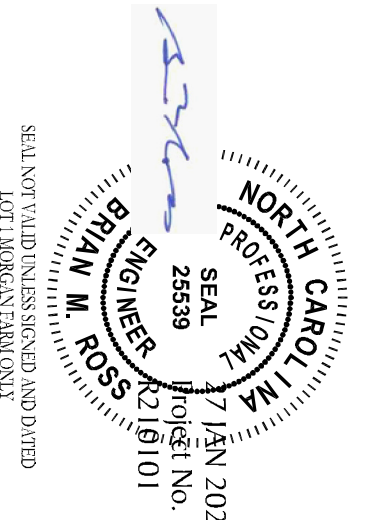


**FOUNDATION & FIRST FLOOR FRAMING**

SCALE: 1/4" = 1'-0"



STRUCTURAL DESIGN IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODES (IBC) AND THE INTERNATIONAL RESIDENTIAL CODES (IRC) AS APPLIED BY THE ENGINEER. ENGINEERS SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY AND DOES NOT GUARANTEE THE ACCURACY OF DIMENSIONS, MATERIALS, OR CONSTRUCTION. SEAL APPLIES ONLY FOR THE NUMBER OF ADDITIONAL LISTS OF THE ENGINEER'S DESIGN. FAILURE TO VERIFY THE ENGINEER'S DESIGN IS THE RESPONSIBILITY OF THE CLIENT.

709 W. JONES STREET  
 RALEIGH, NC 27603  
 TEL 919 832 5680  
 FAX 919 832 5675  
 WWW.ROSSLINDEN.COM



**ROSS LINDEN**  
 ENGINEERS PC

ROSS LINDEN ENGINEERS PC ASSUMES NO LIABILITY FOR DAMAGES OR REPARATIONS OF ANY KIND, INCLUDING BUT NOT LIMITED TO FINANCIAL LOSS, ARISING FROM THE USE OF THIS DOCUMENTATION, WHETHER OR NOT SUCH DAMAGES ARE CAUSED BY NEGLIGENCE OR OTHERWISE. THE CONDITIONAL LIST IS LIMITED TO THE DESIGN AND CONSTRUCTION OF THE PROJECT DESCRIBED IN THE TITLE BLOCK.

**STEPHENSON BUILDERS**  
 LOT 1 MORGAN FARM

PROJECT NO.	R210101
DESIGN BY	ILR
DATE	12 MAR 18
REVISION	141103 2 DEC 14

SHEET NO.  
**S1**  
 OF 55

**WALL BRACING NOTES:**

WALL BRACING SHALL BE IN ACCORDANCE WITH SECTION R602.10.3 CONTINUOUS SHEATHING. BRACING METHOD (S) SHALL BE USED IN ACCORDANCE WITH TABLE R602.10.1.

THE REQUIRED LENGTH OF BRACING FOR EACH SIDE OF A RECTANGLE CIRCUMSCRIBED AROUND THE PLAN OR A PORTION OF THE PLAN AT EACH STORY LEVEL SHALL BE IN ACCORDANCE WITH TABLE R602.10.3 AND FIGURE R602.10.3(1). UNLESS NOTED OTHERWISE, THE ENTIRE FRAME IS ASSUMED TO BE CIRCUMSCRIBED WITHIN A SINGLE RECTANGLE.

MINIMUM PANEL WIDTH IS 3'-0". SEE SECTION R602.10.3 FOR ADDITIONAL TABLE R602.10.1. CIRCUMSCRIBED BRACING SHALL BE IN ACCORDANCE WITH FIGURE R602.10.1.

NO DOWN BRACE SHALL BE REQUIRED BETWEEN FLOORS EXTENDING FROM BOTTOM OF FLOOR BAND UP STUDS WHERE REQUIRED TO CONNECT DIRECTLY TO FOUNDATION.

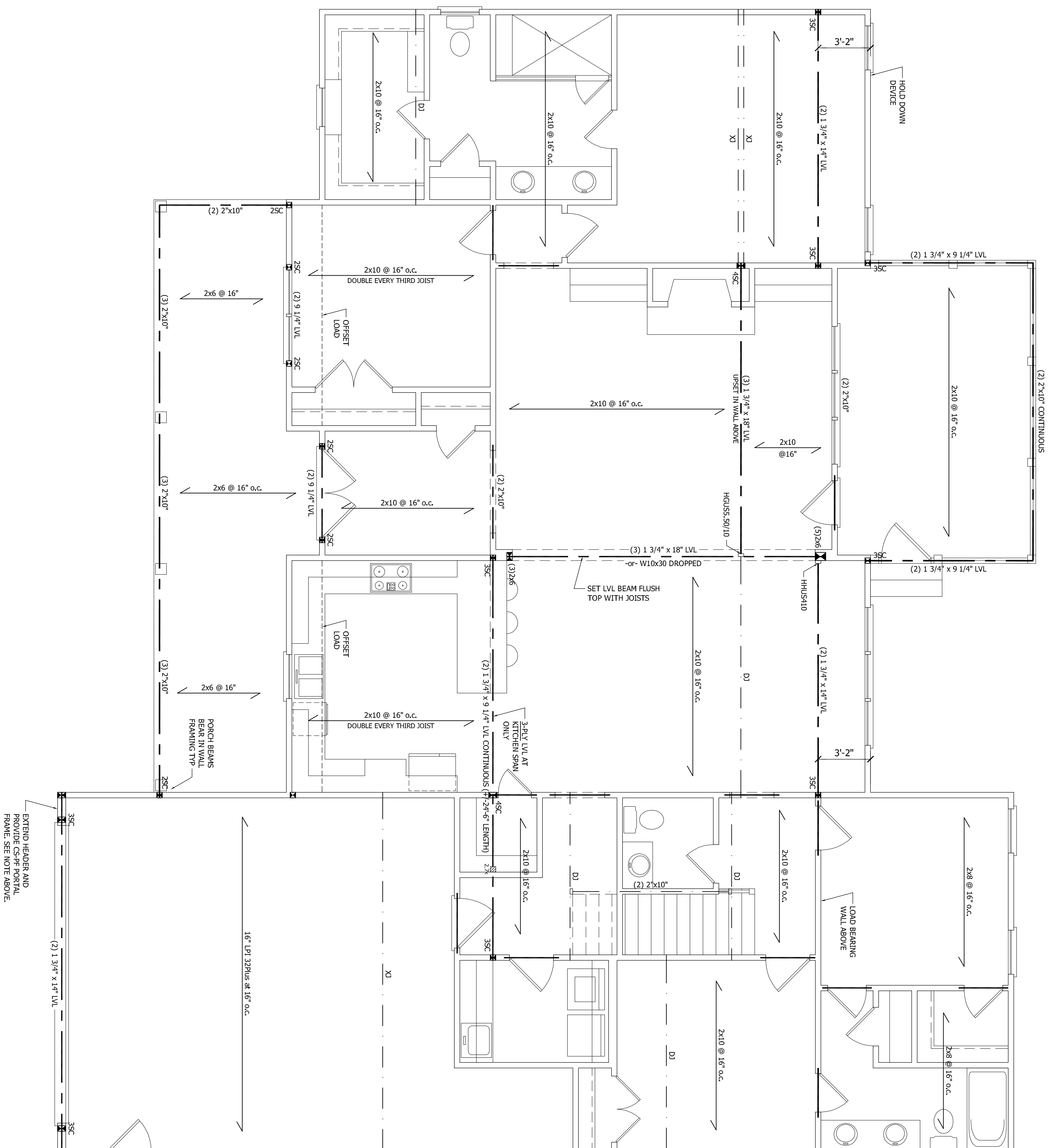
WIND SPEED: 115 mph  
 EAVE TO RIDGE HEIGHT: 14.67 ft

