

THE BLANCO

NORTH CAROLINA

SQUARE FOOTAGES

FIRST FLOOR (HTD.)	= 1316 sf
GARAGE FRONT PORCH REAR PORCH	= 401 sf = 80 sf = 81 sf
TOTAL	= 1878 sf

INDEX OF SHEETS

- A1.0 COVER SHEET
- GENERAL NOTES A1.1
- FLOOR PLAN & NOTES A2.0
- **EXTERIOR ELEVATIONS & NOTES** A3.0
- EXTERIOR ELEVATIONS A3.1
- E1.0 ELECTRICAL PLAN

INDEX OF SHEETS (CONT.)

CS	COVER SHEET, SPECIFICATI
F-1.1m	MONOLITHIC SLAB FOUNDAT
S-1.1	FIRST FL. FRAMING & BRACI
D1-D7	STANDARD DETAILS

GENERAL CONTRACTOR

LGI HOMES

SCOTT STERLING V.P. OF CONSTRUCTION FOR NC / SC 704-953-3824

ARCHITECT

COX ARCHITECTURE & DESIGN, PLLC

R. CRAIG COX 1310 SOUTH TRYON STREET SUITE 111 CHARLOTTE, NC 28203 980-237-3827

WWW.COXARCHITECTURE.COM CRAIG@COXARCHITECTURE.COM

ENGINEER

QUEEN CITY CONSULTING & DESIGN, PLLC

2039 JESUP DRIVE CHARLOTTE, NC 28208

WWW.QC-DESIGNS.COM



Stone Veneer Water Table: 24" or to bottom of window sill, front facing, no return

IONS, ETC. TION ING PLAN



THE BLANCO	NORTH CAROLINA	
CH-9 Most documents are moreary of con adomtecture and oceans and enall not be used on semproduce on without written becaus, cox adomtecture and beam detains, cox adomtecture and beam detains, cox adomtecture and beam detains.		
PERMIT SET FOR CONSTRUCTION		
● 5 JANUARY 2024		
COVER SHEET		
A1	.0	

GENERAL NOTES

-DO NOT SCALE DRAWINGS; DESIGNATED DIMENSIONS SHALL BE USED IN PREFERENCE TO MEASUREMENTS BY SCALE.

-GENERAL CONTRACTOR SHALL VERIFY AND COMPLY TO ALL LOCAL & NATIONAL BUILDING CODES. CONTACT ARCHITECT IF INSPECTORS REQUIRE REVISIONS OR ALTERATIONS TO DRAWINGS. -ALL SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR DAMAGE

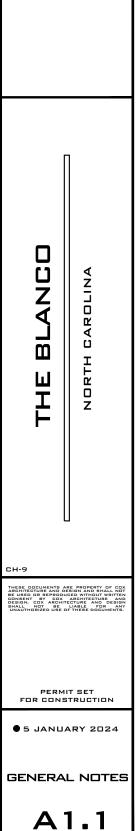
TO OTHER TRADES.

DESIGN SPECIFICATIONS

USE GROUP: (IBC 310) "R-3" ONE & TWO FAMILY DWELLING CONSTRUCTION CLASS: (IBC 601) "TYPE V-B" UNPROTECTED HEIGHT & AREA LIMIT: (LOCAL ZONING) 35' MAXIMUM 2 STORY HEIGHT EMERGENCY ESCAPE: (IRC 310-311) EGRESS OR RESCUE WINDOWS FROM SLEEPING ROOMS SHALL HAVE MINIMUM OF 5.7 SQ. FT. NET CLEAR OPENING (5.0 SQ. FT. NET OPENING @ GRADE FLOOR) MINIMUM 20" WIDTH. MINIMUM 24" HEIGHT. MAXIMUM 44" SILL HEIGHT GARAGE / HOUSE CEILING / ASSEMBLY: (IRC 702) $\frac{1}{2}$ " GYPSUM WALL BOARD %" TYPE "X" GYPSUM BOARD CEILING WHERE LIVING IS ABOVE 20 MINUTE RATED GARAGE / HOUSE DOOR ATTIC VENTILATION: (IRC 806) [TOTAL ATTIC SQ. FT.] / [300] = SQ. FT. AREA REQUIRED RIDGE VENT: [LINEAR FEET OF VENT] X [18 SQUARE INCHES IN FREE AREA] / 12 = SQ. FT. PROVIDED SOFFIT VENT: [LINEAR FEET OF VENT] X [7 SQUARE INCHES IN FREE AREA] / 12 = SQ. FT. PROVIDED EDGE SHINGLE OVER VENT: [LINEAR FEET OF VENT] X [9 SQUARE INCHES IN FREE AREA] / 12 = SQ. FT. PROVIDED ROOF LOUVER VENTS: [NUMBER OF VENTS] X [70 SQUARE INCHES IN FREE AREA] / 12 = SQ. FT. PROVIDED CRAWL SPACE VENTILATION: (IRC 408) [TOTAL CRAWL SPACE SQ. FT.] / [300] = SQ. FT. AREA REQUIRED FOUNDATION VENT: FREE SPACE PROVIDED BY VENT = F [FREE AREA REQUIRED] / F = NUMBER OF VENTS REQUIRED







