

PLAN:
Anconia

SHEET TITLE:
ELEVATIONS

PROJECT ADDRESS:
54 Alder Dr.
Magnolia Hills Lot 66

DESIGNED BY:
Precision Custom Homes
Raeferd, NC
Shaun@PrecisionCustomHomesNC.com

DATE:

9/11/25

SCALE:

1/4" = 1'

SHEET:

A-1



FRONT ELEVATION

Scale: 1/4" = 1'0"

9'0" CEILING HEIGHT FIRST FLOOR
(HEADER HEIGHT 7'6")
8'0" CEILING HEIGHT SECOND FLOOR
(Frame Headers to Top Plates on 2nd Floor)

FRAME WINDOWS TO HEADER HEIGHT



LEFT ELEVATION

Scale: 1/8" = 1'0"



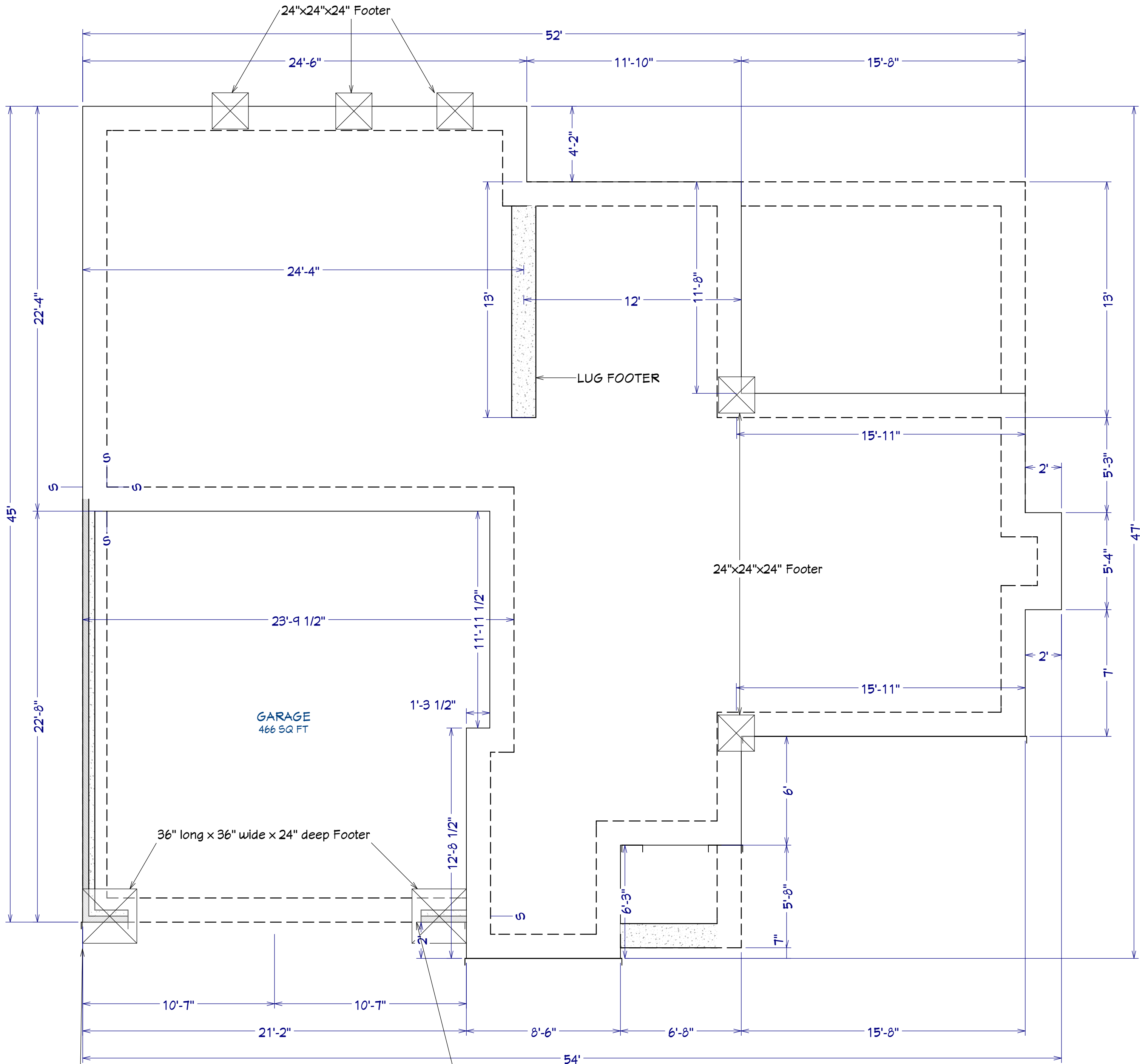
REAR ELEVATION

Scale: 1/8" = 1'0"



RIGHT ELEVATION

Scale: 1/8" = 1'0"



Install bottom mat of #4 reinforcing steel (2- #4 bars ea way) in the bottom of the footing on rebar chairs providing a minimum of 3 inches of cover from the bottom of the footing. Ensure a minimum cover of 1 1/2" of cover between the sides of the footing and the edges of the rebar.

FOUNDATION PLAN
Scale: 1/4" = 1'0"

AREA SCHEDULE	
NAME	AREA
1st FLOOR	1,403 SF
2nd FLOOR	1,074 SF
GARAGE	497 SF
FRONT PORCH	35 SF
COVERED PORCH	183 SF
TOTAL HEATED	2,477 SF
TOTAL UNDER ROOF	3,192 SF

PLAN:
Anconia

SHEET TITLE:
FOUNDATION

PROJECT ADDRESS:
54 Alder Dr.
Magnolia Hills Lot 66

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Raeferd, NC
Shaun@PrecisionCustomHomesNC.com

DATE:

9/11/25

SCALE:

1/4" = 1'

SHEET:

A-2

PLAN:
Anconia

PROJECT ADDRESS: 54 Alder Dr. Magnolia Hills Lot 66	SHEET TITLE: DETAIL SHEETS
--	---

DESIGNED BY:

Precision Custom Homes
RaeFord, NC
Shaun@PrecisionCustomHomesNC.com

DATE:
9/11/25

SCALE:

$1/4" = 1'$

SHEET:

A-3

A-3

2 X STUDS @ 16" O.C.
INSULATION TO MEET LOCAL
CODES

SILL SEAL

4" CONCRETE
SLAB

MOISTURE BARRIER
6 MIL.

COMPACTED FILL

1/2" DIA. (MIN. 7" EMBEDMENT)
ANCHOR BOLTS @ 6' O.C.
(ADJUST LOCATIONS AT DOOR
OPENINGS)
LOCATE 12" FROM PLATE ENDS

P.T. SILL PLATE

8"

12"

16"

-P.T. SILL PLATE

8"

12"

COMPACTED FILL

← 16" →

MONOLITHIC SLAB

FOUNDATION NOTES:

**ALL FOOTINGS SHALL BEAR ON ORIGINAL UNDISTURBED SOIL
THE 28 DAY COMPRESSIVE STRENGTH OF ALL FOOTINGS IS 3000 PSI**

PROVIDE WATER PROOFING AND PERIMETER DRAINS AS REQUIRED

FOOTING WIDTHS ARE BASED ON A LOAD BEARING SOIL CAPACITY OF 2000 PSI

PROVIDE 6 MIL POLY VAPOR BARRIER TO COVER GROUND IN CRAWL SPACE AND GROUND UNDER POURED CONCRETE

ALL ANCHOR BOLTS TO BE 1/2" X 12" LONG. ANCHOR BOLTS SHALL BE SPACED AT A MAXIMUM OF 6' ON CENTER AND NO MORE THEN 1' FROM EACH CORNER

