

PLANS DESIGNED TO THE 2018 IRC WITH NORTH CAROLINA RESIDENTIAL CODE AMENDMENTS

HOUSE DESIGNED FOR 115 MPH, EXPOSURE B

ANCHOR BOLTS SHALL BE MIN. 1/2" DIAMETER & SHALL EXTEND A MINIMUM 7" INTO MASONRY OR CONCRETE. ANCHOR BOLTS TO BE NO MORE THAN 6' O.C. AND WITHIN 12" OF THE CORNER.

WALL BRACING IS PER THE PRESCRIPTIVE CONTINUOUS SHEATHING METHOD, (R602), PROVIDING MIN 7/16" OSB W/ 6" EDGE AND 12" FIELD FASTENING. SEE PAGE S-1 FOR MORE INFORMATION

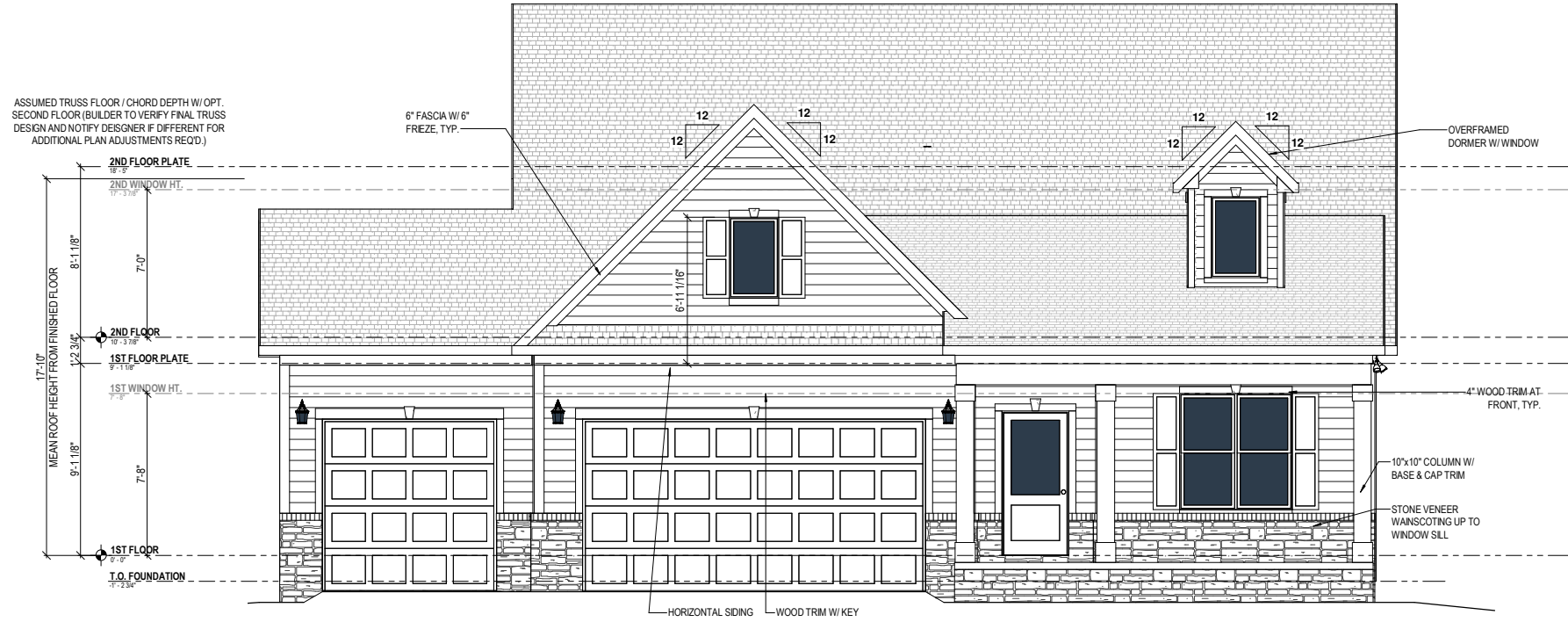
SIDING PER COMMUNITY REQUIREMENT. GUTTERS PER COMMUNITY REQUIREMENT.

| Heated SQFT | |
|-------------------|----------------|
| Description | Area |
| 1st Floor Livable | 2203 SF |
| 2nd Floor Livable | 709 SF |
| Total | 2912 SF |

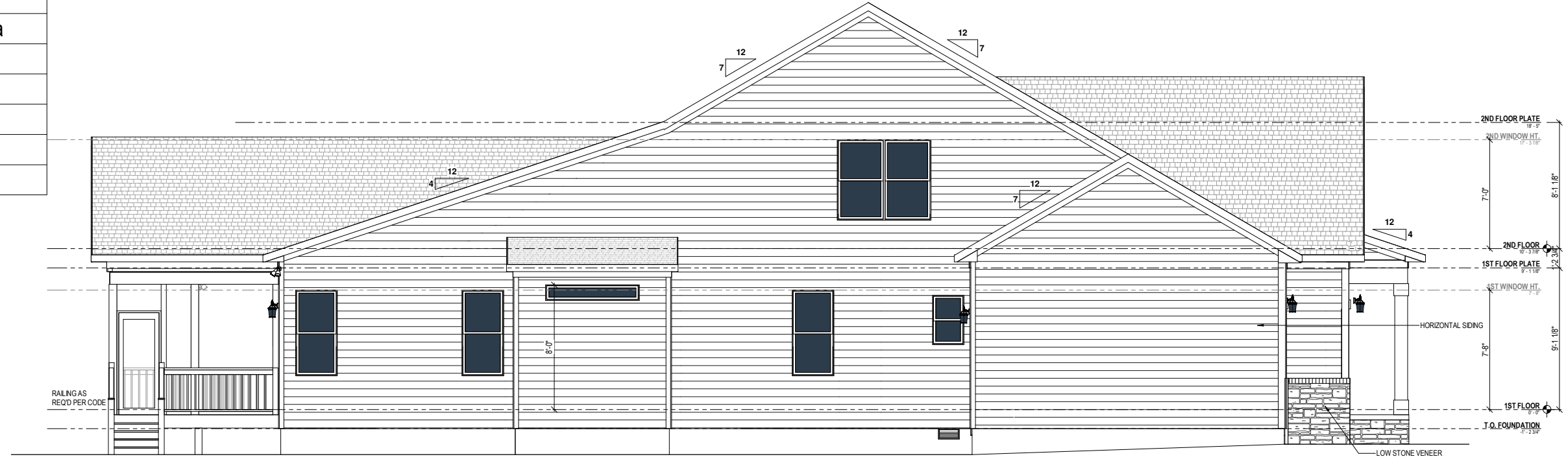
| Unheated SQFT | |
|----------------|--------|
| Description | Area |
| Garage | 438 SF |
| 3rd Car Garage | 240 SF |
| Front Porch | 191 SF |
| Screened Porch | 198 SF |
| Deck | 238 SF |

MEAN ROOF HGT = 17'-10"

ENERGY COMPLIANCE MINIMUMS
 MAX GLAZING U-FACTOR = 0.35
 WALL R-VALUE = 15
 CEILING R-VALUE = 38
 FLOOR R-VALUE = 19



1 FRONT ELEVATION - 1
 1aS1 1/8" = 1'-0" WHEN PRINTED ON 11"x17" / ANSI B PAPER SIZE



2 LEFT ELEVATION - 1
 1aS1 1/8" = 1'-0" WHEN PRINTED ON 11"x17" / ANSI B PAPER SIZE



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DESIGN BY PLANWORX
 ARCHITECTURE PA

