

1. DESIGN CRITERIA:

- A. DESIGNED USING INTERNATIONAL BUILDING CODE, 2006 EDITION
- B. ROOF LIVE LOAD/SNOW LOAD = 150 PSF
- C. ROOF DEAD LOAD = 15 PSF
- D. FLOOR LIVE LOAD = 40 PSF
- E. FLOOR DEAD LOAD = 12 PSF
- F. WIND SPEED = 85 MPH
- G. EXPOSURE TYPE = 'C'
- H. SEISMIC PARAMETERS, S_s = 0.9 %
S₁ = 0.1 %
- I. MINIMUM FROST DEPTH = 28 INCHES

2. FOUNDATIONS & SLAB ON GRADE:

- A. ALL FOOTING AND FOUNDATION DESIGNS ARE BASED ON AN ALLOWABLE SOIL BEARING CAPACITY OF 1,500 PSF BEARING ON COMPETENT NATIVE SOIL (CODE MINIMUM). IF THE SITE HAS A LOWER BEARING CAPACITY THAN ASSUMED THE FOUNDATION PLAN WILL NEED TO BE REDESIGNED. IF SOIL IS DISTURBED, COMPACT SOIL IN 6" LIFTS TO 95% MAXIMUM DRY DENSITY PER ASTM D960.
- B. MINIMUM FROST DEPTH FROM LOWEST ADJACENT FINISH GRADE TO BOTTOM OF FOOTING SHALL BE MAINTAINED FOR ALL EXTERIOR FOOTINGS.
- C. CONTRACTOR TO VERIFY LOCATIONS FOR STEP FOOTINGS AND FOUNDATION WALLS BASED ON SITE RELATED FINISHED GRADE. IF NECESSARY, FOOTING STEPS ARE TO BE A MAXIMUM OF (2) VERTICALLY TO (1) HORIZONTALLY.
- D. ALL SLABS SHALL HAVE REINFORCING PER PLANS & CONTROL JOINTS @ 10'-0" SPACING MAX.
- E. ALL STRUCTURAL FILL BELOW FOOTINGS SHALL EXTEND OUT PAST FOOTINGS AT A SLOPE OF 1 HORIZONTAL TO 5 VERTICAL TO COMPETENT SOILS.
- F. PROVIDE ADEQUATE DRAINAGE BEHIND ALL WALLS TO ALLEVIATE ANY STANDING WATER.
- G. ALL CONCRETE PAD & APRON LOCATIONS TO BE SECURED TO FOUNDATION WITH #4 DOWELS @ 24" O.C. EXTEND EXPOSED SIDES A MINIMUM OF 24" BELOW FINISHED GRADE.
- H. MINIMUM CONCRETE SLAB DEPTH IS 4".

3. CONCRETE:

- A. THE MINIMUM COMPRESSIVE STRENGTHS FOR CONCRETE AT 28 DAYS SHALL BE AS FOLLOWS (DESIGNED USING 2,500 PSI):
 - 1. ALL FOOTINGS, FOUNDATIONS, AND STEM WALLS FC = 3,000 PSI
 - 2. SLABS ON GRADE FC = 3,500 PSI
- B. MINIMUM CLEAR PROTECTION FOR REINFORCEMENT SHALL BE AS FOLLOWS:
 - 1. PLACED DIRECTLY AGAINST EARTH 3"
 - 2. FORMED SURFACES #3 BARS OR SMALLER 1-1/2"
 - 3. STRUCTURAL SLABS 1"
- C. SAWN CONTROL & CONSTRUCTION JOINTS SHALL BE MADE AS SOON AS POSSIBLE WITHOUT DAMAGE TO THE SURFACE. FILLING OF SAWN JOINTS WHERE REQUIRED SHALL BE DELAYED AS LONG AS POSSIBLE TO ALLOW MAXIMUM SHRINKAGE TO OCCUR IN SLABS.
- D. ALL EMBEDDED ANCHOR BOLTS SHALL BE A36 OR A307 STEEL W/ 7" MIN. EMBEDMENT. ANCHOR BOLTS TO BE WITHIN 1'-0" OF SILL PLATE ENDS, WITH A MIN. OF TWO PER WALL AND NO CLOSER THAN 6" FROM CONCRETE WALL CORNERS. REFER TO LOG MANUFACTURERS SPECIFIC BOLT PLAN FOR LOG WALL ANCHORS. DO NOT POUR FOUNDATION WITH OUT LOG MANUFACTURERS BOLT PLAN.
- E. WET SETTING OF REINFORCING BARS IN FOOTINGS AND WALLS IS NOT ALLOWED.
- F. BLOCK-OUT ALL STEM WALLS @ ENTRIES AS REQUIRED.
- G. CONCRETE FORM WORK TO BE OF ADEQUATE STRENGTH AND BRACED TO PREVENT DEFORMATION.
- H. PROTECT ALL CONCRETE FROM FREEZING.
- I. ALL LOWER LEVEL AND RETAINING WALLS WHICH HAVE FILL HIGHER THAN AN INTERIOR FLOOR LEVEL SHALL HAVE AN APPROVED WATERPROOFING MEMBRANE APPLIED.
- J. PROVIDE ADEQUATE TEMPORARY BRACING OF CONCRETE AND/OR CMU RETAINING WALLS DURING BACKFILL PRIOR TO INSTALLATION OF MAIN FLOOR FRAMING AND BASEMENT CONCRETE SLAB ON GRADES. WALL DESIGNS ARE BASED ON TOP OF WALL RESTRAINED BY FINISHED FLOOR SYSTEM AND RESISTING SLIDING BY HAVING BASEMENT CONCRETE SLAB ON GRADE FLOOR INSTALLED.
- K. IT IS RECOMMENDED THAT ALL GRADING, EXCAVATION, AND INSTALLATION OF FOUNDATIONS BE PERFORMED UNDER THE INSPECTION AND TESTING OF A QUALIFIED GEOTECHNICAL CONSULTANT DURING THE CRITICAL STAGES OF CONSTRUCTION.
- L. STAIN & TEXTURE OF EXPOSED CONCRETE SURFACES PER OWNERS DIRECTION.

4. REINFORCING STEEL:

- A. ASTM A615, GRADE 40, BARS TO BE WELDED SHALL BE ASTM A706, GRADE 40.
- B. MINIMUM LENGTH OF LAPPED SPLICES SHALL BE 48 TIMES BAR DIAMETER UNLESS NOTED OTHERWISE. STAGGER SPLICES IN WALLS SO THAT NO TWO ADJACENT BARS ARE SPLICED IN THE SAME LOCATION.
- C. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185, F_y = 75,000 PSI.
- D. REINFORCING SHALL BE CONTINUOUS THROUGH ALL COLD JOINTS.
- E. PROVIDE CORNER BARS W/ 18" LEGS AT CORNERS AND INTERSECTING WALLS AND FOOTINGS, SIZE AND PLACEMENT TO MATCH HORIZONTAL REINFORCEMENT.
- F. PROVIDE #4 HORIZONTALS AT TOP OF WALL, CONT. IN FOOTINGS, AND ABOVE ALL OPENINGS.
- G. PROVIDE #4 HORIZONTALS AT ALL INTERSECTING FLOORS AND ROOF LEVELS, BOTTOM OF ALL WINDOWS AND AT 10'-0" O.C. MAXIMUM OR PER PLANS.
- H. PROVIDE #4 VERTICALS AT 24" O.C. W/ STANDARD HOOK EXTENDING INTO FOOTING AT EACH SIDE OF WALL OPENINGS AND AT EACH END OF WALLS.
- I. PROVIDE FOUNDATION HOLD-DOWNS AT ALL SHEAR WALL LOCATIONS PER PLAN, IF APPLICABLE.

5. WOOD FRAMING:

- A. STRUCTURAL LUMBER SHALL BE DOUGLAS FIR-LARCH (DF-L) #2 OR BETTER.
- B. WOOD INSTALLED WITHIN 1" OF CONCRETE OR MASONRY SHALL BE REDWOOD OR PRESSURE TREATED.
- C. PROVIDE WET USE ADHESIVES.
- D. MAXIMUM LUMBER MOISTURE CONTENTS SHALL BE 15%.
- E. ALL FRAMING DETAILS SHALL BE IN ACCORDANCE WITH THE ADOPTED CODE.
- F. PROVIDE SOLID BLOCKING BELOW ALL BEARING WALLS AND POSTS. PROVIDE BLOCKING @ 24" O.C. @ JOISTS PARALLEL WITH BEARING WALLS ABOVE.
- G. MINIMUM HEADER AT BEARING WALL TO BE 4X8 WITH 4X6 BEARING STUD PLUS KING STUD EACH SIDE. HEADERS WITH LARGER LOADING WILL BE CALLED OUT IN PLANS.
- H. BLOCK AND NAIL ALL HORIZONTAL PANEL EDGES AT SHEAR WALLS.
 - 1. ROOF SHEATHING- 1 5/8" CDX MIN. (32/16) SPAN RATING 100 @ 2 1/2" O.C. EDGE AND 12" O.C. FIELD U.N.O.
 - 2. FLOOR SHEATHING- 3/4" CDX MIN. (48/24) SPAN RATING 100 @ 6" O.C. EDGE AND 12" O.C. FIELD U.N.O.
 - 3. EXT. WALL SHEATHING- 1 5/8" CDX MIN. (24/0) SPAN RATING ALL SPAN RATINGS TO MEET LOCAL CODES.
- I. ORIENTED STRAND BOARD (OSB) WITH THE SAME SPAN RATING MAY BE SUBSTITUTED.
- J. ALL EXTERIOR WALLS TO BE 2X6 @ 16" O.C. AND AT INTERIOR NON-LOAD BEARING PARTITIONS TO BE 2X4 @ 16" O.C. STUD WALLS (U.N.O.)
- K. 2X DIMENSIONAL STUDS ARE TO BE STANDARD (DF-L) #2 OR BETTER WESTERN WHITE WOODS (WWW)
- L. PROVIDE STEEL STRAPS AT PIPES IN STUD WALLS AS REQUIRED BY THE ADOPTED CODE.
- M. OVER-FRAMING SHALL BE DONE SUCH THAT VERTICAL LOADS ARE TRANSFERRED TO MAIN STRUCTURE BELOW BY DIRECT BEARING AT SPACING NOT TO EXCEED 24" O.C.
- N. METAL HANGERS AND CONNECTIONS ARE 'SIMPSON' AND SHALL BE INSTALLED PER 'SIMPSON' RECOMMENDATIONS.
- O. ENGINEER 'T' JOISTS TO BE DESIGNED, CERTIFIED, ERECTED, INSTALLED, AND BRACED PER MANUFACTURER'S SPECS. ALL REFERENCES ON PLANS ARE FOR TRUS-JOIST, A WEYERHAEUSER BUSINESS PRODUCT. USE THESE PRODUCTS OR AN EQUIVALENT APPROVED MANUFACTURER.
- P. SHEATHING SHALL BE APA RATED EXPOSURE 1
- Q. STAGGER SHEATHING END JOINTS 4'-0"
- R. PROVIDE 1/4" SPACE AT ALL PANEL EDGES FOR EXPANSION.
- S. FRAME INTERIOR BEARING WALLS SHORT TO ACCOUNT FOR LOG SETTLING.
- T. FRAME INTERIOR POSTS SHORT TO ACCOUNT FOR LOG SETTLING. USE REMOVABLE SHIMS OR SETTLING JACK AS NECESSARY.
- U. ALL WINDOW SIZES ARE NOMINAL. VERIFY ACTUAL LOG OPENINGS WITH LOG & WINDOW MANUFACTURERS.
- V. ALL MICROLAM LVL'S SHALL HAVE THE MINIMUM SECTION PROPERTIES OF F_b = 2600 PSI, F_v = 285 PSI, E = 1, 900,000 PSI.
- W. ALL ROOF OPENINGS GREATER THAN 12'X12' SHALL BE FRAMED IN OPENINGS.
- X. GLUE-LAM BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F V4 FOR SIMPLY SUPPORTED AND 24F-V6 FOR CANTILEVERED BEAMS. F_b = 2400 PSI, F_v = 165 PSI, E = 1,600,000 PSI. PROVIDE WET USE GLUE ON ALL EXTERIOR LOCATIONS.

6. STRUCTURAL STEEL:

- A. BOLTS AND LAGS SHALL CONFORM TO ASTM A36 (U.N.O.)
- B. STEEL TUBES TO CONFORM TO ASTM500, GRADE B (F_y = 40KSI)
- C. PROVIDE MILD STEEL PLATE WASHERS AT ALL BOLT HEADS AND NUTS BEARING AGAINST WOOD
- D. ALL WORK SHALL BE IN ACCORDANCE WITH THE 5TH EDITION, OR 1ST EDITION LRFD MANUAL OF AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS
- E. ALL WELDING SHALL BE PERFORMED PER AWS D1.1 WITH A MINIMUM WELD SIZE OF 3/16" AND WITH E70XX ELECTRODE.
- F. MACHINE BOLTS SHALL BE ASTM A325 (U.N.O.)
- G. PROVIDE LOCK WASHERS BETWEEN NUT AND CONNECTED STEEL.
- H. ALL STEEL, INCLUDING NUTS, BOLTS, AND WASHERS EXPOSED TO WEATHER, SHALL BE GALVANIZED.

7. PRE-MANUFACTURED METAL PLATED TRUSSES:

- A. PRE-MANUFACTURED TRUSSES PROVIDER TO VERIFY ALL LOADING PATTERNS TO FOOTINGS BELOW.
- B. PRE-MANUFACTURED TRUSSES PROVIDER TO PROVIDE SUPPORT @ TRUSSES FOR LOADING SHOWN ON ALL PLANS, SECTIONS AND DETAILS. VERIFY SECOND FLOOR LOADING AND SPECIAL CASE POINT LOADING FROM LOG AND FRAMED ROOF SYSTEMS.
- C. ALL PRE-MANUFACTURED ROOF TRUSSES SHALL BE DESIGNED FOR THE ROOF LOADS SHOWN AND ACCOUNT FOR ANY REQUIRED ADDITIONAL DRIFT, VALLEY, OR LIVE LOAD PER CODE. TRUSS SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD (E.O.R.) FOR REVIEW AND COMPLIANCE.

9. GENERAL STRUCTURAL NOTES:

- A. CONTRACTOR TO VERIFY ALL OPENINGS, BUILDING DIMENSIONS, COLUMN LOCATIONS AND DIMENSIONS WITH OWNER AND LOG MANUFACTURER PRIOR TO POURING OF ANY CONCRETE FOUNDATIONS OR CONSTRUCTION.
- B. THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THESE PLANS UNLESS SUCH CHANGES ARE AUTHORIZED IN WRITING TO THE ENGINEER OF RECORD.
- C. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING SAFE AND ADEQUATE SHORING AND/OR TEMPORARY STRUCTURAL STABILITY FOR ALL PARTS OF THE STRUCTURE DURING CONSTRUCTION. THE STRUCTURE SHOWN ON THE DRAWINGS HAS BEEN DESIGNED FOR FINAL CONFIGURATION.
- D. NOTCHING AND/OR CUTTING OF ANY STRUCTURAL MEMBER IN THE FIELD IS PROHIBITED, UNLESS PRIOR CONSENT IS GIVEN BY THE ENGINEER OF RECORD.

