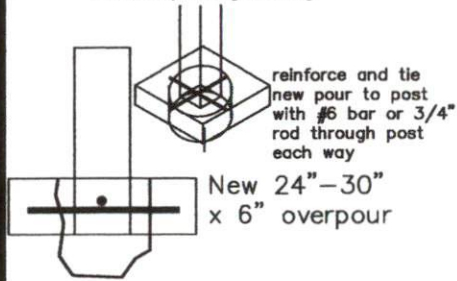


NOTE TO BUILDER:
 It is the sole responsibility
 of the builder to verify and
 verify these plans according to
 the applicable codes (IRC) and to understand
 every part of these plans herein.

Required ALL perimeter posts
 Reinforce / Enlarge Footing

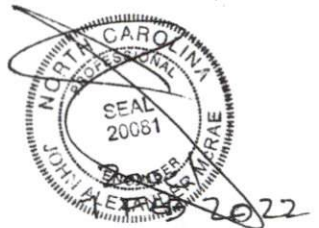
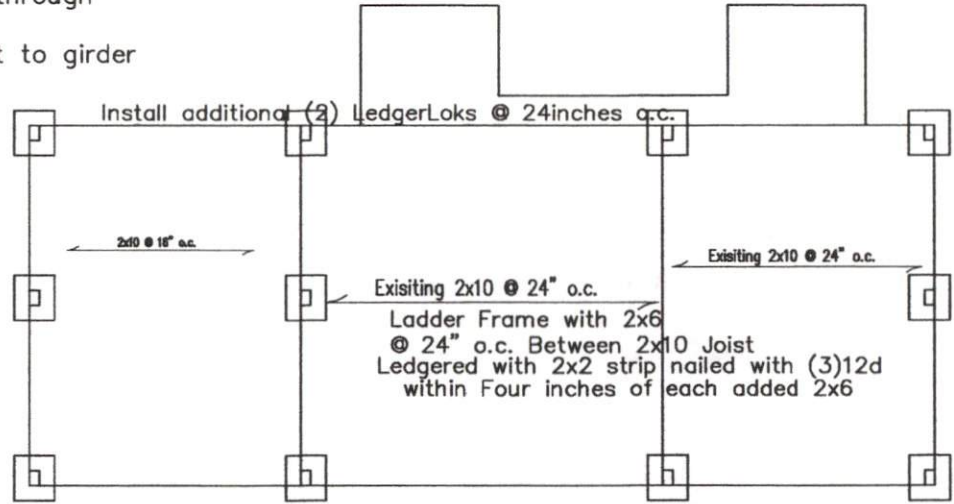
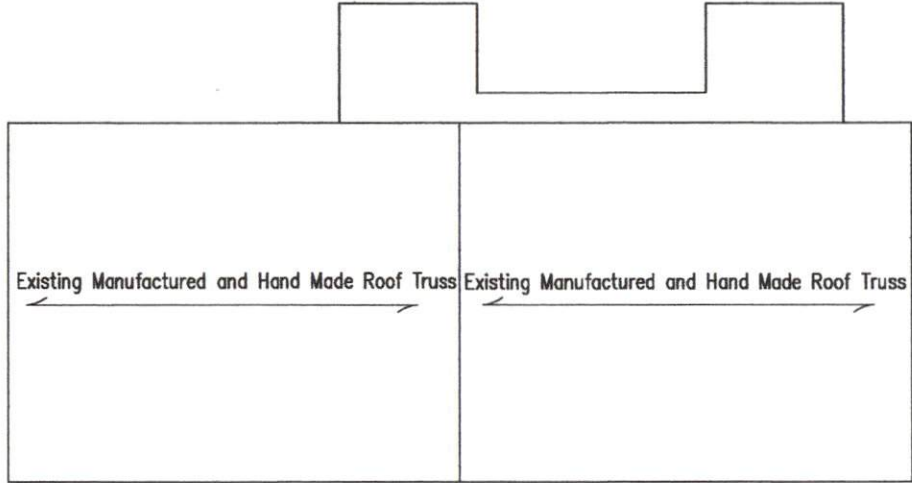


reinforce and tie
 new pour to post
 with #6 bar or 3/4"
 rod through post
 each way

New 24"-30"
 x 6" overpour

Add hurricane clips ALL rafters to
 existing header and at top to flat plate

Attach girder to post with (1) 5/8" through
 bolt or (2) 5/16" ledgerlok screws
 Required ALL Posts to band and post to girder



SCALE: 1/4inch = 1 Foot- 0 Inches

Design to IRC 2015 NCRBC 2018 Residential Building Code

Structural Design By:
 John Alexander McRae, PE, Inc
 218 Coley Farm Rd, Fuquay-Varina, NC 27526
 (919) 210-5749 Fax (919) 552-1738
 Report deficiencies immediately
 2202-11

date:
 2 February 2022

drawn by:
 J A McRae

John Alexander McRae, P.E., Inc.
 Residential and Commercial Engineering
 218 Coley Farm Road Fuquay-Varina NC 27526
 P O Box 1466 Apex, NC 27502
 Cell 919.210.5749 jumppe@jac.ir.com

89 Gillis Court
 Jerry Pounds

sheet no.
S1 of **S1**
 plan no.
2202-11

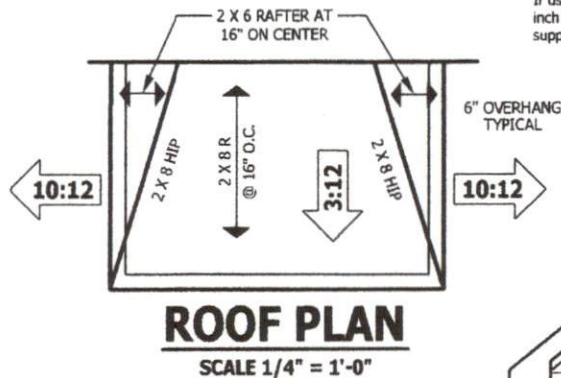
JOHN A. MCRAE, INC. does not assume liability for any deviation of these plans or construction methods. All instructions must be confirmed by contractor prior to commencement of construction.

Z:\Builder\Jerry Pounds Construction, Inc\2102068 Addition\2102068 Study v2 with roof.aec

DECK STAIR NOTES

SECTION AM110

AM110.1 Stairs shall be constructed per Figure AM110. Stringer spans shall be no greater than 7 foot span between supports. Spacing between stringers shall be based upon decking material used per AM107.1. Each Stringer shall have minimum 3 1/2 inches between step cut and back of stringer. If used, suspended headers shall be attached with 3/8 inch galvanized bolts with nuts and washers to securely support stringers at the top.



