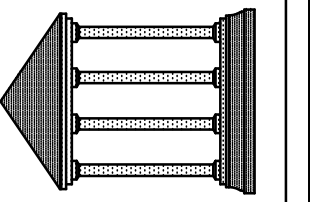


## FOUNDATION LAYOUT

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

\* REFER TO ENGINEER  
STAMPED FOUNDATION  
& FRAMING PLANS  
FOR DETAILS

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CONSTRUCTION

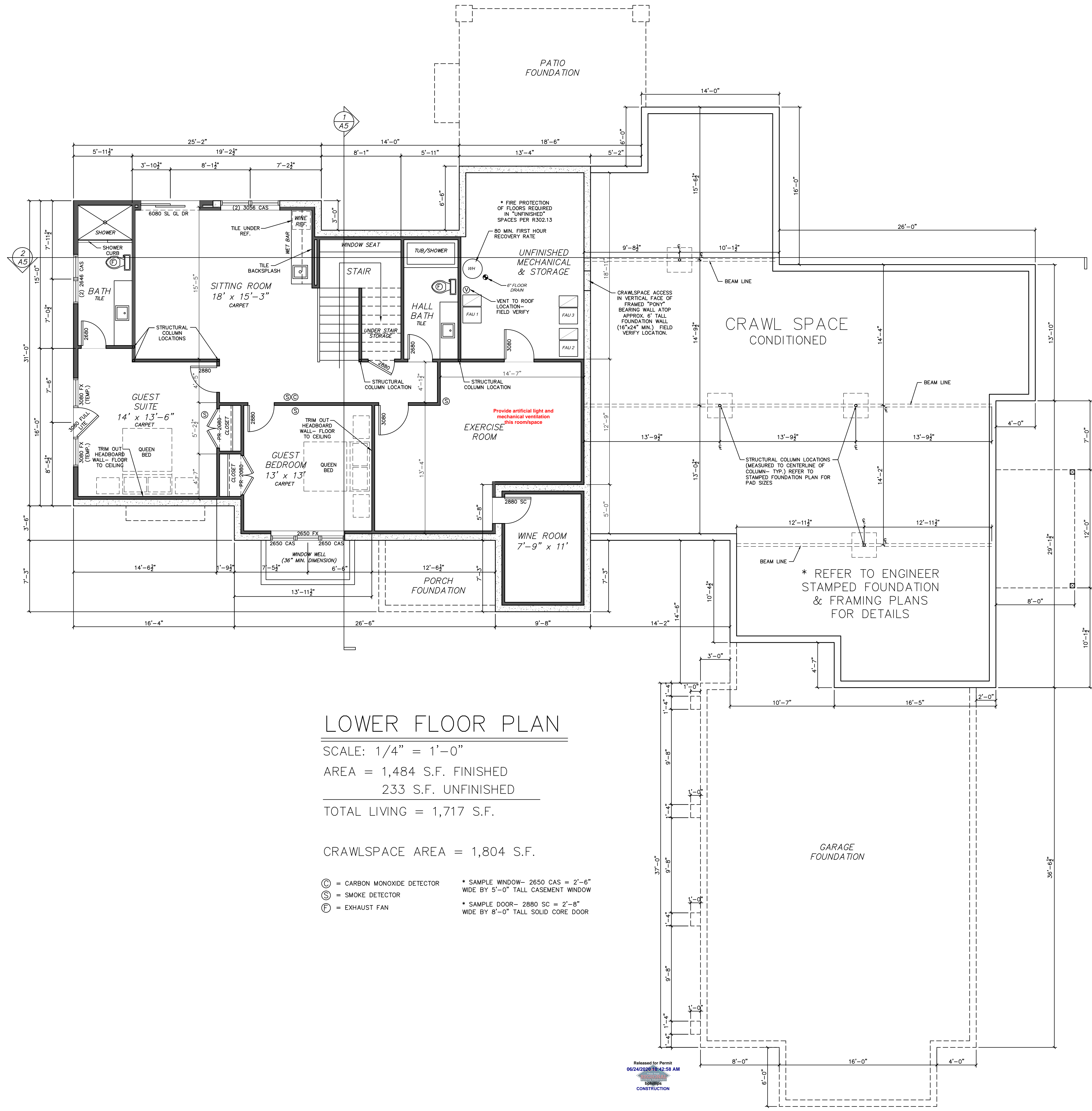


Custom Residence For:  
Gail Walters  
11720 High Meadows Drive  
Colorado Springs, CO

FOUNDATION LAYOUT

Date: June 5, 2020  
Date Revised:  
Drawn by: DDS

A1



### LOWER FLOOR PLAN

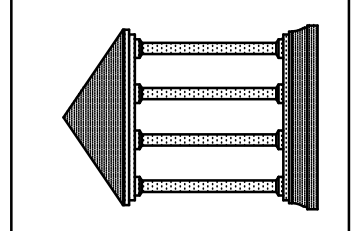
SCALE: 1/4" = 1'-0"

AREA = 1,484 S.F. FINISHED  
233 S.F. UNFINISHED

TOTAL LIVING = 1,717 S.F.

CRAWLSPACE AREA = 1,804 S.F.

- Ⓢ = CARBON MONOXIDE DETECTOR
- Ⓞ = SMOKE DETECTOR
- Ⓧ = EXHAUST FAN
- \* SAMPLE WINDOW- 2650 CAS = 2'-6" WIDE BY 5'-0" TALL CASEMENT WINDOW
- \* SAMPLE DOOR- 2880 SC = 2'-8" WIDE BY 8'-0" TALL SOLID CORE DOOR



Custom Residence For:  
**Gail Walters**  
11720 High Meadows Drive  
Colorado Springs, CO

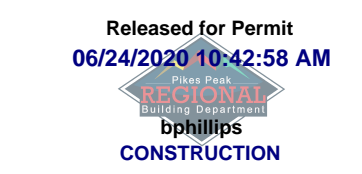
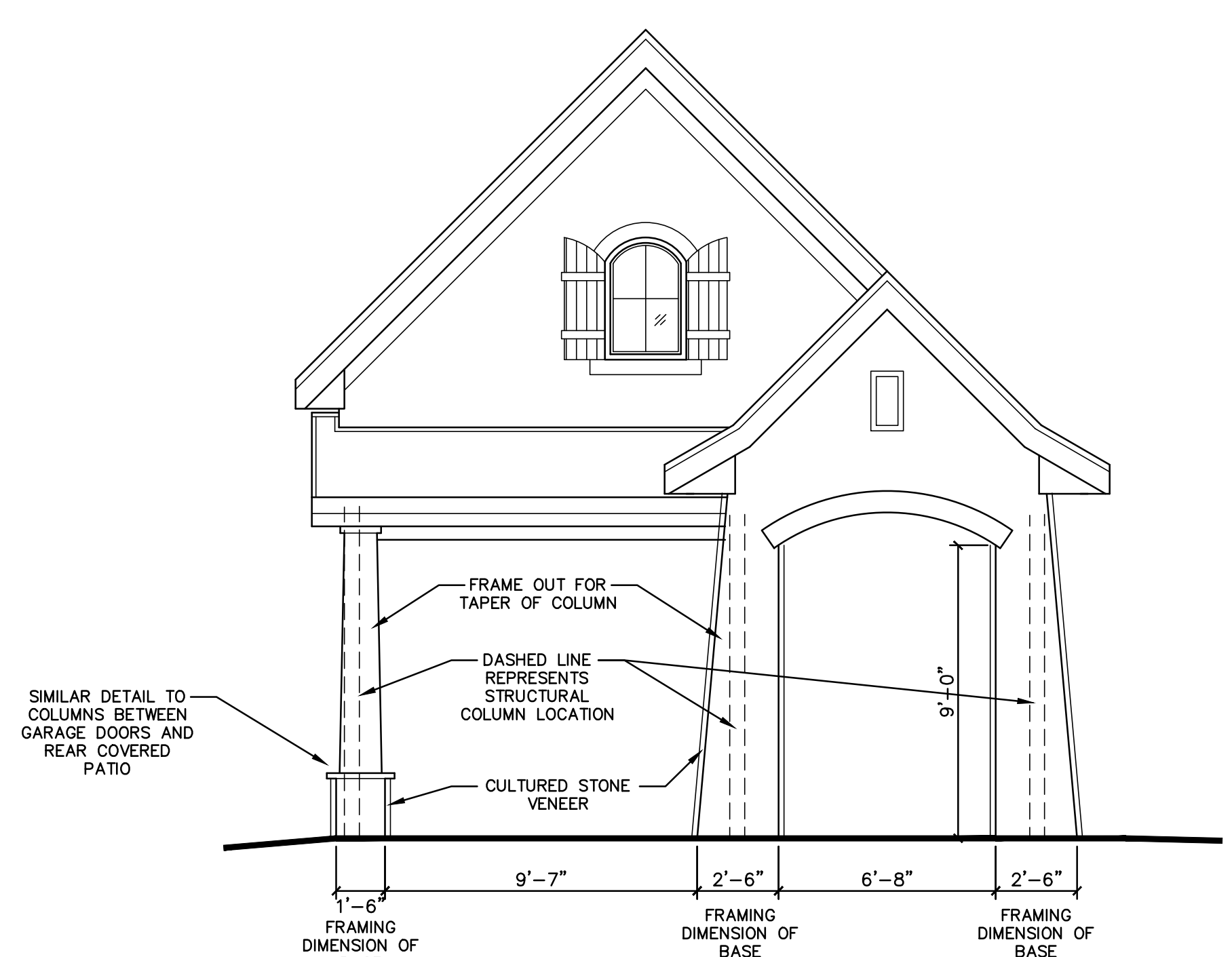
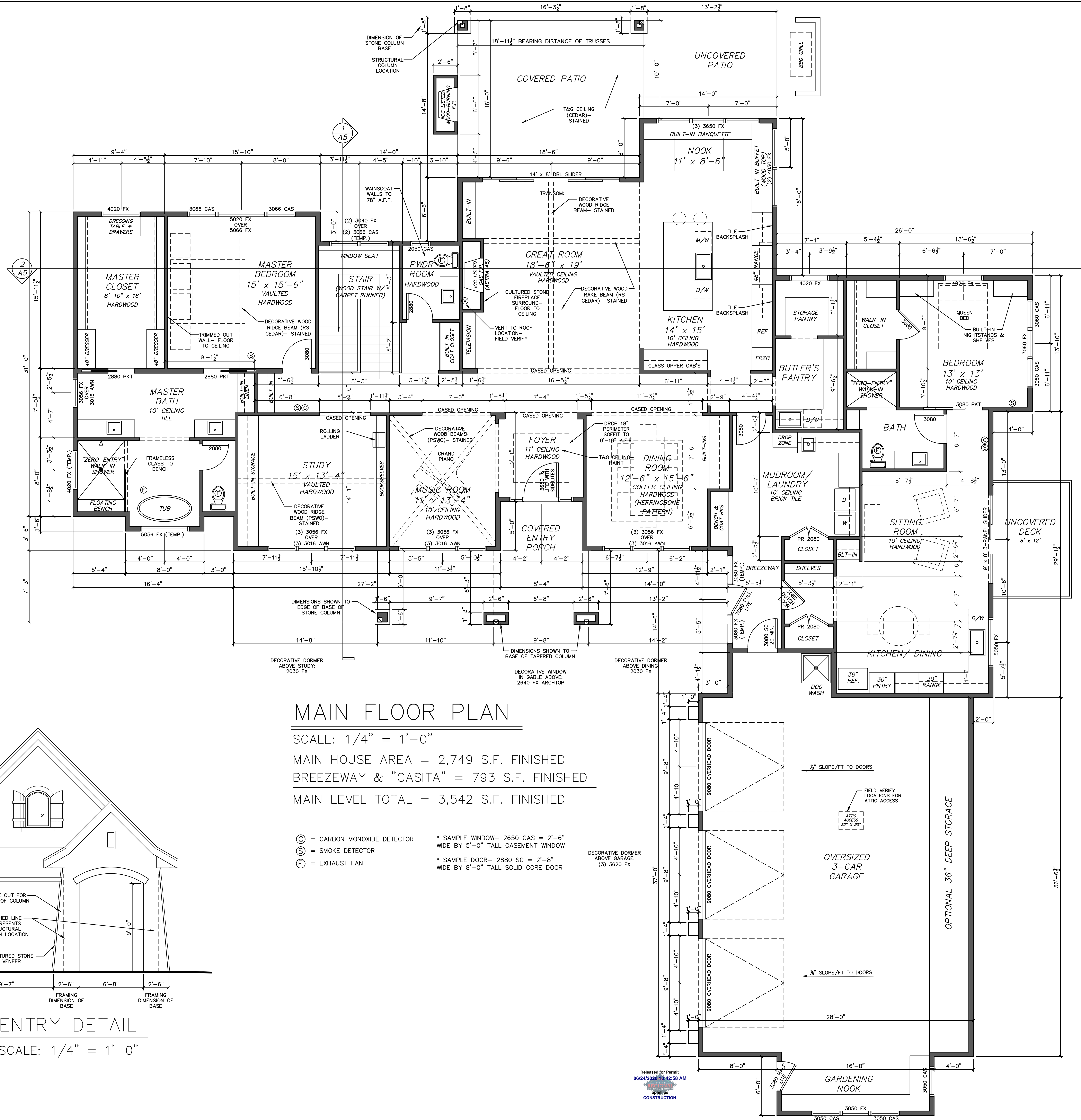
LOWER FLOOR PLAN

Date: June 5, 2020  
Date Revised:  
Drawn by: DDS

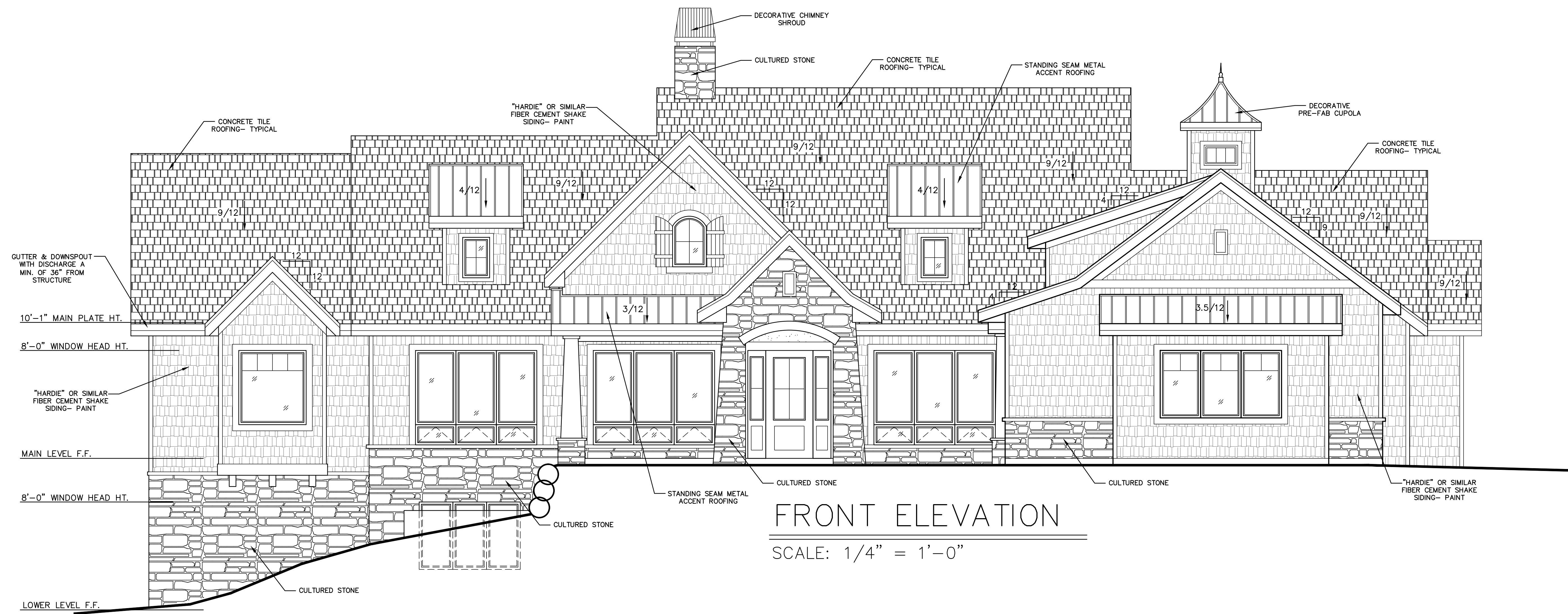
A1

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06/24/2020 10:42:58 AM  
CONSTRUCTION



