



**McMillan Design**  
 847 Wake Forest Business Park, Suite 102  
 Wake Forest, NC 27587  
 Office: 919.263.1509 / Fax: 919.263.1512  
 www.mcmillan-design.com

**ICG Homes**  
**PERRY FARMS**  
**LOT 1**

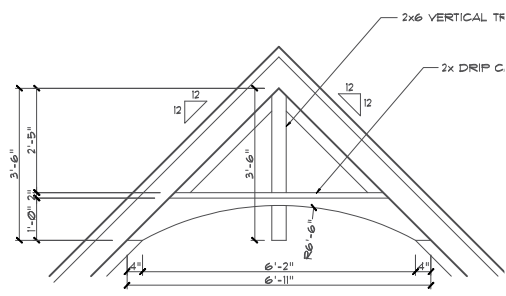
Sheet Title:  
**FRONT & LEFT ELEVATIONS**

| REVISIONS |      |
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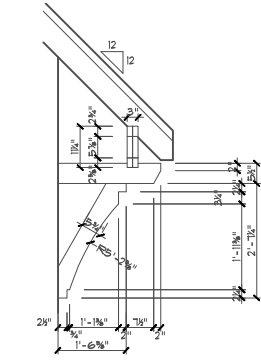
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Plan Number  
**M216-21**  
 Sheet No. **A1**  
 Drawn By: **MB**  
 Date: **07.06.2021**

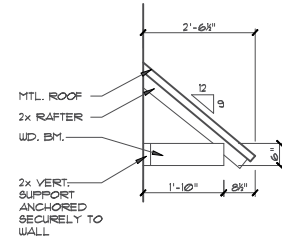
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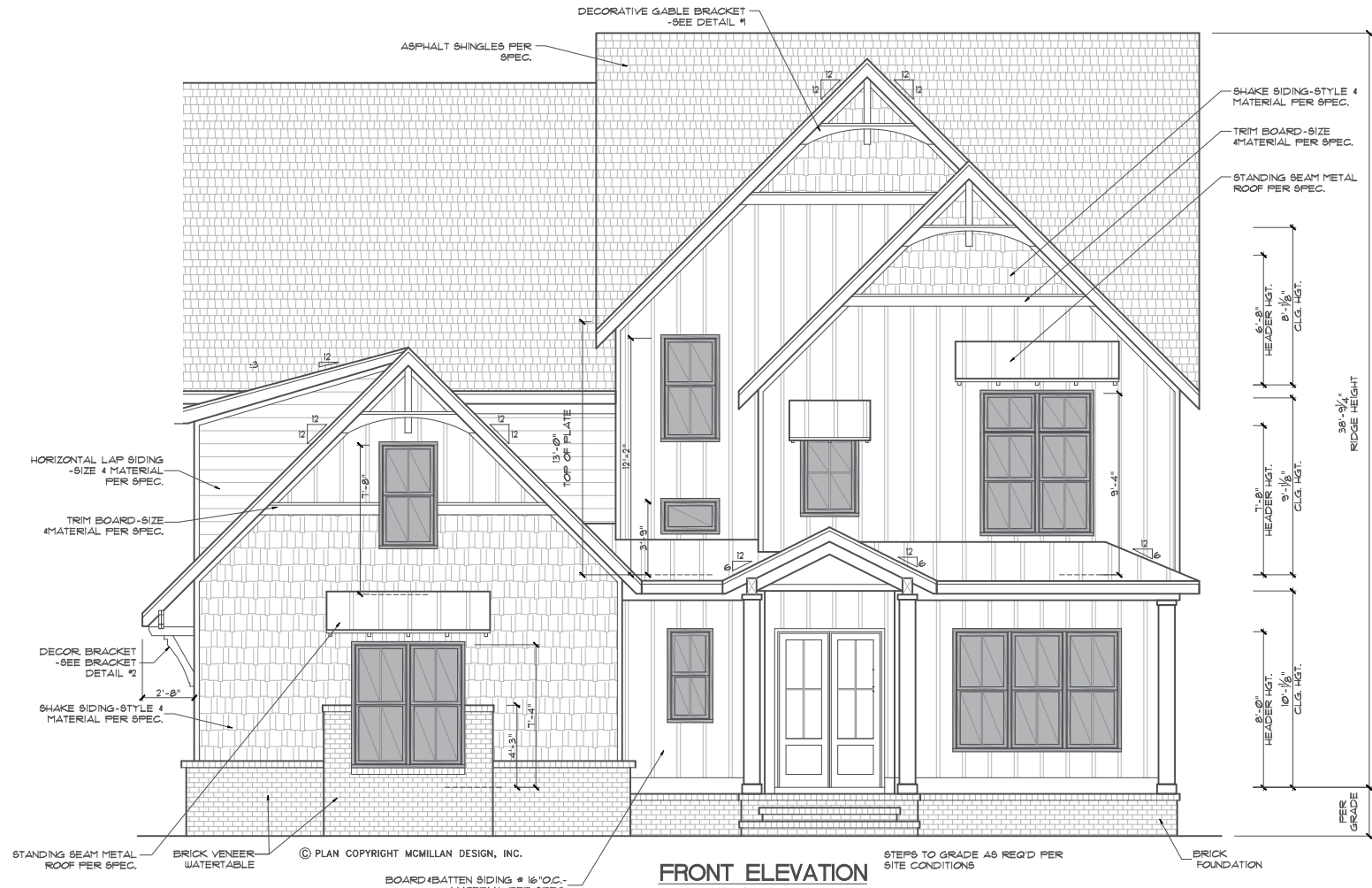
**DECOR. GABLE BRACKET DETAIL**  
 SCALE: 1/2"=1'



**BRACKET DETAIL #2**  
 SCALE: 1/2"=1'



**BRACKET DETAIL #3**  
 SCALE: 1/2"=1'



**FRONT ELEVATION**  
 Scale: 1/4"=1'

**ELEVATION NOTES**

**BUILDING CODES:**  
 THIS PLAN HAS BEEN DESIGNED UNDER THE NC BUILDING CODES, 2018 RESIDENTIAL EDITION.  
**ICE GUARDS:**  
 ICE GUARD & WATER SHIELD REQUIRED ON ALL ROOF SLOPES 4:12 & LESS PER NCRBC

**VENTING CALCULATIONS:**

**CRAWL SPACE:**  
 THE MIN. NET FREE AREA OF CRAWL VENTILATION OPENINGS SHALL NOT BE LESS THAN 1 SQ. FT. FOR EACH 150 SQ. FT. OF CRAWL SPACE AREA.  
 1666 SQ. FT. CRAWL SPACE AREA / 150 = 11.1 SQ. FT. NET FREE AREA REQUIRED  
 \*MAY BE REDUCED BY 50% W/ VAPOR BARRIER

**ATTIC:**  
 2,100 SQ. FT. OF ATTIC / 300 = 7.0 SQ. FT. OF INLET AND OUTLET.  
 VENTILATION MAY BE REDUCED 50% WHEN VENTILATORS ARE USED AT LEAST 3'-0" ABOVE THE CORNICE VENTS.



**LEFT ELEVATION**  
 Scale: 1/4"=1'



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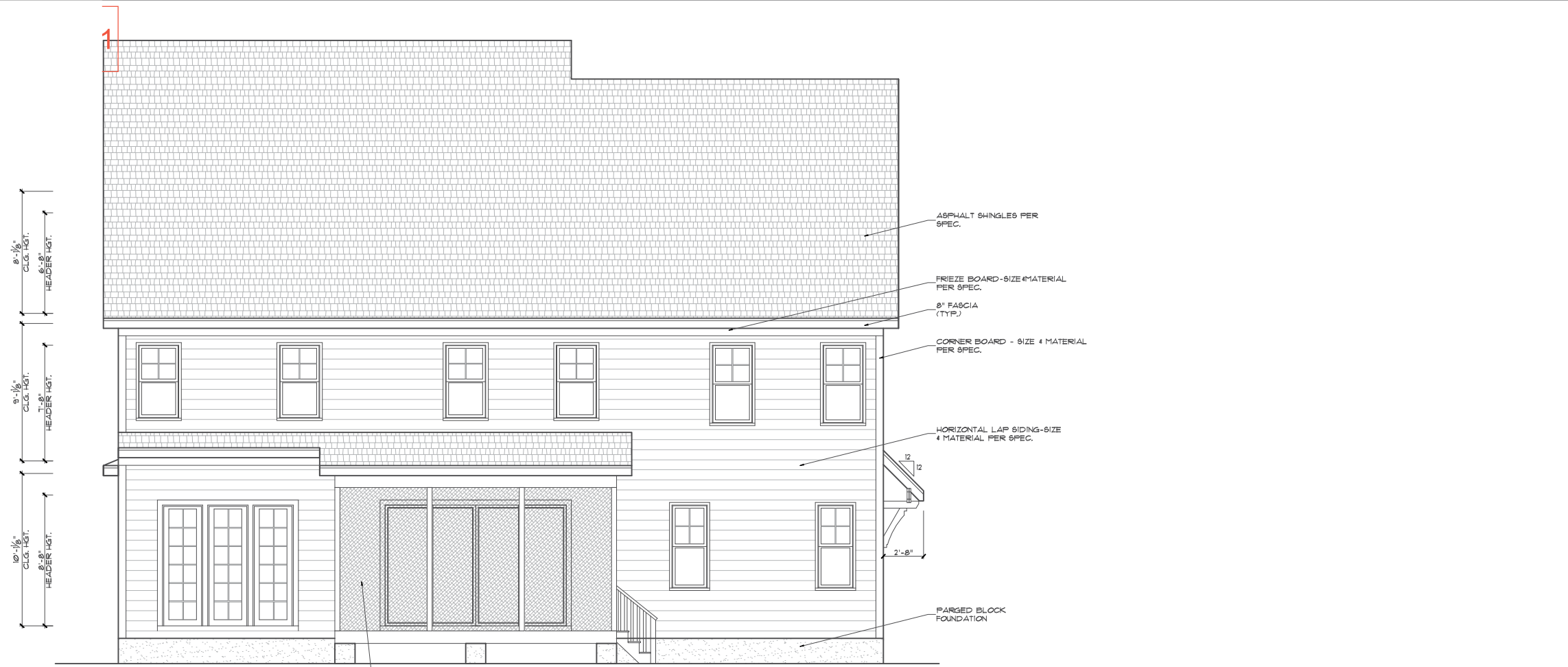
ICG Homes  
 PERRY FARMS  
 LOT 1

Sheet Title:  
**REAR & RIGHT ELEVATIONS**

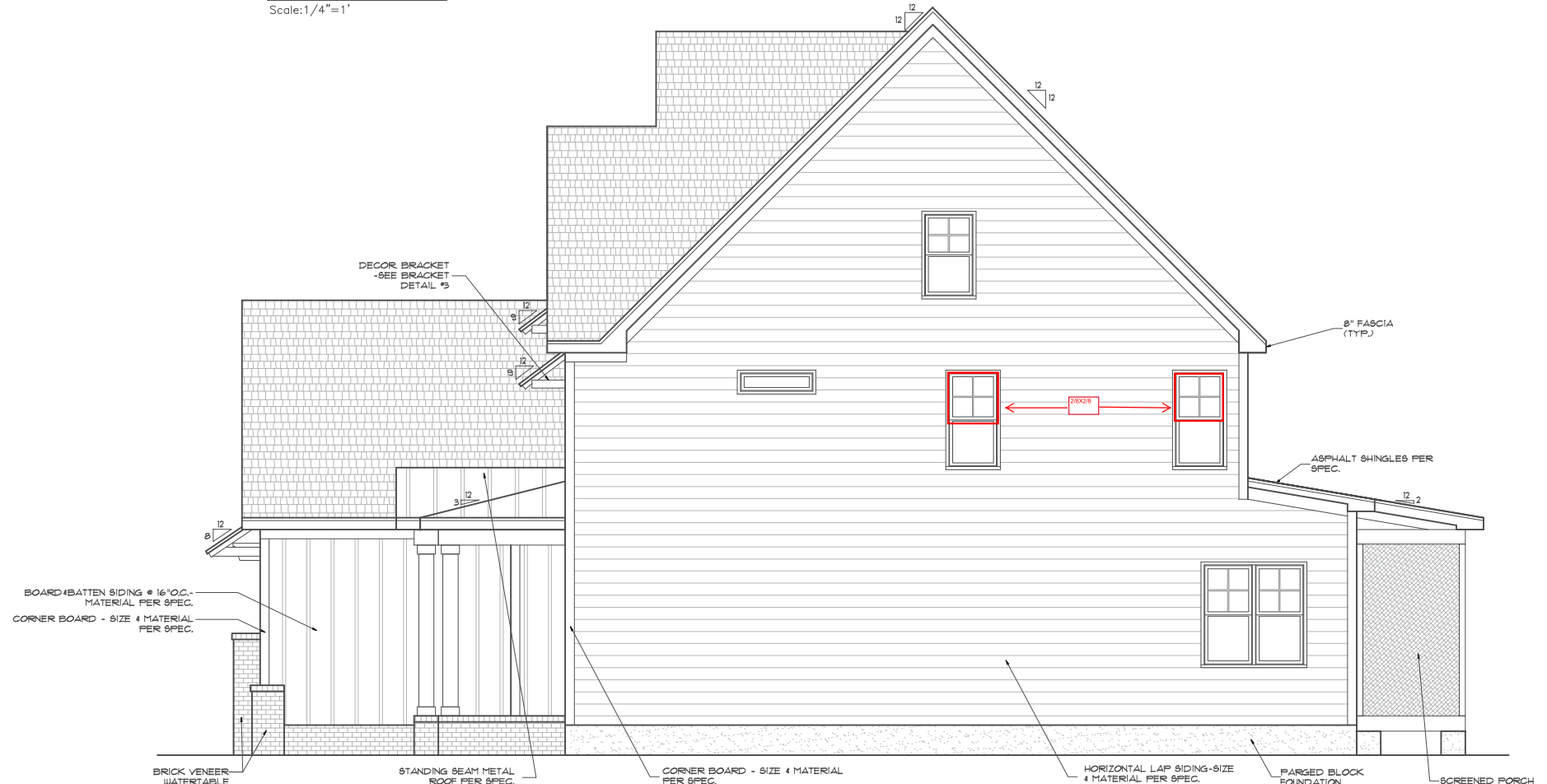
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Plan Number  
**M216-21**  
 Sheet No. **A2**  
 Drawn By: **MB**  
 Date: **07.06.2021**  
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**REAR ELEVATION**  
 Scale: 1/4"=1'



