The KNEER Residence

GENERAL NOTES

1. THESE DRAWINGS AND COPIES THEREOF ARE LEGAL INSTRUMENTS OF THE DESIGNER AND ARE TO BE USED FOR THE CONSTRUCTION OF THE PROJECT ON THE DESIGNATED PROPERTY ONLY AND MAY NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITIY.
2. ALL DIMENSIONS ARE TO THE OUTSIDE FACE OF STUDS. ALL EXTERIOR WALLS SHALL BE 2x6's AT 16" ON CENTER UNLESS NOTED OTHERWISE. ALL INTERIOR WALLS SHALL BE 2x4's AT 16" ON CENTER UNLESS NOTED OTHERWISE.
3. FIBER-CEMENT, FIBER-MAT REINFORCED CEMENTITIOUS BACKER UNITS, GLASS MAT GYPSUM BACKERS or FIBER-REINFORCED GYPSUM BACKERS SHALL BE INSTALLED in ACCORDANCE w/ MFGR's RECOMMENDATIONS at ALL TUB and SHOWER AREAS and WALL PANELS in SHOWER AREAS per IRC R702.4.2.
4. WATER RESISTANT GYPSUM BACKING BOARD SHALL NOT BE USED WHERE THERE WILL BE DIRECT EXPOSURE to WATER, or IN AREAS SUBJECT to CONTINUOUS HUMIDITY per IRC R702.3.8.1.
5. PAINT ALL EXPOSED GALVANIZED METAL. DO NOT PAINT ALUMINIUM MATERIALS.
6. PROVIDE TERMITE TREATMENT AT BUILDING AREA. APPLICATOR SHALL PROVIDE A MINUMUM FIVE YEAR GUARANTEE.
7. BUILT-UP ROOFING SHALL BE A 20-YEAR BONDABLE 4-PLY FIBERGLASS ROOF w/ SHEET. CLASS "B" ROOF.
8. ALL GLASS SHALL BE DUAL-GLAZED w/ BRONZE TINT UNLESS NOTED OTHERWISE. VERIFY COLOR OF FRAMES w/ OWNER PRIOR TO CONSTRUCTION AND INSTALLATION.
9. EACH TRADE SHALL BE RESPONSIBLE FOR THE KNOWLEDGE OF THE RELATIVE INFORMATION CONTAINED IN THESE DOCUMENTS AND THE CONDITIONS UNDER WHICH HE OR SHE WILL BE EXPECTED TO PERFORM.
10. THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS SHALL CAREFULLY AND THOROUGHLY EXAMINE THE PROJECT SITE. FIELD VERIFY ALL CONDITIONS, GRADES, ELEVATIONS AND DIMENSIONS OF THE VARIOUS FEATURES OF THE PROJECT SITE AND SHALL COMPARE THE DRAWINGS WITH EXISTING SITE CONDITIONS. DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE DESIGNER.
11. THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS SHALL REVIEW AND THOROUGHLY EXAMINE AND FAMILIARIZE THEMSELVES WITH ALL THE ELEMENTS AND CONDITIONS IN THESE DRAWINGS AND SPECIFICATIONS. THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS SHALL VERIFY ALL DIMENSIONS ON THE DRAWINGS. ANY DISCREPANCIES AND/OR CONDITIONS NEEDING CLARIFICATION SHALL BE SUBMITTED TO THE DESIGNER FOR HIS RULING IN WRITING PRIOR TO BEGINNING WORK.
12. ALL CONSTRUCTION, FABRICATION AND INSTALLATIONS SHALL CONFORM TO THE LATEST ADOPTED EDITIONS OF THE IRC, AND ANY FEDERAL, STATE AND LOCAL CODES, REGULATIONS AND ORDINANCES OR THE GOVERNING AGENCY HAVING JURRISDICTION OVER THE PROJECT, APPLICABLE CODES, ETC. ARE THOSE WHICH ARE IN EFFECT AT THE TIME THE PERMIT APPLICATION FOR THE PROJECT WAS REPORTED.
13. EACH SUB-CONTRACTOR IS CONSIDERED A SPECIALIST IN HIS OR HER FIELD/TRADE AND SHALL (BEFORE SUBMISSION OF BID OF PERFORMANCE OF WORK) NOTIFY THE GENERAL CONTRACTOR AND THE DESIGNER IN WRITING, OF SCOPE OF WORK CALLED OUT AS CONSTRUCTED, AS DESIGNED AND OR DETAILED.
14. DUE TO REPROGRAPHIC PROCESSES THESE PLANS MAY NOT BE TO SCALE. ALL DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE FROM PLANS, SECTIONS, ELEVATIONS AND DETAILS.
15. THE STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL AND FIRE SPRINKLER (IF APPLICABLE) ARE SUPPLEMENTAL TO THE ARCHITECRUAL DRAWINGS. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THE VARIOUS DRAWINGS IT SHALL BE BROUGHT TO THE DESIGNER'S ATTENTION FOR CLARIFICATION.
16. WHERE CONSTRUCTION DETAILS ARE NOT SHOWN OR NOTED FOR ANY PART OF THE WORK FOR THE TRADE INVOLVED, THE DESIGNER SHALL BE NOTIFIED IMMEDIATELY, IN WRITING, OF ANY ALTERNATIVE NON-STANDARD OR UNTESTED METHODS PROPOSED.
17. ALL EXISTING UTILITIES OR STRUCTURES ARE INDICATED ON THESE PLANS BASED ON INFORMATION OF RECORD. THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS & ANY AND ALL DAMAGES WHICH OCCUR DUE TO HIS OR HER FAILURE TO LOCATE. CONTRACTOR SHALL BE RESPONSIBLE FOR AND PROTECT ANY AND ALL UNDERGROUND UTILITIES.
18. THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR THE ENFORCEMENT OF ALL REQUIREMENTS AND REGULATIONS AND SHALL PERFORM ALL WORK ON THIS PROJECT IN COMPLIANCE WITH THE STATE OF ARIZONA OCCUPATIONAL SAFETY AND HEALTH ACT.
19. CONTRACTOR AND ALL SUB-CONTRACTORS SHALL GUARANTEE ALL WORK AGAINST FAULTY INSTALLATION AND/OR MATERIALS FOR A PERIOD OF NO LESS THAN ONE YEAR.
20. ALL PARTIES USING THESE PLANS, PRINTS AND COPIES, ETC. REALIZE THAT THESE DOCUMENETS AND ANY & ALL SPECIFICATIONS ARE INSTRUMENTS OF SERVICE AND ARE & SHALL REMAIN AT ALL TIMES PROPERTY OF THE DESIGNER. NO REPRODUCTION IS PERMITTED, IN WHOLE AND PART BY ANY MEANS WHATSOEVER.
21. ALL IDEAS, ARRANGEMENT AND DESIGNS ARE THE PROPERTY OF THE DESIGNER AND ARE PROTECTED BY COPYRIGHT LAWS OF THE UNITED STATES.
22. ALL FINISH WORK IS TO BE PROTECTED FROM NEW CONSTRUCTION. DAMAGE CAUSED TO FINISH WORK BY ANY SUB-CONTRACTOR WILL BECOME THE RESPONSIBILITY OF THAT SUB-CONTRACTOR TO REPLACE AS SPECIFIED HERE-IN TO THE ACCEPTABLE STANDARDS OF THE DESIGNER AND THE ORIGINAL SUB-CONTRACTOR RESPONSIBLE FOR THE INITIAL WORK.
23. ALL DOCUMENTS ARE TO BE CONSIDERED PRELIMINARY UNTILL THE ISSUANCE OF A BUILDING/CONSTRUCTION PERMIT. DESIGNER WILL NOT BE RESPONSIBLE FOR ANY DAMAGES STEMMING FROM THE IMPROPER USE OF PRELIMINARY DOCUMENTS INCLUDING SUCH USES AS BIDDING OR PREMATURE CONSTRUCTION.
24. ALL FINISH TRADES ARE TO VERIFY CONDITION OF SURFACE TO BE ADEQUATE FOR INTENDED APPLICATION OR MAY BE MADE SUITABLE THROUGH SANDING OR FILLING AS DEEMED NECESSARY BY FINISH SUB-CONTRACTOR. SHOULD SURFACE NOT BE ADEQUATE, NOTIFY THE CONTRACTOR IN WRITING OR ASSUME ALL LIABILITY FOR FINISHING RESULTS.

ZONING INFORMATION

CURRENT ZONING: PLANNED UNIT DEVELOPMENT

CODE TABLE

PLANS SHALL CONFORM WITH ALL CURRENT GOVERNING CODES
(INCLUDED BUT NOT LIMITED TO) -

- 2018 INTERNATIONAL BUILDING CODE
- 2018 INTERNATIONAL MECHANICAL CODE
- 2018 INTERNATIONAL PLUMBING CODE
- 2018 INTERNATIONAL FUEL GAS CODE
- 2018 INTERNATIONAL FIRE CODE
- 2018 INTERNATIONAL ENERGY CONSERVATION CODE
- 2017 NATIONAL ELECTRIC CODE
- 2010 ADA STANDARDS for ACCESSIBLE DESIGN
- 2006 NFPA 101 LIFE SAFETY CODE

PROJECT TEAM

DESIGNER:
ZETTEL GROUP, INC.
1915 McCULLOCH BLVD NORTH
SUITE 100
LAKE HAVASU CITY, AZ 86403
PH - (928) 453-3910
FAX - (928) 680-5559

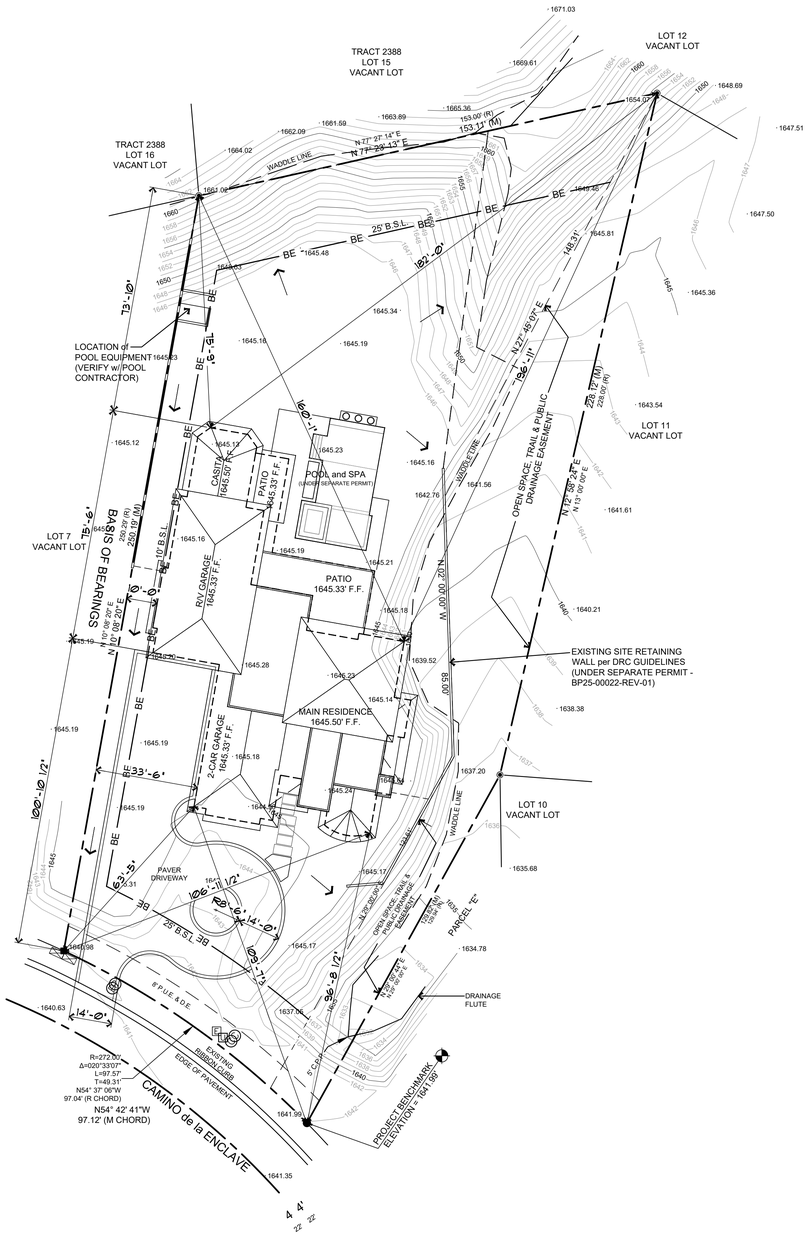
STRUCTURAL ENGINEER:
LEI ENGINEERS, SURVEYORS and PLANNERS
3302 N. MAIN STREET
SPANISH FORK, UT 84660
PH - (801) 798-0555
FAX - (801) 798-9393
office@lei-eng.com

NOTES:

- ENTIRE STRUCTURE, EXCEPT ROOF OVERHANG, IS TO BE LOCATED WITHING THE BUILDING ENVELOPE (BE).
- VERIFY FOR LOCATION OF ALL ON-SITE UTILITIES INCLUDING SEWER & NATURAL GAS and CONNECT TO SAME.
- COMPACTION TESTS SHALL BE PERFORMED BY A LICENSED SURVEY COMPANY. SITE RETENTION SHALL BE A 2:1 MAXIMUM SLOPE AWAY FROM THE STRUCTURE.
- ELECTRICAL METER LOCATION SHALL BE VERIFIED BY LOCAL UTILITY COMPANY.
- ZONING & BUILDING SETBACKS SHALL BE VERIFIED WITH the LOCAL PLANNING and ZONING DEPARTMENTS.
- ALL PERIMETER WALLS, POOLS, OUT BUILDINGS, RETAINING WALLS, ETC. SHALL BE CONSTRUCTED UNDER SEPARATE PERMIT.
- PER IRC R401.3 Drainage.
  Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection that does not create a hazard. Lots shall be graded to drain surface water away from foundation walls. The grade shall fall not fewer than 6 inches within the first 10 feet.

  Exception: Where lot lines, walls, slopes or other physical barriers prohibit 6 inches of fall within 10 feet, drains or swales shall be constructed to ensure drainage away from the structure. Impervious surfaces within 10 feet of the building foundation shall be sloped not less than 2 percent away from the building.

ALL SEDIMENT and EROSION CONTROL DEVICES SHALL BE IN PLACE PRIOR to CONSTRUCTION.



ARCHITECTURAL SITE PLAN
SCALE: 1" = 20'-0"

SHEET INDEX

NOTE:
- STRUCTURAL ELEMENTS of the FOLLOWING PLANS SHALL CONFORM w/ 2018 INTERNATIONAL BUILDING CODE and ALL CURRENT GOVERNING CODES.
- ARCHITECTURAL ELEMENTS of the FOLLOWING PLANS SHALL CONFORM w/ 2018 INTERNATIONAL RESIDENTIAL CODE and ALL CURRENT GOVERNING CODES.

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CONTRACTOR:

PROJECT:
The KNEER Residence
3018 Camino de la Enclave
Tract 2389 Lot 08

◆DESIGN REVIEW PACKAGE
◆ARCHITECTURAL SITE PLAN

REVISIONS:

SCALE: 1" = 20'-0"	JOB #: 2024-08
DRAWN: S.L.Z./S.I.Z.	CHECKED: S.L.Z.
DATE: 14 OCTOBER 2024	
SHEET: A1.1	

KEYNOTE LEGEND

NOT ALL KEYNOTES USED ON THIS LEVEL

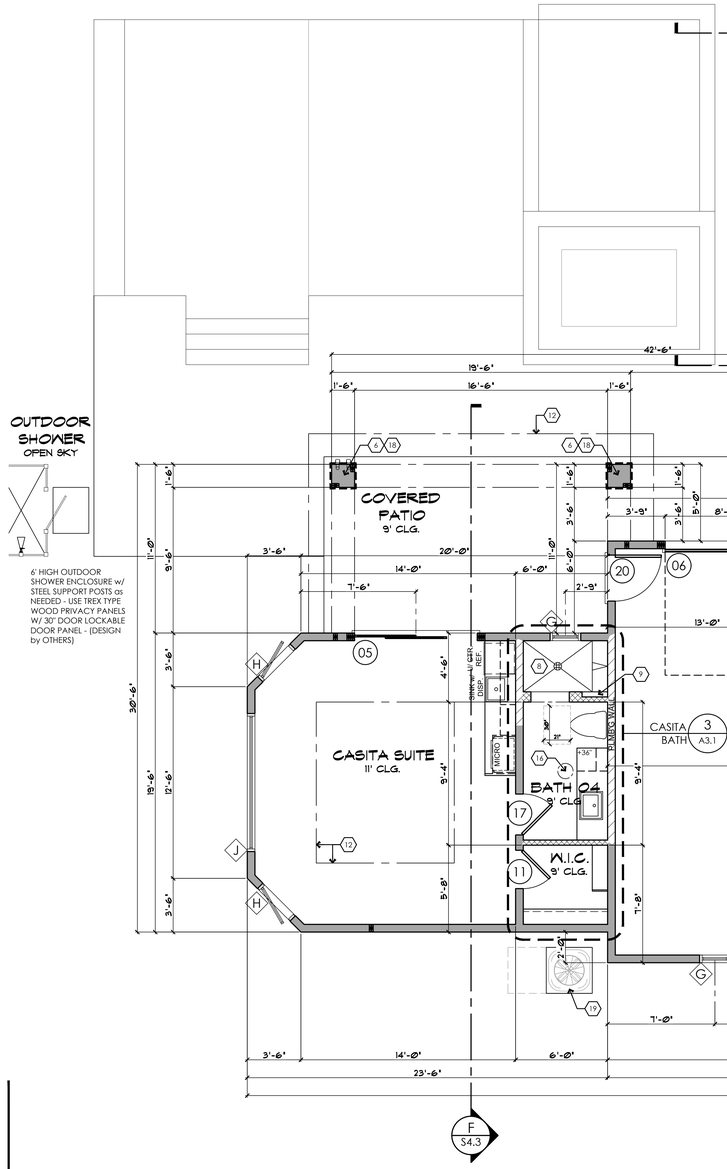
1. GARAGE CEILING, WALLS, and ALL STRUCTURAL MEMBERS SHALL HAVE ⅝" TYPE 'X' GYP. BOARD (TYPICAL)
2. PENETRATION BY MECHANICAL, ELECTRICAL, and PLUMBING CONSTRUCTION of FIRE RESISTIVE WALLS SHALL COMPLY w/ IRC SECTION R302
3. PROVIDE RECIRCULATING PUMP for EACH WATER HEATER (INSTALLED per MFG SPECS) on 18" HIGH WOOD FRAMED PLATFORM w/ 1/2" MINIMUM 'GREEN' GYPSUM BOARD and BARRIER PROTECTION. PROVIDE EXPANSION TANK as REQUIRED. (RUN T&P DIRECTLY TO THE OUTSIDE)
4. SELF CLOSING & LATCHING 1 3/4" THICK SOLID CORE DOOR or 20 MINUTE FIRE-RATED DOOR REQUIRED BETWEEN RESIDENCE and GARAGE PER IRC SECTION R302.5.1.
   R302.5.1Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1⅜ inches (35 mm) in thickness, solid or honeycomb-core steel doors not less than 1⅜ inches (35 mm) thick, or 20-minute fire-rated doors, equipped with a self-closing or automatic-closing device.
5. **22"X30" ATTIC ACCESS PER IRC R807 w/ (2) LAYERS of** TYPE 'X' GYP. BOARD
   R807.1Attic access. Buildings with combustible ceiling or roof construction shall have an attic access opening to attic areas that have a vertical height of 30 inches (762 mm) or greater over an area of not less than 30 square feet (2.8 m2). The vertical height shall be measured from the top of the ceiling framing members to the underside of the roof framing members.
   The rough-framed opening shall be not less than 22 inches by 30 inches (559 mm by 762 mm) and shall be located in a hallway or other location with ready access. Where located in a wall, the opening shall be not less than 22 inches wide by 30 inches high (559 mm wide by 762 mm high). Where the access is located in a ceiling, minimum unobstructed headroom in the attic space shall be 30 inches (762 mm) at some point above the access measured vertically from the bottom of ceiling framing members. See Section M1305.1.3 for access requirements where mechanical equipment is located in attics.
6. WOOD FRAMED STUCCO WRAPPED COLUMN
7. PROVIDE 100 SQ. IN. MAKE-UP AIR OPENING for DRYER EXHAUST ABOVE DOOR
8. TILED SHOWER w/ TILED SEAT - SEE INTERIOR ELEVATIONS
9. 36" HIGH WOOD FRAMED TILED WALL at SHOWER - SEE INTERIOR ELEVATIONS
10. PREFABRICATED ACRYLIC TUB (per OWNER SELECTION) - INSTALL per MANUFACTURER SPECIFICATIONS. PROVIDE ACCESS PANEL to PUMP and GFCI PROTECTION as REQUIRED.
11. '0' CLEARANCE PROPANE FIREPLACE APPLIANCE (SEE INT. ELEVATIONS for HEIGHT). INSTALL per MANUF. SPECS. PROVIDE INSTALLATION INSTRUCTIONS to INSPECTOR. EXTERIOR FIREPLACES SHALL BE RATED for OUTDOOR USE.
12. LINE of SOFFIT ABOVE - SEE REFLECTED CEILING PLAN
13. NOT USED.
14. (5) EQUALLY SPACED SHELVES
15. CUSTOM BUILT-IN LINEN CABINET - SEE INTERIOR ELEVATIONS
16. 12" DIA. SOLATUBE ® - or OWNER APPROVED EQUAL; INSTALL per MANUFACTURER SPECS. ICC-ES #ESL-1303)
17. LOCATION of CULTURED STONE - SEE EXTERIOR ELEVATIONS for ADDITIONAL INFORMATION
18. LOCATION of EXTERIOR TILE FACADE - SEE EXTERIOR ELEVATIONS for ADDITIONAL INFORMATION
19. 4" THICK CONCRETE SLABS for A/C CONDENSING UNIT - VERIFY LOCATION - PROVIDE a 30"x36" CLEAR WORK SPACE IN FRONT of EACH CONDENSER per E3405

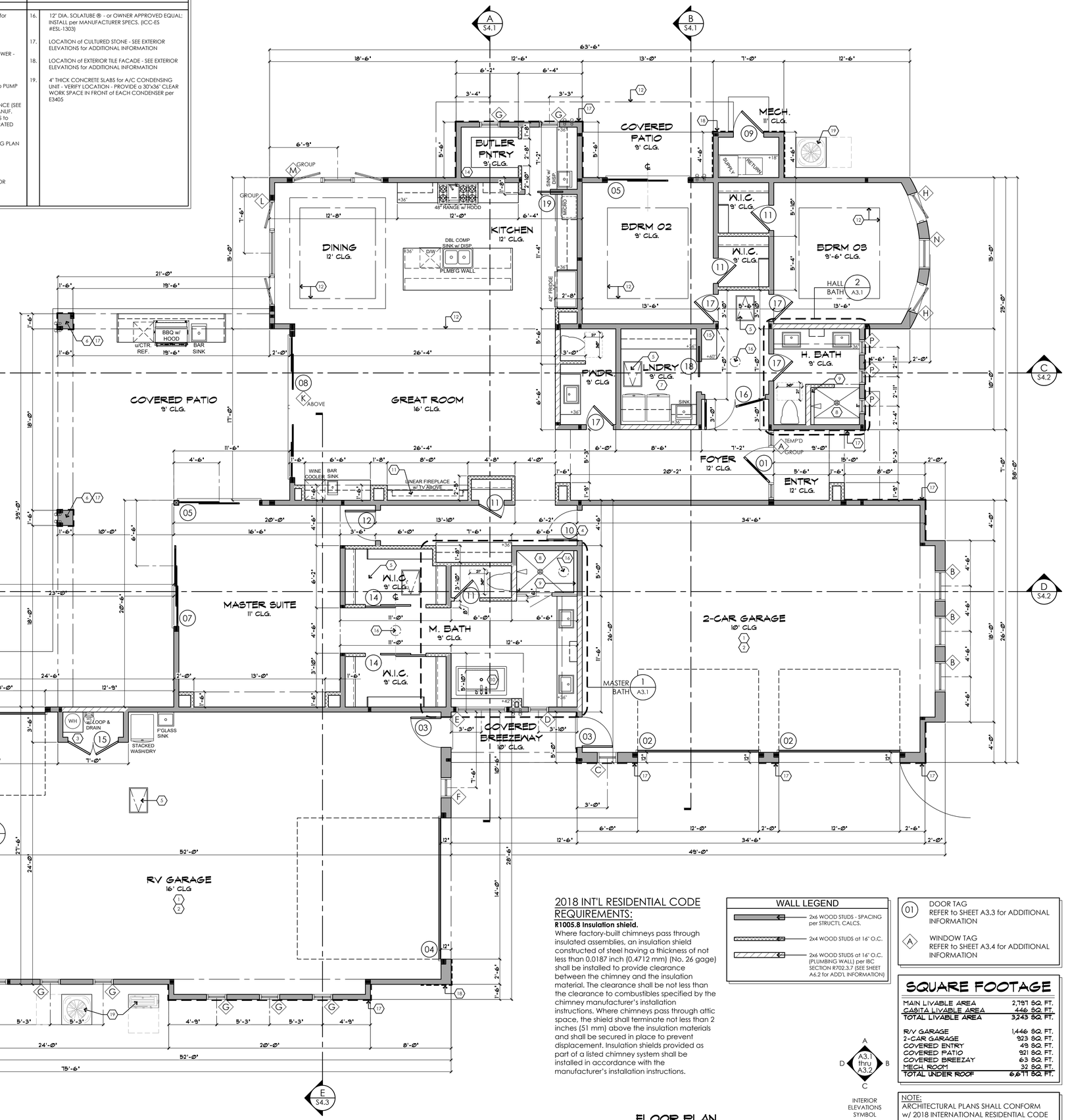
2018 INT'L PLUMBING CODE REQUIREMENTS:

308.10 Thermal expansion tanks.
A thermal expansion tank shall be supported in accordance with the manufacturer's instructions. Thermal expansion tanks shall not be supported by the piping that connects to such tanks.

2018 INT'L MECHANICAL CODE REQUIREMENTS:

307.2.4.1 Ductless mini-split system traps.
Ductless mini-split equipment that produces condensate shall be provided with an inline check valve located in the drain lone, or a trap.





WALL LEGEND

- 2x6 WOOD STUDS - SPACING per STRUCT'L CALCS.
- 2x4 WOOD STUDS at 16" O.C.
- 2x6 WOOD STUDS at 16" O.C. (PLUMBING WALL) per IBC SECTION R702.3.7 (SEE SHEET A6.2 for ADD'L INFORMATION)

01 DOOR TAG
REFER to SHEET A3.3 for ADDITIONAL INFORMATION

A WINDOW TAG
REFER to SHEET A3.4 for ADDITIONAL INFORMATION

SQUARE FOOTAGE

MAIN LIVABLE AREA	2,797 SQ. FT.
CASITA LIVABLE AREA	446 SQ. FT.
TOTAL LIVABLE AREA	3,243 SQ. FT.
RV GARAGE	1,446 SQ. FT.
2-CAR GARAGE	923 SQ. FT.
COVERED ENTRY	49 SQ. FT.
COVERED PATIO	921 SQ. FT.
COVERED BREEZAY	63 SQ. FT.
MECH. ROOM	32 SQ. FT.
TOTAL UNDER ROOF	6,611 SQ. FT.

2018 INT'L RESIDENTIAL CODE REQUIREMENTS:

R1005.8 Insulation shield.
Where factory-built chimneys pass through insulated assemblies, an insulation shield constructed of steel having a thickness of not less than 0.0187 inch (0.4712 mm) (No. 26 gage) shall be installed to provide clearance between the chimney and the insulation material. The clearance shall be not less than the clearance to combustibles specified by the chimney manufacturer's installation instructions. Where chimneys pass through attic space, the shield shall terminate not less than 2 inches (51 mm) above the insulation materials and shall be secured in place to prevent displacement. Insulation shields provided as part of a listed chimney system shall be installed in accordance with the manufacturer's installation instructions.

A / D A3.1 thru A3.2 / B / C — INTERIOR ELEVATIONS SYMBOL

NOTE:
ARCHITECTURAL PLANS SHALL CONFORM w/ 2018 INTERNATIONAL RESIDENTIAL CODE and ALL CURRENT GOVERNING CODES.

