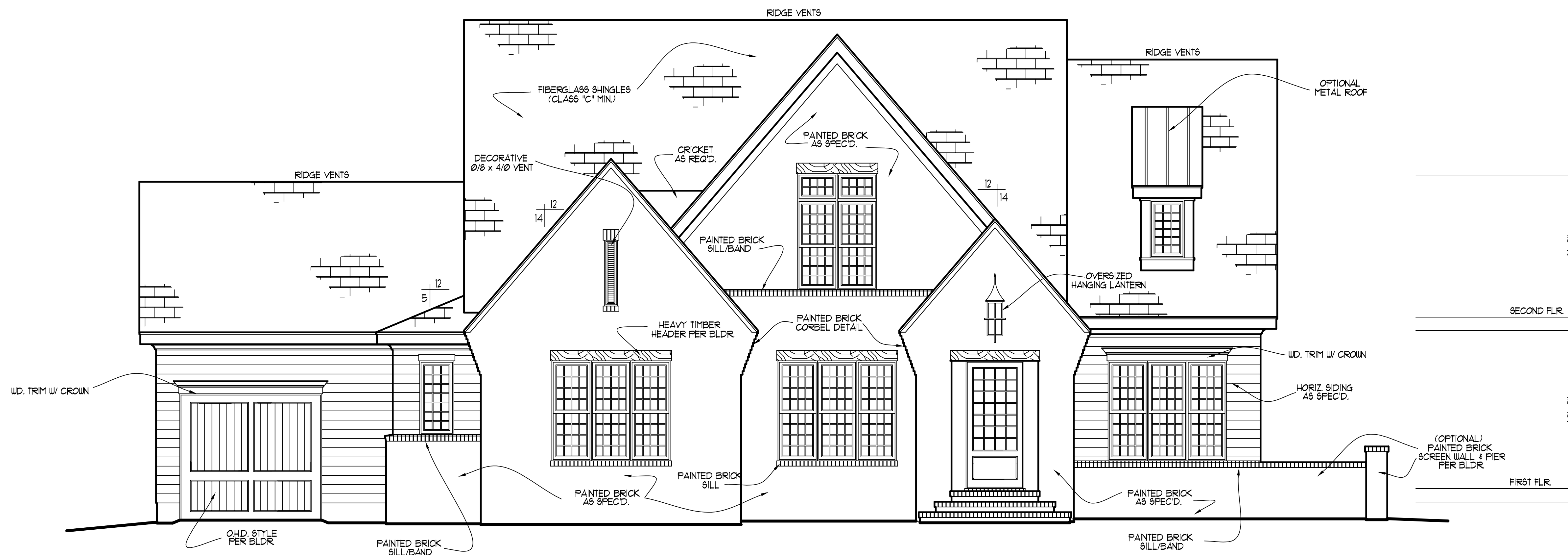


**REAR ELEVATION**  
SCALE: -----1/4" = 1'-0"



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

**NOTE!!**  
MURPHY GARNOW DESIGN GROUP, INC. HEREBY EXPRESSLY RESERVES ITS COPYRIGHT AND OTHER PROPERTY RIGHTS TO THESE PLANS. THESE PLANS ARE TO BE USED FOR THE CONSTRUCTION OF (ONE) RESIDENCE ONLY. ANY OTHER USE, CHANGE AND/OR REPRODUCTION IN ANY FORM WILL RENDER THESE PLANS FRAUDULENT.

ALL DIMENSIONS, SITE CONDITIONS & CODES ARE TO BE VERIFIED BEFORE CONSTR. BEGINS. ONCE CONSTR. HAS BEGUN MURPHY GARNOW DESIGN GROUP, INC. WILL NOT ASSUME ANY LIABILITY FOR ANY EXPENSES ASSOCIATED WITH ERRORS & OMISSIONS.

**ATTIC VENTILATION**  
3832 = 12.11 sq. ft. REQ'D.  
300  
\*( ) - BASE / VENTS =  
\*( ) - BASE / VENTS =  
\* (IT) - RIDGE VENT @ 9 sq.in./ft. = 131 SQ. FT.  
TOTAL = 131 SQ. FT.

\*\* PROVIDE CONTINUOUS SOFFIT VENT SURROUND TO EQUAL OR EXCEED 6.38 SQ. FT.  
\*\*\* (OPT.) PROVIDE THERMOSTATICALLY CONTROLLED POWER VENT TO EQUAL OR EXCEED 6.38 SQ. FT.

**CODE INFORMATION**

- ZONE: (CHECK ONE)  
ZONE 1  
ZONE 2  
ZONE
- GLAZING U-FACTOR
- R-VALUES  
CEILING R-38  
WALL R-15  
FLOOR R-19  
BSMT. WALL  
SLAB PERIMETER  
CRAWL SPACE WALL
- MEAN ROOF HEIGHT 22'-3"
- WALL AND ROOF CLADDING DESIGN VALUE: (MEAN ROOF HGT. 30 FT. OR LESS)  
CRAWL SPACE WALL  
WALLS +8.0, -24.1  
ROOF PITCH 0/12 TO 225/12 +10.0, -45.4  
ROOF PITCH 225/12 TO 1/12 +10.4, -34.8  
ROOF PITCH 1/12 TO 12/12 +16.5, -21.0  
EXPOSURE ADJUSTMENT x

MURPHY GARNOW DESIGN GROUP, INC.  
1140-500 KILPAKE FARM ROAD  
CARY, NORTH CAROLINA 27511  
(919) 481-9115 FAX: (919) 481-6970  
www.murphygarnowdesign.com

WAGONER HOMES  
STONECREST @ NORWOOD  
LOT #1

DRAWN BY: TUG  
DATE: 8-21-19  
FILE NAME: UH-15-3631

REVISIONS	DATE	DESCRIPTION
00-00-00	TUG	PLAN

© COPYRIGHT 2019 MURPHY GARNOW DESIGN GROUP, INC. ALL RIGHTS RESERVED

HOUSE NAME:

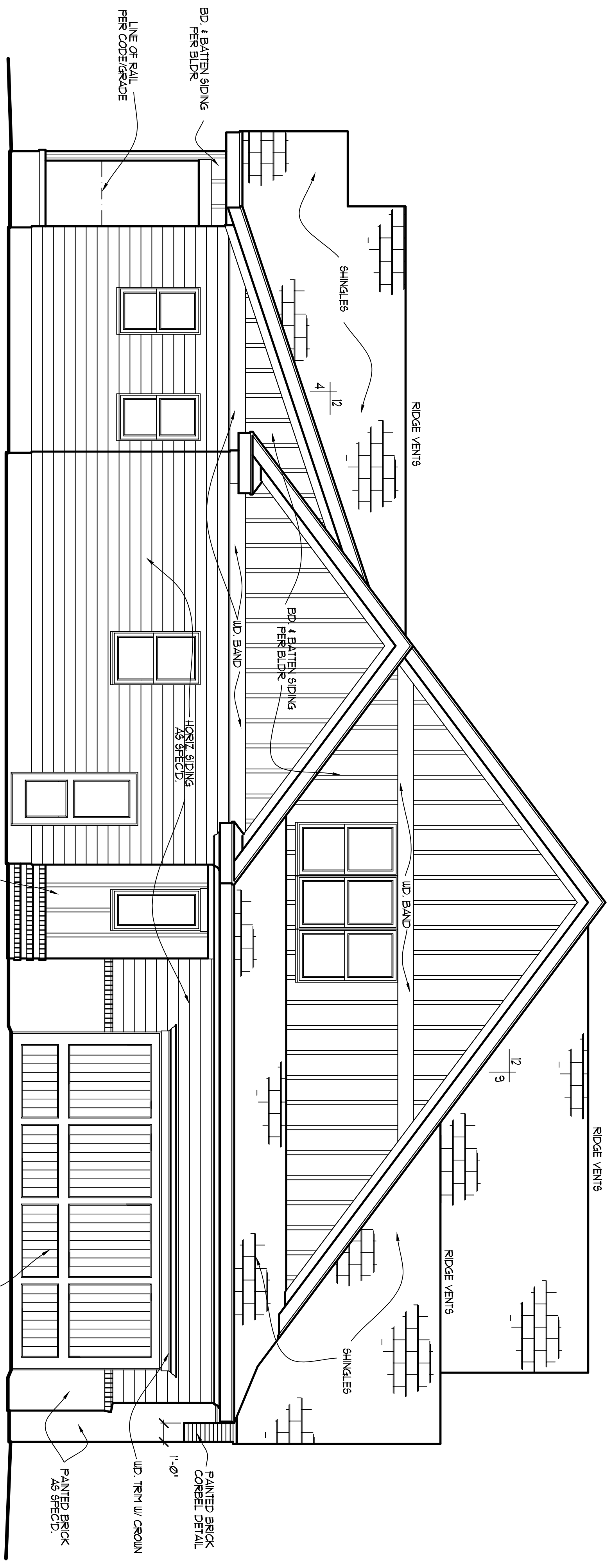
HOUSE NUMBER:

PAGE NUMBER:  
1 of 6

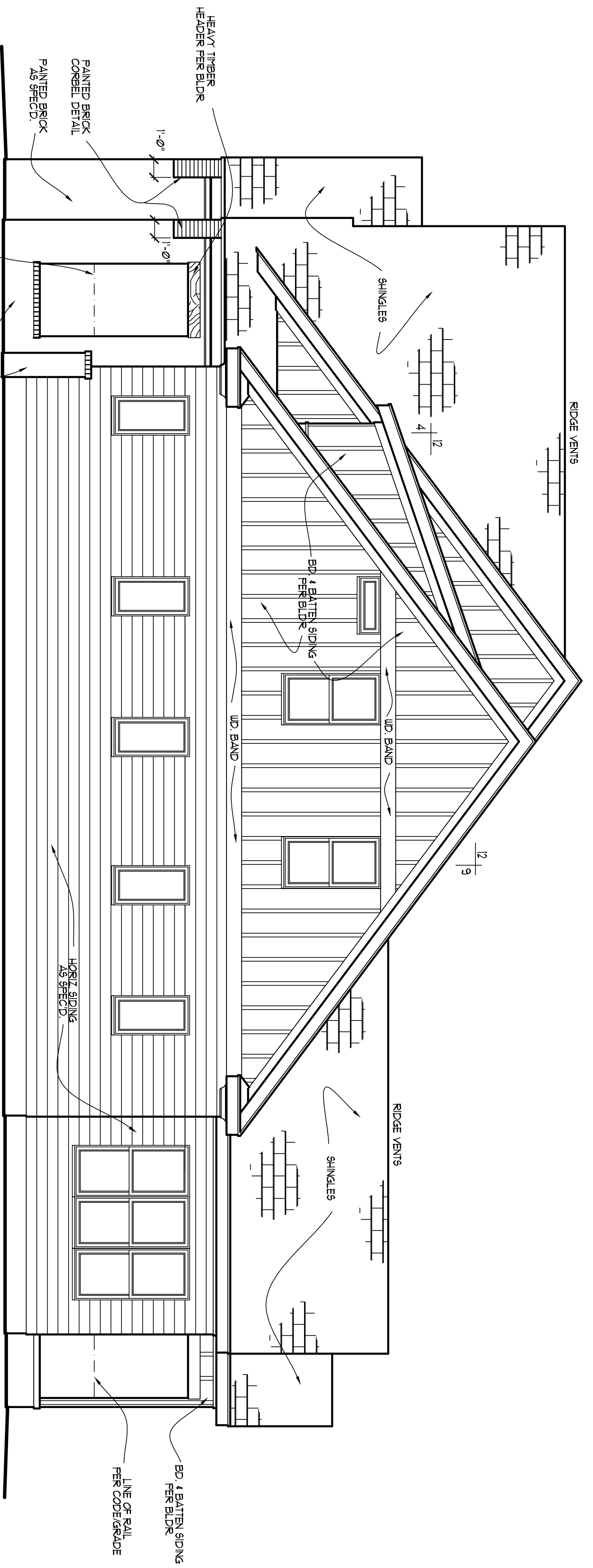
THESE PLANS MEET THE REQUIREMENTS OF THE INTERNATIONAL RESIDENTIAL CODE 2015 AND THE NORTH CAROLINA RESIDENTIAL CODE 2018 EDITION.

**NOTE!!**  
 MURPHY GARNOW DESIGN GROUP, INC. HEREBY EXPRESSLY RESERVES ITS COPYRIGHT AND OTHER PROPERTY RIGHTS TO THESE PLANS. THESE PLANS ARE TO BE USED FOR THE CONSTRUCTION OF ONE RESIDENCE ONLY. ANY OTHER USE, CHANGE AND/OR REPRODUCTION IN ANY FORM WILL RENDER THESE PLANS INVALID.

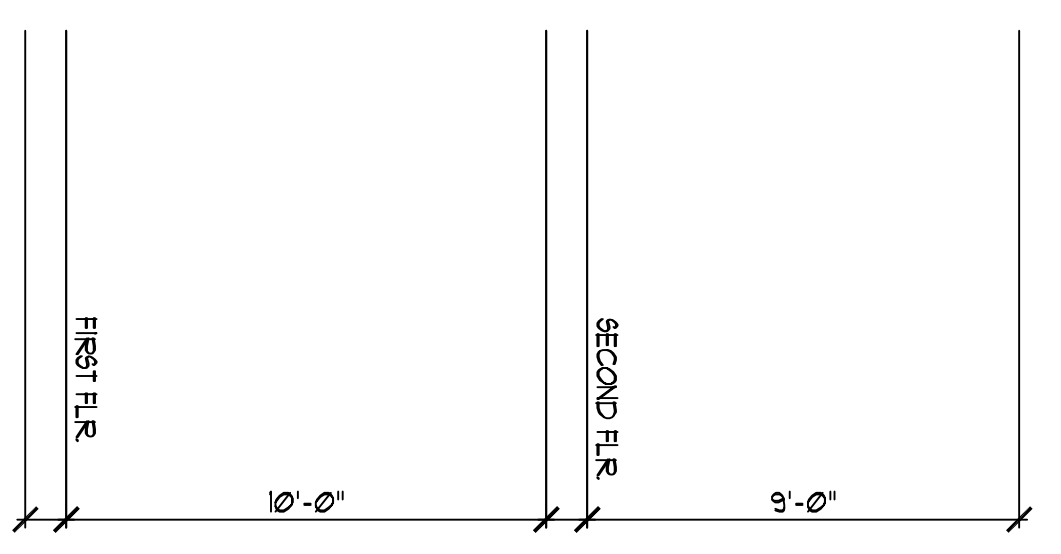
ALL DIMENSIONS SITE TO BEGINS UNLESS OTHERWISE NOTED. BEGINNING FROM CONSTRUCTION OF THIS DESIGN GROUP, INC. WILL NOT ASSUME ANY LIABILITY FOR ANY ERRORS ASSOCIATED WITH THESE PLANS.



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



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

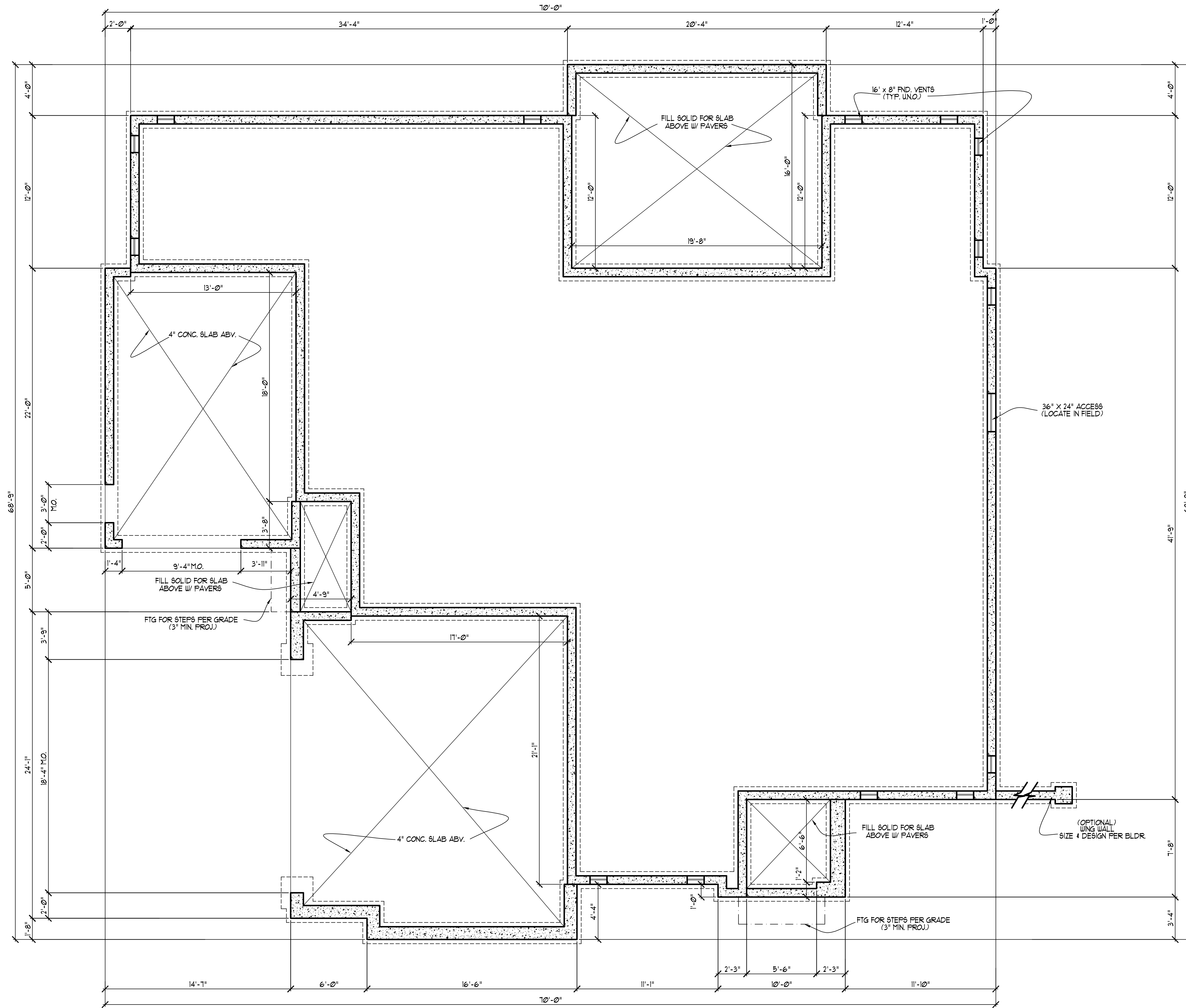


**WAGONER HOMES**  
**STONECREST @ NORWOOD**  
**LOT #21**

**MURPHY GARNOW DESIGN GROUP, INC.**  
 1140-300 KILDAIRE FARM ROAD  
 CARY, NORTH CAROLINA 27511  
 (919) 481-9115 FAX: (919) 481-6970  
 www.murphygarnowdesign.com

THESE PLANS MEET THE REQUIREMENTS OF THE INTERNATIONAL RESIDENTIAL CODE 2009 AND THE NORTH CAROLINA RESIDENTIAL CODE 2008 EDITION.