**RIGHT ELEVATION**  
 Scale: 1/4"=1'



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**ICG Homes**  
**PERRY FARMS**  
**LOT 1**

**FIRST FLOOR PLAN**

**REVISIONS**

| NUMBER | DATE |
|--------|------|
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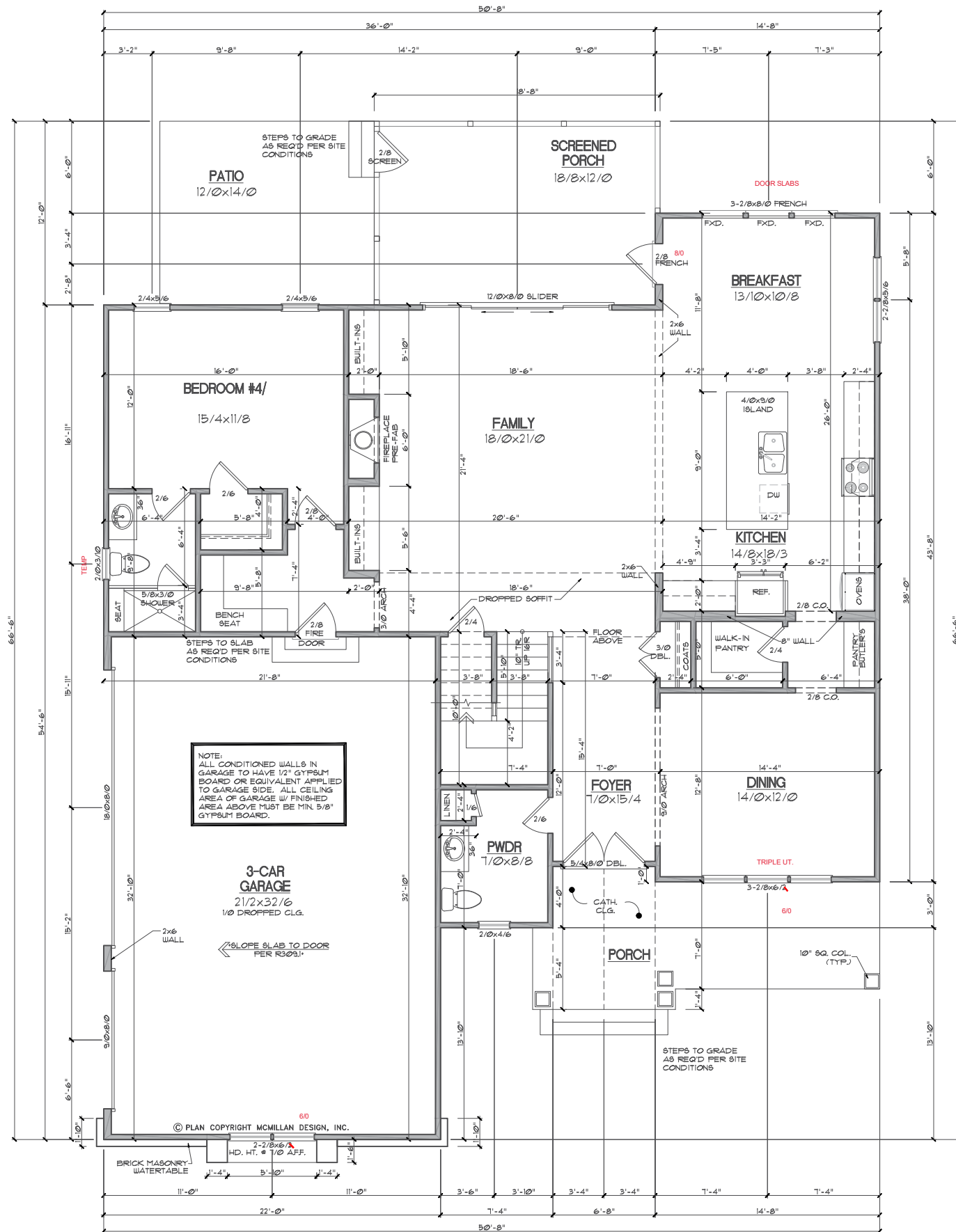
Plan Number  
**M216-21**

Sheet No. **A3**

Drawn By: **MB**

Date: **07.06.2021**

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**DOOR SIZES**  
 FIRST FLOOR DOOR AND OPENING HEIGHTS ARE 8/0 UNL.

**GENERAL NOTES**

**WALLS:**  
 ALL WALLS ARE DRAWN 4" THICK UNL. ANGLED WALL ARE DRAWN #45° UNL.

**SMOKE DETECTORS:**  
 LOCATION AND NUMBER OF DETECTORS SHALL CONFORM TO NEC.

**EGRESS:**  
 ALL BEDROOMS MUST HAVE AT LEAST ONE WINDOW WHICH CONFORMS TO R-310 OF THE NC. BLDG. CODE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY CHOSEN WINDOWS MEET EGRESS REQUIREMENTS AS MANUFACTURERS VARY.

**ATTIC ACCESS:**  
 MIN. ATTIC ACCESS SHALL BE PROVIDED BY BUILDER AND LOCATED ON SITE.

**WALL/CEILING HGT:**  
 WALL AND CEILING HEIGHT NOTES ARE BASED ON NOMINAL WALL SIZE. KNEE WALL HEIGHT LABELS FOR WALLS UNDER RAFTERS ASSUME AN EXTRA 2" FOR FURRING (IN HEATED SPACES) FOR INSULATION. THE WALL HEIGHT REFERS TO THE HGT. FROM THE FLOOR DECKING TO THE BOTTOM OF THE FURRING.

**SQUARE FOOTAGE**

| Heated Square Footage   |         |
|-------------------------|---------|
| First Floor             | 1,866.1 |
| Second Floor            | 1,891.4 |
|                         | 3,557.5 |
| Unheated Square Footage |         |
| 3-Car Garage            | 716.0   |
| Patio                   | 168.0   |
| Porch                   | 173.8   |
| Screened Porch          | 221.0   |
|                         | 1,278.8 |

**FIRST FLOOR**  
 SCALE: 1/4"=1'

**NOTE:**  
 ALL CONDITIONED WALLS IN GARAGE TO HAVE 1/2" GYPSUM BOARD OR EQUIVALENT APPLIED TO GARAGE SIDE. ALL CEILING AREA OF GARAGE W/ FINISHED AREA ABOVE MUST BE MIN. 5/8" GYPSUM BOARD.

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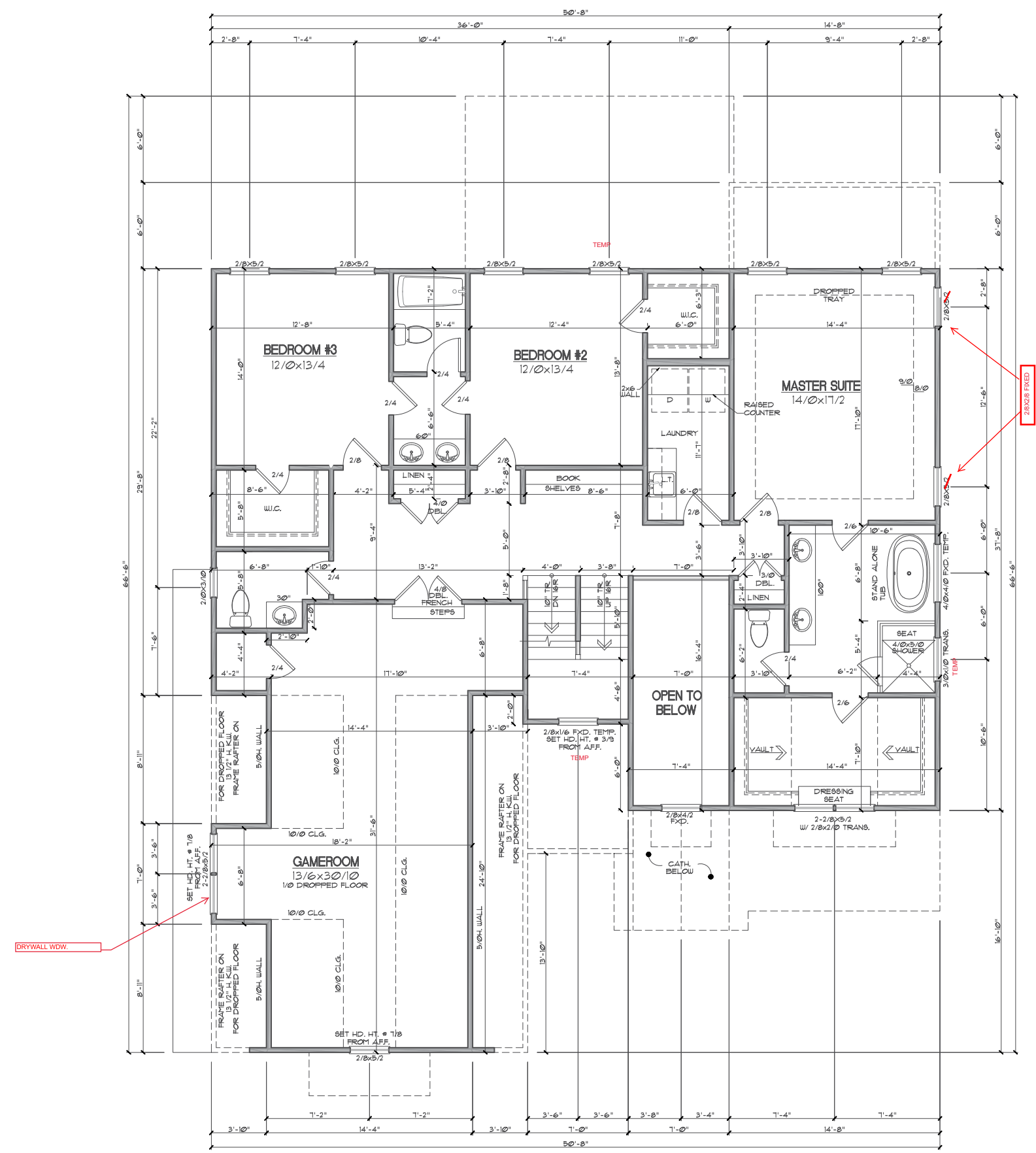
**ICG Homes  
 PERRY FARMS  
 LOT 1**

Sheet Title:  
**SECOND FLOOR  
 PLAN**

| REVISIONS |      |
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Plan Number  
**M216-21**  
 Sheet No. **A4**  
 Drawn By: **MB**  
 Date: **07.06.2021**



**GENERAL NOTES**

**WALLS:**  
 ALL WALLS ARE DRAWN 4" THICK UNO. ANGLED WALL ARE DRAWN #45° UNO.

**SMOKE DETECTOR:**  
 LOCATION AND NUMBER OF DETECTORS SHALL CONFORM TO NEC.

**EGRESS:**  
 ALL BEDROOMS MUST HAVE AT LEAST ONE WINDOW WHICH CONFORMS TO R-310 OF THE N.C. BLDG. CODE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY CHOSEN WINDOWS MEET EGRESS REQUIREMENTS AS MANUFACTURERS VARY.

**ATTIC ACCESS:**  
 MIN. ATTIC ACCESS SHALL BE PROVIDED BY BUILDER AND LOCATED ON SITE.

**WALL/CEILING HGT:**  
 WALL AND CEILING HEIGHT NOTES ARE BASED ON NOMINAL WALL SIZE. KNEE WALL HEIGHT LABELS FOR WALLS UNDER RAFTERS ASSUME AN EXTRA 2" FOR FURRING (IN HEATED SPACES) FOR INSULATION. THE WALL HEIGHT REFERS TO THE HGT. FROM THE FLOOR DECKING TO THE BOTTOM OF THE FURRING.

**SECOND FLOOR**  
 SCALE: 1/4"=1'

DRYWALL WDW.

