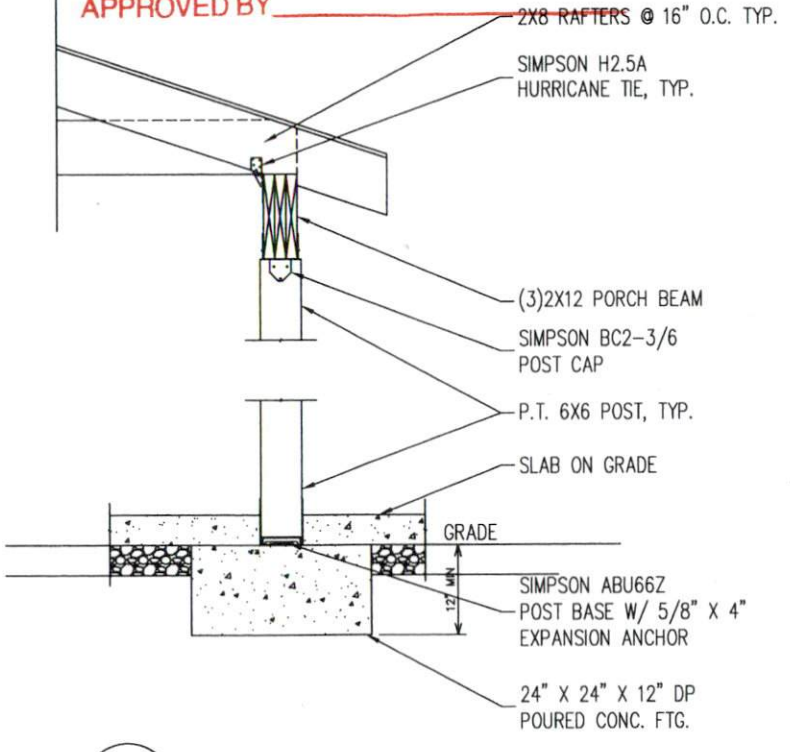
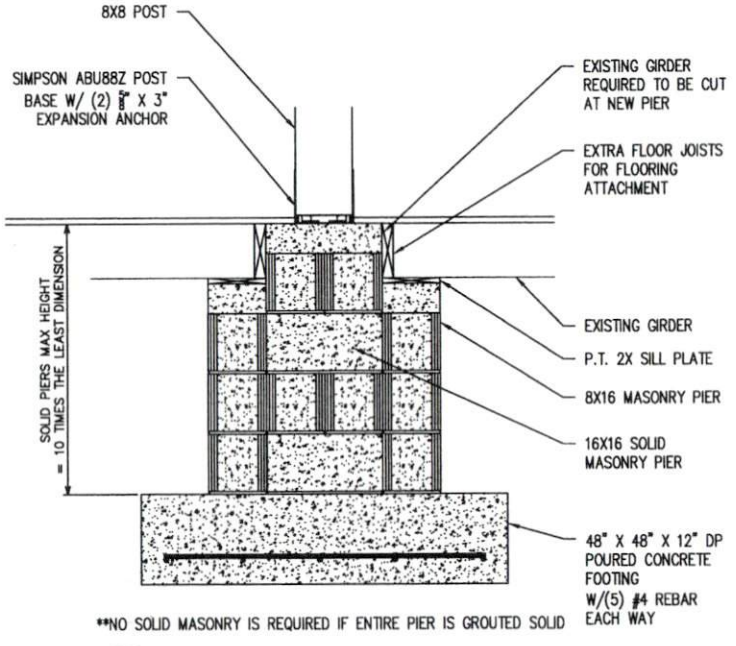
HARNETT COUNTY CENTRAL PERMITTING
APPLICATION # BRES1902-0003
JOB NAME Dale Backus
DATE PLANS RECEIVED 2-4-19
SITE PLANS APPROVED
APPROVED BY



1/S1 PORCH POST DETAIL
SCALE : 3/4" = 1'-0"