NO.	DATE	DESCRIPTION
01	8-21-13	ISSUE FOR PERMITS
02	11-15-2013	REVISED PER PLAN



**NOTE!!**  
 MURPHY GARNOW DESIGN GROUP, INC. HEREBY EXPRESSLY RESERVES ITS COPYRIGHT AND OTHER PROPERTY RIGHTS TO THESE PLANS. THESE PLANS ARE TO BE USED FOR THE CONSTRUCTION OF (ONE) RESIDENCE ONLY. ANY OTHER USE, CHANGE AND/OR REPRODUCTION IN ANY FORM WILL RENDER THESE PLANS FRAUDULENT.

**FOUNDATION NOTES**

- 1) PROVIDE DBL. BAND @ EXTERIOR WALLS PARALLEL TO FLOOR JOISTS
- 2) ALL 1/2 PIERS TO BE TIED INTO FND. WALL (BONDED)
- 3) PROVIDE 1/2" ANCHOR BOLTS @ EXT. WALLS W/ 1" EMBEDMENT @ 6'-0" CNTRS. AND 12" FROM CORNERS

**FND. VENTILATION**

2619 ± 11.46 SQ. FT. REQUIRED:  
 1500

OR

2619 ± 11.74 SQ. FT. REQUIRED:  
 1500

WITH APPROVED VAPOR RETARDER MATERIAL AND OPENINGS PLACED FOR CROSS VENTILATION

\* ONE VENTILATION OPENING SHALL BE WITHIN 3 FEET OF EACH CORNER OF THE BUILDING

ALL DIMENSIONS, SITE CONDITIONS & CODES ARE TO BE VERIFIED BEFORE CONSTR. BEGINS. ONCE CONSTR. HAS BEGUN MURPHY GARNOW DESIGN GROUP, INC. WILL NOT ASSUME ANY LIABILITY FOR ANY EXPENSES ASSOCIATED WITH ERRORS & OMISSIONS.

MURPHY GARNOW DESIGN GROUP, INC.  
 1140-500 KILPAKE FARM ROAD  
 CARY, NORTH CAROLINA 27511  
 (919) 481-9115 FAX: (919) 481-6970  
 www.murphygarnowdesign.com

WAGONER HOMES  
 STONECREST @ NORWOOD  
 LOT #21

DRAWN BY: TUG  
 DATE: 8-21-19  
 FILE NAME: WH-15-3631

REVISIONS	DATE	BY	DESCRIPTION
00-00-00	TUG	PLAN	

© COPYRIGHT 2019 MURPHY GARNOW DESIGN GROUP, INC. ALL RIGHTS RESERVED

HOUSE NAME:

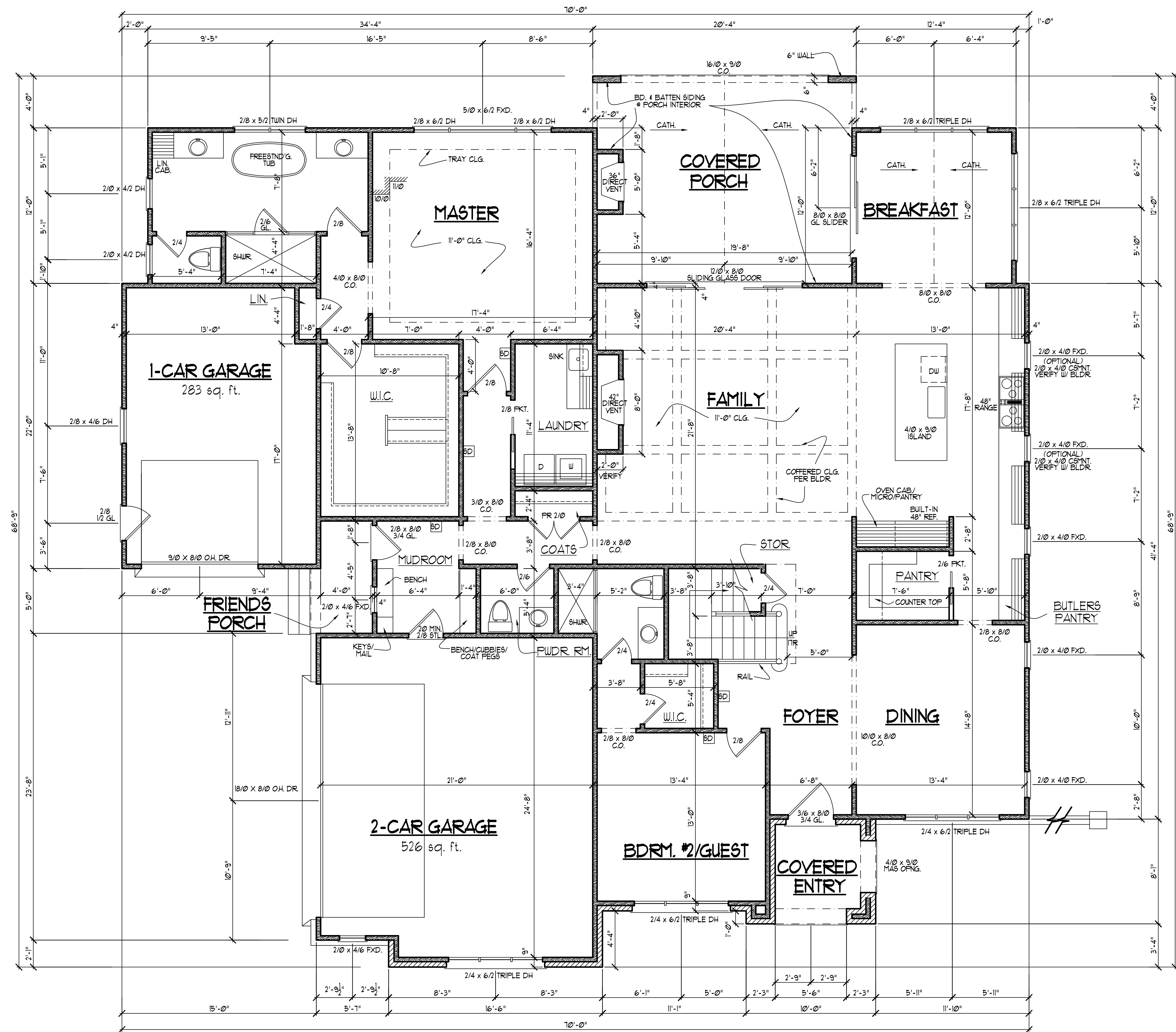
HOUSE NUMBER:

PAGE NUMBER:

3 of 6

**FOUNDATION PLAN**  
 SCALE: ----- 1/4"=1'-0"

THESE PLANS MEET THE REQUIREMENTS OF THE INTERNATIONAL RESIDENTIAL CODE 2015 AND THE NORTH CAROLINA RESIDENTIAL CODE 2018 EDITION.



**NOTE!!**  
 MURPHY GARNOW DESIGN GROUP, INC. HEREBY EXPRESSLY RESERVES ITS COPYRIGHT AND OTHER PROPERTY RIGHTS TO THESE PLANS. THESE PLANS ARE TO BE USED FOR THE CONSTRUCTION OF (ONE) RESIDENCE ONLY. ANY OTHER USE, CHANGE AND/OR REPRODUCTION IN ANY FORM WILL RENDER THESE PLANS FRAUDULENT.

ALL DIMENSIONS, SITE CONDITIONS & CODES ARE TO BE VERIFIED BEFORE CONSTR. BEGINS. ONCE CONSTR. HAS BEGUN MURPHY GARNOW DESIGN GROUP, INC. WILL NOT ASSUME ANY LIABILITY FOR ANY EXPENSES ASSOCIATED WITH ERRORS & OMISSIONS.

- FIRST FLOOR NOTES:**
- 1) 10'-0" CLG. HGT. (TYP.) UNO.
  - 2) SET WINDOWS @ 8'-0" AFF. (TYP.) UNO. (VERIFY)
  - 3) STAIRS: UP 11 RISERS @ 7 1/4" (+/-) (TYP.) (VERIFY W/ FLR. SYSTEM.)
  - 4) PROVIDE 5/8" TYPE 'X' GYPSUM @ GARAGE CEILING ADJACENT TO HTD. SPACES. PROVIDE 1/2" GYPSUM @ GARAGE WALLS ADJACENT TO HTD. SPACES
  - 5) ALL WALLS FIGURED AT 4" WIDTHS FOR STUDS. 9" WIDTHS FOR STUD/BRICK (TYP.) UNO.
  - 6) VERIFY ROUGH OPENINGS, SPECS. FOR CODE REQUIREMENTS WITH WINDOW MANUF.
- 1) SD = SMOKE DETECTOR  
 2) INT. DOORS TO BE 8'-0" H. (VERIFY W/ BLDG.)

**SQUARE FOOTAGE (new constr.)**

	HTD.	UNHTD.
• BSMT.		
• FIRST FLR.	2599	809
• SECOND FLR.	1032	418
• ATTIC (3rd. FLR.)		
<b>TOTAL</b>	<b>3631</b>	<b>1227</b>
<b>MISC.</b>		
• COVERED ENTRY		63
• COVERED PORCH		311
• FRIENDS PORCH		38
•		
•		

**WINDW. FALL PROTECTION NOTES:**  
 SEE CODE SECTIONS R612 THRU R612.4 FOR WINDOW FALL PROTECTION DEVICE REQUIREMENTS IF WINDOW SILL IS LESS THAN 24" ABV. FLR. WITH A 6'-0" OR GREATER DISTANCE TO A SURFACE OUTSIDE AND BELOW THE WINDOW.

MURPHY GARNOW DESIGN GROUP, INC.  
 1140-500 KILPAPE FARM ROAD  
 CARY, NORTH CAROLINA 27511  
 (919) 481-9115 FAX (919) 481-6970  
 www.murphygarnowdesign.com

WAGONER HOMES  
 STONECREST @ NORWOOD  
 LOT #21

DRAWN BY: TUG  
 DATE: 8-21-19  
 FILE NAME: WH-15-3631

REVISIONS	DATE	BY	DESCRIPTION
00-00-00		TUG	PLAN

© COPYRIGHT 2019 MURPHY GARNOW DESIGN GROUP, INC. ALL RIGHTS RESERVED

HOUSE NAME:

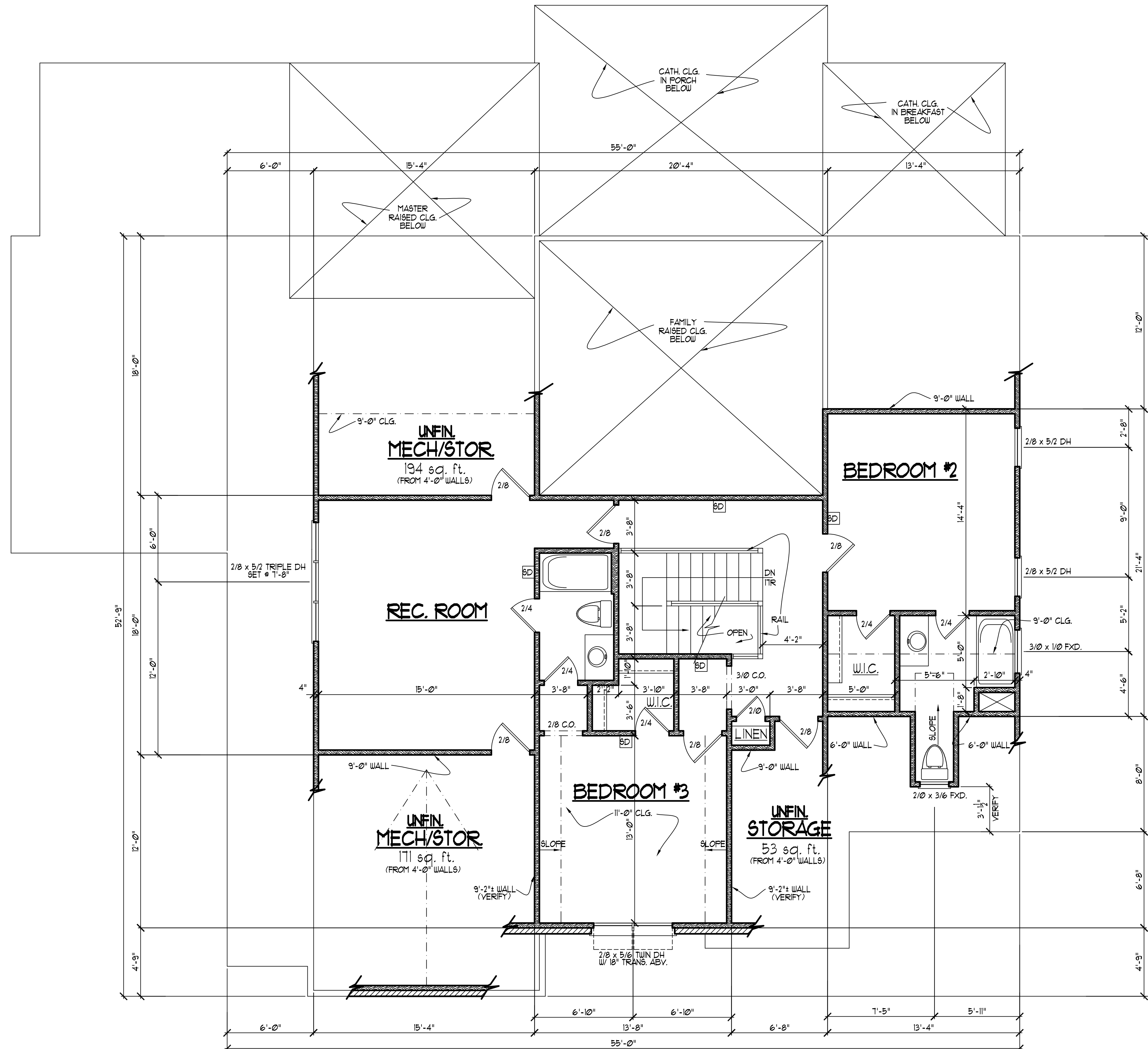
HOUSE NUMBER:

PAGE NUMBER:

4 of 6

**FIRST FLOOR PLAN**  
 SCALE: .....1/4" = 1'-0"

THESE PLANS MEET THE REQUIREMENTS OF THE INTERNATIONAL RESIDENTIAL CODE '2015' AND THE NORTH CAROLINA RESIDENTIAL CODE '2018' EDITION.



**NOTE!!**  
 MURPHY GARNOW DESIGN GROUP, INC. HEREBY EXPRESSLY RESERVES ITS COPYRIGHT AND OTHER PROPERTY RIGHTS TO THESE PLANS. THESE PLANS ARE TO BE USED FOR THE CONSTRUCTION OF (ONE) RESIDENCE ONLY. ANY OTHER USE, CHANGE AND/OR REPRODUCTION IN ANY FORM WILL RENDER THESE PLANS FRAUDULENT.

**SECOND FLOOR NOTES:**

- 1) 9'-0" CLG. HGT. (TYP.) UNO.
- 2) SET WINDOWS @ 1'-4" AFF. (TYP.) UNO. (VERIFY)
- 3) STAIRS: UP 15 RISERS @ 8" (+) (TYP.) (VERIFY W/ FLR. SYSTEM.)
- 4) ALL WALLS FIGURED AT 4" WIDTHS FOR STUDS, 9" WIDTHS FOR STUD/BRICK (TYP.) UNO.
- 5) VERIFY ROUGH OPNG'S, SPECS. FOR CODE REQUIREMENTS WITH WINDOW MANUF.
- 6) SD = SMOKE DETECTOR

ALL DIMENSIONS, SITE CONDITIONS & CODES ARE TO BE VERIFIED BEFORE CONSTR. BEGINS. ONCE CONSTR. HAS BEGUN MURPHY GARNOW DESIGN GROUP, INC. WILL NOT ASSUME ANY LIABILITY FOR ANY EXPENSES ASSOCIATED WITH ERRORS & OMISSIONS.