PROVIDE WATER PROOFING AND PERIMTER DRAINS AS REQUIRED

**FOOTING WIDTHS ARE BASED ON A LOAD
BEARING SOIL CAPACITY OF 2000 PSI**

**PROVIDE 6 MIL POLY VAPOR BARRIER TO
COVER GROUND IN CRAWL SPACE AND
GROUND UNDER POURED CONCRETE**

**ALL ANCHOR BOLTS TO BE 1/2" X 12" LONG.
ANCHOR BOLTS SHALL BE SPACED AT A
MAXIMUM OF 6' ON CENTER AND NO MORE
THEN 1' FROM EACH CORNER**

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ANCHOR BOLTS SHALL BE SPACED AT A
MAXIMUM OF 6' ON CENTER AND NO MORE
THEN 1' FROM EACH CORNER

GENERAL FRAMING NOTES:

ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED

FRAMING LUMBER SHALL BE SYP #2 GRADE AND / OR SPRUCE PINE FIR #1 AND / OR KILN DRIED

WHERE PRE-ENGINEERED JOISTS AND TRUSSES ARE USED, MANUFACTURER SHALL PROVIDE DRAWINGS / SCHEMATICS, WHICH SHALL BEAR OF A N.C. ENGINEER

STUDS AND JOISTS SHALL NOT BE CUT TO INSTALL PLUMBING OR WIRING WITHOUT ADDING METAL OR WOOD SIDE PANELS TO STRENGTHEN MEMBER TO ITS ORIGINAL CAPACITY

NAIL MULTIPLE MEMBERS WITH 2 ROWS OF 16d NAILS STAGGERED 32" O.C. AND USE 3 X 16d NAILS 2" IN AT EACH END.

NAIL FLOOR JOISTS TO SILL PLATE WITH WITH 8d TOE NAILS

ALL EXPOSED FRAMING ON PORCHES OR DECKS SHALL BE PRESSURE TREATED

PROVIDE WATERPROOFING AND DRAINS AS REQUIRED

ALL FRAMING TO BE 16" O.C. WALL FRAMING DIMENSIONS ARE BASED ON 2X4 OR 2X6 EXTERIOR WALLS AND 2X4 INTERIOR WALLS. DOUBLE / TRIPLE JACK STUDS AS NECESSARY UNDER HEADERS AS REQUIRED

LVL'S TO BE SIZED BY OTHERS (TRUSS MANUFACTURER)

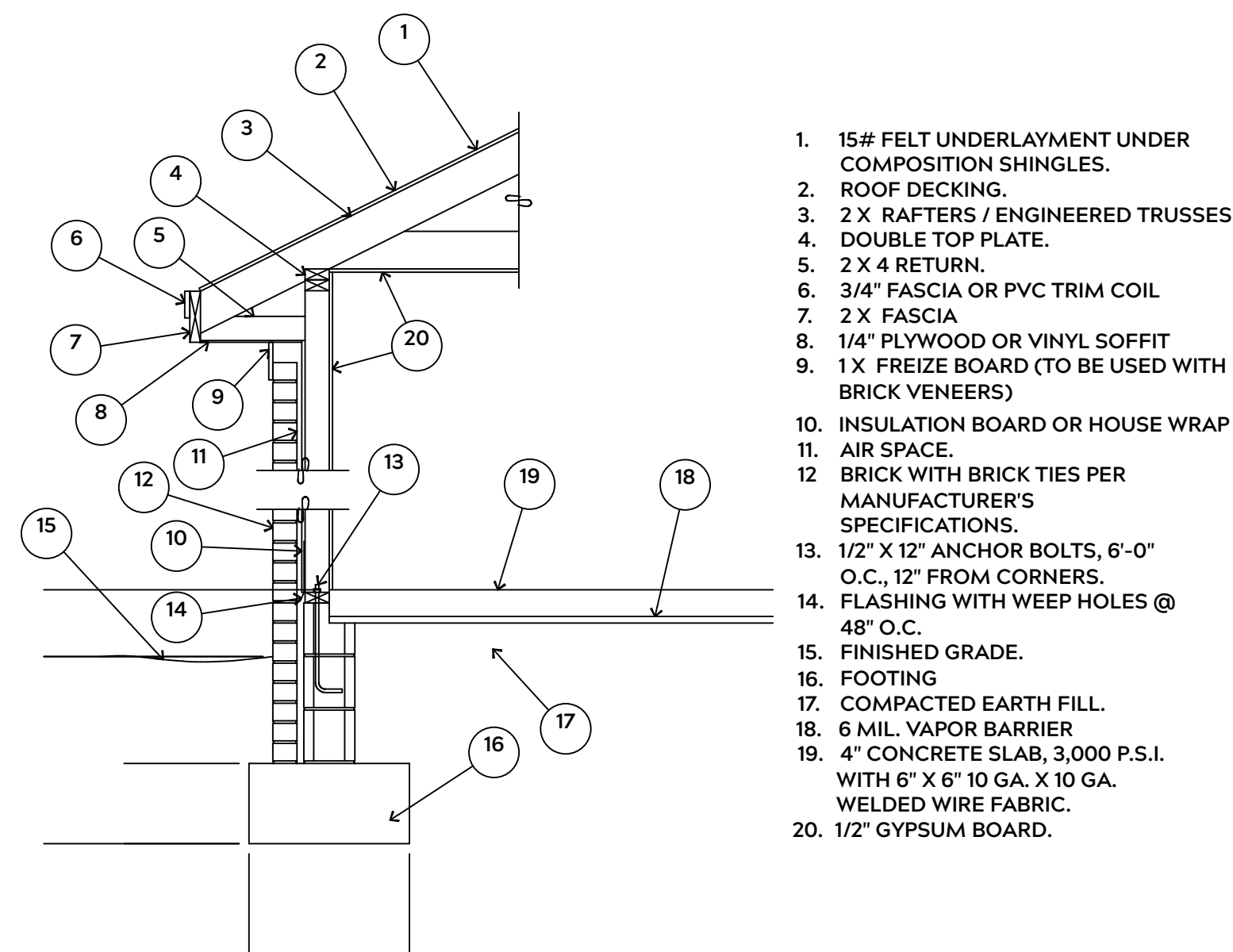
FRAMING LUMBER SHALL BE SYP #2 GRADE AND / OR SPRUCE PINE FIR #1 AND / OR KILN DRIED

STUDS AND JOISTS SHALL NOT BE CUT TO INSTALL PLUMBING OR WIRING WITHOUT ADDING METAL OR WOOD SIDE PANELS TO STRENGTHEN MEMBER TO ITS ORIGINAL CAPACITY

NAIL FLOOR JOISTS TO SILL PLATE WITH WITH 8d TOE NAILS

PROVIDE WATERPROOFING AND DRAINS AS REQUIRED

LVL'S TO BE SIZED BY OTHERS (TRUSS MANUFACTURER)



EXTERIOR WALL SECTION

INTERIOR WALL

P.T. SILL PLATE

4" CONCRETE SLAB
ON 6 MIL VAPOR BARRIER
ON 4" MIN. COMPACTED BASE

1/2" DIA. (MIN. 7" EMBEDMENT)
ANCHOR BOLTS @ 6' O.C.