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

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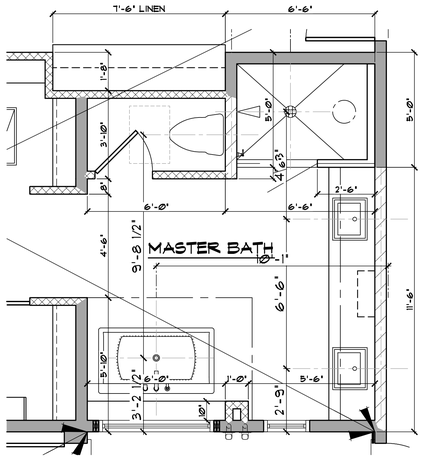
CONTRACTOR:

PROJECT:
The KNEER Residence
3018 Camino de la Enclave
Tract 2389 Lot 08

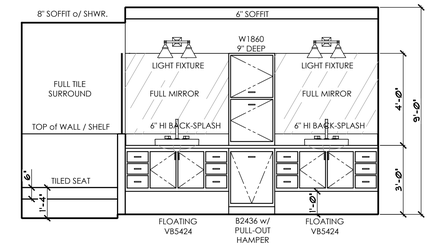
◆ FLOOR PLAN

REVISIONS:

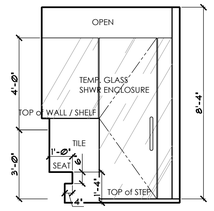
SCALE: 1/4" = 1'-0"	JOB #: 2024-08
DRAWN: S.L.Z./S.I.Z.	CHECKED: S.L.Z.
DATE: 04 APRIL 2025	
SHEET: A2.1	



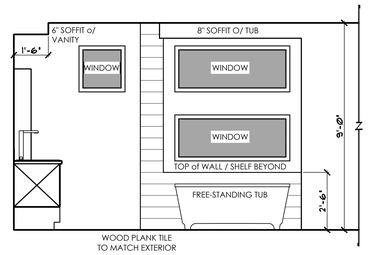
1 ENLARGED FLOOR PLAN - MASTER BATH
SCALE: 3/8" = 1'-0"



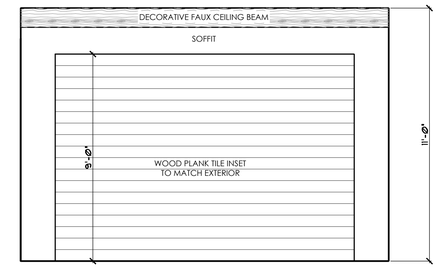
B M. BATH / SHWR.



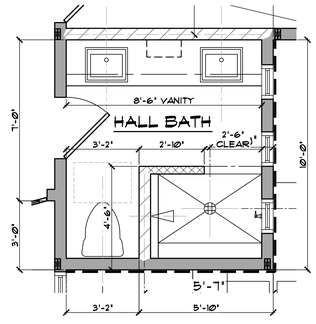
C M. BATH SHOWER



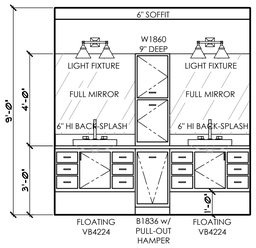
C M. BATH / TUB



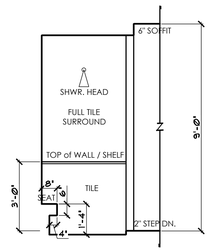
C MASTER SUITE



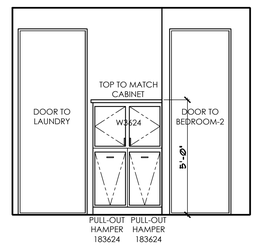
2 ENLARGED FLOOR PLAN - HALL BATH
SCALE: 3/8" = 1'-0"



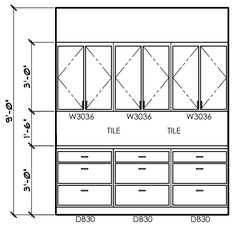
A HALL BATH



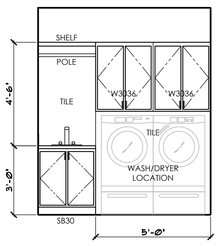
D HALL BATH SHWR.



D HALL LINEN



A LAUNDRY



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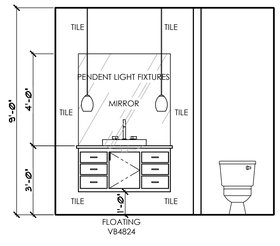
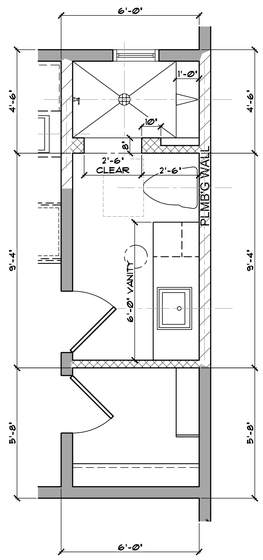
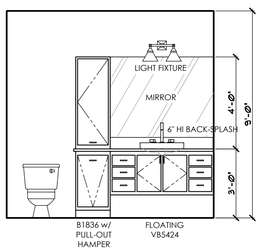


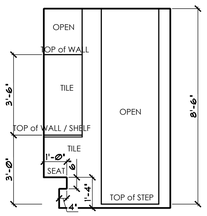
C POWDER



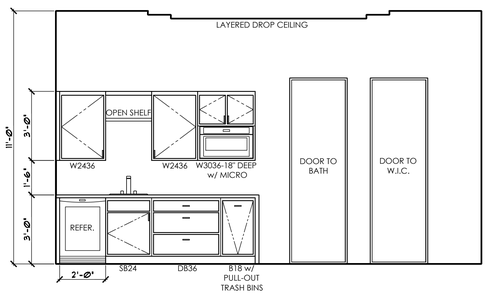
3 ENLARGED FLOOR PLAN - CASITA BATH
SCALE: 3/8" = 1'-0"



B CASITA BATH



C CASITA SHOWER



B CASITA WET BAR

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Tract 2389 Lot 08

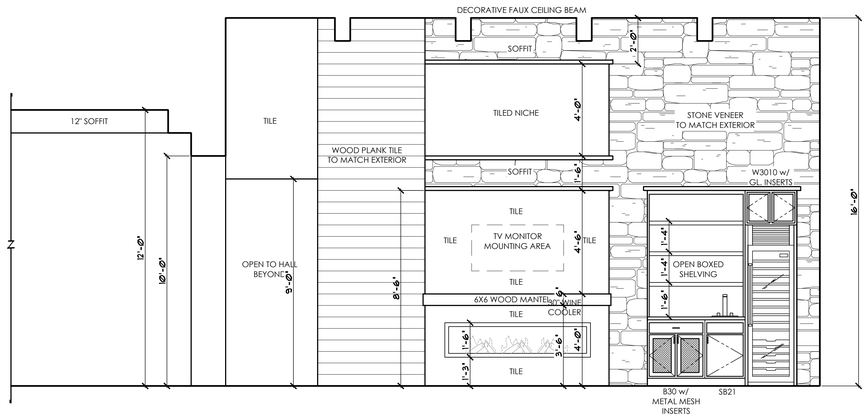
◆ENLARGED FLOOR PLANS
◆and INTERIOR ELEVATIONS

REVISIONS:
△
△
△

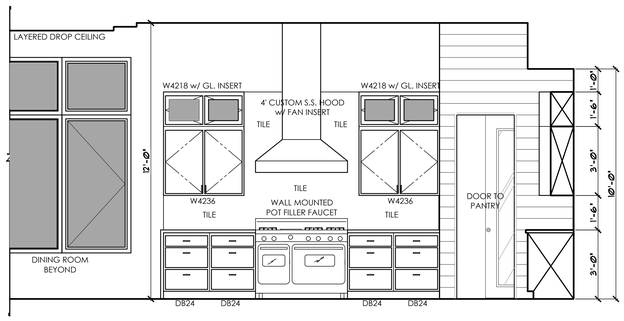
A
D A3.1 thru A3.2 B
C
INTERIOR ELEVATIONS SYMBOL

NOTE:
ARCHITECTURAL PLANS SHALL CONFORM w/ 2018 INTERNATIONAL RESIDENTIAL CODE and ALL CURRENT GOVERNING CODES.

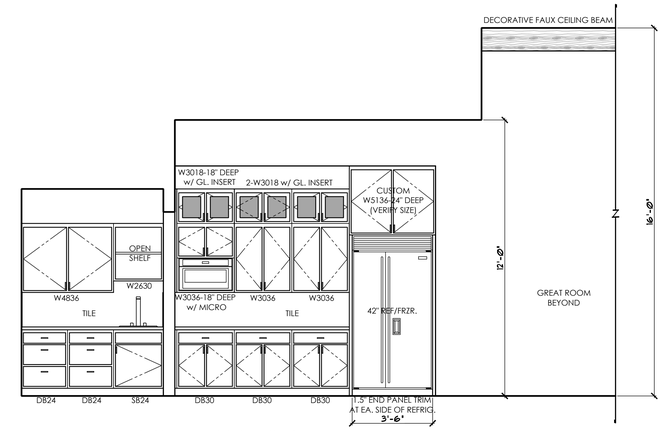
SCALE: 3/8" = 1'-0"	JOB #: 2024-08
DRAWN: S.L.Z./S.I.Z.	CHECKED: S.L.Z.
DATE: 20 MAY 2025	
SHEET: A3.1	



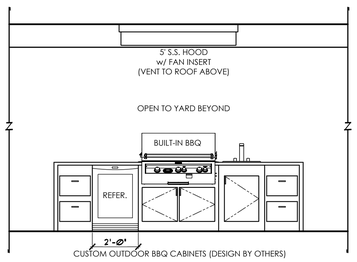
C FOYER / GREAT ROOM / FIREPLACE



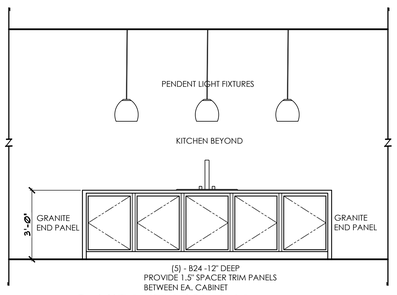
A KITCHEN



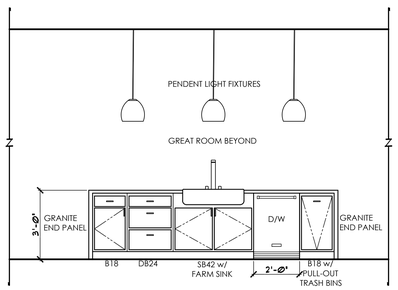
B BUTLER PANTRY / KITCHEN



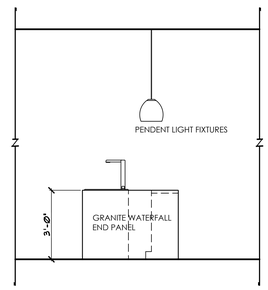
A PATIO BBQ AREA



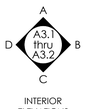
A KITCHEN ISLAND



C KITCHEN ISLAND



B D KITCHEN ISLAND
(OPPOSITE END SIM.)



INTERIOR
ELEVATIONS
SYMBOL

NOTE:
ARCHITECTURAL PLANS SHALL CONFORM w/ 2018 INTERNATIONAL RESIDENTIAL CODE and ALL CURRENT GOVERNING CODES.

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www.zettelgroup.com

CONTRACTOR:

PROJECT:
The KNEER Residence
3018 Camino de la Enclave
Tract 2389 Lot 08

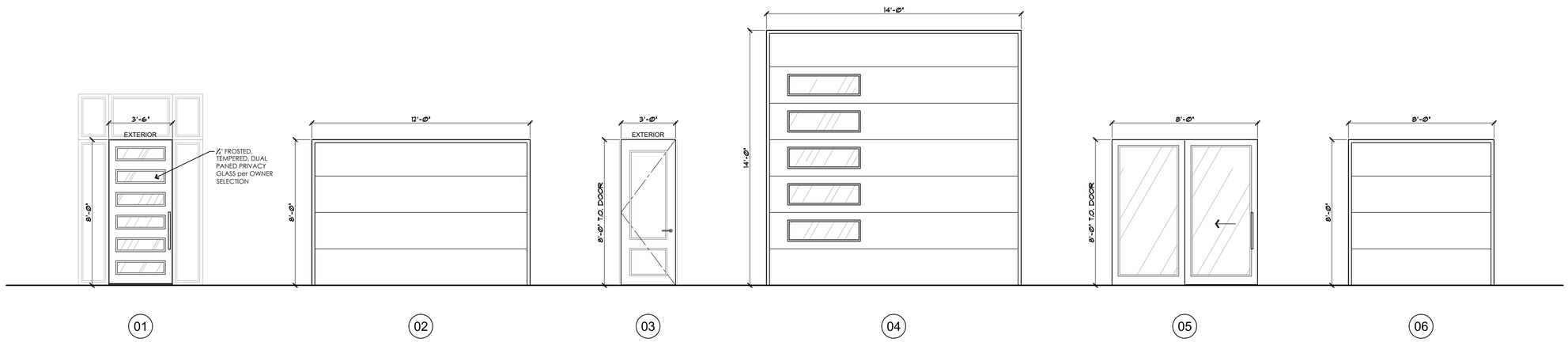
◆ INTERIOR ELEVATIONS

REVISIONS:
△
△
△

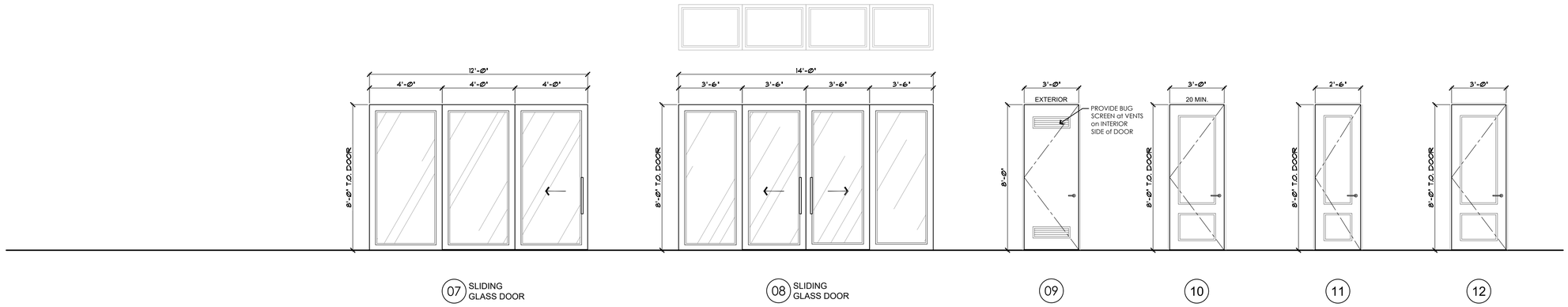
SCALE: 3/8" = 1'-0"
JOB #: 2024-08
DRAWN: S.L.Z./S.I.Z.
CHECKED: S.L.Z.
DATE: 20 MAY 2025
SHEET
A3.2

DOOR NOTES:

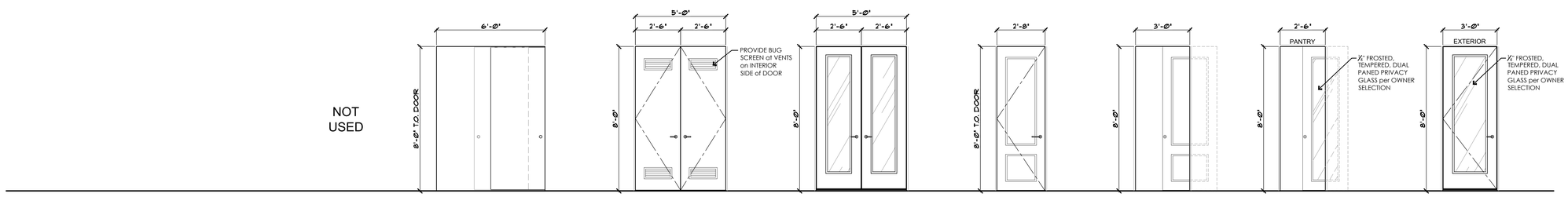
1. ALL INTERIOR DOORS TO BE SOLID CORE MASONITE WITH WOOD FRAMES. VERIFY FINISH WITH OWNER.
2. INTERIOR DOORS TO HAVE ADJUSTABLE ANCHORS - 3 PER JAMB. EXTERIOR DOORS SHALL HAVE 3 COUNTERSUNK HOLES PER JAMB FOR SCREW CONNECTION TO WOOD STUDS.



01 02 03 04 05 06



07 SLIDING GLASS DOOR 08 SLIDING GLASS DOOR 09 10 11 12



13 14 CLOSET BY-PASS 15 16 17 18 POCKET DOOR 19 POCKET DOOR 20

NOTE:
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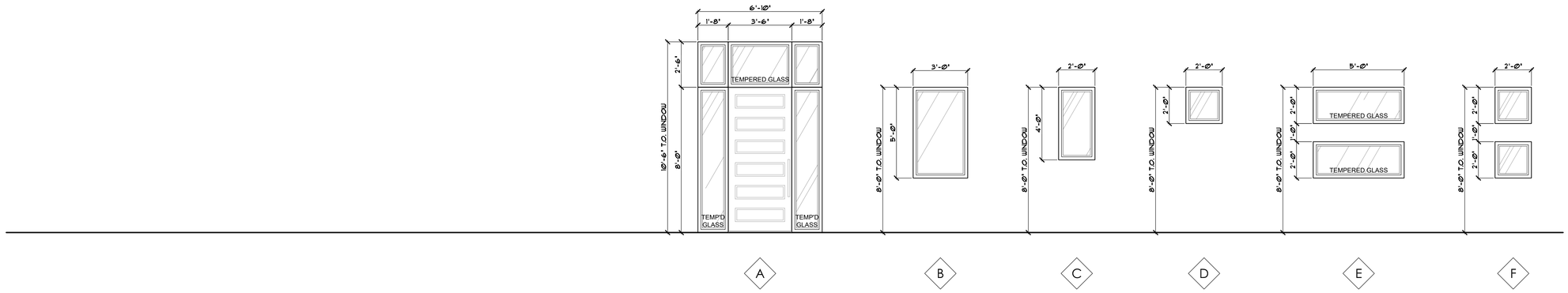
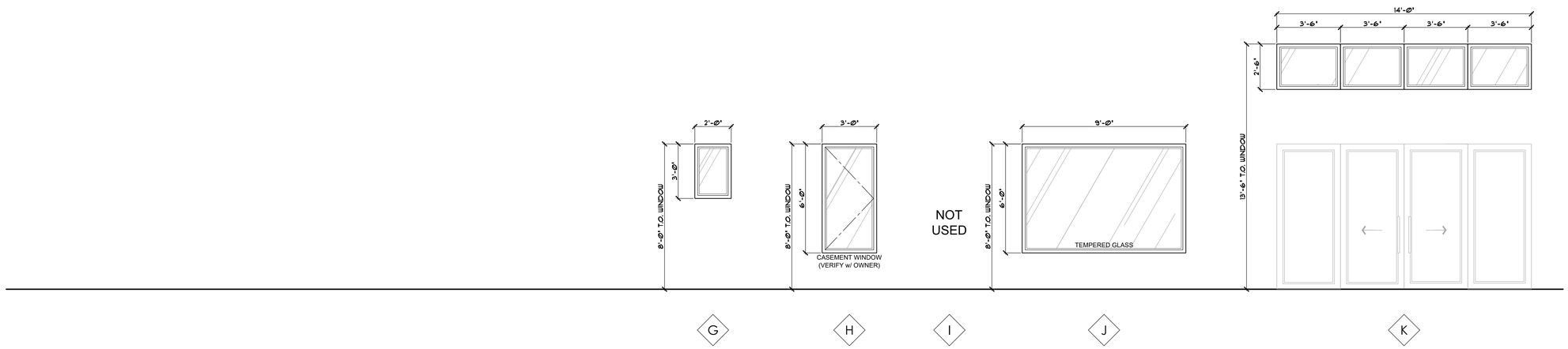
Tract 2389 Lot 08

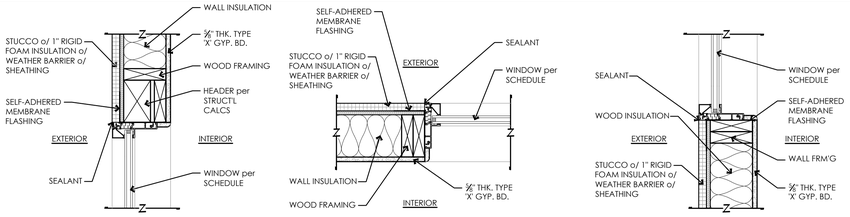
◆DOOR DETAILS

REVISIONS:

SCALE: 3/8" = 1'-0"	JOB #: 2024-08
DRAWN: S.L.Z.	CHECKED: S.L.Z.
DATE: 19 MAY 2025	
SHEET: A8.3	



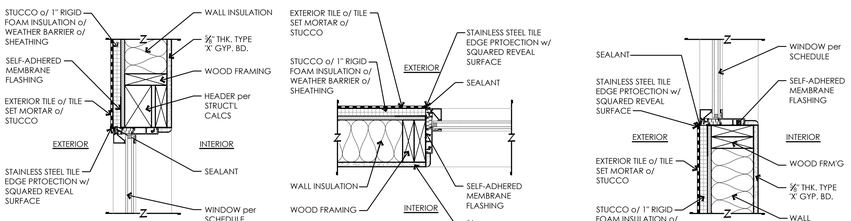




1 WINDOW HEAD - STUCCO
SCALE: 1-1/2" = 1'-0"

2 WINDOW JAMB - STUCCO
SCALE: 1-1/2" = 1'-0"

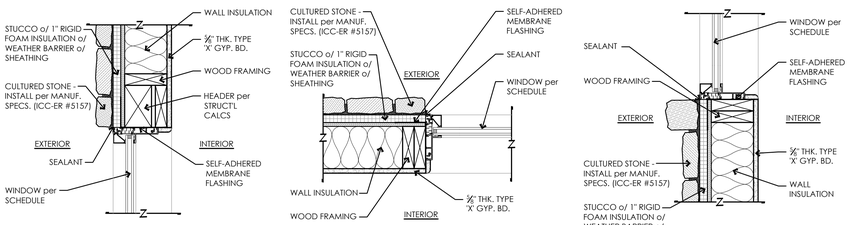
3 WINDOW SILL - STUCCO
SCALE: 1-1/2" = 1'-0"



4 WINDOW HEAD - TILE
SCALE: 1-1/2" = 1'-0"

5 WINDOW JAMB - TILE
SCALE: 1-1/2" = 1'-0"

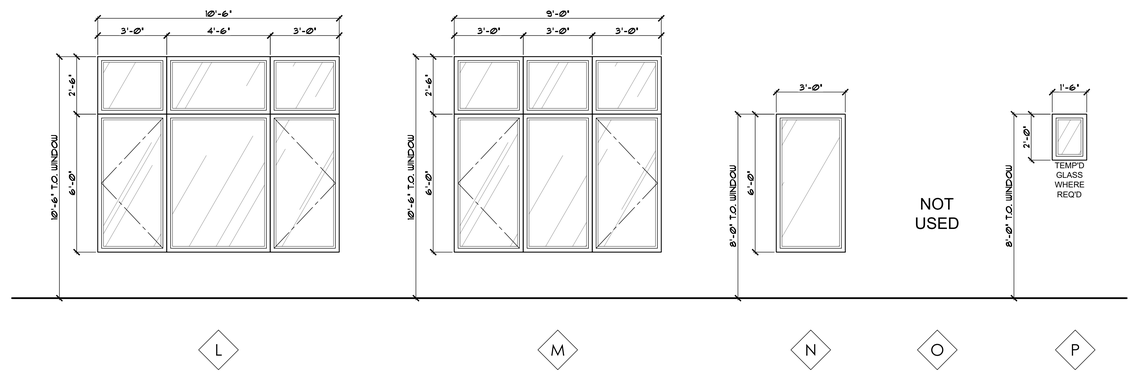
6 WINDOW SILL - TILE
SCALE: 1-1/2" = 1'-0"



7 WINDOW HEAD - STONE
SCALE: 1-1/2" = 1'-0"

8 WINDOW JAMB - STONE
SCALE: 1-1/2" = 1'-0"

9 WINDOW SILL - STONE
SCALE: 1-1/2" = 1'-0"



WINDOW NOTES:

1. ALL GLASS SHALL BE DUO-GLAZED BRONZE TINT w/ ½" AIRSPACE SEPARATION on BRONZE FINISH ALUMINUM FRAMES (UNLESS NOTED OTHERWISE).
2. ALL GLASS DOORS SHALL HAVE TEMPERED SAFETY GLAZING GLASS. TYPE and THICKNESS to COMPLY w/ IRC SECTION R308.4.
3. ALL WINDOWS or GLAZING WITHIN 24" of a DOOR MUST BE TEMPERED.
4. SHOWER DOOR and GLASS ENCLOSURES MUST BE TEMPERED.
5. ALL WINDOWS WITHIN SHOWERS and TUB AREAS MUST COMPLY w/ IRC SECTION R308.4 and R308.9.
6. GLASS BLOCK SHALL BE INSTALLED per IRC R610.