**FIRST FLOOR:**

SHORT SIDE LENGTH OF CIRCUMSCRIBED RECTANGLE: 52.83 ft  
 REQUIRED LENGTH OF BRACING = 2.5 ft

LONG SIDE LENGTH OF BRACING = 33.5 ft  
 REQUIRED LENGTH OF BRACING = 3.0 ft

LONG SIDE LENGTH OF CIRCUMSCRIBED RECTANGLE: 69.33 ft  
 REQUIRED LENGTH OF BRACING = 3.0 ft



**FIRST CEILING FRAMING**

SCALE: 1/4" = 1'-0"

**FRAMING NOTES**

1. STRUCTURAL NOTES SHEET SS.
2. FRAMING SHALL BE #2 SPF OR #2 SYP UNLESS NOTED OTHERWISE.
3. EXTENSION AND BEARING HEADERS (2) 2"x10" UNLESS NOTED OTHERWISE.
4. DENOTES POINT LOAD. SEE CONSTRUCTION NOTE #4 ON SS.

**FRAMING SYSTEM**  
 JOIST LAYOUT AND PLACEMENT BY MANUFACTURER TO COMPARE WITH THE SUPPORT LOCATIONS SHOWN. JOISTS SHALL BE DESIGNED FOR MAXIMUM L/800 LIVE LOAD DEFLECTION. JOIST SPACING SHALL BE IN ACCORDANCE WITH THE ENGINEER'S DESIGN AND MANUFACTURER'S INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

EXTEND HEADER AND PROVIDE C&P PORTAL FRAME ABOVE PER FIG. R602.10.1. PROVIDE STRIP STRAP (OR EQUIVALENT) EACH SIDE AS SHOWN. FASTEN SHEATHING TO HEADER AND WALL. FRAMING (EACH STUD) WITH BR NAILS IN 7" OC. AS SHOWN. SEE MANUFACTURER'S INSTRUCTIONS FOR ADDITIONAL REQUIREMENTS. SEE SHEET SS FOR DETAIL.



**ROSS LINDEN**  
ENGINEERS PC

**STEPHENSON BUILDERS**  
LOT 1 MORGAN FARM

709 W. JONES STREET  
 RALEIGH, NC 27603  
 TEL 919 832 5680  
 FAX 919 832 5675  
 WWW.ROSSLINDEN.COM

**NORTH CAROLINA**  
**PROFESSIONAL SEAL**  
 25559  
 17 JAN 2021  
**BRIM M. ROSS**  
 ENGINEER  
 PROJECT NO. 19101

SEAL NOT VALID UNLESS SIGNED AND DATED BY THE ISSUING ENGINEER

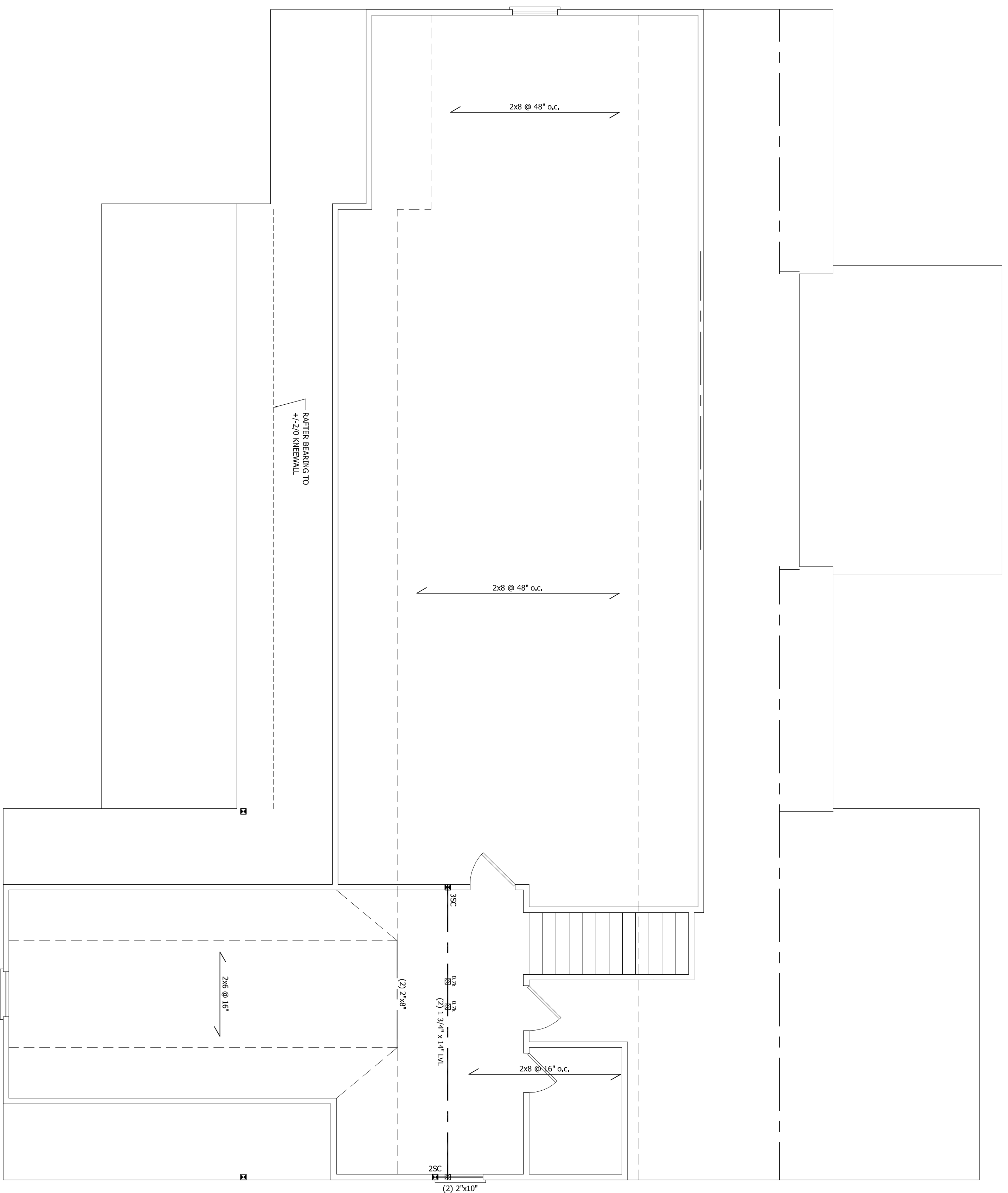
STRUCTURAL DESIGN IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE (IBC) 2018 EDITION AS AMENDED BY THE 2019 SUPPLEMENT. ENGINEERS SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY AND DOES NOT CONSTITUTE AN ENDORSEMENT OR GUARANTEE OF ANY KIND. THE ENGINEER'S LIABILITY IS LIMITED TO THE DESIGN AND CONSTRUCTION OF THE STRUCTURE SHOWN HEREON.

