	LIVE LOAD	DEAD LOAD
TABLE R301.4	(PSF)	(PSF)
DWELLING UNITS	40	10
SLEEPING ROOMS	30	10
ATTICS WITH STORAGE	20	10
ATTICS WITHOUT STORAGE	10	10
ROOF SNOW	20	10
STAIRS	40	10
DECKS	40	10
EXTERIOR BALCONIES	60	10
PASSENGER VEHICLE GARAGES	50	_
FIRE ESCAPES	40	10
GUARDRAILS AND HANDRAILS	200	-

1. FRAMING LUMBER SHALL BE #2 SPRUCE PINE FIR (SPF) WITH THE FOLLOWING DESIGN PROPERTIES:

2. FRAMING LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE #2 SOUTHERN YELLOW PINE (SYP) TREATED IN ACCORDANCE WITH AWPA C22 WITH THE FOLLOWING DESIGN PROPERTIES:

3. ENGINEERED WOOD BEAMS SHALL BE LAMINATED VENEER LUMBER (LVL) OR PARALLEL STRAND LUMBER (PSL) WITH THE Fb = 2900 PSI Fv = 285 PSI E = 1.9E6 PSI

4. STRUCTURAL STEEL SHALL CONFORM TO ASTM A-36 MINIMUM GRADE.

5. BOLTS SHALL CONFORM TO A307 MINIMUM GRADE.

6. REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615 GRADE 60.

7. POURED CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. MATERIALS USED TO PRODUCE CONCRETE SHALL COMPLY WITH THE APPLICABLE STANDARDS LISTED IN ACI 318 OR ASTM C 1157.

8. CONCRETE LOCATED PER TABLE R402.2 SHALL BE AIR ENTRAINED WITH THE TOTAL AIR CONTENT NOT LESS THAN 5 PERCENT OR MORE THAN 7 PERCNET.

9. MASONRY UNITS SHALL CONFORM TO ACI 530/ASCE 5/TMS 402 AND MORTAR SHALL COMPLY WITH ASTM C 270.

10. ALLOWABLE SOIL BEARING PRESSURE 2000 PSF.

ENGINEER'S SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY AND DOES NOT CERTIFY ARCHITECTURAL LAYOUT OR DIMENSIONAL ACCURACY. ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION METHODS OR ANY DEVIATION FROM THE PLANS.

ALL CONSTRUCTION, WORKMANSHIP, MATERIAL QUALITY AND SELECTION SHALL BE IN ACCORDANCE WITH THE $\underline{\text{NORTH}}$ CAROLINA STATE BUILDING CODE - RESIDENTIAL CODE 2018 EDITION FROM THE INTERNATIONAL RESIDENTIAL CODE 2018 (IRC), AND LOCAL CODES AND REGULATIONS. DIMENSIONS SHALL GOVERN OVER SCALE AND CODE SHALL GOVERN OVER

ADDITIONAL LOADS

FIGURE R301.2(4) - BASIC DESIGN WIND SPEED 100 MPH

FIGURE R301.2(2) - SEISMIC DESIGN CATEGORY B

TABLE R301.2(2) - COMPONENT AND CLADDING LOADS FOR A MEAN ROOF HEIGHT OF 30 FEET OR LESS LOCATED IN EXPOSURE B

ROOF VALUES BOTH POSITIVE AND NEGATIVE SHALL BE DESIGNED BASED ON ROOF PITCHES AS FOLLOWS:

45.4 PSF FOR 0:12 TO 2:25:12, 34.8 PSF FOR 2:25:12 TO 7:12 AND 21 PSF FOR 7:12 TO 12:12 WALL CLADDING IS DESIGNED FOR A 24.1 PSF POSITIVE AND NEGATIVE PRESSURE

TABLE N1102.1 - REFER TO TABLE N1101.1 TO DETERMINE THE CLIMATE ZONE BY COUNTY AND REFER TO TABLE

N1102.1 FOR R VALUE INSULATION REQUIREMENTS LISTED BY ZONE.

TABLE N1102.1 - ZONE 7 - MAX. GLAZING U FACTOR: 0.40. MIN. INSULATION R VALUES: CEILING R-30, WALLS R-13, FLOORS R-19, BASEMENT WALLS R-7, SLAB PERIMETER R-0, CRAWL SPACE WALLS R-7.

