWORK SHALL BE CUT, FITTED, JOINTED TOGETHER, TIED, SET TO REQUIRED LINES AND LEVELS, SHORED IN PLACE ETC., IN A NEAT WORKMANLIKE MANNER TO THE ENTIRE SATISFACTION OF THE LANDSCAPE ARCHITECT. ALL SPLIT WOOD SHALL BE REMOVED AND REPLACED.
B. BOLTING: HEADS AND NUTS OF MACHINE BOLTS AND NUTS OF CARRIAGE BOLTS SHALL HAVE WASHERS, EXCEPT AGAINST STEEL PLATES. BOLT, SPLICE AND HAND ALL BEAMS AS SHOWN ON DRAWINGS. CUT ALL BOLTS FLUSH WITH NUTS, PLAIN SMOOTH AND REMOVE ALL BURRS. HOLES FOR BOLTS SHALL BE BORED 1/32" TO 1/16" LARGER THAN NOMINAL BOLT DIAMETER. NAILS SHALL NOT BE INSTALLED CLOSER THAN 1/2 THEIR LENGTHS AND DRILLED HOLES, ONE SIZE SMALLER THAN NAIL SHANK, SHALL BE USED WHERE WOOD MEMBERS ARE LIABLE TO BE SPLIT BY NORMALLY DRIVEN NAILS. ALL NAILING SHALL BE IN ACCORDANCE WITH U.B.C.
C. STRUCTURAL MEMBERS SHALL NOT BE CUT FOR PIPES, ETC., UNLESS SPECIFICALLY NOTED OR DETAILED.
D. FINISHING: CONTRACTOR TO STAIN, PAINT OR SEAL WOOD. REFER TO DRAWINGS. PAINT ALL METAL TO MATCH WOOD FINISH UNLESS NOTED OTHERWISE WITH (1) COAT ZINC RICH PRIMER AND (2) COATS SEMI-GLOSS OIL BASE EXTERIOR PAINT.
E. CLEANUP: CONTRACTOR SHALL DAILY REMOVE ALL RUBBISH, SCRAPS, EXTRANEOUS CONCRETE AND HARDWARE FROM THE PREMISES AND KEEP THE JOB REASONABLY CLEAN AT ALL TIMES. SPILLED OR OVERSPRAYED PAINT SHALL BE IMMEDIATELY CLEANED OFF OF FINISHED SURFACES TO THE LANDSCAPE ARCHITECT'S SATISFACTION. SPECIAL CARE SHALL BE EXERCISED TO PREVENT ACCUMULATIONS OF MATERIAL TO FORM A FIRE OR SAFETY HAZARD.

TUBULAR STEEL

1.0 SCOPE OF WORK

WORK INCLUDED:
A. FURNISH AND INSTALL TUBULAR STEEL PER PLANS, DETAILS AND SPECIFICATIONS.
RELATED WORK SPECIFIED IN THIS SECTION:

2.0 QUALITY ASSURANCE

A. QUALIFICATIONS
  A.1. PERFORM SHOP WELDING ON THE PREMISES OF A FABRICATOR LICENSED BY THE CITY BUILDING AND SAFETY DEPARTMENT.
  A.2. PERFORM WELDING BY WELDERS APPROVED AND CERTIFIED IN ACCORDANCE WITH REQUIREMENTS OF AWS.
B. REFERENCE STANDARDS
  B.1. "AISC" STEEL CONSTRUCTION MANUAL.
  B.2. "CODE FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION". AWS F1.0 OF THE AMERICAN WELDING SOCIETY.
  B.3. "METAL FINISHES MANUAL", OF THE NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS (NAAMM).

3.0 SUBMITTALS

A. SUBMIT COMPLETE SHOP DRAWINGS TO THE LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE FOR REVIEW IN ADVANCE OF FABRICATION.
  A.1. SHOW DIMENSIONS, SITES, THICKNESSES, GAUGES, FINISHES, JOINING, ATTACHMENTS AND RELATIONSHIP TO ADJACENT WORK.
  A.2. WHERE WELDED CONNECTIONS, CONCRETE INSERTS, AND OTHER ITEMS ARE REQUIRED TO RECEIVE OTHER WORK, SHOW EXACT LOCATIONS REQUIRED.
  A.3. FOR STANDARD MANUFACTURED ITEMS, SUBMIT WORK SHEETS SHOWING ILLUSTRATED CUTS OF ITEMS TO BE FURNISHED, SCALE, DETAILS AND DIMENSIONS.