Tillery 9' - OYL NC1 111

Caruso Homes

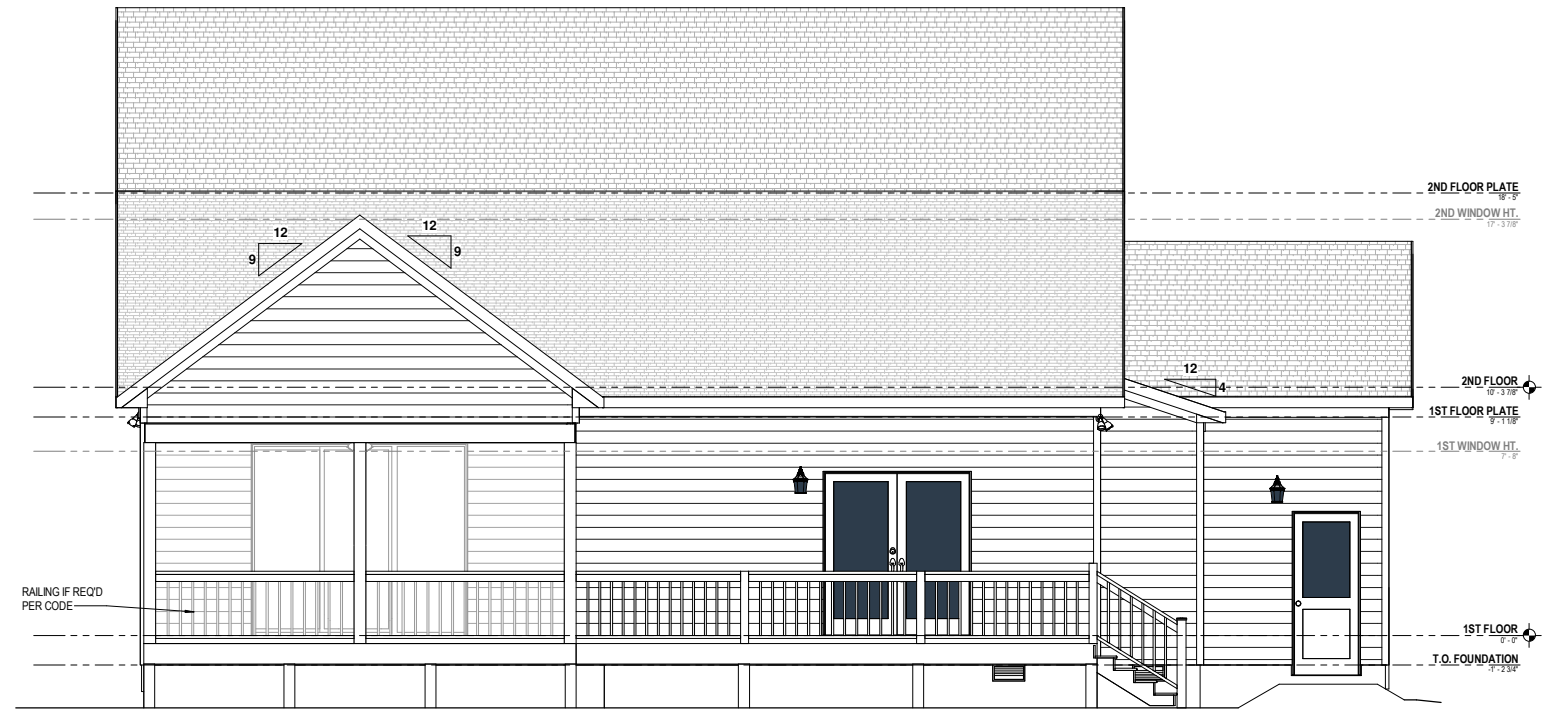
Front & Left Elevation 1

Date: 10/27/2023

Drawn By: RDC

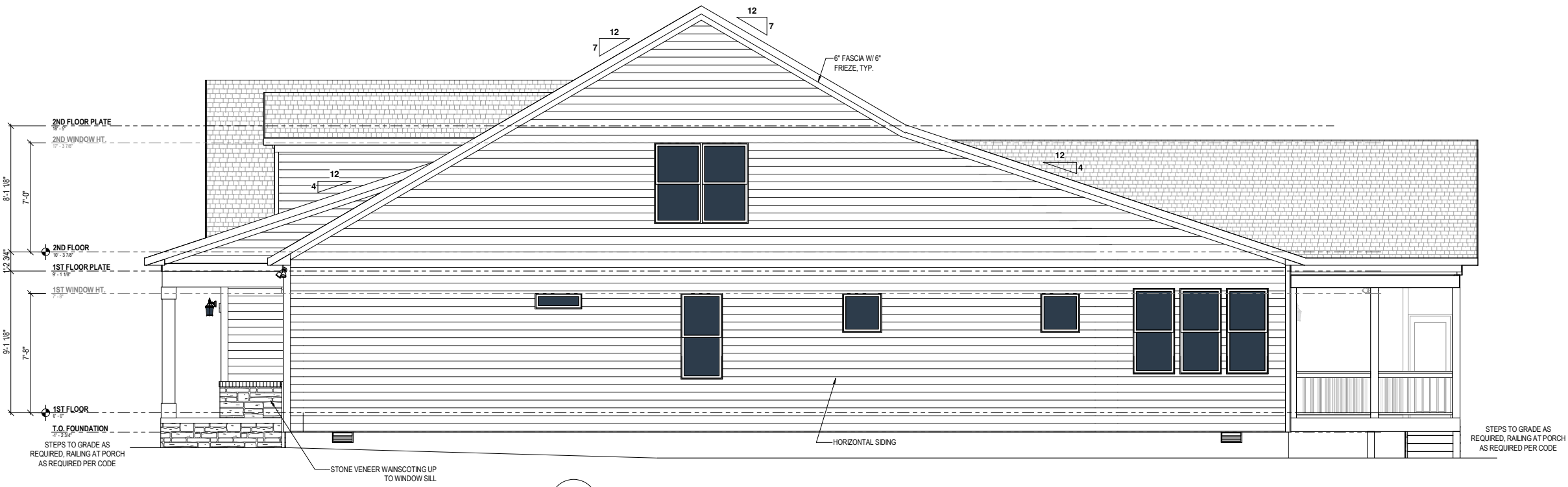
Checked By: SGM

1aS1



1 REAR ELEVATION - 1
1aS2 1/8" = 1'-0" WHEN PRINTED ON 11"x17" / ANSI B PAPER SIZE

STEPS TO GRADE AS REQUIRED, RAILING AS REQUIRED PER CODE



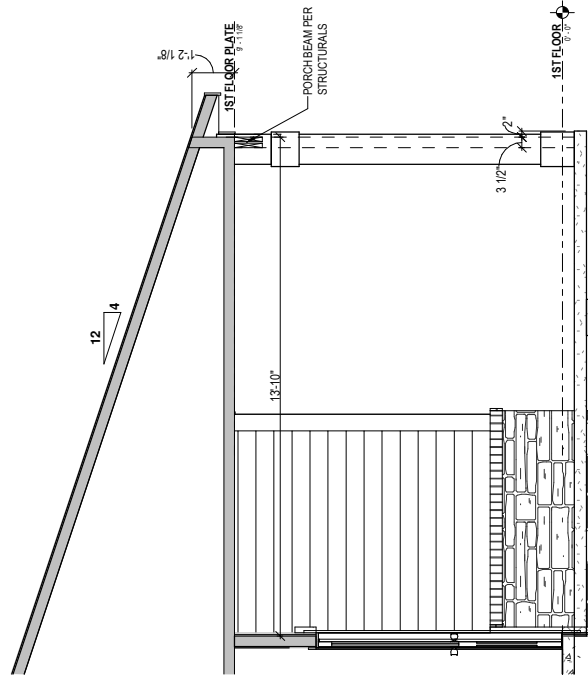
2 RIGHT ELEVATION - 1
1aS2 1/8" = 1'-0" WHEN PRINTED ON 11"x17" / ANSI B PAPER SIZE

STEPS TO GRADE AS REQUIRED, RAILING AT PORCH AS REQUIRED PER CODE

STEPS TO GRADE AS REQUIRED, RAILING AT PORCH AS REQUIRED PER CODE

Roof Vent Calculations

SQFT. REQUIRED $3,270 / 150 = 21.8$ SQFT.

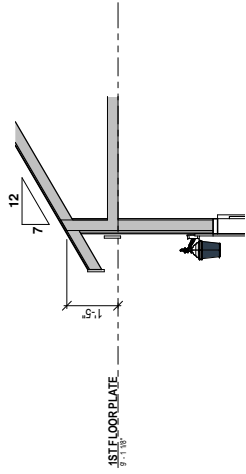


5 FRONT PORCH
3/16" = 1'-0" WHEN PRINTED ON 11" X 17" / ANSI B PAPER SIZE

2FL

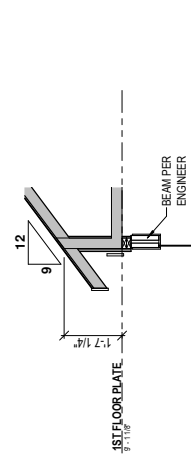
6 3RD CAR GARAGE
3/16" = 1'-0" WHEN PRINTED ON 11" X 17" / ANSI B PAPER SIZE

2FL



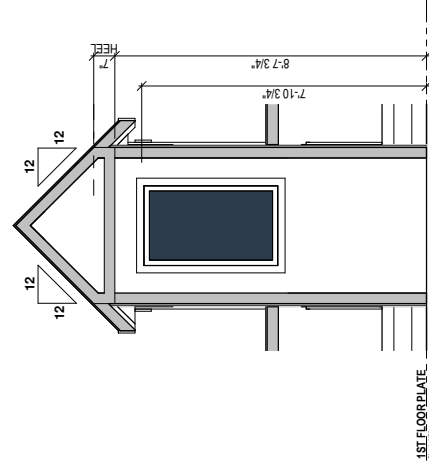
7 SCREENED PORCH
3/16" = 1'-0" WHEN PRINTED ON 11" X 17" / ANSI B PAPER SIZE

2FL



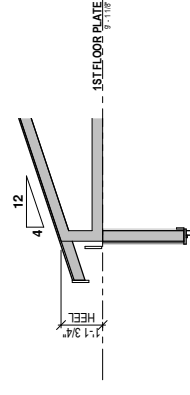
4 OVERFRAMED DORMER
3/16" = 1'-0" WHEN PRINTED ON 11" X 17" / ANSI B PAPER SIZE

2FL



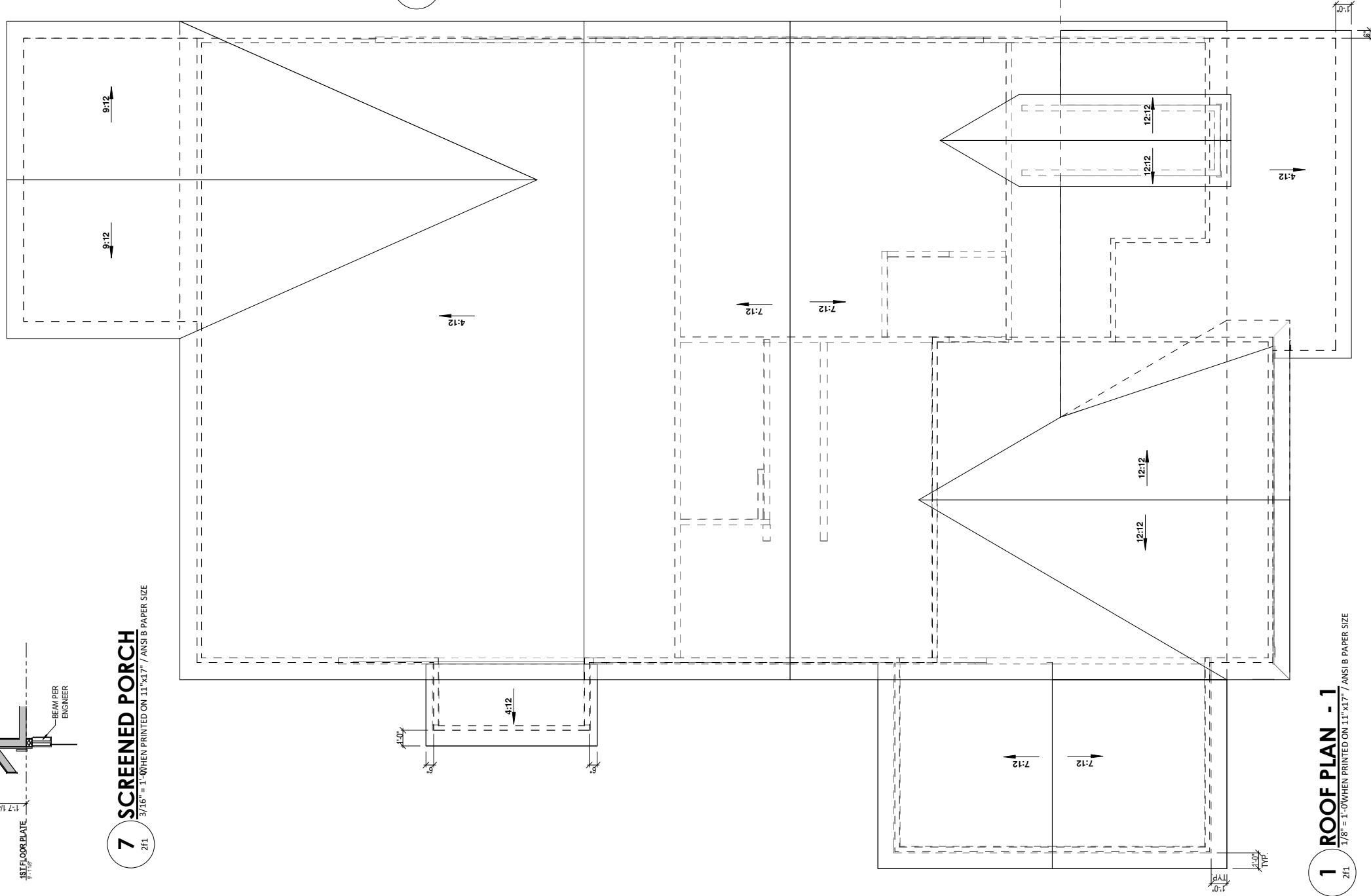
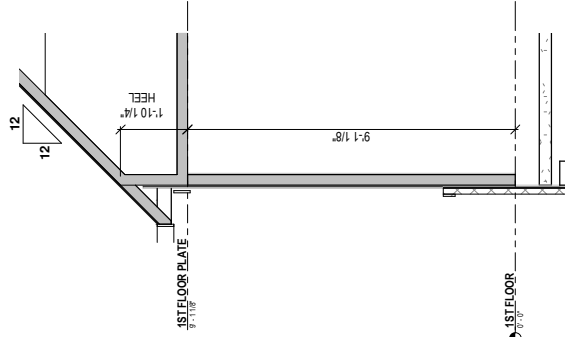
3 GABLE OVER OWNER'S RETREAT
3/16" = 1'-0" WHEN PRINTED ON 11" X 17" / ANSI B PAPER SIZE