WALL SCHEDULE

FRAMED WALLS

OVERHEAD/BELOW

STAIR NOTES

-STAIR FABRICATOR / INSTALLER TO VERIFY THAT STAIRS MEET ALL REQ'D CODES

-ADJUSTMENTS TO STAIR TO BE CONFIRMED W/ ARCHITECT & CONTRACTOR PRIOR TO STAIR CONSTRUCTION

CEILING HEIGHT NOTES

9' - 1 ½" CEILING HEIGHTS ON FIRST FLOOR

MEASURED FROM TOP OF SUBFLOOR / CONCRETE SLAB TO BOTTOM OF FLOOR JOISTS / ROOF TRUSSES

COLUMN NOTES

COLUMNS TO BE: AFCO OR COLUMN OF EQUAL BEARING CAPACITY. (6000 # MINIMUM) TOP CONNECTION: (2) #8 - 1/4" x 3" STAINLESS STEEL SCREWS PER SIDE INSERTED INTO BEAM. BOTTOM CONNECTION: (3) UBS - #18043 BRACKETS FASTENED WITH (2) 1/4" x 1 1/4" SCREWS INTO COLUMN & (2) ¹/₄" x 3 ³/₄" CONCRETE SCREWS THROUGH FASTENER INTO CONCRETE

ELECTRICAL PANEL/METER

MAXIMUM DISTANCE BETWEEN ELECTRICAL PANEL & ELECTRICAL METER (NEC 230.70) TO BE DETERMINED BY LOCAL AUTHORITY

DOOR & WINDOW LEGEND

30 68 HEIGHT: 6'-8" WIDTH: 3'-0" DOORS: P = POCKET

WINDOWS: SH = SINGLE HUNG F = FIXED

DOOR NOTES

-ATTIC ACCESS DOORS TO INCLUDE WEATHER STRIPPING & INSULATION

-TOP OF INTERIOR CASING @ ADJACENT DOORS & WINDOWS TO ALIGN WHEN HEADER CALL OUTS ARE EQUAL

-DOOR SUPPLIER TO SPECIFY & ORDER TEMPERED GLASS IN DOORS AS REQ'D BY LOCAL CODE.

