ABBREVIATIONS

@	AT	LAB.	LABORATORY
A.B.	ANCHOR BOLT	LAM.	LAMINATE
ACOUST. or AC	ACCOUSTICAL	LAV.	LAVATORY
A.C.T.	ACCOUSTICAL CEILING TILE	LT. WT.	LIGHT WEIGHT
ACM	ACCOUSTICAL MYLAR	MACH.	MACHINE
ADJ.	ADJUSTABLE	MANUF.	MANUFACTURER
A.F.F.	ABOVE FINISHED FLOOR	MATL.	MATERIAL
A.F.G.	ABOVE FINISHED GRADE	MAX.	MAXIMUM
AGG.	AGGREGATE	MECH.	MECHANICAL
ALUM. or AL	ALUMINUM	M.E.S.	METAL EDGE STRIP
ANCH.	ANCHOR	MET.	METAL
APPROX.	APPROXIMATELY	M.H.	MAN HOLE
ASB.	ASBESTOS	MIL.	MIL
ATTEN.	ATTENUATION	MIN.	MINIMUM
BD.	BOARD	MISC.	MISCELLANEOUS
B.J.B.	BAR JOIST BEARING	MLD.	MOLDING
BLDG.	BUILDING	M.O.	MASONRY OPENING
BLK.	BLOCK	M.R.	MOISTURE RESISTANT
BM.	BEAM	MTL.	METAL
BRG. PL.	BEARING PLATE	NEC'Y	NECESSARY
BRK.	BRICK	N.I.C.	NOT IN CONTRACT
BRZ.	BRONZE	N.T.S.	NOT TO SCALE
BOT.	BOTTOM	O	OIL
CAB.	CABINET	O.C. or O/C	ON CENTER
C.B.	CATCH BASIN or CHALK BOARD	O.D.	OUTSIDE DIAMETER
CEM.	CEMENT	O/O	OUT TO OUT
CER.	CERAMIC	OPG.	OPENING
C.G.	CORNER GUARD	O.H.	OVERHEAD
C.J.	CONTROL JOINT	OPP.	OPPOSITE
CK.	CAULK	P	PAINT(ED)
CL. or ℄	CENTERLINE	PARTN.	PARTITION
CLG.	CEILING	P.BD.	PARTICLE BOARD
C.M.U.	CONCRETE MASONRY UNIT	P.C.T.	PORCELAIN TILE
C.O.	CLEAN OUT	PL.	PLATE
COL.	COLUMN	PLAM.	PLASTIC LAMINATE
CONC.	CONCRETE	PLAS.	PLASTIC
CONC. BLK.	CONCRETE BLOCK	PLWD. or PWD.	PLYWOOD
CONST.	CONSTRUCTION	PNL.	PANELING
CONT.	CONTINUOUS	POLY.	POLYETHENE
CORR.	CORRIDOR	PORC.	PORCELAIN
CPT.	CARPET	P.T.	PAINT
C.R.	COLD ROLLED	PVMT.	PAVEMENT
C.T.	CERAMIC TILE	Q.T.	QUARRY TILE
DBL.	DOUBLE	R	RISERS
DET. or DTL.	DETAIL	R & S	ROD & SHELF
D.F.	DRINKING FOUNTAIN	RAD. or R	RADIUS
DIA. or ø	DIAMETER	R.B.	RUBBER BASE
DIAG.	DIAGONAL	R.C.P.	REINFORCED CONCRETE PIPE
DIM.	DIMENSION	R.D.	ROOF DRAIN
DISP.	DISPENSER	REF.	REFERENCE
DTL.	DETAIL	REC.	RECESSED
DN.	DOWN	REF.	REFRIGERATOR
D.O.	DO OVER	REINF.	REINFORCED
D.S.	DOWN SPOUT	REQ'D	REQUIRED
DWG.	DRAWING	RES.	RESISTANT
E	EPOXY	RESIL.	RESILIENT
E.DF.	ELECTRIC DRINKING FOUNTAIN	RET.	RETAINING
E.I.F.S.	EXTERIOR INSULATION & FINISH SYSTEM	RM.	ROOM
E.J.	EXPANSION JOINT	R.O.	ROUGH OPENING
E.W.C.	ELECTRIC WATER COOLER	SB.	SPLASH BACK
EA.	EACH	SC.	SOLID CORE
EL. or ELEV.	ELEVATION	SCHED.	SCHEDULE
ELECT.	ELECTRIC(AL)	SCW.	SOLID CORE WOOD
ENAM.	ENAMEL	SECT.	SECTION
E.O.S.	EDGE OF SLAB	SHT.	SHEET
E.PT.	EPOXY PAINT	SIM.	SIMILAR
EQ.	EQUAL	SLR.	SEALER
EQUIP.	EQUIPMENT	SPEC.	SPECIFICATIONS
E.W.	EACH WAY	SQ.	SQUARE
EXIST.	EXISTING	S.S.	STAINLESS STEEL or STORM SEWER
EXP.	EXPOSED	ST.	STAIN
EXP. JT. or E.J.	EXPANSION JOINT	STD.	STANDARD
EXT.	EXTERIOR	STL.	STEEL
EXT. GDE.	EXTERIOR GRADE	STN.	STONE
F.B.O.	FURNISHED BY OTHERS	STRUCT.	STRUCTURE
F/C or F.C.U.	FAN COIL UNIT	STUC.	STUCCO
F.D.	FLOOR DRAIN	SUSP.	SUSPENDED
F.E.C.	FIRE EXTINGUISHER CABINET	S.V.	SHEET VINYL
F.H.	FLAT HEAD	SYM.	SYMMETRICAL
FND.	FOUNDATION	SYN.	SYNTHETIC
FIN.	FINISH	T.	TREAD
FLR.	FLR.	T. & B.	TOP AND BOTTOM
FLUOR.	FLUORESCENT	T. & G.	TONGUE AND GROOVE
F.O.S.	FACE OF STUD	TB	TACKBOARD
FRM.	FRAME	TC	TEACHER CABINET
FT.	FOOT	TEL.	TELEPHOINE
FTG.	FOOTING	TF	TOP OF FOOTING
G.I.	GALVANIZED IRON	THK	THICK(NESS)
GA.	GAUGE	THR	THRESHOLD
GALV.	GALVANIZED	THRU.	THROUGH
G.B.	GRAB BAR	T.O.C.	TOP OF CONCRETE
GEN.	GENERAL	T.TILE	TERRAZZO TILE
GL.	GLASS	TXP.	TEXTURED PAINT
GLS. BLK.	GLASS BLOCK	TYP.	TYPICAL
GRT.	GROUT	TZ.	TERRAZZO
GYP.	GYPSUM	U.L.	UNDER WRITERS LABORATORIES
GYP. BD. or GPBD	GYPSUM BOARD	UNF.	UNFINISHED
H.B.	HOSE BIBB	U.O.N.	UNLESS OTHERWISE NOTED
HBD.	HARDBOARD	UR	URINAL
H.C.	HANDICAPPED	V.C.G.B.	VINYL COVERED GYP. BOARD
H.C.W.	HOLLOW CORE WOOD	V.C.P.	VITRIFIED CLAY PIPE
HDW.	HARDWARE	V.C.T.	VINYL COMPOSITION TILE
H.M.	HOLLOW METAL	VERT.	VERTICAL
H.R.	HANDRAIL	VIN.	VINYL
HR.	HOUR	VWC.	VINYL WALL COVERING
HD.	HEAD	W	WAX
HDWD. or HWD.	HARDWOOD	W/	WITH
HORIZ.	HORIZONTAL	WATER-RES.	WATER-RESISTANT
HT.	HEIGHT	WC	WATER CLOSET
INCL.	INCLUDING	WD.	WOOD
I.D.	INSIDE DIAMETER	W.F.	WIDE FLANG
IN.	INCH	WIN.	WINDOW
INSUL.	INSULATION	W.P.	WATERPROOF
INT.	INTERIOR	W.R.G.B.	WATER-RESISTANT GYPBRD
INV.	INVERT	WSCT.	WAINSCOT
J.B.	JUNCTION BOX	W.W.F./W.W.M.	WELDED WIRE FABRIC/MESH
J.T.	JOINT	W.W.M.	WELDED WIRE MESH
KIT.	KITCHEN		

atmos

A CUSTOM HOME DRAWN FOR:

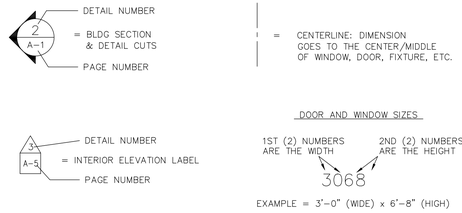
VAISHNAVI KRISHNAN

50 TALBERT ROAD, RALEIGH, NC

JOB# 21-001

INDEX TO DRAWING

LEGEND



GENERAL NOTES

OVERALL

1) ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES, REGULATIONS, AND FHA/VA MPS.

2) CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT SITE BEFORE BEGINNING CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED AND DISCUSSED WITH THE HOMEOWNER & ATMOS PROJECT MANAGER FOR JUSTIFICATION AND/OR CORRECTION BEFORE PROCEEDING WITH WORK. CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ERRORS THAT ARE NOT REPORTED.

3) ALL DIMENSIONS SHOULD BE READ OR CALCULATED AND NEVER SCALED.

4) CONTRACTOR SHALL INSURE COMPATIBILITY OF THE BUILDING WITH ALL SITE REQUIREMENTS.

5) WALLS ON BOTH SIDES OF TUBS OR SHOWER UNITS SHALL BE SET ACCORDING TO UNIT. THIS MAY AFFECT OTHER WALL LOCATIONS– DEPENDING ON THE SIZE UNIT BEING USED.

6) ALL MANUFACTURED ITEMS INSTALLED IN THIS PROJECT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.

7) COORDINATE ALL PLUMBING FIXTURES WITH SPECS AND/OR OWNER. (BRAND, COLOR, ETC.)

8) AFTER COMPLETION OF PROJECT, CONTRACTOR SHALL REMOVE ALL DEBRIS, & LABELS, WASH GLASS, CLEAN ALL NEWLY INSTALLED ITEMS & ADJACENT SURFACES. (LEAVE BROOM CLEAN.)

9) ALL WINDOWS AND DOORS ARE DIMENSIONED TO THE CENTER. ALL EXTERIOR WALL DIMENSIONS ARE TO THE EXTERIOR OF THE WALL.

NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.

APPROVED
Limited building only review
Permit holder responsible for full compliance with the code

07/20/2022

Harnett COUNTY NORTH CAROLINA

See revised engineered drawings after sheet 12

atmos

SIGN-OFF SIGNATURES AND DATES

HOMEOWNER	DATE
HOMEOWNER	DATE
REALTOR	DATE
BUILDER	DATE

Subdivision :

Block :

Lot :

Project Information :	
Job # & Name : 21-001 KRISHNAN	
Current Revision Date :12.27.21	
Drawing Start Date : 00-00-0000	
Scale : 1/4" = 1'-0"	
Drawn By : First & Last Name	
Checked By : First & Last Name	
VAISHNAVI KRISHNAN	
Address (Build Location) :	
50 TALBERT ROAD, RALEIGH, NC.	
Project Manager :BEN STONE	

First Floor Heated & Cooled :	1,821
Second Floor Heated & Cooled :	999
Basement Floor Heated & Cooled :	0,000
Total Heated & Cooled :	2,820
Unfinished Bonus room:	304
Double-Car Garage :	505
UnCovered Front Porch :	49
UnCovered Rear Porch :	263
Covered Front Porch :	000
Total Unheated :	1121
Total Area Under Beam :	3,941

Door Schedule

Symbol	Qty.	Size	Location	Description
1	1	16'-0" x 8'-0"	Exterior	Overhead Garage Door
42	1	3/0x8/0	Exterior R.H.	Door Unit
37	1	2/8x8/0	Exterior L.H.	Glass Door Unit
54	1	5/0x8/0	Exterior	Double Front Door Unit - Square
103	1	2/0x8/0	Interior L.H.	Door Unit
105	2	2/0x8/0	Interior	Double Door Unit
109	2	2/4x8/0	Interior L.H.	Door Unit
110	2	2/4x8/0	Interior R.H.	Door Unit
112	2	2/6x8/0	Interior L.H.	Door Unit
113	4	2/6x8/0	Interior R.H.	Door Unit
116	1	2/6x5/4	Interior L.H.	Door Unit w/ Sill and Weatherstrip
117	1	2/6x5/4	Interior R.H.	Door Unit w/ Sill and Weatherstrip
137	0	2/8x8/0	Interior L.H.	Door Unit w/ Sill and Weatherstrip
149	0	5/0x8/0	Interior	Cased Opening
161	1	2/8x8/0	Interior	Arched Opening
170	3	4/0x8/0	Interior	Arched Opening
191	2	1/6x8/0	Interior L.H.	Door Unit
196	3	2/6x8/0	Interior R.H.	Door Unit
197	1	2/8x8/0	Interior R.H.	Door Unit
201	2	2/4x8/0	Interior L.H.	Door Unit
202	2	2/4x8/0	Interior R.H.	Door Unit
203	1	3/6x8/0	Interior	Arched Opening
205	1	1/8x8/0	Interior L.H.	Door Unit

Window Schedule

Symbol	Qty.	Size	Type	Description
A	6	3/0x5/2	Single Hung	Single (2-Tempered)
B	1	3/0x5/2	Single Hung	Single
I	1	4/0x4/0	Fixed	Single
S	1	2/0x3/0	Single Hung	Single
AP	4	3/0x6/0	Single Hung	Single
BH	1	2/8x4/0	Fixed	Single
BL	4	2/8x6/0	Single Hung	Single
BN	1	2/8x6/0	Single Hung	Triple (Tempered)
BY	1	3/0x2/0	Fixed	Transom

atmos

SIGN-OFF SIGNATURES AND DATES :

HOMEOWNER DATE

HOMEOWNER DATE

REALTOR DATE

BUILDER DATE

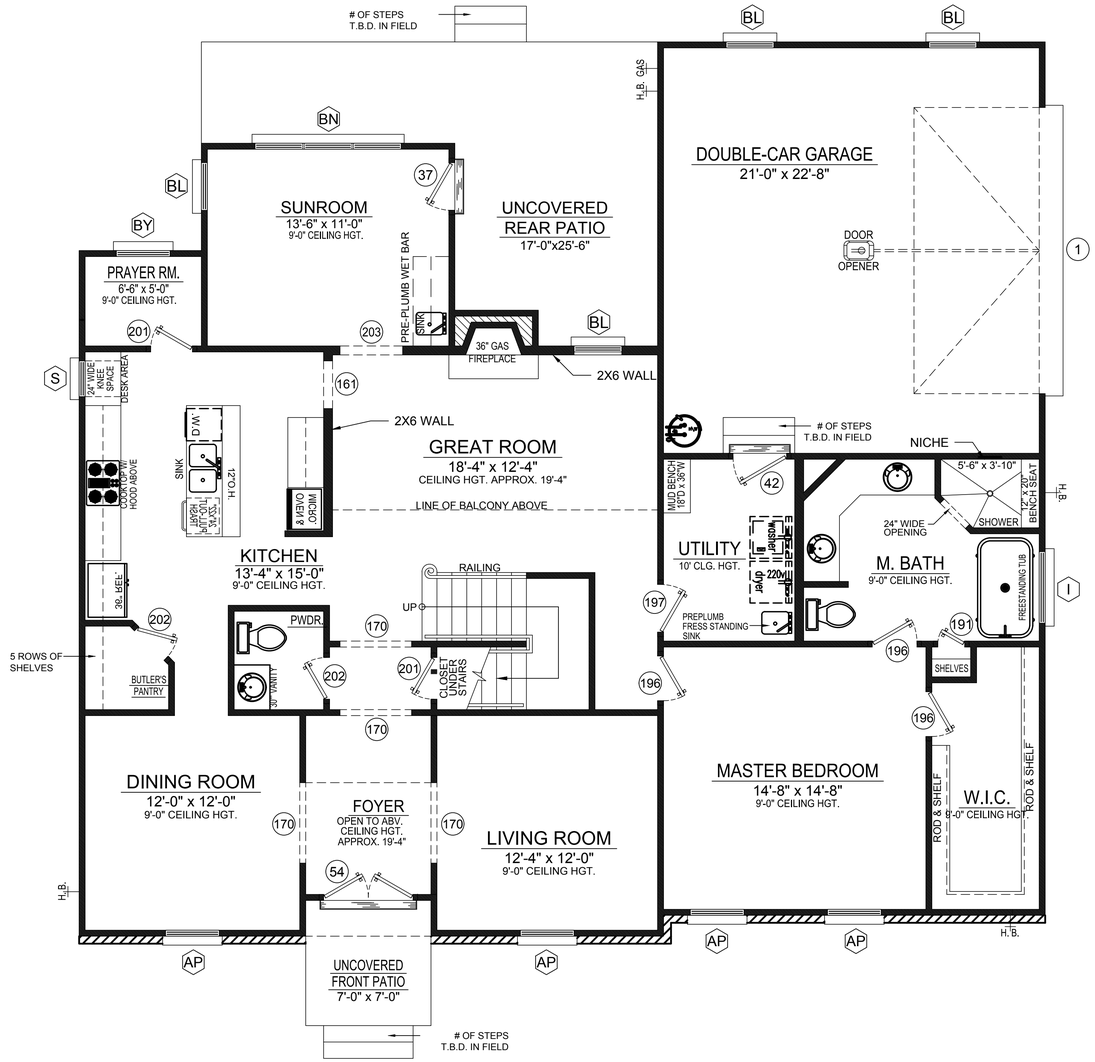
Subdivision :

Block :

Lot :

Project Information :
Job # & Name : 21-001 KRISHNAN
Current Revision Date :12.27.21
Drawing Start Date : 00-00-0000
Scale : 1/4" = 1'-0"
Drawn By : First & Last Name
Checked By : First & Last Name
VAISHNAVI KRISHNAN
Address (Build Location) :
50 TALBERT ROAD, RALEIGH, NC.
Project Manager :BEN STONE

First Floor Heated & Cooled :	1,821
Second Floor Heated & Cooled :	999
Basement Floor Heated & Cooled :	0,000
Total Heated & Cooled :	2,820
Unfinished Bonus room:	304
Double-Car Garage :	505
UnCovered Front Porch :	49
UnCovered Rear Porch :	263
Covered Front Porch :	000
Total Unheated :	1121
Total Area Under Beam :	3,941



1 FIRST FLOOR INFORMATION PLAN

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

WALL LEGEND :

- STUD WALLS
- BRICK

atmos

SIGN-OFF SIGNATURES AND DATES :

HOMEOWNER	DATE	HOMEOWNER	DATE	REALTOR	DATE	BUILDER	DATE
---	---	---	---	---	---	---	---

Subdivision :

Block :

Lot :

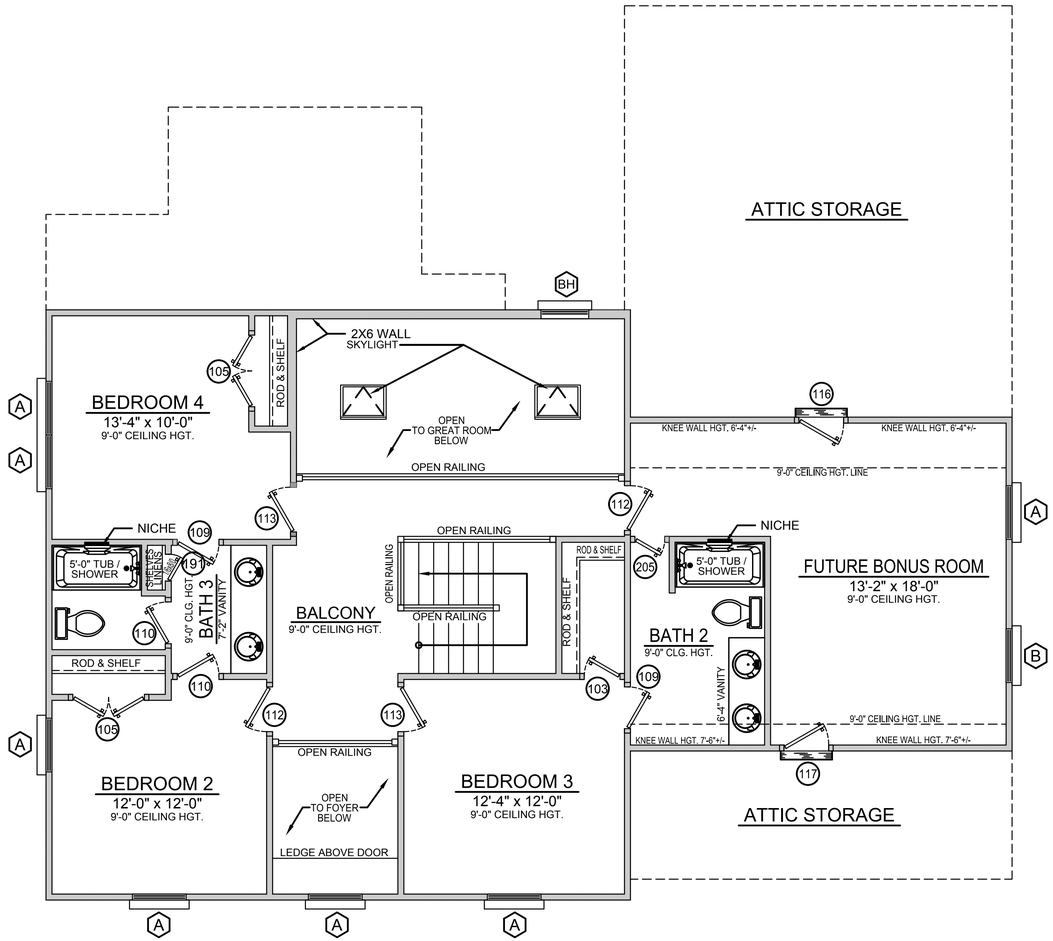
Project Information :
Job # & Name : 21-001 KRISHNAN
Current Revision Date :12.27.21
Drawing Start Date : 00-00-0000
Scale : 1/4" = 1'-0"
Drawn By : First & Last Name
Checked By : First & Last Name
VAISHNAVI KRISHNAN
Address (Build Location) :
50 TALBERT ROAD, RALEIGH, NC.
Project Manager :BEN STONE

First Floor Heated & Cooled :	1,821
Second Floor Heated & Cooled :	999
Basement Floor Heated & Cooled :	0,000
Total Heated & Cooled :	2,820
Unfinished Bonus room:	304
Double-Car Garage :	505
UnCovered Front Porch :	49
UnCovered Rear Porch :	263
Covered Front Porch :	000
Total Unheated :	1121
Total Area Under Beam :	3,941

WALL LEGEND :

STUD WALLS

BRICK



1 SECOND FLOOR INFORMATION PLAN

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

atmos

SIGN-OFF SIGNATURES AND DATES :

HOMEOWNER	DATE	HOMEOWNER	DATE	REALTOR	DATE	BUILDER	DATE
---	---	---	---	---	---	---	---

Subdivision :

Block :

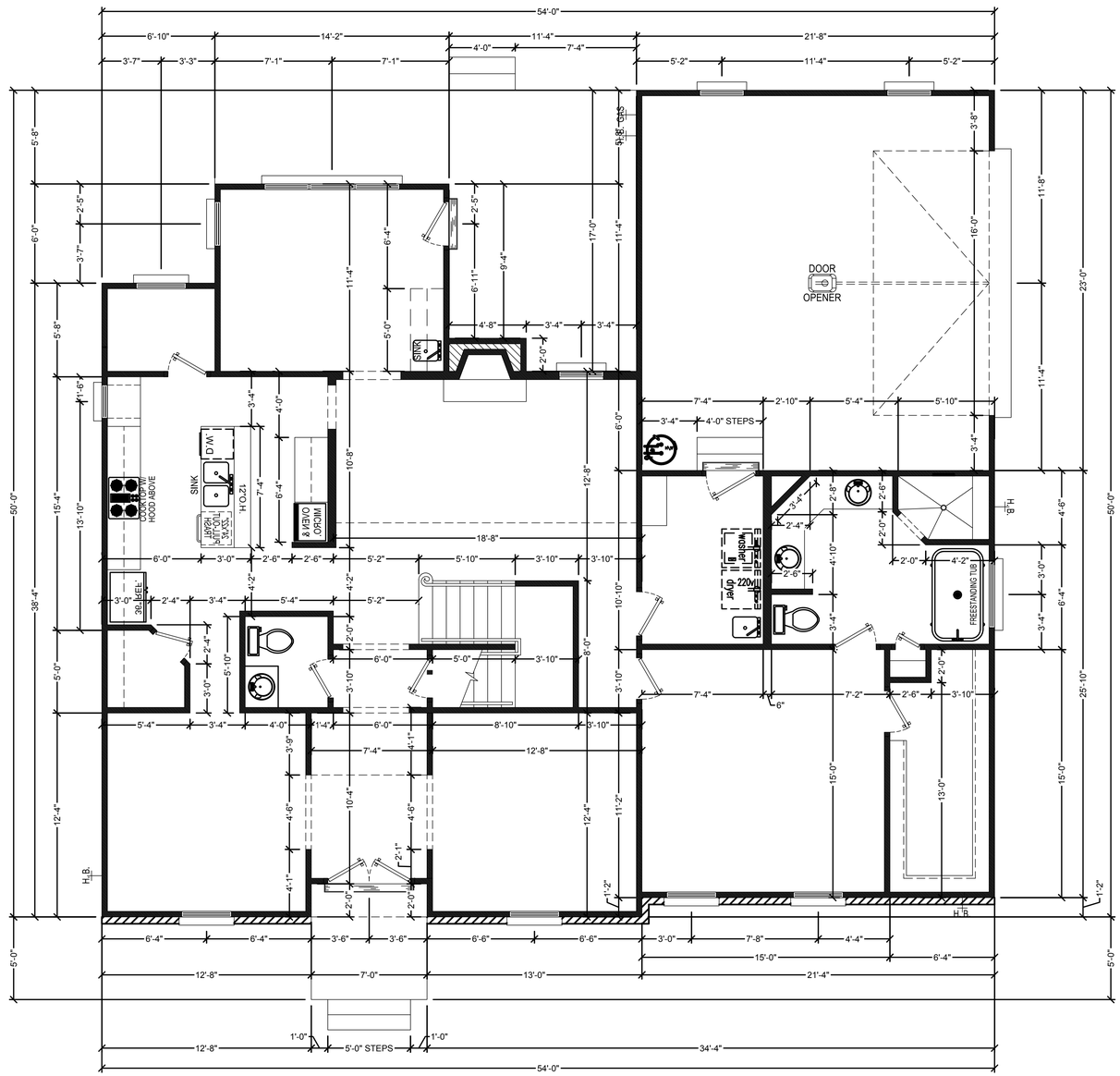
Lot :

Project Information :
Job # & Name : 21-001 KRISHNAN
Current Revision Date :12.27.21
Drawing Start Date : 00-00-0000
Scale : 1/4" = 1'-0"
Drawn By : First & Last Name
Checked By : First & Last Name
VAISHNAVI KRISHNAN
Address (Build Location) :
50 TALBERT ROAD, RALEIGH, NC,
Project Manager :BEN STONE

First Floor Heated & Cooled :	1,821
Second Floor Heated & Cooled :	999
Basement Floor Heated & Cooled :	0,000
Total Heated & Cooled :	2,820
Unfinished Bonus room:	304
Double-Car Garage :	505
UnCovered Front Porch :	49
UnCovered Rear Porch :	263
Covered Front Porch :	000
Total Unheated :	1121
Total Area Under Beam :	3,941

WALL LEGEND :

STUD WALLS



1 FIRST FLOOR DIMENSION PLAN

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

atmos

SIGN-OFF SIGNATURES AND DATES :

HOMEOWNER	DATE	HOMEOWNER	DATE	REALTOR	DATE	BUILDER	DATE
---	---	---	---	---	---	---	---

Subdivision :

Block :

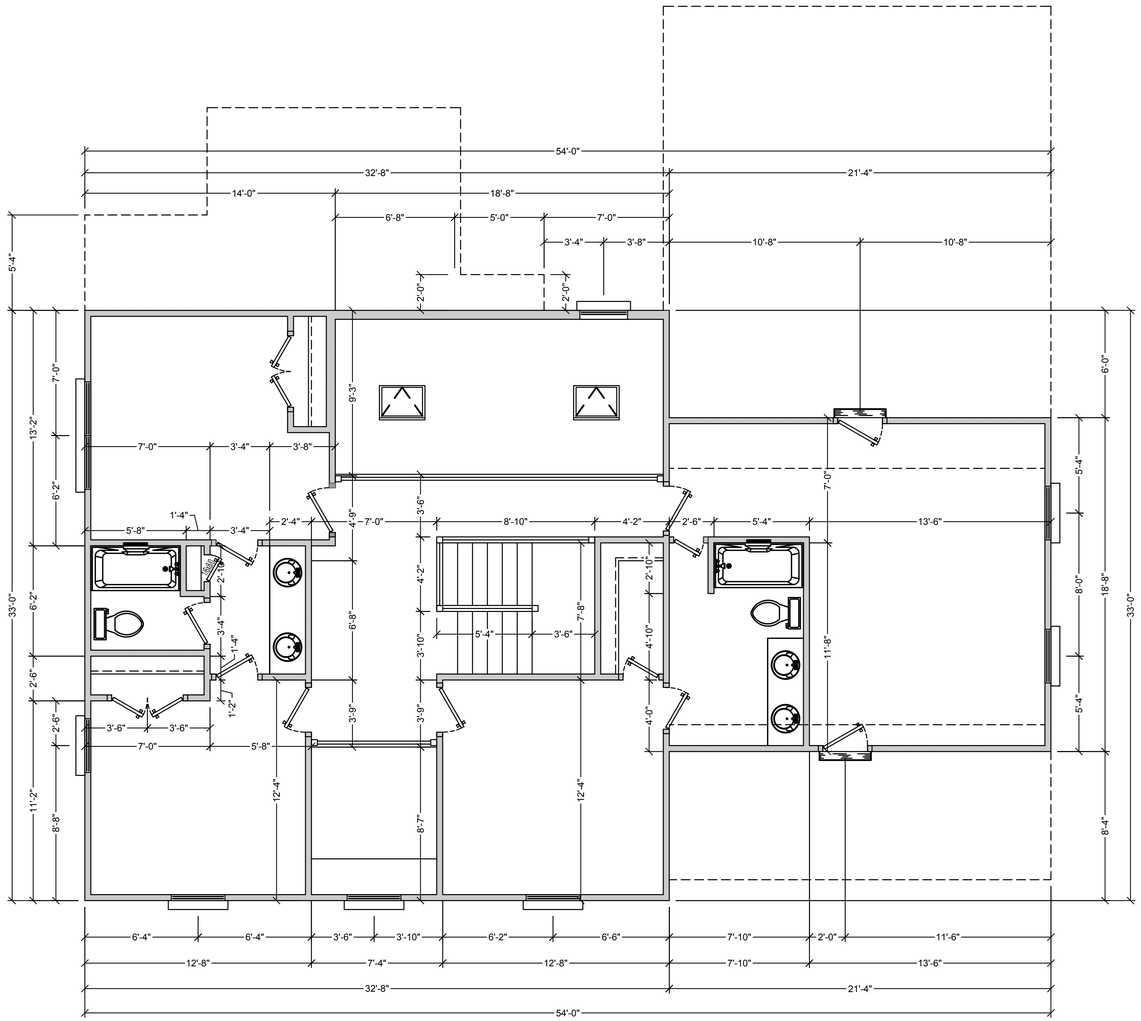
Lot :

Project Information :
Job # & Name : 21-001 KRISHNAN
Current Revision Date :12.27.21
Drawing Start Date : 00-00-0000
Scale : 1/4" = 1'-0"
Drawn By : First & Last Name
Checked By : First & Last Name
VAISHNAVI KRISHNAN
Address (Build Location) :
50 TALBERT ROAD, RALEIGH, NC.
Project Manager :BEN STONE

First Floor Heated & Cooled :	1,821
Second Floor Heated & Cooled :	999
Basement Floor Heated & Cooled :	0,000
Total Heated & Cooled :	2,820
Unfinished Bonus room:	304
Double-Car Garage :	505
UnCovered Front Porch :	49
UnCovered Rear Porch :	263
Covered Front Porch :	000
Total Unheated :	1121
Total Area Under Beam :	3,941

WALL LEGEND:

STUD WALL



1 SECOND FLOOR DIMENSION PLAN

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

atmos

SIGN-OFF SIGNATURES AND DATES

HOMEOWNER	DATE	HOMEOWNER	DATE	REALTOR	DATE	BUILDER	DATE

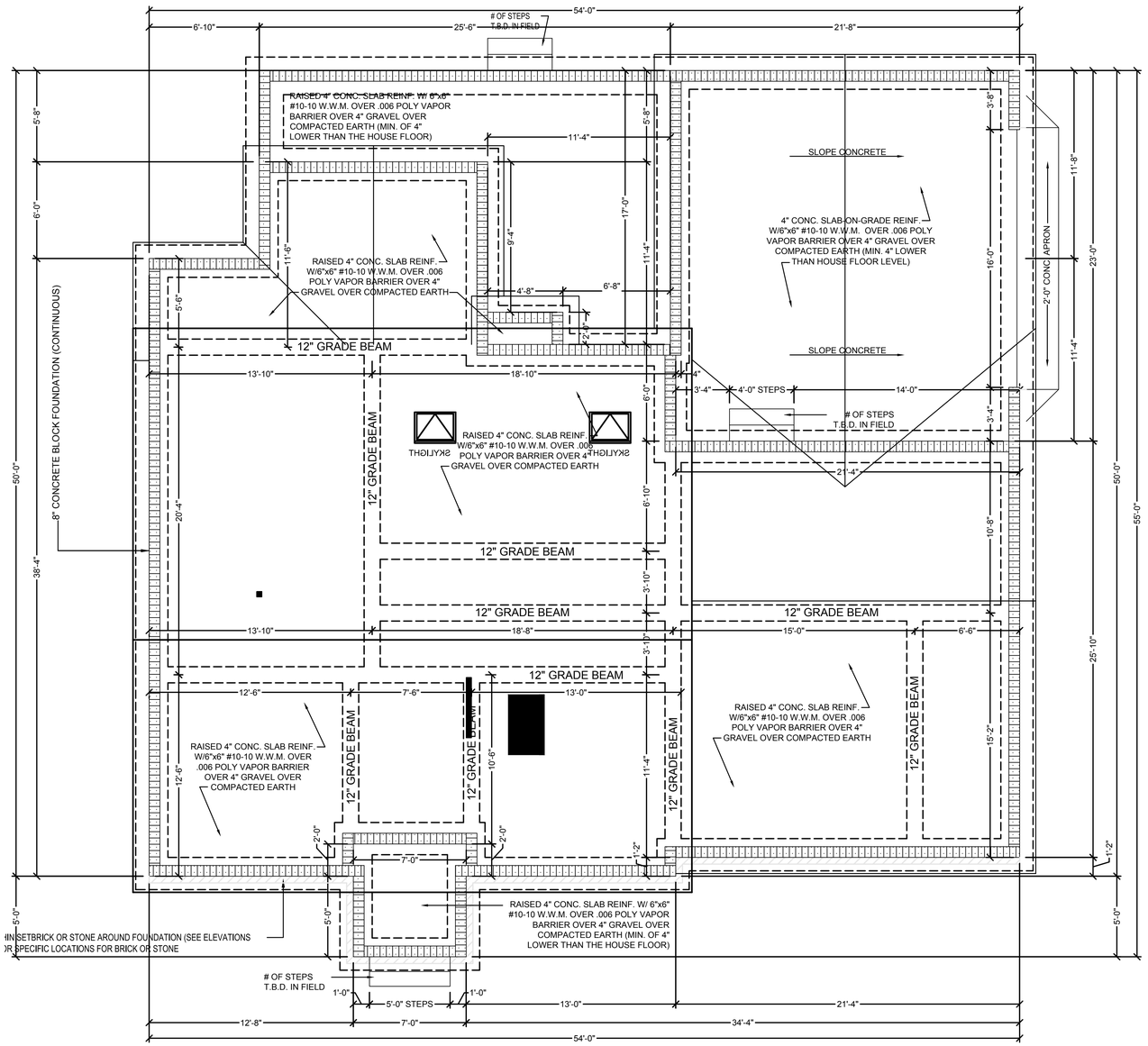
Subdivision :

Block :

Lot :

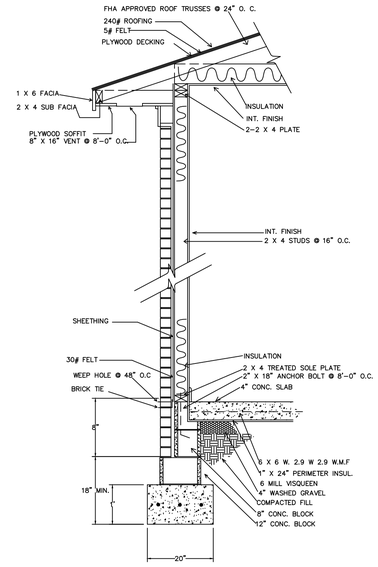
Project Information :
Job # & Name : 21-001 KRISHNAN
Current Revision Date :12.27.21
Drawing Start Date : 00-00-0000
Scale : 1/4" = 1'-0"
Drawn By : First & Last Name
Checked By : First & Last Name
VAISHNAVI KRISHNAN
Address (Build Location) :
50 TALBERT ROAD, RALEIGH, NC.
Project Manager :BEN STONE

First Floor Heated & Cooled :	1,821
Second Floor Heated & Cooled :	999
Basement Floor Heated & Cooled :	0,000
Total Heated & Cooled :	2,820
Unfinished Bonus room:	304
Double-Car Garage :	505
UnCovered Front Porch :	49
UnCovered Rear Porch :	263
Covered Front Porch :	000
Total Unheated :	1121
Total Area Under Beam :	3,941

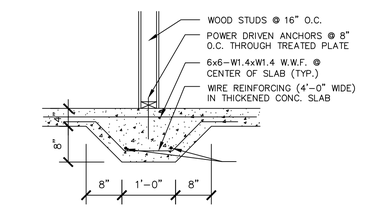


1 FOUNDATION PLAN

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



TYPICAL WALL SECTION



TYP. GRADE BEAM DTL.

SCALE: N.T.S.

atmos

SIGN-OFF SIGNATURES AND DATES :

HOMEOWNER	DATE	HOMEOWNER	DATE	
REALTOR	DATE	BUILDER	DATE	

Subdivision :

Block :

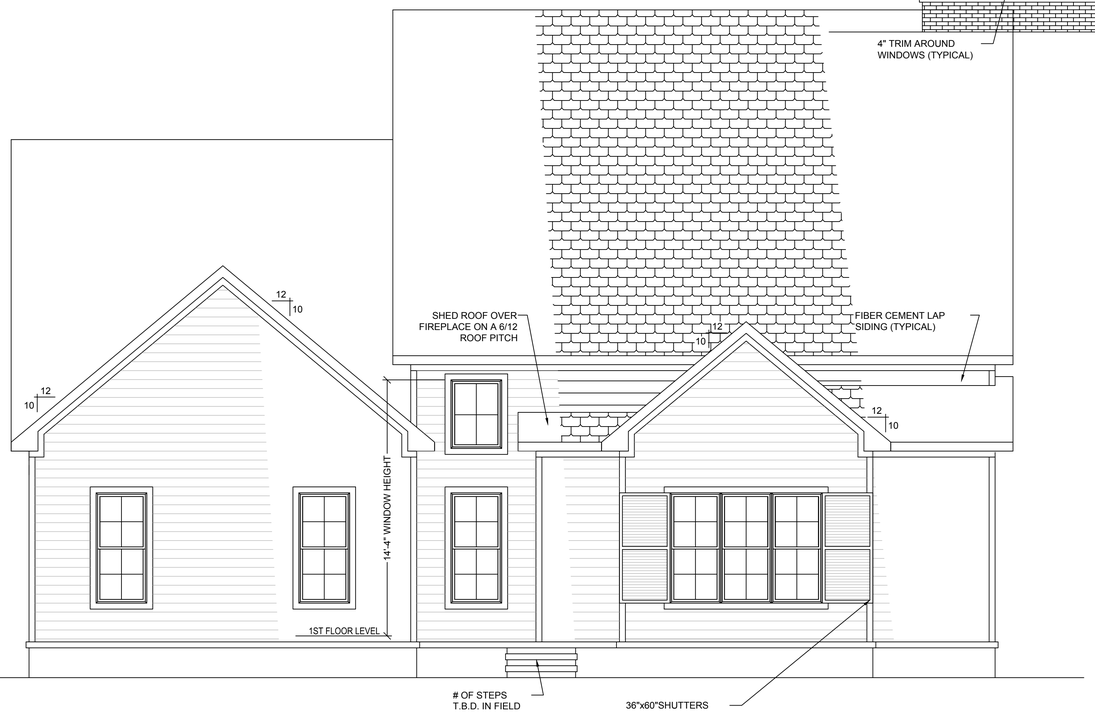
Lot :

Project Information :
Job # & Name : 21-001 KRISHNAN
Current Revision Date :12.27.21
Drawing Start Date : 00-00-0000
Scale : 1/4" = 1'-0"
Drawn By : First & Last Name
Checked By : First & Last Name
VAISHNAVI KRISHNAN
Address (Build Location) :
50 TALBERT ROAD, RALEIGH, NC.
Project Manager :BEN STONE

First Floor Heated & Cooled :	1,821
Second Floor Heated & Cooled :	999
Basement Floor Heated & Cooled :	0,000
Total Heated & Cooled :	2,820
Unfinished Bonus room:	304
Double-Car Garage :	505
UnCovered Front Porch :	49
UnCovered Rear Porch :	263
Covered Front Porch :	000
Total Unheated :	1121
Total Area Under Beam :	3,941

GENERAL ELEVATION NOTES :
1. RIDGE VENTS TO BE INSTALLED U.N.O.

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



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

Project Information :
Job # & Name : 21-001 KRISHNAN
Current Revision Date :12.27.21
Drawing Start Date : 00-00-0000
Scale : 1/4" = 1'-0"
Drawn By : First & Last Name
Checked By : First & Last Name
VAISHNAVI KRISHNAN
Address (Build Location) :
50 TALBERT ROAD, RALEIGH, NC.
Project Manager :BEN STONE

First Floor Heated & Cooled :	1,821
Second Floor Heated & Cooled :	999
Basement Floor Heated & Cooled :	0,000
Total Heated & Cooled :	2,820
Unfinished Bonus room:	304
Double-Car Garage :	505
UnCovered Front Porch :	49
UnCovered Rear Porch :	263
Covered Front Porch :	000
Total Unheated :	1121
Total Area Under Beam :	3,941

atmos

SIGN-OFF SIGNATURES AND DATES :

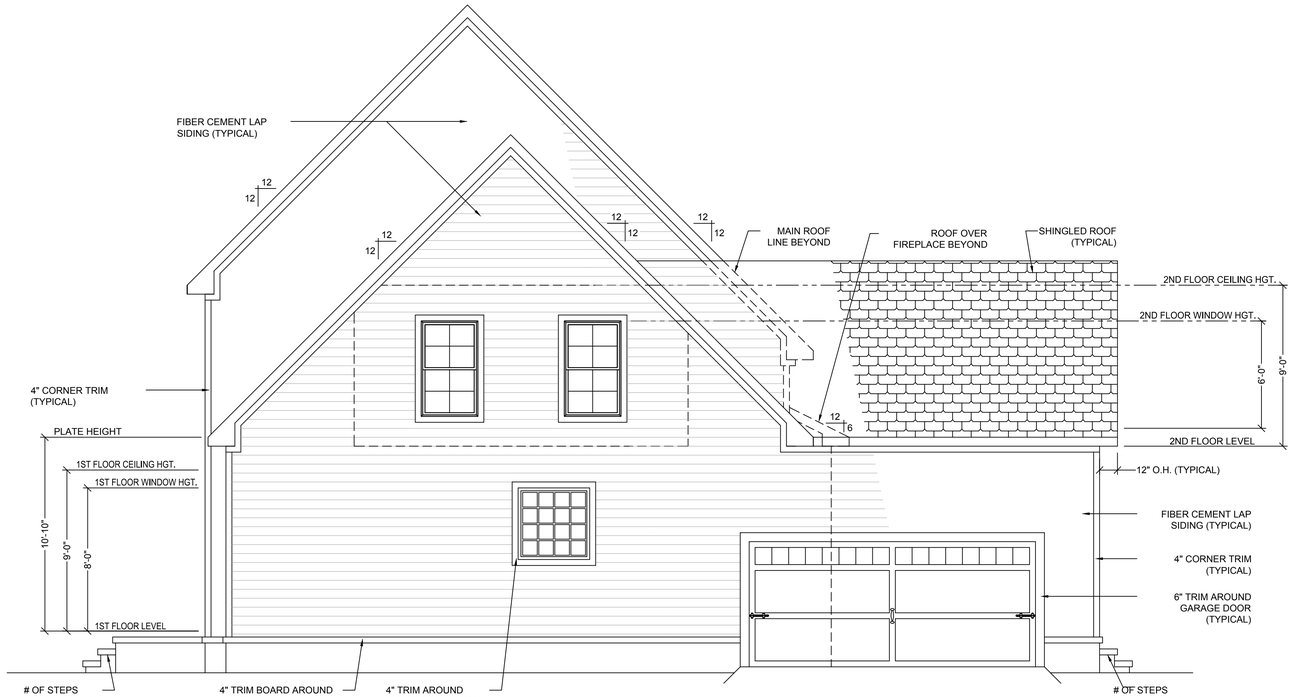
HOMEOWNER	DATE	HOMEOWNER	DATE	
REALTOR	DATE	BUILDER	DATE	

Subdivision :

Block :

Lot :

GENERAL ELEVATION NOTES :
1. RIDGE VENTS TO BE INSTALLED U.N.O.



1 RIGHT SIDE ELEVATION

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

2 LEFT SIDE ELEVATION

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

Project Information :
Job # & Name : 21-001 KRISHNAN
Current Revision Date :12.27.21
Drawing Start Date : 00-00-0000
Scale : 1/4" = 1'-0"
Drawn By : First & Last Name
Checked By : First & Last Name
VAISHNAVI KRISHNAN
Address (Build Location) :
50 TALBERT ROAD, RALEIGH, NC.
Project Manager :BEN STONE

First Floor Heated & Cooled :	1,821
Second Floor Heated & Cooled :	999
Basement Floor Heated & Cooled :	0,000
Total Heated & Cooled :	2,820
Unfinished Bonus room:	304
Double-Car Garage :	505
UnCovered Front Porch :	49
UnCovered Rear Porch :	263
Covered Front Porch :	000
Total Unheated :	1121
Total Area Under Beam :	3,941

atmos

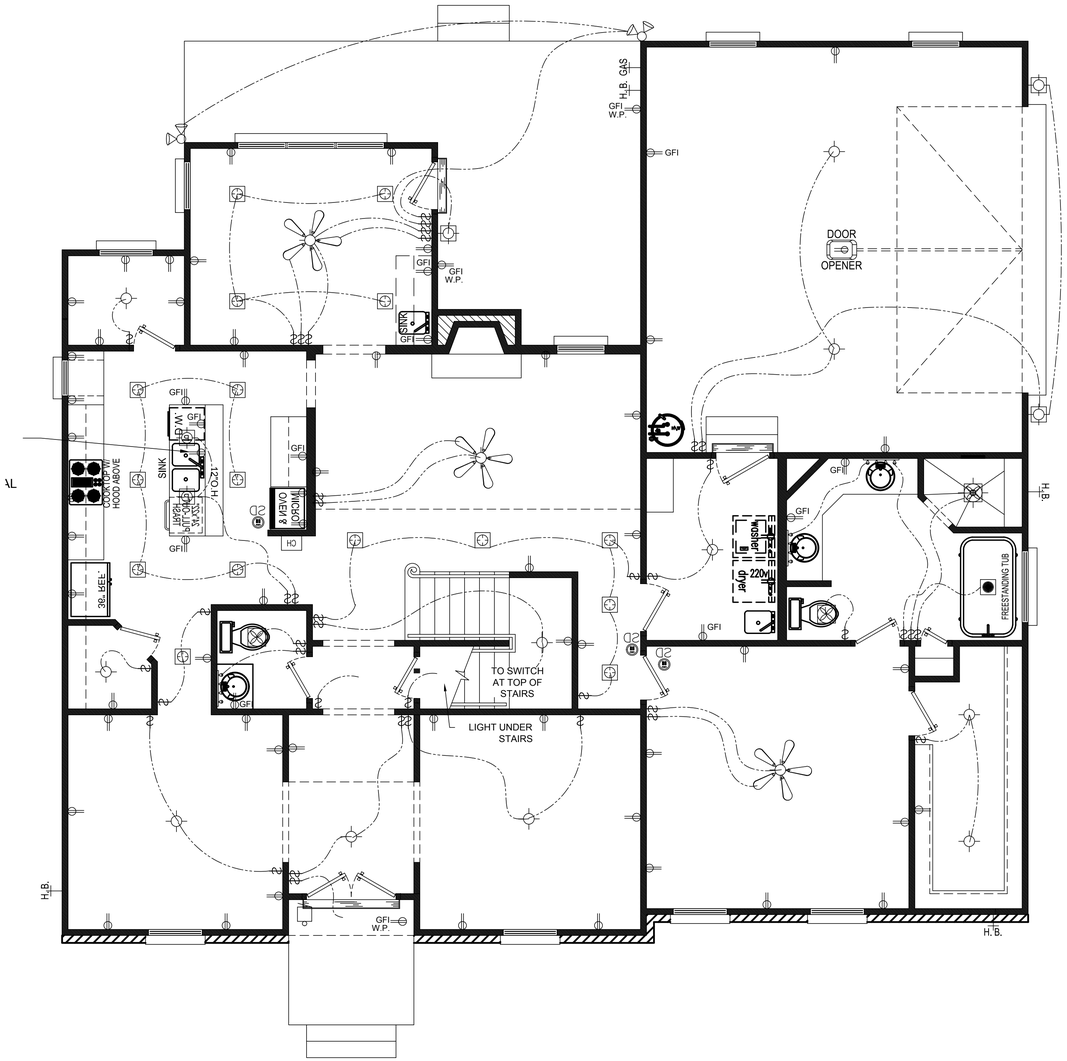
SIGN-OFF SIGNATURES AND DATES :

HOMEOWNER	DATE	HOMEOWNER	DATE	REALTOR	DATE	BUILDER	DATE
---	---	---	---	---	---	---	---

Subdivision :

Block :

Lot :



1 FIRST FLOOR ELECTRICAL PLAN

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

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	POWER SWITCH		WATERPROOF RECESSED CAN LIGHT WITH FAN
	DIMMER POWER SWITCH		EXHAUST FAN
	ELECT. RECEPTACLE (110V UNLESS OTHERWISE NOTED)	SD	SMOKE DETECTOR
GFI	GROUND FAULT INTERRUPTER ELECT. RECEPTACLE	CH	DOOR BELL AND CHIME
	ELECT. RECEPTACLE– LOCATED IN FLOOR OR CEILING		PENDANT/HANGING LIGHT FIXTURE
	CEILING FAN		RECESSED CAN LIGHT
			7" LED PUCK LIGHT
	CEILING HANGING/SURFACE MOUNTED LIGHT FIXTURE		VANITY WALL MOUNTED LIGHT FIXTURE
	FLOOD/SECURITY LIGHT		WATERPROOF CEILING/SURFACE MOUNTED LIGHT FIXTURE

Project Information :
Job # & Name : 21-001 KRISHNAN
Current Revision Date :12.27.21
Drawing Start Date : 00-00-0000
Scale : 1/4" = 1'-0"
Drawn By : First & Last Name
Checked By : First & Last Name
VAISHNAVI KRISHNAN
Address (Build Location) :
50 TALBERT ROAD, RALEIGH, NC.
Project Manager :BEN STONE

First Floor Heated & Cooled :	1,821
Second Floor Heated & Cooled :	999
Basement Floor Heated & Cooled :	0,000
Total Heated & Cooled :	2,820
Unfinished Bonus room:	304
Double-Car Garage :	505
UnCovered Front Porch :	49
UnCovered Rear Porch :	263
Covered Front Porch :	000
Total Unheated :	1121
Total Area Under Beam :	3,941

atmos

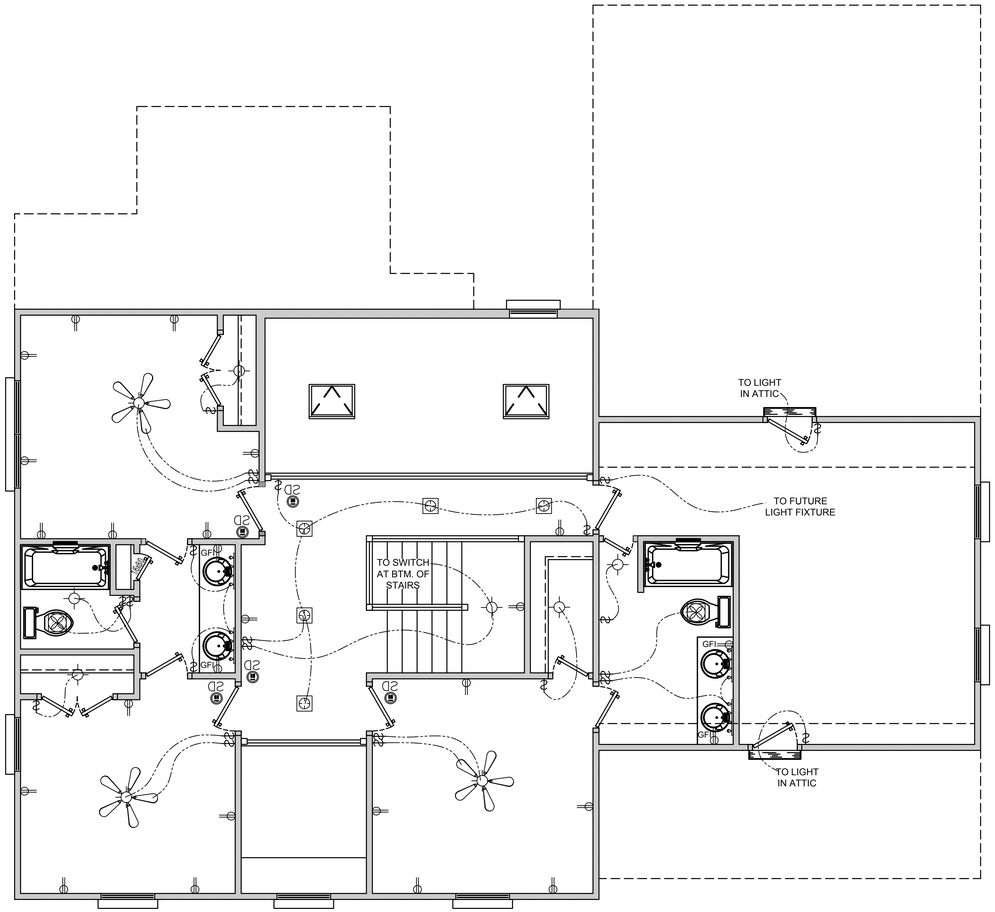
SIGN-OFF SIGNATURES AND DATES

HOMEOWNER	DATE	HOMEOWNER	DATE	REALTOR	DATE	BUILDER	DATE
---	---	---	---	---	---	---	---

Subdivision :

Block :

Lot :



1 SECOND FLOOR ELECTRICAL PLAN

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

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
$ $3	POWER SWITCH		WATERPROOF RECESSED CAN LIGHT WITH FAN
	DIMMER POWER SWITCH		EXHAUST FAN
	ELECT. RECEPTACLE (110V UNLESS OTHERWISE NOTED)	SD	SMOKE DETECTOR
GFI	GROUND FAULT INTERRUPTER ELECT. RECEPTACLE	CH	DOOR BELL AND CHIME
	ELECT. RECEPTACLE– LOCATED IN FLOOR OR CEILING		PENDANT/HANGING LIGHT FIXTURE
	CEILING FAN		RECESSED CAN LIGHT
			VANITY WALL MOUNTED LIGHT FIXTURE
	CEILING HANGING/SURFACE MOUNTED LIGHT FIXTURE		WATERPROOF CEILING/SURFACE MOUNTED LIGHT FIXTURE
	FLOOD/SECURITY LIGHT		

atmos

SIGN-OFF SIGNATURES AND DATES :-

HOMEOWNER DATE
HOMEOWNER DATE
REALTOR DATE
BUILDER DATE

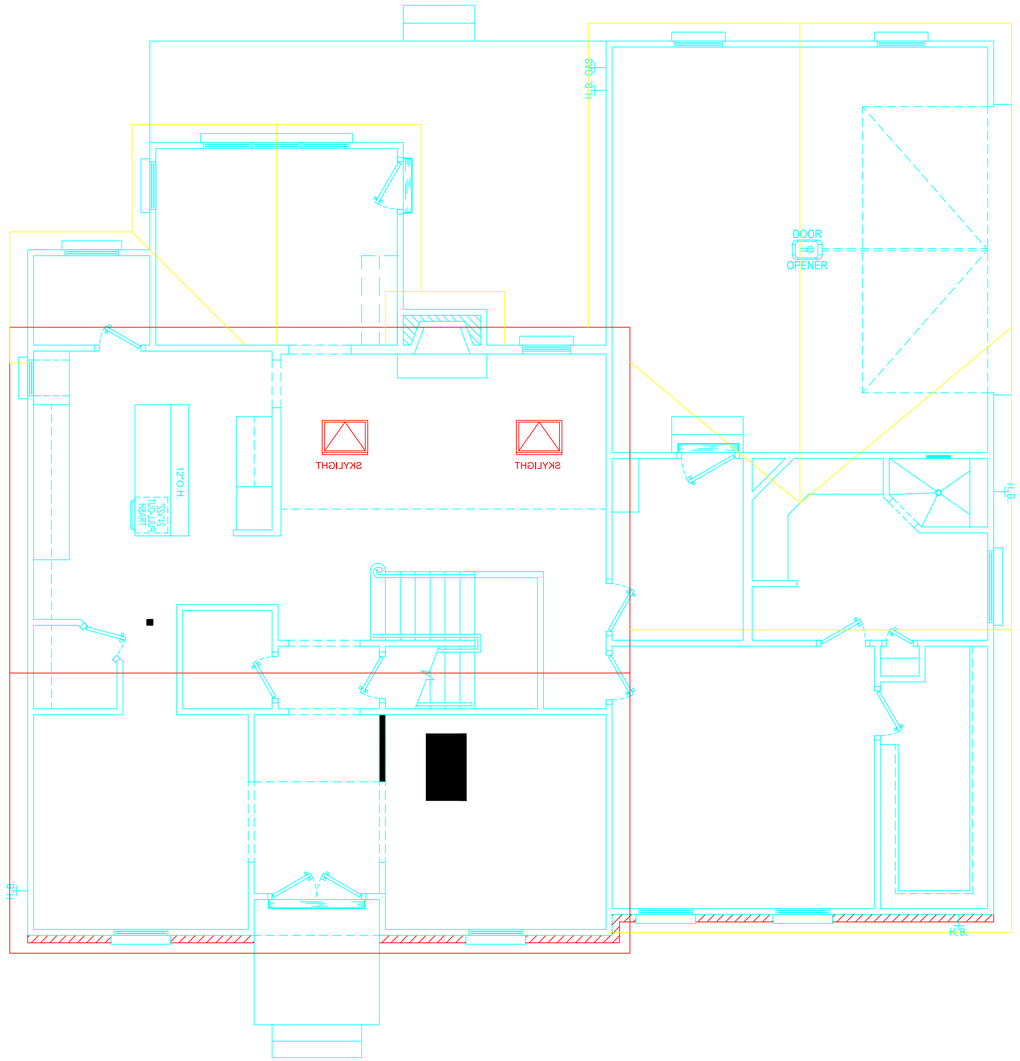
Subdivision :

Block :

Lot :

Project Information :
Job # & Name : 21-001 KRISHNAN
Current Revision Date :12.27.21
Drawing Start Date : 00-00-0000
Scale : 1/4" = 1'-0"
Drawn By : First & Last Name
Checked By : First & Last Name
VAISHNAVI KRISHNAN
Address (Build Location) :
50 TALBERT ROAD, RALEIGH, NC.
Project Manager :BEN STONE

First Floor Heated & Cooled :	1,821
Second Floor Heated & Cooled :	999
Basement Floor Heated & Cooled :	0,000
Total Heated & Cooled :	2,820
Unfinished Bonus room:	304
Double-Car Garage :	505
UnCovered Front Porch :	49
UnCovered Rear Porch :	263
Covered Front Porch :	000
Total Unheated :	1121
Total Area Under Beam :	3,941



1 ROOF PLAN

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

atmos

SIGN-OFF SIGNATURES AND DATES :

HOMEOWNER	DATE	HOMEOWNER	DATE	REALTOR	DATE	BUILDER	DATE
---	---	---	---	---	---	---	---

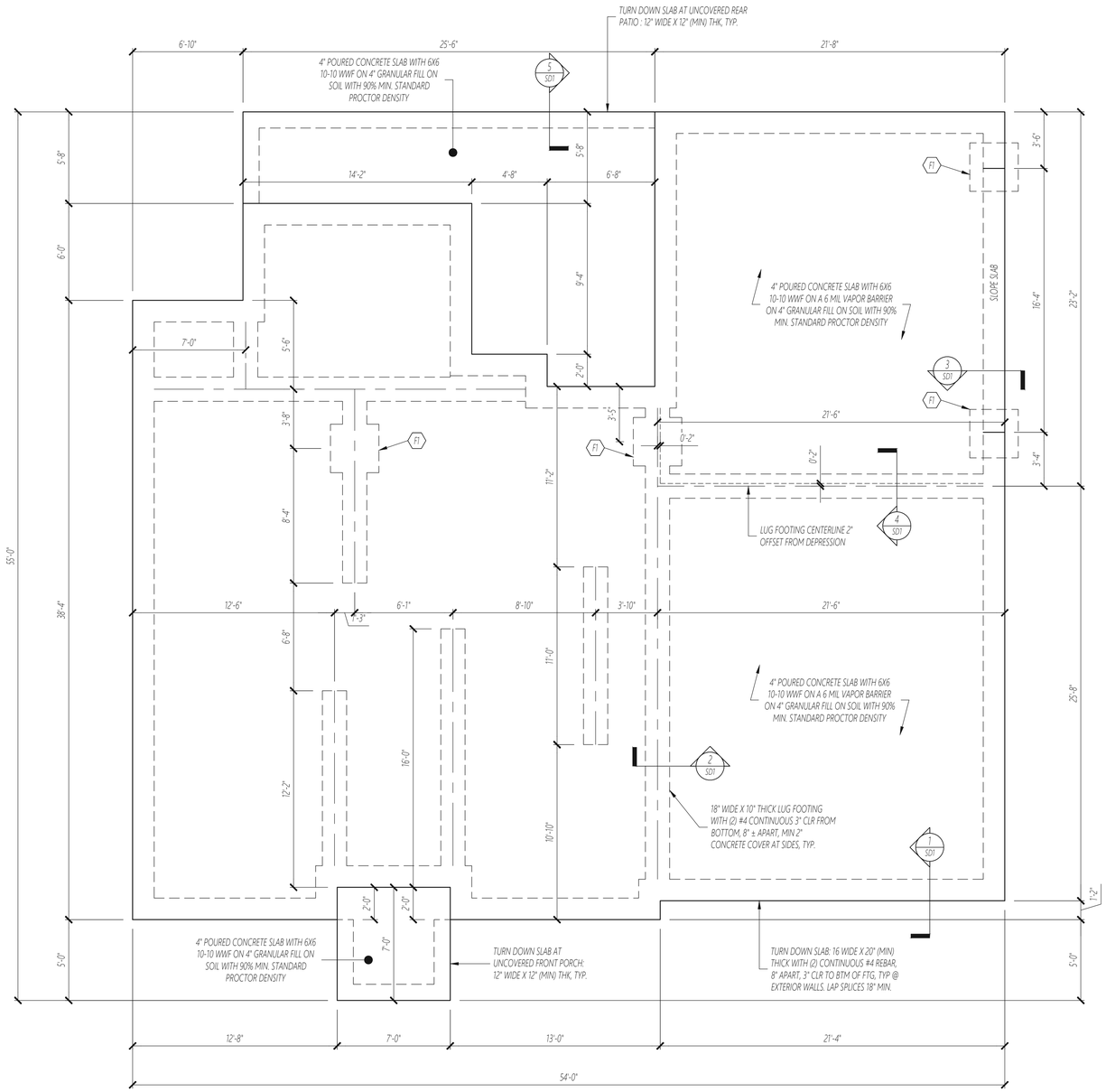
Subdivision :

Block :

Lot :

Project Information :
Job # & Name : 21-001 KRISHNAN
Current Revision Date :12.27.21
Drawing Start Date : 00-00-0000
Scale : 1/4" = 1'-0"
Drawn By : First & Last Name
Checked By : First & Last Name
VAISHNAVI KRISHNAN
Address (Build Location) :
50 TALBERT ROAD, RALEIGH, NC.
Project Manager :BEN STONE

First Floor Heated & Cooled :	1,821
Second Floor Heated & Cooled :	999
Basement Floor Heated & Cooled :	0,000
Total Heated & Cooled :	2,820
Unfinished Bonus room:	304
Double-Car Garage :	505
UnCovered Front Porch :	49
UnCovered Rear Porch :	263
Covered Front Porch :	000
Total Unheated :	1121
Total Area Under Beam :	3,941



FOUNDATION PLAN

1/4" = 1'-0"

COMMON WORD ABBREVIATIONS

-SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

FOUNDATION SCHEDULE

F1: 10" THICK X 36" SQ. FOOTING WITH (6) #4 REBAR @ 6" O.C. EACH DIRECTION, 3" CLR FROM BOTTOM AND SIDES OF FOOTING.

NOTES:

- FOUNDATION WALL HEIGHT AND BACKFILL LIMITATIONS ARE TO BE GOVERNED BY THE NCRBC, LATEST EDITION.
- BUILDER IS TO VERIFY WALL THICKNESS, REBAR SIZE AND SPACING IF REQUIRED BY WALL HEIGHT AND BACKFILL CONDITIONS.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 046023 12-22-2021 BENJAMIN D. OKE

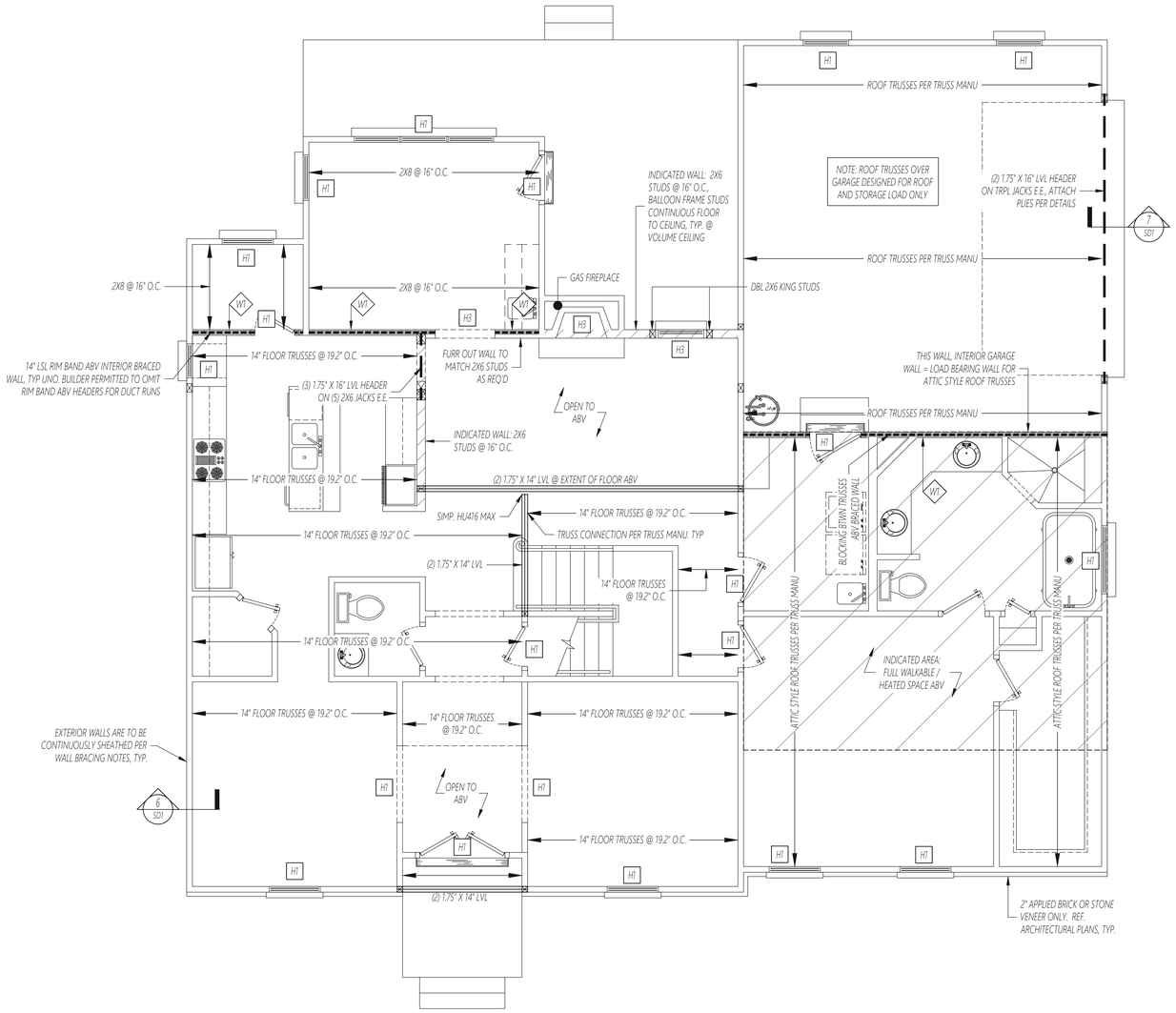
oke nichols engineering
Structural Engineering and Consulting
2301 Stonehenge Dr., Suite 202, Raleigh, NC, 27615
(919) 916-5290 License No. C-4754

ATMOS BUILDERS
STRUCTURAL ADDENDUM
50 TALBERT DRIVE

ENG:	BDO
DATE:	12-22-2021
REV:	

PROJECT NO.
2110304

SHEET NO.
S1



1ST FLOOR FRAMING PLAN

WALLS AND CEILING

1/4" = 1'-0"

COMMON WORD ABBREVIATIONS

-SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

WOOD FRAMING NOTES

ALL FLOORS

-SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1 /NO. 2 SPRUCE-PINE-FIR FOR RAFTERS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
- P.T. SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SOUTHERN YELLOW PINE FOR POSTS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
-SOLID SAWN WOOD FRAMING SUBSTITUTION ALLOWED ONLY BY PERMISSION OF ENGINEER OF RECORD.

ADDITIONAL JOISTS

-NON-LOAD BEARING WALLS, BUILT-INS, AND CABINETRY ON THE FLOOR ABOVE THAT ARE PARALLELL TO THE FRAMING SYSTEM ON THIS SHEET SHALL HAVE AN ADDITIONAL JOIST PLACED BELOW, TYP UNO, BUILDER TO INSTALL AS REQUIRED, FIELD VERIFY DIMENSIONS

NO. OF STUDS FOR BEAM SUPPORT

ALL FLOORS

	BEAM TYPE	NO. OF STUDS AT E.E. OF BEAM, TYP UNO
SAWN	(2)-PLY SAWN BEAM	2
	(3)-PLY SAWN BEAM	3
LVL	(2)-PLY LVL BEAM	3
	(3)-PLY LVL BEAM	4
	(4)-PLY LVL BEAM	5

NOTES:
-SINGLE PLY LVL BEAMS AND X/S TO BE SUPPORT BY SINGLE STUD AT EACH END, TYP.
-WHERE BEAMS BEAR PARALLEL TO WALL, BEARING LENGTH OF BEAM AND NO. OF STUDS TO EXTEND ALONG LENGTH OF WALL IN PARALLEL DIRECTION, TYP UNO.

HEADER SCHEDULE

THIS FLOOR ONLY

H1: (2) 2X10 ON (1) JACK E.E.

H2: (2) 1.75" X 9.25" LVL ON (2) JACKS E.E.

H3: (3) 2X10'S ON (1) 2X6 JACK E.E.

H4: (3) 1.75" X 9.25" LVL'S ON (2) 2X6 JACKS E.E.

NOTES:
-HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED AND SHALL BE FRAMED ACCORDING TO ACCEPTED CONSTRUCTION PRACTICE.

KING STUD SCHEDULE

EXTERIOR WALLS ONLY, ALL FLOORS

MAX OPENING DIMENSION	NO. KING STUDS E.E. 2X4 WALL	NO. KING STUDS E.E. 2X6 WALL
≤3'	1	1
4'	2	1
8'	3	2
12'	5	2
16'	6	3
18'	7	4

NOTES:
-NO. OF KINGS STUDS LISTED ABOVE BASED ON A 10' NOMINAL WALL HEIGHT AND 16" O.C. STUD SPACING.
-SPANS BASED ON ROUGH OPENINGS. FOR SPANS BTWN DIMENSIONS LISTED ABOVE ROUND UP FOR NO. OF KING STUDS UNO.

WALL BRACING

THIS FLOOR ONLY

ALL EXTERIOR STUD WALLS ARE TO BRACED WITH CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANELING (METHOD CS-WSP), 3/8" MINIMUM THICKNESS, NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, AND 12" O.C. IN PANEL FIELD.

ALL BRACED WALLS SHALL BE SECURED WITH A CONTINUOUS RIM JOIST, ADDITIONAL JOIST, OR FULL HEIGHT BLOCKING ABOVE AND BELOW BRACED WALL PANEL. JOIST / BLOCKING SHALL BE ATTACHED WITH 8d TOENAILS @ 6" O.C. ALONG TOP OF WALL AND (3) 16d NAILS @ 16" O.C. ALONG BOTTOM OF WALL. HORIZONTAL BLOCKING IS REQUIRED AT PANEL JOINTS IN BRACED WALL PANELS.

EXTERIOR BRACED WALLS:
-CONTINUOUS PERIMETER SHEATHING = 234'

SHADED WALLS = INTERIOR BRACED WALLS AND EXTERIOR WALLS WITH ALTERNATIVE BRACING METHODS

W1 - 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.

NOTES:
-WALL BRACING SHALL BE INSTALLED TO BE IN ACCORDANCE WITH SECT. R602.10.3 OF THE 2018 NCRC.
-WHERE A BUILDING OR PORTIONS THEREOF DOES NOT COMPLY WITH SECT. R602.10.3, ALTERNATIVE METHODS OF BRACING HAVE BEEN DESIGNED IN ACCORDANCE TO ENGINEERING DESIGN PER SECT. R602.10.5 OF THE 2018 NCRC.

NORTH CAROLINA PROFESSIONAL SEAL 046023 ENGINEER 12-22-2021 BENJAMIN D. OKE

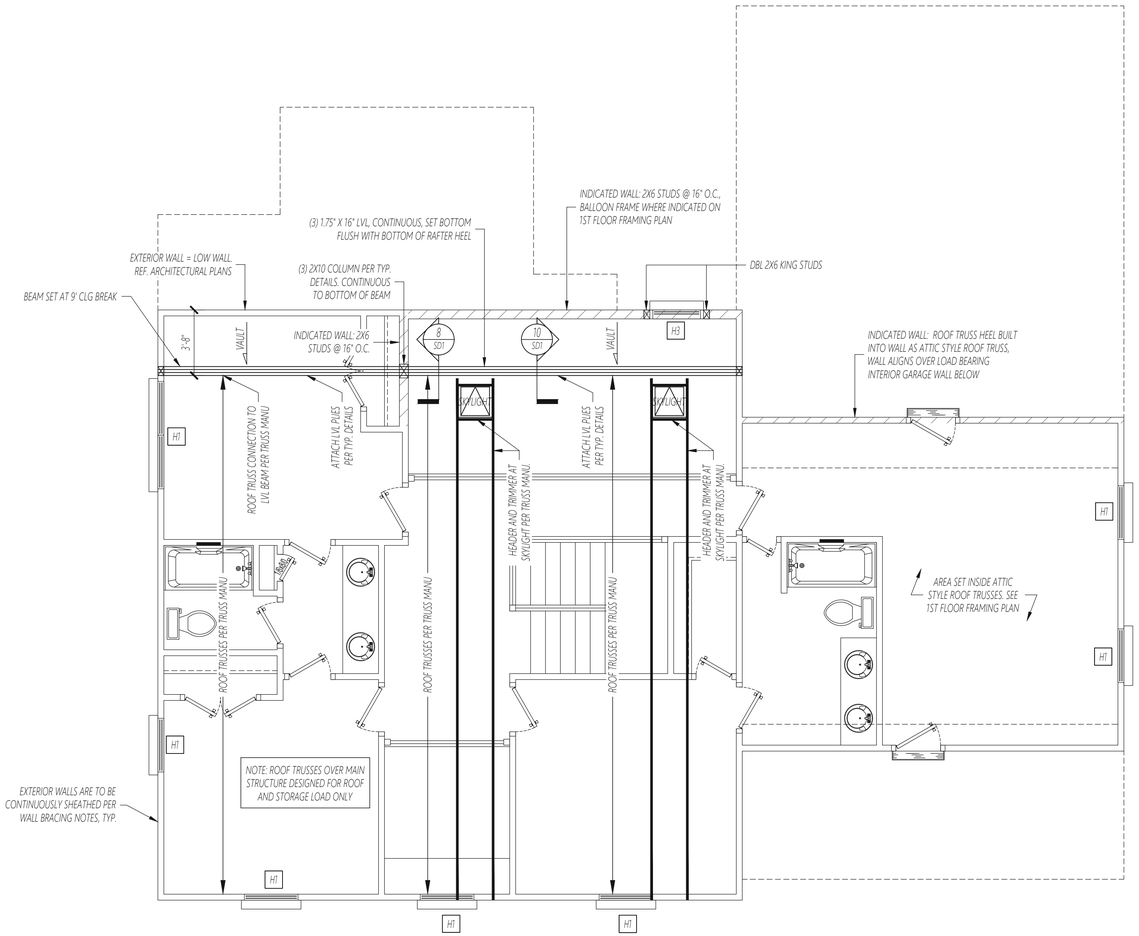
oke nichols engineering
Structural Engineering and Consulting
2301 Stonehenge Dr., Suite 202, Raleigh, NC, 27615
(919) 916-6290 License No. C-4754

ATMOS BUILDERS
STRUCTURAL ADDENDUM
50 TALBERT DRIVE

ENG:	BDO
DATE:	12-22-2021
REV:	

PROJECT NO.
2110304

SHEET NO.
S2
2 of 5



2ND FLOOR FRAMING PLAN

WALLS AND CEILING

1/4" = 1'-0"

COMMON WORD ABBREVIATIONS

-SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

WOOD FRAMING NOTES

ALL FLOORS

-SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1 /NO. 2 SPRUCE-PINE-FIR FOR RAFTERS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
- P.T. SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SOUTHERN YELLOW PINE FOR POSTS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
-SOLID SAWN WOOD FRAMING SUBSTITUTION ALLOWED ONLY BY PERMISSION OF ENGINEER OF RECORD.

NO. OF STUDS FOR BEAM SUPPORT

ALL FLOORS

	BEAM TYPE	NO. OF STUDS AT E.E. OF BEAM, TYP UNO
SAWN	(2)-PLY SAWN BEAM	2
	(3)-PLY SAWN BEAM	3
LVL	(2)-PLY LVL BEAM	3
	(3)-PLY LVL BEAM	4
	(4)-PLY LVL BEAM	5

NOTES:
-SINGLE PLY LVL BEAMS AND X/S TO BE SUPPORT BY SINGLE STUD AT EACH END, TYP.
-WHERE BEAMS BEAR PARALLEL TO WALL, BEARING LENGTH OF BEAM AND NO. OF STUDS TO EXTEND ALONG LENGTH OF WALL IN PARALLEL DIRECTION, TYP UNO.

HEADER SCHEDULE

THIS FLOOR ONLY

H1: (2) 2X10 ON (1) JACK E.E.

H2: (2) 1.75" X 9.25" LVL ON (2) JACKS E.E.

H3: (3) 2X10'S ON (1) 2X6 JACK E.E.

H4: (3) 1.75" X 9.25" LVL'S ON (2) 2X6 JACK'S E.E.

NOTES:
-HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED AND SHALL BE FRAMED ACCORDING TO ACCEPTED CONSTRUCTION PRACTICE.

KING STUD SCHEDULE

EXTERIOR WALLS ONLY, ALL FLOORS

MAX OPENING DIMENSION	NO. KING STUDS E.E. 2X4 WALL	NO. KING STUDS E.E. 2X6 WALL
≤3'	1	1
4'	2	1
8'	3	2
12'	5	2
16'	6	3
18'	7	4

NOTES:
-NO. OF KINGS STUDS LISTED ABOVE BASED ON A 10' NOMINAL WALL HEIGHT AND 16" O.C. STUD SPACING.
-SPANS BASED ON ROUGH OPENINGS. FOR SPANS BTWN DIMENSIONS LISTED ABOVE ROUND UP FOR NO. OF KING STUDS UNO.

WALL BRACING

THIS FLOOR ONLY

ALL EXTERIOR STUD WALLS ARE TO BRACED WITH CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANELING (METHOD CS-WSP), 3/8" MINIMUM THICKNESS, NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, AND 12" O.C. IN PANEL FIELD.

ALL BRACED WALLS SHALL BE SECURED WITH A CONTINUOUS RIM JOIST, ADDITIONAL JOIST, OR FULL HEIGHT BLOCKING ABOVE AND BELOW BRACED WALL PANEL. JOIST / BLOCKING SHALL BE ATTACHED WITH 8d TOENAILS @ 6" O.C. ALONG TOP OF WALL AND (3) 16d NAILS @ 16" O.C. ALONG BOTTOM OF WALL. HORIZONTAL BLOCKING IS REQUIRED AT PANEL JOINTS IN BRACED WALL PANELS.

EXTERIOR BRACED WALLS:
-CONTINUOUS PERIMETER SHEATHING = 11.2'

NOTES:
-WALL BRACING SHALL BE INSTALLED TO BE IN ACCORDANCE WITH SECT. R602.10.3 OF THE 2018 NCRC.
-WHERE A BUILDING OR PORTIONS THEREOF DOES NOT COMPLY WITH SECT. R602.10.3, ALTERNATIVE METHODS OF BRACING HAVE BEEN DESIGNED IN ACCORDANCE TO ENGINEERING DESIGN PER SECT. R602.10.5 OF THE 2018 NCRC.

NORTH CAROLINA PROFESSIONAL SEAL 046023 ENGINEER BENJAMIN D. DAVIS 12-22-2021

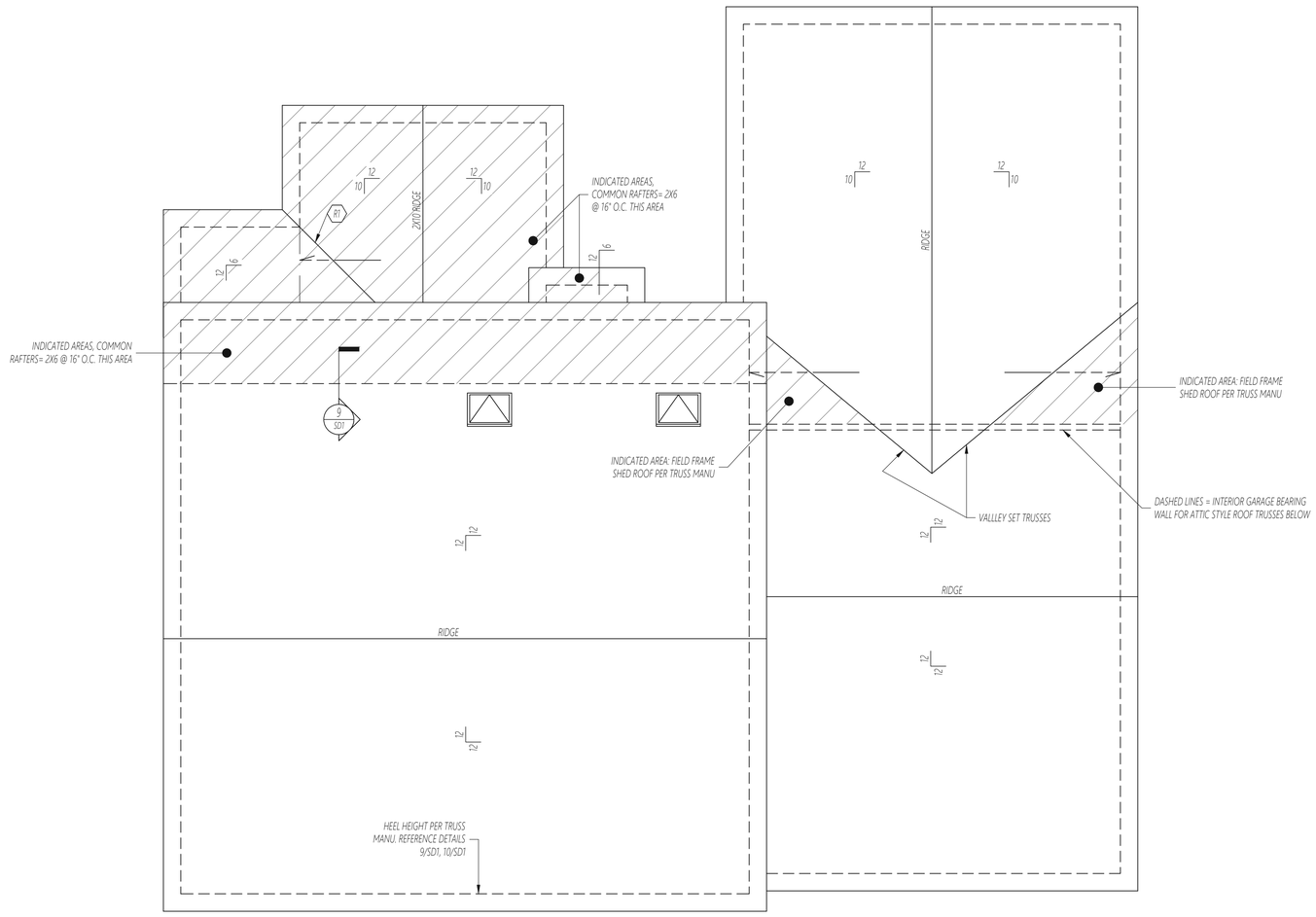
oke nichols engineering
Structural Engineering and Consulting
2301 Stonehenge Dr., Suite 202, Raleigh, NC, 27615
(919) 916-6290 License No. C-4754

ATMOS BUILDERS
STRUCTURAL ADDENDUM
50 TALBERT DRIVE

ENG:	BDO
DATE:	12-22-2021
REV:	

PROJECT NO.
2110304

SHEET NO.
S3
3 of 5



ROOF FRAMING PLAN

1/4" = 1'-0"

COMMON WORD ABBREVIATIONS

-SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

WOOD FRAMING NOTES

ALL FLOORS

-SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1 /NO. 2 SPRUCE-PINE-FIR FOR RAFTERS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
- P.T. SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SOUTHERN YELLOW PINE FOR POSTS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
-SOLID SAWN WOOD FRAMING SUBSTITUTION ALLOWED ONLY BY PERMISSION OF ENGINEER OF RECORD.

FRAMING NOTES

ROOF ONLY

R1: OVERFRAME VALLEY (2X10 SLEEPER)

NOTES:
-ROOF TRUSSES PER MANUFACTURER, TYPICAL UNO
-ATTACH ROOF TRUSSES TO DBL TOP PLATE WITH HOLDOWN DEVICE PER TRUSS MANU.
-CONTRACTOR IS TO VERIFY ALL ROOF PITCHES, OVERHANGS, AND HEEL HEIGHTS PRIOR TO CONSTRUCTION

oke nichols engineering
Structural Engineering and Consulting
2301 Stonehenge Dr., Suite 202, Raleigh, NC, 27615
(919) 916-6290 License No. C-4754

ATMOS BUILDERS
STRUCTURAL ADDENDUM
50 TALBERT DRIVE

ENG:	BDO
DATE:	12-22-2021
REV:	

PROJECT NO.
2110304

SHEET NO.
S4

CONSTRUCTION SPECIFICATIONS

GENERAL NOTES

GN.01: CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 ED. ALL WORK IS TO BE DONE IN STRICT ACCORDANCE WITH STATE AND LOCAL CODES.

GN.02: METHODS, PROCEDURES AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND INSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.

DIMENSIONS

DM.01: DIMENSIONS SHOWN SHALL GOVERN OVER SCALE ON THESE DRAWINGS.

DESIGN LOADS

DL.01: DESIGN LOADS SHALL CONFORM WITH THE TABLE BELOW

USE	LIVE LOAD (PSF)
UNINHABITABLE ATTIC WITHOUT STORAGE, LESS THAN 42" HEADROOM	10
UNINHABITABLE ATTIC WITH LIMITED STORAGE	20
HABITABLE ATTIC / ATTIC WITH FIXED STAIR ACCESS	30
COMMON AREAS / SLEEPING ROOMS	40
EXTERIOR BALCONIES / DECKS	40
FIRE ESCAPES	40
STAIRS	40
ROOF	20
PASSENGER VEHICLE GARAGE	50
GUARDRAILS AND HANDRAILS	200
GUARDRAIL IN-FILL COMPONENTS	50

* A UNIFORMLY DISTRIBUTED DEAD LOAD OF 10 PSF SHALL BE APPLIED TO USE CATEGORIES LISTED ABOVE UNLESS NOTED OTHERWISE.
* A UNIFORMLY DISTRIBUTED DEAD LOAD OF 5 PSF SHALL BE APPLIED TO VAULTED CEILING AREAS.
* THE CONTRACTOR IS RESPONSIBLE FOR INDICATING ON PLANS ALL AREAS REQUIRING A DESIGN FOR INCREASED DEAD LOAD SUCH AS TILED FLOOR AREAS OR SLATE ROOF COVERINGS. FOR ALL AREAS NOT INDICATED ON PLANS, THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THE DEAD LOAD DOES NOT EXCEED THE 10 PSF DESIGN LIMITATION.

DL.02: INTERIOR WALLS: 5 PSF LATERAL.

DL.03: BASIC WIND DESIGN VELOCITY, V(ultimate) OF 115 MPH.

DL.04: LOAD DURATION FACTOR FOR ROOF STRUCTURAL MEMBERS IS 1.15.

DL.05: SOIL BEARING CAPACITY 2000 PSF (PRESUMPTIVE).

WOOD CONSTRUCTION

WC.01: SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1 / NO. 2 SPRUCE PINE FIR FOR JOISTS, RAFTERS, WOOD GIRDERS / BEAMS, ETC. PRESSURE TREATED WOOD FRAMING DESIGN IS BASED ON NO. 2 SOUTHERN YELLOW PINE FOR POSTS, JOISTS, RAFTERS, WOOD GIRDERS/BEAMS, ETC.

WC.02: STUDS SHALL BE SPRUCE PINE FIR NO.1 / NO. 2 OR EQUAL TYP UNO.

WC.03: LUMBER IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA STANDARD C-15. ALL OTHER EXPOSED LUMBER SHALL BE TREATED IN ACCORDANCE WITH AWPA 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).

WC.04: LAMINATED VENEER LUMBER (LVL) DESIGN IS BASED ON MICROLAM 1.9E MINIMUM DESIGN STRESS VALUES AS FOLLOWS: E= 1.966 PSI, Fb = 2600 PSI, Fv = 285 PSI, Fc = 750 PSI

WC.05: PARALLEL STRAND LUMBER (PSL) DESIGN IS BASED ON PARALLAM 1.8E MINIMUM DESIGN STRESS VALUES AS FOLLOWS: E= 1.866 PSI, Fb = 2400 PSI, Fv = 190 PSI, Fc = 545 PSI

WC.06: LAMINATED STRAND LUMBER (LSL) DESIGN IS BASED ON TIMBERSTRAND 1.3E MINIMUM DESIGN STRESS VALUES AS FOLLOWS: E= 1.366 PSI, Fb = 1700 PSI, Fv = 425 PSI, Fc = 710 PSI

WC.07: SOLID SAWN, LVL, AND PSL BEAMS BEARING ONTO A STUD WALL SHALL THE BEAR THE FULL WIDTH OF THE SUPPORTING WALL WHEN FRAMED PERPENDICULAR TO THE WALL, AND, IN ALL CASES, SHALL BE SUPPORTED ON A GANGED STUD COLUMN SUCH THAT THE GANGED NUMBER OF STUDS IS AT LEAST AS WIDE AS THE BEAM BEING SUPPORTED OR, WHEN FRAMED PARALLEL TO THE WALL, SHALL BEAR ON (2) STUDS MINIMUM FOR SAWN BEAMS AND (3) STUDS MINIMUM FOR LVL AND PSL BEAMS, UNO.

WC.08: SINGLE LVL OR SOLID SAWN MEMBERS OF 1.75" OR LESS WIDTH, BEARING ONTO A STUD WALL SHALL BEAR 2" MINIMUM ONTO THE WALL AND SHALL BE SUPPORTED BY (1) ADDITIONAL STUD.

WC.09: SOLID SAWN LUMBER PLIES THAT ARE GANGED TO FORM UP TO A (4) PLY A BEAM SHALL HAVE ADJACENT PLIES IN THE BEAM FASTENED TOGETHER WITH (3) ROWS OF 10d NAILS @ 16" O.C. INSTALLED ON (1) OUTER SIDE OF A (2) PLY BEAM AND INSTALLED (1) OUTER SIDE AND ON EACH ADJACENT PLY OF A (3) OR MORE GANGED PLY BEAM, TYP UNO

WC.10: LVL PLIES THAT ARE GANGED TO FORM UP TO A (3) PLY BEAM, LESS THAN 16" IN DEPTH, SHALL HAVE ADJACENT PLIES IN THE BEAM FASTENED TOGETHER WITH (3) ROWS OF 12d NAILS @ 12" O.C. INSTALLED ON (1) OUTER SIDE OF A (2) PLY BEAM AND INSTALLED ON BOTH OUTER SIDES OF A (3) PLY BEAM. LVL BEAMS 16" DEEP OR GREATER OR (4) OR MORE GANGED PLIES SHALL BE FASTENED AS INDICATED ON PLANS.

WC.11: TYPICAL STUD WALL FRAMING SHALL BE 2X4 STUDS SPACED AT 16" O.C. OR, OF A WIDTH, OR SPACING AS INDICATED OTHERWISE ON PLANS. STUD WALLS SHALL BE FRAMED CONTINUOUS, WITHOUT BREAK, ALONG THE HEIGHT OF THE WALL AND SHALL CONSIST OF A SOLE PLATE AT THE BOTTOM OF THE WALL AND A DOUBLE TOP PLATE AT THE TOP OF THE WALL. DISCONTINUITIES IN A STUD WALL SHALL NOT OCCUR EXCEPT AS REQUIRED FOR DOOR OR WINDOW OPENINGS. THE KING STUDS FOR SUCH OPENINGS SHALL BE CONTINUOUS.

WC.12: THE REQUIRED NUMBER OF KING STUDS FOR EXTERIOR HEADERS IN 2X4 STUD WALLS SHALL BE DETERMINED BY NCSBC TABLE 602.3(5)(d) UNLESS NOTED OTHERWISE ON PLANS. FOR 2X6 OR WIDER STUD WALLS THE REQUIRED NUMBER OF KING STUDS FOR EXTERIOR HEADERS WALLS SHALL BE EQUAL TO 1/2 THE AMOUNT OF STUDS AS INDICATED BY THE TABLE LISTED ABOVE.

WC.13: STUDS THAT ARE GANGED TO FORM A LOAD BEARING COLUMN OR A COLUMN TRANSFERRING LOAD FROM ONE FLOOR TO THE NEXT SHALL HAVE ADJACENT STUDS WITHIN THE COLUMN NAILED TOGETHER WITH (2) ROWS OF 10d NAILS AT 8" O.C. (3) ROWS OF 10d NAILS @ 8" O.C. FOR 2X8 OR 2X10 STUDS). ALL COLUMNS SHALL PROVIDE A CONTINUOUS LOAD PATH DOWN TO THE FOUNDATION OR OTHER ENGINEERED STRUCTURAL ELEMENTS INCLUDING SOLID BLOCKING OF EQUAL WIDTH OF THE COLUMN PROVIDED WITHIN THE DEPTH OF THE FLOOR SYSTEM CAVITY.

WC.14: NAILS SHALL BE COMMON WIRE NAILS TYP UNO.

WC.15: LAG SCREWS SHALL CONFORM TO ANSI/ASME STANDARD B18.2.1-1981.

WC.16: PILOT HOLES SHALL BE USED FOR LAG SCREW INSTALLATION AND SHALL BE BORED ACCORDING TO NDS SPECIFICATIONS.

WC.17: BOLTS AND LAG SCREWS USED FOR BOLTING WOOD MEMBERS SHALL HAVE STANDARD WASHERS INSTALLED FOR THE NUTS AND BOLT / SCREW HEADS.

STEEL CONSTRUCTION

ST.01: STRUCTURAL STEEL SHALL MEET THE REQUIREMENTS OF THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.

ST.02: HOLLOW STRUCTURAL SECTIONS (HSS) SHALL CONFORM TO ASTM A500 GRADE C.

ST.03: ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A992 MINIMUM GRADE TYP UNO.

ST.04: BOLTS SHALL CONFORM TO ASTM A307 MINIMUM GRADE TYP UNO.

ST.05: WELDING ELECTRODES SHALL BE E70XX.

ST.06: ALL WELDING SHALL BE PERFORMED BY AN AWS CERTIFIED WELDER.

ST.07: REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615 GRADE 60 TYP UNO.

ST.08: STEEL FLITCH PLATE BEAMS SHALL CONSIST OF A CONTINUOUS STEEL PLATE BOLTED BETWEEN TWO PIECES OF CONTINUOUS LUMBER. PLATE AND LUMBER AS SIZED PER PLANS. BOLT ASSEMBLY TOGETHER USING 1/2" Ø THROUGH BOLTS SPACED AT 24" O.C. STAGGERED TOP TO BOTTOM OF BEAM. MAINTAIN A 2" EDGE DISTANCE. PLACE TWO BOLTS, ONE ABOVE THE OTHER, 6" FROM EACH END OF THE BEAM.

ST.09: ALL STEEL, HSS, AND STEEL FLITCH PLATE BEAMS BEARING ONTO A STUD WALL SHALL THE BEAR THE FULL WIDTH OF THE SUPPORTING WALL WHEN FRAMED PERPENDICULAR TO THE WALL, AND, IN ALL CASES, SHALL BE SUPPORTED ON A GANGED STUD COLUMN SUCH THAT THE GANGED NUMBER OF STUDS IS AT LEAST AS WIDE AS THE BEAM BEING SUPPORTED OR, WHEN FRAMED PARALLEL TO THE WALL, SHALL BEAR ON (2) STUDS MINIMUM UNO.

MASONRY CONSTRUCTION

MS.01: MASONRY CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS OF ACI 530-95, LATEST EDITION.

MS.02: CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C 90 OR ASTM C 55.

MS.03: MORTAR SHALL BE TYPE M OR S CONFORMING TO ASTM C 476.

MS.04: ALL LOAD BEARING MASONRY UNITS SHALL BE LAID IN A RUNNING BOND, TYP.

MS.05: MASONRY PILASTERS SHALL BE BLOCK BONDED TO THE MASONRY WALL IMMEDIATELY ADJACENT, TYP.

MS.06: THE MAXIMUM HEIGHT OF HOLLOW AND SOLID GROUTED MASONRY UNITS USED IN MASONRY PIER CONSTRUCTION SHALL CONFORM WITH THE TABLE BELOW

LEAST PIER DIMENSION	MAX HEIGHT FOR HOLLOW UNITS	MAX HEIGHT FOR SOLID UNITS
8"	32"	80"
12"	48"	120"
16"	64"	160"
20"	80"	NA
24"	96"	NA

CONCRETE CONSTRUCTION

CN.01: REINFORCED CAST IN PLACE CONCRETE SHALL BE PROPORTIONED, MIXED AND PLACED IN ACCORDANCE WITH THE SPECIFICATIONS OF ACI 318, LATEST EDITION.

CN.02: ALL CONCRETE, INCLUDING CONCRETE FOR FOOTINGS, IS TO BE CAST IN PLACE, TYP UNO.

CN.03: CAST IN PLACE CONCRETE SHALL BE NORMAL WEIGHT CONCRETE AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS TYP UNO.

CN.04: WHERE CAST IN PLACE CONCRETE WALLS RETAIN 4 FEET OR MORE OF UNBALANCED FILL, THEY SHALL BE LATERALLY SUPPORTED AT THE TOP AND BOTTOM BEFORE BACKFILLING.

SUBSTITUTIONS

SB.01: SYNTHETIC POLYPROPYLENE FIBRILLATED MICRO FIBERS, FIBER LENGTH 1 1/2", DOSAGE RATE 1 1/2 LBS/CU YD, MAY BE USED IN LIEU OF WELDED WIRE FABRIC IN GROUND SUPPORTED SLAB CONSTRUCTION.

SB.02: SOLID SAWN LUMBER SPECIES AND GRADE SUBSTITUTION IS ALLOWED ONLY BY WRITTEN AUTHORIZATION OF SUBSTITUTION BY ENGINEER OF RECORD.

SB.03: ENGINEERED WOOD BEAM AND I-JOIST SUBSTITUTION IS ALLOWED PROVIDED THAT THE CONTRACTOR OR THE LUMBER SUPPLIER RESPONSIBLE FOR THE SUBSTITUTION PROVIDES DOCUMENTATION AT THE TIME OF INSPECTION DEMONSTRATING THAT THE MATERIAL SUBSTITUTION MEETS OR EXCEEDS THE MINIMUM DESIGN SPECIFICATIONS OF THE ENGINEERED WOOD BEAMS OR I-JOISTS NOTED ON THE SEALED SET OF ENGINEERED PLANS. IN ALL CASES, THE I-JOIST SPACING NOTED ON THE SEALED SET OF PLANS IS TO REMAIN THE SAME.

SB.04: ALL OTHER UNAUTHORIZED SUBSTITUTIONS AND / OR DEVIATIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. FAILURE OF THE CONTRACTOR TO CONFORM TO THE STRUCTURAL DRAWINGS SHALL VOID THE ENGINEER'S SEAL AND THE FIRM'S LIABILITY UNLESS CHANGES TO THE STRUCTURAL PLANS ARE APPROVED BY THE ENGINEER OF RECORD.

LEGAL DISCLAIMER / MISCELLANEOUS NOTES

THE ELECTRONIC DISTRIBUTION OF THIS DOCUMENT TO PARTIES OTHER THAN THE INTENDED CLIENT AND / OR DIGITAL MODIFICATION OF THIS DOCUMENT IN ANY WAY IS PROHIBITED AND SHALL VOID THE ENGINEER OF RECORD'S SEAL.

OKE NICHOLS ENGINEERING, INC DOES NOT PERFORM FENESTRATION, ROOF VENT, OR ATTIC CALCULATIONS OR ANY OTHER AREA CALCULATIONS THAT ARE NOT RELATED TO STRUCTURAL ENGINEERING.

TRUSSES ARE TO BE DESIGNED BY OTHERS AS AN ENGINEER REGISTERED IN NORTH CAROLINA. FINAL TRUSS DRAWING SHOULD BE SUBMITTED TO OKE NICHOLS ENGINEERING, INC FOR REVIEW PRIOR TO CONSTRUCTION.

REVIEW SETS SHALL BE PROVIDED TO THE CLIENT TO ENSURE THAT THE SCOPE OF WORK HAS BEEN COMPLETED IN CONFORMANCE WITH THE CLIENT'S PREFERENCES. CLIENT APPROVAL OF REVIEW SETS SHALL INDICATE THAT THE CLIENT HAS ADEQUATELY REVIEWED THE SET OF DRAWINGS AND ACKNOWLEDGES THAT THE SCOPE OF WORK HAS BEEN COMPLETED TO THE CLIENT'S SATISFACTION. UPON APPROVAL OF REVIEW SETS, THE SEALED SET OF PLANS ARE ISSUED AND SHALL BE CONSIDERED FINALIZED CONSTRUCTION DOCUMENTS.

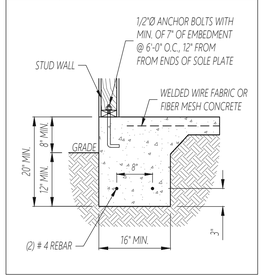
THE BUILDER IS RESPONSIBLE FOR REVIEWING ALL PLANS PRIOR TO CONSTRUCTION, AND IN THE CASE OF EXISTING CONSTRUCTION, VERIFYING ALL EXISTING CONDITIONS DURING DEMOLITION PRIOR TO CONSTRUCTION.

COMMON ABBREVIATIONS

ABV	ABOVE	FND	FOUNDATION	THK	THICK
B.E.	BOTH ENDS	FTG	FOOTING	TYP	TYPICAL
BTWN	BETWEEN	HDG	HOT DIPPED GALVANIZED	TRPL	TRIPLE
C.J.	CEILING JOIST	HGR	HANGER	TSP	TRIPLE STUD POCKET
CONC.	CONCRETE	LVL	LAMINATED VENEER LUMBER	UNO	UNLESS NOTED OTHERWISE
CONT	CONTINUOUS	NO.	NUMBER	WF	WIDE FLANGE BEAM
CS	CONTINUOUS SHEATHING	NTS	NOT TO SCALE	XJ	EXTRA JOIST
DIA	DIAMETER	O/C	ON CENTER		
DBL	DOUBLE	PSL	PARALLEL STRAND LUMBER		
DJ	DOUBLE JOIST	PT	PRESSURE TREATED		
DSP	DBL STUD POCKET	REF.	REFERENCE		
E.E.	EACH END	SIMP.	SIMPSON		
FLR	FLOOR	SQ	SQUARE		

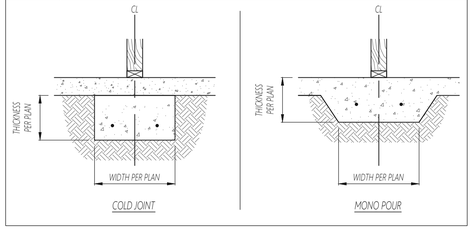
1 SECTION, 3/4" = 1'-0"

TYPICAL TURN DOWN SLAB



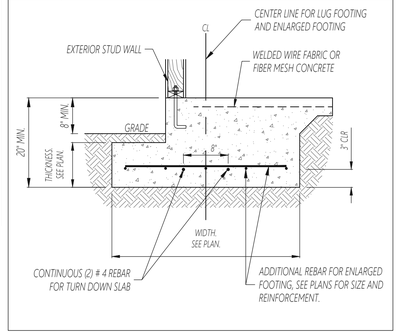
2 SECTION, 3/4" = 1'-0"

TYPICAL LUG FOOTING: COLD JOINT, MONO POUR OPTIONS



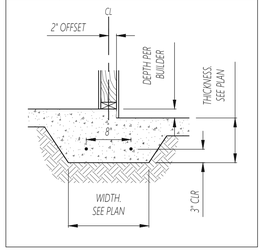
3 SECTION, 3/4" = 1'-0"

TYPICAL ENLARGED FOOTING @ EXTERIOR TURN DOWN SLAB



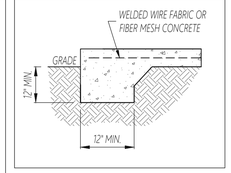
4 SECTION, 3/4" = 1'-0"

MONOLITHIC LUG FOOTING @ GARAGE THRESHOLD



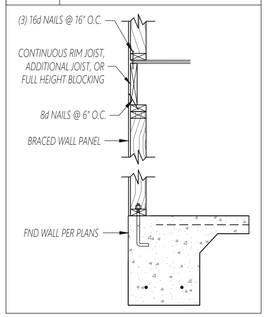
5 SECTION, 3/4" = 1'-0"

MONOLITHIC LUG FOOTING @ PATIO



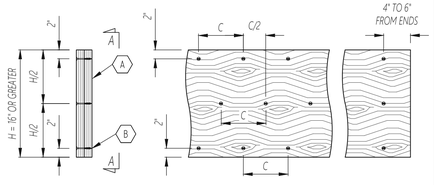
6 SECTION, 3/4" = 1'-0"

TYPICAL BRACED WALL PANEL



7 SECTION, 3/4" = 1'-0"

TYPICAL 2-PLY LVL FASTENING ATTACHMENT, 16" DEPTH OR GREATER

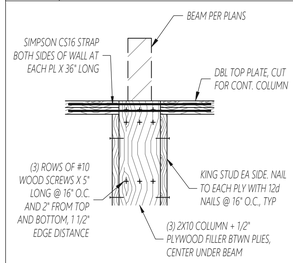


ITEM	DESCRIPTION
A	2-PLY LVL BEAM, 16" DEPTH OR GREATER
B	SIMPSON BRAND SDW22338 STRUCTURAL WOOD SCREWS OR 3 1/2" FlatLOK BRAND STRUCTURAL WOOD SCREWS
C	O.C. SPACING= 12"

*BUILDER PERMITTED TO SUBSTITUTE 1/2" Ø THROUGH BOLTS FOR STRUCTURAL WOOD SCREWS @ EQUAL SPACING.

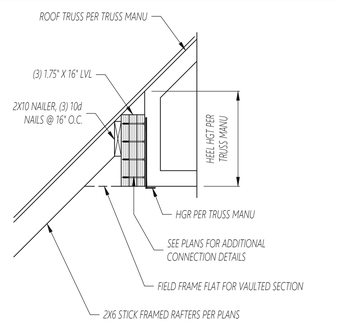
8 SECTION, 3/4" = 1'-0"

TYPICAL COLUMN: (3) 2X10



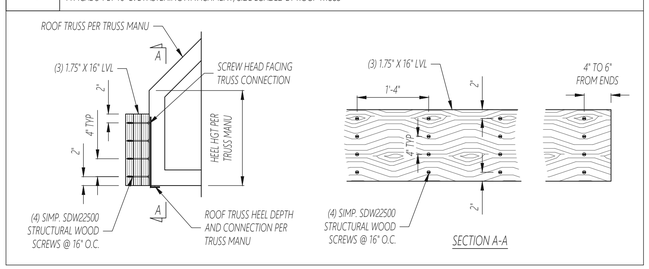
9 SECTION, 3/4" = 1'-0"

ROOF TRUSS, LVL BEAM, STICK FRAMED ROOF FRAMING WITH VAULTED SECTION



10 SECTION, 3/4" = 1'-0"

TYPICAL 3-PLY 16" LVL FASTENING ATTACHMENT, SIDE LOADED BY ROOF TRUSS



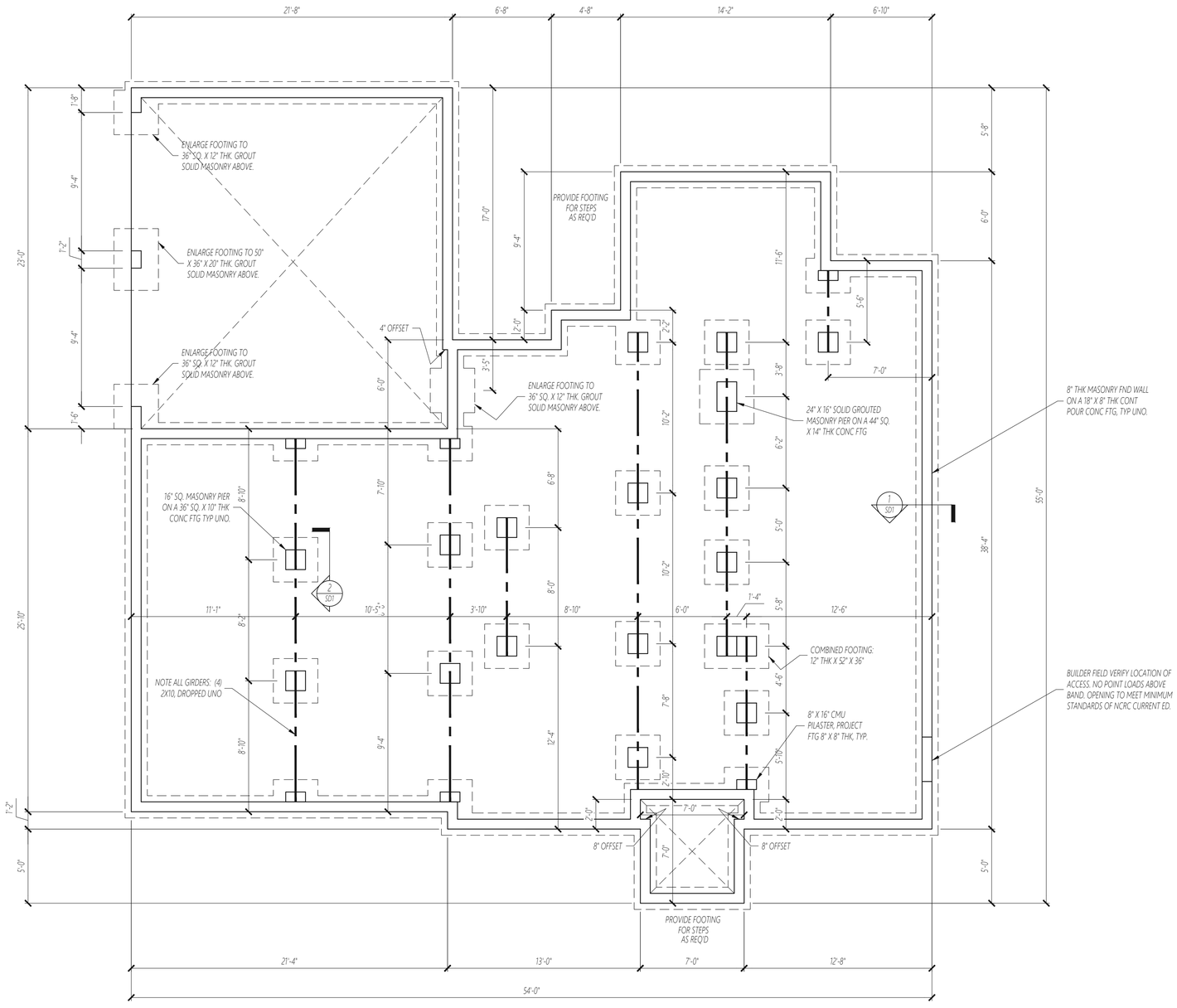
oke nichols engineering
Structural Engineering and Consulting
2301 Stonehenge Dr., Suite 202, Raleigh, NC, 27615
(919) 916-9290 License No. C-4754

ATMOS BUILDERS
STRUCTURAL ADDENDUM
50 TALBERT DRIVE

ENG:	BDO
DATE:	12-22-2021
REV:	

PROJECT NO.
2110304

SHEET NO.
SD1
5 of 5



FOUNDATION PLAN

1/4" = 1'-0"

COMMON WORD ABBREVIATIONS

-SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

FOUNDATION NOTES

- FOUNDATION WALL HEIGHT AND BACKFILL LIMITATIONS ARE TO BE GOVERNED BY THE NCRBC, LATEST EDITION.
- BUILDER IS TO VERIFY WALL THICKNESS, REBAR SIZE, AND REBAR SPACING IF REQUIRED BY WALL HEIGHT AND BACKFILL CONDITIONS.
- EXTERIOR PERIMETER DIMENSIONS ARE ASSUMED TO BE OUT TO OUT OF SHEATHING, BUILDER TO OFFSET SILL PLATE AS REQ'D FOR FRAMING ABV.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 046023 6-8-2022 BENJAMIN D. DAVIS

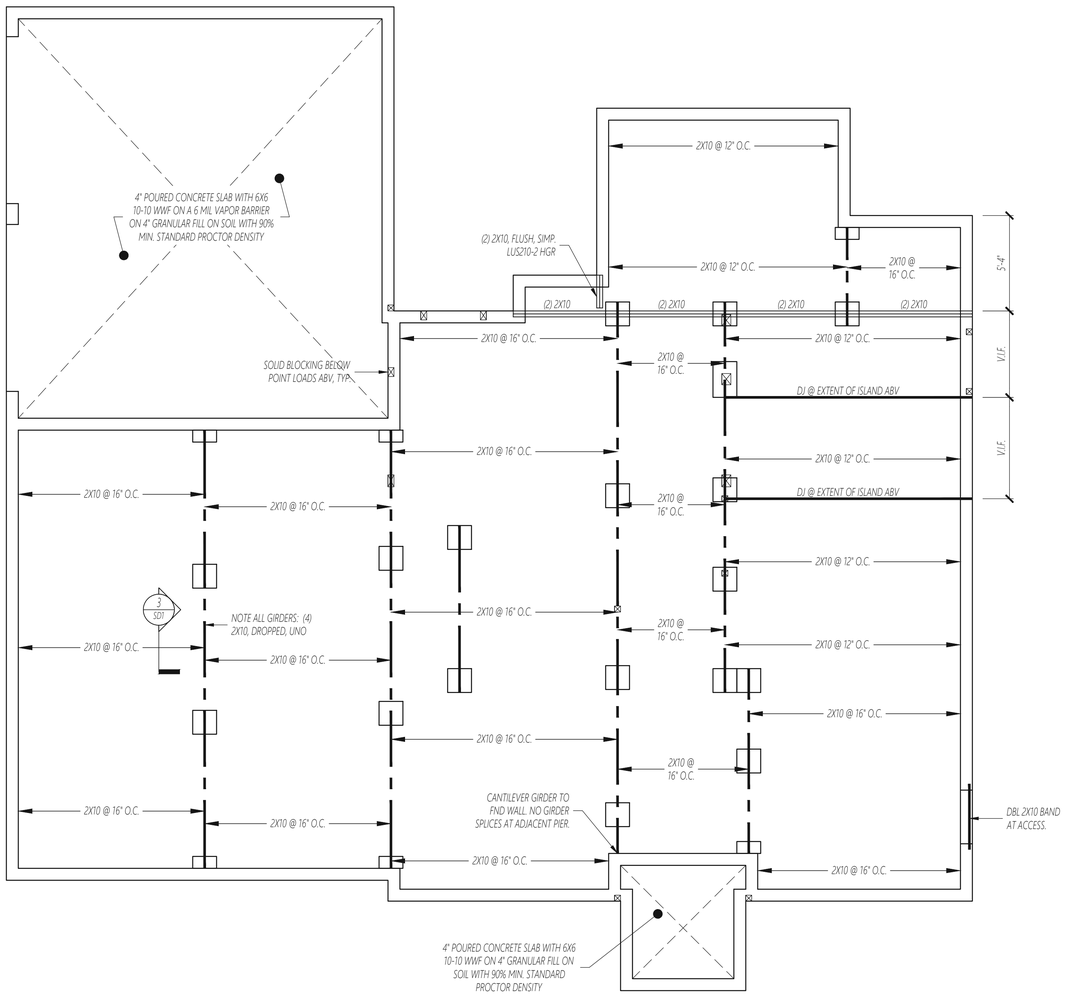
oke nichols engineering
Structural Engineering and Consulting
2301 Stonehenge Dr., Suite 202, Raleigh, NC, 27615
(919) 916-6290 License No. C-4754

ATMOS BUILDERS
STRUCTURAL ADDENDUM
50 TALBERT DRIVE

ENG:	BDO
DATE:	6-8-2022
REV:	

PROJECT NO.
2210165

SHEET NO.
S1
1 of 6



CRAWL SPACE FRAMING PLAN

1/4" = 1'-0"

COMMON WORD ABBREVIATIONS

-SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

WOOD FRAMING NOTES

ALL FLOORS

-SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1 /NO. 2 SPRUCE-PINE-FIR FOR RAFTERS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
- P.T. SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SOUTHERN YELLOW PINE FOR POSTS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
-SOLID SAWN WOOD FRAMING SUBSTITUTION ALLOWED ONLY BY PERMISSION OF ENGINEER OF RECORD.

ADDITIONAL JOISTS

-NON-LOAD BEARING WALLS, BUILT-INS, AND CABINETRY ON THE FLOOR ABOVE THAT ARE PARALLELL TO THE FRAMING SYSTEM ON THIS SHEET SHALL HAVE AN ADDITIONAL JOIST PLACED BELOW, TYP UNO, BUILDER TO INSTALL AS REQUIRED, FIELD VERIFY DIMENSIONS

NORTH CAROLINA PROFESSIONAL SEAL 046023 ENGINEER BENJAMIN D. DAVIS 6-8-2022

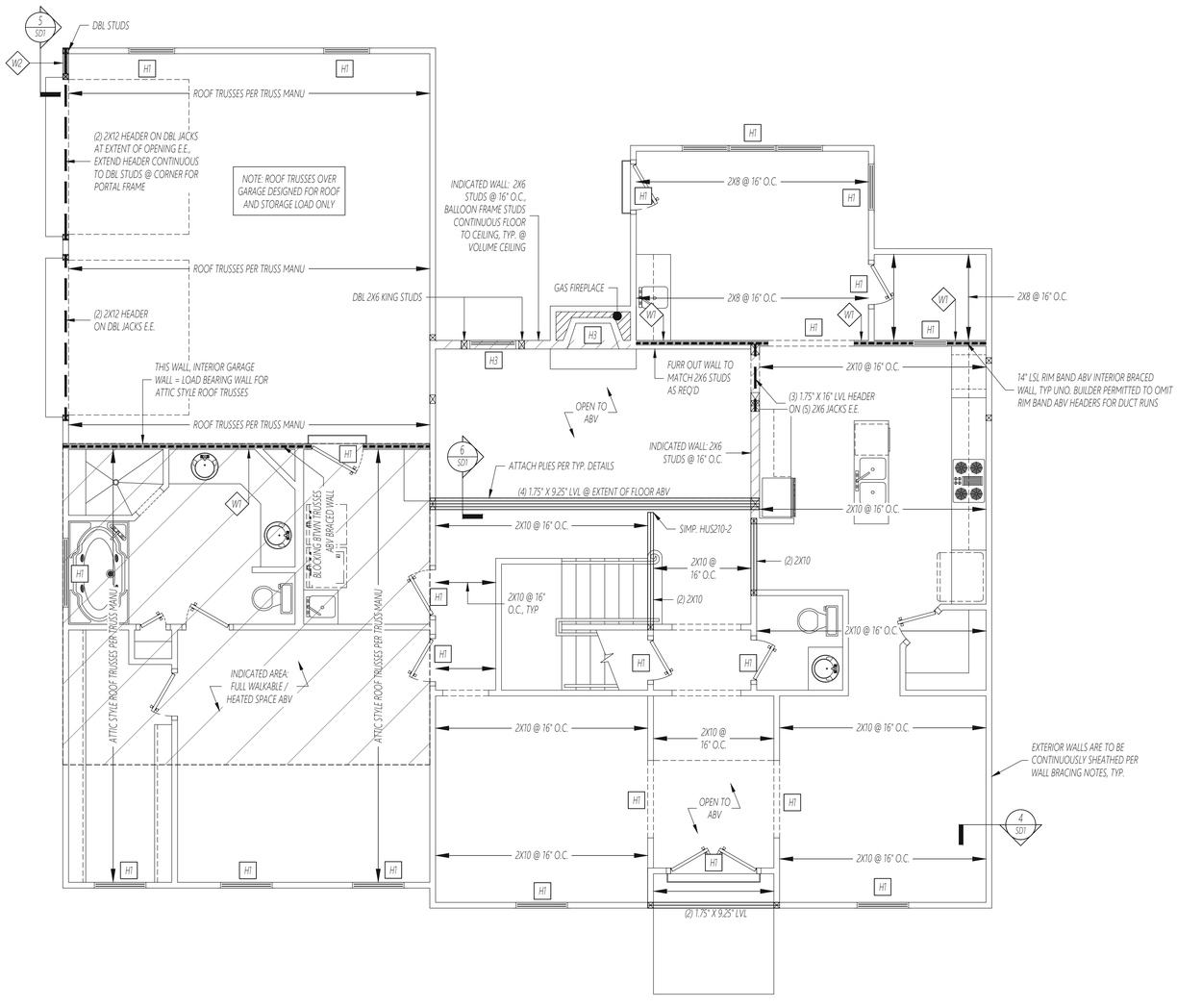
oke nichols engineering
Structural Engineering and Consulting
2301 Stonehenge Dr., Suite 202, Raleigh, NC, 27615
(919) 916-6290 License No. C-4754

ATMOS BUILDERS
STRUCTURAL ADDENDUM
50 TALBERT DRIVE

ENG:	BDO
DATE:	6-8-2022
REV:	

PROJECT NO.
2210165

SHEET NO.
S2



1ST FLOOR FRAMING PLAN

WALLS AND CEILING

1/4" = 1'-0"

COMMON WORD ABBREVIATIONS

-SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

WOOD FRAMING NOTES

ALL FLOORS

-SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1 /NO. 2 SPRUCE-PINE-FIR FOR RAFTERS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
- P.T. SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SOUTHERN YELLOW PINE FOR POSTS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
-SOLID SAWN WOOD FRAMING SUBSTITUTION ALLOWED ONLY BY PERMISSION OF ENGINEER OF RECORD.

ADDITIONAL JOISTS

-NON-LOAD BEARING WALLS, BUILT-INS, AND CABINETRY ON THE FLOOR ABOVE THAT ARE PARALLELL TO THE FRAMING SYSTEM ON THIS SHEET SHALL HAVE AN ADDITIONAL JOIST PLACED BELOW, TYP UNO, BUILDER TO INSTALL AS REQUIRED, FIELD VERIFY DIMENSIONS

NO. OF STUDS FOR BEAM SUPPORT

ALL FLOORS

	BEAM TYPE	NO. OF STUDS AT E.E. OF BEAM, TYP UNO
SAWN	(2)-PLY SAWN BEAM	2
	(3)-PLY SAWN BEAM	3
LVL	(2)-PLY LVL BEAM	3
	(3)-PLY LVL BEAM	4
	(4)-PLY LVL BEAM	5

NOTES:
-SINGLE PLY LVL BEAMS AND X/S TO BE SUPPORT BY SINGLE STUD AT EACH END, TYP.
-WHERE BEAMS BEAR PARALLEL TO WALL, BEARING LENGTH OF BEAM AND NO. OF STUDS TO EXTEND ALONG LENGTH OF WALL IN PARALLEL DIRECTION, TYP UNO.

HEADER SCHEDULE

THIS FLOOR ONLY

H1: (2) 2X10 ON (1) JACK E.E.

H2: (2) 1.75" X 9.25" LVL ON (2) JACKS E.E.

H3: (3) 2X10'S ON (1) 2X6 JACK E.E.

H4: (3) 1.75" X 9.25" LVL'S ON (2) 2X6 JACKS E.E.

NOTES:
-HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED AND SHALL BE FRAMED ACCORDING TO ACCEPTED CONSTRUCTION PRACTICE.

KING STUD SCHEDULE

EXTERIOR WALLS ONLY, ALL FLOORS

MAX OPENING DIMENSION	NO. KING STUDS E.E. 2X4 WALL	NO. KING STUDS E.E. 2X6 WALL
≤3"	1	1
4'	2	1
8'	3	2
12'	5	2
16'	6	3
18'	7	4

NOTES:
-NO. OF KINGS STUDS LISTED ABOVE BASED ON A 10' NOMINAL WALL HEIGHT AND 16" O.C. STUD SPACING.
- SPANS BASED ON ROUGH OPENINGS. FOR SPANS BTWN DIMENSIONS LISTED ABOVE ROUND UP FOR NO. OF KING STUDS UNO.

WALL BRACING

THIS FLOOR ONLY

ALL EXTERIOR STUD WALLS ARE TO BRACED WITH CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANELING (METHOD CS-WSP), 3/8" MINIMUM THICKNESS, NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, AND 12" O.C. IN PANEL FIELD.

ALL BRACED WALLS SHALL BE SECURED WITH A CONTINUOUS RIM JOIST, ADDITIONAL JOIST, OR FULL HEIGHT BLOCKING ABOVE AND BELOW BRACED WALL PANEL. JOIST / BLOCKING SHALL BE ATTACHED WITH 8d TOENAILS @ 6" O.C. ALONG TOP OF WALL AND (3) 16d NAILS @ 16" O.C. ALONG BOTTOM OF WALL. HORIZONTAL BLOCKING IS REQUIRED AT PANEL JOINTS IN BRACED WALL PANELS.

EXTERIOR BRACED WALLS:
-CONTINUOUS PERIMETER SHEATHING = 23.4'

SHADED WALLS = INTERIOR BRACED WALLS AND EXTERIOR WALLS WITH ALTERNATIVE BRACING METHODS

W1 - 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.

W2 - PORTAL FRAME WHERE INDICATED. SEE DETAILS FOR CONSTRUCTION SPECIFICATIONS. SHEATH WALLS @ PORTAL FRAME WITH 7/16" MIN. THICKNESS WOOD STRUCTURAL PANELING.

NOTES:
-WALL BRACING SHALL BE INSTALLED TO BE IN ACCORDANCE WITH SECT. R602.10.3 OF THE 2018 NCRC.
-WHERE A BUILDING OR PORTIONS THEREOF DOES NOT COMPLY WITH SECT. R602.10.3, ALTERNATIVE METHODS OF BRACING HAVE BEEN DESIGNED IN ACCORDANCE TO ENGINEERING DESIGN PER SECT. R602.10.5 OF THE 2018 NCRC.

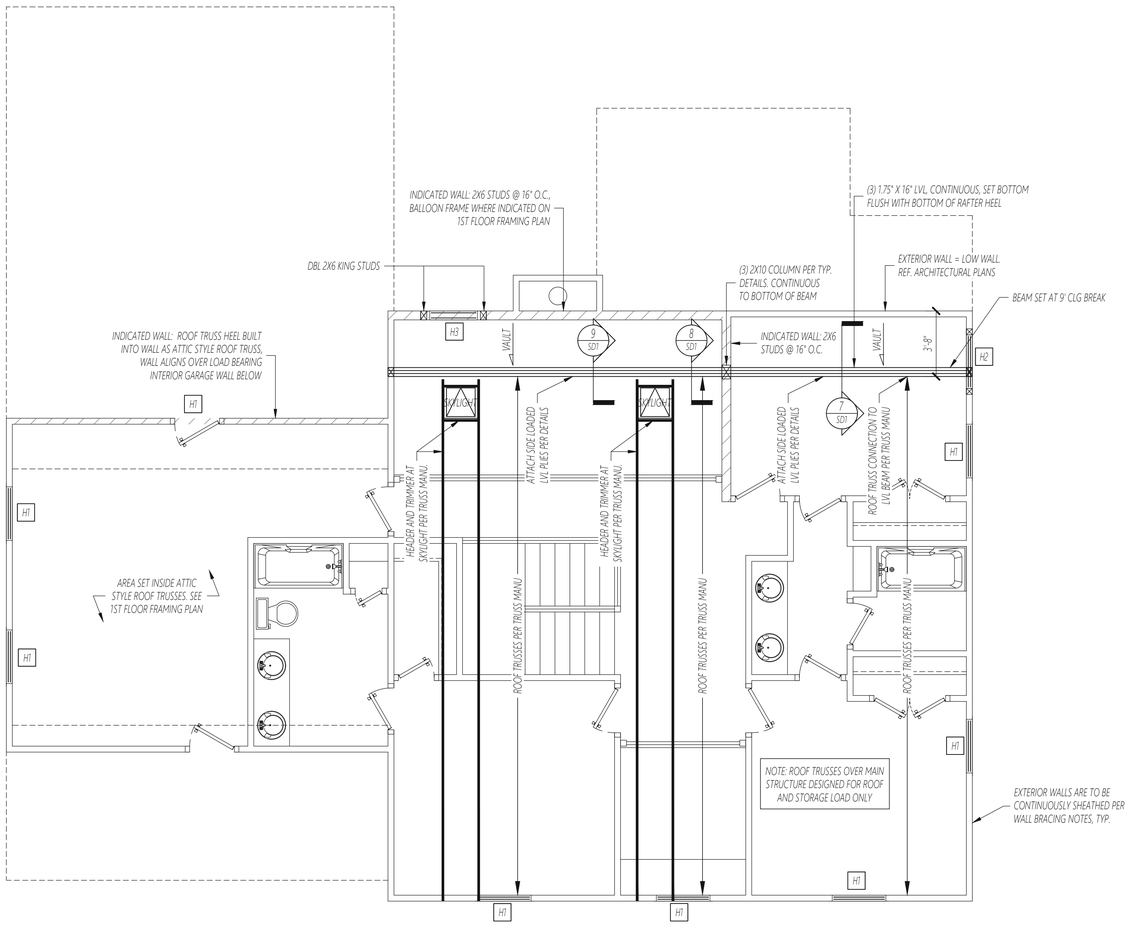
oke nichols engineering
Structural Engineering and Consulting
2301 Stonehenge Dr., Suite 202, Raleigh, NC, 27615
(919) 916-9290 License No. C-4754

ATMOS BUILDERS
STRUCTURAL ADDENDUM
50 TALBERT DRIVE

ENG:	BDO
DATE:	6-8-2022
REV:	

PROJECT NO.
2210165

SHEET NO.
S3



2ND FLOOR FRAMING PLAN

WALLS AND CEILING

1/4" = 1'-0"

COMMON WORD ABBREVIATIONS

-SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

WOOD FRAMING NOTES

ALL FLOORS

-SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1 /NO. 2 SPRUCE-PINE-FIR FOR RAFTERS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
- P.T. SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SOUTHERN YELLOW PINE FOR POSTS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
-SOLID SAWN WOOD FRAMING SUBSTITUTION ALLOWED ONLY BY PERMISSION OF ENGINEER OF RECORD.

NO. OF STUDS FOR BEAM SUPPORT

ALL FLOORS

	BEAM TYPE	NO. OF STUDS AT E.E. OF BEAM, TYP UNO
SAWN	(2)-PLY SAWN BEAM	2
	(3)-PLY SAWN BEAM	3
LVL	(2)-PLY LVL BEAM	3
	(3)-PLY LVL BEAM	4
	(4)-PLY LVL BEAM	5

NOTES:
-SINGLE PLY LVL BEAMS AND X/S TO BE SUPPORT BY SINGLE STUD AT EACH END, TYP.
-WHERE BEAMS BEAR PARALLEL TO WALL, BEARING LENGTH OF BEAM AND NO. OF STUDS TO EXTEND ALONG LENGTH OF WALL IN PARALLEL DIRECTION, TYP UNO.

HEADER SCHEDULE

THIS FLOOR ONLY

H1: (2) 2X10 ON (1) JACK E.E.

H2: (2) 1.75" X 9.25" LVL ON (2) JACKS E.E.

H3: (3) 2X10'S ON (1) 2X6 JACK E.E.

H4: (3) 1.75" X 9.25" LVL'S ON (2) 2X6 JACKS E.E.

NOTES:
-HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED AND SHALL BE FRAMED ACCORDING TO ACCEPTED CONSTRUCTION PRACTICE.

KING STUD SCHEDULE

EXTERIOR WALLS ONLY, ALL FLOORS

MAX OPENING DIMENSION	NO. KING STUDS E.E. 2X4 WALL	NO. KING STUDS E.E. 2X6 WALL
≤3'	1	1
4'	2	1
8'	3	2
12'	5	2
16'	6	3
18'	7	4

NOTES:
-NO. OF KINGS STUDS LISTED ABOVE BASED ON A 10' NOMINAL WALL HEIGHT AND 16" O.C. STUD SPACING.
-SPANS BASED ON ROUGH OPENINGS. FOR SPANS BTWN DIMENSIONS LISTED ABOVE ROUND UP FOR NO. OF KING STUDS UNO.

WALL BRACING

THIS FLOOR ONLY

ALL EXTERIOR STUD WALLS ARE TO BRACED WITH CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANELING (METHOD CS-WSP), 3/8" MINIMUM THICKNESS, NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, AND 12" O.C. IN PANEL FIELD.

ALL BRACED WALLS SHALL BE SECURED WITH A CONTINUOUS RIM JOIST, ADDITIONAL JOIST, OR FULL HEIGHT BLOCKING ABOVE AND BELOW BRACED WALL PANEL. JOIST / BLOCKING SHALL BE ATTACHED WITH 8d TOENAILS @ 6" O.C. ALONG TOP OF WALL AND (3) 16d NAILS @ 16" O.C. ALONG BOTTOM OF WALL. HORIZONTAL BLOCKING IS REQUIRED AT PANEL JOINTS IN BRACED WALL PANELS.

EXTERIOR BRACED WALLS:
-CONTINUOUS PERIMETER SHEATHING = 1\12'

NOTES:
-WALL BRACING SHALL BE INSTALLED TO BE IN ACCORDANCE WITH SECT. R602.10.3 OF THE 2018 NCRC.
-WHERE A BUILDING OR PORTIONS THEREOF DOES NOT COMPLY WITH SECT. R602.10.3, ALTERNATIVE METHODS OF BRACING HAVE BEEN DESIGNED IN ACCORDANCE TO ENGINEERING DESIGN PER SECT. R602.10.5 OF THE 2018 NCRC.

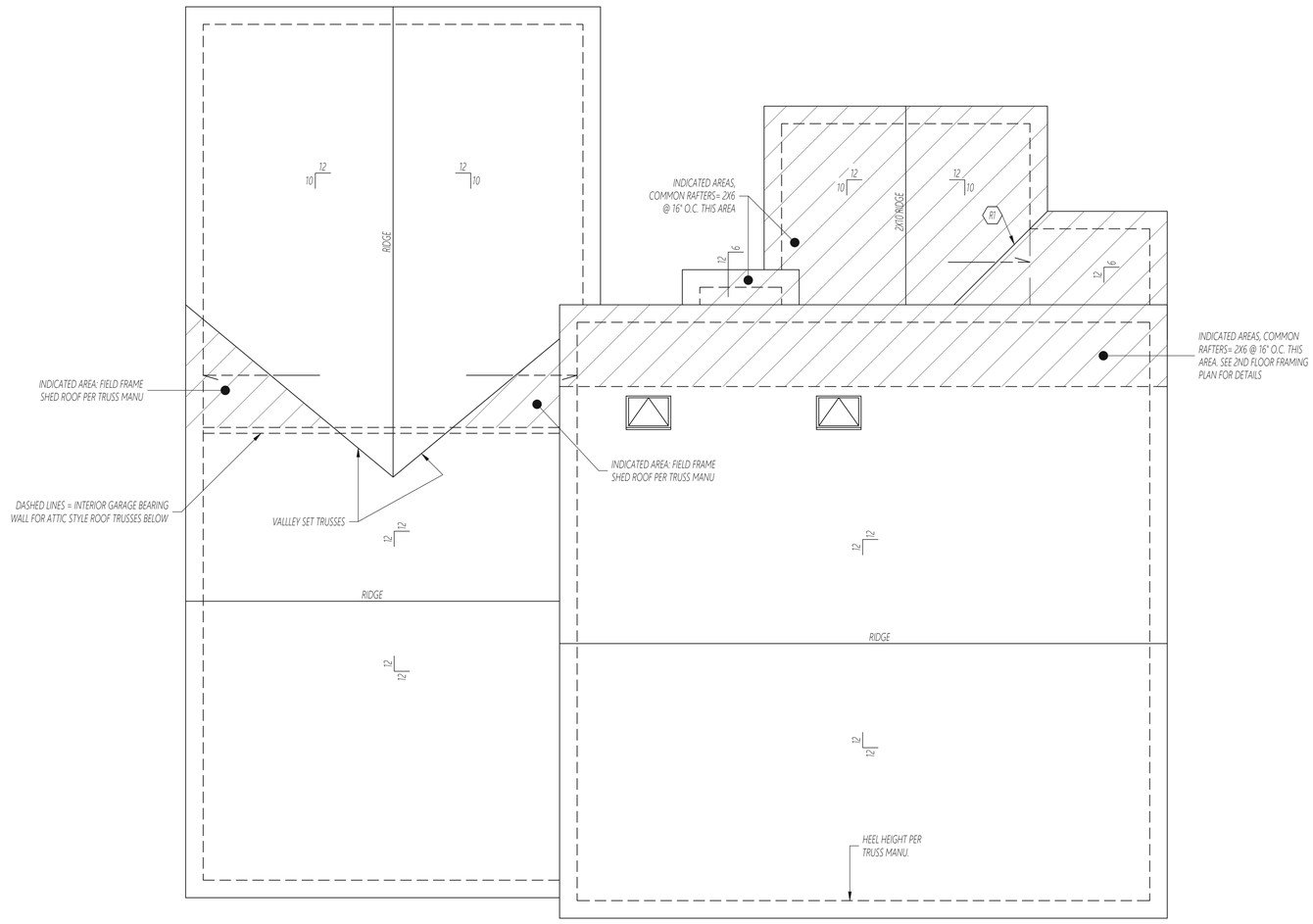
oke nichols engineering
Structural Engineering and Consulting
2301 Stonehenge Dr., Suite 202, Raleigh, NC, 27615
(919) 916-6290 License No. C-4754

ATMOS BUILDERS
STRUCTURAL ADDENDUM
50 TALBERT DRIVE

ENG:	BDO
DATE:	6-8-2022
REV:	

PROJECT NO.
2210165

SHEET NO.
S4
4 of 6



ROOF FRAMING PLAN

1/4" = 1'-0"

COMMON WORD ABBREVIATIONS

-SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

WOOD FRAMING NOTES

ALL FLOORS

-SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1 /NO. 2 SPRUCE-PINE-FIR FOR RAFTERS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
- P.T. SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SOUTHERN YELLOW PINE FOR POSTS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
-SOLID SAWN WOOD FRAMING SUBSTITUTION ALLOWED ONLY BY PERMISSION OF ENGINEER OF RECORD.

FRAMING NOTES

ROOF ONLY

R1: OVERFRAME VALLEY (2X10 SLEEPER)

NOTES:
-ROOF TRUSSES PER MANUFACTURER, TYPICAL UNO
-ATTACH ROOF TRUSSES TO DBL TOP PLATE WITH HOLDOWN DEVICE PER TRUSS MANU.
-CONTRACTOR IS TO VERIFY ALL ROOF PITCHES, OVERHANGS, AND HEEL HEIGHTS PRIOR TO CONSTRUCTION

oke nichols engineering
Structural Engineering and Consulting
2301 Stonehenge Dr., Suite 202, Raleigh, NC, 27615
(919) 916-6290 License No. C-4754

ATMOS BUILDERS
STRUCTURAL ADDENDUM
50 TALBERT DRIVE

ENG:	BDO
DATE:	6-8-2022
REV:	

PROJECT NO.
2210165

SHEET NO.
S5

CONSTRUCTION SPECIFICATIONS

GENERAL NOTES

GN.01: CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 ED. ALL WORK IS TO BE DONE IN STRICT ACCORDANCE WITH STATE AND LOCAL CODES.

GN.02: METHODS, PROCEDURES AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND INSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.

DIMENSIONS

DM.01: DIMENSIONS SHOWN SHALL GOVERN OVER SCALE ON THESE DRAWINGS.

DESIGN LOADS

DL.01: DESIGN LOADS SHALL CONFORM WITH THE TABLE BELOW

USE	LIVE LOAD (PSF)
UNINHABITABLE ATTIC WITHOUT STORAGE, LESS THAN 42" HEADROOM	10
UNINHABITABLE ATTIC WITH LIMITED STORAGE	20
HABITABLE ATTIC / ATTIC WITH FIXED STAIR ACCESS	30
COMMON AREAS / SLEEPING ROOMS	40
EXTERIOR BALCONIES / DECKS	40
FIRE ESCAPES	40
STAIRS	40
ROOF	20
PASSENGER VEHICLE GARAGE	50
GUARDRAILS AND HANDRAILS	200
GUARDRAIL IN-FILL COMPONENTS	50

* A UNIFORMLY DISTRIBUTED DEAD LOAD OF 10 PSF SHALL BE APPLIED TO USE CATEGORIES LISTED ABOVE UNLESS NOTED OTHERWISE.
* A UNIFORMLY DISTRIBUTED DEAD LOAD OF 5 PSF SHALL BE APPLIED TO VAULTED CEILING AREAS.
* THE CONTRACTOR IS RESPONSIBLE FOR INDICATING ON PLANS ALL AREAS REQUIRING A DESIGN FOR INCREASED DEAD LOAD SUCH AS TILED FLOOR AREAS OR SLATE ROOF COVERINGS. FOR ALL AREAS NOT INDICATED ON PLANS, THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THE DEAD LOAD DOES NOT EXCEED THE 10 PSF DESIGN LIMITATION.

DL.02: INTERIOR WALLS: 5 PSF LATERAL.

DL.03: BASIC WIND DESIGN VELOCITY, V(ultimate) OF 115 MPH.

DL.04: LOAD DURATION FACTOR FOR ROOF STRUCTURAL MEMBERS IS 1.15.

DL.05: SOIL BEARING CAPACITY 2000 PSF (PRESUMPTIVE).

WOOD CONSTRUCTION

WC.01: SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1 / NO. 2 SPRUCE PINE FIR FOR JOISTS, RAFTERS, WOOD GIRDERS / BEAMS, ETC. PRESSURE TREATED WOOD FRAMING DESIGN IS BASED ON NO. 2 SOUTHERN YELLOW PINE FOR POSTS, JOISTS, RAFTERS, WOOD GIRDERS/BEAMS, ETC.

WC.02: STUDS SHALL BE SPRUCE PINE FIR NO.1 / NO. 2 OR EQUAL TYP UNO.

WC.03: LUMBER IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA STANDARD C-15. ALL OTHER EXPOSED LUMBER SHALL BE TREATED IN ACCORDANCE WITH AWPA STANDARD C-2 OR BY ANY METHOD GIVING EQUAL PROTECTION. THE BUILDING CODE OFFICE MAY ALSO APPROVE A NATURAL DECAY RESISTANT WOOD PER SECTION 19-6A).

WC.04: LAMINATED VENEER LUMBER (LVL) DESIGN IS BASED ON MICROLAM 1.9E MINIMUM DESIGN STRESS VALUES AS FOLLOWS: E= 1.966 PSI, Fb = 2600 PSI, Fv = 285 PSI, Fc = 750 PSI

WC.05: PARALLEL STRAND LUMBER (PSL) DESIGN IS BASED ON PARALLAM 1.8E MINIMUM DESIGN STRESS VALUES AS FOLLOWS: E= 1.866 PSI, Fb = 2400 PSI, Fv = 190 PSI, Fc = 545 PSI

WC.06: LAMINATED STRAND LUMBER (LSL) DESIGN IS BASED ON TIMBERSTRAND 1.3E MINIMUM DESIGN STRESS VALUES AS FOLLOWS: E= 1.366 PSI, Fb = 1700 PSI, Fv = 425 PSI, Fc = 710 PSI

WC.07: SOLID SAWN, LVL, AND PSL BEAMS BEARING ONTO A STUD WALL SHALL THE BEAR THE FULL WIDTH OF THE SUPPORTING WALL WHEN FRAMED PERPENDICULAR TO THE WALL, AND, IN ALL CASES, SHALL BE SUPPORTED ON A GANGED STUD COLUMN SUCH THAT THE GANGED NUMBER OF STUDS IS AT LEAST AS WIDE AS THE BEAM BEING SUPPORTED OR, WHEN FRAMED PARALLEL TO THE WALL, SHALL BEAR ON (2) STUDS MINIMUM FOR SAWN BEAMS AND (3) STUDS MINIMUM FOR LVL AND PSL BEAMS, UNO.

WC.08: SINGLE LVL OR SOLID SAWN MEMBERS OF 1.75" OR LESS WIDTH, BEARING ONTO A STUD WALL SHALL BEAR 2" MINIMUM ONTO THE WALL AND SHALL BE SUPPORTED BY (1) ADDITIONAL STUD.

WC.09: SOLID SAWN LUMBER PLIES THAT ARE GANGED TO FORM UP TO A (4) PLY A BEAM SHALL HAVE ADJACENT PLIES IN THE BEAM FASTENED TOGETHER WITH (3) ROWS OF 10d NAILS @ 16" O.C. INSTALLED ON (1) OUTER SIDE OF A (2) PLY BEAM AND INSTALLED (1) OUTER SIDE AND ON EACH ADJACENT PLY OF A (3) OR MORE GANGED PLY BEAM, TYP UNO

WC.10: LVL PLIES THAT ARE GANGED TO FORM UP TO A (3) PLY BEAM, LESS THAN 16" IN DEPTH, SHALL HAVE ADJACENT PLIES IN THE BEAM FASTENED TOGETHER WITH (3) ROWS OF 12d NAILS @ 12" O.C. INSTALLED ON (1) OUTER SIDE OF A (2) PLY BEAM AND INSTALLED ON BOTH OUTER SIDES OF A (3) PLY BEAM. LVL BEAMS 16" DEEP OR GREATER OR (4) OR MORE GANGED PLIES SHALL BE FASTENED AS INDICATED ON PLANS.

WC.11: TYPICAL STUD WALL FRAMING SHALL BE 2X4 STUDS SPACED AT 16" O.C. OR, OF A WIDTH, OR SPACING AS INDICATED OTHERWISE ON PLANS. STUD WALLS SHALL BE FRAMED CONTINUOUS, WITHOUT BREAK, ALONG THE HEIGHT OF THE WALL AND SHALL CONSIST OF A SOLE PLATE AT THE BOTTOM OF THE WALL AND A DOUBLE TOP PLATE AT THE TOP OF THE WALL. DISCONTINUITIES IN A STUD WALL SHALL NOT OCCUR EXCEPT AS REQUIRED FOR DOOR OR WINDOW OPENINGS. THE KING STUDS FOR SUCH OPENINGS SHALL BE CONTINUOUS.

WC.12: THE REQUIRED NUMBER OF KING STUDS FOR EXTERIOR HEADERS IN 2X4 STUD WALLS SHALL BE DETERMINED BY NCSBC TABLE 602.3(5)(d) UNLESS NOTED OTHERWISE ON PLANS. FOR 2X6 OR WIDER STUD WALLS THE REQUIRED NUMBER OF KING STUDS FOR EXTERIOR HEADERS WALLS SHALL BE EQUAL TO 1/2 THE AMOUNT OF STUDS AS INDICATED BY THE TABLE LISTED ABOVE.

WC.13: STUDS THAT ARE GANGED TO FORM A LOAD BEARING COLUMN OR A COLUMN TRANSFERRING LOAD FROM ONE FLOOR TO THE NEXT SHALL HAVE ADJACENT STUDS WITHIN THE COLUMN NAILED TOGETHER WITH (2) ROWS OF 10d NAILS AT 8" O.C. ((3) ROWS OF 10d NAILS @ 8" O.C. FOR 2X8 OR 2X10 STUDS). ALL COLUMNS SHALL PROVIDE A CONTINUOUS LOAD PATH DOWN TO THE FOUNDATION OR OTHER ENGINEERED STRUCTURAL ELEMENTS INCLUDING SOLID BLOCKING OF EQUAL WIDTH OF THE COLUMN PROVIDED WITHIN THE DEPTH OF THE FLOOR SYSTEM CAVITY.

WC.14: NAILS SHALL BE COMMON WIRE NAILS TYP UNO.

WC.15: LAG SCREWS SHALL CONFORM TO ANSI/ASME STANDARD B18.2.1-1981.

WC.16: PILOT HOLES SHALL BE USED FOR LAG SCREW INSTALLATION AND SHALL BE BORED ACCORDING TO NDS SPECIFICATIONS.

WC.17: BOLTS AND LAG SCREWS USED FOR BOLTING WOOD MEMBERS SHALL HAVE STANDARD WASHERS INSTALLED FOR THE NUTS AND BOLT / SCREW HEADS.

STEEL CONSTRUCTION

ST.01: STRUCTURAL STEEL SHALL MEET THE REQUIREMENTS OF THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.

ST.02: HOLLOW STRUCTURAL SECTIONS (HSS) SHALL CONFORM TO ASTM A500 GRADE C.

ST.03: ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A992 MINIMUM GRADE TYP UNO.

ST.04: BOLTS SHALL CONFORM TO ASTM A307 MINIMUM GRADE TYP UNO.

ST.05: WELDING ELECTRODES SHALL BE E70XX.

ST.06: ALL WELDING SHALL BE PERFORMED BY AN AWS CERTIFIED WELDER.

ST.07: REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615 GRADE 60 TYP UNO.

ST.08: STEEL FLITCH PLATE BEAMS SHALL CONSIST OF A CONTINUOUS STEEL PLATE BOLTED BETWEEN TWO PIECES OF CONTINUOUS LUMBER. PLATE AND LUMBER AS SIZED PER PLANS. BOLT ASSEMBLY TOGETHER USING 1/2" ϕ THROUGH BOLTS SPACED AT 24" O.C. STAGGERED TOP TO BOTTOM OF BEAM. MAINTAIN A 2" EDGE DISTANCE. PLACE TWO BOLTS, ONE ABOVE THE OTHER, 6" FROM EACH END OF THE BEAM.

ST.09: ALL STEEL, HSS, AND STEEL FLITCH PLATE BEAMS BEARING ONTO A STUD WALL SHALL THE BEAR THE FULL WIDTH OF THE SUPPORTING WALL WHEN FRAMED PERPENDICULAR TO THE WALL, AND, IN ALL CASES, SHALL BE SUPPORTED ON A GANGED STUD COLUMN SUCH THAT THE GANGED NUMBER OF STUDS IS AT LEAST AS WIDE AS THE BEAM BEING SUPPORTED OR, WHEN FRAMED PARALLEL TO THE WALL, SHALL BEAR ON (3) STUDS MINIMUM FOR SAWN BEAMS AND (3) STUDS MINIMUM FOR LVL AND PSL BEAMS, UNO.

MASONRY CONSTRUCTION

MS.01: MASONRY CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS OF ACI 530-95, LATEST EDITION.

MS.02: CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C 90 OR ASTM C 55.

MS.03: MORTAR SHALL BE TYPE M OR S CONFORMING TO ASTM C 476.

MS.04: ALL LOAD BEARING MASONRY UNITS SHALL BE LAID IN A RUNNING BOND, TYP.

MS.05: MASONRY PILASTERS SHALL BE BLOCK BONDED TO THE MASONRY WALL IMMEDIATELY ADJACENT, TYP.

MS.06: THE MAXIMUM HEIGHT OF HOLLOW AND SOLID GROUTED MASONRY UNITS USED IN MASONRY PIER CONSTRUCTION SHALL CONFORM WITH THE TABLE BELOW

LEAST PIER DIMENSION	MAX HEIGHT FOR HOLLOW UNITS	MAX HEIGHT FOR SOLID UNITS
8"	32"	80"
12"	48"	120"
16"	64"	160"
20"	80"	NA
24"	96"	NA

CONCRETE CONSTRUCTION

CN.01: REINFORCED CAST IN PLACE CONCRETE SHALL BE PROPORTIONED, MIXED AND PLACED IN ACCORDANCE WITH THE SPECIFICATIONS OF ACI 318, LATEST EDITION.

CN.02: ALL CONCRETE, INCLUDING CONCRETE FOR FOOTINGS, IS TO BE CAST IN PLACE, TYP UNO.

CN.03: CAST IN PLACE CONCRETE SHALL BE NORMAL WEIGHT CONCRETE AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS TYP UNO.

CN.04: WHERE CAST IN PLACE CONCRETE WALLS RETAIN 4 FEET OR MORE OF UNBALANCED FILL, THEY SHALL BE LATERALLY SUPPORTED AT THE TOP AND BOTTOM BEFORE BACKFILLING.

SUBSTITUTIONS

SB.01: SYNTHETIC POLYPROPYLENE FIBRILLATED MICRO FIBERS, FIBER SIZE AND DOSAGE RATE PER MANUFACTURER SPECIFICATION, MAY BE USED IN LIEU OF WELDED WIRE FABRIC IN GROUND SUPPORTED SLAB CONSTRUCTION.

SB.02: SOLID SAWN LUMBER SPECIES AND GRADE SUBSTITUTION IS ALLOWED ONLY BY WRITTEN AUTHORIZATION OF SUBSTITUTION BY ENGINEER OF RECORD.

SB.03: ENGINEERED WOOD BEAM AND I-JOIST SUBSTITUTION IS ALLOWED PROVIDED THAT THE CONTRACTOR OR THE LUMBER SUPPLIER RESPONSIBLE FOR THE SUBSTITUTION PROVIDES DOCUMENTATION AT THE TIME OF INSPECTION DEMONSTRATING THAT THE MATERIAL SUBSTITUTION MEETS OR EXCEEDS THE MINIMUM DESIGN SPECIFICATIONS OF THE ENGINEERED WOOD BEAMS OR I-JOISTS NOTED ON THE SEALED SET OF ENGINEERED PLANS. IN ALL CASES, THE I-JOIST SPACING NOTED ON THE SEALED SET OF PLANS IS TO REMAIN THE SAME.

SB.04: ALL OTHER UNAUTHORIZED SUBSTITUTIONS AND / OR DEVIATIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. FAILURE OF THE CONTRACTOR TO CONFORM TO THE STRUCTURAL DRAWINGS SHALL VOID THE ENGINEER'S SEAL AND THE FIRM'S LIABILITY UNLESS CHANGES TO THE STRUCTURAL PLANS ARE APPROVED BY THE ENGINEER OF RECORD.

LEGAL DISCLAIMER / MISCELLANEOUS NOTES

THE ELECTRONIC DISTRIBUTION OF THIS DOCUMENT TO PARTIES OTHER THAN THE INTENDED CLIENT AND / OR DIGITAL MODIFICATION OF THIS DOCUMENT IN ANY WAY IS PROHIBITED AND SHALL VOID THE ENGINEER OF RECORD'S SEAL.

OKE NICHOLS ENGINEERING, INC DOES NOT PERFORM FENESTRATION, ROOF VENT, OR ATTIC CALCULATIONS OR ANY OTHER AREA CALCULATIONS THAT ARE NOT RELATED TO STRUCTURAL ENGINEERING.

TRUSSES ARE TO BE DESIGNED BY OTHERS AS AN ENGINEER REGISTERED IN NORTH CAROLINA. FINAL TRUSS DRAWING SHOULD BE SUBMITTED TO OKE NICHOLS ENGINEERING, INC FOR REVIEW PRIOR TO CONSTRUCTION

REVIEW SETS SHALL BE PROVIDED TO THE CLIENT TO ENSURE THAT THE SCOPE OF WORK HAS BEEN COMPLETED IN CONFORMANCE WITH THE CLIENT'S PREFERENCES. CLIENT APPROVAL OF REVIEW SETS SHALL INDICATE THAT THE CLIENT HAS ADEQUATELY REVIEWED THE SET OF DRAWINGS AND ACKNOWLEDGES THAT THE SCOPE OF WORK HAS BEEN COMPLETED TO THE CLIENT'S SATISFACTION. UPON APPROVAL OF REVIEW SETS, THE SEALED SET OF PLANS ARE ISSUED AND SHALL BE CONSIDERED FINALIZED CONSTRUCTION DOCUMENTS.

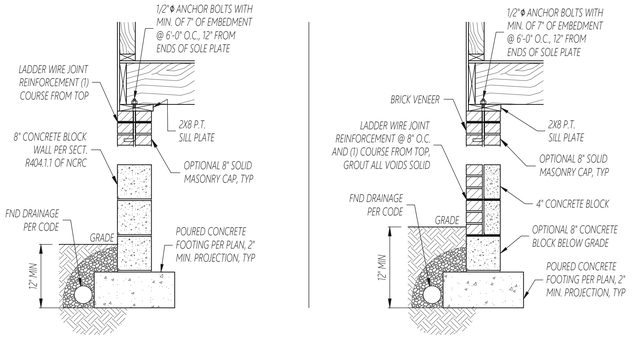
THE BUILDER IS RESPONSIBLE FOR REVIEWING ALL PLANS PRIOR TO CONSTRUCTION, AND IN THE CASE OF EXISTING CONSTRUCTION, VERIFYING ALL EXISTING CONDITIONS DURING DEMOLITION PRIOR TO CONSTRUCTION.

COMMON ABBREVIATIONS

ABV	ABOVE	FND	FOUNDATION	THK	THICK
B.E.	BOTH ENDS	FTG	FOOTING	TYP	TYPICAL
BTWN	BETWEEN	HDG	HOT DIPPED GALVANIZED	TRPL	TRIPLE
C.J.	CEILING JOIST	HGR	HANGER	TSP	TRIPLE STUD POCKET
CONC.	CONCRETE	LVL	LAMINATED VENEER LUMBER	UNO	UNLESS NOTED OTHERWISE
CONT	CONTINUOUS	NO.	NUMBER	V.I.F.	VERIFY IN FIELD
CS	CONTINUOUS SHEATHING	NTS	NOT TO SCALE	WF	WIDE FLANGE BEAM
DIA	DIAMETER	O.C.	ON CENTER	XJ	EXTRA JOIST
DBL	DOUBLE	PSL	PARALLEL STRAND LUMBER		
DJ	DOUBLE JOIST	PT	PRESSURE TREATED		
DSP	DBL STUD POCKET	REF.	REFERENCE		
E.E.	EACH END	SIMP.	SIMPSON		
FLR	FLOOR	SQ	SQUARE		

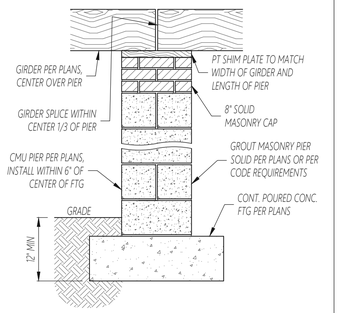
1 SECTION, 3/4" = 1'-0"

TYPICAL CRAWL SPACE FOUNDATION WALL: PLAIN MASONRY, BRICK SKIRT OPTION



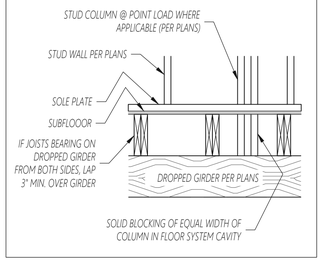
2 SECTION, 3/4" = 1'-0"

TYPICAL MASONRY PIER AND GIRDER



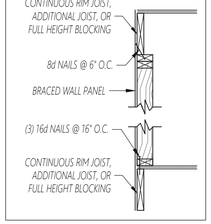
3 SECTION, 3/4" = 1'-0"

TYPICAL DROPPED GIRDER



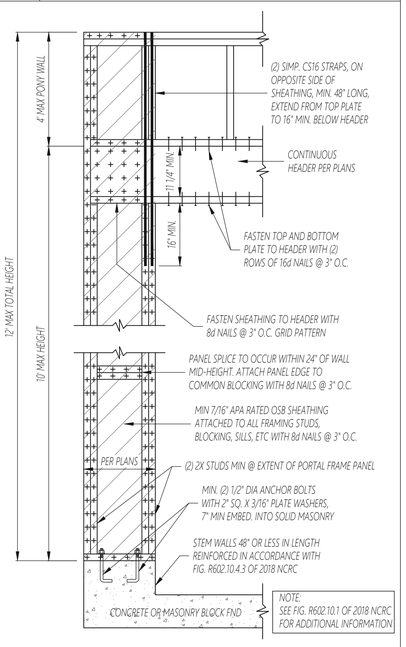
4 SECTION, 3/4" = 1'-0"

TYPICAL BRACED WALL PANEL



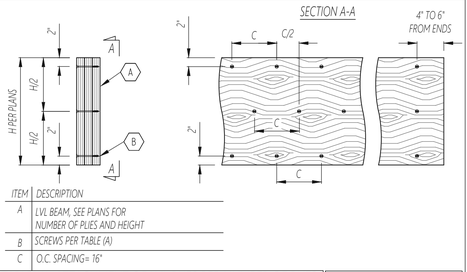
5 SECTION, 3/4" = 1'-0"

TYPICAL PORTAL FRAME CONSTRUCTION, SINGLE FRAME



6 SECTION, 3/4" = 1'-0"

TYPICAL LVL FASTENING ATTACHMENT: 16" OR DEEPER LVL PLIES



ITEM	DESCRIPTION
A	LVL BEAM, SEE PLANS FOR NUMBER OF PLIES AND HEIGHT
B	SCREWS PER TABLE (A)
C	O.C. SPACING= 16"

TABLE (A), ATTACHMENT OF LVL PLIES PER NUMBER OF PLIES

NUMBER OF LVL PLIES	SIMPSON BRAND SCREW OPTION	FlatLOK BRAND SCREW OPTION
(2) PLY LVL	SDW22338 STRUCTURAL WOOD SCREWS	3 1/2" FlatLOK STRUCTURAL WOOD SCREWS
(3) PLY LVL	SDW22500 STRUCTURAL WOOD SCREWS	5" FlatLOK STRUCTURAL WOOD SCREWS
(4) PLY LVL	SDW22634 STRUCTURAL WOOD SCREWS	6-3/4" FlatLOK STRUCTURAL WOOD SCREWS

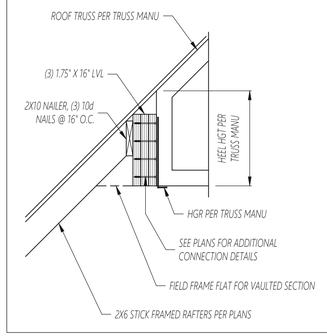
*BUILDER PERMITTED TO SUBSTITUTE ½" ϕ THROUGH BOLTS FOR STRUCTURAL WOOD SCREWS @ EQUAL SPACING.

NOTES:
-LVL'S WITH HEIGHT OF 16" OR GREATER SHALL BE SCREWED PER THIS DETAIL

-ALL (4) PLY LVL'S SHALL BE SCREWED PER THIS DETAIL, REGARDLESS OF DEPTH, OMIT CENTER ROW OF SCREWS FOR LVL'S WITH HEIGHT LESS THAN 16"

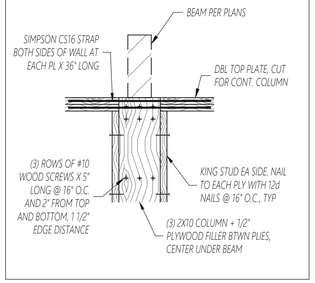
7 SECTION, 3/4" = 1'-0"

ROOF TRUSS, LVL BEAM, STICK FRAMED ROOF FRAMING WITH VAULTED SECTION



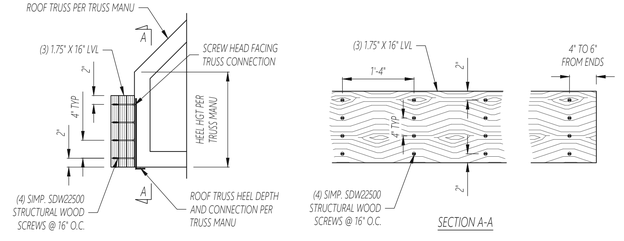
8 SECTION, 3/4" = 1'-0"

TYPICAL COLUMN: (3) 2X10



9 SECTION, 3/4" = 1'-0"

TYPICAL 3-PLY 16" LVL FASTENING ATTACHMENT, SIDE LOADED BY ROOF TRUSS



oke nichols engineering
Structural Engineering and Consulting
2301 Stonehenge Dr., Suite 202, Raleigh, NC, 27615
(919) 916-5290 License No. C-4754

ATMOS BUILDERS
STRUCTURAL ADDENDUM
50 TALBERT DRIVE

ENG:	BDO
DATE:	6-8-2022
REV:	

PROJECT NO.
2210165

SHEET NO.
SD1
6 of 6