DECK BRACING

SECTION AM109

AM109.1 Deck bracing. Decks shall be braced to provide lateral stability. The following are acceptable means to provide lateral stability.

AM109.1.1. When the deck floor height is less than 4'-0" above finished grade per Figure AM109 and the deck is attached to the structure in accordance with Section AM104, lateral bracing is not required.

AM109.1.2. 4 x 4 wood knee braces may be provided on each column in both directions. The knee braces shall attach 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 degrees and 60 degrees from the horizontal. Knee braces shall be bolted to the post and the girder/double band with one 5/8 inch hot dipped galvanized bolt with nut and washer at both ends of the brace per Figure AM109.1

AM109.1.3. For freestanding decks without knee braces or diagonal bracing, lateral stability may be provided by embedding the post in accordance with Figure AM109.2 and the following:

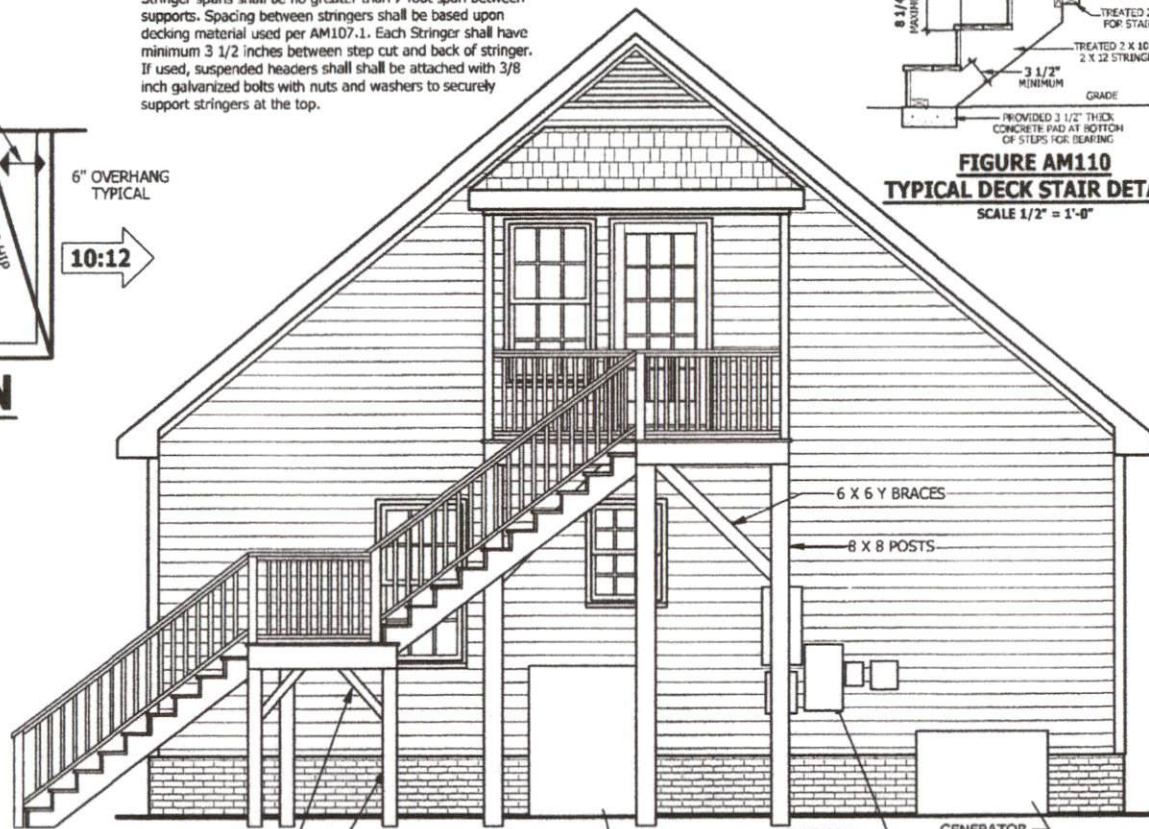
| POST SIZE | MAX. TRIBUTARY AREA | MAX. POST HEIGHT | EMBEDMENT DEPTH | CONCRETE DIAMETER |
|-----------|---------------------|------------------|-----------------|-------------------|
| 4 X 4 | 48 SF | 4'-0" | 2'-6" | 1'-0" |
| 6 X 6 | 120 SF | 6'-0" | 3'-6" | 1'-8" |

AM109.1.4. 2 x 6 diagonal vertical cross bracing may be provided in two perpendicular directions for freestanding decks or parallel to the structure at the exterior column line for attached decks. The 2 x 6's shall be attached to the posts with one 5/8 inch hot dipped galvanized bolt with nut and washer at each end of each bracing member per Figure AM109.3.

AM109.1.5. For embedment of piles in Coastal Regions, see Chapter 45.

PLANS DESIGNED TO THE 2018 NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE

| CLIMATE ZONE | ZONE 4A |
|--------------------------|------------|
| FENESTRATION U-FACTOR | 0.35 |
| SKYLIGHT U-FACTOR | 0.55 |
| GLAZED FENESTRATION SHGC | 0.30 |
| CEILING R-VALUE | 38 or 30ci |
| WALL R-VALUE | 15 |
| FLOOR R-VALUE | 19 |



RIGHT SIDE ELEVATION

SCALE 1/8" = 1'-0"

SQUARE FOOTAGE

| | |
|----------|------------|
| HEATED | |
| STUDY | 506 SQ.FT. |
| TOTAL | 376 SQ.FT. |
| UNHEATED | |
| DECK | 88 SQ.FT. |

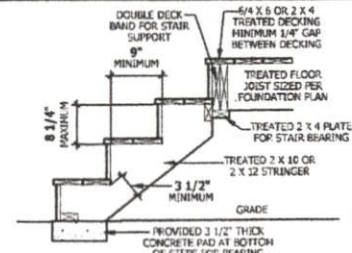
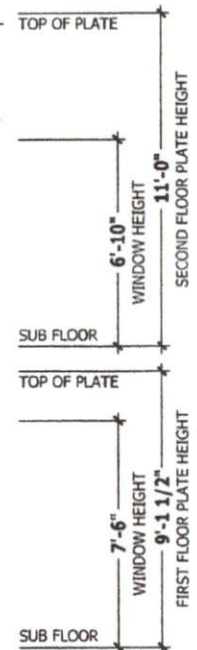