WINDOW NOTES

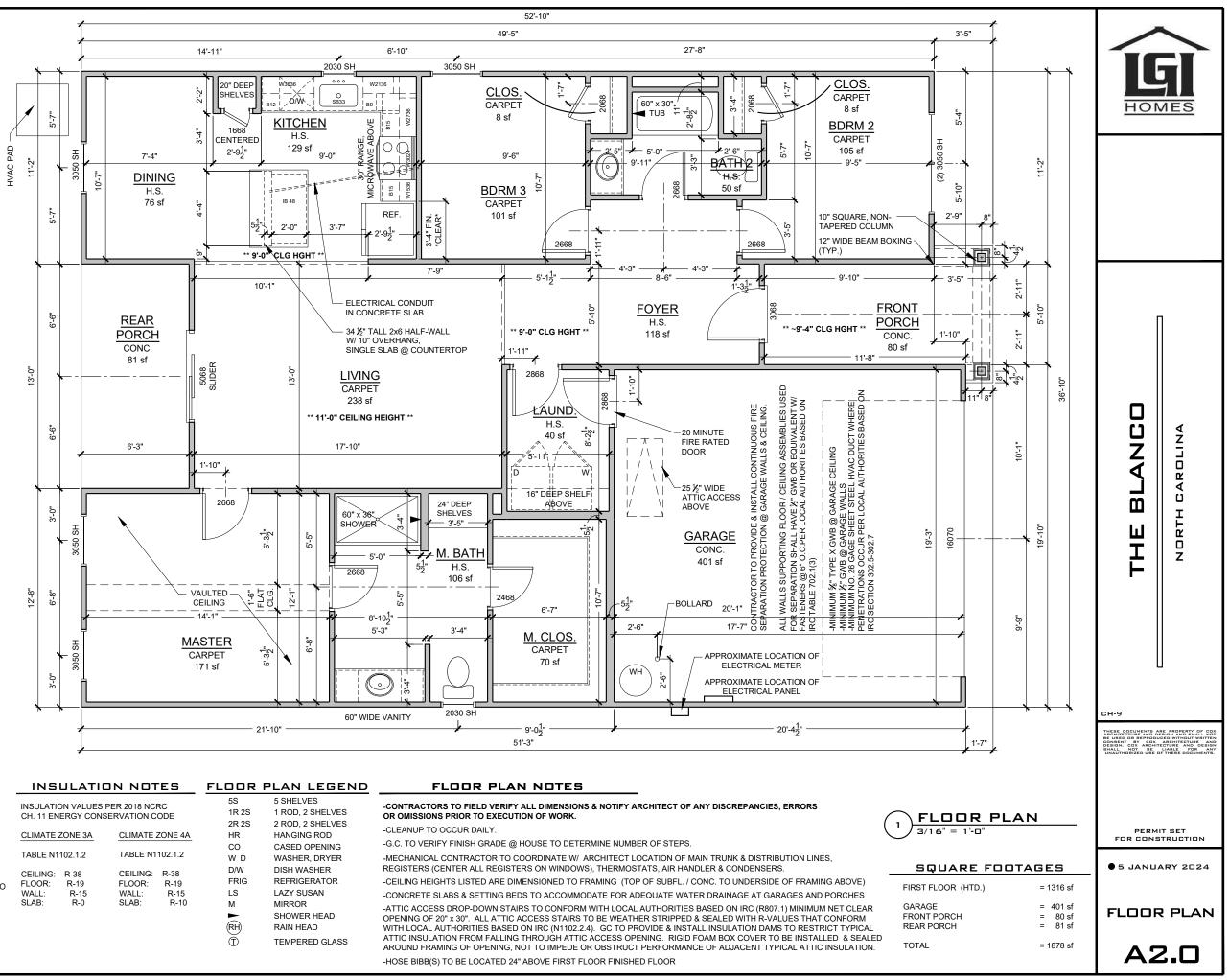
-ALL WINDOW DIMENSIONS ARE BASED ON M.I. WINDOW ROUGH OPENING CALL OUTS, UNO. FINAL SELECTION OF WINDOW SIZES ARE TO BE VERIFIED IN FIELD.

-WINDOWS TO BE INSTALLED BY CERTIFIED WINDOW INSTAL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

-WINDOW SUPPLIER TO SPECIFY & ORDER TEMPERED GLASS IN WINDOWS AS REQ'D BY LOCAL CODE.

-G.C. AND WINDOW SUPPLIER TO VERIFY THAT EACH BEDRO HAVE A MINIMUM OF ONE WINDOW WHICH MEETS EMERGEN EGRESS AS REQUIRED BY LOCAL AUTHORITY BASED ON TH WINDOW SUPPLIER TO ADD EGRESS HARDWARE TO CASEM WINDOWS IF NECESSARY