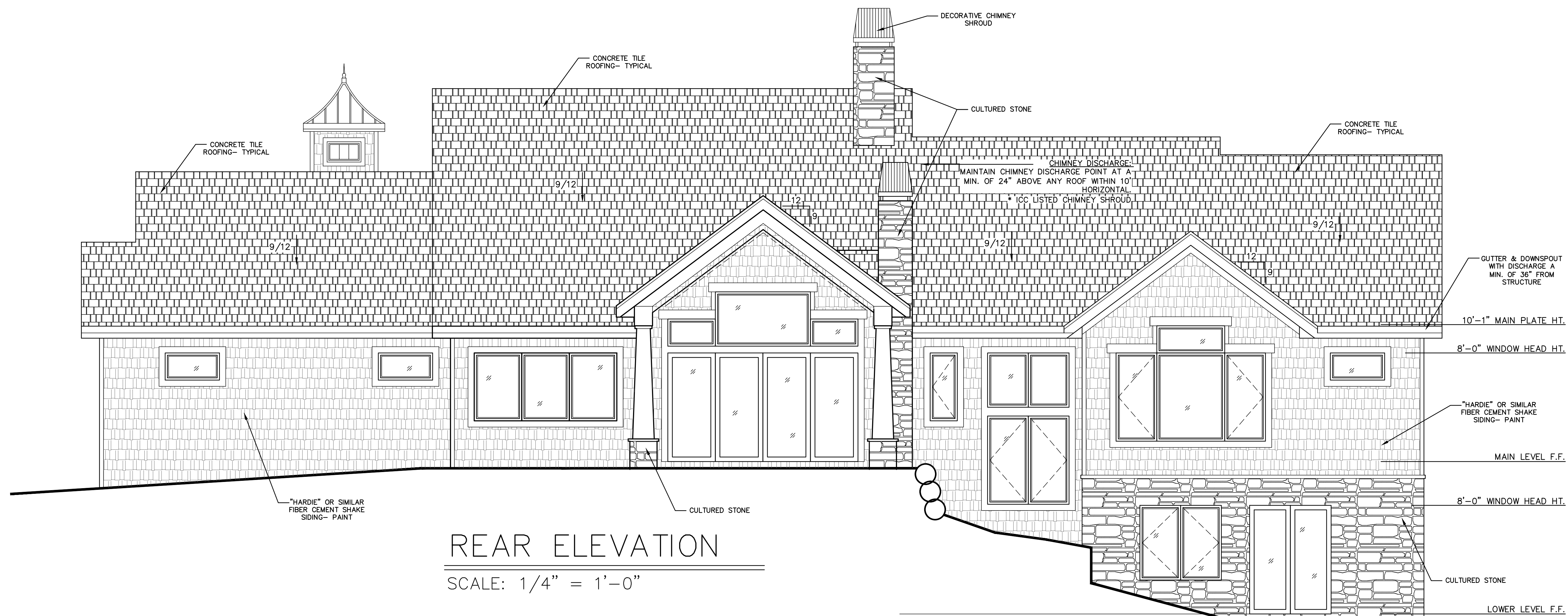






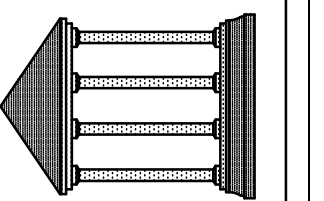
**FRONT ELEVATION**

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



**REAR ELEVATION**

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

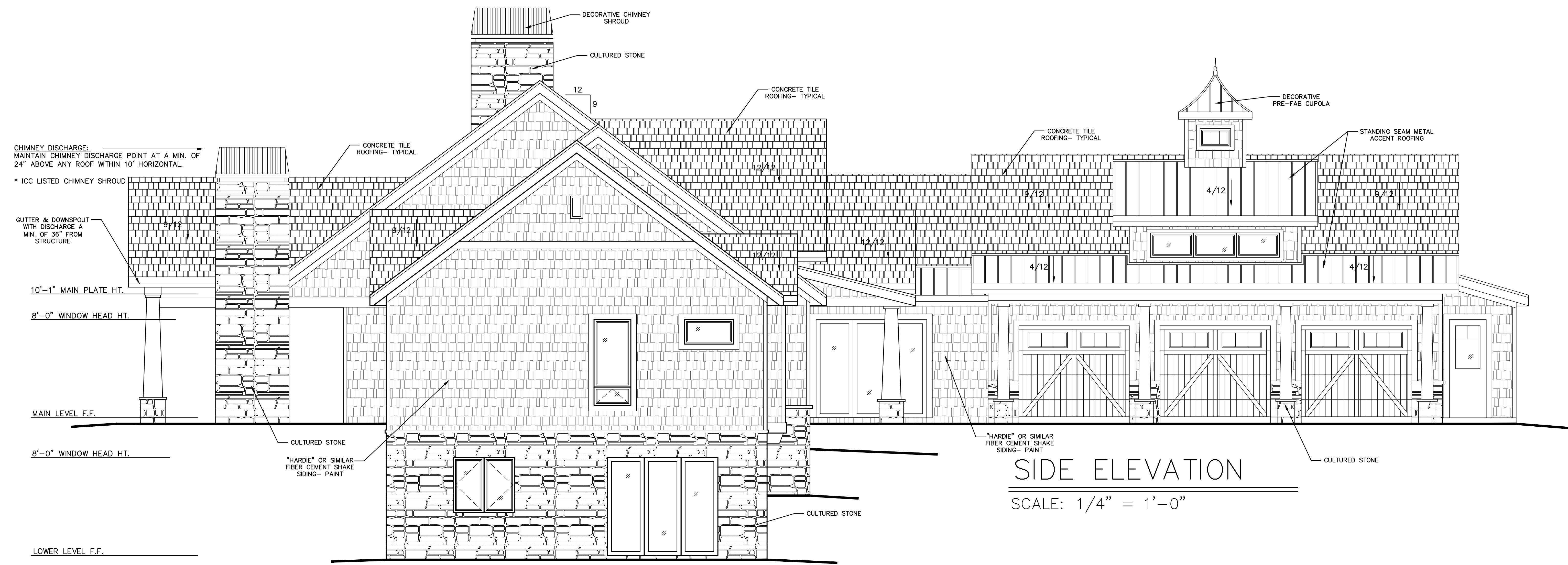


Custom Residence For:  
**Gail Walters**  
 11720 High Meadows Drive  
 Colorado Springs, CO

BUILDING ELEVATIONS

Date: June 5, 2020  
 Date Revised:  
 Drawn by: DDS

A3



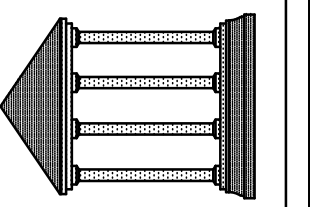
SIDE ELEVATION

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

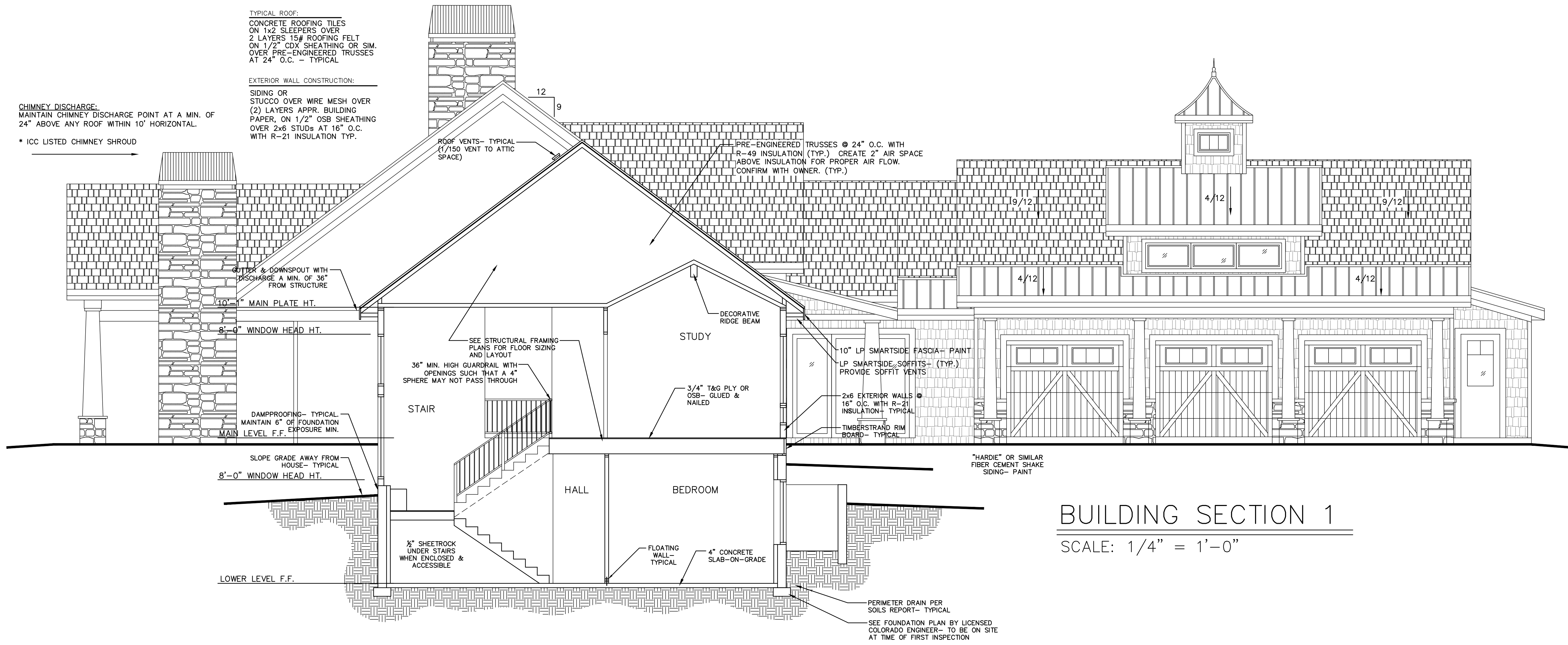


SIDE ELEVATION

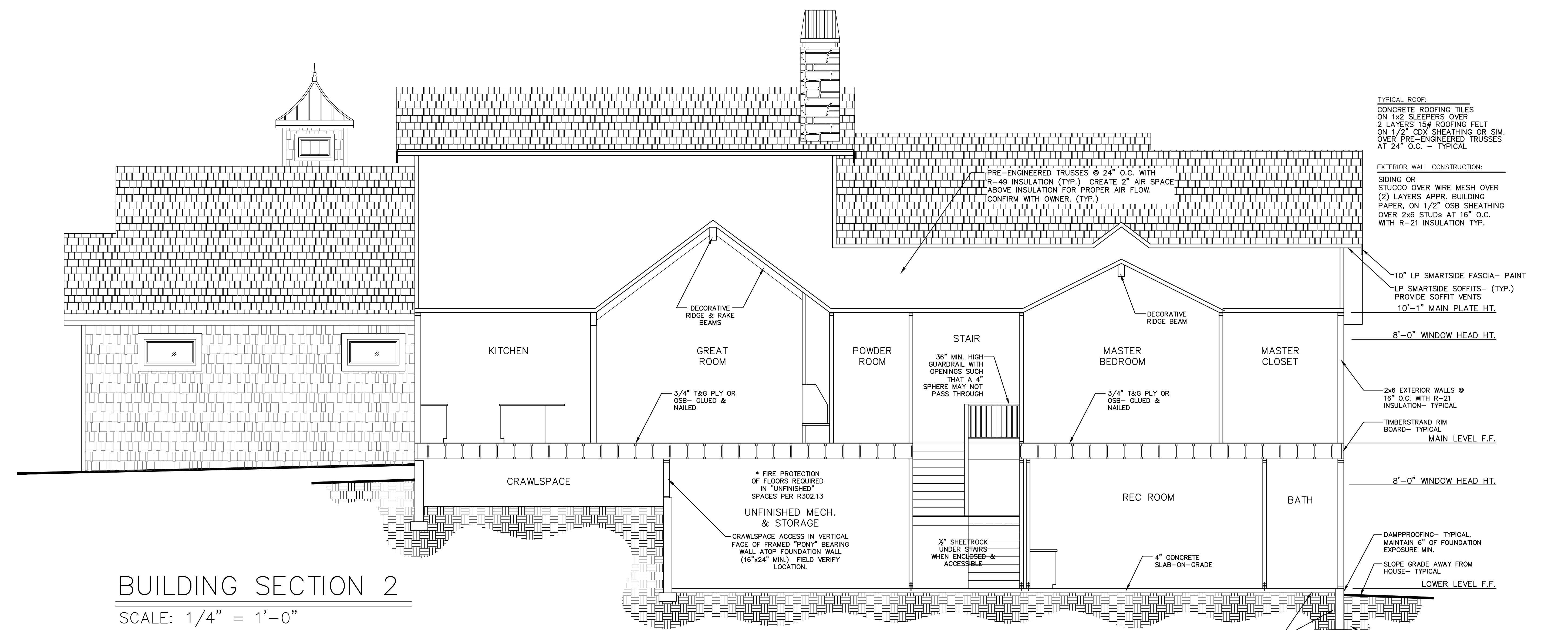
SCALE: 1/4" = 1'-0"







**BUILDING SECTION 1**  
 SCALE: 1/4" = 1'-0"



**BUILDING SECTION 2**  
 SCALE: 1/4" = 1'-0"

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 06/24/2020 10:42:58 AM  
 CONSTRUCTION



**GENERAL NOTES:**

**DISCREPANCIES:**  
DIMENSIONS AND ELEVATIONS INDICATED ON THESE PLANS SHALL BE VERIFIED BY THE CONTRACTOR. DISCREPANCIES IN THE DRAWINGS OR BETWEEN THE DRAWINGS AND FIELD CONDITIONS SHALL BE REFERRED TO THE DESIGNER FOR ADJUSTMENT BEFORE THE WORK IS PERFORMED. FAILURE TO NOTIFY THE DESIGNER SHALL PLACE FULL RESPONSIBILITY UPON THE CONTRACTOR TO MAKE WHATEVER CHANGES OR CORRECTIONS AS SHALL BE REQUIRED.

**MATERIAL INSTALLATION:**  
ALL MATERIALS, SUPPLIES AND EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S WRITTEN RECOMMENDATIONS AND PER APPLICABLE CODES AND REQUIREMENTS. THE DESIGNER SHALL NOT HAVE CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES IN CONNECTION WITH THE WORK, FOR ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTOR OR ANY OTHER PERSON PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

**DIMENSIONING:**  
ALL DIMENSIONS TO FACE OF STUD OR FACE OF CONCRETE WALL. DO NOT SCALE DRAWINGS. ALL ANGLED WALLS ARE AT 45 DEGREES, UNLESS NOTED OTHERWISE.

**EXHAUST FANS / SMOKE & CARBON MONOXIDE DETECTORS:**  
PROVIDE MECHANICAL EXHAUST FROM BATHROOMS. MAIN LEVEL- BATHROOM VENTS LESS THAN 25' IN LENGTH WITH R-6 INSULATION AND APPROVED CAP.  
PROVIDE SMOKE & CARBON MONOXIDE DETECTORS WHERE SHOWN, INTER LINK SMOKE DETECTORS ON ALL LEVELS.

**TYPICAL STAIR CONSTRUCTION:**  
SEE PLANS FOR STAIR RISE, RUN AND WIDTH- 7-3/4" MAX. RISE, 11" TYP. RUN AND 36" MIN. CLEAR WIDTH. PROVIDE HANDRAIL AT LEAST ONE SIDE 34"-38" ABOVE TREAD NOSING. PROVIDE MINIMUM HEADROOM OF 6'-8" ABOVE TREAD NOSING.

**TYPICAL INTERIOR WALL CONSTRUCTION:**  
ALL INTERIOR WALL ARE 2x4 AT 16" O.C., U.N.O. TAPE, TEXTURE AND PAINT EACH SIDE.

**TYPICAL FOUNDATION WALL CONSTRUCTION:**  
8" FOUNDATION WALL WITH REINFORCING AND FOOTING DESIGN PER SOILS ENGINEER, DAMPROOF, 2x TREATED SILL PLATES W/O SPECIFIED ENGINEERED DESIGN, STAMPED BY A PROFESSIONAL ENGINEER, 1/2" DIA. ANCHOR BOLTS A MINIMUM OF 7" INTO CONCRETE, MAINTAIN MINIMUM 6" BETWEEN WOOD CONSTRUCTION AND FINISH GRADE, MAINTAIN MINIMUM OF 30" BETWEEN FINISH GRADE AND BOTTOM OF FOOTING.

**TYPICAL FLOOR CONSTRUCTION:**  
3/4" T&G PLYWOOD FLOORING GLUED AND SCREWED TO FLOOR JOISTS.

**TYPICAL ATTIC VENTILATION:**  
PROVIDE ROOF VENTS PER R806, MINIMUM 1 S.F. VENT PER 150 S.F. ATTIC AREA. 1 S.F. PER 300 S.F. ALLOWED WITH 50% ON THE VENTS LOCATED IN THE UPPER ROOF WITH THE BALANCE LOCATED IN THE EAVES.

