

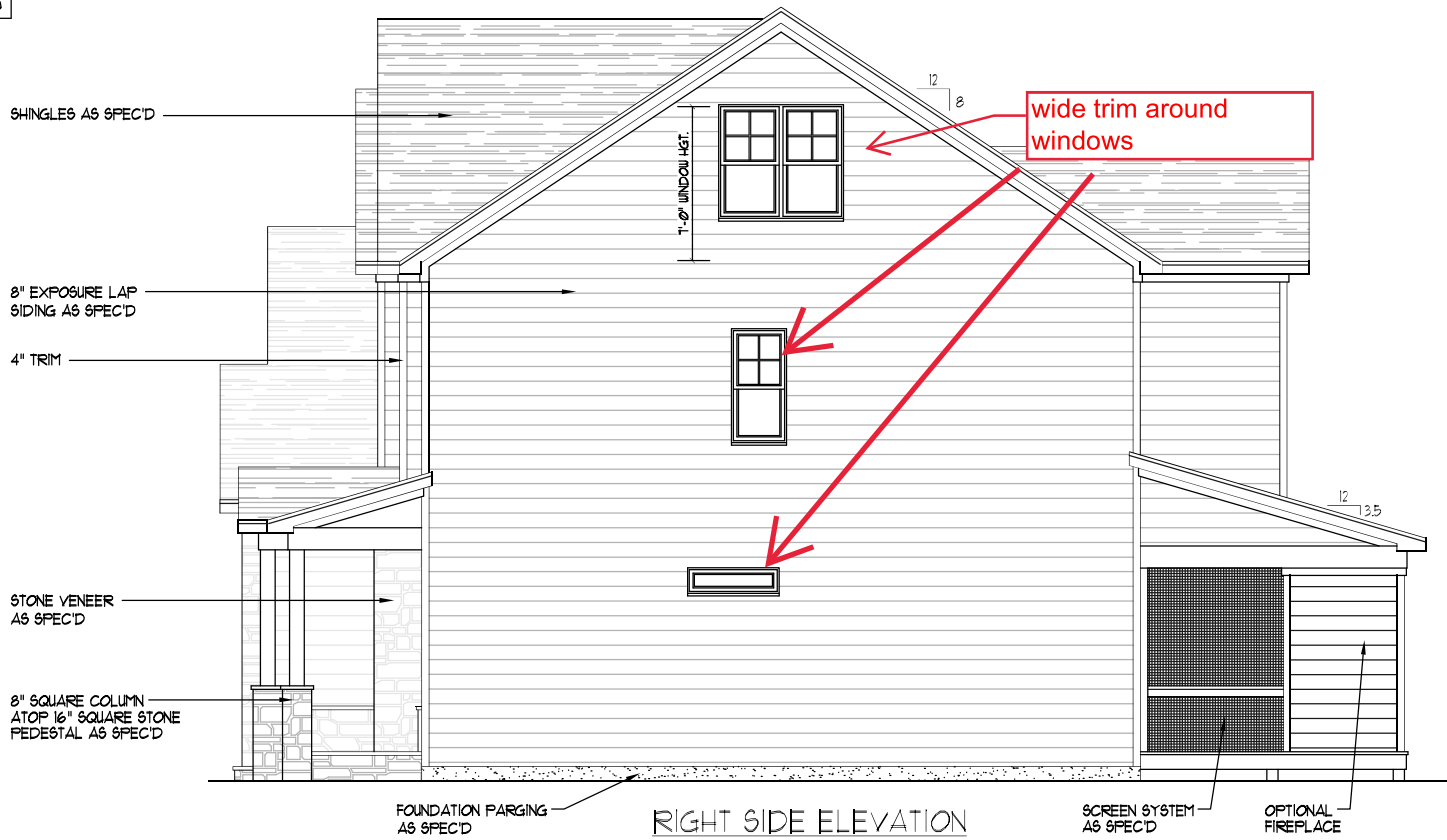


FRONT ELEVATION "A"  
SCALE: ----- 1/4" = 1'-0"

Wide trim around window

| TABLE 402.1.1 ENERGY CONSERVATION CODE<br>INSULATION AND PENETRATION REQUIREMENTS BY COMPONENT |             |                 |                   |                            |                  |                      |       |           |            |               |
|--|-------------|-----------------|-------------------|----------------------------|------------------|----------------------|-------|-----------|------------|---------------|
| CLIMATE ZONE   | FENS. U-FAC | SKY-LIGHT U-FAC | GLAZED FENS. SHGC | MINIMUM INSULATION R-VALUE |                  |                      |       |           |            |               |
|  |             |                 |                   | CEILING                    | WOOD WALL        | MASS WALL            | FLOOR | BATT WALL | SLAB DEPTH | CEILING SPACE |
| 3  | 0.35        | 0.35            | 0.30              | 38 or 30 cont.             | 15 or 13-2.5     | 5/13 or 5/10 cont.   | 19    | 5/13      | 0          | 5/13          |
| 4  | 0.35        | 0.35            | 0.30              | 38 or 30 cont.             | 15 or 13-2.5     | 5/13 or 5/10 cont.   | 19    | 10/13     | 10         | 10/13         |
| 5  | 0.35        | 0.35            | NR                | 38 or 30 cont.             | 15, 13-5 or 13-3 | 13/11 or 13/13 cont. | 30    | 10/13     | 10         | 10/13         |

SEE TABLE 301 CLIMATE ZONES BY COUNTY ENERGY CONSERVATION CODE  
SEE FOOTNOTES OF TABLE N102.1 FOR FOOTNOTES AND DETAILED EXPLANATIONS.



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

THIS PLAN CONFORMS TO THE 2018 EDITION OF THE  
I.R.C. / NORTH CAROLINA RESIDENTIAL CODE.

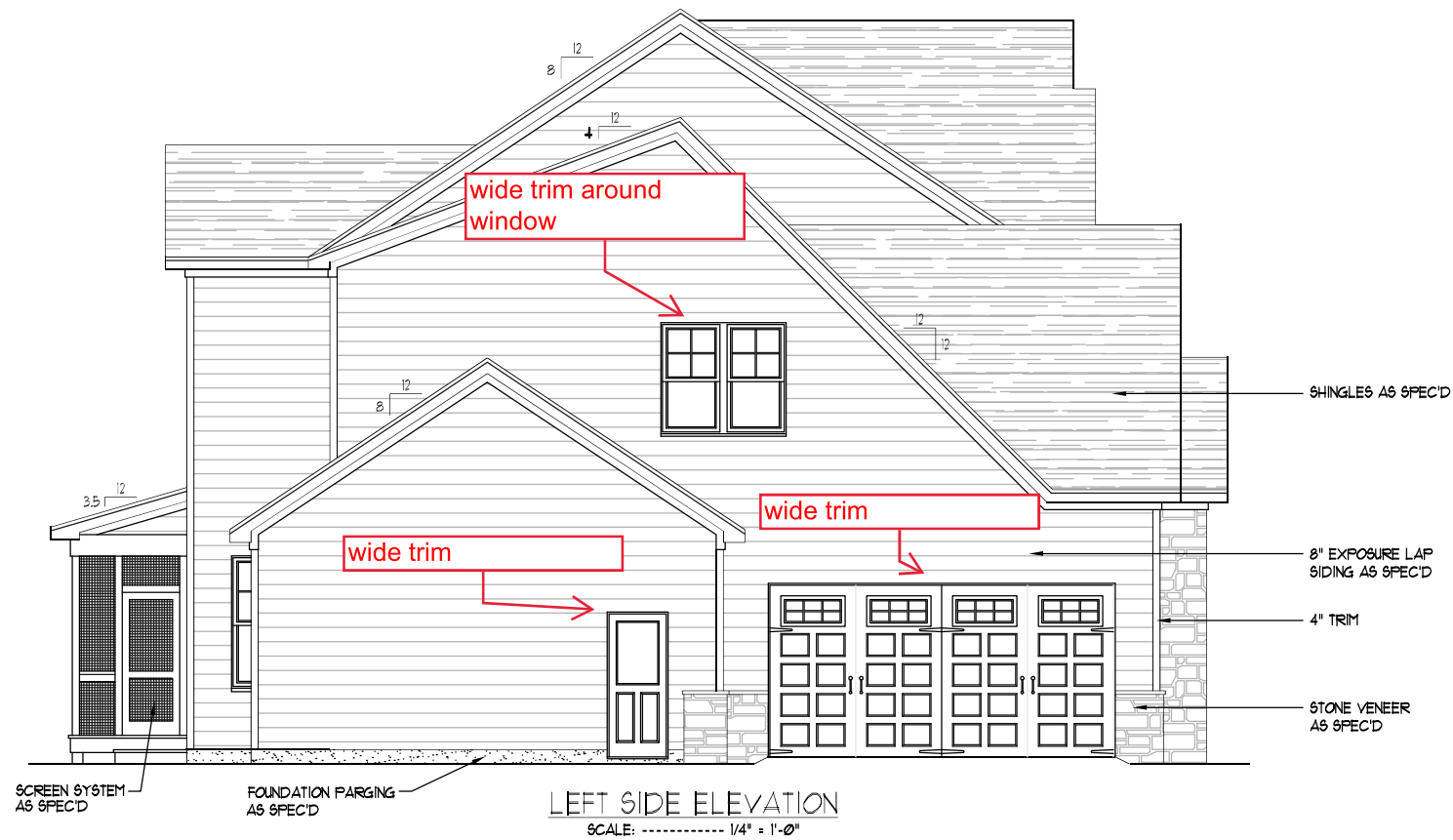
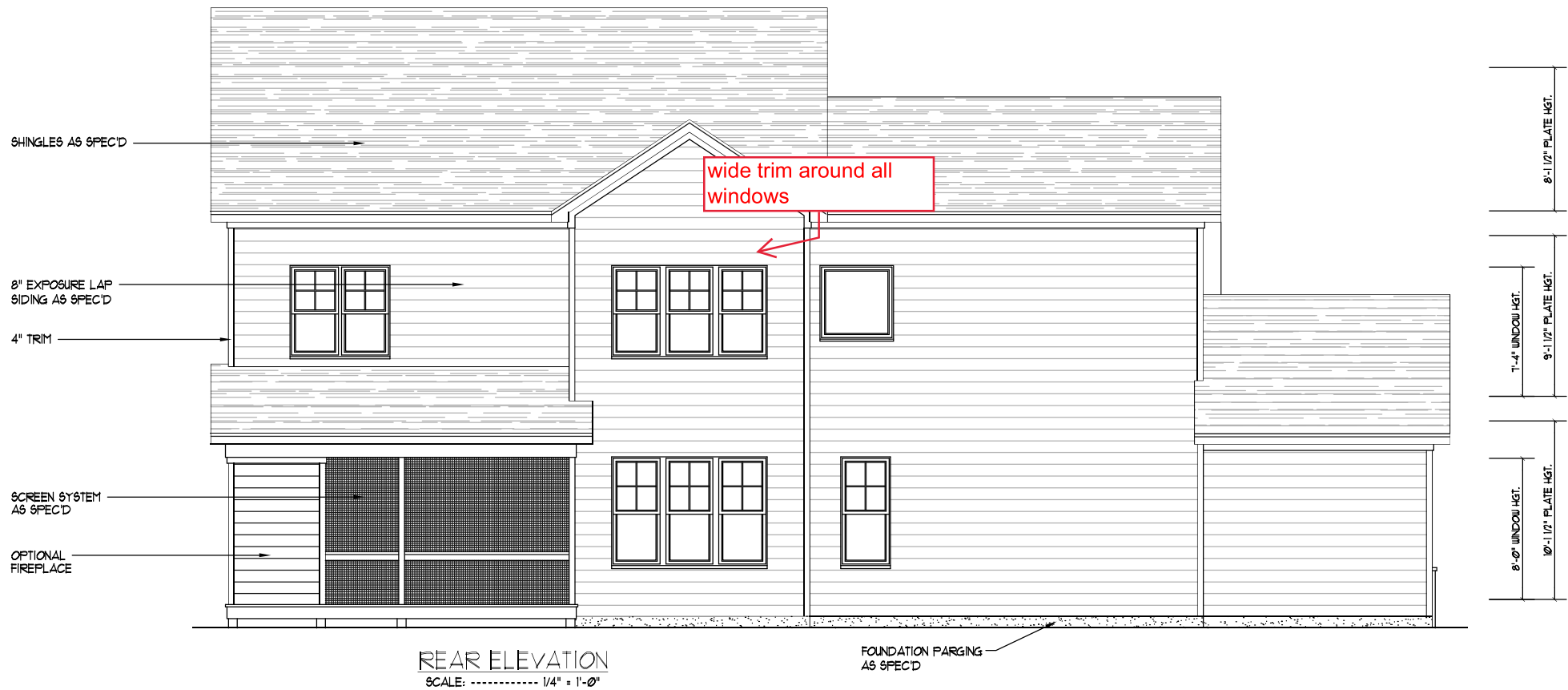
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PROJECT FOR: I.C.G.  
LOCATION: TBD  
LOT: MULTI  
SUBDIVISION: TBD  
COUNTY: TBD

