

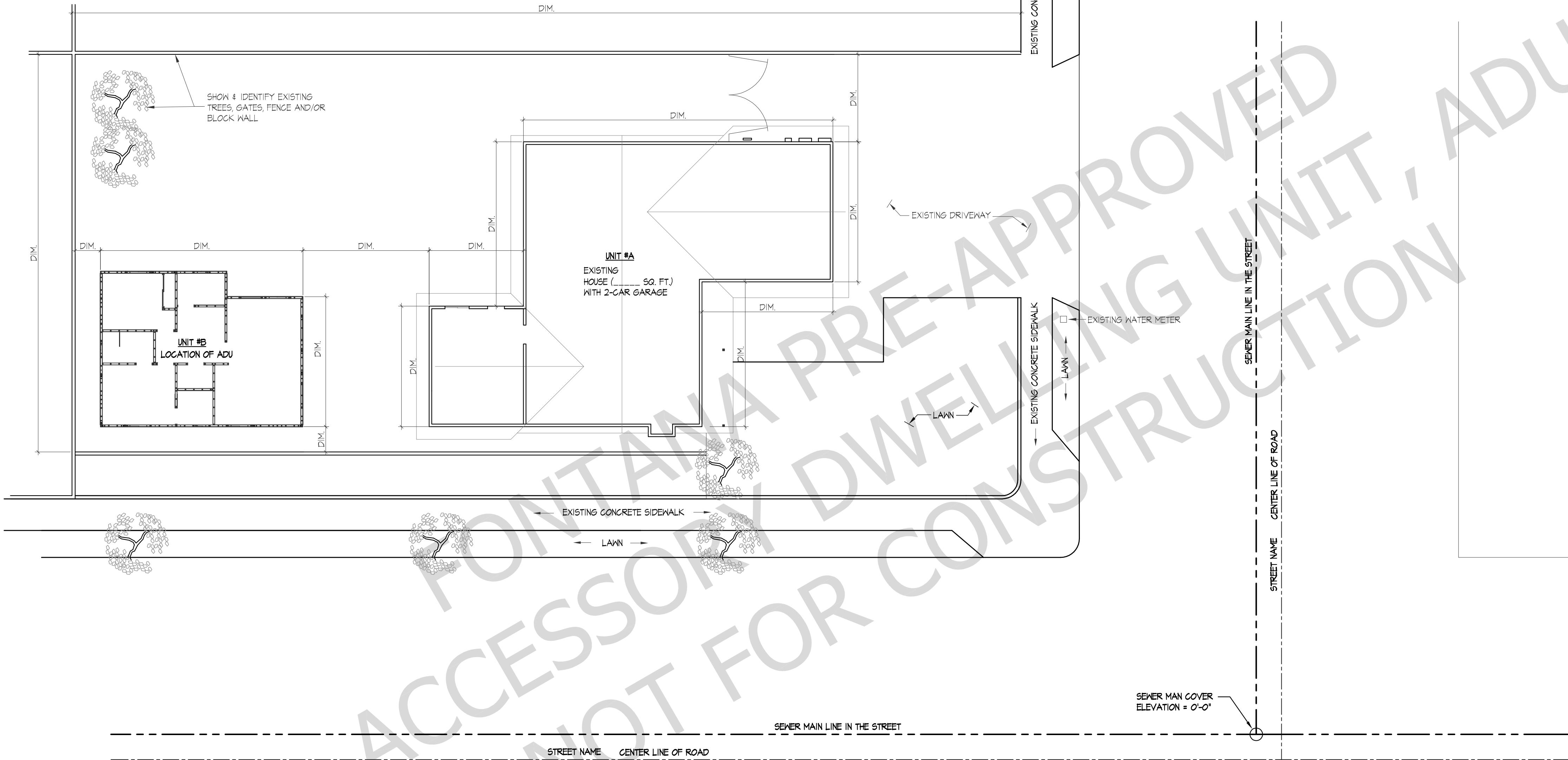
NAME OF OWNER / NAME OF ADU

ADDRESS
CITY & STATE

PICTURE OF EXISTING HOUSE

PICTURE OF EXISTING HOUSE

B PICTURE



A PICTURE

PICTURE OF EXISTING HOUSE

OWNERS:
NAME:
ADDRESS:
PHONE:
EMAIL:

APPLICANT:
NAME:
ADDRESS:
PHONE:
EMAIL:

ENGINEER:
TANG STRUCTURAL ENGINEERS, INC.
1980 CHERRY AVE SUITE 114
FONTANA, CA 92336
PHONE: 909-429-0450
EMAIL: CHT@TANG-SE.COM

PROJECT DATA & SCOPE:

SITE ADDRESS: _____

APN: _____

ZONE: _____

CONSTRUCTION TYPE: V-B

PROPOSED:

- MORNING GLORY ADU: 462 SQ. FT. WITH 1 BEDROOM & 1 BATH.
- CARNATION ADU: 738 SQ. FT. WITH 2 BEDROOMS & 2 BATHS.
- SUNFLOWER ADU: 1,483 SQ. FT. ADU WITH 3 BEDROOMS & 2 BATHS
- OTHERS: _____

PLANNING:

EXTERIOR ELEVATION FINISHES, ROOFING MATERIALS AND COLORS ARE TO MATCH EXISTING HOUSE. SEE EXTERIOR ELEVATION AND ROOFING & WEATHERPROOFING NOTES ON SHEET C51. PLACE A 1X6 WHERE APPLIC.

SIDING	ROOFING	DOOR & WINDOW FRAME	PAINT
<input type="checkbox"/> STUCCO	<input type="checkbox"/> TILE ROOF	<input type="checkbox"/> WHITE	<input type="checkbox"/> WHITE
<input type="checkbox"/> FIBER CEMENT	<input type="checkbox"/> SHINGLES	<input type="checkbox"/> PAINT TO MATCH	<input type="checkbox"/> BROWN
<input type="checkbox"/> BRICK VENEER	<input type="checkbox"/> METAL ROOF	<input type="checkbox"/> METAL	<input type="checkbox"/> GRAY
<input type="checkbox"/> STONE VENEER	<input type="checkbox"/> OTHERS	<input type="checkbox"/> BROWN	<input type="checkbox"/> BROWN
<input type="checkbox"/> WOOD SIDING	<input type="checkbox"/> OTHERS	<input type="checkbox"/> OTHERS	<input type="checkbox"/> OTHERS
<input type="checkbox"/> OTHERS			

ENGINEERING:

IF ANY FOLLOWING ITEM IS APPLICABLE, A PERMITTED BY ENGINEERING DEPARTMENT IS REQUIRED.

- A. NEW APPROACH (YES OR NO)
- B. NEW CITY SIDEWALK (YES OR NO)
- C. NEW SEWER CONNECTION TO CITY MAIN SEWER (YES OR NO)

FIRE:

- A. EXISTING HOUSE: FIRE SPRINKLERS (YES OR NO)
IF YES, FIRE SPRINKLER INSTALLATION IS REQUIRED FOR THE NEW ADU.
- B. FIRE HAZARD ZONE (YES OR NO)

FIRE TEST IS REQUIRED FOR ALL ADU. CONTACT FONTANA BUILDING FIRE DEPARTMENT (909) 824-4441 FOR SCHEDULE TEST.

BUILDING:

- A. EXISTING HOME ON SEPTIC SYSTEMS (YES OR NO).
IF YES, AN APPROVAL FROM STATE WATER BOARD IS REQUIRED
- B. ADU FLOOD ZONE (YES OR NO)
- C. FULL SITE PLAN SHALL INCLUDE:
 - 1. WALKWAYS LEADING TO THE NEW ADU
 - 2. LOCATION OF ALL UTILITIES (WATER, SEWER & ELECTRICAL PANEL)
 - 3. LOCATION OF ALL STRUCTURES ON THE PROPERTY
 - 4. DIMENSION SITE PLAN INCLUDE DIMENSION FROM ADU TO OTHER STRUCTURES AND PROPERTY LINE.
 - 5. CALL OUT EXISTING LAWN, PLANTER, POOL, ETC.
 - 6. EXISTING TREES, GATES, FENCE AND/OR BLOCK WALL
 - 7. EXISTING DRIVEWAY, WALKWAY AND CONCRETE SLAB
 - 8. UTILITY CONNECTIONS TO NEW ADU (ELECTRIC, WATER, SEWER, AND GAS)
- D. ALL NEW ELECTRICAL PANELS SHALL BE RATED FOR MINIMUM 225 AMP AND SHALL BE PROVIDED WITH A SURGE PROTECTOR.
- E. A SEPARATED GAS AND ELECTRIC METER IS REQUIRED FOR ADU LARGER THAN 900 SQ. FT.
- F. ADU PAD BE ELEVATED WITH 5% SLOPE IN THE FIRST 10 FEET. FROM FACE OF WALL OR PROVIDE 5% SURFACE SLOPE TO DRAIN.
- G. EASEMENT CONSIDERATION: ADU STRUCTURE SHOULD NOT BE WITHIN THE EASEMENT.
- H. SHOW IMAGINARY LINE BETWEEN ADU AND EXISTING STRUCTURE. MINIMUM 5 FT. FROM FACE OF EXISTING HOUSE. IF ADU IS LESS THAN 5 FT. FROM THE IMAGINARY LINE THE EXTERIOR WALL SHALL BE 1 HOUR RATED WALL CONSTRUCTION.

GENERAL CODES:

1. THIS PROJECT SHALL COMPLY WITH THE FOLLOWING BUILDING CODES AND GLB GLENDORA MUNICIPAL BUILDING CODE:
 - 2022 CALIFORNIA RESIDENTIAL CODE
 - 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
 - 2022 CALIFORNIA ELECTRICAL CODE
 - 2022 CALIFORNIA MECHANICAL CODE
 - 2022 CALIFORNIA PLUMBING CODE
 - 2022 CALIFORNIA FIRE CODE
 - 2022 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS
2. DURING ALL CONSTRUCTION ACTIVITIES, THE APPLICANT MUST IMPLEMENT ADEQUATE DUST CONTROL MEASURES AS REQUIRED BY THE UNIFORM BUILDING CODE, SCAGMD, AND CITY REGULATIONS TO MINIMIZE THE DISPERSION OF DUST.
3. THE INDIVIDUAL RESPONSIBLE FOR SUPERVISING THE CONSTRUCTION MUST ENSURE THAT THE WORK COMPLIES WITH CODE REQUIREMENTS BEFORE REQUESTING AN INSPECTION.
4. DISPOSAL OF EXCESS OR WASTE CONCRETE INTO PUBLIC ROADWAYS OR DRAINAGE SYSTEMS IS STRICTLY PROHIBITED. ARRANGEMENTS MUST BE MADE TO STORE CONCRETE WASTE ON-SITE UNTIL IT CAN BE DISPOSED OF AS SOLID WASTE.
5. PRIOR TO PLACING ANY CONSTRUCTION MATERIALS OR EQUIPMENT IN PUBLIC ROADWAYS, A SEPARATE PERMIT MUST BE OBTAINED FROM THE CITY PUBLIC WORKS DEPARTMENT.
6. CONSTRUCTION WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. ANY CHANGES MADE DURING CONSTRUCTION THAT ARE NOT IN COMPLIANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS SHALL BE RESUBMITTED FOR APPROVAL AS AN AMENDED SET OF CONSTRUCTION DOCUMENT.

SHEET INDEX:

- T1 SITE PLAN, PROJECT DATA, SHEET INDEX, VICINITY MAP
- A1 ADU FLOOR PLAN, ROOF PLAN & BUILDING ELEVATIONS
- A2 ADU ELECTRICAL, MECHANICAL, PLUMBING & GAS AND WATER LINE PLAN
- S1 ADU FOUNDATION, FRAMING PLAN & BUILDING SECTIONS
- D1 FOUNDATION AND FRAMING DETAILS
- C51 CONSTRUCTION SPECIFICATION
- C52 GENERAL NOTES & DETAILS
- C53 CONSTRUCTION NOTES, SCHEDULES & LEGENDS
- TR1 TRUSS CALCULATIONS

SHEET TITLE: SAMPLE SITE PLAN

Project Title: CARNATION AVE (738 SQ. FT.)
Fontana, CA 92335

Sheet Title: CARNATION AVE (738 SQ. FT.)
Fontana, CA 92335

Print Date: 3/1/25

Drawing Date: 3/1/25

Sheet: T1

VICINITY MAP

VICINITY MAP
WITH LABEL SITE LOCATION

AERIAL VIEW

AERIAL VIEW OF THE PARCEL

AREA CALCULATION

SITE AREA (LOT SIZE): 7,187 SQ. FT.
EXISTING HOUSE: 1,481 SQ. FT.
LIVING AREA: 400 SQ. FT.
GARAGE: 1,281 SQ. FT.
TOTAL AREA: 1,681 SQ. FT.

PROPOSED ADU: 738 SQ. FT.
TOTAL PROPOSED LIVING AREA: 2,619 SQ. FT.
PROPOSED SITE COVERAGE: 2,619 SQ. FT. OR 36.44%

DEFER SUBMITTAL:

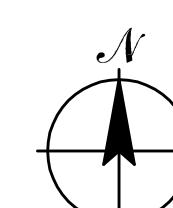
1. FIRE SPRINKLER IS A DEFERRED SUBMITTAL, IF IT IS REQUIRED.
2. SOLAR PHOTOVOLTAIC A DEFERRED SUBMITTAL, IF IT IS REQUIRED.

NOTE:

DEFERRED SUBMITTAL SHOP DRAWINGS, DETAILS AND CALCULATIONS SHALL BE SEALED AND SIGNED BY A LICENSED CIVIL OR STRUCTURAL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA. THE DESIGN PACKAGE SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO SUBMITTING TO BUILDING OFFICIAL FOR APPROVAL. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE FABRICATION AND INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

SITE PLAN

SCALE: 3/32" = 1'-0"

