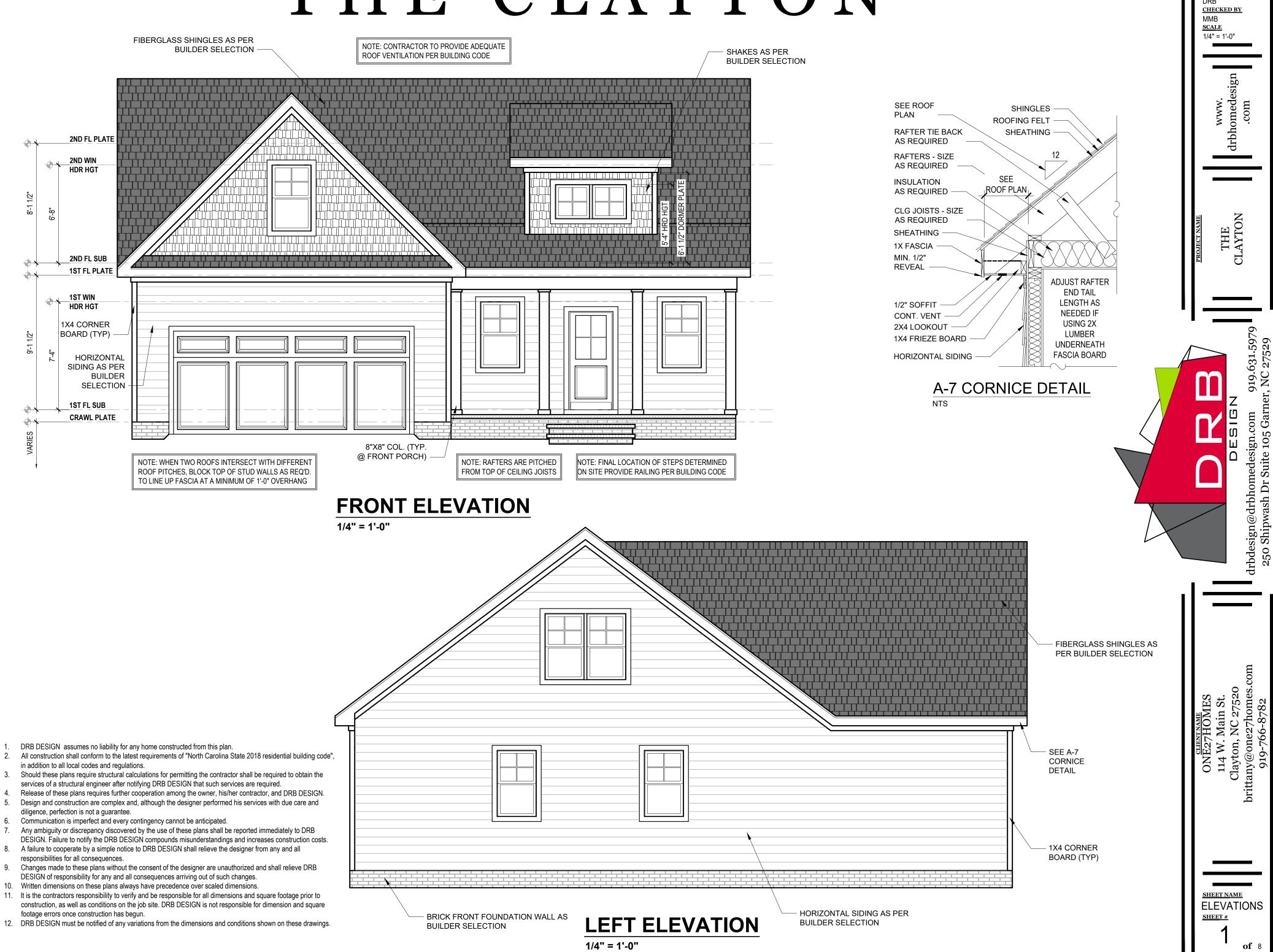
THE CLAYTON

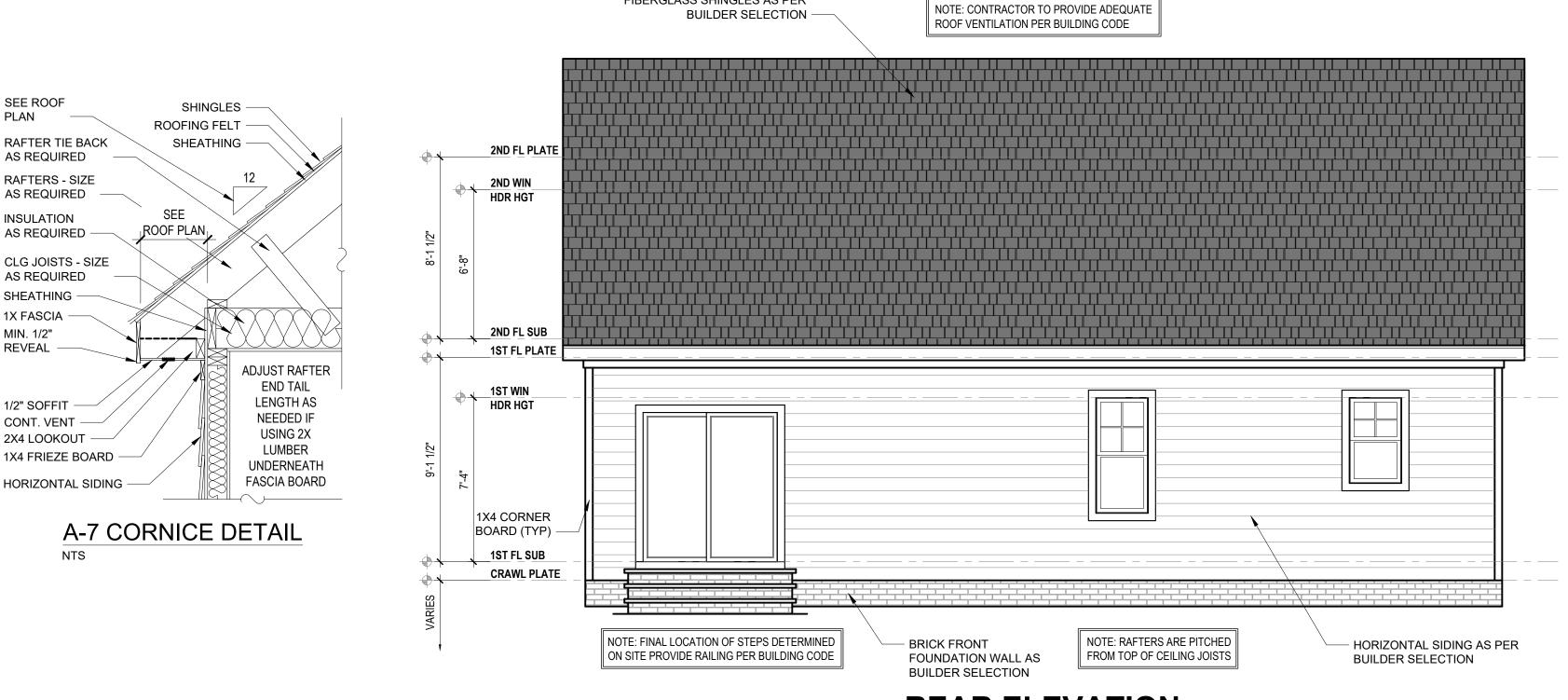
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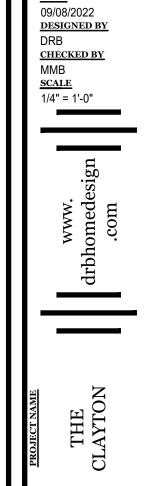
09/08/2022 **DESIGNED BY**



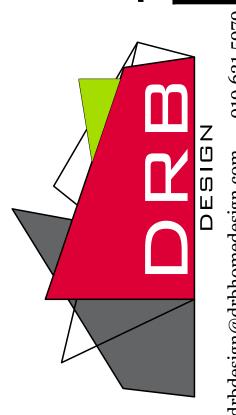
THE CLAYTON

FIBERGLASS SHINGLES AS PER





DRB2201-0233Z



REAR ELEVATION



1/4" = 1'-0"

SEE ROOF

RAFTER TIE BACK

AS REQUIRED **RAFTERS - SIZE**

AS REQUIRED

INSULATION

MIN. 1/2" REVEAL

1/2" SOFFIT

CONT. VENT

2X4 LOOKOUT

1X4 FRIEZE BOARD

AS REQUIRED

CLG JOISTS - SIZE AS REQUIRED **SHEATHING** 1X FASCIA

PLAN

- DRB DESIGN assumes no liability for any home constructed from this plan.
- All construction shall conform to the latest requirements of "North Carolina State 2018 residential building code", in addition to all local codes and regulations. Should these plans require structural calculations for permitting the contractor shall be required to obtain the
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ELEVATIONS

SHEET #



41'-0"

NOTE: SEE STRUCTURAL PLANS FOR ENGINEERING INFORMATION

DRB2201-0233Z 09/08/2022 DESIGNED BY CHECKED BY

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STEM WALL SHEET #

FOUNDATION PLAN

MONOLITHIC

1/4" = 1'-0"

41'-0"

21'-8"

NOTE: SEE STRUCTURAL PLANS FOR ENGINEERING INFORMATION

19'-4"

PROJECT #

DRB2201-0233Z

DATE

09/08/2022

DESIGNED BY

DRB

CHECKED BY

MMB

SCALE

1/4" = 1'-0"

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THH THE

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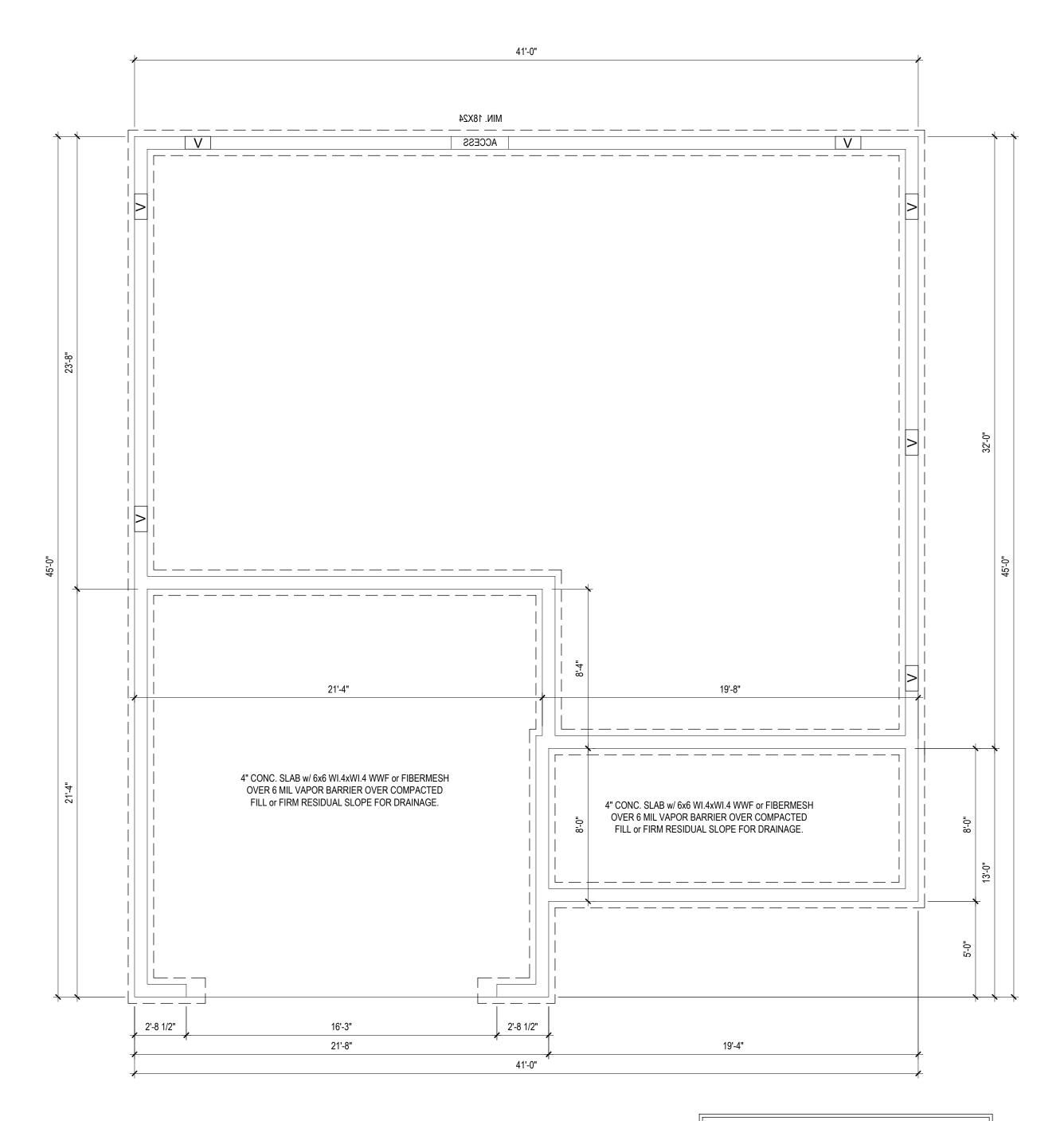
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SHEET NAME
MONOLITHIC
SHEET #

• ----

of 8



NOTE: VENT CRAWLSPACE PER LOCAL CODES AND REQUIREMENTS

FOUNDATION PLAN

1/4" = 1'-0" CRAWLSPACE

NOTE: SEE STRUCTURAL PLANS FOR ENGINEERING INFORMATION AND CRAWLSPACE VENTILATION CALCULATIONS PROJECT #
DRB2201-0233Z
DATE
09/08/2022
DESIGNED BY
DRB
CHECKED BY
MMB
SCALE
1/4" = 1'-0"