2FL



2 GABLE ROOF OVER GARAGE
3/16" = 1'-0" WHEN PRINTED ON 11" X 17" / ANSI B PAPER SIZE

2FL



1 ROOF PLAN - 1
1/8" = 1'-0" WHEN PRINTED ON 11" X 17" / ANSI B PAPER SIZE

2FL

Date: 10/27/2023

Drawn By: RDC

Checked By: SGM

Tillery 9' - OYL NC1 111

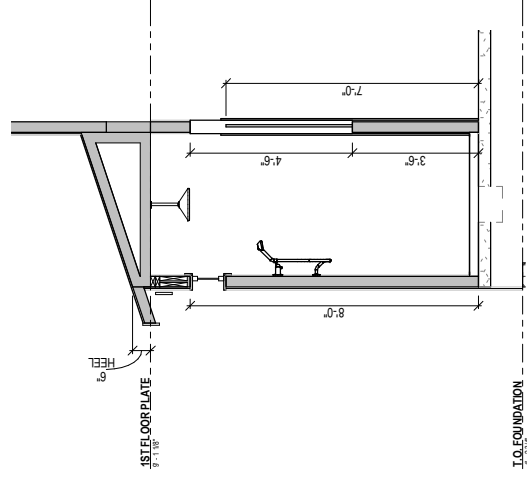
Caruso Homes

Roof Plan - 1

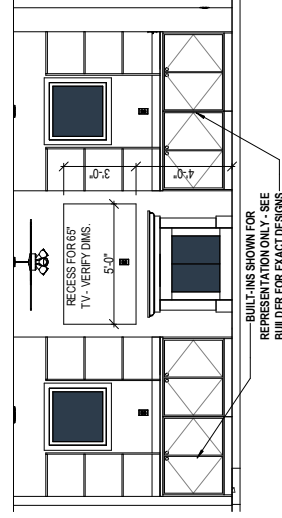
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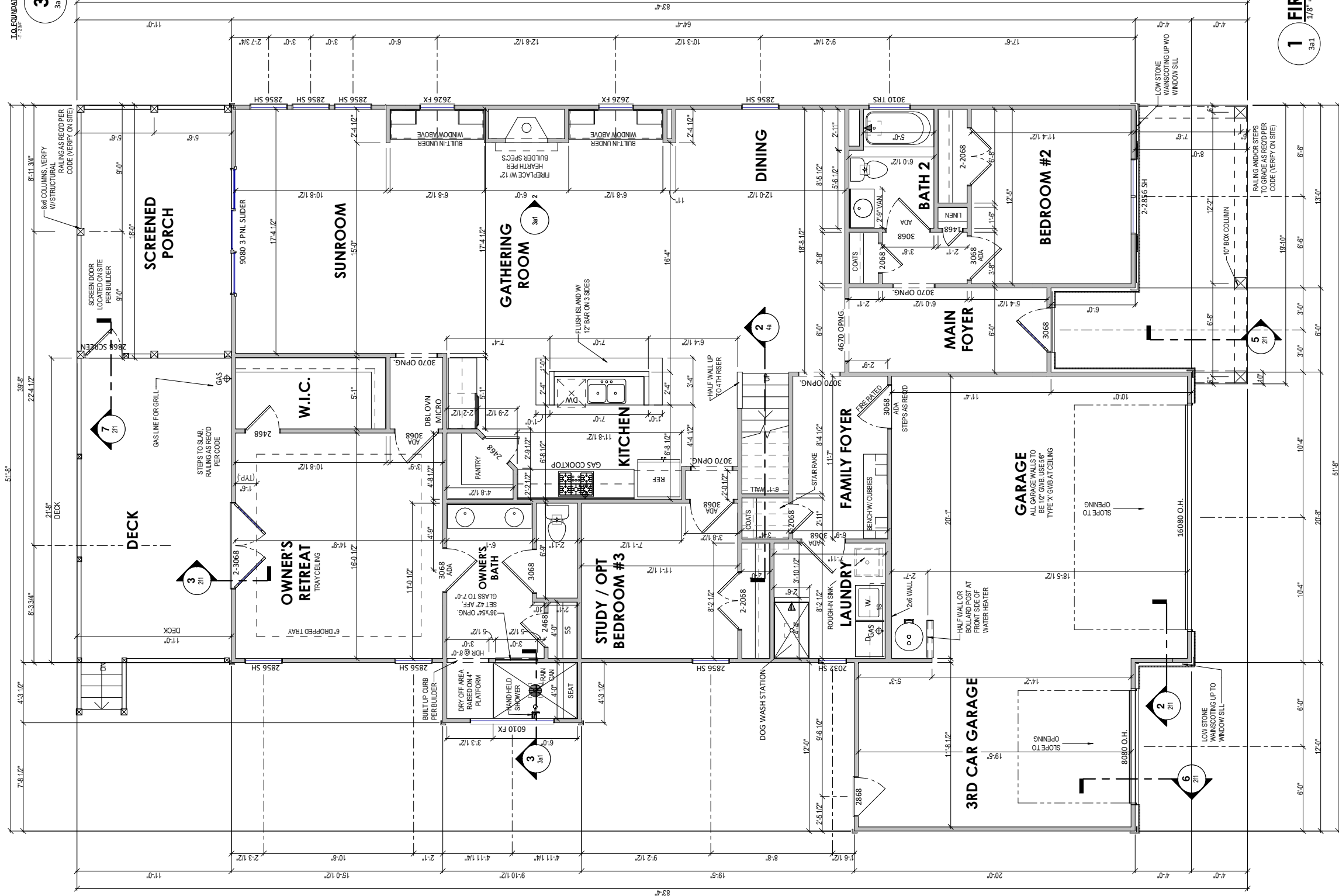




3 Owner's Bath Section
 3/16" = 1'-0" WHEN PRINTED ON 11" X 17" / ANSI B PAPER SIZE



2 FIREPLACE ELEVATION
 1/8" = 1'-0" WHEN PRINTED ON 11" X 17" / ANSI B PAPER SIZE



1 FIRST FLOOR - 1
 1/8" = 1'-0" WHEN PRINTED ON 11" X 17" / ANSI B PAPER SIZE

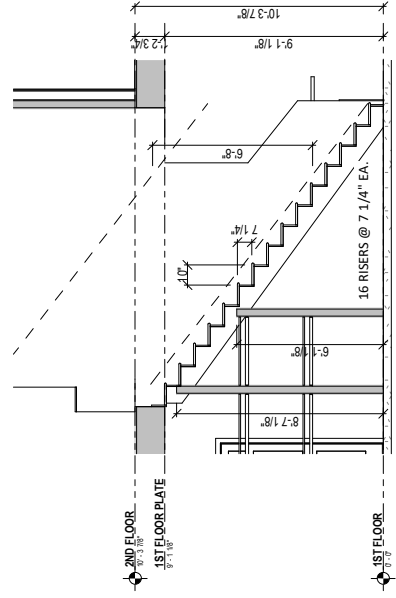
3a1

Date: 10/27/2023
 Drawn By: RDC
 Checked By: SGM

Tillery 9' - OYL NC1 111
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 First Floor Plan

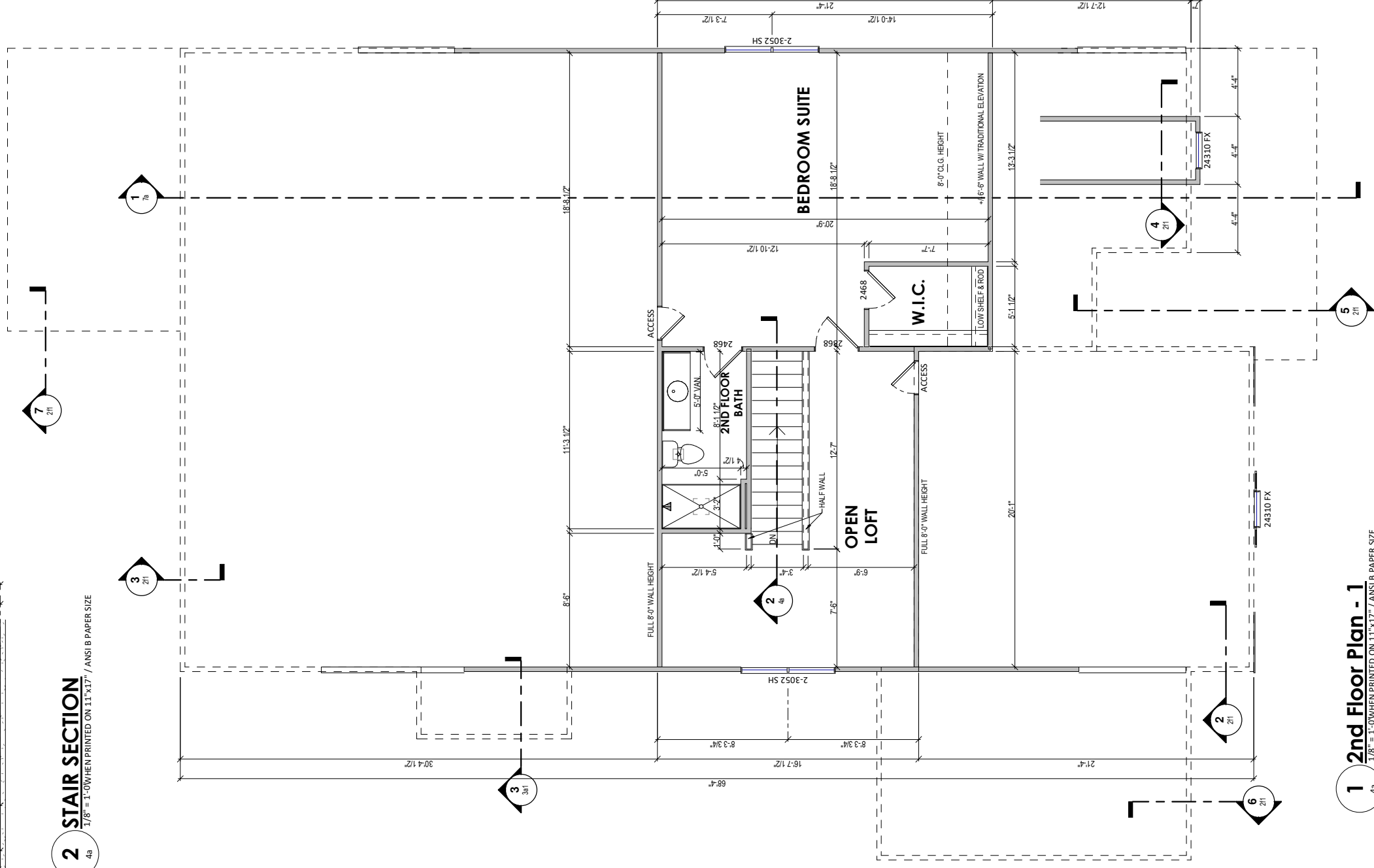
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2 STAIR SECTION

1/8" = 1'-0" WHEN PRINTED ON 11" X 17" / ANSI B PAPER SIZE



4a

Date: 10/27/2023

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Tillery 9' - OYL NC1 111

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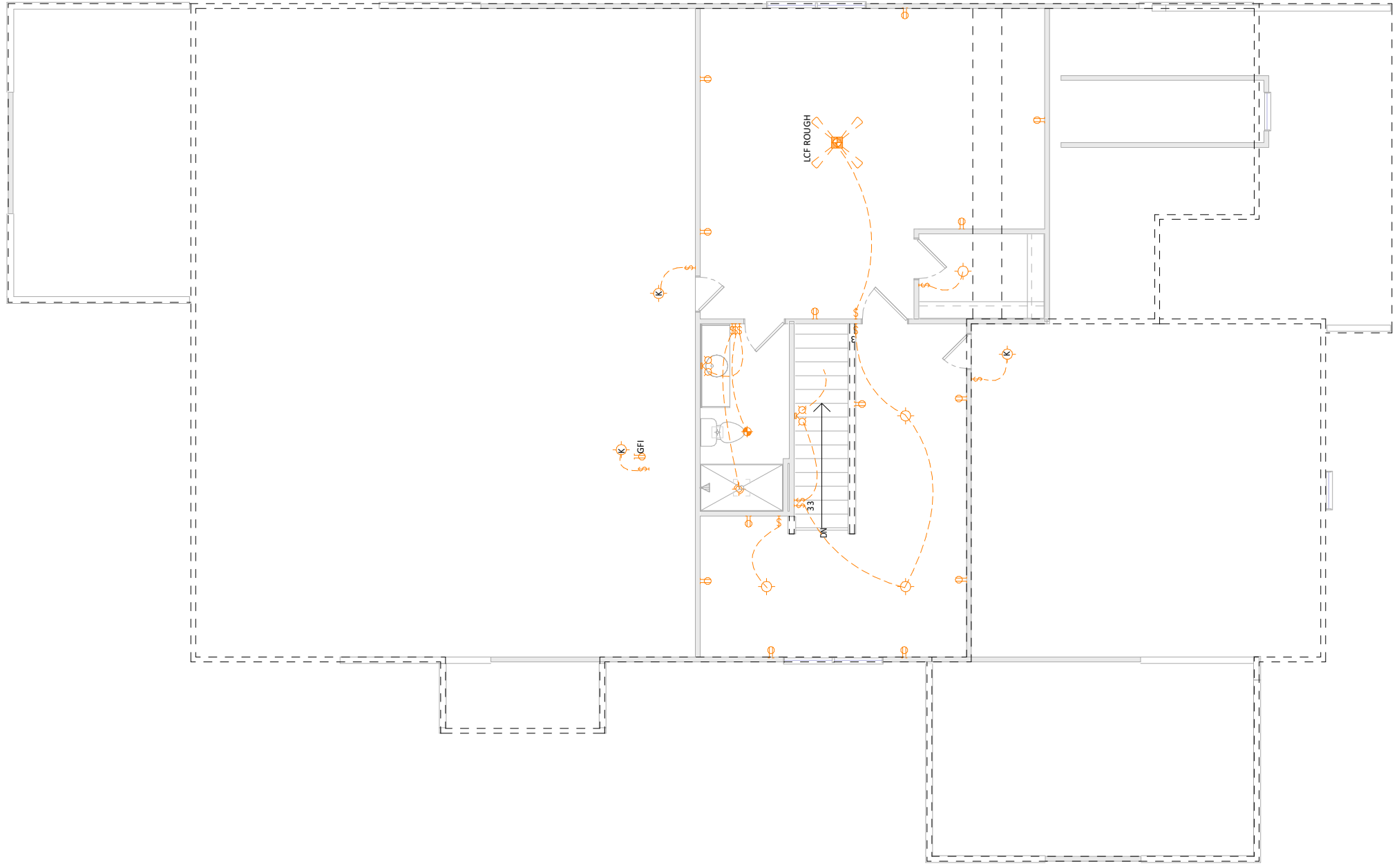
Second Floor Plan