**MARSHALL**  
PLAN NAME  
C2-3069-56GL 1.11.24  
PLAN I.D. DATE



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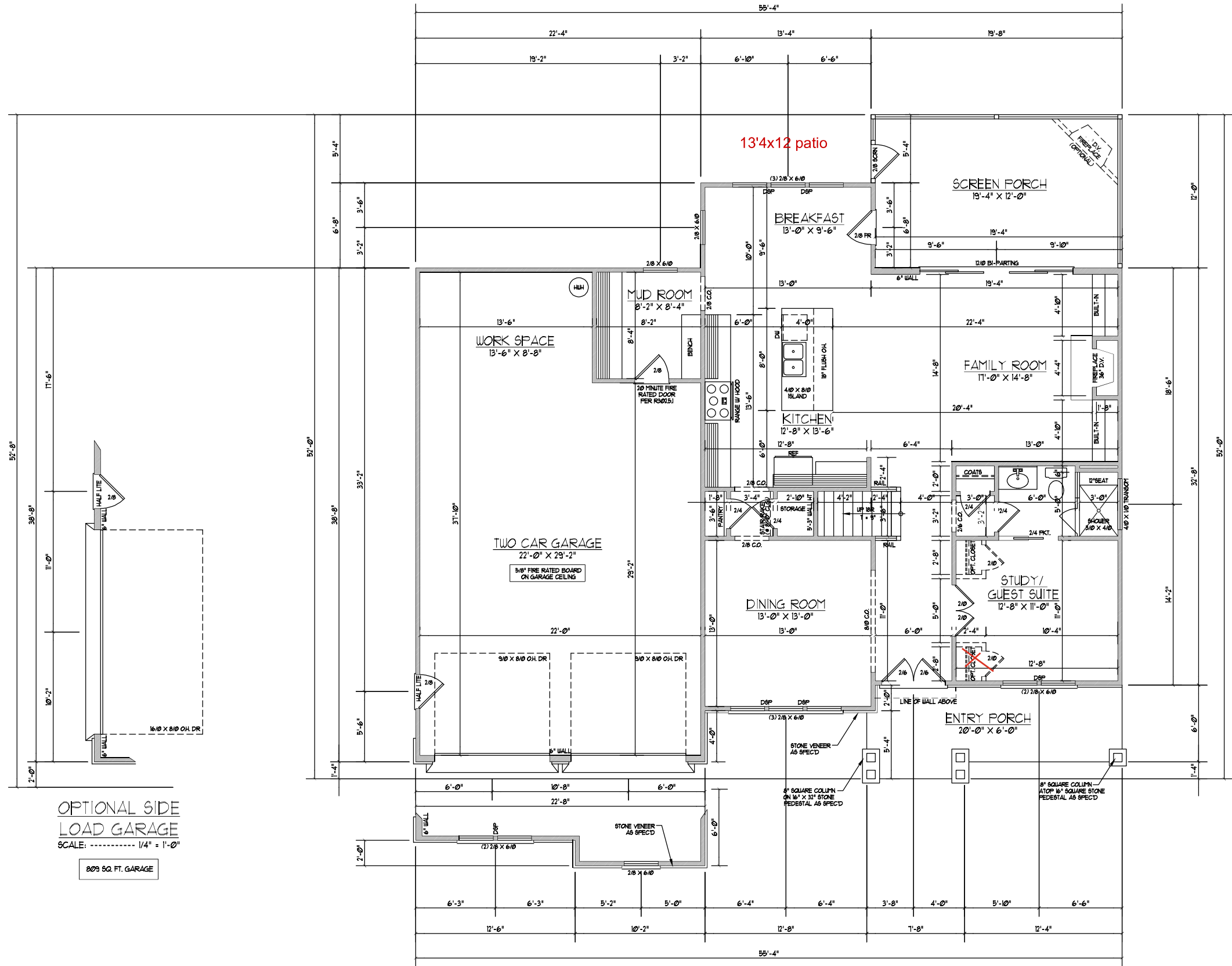
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LOCATION: TBD  
LOT: MULTI  
SUBDIVISION: TBD  
COUNTY: TBD

**MARSHALL**  
PLAN NAME  
**C2-3069-56GL**  
PLAN I.D.  
**1.11.24**  
DATE



OPTIONAL SIDE  
LOAD GARAGE  
SCALE: ----- 1/4" = 1'-0"  
809 SQ. FT. GARAGE

ELEVATION "A"  
FIRST FLOOR PLAN  
SCALE: ----- 1/4" = 1'-0"  
173 HEATED SQ. FT.  
188 SQ. FT. GARAGE  
126 SQ. FT. ENTRY PORCH  
234 SQ. FT. SCREEN PORCH

- NOTES:
- 1) 10'-0" CLG. HGT. (10' - 1 1/2" FLT. HGT.) UNLESS OTHERWISE NOTED.
  - 2) ALL WALLS DRAWN AT 4" WIDTHS
  - 3) SET WINDOWS AT 8'-0" A.S.F. UNLESS OTHERWISE NOTED.
  - 4) DIMENSIONS ARE TO FRAMING UNLESS OTHERWISE NOTED.
  - 5) CONSULT WINDOW MANUFACTURER'S SPECS. FOR EGRESS REQUIREMENTS, PRESSURE RATINGS, & ROUGH OPENINGS.
  - 6) ELECTRICAL LAYOUT BY BUILDER

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LOCATION: TBD  
LOT: MULTI  
SUBDIVISION: TBD  
COUNTY: TBD

MARSHALL  
PLAN NAME  
C2-3069-56GL 1.11.24  
DATE  
PLAN I.D.

A-2  
SHEET

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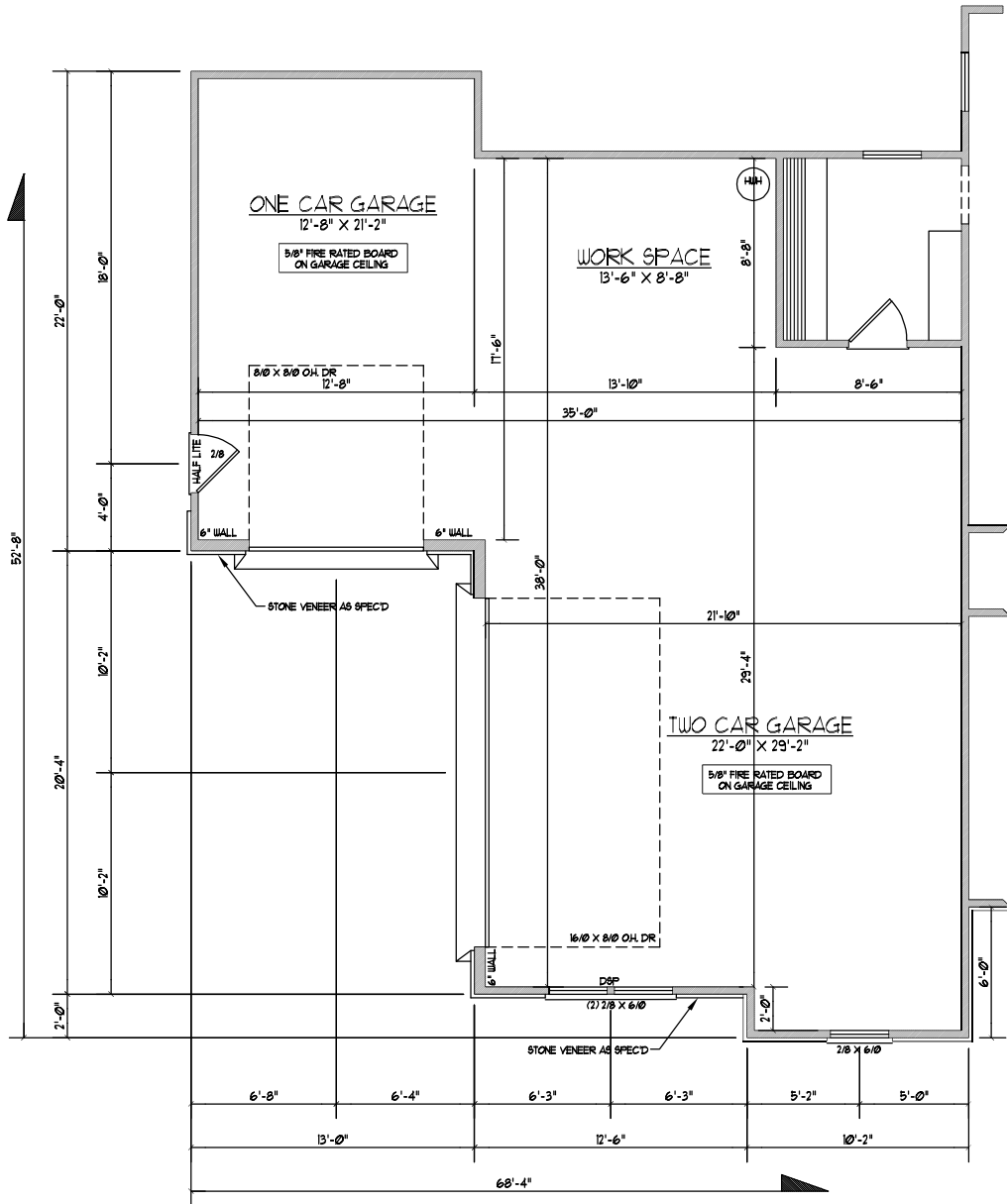
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SUBDIVISION: TBD  
COUNTY: TBD

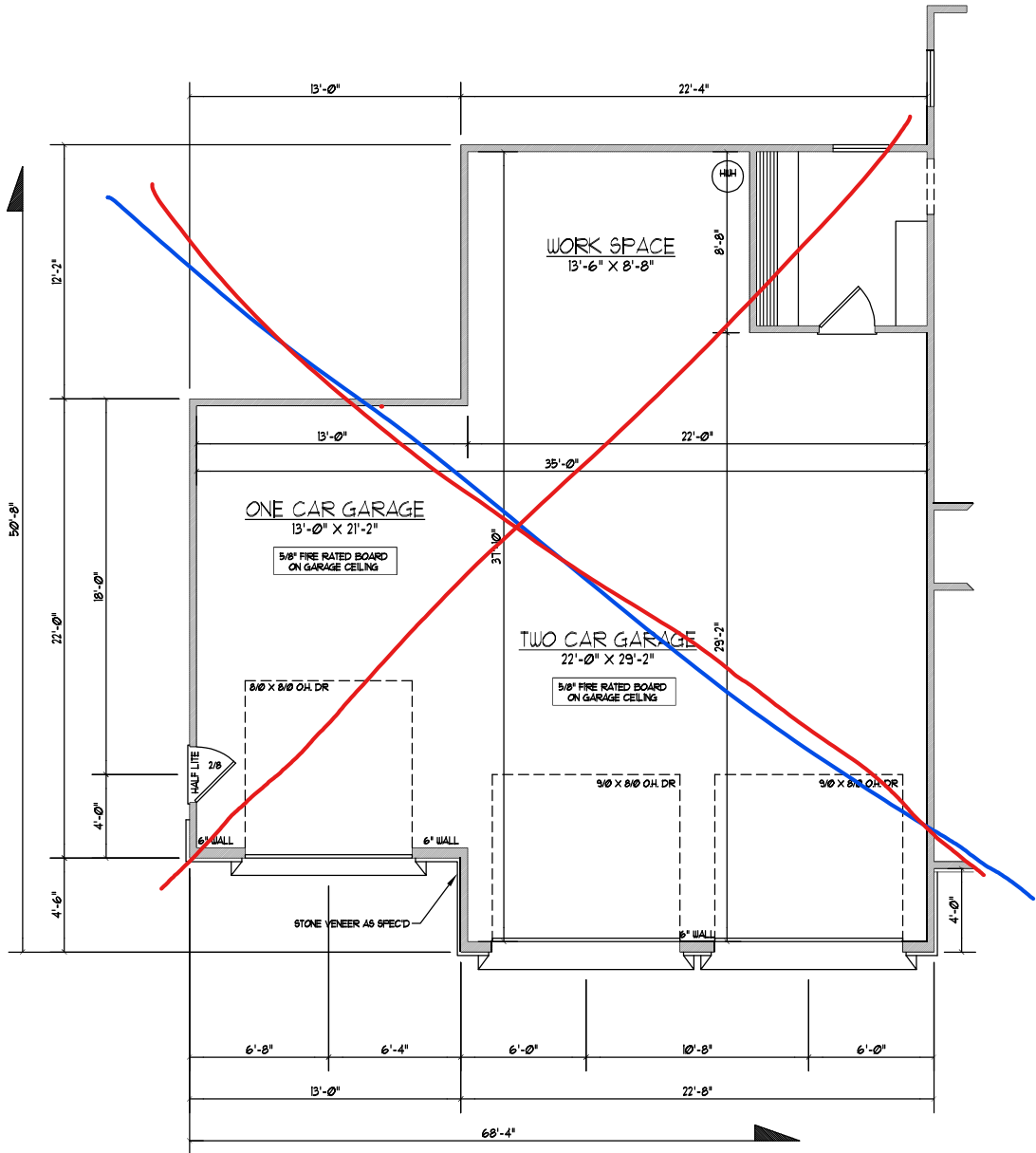
MARSHALL  
PLAN NAME  
C2-3069-56GL  
1.11.24  
DATE  
PLAN I.D.