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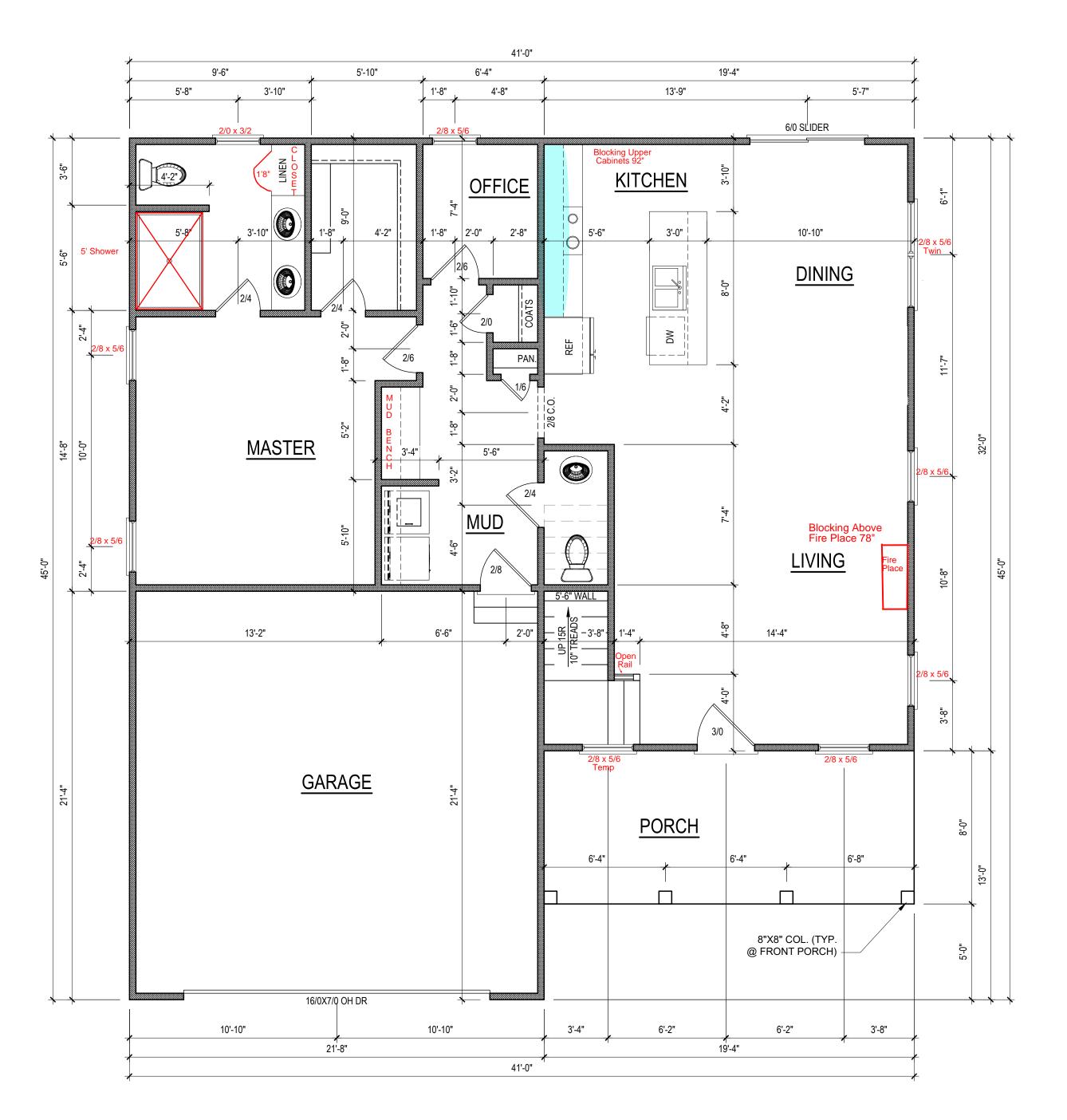
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SHEET NAME
CRAWLSPACE
SHEET #



FIRST FLOOR PLAN

1/4" = 1'-0" **CEILING HGT. = 9'-0"** HEATED/HABITABLE **SQUARE FOOTAGE**

First Floor 1134 472 **Second Floor**

TOTAL HEATED 1606

UNHTD SQUARE FOOTAGE 459 Garage 155 **Front Porch** 250 Rec. Room

TOTAL UNHEATED

2470 **TOTAL SQ FT**

864

NOTE: ALL EXTERIOR WALLS ARE NOMINAL 4" UNO

NOTE: ALL INTERIOR WALLS ARE NOMINAL 4" UNO

NOTE: ALL DIMENSIONS ARE FRAME TO FRAME

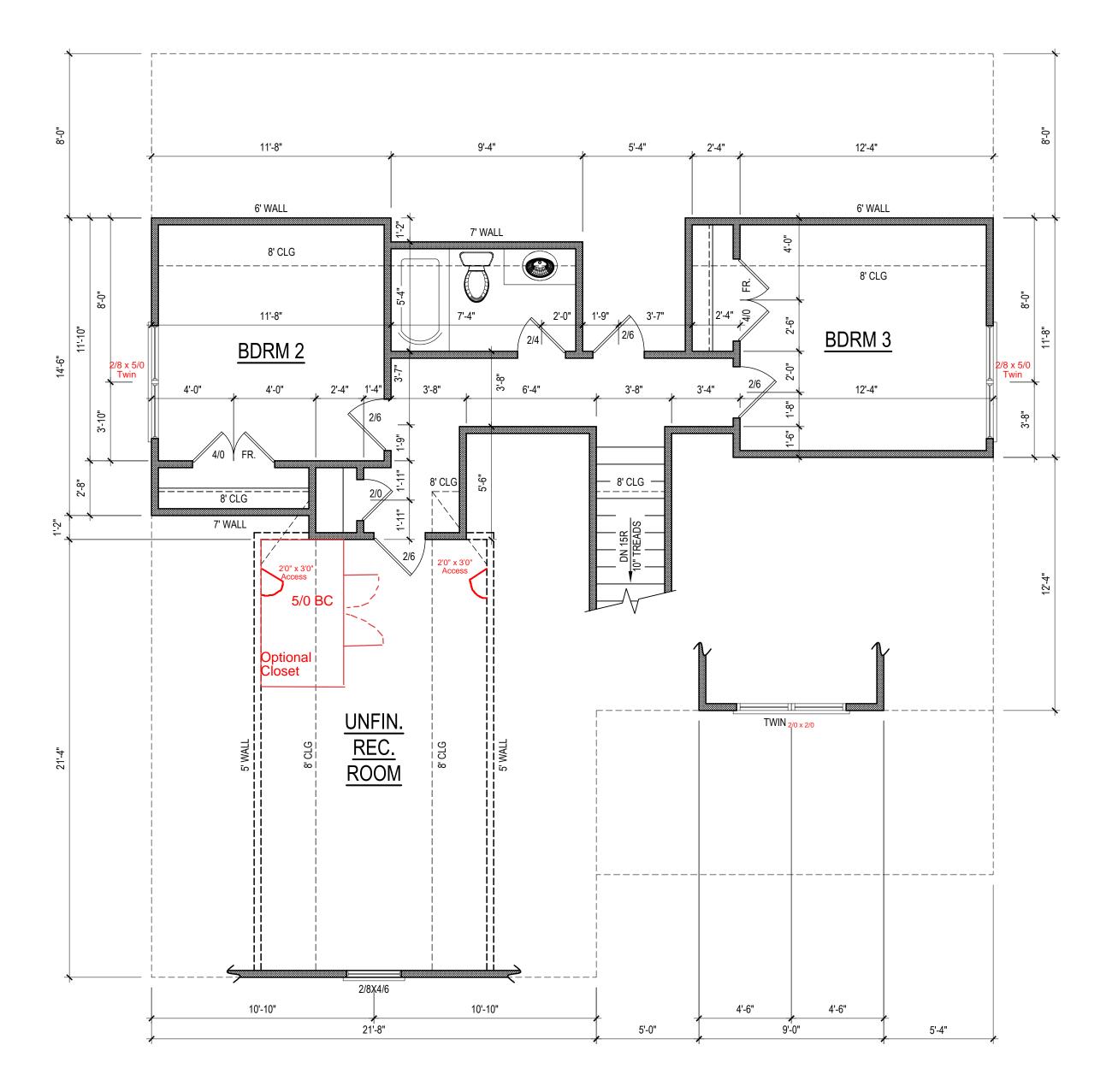
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<u>PROJECT #</u>
DRB2201-0233Z 09/08/2022 DESIGNED BY DRB CHECKED BY

1ST FLOOR

SHEET #



SECOND FLOOR PLAN

1/4" = 1'-0"

CEILING HGT. = 8'-0"

PROJECT #

DRB2201-0233Z

DATE

09/08/2022

DESIGNED BY

DRB

CHECKED BY

MMB

SCALE

1/4" = 1'-0"

www. drbhomedesign

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NOTE: ALL EXTERIOR WALLS ARE NOMINAL 4" UNO

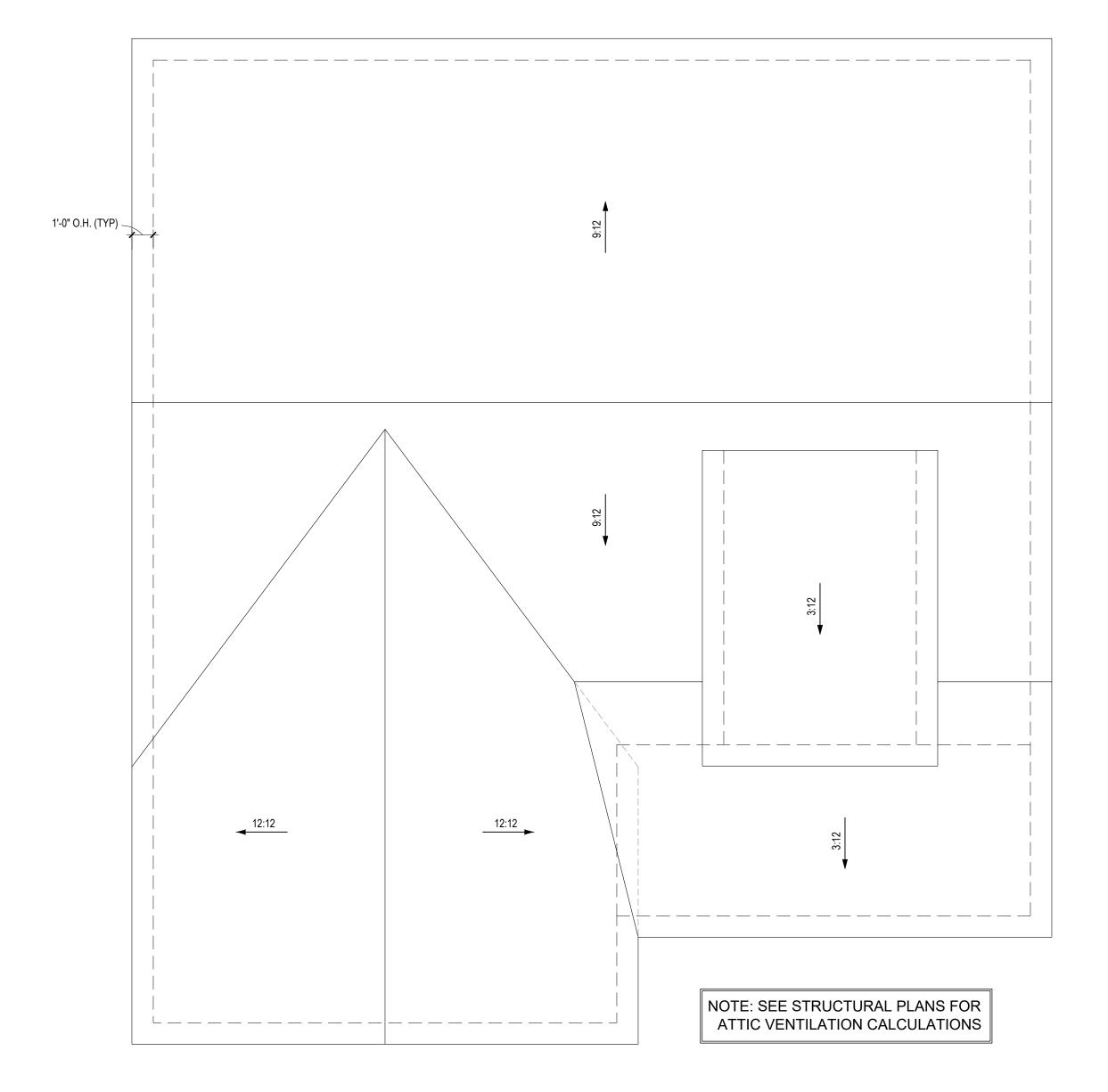
NOTE: ALL INTERIOR WALLS ARE NOMINAL 4" UNO

NOTE: ALL DIMENSIONS ARE FRAME TO FRAME

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SHEET NAME
2ND_FLOOR
SHEET #