**MURPHY GARNOW DESIGN GROUP, INC.**  
 1140-500 KILPAKE FARM ROAD  
 CARY, NORTH CAROLINA 27511  
 (919) 481-9115 FAX: (919) 481-6970  
 www.murphygarnowdesign.com

**WAGONER HOMES**  
 STONECREST @ NORWOOD  
 LOT #21

DRAWN BY: TUG  
 DATE: 8-21-19  
 FILE NAME: WH-15-3631

REVISIONS	DATE	BY	DESCRIPTION
00-00-00		TUG	PLAN

© COPYRIGHT 2019 MURPHY GARNOW DESIGN GROUP, INC. ALL RIGHTS RESERVED

HOUSE NAME:

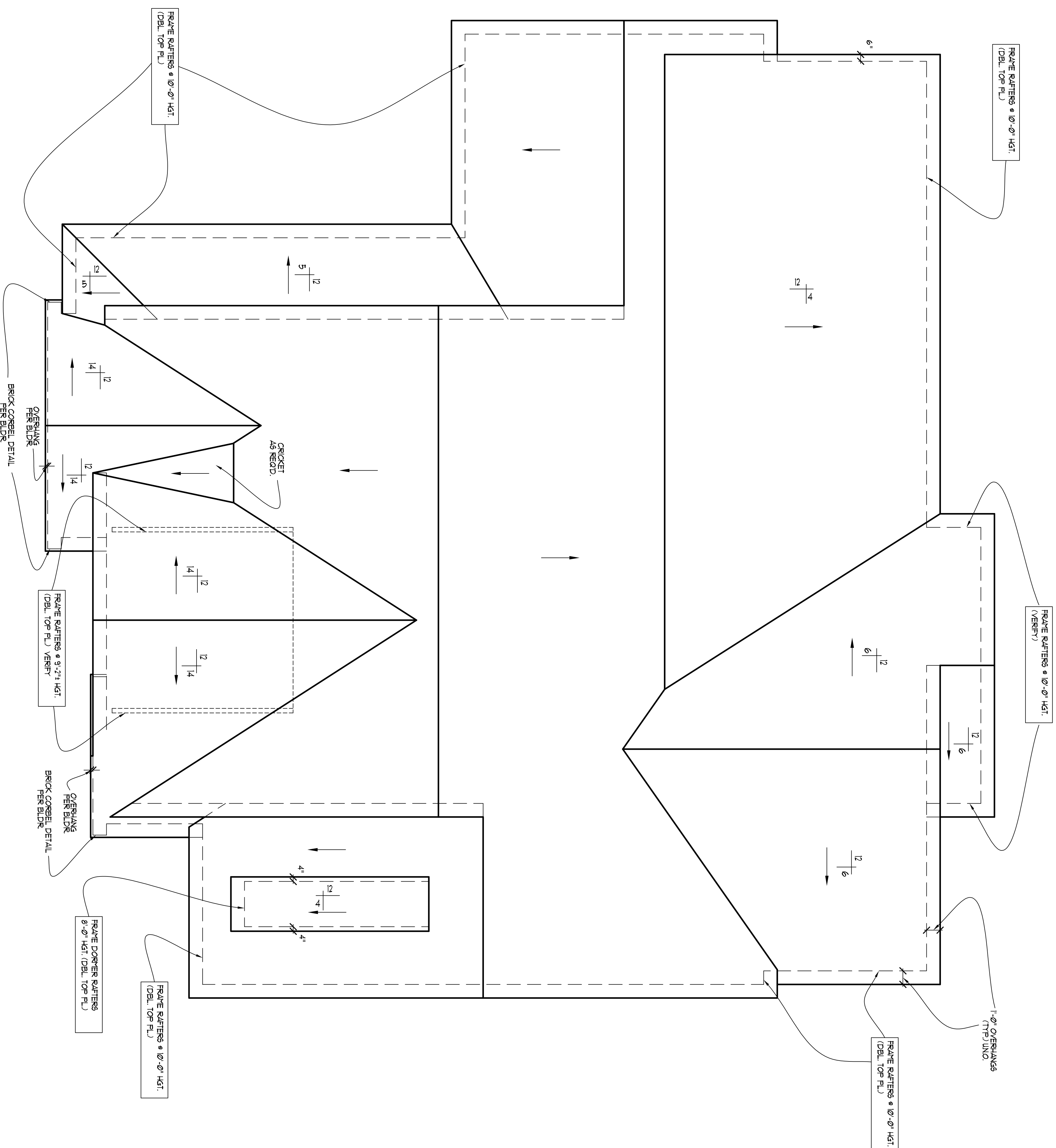
HOUSE NUMBER:

PAGE NUMBER:

5 of 6

**SECOND FLOOR PLAN**  
 SCALE: .....1/4" = 1'-0"

THESE PLANS MEET THE REQUIREMENTS OF THE INTERNATIONAL RESIDENTIAL CODE 2015 AND THE NORTH CAROLINA RESIDENTIAL CODE 2018 EDITION.



**NOTE!!**  
 MURPHY GARNOW DESIGN GROUP, INC. HEREBY EXPRESSLY RESERVES ITS COPYRIGHT AND OTHER PROPERTY RIGHTS TO THESE PLANS. THESE PLANS ARE TO BE USED FOR THE CONSTRUCTION OF ONE RESIDENCE ONLY. ANY OTHER USE, CHANGE AND/OR REPRODUCTION IN ANY FORM WILL RENDER THESE PLANS INVALID.

- ROOF FRAMING NOTES:**
- 1) ALL ROOF FITCHES TO BE 9/12 (TRP/JUNO)
  - 2) PROVIDE 2x4 COLLAR BEAMS EVERY OTHER RAFTER (TRP)
  - 3) PROVIDE HURRICANE CLIPS AT ALL VALLEYS AND OPPOSING DEL. RAFTERS
  - 4) PROVIDE DEL. HEADERS AND TRIMMERS AT ALL ROOF OPENINGS (EX. DORMERS, SKYLIGHTS, CHIMNEYS, ETC.)
  - 5) 2x8 RAFTERS @ GATH OR VALLEYS CLG'S TO BE FLIPPED DOWN 2" OR USE 2x10 RAFTERS (VERIFY BRNG HGT.) FOR PROPER INSTALLATION PER CODE
  - 6) VERIFY ALL RAFTER BRNG. HGT'S BEFORE CONSTR. HAS BEGAN

ALL DIMENSIONS SITE TO BE BOUNDARIES UNLESS NOTED OTHERWISE. BEGIN MURPHY GARNOW DESIGN GROUP, INC. SHALL NOT ASSUME ANY LIABILITY FOR ANY ERRORS ASSOCIATED WITH ERRORS & OMISSIONS.

**MURPHY GARNOW DESIGN GROUP, INC.**  
 1140-300 KILDARE FARM ROAD  
 CARY, NORTH CAROLINA 27511  
 (919) 481-9115 FAX: (919) 481-6970  
 www.murphygarnowdesign.com

**WAGONER HOMES**  
**STONECREST @ NORWOOD**  
**LOT #21**

DRAWN BY: TUGS  
 DATE: 8-21-19  
 FILE NAME: UH-15-3631

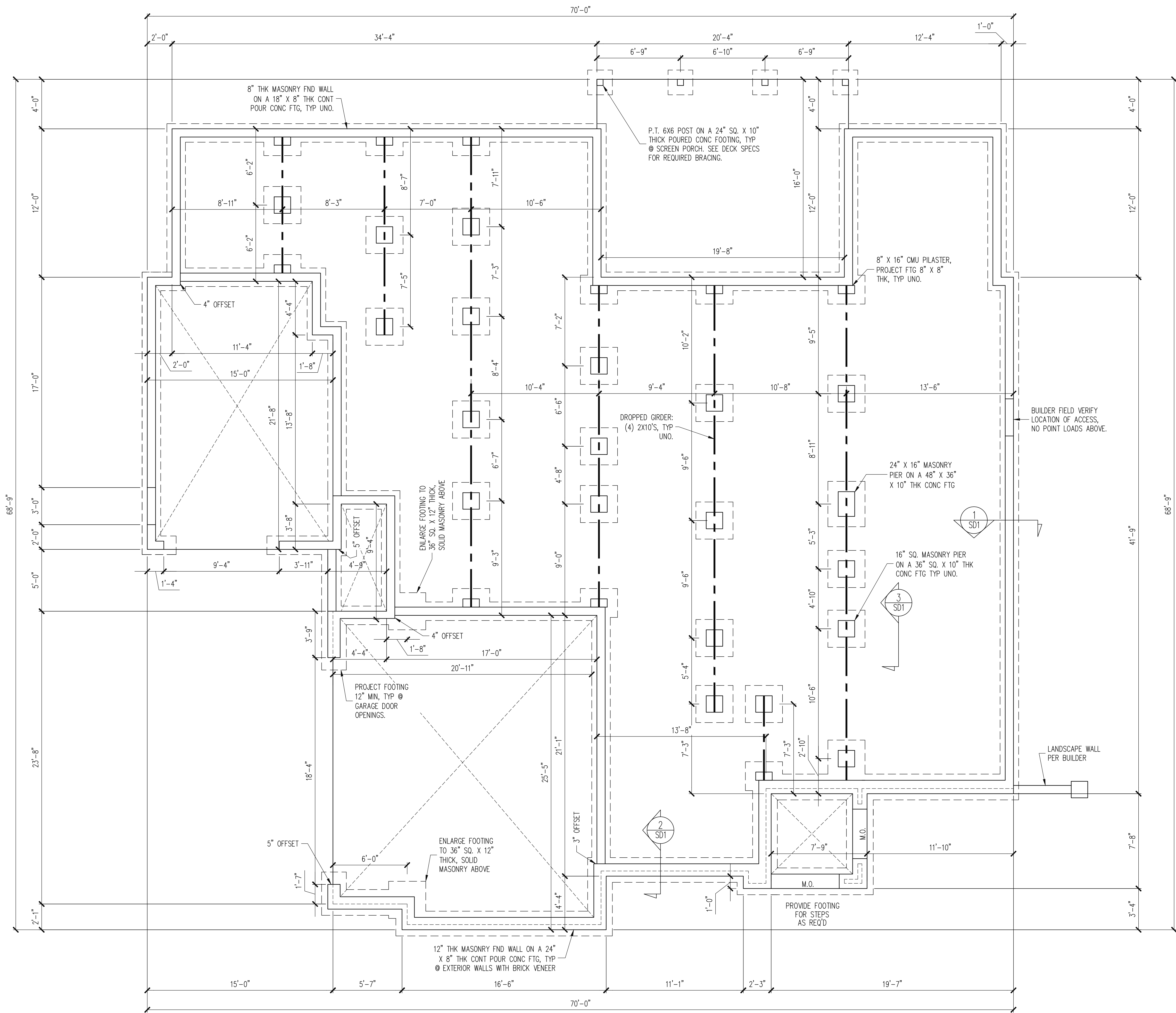
REVISIONS	DATE	DESCRIPTION
00-00-00	TUGS	PLAN

HOUSE NAME:  
 HOUSE NUMBER:

PAGE NUMBER:  
**6 of 6**

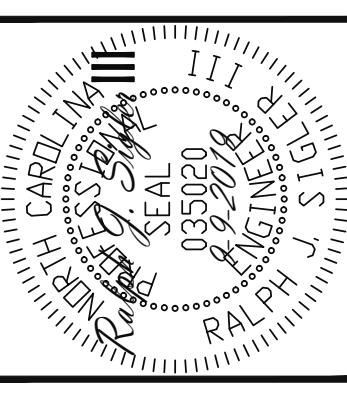
**ROOF FRAMING PLAN**

SCALE: 1/4" = 1'-0"  
 THESE PLANS MEET THE REQUIREMENTS OF THE INTERNATIONAL RESIDENTIAL CODE 2018 AND THE NORTH CAROLINA RESIDENTIAL CODE 2008 EDITION.



NOTES:  
 -HEIGHT AND BACKFILL LIMITATIONS FOR FOUNDATION WALLS ARE TO BE GOVERNED BY THE NCSBC, LATEST EDITION.

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



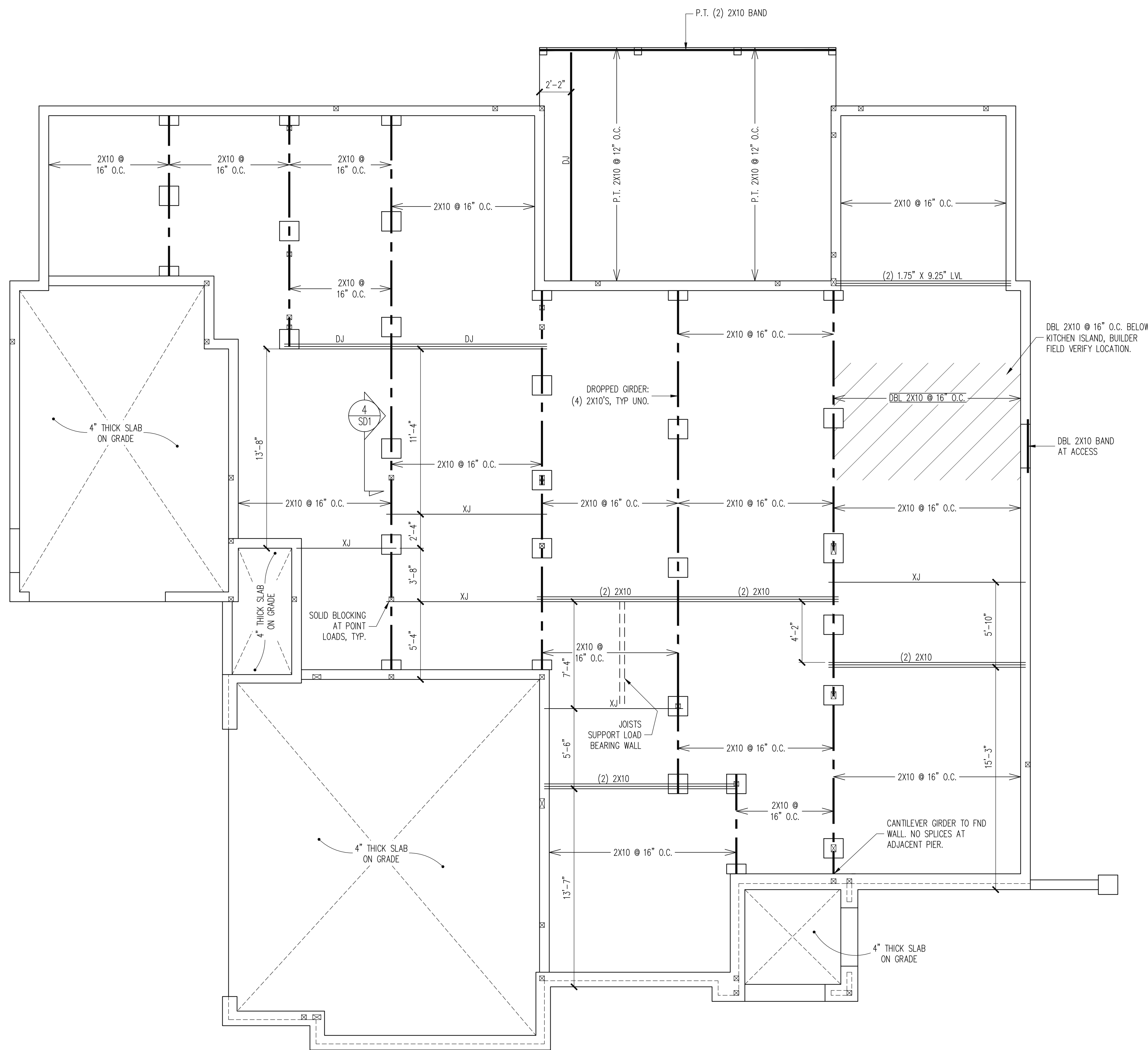
**Engineering Lech Associates, P.A.**  
 STRUCTURAL ENGINEERS  
 License No. C-3870  
 183 Wind Chime Ct, Ste 100  
 Raleigh, North Carolina 27615  
 Phone (919) 844-1661

WAGONER HOMES
STRUCTURAL ADDENDUM
SCOPE: 7 STONECREST AT NORWOOD
LOC: 7 STONECREST AT NORWOOD

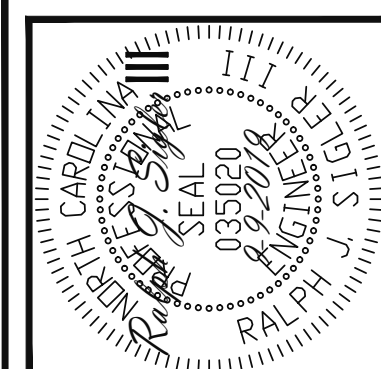
ENG: RJS/CMC  
 DATE: 9-9-2019

PROJECT NO.  
 19-65-362

SHEET NO.  
 S1  
 1 of 7



CRAWL SPACE FRAMING PLAN  
 1/4" = 1'-0"



**Engineering Lech**  
 ASSOCIATES, P.A.  
 STRUCTURAL ENGINEERS  
 License No. C-3870  
 183 Wind Chime Ct, Ste 100  
 Raleigh, North Carolina 27615  
 Phone (919) 844-1661