**TYPICAL ROOF CONSTRUCTION:**  
ASPHALT SHINGLES (MIN. 240#/SQ) ON 1 LAYERS 30# ROOFING FELT ON 1/2" OSB ROOF. ALL ASPHALT SHINGLES SHALL BE APPROVED AND INSTALLED PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

OR CONCRETE ROOFING TILES ON 1x2 SLEEPERS OVER 2 LAYERS 15# ROOFING FELT ON 1/2" PLYWOOD ROOF SHEATHING OVER PRE-ENGINEERED TRUSSES AT 24" O.C. MINIMUM 2 FASTENERS PER TILE.

**TYPICAL EXTERIOR WALL CONSTRUCTION:**  
STUCCO OVER WIRE MESH ON OSB OR PLYWOOD SHEATHING ON 2x6 STUDS AT 16" O.C. WITH R-19 INSULATION.

**TEMPERED GLAZING:**  
ALL GLAZING LOCATED IN HAZARDOUS LOCATIONS SHALL BE SAFETY GLAZING. THIS SHALL INCLUDE BUT NOT BE LIMITED TO: ALL GLAZING IN EXCESS OF 9 S.F. WITHIN 18" OF A FLOOR OR WALKING SURFACE WHERE THE TOP EDGE OF THE GLAZING IS MORE THAN 36" ABOVE THE FLOOR, GLAZING IN DOORS, GLAZING IN SHOWER AND TUB ENCLOSURES, GLAZING WITH 24" HORIZONTAL OF A CLOSED DOOR (ARC OF DOOR) THAT IS ALSO WITHIN 60" OF THE FLOOR OR WALKING SURFACE.

**BEDROOM EGRESS:**  
ALL ROOMS USED FOR SLEEPING SHALL HAVE AN EGRESS WINDOW OR DOOR. WINDOW SUPPLIER SHALL VERIFY THAT WINDOWS MEET SIZE REQUIREMENTS FOR THE LOCAL CODE. EGRESS WINDOW SILLS SHALL BE WITHIN 44" OF THE FLOOR. EGRESS WINDOW WELLS WILL BE A MINIMUM OF 3", WITH A MINIMUM OF 9 S.F. A FIXED LADDER IS REQUIRED IF THE EGRESS WELL IS GREATER THAN 44" DEEP.

**CHIMNEY DISCHARGE:**  
MAINTAIN CHIMNEY DISCHARGE AT A MINIMUM OF 24" ABOVE ANY ROOF WITHIN 10' HORIZONTAL, BUT NOT LESS THAN 36" ABOVE THE HIGHEST POINT WHERE THE CHIMNEY PASSES THROUGH THE ROOF.

**FIREPLACES:**  
ALL FIREPLACES TO BE UL LISTED UNITS WITH APPROVED LABEL VISIBLE ON UNIT AT THE TIME OF RBD INSPECTION.

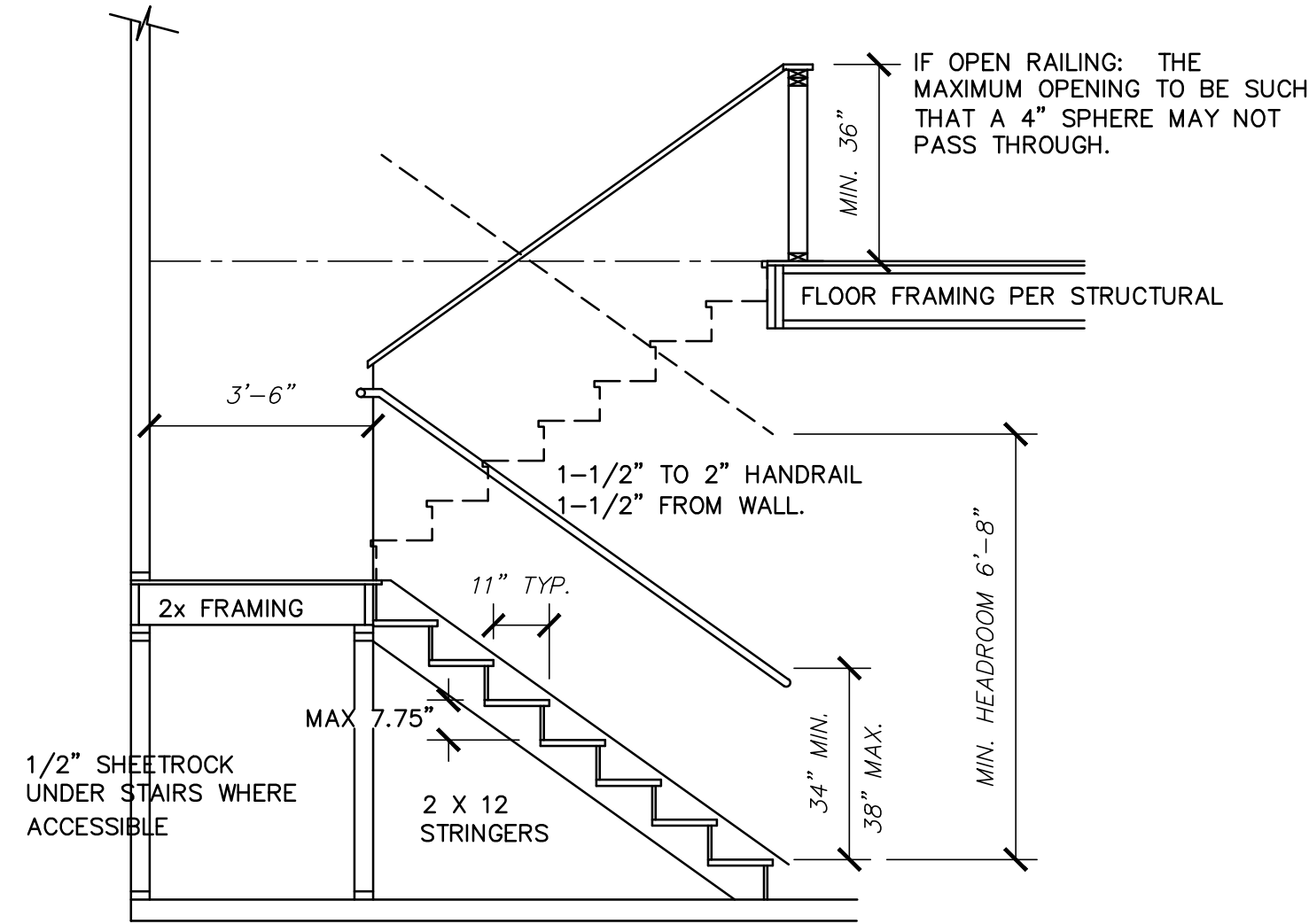
**DRYER VENTS:**  
DRYER VENTS TO BE A MAXIMUM OF 25' LONG, REDUCED BY 2.5' FOR EVERY 45 DEGREE BEND AND 5' FOR EVERY 90 DEGREE BEND, PER M1501, WITH APPROVED CAP AND BACKDRAFT DAMPER. PROVIDE MINIMUM 100 S.I. LOUVER IN DOOR TO LAUNDRY ROOM.

**FOUNDATION DESIGN AND SOILS REPORT:**  
SOILS REPORT AND FOUNDATION DESIGN BY LICENSED COLORADO ENGINEER OR ARCHITECT SHALL BE ON HAND AT THE TIME OF THE FIRST INSPECTION.

**DOORS & WINDOWS:**  
DOORS AND WINDOWS ARE PER THE OWNER'S SELECTION. SIZES AS LISTED ON FLOOR PLANS. SIZES SHOWN IN FEET AND INCHES. I.E. DOOR LISTED AS 3068 IS 3'-0" WIDE AND 6'-8" TALL. WINDOW LISTED AS 3040CAS IS 3'-0" WIDE AND 4'-0" TALL AND IS A CASEMENT WINDOW. OTHER OPERATIONS SHOWN: A = AWNING, CAS = CASEMENT, HS = HORIZONTAL SLIDING, DH = DOUBLE HUNG, F = FIXED AND SH = SINGLE HUNG.

**GYPSUM BOARD REQUIREMENTS AND LOCATIONS:**  
PROVIDE 1/2" GYPSUM BOARD AT THE FOLLOWING LOCATIONS-  
\* UNDER STAIRS IF ENCLOSED AND ACCESSIBLE.  
PROVIDE 5/8" TYPE "X" GYPSUM BOARD AT THE FOLLOWING LOCATIONS-  
\* COMMON WALL, STRUCTURAL MEMBERS AND ENTIRE CEILING OF GARAGE. WRAP ALL BEAMS AND SUPPORTING COLUMNS- TYP.

NOTE: THESE STAIR NOTES AND SECTION ARE GENERIC- REFER TO PLAN AND BUILDING SECTIONS FOR STAIR DIMENSIONS FOR THIS PLAN.



**IBC STAIR NOTES:**

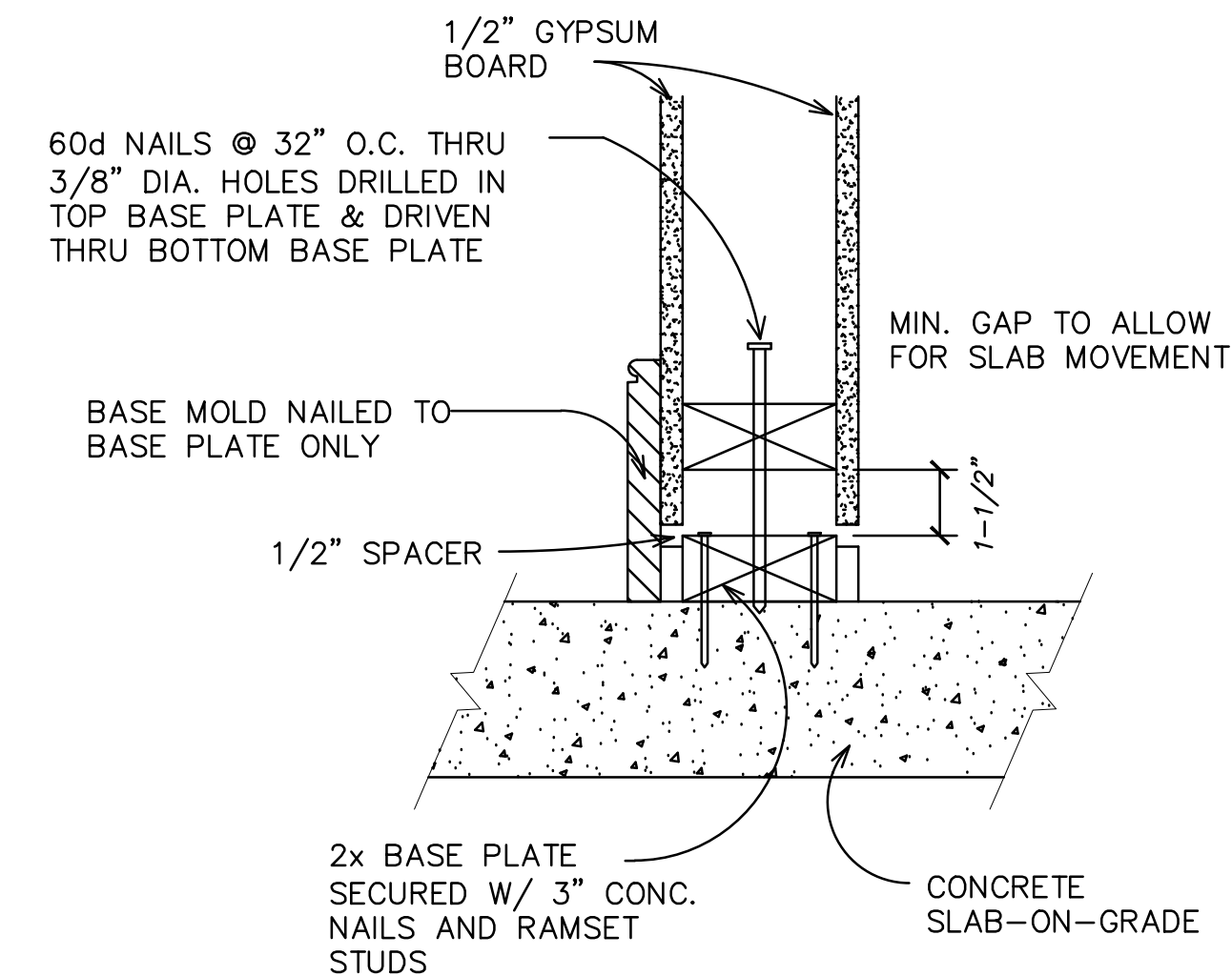
MAX. STAIR RISE NOT TO EXCEED 7.75". RISER VARIATION NOT TO EXCEED 3/8". TYP. TREAD RUN IS 11".

AT WINDING STAIRS, A MIN. TREAD RUN OF 10" MUST BE PROVIDED AT A POINT NO MORE THAN 12" FROM THE SIDE OF THE STAIRWAY WHERE THE TREAD IS NARROWEST, BUT IN NO CASE SHALL THE WIDTH OF ANY RUN BE LESS THAN 6".

MIN. STAIR WIDTH IS 36".

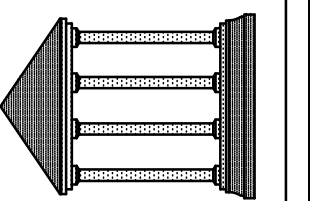
ONE HANDRAIL SHALL BE PROVIDED. THE TOP OF THE HANDRAIL SHALL BE NOT LESS THAN 34" NOR MORE THAN 38" ABOVE THE TREAD NOSING. THE HAND GRIP PORTION OF THE HANDRAIL SHALL BE NOT LESS THAN 1-1/2" NOR MORE THAN 2" IN CROSS-SECTIONAL DIMENSION OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE. HANDRAILS PROJECTING FROM A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1-1/2" BETWEEN THE WALL AND THE HANDRAIL.

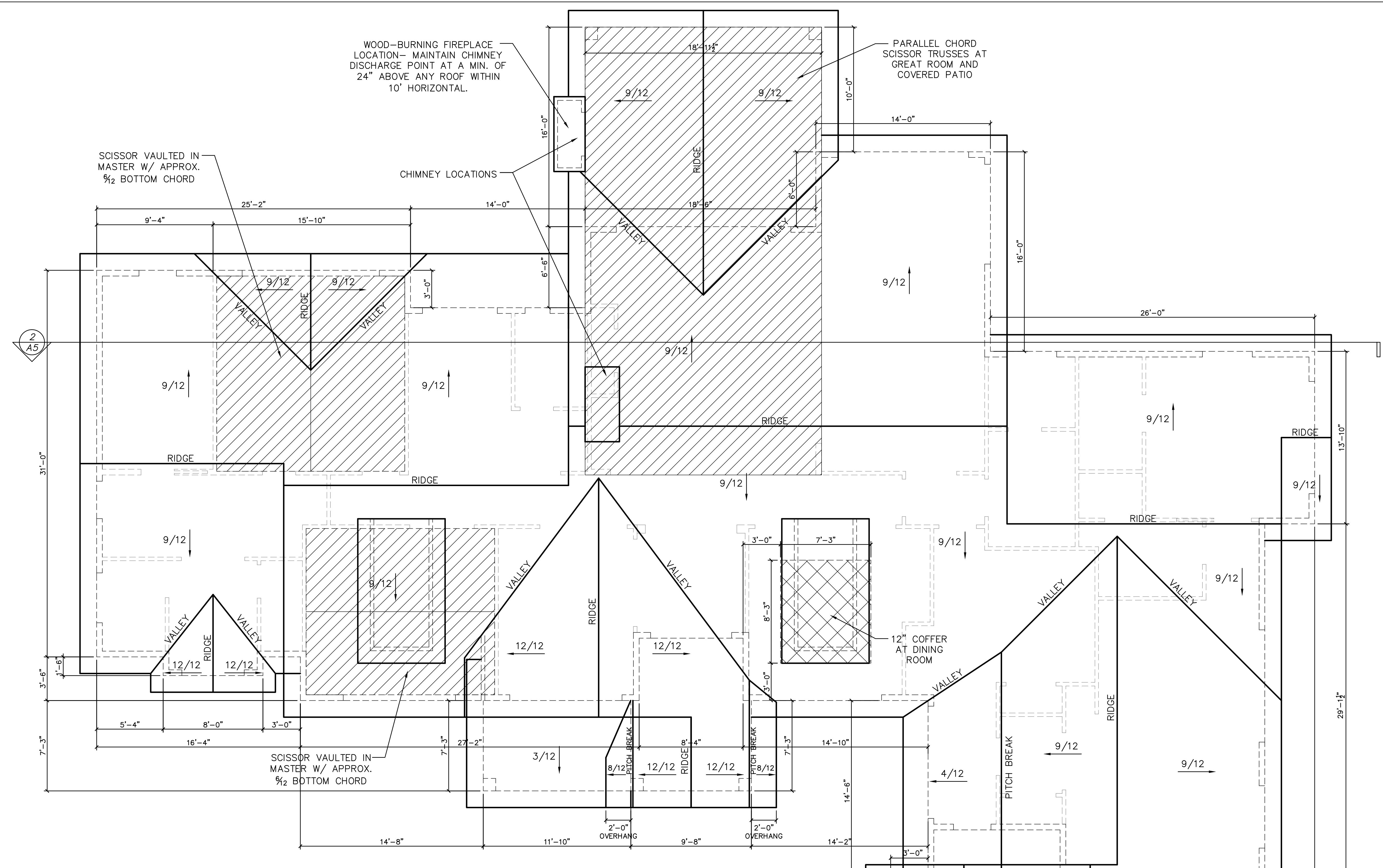
STAIRWAYS OPEN ON ONE OR BOTH SIDES SHALL HAVE GUARDRAILS. OPEN GUARDRAILS SHALL HAVE INTERMEDIATE RAILS OR AN ORNAMENTAL PATTERN SUCH THAT A SPHERE 4" IN DIA. CANNOT PASS THROUGH. THE TOP OF GUARDRAILS AT LANDINGS SHALL BE NOT LESS THAN 36" IN HEIGHT.