FIGURE AM110
TYPICAL DECK STAIR DETAIL
SCALE 1/2" = 1'-0"



AIR LEAKAGE

Section N1102.4

N1102.4.1 Building thermal envelope. The building thermal envelope shall be durably sealed with an air barrier system to limit infiltration. The sealing methods between dissimilar materials shall allow for differential expansion and contraction. For all homes, where present, the following shall be caulked, gasketed, weather stripped or otherwise sealed with an air barrier material or solid material consistent with Appendix E-2.4 of this code:

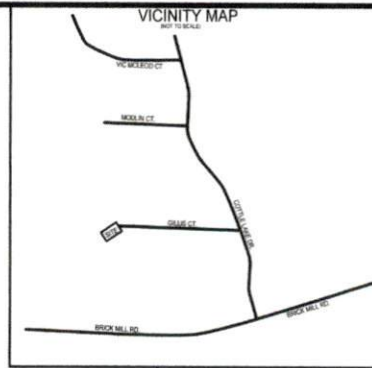
1. Blocking and sealing floor/ceiling systems and under knee walls open to unconditioned or exterior space.
2. Capping and sealing shafts or chases, including flue shafts.
3. Capping and sealing soffit or dropped ceiling areas.

RIGHT FIVATION
Haynes
 Jerry Pounds Construction, Inc.
 SQUARE FOOTAGE TOTAL UNHEATED DECK
 © Copyright
 3/
 2/
 PAC

NOTES:

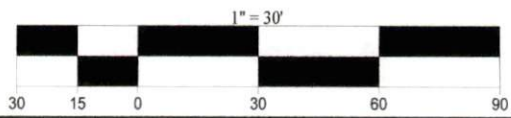
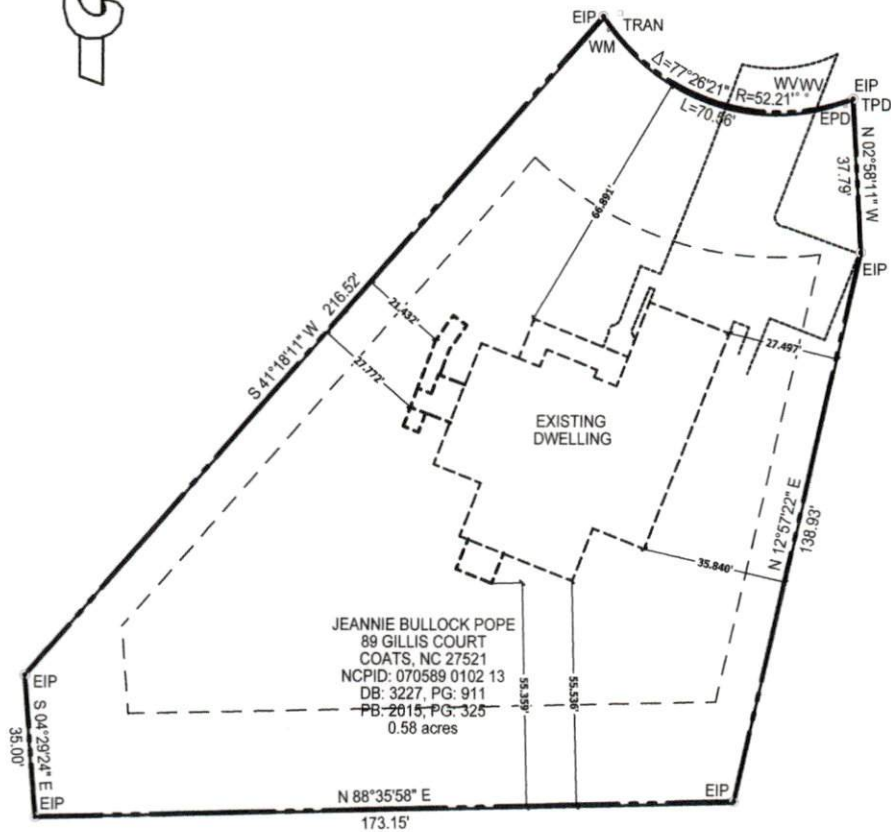
1. All EIS and EIPs are "Control Corners".
2. No NCGS Monuments found within 2000' of the Property.
3. All bearings are referenced to Deed Bk 3227, Pg 911, and Plat Bk 2015, Pg 325 all distances are horizontal.
4. Deed references as noted on map.