PROJECT NO. <b>R210101</b>	DESIGN BY LJR 25 JAN 21
REVISION 180301 12 MAR 18 141103 2 DEC 14	DATE 12 MAR 18 2 DEC 14

**FIRST CEILING FRAMING**

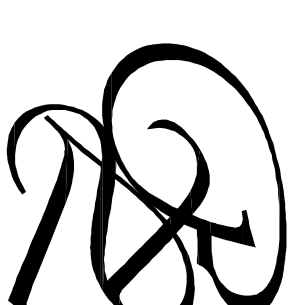
SHEET NO.  
**S2**  
OF 55

NOTE:  
PER SECTION R602.10.3.2, THE AMOUNT OF BRACING PROVIDED  
FOR THE FIRST STORY BELOW DECK LEVELS AND A SEPARATE  
ANALYSIS OF SECOND STORY BRACING IS NOT REQUIRED.



- FRAMING NOTES**
1. STRUCTURAL NOTES SHEET SS.
  2. FRAMING SHALL BE #2 SPF OR #2 SPF u.l.a.
  3. EXTENSION AND BEARING HEADERS (2) 2"x10" u.l.a.
  4. ■ DENOTES POINT LOAD. SEE CONSTRUCTION NOTE #4 ON SS.

709 W. JONES STREET  
RALEIGH, NC 27603  
TEL 919 832 5680  
FAX 919 832 5675  
WWW.ROSSLINDEN.COM



**ROSS LINDEN**  
ENGINEERS PC

ROSS LINDEN ENGINEERS PC ASSUMES NO  
LIABILITY FOR CHANGES OR MODIFICATIONS  
SCHEDULED TO THIS PLAN BY OTHERS OR FOR  
DEVIATION FROM THESE PLANS.

PLAN ENGINEERING RELIANTS THE PROPERTY  
OR ROSS LINDEN ENGINEERS PC AND NOT  
THE CLIENT. ANY CHANGES TO THE PLAN  
WHOLE OR PART IS STRICTLY PROHIBITED.  
CLIENT FOR APPROVAL AND CONTRACT USE.  
THE CONDITIONAL LIST IS LIMITED TO THE  
AND REVISOR FOR THE SHD DECKING.

STEPHENSON BUILDERS  
LOT 1 MORGAN FARM

PROJECT NO.  
**R210101**

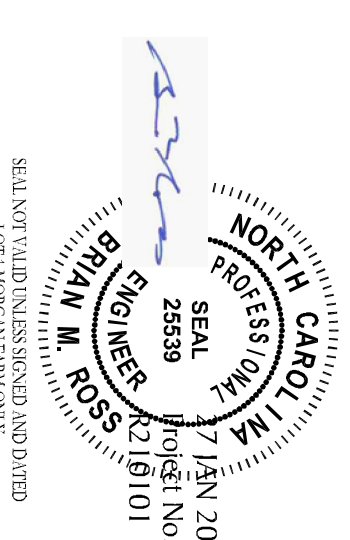
DESIGN BY LIR  
25 JAN 21

REVISION  
180301 12 MAR 18  
141103 2 DEC 14

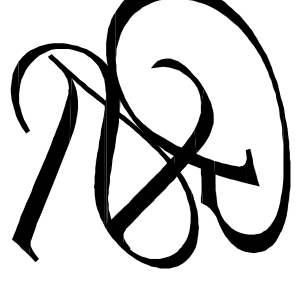
SECOND CEILING  
FRAMING

SHEET NO.  
**S3**  
OF 55

SECOND CEILING FRAMING  
SCALE: 1/4" = 1'-0"



STRUCTURAL DESIGN IN ACCORDANCE  
WITH THE 2015 INTERNATIONAL BUILDING  
CODES AND THE 2015 INTERNATIONAL  
MECHANICAL AND ELECTRICAL  
CORRECTIONS ONLY AND DOES NOT  
CONSTITUTE AN ENDORSEMENT OR  
DIMENSIONAL ACCURACY.  
SEAL APPLIES ONLY FOR THE NUMBER  
OF ADDITIONAL LISTS OF THE PLANS WILL  
ENGINEERS PC.



709 W. JONES STREET  
 RALEIGH, NC 27603  
 TEL 919 832 5680  
 FAX 919 832 5675  
 WWW.ROSSLINDEN.COM

**ROSS LINDEN**  
 ENGINEERS PC

ROSS LINDEN ENGINEERS PC ASSUMES NO LIABILITY FOR CHANGES OR MODIFICATIONS TO THIS PLAN, PERMITS, OR OTHER DOCUMENTS DERIVED FROM THESE PLANS.  
 PLAN ENGINEERING RELIGIOUS THE PROPERTY OF ROSS LINDEN ENGINEERS PC AND ANY REVISIONS TO THIS PLAN SHALL BE MADE BY THE ENGINEER OR ARCHITECT. THE USE OF THIS PLAN FOR ANY OTHER PROJECT OR PART IS STRICTLY PROHIBITED. THE CONDITIONAL LIST IS LIMITED TO THE LISTED ITEMS AND IS NOT TO BE USED FOR ANY OTHER PROJECT OR PART.  
 THE CONDITIONAL LIST IS LIMITED TO THE LISTED ITEMS AND IS NOT TO BE USED FOR ANY OTHER PROJECT OR PART.