A-2  
SHEET



OPT. 3rd CAR SIDE LOAD GARAGE  
SCALE: ----- 1/4" = 1'-0"

1016 SQ. FT. GARAGE



OPT. 3rd CAR FRONT LOAD GARAGE  
SCALE: ----- 1/4" = 1'-0"

1014 SQ. FT. GARAGE

ELEVATION "A"

- NOTES:
- 1) 10'-0" CLG. HGT. (10' - 1 1/2" FLT. HGT.) UNLESS OTHERWISE NOTED.
  - 2) ALL WALLS DRAIN AT 4" WIDTHS
  - 3) SET WINDOWS AT 8'-0" A.S.F. UNLESS OTHERWISE NOTED.
  - 4) DIMENSIONS ARE TO FRAMING UNLESS OTHERWISE NOTED.
  - 5) CONSULT WINDOW MANUFACTURER'S SPECS. FOR EGRESS REQUIREMENTS, PRESSURE RATINGS, & ROUGH OPENINGS.
  - 6) ELECTRICAL LAYOUT BY BUILDER

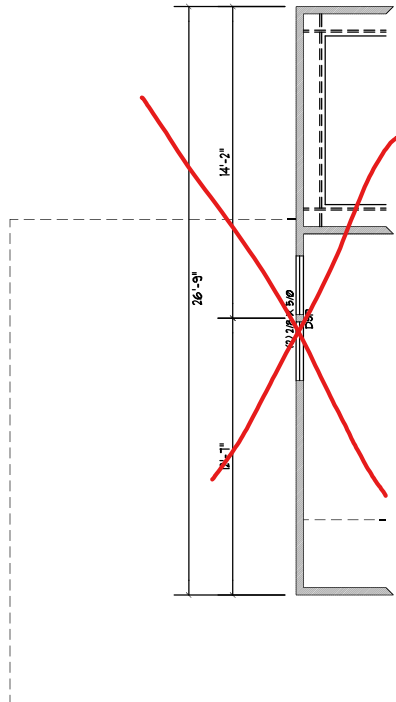
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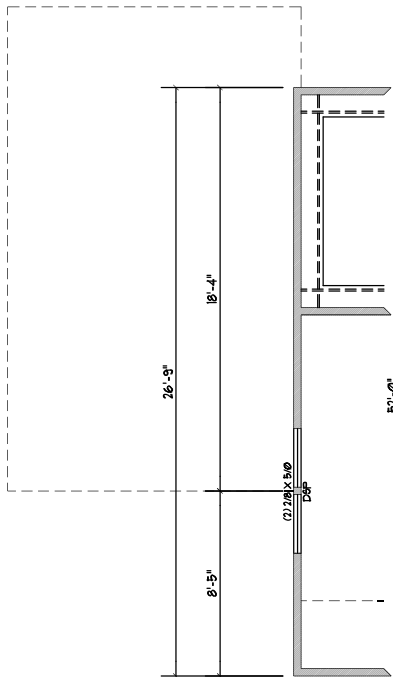
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LOCATION: TBD  
LOT: MULTI  
SUBDIVISION: TBD  
COUNTY: TBD

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PLAN NAME  
**C2-3069-56GL**  
DATE  
1.11.24  
PLAN I.D.

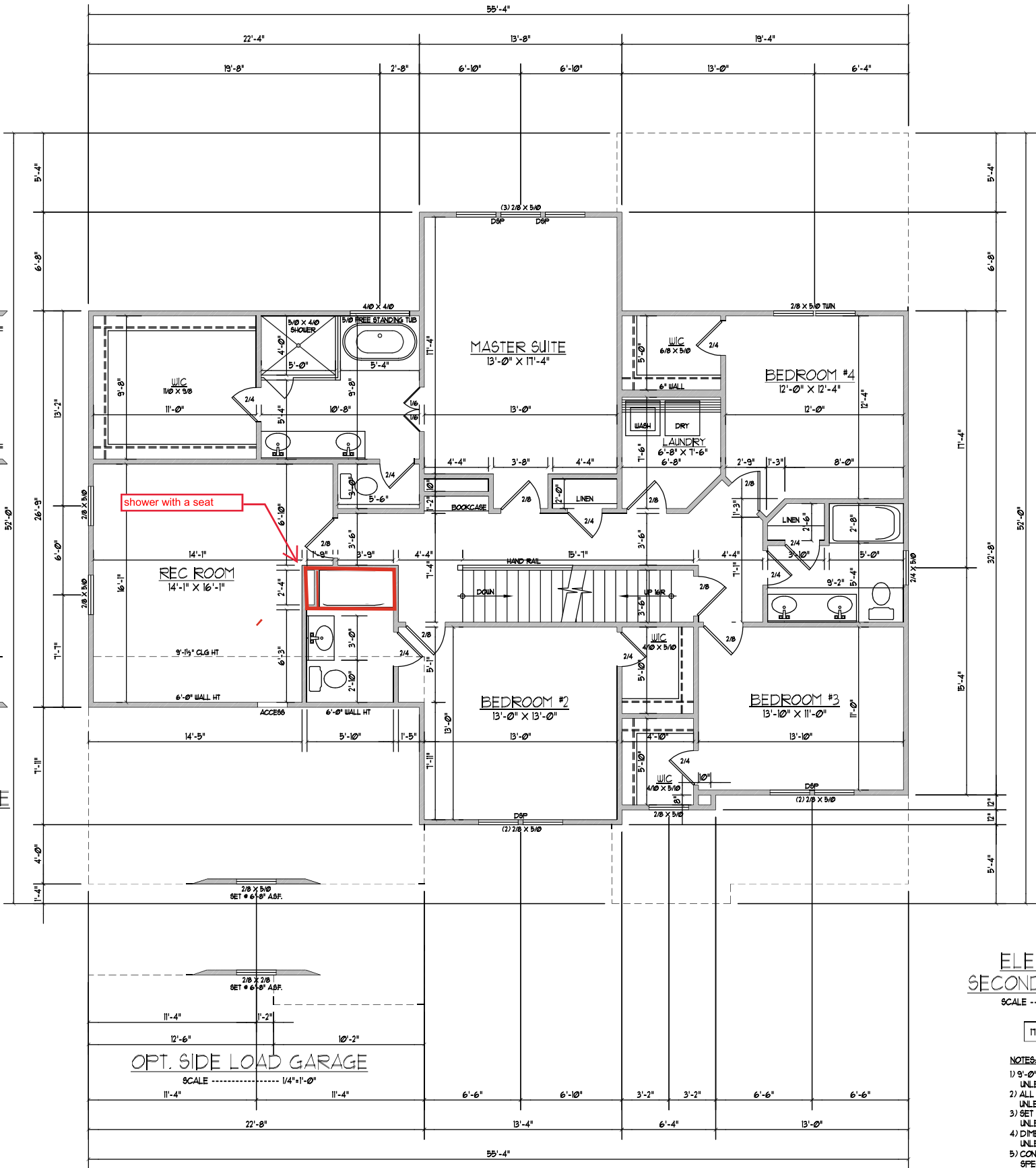
**A-3**  
SHEET



OPT. 3RD CAR GARAGE  
FRONT LOAD  
SCALE 1/4"=1'-0"



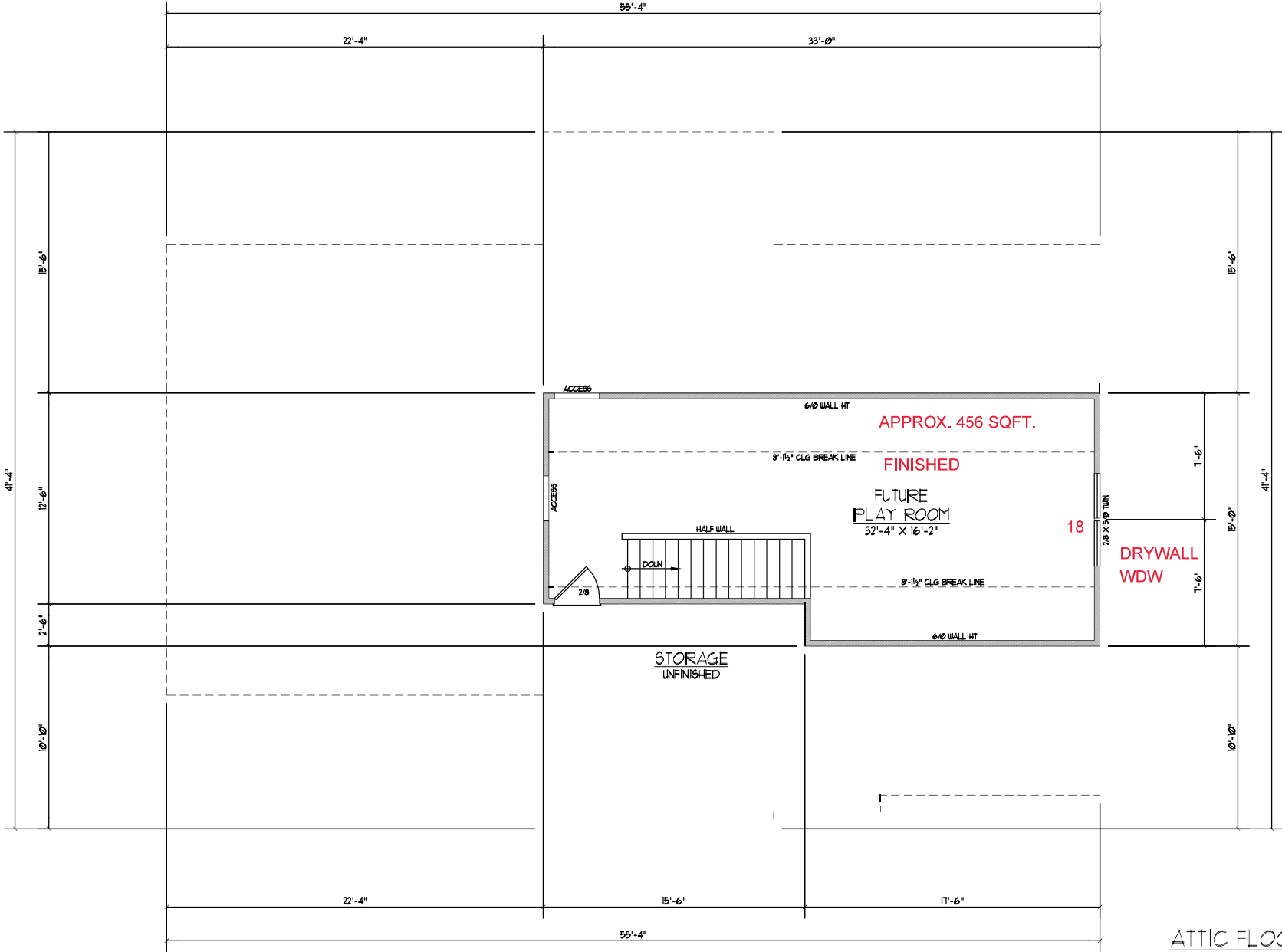
OPT. 3RD CAR GARAGE  
SIDE LOAD  
SCALE 1/4"=1'-0"



ELEVATION "A"  
SECOND FLOOR PLAN  
SCALE 1/4"=1'-0"

1796 HEATED SQ. FT.

- NOTES:
- 1) 9'-0" CLG. HGT. (9' - 1 1/2" FLT. HGT.) UNLESS OTHERWISE NOTED.
  - 2) ALL WALLS DRAIN AT 4" WIDTHS UNLESS OTHERWISE NOTED.
  - 3) SET WINDOWS AT 1'-4" A&F. UNLESS OTHERWISE NOTED.
  - 4) DIMENSIONS ARE TO FRAMING UNLESS OTHERWISE NOTED.
  - 5) CONSULT WINDOW MANUFACTURER'S SPECS. FOR EGRESS REQUIREMENTS, PRESSURE RATINGS, & ROUGH OPENINGS.
  - 6) ELECTRICAL LAYOUT BY BUILDER



ATTIC FLOOR PLAN

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

456 SQ. FT. STORAGE

- NOTES:
- 1) 8'-0" CLG. HGT. (8' - 1 1/2" FLT. HGT.) UNLESS OTHERWISE NOTED.
  - 2) ALL WALLS FIGURED AT 4" WIDTHS UNLESS OTHERWISE NOTED.
  - 3) SET WINDOWS AT 6'-8" A.S.F. UNLESS OTHERWISE NOTED.
  - 4) DIMENSIONS ARE TO FRAMING UNLESS OTHERWISE NOTED.
  - 5) CONSULT WINDOW MANUFACTURER'S SPECS. FOR EGRESS REQUIREMENTS, PRESSURE RATINGS, & ROUGH OPENINGS.
  - 6) ELECTRICAL LAYOUT BY BUILDER