 $\frac{\text{TABLE N1102.1 - ZONE 8 - MAX. GLAZING U FACTOR: 0.40.}}{\text{FLOORS }\frac{1}{R-19}, \text{BASEMENT WALLS }\frac{1}{R-19}, \text{SLAB PERIMETER }\frac{1}{R-5} (2 \text{ FT DEEP}), \text{CRAWL SPACE WALLS }\frac{1}{R-10}.}$

1. STEEL FLITCH BEAMS SHALL BE FASTENED TOGETHER WITH 1/2" DIAMETER BOLTS WITH WASHERS PLACED UNDER THE THREADED END OF THE BOLT. BOLTS SHALL BE SPACED AT MAXIMUM 24" o.c. STAGGERED TOP AND BOTTOM OF BEAM WITH A MINIMUM 2" EDGE DISTANCE. TWO BOLTS SHALL BE LOCATED AT 6" FROM EACH END OF FLITCH BEAM.

2 STFFI RFAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" AND FULL FLANGE WIDTH. BEAMS MUST BE ANCHORED AT EACH END WITH A MINIMUM OF FOUR 16d NAILS OR TWO 1/2" x 4" LAG SCREWS.

3. ENGINEERED WOOD BEAMS SHALL BE INSTALLED WITH ALL CONNECTIONS PER MANUFACTURER'S INSTRUCTIONS.

4. ALL BEAMS SHALL BE CONTINUOUSLY SUPPORTED LATERALLY AND SHALL BEAR FULL WIDTH ON THE SUPPORTING WALLS OR COLUMNS INDICATED WITH A MINIMUM OF THREE STUDS.

5. SOLID BLOCKING SHALL BE PROVIDED AT ALL POINT LOADS TO TRANSFER LOADS THROUGH FLOOR LEVELS. COLUMNS SHALL BE CONTINUOUS TO THE FOUNDATION OR TO OTHER STRUCTURAL ELEMENTS.

6. ENGINEERED WOOD FLOOR SYSTEMS AND ROOF TRUSS SYSTEMS SHALL BE PROVIDED FOR REVIEW AND COORDINATED WITH THE ENGINEER OF RECORD. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

7. WALL BRACING REQUIREMENTS SHALL BE IN ACCORDANCE WITH $\underline{\text{SECTION R602.10}}$ OF THE NORTH CAROLINA RESIDENTIAL

8. BRICK LINTELS SHALL BE 3 $1/2 \times 3 1/2 \times 1/4$ STEEL ANGLE FOR UP TO 60" MAXIMUM SPAN AND 6 $\times 4 \times 5/16$ FOR SPANS

9. BRICK LINTELS AT SLOPED AREAS SHALL BE 4 x 3 1/2 x 1/4 STEEL ANGLE WITH 16d NAILS IN 3/16" HOLES IN 4" ANGLE LEG AT 12" o.c. TO DOUBLE RAFTER. WHEN THE SLOPE EXCEEDS 4:12 A MINIMUM OF $3 \times 3 \times 1/4$ PLATES SHALL BE WELDED AT 24" o.c. ALONG THE STEEL ANGLE.

Prince Place Lot 13

				TIC '	VENT S	CHEDU	LE		
					ELEVATIO	N			
MAIN	HOUSE		SQ FTG	2453	AT	/ NEAR RID	GE	AT / NE	AR EAVE
VENT TYPE	SQ. REQL	. FT. JIRED	SQ. FT.	PERCENT OF TOTAL	POT LARGE (SQ. FT. EACH)	POT SMALL (SQ. FT. EACH)	RIDGE VENT (SQ. FT. PER LF)	EAVE VENT (SQ. IN. EACH)	CONT. VENT (SQ. IN. PER LF)
	RAN		SUPPLIED	SUPPLIED	0.4236	0.2778	0.125	0.1944	0.0625
RIDGE VENT	3.27	4.09	8.75	46.67	0	0	70.00		
SOFFIT VENTS	4.91	4.09	10.00	53.33				0	160.00
TOTAL (MIN)	8.18	8.18	18.75	100.00	POT VENTS MAY B	E REQUIRED IF THERI	E IS INSUFFICIENT RID	GE AVAILABLE	

* SCH	EDULE HAS	S BEEN CA	LCULATED ASSU	MING EAVE VENT	TLATION AT 50-60%	OF TOTAL A	ND RIDGE AT 40-509	6 OF TOTAL	REQUIRED VENTIL	ATION.

REVISION LOG				
REVISION: 001	DATE: 01/28/2022			
1. ADD 3-CAR GARAGE TO	O PLAN.			
REVISION: 002	DATE: 02/08/2022			
1. CHANGED THE 2 CAR G	SARAGE DOOR 16080 GARAGE DOOR TO 18080			
	GE FRONT WALL 24" TO ACCOMMODATE NEW GARAGE DOOR SIZE			
CHANGED THE 8080 GA	RAGE DOOR TO 9080			

4. EXTENDED 1 CAR GARAGE SIDE WALL 12" TO ACCOMMODATE NEW GARAGE DOOR SIZE

SQU	ARE FOOT	AGE
	HEATED S.F.	UNHEATED S.F.
FIRST FLOOR	1534	0
SECOND FLOOR	1256	0
3 CAR GARAGE	0	827
FRONT PORCH	0	171
SCREEN PORCH	0	181
TOTAL	2790	1179
	OPTIONS	
	HEATED S.F.	UNHEATED S.F.