STEPHENSON BUILDERS  
 LOT 1 MORGAN FARM

PROJECT NO.  
**R210101**

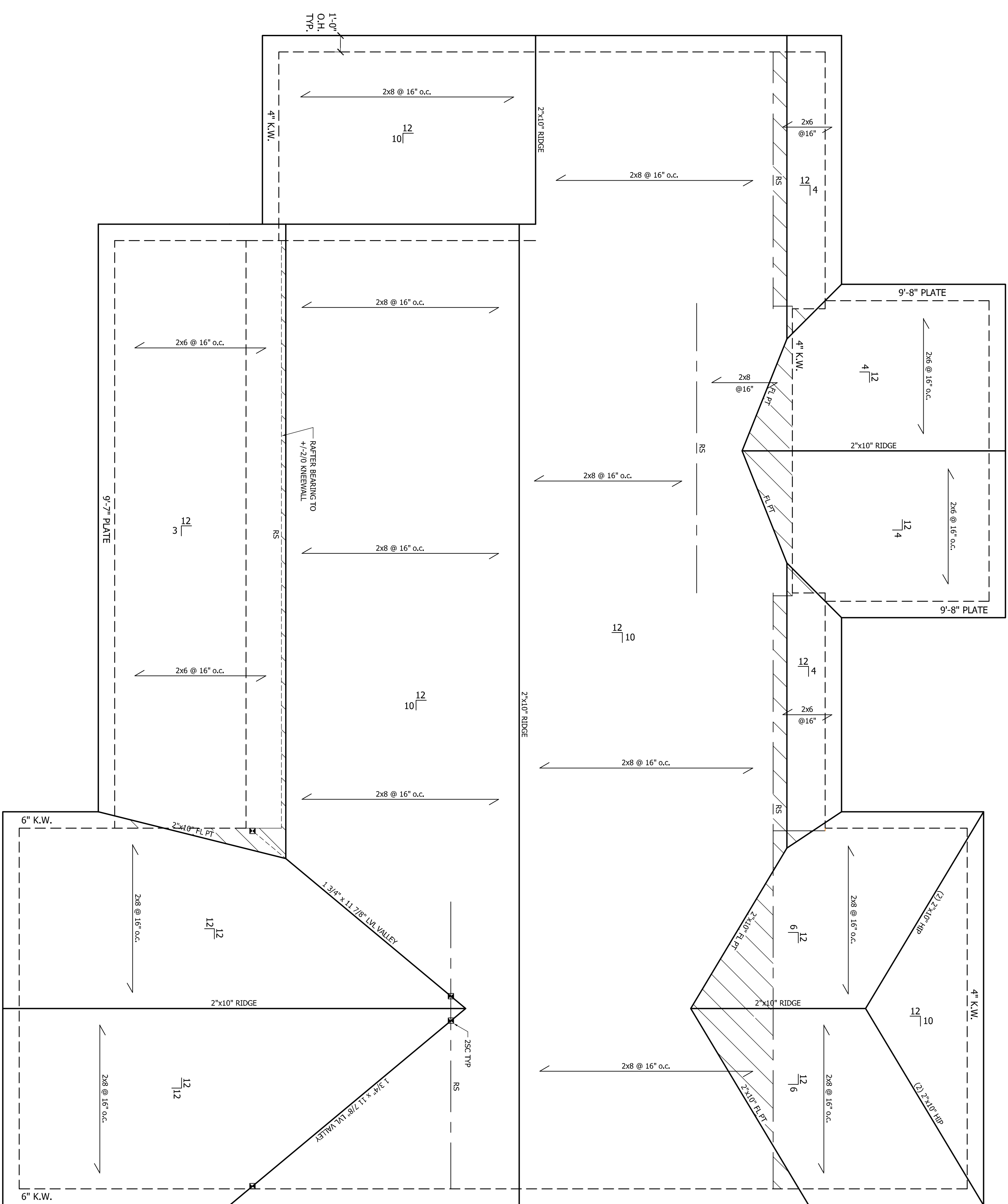
DESIGN BY  
 LLR  
 25 JAN 21

REVISION  
 180301 12 MAR 18  
 141103 2 DEC 14

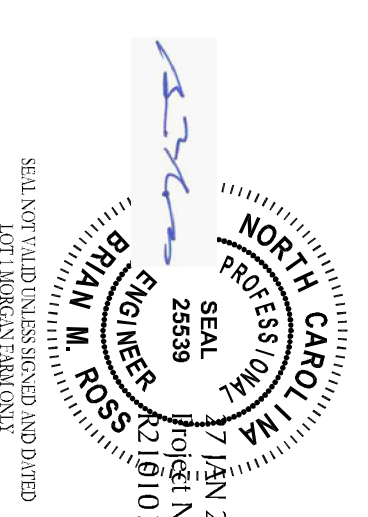
ROOF PLAN  
 FRAMING

SHEET NO.  
**S4**

- ROOF FRAMING NOTES**
- STRUCTURAL NOTES SHEETS.
  - FRAMING SHALL BE #2 SPF OR #2 SYP UNLA.
  - ROUTE 2x4 COLLAR TIES AT 8' o.c. AT UPPER THIRD OF RAFTERS UNLA ON PLAN.
  - RUR RIDGES FOR FULL WATER CONTACT
  - DENOTES POINT LOAD. SEE CONSTRUCTION NOTE #4 ON SS.
  - DENOTES OVERFRAMED AREA
- PROVIDE 2x4 RAFTER TIES AT 15' o.c. AT 45° BETWEEN RAFTERS AND CEILING JOISTS. USE (4) 1/4" NAILS AT EACH CONNECTION, ONE END OF TIE IS TO BE NAIL IN 8' o.c. AT LOCATIONS WHERE NO KNEE WALLS ARE PROVIDED.

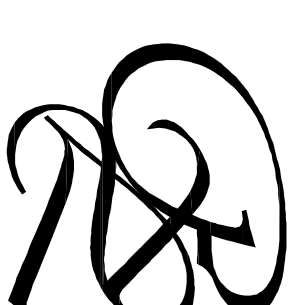


ROOF PLAN FRAMING  
 SCALE: 1/4" = 1'-0"



STRUCTURAL DESIGN IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE (IBC) AND THE INTERNATIONAL RESIDENTIAL CODE (IRC). ENGINEERS SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY AND DOES NOT COVER DIMENSIONAL ACCURACY. SEAL APPLIES ONLY FOR JOB NUMBER AND PROJECT NO. SEAL APPLIES TO THE ENGINEER'S COVERED FAILURE TO VERIFY THE ENGINEER'S QUALITY OF WORK. ENGINEERS, INC.