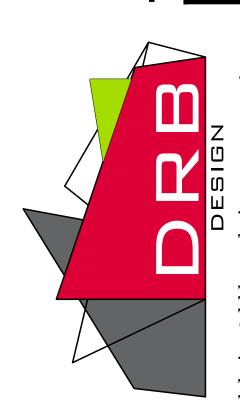
of 8



NOTE: ANY ROOF PITCH 4:12 OR LESS SHALL BE PROPERLY WATERPROOFED PER BLDG. CODE

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

<u>PROJECT #</u> DRB2201-0233Z <u>DATE</u> 09/08/2022 DESIGNED BY CHECKED BY



1. DRB DESIGN assumes no liability for any home constructed from this plan.

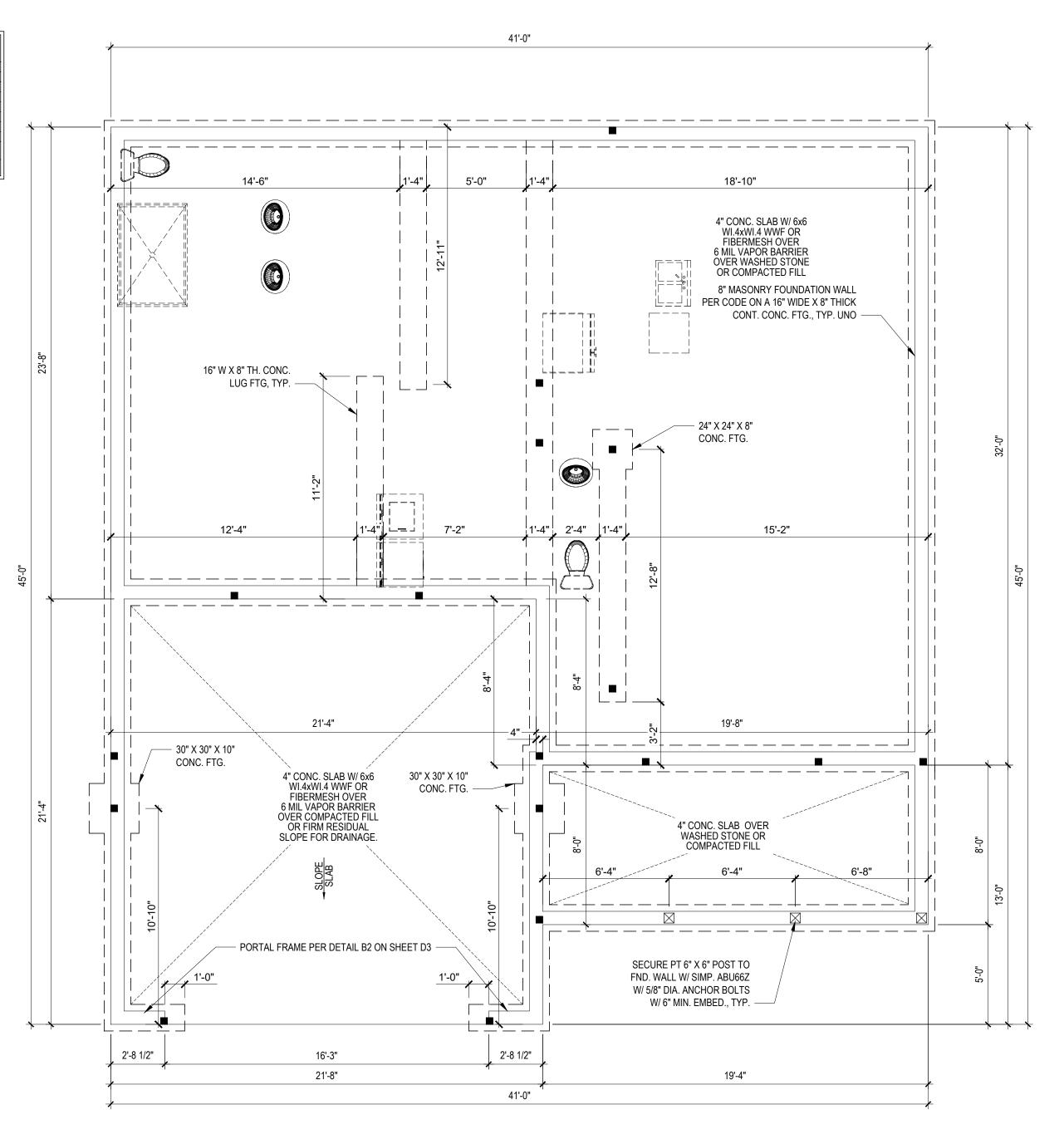
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SHEET NAME **ROOF** SHEET #

| | LIVE LOAD (PSF) | DEAD LOAD (PSF) | DEFLECTION | |
|--------------------|---------------------------------|--------------------|------------|-------|
| | (- / | (- / | LL | TL |
| FLOOR (primary) | 40 | 10 | L/360 | L/240 |
| FLOOR (secondary) | 40 | 10 | L/360 | L/240 |
| ATTIC (w/ storage) | 20 | 10 | L/240 | L/180 |
| ATTIC (no access) | 10 | 5 | L/240 | L/180 |
| EXTERNAL BALCONY | 40 | 10 | L/360 | L/240 |
| ROOF | 20 | 10 | L/240 | L/180 |
| ROOF TRUSS | 20 | 20 | L/240 | L/180 |
| WIND LOAD | BASED ON 120 MPH (EXPOSURE B) | | | |
| SEISMIC | BASED ON SEISMIC ZONES A, B & C | | | |

STRUCTURAL NOTES:

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- IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, PA IS NOT RESPONSIBLE FOR DIMENSIONS AND SQUARE FOOTAGE ERRORS ONCE
- CONSTRUCTION BEGINS. ALL LUMBER SHALL BE SYP #2 (UNO)
- ALL LVL LUMBER TO BE 1.75" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2600
- (I.E. iLEVEL MICROLAM)
- ALL LSL LUMBER IS TO BE 1.55E (Fb = 2325 PSI)
 ALL LOAD BEARING EXTERIOR WINDOW HEADERS ARE TO BE (2) 2x10 w/ (1) 2x4 JACK STUD (U.N.O.) AND KING STUDS PER TABLE R602.7.5, AND TOGETHER w/ (2) 10d NAILS @ 8" O.C., PROVIDED THAT THE TOP OF THE WINDOW HEIGHT IS 6'-8", MINIMUM BOTTOM OF THE WINDOW HEIGHT IS 1'-6". OTHERWISE REFER TO TABLES R602.7(1)
- AND R602.7(2). ALL INTERIOR LOAD BEARING HEADERS TO BE (2) 2x10 (U.N.O.) REFER TO TABLES R602.7(1) AND R602.7(2) FOR JACK STUD REQUIREMENTS FOR HEADER SPANS FOR INTERIOR AND EXTERIOR LOAD CONDITIONS (UNO)
- REFER TO 2018 NC BUILDING CODE SECTION R602 FOR CONSTRUCTION OF ALL WALLS OVER 10'-0" IN HEIGHT.
- ALL STRUCTURAL STEEL SHALL BE ASTM A992 GRADE 50
- Fv = 50 KSI MIN. (UNO)
- ALL EXTERIOR LUMBER TO BE #2 SYP PT ALL CONCRETE, fc = 3000 PSI MIN.
- PRESUMPTIVE BEARING CAPACITY = 2000 PSF
- 1/2"Ø ANCHOR BOLTS SPACED AT MAXIMUM OF 6'-0" O.C. AND NOT MORE THAN 12" FROM THE CORNER. THERE SHALL BE A MINIMUM OF (2) BOLTS PER PLATE SECTION. ANCHOR BOLTS SHALL BE SPACED AT 3'-0" O.C. FOR BASEMENTS. ANCHOR BOLT SHALL EXTEND 7" INTO CONCRETE OR MASONRY.
- PSL COLUMNS DESIGNED WITH MAX. HEIGHT OF 9'-0" (UNO)
- PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (U.N.O.)
- PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.4 OF THE 2018 IRC. MAXIMUM MASONRY PIER HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST
- HORIZONTAL DIMENSION. UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY ANCHORED TO THE FOUNDATION.
- 17) METAL HANGERS SHALL BE SIMPSON OR APPROVED EQUAL.



FOUNDATION PLAN

1/4" = 1'-0"

STEM WALL

 * Engineers seal does not include construction means, methods, techniques, sequences, procedures or safety precaution.
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 * Please review these documents carefully. Tyndall Engineering & Design, P.A. will interpret that all dimensions, recommendations, etc. presented in these documents were deemed accentable once construction emed acceptable once construction



TYNDALL ENGINEERING & DESIGN, P.A.



ONE27 HOMES

STEN

| Project #: | |
|-------------------|--|
| DRB2201-0233Z | |
| Date: 09/22/22 | |
| Engineered By: | |
| AM | |
| DWG. Checked By: | |

| | SEE PLAN | | | | |
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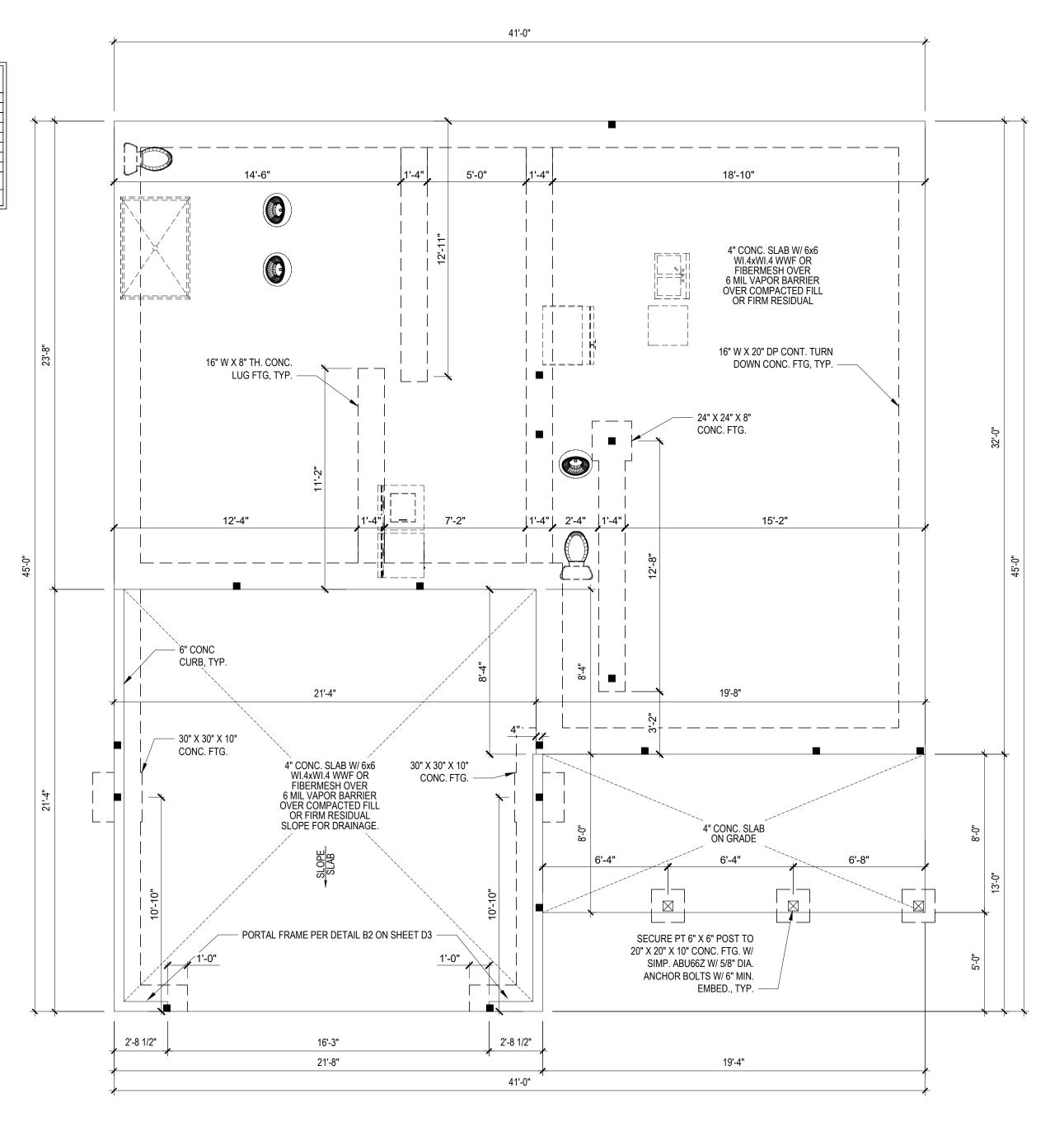
Sheet Number

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| | LIVE LOAD (PSF) | DEAD LOAD (PSF) | DEFLECTION | |
|--------------------|---------------------------------|--------------------|------------|-------|
| | (- / | (- / | LL | TL |
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| FLOOR (secondary) | 40 | 10 | L/360 | L/240 |
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| EXTERNAL BALCONY | 40 | 10 | L/360 | L/240 |
| ROOF | 20 | 10 | L/240 | L/180 |
| ROOF TRUSS | 20 | 20 | L/240 | L/180 |
| WIND LOAD | BASED ON 120 MPH (EXPOSURE B) | | | |
| SEISMIC | BASED ON SEISMIC ZONES A, B & C | | | |

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FOUNDATION PLAN

1/4" = 1'-0"

MONOLITHIC

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TYNDALL ENGINEERING & DESIGN, P.A.



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ONE27 HOMES

| Project #: | |
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| DRB2201-0233Z | |
| DKD2201-02332 | |
| Date: | - |
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| 09/22/22 | |
| | |
| Engineered By: | |
| AM | |
| AlVI | |
| DWG. Checked By: | - |
| DWG. Checked By. | |
| AWI. | |

| | SEE PLAN | | | |
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| | RE | VISIONS | | |
| No. | Date: | Remarks | | |
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Sheet Number