10"

18"

LUG FOOTING

2 X STUDS @ 16" O.C.

2 X PLATE WITH ANCHOR BOLTS @ 12" O.C.

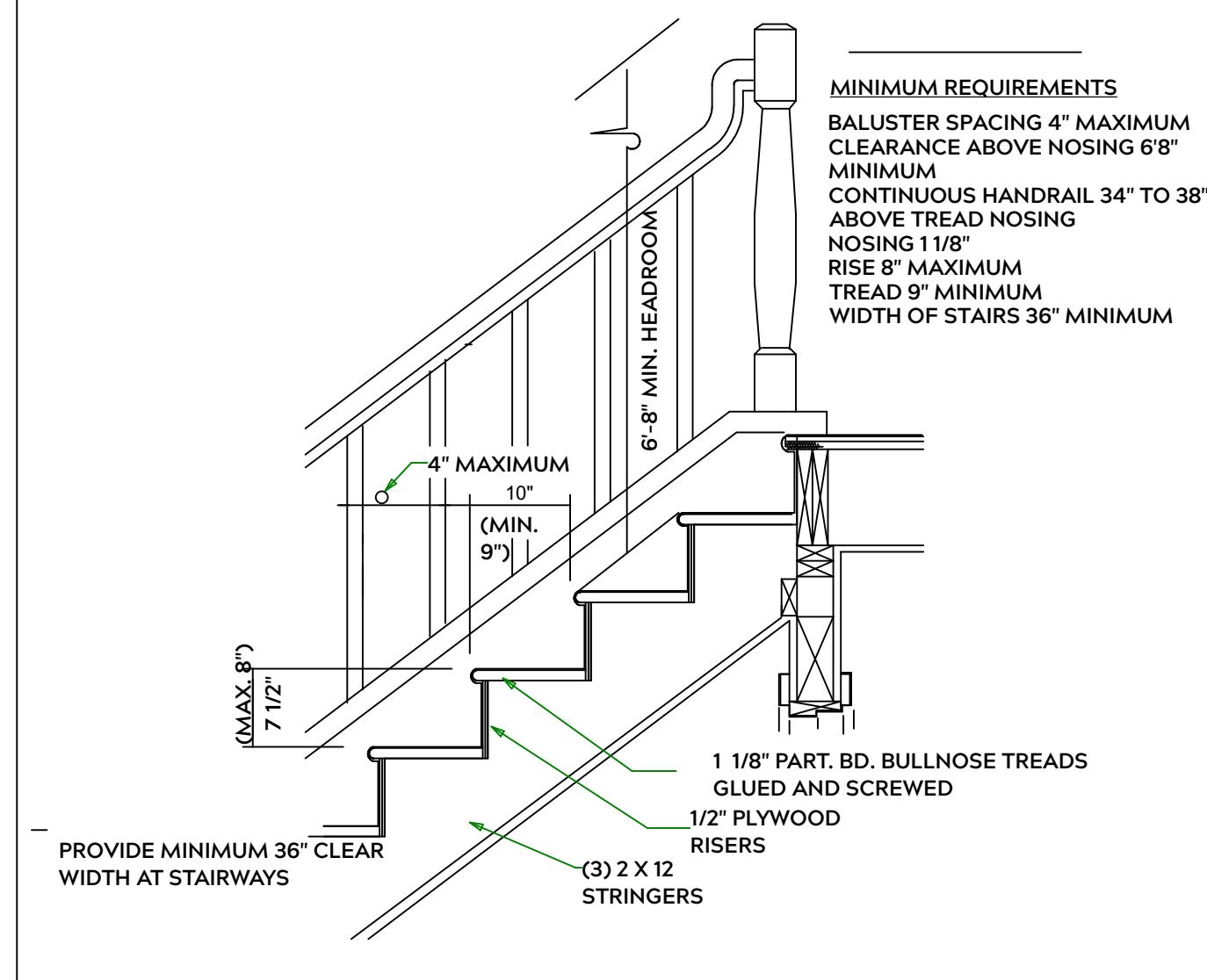
1/2" GYPSUM BOARD

1/2" EXPANSION JOINT

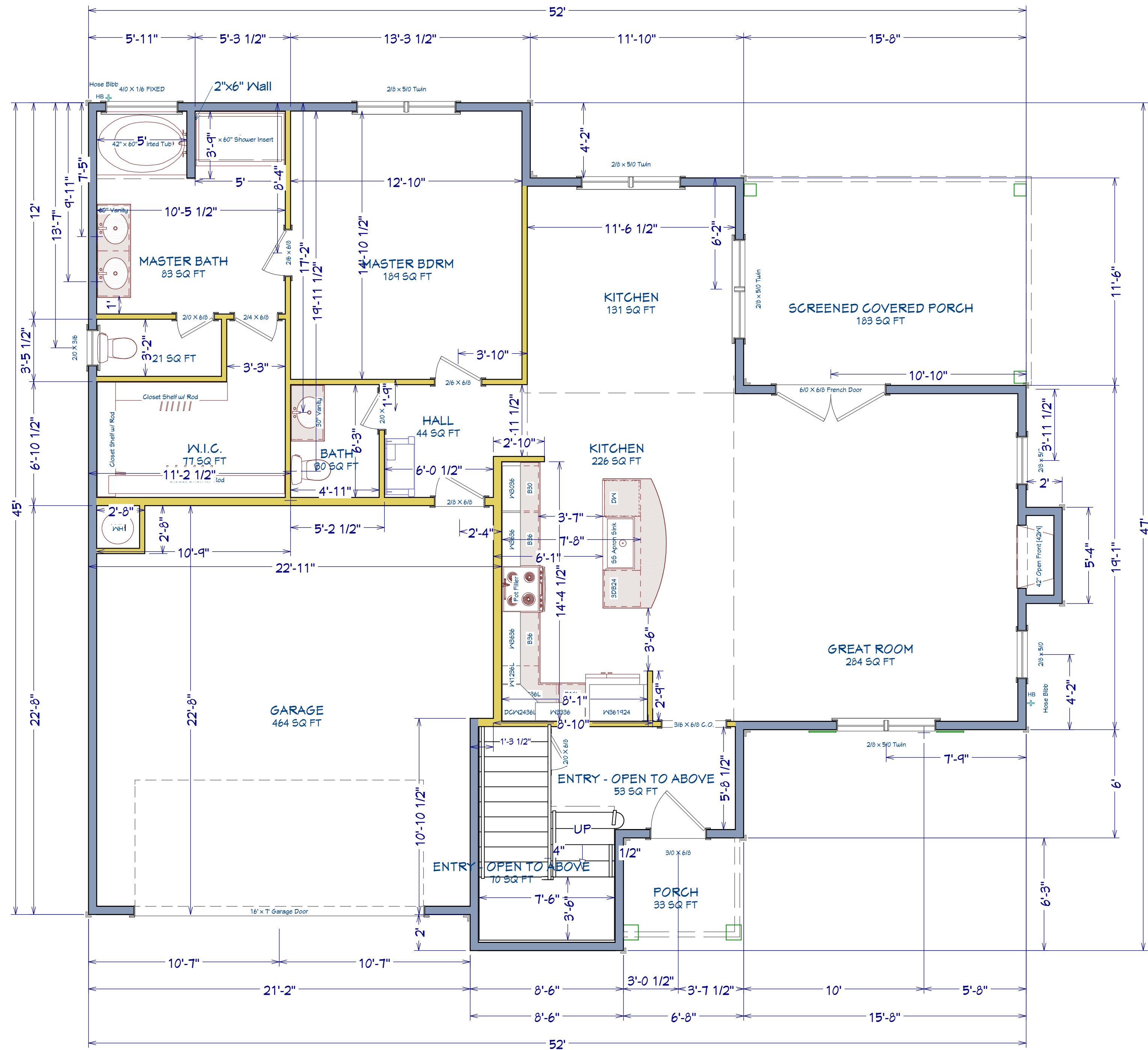
4" CONCRETE PAD

1 1/2"

INTERIOR WALL @ GARAGE STEP DOWN



STAIR DETAIL



AREA SCHEDULE	
NAME	AREA
1st FLOOR	1,403 SF
2nd FLOOR	1,074 SF
GARAGE	497 SF
FRONT PORCH	35 SF
COVERED PORCH	183 SF
TOTAL HEATED	2,477 SF
TOTAL UNDER ROOF	3,192 SF