2x8x5/2



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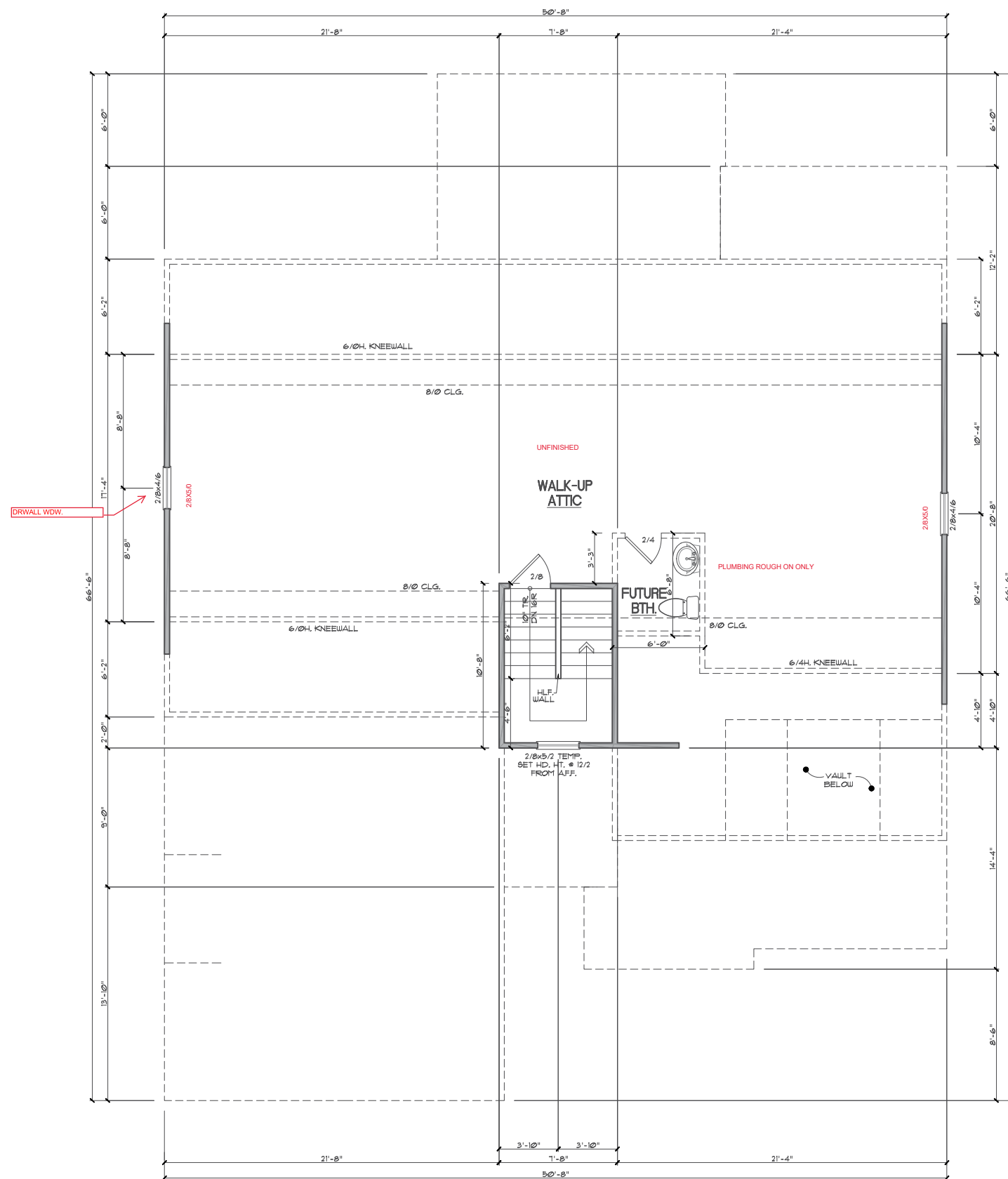
ICG Homes  
 PERRY FARMS  
 LOT 1

Sheet Title:  
**ATTIC FLOOR PLAN**

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Plan Number  
**M216-21**  
 Sheet No. **A5**  
 Drawn By: **MB**  
 Date: **07.06.2021**



**GENERAL NOTES**

**WALLS:**  
 ALL WALLS ARE DRAWN 4" THICK UNO.  
 ANGLED WALL ARE DRAWN #45° UNO.

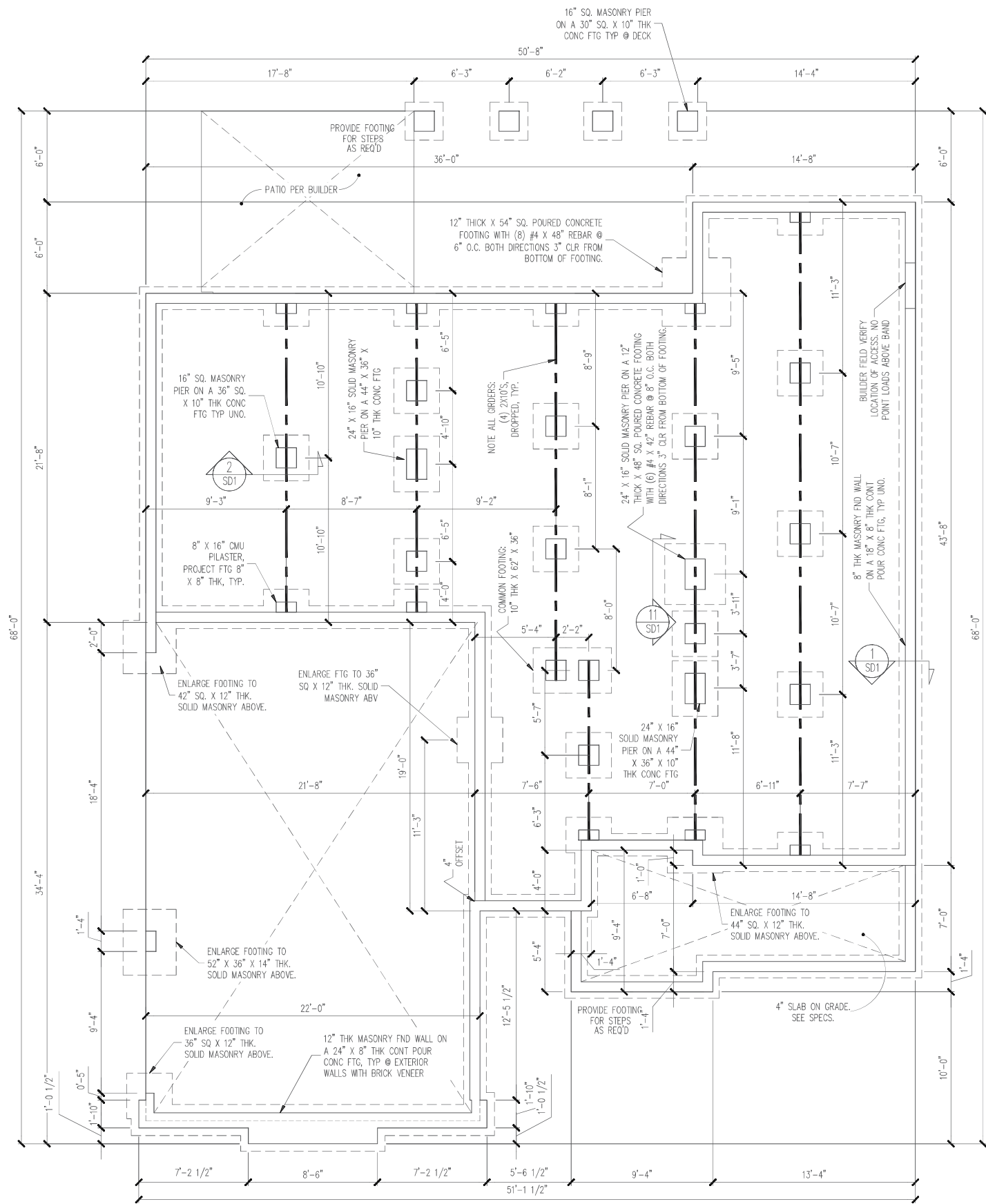
**SMOKE DETECTORS:**  
 LOCATION AND NUMBER OF DETECTORS SHALL CONFORM TO NEC.

**EGRESS:**  
 ALL BEDROOMS MUST HAVE AT LEAST ONE WINDOW WHICH CONFORMS TO R-310 OF THE N.C. BLDG. CODE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY CHOSEN WINDOWS MEET EGRESS REQUIREMENTS AS MANUFACTURERS VARY.

**ATTIC ACCESS:**  
 MIN. ATTIC ACCESS SHALL BE PROVIDED BY BUILDER AND LOCATED ON SITE.

**WALL/CEILING HGT.**  
 WALL AND CEILING HEIGHT NOTES ARE BASED ON NOMINAL WALL SIZE.  
 KNEE WALL HEIGHT LABELS FOR WALLS UNDER RAFTERS ASSUME AN EXTRA 2" FOR FURRING (IN HEATED SPACES) FOR INSULATION. THE HGT. HEIGHT REFERS TO THE HGT. FROM THE FLOOR DECKING TO THE BOTTOM OF THE FURRING.

**ATTIC FLOOR**  
 SCALE: 1/4"=1'

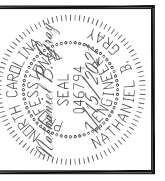


PLAN DESIGNED UNDER  
2018 NORTH CAROLINA  
RESIDENTIAL CODE

NOTES:  
-HEIGHT AND BACKFILL LIMITATIONS FOR FOUNDATION WALLS ARE TO BE GOVERNED BY THE NCSBC, LATEST EDITION. REINFORCEMENT AND GROUTING SHALL BE DETERMINED BY FINAL SITE CONDITIONS.

-BUILDER TO FIELD LOCATE CRAWLSPACE ACCESS OPENING WITH MINIMUM DIMENSIONS OF 18X24. DO NOT LOCATE ACCESS OPENING BELOW POINT LOADS FROM ABOVE WITHOUT ENGINEER APPROVAL.

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



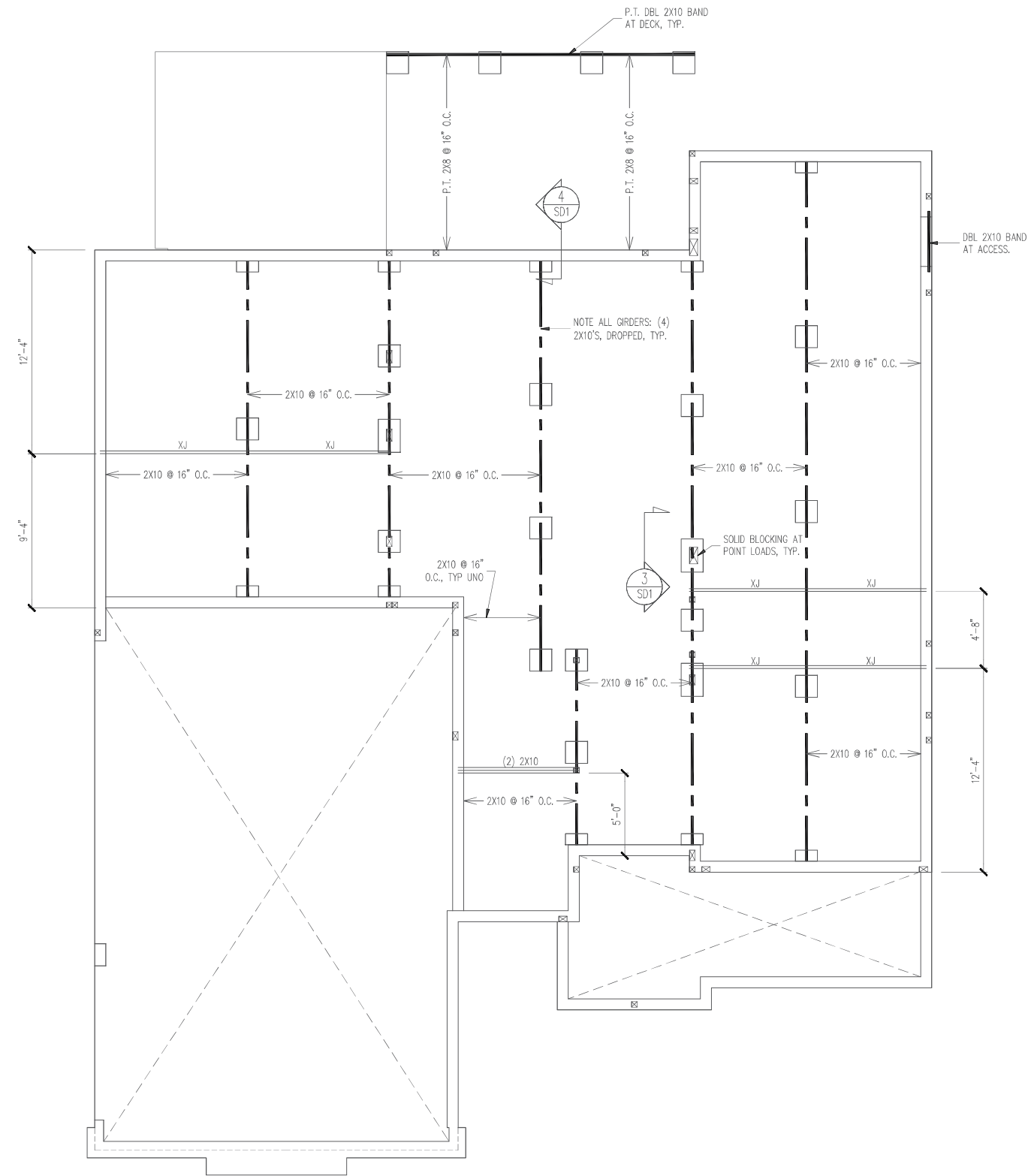
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|         |                     |       |           |
|---------|---------------------|-------|-----------|
| CLIENT: | ICG HOMES           |       |           |
| SCOPE:  | STRUCTURAL ADDENDUM |       |           |
| LOT:    | PERRY FARMS LOT 1   | ENG:  | NBG/CR    |
| REV:    |                     | DATE: | 7/15/2021 |

PLAN NO.  
M216-21

PROJECT NO.  
21-21-198

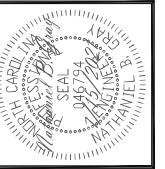
SHEET NO.  
S1  
1 of 7



CRAWL SPACE FRAMING PLAN  
 1/4" = 1'-0"

**STRUCTURAL ENGINEERS**  
 License No. C-3870  
 183 Wind Chime Court, Suite 100  
 Raleigh, North Carolina 27615  
 (919) 844-1661 Fax: (919) 844-1665

**Engineering Tech ASSOCIATES, P.A.**



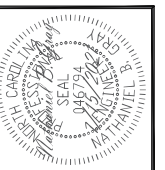
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|         |                     |       |           |
|---------|---------------------|-------|-----------|
| CLIENT: | ICG HOMES           |       |           |
| SCOPE:  | STRUCTURAL ADDENDUM |       |           |
| LOT:    | PERRY FARMS LOT 1   | ENG:  | NBG/CR    |
|         |                     | REV:  |           |
|         |                     | DATE: | 7/15/2021 |

PLAN NO.  
M216-21

PROJECT NO.  
21-21-198

SHEET NO.  
S2



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|         |                     |
|---------|---------------------|
| CLIENT: | ICG HOMES           |
| SCOPE:  | STRUCTURAL ADDENDUM |
| LOT:    | PERRY FARMS LOT 1   |
| ENG:    | NBG/CR              |
| REV:    |                     |
| DATE:   | 7/15/2021           |

PLAN NO.  
M216-21

PROJECT NO.  
21-21-198

SHEET NO.  
S3

3 of 7

**CONSTRUCTION SPECIFICATIONS**  
 INSTANT REFERENCES

REFER TO THE CONSTRUCTION SPECIFICATIONS SECTIONS FOR THE FOLLOWING INFORMATION:  
 PART 1.01: CURRENT GOVERNING CODE  
 PART 14: STUD SUPPORT FOR BEAMS  
 PART 17: KING STUDS FOR EXTERIOR WALLS  
 SEE DETAIL / CONSTRUCTION SPECIFICATIONS SHEETS FOR I-JOISTS ALLOWABLE SUBSTITUTIONS

**HEADER SCHEDULE**

- H1 SINGLE 2X4 TURNED FLAT (A)
- H2 (2) 2X4'S ON SINGLE JACKS (B)
- H3 (2) 2X10'S ON SINGLE JACKS (C)
- H4 (2) 1.75" X 9.25" LVL'S ON DBL JACKS
- H5 (2) 2X10'S ON DBL JACKS

- (A) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPENING 38" MAX.
- (B) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPNG 38" TO 74" MAX.
- (C) TYPICAL FOR ALL CONDITIONS NOT LISTED IN (A) OR (B) UNO.