**FLOATING WALL DETAIL**

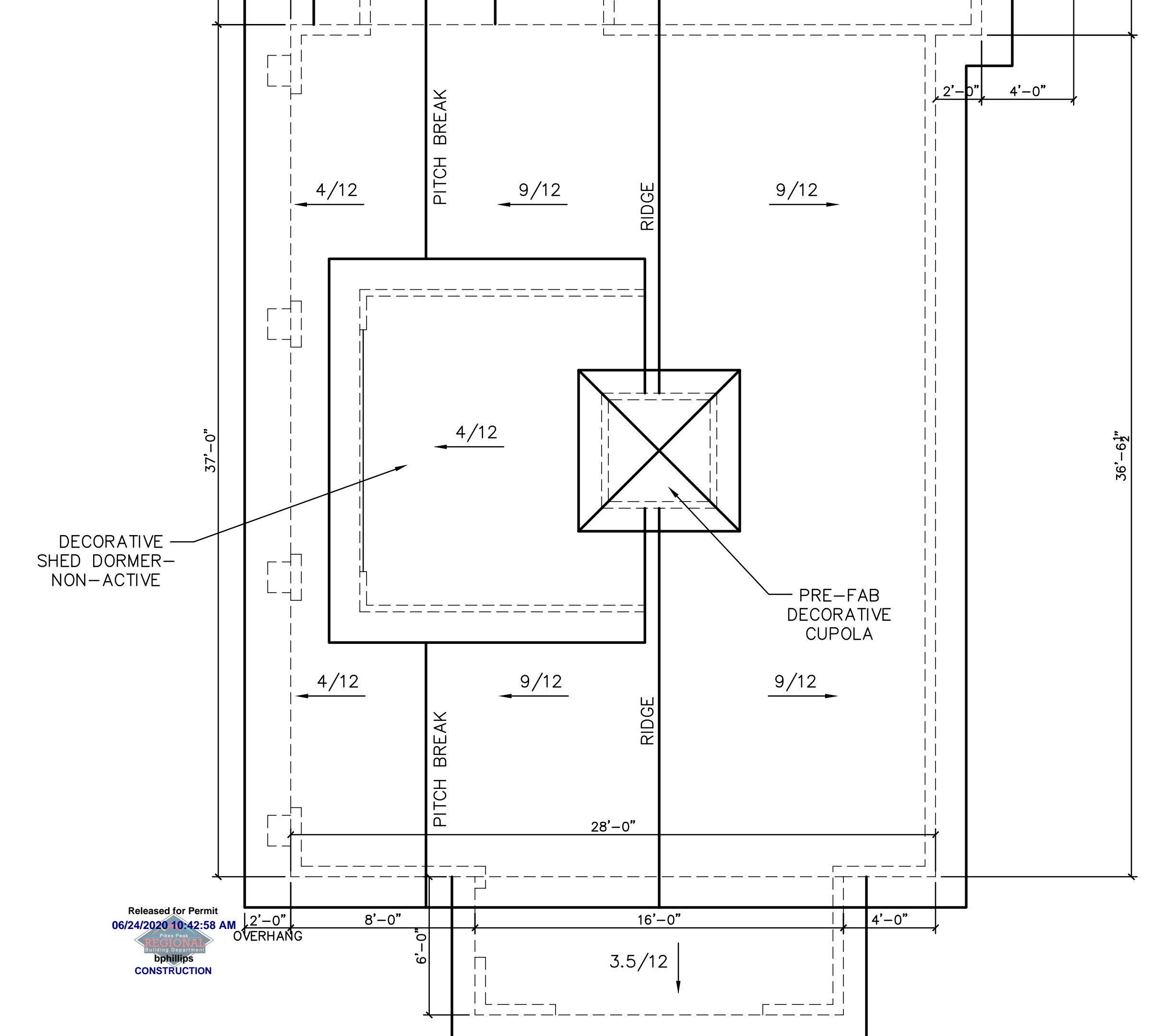
NO SCALE



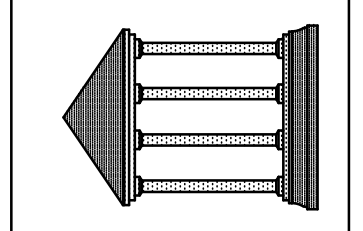


**ROOF PLAN**  
 SCALE: 1/4" = 1'-0"

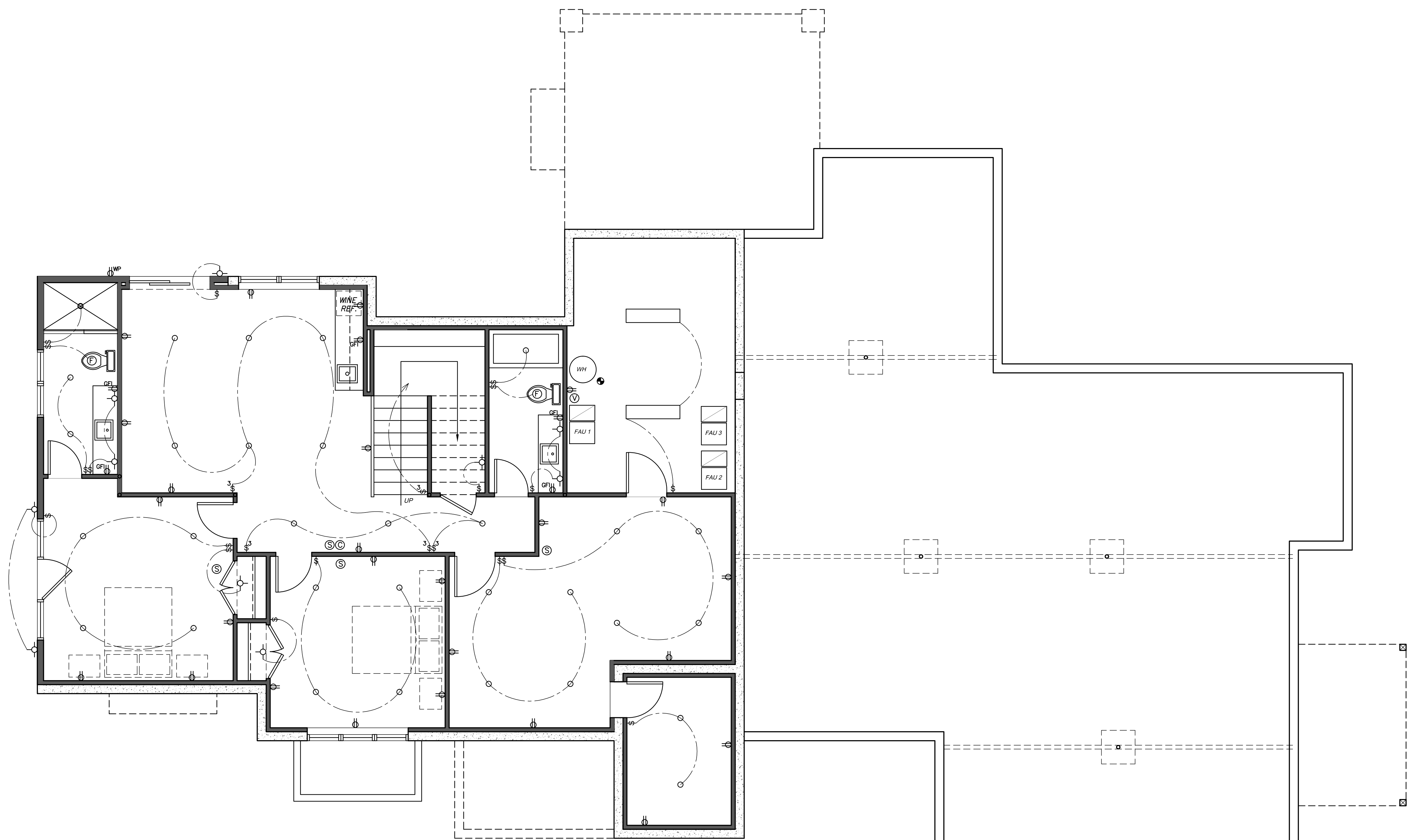
- TRUSS DESIGN NOTES:*
- \* 16" OVERHANGS OVERALL (24" AT FRONT GARAGE OVERHANG AND ENTRY GABLE)
  - \* ABOVE 7000'
  - \* DESIGN FOR CONCRETE TILE ROOFING (USING ASPHALT)
  - \* MIX OF ROOF PITCHES- SEE PLAN AND ELEVATIONS
  - \* 10'-1" PLATE OVERALL
  - \* 11'-1" PLATE AT FOYER
  - \* 12" COFFER AT DINING ROOM- SEE PLAN
  - \* VAULTED GREAT ROOM AND COVERED PATIO (PARALLEL CHORD SCISSOR)
  - \* VAULTED CEILINGS AT MASTER BEDROOM AND STUDY WITH APPROX. 1/2 BOTTOM CHORD



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 TRUSSES  
 CONSTRUCTION







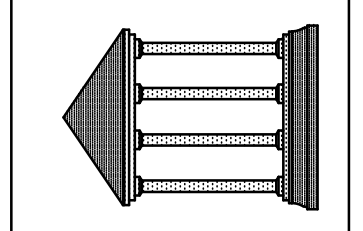
## LOWER FLOOR PLAN ELECTRICAL

**ELECTRICAL PLAN LEGEND**

|  |                                     |
|--|-------------------------------------|
| Ⓧ = THERMOSTAT LOCATION  | Ⓢ = SINGLE POLE SWITCH              |
| Ⓥ = VENT   | Ⓢ <sub>3</sub> = THREE-WAY SWITCH   |
| Ⓢ = SMOKE DETECTOR. ALL DETECTORS ARE HARDWIRED AND INTER LINKED WITH BATTERY BACKUP.                | Ⓢ <sub>4</sub> = FOUR WAY SWITCH    |
| Ⓢ = EXHAUST FAN  | Ⓢ <sub>0</sub> = DIMMER SWITCH      |
| Ⓢ = WATER SUPPLY   | Ⓢ = OVERHEAD LIGHT- CEILING MOUNTED |
| Ⓢ = DOORBELL   | Ⓢ = WALL MOUNTED LIGHT/ SCENCE      |
| FAU = FORCED AIR UNIT. PROVIDE CLEARANCES AND INSTALLATION ACCORDING TO MANUFACTURERS SPECIFICATION. | A.C. = ABOVE COUNTER                |
| Ⓢ = HOSE BIBB  | B.C. = BELOW COUNTER                |
| = CEILING FAN  | = UNDER CAB. LIGHTING               |
| = CEILING FAN WITH LIGHT KIT   | ○ = RECESSED CAN                    |
| = 4'/8" DOUBLE TUBE LED  | Ⓢ = PENDANT/HANGING LIGHT           |
| Ⓢ = FOURLEX OUTLET   | Ⓢ = DIRECTIONAL / SPOT LIGHTING     |
| Ⓢ = DUPLEX OUTLET  | Ⓢ = NATURAL GAS                     |
| Ⓢ = DUPLEX OUTLET- HALF HOT  | WP = WEATHERPROOF DUPLEX OUTLET.    |
| Ⓢ = 220 OUTLET   |                                     |

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 bphillips  
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**Design Renaissance**  
 Architectural Design & Planning  
 11720 High Meadows Drive  
 Colorado Springs, CO 80907  
 719.534.6844  
 info@designrenaissance.com

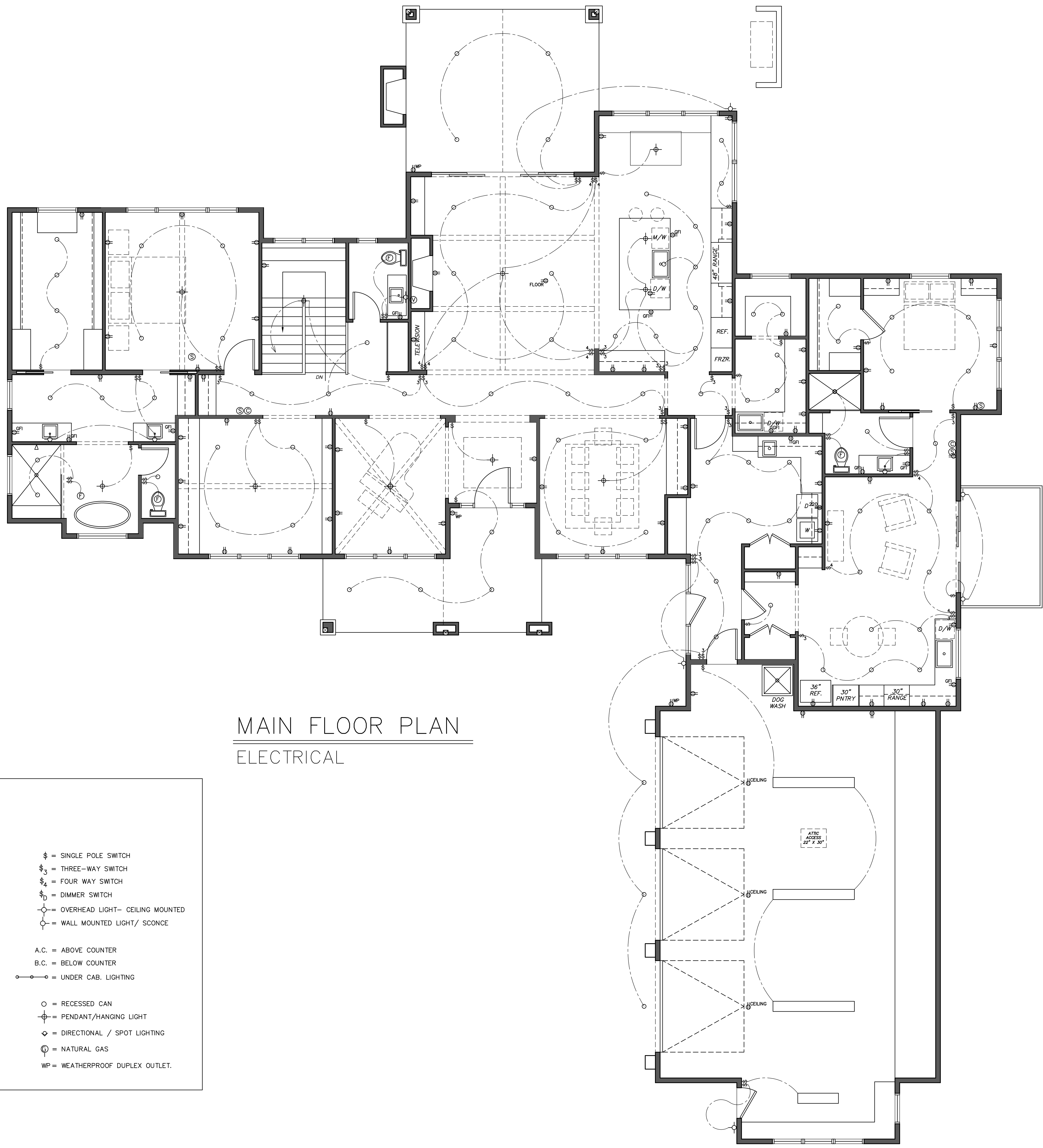


Custom Residence For:  
 Gail Walters  
 11720 High Meadows Drive  
 Colorado Springs, CO