MEAN ROOF HEIGHT 1 STORY = 11'-0" CLADDING POSITIVE & NEGATIVE PRESSURE = 21 PSF

CLADDING POSITIVE & NEGATIVE PRESSURE = 34.8 PSF

CLADDING POSITIVE & NEGATIVE PRESSURE = 34.8 PSF

ANCHOR BOLTS INSTALL ANCHOR BOLTS, NUTS, AND WASHERS PER CODE AT ALL EXTERIOR WALL TREATED PLATES AND AT INTERIOR BEARING WALL TREATED PLATES ON SLAB FOUNDATIONS. TO BE A MINIMUM OF 6' O.C. AND WITHIN 12" FROM THE ENDS OF EACH PLATE.

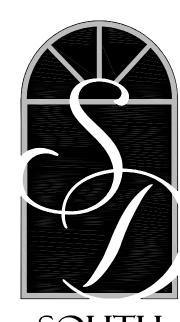
MI WINDOWS 3500 SERIES

1 1/2 STORY = 19'-0"

2 STORY = 19'-0"

DESIGN PRESSURES MINIMUM RATING: 25 PSF

LOW E-GLASS WINDOWS



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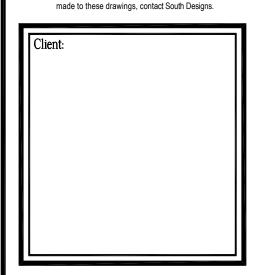
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COVER SHEET

Sheet No.

TABLE N1102.1 CLIMATE ZONES 3-5

ABBREVIATIONS	
ABBREVIATIONS CONC CONCRETE CONT CONTINUOUS DBL DOUBLE DJ DOUBLE JOIST DSP DOUBLE STUD POCKET EA EACH FL PT FLAT PLATE FTG FOOTING HGR HANGER LVL LAMINATED VENEER LUMBEI NTS NOT TO SCALE OC ON CENTER PSL PARALLEL STRAND LUMBER PT PRESSURE TREATED SC STUD COLUMN SP STUD POCKET	•
TJ TRIPLE JOIST TYP TYPICAL UNO UNLESS NOTED OTHERWISE	ţ

CLIMATE FENESTRATION SKYLIGHT b FENESTRATION CEILING K FRAMED WALL R-VALUE R-V 0.35 0.65 0.30 30 13 5/10 19 10/13^f 0

NR 38 OR 1 19 OR 13+5 13417 30 9 10413 10 ^d 10413

b. THE FENESTRATION U-FACTOR COLUMN EXCLUDED SKYLIGHTS. THE SHGC COLUMN APPLIES TO ALL GLAZED FENESTRATION. c. "10/13" MEANS R-10 CONT. INSULATED SHEATHING ON THE INTERIOR OR EXTERIOR OF THE HOME OR R-13 CAVITY INSULATION AT THE INTERIOR OF THE BASEMENT WALL OR

d. FOR MONOLITHIC SLABS, INSULATION SHALL BE APPLIED FROM THE INSPECTION GAP DOWNWARD TO THE BOTTOM OF THE FOOTING OR A MAXIMUM OF 18 INCHES BELOW GRADE, WHICHEVER IS LESS, FOR FLOATING SLABS, INSULATION SHALL EXTEND TO THE BOTTOM OF THE FOUNDATION WALL OR 24 INCHES, WHICHEVER IS LESS, R-5 SHALL BE ADDED TO THE REQUIRED SLAB EDGE RAVAULE FOR HEATED SLABS.

0.30 | 38 OR | 15 OR 13+2.5^h | 5/10 | 19 | 10/13 | 10 ^d

R. R.19 FIBERCIASS BATTS COMPRESSED AND INSTALLED IN A NOMINAL 2:6 CAVITY IS DEEMED TO COMPLY. FIBERCIASS BATTS RATED R-19 OR HIGHER COMPRESSED AND INSTALLED IN A 2x4 WALL IS NOT DEEMED TO COMPLY.

f. BASEMENT WALL INSULATION IS NOT REQUIRED IN WARM-HUMID LOCATIONS AS DEFINED BY FIGURE N1101.2 (1 AND 2) AND TABLE N1101.2.

g. OR INSULATION SUFFICIENT TO FILL THE FRAMING CAVITY, R-19 MINIMUM.

