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KIEFER HOUSE

REAR ELEVATION

 $1/4^{-1} = 1^{-1} - 0^{-1}$



- 1. DRB DESIGN assumes no liability for any home constructed from this plan.
- 2. All construction shall conform to the latest requirements of "North Carolina State 2018 residential building code", in addition to all local codes and regulations.

PROJECT #

06/22/2022

DATE

NW CHECKED BY DRB SCALE 1/4" = 1'-0"

DRB2201-0117

DRAWN/DESIGNED BY

drbhomedesig

KEVIN KIEFER HOUSE

Fug

SHEET NAME ELEVATIONS

SHEET #

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- 3. Should these plans require structural calculations for permitting the contractor shall be required to obtain the services of a structural engineer after notifying DRB DESIGN that such services are required.
- 4. Release of these plans requires further cooperation among the owner, his/her contractor, and DRB DESIGN. 5. Design and construction are complex and, although the designer performed his services with due care and
- diligence, perfection is not a guarantee.
- 6. Communication is imperfect and every contingency cannot be anticipated. 7. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to DRB
- DESIGN. Failure to notify the DRB DESIGN compounds misunderstandings and increases construction costs. 8. A failure to cooperate by a simple notice to DRB DESIGN shall relieve the designer from any and all
- responsibilities for all consequences. 9. Changes made to these plans without the consent of the designer are unauthorized and shall relieve DRB DESIGN of responsibility for any and all consequences arriving out of such changes.
- 10. Written dimensions on these plans always have precedence over scaled dimensions.
- 11. It is the contractors responsibility to verify and be responsible for all dimensions and square footage prior to construction, as well as conditions on the job site. DRB DESIGN is not responsible for dimension and square
- footage errors once construction has begun. 12. DRB DESIGN must be notified of any variations from the dimensions and conditions shown on these drawings.



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SECOND FLOOR PLAN

1/4" = 1'-0"

CEILING HGT. = 8'-0"

NEW WALLS

DIMENSIONS PRIOR TO CONSTRUCTION





*E n FA t 1 d H*F 1 i re e d	*Engineers seal does not include construction means, methods, techniques, sequences, procedures or safety precaution. *Any deviations or discrepancies on plans are to be brought to the immediate attention of Tyndall Engineering & Design, P.A. Failure to do so will void Tyndall Engineering & Design, P.A. liability. *Please review these documents carefully. Tyndall Engineering & Design, P.A. will interpret that all dimensions, recommendations, etc. presented in these documents were deemed acceptable once construction begins.							
	Invine a Design, P.A. FNGINEERING & DESIGN, P.A. 250 Shipwash Drive - Gamer - North Caroline - 27829 www.tyndailangineering.com							
Client	KEVIN KEIFER	Pian: KEIFER REMODEL						
	1ST FLOOR HEADER 2ND FLOOR FRAMING							
	Project #: DRB2201-0117 Date: 08/29/22 Engineered By: LKC DWG. Checked By: AWL Scale: SEE PLAN REVISIONS <u>No.</u> Date: <u>Remarks</u>							
	Image: system Image: system							

DESIGN LOADS

	LIVE LOAD (PSE)	DEAD LOAD (PSE)	DEFLECTION			
	(,	()	LL	TL		
FLOOR (primary)	40	10	L/360	L/240		
FLOOR (secondary)	40	10	L/360	L/240		
ATTIC (w/ storage)	20	10	L/240	L/180		
ATTIC (no access)	10	5	L/240	L/180		
EXTERNAL BALCONY	40	10	L/360	L/240		
ROOF	20	10	L/240	L/180		
ROOF TRUSS	20	20	L/240	L/180		
WIND LOAD	BASED ON 120 MPH (EXPOSURE B)					
SEISMIC	BASED ON SEISMIC ZONES A, B & C					

STRUCTURAL NOTES:

- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.
- 2) IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, PA IS NOT RESPONSIBLE FOR DIMENSIONS
- AND SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS. ALL LUMBER SHALL BE SYP #2 (UNO)
- ALL LVL LUMBER TO BE 1.75" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2600 PSI, E = 1.9M PSI (I.E. iLEVEL MICROLAM)
- ALL LSL LUMBER IS TO BE 1.55E (Fb = 2325 PSI)
- ALL LOAD BEARING EXTERIOR WINDOW HEADERS ARE TO BE (2) 2x10 w/ (1) 2x4 JACK STUD (U.N.O.) AND KING STUDS PER TABLE R602.7.5, AND TOGETHER w/ (2) 10d NAILS @ 8" O.C., PROVIDED THAT THE TOP OF THE WINDOW HEIGHT IS 6'-8", MINIMUM BOTTOM OF THE WINDOW HEIGHT IS 1'-6". OTHERWISE REFER TO TABLES R602.7(1) AND R602.7(2).
- ALL INTERIOR LOAD BEARING HEADERS TO BE (2) 2x10 (U.N.O.) REFER TO TABLES R602.7(1) AND R602.7(2) FOR JACK STUD REQUIREMENTS FOR HEADER SPANS FOR INTERIOR AND EXTERIOR LOAD CONDITIONS (UNO)
- REFER TO 2018 NC BUILDING CODE SECTION R602 FOR CONSTRUCTION 6) OF ALL WALLS OVER 10'-0" IN HEIGHT.
- ALL STRUCTURAL STEEL SHALL BE ASTM A992 GRADE 50 Fy = 50 KSI MIN. (UNO)
- ALL EXTERIOR LUMBER TO BE #2 SYP PT
- ALL CONCRETE, fc = 3000 PSI MIN.
- PRESUMPTIVE BEARING CAPACITY = 2000 PSF 1/2"Ø ANCHOR BOLTS SPACED AT MAXIMUM OF 6'-0" O.C. AND NOT MORE 11) THAN 12" FROM THE CORNER. THERE SHALL BE A MINIMUM OF (2) BOLTS PER PLATE SECTION. ANCHOR BOLTS SHALL BE SPACED AT 3'-0" O.C. FOR BASEMENTS. ANCHOR BOLT SHALL EXTEND 7" INTO CONCRETE OR MASONRY.
- 12) PSL COLUMNS DESIGNED WITH MAX. HEIGHT OF 9'-0" (UNO)
- PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP 13) AND BOTTOM OF PORCH COLUMNS. (U.N.O.)
- PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.4 OF THE 2018 14) IRC.
- 15) MAXIMUM MASONRY PIER HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION.
- 16) UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY
- ANCHORED TO THE FOUNDATION. 17) METAL HANGERS SHALL BE SIMPSON OR APPROVED EQUAL.

STRUCTURAL SHEATHING NOTES

- 1) DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 120 MPH OR LESS.
- 2) WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE 2018 NCRC. 3) BRACING REQUIREMENTS SHALL BE PER TABLE R602.10.3. REFER TO SECTION R602.10.4 FOR LOAD PATH DETAILS INCLUDING
- $\langle 1 \rangle$ REFERENCE FIGURE R602.10.4.3 OF THE 2018 NCRC.

CONNECTIONS & SUPPORT OF BRACED WALL PANELS.

- 4) INTERIOR BRACED WALL PANELS (BWP) INDICATED SHALL BE SHEATHED IN ACCORDANCE WITH THE GB METHOD OR WSP METHOD AS PRESCRIBED IN SECTION R602.10.1 (UNO)
- 2 1/2" GYPSUM BOARD (GB) MINIMUM LENGTH OF 8'-0" (ISOLATED PANELS) OR 4'-0" (CONTINUOUS SHEATHING). SECURE w/ 5d COOLER NAILS (OR EQUAL PER TABLE R702.3.5) SPACED @ 7" O.C. AT PANEL EDGES, INCLUDING TOP AND BOTTOM PLATES & 7" O.C. AT INTERMEDIATE SUPPORTS
- (3) 3/8" WOOD STRUCTURAL PANEL (WSP) SECURE w/ 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS
- 5) EXTERIOR BRACED WALL PANELS (BWP) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.3 (UNO)
- 6) ALL SHEATHABLE SURFACES OF EXTERIOR WALLS (INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS) SHALL BE CONTINUOUSLY SHEATHED WITH WOOD STRUCTURAL PANEL (WSP) SHEATHING WITH A MINIMUM THICKNESS OF 3/8". SHEATHING SHALL BE SECURED WITH MINIMUM 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND SPACED AT 12" O.C. AT INTERMEDIATE SUPPORTS.
- 7) MINIMUM BRACED WALL PANEL LENGTHS WITH CS-WSP METHOD SHALL BE AS FOLLOWS: - 24" ADJACENT TO OPENINGS NOT MORE THAN
 - 67% OF WALL HEIGHT
 - 30" ADJACENT TO OPENINGS GREATER THAN 67% AND LESS THAN 85% OF WALL HEIGHT.
 - 48" FOR OPENINGS GREATER THAN 85% OF
- $\langle 4 \rangle$ SHEATH INTERIOR & EXTERIOR

WALL HEIGHT

- 8) FOR CS-WSP METHOD, A MINIMUM 24" BRACED WALL PANEL CORNER RETURN SHALL BE PROVIDED AT BOTH ENDS OF A BRACED WALL LINE IN ACCORDANCE WITH FIGURE R602.10.3(4). IN LIEU OF A CORNER RETURN, EITHER A MIN. 48" BRACED WALL PANEL SHALL BE PROVIDED AT THE CORNER OR A HOLD-DOWN DEVICE WITH A MINIMUM UPLIFT DESIGN VALUE OF 800# SHALL BE FASTENED TO THE EDGE OF THE BRACED WALL PANEL CLOSEST TO THE CORNER AND TO THE FOUNDATION OR FRAMING BELOW.
- (5) MINIMUM 800# HOLD-DOWN DEVICE



CEILING HGT. = 8'-0"

1/4" = 1'-0"

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	ENGINEERING & DESIGN, P.A.	r 919 773-1200 = # 919 773-9458 250 Shipwash Drive = Garner = North Garolina = 27529 www.tyndallengineering.com						
Client	KEVIN KEIFER	Plan: KEIFER REMODEL						
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	2 of 2							