

PLAN: Menger w/ Porch

ELEVATIONS

PROJECT ADDRESS: 184 Edes Ct. Liberty Meadows Lot 22

Precision Custom Hom Raeford, NC n@PrecisionCustomHom

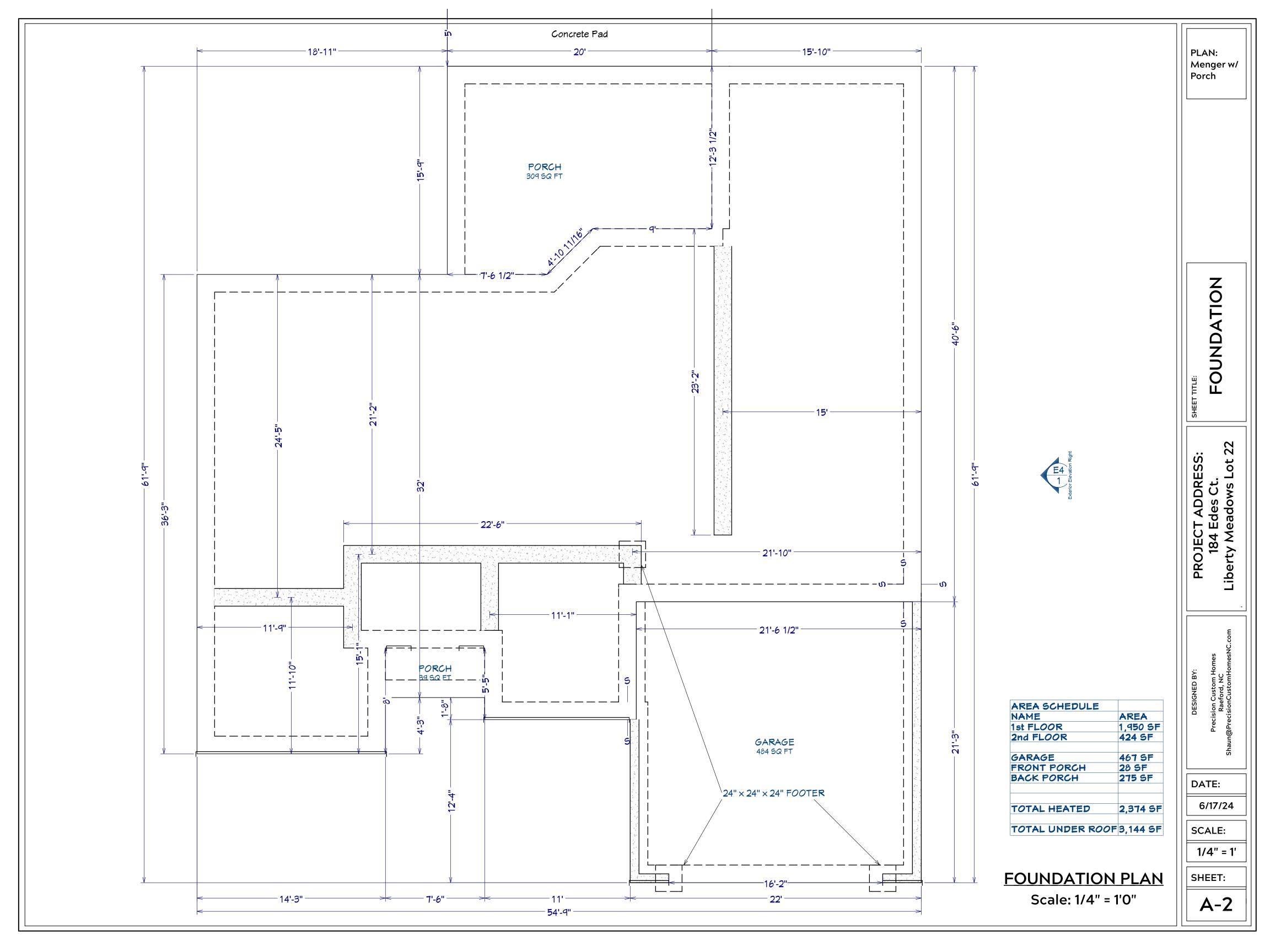
DATE:

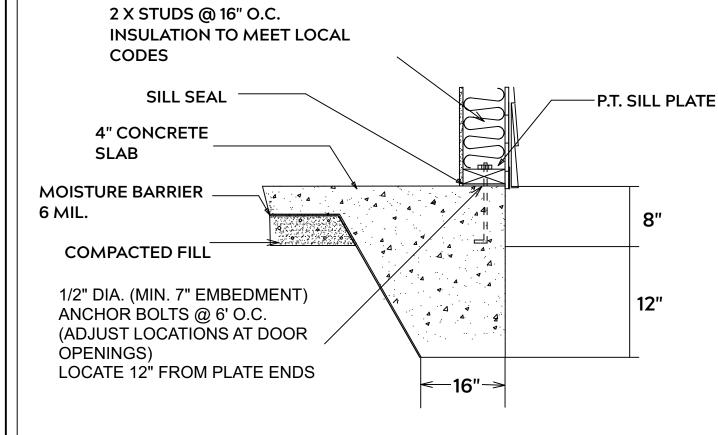
6/17/24

1/4" = 1'

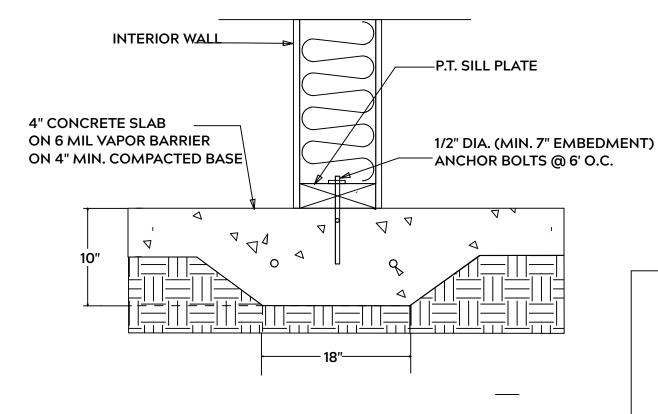
SHEET:

A-1

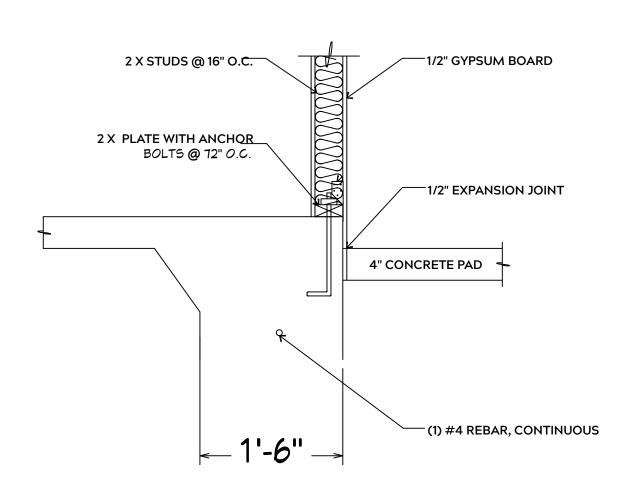




MONOLITHIC SLAB



LUG FOOTING



FOUNDATION NOTES:

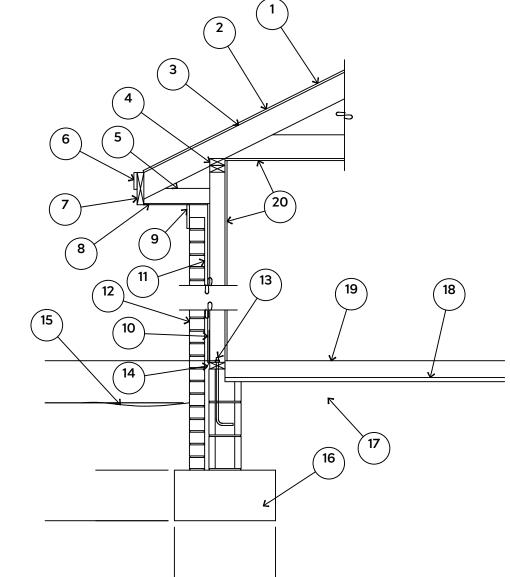
ALL FOOTINGS SHALL BEAR ON ORIGINAL UNDISTURBED SOIL THE 28 DAY COMPRESSIVE STRENGTH OF ALL **FOOTINGS IS 3000 PSI**

PROVIDE WATER PROOFING AND 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



15# FELT UNDERLAYMENT UNDER COMPOSITION SHINGLES.

2. ROOF DECKING.

3. 2 X RAFTERS / ENGINEERED TRUSSES

DOUBLE TOP PLATE.

5. 2 X 4 RETURN. 6. 3/4" FASCIA OR PVC TRIM COIL

7. 2 X FASCIA

1/4" PLYWOOD OR VINYL SOFFIT

9. 1X FREIZE BOARD (TO BE USED WITH **BRICK VENEERS)**

10. INSULATION BOARD OR HOUSE WRAP

11. AIR SPACE.

12 BRICK WITH BRICK TIES PER MANUFACTURER'S SPECIFICATIONS.

13. 1/2" X 12" ANCHOR BOLTS, 6'-0" O.C., 12" FROM CORNERS.

4. FLASHING WITH WEEP HOLES @ 48" O.C.

15. FINISHED GRADE.

16. FOOTING

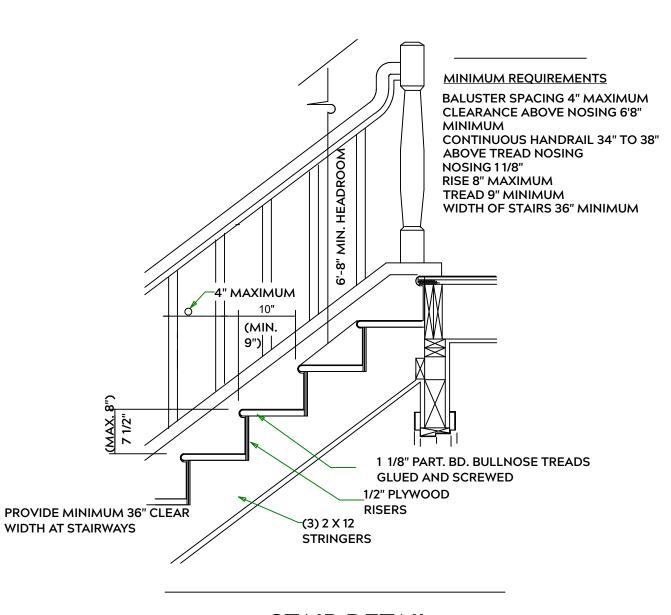
17. COMPACTED EARTH FILL

18. 6 MIL. VAPOR BARRIER

19. 4" CONCRETE SLAB, 3,000 P.S.I. WITH 6" X 6" 10 GA. X 10 GA. WELDED WIRE FABRIC.

20. 1/2" GYPSUM BOARD.