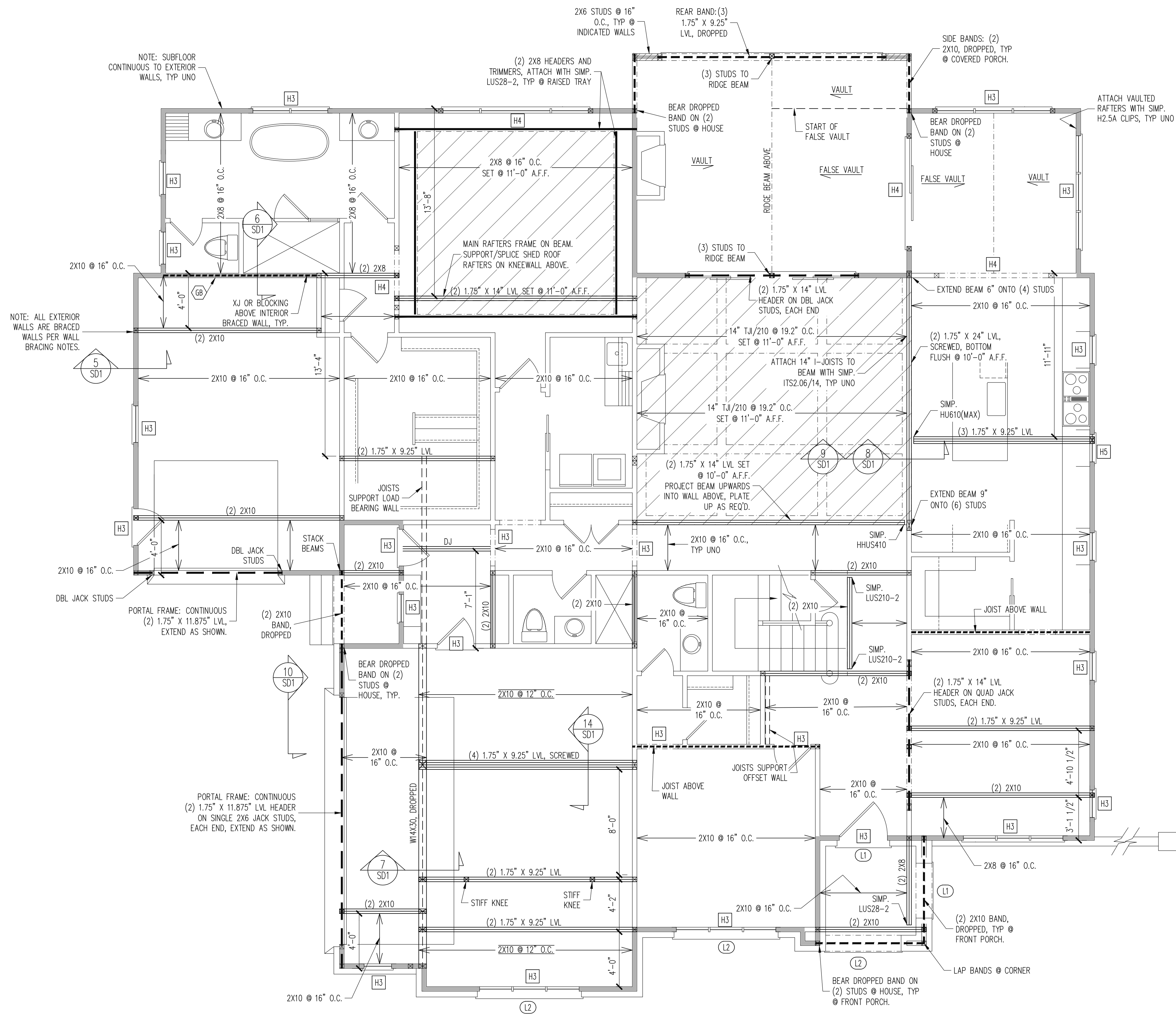
WAGONER HOMES
STRUCTURAL ADDENDUM
SCOPE: 7 STONECREST AT NORWOOD
LOC: 7 STONECREST AT NORWOOD

ENG: RJS/CMC  
 DATE: 9-9-2019

PROJECT NO.  
 19-65-362

SHEET NO.  
 S2  
 2 of 7





NOTE: SUBFLOOR CONTINUOUS TO EXTERIOR WALLS, TYP UNO

NOTE: ALL EXTERIOR WALLS ARE BRACED WALLS PER WALL BRACING NOTES.

PORTAL FRAME: CONTINUOUS (2) 1.75" X 11.875" LVL HEADER ON SINGLE 2X6 JACK STUDS, EACH END, EXTEND AS SHOWN.

**REQUIRED STUDS FOR BEAM SUPPORT**

REFER TO PART 14: STUD SUPPORTS FOR BEAMS OF THE CONSTRUCTION SPECIFICATIONS FOR REQUIRED NUMBER OF STUDS FOR BEAM SUPPORT, TYP UNO.

**LINTEL SCHEDULE**

- L1 L 3 1/2 X 3 1/2 X 1/4 TYP UNO
- L2 L 5 X 3 1/2 X 5/16
- L3 L 6 X 4 X 5/16 ATTACHED TO HEADER (2)- 1/2" DIA. X 3" LONG LAG SCREWS AT 16" O.C. (ONE LAG SCREW @ 16" O.C. PERMITTED FOR 5" OR LESS BRICK ABOVE)
- L4 16 GAUGE FLEX LINTEL PER BUILDER

**HEADER SCHEDULE**

- H1 SINGLE 2X4 TURNED FLAT (A)
- H2 (2) 2X4'S ON SINGLE JACKS (B)
- H3 (2) 2X10'S ON SINGLE JACKS (C)
- H4 (2) 1.75" X 9.25" LVL'S ON DBL JACKS
- H5 (2) 2X10'S ON DBL JACKS

- (A) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPENING 38" MAX.
- (B) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPNG 38" TO 74" MAX.
- (C) TYPICAL FOR ALL CONDITIONS NOT LISTED IN (A) OR (B) UNO.

NOTES:  
-HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED.

**HEADER KING STUDS**

SEE PART 17: KING STUDS OF THE CONSTRUCTION SPECIFICATIONS FOR REQUIRED NUMBER OF KING STUDS FOR EXTERIOR WALL HEADERS

**WALL BRACING**

ALL EXTERIOR STUD WALLS ARE TO BE CONTINUOUSLY SHEATHED WITH 7/16 APA RATED OSB NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.

SINGLE JOIST, CONTINUOUS RIM JOIST, OR BLOCKING OF EQUAL DEPTH IS REQUIRED ABOVE AND BELOW ALL BRACED WALLS. NAIL BLOCKING ABOVE WALL TO TOP PLATE WITH 8d TOE NAILS @ 6" O.C. NAIL SOLE PLATE OF BRACED WALL TO BLOCKING BELOW WITH (3) 16d NAILS @ 16" O.C. BLOCKING AT HORIZONTAL JOINTS IN BRACED WALL LINES ONLY REQUIRED AT SHADED WALLS, UNO.

**SHADED WALLS:**

GB - INTERIOR BRACED WALL WITH GYPSUM BOARD, 1/2" GB BOTH SIDES OF WALL ATTACHED TO PANEL EDGES, INCLUDING TOP AND BOTTOM PLATES, AT 7" O.C. (BUILDER PERMITTED TO SUBSTITUTE "WSP" FOR ANY "GB" WALL)

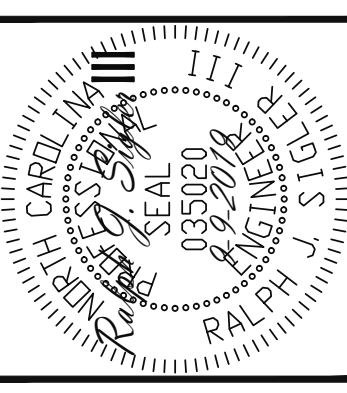
WSP - INTERIOR BRACED WALL WITH 3/8" MIN. THICKNESS WOOD STRUCTURAL PANELING, (1) SIDE. ATTACH WSP TO STUD WALL WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD. BLOCK AT ALL PANEL EDGES.

PROVIDED CONTINUOUS SHEATHING = 3/17" MIN. -WALL BRACING IS BY ENGINEERED DESIGN AND NOT PRESCRIPTIVE PER SECTION 602.10 OF THE 2018 NCR. CONTINUOUS SHEATHING HAS BEEN PROVIDED, ALONG WITH ALTERNATIVE METHODS TO INSURE THE MINIMUM INTENT OF SECTION 602.10 OF THE 2018 NCR HAS BEEN MET AND EXCEEDED.

-BRACED WALL PANELS SHALL BE FASTENED IN ACCORDANCE WITH TABLE 602.3(1) TO PROVIDE CONTINUOUS PANEL UPLIFT RESISTANCE AND COMPLIANCE WITH NCRBC R602.3.5 AND R802.11 UNLESS NOTED OTHERWISE ON STRUCTURAL PLANS.

**1ST FLOOR FRAMING PLAN**

WALLS AND CEILING  
1/4" = 1'-0"



**STRUCTURAL ENGINEERS**  
License No. C-3870  
183 Wind Chime Ct, Ste 100  
Raleigh, North Carolina 27615  
Phone (919) 844-1661

**Engineering Lech Associates, P.A.**

**WAGONER HOMES**  
STRUCTURAL ADDENDUM

**SCOPE:** LOC: 7 STONECREST AT NORWOOD

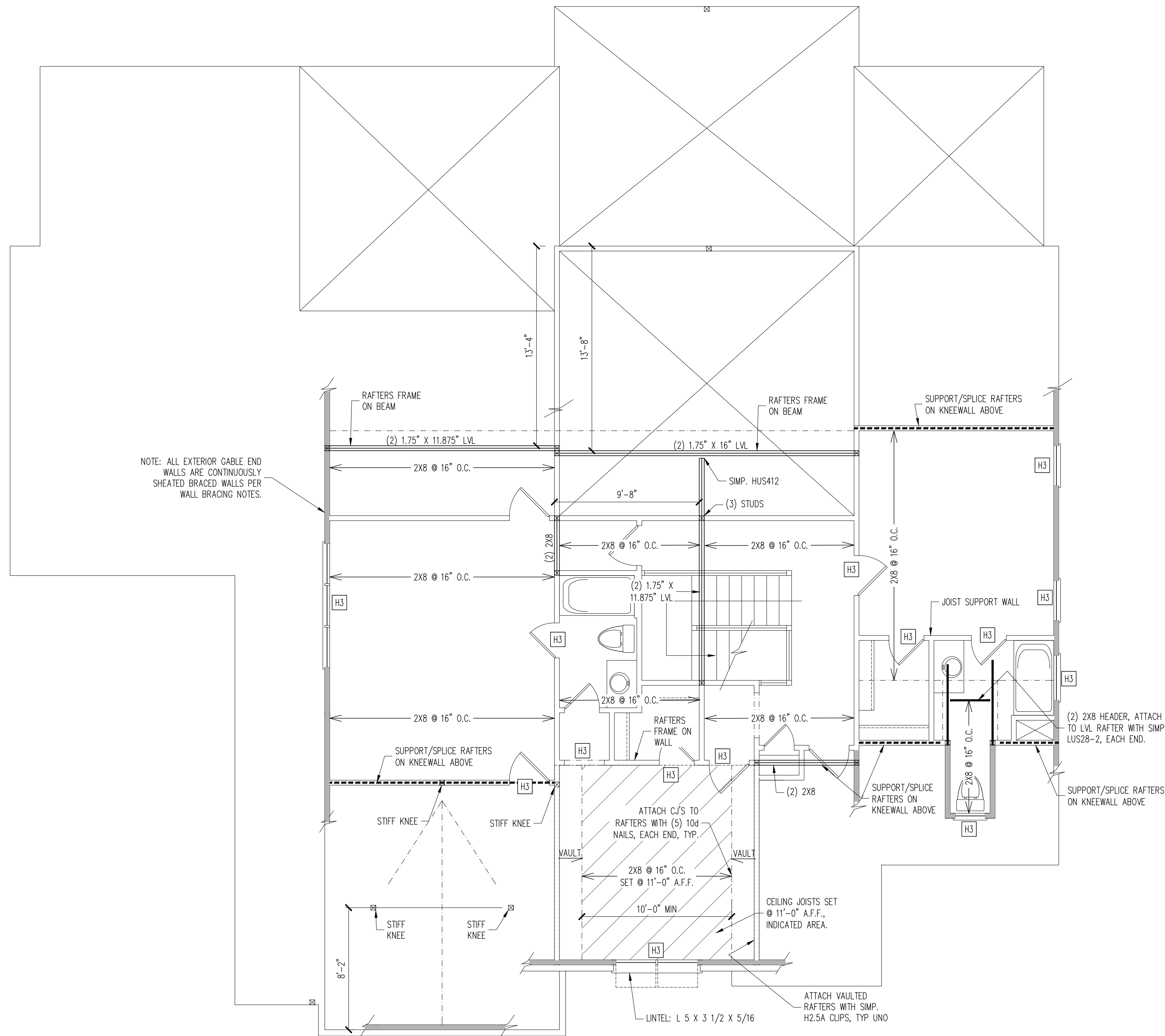
**ENG:** RJS/CMC

**DATE:** 9-9-2019

**PROJECT NO.:** 19-65-362

**SHEET NO.:** S3

3 of 7



**REQUIRED STUDS FOR BEAM SUPPORT**

REFER TO PART 14: STUD SUPPORTS FOR BEAMS OF THE CONSTRUCTION SPECIFICATIONS FOR REQUIRED NUMBER OF STUDS FOR BEAM SUPPORT, TYP UNO.

**HEADER SCHEDULE**

- H1 SINGLE 2X4 TURNED FLAT (A)
- H2 (2) 2X4'S ON SINGLE JACKS (B)
- H3 (2) 2X10'S ON SINGLE JACKS (C)
- H4 (2) 1.75" X 9.25" LVL'S ON DBL JACKS

- (A) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPENING 38" MAX.
- (B) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPNG 38" TO 74" MAX.
- (C) TYPICAL FOR ALL CONDITIONS NOT LISTED IN (A) OR (B) UNO.

NOTES:  
-HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED.

**HEADER KING STUDS**

SEE PART 17: KING STUDS OF THE CONSTRUCTION SPECIFICATIONS FOR REQUIRED NUMBER OF KING STUDS FOR EXTERIOR WALL HEADERS

**WALL BRACING**

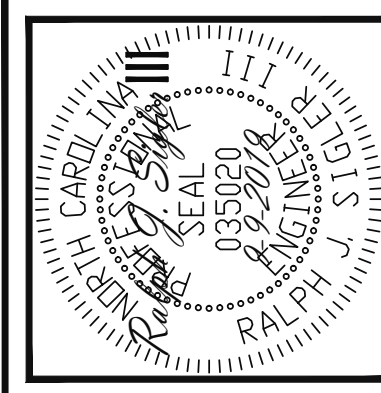
ALL EXTERIOR STUD WALLS ARE TO BE CONTINUOUSLY SHEATHED WITH 7/16 APA RATED OSB NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.

SINGLE JOIST, CONTINUOUS RIM JOIST, OR BLOCKING OF EQUAL DEPTH IS REQUIRED ABOVE AND BELOW ALL BRACED WALLS. NAIL BLOCKING ABOVE WALL TO TOP PLATE WITH 8d TOE NAILS @ 6" O.C. NAIL SOLE PLATE OF BRACED WALL TO BLOCKING BELOW WITH (3) 16d NAILS @ 16" O.C. BLOCKING AT HORIZONTAL JOINTS IN BRACED WALL LINES ONLY REQUIRED AT SHADED WALLS, UNO.

SHADED WALLS:

PROVIDED CONTINUOUS SHEATHING = 93" MIN.  
-WALL BRACING IS BY ENGINEERED DESIGN AND NOT PRESCRIPTIVE PER SECTION 602.10 OF THE 2018 NCR. CONTINUOUS SHEATHING HAS BEEN PROVIDED, ALONG WITH ALTERNATIVE METHODS TO INSURE THE MINIMUM INTENT OF SECTION 602.10 OF THE 2018 NCR HAS BEEN MET AND EXCEEDED.

-BRACED WALL PANELS SHALL BE FASTENED IN ACCORDANCE WITH TABLE 602.3(1) TO PROVIDE CONTINUOUS PANEL UPLIFT RESISTANCE AND COMPLIANCE WITH NCRBC R602.3.5 AND R802.11 UNLESS NOTED OTHERWISE ON STRUCTURAL PLANS.



**Engineering Lech**  
STRUCTURAL ENGINEERS  
License No. C-3870  
183 Wind Chime Ct, Ste 100  
Raleigh, North Carolina 27615  
Phone (919) 844-1661  
ASSOCIATES, P.A.