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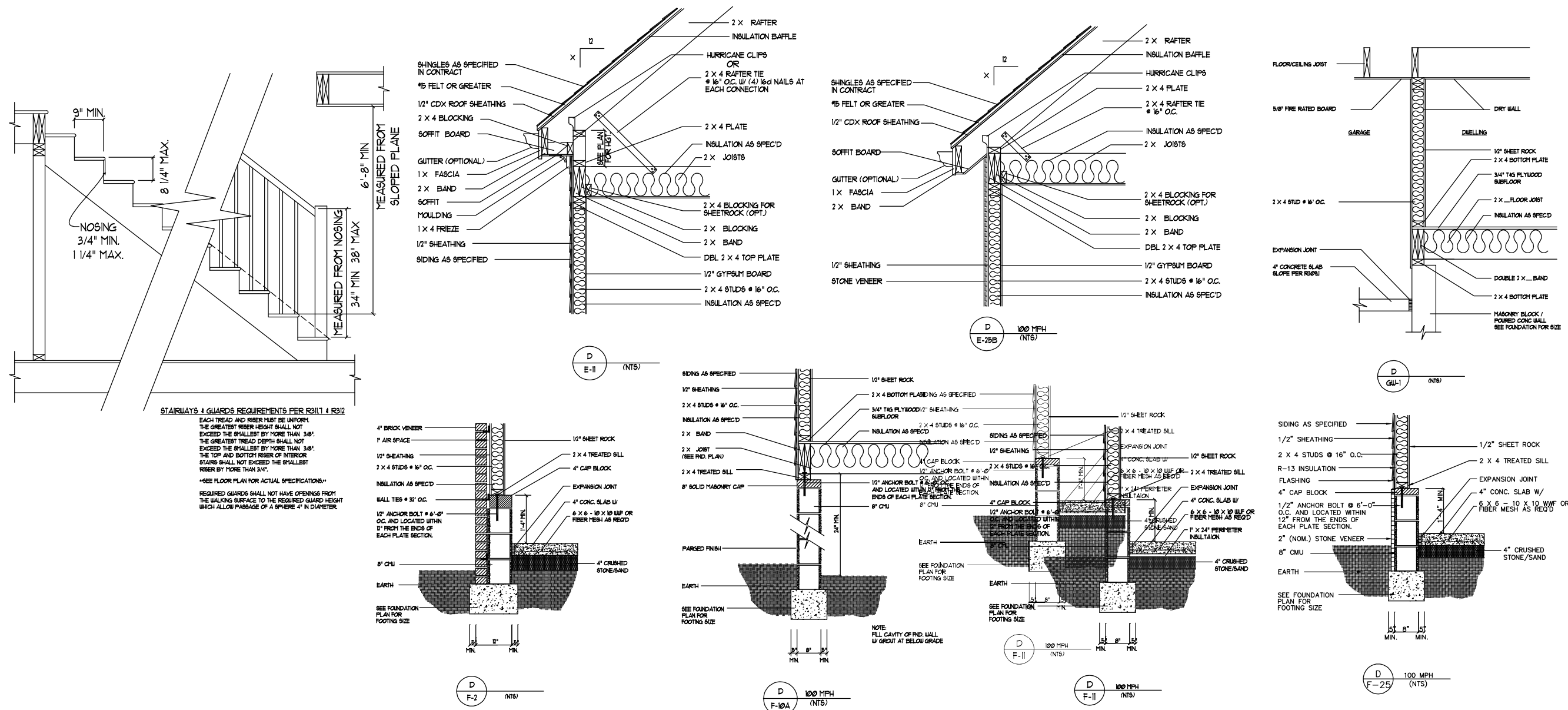
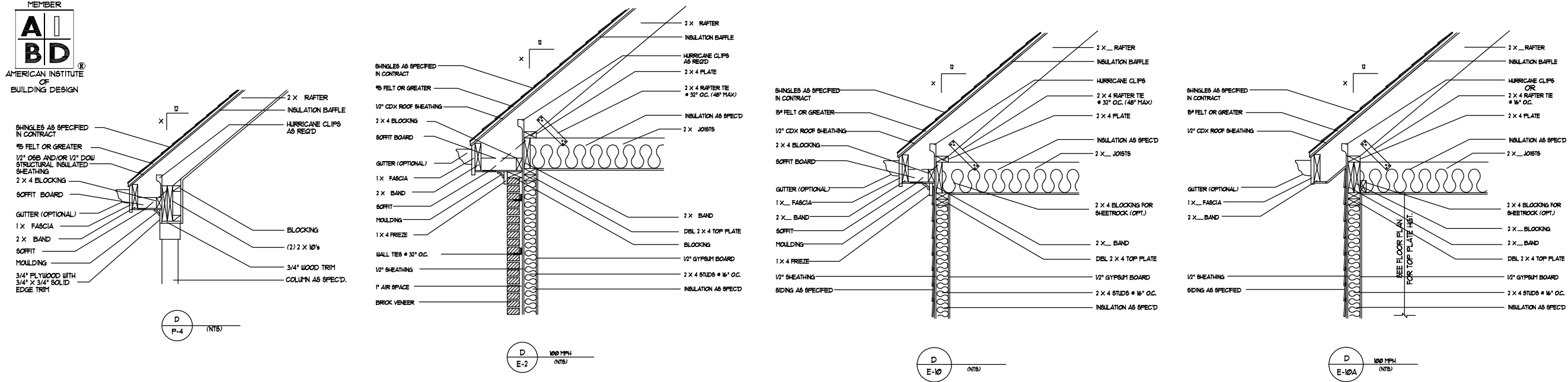
Dimensions govern over scale, code governs over dimensions.

PROJECT FOR: I.C.G.  
LOCATION: TBD  
LOT: MULTI  
SUBDIVISION: TBD  
COUNTY: TBD

MARSHALL  
PLAN NAME  
C2-3069-56GL  
PLAN I.D.  
1.11.24  
DATE

A-4  
SHEET





**DYNAMIC  
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PROJECT FOR: I.C.G.  
LOCATION: TBD  
LOT: MULTI  
SUBDIVISION: TBD  
COUNTY: TBD

|          |           |              |         |      |
|----------|-----------|--------------|---------|------|
| MARSHALL | PLAN NAME | C2-3069-56GL | 1.11.24 | DATE |
|          |           | PLAN I.D.    |         |      |

**D-1**  

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SHEET



PROJECT #  
22-1915 (314)

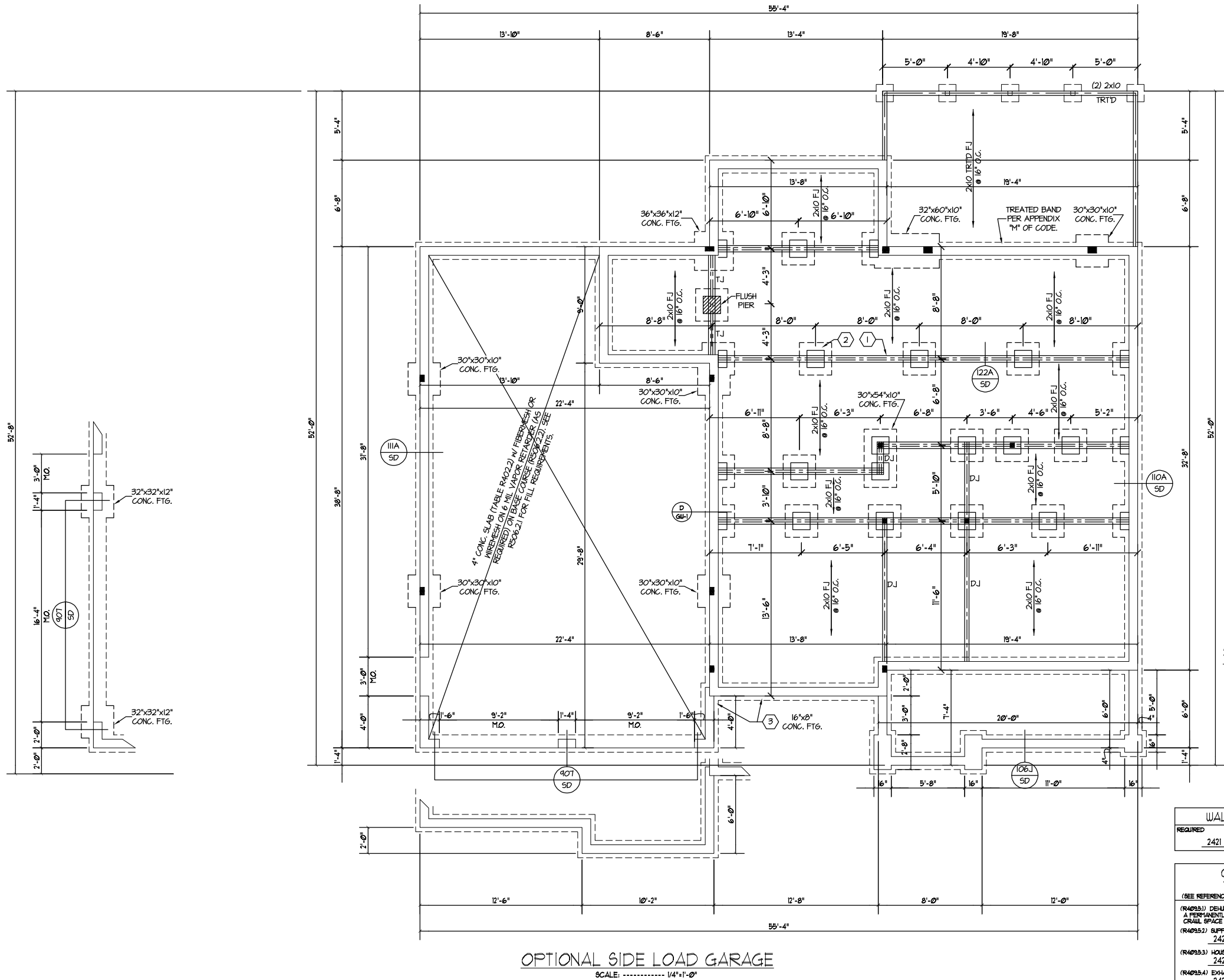
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**Lot 314, Serenity**  
"Marshall-A-GL"  
ICG HOMES

**S-1.1**



#### FOUNDATION STRUCTURAL NOTES

NC (2018 NCRG); Wind: 115-120 mph - CRANL

- (3) 2x10 SYP#2 OR SPF#2 GIRDER, TYPICAL UNO.
- CONCRETE BLOCK PIER SIZE SHALL BE:

| SIZE  | HOLLOW    | SOLID        |
|-------|-----------|--------------|
| 8x16  | UP TO 32" | UP TO 5'-0"  |
| 12x16 | UP TO 48" | UP TO 9'-0"  |
| 16x16 | UP TO 64" | UP TO 12'-0" |
| 24x24 | UP TO 96" |              |

  - WITH 30" x 30" x 10" CONCRETE FOOTING, UNO.
- WALL FOOTING AS FOLLOWS

|         |                     |
|---------|---------------------|
| DEPTH:  | 8" - UP TO 2 STORY  |
|         | 10" - 3 STORY       |
| WIDTH:  | 16" - UP TO 2 STORY |
| SIDING: | 20" - 3 STORY       |
| BRICK:  | 16" - 1 STORY       |
|         | 20" - 2 STORY       |
|         | 24" - 3 STORY       |

- FOR FOUNDATION WALL HEIGHT AND BACKFILL REQUIREMENTS, REFER TO CODE TABLE R404.1.1 (1 THRU 4) NOTE: ASSUMED SOIL BEARING CAPACITY = 2000 PSF. CONTRACTOR MUST VERIFY SITE CONDITIONS AND CONTACT SOILS ENGINEER IF MARGINAL OR UNSTABLE SOILS ARE ENCOUNTERED.

- (4) 2x10 SPF #2 OR SYP #2 GIRDER
- (2) 1.75x4.25 LVL OR LSL GIRDER
- (3) 1.75x4.25 LVL OR LSL GIRDER

- "■" DESIGNATES A SIGNIFICANT POINT LOAD TO HAVE SOLID BLOCKING TO PIER. SOLID BLOCK ALL BEAM BEARING POINTS NOTED TO HAVE THREE OR MORE STUDS TO END, TYPICAL.

#### ABBREVIATIONS:

- "SJ" = SINGLE JOIST
- "DJ" = DOUBLE JOIST
- "TJ" = TRIPLE JOIST

- ADJUST SUBFLOOR THICKNESS OR JOIST SPACING AS REQ'D FOR FLOOR FINISH MATERIALS.

#### ELEVATION "A" FOUNDATION PLAN

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

#### NOTES:

- SEE SHEET D-1 FOR DETAILS.
- DIMENSIONS ARE TO EXTERIOR OF FOUNDATION.

#### WALL VENTED CRAWL SPACE

| REQUIRED |              |       |                        |
|----------|--------------|-------|------------------------|
| 2421     | SQ. FT. / 50 | 16.14 | SQ. FT. OF VENTILATION |

#### CLOSED CRAWL SPACE VENTILATION METHODS

(SEE REFERENCED SECTIONS IN CODE BOOK FOR DETAILED INSTRUCTIONS)

(R409.3.1) DEHUMIDIFIER  
A PERMANENTLY INSTALLED DEHUMIDIFIER SHALL BE PROVIDED IN THE CRAWL SPACE WITH THE MINIMUM RATED CAPACITY OF 5 PINTS PER DAY.

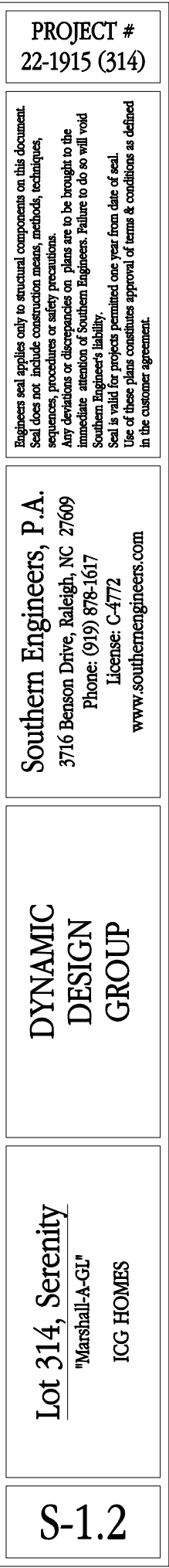
(R409.3.2) SUPPLY AIR  
2421 SQ. FT. / 30 = 81 CFM

(R409.3.3) HOUSE AIR  
2421 SQ. FT. / 50 = 49 CFM

(R409.3.4) EXHAUST FAN  
2421 SQ. FT. / 50 = 49 CFM

(R409.3.5) CONDITIONED SPACE  
THE CRAWL SPACE SHALL BE DESIGNED AS A HEATED AND COOLED, CONDITIONED SPACE WITH BUILT INSULATION INSTALLED AS PER THE REQUIREMENTS OF SECTION R409.3.1.