NOTE:
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PROJECT:
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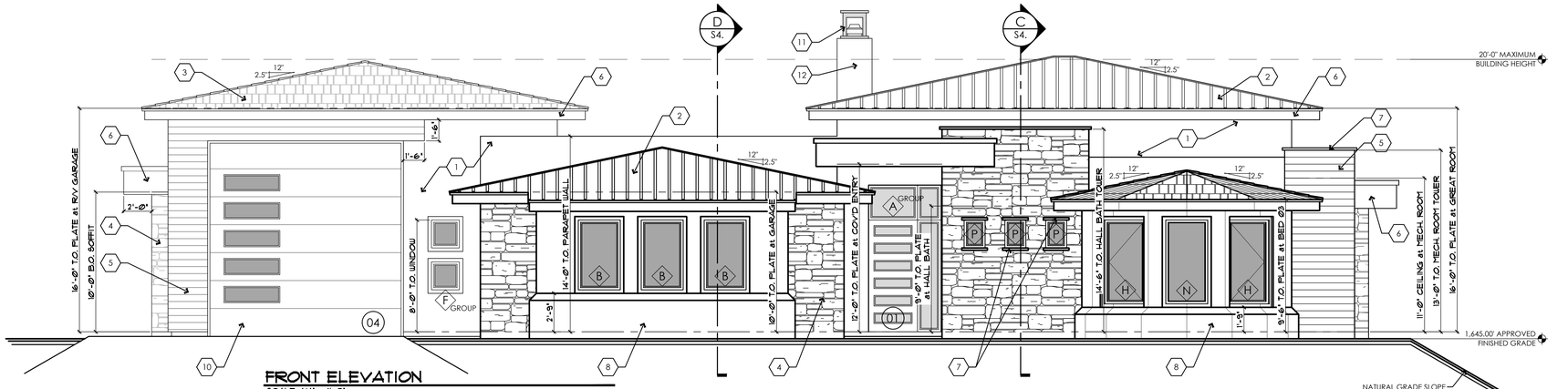
3018 Camino de la Enclave
Tract 2389 Lot 08

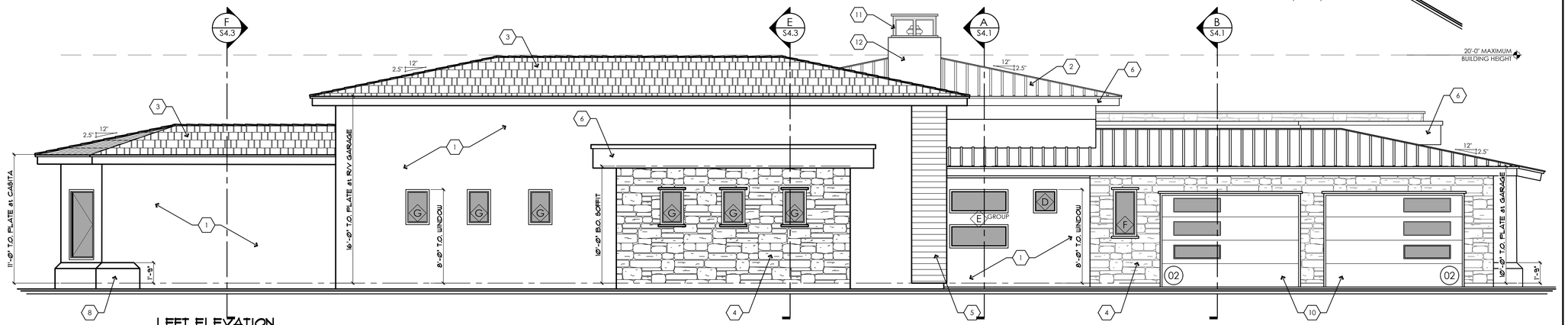
◆ WINDOW DETAILS

REVISIONS:
△
△
△

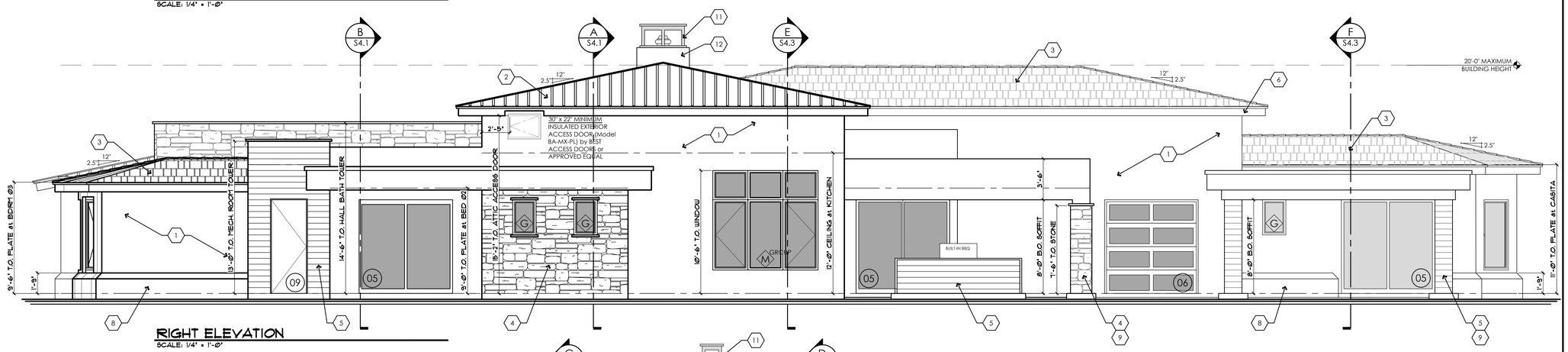
SCALE: AS NOTED	JOB #: 2024-08
DRAWN: S.L.Z.	CHECKED: S.L.Z.
DATE: 19 MAY 2025	
SHEET: A3.4	



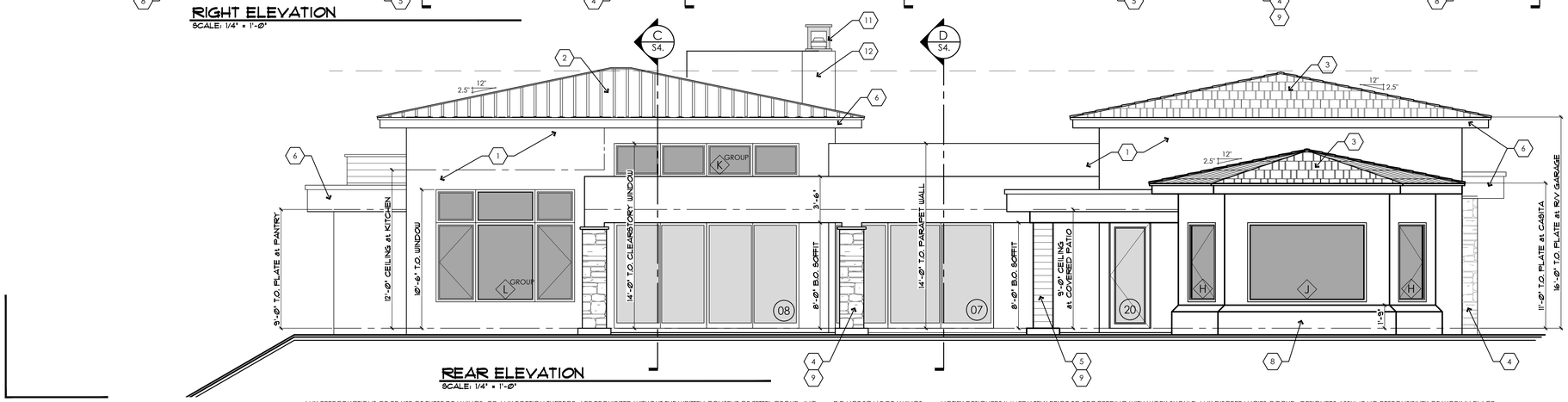
FRONT ELEVATION
SCALE: 1/4" = 1'-0"



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



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



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

KEYNOTE LEGEND

NOTE: NOT ALL KEYNOTES USED ON THIS SHEET

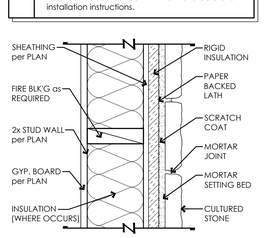
1. DASH FINISH STUCCO (COLOR per OWNER SELECTION) - INSTALL per MANUF. SPECS (ICC-ER #1194) - USE 90 DEGREE CORNER CHANNEL for ALL EXTERIOR STUCCO CORNERS
2. STANDING SEAM METAL ROOFING (COLOR per OWNER SELECTION) - INSTALL per MANUF. SPECS (ICC-ER #ESR-2048)
3. CONCRETE ROOF TILE (ICC-ER #1215) o/ TWO LAYERS of 30lb FELT o/ SHEATHING o/ PRE-MFG'd ROOF TRUSSES at 24" O.C.
4. CULTURED STONE VENEER per OWNER SELECTION - ICC-ER #4147 - INSTALL per MANUF. SPECS. - REFER to DETAIL on SHEET A4.1.
5. 6" WIDE ELONGATED EXTERIOR TILE VENEER o/ STUCCO per OWNER SELECTION - INSTALL per MANUF. SPECS. - REFER to DETAIL on SHEET A4.1.
6. WOOD FRAMED and STUCCO WRAPPED FASCIA
7. WOOD FRAMED and STUCCO WRAPPED TRIM
8. WOOD FRAMED and STUCCO WRAPPED NON-STRUCTURAL POP-OUT
9. WOOD FRAMED and STUCCO WRAPPED COLUMN
10. INSULATED OVERHEAD SECTIONAL GARAGE DOOR w/ TINTED TEMPERED GLASS PANELS
11. CUSTOM CHIMNEY CAP (www.chimneyking.com OR OWNER APPROVED EQUAL)

    R1004.3 Decorative shrouds.
    Decorative shrouds shall not be installed at the termination of chimneys for factory-built fireplaces except where the shrouds are listed and labeled for use with the specific factory-built fireplace system, and installed in accordance with the manufacturer's instructions.

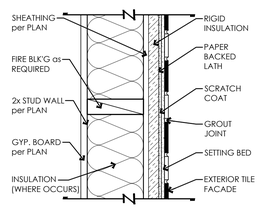
    R1005.2 Decorative shrouds.
    Decorative shrouds shall not be installed at the termination of factory-built chimneys except where the shrouds are listed and labeled for use with the specific factory-built chimney system and installed in accordance with the manufacturer's installation instructions.
12. WOOD FRAMED and STUCCO WRAPPED CHIMNEY w/ APPROVED SPARK ARRESTOR - INSTALL 2'-0" ABOVE the HIGHEST POINT WITHIN a 10'-0" RADIOUS - **MUST BE UL LISTED**

    R1005.4 Factory-built fireplaces.
    Chimneys for use with factory-built fireplaces shall comply with the requirements of UL 127.

    R1005.8 Insulation shield.
    Where factory-built chimneys pass through insulated assemblies, an insulation shield constructed of steel having a thickness of not less than 0.0187 inch (0.4712 mm) (No. 26 gage) shall be installed to provide clearance between the chimney and the insulation material. The clearance shall be not less than the clearance to combustibles specified by the chimney manufacturer's installation instructions. Where chimneys pass through attic space, the shield shall terminate not less than 2 inches (51 mm) above the insulation materials and shall be secured in place to prevent displacement. Insulation shields provided as part of a listed chimney system shall be installed in accordance with the manufacturer's installation instructions.



CULTURED STONE INSTALLATION DETAIL
NOT TO SCALE



EXTERIOR TILE FACADE INSTALLATION DETAIL
NOT TO SCALE

REFER to BUILDING SECTIONS for ADDITIONAL PLATE / CEILING HEIGHT INFORMATION

(01) DOOR TAG
REFER to SHEET A3.3 for ADDITIONAL INFORMATION

(A) WINDOW TAG
REFER to SHEET A3.4 for ADDITIONAL INFORMATION

NOTE:
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Tract 2389 Lot 08

◆ EXTERIOR ELEVATIONS

REVISIONS:
△
△
△

SCALE: 1/4" = 1'-0"
JOB #: 2024-08
DRAWN: S.L.Z./S.I.Z.
CHECKED: S.L.Z.
DATE: 4 APRIL 2025
SHEET: A4.1

ELECTRICAL SYMBOL LEGEND
NOT ALL SYMBOLS MAY USED

- SURFACE MOUNTED CEILING LIGHT FIXTURE
- PENDANT LIGHT FIXTURE
- RECESSED CAN LIGHT FIXTURE
- M/C — MINI RECESSED CAN LIGHT FIXTURE
- 1'x4' SURFACE MOUNTED LED LIGHT FIXTURE
- VP — VAPOR PROOF RECESSED LIGHT FIXTURE
- EXHAUST FAN - 50 CFM MIN - VENTED TO OUTSIDE
- EXHAUST FAN - 50 CFM MIN - VENTED to OUTSIDE VAPOR PROOF LENSE & GFI at SHOWERS
- CEILING FAN
- SD — SMOKE DETECTOR (CLG MOUNT) 3' FROM R/A and CEILING FANS
- CM — CARBON MONOXIDE DETECTOR

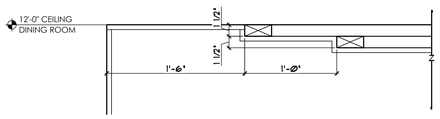
NOTE:
REFER to SHEET A6.2 for ADDITIONAL ELECTRICAL, MECHANICAL and PLUMBING REQUIREMENTS

2018 INT'L MECHANICAL CODE REQUIREMENTS:
307.2.4.1 Ductless mini-split system traps.
Ductless mini-split equipment that produces condensate shall be provided with an inline check valve located in the drain lone, or a trap.

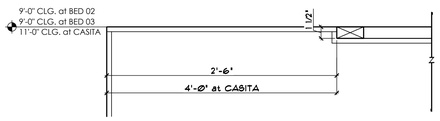
2018 INT'L PLUMBING CODE REQUIREMENTS:
308.10 Thermal expansion tanks.
A thermal expansion tank shall be supported in accordance with the manufacturer's instructions. Thermal expansion tanks shall not be supported by the piping that connects to such tanks.

2018 INT'L RESIDENTIAL CODE REQUIREMENTS:
N1104.1 (R404.1) Lighting equipment (Mandatory).
Not less than 90 percent of the permanently installed lighting fixtures shall contain only high-efficacy lamps.

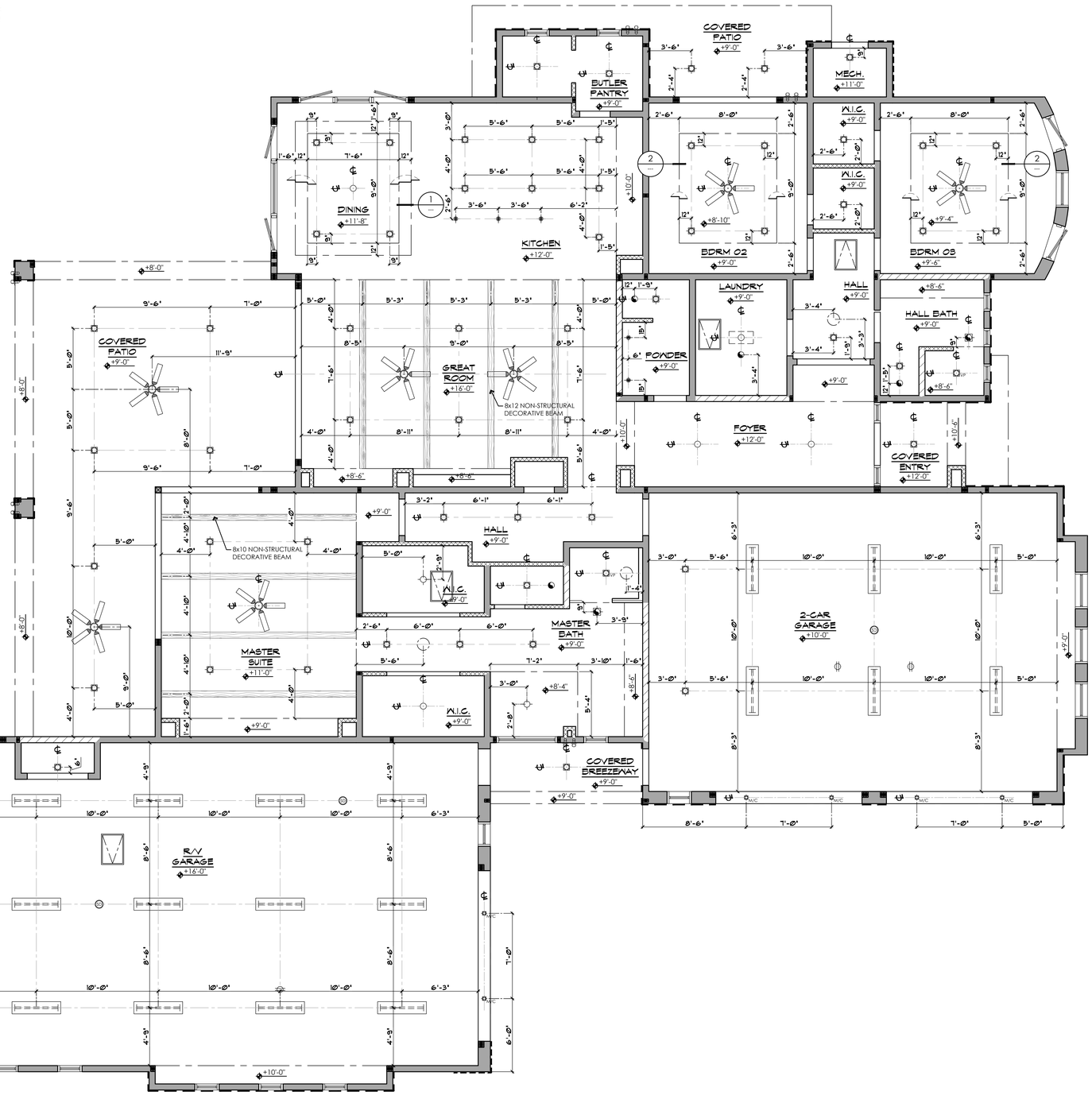
2018 INT'L RESIDENTIAL CODE REQUIREMENTS:
R1005.8 Insulation shield.
Where factory-built chimneys pass through insulated assemblies, an insulation shield constructed of steel having a thickness of not less than 0.0187 inch (0.4712 mm) (No. 26 gage) shall be installed to provide clearance between the chimney and the insulation material. The clearance shall be not less than the clearance to combustibles specified by the chimney manufacturer's installation instructions. Where chimneys pass through attic space, the shield shall terminate not less than 2 inches (51 mm) above the insulation materials and shall be secured in place to prevent displacement. Insulation shields provided as part of a listed chimney system shall be installed in accordance with the manufacturer's installation instructions.



1 SOFFIT at DINING ROOM
NOT to SCALE



2 SOFFIT at GUEST SUITES 2 and 3
NOT to SCALE



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CONTRACTOR:

PROJECT:
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Tract 2389 Lot 08

◆ REFLECTED CEILING PLAN

REVISIONS:
1.
2.
3.

SCALE: 1/4" = 1'-0"	JOB #: 2024-08
DRAWN: S.L.Z./S.I.Z.	CHECKED: S.L.Z.
DATE: 04 APRIL 2025	
SHEET: A5.1	

REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0"

NOTE:
ARCHITECTURAL PLANS SHALL CONFORM w/ 2018 INTERNATIONAL RESIDENTIAL CODE and ALL CURRENT GOVERNING CODES.

ELECTRICAL SYMBOL LEGEND

NOT ALL SYMBOLS MAY USED

- SURFACE MOUNTED CEILING LIGHT FIXTURE
- PENDANT LIGHT FIXTURE
- RECESSED CAN LIGHT FIXTURE
- M/C — MINI RECESSED CAN LIGHT FIXTURE
- WALL MOUNTED LIGHT FIXTURE
- UNDER CABINET L.E.D. TASK LIGHT
- 1'x4' SURFACE MOUNTED LED LIGHT FIXTURE
- P — PHOTO CELL WALL LIGHT FIXTURE
- VP — VAPOR PROOF RECESSED LIGHT FIXTURE
- EXHAUST FAN - 50 CFM MIN - VENTED TO OUTSIDE
- EXHAUST FAN - 50 CFM MIN - VENTED to OUTSIDE VAPOR PROOF LENSE & GFCI at SHOWERS
- CEILING FAN
- RECESSED STEP LIGHT
- SD — SMOKE DETECTOR (CLG MOUNT) 3' FROM R/A and CEILING FANS
- CM — CARBON MONOXIDE DETECTOR
- SINGLE SWITCH
- 3 — 3-WAY SWITCH
- WP 3 — WEATHER PROOF SWITCH
- DS — AUTOMATIC DOOR SWITCH
- 110v DUPLEX OUTLET
- 110v DUPLEX OUTLET - HIDDEN
- 110v DUPLEX OUTLET - HALF HOT
- 220v OUTLET
- GFI — GROUND FAULT INTERRUPT OUTLET
- GFI WP — GROUND FAULT INTERRUPT OUTLET - WEATHER PROOF
- DUPLEX OUTLET - FLOOR MOUNTED
- J — JUNCTION BOX
- AC — 220v CIRCUIT for HVAC
- GAS or LP VALVE
- HOSE BIBB w/ SHUT OFF / BUBBLER "T"

NOTE:
REFER to SHEET A6.2 for ADDITIONAL ELECTRICAL, MECHANICAL and PLUMBING REQUIREMENTS

2018 INT'L RESIDENTIAL CODE REQUIREMENTS:

R1005.8 Insulation shield.
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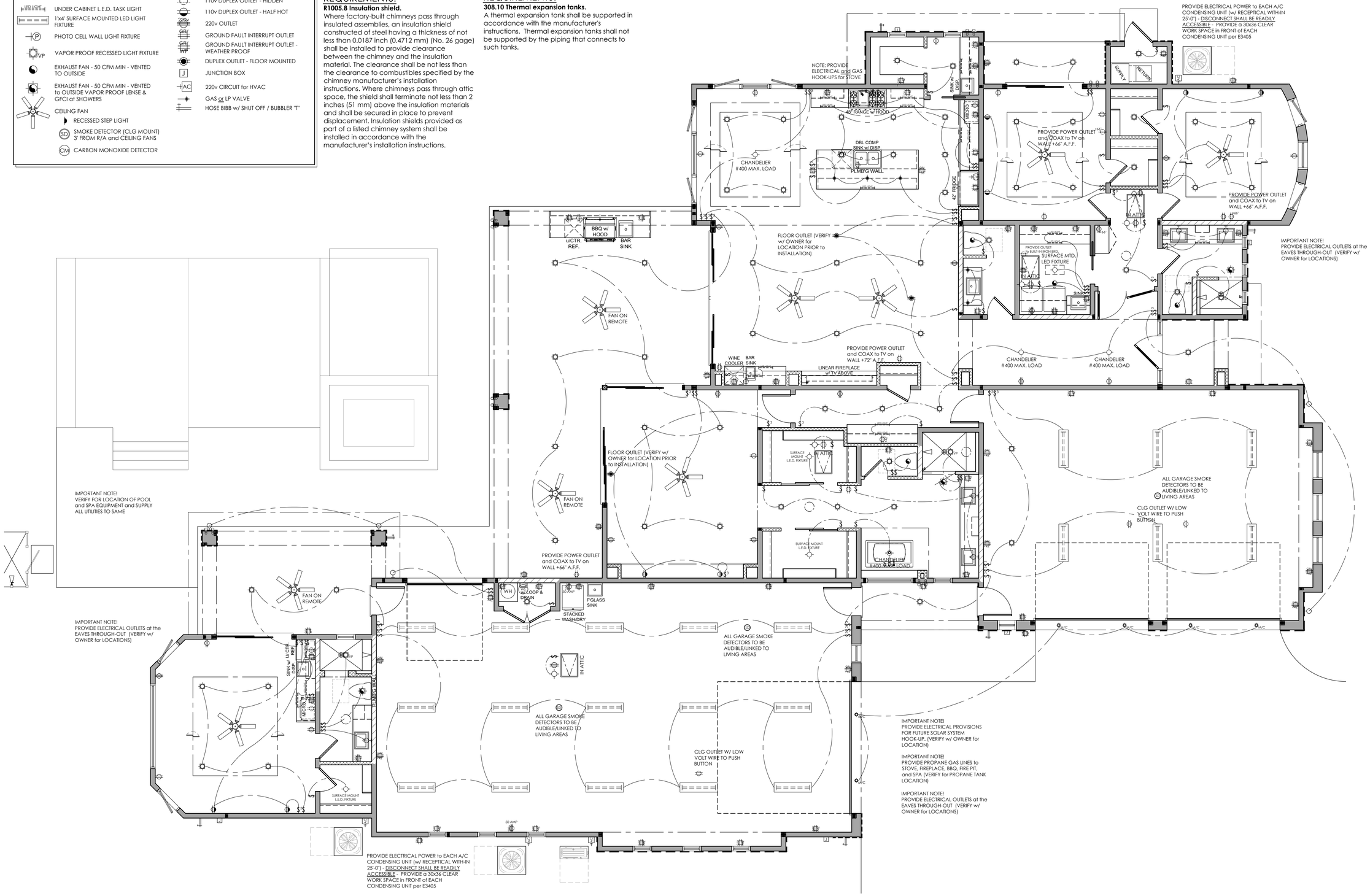

ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"

NOTE:
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Tract 2389 Lot 08

◆ELECTRICAL PLAN

REVISIONS:
△
△
△

SCALE: 1/4" = 1'-0"	JOB #: 2024-08
DRAWN: S.L.Z./S.I.Z.	CHECKED: S.L.Z.
DATE: 04 APRIL 2025	
SHEET: A6.1	

2018 IRC MECHANICAL REQUIREMENTS:

M1411.8 Locking access port caps.
Refrigerant circuit access ports located outdoors shall be fitted with locking-type tamper-resistant caps or shall be otherwise secured to prevent unauthorized access.

M1502.3 Duct termination.
Exhaust ducts shall terminate on the outside of the building. Exhaust duct terminations shall be in accordance with the dryer manufacturer's installation instructions. If the manufacturer's instructions do not specify a termination location, the exhaust duct shall terminate not less than 3 feet (914 mm) in any direction from openings into buildings. Exhaust duct terminations shall be equipped with a backdraft damper. Screens shall not be installed at the duct termination.

M1502.3.1 Exhaust termination outlet and passageway size.
The passageway of dryer exhaust duct terminals shall be undiminished in size and shall provide an open area of not less than 12.5 square inches (8065 mm2).

M1502.4.2 Duct installation.
Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation. *(Note: Dryer ducts shall be no less than 4 inches in diameter; therefore, they shall be installed in a wall space greater than 4 inches in width.)*

M1502.4.6 Length identification.
Where the exhaust duct equivalent length exceeds 35 feet (10 668 mm), the equivalent length of the exhaust duct shall be identified on a permanent label or tag. The label or tag shall be located within 6 feet (1829 mm) of the exhaust duct connection. *(Note: Duct labeling is no longer required unless the equivalent duct length exceeds 35 feet as allowed by M1502.4.5.2 and M1502.4.5.3)*

M1503.6 Makeup air required.
Where one or more gas, liquid or solid fuel-burning appliance that is neither direct-vent nor uses a mechanical draft venting system is located within a dwelling unit's air barrier, each exhaust system capable of exhausting in excess of 400 cubic feet per minute (0.19 m3/s) shall be mechanically or passively provided with makeup air at a rate approximately equal to the exhaust air rate. Such makeup air systems shall be equipped with not fewer than one damper complying with Section M1503.6.2. *(Note: Make-up air for exhaust systems in excess 400 CFM is no longer required unless natural draft appliances are provided in the residence.)*

2018 INT'L PLUMBING CODE REQUIREMENTS:

308.10 Thermal expansion tanks.
A thermal expansion tank shall be supported in accordance with the manufacturer's instructions. Thermal expansion tanks shall not be supported by the piping that connects to such tanks.

2018 INT'L MECHANICAL CODE REQUIREMENTS:

307.2.4.1 Ductless mini-split system traps.
Ductless mini-split equipment that produces condensate shall be provided with an inline check valve located in the drain lone, or a trap.

2018 INT'L RESIDENTIAL CODE REQUIREMENTS:

R1005.8 Insulation shield.
Where factory-built chimneys pass through insulated assemblies, an insulation shield constructed of steel having a thickness of not less than 0.0187 inch (0.4712 mm) (No. 26 gage) shall be installed to provide clearance between the chimney and the insulation material. The clearance shall be not less than the clearance to combustibles specified by the chimney manufacturer's installation instructions. Where chimneys pass through attic space, the shield shall terminate not less than 2 inches (51 mm) above the insulation materials and shall be secured in place to prevent displacement. Insulation shields provided as part of a listed chimney system shall be installed in accordance with the manufacturer's installation instructions.

2018 INT'L RESIDENTIAL CODE REQUIREMENTS:

N1104.1 (R404.1) Lighting equipment (Mandatory).
Not less than 90 percent of the permanently installed lighting fixtures shall contain only high-efficacy lamps.

2018 INT'L RESIDENTIAL CODE REQUIREMENTS:

R702.3.7 Water-resistant gypsum backing board.
Gypsum board used as the base or backer for adhesive application of ceramic tile or other required nonabsorbent finish material shall conform to ASTM C1178, C1278 or C1396. Use of water-resistant gypsum backing board shall be permitted on ceilings. Water-resistant gypsum board shall not be installed over a Class I or II vapor retarder in a shower or tub compartment. Cut or exposed edges, including those at wall intersections, shall be sealed as recommended by the manufacturer.

R702.3.7.1 Limitations.
Water-resistant gypsum backing board 1shall not be used where there will be direct exposure to water, or in areas subject to continuous high humidity.

R702.4.2 Backer boards.
Materials used as backers for wall tile in tub and shower areas and wall panels in shower areas shall be of materials listed in Table R702.4.2, and installed in accordance with the manufacturer's recommendations.

2018 IRC ELECTRICAL REQUIREMENTS:

E3703.5 Garage branch circuits.
Not less than one 120-volt, 20-ampere branch circuit shall be installed to supply receptacle outlets in attached garages and in detached garages with electric power. This circuit shall not have other outlets.
Exception: This circuit shall be permitted to supply readily accessible outdoor receptacle outlets.

