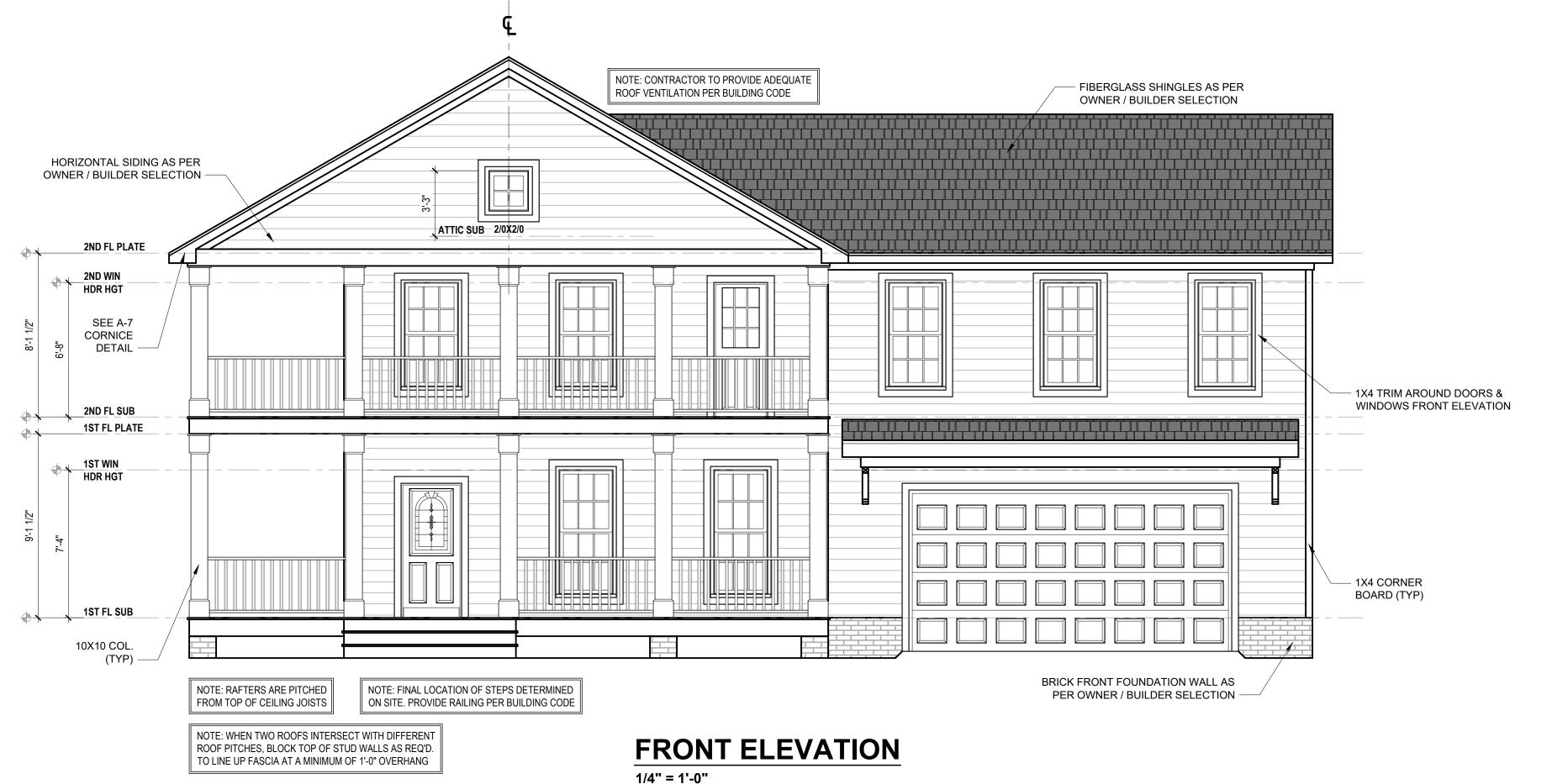
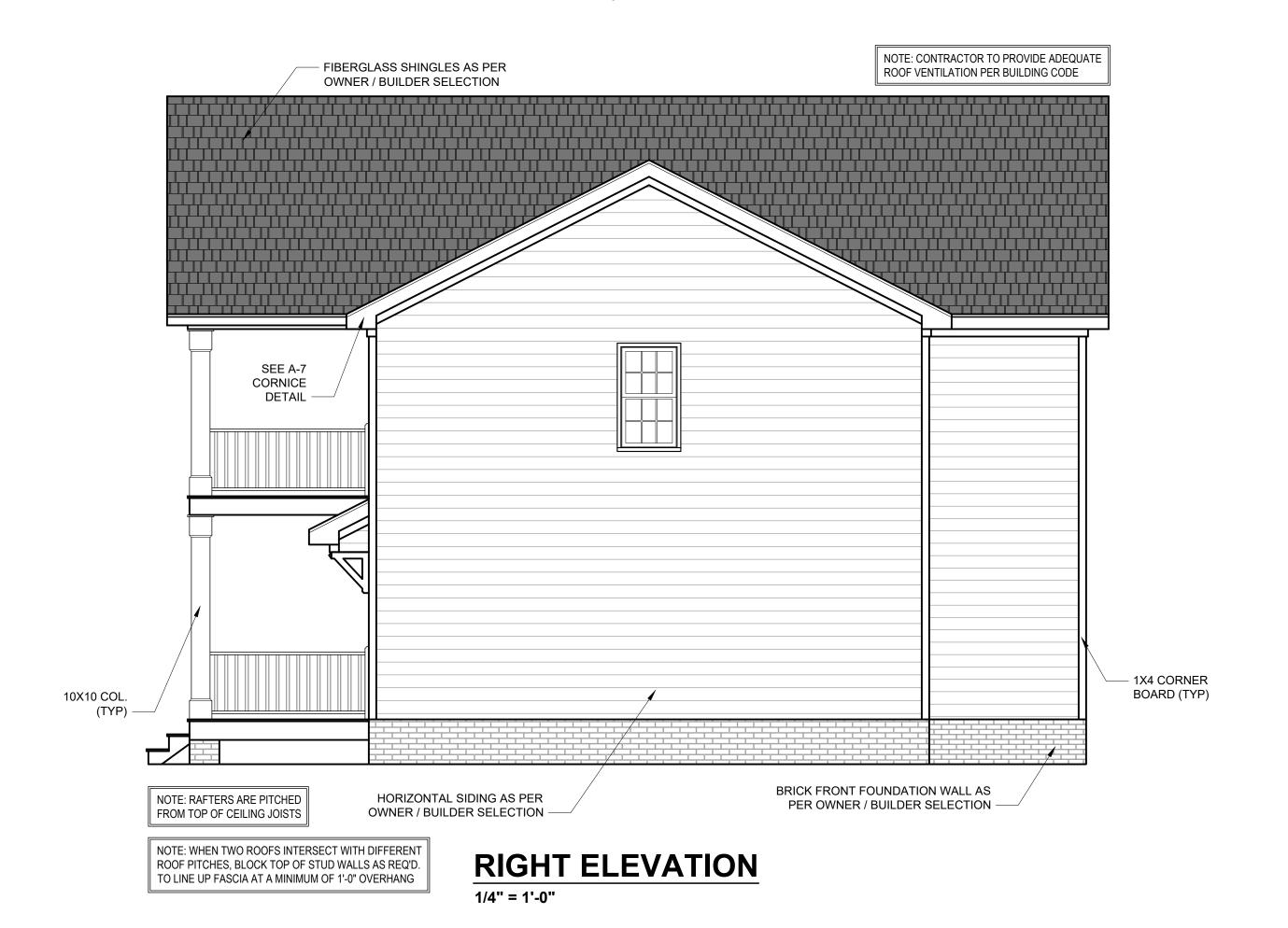
# VARGAS RESIDENCE





. 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.
3. Should these plans require structural calculations for permitting the contractor shall be required to obtain the services of a structural engineer after notifying DRB DESIGN that such services are required.
4. Release of these plans requires further cooperation among the owner, his/her contractor, and DRB DESIGN.

Nelease of these plans requires future cooperation among the owner, mishler contractor, and DRB DESIGN
 Design and construction are complex and, although the designer performed his services with due care and diligence, perfection is not a guarantee.

6. Communication is imperfect and every contingency cannot be anticipated.

7. Any ambiguity or discrepancy discovered by the use of these plans shall be

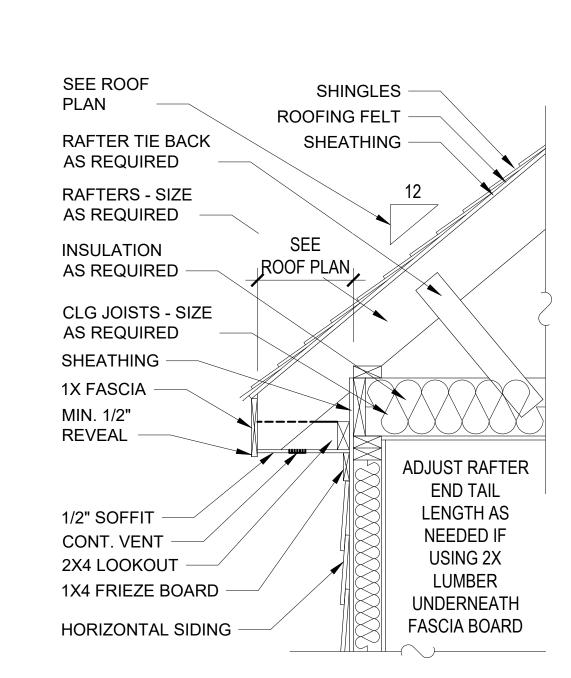
Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to DRB DESIGN. Failure to notify the DRB DESIGN compounds misunderstandings and increases construction costs.
 A failure to cooperate by a simple notice to DRB DESIGN shall relieve the designer from any and all responsibilities for all consequences.

9. Changes made to these plans without the consent of the designer are unauthorized and shall relieve DRB DESIGN of responsibility for any and all consequences arriving out of such changes.

10. Written dimensions on these plans always have precedence over scaled dimensions.

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11. It is the contractors responsibility to verify and be responsible for all dimensions and square footage prior to construction, as well as conditions on the job site. DRB DESIGN is not responsible for dimension and square footage errors once construction has begun.

12. DRB DESIGN must be notified of any variations from the dimensions and conditions shown on these drawings.



A-7 CORNICE DETAIL

NTS

DRB2201-0063A

DATE

07/26/2022

DRAWN/DESIGNED BY

MMB

CHECKED BY

DRB

SCALE

1/4" = 1'-0"

Tr)

