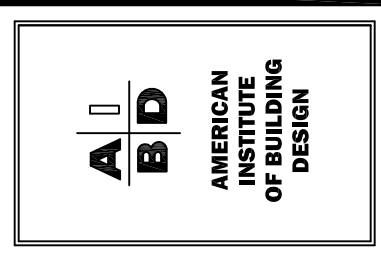


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 405 S. Lakeside Dr, Raleigh, NC 27606 Tel: (919) 852-3500 www.trd-chp.com



DRAWN BY:	REVISED:	ADDRESS/LOCATION:
		5111 SOUTH RIVER ROAD
		LILLINGTON, NC 27146
		HARRITT COUNTY
CLIENT:	PROJECT:	DATE:
ERL M399E	RESIDENCE	1 OF 9 OCTOBER 25, 2021
SHEET:	SHEET:	SHEET NAME:
1 OF 9	DI-2	FRONT AND RIGHT ELEVATIONS

GENERAL NOTES:

- 1) THESE PLANS HAVE BEEN DESIGNED TO MEET THE REQUIREMENTS OF THE NCBC 2018 RESIDENTIAL CODE
- 2) THESE PLANS ARE DESIGNED TO BE USED BY A LICENSED GENERAL CONTRACTOR
- 3) DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS
- 4) ALL FIELD PLANS ARE TO BE HANDLED BY THE GENERAL CONTRACTOR UNLESS NOTED OTHERWISE
- 5) ENGINEER'S INFORMATION AND NOTES TAKE PRECEDENCE OVER TRD PLAN

GENERAL CONTRACTOR:

- 1) PRIOR TO CONSTRUCTION, REVIEW ALL PLANS VERIFYING DIMENSIONS, LOCAL CODES, ENERGY TYPES AND SITE CONDITIONS
- 2) ANY DISCREPANCY IN THE PLANS IS TO BE BROUGHT TO THE ATTENTION OF TRD FOR CORRECTION PRIOR TO CONSTRUCTION OTHERWISE IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR
- 3) INSURE ALL PHASES OF CONSTRUCTION COMPLY WITH BUILDING CODES IN THE AREA THE HOME IS TO BE BUILT
- 4) CONSULT WITH LOCAL ENGINEER FOR STRUCTURAL DESIGN
- 5) ONCE CONSTRUCTION BEGINS, CONTRACTOR ASSUMES ALL RESPONSIBILITY

TRIANGLE RESIDENTIAL DESIGNS:

- 1) THESE PLANS ARE THE COPYRIGHTED PROPERTY OF TRD. THEY ARE NOT TO BE REPRODUCED WHOLE OR IN PART, WITHOUT WRITTEN CONSENT FROM TRD.
- 2) THE LIABILITY OF TRD IN CONNECTION WITH THIS PLAN AND THE HOME BUILT THEREFROM IS LIMITED TO THE TOTAL FEES PAID BY THE PURCHASER OF THE PLAN.
- 3) TRD ASSUMES NO LIABILITY FOR ALTERATIONS TO THE PLANS, FIELD MODIFICATIONS OF THE PLANS OR STRUCTURAL COMPONENTS. THEY ARE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

NON-EXCLUSIVE LICENSE:

THE PURCHASER OF THIS PLAN HAS BEEN GRANTED A NON-EXCLUSIVE, NON-TRANSFERABLE LICENSE TO USE THIS COPYRIGHTED PLAN TO BUILD ONE HOME. THE PLANS ARE NOT TO BE REPRODUCED, WHOLE OR IN PART, OR RESOLD, WITHOUT WRITTEN CONSENT FROM TRD. ANY BREACH OF THESE TERMS ENTITLES TRD TO PURSUE ALL REMEDIES BY LAW.

MEAN ROOF HEIGHT

16'-6" EAVE HT. + 26'-4" OVERALL HT. = 42'-10" TOTAL
 42'-10" TOTAL / 2 = 21'-5" MEAN ROOF HT.

NOTES:

- DISTANCES INDICATED ARE FROM FINISHED GRADE AND ASSUME A FLAT LOT WITH MINIMUM GRADE REQUIREMENTS.
- DESIGN PRESSURE = 35 PSF

DESIGN LOADS

FLOOR LIVE LOAD (SLEEPING): 30 PSF
 FLOOR LIVE LOAD (ALL OTHERS): 40 PSF
 DECKS: 40 PSF
 BALCONIES: 60 PSF
 ATTIC DEAD LOAD (NO STOR.): 10 PSF
 ATTIC LIVE LOAD (STORAGE): 20 PSF
 ATTIC W/STAIRS (DEVELOPABLE): 40 PSF

MIN. VALUES FOR ENERGY COMPLIANCE

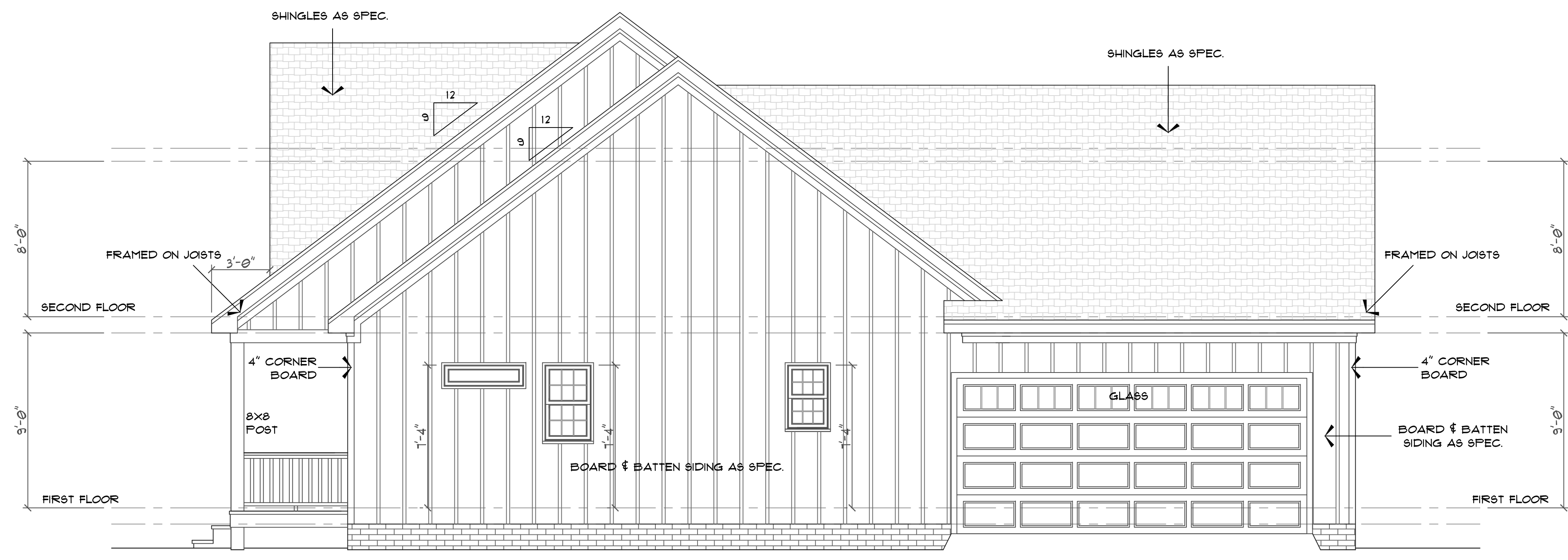
CEILING: R-38
 WALLS: R-15
 FLOORS: R-19
 BASEMENT WALLS: R-1
 CRAWL SPACE WALLS: R-9
 SLAB PERIMETERS @ 24" DEEP: R-4
 MAX. GLAZING U-FACTOR = 0.35
 ZONE 4

EXTERIOR MATERIALS

	ROOF SHINGLES
	METAL ROOF
	HORIZONTAL SIDING
	BOARD & BATTEN SIDING
	VERTICAL SIDING
	SHAKE SIDING
	BRICK
	STONE
	STUCCO OR PARGING
	SCREEN
	BRICK ROWLOCK OR SOLDIER



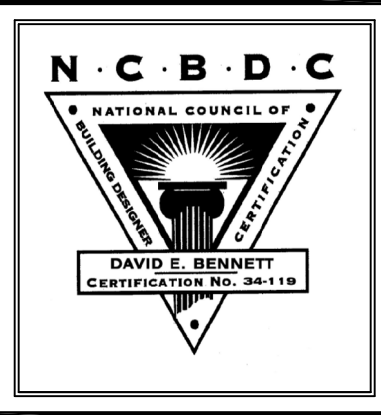
FRONT ELEVATION
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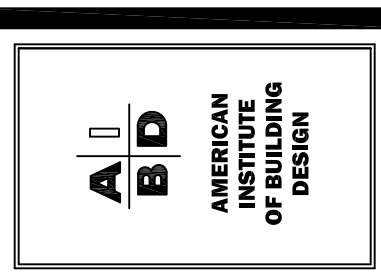
RIGHT ELEVATION
SCALE: 1/4"=1'-0"

INDEX TO SHEETS

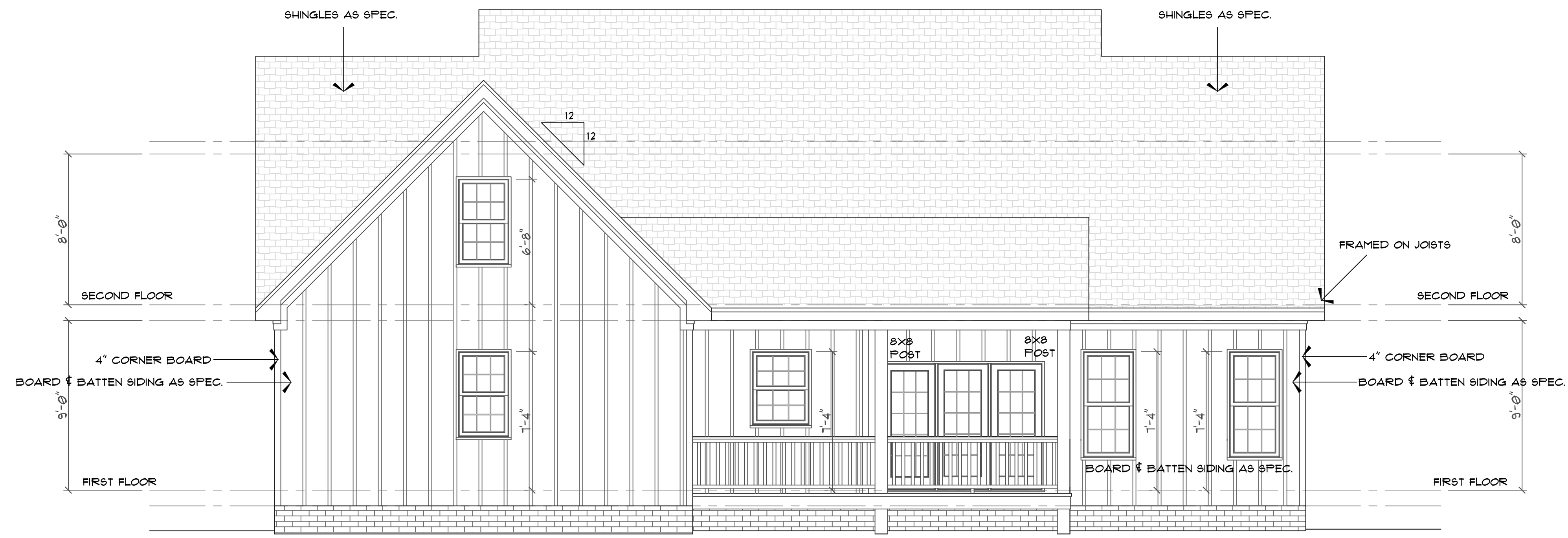
SHEET	NAME
1	FRONT & RIGHT SIDE ELEVATIONS
2	REAR & LEFT SIDE ELEVATIONS
3	FOUNDATION PLAN
4	FLOOR FRAMING PLAN
5	FIRST FLOOR PLAN
6	FIRST FLOOR STRUCTURAL PLAN
7	SECOND FLOOR PLAN
8	SECOND FLOOR STRUCTURAL PLAN
9	ROOF PLAN
DI-2	DETAIL SHEETS



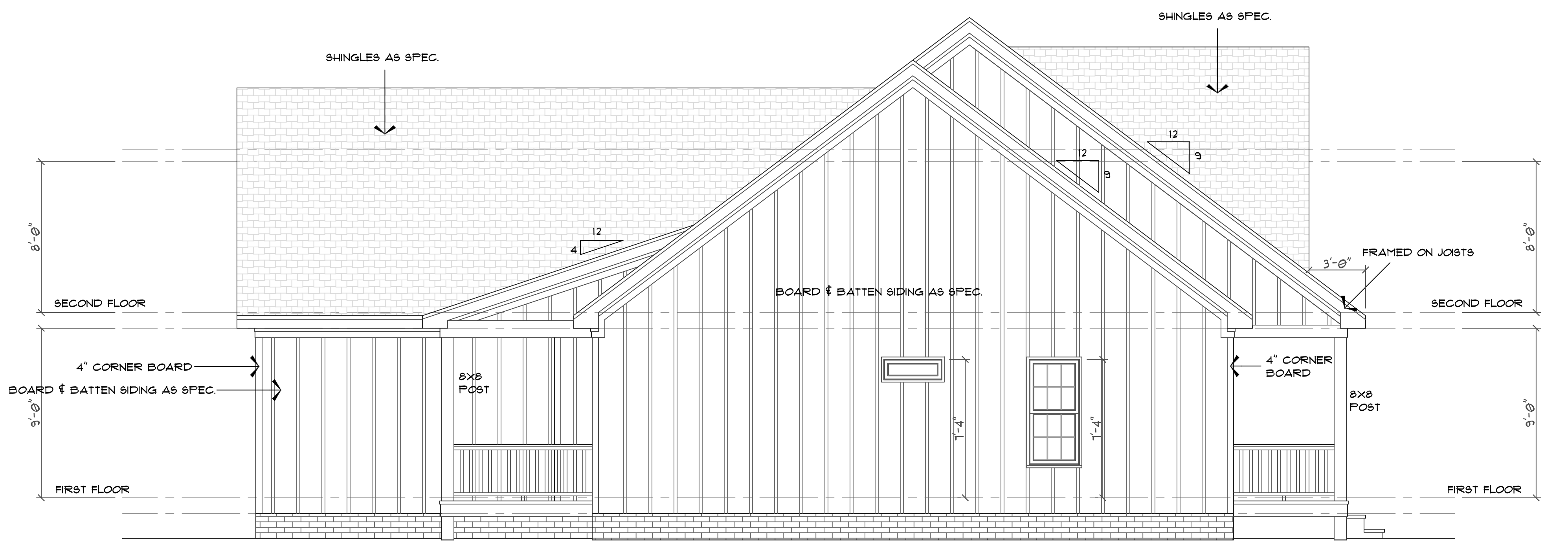
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DRAWN BY: ADDRESS/LOCATION: 511 SOUTH RIVER ROAD LILLINGTON, NC 27446 HARNETT COUNTY	REVISED: DATE: OCTOBER 25, 2021 SHEET NAME: REAR AND LEFT ELEVATIONS
--	--

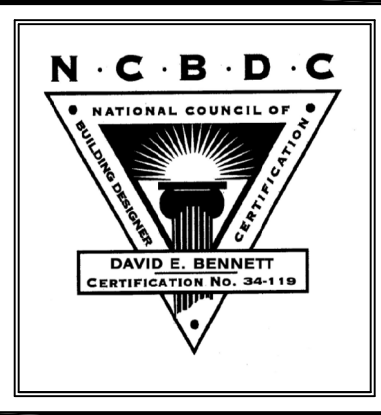


REAR ELEVATION
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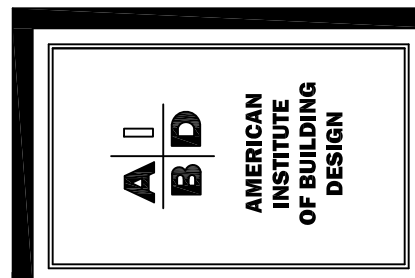


LEFT ELEVATION
SCALE: 1/4"=1'-0"