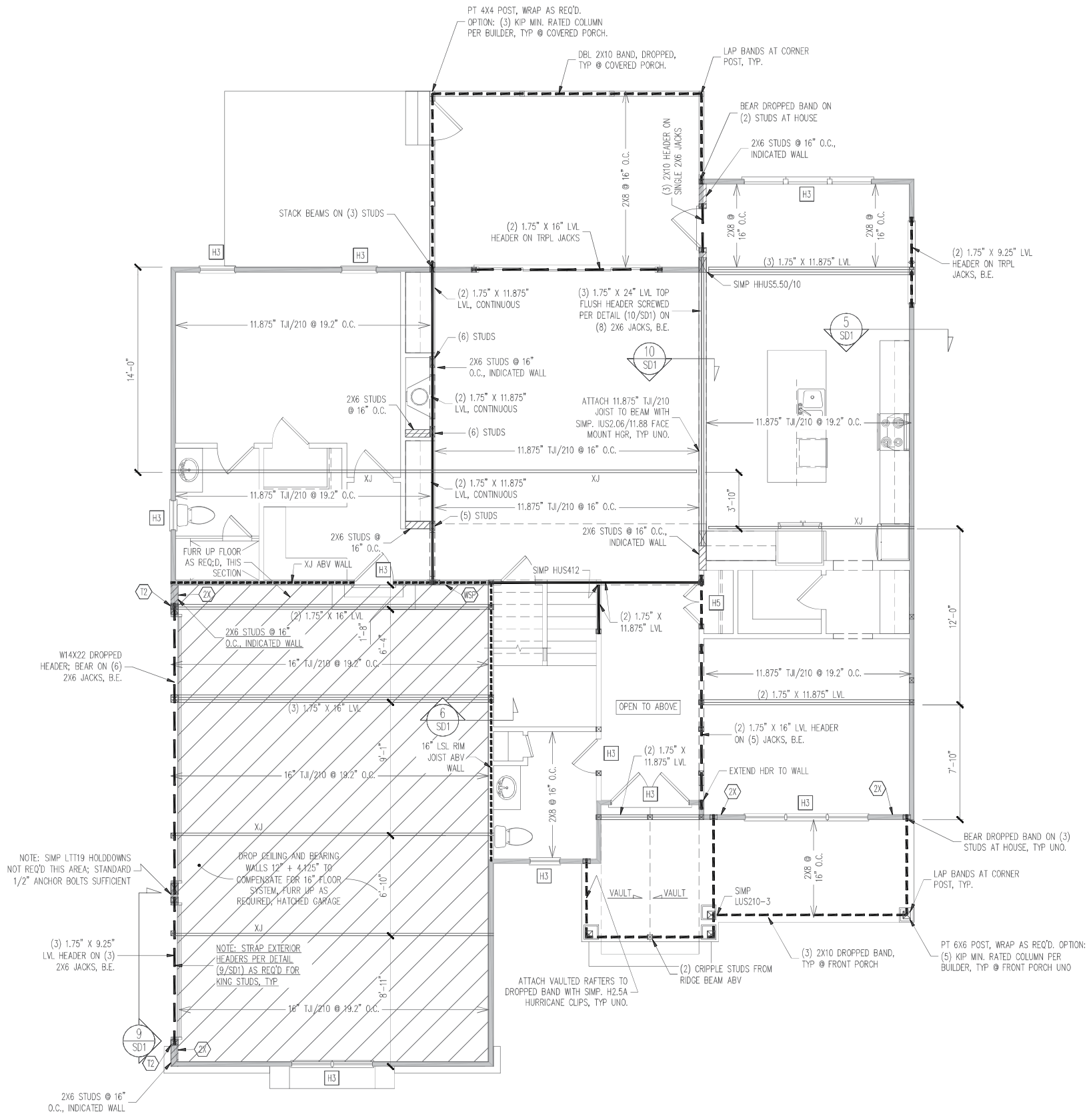
NOTES:  
 -HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED.

**WALL BRACING**

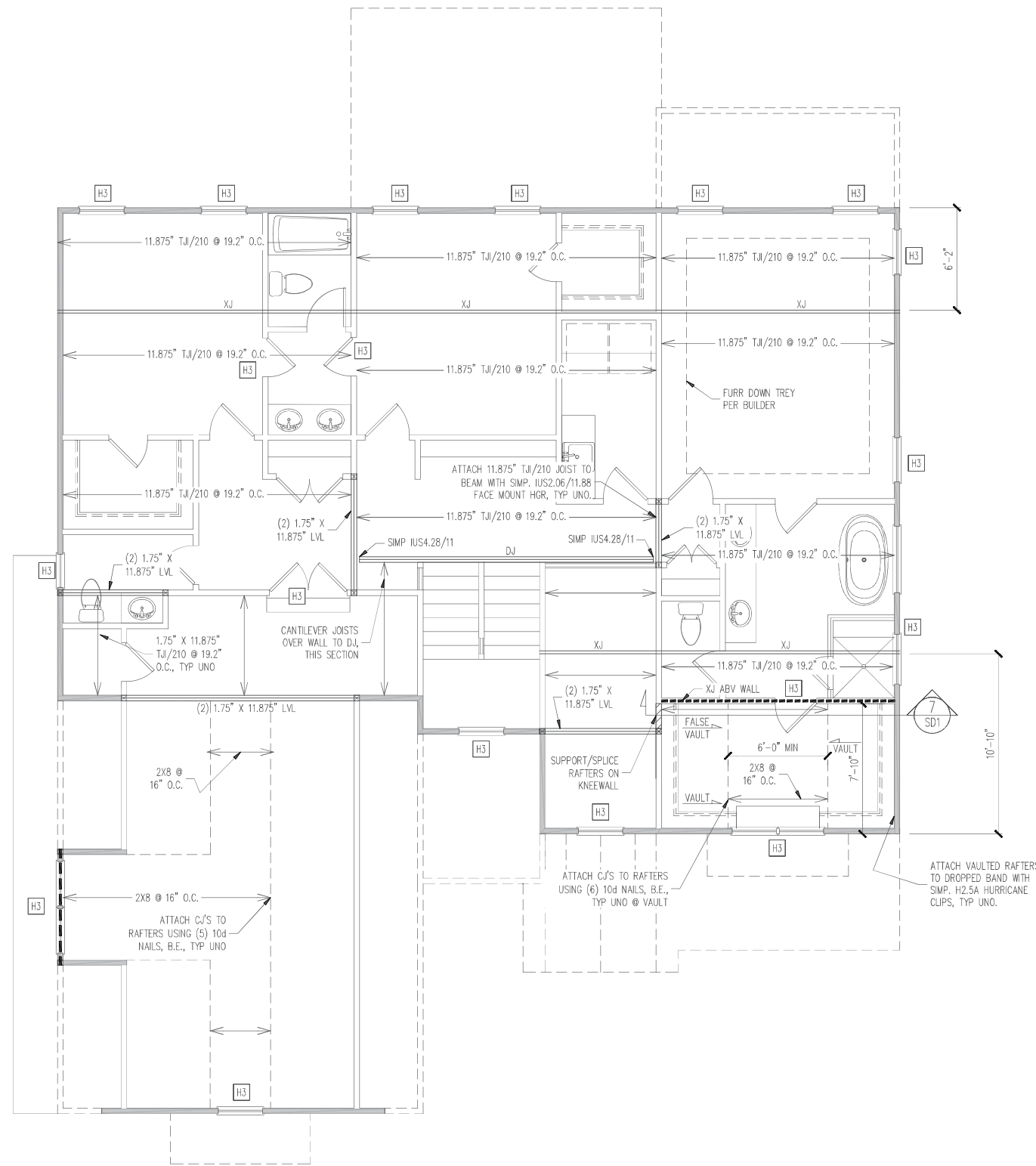
SHADED WALLS:  
 ALL EXTERIOR STUD WALLS, EXTERIOR SIDE, ARE TO BE CONTINUOUSLY SHEATHED WITH 7/16 APA RATED OSB NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.  
 WSP - ONE SIDE OF INTERIOR WALL OR INSIDE OF EXTERIOR WALL WITH 3/8" MIN. THICKNESS WOOD STRUCTURAL PANELING. ATTACH WSP TO STUD WALL WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.  
 T2 - SIMPSON LTT19 HOLDDOWN SECURED AS UPLIFT DEVICE TO CORNER STUDS OR KING/JACKS ATTACH TO FOUNDATION OR SLAB THROUGH P.T. SILL PLATE WITH 1/2" DIA. ANCHOR BOLT.  
 GB - INTERIOR BRACED WALL. 1/2" GB SECURED PER TABLE R602.10.2 OF THE 2018 NCRBC. (FASTENERS @ 7" O.C.) BOTH SIDES OF WALL, OR (FASTENERS @ 4" O.C.) ONE SIDE OF WALL AT STAIRS.  
 2X - SHEATH BOTH SIDES OF STUD WALL WITH 3/8" APA RATED OSB, NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.

NOTES:  
 PROVIDED CONTINUOUS SHEATHING = 225' MIN.  
 REFERENCE PART 16.02 OF CONSTRUCTION SPECIFICATIONS FOR GENERAL WIND BRACING INFORMATION.

1ST FLOOR FRAMING PLAN  
 WALLS AND CEILING  
 1/4" = 1'-0"







**CONSTRUCTION SPECIFICATIONS**  
**INSTANT REFERENCES**  
 REFER TO THE CONSTRUCTION SPECIFICATIONS SECTIONS FOR THE FOLLOWING INFORMATION:  
 PART 1.01: CURRENT GOVERNING CODE  
 PART 14: STUD SUPPORT FOR BEAMS  
 PART 17: KING STUDS FOR EXTERIOR WALLS  
 SEE DETAIL / CONSTRUCTION SPECIFICATIONS SHEETS FOR I-JOISTS ALLOWABLE SUBSTITUTIONS

**HEADER SCHEDULE**

|    |                                      |
|----|--------------------------------------|
| H1 | SINGLE 2X4 TURNED FLAT (A)           |
| H2 | (2) 2X4'S ON SINGLE JACKS (B)        |
| H3 | (2) 2X10'S ON SINGLE JACKS (C)       |
| H4 | (2) 1.75" X 9.25" LVL'S ON DBL JACKS |
| H5 | (2) 2X10'S ON DBL JACKS              |

-----

(A) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPENING 38" MAX.  
 (B) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPNG 38" TO 74" MAX.  
 (C) TYPICAL FOR ALL CONDITIONS NOT LISTED IN (A) OR (B) UNO.

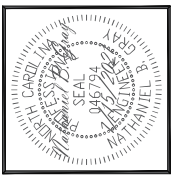
NOTES:  
 -HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED.

**WALL BRACING**  
 SHADED WALLS:  
 ALL EXTERIOR STUD WALLS, EXTERIOR SIDE, ARE TO BE CONTINUOUSLY SHEATHED WITH 7/16 APA RATED OSB NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.  
 NOTES:  
 PROVIDED CONTINUOUS SHEATHING = 181' MIN.  
 REFERENCE PART 16.02 OF CONSTRUCTION SPECIFICATIONS FOR GENERAL WIND BRACING INFORMATION.

**2ND FLOOR FRAMING PLAN**  
 WALLS AND CEILING  
 1/4" = 1'-0"

**STRUCTURAL ENGINEERS**  
 License No. C-3870  
 183 Wind Chime Court, Suite 100  
 Raleigh, North Carolina 27615  
 (919) 844-1661 Fax: (919) 844-1665

**Engineering Tech ASSOCIATES, P.A.**



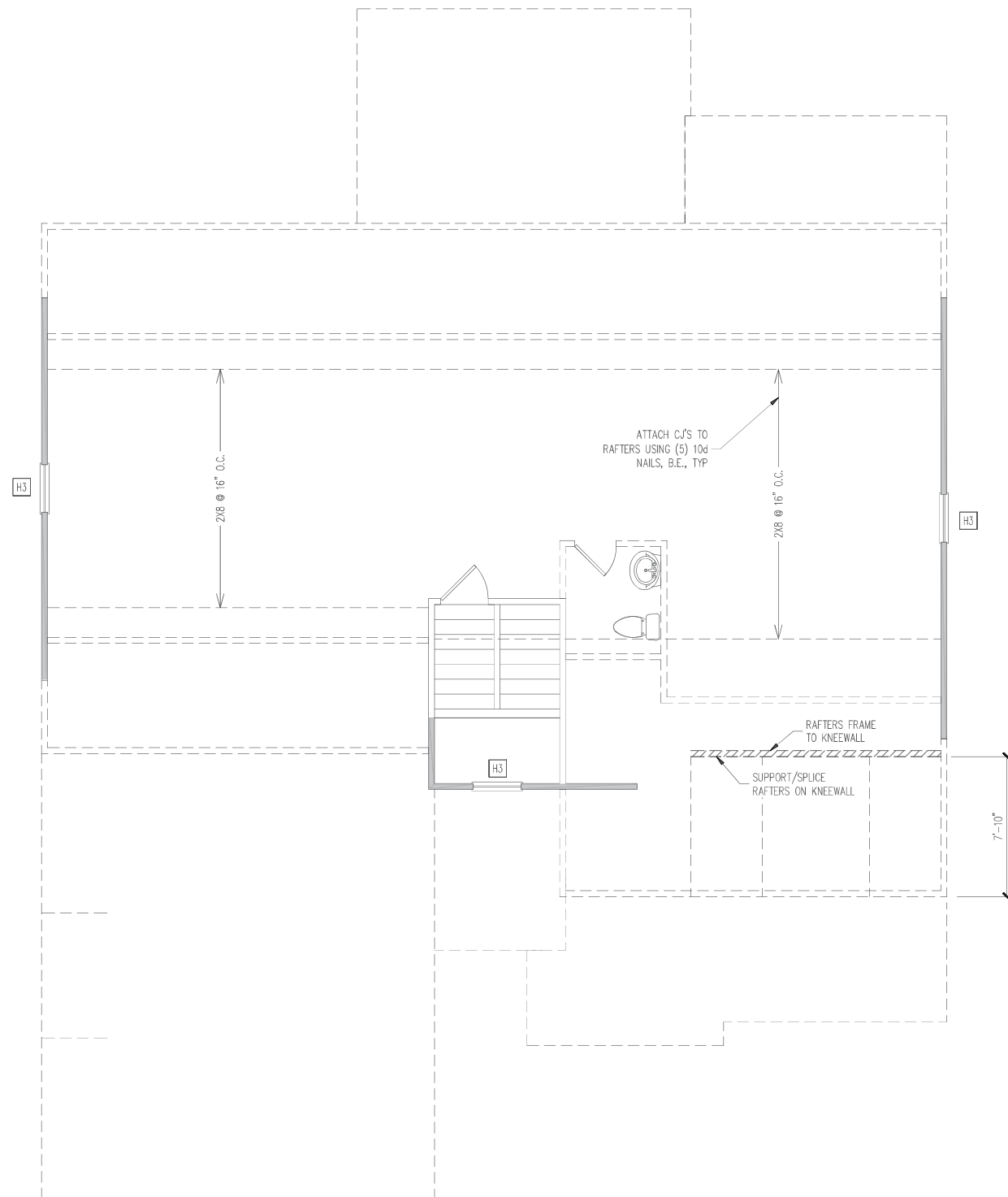
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|                |                     |              |           |
|----------------|---------------------|--------------|-----------|
| <b>CLIENT:</b> | ICG HOMES           |              |           |
| <b>SCOPE:</b>  | STRUCTURAL ADDENDUM |              |           |
| <b>LOT:</b>    | PERRY FARMS LOT 1   | <b>ENG:</b>  | NBG/CR    |
| <b>REY:</b>    |                     | <b>DATE:</b> | 7/15/2021 |