This survey in of another category,
not for recordation sales or conveyances



LEGEND

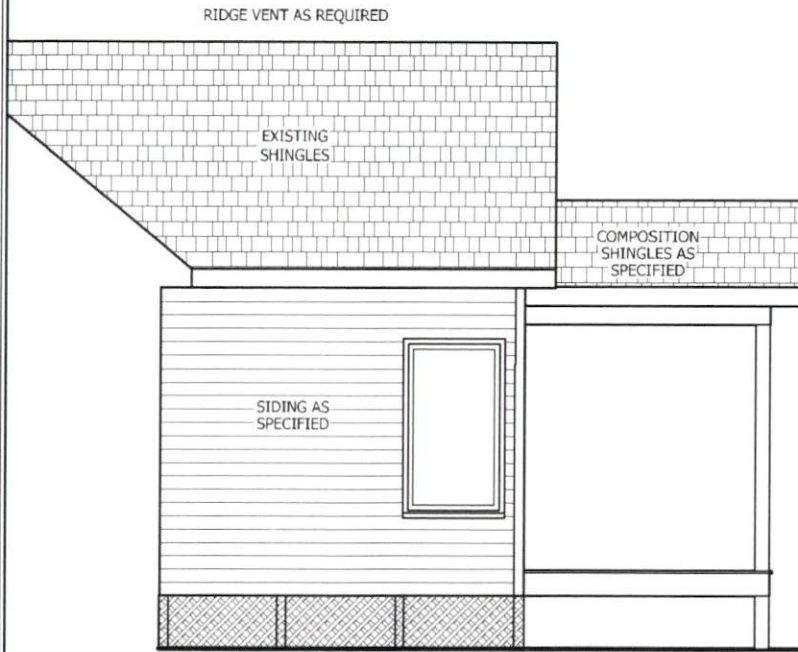
- POB Point of Beginning**
- New Iron Set
 - Iron Pin Found
 - Wooden Bollard
 - ▲ Found Stone
 - ▲ Found Stake and Stone
 - ⊕ Cotton Spindle Set
 - ⊕ Record Stone Not Found
- Property Lines
 - - - - - Fence Line
 - - - - - Centerline of Road
 - - - - - Edge of Asphalt
 ~~~~~ Woodline  
 - - - - - Edge of Concrete  
 - E - Overhead Electric



MINIMUM BUILDING SETBACKS  
 FRONT YARD -----35'  
 REAR YARD -----20'  
 SIDE YARD -----10'  
 CORNER LOT SIDE YARD----- 20'

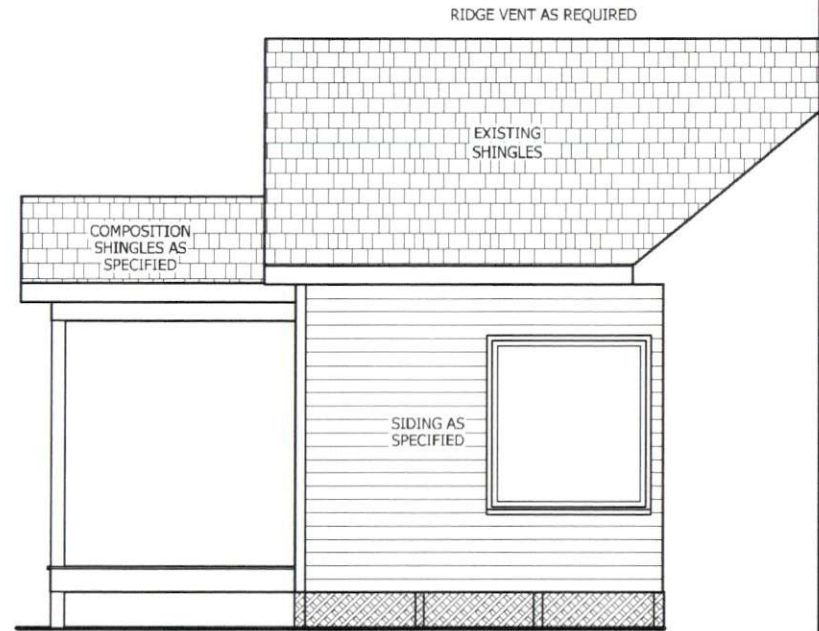
|                                                                                                                                                                                         |                                                                                              |                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------|
| <b>SURVEY OF</b>                                                                                                                                                                        | <b>PROPOSED PLOT PLAN</b><br><b>JEANNIE BULLOCK POPE</b><br>89 GILLIS CT., COATS, N.C. 27521 |                       |
|                                                                                                                                                                                         | TOWNSHIP: GROVE                                                                              | STATE: NORTH CAROLINA |
| COUNTY: HARNETT                                                                                                                                                                         |                                                                                              | DATE: JUNE 24, 2021   |
| ZONED<br>RA-40                                                                                                                                                                          | TAX PARCE ID# 0589-88-0083                                                                   |                       |
| OWNER: JEANNIE BULLOCK POPE<br>89 GILLIS CT.<br>COATS, NC 27521                                                                                                                         |                                                                                              |                       |