PLAN:
Anconia

SHEET TITLE:
1st FLOOR

PROJECT ADDRESS:
54 Alder Dr.
Magnolia Hills Lot 66

DESIGNED BY:
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Raeferd, NC
Shaun@PrecisionCustomHomesNC.com

DATE:

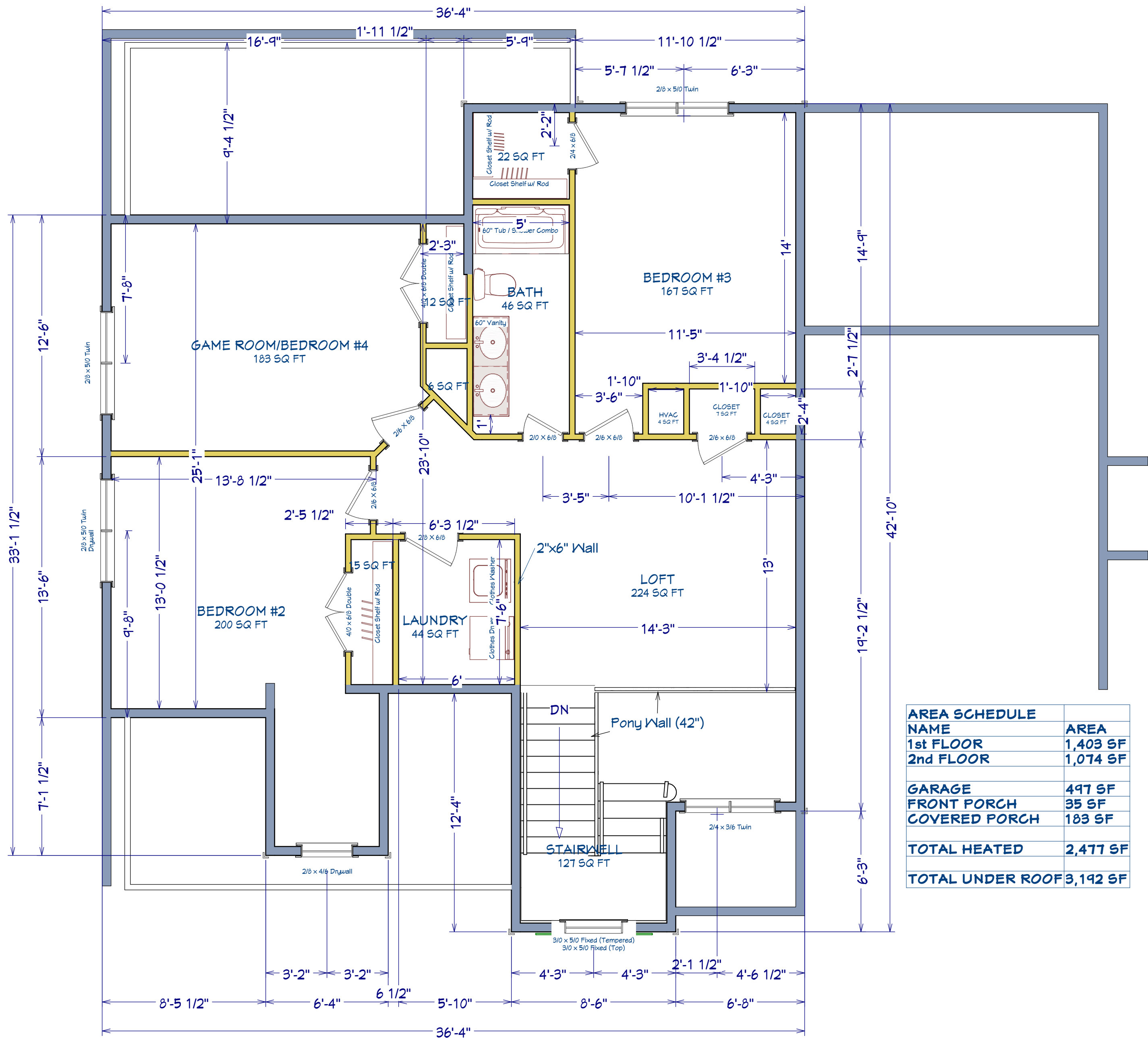
9/11/25

SCALE:

1/4" = 1'

SHEET:

A-4



AREA SCHEDULE	
NAME	AREA
1st FLOOR	1,403 SF
2nd FLOOR	1,074 SF
GARAGE	497 SF
FRONT PORCH	35 SF
COVERED PORCH	183 SF
TOTAL HEATED	2,477 SF
TOTAL UNDER ROOF	3,192 SF

PLAN:
Anconia

SHEET TITLE:
2nd FLOOR

PROJECT ADDRESS:
54 Alder Dr.
Magnolia Hills Lot 66

DESIGNED BY:
Precision Custom Homes
Raeferd, NC
Shaun@PrecisionCustomHomesNC.com

DATE:

9/11/25

SCALE:

1/4" = 1'

SHEET:

A-5



ROOF & FLOOR TRUSSES & BEAMS

Reilly Road Industrial Park
Fayetteville, N.C. 28309
Phone: (910) 864-8787
Fax: (910) 864-4444

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature Sales Area

Sales Area

LOAD CHART FOR JACK STUDS

(BASED ON TABLES R502.5(1) & (b))

NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

END REACTION (UP TO)	REQ'D STUDS FOR (1) FLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (1) FLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (1) FLY HEADER
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

Dimension Notes
1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
2. All interior wall dimensions are to face of frame wall unless noted otherwise
3. All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

All Walls Shown Are Considered Load Bearing

Plumbing Drop Notes
1. Plumbing drop locations shown are NOT exact.
2. Contractor to verify ALL plumbing drop locations prior to setting Floor Trusses.
3. Adjust spacing as needed not to exceed 24" oc.

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
●	HUS410	USP	28	NA	16d/3-1/2"	16d/3-1/2"

Products - Field Framed				
PlotID	Length	Product	Plies	Net Qty
BM1	19' 0"	1-3/4"x 18" LVL Kerto-S	2	2
BM2	5' 0"	1-3/4"x 14" LVL Kerto-S	2	2
BM3	7' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2
GDH	22' 0"	1-3/4"x 18" LVL Kerto-S	2	2

1 Truss Placement Plan
Scale: 1/4"=1'

△ = Indicates Left End of Truss
(Reference Engineered Truss Drawing)
Do NOT Erect Truss Backwards

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com



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END REACTION (UP TO)	REQ'D STUDS FOR (1) 1" HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (1) 1" HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (1) 1" HEADER
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

Dimension Notes
1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
2. All interior wall dimensions are to face of frame wall unless noted otherwise
3. All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

All Walls Shown Are Considered Load Bearing

Roof Area = 2878.47 sq.ft.
Ridge Line = 77.6 ft.
Hip Line = 0 ft.
Horiz. OH = 131.95 ft.
Raked OH = 228.03 ft.
Decking = 99 sheets

Hatch Legend
Box Storage
6' 11-3/4" Walls
14' 7-1/4" Walls
2nd Floor Walls
Vaulted Ceiling
Drop Beam

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
■	HUS26	USP	7	NA	16d/3-1/2"	16d/3-1/2"