LOWER ELECTRICAL PLAN  
 June 5, 2020  
 Date Revised  
 Drawn by  
 DDS

LOWER ELECTRICAL PLAN  
 June 5, 2020  
 Date Revised  
 Drawn by  
 DDS

E1



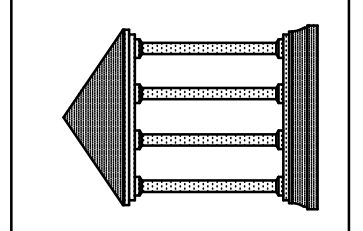
MAIN FLOOR PLAN  
ELECTRICAL

**ELECTRICAL PLAN LEGEND**

- Ⓟ = THERMOSTAT LOCATION
- Ⓥ = VENT
- Ⓢ = SMOKE DETECTOR. ALL DETECTORS ARE HARDWIRED AND INTER LINKED WITH BATTERY BACKUP.
- Ⓣ = EXHAUST FAN
- Ⓦ = WATER SUPPLY
- Ⓝ = DOORBELL
- FAU = FORCED AIR UNIT. PROVIDE CLEARANCES AND INSTALLATION ACCORDING TO MANUFACTURERS SPECIFICATION.
- †HB = HOSE BIBB
- Ⓢ = SINGLE POLE SWITCH
- Ⓢ₃ = THREE-WAY SWITCH
- Ⓢ₄ = FOUR WAY SWITCH
- Ⓢₒ = DIMMER SWITCH
- Ⓢₒ = OVERHEAD LIGHT- CEILING MOUNTED
- Ⓢₒ = WALL MOUNTED LIGHT/ SCONCE
- A.C. = ABOVE COUNTER
- B.C. = BELOW COUNTER
- Ⓢₒ = UNDER CAB. LIGHTING
- = RECESSED CAN
- Ⓢₒ = PENDANT/HANGING LIGHT
- ◇ = DIRECTIONAL / SPOT LIGHTING
- Ⓢₒ = NATURAL GAS
- WP = WEATHERPROOF DUPLEX OUTLET.
- Ⓢₒ = CEILING FAN
- Ⓢₒ = CEILING FAN WITH LIGHT KIT
- ▭ = 4' / 8' DOUBLE TUBE LED
- Ⓢₒ = FOURPLEX OUTLET
- Ⓢₒ = DUPLEX OUTLET
- Ⓢₒ = DUPLEX OUTLET- HALF HOT
- Ⓢₒ = 220 OUTLET

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**Design Renaissance**  
Architectural Design & Planning  
11720 High Meadows Drive  
Colorado Springs, CO 80907  
719.653.4684  
darrin@designrenaissance.net



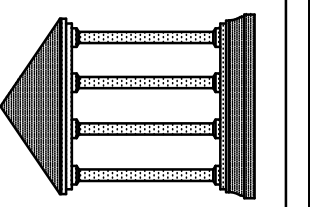
Custom Residence For:  
Gail Walters  
11720 High Meadows Drive  
Colorado Springs, CO

MAIN ELECTRICAL PLAN  
June 5, 2020  
Date Revised  
Drawn by  
DDS

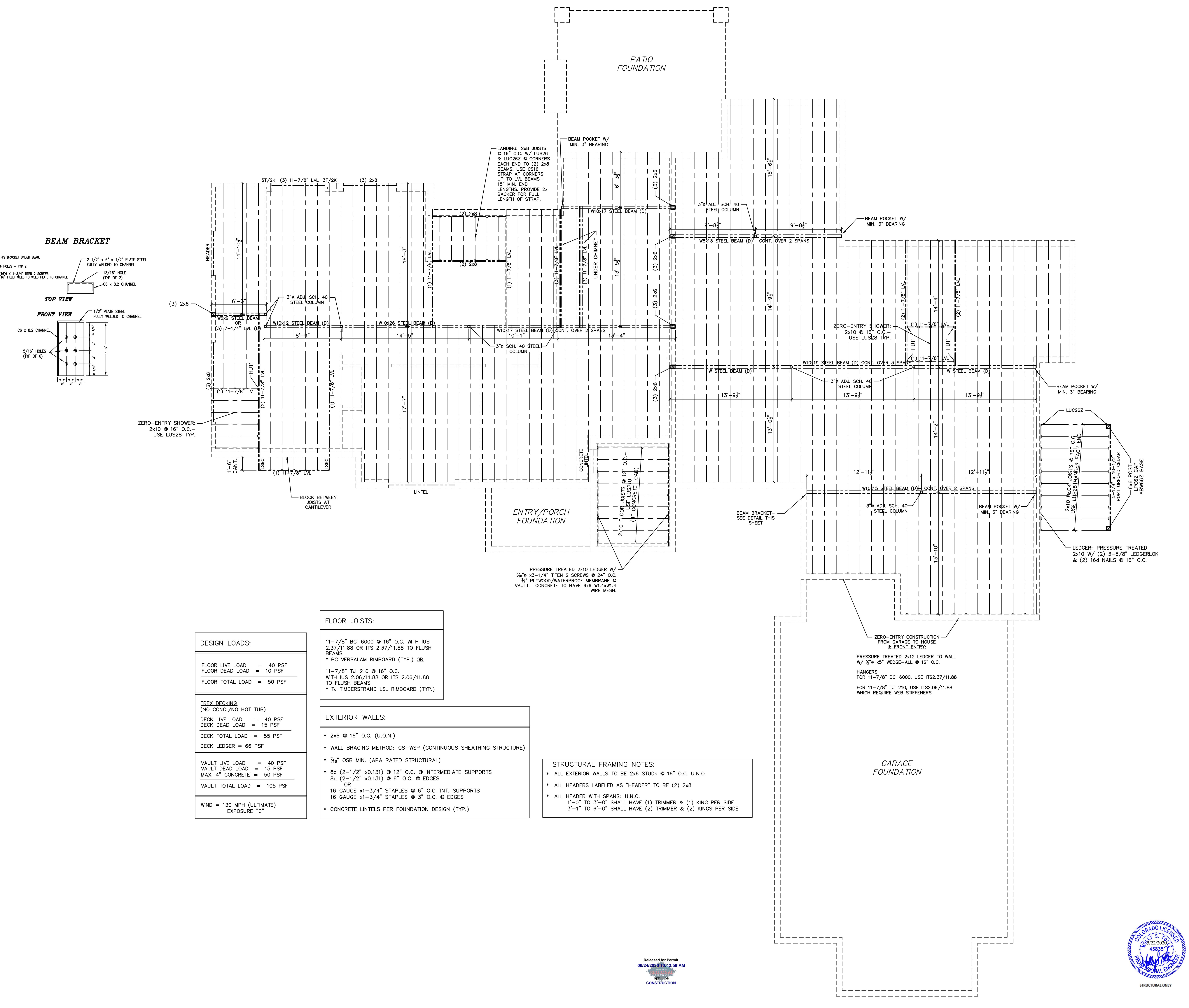
MAIN ELECTRICAL PLAN  
June 5, 2020  
Date Revised  
Drawn by  
DDS

E2

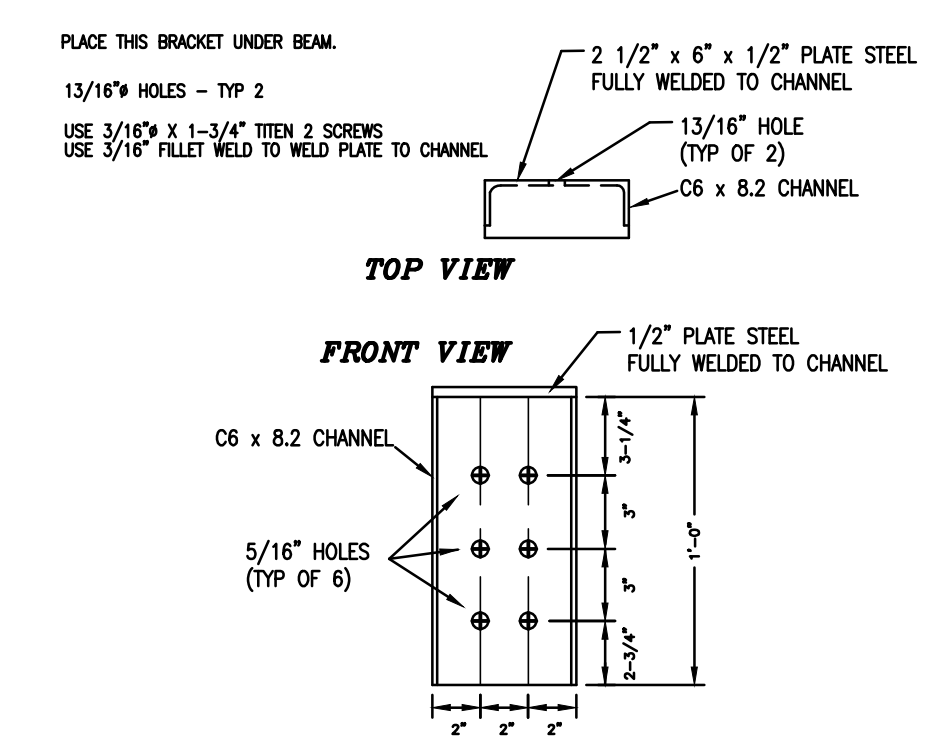




STRUCTURAL ONLY



**BEAM BRACKET**



ZERO-ENTRY SHOWER:  
 2x10 @ 16\"/>

ENTRY/PORCH FOUNDATION

GARAGE FOUNDATION

**DESIGN LOADS:**

|   |           |
|---|-----------|
| FLOOR LIVE LOAD                                 | = 40 PSF  |
| FLOOR DEAD LOAD                                 | = 10 PSF  |
| FLOOR TOTAL LOAD                                | = 50 PSF  |
| <b>TREX DECKING (NO CONC./NO HOT TUB)</b>       |           |
| DECK LIVE LOAD                                  | = 40 PSF  |
| DECK DEAD LOAD                                  | = 15 PSF  |
| DECK TOTAL LOAD                                 | = 55 PSF  |
| DECK LEDGER                                     | = 66 PSF  |
| <b>VAULT LIVE LOAD</b>                          |           |
| VAULT DEAD LOAD                                 | = 15 PSF  |
| MAX. 4\"/>                                      |           |
| VAULT TOTAL LOAD                                | = 105 PSF |
| <b>WIND = 130 MPH (ULTIMATE) EXPOSURE \"C\"</b> |           |

**FLOOR JOISTS:**

|            |
|------------|
| 11-7/8\"/> |
| 11-7/8\"/> |

**EXTERIOR WALLS:**

- 2x6 @ 16\"/>
- WALL BRACING METHOD: CS-WSP (CONTINUOUS SHEATHING STRUCTURE)
- 3/4\"/>
- Bd (2-1/2\"/>
- OR
- 16 GAUGE x1-3/4\"/>
- 16 GAUGE x1-3/4\"/>
- CONCRETE LINTELS PER FOUNDATION DESIGN (TYP.)

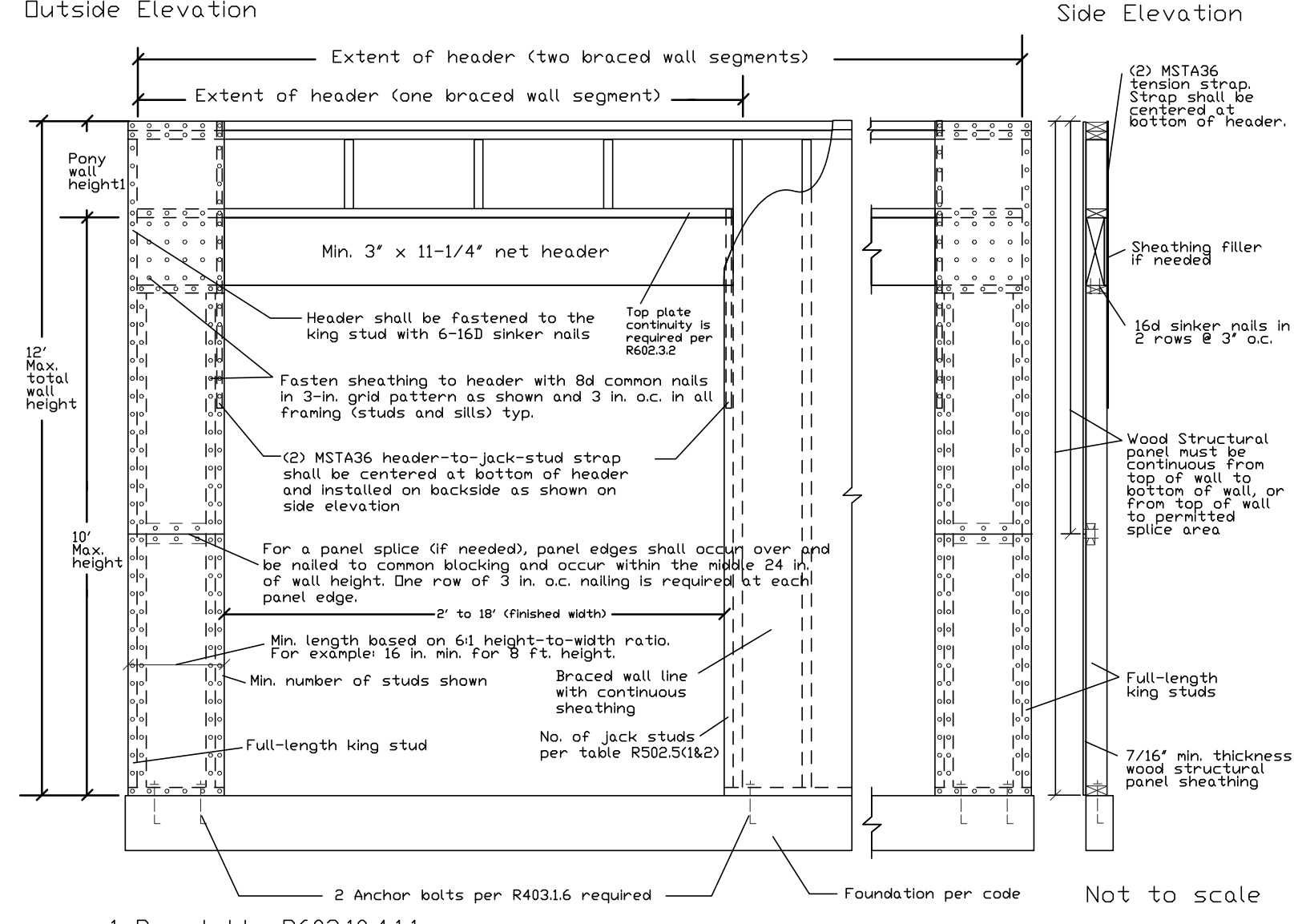
**STRUCTURAL FRAMING NOTES:**

- ALL EXTERIOR WALLS TO BE 2x6 STUDS @ 16\"/>
- ALL HEADERS LABELED AS \"HEADER\" TO BE (2) 2x8
- ALL HEADER WITH SPANS: U.N.O.
- 1'-0\"/>
- 3'-1\"/>

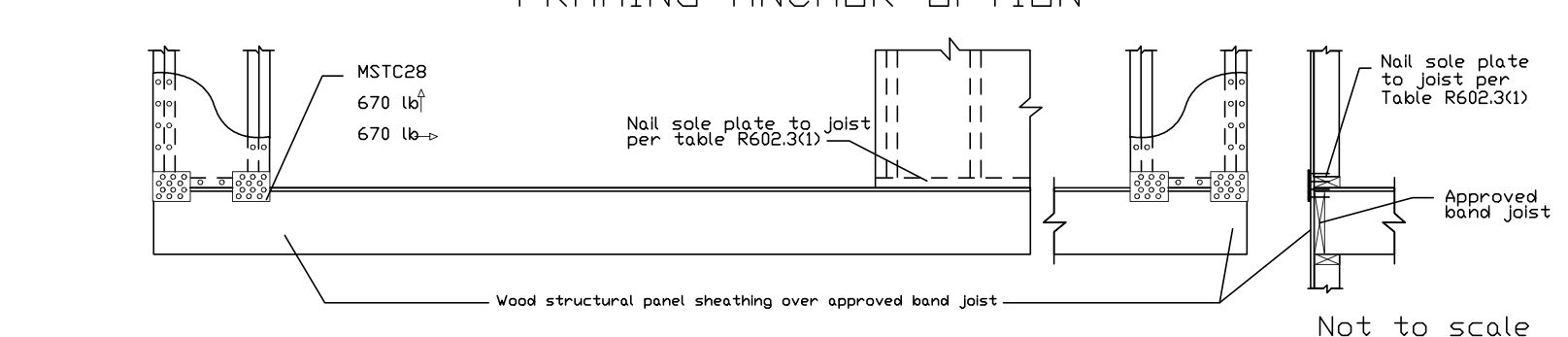
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 TRIMMER  
 CONSTRUCTION



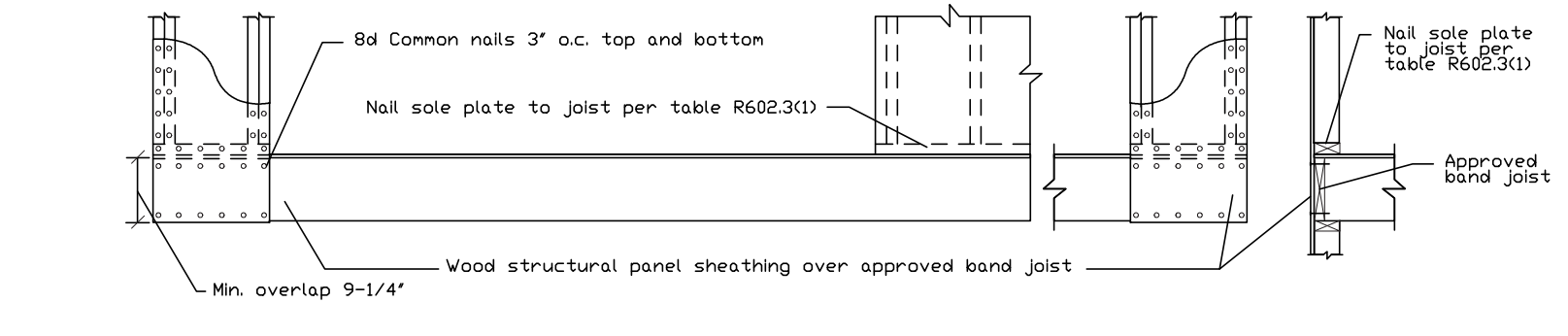
**OVER CONCRETE OR MASONRY BLOCK FOUNDATION**