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| ELECTRICAL LEGEND | | | |
|-------------------|-------------------------------|--|----------------------------------|
| | SINGLE POLE SWITCH | | DOOR BELL BUTTON |
| | 3-WAY SWITCH | | DOOR BELL CHIME |
| | 4-WAY SWITCH | | GARAGE DOOR BUTTON |
| | DIMMER SWITCH | | GARAGE DOOR OPENER |
| | 220 VOLT OUTLET | | WEATHERPROOF OUTLET |
| | DUPLEX OUTLET | | CEILING OUTLET |
| | GROUND FAULT OUTLET | | FLOOR OUTLET |
| | SMOKE DETECTOR | | CARBON MONOXIDE & SMOKE DETECTOR |
| | CARBON MONOXIDE DETECTOR | | DATA NETWORK OUTLET |
| | TELEVISION OUTLET | | TELEPHONE OUTLET |
| | SERVICE PANEL | | GARBAGE DISPOSAL |
| | SERVICE METER | | ACCENT LIGHT |
| | WALL MOUNT LIGHT | | SINGLE SCONCE |
| | FLOOD LIGHT | | DOUBLE SCONCE |
| | STRIP LIGHT | | STAIR LIGHT |
| | BATH FAN & LIGHT | | BATH FAN |
| | COMBO CLOSET CASTER LIGHT | | UNDER CABINET LIGHT |
| | PULL CHAIN LIGHT | | KEYLESS LIGHT |
| | FLUSH MOUNT LIGHT | | HANGING LIGHT |
| | HANGING PENDANT LIGHT | | MINIATURE PUCK LIGHT |
| | RECESSED CAN LIGHT | | RECESSED EYEBALL LIGHT |
| | FLUORESCENT LIGHT RECTANGULAR | | FLUORESCENT LIGHT ROUND |
| | CEILING FAN | | LIGHT w/ FAN ROUGH |
| | LIGHTED CEILING FAN | | LIGHT & FAN ROUGH |



1 SECOND FLOOR ELECTRICAL
1/8" = 1'-0" WHEN PRINTED ON 11"x17" / ANSI B PAPER SIZE
 5b



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Tillery 9' - OYL NC1 111

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Electrical Plan Second Floor

Date: 10/27/2023

Drawn By: RDC

Checked By: SGM

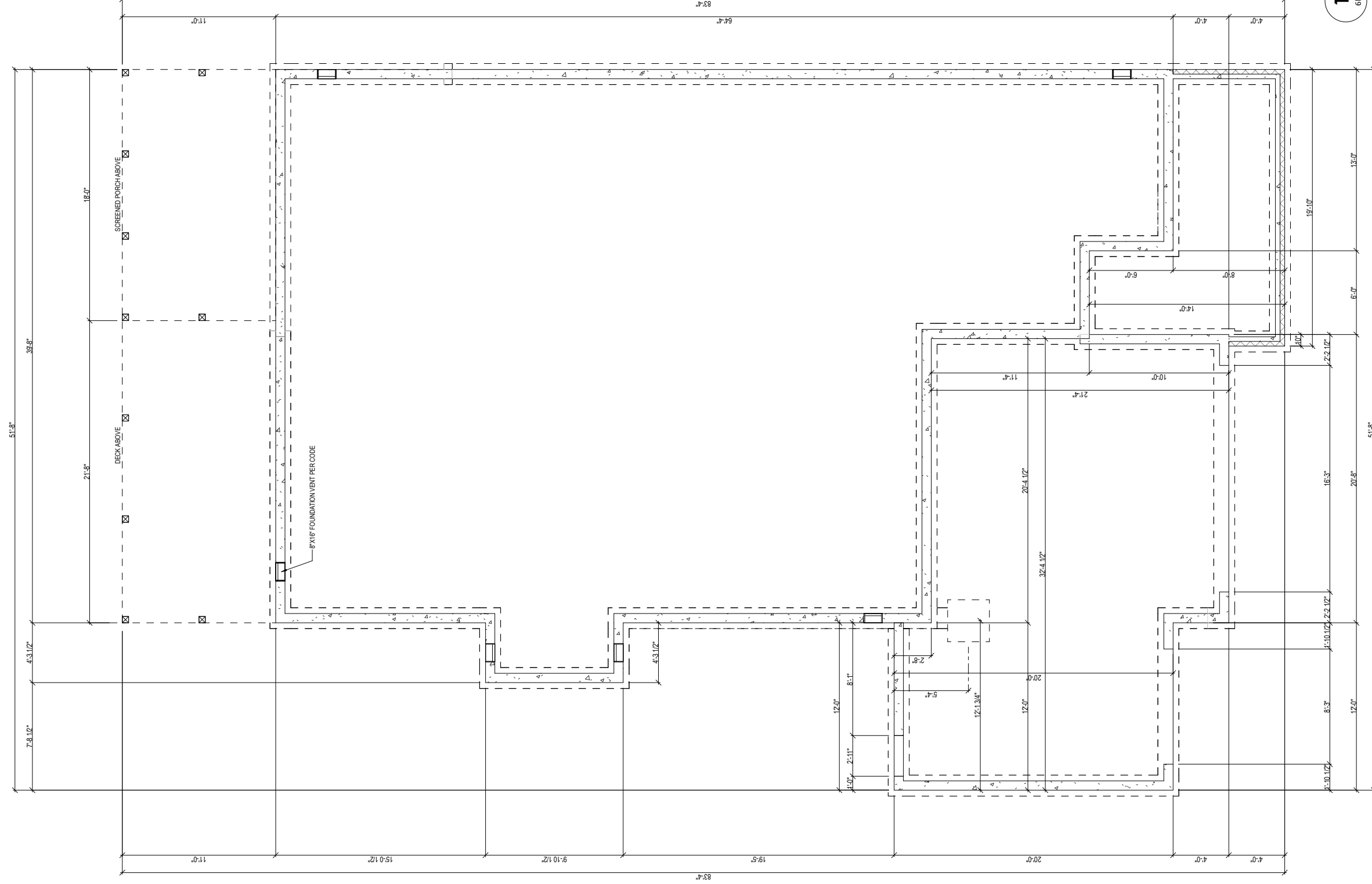
5b

NOTE: THIS SHEET IS AN ARCHITECTURAL FOUNDATION SHEET INTENDED ONLY FOR EXTERIOR DIMENSIONS AND/OR VENTILATION REQUIREMENTS/SPECIFICATIONS.

SEE SEALED STRUCTURAL PAGE FOR INFORMATION REGARDING, BUT NOT LIMITED TO, FOOTING LOCATIONS AND SPECIFICATIONS, PIER LOCATIONS AND SPECIFICATIONS, DECK FRAMING, AND COMPACTION

Crawl Vent Calculations

SOFT. OF VENTILATION REQD = 2203 CRAWL SQFT. /1500 = 1.47 SQFT.
 NUMBER OF VENTS REQD = 1.47 / 0.45 SQFT. PER VENT = 4 VENTS
 VENT SHALL BE PLACED WITHIN AT LEAST 3'-0" FROM EACH FOUNDATION CORNER.
 # OF CORNERS EFFECTED = 6
 NUMBER OF CORNERS IS GREATER THAN SQUARE FOOTAGE REQUIREMENTS, THEREFORE THE NUMBER OF FOUNDATION VENTS REQUIRED IS = 6 VENTS
BASED ON TYPICAL AUTOMATIC FOUNDATION VENT HAVING 65 SQ. INCHES OF VENTING.
 CONTRACTOR TO CONFIRM. ACTUAL VENTS USED AND ADJUST AS NEEDED IN FIELD.



1 Crawl Foundation
6b 1/8" = 1'-0" WHEN PRINTED ON 11"x17" / ANSI B PAPER SIZE

Date: 10/27/2023

Drawn By: sgm

Checked By: sgm

Tillery 9' - OYL NC1 111

Caruso Homes

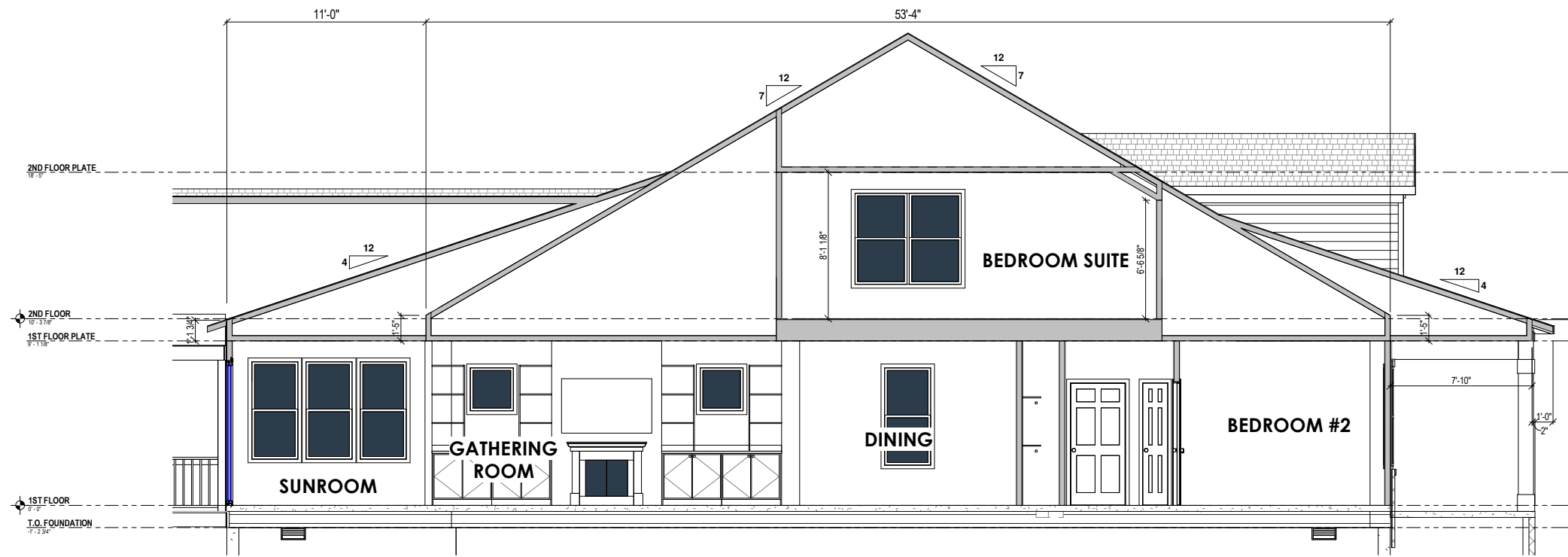
Crawl Foundation

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6b



1 BUILDING SECTION
 7a 1/8" = 1'-0" WHEN PRINTED ON 11"x17" / ANSI B PAPER SIZE

Tillery 9' - OYL NC1 111

Caruso Homes

Building Section

Date: 10/27/2023

Drawn By: rdc

Checked By: sgm

7a

FOUNDATION NOTES:

- FOUNDATIONS TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 4 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE WITH ALL LOCAL AMENDMENTS.
- STRUCTURAL CONCRETE TO BE $F_c = 3000$ PSI, PREPARED AND PLACED IN ACCORDANCE WITH ACI STANDARD 318.
- FOOTINGS TO BE PLACED ON UNDISTURBED EARTH, BEARING A MINIMUM OF 12" BELOW ADJACENT FINISHED GRADE, OR AS OTHERWISE DIRECTED BY THE CODE ENFORCEMENT OFFICIAL.
- FOOTING SIZES BASED ON A PRESUMPTIVE SOIL BEARING CAPACITY OF 2000 PSF. CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE SUITABILITY OF THE SITE SOIL CONDITIONS AT THE TIME OF CONSTRUCTION. FOOTINGS AND PIERS SHALL BE CENTERED UNDER THEIR RESPECTIVE ELEMENTS, PROVIDE 2" MINIMUM FOOTING PROJECTION FROM THE FACE OF MASONRY.
- MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS TO BE AS SPECIFIED IN SECTION R404.1 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.
- FILASTERS TO BE BONDED TO PERIMETER FOUNDATION WALL.
- PROVIDE FOUNDATION WATERPROOFING, AND DRAIN WITH POSITIVE SLOPE TO OUTLET AS REQUIRED BY SITE CONDITIONS.
- PROVIDED PERIMETER INSULATION FOR ALL FOUNDATIONS PER 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.
- CORSELL FOUNDATION WALL AS REQUIRED TO ACCOMMODATE BRICK VENEERS.
- CRAWL SPACE TO BE GRADED LEVEL, AND CLEARED OF ALL DEBRIS.
- FOUNDATION ANCHORAGE SHALL BE CONSTRUCTED PER THE 2018 NORTH CAROLINA RESIDENTIAL CODE SECTION R403.16. MINIMUM 1/2" DIA. BOLTS SPACED AT 6'-0" ON CENTER, WITH A 1" MINIMUM EMBEDMENT INTO MASONRY OR CONCRETE. MINIMUM (2) ANCHOR BOLTS PER PLATE SECTION AND (1) LOCATED NOT MORE THAN 12" FROM THE CORNER. ANCHOR BOLTS SHALL BE LOCATED IN THE CENTER THIRD OF THE PLATE.
- ABBREVIATIONS:

| | |
|-------------------|--------------------|
| DJ = DOUBLE JOIST | SJ = SINGLE JOIST |
| GT = GIRDER TRUSS | FT = FLOOR TRUSS |
| SC = STUD COLUMN | DR = DOUBLE RAFTER |
| EE = EACH END | TR = TRIPLE RAFTER |
| TJ = TRIPLE JOIST | OC = ON CENTER |
| CL = CENTER LINE | PL = POINT LOAD |
- ALL PIERS TO BE 16"x16" MASONRY AND ALL FILASTERS TO BE 2"x16" MASONRY, TYPICAL. (UNO)
- WALL FOOTINGS TO BE CONTINUOUS CONCRETE, SIZES PER STRUCTURAL PLAN.
- A FOUNDATION EXCAVATION OBSERVATION SHOULD BE CONDUCTED BY A PROFESSIONAL GEOTECHNICAL ENGINEER, OR HIS QUALIFIED REPRESENTATIVE. IF ISOLATED AREAS OF YIELDING MATERIALS AND/OR POTENTIALLY EXPANSIVE SOILS ARE OBSERVED IN THE FOOTING EXCAVATIONS AT THE TIME OF CONSTRUCTION, SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. MUST BE PROVIDED THE OPPORTUNITY TO REVIEW THE FOOTING DESIGN PRIOR TO CONCRETE PLACEMENT.
- ALL FOOTINGS & SLABS ARE TO BEAR ON UNDISTURBED SOIL OR 95% COMPACTED FILL, VERIFIED BY ENGINEER OR CODE OFFICIAL.

REINFORCE GARAGE PORTAL WALLS PER FIGURE R602.10.4.3 OF THE 2018 NCR. (TYP)

REFER TO BRACED WALL PLAN FOR PANEL LOCATIONS AND ANY REQUIRED HOLD-DOWNS. ADDITIONAL INFORMATION PER SECTION R602.10.4 AND FIGURE R602.10.3(4) OF THE 2018 NCR.

NOTE: ALL EXTERIOR FOUNDATION DIMENSIONS ARE TO FRAMING AND NOT BRICK VENEER. UNO

NOTE: A 4" CRUSHED STONE BASE COURSE IS NOT REQUIRED WHEN SLAB IS INSTALLED ON WELL-DRAINED OR SAND-GRAVEL MIXTURE SOILS CLASSIFIED AS GROUP 1 PER TABLE R409.1

BEAM POCKETS MAY BE SUBSTITUTED FOR MASONRY FILASTERS AT GIRDER ENDS. BEAM POCKETS SHALL HAVE A MINIMUM 4" SOLID MASONRY BEARING.

NOTE: REDUCE JOIST SPACINGS UNDER TILE FLOORS, GRANITE COUNTERTOPS AND/OR ISLANDS.

18"x24" MIN. CRAWL SPACE ACCESS DOOR TO BE LOCATED IN FIELD PER BUILDER. PROVIDE MINIMUM (2) 2"x10" HEADER OVER DOOR w/ MIN. 4" BEARING AT EACH END. AVOID SHOWN POINT LOADS.

DECK JOISTS SHALL BE SPACED AT A MAX. 12" O.C. WHEN DECK BOARDS ARE INSTALLED DIAGONALLY.

NOTE: FOUNDATION ANCHORAGE HAS BEEN DESIGNED TO RESIST THE CONTINUOUS WIND UPLIFT LOAD PATH IN ACCORDANCE WITH METHOD 3 OF SECTION R602.3.5 OF THE 2018 NCR.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY CARUSO HOYES CONSULTING/REVISED ON 10/27/2023. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

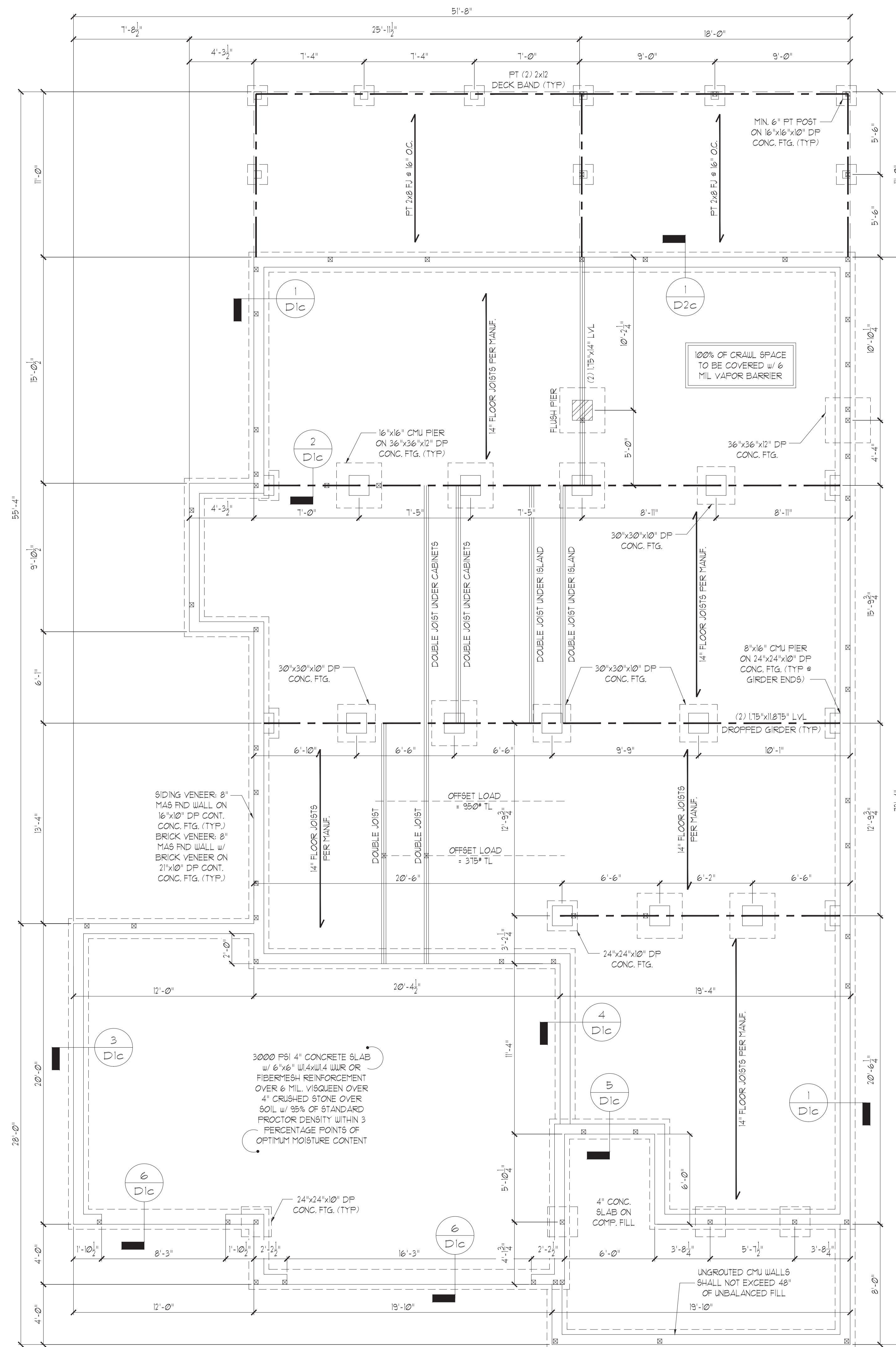
STRUCTURAL MEMBERS ONLY

ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT. SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. FAILURE TO DO SO WILL VOID SUMMIT LIABILITY.

STRUCTURAL ANALYSIS BASED ON 2018 NCR.

CRAWL SPACE FOUNDATION PLAN

SCALE: 1/4" = 1'



CRAWL SPACE VENTILATION:
 2203 SQ. FT. / 150 = 14.7 SQ. FT. REQ'D.
 14.7 SQ. FT. / 0.45 PER VENT = 33 VENTS REQ'D.

NOTE: WHERE AN APPROVED VAPOR BARRIER IS INSTALLED OVER GROUND SURFACE, THE REQ'D. VENTILATION MAY BE REDUCED BY 50%.

STUD SPACED @ END CRIPPLE WALLS

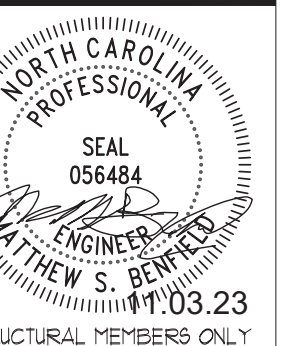
| STUD SIZE | MAXIMUM STUD HEIGHT | | |
|-----------|---------------------|----------------|----------------|
| | UP TO 48" | 4'-1" TO 6'-0" | 6'-1" TO 8'-0" |
| 2x4 | 16" | 12" | N/A |
| 2x6 | 16" | 16" | 12" |

- NOTES:**
- CRIPPLE STUDS EXCEEDING 48" IN HEIGHT SHALL BE CONSIDERED AN ADDITIONAL STORY PER R602.9
 - CRIPPLE STUDS SHALL NOT BE FRAMED SMALLER THAN THE STUD SIZE FRAMED ABOVE.
 - SQUASH BLOCKING SHALL BE INSTALLED UNDER ALL SHOWN STUD COLUMNS.
 - CRIPPLE WALLS SHALL BE SHEATHED IN ACCORDANCE WITH SHEATHING METHOD DENOTED ON FLOOR ABOVE.