10. SPECIAL INSPECTIONS AND STRUCTURAL OBSERVATIONS:

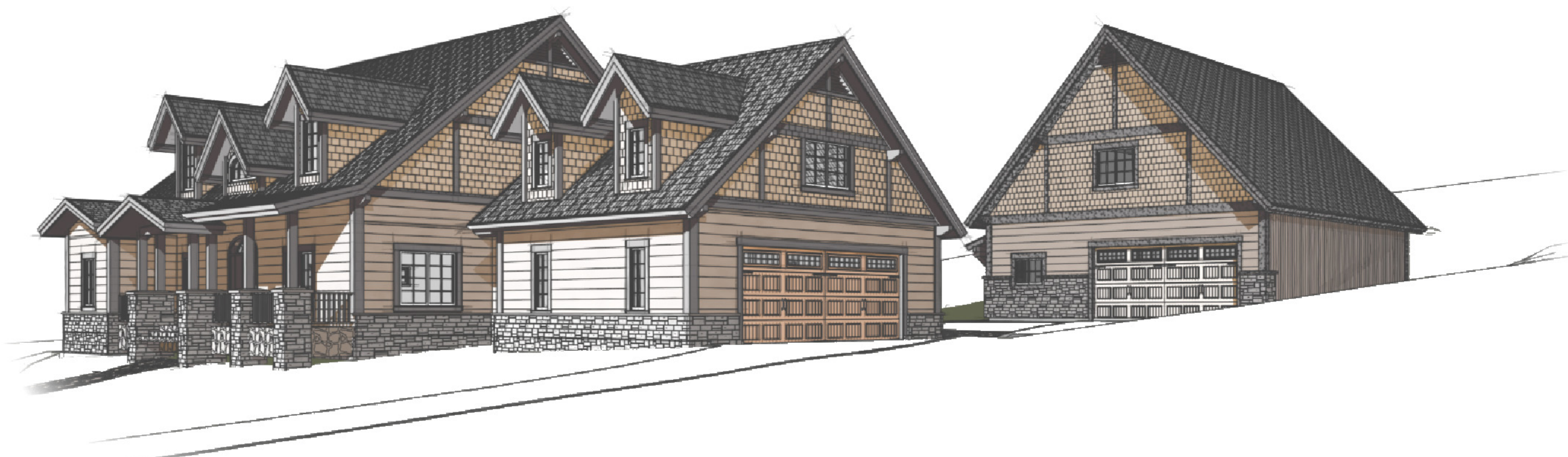
- A. PER IBC SECTION 1702, WHEN SPECIFICALLY REQUIRED BY THE LOCAL JURISDICTION, A REPRESENTATIVE FROM THE ENGINEER OF RECORD'S OFFICE SHALL BE PRESENT TO PERFORM ON-SITE STRUCTURAL OBSERVATION VISITS. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL SIGNIFICANT TIMES OF CONSTRUCTION WITH THE ENGINEER OF RECORDS OFFICE PRIOR TO THE DAY OF CONSTRUCTION AND/OR PLACEMENT (MINIMUM OF 7 DAYS). SIGNIFICANT TIMES OF CONSTRUCTION ARE AS FOLLOWS:
 - 1. PLACEMENT OF STRUCTURALLY RELATED REINFORCED CONCRETE FOUNDATIONS, INCLUDING REBAR.
 - 2. PLACEMENT OF PERIMETER LOAD BEARING WALLS, LOAD SUPPORTING BEAMS AND/OR HEADERS AND LATERAL RESISTING CONNECTION ELEMENTS.
 - 3. COMPLETION OF STRUCTURAL SYSTEMS AS REQUIRED AND/OR DEFINED BY THE LOCAL JURISDICTION.
- B. STRUCTURAL OBSERVATIONS DO NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR THE SPECIAL INSPECTIONS REQUIRED BY THE IBC SECTION 1701 OR OTHER SECTIONS OF THE CODE AS REQUIRED BY THE LOCAL BUILDING JURISDICTION.
- C. ALL SPECIAL INSPECTIONS SHALL BE PERFORMED TO MEET THE REQUIREMENTS OF THE LATEST IBC AND THE LOCAL BUILDING JURISDICTION.
- D. ALL SPECIAL INSPECTIONS SHALL BE PERFORMED BY A QUALIFIED PERSON WHO SHALL SHOW COMPLIANCE TO THE SATISFACTION OF THE BUILDING OFFICIAL, OWNER, ARCHITECT AND ENGINEER OF RECORD FOR THE PARTICULAR OPERATION. ALL SPECIAL INSPECTION REPORTS SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AND ENGINEER OF RECORD WITH THE PROJECT INFORMATION AND ADDRESS.

| | |
|---------------------------|--------------------|
| MAIN LEVEL | 150 sq. ft. |
| UPPER LEVEL | 637 sq. ft. |
| TOTAL LIVING SPACE | 787 sq. ft. |
| | |
| GARAGE | 1084 sq. ft. |

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| A7 | ROOF & UPPER FLOOR FRAMING |
| M1 | MECHANICAL |
| M2 | ENERGY SURVEY |

LEGAL DESCRIPTION

LOT #20 OF THE ASPEN RIDGE PHASE II SUBDIVISION MCCALL, IDAHO



PROJECT NO.
13-002

SHOP FOR BILL HARDT
LOT #20 OF ASPEN RIDGE MCCALL, ID

CONTRACTOR TO VERIFY ALL DETAILS, DIMENSIONS, AND SPECIFICATIONS PRIOR TO CONSTRUCTION, AND REPORT ANY OMISSIONS AND/OR ERRORS TO SMC DESIGN. THE PURCHASER OR BUILDER OF THIS PLAN RELEASES SMC DESIGN FROM ANY CLAIMS, LITIGATIONS OR SUITS THAT MAY ARISE DURING CONSTRUCTION OR ANYTIME THEREAFTER.

SCALE:
1/8" = 1'-0"

INITIAL DATE: 1/31/2013
PRINT DATE: 3/5/2013

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COVER SHEET

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SHEET NUMBER
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○ BEAM SCHEDULE ○
A (1) 4x8 D.F.

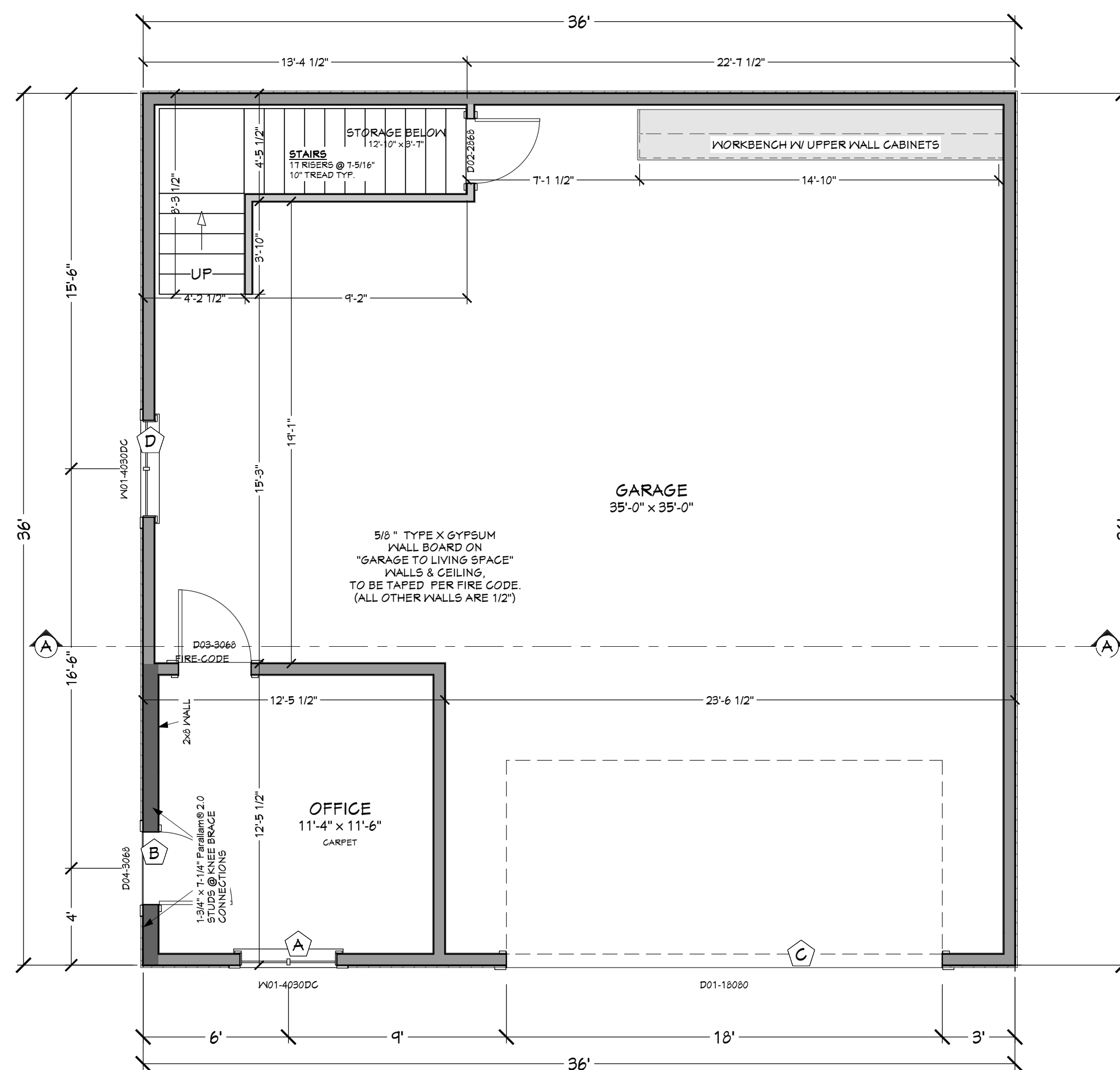
◇ HEADER SCHEDULE ◇
A (1) 4x8 D.F.
B (1) 4x10 D.F.
C (3) 1-3/4" x 1/4" 1.9E Microllam® LVL
D (2) 1-3/4" x 9-1/4" 1.9E Microllam® LVL
W/2 TRIMMERS EACH END

| NUMBER | QTY | FLOOR | SIZE | WIDTH | HEIGHT | TRIMMED | DESCRIPTION | COMMENTS | QTY | NUMBER |
|--------|-----|-------|--------|-------|--------|---------|------------------|----------|-----|--------|
| W01 | 2 | 1 | 40300C | 48" | 36" | | DRL CASIMINT LVL | | 2 | W01 |
| W02 | 1 | 2 | 4040B5 | 48" | 48" | YES | RIGHT SLIDING | | 1 | W02 |
| W03 | 1 | 2 | 5040B5 | 60" | 48" | YES | RIGHT SLIDING | | 1 | W03 |

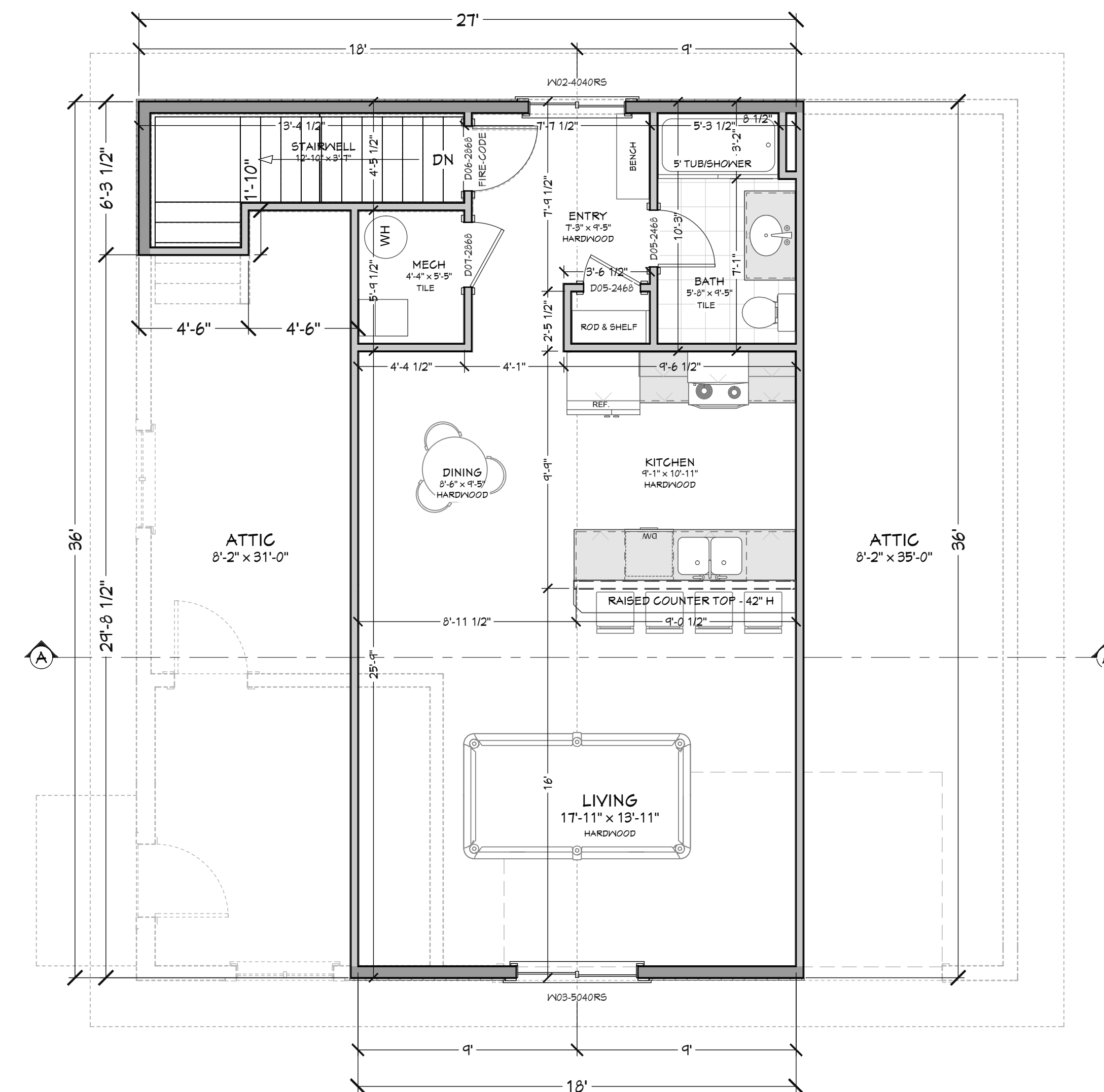
| NUMBER | QTY | FLOOR | SIZE | WIDTH | HEIGHT | TRIMMED | DESCRIPTION | COMMENTS | QTY | NUMBER |
|--------|-----|-------|-----------|-------|--------|---------|-------------|-----------|-----|--------|
| D01 | 1 | 1 | 18060 R | 216" | 80" | | GARAGE | | 1 | D01 |
| D02 | 1 | 1 | 2868 L IN | 32" | 80" | | HINGED | | 1 | D02 |
| D03 | 1 | 1 | 3068 L EX | 36" | 80" | | HINGED | FIRE CODE | 1 | D03 |
| D04 | 1 | 1 | 3068 R EX | 36" | 80" | | HINGED | | 1 | D04 |
| D05 | 2 | 2 | 2468 R IN | 28" | 80" | | HINGED | | 2 | D05 |
| D06 | 1 | 2 | 2868 L IN | 32" | 80" | | HINGED | FIRE CODE | 1 | D06 |
| D07 | 1 | 2 | 2868 R IN | 32" | 80" | | HINGED | | 1 | D07 |

MAIN LEVEL 150 sq. ft.
UPPER LEVEL 637 sq. ft.
TOTAL LIVING SPACE 787 sq. ft.