1. "13-5" MEANS R-13 CAVITY INSULATION PLUS R-5 INSULATED SHEATHING, 15-3 MEANS R-15 CAVITY INSULATION PLUS R-3 INSULATED SHEATHING, IF STRUCTURAL SHEATHING COVERS 25
PERCENT OR LESS OF THE EXTERIOR, INSULATING SHEATHING IS NOT REQUIRED WHERE STRUCTURAL SHEATHING IS USED. IF THE STRUCTURAL SHEATHING COVERS MORE THAN 25 PERCENT
OF THE EXTERIOR, STRUCTURAL SHEATHING SHALL BE SUPPLEMENTED WITH INSULATED SHEATHING OF AT LEAST R-2, 13-2-5 MEANS R-13 CAVITY INSULATION PLUS R-2,5 SHEATHING.

FOR MASS WALLS, THE SECOND R-VALUE APPLIES WHEN MORE THAN HALF THE INSULATION IS ON THE INTERIOR OF THE MASS WALL.

j. R-30 SHALL BE DEEMED TO SATISFY THE CELLING INSULATION REQUIREMENT WHEREVER THE FULL HEIGHT OF THE UNCOMPRESSED R-30 INSULATION EXTENDS OVER THE WALL TOP PLATE AT THE EAVES. OTHERWISE R-38 INSULATION IS REQUIRED WHERE ADEQUATE CLEARANCE EXISTS OR INSULATION MUST EXTEND TO EITHER THE INSULATION BAFFLE OR WITHIN 1" OF THE ATTIC ROOF DECK.

K. TABLE VALUE REQUIRED EXCEPT FOR ROOF EDGE WHERE THE SPACE IS LIMITED BY THE PITCH OR THE ROOF, THERE THE INSULATION MUST FILL THE SPACE UP TO THE AIR BAFFLE.

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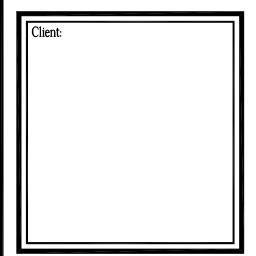
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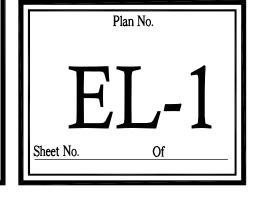
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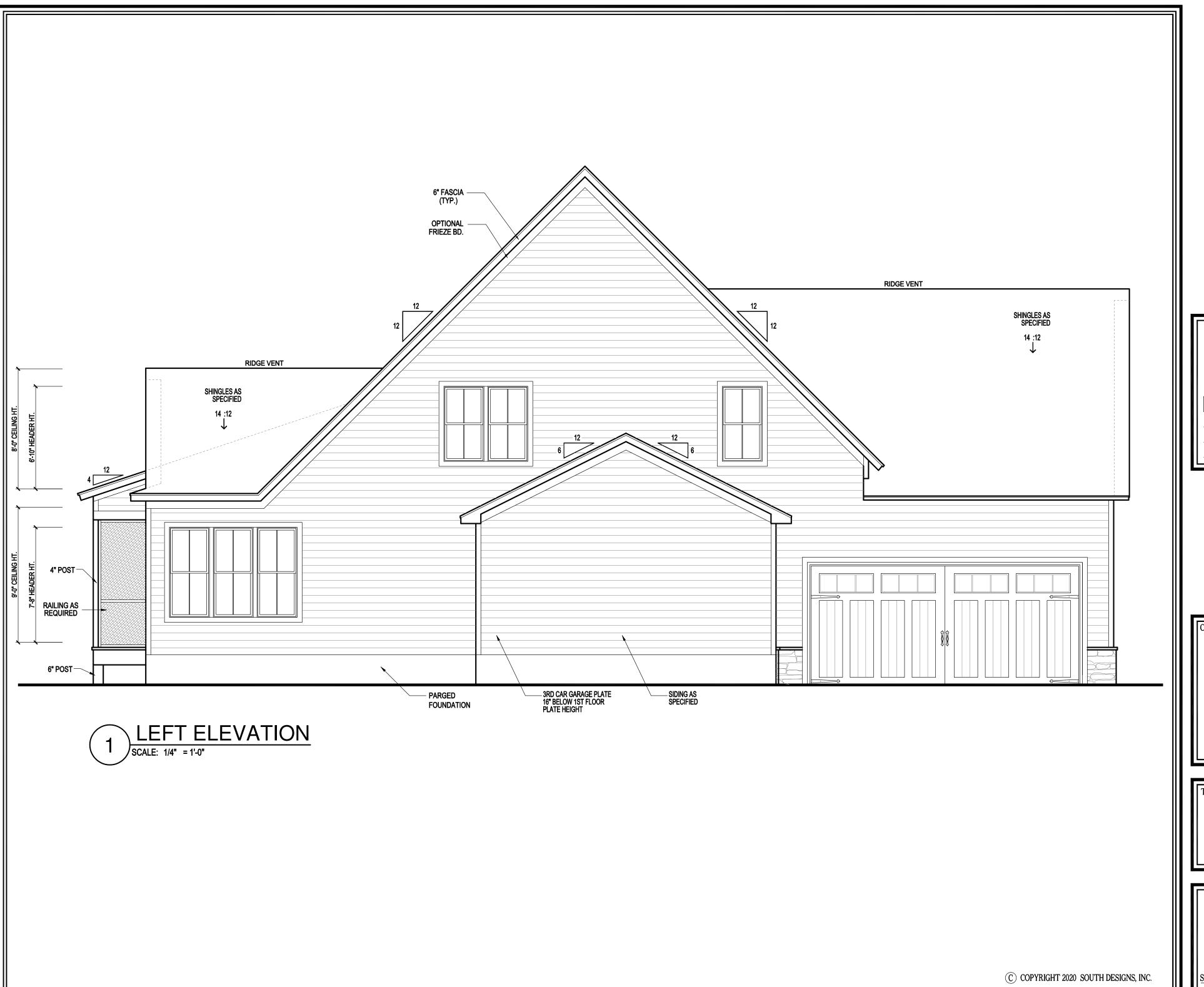
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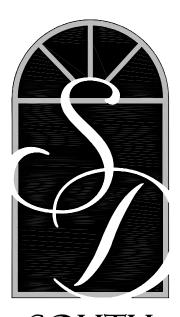