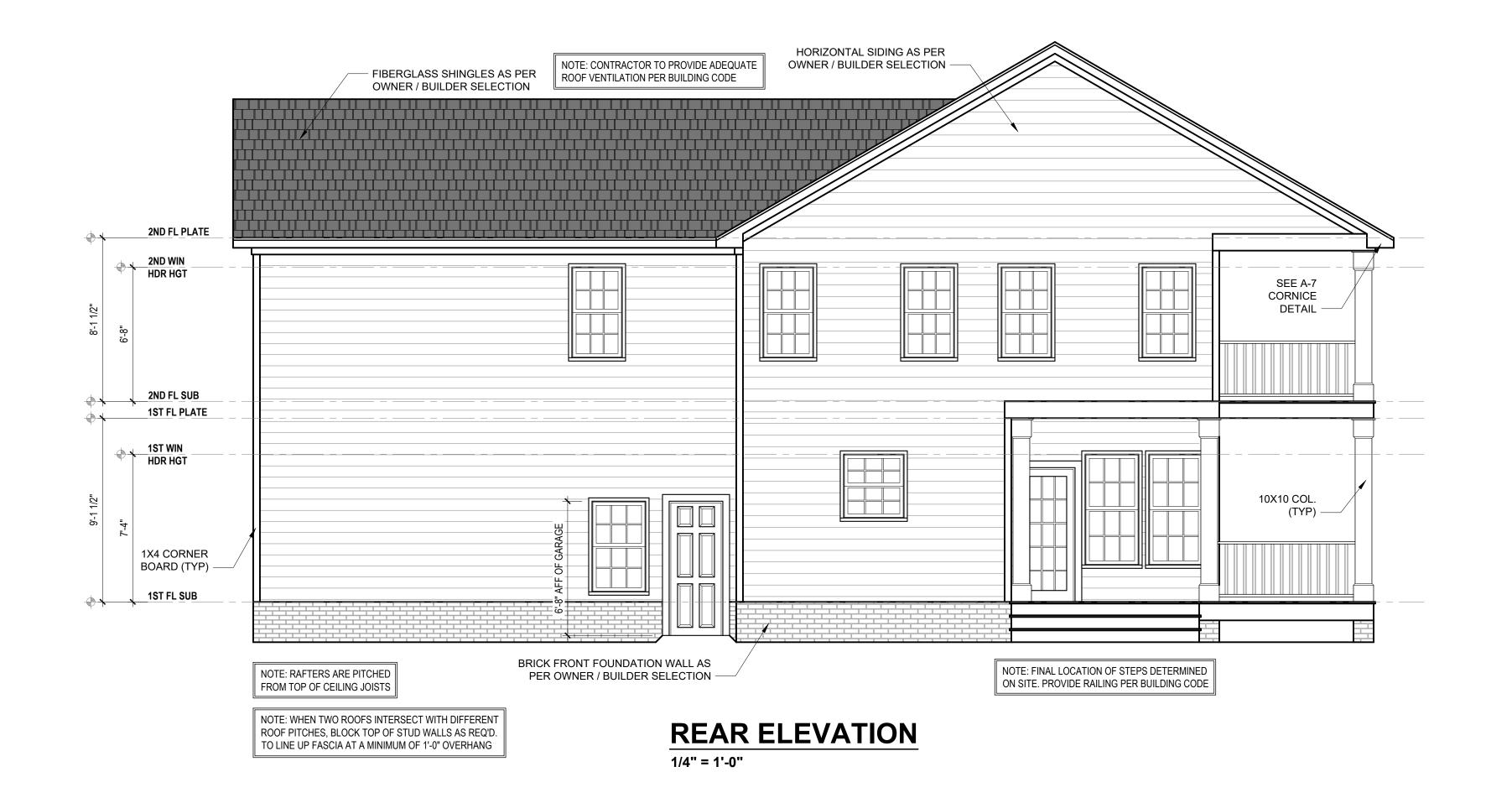
VARGAS

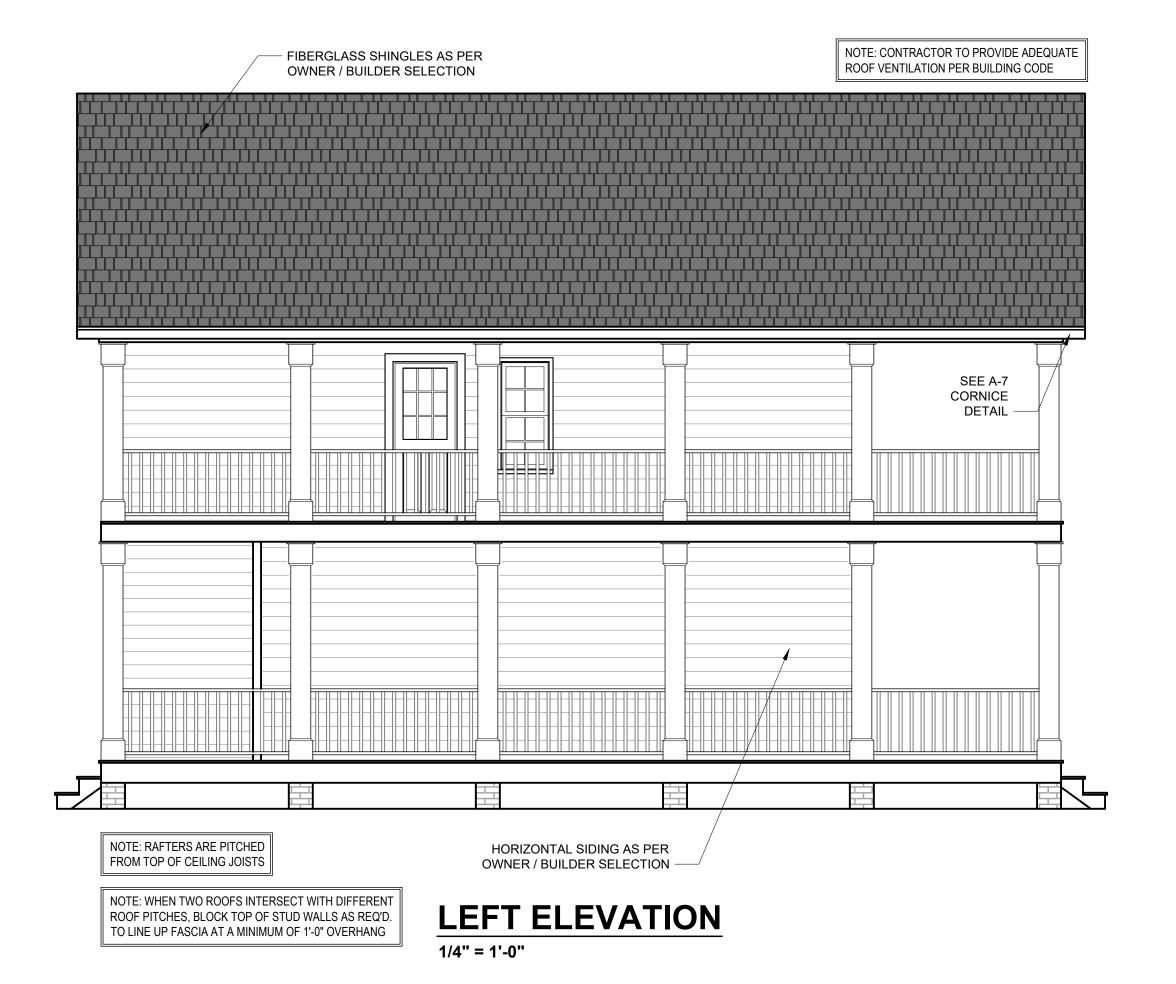
DESIGN sign@drbhomedesign.com 919.631.5979 Shipwash Dr Suite 105 Garner, NC 27529

Fredy Vargas
94 Sommerset Dr.,
Clayton, NC 27520
solidsurgaceinstallers@yahoo.com
(919) 585-3928

SHEET NAME
ELEVATIONS
SHEET #

# VARGAS RESIDENCE





DRB DESIGN assumes no liability for any home constructed from this plan. 2. All construction shall conform to the latest requirements of "North Carolina State 2018 residential building code",

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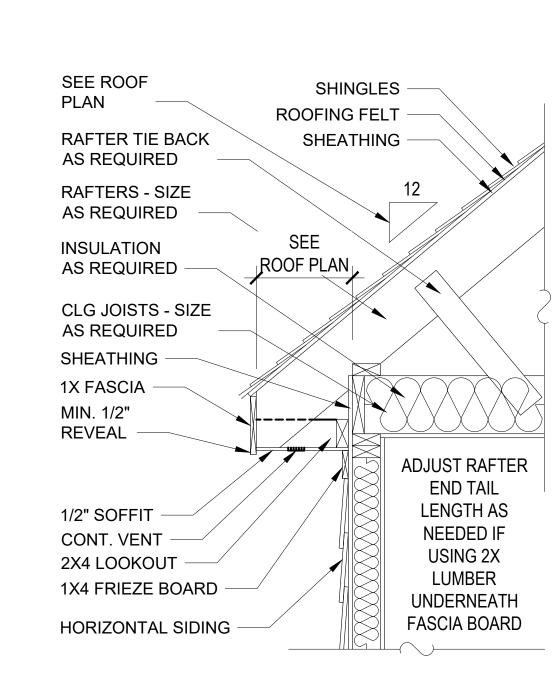
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11. It is the contractors responsibility to verify and be responsible for all dimensions and square footage prior to construction, as well as conditions on the job site. DRB DESIGN is not responsible for dimension and square

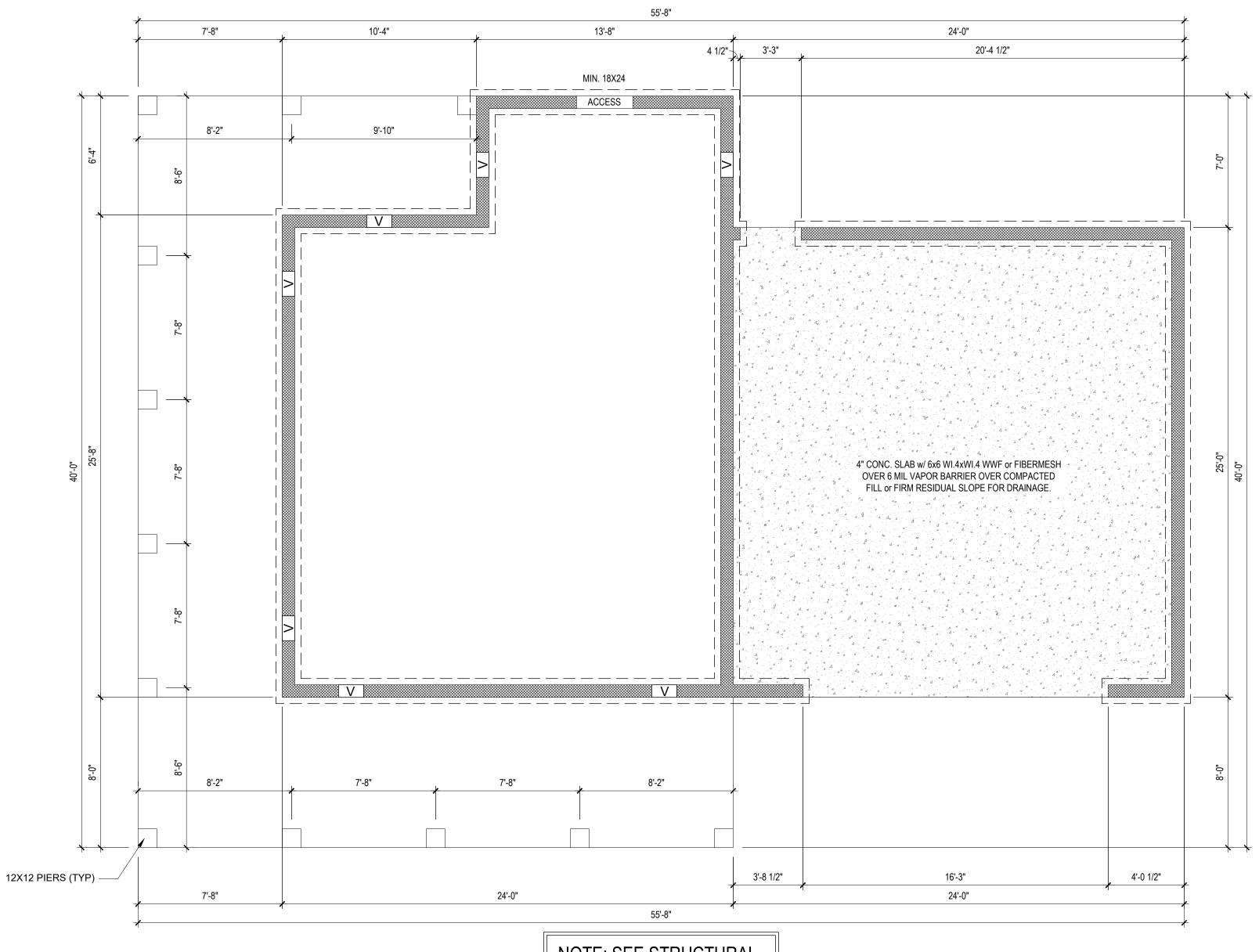
footage errors once construction has begun. 12. DRB DESIGN must be notified of any variations from the dimensions and conditions shown on these drawings.



A-7 CORNICE DETAIL

07/26/2022 DRAWN/DESIGNED BY MMB CHECKED BY DRB SCALE 1/4" = 1'-0"

ELEVATIONS



NOTE: SEE STRUCTURAL PLANS FOR ENGINEERING INFORMATION

NOTE: VENT CRAWLSPACE PER LOCAL CODES AND REQUIREMENTS

**FOUNDATION PLAN** 

1/4" = 1'-0"

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.

3. Should these plans require structural calculations for permitting the contractor shall be required to obtain the services of a structural engineer after notifying DRB DESIGN that such services are required.

Release of these plans requires further cooperation among the owner, his/her contractor, and DRB DESIGN.
 Design and construction are complex and, although the designer performed his services with due care and diligence, perfection is not a guarantee.

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 Changes made to these plans without the consent of the designer are unauthorized and shall relieve DRB DESIGN of responsibility for any and all consequences arriving out of such changes.

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11. It is the contractors responsibility to verify and be responsible for all dimensions and square footage prior to construction, as well as conditions on the job site. DRB DESIGN is not responsible for dimension and square footage prior to construction has because

footage errors once construction has begun.