SEAL NOT VALID UNLESS ISSUED AND DATED BY THE ENGINEER'S FIRM ONLY



709 W. JONES STREET  
RALEIGH, NC 27603  
TEL 919 832 5680  
FAX 919 832 5675  
WWW.ROSSLINDEN.COM

# ROSS LINDEN ENGINEERS PC

ROSS LINDEN ENGINEERS PC ASSUMES NO LIABILITY FOR DAMAGES OR MODIFICATIONS TO THIS PLAN. THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AND VERIFY THE ACCURACY OF THE INFORMATION PROVIDED BY THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTING CONDITIONS AND VERIFY THE ACCURACY OF THE INFORMATION PROVIDED BY THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTING CONDITIONS AND VERIFY THE ACCURACY OF THE INFORMATION PROVIDED BY THE OWNER.

## STEPHENSON BUILDERS LOT 1 MORGAN FARM

PROJECT NO.  
**R210101**

DESIGN BY  
ILR  
25 JAN 21

REVISION  
180301 12 MAR 18  
141103 2 DEC 14

### STRUCTURAL NOTES & DETAILS

SHEET NO.  
**SS**

OF 55

### STRUCTURAL NOTES

#### GENERAL

1. ENGINEER'S SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY. THE CONTRACTOR SHALL VERIFY THE DIMENSIONAL ACCURACY, CROSS LINDEN ENGINEERS PC ASSUMES NO LIABILITY FOR CHANGES OR MODIFICATIONS MADE TO THESE PLANS BY OTHERS OR FOR CONSTRUCTION METHODS, OR FOR ANY DEVIATION FROM THE PLANS.
2. ALL CONSTRUCTION WORKMANSHIP, MATERIAL QUALITY AND SELECTION SHALL BE IN ACCORDANCE WITH THE NORTH CAROLINA RESIDENTIAL CODE (NCRC) AND LOCAL CODES AND REGULATIONS. DIMENSIONS SHALL GOVERN OVER SCALE AND ROOM SHALL GOVERN OVER DIMENSIONS.
3. CONTACT THE ENGINEER PRIOR TO CONSTRUCTION IF ANY DISCREPANCIES ARE NOTED ON THE PLANS.
4. ONLY CURRENT SEALED DRAWINGS ARE TO BE USED FOR CONSTRUCTION.

#### CONSTRUCTION

1. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM OF TWO BOLTS. BOLTS SHALL BE SPACED AT EACH END WITH A MINIMUM OF TWO 1/2" X 4" LAG SCREWS.
2. ENGINEERED WOOD BEAMS SHALL BE INSTALLED WITH ALL CONNECTIONS PER MANUFACTURER'S INSTRUCTIONS.
3. ALL BEAMS SHALL BE CONTINUOUSLY SUPPORTED. LATERAL BRACING SHALL BE PROVIDED AT EACH END WITH A MINIMUM OF TWO 1/2" X 4" LAG SCREWS.
4. SOLID BLOCKING SHALL BE PROVIDED AT ALL JOINT LOADS TO CONTINUOUS TO THE FOUNDATION OR TO OTHER STRUCTURAL ELEMENTS.
5. ENGINEERED WOOD FLOOR SYSTEMS AND ROOF TRUSS SYSTEMS SHALL BE PROVIDED FOR REVIEW AND COORDINATED WITH THE ENGINEER OF RECORD. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. THE MANUFACTURER AND REVIEWED BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.
6. WALL BRACING REQUIREMENTS SHALL BE IN ACCORDANCE WITH SECTION 602.12 OF THE NORTH CAROLINA RESIDENTIAL CODE.
  - A. EXTERIOR WALLS ARE ASSIGNED TO BE BRACED WALL LINES BRACED WALL LINES WHERE APPLICABLE. SEE PLAN FOR LOCATIONS.
  - B. CONTINUOUSLY SHEATHED WITH 1/2" WOOD STRUCTURAL SHEATHING (PLYWOOD OR OSB) PER CODE SECTION 602.12.4. EXTERIOR BRACED WALL LINES ARE ASSIGNED TO BE BRACED WITH ALTERNATE BRACING METHODS. IF USED, MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE CODE AND MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
  - C. INTERIOR BRACED WALL LINES ARE CONSIDERED TO BE BRACED WITH 1/2" OR GYPSUM BOARD BRACED WALL PANELS. SEE TABLE 602.12.4 FOR CONNECTION CRITERIA FOR GARAGE WALLS AND OTHER WALLS WITH MULTIPLE OR LARGE OPENINGS.
7. STEEL FRITCH BEAMS SHALL BE FASTENED TOGETHER WITH 1/2" DIAMETER BOLTS WITH WASHERS PLACED UNDER THE THIRD END OF THE BOLT. BOLTS SHALL BE SPACED AT MAXIMUM 24" O.C. STAGGERED FOR AND BOTTOM OF BEAM WITH MAXIMUM 12" O.C. STAGGERED FOR AND TOP OF BEAM. BOLTS SHALL BE LOCATED AT 6" FROM EACH END OF FITCH BEAM.
8. BRICK LINTELS SHALL BE 3/2" X 1/2" X 1/4" STEEL ANGLE FOR UP TO 6" RISE AND 9" RUN, AND 4" X 1/2" X 1/4" STEEL ANGLE FOR MORE THAN 6" RISE.
9. BRICK LINTELS AT ROOFED AREAS SHALL BE 3/2" X 1/2" X 1/4" STEEL ANGLE FOR UP TO 6" RISE AND 9" RUN, AND 4" X 1/2" X 1/4" STEEL ANGLE FOR MORE THAN 6" RISE. WHEN THE SLOPE EXCEEDS 4:12 A MINIMUM OF 3 X 3 X 1/4" PLATES SHALL BE WELDED AT 2" O.C. ALONG THE STEEL ANGLE.

DESIGN LOADS	LIVE LOAD (PSF)	DEAD LOAD (PSF)
TABLE R301.4 DORMER ROOMS	30	10
SLEEPING ROOMS	20	10
ATTICS WITH STORAGE	20	10
ATTIC WITH NO STORAGE	20	10
CEILING	10	10
DECKS	40	10
PARKING GARAGE	40	10
PASSENGER VEHICLE GARAGES	40	10
FIRE ESCAPES	40	10
GUARDRAILS AND HANDRAILS	200	-

#### ADDITIONAL LOADS

TABLE R301.2(b) BASIC DESIGN WIND SPEED 115 MPH  
TABLE R301.2(c) SEISMIC DESIGN CATEGORY B

TABLE R301.2(b) DESIGN POSITIVE AND NEGATIVE PRESSURE FOR DOORS AND WINDOWS FOR A MEAN ROOF HEIGHT OF 35 FEET OR LESS SHALL BE 27 PSF

TABLE R301.2(b) COMPONENT AND CLADDING LOADS FOR A BUILDING LOCATED IN EXPOSURE B

ROOF VALUES BOTH POSITIVE AND NEGATIVE SHALL BE DESIGNED BASED ON ROOF PITCHES AND MEAN ROOF HEIGHT AS FOLLOWS:

MEAN ROOF HEIGHT	ROOF PITCH	4-30 FT	31 FT - 40 FT	41 FT - 45 FT	46 FT - 50 FT	51 FT - 55 FT	56 FT - 60 FT	61 FT - 65 FT	66 FT - 70 FT	71 FT - 75 FT	76 FT - 80 FT	81 FT - 85 FT	86 FT - 90 FT	91 FT - 95 FT	96 FT - 100 FT
0.12 to 2.25:12	4-30 FT	4.5	4.7	4.9	5.1	5.3	5.5	5.7	5.9	6.1	6.3	6.5	6.7	6.9	7.1
2.25 to 10:12	4-30 FT	4.8	5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0	7.2	7.4
10 to 15:12	4-30 FT	5.1	5.3	5.5	5.7	5.9	6.1	6.3	6.5	6.7	6.9	7.1	7.3	7.5	7.7
15 to 20:12	4-30 FT	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0	7.2	7.4	7.6	7.8	8.0
20 to 25:12	4-30 FT	5.7	5.9	6.1	6.3	6.5	6.7	6.9	7.1	7.3	7.5	7.7	7.9	8.1	8.3
25 to 30:12	4-30 FT	6.0	6.2	6.4	6.6	6.8	7.0	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6
30 to 35:12	4-30 FT	6.3	6.5	6.7	6.9	7.1	7.3	7.5	7.7	7.9	8.1	8.3	8.5	8.7	8.9
35 to 40:12	4-30 FT	6.6	6.8	7.0	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0	9.2
40 to 45:12	4-30 FT	6.9	7.1	7.3	7.5	7.7	7.9	8.1	8.3	8.5	8.7	8.9	9.1	9.3	9.5
45 to 50:12	4-30 FT	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0	9.2	9.4	9.6	9.8
50 to 55:12	4-30 FT	7.5	7.7	7.9	8.1	8.3	8.5	8.7	8.9	9.1	9.3	9.5	9.7	9.9	10.1
55 to 60:12	4-30 FT	7.8	8.0	8.2	8.4	8.6	8.8	9.0	9.2	9.4	9.6	9.8	10.0	10.2	10.4
60 to 65:12	4-30 FT	8.1	8.3	8.5	8.7	8.9	9.1	9.3	9.5	9.7	9.9	10.1	10.3	10.5	10.7
65 to 70:12	4-30 FT	8.4	8.6	8.8	9.0	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0
70 to 75:12	4-30 FT	8.7	8.9	9.1	9.3	9.5	9.7	9.9	10.1	10.3	10.5	10.7	10.9	11.1	11.3
75 to 80:12	4-30 FT	9.0	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0	11.2	11.4	11.6
80 to 85:12	4-30 FT	9.3	9.5	9.7	9.9	10.1	10.3	10.5	10.7	10.9	11.1	11.3	11.5	11.7	11.9
85 to 90:12	4-30 FT	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0	11.2	11.4	11.6	11.8	12.0	12.2
90 to 95:12	4-30 FT	9.9	10.1	10.3	10.5	10.7	10.9	11.1	11.3	11.5	11.7	11.9	12.1	12.3	12.5
95 to 100:12	4-30 FT	10.2	10.4	10.6	10.8	11.0	11.2	11.4	11.6	11.8	12.0	12.2	12.4	12.6	12.8

#### WALL CLADDING SHALL BE DESIGNED FOR A 241 PSF POSITIVE AND NEGATIVE PRESSURE.

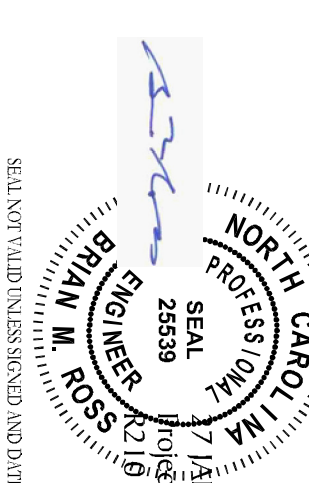
#### MATERIALS

1. REINFORCING LUMBER SHALL BE #2 SERVICE PINE (SPF) WITH THE FOLLOWING DESIGN PROPERTIES:  
F<sub>b</sub> = 875 PSI F<sub>v</sub> = 70 PSI E = 1,466,000 PSI
2. REMAINING LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE #2 SOUTHERN YELLOW PINE (SYP) TREATED IN ACCORDANCE WITH AWPA C22 WITH THE FOLLOWING DESIGN PROPERTIES:  
F<sub>b</sub> = 1,000 PSI F<sub>v</sub> = 95 PSI E = 1,680,000 PSI
3. ENGINEERED WOOD BEAMS SHALL BE LAMINATED VENEER LUMBER (LVL) OR PARALLEL STRAND LUMBER (PSL) WITH THE FOLLOWING DESIGN PROPERTIES:  
F<sub>b</sub> = 3,600 PSI F<sub>v</sub> = 285 PSI E = 1,946,000 PSI  
THE FOLLOWING PRODUCTS MEET OR EXCEED THE ABOVE SPECIFICATIONS AND MAY BE USED AT THE LOCATION:  
BROADSPAN 1.96-2799R LVL BY GEORGIA PACIFIC  
LEVEL TRUS JOIST 1.9E MICRO-LAM LVL BY WEYERHAEUSER
4. STRUCTURAL STEEL WIDE FLANGE BEAMS SHALL CONFORM TO ASTM A992 OR A572 GRADE 50. ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A36.
5. BOLTS SHALL CONFORM TO A325 MINIMUM GRADE.
6. REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A63 GRADE 60.
7. SEE TABLE 602.10 FOR STRUCTURAL MEMBER FASTENING REQUIREMENTS.
8. POLYRED CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. MATERIALS USED TO PRODUCE CONCRETE SHALL COMPLY WITH THE APPLICABLE STANDARDS LISTED IN ACI 318 OR ASTM C119.
9. CONCRETE LOCATED PER TABLE 602.2 SHALL BE AIR ENTRAINED WITH THE TOTAL AIR CONTENT NOT LESS THAN 5 PERCENT OR MORE THAN 7 PERCENT.
10. MASONRY UNITS SHALL CONFORM TO ACI 530/ASCE 5/TMS 402 AND MORTAR SHALL COMPLY WITH ASTM C270.