**NOTES:**

- 1) SEE SHEET D-1 FOR DETAILS.
- 2) DIMENSIONS ARE TO EXTERIOR OF FOUNDATION



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DYNAMIC  
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GROUP

**Lot 314, Serenity**  
**"Marshall-A-GL"**  
**ICG HOMES**

S-2.1



NOTES:

- 1) SHADED WALLS DENOTE LOAD BEARING WALLS.
- 2) ■ DENOTES SOLID STUDS.



PROJECT #  
22-1915 (314)

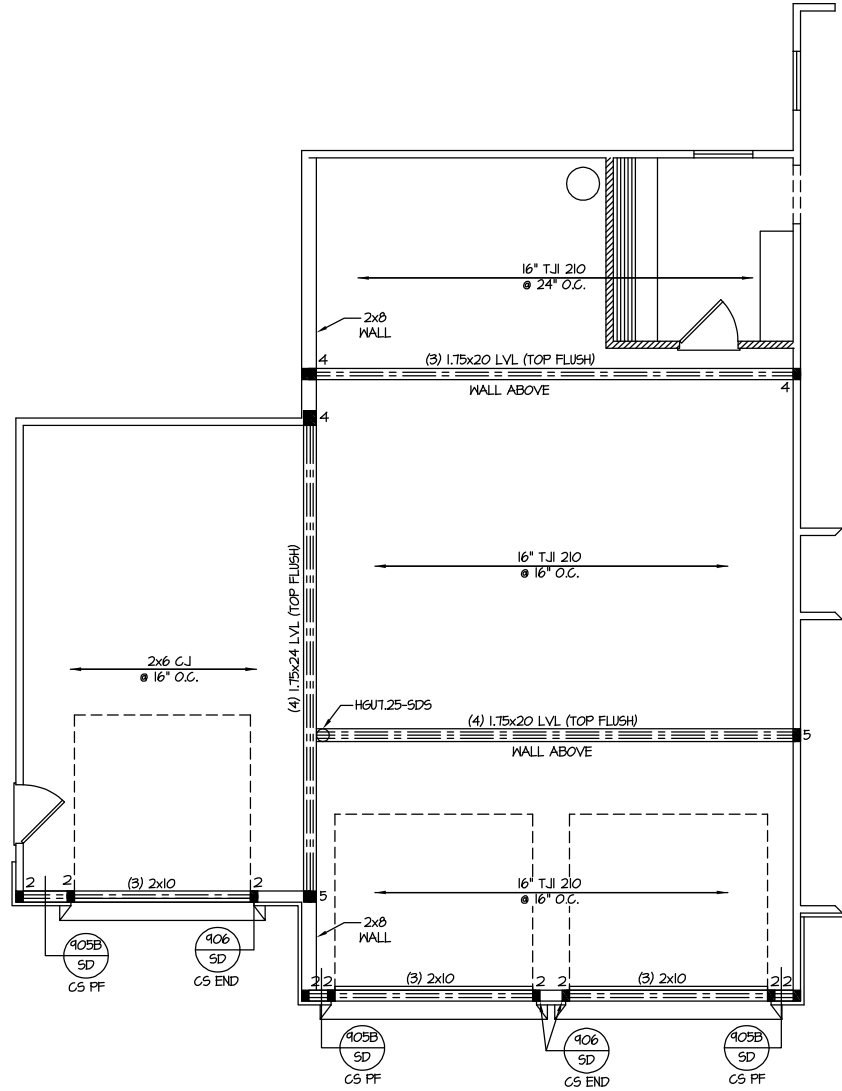
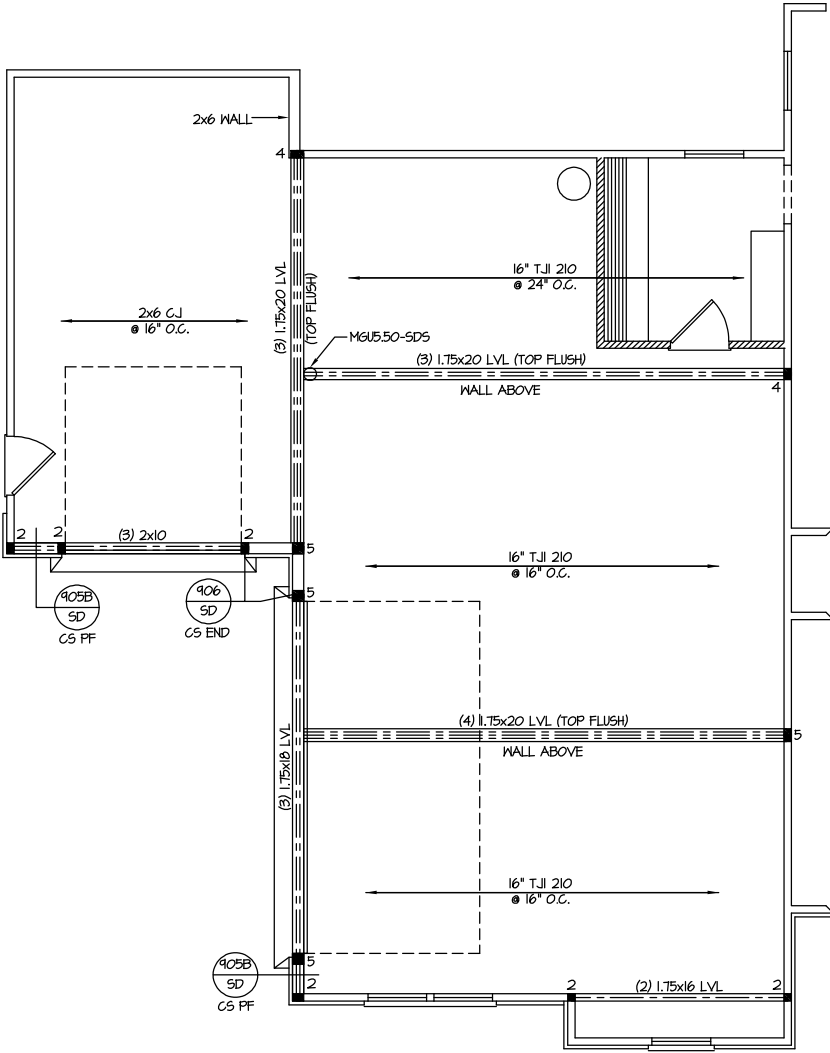
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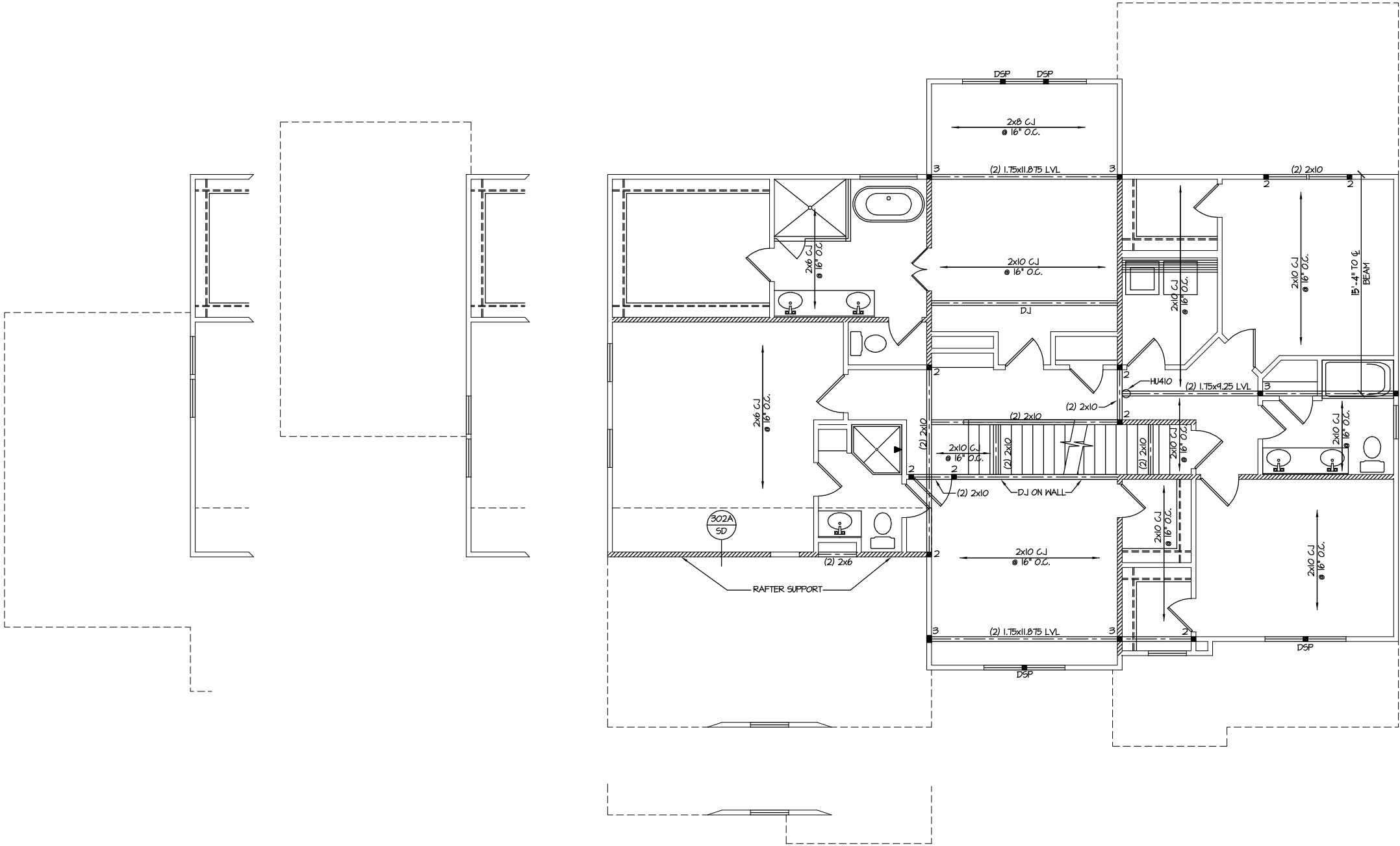
Lot 314, Serenity  
"Marshall-A-GI"  
ICG HOMES

S-2.2



FIRST FLOOR CEILING /  
STRUCTURAL PLAN  
SCALE: ..... 1/4" = 1'-0"

- NOTES:
- 1) SHADED WALLS DENOTE LOAD BEARING WALLS.
  - 2) ■ DENOTES SOLID STUDS.



ELEVATION "A"  
SECOND FLOOR CEILING/  
STRUCTURAL PLAN  
SCALE: ..... 1/4" = 1'-0"

NOTES:  
1) SHADED WALLS DENOTE LOAD BEARING WALLS.  
2) ■ DENOTES SOLID STUDS.

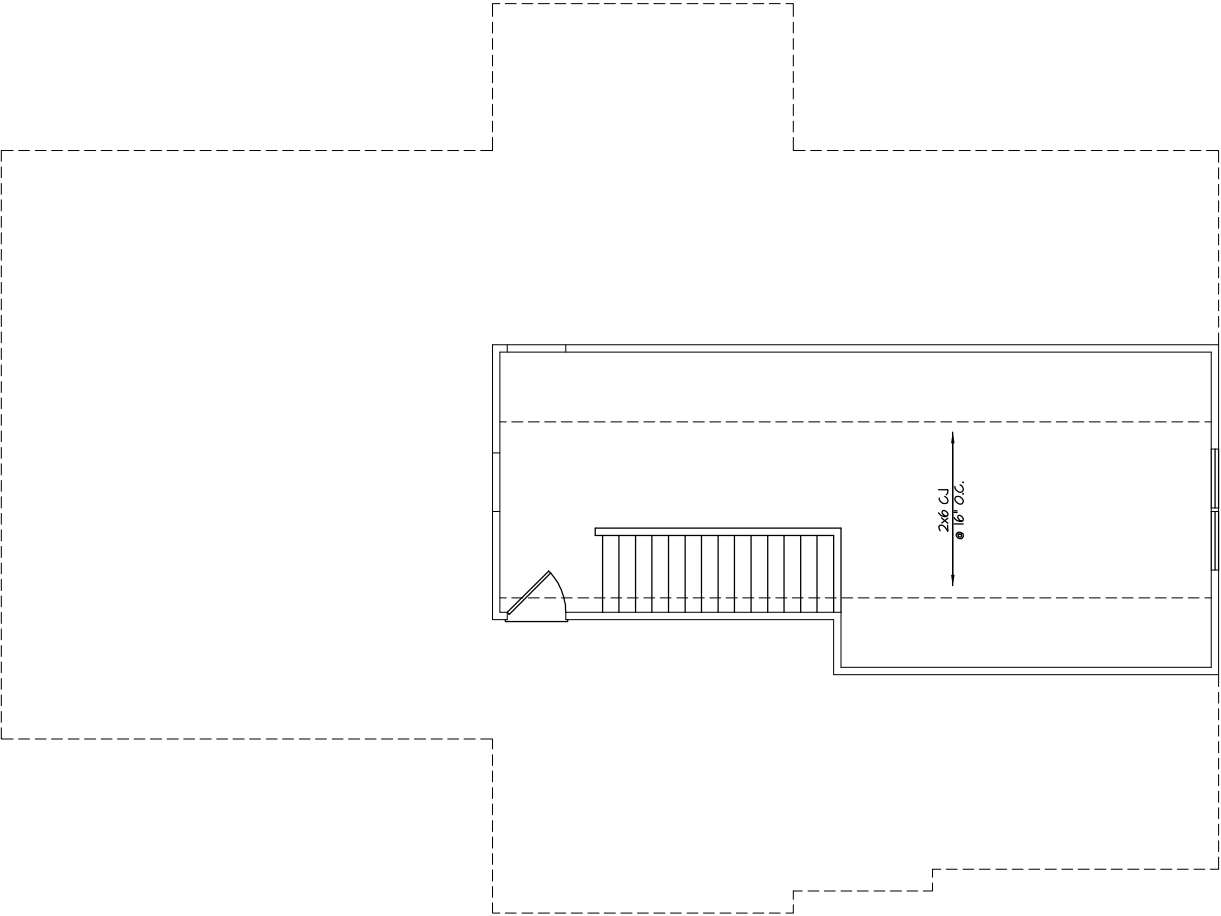


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ATTIC FLOOR CEILING/  
STRUCTURAL PLAN  
SCALE: ..... 1/4" = 1'-0"

- NOTES:  
1) SHADED WALLS DENOTE LOAD BEARING WALLS.  
2) ■ DENOTES SOLID STUDS.