12. DRB DESIGN must be notified of any variations from the dimensions and conditions shown on these drawings.

VARGAS

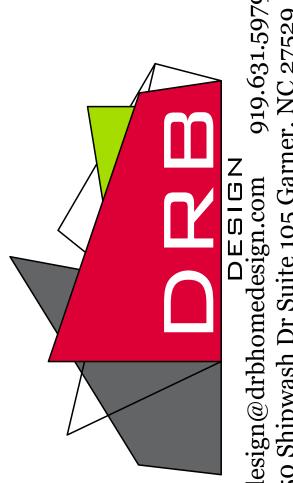
WEBSITE

| VARGAS | Grbhomedesign.com | RESIDENCE

DRB2201-0063A

07/26/2022 drawn/designed by

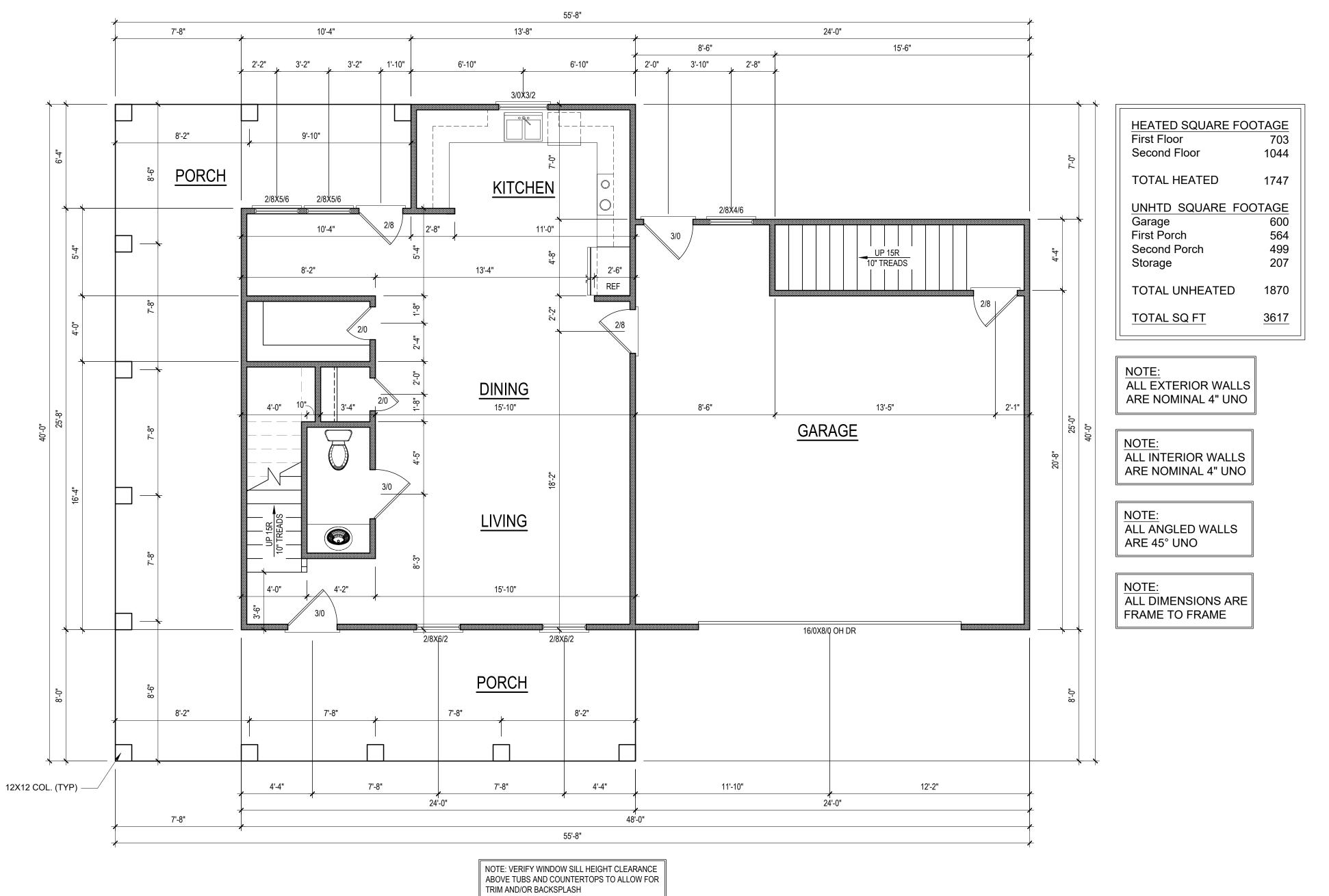
MMB



Fredy Vargas 94 Sommerset Dr., Clayton, NC 27520 Isurgaceinstallers@yahoo.com

SHEET NAME
FOUNDATION
SHEET #

3



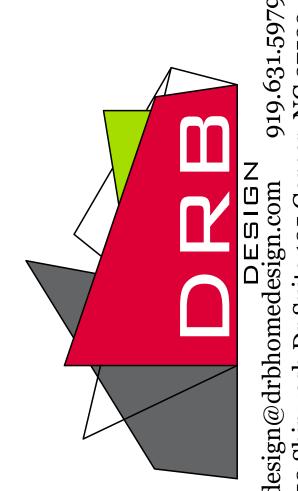
FIRST FLOOR PLAN

CEILING HGT. = 9'-0"

1/4" = 1'-0"

- 1. DRB DESIGN assumes no liability for any home constructed from this plan.
- 2. All construction shall conform to the latest requirements of "North Carolina State 2018 residential building code", in addition to all local codes and regulations.
- 3. Should these plans require structural calculations for permitting the contractor shall be required to obtain the services of a structural engineer after notifying DRB DESIGN that such services are required. Release of these plans requires further cooperation among the owner, his/her contractor, and DRB DESIGN.
- 5. Design and construction are complex and, although the designer performed his services with due care and
- diligence, perfection is not a guarantee.
- 6. Communication is imperfect and every contingency cannot be anticipated. 7. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to DRB
- DESIGN. Failure to notify the DRB DESIGN compounds misunderstandings and increases construction costs.

  8. A failure to cooperate by a simple notice to DRB DESIGN shall relieve the designer from any and all
- responsibilities for all consequences. 9. Changes made to these plans without the consent of the designer are unauthorized and shall relieve DRB
- DESIGN of responsibility for any and all consequences arriving out of such changes. 10. Written dimensions on these plans always have precedence over scaled dimensions.
- 11. It is the contractors responsibility to verify and be responsible for all dimensions and square footage prior to construction, as well as conditions on the job site. DRB DESIGN is not responsible for dimension and square
- footage errors once construction has begun. 12. DRB DESIGN must be notified of any variations from the dimensions and conditions shown on these drawings.



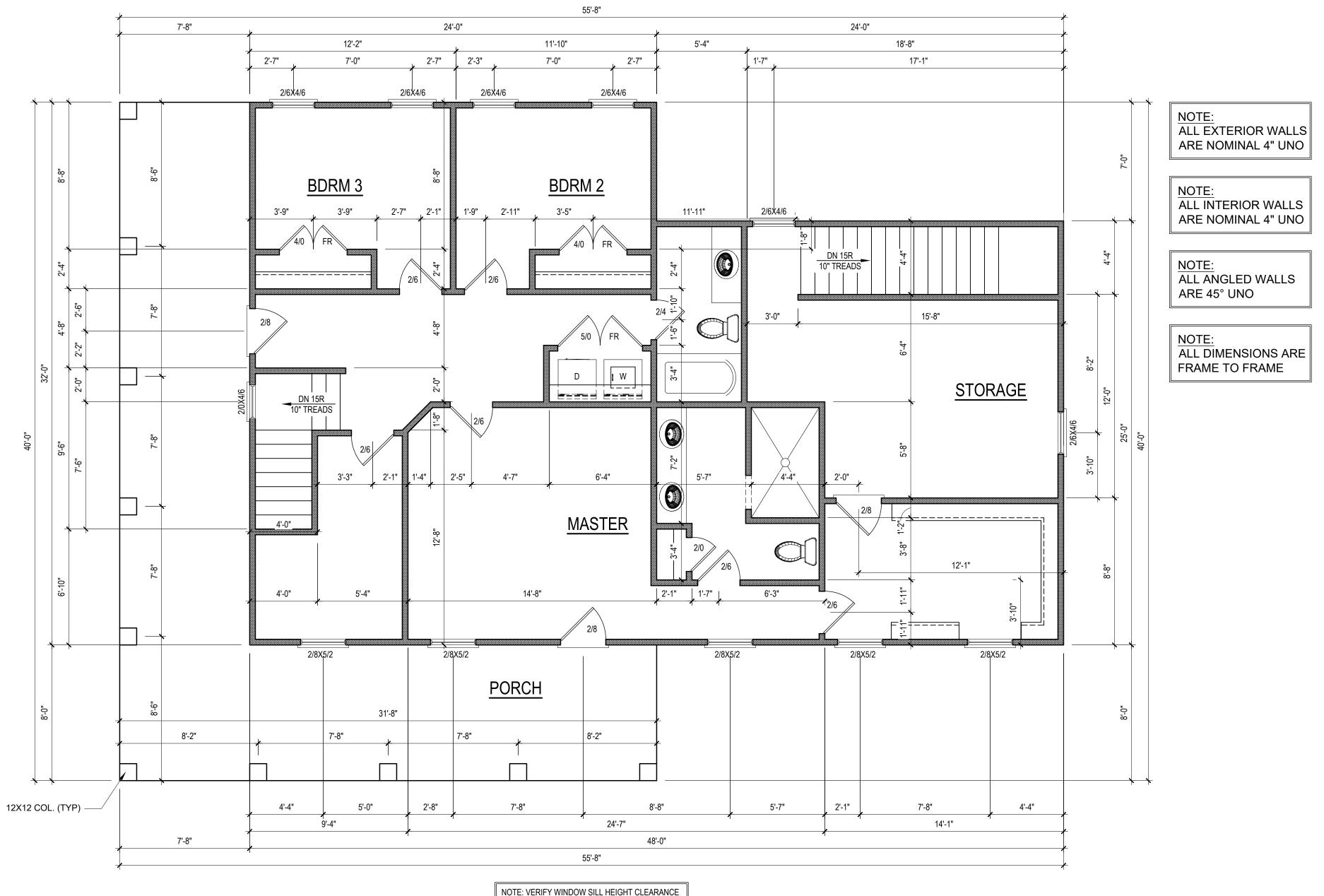
DRB2201-0063A

07/26/2022 DRAWN/DESIGNED BY

 $\frac{\text{SCALE}}{1/4"} = 1'-0"$ 

MMB CHECKED BY DRB

SHEET NAME 1ST\_FLOOR



NOTE: VERIFY WINDOW SILL HEIGHT CLEARANCE ABOVE TUBS AND COUNTERTOPS TO ALLOW FOR TRIM AND/OR BACKSPLASH

# **SECOND FLOOR PLAN**

1/4" = 1'-0" CEILING HGT. = 8'-0"

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

2. All construction shall conform to the latest requirements of "North Carolina State 2018 residential building code", in addition to all local codes and regulations.

3. Should these plans require structural calculations for permitting the contractor shall be required to obtain the services of a structural engineer after notifying DRB DESIGN that such services are required.

4. Release of these plans requires further cooperation among the owner, his/her contractor, and DRB DESIGN.

5. Design and construction are complex and, although the designer performed his services with due care and diligence, perfection is not a guarantee.

6. Communication is imperfect and every contingency cannot be anticipated.

7. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to DRB

DESIGN. Failure to notify the DRB DESIGN compounds misunderstandings and increases construction costs. 8. A failure to cooperate by a simple notice to DRB DESIGN shall relieve the designer from any and all

responsibilities for all consequences. 9. Changes made to these plans without the consent of the designer are unauthorized and shall relieve DRB

DESIGN of responsibility for any and all consequences arriving out of such changes. 10. Written dimensions on these plans always have precedence over scaled dimensions.

11. It is the contractors responsibility to verify and be responsible for all dimensions and square footage prior to construction, as well as conditions on the job site. DRB DESIGN is not responsible for dimension and square

footage errors once construction has begun.

12. DRB DESIGN must be notified of any variations from the dimensions and conditions shown on these drawings.

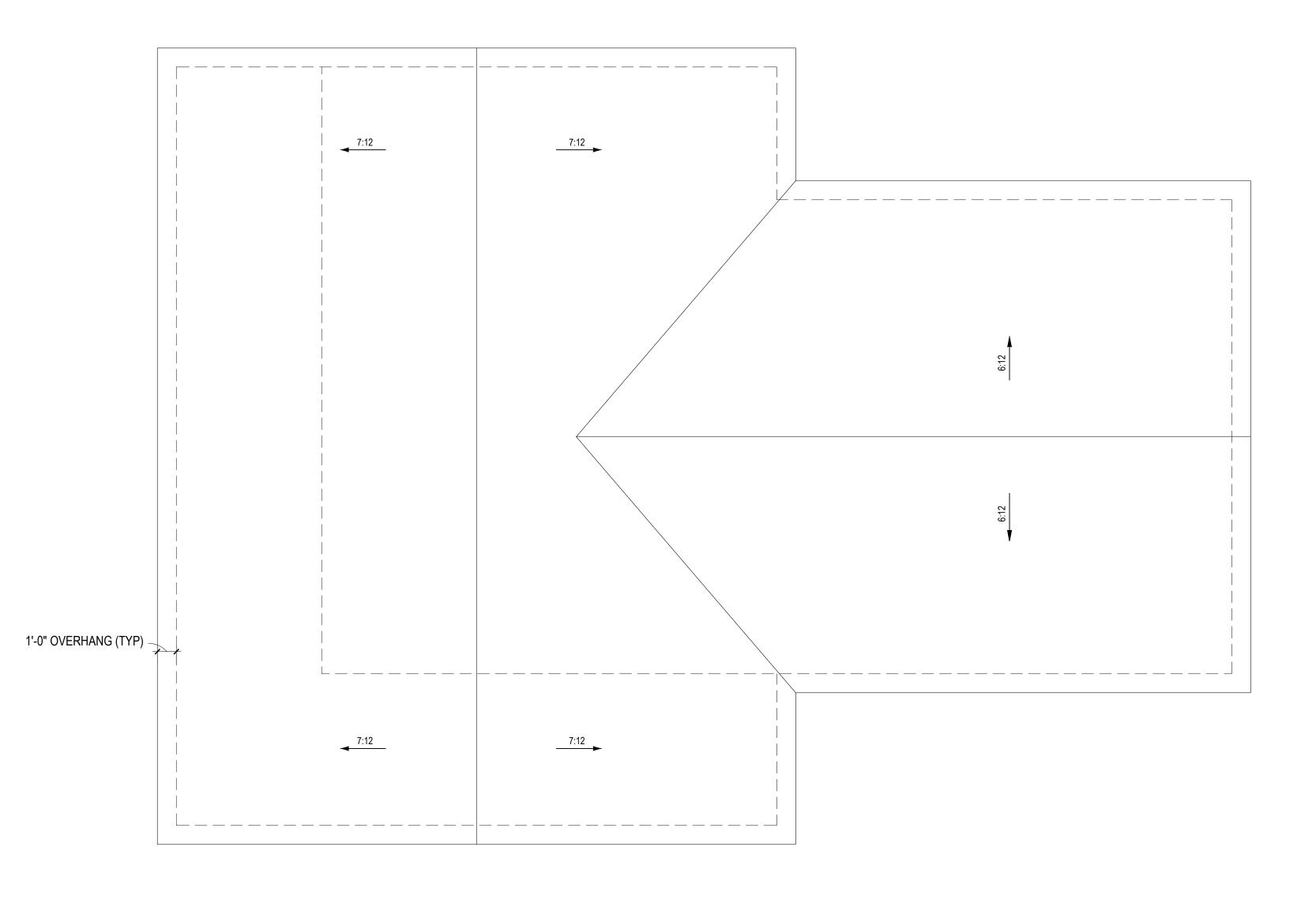
DRB2201-0063A

07/26/2022 DRAWN/DESIGNED BY

MMB CHECKED BY

SHEET NAME

2ND\_FLOOR



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

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

2. All construction shall conform to the latest requirements of "North Carolina State 2018 residential building code",

in addition to all local codes and regulations. 3. Should these plans require structural calculations for permitting the contractor shall be required to obtain the services of a structural engineer after notifying DRB DESIGN that such services are required.