CLIENT: CARUSO HOYES
 206 HIGH HOUSE ROAD, SUITE 205
 CARY, NC 27511

PROJECT: NCI III (Tillery I)
 Crawl Space Foundation



DRAWING DATE: 10/20/23
 SCALE: 3/16" = 1'-0"
 PROJECT: 4-2315442
 DRAWN BY: EPB
 CHECKED BY: PMS
 ORIGINAL INFORMATION PROJECT: 4-231544 DATE: 04/2/2023

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET **S1.0c**

GENERAL STRUCTURAL NOTES:

- CONSTRUCTION SHALL CONFORM TO 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE WITH ALL LOCAL AMENDMENTS.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS. CONTRACTOR SHALL COMPLY WITH THE CONTENTS OF THE DRAWING FOR THIS SPECIFIC PROJECT. ENGINEER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THIS PLAN.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY BRACING REQUIRED TO RESIST ALL FORCES ENCOUNTERED DURING ERECTION.
- PROPERTIES USED IN THE DESIGN ARE AS FOLLOWS:
MICROLAM (LVL): $F_b = 2600$ PSI, $F_v = 285$ PSI, $E = 1.9 \times 10^6$ PSI
PARALLAM (PSL): $F_b = 2900$ PSI, $F_v = 290$ PSI, $E = 1.25 \times 10^6$ PSI
- ALL WOOD MEMBERS SHALL BE #2 SYP UNLESS NOTED ON PLAN. ALL STUD COLUMNS SHALL BE #2 SFF (UNO).
- ALL BEAMS SHALL BE SUPPORTED WITH A (2) 2x4 #2 SFF STUD COLUMN AT EACH END UNLESS NOTED OTHERWISE.
- ALL REINFORCING STEEL SHALL BE GRADE #6 BARS CONFORMING TO ASTM A615 AND SHALL HAVE A MINIMUM COVER OF 3".
- FOUNDATION ANCHORAGE SHALL BE CONSTRUCTED PER THE 2018 NORTH CAROLINA RESIDENTIAL CODE SECTION R403.1.6. MINIMUM 1/2" DIA. BOLTS SPACED AT 6'-0" ON CENTER WITH A 1" MINIMUM EMBEDMENT INTO MASONRY OR CONCRETE. MINIMUM (2) ANCHOR BOLTS PER PLATE SECTION AND (1) LOCATED NOT MORE THAN 12" FROM THE CORNER. ANCHOR BOLTS SHALL BE LOCATED IN THE CENTER THIRD OF THE PLATE.
- CONTRACTOR TO PROVIDE LOOKOUTS WHEN CEILING JOISTS SPAN PERPENDICULAR TO RAFTERS.
- FLITCH BEAMS, 4-PLY LVL'S AND 3-PLY SIDE LOADED LVL'S SHALL BE BOLTED TOGETHER WITH 1/2" DIA. THRU BOLTS SPACED AT 24" O.C. (MAX) STAGGERED OR EQUIVALENT CONNECTIONS PER DETAIL 1/D31. MIN EDGE DISTANCE SHALL BE 2" AND (2) BOLTS SHALL BE LOCATED MINIMUM 6" FROM EACH END OF THE BEAM.
- ALL NON-LOAD BEARING HEADERS SHALL BE (1) FLAT 2x4 SYP #2, DROPPED. FOR NON-LOAD BEARING HEADERS EXCEEDING 8'-0" IN WIDTH AND/OR WITH MORE THAN 2'-0" OF CRIPPLE WALL ABOVE, SHALL BE (2) FLAT 2x4 SYP #2, DROPPED. (UNLESS NOTED OTHERWISE).
- ABBREVIATIONS:

- | | |
|-------------------|--------------------|
| DJ = DOUBLE JOIST | SJ = SINGLE JOIST |
| GT = GIRDER TRUSS | FT = FLOOR TRUSS |
| SC = STUD COLUMN | DR = DOUBLE RAFTER |
| EE = EACH END | TR = TRIPLE RAFTER |
| TJ = TRIPLE JOIST | OC = ON CENTER |
| CL = CENTER LINE | PL = POINT LOAD |

WALL STUD SCHEDULE (10 FT HEIGHT)

| STUD SIZE | STUD SPACING (O.C.) | | | |
|-----------|---------------------|--------------|-----------------|------------------|
| | ROOF ONLY | ROOF 4 FLOOR | ROOF 4 2 FLOORS | NON-LOAD BEARING |
| 2x4 | 24" | 16" | 12" | 24" |
| 2x6 | 24" | 24" | 16" | 24" |

- NOTES:
- BRACED WALLS STUDS SHALL BE A MAX. OF 16" O.C.
 - STUDS SUPPORTS OPTIONAL WALK-UP ATTIC SHALL BE SPACED A MAX. OF 16" O.C.
 - TWO STORY WALLS SHALL BE FRAMED W/ 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C. BALLOON FRAMED W/ CROSS BRACING @ 6'-0" O.C. VERTICALLY.
 - FOR STUDS GREATER THAN 10'-0" IN HEIGHT, REFER TO TWO STORY WALL NOTE FOR FRAMING REQUIREMENT.

ALL HEADERS WHERE BRICK IS USED, TO BE:

- ① LINTEL (UNO.)

LINTEL SCHEDULE:

STEEL ANGLES TO HAVE MINIMUM 4" BEARING ONTO BRICK AT EACH END.

- ① L3x3x1/4"
- ② L5x3x1/4"
- ③ L5x3-1/2x5/16"
- ④ L5x3-1/2x5/16" ROLLED OR EQUAL ARCHED COMPONENT.

SECURE LINTEL TO HEADER W/ (2) 1/2" DIAMETER LAG SCREWS STAGGERED @ 16" O.C. (TYP FOR ③)

SHADE WALLS INDICATED LOAD BEARING WALLS

JOIST & BEAM SIZES SHOWN ARE MINIMUMS. BUILDER MAY INCREASE DEPTH FOR EASE OF CONSTRUCTION.

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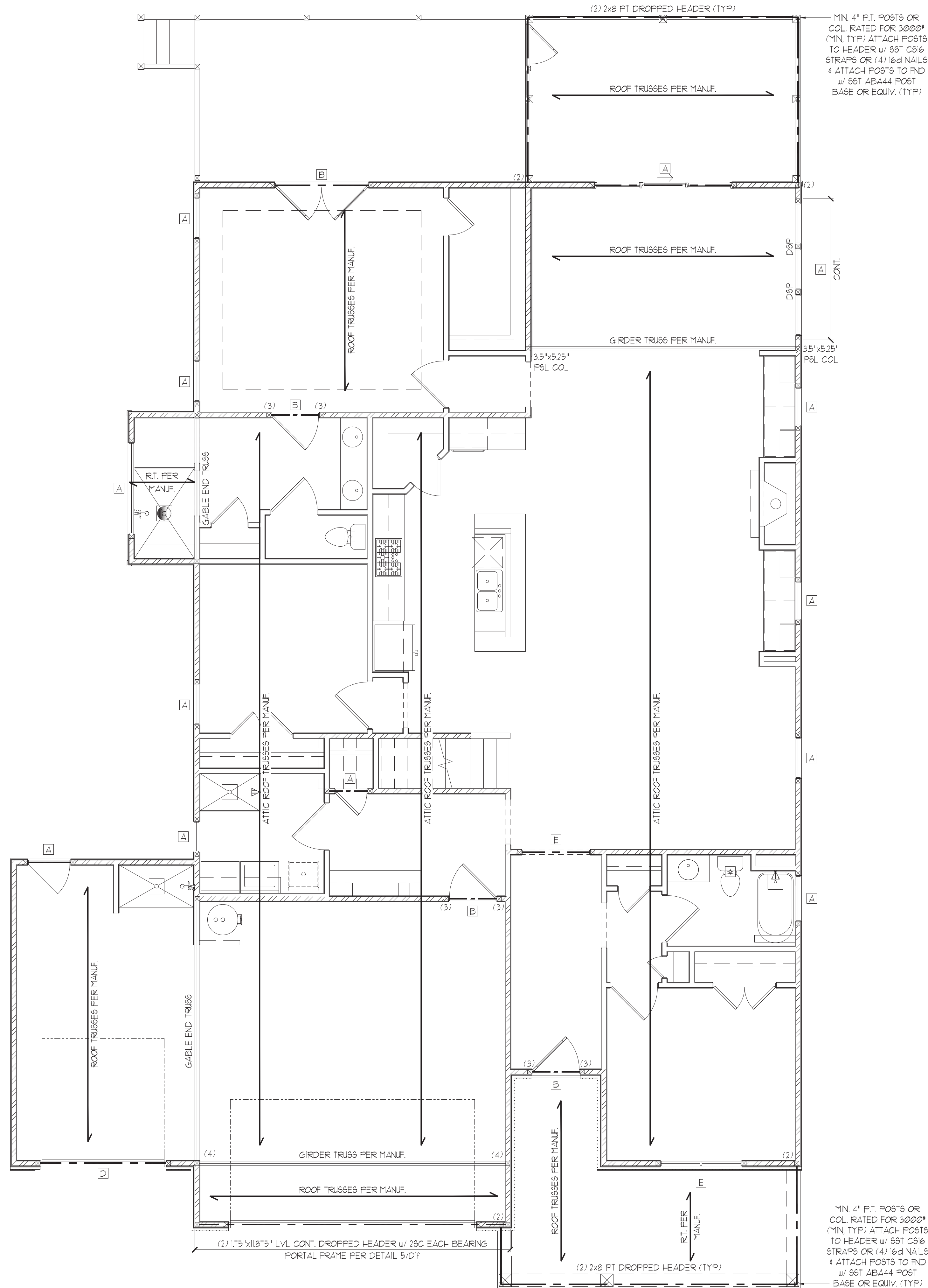
STRUCTURAL MEMBERS ONLY

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STRUCTURAL ANALYSIS BASED ON 2018 NCR.

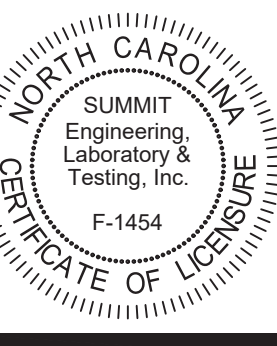
FIRST FLOOR FRAMING PLAN

SCALE: 1/4"=1'



| HEADER SCHEDULE | | |
|-----------------|--------------------|------------------|
| TAG | SIZE | JACKS (EACH END) |
| A | (2) 2x6 | (1) |
| B | (2) 2x8 | (2) |
| C | (2) 2x10 | (2) |
| D | (2) 2x12 | (2) |
| E | (2) 9-1/4" LSL/LVL | (3) |
| F | (3) 2x6 | (1) |
| G | (3) 2x8 | (2) |
| H | (3) 2x10 | (2) |
| I | (3) 2x12 | (3) |

NOTES:
 1. HEADER SIZES SHOWN ON PLANS ARE MINIMUMS. GREATER HEADER SIZES MAY BE USED FOR EASE OF CONSTRUCTION.
 2. ALL HEADERS TO BE DROPPED (UNO.)
 3. STUD COLUMNS NOTED ON PLAN OVERRIDE STUD COLUMNS LISTED ABOVE (UNO.)



CLIENT: CARUSO HOMES
 206 HIGH HOUSE ROAD, SUITE 205
 CARY, NC 27511

PROJECT: NCI III (Tillery I)
 First Floor Framing Plan



DRAWING DATE: 10/20/23
 SCALE: 3/16" = 1'-0"
 PROJECT: 42154402
 DRAWN BY: EPB
 CHECKED BY: HSB
 ORIGINAL INFORMATION PROJECT: 421544 DATE: 04/2/2023

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS
 SHEET S3.0

| HEADER SCHEDULE | | |
|-----------------|--------------------|------------------|
| TAG | SIZE | JACKS (EACH END) |
| A | (2) 2x6 | (1) |
| B | (2) 2x8 | (2) |
| C | (2) 2x10 | (2) |
| D | (2) 2x12 | (2) |
| E | (2) 9-1/4" LBL/LVL | (3) |
| F | (3) 2x6 | (1) |
| G | (3) 2x8 | (2) |
| H | (3) 2x10 | (2) |
| I | (3) 2x12 | (3) |

NOTES:
 1. HEADER SIZES SHOWN ON PLANS ARE MINIMUMS. GREATER HEADER SIZES MAY BE USED FOR EASE OF CONSTRUCTION.
 2. ALL HEADERS TO BE DROPPED (UNO).
 3. STUD COLUMNS NOTED ON PLAN OVERRIDE STUD COLUMNS LISTED ABOVE (UNO).

| KING STUD SCHEDULE | |
|---------------------|-------------------------|
| MAXIMUM HEADER SPAN | MINIMUM KING STUDS E.E. |
| 3'-0" | (1) |
| 4'-0" | (2) |
| 8'-0" | (3) |
| 12'-0" | (5) |
| 16'-0" | (6) |

| WALL STUD SCHEDULE (10 FT HEIGHT) | | | | |
|-----------------------------------|---------------------|----------------|-----------------|------------------|
| STUD SIZE | STUD SPACING (O.C.) | | | |
| | ROOF ONLY | ROOF & 1 FLOOR | ROOF & 2 FLOORS | NON-LOAD BEARING |
| 2x4 | 24" | 16" | 12" | 24" |
| 2x6 | 24" | 24" | 16" | 24" |

NOTES:
 1. BRACED WALLS STUDS SHALL BE A MAX. OF 16" O.C.
 2. STUDS SUPPORTS OPTIONAL WALK-UP ATTIC SHALL BE SPACED A MAX. OF 16" O.C.
 3. TWO STORY WALLS SHALL BE FRAMED w/ 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C. BALLOON FRAMED w/ CROSS BRACING @ 6'-0" O.C. VERTICALLY.
 4. FOR STUDS GREATER THAN 10'-0" IN HEIGHT, REFER TO TWO STORY WALL NOTE FOR FRAMING REQUIREMENT.