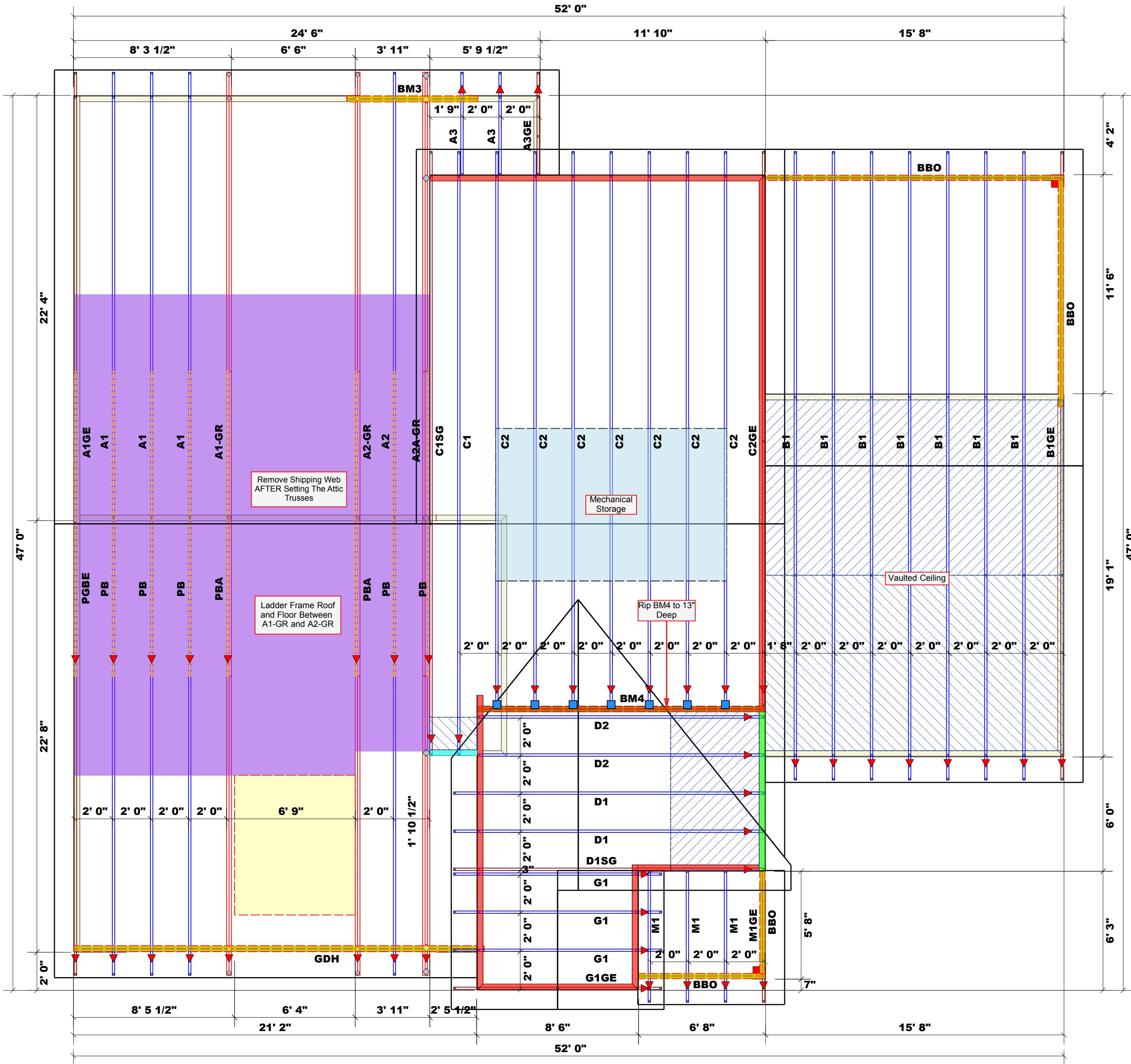
Products - Field Framed				
PlotID	Length	Product	Plies	Net Qty
BM1	19' 0"	1-3/4"x 18" LVL Kerto-S	2	2
BM2	5' 0"	1-3/4"x 14" LVL Kerto-S	2	2
BM3	7' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2
GDH	22' 0"	1-3/4"x 18" LVL Kerto-S	2	2

Products - Field Framed				
PlotID	Length	Product	Plies	Net Qty
BM4	16' 0"	1-3/4"x 14" LVL Kerto-S	2	2

1 Truss Placement Plan
Scale: 1/4"=1'

△ = Indicates Left End of Truss
(Reference Engineered Truss Drawing)
Do NOT Erect Truss Backwards

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Comtech

Reilly Road Industrial Park, PO Box 40408
Fayetteville, NC 28309
Phone: (910) 864-8787

Reaction Summary

Job #: 251265-A

Product: Roof

Sch Del On: 10/17/2025

Customer Information

Precision Custom Homes and Renovations

Address & Phone

206 Shoreline Drive
Raeford NC 28376
Phone: (910) 988-8172

Builder

Contact
Allen Peterson
(704) 451-4444

Job Information

Lot 66 Magnolia Hills

Address

Lot 66 Magnolia Hills
54 Alder Dr.
Cameron NC

Lot

66

Sub-Division

Magnolia Hills

Sales Person

Neil Baggett

Customer P.O. No.

Estimator

Neil Baggett

Designer

Neil Baggett

Delivery Notes:

Notes:

Loading

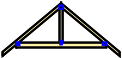
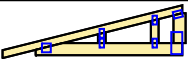
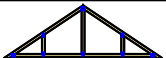
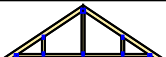
TCLL	TCDL	BCLL	BCDL
20	10	0	10

Spacing: 2-00-00 O.C.

Loading				Building Code	Wind Design Method	Velocity	Exp Cat	Wind Max	
TCLL	TCDL	BCLL	BCDL				Occ Cat	TCDL	BCDL
20	10	0	10	IRC2021/TPI2014	MWFRS (Envelope)/C-C hybrid Wind ASCE 7-16	130 mph	C II	6	6

Roof Trusses

Label	Profile	Qty	Span	TC Pitch	TC	Reactions
		Ply	Height	BC Pitch	BC	
A1		3	44-11-00	8 / 12	2 x 8	Joint 16 Joint 20 Joint 24 2234 1817 2157 0 0 0
		1-ply	11-08-10		2 x 10	
A1-GR		1	44-11-00	8 / 12	2 x 8	Joint 16 Joint 20 Joint 24 5742 3642 4452 0 0 0
		2-ply	11-08-10		2 x 10	
A1GE		1	44-11-00	8 / 12	2 x 8	Joint 26 Joint 31 Joint 37 2252 1780 2176 -89 0 -93
		1-ply	11-08-10		2 x 10	
A2		1	44-11-00	8 / 12	2 x 8	Joint 16 Joint 20 Joint 24 2179 1721 2174 0 0 0
		1-ply	11-08-10		2 x 10	
A2-GR		1	44-11-00	8 / 12	2 x 8	Joint 16 Joint 20 Joint 24 5786 3460 4525 0 0 0
		2-ply	11-08-10		2 x 10	
A2A-GR		1	44-11-00	8 / 12	2 x 8	Joint 16 Joint 20 Joint 24 4364 5113 6289 0 0 0
		3-ply	11-08-10		2 x 10	
A3		2	4-02-00	8 / 12	2 x 6	Joint 4 Joint 5 241 167 0 -81
		1-ply	4-09-04		2 x 6	
A3GE		1	4-02-00	8 / 12	2 x 6	Joint 5 Joint 7 241 175 0 -132
		1-ply	4-09-04		2 x 6	
B1		7	30-06-00	8 / 12	2 x 6	Joint 2 Joint 14 Joint 11 801 1793 636 -94 -70 -374
		1-ply	11-04-00	5 / 12	2 x 6	
B1GE		1	30-06-00	8 / 12	2 x 6	Continuous Support
		1-ply	11-04-00	5 / 12	2 x 6	
C1		1	30-05-08	8 / 12	2 x 6	Joint 1 Joint 7 1210 1278 -48 -104
		1-ply	8-10-02		2 x 6	
C1SG		1	30-05-08	8 / 12	2 x 6	Joint 1 Joint 7 1210 1278 -208 -307
		1-ply	8-10-02		2 x 6	
C2		7	27-10-08	8 / 12	2 x 6	Joint 1 Joint 10 1108 1180 -37 -104
		1-ply	7-09-14		2 x 6	
C2GE		1	27-10-08	8 / 12	2 x 6	Continuous Support
		1-ply	7-09-14		2 x 6	
D1		2	15-01-00	10 / 12	2 x 10	Joint 1 Joint 4 610 674 -6 -46
		1-ply	8-11-00		2 x 6	
D1SG		1	15-01-00	10 / 12	2 x 10	Joint 1 Joint 4 610 674 -83 -145
		1-ply	8-11-00		2 x 6	
D2		2	15-01-00	10 / 12	2 x 10	Joint 1 Joint 4 613 596 -3 -47
		1-ply	8-11-00		2 x 6	