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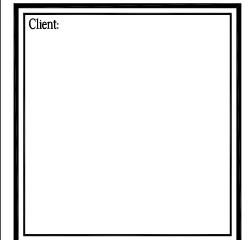
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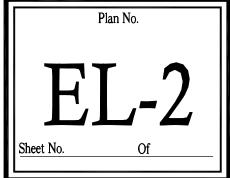
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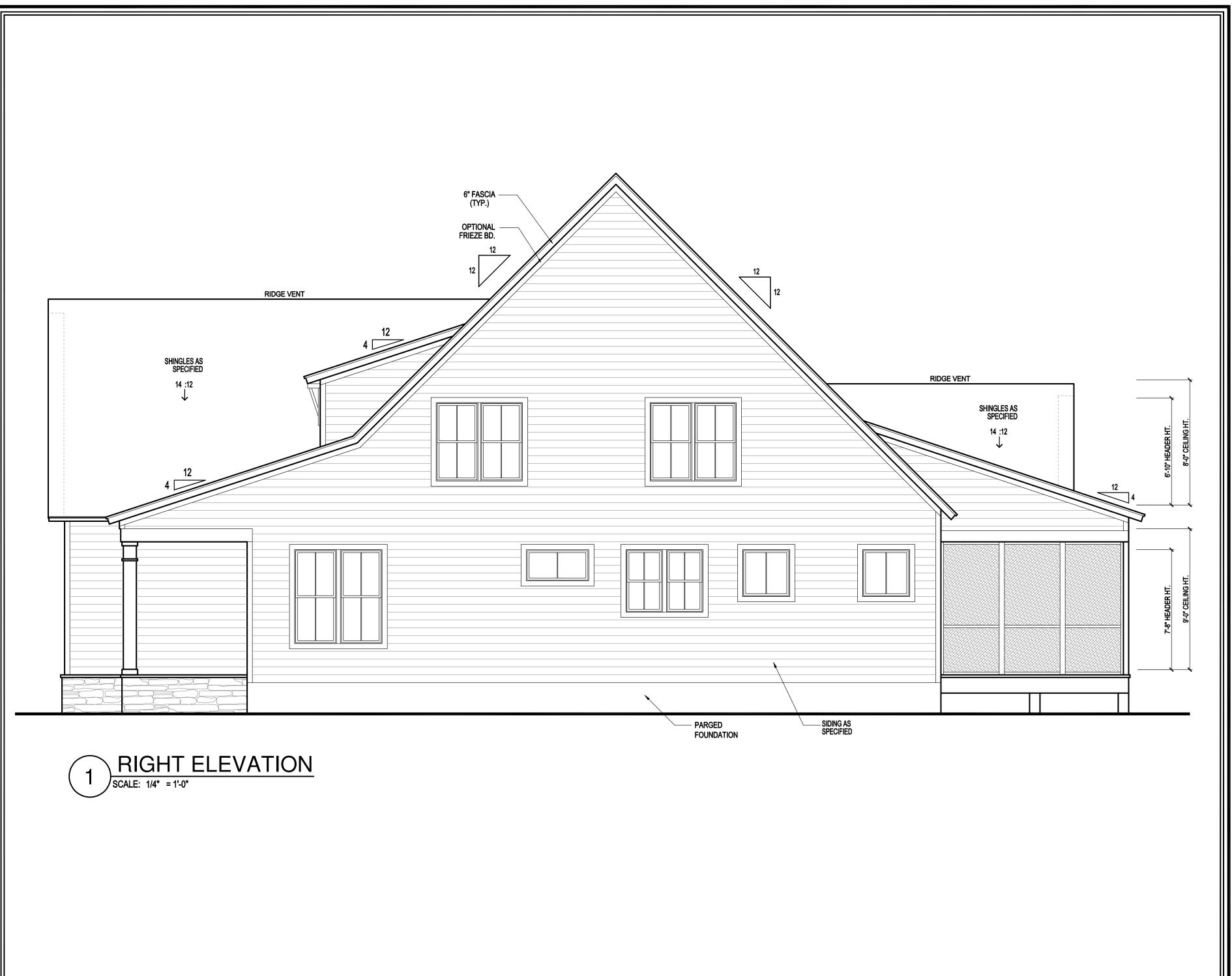