E3902.8 Bathtub or shower stall receptacles.
125-volt, single phase, 15- and 20-ampere receptacles that are located within 6 feet (1829 mm) of the outside edge of a bathtub or shower stall shall have ground-fault circuit-interrupter protection for personnel. [210.8(A)(8)]

E3902.9 Laundry areas.
125-volt, single-phase, 15- and 20-ampere receptacles installed in laundry areas shall have ground-fault circuit-interrupter protection for personnel. [210.8(A)(9)]

E3902.10 Kitchen dishwasher branch circuit.
Ground-fault circuit-interrupter protection shall be provided for outlets that supply dishwashers in dwelling unit locations. [210.8(D)]

E3902.16 Arc-fault circuit-interrupter protection.
Branch circuits that supply 120-volt, single-phase, 15- and 20-ampere outlets installed in kitchens, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreations rooms, closets, hallways, laundry areas and similar rooms or areas shall be protected by any of the following: [210.12(A)]

1. A listed combination-type arc-fault circuit interrupter, installed to provide protection of the entire branch circuit. [210.12(A)(1)]

2. A listed branch/feeder-type AFCI installed at the origin of the branch-circuit in combination with a listed outlet branch-circuit-type arc-fault circuit interrupter installed at the first outlet box on the branch circuit. The first outlet box in the branch circuit shall be marked to indicate that it is the first outlet of the circuit. [210.12(A)(2)]

3. A listed supplemental arc-protection circuit breaker installed at the origin of the branch circuit in combination with a listed outlet branch-circuit-type arc-fault circuit interrupter installed at the first outlet box on the branch circuit where all of the following conditions are met:
   3.1. The branch-circuit wiring shall be continuous from the branch-circuit over-current device to the outlet branch-circuit arc-fault circuit interrupter.
   3.2. The maximum length of the branch-circuit wiring from the branch-circuit over-current device to the first outlet shall not exceed 50 feet (15.2 m) for 14 AWG conductors and 70 feet (21.3 m) for 12 AWG conductors.
   3.3. The first outlet box on the branch circuit shall be marked to indicate that it is the first outlet on the circuit. [210.12(A)(3)]

4. A listed outlet branch-circuit-type arc-fault circuit interrupter installed at the first outlet on the branch circuit in combination with a listed branch-circuit over-current protective device where all of the following conditions are met:
   4.1. The branch-circuit wiring shall be continuous from the branch-circuit over-current device to the outlet branch-circuit arc-fault circuit interrupter.
   4.2. The maximum length of the branch-circuit wiring from the branch-circuit over-current device to the first outlet shall not exceed 50 feet (15.2 m) for 14 AWG conductors and 70 feet (21.3 m) for 12 AWG conductors.
   4.3. The first outlet box on the branch circuit shall be marked to indicate that it is the first outlet on the circuit.
   4.4. The combination of the branch-circuit overcurrent device and outlet branch-circuit AFCI shall be identified as meeting the requirements for a system combination-type AFCI and shall be listed as such. [210.12(A)(4)]

5. Where metal outlet boxes and junction boxes and RMC, IMC, EMT, Type MC or steel-armored Type AC cables meeting the requirements of Section E3908.8, metal wireways or metal auxiliary gutters are installed for the portion of the branch circuit between the branch-circuit overcurrent device and the first outlet, a listed outlet branch-circuit type AFCI installed at the first outlet shall be considered as providing protection for the remaining portion of the branch circuit. [210.12(A)(5)]

6. Where a listed metal or nonmetallic conduit or tubing or Type MC cable is encased in not less than 2 inches (50.8 mm) of concrete for the portion of the branch circuit between the branch-circuit overcurrent device and the first outlet, a listed outlet branch-circuit-type AFCI installed at the first outlet shall be considered as providing protection for the remaining portion of the branch circuit. [210.12(A)(6)]

   Exception: AFCI protection is not required for an individual branch circuit supplying only a fire alarm system where the branch circuit is wired with metal outlet and junction boxes and RMC, IMC, EMT or steel-sheathed armored cable Type AC or Type MC meeting the requirements of Section E3908.8.

(Note: Arc-fault protection is now required for circuits in kitchens and laundry areas.)

E4001.11.1Faceplate grounding.
Snap switches, including dimmer and similar control switches, shall be connected to an equipment grounding conductor and shall provide a means to connect metal faceplates to the equipment grounding conductor, whether or not a metal faceplate is installed. Metal faceplates shall be grounded. Snap switches shall be considered to be part of an effective ground-fault current path if either of the following conditions is met:

1. The switch is mounted with metal screws to a metal box or metal cover that is connected to an equipment grounding conductor or to a nonmetallic box with integral means for connecting to an equipment grounding conductor.
2. An equipment grounding conductor or equipment bonding jumper is connected to an equipment grounding termination of the snap switch. [404.9(B)]

E4002.14 Tamper-resistant receptacles.
In areas specified in Section E3901.1, 15- and 20-ampere, 125- and 250-volt nonlocking-type receptacles shall be listed tamper-resistant receptacles. [406.12(A)]

Exception: Receptacles in the following locations shall not be required to be tamper resistant;
1. Receptacles located more than 5.5 feet (1676 mm) above the floor.
2. Receptacles that are part of a luminaire or appliance.
3. A single receptacle for a single appliance or a duplex receptacle for two appliances where such receptacles are located in spaces dedicated for the appliances served and, under conditions of normal use, the appliances are not easily moved from one place to another. The appliances shall be cord-and-plug-connected to such receptacles in accordance with Section E3909.4. [406.12(A) Exception]

GENERAL ELECTRICAL NOTES:

1. Electrical plan is strictly diagrammatic. Contractor to obtain engineering when requested by local building officials. all work must conform to the latest IBC, IRC, plumbing, mechanical and electrical codes.
2. Provide electrical service w/ 26' copper ground embedment w/ 2" concrete cover. Provide water bond near bottom of footing (MIN. 4" AWG.)
3. Provide electrical service to HVAC unit(s). Verify location w/ contractor.
4. Pre-wire all ceiling fans as shown.
5. Plumb for natural gas (if used) for water heater. Raise fixture 18" from floor and provide vehicle barrier.
6. Smoke detector to be placed 3'-0" MIN. from return air, A/C vents and ceiling fans.
7. Verify w/ owner and/or contractor for:
   7.1. Preferred locations for T.V. and phone outlets.
   7.2. Any changes to the electrical layout.
8. Verify w/ owner and/or contractor for any additional amenities.
9. Provide switched outlets along perimeter of roof line for Christmas lights.
10. Provide GFCI protection and bonding of metal parts at all vapor proof light fixtures.

R314.3 Smoke Alarm Location.
Smoke alarms shall be installed in the following locations:

1. In each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
3. On each additional story of the dwelling, including basements and habitable attics and not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.
4. Smoke alarms shall be installed not less than 3 feet (914 mm) horizontally from the door or opening of a bathroom that contains a bathtub or shower unless this would prevent placement of a smoke alarm required by this section.

R314.3.1Installation near cooking appliances.
Smoke alarms shall not be installed in the following locations unless this would prevent placement of a smoke alarm in a location required by Section R314.3.

1. Ionization smoke alarms shall not be installed less than 20 feet (6096 mm) horizontally from a permanently installed cooking appliance.
2. Ionization smoke alarms with an alarm-silencing switch shall not be installed less than 10 feet (3048 mm) horizontally from a permanently installed cooking appliance.
3. Photoelectric smoke alarms shall not be installed less than 6 feet (1828 mm) horizontally from a permanently installed cooking appliance.

R314.5 Combination alarms.
Combination smoke and carbon monoxide alarms shall be permitted to be used in lieu of smoke alarms.

R315.1 General.
Carbon monoxide alarms shall comply with Section R315.

R315.1.1 Listings.
Carbon monoxide alarms shall be listed in accordance with UL 2034. Combination carbon monoxide and smoke alarms shall be listed in accordance with UL 2034 and UL 217.

R315.2 Where required.
Carbon monoxide alarms shall be provided in accordance with Sections R315.2.1 and R315.2.2.

R315.2.1 New construction.
For new construction, carbon monoxide alarms shall be provided in dwelling units where either or both of the following conditions exist.

1. The dwelling unit contains a fuel-fired appliance.

2. The dwelling unit has an attached garage with an opening that communicates with the dwelling unit.

R315.3 Location.
Carbon monoxide alarms in dwelling units shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms. Where a fuel-burning appliance is located within a bedroom or its attached bathroom, a carbon monoxide alarm shall be installed within the bedroom.

R315.4 Combination alarms.
Combination carbon monoxide and smoke alarms shall be permitted to be used in lieu of carbon monoxide alarms.

2017 NAT'L ELECTRICAL CODE REQUIREMENTS:

406.12 Tamper-resistant receptacles.
All 15- and 20-ampere, 125- and 250-volt non-locking-type receptacles in the areas specified in 406.129(1) - (7) shall be listed tamper-resistant receptacles.
1. Dwelling units in all areas specified in 210.52 and 550.13
2. Guest rooms and guest suites of hotels and motels
3. Child care facilities
4. Preschools and elementary education facilities
5. Business offices, corridors, waiting rooms, and the like in clinics, medical and dental offices and outpatient facilities.
6. Subset if assembly occupancies described in 518.2, to include places of waiting transportation, gymnasiums, skating rinks and auditoriums.
7. Dormitories

(Note: Items 4 through 7 are new requirements for tamper-resistant receptacles.)

NOTE:
ARCHITECTURAL PLANS SHALL CONFORM w/ 2018 INTERNATIONAL RESIDENTIAL CODE and ALL CURRENT GOVERNING CODES.

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CONTRACTOR:

PROJECT:
The KNEER Residence
3018 Camino de la Enclave
Tract 2389 Lot 08

◆GENERAL MECH., ELECTRICAL ◆and PLUMBING NOTES

REVISIONS:
△
△
△

SCALE: NO SCALE	JOB #: 2024-08
DRAWN: S.L.Z./S.I.Z.	CHECKED: S.L.Z.
DATE: 04 APRIL 2025	
SHEET: A6.2	

OPTION:
R806.5 Unvented attic and unvented enclosed rafter assemblies.
Unvented attics and unvented enclosed roof framing assemblies created by ceilings that are applied directly to the underside of the roof framing members and structural roof sheathing applied directly to the top of the roof framing members/rafters, shall be permitted where all the following conditions are met:

1. The unvented attic space is completely within the building thermal envelope.

2. Interior Class I vapor retarders are not installed on the ceiling side (attic floor) of the unvented attic assembly or on the ceiling side of the unvented enclosed roof framing assembly.

3. Where wood shingles or shakes are used, a minimum ¼-inch (6.4 mm) vented airspace separates the shingles or shakes and the roofing underlayment above the structural sheathing.

4. In Climate Zones 5, 6, 7 and 8, any air-impermeable insulation shall be a Class II vapor retarder, or shall have a Class II vapor retarder coating or covering in direct contact with the underside of the insulation.

5. Insulation shall comply with Item 5.3 and either Item 5.1 or 5.2:

5.1. Item 5.1.1, 5.1.2, 5.1.3 or 5.1.4 shall be met, depending on the air permeability of the insulation directly under the structural roof sheathing.

5.1.1. Where only air-impermeable insulation is provided, it shall be applied in direct contact with the underside of the structural roof sheathing.

5.1.2. Where air-permeable insulation is installed directly below the structural sheathing, rigid board or sheet insulation shall be installed directly above the structural roof sheathing in accordance with the R-values in Table R806.5 for condensation control.

5.1.3. Where both air-impermeable and air-permeable insulation are provided, the air-impermeable insulation shall be applied in direct contact with the underside of the structural roof sheathing in accordance with Item 5.1.1 and shall be in accordance with the R-values in Table R806.5 for condensation control. The air-permeable insulation shall be installed directly under the air-impermeable insulation.

5.1.4. Alternatively, sufficient rigid board or sheet insulation shall be installed directly above the structural roof sheathing to maintain the monthly average temperature of the underside of the structural roof sheathing above 45°F (7°C). For calculation purposes, an interior air temperature of 68°F (20°C) is assumed and the exterior air temperature is assumed to be the monthly average outside air temperature of the three coldest months.

5.2. In Climate Zones 1, 2 and 3, air-permeable insulation installed in unvented attics shall meet the following requirements:

5.2.1. An approved vapor diffusion port shall be installed not more than 12 inches (305 mm) from the highest point of the roof, measured vertically from the highest point of the roof to the lower edge of the port.

5.2.2. The port area shall be greater than or equal to 1:600 of the ceiling area. Where there are multiple ports in the attic, the sum of the port areas shall be greater than or equal to the area requirement.

5.2.3. The vapor-permeable membrane in the vapor diffusion port shall have a vapor permeance rating of greater than or equal to 20 perms when tested in accordance with Procedure A of ASTM E96.

5.2.4. The vapor diffusion port shall serve as an air barrier between the attic and the exterior of the building.

5.2.5. The vapor diffusion port shall protect the attic against the entrance of rain and snow.

5.2.6. Framing members and blocking shall not block the free flow of water vapor to the port. Not less than a 2-inch (51 mm) space shall be provided between any blocking and the roof sheathing. Air-permeable insulation shall be permitted within that space.

5.2.7. The roof slope shall be greater than or equal to 3:12 (vertical/horizontal).

5.2.8. Where only air-permeable insulation is used, it shall be installed directly below the structural roof sheathing.

5.2.9. Air-impermeable insulation, if any, shall be directly above or below the structural roof sheathing and is not required to meet the R-value in Table 806.5. Where directly below the structural roof sheathing, there shall be no space between the air-impermeable insulation and air-permeable insulation.

5.2.10. The air shall be supplied at a flow rate greater than or equal to 50 CFM (23.6 L/s) per 1,000 square feet (93 m2) of ceiling. The air shall be supplied from ductwork providing supply air to the occupiable space when the conditioning system is operating. Alternatively, the air shall be supplied by a supply fan when the conditioning system is operating.

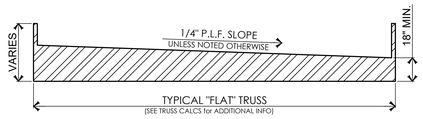
5.3. Where preformed insulation board is used as the air-impermeable insulation layer, it shall be sealed at the perimeter of each individual sheet interior surface to form a continuous layer.

TABLE R806.5 INSULATION for CONDENSATION CONTROL

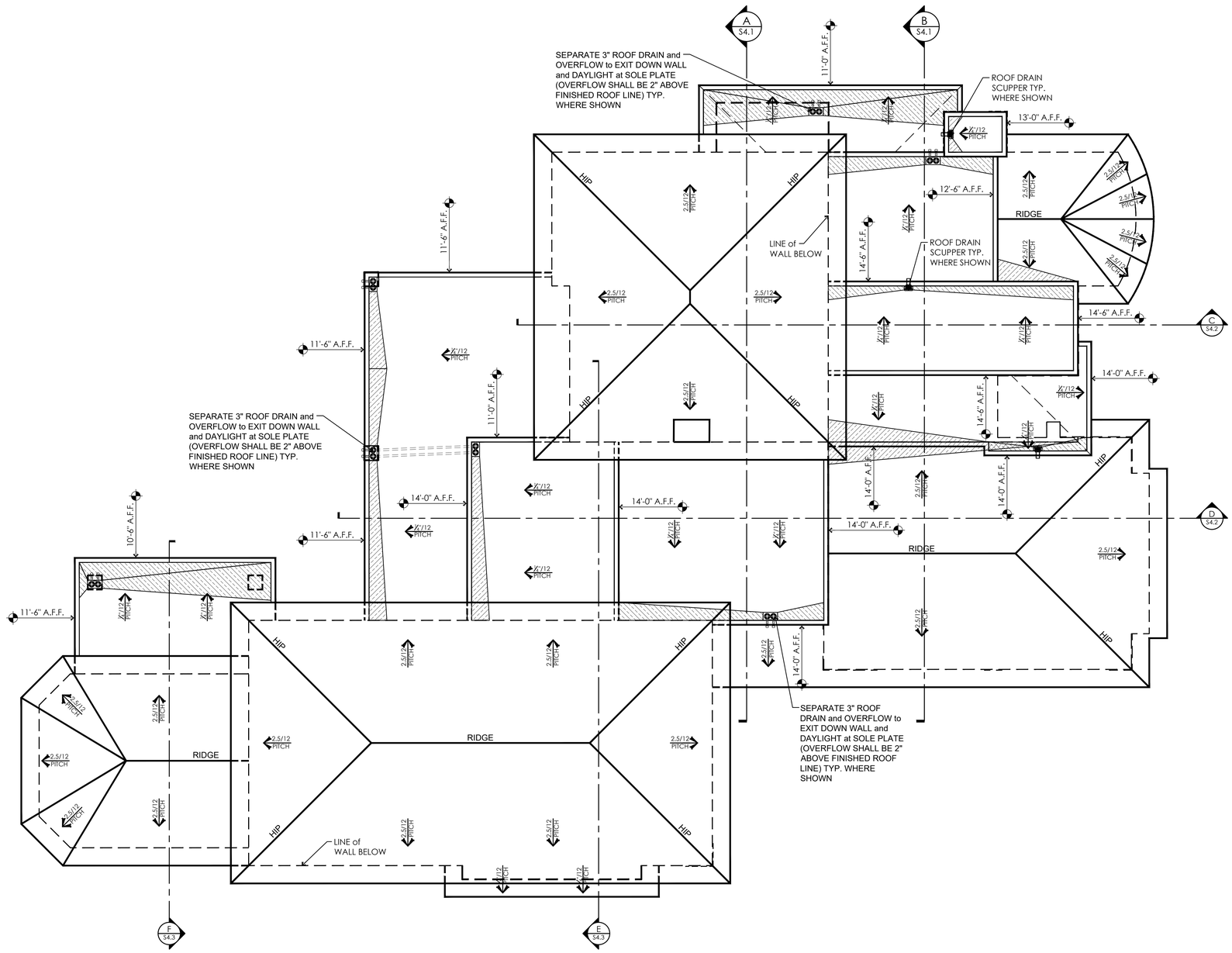
CLIMATE ZONE	MINIMUM RIGID BOARD on AIR-IMPERMEABLE INSULATION R-VALUE [a,b]
2B and 3B tile roof only	0 (none required)
1, 2A, 2B, 3A, 3B, 3C	R-5
4C	R-10
4A, 4B	R-15
5	R-20
6	R-25
7	R-30
8	R-35

a. Contributes to but does not supersede the requirements in Section N1102.

b. Alternatively, sufficient continuous insulation shall be installed directly above the structural roof sheathing to maintain the monthly average temperature of the underside of the structural roof sheathing above 45°F (7°C). For calculation purposes, an interior air temperature of 68°F (20°C) is assumed and the exterior air temperature is assumed to be the monthly average outside air temperature of the three coldest months.



TRUSS NOTES:
- ALL TRUSSES SHALL BE DESIGNED BY a STATE REGISTERED CIVIL ENGINEER as REQ'D.
- ALL TRUSSES SHALL BE 24" O.C. MAX.
- FIELD VERIFY ALL TRUSS SPANS PRIOR to ORDERING and FABRICATION.



ROOF PLAN
SCALE: 3/16" = 1'-0"

NOTE:
ARCHITECTURAL PLANS SHALL CONFORM w/ 2018 INTERNATIONAL RESIDENTIAL CODE and ALL CURRENT GOVERNING CODES.

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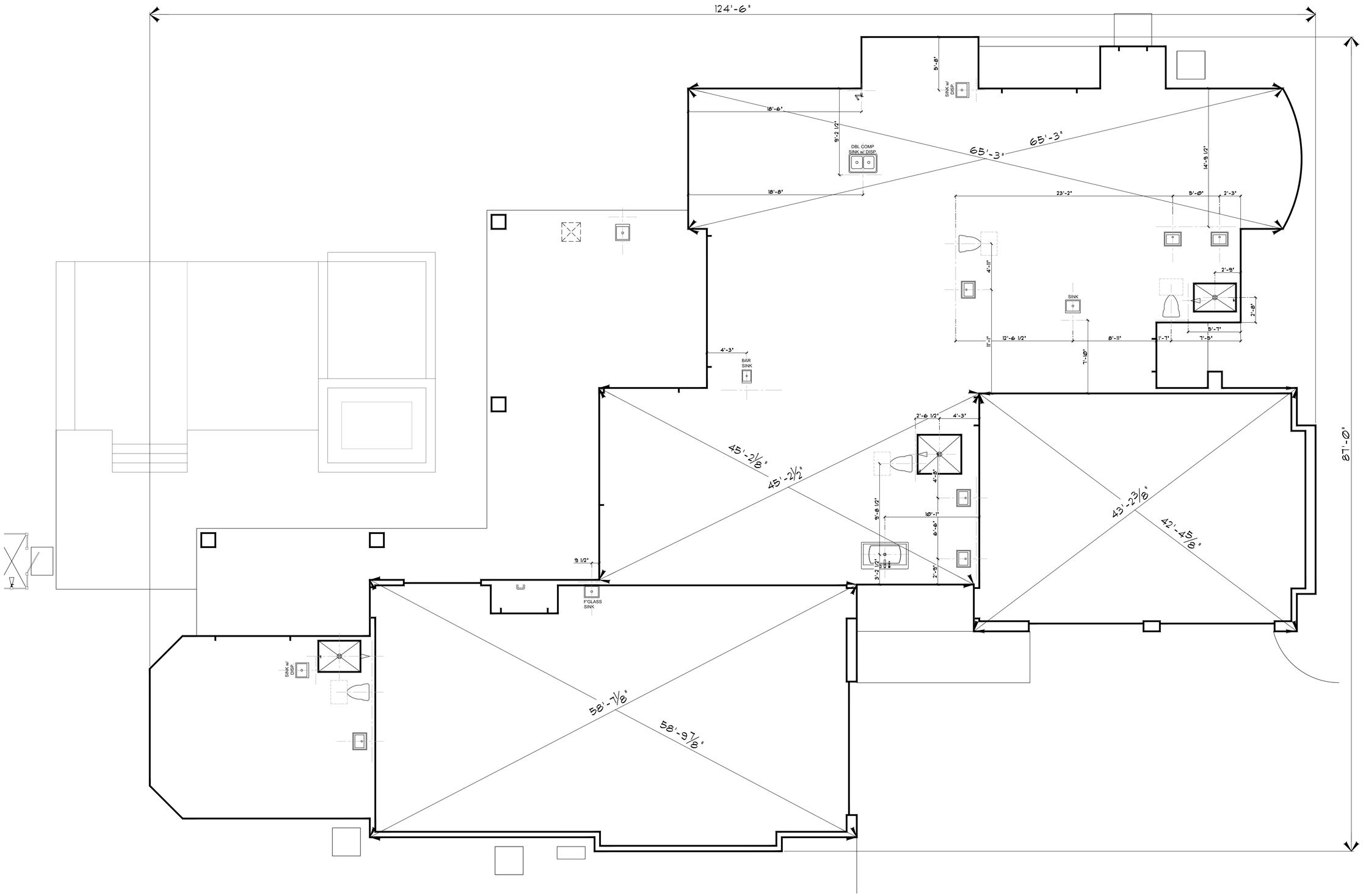
CONTRACTOR:

PROJECT:
The KNEER Residence
3018 Camino de la Enclave
Tract 2389 Lot 08

◆ROOF DRAINAGE PLAN

REVISIONS:
△
△
△

SCALE: 3/16" = 1'-0"
JOB #: 2024-08
DRAWN: S.L.Z./S.I.Z.
CHECKED: S.L.Z.
DATE: 04 APRIL 2025
SHEET A7.1



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

NOTE:
ARCHITECTURAL PLANS SHALL CONFORM w/ 2018 INTERNATIONAL RESIDENTIAL CODE and ALL CURRENT GOVERNING CODES.

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CONTRACTOR:

PROJECT:
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Tract 2389 Lot 08

◆ PLUMBING FIXTURE PLAN

REVISIONS:

SCALE: 1/4" = 1'-0"	JOB #: 2024-08
DRAWN: s.l.z.	CHECKED: S.L.Z.
DATE: 04 APRIL 2025	
SHEET: A8.1	

BASIS OF DESIGN

1. GOVERNING BUILDING CODE ..... 2018 IBC

2. GRAVITY DESIGN:
   - ROOF DEAD LOAD (TILE) ..... 25 PSF
   - ROOF DEAD LOAD (SHINGLES, METAL, MEMBRANE) ..... 20 PSF
   - FLOOR DEAD LOAD ..... 25 PSF
   - FLOOR LIVE LOAD ..... 40 PSF
   - ROOF LIVE LOAD ..... 20 PSF

3. SEISMIC DESIGN:
   - LATERAL SYSTEM ..... SHEAR WALL
   - ZONE C
   - I 1.0
   - S_s=0.189 S_1=0.113 S_{ms}=0.202 S_{m1}=0.179 R=6.5
   - SITE CLASS (ASSUMED) ..... D
   - RISK CATEGORY II

4. WIND DESIGN:
   - BASIC WIND SPEED ..... 99 MPH
   - EXPOSURE C

5. SOILS:
   - SOIL BEARING PRESSURE (ASSUMED PER 2018 IBC 1806.2) ..... 1500 PSF

GENERAL

1. THE GENERAL CONTRACTOR SHALL:

   A. BECOME FAMILIAR WITH ALL PORTIONS OF THE CONTRACT DOCUMENTS AND ENSURE THAT ALL SUBCONTRACTORS ARE FAMILIAR WITH THOSE PORTIONS PERTAINING TO THEIR AREA OF WORK. NO DEVIATIONS WILL BE ALLOWED UNLESS AGREED UPON BY ALL PARTIES IN WRITING PRIOR TO CONSTRUCTION OR FABRICATION.

   B. VERIFY ALL DIMENSIONS AND ELEVATIONS. COORDINATE ALL DOORS, WINDOWS, NON-BEARING INTERIOR AND EXTERIOR WALLS, ELEVATIONS, SLOPES, STAIRS, CURBS, DRAINS, RECESSES, DEPRESSIONS, RAILINGS, WATERPROOFING, FINISHES, CHAMFERS, KERFS, ETC.

   C. FIELD VERIFY ALL SITE CONDITIONS AND IMMEDIATELY NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER REGARDING ACTUAL CONDITIONS AT THE SITE WHICH ARE NOT PER THE DRAWINGS.

   D. COORDINATE ALL WORK BETWEEN THE VARIOUS TRADES AND SUBCONTRACTORS. REPORT ANY MODIFICATIONS TO THE STRUCTURAL PORTION OF THE BUILDING BY OTHER TRADES TO THE ARCHITECT AND STRUCTURAL ENGINEER.

   E. BE RESPONSIBLE FOR SAFETY AND PROTECTION IN AND AROUND THE JOB SITE AND/OR ADJACENT PROPERTIES.

2. CONTRACT DOCUMENTS:

   A. REFER TO THE SPECIFICATIONS FOR INFORMATION NOT COVERED BY THESE GENERAL NOTES OR THE DRAWINGS.

   B. DETAILS, SECTIONS AND NOTES SHOWN ON THE STRUCTURAL DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO ALL SIMILAR SITUATIONS ELSEWHERE, UNLESS NOTED OR SHOWN OTHERWISE.

   C. THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE OVER SHOP DRAWINGS UNLESS SPECIFICALLY NOTED OTHERWISE.

   D. INFORMATION ON DRAWINGS INDICATING EXISTING CONDITIONS IS BASED ON BEST PRESENT KNOWLEDGE, BUT MAY NOT BE ENTIRELY ACCURATE AND MUST BE FIELD VERIFIED.

3. BUILDING CODE COMPLIANCE:

   A. INSPECTION, TESTING, CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE GOVERNING BUILDING CODE AND STANDARDS. ASTM AND IBC DESIGNATIONS SHALL BE AS AMENDED TO LATEST DATE UNLESS NOTED OTHERWISE.

4. COORDINATION:

   A. COORDINATE AND VERIFY ROOF, FLOOR, AND WALL OPENINGS REQUIRED WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND/OR OTHER DRAWINGS PRIOR TO CONSTRUCTION. REPORT OPENINGS REQUIRED WHICH ARE NOT SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW.

   B. COORDINATE ANY CONSTRUCTION SITUATION NOT COVERED BY THESE PLANS, GENERAL NOTES, OR SPECIFICATIONS WITH THE ARCHITECT AND STRUCTURAL ENGINEER.

5. CONSTRUCTION SEQUENCE, SHORING, AND BRACING REQUIREMENTS:

   A. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE METHOD, MEANS, AND SEQUENCE OF ALL STRUCTURAL ERECTION EXCEPT WHEN SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS. HE SHALL PROVIDE TEMPORARY SHORING AND BRACING AS HIS METHOD OF ERECTION REQUIRES TO PROVIDE ADEQUATE VERTICAL AND LATERAL SUPPORT DURING ERECTION. THIS SHORING AND BRACING SHALL REMAIN IN PLACE UNTIL ALL PERMANENT MEMBERS ARE PLACED AND ALL FINAL CONNECTIONS ARE COMPLETED, INCLUDING ALL ROOF AND FLOOR ATTACHMENTS.