**PLAN NO.**  
M216-21

**PROJECT NO.**  
21-21-198

**SHEET NO.**  
S4  
4 of 7



**CONSTRUCTION SPECIFICATIONS**  
**INSTANT REFERENCES**

REFER TO THE CONSTRUCTION SPECIFICATIONS SECTIONS FOR THE FOLLOWING INFORMATION:

PART 1.01: CURRENT GOVERNING CODE

PART 14: STUD SUPPORT FOR BEAMS

PART 17: KING STUDS FOR EXTERIOR WALLS

SEE DETAIL / CONSTRUCTION SPECIFICATIONS SHEETS FOR I-JOISTS ALLOWABLE SUBSTITUTIONS

**HEADER SCHEDULE**

|    |                                      |
|----|--------------------------------------|
| H1 | SINGLE 2X4 TURNED FLAT (A)           |
| H2 | (2) 2X4'S ON SINGLE JACKS (B)        |
| H3 | (2) 2X10'S ON SINGLE JACKS (C)       |
| H4 | (2) 1.75" X 9.25" LVL'S ON DBL JACKS |
| H5 | (2) 2X10'S ON DBL JACKS              |

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(A) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPENING 38" MAX.

(B) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPNG 38" TO 74" MAX.

(C) TYPICAL FOR ALL CONDITIONS NOT LISTED IN (A) OR (B) UNO.

NOTES:  
 -HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED.

**WALL BRACING**

SHADED WALLS:

ALL EXTERIOR STUD WALLS, EXTERIOR SIDE, ARE TO BE CONTINUOUSLY SHEATHED WITH 7/16 APA RATED OSB NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.

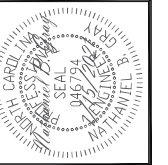
NOTES:  
 PROVIDED CONTINUOUS SHEATHING = 55" MIN.

REFERENCE PART 16.02 OF CONSTRUCTION SPECIFICATIONS FOR GENERAL WIND BRACING INFORMATION.

WALK-UP ATTIC FRAMING PLAN  
 WALLS AND CEILING  
 1/4" = 1'-0"

**Engineering Tech**  
**ASSOCIATES, P.A.**

STRUCTURAL ENGINEERS  
 License No. C-3870  
 183 Wind Chime Court, Suite 100  
 Raleigh, North Carolina 27615  
 (919) 844-1661 Fax: (919) 844-1665



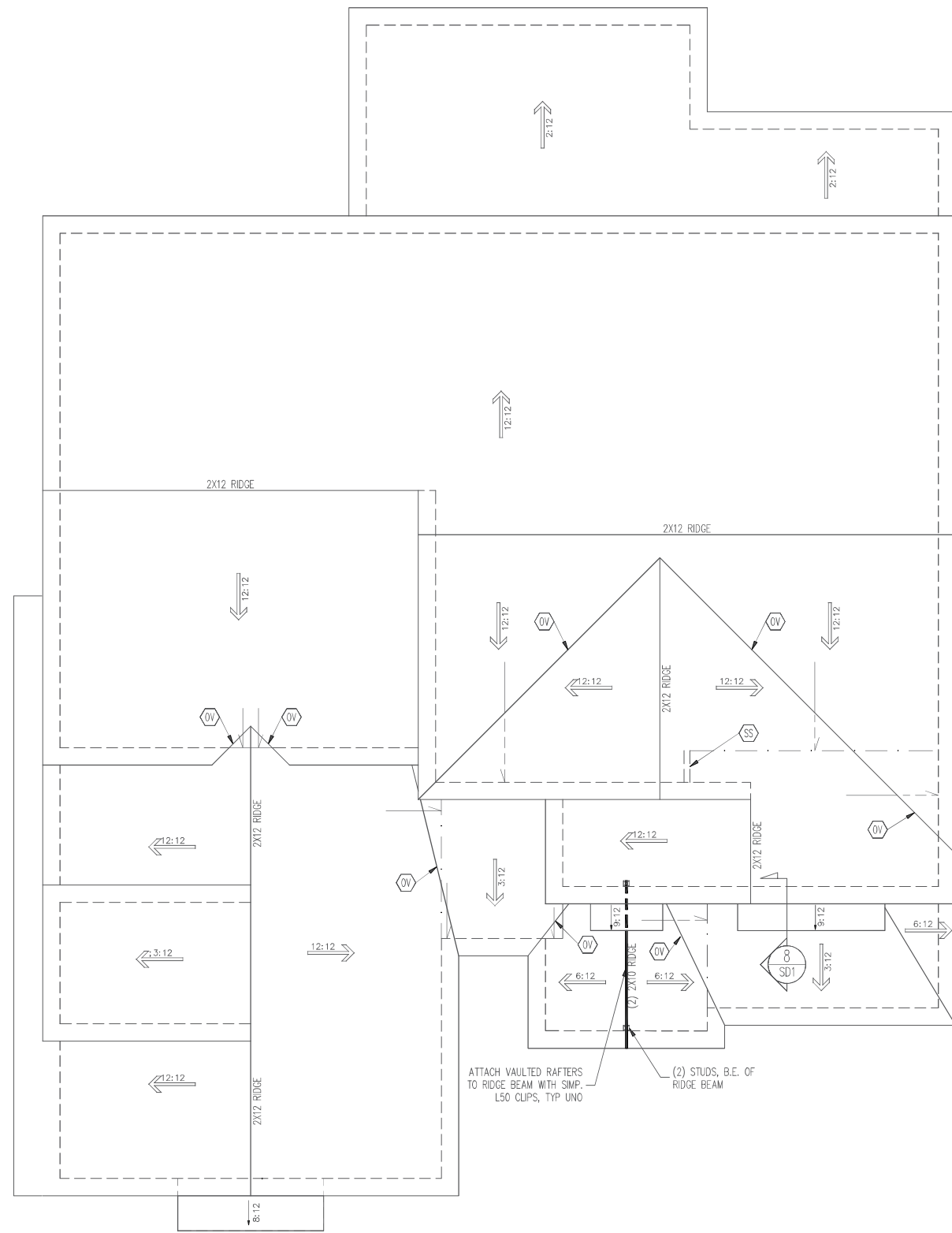
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|         |                   |                     |           |
|---------|-------------------|---------------------|-----------|
| CLIENT: | ICG HOMES         |                     |           |
|         | SCOPE:            | STRUCTURAL ADDENDUM |           |
| LOT:    | PERRY FARMS LOT 1 | ENG:                | NBG/CR    |
|         |                   | REV:                |           |
|         |                   | DATE:               | 7/15/2021 |

PLAN NO.  
**M216-21**

PROJECT NO.  
**21-21-198**

SHEET NO.  
**S5**  
 5 of 7




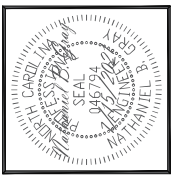
| FRAMING SCHEDULE |  |
|------------------|--|
| ROOF ONLY        |  |
| OV               | OVERFRAME VALLEY ( 2X10 SLEEPER )        |
| SS               | SUPPORT/SPLICE RAFTERS ON KNEEWALL BELOW |
| SB               | SUPPORT/SPLICE RAFTERS ON BEAM BELOW     |

| FRAMING NOTES   |  |
|---|--|
| ROOF ONLY   |  |
| -COMMON RAFTERS 2X8 @ 16" O.C. TYP U.N.O.   |  |
| -COLLAR TIES 2X4 EVERY 3RD SET OF RAFTERS TYP U.N.O.  |  |
| -VERIFY ALL KNEEWALL HEIGHTS, ROOF PITCHES, & ARCHITECTURAL OVERHANGS PRIOR TO CONSTRUCTION |  |

**ROOF FRAMING PLAN**  
1/4" = 1'-0"

  
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 License No. C-3870  
 183 Wind Chime Court, Suite 100  
 Raleigh, North Carolina 27615  
 (919) 844-1661 Fax: (919) 844-1665  
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|         |                     |      |        |
|---------|---------------------|------|--------|
| CLIENT: | ICG HOMES           |      |        |
| SCOPE:  | STRUCTURAL ADDENDUM |      |        |
| LOT:    | PERRY FARMS LOT 1   | ENG: | NBG/CR |
| REV:    |                     | REY: |        |
| DATE:   | 7/15/2021           |      |        |

PLAN NO.  
**M216-21**

PROJECT NO.  
**21-21-198**

SHEET NO.  
**S6**

6 of 7

# CONSTRUCTION SPECIFICATIONS

- PART 1: GENERAL**
- 1.01 CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
  - 1.02 DIMENSIONS SHOWN SHALL GOVERN OVER SCALE ON THESE DRAWINGS.
  - 1.05 METHODS, PROCEDURES AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR, WHO SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND INSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.
- PART 2: DESIGN LOADS**
- 2.01 DESIGN LOADS SHALL CONFORM WITH THE TABLE BELOW:

| USE   | LIVE LOAD (PSF) | DEAD LOAD (PSF)    |
|---|-----------------|--------------------|
| BALCONIES, DECKS, ATTICS WITH FIXED STAIR ACCESS, DWELLING UNITS INCLUDING ATTICS WITH FIXED STAIR ACCESS, STAIRS, FIRE ESCAPES | 40              | 10                 |
| GARAGES (PASSENGER CARS ONLY)   | 50              | 10                 |
| ATTICS (NO STORAGE, LESS THAN 5' HEADROOM)  | 10              | 10                 |
| ATTICS (WITH STORAGE)   | 20              | 10                 |
| ROOF  | 20              | 10 (15 FOR VAULTS) |

- PART 3: STRUCTURAL STEEL**
- 3.01 WIDE FLANGE BEAMS AND TEE SECTIONS SHALL CONFORM TO ASTM A392 MINIMUM GRADE.
  - 3.02 SQUARE AND RECTANGULAR TUBING SHALL CONFORM TO ASTM A500 GRADE B MINIMUM GRADE.
  - 3.03 STEEL PIPE SHALL CONFORM TO ASTM A53 GRADE B, TYPE S, MINIMUM GRADE.
  - 3.04 ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 MINIMUM GRADE.
- PART 4: WELDING**
- 4.01 WELDING ELECTRODES SHALL BE E70XX AND ALL WELDING SHALL BE PERFORMED BY AN AWS CERTIFIED WELDER.

- PART 5: CONCRETE AND SLABS ON GRADE**
- 5.01 CAST IN PLACE CONCRETE SHALL BE OF NORMAL WEIGHT, 60# AIR ENTRAINMENT AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS TYP UNO. ALL CONCRETE, INCLUDING CONCRETE FOR FOOTINGS, IS TO BE CAST IN PLACE, TYP UNO.
  - 5.02 REINFORCED CAST IN PLACE CONCRETE SHALL BE PROPORTIONED, MIXED AND PLACED IN ACCORDANCE WITH THE SPECIFICATIONS OF A308, LATEST EDITION.
  - 5.03 SLABS ON GRADE, IF ANY, SHALL CONTAIN SYNTHETIC POLYPROPYLENE FIBRILATED MICRO FIBERS, FIBER LENGTH 1 1/2", STRIKE RATE 1 1/2 LB/50 SQ YD SLAB TO BE PLACED ON A 6 MIL VAPOR BARRIER OR 2" MIN GRANULAR FILL ON SOIL WITH 90% MIN STANDARD PROCTOR DENSITY. VAPOR BARRIER MAY BE OMITTED FOR SLABS NOT IN ENCLOSED AREAS.
- PART 6: REBAR AND MISC. REINFORCEMENT**
- 6.01 REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615 GRADE 60 TYP UNO.
  - 6.02 LAP SPICES SHALL BE CLASS B AS DEFINED BY A308, TYP UNO.
  - 6.03 WIRE REINFORCEMENT SHALL BE 9 GA AND SHALL CONFORM TO ASTM A1064.