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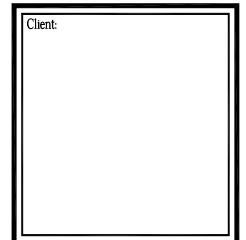
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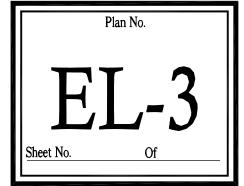
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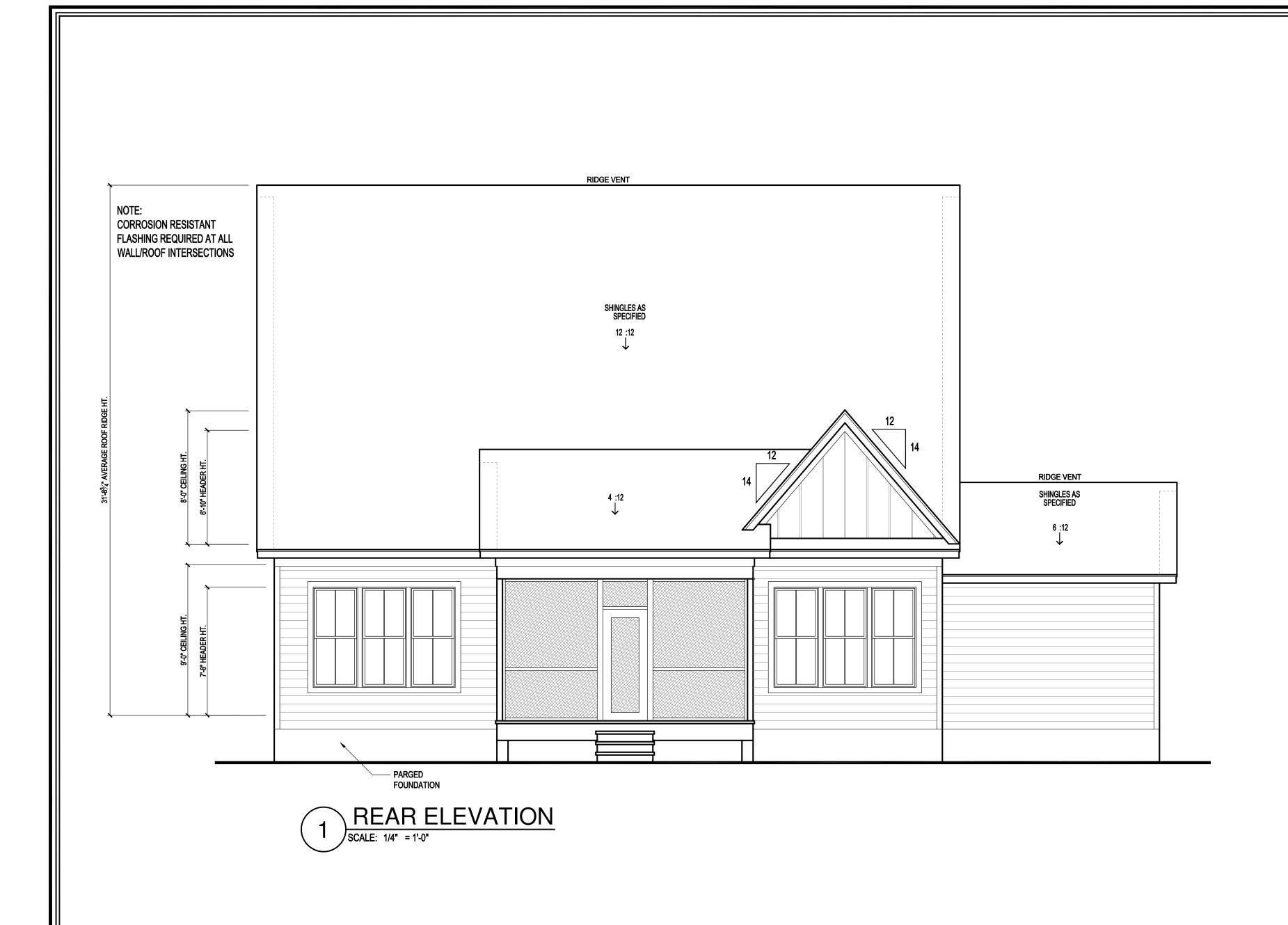