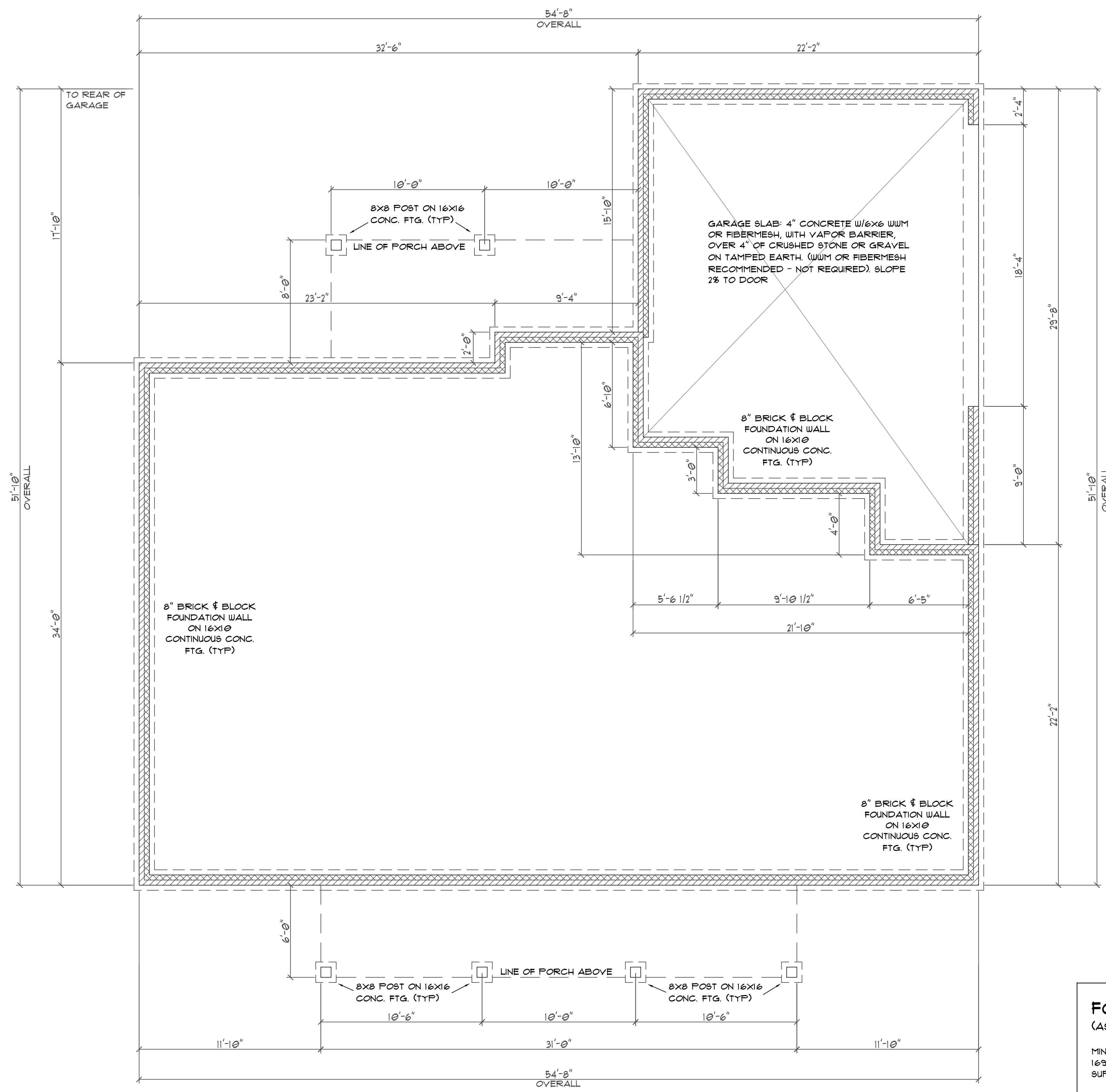
EXTERIOR MATERIALS	
	ROOF SHINGLES
	METAL ROOF
	HORIZONTAL SIDING
	BOARD & BATTEN SIDING
	VERTICAL SIDING
	SHAKE SIDING
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	STUCCO OR PARING
	SCREEN
	BRICK ROWLOCK OR SOLDIER



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DRAWN BY:		REVISED:	
ADDRESS/LOCATION:		DATE:	
CLIENT:	PROJECT:	SHEET:	DATE:
ERL M899	RESIDENCE	3 OF 9	OCTOBER 25, 2021
PROJECT:		SHEET NAME:	
5171 SOUTH RIVERS ROAD		FOUNDATION PLAN	
LILLINGTON, NC 27646			
HARRNETT COUNTY			



FOUNDATION MATERIALS LEGEND

	BRICK
	CONCRETE BLOCK
	CONCRETE FOOTING
	CONCRETE

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

FOUNDATION VENT CALCULATION
 (AS PER 2018 NORTH CAROLINA RESIDENTIAL CODE)

MINIMUM REQUIRED:
 1697 SQFT OF CRAWL SPACE DIVIDED BY 300 EQUALS 5.65 SQFT OF AREA SUPPLIED:

NOTES:
 • ONE VENT MUST BE WITHIN 3' OF EACH CORNER OF THE BUILDING
 • POSSIBLE VENT LOCATIONS INDICATED ON THE FOUNDATION PLAN.
 • ACCESS DOORS MAY BE VENTED FOR ADDITIONAL REQUIRED VENTILATION.
 • CRAWL SPACE MUST BE CROSS-VENTILATED AND AN APPROVED VAPOR RETARDER COVERS 100% OF THE CRAWL SPACE.

FOUNDATION VENT CALCULATION

(AS PER 2018 NORTH CAROLINA RESIDENTIAL CODE)

MINIMUM REQUIRED:
1691 SQFT OF CRAWL SPACE DIVIDED BY 300 EQUALS 5.65 SQFT OF AREA SUPPLIED.

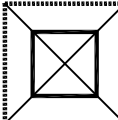
NOTES:

- * ONE VENT MUST BE WITHIN 3' OF EACH CORNER OF THE BUILDING
- * POSSIBLE VENT LOCATIONS INDICATED ON THE FOUNDATION PLAN
- * ACCESS DOORS MAY BE VENTED FOR ADDITIONAL REQUIRED VENTILATION.
- * CRAWL SPACE MUST BE CROSS-VENTILATED AND AN APPROVED VAPOR RETARDER COVERS 100% OF THE CRAWL SPACE.

IRC 2015 NCBC 2018 REQUIRES VAPOR BARRIER OVER 100 PERCENT OF CRAWL AREA ALL FLOOR JOISTS

or 2 x 10 @ 16 # 2 SPF or Better

ORIENTED Left to Right

 DENOTES 12"x16" -or- 16"x16" CMU PIER WITH 8" SOLID CAP ON 30"x30"x10" CONC. FTR.

CONCRETE PIER SIZES

Size	Hollow Masonry	Solid Masonry
12"x16"	Up to 48" High	Up to 9'-0" High
16"x16"	Up to 64" High	Up to 12'-0" High

FOUNDATION WALLS

ALL FOUNDATION WALLS 8" BLOCK PARGED -or- 4" BRICK w/ 4" BLOCK w/ 8" SOLID CAP ON 18"x10" CONTINUOUS CONCRETE FOOTER

20" x 10" in areas of brick veneer

GIRDERS

(3) 2"x10" #2 SYP -or- NEW SFPA SYP Values Used

(4) 2x 10 # 2 SPF or Better

Anchor bolts required ALL foundation walls provide 1/2" x 10" with 7 inch embedment 6' on center and 12 inches from ends / corners

DESIGN TO IRC 2015 NCBC 2018

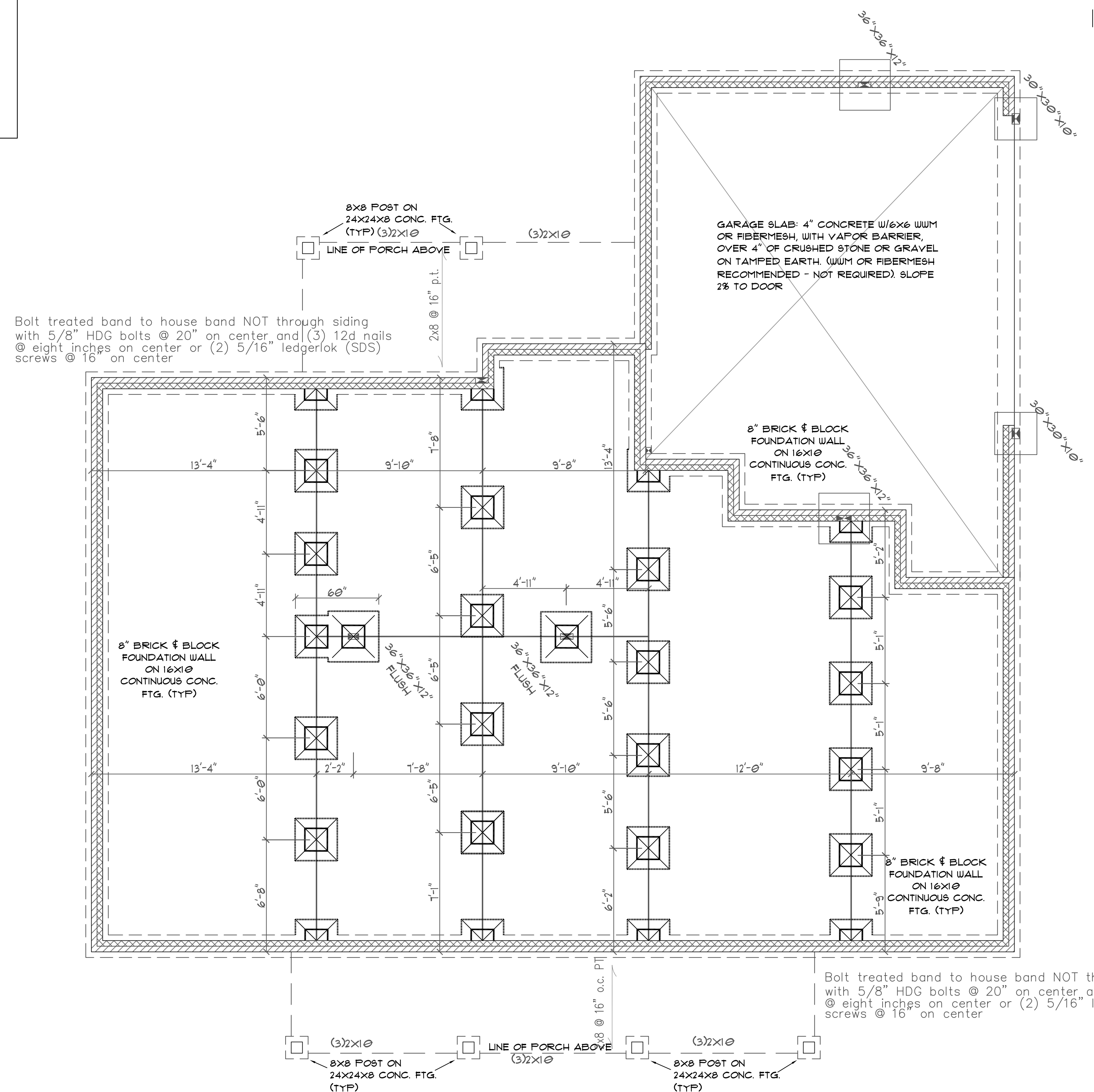
CRAWL SPACE VENTILATION

1687 SQ. FT. OF CRAWL / 150 = 11.3 SQ. FT. OF FREE VENT REQUIRED

NOTE: REFER TO SECTION 409.1 (CRAWL SPACE VENTILATION) IN THE NORTH CAROLINA STATE BUILDING CODE (IRC)

IRC 2015 NCBC 2018 REQUIRES VAPOR BARRIER OVER 100 PERCENT OF CRAWL AREA REDUCING VENTING

1687 SQ. FT. OF CRAWL / 300 = 5.62 SQ. FT. OF FREE VENT REQUIRED
5.62 / 0.44 = 13 - 8 x 16 vents (64 SQ IN FREE)

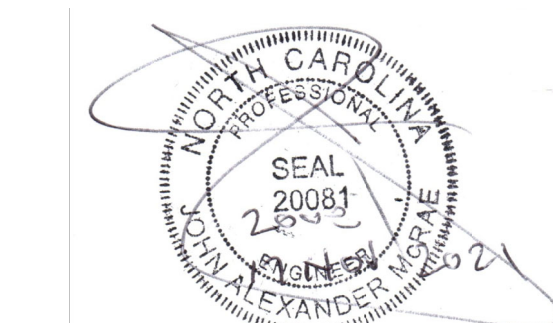


FOUNDATION MATERIALS LEGEND

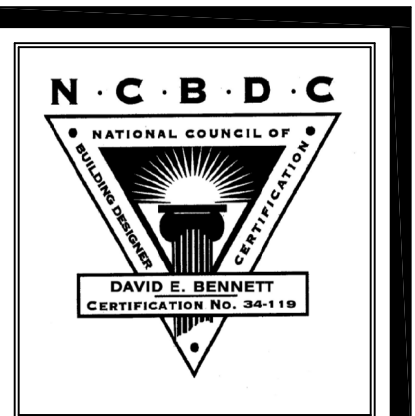
	BRICK
	CONCRETE BLOCK
	CONCRETE FOOTING
	CONCRETE

FOUNDATION PLAN

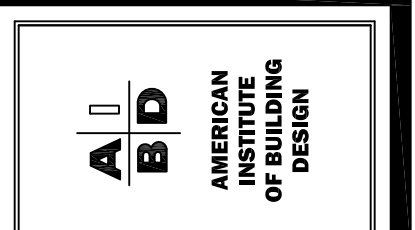
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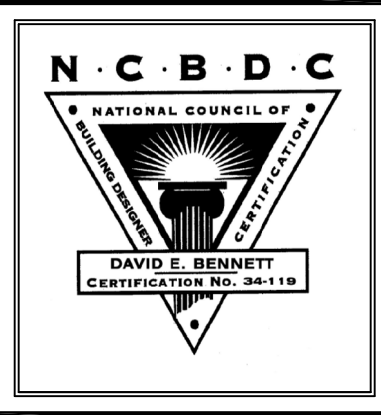
Structural Design By:
John Alexander McRae, PE, Inc
218 Coley Farm Road
Fuquay-Varina North Carolina 27526
jampe@nc.rr.com (919) 210-5749
P O Box 1466 Apex, NC 27502
Report deficiencies immediately
2110-39
(NC C-2298)



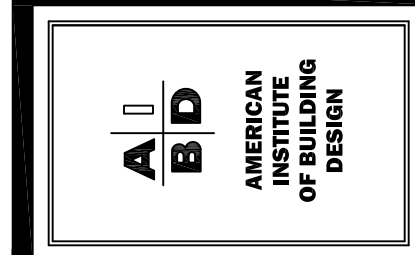
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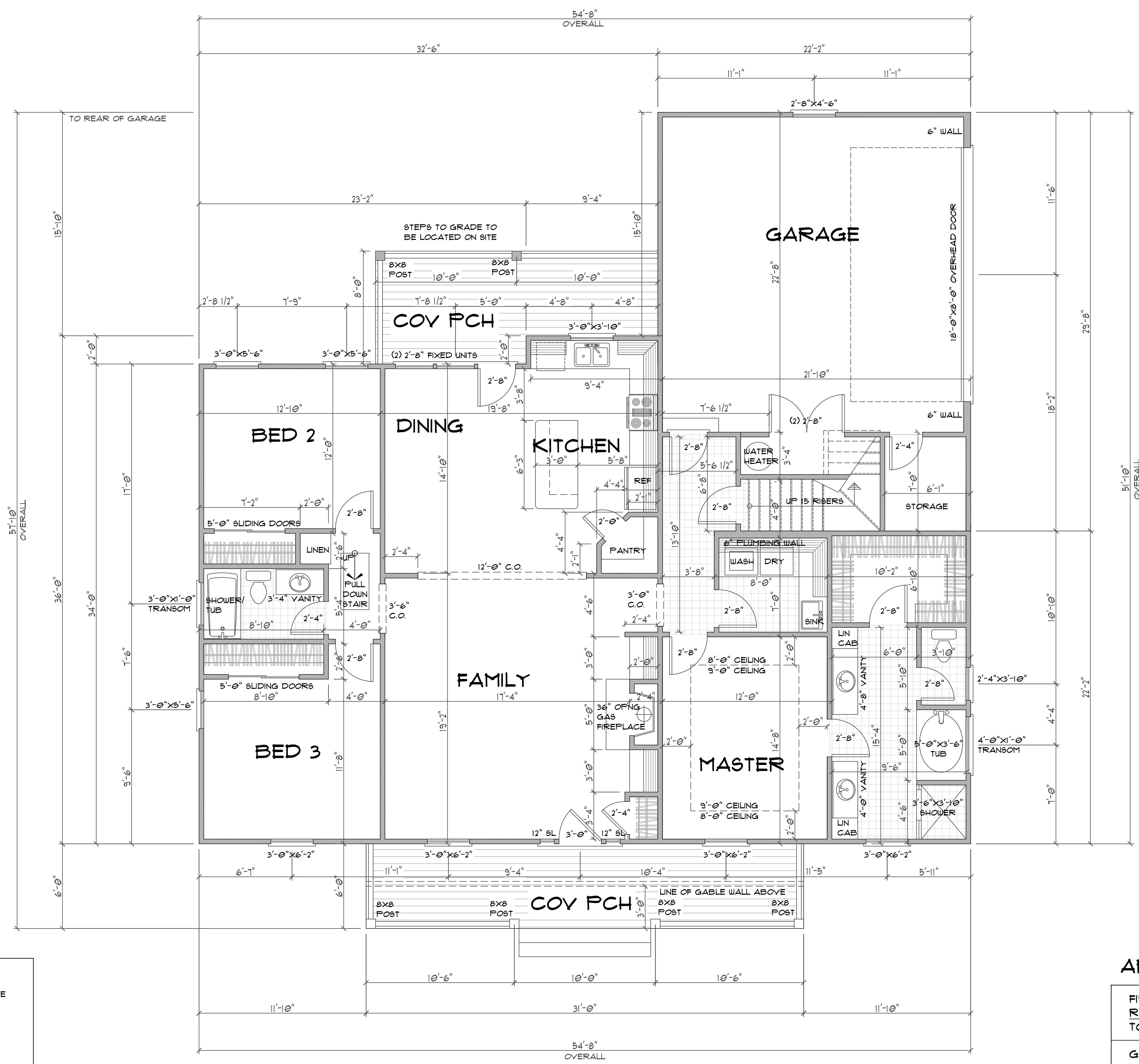
CLIENT:	ERL M899
PROJECT:	5111 SOUTH RIVER ROAD LILLINGTON, NC 27546
RESIDENCE:	HARNETT COUNTY
SHEET:	4 OF 9
DATE:	OCTOBER 25, 2021
SHEET NAME:	FLOOR BRACING PLAN
DRAWN BY:	
REVIS/ED:	
ADDRESS/LOCATION:	