EXTERIOR WALL SECTION



STAIR DETAIL

GENERAL FRAMING NOTES:

ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY SHALLE 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. DOULBE / TRIPLE JACK STUDS AS NECESSARY UNDER HEADERS AS REQUIRED

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

INTERIOR WALL @ GARAGE STEP DOWN

PLAN: Menger w/ Porch

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22 Lot T ADDRESS Edes Ct. **PROJECT**

Liberty Meadows

Precision Custom Hor Raeford, NC @PrecisionCustomHor

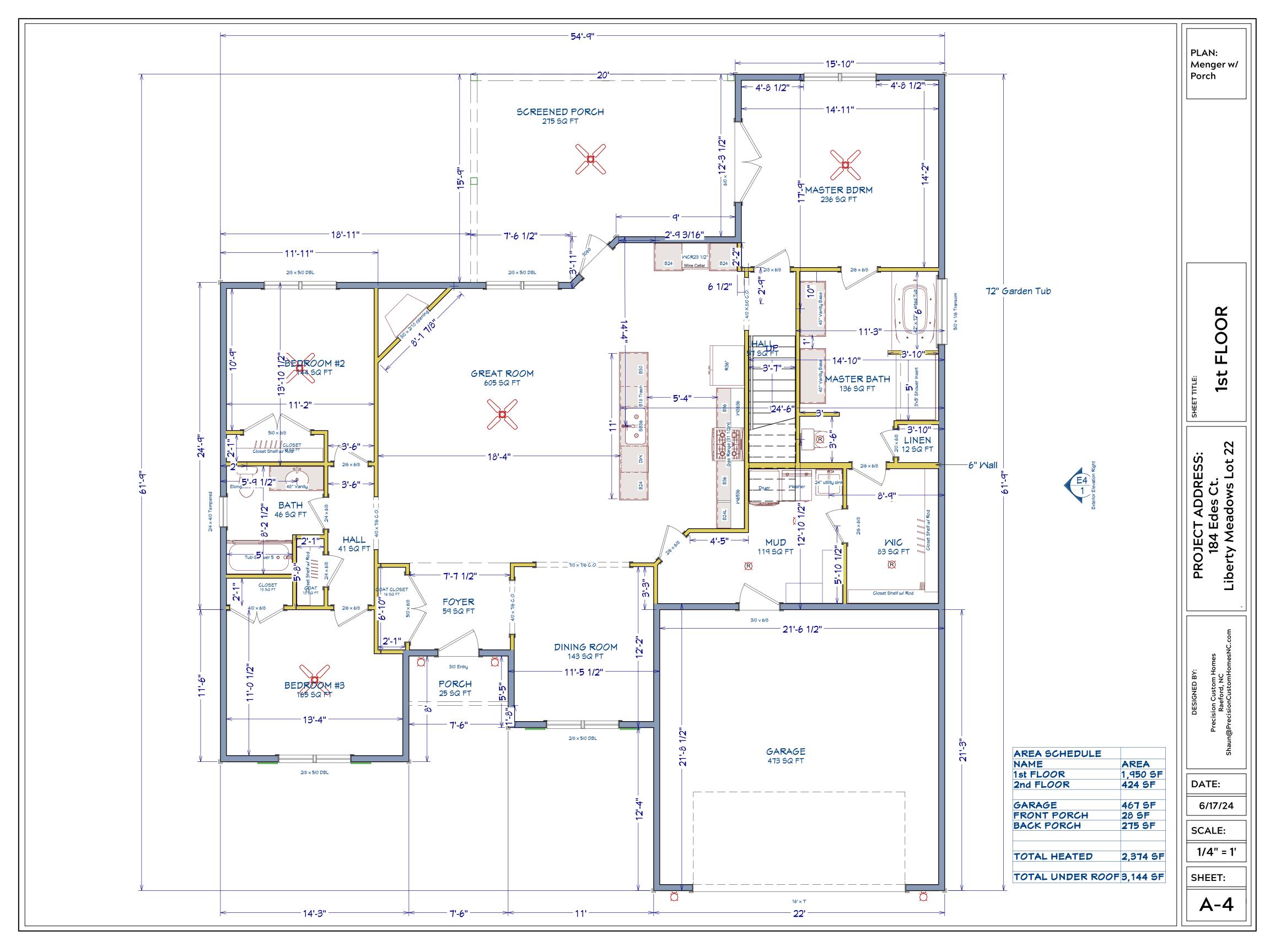
DATE:

6/17/24

SCALE: 1/4" = 1'

SHEET:

A-3



15'-10 1/2" - 4'-5 1/2" · <2'-10"><3'-10 1/2"> BONUS \$5 SQ FT Closet Shelf w/ Rod CLOSET 39 SQ FT Frame Exterior Bonus Walls with 6" Studs R 21'-2 1/2" 3030FX AREA SCHEDULE
NAME
1st FLOOR
2nd FLOOR AREA BONUS 352 SQ FT 1,950 SF 424 SF - 1**5**'-3" 467 SF 28 SF GARAGE FRONT PORCH BACK PORCH 7 275 SF R TOTAL UNDER ROOF 3,144 SF 2/8 × 5/0 Drywall Center window on gable (not on room) - 16'-2" -<2'-10">< LIVING AREA 425 SQ FT

PLAN: Menger w/ Porch

2nd FLOOR

SHEET TITLE:

PROJECT ADDRESS: 184 Edes Ct. Liberty Meadows Lot 22

> Precision Custom Homes Raeford, NC ihaun@PrecisionCustomHomesNC.com

DATE:

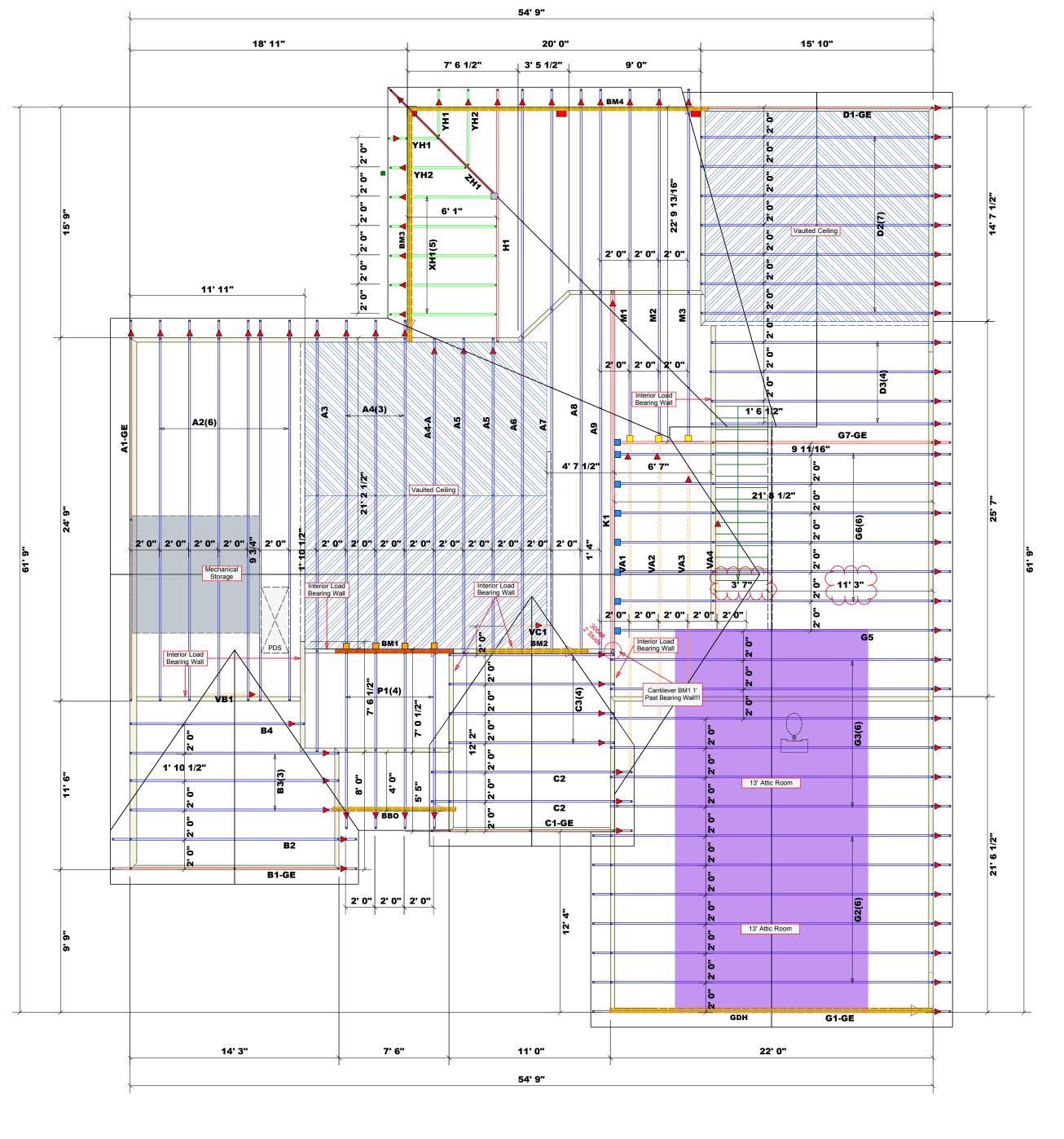
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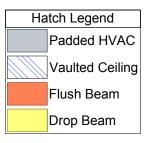
SCALE:

1/4" = 1'

SHEET:

A-5





Dimension Notes All exterior wall to wall dimensions are to face of stud unless noted otherwise
 All interior wall dimensions are to face of stud unless noted otherwise
 All exterior wall to truss dimensions are to face of stud unless noted otherwise

Roof Area = 3933.66 sq.ft. Ridge Line = 141.05 ft. Hip Line = 33.43 ft. Horiz. OH = 228.43 ft. Raked OH = 185.86 ft. Decking = 135 sheets

All Walls Shown Are Considered Load Bearing

= Indicates Left End of Truss (Reference Engineered Truss Drawing) Do Not Erect Trusses Backwards

Truss Placement Plan
Scale: 3/16"=1'

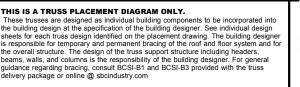
		Products			
PlotID	Length	Product	Plies	Net Qty	Fab Type
BM1	9' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2	FF
BM2	8' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2	FF
GDH	22' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2	FF
BM3	16' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2	FF
BM4	22' 0"	2x12 SP No.2	2	2	FF

	Conne	ctor Info	rmati	ion	Nail Info	rmation
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
	HJC26	USP	1	Varies	16d/3-1/2"	10d/3"
	HUS26	USP	8	Varies	16d/3-1/2"	16d/3-1/2"
	JUS24	USP	3	Varies	10d/3"	10d/3"
	LSSH210	USP	4	Varies	Per Manufactuer	Per Manufactuer

All Truss Reactions are Less than 3,000 lbs. Unless Noted Otherwise.

-- Denotes Reaction Greater than 3,000 lbs. Reaction / # of Studs

(BASE	ART FOR JAC ON TABLES R502.5(1)) & (b))	BUILDER	Precision Custom Homes	COUNTY	Harnett	THIS IS A TRUS These trusses are the building design
~	ACK STUDS REQUIRED HEADER/GIRDER NO SQ ABQUE OF SQ ABQ		JOB NAME	Lot 22 Liberty Meadows	ADDRESS	184 Edes Ct., Cameron, NC	sheets for each tru is responsible for t the overall structur beams, walls, and guidance regarding
END REACTION (UP TO) REQ'S STUDS FOI	END REACTION (UP TO) REQ'D STUDS FOR (3) PLY HEADER	(UP TO) REQ'D STUDS FOR (4) PLY HEADER	PLAN	Menger w/Bonus Bath	MODEL	Roof	delivery package of Bearing reactions prescriptive Code
1700 1 3400 2 5100 3	2550 1 5100 2 7650 3	3400 1 6800 2 10200 3	SEAL DATE	6/17/2024	DATE REV.	6/20/204	(derived from the foundation size an than 3000# but no
8500 4 8500 5 10200 6	10200 4 12750 5 15300 6	13600 4 17000 5	QUOTE #	N/A	DRAWN BY	Neil Baggett	be retained to design
11900 7 13600 8 15300 9			JOB#	J0524-3226	SALESMAN	Neil Baggett	