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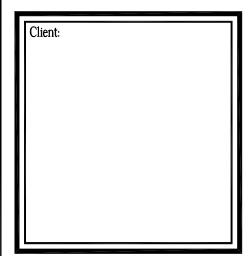
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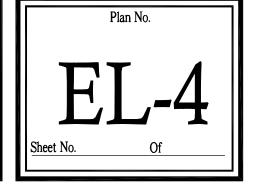
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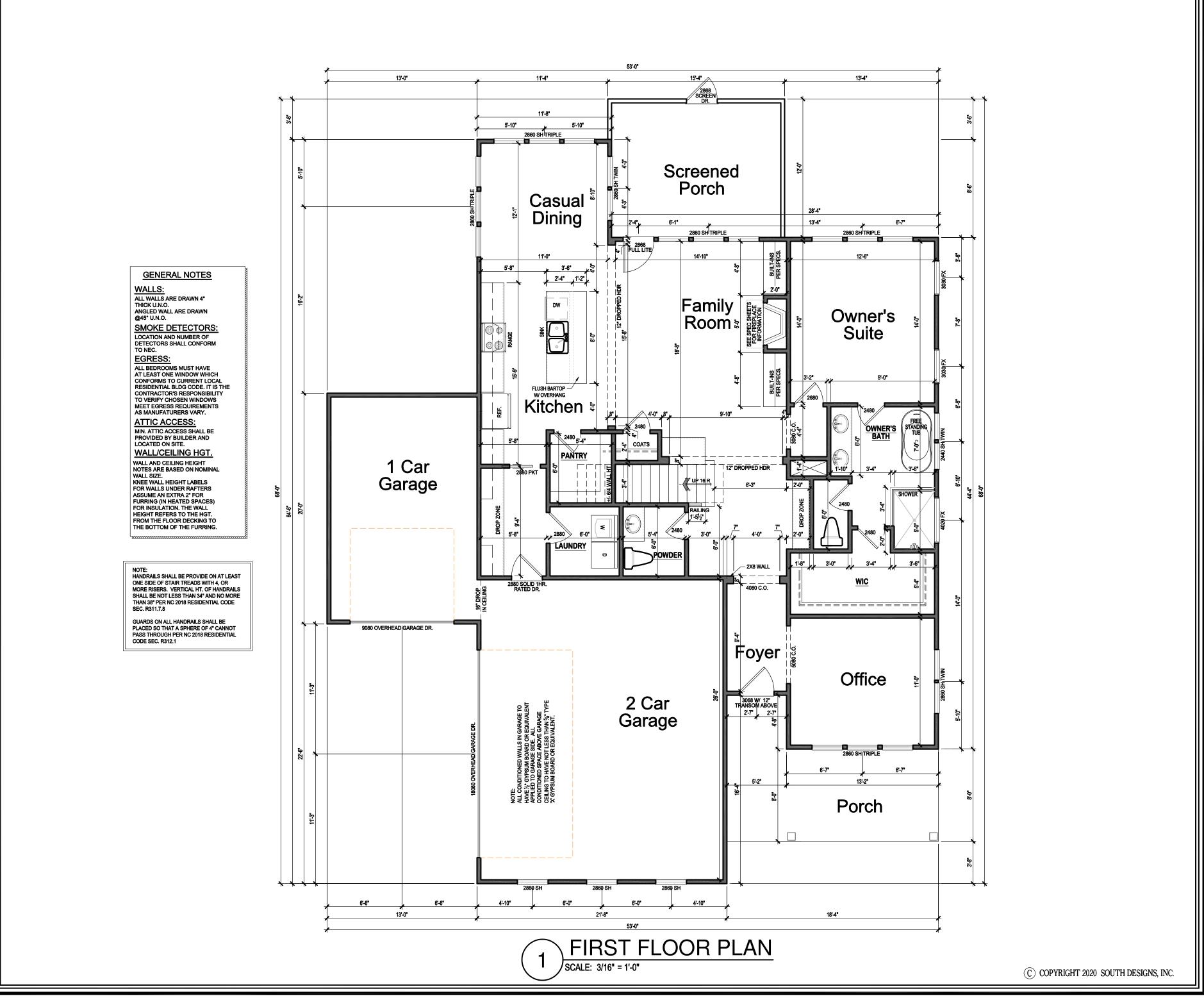