| <b>ON THE LEVEL .</b><br><b>LAND SURVEYING, PLLC.</b><br>JAMES LONNIE PEACOCK, PLS<br>NC Reg. Land Surveyor No. L-5141<br>1646 DENNING RD. BENSON, N.C 27504<br>TELEPHONE: 919-422-3580 |                                                                                              |                       |
| SCALE 1" = 30' FEET                                                                                                                                                                     |                                                                                              |                       |

\\ARCHIVE\Archive\Builder\Jerry Pounds Construction, Inc\210206B Addition\210206B Addition.aec



## RIGHT SIDE ELEVATION

SCALE 1/4" = 1'-0"



EXISTING RAMP NOT SHOWN FOR CLARITY

## LEFT SIDE ELEVATION

SCALE 1/4" = 1'-0"

LEFT & RIGHT ELEVATIONS

89 Gillis Ct, Coats, NC 27521

Jerry Pounds Construction, Inc.

PO Box 250, Clayton, NC 27528

919-422-1175

**HAYNES**  
HOME PLANS, INC.  
P.O. Box 702, Lake Forest, NC 27086, 919-435-9188, Fax 919-435-9396

| SQUARE FOOTAGE |            |
|----------------|------------|
| HEATED         | 228 SQ.FT. |
| UNHEATED       | 128 SQ.FT. |
| COVERED PORCH  | 28 SQ.FT.  |
| TOTAL          | 384 SQ.FT. |

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3/10/2021

210206B

PAGE 2 OF 5

## PLANS DESIGNED TO THE 2018 NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE

MEAN ROOF HEIGHT: 16'-4"      HEIGHT TO RIDGE: 20'-0"

| CLIMATE ZONE               | ZONE 3A    | ZONE 4A    | ZONE 5A    |
|----------------------------|------------|------------|------------|
| FENESTRATION U-FACTOR      | 0.35       | 0.35       | 0.35       |
| SKYLIGHT U-FACTOR          | 0.55       | 0.55       | 0.55       |
| GLAZED FENESTRATION SHGC   | 0.30       | 0.30       | 0.30       |
| CEILING R-VALUE            | 38 or 30ci | 38 or 30ci | 38 or 30ci |
| WALL R-VALUE               | 15         | 15         | 19         |
| FLOOR R-VALUE              | 19         | 19         | 30         |
| * BASEMENT WALL R-VALUE    | 5/13       | 10/15      | 10/15      |
| ** SLAB R-VALUE            | 0          | 10         | 10         |
| * CRAWL SPACE WALL R-VALUE | 5/13       | 10/15      | 10/19      |

\* 10/13\* MEANS R-10 SHEATHING INSULATION OR R-13 CAVITY INSULATION  