GARAGE 1084 sq. ft.



MAIN LEVEL



UPPER LEVEL

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| A7 | ROOF & UPPER FLOOR FRAMING |
| M1 | MECHANICAL |
| M2 | ENERGY SURVEY |

SHOP FOR BILL HARDT
LOT #20 OF ASPEN RIDGE MCCALL, ID

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

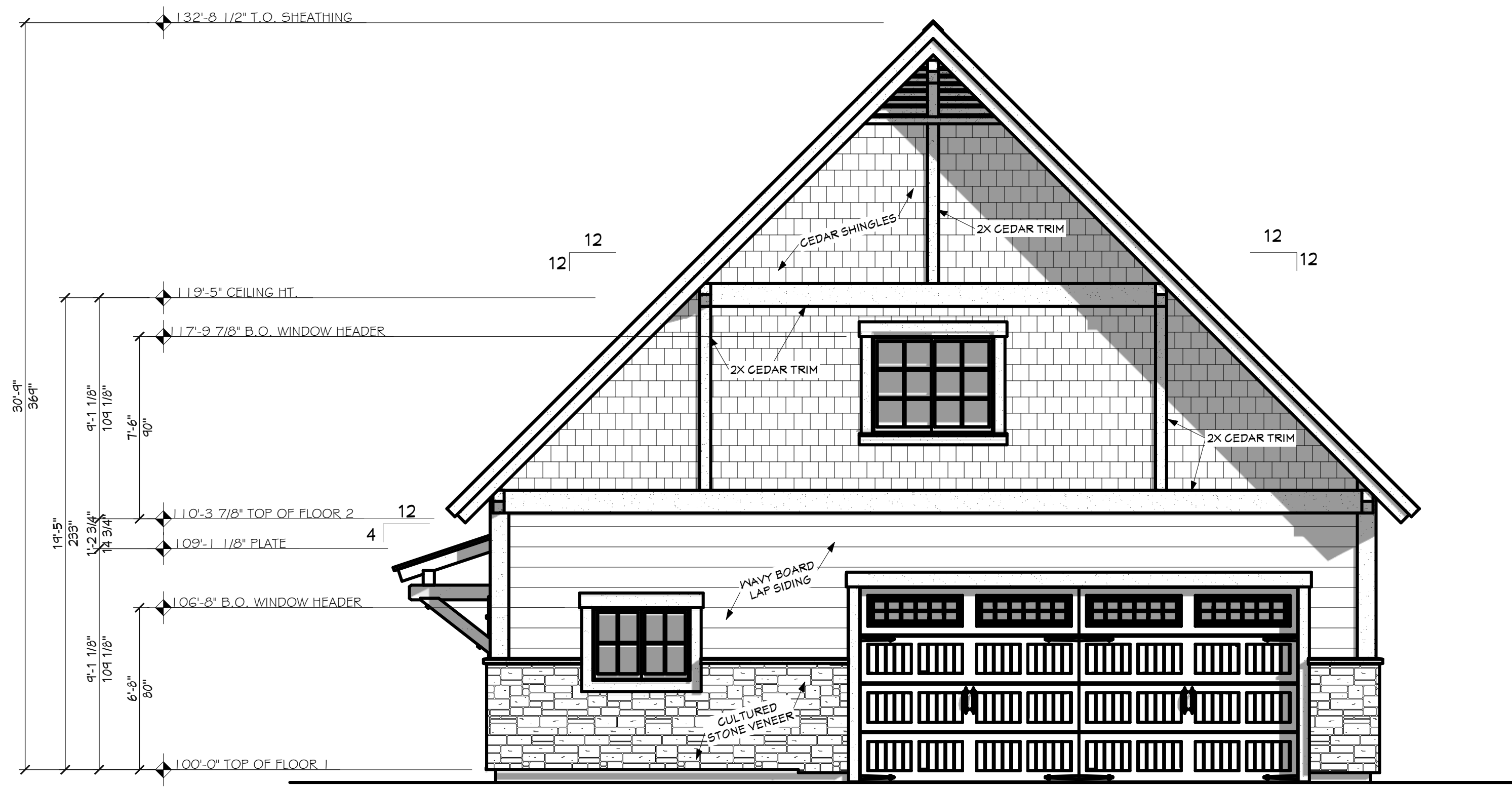
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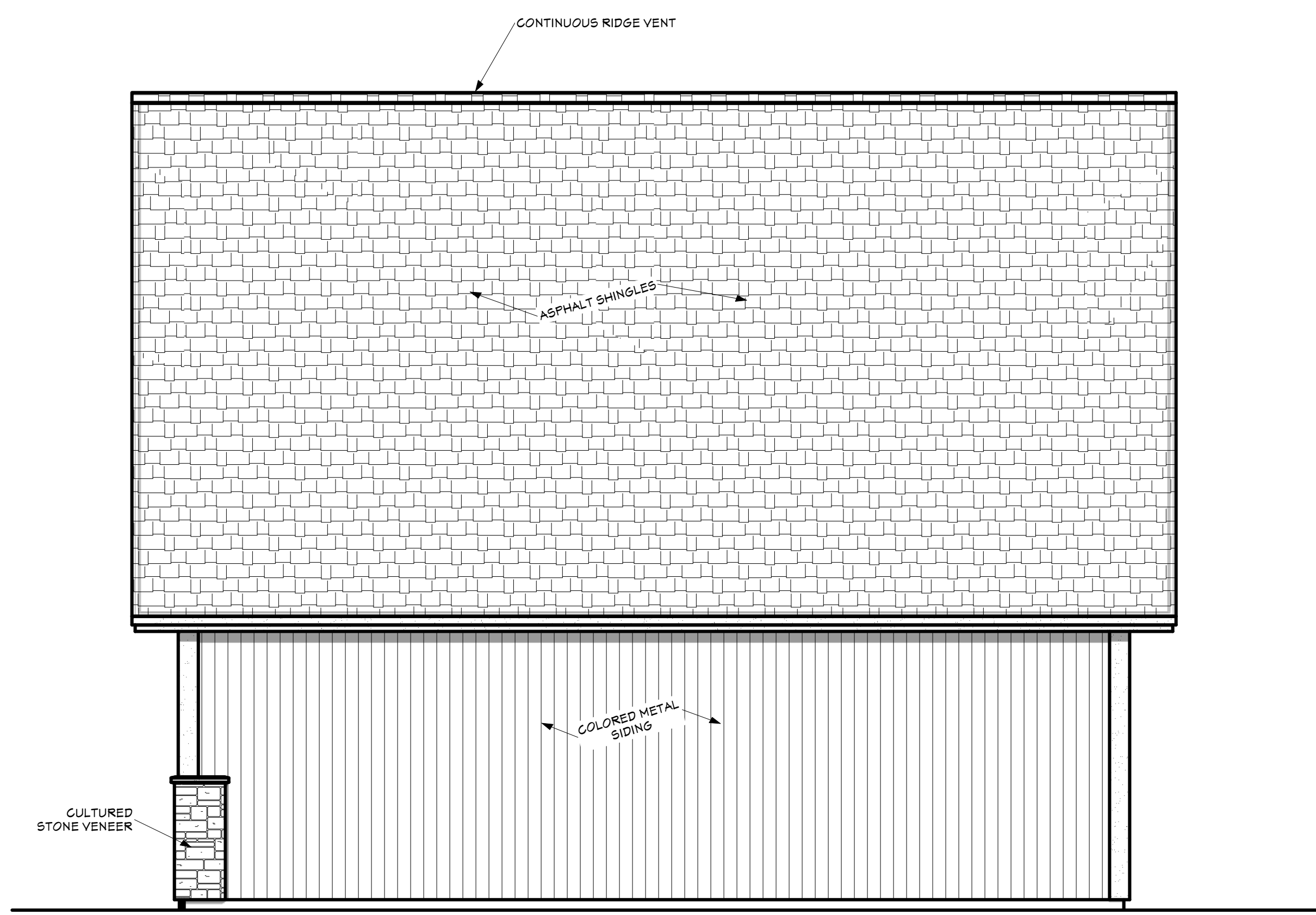
FLOOR PLANS

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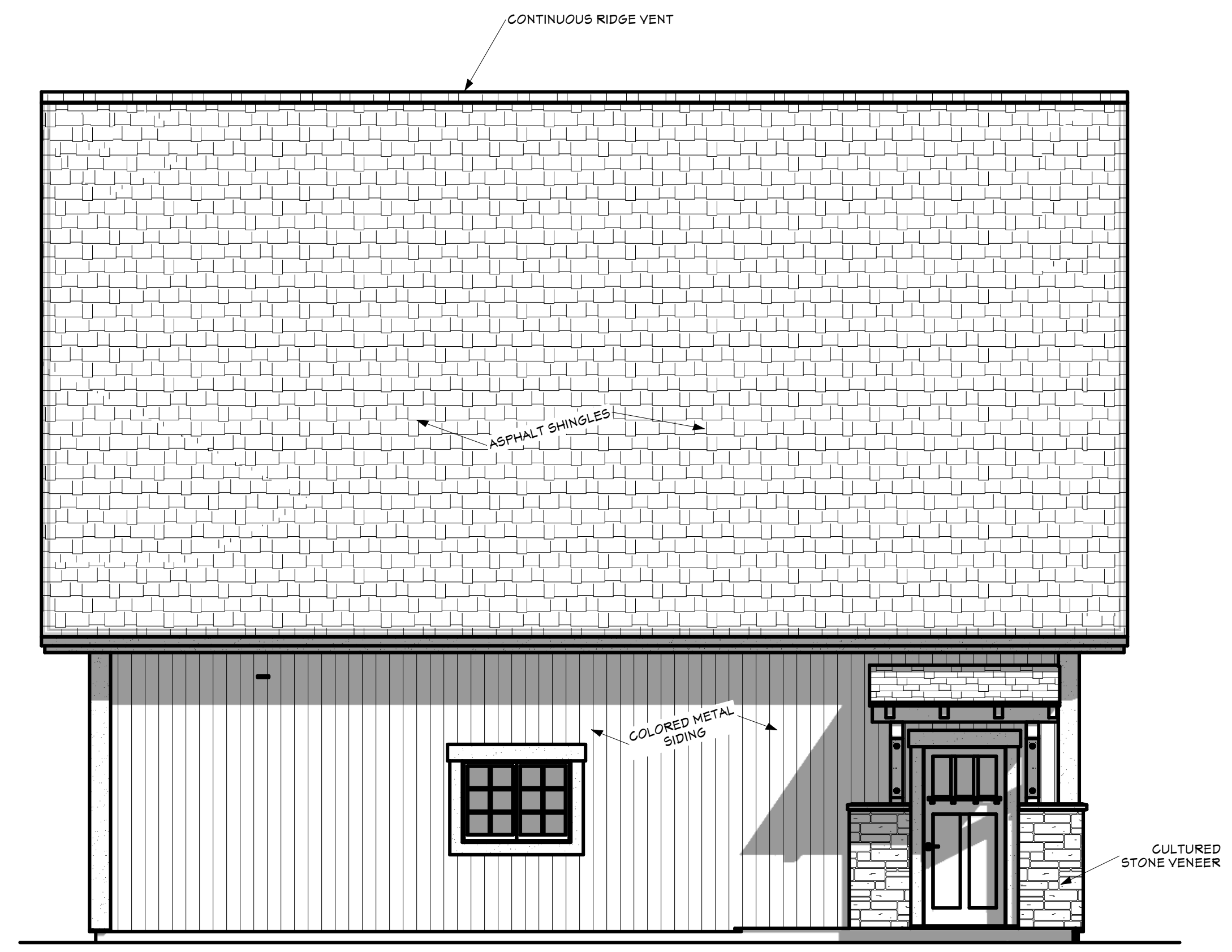
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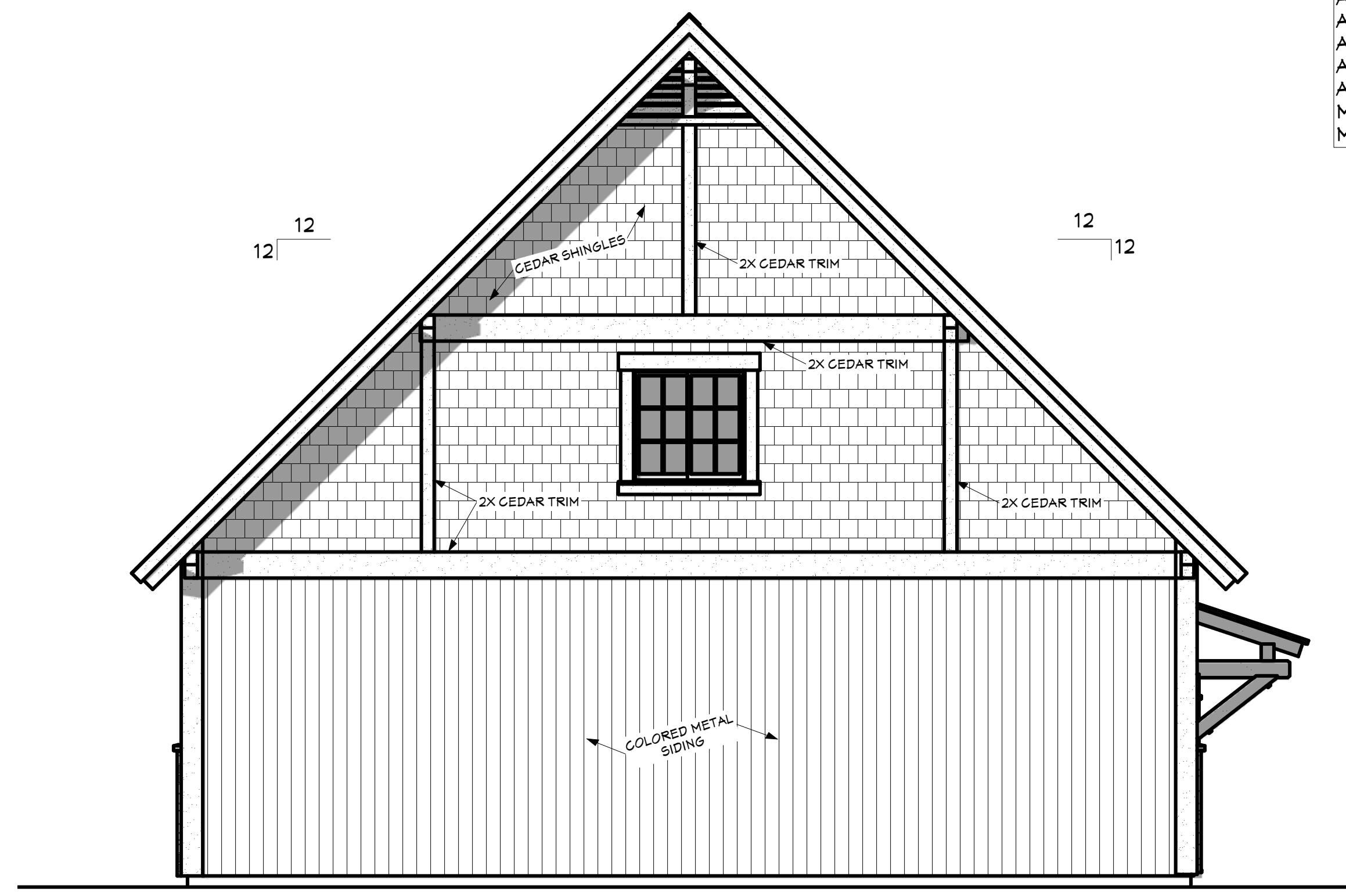
FRONT ELEVATION
SCALE: 1/4 in = 1 ft