Roof Trusses						
Label	Profile	Qty	Span	TC Pitch	TC	Reactions
		Ply	Height	BC Pitch	BC	
G1		3	8-05-00	10 /12	2 x 4	Joint 2 Joint 4 409 409 -34 -34
		1-ply	4-11-02		2 x 6	
G1GE		1	8-05-00	10 /12	2 x 4	Continuous Support
		1-ply	4-11-02		2 x 6	
M1		3	5-08-00	3 /12	2 x 4	Joint 2 Joint 4 306 202 -132 -82
		1-ply	2-00-00		2 x 6	
M1GE		1	5-08-00	3 /12	2 x 4	Joint 2 Joint 8 306 202 -189 -120
		1-ply	2-00-00		2 x 6	
PB		5	16-00-00	8 /12	2 x 4	Continuous Support
		1-ply	5-04-00		2 x 4	
PBA		2	16-00-00	8 /12	2 x 6	Continuous Support
		1-ply	5-04-00		2 x 4	
PGBE		1	16-00-00	8 /12	2 x 4	Continuous Support
		1-ply	5-04-00		2 x 4	



Comtech

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Reaction Summary

Job #: 251265-B

Product: Floor

Sch Del On: 10/17/2025

Customer Information

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Address & Phone

206 Shoreline Drive
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Phone: (910) 988-8172

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Contact

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Sales Person

Neil Baggett

Estimator

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Customer P.O. No.

Designer

Neil Baggett

Delivery Notes:

Notes:

Loading

TCLL	TCDL	BCLL	BCDL
0	0	0	0

Spacing: 0-00 O.C.

Loading				Building Code	Wind Design Method	Velocity	Exp Cat	Wind Max	
TCLL	TCDL	BCLL	BCDL				Occ Cat	TCDL	BCDL
40	10	0	5	IRC2021/TPI2014	MWFRS (Envelope)/C-C hybrid Wind ASCE 7-16	130 mph	C II	6	6

Floor Trusses

Label	Profile	Qty	Span	TC	Reactions													
		Ply	Height	BC														
F1		6	17-07-00	2 x 4	Joint 13	Joint 19	Joint 22											
		1-ply	1-02-00	2 x 4	628	1033	284											
F1A		1	17-07-00	2 x 4	Joint 17	Joint 27	Joint 26	Joint 28	Joint 24	Joint 22	Joint 21	Joint 20	Joint 19	Joint 18				
		1-ply	1-02-00	2 x 4	45	5	123	2701	139	151	146	147	147	148				
						0	-249	-218	0	0	0	0	0	0				
						Joint 28	Joint 28	Joint 32										
						2701	2701	3004										
						0	0	0										
F2		3	17-03-08	2 x 4	Joint 14	Joint 22												
		1-ply	1-02-00	2 x 4	937	937												
F3		6	17-03-08	2 x 4	Joint 13	Joint 20	Joint 23											
		1-ply	1-02-00	2 x 4	686	1100	180											
F4		1	17-03-08	2 x 4	Joint 14	Joint 21	Joint 24											
		1-ply	1-02-00	2 x 4	700	1748	2508											
				0	0	0												

North Carolina 2018 - R402.1.5 Total UA

**Property**

32 Brewster Ct
Cameron, NC 28326
Model: Anconia
Community: Liberty Meadows

Organization

Southern Energy Manager
Justin Smith

Inspection Status

Results are projected

Builder

SMG Precision Properties

Template - SMG Precision - Liberty
Meadows Lot 33 - CZ 4 slab -
Liberty Meadows Lot 33

This report is based on a proposed design and does not confirm field enforcement of design elements.

Building UA

Elements	NC Reference	As Designed
Ceilings	52.2	49.6
Above-Grade Walls	219.5	163.0
Windows, Doors and Skylights	122.3	110.4
Slab Floor:	95.1	123.3
Framed Floors	15.8	17.2
Foundation Walls	0.0	0.0
Rim Joists	7.4	6.0
Overall UA (Design must be equal or lower):	512.3	469.5

Requirements

✓	R402.1.5	Total UA alternative compliance passes by 8.4%. The proposed home meets the UA requirement by 8.4%
✓	402.3.2	Average SHGC: 0.28 Max SHGC: 0.30 Average SHGC of 0.28 is greater than the maximum of 0.30.
✓	R402.4.2.2	Air Leakage Testing Air sealing is 0.27 CFM50 / ft² Shell Area. It must not exceed 0.30 CFM50 / ft² Shell Area.
✓	R402.5	Area-weighted average fenestration SHGC Area-weighted average fenestration SHGC is 0.28. The maximum allowed value is [No Limit].
✓	R402.5	Area-weighted average fenestration U-Factor
✓	R404.1	Lighting Equipment At least 75.0% of fixtures shall be high-efficacy lamps, currently 100.0% are high-efficacy.
✓	Mandatory Checklist	Mandatory code requirements that are not checked by Ekotrope must be met. 2015 IECC Mandatory Checklist must be checked as complete.
✓	R403.3.1	Duct Insulation Duct insulation meets the requirements specified in North Carolina 2018 Code Section 403.3.1.
✓	403.3.3	Duct Testing

Design exceeds requirements for North Carolina 2018 Prescriptive compliance by 8.4%.

Name: Justin Smith
Organization: Southern Energy Management

Signature: Justin Smith
Digitally signed: 2/1/23 at 10:15 AM

Ekotrope RATER - Version 4.0.2.3086

North Carolina 2018 Prescriptive compliance results calculated using Ekotrope RATER's energy and code compliance algorithm, including appropriate amendments.
Ekotrope RATER is a RESNET Accredited HERS Rating Tool. All results are based on data entered by Ekotrope users.
Ekotrope disclaims all liability for the information shown on this report.