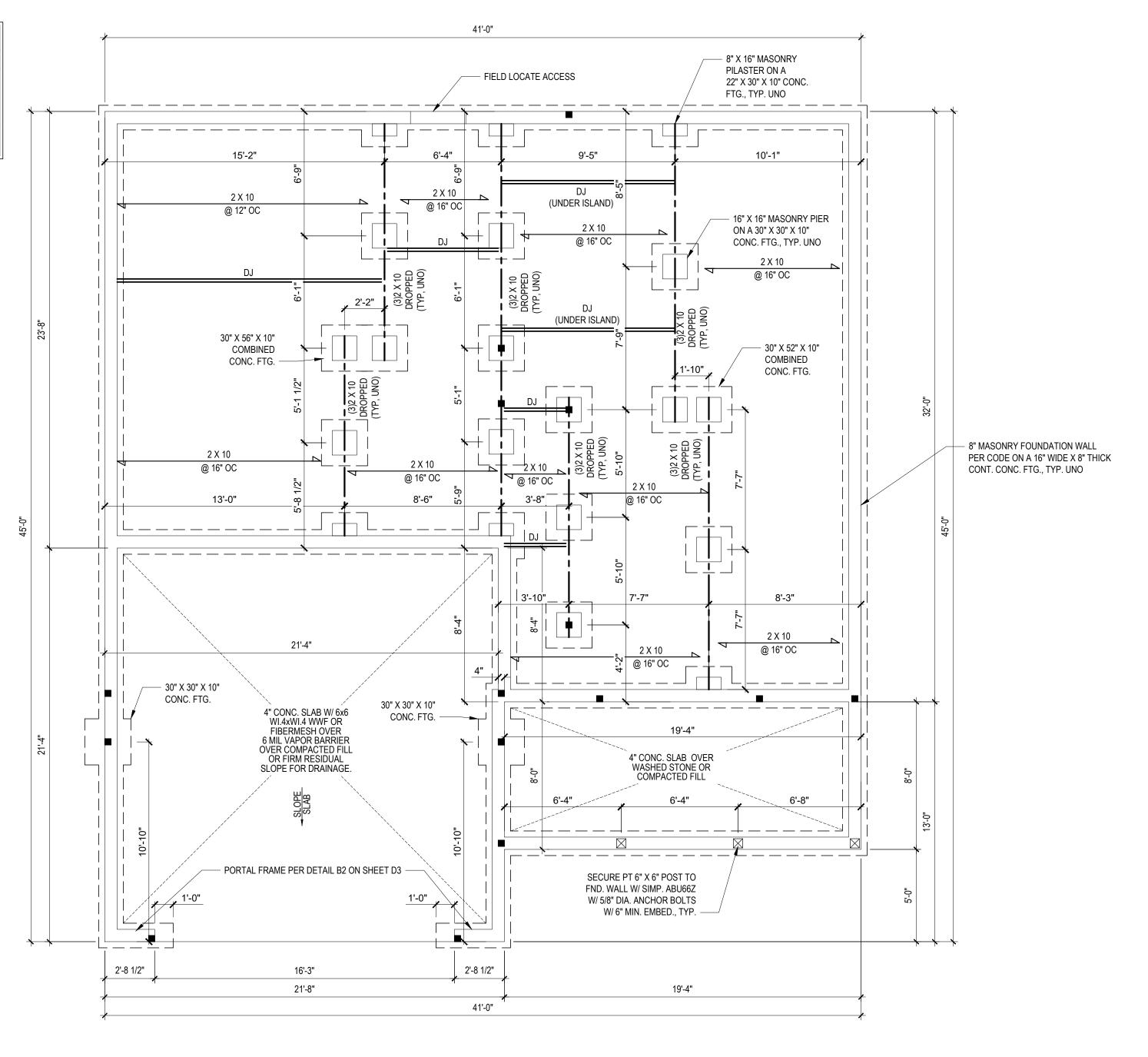
S1.1 1 of 7

DESIGN LOADS

| | LIVE LOAD (PSF) | | | DEFLECTION | |
|--------------------|---------------------------------|-------|-------|------------|--|
| | (-) | (- / | LL | TL | |
| FLOOR (primary) | 40 | 10 | L/360 | L/240 | |
| FLOOR (secondary) | 40 | 10 | L/360 | L/240 | |
| ATTIC (w/ storage) | 20 | 10 | L/240 | L/180 | |
| ATTIC (no access) | 10 | 5 | L/240 | L/180 | |
| EXTERNAL BALCONY | 40 | 10 | L/360 | L/240 | |
| ROOF | 20 | 10 | L/240 | L/180 | |
| ROOF TRUSS | 20 | 20 | L/240 | L/180 | |
| WIND LOAD | BASED ON 120 MPH (EXPOSURE B) | | | | |
| SEISMIC | BASED ON SEISMIC ZONES A, B & C | | | | |

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- 6) REFER TO 2018 NC BUILDING CODE SECTION R602 FOR CONSTRUCTION OF ALL
- WALLS OVER 10'-0" IN HEIGHT.
- 7) ALL STRUCTURAL STEEL SHALL BE ASTM A992 GRADE 50 Fy = 50 KSI MIN. (UNO)
- 8) ALL EXTERIOR LUMBER TO BE #2 SYP PT
- 9) ALL CONCRETE, fc = 3000 PSI MIN.
- 9) ALL CONCRETE, to = 3000 PSI MIN. 10) PRESUMPTIVE BEARING CAPACITY = 2000 PSF
- 11) 1/2"Ø ANCHOR BOLTS SPACED AT MAXIMUM OF 6'-0" O.C. AND NOT MORE THAN 12" FROM THE CORNER. THERE SHALL BE A MINIMUM OF (2) BOLTS PER PLATE SECTION. ANCHOR BOLTS SHALL BE SPACED AT 3'-0" O.C. FOR BASEMENTS. ANCHOR BOLT SHALL EXTEND 7" INTO CONCRETE OR MASONRY.
- 2) PSL COLUMNS DESIGNED WITH MAX. HEIGHT OF 9'-0" (UNO)
- 13) PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (U.N.O.)
- 14) PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.4 OF THE 2018 IRC.
- 15) MAXIMUM MASONRY PIER HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION.
- 16) UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY ANCHORED TO THE FOUNDATION.
- 17) METAL HANGERS SHALL BE SIMPSON OR APPROVED EQUAL.



FOUNDATION PLAN

1/4" = 1'-0"

CRAWLSPACE

ENAME. ME) DRB\DRB_2027\DRB2201-0233Z_ONEZ/HOMES_CLATTON\DRB2201-0233Z_LEFT_ONEZ/HOMES_CLATTON\CAD_FLES\DRB2201-0233Z_LEFT_EDWG_SAVED_BY: SMAHESH_LAST_PLOT DATE:9/28/2022_4:56|

* Engineers seal does not include construction means, methods, techniques, sequences, procedures or safety precaution.

* Any deviations or discrepancies on plans are to be brought to the immediate attention of Tyndall Engineering & Design, P.A. Failure to do so will void Tyndall Engineering & Design, P.A. liability.

* Please review these documents carefully. Tyndall Engineering & Design, P.A. will interpret that all dimensions, recommendations, etc. presented in these documents were deemed acceptable once construction begins.



ENGINEERING & DESIGN, P.A.



Plan:
THE CLAYTON - LEFT

ONE27 HOMES

CRAWL SPACE FDN. PLAN

| Project #: DRB2201-0233Z |
|-----------------------------|
| Date: 09/22/22 |
| Engineered By: AM |
| DWG. Checked By: |

| | SEE PLAN | | | | |
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| | REVISIONS | | | | |
| No. | Date: | Remarks | | | |
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Sheet Number

S1.2

of 7

ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.

DESIGN LOADS

(PSF)

DEAD LOAD

BASED ON 120 MPH (EXPOSURE B)

BASED ON SEISMIC ZONES A, B & C

DEFLECTION

L/360 L/240

L/240 L/180

L/240 L/180

L/240 L/180

L/240 L/180 L/360 L/240 BWL 1

2) IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, PA IS NOT RESPONSIBLE FOR DIMENSIONS AND SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.

ALL LUMBER SHALL BE SYP #2 (UNO)

ALL LVL LUMBER TO BE 1.75" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2600 PSI, E = 1.9M PSI

(I.E. iLEVEL MICROLAM)
ALL LSL LUMBER IS TO BE 1.55E (Fb = 2325 PSI)

4) ALL LOAD BEARING EXTERIOR WINDOW HEADERS ARE TO BE (2) 2x10 w/ (1) 2x4 JACK STUD (U.N.O.) AND KING STUDS PER TABLE R602.7.5, AND TOGETHER w/ (2) 10d NAILS @ 8" O.C., PROVIDED THAT THE TOP OF THE WINDOW HEIGHT IS 6'-8", MINIMUM BOTTOM OF THE WINDOW HEIGHT IS 1'-6". OTHERWISE REFER TO TABLES R602.7(1)

5) ALL INTERIOR LOAD BEARING HEADERS TO BE (2) 2x10 (U.N.O.) REFER TO TABLES R602.7(1) AND R602.7(2) FOR JACK STUD REQUIREMENTS FOR HEADER SPANS FOR

INTERIOR AND EXTERIOR LOAD CONDITIONS (UNO)
6) REFER TO 2018 NC BUILDING CODE SECTION R602 FOR CONSTRUCTION OF ALL

WALLS OVER 10'-0" IN HEIGHT.
7) ALL STRUCTURAL STEEL SHALL BE ASTM A992 GRADE 50

Fy = 50 KSI MIN. (UNO)

8) ALL EXTERIOR LUMBER TO BE #2 SYP PT

9) ALL CONCRETE, fc = 3000 PSI MIN. 10) PRESUMPTIVE BEARING CAPACITY = 2000 PSF

11) 1/2"Ø ANCHOR BOLTS SPACED AT MAXIMUM OF 6'-0" O.C. AND NOT MORE THAN 12" FROM THE CORNER. THERE SHALL BE A MINIMUM OF (2) BOLTS PER PLATE SECTION. ANCHOR BOLTS SHALL BE SPACED AT 3'-0" O.C. FOR BASEMENTS. ANCHOR BOLT SHALL EXTEND 7" INTO CONCRETE OR MASONRY.

12) PSL COLUMNS DESIGNED WITH MAX. HEIGHT OF 9'-0" (UNO)
13) PROVIDE A MINIMUM OF 500# LIPLIET & LATERAL CONNECTION AT I

13) PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (U.N.O.)

PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.4 OF THE 2018 IRC.
 MAXIMUM MASONRY PIER HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST

HORIZONTAL DIMENSION.

16) UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY ANCHORED TO THE

17) METAL HANGERS SHALL BE SIMPSON OR APPROVED EQUAL.

STRUCTURAL SHEATHING NOTES

1) DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 120 MPH OR

 WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE 2018 NCRC.

3) BRACING REQUIREMENTS SHALL BE PER TABLE R602.10.3.
REFER TO SECTION R602.10.4 FOR LOAD PATH DETAILS INCLUDING CONNECTIONS & SUPPORT OF BRACED WALL PANELS.

1 REFERENCE FIGURE R602.10.4.3 OF THE 2018 NCRC.

INTERIOR BRACED WALL PANELS (BWP) INDICATED SHALL BE SHEATHED IN ACCORDANCE WITH THE GB METHOD OR WSP METHOD AS PRESCRIBED IN SECTION R602.10.1 (UNO)

(2) 1/2" GYPSUM BOARD (GB) MINIMUM LENGTH OF 8'-0" (ISOLATED PANELS) OR 4'-0" (CONTINUOUS SHEATHING).
SECURE w/ 5d COOLER NAILS (OR EQUAL PER TABLE R702.3.5)
SPACED @ 7" O.C. AT PANEL EDGES, INCLUDING TOP AND BOTTOM PLATES & 7" O.C. AT INTERMEDIATE SUPPORTS

3)8" WOOD STRUCTURAL PANEL (WSP) SECURE w/ 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS

5) EXTERIOR BRACED WALL PANELS (BWP) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.3 (UNO)

6) ALL SHEATHABLE SURFACES OF EXTERIOR WALLS (INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS) SHALL BE CONTINUOUSLY SHEATHED WITH WOOD STRUCTURAL PANEL (WSP) SHEATHING WITH A MINIMUM THICKNESS OF 3/8". SHEATHING SHALL BE SECURED WITH MINIMUM 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND SPACED AT 12" O.C. AT INTERMEDIATE SUPPORTS.

7) MINIMUM BRACED WALL PANEL LENGTHS WITH CS-WSP METHOD SHALL BE AS FOLLOWS: - 24" ADJACENT TO OPENINGS NOT MORE THAN

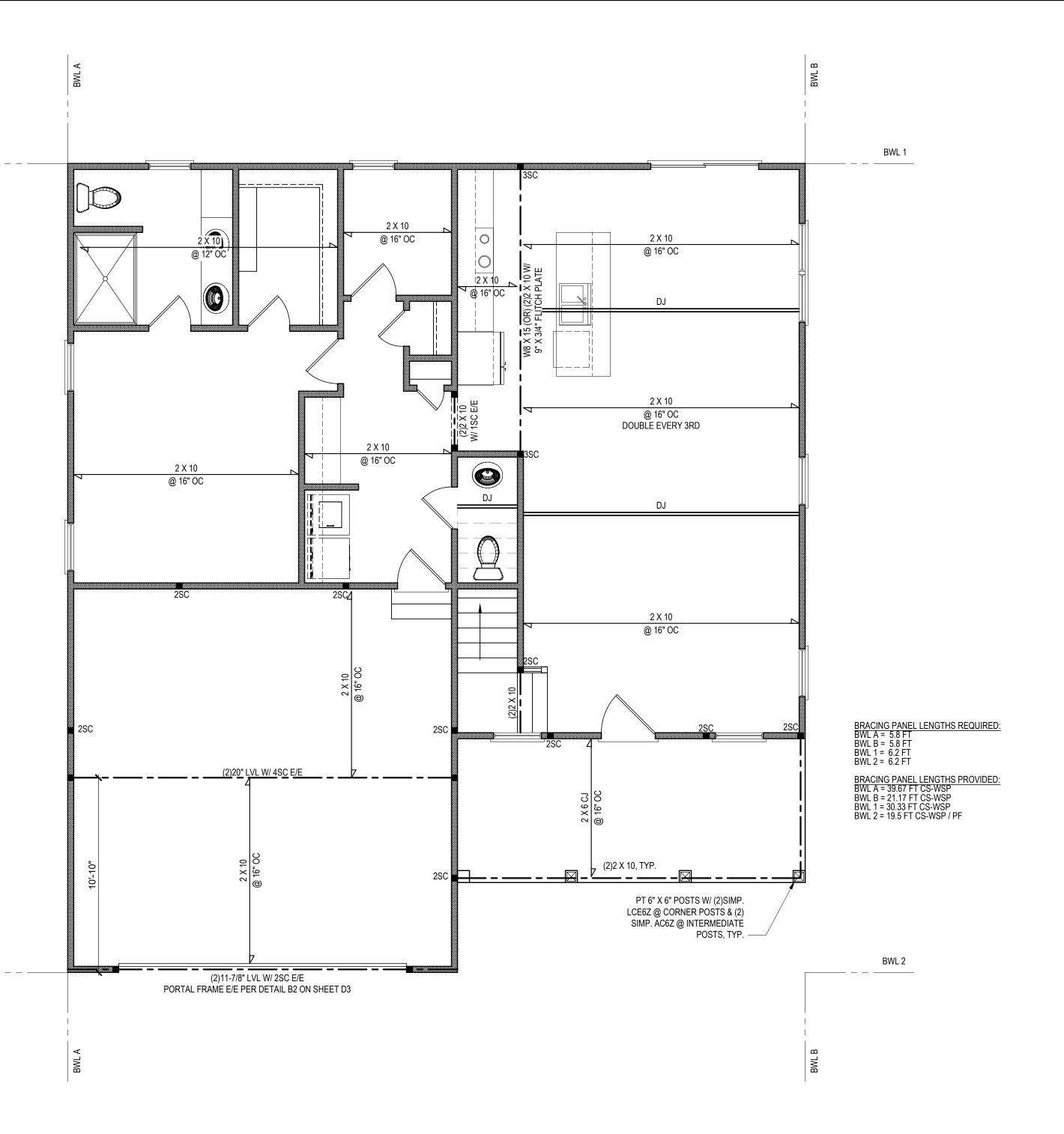
67% OF WALL HEIGHT
- 30" ADJACENT TO OPENINGS GREATER THAN
67% AND LESS THAN 85% OF WALL HEIGHT.
- 48" FOR OPENINGS GREATER THAN 85% OF
WALL HEIGHT

BWL 2

4 SHEATH INTERIOR & EXTERIOR

8) FOR CS-WSP METHOD, A MINIMUM 24" BRACED WALL PANEL CORNER RETURN SHALL BE PROVIDED AT BOTH ENDS OF A BRACED WALL LINE IN ACCORDANCE WITH FIGURE R602.10.3(4). IN LIEU OF A CORNER RETURN, EITHER A MIN. 48" BRACED WALL PANEL SHALL BE PROVIDED AT THE CORNER OR A HOLD-DOWN DEVICE WITH A MINIMUM UPLIFT DESIGN VALUE OF 800# SHALL BE FASTENED TO THE EDGE OF THE BRACED WALL PANEL CLOSEST TO THE CORNER AND TO THE FOUNDATION OR FRAMING BELOW.