4.0 MATERIALS

A. ROLLED STEEL SHAPES AND STEEL PLATES: ASTM A36.
B. STEEL TUBING: ASTM A500 GRADE A, OR ASTM 1501 SEAMLESS - G.A. PER DETAILS.
C. STEEL PIPE: ASTM A53, TYPE E OR S, GRADE A OR A120, GALVANIZED 6" DIAMETER.
D. STEEL BOLTS: ASTM A307, GRADE A.
E. WELDING RODS: CONFORM TO AWS REQUIREMENTS FOR INTENDED USE.
F. CONCRETE INSERTS: AS INDICATED ON THE PLANS.
G. SHOP PRIME-COAT PAINT: CONFORM TO EITHER FS TT-P-86 TYPE II FOR RED LEAD/ALKYD TYPE PAINT OR TO FS TT-P-45 FOR ZINC CHROMATE TYPE PAINT- (2) SHOP COATS.
H. TOUCH-UP FOR GALVANIZED SURFACES: ALL STATE No. 321 GALVANIZING POWDER (30% TIN, 30% ZINC, 40% LEAD AND FLUX) AS MANUFACTURED BY ALL STATE WELDING ALLOYS CO., OR SPEED GALVANIZED BY W.D.L. CO. OR EQUAL.
I. NON-SHRINK GROUT: MINI WAX CONSTRUCTION PRODUCTS DIVISION POR-ROCK, OR APPROVED EQUAL.
J. METAL ENAMEL: FS TT-P-37C - (2 COATS).

5.0 FABRICATION

A. CONFORM TO THE REQUIREMENTS OF THE REFERENCED STANDARDS.
  A.1. FOR MANUAL WELDING, USE LOW HYDROGEN TYPE E-7015 AND 7016 ELECTRODES.
  A.2. WELD PREHEAT SHALL BE DETERMINED FROM MILL REPORTS SHOWING THE CHEMICAL COMPOSITION OF THE REINFORCEMENT.
B. SHOP PRIME ALL FERROUS ITEMS TO 1 MILL DRY COAT THICKNESS AFTER FABRICATION, DE-BURRING AND GRINDING SMOOTH WELDS AND ROUGH SPOTS. TOUCH-UP AFTER INSTALLATION. LEAVE IN PROPER CONDITION TO RECEIVE FINISH PAINTING.
  B.1. DO NOT PAINT REBAR AND STEEL SURFACES TO BE EMBEDDED IN OR BONDED TO CONCRETE.
C. WELDS SHALL BE GROUND SMOOTHLY, ALL WELD SPATTER REMOVED AND WORK SHALL COMPLY WITH THE SPECIFICATIONS OF THE "AMERICAN WELDING SOCIETY."
D. SUBCONTRACTOR TO PERFORM ALL THE ABOVE WORK IN ACCORDANCE WITH THE GOVERNING PLANS AND SPECIFICATIONS.

6.0 COORDINATION WITH OTHER WORK

A. EXAMINE DRAWINGS AND SPECIFICATIONS, AND INCLUDE ALL MISCELLANEOUS METAL WORK WHICH IS NOT DISTINCTLY SPECIFIED IN OTHER SECTIONS.
B. PROVIDE ALL CONNECTIONS, ANCHORS, BOLTS, WELDING, CUTTING, PUNCHING, DRILLING, TAPPING OR OTHER CONNECTION REQUIRED TO FIT MISCELLANEOUS METAL WITH OTHER WORK.
C. PROVIDE ITEMS TO BE INSTALLED BY OTHER TRADES WELL IN ADVANCE, TO PERMIT PROPER SEQUENCING AND SCHEDULING OF OTHER WORK.

7.0 INSTALLATION

A. MISCELLANEOUS METALWORK SHALL BE FREE FROM DEFECTS WHICH WOULD IMPAIR STRENGTH, DURABILITY AND APPEARANCE.
B. ERECT PLUMB, STRAIGHT, TRUE AND ACCURATELY FIT IN PLACE BRACE, REINFORCE, AND ANCHOR IN PLACE. GRIND ALL FIELD WELDS.
C. PROVIDE NON-SHRINK GROUTING OF ALL FRAMES, PLATES, SILLS, BOLTS AND OTHER ITEMS NOT DESIGNATED TO BE DONE BY OTHERS.
D. CONCEAL ALL CONNECTIONS IN THE FINISHED WORK, WHERE POSSIBLE. EXPOSED SCREW CONNECTIONS SHALL BE ALLEN HEAD SCREWS MATCHING THE MATERIAL THEY FASTEN.
E. SET BASE PLATE FOR SUPPORT POSTS., TRUE AND PLUMB IN CONCRETE FOOTING PER DETAILS.
F. PROTECT ALL DISSIMILAR METALS FROM GALVANIC CORROSION BY PRESSURE TAPES, COATINGS, OR ISOLATORS.
G. AFTER ERECTION, CLEAN OFF ALL RUST, SCALE AND OIL. CLEAN FIELD WELDS, BOLTS, AND ABRADED AREAS. TOUCH-UP ALL AREAS WITH THE SAME MATERIAL AS USED FOR THE SHOP COAT, LEAVING ALL SURFACES READY TO RECEIVE FINISH COATS. APPLY SECOND COAT OF PRIMER ON SITE.
H. APPLY (2) COATS ZINC RICH PRIMER COAT AND TWO FINISH COATS OF EXTERIOR METAL ENAMEL TO METAL SURFACES, COLOR AS SELECTED BY OWNER'S REPRESENTATIVE.