   B. SHORING AND SUPPORTING FORM WORK FOR SUSPENDED CONCRETE OR MASONRY MATERIAL SHALL REMAIN IN PLACE AND SHALL NOT BE REMOVED UNTIL THE STRUCTURAL MEMBERS HAVE ACQUIRED SUFFICIENT STRENGTH TO SAFELY SUPPORT THEIR OWN WEIGHT AND ANY ADDITIONAL CONSTRUCTION, STORAGE, AND/OR OTHER LOADS TO WHICH THEY MAY BE SUBJECTED. IN NO CASE SHALL THEY BE REMOVED PRIOR TO 7 DAYS. RE-SHORING SHALL BE IMMEDIATELY INSTALLED UPON REMOVAL OF SUCH FORMS AND SHALL REMAIN IN PLACE UNTIL 28 DAYS AFTER PLACING OF MATERIAL OR UNTIL MATERIAL HAS REACHED ITS 28 DAY DESIGN STRENGTH, WHICHEVER IS LONGER. DO NOT REMOVE LARGE AREAS OF SHORING BEFORE STARTING RE-SHORING PROCEDURES.

   C. NON-BEARING INTERIOR WALLS SHALL BE ADEQUATELY BRACED TO THE STRUCTURE ABOVE WITH ALLOWANCE FOR DEFLECTION OF THE STRUCTURE ABOVE AND/OR BELOW.

   D. BUILDING WALLS WHICH RETAIN EARTH MUST BE BRACED AT THE TOP. DO NOT BACKFILL UNLESS BRACING IS PROVIDED OR UNTIL THE COMPLETE FLOOR OR ROOF SYSTEM IS IN PLACE, TYPICAL, UNLESS NOTED OTHERWISE.

6. OMISSIONS AND/OR CONFLICTS:

   A. OMISSIONS IN AND/OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER AND SHALL BE RESOLVED BY THE SAME BEFORE PROCEEDING WITH ANY WORK INVOLVED.

   B. IN CASE OF CONFLICTS IN THE STRUCTURAL WORK, THE MOST STRINGENT REQUIREMENTS, AS DIRECTED BY THE ARCHITECT AND STRUCTURAL ENGINEER, SHALL BE IMPLEMENTED AT NO ADDITIONAL COST TO THE OWNER.

7. MISCELLANEOUS:

   A. DURING AND AFTER CONSTRUCTION, THE CONTRACTOR AND/OR OWNER SHALL KEEP THE LOADS ON THE STRUCTURE WITHIN THE LIMITS OF THE DESIGN.

   B. OBSERVATION VISITS TO THE SITE BY REPRESENTATIVES OF THE ARCHITECT AND/OR STRUCTURAL ENGINEER SHALL NOT BE CONSTRUED AS INSPECTION NOR APPROVAL OF CONSTRUCTION.

8. SUBMITTALS:

   A. THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION, ERECTION, INSTALLATION, OR OTHERWISE BEING INCORPORATED INTO THE WORK.
   - REINFORCING STEEL SHOP DRAWINGS.
   - STRUCTURAL STEEL SHOP DRAWINGS.
   - ENGINEERED TRUSS DRAWINGS.

   * THESE SUBMITTALS SHALL BE STAMPED BY A PROFESSIONAL ENGINEER CURRENTLY REGISTERED IN THE STATE OF LICENSURE OF THE ENGINEER OF RECORD.

   B. A MINIMUM OF TWO WEEKS SHALL BE ALLOWED FOR THE REVIEW OF ALL SUBMITTALS BY THE ARCHITECT AND STRUCTURAL ENGINEER.

   C. REQUESTS FOR SUBSTITUTIONS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER IN WRITING. REASON(S) FOR THE REQUEST AND COST DIFFERENTIALS SHALL BE INCLUDED IN THE REQUESTS. SUBSTITUTIONS ARE NOT ALLOWED UNLESS APPROVED IN WRITING BY THE ARCHITECT AND STRUCTURAL ENGINEER.

SITE PREPARATION

1. REQUIREMENTS

   A. DO NOT PLACE FOOTINGS OR FOUNDATIONS ON DISTURBED SOILS, UNDOCUMENTED FILL, DEBRIS, FROZEN SOIL, OR IN PONDED WATER.

   B. ALL UNSUITABLE SOILS AND VEGETATION, SUCH AS TOPSOIL, ORGANIC SOILS, UNDOCUMENTED FILL, DISTURBED NATIVE SOILS, AND OTHER DELETERIOUS MATERIALS, SHALL BE REMOVED FROM BELOW FOOTINGS, FOUNDATIONS, AND FLOOR SLABS.

CONCRETE

1. CODES AND STANDARDS:

   A. CONCRETE WORK SHALL COMPLY WITH THE AMERICAN CONCRETE INSTITUTE (ACI) EDITIONS OF:
   - I. ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".
   - II. ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
   - III. ACI 347, "RECOMMENDED PRACTICE FOR CONCRETE FORM WORK".

2. MATERIALS:

   A. CEMENT SHALL CONFORM TO ASTM C150, TYPE II, PORTLAND CEMENT.

   B. HARD ROCK AGGREGATES SHALL CONFORM TO ASTM C33. LIGHTWEIGHT AGGREGATES SHALL CONFORM TO ASTM C330.

   C. WATER SHALL BE POTABLE.

   D. AIR ENTRAINMENT SHALL CONFORM TO ASTM C260.

   E. FLY ASH SHALL CONFORM TO ASTM C618.

   F. CALCIUM CHLORIDE SHALL NOT BE USED.

3. MIX DESIGNS:

   A. ONLY ONE TYPE OF CONCRETE SHALL BE PLACED AT THE SITE AT ANY GIVEN TIME.

   B. A MIX DESIGN THAT PRODUCES THE LOWEST SLUMP COMPATIBLE WITH PROPER PLACEMENT SHALL BE USED, 4" MAXIMUM.

   C. CONCRETE MIXES SHALL CONFORM TO THE FOLLOWING:

TYPE OF CONCRETE MEMBER	MINIMUM STRENGTH AT 28 DAYS (PSI)	MAX. W/C (RATIO)	DRY WEIGHT (PCF)	MAX AGGREGATE SIZE (INCHES)	AIR ENTRAIN-MENT (%)	MIN. CEMENT PER YARD (LBS)
FOOTINGS:	2500	0.50	145	0'-0 3/4"	3 ±-1	517
FOUNDATION WALLS:	2500	0.45	145	0'-0 3/4"	3 ±-1	564
SLAB ON GRADE:						
INTERIOR	2500	0.45	145	0'-0 3/4"	3 ±-1	564
EXTERIOR	2500	0.45	145	0'-0 3/4"	6 ±-1	564
SLABS ON DECK:						
LT. WT.*	2500	0.53	110	0'-0 3/4"	6 ±-1	564
COLUMNS:	2500	0.45	145	0'-0 3/4"	3 ±-1	564
BEAMS:	2500	0.45	145	0'-0 3/4"	3 ±-1	564

   * LT. WT. CONCRETE SHALL HAVE A MIN. SPLITTING TENSILE STRENGTH OF 450 PSI.

   D. LIMIT FLY ASH TO 15% OF THE TOTAL CEMENTITIOUS MATERIAL

   E. PEA GRAVEL AGGREGATE AND/OR PLASTICIZER MAY BE USED IN CONGESTED AREAS WHEN REQUIRED TO PROPERLY FILL ALL VOIDS AND/OR FOR WORKABILITY. (CONTRACTOR'S OPTION).

4. CONSTRUCTION:

   A. CONCRETE SHALL BE PROPERLY VIBRATED DURING PLACEMENT.

   B. PRIOR TO PLACING CONCRETE, CHECK WITH ALL TRADES TO ENSURE PROPER PLACEMENT OF OPENINGS, BLOCK OUTS, SLEEVES, CURBS CONDUITS, BOLTS, INSERTS, EMBEDS, DOWELS, ETC. ANCHOR BOLTS AND DOWELS SHALL BE PLACED PRIOR TO CASTING CONCRETE.

   C. CONSTRUCTION JOINTS AND BULKHEADS SHALL BE FORMED WITH A KEY WAY. ALL CONTACT SURFACES, NEW OR EXISTING, AT CONSTRUCTION JOINTS SHALL BE INTENTIONALLY ROUGHENED PRIOR TO CASTING ADJACENT POUR.

   D. OPENINGS IN FLOORS AND/OR WALLS SHALL HAVE ADDITIONAL REINFORCING AROUND ALL SIDES OF THE OPENING EQUIVALENT TO THE BARS CUT BY THE OPENING WITH HALF ON EACH SIDE OF THE OPENING OR 2-#5 BARS, WHICHEVER IS GREATER, UNLESS NOTED OTHERWISE. BARS PARALLEL TO THE PRINCIPAL REINFORCING SHALL RUN FULL LENGTH OF THE SPAN. BARS IN THE OTHER DIRECTION SHALL RUN 24 INCHES BEYOND THE EDGE OF THE OPENING OR END WITH A STANDARD HOOK. ALSO PROVIDE 2-#5 x 4'-0" DIAGONAL BARS AT EACH CORNER OF EACH OPENING.

   E. NO PENETRATION SHALL BE ALLOWED THROUGH ANY CONCRETE BEAM, JOIST, COLUMN, PIER, OR JAMB WITHOUT THE ARCHITECT'S AND STRUCTURAL ENGINEER'S PRIOR WRITTEN APPROVAL. PENETRATIONS SHALL BE RE-ROUTED AS REQUIRED AT THESE LOCATIONS.

5. FOOTINGS:

   A. FOOTINGS SHALL BEAR ON PROPERLY PREPARED MATERIAL. SEE THE SITE PREPARATION NOTES.

   B. FOOTINGS SHALL BE CENTERED BELOW THE WALL AND/OR COLUMN ABOVE, TYPICAL UNLESS NOTED OTHERWISE.

   C. EXTERIOR FOOTINGS SHALL BEAR BELOW THE EFFECTS OF FROST.

   D. PROVIDE 2x4 BEVELED KEY WAYS IN ALL CONTINUOUS WALL FOOTINGS.

   E. STAGGER FOOTING CONSTRUCTION JOINTS FROM WALL CONSTRUCTION JOINTS ABOVE BY AT LEAST 6 FEET.

   F. REINFORCING IN CONTINUOUS FOOTINGS SHALL BE CONTINUOUS AT CORNERS AND/OR INTERSECTIONS BY PROVIDING PROPER LAP LENGTHS AND/OR CORNER BARS.

   G. NO PENETRATIONS SHALL BE ALLOWED THROUGH ANY CONCRETE FOOTING. WHEN CONFLICTS ARISE BETWEEN UNDERGROUND PLUMBING, UTILITIES, ETC., THE FOOTING SHALL BE STEPPED DOWN BELOW THE CONFLICT AND A CONCRETE WALL, PIER, COLUMN, ETC., SHALL BE EXTENDED TO THE FOOTING AS REQUIRED.

   H. BEARING SURFACES FOR FOOTINGS WHICH ARE, OR BECOME, UNDERMINED DURING CONSTRUCTION SHALL BE BACKFILLED WITH A LEAN-MIX CONCRETE (1000 PSI MIN.).

6. SLABS ON GRADE:

   A. INTERIOR SLABS ON GRADE SHALL BE A MINIMUM OF 4 INCHES THICK, SHALL BEAR ON A 4 INCH MINIMUM LAYER OF FREE-DRAINING GRAVEL, AND SHALL BE REINFORCED WITH #4 BARS AT 24" O.C. BOTH WAYS, TYPICAL UNLESS NOTED OTHERWISE. PROVIDE CHAIRS WITH SAND PLATES FOR PROPER PLACEMENT.

   B. LARGE AREAS OF INTERIOR SLABS ON GRADE SHALL BE PLACED IN STRIPS NOT TO EXCEED 120 FEET IN LENGTH NOR 30 FEET IN WIDTH WHICH ARE SUBDIVIDED BY CONSTRUCTION AND/OR CONTRACTION (CONTROL) JOINTS INTO ROUGHLY SQUARES WHOSE SIDES SHALL NOT EXCEED 15 FEET IN EITHER DIRECTION.

   C. SEE ARCHITECTURAL FOR EXTERIOR SLABS ON GRADE, TYPICAL, UNLESS NOTED OTHERWISE.

MASONRY VENEER ANCHOR TIES

1. PRODUCTS:

   A. MASONRY VENEER ANCHOR TIES SHALL BE ONE OF THE FOLLOWING:
   - I. DOVETAIL ANCHORS.
   - II. DX-10 SEISMIC CLIP INTERLOCK SYSTEM BY HOHMANN & BARNARD.
   - III. ARCHITECT AND STRUCTURAL ENGINEER APPROVED TWO PIECE ADJUSTABLE HOT-DIPPED GALVANIZED TIES.

2. INSTALLATION:

   A. MAXIMUM SPACING SHALL BE 16" O.C. HORIZONTAL AND VERTICAL.

   B. PROVIDE CONTINUOUS HORIZONTAL GALVANIZED #9 WIRE IN CENTER THIRD OF MORTAR JOINTS AT 16" O.C. ENGAGE #9 WIRE WITH ALL ANCHOR TIES.

   C. CONSTRUCTION JOINTS IN MASONRY VENEER WALLS SHALL BE PROVIDED AS PER THE ARCHITECTURAL DRAWINGS, AND SHALL BE SPACED AT A MAXIMUM OF 15'-0" O.C. FOR MASONRY BLOCK VENEER.

REINFORCING STEEL

1. CODES AND STANDARDS:

   A. REINFORCING STEEL SHALL COMPLY WITH:
   - I. AMERICAN CONCRETE INSTITUTE BUILDING CODE & COMMENTARY ACI 318.
   - II. AMERICAN CONCRETE INSTITUTE "DETAILING MANUAL", ACI 315 (OR SP-66).

2. MATERIALS:

   A. REINFORCING STEEL SHALL BE NEW STOCK DEFORMED BARS AND SHALL CONFORM TO ASTM A615, GRADE 60, WITH A DESIGN YIELD STRENGTH OF 60,000 PSI, EXCEPT AS NOTED BELOW.
   - I. DOWELS TO BE BENT IN THE FIELD DURING CONSTRUCTION SHALL BE ASTM A615, GRADE 40 OR ASTM A706, GRADE 60, "LOW-ALLOY STEEL".
   - II. REINFORCING TO BE WELDED SHALL BE ASTM A706, GRADE 60, "LOW-ALLOY STEEL".

   B. MASONRY JOINT REINFORCING SHALL BE MANUFACTURED FROM WIRE WHICH CONFORMS TO ASTM A82.

3. CONSTRUCTION:

   A. REINFORCING SHALL BE DETAILED, BOLSTERED, AND SUPPORTED PER ACI 315.

   B. REINFORCING STEEL SHALL BE FREE OF LOOSE, FLAKY RUST, SCALE, GREASE, OIL, DIRT, AND OTHER MATERIALS WHICH MIGHT AFFECT OR IMPAIR BOND.

   C. REINFORCING SHALL BE CONTINUOUS IN WALLS, BEAMS, COLUMNS, SLABS, FOOTINGS, ETC.

   D. SPLICES IN CONTINUOUS REINFORCING SHALL BE MADE IN AREAS OF COMPRESSION AND/OR AT POINTS OF MINIMUM STRESS, TYPICAL UNLESS NOTED OTHERWISE. LAP SPLICES SHALL BE 40 BAR DIAMETERS LONG IN CONCRETE AND 48 BAR DIAMETERS LONG IN MASONRY. MINIMUM LAP SHALL BE 24 INCHES LONG. DOWELS SHALL HAVE A MINIMUM OF 30 BAR DIAMETERS EMBEDMENT. TENSION SPLICES SHALL BE USED IN CONCRETE WHEN SPECIFICALLY NOTED. USE A CLASS B SPLICE. SPLICES IN TOP BARS IN SUSPENDED SLABS AND BEAMS SHALL BE MADE AT MID SPAN. SPLICES IN BOTTOM BARS IN SUSPENDED SLABS AND BEAMS SHALL BE MADE AT SUPPORTS.

   E. BENDS SHALL BE MADE COLD. DO NOT USE HEAT. BENDS SHALL BE DONE IN THE FABRICATOR'S SHOP UNLESS SPECIFICALLY NOTED FOR THE FIELD. DO NOT UN-BEND OR RE-BEND A PREVIOUSLY BENT BAR.

   F. REINFORCING STEEL IN CONCRETE SHALL BE SECURELY ANCHORED AND TIED IN PLACE PRIOR TO PLACING CONCRETE AND SHALL BE POSITIONED WITH THE FOLLOWING MINIMUM CONCRETE COVER:
   - CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH ..... 3"
   - CONCRETE EXPOSED TO EARTH OR WEATHER:
     - #6 AND LARGER ..... 2"
     - #5 AND SMALLER ..... 1 1/2"
   - CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
     - SLABS AND WALLS, #11 AND SMALLER ..... 3/4"
     - BEAMS AND COLUMNS, MAIN REINFORCING OR TIES ..... 1 1/2"
     - SLABS ON GRADE ..... CENTER OF SLAB

   G. REINFORCING STEEL IN MASONRY SHALL BE PLACED PRIOR TO GROUTING AND SHALL BE PLACED, POSITIONED, AND LOCATED ACCORDING TO THE STRUCTURAL DRAWINGS. IT SHALL BE SECURED AGAINST DISPLACEMENT AT INTERVALS NOT TO EXCEED 200 BAR DIAMETERS OR TEN FEET.

   H. NO REINFORCING STEEL SHALL BE WELDED UNLESS SPECIFICALLY NOTED AS SUCH. USE ESO3X ELECTRODES AND ASTM A706 REINFORCING. COMPLY WITH AWS REQUIREMENTS.

   I. EPOXY COATED REINFORCING BARS SHALL BE USED WHEN SPECIFICALLY NOTED. INCREASE LAP SPLICE LENGTHS AS REQUIRED BY THE IBC.

STRUCTURAL STEEL

1. CODES AND STANDARDS:

   A. STRUCTURAL STEEL WORK SHALL COMPLY WITH:
   - I. THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", WITH "COMMENTARY".
   - II. AISC "CODE OF STANDARD PRACTICE" EXCLUDING SECTIONS 1.51, 3.3 (1ST SENTENCE), 4.2, 7.5.4, AND 7.11.5.
   - III. AMERICAN WELDING SOCIETY (AWS) "STRUCTURAL WELDING CODE", EXCLUDING ITEMS CONFLICTING WITH AISC REQUIREMENTS.

2. MATERIALS:

   A. STRUCTURAL STEEL SHAPES SHALL CONFORM TO ASTM A572 GRADE 50 ENHANCED STEEL. STRUCTURAL STEEL PLATES SHALL CONFORM TO ASTM A36.

   B. STRUCTURAL TUBE STEEL SHALL CONFORM TO ASTM A500, GRADE B, WITH A MINIMUM YIELD STRENGTH Fy=46 KSI.

   C. STRUCTURAL PIPE SHALL CONFORM TO ASTM A53, WITH A MINIMUM YIELD STRENGTH Fy=36 KSI.

   D. HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM A325. ALL OTHER BOLTS SHALL CONFORM TO ASTM A307 OR BETTER.

   E. WELDED HEADED ANCHOR STUDS AND HEADED BAR ANCHORS SHALL CONFORM TO THE MANUFACTURER'S SPECIFICATIONS.

3. CONSTRUCTION:

   A. FABRICATION SHALL BE DONE IN AN APPROVED FABRICATOR'S SHOP.

   B. CAMBER IN BEAMS SHALL BE AS INDICATED ON PLANS.

   C. PROVIDE A SHOP COAT OF PAINT ON ALL STEEL ITEMS, EXCEPT AT AREAS OF WELDING AND/OR BOLTING.

   D. USE HIGH STRENGTH (8000 PSI MINIMUM AT 28 DAYS), NON-SHRINK, LIQUID EPOXY GROUT BENEATH ALL STEEL BASE PLATES AND BEARING PLATES. MIX GROUT WITH SAND OR PEA GRAVEL AS RECOMMENDED BY THE MANUFACTURER. PLACE GROUT AS SOON AS STEEL MEMBER HAS BEEN PROPERLY POSITIONED AND ALIGNED.

   E. WHERE STRUCTURAL STEEL WIDE FLANGE, PIPE, OR TUBE SECTIONS ARE EMBEDDED IN CONCRETE OR MASONRY AND REINFORCING BARS BUTT TO IT, DEFORMED BAR ANCHORS OR REINFORCING BARS WITH THE SAME SIZE AND SPACING AS THE ADJACENT REINFORCING BARS, 48 BAR DIAMETERS LONG, SHALL BE WELDED TO THE STRUCTURAL STEEL. THE MANUFACTURER'S WELDING PROCEDURES SHALL BE ADHERED TO.

4. BOLTED CONNECTIONS:

   A. BOLTS SHALL BE 3/4" DIAMETER, UNLESS NOTED OTHERWISE.

   B. BOLT SHALL BE BEARING TYPE CONNECTIONS UNLESS NOTED OTHERWISE.

   C. STEEL TO STEEL BOLTED CONNECTIONS SHALL BE MADE WITH ASTM A325 HIGH STRENGTH BOLTS AND NUTS, UNLESS NOTED OTHERWISE. BOLTS SHALL CARRY THE IDENTIFYING MARK OF THREE (3) RADIAL LINES.

   D. ALL OTHER BOLTED CONNECTIONS SHALL BE MADE WITH BOLTS AND NUTS CONFORMING TO ASTM A307 UNLESS NOTED OTHERWISE, INCLUDING ANCHOR BOLTS.

   E. BOLTED CONNECTIONS SHALL BE TIGHTENED AND SHALL HAVE WASHERS AS REQUIRED BY AISC UNLESS NOTED OTHERWISE.

   F. ENLARGING OF HOLES SHALL BE ACCOMPLISHED BY MEANS OF REAMING. DO NOT USE A TORCH ON ANY BOLT HOLES.

5. WELDED CONNECTIONS:

   A. WELDED CONNECTIONS SHALL BE MADE USING LOW HYDROGEN MATCHING FILLER MATERIAL ELECTRODES, UNLESS NOTED OTHERWISE.

   B. WELDERS SHALL BE CURRENTLY CERTIFIED ACCORDING TO AWS WITHIN THE LAST 12 MONTHS. ALL WELDING PROCEDURES SHALL BE PRE-QUALIFIED. WELDERS SHALL FOLLOW WELDING PROCEDURES.

   C. WELDING AND GAS CUTTING SHALL BE DONE PER AWS.

   D. WELDS SHALL HAVE THE SLAG REMOVED.

GENERAL FRAMING NOTES

1. ALL JOISTS, RAFTERS, POSTS AND HEADERS SHALL BE DOUGLAS FIR LARCH NO.2 OR EQUAL U.N.O. IF TJI'S OR EQUAL ARE USED, THEY MUST BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS. ALSO PROVIDE BRIDGING @ 8' O.C. FOR FLOOR JOISTS.

2. ALL JOISTS AND RAFTERS SHALL HAVE SOLID BLOCKING AT THEIR BEARING POINTS. ROOF JOISTS TO HAVE HURRICANE CLIPS AT 24" O.C. MIN.

3. ALL WOOD/LUMBER PLACED ONTO CONCRETE SHALL BE PRESSURE TREATED OR REDWOOD.

4. ALL WOOD CONNECTIONS MUST CARRY THE CAPACITY OF THE MEMBER, CONTRACTOR IS RESPONSIBLE FOR CONNECTIONS. IF OTHER THAN STANDARD CONNECTIONS ARE REQUIRED, SEE PROJECT ENGINEER FOR ADDITIONAL ASSISTANCE. USE SIMPSON OR EQUAL CONNECTIONS FOR WOOD TO WOOD.

5. ALL COLUMNS SHALL EXTEND DOWN THROUGH THE STRUCTURE TO THE FOUNDATION. ALL COLUMNS SHALL BE BRACED AT ALL FLOOR LEVELS. COLUMNS SHALL BE AS WIDE AS THE MEMBER THEY SUPPORT.

6. ALL EXTERIOR WALLS SHALL BE SHEATHED WITH 3/8" THICK EXP 1 SHEATHING OR EQUAL WITH 8d NAILS @ 6" O.C. EDGES AND @ 12" O.C. IN THE FIELD -- BLOCKED, UNLESS OTHERWISE NOTED.

7. ALL FLOOR SHEATHING TO BE 3/4" THICK T&G SHEATHING GLUED AND NAILED WITH 10d COMMON NAILS OR EQUAL @ 6" O.C. EDGES AND @ 10" O.C. IN THE FIELD.

8. VERIFY ALL BEAM SIZES WITH ENGINEERING SPECIFICATIONS.

9. ALL BEAMS AND HEADERS OVER 48" SHALL BE SUPPORTED BY DOUBLE TRIMMERS UNLESS NOTED OTHERWISE.

10. TRUSS MANUFACTURER SHALL PROVIDE ENGINEERING SPECS. FOR ALL TRUSSES.

11. USE 7/16" O.S.B. OR CDX PLYWOOD SHEATHING WITH
    - 8d NAILS @ 6" O.C. AT EDGES OF ROOF
    - 10d NAILS @ 4" O.C. AT GABLE ENDS
    - SPACE NAILS 12" O.C. ON INTERMEDIATE MEMBERS
    - STAGGER SHEATHING JOINTS
    - PLYWOOD PERP. TO RAFTERS AND TRUSSES

12. SOLID BLOCK BETWEEN TRUSSES. HOLD DOWN EVERY 3RD BLOCK FOR ATTIC VENTILATION.

13. ALL OVER FRAME AREAS TO HAVE FULL ROOF SHEATHING BELOW.

14. PROVIDE SQUASH BLOCKING AT RIM JOIST BELOW ALL POSTS FROM ROOF, HEADER OR BEAM POINT LOADS.

15. PROVIDE DOUBLE FLOOR JOISTS BELOW ALL PARALLEL BEARING WALLS

16. ALL FRAMING LUMBER SHALL BE HEM FIR OR BETTER UNLESS A HIGHER GRADE IS NOTED OTHERWISE.

17. GLULAM BEAMS SHALL BE 24F-V4 DF/DF FOR SINGLE SPANS AND 24F-V8 DF/DF FOR MULTIPLE SPANS, AND CANTILEVERED SPANS.

18. ALL RAFTERS AND JOISTS OVER THREE FEET LONG SHALL BE HANGERED IF NOT SUPPORTED BY BOTTOM BEARING. ALL HANGERS AND OTHER WOOD CONNECTIONS MUST BE DESIGNED TO CARRY THE CAPACITY OF THE MEMBER THAT THEY ARE SUPPORTING.

19. FRAMING CONNECTIONS NOTED ON THE DRAWINGS ARE SIMPSON STRONGTIE OR EQUAL. INSTALL WITH THE CATALOG DESIGNATED CONNECTOR IN EACH HOLE.

20. NO STRUCTURAL MEMBER SHALL BE CUT OR NOTCHED UNLESS SPECIFICALLY SHOWN, NOTED OR APPROVED BY ENGINEER.

21. LAG SCREWS SHALL BE INSERTED IN A DRILLED PILOT HOLE 60%-75% OF THE SHANK DIAMETER BY TURNING WITH A WRENCH, NOT BY DRIVING WITH A HAMMER. ALL NUTS, BOLTS AND LAG SCREWS SHALL BE PROVIDED WITH AN OVERSIZED WASHER.

22. NAILS TO BE COMMON WIRE UNLESS OTHERWISE NOTED

23. ALL BOLT HOLES SHALL BE DRILLED WITH A BIT 1/32" TO 1/16" LARGER THAN THE NOMINAL BOLT DIAMETER.

24. ALL JOINTS IN WALL SHEATHING SHALL OCCUR IN THE MIDDLE OF A PLATE OR BLOCK AND BASED ON EACH SIDE OF THE JOINT WITH EDGE NAILING PER SHEARWALL SCHEDULE.

25. ALL OVER BUILT ROOF RAFTERS SHALL BE BRACED VERTICALLY TO THE TRUSSES BELOW AT 6'-0" O.C. MAXIMUM IN ORDER TO SPREAD THE LOAD EVENLY OVER THE TRUSSES.

26. PROVIDE 1/2" MINIMUM CLEARANCE BETWEEN TOP PLATE OF INTERIOR PARTITIONS AND BOTTOM CHORD OF TRUSSES (TO ENSURE THAT LOADING WILL BE AS DESIGNED).