tions less than or equal to 3000# are deemed to comply with the Code requirements. The contractor shall refer to the attached Table in the prescriptive Code requirements) to determine the minimum ze and number of wood studs required to support reactions greater but not greater than 15000#. A registered design professional shall to design the support system for any reaction that exceeds those the attached Tables. A registered design professional shall be esign the support system for all reactions that exceed 15000#. **TRUSSES & BEAMS**

Neil Baggett

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

соттесн

ROOF & FLOOR

North Carolina 2018 - R402.1.5 Total UA

Property

368 Solomon Dr Cameron, NC 28326 Community: Liberty Meadows Organization

Southern Energy Manager Justin Smith

Inspection StatusResults are projected



Template - SMG Precision - Liberty Meadows Lot 31 - CZ 4 slab -

Liberty Meadows Lot 31

Builder SMG Precision Properties

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	71.2	67.6
Above-Grade Walls	195.4	145.1
Windows, Doors and Skylights	82.0	72.1
Slab Floor:	108.6	141.9
Framed Floors	16.4	17.8
Foundation Walls	0.0	0.0
Rim Joists	1.7	1.4
Overall UA (Design must be equal or lower):	475.3	445.9

Requirements

	R402.1.5	Total UA alternative compliance passes by 6.2%.	The proposed home meets the UA requirement by 6.2%
	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 0.22 CFM50 / ft² Shell Area. It must not exceed 0.30 CFM50 / ft² Shell Area.
\bigcirc	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	
\bigcirc	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 6.2%.

Name:	Justin Smith	Signature:	Justin Smith
Organization:	Southern Energy Management	Digitally signed:	3/2/23 at 3:00 PM

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Organization

Southern Energy Management Justin Smith

Builder

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General Building Information	n
Number Of Bedrooms	3
Number Of Floors	2
Conditioned Floor Area [sq. ft.]	2,374
Has Electric Vehicle Ready Space	No
Unconditioned, attached garage?	Yes
Conditioned Volume [cu. ft.]	20,942
Total Units in Building	1
Residence Type	Single family detached
Number of Floors in Building	-
Floor Number	-
Model	
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								
Nam	e Library Type	e Perimeter	Floor Grade	Carpet R	Exposed Masonry Area	Surface Area	Location	Enclosing
slat	Uninsulated	223	On Grade	1	0	1,950.0 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

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Justin Smith

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SMG Precision Properties





ı	Framed Flooi	r				
Γ	Name	Library Type	Carpet R	Floor Grade	Surface Area	Location
	over garage	R 19, 16"OC G1 Carpet	0	Above Grade	348.0 ft²	Unconditioned, attached garage

Framed Floor Library List					
	Name	Effective R-value			
R 19, 16"OC	C G1 Carpet	19.566			

Rim Joist			
Name	Library Type	Surface Area	Location
1st floor garage	R 19 G1, 16"OC	31.0 ft²	Unconditioned, attached garage

Rim Joist Library L	List
Name	e Effective Insulation R-value
R 19 G1, 16"OC	17.30

				Vall
Locatio	Surface Area	Surface Color	Library Type	Name
Exposed Exterio	1,732.0 ft²	Medium	R 19 Adv. Framing G1 16" O.C	1st floor ambient
Unconditioned, attached garage	275.0 ft²	Medium	R 19 Adv. Framing G1 16" O.C	1st floor garage
Exposed Exterio	128.0 ft²	Medium	R 19 Adv. Framing G1 16" O.C	2nd floor ambient
Attio	637.0 ft²	Medium	R 19 Adv. Framing G1 16" O.C	2nd floor attic