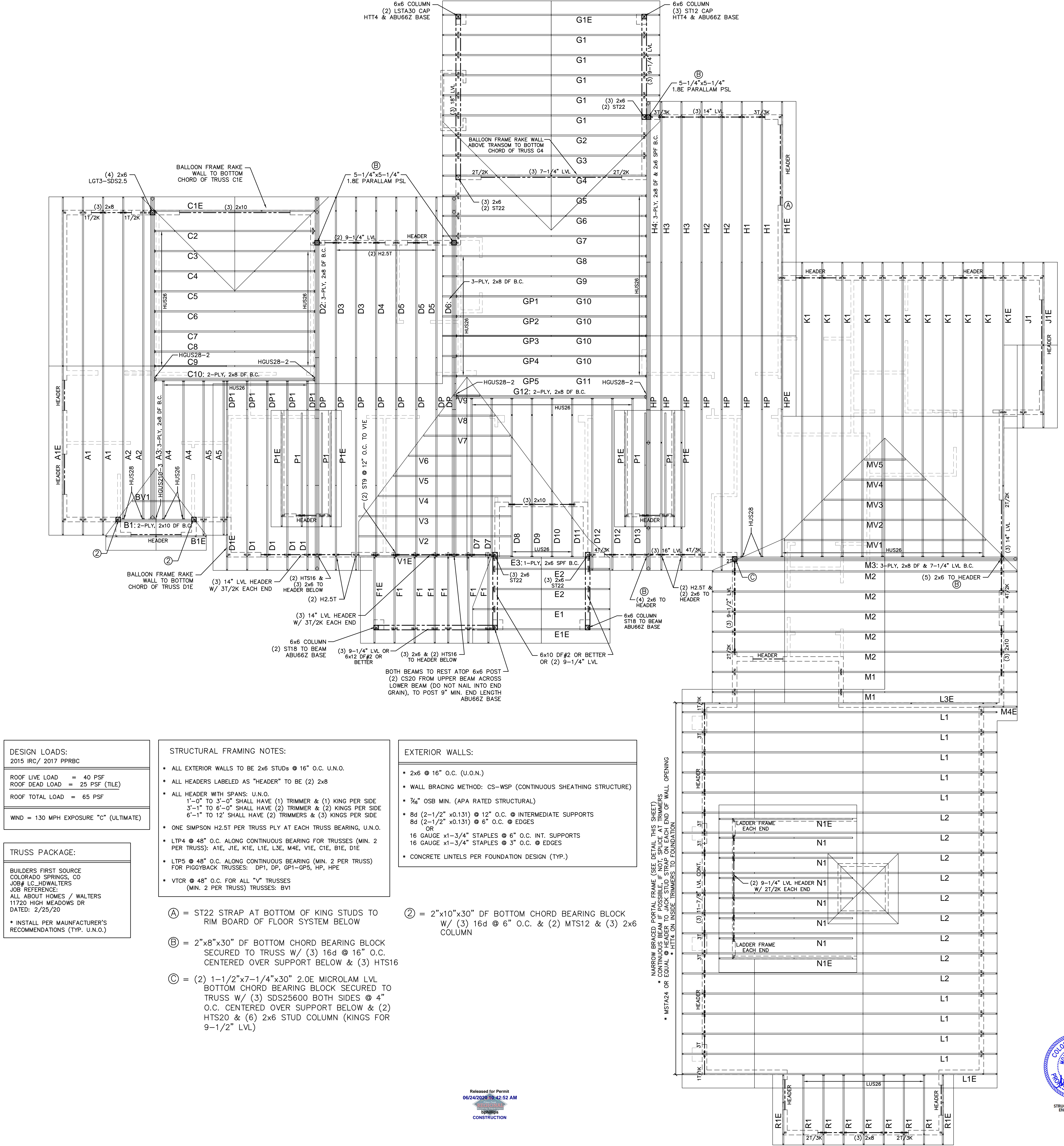
**OVER RAISED WOOD FLOORS OR SECOND FLOOR - FRAMING ANCHOR OPTION**



**OVER RAISED WOOD FLOORS OR SECOND FLOOR - WOOD STRUCTURAL PANEL OVERLAP OPTION**



**NARROW BRACED PORTAL FRAME DETAIL**



**DESIGN LOADS:**  
 2015 IRC / 2017 PPRBC

|                 |                 |
|-----------------|-----------------|
| ROOF LIVE LOAD  | = 40 PSF        |
| ROOF DEAD LOAD  | = 25 PSF (TILE) |
| ROOF TOTAL LOAD | = 65 PSF        |

WIND = 130 MPH EXPOSURE "C" (ULTIMATE)

**TRUSS PACKAGE:**

BUILDERS FIRST SOURCE  
 COLORADO SPRINGS, CO  
 JOSEPH L. HOWALTERS  
 JOB REFERENCE:  
 ALL ABOUT HOMES / WALTERS  
 11720 HIGH MEADOWS DR  
 DATED: 2/25/20

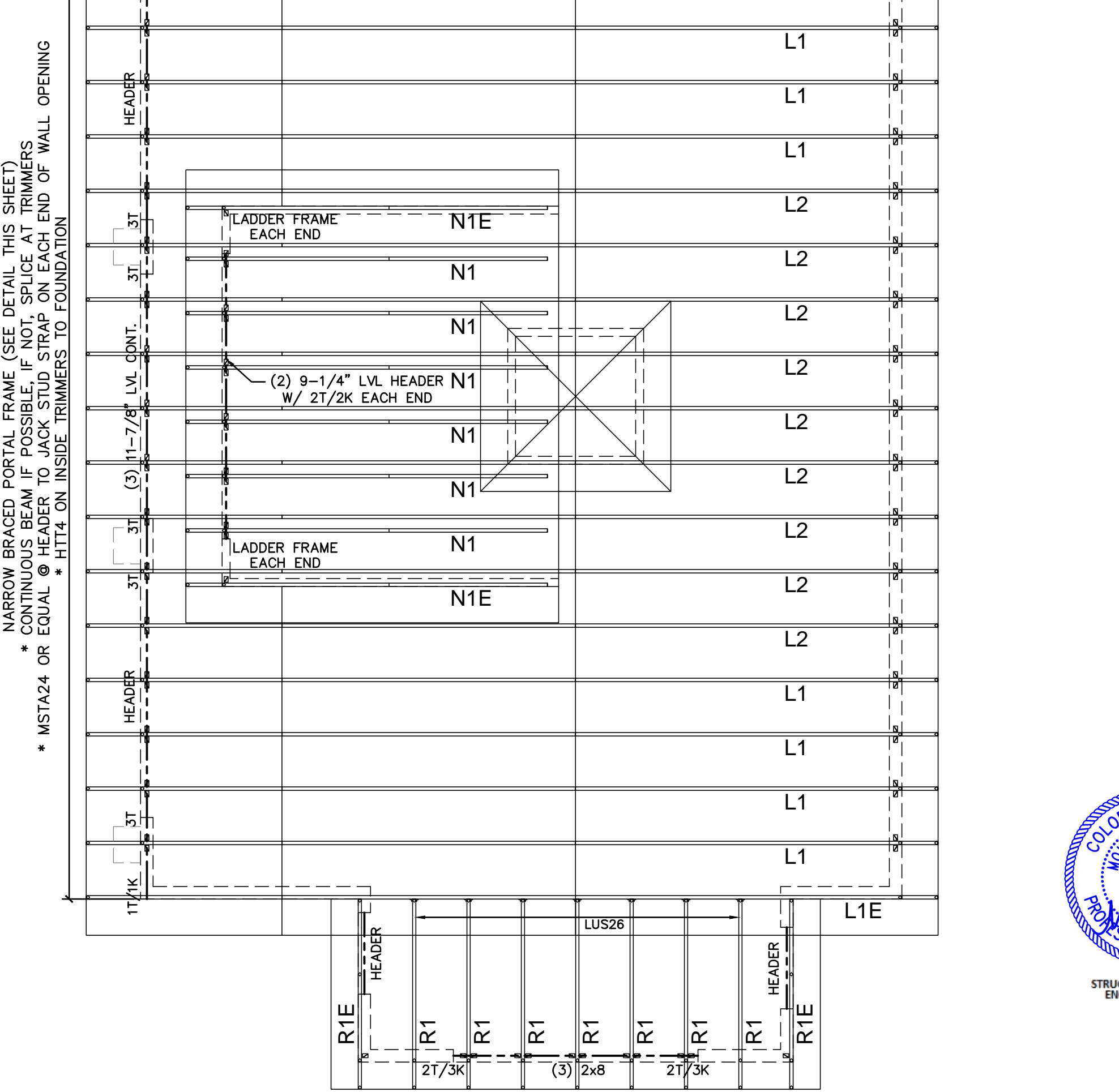
\* INSTALL PER MANUFACTURER'S RECOMMENDATIONS (TYP. U.N.O.)

- STRUCTURAL FRAMING NOTES:**
- ALL EXTERIOR WALLS TO BE 2x6 STUDS @ 16" O.C. U.N.O.
  - ALL HEADERS LABELED AS "HEADER" TO BE (2) 2x8
  - ALL HEADER WITH SPANS: U.N.O.  
 1'-0" TO 3'-0" SHALL HAVE (1) TRIMMER & (1) KING PER SIDE  
 3'-1" TO 6'-0" SHALL HAVE (2) TRIMMER & (2) KINGS PER SIDE  
 6'-1" TO 12" SHALL HAVE (2) TRIMMERS & (3) KINGS PER SIDE
  - ONE SIMPSON H2.5T PER TRUSS PLY AT EACH TRUSS BEARING, U.N.O.
  - LTP4 @ 48" O.C. ALONG CONTINUOUS BEARING FOR TRUSSES (MIN. 2 PER TRUSS): A1E, J1E, K1E, L1E, M4E, V1E, C1E, B1E, D1E
  - LTP5 @ 48" O.C. ALONG CONTINUOUS BEARING (MIN. 2 PER TRUSS) FOR PIGGYBACK TRUSSES: DP1, DP, GP1-GP5, HP, HPE
  - VTCR @ 48" O.C. FOR ALL "V" TRUSSES (MIN. 2 PER TRUSS) TRUSSES: BV1

- (A) = ST22 STRAP AT BOTTOM OF KING STUDS TO RIM BOARD OF FLOOR SYSTEM BELOW
- (B) = 2"x8"x30" DF BOTTOM CHORD BEARING BLOCK SECURED TO TRUSS W/ (3) 16d @ 6" O.C. & (2) MTS12 & (3) 2x6 CENTERED OVER SUPPORT BELOW
- (C) = (2) 1-1/2"x7-1/4"x30" 2.0E MICROLAM LVL BOTTOM CHORD BEARING BLOCK SECURED TO TRUSS W/ (3) SDS25600 BOTH SIDES @ 4" O.C. CENTERED OVER SUPPORT BELOW & (2) HTS20 & (6) 2x6 STUD COLUMN (KINGS FOR 9-1/2" LVL)

- EXTERIOR WALLS:**
- 2x6 @ 16" O.C. (U.O.N.)
  - WALL BRACING METHOD: CS-WSP (CONTINUOUS SHEATHING STRUCTURE)
  - 7/16" OSB MIN. (APA RATED STRUCTURAL)
  - 8d (2-1/2" x 0.131) @ 12" O.C. @ INTERMEDIATE SUPPORTS  
 8d (2-1/2" x 0.131) @ 6" O.C. @ EDGES
  - 16 GAUGE x1-3/4" STAPLES @ 6" O.C. INT. SUPPORTS  
 16 GAUGE x1-3/4" STAPLES @ 3" O.C. @ EDGES
  - CONCRETE LINTELS PER FOUNDATION DESIGN (TYP.)

- (2) = 2"x10"x30" DF BOTTOM CHORD BEARING BLOCK W/ (3) 16d @ 6" O.C. & (2) MTS12 & (3) 2x6 COLUMN



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 06/24/2020 10:42:52 AM  
 ENGINEER  
 CONSTRUCTION



STRUCTURAL ONLY EXCEPT ENGINEERED TRUSSES



**DESIGN LOADS:**

- 2015 INTERNATIONAL RESIDENTIAL CODE (IRC)
- 2017 PINES FROM REGIONAL BUILDING CODE (PPRBC)
- SITE ELEVATION UNDER 7,000 FT
- TRUSS PACKAGE
- BUILDERS FIRST SOURCE
- COLORADO SPRINGS, CO
- JOSEPH L. HOWLANDERS
- JOB REFERENCE: ALL ABOUT HOMES / WALTERS
- 11720 HIGH MEADOWS DRIVE
- DATED: 2/25/20

BUILDER TO VERIFY ALL DIMENSIONS PRIOR TO ANY CONSTRUCTION. SEE THE ARCHITECTURAL PLANS FOR ANY ADDITIONAL DIMENSIONS.

ALL LOOSE DIRT/ROCKS MUST BE REMOVED PRIOR TO POURING THE FOUNDATION FOOTERS AND PADS.

**FOUNDATION WALLS:**

- 8" CONCRETE WALL WITH ASPHALT EMULSION WATERPROOFING OR EQUIVALENT (TYP., U.O.N.)
- WALL HEIGHTS AND STEPDOWNS PER ARCHITECTURAL DRAWINGS (MAX. 12 FT TALL)
- BLOCK-OUTS FOR BEAM POCKETS, WINDOWS AND DOORWAYS ARE REQUIRED. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS AND SIZES.

**REINFORCED PADS:**

- ALL PADS 30" SQ TO 54" SQ ARE 11.5" THICK, REINFORCED WITH #4/60 REBAR @ 10" O.C.W.
- 36" x 54" PAD - 11.5" THICK, REINFORCED WITH #4/60 REBAR @ 10" O.C.W.