#### ABBREVIATIONS

CONC	CONCRETE
CONT	CONTINUOUS
DBL	DOUBLE
DBL	DOUBLE JOIST
ESP	DOUBLE STUD/POCKET
E	FLAT PLATE
FL	FLAT PLATE
FTG	FOOTING
FOR	FANNER
L	LUMBER
LNS	NOT TO SCALE
OC	ON CENTER
OC	PASSENGER TREATED
FT	FRITCH BEAM
SC	STUD/POCKET
SP	STUD/POCKET
TTT	TYPICAL
UNO	UNLESS NOTED OTHERWISE
XI	EXTRA JOIST

STRUCTURAL DESIGN IN ACCORDANCE WITH THE NORTH CAROLINA RESIDENTIAL CODE (NCRC) AND LOCAL CODES. 2018 EDITION.



STRUCTURAL DESIGN IN ACCORDANCE WITH THE NORTH CAROLINA RESIDENTIAL CODE (NCRC) AND LOCAL CODES. 2018 EDITION.

ENGINEERS SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY AND DOES NOT DIMENSIONAL ACCURACY.

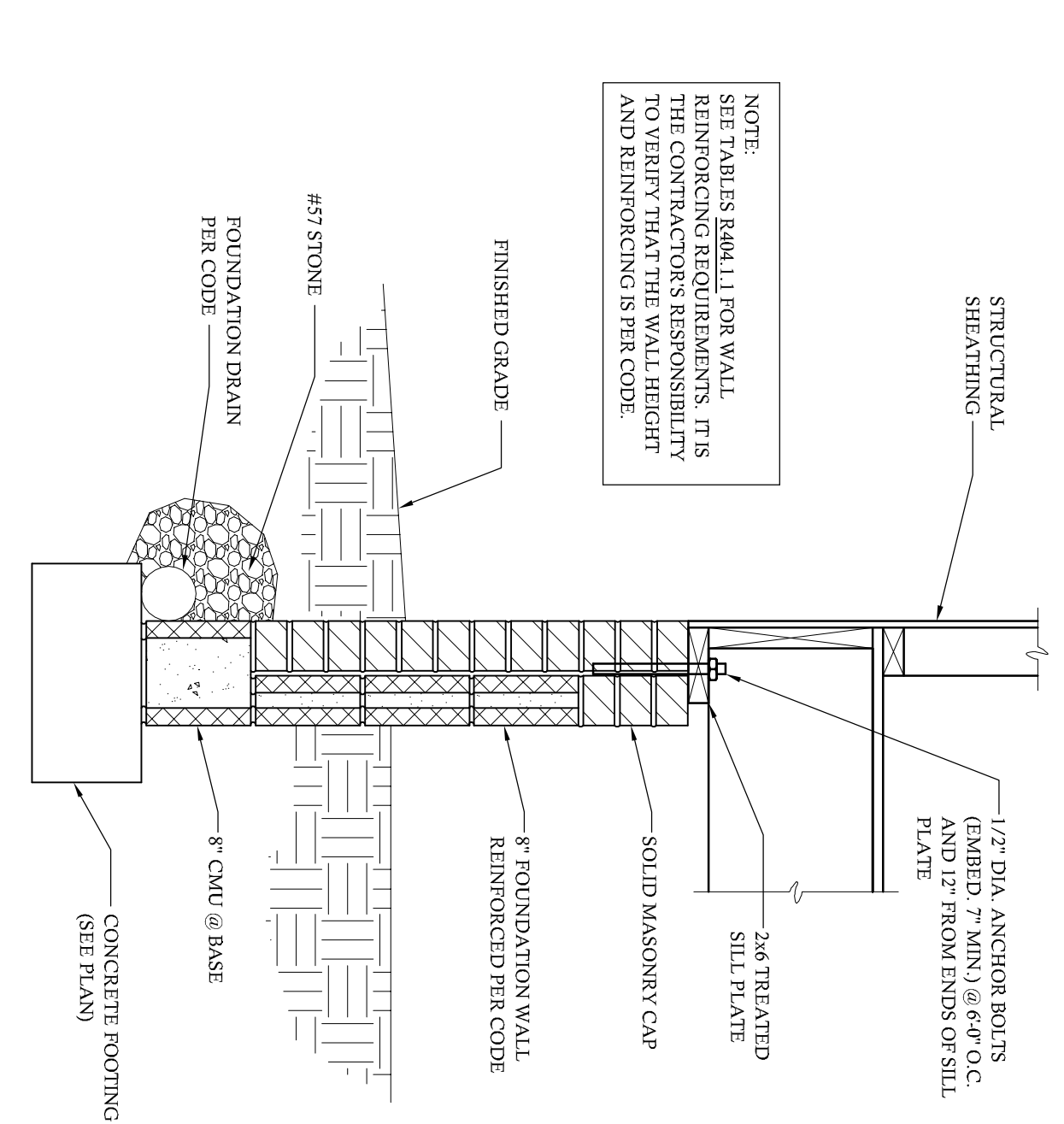
SEAL APPLIES ONLY FOR JOB NUMBER 25559 AND PROJECT NO. R210101.

IF THERE IS A CHANGE TO THE ENGINEER OF RECORD, FAILURE TO NOTIFY THE ENGINEER OF RECORD MAY BE PENALIZED.