WAGONER HOMES
STRUCTURAL ADDENDUM
SCOPE: 7 STONECREST AT NORWOOD
LOC: 7 STONECREST AT NORWOOD

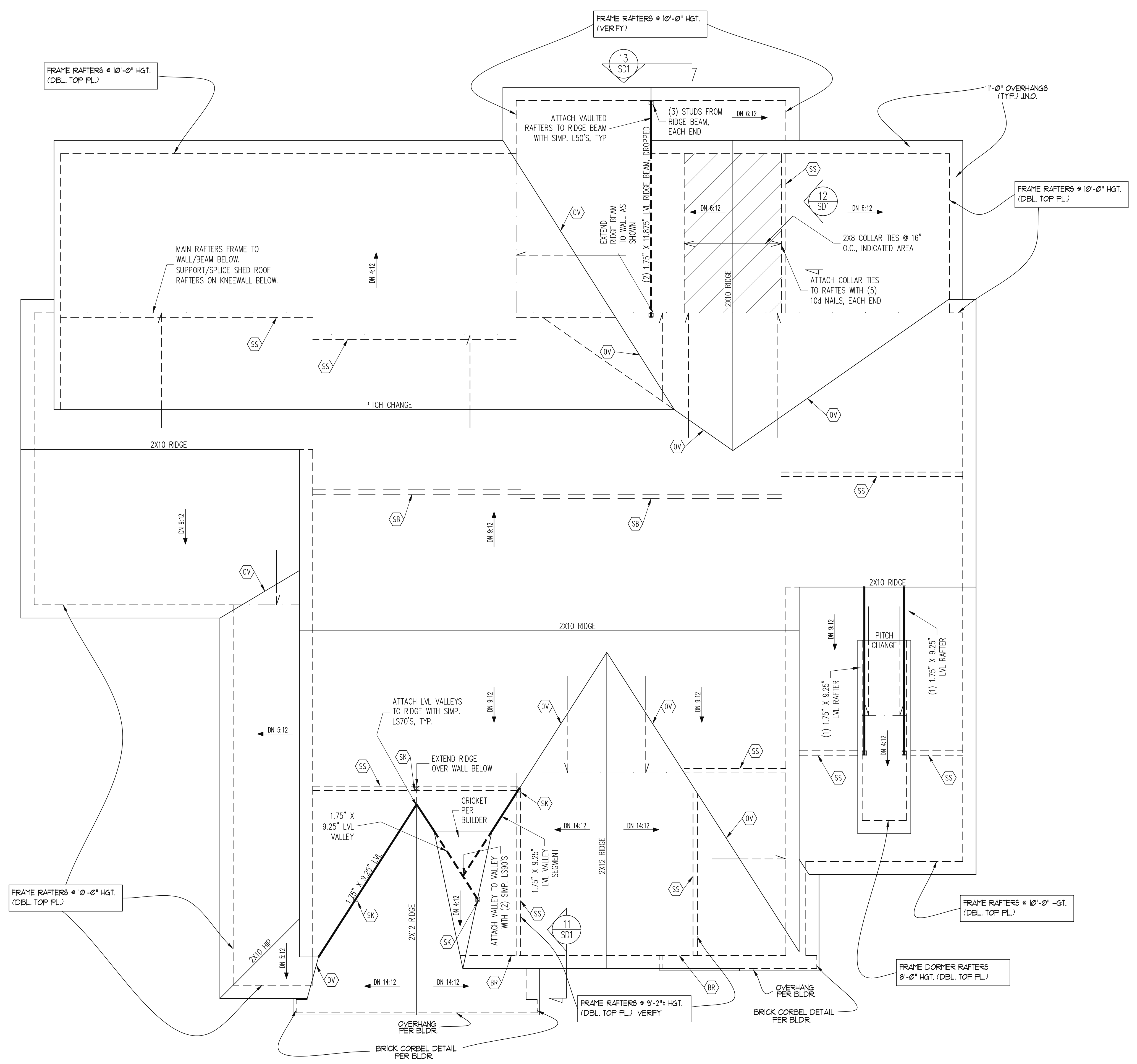
ENG: RJS/CMC  
DATE: 9-9-2019

PROJECT NO.  
19-65-362

SHEET NO.  
S4  
4 of 7

2ND FLOOR FRAMING PLAN

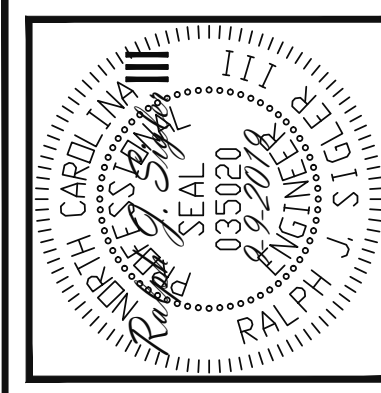
WALLS AND CEILING  
1/4" = 1'-0"



FRAMING SCHEDULE	
ROOF ONLY	
BR	SUPPORT BRICK VENEER PER SECT.R703.8 OF THE NCR, LATEST EDITION.
OV	OVERFRAME VALLEY ( 2X10 SLEEPER )
SK	DBL 2X4 STIFF KNEE
SS	SUPPORT/SPLICE RAFTERS ON KNEEWALL BELOW
SB	SUPPORT/SPLICE RAFTERS ON BEAM BELOW

**FRAMING NOTES**  
 ROOF ONLY  
 -COMMON RAFTERS 2X8 @ 16" O.C. TYP U.N.O.  
 -COLLAR TIES 2X4 EVERY 3RD SET OF RAFTERS TYP U.N.O.  
 -VERIFY ALL KNEEWALL HEIGHTS, ARCHITECTURAL OVERHANGS, AND ROOF PITCHES PRIOR TO CONSTRUCTION