Harnett COUNTY NORTH CAROLINA

Approved
button 02/06/2019



**NO SOLID MASONRY IS REQUIRED IF ENTIRE PIER IS GROUTED SOLID

2/S1 HIGH PIER DETAIL
SCALE : 3/4" = 1'-0"

PROPOSED FRAMING DETAIL
SCALE: 3/4" = 1'-0"

PLANS PREPARED FOR:
DALE AND CORI BACKUS
255 SHUE ROAD
BROADWAY, NC 27505

PROJECT INFORMATION:
ROOF REPLACEMENT & FRONT PORCH
255 SHUE ROAD
BRAODWAY, NC 27505
(HARNETT COUNTY)

PLANS PREPARED BY:
PAK KEUNG YIP, PE
1501 HERITAGE CLUB AVE.
WAKE FOREST, NC 27587
(919) 412-5431
pkyip@pkyipengineering.com

PROJECT NUMBER:
2019-SI-002

SEAL:
NORTH CAROLINA PROFESSIONAL SEAL 035639 ENGINEER PAK KEUNG YIP
Date: FEBRUARY 3RD, 2019

REV	DATE	ISSUED FOR:
0	2-3-19	CONSTRUCTION DRAWING

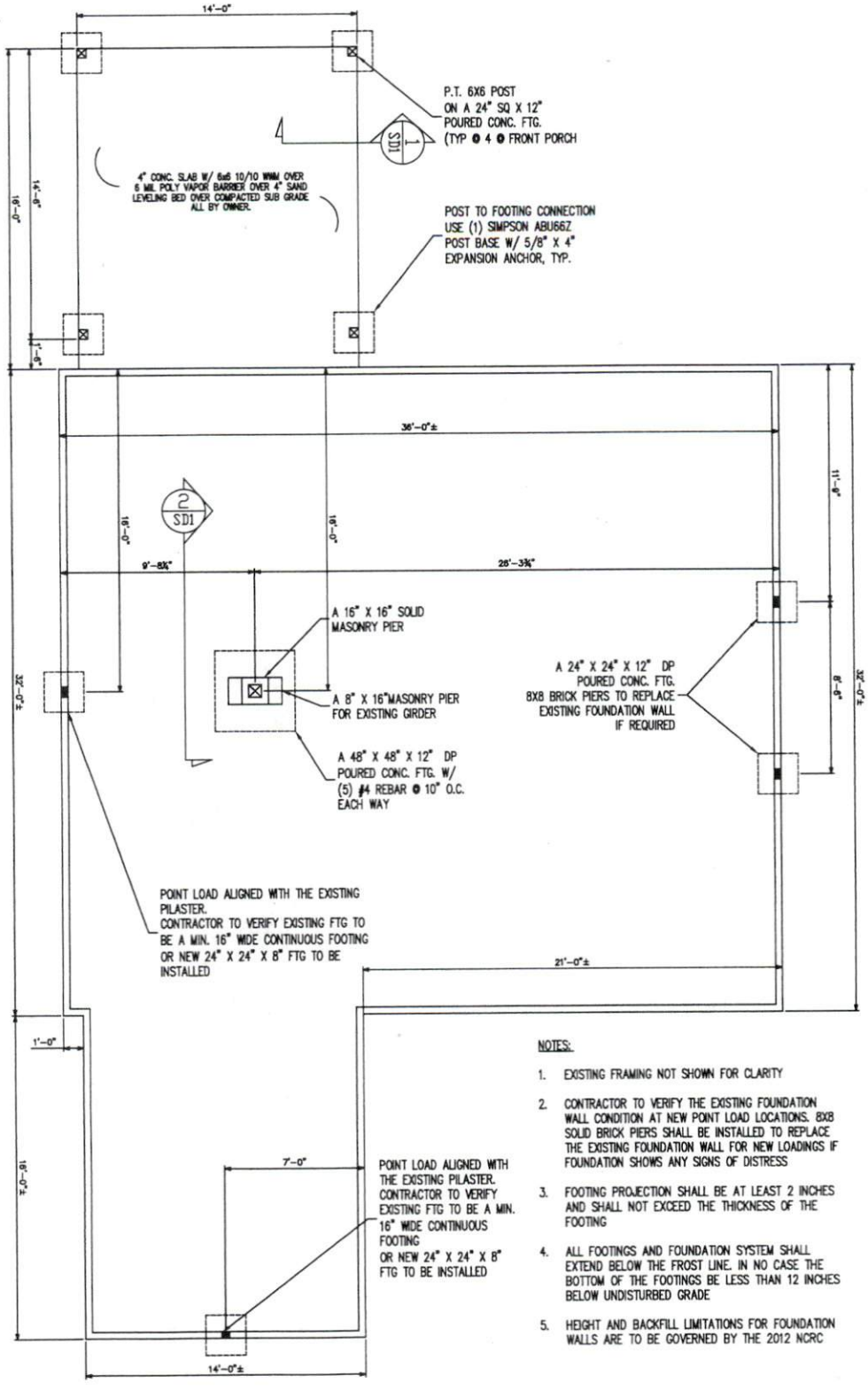
DRAWN BY: PKY | CHECKED BY: PKY

SHEET TITLE:
PROPOSED FRAMING DETAILS

SHEET NUMBER: **SD-1**
REVISION: **0**

PROPOSED FOUNDATION PLAN

SCALE: 3/16" = 1'-0"



NOTES:

1. EXISTING FRAMING NOT SHOWN FOR CLARITY