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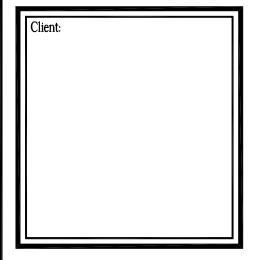
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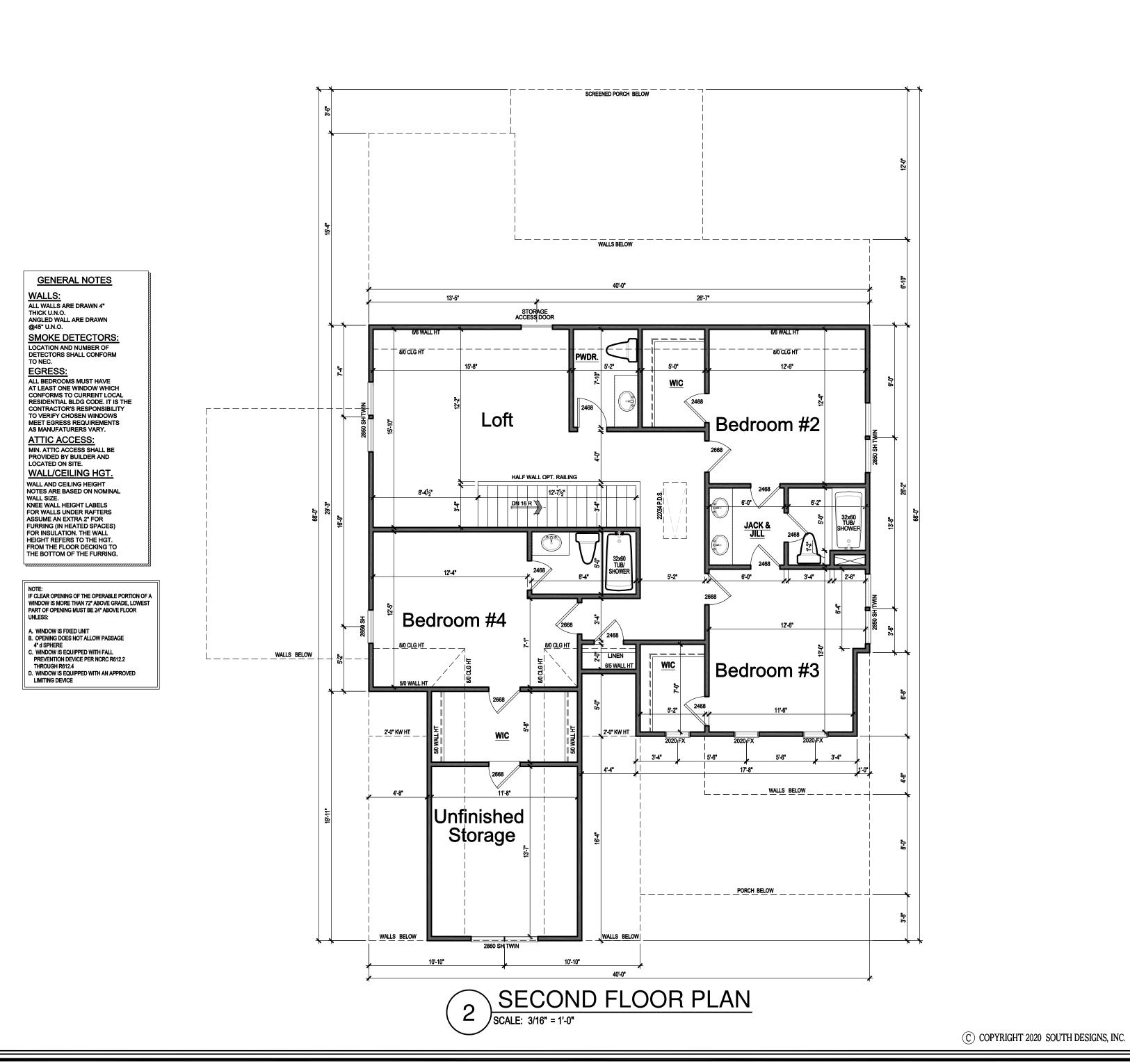


FIRST FLOOR PLAN

Plan No.

A-1

Sheet No. Of





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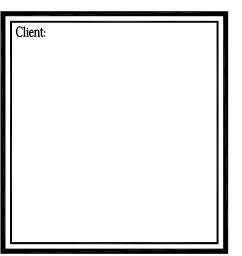
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SECOND FLOOR PLAN

Plan No.

A-2

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