(5) MINIMUM 800# HOLD-DOWN DEVICE



FIRST FLOOR PLAN

1/4" = 1'-0" CEILING HGT. = 9'-0"

means, methods, techniques, sequences, procedures or safety precaution.

* Any deviations or discrepancies on plans are to be brought to the immediate attention of Tyndall Engineering & Design, P.A. Failure to do so will void Tyndall Engineering & Design, P.A. liability.

* Please review these documents carefully. Tyndall Engineering & Design, P.A. will interpret that all dimensions, recommendations, etc. presented in these documents were deemed acceptable once construction begins.



ENGINEERING & DESIGN, P.A.



Plan:
THE CLAYTON - LEFT

1ST FLR. HEADE! 2ND FLR. FRMG.

| Project #: |
|------------------|
| DRB2201-0233Z |
| DRD2201 0233E |
| Date: |
| 09/22/22 |
| 07122122 |
| Engineered By: |
| AM |
| Alvi |
| DWG. Checked By: |
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SEE PLAN

| | REVISIONS | | | | |
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Sheet Number

S2

DESIGN LOADS

| | LIVE LOAD (PSF) | DEAD LOAD (PSF) | DEFLECTION | |
|--------------------|---------------------------------|--------------------|------------|-------|
| | (/ | (, ,, | LL | TL |
| FLOOR (primary) | 40 | 10 | L/360 | L/240 |
| FLOOR (secondary) | 40 | 10 | L/360 | L/240 |
| ATTIC (w/ storage) | 20 | 10 | L/240 | L/180 |
| ATTIC (no access) | 10 | 5 | L/240 | L/180 |
| EXTERNAL BALCONY | 40 | 10 | L/360 | L/240 |
| ROOF | 20 | 10 | L/240 | L/180 |
| ROOF TRUSS | 20 | 20 | L/240 | L/180 |
| WIND LOAD | BASED ON 120 MPH (EXPOSURE B) | | | |
| SEISMIC | BASED ON SEISMIC ZONES A, B & C | | | |

STRUCTURAL NOTES:

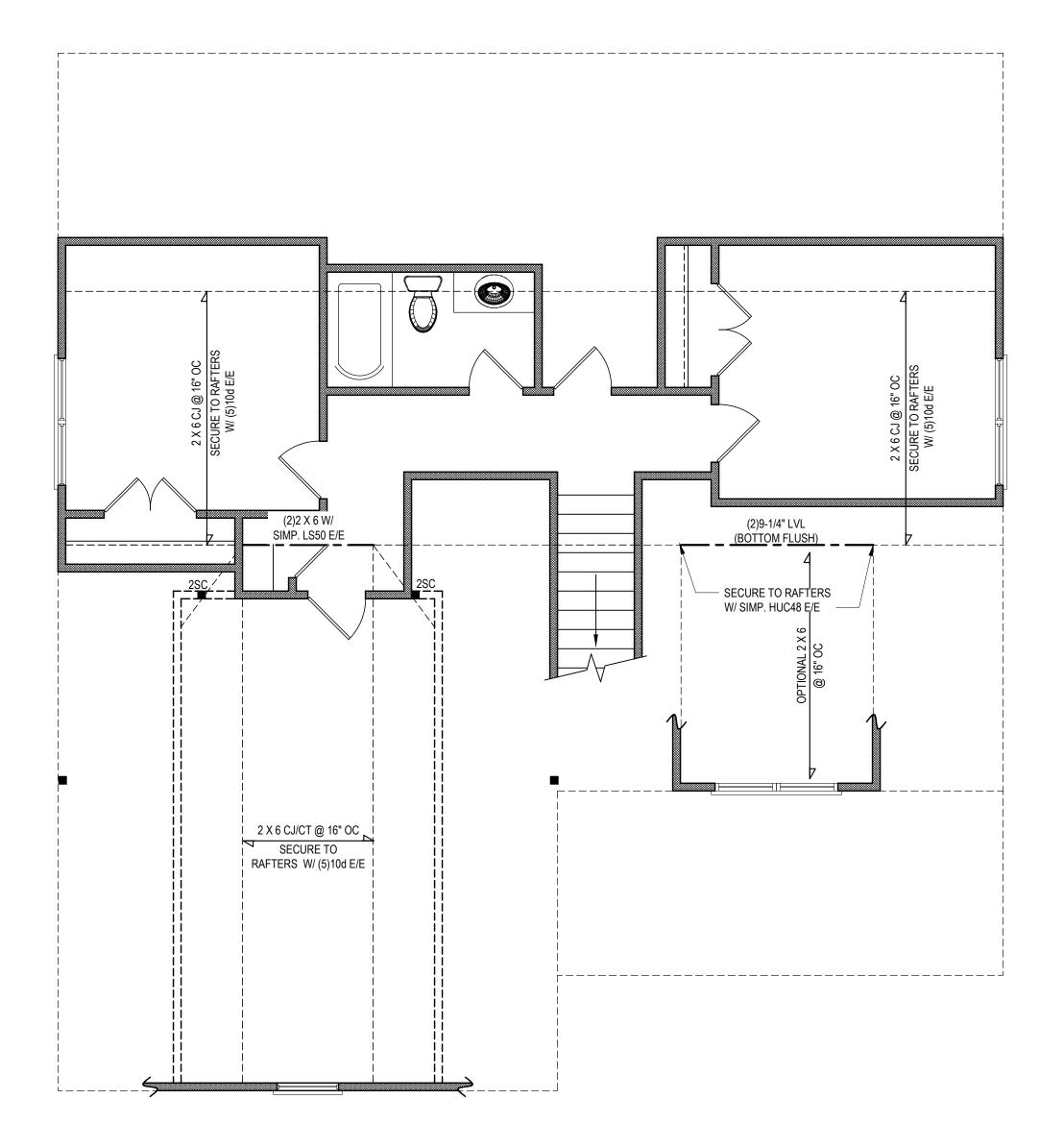
- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.
- 2) IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, PA IS NOT RESPONSIBLE FOR DIMENSIONS AND SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.
- 3) ALL LUMBER SHALL BE SYP #2 (UNO)
 ALL LVL LUMBER TO BE 1.75" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2600
 PSI, E = 1.9M PSI
- (I.E. iLEVEL MICROLAM)
 ALL LSL LUMBER IS TO BE 1.55E (Fb = 2325 PSI)
- 4) ALL LOAD BEARING EXTERIOR WINDOW HEADERS ARE TO BE (2) 2x10 w/ (1) 2x4 JACK STUD (U.N.O.) AND KING STUDS PER TABLE R602.7.5, AND TOGETHER w/ (2) 10d NAILS @ 8" O.C., PROVIDED THAT THE TOP OF THE WINDOW HEIGHT IS 6'-8", MINIMUM BOTTOM OF THE WINDOW HEIGHT IS 1'-6". OTHERWISE REFER TO TABLES R602.7(1) AND R602.7(2)
- 5) ALL INTERIOR LOAD BEARING HEADERS TO BE (2) 2x10 (U.N.O.) REFER TO TABLES R602.7(1) AND R602.7(2) FOR JACK STUD REQUIREMENTS FOR HEADER SPANS FOR INTERIOR AND EXTERIOR LOAD CONDITIONS (UNO)
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- 9) ALL CONCRETE, fc = 3000 PSI MIN.
- 0) PRESUMPTIVE BEARING CAPACITY = 2000 PSF
- 11) 1/2"Ø ANCHOR BOLTS SPACED AT MAXIMUM OF 6'-0" O.C. AND NOT MORE THAN 12"
 FROM THE CORNER. THERE SHALL BE A MINIMUM OF (2) BOLTS PER PLATE SECTION.
 ANCHOR BOLTS SHALL BE SPACED AT 3'-0" O.C. FOR BASEMENTS. ANCHOR BOLT
 SHALL EXTEND 7" INTO CONCRETE OR MASONRY.
- 12) PSL COLUMNS DESIGNED WITH MAX. HEIGHT OF 9'-0" (UNO)
- 13) PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (U.N.O.)
- 14) PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.4 OF THE 2018 IRC.
- 15) MAXIMUM MASONRY PIER HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION.
 16) UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY ANCHORED TO THE
- FOUNDATION.

 17) METAL HANGERS SHALL BE SIMPSON OR APPROVED EQUAL.

STRUCTURAL SHEATHING NOTES

- 1) DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 120 MPH OR
- WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE 2018 NCRC.
- 3) BRACING REQUIREMENTS SHALL BE PER TABLE R602.10.3.
 REFER TO SECTION R602.10.4 FOR LOAD PATH DETAILS INCLUDING CONNECTIONS & SUPPORT OF BRACED WALL PANELS.
- $\fbox{1}$ REFERENCE FIGURE R602.10.4.3 OF THE 2018 NCRC.
- 4) INTERIOR BRACED WALL PANELS (BWP) INDICATED SHALL BE SHEATHED IN ACCORDANCE WITH THE GB METHOD OR WSP METHOD AS PRESCRIBED IN SECTION R602.10.1 (UNO)
- 2 1/2" GYPSUM BOARD (GB) MINIMUM LENGTH OF 8'-0" (ISOLATED PANELS) OR 4'-0" (CONTINUOUS SHEATHING).
 SECURE w/ 5d COOLER NAILS (OR EQUAL PER TABLE R702.3.5)
 SPACED @ 7" O.C. AT PANEL EDGES, INCLUDING TOP AND
 BOTTOM PLATES & 7" O.C. AT INTERMEDIATE SUPPORTS
- (3) 3/8" WOOD STRUCTURAL PANEL (WSP) SECURE w/ 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS
- 5) EXTERIOR BRACED WALL PANELS (BWP) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.3 (UNO)
- 6) ALL SHEATHABLE SURFACES OF EXTERIOR WALLS (INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS) SHALL BE CONTINUOUSLY SHEATHED WITH WOOD STRUCTURAL PANEL (WSP) SHEATHING WITH A MINIMUM THICKNESS OF 3/8". SHEATHING SHALL BE SECURED WITH MINIMUM 6d COMMON NAILS SPACED AT 6" O.C. AT
- PANEL EDGES AND SPACED AT 12" O.C. AT INTERMEDIATE SUPPORTS.

 7) MINIMUM BRACED WALL PANEL LENGTHS WITH CS-WSP METHOD SHALL BE AS FOLLOWS:
 - 24" ADJACENT TO OPENINGS NOT MORE THAN 67% OF WALL HEIGHT - 30" ADJACENT TO OPENINGS GREATER THAN 67% AND LESS THAN 85% OF WALL HEIGHT
 - 30" ADJACENT TO OPENINGS GREATER THAN 67% AND LESS THAN 85% OF WALL HEIGHT. - 48" FOR OPENINGS GREATER THAN 85% OF WALL HEIGHT
- 4 SHEATH INTERIOR & EXTERIOR
- 8) FOR CS-WSP METHOD, A MINIMUM 24" BRACED WALL PANEL CORNER RETURN SHALL BE PROVIDED AT BOTH ENDS OF A BRACED WALL LINE IN ACCORDANCE WITH FIGURE R602.10.3(4). IN LIEU OF A CORNER RETURN, EITHER A MIN. 48" BRACED WALL PANEL SHALL BE PROVIDED AT THE CORNER OR A HOLD-DOWN DEVICE WITH A MINIMUM UPLIFT DESIGN VALUE OF 800# SHALL BE FASTENED TO THE EDGE OF THE BRACED WALL PANEL CLOSEST TO THE CORNER AND TO THE FOUNDATION OR FRAMING BELOW.
- (5) MINIMUM 800# HOLD-DOWN DEVICE



SECOND FLOOR PLAN

1/4" = 1'-0"

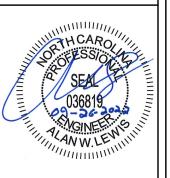
CEILING HGT. = 8'-0"

* Engineers seal does not include construction means, methods, techniques, sequences, procedures or safety precaution.

* Any deviations or discrepancies on plans are to be brought to the immediate attention of Tyndall Engineering & Design, P.A. Failure to do so will void Tyndall Engineering & Design, P.A. liability.

* Please review these documents carefully.

Tyndall Engineering & Design, P.A. will interpret that all dimensions, recommendations, etc. presented in these documents were deemed acceptable once construction begins.



TYNDALL
ENGINEERING & DESIGN, P.A.



Plan:
THE CLAYTON - LEFT

2ND FLR. HDR. 2ND FLR. CLG.