**REINFORCED FOOTERS:**

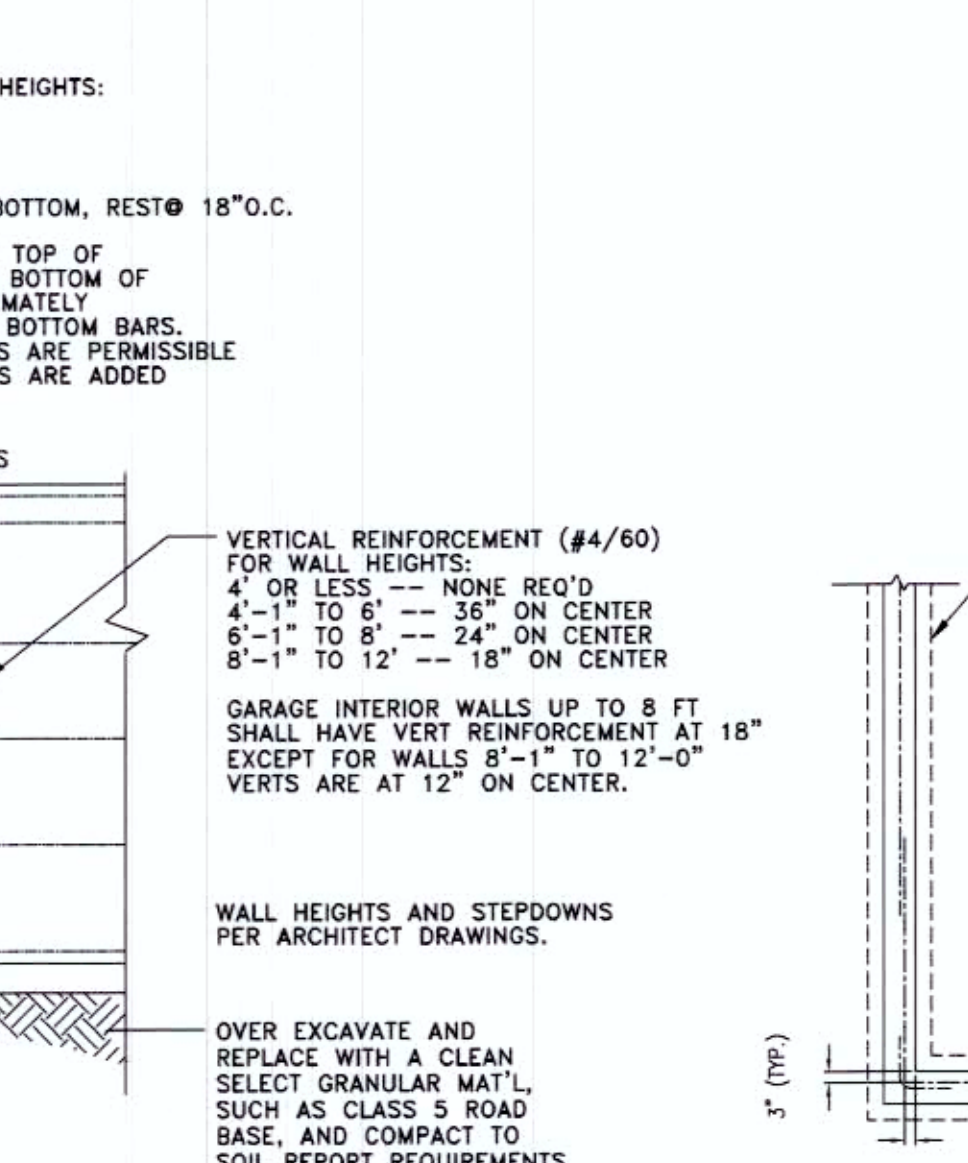
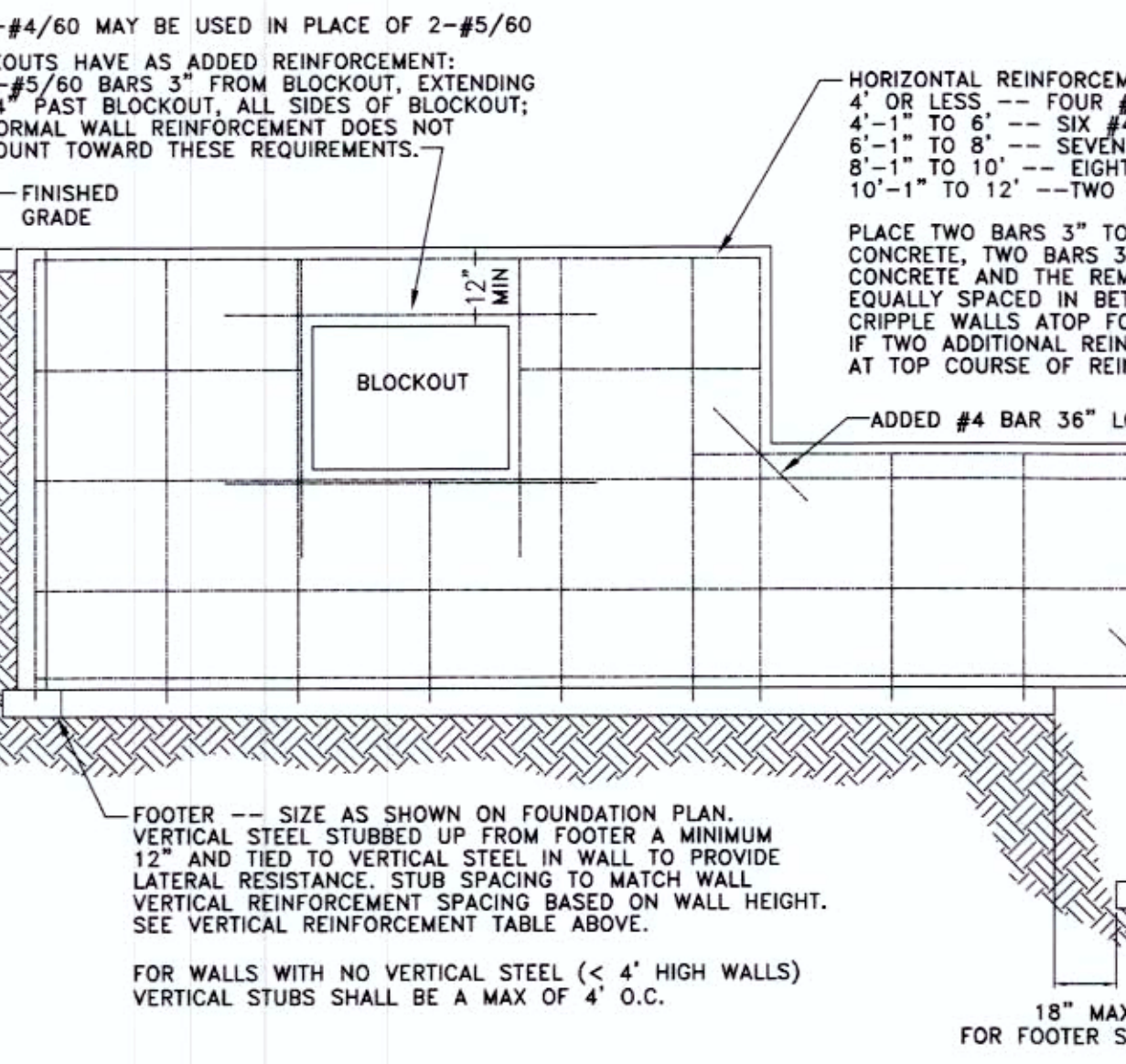
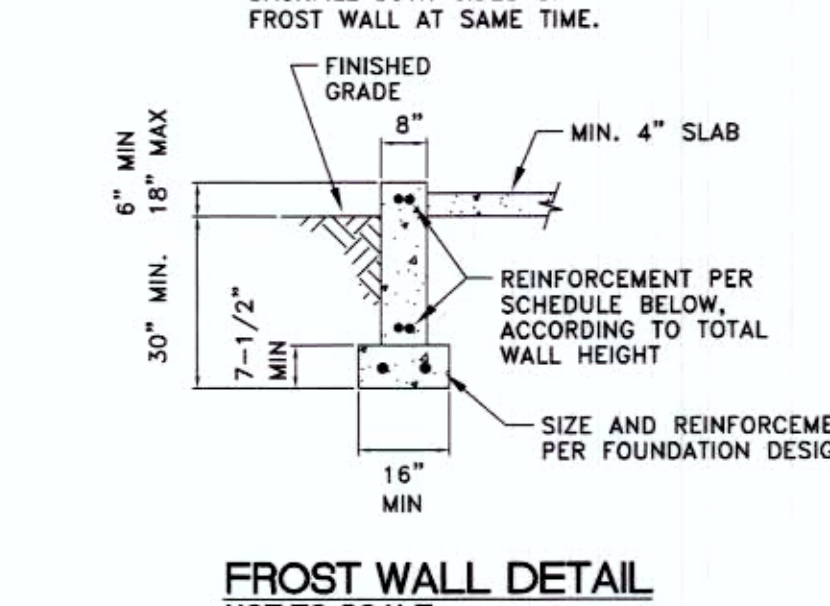
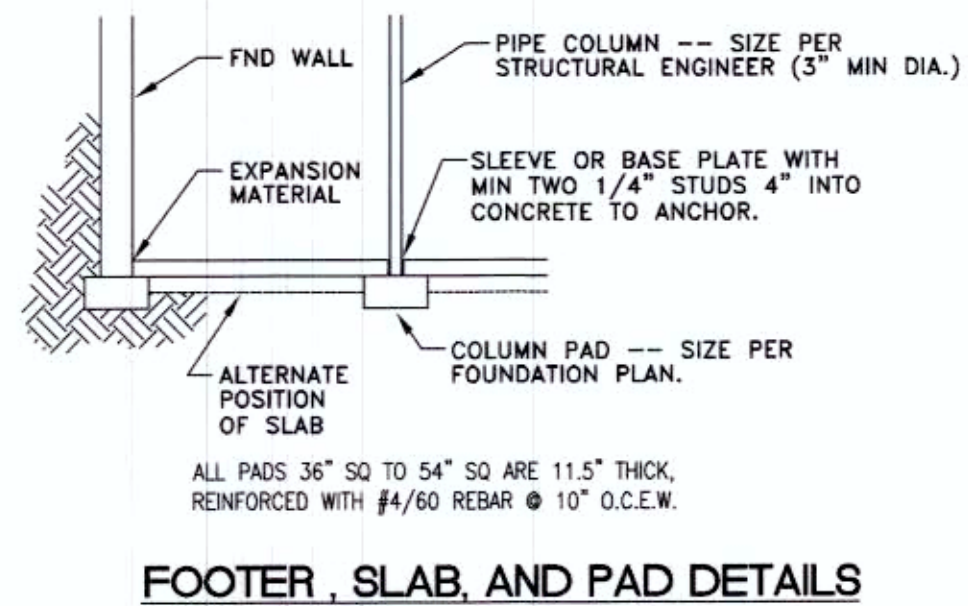
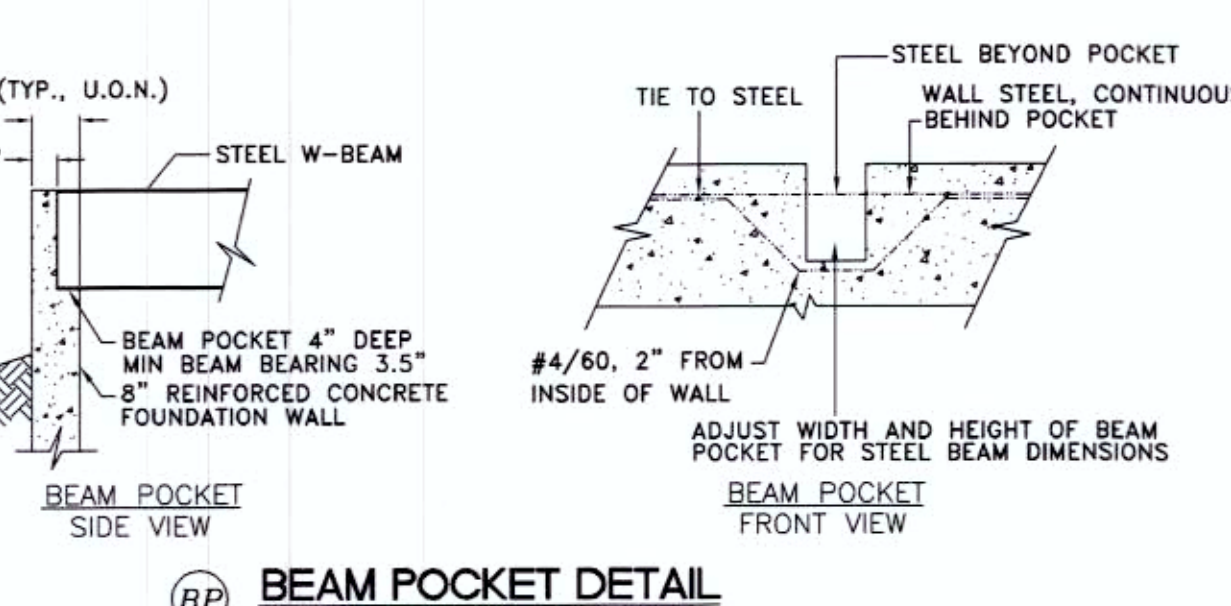
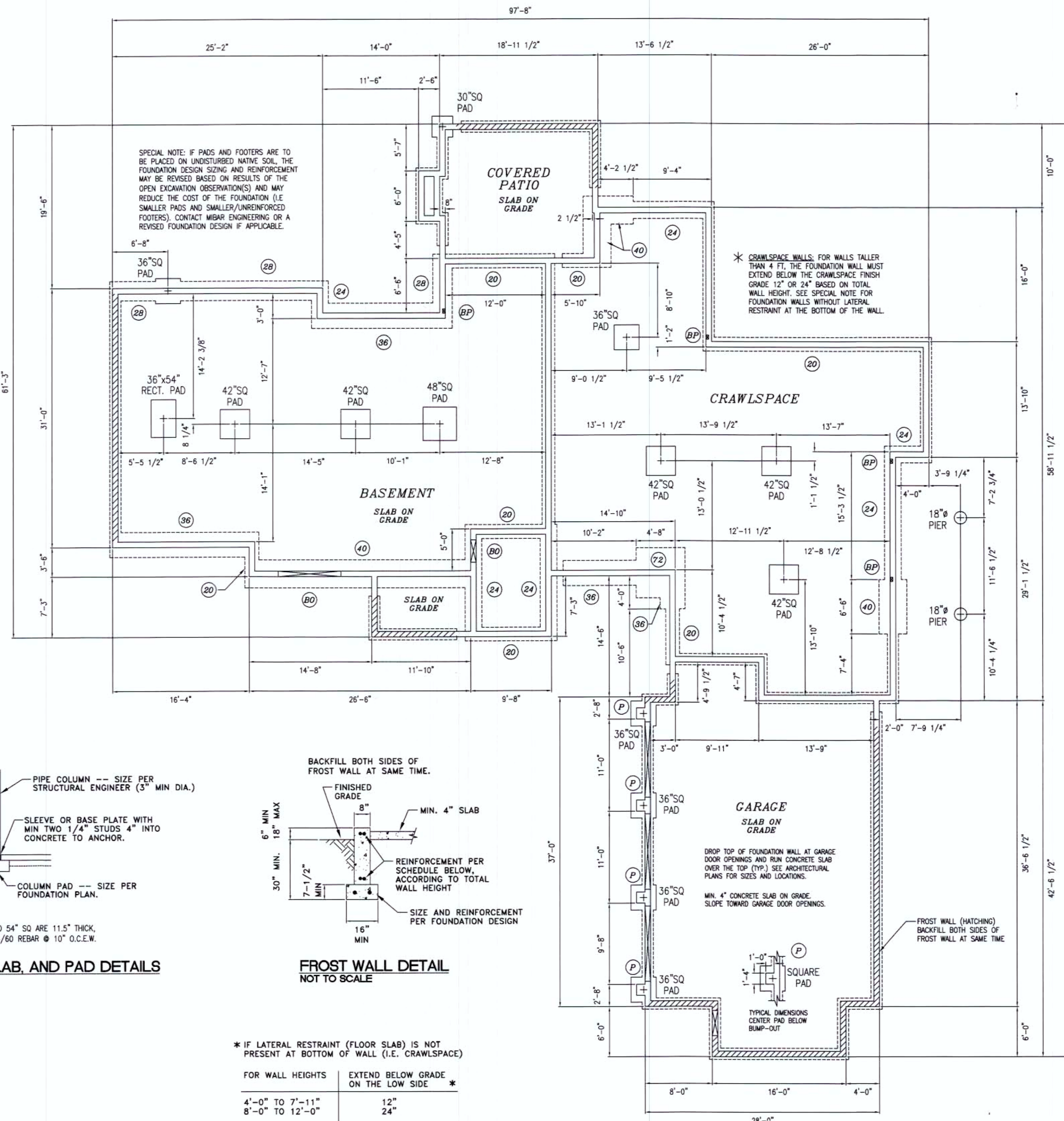
- 16" WIDE x 7.5" THICK REINFORCED CONCRETE FOOTER CENTERED UNDER AN 8" REINFORCED CONCRETE FOUNDATION PERIMETER WALL. REINFORCE FOOTER WITH (2)-#4/60 REBAR HELD 3" FROM BOTTOM AND SIDES (WALLS AS MARKED)

**EUFER ROD**

- EUFER GROUNDING ROD MUST BE TIED TO BOTH THE FOOTER STEEL AND FOUNDATION WALL STEEL PER THE PPRBC 'EUFER ROD GROUNDING HANDBOOK' (REFER TO THE PPRBC WEBSITE OR CONTACT OUR OFFICE FOR ANY DETAILS/QUESTIONS REGARDING PROPER INSTALLATION)

**SILL PLATE:**

- MIN. 1/2" # X 10" ANCHOR BOLTS AT 4'-0" O.C. MAX. 12" MAX. AT SPLICES, AND MAX. 12" FROM ENDS THROUGH A MIN. 2 X 4 PRESSURE TREATED OR REDWOOD SILL PLATE (OR EQUIVALENT)



**FOUNDATION WALL - FRONT VIEW**  
NOT TO SCALE

**FOUNDATION WALL - TOP VIEW**  
NOT TO SCALE

**FOUNDATION REINFORCEMENT DETAILS FOR CONCRETE WALLS UP TO 12 FT HIGH WHEN AN OVER EXCAVATION IS REQUIRED (EL PASO COUNTY, NOT TO SCALE)**

**SPECIFICATIONS:**

**SOILS REPORT:** THE SOILS REPORT FORMS PART OF THIS FOUNDATION PLAN; READ IT CAREFULLY. ASK THE ENGINEER ABOUT ANY PART YOU DO NOT UNDERSTAND. CALL THE ATTENTION OF THE ENGINEER TO ANY CHANGES IN SOIL CONDITIONS FROM THAT WHICH ARE DISCUSSED IN THE SOILS REPORT. GENERALLY, AN EXAMINATION OF THE FOUNDATION EXCAVATION BY THE ENGINEER IS REQUIRED PRIOR TO BEGINNING CONSTRUCTION.