27. DOUBLE TOP PLATE WITH MINIMUM 48" LAP SPLICE.

28. COLUMNS AND POSTS LOCATED ON CONCRETE OR MASONRY FLOORS OR DECKS EXPOSED TO THE WEATHER OR TO WATER SPLASH OR IN BASEMENTS, AND WHICH SUPPORT PERMANENT STRUCTURES, SHALL BE SUPPORTED BY CONCRETE PIERS OR METAL PEDESTALS PROJECTING ABOVE FLOORS UNLESS APPROVED WOOD OF NATURAL RESISTANCE BO DECAY OR TREATED WOOD IS USED. THE PEDESTALS SHALL PROJECT AT LEAST 6" ABOVE EXPOSED EARTH AND AT LEAST 1" ABOVE SUCH FLOORS.

29. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE IBC, AND LOCAL ORDINANCES.

30. CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO STARTING CONSTRUCTION.

WOOD TRUSS NOTES

1. BOTTOM CHORDS OF TRUSSES, ACTING AS CEILING MEMBERS MUST BE ABLE TO SUPPORT A 10 PSF LIVE LOAD PER IBC REQUIREMENTS.

2. THE TRUSS MANUFACTURERS SHALL BE RESPONSIBLE FOR THE DESIGN AND FABRICATION OF THE PRE-ENGINEERED TRUSSES, AND SHALL DESIGN THE TRUSSES PER ATTACHED ENGINEERING SPECS.

3. THE TRUSSES SHALL BE DESIGNED TO CARRY ANY ADDITIONAL LOADS DUE TO MECHANICAL UNITS, OVERHEAD DOORS, ROOF OVERHOLITS, ETC.

4. THE TRUSSES SHALL ALSO BE DESIGNED PER THE IBC, AND LOCAL ORDINANCES.

5. ALL MEMBERS SHALL BE DESIGNED FOR COMBINED STRESSES, BASED ON THE WORST LOADING CONDITION.

6. THE TRUSS MANUFACTURER SHALL INDICATE PROPER BRACING OF COMPRESSION CHORD MEMBERS @ 6'-0" LONG (OR LONGER), AS WELL AS BRACING FOR TRUSS ERECTION.

7. ALL DIMENSIONS SHALL BE FIELD VERIFIED PRIOR TO FABRICATION.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF THE TRUSSES PER THE TRUSS MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS. NO WEB OR CHORD MEMBERS SHALL BE MODIFIED IN THE FIELD.

9. THE PROJECT ENGINEER, OR ENGINEER OF RECORD, IS NOT RESPONSIBLE FOR THE PRE-ENGINEERED TRUSSES, NOR FOR THE INSTALLATION ETC. OF THE TRUSSES. TRUSS PLANT SHALL PROVIDE LICENSED ENGINEERED PLAN. (CONTRACTOR TO VERIFY TRUSS LAYOUT IS CONSISTENT WITH THESE PLANS. ENGINEER SHOULD BE NO

Shear Wall Schedule[1,3]

Designation	Material	Nailing		8d Nails		Capacity		1/2" Anchor Bolt Spacing	Note
		Edge	Field	Edge	Field	Wind	Seismic		
1	3/8" OSB or CDX plywood	$3^1/_2$"	12"	6"	12"	339	241	32" o.c.	- - -
2	3/8" OSB or CDX plywood	2^{-6}	12"	4"	12"	495	350	24" o.c.	- - -
PF	APA Wood Portal Frame - See Details 38/S2.3 & 15/S1.2								

Notes:
1. Wall studs are to be spaced at 16" o.c. U.N.O.
2. Sheath above and below openings in perforated shear w alls as per the adjacent shear w all designation on each side of the
3. Use (2) king studs at each end of shear panels (Shear Wall Chords) U.N.O.
4. All panel edges shall be blocked w ith 2x or w ider framing w ith edge nailing at all supports and panel edges U.N.O.
5. Where panels are applied on both faces of a w all and nail spacing is less than 6" o.c. on either side, panel joints shall be offset to fall on different framing members.
6. Framing at adjoining panel edges and sill plates shall be 3x or w ider for edge nailing 3" o.c. or less. Nails at adjoining panel edges and into sill plates shall be staggered. (Double 2x framing stitch-nailed w ith staggered 16d nails w ith spacing equal to the shear w all edge nailing is an adequate substitute for 3x framing.)

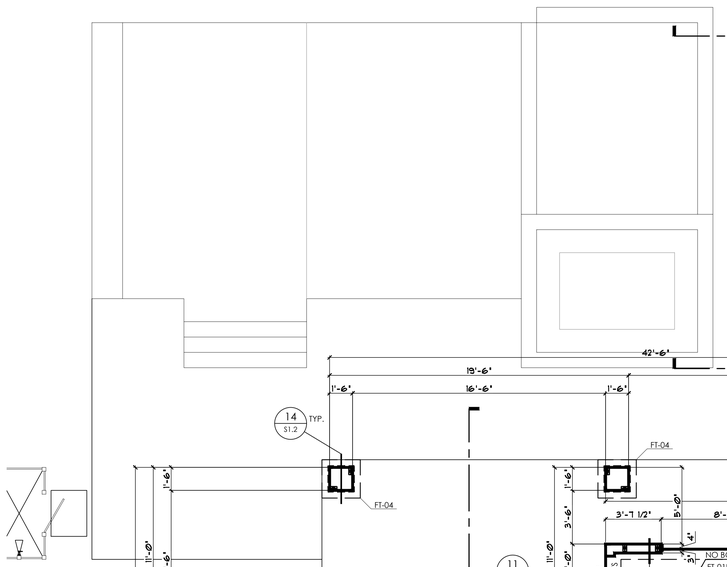
Footing Schedule

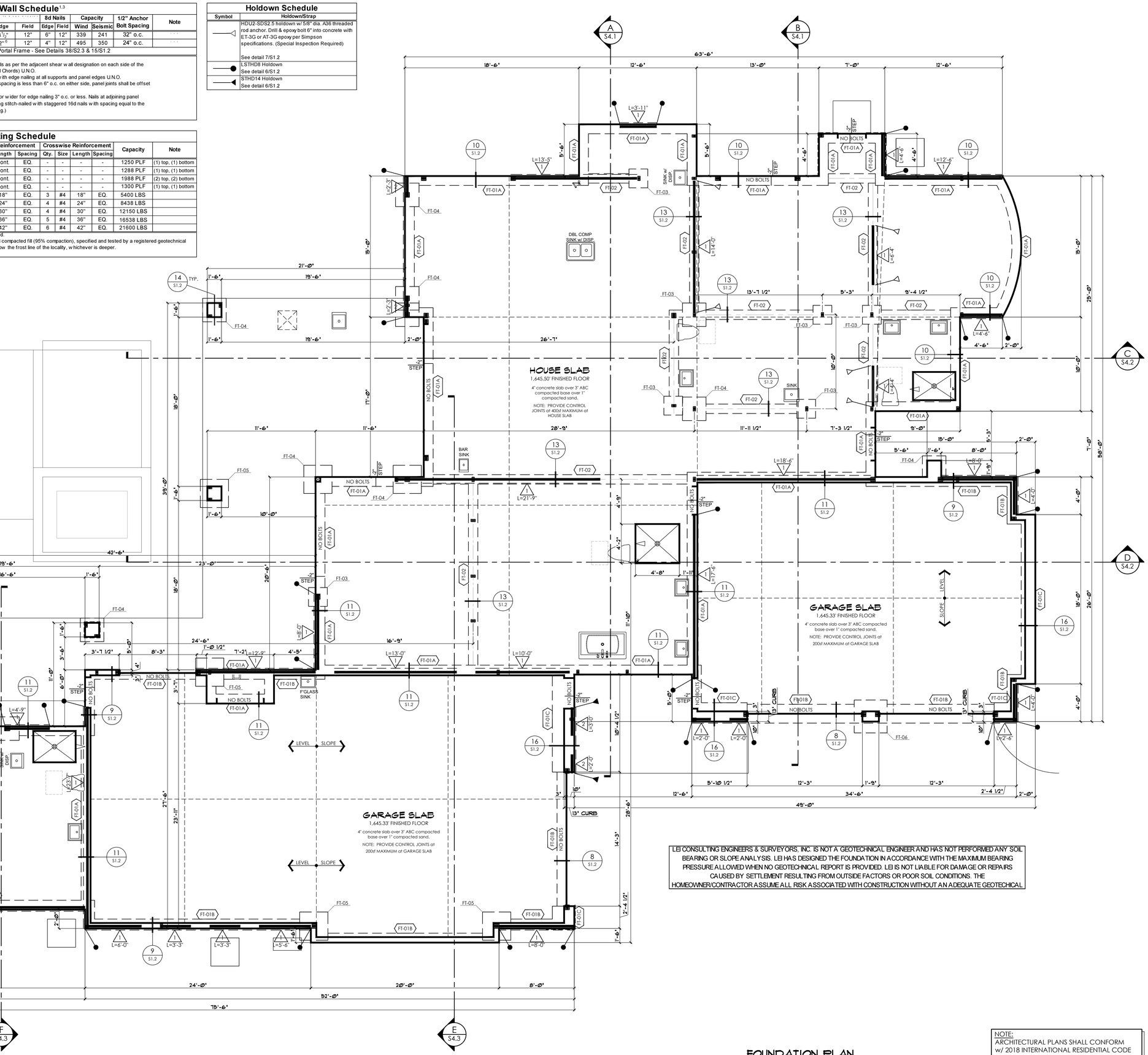
Designation	Length	Width	Depth	Lengthwise Reinforcement				Crosswise Reinforcement				Capacity	Note
				Qty.	Size	Length	Spacing	Qty.	Size	Length	Spacing		
FT1A	Cont.	12"	20"	2	#4	Cont.	EQ.	-	-	-	-	1250 PLF	(1) top, (1) bottom
FT1B	Cont.	12"	14"	2	#4	Cont.	EQ.	-	-	-	-	1288 PLF	(1) top, (1) bottom
FT1C	Cont.	18"	14"	4	#4	Cont.	EQ.	-	-	-	-	1988 PLF	(2) top, (2) bottom
FT2	Cont.	12"	16"	2	#4	Cont.	EQ.	-	-	-	-	1300 PLF	(1) top, (1) bottom
FT3	24"	24"	12"	3	#4	18"	EQ.	3	#4	18"	EQ.	5400 LBS	
FT4	30"	30"	12"	4	#4	24"	EQ.	4	#4	24"	EQ.	8438 LBS	
FT5	36"	36"	12"	4	#4	30"	EQ.	4	#4	30"	EQ.	12150 LBS	
FT6	42"	42"	12"	5	#4	36"	EQ.	5	#4	36"	EQ.	16538 LBS	
FT7	48"	48"	12"	6	#4	42"	EQ.	6	#4	42"	EQ.	21600 LBS	

Notes:
1. f'c= 2,500 psi, fy= 60,000 psi. No special inspection required.
2. Footings shall bear on undisturbed native soils or structural compacted fill (95% compaction), specified and tested by a registered geotechnical
3. All footings shall bear a minimum of 12" below grade or below the frost line of the locality, w hichever is deeper.

Holdown Schedule

Symbol	Holdown/Strap
	HDU2-SDS2.5 holdown w/ 5/8" dia. A36 threaded rod anchor. Drill & epoxy bolt 6" into concrete with ET-3G or AT-3G epoxy per Simpson specifications. (Special Inspection Required) See detail 7/S1.2
	LSTHD8 Holdown See detail 6/S1.2
	STHD14 Holdown See detail 6/S1.2





LEI CONSULTING ENGINEERS & SURVEYORS, INC. IS NOT A GEOTECHNICAL ENGINEER AND HA'S NOT PERFORMED ANY SOIL BEARING OR SLOPE ANALYSIS. LEI HAS DESIGNED THE FOUNDATION IN ACCORDANCE WITH THE MAXIMUM BEARING PRESSURE ALLOWED WHEN NO GEOTECHNICAL REPORT IS PROVIDED. LEI IS NOT LIABLE FOR DAMAGE OR REPAIRS CAUSED BY SETTLEMENT RESULTING FROM OUTSIDE FACTORS OR POOR SOIL CONDITIONS. THE HOMEOWNER/CONTRACTOR ASSUME ALL RISK ASSOCIATED WITH CONSTRUCTION WITHOUT AN ADEQUATE GEOTECHICAL

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

NOTE:
ARCHITECTURAL PLANS SHALL CONFORM w/ 2018 INTERNATIONAL RESIDENTIAL CODE and ALL CURRENT GOVERNING CODES.

PROFESSIONAL ENGINEER CERTIFICATE
ERIC B. MURRAY
Signed: 06/02/2025
STRUCTURAL ELEMENTS ONLY

LEI ENGINEERS SURVEYORS PLANNERS
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Spanish Fork,UT 84660
Ph: 801-798-0555
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office@lei-eng.com
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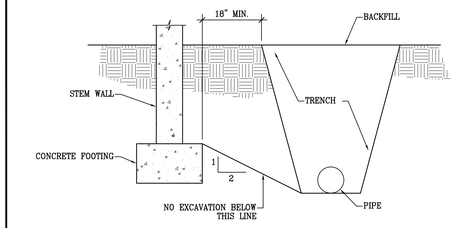
CONTRACTOR:

PROJECT:
The KNEER Residence
3018 Camino de la Enclave
Tract 2389 Lot 08

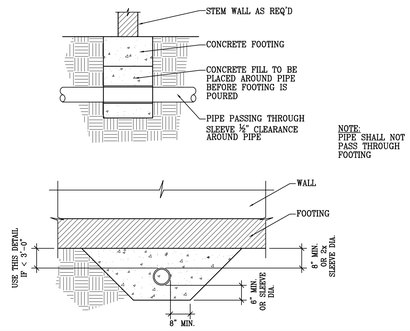
◆FOUNDATION PLAN

REVISIONS:

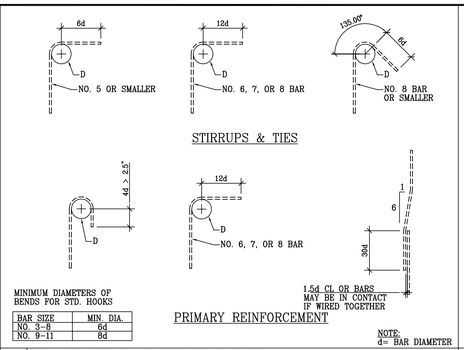
SCALE: 1/4" = 1'-0"	JOB #: 2024-08
DRAWN: S.I.Z.	CHECKED: LEI ENG'R
DATE: 04 APRIL 2025	
SHEET: S1.1	



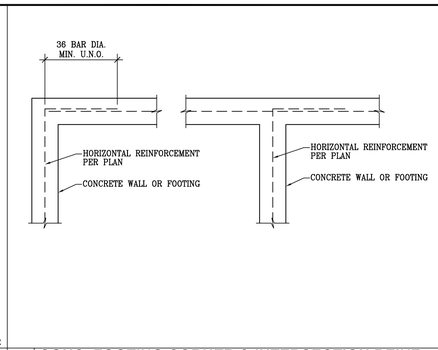
1 TRENCH ADJACENT TO CONCRETE FOOTING



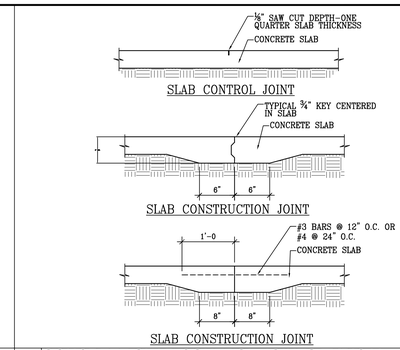
2 PIPE PASSING UNDER CONT. CONC. FOOTING TYP.



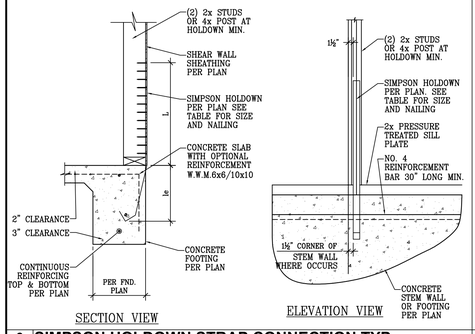
3 STANDARD BAR BENDING DETAIL



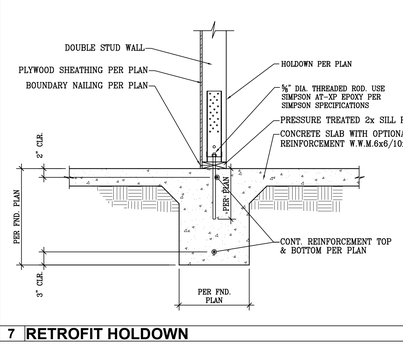
4 CONC. FOOTING CORNER & INTERSECTION REINF.



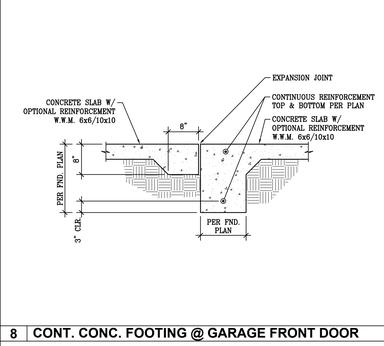
5 CONCRETE SLAB CONTROL JOINTS TYPICAL



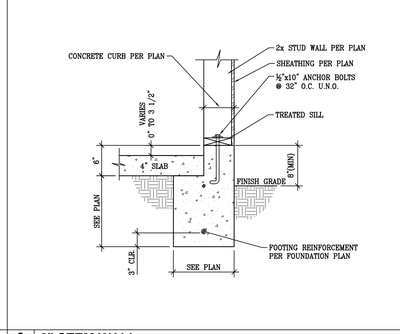
6 SIMPSON HOLDOWN STRAP CONNECTION TYP.



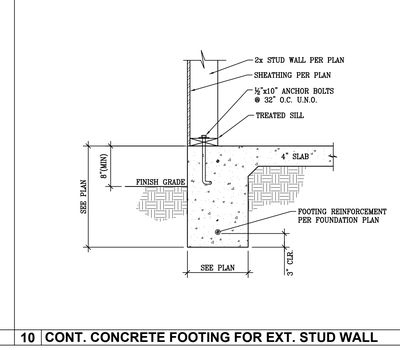
7 RETROFIT HOLDOWN



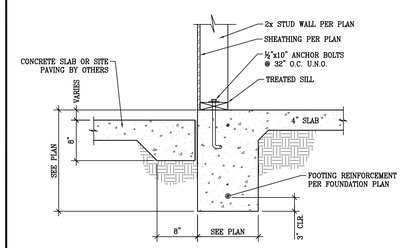
8 CONT. CONC. FOOTING @ GARAGE FRONT DOOR



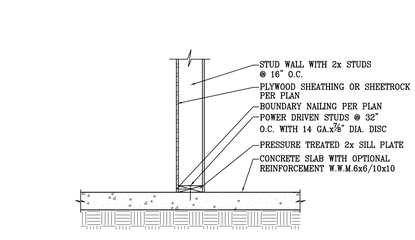
9 6" STEM WALL



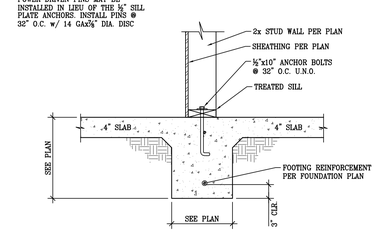
10 CONT. CONCRETE FOOTING FOR EXT. STUD WALL



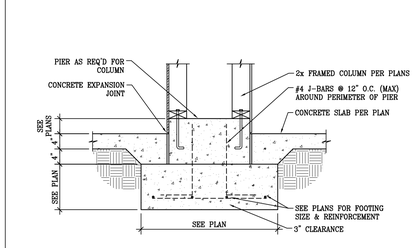
11 CONT. CONCRETE FOOTING ADJACENT TO CONC. SLAB



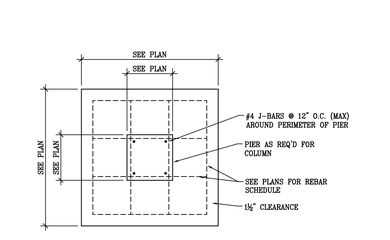
12 NON-BEARING INT. STUD WALL TO CONC. SLAB CONN.

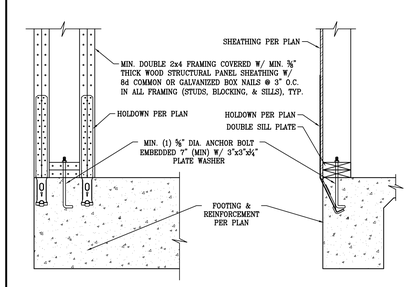


13 CONT. CONC. FOOTING FOR INT. BEARING STUD WALL



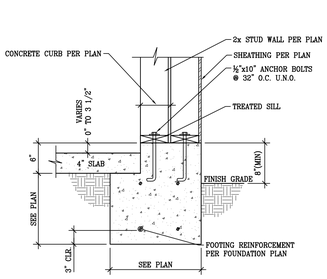
14 PIER FOOTING DETAIL





NOTE: SEE 38/S2.3 FOR PORTAL FRAME HEADER CONNECTION

15 PORTAL FRAME TO FOOTING



16 WIDE STEM WALL

17

18

19

20

21

22

23

24

CERTIFICATE
Professional Engineer / Land Surveyor / Structural Engineer
560853
ERIC B. MURRAY
Signed: 06/02/2025
STRUCTURAL ELEMENTS ONLY

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www.lei-eng.com

PROJECT:
The KNEER Residence
Tract 2389 Lot 08
APN #113-36-017

◆STRUCTURAL
◆DETAILS

REVISIONS:

SCALE: N.T.S.	JOB #: 2025-2169
DRAWN: EBM	CHECKED: LEI ENG'R
DATE: 01 MAY 2025	
SHEET: S1.2	

Framing Notes

1. Plans are not complete without the structural
2. Refer to sheet SD.0 for the general structural notes.
3. Roof sheathing to be APA rated 7/16" OSB or CDX plywood with 8d nails at 6" o.c. edge, 12" o.c. field.
4. Floor sheathing to be APA rated 3/4" T&G with 10d nails or Simpson WSNTL2LS #6 wood screws at 6" o.c. edge, 12" o.c. field.
5. Exterior stud walls to be 2x6 at 16" o.c. U.N.O.
6. Use (8) 16d nails between top plate splice points on all exterior and shear walls. Provide a 4'-0" minimum lap
7. Install all Simpson hardware per manufacturer's specifications.
8. Holdowns shall be installed on (2) full height king studs (minimum).
9. Overbuild roof rafters to be 2x6 DF-L #2 at 24" o.c. U.N.O.
10. All details shall apply in all similar situations.
11. All lumber not permanently protected from the elements shall be preservative treated or of a decay resistant species. Contact LEI Engineers and Surveyors, Inc. if a different species is to be used.

Post Schedule

Designation	Post Size
P1	(1) 2x
P2	(2) 2x
P3	(3) 2x
P4	(4) 2x
P5	(5) 2x
P6	4x4
P7	6x6

Notes:
1. Posts indicate number of trimmer studs when specified at headers. All other post designations refer to full height king studs U.N.O.
2. Install (1) trimmer stud and (1) king stud each side of each opening U.N.O.
3. Install (2) trimmer studs each side of openings greater than 6'-0" U.N.O.
4. Install (2) king studs each side of openings greater than 8'-0" U.N.O.
5. 2x built-up posts shall be the same width of the wall in which they are framed U.N.O.
6. Nail each ply of 2x built-up posts w/ 16d nails @ 6" o.c. staggered U.N.O.
7. Posts that are not framed within a stud wall shall be braced with BC or AC post cap and PB or ABA post base U.N.O.

Beam Schedule

Desig.	Qty.	Size	Type
RB1	1	4 x 6	DF-L#2
RB2	1	4 x 8	DF-L#2
RB3	1	6 x 12	DF-L#2
RB4	1	5 1/8" x 12"	Glulam
RB5	1	6 x 12	DF-L#2
RB6	1	5 1/8" x 18"	Glulam
RB7	1	6 x 12	DF-L#2
RB8	1	4 x 6	DF-L#2
RB9	1	6 x 10	DF-L#2
RB10	1	5 1/8" x 12"	Glulam
RB11	1	5 1/8" x 12"	Glulam
RB12	1	5 1/8" x 12"	Glulam
RB13	1	4 x 8	DF-L#2
RB14	1	6 x 12	DF-L#2
RB15	1	6 x 8	DF-L#2
RB16	1	6 x 10	DF-L#2
RB17	1	4 x 8	DF-L#2
RB18	1	6 x 8	DF-L#2
RB19	1	5 1/8" x 12"	Glulam
RB20	1	6 x 8	DF-L#2
RB21	1	5 1/8" x 10 1/2"	Glulam
RB22	1	6 3/4" x 12"	Glulam
RB23	1	5 1/8" x 12"	Glulam
RB24	1	5 1/8" x 12"	Glulam
RB25	1	5 1/8" x 19 1/2"	Glulam
RB26	1	4 x 12	DF-L#2

Rafter Schedule

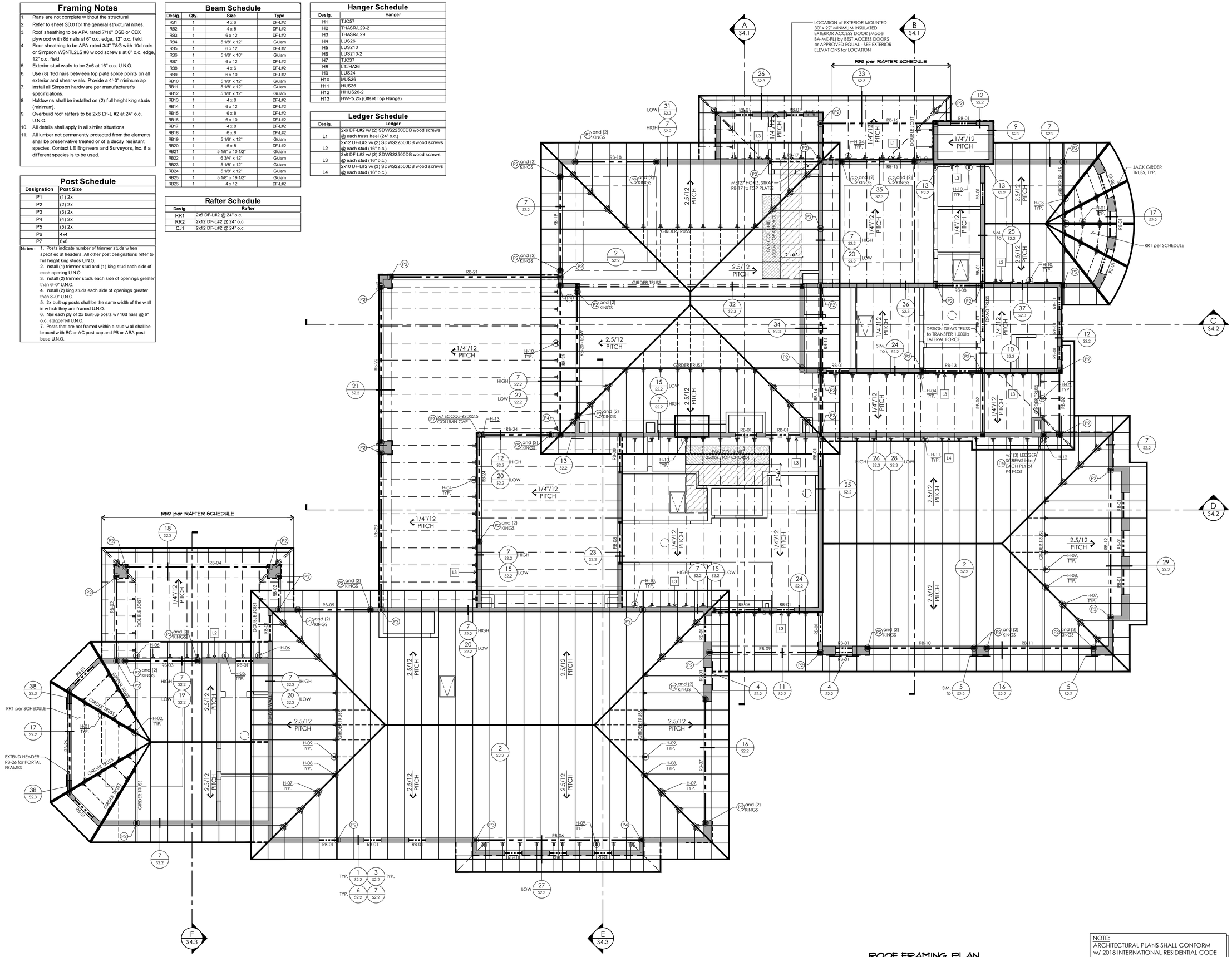
Desig.	Rafter
RR1	2x6 DF-L#2 @ 24" o.c.
RR2	2x12 DF-L#2 @ 24" o.c.
CJ1	2x12 DF-L#2 @ 24" o.c.