ALL HEADERS WHERE BRICK IS USED, TO BE:
 (1) LINTEL (UNO).

LINTEL SCHEDULE:
 STEEL ANGLES TO HAVE MINIMUM 4" BEARING ONTO BRICK AT EACH END.

- L3x3x1/4"
- L5x3x1/4"
- L5x3-1/2x5/16"
- L5x3-1/2x5/16" ROLLED OR EQUAL ARCHED COMPONENT.

SECURE LINTEL TO HEADER w/ (2) 1/2" DIAMETER LAG SCREWS STAGGERED @ 16" O.C. (TYP FOR (3))

SHADE WALLS INDICATED LOAD BEARING WALLS

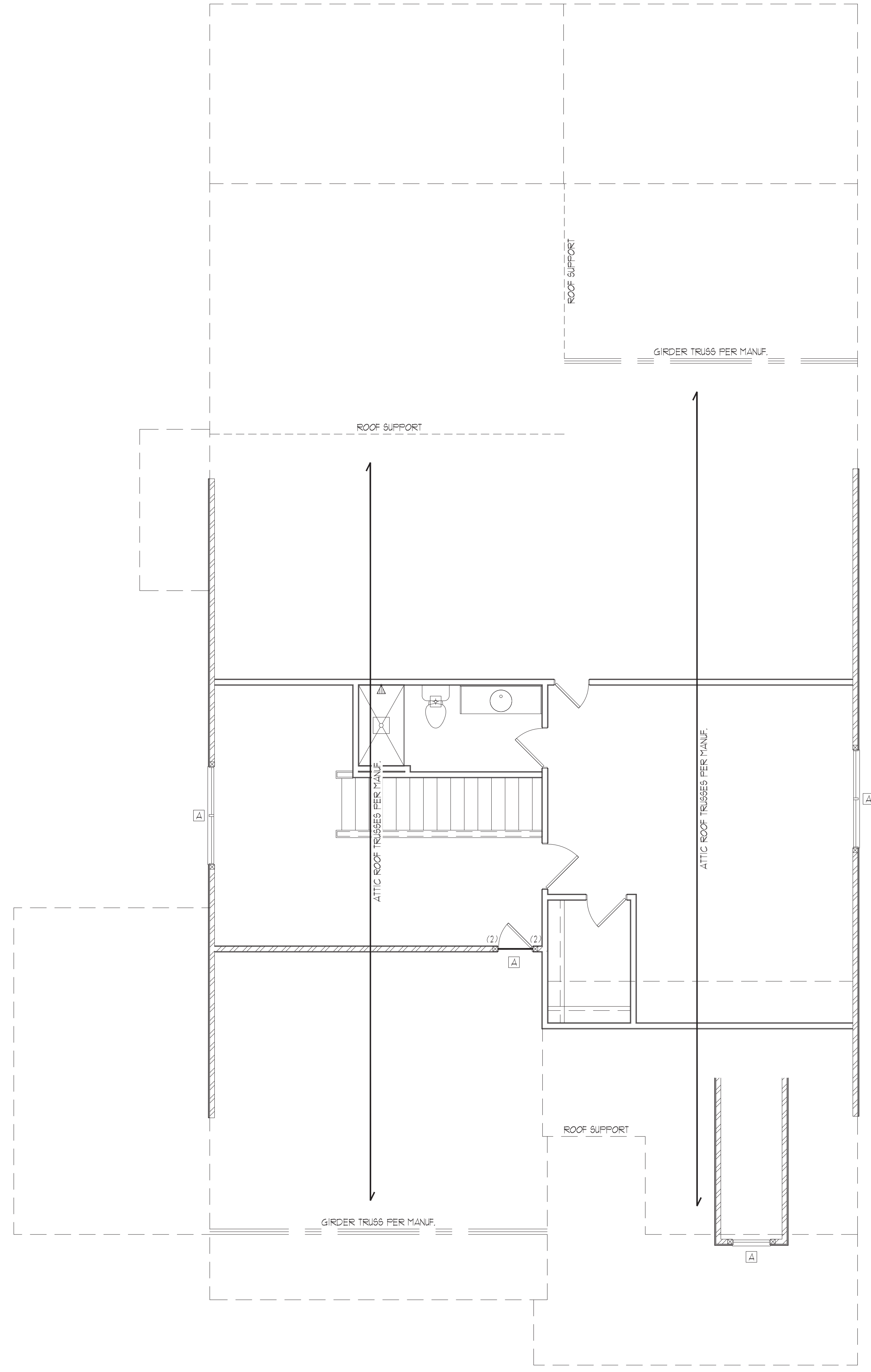
JOIST & BEAM SIZES SHOWN ARE MINIMUMS. BUILDER MAY INCREASE DEPTH FOR EASE OF CONSTRUCTION.

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STRUCTURAL ANALYSIS BASED ON 2018 NCR.

SECOND FLOOR FRAMING PLAN
 SCALE: 1/4"=1'

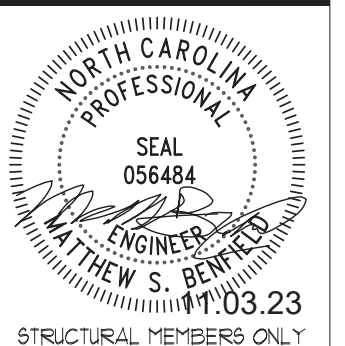


ELEVATION 1



CLIENT: CARUSO HOMES
 206 HIGH HOUSE ROAD, SUITE 205
 CARY, NC 27511

PROJECT: NCI III (Tillery I)
 Second Floor Framing Plan



DATE: 03/23/2023
 SCALE: 24/06 1/4"=1'-0"
 PROJECT: 4231944
 DRAWN BY: EPB
 CHECKED BY: MSB

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS
 SHEET: S4.0

| MAX. UPLIFT | ROOF TO WALL | FLOOR TO FLOOR | FLOOR TO END |
|-------------|--------------|--------------------------------|--------------|
| 600 LBS | H2.5A | PER WALL SHEATHING & FASTENERS | |
| 1200 LBS | (2) H2.5A | C916 (END ± 11') | DTT2Z |
| 1450 LBS | HT920 | C916 (END ± 11') | DTT2Z |
| 2000 LBS | (2) MT920 | (2) C916 (END ± 11') | DTT2Z |
| 2900 LBS | (2) HT920 | (2) C916 (END ± 11') | HTT4 |
| 3685 LBS | LGT3-SD92.5 | M9TC92 | HTT4 |

- ALL PRODUCTS LISTED ARE SIMPSON STRONG-TIE. EQUIVALENT PRODUCTS MAY BE USED PER MANUFACTURER'S SPECIFICATIONS.
- UPLIFT VALUES LISTED ARE FOR SYP #2 GRADE MEMBERS.
- REFER TO TRUSS LAYOUT PER MANUF. FOR UPLIFT VALUES AND TRUSS TO TRUSS CONNECTIONS. CONNECTORS SPECIFIED BY TRUSS MANUFACTURER OVERRIDE THOSE LISTED ABOVE.
- CONTACT SUMMIT FOR REQUIRED CONNECTORS WHEN LOADS EXCEED THOSE LISTED ABOVE.

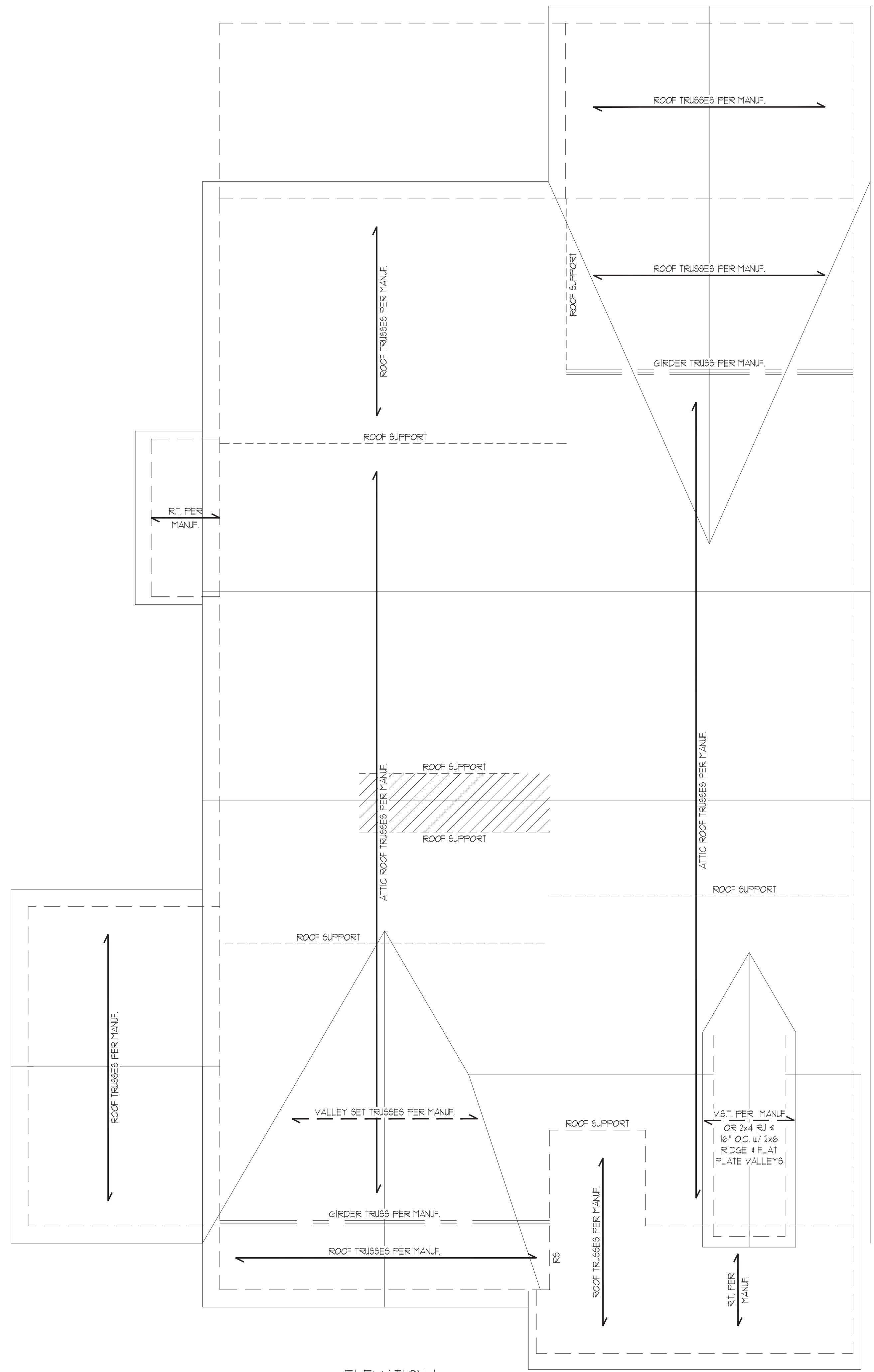
NOTE: 1ST FLY OF ALL SHOWN GIRDER TRUSSES TO ALIGN WITH INSIDE FACE OF WALL (TYP, UNO)

NOTE: ROOF TRUSSES SHALL BE SPACED TO SUPPORT FALSE FRAMED DORMER WALLS (TYP, UNO)

REFER TO DETAIL 5/D3F FOR EYEBROW, RETURN OR SHED ROOF FRAMING REQUIREMENTS. (TYP FOR ROOFS PROTRUDING MAXIMUM 24" FROM STRUCTURE)

NOTE: TRUSS UPLIFT LOADS SHALL BE DETERMINED PER TRUSS MANUFACTURER IN ACCORDANCE WITH SECTION R02.1111 WALL SHEATHING AND FASTENERS HAVE BEEN DESIGNED TO RESIST THE WIND UPLIFT LOAD PATH IN ACCORDANCE WITH METHOD 3 OF SECTION R02.3.5 OF THE 2018 NCR. REFER TO BRACED WALL PLANS FOR SHEATHING AND FASTENER REQUIREMENTS.