Project #:
DRB2201-0233Z

Date:
09/22/22

Engineered By:
AM

DWG. Checked By:
AWL

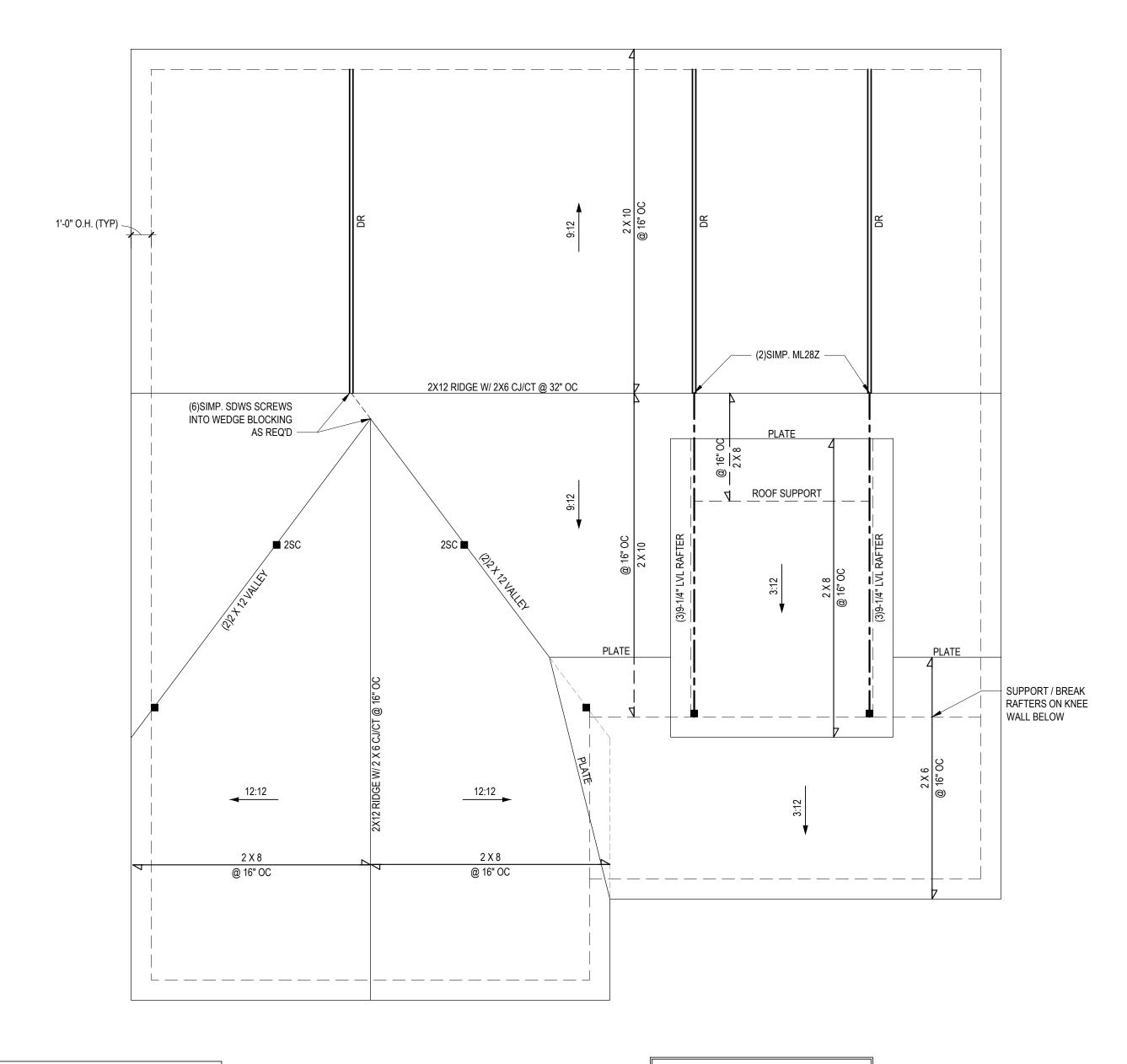
REVISIONS

No. Date: Remarks

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Sheet Number

S3



1594 SQ. FT. OF ATTIC / 300 = 5.31 SQ. FT. INLETS/OUTLETS REQUIRED

- CALCULATION BASED ON VENTILATORS USED AT LEAST 3'-0" ABOVE
 THE COMICE VENTS WITH THE BALANCE OF VENTILATION PROVIDED
 BY EAVE VENTS.
- 2) CATHEDRAL CEILINGS SHALL HAVE A 1" MINIMUM CLEARANCE BETWEEN THE BOTTOM OF THE ROOF DECK AND THE INSULATION.

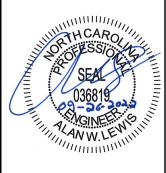
NO SCALE *

ATTIC VENTILATION CALCULATION

NOTE: ANY ROOF PITCH 4:12 OR LESS SHALL BE PROPERLY WATERPROOFED PER BLDG. CODE

ROOF PLAN1/4" = 1'-0"

* Engineers seal does not include construction means, methods, techniques, sequences, procedures or safety precaution.
* Any deviations or discrepancies on plans are to be brought to the immediate attention of Tyndall Engineering & Design, P.A. Failure to do so will void Tyndall Engineering & Design, P.A. liability.
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TYNDALL ENGINEERING & DESIGN, P.A.



Plun:
THE CLAYTON - LEFT

ROOF PLAN

ONE27 HOMES

| Project #: DRB2201-0233Z | |
|-----------------------------|---|
| Date: 09/22/22 | |
| Engineered By: AM | _ |
| DWG. Checked By: | |

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Sheet Number

S4

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STRUCTURAL NOTES

ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.

2) DESIGN LOADS:

| | LIVE LOAD (PSF) | DEAD LOAD (PSF) | DEFLECTION | |
|---------------------------|-------------------------------|--------------------|------------|-------|
| | | | LL | TL |
| ALL FLOORS | 40 | 10 | L/360 | L/240 |
| ATTIC (w/ walk up stairs) | 30 | 10 | L/360 | L/240 |
| ATTIC (pull down access) | 20 | 10 | L/240 | L/180 |
| ATTIC (no access) | 10 | 5 | L/240 | L/180 |
| EXTERNAL BALCONY | 40 | 10 | L/360 | L/240 |
| ROOF | 20 | 10 | L/240 | L/180 |
| ROOF TRUSS | 20 | 20 | L/240 | L/180 |
| WIND LOAD | BASED ON 120 MPH (EXPOSURE B) | | | |
| SEISMIC | SEISMIC ZONES A, B & C | | | |

- MINIMUM ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF
- CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF FIVE INCHES
- MAXIMUM DEPTH OF UNBALANCED FILL AGAINST FOUNDATION WALLS TO BE LESS THAN 4'-0" WITHOUT USING SUFFICIENT WALL BRACING. REFER TO SECTION R404 OF 2018 NC BUILDING CODE FOR BACKFILL LIMITATIONS BASED ON WALL HEIGHT, WALL THICKNESS, SOIL TYPE, AND UNBALANCED BACKFILL HEIGHT.
- ALL FRAMING LUMBER SHALL BE SYP #2 (Fb = 800 PSI, BASED ON 2x10) UNO.
- ALL FRAMING LUMBER EXPOSED TO THE ELEMENTS SHALL BE TREATED MATERIAL. ALL LVL LUMBER TO BE 1.75" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2600 PSI, E = 1.9M PSI (U.N.O.) ALL LSL LUMBER TO BE 3.5" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2325 PSI, E = 1.6M PSI (U.N.O.) ALL PSL LUMBER TO BE 3.5" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2400 PSI, E = 1.8M PSI (U.N.O.)
- ALL LOAD BEARING EXTERIOR HEADERS SHALL BE AT (2) 2x10. (U.N.O.) REFER TO TABLE R602.7(1) & (2) FOR JACK STUD REQUIREMENTS FOR HEADER SPANS FOR INTERIOR AND EXTERIOR LOAD CONDITIONS UNLESS SPECIFICALLY NOTED ON PLANS.
- ALL STRUCTURAL STEEL W-SHAPES (I-BEAMS) SHALL BE ASTM A992 GRADE 50. ALL STEEL ANGLES, PLATES, AND C-CHANNELS SHALL BE ASTM A36. ALL STEEL PIPE SHALL BE ASTM A53 GRADE B.
- STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3-1/2" AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO (2) LAG SCREWS (1/2"0% 4" LONG), LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDED THE JOISTS ARE TOE NAILED TO THE SOLE PLATES, AND THE SOLE PLATES ARE NAILED OR BOLTED TO THE BEAM FLANGES @ 48" O.C.
- 10) PROVIDE ANCHOR BOLT PLACEMENT PER SECTION 403.1.6: 1/2"Ø ANCHOR BOLTS SPACED AT 6'-0" O.C. AND PLACED 12" FROM THE END OF EACH PLATE SECTION. ANCHOR BOLTS SHALL BE SPACED AT 3'-0" O.C. FOR BASEMENTS. ANCHOR BOLT SHALL EXTEND 7" INTO CONCRETE OR MASONRY. THE BOLTS SHALL BE LOCATED IN THE MIDDLE THIRD OF THE WIDTH OF THE PLATE.
- FOUNDATION DRAINAGE-DAMP PROOFING OR WATERPROOFING PER SECTION 405 AND 406 OF NC BUILDING CODE.
- WALL CLADDING SHALL BE DESIGNED FOR 28.0 POUNDS PER SQUARE FOOT (LBS/SQFT) OR GREATER POSITIVE AND NEGATIVE PRESSURE. ROOF VALUES BOTH POSITIVE AND NEGATIVE SHALL BE AS FOLLOWS: 39.0 LBS/SQFT FOR ROOF PITCHES 0/12 TO 1.5/12 36.0 LBS/SQFT FOR ROOF PITCHES 1.5/12 TO 6/12 18.0 LBS/SQFT FOR ROOF PITCHES 6/12 TO 12/12 *MEAN ROOF HEIGHT 30'-0" OR LESS
- 13) FOR ROOF SLOPES FROM 2/12 THROUGH 4/12, BUILDER TO INSTALL 2 LAYERS OF 15# FELT PAPER.
- 14) REFER TO SECTION R602.3 FOR FRAMING OF ALL WALLS OVER 10'-0" IN HEIGHT.
- 15) PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.3 OF THE 2018 NCRC.
- 16) UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY ANCHORED TO THE FOUNDATION.
- 17) REFER TO TABLE N1102.1 FOR PRESCRIPTIVE BUILDING ENVELOPE THERMAL COMPONENT CRITERIA.
- 18) PSL COLUMNS DESIGNED WITH MAXIMUM HEIGHT OF 9'-0" (U.N.O.)
- 19) PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (U.N.O.)
- 20) MAXIMUM MASONRY PEIR HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION.
- 21) IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, PA IS NOT RESPONSIBLE FOR DIMENSION OR SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.

| CLIMATE ZONES | FENESTRATION U-FACTOR b,j | SKYLIGHT ^b U-FACTOR | GLAZED FENESTRATION SHGC ^{b,k} | CEILING ^m R-VALUE | WOOD FRAMED WALL R-VALUE | MASS WALL R-VALUE ⁱ | FLOOR R-VALUE | BASEMENT ^{c,<u>o</u>} WALL R-VALUE | SLAB ^d R-VALUE AND DEPTH | CRAWL SPACE ^C WALL R-VALUE |
|------------------|------------------------------|-----------------------------------|---|---------------------------------|-------------------------------------|--------------------------------------|------------------|---|---|---|
| 3 | 0.35 | 0.55 | 0.30 | 38 or 30 cont | 15 or 13 + 2.5 | <u>5/13 or</u> <u>5/10 cont</u> | 19 | <u>5/13</u> ^f | 0 | 5/13 |
| 4 | 0.35 | 0.55 | 0.30 | 38 or 30 cont ^j | 15 or 13 + <u>2.5</u> h | 5/13 or 5/10 cont | 19 | <u>10/15</u> | 10 | <u>10/15</u> |
| 5 | <u>0.35</u> | 0.55 | NR | 38 or 30 cont | ⁿ <u>19, or 13 + 5</u> h | 13/17 <u>or</u> 13/12.5 cont | 30 ^g | <u>10/15</u> | 10 | <u>10/19</u> |

TABLE N1102.1 CLIMATE ZONES 3-5

R-VALUES ARE MINIMUMS. U-FACTORS AND SHGC ARE MAXIMUMS. WHEN INSULATION IS INSTALLED IN A CAVITY WHICH IS LESS THAN THE LABEL OR DESIGN THICKNESS OF THE INSULATION, THE INSTALLED R-VALUE OF THE INSULATION, THE INSTALLED R-VALUE OF THE INSULATION SHALL NOT BE LESS THAN THE R-VALUE SPECIFIED IN THE TABLE.

- b. THE FENESTRATION U-FACTOR COLUMN EXCLUDED SKYLIGHTS. THE SOLAR HEAT GAIN COEFFICIENT (SHGC) COLUMN APPLIES TO ALL GLAZED FENESTRATION.
- c. $\underline{\text{"10/15"}}$ MEANS R-10 CONTINUOUS INSULATED SHEATHING ON THE INTERIOR OR EXTERIOR OF THE HOME
- OR R-15 CAVITY INSULATION AT THE INTERIOR OF THE BASEMENT WALL OR CRAWL SPACE WALL. d. FOR MONOLITHIC SLABS, INSULATION SHALL BE APPLIED FROM THE INSPECTION GAP DOWNWARD TO THE BOTTOM OF THE FOOTING OR A MAXIMUM OF 24" SELOW GRADE WHICHEVER IS LESS, FOR FLOATING SLABS, INSULATION SHALL EXTEND TO THE BOTTOM OF THE FOUNDATION WALL OR 3", WHICHEVER IS LESS, RS SHALL BE ADDED TO THE REQUIRED SLAB EDGE R-VALUES FOR HEATED SLABS.
- BASEMENT WALL INSULATION IS NOT REQUIRED IN WARM-HUMID LOCATIONS AS DEFINED BY FIGURE N1101.7 AND TABLE N1101.7.
- g. OR INSULATION SUFFICIENT TO FILL THE FRAMING CAVITY. R-19 MINIMUM.
- h. THE FIRST VALUE IS CAVITY INSULATION, THE SECOND VALUE IS CONTINUOUS INSULATION, SO "13+5" MEANS R-13 CAVITY INSULATION PLUS R-5 INSULATED SHEATHING 19-37 MEANS R-15 CAVITY INSULATION PLUS R-3 INSULATED SHEATHING, IF STRUCTURAL SHEATHING COVERS MORE THE EXTERIOR, INSULATING SHEATHING IS USED. IF STRUCTURAL SHEATHING COVERS MORE THAN 25 PERCENT OF THE EXTERIOR, SHEAL BE SUPPLEMENTED WITH INSULATED SHEATHING OF AT LEAST R-2, "13 + 2.5" MEANS R-13 CAVITY
- i. FOR MASS WALLS, THE SECOND R-VALUE APPLIES WHEN MORE THAN HALF THE INSULATION IS ON THE INTERIOR MASS WALL
- 1. FUR WASS WALLS, THE SECURIO REVALUE APPLIES WHITE INDUCE THAN THE INSULATION TO UT THE INTERPORT WASSE WALLS.

