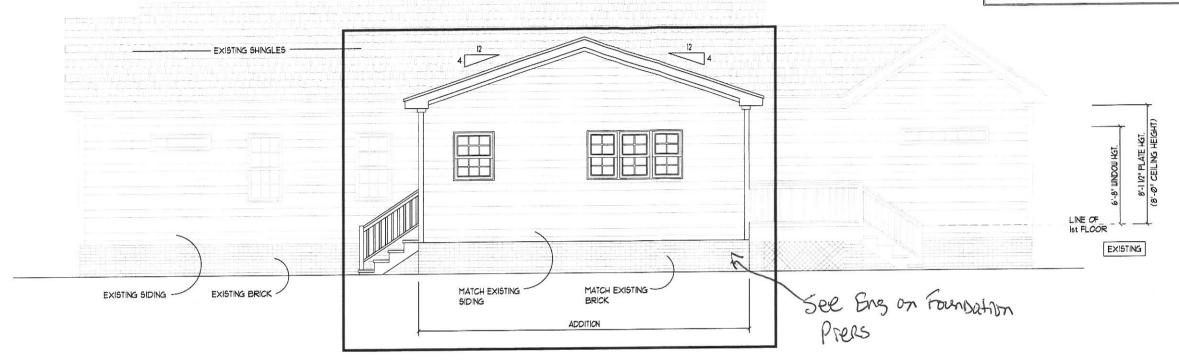
NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes
and is subject to field inspection and verification. APPROVED Harnett COUNTY 01/11/2021 NORTH CAROLINA PLEASE NOTE:
EXISTING STRUCTURES MAY VARY SOME FROM WHAT IS
DRAWN ON THE PLANS. CONTRACTOR / BUILDER AND ALL
OF THE PARTIES WORKING ON THE ADDITION / RENOVATION
SHALL VERRY ALL CONDITIONS AND DIMENSIONS PRIOR TO
CONSTRUCTION (SOME DIMENSIONS MAY HAVE BEEN
AUJUSTED DURING INITIAL CONSTRUCTION AND/OR OTHER
RENOVATIONS). EVERY EFFORT HAS BEEN MADE FOR
ACCURATE AND COMPLETE DIFFENSIONING. ANY ERROR OR
ORISSIONS SHALL BE REPORTED TO KATHY PICKENS FOR
CORRECTIONS OR JUSTIFICATION. ONCE CONSTRUCTION HAS
COMMENCED, THE CONTRACTOR / BUILDER AND ALL OF THE
PARTIES WORKING ON THIS ADDITION / RENOVATION SHOULD
RECHECK MEASUREMENTS PRIOR TO ANY CONSTRUCTION
AND MAKE THE NECESSARY CHANGES AND WILL ASSITE
ALL RESPONSIBILITY. DIMENSIONS GOVERN OVER SCALE,
CODES GOVERN OVER DIMENSIONS.







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

KATHY PICKENS 919-749-2805 kathypickensdesigns.com

DAVID & KELLY MURPHY

FUQUAY YARINA, NC 919-414-4527

ADDRESS: 41 WOODLAND RIDGE DR FUQUAY VARINA, NO

ADDITION PLAN NO: 10/21/2020

REVISIONS	DATE
11271010110	

All structural systems and components including, but not limited to, roof system, beams, headers, columns, cantilevers and offset load bearing walls are to be sized and sealed by a structural or civil engineer and/or supplier.

It shall be the responsibility of the Owner/Contractor to verify the securacy of the information shown on these plans prior to construction. Should any inconsistency, error or omissions be found, contact Kathy Pickerss Residential Besigns immediately for corrections of judification. Once construction has commenced, the contractor or owner shall assume all responsibility for any errors and their costs.

It is the responsibility of the contractor to ensure the house fits properly on the lot. Kathy Pickness Residential Designs is not responsible for any changes necessary to ears the house fits according to the setbecks, subdivision regulations, etc. The house was designed according to dismostion specifications from the client representation of the pro-tection of the contract of the contract of the resource of the contract of the contract of the fitting correctly on the property.

ELEVATIONS

PLEASE NOTE: MLEASE NOTE:
EXISTING STRUCTURES MAY YARY SOME FROM WHAT IS
DRAWN ON THE PLANS, CONTRACTOR / BUILDER AND ALL
OF THE PARTIES WORKING ON THE ADDITION / RENOVATION OF THE PARTIES WORKING ON THE ADDITION / RENOVATION SHALL VERIET ALL CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION (SOME DIMENSIONS MAY HAVE BEEN ADJUSTED DURING NITIAL CONSTRUCTION AND/OR OTHER RENOVATIONS). EVERY EFFORT HAS BEEN MADE FOR ACCURATE AND COMPLETE DIMENSIONING. ANY ERROR OR CHISSIONS SHALL BE REPORTED TO KATHY PICKENS FOR CORRECTIONS OR JUST FICATION. ONCE CONSTRUCTION HAS COMPRICED, THE CONTRACTOR / BUILDER AND ALL OF THE PARTIES WORKING ON THIS ADDITION / REPOVATION FOR TO ANY CONSTRUCTION. AND MAKE THE NECESSARY CHANGES AND WILL ASSUME ALL RESPONSIBILITY. DIMENSIONS GOVERN OVER SCALE, CODES GOVERN OVER DIMENSIONS.

FIRST FLOOR NOTES

I) MATCH EXISTING PLATE, CEILING AND

2) 8'-0" CLG. HGT. (8'-1 1/2" PLT. HGT.), UN.O.

(SEE NOTE \*1)
3) ALL NEW WALLS FIGURED AT 4 1/2" WIDTHS.
4) SET WINDOWS AT 6'-8" AFF., UN.O.

6) CONTRACTOR TO VERIFY ALL EXISTING DIMENSIONS 4 HEIGHTS.

PRESSURE RATINGS. & ROUGH OPIG'S 9) ELECTRICAL LAYOUT BY BUILDER

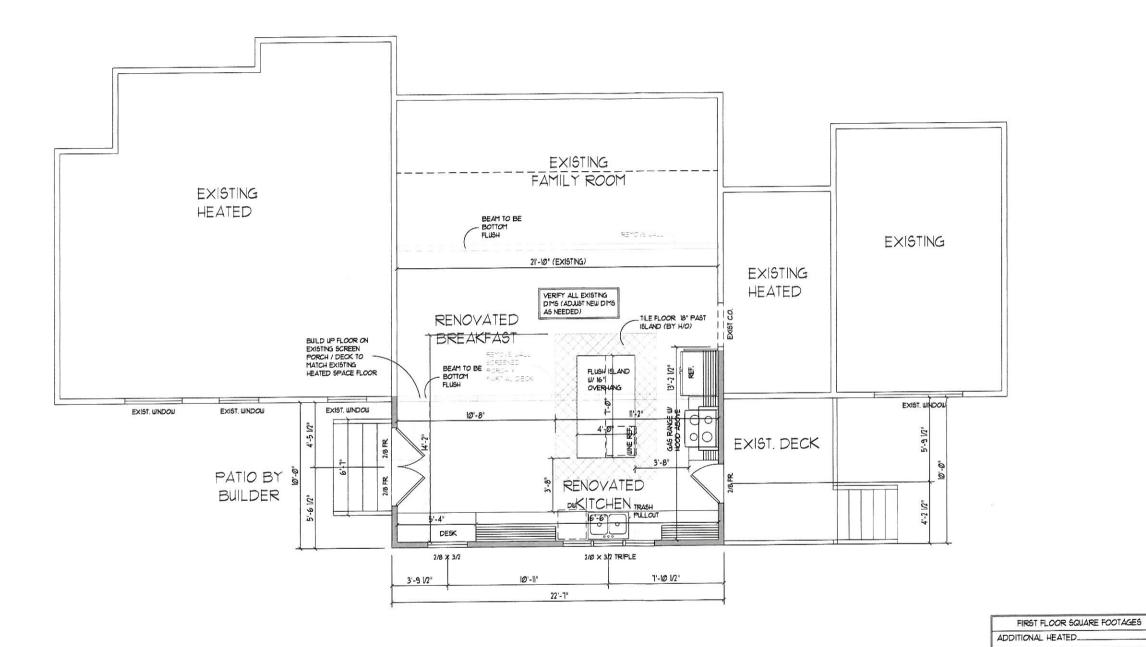
5) MATCH EXISTING MATERIALS, UN.O.

1) DIMENSIONS ARE TO FRAMING, UN.O. 3) CONSULT WINDOW MANUFACTURER'S SPECS. FOR EGRESS REQUIREMENTS,

WINDOW HEIGHTS, UNO.

(SEE NOTE #)

(SEE NOTE 1)



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



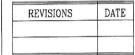
KATHY PICKENS 919-749-2805 kathypickensdesigns.com

DAVID & KELLY MURPHY

FUQUAY VARINA, NC 919-414-4527

ADDRESS: 41 WOODLAND RIDGE DR. FUQUAY VARINA, NC

ADDITION PLAN NO: DATE: 10/21/2020



The drawings and specifications / plans contained on these pages are offered to the named client or contractor for a conditional one time use. The conditional use is limited to the lot and rubdivision herein, and only for the said location.

These plans are designed to be used by a general contractor. It is the responsibility of the contractor to ensure that all phases of construction comply with all building code requirement. The contractor is also responsible for obtaining all required permits for all phases of construction.

All structural systems and components including, but not limited to, roof system, beams, headers, columns, cantilevers and offset load bearing walls are to be sized and seaded by a structural or civil engineer and/or supplier.

All construction, workmanship, material selection and quality shall be in accordance with the North Carolina State Building Code - Residential Code 2016 Edition and local codes and regulations.

It is the responsibility of the contractor to ensure the house fits property on the lot. Eathy Fickens Besidential Beigns is not responsible for any changes necessary to ensure the house fits eccording to the setbacks, subdivision regulations, etc. The house was designed according to dimension specifications are professional nurrepro be hired if there are concerns about the setbacks and the house fitting correctly on the property.

1st FLOOR PLAN

A-2

FIRST FLOOR PLAN

	Live Load (PSF)	Dead Load (PSF)	Deflection
All Floors	40	10	L/3€0
Attic Platforms	25	20	L/360
Ceiling	10	10	L/360
Decks/Balconies	60	10	L/240
Roof	20	15	L/240
Wind Load	115 MPH (UON)	115 MPH (UON)	L/240

## General Plan Reading Notes:

- 1) If any handwritten notes are provided plans must be printed in color or read digitally.
- 2) Handwritten notes in Red and Blue ink shall take priority over all printed texts.
- 3) Noted dimensions shall take priority over scaled drawings. 4) These general notes shall apply unless otherwise noted in handwriting.

# Foundation Notes:

- 1) Assumed soil load bearing capacity = 2000 FSF
- 2) Minimum 28 day f'c of concrete = 3000 FSI
- 3) Foundations to be built in accordance with NCRC 2018, CH  $4\,$
- "Tie-In"s shall be (2) 16" long \$4 epoxy bonded dowels half embedded mid-depth into existing footings. If no footing exists, omit Tie-in
- 5) Install anchor bolts per R403.1.6.
- 6) All slabs shall be  $4^{\prime\prime}$  thick, 3000 psi concrete slab on  $4^{\prime\prime}$ of #57 sub-base w/ a 6 mil vapor barrier (if used in an interior or garage application) w/ 10/10 6x6 welded wire fabric UON.
- 7) All slabs shall be on compacted fill or full depth self consolidated structural fill (#57) (at porches, garages and stem wall slabs UON.
- 8) All suspended slabs on metal pans shall utilize 16GA type
- 5) Max unreinforced, unbalanced condition of any CMU wall shall be 36". Any foundation wall subjected to 24" of unbalanced fill or more shall be fully grouted. Top course of all foundation walls shall be fully grouted.
- 10) Max CMU pier height to be 4x its least horizontal dimension. All piers shall be fully grouted.
- 11) All piers shall be in the middle 1/3rd of the footing. Min 2" footing projection at each side. Max projection shall be the depth of the footing.

# Pooting Schedule:

- $A = 16'' \times 16'' \times 8''$   $E = 36'' \times 36'' \times 12''$
- $B = 20" \times 20" \times 8"$   $F = 40" \times 40" \times 12"$  w/ (3) \$\div 4 EW @ bottoms
- $C = 24'' \times 24'' \times 10''$   $G = 48'' \times 48'' \times 12''$  W/ (4) \$4 EW & bottoms.
- D = 30"x30"x12" 'All rebar in footings to have 3" cover.

# Header Schedule:

- $A = (2) 2 m \in w/(1) 2 m 4 Jack @ EE$ B = (2)2m8 w/(2) 2m4 Jack @ EE
- C = (2)2x10 w/(2) 2x4 Jack @ EE
- D = (2)2x12 w/(3) 2x4 Jack @ EE
- E = (2)9 1/4" LVL w/ (3) 2x4 Js @
- Use 2x6 studs in 2x6 walls. In 2x6 walls use 3 ply headers
- \* If wall is 2x6, king studs shall be 2x6.

King Stud Schedule:

'-3' wide = (1)2x4 @ EE

8'-6' wide = (2)2x4 @ EE

6'-9' wide = (3)2x4 @ EE

	Exterior (Load Bearing or Non Bearing)	Non-Bearing (INI)
2x4@ 16" O.C.	2x4@ 16" O.C.	2X4@ 24" O.C.
		2X4 @ 24" O.C
		2%4 @ 16" O.C.
		2X4 @ 16" O.C.W/ B
The second control of		2X6 @ 16" O.C.
(2)2x4@ 12" O.C. W/ B 2x6 @ 12" O.C. W/ B	(2)2x6@ 16" O.C. W/ B&S	2%6@ 16" O.C. W/ B (2)2%4 @ 16" OC W/ B
		2%6@ 12" O.C. (2)2%4@ 16" O.C. W/B
(2)2x6@ 16" O.C. W/ B 2x8 @ 16" O.C.	2X6 @ 12" O.C.	2X8 @ 16" O.C.
	Bearing)  2m4@ 16" O.C.  2m4@ 12" O.C.  2m6 @ 16" O.C.  (2) 2m4 @ 16" O.C.  2m4@ 12" O.C. W/ B  2m6 @ 12" O.C. W/ B  2m6 @ 12" O.C. W/ B  (2) 2m4@ 12" O.C. W/ B	Bearing)         Non Bearing)           2x4@ 16" O.C.         2x4@ 16" O.C.           2x4@ 12" O.C.         2x4@ 12" O.C. W/ BsS           2x6 @ 16" O.C.         2x4@ 12" O.C. W/ BsS           2x6 @ 16" O.C.         2x4@ 12" O.C. W/ BsS           2x6 @ 16" O.C.         2x4@ 12" O.C. W/ BsS           2x6 @ 12" O.C.         2x4@ 12" O.C. W/ BsS           2x6 @ 12" O.C.         2x6 @ 12" O.C. W/ BsS           2x6 @ 12" O.C. W/ B         2x6 @ 12" O.C. W/ BsS           (2) 2x4@ 12" O.C. W/ B         (2) 2x4@ 12" O.C. W/ BsS           (2) 2x4@ 12" O.C. W/ B         (2) 2x6@ 16" O.C. W/ BsS           (2) 2x4@ 12" O.C. W/ B         (2) 2x6@ 16" O.C. W/ BsS           (2) 2x6@ 12" O.C. W/ B         2x6 @ 16" O.C. W/ BsS           (2) 2x6@ 12" O.C. W/ B         2x6 @ 16" O.C. W/ BsS

- . Table based on 115 MPH wind zone. Exposure B. L/240 deflection
- B= Blocking: 2x Horizontal blocking at 6' p.c. vert. with (2) 10d nails
- S= Strapping: CS22 strapping to the interior face of the center 2/3rd height of every other stud. Half populate with 10d x 1.5" nails.
- . If wall supports 2 stories and a roof, add 2' to the actual wall height and apply the table.
- If wall supports only roof, subtract 2' to the wall actual wall height and apply the table
- Praming Notes: 1) All dimensional lumber to be Spruce Fine Fir No.2 or better.
- 2) Engineered Beams single ply = 1.75" wide w/ Fb of: LVL= 2600 psi, LSL = 2325 psi. FSL (columns) shall be 3.5" wide w/ F'b = 1344 psi
- 3) All floor framing per NCRC 2018 CH S. All Wall framing per NCRC 2018 C=6
- 4) All I-joists and floor truss framing per supplier's specifications and layout.
- 5) All structural steel shall be ASTM A-36; Fy= 36 KSI.
- 6) All weld material shall be 70 KSI material.
- 7) All welds to be installed by a certified AWS welder.
- S) Install double joist under all walls parallel with joists.
- 5) Typically, load bearing walls (LBW) are shown hatched in red. Mearby girders and beams should be assumed to be directly supporting these LBWs. UON.
- 10) All LVL beams of 3 ply or more shall be fastened with "" dia bolts at 16" o.c. staggered w/ 2" min edge distance from top/bottom edge UCN. 2 ply LVLs shall be fastened with (4) \$5 3" long wood screws UON.
- Circled numbers indicate number of 2x4/2x6 studs in a stud column. Strap all stud columns of 4 or more with (3) horizontal CS22 straps.
- 12) All beam bearings shall be no less than 3". All other bearing to be 2" min.
- 13) All hangers shall be standard, appropriately sized face mounted UON. Consult Simpson catalog or local supplier. High capacity hangers will be load rated on plans.
- 14) Install all hardware per manufacturer's guidelines.

## Lateral Bracing:

- 1) Unless otherwise noted, lateral bracing is found sufficient and compliant with minimum requirements set forth in NCRC 2018 Table R602.10.2 provided all exterior walls are sheathed at the exterior per CS-WSP, R602.10.3 which includes 2x4 (min) stude at 16" o.c. sheathed with 7/16" OSB w/ (1)8d nail at 6" o.c. edge and (1) 9d nail at 12" o.c. field. Typically, required length of CS-WSP at each designated shear walls are shown on plans.
- 2) All noted Portal Frame (F-F) shall be compliant with R602.10.1
- 3) All locations noted with "HD" shall be 900 lbs min capacity. Options include 36" long CS16 straps fully populated with 10d nails, centered at interface, Simpson MSTC66B3Z or Simpson LSTA21. Install CS16 strap from top plate to 16" below top of stud.
- 4) Minimum corner return in each direction shall be 24" of wood structural panel unless atherwise nated.
- 5) Walls noted as GBC shall be framed in accordance with R602.10.2

### Wood Deck Notes:

- 1) All lumber to be pressure treated Spruce Pine Fir No.2 or better.
- 2) Band attachments to be installed per NCRC 2018, Appendix M (AM 104.1(1))
- Install lateral bracing AM109.1
- Install handrails per AMIII.1
- Max Post Heights per AM 108.1
- 6) Stair Stringers per AM 107.1

# Screened in and Covered Porch Notes:

- All wood deck notes apply.
- 2) Posts to be attached to footings, slab or CMU piers using ABU44 or ABU66 post base (or applicable size).
- 3) Uplift for posts to headers may be either (2) Simpson LCE4, (2) Simpson GA2 clips with 3" long #9 screws or [4] 4" diameter, 5" long LedgerLoks driven at a 45" degree angle to each side of posts or notched 50% width w/ (2) LedgerLoks.
- 4) Uplift for posts to floor framing may be either (2) Simpson GA2 clips with 3" long #9 screws or (4) 4" diameter, 5" long LedgerLoks driven at a 45" degree angle to each side.

## Roof Framing Notes:

- 1) All roof framing shall be in accordance with NCRC 2015 5# 9
- 2) All dimensional lumber to be Spruce Fine Fur No.2 or better.
- height eave to ridge up from eave nailed with (5) 10d mails at each end. UON
- E) Roof trusses per others; installation per supplier

# General Construction Notes:

- All dimensions to be verified by the contractor in
- Takla Engineering assumes no responsibility for
- 4) Any questions pertaining to structural components should be immediately brought to the attention of Takla Engineering.
- 5) Limitations: Services provided are in accordance with the standard of practice for structural engineering and within the limits imposed by scope, schedule and budget. The determinations contained in this report are based on conditions observed at the time of the evaluation. No quarantees or warranties, expressed or implied, under this Agreement or otherwise, shall be construed in connection with services provided. Sequencing, shoring, means and methods of construction are considered beyond the scope of this design. Takla Engineering shall not be

•	CONC	Concrete
•	CONT.	Continuous
•	C.J	Ceiling Joists
•	CMU	Conc Masonry Unit
•	CS-WSP	Sheathing per R602.
•	DIA	Diameter

DJ / DR

GB Girder Roof Truss GRT

MANUF

O.F. PF

All flat valleys for over-framed roofs shall be attached using (3) 3" long \$9 screws at each main

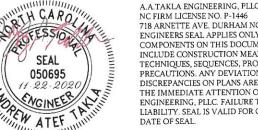
4) Sheath with 7/16" OSB w/ 8d nails at 6" o.c. edge and 12" c.c. field.

5) All collar ties to be installed no higher than 1/3rd

10.3 DBL Double Double Joist / Rafter Equal EQ Each End EE FJ Floor Joist FND Foundation Floor Truss FT FTG Footing HGR Hanger HD Holddowns LBW Load Bearing Wall Manufacturer NTS Not To Scale On Center 0.0. Over-framed (roof) Portal Frame Point Load PT. Pressure Treated P.T. R.T. Roof Truss

Stud Column SI Similar STM SIGR

Typical TYP.



NC FIRM LICENSE NO. P-1446
718 ARNETTE AVE. DURHAM NC 27701 919-423-0470 ENGINEERS SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT, SEAL DOES NOT TECHNIQUES, SEQUENCES, PROCEDURES, OR SAFETY DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO ENGINEERING, PLLC. FAILURE TO DO SO WILL VOID LIABILITY. SEAL IS VALID FOR ONE YEAR FROM THE

1) All temporary shoring, means and methods are the responsibility of the contractor.

the field.

safety of project delivery.

Abbreviations: any safety aspect of Work.

Gypsum Board (shear wall)

Staggered SUP Supplier

UON Unless Otherwise Noted

> A.A.TAKLA ENGINEERING, PLLC INCLUDE CONSTRUCTION MEANS, METHODS. PRECAUTIONS. ANY DEVIATIONS OR THE IMMEDIATE ATTENTION OF A.A TAKLA

Dr

41 Woodland Ridge I Fuquay Varina, NC Scott Corcoran Scott Corcoran Structural Notes 0508-20

Project: Location Company: Care of: Subject: Job No.:

X1 For Construction [] Not for Construction PROJ# 0508-20

DATE: 11/22/20 REVISIONS: 1

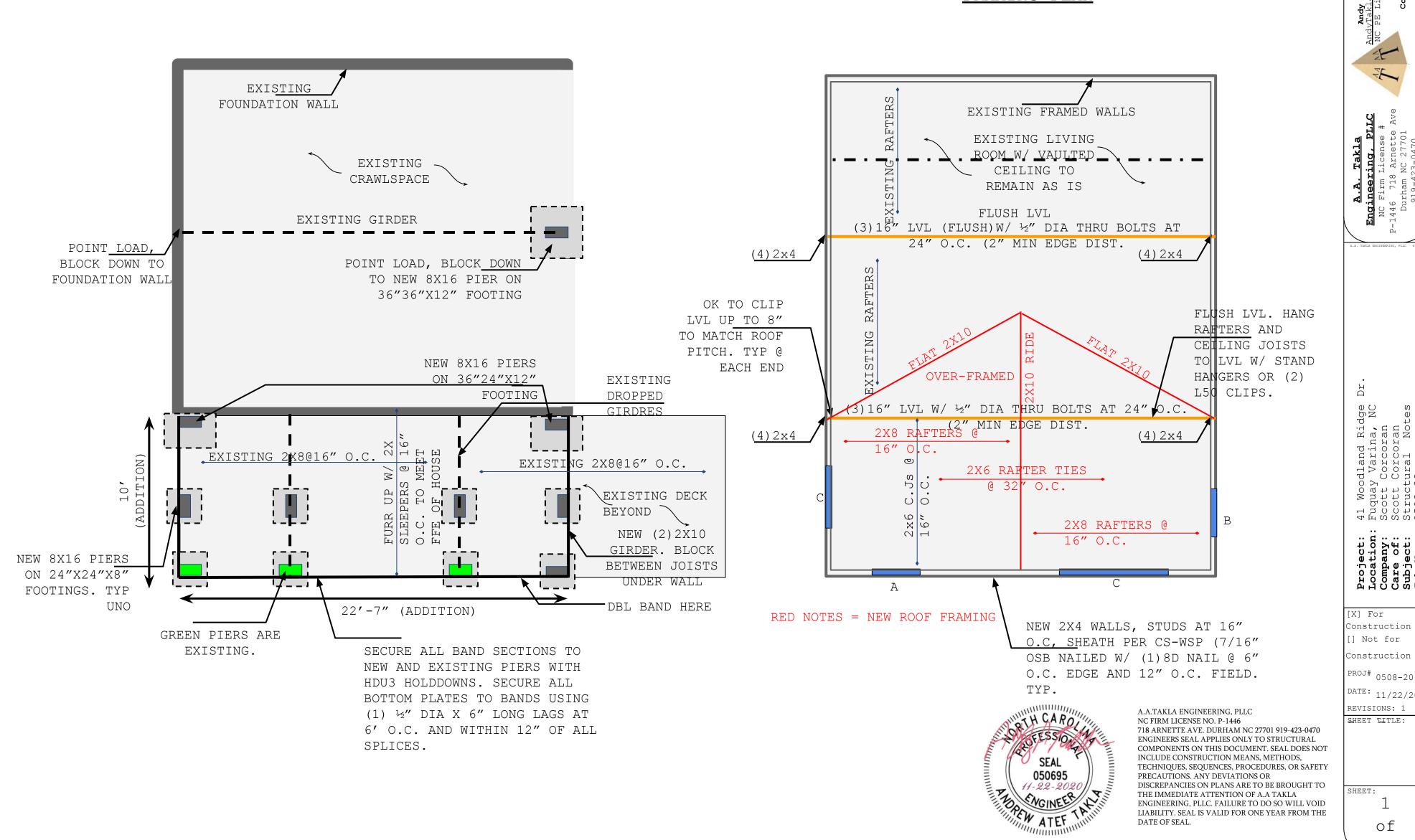
> SHEET TITLE: STRUCTURAL NOTES

SHEET: 2

of

# FOUNDATION AND FLOOR FRAMING PLAN

# CEILING AND ROOF FRAMING PLAN



Andy A. Takla, PE AndyTakla@TaklaEngr.co NC PE License # 05069!

Construction Construction

DATE: 11/22/20

SHEET TITLE:

Height Interior (Load

2x4@ 16" O.C.

2x4@ 12" O.C.

2x4@ 12" O.C.

2x6 @ 16" O.C.

2X6 @ 16" O.C.

2x6 @ 12" O.C.

2x8 @ 16" O.C.

and apply the table.

and apply the table

Framing Notes:

2" min.

(2) 2X4 @ 16" O.C.

2x4@ 12" O.C. W/ B

2x6 @ 12" O.C. W/ B

2x6 @ 16" O.C.

(Max) Bearing)

	Live Load (PSF)	Dead Load (PSF)	Deflection
All Floors	40	10	L/360
Attic Platforms	25	10	L/360
Ceiling	10	10	L/360
Decks/Balconies	60	10	L/240
Roof	20	15	L/240
Wind Load	115 MPH(UON)	115 MPH (UON)	L/240

# General Plan Reading Notes:

- 1) If any handwritten notes are provided plans must be printed in color or read digitally.
- 2) Handwritten notes in Red and Blue ink shall take priority over all printed texts.
- 3) Noted dimensions shall take priority over scaled drawings.
- 4) These general notes shall apply unless otherwise noted in handwriting.

- 1) Assumed soil load bearing capacity = 2000 PSF
- 2) Minimum 28 day f'c of concrete = 3000 PSI
- 3) Foundations to be built in accordance with NCRC 2018, CH 4
- 4) "Tie-In"s shall be (2) 16" long #4 epoxy bonded dowels half embedded mid-depth into existing footings. If no footing exists, omit Tie-in
- 5) Install anchor bolts per R403.1.6.
- 6) All slabs shall be 4" thick, 3000 psi concrete slab on 4" of #57 sub-base w/ a 6 mil vapor barrier (if used in an interior or garage application) w/ 10/10 6x6 welded wire fabric UON.
- 7) All slabs shall be on compacted fill or full depth self consolidated structural fill (#57) (at porches, garages and stem wall slabs UON.
- 8) All suspended slabs on metal pans shall utilize 16GA type B UON
- 9) Max unreinforced, unbalanced condition of any CMU wall shall be 36". Any foundation wall subjected to 24" of unbalanced fill or more shall be fully grouted. Top course of all foundation walls shall be fully grouted.
- 10) Max CMU pier height to be 4x its least horizontal dimension. All piers shall be fully grouted.
- 11) All piers shall be in the middle 1/3rd of the footing. Min 2" footing projection at each side. Max projection shall be the depth of the footing.

# Footing Schedule:

- A = 16"x16"x8" E = 36"x36"x12"
- B = 20"x20"x8" F = 40"x40"x12" w/ (3) \$\$4 EW @ bottoms $C = 24" \times 24" \times 10"$   $G = 48" \times 48" \times 12"$  W/ (4) #4 EW @ bottoms.
- D = 30"x30"x12" \*All rebar in footings to have 3" cover.

# Header Schedule:

- A = (2)2x6 w/ (1) 2x4 Jack @ EEB = (2)2x8 w/ (2) 2x4 Jack @ EE
- C = (2)2x10 w/ (2) 2x4 Jack @ EE
- D = (2)2x12 w/ (3) 2x4 Jack @ EE

# E = (2) 9 1/4" LVL w/ (3) 2x4 Js @

- EE
- \* Use 2x6 studs in 2x6 walls. \* In 2x6 walls use 3 ply headers

# \* If wall is 2x6. king

# King Stud Schedule: 0'-3' wide = (1)2x4 @ EE 3'-6' wide = (2)2x4 @ EE 6'-9' wide = (3)2x4 @ EE

studs shall be 2x6.

- 13) All hangers shall be standard, appropriately sized face mounted UON. Consult Simpson catalog or local supplier. High capacity hangers will be load rated on plans.
- 14) Install all hardware per manufacturer's guidelines.

# Lateral Bracing:

Exterior (Load Bearing or Non-Bearing (INT)

(2) 2x4@ 12" O.C. W/ B&S 2X6 @ 16" O.C.

2X4@ 24" O.C.

2X4 @ 24" O.C

2X4 @ 16" O.C.

2X4 @ 16" O.C.W/ B

2X6@ 16" O.C. W/ B

(2)2X4@ 16" O.C. W/B

2X60 12" O.C.

2X8 @ 16" O.C.

Non Bearing)

2x4@ 16" O.C.

2x6 @ 16" O.C.

2x6 @ 12" O.C.

(2) 2x4@ 12" O.C. W/ B (2) 2x6@ 16" O.C. W/ B&S

(2) 2x4@ 12" O.C. W/ B (2) 2x6@ 12" O.C. W/ B&S

• Table based on 115 MPH wind zone, Exposure B, L/240 deflection

• B= Blocking: 2x Horizontal blocking at 6' o.c. vert. with (2) 10d nails

• If wall supports 2 stories and a roof, add 2' to the actual wall height

. If wall supports only roof, subtract 2' to the wall actual wall height

2) Engineered Beams single ply = 1.75" wide w/ Fb of: LVL= 2600 psi, LSL

3) All floor framing per NCRC 2018 CH 5. All Wall framing per NCRC 2018

9) Typically, load bearing walls (LBW) are shown hatched in red. Nearby

girders and beams should be assumed to be directly supporting these

10) All LVL beams of 3 ply or more shall be fastened with 44" dia bolts at

16" o.c. staggered w/ 2" min edge distance from top/bottom edge UON.

Strap all stud columns of 4 or more with (3) horizontal CS22 straps.

2 ply LVLs shall be fastened with (4) #9 3" long wood screws UON.

12) All beam bearings shall be no less than 3". All other bearing to be

11) Circled numbers indicate number of 2x4/2x6 studs in a stud column.

4) All I-joists and floor truss framing per supplier's specifications

= 2325 psi. PSL (columns) shall be 3.5" wide w/ F'b = 1344 psi

• S= Strapping: CS22 strapping to the interior face of the center 2/3rd

height of every other stud. Half populate with 10d x  $1.5^{\prime\prime}$  nails.

1) All dimensional lumber to be Spruce Pine Fir No.2 or better.

5) All structural steel shall be ASTM A-36; Fy= 36 KSI.

7) All welds to be installed by a certified AWS welder.

8) Install double joist under all walls parallel with joists.

6) All weld material shall be 70 KSI material.

2x6 @ 12" O.C. W/ B 2x8 @ 16" O.C. W/ B

(2) 2x6@ 16" O.C. W/ B 2X8 @ 12" O.C.

2x4@ 12" O.C. W/ B&S

2x4@ 12" O.C. W/ B&S

(2)2x4@ 12" O.C. W/ B&S

2x6 @ 12" O.C. W/ B&S

2x6 @ 12" O.C. W/ B&S

- 1) Unless otherwise noted, lateral bracing is found sufficient and compliant with minimum requirements set forth in NCRC 2018 Table R602.10.2 provided all exterior walls are sheathed at the exterior per CS-WSP, R602.10.3 which includes 2x4 (min) studs at 16" o.c. sheathed with 7/16" OSB w/ (1)8d nail at 6" o.c. edge and (1)8d nail at 12" o.c. field. Typically, required length of CS-WSP at each designated shear walls are shown on plans.
- 2) All noted Portal Frame (P-F) shall be compliant with R602.10.1
- 3) All locations noted with "HD" shall be 800 lbs min capacity. Options include 36" long CS16 straps fully populated with 10d nails, centered at interface, Simpson MSTC66B3Z or Simpson LSTA21. Install CS16 strap from top plate to 16" below top of stud.
- 4) Minimum corner return in each direction shall be 24" of wood structural panel unless otherwise noted.
- (2) 2X4 @ 16" OC W/ B 5) Walls noted as GB2 shall be framed in accordance with R602.10.2

# Wood Deck Notes:

- 1) All lumber to be pressure treated Spruce Pine Fir No.2 or better.
- 2) Band attachments to be installed per NCRC 2018, Appendix M (AM 104.1(1))
- 3) Install lateral bracing AM109.1
- 4) Install handrails per AM111.1 5) Max Post Heights per AM 108.1
- 6) Stair Stringers per AM 107.1

# Screened in and Covered Porch Notes:

- 1) All wood deck notes apply.
- 2) Posts to be attached to footings, slab or CMU piers using ABU44 or ABU66 post base (or applicable size).
- 3) Uplift for posts to headers may be either (2) Simpson LCE4, (2) Simpson GA2 clips with 3" long #9 screws or (4) %" diameter, 5" long LedgerLoks driven at a 45" degree angle to each side of posts or notched 50% width w/ (2) LedgerLoks.
- 4) Uplift for posts to floor framing may be either (2) Simpson GA2 clips with 3" long #9 screws or (4) 4" diameter, 5" long LedgerLoks driven at a 45" degree angle to each side.

# Roof Framing Notes:

- 1) All roof framing shall be in accordance with NCRC 2018 CH 9.
- 2) All dimensional lumber to be Spruce Pine Fur No.2 or
- 3) All flat valleys for over-framed roofs shall be
- 4) Sheath with 7/16" OSB w/ 8d nails at 6" o.c. edge
- 5) All collar ties to be installed no higher than 1/3rd height eave to ridge up from eave nailed with (5) 10d nails at each end. UON
- 6) Roof trusses per others; installation per supplier guidelines.

- 1) All temporary shoring, means and methods are the responsibility of the contractor.
- 2) All dimensions to be verified by the contractor in
- 3) Takla Engineering assumes no responsibility for safety of project delivery.
- 4) Any questions pertaining to structural components should be immediately brought to the attention of Takla Engineering.
- 5) Limitations: Services provided are in accordance with the standard of practice for structural engineering and within the limits imposed by scope, schedule and budget. The determinations contained in this report are based on conditions observed at the time of the evaluation. No quarantees or warranties, expressed or implied, under this Agreement or otherwise, shall be construed in connection with services provided. Sequencing, shoring, means and methods of construction are considered beyond the scope of this design. Takla Engineering shall not be

# Abbreviations: any safety aspect of Work.

•	CONC	Concrete
•	CONT.	Continuous
•	C.J	Ceiling Joists
•	CMU	Conc Masonry Unit
•	CS-WSP	Sheathing per R602.10.3

DIA Diameter DBL Double

DJ / DR Double Joist / Rafter

EQ Equal EEEach End FJFND FT

GB Gypsum Board (shear wall)

HGR HDLBW

NTS Not To Scale On Center o.c.

PL

attached using (3) 3" long #9 screws at each main

and 12" o.c. field.

Floor Joist Foundation Floor Truss FTG Footing GRT Girder Roof Truss Hanger Holddowns Load Bearing Wall MANUF Manufacturer

O.F. Over-framed (roof) PFPortal Frame

Point Load P.T. Pressure Treated R.T. Roof Truss SC Stud Column

SIM Similar STGR Staggered SUP Supplier TYP. Typical

UON Unless Otherwise Noted



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A.A. Takla Engineering, PLLC

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Project: Location Company: Care of: Subject: Job No.:

[X] For Construction [] Not for Construction

PROJ# 0508-20 DATE: 11/22/20

REVISIONS: 1 SHEET TITLE:

STRUCTURAL NOTES

SHEET: 2

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