Building Summary

Property

32 Brewster Ct
Cameron, NC 28326
Model: Anconia
Community: Liberty Meadows

Organization

Southern Energy Management
Justin Smith

Inspection Status

Results are projected



SOUTHERN ENERGY
MANAGEMENT
ENERGY EFFICIENCY & SOLAR POWER

Template - SMG Precision - Liberty Meadows Lot 33
- CZ 4 slab - ecoSelect
Liberty Meadows Lot 33

Builder

SMG Precision Properties

General Building Information

Number Of Bedrooms	4
Number Of Floors	2
Conditioned Floor Area [sq. ft.]	2,477
Has Electric Vehicle Ready Space	No
Unconditioned, attached garage?	Yes
Conditioned Volume [cu. ft.]	22,622
Total Units in Building	1
Residence Type	Single family detached
Number of Floors in Building	-
Floor Number	-
Model	Anconia
Community	Liberty Meadows
RESNET/IECC 2006-2018 Climate Zone	4A
IECC 2021 Climate Zone	3A

Foundation Wall

None Present

Foundation Wall Library List

None Present

Slab

Name	Library Type	Perimeter	Floor Grade	Carpet R	Exposed Masonry Area	Surface Area	Location	Enclosing
slab	Uninsulated	200	On Grade	1	0	1,403.0 ft²	Exposed Exterior	Conditioned Space

Slab Library List

Name	Wall Construction Type	Slab Completely Insulated?	Underslab Insulation Width [ft]	Perimeter Insulation Depth [ft]	Perimeter Insulation R Value	Thermal Break	Effective R-value
Uninsulated	Wood Frame / Other	No	0	0	0	No	0.00

Building Summary

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Organization

Southern Energy Management
Justin Smith

Inspection Status

Results are projected



SOUTHERN ENERGY
MANAGEMENT
ENERGY EFFICIENCY & SOLAR POWER

Builder

SMG Precision Properties

Template - SMG Precision - Liberty Meadows Lot 33

- CZ 4 slab - ecoSelect

Liberty Meadows Lot 33

Framed Floor

Name	Library Type	Carpet R	Floor Grade	Surface Area	Location
over garage	R 19, 16"OC G1 Carpet	0	Above Grade	337.0 ft²	Unconditioned, attached garage

Framed Floor Library List

Name	Effective R-value
R 19, 16"OC G1 Carpet	19.566

Rim Joist

Name	Library Type	Surface Area	Location
1st floor ambient	R 19 G1, 16"OC	87.0 ft²	Exposed Exterior
1st floor garage	R 19 G1, 16"OC	47.0 ft²	Unconditioned, attached garage

Rim Joist Library List

Name	Effective Insulation R-value
R 19 G1, 16"OC	17.30

Wall

Name	Library Type	Surface Color	Surface Area	Location
1st floor ambient	R 19 Adv. Framing G1 16" O.C	Medium	1,381.0 ft²	Exposed Exterior
1st floor garage	R 19 Adv. Framing G1 16" O.C	Medium	419.0 ft²	Unconditioned, attached garage
2nd floor ambient	R 19 Adv. Framing G1 16" O.C	Medium	694.0 ft²	Exposed Exterior
2nd floor attic	R 19 Adv. Framing G1 16" O.C	Medium	706.0 ft²	Attic

Building Summary

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32 Brewster Ct
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Southern Energy Management
Justin Smith

Inspection Status

Results are projected



SOUTHERN ENERGY
MANAGEMENT
ENERGY EFFICIENCY & SOLAR POWER

Template - SMG Precision - Liberty Meadows Lot 33
- CZ 4 slab - ecoSelect
Liberty Meadows Lot 33

Builder

SMG Precision Properties

Wall Library List

Name	Effective R-value
R 19 Adv. Framing G1 16" O.C	17.492

Glazing

Name	Library Type	Wall Assignment	Foundation Wall Assignment	Is Operable	Overhang Depth	Overhang Ft To Top	Overhang Ft To Bottom	Orientation	Surface Area
front 2nd unshaded	33/28	2nd floor ambient		Yes	0	0	0	Southeast	42.2 ft²
front unshaded	33/28	1st floor ambient		Yes	0	0	0	Southeast	27.0 ft²
left shaded	33/28	1st floor ambient		Yes	15	1	6	Southwest	27.0 ft²
left unshaded	33/28	1st floor ambient		Yes	0	0	0	Southwest	27.0 ft²
rear 2nd unshaded	33/28	2nd floor ambient		Yes	0	0	0	Northwest	27.0 ft²
rear shaded	33/28	1st floor ambient		Yes	12	2	9	Northwest	40.2 ft²
rear unshaded	33/28	1st floor ambient		Yes	0	0	0	Northwest	60.0 ft²
right 2nd unshaded	33/28	2nd floor ambient		Yes	0	0	0	Northeast	54.0 ft²
right unshaded	33/28	1st floor ambient		Yes	0	0	0	Northeast	7.0 ft²

Glazing Library List

Name	Shgc	U-factor
33/28	0.28	0.330

Skylight

None Present

Building Summary

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32 Brewster Ct
Cameron, NC 28326
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Inspection Status

Results are projected



SOUTHERN ENERGY
MANAGEMENT
ENERGY EFFICIENCY & SOLAR POWER

Template - SMG Precision - Liberty Meadows Lot 33
- CZ 4 slab - ecoSelect
Liberty Meadows Lot 33

Builder

SMG Precision Properties

Skylight Library List

None Present

Opaque Door

Name	Library Type	Wall Assignment	Foundation Wall Assignment	Emittance	Solar Absorptance	Surface Color	Surface Area	Location
front entry	Fiberglass R-5	1st floor ambient		0.9	0.75	Medium	20.0 ft²	Exposed Exterior
garage entry	Fiberglass R-5	1st floor garage		0.9	0.75	Medium	18.0 ft²	Unconditioned, attached garage

Opaque Door Library List

Name	Effective U-factor
Fiberglass R-5	0.200

Roof Insulation

Name	Library Type	Attic Exterior Area [ft²]	Clay or Concrete Roof Tiles	Surface Color	Surface Area	Location
attic	R 38 Attic BLOWN FG G1 2x10 24"OC NO Radiant Barrier	2,557.8	No	Dark	1,740.0 ft²	Attic

Roof Insulation Library List

Name	Has Radiant Barrier	Effective R-value
R 38 Attic BLOWN FG G1 2x10 24"OC NO Radiant Barrier	No	35.115

Whole House Infiltration

Infiltration	Measurement Type	Shelter Class
1809 CFM at 50 Pa	Blower-door tested	4

Building Summary

Property 32 Brewster Ct Cameron, NC 28326 Model: Anconia Community: Liberty Meadows	Organization Southern Energy Management Justin Smith	Inspection Status Results are projected	 SOUTHERN ENERGY MANAGEMENT ENERGY EFFICIENCY & SOLAR POWER
Template - SMG Precision - Liberty Meadows Lot 33 - CZ 4 slab - ecoSelect Liberty Meadows Lot 33			
Builder SMG Precision Properties			

Mechanical Ventilation

None Present

Lighting

% Interior Fluorescent Lighting	% Interior LED Lighting	% Exterior Fluorescent Lighting	% Exterior LED Lighting	% Garage Fluorescent Lighting	% Garage LED Lighting
10	90	0	0	0	0

Onsite Generation

None Present

Onsite Generation Library List

None Present

Solar Generation

None Present

Dehumidifier

None Present

Dehumidifier Library List

None Present

Building Summary

Property

32 Brewster Ct
Cameron, NC 28326
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Community: Liberty Meadows

Organization

Southern Energy Management
Justin Smith

Inspection Status

Results are projected



SOUTHERN ENERGY
MANAGEMENT
ENERGY EFFICIENCY & SOLAR POWER

Template - SMG Precision - Liberty Meadows Lot 33
- CZ 4 slab - ecoSelect
Liberty Meadows Lot 33

Builder

SMG Precision Properties

Whole House Fan

None Present

Whole House Fan Library List

None Present

Conditioning Equipment

Name	Library Type	Serial Number	Heating Percent Load	Cooling Percent Load	Hot Water Percent Load	Location
1st floor heat pump	z 24k 14 SEER 8.2hspf		57%	57%	0%	Attic
2nd floor heat pump	z 30k 14 SEER 8.2hspf		43%	43%	0%	Attic
Water Heating	z 50 gal. 0.95 EF Elec		0%	0%	100%	Unconditioned Garage