RIGHT ELEVATION
SCALE: 1/4 in = 1 ft



LEFT ELEVATION
SCALE: 1/4 in = 1 ft



REAR ELEVATION
SCALE: 1/4 in = 1 ft

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ELEVATIONS

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FOOTING SCHEDULE

| | WIDTH | DEPTH | REINFORCEMENT |
|----|-------|-------|--------------------|
| F1 | 14" | 10" | (2) #4 CONT. REBAR |
| F2 | 16" | 10" | (2) #4 CONT. REBAR |
| F3 | 42" | 10" | (5) #4 CONT. REBAR |

FOUNDATION CONCRETE

| | |
|------------------------|-------------|
| FOOTINGS | 12 Cu. Yds. |
| STEM WALLS | 7 Cu. Yds. |
| 4" PLAIN CONCRETE SLAB | 16 Cu. Yds. |
| TOTAL CONCRETE | 35 Cu. Yds. |

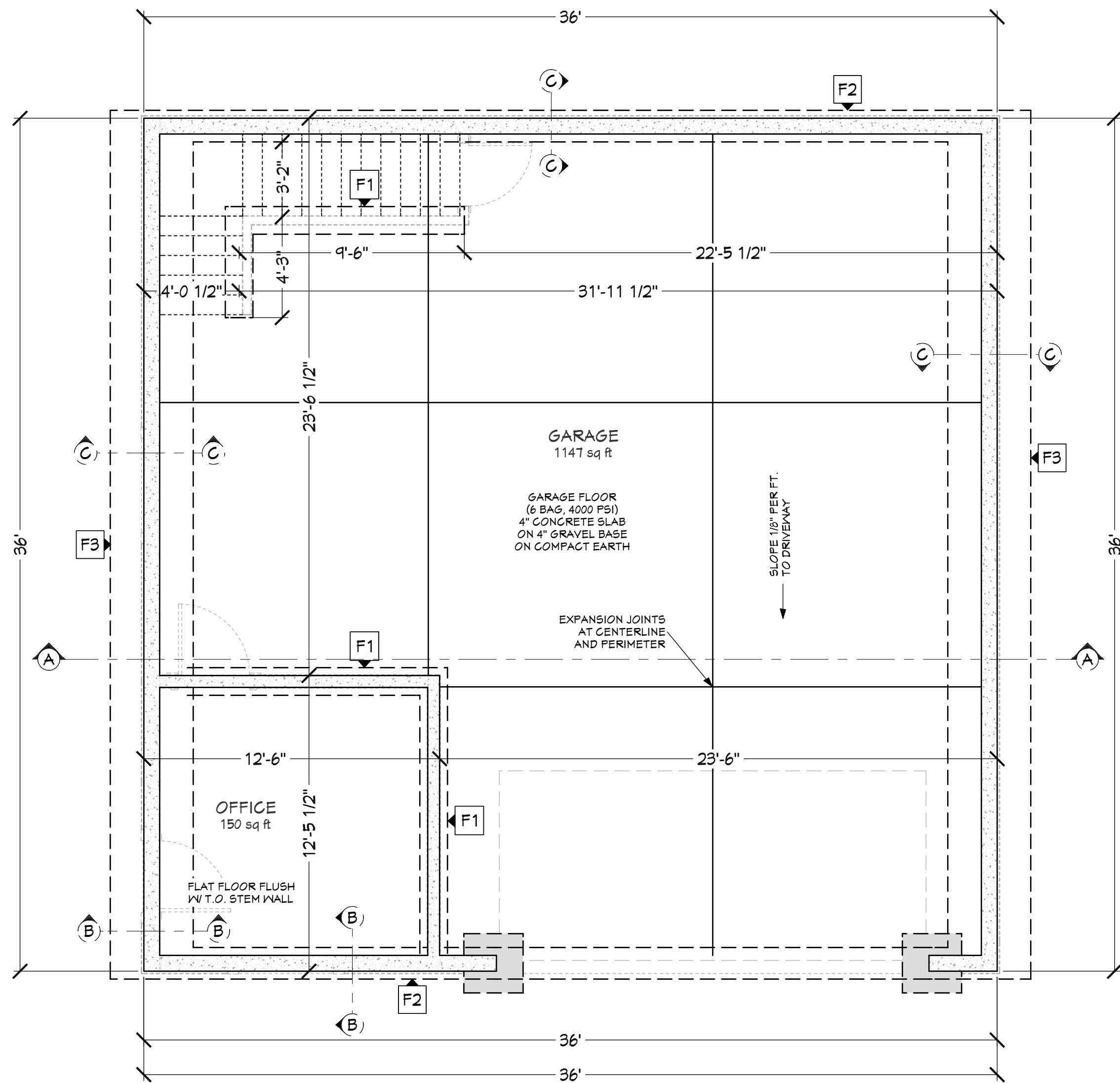
BWP CONSTRUCTION METHOD LEGEND

- LIB - LET IN BRACING
- DWB - DIAGONAL WOOD BOARDS
- WSP - WOOD STRUCTURAL PANEL
- SFB - STRUCTURAL FIBER BOARD
- GB - GYPSUM BOARD
- PBS - PARTICLEBOARD SHEATHING
- PCP - PORTLAND CEMENT PLASTER
- HPS - HARDBOARD PANEL SIDING
- ABW - ALTERNATE BRACED WALL
- IPF - INTERMITTENT PORTAL FRAME
- CS-WSP - CONT. SHEATHING - WOOD STRUCTURAL PANEL
- CS-G - WOOD STRUCTURAL PANEL ADJACENT TO GARAGE & SUPPORTING ROOF LOAD ONLY
- CS-PF - CONT. PORTAL FRAME

| BRACED PANEL LENGTH TABLE - BASED ON WIND SPEED (90 mph) | | | | | | | | | |
|--|----------------------------------|--------------------------|-------------------------------|------------------------|---------------------------|--------------------------|----------------------------|-------------------------------|-------------------------|
| BRACED WALL LINE | BRACING METHOD TABLE R602.10.4.1 | BRACED WALL LINE SPACING | REQUIRED BRACING LENGTH (FT.) | EXPOSURE FACTOR FTNT:b | ROOF TO EAVE TOTAL FTNT:c | WALL HEIGHT TOTAL FTNT:d | NUMBER BRACED LINES FTNT:e | REQUIRED BRACING LENGTH (FT.) | PROVIDED BRACING LENGTH |
| MAIN LEVEL | | | | | | | | | |
| BWL X1 | WSP | 36.00 | 6.70 | 1.00 | 1.60 | 0.95 | 1.00 | 10'-3" | 11'-0" |
| BWL X2 | WSP | 36.00 | 6.70 | 1.00 | 1.60 | 0.95 | 1.00 | 10'-3" | 12'-0" |
| BWL Y1 | WSP | 36.00 | 6.70 | 1.00 | 1.60 | 0.95 | 1.00 | 10'-3" | 12'-0" |
| BWL Y2 | WSP | 36.00 | 6.70 | 1.00 | 1.60 | 0.95 | 1.00 | 10'-3" | 12'-0" |

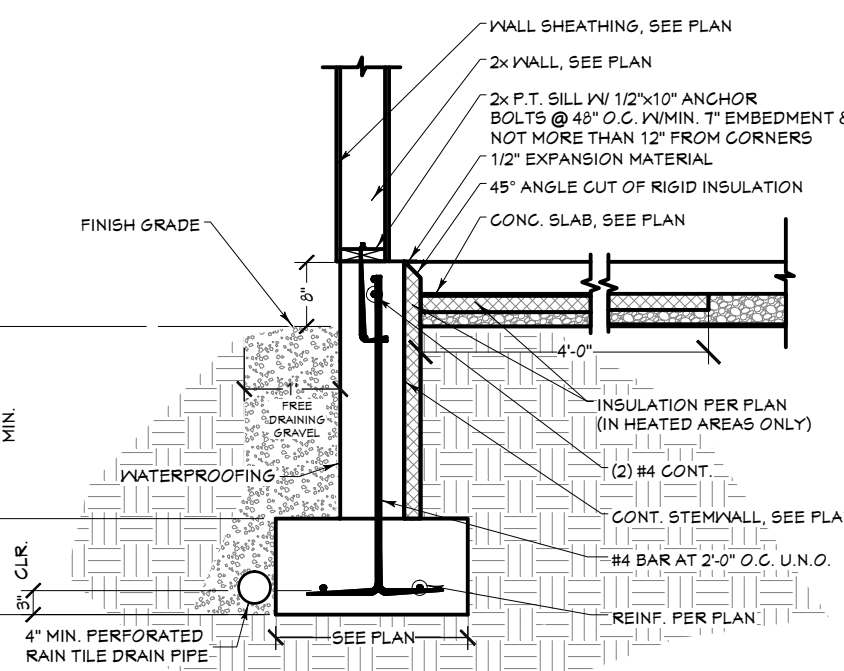
*ADJUSTMENT CALCULATION METHOD:

$$\text{REQUIRED BRACING LENGTH (FT)} \times \text{EXPOSURE FACTOR FTNT: b} \times \text{ROOF TO EAVE TOTAL FTNT: c} \times \text{WALL HEIGHT TOTAL FTNT: d} \times \text{NUMBER BRACED LINES FTNT: e} = \text{REQUIRED BRACING LENGTH (FT)}$$

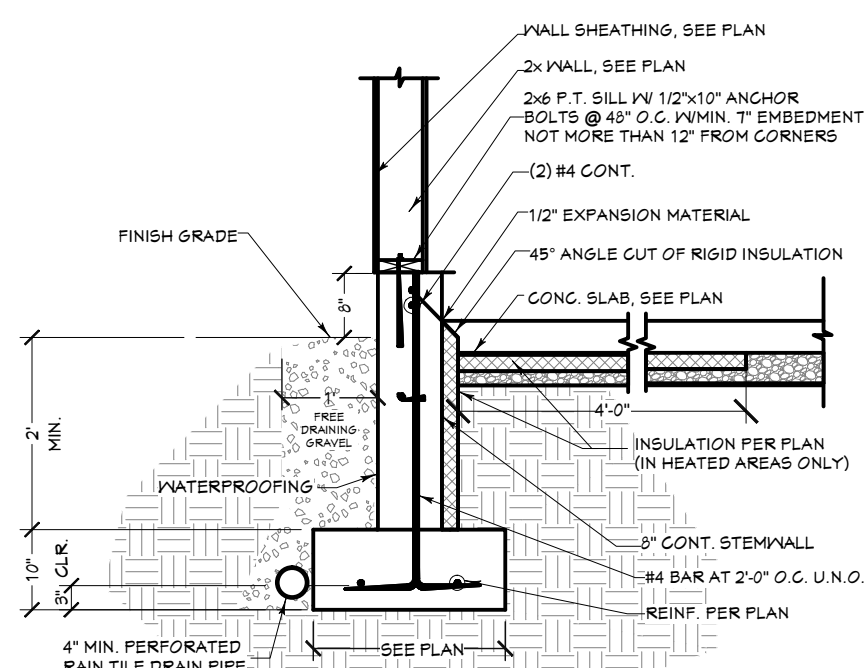


FOUNDATION PLAN

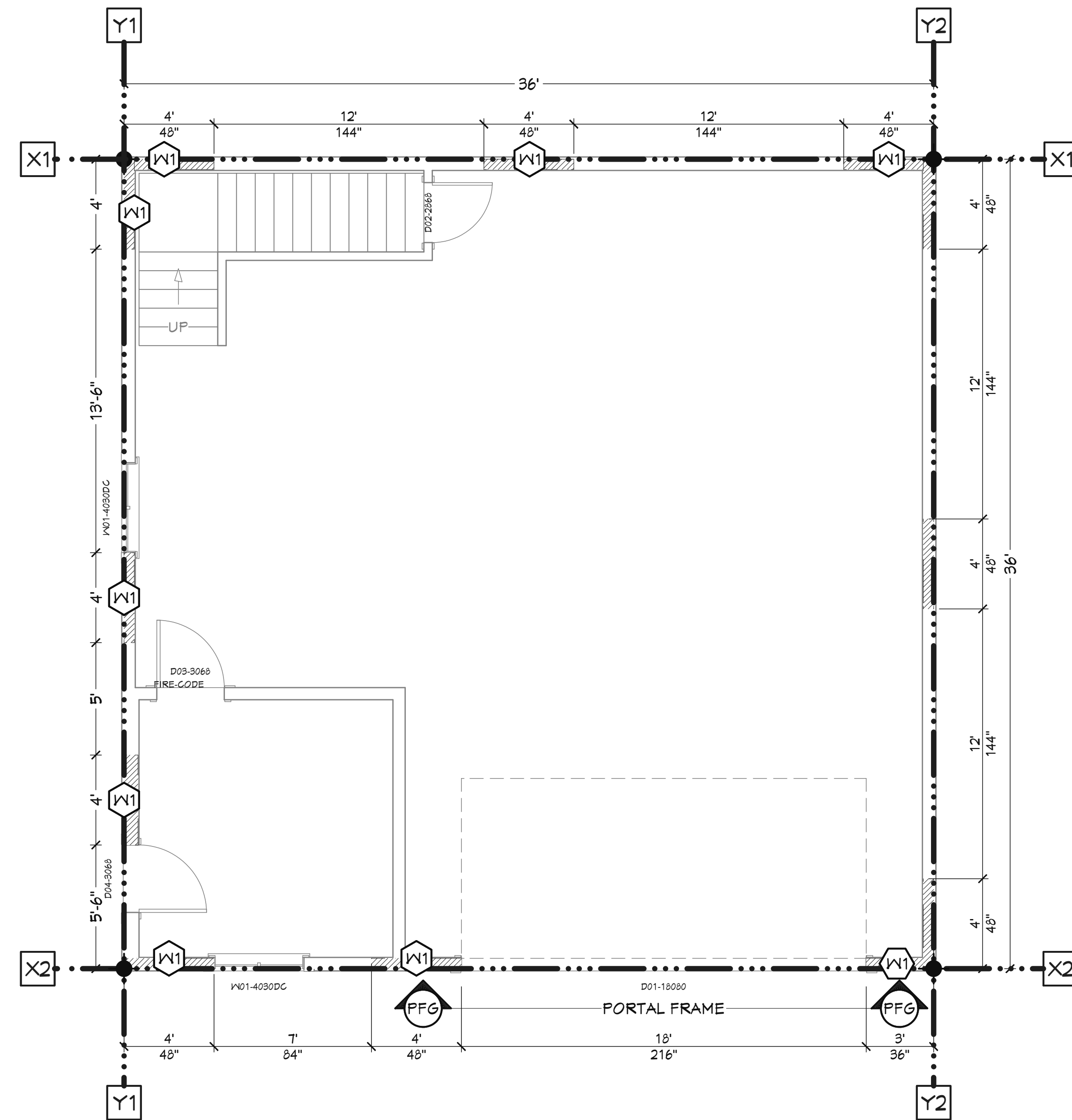
- W1: 7/16" OSB SHEATHING W/8d NAILS @ 6" O.C. (EDGES), 12" O.C. (FIELD); BLKG. @ ALL EDGES (EXCEPT FOR CS METHOD)
- W2: 1/2" GYP BOARD W/5d COOLER NAILS @ 4" O.C.
- W3: CS METHOD
- PF: PORTAL FRAME GARAGE