HATCHED AREA DENOTES
BREAK AWAY BOTTOM
CHORD FROM ATTIC TRUSS



ELEVATION 1

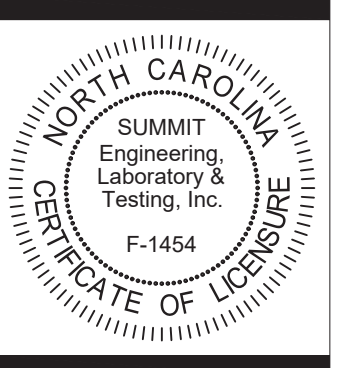
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STRUCTURAL ANALYSIS BASED ON 2018 NCR.

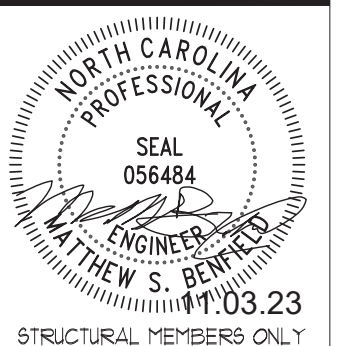
ROOF FRAMING PLAN

SCALE: 1/4"=1'



CLIENT: CARUSO HOMES
206 HIGH HOUSE ROAD, SUITE 205
CARY, NC 27511

PROJECT: NCI III (Tillery 1)
Roof Framing Plan



DATE: 10/20/23
SCALE: 1/4"=1'-0"
SHT 10'-0" x 10'-0"
PROJECT # 4231942
DRAWN BY: EPB
CHECKED BY: MBB

ORIGINAL INFORMATION
PROJECT # 4231944 DATE 04/2/2023

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

| REQUIRED BRACED WALL PANEL CONNECTIONS | | | | |
|----------------------------------------|-----------------------|----------------|-----------------------------|-----------------------------|
| METHOD | MATERIAL | MIN. THICKNESS | REQUIRED CONNECTION | |
| | | | * PANEL EDGES | * INTERMEDIATE SUPPORTS |
| CS-U5FP | WOOD STRUCTURAL PANEL | 3/8" | 6d COMMON NAILS @ 6" O.C. | 6d COMMON NAILS @ 12" O.C. |
| GB | GYPSUM BOARD | 1/2" | 5d COOLER NAILS** @ 1" O.C. | 5d COOLER NAILS** @ 1" O.C. |
| U5FP | WOOD STRUCTURAL PANEL | 3/8" | 6d COMMON NAILS @ 6" O.C. | 6d COMMON NAILS @ 12" O.C. |
| FF | WOOD STRUCTURAL PANEL | 1/16" | PER FIGURE R602.10.1 | PER FIGURE R602.10.1 |

*OR EQUIVALENT PER TABLE R102.3.5

BRACED WALL NOTES:

- WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10 FROM THE 2018 NORTH CAROLINA RESIDENTIAL CODE.
- WALLS ARE DESIGNED FOR SEISMIC ZONES A-C AND ULTIMATE WIND SPEEDS UP TO 130 MPH.
- REFER TO ARCHITECTURAL PLAN FOR DOOR/WINDOW OPENING SIZES.
- BRACING MATERIALS, METHODS AND FASTENERS SHALL BE IN ACCORDANCE WITH TABLE R602.10.1.
- ALL BRACED WALL PANELS SHALL BE FULL WALL HEIGHT AND SHALL NOT EXCEED 10 FEET FOR ISOLATED PANEL METHOD AND 12 FEET FOR CONTINUOUS SHEATHING METHOD WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
- MINIMUM PANEL LENGTH SHALL BE PER TABLE R602.10.1.
- THE INTERIOR SIDE OF EXTERIOR WALLS AND BOTH SIDES OF INTERIOR WALLS SHALL BE SHEATHED CONTINUOUSLY WITH MINIMUM 1/2" GYPSUM BOARD (UNO).
- FOR CONTINUOUS SHEATHING METHOD, EXTERIOR WALLS SHALL BE SHEATHED ON ALL SHEATHABLE SURFACES INCLUDING INFILL AREAS BETWEEN BRACED WALL PANELS, ABOVE AND BELOW WALL OPENINGS, AND ON GABLE END WALLS.
- FLOORS SHALL NOT BE CANTILEVERED MORE THAN 24" BEYOND THE FOUNDATION OR BEARING WALL BELOW WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
- A BRACED WALL PANEL SHALL BE LOCATED WITHIN 12 FEET OF EACH END OF A BRACED WALL LINE.
- THE MAXIMUM EDGE DISTANCE BETWEEN BRACED WALL PANELS SHALL NOT EXCEED 21 FEET.
- MASONRY OR CONCRETE STEM WALLS WITH A LENGTH OF 40' OR LESS SUPPORTING A BRACED WALL PANEL SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.4.3 OF THE 2018 NCRS OR DETAIL 21/D2.
- BRACED WALL PANEL CONNECTIONS TO FLOOR/CEILING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.4.
- BRACED WALL PANEL CONNECTIONS TO ROOF SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.5.
- CRIPPLE WALLS AND WALK OUT BASEMENT WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10.4.6.
- PORTAL WALLS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.1 (UNO).
- ON SCHEMATIC, SHADED WALLS INDICATE BRACED WALL PANELS. ABBREVIATIONS:

GB = GYPSUM BOARD
 CS-XXX = CONT. SHEATHED
 FF = PORTAL FRAME

U5FP = WOOD STRUCTURAL PANEL
 ENG = ENGINEERED SOLUTION
 FF-ENG = ENG. PORTAL FRAME

INSTALL HOLD-DOWNS FOR BRACED WALL END CONDITIONS PER SECTION R602.10.4 AND FIGURE R602.10.31.41 OF THE 2018 NCRS.

NOTE: WALL SHEATHING AND FASTENERS HAVE BEEN DESIGNED TO RESIST THE CONTINUOUS WIND UPLIFT LOAD PATH IN ACCORDANCE WITH METHOD 3 OF SECTION R602.3.5 OF THE 2018 NCRS.

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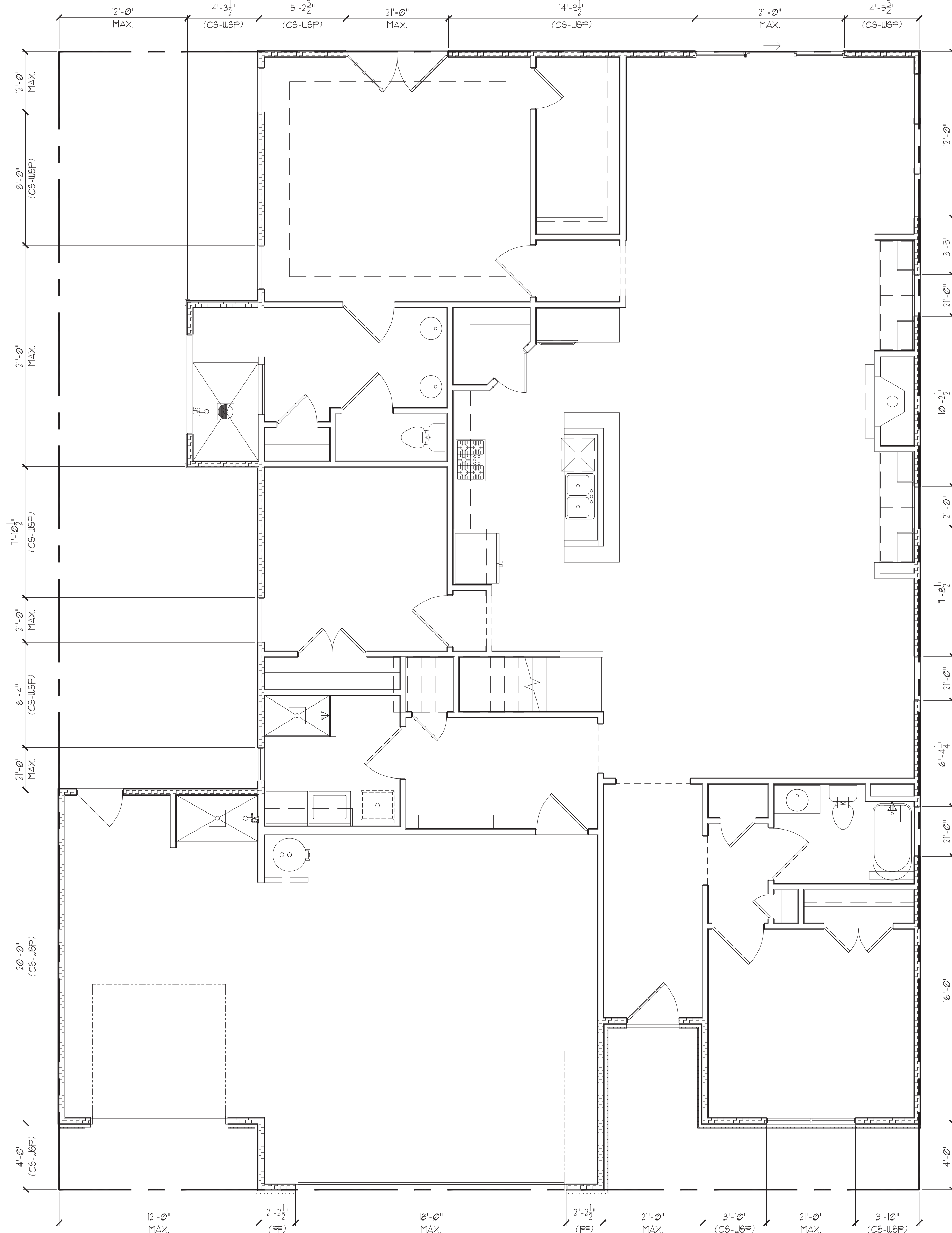
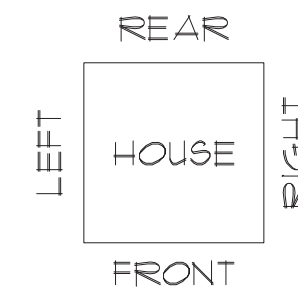
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STRUCTURAL ANALYSIS BASED ON 2018 NCRS.

FIRST FLOOR BRACING PLAN

SCALE: 1/4" = 1'



ELEVATION 1

| FIRST FLOOR BRACING (FT) | | |
|-----------------------------|----------|----------|
| CONTINUOUS SHEATHING METHOD | | |
| | REQUIRED | PROVIDED |
| FRONT SIDE | 11.8 | 14.2 |
| LEFT SIDE | 9.2 | 46.2 |
| REAR SIDE | 11.8 | 28.1 |
| RIGHT SIDE | 9.2 | 47.6 |

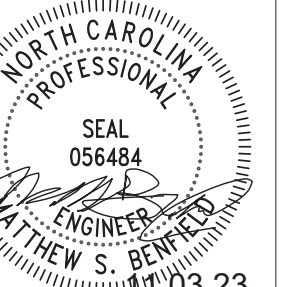


ENGINEERING LABORATORY TESTING
 3070 HAMMOND BUSINESS PLACE, SUITE 171
 RALEIGH, NC 27603
 OFFICE: 919.380.9991
 FAX: 919.380.9993
 WWW.SUMMIT-COMPANIES.COM



CLIENT: CARUSO HOMES
 206 HIGH HOUSE ROAD, SUITE 205
 CARY, NC 27511

PROJECT: NCI III (Tillery I)
 First Floor Bracing Plan



DATE: 10/20/2023
 SCALE: 3/16" = 1'-0"
 PROJECT: 4315442
 DRAWN BY: EPB
 CHECKED BY: MBB

PROJECT: 431544
 DATE: 04/2/2023

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS