

# TAYLOR GARAGE

PROJECT#  
DRB2101-0151  
DATE  
07/19/2021  
DRAWN/DESIGNED BY  
MMB  
CHECKED BY  
DRB  
SCALE  
1/4" = 1'-0"

WEBSITE  
drbhomedesign.com

PROJECT NAME  
TAYLOR RESIDENCE

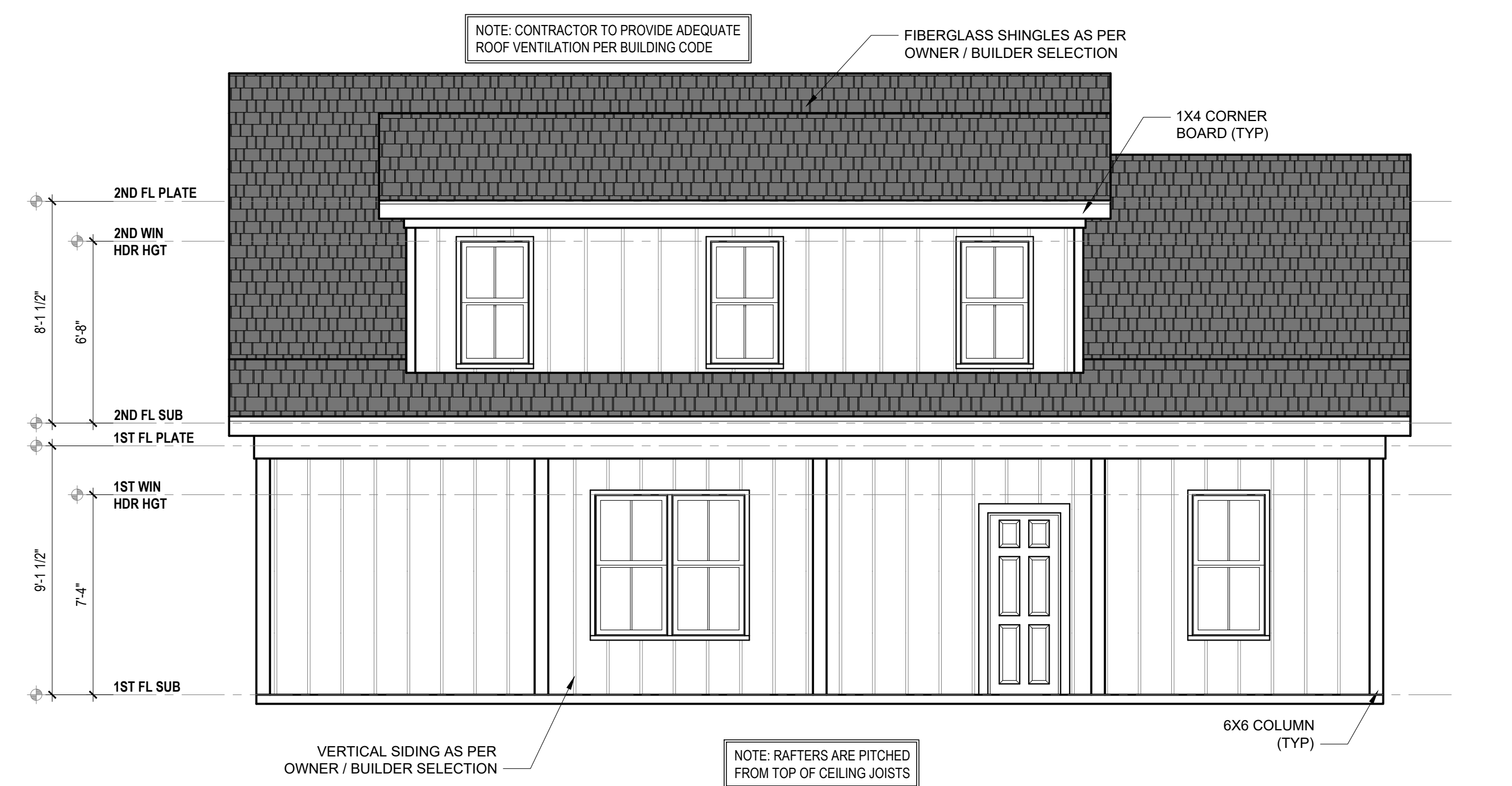
DRB DESIGN  
drbdesign@drbhomedesign.com 919.631.5979  
250 Shipwash Dr Suite 105 Garner, NC 27529



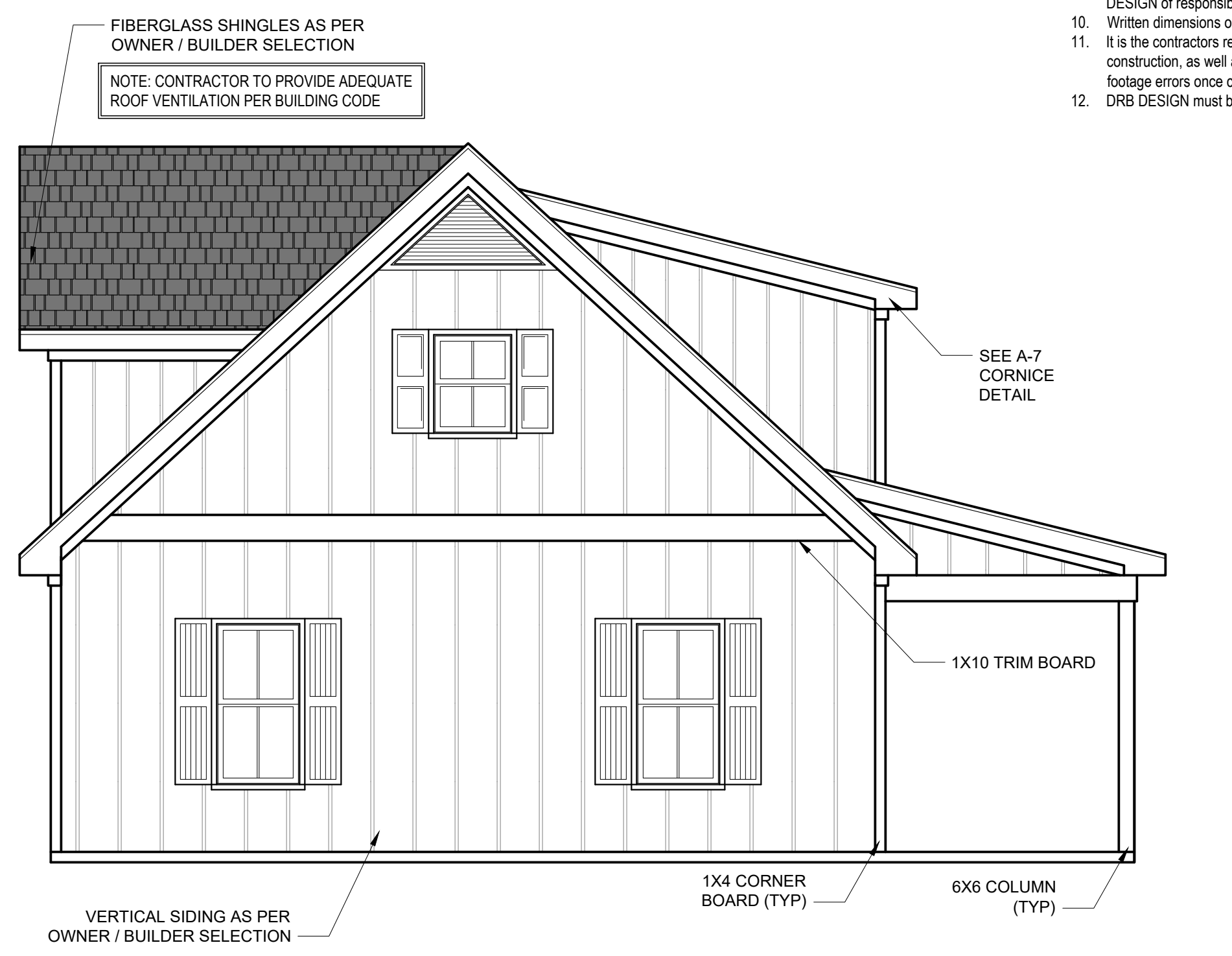
**FRONT ELEVATION**  
1/4" = 1'-0"



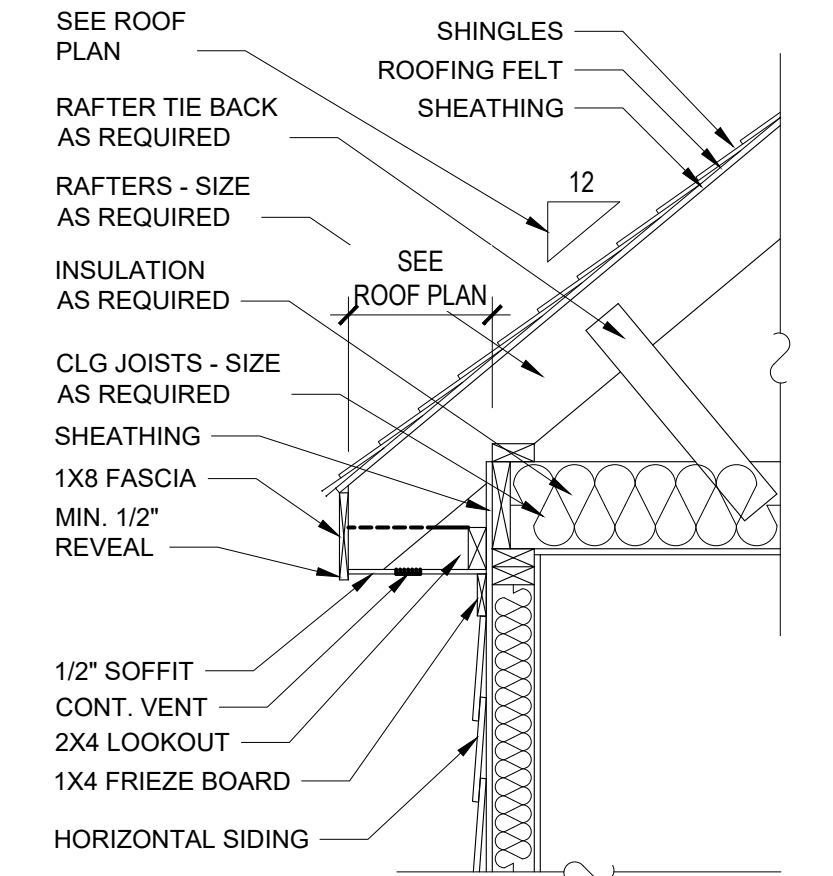
**LEFT ELEVATION**  
1/4" = 1'-0"



**REAR ELEVATION**  
1/4" = 1'-0"



**RIGHT ELEVATION**  
1/4" = 1'-0"

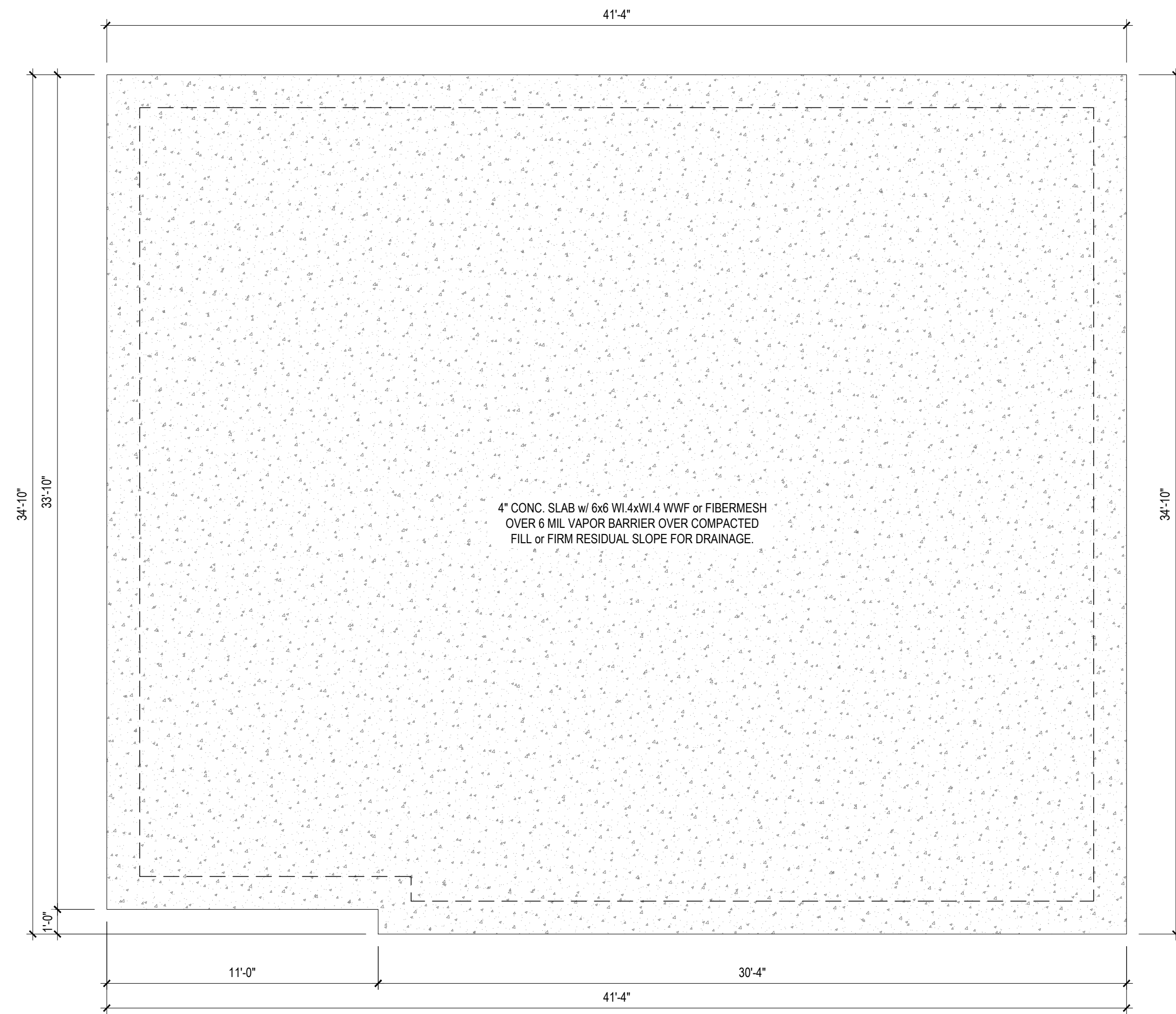


**A-7 CORNICE DETAIL**  
NTS

- 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 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.
- 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 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.
- 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 arising out of such changes.
- Written dimensions on these plans always have precedence over scaled dimensions.
- It is the contractor's 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.
- DRB DESIGN must be notified of any variations from the dimensions and conditions shown on these drawings.

CLIENT NAME  
Jon Taylor  
P.O. Box 2252  
Lillington, NC 27546  
jontaylorrealty@yahoo.com  
910-528-6522

SHEET NAME  
ELEVATIONS  
SHEET #  
**A1**  
of 3

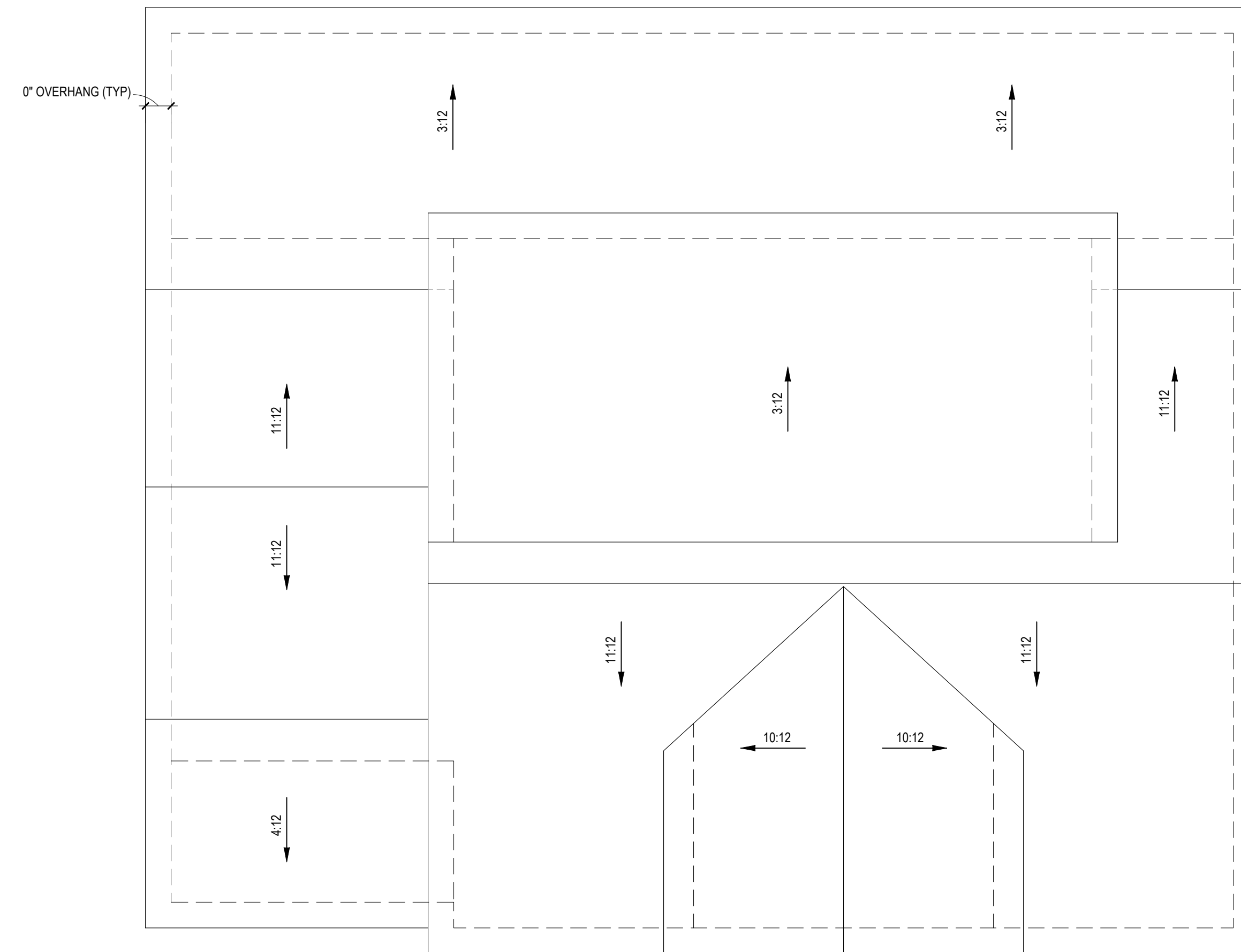


4" CONC. SLAB w/ 6x6 W1.4xW1.4 WWF or FIBERMESH  
OVER 6 MIL VAPOR BARRIER OVER COMPACTED  
FILL or FIRM RESIDUAL SLOPE FOR DRAINAGE.

NOTE: SEE STRUCTURAL  
PLANS FOR ENGINEERING  
INFORMATION

**FOUNDATION PLAN**

1/4" = 1'-0"



**ROOF PLAN**

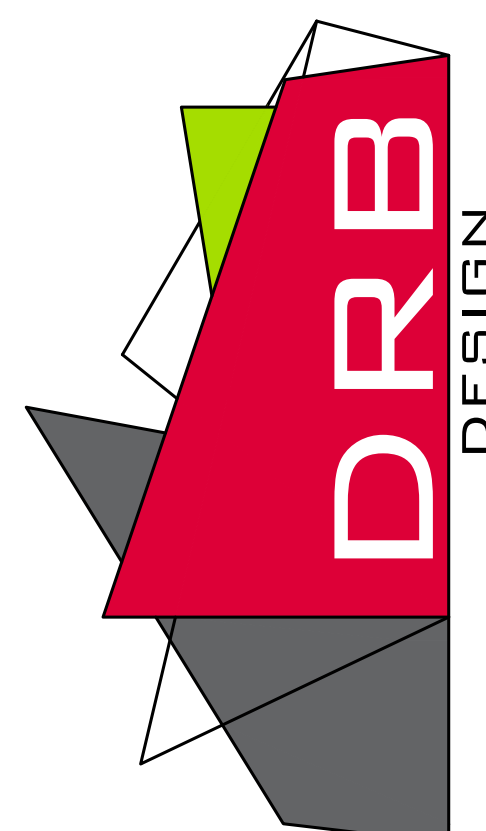
1/4" = 1'-0"

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.
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 arising 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.

PROJECT#  
DRB2101-0151  
DATE  
07/19/2021  
DRAWN/DESIGNED BY  
MMB  
CHECKED BY  
DRB  
SCALE  
1/4" = 1'-0"

WEBSITE  
drbhomedesign.com

PROJECT NAME  
TAYLOR  
RESIDENCE



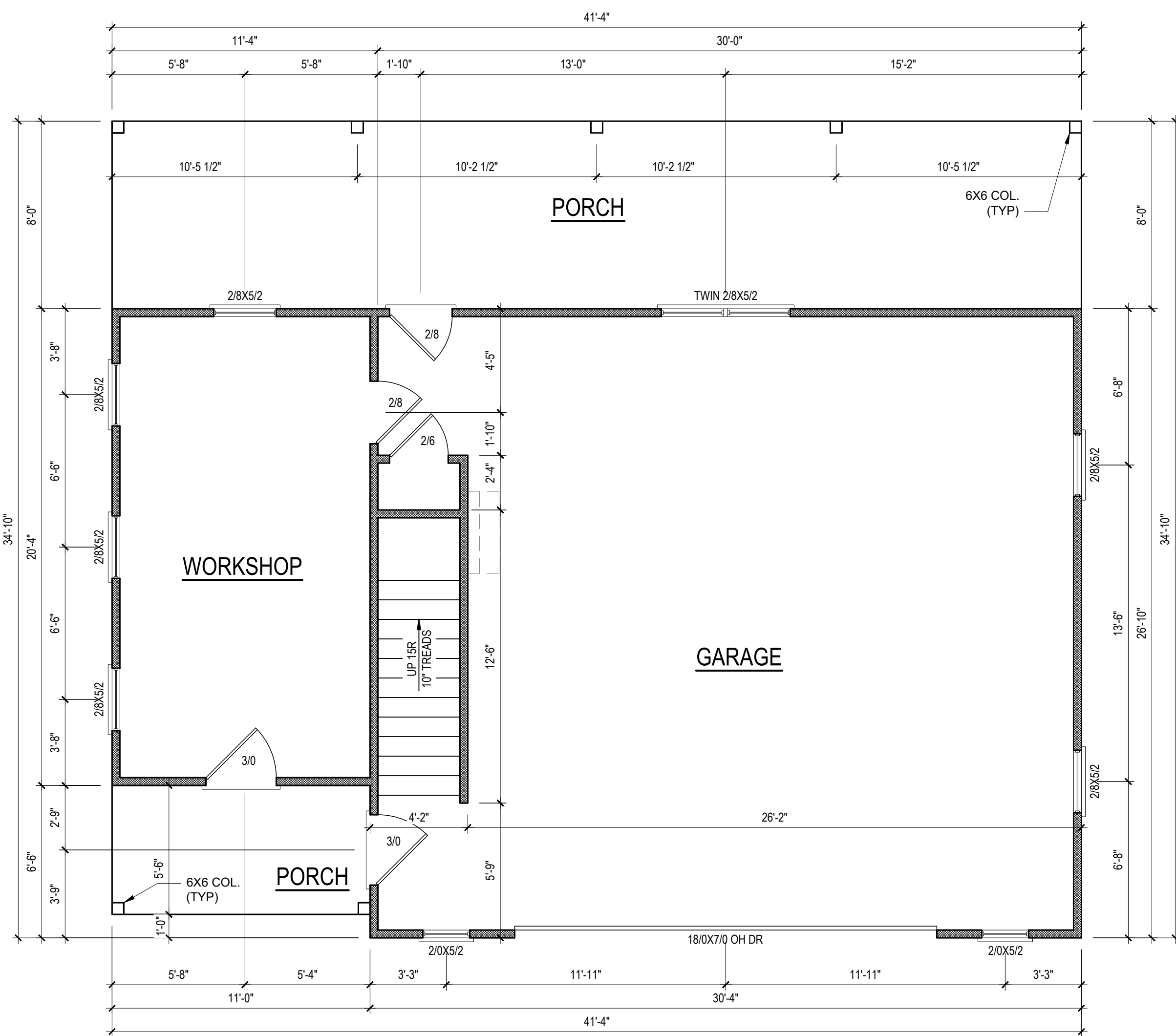
drbdesign@drbhomedesign.com 919.631.5979  
250 Shipwash Dr Suite 105 Garner, NC 27529

CLIENT NAME  
Jon Taylor  
P.O. Box 2252  
Lillington, NC 27546  
jontaylorrealty@yahoo.com  
910-528-6522

SHEET NAME  
FOUND/ROOF

SHEET#  
A2  
of 3





**FIRST FLOOR PLAN**  
1/4" = 1'-0" CEILING HGT. = 9'-0"

**HEATED/HABITABLE SQUARE FOOTAGE**

Second Floor 574

**TOTAL HEATED 574**

**UNHTD SQUARE FOOTAGE**

Garage 814

Workshop 224

Front Porch 61

Back Porch 331

**TOTAL UNHEATED 1430**

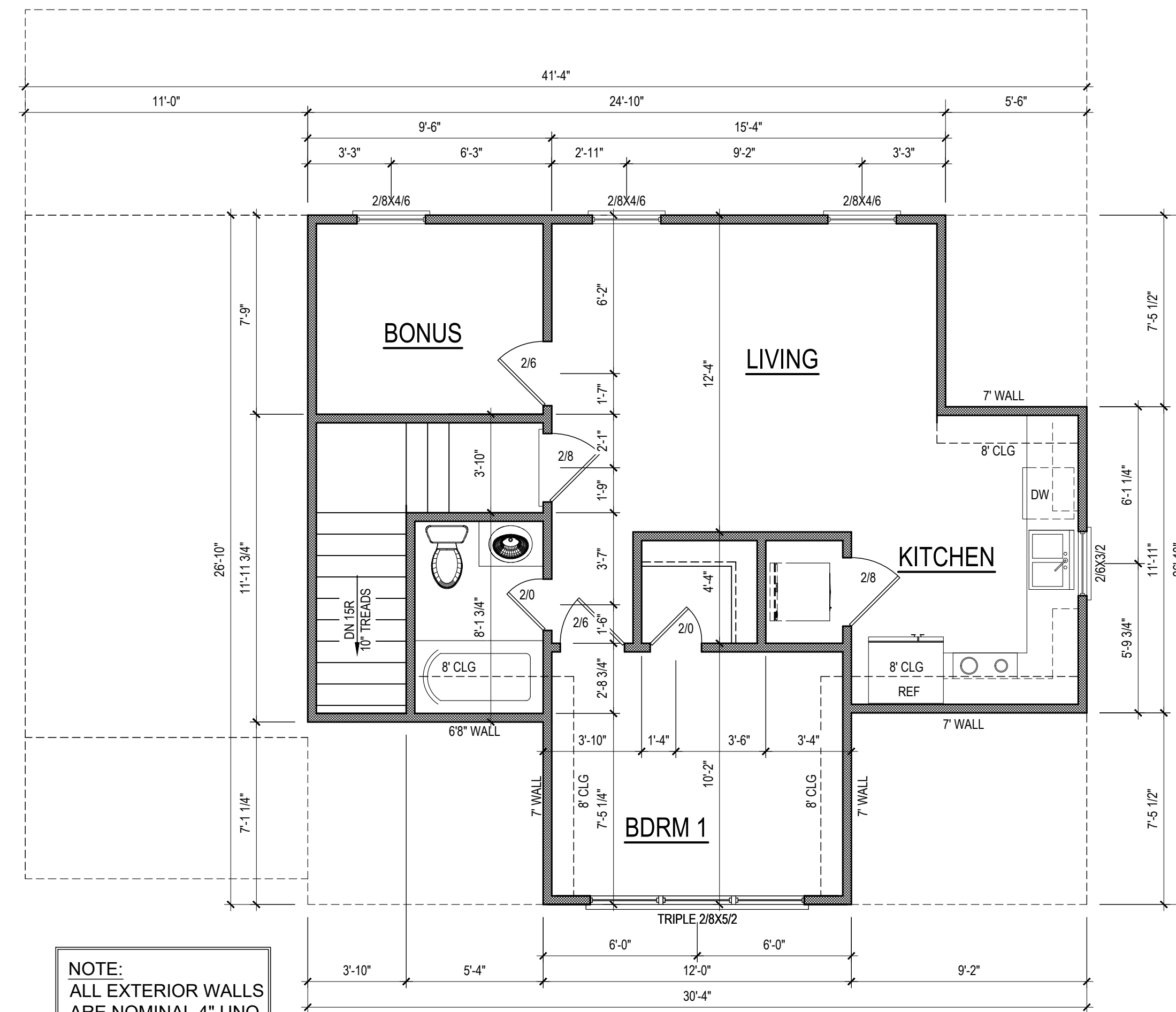
**TOTAL SQ FT 2004**

NOTE:  
ALL DIMENSIONS ARE  
FRAME TO FRAME

NOTE:  
ALL INTERIOR WALLS  
ARE NOMINAL 4" UNO

NOTE:  
ALL EXTERIOR WALLS  
ARE NOMINAL 4" UNO

- 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 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.
- 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 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.
- 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 arising out of such changes.
- Written dimensions on these plans always have precedence over scaled dimensions.
- It is the contractor's 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.
- DRB DESIGN must be notified of any variations from the dimensions and conditions shown on these drawings.



NOTE:  
ALL EXTERIOR WALLS  
ARE NOMINAL 4" UNO

NOTE:  
ALL INTERIOR WALLS  
ARE NOMINAL 4" UNO

NOTE:  
ALL DIMENSIONS ARE  
FRAME TO FRAME

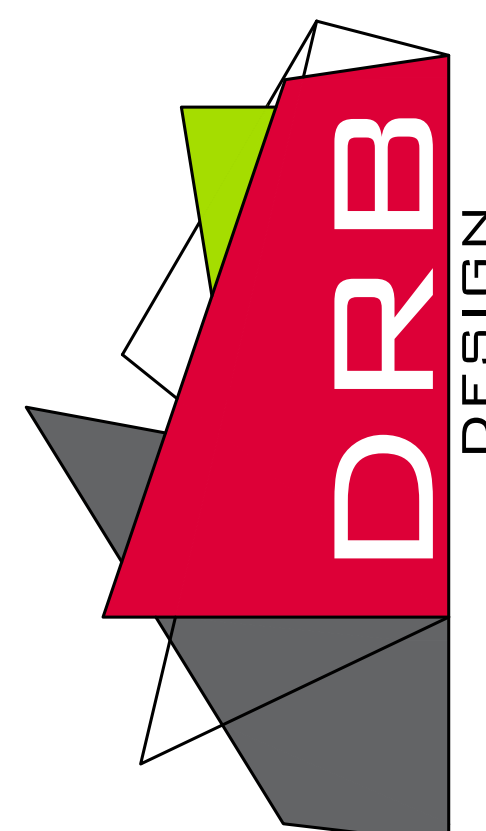
NOTE: VERIFY WINDOW SILL HEIGHT CLEARANCE  
ABOVE TUBS AND COUNTERTOPS TO ALLOW FOR  
TRIM AND/OR BACKSPLASH

**SECOND FLOOR PLAN**  
1/4" = 1'-0" CEILING HGT. = 8'-0"

PROJECT#  
DRB2101-0151  
DATE  
07/19/2021  
DRAWN/DESIGNED BY  
MMB  
CHECKED BY  
DRB  
SCALE  
1/4" = 1'-0"

WEBSITE  
drbhomedesign.com

PROJECT NAME  
TAYLOR  
RESIDENCE



drbdesign@drbhomedesign.com 919.631.5979  
250 Shipwash Dr Suite 105 Garner, NC 27529

CLIENT NAME  
Jon Taylor  
P.O. Box 2252  
Lillington, NC 27546  
jontaylorrealty@yahoo.com  
910-528-6522

SHEET NAME  
1ST/2ND FLOOR  
SHEET#

A3  
of 3





**DESIGN LOADS**

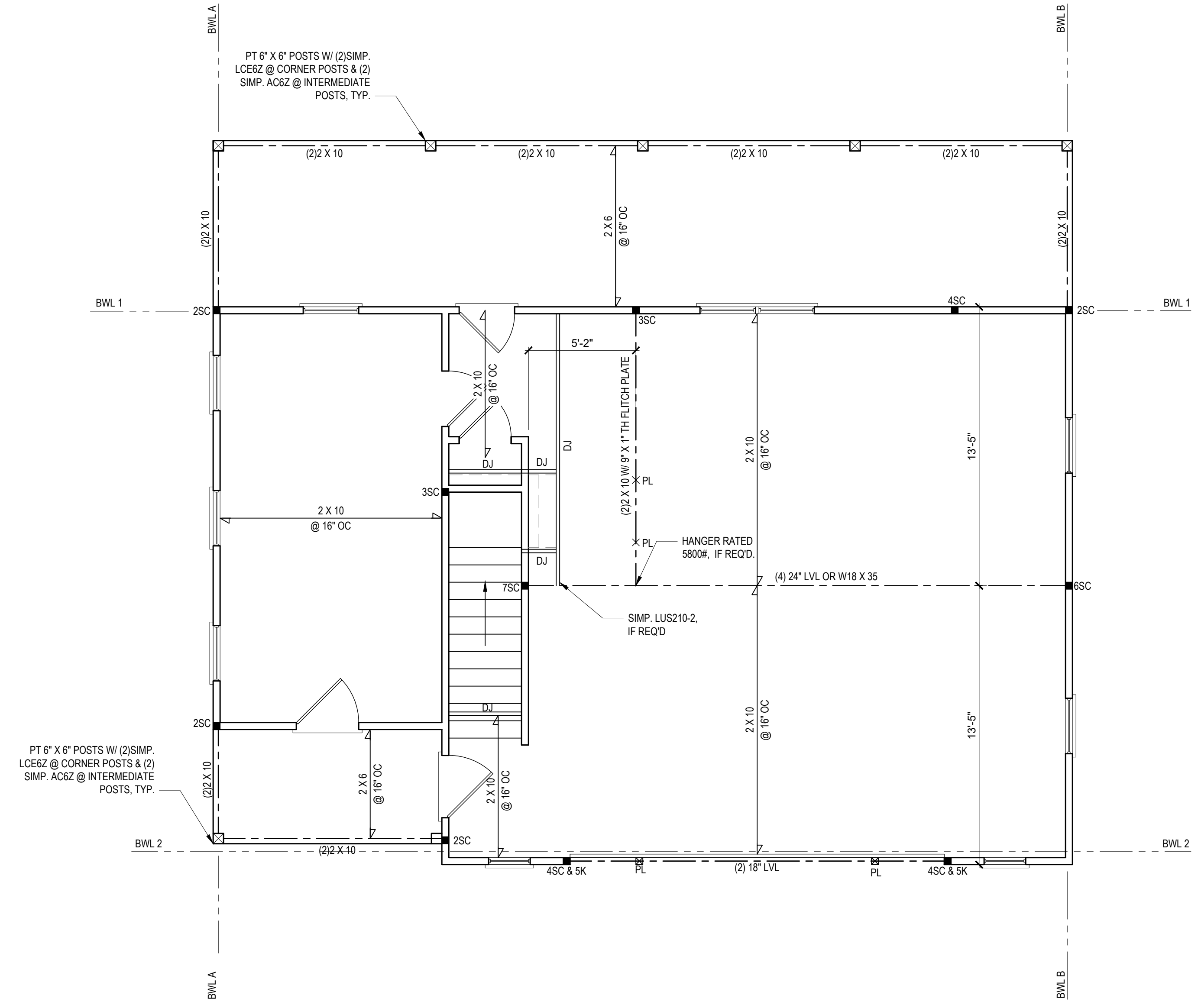
	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION	
			LL	TL
FLOOR (primary)	40	10	L/360	L/240
FLOOR (secondary)	40	10	L/360	L/240
ATTIC (w/ storage)	20	10	L/240	L/180
ATTIC (no access)	10	5	L/240	L/180
EXTERNAL BALCONY	40	10	L/360	L/240
ROOF	20	10	L/240	L/180
ROOF TRUSS	20	20	L/240	L/180
WIND LOAD	BASED ON 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.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, P.A. IS NOT RESPONSIBLE FOR DIMENSIONS AND SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.
- ALL LUMBER SHALL BE SYP #2 (LNU).
- ALL LVL LUMBER TO BE 1.75" WIDE NOMINAL EACH SINGLE MEMBER AND  $F_b = 2600$  PSI,  $E = 1.9M$  PSI.
- (I.E. LEVEL, MICRO-LAM)
- ALL LSL LUMBER IS TO BE 1.55E ( $F_b = 2325$  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 R602.1.5, AND TOGETHER w/ (2) 10# 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 (LNU).
- 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.
- $F_y = 50$  KSI MIN. (LNU).
- ALL EXTERIOR LUMBER TO BE #2 SYP PT.
- ALL CONCRETE  $f_c = 3000$  PSI MIN.
- PRESUMPTIVE BEARING CAPACITY = 2000 PSF.
- 12" ANCHOR BOLTS SPACED AT MINIMUM 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" (LNU).
- PROVIDE A MINIMUM OF 50# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF FORM 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.
- METAL HANGERS SHALL BE SIMPSON OR APPROVED EQUAL.

**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 NRC.
- 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 NRC.
- 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 (LNU).
- 1 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.
- EXTERIOR BRACED WALL PANELS (BWP) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.3 (LNU).
- 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. 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.
- SHEATH INTERIOR & EXTERIOR.
- FOR CS-WSP METHOD, A MINIMUM 2" BRACED WALL PANEL CORNER RETURN SHALL BE PROVIDED AT BOTH ENDS OF A BRACED WALL LINE IN ACCORDANCE WITH FIGURE R602.10.3(a). 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.
- MINIMUM 800# HOLD-DOWN DEVICE.



**BRACING PANEL LENGTHS REQUIRED:**  
 BWL A = 10.7 FT  
 BWL B = 10.7 FT  
 BWL 1 = 7.2 FT  
 BWL 2 = 7.2 FT

**BRACING PANEL LENGTHS PROVIDED:**  
 BWL A = 11.7 FT CS-WSP  
 BWL B = 20.8 FT CS-WSP  
 BWL 1 = 29.8 FT CS-WSP  
 BWL 2 = 7.7 FT CS-WSP

NOTE: SECURE 4-PLY W/ 1/2" THRU-BOLTS @ 24" O.C.

# K = NUMBER OF KING STUDS

**FIRST FLOOR PLAN**  
 1/4" = 1'-0"      CEILING HGT. = 9'-0"

Engineers seal does not include construction means, methods, techniques, sequences, procedures or safety precautions. Any deviation 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.**  
 100 Blinnwood Drive • Garner, NC 27530 • 919.775.4444  
 www.tyndallengineering.com

CLIENT: **JON TAYLOR REALTY**  
 PROJECT: **GARAGE CONSTRUCTION**

**1ST FLOOR HEADER  
 2ND FLOOR FRAMING**

Project #:	DRB2101-0151
Date:	07/29/21
Drawn/Design By:	IJE
DWG. Checked By:	PTII
Scale:	SEE PLAN

REVISIONS		
No.	Date	Remarks

Sheet Number  
**S2**  
 2 of 6

FILENAME: Z:\P\2021\082101-0151\_JON\_TAYLOR\_REALTY\CAD\FILES\082101-0151\_2\_L.FRAMING\_SAVED\_BV\_PRESERVE\_TYNDALL.DWG DATE: 07/29/2021 5:21 PM

**DESIGN LOADS**

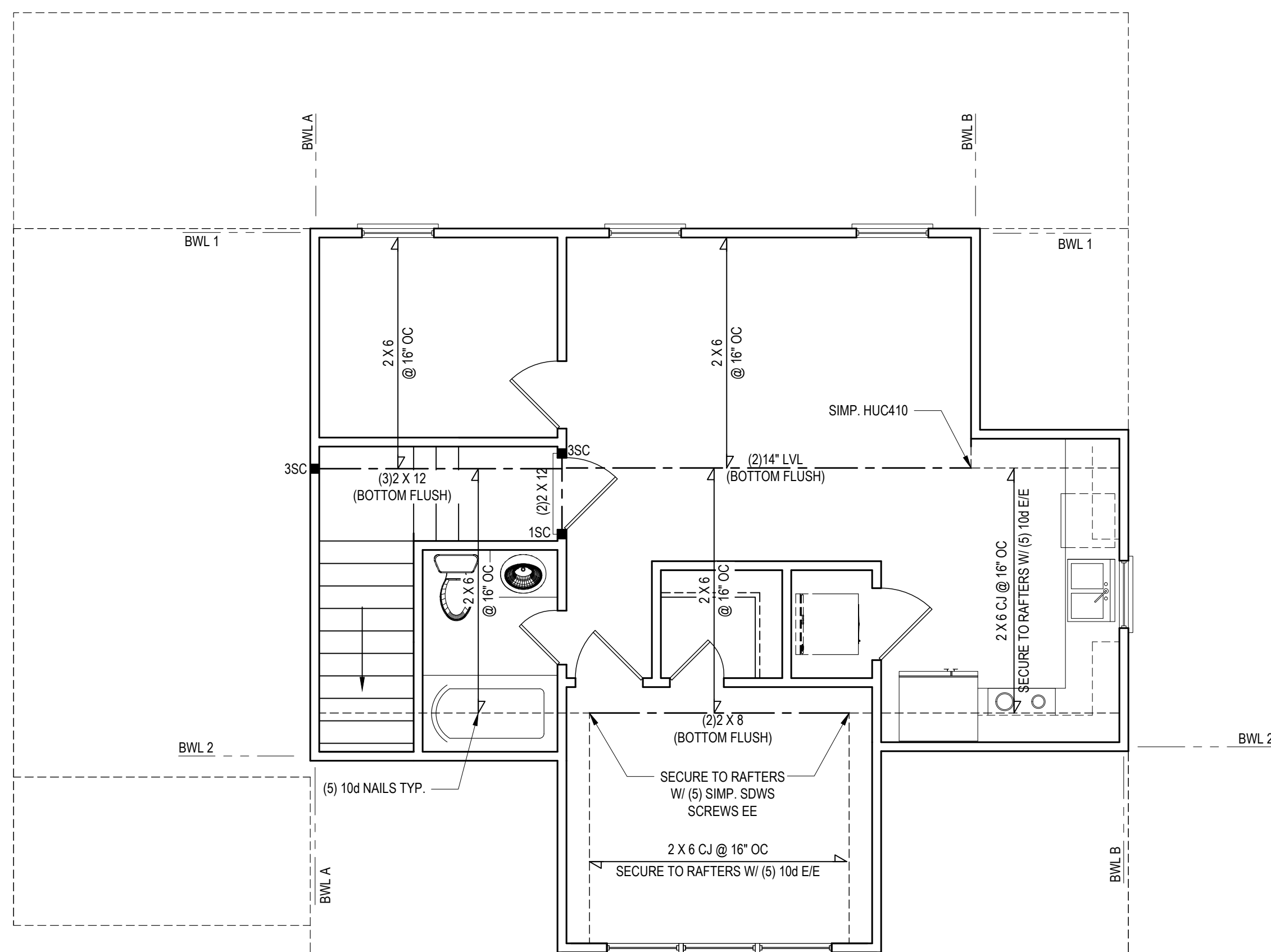
	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION	
			LL	TL
FLOOR (primary)	40	10	L/360	L/240
FLOOR (secondary)	40	10	L/360	L/240
ATTIC (w/ storage)	20	10	L/240	L/180
ATTIC (no access)	10	5	L/240	L/180
EXTERNAL BALCONY	40	10	L/360	L/240
ROOF	20	10	L/240	L/180
ROOF TRUSS	20	20	L/240	L/180
WIND LOAD	BASED ON 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.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, P.A. 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  $F_b = 2600$  PSI,  $E = 1.9M$  PSI.
- (I.E. LEVEL, MICRO-LAM)
- ALL LSL LUMBER IS TO BE 1.55E ( $F_b = 2325$  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 R602.1.5, 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.
- $F_y = 50$  KSI MIN. (UNO).
- ALL EXTERIOR LUMBER TO BE #2 SYP PT.
- ALL CONCRETE  $f_c = 3000$  PSI MIN.
- PRESUMPTIVE BEARING CAPACITY = 2000 PSF.
- 12" ANCHOR BOLTS SPACED AT MINIMUM 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 50# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF FORM 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.
- METAL HANGERS SHALL BE SIMPSON OR APPROVED EQUAL.

**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 NRC.
- 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 NRC.
- 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).
  - 12" 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.
- EXTERIOR BRACED WALL PANELS (BWP) 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 CABLE 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. 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.
- SHEATH INTERIOR & EXTERIOR.
- FOR CS-WSP METHOD, A MINIMUM 2" 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.
  - MINIMUM 800# HOLD-DOWN DEVICE.

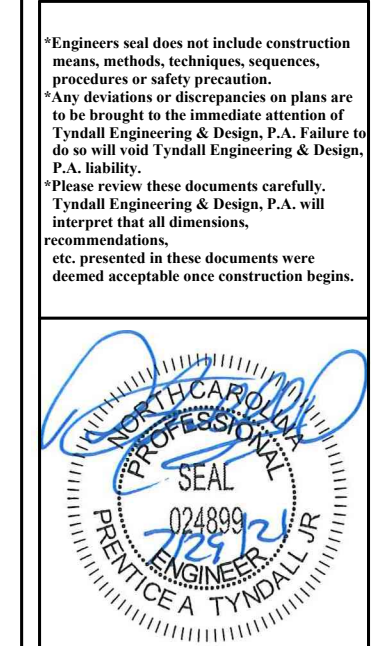


**BRACING PANEL LENGTHS REQUIRED:**  
 BWL A = 3.2 FT  
 BWL B = 3.2 FT  
 BWL 1 = 2.2 FT  
 BWL 2 = 2.2 FT

**BRACING PANEL LENGTHS PROVIDED:**  
 BWL A = 19.1 FT CS-WSP  
 BWL B = 16.3 FT CS-WSP  
 BWL 1 = 16.2 FT CS-WSP  
 BWL 2 = 17.7 FT CS-WSP

**SECOND FLOOR PLAN**

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



**TYNDALL ENGINEERING & DESIGN, P.A.**  
 100 Blinnwood Drive • Garner, NC 27529  
 919.775.0400 • 919.775.0444  
 www.tyndallengineering.com

Client: **JON TAYLOR REALTY**  
 Project: **GARAGE CONSTRUCTION**

**2ND FLOOR HEADER**  
**2ND FLR. CLG. FRAMING**

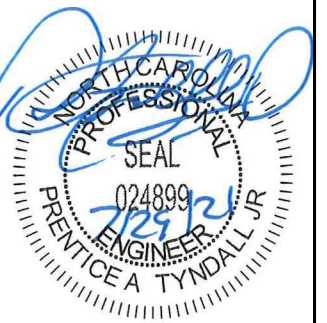
Project #:	DRB2101-0151
Date:	07/29/21
Drawn/Design By:	IJE
DWG. Checked By:	PTII
Scale:	SEE PLAN

REVISIONS		
No.	Date	Remarks

Sheet Number  
**S3**  
 3 of 6

FILENAME: Z:\PDR\_2021\DRB2101-0151\_JON\_TAYLOR\_REALTY\CAD\_FILES\DRB2101-0151\_2\_L.FRAMING\_SAVED\_BY\_PRESHINCE\_TYNDALL.DWG DATE: 07/29/2021 5:21 PM

\*Engineers seal does not include construction means, methods, techniques, sequences, procedures or safety precautions.  
 Any deviations or discrepancies on plans are to be brought to the immediate attention of Tynndall Engineering & Design, P.A. Failure to do so will void Tynndall Engineering & Design, P.A. liability.  
 \*Please review these documents carefully. Tynndall 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.  
 199 Blythebark Drive • Garner • North Carolina • 27529  
 919.775.2500 • 919.775.4444  
 www.tynndallengineering.com

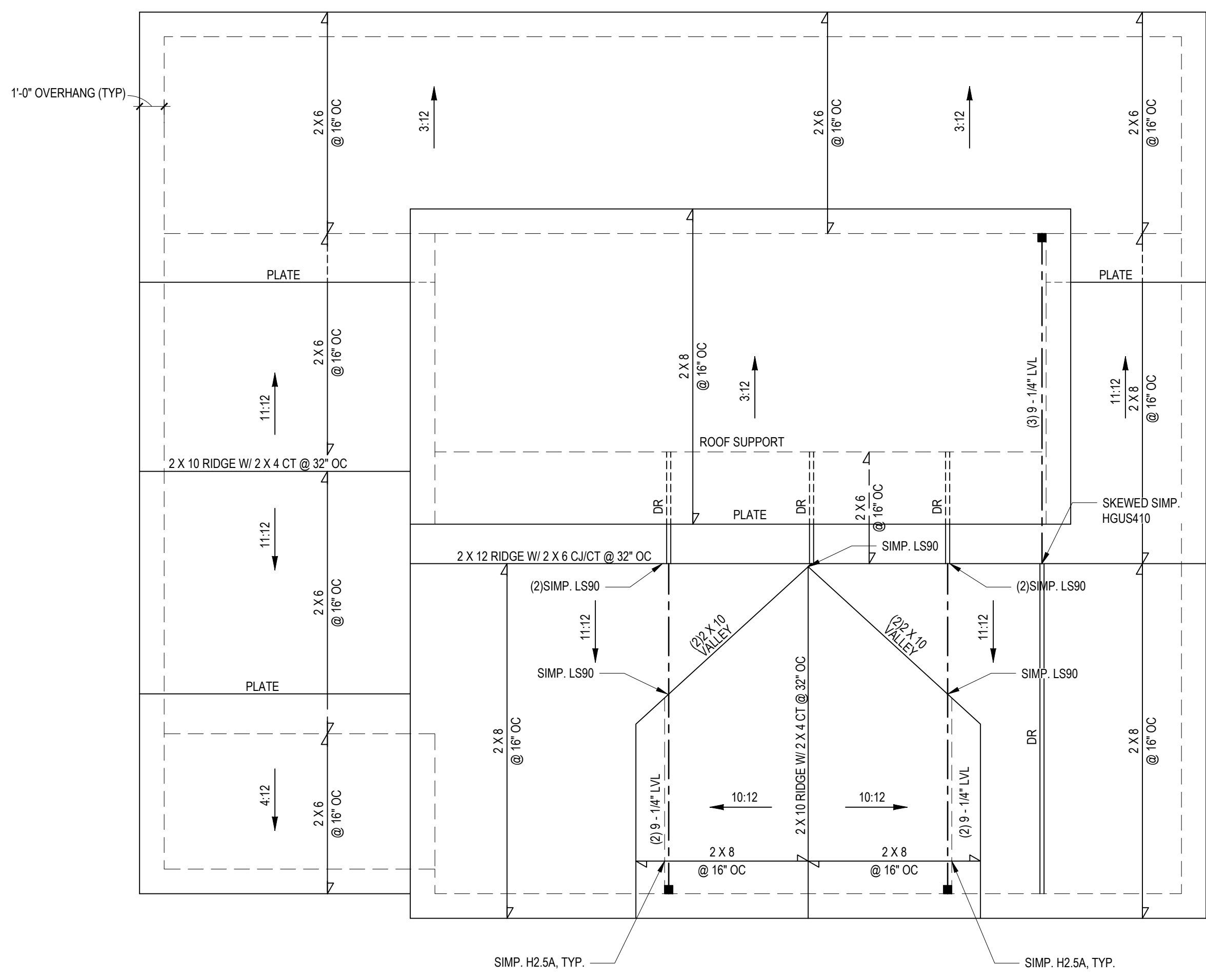
Client: **JON TAYLOR REALTY**  
 Project: **GARAGE CONSTRUCTION**

# ROOF PLAN

Project #: DRB2101-0151  
 Date: 07/29/21  
 Drawn/Design By: IJE  
 DWG. Checked By: PTH  
 Scale: SEE PLAN

REVISIONS		
No.	Date	Remarks
△		
△		
△		
△		

Sheet Number  
**S4**  
 4 of 6



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

FILENAME: Z:\PDR\_2021\082101-0151\_JON\_TAYLOR\_REALTY\CAD\_FILES\DRB2101-0151\_2\_LFWD\_SAVED\_BV\_PRESERVE\_TYNDAI.LIST PLOT DATE: 07/29/2021 5:21 PM



**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) 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	20	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			

- 3) MINIMUM ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF
- 4) CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF FIVE INCHES UNLESS NOTED OTHERWISE (U.N.C.)
- 5) MAXIMUM DEPTH OF UNBALANCED FILL AGAINST FOUNDATION WALLS TO BE LESS THAN 4'-0" WITHOUT USING SUFFICIENT WALL BRACING. REFER TO SECTION R602.3 OF 2018 NC BUILDING CODE FOR BACKFILL LIMITATIONS BASED ON WALL HEIGHT, WALL THICKNESS, SOIL TYPE, AND UNBALANCED BACKFILL HEIGHT.
- 6) ALL FRAMING LUMBER SHALL BE SYP #2 (Fb = 800 PSI, BASED ON D x D) (U.N.) 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 = 2000 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 = 1.8M 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" 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" 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 WALLS BOTH POSITIVE AND NEGATIVE SHALL BE AS FOLLOWS:  
39.0 LBS/SQFT FOR ROOF PITCHES 0/12 TO 1/12  
36.0 LBS/SQFT FOR ROOF PITCHES 1/12 TO 6/12  
18.0 LBS/SQFT FOR ROOF PITCHES 6/12 TO 12/12  
\*MEAN ROOF HEIGHT 3/4" 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 NRC.
- 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 DIMENSION. (U.N.O.)
- 20) MAXIMUM MASONRY PER 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.

**DEFINITIONS FOR COMMON ABBREVIATIONS**

ALT = ALTERNATE	MAX = 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	REIN = 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

1) MAXIMUM HEIGHT OF DECK SUPPORT POSTS AS FOLLOWS:

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) 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 45° AND 60° FROM THE HORIZONTAL. KNEE BRACES SHALL BE BOLTED TO THE POST AND GIRDER WITH ONE 5/8" 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" HOT DIPPED GALVANIZED BOLT AT EACH END OF EACH BRACING MEMBER.

E. FOR EMBEDMENT OF PILES IN COASTAL REGIONS, SEE CHAPTER 46.

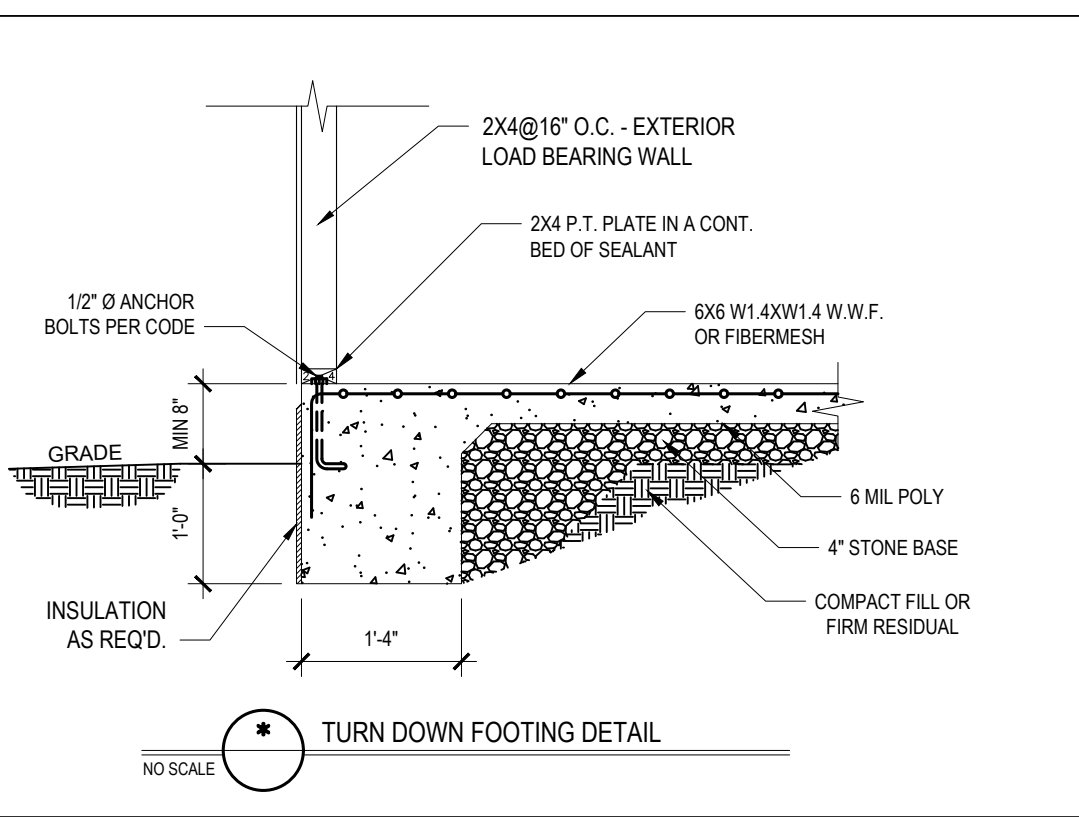


TABLE N1102.1 CLIMATE ZONES 3-5

CLIMATE ZONES	FENESTRATION U-FACTOR <sup>a,1</sup>	SKYLIGHT U-FACTOR <sup>b</sup>	GLAZED FENESTRATION SHGC <sup>c,1,2</sup>	CEILING R-VALUE <sup>m</sup>	WOOD FRAMED WALL R-VALUE	MASS WALL R-VALUE	FLOOR R-VALUE	BASEMENT WALL R-VALUE <sup>e,6</sup>	SLAB R-VALUE AND DEPTH <sup>d</sup>	CRAWL SPACE WALL R-VALUE <sup>e,7</sup>
3	0.35	0.55	0.30	38 or 30 cont <sup>1</sup>	15 or 13 + 2.5 <sup>h</sup>	5/13 or 5/10 cont <sup>1</sup>	19	5/13 <sup>1</sup>	0	5/13
4	0.35	0.55	0.30	38 or 30 cont <sup>1</sup>	15 or 13 + 2.5 <sup>h</sup>	5/13 or 5/10 cont <sup>1</sup>	19	10/15	10	10/15
5	0.35	0.55	NR	38 or 30 cont <sup>1</sup>	19, or 13 + 5 <sup>h</sup> or 15 + 3 <sup>h</sup>	13/17 or 13/12.5 cont <sup>1</sup>	30 <sup>9</sup>	10/15	10	10/19

- NO SCALE
- \* TABLE N1102.1 CLIMATE ZONES 3-5
- <sup>a</sup> R-VALUES ARE MINIMUM 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.
- <sup>b</sup> THE FENESTRATION U-FACTOR COLUMN EXCLUDES SKYLIGHTS. THE SQUARE-HEAT GAIN COEFFICIENT (SHGC) COLUMN APPLIES TO ALL GLAZED FENESTRATION.
- <sup>c</sup> 100% MEANS IS CONTINUOUS INSULATED SHEATHING ON THE INTERIOR OR EXTERIOR OF THE HOME OR IS A CAVITY INSULATION AT THE INTERIOR OF THE BASEMENT WALL OR CRAWL SPACE WALL.
- <sup>d</sup> FOR MONOLITHIC SLAB INSULATION SHALL BE APPLIED FROM THE INSULATION GAP DOWNWARD TO THE BOTTOM OF THE FOOTING OR MINIMUM 24" BELOW SPACE HITCHES OR IS LSL. STRUCTURAL SHEATHING COVERS MORE THAN 20% PRESENT OF THE EXTERIOR. SHALL BE SUBSTITUTED WITH INSULATED SHEATHING OF AT LEAST 2" x 2" MEANS R-13 CAVITY INSULATION PLUS 2.5 SHEATHING.
- <sup>e</sup> SEE LIST
- <sup>f</sup> BASEMENT WALL INSULATION IS NOT REQUIRED IN WINDHARMS LOCATIONS AS DEFINED BY FIGURE N1102.2 AND TABLE N1102.7.
- <sup>g</sup> OR INSULATION SUFFICIENT TO FILL THE FRAMING CAVITY. IS MINIMUM
- <sup>h</sup> THE FIRST VALUE IS CAVITY INSULATION. THE SECOND VALUE IS CONTINUOUS INSULATION. 90-134° MEANS R-13 CAVITY INSULATION PLUS R-4 INSULATED SHEATHING. 184° MEANS R-13 CAVITY INSULATION. PLUS R-9 INSULATED SHEATHING. 2. STRUCTURAL SHEATHING COVERS 25% OR LESS OF THE EXTERIOR. INSULATION BRACING IS NOT REQUIRED WHERE THE STRUCTURAL SHEATHING IS USED. 3. STRUCTURAL SHEATHING COVERS MORE THAN 20% PRESENT OF THE EXTERIOR. SHALL BE SUBSTITUTED WITH INSULATED SHEATHING OF AT LEAST 2" x 2" MEANS R-13 CAVITY INSULATION PLUS 2.5 SHEATHING.
- <sup>i</sup> FOR WIND HARMS THE SECOND R-VALUE APPLIES WHEN MORE THAN HALF THE INSULATION ON THE INTERIOR MASS WALL.
- <sup>j</sup> IN ADDITION TO THE EXEMPTION IN SECTION N1102.3.3, A MAXIMUM OF THIS GLAZED FENESTRATION PRODUCT ASSEMBLY HAVING A U-FACTOR NO GREATER THAN 0.55 SHALL BE PERMITTED TO BE SUBSTITUTED FOR MINIMUM CODE COMPLIANT FENESTRATION PRODUCT ASSEMBLY WITHOUT PENALTY.
- <sup>k</sup> IN ADDITION TO THE EXEMPTION IN SECTION N1102.3.3, A MAXIMUM OF THIS GLAZED FENESTRATION PRODUCT ASSEMBLY HAVING A SHGC NO GREATER THAN 0.30 SHALL BE PERMITTED TO BE SUBSTITUTED FOR MINIMUM CODE COMPLIANT FENESTRATION PRODUCT ASSEMBLY WITHOUT PENALTY.
- <sup>l</sup> IS SHALL BE REQUIRED TO VERIFY THE GLAZING INSULATION REQUIREMENT WHERE THE FULL HEIGHT OF AN INSULATED INSULATION EXTENDS OVER THE WALL TOP PLATE AT THE LEAVE. OTHERWISE, INSULATION IS REQUIRED WHERE ADEQUATE CLEARANCE EXISTS OR INSULATION MUST EXTEND TO EITHER THE INSULATION SURFACE OR WITHIN 1/8" OF THE GLAZING EDGE.
- <sup>m</sup> 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 BATTLE.
- <sup>n</sup> IS IN PERFORM AS SHOWN COMPRESSED AND NOTED IN A MINIMUM 1" x 1" FRAMING CAVITY. IS DENIED TO COMPLY. PERMISSIBLE BATTERS W/IN 1% OR HIGHER COMPRESSED AND REINSTALLED IN 24" WALLS IS NOT PERMITTED TO COMPLY.
- <sup>o</sup> BASEMENT WALL MEETING THE MINIMUM MASS WALL SPECIFIC-HEAT CONTENT REQUIREMENT MAY USE THE MASS WALL R-VALUE AS THE MINIMUM REQUIREMENT.

- SQ. FT. OF CRAWL SPACE / 150 = - SQ. FT. OF REOD VENTILATION WITHOUT CROSS VENTILATION  
- SQ. FT. OF VENTILATION REQD / 0.45 SQ.FT. PER VENT = - VENTS REQD

-OR-

- SQ. FT. OF CRAWL SPACE / 1500 = - SQ. FT. OF REOD VENTILATION WITH CROSS VENTILATION  
- SQ. FT. OF VENTILATION REQD / 0.45 SQ.FT. PER VENT = - VENTS REQD

- 1) VENT LOCATIONS MAY VARY FROM THOSE SHOWN ON PLAN, HOWEVER VENTS SHALL BE PLACED TO PROVIDE ADEQUATE VENTILATION AT ALL POINTS AND TO PREVENT DEAD AIR POCKETS.
- 2) THE TOTAL AREA OF VENTILATION OPENINGS MAY BE REDUCED TO 1/1000 OF THE CRAWL SPACE GROUND AREA WHERE THE REQUIRED OPENINGS ARE PLACED IN ORDER TO PROVIDE CROSS VENTILATION OF THE CRAWL SPACE. THE INSTALLATION OF OPERABLE DOORS SHALL NOT BE PROHIBITED. ONE FOUNDATION VENT SHALL BE INSTALLED FOR EACH ROOM OF THE BUILDING. TO PREVENT RAINWATER ENTRY WHEN THE CRAWL SPACE IS BUILT ON A SLOPED SITE, THE SPILL FOUNDATION SHALL BE CONSTRUCTED WITH VENT OPENINGS. VENT DAMPS SHALL BE PROVIDED WHEN THE BOTTOM OF THE FOUNDATION VENT OPENING IS LESS THAN 6 INCHES ABOVE THE FINISHED EXTERIOR GRADE.
- WALL VENTED CRAWL SPACES REQUIRE FULL COVERAGE GROUND VAPOR RETARDERS.

**CRAWL SPACE VENTILATION CALCULATION**

NO SCALE

- SQ. FT. OF ATTIC / 300 = - SQ. FT. INLETS/OUTLETS REQUIRED

- 1) CALCULATION BASED ON VENTILATORS USED AT 1 LEAST 2" ABOVE THE CORICE VENTS WITH THE BALANCE OF VENTILATION PROVIDED BY OTHER VENTS.
- 2) COUNTERS, CEILING SHALL HAVE A 1" MINIMUM CLEARANCE BETWEEN THE BOTTOM OF THE ROOF DECK AND THE INSULATION.

**ATTIC VENTILATION CALCULATION**

NO SCALE

\* Engineers and does not include construction means, methods, techniques, sequences, procedures or safety precautions.  
Any deviations or discrepancies on plans are to be brought to the immediate attention of 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.**  
1101 W. 7th Street, Suite 100  
Raleigh, NC 27601  
919.775.2100 • 919.775.2101  
www.tyndallengineering.com



CLIENT: **JON TAYLOR REALTY**  
PROJECT: **GARAGE CONSTRUCTION**

**STANDARD DETAILS**

Project #: **DRB2101-0151**  
Date: **07/29/21**  
Drawn/Design By: **LJE**  
DWG. Checked By: **PTII**  
Scale: **SEE PLAN**

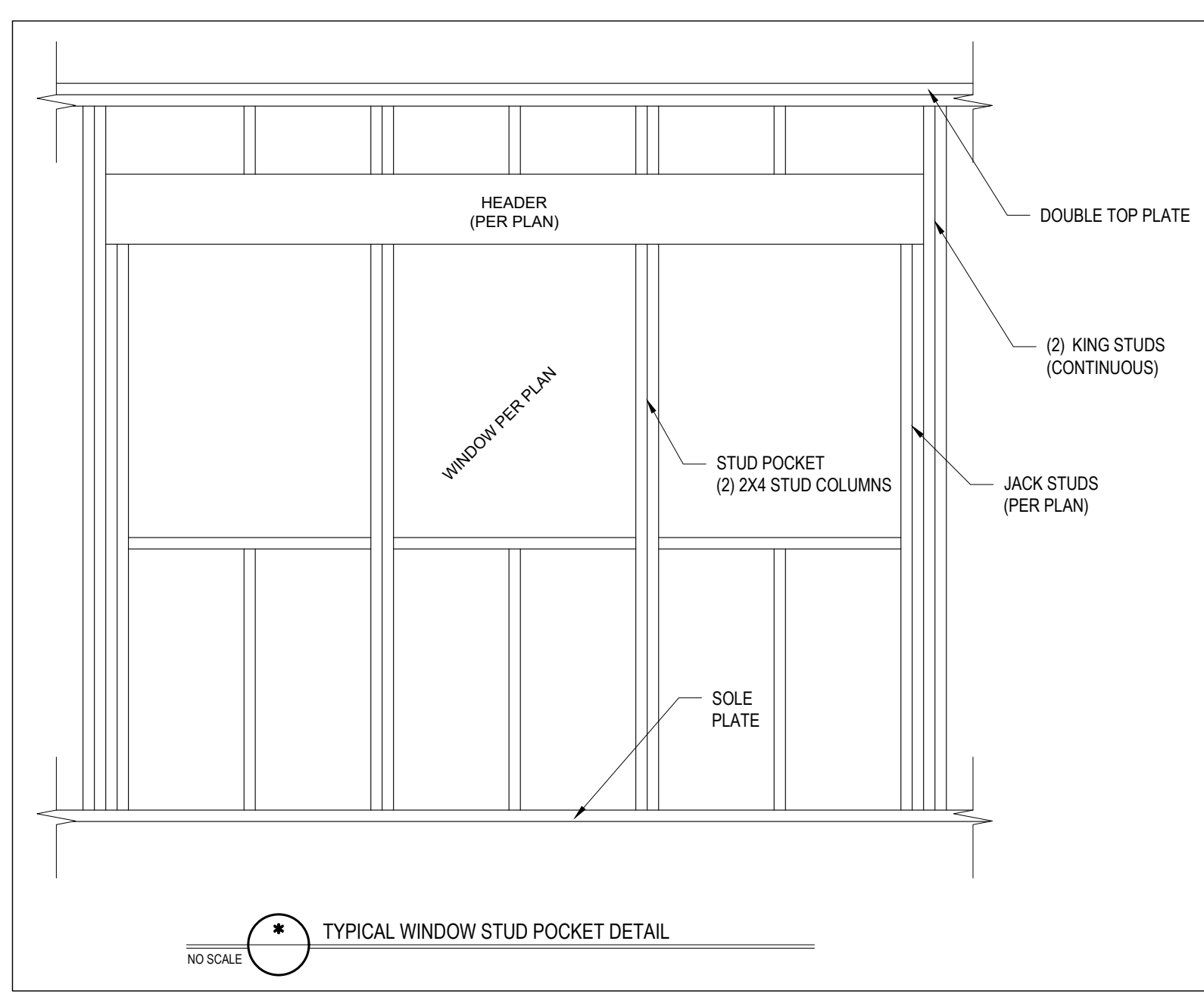
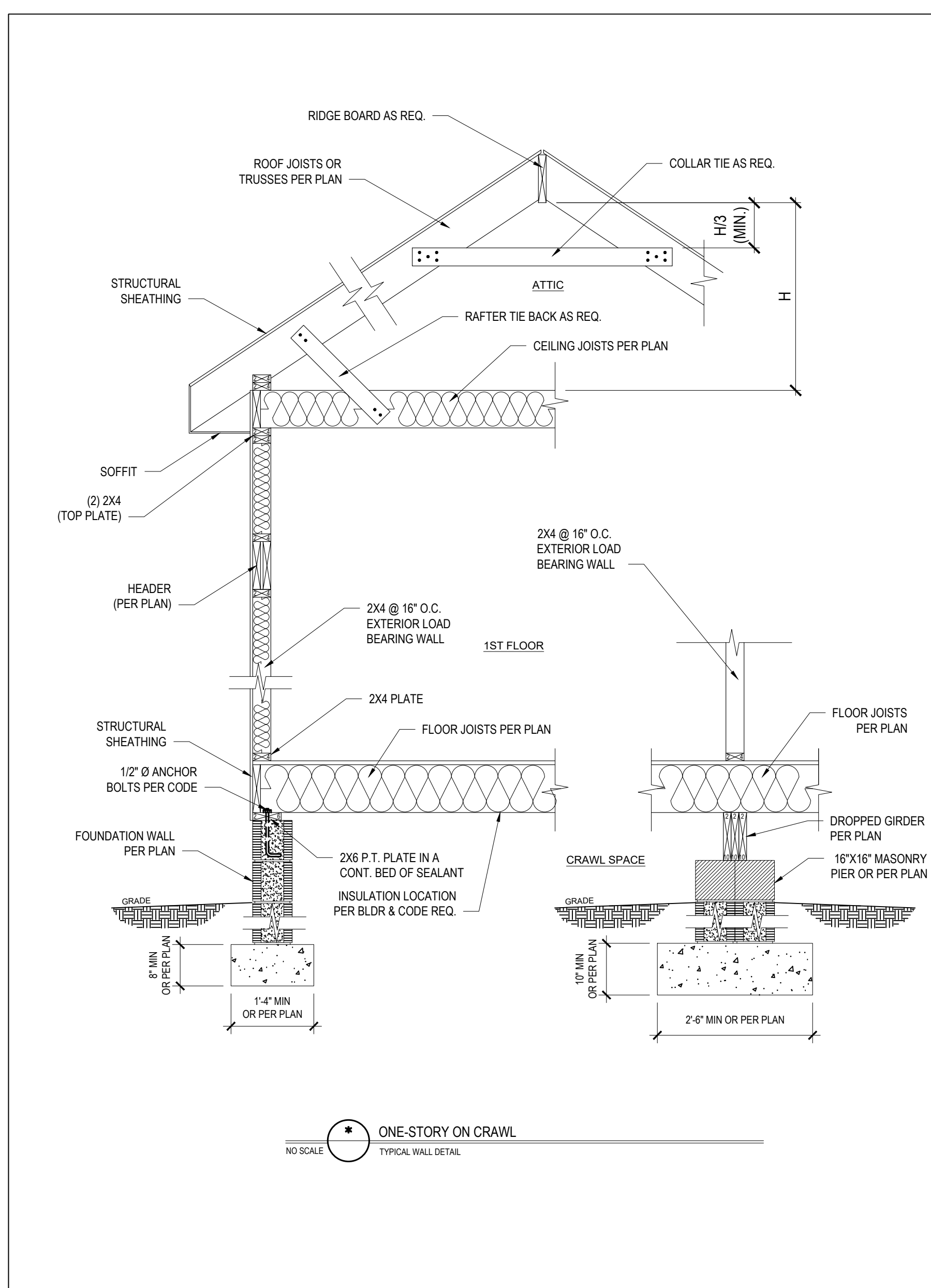
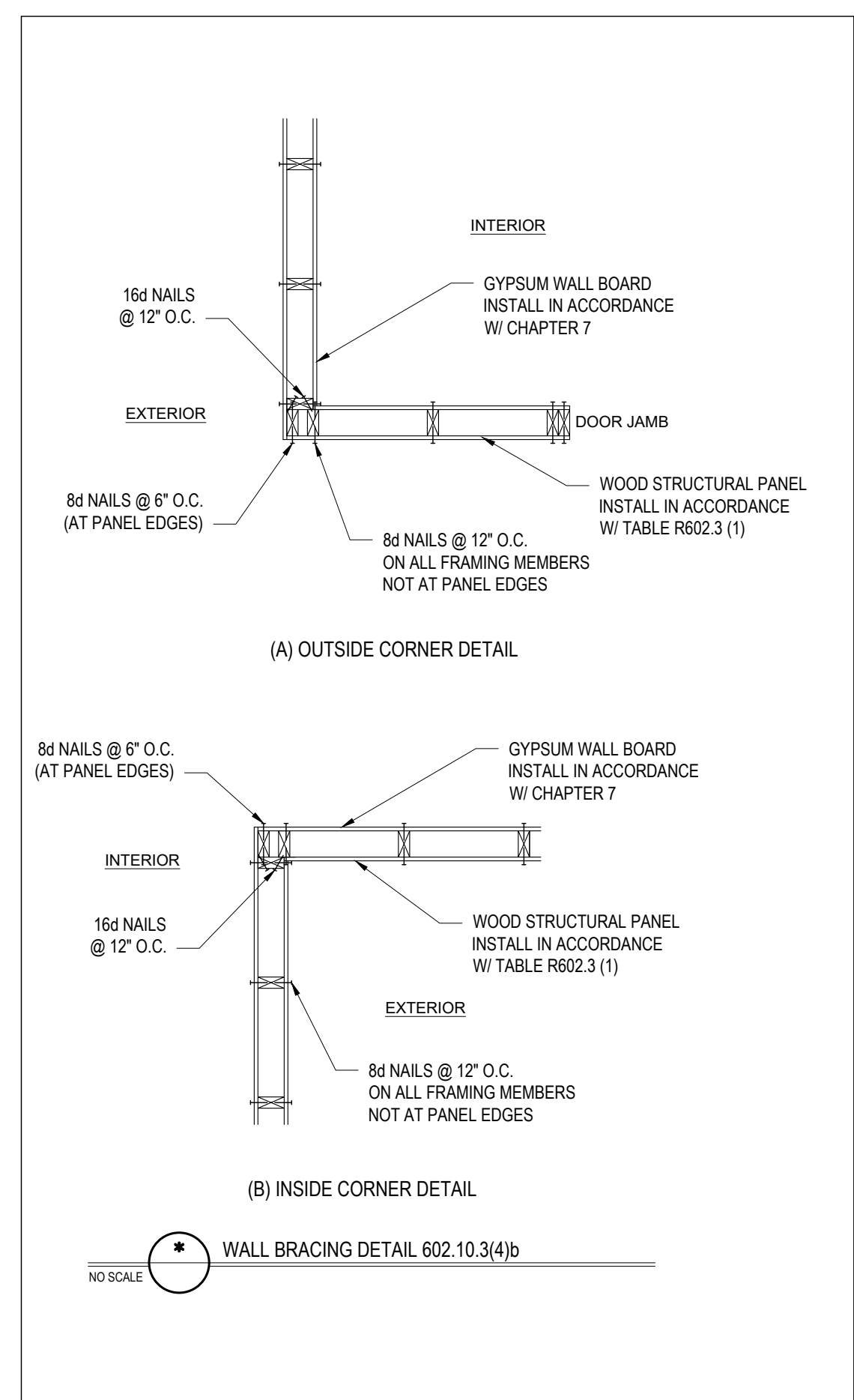
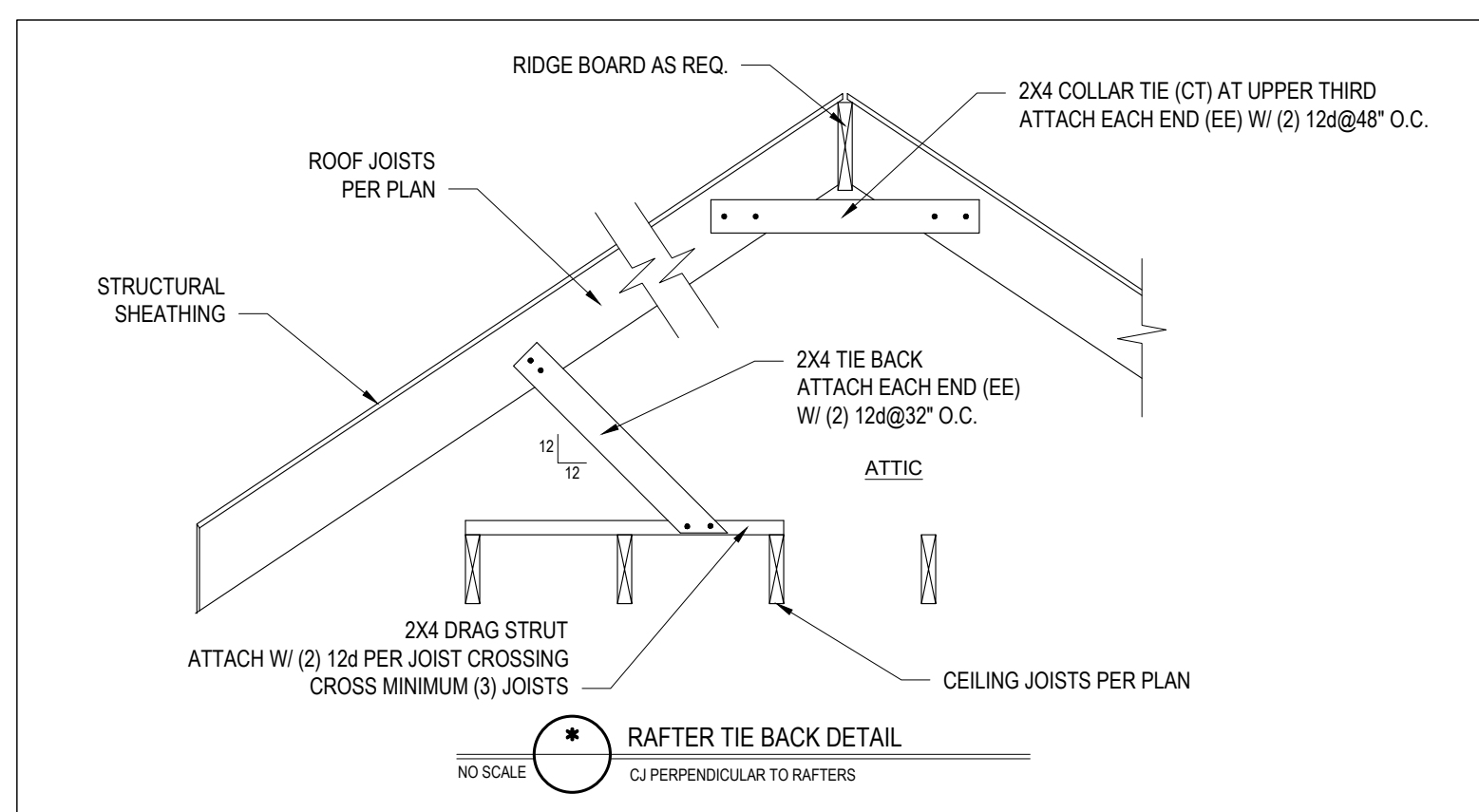
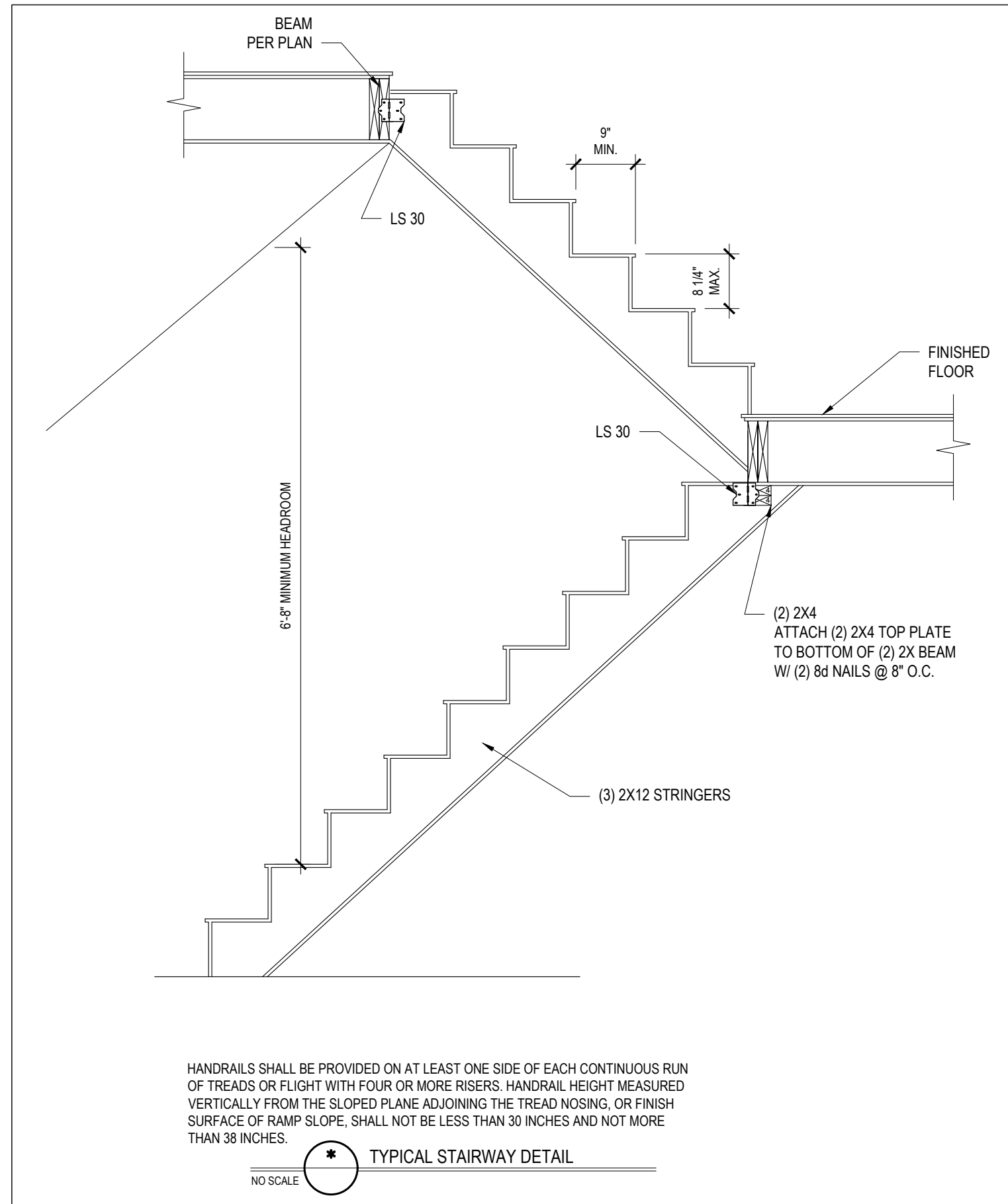
**REVISIONS**

No.	Date	Remarks
Δ		
Δ		
Δ		
Δ		

Sheet Number  
**D1**  
5 of 6



HARDWARE CROSS-REFERENCE CHART		
SIMPSON STRONG-TIE	USP STRUCTURAL CONNECTORS	
PRODUCT NUMBER	PRODUCT NUMBER	
AS5	MPA1	
ABE	PAE	
CBSQ	CBSQ	
CCQ	KCCQ	
CMSTC16	CMSTC16	
CS	RS	
H1	RT15	
H2.5A	RT7A	
H10	RT16	
HD08-SDS3	UPH08	
HDU2-SDS2.5	PHD2	
HDUS-SDS2.5	PHD5	
HETA	HTA	
HGAM10KTA	HGAM	
HHQ14-SDS2.5	UPH14	
HTS	HTW	
HTT	HTT	
HUS	HUS	
LTA1	LPTA	
LTHA26	HUC26	
LTP4	MP4F	
LUS	JUS	
MAS	FA3	
MSTAM	MSTAM	
PC	PCM	
PHD-SDS3	PHD	
SSP	RSPT6	
STC	TR1	
STHD	STAD	



Engineers and designers are not responsible for construction methods, techniques, sequences, procedures or safety precautions. Any deviations or discrepancies on plans are to be brought to the immediate attention of Tyn dall Engineering & Design, P.A. Failure to do so will void Tyn dall Engineering & Design, P.A. liability.

Please review these documents carefully. Tyn dall 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.  
1100 Blytheville Drive • Denver • North Carolina • 27829  
www.tyndallengineering.com

Client: **JON TAYLOR REALTY**  
Project: **GARAGE CONSTRUCTION**

**STANDARD DETAILS**

Project #: DRB2101-0151  
Date: 07/29/21  
Drawn/Design By: IJE  
DWG. Checked By: PTII  
Scale: SEE PLAN

REVISIONS		
No.	Date	Remarks

Sheet Number  
**D2**  
6 of 6