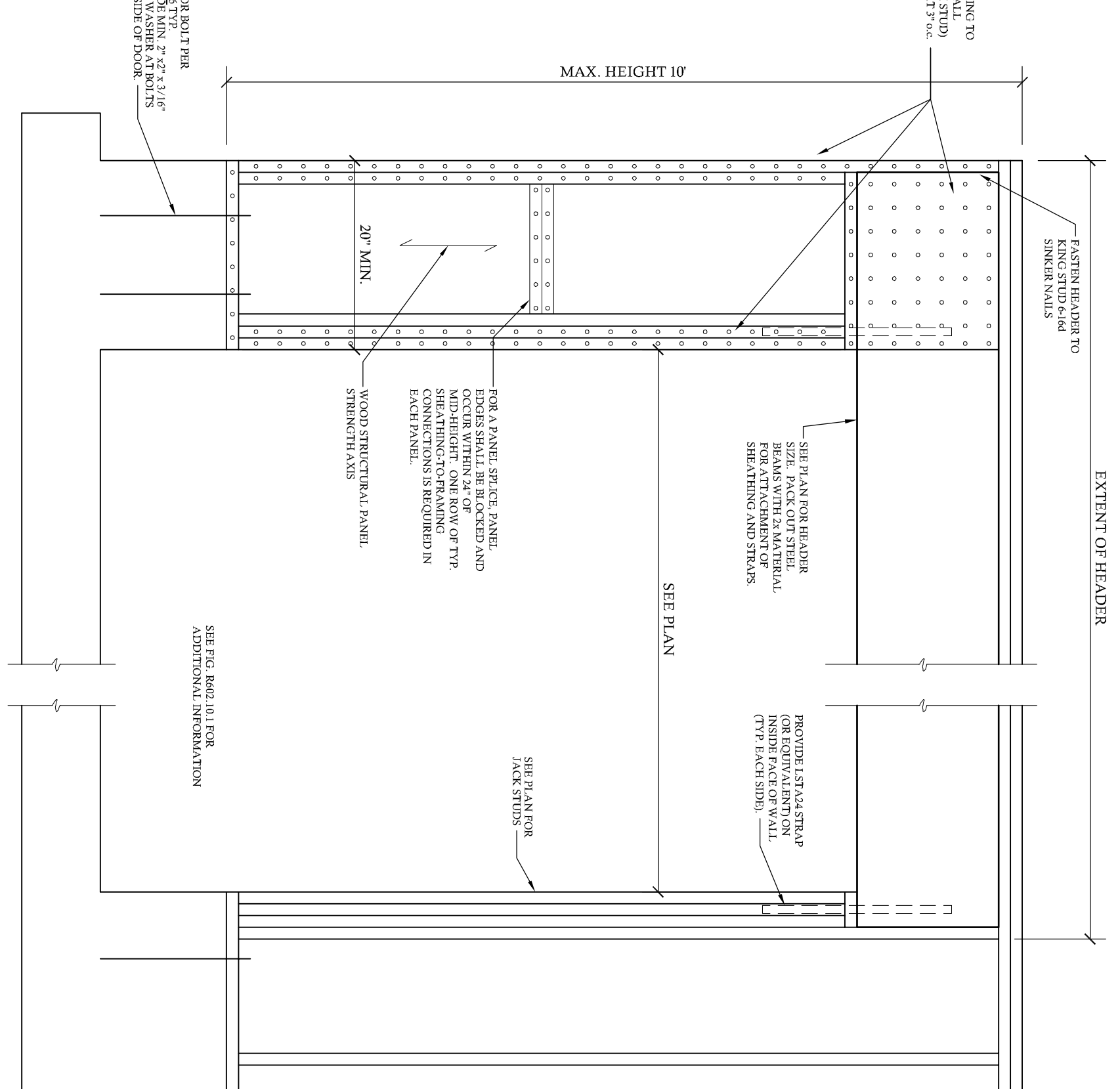
INDICATES THE SEAL OF THE ENGINEER OF RECORD.

### 8" FOUNDATION WALL

SCALE: 1" = 1'-0"



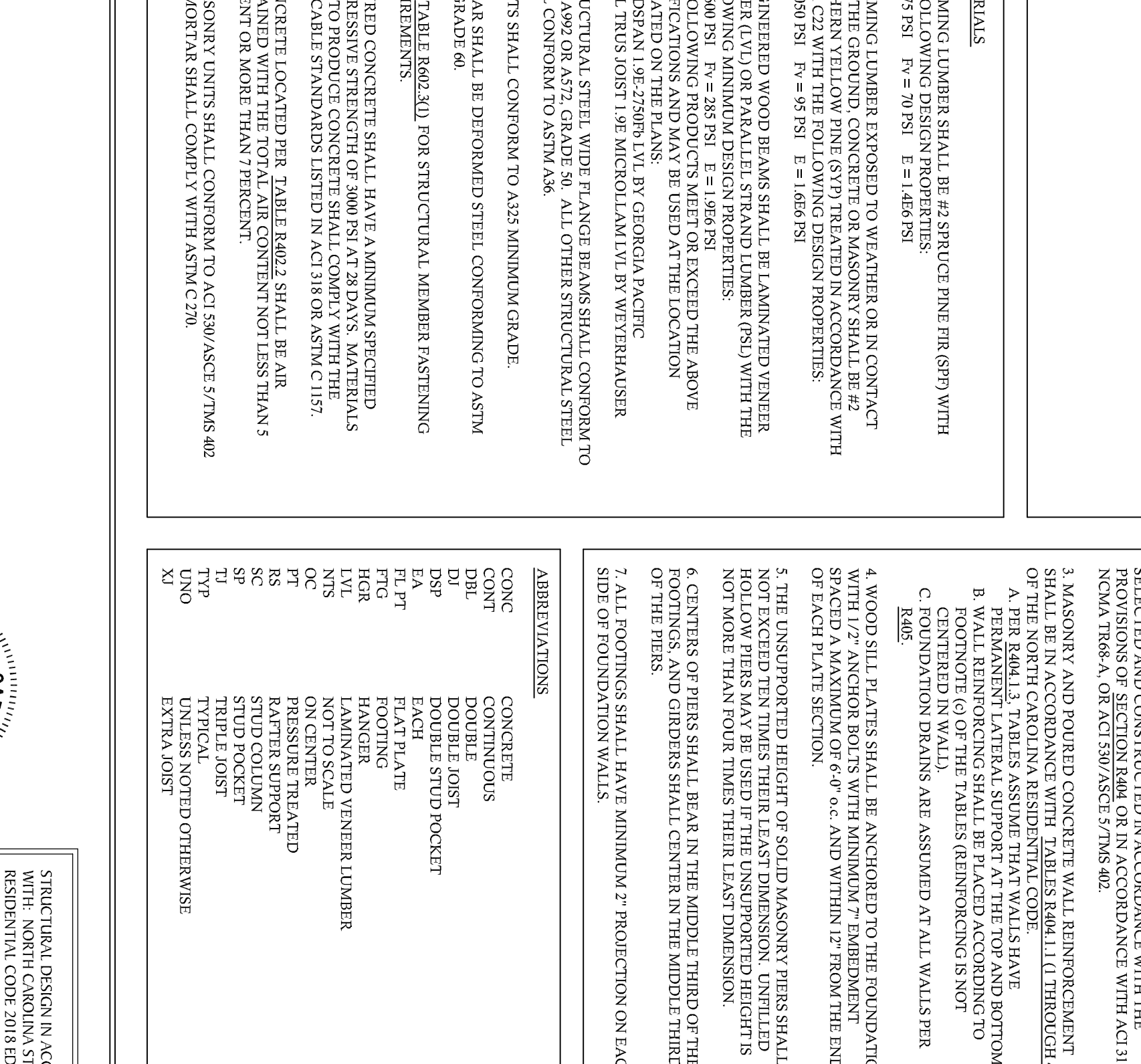
NOTE: REBAR SHALL BE PLACED IN THE WALL REINFORCING REQUIREMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE WALL HEIGHT AND REINFORCING IS PER CODE.



### CS-PP PORTAL FRAME BRACED WALL PANEL

BASED ON FIG. 602.11.1

EXTENT OF HEADER



MAX. HEIGHT 10'

20" MIN.

SEE PLAN FOR REBAR

SEE PLAN FOR REBAR

SEE PLAN FOR REBAR

SEE PLAN FOR REBAR