## NOTES

- THE BUILDER IS RESPONSIBLE FOR REVIEWING PLANS PRIOR TO CONSTRUCTION. THE BUILDER SHALL IMMEDIATELY CONTACT THE ENGINEER OF RECORD (EOR) BEFORE PROCEEDING IF THE FOLLOWING CONDITIONS ARE NOTED BEFORE OR DURING CONSTRUCTION:
- 1) THE WORKING PLANS DO NOT BEAR THE SEAL OF THE EOR
  - 2) THE PLANS CONTAIN DISCREPANT OR INCOMPLETE INFORMATION
  - 3) ANY ERRORS DUE TO A FAILURE TO FOLLOW THE ABOVE PROCEDURES SHALL NOT BE THE RESPONSIBILITY OF THE EOR. FURTHERMORE, IT IS THE RESPONSIBILITY OF THE BUILDER TO ENSURE THAT ANY REVISIONS ISSUED BY THE EOR ARE PROPERLY DISTRIBUTED TO THE SUBCONTRACTORS
- THE EOR DOES NOT PERFORM PENETRATION OR VENTING CALCULATIONS OR ANY OTHER CALCULATIONS THAT ARE NOT DIRECTLY RELATED TO STRUCTURAL ENGINEERING.
- ROOF AND FLOOR TRUSSES TO BE DESIGNED BY AN ENGINEER REGISTERED BY THE STATE. FINAL TRUSS DRAWING SHOULD BE SUBMITTED TO THE EOR FOR REVIEW.

## DECK SPECIFICATIONS

1. A DECK IS AN EXPOSED EXTERIOR WOOD FLOOR STRUCTURE WHICH MAY BE ATTACHED TO A STRUCTURE OR BE FREE STANDING. ROOFED PORCHES, OPEN OR SCREENED IN, MAY BE CONSTRUCTED USING THESE PROVISIONS.
2. SUPPORT POSTS SHALL BE SUPPORTED BY A FOOTING.
3. WHEN ATTACHED TO A STRUCTURE, THE STRUCTURE TO WHICH ATTACHED SHALL HAVE A TREATED WOOD BAND FOR THE LENGTH OF THE DECK, OR CORROSION RESISTANT FLASHING SHALL BE USED TO PREVENT MOISTURE FROM COMING IN CONTACT WITH THE UNTREATED FRAMING OF THE STRUCTURE. THE DECK BAND AND THE STRUCTURE BAND SHALL BE CONSTRUCTED IN CONTACT WITH EACH OTHER EXCEPT AT BREAK VENER AND WHERE PLYWOOD SHEATHING IS REQUIRED AND PROPERLY FLASHED. SIDING SHALL NOT BE INSTALLED BETWEEN THE STRUCTURE AND THE DECK BAND. IF ATTACHED TO A BRICK STRUCTURE, NEITHER FLASHING NOR A TREATED BAND FOR THE BRICK STRUCTURE IS REQUIRED. IN ADDITION, THE TREATED DECK BAND SHALL BE CONSTRUCTED IN CONTACT WITH THE BRICK.
4. WHEN THE DECK IS SUPPORTED AT THE STRUCTURE BY ATTACHING THE DECK TO THE STRUCTURE, THE FOLLOWING ATTACHMENT SCHEDULES SHALL APPLY FOR ATTACHING THE DECK BAND TO THE STRUCTURE:

| REQUIRED FASTENERS                        | JOIST LENGTH  |   |
|---|---|---|
|   | UP TO 8' MAX.   | UP TO 16' MAX.  |
| A. ALL STRUCTURES EXCEPT BRICK STRUCTURES | ONE - 5/8" # BOLT @ 42" O.C. AND (2) ROWS OF 1/2" X 4" W/ 4" OVERLAP @ 8" O.C. OR TWO ROWS OF SIMPSON SDW22400DB @ d = 32" O.C. STAGGERED | ONE - 5/8" # BOLT @ 20" O.C. AND (3) ROWS OF 1/2" X 4" W/ 4" OVERLAP @ 8" O.C. OR TWO ROWS OF SIMPSON SDW22400DB @ d = 16" O.C. STAGGERED |
| B. BRICK VENEER STRUCTURES                | ONE - 5/8" # BOLT @ 28" O.C.  | ONE - 5/8" # BOLT @ 10" O.C.  |

| REQUIRED FASTENERS                        | JOIST LENGTH                 |                              |
|---|------------------------------|------------------------------|
|   | UP TO 8' MAX.                | UP TO 16' MAX.               |
| A. ALL STRUCTURES EXCEPT BRICK STRUCTURES | ONE - 5/8" # BOLT @ 28" O.C. | ONE - 5/8" # BOLT @ 10" O.C. |

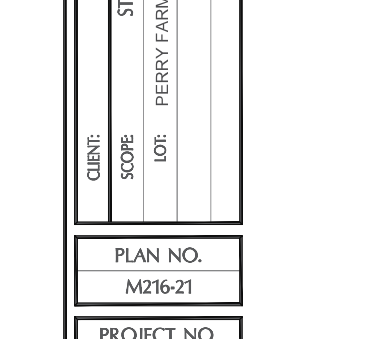
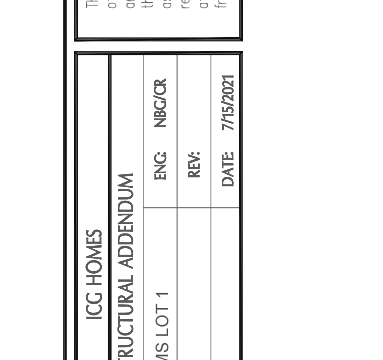
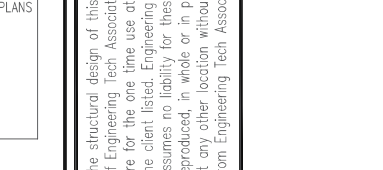
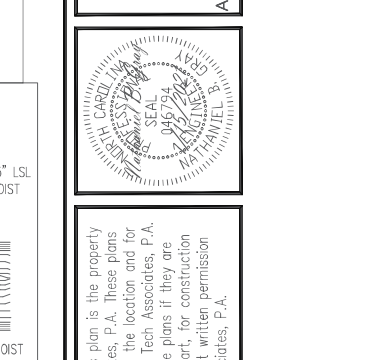
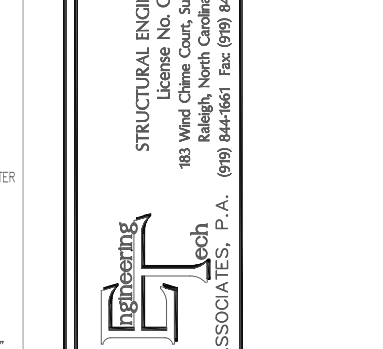
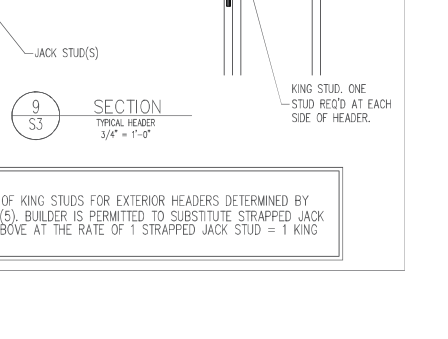
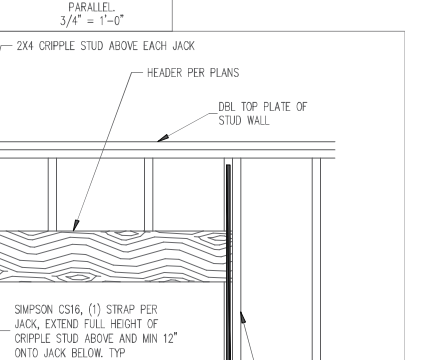
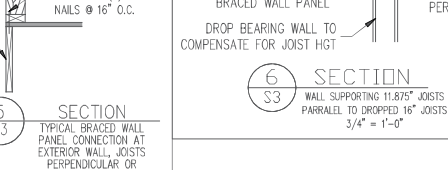
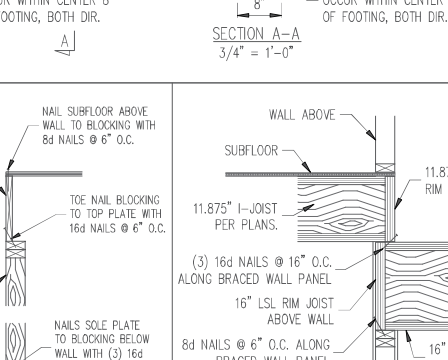
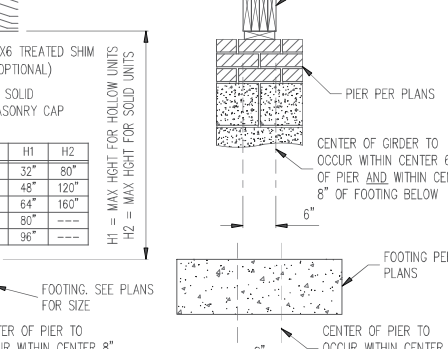
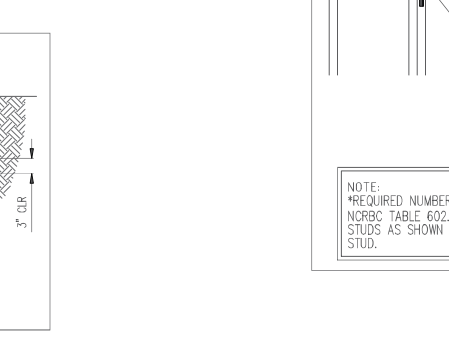
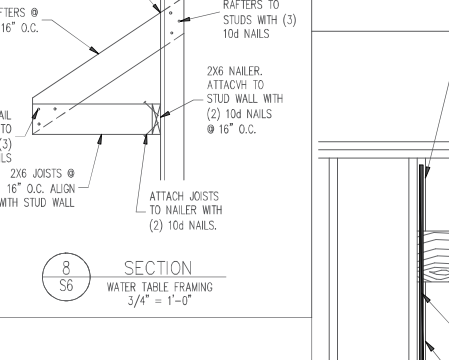
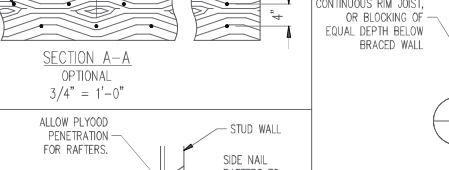
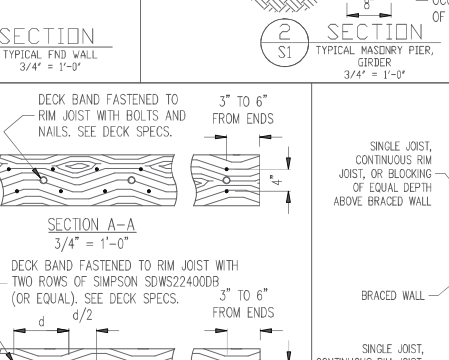
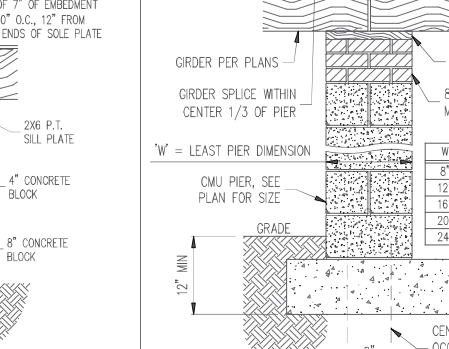
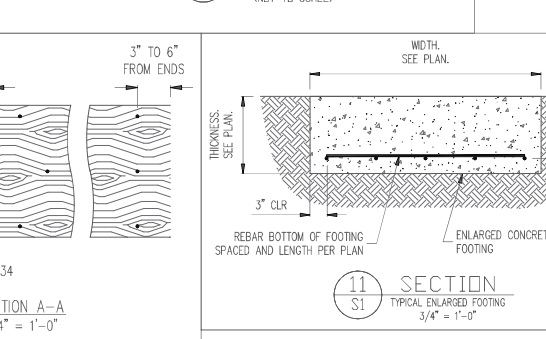
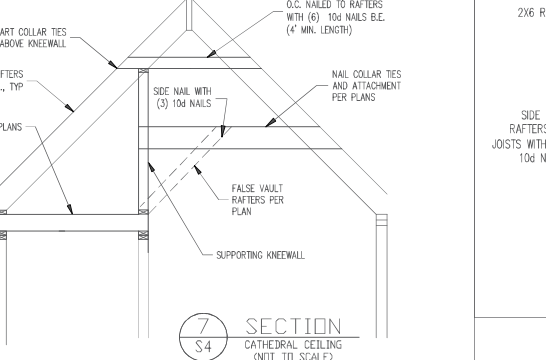
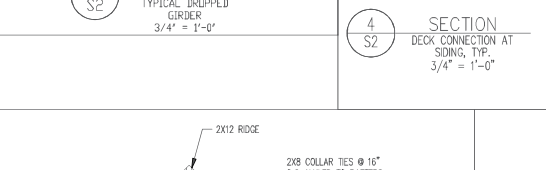
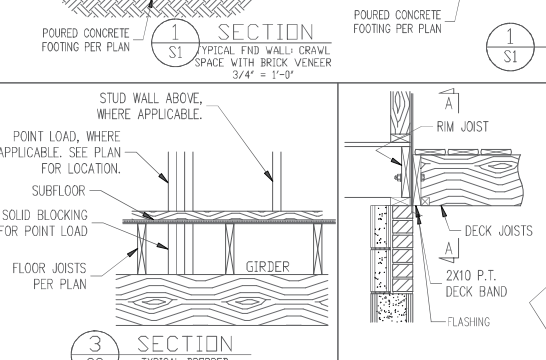
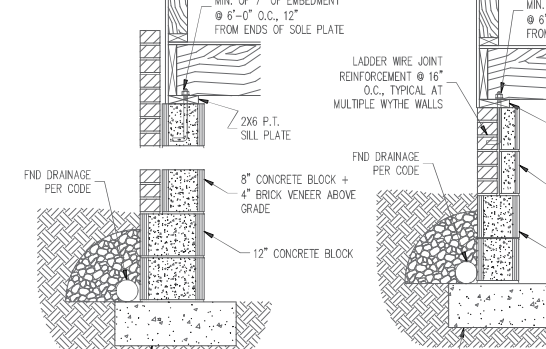
- NOTES:
- 1) ALL NAILS AND BOLTS ARE TO BE HOT DIP GALVANIZED.
  - 2) MINIMUM EDGE DISTANCE FOR BOLTS IS 1 1/2".
  - 3) NAILS MUST PENETRATE THE SUPPORTING STRUCTURE A MINIMUM OF 1 1/2".