8.0 REPAIR OF DEFECTS

ALL DEFECTIVE OR DAMAGED WORK SHALL BE REPLACED, REMOVED AND REPAIRED AS DIRECTED BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE AT NO COST TO THE OWNER.

9.0 CLEAN-UP

A. CLEAN-UP AND REMOVE FROM THE SITE ALL UNUSED MATERIALS AND DEBRIS RESULTING FROM THE PERFORMANCE OF THIS WORK NOT LESS THAN ONCE A WEEK OR THE LAST WORKING DAY EACH WEEK. ALL TRASH SHALL BE REMOVED COMPLETELY FROM THE PROJECT SITE.
B. TOUCHUP- CONTRACTOR SHALL CLEAN AND RETOUCH CONTRACTOR'S WORK AS NECESSARY, OR AS REQUIRED FOR FINAL APPROVAL BY THE LANDSCAPE ARCHITECT WITHIN 24 HOURS NOTICE.
C. UNPAINTED SURFACE- CONTRACTOR SHALL LEAVE ALL SURFACES NOT TO BE PAINTED, PAVING, HARDWARE, OR PLANT MATERIALS FREE FROM ANY PAINT, STAIN, SPATTERING, SMEARS OR SMUDGES WHICH ARE THE RESULT OF THE CONTRACTORS OPERATION.
D. LOCATION- CONTRACTOR SHALL NOT CLEAN EQUIPMENT AND BRUSHES OR DISPOSE OF THINNERS, PAINT OR OTHERS CHEMICALS IN AREAS TO BE PLANTED OR IN THE VICINITY OF EXISTING PLANTS.

CONCRETE

1.0 SCOPE OF WORK

FURNISH AND INSTALL ALL CONCRETE WORK COMPLETE AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS INCLUDING, BUT NOT LIMITED TO:

A. FURNISH AND SET ALL REINFORCING STEEL, BOLTS AND ANCHORS.
B. INSTALL ALL ITEMS REQUIRED BY OTHER TRADES WHICH ARE TO BE CAST INTO CONCRETE.
C. CONCRETE MOW CURBS, BANDING, OTHER FLATWORK, FOOTINGS, PADS AND SLABS FOR: WALLS, FENCING, CONTROLLERS, ETC., WHERE APPLICABLE.

2.0 GENERAL

ALL REQUIREMENTS OF SUBSECTION 3.31, STANDARD SPECIFICATIONS FOR PUBLIC

WORKS CONSTRUCTION, SHALL APPLY EXCEPT AS SPECIFIED HEREIN.

2.1 INSPECTION OF SITE

EXAMINE RELATED WORK AND SURFACES BEFORE STARTING WORK IN THIS SECTION. REPORT TO THE LANDSCAPE ARCHITECT IN WRITING, SITE CONDITIONS WHICH WILL PREVENT THE PROPER PROVISION OF THIS WORK. BEGINNING THE WORK IN THIS SECTION WITHOUT REPORTING UNSUITABLE CONDITIONS TO THE LANDSCAPE ARCHITECT CONSTITUTES ACCEPTANCE OF SITE CONDITIONS BY THE CONTRACTOR. ANY REQUIRED REMOVAL, REPAIR, OR REPLACEMENT OF THIS WORK CAUSED BY UNSUITABLE CONDITIONS SHALL BE DONE AT NO ADDITIONAL COST TO OWNER.

2.2 PROTECTION OF EXISTING CONDITIONS

CONTRACTOR SHALL ACQUAINT HIMSELF WITH ALL SITE CONDITIONS. HE SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT EXISTING SITE CONDITIONS. SHOULD DAMAGE BE INCURRED, THIS CONTRACTOR SHALL REPAIR DAMAGE TO ITS ORIGINAL CONDITION OR FURNISH AND INSTALL EQUAL REPLACEMENT AT HIS OWN EXPENSE, TO THE SATISFACTION OF THE OWNER.