 \*\* INSULATION DEPTH WITH MONOLITHIC SLAB 24" OR FROM INSPECTION GAP TO BOTTOM OF FOOTING; INSULATION DEPTH WITH STEM WALL SLAB 24" OR TO BOTTOM OF FOUNDATION WALL

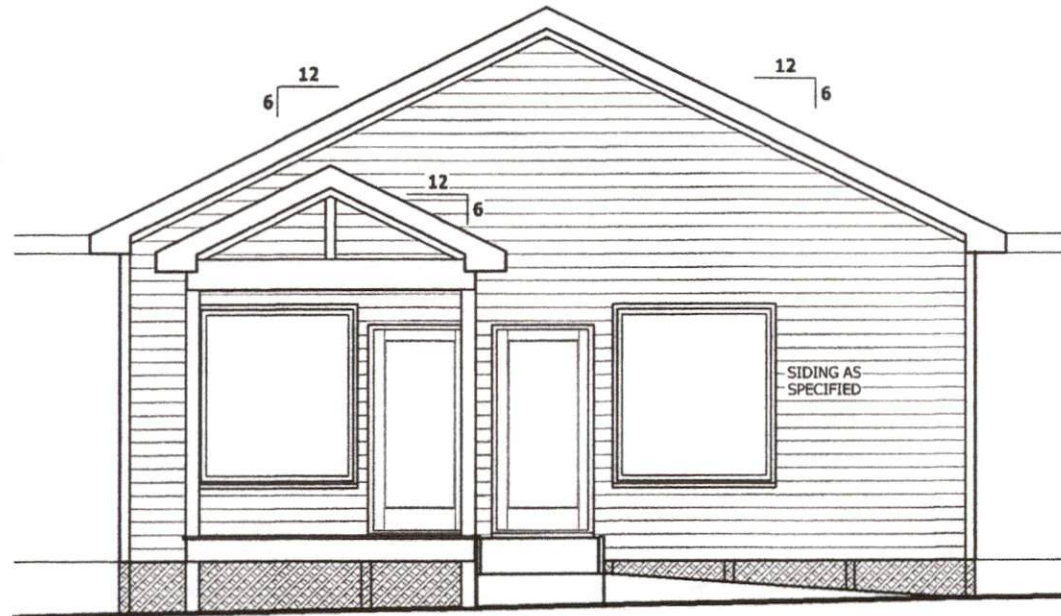
DESIGNED FOR WIND SPEED OF 120 MPH, 3 SECOND GUST (93 FASTEST MILE) EXPOSURE 'B'

COMPONENT & CLADDING DESIGNED FOR THE FOLLOWING LOADS

| MEAN ROOF | UP TO 30' | 30'-1" TO 35' | 35'-1" TO 40' | 40'-1" TO 45' |
|-----------|-----------|---------------|---------------|---------------|
| ZONE 1    | 14.2      | -15.0         | 14.9          | -15.8         |
| ZONE 2    | 14.2      | -18.0         | 14.9          | -18.9         |
| ZONE 3    | 14.2      | -18.0         | 14.9          | -18.9         |
| ZONE 4    | 15.5      | -16.0         | 16.3          | -16.8         |
| ZONE 5    | 15.5      | -20.0         | 16.3          | -21.0         |

### SQUARE FOOTAGE

|                 |            |
|-----------------|------------|
| <b>HEATED</b>   |            |
| LIVING ROOM     | 376 SQ.FT. |
| TOTAL           | 376 SQ.FT. |
| <b>UNHEATED</b> |            |
| COVERED PORCH   | 76 SQ.FT.  |
| TOTAL           | 76 SQ.FT.  |



## REAR ELEVATION

SCALE 1/4" = 1'-0"

### AIR LEAKAGE

#### Section N1102.4

**N1102.4.1 Building thermal envelope.** The building thermal envelope shall be durably sealed with an air barrier system to limit infiltration. The sealing methods between dissimilar materials shall allow for differential expansion and contraction. For all homes, where present, the following shall be caulked, gasketed, weather stripped or otherwise sealed with an air barrier material or solid material consistent with Appendix E-2.4 of this code:

1. Blocking and sealing floor/ceiling systems and under knee walls open to unconditioned or exterior space.
2. Capping and sealing shafts or chases, including flue shafts.
3. Capping and sealing soffit or dropped ceiling areas.

### ROOF VENTILATION

#### SECTION R806 (VERIFY VENTING OF NEW LIVING ROOM)

SQUARE FOOTAGE OF ROOF TO BE VENTED = 376 SQ.FT.

NET FREE CROSS VENTILATION NEEDED:

WITHOUT 50% TO 80% OF VENTING 3'-0" ABOVE EAVE = 2.5 SQ.FT.

WITH 50% TO 80% OF VENTING 3'-0" ABOVE EAVE; OR WITH CLASS I OR II VAPOR RETARDER ON WARM-IN-WINTER SIDE OF CEILING = 1.25 SQ.FT.

REAR ELEVATION

Jerry Pounds Construction, Inc.  
PO Box 259, Clayton, NC 27528

**HAYNES**

SQUARE FOOTAGE  
HEATED LIVING ROOM  
TOTAL  
UNHEATED COVERED PORCH  
TOTAL

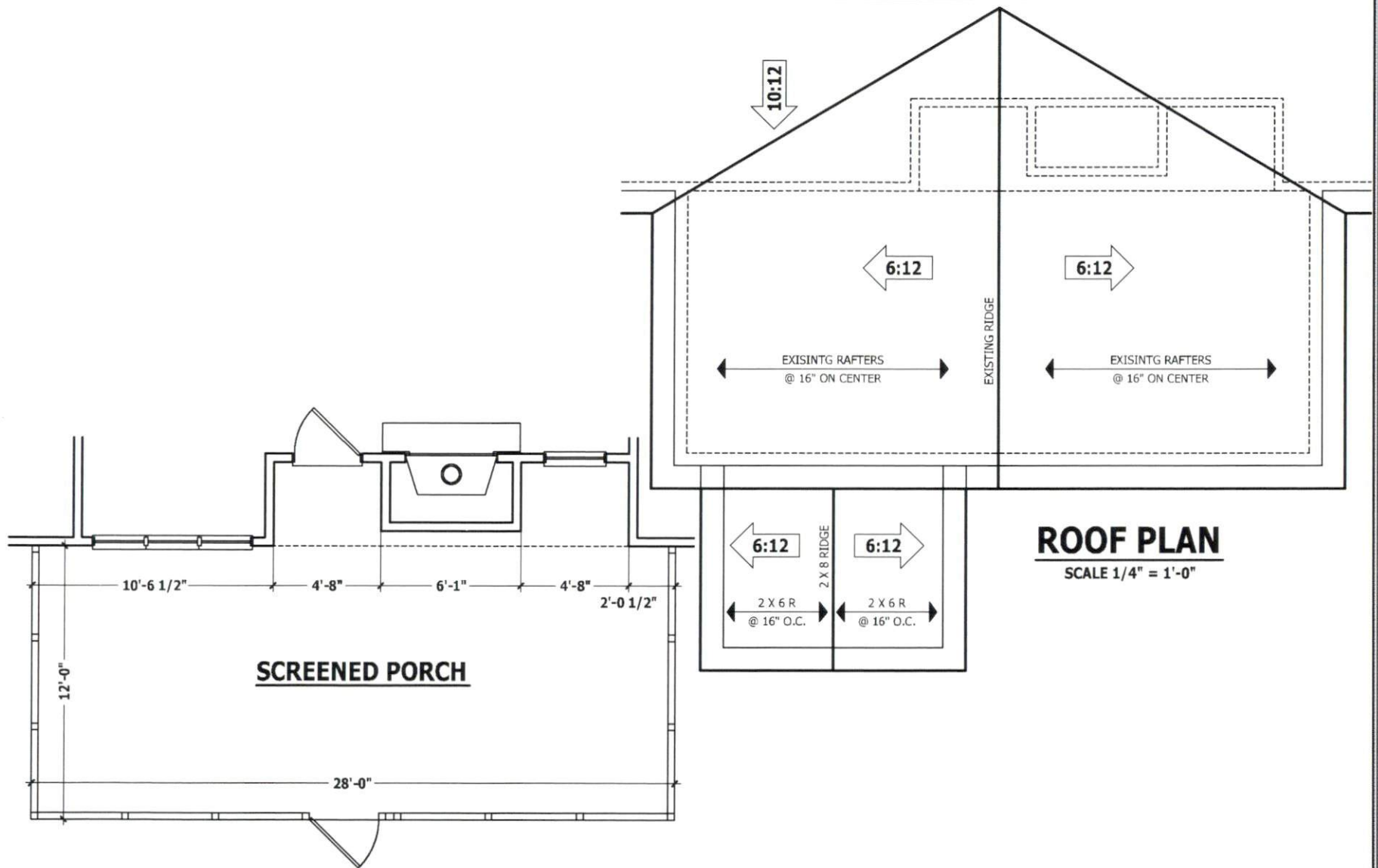