Release of these plans requires further cooperation among the owner, his/her contractor, and DRB DESIGN.
 Design and construction are complex and, although the designer performed his services with due care and

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6. Communication is imperfect and every contingency cannot be anticipated. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to DRB

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11. It is the contractors responsibility to verify and be responsible for all dimensions and square footage prior to construction, as well as conditions on the job site. DRB DESIGN is not responsible for dimension and square

footage errors once construction has begun. 12. DRB DESIGN must be notified of any variations from the dimensions and conditions shown on these drawings.

### 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:

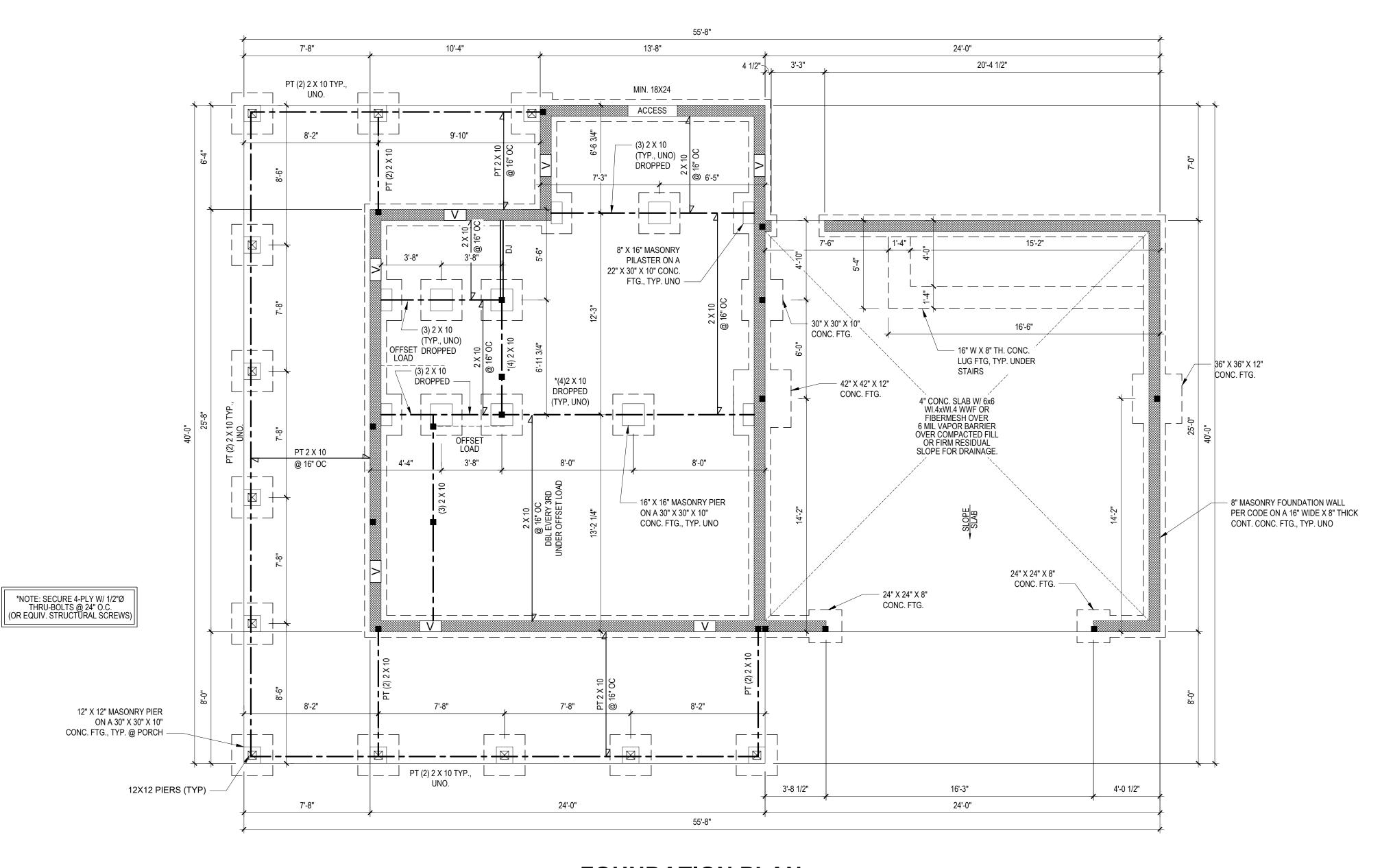
  1) ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.
- 2) IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, 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)
- 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 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.

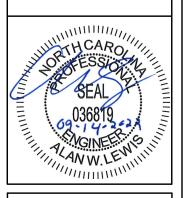
  17) METAL HANGERS SHALL BE SIMPSON OR APPROVED EQUAL.



# **FOUNDATION PLAN**

1/4" = 1'-0"

NOTE: VENT CRAWLSPACE PER LOCAL CODES AND REQUIREMENTS \*Engineers seat 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. 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 begi



DRB2201-0063A 9-13-2022 Engineered By: HJS DWG. Checked By: AWL

SEE PLAN

REVISIONS No. Date:

**Sheet Number** 

#### **DESIGN LOADS**

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLE	CTION
	( - /	( - )	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:

1) 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

  1. The state of the state o @ 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)
- 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. 7) ALL STRUCTURAL STEEL SHALL BE ASTM A992 GRADE 50
- Fy = 50 KSI MIN. (UNO) 8) ALL EXTERIOR LUMBER TO BE #2 SYP PT
- ALL CONCRETE, fc = 3000 PSI MIN.
- PRESUMPTIVE BEARING CAPACITY = 2000 PSF 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)
   PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM
   OF POPCH COLUMNS. (LN O.)
- 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
- 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
- 2) 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.

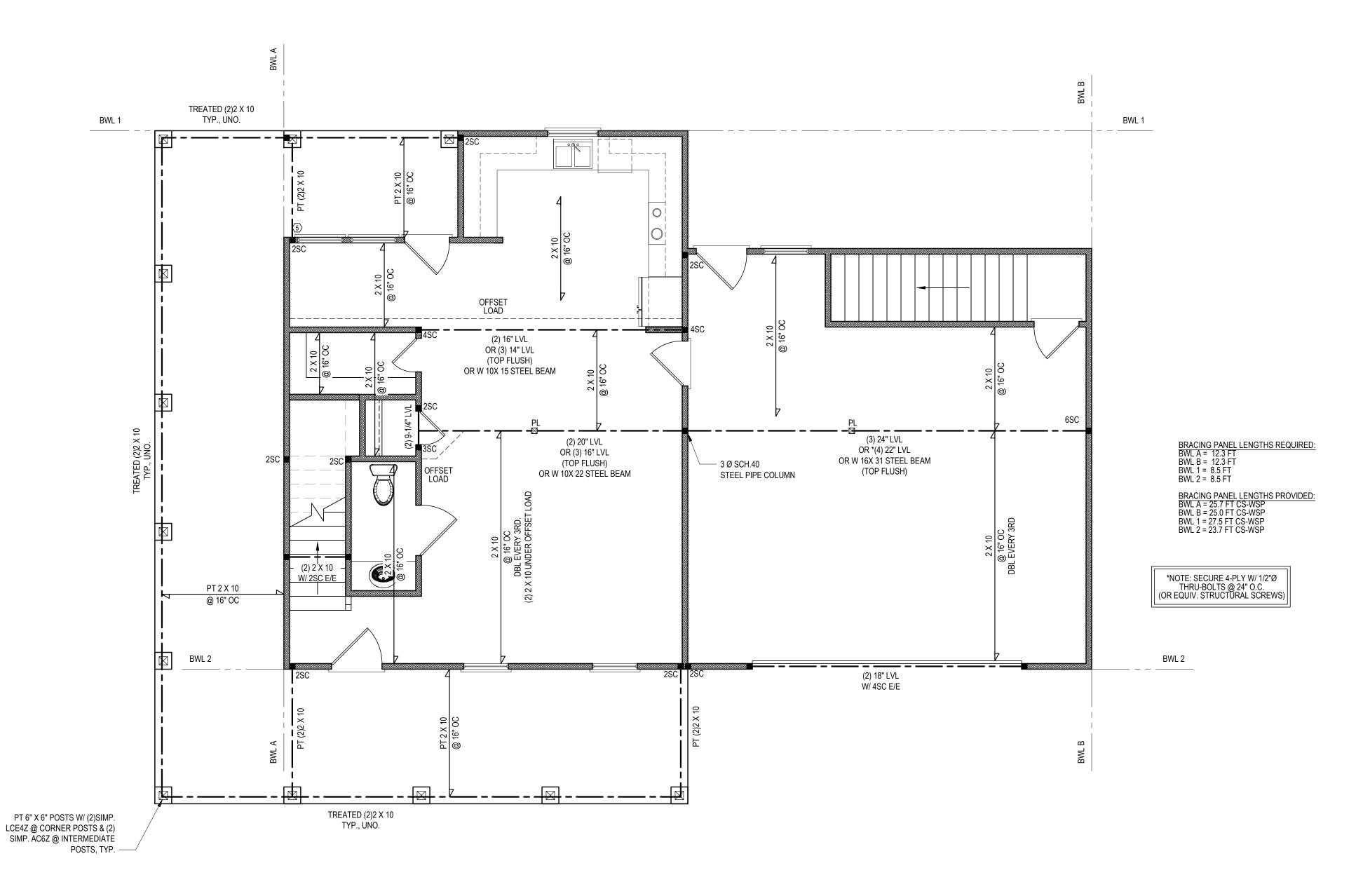
#### 1 REFERENCE FIGURE R602.10.4.3 OF THE 2018 NCRC.

- 4) INTERIOR BRACED WALL PANELS (BWP) INDICATED SHALL BE SHEATHED IN ACCORDANCE WITH THE GB METHOD OR WSP METHOD AS
- $\langle 2 \rangle$  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
- $\langle 3 \rangle$  3/8" WOOD STRUCTURAL PANEL (WSP) SECURE w/ 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT
- 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

#### (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"

\*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. 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



DRB2201-0063A 9-13-2022 Engineered By: HJS DWG. Checked By: AWL

SEE PLAN

REVISIONS No. Date:

**Sheet Number** 

#### **DESIGN LOADS**

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION		
	( 5. )	(* 5. /	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	BAS	SED ON 120 MPH (E	XPOSURE B)		
SEISMIC	BASED ON SEISMIC ZONES A, B & C				

STRUCTURAL NOTES:

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- 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
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- 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
- ALL CONCRETE, fc = 3000 PSI MIN. PRESUMPTIVE BEARING CAPACITY = 2000 PSF
- 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# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (UN O.)
- 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
- 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
- 2) 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.

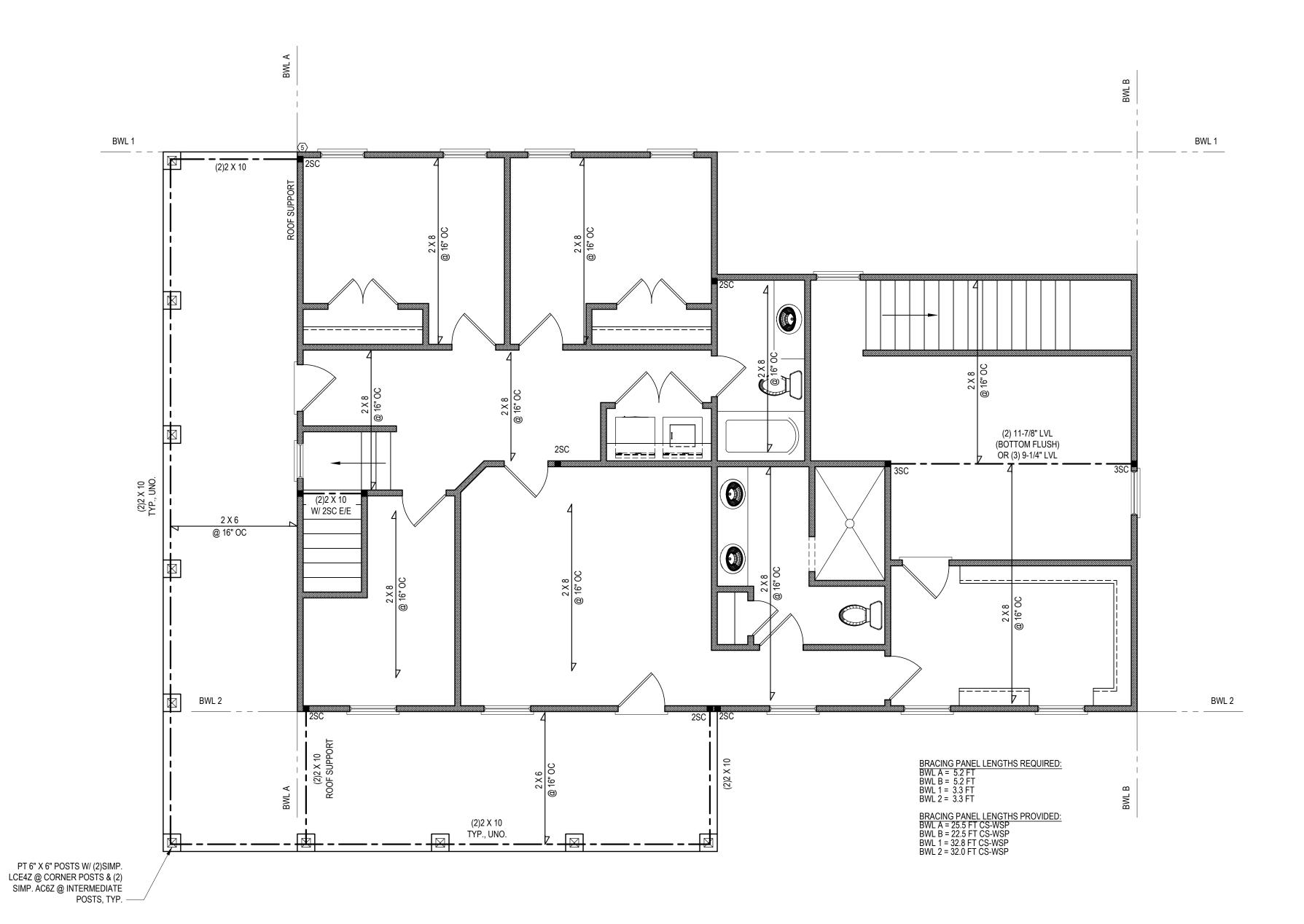
#### 1 REFERENCE FIGURE R602.10.4.3 OF THE 2018 NCRC.

- 4) INTERIOR BRACED WALL PANELS (BWP) INDICATED SHALL BE SHEATHED IN ACCORDANCE WITH THE GB METHOD OR WSP METHOD AS
- $\langle 2 \rangle$  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
- 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

#### (4) SHEATH INTERIOR & EXTERIOR

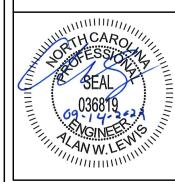
- 8) FOR CS-WSP METHOD, A MINIMUM 24" BRACED WALL PANEL CORNER RETURN SHALL BE PROVIDED AT BOTH ENDS OF A BRACED WALL LINE IN ACCORDANCE WITH FIGURE R602.10.3(4). IN LIEU OF A CORNER RETURN, EITHER A MIN. 48" BRACED WALL PANEL SHALL BE PROVIDED AT THE CORNER OR A HOLD-DOWN DEVICE WITH A MINIMUM UPLIFT 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"

\*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. 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



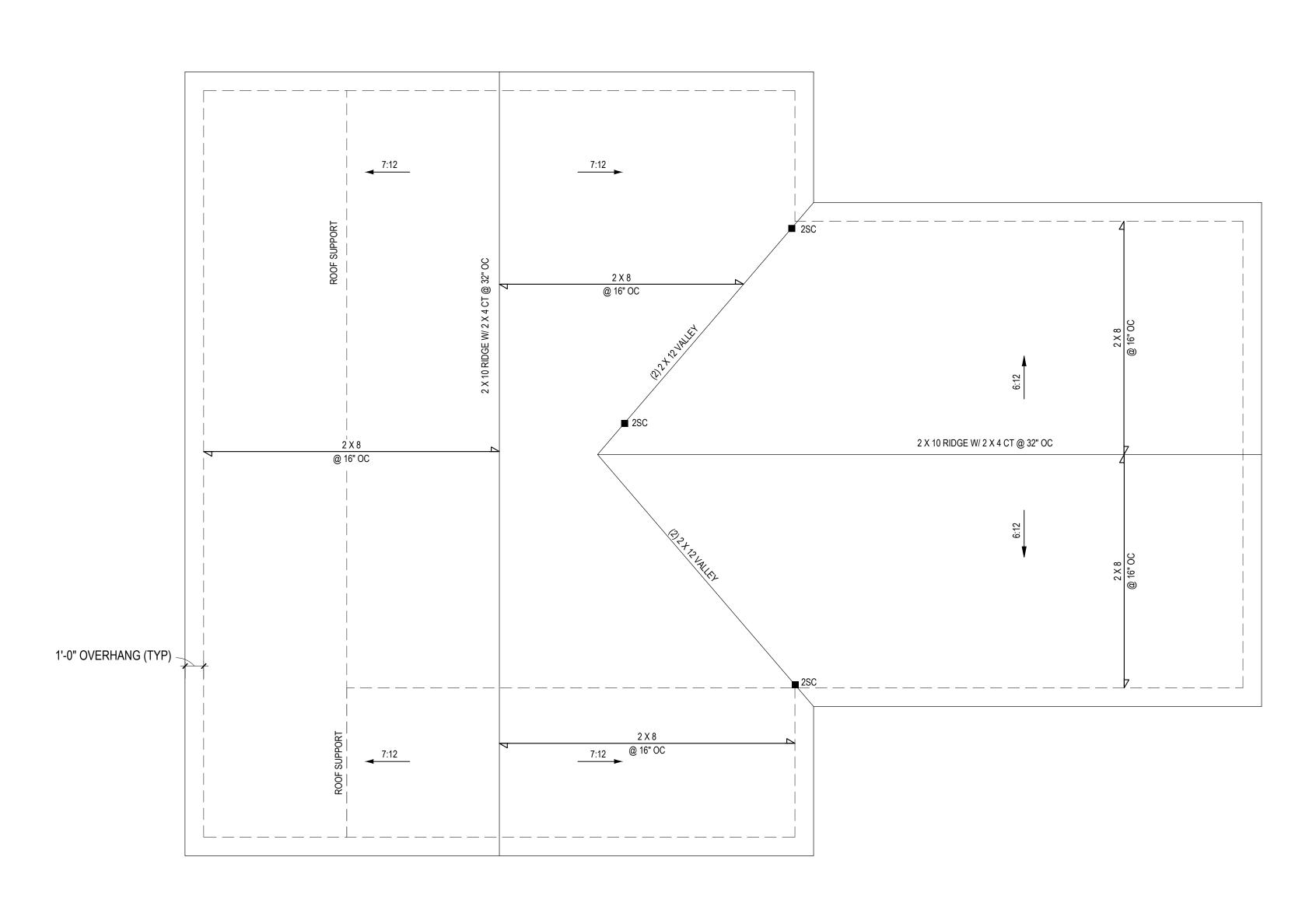
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DRB2201-0063A 9-13-2022 Engineered By: HJS DWG. Checked By: AWL

SEE PLAN

REVISIONS No. Date:

**Sheet Number** 



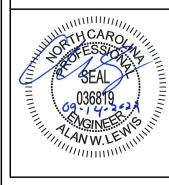
**ROOF PLAN** 1/4" = 1'-0"

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\*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 acceptable once construction begins.



Project #: DRB2201-0063A Date:
9-13-2022
Engineered By:

Scale: SEE PLAN

**Sheet Number** 

DESIGN LOADS:

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION	
	(FSF)	(F3F)	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 MF	PH (EXPOSURE B)	
SEISMIC		SEISMIC ZOI	NES A, B & C	

3) MINIMUM ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF

THICKNESS, SOIL TYPE, AND UNBALANCED BACKFILL HEIGHT.

- 4) 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
- 6) 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.)
- 7) 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.
- 8) 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.
- 9) 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"Ø x 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. THERE SHALL BE A MINIMUM TWO ANCHOR BOLTS PER PLATE SECTION.
- 11) FOUNDATION DRAINAGE-DAMP PROOFING OR WATERPROOFING PER SECTION 405 AND 406 OF NC BUILDING CODE.
- 12) WALL AND ROOF CLADDING VALUES: 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
- 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.)

\*\*MEAN ROOF HEIGHT 30'-0" OR LESS

- 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.

			GLAZED		WOOD	MASS		BASEMENT °,º	SLAB <sup>d</sup>	CRAWL SPACE °
CLIMATE	FENESTRATION	SKYLIGHT <sup>b</sup>	FENESTRATION	CEILING <sup>m</sup>	FRAMED WALL	WALL :	FLOOR	WALL	R-VALUE	WALL
ZONES	U-FACTOR B, J	U-FACTOR	SHGC <sup>b,<u>k</u></sup>	R-VALUE	R-VALUE	R-VALUE '	R-VALUE	R-VALUE	AND DEPTH	R-VALUE
3	0.35	0.55	0.30	38 or 30 cont	$\frac{15}{13}$ or 13 + 2.5	<u>5/13 or</u> <u>5/10 cont</u>	19	<u>5/13</u> <sup>f</sup>	0	5/13
4	0.35	0.55	<u>0.30</u>	38 or 30 cont <sup>j</sup>	15 or 13 + <u>2.5</u>	<u>5/13 or</u> 5/10 cont	19	<u>10/15</u>	10	<u>10/15</u>
5	0.35	0.55	NR	38 or 30 cont	<sup>n</sup> 19, or 13 + 5 or 15 + 3	13/17 <u>or</u> 13/12.5 cont	<b>30</b> <sup>g</sup>	10/15	10	10/19

\* TABLE N1102.1 CLIMATE ZONES 3-5

a. 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 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. "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" BELOW GRADE WHICHEVER IS LESS. FOR FLOATING SLABS, INSULATION SHALL EXTEND TO THE BOTTOM OF THE FOUNDATION WALL OR 24", WHICHEVER IS LESS. R-5 SHALL BE ADDED TO THE REQUIRED SLAB EDGE R-VALUES FOR HEATED SLABS. e. DELETED

f. 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. "15+3" MEANS R-15 CAVITY INSULATION. PLUS R-3 INSULATED SHEATHING. IF STRUCTURAL SHEATHING COVERS 25% OR LESS OF THE EXTERIOR,

 $\underline{\textbf{INSULATING SHEATHING IS NOT REQUIRED WHERE THE STRUCTURAL SHEATHING IS USED. IF STRUCTURAL SHEATHING COVERS MORE THAN 25 PERCENT}$ 

i. FOR MASS WALLS, THE SECOND R-VALUE APPLIES WHEN MORE THAN HALF THE INSULATION IS ON THE INTERIOR MASS WALL.

j. IN ADDITION TO THE EXEMPTION IN SECTION N1102.3.3, A MAXIMUM OF TWO GLAZED FENESTRATION PRODUCT ASSEMBLIES HAVING A U-FACTOR NO GREATER THAN 0.55 SHALL BE  $\underline{\textbf{PERMITTED TO BE SUBSTITUTED FOR MINIMUM CODE COMPLIANT FENESTRATION PRODUCT ASSEMBLIES WITHOUT PENALTY.}$ 

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.

R-30 SHALL BE DEEMED TO SATISFY THE CEILING INSULATION REQUIREMENT WHEREVER THE FULL HEIGHT OF UNCOMPRESSED R-30 INSULATION EXTENDS OVER THE WALL TOP PLATE AT THE EAVES, OTHERWISE R-38 INSULATION IS REQUIRED WHERE ADEQUATE CLEARANCE EXISTS OR INSULATION MUST EXTEND TO EITHER THE INSULATION BAFFLE OR WITHIN 1 INCH OF THE ATTIC ROOF DECK.

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

n. R-19 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 2X4 WALL IS NOT DEEMED TO COMPLY. 9. BASEMENT WALL MEETING THE MINIMUM MASS WALL SPECIFIC HEAT CONTENT REQUIREMENT MAY USE THE MASS WALL R-VALUE AS THE MINIMUM REQUIREMENT.

630 SQ. FT. OF CRAWL SPACE / 150 = 4.2 SQ. FT. OF REQ'D VENTILATION WITHOUT CROSS VENTILATION 4.2 SQ. FT. OF VENTILATION REQ'D / 0.88 SQ.FT. PER VENT = 5 VENTS REQ'D (BASED ON 8" X 16" VENTS)1

630 SQ. FT. OF CRAWL SPACE / 1500 = .42 SQ. FT. OF REQ'D VENTILATION WITH CROSS VENTILATION .42 SQ. FT. OF VENTILATION REQ'D / 0.88 SQ.FT. PER VENT = 1 VENTS REQ'D (BASED ON 8" X 16" VENTS)2

\ CRAWL SPACE VENTILATION CALCULATION

PROVIDE ADEQUATE VENTILATION AT ALL POINTS AND TO PREVENT DEAD AIR POCKETS.

2) 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 WALLS MAY BE CONSTRUCTED WITHOUT WALL VENT OPENINGS. VENT DAMS SHALL BE PROVIDED VHEN THE BOTTOM OF THE FOUNDATION VENT OPENING IS LESS THAN 4 INCHES ABOVE THE FINISHED

WALL VENTED CRAWL SPACES REQUIRE FULL COVERAGE GROUND VAPOR RETARDERS.

1350 SQ. FT. OF ATTIC / 300 = 4.5 SQ. FT. INLETS/OUTLETS REQUIRED THE COMICE VENTS WITH THE BALANCE OF VENTILATION PROVIDED CATHEDRAL CEILINGS SHALL HAVE A 1" MINIMUM CLEARANCE BETWEEN THE BOTTOM OF THE ROOF DECK AND THE INSULATION. \* ATTIC VENTILATION CALCULATION



DEFINITIONS FOR COMMON ABBREVIATIONS

MINIMUM CEILING JOIST CONCRETE MASONRY UNIT = ON CENTER POINT LOAD COLUMN CONC CONCRETE PRESSURE TREATED CONTINUOUS REINF REINFORCED COLLAR TIE REQD DOUBLE

REQUIRED ROOF SUPPORT DIAMETER STUD COLUMN DOUBLE JOIST DOUBLE RAFTER SCH SCHEDULE EACH SPECIFIED THICK FLOOR JOIST TRIPLE JOIST

TYPICAL FOOTING UNLESS NOTED OTHERWISE GALV GALVANIZED WIDE FLANGE BEAM HORIZ HORIZONTAL HEIGHT WELDED WIRE FABRIC MANUFACTURER EXTRA JOIST

TREATED

MAXIMUM HEIGHT OF DECK SUPPORT POSTS AS FOLLOWS:

FOUNDATION

COL

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 THESE METHODS:
- A. THE DECK FLOOR HEIGHT IS LESS THAN 4'-0" AND THE DECK IS

ATTACHED TO THE STRUCTURE IN ACCORDANCE WITH SECTION (4)

45° AND 60° FROM THE HORIZONTAL. KNEE BRACES SHALL BE BOLTED

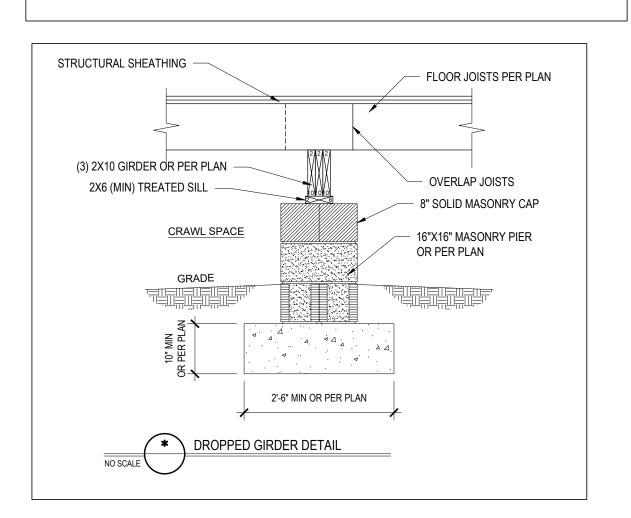
TO THE POST AND GIRDER WITH ONE 5/8"Ø HOT DIPPED GALVANIZED

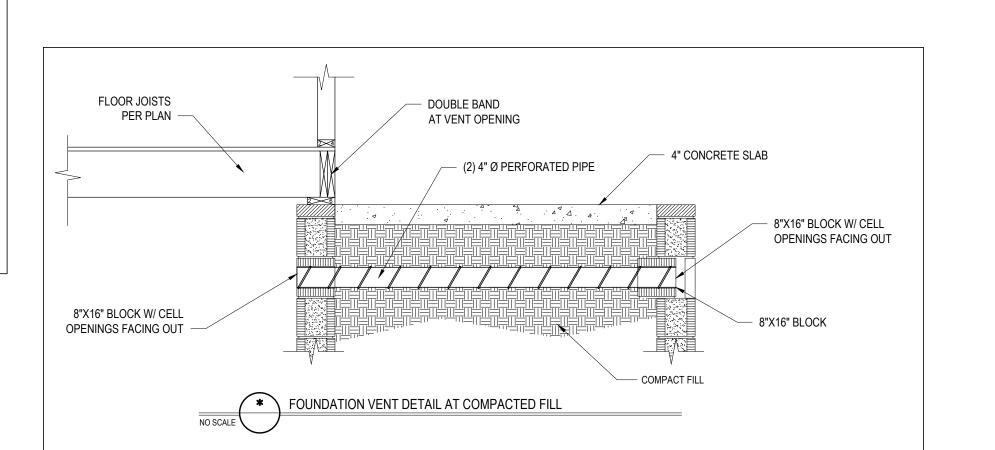
- ABOVE. LATERAL BRACING IS NOT REQUIRED. B. 4 x 4 WOOD KNEE BRACES MAY BE PROVIDED ON EACH COLUMN IN BOTH DIRECTIONS. THE KNEE BRACES SHALL ATTACH TO EACH POST AT A POINT NOT LESS THAN 1/3 OF THE POST LENGTH FROM THE TOP OF THE POST, AND THE BRACES SHALL BE ANGLED BETWEEN
- BOLT AT EACH END OF THE BRACE. C. FOR FREESTANDING DECKS WITHOUT KNEE BRACES OR DIAGONAL BRACING, LATERAL STABILITY MAY BE PROVIDED BY EMBEDDING THE

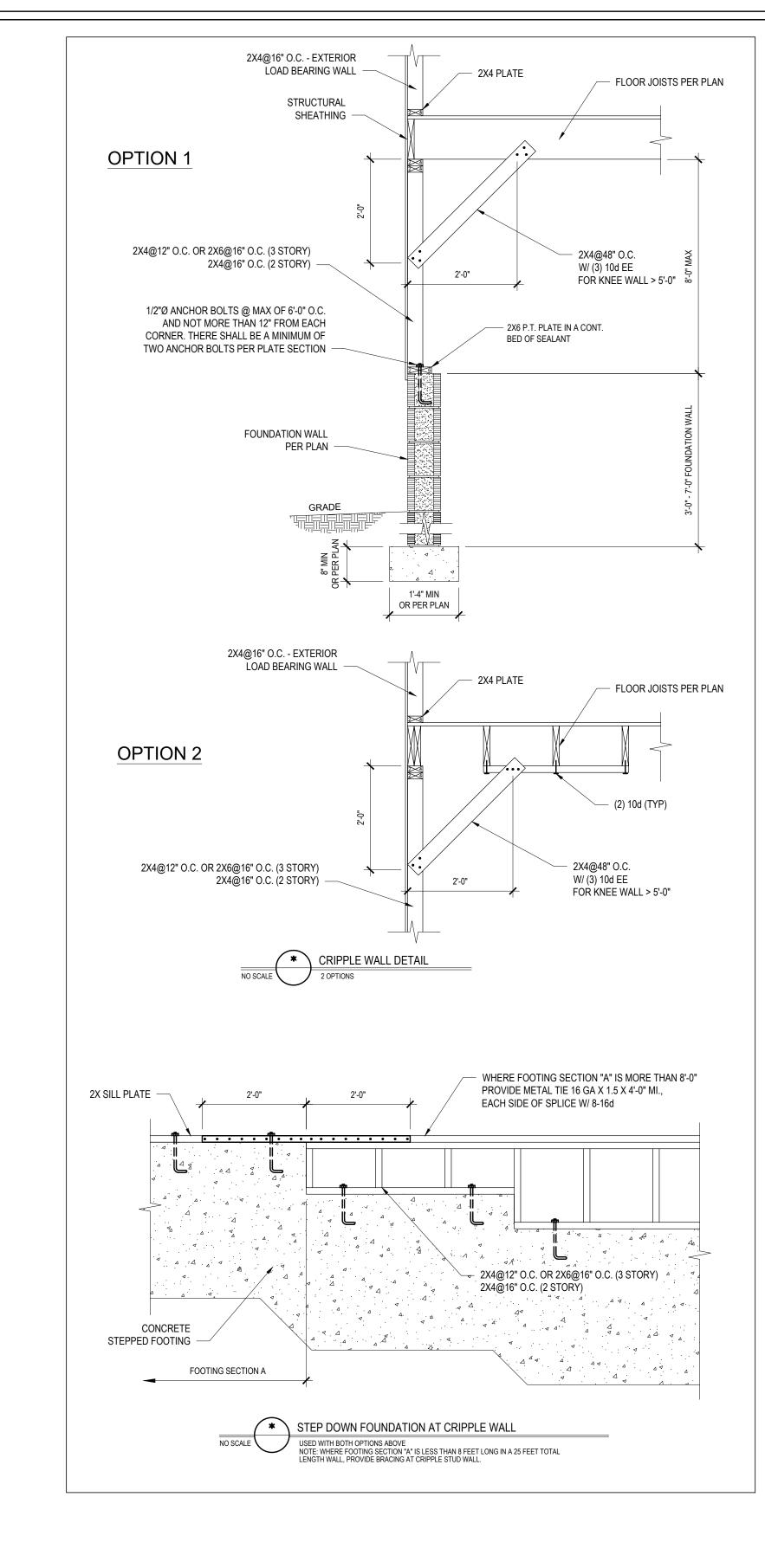
_	POSTS IN ACCORDANCE WITH THE FOLLOWING:				
	POST SIZE	MAX. TRIBUTARY AREA	MAX. POST HEIGHT	EMBEDMENT DEPTH	CONCRETE DIAMETER
	4 x 4	48 SQ. FT.	4'-0"	2'-6"	1'-0"
	6 x 6	120 SQ. FT.	6'-0"	3'-6"	1'-8"

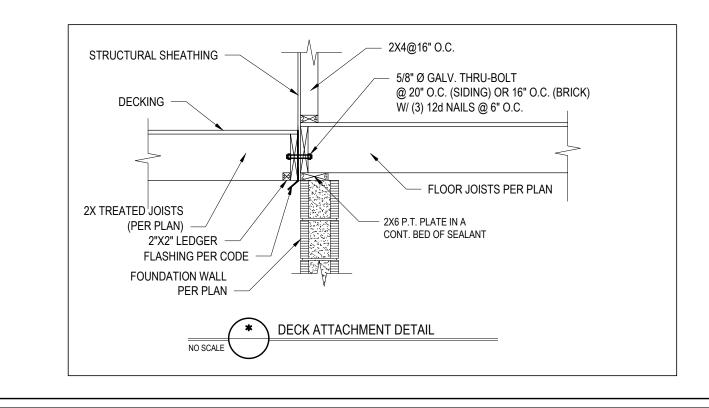
D. 2 x 6 DIAGONAL VERTICAL CROSS BRACING MAY BE PROVIDED IN TWO (2) PERPENDICULAR DIRECTIONS FOR FREESTANDING DECKS OR PARALLEL TO THE STRUCTURE AT THE EXTERIOR COLUMN LINE FOR ATTACHED DECKS. THE 2 x 6s SHALL BE ATTACHED TO THE POSTS WITH ONE 5/8"Ø HOT

DIPPED GALVANIZED BOLT AT EACH END OF EACH BRACING MEMBER. E. FOR EMBEDMENT OF PILES IN COASTAL REGIONS, SEE CHAPTER 46.