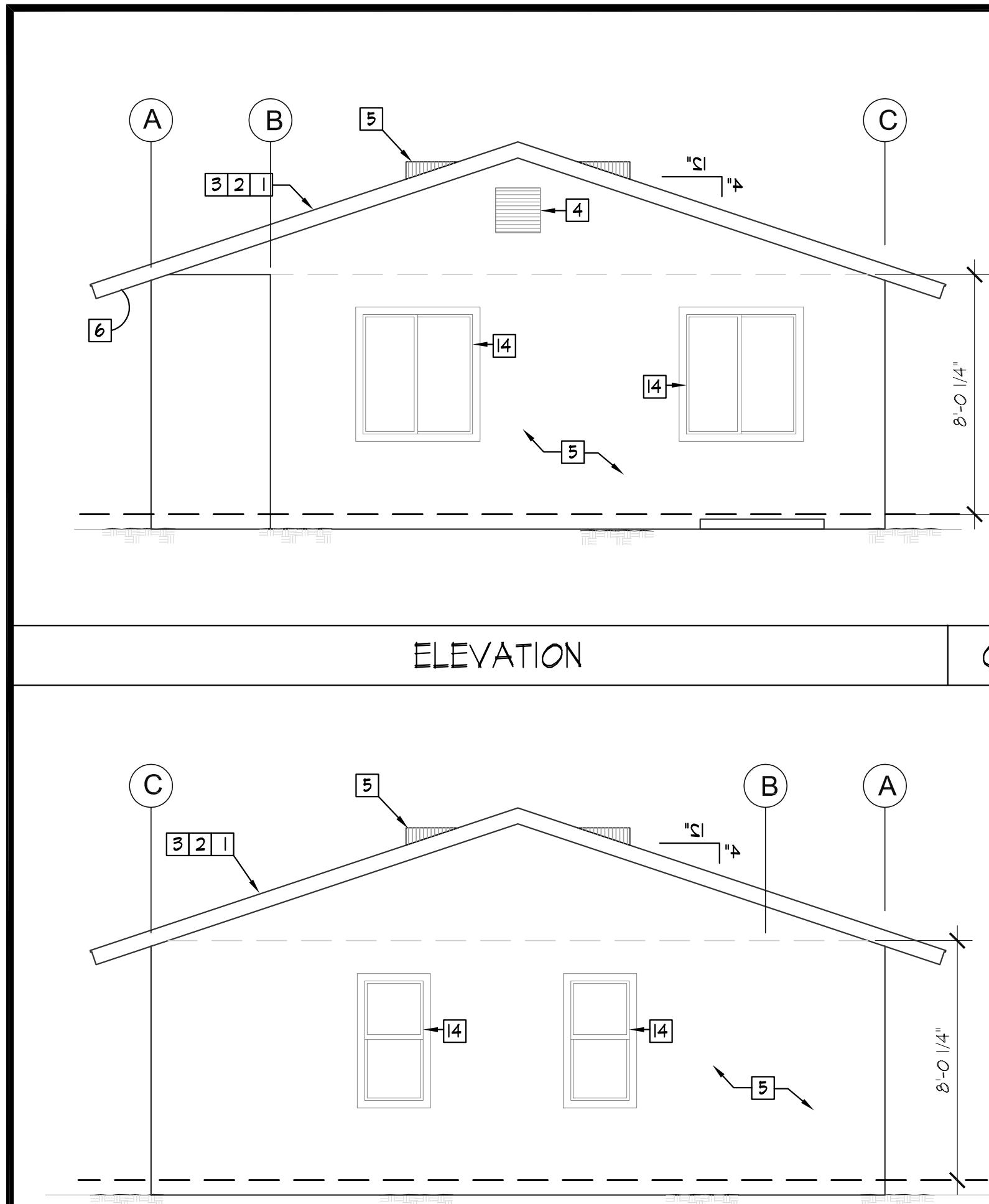


N

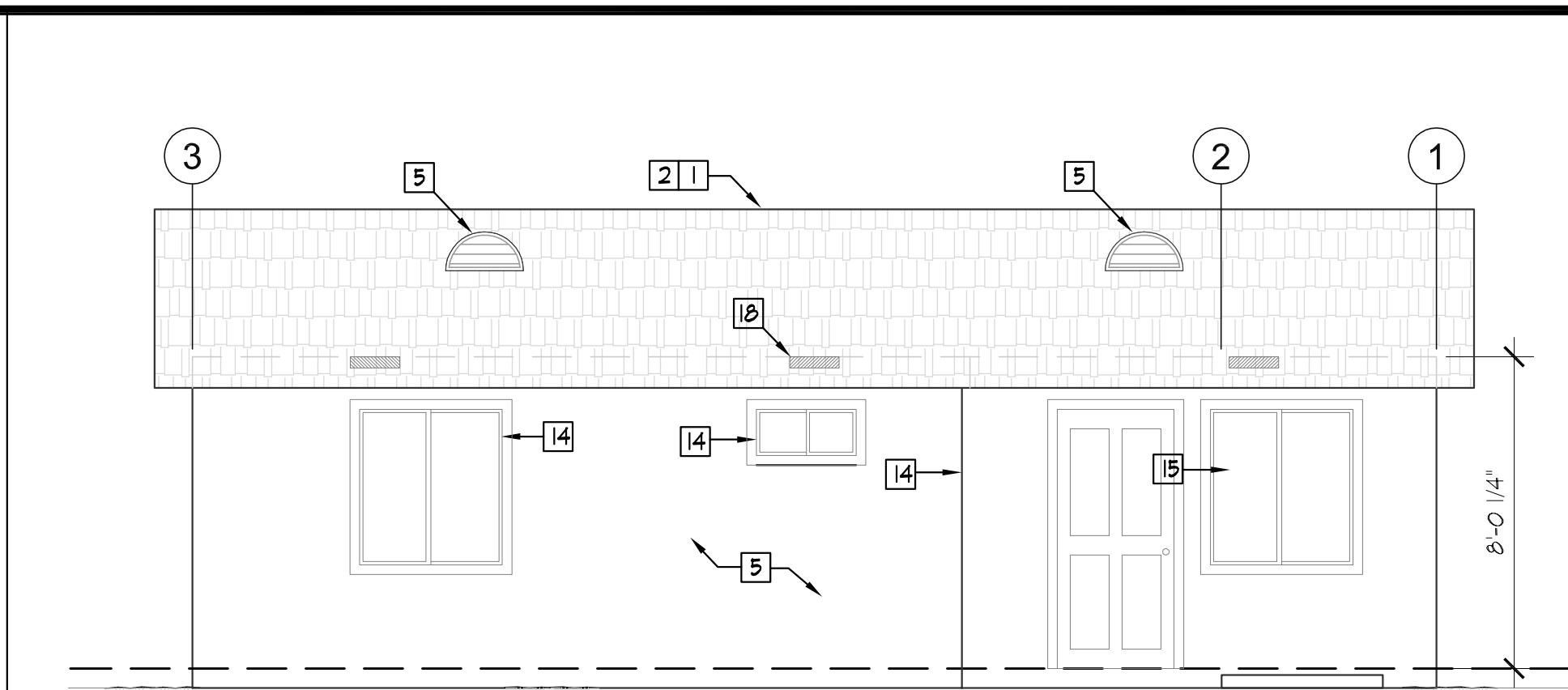


N

T1



ELEVATION C



ELEVATION A



ELEVATION D



ELEVATION B

ATTIC VENTILATION REQUIRED

NET FREE CROSS VENTILATION AREA = $\frac{1}{300}$
VENT AREA REQ'D = $738 \text{ ft}^2 / 300 = 2.46 \text{ ft}^2 \times 144 = 354 \text{ in}^2$

ROOF VENTS SIZING
12" x 24" HALF ROUND GALVANIZED DORMER ATTIC VENTILATION WITH RESISTANT WIRE MESH V/A 100 = 144 SQ. INCHES EACH
QTY = 4 VENTS
VENT AREA PROVIDED = $4 \times 144 \text{ in}^2 = 576 \text{ in}^2$

SOFFIT VENTS
3 1/2" x 22" BLOCKING BETWEEN TRUSS AT 75% EFFICIENCY =
54 in²
QTY = 3 VENTS
VENT AREA PROVIDED = $3 \times 54 \text{ in}^2 = 162 \text{ in}^2$

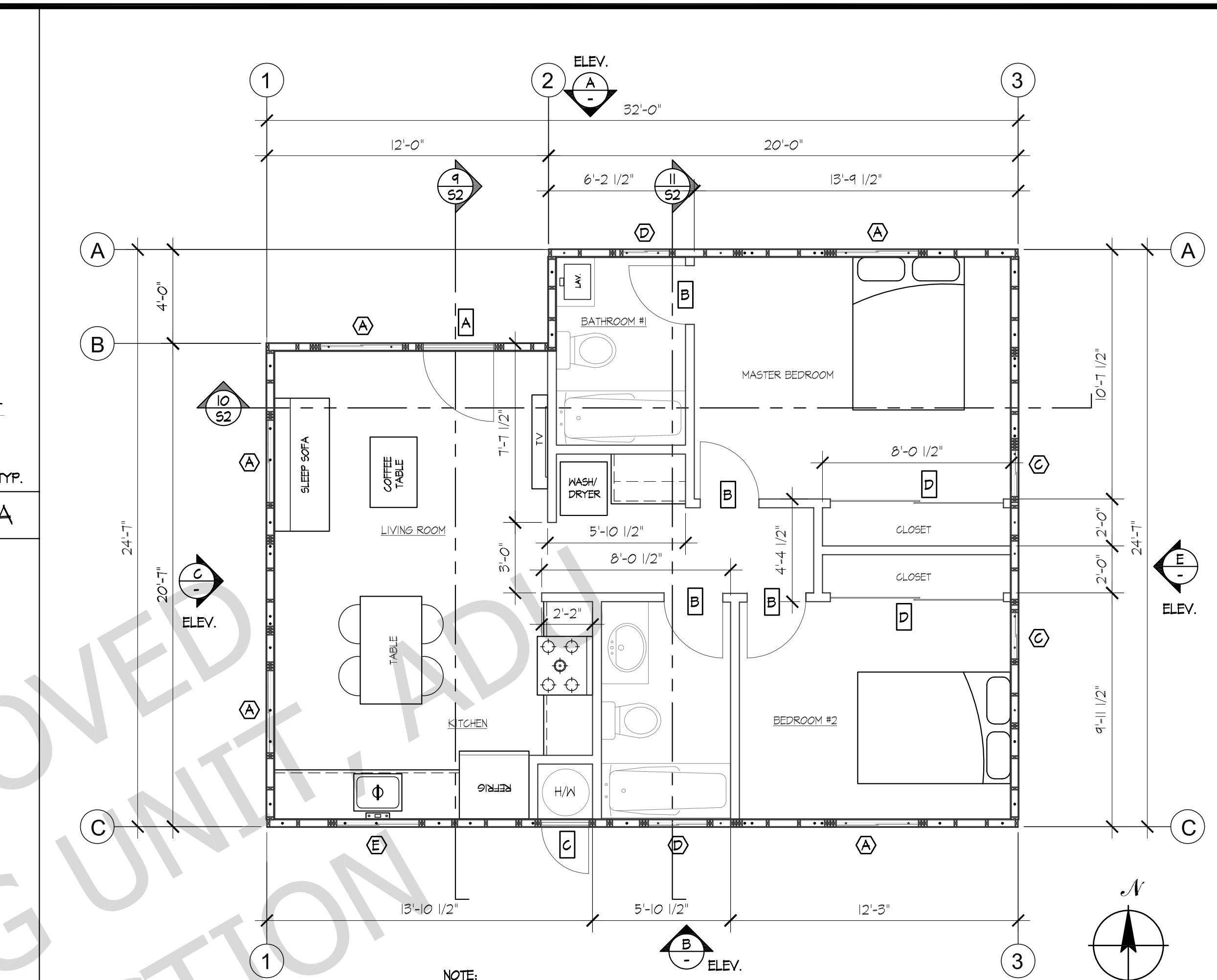
TOTAL VENT AREA PROVIDED
(576 in²) + (162 in²) = 738 in² > 354 in²

19

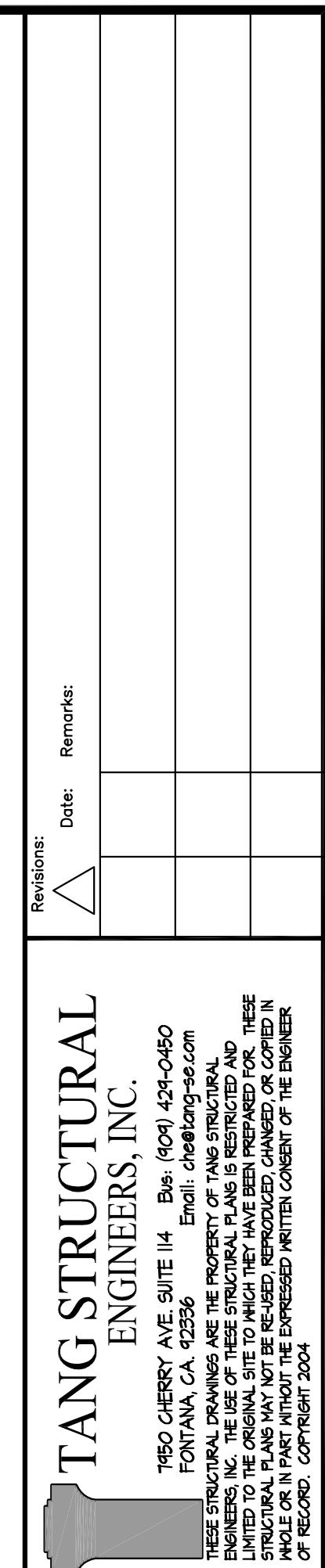
15

ATTIC VENTILATION CALC.