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3/10/21

210204

PAGE 1 C





**EXISTING FLOOR PLAN**  
SCALE 1/4" = 1'-0"

**ROOF PLAN**  
SCALE 1/4" = 1'-0"

**ROOF PLAN / EXISTING**  
89 Gillis Ct, Coats, NC 27521

**Jerry Pounds Construction, Inc.**  
PO Box 250, Clayton, NC 27528  
919-422-1175

**HAYNES**  
HOME PLANS, INC.  
P.O. Box 702, Wake Forest, NC 27788-9145-914599

| SQUARE FOOTAGE |             |
|----------------|-------------|
| HEATED         | 379 SQ. FT. |
| UNHEATED       | 28 SQ. FT.  |
| COVERED PORCH  | 26 SQ. FT.  |
| TOTAL          | 433 SQ. FT. |

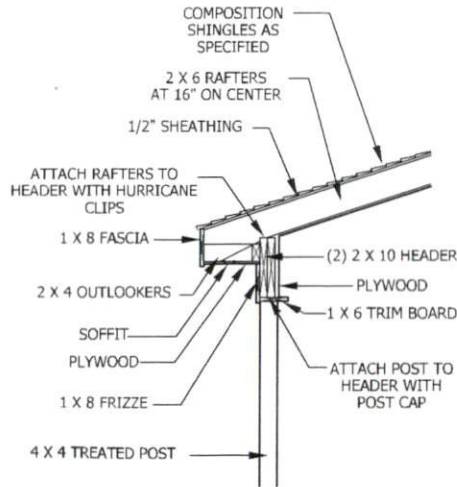
### STRUCTURAL NOTES

All construction shall conform to the latest requirements of the 2018 North Carolina Residential Building Code, plus all local codes and regulations. This document in no way shall be construed to supersede the code.

**JOB SITE PRACTICES AND SAFETY:** Haynes Home Plans, Inc. assumes no liability for contractor practices and procedures or safety program. Haynes Home Plans, Inc. takes no responsibility for the contractor's failure to carry out the construction work in accordance with the contract documents. All members shall be framed, anchored, and braced in accordance with good construction practice and the building code.

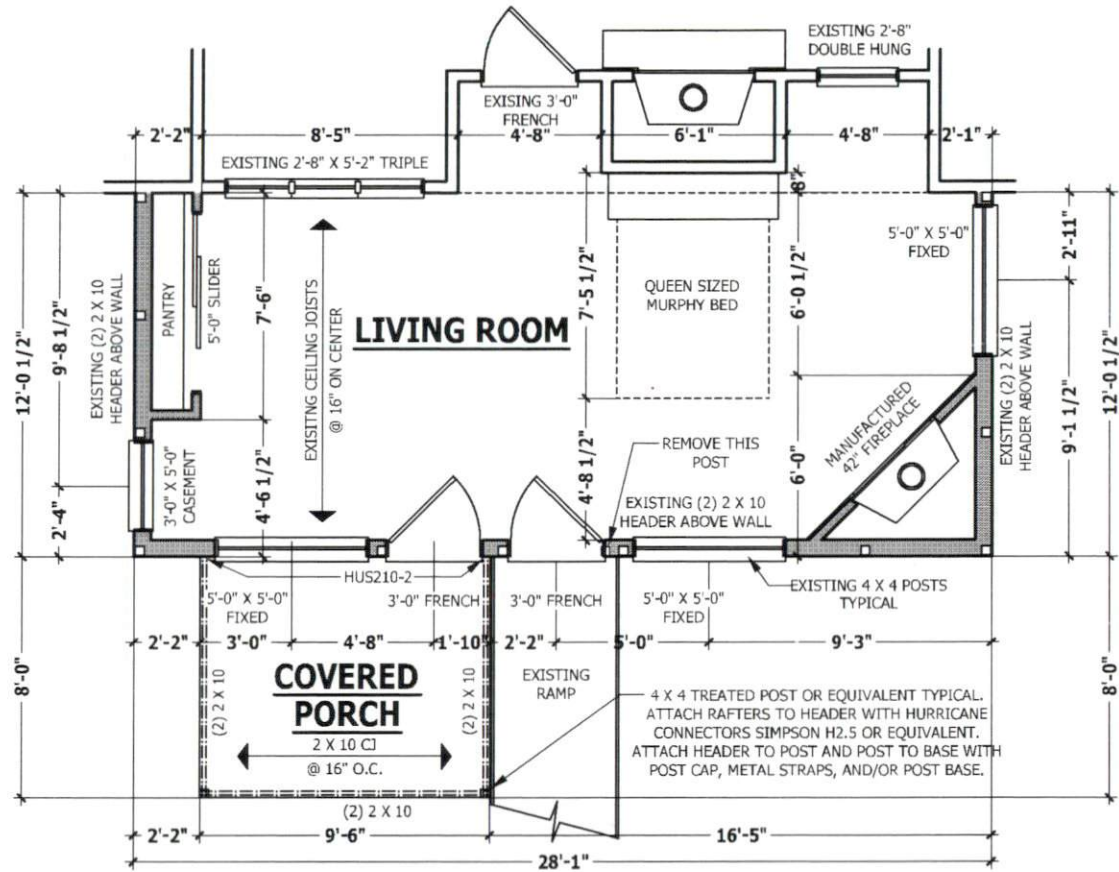
| DESIGN LOADS                 | LIVE LOAD (PSF) | DEAD LOAD (PSF) | DEFLECTION (LL) |
|------------------------------|-----------------|-----------------|-----------------|
| Attics without storage       | 10              |                 | L/240           |
| Attics with limited storage  | 20              | 10              | L/360           |
| Balconies and decks          | 40              | 10              | L/360           |
| Fire escapes                 | 40              | 10              | L/360           |
| Guardrails and handrails     | 200             |                 |                 |
| Guardrail in-fill components | 50              |                 |                 |
| Rooms other than sleeping    | 40              | 10              | L/360           |
| Stairs                       | 40              |                 | L/360           |
| Snow                         | 20              |                 |                 |

**FRAMING LUMBER:** All non treated framing lumber shall be SPF #2 (Fb = 875 PSI) or SYP #2 (Fb = 750 PSI) and all treated lumber shall be SYP #2 (Fb = 750 PSI) unless noted otherwise.



### PORCH BOXING DETAIL

SCALE 1/2" = 1'-0"