**SITE DEVELOPMENT:** ROUGH GRADE TO LEAVE GOOD DRAINAGE DURING AND AFTER CONSTRUCTION. FINAL GRADE AFTER CONSTRUCTION SHALL BE SIX INCHES OF DROP AWAY FROM BUILDING IN THE FIRST TEN FEET. REMOVE TOPSOIL AND ORGANIC MATERIAL FROM WHERE COMPONENTS OF YOUR FOUNDATION AND SLABS WILL GO. IF YOU DISCOVER GROUND WATER, NOTIFY THE ENGINEER. **DO NOT** BUILD ON FROZEN SOIL OR MUD.

**SOILS:** SOILS ARE A CONSTRUCTION MATERIAL; HOWEVER, WITHOUT PROPER USE, THEY CAN BEHAVE IN UNPREDICTABLE FASHIONS. HERE'S WHAT WE CONSIDER PROPER USE:

- FILL AND COMPACT SOFT SPOTS TO THE DENSITY REQUIRED FOR THAT AREA OF THE FOUNDATION.
- SOIL UNDER LOAD BEARING COMPONENTS OF THE STRUCTURE, SUCH AS WALLS AND PADS, SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY. BACKFILL AGAINST FOUNDATION WALLS SHALL BE COMPACTED TO 80% MODIFIED PROCTOR DENSITY.
- BACKFILL SHOULD BE MADE IN 6" LAYERS, CALLED LIFTS, WITH EACH LIFT PROPERLY COMPACTED TO THE REQUIRED DENSITY. USING THE PROPER COMPACTING EQUIPMENT. FOUNDATION WALLS DESIGNED TO HAVE BACKFILL ON BOTH SIDES SHALL HAVE FILL BROUGHT UP EQUALLY ON BOTH SIDES, RATHER THAN BACKFILLING ONE SIDE PRIOR TO BACKFILLING THE OTHER. GENERALLY, USE OF A "JUMPING JACK" FOR COHESIVE SOILS (i.e., CLAY OR SILT) OR A VIBRATORY PLATE COMPACTOR FOR GRANULAR SOILS (i.e., SANDY) WILL PROVIDE GOOD RESULTS. THE SOIL SHOULD BE AT THE RIGHT MOISTURE CONTENT; IF IT SEEMS WET OR DRY, NOTIFY THE SOILS ENGINEER FOR ADVICE. **CAUTION:** USING BOOM MOUNTED COMPACTING EQUIPMENT, SUCH AS A SHAKER HEAD OR "STRINGERS", OR BACKFILLING EXCEPT WITH A BACKFILL EXCEPT FOR FOUNDATION WALLS WITHOUT LATERAL RESTRAINT AT THE BOTTOM OF THE WALL.
- COMPACT BACKFILL AROUND FOUNDATIONS, WALL FAILURE IS LIKELY. LIKEWISE, AUTOS, TRUCKS, FRONT END LOADERS, ETC., ARE NOT COMPACTING EQUIPMENT, AND IF THEY ARE DRIVEN CLOSE (WITHIN TEN FEET) TO A FOUNDATION WALL, IT IS LIKELY THE WALL WILL BOW AND CRACK.
- COMPACTION SHALL BE ACCOMPLISHED SO AS TO FORM A BERM OF DENSE SOIL AGAINST THE SIDE OF THE STRUCTURE TO PROVIDE ADEQUATE LATERAL SUPPORT. EACH LIFT IN THE PROCESS SHALL BE FINISHED ALONG THE ENTIRE LENGTH OF THE WALL BEFORE STARTING ON THE NEXT LIFT. DO NOT COMPACT TOO TIGHTLY OR IN SUCH A FASHION THAT WEDGING OCCURS AGAINST THE FOUNDATION WALL OR BOWING AND CRACKING OF THE WALL CAN OCCUR. GENERALLY, FLOOR JOISTS AND SLABS MUST BE IN PLACE PRIOR TO BACKFILLING AGAINST THE FOUNDATION; THE FOUNDATION DESIGN WILL LIST SPECIFIC EXCEPTIONS. BLOCK BETWEEN THE FOUNDATION WALL AND PARALLEL FLOOR JOISTS AT FOUR FOOT CENTERS ALONG FULL HEIGHT FOUNDATION WALLS.
- DO NOT ALLOW THE BACKFILL TO BE SATURATED WITH WATER AT ANY TIME, DURING OR AFTER CONSTRUCTION. THIS PLACES EXCESSIVE PRESSURE AGAINST THE WALL AND CAN CAUSE CRACKING OR BOWING.
- SILL PLATES SHALL BE ANCHORED WITH 1/2" DIAMETER ANCHOR BOLTS AT A MAXIMUM SPACING OF 48 INCHES AND WITHIN 12 INCHES OF PLATE ENDS, UNLESS OTHERWISE NOTED.

**CONCRETE:** CONCRETE SHALL BE A MINIMUM OF 3,000 PSI WITH A MAXIMUM SLUMP OF 4 INCHES FOR WALLS PADS AND SHALLOW PIERS AND A MINIMUM OF 3,500 PSI WITH A MAXIMUM 4 INCH SLUMP FOR DEEP DRILLED PIERS UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS. SLUMP MAY BE INCREASED TO 6 INCHES WITH POZZOLAN ADDERS IF NO ADDITIONAL WATER IS USED IN THE MIX. BEWARE OF CONCRETE TRUCK OPERATORS WHO WISH TO ADD WATER TO THE CONCRETE AT THE SITE TO MAKE IT MORE WORKABLE. ADDITIONAL WATER WILL DECREASE THE STRENGTH OF THE CONCRETE. THE CONCRETE MUST STAY IN THE FORMS FOR A MINIMUM OF 72 HOURS TO CURE OR BE COVERED WITH CURING SHEETS OR SPRAYED WITH A CURING COMPOUND. WATER IN THE CONCRETE IS REQUIRED TO COMPLETE THE CHEMICAL REACTION, AND IF THE CONCRETE IS UNCOVERED TOO SOON AFTER PLACEMENT, IT WILL DRY OUT TO THE DETRIMENT OF THE CONCRETE'S STRENGTH AND APPEARANCE. FOUNDATIONS WHICH HAVE FORMS STRIPPED EARLY END UP WITH AS LITTLE AS HALF THE STRENGTH OF FOUNDATION WALLS WHICH ARE PROPERLY CURED. SIMILARLY, DO NOT ALLOW THE CONCRETE TO FREEZE DURING THE FIRST SEVEN DAYS. THE WATER WITHIN THE CONCRETE FREEZES AND BECOMES UNAVAILABLE FOR THE CHEMICAL REACTION, POSSIBLY CAUSING A DETRIMENT TO THE CONCRETE'S STRENGTH AND APPEARANCE. EXCEPT IN VERY MASSIVE STRUCTURES, THE HEAT OF HYDRATION OF CONCRETE IS GENERALLY NOT SUFFICIENT TO PREVENT FREEZING DURING A TYPICAL COLORADO WINTER NIGHT.

DO NOT LET THE CONCRETE DROP FARTHER THAN TEN FEET WHEN PLACING IT. AVOID DROPPING CONCRETE ON REINFORCING STEEL AS MUCH AS POSSIBLE, AS THIS WILL TEND TO DISPLACE THE STEEL. AFTER PLACEMENT, ROD OR VIBRATE THE CONCRETE TO ELIMINATE JOINTS AND AIR POCKETS, BUT DO NOT CAUSE THE INGREDIENTS TO SEPARATE OR WATER TO POOL AT THE TOP. EXCESSIVE VIBRATION CAN CAUSE DAMAGE TO THE FORMS. **DO NOT** PLACE STRESS AGAINST CONCRETE FOR AT LEAST SEVEN DAYS AFTER PLACEMENT. USE FORMS WHICH ARE PROPERLY OILED AND BRACED. LEAVE THEM IN PLACE UNTIL THE CONCRETE HAS CURED TO THE POINT WHERE IT CAN SUPPORT ITS OWN WEIGHT. REMOVE FORMS CAREFULLY SO AS NOT TO DAMAGE THE CONCRETE; PATCH ANY VOIDS WITH A GROUT USING THE SAME MIXTURE AS THE ORIGINAL CONCRETE, BUT WITHOUT THE COARSE AGGREGATE. PUT CONTROL JOINTS IN SLABS AT NO MORE THAN 12 FEET EACH DIRECTION. USE OF POLY FIBER MESH IN SLABS LESS THAN 6" THICK AND WELDED WIRE FABRIC IN SLABS 6" THICK OR GREATER IS RECOMMENDED TO REDUCE SHRINKAGE CRACKING. IF DEEP DRILLED PIERS (CONCRETE SQUEEZES) ARE USED IN THE FOUNDATION, A MAXIMUM OF FOUR HOURS BETWEEN THE DRILLING OF THE HOLE AND THE PLACEMENT OF THE CONCRETE IS ALLOWED, WITH LESS THAN ONE HOUR BEING DESIRED. IF GROUNDWATER IS ENCOUNTERED, IMMEDIATE FILLING IS REQUIRED, UP TO ONE INCH OF WATER IS AUTHORIZED IN CAISSON HOLES PRIOR TO CONCRETE PLACEMENT; DEEPER WATER MUST BE PUMPED OR OTHERWISE FORCED OUT.

**STEEL:** REINFORCING STEEL IS GRADE 60, UNLESS OTHERWISE CALLED OUT ON THE PLANS. STEEL SHALL BE FREE OF RUST, DIRT, OIL, SCALE, OR ANYTHING ELSE WHICH WILL IMPAIR ITS ABILITY TO ADHERE TO CONCRETE. ALL REINFORCING STEEL SHALL BE SECURELY TIED AT ALL INTERSECTIONS AND SUPPORTED TO PREVENT DISPLACEMENT DURING CONCRETE PLACING OPERATIONS. STEEL MUST NOT BE ANY CLOSER THAN THREE INCHES TO SURFACES WHICH WILL BE EXPOSED TO EARTH AND 2 INCHES FROM OTHER SURFACES. SEE THE REINFORCEMENT DETAILS FOR ADDITIONAL PLACEMENT REQUIREMENTS. OVERLAP AND THE SPLICES 18 INCHES. BEND AND THE CORNER 24 INCHES. PLACEMENT OF REINFORCING STEEL ACCORDING TO THE DESIGN IS IMPORTANT IN ORDER TO ALLOW THE STEEL AND CONCRETE TO WORK TOGETHER TO DEVELOP MAXIMUM STRENGTH.

**LIABILITY:** ALL DESIGN AND CONSTRUCTION REPRESENTS COMPROMISE. THIS FOUNDATION DESIGN HAS BEEN ACCOMPLISHED WITH ECONOMY, CONSTRUCTIBILITY, AND RELIABILITY AS PRIMARY CONSIDERATIONS AND REFLECTS THE CURRENT STANDARDS OF PRACTICE IN THE FRONT RANGE AREA. IT HAS NOT BEEN DESIGNED TO WITHSTAND EVERY CONCEIVABLE EVENT WHICH MIGHT OCCUR, AS THAT WOULD RENDER THE FOUNDATION EXCEPTIONALLY DIFFICULT TO BUILD AND EXCEEDINGLY EXPENSIVE. LIKEWISE, THE DETAILS ARE NOT INTENDED TO PROVIDE STEP-BY-STEP INSTALLATION INSTRUCTIONS; THE IRC/IBC BUILDING CODE PROVIDES OTHER INFORMATION NEEDED FOR FOUNDATION CONSTRUCTION. A WORKING KNOWLEDGE OF THE CODE AS WELL AS PRACTICAL EXPERIENCE IN LOCAL FOUNDATION CONSTRUCTION IS REQUIRED TO COMPLETE THE FOUNDATION. IF YOU OR ANY MEMBER OF THE CONSTRUCTION TEAM HAS ANY QUESTION ABOUT ANY PORTION OF THIS FOUNDATION DESIGN, YOU **MUST** CONTACT THIS OFFICE TO RESOLVE THE SITUATION PRIOR TO PROCEEDING WITH CONSTRUCTION. WHILE THE DESIGN OF THIS FOUNDATION SHOULD PROVIDE A STRUCTURE WHICH WILL FUNCTION WELL FOR THE LIFE OF THE BUILDING UNDER NORMAL CIRCUMSTANCES, UNFORESEEN EVENTS, SUCH AS FLOODING, EXCEPTIONAL LOADS, OR EVEN IMPROPER CONSTRUCTION NOT NOTICED DURING BUILDING CAN CAUSE PROBLEMS. THEREFORE, THE LIMITS OF LIABILITY EXTEND TO THE FEE RECEIVED FOR THE PROFESSIONAL SERVICES PROVIDED.

**SPECIAL NOTE: USING CALCIUM CHLORIDE AS AN ACCELERATING ADMIXTURE IS NOT PERMITTED IN THIS DESIGN.**

**SPECIAL NOTE: IF AN INDIVIDUAL PERFORMS INSPECTIONS, OTHER THAN MIBAR ENGINEERING OR LOCAL BUILDING OFFICIAL, THAT INDIVIDUAL WILL ASSUME ALL LIABILITY FOR THIS FOUNDATION DESIGN.**

ALL FOUNDATION ELEMENTS (I.E. PADS AND FOOTERS) MUST BE PLACED ON COMPACTED STRUCTURAL FILL PER SOIL REPORT REQUIREMENTS. CONTACT GEOTECHNICAL ENGINEER FOR ADDITIONAL INFORMATION AND CLARIFICATION. ALLOW A 12" GAP IN THE FOOTER AS SHOWN FOR THE PERIMETER DRAIN.

PROVIDE COPY OF STRUCTURAL FILL REPORT TO MIBAR. SOIL BEARING MUST BE 2,000 PSF OR HIGHER FOR THIS FOUNDATION DESIGN TO BE VALID. FOUNDATION DESIGN SIZING AND REINFORCEMENT MAY BE REVISED BASED ON RESULTS OF THE OPEN EXCAVATION OBSERVATION(S) AND STRUCTURAL FILL REPORT.

**RESIDENCE FOUNDATION DESIGN - PLAN VIEW**  
SCALE: 1/8" = 1 FT

| No. | Revision/Issue/Change                          | Date      |
|-----|--|-----------|
| 1.  | Garage dims modified + added bump-out supports | 3/28/2020 |
| 2.  | Fireplace foundation adjusted at rear deck     | 6/05/2020 |

**GENERAL NOTES:**

- THE SPECIFICATIONS, SOILS REPORT, AND OPEN HOLE LETTER ARE PART OF THIS DESIGN.
- VERIFY LOCATIONS OF PADS.
- LOAD BEARING COMPONENTS SUSCEPTIBLE TO THE WEATHER SHALL BE FINISHED TO A MINIMUM OF 30" BELOW AND 6" ABOVE FINISHED GRADE.
- FOOTER AND PAD SIZES SHOWN ON THIS DESIGN ARE MINIMUM AND MAY BE UP SIZED. SEE DETAILS FOR ADDITIONAL INFORMATION.
- PADS 36" SQ THRU 60" SQ ARE 11.5" THICK, W/ #4/60 AT 10" O.C. EACH WAY. SEE DETAILS FOR ADDITIONAL INFORMATION.
- WALL THICKNESSES SHOWN ARE NOMINAL. WALL HEIGHTS VARY. REFER TO ARCHITECTURAL DRAWINGS AND DETAIL SHEETS.
- IF WALL HEIGHTS EXCEED 12 FEET, OR IF ANY UNFORESEEN CONDITIONS ARISE, CONTACT THE ENGINEER.
- REFER TO DETAIL SHEETS FOR REINFORCEMENT SCHEDULE AND ADDITIONAL INFORMATION.
- BLOCK-OUTS FOR BEAM POCKETS, WINDOWS AND DOORWAYS ARE REQUIRED. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS AND SIZES.
- PLACE THE CONCRETE SLAB OR OTHER SUITABLE LATERAL RESTRAINT, IN ADDITION TO FLOOR JOISTS AND SUBFLOOR, PRIOR TO BACKFILLING.
- PLACE AND COMPACT BACKFILL IN LIFTS ALONG ENTIRE LENGTH OF WALL. SEE SPECIFICATIONS.

**FOUNDATION DESIGN:**  
2,000 PSF OVERDIG/STRUCTURAL FILL  
RMG JOB# 175450 DATED: 4/6/20

PROVIDE COPY OF STRUCTURAL FILL REPORT TO MIBAR. SOIL BEARING MUST BE 2,000 PSF OR HIGHER FOR THIS FOUNDATION DESIGN TO BE VALID.

MIBAR ENGINEERING LTD., LLC  
6828 SILVER PONDS HEIGHTS  
SUITE 101  
COLORADO SPRINGS, CO 80908

OFFICE: (719) 487-0812  
FAX (719) 481-9204

Project: 20093  
Sheet: 1 of 1  
Date: 4/24/2020  
Scale: 1/8"=1'  
Drawn by: GRR  
Checked by: RCL

Project Name and Address  
ALL ABOUT HOMES  
WALTERS RESIDENCE  
11720 HIGH MEADOWS DRIVE  
LOT #5, BLOCK #1  
HIGH MEADOWS SUBDIVISION  
EL PASO COUNTY, COLORADO

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CONSTRUCTION