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S-4

PROJECT #  
22-1915 (314)

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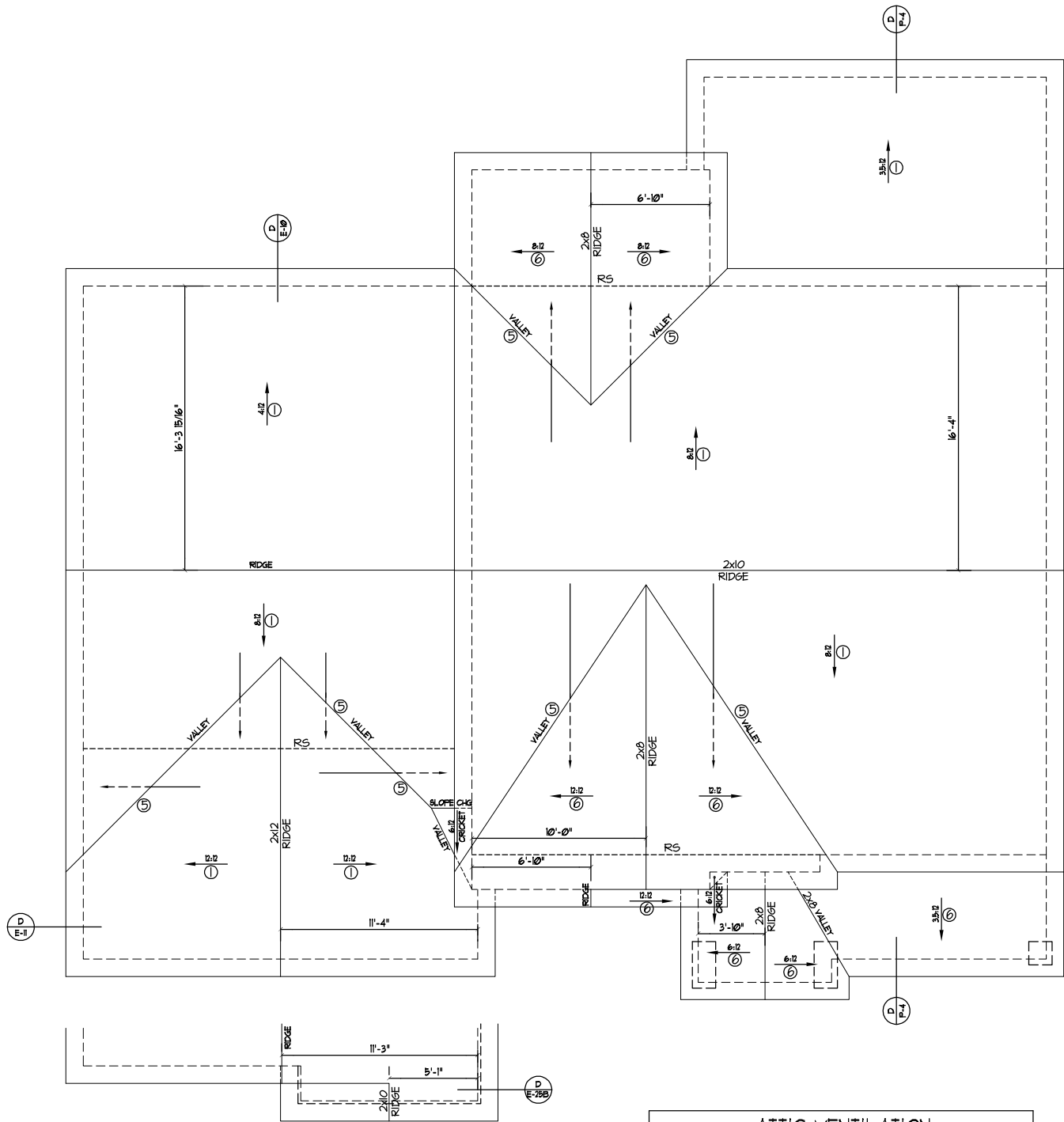
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"Marshall-A-Gl"  
ICG HOMES

**S-5.1**



OPTIONAL SIDE LOAD GARAGE

| ATTIC VENTILATION |                                    |               |            |                              |                                     |                                  |
|-------------------|------------------------------------|---------------|------------|------------------------------|-------------------------------------|----------------------------------|
| REQUIRED          |                                    |               |            |                              |                                     |                                  |
| <u>2421</u>       | SQ FT OF ATTIC / 300 = <u>8.07</u> |               |            | SQ. FT. OF<br>INLET & OUTLET |                                     |                                  |
| PROVIDED          |                                    |               |            |                              |                                     |                                  |
| (INLET)<br>SOFFIT | <u>871</u>                         | SQ. FT. PER x | <u>115</u> | LINEAR FT. OF VENT.          | = <u>8.05</u> SQ. FT. OF VENT.      | <u>47</u> %<br>(TOTAL OF INLET)  |
| (OUTLET)<br>RIDGE | <u>11</u>                          | SQ. FT. PER x | <u>116</u> | LINEAR FT. OF VENT.          | = <u>12.76</u> SQ. FT. OF VENT.     | <u>53</u> %<br>(TOTAL OF OUTLET) |
|                   |                                    |               |            |                              | <u>20.81</u> TOTAL SQ. FT. OF VENT. |                                  |

ROOF FRAMING NOTES:

NC (2018 NCRC); Wind: 115-120 mph

- 2x8 RAFTERS @ 16" O.C. WITH 2x10 RIDGE, UNO.
  - (2) 2x10 OR 1.75x11.875 LVL HIP, (2) 2x10 HIP5 MAY BE SPLICED WITH A MIN. 6'-0" OVERLAP AT CENTER
  - (2) 2x10 OR 1.75x9.25 LVL VALLEY. DO NOT SPLICE VALLEYS
  - 1.75x11.875 LVL OR (2)1.75x9.25 LVL VALLEY
  - FALSE FRAME VALLEY ON 2x10 FLAT PLATE
  - 2x6 RAFTERS @ 16" O.C. W/ 2x8 RIDGE, UNO.
  - 2x10 RAFTERS @ 16" O.C. W/ 2x12 RIDGE, UNO.
  - EXTEND RIDGE 12" BEYOND INTERSECTION
- "SR" = SINGLE RAFTER
  - "DR" = DOUBLE RAFTER
  - "TR" = TRIPLE RAFTER
  - "RS" = ROOF SUPPORT
  - "■" = (3) STUD OR 4x4 POST FOR ROOF SUPPORT (USE 2X6 STUDS OR 6X6 POST FOR SUPPORT OVER 10'-0" IN HEIGHT)
  - ATTACH VAULTED RAFTERS WITH HURRICANE CLIPS: SIMPSON "H-2.5A" OR EQUIVALENT. TIES TO BE INSTALLED ON THE OUTSIDE FACE OF FRAMING.
  - INSTALL RAFTER TIES AND COLLAR TIES PER SECTION R802.3.1 OF THE 2018 NC RESIDENTIAL CODE.

ELEVATION "A"  
ROOF FRAMING PLAN

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

NOTES:

- SEE SHEET D-1 FOR DETAILS.
- DIMENSIONS ARE FROM EXT. OF FRAMING TO CENTER LINE OF RIDGE.



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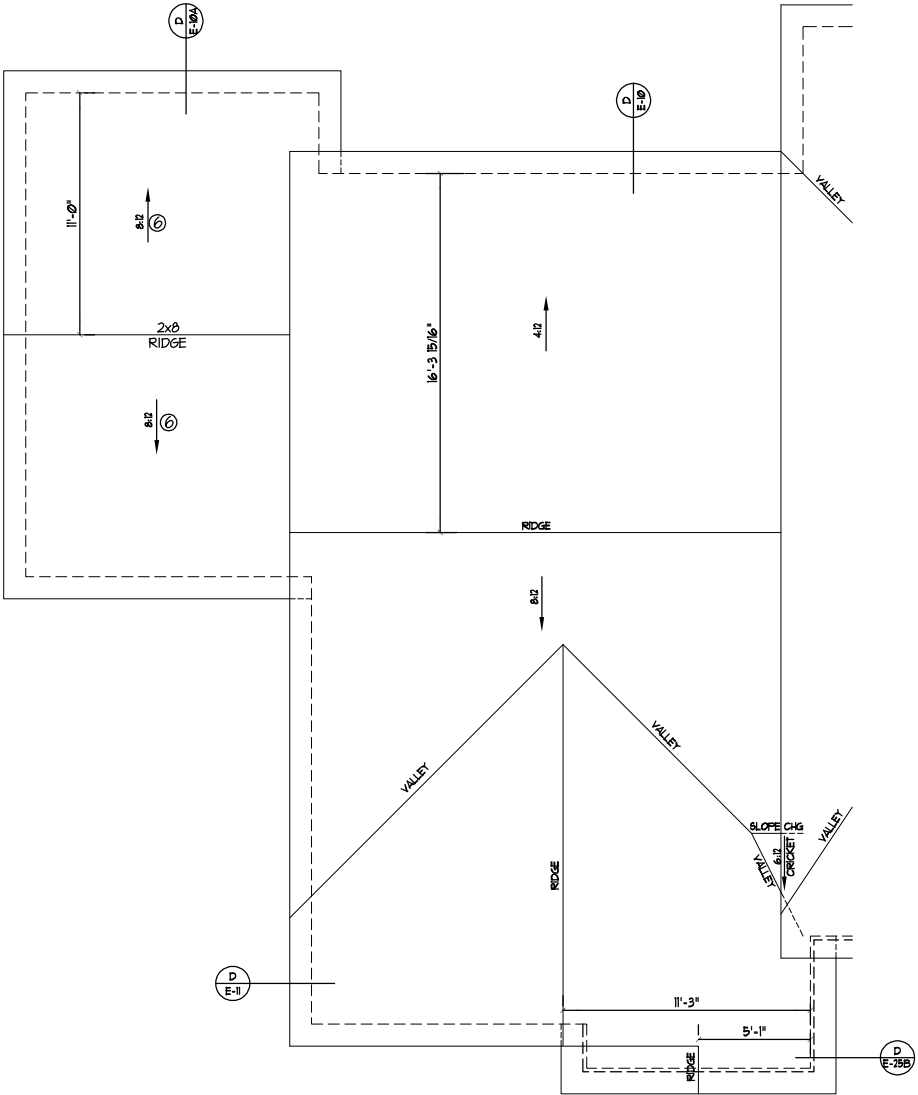
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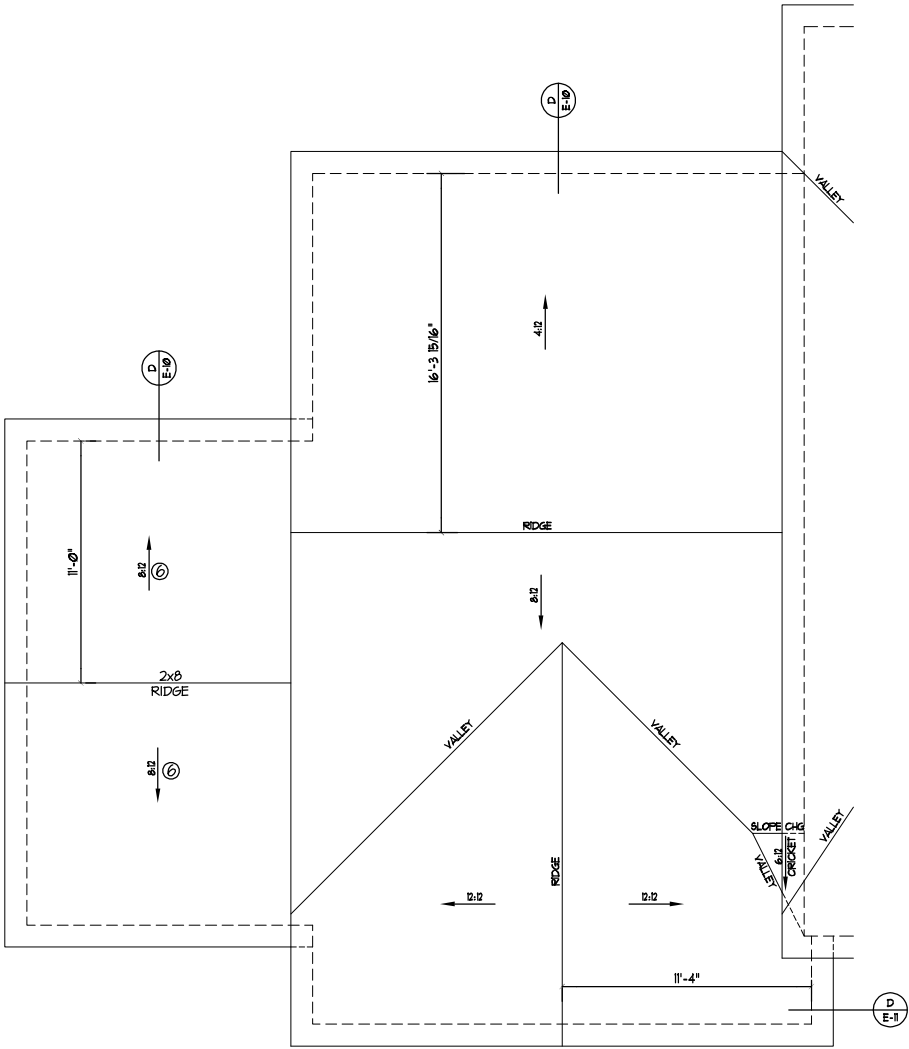
DYNAMIC  
DESIGN  
GROUP

Lot 314, Serenity  
"Marshall-A-GI"  
ICG HOMES

S-5.2



OPT. 3rd CAR SIDE LOAD GARAGE  
SCALE: 1/4" = 1'-0"



OPT. 3rd CAR FRONT LOAD GARAGE  
SCALE: 1/4" = 1'-0"

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

- NOTES:
- 1) SEE SHEET D-1 FOR DETAILS.
  - 2) DIMENSIONS ARE FROM EXT. OF FRAMING TO CENTER LINE OF RIDGE.