### NEW FLOOR PLAN

SCALE 1/4" = 1'-0"

### SQUARE FOOTAGE

| SQUARE FOOTAGE |            |
|----------------|------------|
| HEATED         |            |
| LIVING ROOM    | 376 SQ.FT. |
| TOTAL          | 376 SQ.FT. |
| UNHEATED       |            |
| COVERED PORCH  | 76 SQ.FT.  |
| TOTAL          | 76 SQ.FT.  |

FLOOR PLAN

89 Gillis Ct, Coats, NC 27521

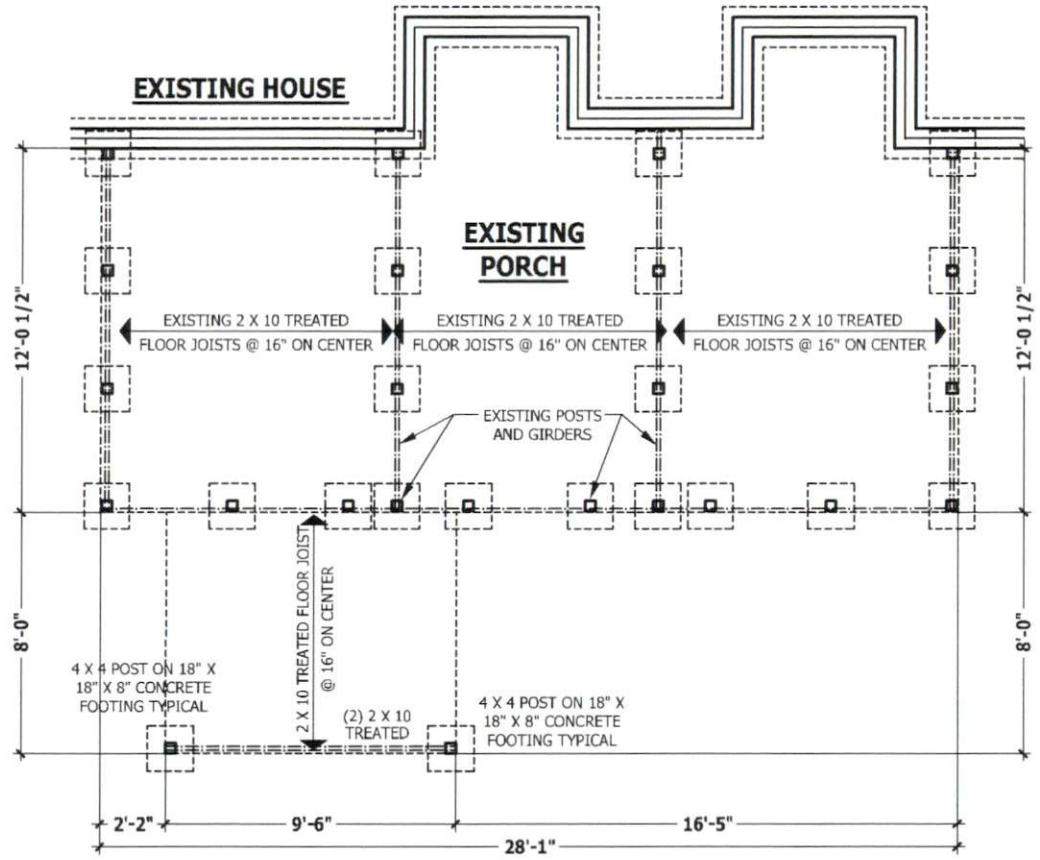
Jerry Pounds Construction, Inc.  
PO Box 250, Clayton, NC 27528  
919-422-1175

**HAYNES**  
HOME PLANS, INC.  
P.O. Box 702, Lake Forest, NC 27557, 919-455-4185, Fax: 919-455-3105

SQUARE FOOTAGE  
HEATED  
LIVING ROOM 376 SQ.FT.  
TOTAL 376 SQ.FT.  
UNHEATED  
COVERED PORCH 76 SQ.FT.  
TOTAL 76 SQ.FT.

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2/9/2021  
2102068

PAGE 4 OF 5



# FOUNDATION PLAN

SCALE 1/4" = 1'-0"

FOUNDATION PLAN

89 Gillis Ct, Coats, NC 27521

Jerry Pounds Construction, Inc.  
 PO Box 250, Clayton, NC 27528  
 919-422-1175

**HAYNES**  
 HOME PLANS, INC.  
P.O. Box 702, Rose Branch, NC 27388, 919-485-4188, Fax 1-866-314-0886

| SQUARE FOOTAGE |            |
|----------------|------------|
| HEATED         |            |
| COVERED PORCH  | 226 SQ.FT. |
| UNHEATED       | 159 SQ.FT. |
| COVERED PORCH  | 26 SQ.FT.  |
| TOTAL          | 261 SQ.FT. |

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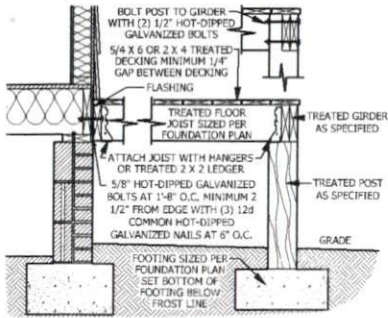
3/10/2021

2102068

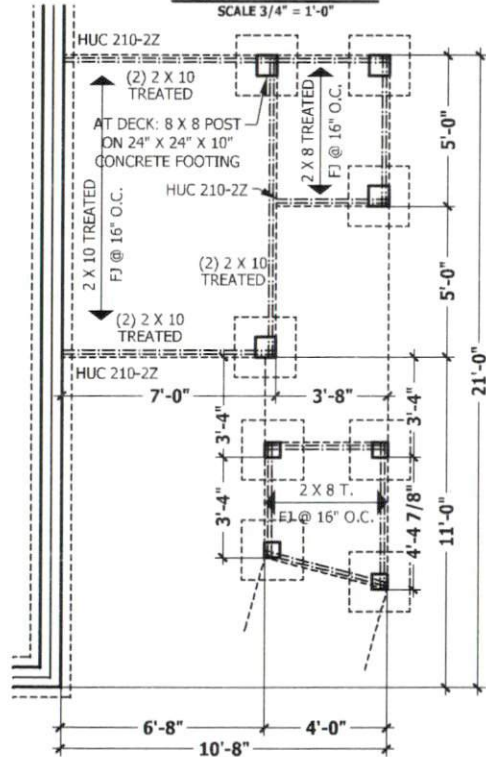
PAGE 3 OF 5



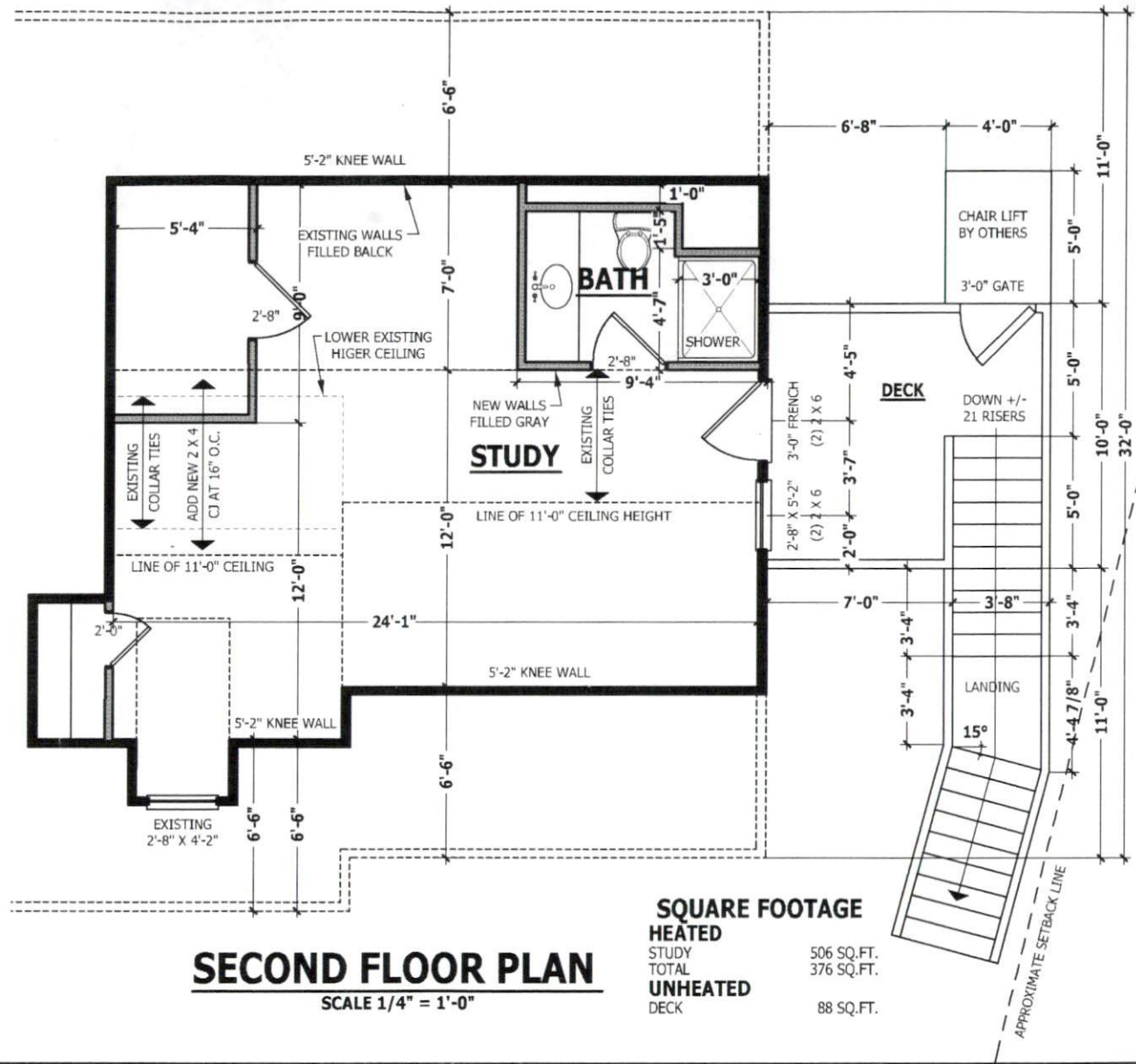
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**DECK ATTACHMENT**  
SCALE 3/4" = 1'-0"



**DECK FOUNDATION**  
SCALE 1/4" = 1'-0"



**SECOND FLOOR PLAN**  
SCALE 1/4" = 1'-0"

| SQUARE FOOTAGE |            |
|----------------|------------|
| HEATED         |            |
| STUDY          | 506 SQ.FT. |
| TOTAL          | 376 SQ.FT. |
| UNHEATED       |            |
| DECK           | 88 SQ.FT.  |

**FLOOR PLAN AND FOUNDATION**  
89 Gillis Ct., Coats, NC

**Jerry Pounds Construction, Inc.**  
PO Box 250, Clayton, NC 27528  
919-422-1175

**HAYNES HOME PLANS, INC.**  
P.O. Box 102, Lake Forest, NC 27558 919-455-5126 FAX 919-455-5126

| SQUARE FOOTAGE |            |
|----------------|------------|
| HEATED         |            |
| TOTAL          | 376 SQ.FT. |
| UNHEATED       |            |
| DECK           | 88 SQ.FT.  |

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**3/18/2021**  
210206B  
PAGE 2 OF 2