 IN ADDITION OT THE EXEMPTION IN SECTION 11/102.3.3. A MAXIMUM OF TWO GLAZE FURSHITATION PRODUCT ASSEMBLES HAVING A U-FACTOR NO GREATER THAN 0.55 SHALL BE PERMITTED TO BE SUBSTITUTED FOR MINIMUM CODE COMPLIANT FENESTRATION PRODUCT ASSEMBLES WITHOUT PENALTY.
- k. IN ADDITION TO THE EXEMPTION IN SECTION N1102.3.3, A MAXIMUM OF TWO GLAZED FENESTRATION PRODUCT ASSEMBLIES HAVING A SHGC NO GREATER THAN 0.70 SHALL BE
- PERMITTED TO BE SUBSTITUTED FOR MINIMUM CODE COMPLIANT FENESTRATION PRODUCT ASSEMBLIES WITHOUT PENALTY.
- PERMITTED TO BE SUBSTITUTED FOR MINIMUM CODE COMPLANT FENES TRAITON PROJECT ASSEMBLES WITHOUT PENALTY.

 I. R-30 SHALD BE DEEMED TO SATISFY THE CEILING INSULATION REQUIRED. WHERE ADEQUATE CLEARANCE EXISTS OR INSULATION MUST EXTEND TO EITHER THE INSULATION BAFFLE OR WITHIN 1 INCH
 OF THE ATTIC ROOF DECK.

 T. TABLE VALUE REQUIRED EXCEPT FOR ROOF EDGE WHERE THE SPACE IS LIMITED BY THE PITCH OF THE ROOF. THERE THE INSULATION MIST FILL THE SPACE UP TO THE AIR BAFFLE.

 B. T. 15 FIBERGLASS BATTS COMPRESSED AND INSTALLED IN A NOMINAL 2 × 6 FRAMING CAVITY IS DEEMED TO COMPLY, FIBERGLASS BATTS RATED R-19 OR HIGHER COMPRESSED
 AND INSTALLED IN A ZMI WALL IS NOT DEEMED TO COMPLY.
- o. BASEMENT WALL MEETING THE MINIMUM MASS WALL SPECIFIC HEAT CONTENT REQUIREMENT MAY USE THE MASS WALL R-VALUE AS THE MINIMUM REQUIREMENT.

DEFINITIONS FOR COMMON ABBREVIATIONS

= MAXIMUM

| CANT | = | CANTILEVER | MIN | = | MINIMUM |
|-------|---|-----------------------|-------|---|------------------------|
| CJ | = | CEILING JOIST | NOM | = | NOMINAL |
| CMU | = | CONCRETE MASONRY UNIT | O.C. | = | ON CENTER |
| COL | = | COLUMN | PL | = | POINT LOAD |
| CONC | = | CONCRETE | PT | = | PRESSURE TREATED |
| CONT | = | CONTINUOUS | REINF | = | REINFORCED |
| CT | = | COLLAR TIE | REQD | = | REQUIRED |
| DBL | = | DOUBLE | RJ | = | ROOF JOIST |
| DIA | = | DIAMETER | RS | = | ROOF SUPPORT |
| DJ | = | DOUBLE JOIST | SC | = | STUD COLUMN |
| DR | = | DOUBLE RAFTER | SCH | = | SCHEDULE |
| EA | = | EACH | SPEC | = | SPECIFIED |
| EE | = | EACH END | THK | = | THICK |
| FJ | = | FLOOR JOIST | TJ | = | TRIPLE JOIST |
| FND | = | FOUNDATION | TRTD | = | TREATED |
| FTG | = | FOOTING | TYP | = | TYPICAL |
| GALV | = | GALVANIZED | UNO | = | UNLESS NOTED OTHERWISE |
| HORIZ | = | HORIZONTAL | W | = | WIDE FLANGE BEAM |
| HT | = | HEIGHT | WWF | = | WELDED WIRE FABRIC |
| MANUF | = | MANUFACTURER | XJ | = | EXTRA JOIST |
| | | | | | |

MAXIMUM HEIGHT OF DECK SUPPORT POSTS AS FOLLOWS:

= ALTERNATE

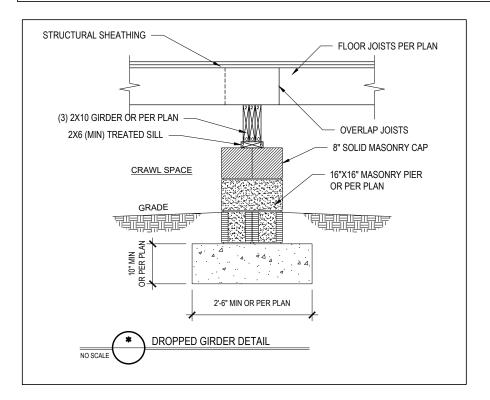
| POST SIZE | MAX. POST HEIGHT** |
|-----------|--------------------|
| 4 x 4 | 8'-0" |
| 6 x 6 | 20'-0" |
| *** | OVER 20'-0" |

- THIS TABLE IS BASED ON NO. 2 TREATED SOUTHERN PINE POSTS. MAXIMUM TRIBUTARY AREA IS BASED ON 128 TOTAL SQUARE FEET WHICH MAY BE LOCATED AT DIFFERENT LEVELS. FROM TOP OF FOOTING TO BOTTOM OF GIRDER
- DECKS WITH POST HEIGHTS OVER 20-0" SHALL BE DESIGNED AND SEALED BY A PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT.
- 2) DECKS SHALL BE BRACED TO PROVIDE LATERAL STABILITY BY ONE OF
- THE DECK FLOOR HEIGHT IS LESS THAN 4'-0" AND THE DECK IS ATTACHED TO THE STRUCTURE IN ACCORDANCE WITH SECTION (4)
- ABOVE. LATERAL BRACING IS NOT REQUIRED.

 4 x 4 WOOD KNEE BRACES MAY BE PROVIDED ON EACH COLUMN IN BOTH DIRECTIONS. THE KNEE BRACES SHALL ATTACH TO EACH POST AT A POINT NOT LESS THAN 1/3 OF THE POST LENGTH FROM THE
- TOP OF THE POST, AND THE BRACES SHALL BE ANGLED BETWEEN 45° AND 60° FROM THE HORIZONTAL KNEE BRACES SHALL BE BOLTED. TO THE POST AND GIRDER WITH ONE 5/8"Ø HOT DIPPED GALVANIZED BOLT AT EACH END OF THE BRACE.
- C. FOR FREESTANDING DECKS WITHOUT KNEE BRACES OR DIAGONAL BRACING, LATERAL STABILITY MAY BE PROVIDED BY EMBEDDING THE POSTS IN ACCORDANCE WITH THE FOLLOWING:

| POST SIZE | MAX. TRIBUTARY AREA | MAX. POST HEIGHT | EMBEDMENT DEPTH | CONCRETE DIAMETER |
|-----------|------------------------|---------------------|--------------------|----------------------|
| 4 x 4 | 48 SQ. FT. | 4'-0" | 2'-6" | 1'-0" |
| 6 x 6 | 120 SQ. FT. | 6'-0" | 3'-6" | 1'-8" |

- D. 2 x 6 DIAGONAL VERTICAL CROSS BRACING MAY BE PROVIDED IN TWO (2) PERPENDICULAR DIRECTIONS FOR FREESTANDING DECKS OR PARALLEL TO THE STRUCTURE AT THE EXTERIOR COLUMN LINE FOR ATTACHED DECKS THE 2 x 6s SHALL BE ATTACHED TO THE POSTS WITH ONE 5/8"Ø HOT
- DIPPED GALVANIZED BOLT AT EACH END OF EACH BRACING MEMBER FOR EMBEDMENT OF PILES IN COASTAL REGIONS, SEE CHAPTER 46.

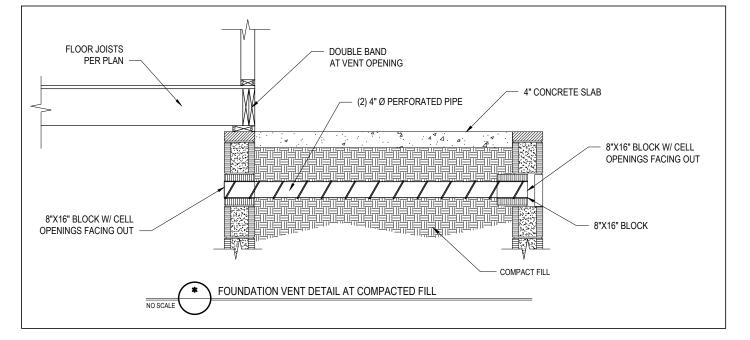


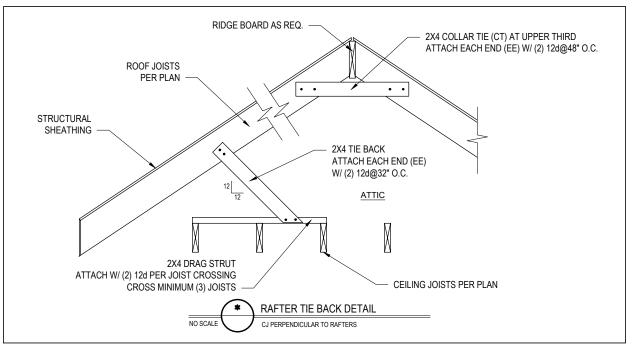
1038 SQ. FT. OF CRAWL SPACE / 150 = 6.92 SQ. FT. OF REQ'D VENTILATION WITHOUT CROSS VENTILATION 6.92 SQ. FT. OF VENTILATION REQ'D / 0.45 SQ.FT. PER VENT = 16 VENTS REQ'D1

1038 SQ. FT. OF CRAWL SPACE / 1500 = 0.69 SQ. FT. OF REQ'D VENTILATION WITH CROSS VENTILATION 0.69 SQ. FT. OF VENTILATION REQ'D / 0.45 SQ.FT. PER VENT = 2 VENTS REQ'D2

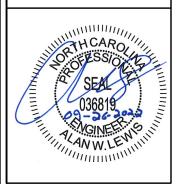
- THE TOTAL AREA OF VENTILATION OPENINGS MAY BE REDUCED TO 1/1500 OF THE CRAWL SPACE GROUND AREA WHERE THE REQUIRED OPENINGS ARE PLACED SO AS TO PROVIDE CROSS VENTILATION OF THE CRAWL SPACE THE INSTALLATION OF OPERABLE LOUVERS SHALL NOT BE PROHIBITED. ONE FOUNDATION VENT SHALL BE WITHIN 3 FEET OF EACH CORNER OF THE BUILDING. TO PREVENT RAINWATER ENTRY WHEN THE CRAWL SPACE IS BUILT ON A SLOPED SITE, THE UPHILL FOUNDATION WHEN THE BOTTOM OF THE FOUNDATION VENT OPENING IS LESS THAN 4 INCHES ABOVE THE FINISHED