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



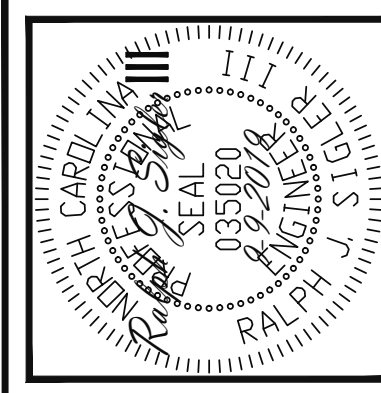
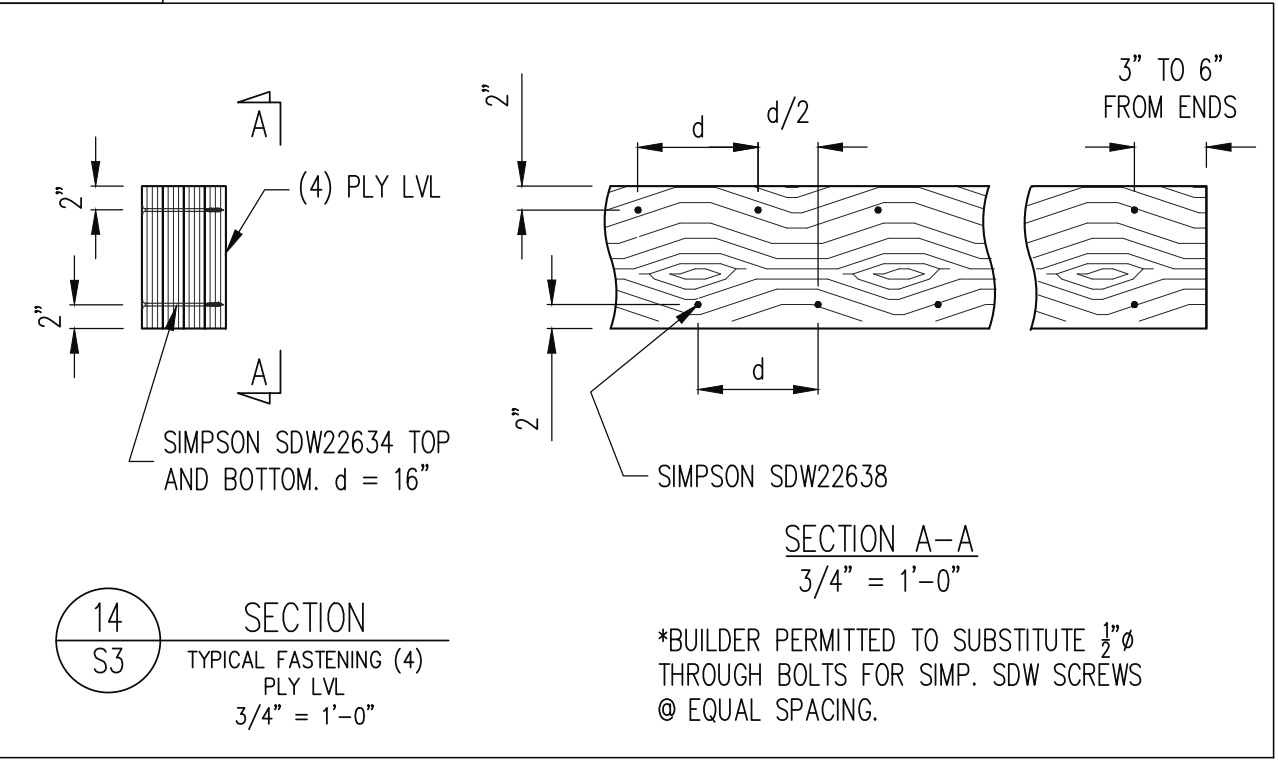
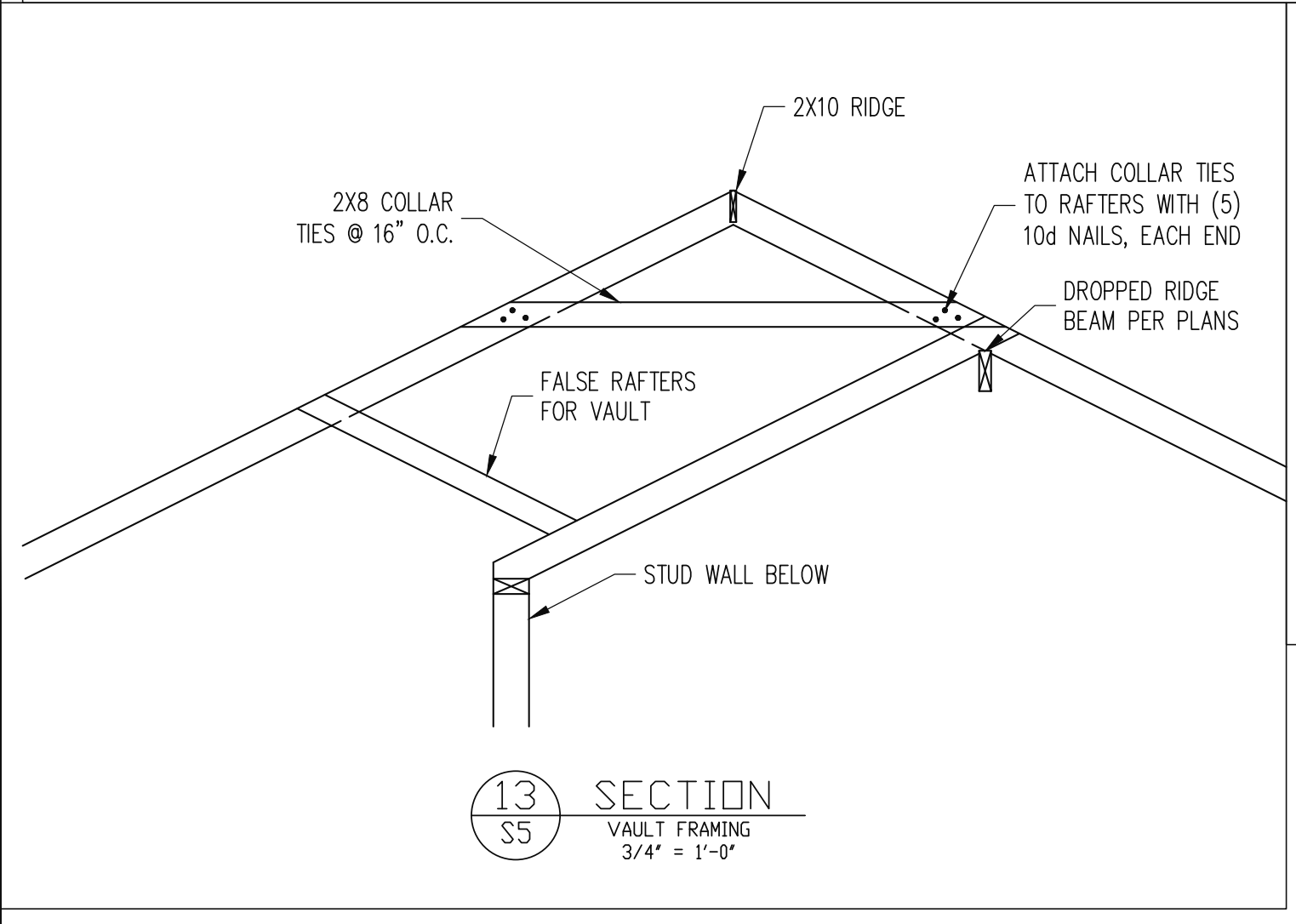
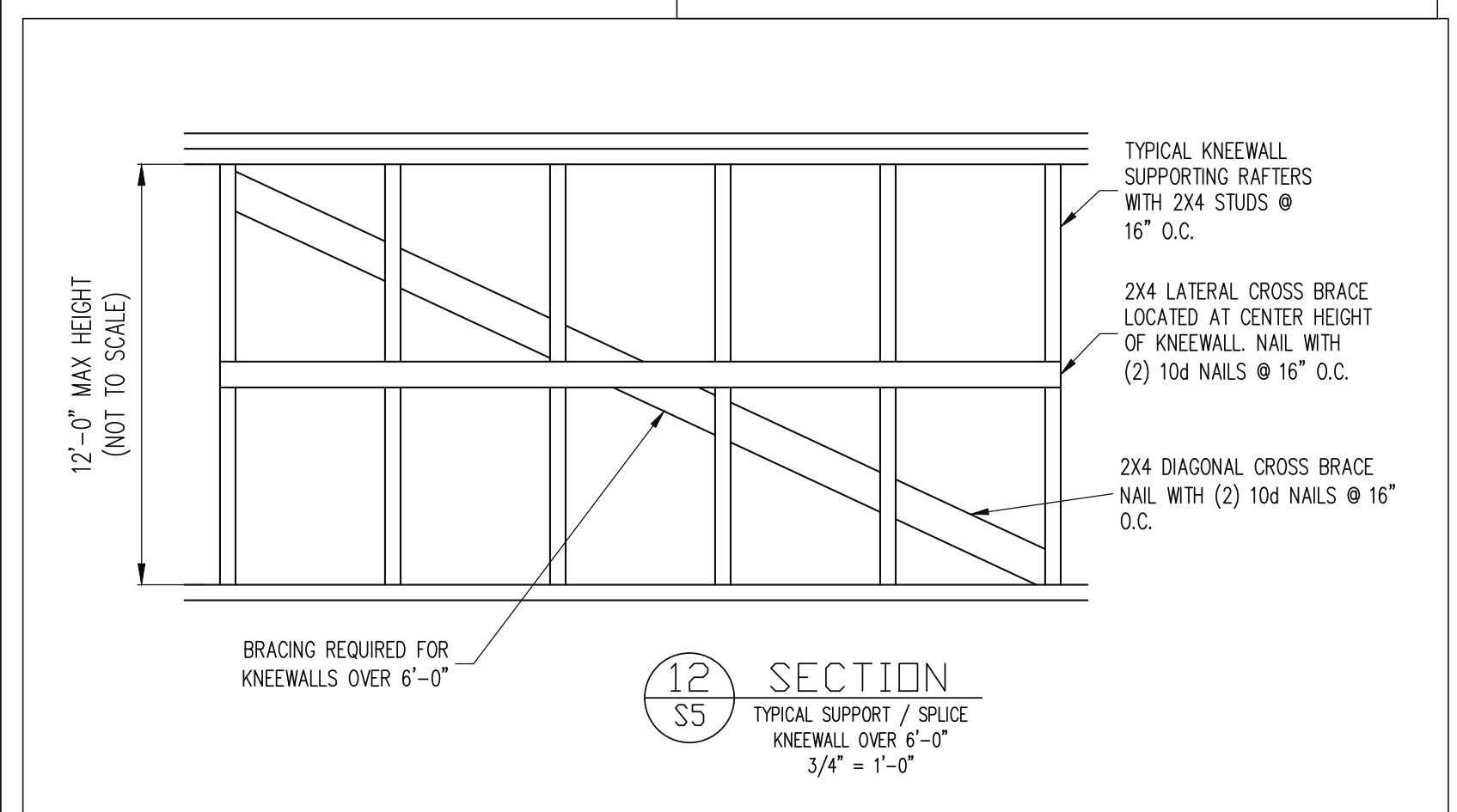
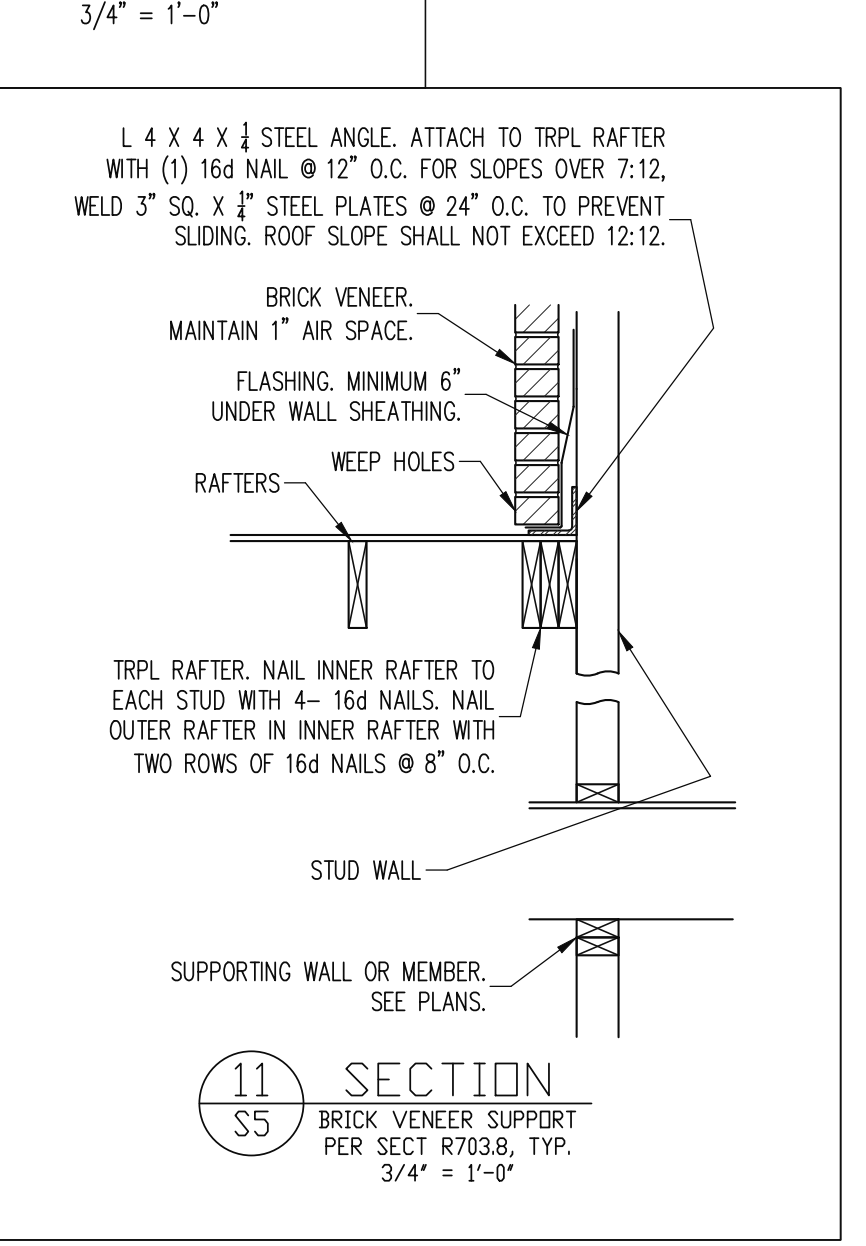
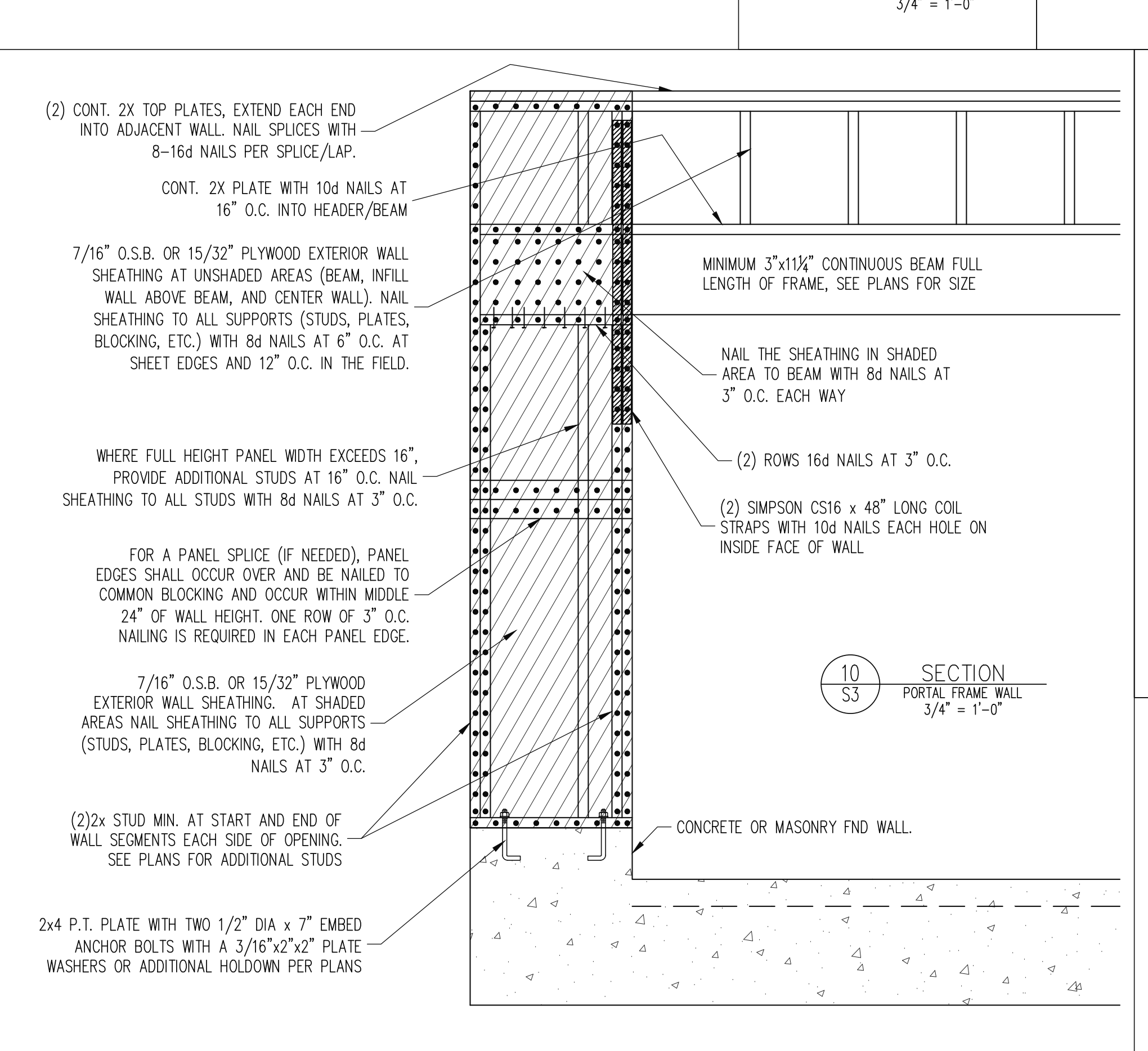
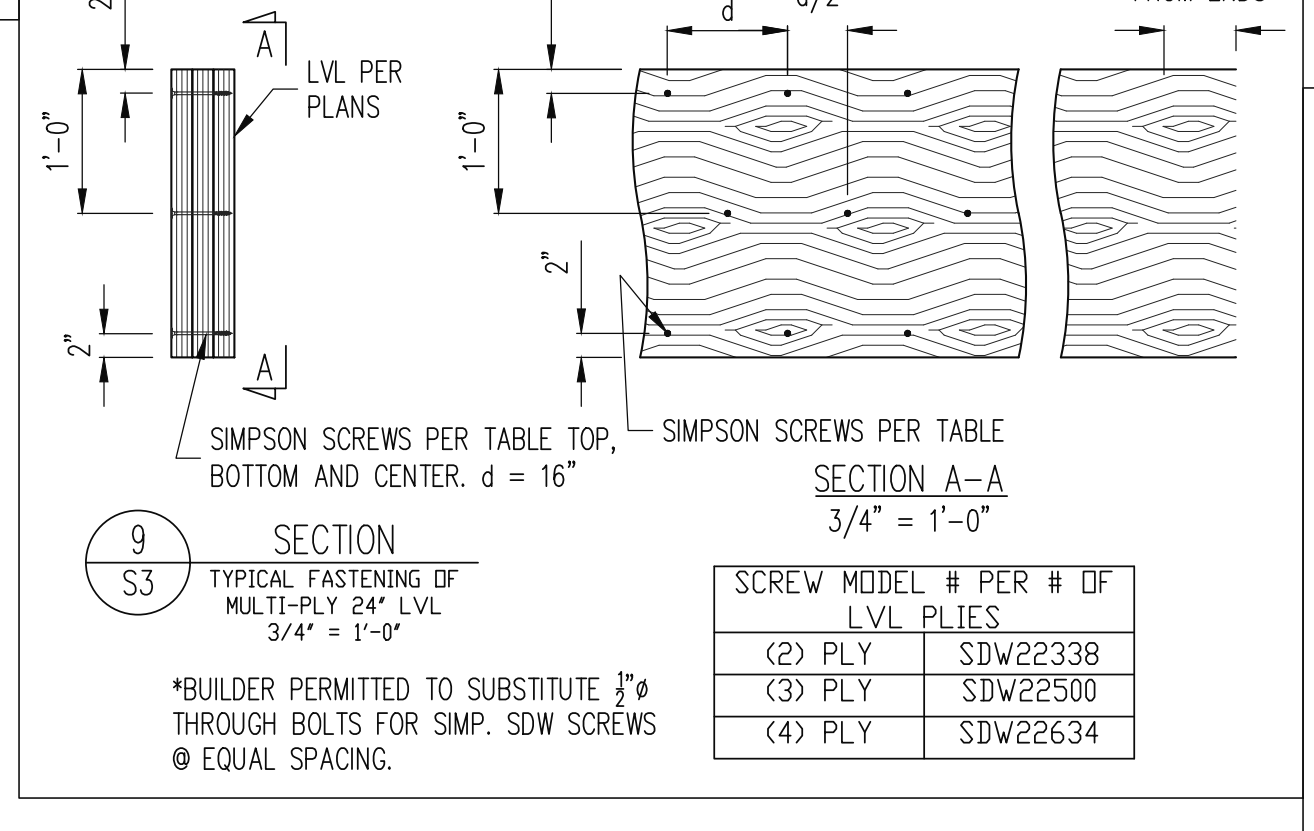
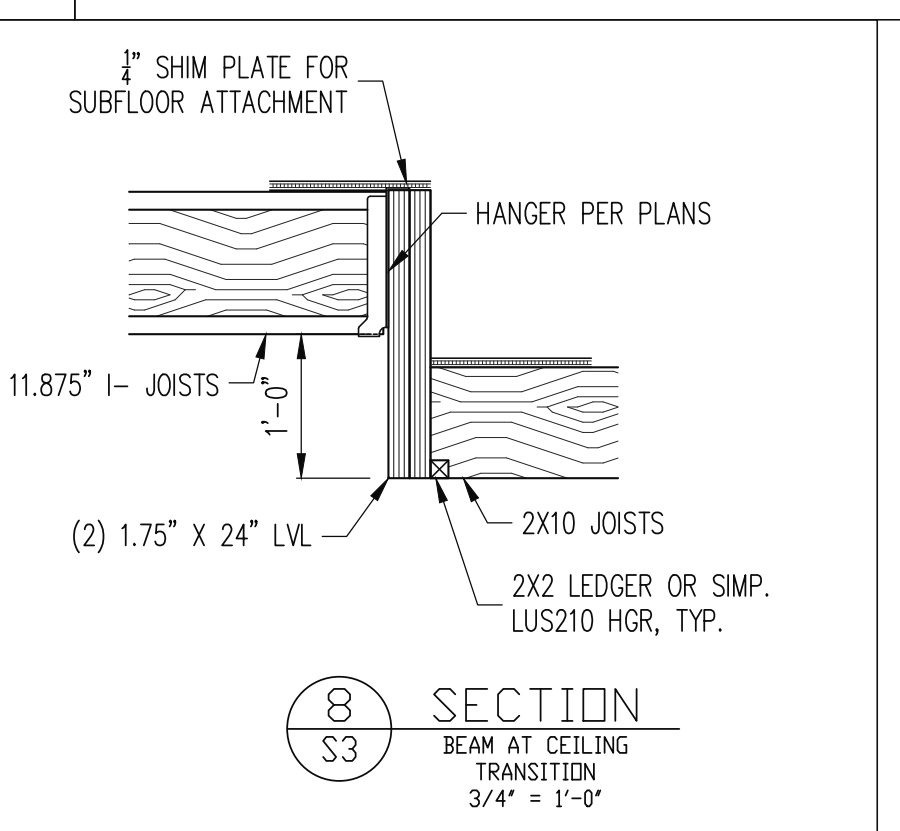
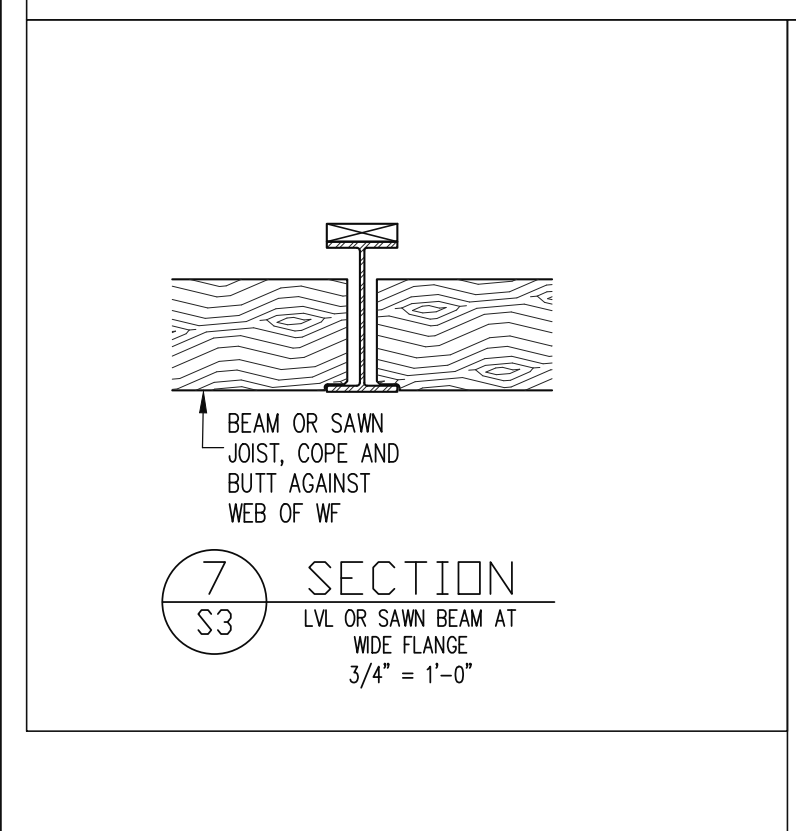
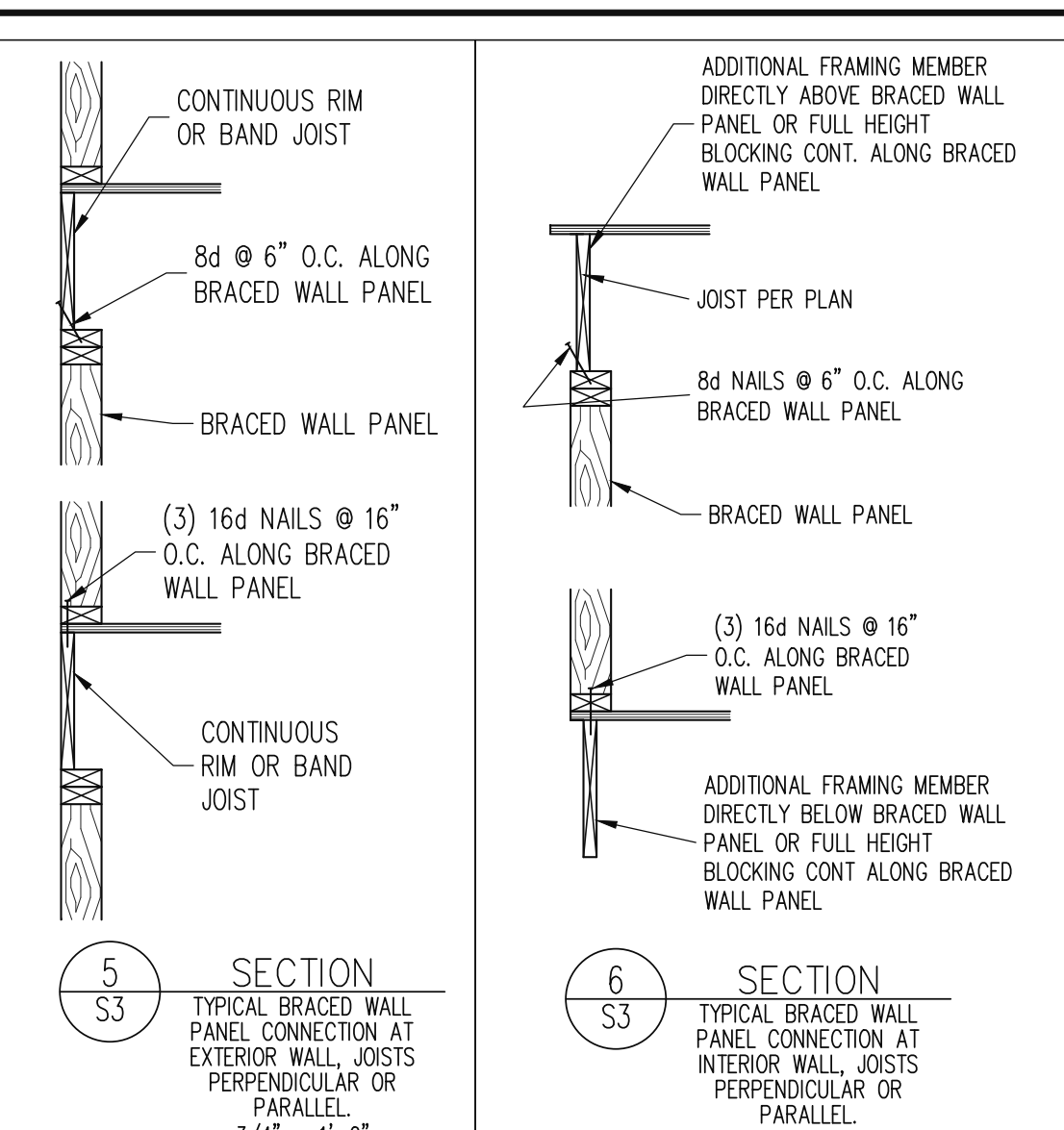
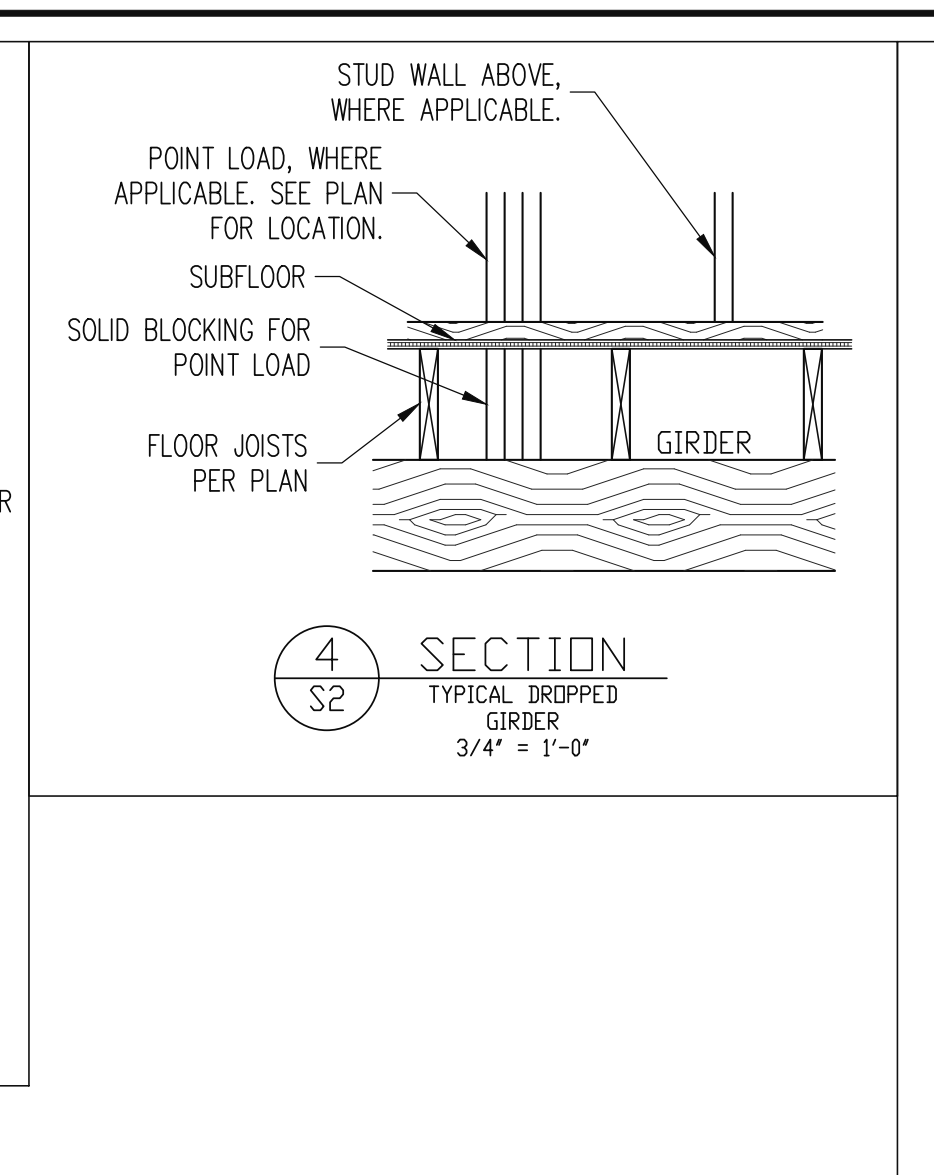
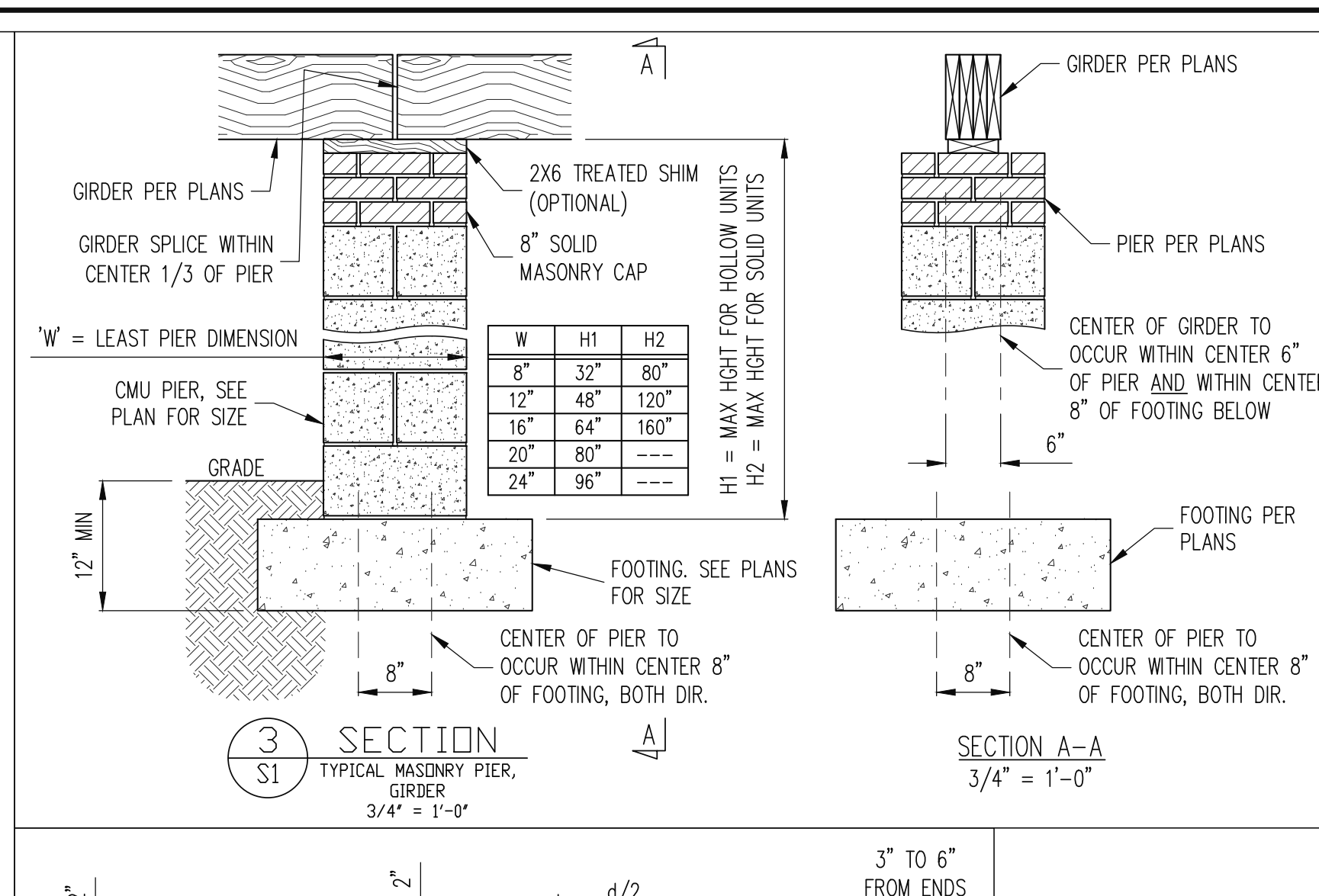
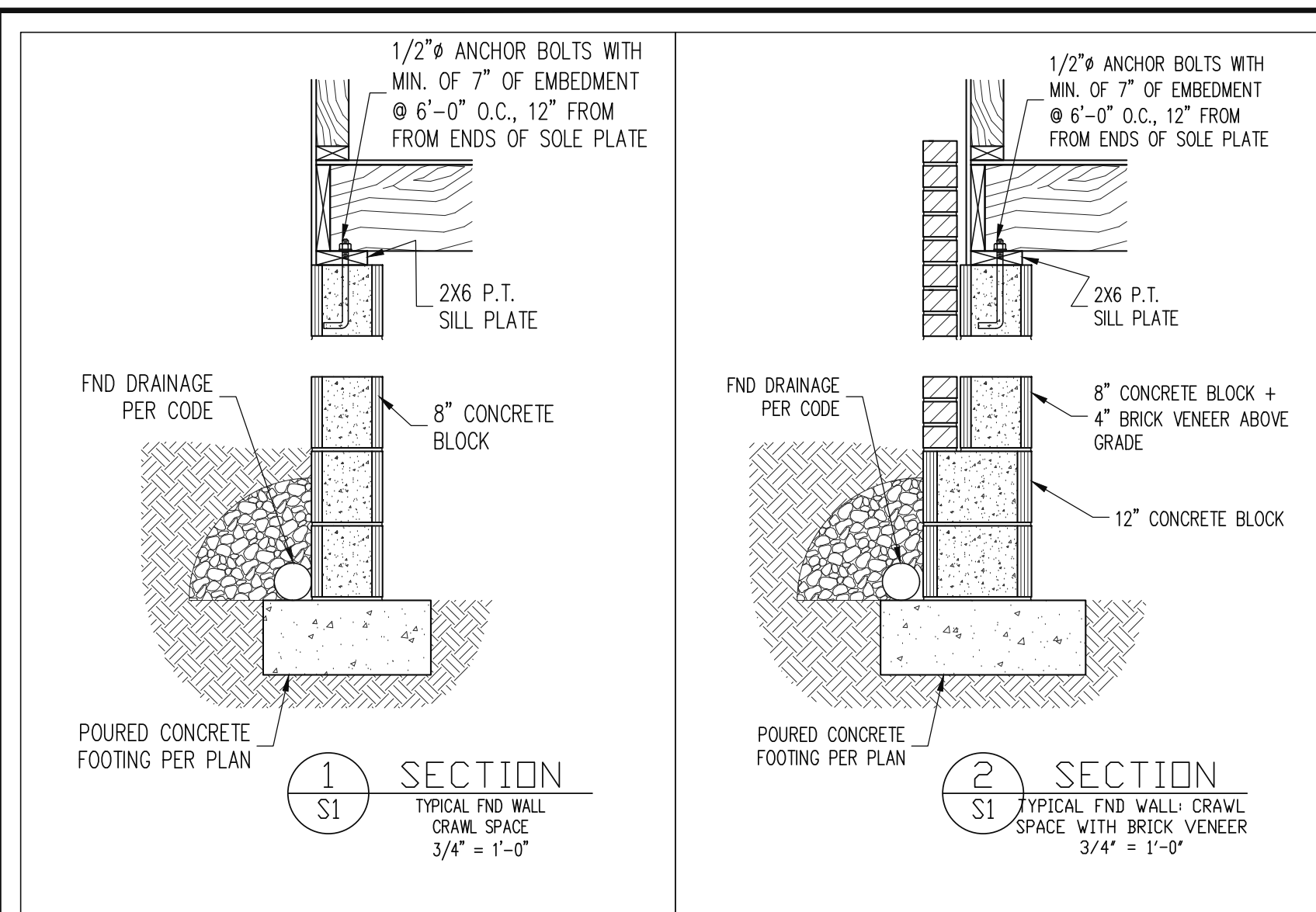
**Engineering Lech**  
 ASSOCIATES, P.A.  
 STRUCTURAL ENGINEERS  
 License No. C-3870  
 183 Wind Chime Ct, Ste 100  
 Raleigh, North Carolina 27615  
 Phone (919) 844-1661

