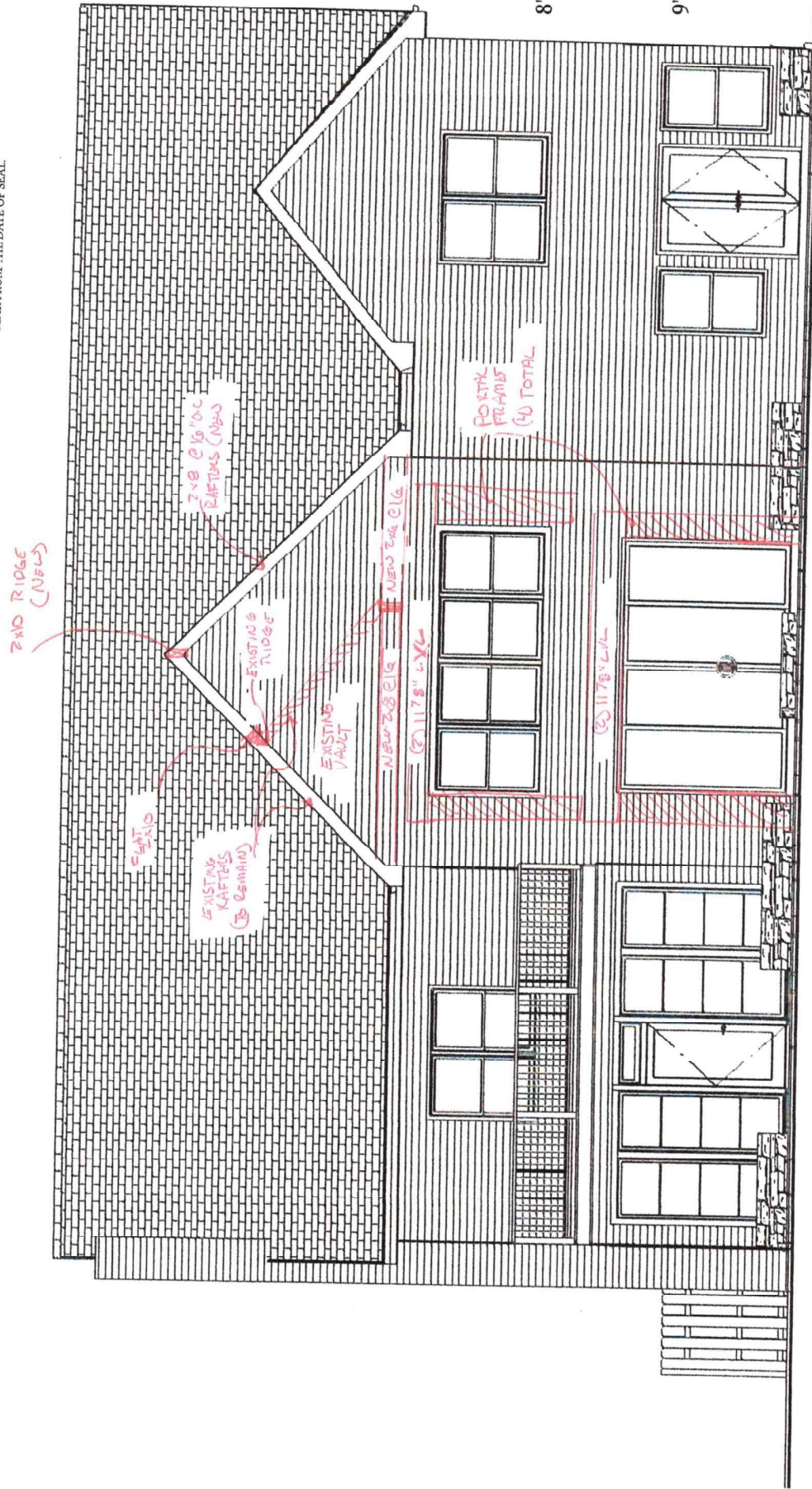




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NEW LOOF FRAMING
 SECTION

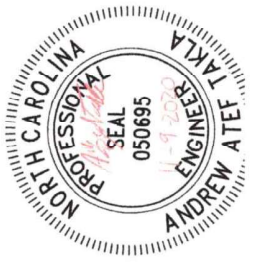
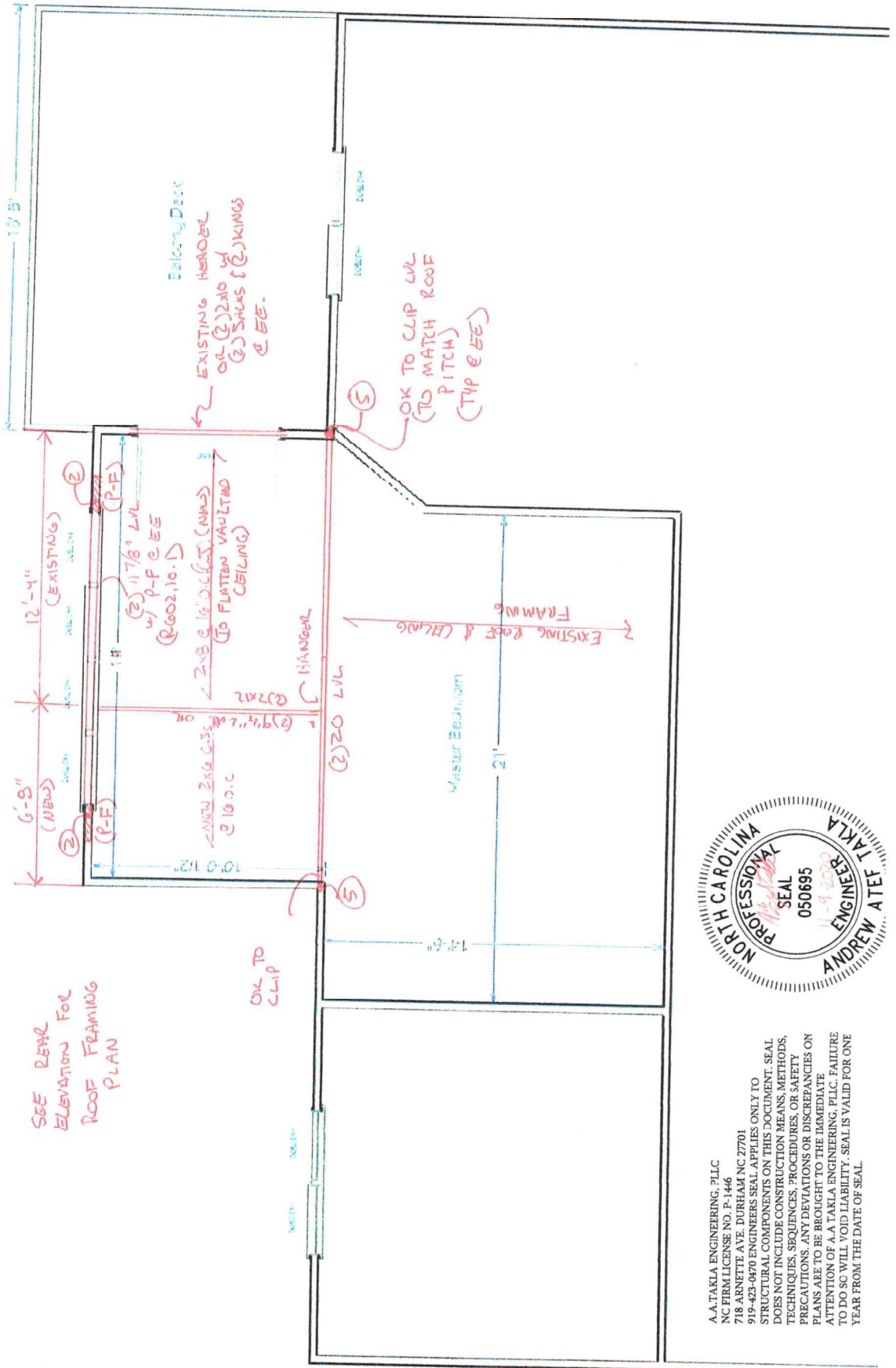


8' ceiling height

9' ceiling height

2nd STORY CEILING FRAMING

SEE REAR ELEVATION FOR ROOF FRAMING PLAN



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Design Loads: (Exceeds minimum requirements set forth by code)

Live Load (PSF)	Dead Load (PSF)	Deflection (Max)
40	10	L/360
25	10	L/360
10	10	L/360
60	10	L/240
20	15	L/240
115 MPH (UON)	115 MPH (UON)	L/240

General Plan Reading Notes:

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

Foundation Notes:

- Assumed soil load bearing capacity = 2000 PSF
- Minimum 28 day f'c of concrete = 3000 PSI
- Foundations to be built in accordance with NCR 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
- Install anchor bolts per R403.1.6.
- All slabs shall be 4" thick, 3000 psi concrete slab on 4" of #5 sub-base w/ a 6 mil vapor barrier (if used in an interior or garage application) w/ 10/10 6x8 welded wire fabric UON.
- All slabs shall be on compacted fill or full depth self consolidated structural fill (#57) (at porches, garages and stem wall slabs UON).
- All suspended slabs on metal pans shall utilize 16GA type B UON.
- Max unreinforced, unbalanced condition of any CMU wall shall be 36". Any foundation wall subjected to 24" or unbalanced fill or more shall be fully grouted. Top course of all foundation walls shall be fully grouted.
- Max CMU pier height to be 4x its least horizontal dimension. All piers shall be fully grouted.
- 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.

Footings Schedule:

A = 16"x16"x8"	E = 36"x36"x12"
B = 20"x20"x8"	F = 40"x40"x12"
C = 24"x24"x10"	G = 48"x48"x12"
D = 30"x30"x12"	H = All rebar in footings to have 3" cover.

Header Schedule:

A = (2) 2x6 w/ (1) 2x4 Jack @ EE
B = (2) 2x6 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 @

King Stud Schedule:

A = 0'-3" wide = (1) 2x4 @ EE
B = 3'-6" wide = (2) 2x4 @ EE
C = 6'-9" wide = (3) 2x4 @ EE
D = 10'-0" wide = (4) 2x4 @ EE
E = If wall is 2x6, King studs shall be 2x6.

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

Stud Schedule for Walls 10' or Taller (supporting 1 + roof)

Height Interior (Load Bearing)	Exterior (Lead Bearing or Non-Bearing (LWB Non Bearing))
10'	2x4 @ 16" O.C.
11'	2x4 @ 12" O.C. w/ B&S 2x6 @ 16" O.C.
12'	2x4 @ 12" O.C. w/ B&S 2x6 @ 12" O.C.
13'	(2) 2x4 @ 12" O.C. w/ B&S 2x6 @ 12" O.C. w/ B&S
14'	2x4 @ 12" O.C. w/ B 2x6 @ 12" O.C. w/ B&S
15'	(2) 2x4 @ 12" O.C. w/ B 2x6 @ 12" O.C. w/ B
16'	(2) 2x4 @ 12" O.C. w/ B 2x6 @ 12" O.C. w/ B
17'	(2) 2x4 @ 12" O.C. w/ B 2x6 @ 12" O.C. w/ B

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 @ EE
- 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.
- If wall supports only roof, subtract 2' to the wall actual wall height and apply table.
- Examined Note

Examined Note:

- All dimensional lumber to be Spruce Pine Fir No.2 or better.
- Engineered Beams single ply = 1.75" wide w/ FB of: IWM= 2600 psi, LSL = 2325 psi, FSL (columns) shall be 3.5" wide w/ F'b = 1344 psi
- All floor framing per NCR 2018 CH 5. All Wall framing per NCR 2018 CH 6.
- All I-joists and floor truss framing per supplier's specifications and layout.
- All structural steel shall be ASTM A-36; Fy= 36 KSI.
- All weld to be installed by a certified AWS welder.
- Typically, load bearing walls (LBW) are shown hatched in red. Nearby girders and beams should be assumed to be directly supporting these LBWs, UON.
- All LVL beams of 3 ply or more shall be fastened with 1/2" dia bolts at 2 ply LVLs shall be fastened with (4) #3 3" long wood screws UON.
- Strap all stud columns of 4 or more with (3) horizontal CS22 straps.
- All beam bearings shall be no less than 3". All other bearing to be 2" min.
- 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.
- Install all hardware per manufacturer's guidelines.

Internal Bracing:

- Unless otherwise noted, lateral bracing is found sufficient and compliant with minimum requirements set forth in NCR 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.
- All noted Portal Frame (P-F) shall be compliant with R602.10.1.
- All locations noted with "EP" shall be 800 lbs min capacity. Options include 36" long GS16 straps fully populated with 10d nails, centered at interface, Simpson M57C6B3Z or Simpson L57M1. Install CS16 strap from top plate to 1/2" below top of stud.
- Minimum corner return in each direction shall be 24" of wood structural panel unless otherwise noted.
- Walls noted as GB shall be framed in accordance with R602.10.2

Wood Deck Notes:

- All lumber to be pressure treated Spruce Pine Fir No.2 or better.
- Band attachments to be installed per NCR 2018, Appendix M (AM 104.1(1))
- Install lateral bracing AM109.1
- Install handrails per AM111.1
- Max Post Heights per AM 108.1
- Stair Stringers per AM 110.1

Screened in and Covered Porch Notes:

- All wood deck notes apply.
- Posts to be attached to footings, slab or CMU piers using A3044 or A3065 post base (or applicable size).
- Uplift for posts to headers may be either (2) Simpson LCEs, (2) Simpson G1 clips with 3" long #9 screws or (4) 1/2" diameter, 5" long LedgerLoks driven at a 45 degree angle to each side of posts or notched 50% width w/ (2) LedgerLoks.
- Uplift for posts to floor framing may be either (2) Simpson G1 clips with 3" long #9 screws or (4) 1/2" diameter, 5" long LedgerLoks driven at a 45 degree angle to each side.

Roof Framing Notes:

- All roof framing shall be in accordance with NCR 2018 CH 9.
- All dimensional lumber to be Spruce Pine Fir No.2 or better.
- All flat valleys for over-framed roofs shall be attached using (3) 3" long #9 screws at each main rafter.
- Sheath with 7/16" OSB w/ 8d nails at 6" o.c. edge and 12" o.c. field.
- 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
- Roof trusses per others; installation per supplier guidelines.

General Construction Notes:

- All temporary shoring, means and methods are the responsibility of the contractor.
- All dimensions to be verified by the contractor in the field.
- Takla Engineering assumes no responsibility for safety of project delivery.
- Any questions pertaining to structural components should be immediately brought to the attention of Takla Engineering.
- 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 guarantees 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 responsible for any safety aspect of Work.

Abbreviations:

- CONC Concrete
- CONT. Continuuous
- 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
- EE Each End
- FJ Floor Joist
- FND Foundation
- FT Floor Truss
- FTG Footing
- GB Gypsum Board (shear wall)
- GRT Girder Roof Truss
- HGR Hanger
- HD Holdowns
- LSW Load Bearing Wall
- MANUF Manufacturer
- NCT To Scale
- On Center
- O.F. Over-framed (roof)
- PF Portal Frame
- PL Point Load
- Pressure Treated
- Roof Truss
- R.T.
- SC Stud Column
- SIM Similar
- STGR Staggered
- SUP Supplier
- Typical
- UON Unless Otherwise Noted

A.A. Takla Engineering, PLLC

Consulting. Design. Efficiency.

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Project: 57 Inlet View

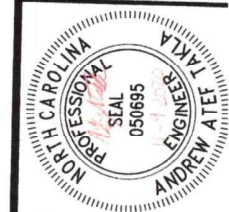
Location: Sanford, NC

Company: Frey's Building and Remodeling

Care of: Scott Frey

Subject: Structural Notes

Job No.: 0434-20



STRUCTURAL NOTES

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