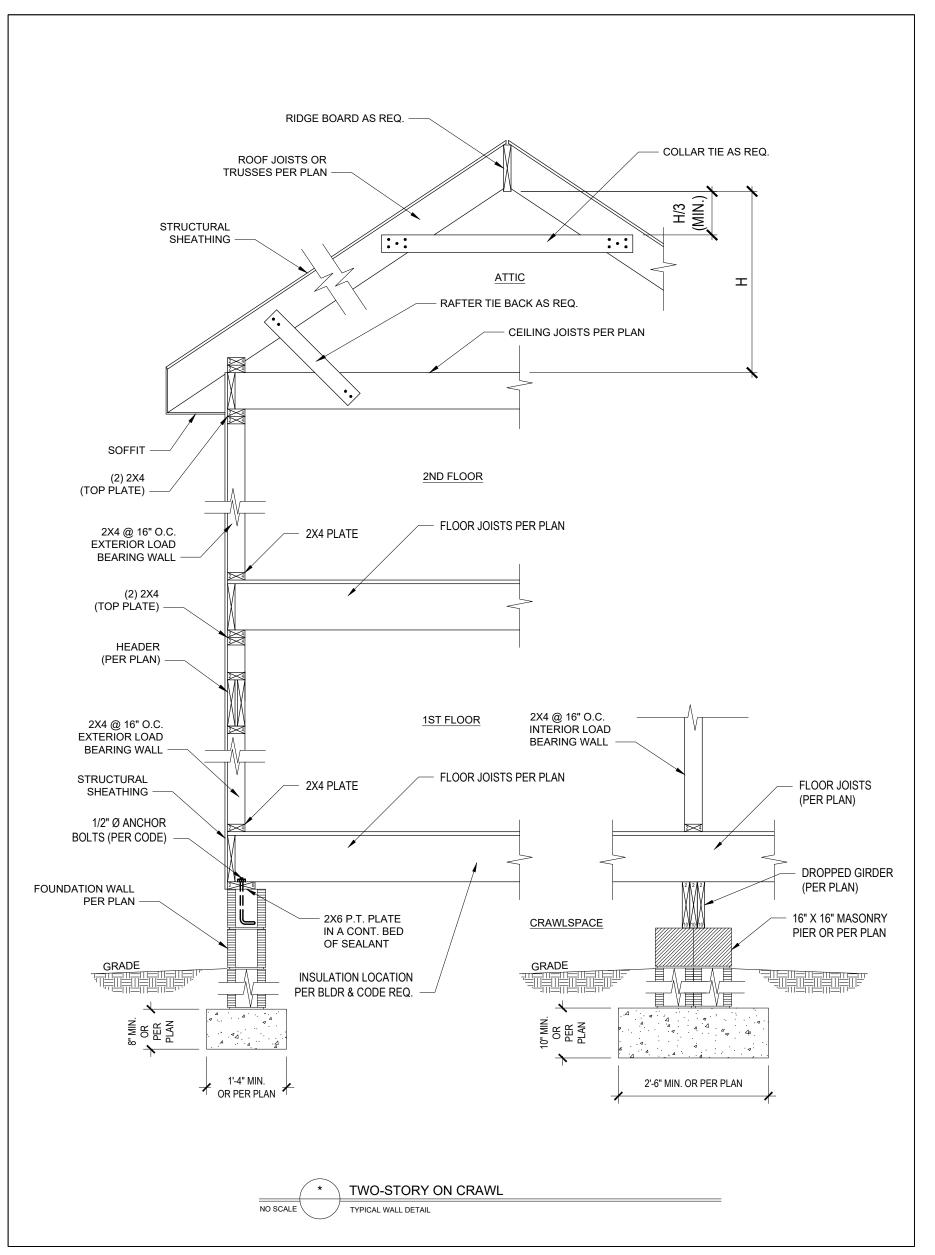
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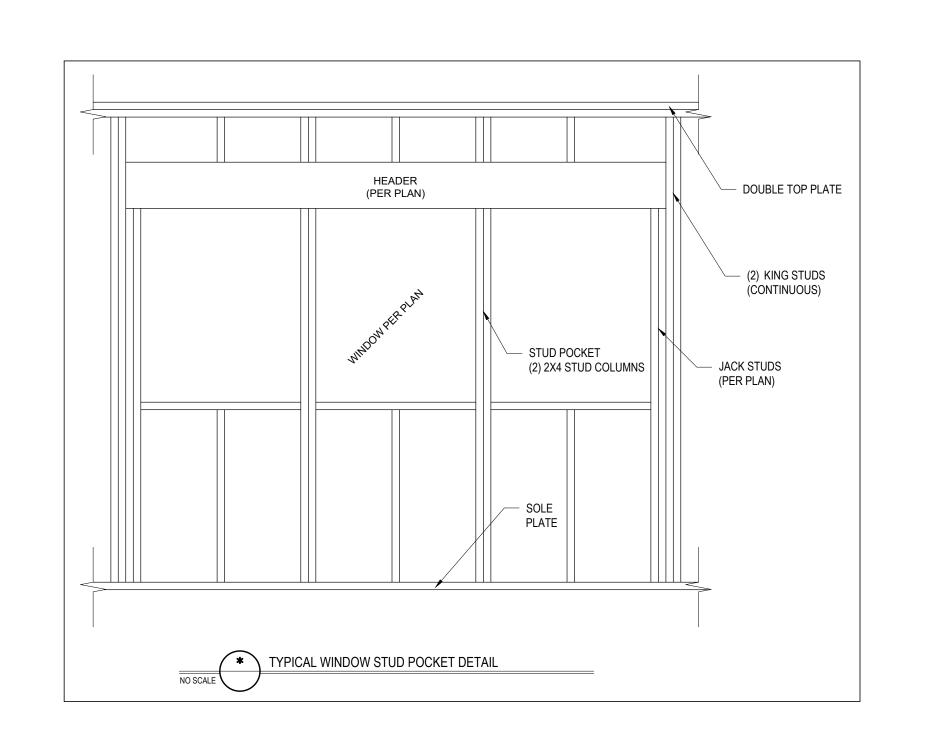


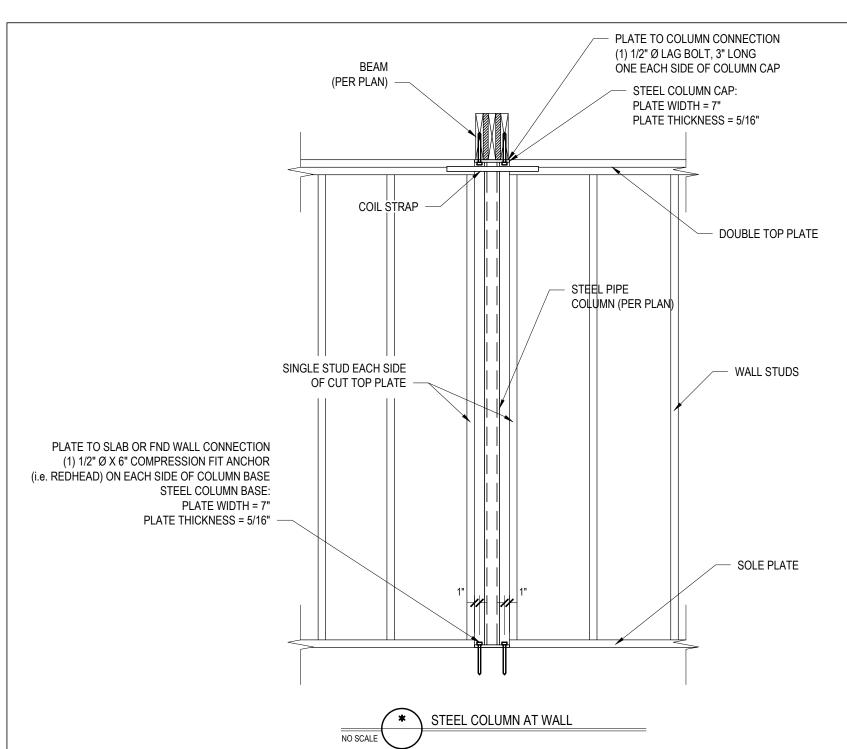
DRB2201-0063A 9-13-2022 **Engineered By:** HJS DWG. Checked By: AWL

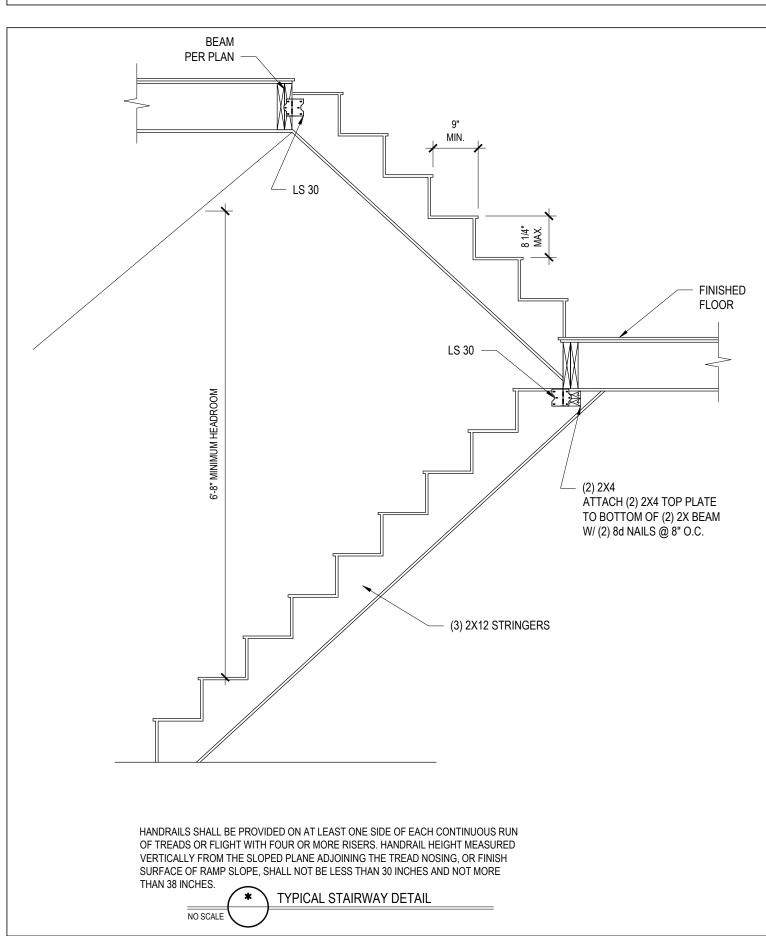
SEE PLAN REVISIONS Date:

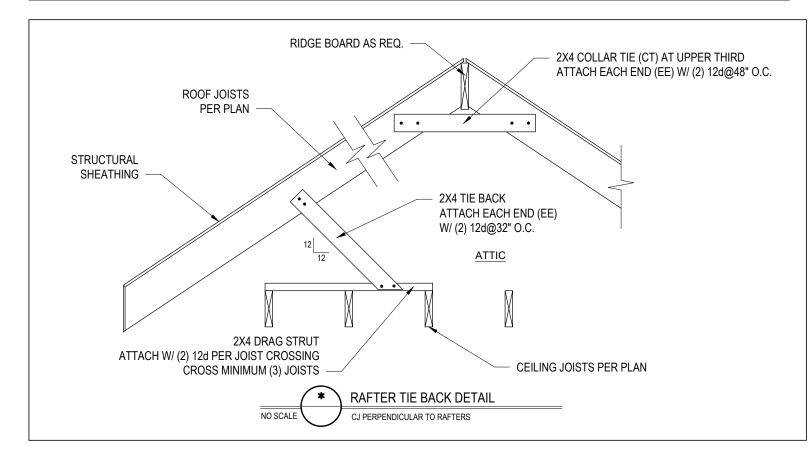
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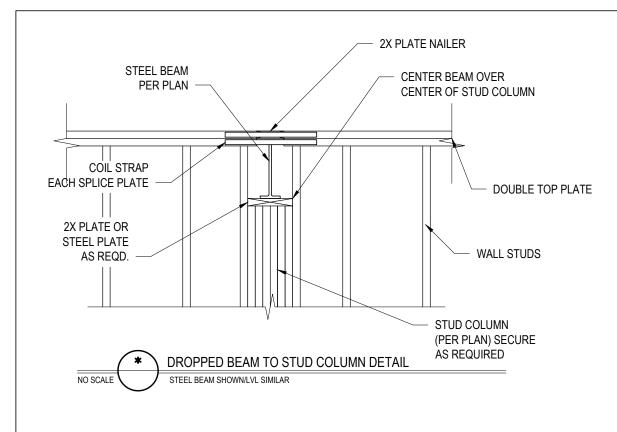


