Carriage Circle Lot 1162- 112 Spruce Hollow Circle, Spring Lake 28390

Harnett County Created: 12/7/2020 Revised: 3/15/2021

**Elevation Euro** Garage Left Fiber Cement Siding



2550 Capitol Drive Suite 105 Creedmoor, NC 27522 919-528-1347

# 2334 The Nicklaus II - LH

	HERITAGE EUROPEAN		HERITAGE F	ARMHOUSE
	UNHEATED	HEATED	UNHEATED	HEATED
FIRST FLOOR	0	971	0	971
SECOND FLOOR	0	1363	0	1363
REAR COVERED PORCH	50	0	50	0
FRONT PORCH	120	0	120	0
GARAGE	472	0	472	0
SUBTOTALS	642	2334	642	2334
TOTAL UNDER ROOF	29	76	29	76
OI	PTIONS			
OI	PTIONS UNHEATED S.F.	HEATED S.F.		
OI		HEATED S.F.		
— — —	UNHEATED S.F.			
OI 	UNHEATED S.F.	0		
— — — — — — — — — — — — — — — — — — —	UNHEATED S.F. 0 0	0		
OI 	UNHEATED S.F.  0  0  0	0 0 0		
OI 	UNHEATED S.F.  0  0  0  0	0 0 0 0		
OI	UNHEATED S.F.  0  0  0  0  0	0 0 0 0		
——————————————————————————————————————	UNHEATED S.F.  0  0  0  0  0  0  0	0 0 0 0		

SQUARE FOOTAGE

	REVISION LOG							
Rev	Description	Drawn By	Date	Sheets Affected	Brochure Required	Engineering Required		
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								

ARCHITECTURAL DRAWINGS					
Sheet No. Sheet Description					
0.0	Cover Sheet				
2.1	First Floor Plan				
2.2	Second Floor Plan				
3.A.0	Heritage European Front & Right Elevations				
3.A.1	Heritage European Left & Rear Elevations				
3.A.2	Heritage European Roof Plan				
3.B.0	Heritage Farmhouse Front & Right Elevations				
3.B.1	Heritage Farmhouse Left & Rear Elevations				
3.B.2	Heritage Farmhouse Roof Plan				
S.1.1	Crawl Foundation				
S.1.2	Slab Foundation				
S.2.1	Second Floor Framing				
S.3.1	Attic Floor Framing				
S.4.1	Roof Plan - Heritage European				
\$.4.2	Roof Plan - Heritage Farmhouse				





2550 Capitol Drive Suite 105 Creedmoor, NC 27522 919-528-1347

	-	9	
	1	2	
1	1	4	
1	1	8	
	1	2	
1	1	1	2334 - ITE NICKLAUS II - LE
DATE	DESCRIPTION	HEV.#	TITE AT

CURRENT REVISION DATE: XX/XX/XXXX

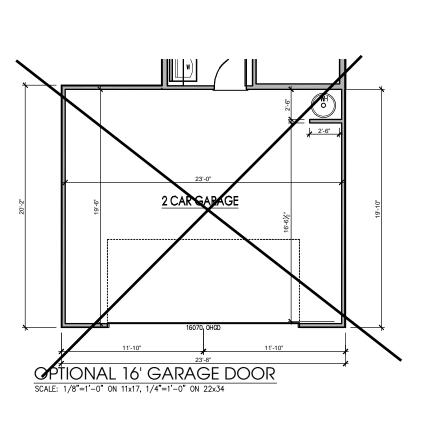
0.0

#### **General Floor Plan Notes**

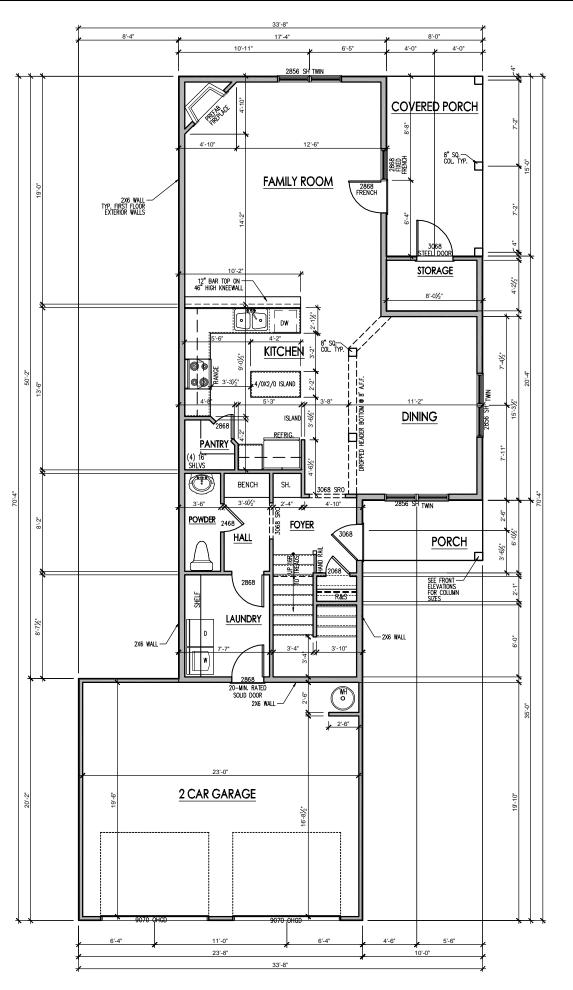
General Floor Plan Notes shall apply unless noted otherwise on plan.

- Wall Heights: Typically 10°-1-1/2° at first floor and second floor, and 9° 1-1/2° at attics U.N.O.. All walls are constructed using a double top plate. Splices at Double Top Plate do not need to occur at Vertical Studs but must be at least 24° opart from Joint in other Top Plate layer. Special wall heights are noted on plans where they occur.
- 2. Wall Thickness is typically 4" at exterior walls, 3-1/2" at interior. 2x6 frame shall be used at walls that back up to plumbing fixtures. Walls greater than 10' high shall be framed with 2x6 framing or greater and will be noted as a special condition where it occurs on plan.
- Header height shall be 8'-0" AFF at First Floor, and 7'-6" AFF at Second Floor unless noted otherwise.
- Jacks: Openings up to 3'-4" wide shall have (1) 2x4 jack stud SPF on each side. Openings greater than 3'-4" wide shall have (2) 2x4 jack studs SPF on each side.
- Soffits, Coffered Ceilings, Trey Ceilings and other significant ceiling plan elements are shown on the floor plans and are denoted as single dashed lines. Unless specifically call out as included, Kitchens do not include soffits over wall cabinety.
- Door & Window Frames, where occurring near corners, shall be a minimum of 6' from corner. Except for walk-in closets with doors near a corner, doors at closets shall be centered on closet.
- Windows: Shall have at least (1) window in each sleeping room, that meets egress. Shall be provided with tempered glass of hazardous glazing areas. False windows shall be installed with obscure alazina.
- Closets for clothing or coat storage shall be equipped with 1 rod/shelf, open wire. Closets for linen shall have 5 open wire shelves. Closets for partitles shall have 5 wood shelves, painted.
- Stair treads shall be 10" deep, risers shall be a maximum of 7-3/4", unless noted otherwise.
- 10. Handralis and Guards at stairs shall be 34" above the finished surface of the ramp surface of the stair. Handralis at landings and overlooks of multilevel spaces shall be 36" above finished floor. Guards (pickets or balisters) shall be spaced with no more than 4" between guards.
- Aftic Access shall be provided at all aftic area with a height greater than 30°. Minimum clear aftic access shall be 20° x 30°. Pull down statis and access doors in knee walls meeting minimum criteria are also acceptable.
- 12. Garage Door to Living Space shall be 2'-8" x 6'-8" minimum size and shall be 20 minute fire rated and weather sealed.
- 13. Garage Walls, as a minimum, shall be separated from living space and living space aftic by installing 1/2" gypsum board on the garage side of the wall.

SQUARE FOOTAGE HERITAGE EUROPEAN & FARMHOUSE						
	UNHEATED S.F.	HEATED S.F.				
FIRST FLOOR	0	971				
SECOND FLOOR	0	1363				
FRONT PORCH	50	0				
COVERED PORCH	120	0				
GARAGE	472	0				
TOTAL	642	2334				
-	OPTIONS					
	UNHEATED S.F.	HEATED S.F.				