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DYNAMIC  
DESIGN  
GROUP

Lot 314, Serenity  
"Marshall-A-GL"  
ICG HOMES

SD

STRUCTURAL NOTES

NC (2018 NCRC): Wind: 115-120 mph

- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS INCLUDING ROOF, RAFTERS, HIPs, VALLEYS, RIDGES, FLOORS, WALLS, BEAMS AND HEADERS, COLUMNS, CANTILEVERS, OFFSET LOAD BEARING WALLS, PIER & GIRDER SYSTEM, FOOTING, AND PILING SYSTEM. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM. ALL REQUIREMENTS FOR PROFESSIONAL CERTIFICATION SHALL BE PROVIDED BY THE APPROPRIATE PROFESSIONAL. SOUTHERN ENGINEERS, P.A. CERTIFIES ONLY THE STRUCTURAL COMPONENTS AS SPECIFICALLY STATED.
- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE 2018 NC RESIDENTIAL CODE, PLUS ALL LOCAL CODES AND REGULATIONS. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK, NOR WILL THE ENGINEER BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. "CONSTRUCTION REVIEW" SERVICES ARE NOT PART OF OUR CONTRACT. ALL MEMBERS SHALL BE FRAMED, ANCHORED, TIED AND BRACED IN ACCORDANCE WITH GOOD CONSTRUCTION PRACTICE AND THE BUILDING CODE.
- DESIGN LOADS (LISTED AS: LIVE LOAD, DEAD LOAD, DEFLECTION)
  - ROOMS OTHER THAN SLEEPING ROOMS: (40 PSF, 10 PSF, L/360)
  - SLEEPING ROOMS: (30 PSF, 10 PSF, L/360)
  - ATTIC WITH PERMANENT STAIR: (40 PSF, 10 PSF, L/360)
  - ATTIC WITHOUT PERMANENT STAIR: (20 PSF, 10 PSF, L/360)
  - ATTIC WITHOUT STORAGE: (10 PSF, 10 PSF, L/240)
  - STAIRS: (40 PSF, 10 PSF, L/360)
  - DECKS AND EXTERIOR BALCONIES: (40 PSF, 10 PSF, L/360)
  - PASSENGER VEHICLE GARAGES: (30 PSF, 10 PSF, L/360)
  - SNOW: (20 PSF)
- WALLS SHALL BE BRACED BY SHEATHING WALLS ON ALL STORIES WITH WOOD STRUCTURAL PANELS. SEE FRAMING NOTES FOR THICKNESS AND NAILING REQUIREMENTS.
- SEE APPENDIX M (DCA6) FOR EXTERIOR DECK REQUIREMENTS INCLUDING ATTACHMENTS FOR LATERAL LOADS.
- CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF 5 INCHES UNLESS NOTED OTHERWISE (UNO). AIR ENTRAINED PER TABLE 402.2. ALL CONCRETE SHALL BE PROPORTIONED, MIXED, HANDLED, SAMPLED, TESTED, AND PLACED IN ACCORDANCE WITH ACI STANDARDS. ALL SAMPLES FOR PUMPING SHALL BE TAKEN FROM THE EXIT END OF THE PUMP. CONTROL JOINTS IN SLABS SHALL BE SPACED ON A GRID OF +30 TIMES THE DEPTH (D). CONTROL JOINTS SHALL BE SAWCUT TO A DEPTH OF 1/3. (I.E. 4" CONCRETE SLABS SHALL HAVE 1 1/4" DEEP CONTROL JOINTS SAWCUT IN SLAB ON A +10'-0" x +10'-0" GRID).
- ALLOWABLE SOIL BEARING PRESSURE ASSUMED TO BE 2000 PSF. THE CONTRACTOR MUST CONTACT A GEOTECHNICAL ENGINEER AND THE STRUCTURAL ENGINEER IF UNSATISFACTORY SUBSURFACE CONDITIONS ARE ENCOUNTERED. THE SURFACE AREA ADJACENT TO THE FOUNDATION WALL SHALL BE PROVIDED WITH ADEQUATE DRAINAGE, AND SHALL BE GRADED SO AS TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS.
- ALL FRAMING LUMBER SHALL BE SPF #2 (Fb = 875 PSI) UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE SYP #2. PLATE MATERIAL MAY BE SPF #3 OR SYP #3 (Fc(perp) = 425 PSI - MIN).
- L.V.L. SHALL BE LAMINATED VENEER LUMBER: Fb=2600 PSI, Fv=285 PSI, E=1.9x10<sup>6</sup> PSI.
  - L.S.L. SHALL BE PARALLEL STRAND LUMBER: Fb=2400 PSI, Fv=240 PSI, E=2.0x10<sup>6</sup> PSI.
  - L.S.L. SHALL BE LAMINATED STRAND LUMBER: Fb=2250 PSI, Fv=400 PSI, E=1.55x10<sup>6</sup> PSI. INSTALL ALL CONNECTIONS PER MANUFACTURERS INSTRUCTIONS.
- ALL ROOF TRUSS AND I-JOIST LAYOUTS SHALL BE PREPARED IN ACCORDANCE WITH THE SEALED STRUCTURAL DRAWINGS. TRUSSES AND I-JOISTS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURE'S SPECIFICATIONS. ANY CHANGE IN TRUSS OR I-JOIST LAYOUT SHALL BE COORDINATED WITH SOUTHERN ENGINEERS.
- ALL STRUCTURAL STEEL SHALL BE ASTM A-36. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" INCHES AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO LAG SCREWS (1/2" DIAMETER x 4" LONG). LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDING THE JOIST ARE TOE NAILED TO THE SOLE PLATE, AND SOLE PLATE IS NAILED OR BOLTED TO THE BEAM FLANGE @ 48" O.C. ALL STEEL TUBING SHALL BE ASTM A500.
- REBAR SHALL BE DEFORMED STEEL, ASTM#65, GRADE 60. LAP ALL REBAR SPLICES 30 BAR DIAMETERS.
- FLITCH BEAMS SHALL BE BOLTED TOGETHER USING (2) ROWS OF 1/2" DIAMETER BOLTS (ASTM A325) WITH WASHERS PLACED UNDER THE THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" O.C. (MAX), AND STAGGERED AT THE TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH 2 BOLTS LOCATED AT 6" FROM EACH END.
- BRICK LINTELS (WHEN REQUIRED) SHALL BE 3 1/2"x3 1/2"x1/4" STEEL ANGLE FOR UP TO 6'-0" SPAN AND 6"x4"x5/16" STEEL ANGLE WITH 6" LEG VERTICAL FOR SPANS UP TO 9'-0". SEE PLANS FOR SPANS OVER 9'-0". SEE ALSO SECTION R703.8.3 LINTELS.
- METAL CONNECTORS REFERENCED ON PLANS CORRESPOND TO SIMPSON STRONG-TIE BRAND. CONNECTORS OF EQUAL OR BETTER CAPACITY ARE ACCEPTABLE. CORROSION RESISTANCE PER CODE AND AS RECOMMENDED BY MANUFACTURER.

FRAMING NOTES

NC (2018 NCRC): Wind: 115-120 mph

- BRACING METHOD AND TYPE: CONTINUOUSLY SHEATHED WSP: C5-WSP. NOTE THAT THE WALL BRACING AMOUNT PROVIDED ON THE PLANS (DETAILS AND SPECIFICATIONS) IS GREATER THAN THE AMOUNT OF WALL BRACING REQUIRED BY SECTION R602.10 OF THE CODE. SEE NOTES BELOW FOR DETAILS AND SPECIFICATIONS FOR WALL BRACING AND WALL FRAMING.
- EXTERIOR WALL SHEATHING: WALLS SHALL BE BRACED BY SHEATHING WALLS ON ALL STORIES WITH WOOD STRUCTURAL PANEL SHEATHING (WSP) (EXPOSURE B: 1/16", EXPOSURE C: 15/32"). SHEATHING SHALL BE ATTACHED WITH 8d NAILS AT A 6"x12" NAILING PATTERN (6" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES.
- WSP SHEATHING SHALL EXTEND TO THE UPPERMOST DOUBLE BEARING PLATE. BLOCK AT ROOF PER SECTION R602.10.4.5 AND ATTACH BRACED WALLS PER CODE. WSP SHEATHING BETWEEN FLOORS SHALL BE SPLICED ALONG CONTINUOUS BAND OR THE WSP SHEATHING MAY BE SPLICED ACROSS STUDS (CONTINUOUS ACROSS FLOOR SYSTEM) WITH BLOCKING AT PANEL EDGES. (MINIMUM 12" BEYOND FLOOR BREAK) OR OTHER APPROVED METHOD.
- "HD" = HOLD-DOWN: HOLD-DOWN DEVICE (NOTED AS "HD" ON PLANS) SHALL BE AN 800 POUND CAPACITY ASSEMBLY AS NOTED ON PLANS. SEE DETAILS FOR HD ASSEMBLY.
  - "\*GROUND/FIRST FLOOR": USE "HD HOLD-DOWN DETAIL" ON SD SHEET (OR EQUIV.)
  - "\*\*JEFFER FLOORS": ATTACH BASE OF KING STUD WITH A SIMPSON C520 OR C5HP20 STRAP DOWN ACROSS THE BAND AND DOWN TO A STUD BELOW OR HEADER BELOW. EXTEND STRAP 1" MIN ALONG EACH STUD (OR HEADER) AND ATTACH EACH END W/ (1) 8d NAILS.
- INTERIOR BRACED WALL: (NOTED AS "IBW" ON PLANS) ATTACH 1/2" GYPSUM BOARD (GB) ON EACH SIDE OF WALL WITH A MIN. OF 5d COOLER NAILS OR #6 SCREWS @ 1' O.C. ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS. SEE SECTION R602.10.4.4 OF THE CODE.
- INTERIOR BRACED WALL-WOOD STRUCTURAL PANEL: (NOTED AS "IBW-WSP" ON PLANS). ATTACH ONE SIDE WITH 1/8" WSP SHEATHING WITH 8d NAILS AT A 6"x12" NAILING PATTERN (6" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES. ATTACH GB OVER WSP AS REQUIRED. ATTACH OPPOSITE SIDE WITH 1/2" GB WITH A MIN. OF 5d COOLER NAILS OR #6 SCREWS @ 1' O.C. ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS. SEE SECTION R602.10.4.4 OF THE CODE.

HEADER/BEAM & COLUMN NOTES

- ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2)2x10 (4" WALL) OR (3)2x10 (6" WALL) WITH (1) SUPPORT STUD, UNLESS NOTED OTHERWISE.
- THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD POCKET OR COLUMN. THE NUMBER OF KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM "d" IN TABLE R602.3(5) OR AS BELOW PER NCDOT COMMENTARY "KING STUDS AT WALL OPENINGS" REVISED 1-4-2020:
  - UP TO 3' SPAN: (1) KING STUD
  - OVER 3' UP TO 6' SPAN: (2) KING STUDS
  - OVER 6' UP TO 9' SPAN: (3) KING STUDS
  - OVER 9' UP TO 12' SPAN: (4) KING STUDS
  - OVER 12' UP TO 15' SPAN: (5) KING STUDS

LVL CONNECTION LEGEND

- (2) FLY 1.75" LVL BEAMS:
  - (3) ROWS OF 10d NAILS @ 12" O.C. OR
  - (2) ROWS OF SIMPSON SDN22330 (OR EQUAL) SCREWS @ 16" O.C. FOR BEAMS UP TO 18"
  - (3) ROWS OF SIMPSON SDN22330 (OR EQUAL) SCREWS @ 16" O.C. FOR BEAMS GREATER THAN 18".
- (3) FLY 1.75" LVL BEAMS:
  - (3) ROWS OF 10d NAILS @ 8" O.C. ON EACH SIDE OR
  - (2) ROWS OF SIMPSON SDN22500 (OR EQUAL) SCREWS @ 16" O.C. FOR BEAMS UP TO 18"
  - (3) ROWS OF SIMPSON SDN22500 (OR EQUAL) SCREWS @ 16" O.C. FOR BEAMS GREATER THAN 18".
- (4) FLY 1.75" LVL BEAMS:
  - (2) ROWS OF SIMPSON SDN22634 (OR EQUAL) SCREWS @ 16" O.C. FOR BEAMS UP TO 18"
  - (3) ROWS OF SIMPSON SDN22634 (OR EQUAL) SCREWS @ 16" O.C. FOR BEAMS GREATER THAN 18".