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CLIENT:	ERL MASSE
PROJECT:	RESIDENCE
SHEET:	5 OF 9
DATE:	OCTOBER 25, 2021
SHEET NAME:	FIRST FLOOR PLAN
DRAWN BY:	
REVISION:	
ADDRESS/LOCATION:	5171 SOUTH RIVER ROAD LILLINGTON, NC 27546 HARNETT COUNTY

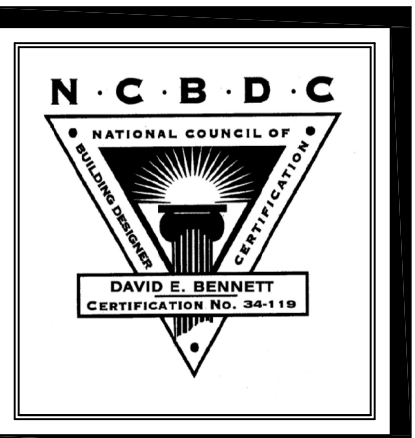


- NOTES:**
- 9'-0" CEILING ON THIS FLOOR UNLESS NOTED OTHERWISE (UNO)
 - STAIRS ARE DESIGNED TO COVER A 120" MAX. RISE:
 - 15 RISERS @ 1.06" +/- EACH OR
 - 16 RISERS @ 1.3" +/- EACH
 - 14 OR 15 TREADS @ 9" EACH (ROUGH CUT)
 (FIELD VERIFY ALL STAIRS DIMENSIONS)
 - ALL ANGLES 45 UNLESS OTHERWISE NOTED
 - ALL DOOR HEIGHTS 6'-8" UNLESS OTHERWISE NOTED
 - ALL DOOR JAMBS ARE 4" UNLESS OTHERWISE NOTED
 - SEE CHAPTER 6 OF THE 2018 NC RESIDENTIAL BUILDING CODE FOR WALL CONSTRUCTION
 - GARAGE WALLS ADJACENT TO HEATED SPACE SHALL BE COVERED WITH FIRE RATED SHEETROCK PER CODE
 - ALL HABITABLE ROOMS SHALL MEET LIGHT, VENTILATION & EGRESS CODES AS REQUIRED
 - ALL WINDOW SIZES & DETAILS TO BE VERIFIED WITH CHOSEN MANUFACTURER
 - PROVIDE SMOKE DETECTORS AS REQUIRED BY CODE

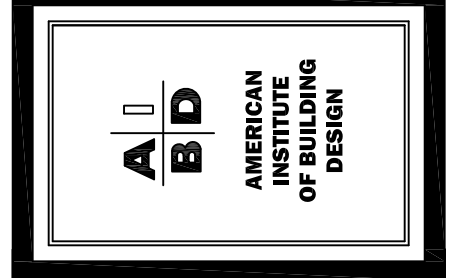
AREA CALCULATION

FIRST FLOOR:	1681 SQFT
REC ROOM:	374 SQFT
TOTAL LIVING:	2061 SQFT
GARAGE:	574 SQFT
FRONT PORCH:	186 SQFT
REAR PORCH:	160 SQFT
TOTAL NON-LIVING:	920 SQFT

FIRST FLOOR PLAN
SCALE: 1/4"=1'-0"
9'-0" CEILING ON THIS FLOOR



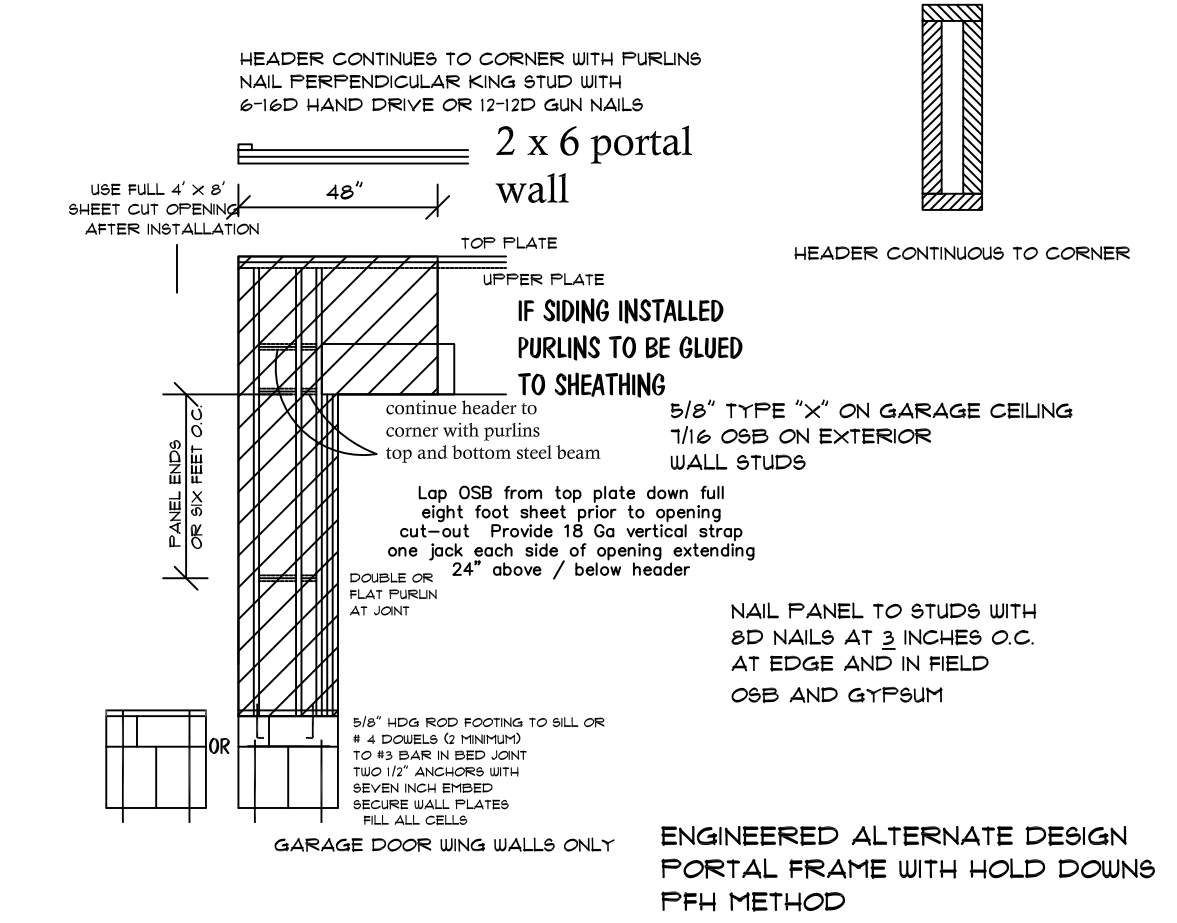
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CLIENT:	ERL MASSE
PROJECT:	RESIDENCE
SHEET:	6 OF 9
DATE:	OCTOBER 25, 2021
SHEET NAME:	FIRST FLOOR STRUCTURAL PLAN

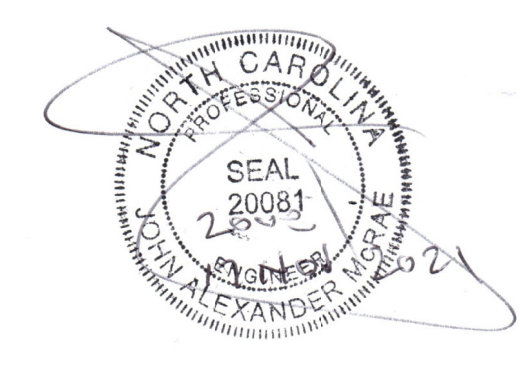
The number of kings shall equal half the cripple studs above or below the opening.

IRC 2015 NCBC 2018 REQUIRES VAPOR BARRIER OVER 100 PERCENT OF CRAWL AREA



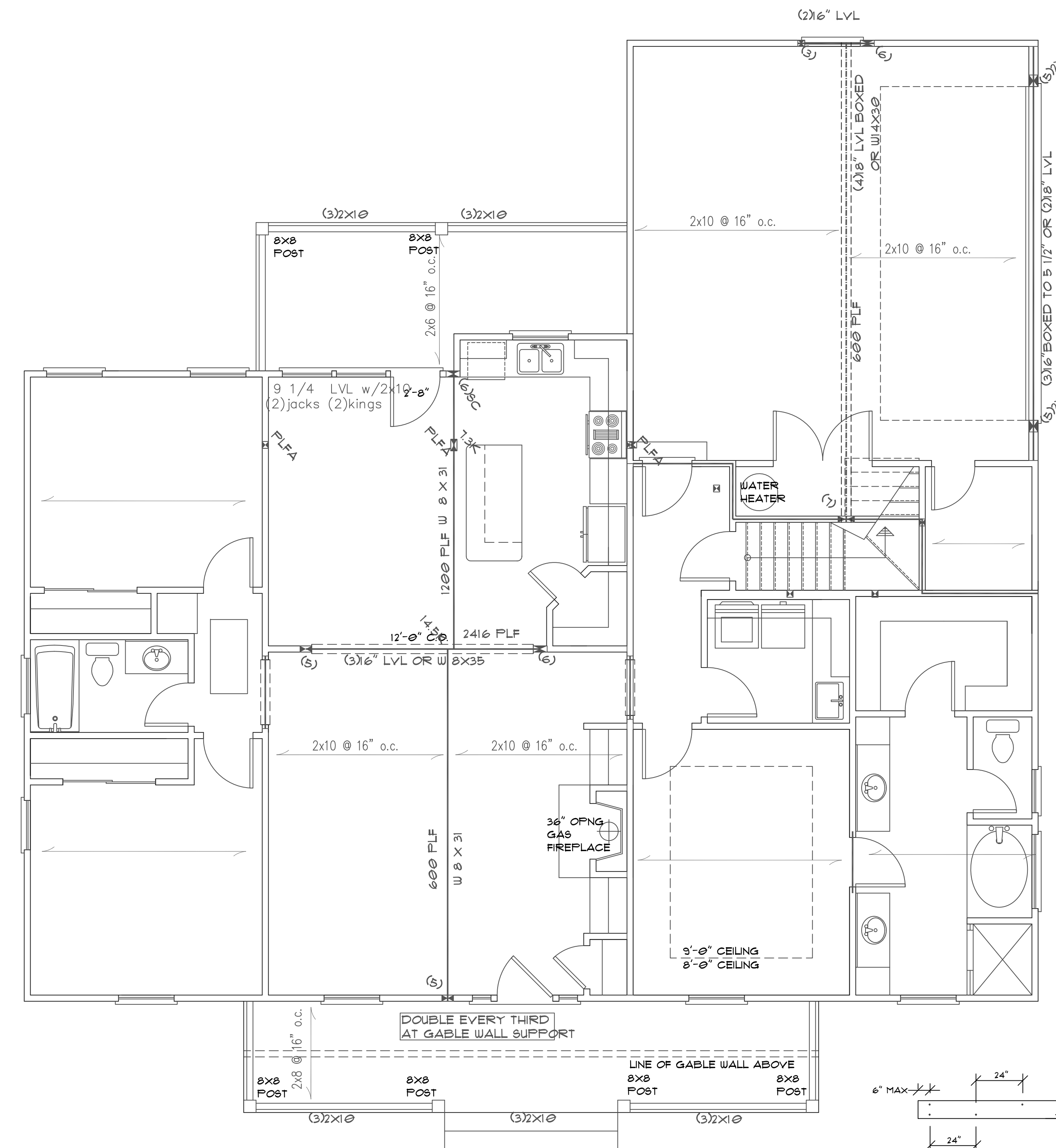
ALL FLOOR JOISTS 2 X 10 @16 #2 SPF OR BETTER
 ALL CEILING JOIST 2 X 8 @ 16 Up To 15'
 2 X 6 @ 16 Up To 11'
 ORIENTED Left to Right
 ALL EXTERIOR AND BEARING HEADER (2) 2"x10" u.n.o.
 ALL LVL BEAMS/HEADERS 3 STUD COLUMNS EACH END u.n.o.
 ALL FRAMING #2 SPF OR BETTER u.n.o.

All stories to be sheathed with 7/16" OSB nailed @ six inches on center edges and ends with additional nailing of "braced" panels as noted below:
ALL EXTERIOR BEARING AND NON LOAD BEARING WALLS FOUR FOOT PANEL AT CORNERS AND MAXIMUM 12' O.C.
 Wall Bracing 7/16" OSB Lap OSB from top plate down full eight foot sheet prior to opening cut-out. Nail with 8d nails at THREE inches on center edges/ends six inches in field. Purlins at panel
 MINIMUM PANEL WIDTH 48" U.N.O.



Structural Design By:
 John Alexander McRae, PE, Inc
 218 Coley Farm Road
 Fuquay-Varina North Carolina 27526
 jampe@nc.rr.com (919) 210-5749
 P O Box 1466 Apex, NC 27502
 Report deficiencies immediately
 2110-39
 (NC C-2298)

ALL EXTERIOR AND BEARING HEADER (2) 2"x10" u.n.o.
 ALL LVL BEAMS/HEADERS 3 STUD COLUMNS EACH END u.n.o.
 ALL FRAMING #2 SPF OR BETTER u.n.o.



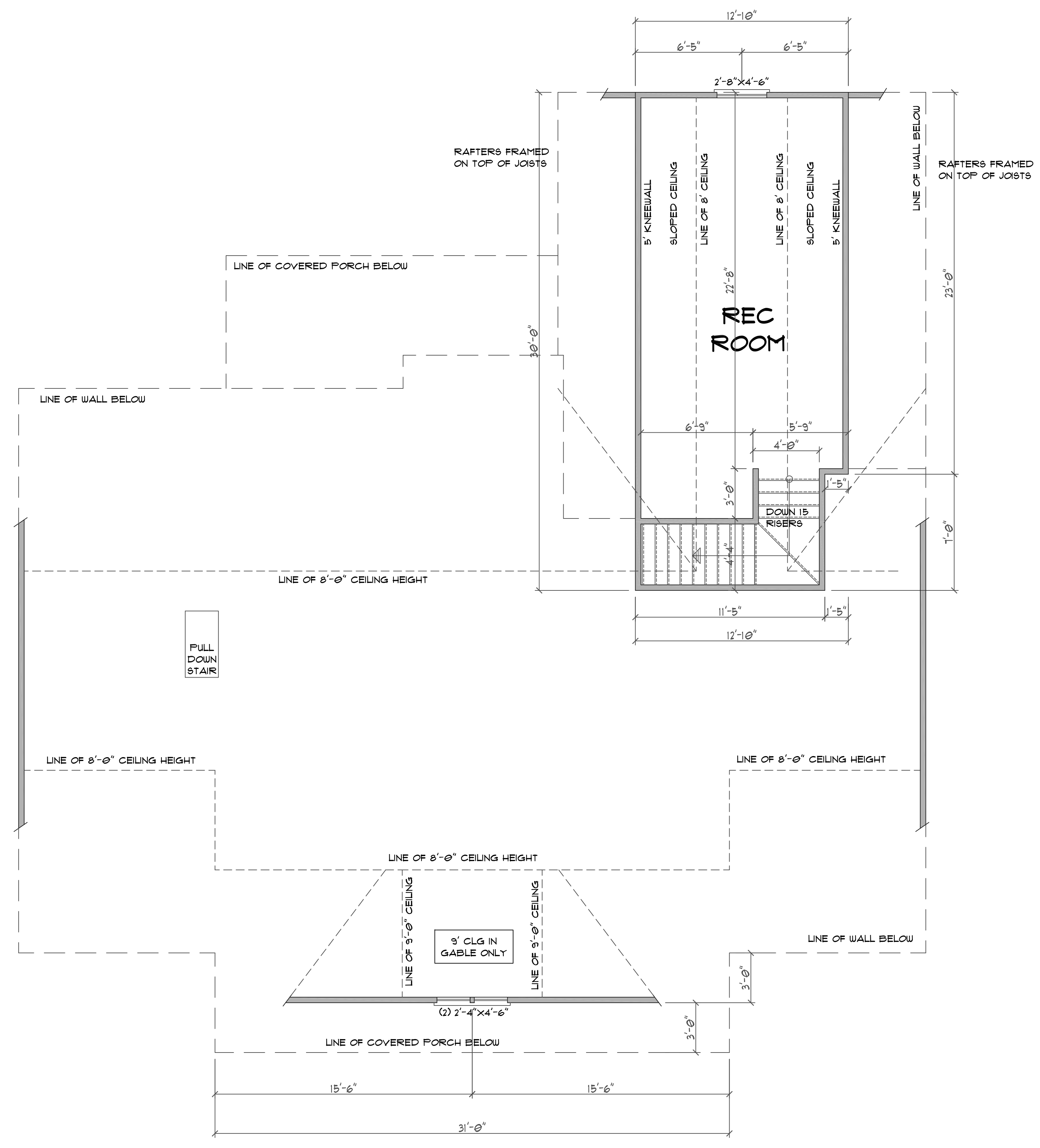
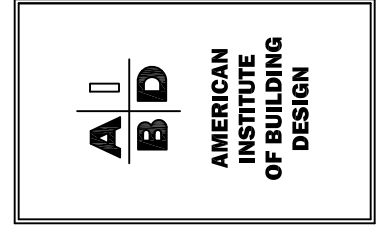
LIMITED LENGTH OF WING WALLS WILL REQUIRE 7/16 OSB SHEATHING BOTH SIDES OF WALL LAP OSB FROM TOP PLATE DOWN FULL EIGHT FOOT SHEET PRIOR TO OPENING CUT-OUT