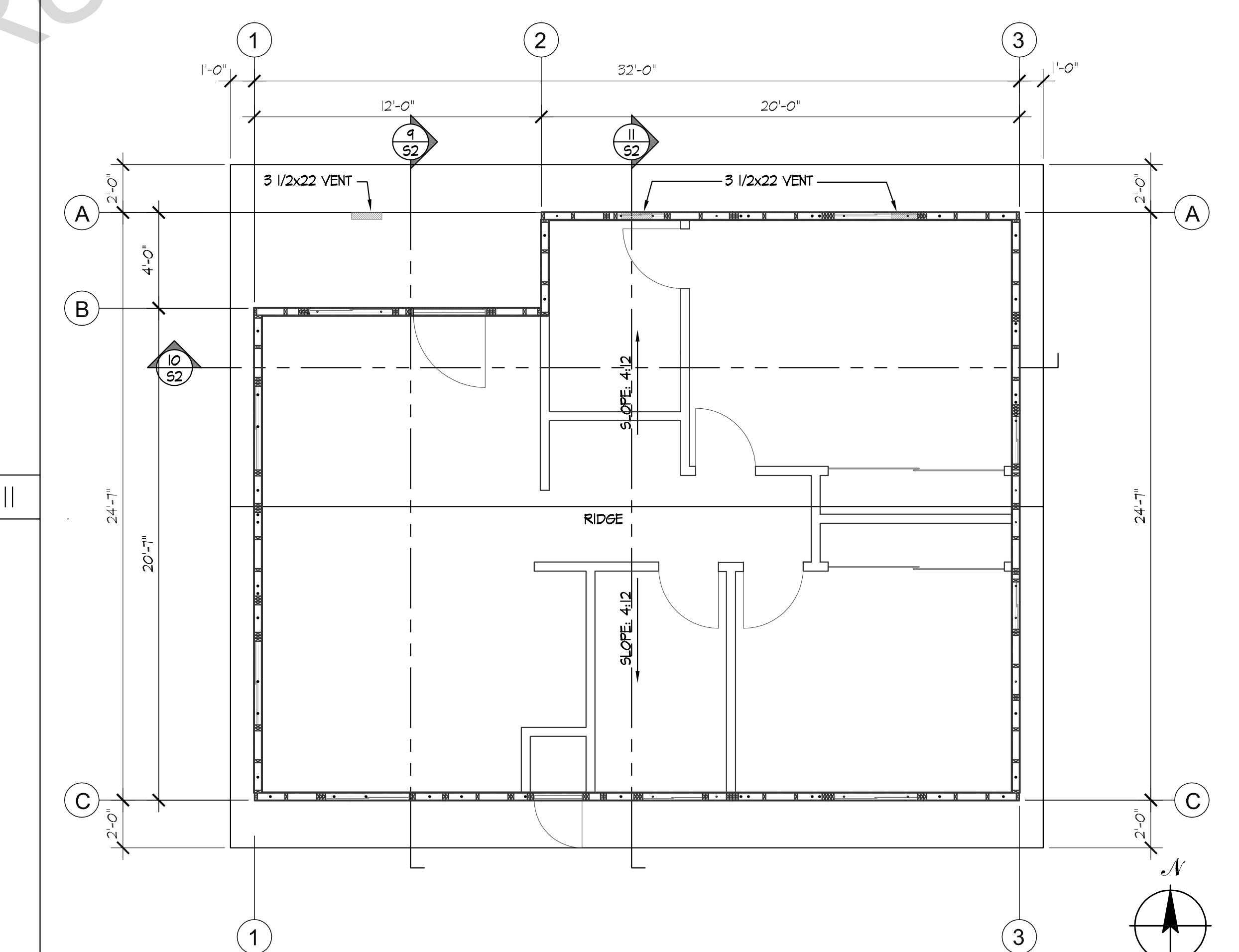
11



FLOOR PLAN



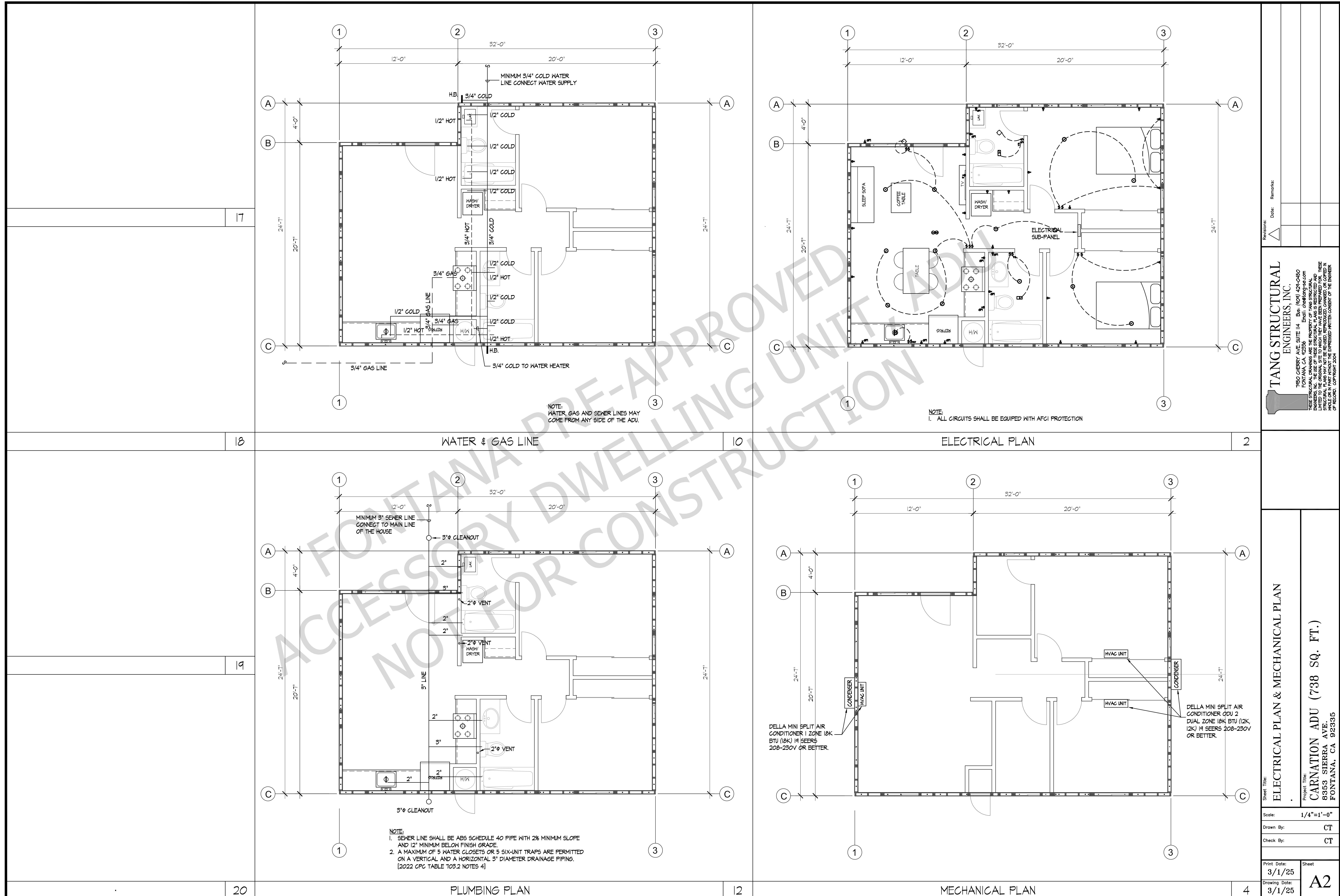
2

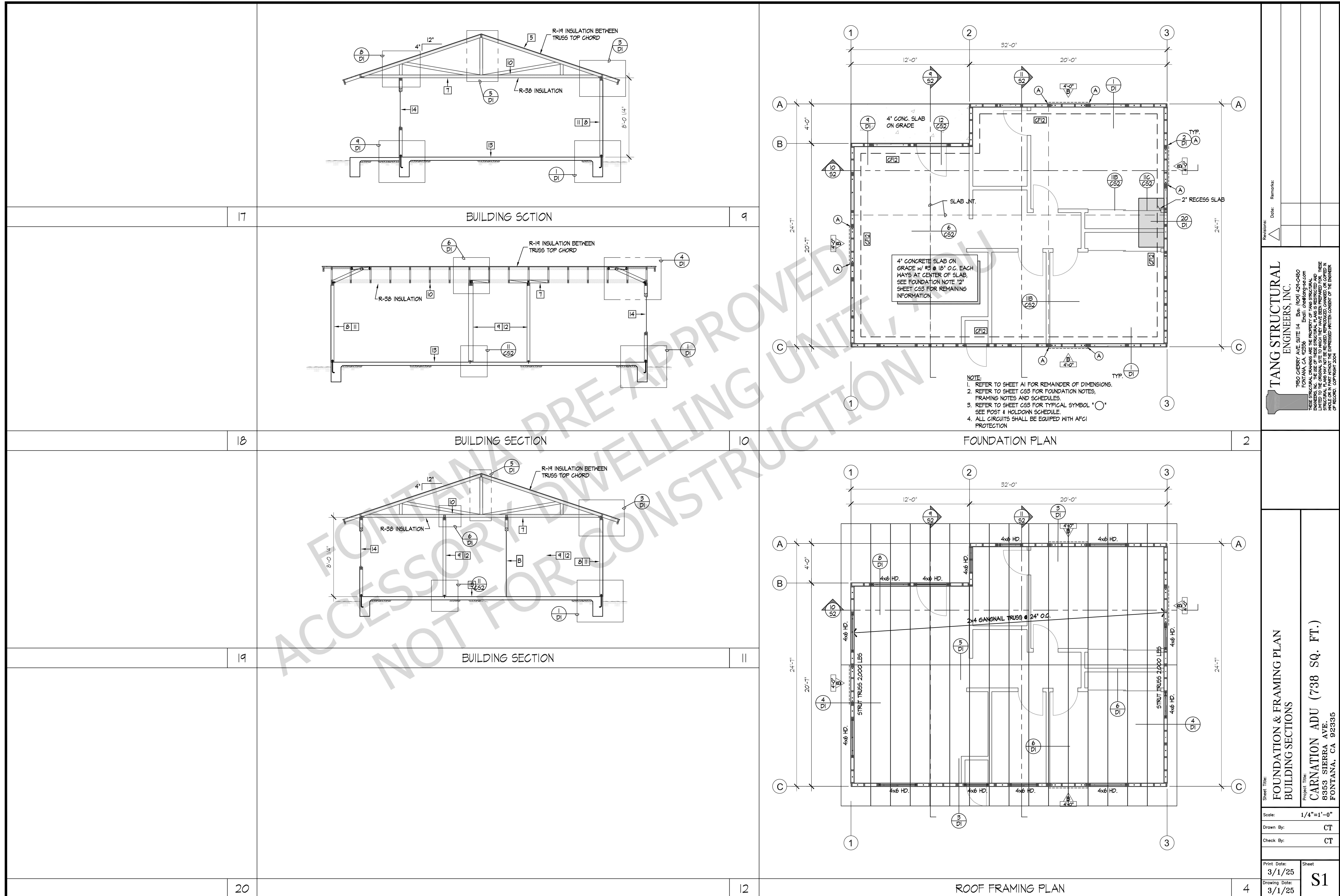


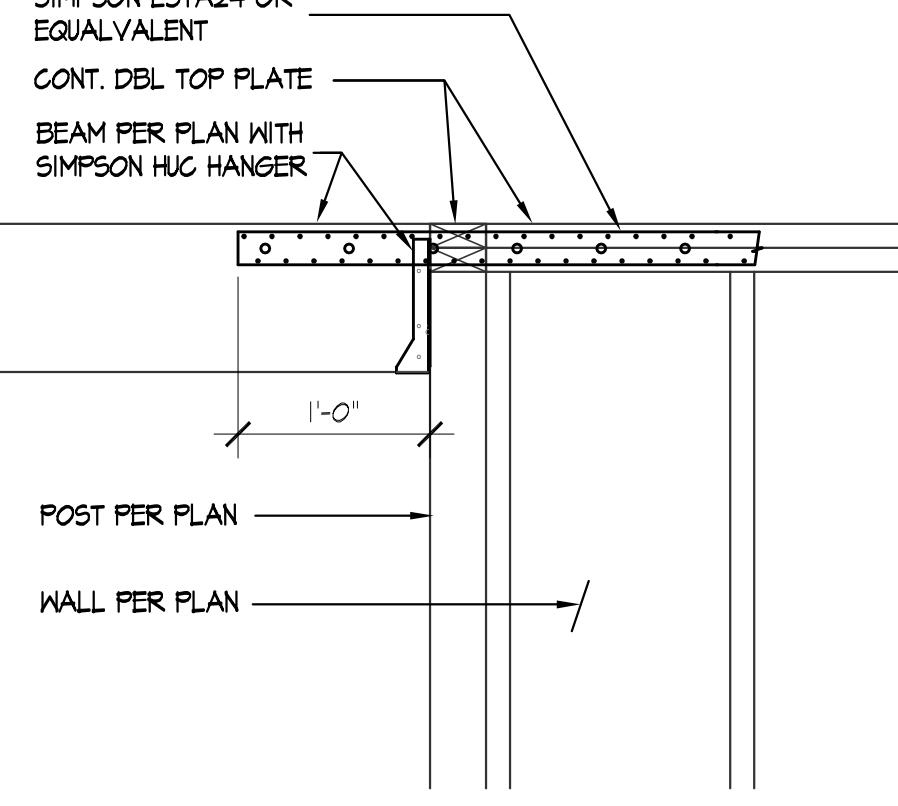
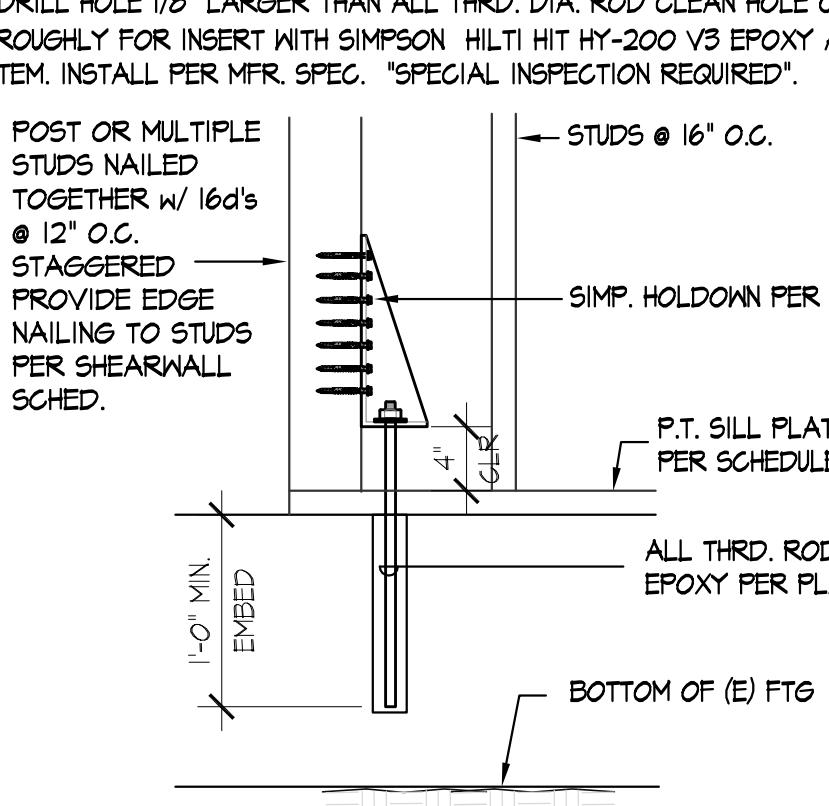
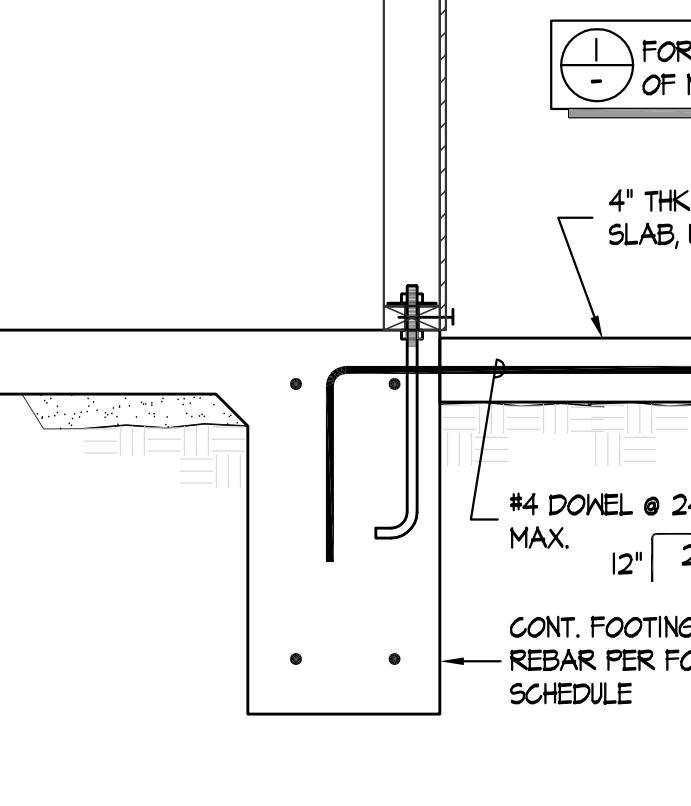
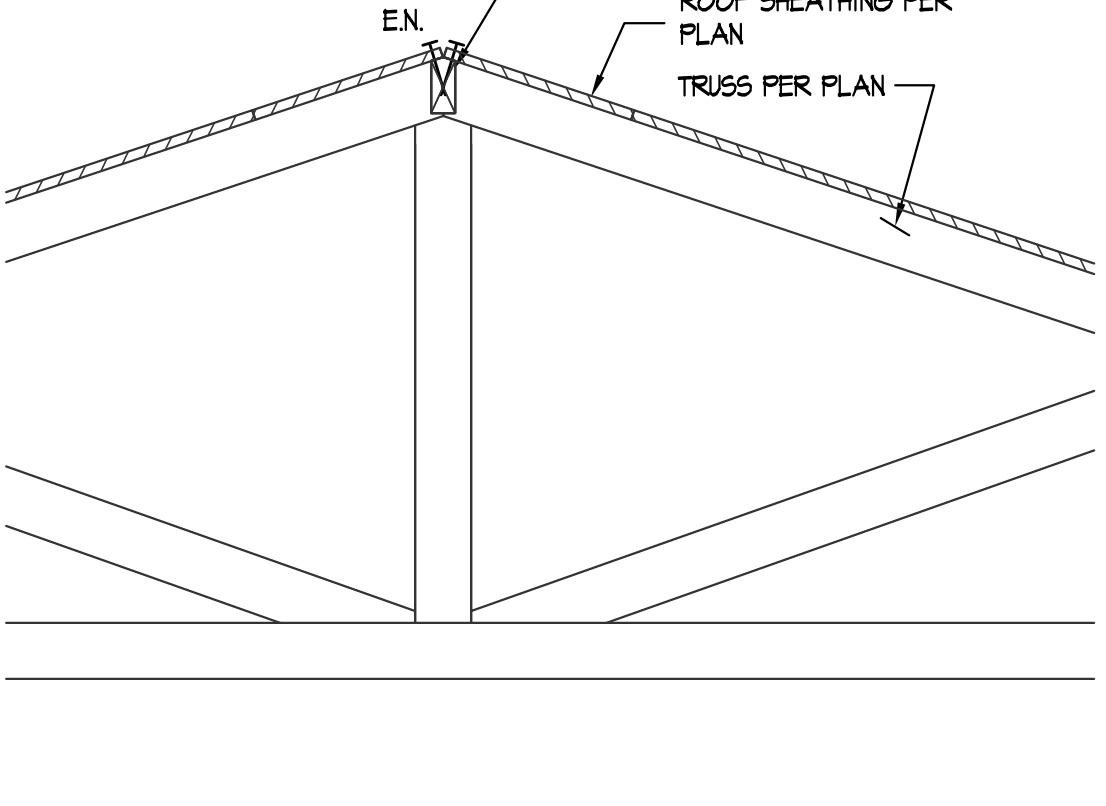
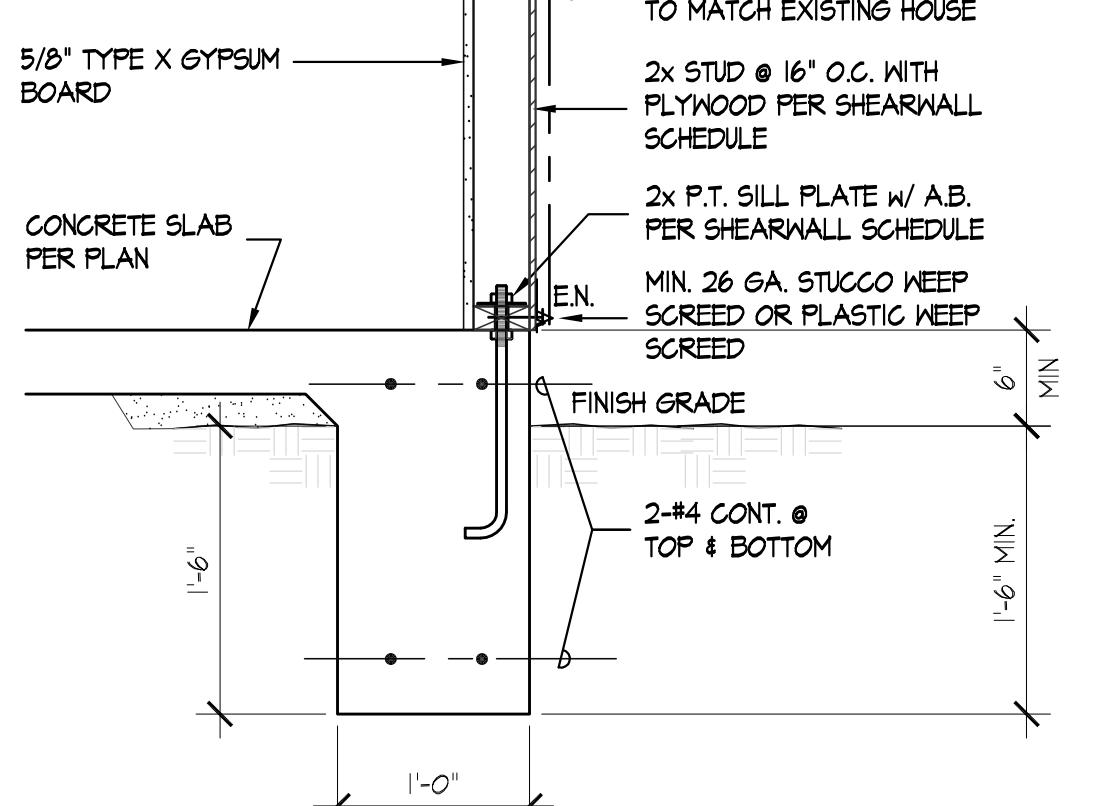