Hanger Schedule

Desig.	Hanger
H1	TJC57
H2	THASR/L29-2
H3	THASR/L29
H4	LUS26
H5	LUS210
H6	LUS210-2
H7	TJC37
H8	LTJHA26
H9	LUS24
H10	MUS26
H11	HUS26
H12	HHUS26-2
H13	HWF5.25 (Offset Top Flange)

Ledger Schedule

Desig.	Ledger
L1	2x6 DF-L#2 w/ (2) SDWS22500DB wood screws @ each truss heel (24" o.c.)
L2	2x12 DF-L#2 w/ (2) SDWS22500DB wood screws @ each stud (16" o.c.)
L3	2x6 DF-L#2 w/ (2) SDWS22500DB wood screws @ each stud (16" o.c.)
L4	2x10 DF-L#2 w/ (3) SDWS22500DB wood screws @ each stud (16" o.c.)



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

NOTE:
ARCHITECTURAL PLANS SHALL CONFORM w/ 2018 INTERNATIONAL RESIDENTIAL CODE and ALL CURRENT GOVERNING CODES.

REGISTERED PROFESSIONAL ENGINEER
STATE OF UTAH
86953
ERIC B. MURRAY
Signed: 06/02/2025
STRUCTURAL ELEMENTS ONLY

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Spanish Fork,UT 84660
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Fax: 801-798-9393
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CONTRACTOR:

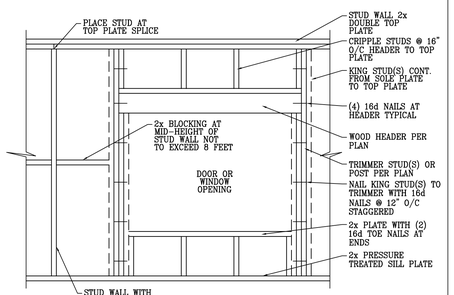
PROJECT:
The KNEER Residence
3018 Camino de la Enclave
Tract 2389 Lot 08

- THESE DRAWINGS ARE AN INSTRUMENT OF SERVICE AND REMAIN THE PROPERTY OF ZETTEL GROUP, INC.
- WHILE EVERY EFFORT HAS BEEN MADE IN THE PREPARATION OF THIS PLAN TO AVOID ERRORS, THE CONTRACTOR IS RESPONSIBLE TO CHECK ALL DIMENSIONS, STRUCTURAL LUMBER SIZES AND OTHER DETAILS AND BE RESPONSIBLE FOR SAME.

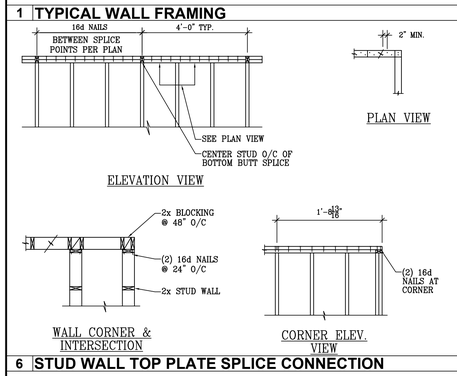
◆ ROOF FRAMING PLAN

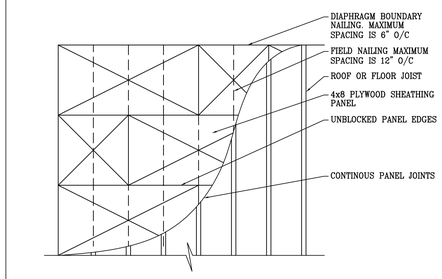
REVISIONS:

SCALE: 1/4" = 1'-0"	JOB #: 2024-08
DRAWN: e.l.z.	CHECKED: LEI ENG'R
DATE: 04 APRIL 2025	
SHEET: S2.1	

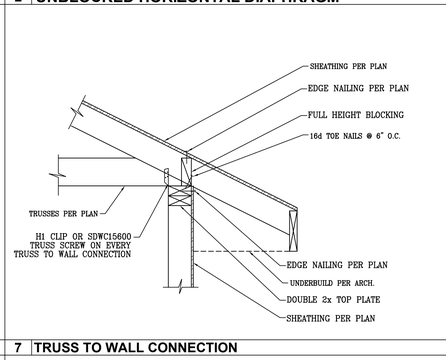


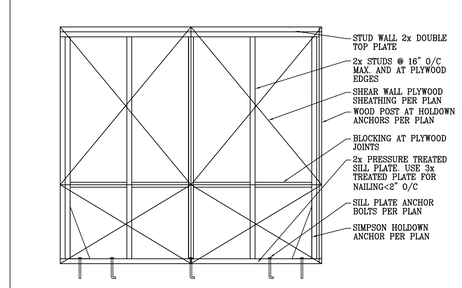
1 TYPICAL WALL FRAMING



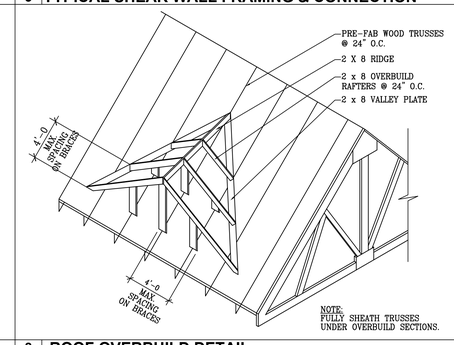


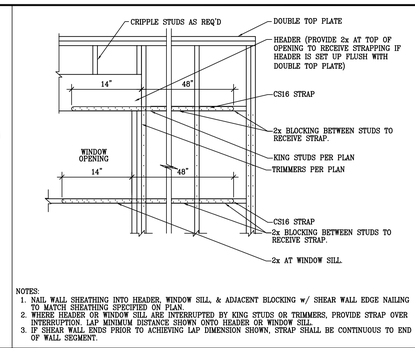
2 UNBLOCKED HORIZONTAL DIAPHRAGM





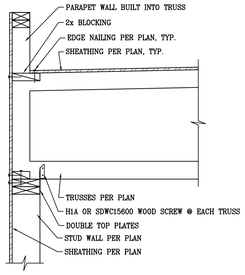
3 TYPICAL SHEAR WALL FRAMING & CONNECTION

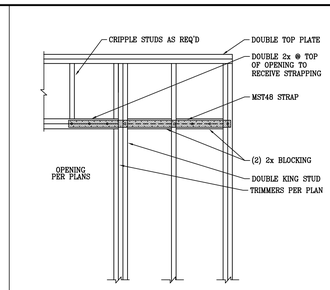




NOTES:
1. NAIL WALL SHEATHING INTO HEADER, WINDOW SILL & ADJACENT BLOCKING w/ SHEAR WALL EDGE NAILING TO MATCH SHEATHING SPECIFIED ON PLAN.
2. WHERE HEADER OR WINDOW SILL ARE INTERRUPTED BY KING STUDS OR TRIMMERS, PROVIDE STRAP OVER INTERRUPTION. LAP MINIMUM DISTANCE SHOWN ONTO HEADER OR WINDOW SILL.
3. IF SHEAR WALL ENDS PRIOR TO ACHIEVING LAP DIMENSION SHOWN, STRAP SHALL BE CONTINUOUS TO END OF WALL SEGMENT.

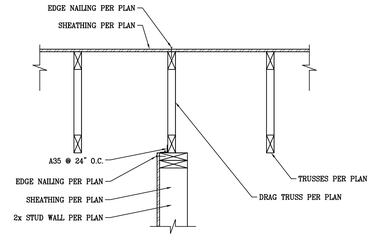
4 BLOCK HEADER & SILL PLATE PER PLANS (SW1 & SW2)



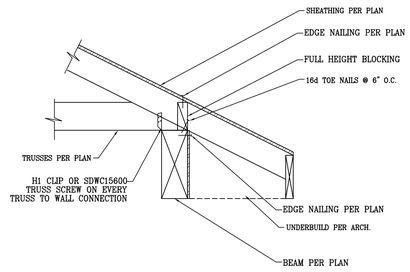


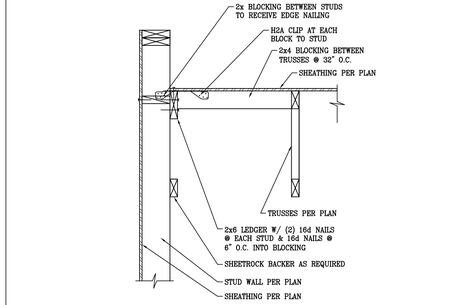
NOTE:
1. NAIL WALL SHEATHING INTO HEADER & ADJACENT 2x BLOCKING W/ 8d NAILS @ 4" O.C.
2. USE CMSTC16 STRAP AT ADJACENT OPENINGS AND LAP 16" MINIMUM ONTO HEADER.

5 HEADER BLOCKING DETAIL - PER PLANS

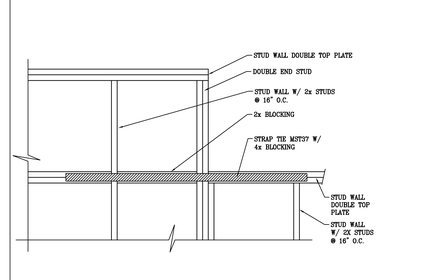


6 STUD WALL TOP PLATE SPLICE CONNECTION

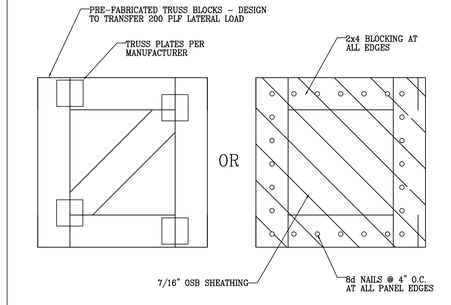




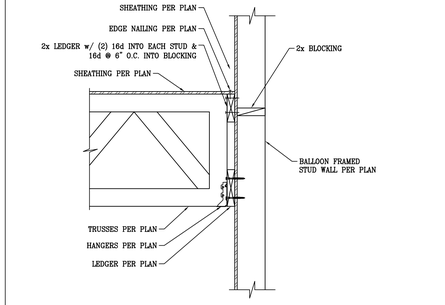
7 TRUSS TO WALL CONNECTION



8 ROOF OVERBUILD DETAIL

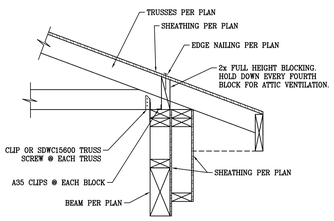


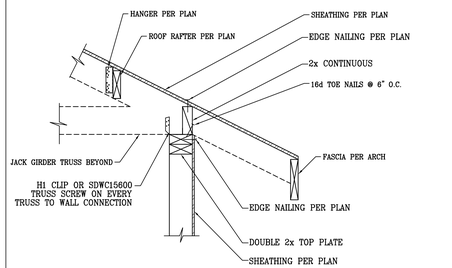
9 ROOF TRUSS TO WALL CONNECTION



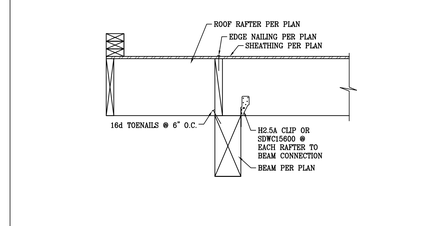
10 DRAG TRUSS AT SHEAR WALL

11 TRUSS TO BEAM CONNECTION

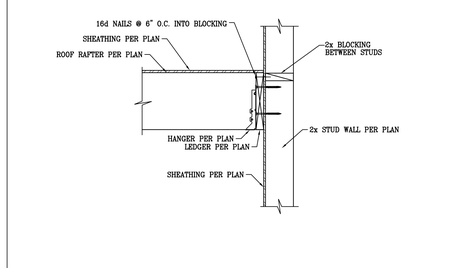




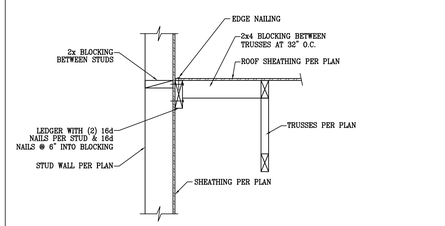
12 PARAPET WALL WITH PARALLEL TRUSS DETAIL



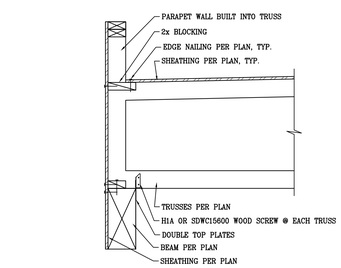
13 STUD WALL STEP-DOWN CONNECTION

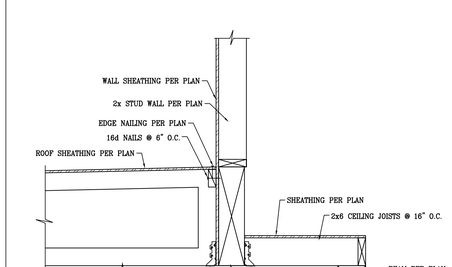


14 TYPICAL TRUSS BLOCKING



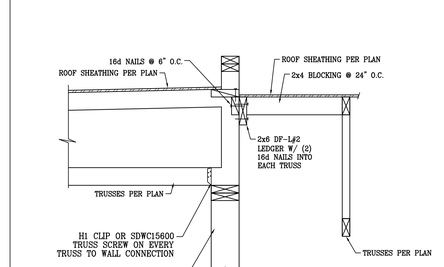
15 LOW TRUSSES AT BALLOON FRAMED WALL



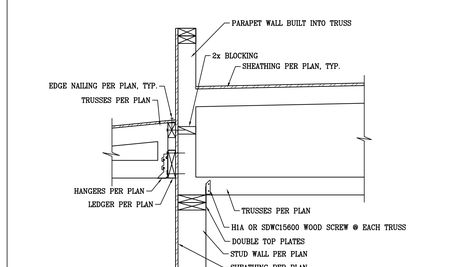


16 FULL HEIGHT TRUSS BLOCKING AT DOUBLE WALL

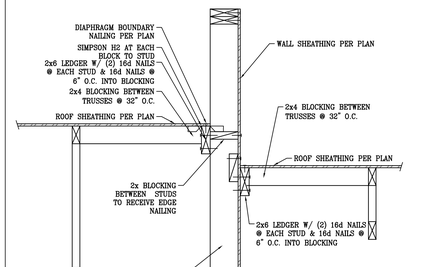
17 TRUSS TO WALL CONNECTION



18 CANTILEVERED RAFTER TO BEAM CONNECTION



19 ROOF RAFTER TO STUD WALL



20 LOW ROOF AT BALLOON FRAMED STUD WALL

21 ROOF TRUSS TO WALL CONNECTION

22 FRAMING TO BEAM CONNECTION

23 FRAMING TRANSITION

24 FRAMING TRANSITION

25 PARAPET WALL WITH PARALLEL TRUSS DETAIL

Professional Engineer / Land Surveyor
CERTIFICATE
86253
ERIC B. MURRAY
Signed: 06/02/2025
UTAH U.S.A.
STRUCTURAL ELEMENTS ONLY

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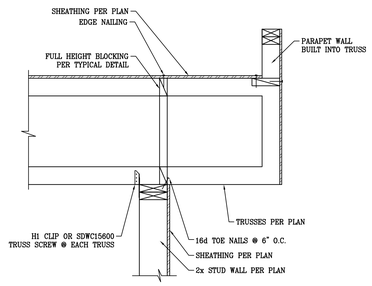
PROJECT:
The KNEER Residence
Tract 2389 Lot 08
APN #113-36-017

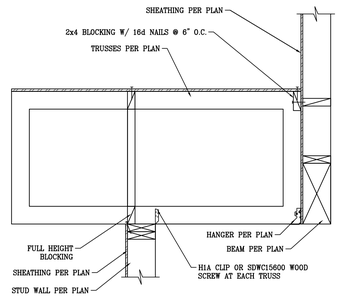
◆STRUCTURAL
◆DETAILS

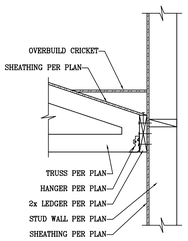
REVISIONS:

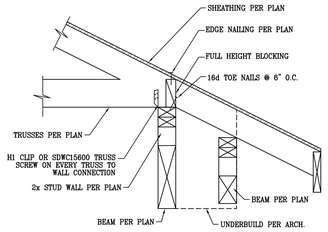
SCALE:	JOB #:
N.T.S.	2025-2169
DRAWN:	CHECKED:
EBM	LEI ENG'R
DATE:	
01 MAY 2025	

SHEET
S2.2

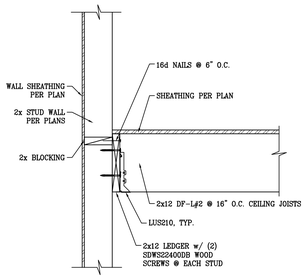




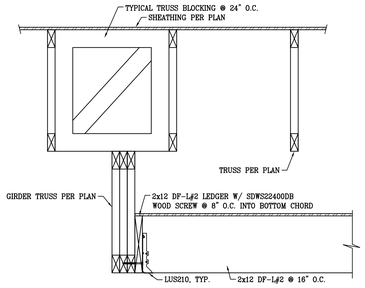




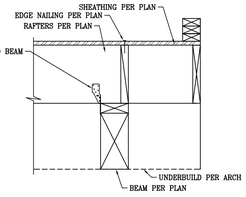
26 CANTILEVER ROOF TRUSSES



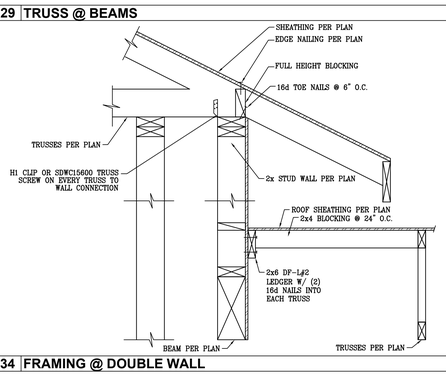
27 SHED ROOF AT LOW BEAM



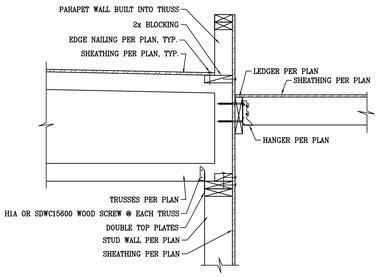
28 BALLOON FRAMED WALL WITH LEDGER



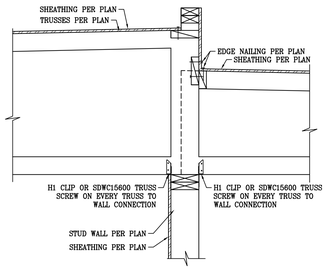
29 TRUSS @ BEAMS



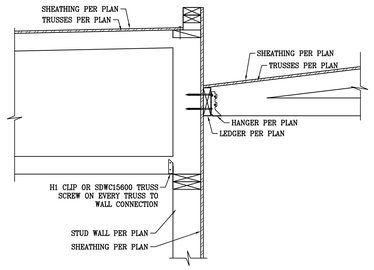
30 NOT USED



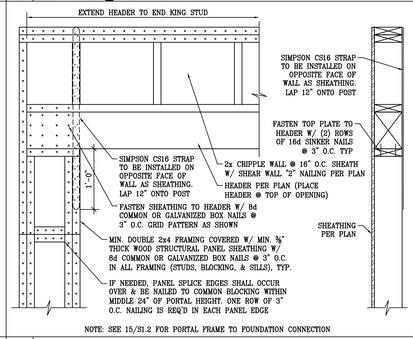
31 JOIST TO LEDGER CONNECTION



32 FRAMING TRANSITION @ GIRDER TRUSS



33 RAFTERS @ BEAM



34 FRAMING @ DOUBLE WALL

35 SHARED WALL

36 SHARED WALL

37 FRAMING TRANSITION

38 PORTAL FRAME

39

40

41

42

CERTIFICATE
66953
ERIC B. MURRAY
Signed: 06/02/2025
ARIZONA U.S.A.
STRUCTURAL ELEMENTS ONLY

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PROJECT:
The KNEER Residence
Tract 2389 Lot 08
APN #113-36-017

◆STRUCTURAL
◆DETAILS

REVISIONS:

SCALE:	JOB #:
N.T.S.	2025-2169
DRAWN: EBM	CHECKED: LEI ENG'R
DATE: 01 MAY 2025	

SHEET
S2.3

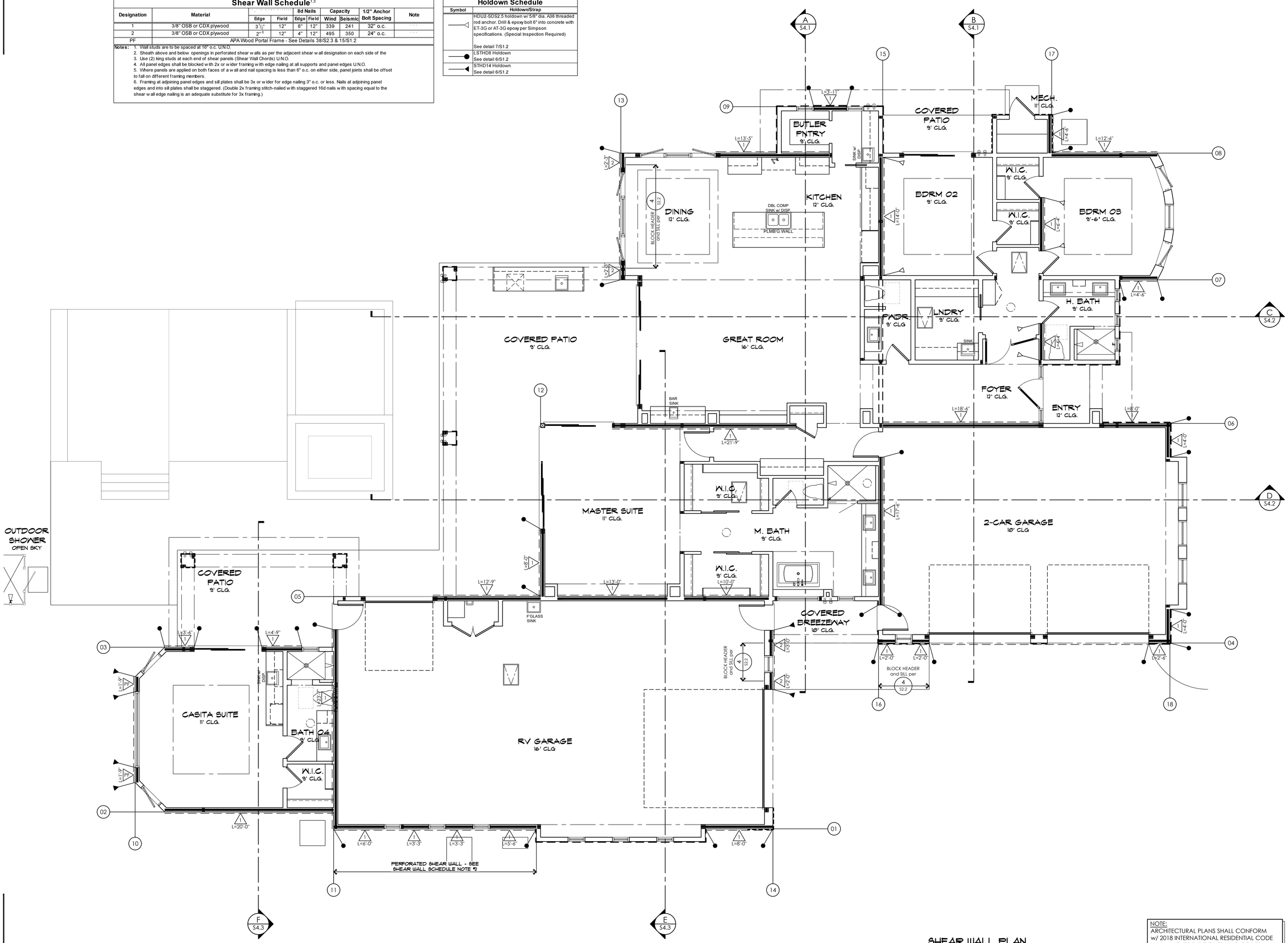
Shear Wall Schedule[1,3]

Designation	Material	8d Nails Edge	8d Nails Field	Capacity Edge	Capacity Field	Capacity Wind	Capacity Seismic	1/2" Anchor Bolt Spacing	Note
1	3/8" OSB or CDX plywood	$3^1/_2$"	12"	6"	12"	339	241	32" o.c.	- - -
2	3/8" OSB or CDX plywood	2^{-6}	12"	4"	12"	495	350	24" o.c.	- - -
PF	APA Wood Portal Frame - See Details 38/S2.3 & 15/S1.2								

Notes:
1. Wall studs are to be spaced at 16" o.c. U.N.O.
2. Sheath above and below openings in perforated shear w alls as per the adjacent shear w all designation on each side of the
3. Use (2) king studs at each end of shear panels (Shear Wall Chords) U.N.O.
4. All panel edges shall be blocked w ith 2x or w ider framing w ith edge nailing at all supports and panel edges U.N.O.
5. Where panels are applied on both faces of a w all and nail spacing is less than 6" o.c. on either side, panel joints shall be offset to fall on different framing members.
6. Framing at adjoining panel edges and sill plates shall be 3x or w ider for edge nailing 3" o.c. or less. Nails at adjoining panel edges and into sill plates shall be staggered. (Double 2x framing stitch-nailed w ith staggered 16d nails w ith spacing equal to the shear w all edge nailing is an adequate substitute for 3x framing.)

Holdown Schedule

Symbol	Holdown/Strap
	HDU2-SDS2.5 holdown w/ 5/8" dia. A36 threaded rod anchor. Drill & epoxy bolt 6" into concrete with ET-3G or AT-3G epoxy per Simpson specifications. (Special Inspection Required) See detail 7/S1.2
	LSTHD8 Holdown See detail 6/S1.2
	STHD14 Holdown See detail 6/S1.2



SHEAR WALL PLAN
SCALE: 1/4" = 1'-0"

NOTE:
ARCHITECTURAL PLANS SHALL CONFORM w/ 2018 INTERNATIONAL RESIDENTIAL CODE and ALL CURRENT GOVERNING CODES.

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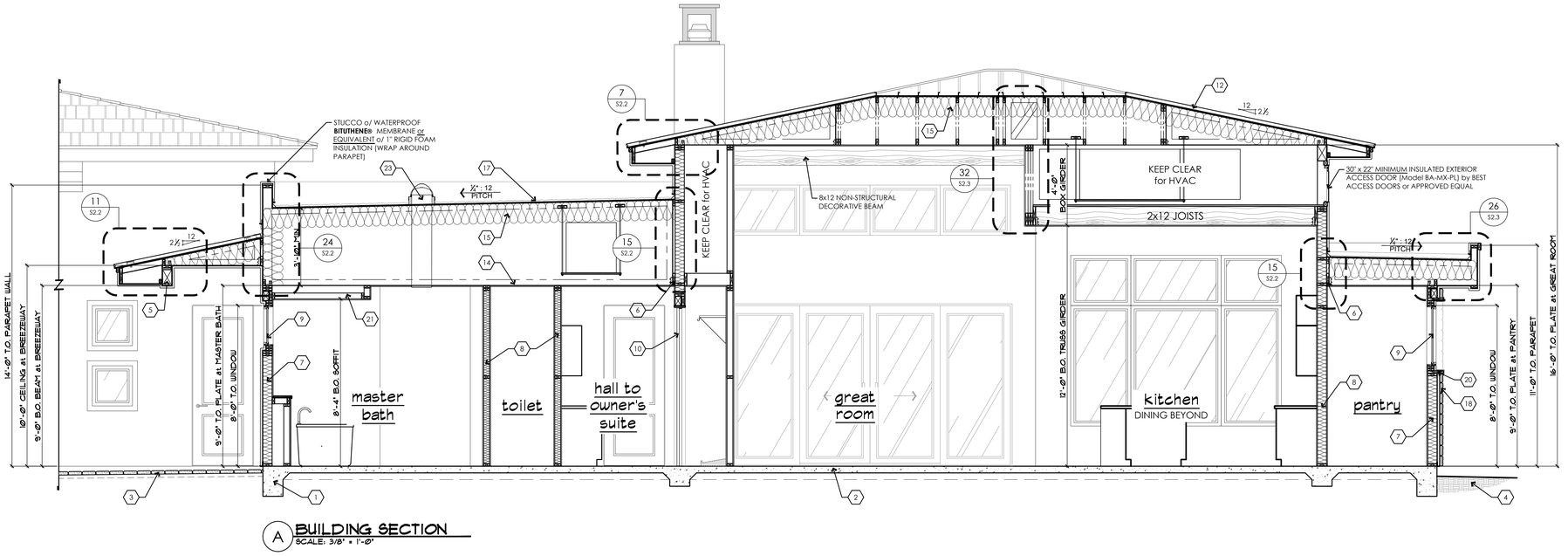
CONTRACTOR:

PROJECT:
The KNEER Residence
3018 Camino de la Enclave
Tract 2389 Lot 08

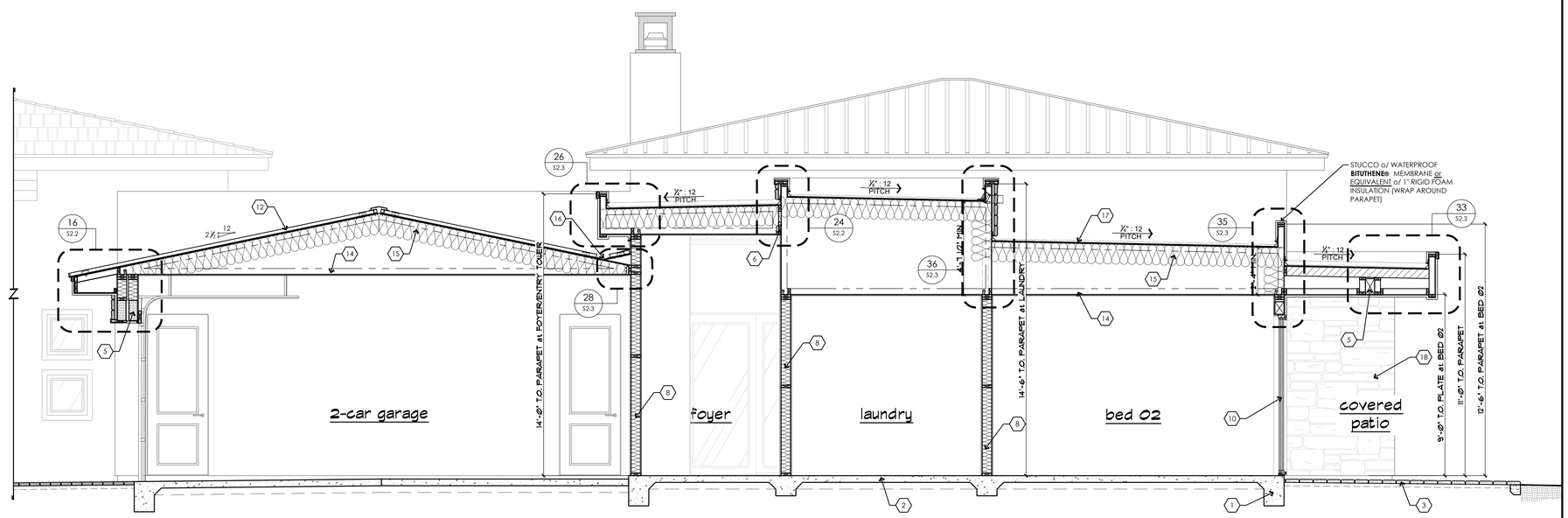
◆ SHEAR WALL PLAN

REVISIONS:

SCALE: 1/4" = 1'-0"	JOB #: 2024-08
DRAWN: e.l.z.	CHECKED: LEI ENG'R
DATE: 04 APRIL 2025	
SHEET: S3.1	



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



B BUILDING SECTION
SCALE: 3/8" = 1'-0"

KEYNOTE LEGEND

NOTE: NOT ALL KEYNOTES USED ON THIS SHEET

FOUNDATION:

1. CONCRETE FOOTING per STRUCTL DRAWINGS
2. CONCRETE SLAB OVER APPROVED COMPACTED SOIL per STRUCTURAL DRAWINGS
3. CONCRETE PAVERS/CONCRETE FLATWORK per OWNER SELECTION - SLOPE AWAY FROM STRUCTURE
4. FINISH GRADE - SLOPE AWAY FROM STRUCTURE

WALL CONSTRUCTION:

5. BEAM/HEADER per STRUCTURAL CALCS
6. LEDGER STRIP per STRUCTURAL CALCS
7. R20 MINIMUM EXTERIOR WALL INSULATION
8. R11 MINIMUM SOUND BATTS at ALL INTERIOR WALLS, TYPICAL
9. DUAL GLAZE WINDOW per WINDOW SCHEDULE
10. DOOR per DOOR SCHEDULE

FLOOR / ROOF CONSTRUCTION:

11. FLAT CONCRETE ROOF TILE (ICC-ER ESR 1215) o/ TWO LAYERS of 30lb FELT o/ APA-RATED SHEATHING (per STRUCTURAL CALCS)
12. STANDING SEAM METAL ROOFING (ICC-ER #ESR-2048) o/ TWO LAYERS of 30lb FELT o/ APA-RATED SHEATHING (per STRUCTURAL CALCS) o/ PREFABRICATED ROOF TRUSSES
13. NOT USED.
14. PREFABRICATED ROOF TRUSSES at **24" ON CENTER** UNLESS NOTED OTHERWISE
15. R38 MINIMUM ROOF INSULATION at ROOF DECK
16. DRAINAGE CRICKET per PLAN w/ FLASHING as REQUIRED, TYPICAL WHERE SHOWN
17. DURO-LAST (or APPROVED EQUAL) ROOFING o/ 2-LAYERS of 30 LB FELT o/ SHEATHING o/ PRE-MFG'd ROOF TRUSSES at 24" ON CENTER

FINISH CONSTRUCTION:

18. CULTURED STONE VENEER per OWNER SELECTION - ICC-ER #4147 - INSTALL per MANUF. SPECS
19. 6" WIDE ELONGATED EXTERIOR TILE VENEER per OWNER SELECTION - ICC-ER #5157 - INSTALL per MANUF. SPECS
20. WOOD FRAMED and STUCCO WRAPPED TRIM at TOP of CULTURED STONE VENEER
21. WOOD FRAMED and ⅝" TYPE 'X' DRYWALL WRAPPED INTERIOR SOFFIT - SEE INTERIOR ELEVATIONS
22. WOOD FRAMED and STUCCO WRAPPED EXTERIOR SOFFIT - SEE EXTERIOR ELEVATIONS
23. 12" DIA. SOLATUBE ® - or OWNER APPROVED EQUAL; INSTALL per MANUFACTURER SPECS. (ICC-ES #ESL-1303) SEE REFLECTED CEILING PLAN for FOR LOCATION

2018 INT'L RESIDENTIAL CODE REQUIREMENTS:

R702.3.7 Water-resistant gypsum backing board.
Gypsum board used as the base or backer for adhesive application of ceramic tile or other required nonabsorbent finish material shall conform to ASTM C1178, C1278 or C1396. Use of water-resistant gypsum backing board shall be permitted on ceilings. Water-resistant gypsum board shall not be installed over a Class I or II vapor retarder in a shower or tub compartment. Cut or exposed edges, including those at wall intersections, shall be sealed as recommended by the manufacturer.

R702.3.7.1 Limitations.
Water-resistant gypsum backing board shall not be used where there will be direct exposure to water, or in areas subject to continuous high humidity.

R702.4.2 Backer boards.
Materials used as backers for wall tile in tub and shower areas and wall panels in shower areas shall be of materials listed in Table R702.4.2, and installed in accordance with the manufacturer's recommendations.

This drawing has been drawn under the guidance of **LEI Consulting Engineers and Surveyors, Inc.** and has been reviewed for compliance with the structural calculations and for structural correctness only. The scope of **LEI Consulting Engineers and Surveyors, Inc.**'s work does not exceed that of the accompanying structural calculations.

NOTE:
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- ARCHITECTURAL ELEMENTS of the FOLLOWING PLANS SHALL CONFORM w/ 2018 INTERNATIONAL RESIDENTIAL CODE and ALL CURRENT GOVERNING CODES.

REGISTERED PROFESSIONAL ENGINEER
ERIC B. MURRAY
6953
ERIC B. MURRAY
Signed: 06/02/2025
STATE OF UTAH
STRUCTURAL ELEMENTS ONLY

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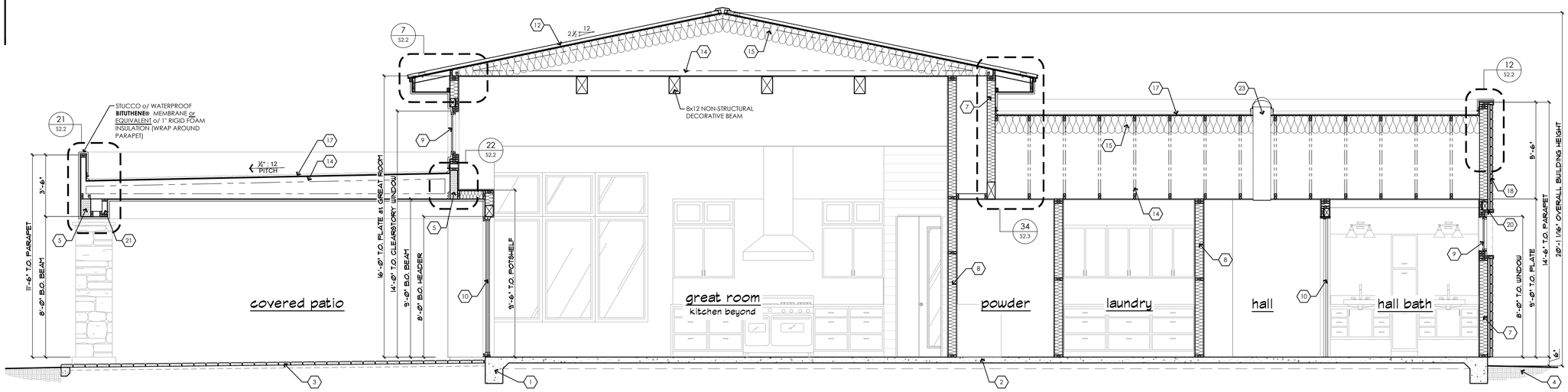
CONTRACTOR:

PROJECT:
The KNEER Residence
3018 Camino de la Enclave
Tract 2389 Lot 08

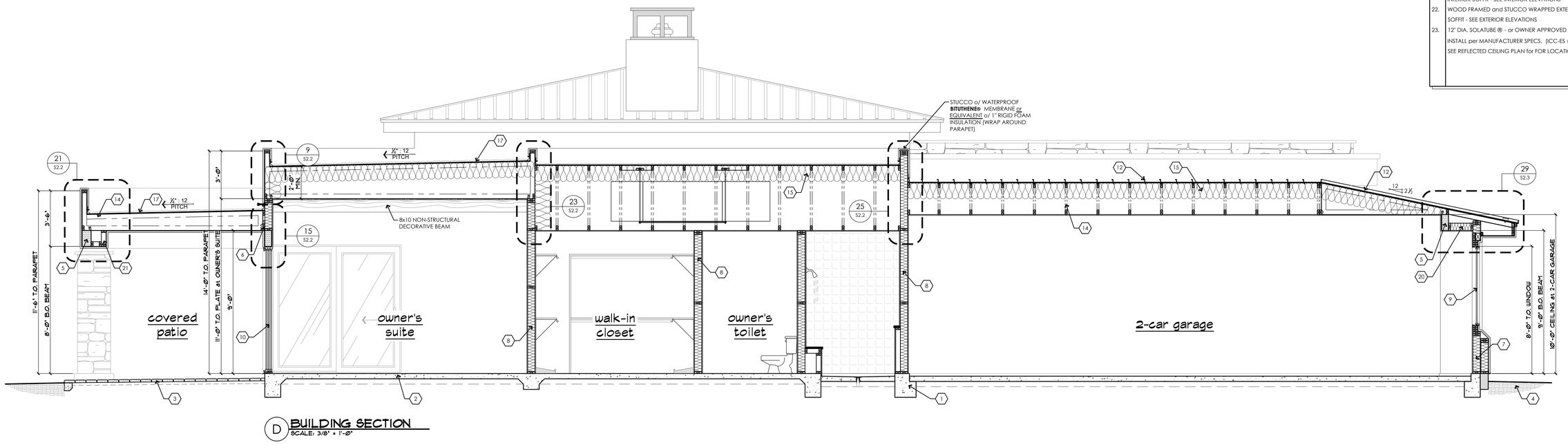
◆BUILDING SECTIONS◆

REVISIONS:

SCALE: 3/8" = 1'-0"	JOB #: 2024-08
DRAWN: S.I.Z.	CHECKED: LEI ENG'R
DATE: 04 APRIL 2025	
SHEET: S4.1	



C BUILDING SECTION
SCALE: 3/8" = 1'-0"



D BUILDING SECTION
SCALE: 3/8" = 1'-0"

KEYNOTE LEGEND

NOTE: NOT ALL KEYNOTES USED ON THIS SHEET

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LICENSED PROFESSIONAL ENGINEER
Eric Murray
6953
ERIC B. MURRAY
Signed: 06/02/2025
STATE OF UTAH
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◆ BUILDING SECTIONS

REVISIONS:
1.
2.
3.

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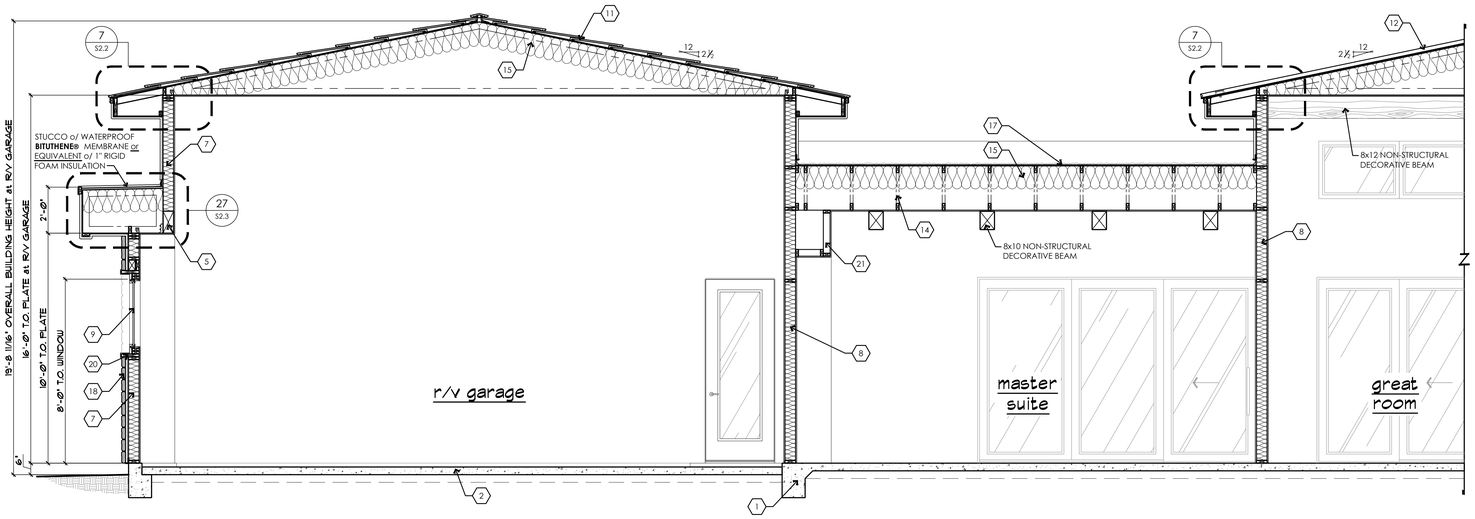
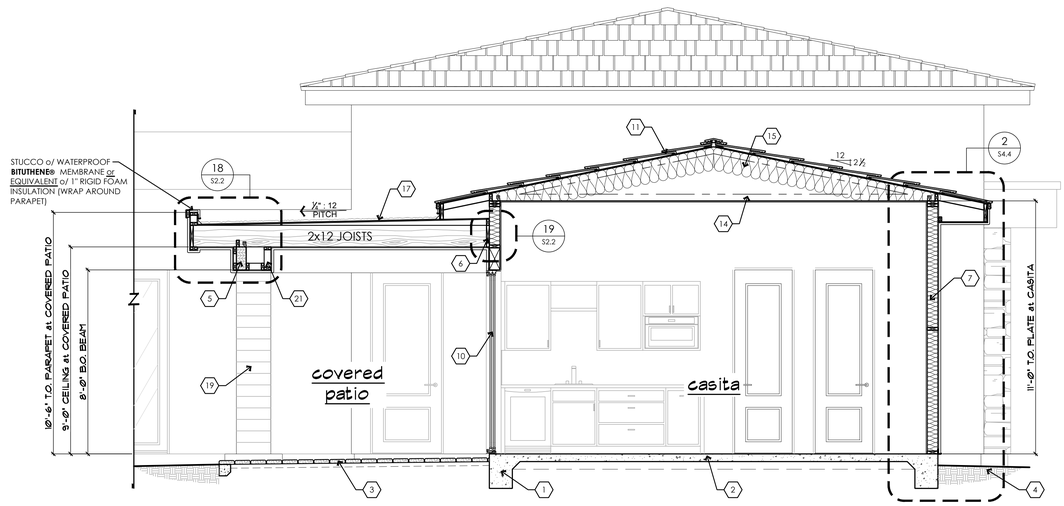
DRAWN: S.I.Z.	CHECKED: LEI ENG'R
DATE: 04 APRIL 2025	
SHEET: S4.2	



E BUILDING SECTION
SCALE: 3/8" = 1'-0"



F BUILDING SECTION
SCALE: 3/8" = 1'-0"

KEYNOTE LEGEND

NOTE: NOT ALL KEYNOTES USED ON THIS SHEET

FOUNDATION:

1. CONCRETE FOOTING per STRUCTL DRAWINGS
2. CONCRETE SLAB OVER APPROVED COMPACTED SOIL per STRUCTURAL DRAWINGS
3. CONCRETE PAVERS/CONCRETE FLATWORK per OWNER SELECTION - SLOPE AWAY FROM STRUCTURE
4. FINISH GRADE - SLOPE AWAY FROM STRUCTURE

WALL CONSTRUCTION:

5. BEAM/HEADER per STRUCTURAL CALCS
6. LEDGER STRIP per STRUCTURAL CALCS
7. R20 MINIMUM EXTERIOR WALL INSULATION
8. R11 MINIMUM SOUND BATTS at ALL INTERIOR WALLS, TYPICAL
9. DUAL GLAZE WINDOW per WINDOW SCHEDULE
10. DOOR per DOOR SCHEDULE

FLOOR / ROOF CONSTRUCTION:

11. FLAT CONCRETE ROOF TILE (ICC-ER ESR 1215) o/ TWO LAYERS of 30lb FELT o/ APA-RATED SHEATHING (per STRUCTURAL CALCS)
12. STANDING SEAM METAL ROOFING (ICC-ER #ESR-2048) o/ TWO LAYERS of 30lb FELT o/ APA-RATED SHEATHING (per STRUCTURAL CALCS) o/ PREFABRICATED ROOF TRUSSES
13. NOT USED.
14. PREFABRICATED ROOF TRUSSES at **24" ON CENTER** UNLESS NOTED OTHERWISE
15. R38 MINIMUM ROOF INSULATION at ROOF DECK
16. DRAINAGE CRICKET per PLAN w/ FLASHING as REQUIRED, TYPICAL WHERE SHOWN
17. DURO-LAST (or APPROVED EQUAL) ROOFING o/ 2-LAYERS of 30 LB FELT o/ SHEATHING o/ PRE-MFG'd ROOF TRUSSES at 24" ON CENTER

FINISH CONSTRUCTION:

18. CULTURED STONE VENEER per OWNER SELECTION - ICC-ER #4147 - INSTALL per MANUF. SPECS
19. 6" WIDE ELONGATED EXTERIOR TILE VENEER per OWNER SELECTION - ICC-ER #5157 - INSTALL per MANUF. SPECS
20. WOOD FRAMED and STUCCO WRAPPED TRIM at TOP of CULTURED STONE VENEER
21. WOOD FRAMED and ⅝" TYPE 'X' DRYWALL WRAPPED INTERIOR SOFFIT - SEE INTERIOR ELEVATIONS
22. WOOD FRAMED and STUCCO WRAPPED EXTERIOR SOFFIT - SEE EXTERIOR ELEVATIONS
23. 12" DIA. SOLATUBE ® - or OWNER APPROVED EQUAL; INSTALL per MANUFACTURER SPECS. (ICC-ES #ESL-1303) SEE REFLECTED CEILING PLAN for FOR LOCATION

2018 INT'L RESIDENTIAL CODE REQUIREMENTS:

R702.3.7 Water-resistant gypsum backing board.
Gypsum board used as the base or backer for adhesive application of ceramic tile or other required nonabsorbent finish material shall conform to ASTM C1178, C1278 or C1396. Use of water-resistant gypsum backing board shall be permitted on ceilings. Water-resistant gypsum board shall not be installed over a Class I or II vapor retarder in a shower or tub compartment. Cut or exposed edges, including those at wall intersections, shall be sealed as recommended by the manufacturer.

R702.3.7.1 Limitations.
Water-resistant gypsum backing board shall not be used where there will be direct exposure to water, or in areas subject to continuous high humidity.

R702.4.2 Backer boards.
Materials used as backers for wall tile in tub and shower areas and wall panels in shower areas shall be of materials listed in Table R702.4.2, and installed in accordance with the manufacturer's recommendations.

This drawing has been drawn under the guidance of **LEI Consulting Engineers and Surveyors, Inc.** and has been reviewed for compliance with the structural calculations and for structural correctness only. The scope of **LEI Consulting Engineers and Surveyors, Inc.**'s work does not exceed that of the accompanying structural calculations.

NOTE:
- STRUCTURAL COMPONENTS DESIGNED ACCORDING to the 2018 INTERNATIONAL BUILDING CODE and ALL CURRENT GOVERNING CODES.
- ARCHITECTURAL ELEMENTS of the FOLLOWING PLANS SHALL CONFORM w/ 2018 INTERNATIONAL RESIDENTIAL CODE and ALL CURRENT GOVERNING CODES.

REGISTERED PROFESSIONAL ENGINEER
ERIC B. MURRAY
6953
ERIC B. MURRAY
Signed: 06/02/2025
STATE OF UTAH
STRUCTURAL ELEMENTS ONLY

LEI
ENGINEERS
SURVEYORS
PLANNERS
3302 No. Main Street
Spanish Fork,UT 84660
Ph: 801-798-0555
Fax: 801-798-9393
office@lei-eng.com
www.lei-eng.com

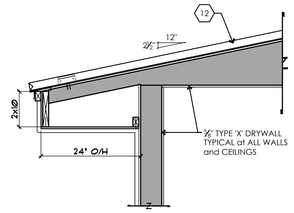
CONTRACTOR:

PROJECT:
The KNEER Residence
3018 Camino de la Enclave
Tract 2389 Lot 08

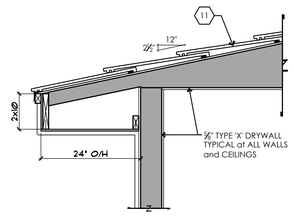
◆◆ BUILDING SECTIONS

REVISIONS:
1.
2.
3.

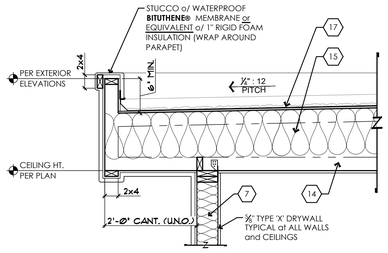
SCALE: 3/8" = 1'-0" | JOB #: 2024-08
DRAWN: S.I.Z. | CHECKED: LEI ENG'R
DATE: 04 APRIL 2025
SHEET: S4.3



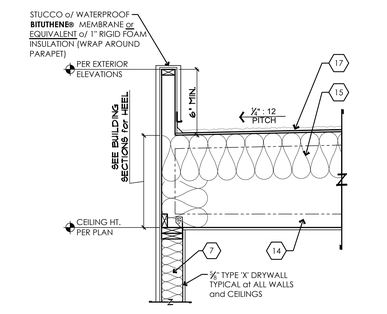
6 DETAIL at TYPICAL STUCCO FASCIA - STANDING SEAM
SCALE: 3/4" = 1'-0"



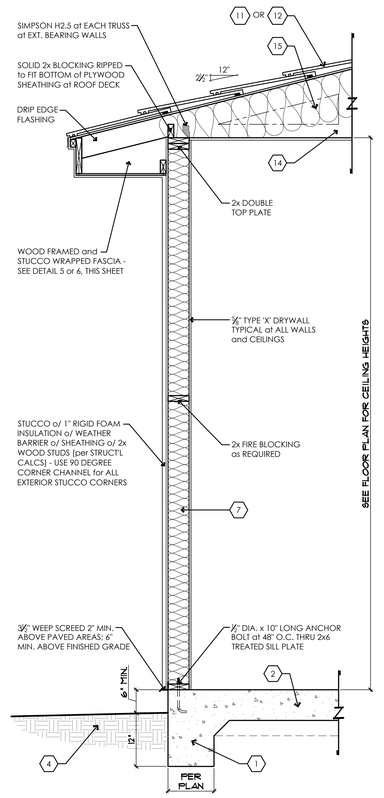
5 DETAIL at TYPICAL STUCCO FASCIA - TILE
SCALE: 3/4" = 1'-0"



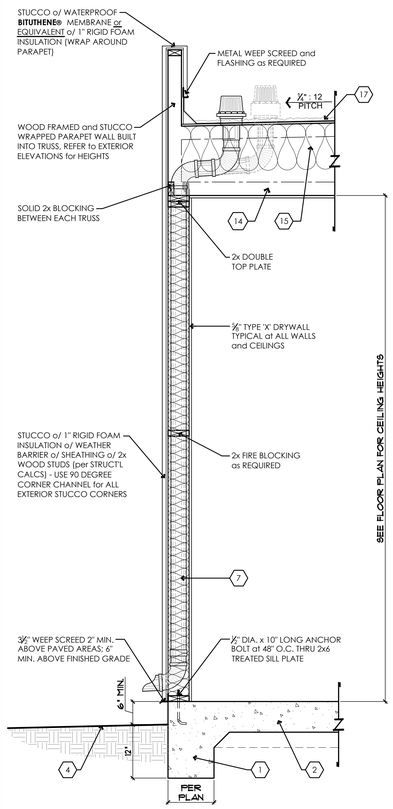
4 DETAIL at PARAPET CANTILEVER
SCALE: 3/4" = 1'-0"



3 DETAIL at PARAPET WALL
SCALE: 3/4" = 1'-0"



2 TYPICAL SINGLE STORY WALL
SCALE: 3/4" = 1'-0"



1 TYP. SINGLE STORY PARAPET WALL
SCALE: 3/4" = 1'-0"

KEYNOTE LEGEND

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ERIC B. MURRAY
56953
Signed: 06/02/2025
STATE OF UTAH
STRUCTURAL ELEMENTS ONLY

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www.lei-eng.com

CONTRACTOR:

PROJECT:
The KNEER Residence
3018 Camino de la Enclave
Tract 2389 Lot 08

ARCHITECTURAL DETAILS

REVISIONS:

△	
△	
△	

SCALE: AS NOTED	JOB #: 2024-08
DRAWN: S.I.Z.	CHECKED: LEI ENG'R
DATE: 04 APRIL 2025	
SHEET: S4.4	