CRAWL SPACE VENTILATION CALCULATION





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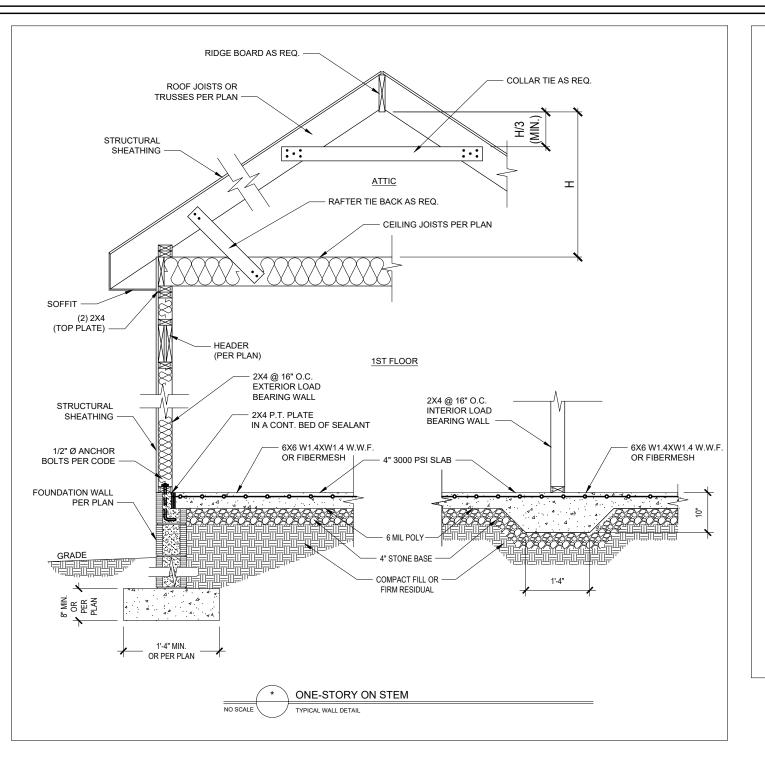
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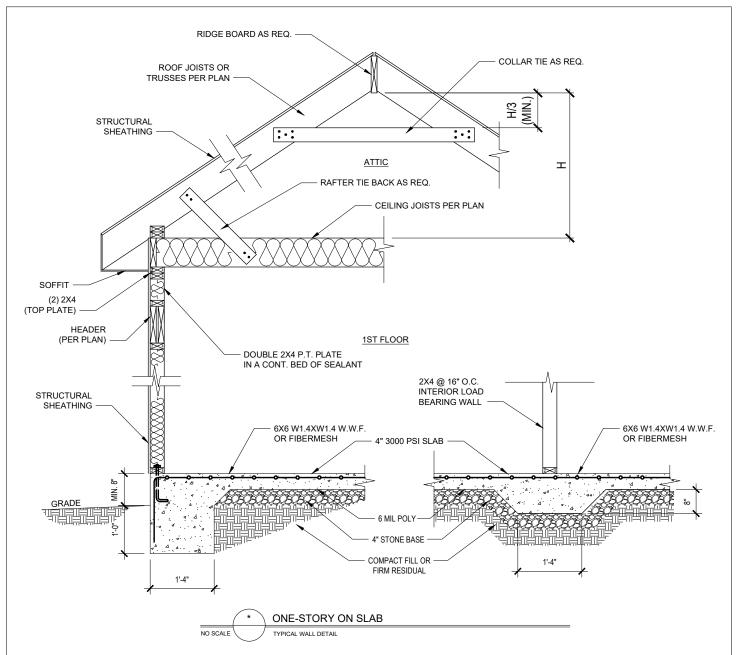
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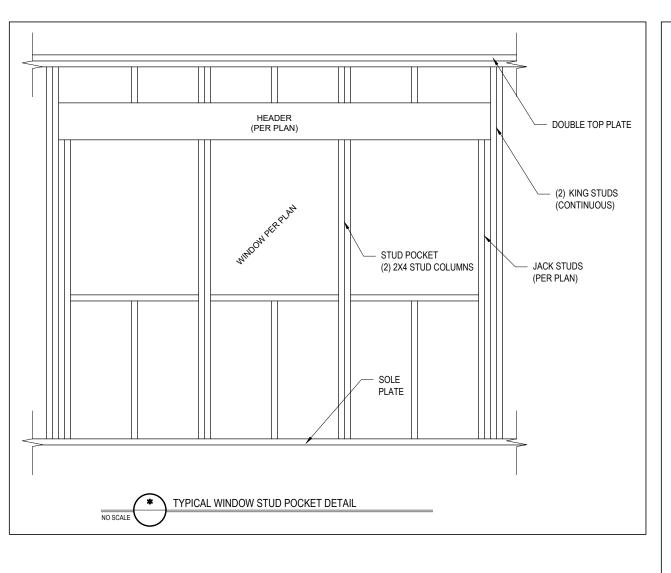
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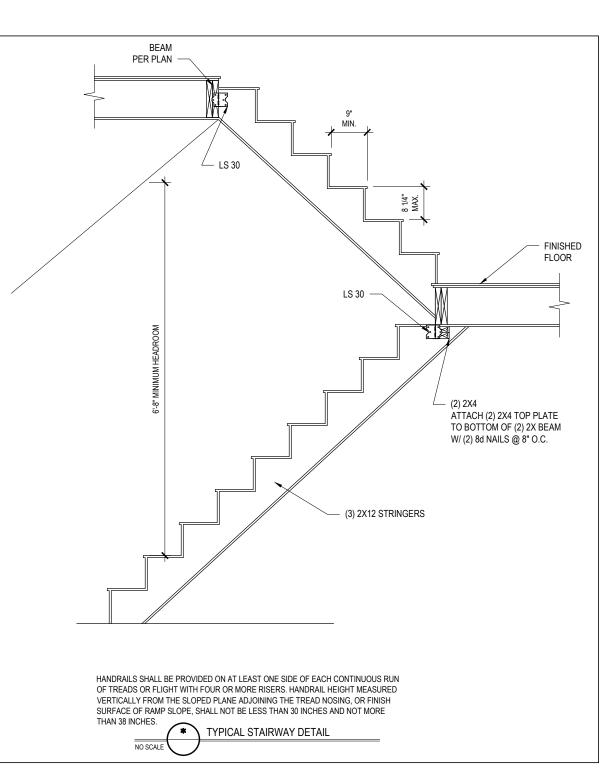
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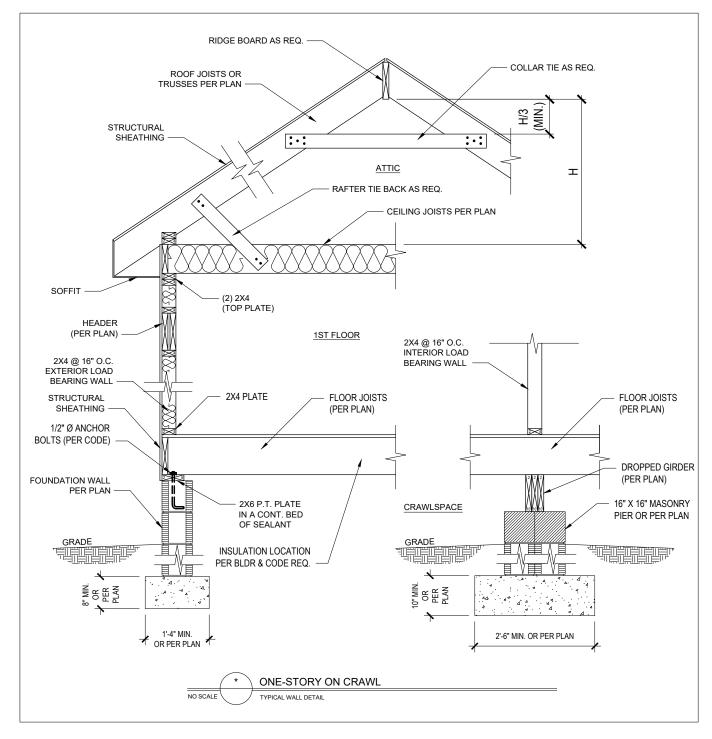
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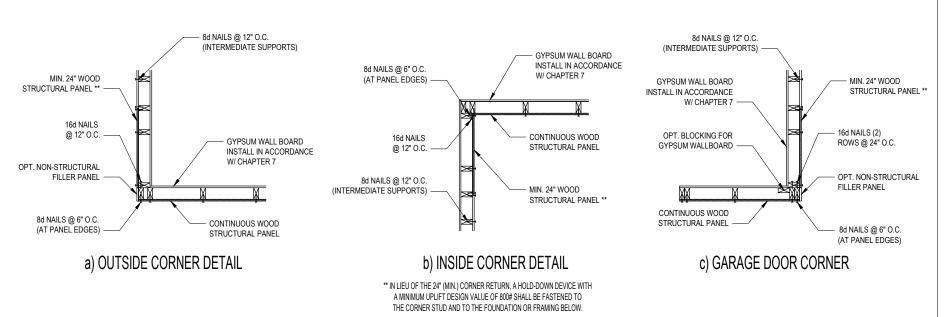
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D2



B1: TYPICAL EXTERIOR CORNER FRAMING FOR CONTINUOUS SHEATHING NO SCALE

STRUCTURAL SHEATHING NOTES

- DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 120 MPH OR LESS.
 WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602-10 OF THE 2018 NORC
 BRACING REQUIREMENTS SHALL BE PER TABLE R602-10.3. REFER TO SECTION R602-10.4 FOR LOAD PATH DETAILS INCLUDING CONNECTIONS & SUPPORT OF BRACED WALL PANELS.

REFERENCE FIGURE R602.10.4.3 OF THE 2018 NCRC.

- INTERIOR BRACED WALL PANELS (BWP) INDICATED SHALL BE SHEATHED IN ACCORDANCE WITH THE GB METHOD OR WSP METHOD AS PRESCRIBED IN SECTION R602.10.1 (UNO)
- 2 1/2" GYPSUM BOARD (GB) MINIMUM LENGTH OF 8'-0" (ISOLATED PANELS) OR 4'-0" (CONTINUOUS SHEATHING
- (3) 3/8" WOOD STRUCTURAL PANEL (WSP) SECURE W/ 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS
- 5. EXTERIOR BRACED WALL PANELS (BWP) SHALL BE EXTERIOR BACAGED WALL PANELS (BWF) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.3 (UNO)
 ALL SHEATHABLE SURFACES OF EXTERIOR WALLS (INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS) SHALL BE CONTINUOUSLY SHEATHED WITH WOOD STRUCTURAL PANEL (WSP) SHEATHING WITH
- WITH WOOD STRUCTURAL PANEL (WSP) SHEATHING WITH A MINIMUM THICKNESS OF 3/8". SHEATHING SHALL BE SCURED WITH MINIMUM 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND SPACED AT 12" O.C. AT INTERNEDIATE SUPPORTS.

 7. MINIMUM BRACED WALL PANEL LENGTHS WITH CS-WSP METHOD SHALL BE AS FOLLOWS:

 24" ADJACENT TO OPENINGS NOT MORE THAN 67% OF WALL HEIGHT

 30" ADJACENT TO OPENINGS GREATER THAN 67% AND LESS THAN 65% OF WALL HEIGHT

 48" FOR OPENINGS GREATER THAN 85% OF WALL HEIGHT

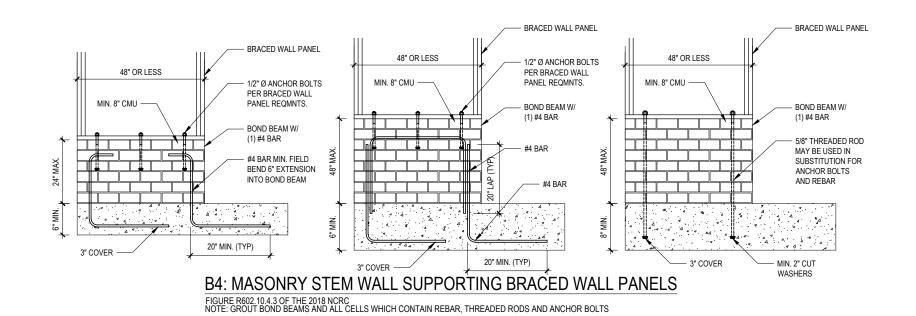
4 SHEATH INTERIOR AND EXTERIOR

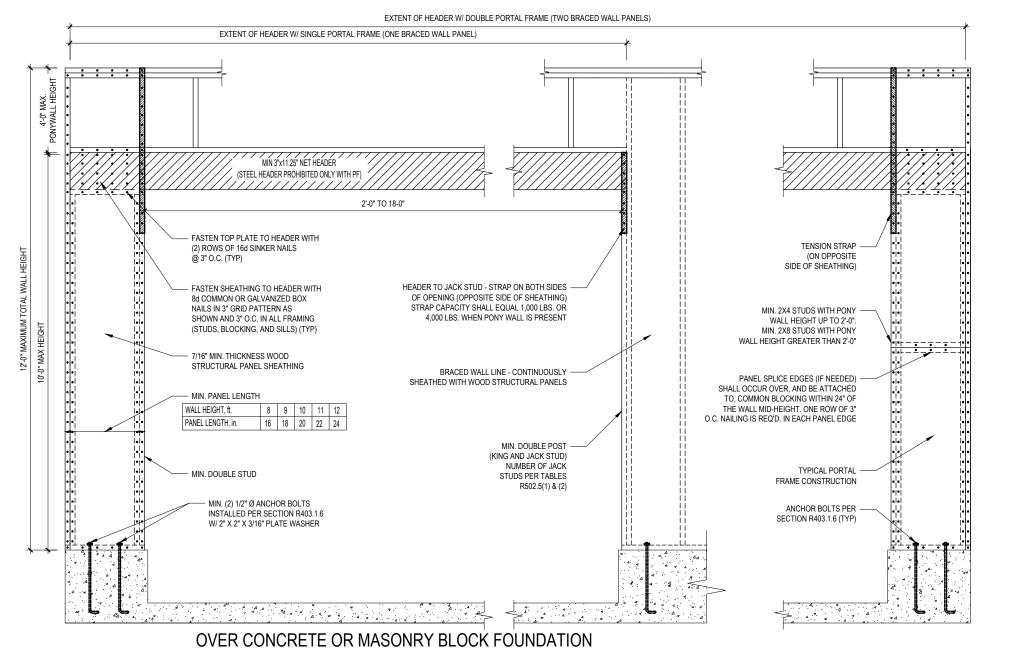
8. FOR CS-WSP METHOD, A MINIMUM 24" BRACED WALL PANEL CORNER RETURN SHALL BE PROVIDED AT BOTH ENDS OF A BRACED WALL LINE IN ACCORDANCE WITH FIGURE R602-10.3 (4). IN LIEU OF A CORNER RETURN, EITHER A MINIMUM 49" BRACED WALL PANEL SHALL BE PROVIDED AT THE CORNER OR A HOLD-DOWN DEVICE WITH A MINIMUM UPLIFT DESIGN VALUE OF 800# SHALL BE FASTENED TO THE EDGE OF THE BRACED WALL PANEL CLOSEST TO THE CORNER AND TO THE FOUNDATION OR FRAMING BELOW

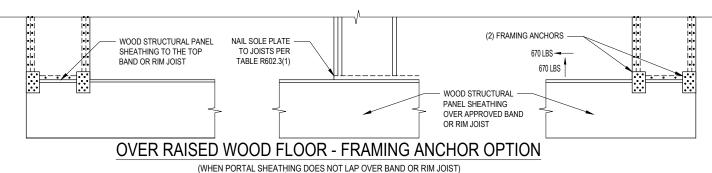
5 MINIMUM 800# HOLD-DOWN DEVICE

| REQUIRED BRACED WALL PANEL CONNECTIONS | | | | | | | | |
|--|--------------------------|----------------|-------------------------------|-------------------------------|--|--|--|--|
| REQUIRED CONNECTION | | | | | | | | |
| METHOD | MATERIAL | MIN. THICKNESS | @ PANEL EDGES | @ INTERMEDIATE SUPPORTS | | | | |
| CS-WSP | WOOD STRUCTURAL PANEL | 3/8" | 6d COMMON NAILS @ 6" O.C. | 6d COMMON NAILS @ 12" O.C. | | | | |
| GB | GYPSUM BOARD | 1/2" | 5d COOLER NAIL** @ 7" O.C. | 5d COOLER NAIL** @ 7" O.C. | | | | |
| WSP | WOOD STRUCTURAL PANEL | 3/8" | 6d COMMON NAILS @ 6" O.C. | 6d COMMON NAILS @ 12" O.C. | | | | |

OR EQUIVALENT PER TABLE R702.3.5 **B3: BRACE WALL PANEL CONNECTIONS NO SCALE







(WHEN PORTAL SHEATHING DOES NOT LAP OVER BAND OR RIM JOIST) ATTACH SHEATHING TO BAND WOOD STRUCTURAL PANEL NAIL SOLE PLATE OR RIM JOIST WITH 8d COMMON TO JOISTS PER NAILS 3" O.C. TOP AND BOTTOM BAND OR RIM JOIST TABLE R602.3(1) WOOD STRUCTURAL PANEL SHEATHING OVER APPROVED BAND OR RIM JOIST

OVER RAISED WOOD FLOOR - OVERLAP OPTION (WHEN PORTAL SHEATHING LAPS OVER BAND OR RIM JOIST)

B2: METHOD CS-PF: CONTINUOUSLY SHEATHED PORTAL FRAME

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