PORCH POST NOTES:

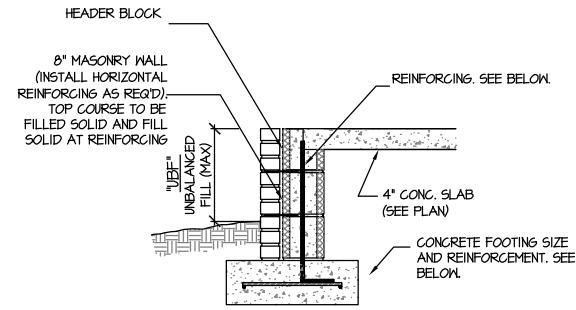
- 4x4 (6x6) TRTD POST (OR EQUAL).
  - ATTACH TRUSSES (RAFTERS) AT PORCH WITH HURRICANE CONNECTORS.
- POST CAP: SIMPSON AC4-MAX (AC6-MAX)
  - POST CAP AT CORNER: (2) SIMPSON LCE4 (MITER HEADER AT CORNER). HIGH WIND; ADD (1) SIMPSON H6.
  - POST BASE: SIMPSON ABU44 (ABU66).
    - MONO: 3/8" ANCHOR (EMBED 1')
    - GMU: 3/8" ANCHOR (EXTEND TO FOOTING - HIGH WIND ONLY)
  - POST BASE: WOOD FOUNDATION: (2) SIMPSON C516 STRAPS AT POSTS. EXTEND 12" ONTO EACH POST (UPPER AND LOWER) OR TO GIRDER.
- NOTE: THE ABOVE CONNECTORS ARE SUGGESTIONS. EQUIVALENT CONNECTORS THAT MEET THE REQUIREMENTS OF THE NC RESIDENTIAL BUILDING CODE, LOCAL CODES, AND/OR ARE APPROVED BY THE BUILDING INSPECTOR MAY BE SUBSTITUTED.

WOOD I-JOISTS

(SHALL BE ONE OF THE FOLLOWINGS):

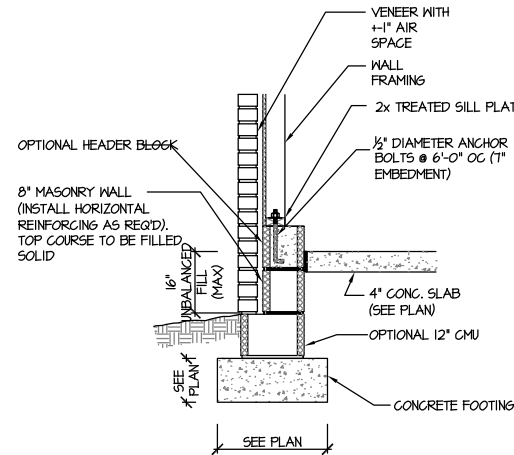
- TJ 210 BY TRUS JOIST
  - LPI 20 PLUS BY LP
  - BCI 5000s 1.8 BY BC
  - BLI 40 BY oNcenter
- ALL I-JOISTS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- INSTALL SQUASH BLOCKS, WEB STIFFENERS, ETC. AS REQUIRED BY AND ACCORDING TO THE I-JOIST MANUFACTURER'S SPECIFICATIONS AND INSTRUCTIONS.
- HANGERS FOR I-JOISTS ARE THE RESPONSIBILITY OF THE I-JOIST SUPPLIER.

NOTE: I-JOISTS MAY BE SUBSTITUTED WITH FLOOR TRUSSES DESIGNED BY SUPPLIER (SAME DEPTH AND LAYOUT).

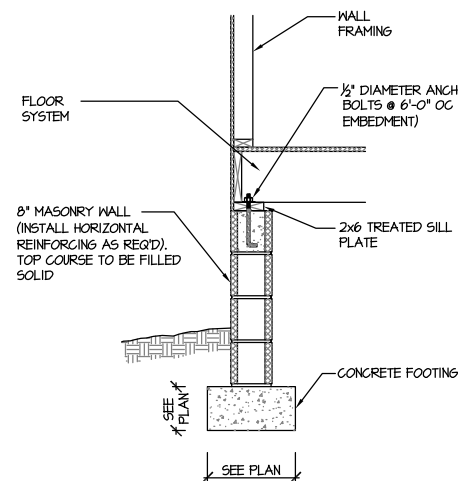


- "UBF" = UP TO 16" → 8" MASONRY (IN-REINFORCED) ON 16" WIDE BY 8" DEEP (MIN) CONC. FTG.
- "UBF" = 16" UP TO 24" → REINFORCE WALL W/ #5 BAR @ 48" O.C. W/ 75° BEND INTO FTG. 24" WIDE BY 10" DEEP CONC FTG REINFORCED W/ (3) #4 BAR OR (2) #5 BAR CONTINUOUS WITH #4 TIES @ 48" O.C.
- "UBF" = 24" UP TO 48" → REINFORCE WALL W/ #5 BAR @ 24" O.C. W/ 75° BEND INTO FTG. 24" WIDE BY 10" DEEP CONC FTG REINFORCED W/ (3) #4 BAR OR (2) #5 BAR CONTINUOUS WITH #4 TIES @ 24" O.C.

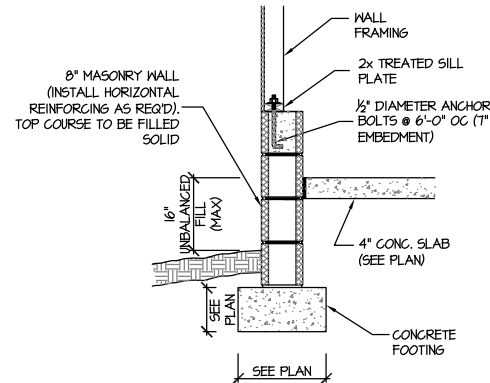
### 115-120 106J SD FILLED PORCH WALL (BRICK SKIRT)



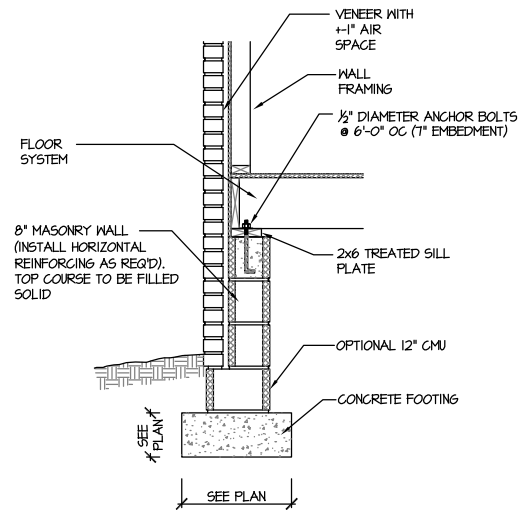
### 115-120 109A SD STEM WALL SLAB @ GARAGE (VENEER)



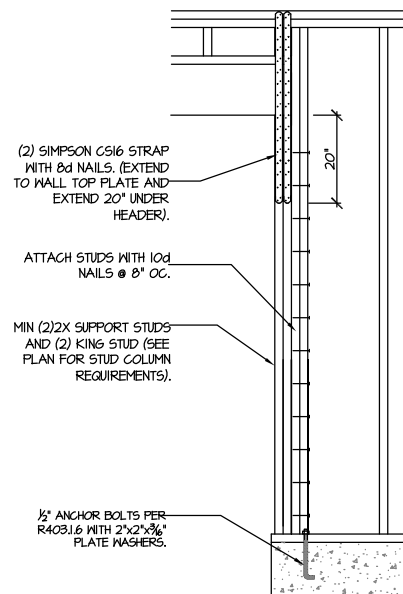
### 115-120 110A SD CRAWL SPACE FOOTING (SIDING OR EQUAL)



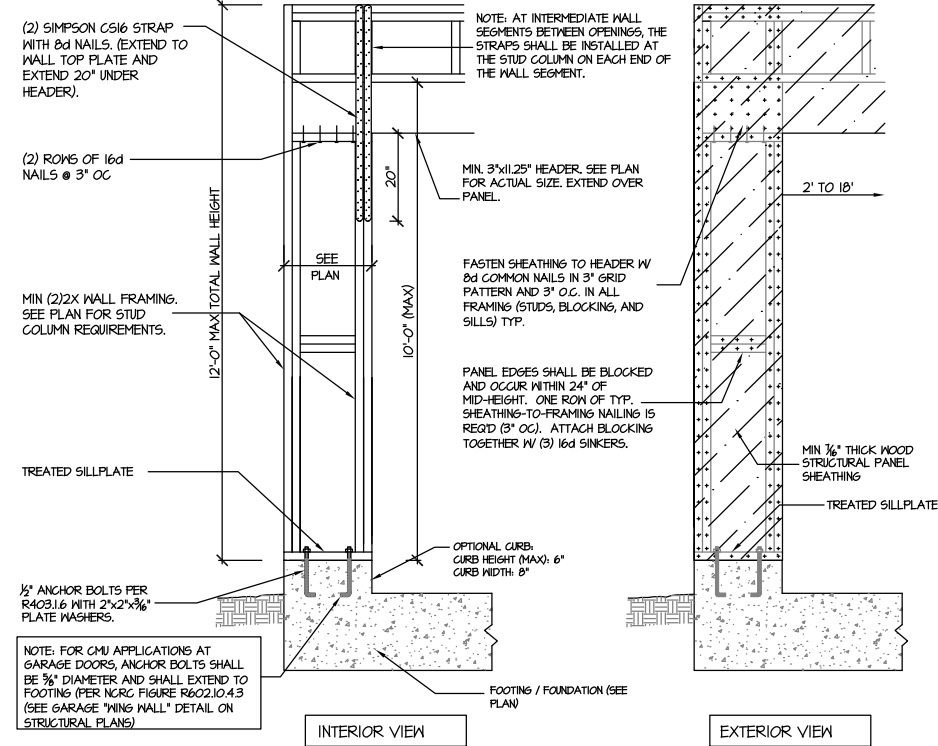
### 115-120 111A SD GARAGE WALL FOOTING (SIDING OR EQUAL)



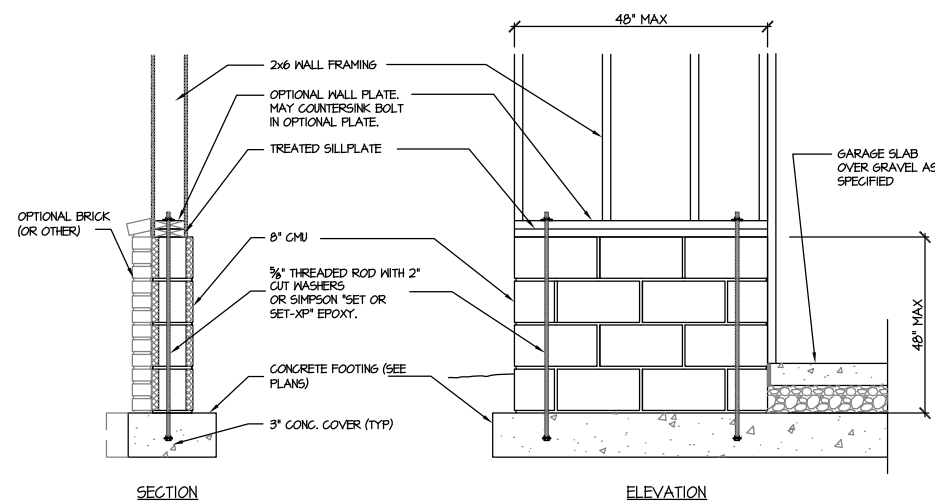
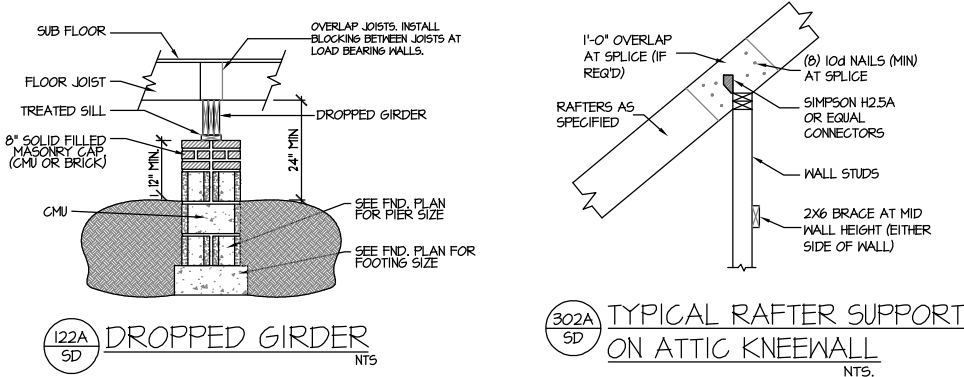
### 115-120 112A SD CRAWL SPACE FOOTING (VENEER)



### 906 SD CS-PF: END CONDITION DETAIL (FOR USE WITH SINGLE CS-PF CONDITION) DETAIL AND APPLICATION BASED ON NCRG FIGURE R602.10.1 - PORTAL FRAME CONSTRUCTION



### 905B SD CS-PF: CONTINUOUS PORTAL FRAME CONSTRUCTION DETAIL AND APPLICATION BASED ON NCRG FIGURE R602.10.1 - PORTAL FRAME CONSTRUCTION



### 901 SD GARAGE "WING WALL" REINFORCING PER IRC FIGURE R602.10.4.3



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