2550 Capitol Drive Suite 105 Creedmoor, NC 27522 919-528-1347

۵	ľ	ľ	ľ	ľ	Ė	ľ	ľ	
DESCRIPTION	_	-	-		-	_	_	
REV.#	1	7	3	4	9	9	7	0

First Floor Plan

- THE NICKLAUS II

2334

DRAWN BY: South Designs

05/05/2017

CURRENT REVISION DATE:

URRENT REVISION DA
XX/XX/XXXX

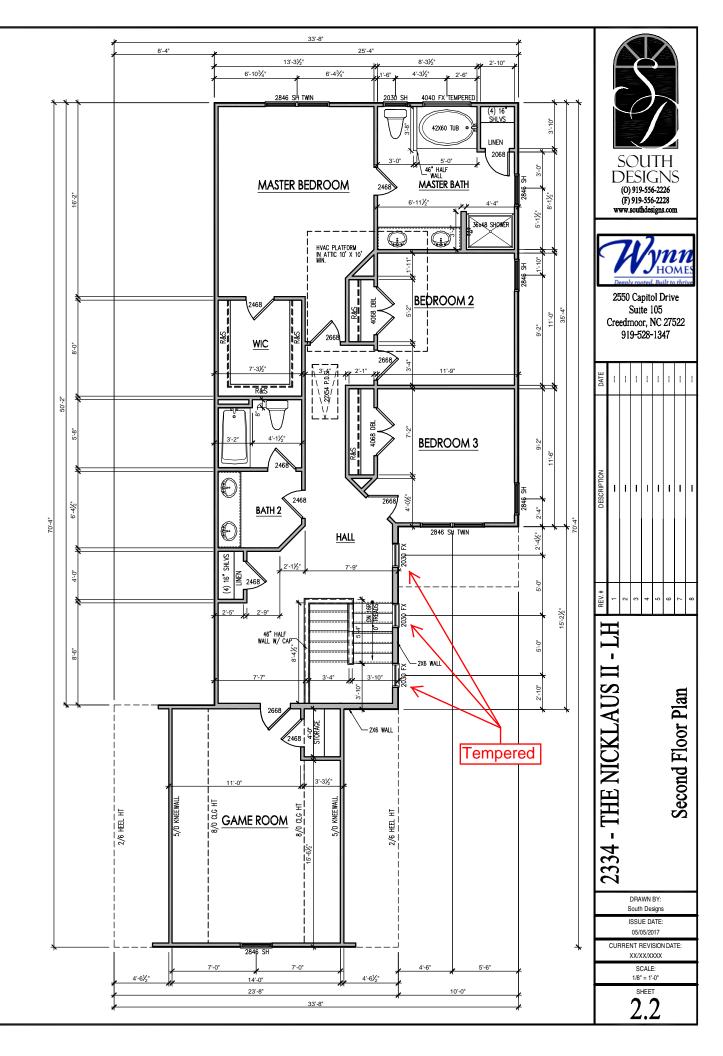
SCALE:
1/8" = 1'-0"

2.1

#### **General Floor Plan Notes**

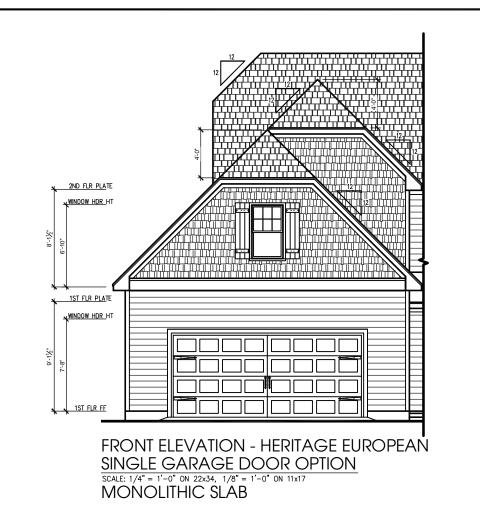
## General Floor Plan Notes shall apply unless noted otherwise on plan.

- Wall Heights: Typically 10'-1-1/2' at first floor and second floor, and 9' 1-1/2' at attics U.N.O.. All walls are constructed using a double top plate. Splices at Double Top Plate do not need to occur at Vertical Studs but must be at least 24' apart from Joint in other Top Plate layer. Special wall heights are noted on plans where they occur.
- Wall Thickness is typically 4° at exterior walls, 3-1/2° at interior. 2x6 frome shall be used at walls that back up to plumbing fixtures. Walls greater than 10° high shall be fromed with 2x6 framing or greater and will be noted as a special condition where it occurs on plan.
- Header height shall be 8'-0" AFF at First Floor, and 7'-6" AFF at Second Floor unless noted otherwise.
- Jacks: Openings up to 3'-4" wide shall have (1) 2x4 jack stud SPF on each side. Openings greater than 3'-4" wide shall have (2) 2x4 jack studs SPF on each side.
- Soffits, Coffered Ceilings, Trey Ceilings and other significant ceiling plan elements are shown on the floor plans and are denoted as single dashed lines. Unless specifically call out as included, Kitchens do not include soffits over wall cabinetry.
- Door & Window Frames, where occurring near corners, shall be a minimum of 6' from corner. Except for walk-in closets with doors near a corner, doors at closets shall be centered on closet.
- 7. Windows: Shall have at least (1) window in each sleeping room, that meets egress. Shall be provided with tempered glass at hazardous glazing areas. False windows shall be installed with obscure glazing.
- Closets for clothing or coat storage shall be equipped with 1 rod/shell, open wire. Closets for linen shall have 5 open wire shelves. Closets for pantries shall have 5 wood shelves, painted.
- Stair treads shall be 10" deep, risers shall be a maximum of 7-3/4", unless noted otherwise.
- 10. Handralis and Guards at stairs shall be 34° above the finished surface of the ramp surface of the stair. Handralis at landings and overlooks of multilevel spaces shall be 36° above finished floor. Guards (pickets or ballsters) shall be spaced with no more than 4° between guards.
- Aftic Access shall be provided at all aftic area with a height greater than 30°. Minimum clear aftic access shall be 20° x 30°. Pull down stairs and access doors in Knee walls meeting minimum criteria are also acceptable.
- 12. Garage Door to Living Space shall be 2'-8" x 6'-8" minimum size and shall be 20 minute fire rated and weather sealed.
- 13. Garage Walls, as a minimum, shall be separated from living space and living space attic by installing 1/2" gypsum board on the garage side of the wall.



SECOND FLOOR PLAN

SCALE: 1/8"=1'-0" ON 11x17, 1/4"=1'-0" ON 22x34





FRONT ELEVATION - HERITAGE EUROPEAN SCALE: 1/4" = 1'-0" ON 22x34, 1/8" = 1'-0" ON 11x17

MONOLITHIC SLAB







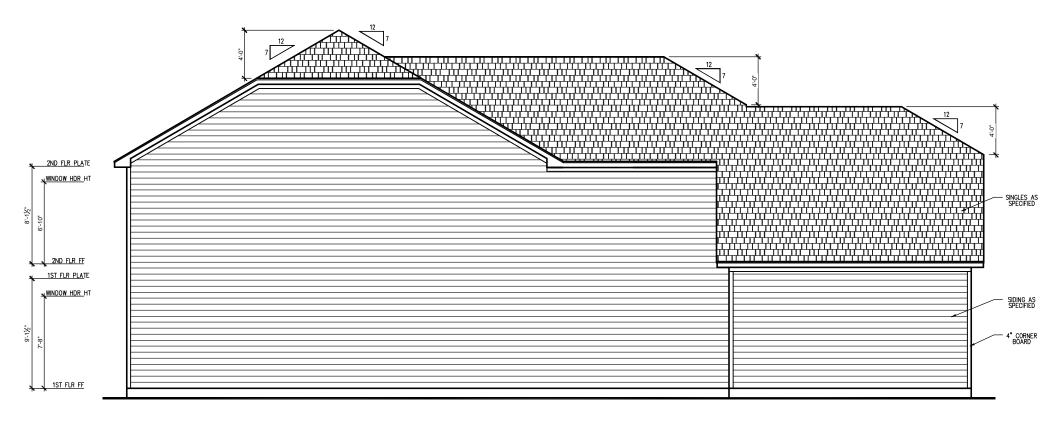
2550 Capitol Drive Suite 105 Creedmoor, NC 27522 919-528-1347

DRAWN BY:

05/05/2017

CURRENT REVISION DATE: XX/XX/XXXX SCALE: 1/8" = 1'-0"

3.A.0



LEFT SIDE ELEVATION - HERITAGE EUROPEAN

SCALE: 1/4" = 1'-0" ON 22x34, 1/8" = 1'-0" ON 11x17

MONOLITHIC SLAB



REAR ELEVATION - HERITAGE EUROPEAN

SCALE: 1/4" = 1'-0" ON 22x34, 1/8" = 1'-0" ON 11x17

MONOLITHIC SLAB





2550 Capitol Drive Suite 105 Creedmoor, NC 27522 919-528-1347

E	L						<b>7</b>	•
REV.#	ļ	2	3	4	9	9	2	c
DESCRIPTION	I	ı	1	I	1	ı	ı	
DATE		1	1	1		1	1	

2334 - THE NICKLAUS II - LH Heritage European Rear & Left Elevations

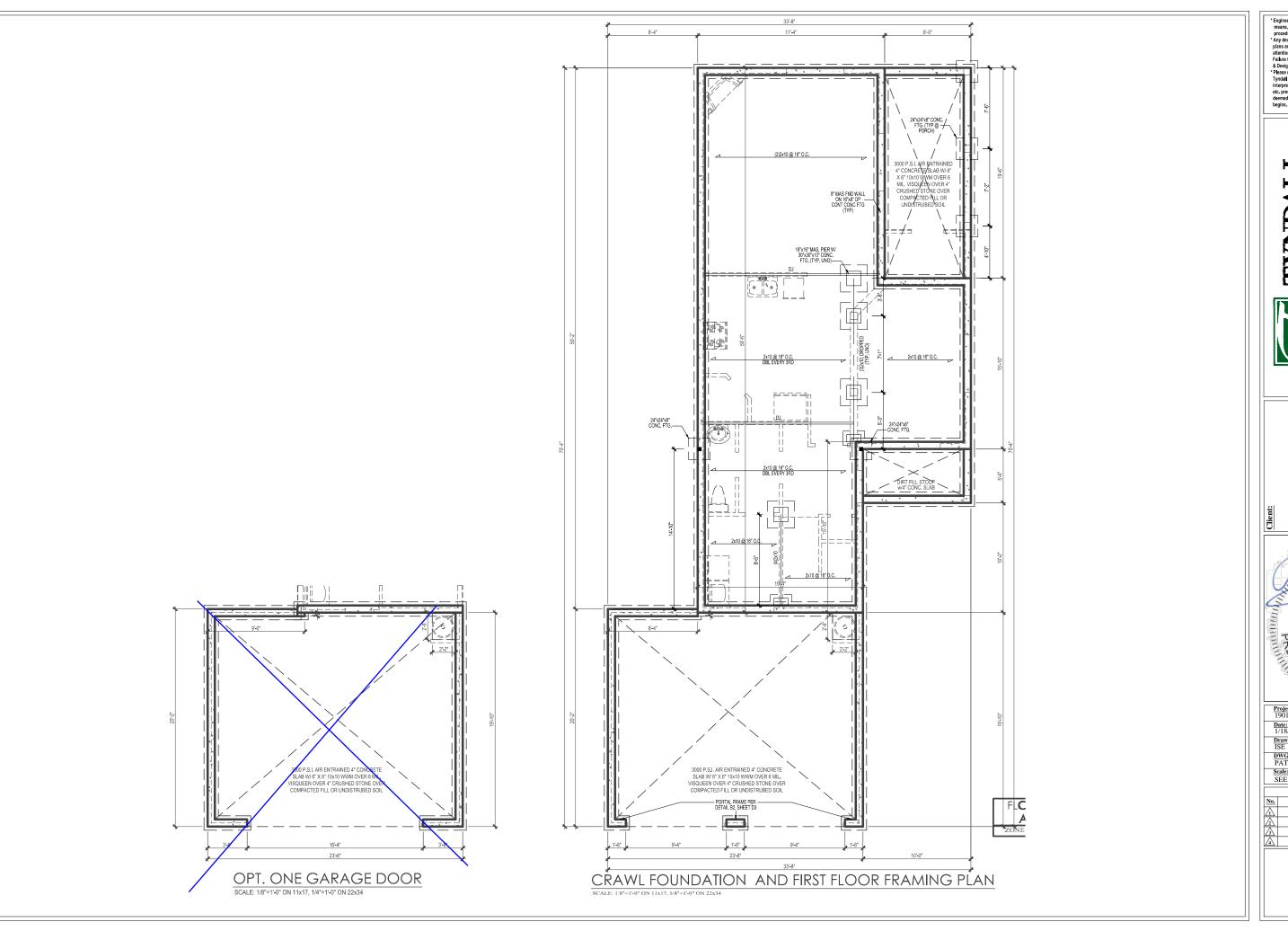
DRAWN BY: South Designs

ISSUE DATE 05/05/2017

CURRENT REVISION DATE:
XX/XX/XXXX

SCALE:
1/8" = 1'-0"

3.A.1



\*Engineers seal does not include construction means, methods, techniques, sequences, procedures or safety precaution.

\*Any deviations or discrepancies on plans are to be brought to the immediate attention of Tyndall Engineering & Design, P.A. Fallure to do so will void Tyndall Engineering & Design, P.A. Hability.

\*Please review these documents carefully.
Tyndall Engineering & Design, P.A. will interpret that all dimensions, recommendations, etc. presented in these documents were deemed acceptable once construction begins.

TYNDALL ENGINEERING & DESIGN, PA



Plan: THE NICKLAUSII GARAGE LEFT



| Project #: | 1901-010039 | | Date: | 1/18/19 | | Drawn/Design By: | ISE | | DWG. Checked By: | PAT | | Scale: | SEE PLAN |

	<u>KEVISIONS</u>						
No.	Date:	Remarks					
$\Lambda$							
2							
3							
4							
	Sheet Numb	er					

**S**1

### DESIGN LOADS

		LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLE	CTION
		(, 0, )	(, 5, )	LL	TL.
	FLOOR (primary)	40	10	L/360	L/240
- 1	FLOOR (secondary)	40	10	L/360	L/240
	ATTIC (w/ storage)	20	10	L/240	L/180
- 1	ATTIC (no access)	10	5	L/240	L/180
- 1	EXTERNAL BALCONY	40	10	L/360	L/240
	ROOF	20	10	L/240	L/180
	ROOF TRUSS	20	20	L/240	L/180
	WIND LOAD	BASED	ON 120 MPH	(EXPOSUR	RE B)
	SEISMIC	BASED (	ON SEISMIC ZO	NES A, E	8 & C

- STRUCTURAL NOTES:

  1) ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CARQUINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REQULATIONS.

  2) IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, PA IS NOT RESPONSIBLE FOR DIMENSIONS AND SQUARE FOOTAGE REFORM ONCE CONSTRUCTION BEGINS.

  3) ALL LUMBERS SHALL BE SYP #2 (UNO)
  ALL LYL LUMBER TO BE 1.75" WIDE NOMINAL EACH SINGLE MEMBER AND Fo = 2500 PSI, E = 1.5M PSI (I.E. LLC. LUMBER SHALL BE SYP #2 (UNO)
  ALL LYL LUMBER TO BE 1.55" WIDE NOMINAL EACH SINGLE MEMBER AND FO = 2500 PSI, E = 1.5M PSI (I.E. LLC. LUMBER STO BE 1.55" FO = 2.325 PSI)

  4) ALL LOAD BEARNIS EXTERIOR WINDOW HEADERS WITH MAXIMUM SPAN OF 5"-6" SHOULD BE A (2) 2x10 w/ (1) 2x4 AKING STUD ANALD TOGETHER W/ (2) 104 Ø 8" O.C. PROVIDED THAT THE TOP OF THE WINDOW HEIGHT IS 6"-6". MINIMUM BOTTOM OF OTO FW WINDOW HEIGHT IS 6"-6". MINIMUM BOTTOM OF OTO FW WINDOW HEIGHT IS 6"-5". MINIMUM BOTTOM OF "IN BUILDING COOD SECTION REOZ FOR CONSTRUCTION OF ALL WALLS OVER 10"-0" IN HEIGHT.

  3) ALL INTERIOR LOAD BEARING HEADER SANAS FOR INTERIOR AND EXTERIOR LOAD CONDITIONS (UNO)

  REFER TO 2018 NG BUILDING COOD SECTION REOZ FOR CONSTRUCTION OF ALL WALLS OVER 10"-0" IN HEIGHT.

  3) ALL STRUCTURAL STEEL SHALL BE ASTM A992 GRADE 50 FF = 50 KSI MIN. (UNO)

  3) ALL EXTERIOR CAPACITY = 2000 PSI MIN.

  3) PRESUMENTIVE BEARING CAPACITY = 2000 PSI MIN.

  4) PRESUMENTIVE BEARING CAPACITY = 2000 PSI MIN.

  3) PRESUMENTIVE BEARING CAPACITY = 2000 PSI MIN.

  4) P

- MASONRY.

  12 PSL COLUMNS DESIGNED WITH MAX. HEIGHT OF 9"—0" (UNO)

  13) PROVIDE A MINIMUM OF 5009 UPLIET & LATERAL CONNECTION

  AT TO P AND BOTTOM OF PORCH COLUMNS. (UN.O.)

  14) PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.4 OF

  THE 2018 IRC.

  15) MAXIMUM MASONRY PIER HEIGHT SHALL NOT EXCEED FOUR

  TIMES ITS LEAST HORIZONTAL DIMENSION.

  16) UPLIET LOADS GREATER THAN 5009 SHALL BE

  CONTINUOUSLY ANDHORED TO THE FOUNDATION.

  17) METAL HANGERS SHALL BE SIMPSON OR APPROVED EQUAL.

#### STRUCTURAL SHEATHING NOTES

- DESIGNED FOR SEISMIC ZONE A—C AND WIND SPEEDS OF 120 MPH OR LESS.

  WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE 2018 NORC.

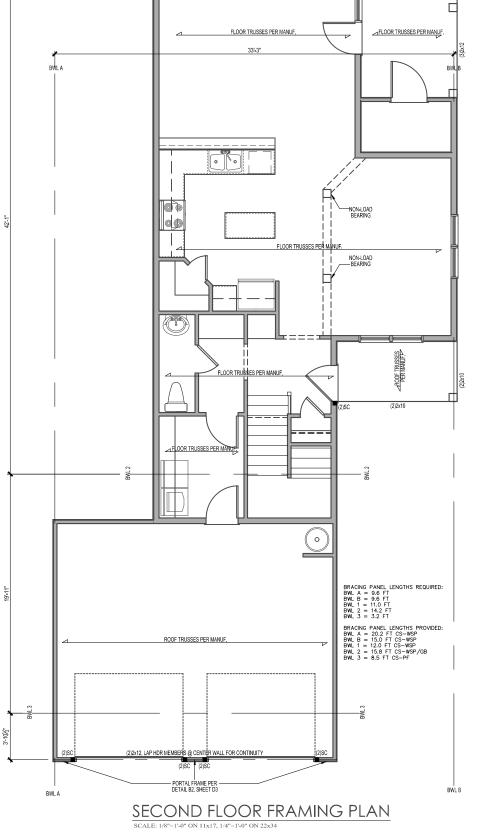
  BRACING REQUIREMENTS SHALL BE PER TABLE R602.10.3. REFER TO SECTION R602.10.4 FOR LOAD PATH DETAILS INCLUDING CONNECTIONS & SUPPORT OF BRACED WALL PANELS.
- 1 REFERENCE FIGURE R602.10.4.3 OF THE 2018 NCRC.
- 4) INTERIOR BRACED WALL PANELS (BWP) INDICATED SHALL BE SHEATHED IN ACCORDANCE WITH THE GB METHOD OR WSP METHOD AS PRESCRIBED IN SECTION R602.10.1 (UNO)
- (2) 1/2" GYPSUM BOARD (GB) MINIMUM LENGTH OF B'-O" (ISOLATED PANELS) OR 4'-O" (CONTINUOUS SHEATHING). SECURE W/ 54 COOLER NAILS (OR EQUAL PER TABLE R702.3.5) SPACED @ 7" O.C. AT PANEL EDGES, INCLUDING TOP AND BOTTOM PLATES & 7" O.C. AT INTERMEDIATE SUPPORTS
- 3 3/8" WOOD STRUCTURAL PANEL (WSP) SECURE W/ 8d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS
- 5) EXTERIOR BRACED WALL PANELS (BWP) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.3 (UNO)
  6) ALL SHEATHABLE SURFACES OF EXTERIOR WALLS
- ALL SHEATHABLE SURFACES OF EXTERIOR WALLS
  (INCLUDING AREAS ABOVE AND BELLOW OPENINGS AND
  GABLE END WALLS) SHALL BE CONTINUOUSLY SHEATHED
  WITH WOOD STRUCTURAL PANEL (WSP) SHEATHING WITH A
  MINIMUM THICKNESS OF 3/8". SHEATHING SHALL BE
  SECURED WITH MINIMUM 6d COMMON NAILS SPACED AT 6"
  O.C. AT PANEL EDGES AND SPACED AT 12" O.C. AT
  INTERNEDIATE SUPPORTS.

  MINIMUM BRACED WALL PANEL LENGTHS WITH CS—WSP
  METHOD SHALL BEA ST FOLLOWS:

   24" ADJACENT TO OPENINGS NOT MORE THAN
  67% OF WALL HEIGHT
   30" ADJACENT TO OPENINGS GREATER THAN
  67% AND LESS THAN 85% OF WALL HEIGHT.
   48" FOR OPENINGS GREATER THAN 85% OF
  WALL HEIGHT

  WALL HEIGHT

  (4) SHEATH INTERIOR & EXTERIOR
- 4 SHEATH INTERIOR & EXTERIOR
- 8) FOR CS-WSP METHOD, A MINIMUM 24" BRACED WALL PANEL CORNER RETURN SHALL BE PROVIDED AT BOTH ENDS OF A BRACED WALL LINE IN ACCORDANCE WITH FIGURE R602.10.3(4). IN LIEU OF A CORNER RETURN, EITHER A MIN. 48" BRACED WALL PANEL SHALL BE PROVIDED AT THE CORNER OR A HOLD-DOWN DEVICE WITH A MINIMUM UPLIFT DESIGN VALUE OF 800% SHALL BE FASTENED TO THE EDGE OF THE BRACED WALL PANEL CLOSEST TO THE CORNER AND TO THE FOUNDATION OR FRAMING BELOW.
  - (5) MINIMUM 800# HOLD-DOWN DEVICE



BRACING PANEL LENGTHS REQUIRED: BWL A = 3.2 FT BWL B = 3.2 FT BWL 1 = 3.8 FT BWL 2 = 5.6 FT BWL 3 = 1.8 FT BRACING PANEL LENGTHS PROVIDED: BWL A = 25.0 FT GB BWL B = 13.7 FT GB BWL 1 = 7.0 FT GB BWL 2 = 7.2 FT CS-WSP/GB BWL 3 = 6.0 FT GB ATTIC TRUSSES PER MANUF,

ATTIC FLOOR FRAMING PLAN

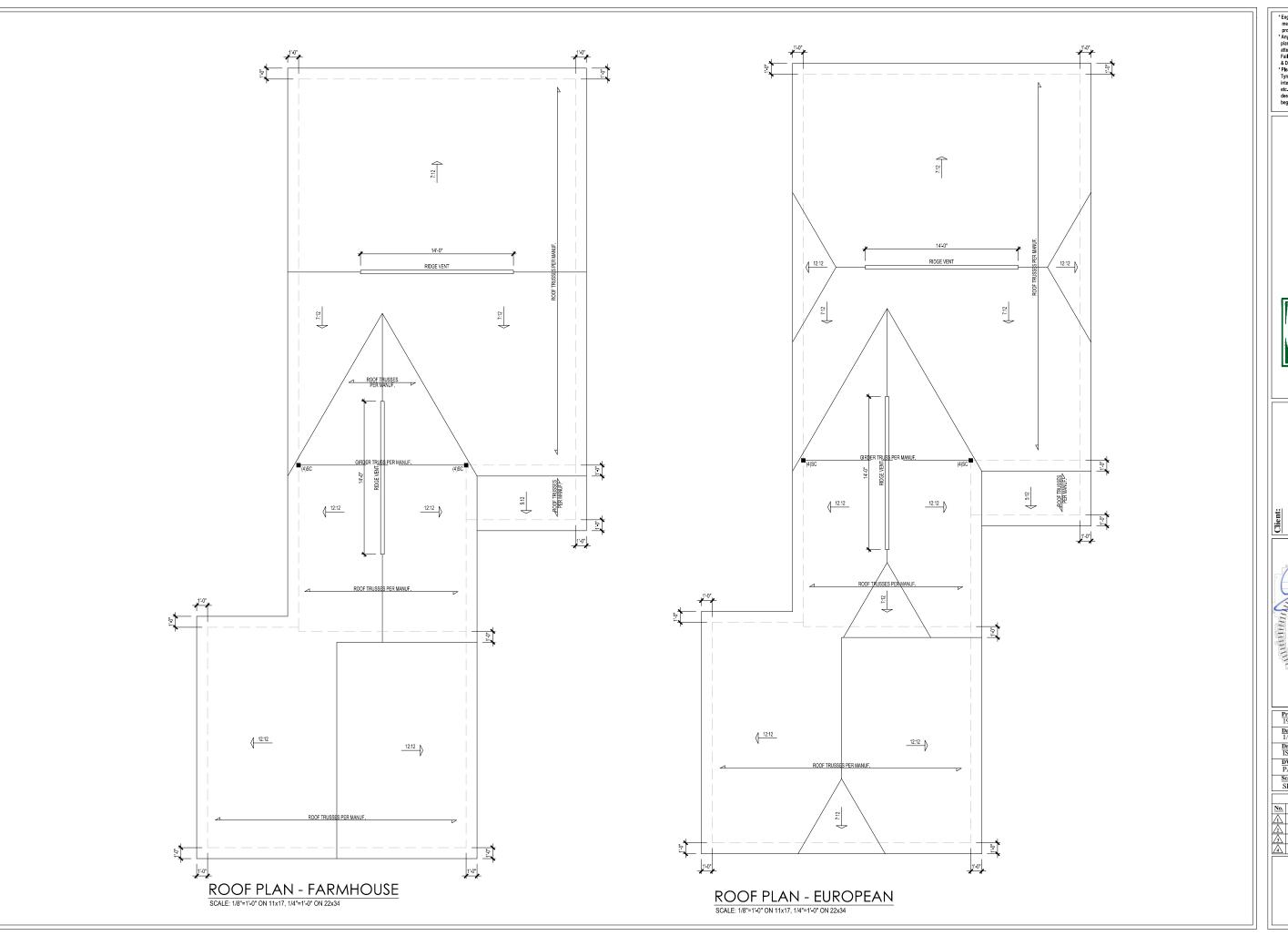
BWL B plans are to be brought to the immediate attention of Tyndall Engineering & Design, P.A. Failure to do so will void Tyndall Engineering Failure to do so will void Tyndal Engineeri & Design, P.A. faibility.

\*Please review these documents carefully. Tyndall Engineering & Design, P.A. will interpret that all dimensions, recommendat etc. presented in these documents were deemed acceptable once construction begins. TYNDALL ENGINEERING & DESIGN, P.A. 7 919 778-1200 = # 919 7; irher = North Carolina : www.tyndallonginoeri à THE NICKLAUSII GARAGE LEFT 024898 73475 VGINE NGINE OF A TYNORUS Project #: 1901-010039 Date: 1/18/19 Drawn/Design By:

\* Engineers seal does not include construction means, methods, techniques, sequ

ROOF TRUSSES PER MANUF. OPTIONAL 16' GARAGE DOOR BRACING PANEL LENGTHS REQUIRED: BWL 3 = 3.2 FT SCALE: 1/8"=1'-0" ON 11x17, 1/4"=1'-0" ON 22x34 BRACING PANEL LENGTHS PROVIDED: BWL 3 = 7.7 FT CS-WSP

DWG. Checked By: PAT SEE PLAN 4 Sheet Number **S**3



\* Engineers seal does not include construction means, methods, techniques, sequences, procedures or safety precaution.
\* Any devalations or discrepancies on plans are to be brought to the immediate attention of Tyndal Engineering & Design, P.A. Fallure to do so will void Tyndal Engineering & Design, P.A. Jability.

\* Please review these documents carefully.
Tyndal Engineering & Design, P.A. will interpret that all dimensions, recommendations, etc. presented in these documents were deemed acceptable once construction begins.

TYNDALL ENGINEERING & DESIGN, P.A.



<u>Plan:</u> THE NICKLAUSII GARAGE LEFT



Project #:
1901-010039

Date:
1/18/19

Drawn/Design By:
ISE

DWG. Checked By:
PAT

Scale:
SEE PLAN

	REVISIONS						
No.	Date:	Remarks					
$\Lambda$							
2							
3							
4							
Sheet Number							

**S**4

#### STRUCTURAL NOTES

ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.

2) DESIGN LOADS:

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLE	стіон	
	, . ,	, ,	LL	TL	
ALL FLOORS	40	10	L/360	L/240	
ATTIC (w/ walk up stairs)	30	10	L/360	L/240	
ATTIC (pull down access)	20	10	L/240	L/180	
ATTIC (no access)	10	5	L/240	L/180	
EXTERNAL BALCONY	40	10	L/360	L/240	
ROOF	20	10	L/240	L/180	
ROOF TRUSS	20	20	L/240	L/180	
WIND LOAD	BASED ON 120 MPH (EXPOSURE B)				
SEISMIC		SEISMIC ZONI	ES A, B & C		

- 3) MINIMUM ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF
- 4) CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF FIVE INCHES UNLESS NOTED OTHERWISE. (U.N.O.)

- ALL FRAMING LUMBER SHALL BE SYP  $\frac{1}{2}$  (Tb = 800 PS, BASED ON 2×10) UND. ALL FRAMING LUMBER EXPOSED TO THE ELEMENTS SHALL BE TREATED MATERIAL ALL VL. LUMBER TO BE 1.75 WIDE NOMINAL EACH SNOLE MEMBER AND Fb = 2800 PS, E = 1.9M PSI (U.N.O.) ALL LSL LUMBER TO BE 3.5 WIDE NOMINAL EACH SNOLE MEMBER AND Fb = 2325 PS, E = 1.6M FSI (U.N.O.) ALL PSL LUMBER TO BE 3.5 WIDE NOMINAL EACH SNOLE MEMBER AND Fb = 2400 PS), E = 1.8M PSI (U.N.O.)
- ALL STRUCTURAL STEEL W-SHAPES (I-BEAMS) SHALL BE ASTM A992 GRADE 50. ALL STEEL ANGLES, PLATES, AND C-CHANNELS SHALL BE ASTM A36. ALL STEEL PIPE SHALL BE ASTM A53 GRADE B.
- 9) STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3-1/2" AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO (2) LAG SCOREW (1/2" o \* 4" LONG). LATERAL SUPPORT IS CONSIDERED ADCOUNTE PROVIDED THE JOSTS ARE TOE NAILED TO THE SOLE PLATES, AND THE SOLE PLATES ARE NAILED OR BOLTED TO THE BEAM FLANGES @ 48" O.C.
- 10) PROVIDE ANCHOR BOLT PLACEMENT PER SECTION 403.1.6: 1/2" 

  ANCHOR BOLTS SPACED AT 6"-0" O.C. AND PLACED 12" FROM THE END OF EACH PLATE SECTION. ANCHOR BOLTS SHALL BE SPACED AT 3"-0" O.C. FOR BASSMENTS. ANCHOR BOLT SHALL EXTEND 7" INTO CONCRETE OR MASONRY. THE BOLTS SHALL BE LOCATED IN THE MIDDLE THIRD OF THE WIDTH OF THE PLATE. THERE SHALL BE A MINIMUM TWO ANCHOR BOLTS PER PLATE SECTION.
- 11) FOUNDATION DRAINAGE-DAMP PROOFING OR WATERPROOFING PER SECTION 405 AND 406 OF NC BUILDING CODE.
- 12) WALL AND ROOF CLADDING VALUES:
  WALL CLADDING SHALL BE DESIGNED FOR 28.0 POUNDS PER SQUARE FOOT (LBS/SQFT) OR GREATER POSITIVE AND NEGATIVE PRESSURE.
  ROOF VALUES BOTH POSITIVE AND NEGATIVE SHALL BE AS FOLLOWS:
  39.0 LBS/SQFT FOR ROOF PITCHES 0/12 TO 1.5/12
  36.0 LBS/SQFT FOR ROOF PITCHES 15/12 TO 6/12
  18.0 LBS/SQFT FOR ROOF PITCHES 6/12 TO 12/12
  \*\*MEAN ROOF HIGHES 15.0-0" OR LESS
- 13) FOR ROOF SLOPES FROM 2/12 THROUGH 4/12, BUILDER TO INSTALL 2 LAYERS OF 15# FELT PAPER.
- 14) REFER TO SECTION R602.3 FOR FRAMING OF ALL WALLS OVER 10'-0" IN HEIGHT
- 15) PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.3 OF THE 2018 IRC
- 16) UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY ANCHORED TO THE FOUNDATION.
- 17) REFER TO TABLE N1102.1 FOR PRESCRIPTIVE BUILDING ENVELOPE THERMAL COMPONENT CRITERIA.
- 19) PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (U.N.O.)
- 20) MAXIMUM MASONRY PEIR HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION.
- 21) IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION.
  TYNDALL ENGINEERING & DESIGN, PA IS NOT RESPONSIBLE FOR DIMENSION OR SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.

CLIMATE ZONES	FENESTRATION U-FACTOR			CEILING™ R-VALUE	WOOD FRAMED WALL R-VALUE	MASS WALL R-VALUE	FLOOR R-VALUE	BASEMENT <sup>©</sup> WALL R-VALUE	SLAB <sup>d</sup> R-VALUE AND DEPTH	CRAWL SPACE® WALL R-VALUE
3	0.35	0.55	0.30	38 or 30 cont	15 or 13 + 2.5	5/13 or 5/10 cont	19	5/13	0	5/13
4	0.35	0.55	0.30	38 or 30 cont j	13 + <u>2.5</u> "	5/13 or 5/10 cont	19	10/15	10	10/15
5	0.35	0.55	NR	38 or 30 cont J	19, or 13 + 5 or 15 + 3	13/17 <u>or</u> 13/12.5 cont	30 <sup>9</sup>	10/15	10	10/19

#### \* TABLE N1102.1 CLIMATE ZONES 3-5

- \* IABLE NITUZ.1 CLIMATE ZUNES 3—3

  NO SCALE

  A R-VAULUS REMANAS. U-ACTROS AS 905 CA REMANDAR WICH ROBATION IS INSTALLD IN A CANTY WHICH IS LESS THAN THE LABEL OF DESIGN THICKNESS OF THE ROBATION, THE INSTALLED R-VAULE OF THE ROBATION SHALL NOT BE LESS THAN THE R-VALUE SPECIFIED IN THE TABLE.

  5. THE PROSTRATION R-PLATER COLUMN DEVIALED SYNCHETY. THE SCALE REAT CONFIDENT IS SHALL PLATE CONFIDENT IN SHALL PLATE CONFIDENTIAL PLATE CONFIDENT IN SHALL PLATE CONFIDENTIAL PLATE CONFIDENTI

  - BOOLDING IN THE PROMOTOR OF THE FORMATION AND THE ACCUSATION AND THE SECRET PROMOTOR OF THE FORMATION AND THE ACCUSATION AND TH

972 SQ. FT. OF CRAWL SPACE / 150 = 6.48 SQ. FT. OF REQ'D VENTILATION WITHOUT CROSS VENTILATION 6.48 SQ. FT. OF VENTILATION REQ'D / 0.45 SQ.FT. PER VENT = 15 VENTS REQ'D:

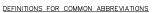
- VENT LOCATIONS MAY VARY FROM THOSE SHOWN ON PLAN, HOWEVER VENTS SHALL BE PLACED TO PROVIDE ADEQUATE VENTILATION AT ALL POINTS AND TO PREVENT DEAD AIR POCKETS.
- THE TOTAL AREA OF WITHAINS OF MOST AND THE STORY THE AREA PROCESS.

  THE TOTAL AREA OF WITHAINS OF SHORES MAY E REDUCED IN 1/000 OF THE GOAR. SPACE OF THE WITHAIN OF THE STORY OF THE WITHAIN OF THE STORY OF THE WITHAIN OF WI

\* CRAWL SPACE VENTILATION CALCULATION

1650 SQ. FT. OF ATTIC / 300 = 5.50 SQ. FT. INLETS/OUTLETS REQUIRED

- CALCULATION BASED ON VENTILATORS USED AT LEAST 3"-0" ABOVE THE COMICE VENTS WITH THE BALANCE OF VENTILATION PROVIDED BY EAVE VENTS.
- CATHEDRAL CEILINGS SHALL HAVE A 1" MINIMUM CLEARANCE BETWEEN THE BOTTOM OF THE ROOF DECK AND THE INSULATION.
- \* ATTIC VENTILATION CALCULATION



MANUAUM
MANUAUM
MONIMAL
OO NICENTER
PLATE
PLATE
PLATE
PERSSURE TREATED
REINFORCED
REOUF SUPPORT
SOF SUPPORT
SOF SUPPORT
SOF SUPPORT
SOF SUPPORT
TREATED
TYPICAL
UNLES
TYPICAL
UNLES
TYPICAL
UNLES
TYPICAL
UNLES
TO SUPPORT
TREATED
TYPICAL
TYP ALT CANT CJ COU COU CONT CT DBIA DJ DR EE FJ FND FTG GALV HORIZ HT

1) MAXIMUM HEIGHT OF DECK SUPPORT POSTS AS FOLLOWS:

POST SIZE	MAX. POST HEIGHT**
4 × 4	8'-0"
6 x 6	20'-0"
***	OVER 20'-0"

- THIS TABLE IS BASED ON NO. 2 TREATED SOUTHERN PINE POSTS,
  MAXIMUM TRIBUTARY AREA IS BASED ON 128 TOTAL SQUARE FEET
  WHICH MAY BE LOCATED AT DIFFERENT LEVELS.
  FROM TOP OF FOOTING TO BOTTOM OF GIRDER
  DECKS WITH POST HEIGHTS OVER 20-0' SHALL BE DESIGNED AND
  SEALED BY A PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT.
- 2) DECKS SHALL BE BRACED TO PROVIDE LATERAL STABILITY BY ONE OF THESE METHODS:
- HIESE MEINDUS:

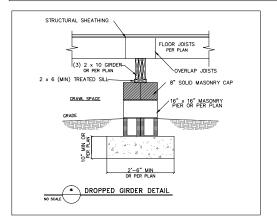
  A THE DECK FLOOR HEIGHT IS LESS THAN 4"-0" AND THE DECK IS
  ATTACHED TO THE STRUCTURE IN ACCORDANCE WITH SECTION (4)
  ABOVE. LATERAL BRACING IS NOT REQUIRED.

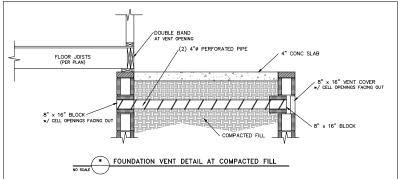
  B. 4 × 4 WOOD KIKE BRACIES MAY BE PROVIDED ON EACH COLUMN IN
  BOTH DIRECTIONS. THE KIKE BRACES SHALL BATCHO TO EACH POST
  AT A POINT NOT LESS THAN 1/3 OF THE POST LENGTH FROM THE
  TOP OF THE POST. AND THE BRACES SHALL BE ANGLED BETWEEN
  45' AND 60' FROM THE HORIZONTAL KIKE BRACES SHALL BE BOLIZED
  OTHER FOST AND GROBER WITH ONE 5/8" # NOT DIPPED GALVANIZED
  OTHER FOST AND GROBER WITH ONE 5/8" # NOT DIPPED GALVANIZED

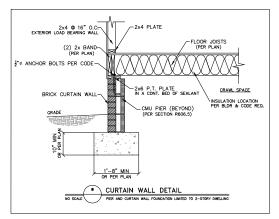
  C. FOR FREESTANDING DECKS WITHOUT KIKE BRACES OR DIAGONAL
  BRACKONG, LATERAL STABILITY MAY BE PROVIDED BY EMBEDDING THE
  POSTS IN ACCORDANCE WITH THE FOLLOWING:

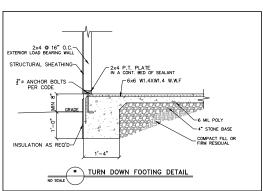
ĺ	POST SIZE	MAX. TRIBUTARY AREA	MAX. POST HEIGHT	EMBEDMENT DEPTH	CONCRETE DIAMETER	
	4 × 4	48 SQ. FT.	4'-0"	2'-6"	1'-0"	
	6 × 6	120 SQ. FT.	6'-0"	3'-6"	1'-8"	

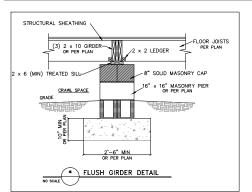
D. 2 x 6 DIAGONAL VERTICAL CROSS BRACING MAY BE PROVIDED IN TWO
(2) PERPENDICULAR DIRECTIONS FOR FREESTANDING DECKS OR PARALLEL
TO THE STRUCTURE AT THE EXPENDENC OCLUMN LINE FOR ATTACHED DECKS
THE 2 x 6s SHALL BE ATTACHED TO THE POSTS WITH ONE 5/8" 6 HOT
DIPPED CALVANIZED BOLT AT EACH END OF EACH BRACING MEMBER.
E. FOR EMBEDMENT OF PILES IN COASTAL REGIONS, SEE CHAPTER 46.

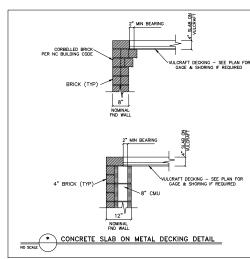


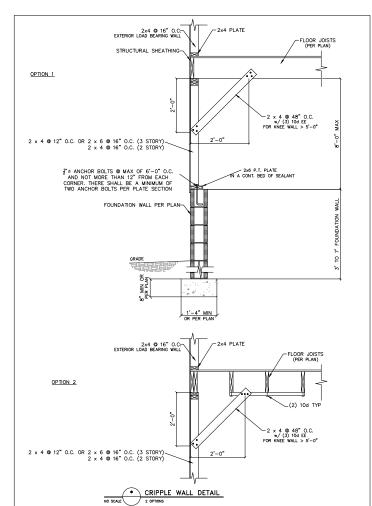


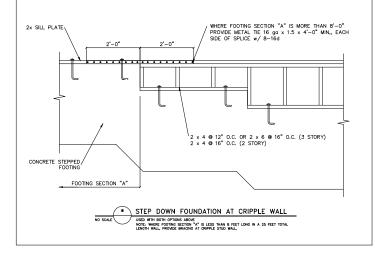


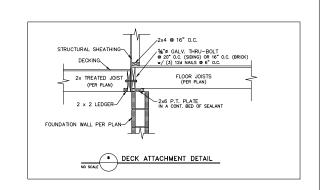












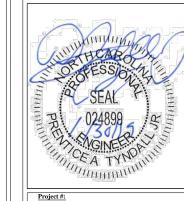
\* Engineers seal does not include construction means, methods, techniques, sequ plans are to be brought to the immed attention of Tyndall Engineering & Design, P.A. Failure to do so will void Tyndall Engineering & Design, P.A. liability.

\* Please review these documents carefully. \* Please review these documents carefully. Tyndall Engineering & Design, P.A. will interpret that all dimensions, recommenda etc. presented in these documents were deemed acceptable once construction begins.

TYNDALL ENGINEERING & DESIGN, P.A.

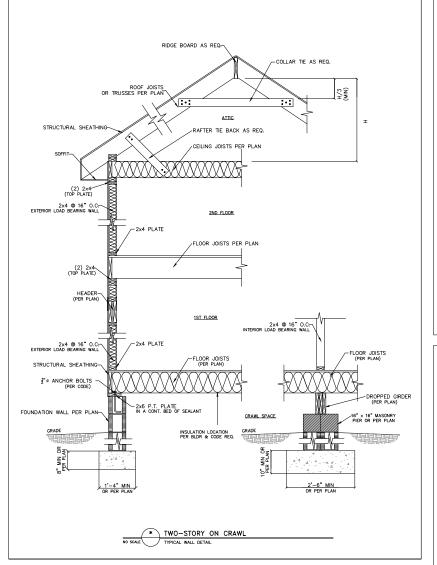
1419 778-1200 = 1419 7. 1441 = North Carelina - www.kyndallenaineari

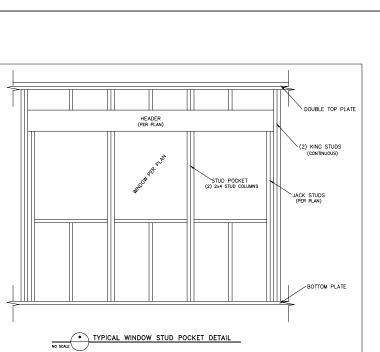


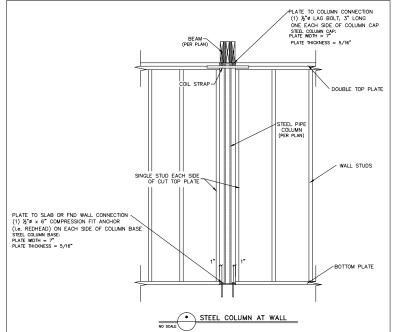


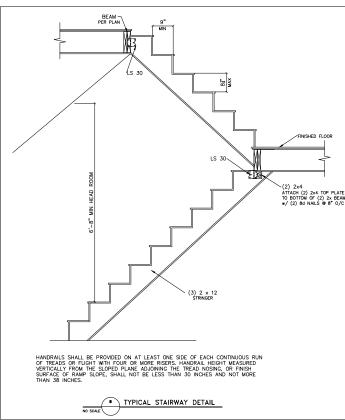
Project #: 1901-010039 Date: 1/18/19 Drawn/Design By ACS DWG. Checked By: PAT NOT TO SCALLE

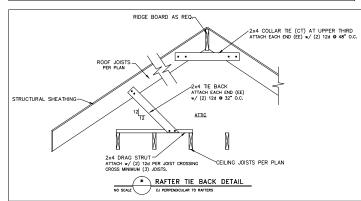
Remarks

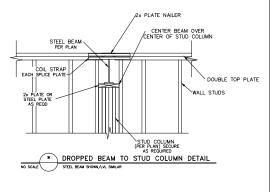


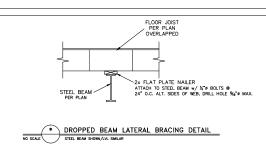


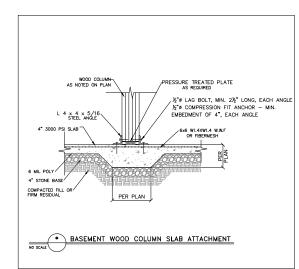


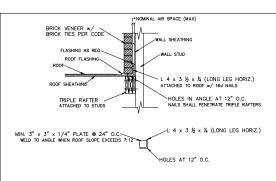












ALLOWABLE SPANS FOR LINTELS SUPPORTING MASONRY VENEER

SIZE OF ANGLE <sup>(1,3)</sup>	NO STORY ABOVE(5)	1 STORY ABOVE(5)	2 STORIES ABOVE (5)	# OF ½" (OR EQUIV.) REINFORCING BARS IN REINFORCED LINTEL(2.4,5)
L 3 x 3 x 1/4	6'-0"	4'-6"	3'-0"	1
L 4 × 3 × 1/4	8'-0"	6'-0"	4'-6"	1
L 5 × 3 ½ × ¾6	10'-0"	8'-0"	6'-0"	2
L6 × 3 ½ × ¾6	14'-0"	9'-6"	7'-0"	2
2L 5 x 3 ½ x 5√6	20'-0"	12'-0"	9'-6"	4

- 1. LONG LEG OF THE ANGLE SHALL BE PLACED IN A VERTICAL POSITION.

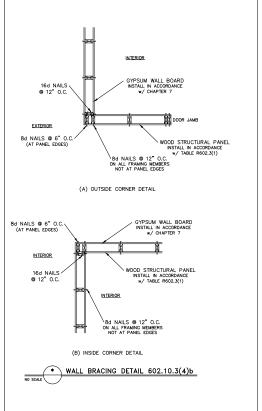
  2. DEPTH OF REINFORCED LINTELS SHALL NOT BE LESS THAN 87 AND ALL CELLS OF NOT LESS THAN 87 AND THE STALL EXTEND NOT LESS THAN 87 INTO THE SUPPORT.

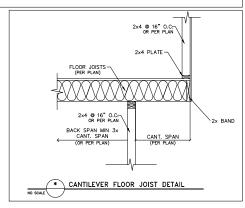
  3. STEEL MEMBERS INDICATED ARE ADDICULATE TYPICAL EXAMPLES, OTHER STEEL MEMBERS METHING STRUCTURAL DESIGN REQUIREMENTS SHALL BE PERMITTED TO BE USED.

  4. ETHER STEEL ANGEL OR REINFORCED LINTEL SHALL SPAN DETAILS OF THE STEEL ANGEL OR REINFORCED LINTEL SHALL SHALL SPAN DETAILS OF THE STEEL ANGEL OR REINFORCED LINTEL SHALL SHAL

- \* MASONRY VENEER SUPPORT FIG 703.8.3.1

HARDWARE CRO	SS-REFERENCE CHART		
SIMPSON STRONG-TIE	USP STRUCTURAL CONNECTORS		
PRODUCT NUMBER	PRODUCT NUMBER		
A35	MPA1		
ABE	PAE		
CBSQ	CBSQ		
CCQ	KCCQ		
CMSTC16	CMSTC16		
CS	RS		
H1	RT15		
H2.5A	RT7A		
H10	RT16		
HDQ8-SDS3	UPHD8		
HDU2-SDS2.5	PHD2		
HDU5-SDS2.5	PHD5		
HETA	HTA		
HGAM10KTA	HGAM		
HHDQ14-SDS2.5	UPHD14		
HTS	HTW		
HTT	нтт		
HUS	HUS		
LTA1	LPTA		
LTHJA26	HJC26		
LTP4	MP4F		
LUS	JUS		
MAS	FA3		
MSTAM	MSTAM		
PC	PCM		
PHD-SDS3	PHD		
SSP	RSPT6		
STC	TR1		
STHD	STAD		







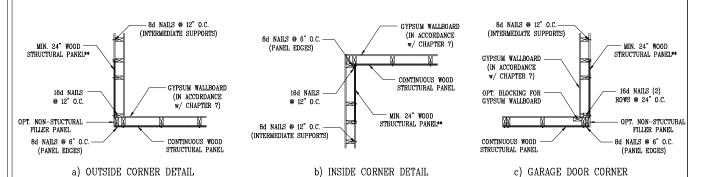






REVISIONS					

	REVISIO	NS					
No.	Date:	Remarks					
1 2 3 4							
2							
3							
4							
Sheet Number							



\*\* IN LIEU OF THE 24" (MIN.) CORNER RETURN. A HOLD-DOWN DEVICE WITH A MINIMUM UPLIFT DESIGN VALUE OF 800# SHALL BE FASTENED TO THE CORNER STUD AND TO THE FOUNDATION OR FRAMING BELOW.

# TYPICAL EXTERIOR CORNER FRAMING FOR CONTINUOUS SHEATHING

#### STRUCTURAL SHEATHING NOTES

- DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 120 MPH OR LESS.
- 2) WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE 2018 NCRC.
- 3) BRACING REQUIREMENTS SHALL BE PER TABLE R602.10.3.
  REFER TO SECTION R602.10.4 FOR LOAD PATH DETAILS
  INCLUDING CONNECTIONS & SUPPORT OF BRACED WALL
  PANELS.
- (1) REFERENCE FIGURE R602.10.4.3 OF THE 2018 NCRC.
- INTERIOR BRACED WALL PANELS (BWP) INDICATED SHALL
  BE SHEATHED IN ACCORDANCE WITH THE GB METHOD OR
  WSP METHOD AS PRESCRIBED IN SECTION R602.10.1 (UNO
- (2) 1/2" GYPSUM BOARD (GB) MINIMUM LENGTH OF B'-0" (SGLATED PANELS) OR 4"-0" (CONTINUOUS SHEATHING). SECURE V 50 COOLER MAILS (OR EQUIA PER TABLE R702.3.5) SPACED @ 7" O.C. AT PANEL EDGES, INCLUMNO TOP AND BOTTOM PLATES & 7" O.C. AT INTERMEDIATE SUPPORT
- (3) 3/8" WOOD STRUCTURAL PANEL (WSP) SECURE w/ 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS
- 6 O.C. AT PANEL EDGES AND TO CO.

  AT INTERMEDIATE SUPPORTS

  5) EXTERIOR BRACED WALL PANELS (BWP) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION REGO. 10.3 (UNO)

  6) ALL SHEATHABLE SUPPORTS OF EXTERNOR WALLS

  ALL SHEATHABLE SUPPORTS OF EXTERNOR WALLS

  CABLE END WALLS) SHALL BE CONTINUOUSLY SHEATHAB WITH MOST STRUCTURAL PANEL (WSP) SHEATHING WITH A MINIMUM THICKNESS OF 3/8". SHEATHING SHALL BE SECURED WITH MINIMUM BO COMMON NAILS SPACED AT 6"

  O.C. AT PANEL EDGES AND SPACED AT 12" O.C. AT INTERMEDIATE SUPPORTS.

  7) MINIMUM BRACED WALL PANEL LENGTHS WITH CS-WSP METHOD SHALL BE AS FOLLOWS:

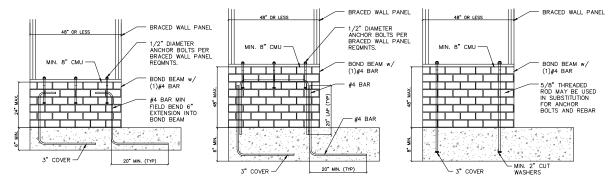
   24" ADJACENT TO OPENINGS NOT MORE THAN 67% AND LESS THAN 85% OF WALL HEIGHT.

   48" FOR OPENINGS GREATER THAN 67% OF WALL HEIGHT.

   48" FOR OPENINGS GREATER THAN 65% OF WALL HEIGHT.
- 4 SHEATH INTERIOR & EXTERIOR
- (5) MINIMUM 800# HOLD-DOWN DEVICE

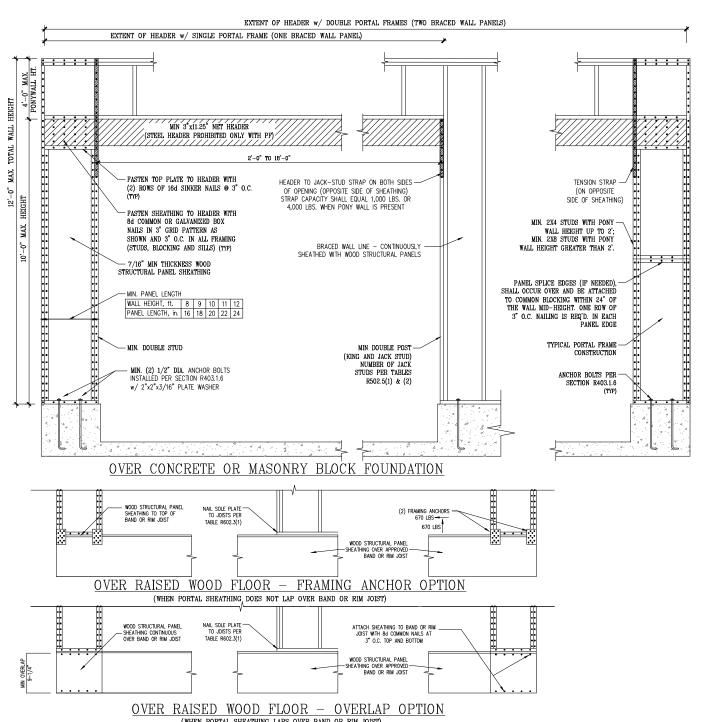
REQUIRED BRACED WALL PANEL CONNECTIONS							
			REQUIRED CONNECTION				
METHOD	MATERIAL	MIN. THICKNESS	@ PANEL EDGES	@ INTERMEDIATE SUPPORTS			
CS-WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS ⊚ 6" O.C.	6d COMMON NAILS @ 12" O.C.			
GB	GYPSUM BOARD	1/2"	5d COOLER NAIL** ⊚ 7" O.C.	5d COOLER NAIL** @ 7" O.C.			
WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS © 6" O.C.	6d COMMON NAILS @ 12" O.C.			

\*\*OR EQUIVALENT PER TABLE R702.3.5 B3: BRACE WALL PANEL CONNECTIONS



B4: MASONRY STEM WALL SUPPORTING BRACED WALL PANELS

FIGURE R602.10.4.3 OF THE 2018 NCRC NOTE: GROUT BOND BEAMS AND ALL CELLS WHICH CONTAIN REBAR, THREADED RODS AND ANCHOR BOLTS

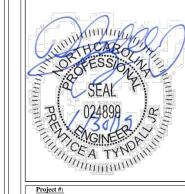


B2: METHOD CS-PF: CONTINUOUSLY SHEATHED PORTAL FRAME

\* Engineers seal does not include construction plans are to be brought to the imm attention of Tyndal Engineering & Design, P.A. Failure to do so will void Tyndall Engineering Failure to do so will void Tyndall Engineer & Design, P.A. Hability.

\*Please review these documents carefully.
Tyndall Engineering & Design, P.A. will interpret that all dimensions, recommenda etc. presented in these documents were deemed acceptable once construction begins.

TYNDALL ENGINEERING & DESIGN, P.A.



Project #: 1901-010039 Date: 1/18/19 Drawn/Design By ACS DWG. Checked By: PAT NOT TO SCALE