- PART 7: MASONRY**
- 7.01 CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 AND C55, NORMAL WEIGHT, FM = 1,500 PSI MIN.
  - 7.02 CLAY MASONRY UNITS SHALL CONFORM TO ASTM C62-17 GRADE SW.
  - 7.03 MORTAR SHALL BE TYPE S, MORTAR AND GROUT SHALL CONFORM TO ASTM C476, MIN COMPRESSIVE STRENGTH OF 2000 PSI.
  - 7.04 MASONRY CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS OF ACI 530.
  - 7.05 LADDER WIRE REINFORCEMENT SHALL CONFORM TO ASTM A951. 6" MIN LAPS FOR CONTINUOUS WALL APPLICATIONS.
- PART 8: BOLTS AND LAG SCREWS**
- 8.01 BOLTS SHALL CONFORM TO ASTM A307 MINIMUM GRADE TYP UNO. INSTALL STANDARD STEEL WASHERS (ASTM F444-07A) FOR THE NUT / BOLT HEAD WHEN BOLLING WOOD MEMBERS.
  - 8.02 LAG SCREWS SHALL CONFORM TO ANSI/AIAE STANDARD B18.2.1-1981. PILOT HOLES SHALL BE USED FOR LAG SCREW INSTALLATION AND SHALL BE BORED ACCORDING TO NDS SPECIFICATIONS. INSTALL STANDARD STEEL WASHERS (ASTM F444-07A) FOR SCREW HEAD.

- PART 9: DRIVEN FASTENERS**
- 9.01 NAILS, SPIKES AND STAPLES SHALL CONFORM TO ASTM F 1667-05. NAILS ARE TO BE COMMON WIRE OR BOX.
- PART 10: DIMENSIONAL LUMBER**
- 10.01 SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SPRUCE PINE OR SYP #2 FOR JOISTS, RAFTERS, GIRDERS, BEAMS, STUDS, ETC.
- PART 11: FINISHED LUMBER**
- 11.01 LV OR PSL MINIMUM ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS:  
 E = 1.8 X 10<sup>6</sup> PSI, F<sub>b</sub> = 3000 PSI, F<sub>v</sub> = 285 PSI, F<sub>c</sub> = 750 PSI  
 LVL MINIMUM ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS:  
 E = 1.3 X 10<sup>6</sup> PSI, F<sub>b</sub> = 1700 PSI, F<sub>v</sub> = 400 PSI, F<sub>c</sub> = 680 PSI
- PART 12: PRESSURE TREATED LUMBER**
- 12.01 LUMBER IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE PRESURE TREATED IN ACCORDANCE WITH ANPA STANDARD C-15. ALL OTHER EXPOSED LUMBER SHALL BE TREATED IN ACCORDANCE WITH ANPA STANDARD C-2 OR BY ANY METHOD GIVING EQUAL PROTECTION. THE BUILDING CODE OFFICE MAY ALSO APPROVE A NATURAL DECAY RESISTANT WOOD PER SECTION 19-4(A).

- PART 13: STEEL FLUTE PLATE BEAMS**
- 13.01 FLUTE PLATE BEAMS SHALL CONSIST OF A CONTINUOUS STEEL FLUTE BOLTED BETWEEN TWO PIECES OF CONTINUOUS LUMBER AS SIZED ON THE PLANS. BOLT PICES TOGETHER USING 1/2" BOLTS SPACED AT 24" O.C. STAGGERED TOP TO BOTTOM OF THE BEAM. MAINTAIN A 2" EDGE DISTANCE. PLACE TWO BOLTS, ONE ABOVE THE OTHER, 6" ± 2" FROM EACH END OF THE BEAM.
- PART 14: STUD SUPPORTS FOR BEAMS**
- 14.01 STEEL ENGINEERED LUMBER, AND FLUTE PLATE BEAMS BEARING ON A STUD WALL SHALL BEAR AS FOLLOWS:

1-WHEN THE BEAM IS PERPENDICULAR TO, OR SKewed RELATIVE TO THE WALL, THE BEAM SHALL BEAR FULL WIDTH ON THE SUPPORTING WALL INDICATED AND SHALL BE SUPPORTED BY A MINIMUM OF THREE GANGED STUDS, OR A GANGED STUD COLUMN WITH A NUMBER OF STUDS AS SHOWN ON THE PLANS. THE MINIMUM WIDTH OF THE STUD COLUMN SHALL BE 6" MIN. THE BEAM BEARING ON THE END OF A STUD WALL PARALLEL TO THE BEAM SHALL BEAR A MINIMUM OF 4 1/2" ONTO THE WALL AND BE SUPPORTED BY A TYP. STUD GANGED COLUMN TYP UNO.

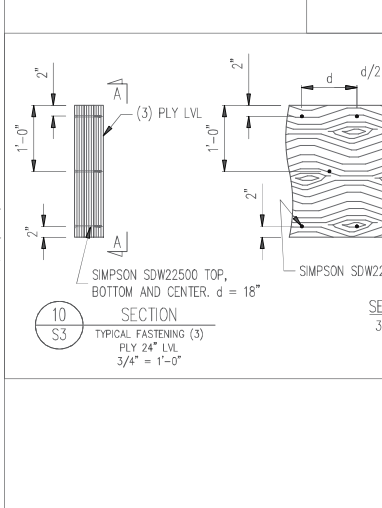


NOTE: \*REQUIRED NUMBER OF KING STUDS FOR EXTERIOR HEADERS DETERMINED BY NCRBC TABLE 602.3(5). BUILDER IS PERMITTED TO SUBSTITUTE STRAPPED JACK STUDS AS SHOWN ABOVE AT THE RATE OF 1 STRAPPED JACK STUD = 1 KING STUD.

### ALLOWABLE I-JOIST SUBSTITUTION

NOTE: MAINTAIN JOIST DEPTH, DIRECTION, AND SPACING SPECIFIED ON PLANS.

| MANUFACTURER  | DEPTH   | SERIES   | SIMPSON FACE  | SIMPSON TOP   |
|---------------|---------|----------|---------------|---------------|
|               |         |          |               | FLANGE HGR    |
| BULEWIL       | 11.875" | BU 40    | IUS2.56/11.88 | ITS2.57/11.88 |
| BRUCE CASCADE | 11.875" | BC 6000x | IUS2.57/11.88 | ITS2.57/11.88 |
| IN.TE. BEAMS  | 11.875" | IB 400   | IUS2.56/11.88 | ITS2.56/11.88 |
| LP CORP       | 11.875" | LP 204   | IUS2.56/11.88 | ITS2.56/11.88 |
| WOOD          | 11.875" | W 401    | IUS2.56/11.88 | ITS2.56/11.88 |
| ROSEBURG      | 11.875" | R9FI 40x | IUS2.56/11.88 | ITS2.56/11.88 |
| WEYERHAEUSER  | 11.875" | W12 210  | IUS2.06/11.88 | ITS2.06/11.88 |
| WEYERHAEUSER  | 11.875" | EE-20    | IUS2.57/11.88 | ITS2.57/11.88 |



9. ALL NAILS AND BOLTS ARE TO BE HOT DIP GALVANIZED.  
 10. MINIMUM EDGE DISTANCE FOR BOLTS IS 1 1/2".  
 11. NAILS MUST PENETRATE THE SUPPORTING STRUCTURE A MINIMUM OF 1 1/2".

**STRUCTURAL ENGINEERS**  
 License No. C-3870  
 183 Wind Chime Court, Suite 100  
 Raleigh, North Carolina 27615  
 (919) 844-1661 Fax: (919) 844-1665

**Engineering Tech ASSOCIATES, P.A.**

CAROLINA STATE UNIVERSITY  
 REGISTERED PROFESSIONAL SEAL  
 0457300  
 MA 11/16/16  
 MA 11/16/16

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|              |                     |       |           |
|--------------|---------------------|-------|-----------|
| CLIENT:      | ICG HOMES           | DATE: | 7/15/2021 |
| SCOPE:       | STRUCTURAL ADDENDUM | ENG:  | NRBC/K    |
| LOT:         | PERRY FARMS LOT 1   | REV:  |           |
| PLAN NO.:    | M216-21             |       |           |
| PROJECT NO.: | 21-21-198           |       |           |
| SHEET NO.:   | SD1                 |       |           |
|              | 7 of 7              |       |           |



**McMillan Design**  
 123 S. White St. Wake Forest, NC 27587  
 Office: 919.263.1509 / Fax: 919.263.1512  
 www.mcmillan-design.com

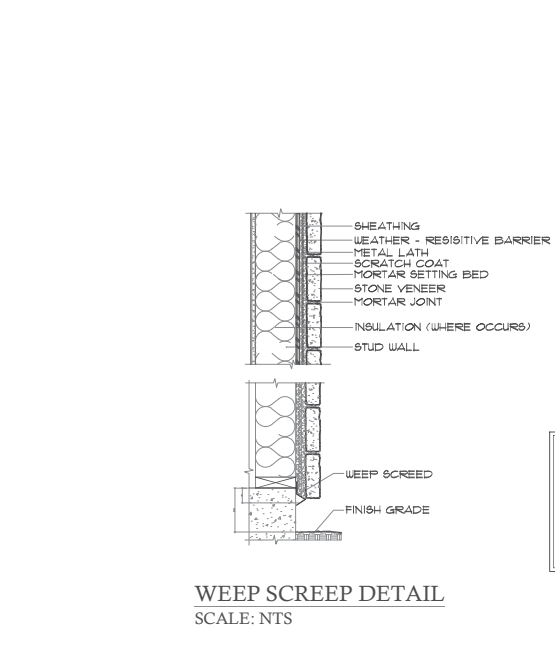
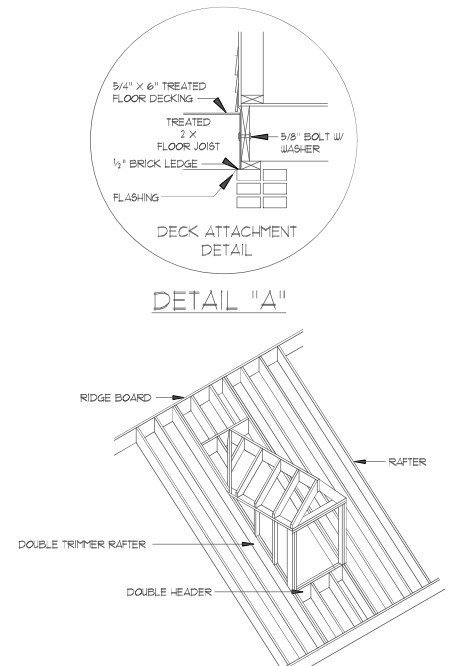
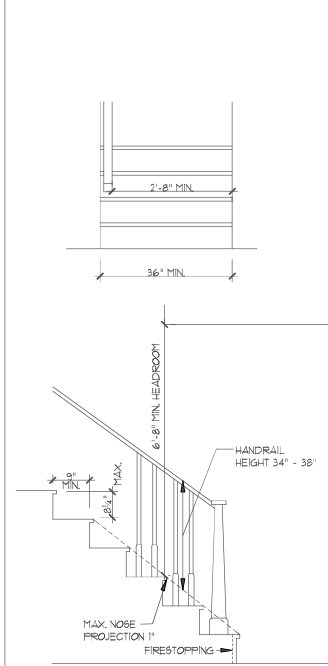
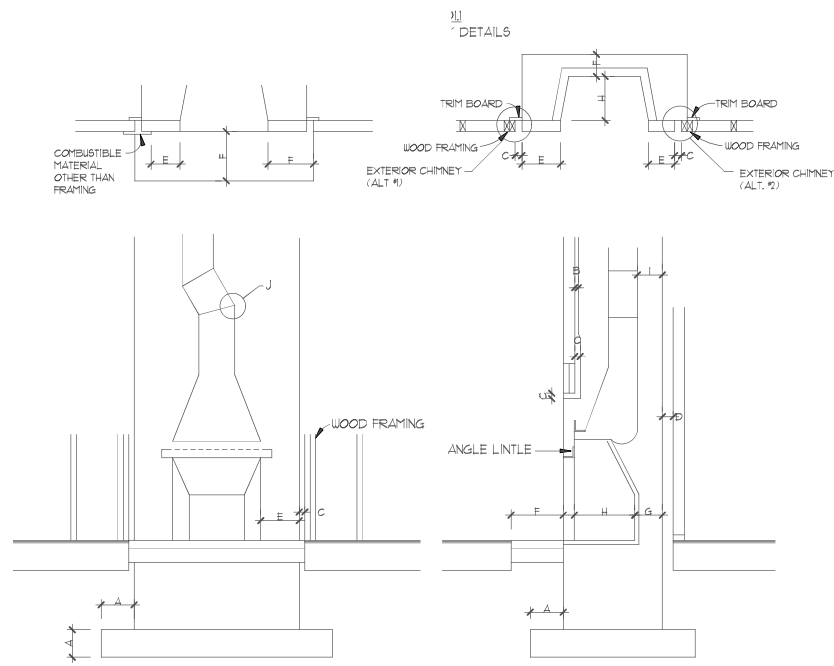
TYPICAL DETAILS

DETAIL SHEET

| REVISIONS |      |
|-----------|------|
| NUMBER    | DATE |
|           |      |
|           |      |
|           |      |
|           |      |
|           |      |
|           |      |