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

Inspection Status

Results are projected

Glazing									
Name	Library Type	Wall Assignment	Foundation Wall Assignment	ls 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	West	13.5 ft²
front unshaded	33/28	1st floor ambient		Yes	0	0	0	West	54.0 ft²
left unshaded	33/28	1st floor ambient		Yes	0	0	0	North	7.5 ft²
rear shaded	33/28	1st floor ambient		Yes	10	2	9	East	56.0 ft²
rear unshaded	33/28	1st floor ambient		Yes	0	0	0	East	54.0 ft²
right unshaded	33/28	1st floor ambient		Yes	0	0	0	South	9.2 ft²

Glazing Library List			
Name	Shgc	U-factor	
33/28	0.28	0.330	

Skylight	
	None Present
l	

Skylight Library List	
	None Present

Property 368 Solomon Dr Cameron, NC 28326 Community: Liberty Meadows

Community: Liberty Meadows

Template - SMG Precision - Liberty Meadows Lot 31

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Justin Smith

Builder

SMG Precision Properties





Opaque Doo	r							
Name	Library Type	Wall Assignment	Foundation Wall Assignment		Solar Absorptance		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	20.0 ft²	Unconditioned, attached garage

Opaque D	oor Library List	
	Name	Effective U-factor
	Fiberglass R-5	0.200

Roof Insulation	on					
Name	Library Type	Attic Exterior Area [ft²]	Clay or Concrete Roof Tiles		Surface Area	Location
attic	R 38 Attic BLOWN FG G1 2x10 24"OC NO Padiant Barrier	3,489.78	No	Dark	2,374.0 ft²	Attic

Roof Insulati	on Library L	ist	
Name	•	Has Radiant Barrier	Effective R-value
R 38 Attic BLOWN FG G1 2x10 24"OC NO		No	35.115

Whole House	Infiltration		
Infiltration	Measurement Type	Shelter Class	S
1675 CFM at 50 Pa	Blower-door tested	4	1

Mec	hani	ical	∣ Ventilation
14100	IIGII	ı u	. V CII LII a LI OI I

None Present

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Inspection Status

Results are projected

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None Present

SMG Precision Properties



	Lighting					
	% Interior Fluorescent Lighting	% Interior LED Lighting	g % Exterior Fluorescent Lighting	% Exterior LED Lighting	% Garage Fluorescent Lighting	% Garage LED Lighting
	10	90	0	0	0	0
	_			`		
	Onsite Gener	ration				
			None Present			
	Onsite Gener	ation Library Lis	st			
			None Present			
	Solar Genera	tion	None Present			
Ī						
	Dehumidifier		None Present			
	Dehumidifier	Library List				
			None Present			
	Whole House	Fan				

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SMG Precision Properties

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		100%	100%	0%	Attic
Water Heating	z 50 gal. 0.95 EF Elec		0%	0%	100%	Unconditioned Garage

Inspection Status

Results are projected

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		

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			

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SMG Precision Properties





Distribution System	
Distribution Type	Forced Air
Heating Equipment	1st floor heat pump
Cooling Equipment	1st floor heat pump
Sq. Feet Served	2,374
# Return Grilles	3
Supply Duct R Value	8
Return Duct R Value	8
Supply Duct Area [ft²]	640.98
Return Duct Area [ft²]	356.1
Leakage to Outdoors	94 CFM @ 25Pa (3.96 / 100 ft²)
Total Leakage	94 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	

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SMG Precision Properties



Water Distribution	
Water Fixture Type	Low-flow
Use Default Hot Water Pipe Length	No
Hot Water Pipe Length [ft]	89
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

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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 03/02/22__

-confirm HVAC specs

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