FOUNDATION DETAIL @ OFFICE
SCALE: 1/2 in = 1 ft



FOUNDATION DETAIL @ GARAGE
SCALE: 1/2 in = 1 ft



WALL BRACING

FOUNDATION NOTES:

- ALL ANGLE 45° UNO
- 8" THICK WALLS CONCRETE FOUNDATION WALLS
- ALL INTERIOR DIMENSIONS ARE TO CENTER OF FOOTING
- STEM WALL 4" TALL - STEP DOWN TO FOLLOW NATURAL TERRAIN

SHEET INDEX

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- A2 SITE PLAN
- A3 FLOOR PLANS
- A4 ELEVATIONS
- A5 FOUNDATION & WALL BRACING
- A6 DETAIL VIEWS - FRAMING
- A7 ROOF & UPPER FLOOR FRAMING
- M1 MECHANICAL
- M2 ENERGY SURVEY

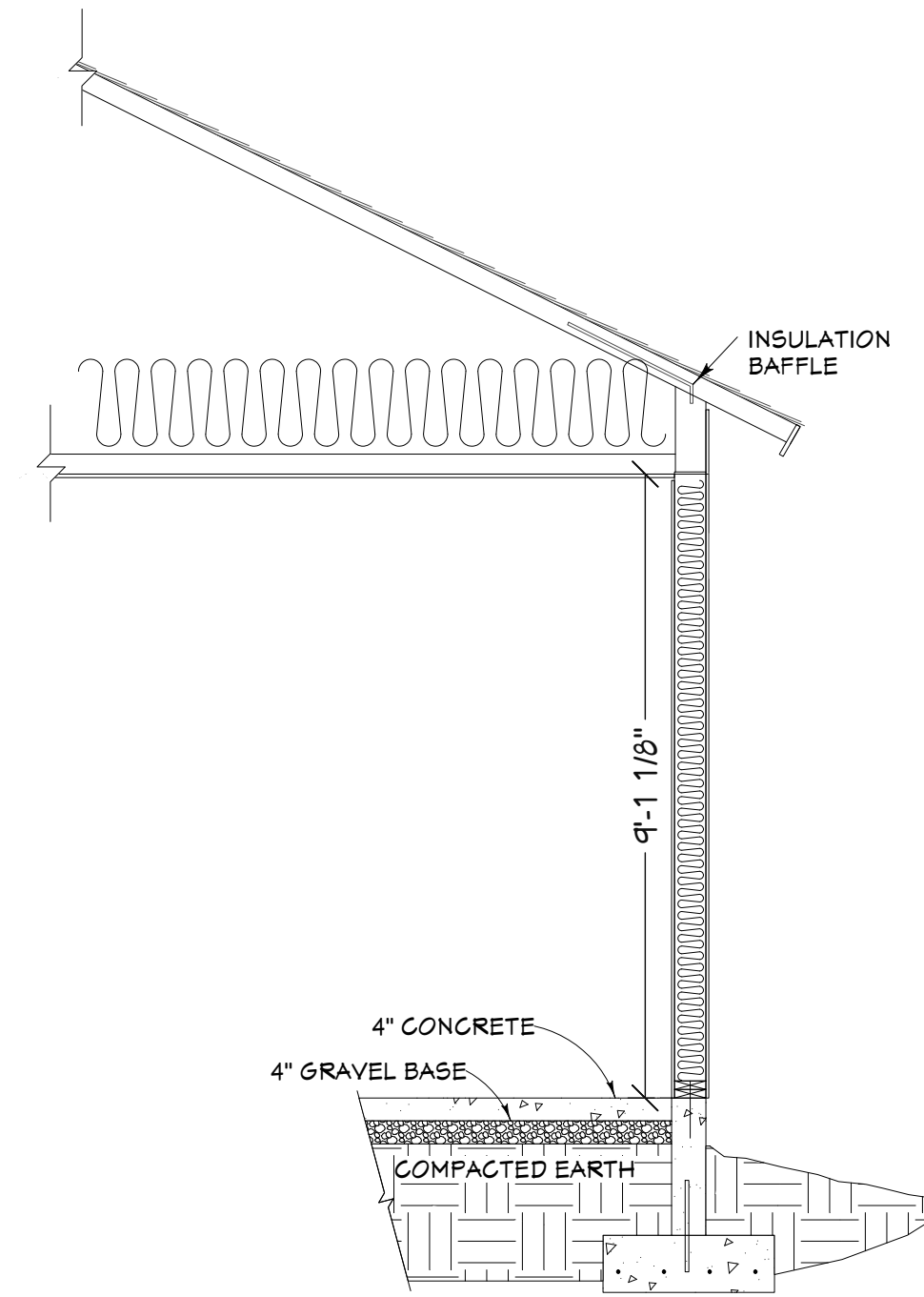
CONTRACTOR TO VERIFY ALL DETAILS, DIMENSIONS, AND SPECIFICATIONS PRIOR TO CONSTRUCTION, AND REPORT ANY OMISSIONS AND/OR ERRORS TO SMC DESIGN. THE PURCHASER OR BUILDER OF THIS PLAN RELEASES SMC DESIGN FROM ANY CLAIMS, LITIGATIONS OR SUITS THAT MAY ARISE DURING CONSTRUCTION OR ANYTIME THEREAFTER.

TYPICAL ROOF MATERIALS
ARCHITECTURAL SHINGLES
P.E. TRUSSES @ MFG SPECS
(SEE TRUSS LAYOUT FOR TRUSS TYPE)
5/8" WAFER BOARD W/CLIPS
INSULATION BAFFLE
R-38 ROCKWOOL (BLOWN)

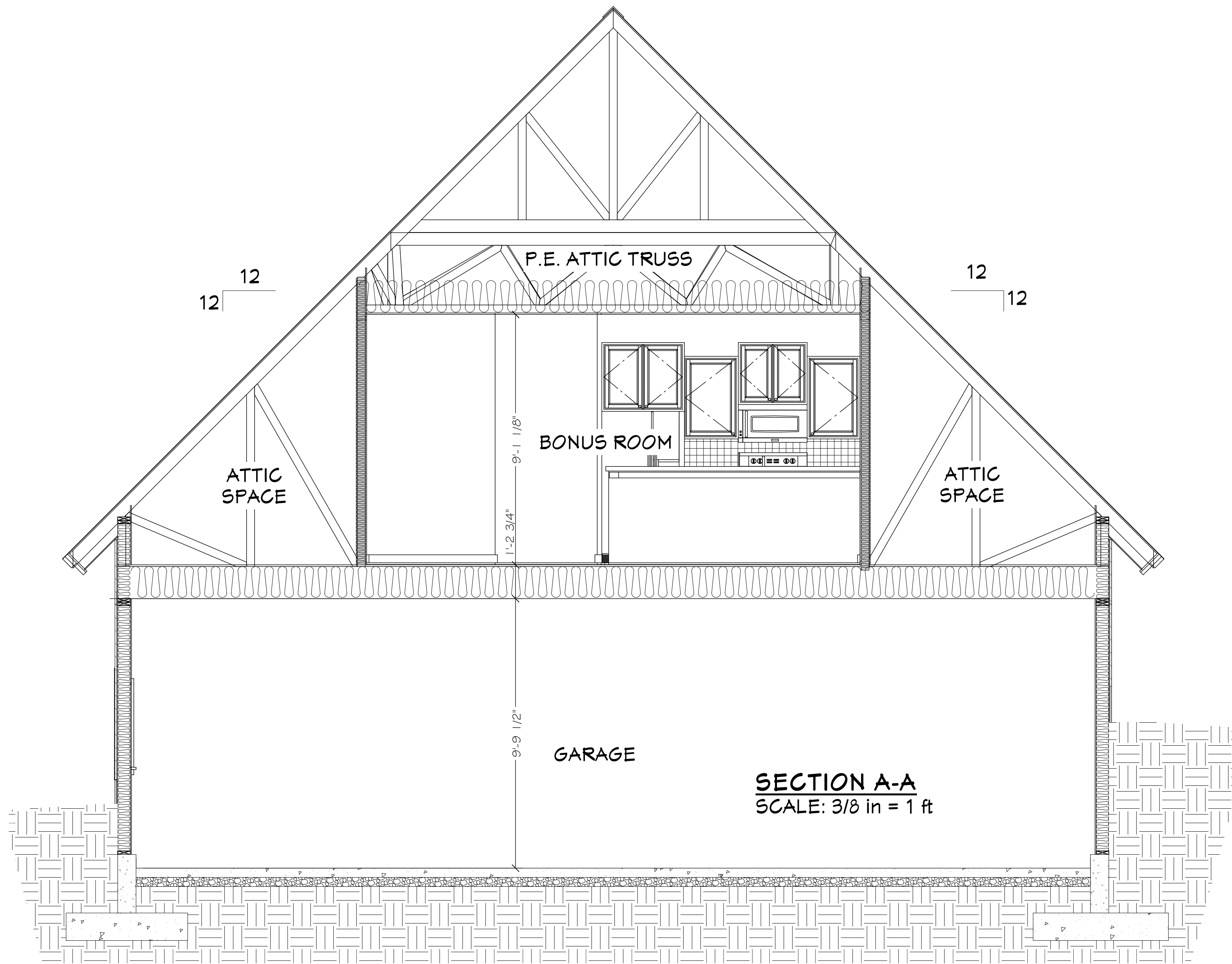
TYPICAL EAVE MATERIALS
2-STEP CEDAR FASCIA BOARD
SOFFIT VENTS 6" x 16" 8'-0" O.C.

TYPICAL WALL MATERIALS
2x STUDS PER PLAN
1/2" GYPSUM BOARD
.004 MIL. POLYETHYLENE
R-21 F.G. INSULATION
7/16" OSB SHEAR PANELS
CEDAR "WAVY BOARD" LAP SIDING

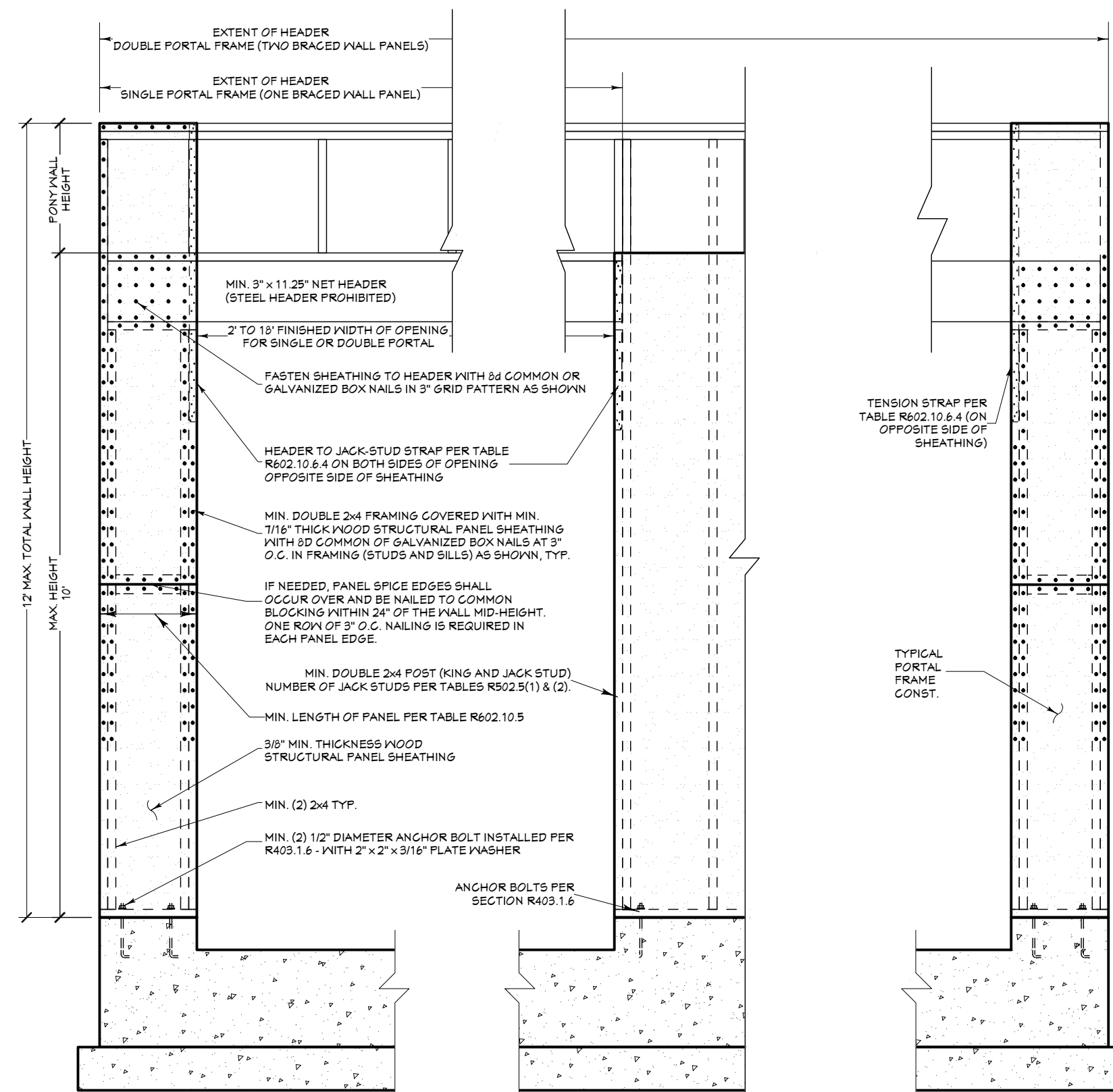
TYPICAL FOUNDATION MATERIALS
2x P.T. PLATE
1/2" x 10" A. BOLT @ 4' O.C.
4" CONCRETE ON 4" GRAVEL BASE
ON COMPACTED EARTH
8" CONC. FOUND. (5 1/2 BAG, 3500psi) ON
CONC. FOOTING (5 1/2 BAG, 3500psi)
(SEE FOUNDATION PLAN FOR FOOTING SIZES)



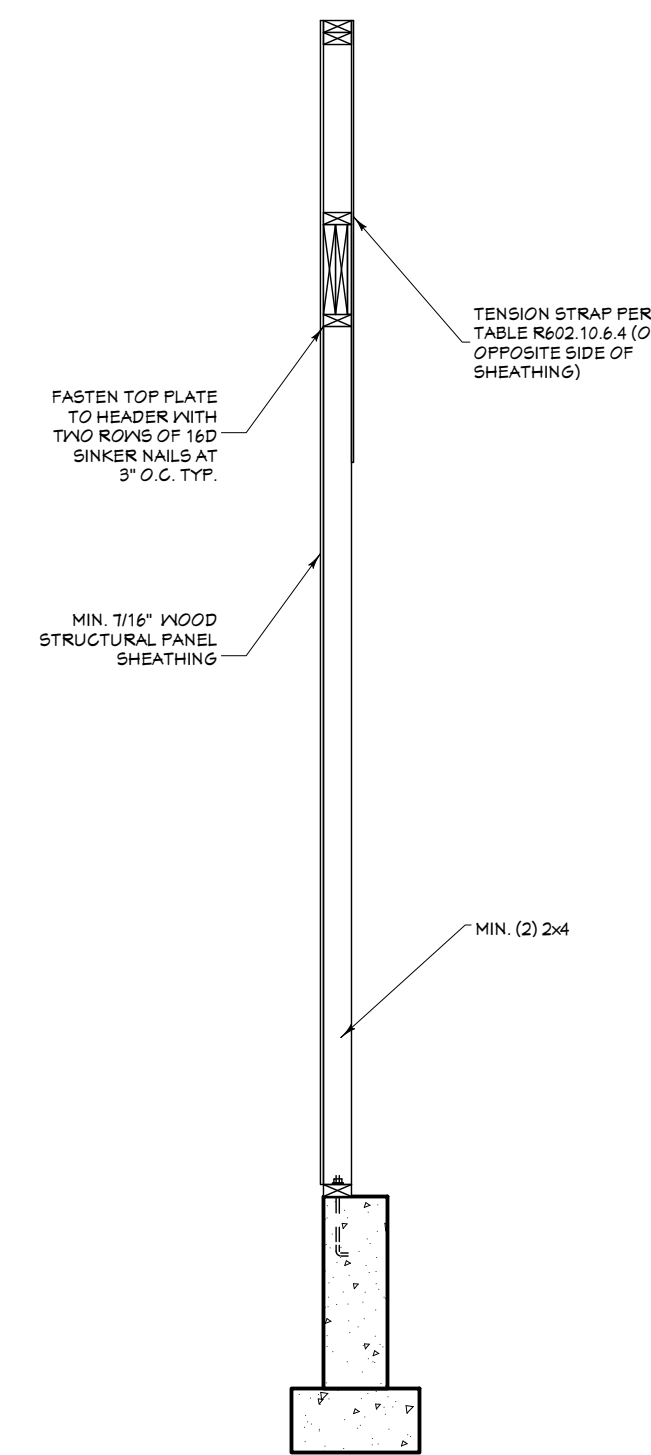
TYPICAL CROSS-SECTION
SCALE: 3/8 in = 1 ft



SECTION A-A
SCALE: 3/8 in = 1 ft



PORTAL FRAME DETAIL
SCALE: 1/2 in = 1 ft



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| NUMBER | QTY | FLOOR | SIZE | WIDTH | HEIGHT | WINDOW SCHEDULE | TEMPERED | DESCRIPTION | COMMENTS | QTY | NUMBER |
|--------|-----|-------|--------|-------|--------|-----------------|----------|---------------------|----------|-----|--------|
| W01 | 2 | 1 | 2030DC | 48" | 36" | | | DBL. CASHPNT-LH/RHR | | 2 | W01 |
| W02 | 1 | 2 | 2040RS | 48" | 48" | YES | | RIGHT SLIDING | | 1 | W02 |
| W03 | 1 | 2 | 5040RS | 60" | 48" | YES | | RIGHT SLIDING | | 1 | W03 |

◊ HEADER SCHEDULE ◊

- A (1) 4x8 D.F.
- B (1) 4x10 D.F.
W/2 TRIMMERS EACH END
- C (3) 1-3/4" x 14" 1.9E Microllam® LVL
- D (2) 1-3/4" x 9-1/4" 1.9E Microllam® LVL
W/2 TRIMMERS EACH END

| NUMBER | QTY | FLOOR | SIZE | WIDTH | HEIGHT | TYPE | TEMPERED | COMMENTS | QTY | NUMBER |
|--------|-----|-------|-----------|-------|--------|--------|----------|-----------|-----|--------|
| D01 | 1 | 1 | 1A0300 R | 216" | 96" | GARAGE | | | 1 | D01 |
| D02 | 1 | 1 | 286A L IN | 32" | 80" | HINGED | | | 1 | D02 |
| D03 | 1 | 1 | 306A L EX | 36" | 80" | HINGED | | FIRE CODE | 1 | D03 |
| D04 | 1 | 1 | 306A R EX | 36" | 80" | HINGED | | | 1 | D04 |
| D05 | 2 | 2 | 286A R IN | 32" | 80" | HINGED | | | 2 | D05 |
| D06 | 1 | 2 | 286A L IN | 32" | 80" | HINGED | | FIRE CODE | 1 | D06 |
| D07 | 1 | 2 | 286A R IN | 32" | 80" | HINGED | | | 1 | D07 |

○ BEAM SCHEDULE ○

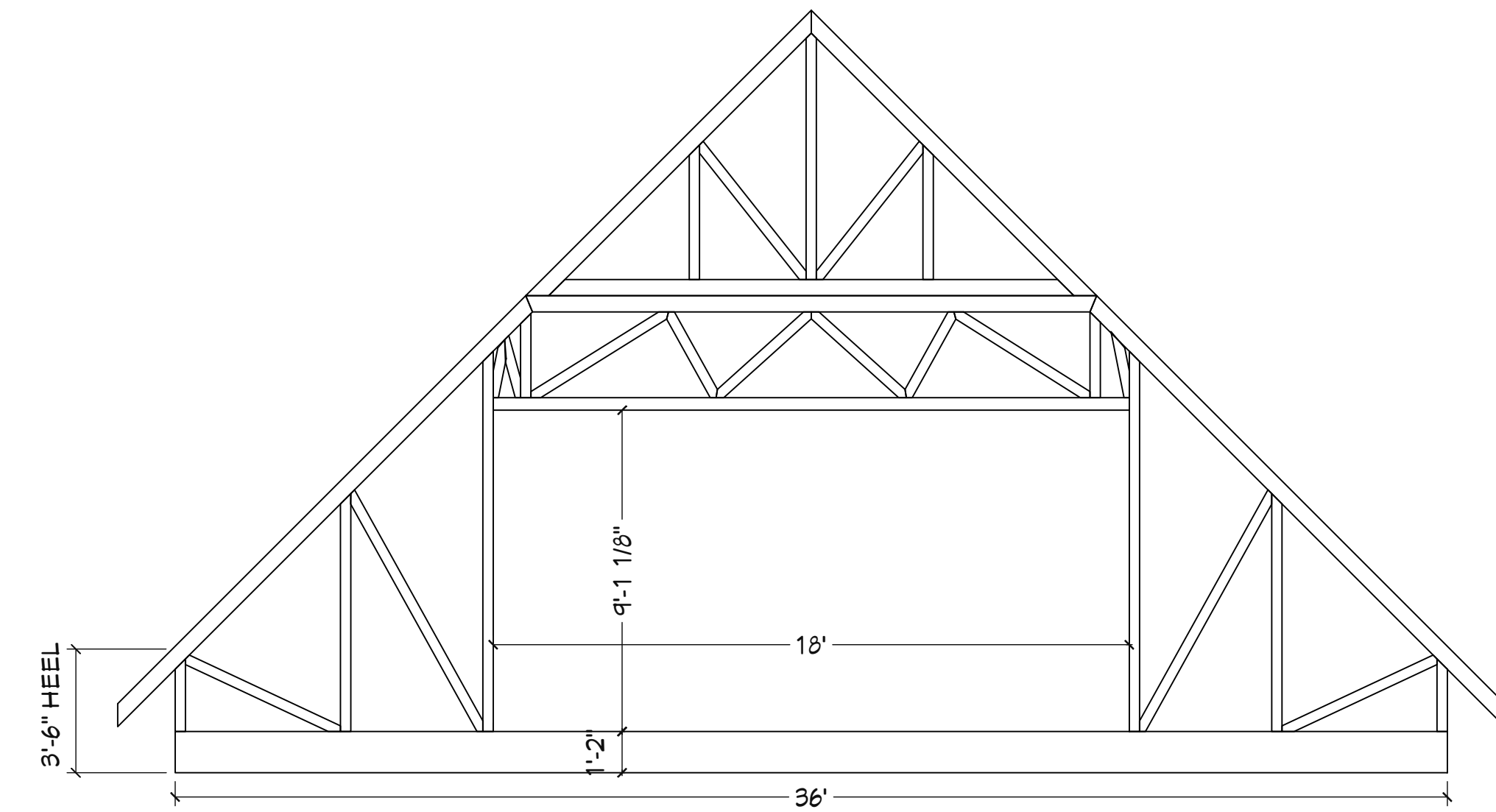
- A (1) 4x8 D.F.

MAIN LEVEL 150 sq. ft.
UPPER LEVEL 637 sq. ft.
TOTAL LIVING SPACE 787 sq. ft.

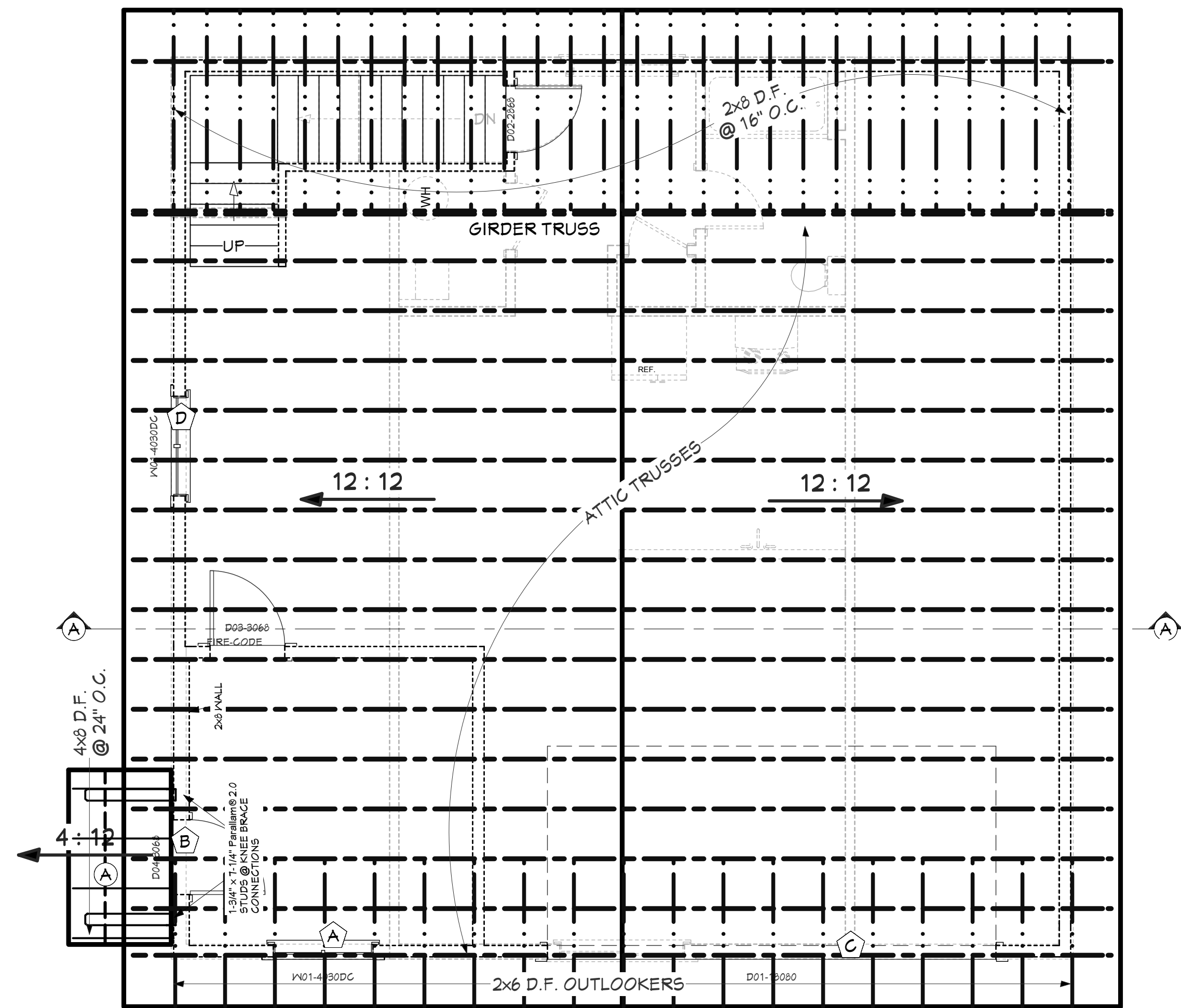
GARAGE 1084 sq. ft.

ROOF MATERIALS

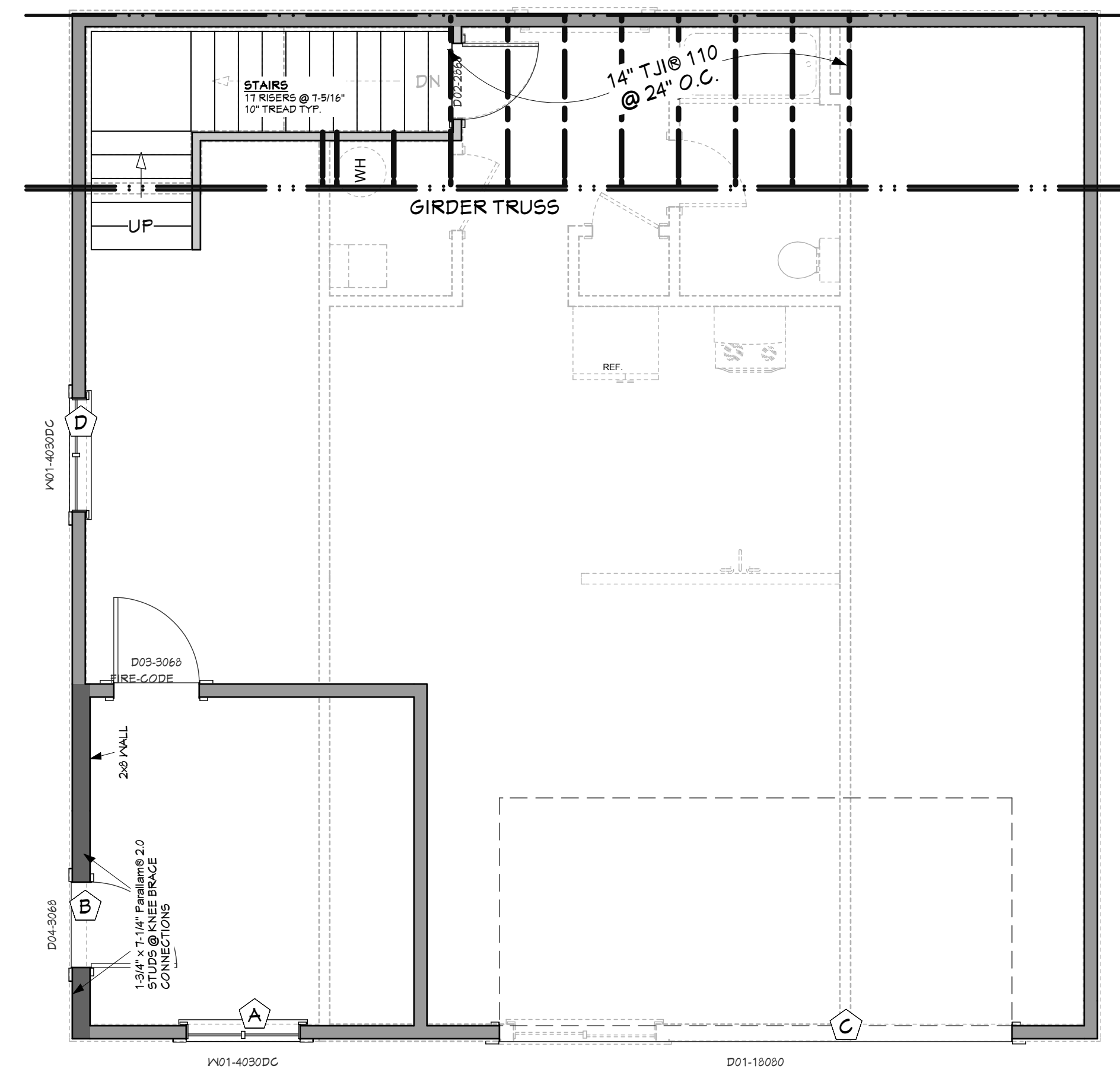
- RIDGE VENT 36 ft
- RIDGE CAP 40 ft
- 8x8x0 SHINGLES 2294 sq ft
- 4x8x5/8" SHEATHING 70 ea
- GABLE FASCIA 122 ft
- EAVE FASCIA 94 ft
- METAL DRIP EDGE 216 ft



ATTIC TRUSS PROFILE



ROOF LAYOUT



FLOOR FRAMING

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PROJECT NO.
13-002

SHOP FOR BILL HARDT
LOT #20 OF ASPEN RIDGE MCCALL, ID

CONTRACTOR TO VERIFY ALL DETAILS, DIMENSIONS, AND SPECIFICATIONS PRIOR TO CONSTRUCTION, AND REPORT ANY OMISSIONS AND/OR ERRORS TO SMC DESIGN. THE PURCHASER OR BUILDER OF THIS PLAN RELEASES SMC DESIGN FROM ANY CLAIMS, LITIGATIONS OR SUITS THAT MAY ARISE DURING CONSTRUCTION OR ANYTIME THEREAFTER.

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

INITIAL DATE: 1/31/2013
PRINT DATE: 3/5/2013

DRAWN BY:
Steve Curtis

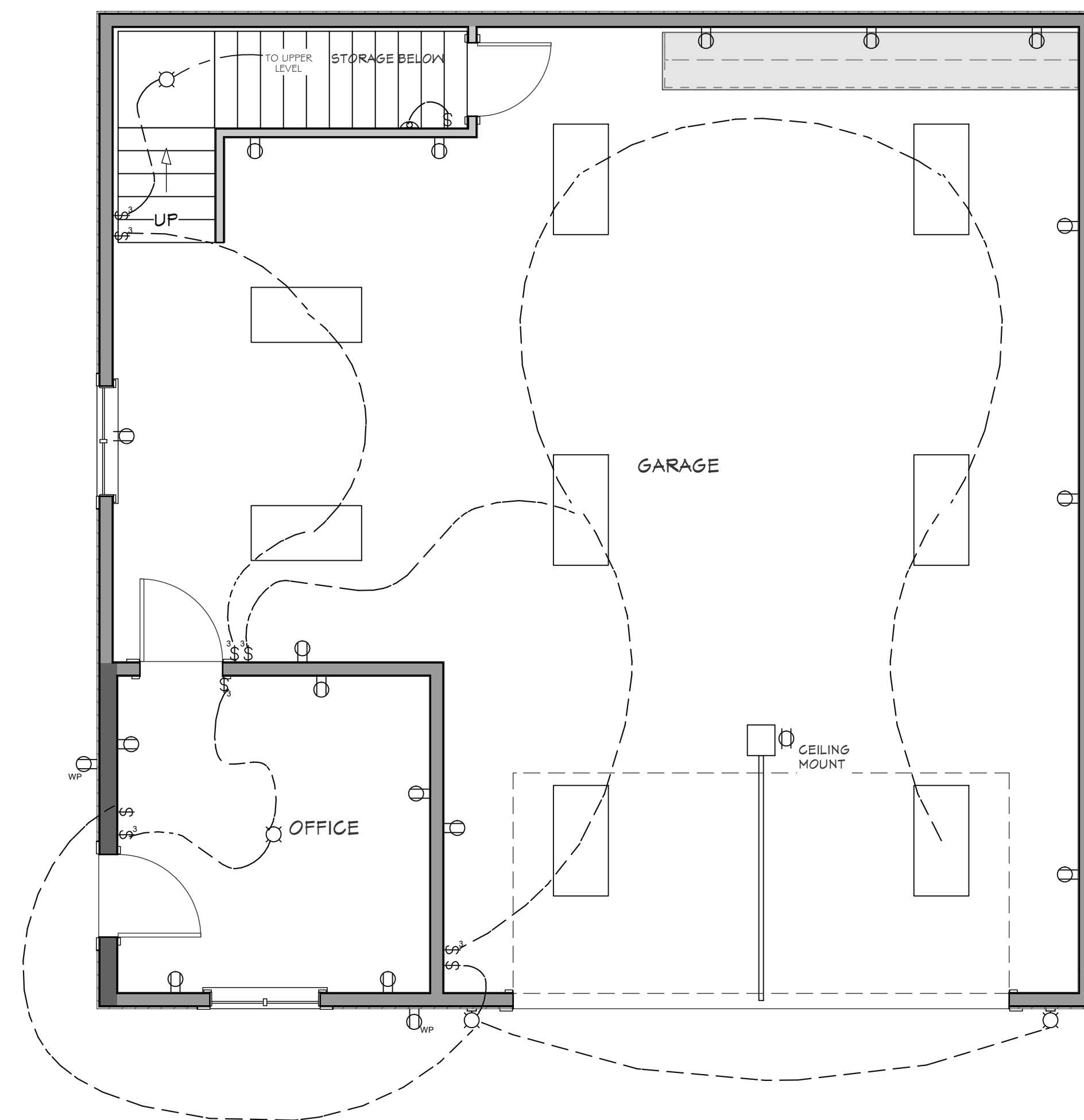
ROOF & UPPER FLOOR FRAMING

SMC Design
SMC Design
208.249.7288
Nampa, ID

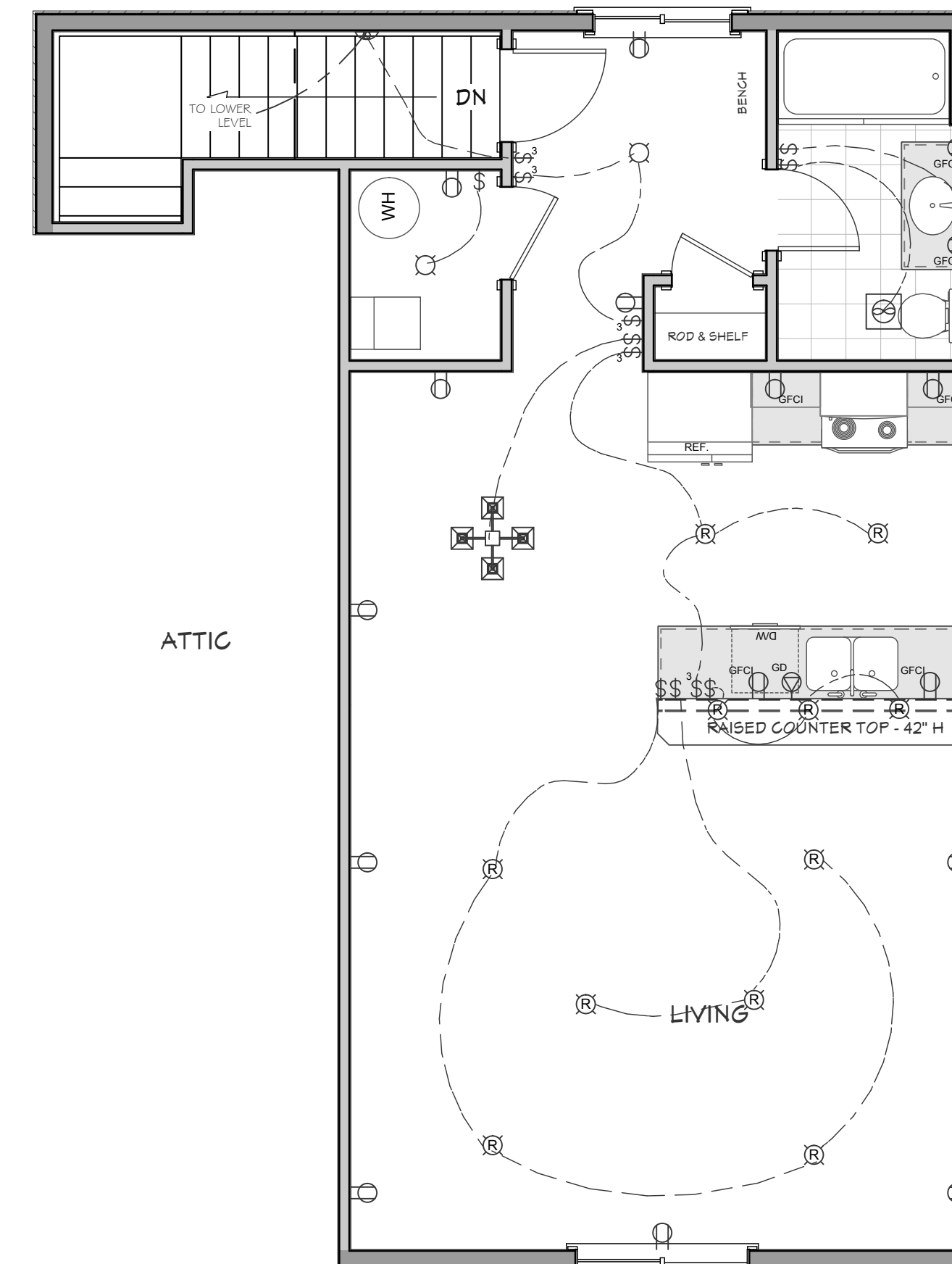
SHEET NUMBER
A7
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| NUMBER | QTY | FLOOR | ATTACHED TO | DESCRIPTION | COMMENTS |
|--------|-----|-------|-------------|------------------------------------|----------|
| EQ1 | 6 | 1 | CEILING | 2'X4'2" SURFACE MOUNTED (4RW2 L/D) | |
| EQ2 | 3 | 1 | WALL | SINGLE POLE | |
| EQ3 | 7 | 1 | WALL | THREE WAY | |
| EQ4 | 1 | 1 | CEILING | DUPLEX | |
| EQ5 | 1 | 1 | WALL | WALL SCONCE | |
| EQ6 | 2 | 1 | WALL | CAGED LANTERN | |
| EQ7 | 2 | 1 | WALL | DUPLEX (WEATHERPROOF) | |
| EQ8 | 7 | 2 | WALL | SINGLE POLE | |
| EQ9 | 2 | 2 | CEILING | CONTEMPORARY FLUSH | |
| F10 | 6 | 2 | WALL | GFCI | |
| F11 | 1 | 2 | WALL | BATHROOM WALL LIGHT | |
| F12 | 1 | 2 | CEILING | PYRALIST | |
| F13 | 5 | 2 | WALL | THREE WAY | |
| F14 | 1 | 2 | WALL | WALL SCONCE | |
| F15 | 2 | 1 | CEILING | CONTEMPORARY FLUSH | |
| F16 | 1 | 2 | CEILING | RECESSED DOWN LIGHT 6" | |
| F17 | 10 | 2 | WALL | DUPLEX | |
| F18 | 1 | 2 | WALL | GARAGE DISPOSAL SWITCH | |
| F19 | 1 | 2 | CEILING | CHAFTSMAN CHANDLIER | |
| F20 | 16 | 1 | WALL | DUPLEX | |

| | |
|--|--|
| | 220V RECP. |
| | GFCI |
| | GROUND FAULT CIRCUIT INTERRUPTER RECP. |
| | WP |
| | WEATHERPROOF RECP. |
| | EXHAUST FAN |
| | EXHAUST FAN/LIGHT COMBO |
| | CEILING FAN/LIGHT COMBO |
| | CABLE JACK |
| | TELEPHONE JACK |
| | TELEVISION JACK |
| | SMOKE DETECTOR (WALL MOUNT) |
| | SMOKE DETECTOR (CEILING MOUNT) |
| | WALL SCONCE |
| | LIGHT-CEILING MOUNT |
| | LIGHT-CEILING (RECESSED) |
| | LIGHT-FLUORESCENT |
| | LIGHT-MINI CAN |
| | SWITCH |
| | SWITCH- 3 WAY |
| | SWITCH- 4 WAY |
| | SWITCH- DIMMER |
| | SWITCH- WEATHER PROOF |
| | SWITCH- WMOTION SENSOR |



MAIN LEVEL



UPPER LEVEL

EXTERIOR LIGHTING NOTES:

All exterior lighting shall use full cutoff luminaires with the light source downcast and fully shielded, with the following exceptions:

(A) Luminaires that have a maximum output of four hundred (400) lumens per fixture, regardless of number of lamps (equal to one 40 watt incandescent light), may be left unshielded, provided the luminaire has an opaque top or is under an opaque structure. (See figure 5 in section 3.14.04 of this chapter.)

(B) Luminaires that have a maximum output of one thousand (1,000) lumens per fixture, regardless of number of lamps (equal to one 60 watt incandescent light), the bulb is not visible, and the luminaire has an opaque top or is under an opaque structure. (See figure 3 in section 3.14.04 of this chapter.)

(C) Floodlights with external shielding shall be angled; provided, that no light is directed above a twenty five degree (25°) angle measured from the vertical line from the center of the light extended to the ground, and only if the luminaire does not cause glare or light to shine on adjacent property or public rights of way (see figure 6 in section 3.14.04 of this chapter). Photocells with timers that allow a floodlight to go on at dusk and off by eleven o'clock (11:00) P.M. are encouraged.

(D) Sensor activated luminaires, provided:

1. It is located in such a manner as to prevent glare and lighting onto properties of others or into a public right of way;
2. The luminaire is set to only go on when activated and to go off within five (5) minutes after activation has ceased;
3. The luminaire shall not be triggered by activity off the property.

PLACEMENT AND HEIGHT:

Private Property: Freestanding luminaires on private property in residential zones shall be mounted at a height equal to or less than the sum of $H = (D/3)+3$, where D is the distance in feet to the nearest property boundary, but shall not be higher than fifteen feet (15') from ground level to the top of the luminaire, whichever is less.

Example

| Pole Height | Distance To Property Line |
|-------------|---------------------------|
| 15 feet | 36 feet (36/3 = 12+3=15) |
| 12 feet | 27 feet (27/3 = 9+3=12) |
| 9 feet | 18 feet (18/3 = 6+3=9) |

All exterior lighting shall not cause light trespass and shall protect adjacent properties from glare and excessive lighting.

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REScheck Software Version 4.4.4 Compliance Certificate

Energy Code: **2012 IECC**
 Location: **McCall, Idaho**
 Construction Type: **Single Family**
 Project Type: **New construction**
 Building Orientation: **Bldg. faces 270 deg. from North**
 Conditioned Floor Area: **788 ft2**
 Glazing Area Percentage: **2%**
 Heating Degree Days: **8772**
 Climate Zone: **6**

Construction Site: _____ Owner/Agent: _____ Designer/Contractor: _____

Compliance: Passes using performance alternative
 Compliance: **0.2% Better Than Code**

| Assembly | Gross Area or Perimeter | Cavity R-Value | Cont. R-Value | Glazing or Door U-Factor | UA |
|---|-------------------------|----------------|---------------|--------------------------|----|
| Floor 1: Slab-On-Grade/Unheated Insulation depth: 6.0" | 50 | | 13.1 | | 33 |
| Floor 2: All-Wood Joist/Truss/Over Unconditioned Space | 638 | 38.0 | 0.0 | | 37 |
| Walls - Lower - North: Wood Frame, 16" o.c. Orientation: Left Side | 108 | 30.0 | 0.0 | | 4 |
| Door 1: Solid Orientation: Left Side | 20 | | | 0.500 | 10 |
| Walls - Lower - East: Wood Frame, 16" o.c. Orientation: Back | 108 | 30.0 | 0.0 | | 4 |
| Door 2: Solid Orientation: Back | 20 | | | 0.500 | 10 |
| Walls - Lower - South: Wood Frame, 16" o.c. Orientation: Right Side | 108 | 30.0 | 0.0 | | 5 |
| Walls - Lower - West: Wood Frame, 16" o.c. Orientation: Front | 108 | 30.0 | 0.0 | | 5 |
| Window 1: Vinyl Frame:Double Pane with Low-E SHGC: 0.26 Orientation: Front | 12 | | | 0.260 | 3 |
| Walls - Upper - North: Wood Frame, 24" o.c. Orientation: Left Side | 600 | 30.0 | 0.0 | | 28 |
| Walls - Upper - East: Steel Frame, 16" o.c. Orientation: Back | 231 | 30.0 | 0.0 | | 20 |
| Window 2: Vinyl Frame:Double Pane with Low-E SHGC: 0.26 Orientation: Back | 16 | | | 0.260 | 4 |
| Walls - Upper - South: Wood Frame, 24" o.c. Orientation: Right Side | 600 | 30.0 | 0.0 | | 28 |
| Walls - Upper - West: Wood Frame, 16" o.c. Orientation: Front | 231 | 30.0 | 0.0 | | 10 |
| Window 3: Vinyl Frame:Double Pane with Low-E SHGC: 0.26 Orientation: Front | 20 | | | 0.260 | 5 |
| Ceiling 1: Flat Ceiling or Scissor Truss Furnace 1: Forced Hot Air 78 AFUE | 788 | 0.0 | 60.0 | | 13 |

Compliance Statement: The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2012 IECC requirements in REScheck Version 4.4.4 and to comply with the mandatory requirements listed in the REScheck Inspection Checklist.

Project Title: _____ Report date: 02/21/13
 Data filename: V:\Dropbox\SMC Projects\2013 Projects\13-003 Bill Hardt\13-003 RESCheck\13-003 Bill Hardt.rck Page 1 of 6

Name - Title _____ Signature _____ Date _____

Project Title: _____ Report date: 02/21/13
 Data filename: V:\Dropbox\SMC Projects\2013 Projects\13-003 Bill Hardt\13-003 RESCheck\13-003 Bill Hardt.rck Page 2 of 6



REScheck Software Version 4.4.4 Inspection Checklist

Energy Code: **2012 IECC**
 Location: **McCall, Idaho**
 Construction Type: **Single Family**
 Project Type: **New construction**
 Building Orientation: **Bldg. faces 270 deg. from North**
 Conditioned Floor Area: **788 ft2**
 Glazing Area Percentage: **2%**
 Heating Degree Days: **8772**
 Climate Zone: **6**

Ceilings:

Ceiling 1: Flat Ceiling or Scissor Truss, R-60.0 continuous insulation
 Comments: _____
 Where air permeable insulation exists in vented attics, a baffle (of solid material) is installed adjacent to soffit and eave vents. Baffles maintain an opening equal or greater than the size of the vent. The baffle extends over the top of the attic insulation.

Above-Grade Walls:

Walls - Lower - North: Wood Frame, 16" o.c., R-30.0 cavity insulation
 Comments: _____

Walls - Lower - East: Wood Frame, 16" o.c., R-30.0 cavity insulation
 Comments: _____

Walls - Lower - South: Wood Frame, 16" o.c., R-30.0 cavity insulation
 Comments: _____

Walls - Lower - West: Wood Frame, 16" o.c., R-30.0 cavity insulation
 Comments: _____

Walls - Upper - North: Wood Frame, 24" o.c., R-30.0 cavity insulation
 Comments: _____

Walls - Upper - East: Steel Frame, 16" o.c., R-30.0 cavity insulation
 Comments: _____

Walls - Upper - South: Wood Frame, 24" o.c., R-30.0 cavity insulation
 Comments: _____

Walls - Upper - West: Wood Frame, 16" o.c., R-30.0 cavity insulation
 Comments: _____

Windows:

Window 1: Vinyl Frame:Double Pane with Low-E, U-factor: 0.260
 For windows without labeled U-factors, describe features:
 #Panels _____ Frame Type _____ Thermal Break? _____ Yes _____ No
 Comments: _____

Window 2: Vinyl Frame:Double Pane with Low-E, U-factor: 0.260
 For windows without labeled U-factors, describe features:
 #Panels _____ Frame Type _____ Thermal Break? _____ Yes _____ No
 Comments: _____

Window 3: Vinyl Frame:Double Pane with Low-E, U-factor: 0.260
 For windows without labeled U-factors, describe features:
 #Panels _____ Frame Type _____ Thermal Break? _____ Yes _____ No
 Comments: _____

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Doors:

Door 1: Solid, U-factor: 0.500
 Comments: _____
 This door is exempt from the U-factor requirement.

Door 2: Solid, U-factor: 0.500
 Comments: _____

Floors:

Floor 1: Slab-On-Grade/Unheated, 6.0" insulation depth, R-13.1 continuous insulation
 Comments: _____
 Slab insulation extends down from the top of the slab to at least 6.0 ft. OR down to at least the bottom of the slab then horizontally for a total distance of 6.0 ft.

Floor 2: All-Wood Joist/Truss/Over Unconditioned Space, R-38.0 cavity insulation
 Comments: _____
 Floor insulation is installed in permanent contact with the underside of the subfloor decking.

Heating and Cooling Equipment:

Furnace 1: Forced Hot Air: 78 AFUE or higher
 Make and Model Number: _____

Air Leakage:

Building envelope air tightness complies by a post rough-in blower door test result of less than 3 ACH at 50 pascals.
 Automatic or gravity dampers are installed on all outdoor air intakes and exhausts.
 Wood-burning fireplaces shall have tight-fitting flue dampers and outdoor combustion air.

Air Barrier, Sealing, and Insulation Installation Criteria:

A continuous air barrier is installed in the building envelope including rim joists and exposed edges of insulation. Breaks or joints in the air barrier are sealed. Air permeable insulation is not used as a sealing material.
 Junction of foundation and wall sill plates, wall top plate and top of wall, sill plate and rim-band, and rim band and subfloor are sealed. Corners, headers, and rim joists making up the thermal envelope are insulated.
 Insulation in floors (including above garage and cantilevered floors) is installed to maintain permanent contact with underside of subfloor decking. Exterior insulation for framed walls is in substantial contact and continuous alignment with the air barrier. Crawl space wall insulation installed in lieu of floor insulation is permanently attached to crawlspace walls. Inspection of log walls is in accordance with the provisions of ICC-400.

Spaces between fenestration jambs and framing and skylights and framing are sealed. Batts in narrow cavities are cut to fit, or narrow cavities are filled with insulation that readily fills the available cavity space.
 Exposed earth in unvented crawl spaces is covered with Class I vapor retarder with overlapping joints taped.
 Air sealing is installed between the garage and conditioned spaces.

Exterior walls adjacent to showers and tubs are insulated and have air barrier separating the wall from the shower and tubs.
 Access openings, drop down stairs or knee wall doors to unconditioned attic spaces are insulated and sealed.
 Recessed light fixtures installed in the building thermal envelope are IC rated, airtight labeled at air leakage rate <= 2.0 cfm, and sealed to the drywall with gasket or caulk.

Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space are air sealed.
 Plumbing and Wiring: Insulation is placed between the exterior of the wall assembly and pipes. Batt insulation is cut and fitted around wiring and plumbing, or for insulation that on installation readily conforms to available space such insulation shall fill all space between wall and piping/wiring.

Air barrier extends behind electrical or communication boxes or, air sealed type boxes are installed.
 HVAC register boots that penetrate building thermal envelope are sealed to subfloor or drywall.
 Fireplace walls have air barrier and closure doors are gasketed.

Materials Identification and Installation:

Materials and equipment are installed in accordance with the manufacturer's installation instructions.
 Materials and equipment are identified so that compliance can be determined.
 Manufacturer manuals for all installed heating and cooling equipment and service water heating equipment have been provided.
 Insulation R-values and glazing U-factors are clearly marked on the building plans or specifications.

Duct Insulation:
 All ducts not completely inside the building envelope are insulated to at least R-6.

Duct Construction and Testing:

Project Title: _____ Report date: 02/21/13
 Data filename: V:\Dropbox\SMC Projects\2013 Projects\13-003 Bill Hardt\13-003 RESCheck\13-003 Bill Hardt.rck Page 4 of 6

- Building framing cavities are not used as ducts or plenums.
- All joints and seams of air ducts, air handlers, and filter boxes are substantially airtight by means of tapes, mastics, liquid sealants, gasketing or other approved closure systems. Tapes, mastics, and fasteners are rated UL 181A or UL 181B and are labeled according to the duct construction. Metal duct connections with equipment and/or fittings are mechanically fastened. Crimp joints for round metal ducts have a contact lap of at least 1 1/2 inches and are fastened with a minimum of three equally spaced sheet-metal screws.

Exceptions:
 Joint and seams covered with air-impermeable spray foam.
 Where a partially inaccessible duct connection exists, mechanical fasteners can be equally spaced on the exposed portion of the joint so as to prevent a hinge effect.

- Continuously welded and locking-type longitudinal joints and seams on ducts operating at less than 2 in. w.g. (500 Pa).
- All ducts and air handlers are located within conditioned space.

Temperature Controls:

- At least one programmable thermostat is installed to control the primary heating system and has set-points initialized at 70 degree F for the heating cycle and 78 degree F for the cooling cycle.
- Heat pumps having supplementary electric-resistance heat have controls that prevent supplemental heat operation when the compressor can meet the heating load.

Heating and Cooling Equipment Sizing:

- Equipment is sized in accordance with ACCA Manual S based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies.
- For systems serving multiple dwelling units documentation has been submitted demonstrating compliance with 2012 IECC Commercial Building Mechanical and/or Service Water Heating (Sections C403 and C404).

Circulating Service Hot Water Systems:

- Systems include an automatic or accessible manual switch to turn off the circulating pump when the system is not in use.
- Pipes are insulated to R-3 when any one of the following apply:

- (a) piping serves more than one dwelling unit,
- (b) piping between water heater and kitchen or water heater and distribution manifold,
- (c) piping outside conditioned space, buried, or located under a floor slab,
- (d) supply and return piping in recirculation systems other than demand recirculation systems,
- (e) piping is > 3/4 inch nominal diameter,
- (f) piping runs >30 feet having 3/8 inch max diameter,
- (g) piping runs >20 feet having 1/2 inch max diameter,
- (h) piping runs >10 feet having 3/4 inch max diameter,
- (i) piping runs >5 feet having max diameter within the run > 3/4 inch.

Heating and Cooling Piping Insulation:

- HVAC piping conveying fluids above 105 degrees F or chilled fluids below 55 degrees F are insulated to R-3.
- HVAC piping insulation exposed to outdoor elements is protected from damage and shielded from solar radiation.

Ventilation:

- Ventilation fans satisfy the following efficacy criteria:

- (1) Range hoods and in-line fan: 2.8 cfm/watt.
- (2) Bath/utility room with rated cfm >= 10 > and <90: 1.4 cfm/watt.
- (3) Bath/utility room with rated minimum cfm >= 90: 2.8 cfm/watt.

Swimming Pools and In-ground Spas:

- Heaters have an readily accessible on-off switch.
- Heaters operating on natural gas or LPG have an electronic pilot light.
- Schedule-capable automatic on-off timer switches are installed on heaters and pumps.

Exceptions:
 Where public health standards require continuous pump operation.
 Where pumps operate within solar- and/or waste-heat-recovery systems.

- Heated pools and spas have a vapor retardant cover.

Exceptions:
 Covers are not required when 70% of the heating energy is from site-recovered energy or solar energy source.

Project Title: _____ Report date: 02/21/13
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- Other Requirements:**
- Snow- and ice-melting systems with energy supplied from the service to a building shall include automatic controls capable of shutting off the system when a) the pavement temperature is above 50 degrees F, b) no precipitation is falling, and c) the outdoor temperature is above 40 degrees F (a manual shutoff control is also permitted to satisfy requirement 'c').

Certificate:

- A permanent certificate is provided on or in the electrical distribution panel listing the predominant insulation R-values; window U-factors; type and efficiency of space-conditioning and water heating equipment; and results from any required duct system and building envelope air leakage testing. The certificate does not cover or obstruct the visibility of the circuit directory label, service disconnect label or other required labels.

NOTES TO FIELD: (Building Department Use Only)



2012 IECC Energy Efficiency Certificate

| Insulation Rating | R-Value |
|----------------------------------|---------|
| Ceiling / Roof | 60.00 |
| Wall | 30.00 |
| Floor / Foundation | 38.00 |
| Ductwork (unconditioned spaces): | |

| Glass & Door Rating | U-Factor | SHGC |
|---------------------|----------|------|
| Window | 0.26 | 0.26 |
| Door | 0.50 | NA |

| Heating & Cooling Equipment | Efficiency |
|-----------------------------|------------|
| Forced Hot Air Furnace | |
| Water Heater | |

| Building Air Leakage and Duct Test Results | |
|--|--|
| Building Air Leakage Test Results | |
| Name of Air Leakage Tester | |
| Duct Tightness Test Results | |
| Name of Duct Tester | |

Name: _____ Date: _____
 Comments: _____

Project Title: _____ Report date: 02/21/13
 Data filename: V:\Dropbox\SMC Projects\2013 Projects\13-003 Bill Hardt\13-003 RESCheck\13-003 Bill Hardt.rck Page 6 of 6

PROJECT NO.
13-002

SHOP FOR BILL HARDT
LOT #20 OF ASPEN RIDGE MCCALL, ID

SCALE:
NO SCALE

INITIAL DATE: 1/31/2013
PRINT DATE: 3/5/2013

DRAWN BY:
Steve Curtis

SMC Design
SMC Design
208.249.7288
Nampa, ID

SHEET NUMBER
M2
PAGE 9 OF 9

CONTRACTOR TO VERIFY ALL DETAILS, DIMENSIONS, AND SPECIFICATIONS PRIOR TO CONSTRUCTION, AND REPORT ANY OMISSIONS AND/OR ERRORS TO SMC DESIGN. THE PURCHASER OR BUILDER OF THIS PLAN RELEASES SMC DESIGN FROM ANY CLAIMS, LITIGATIONS OR SUITS THAT MAY ARISE DURING CONSTRUCTION OR ANYTIME THEREAFTER.

ENERGY SURVEY

| SHEET INDEX | |
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| A2 | SITE PLAN |
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