2.3 COORDINATION

A. COOPERATION ON-SITE: COORDINATE AND COOPERATE WITH OTHER CONTRACTORS TO ENABLE THE WORK TO PROCEED AS RAPIDLY AND EFFICIENTLY AS POSSIBLE.
B. WORK WITH OTHER TRADES: COORDINATE WITH GENERAL CONTRACTOR ITEMS OF OTHER TRADES TO BE FURNISHED AND SET IN PLACE. SUCH PORTIONS OF THEIR WORK AS ALL OR IN PART EMBEDDED, BUILT-IN, ATTACHED TO, OR SUPPORTED BY THE WORK SHALL BE EXECUTED BY THEM IN AMPLE TIME THAT PROGRESS OF THE WORK IS NOT DELAYED. ANY CUTTING OR PATCHING MADE NECESSARY TO COMPLY WITH THIS INJUNCTION SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

2.4 APPROVAL

WHEREVER THE TERMS "APPROVE," "APPROVAL," OR "APPROVED" ARE USED IN THE SPECIFICATIONS, THEY MEAN APPROVAL OF THE LANDSCAPE ARCHITECT, THE OWNER'S REPRESENTATIVE OR THEIR FIELD REPRESENTATIVES, IN WRITING.

2.5 SUBMITTALS

AFTER AWARD OF CONTRACT, CONTRACTOR SHALL SUBMIT FOR APPROVAL SAMPLES AND SPECIFICATIONS OF SPECIFIED ITEMS PRIOR TO BEGINNING WORK. APPROVED SAMPLES SHALL BE STANDARDS FOR COMPLETING WORK. SAMPLES SHALL CONSIST OF 3' SQUARE PANELS. CONTRACTOR SHALL PROVIDE ONE PANEL FOR EACH COLOR AND/OR FINISH ON THE JOB SITE. EACH SAMPLE SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT.

2.6 SUBSTITUTIONS

A. STANDARDS- SPECIFIC REFERENCE TO MANUFACTURES NAMES AND PRODUCTS SPECIFIED IN THIS SECTION ARE USED AS STANDARDS; THIS IMPLIES NO RIGHT TO SUBSTITUTE OTHER MATERIAL OR METHODS WITHOUT WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT.
B. APPROVAL- INSTALLATION OF ANY APPROVED SUBSTITUTIONS IS CONTRACTOR'S RESPONSIBILITY. ANY CHANGES REQUIRED FOR INSTALLATION OF ANY APPROVED SUBSTITUTION MUST BE MADE TO THE SATISFACTION OF LANDSCAPE ARCHITECT AND WITHOUT ADDITIONAL COST TO OWNER. APPROVAL BY LANDSCAPE ARCHITECT OF SUBSTITUTED MATERIALS AND/OR DIMENSIONAL DRAWINGS DOES NOT WAIVE THESE REQUIREMENTS.

2.7 WARRANTY

IN ADDITION TO MANUFACTURERS' GUARANTEES OR WARRANTIES, ALL WORK SHALL BE WARRANTED FOR ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP BY CONTRACTOR. WARRANTY SHALL ALSO COVER REPAIR OF DAMAGE TO ANY PART OF THE PREMISES.

3.0 MATERIALS

A. PORTLAND CEMENT SHALL CONFORM TO ASTM-C150, TYPE I OR TYPE II.
B. CONCRETE AGGREGATE SHALL CONFORM TO ASTM-C33. WATER SHALL BE CLEAN, FREE FROM STRONG ACIDS, ALKALI, OIL OR ORGANIC MATTER.
C. ADMIXTURE FOR ALL FORMED CONCRETE SHALL BE SIKA CHEMICAL CORP'S "PLASTIMENT", OR APPROVED EQUAL, APPLIED IN STRICT ACCORDANCE WITH MANUFACTURER'S DIRECTIONS.
D. REINFORCEMENT: REINFORCING STEEL ASTM-A15 AND ASTM-A-305. WIREFABRIC: ASTM-A185
E. FORMS:
  E.1. LUMBER SHALL BE "CONSTRUCTION GRADE" DOUGLAS FIR
  E.2. PLYWOOD FOR FORMING OF CONCRETE WHICH IS EXPOSED SHALL BE PLYFORM. ALL PLYWOOD USED FOR FORMING SHALL BE AT LEAST 5/8 INCH THICK AND EDGE SEALED.
F. EXPANSION JOINT FILLER SHALL CONFORM WITH ASTM-D1751 (PREMOLDED).
G. PROVIDE CERTIFIED MILL TEST REPORTS OF THE CHEMICAL AND PHYSICAL PROPERTIES OF REINFORCING BARS AND WELDED WIRE FABRIC.
  G.1. REINFORCING BARS- DEFORMED BILLET-STEEL BARS CONFORMING TO ASTM A615, CLEAN AND FREE FROM RUST, SCALE, OR COATING THAT WILL REDUCE BOND.
  G.2. WELDED WIRE FABRIC
    G.2.1. CONFORM TO ASTM A185. TAGS DESIGNATING WIRE SIZE AND SPACING SHALL BE LEFT ON EACH ROLL UNTIL READY FOR USE.
    G.2.2. UNLESS OTHERWISE APPROVED WELDED WIRE MESH SHALL BE 6" X 6" NO.10 NO.10 CONTINUOUS.

4.0 CONCRETE

A. QUALITY
  A.1. CONTRACTOR ASSUMES RESPONSIBILITY FOR THE DESIGN MIX AND GUARANTEES THE SPECIFIED ULTIMATE STRENGTH AS INDICATED OR SPECIFIED HEREIN.
  A.2. CONCRETE, MINIMUM 28-DAY ULTIMATE STRENGTH SHALL BE 2500 PSI.
  A.3. READY-MIXED CONCRETE SHALL CONFORM TO ASTM-C94.
B. PROPORTIONS AND CONSISTENCY
  B.1. THE PROPORTIONS OF AGGREGATE TO CEMENT SHALL PROVIDE A DENSE MIXTURE WHICH WILL READILY WORK INTO ALL CORNERS OF THE FORMS AND AROUND ALL REINFORCEMENTS WITHOUT ANY SEGREGATION OF THE MATERIALS, CAUSE EXCESS FREE WATER TO COLLECT ON THE SURFACE OR CAUSE EXCESSIVE BLEEDING OF THE FORMS.
  B.2. THE RECOMMENDED PRACTICES OF THE AMERICAN CONCRETE INSTITUTE SHALL BE FOLLOWED IN ALL APPLICABLE PROCEDURES. THE MAXIMUM SLUMP SHALL NOT EXCEED (4") FOUR INCHES FOR FOOTINGS, SLABS ONGRADE, AND MASS CONCRETE; 5 INCHES FOR FOUNDATION WALLS.
C. CONTROL- THE CONCRETE QUALITY, PROPORTIONS, CONSISTENCY, ETC., IS SUBJECT TO THE APPROVAL OF OWNER, AND NO CHANGES SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL.

5.1 FORMWORK

A. FORMS FOR CONCRETE WORK SHALL BE EITHER METAL OR WOOD. FORMS THAT ARE WARPED OR THAT DO NOT HAVE A SMOOTH STRAIGHT UPPER EDGE SHALL NOT BE USED. FORMS SHALL BE SET WITH THE UPPER EDGE OF THE BOARD TRUE TO LINE AND GRADE AND SHALL BE STAKED RIGIDLY IN PLACE WITH STAKES SET NOT MORE THAN FOUR FEET (4') APART SO AS TO REMAIN IMMOVABLE THROUGHOUT THE CONSTRUCTION. ALL FORMS SHALL BE APPROVED BY LANDSCAPE ARCHITECT WITHIN A TOLERANCE OF ONE PERCENT (1%). NOTIFY LANDSCAPE ARCHITECT 48 HOURS IN ADVANCE TO SCHEDULE INSPECTION. ALL MATERIALS SHALL BE ACCURATELY AND SEPARATELY WEIGHTED AND MIXING SHALL CONTINUE UNTIL THE DISTRIBUTION OF MATERIAL IS UNIFORM AND THE MASS OF CONCRETE IS HOMOGENEOUS.
B. TWO AND ONE-HALF (2 1/2) GALLONS OF WATER PER CUBIC YARD, SHALL BE WITHHELD FROM THE MIX AT THE PLANT, AND ALL OR A PORTION MAY BE ADDED TO THE MIX AT THE JOB SITE AS DIRECTED BY THE INSPECTOR. THE CONCRETE SHALL BE MIXED AT LEAST 5 MINUTES AFTER SUCH WATER IS ADDED AND NOT LESS THAN 3 MINUTES OF THIS TIME SHALL BE IMMEDIATELY PRIOR TO THE DISCHARGE OF THE BATCH. TOTAL MIXING TIME AFTER ADDING ORIGINAL WATER SHALL BE AT LEAST 15 MINUTES.
C. CONCRETE WHICH IS NOT PLACED WITHIN 90 MINUTES AFTER THE INTRODUCTION OF CEMENT AND WATER, AND CONCRETE WHICH HAS STOOD FOR 30 MINUTES AFTER LEAVING THE MIXER, SHALL NOT BE USED.

5.2 REBAR

A. REINFORCING BAR SHALL BE SPLICED WITH 30 BAR DIAMERS MINIMUM OVERLAP.

6.0 CONVEYING AND PLACING

A. BEFORE POURING, ALL FORMS SHALL BE THOROUGHLY CLEANED AND MADE TIGHT. THE BOTTOM OF TRENCHES SHALL BE WETTED DOWN BEFORE POURING FOOTINGS; EARTH SHALL NOT BE MUDDY AT THE TIME OF POURING. CONCRETE SHALL NOT BE PLACED UNTIL REINFORCEMENTS, ROUGH HARDWARE, AND FORMS ARE APPROVED BY OWNER OR LANDSCAPE ARCHITECT.
B. BEFORE DEPOSITING NEW CONCRETE AGAINST OLD CONCRETE, ALL LAITANCE SHALL BE REMOVED, AND THE SURFACES ROUGHENED TO EXPOSE THE EMBEDDED AGGREGATE. THE SURFACES SHALL THEN BE COVERED WITH CEMENT GROUT, USING THE SPECIFIED MIX WITH 1/2 OF THE COURSE AGGREGATE OMITTED, 1 1/2 INCHES THICK.
C. CONVEYING AND PLACING OF CONCRETE SHALL BE DONE SO AS TO PREVENT SEPARATION OF INGREDIENTS, AND IN NO CASE SHALL THE FREE FALL EXCEED 6 FEET. TREMIES SHALL BE USED AS REQUIRED. SURFACES OF CONCRETE SHALL BE KEPT REASONABLY LEVEL, WITH A MINIMUM AMOUNT OF CONCRETE BEING ALLOWED TO FLOW AFTER BEING PLACED. PLACING SHALL BE PERFORMED AS A CONTINUOUS OPERATION UNTIL EACH SECTION IS COMPLETED.
D. CONCRETE SHALL BE SPADED AND VIBRATED WITH MECHANICAL VIBRATORS TO A MAXIMUM SUBSIDENCE, WITHOUT SEPARATION OF INGREDIENTS. THE MOVING OF CONCRETE BY VIBRATION WILL NOT BE PERMITTED.

6.1 COLORED CONCRETE

INTEGRAL COLOR SHALL BE PER PLAN WHERE APPLICABLE.

7.0 GROUTING

A. GROUT SHALL BE COMPOSED OF ONE PART PORTLAND CEMENT AND TWO PARTS OF FINE AGGREGATE BY VOLUME. MATERIALS SHALL BE MIXED DRY AND WATER ADDED JUST SUFFICIENT TO MAKE THE MIXTURE FLOW UNDER ITS OWN WEIGHT.

8.0 CURING AND PROTECTION

A. ALL EXPOSED SURFACES OF CONCRETE SHALL BE PROTECTED FROM DAMAGE DUE TO TEMPERATURE, ELEMENTS, AND CONSTRUCTION OPERATIONS.
B. CURING:
  B.1. ALL EXPOSED SURFACES OF CONCRETE SHALL BE PROTECTED FROM PREMATURE DRYING AND FRESHLY PLACED CONCRETE SHALL BE PROTECTED AGAINST WASH BY RAIN. ALL CONCRETE SHALL BE KEPT WET FOR A PERIOD OF TEN DAYS AFTER PLACING.
  B.2. ALL LIQUID CURING COMPOUNDS SHALL BE USED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND SHALL NOT BE USED ON SURFACES RECEIVING CONCRETE HARDENER.

9.0 DEFECTIVE CONCRETE

A. CONCRETE WHICH IS NOT IN ACCORDANCE WITH THESE SPECIFICATIONS, OUT OF LINE, LEVEL, OR PLUMB; SHOWING STRUCTURAL CRACKS, ROCK POCKETS, VOIDS, SPALLS, HONEYCOMBING, EXPOSED REINFORCING OR OTHER DAMAGED SURFACES SHALL BE CONSIDERED AS DEFECTIVE.
B. ALL FINES AND IRREGULARITIES SHALL BE REMOVED FROM EXPOSED CONCRETE SURFACES WHILE THE CONCRETE IS STILL GREEN. WHERE PATCHING IS REQUIRED, ALL LOOSE AND UNIFORM CONCRETE SHALL BE REMOVED PRIOR TO PATCHING.

10.0 CONCRETE FINISHES

FLAT SURFACES SHALL BE SCREEDED TO THE REQUIRED LEVELS AND SLOPE AND THEN ANY EXCESS WATER OR LAITANCE REMOVED. CONCRETE SHALL BE COMPACTED WITH A GRID TAMPER AND THEN FLOATED TO A TRUE AND LEVEL SURFACE WITHIN THE TOLERANCE OF 1/8 INCH ALONG A 10 FOOT STRAIGHT EDGE. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE ON ALL FLATWORK. SEE PLANS FOR CONCRETE FINISH.

11.0 EXPANSION JOINTS

CONTROL JOINTS AND OTHER EDGES SHALL BE FORMED IN FRESH CONCRETE USING A CLEAN EDGING OR JOINTING TOOL TO PROVIDE A SMOOTH UNIFORM FINISH.

12.0 CLEAN-UP

UPON COMPLETION OF ALL CONCRETE WORK AND BEFORE FINAL ACCEPTANCE, CONTRACTOR SHALL REMOVE ALL TOOLS, SURPLUS MATERIALS, APPARATUS, DEBRIS, ETC., FROM THE SITE AND THE SITE SHALL BE LEFT IN A CLEAN, NEAT CONDITION ACCEPTABLE TO OWNER.

W.D.I.D. NUMBER - 733C395364

Underground Service Alert
Call: TOLL FREE
811
TWO WORKING DAYS BEFORE YOU DIG

BASIS OF BEARINGS:
THE CENTERLINE OF CALHOUN STREET BEING N 00°18'22" W, PER MB 363/74-78.

BENCHMARK: BENCHMARK NO. 1003
3 1/2" BRONZE DISK STAMPED "CITY OF COACHELLA BENCHMARK PLS. 7766" IN CONCRETE SURFACE THE LOCATION OF WHICH BEING MORE PARTICULARLY DESCRIBED BELOW.
ESTABLISHED BY: ADVANCED SURVEY CONCEPTS INC. IN JUNE 2012.
THE STATION IS LOCATED AT AVENUE 50 AND VAN BUREN STREET.
THE STATION IS A 3 1/2" BRASS DISC SET IN THE TOP OF CURB AT THE NORTHEAST CURB RETURN. IT IS 32' NORTH OF THE CENTERLINE OF AVENUE 50, 75' EAST OF THE CENTERLINE OF VAN BUREN AND 2' EAST OF THE B.C.R. OF THE NORTHEAST CURB RETURN.
ELEVATION = 457.027' NGVD 29 (US. SURVEY FEET)
ELEVATION = 459.227' NAVD 88 + 500' FEET (US. SURVEY FEET)
THE ELEVATION LISTED ABOVE IS ACTUAL ELEVATION PLUS (+) 500'. TO OBTAIN ACTUAL ELEVATION SUBTRACT 500.00 FEET FROM ELEVATION LISTED ABOVE.
YEAR LEVELED. JUNE 2012

NO.	DATE	BY		APPV'D	DATE

REVISIONS

ANDREW R. SIMMONS
C72868
CIVIL

RECOMMENDED FOR APPROVAL: DATE: ____________
TKE ENGINEERING INC.
CITY OF COACHELLA
APPROVED FOR CONSTRUCTION: DATE: ____________
CITY ENGINEER: ANDREW R. SIMMONS
R.C.E. C72868 EXP. DATE: 6-30-26
DATE: ____________
GABRIEL PEREZ - DEVELOPMENT SERVICES DIRECTOR

SEAL:
CEAZAR V. AGUILAR
No. 41679
Exp. 03/31/26
CIVIL

PLANS PREPARED UNDER THE SUPERVISION OF:
ACI
AGUILAR CONSULTING INC.
231 E. ALESSANDRO BLVD. #6A393
RIVERSIDE, CA 92508
PH: (909) 709-4393

CEAZAR V. AGUILAR DATE
R.C.E. NO. 41679
EXP. 03-31-26

CITY OF COACHELLA
WALL PLANS
TRACT NO. 32074-2
CONSTRUCTION SPECIFICATIONS
IN A PORTION OF SECTION 1, T.6 S., R. 7 E., S.B. & M
FOR: COACHELLA VALLEY HOUSING COALITION

SHEET NO. 6
OF 6
FILE NO.

COACHELLA VALLEY HOUSING COALITON
45-701 MONROE ST, SUITE G, INDIO CA, 92201
760-347-3157

COLOR SCHEME: WA 1

SUBMITTED BY: ***COACHELLA VALLEY HOUSING COALITION***
PROJECT: ***COACHELLA URBAN SELF HELP (MARIPOSA POINT)***
DATE: ***7/25/25***

ROOFING

COLOR: WEATHERED ADOBE (2530)

MANUFACTURER: EAGLE

PROFILE: MALIBU

WEIGHT: CONVENTIONAL

REF: 0.23 **AGED REF:** 0.26 **EMI:** 0.92 **AGED SRI:** 27

TRIM

COLOR: THUNDERBIRD

MANUFACTURER: PPG

STUCCO

MANUFACTURER: LA HABRA

COLOR: MISTY (X-17)

FINISH: Sand / Float

COACHELLA VALLEY HOUSING COALITON
45-701 MONROE ST, SUITE G, INDIO CA, 92201
760-347-3157

COLOR SCHEME: WA 2

SUBMITTED BY: ***COACHELLA VALLEY HOUSING COALITION***
PROJECT: ***COACHELLA URBAN SELF HELP (MARIPOSA POINT)***
DATE: ***7/25/25***

ROOFING

COLOR: WEATHERED ADOBE (2530)

MANUFACTURER: EAGLE

PROFILE: MALIBU

WEIGHT: CONVENTIONAL

REF: 0.23 **AGED REF:** 0.26 **EMI:** 0.92 **AGED SRI:** 27

TRIM

COLOR: INTROSPECTIVE

MANUFACTURER: PPG

STUCCO

MANUFACTURER: LA HABRA

COLOR: SILVERADO (X-820)