2. CONTRACTOR TO VERIFY THE EXISTING FOUNDATION WALL CONDITION AT NEW POINT LOAD LOCATIONS. 8X8 SOLID BRICK PIERS SHALL BE INSTALLED TO REPLACE THE EXISTING FOUNDATION WALL FOR NEW LOADINGS IF FOUNDATION SHOWS ANY SIGNS OF DISTRESS
3. FOOTING PROJECTION SHALL BE AT LEAST 2 INCHES AND SHALL NOT EXCEED THE THICKNESS OF THE FOOTING
4. ALL FOOTINGS AND FOUNDATION SYSTEM SHALL EXTEND BELOW THE FROST LINE. IN NO CASE THE BOTTOM OF THE FOOTINGS BE LESS THAN 12 INCHES BELOW UNDISTURBED GRADE
5. HEIGHT AND BACKFILL LIMITATIONS FOR FOUNDATION WALLS ARE TO BE GOVERNED BY THE 2012 NCRC

PLANS PREPARED FOR:
DALE AND CORI BACKUS
255 SHUE ROAD
BROADWAY, NC 27505

PROJECT INFORMATION:
ROOF REPLACEMENT & FRONT PORCH
255 SHUE ROAD
BROADWAY, NC 27505
(HARNETT COUNTY)

PLANS PREPARED BY:

PAK KEUNG YIP, PE
1501 HERITAGE CLUB AVE.
WAKE FOREST, NC 27587
(919) 412-5431
pky@pkypengineering.com

PROJECT NUMBER:
2019-SI-002

SEAL:

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 035639 PAK KEUNG YIP
Date: FEBRUARY 3RD, 2019

REV	DATE	ISSUED FOR:
0	2-3-19	CONSTRUCTION DRAWING

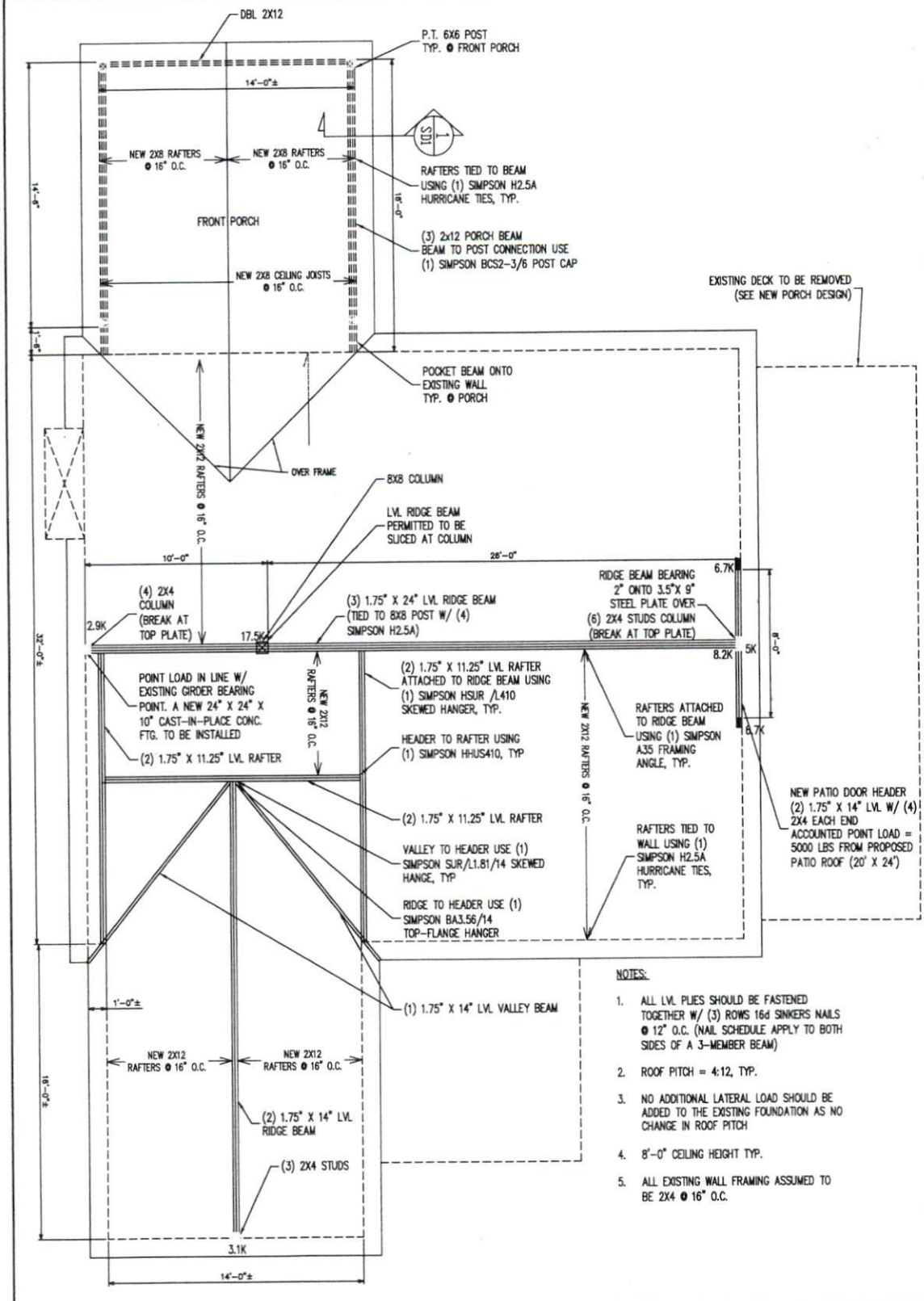
DRAWN BY: PKY | CHECKED BY: PKY

SHEET TITLE:
PROPOSED FOUNDATION PLAN

SHEET NUMBER: S-1 | REVISION: 0

PROPOSED ROOF FRAMING PLAN

SCALE: 3/16" = 1'-0"



NOTES:

1. ALL LVL PLIES SHOULD BE FASTENED TOGETHER W/ (3) ROWS 16d SINKERS NAILS @ 12" O.C. (NAIL SCHEDULE APPLY TO BOTH SIDES OF A 3-MEMBER BEAM)
2. ROOF PITCH = 4:12, TYP.
3. NO ADDITIONAL LATERAL LOAD SHOULD BE ADDED TO THE EXISTING FOUNDATION AS NO CHANGE IN ROOF PITCH
4. 8'-0" CEILING HEIGHT TYP.
5. ALL EXISTING WALL FRAMING ASSUMED TO BE 2X4 @ 16" O.C.

PLANS PREPARED FOR:
DALE AND CORI BACKUS
255 SHUE ROAD
BROADWAY, NC 27505

PROJECT INFORMATION:
ROOF REPLACEMENT & FRONT PORCH
255 SHUE ROAD
BROADWAY, NC 27505
(HARNETT COUNTY)

PLANS PREPARED BY:

PAK KEUNG YIP, PE
1501 HERITAGE CLUB AVE.
WAKE FOREST, NC 27587
(919) 412-5431
pky@pkypengineering.com

PROJECT NUMBER: 2019-SI-002

SEAL:

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 035639 PAK KEUNG YIP
1ST FEBRUARY RD, 2019

REV	DATE	ISSUED FOR:
0	2-3-19	CONSTRUCTION DRAWING

DRAWN BY: PKY | CHECKED BY: PKY

SHEET TITLE: PROPOSED ROOF FRAMING PLAN

SHEET NUMBER: S-2

REVISION: 0

GENERAL REQUIREMENTS & DESIGN CRITERIA

1. BUILDING CODE AND REFERENCE STANDARDS:
ALL CONSTRUCTION AND DESIGN SHOULD CONFORM TO 2012 NORTH CAROLINA RESIDENTIAL CODE

2. CONTRACTOR IS RESPONSIBLE FOR THE MEANS, METHODS, PROCEDURES, TECHNIQUES, SEQUENCES OF CONSTRUCTION AND ALL JOB RELATED SAFETY STANDARDS SUCH AS OSHA.

3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS RELATING TO EXISTING CONDITIONS BY MAKING FIELD SURVEYS AND MEASUREMENTS PRIOR TO COMMENCING FABRICATION OR CONSTRUCTION.

4. CONTRACTOR SHALL COMPARE AND COORDINATE THE DRAWINGS OF ALL DISCIPLINES AND REPORT ANY DISCREPANCIES BETWEEN THE DRAWINGS TO THE ARCHITECT AND ENGINEER.

5. DESIGN LOADING:

LIVE LOAD:

1.	ROOF LIVE LOAD	= 20 PSF
2.	FLOOR LIVE LOAD	= 40 PSF
3.	ATTIC WITH LIMITED STORAGE	= 20 PSF
4.	ATTIC WITHOUT STORAGE	= 10 PSF
5.	DECKS	= 40 PSF
6.	STAIRS	= 40 PSF

WIND LOAD:
WIND SPEED = 95 MPH (ASCE 7-05); CAT II; EXP B

GROUND SNOW LOAD: = 15 PSF

SEISMIC: = NOT CONTROLLING

FOUNDATION

1. FOUNDATIONS BEARING ON EXISTING SOILS HAVE BEEN DESIGNED FOR A MINIMUM ALLOWABLE SOIL BEARING CAPACITY OF 2000 PSF, U.N.O.

2. ALL TOP SOIL, ORGANIC AND VEGETATIVE MATERIAL SHOULD BE REMOVED PRIOR TO CONSTRUCTION. ANY REQUIRED FILL SHALL BE CLEAN, GRANULAR MATERIAL COMPACTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557.

3. BACKFILL SHALL NOT BE PLACED AGAINST THE WALL UNTIL THE WALL HAS SUFFICIENT STRENGTH AND HAS BEEN ANCHORED TO THE FLOOR ABOVE OR HAS BEEN SUFFICIENTLY BRACED TO PREVENT DAMAGE BY THE BACKFILL.
(NCRC R404.1.7)

4. DRAINS SHALL BE PROVIDED AROUND ALL CONCRETE OR MASONRY FOUNDATIONS THAT RETAIN EARTH AND ENCLOSE HABITABLE OR USABLE SPACES LOCATED BELOW GRADE. (NCRC R405.1)
EXCEPTION: A DRAINAGE SYSTEM IS NOT REQUIRED WHEN THE FOUNDATION IS INSTALLED ON WELL-DRAINED GROUND OR SAND-GRAVEL MIXTURE SOILS ACCORDING TO THE UNIFIED SOIL CLASSIFICATION SYSTEM, GROUP I SOILS, AS DETAILED IN TABLE R405.1.

5. FOUNDATION WALLS THAT RETAIN EARTH AND ENCLOSE INTERIOR SPACES, AND FLOORS BELOW GRADE SHALL BE DAMPPROOFED FROM THE TOP OF THE FOOTING TO THE FINISHED GRADE.

STRUCTURAL STEEL SPECIFICATIONS

1. STEEL DESIGN, FABRICATION, AND ERECTION SHALL CONFORM WITH "ANSI/AISC 360-10 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS"

MATERIALS:	
W-SHAPES	ASTM A992
S-SHAPES, M-SHAPES	ASTM A36
C-SHAPES & MC-SHAPES	ASTM A36
ANGLES & PLATES	ASTM A36
HSS SHAPES	ASTM A500, GRADE B
STEEL PIPE	ASTM A53, GRADE B
HIGH STRENGTH BOLTS	ASTM A325
COMMON BOLTS	ASTM A307
ANCHOR RODS	ASTM F1554, GRADE 55
WELDED HEADED STUDS	ASTM A108
DEFORMED BAR ANCHORS	ASTM A496
WELDING ELECTRODES	AWS D1.1, E70 SERIES

2. WELDING SHALL CONFORM WITH THE LATEST AWS D1.1 "SPECIFICATIONS FOR WELDING IN BUILDING CONSTRUCTION", AND SHALL UTILIZE E7XXX ELECTRODES UNLESS NOTED OTHERWISE.

CONCRETE AND REINFORCING STEEL SPECIFICATIONS

1. CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 318-08, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"

2. CONCRETE SHALL HAVE A MINIMUM OF 3000 PSI, 28 DAY COMPRESSIVE STRENGTH, UNLESS NOTED OTHERWISE.

3. REINFORCING BARS, DOWELS AND TIES SHALL CONFORM TO ASTM-615 GRADE 60 REQUIREMENTS AND SHALL BE FREE OF RUST, DIRT, AND MUD.

4. STEEL REINFORCEMENT FOR FOUNDATION WALL SHALL HAVE CONCRETE COVER CONFORM TO ACI 318-08.

CONCRETE MASONRY SPECIFICATIONS

1. CONCRETE MASONRY MATERIALS AND CONSTRUCTION SHALL CONFORM TO ACI 530-08 BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES

2. CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C 90. MINIMUM NET AREA COMPRESSIVE STRENGTH OF MASONRY UNITS SHALL BE 1,500 PSI AT 28 DAYS.

3. MORTAR SHALL BE TYPE M OR S AND SHALL COMPLY WITH ASTM C270, PROPORTIONS OR PROPERTIES SPECIFICATION.

4. WEEPHOLES SHALL BE PROVIDED IN THE OUTSIDE WYTHE OF MASONRY WALLS AT A MAXIMUM SPACING OF 48 INCHES ON CENTER. WEEPHOLES SHALL NOT BE LESS THAN 3/16 INCH (5 MM) IN DIAMETER. WEEPHOLES SHALL BE LOCATED IMMEDIATELY ABOVE THE FLASHING. (NCRC R703.7.6)

5. APPROVED CORROSION-RESISTANT FLASHING SHALL BE APPLIED SHINGLE-FASHION IN A MANNER TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS. (NCRC R703.8)

WOOD SPECIFICATIONS

1. WOOD MATERIALS AND CONSTRUCTION SHALL CONFORM TO NDS-05 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION AND APA E30-03 ENGINEERED WOOD CONSTRUCTION GUIDE.

2. DIMENSIONAL LUMBER USED AS STRUCTURAL FRAMING (I.E. JOISTS, RAFTERS, HEADERS, BEAM, OR GIRDERS) SHALL BE SPRUCE PINE FIR #2 OR EQUAL.

3. DIMENSIONAL LUMBER USED AS STUD FRAMING SHALL BE MINIMUM NO.3 OR STUD GRADE LUMBER.

4. LAMINATED VENEER LUMBER (LVL) MINIMUN ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS:
E= 2,000,000 PSI, FB = 3100 PSI, FV = 285 PSI, FC = 750 PSI

5. STRUCTURAL WOOD PANEL SHALL CONFORM TO THE REQUIREMENTS OF PS 1, STRUCTURAL PLYWOOD, ESTABLISHES REQUIREMENTS FOR STRUCTURAL PLYWOOD. PS 2, PERFORMANCE STANDARD FOR WOOD-BASED STRUCTURAL-USE PANELS, ESTABLISHES REQUIREMENTS FOR STRUCTURAL WOOD-BASED PANELS SUCH AS ORIENTED STRAND BOARD (OSB).

6. ROOF AND WALL SHEATHING SHALL BE APA RATED 5-PLY 7/16" PLYWOOD OR OSB SHEATHING.

7. FLOOR SHEATHING SHALL BE TONGUE AND GROOVE APA RATED 5-PLY 3/4"PLYWOOD OR OSB SHEATHING.

8. ALL WOOD IN CONTACT WITH THE GROUND, EMBEDDED IN CONCRETE, IN DIRECT CONTACT WITH THE GROUND OR EMBEDDED IN CONCRETE EXPOSED TO THE WEATHER THAT SHALL BE APPROVED PRESSURE TREATED.

9. ALL LUMBER SHALL HAVE A MAXIMUM MOISTURE CONTENT OF 19% AT THE TIME OF GRADING.

10. NAILS AND STAPLES SHALL CONFORM TO REQUIREMENTS OF ASTM F1667. HOLES SHOULD BE PRE-DRILLED WHERE NECESSARY TO PREVENT SPLITTING.

11. COMPONENT OF EXTERIOR WALLS SHALL BE FASTENED IN ACCORDANCE WITH NCRC TABLE R602.3(1) THROUGH R602.3(4).

12. DRILLING AND NOTCHING OF STUD AND TOP PLATE SHOULD BE ACCORDANCE WITH NCRC R502.6 THROUGH R502.6.1

13. THE END OF EACH JOIST, BEAM OR GIRDER SHALL NOT HAVE LESS THAN 1.5 INCHES OF BEARING ON WOOD OR METAL AND NOT LESS THAN 3 INCHES ON MASONRY OR CONCRETE.

STRUCTURAL NOTES

PLANS PREPARED FOR:

DALE AND CORI BACKUS

255 SHUE ROAD
BROADWAY, NC 27505

PROJECT INFORMATION:

ROOF REPLACEMENT & FRONT PORCH

255 SHUE ROAD
BRAODWAY, NC 27505
(HARNETT COUNTY)

PLANS PREPARED BY:

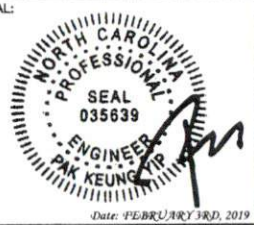
PAK KEUNG YIP, PE

1501 HERITAGE CLUB AVE.
WAKE FOREST, NC 27587
(919) 412-5431
pkyip@pkyipengineering.com

PROJECT NUMBER:

2019-SI-002

SEAL:



Date: FEBRUARY 3RD, 2019

REV	DATE	ISSUED FOR:
0	2-3-19	CONSTRUCTION DRAWING

DRAWN BY: PKY | CHECKED BY: PKY

SHEET TITLE:

STRUCTURAL NOTES

SHEET NUMBER:	REVISION:
SD-2	**0**