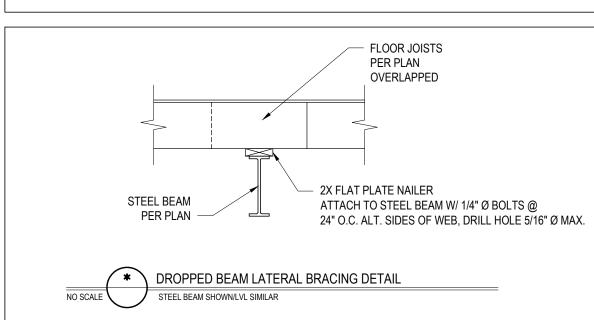


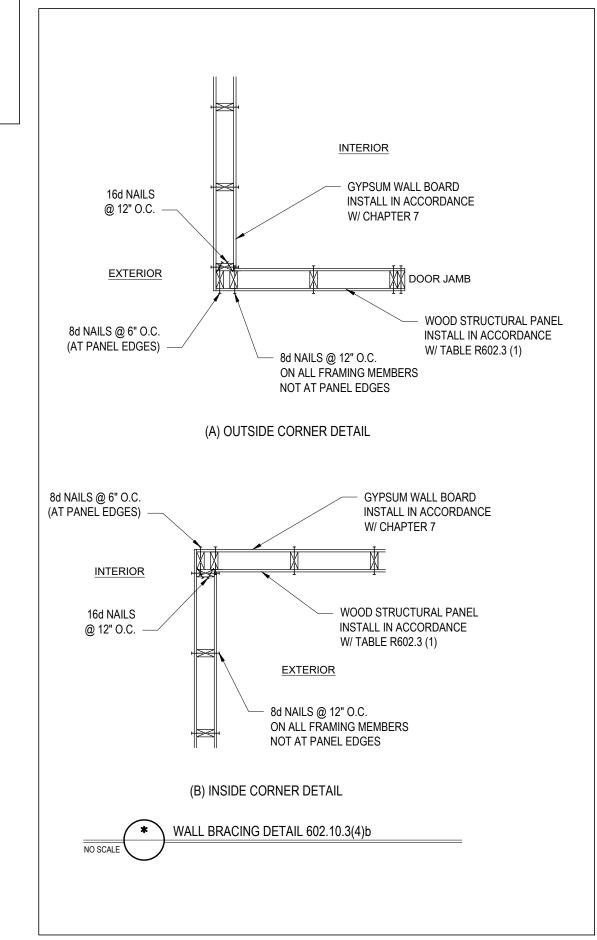


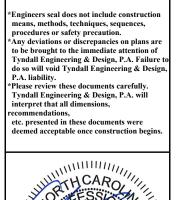


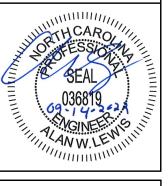


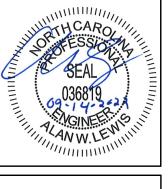








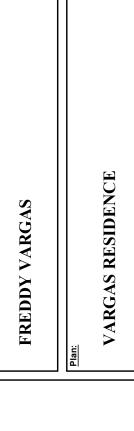












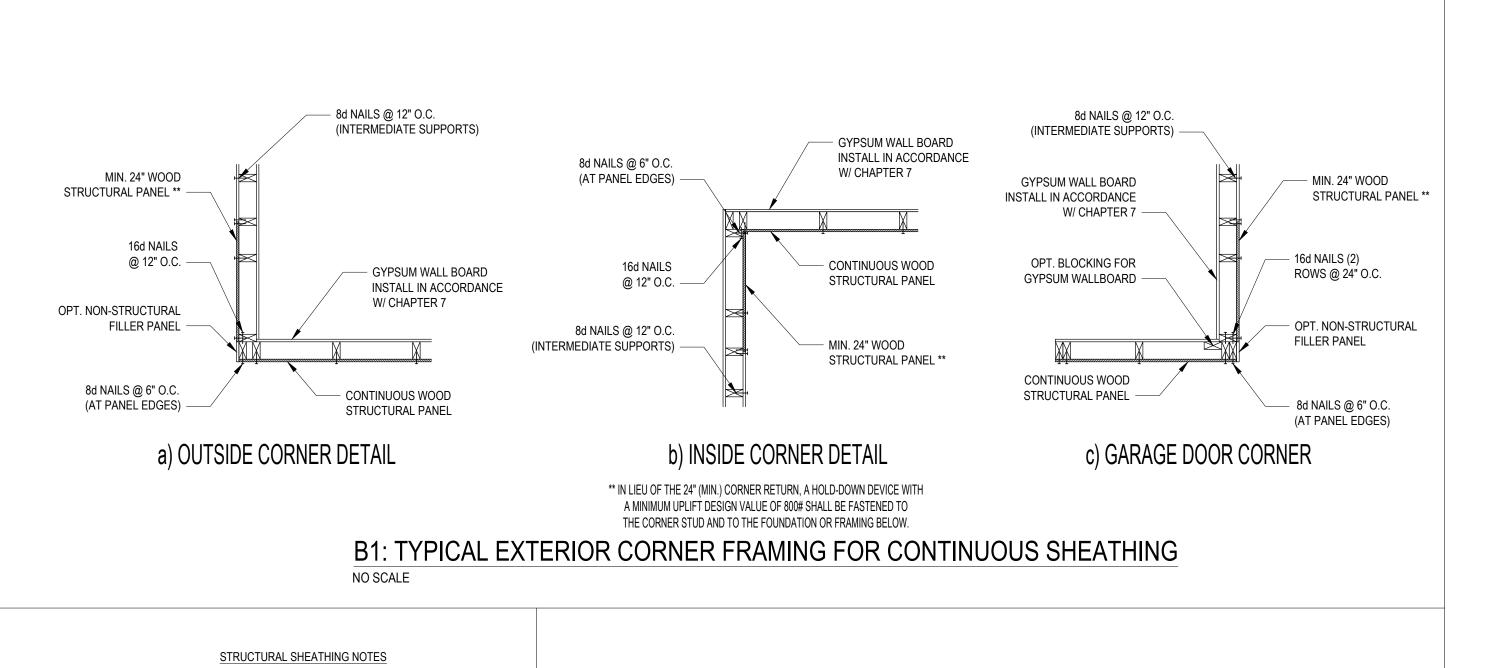
STANDARI DETAILS

Project #: DRB2201-0063A
<u>Date:</u>
9-13-2022 Engineered By:
HJS
DWG. Checked By: AWL

DWG. Checked By:
AWL
Scale:
SEE PLAN
REVISIONS

	REVISIONS					
No.	Date:	Remarks				
2						
3						
4						

**Sheet Number** 



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

@ 6" O.C.

@ 12" O.C.

\*\*OR EQUIVALENT PER TABLE R702.3.5

## **B3: BRACE WALL PANEL CONNECTIONS**

NO SCALE

1. DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF

2. WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION

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

1 REFERENCE FIGURE R602.10.4.3 OF THE 2018 NCRC.

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

(3) 3/8" WOOD STRUCTURAL PANEL )WSP) SECURE W/ 6d

CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.3 (UNO)

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 64 COMMON NAILS SPACED AT 6

O.C. AT PANEL EDGES AND SPACED AT 12" O.C. AT

'. MINIMUM BRACED WALL PANEL LENGTHS WITH CS-WSP

- 24" ADJACENT TO OPENINGS NOT MORE THAN 67%

- 48" FOR OPENINGS GREATER THAN 85% OF WALL

PANEL CORNER RETURN SHALL BE PROVIDED AT BOTH

ENDS OF A BRACED WALL LINE IN ACCORDANCE WITH

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

FIGURE R602.10.3 (4). IN LIEU OF A CORNER RETURN, EITHER A MINIMUM 48" BRACED WALL PANEL SHALL BE PROVIDED AT THE CORNER OR A HOLD-DOWN DEVICE

- 30" ADJACENT TO OPENINGS GREATER THAN 67% AND

INTERMEDIATE SUPPORTS.

OF WALL HEIGHT

METHOD SHALL BE AS FOLLOWS:

LESS THAN 85% OF WALL HEIGHT

 $\overline{\langle 4 \rangle}$  SHEATH INTERIOR AND EXTERIOR

5 MINIMUM 800# HOLD-DOWN DEVICE

8. FOR CS-WSP METHOD, A MINIMUM 24" BRACED WALL

AND 12" O.C. AT INTERMEDIATE SUPPORTS

5. EXTERIOR BRACED WALL PANELS (BWP) SHALL BE

6. ALL SHEATHABLE SURFACES OF EXTERIOR WALLS (INCLUDING AREAS ABOVE AND BELOW OPENINGS AND

COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES

4. INTERIOR BRACED WALL PANELS (BWP) INDICATED SHALL BE SHEATHED IN ACCORDANCE WITH THE GB METHOD OR

R602.10 OF THE 2018 NCRC

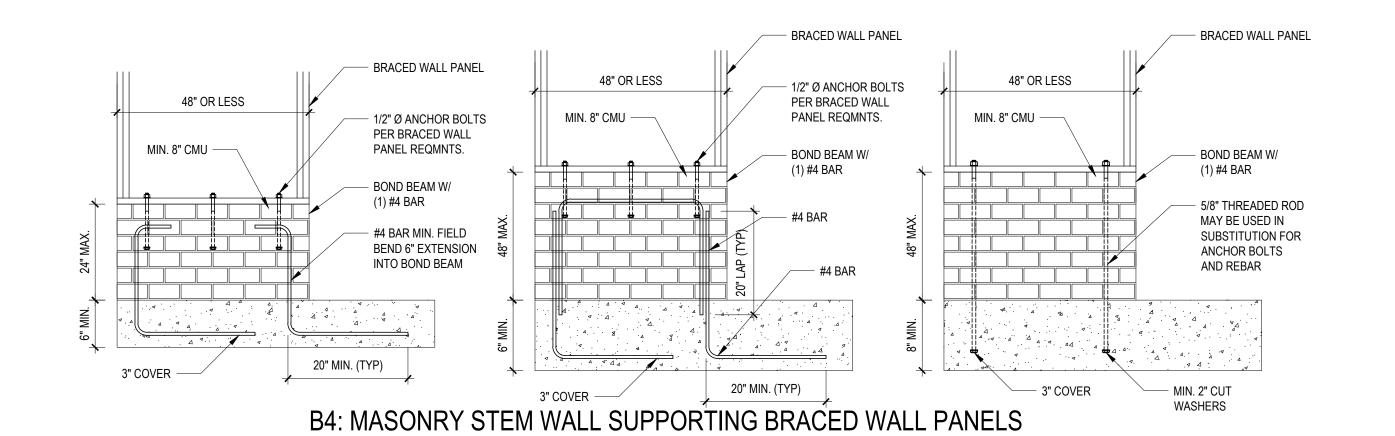


FIGURE R602.10.4.3 OF THE 2018 NCRC NOTE: GROUT BOND BEAMS AND ALL CELLS WHICH CONTAIN REBAR, THREADED RODS AND ANCHOR BOLTS

(WHEN PORTAL SHEATHING LAPS OVER BAND OR RIM JOIST) B2: METHOD CS-PF: CONTINUOUSLY SHEATHED PORTAL FRAME FIGURE R602.10.1

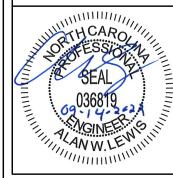
EXTENT OF HEADER W/ DOUBLE PORTAL FRAME (TWO BRACED WALL PANELS) EXTENT OF HEADER W/ SINGLE PORTAL FRAME (ONE BRACED WALL PANEL) MIN 3"x11.25" NET HEADER (STEEL HEADER PROHIBITED ONLY WITH PF) 2'-0" TO 18-0" FASTEN TOP PLATE TO HEADER WITH TENSION STRAP (2) ROWS OF 16d SINKER NAILS (ON OPPOSITE @ 3" O.C. (TYP) SIDE OF SHEATHING) HEADER TO JACK STUD - STRAP ON BOTH SIDES -- FASTEN SHEATHING TO HEADER WITH OF OPENING (OPPOSITE SIDE OF SHEATHING) 8d COMMON OR GALVANIZED BOX STRAP CAPACITY SHALL EQUAL 1,000 LBS. OR NAILS IN 3" GRID PATTERN AS MIN. 2X4 STUDS WITH PONY 4,000 LBS. WHEN PONY WALL IS PRESENT SHOWN AND 3" O.C. IN ALL FRAMING WALL HEIGHT UP TO 2'-0". (STUDS, BLOCKING, AND SILLS) (TYP) MIN. 2X8 STUDS WITH PONY WALL HEIGHT GREATER THAN 2'-0" 7/16" MIN. THICKNESS WOOD STRUCTURAL PANEL SHEATHING BRACED WALL LINE - CONTINUOUSLY PANEL SPLICE EDGES (IF NEEDED) -SHEATHED WITH WOOD STRUCTURAL PANELS SHALL OCCUR OVER, AND BE ATTACHED MIN. PANEL LENGTH TO, COMMON BLOCKING WITHIN 24" OF WALL HEIGHT, ft. THE WALL MID-HEIGHT. ONE ROW OF 3" 8 9 10 11 12 O.C. NAILING IS REQ'D. IN EACH PANEL EDGE PANEL LENGTH, in. | 16 | 18 | 20 | 22 | 24 MIN. DOUBLE POST (KING AND JACK STUD) NUMBER OF JACK TYPICAL PORTAL - MIN. DOUBLE STUD STUDS PER TABLES FRAME CONSTRUCTION R602.7(1) & (2) - MIN. (2) 1/2" Ø ANCHOR BOLTS ANCHOR BOLTS PER -INSTALLED PER SECTION R403.1.6 SECTION R403.1.6 (TYP) W/ 2" X 2" X 3/16" PLATE WASHER OVER CONCRETE OR MASONRY BLOCK FOUNDATION (2) FRAMING ANCHORS -NAIL SOLE PLATE -WOOD STRUCTURAL PANEL SHEATHING TO THE TOP TO JOISTS PER BAND OR RIM JOIST TABLE R602.3(1) 670 LBS WOOD STRUCTURAL

PANEL SHEATHING OVER APPROVED BAND OR RIM JOIST OVER RAISED WOOD FLOOR - FRAMING ANCHOR OPTION

(WHEN PORTAL SHEATHING DOES NOT LAP OVER BAND OR RIM JOIST) ATTACH SHEATHING TO BAND NAIL SOLE PLATE WOOD STRUCTURAL PANEL OR RIM JOIST WITH 8d COMMON TO JOISTS PER SHEATHING TO THE TOP 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

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SHEATHIN( DETAILS

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