WAGONER HOMES
STRUCTURAL ADDENDUM
SCOPE: 7 STONECREST AT NORWOOD
LOC: 7 STONECREST AT NORWOOD

ENG: RJS/CMC  
 DATE: 9-9-2019

PROJECT NO.  
 19-65-362

SHEET NO.  
 S5  
 5 of 7



**Engineering Lech**  
 STRUCTURAL ENGINEERS  
 License No. C-3870  
 183 Wind Chime Ct, Ste 100  
 Raleigh, North Carolina 27615  
 Phone (919) 844-1661  
 ASSOCIATES, P.A.

WAGONER HOMES  
 STRUCTURAL ADDENDUM  
 SCOPE:  
 LOC: 7 STONECREST AT NORWOOD

ENG: RJS/CMC  
 DATE: 9-9-2019

PROJECT NO.  
 19-65-362

SHEET NO.  
 SD1  
 6 of 7

## CONSTRUCTION SPECIFICATIONS

- PART 1: GENERAL**
- 1.01 CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
- 1.02 DIMENSIONS SHOWN SHALL GOVERN OVER SCALE ON THESE DRAWINGS.
- 1.05 METHODS, PROCEDURES AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR, WHO SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND INSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.

### PART 2: DESIGN LOADS

DESIGN LOADS SHALL CONFORM WITH THE TABLE BELOW:	LIVE LOAD (PSF)	DEAD LOAD (PSF)
BALCONIES, DECKS, ATTICS WITH FIXED STAIR ACCESS, DWELLING UNITS INCLUDING ATTICS WITH FIXED STAIR ACCESS, STAIRS, FIRE ESCAPES	40	10
GARAGES (PASSENGER CARS ONLY)	50	---
ATTICS (NO STORAGE, LESS THAN 5' HEADROOM)	10	10
ATTICS (WITH STORAGE)	20	10
ROOF	20	10 (15 FOR VAULTS)

- NOTES: - INDIVIDUAL STAIR TREADS ARE TO BE DESIGNED FOR THE UNIFORMLY DISTRIBUTED LIVE LOAD OF 40 PSF OR A 300 LB. CONCENTRATED LOAD ACTING OVER AN AREA OF 4 SQ. WHICHEVER PRODUCES THE GREATER STRESS.  
- BUILDER TO VERIFY DEAD LOAD DOES NOT EXCEED 10 PSF WHEN HEAVY FLOOR OR ROOF FINISHES SUCH AS TILE OR SLATE ARE UTILIZED. NOTIFY ENGINEERING UNDER THESE CONDITIONS.
- 2.02 INTERIOR WALLS: 5 PSF LATERAL.
- 2.03 BASIC WIND DESIGN VELOCITY OF 120 MPH.
- 2.04 SOIL BEARING CAPACITY 2000 PSF (PRESUMPTIVE).

### PART 3: STRUCTURAL STEEL

- 3.01 WIDE FLANGE BEAMS AND TEE SECTIONS SHALL CONFORM TO ASTM A992 MINIMUM GRADE.
- 3.02 SQUARE AND RECTANGULAR TUBING SHALL CONFORM TO ASTM A500 GRADE B MINIMUM GRADE.
- 3.03 STEEL PIPE SHALL CONFORM TO ASTM A53 GRADE B, TYPE S, MINIMUM GRADE
- 3.04 ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 MINIMUM GRADE
- 3.05 STRUCTURAL STEEL CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.

### PART 4: WELDING

- 4.01 WELDING ELECTRODES SHALL BE E70XX AND ALL WELDING SHALL BE PERFORMED BY AN AWS CERTIFIED WELDER

### PART 5: CONCRETE AND SLABS ON GRADE

- 5.01 CAST IN PLACE CONCRETE SHALL BE OF NORMAL WEIGHT, 8% AIR ENTRAINMENT, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS TYP. UNO. ALL CONCRETE, INCLUDING CONCRETE FOR FOOTINGS, IS TO BE CAST IN PLACE, TYP. UNO.
- 5.02 REINFORCED CAST IN PLACE CONCRETE SHALL BE PROPORTIONED, MIXED AND PLACED IN ACCORDANCE WITH THE SPECIFICATIONS OF ACI 308, LATEST EDITION.
- 5.03 SLABS ON GRADE, IF ANY, SHALL CONTAIN SYNTHETIC POLYPROPYLENE FIBER-REINFORCED MICRO FIBERS, FIBER LENGTH 1 1/2", DOSAGE RATE 1 1/2 LBS/SQ. YD. SLAB TO BE PLACED ON A 6 MIL VAPOR BARRIER ON 2" MIN GRANULAR FILL ON SOIL WITH 90% MIN STANDARD PROCTOR DENSITY. VAPOR BARRIER MAY BE OMITTED FOR SLABS NOT

- IN ENCLOSED AREAS
- PART 6: REBAR AND WIRE REINFORCEMENT**
- 6.01 REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615 GRADE 60 TYP UNO
- 6.02 LAP SPICES SHALL BE CLASS B AS DEFINED BY ACI 318, TYP UNO
- 6.03 WIRE REINFORCEMENT SHALL BE 9 GA AND SHALL CONFORM TO ASTM A1064.

### PART 7: MASONRY

- 7.01 CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 AND C55, NORMAL WEIGHT,  $f_m = 1,500$  PSI MIN
- 7.02 CLAY MASONRY UNITS SHALL CONFORM TO ASTM C62-17 GRADE SW
- 7.03 MORTAR SHALL BE TYPE S. MORTAR AND GROUT SHALL CONFORM TO ASTM C476, MIN COMPRESSIVE STRENGTH OF 2000 PSI.
- 7.04 MASONRY CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS OF ACI 530
- 7.05 LADDER WIRE REINFORCEMENT SHALL CONFORM TO ASTM A951, 6" MIN LAPS FOR CONTINUOUS WALL APPLICATIONS

### PART 8: BOLTS AND LAG SCREWS

- 8.01 BOLTS SHALL CONFORM TO ASTM A307 MINIMUM GRADE TYP UNO. INSTALL STANDARD STEEL WASHERS (ASTM F844-076) FOR THE NUT / BOLT HEAD WHEN BOLTING WOOD MEMBERS
- 8.02 LAG SCREWS SHALL CONFORM TO ANS/ASME STANDARD B18.2.1-1991. PILOT HOLES SHALL BE USED FOR LAG SCREW INSTALLATION AND SHALL BE BORED ACCORDING TO NDS SPECIFICATIONS. INSTALL STANDARD STEEL WASHERS (ASTM F844-076) FOR SCREW HEAD

### PART 9: DRIVEN FASTENERS

- 9.01 NAILS, SPICES AND STAPLES SHALL CONFORM TO ASTM F 1667- 05. NAILS ARE TO BE COMMON WIRE OR BOX

### PART 10: DIMENSIONAL LUMBER

- 10.01 SOLID SAWN LUMBER FRAMING DESIGN IS BASED ON NO. 2 SPRUCE PINE FIR OR STP #2 FOR JOISTS, RAFTERS, ORDERS, BEAMS, STUDS, ETC.

### PART 11: ENGINEERED LUMBER

- 11.01 LVL, OR PSD, MINIMUM ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS:  
 $F_t = 1.8 \times 1008$  PSI,  $F_c = 2600$  PSI,  $F_v = 285$  PSI,  $F_e = 750$  PSI  
LS, MINIMUM ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS:  
 $E = 1.3 \times 1008$  PSI,  $F_b = 1700$  PSI,  $F_v = 400$  PSI,  $F_c = 680$  PSI

### PART 12: PRESSURE TREATED LUMBER

- 12.01 LUMBER IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE PRESSURE TREATED IN ACCORDANCE WITH ANPA STANDARD C-15. ALL OTHER EXPOSED LUMBER SHALL BE TREATED IN ACCORDANCE WITH ANPA STANDARD C-2 OR BY ANY METHOD GIVING EQUAL PROTECTION. THE BUILDING CODE OFFICE MAY ALSO APPROVE A NATURAL DECAY RESISTANT WOOD PER SECTION 19-6(A)

### PART 13: STEEL FLUTCH PLATE BEAMS

- 13.01 FLUTCH PLATE BEAMS SHALL CONSIST OF A CONTINUOUS STEEL PLATE BOLTED BETWEEN TWO PIECES OF CONTINUOUS LUMBER AS SIZED ON THE PLANS. BOLT PIECES TOGETHER USING 1/2" BOLTS SPACED AT 24" O.C., STAGGERED TOP TO BOTTOM OF THE BEAM. MAINTAIN A 2" EDGE DISTANCE. PLACE TWO BOLTS, ONE ABOVE THE OTHER, 6" ± 2" FROM EACH END OF THE BEAM.