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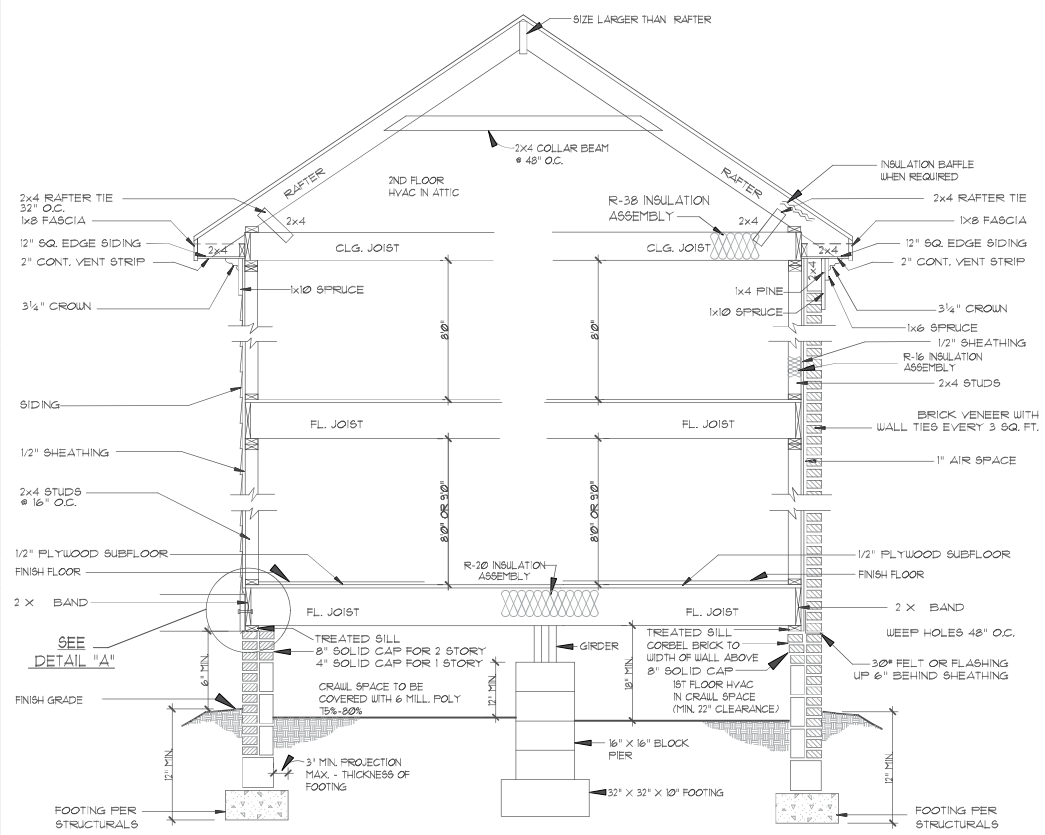
Plan Number  
**TYPICAL**  
 Sheet No. **D1**  
 Drawn By: **MMc.**  
 Date: **10-01-19**



**ELEVATION NOTES**  
 BUILDING CODES:  
 THIS PLAN HAS BEEN DESIGNED UNDER THE NC BUILDING CODES, 2008 RESIDENTIAL EDITION.  
 ICE GUARDS:  
 ICE GUARD 4 WATER SHIELD REQUIRED ON ALL ROOF SLOPES 4:12 & LESS PER NCRC

| ITEM                                       | LETTER | REQUIREMENT   |
|--|--------|---|
| <b>FOOTING:</b>                            |        |   |
| THICKNESS                                  | A      | 12" MINIMUM   |
| PROJECTION PASSED CHIMNEY                  | A      | 12" MINIMUM ALL SIDES   |
| <b>MORTAR:</b>                             |        |   |
| FIREBRICK                                  |        | REFRACTORY  |
| FLUE LINING                                |        | TYPE M, S, N OR REFRACTORY  |
| MASONRY OTHER THAN ABOVE                   |        | TYPE M, S OR N  |
| <b>MASONRY SUPPORT (LINTELS):</b>          |        | MASONRY, CONCRETE OR STEEL (3 1/2" X 3 1/2" X 5/16" MIN)  |
| <b>ASH DUMP</b>                            |        | NOT REQUIRED, HOWEVER WHEN USED MUST BE FIREPROOF AND MINIMUM 5" DIAMETER DOOR  |
| <b>CLEARANCES:</b>                         |        |   |
| WOOD FRAMING                               | B      | 1" CHIMNEY MASONRY (EXCEPTION: MASONRY CHIMNEYS COMPLETELY ON THE EXTERIOR OF A BUILDING AGAINST THE SHEATHING ARE NOT REQUIRED TO COMPLY WITH THESE PROVISIONS.)                       |
|  | C      | 2" FIREPLACE MASONRY EXCLUDING FACING MATERIAL  |
|  | D      | 4" AT BACK OF FIREPLACE MASONRY   |
| COMBUSTIBLE MATERIAL                       | E      | 6" FROM EDGES OF FIREPLACE OPENING EXCEPT MATERIAL ABOVE FIREPLACE OPENING PROJECTING MORE THAN 1 1/2" FROM THE FACE OF THE FIREPLACE SHALL BE A MINIMUM OF 12" ABOVE FIREPLACE OPENING |
| ABOVE ROOF                                 |        | 2" ABOVE HIGHEST POINT OR 2" HIGHER THAN ANY PORTION OF BUILDING WITHIN 10'   |
| <b>HEARTH EXTENSION:</b>                   |        |   |
| F/P FENING (6 SQ. FT.)                     | F      | 8" EACH SIDE OF OPENING, 16" IN FRONT OF FACING MATERIAL  |
| F/P OPENING (6 SQ. FT. OR)                 | F      | 12" EACH SIDE OF OPENING, 20" IN FRONT OF FACING MATERIAL   |
| <b>THICKNESS OF FIREBOX WALLS:</b>         | G      | BACK 4 SIDE WALLS 6" SOLID MASONRY OR REINFORCED CONCRETE WITH MINIMUM 2" THICKNESS FIREBRICK OR REFRACTORY MATERIAL. (EXCEPTION: 12" SOLID MASONRY WALLS REQUIRE NO LINING)            |
| <b>FIREBOX DEPTH:</b>                      | H      | 16" FROM FACE OF FIREPLACE  |
| <b>FLUE REQUIREMENTS:</b>                  |        |   |
| WALLS AROUND FLUE                          | I      | FLUE SHALL BE ENCASED IN NOT LESS THAN 4" OF SOLID MASONRY.   |
| DISTANCES BETWEEN ADJACENT FLUES           |        | TWO FLUES ADJOINING EACH OTHER SHALL HAVE JOINTS STAGGERED 1"   |
|  |        | MORE THAN 2 FLUES IN SAME CHIMNEY REQUIRE 4" W/ THE SEPARATION SO THAT NO MORE THAN TWO FLUES ADJOIN WITHOUT A W/ THE SEPARATION  |
| TYPE OF MORTAR                             |        | TYPE M, S, N OR REFRACTORY MORTAR WITH CLOSE FITTING JOINTS LEFT SMOOTH ON THE INSIDE   |
| THICKNESS                                  |        | 3/8" MINIMUM WITH VARIATION OF 1/8" IN WALLS  |
| EFFECTIVE FLUE AREA (SEE TABLES 16A & 16B) |        | RECTANGULAR 1/10 OF FIREPLACE OPENING, ROUND 1/12 OF FIREPLACE OPENING  |
| SLOPE                                      | J      | MAXIMUM 30 DEGREES FROM VERTICAL WITH MITERED JOINTS  |

THE NET FREE AREA OF SQUARE OR RECTANGULAR FLUES AS LISTED IN TABLE 16A SHALL NOT BE LESS THAN 1/10 THE FACE AREA OF THE FIREPLACE OPENING. THE NET FREE AREA OF ROUND FLUES AS LISTED IN TABLE 16B SHALL NOT BE LESS THAN 1/12 THE FACE AREA OF THE FIREPLACE OPENING. THE COMBINED AREAS OF ALL FACES SHALL BE USED.



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

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

**ATTIC ACCESS:**  
 ATTIC SPACES SHALL BE PROVIDED WITH AN INTERIOR ACCESS OPENING NOT LESS THAN 21" X 30". ACCESS OPENING SHALL BE READILY ACCESSIBLE AND PROVIDED WITH A LID OR DEVICE THAT MAY BE EASILY REMOVED OR OPERATED. WHEN MECHANICAL EQUIPMENT IS TO BE INSTALLED IN THE ATTIC, AND ONLY INTERIOR ACCESS IS TO BE PROVIDED, THE ACCESS OPENING SHALL BE NOT LESS THAN SPECIFIED ABOVE, BUT IN NO CASE LESS THAN THE SIZE REQUIRED TO INSTALL OR REMOVE THE LARGEST MAJOR COMPONENT OF THE UNIT WITHOUT DISASSEMBLY.  
 EXCEPTION: CONCEALED AREAS NOT LOCATED OVER THE MAIN STRUCTURE INCLUDING PORCHES, KNEEWALLS LESS THAN 5' IN HEIGHT, DORMERS, BAY WINDOWS, ETC. ARE NOT REQUIRED TO HAVE ACCESS.

**CRAWL SPACE ACCESS** - MINIMUM SIZE IS 36" X 22"

**SAFETY GLAZING:**  
 ALL SAFETY GLAZING MATERIALS MUST BE PERMANENTLY LABELED TO INDICATE IT CONFORMS TO ANSI Z97.1. LAMINATED GLASS MAY BE PERMANENTLY LABELED OR ACCOMPANIED BY A CERTIFICATE CERTIFYING CONFORMANCE TO ANSI Z97.1.  
 SAFETY GLAZING MATERIAL MUST BE USED FOR THE FOLLOWING SPECIFIED HAZARDOUS LOCATIONS:

1. ALL BATHUB DOORS AND ENCLOSURES
2. ALL SHOWER DOORS AND ENCLOSURES
3. ALL STORM DOORS OR COMBINATION DOORS
4. ALL SLIDING GLASS DOORS (PATIO TYPE)
5. ALL SURGING EXIT AND ENTRANCE DOORS BOTH FRAMED AND UNFRAMED
6. ALL GLAZING IN FIXED PANELS HAVING A GLAZED AREA IN EXCESS OF 9 SQ. FT. WITH LOWEST EDGE LESS THAN 18" ABOVE THE FINISHED FLOOR LEVEL, SIDEWALKS, PATIOS OR DESIGNED WALKING SURFACE ON EITHER SIDE WITHIN 36" OF SUCH GLAZING (INCLUDES GLAZED PANELS IN MULTI-STORY STRUCTURES).

**CRICKETS AND SADDLES:**

CRICKETS OR CHIMNEY SADDLES SHALL BE INSTALLED ON THE UPPER SIDE OF ALL CHIMNEYS GREATER THAN 30" WIDE WHICH RUN PARALLEL TO BUT DO NOT INTERSECT THE RIDGEL. THEY SHALL BE COVERED AND FLASHED SO AS NOT TO LEAK.

**STAIR WIDTH:**

INTERIOR 2'-8" CLEAR OF HANDRAIL  
 EXTERIOR 3'-0" MINIMUM WIDTH

**HANDRAIL AND GUARDRAIL:**

HEIGHT FOR STEPS 30" MINIMUM  
 HEIGHT FOR ALL OTHER RAILS 36" MINIMUM

**NOTE:** EVERY PORCH, DECK, TERRACE, RAISED PORCH SURFACE OR ENTRANCE PLATFORM WITH A HEIGHT ABOVE FINISHED GRADE OR SURFACE OF 2'-6" TO 6'-0" SHALL HAVE GUARDRAILS WITH INTERMEDIATE RAILS OR ORNAMENTAL PATTERNS SUCH THAT AN 18" SPHERE CANNOT PASS THROUGH ANY OPENINGS. WHEN THE PORCH, DECK, TERRACE, RAISED PORCH SURFACE OR ENTRANCE PLATFORM IS AT A HEIGHT GREATER THAN 6'-0" ABOVE FINISHED GRADE OR SURFACE, THE GUARDRAILS SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL PATTERNS SUCH THAT A 6" SPHERE CANNOT PASS THROUGH ANY OPENING. THE HEIGHT OF THE GUARDRAIL SHALL BE A MINIMUM OF 36".

**FOOTINGS:** SEE FOUNDATION PLAN ENGINEERED FOOTING

**MAXIMUM UNSUPPORTED PIER HEIGHT:**

|           | HOLLOW MASONRY | SOLID MASONRY |
|-----------|----------------|---------------|
| 8' X 16"  | 32"            | 80"           |
| 16' X 16" | 64"            | 13'-4"        |

**CRAWL SPACE DEBRIS:**

CRAWL SPACE GROUND SHALL BE FREE OF ALL DEBRIS, SOIL, TREE STUMPS AND OTHER ORGANIC MATERIAL AND PROVIDE A SMOOTH SURFACE FREE OF POCKETS. WHERE SOIL CONDITIONS EXIST WHICH IMPEDE WATER ABSORPTION OR NATURAL DRAINAGE, A POSITIVE DRAIN SHALL BE PROVIDED.

**MINIMUM SHELF ANGLE:** 6" X 4" 5/16" WITH LONGER LEG VERTICAL

**ALLOWABLE SPANS FOR LINTELS SUPPORTING MASONRY VENER:**

| SIZE OF ANGLES (13)    | MAXIMUM SPAN (24) |
|------------------------|-------------------|
| 3 1/2" X 3 1/2" X 1/2" | 6'-0"             |
| 5" X 3 1/2" X 5/16"    | 10'-0"            |

**FOOTNOTES:**

- (1) LONG LEG OF THE ANGLE SHALL BE PLACED IN A VERTICAL POSITION.
- (2) SPANS OVER 4' SHALL BE SHORED UP UNTIL CURED.
- (3) STEEL MEMBERS INDICATED ARE ADEQUATE TYPICAL EXAMPLES; OTHER STEEL MEMBERS, INCLUDING LIGHT GAUGE STEEL, MEETING STRUCTURAL DESIGN REQUIREMENTS MAY BE USED.
- (4) SPANS OVER 10'-0" SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER.

MAXIMUM PROJECTION FOR FLOOR JOIST IS 15" EXCEPT WHERE STRUCTURAL SYSTEM SUPPORTS ONLY THE FLOOR & ROOF LOAD OF BAY WINDOW (SEE SKETCH APPENDIX 'C' VOL. 15 N.C. UNIFORM RESIDENTIAL BUILDING CODE) OR WHEN DESIGNED BY PROFESSIONAL.

COLLAR BEAM (2" X 4" MIN) SHALL BE INSTALLED ON AT LEAST EACH THIRD PAIR OF RAFTERS AND SHALL BE DOUBLE NAILED.

MASONRY VENEER SHALL NOT EXCEED 35' IN HEIGHT ABOVE FOUNDATION AND SHALL BE ANCHORED BY CORROSION RESISTANT METAL TIES SPACED NO MORE THAN 16" VERTICALLY AND 32" HORIZONTALLY.