FINISH: Sand / Float

COACHELLA VALLEY HOUSING COALITON
45-701 MONROE ST, SUITE G, INDIO CA, 92201
760-347-3157

COLOR SCHEME: WT 1

SUBMITTED BY: ***COACHELLA VALLEY HOUSING COALITION***
PROJECT: ***COACHELLA URBAN SELF HELP (MARIPOSA POINT)***
DATE: ***7/25/25***

ROOFING

COLOR: WEATHERED TERRACOTTA (2532)

MANUFACTURER: EAGLE

PROFILE: MALIBU

WEIGHT: CONVENTIONAL

REF: 0.24 **AGED REF:** 0.26 **EMI:** 0.22 **AGED SRI:** 26

TRIM

COLOR: TRANSCEND

MANUFACTURER: PPG

STUCCO

MANUFACTURER: LA HABRA

COLOR: ASPEN (X-23)

FINISH: Sand / Float

COACHELLA VALLEY HOUSING COALITON
45-701 MONROE ST, SUITE G, INDIO CA, 92201
760-347-3157

COLOR SCHEME: WT 2

SUBMITTED BY: ***COACHELLA VALLEY HOUSING COALITION***
PROJECT: ***COACHELLA URBAN SELF HELP (MARIPOSA POINT)***
DATE: ***7/25/25***

ROOFING

COLOR: WEATHERED TERRACOTTA (2532)

MANUFACTURER: EAGLE

PROFILE: MALIBU

WEIGHT: CONVENTIONAL

REF: 0.24 **AGED REF:** 0.26 **EMI:** 0.22 **AGED SRI:** 26

TRIM

COLOR: SHELL CREEK WHITE

MANUFACTURER: PPG

STUCCO

MANUFACTURER: LA HABRA

COLOR: MEADOWBROOK (X-48)

FINISH: Sand / Float

COACHELLA VALLEY HOUSING COALITON
45-701 MONROE ST, SUITE G, INDIO CA, 92201
760-347-3157

COLOR SEQUENCE-SHEET

SUBMITTED BY: ***COACHELLA VALLEY HOUSING COALITION***
PROJECT: ***COACHELLA URBAN SELF HELP (MARIPOSA POINT)***
DATE: ***7/25/25***

LOT #	ADDRESS	PLAN /SQ FT	COLOR SCHEME
1	50304 CALLE XAVIER	PD-4 /1374	WA1
2	50310 CALLE XAVIER	COA-4 / 1412	WT1
3	50316 CALLE XAVIER	PD-4 /1374	WA2
4	50322 CALLE XAVIER	COA-4 / 1412	WT2
5	50328 CALLE XAVIER	PD-4 /1374	WA1
6	50334 CALLE XAVIER	COA-4 / 1412	WT1
7	50340 CALLE XAVIER	PD-4 /1374	WA2
8	50346 CALLE XAVIER	COA-4 / 1412	WT2
9	50352 CALLE XAVIER	PD-4 /1374	WA1
10	50358 CALLE XAVIER	COA-4 / 1412	WT1
11	50364 CALLE XAVIER	PD-4 /1374	WA2
12	50370 CALLE XAVIER	COA-4 / 1412	WT2
13	50376 CALLE XAVIER	PD-4 /1374	WA1
14	50382 CALLE XAVIER	COA-4 / 1412	WT1
15	50388 CALLE XAVIER	PD-4 /1374	WA2
16	50394 CALLE XAVIER	COA-4 / 1412	WT2
17	50400 CALLE XAVIER	PD-4 /1374	WA1
18	50406 CALLE XAVIER	COA-4 / 1412	WT1
19	50412 CALLE XAVIER	PD-4 /1374	WA2
20	50418 CALLE XAVIER	COA-4 / 1412	WT2
21	50424 CALLE XAVIER	PD-4 /1374	WA1
22	50430 CALLE XAVIER	COA-4 / 1412	WT1
23	50436 CALLE XAVIER	PD-4 /1374	WA2
52	83579 AVENIDA SAN DOMINGO	COA-4 / 1412	WT2

COACHELLA VALLEY HOUSING COALITON
45-701 MONROE ST, SUITE G, INDIO CA, 92201
760-347-3157

FLOORING OPTIONS

SUBMITTED BY: ***COACHELLA VALLEY HOUSING COALITION***
PROJECT: ***COACHELLA URBAN SELF HELP (MARIPOSA POINT)***
DATE: ***7/25/25***


Arbo


Baso


Oris


Silva

FINEWOOD

GLAZE PORCELAIN

TILE FLOORING

SUPPLIER: EMSER TILE

SIZE: 9”X35”

THICKENESS: 9mm

FINISH: MATTE

EDGE: PRESSED