### PART 14: STUD SUPPORTS FOR BEAMS

- 14.01 STEEL, ENGINEERED LUMBER, AND FLUTCH PLATE BEAMS BEARING ON A STUD WALL SHALL BEAR AS FOLLOWS:  
1-WHEN THE BEAM IS PERPENDICULAR TO, OR SKEWED RELATIVE TO THE WALL, THE BEAM SHALL BEAR FULL WIDTH ON THE SUPPORTING WALL INDICATED AND SHALL BE SUPPORTED

- BY A MINIMUM OF THREE GANGED STUDS, OR A GANGED STUD COLUMN WITH A NUMBER OF STUDS SUCH THAT THE STUD COLUMN IS AT LEAST AS WIDE AS THE TRUE WIDTH OF THE BEAM BEING SUPPORTED, WHICHEVER IS GREATER, TYP UNO. FOR THE SKEWED CONDITION PARTICULAR CARE SHALL BE TAKEN TO ENSURE STUD COLUMN IS CENTERED ON THE BEAM
- 2-BEAMS BEARING ONTO THE END OF A STUD WALL PARALLEL TO THE BEAM SHALL BEAR A MINIMUM OF 4 1/2" ONTO THE WALL AND BE SUPPORTED BY A TRIP. STUD GANGED COLUMN TYP UNO.

### 14.02 DIMENSIONAL LUMBER BEAMS BEARING ON A STUD WALL SHALL BEAR AS FOLLOWS:

- 1-WHEN THE BEAM IS PERPENDICULAR TO, OR SKEWED RELATIVE TO THE WALL, THE BEAM SHALL BEAR FULL WIDTH ON THE SUPPORTING WALL INDICATED (LESS 1 1/2" TO ALLOW FOR A CONTINUOUS RIM JOIST WHERE APPLICABLE) AND SHALL BE SUPPORTED BY A GANGED STUD COLUMN THE SAME WIDTH AS THE BEAM TYP UNO. (E.G., A TRIPLE 2X10 IS TO BE SUPPORTED BY (3) STUDS). FOR THE SKEWED CONDITION PARTICULAR CARE SHALL BE TAKEN TO ENSURE STUD COLUMN IS CENTERED ON THE BEAM
- 2-BEAMS BEARING ONTO THE END OF A STUD WALL PARALLEL TO THE BEAM SHALL BEAR A MINIMUM OF 3" ONTO THE WALL AND BE SUPPORTED BY A DBL. STUD GANGED COLUMN TYP UNO.

### 14.03 EXTRA JOISTS BEARING ON A STUD WALL PERPENDICULAR TO OR SKEWED RELATIVE TO THE BEAM SHALL BE SUPPORTED BY ONE ADDITIONAL STUD.

- 14.04 STUDS THAT ARE GANGED TO FORM A COLUMN SHALL HAVE ADJACENT STUDS WITHIN THE COLUMN NAILED TOGETHER WITH ONE ROW OF 10d NAILS AT 8" O.C. (TWO ROWS OF 10d NAILS @ 8" O.C., 3" APART, FOR 2X8 OR 2X10 STUDS) ALL COLUMN SHALL BE CONTINUOUS DOWN TO THE FOUNDATION OR OTHER PROPERLY DESIGNED STRUCTURAL ELEMENT SUCH AS A BEAM. COLUMNS TRANSFERRING LOADS THROUGH FLOOR LEVELS SHALL BE SOLIDLY BLOCKED FOR THE FULL WIDTH OF THE STUD COLUMN WITHIN THE CAVITY FORMED BY THE FLOOR JOISTS.

### PART 15: NAILING OF MULTI-PLY WOOD BEAMS

- 15.01 SOLID SAWN LUMBER JOISTS THAT ARE GANGED TO FORM A BEAM SHALL HAVE ADJACENT MEMBERS IN THE BEAM NAILED TOGETHER WITH THREE ROWS OF 10d NAILS @ 16" O.C. FOR 2X10 OR LARGER, TWO ROWS OF 10d NAILS @ 16" O.C. FOR 2X8, ONE ROW OF 10d NAILS @ 16" O.C. FOR 2X6 OR SMALLER. STAGGER ROWS 5" MIN.

### 15.02 LVL MEMBERS THAT ARE GANGED TO FORM A BEAM SHALL HAVE ADJACENT MEMBERS IN THE BEAM FASTENED TOGETHER PER MANUFACTURERS RECOMMENDATIONS, TYP UNO

### PART 16: WALL FRAMING

- 16.01 STUD WALLS SHALL CONSIST OF 2X4 STUDS SPACED AT 16" O.C. UNO. STUDS SHALL BE CONTINUOUS FROM SOLE PLATE AT FLOOR TO DOUBLE TOP PLATE AT THE CEILING OR ROOF. NO INTERMEDIATE BANDS OR PLATES SHALL CAUSE DISCONTINUITIES IN A STUD WALL EXCEPT AS REQUIRED FOR DOOR OR WINDOW OPENINGS. THE KING STUDS FOR SUCH OPENINGS SHALL BE CONTINUOUS, TYP UNO

### PART 17: KING STUDS

- 17.01 KING STUDS FOR OPENINGS IN EXTERIOR WALLS SHALL BE AS FOLLOWS:
- | MAX OPENING WIDTH | 5'-0" | 9'-0" | 13'-0" | 17'-0" | 21'-0" |
|-------------------|-------|-------|--------|--------|--------|
| STUD SIZE         | 2x4   | 1 2   | 3 4    | 4 5    | 2      |
| 2x6               | 1     | 1     | 2      | 2      | 2      |
| 2x8               | 1     | 1     | 1      | 1      | 2      |

### PART 18: SUBSTITUTIONS

- 18.01 MATERIAL OR MEMBER SIZE SUBSTITUTIONS OR PLAN DEVIATIONS REQUIRE THE WRITTEN AUTHORIZATION OF THE DESIGNERS. UNAUTHORIZED DEVIATIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

### PART 19: OWNERSHIP OF STRUCTURAL DESIGN

- 19.01 THE STRUCTURAL DESIGN OF THIS PLAN IS THE PROPERTY OF ENGINEERING TECH ASSOCIATES (ETA). THESE PLANS ARE FOR THE ONE TIME USE AT THE LOCATION INDICATED AND FOR THE CLIENT LISTED. ETA ASSUMES NO LIABILITY FOR THESE PLANS IF THEY ARE REPRODUCED, IN WHOLE OR IN PART, FOR CONSTRUCTION AT ANY OTHER LOCATION WITHOUT WRITTEN PERMISSION FROM ETA.

## NOTES

- THE BUILDER IS RESPONSIBLE FOR REVIEWING PLANS PRIOR TO CONSTRUCTION. THE BUILDER SHALL IMMEDIATELY CONTACT THE ENGINEER OF RECORD (EOR) BEFORE PROCEEDING IF THE FOLLOWING CONDITIONS ARE NOTED BEFORE OR DURING CONSTRUCTION:  
1) THE WORKING PLANS DO NOT BEAR THE SEAL OF THE EOR.  
2) THE PLANS CONTAIN DISCREPANT OR INCOMPLETE INFORMATION.

- ANY ERRORS DUE TO A FAILURE TO FOLLOW THE ABOVE PROCEDURES SHALL NOT BE THE RESPONSIBILITY OF THE EOR. FURTHERMORE, IT IS THE RESPONSIBILITY OF THE BUILDER TO ENSURE THAT ANY REVISIONS ISSUED BY THE EOR ARE PROMPTLY DISTRIBUTED TO THE SUBCONTRACTORS.

- THE EOR DOES NOT PERFORM PENETRATION OR VENTING CALCULATIONS OR ANY OTHER CALCULATIONS THAT ARE NOT DIRECTLY RELATED TO STRUCTURAL ENGINEERING.

- ROOF AND FLOOR TRUSSES TO BE DESIGNED BY AN ENGINEER REGISTERED BY THE STATE. FINAL TRUSS DRAWING SHOULD BE SUBMITTED TO THE EOR FOR REVIEW.

## ABBREVIATIONS

ABV	ABOVE	FND	FOUNDATION	TJ	TRIPLE JOIST
B	BOTH	FTC	FOOTING	TYP	TYPICAL
B/C	BOTH ENDS	HDC	HOT DIPPED GALVANIZED	TRP	TRIPLE STUD POCKET
B/W	BETWEEN	HGR	HANGER	UNO	UNLESS NOTED OTHERWISE
CP	CAST IN PLACE	LW	LAMINATED VENEER LUMBER	XJ	EXTRA JOIST
CONC	CONCRETE	NTS	NOT TO SCALE		
CS	CONTINUOUS SHEATHING	O.C.	ON CENTER		
DIA	DIAMETER	PS	PARALLEL STRAND LUMBER		
DI	DOUBLE	PT	PRESSURE TREATED		
DBL	DOUBLE	QJ	QUAD JOIST		
DJ	DOUBLE JOIST	SP	SP STUD POCKET		
DSP	DBL STUD POCKET	SQ	SQUARE		
EQ	EQUAL				
EA	EACH				
FLG	FLANGE				
FL PL	FLUTCH PLATE				
FLR	FLOOR				

## ALLOWABLE I-JOIST SUBSTITUTION

- NOTE: MAINTAIN JOIST DEPTH, DIRECTION, AND SPACING SPECIFIED ON PLANS.

MANUFACTURER	DEPTH	SERIES	SIMPSON FGR	SIMPSON TOP FLANGES HGR
BLUELINK	14"	BLI 40	IUS2.56/14	ITS2.56/14
BOISE CASCADE	14"	BO 5000s	IUS2.06/14	ITS2.06/14
BOISE CASCADE	14"	BO 6000s	IUS2.37/14	ITS2.37/14
LP CORP	14"	LPI 20+	IUS2.56/14	ITS2.56/14
NORDIC	14"	N 40X	IUS2.56/14	ITS2.56/14
ROSEBURG	14"	RPH 40s	IUS2.56/14	ITS2.56/14
WEYERHAEUSER	14"	EA 210	IUS2.06/14	ITS2.06/14
WEYERHAEUSER	14"	EE-20	IUS2.37/14	ITS2.37/14
BLUELINK	14"	BLI 80	IUS3.56/14	ITS3.56/14
LP CORP	14"	LPI 42+	IUS3.56/14	ITS3.56/14
NORDIC	14"	N-80	IUS3.56/14	ITS3.56/14
ROSEBURG	14"	RPH 80s	IUS3.56/14	ITS3.56/14
WEYERHAEUSER	14"	LJ 360	IUS2.37/14	ITS2.37/14
WEYERHAEUSER	14"	EE-20	IUS3.56/14	ITS3.56/14

- JOISTS NOT LISTED IN THE ABOVE TABLE MAY BE USED PROVIDED THEY MEET OR EXCEED THE PROPERTIES OF THOSE LISTED. SUBSTITUTE USP BRAND HANGERS WITH EQUIVALENT VALUES AS DESIRED.

## DECK SPECIFICATIONS

1. A DECK IS AN EXPOSED EXTERIOR WOOD FLOOR STRUCTURE WHICH MAY BE ATTACHED TO A STRUCTURE OR BE FREE STANDING. ROOFED PORCHES, OPEN OR SKREENED IN, MAY BE CONSTRUCTED USING THESE PROVISIONS.
2. SUPPORT POSTS SHALL BE SUPPORTED BY A FOOTING.
3. WHEN ATTACHED TO A STRUCTURE, THE STRUCTURE TO WHICH ATTACHED SHALL HAVE A TREATED WOOD BAND FOR THE LENGTH OF THE DECK, OR CORROSION RESISTANT FLASHING SHALL BE USED TO PREVENT MOISTURE FROM COMING IN CONTACT WITH THE UNTREATED FRAMING OF THE STRUCTURE. THE DECK BAND AND THE STRUCTURE BAND SHALL BE CONSTRUCTED IN CONTACT WITH EACH OTHER EXCEPT AT BRICK VENEER AND WHERE FLYWOOD SHEATHING IS REQUIRED AND PROPERLY FLASHED. SOING SHALL NOT BE INSTALLED BETWEEN THE STRUCTURE AND THE DECK BAND. IF ATTACHED TO A BRICK STRUCTURE, NEITHER FLASHING NOR A TREATED BAND FOR THE BRICK STRUCTURE IS REQUIRED. IN ADDITION, THE TREATED DECK BAND SHALL BE CONSTRUCTED IN CONTACT WITH THE BRICK.
4. WHEN THE DECK IS SUPPORTED AT THE STRUCTURE BY ATTACHING THE DECK TO THE STRUCTURE, THE FOLLOWING ATTACHMENT SCHEDULES SHALL APPLY FOR ATTACHING THE DECK BAND TO THE STRUCTURE:

### A. BRICK VENEER STRUCTURES

REQUIRED FASTENERS	JOIST LENGTH	
	UP TO 8' MAX.	UP TO 16' MAX.
ONE - 5/8" BOLT @ 42" O.C. AND (2) ROWS OF 12d NAILS @ 8" O.C. OR TWO ROWS OF SIMPSON SDWS2400B @ d = 32" O.C. STAGGERED	ONE - 5/8" BOLT @ 20" O.C. AND (3) ROWS OF 12d NAILS @ 6" O.C. OR TWO ROWS OF SIMPSON SDWS2400B @ d = 16" O.C. STAGGERED	

### B. BRICK VENEER STRUCTURES

REQUIRED FASTENERS	JOIST LENGTH	
	UP TO 8' MAX.	UP TO 16' MAX.
ONE - 5/8" BOLT @ 28" O.C.	ONE - 5/8" BOLT @ 16" O.C.	

### 5. IF THE DECK BAND IS SUPPORTED BY A 1/2" MINIMUM MASONRY LEDGE ALONG THE FOUNDATION WALL, 5/8" BOLTS SPACED @ 48" O.C. MAY BE USED FOR SUPPORT.

6. OTHER MEANS OF SUPPORT, SUCH AS JOIST HANGERS, MAY BE USED TO CONNECT DECK JOISTS TO A TREATED STRUCTURE BAND
7. ORDERS SHALL BEAR DIRECTLY ON POSTS OR BE CONNECTED TO THE SIDES OF POSTS WITH 2 - 5/8" BOLTS
8. FLOOR DECKING SHALL BE NO. 2 GRADE TREATED SOUTHERN PINE OR EQUIVALENT. THE MINIMUM FLOOR DECKING THICKNESS SHALL BE AS FOLLOWS:

JOIST SPAN	DECKING
12" O.C.	1" S4S
16" O.C.	1" T&G
24" O.C.	1 1/4" S4S
32" O.C.	2" S4S

### 9. MAXIMUM HEIGHT OF DECK SUPPORT POSTS IS AS FOLLOWS:

POST SIZE	MAX POST HEIGHT
4X4	8'
6X6	20'
ENGINEERED	20' +

- NOTES: 1) THIS TABLE IS BASED ON NO. 2 TREATED SOUTHERN PINE POSTS.  
2) THIS TABLE IS BASED ON A MAXIMUM TRIBUTARY AREA OF 128 SQ. FT.  
3) POST HEIGHT IS FROM TOP OF FOOTING TO BOTTOM OF ORDER.

### 10. DECKS SHALL BE BRACED TO PROVIDE LATERAL STABILITY BY ONE OF THE FOLLOWING METHODS:

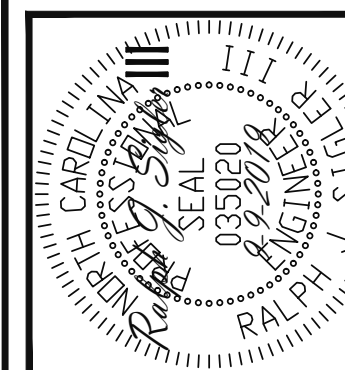
- A. WHEN THE DECK FLOOR HEIGHT IS LESS THAN 4'-0" AND THE DECK IS ATTACHED TO THE STRUCTURE IN ACCORDANCE WITH SECTION 4, LATERAL BRACING IS NOT REQUIRED.
- B. 4X4 WOOD KNEE BRACES MAY BE PROVIDED ON EACH COLUMN IN BOTH DIRECTIONS. THE KNEE BRACES SHALL ATTACH TO EACH POST AT A POINT NOT LESS THAN 1/3 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 ATTACHED AT THE ENDS TO THE ORDER AND THE POST WITH ONE - 5/8" BOLT

- C. FOR FREE STANDING DECKS WITHOUT KNEE BRACES OR DIAGONAL BRACING, LATERAL STABILITY MAY BE PROVIDED BY IMBEDDING THE POSTS IN CONCRETE IN ACCORDANCE WITH THE FOLLOWING:

POST SIZE	TRIBUT. AREA	POST HEIGHT	EMB. DEPTH	CONC. DIAM.
4X4	48 SQ. FT.	4'-0"	2'-6"	1'-0"
6X6	100 SQ. FT.	6'-0"	3'-6"	1'-8"

- D. 2X6 DIAGONAL VERTICAL CROSS BRACING SHALL BE PROVIDED IN TWO PERPENDICULAR DIRECTIONS FOR FREE STANDING DECKS OR PARALLEL TO THE STRUCTURE AT THE EXTERIOR COLUMN LINE FOR ATTACHED DECKS. THE BRACES SHALL BE ATTACHED TO THE POSTS WITH ONE - 5/8" BOLT AT EACH END OF THE BRACE.

- NOTES: 1) ALL NAILS AND BOLTS ARE TO BE HOT DIPPED GALVANIZED.  
2) MINIMUM EDGE DISTANCE FOR BOLTS IS 2 1/2".  
3) NAILS MUST PENETRATE THE SUPPORTING STRUCTURE BAND A MINIMUM OF 1 1/2".



**STRUCTURAL ENGINEERS**  
License No. C-3870  
183 Wind Chime Ct, Ste 100  
Raleigh, North Carolina 27615  
Phone (919) 844-1661

**Engineering Tech ASSOCIATES, P.A.**

**WAGONER HOMES**  
STRUCTURAL ADDENDUM

SCOPE: 7 STONECREST AT NORWOOD

LOC: 7 STONECREST AT NORWOOD

ENG: RJS/CMC  
DATE: 9-9-2019

PROJECT NO.  
19-65-362

SHEET NO.  
SD2