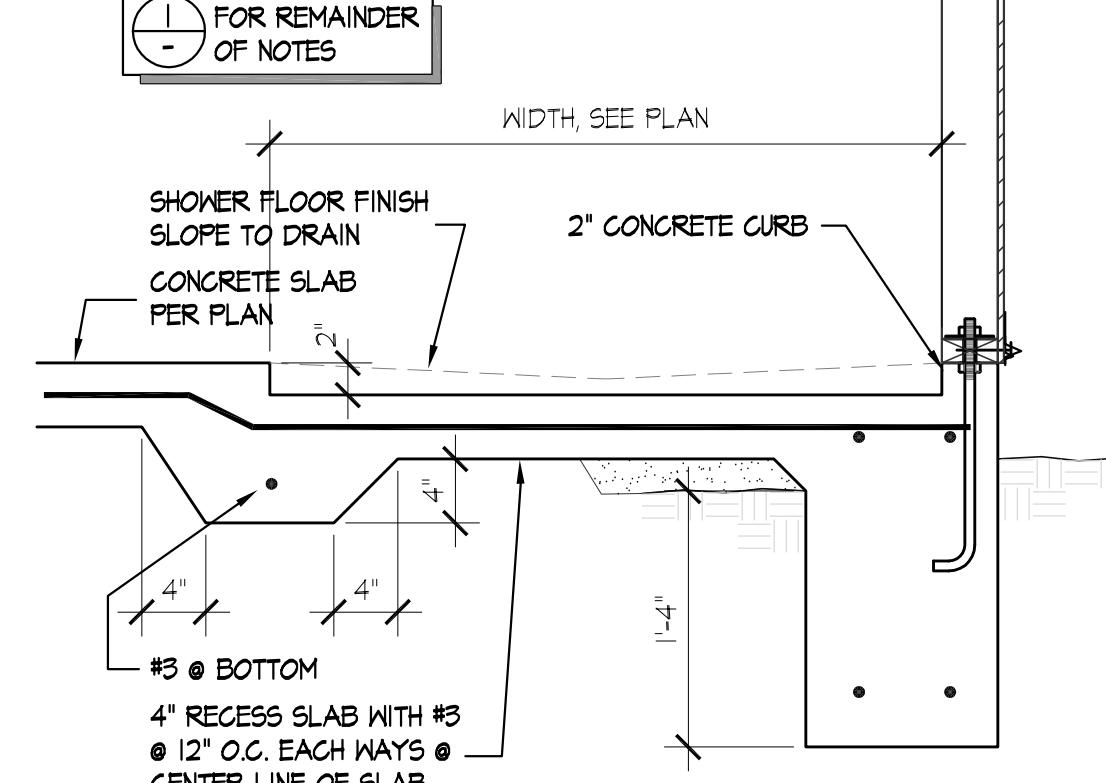
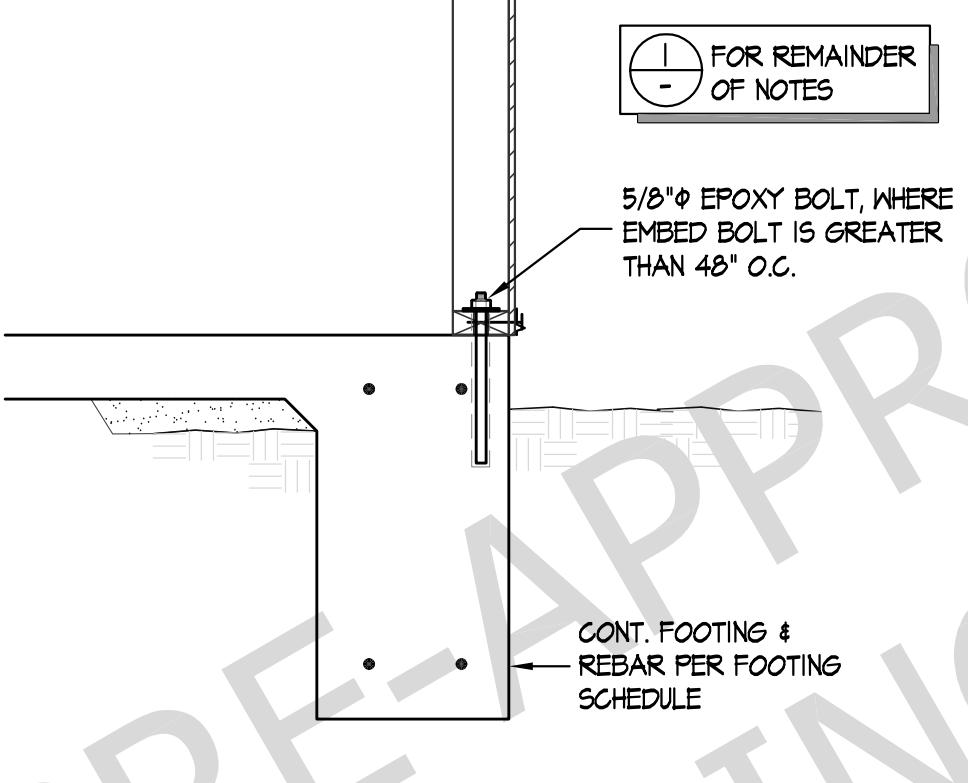
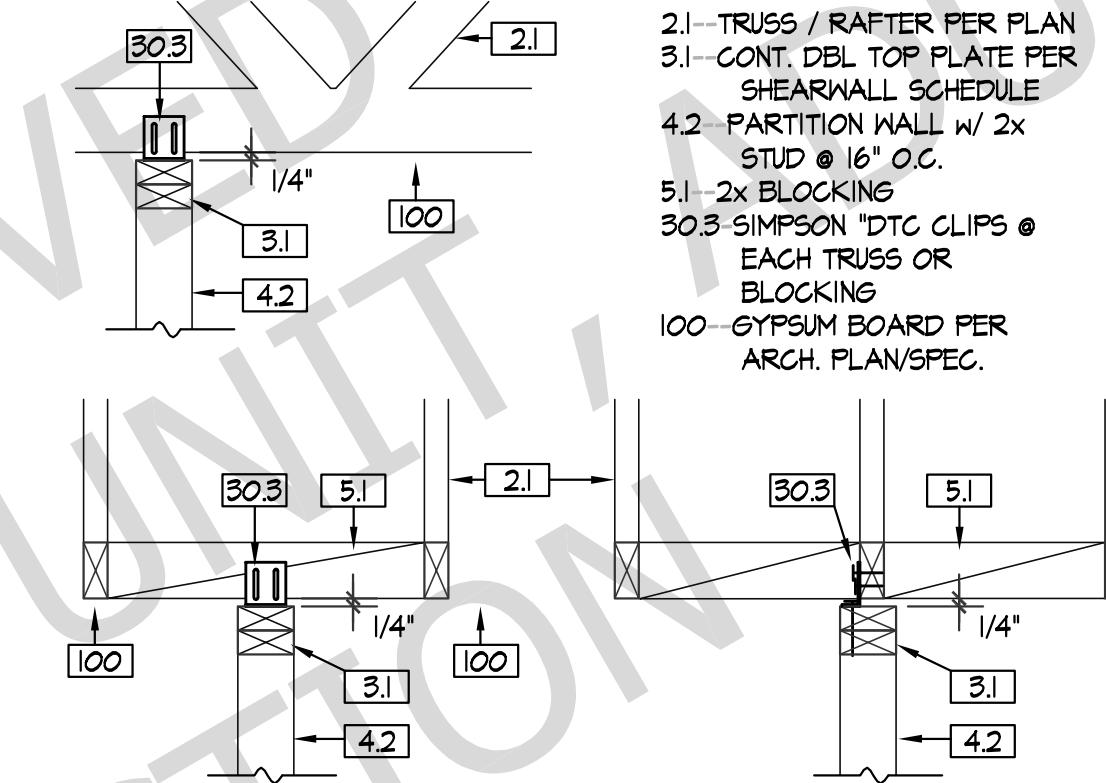
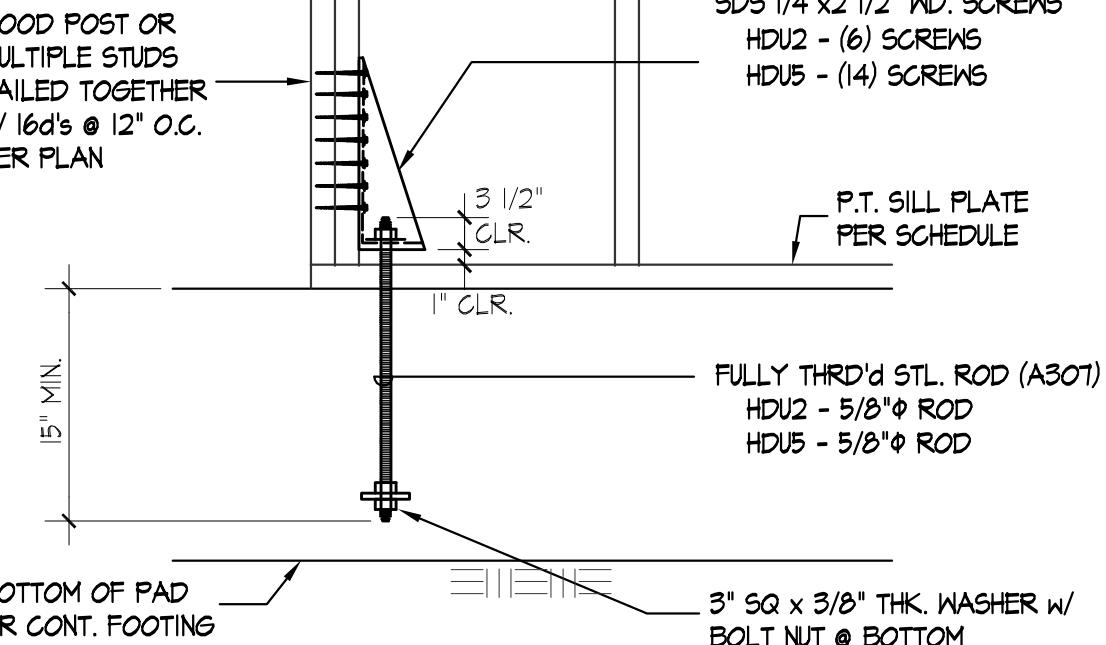
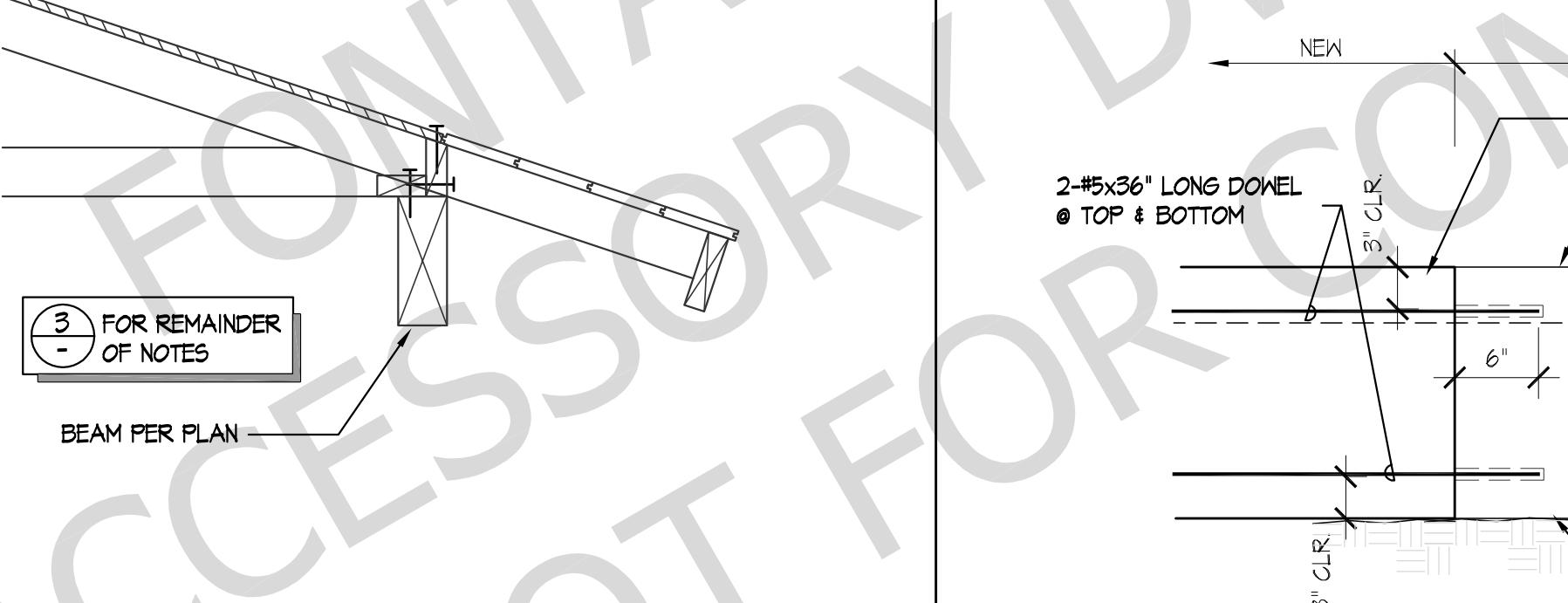
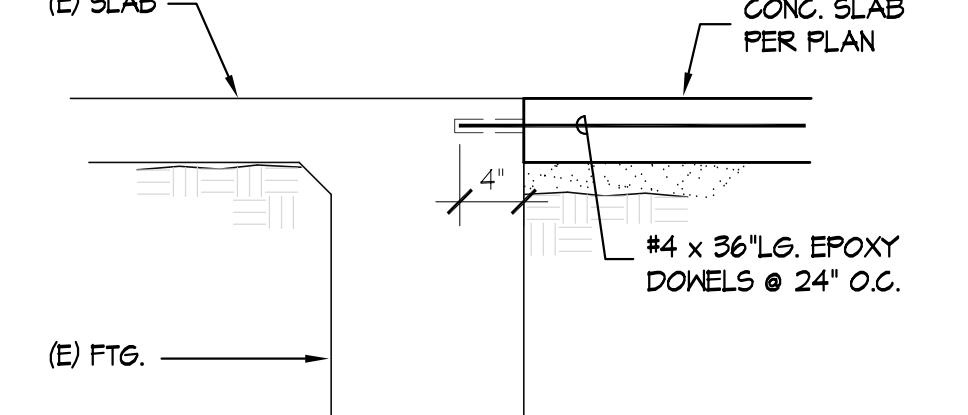
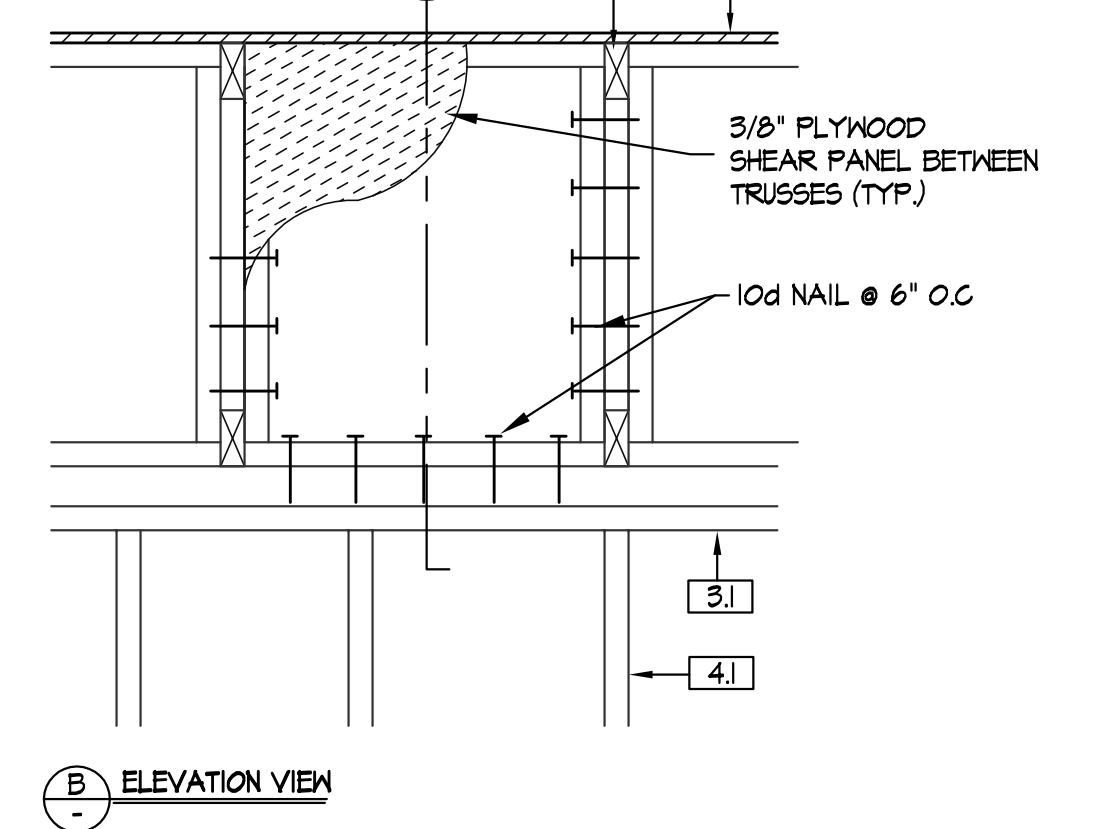
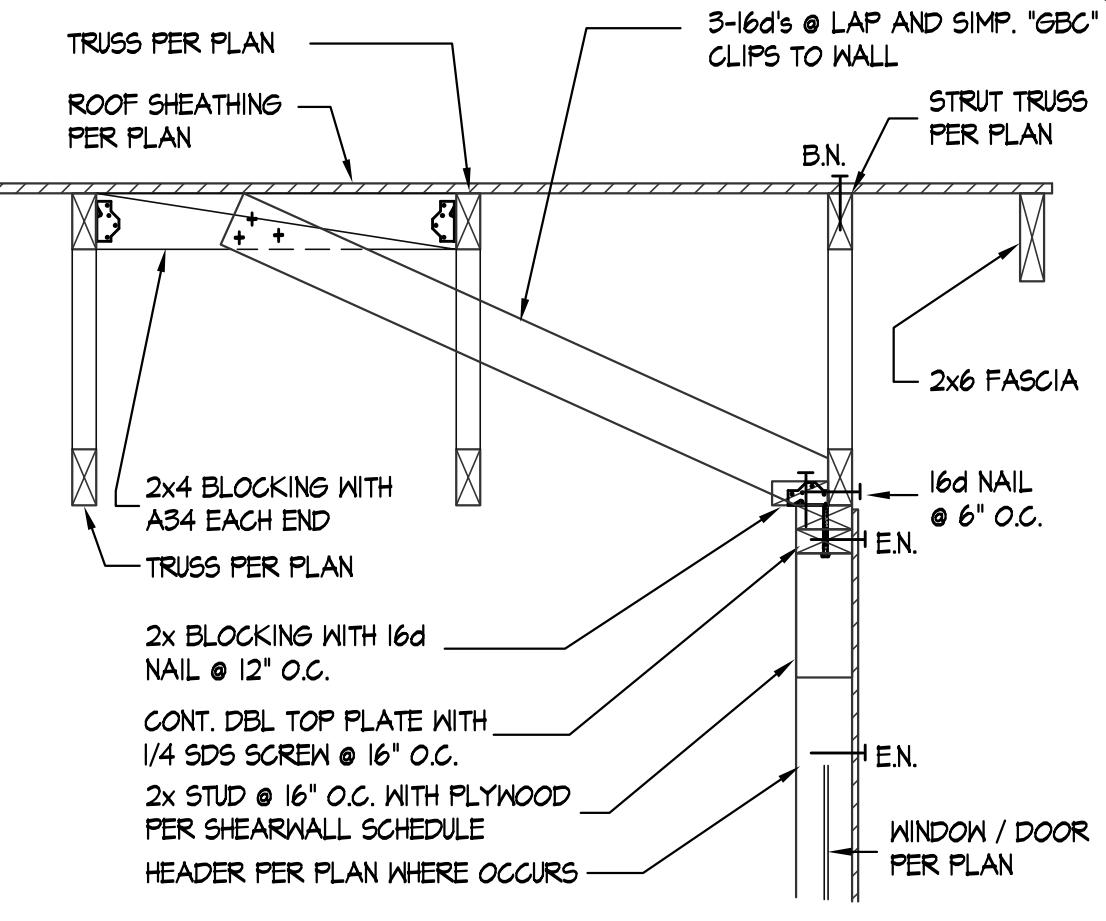
4

ROOF PLAN

Sheet Title:		
Project Title:		
CARNATION ADU (738 Sq. Ft.)		
FONTANA, CA		
Scale: 1/4"=1'-0"		
Drawn By: CT		
Check By: CT		
Print Date: 3/1/25		
Sheet A1		
Drawing Date: 3/1/25		





 <p>NOTE: PREDRILL HOLE 1/8" LARGER THAN ALL THIRD. DIA. ROD CLEAN HOLE OUT THOROUGHLY FOR INSERT WITH SIMPSON HILTI HIT HY-200 V3 EPOXY ANCHORS SYSTEM. INSTALL PER MFR. SPEC. "SPECIAL INSPECTION REQUIRED".</p>	 <p>NOTE: POST OR MULTIPLE STUDS NAILED TOGETHER W/ 16d's @ 12" O.C. STAGGERED PROVIDE EDGE NAILING TO STUDS PER SHEARWALL SCHED.</p>	 <p>NOTE: 4" THK. CONCRETE SLAB, U.N.O. #4 DOWEL @ 24" O.C. MAX. 12" @ 24" P.T. SILL PLATE PER SCHEDULE CONT. FOOTING & REBAR PER FOOTING SCHEDULE</p>	 <p>NOTE: 2x4 BLOCKING ROOF SHEATHING PER PLAN TRUSS PER PLAN</p>	 <p>NOTE: 7/8" STUCCO WITH COLOR TO MATCH EXISTING HOUSE 2x STUD @ 16" O.C. WITH PLYWOOD PER SHEARWALL SCHEDULE 2x P.T. SILL PLATE W/ A.B. PER SHEARWALL SCHEDULE CONCRETE SLAB PER PLAN E.N. MIN. 26 GA. STUCCO WEPP SCREED OR PLASTIC WEPP SCREED FINISH GRADE 2-#4 CONT. @ TOP & BOTTOM 1'-6" MIN. 1'-6" MIN.</p>
BEAM TO WALL 17	EPOXY HOLDOWN 13	EXTERIOR SLAB DOWEL 9	RIDGE BLOCKING 5	PERIMETER WALL TO FOOTING 1
 <p>NOTE: #3 @ BOTTOM 4" RECESS SLAB WITH #3 @ 12" O.C. EACH WAYS @ CENTER LINE OF SLAB 2" CONCRETE CURB CONCRETE SLAB PER PLAN WIDTH, SEE PLAN SHOWER FLOOR FINISH SLOPE TO DRAIN</p>	 <p>NOTE: 5/8" EPOXY BOLT, WHERE EMBED BOLT IS GREATER THAN 48" O.C. CONT. FOOTING & REBAR PER FOOTING SCHEDULE</p>	 <p>NOTE: 2.1 TRUSS / RAFTER PER PLAN 3.1 CONT. DBL. TOP PLATE PER SHEARWALL SCHEDULE 4.2 PARTITION WALL w/ 2x STUD @ 16" O.C. 5.1 2x BLOCKING 303 SIMPSON "DTC" CLIPS @ EACH TRUSS OR BLOCKING 100 GYPSUM BOARD PER ARCH. PLANSPEC.</p>	 <p>NOTE: 1. ALL HOLDOWNS SHALL PROVIDE GAP AT BOTTOM TO ALLOW FOR TENSIONING AND TIGHTENED JUST PRIOR TO COVERING. 2. HOLDOWN RODS SHALL BE SECURELY FASTENED IN PLACE BEFORE POURING CONCRETE.</p> <p>WOOD POST OR MULTIPLE STUDS NAILED TOGETHER W/ 16d's @ 12" O.C. PER PLAN 3 1/2" CLR. 1" CLR. P.T. SILL PLATE PER SCHEDULE FULLY THRD'D STL. ROD (A307) HDU2 - 5/8" ROD HDU5 - 5/8" ROD BOTTOM OF PAD OR CONT. FOOTING 3" SQ x 3/8" THK. WASHER W/ BOLT NUT @ BOTTOM</p>	
RECESS SLAB 18	EPOXY ANCHOR BOLT 14	INTERIOR PARTITION WALL TO TRUSS 6	HOLDOWN 2	 <p>NOTE: * PREDRILL HOLE 1/8" LARGER THAN BOLT DIA. CLEAN HOLE OUT THOROUGHLY FOR FULLY THREADED STL. RODS INSERTED W/ SIMPSON "SET-XP" EPOXY ICC #2508. INSTALL PER MANUF. SPECIFICATION. "SPECIAL INSPECTION REQUIRED".</p> <p>2-#5x36" LONG DOWEL @ TOP & BOTTOM (E) SLAB / FTG. (E) CONC. FTG. 3" CLR.</p>
TRUSS TO BEAM 19	FOOTING TIE 15	 <p>NOTE: 1. PREDRILL HOLE 1/8" LARGER THAN BOLT DIA. CLEAN HOLE OUT THOROUGHLY FOR FULLY THREADED STL. RODS INSERTED W/ SIMPSON "SET-XP" EPOXY ICC #2508. INSTALL PER MANUF. SPECIFICATION. "SPECIAL INSPECTION REQUIRED".</p> <p>(E) SLAB CONC. SLAB PER PLAN #4 x 36" LG. EPOXY DOWELS @ 24" O.C. (E) FTG. BEAM PER PLAN</p>	 <p>NOTE: TRUSS PANEL POINT SHALL REST ON TOP OF SHEAR WALL. SECTION VIEW A B E.N. DSFSDF 1. ROOF SHEATHING PER ROOF DIAPHRAGM 2.1 TRUSS / RAFTER PER PLAN 3.1 CONT. DBL. TOP PLATE PER SHEARWALL SCHEDULE 4.1 STUD WALL w/ PLYWOOD PER SHEARWALL SCHEDULE T2 BEAM / HEADER PER PLAN WHERE OCCURS</p>	 <p>NOTE: TRUSS PER PLAN ROOF SHEATHING PER PLAN SHAPED 2x BLOCKING WITH 16d NAIL @ 6" O.C. 2x4 BRACE @ 6 FT. O.C. MAX. W/ 3-16d's @ LAP AND SIMP. "GBC" CLIPS TO WALL STRUT TRUSS PER PLAN 2x6 FASCIA 2x4 BLOCKING WITH A34 EACH END TRUSS PER PLAN 2x BLOCKING WITH 16d NAIL @ 12" O.C. CONT. DBL. TOP PLATE WITH 1/4 SDS SCREW @ 16" O.C. 2x STUD @ 16" O.C. WITH PLYWOOD PER SHEARWALL SCHEDULE HEADER PER PLAN WHERE OCCURS WINDOW / DOOR PER PLAN</p>
BEAM TO BEAM 20	SLAB TIE 16	EXTERIOR PARTITION WALL TO TRUSS 12	STRUT TRUSS 4	FOUNDATION & FRAMING DETAILS CARNATION A.D.U (738 Sq. Ft.) 8353 SIERA, CA 92383 Sheet Title: Project Title: Fontana, CA Scale: 1" = 1'-0" Drawn By: CT Check By: CT Print Date: 3/1/25 Sheet: D1 Drawing Date: 3/1/25

CONSTRUCTION SPECIFICATION

WATER HEATER:

EFFECTIVE JAN 1, 2022, NEW INSTALLATION GAS OR PROPANE WATER HEATERS SHALL DESIGNATE A SPACE AT LEAST 2.5' X 2.5' WIDE AND 1' TALL FOR THE FUTURE INSTALLATION OF A HEAT PUMP WATER HEATER (HPWH) BY MEETING EITHER A OR B BELOW [PER 2022 CALIFORNIA ENERGY CODE SECTION 150.0(N):]

- IF THE DESIGNATED SPACE IS WITHIN 3' FROM THE WATER HEATER, THEN THIS SPACE SHALL INCLUDE:
 - A DEDICATED 125V, 20-AMP ELECTRICAL RECEPTACLE CONNECTED TO THE ELECTRICAL PANEL WITH A 120/240-VOLT 3 CONDUCTOR, 10 AWG COPPER BRANCH CIRCUIT, WITHIN 3 FEET FROM THE WATER HEATER AND ACCESSIBLE WITH NO OBSTRUCTIONS, AND
 - B. BOTH ENDS OF THE UNUSED CONDUCTOR SHALL BE LABELED "SPARE" AND BE ELECTRICALLY ISOLATED; AND
 - C. A RESERVED SINGLE POLE CIRCUIT BREAKER SPACE IN THE ELECTRICAL PANEL, ADJACENT TO THE CIRCUIT BREAKER FOR THE BRANCH CIRCUIT ABOVE AND LABELED "FUTURE 240V USE"; AND
 - D. A CONDENSATE DRAIN NO MORE THAN 2 INCHES HIGHER THAN THE BASE ON WATER HEATER FOR NATURAL DRAINING WITHOUT PUMP ASSISTANCE.

IF THE DESIGNATED SPACE IS MORE THAN 3' FROM THE WATER HEATER, THEN THIS SPACE SHALL INCLUDE:

- A. A DEDICATED 240V BRANCH CIRCUIT SHALL BE INSTALLED WITHIN 3' FROM THE DESIGNATED SPACE, RATED 30-AMP MINIMUM. THE BLANK COVER SHALL BE IDENTIFIED AS "240V READY"; AND
- B. THE MAIN ELECTRICAL SERVICE PANEL SHALL HAVE A RESERVED SPACE TO ALLOW FOR THE INSTALLATION OF A DOUBLE POLE CIRCUIT BREAKER FOR A FUTURE HPWH INSTALLATION. THE RESERVED SPACE SHALL BE PERMANENTLY MARKED AS "FOR FUTURE 240V USE"; AND
- C. EITHER A DEDICATED COLD WATER SUPPLY, OR THE COLD WATER SUPPLY SHALL PASS THROUGH THE DESIGNATED HPWH LOCATION JUST BEFORE REACHING THE GAS OR PROPANE WATER HEATER; AND
- D. THE HOT WATER SUPPLY PIPE COMING OUT OF THE GAS OR PROPANE WATER HEATER SHALL BE ROUTED FIRST THROUGH THE DESIGNATED HPWH LOCATION BEFORE SERVING ANY FIXTURES; AND
- E. THE HOT AND COLD WATER PIPING AT THE DESIGNATED HPWH LOCATION SHALL BE EXPOSED AND READILY ACCESSIBLE FOR FUTURE INSTALLATION OF AN HPWH; AND
- F. A CONDENSATE DRAIN NO MORE THAN 2 INCHES HIGHER THAN THE BASE ON WATER HEATER FOR NATURAL DRAINING WITHOUT PUMP ASSISTANCE.

UTILITY

- PRIOR TO CONSTRUCTION CONTACT UTILITIES COMPANY FOR INSTALLATION REQUIREMENTS FOR REPLACEMENT, UPGRADE, OR NEW UTILITY SERVICE (E.G., NUMBER & LOCATION OF METERS).
- THE PROPOSED LOCATION OF ELECTRICAL SERVICE REPLACEMENT, UPGRADE OR NEW TO BE APPROVED BY S.C.E.
- SEWER LINE SHALL BE ABS SCHEDULE 40 PIPE WITH 2% MINIMUM SLOPE AND 12" MINIMUM BELOW FINISH GRADE.
- A MAXIMUM OF 5 WATER CLOSETS OR 5-SIX-UNIT TRAPS ARE PERMITTED ON A VERTICAL AND A HORIZONTAL 3" DIAMETER DRAINAGE PIPING [2022 CPC TABLE 103.2 NOTES 4].
- ALL HOSE BIBS MUST HAVE AN APPROVED ANTI-SIPHON DEVICE. [CPC 603.5]
- LOCAL EXHAUST FANS MUST PROVIDE A MINIMUM OF 50 CFM INTERMITTENT OR 20 CFM CONTINUOUS VENTILATION AND EXHAUST TO THE EXTERIOR.
- SMOKE DETECTORS MUST BE INTER-CONNECTED AND HARD-WIRED WITH BATTERY BACKUP AS PER CRC R314.4 AND CRC R314.6 RESPECTIVELY.
- CARBON MONOXIDE ALARMS MUST BE INTER-CONNECTED AND HARD-WIRED WITH BATTERY BACKUP AS PER CRC R315.7 AND CRC R315.5 RESPECTIVELY.

- THE DRYER VENT MUST BE 4 INCHES IN DIAMETER AND HAVE A MAXIMUM COMBINED HORIZONTAL AND VERTICAL LENGTH OF 14 FEET WITH TWO 90-DEGREE ELBOWS.
- A MECHANICAL EXHAUST VENTILATION SYSTEM, SUPPLY VENTILATION SYSTEM, OR COMBINATION THEREOF MUST BE INSTALLED IN COMPLIANCE WITH ASHRAE STANDARD 62.2 AS ADOPTED BY THE CALIFORNIA ENERGY COMMISSION, TO PROVIDE WHOLE-BUILDING VENTILATION WITH OUTDOOR AIR.
- AN INTERMITTENT OR CONTINUOUSLY OPERATING LOCAL MECHANICAL EXHAUST VENTILATION SYSTEM MUST BE INSTALLED IN EACH BATHROOM WITH A BATHTUB SHOWER, OR SIMILAR MOISTURE SOURCE AND IN EACH KITCHEN IN COMPLIANCE WITH ASHRAE STANDARD 62.2 AS ADOPTED BY THE CALIFORNIA ENERGY COMMISSION. THE INTERMITTENT LOCAL EXHAUST VENTILATION AIRFLOW RATES MUST BE 50 CFM IN BATHROOMS AND 100 CFM IN KITCHENS, WHILE THE CONTINUOUS LOCAL EXHAUST VENTILATION AIRFLOW RATES MUST BE 20 CFM IN BATHROOMS AND 5 AIR CHANGES PER HOUR IN KITCHENS BASED ON KITCHEN VOLUME.
- THE WATER HEATER OR FURNACE MUST BE A DIRECT-VENT APPLIANCE.
- A LISTED GASKETED SELF-CLOSING DOOR IS REQUIRED FOR A GAS FAU.

PIPING:

- BUILDING WATER SUPPLY YARD PIPING SHALL HAVE 12" MIN. COVER BELOW FINISH GRADE. [CPC 109.1]
- BUILDING SEWER PIPING SHALL BE NOT LESS THAN 1 FOOT BELOW THE SURFACE OF GROUND. [CPC 118.3]
- UNDERGROUND GAS PIPING SYSTEMS SHALL BE INSTALLED WITH A MINIMUM OF 12" OF COVER. THE MINIMUM COVER SHALL BE INCREASED TO 18" IF EXTERNAL DAMAGE TO THE PIPE OR TUBING FROM EXTERNAL FORCES IS LIKELY TO RESULT. WHERE A MINIMUM OF 12" OF COVER CANNOT BE PROVIDED, THE PIPE SHALL BE INSTALLED IN A CONDUIT OR BRIDGED (SHIELDED). [CPC 210.1.]
- POLYETHYLENE PLASTIC PIPE, TUBING, AND FITTINGS USED TO SUPPLY FUEL GAS SHALL CONFORM TO ASTM D253. PIPE TO BE USED SHALL BE MARKED "GAS" AND "ASTM D253." [CPC 1208.6.5]
- POLYAMIDE PIPE, TUBING, AND FITTINGS SHALL BE IDENTIFIED IN AND CONFORM TO ASTM F2345. PIPE TO BE USED SHALL BE MARKED "GAS" AND "ASTM F2345."
- POLYVINYL CHLORIDE (PVC) AND CHLORINATED POLYVINYL CHLORIDE (CPVC) PLASTIC PIPE, TUBING, AND FITTINGS SHALL NOT BE USED TO SUPPLY FUEL GAS. [NFGA 54.5.6.1.1 - 5.6.4.1.3]
- PLASTICS MATERIALS FOR BUILDING SUPPLY PIPING OUTSIDE UNDERGROUND SHALL HAVE AN ELECTRICALLY CONTINUOUS-CORROSION RESISTANT BLUE INSULATED 14 AWG MIN. COPPER TRACER WIRE. ACCESS SHALL BE PROVIDED TO THE TRACER WIRE OR THE TRACER WIRE SHALL TERMINATE ABOVE GROUND AT EACH END OF THE NONMETALLIC PIPING. [CPC 604.10.1]

GRADING AND SOIL

- LOTS SHALL BE GRADED TO DRAIN SURFACE WATER AWAY FROM THE FOUNDATION WALLS. THE GRADE SHALL FALL A MINIMUM OF 6' WITHIN THE FIRST 10 FT (5% SLOPE), WHERE LOT LINES, WALLS, SLOPES, OR OTHER PHYSICAL BARRIER PROHIBIT 6' OF FALL WITHIN 10 FT, DRAINS OR SNAKES SHALL BE CONSTRUCTED TO ENSURE DRAINAGE AWAY FROM THE STRUCTURE. [CRC R401.3]
- IMPERVIOUS SURFACES WITHIN 10 FT OF THE BUILDING FOUNDATION SHALL BE SLOPED A MINIMUM OF 2% AWAY FROM THE BUILDING. [CRC R401.3 EXCEPTION]
- A GRADING PERMIT IS REQUIRED IF THE AMOUNT OF EARTH BEING MOVED EXCEEDS 200 CUBIC YARDS, OR IF CUTS OR FILLS EXCEED A HEIGHT OR DEPTH OF 6 FEET.
- EROSION CONTROL DEVICES MUST BE INSTALLED AT ALL PERIMETER OPENINGS AND SLOPES. NO SEDIMENTS IS TO LEAVE THE JOB SITE.
- FOR ANY FILL MATERIAL 12 INCHES OR MORE IN DEPTH, A COMPACTION REPORT IS REQUIRED, IN ACCORDANCE WITH CBC 1805.5.0, OR INSPECTED AND APPROVED BY ENGINEER OF RECORD.
- TREES SHALL BE PROTECTED, SEE TREES PROTECTION NOTES, SHEET 051.

FLOOR PLAN

- ADU PLAN SHALL MEET THE ZONING REQUIREMENTS FOR THE AREA OF CONSTRUCTION.
- FOR EXTERIOR WALLS WITHIN 3 FEET OF A PROPERTY LINE, FIRE SPRINKLERS IS REQUIRED. FOR EXTERIOR WALLS 5 FEET OF A PROPERTY LINE, 1-HOUR FIRE RATING IS REQUIRED FOR EXPOSURE TO BOTH SIDES.
- PROJECTIONS ARE PROHIBITED WITHIN 2 FEET OF A PROPERTY LINE. FOR PROJECTIONS WITHIN 3 FEET OF A PROPERTY LINE (WITH SPRINKLERS) OR 5 FEET OF A PROPERTY LINE (WITHOUT SPRINKLERS), A 1-HOUR FIRE RATING IS REQUIRED ON THE UNDERSIDE.
- OPENINGS ARE PROHIBITED WITHIN 3 FEET OF A PROPERTY LINE, FOR WALLS WITHIN 5 FEET OF A PROPERTY LINE (WITHOUT SPRINKLERS), THE MAXIMUM ALLOWABLE OPENING IS 25% OF THE WALL AREA.
- FOR PENETRATIONS, A 1-HOUR FIRE-RESISTANT PENETRATION OF WALLS IS REQUIRED WITHIN 3 FEET OF A PROPERTY LINE (WITH SPRINKLERS) OR 5 FEET OF A PROPERTY LINE (WITHOUT SPRINKLERS).
- THE CONCRETE LANDING MUST HAVE A MINIMUM DEPTH OF 36 INCHES AND A MAXIMUM HEIGHT OF 1/2 INCHES LOWER THAN THE TOP OF THE DOOR THRESHOLD.
- NEW APPROACH AND CITY SIDEWALKS WILL NEED TO BE PERMITTED BY THE ENGINEERING DEPARTMENT.
- NEW SEWER CONNECTION TO THE CITY MAIN SEWER WILL NEED TO BE PERMITTED WITH ENGINEERING DEPARTMENT.
- FIRE SPRINKLER IS REQUIRED FOR NEW ADU HOME IF THE EXISTING HOUSE HAS FIRE SPRINKLERS.

EXTERIOR ELEVATION:

EXTERIOR ELEVATIONS ARE TO MATCH EXISTING HOUSE SUCH AS STUCCO, BRICK AND STONE VENEER, WOOD SIDING, WINDOW FRAME, DOOR STYLES, FINISH COLOR, ETC. ALL EXTERIOR WALL FINISH MUST BE A NON-COMBUSTIBLE MATERIAL, SUCH AS STUCCO, CEMENT FIBER BOARD, FIRE RETARDANT TREATED WOOD SIDING, ETC.)

- STUCCO AND CEMENT PLASTER USED AS AN EXTERIOR WALL COVERING SHOULD BE 1/8-INCH THICK.
- NONCOMBUSTIBLE OR FIRE-RETARDANT-TREATED WOOD SHAKE USED AS AN EXTERIOR WALL COVERING SHOULD HAVE AN UNDERLAYMENT OF MINIMUM 1/2-INCH FIRE-RADED GYPSUM SHEATHING THAT IS TIGHTLY BUTTED, OR TAPE AND MUDDED, OR AN UNDERLAYMENT OF OTHER IGNITION-RESISTANT MATERIAL APPROVED BY THE BUILDING OFFICIAL. B. IGNITION-RESISTANT MATERIAL.
- EXTERIOR DOOR MUST BE SOLID CORE WOOD COMPLYING WITH THE FOLLOWING:
 - STILES AND RAILS MINIMUM 1-3/8 INCHES THICK
 - RAISED PANELS MINIMUM 1-1/4 INCHES THICK

ROOFING & WEATHERPROOFING:

- ROOF COVERING: ALL ROOFING MATERIALS ARE TO MATCH EXISTING HOUSE AND MUST MEET THE APPLICABLE REQUIREMENTS OF CBC 1501. ROOF COVERINGS MUST BE RATED CLASS A ACCORDING TO ASTM E 108 OR UL 790 STANDARDS, WHICH INCLUDES MATERIALS SUCH AS SLATE, CLAY OR CONCRETE ROOF TILE, EXPOSED CONCRETE ROOF DECK, FERRUGOUS OR COPPER SHINGLES OR SHEETS. (COUNTY BUILDING CODE 92.1.1505.1)
- ROOF FLASHING: FLASHING MUST BE INSTALLED AT WALL AND ROOF INTERSECTIONS, AT GUTTERS, WHEREVER THERE IS A CHANGE IN ROOF SLOPE OR DIRECTION, & AROUND ROOF OPENINGS. IF THE FLASHING IS MADE OF METAL, IT MUST BE CORROSION-RESISTANT AND HAVE A THICKNESS OF AT LEAST 0.019 INCHES (NO. 26 GALVANIZED SHEET). (CRC R403.2.1)
- CRICKETS AND SADDLES: A CRICKET OR SADDLE MUST BE INSTALLED ON THE RIDGE SIDE OF ANY CHIMNEY OR PENETRATION NARER THAN 30 INCHES AS MEASURED PERPENDICULAR TO THE SLOPE. THE CRICKET OR SADDLE COVERING MUST BE MADE OF SHEET METAL OR THE SAME MATERIAL AS THE ROOF COVERING. (CRC R405.2.2)
- WATER-RESISTIVE BARRIER: A MINIMUM OF ONE LAYER OF NO. 15 ASPHALT FELT MUST BE ATTACHED TO STUDS OR SHEATHING OF ALL EXTERIOR WALLS. THE FELT MUST BE APPLIED HORIZONTALLY, WITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER BY AT LEAST 2 INCHES, WHERE JOINTS OCCUR, THE FELT MUST BE LAPPED BY AT LEAST 6 INCHES. THE FELT MUST BE CONTINUOUS TO THE TOP OF WALLS AND TERMINATED AT PENETRATIONS AND BUILDING APPENDAGES IN A MANNER THAT MAINTAINS A WEATHER-RESISTANT EXTERIOR WALL ENVELOPE. (CRC R103.2)
- WALL FLASHING: APPROVED CORROSION-RESISTANT FLASHING MUST BE APPLIED SHINGLED FASHION AT THE FOLLOWING LOCATIONS TO PREVENT WATER FROM ENTERING THE WALL CAVITY OR PENETRATING TO THE BUILDING'S STRUCTURAL FRAMING COMPONENTS (CRC R103.8). A. EXTERIOR DOOR AND WINDOW OPENINGS, EXTENDING TO THE SURFACE OF THE EXTERIOR WALL FINISH OR TO THE WATER-RESISTIVE BARRIER FOR SUBSEQUENT DRAINAGE B. AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS, WITH PROJECTING LIPS ON BOTH SIDES UNDER STUCCO COPINGS C. UNDER AND AT THE ENDS OF MASONRY, WOOD, OR METAL COPINGS AND SILLS D. CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM E. WHERE EXTERIOR PORCHES, DECKS, OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD-FRAME CONSTRUCTION F. AT WALL AND ROOF INTERSECTIONS G. AT BUILT-IN GUTTERS
- DAMPPROOFING: DAMPPROOFING MATERIALS FOR FOUNDATION WALLS ENCLOSING USABLE SPACE BELOW GRADE MUST BE INSTALLED ON THE EXTERIOR SURFACE OF THE WALL AND MUST EXTEND FROM THE TOP OF THE FOOTING TO THE FINISHED GRADE. (CRC R406.1)
- WEIR SCREED: A MINIMUM 0.019-INCH (NO. 26 GALVANIZED SHEET GAGE), CORROSION-RESISTANT WEIR SCREED OR PLASTIC WEIR SCREED WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3-1/2 INCHES MUST BE PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE ON EXTERIOR STUD WALLS IN ACCORDANCE WITH ASTM C 92. THE WEIR SCREED MUST BE PLACED A MINIMUM OF 4 INCHES ABOVE THE EARTH OR 2 INCHES ABOVE PAVED AREAS AND MUST ALLOW TRAPPED WATER TO DRAIN TO THE EXTERIOR OF THE BUILDING. (CRC R103.7.2)

MECH, VENT, & INDOOR AIR QUALITY

- VENTILATION AIR SHALL BE PROVIDED DIRECTLY FROM THE OUTDOORS AND NOT AS TRANSFER AIR FROM ADJACENT DWELLING UNITS OR OTHER SPACES SUCH AS GARAGES, UNCONDITIONED GARAGES, OR UNCONDITIONED ATTICS.
- VENTILATION SYSTEM CONTROLS SHALL BE LABELED AND HOMEOWNER SHALL BE PROVIDED WITH INSTRUCTIONS ON HOW TO OPERATE THE SYSTEM.
- COMBUSTION AND SOLID-FUEL BURNING APPLIANCES SHALL BE PROPERLY VENTED, AND AIR SYSTEMS SHALL BE DESIGNED TO PREVENT BACK DRAFTING.
- WALL AND OPENINGS BETWEEN OCCUPYABLE SPACES AND THE GARAGE SHALL BE SEALED.
- HVAC SYSTEMS THAT INCLUDE AIR HANDLERS OR RETURN DUCTS LOCATED IN GARAGES SHALL HAVE TOTAL AIR LEAKAGE OF NO MORE THAN 6% OF TOTAL FAN FLOW WHEN MEASURED AT 0.1 IN. W.C.
- MINIMUM FILTRATION MECHANICAL SYSTEMS SHALL BE PROVIDED WITH A FILTER HAVING A MINIMUM EFFICIENCY OF MERV 6 OR BETTER WHEN SUPPLYING AIR TO OCCUPYABLE SPACE THROUGH DUCTWORK.
- AIR INLETS NOT EXHAUST SHALL BE LOCATED AWAY FROM KNOWN CONTAMINANTS.
- AIR MOVING EQUIPMENT USED TO MEET EITHER THE WHOLE-BUILDING VENTILATION REQUIREMENT OR THE LOCAL VENTILATION EXHAUST REQUIREMENT SHALL BE RATED IN TERMS OF AIRFLOW AND SOUND.
- CONTINUOUSLY OPERATING FANS SHALL BE RATED AT A MAXIMUM OF 1.0 SONE.
- INTERMITTENTLY OPERATED WHOLE-BUILDING VENTILATION FANS SHALL BE RATED AT A MAXIMUM OF 1.0 SONE.
- INTERMITTENTLY OPERATED LOCAL EXHAUST FANS SHALL BE RATED AT A MAXIMUM OF 3.0 SONE.
- REMOTELY LOCATED AIR-MOVING EQUIPMENT (MOUNTED OUTSIDE OF HABITABLE SPACES) SHALL HAVE A MINIMUM OF 4 FEET OF DUCTWORK BETWEEN FAN AND INTAKE GRILL.

ELECTRICAL, PLUMBING, AND MECHANICAL

- EXTERIOR LIGHTING MUST COMPLY WITH THE COUNTY OF SAN BERNARDINO LIGHTING ORDINANCE.
- GROUND FAULT CIRCUIT INTERRUPTER (GFCI) OUTLETS ARE REQUIRED IN CERTAIN AREAS SUCH AS BATHROOMS, KITCHENS, GARAGES, AND OUTDOORS.
- ELECTRICAL CIRCUITS IN BEDROOMS, LIVING ROOMS, AND SIMILAR ROOMS MUST BE PROTECTED BY ARC FAULT CIRCUIT INTERRUPTERS (AFCI).
- INSTALLED LIGHTS MUST MEET CERTAIN EFFICACY AND FIXTURE REQUIREMENTS.
- SMOKE DETECTORS ARE REQUIRED IN EACH EXISTING SLEEPING ROOM, OUTSIDE EACH SEPARATE SLEEPING AREA, AND ON EACH STORY OF A DWELLING.
- CARBON MONOXIDE DETECTORS ARE REQUIRED OUTSIDE EACH SEPARATE SLEEPING AREA AND ON EACH STORY OF A DWELLING.
- WATER CLOSETS MUST HAVE A MINIMUM CLEARANCE OF 30 INCHES WIDE BY 24 INCHES DEEP.
- WATER HEATERS AND HEATING/COOLING EQUIPMENT SUBJECT TO VEHICULAR IMPACT MUST BE PROTECTED BY BOLLARDS OR AN EQUIVALENT MEASURE.
- GAS APPLIANCES IN GARAGES MUST BE PLACED ON A MINIMUM 18-INCH-HIGH PLATFORM.
- SHOWER COMPARTMENTS MUST HAVE A MINIMUM AREA OF 1024 SQUARE INCHES AND A MINIMUM 22-INCH UNBLOCKED DOOR WIDTH.
- FIREPLACES WITH GAS APPLIANCES MUST HAVE THE FLUE DAMPER PERMANENTLY FIXED IN THE OPEN POSITION, AND FIREPLACES WITH LP GAS APPLIANCES MUST NOT HAVE "PIT" OR "SUMP" CONFIGURATIONS.
- ALL NONLOCKING TYPE 125/250-VOLT, 15- AND 20-AMP RECEPTACLES IN DWELLING UNITS INCLUDING ATTACHED AND DETACHED GARAGES AND ACCESSORY BUILDINGS SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES EXCEPT FOR RECEPTACLES LOCATED MORE THAN 5' ABOVE THE FLOOR. [CEC 406.12]
- ALL BRANCH CIRCUITS THAT SUPPLY 120-VOLT, SINGLE PHASE, 15- AND 20-AMP OUTLETS INSTALLED IN DWELLING UNIT FAMILY ROOMS, KITCHENS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER COMBINATION TYPE [CEC 210.2(A)]

2022 RESIDENTIAL LIGHTING STANDARDS

EFFECTIVE ON JAN 1, 2023, THE NEW 2022 ENERGY STANDARDS REQUIRES THAT ALL LIGHTING IN RESIDENTIAL BUILDINGS INCLUDING SINGLE-FAMILY RESIDENTIAL, DUPLEX, RESIDENTIAL GARAGE, TOWNHOUSE, MULTI-FAMILY DWELLING UNITS, HIGH-RISE RESIDENTIAL DWELLING UNITS BE HIGH EFFICIENCY. THE FOLLOWING IS SUMMARY FOR RESIDENTIAL BUILDINGS. MANDATORY LIGHTING REQUIREMENTS FROM 2022 CALIFORNIA ENERGY CODE SECTIONS 150.0(K) & 160.5 (FOR MORE DETAILS SEE https://mnenergy.ca.gov/sites/default/files/2022-08/CEC-400-2022-010_CMF.PDF).

LIGHTING

- ALL LUMINAIRES USED MUST BE HIGH-EFFICIENCY, ACCORDING TO THE CIEES TABLE 150-2-A.
- ALL LED LUMINAIRES AND LAMPS USED MUST BE MARKED "JAB-2016" AND LISTED IN THE CALIFORNIA ENERGY COMMISSION DATABASE AT <https://cacepproducts.energy.ca.gov/pages/applianceSearch.aspx>
- ALL RECESSED DOWNLIGHT LUMINAIRES AND ENCLOSED LUMINAIRES USED MUST BE MARKED "JAB-2016-E" AND LISTED IN THE CALIFORNIA ENERGY COMMISSION DATABASE AT <https://cacepproducts.energy.ca.gov/pages/applianceSearch.aspx>
- RECESSED DOWNLIGHT LUMINAIRES IN CEILINGS MUST NOT BE SCREW-BASED.
- AT LEAST ONE LUMINAIRE IN EACH BATHROOM, GARAGE, LAUNDRY ROOM, AND UTILITY ROOM MUST BE CONTROLLED BY A VACANCY SENSOR.
- ALL LUMINAIRES REQUIRING "JAB-2016" OR "JAB-2016-E" MARKING SHALL BE CONTROLLED BY A DIMMER OR VACANCY SENSOR EXCEPT: CLOSETS LESS THAN 30 SF. & HALLWAYS.
- OUTDOOR LIGHTING PERMANENTLY MOUNTED TO BUILDINGS SHALL BE CONTROLLED BY ONE OF THE FOLLOWING:
 - PHOTOCONTROL AND MOTION SENSOR
 - PHOTOCONTROL AND AUTOMATIC TIME-SWITCH CONTROL
 - ASTRONOMICAL TIME CLOCK
 - ENERGY MANAGEMENT CONTROL SYSTEM PER CIEES 150.0(K)3A11C
- CARPET SYSTEMS, CALGREEN 4504.3. ENSURE THAT ALL CARPET INSTALLED IN THE BUILDING INTERIOR COMPLIES WITH THE TESTING AND PRODUCT REQUIREMENTS OF ONE OF THE FOLLOWING OPTIONS:
 - A. CARPET AND RUG INSTITUTE'S GREEN LABEL PLUS PROGRAM (ALL CARPET CUSHION MUST MEET THE REQUIREMENTS OF THIS PROGRAM).
 - B. CALIFORNIA DEPARTMENT OF PUBLIC HEALTH STANDARD PRACTICE FOR THE TESTING OF VOCs (SPECIFICATION 01350).
 - C. NFPA/ANSI 140 AT THE GOLD LEVEL.
 - D. SCIENTIFIC CERTIFICATIONS SYSTEMS INDOOR ADVANTAGE GOLD.

GREEN BUILDING STANDARDS CODE (CALGREEN)

- ALL NEWLY CONSTRUCTED BUILDINGS OR STRUCTURES, AND ANY ADDITIONS OR ALTERATIONS THAT INCREASE THE BUILDING'S CONDITIONED AREA, VOLUME, OR SIZE, MUST COMPLY WITH CALGREEN RESIDENTIAL MANDATORY MEASURES IN ACCORDANCE WITH CALGREEN 101.3 AND CALGREEN 301.1. EXCEPTION: RESIDENTIAL BUILDINGS UNDERGOING PERMITTED ALTERATIONS, ADDITIONS, OR IMPROVEMENTS, SHALL REPLACE NONCOMPLIANT PLUMBING FIXTURES WITH WATER-SAVING PLUMBING FIXTURES AS PER CALGREEN 301.1 AND CALGREEN 430.3.
- WATER CONSERVATION FOR PLUMBING FIXTURES AND FITTINGS IN COMPLIANCE WITH CALGREEN 4504.4. AT LEAST 80 PERCENT OF THE FLOOR AREA RECEIVING RESILIENT FLOORING, COMPLY WITH ONE OR MORE OF THE FOLLOWING CRITERIA:
 - A. MEET THE VOC EMISSION LIMITS DEFINED IN THE COLLABORATIVE FOR HIGH PERFORMANCE SCHOOLS (CHPS) HIGH PERFORMANCE PRODUCTS DATABASE.
 - B. USE PRODUCTS COMPLIANT WITH CHPS CRITERIA CERTIFIED UNDER THE GREENGUARD CHILDREN & SCHOOLS PROGRAM.
 - C. OBTAIN CERTIFICATION UNDER THE RESILIENT FLOOR COVERING INSTITUTE (RFCI) FLOORSCORE PROGRAM.
 - D. MEET THE REQUIREMENTS OF THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH'S STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL CHAMBERS. VERSION II, FEBRUARY 2010 (ALSO KNOWN AS SPECIFICATION 01350).
- RESILIENT FLOORING SYSTEMS CALGREEN 4504.4. AT LEAST 80 PERCENT OF THE FLOOR AREA RECEIVING RESILIENT FLOORING, COMPLY WITH ONE OR MORE OF THE FOLLOWING CRITERIA:
 - A. MEET THE VOC EMISSION LIMITS DEFINED IN THE COLLABORATIVE FOR HIGH PERFORMANCE SCHOOLS (CHPS) HIGH PERFORMANCE PRODUCTS DATABASE.
 - B. USE PRODUCTS COMPLIANT WITH CHPS CRITERIA CERTIFIED UNDER THE GREENGUARD CHILDREN & SCHOOLS PROGRAM.
 - C. OBTAIN CERTIFICATION UNDER THE RESILIENT FLOOR COVERING INSTITUTE (RFCI) FLOORSCORE PROGRAM.
 - D. MEET THE REQUIREMENTS OF THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH'S STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL CHAMBERS. VERSION II, FEBRUARY 2010 (ALSO KN

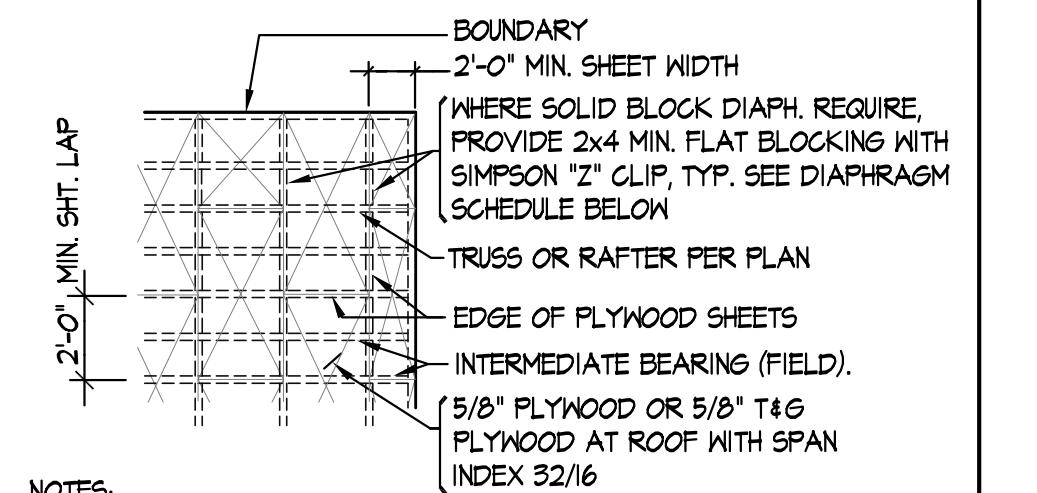
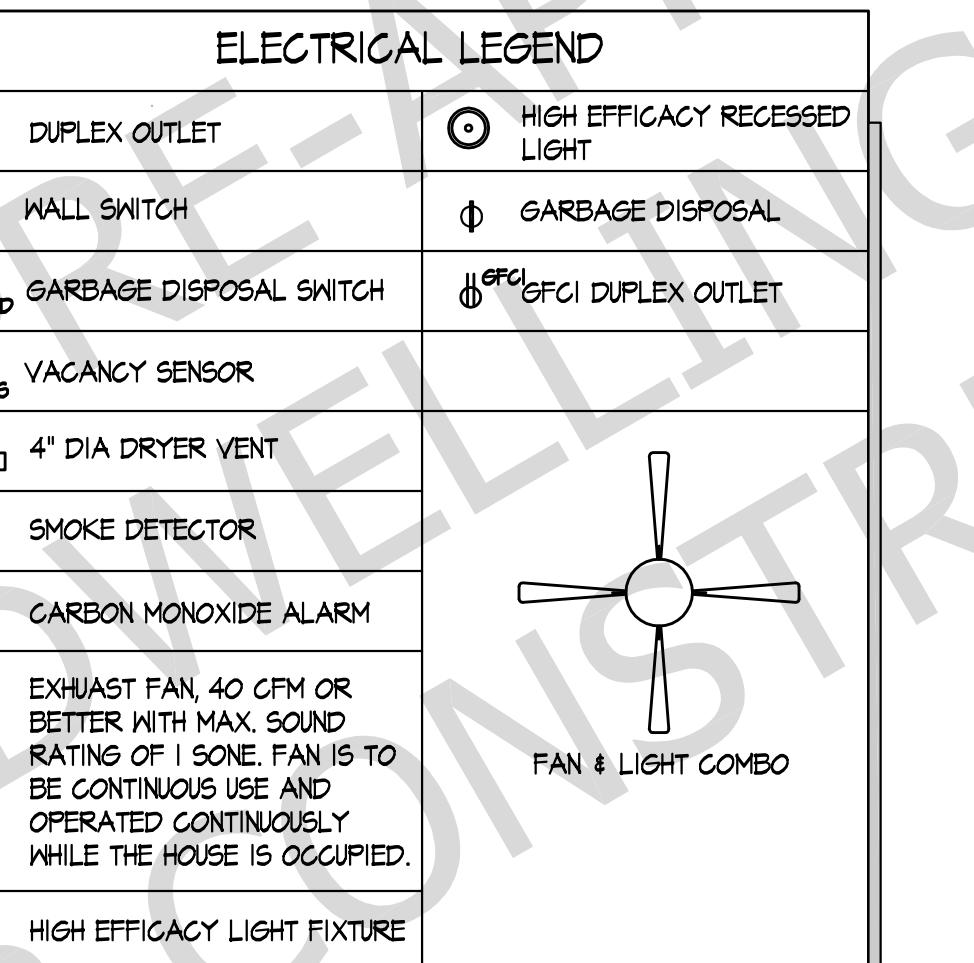
ELEVATION & SECTION NOTES:

- 1 ROOF PITCH: 4:12
- 2 ROOF: CLASS 'A' FIRE RATING TO MATCH EXISTING HOUSE AND SURROUNDING NEIGHBORHOOD, SEE ROOFING AND WEATHERPROOFING SPEC. ON SHEET CS1.
- 3 RADIANT BARRIER IS REQUIRED
- 4 EXTERIOR WALL FINISH TO MATCH EXISTING HOUSE AND SURROUNDING NEIGHBORHOOD.
- 5 ROOF VENT 12" x 24" HALF ROUND GALVANIZED DORMER ATTIC VENTILATION WITH RESISTANT WIRE MESH 1/4" 100 = 100 SQ. INCHES EACH (SEE WILDFIRE ZONE NOTE 5 & 6)
- 6 EAVE VENT (SEE WILDFIRE ZONE NOTE 5 & 6)
- 7 MANUFACTURED TRUSSES
- 8 EXTERIOR WALL: 2x4 STUD WALL
- 9 INTERIOR WALL: 2x4 STUD WALL OR BETTER
- 10 CEILING INSULATION: R-38
- 11 WALL INSULATION: R-19
- 12 INTERIOR FINISH: 1/2" GYPSUM OR BETTER
- 13 CONCRETE SLAB ON GRADE, SEE FOUNDATION NOTE #2.
- 14 WINDOW SCHEDULE ON SHEET CS3.
- 15 SOLID CORE DOOR, SEE DOOR SCHEDULE ON SHEET CS3.
- 16 EXISTING BUILDING
- 17 SLIDE DOOR, SEE DOOR SCHEDULE ON SHEET CS3.
- 18 3 1/2" x 22 1/2" VENT BETWEEN TRUSS

DOOR AND WINDOW SCHEDULE, U.N.O.

MARK	SIZE	TYPE	TEMPERED	NOTES
Ⓐ	3'-6 1/2" x 4'-4"	SLIDE		
Ⓑ	4'-10 1/2" x 4'-4"	SLIDE	YES	
Ⓒ	2'-0" x 4'-4"	SLIDE	YES	VERTICAL
Ⓓ	3'-0" x 1'-2"	SLIDE		
Ⓔ	3'-6 1/2" x 3'-0"	SLIDE		
Ⓐ	3'-0" x 6'-8"	SWING		1-3/8" SOLID CORE
Ⓑ	2'-6" x 6'-8"	SWING		
Ⓒ	2'-0" x 6'-8"	SWING		1-3/8" SOLID CORE WITH VENT
Ⓓ	SEE PLAN	SLIDE		MIRROR
Ⓔ	6'-0" x 6'-8"	SLIDE	YES	

NOTE:
EXTERIOR DOORS, EXTERIOR WINDOWS, EXTERIOR GLAZED DOORS, GLAZED OPENINGS WITHIN EXTERIOR DOORS, GLAZED OPENINGS WITHIN EXTERIOR GARAGE DOORS, AND EXTERIOR STRUCTURAL GLASS VENEER SHALL COMPLY WITH ONE OF THE FOLLOWING (SELECT ONE):
A. EXTERIOR SURFACE OR CLADDING OF NON-COMBUSTIBLE OR IGNITION-RESISTANT MATERIAL
B. SOLID CORE WOOD COMPLYING WITH THE FOLLOWING:
- STILES AND RAILS MINIMUM 1-3/8 INCHES THICK
- RAISED PANELS MINIMUM 1-1/4 INCHES THICK
EXCEPTION: EXTERIOR PERIMETER OF RAISED PANEL MAY TAPER TO A TONGUE MINIMUM 3/8 INCHES THICK
C. MULTI-PANE GLAZING WITH A MINIMUM OF ONE TEMPERED PANE MEETING THE REQUIREMENTS OF SECTION 2406 SAFETY GLAZING, AND WHERE ANY GLAZING FRAMES MADE OF VINYL MATERIALS SHALL HAVE WELDED CORNERS, METAL REINFORCEMENT IN INTERLOCK AREA, AND BE CERTIFIED TO AAMA/WDMA/CSA 101/1.5.2/A40
D. MINIMUM 20-MIN FIRE-RESISTANCE-RATED.
E. MEET PERFORMANCE REQUIREMENTS OF SFM STANDARD 12-1A-2



1. EACH SHEET OF PLYWOOD SHALL CONTAIN A MINIMUM OF 3 SQUARE FEET AND SHALL EXTEND TO 3 BEARINGS MINIMUM WITH FACE GRAIN PERPENDICULAR TO JOISTS.
2. ALL JOISTS & TRUSSES SHALL BE LAID OUT IN A 4'-0" MODULE TO COINCIDE WITH PLYWOOD PATTERN.
3. RUN LONG DIMENSION OF PLYWOOD SHEETS ACROSS (PERPENDICULAR TO) JOIST OR TRUSSES.
4. STAGGER PLYWOOD END JOIST (2'-0" MIN) AS SHOWN.
5. PROVIDE 2 ROWS OF BOUNDARY NAILING TO ALL MEMBERS DESIGNED AS STRUTS, AND AT INTERIOR SHEAR WALLS.
6. ALL NAILS SHALL HAVE A MINIMUM EDGE DISTANCE OF (3/8").
7. NAILING SHALL BE INSPECTED BY ENGINEER OF RECORD & BUILDING OFFICIAL PRIOR TO COVERING.
8. NAILING SHALL BE AS FOLLOWS WITH 10d COMMON NAILS, U.N.O.

AREA	NAIL-10d COMMON NAILS, U.N.O.	ALLOWABLE SHEAR (LB/FT)	COMMENT
D1	6"	6"	12"
D2	6"	6"	12"

BOUNDARY NAILING: PERIMETER, PLATE LINES, CHORDS, STRUTS, CONTINUOUS EDGE & AS CALLED FOR ON PLAN & DETAILS

FIELD NAILING: INTERMEDIATE BEARINGS

PLYWOOD ROOF DIAPHRAGM

ROOF FRAMING NOTES:

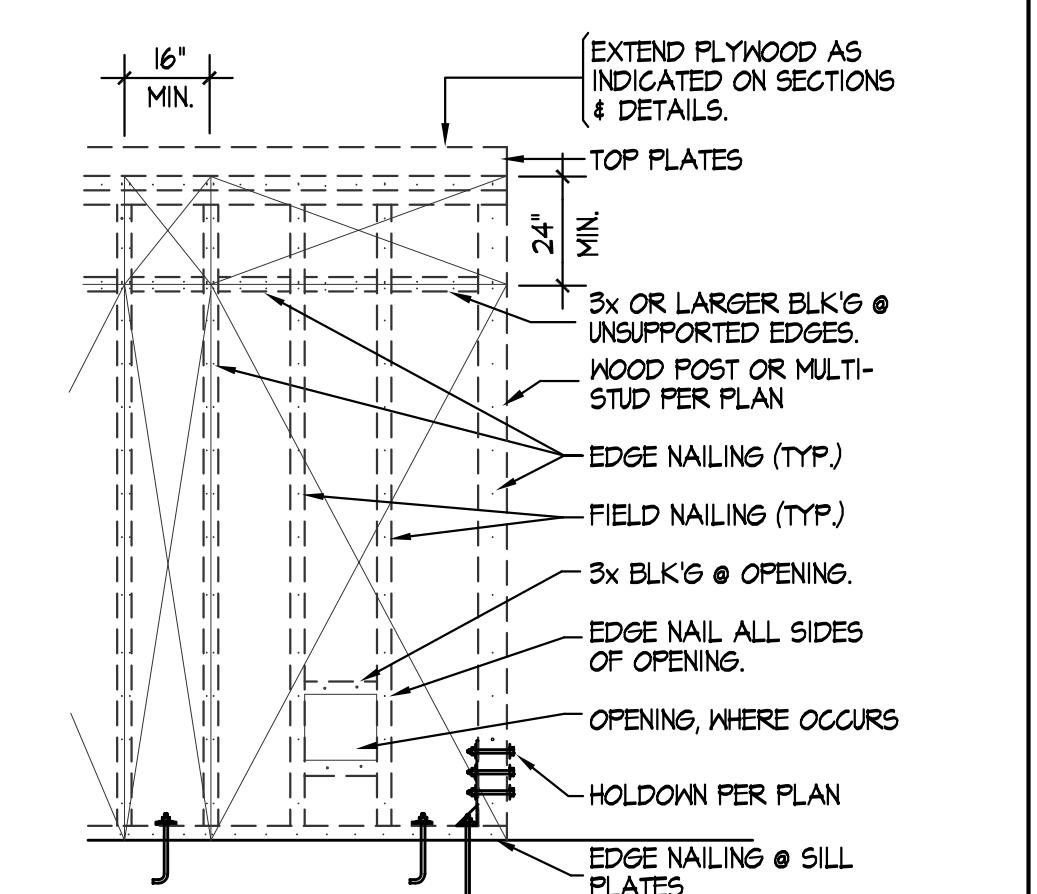
1. PROVIDE GANGNAIL TRUSS @ 24" O.C. U.N.O. TRUSS SHALL BE BY INLAND EMPIRE TRUSS 275 WEST RIDGE STREET PERRIS, CALIFORNIA 92571 (451) 300-1768 OR APPROVED EQUAL BY ENGINEER OF RECORD TANG STRUCTURAL ENGINEERS, INC.
2. SEE DETAIL 1/C62 FOR DPL OR 4X6 TOP PLATE SPLICE REQUIREMENTS.
3. SIZE OF MEMBERS SHALL BE AS INDICATED ON THE PLANS UNLESS APPROVED BY THE ENGINEER IN WRITING.
4. PROVIDE 2 ROWS OF BOUNDARY NAILING TO ALL MEMBERS DESIGNED AS STRUT, & AT INTERIOR SHEAR WALLS.
5. ALL STRUCTURAL PLYWOOD SHALL CONFORM TO PS-1-07, AND SHALL BE IDENTIFIED WITH D.P.P.A. GRADE TRADEMARK.
6. LAG SCREWS SHALL HAVE LEAD HOLES W/ DIAMETERS EQUAL TO 10% OF THOSE OF LAGS, AND THE SAME LENGTHS AS LAGS.
7. PROVIDE DOUBLE JOISTS OR DOUBLE BLOCK AROUND ALL OPENINGS IN ROOF. NO OPENINGS WILL BE PERMITTED IN ROOF OTHER THAN THOSE SHOWN WITHOUT THE ENGINEER'S APPROVAL.
8. TRIM OUT ALL MECHANICAL OPENINGS THRU ROOF W/ 2X4 FLAT BLK'S, AND USE SIMPSON 'Z' CLIPS @ EACH END.
9. PROVIDE SIMPSON "PC" OR "PC" POST CAPS @ ALL POST TO BEAM CONNECTIONS, U.N.O. ON PLANS AND DETAILS.
10. THE BUILDING DEPARTMENT SHALL BE NOTIFIED FOR ROOF DIAPHRAGM NAILING INSPECTION.
11. HANGER IS TO BE FULLY BOLTED OR NAILED U.N.O.
12. ALL STRAPS ARE TO BE FULLY NAILED W/ 10d NAIL U.N.O.
13. PROVIDE DOUBLE STUD BELOW MULTI-TRUSS, U.N.O.

STRUCTURAL OBSERVATION, INSPECTIONS & TESTING

1. PER CALIFORNIA BUILDING CODES CHAPTER 17A REQUIREMENT, THE FOLLOWING CONSTRUCTION REQUIRES TEST, SPECIAL INSPECTION, AND/OR STRUCTURAL OBSERVATION IF MARKED.

TYPE OF CONSTRUCTION	PERIODICAL CONTINUOUS INSPECTION	INSPECTOR	ENGINEER OBSERVATION	TEST
FOUNDATION (REBAR PLACEMENT)		X		
SHEAR WALL NAILING & HARDWARE		X		
ROOF FRAMING		X		
EOXY ALL THREAD		X		
POST INSTALL ANCHOR	X	X		

2. TESTING SHALL BE MADE IN ACCORDANCE WITH THE CURRENT BUILDING CODE BY AN APPROVED SPECIAL TESTING LAB.
3. PERIODICAL AND CONTINUOUS SPECIAL INSPECTION SHALL BE PERFORMED BY A SPECIAL DEPUTY INSPECTOR, AND/OR BY A CALIFORNIA LICENSED STRUCTURAL ENGINEER RETAINED BY THE OWNER.
4. STRUCTURAL OBSERVATION SHALL BE PERFORMED BY ENGINEER OF RECORD, CHE TANG SE4433 RETAINED BY THE OWNER.
5. ALL OBSERVED DEFICIENCIES SHALL BE REPORTED IN WRITING TO THE OWNER'S REPRESENTATIVE, SPECIAL INSPECTOR, CONTRACTOR AND/OR THE BUILDING OFFICIAL, WITH A WRITTEN STATEMENT THAT THE SITE VISITS HAVE BEEN MADE AND IDENTIFYING ANY REPORTED DEFICIENCIES THAT, TO THE BEST OF THE STRUCTURAL OBSERVER'S KNOWLEDGE, HAVE NOT BEEN RESOLVED.
6. FOOTING EXCAVATION SHALL BE INSPECTED BY THE STRUCTURAL ENGINEER OF RECORD AND/OR SOIL ENGINEER RECORD PRIOR TO THE POURING OF CONCRETE.
7. FOR ANY HOLES DRILLED LARGER THAN 1 1/2" OR ANY NOTCHES IN BEAM OR JOIST SHALL BE APPROVED BY THE ENGINEER OF RECORD IN WRITTEN PRIOR TO INSTALLATION.



1. ALL NAILS SHALL BE FULL HEADED NAIL AND SHALL HAVE A MINIMUM 3/8" EDGE DISTANCE.
2. LONG DIRECTION OF PLYWOOD SHEETS TO RUN PARALLEL TO STUD, UNLESS AN ALTERNATE PROPOSAL IS SUBMITTED TO THE ENGINEER.
3. UNLESS NOTED OTHERWISE, STUD WALL SHALL BE 2x STUD @ 16" O.C. W/ 2x P.T. SILL PLATE & 5/8" x 14" LONG ANCHOR BOLT @ 48" O.C.
4. ANCHOR BOLT SHALL BE MINIMUM 14" LONG WITH 8" MINIMUM EMBED INTO CONCRETE FOOTING, U.N.O.
5. ALL NAILING IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE HOT-DIPPED GALVANIZED NAILS.
6. PROVIDE 3 1/2" x 1/4" THK. STEEL PLATE WASHER AT ALL ANCHOR BOLTS
7. NAILING SHALL BE INSPECTED BY ENGINEER OF RECORD & BUILDING OFFICIAL PRIOR TO COVERING.

AREA	3/8" STRUT	2d NAILS	ANCHOR BOLT	SIZE	AVERAGE SPACING	WASHER	SILL PLATE	ALLOWABLE LOAD (LBS/FT)
Ⓐ	ONE SIDE	4"	12"	5/8"	32"	BPS/8-3	2x SILL	350
Ⓑ	ONE SIDE	3"	12"	5/8"	24" O.C.	BPS/8-3	3x SILL	550

NOTE:
CONTRACTOR MUST USE TT&M WALL TEMPLATE WHEN SETTING HARDWARE IN FOUNDATION

SHEAR WALL SCHEDULE

CONST. NOTES, SCHEDULES & LEGENDS

Sheet Title: CARNATION AVE (738 SQ. FT.)
Project Title: 9253 SIEGRA AVE, CA
Scale: N.T.S.
Drawn By: CT
Check By: CT
Print Date: 3/1/25
Drawing Date: 3/1/25
Sheet: CS3

Fontana, CA
Tang Structural Engineers, Inc.
200 Cherry Ave, Suite 14
Fontana, CA 92335
Tang Structural Engineers, Inc. is a professional engineering firm specializing in structural engineering services. We provide a wide range of services including but not limited to: foundation design, structural analysis, code compliance, and construction documentation. Our team of experienced engineers is dedicated to providing high-quality services to our clients. We are committed to safety and quality in all of our work. We are also committed to environmental responsibility and sustainability. We believe that our work has a positive impact on the communities we serve. We are always looking for opportunities to improve and grow. We are a family-owned and operated company with a strong work ethic and a passion for engineering. We are here to help you with all your structural engineering needs.