FIRST FLOOR PLAN
 SCALE: 1/4" = 1'-0"
 9'-0" CEILING ON THIS FLOOR

- NOTES:**
- 9'-0" CEILING ON THIS FLOOR UNLESS NOTED OTHERWISE (UNO)
 - STAIRS ARE DESIGNED TO COVER A 120" MAX. RISE: 15 RISERS @ 1.06" +/- EACH OR 16 RISERS @ 1.3" +/- EACH 14 OR 15 TREADS @ 9" EACH (ROUGH CUT) (FIELD VERIFY ALL STAIRS DIMENSIONS)
 - ALL ANGLES 45 UNLESS OTHERWISE NOTED
 - ALL DOOR HEIGHTS 6'-8" UNLESS OTHERWISE NOTED
 - ALL DOOR JAMBS ARE 4" UNLESS OTHERWISE NOTED
 - SEE CHAPTER 6 OF THE 2018 NC RESIDENTIAL BUILDING CODE FOR WALL CONSTRUCTION
 - GARAGE WALLS ADJACENT TO HEATED SPACE SHALL BE COVERED WITH FIRE RATED SHEETROCK PER CODE
 - ALL HABITABLE ROOMS SHALL MEET LIGHT, VENTILATION & EGRESS CODES AS REQUIRED
 - ALL WINDOW SIZES & DETAILS TO BE VERIFIED WITH CHOSEN MANUFACTURER
 - PROVIDE SMOKE DETECTORS AS REQUIRED BY CODE



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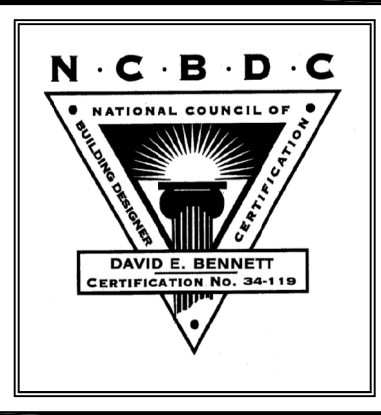
SECOND FLOOR PLAN

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

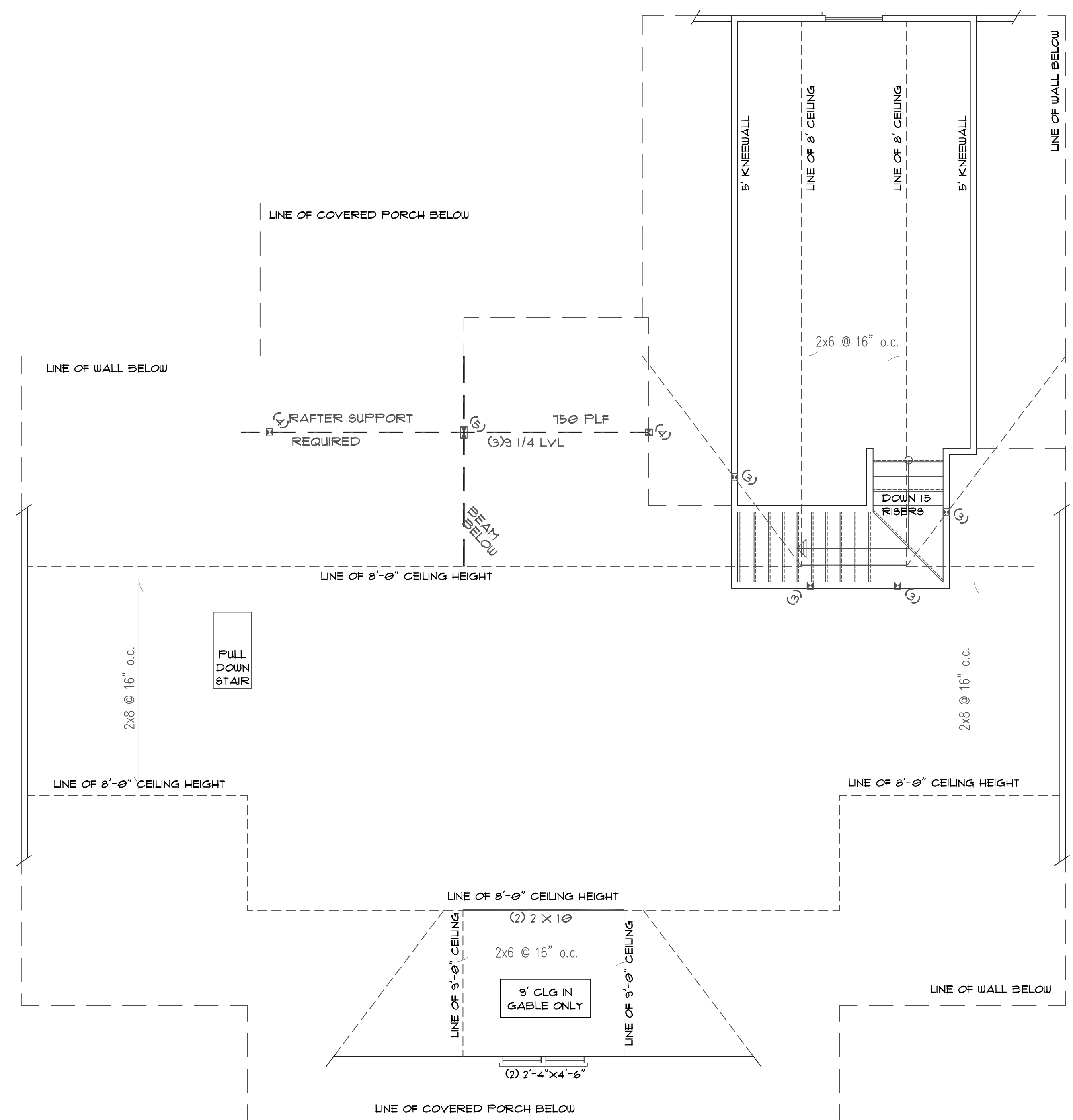
8'-0" CEILING ON THIS FLOOR

- NOTES:**
- 8'-0" CEILING ON THIS FLOOR UNLESS NOTED OTHERWISE (UNO)
 - STAIRS ARE DESIGNED TO COVER A 120" MAX. RISE:
 - 15 RISERS @ 106" +/- EACH OR
 - 16 RISERS @ 113" +/- EACH
 - 14 OR 15 TREADS @ 3" EACH (ROUGH CUT)
 - (FIELD VERIFY ALL STAIRS DIMENSIONS)
 - ALL ANGLES 45 UNLESS OTHERWISE NOTED
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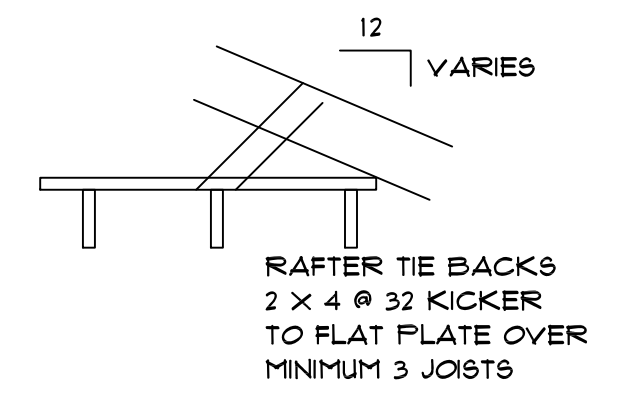
CLIENT:	ERL MASSE
PROJECT:	RESIDENCE
SHEET:	1 OF 3
DATE:	OCTOBER 25, 2021
SHEET NAME:	SECOND FLOOR PLAN
DRAWN BY:	
REVISID:	
ADDRESS/LOCATION:	5111 SOUTH RIVER ROAD LILLINGTON, NC 27546 HARRIS COUNTY



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The number of kings shall equal half the cripple studs above or below the opening.



ALL FLOOR JOISTS 2 X 10 @16
 #2 SPF OR BETTER
 Or 11 7/8 I Joists at 16" or 19.2" By MFR
 ALL CEILING JOIST 2 X 8 @ 16 Up To 15'
 2 X 6 @ 16 Up To 11'
 ALL EXTERIOR AND BEARING HEADER (2) 2"x10" u.n.o.
 ALL LVL BEAMS/HEADERS 3 STUD COLUMNS EACH END u.n.o.
 ALL FRAMING #2 SPF OR BETTER u.n.o.

All stories to be sheathed with 7/16" OSB nailed @ six inches on center edges and ends with additional nailing of "braced" panels as noted below:

ALL EXTERIOR BEARING AND NON LOAD BEARING WALLS
FOUR FOOT PANEL AT CORNERS AND MAXIMUM 12' O.C.

Wall Bracing 7/16" OSB Lap OSB from top plate down full eight foot sheet prior to opening cut-out. Nail with 8d nails at THREE inches on center edges/ends six inches in field. Purins at panel. MINIMUM PANEL WIDTH 48" U.N.O.

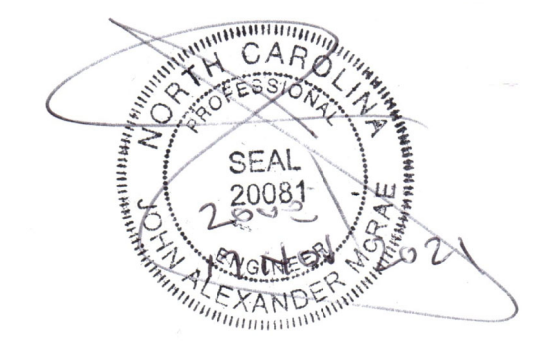
- NOTES:**
- 8'-0" CEILING ON THIS FLOOR UNLESS NOTED OTHERWISE (UNO)
 - STAIRS ARE DESIGNED TO COVER A 120" MAX. RISE:
 - 15 RISERS @ 106" +/- EACH OR
 - 16 RISERS @ 113" +/- EACH
 - 14 OR 15 TREADS @ 3" EACH (ROUGH CUT)
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 - SEE CHAPTER 6 OF THE 2018 NC RESIDENTIAL BUILDING CODE FOR WALL CONSTRUCTION
 - ALL HABITABLE ROOMS SHALL MEET LIGHT, VENTILATION & EGRESS CODES AS REQUIRED
 - ALL WINDOW SIZES & DETAILS TO BE VERIFIED WITH CHOSEN MANUFACTURER
 - PROVIDE SMOKE DETECTORS AS REQUIRED BY CODE

SECOND FLOOR PLAN

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

8'-0" CEILING ON THIS FLOOR

ALL CEILING JOIST 2 X 8 @ 16 Up To 15'
 2 X 6 @ 16 Up To 11'
 #2 SPF OR BETTER
 Oriented As Noted



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 Fuquay-Varina North Carolina 27526
 jampe@nc.rr.com (919) 210-5749
 P O Box 1466 Apex, NC 27502
 Report deficiencies immediately
 2110-39
 (NC C-2298)

DRAWN BY:	REVISED:	ADDRESS/LOCATION:	DATE:
		5111 SOUTH RIVER ROAD LILLINGTON, NC 27146 HARNETT COUNTY	
CLIENT:	PROJECT:	SHEET	DATE:
ERL HASSE	RESIDENCE	8 OF 9	OCTOBER 25, 2021
SHEET NAME:			SECOND FLOOR STRUCTURAL PLAN

ROOF NOTES FOR 2/12 TO 4/12 ROOF PITCH
(AS PER 2018 NC BUILDING CODE)

R905.2.2 SLOPE
ASPHALT SHINGLES SHALL BE USED ONLY ON ROOF SLOPES OF TWO UNITS VERTICAL IN 12 UNITS HORIZONTAL (2/12) OR GREATER. FOR ROOF SLOPES FROM TWO UNITS VERTICAL IN 12 UNITS HORIZONTAL (2/12) UP TO FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (4/12), DOUBLE UNDERLAYMENT APPLICATION IS REQUIRED IN ACCORDANCE WITH SECTION R905.2.1

R905.2.1 UNDERLAYMENT APPLICATION
FOR ROOF SLOPES FROM TWO UNITS VERTICAL IN 12 UNITS HORIZONTAL (1/3 SLOPE), UP TO FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (3/3 SLOPE), UNDERLAYMENT SHALL BE TWO LAYERS APPLIED IN THE FOLLOWING MANNER. APPLY A 19-INCH (483 MM) STRIP OF UNDERLAYMENT FELT PARALLEL TO AND STARTING AT THE EAVES, FASTENED SUFFICIENTLY TO HOLD IN PLACE. STARTING AT THE EAVE, APPLY 36-INCH-WIDE (914 MM) SHEETS OF UNDERLAYMENT, OVERLAPPING SUCCESSIVE SHEET 13 INCHES (483 MM), AND FASTENED SUFFICIENTLY TO HOLD IN PLACE. DISTORTIONS IN THE UNDERLAYMENT SHALL NOT INTERFERE WITH THE ABILITY OF THE SHINGLES TO SEAL. FOR ROOF SLOPES OF FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (3/3 SLOPE) OR GREATER, UNDERLAYMENT SHALL BE ONE LAYER APPLIED IN THE FOLLOWING MANNER. UNDERLAYMENT SHALL BE APPLIED SHINGLE FASHION, PARALLEL TO AND STARTING FROM THE EAVE AND LAPPED 2 INCHES (51 MM), FASTENED SUFFICIENTLY TO HOLD IN PLACE. DISTORTIONS IN THE UNDERLAYMENT SHALL NOT INTERFERE WITH THE ABILITY OF THE SHINGLES TO SEAL. END LAPS SHALL BE OFFSET BY 6 FEET (1826 MM).

ROOF NOTES

- 1) RAFTER SIZES ARE SHOWN AT MINIMUM STRUCTURAL REQUIREMENTS. SIZES MAY BE INCREASED TO PROVIDE MINIMUM INSULATION VALUES OR AIR PASSAGES.
- 2) RAFTER SPANS ARE CALCULATED ON #2 GRADE SPRUCE FINE FIR.
- 3) RAFTERS SHALL BE FRAMED TO RIDGE BOARD OR TO EACH OTHER WITH A GUSSET PLATE.
- 4) RIDGE BOARDS SHALL BE AT LEAST 1" NOMINAL THICKNESS AND NOT LESS IN DEPTH THAN THE CUT END OF THE RAFTER.
- 5) OPPOSING RAFTERS AT THE RIDGE MUST ALIGN WITHIN THE THICKNESS OF THE RIDGE.
- 6) IF CLG JBS ARE NOT PARALLEL TO RAFTERS, SUBFLOORING OR METAL TIES SHALL BE ATTACHED TO RAFTERS ENDS TO SUPPLY A CONTINUOUS TIE ACROSS THE BUILDING OR RAFTERS SHALL BE ATTACHED TO 1"x4" CROSSIES.
- 7) ATTACH 1"x6" OR 2"x4" COLLAR TIES IN THE UPPER THIRD OF THE ROOF TO EVERY THIRD PAIR OF RAFTERS, NOT TO EXCEED 4'-0" O.C.
- 8) ALL DORMERS SHALL HAVE DOUBLE HEADERS AND TRIMMERS.
- 9) TRUSS ROOF DRAWINGS SHALL BE PREPARED BY A REGISTERED DESIGN PROFESSIONAL.
- 10) SHINGLED ROOFS WITH PITCHES 2/12 TO 4/12 SHALL HAVE DOUBLE UNDERLAYMENT.
- 11) A CRICKET OR SADDLE IS REQUIRED FOR CHIMNEYS OVER 36" WIDE. THE COVERING SHALL BE METAL OR THE SAME MATERIAL AS THE ROOF COVERING.

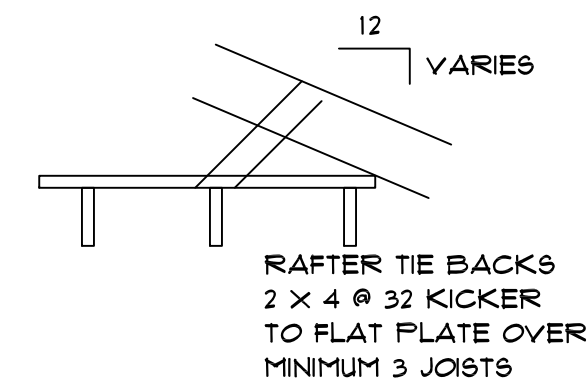
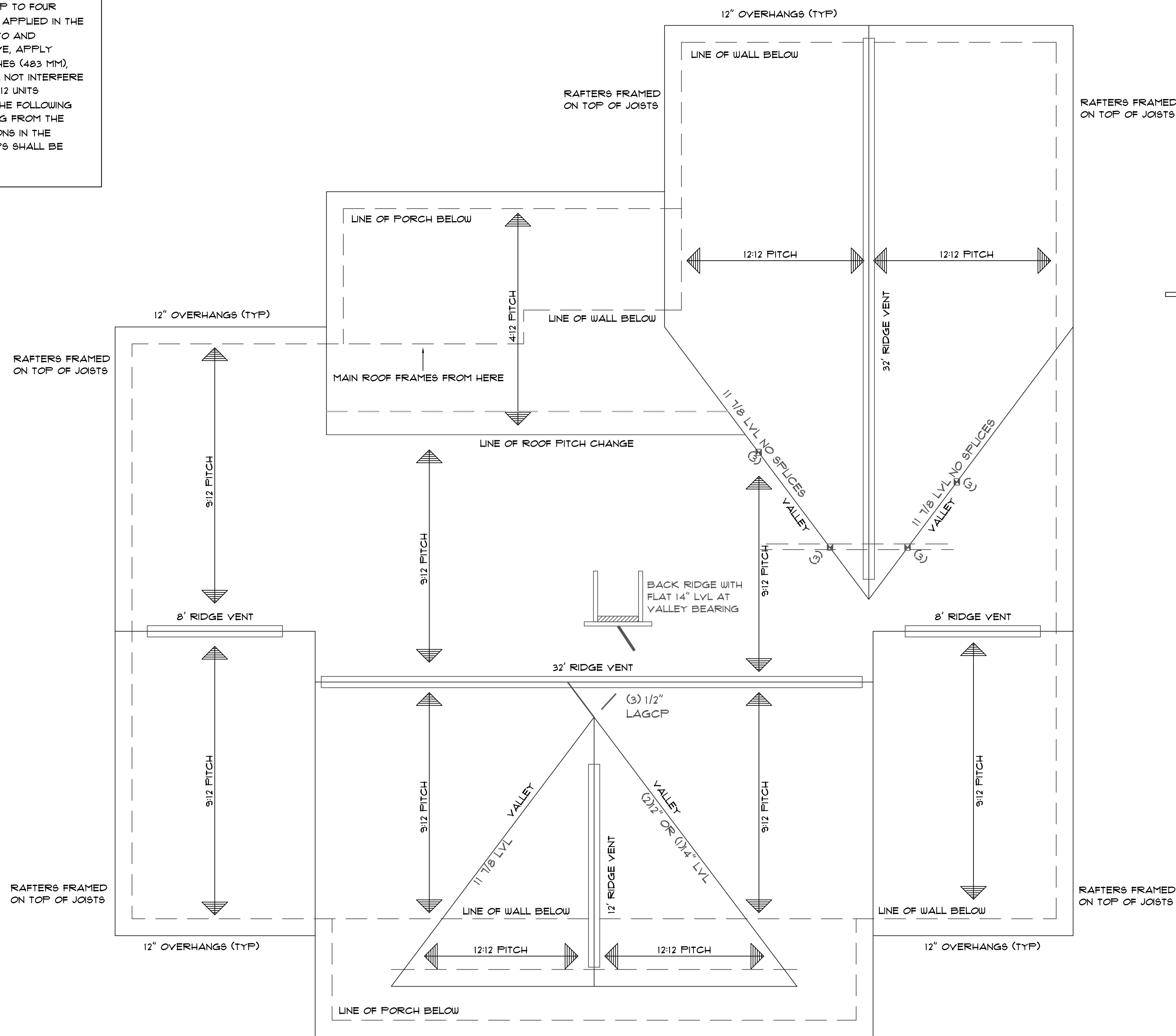
ATTIC VENTILATION CALCULATION
(AS PER 2018 NORTH CAROLINA RESIDENTIAL CODE)

2212 SQFT. OF ATTIC/150 REQUIRE^s = 15.15 SQFT. OF FREE VENT = 1.6 SQFT. IN/1.6 SQFT. OUT.

92 LINEAR FT. OF RIDGE VENT AT 18 SQ. IN./FT. DIVIDED BY 144 SQ. IN./SQ. FT. EQUALS 11.5 SQ. FT. OF FREE AREA.

- EAVES TO HAVE 2" CONTINUOUS EAVE/SOFRIT VENT
- IF ROOF VENTING IS INADEQUATE, SUPPLEMENT WITH POWER ROOF VENTILATORS.
- VENTILATION REQUIREMENT MAY BE REDUCED TO 1 SF/300 SF PROVIDED AT LEAST 50% AND NOT MORE THAN 80% OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED, ATLEAST THREE (3) FEET ABOVE THE EAVE OR CORNICE VENTS, AND WITH THE BALANCE OF THE VENTILATION TO BE PROVIDED BY THE EAVE AND CORNICE VENTS.

NOTE: REFER TO SECTION 006 (ROOF VENTILATION) OF THE NC STATE RESIDENTIAL CODE

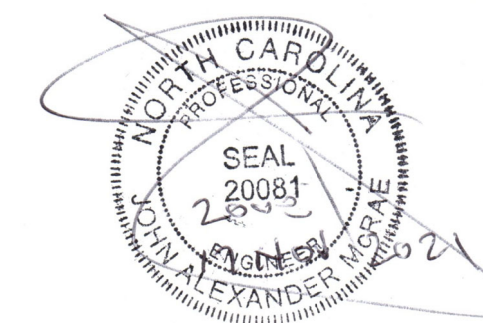


all rafters
2 x 8 @ 16 #2
spf or better
all ridges **2 x 10 u.n.o.**
fur ridge as required to provide full rafter contact fur rafters as required to meet insulation code
lap all rafters at kneewall splices
18" minimum nail with **5-12d** nails from each side
IRC 2015 / NCBC 2018 INCREASES ATTIC / CEILING INSULATION TO R-38

Hips May Be Spliced with six feet between opposing splices
NO Valley Splices

2 x 4 x 48
@ 32 Collar Ties
(115 mph zones)

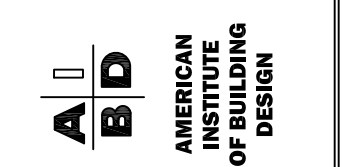
ROOF PLAN
SCALE: 1/4"=1'-0"



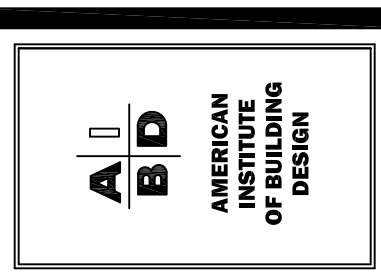
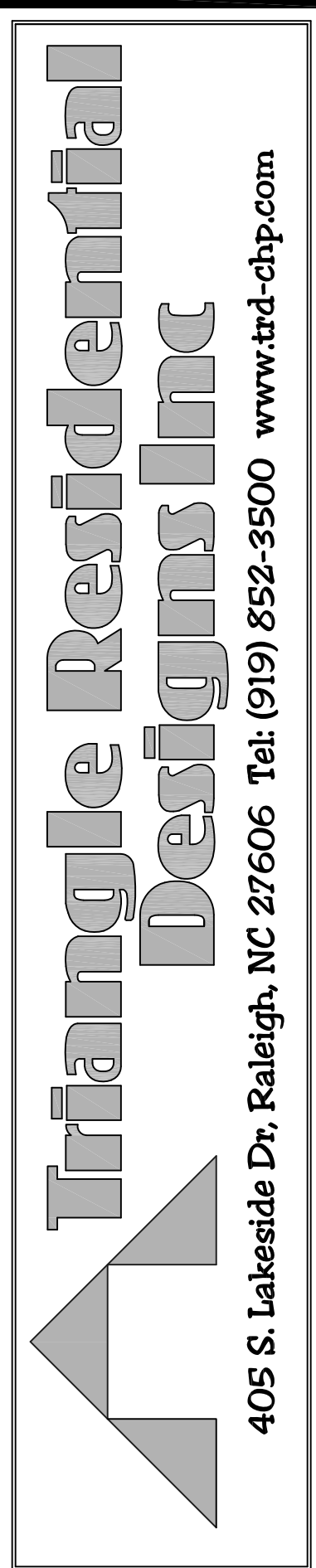
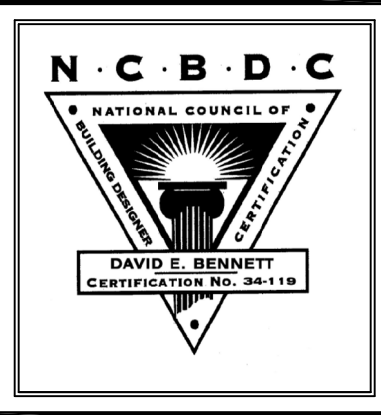
Structural Design By:
John Alexander McRae, PE, Inc
218 Coley Farm Road
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jampe@nc.rr.com (919) 210-5749
P O Box 1466 Apex, NC 27502
Report deficiencies immediately
2110-39
(NC C-2298)



Triangle Residential Designs Inc
405 S. Lakeside Dr, Raleigh, NC 27606 Tel: (919) 852-3500 www.trd-chp.com



CLIENT:	ERL HASS
PROJECT:	RESIDENCE
SHEET:	9 OF 9
DATE:	OCTOBER 25, 2021
SHEET NAME:	ROOF PLAN
DRAWN BY:	
REVISED:	
ADDRESS/LOCATION:	811 SOUTH RIVERS ROAD LILLINGTON, NC 27146 HARRIETT COUNTY



Client: ERL MASSE
 Project: RESIDENCE
 Address/Lot #: 5171 SOUTH RIVER ROAD WILKINGTON, NC 27546 HARNETT COUNTY
 Drawn by: DEB
 Revised:
 Date: OCTOBER 25, 2021
 Shc. D1 of 2

STANDARD CONSTRUCTION DETAILS & NOTES

FLOOR PLAN NOTES

- 1) ALL JOIST SPANS ARE CALCULATED USING #2 GRADE SPRUCE PINE FIR.
- 2) JOIST SIZES ARE SHOWN AT MINIMUM TO MEET STRUCTURAL REQUIREMENTS. SIZES MAY BE INCREASED TO PROVIDE MINIMUM INSULATION VALUES OR AIR PASSAGES.
- 3) PROVIDE DOUBLE FLOOR JOISTS AT ALL NON LOAD BEARING PARTITION WALLS RUNNING PARALLEL TO FLOOR JOISTS. ALSO UNDER ALL BOOKCASES, CABINETS, TUBS AND WASHING MACHINES (RECOMMENDED - NOT REQUIRED)
- 4) FLOOR JOISTS MUST BEAR 15" MIN. ON WOOD OR METAL AND 3" MIN. ON MASONRY OR CONCRETE.
- 5) PROVIDE 1"x4" CROSS-BRACING OR SOLID BLOCKING BETWEEN FLOOR JOISTS AT 6'-0" O.C. MAX. (RECOMMENDED BUT NOT REQUIRED)
- 6) ALL EXTERIOR AND LOAD BEARING HEADERS ARE TO BE (2)-2X10.
- 7) MINIMUM LVL DESIGN STRENGTH: E-2.0 x 2 MILLION PSL FB-2800 PSL FX-285 PSI
- 8) ALL LVL BEAMS TO HAVE 3 STUDS EACH END.
- 9) LOAD BEARING HEADER JACKS MUST REST ON DOUBLE JOISTS - SUPPLY EXTRA JOISTS AS REQUIRED
- 10) DRAFTSTOPPING AND FIREBLOCKING AS REQUIRED PER CODE.
- 11) DESIGNS FOR WOOD FLOOR TRUSSES MUST BE PREPARED BY A REGISTERED DESIGN PROFESSIONAL.

WOOD WALL CONSTRUCTION

- 1) ALL STUDS ARE TO BE #3 GRADE STANDARD OR STUD GRADE LUMBER. - #2 GRADE RECOMMENDED BUT NOT REQUIRED.
- 2) ALL INTERIOR LOAD-BEARING WALLS SHALL BE CONSTRUCTED, FRAMED & FIREBLOCKED AS SPECIFIED FOR EXTERIOR WALLS.
- 3) WALLS ARE 2x4 STUDS @ 16" O.C.
- 4) ALL OPEN AREA, TWO STORY WALLS ARE TO BE BALLOON FRAMED, 2'X 6' STUDS AT 12" O.C.
- 5) DRAFTSTOPPING AND FIREBLOCKING REQUIRED AS PER CODE.
- 6) ALL OPEN AREA, TWO STORY WALLS ARE TO BE BALLOON FRAMED, 2'X 6' STUDS AT 12" O.C.
- 7) WINDOWS SHOULD BE RATED FOR 25PSI.

GARAGE DOOR WALL CONSTRUCTION

- ONLY FOR GARAGE DOOR WALLS THAT DO NOT MEET BRACING REQUIREMENTS OF THE NC 2002 RESIDENTIAL BUILDING CODE.
- 1) PLACE (2)-1/2" DIAM. ANCHOR BOLTS AT OUTSIDE QUARTER OF THESE PANELS. EXTEND #4 STEEL REINFORCING VERTICALLY, LAPPING THE ANCHOR BOLT A MINIMUM OF 6" AND EXTENDING TO THE FOOTING WITH A 4" MINIMUM HORIZONTAL LEG INTO THE FOOTING. THE FOOTING MUST BE REINFORCED WITH (1) #4 BAR TOP AND BOTTOM IN THIS AREA. SECURE WALL TO ANCHOR BOLTS WITH SIMPSON "STRONG TIE" LITES, HTT6, HTT2, MTT2B OR TENSION TIE WITH 180# MINIMUM CAPACITY.
 - 2) FULLY FACE GARAGE WALL WITH 7/16" OSB OR 1/2" CDX NAILED PER TABLE R602.3(1) AND BLOCKED AT ALL WOOD STRUCTURAL PANEL SHEATHING EDGES.

CONCRETE SLAB FLOORS

- 1) CONCRETE SLAB ON GROUND FLOORS SHALL BE A MINIMUM OF 3-1/2" THICK.
- 2) FILL MATERIAL SHALL BE COMACTED TO ASSURE UNIFORM SUPPORT OF SLAB.
- 3) FILL SHALL NOT EXCEED 24" FOR CLEAN SAND OR GRAVEL AND 8" FOR EARTH.
- 4) GARAGE SLABS SHALL BE 4" CONC. W/ 6x6 W/M OR FIBERMESH WITH VAPOR BARRIER, OVER 4" OF CRUSHED STONE OR GRAVEL ON TAMPED EARTH. (W/M OR FIBERMESH RECOMMENDED - NOT REQ'D)
- 5) GARAGE SLAB SHALL BE SLOPED TO FACILITATE THE MOVEMENT OF LIQUIDS TO A DRAIN OR TOWARD THE MAIN VEHICLE ENTRYWAY.
- 6) BASEMENT SLABS: SAME AS GARAGE SLABS BUT WITH PERIMETER INSULATION PER CODE.
- 7) ELEVATED GARAGE FLOOR SHALL BE CAPABLE OF SUPPORTING A 2,000# LOAD OVER A 20-SQUARE-INCH AREA WITH A LIVE LOAD OF 50 PSF
- 8) EXPANSION JOINT REQUIRED WHERE ENCLOSED SLAB MEETS FOUNDATION WALL.

DECK NOTES

- 1) WHEN THE DECK IS ATTACHED TO THE STRUCTURE, THE STRUCTURE 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 TO THE STRUCTURE.
- 2) THE DECK AND STRUCTURE BANDS SHALL BE CONSTRUCTED IN CONTACT WITH EACH OTHER, EXCEPT ON BRICK VENEER STRUCTURES AND WHERE PLYWOOD SHEATHING IS REQUIRED AND PROPERLY FLASHED.
- 3) SIDING SHALL NOT BE INSTALLED BETWEEN THE STRUCTURE AND THE DECK BAND.
- 4) IF ATTACHED TO A BRICK STRUCTURE, NEITHER THE FLASHING NOR A TREATED BAND FOR THE STRUCTURE IS REQUIRED. THE TREATED DECK BAND SHALL BE CONSTRUCTED IN CONTACT WITH THE BRICK VENEER.
- 5) GIRDERS SHALL BEAR DIRECTLY ON POSTS OR BE CONNECTED TO THE SIDES OF THE POSTS WITH 2-5/8" HOT DIPPED GALVANIZED BOLTS.
- 6) FLOOR DECKING SHALL BE #2 GRADE TREATED SOUTHERN PINE OR EQUIVALENT. MINIMUM FLOOR DECKING THICKNESS FOR JOISTS AT 16" O.C. IS 1" T&G.
- 7) DECKS MAY NOT BE ATTACHED TO CANTILEVERED FLOOR SYSTEMS.
- 8) ALL JOIST SPANS ARE CALCULATED USING #2 GRADE SPRUCE PINE FIR.
- 9) JOIST SIZES ARE SHOWN AT MINIMUM TO MEET STRUCTURAL REQUIREMENTS. SIZES MAY BE INCREASED.
- 10) DECKS OVER 4'-0" ABOVE GRADE SHALL BE BRACED AS PER CODE APPENDIX M.

FOUNDATION NOTES

- 1) CRAWL SPACE IS TO BE LEVEL & CLEAN OF CONSTRUCTION DEBRIS, VEGETATION AND ANY ORGANIC MATERIAL.
- 2) ONE VENT MUST BE WITHIN 6" OF EACH CORNER OF THE BUILDING
- 3) POSSIBLE VENT LOCATIONS INDICATED ON THE FOUNDATION PLAN.
- 4) APPROVED VAPOR RETARDER TO COVER 100% OF CRAWL SPACE.

FOOTINGS

- 1) FOOTING PROJECTIONS SHALL BE AT LEAST 2" AND SHALL NOT EXCEED THE THICKNESS OF THE FOOTING.
- 2) THE TOP SURFACE OF FOOTINGS SHALL BE LEVEL W/ MASONRY UNITS WITH FULL MORTAR JOINTS. BOTTOM SURFACE OF FOOTINGS MAY SLOPE NO MORE THAN 10%. FOOTINGS SHALL BE STEPPED TO CHANGE THE ELEVATION OF THE TOP SURFACE OR WHERE THE SLOPE OF THE BOTTOM OF THE FOOTING WILL EXCEED 10%.
- 3) FINISHED GRADE OF THE UNDER FLOOR SURFACE MAY BE LOCATED AT THE BOTTOM OF THE FOOTINGS.
- 4) MINIMUM 8" WALL FOOTING TO BE NO LESS THAN 16" X 8"
- 5) MINIMUM CONCRETE FOOTING STRENGTH = 3000 PSI

DRAINAGE

- 1) INSTALL AROUND FOUNDATION DRAIN TILES, GRAVEL OR CRUSHED STONE DRAINS, PERFORATED PIPES OR OTHER APPROVED SYSTEM AS REQUIRED BY GRADE.
- 2) FOUNDATION DRAINAGE MAY BE OMITTED WHEN THE INTERIOR GRADE IS LESS THAN 12" BELOW THE EXTERIOR GRADE.
- 3) GRADE LOT SO AS TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS AT A MINIMUM OF 6" WITHIN THE FIRST 10'.

WATERPROOFING:

- 1) FOUNDATION WALLS, WHERE THE OUTSIDE GRADE IS HIGHER THAN THE INSIDE GRADE, SHALL BE DAMPROOFED FROM THE TOP OF THE FOOTING TO THE FINISHED GRADE. USE CODE APPROVED METHOD

ANCHORAGE

- 1) THE WOOD SOLE PLATE AT EXTERIOR WALLS ON MONOLITHIC SLABS AND WOOD SILL PLATE SHALL BE ANCHORED TO THE FOUNDATION W/ ANCHOR BOLTS SPACED A MAXIMUM OF 6'-0" ON CENTER AND LOCATED WITHIN 12" FROM THE ENDS OF EACH PLATE SECTION. BOLTS SHALL BE AT LEAST 1/2" IN DIAMETER AND SHALL EXTEND A MINIMUM OF 7" INTO MASONRY OR CONCRETE.
- 2) BOLTS MAY BE REPLACED BY ANCHOR STRAPS, SPACED AS REQUIRED TO PROVIDE EQUIVALENT ANCHORAGE.
- 3) INTERIOR BEARING WALL SOLE PLATES ON MONOLITHIC SLABS SHALL BE ANCHORED W/ APPROVED FASTENERS.

FOUNDATION WALLS

- 1) VERTICAL REINFORCEMENT OF MASONRY WALLS SHALL BE TIED TO THE HORIZONTAL REINFORCEMENT OF THE FOOTINGS.
- 2) FOUNDATION WALL IS TO BE 8" CONC. BLOCK OR 8" BRICK & BLOCK ON CONTINUOUS CONCRETE FOOTING.
- 3) FOUNDATION WALL IS TO HAVE A SOLID 8" MASONRY CAP.
- 4) WALL HEIGHT ABOVE FINISHED SHALL BE 4" WHERE MASONRY VENEER IS USED AND 6" ELSEWHERE.
- 5) WALL SUPPORTING OVER 4' OF UNBALANCED BACKFILL MUST BE BRACED TO PREVENT DAMAGE BY THE BACKFILL.
- 6) CAVITY WALL OR MASONRY VENEER CONSTRUCTION MAY BE SUPPORTED ON AN 8" FOUNDATION WALL, PROVIDED THE WALL IS CORBELED WITH SOLID MASONRY TO THE WIDTH OF THE WALL SYSTEM ABOVE. THE TOTAL HORIZONTAL PROJECTION OF THE CORBEL SHALL NOT EXCEED 2" WITH INDIVIDUAL CORBELS PROJECTING NOT MORE THAN 1/3 THE THICKNESS OF THE UNIT OR 1/2 THE HEIGHT OF THE UNIT. THE TOP COURSE OF ALL CORBELS SHALL BE A HEADER COURSE.
- 7) VENTS ARE INTENDED TO BE 16" X 8" ALUMINUM.

PIERS

- 1) MASONRY PIERS HEIGHT SHALL NOT EXCEED 10 TIMES THEIR LEAST DIMENSION.
- 2) WHEN STRUCTURAL CLAY OR HOLLOW CONCRETE MASONRY UNITS ARE USED TO SUPPORT BEAMS & GIRDERS, THE CELLULAR SPACES MUST BE FILLED SOLIDLY WITH CONCRETE OR TYPE "M" OR "S" MORTAR.
- 3) UNFILLED UNITS MAY BE USED IF THE HEIGHT IS NOT MORE THAN 4 TIMES THE LEAST DIMENSION.
- 4) HOLLOW PIERS SHALL BE CAPPED WITH 4" OF SOLID MASONRY OR CONCRETE, OR SHALL HAVE CAVITIES OF THE TOP COURSE FILLED WITH CONCRETE.
- 5) PIERS INDICATED ON PLAN ARE TYPICALLY 16"x 16" ON 24"x 24"x 8" FOOTINGS.
- 6) TIE ALL HALF PIERS INTO WALLS

CAVITY ACCESS

- 1) MIN. CRAWL SPACE ACCESS IS 18"(W) x 24"(H) W/ DBL. BAND ABOVE. PLACE AT BEST LOCATION WITH REFERENCE TO GRADE.
- 2) ACCESS MAKE BE INCREASED IF MECHANICAL EQUIPMENT IS LOCATED UNDER FLOORS - SEE NC MECHANICAL CODE FOR REQUIREMENTS.
- 3) ATTIC ACCESS SHALL BE 22" x 30" MINIMUM.

GLAZING

- 1) ALL HABITABLE ROOMS SHALL HAVE A GLAZING AREA OF NOT LESS THAN 8% OF THE FLOOR AREA.
- 2) WINDOWS SHALL HAVE A MINIMUM DESIGN REQUIREMENT OF 25#DPI AND U-40
- 3) VERIFY WINDOW EGRESS WITH WINDOW MANUFACTURER.

EMERGENCY ESCAPE

- 1) OPENINGS PROVIDED AS MEANS OF ESCAPE CANNOT HAVE A SILL HEIGHT OF MORE THAN 44" ABOVE THE FLOOR.
- 2) ESCAPE OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 4 SQ. FT. THE MINIMUM CLEAR OPENING HEIGHT IS 22" AND THE WIDTH IS 20".
- 3) ESCAPE OPENING SHALL HAVE A TOTAL GLASS AREA OF NOT LESS THAN 5 SQ. FT. FOR A GROUND WINDOW AND 5.7 SQ. FT. FOR AN UPPER STORY WINDOW.
- 4) REQUIRED EXIT DOORS SHALL BE NO LESS THAN 3'-0" x 6'-8".

GARAGE

- 1) DOOR FROM GARAGE TO HOUSE MUST BE 1-3/8" THICK SOLID WOOD OR SOLID OR HONEYCOMBED CORE STEEL DOORS OR 20 MIN. FIRE RATED.
- 2) GARAGE SHALL BE SEPARATED FROM THE RESIDENCE AND ITS ATTIC AREA BY NOT LESS THAN 1/2" GYPSUM BOARD APPLIED TO THE GARAGE SIDE.

STAIRWAYS

- 1) STAIRWAYS SHALL BE A MINIMUM 3'-0" WIDE.
- 2) HANDRAILS SHALL NOT PROJECT MORE THAN 4.5" ON EITHER SIDE.
- 3) MINIMUM CLEAR WIDTH OF THE STAIRWAY AT AND BELOW THE HANDRAIL SHALL NOT BE LESS THAN 31.5" WHERE THE HANDRAIL IS INSTALLED ON ONE SIDE AND 27" WHERE HANDRAILS ARE ON BOTH SIDES.
- 4) STAIRS NOT REQUIRED FOR EGRESS MAY BE AS NARROW AS 26"
- 5) MAXIMUM RISER HEIGHT SHALL BE 8-1/4" AND THE MINIMUM TREAD DEPTH SHALL BE 9".
- 6) NOSING SHALL BE 3/4" MINIMUM AND 1-1/4" MAXIMUM.
- 7) MINIMUM HEADROOM IN ALL PARTS OF THE STAIR SHALL NOT BE LESS THAN 6'-8".
- 8) WINDERS MUST, AT A POINT NOT MORE THAN 12" FROM THE SIDE WHERE THE TREADS ARE NARROWER, BE LESS THAN 9" AND THE MINIMUM WIDTH OF ANY TREAD IS NOT LESS THAN 4".
- 9) SPIRAL STAIRS MUST BE 26" WIDE MINIMUM AND TREADS MUST BE 7-1/2" AT 12" FROM THE NARROW EDGE. ALL TREADS MUST BE IDENTICAL WITH A MAXIMUM RISE OF 9-1/2". MINIMUM HEADROOM OF 6'-8" REQUIRED.
- 10) CIRCULAR STAIRS MUST, AT A POINT NOT MORE THAN 12" FROM THE SIDE WHERE THE TREADS ARE NARROWER, BE LESS THAN 9" AND THE MINIMUM WIDTH OF ANY TREAD IS NOT LESS THAN 6".

HANDRAIL AND GUARDS

- 1) HANDRAILS SHALL HAVE A MINIMUM HEIGHT OF 34" AND A MAXIMUM HEIGHT OF 38".
- 2) PORCHES, BALCONIES OR RAISED FLOORS OVER 30" ABOVE FLOOR OR GRADE SHALL HAVE GUARD RAILS NO LESS THAN 36" HIGH.
- 3) STAIRS THAT HAVE A RISE OF 30" ABOVE THE FLOOR SHALL HAVE HANDRAILS OF 30" HIGH.
- 4) GUARDS ON OPEN SIDES OF STAIRWAYS, RAISED FLOORS, BALCONIES AND PORCHES SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL CLOSURES OF LESS THAN 4" TO REJECT A 4" SPHERE.

NOTES:

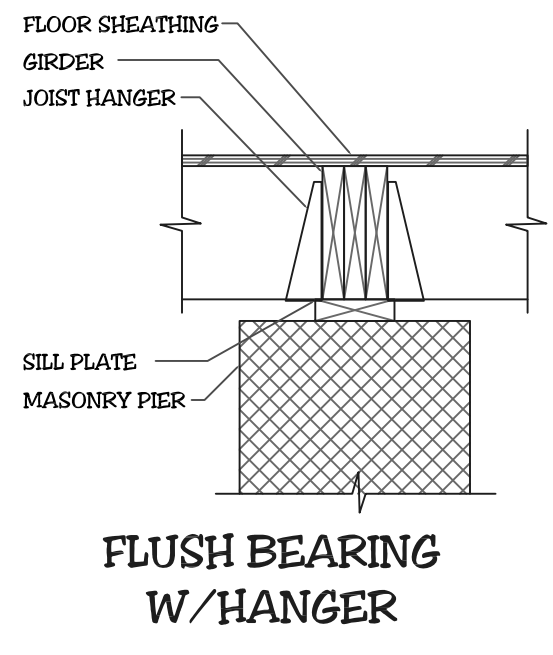
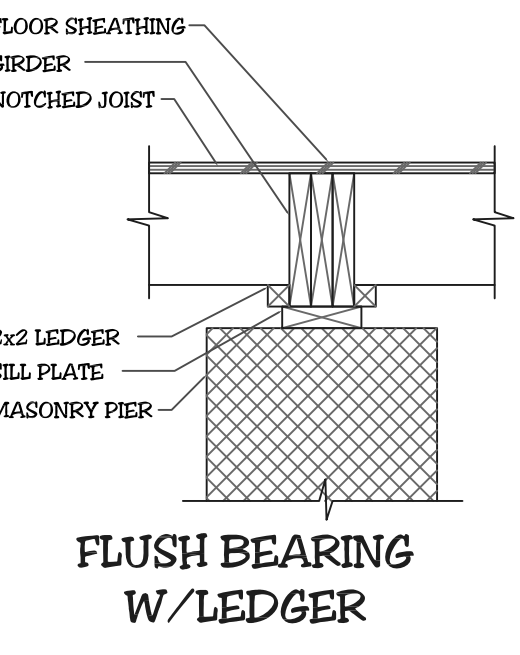
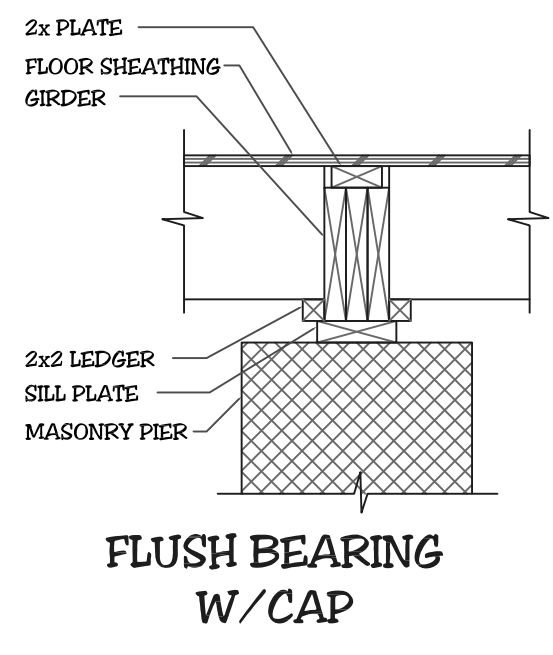
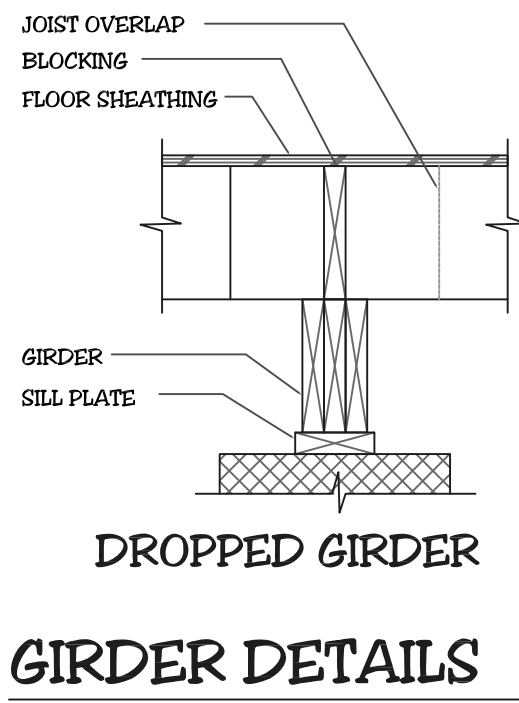
- * THESE PLANS, NOTES AND DETAILS ARE DESIGNED TO MEET THE REQUIREMENTS OF THE 2018 NC BUILDING CODE.
- * ALL NOTES ARE APPLICABLE UNLESS NOTED OTHERWISE (UNO)
- * THIS DETAIL SHEET IS TO BE USED ONLY IN CONJUNCTION WITH PLANS CREATED BY TRIANGLE RESIDENTIAL DESIGNS, INC.

NOTE: SEALED ENGINEER'S DRAWINGS TAKE PRECEDENCE OVER TRD'S STANDARD DETAILS AND NOTES

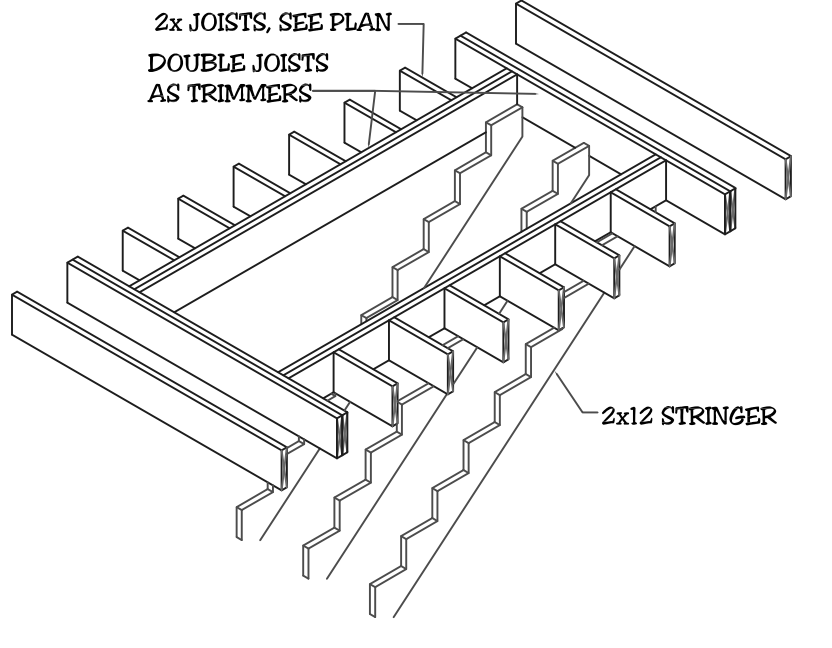
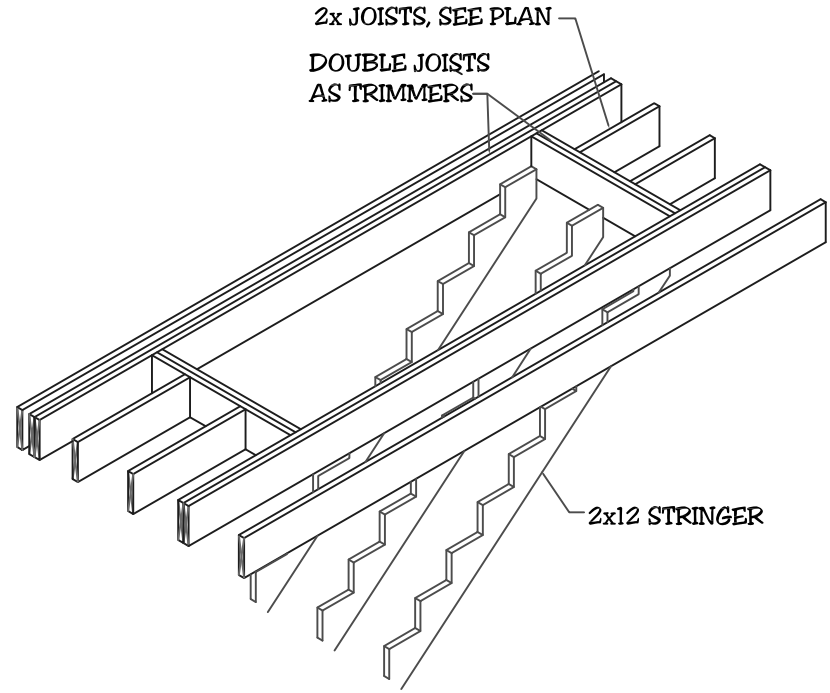
COMPONENT & CLADDING DESIGNED FOR THE FOLLOWING LOADS

	MEAN ROOF HEIGHT				
	UP TO 30'	30'-1" TO 35'	35'-1" TO 40'	40'-1" TO 45'	
ZONE 1	16.5, -18.0	17.3, -18.9	18.0, -19.6	18.5, -20.2	
ZONE 2	16.5, -21.0	17.3, -22.1	18.0, -22.9	18.5, -23.5	
ZONE 3	16.5, -21.0	17.3, -22.1	18.0, -22.9	18.5, -23.5	
ZONE 4	18.0, -19.5	18.9, -20.5	19.6, -21.3	20.2, -21.8	
ZONE 5	18.0, -24.1	18.9, -25.3	19.6, -26.3	20.2, -27.0	

SEE NC BUILDING CODE FOR LOCATION OF ZONES
 PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARDS AND AWAY FROM THE BUILDING SURFACES



GIRDER DETAILS



STAIR FRAMING w/PARALLEL JOISTS

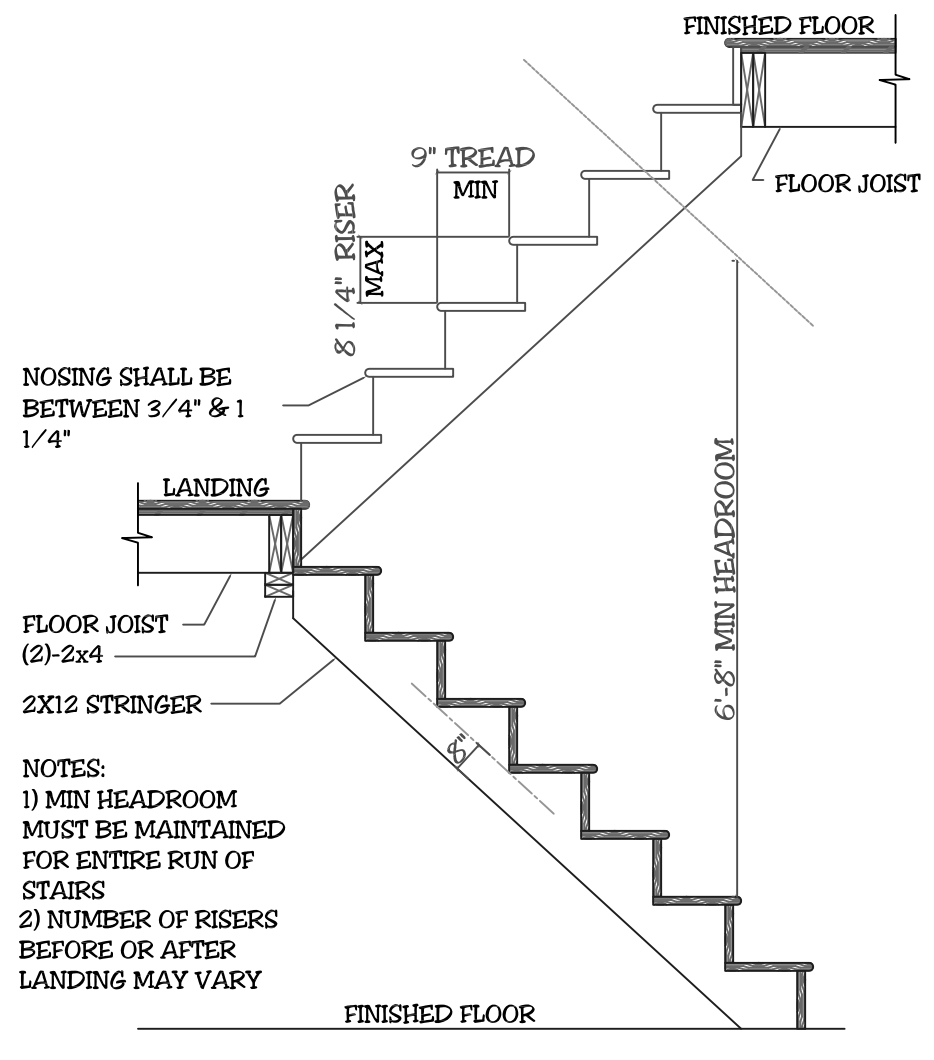
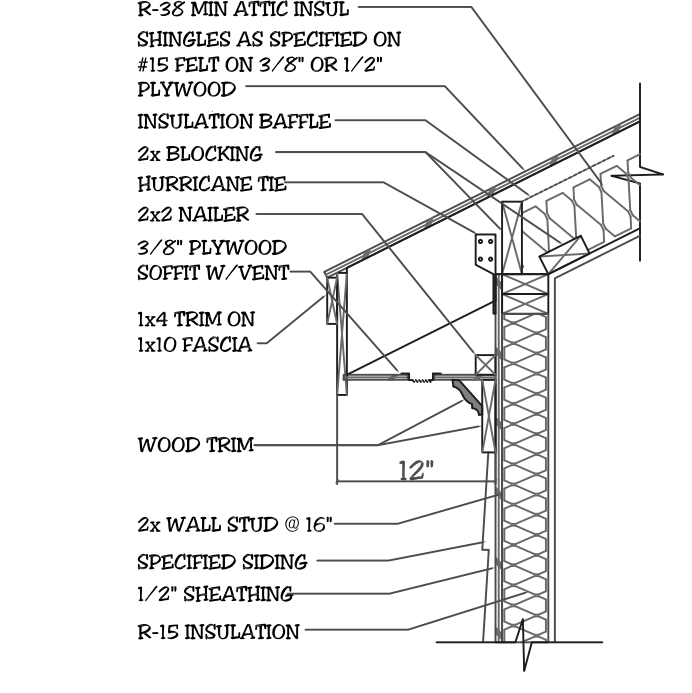
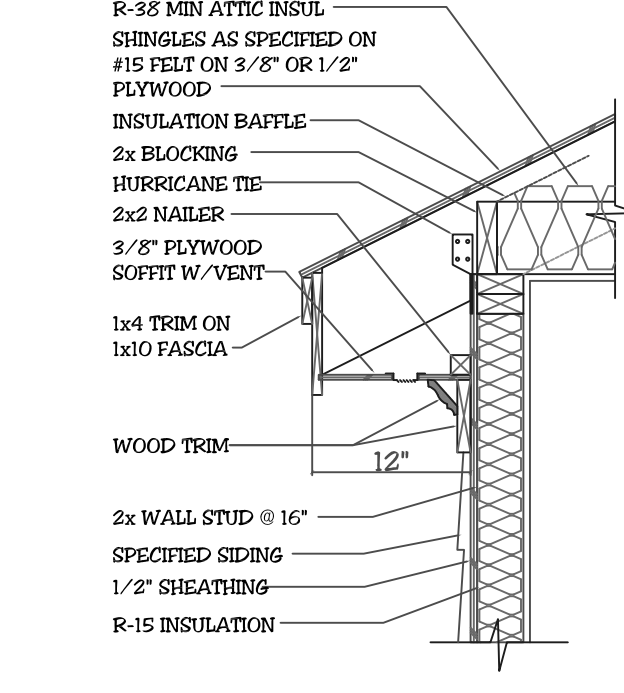
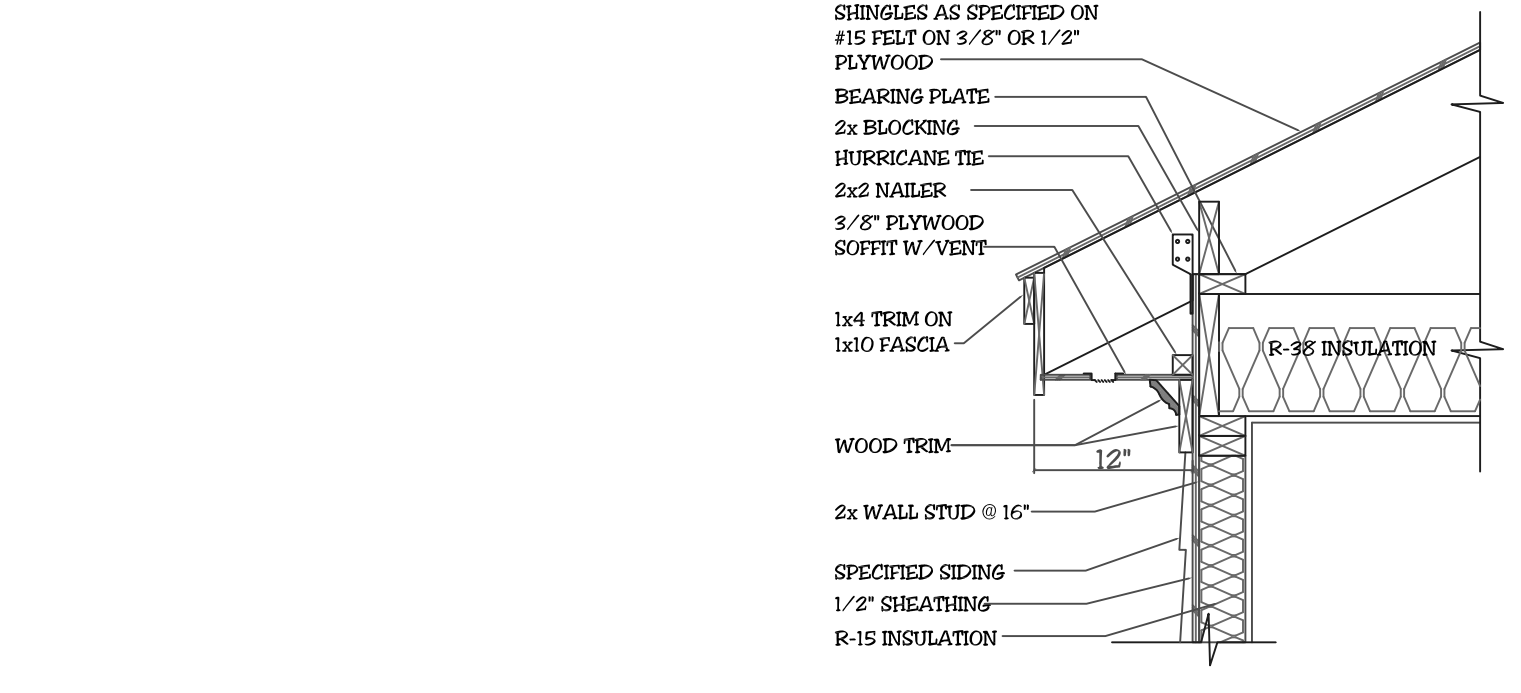
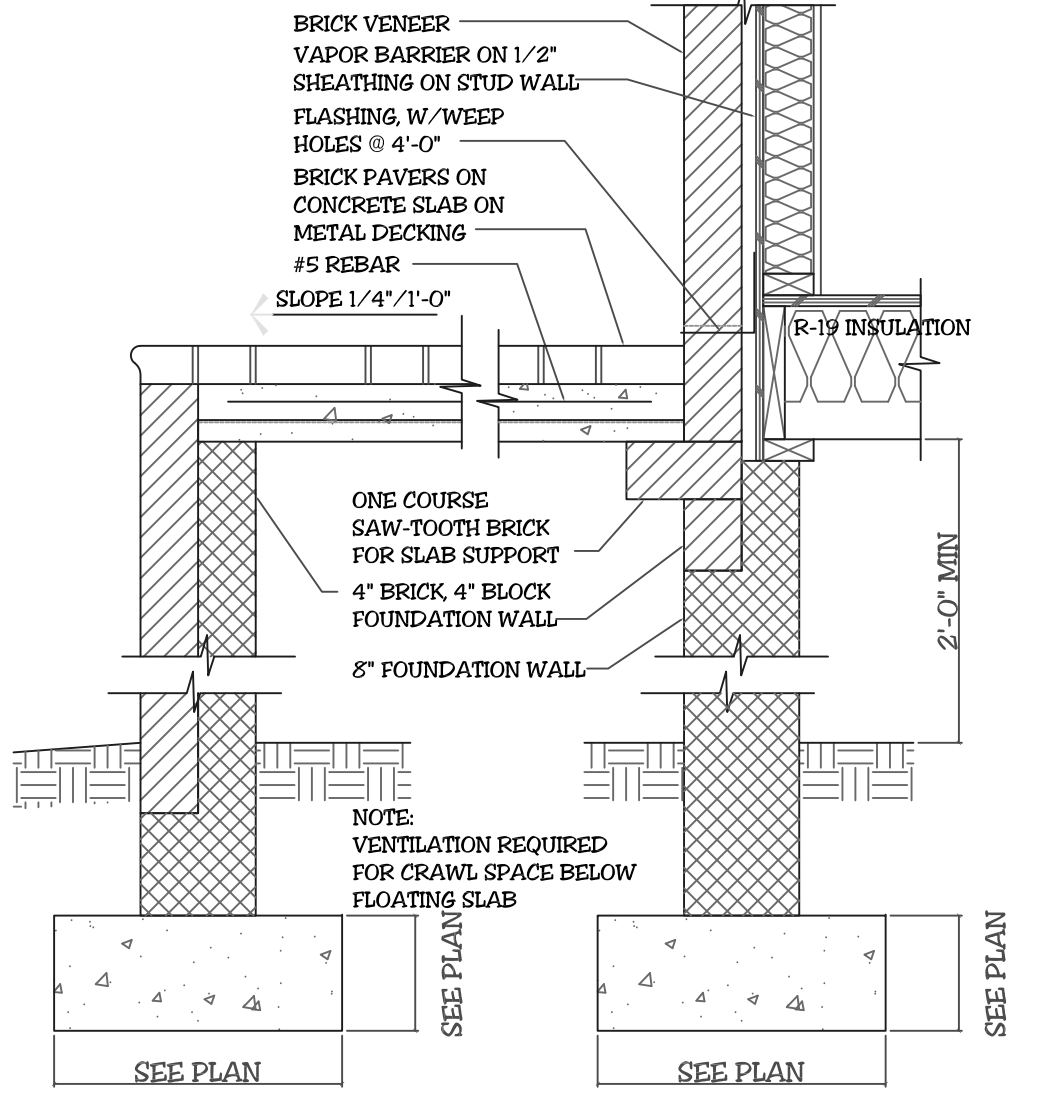
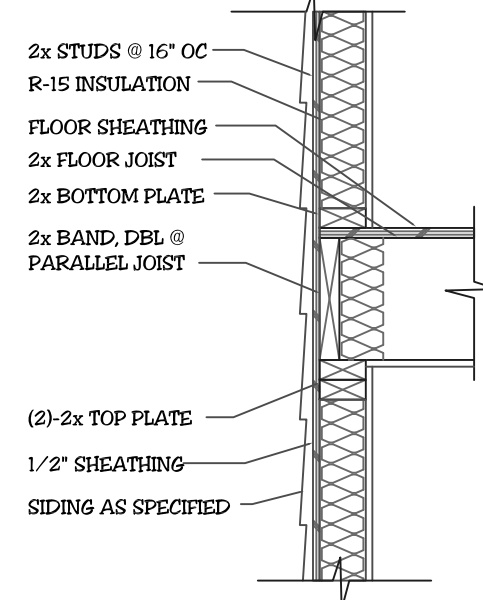
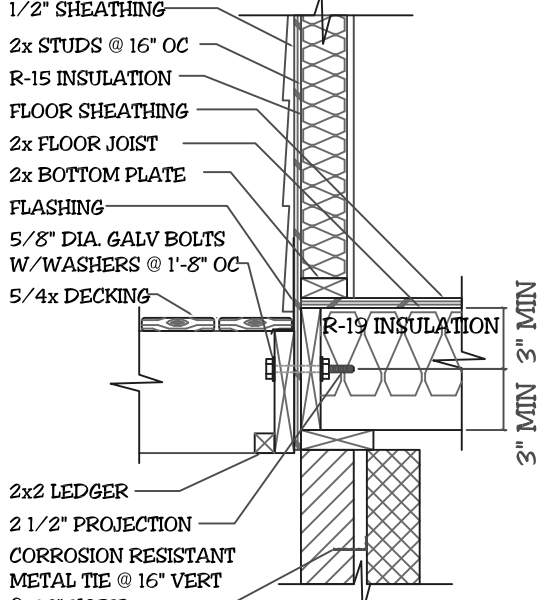
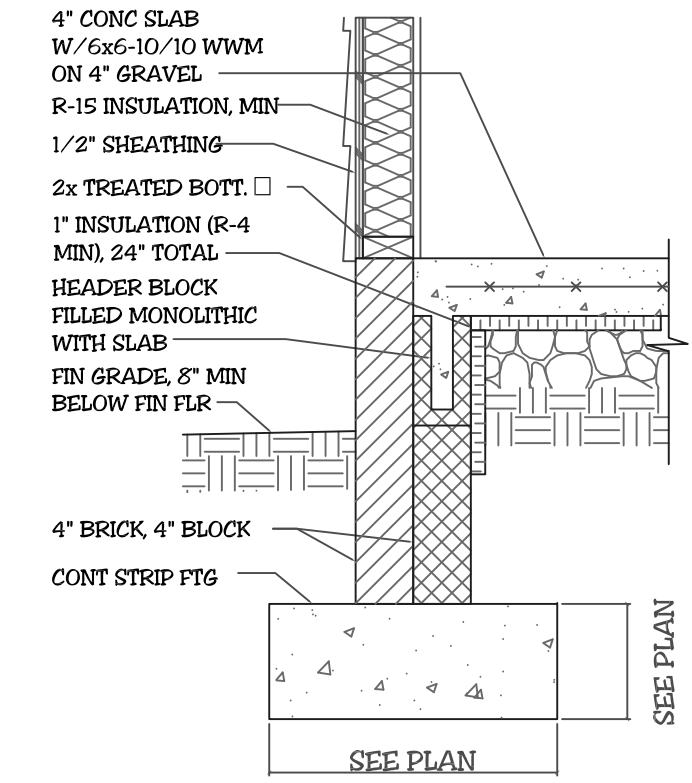
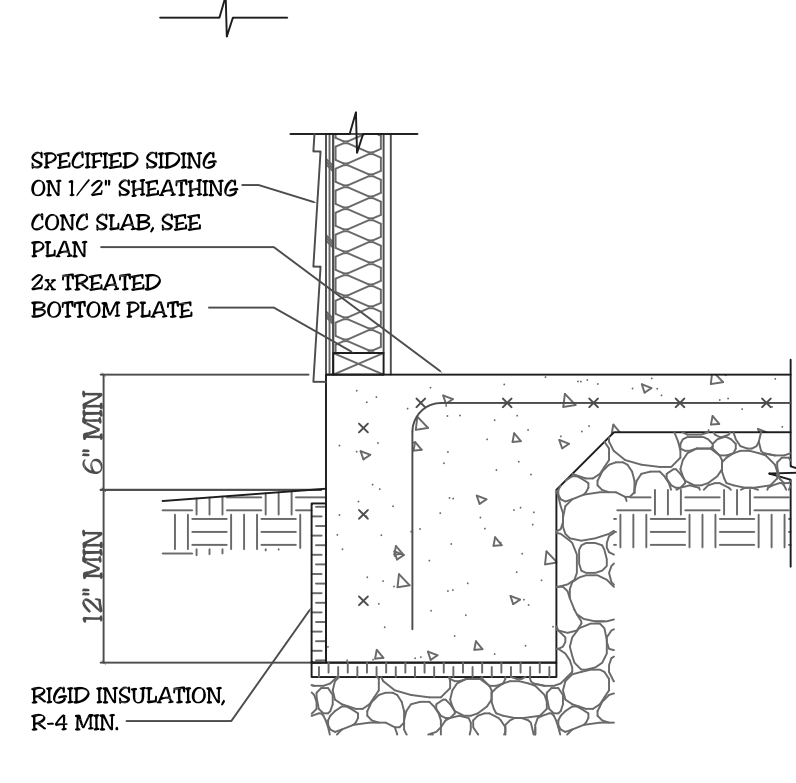
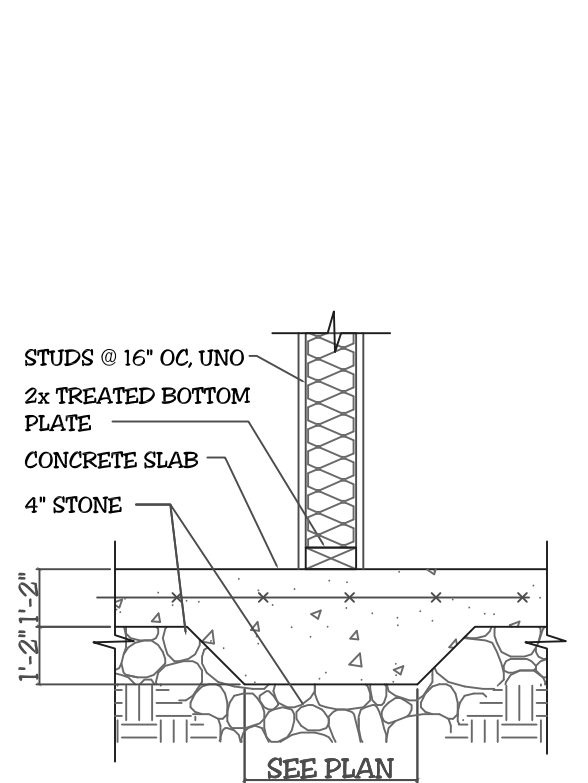
STAIR FRAMING w/PERPENDICULAR JOISTS

NOTES:
 * THESE PLANS, NOTES AND DETAILS ARE DESIGNED TO MEET THE REQUIREMENTS OF THE 2018 NC RESIDENTIAL BUILDING CODE.
 * ALL NOTES ARE APPLICABLE UNLESS NOTED OTHERWISE (UNO)
 * THIS DETAIL SHEET IS TO BE USED ONLY IN CONJUNCTION WITH PLANS CREATED BY TRIANGLE RESIDENTIAL DESIGNS, INC.

NOTE: SEALED ENGINEER'S DRAWINGS TAKE PRECEDENCE OVER TRD'S STANDARD DETAILS AND NOTES

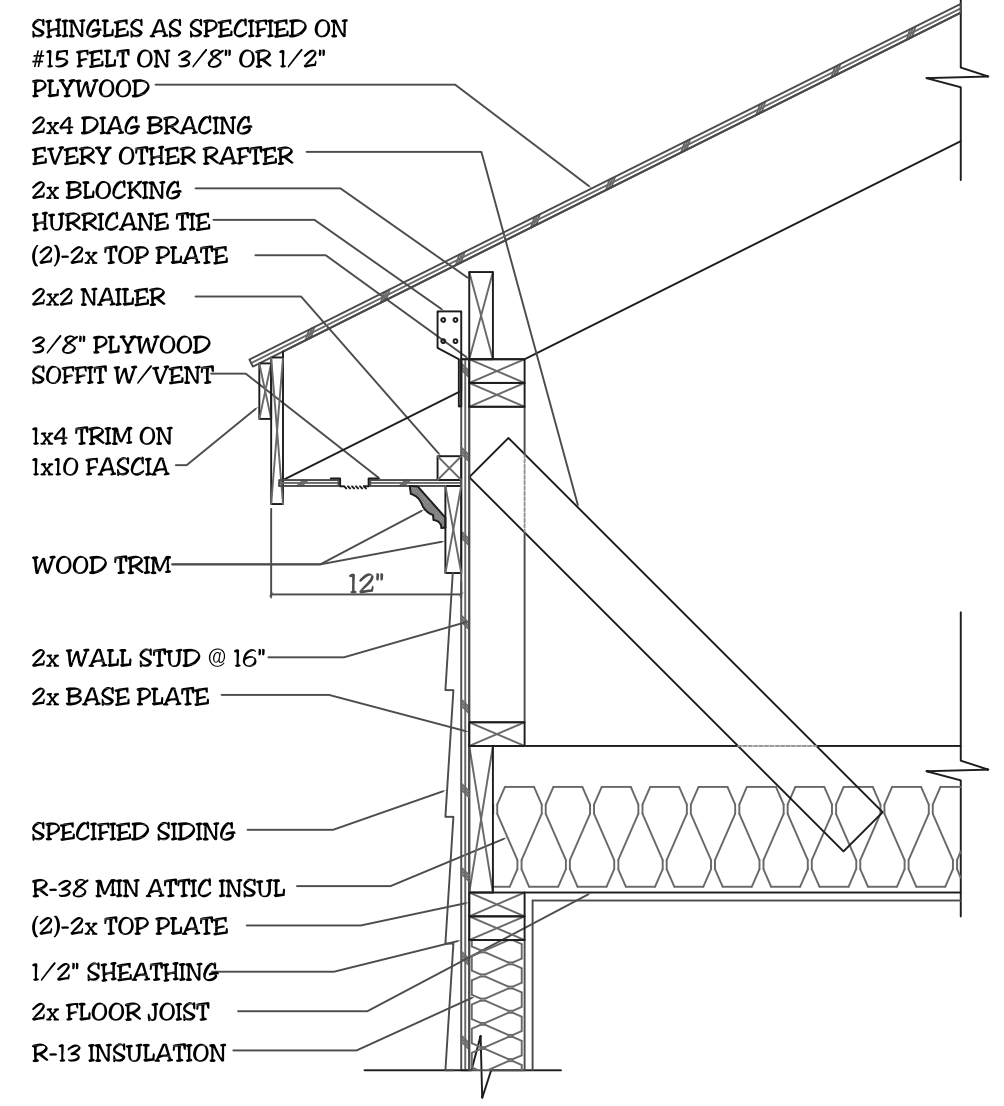
ANCHOR BOLT NOTE

1/2" DIA X 10" ANCHOR BOLTS W/ 7" MIN EMBEDMENT @ 6'-0" OC AND 12" FROM EACH PLATE SPLICE AND CORNER.

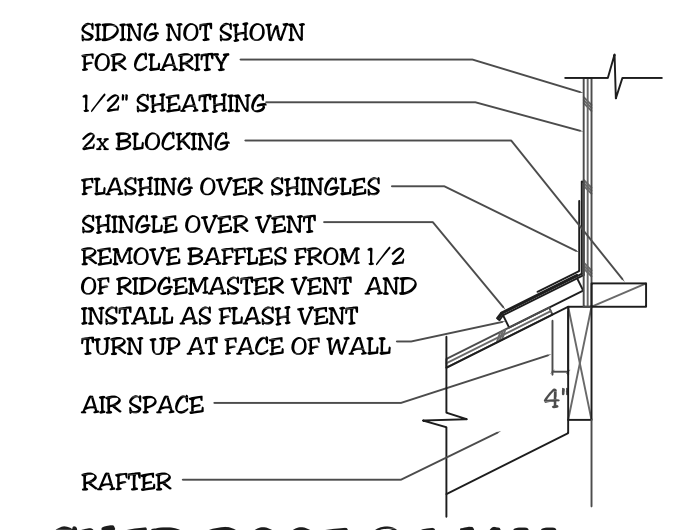


NOTES:
 1) MIN HEADROOM MUST BE MAINTAINED FOR ENTIRE RUN OF STAIRS
 2) NUMBER OF RISERS BEFORE OR AFTER LANDING MAY VARY

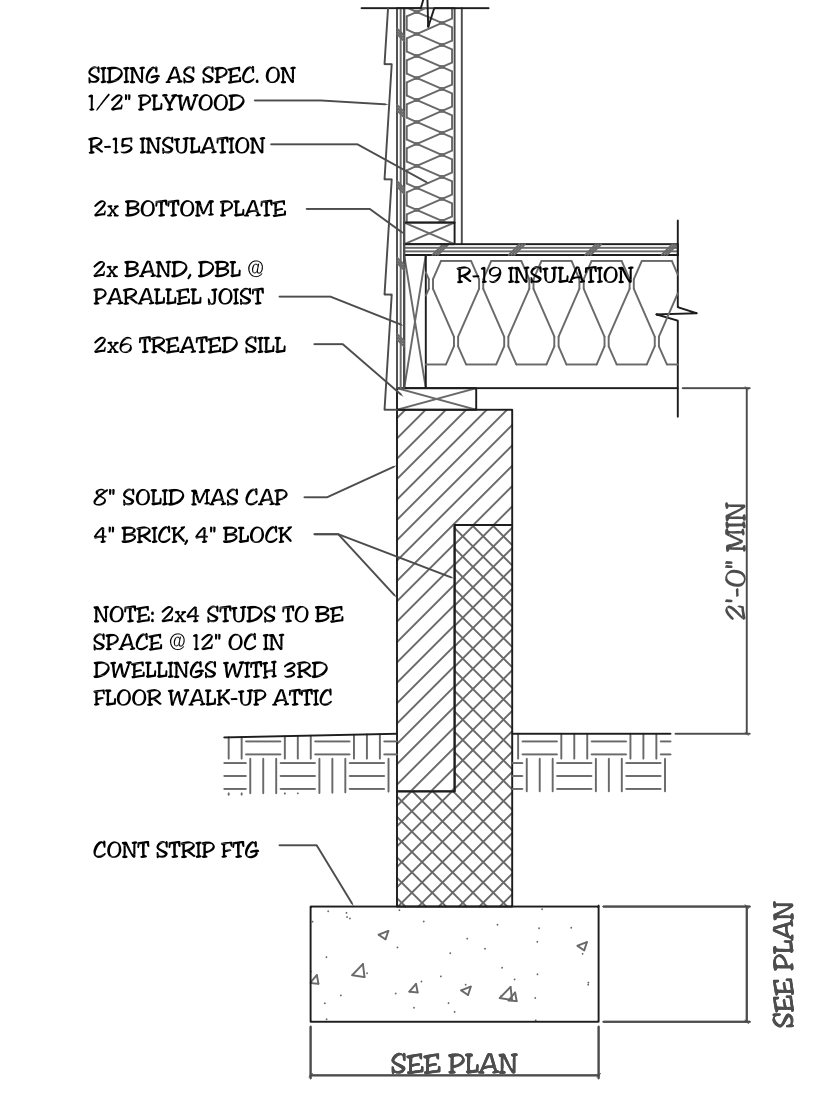
STAIR SECTION



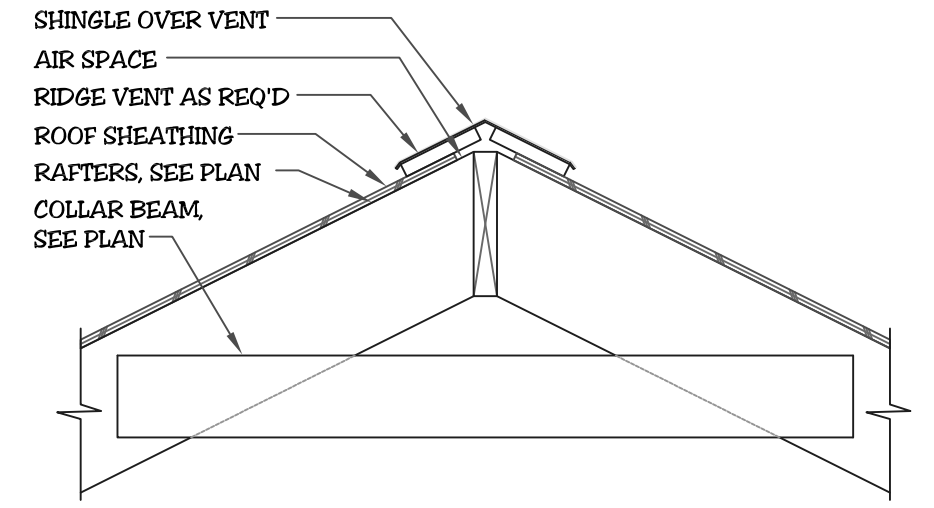
RAFTERS ON KNEEWALL



SHED ROOF @ WALL



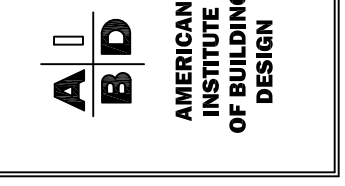
CRAWL SPACE w/SIDING



COLLAR BEAM DETAIL



Triangle Residential Designs Inc
 405 S. Lakeside Dr, Raleigh, NC 27606 Tel: (919) 852-3500 www.trd-chp.com



Client:	ERL MASSE	Address/Plot #:	5171 SOUTH RIVER ROAD
Project:	RESIDENCE	Address/Plot #:	WILKINGTON, NC 27546
Sh.:	D2 of 2	Address/Plot #:	HARNETT COUNTY
Date:	OCTOBER 25, 2021	Drawn by:	DEB
		Revised:	

STANDARD CONSTRUCTION DETAILS