Equipment Type: z 24k 14 SEER 8.2hspf

Equipment Type	Air Source Heat Pump
Fuel Type	Electric
Distribution Type	Forced Air
Motor Type	PSC (Single Speed)
Heating Efficiency	8.2 HSPF
Heating Capacity [kBtu/h]	24
Backup Fuel Type	Electric
Switchover Temperature [°F]	0
Backup Heating Efficiency	1 COP
Use default Supplemental Heat	Yes
Cooling Efficiency	14 SEER
Cooling Capacity [kBtu/h]	24

Building Summary

Property

32 Brewster Ct
Cameron, NC 28326
Model: Anconia
Community: Liberty Meadows

Organization

Southern Energy Management
Justin Smith

Inspection Status

Results are projected



SOUTHERN ENERGY
MANAGEMENT
ENERGY EFFICIENCY & SOLAR POWER

Template - SMG Precision - Liberty Meadows Lot 33
- CZ 4 slab - ecoSelect
Liberty Meadows Lot 33

Builder

SMG Precision Properties

Equipment Type: z 30k 14 SEER 8.2hspf

Equipment Type	Air Source Heat Pump
Fuel Type	Electric
Distribution Type	Forced Air
Motor Type	PSC (Single Speed)
Heating Efficiency	8.2 HSPF
Heating Capacity [kBtu/h]	30
Backup Fuel Type	Electric
Switchover Temperature [°F]	0
Backup Heating Efficiency	1 COP
Use default Supplemental Heat	Yes
Cooling Efficiency	14 SEER
Cooling Capacity [kBtu/h]	30

Equipment Type: z 50 gal. 0.95 EF Elec

Equipment Type	Residential Water Heater
Fuel Type	Electric
Distribution Type	Hydronic Delivery (Radiant)
Hot Water Efficiency	0.95 Energy Factor
Tank Capacity (gal.)	50
Hot Water Capacity [kBtu/h]	40
Recovery Efficiency	0.98

Building Summary

Property

32 Brewster Ct
Cameron, NC 28326
Model: Anconia
Community: Liberty Meadows

Organization

Southern Energy Management
Justin Smith

Inspection Status

Results are projected

Builder

SMG Precision Properties

Template - SMG Precision - Liberty Meadows Lot 33
- CZ 4 slab - ecoSelect
Liberty Meadows Lot 33



SOUTHERN ENERGY
MANAGEMENT
ENERGY EFFICIENCY & SOLAR POWER

Distribution System

Distribution Type	Forced Air
Heating Equipment	1st floor heat pump
Cooling Equipment	1st floor heat pump
Sq. Feet Served	1,403
# Return Grilles	2
Supply Duct R Value	8
Return Duct R Value	8
Supply Duct Area [ft²]	378.81
Return Duct Area [ft²]	140.3
Leakage to Outdoors	56 CFM @ 25Pa (3.99 / 100 ft²)
Total Leakage	56 CFM25
Total Leakage Duct Test Conditions	Post-Construction
Use Default Flow Rate	Yes
Duct 1	
Duct Location	Attic (well vented)
Percent Supply Area	100
Percent Return Area	100
Duct 2	
Duct Location	Conditioned Space
Percent Supply Area	0
Percent Return Area	0
Duct 3	
Duct Location	Conditioned Space
Percent Supply Area	0
Percent Return Area	0
Duct 4	
Duct Location	Conditioned Space
Percent Supply Area	0
Percent Return Area	0
Duct 5	
Duct Location	Conditioned Space
Percent Supply Area	0
Percent Return Area	0
Duct 6	
Duct Location	Conditioned Space
Percent Supply Area	0
Percent Return Area	0

Building Summary

Property

32 Brewster Ct
Cameron, NC 28326
Model: Anconia
Community: Liberty Meadows

Organization

Southern Energy Management
Justin Smith

Inspection Status

Results are projected



SOUTHERN ENERGY
MANAGEMENT
ENERGY EFFICIENCY & SOLAR POWER

Template - SMG Precision - Liberty Meadows Lot 33
- CZ 4 slab - ecoSelect
Liberty Meadows Lot 33

Builder

SMG Precision Properties

Distribution System

Distribution Type	Forced Air
Heating Equipment	2nd floor heat pump
Cooling Equipment	2nd floor heat pump
Sq. Feet Served	1,074
# Return Grilles	2
Supply Duct R Value	8
Return Duct R Value	8
Supply Duct Area [ft ²]	289.98
Return Duct Area [ft ²]	107.4
Leakage to Outdoors	42 CFM @ 25Pa (3.91 / 100 ft ²)
Total Leakage	42 CFM25
Total Leakage Duct Test Conditions	Post-Construction
Use Default Flow Rate	Yes
Duct 1	
Duct Location	Attic (well vented)
Percent Supply Area	100
Percent Return Area	100
Duct 2	
Duct Location	Conditioned Space
Percent Supply Area	0
Percent Return Area	0
Duct 3	
Duct Location	Conditioned Space
Percent Supply Area	0
Percent Return Area	0
Duct 4	
Duct Location	Conditioned Space
Percent Supply Area	0
Percent Return Area	0
Duct 5	
Duct Location	Conditioned Space
Percent Supply Area	0
Percent Return Area	0
Duct 6	
Duct Location	Conditioned Space
Percent Supply Area	0
Percent Return Area	0

HVAC Grading

HVAC Grading Not Conducted

Ceiling Fan

Has Ceiling Fan	No
Cfm Per Watt	100

Building Summary

Property

32 Brewster Ct
Cameron, NC 28326
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Organization

Southern Energy Management
Justin Smith

Inspection Status

Results are projected



SOUTHERN ENERGY
MANAGEMENT
ENERGY EFFICIENCY & SOLAR POWER

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Builder

SMG Precision Properties

Water Distribution

Water Fixture Type	Low-flow
Use Default Hot Water Pipe Length	No
Hot Water Pipe Length [ft]	100
At Least R3 Pipe Insulation?	No
Hot Water Recirculation System?	No
Recirculation System Pipe Loop Length [ft]	20
Drain Water Heat Recovery?	No

Clothes Dryer

Cef	3.01
Fuel Type	Electric
Field Utilization	Timer Controls
Is Outside Conditioned Space	No
Clothes Dryer Available	Yes
Defaults Type	HERS Reference

Clothes Washer

Label Energy Rating	153 kWh/Year
Annual Gas Cost	\$12.00
Electric Rate	\$0.11/kWh
Gas Rate	\$1.22/Therm
Capacity	3.31
Imef	2.1547
Defaults Type	Custom
Load Type	Front-load
Loads Per Week	6
Is Outside Conditioned Space	No
Clothes Washer Available	Yes

Dishwasher

Dishwasher Efficiency	270 kWh
Dishwasher Size	Standard
Annual Gas Cost	\$22.23
Electric Rate	\$0.12/kWh
Gas Rate	\$1.09/Therm
Is Outside Conditioned Space	No

Building Summary

Property

32 Brewster Ct
Cameron, NC 28326
Model: Anconia
Community: Liberty Meadows

Organization

Southern Energy Management
Justin Smith

Inspection Status

Results are projected



SOUTHERN ENERGY
MANAGEMENT
ENERGY EFFICIENCY & SOLAR POWER

Template - SMG Precision - Liberty Meadows Lot 33
- CZ 4 slab - ecoSelect
Liberty Meadows Lot 33

Builder

SMG Precision Properties

Appliances and Controls

Thermostat Cooling Setpoint	**** 75.0
Thermostat Heating Setpoint	**** 70.0
Range/Oven Fuel	Electric
Convection Oven?	No
Induction Range?	No
Range/Oven Outside Conditioned Space?	No
Refrigerator Consumption	538 kWh/Year
Refrigerator Outside Conditioned Space?	No

Notes

Initial Inputs _____ JS 02/01/22 _____

- confirm HVAC specs
- confirm water heater specs
- confirm ventilation entry
- modeled to worst case orientation
- confirm cfl lighting %