-TOP OF INTERIOR CASING @ ADJACENT DOORS & WINDOWS TO ALIGN WHEN HEADER CALL OUTS ARE EQUAL



	INSULATI	ON NOTES	FLOOR F	PLAN LEGEND	FLOOR PLAN NOTES
	INSULATION VALUES CH. 11 ENERGY CON		5S 1R 2S 2R 2S	5 SHELVES 1 ROD, 2 SHELVES 2 ROD, 2 SHELVES	-CONTRACTORS TO FIELD VERIFY ALL DIMENSIONS & NOTIFY ARCHITECT OF ANY DISCREPANCIES, ERRORS OR OMISSIONS PRIOR TO EXECUTION OF WORK.
ALLER	CLIMATE ZONE 3A	CLIMATE ZONE 4A	HR	HANGING ROD	-CLEANUP TO OCCUR DAILY.
ALLER			со	CASED OPENING	-G.C. TO VERIFY FINISH GRADE @ HOUSE TO DETERMINE NUMBER OF STEPS.
ASS	TABLE N1102.1.2	TABLE N1102.1.2	W D	WASHER, DRYER	-MECHANICAL CONTRACTOR TO COORDINATE W/ ARCHITECT LOCATION OF MAIN TRUNK & DISTRIBUTION LINES,
	CEILING: R-38	CEILING: R-38	D/W	DISH WASHER	REGISTERS (CENTER ALL REGISTERS ON WINDOWS), THERMOSTATS, AIR HANDLER & CONDENSERS.
ROOM TO	FLOOR: R-19	FLOOR: R-19	FRIG	REFRIGERATOR	-CEILING HEIGHTS LISTED ARE DIMENSIONED TO FRAMING (TOP OF SUBFL. / CONC. TO UNDERSIDE OF FRAMING A
ENCY	WALL: R-15 SLAB: R-0	WALL: R-15 SLAB: R-10	LS	LAZY SUSAN	-CONCRETE SLABS & SETTING BEDS TO ACCOMMODATE FOR ADEQUATE WATER DRAINAGE AT GARAGES AND POP
THE IRC. EMENT	JLAD. N-U	3LAD. N-10	M (RH)	MIRROR SHOWER HEAD RAIN HEAD	-ATTIC ACCESS DROP-DOWN STAIRS TO CONFORM WITH LOCAL AUTHORITIES BASED ON IRC (R807.1) MINIMUM NE OPENING OF 20" x 30". ALL ATTIC ACCESS STAIRS TO BE WEATHER STRIPPED & SEALED WITH R-VALUES THAT CON WITH LOCAL AUTHORITIES BASED ON IRC (N1102.2.4). GC TO PROVIDE & INSTALL INSULATION DAMS TO RESTRICT
WS			$\widetilde{\mathbb{D}}$	TEMPERED GLASS	ATTIC INSULATION FROM FALLING THROUGH ATTIC ACCESS OPENING. RIGID FOAM BOX COVER TO BE INSTALLED AROUND FRAMING OF OPENING, NOT TO IMPEDE OR OBSTRUCT PERFORMANCE OF ADJACENT TYPICAL ATTIC INS

ROOF NOTES

-CONTRACTORS TO FIELD VERIFY ALL DIMENSIONS & NOTIFY ARCHITECT OF ANY DISCREPANCIES, ERRORS OR OMISSIONS PRIOR TO EXECUTION OF WORK.

-ALL ROOF PENETRATIONS TO BE PLACED ON REAR SIDE OF MAIN RIDGE OR AS SPECIFIED BY ARCHITECT. PAINT TO MATCH SHINGLE COLOR.

-ATTIC INSULATION TO BE BATT. INSUL. PER CODE, PROVIDE BAFFLES @ PERIMETER TO ALLOW 2" FOR AIRFLOW FROM EAVE VENTS TO RIDGE VENTS.

-ROOF SHEATHING TO BE 1/2" T&G PLYWOOD W/ METAL CLIPS @ ENDS.

-ALL BATHROOM & DRYER VENT PENETRATIONS TO RUN TOWARD REAR OF HOUSE & VENT IN REAR OUTSIDE WALL OR ROOF BEHIND MAIN RIDGE

-GUTTER & DOWNSPOUT INSTALLER TO PROVIDE ADEQUATE UNITS PER MANUFACTURER SPECIFICATIONS BASED ON ROOF COVERAGE. SUB-CONTACTOR TO VERIFY NUMBER & LOCATION OF DOWNSPOUTS

-ALL SHINGLED ROOFS WITH A PITCH OF 4:12 OR LESS REQUIRE (2) LAYERS OF 30# FELT PAPER PER LOCAL AUTHORITIES BASED ON IRC

> CEILING: R-38 FLOOR:

WALL:

SLAB:

R-19

R-15

R-0

INSULATIO	IN NOTES	
INSULATION VALUES CH. 11 ENERGY CONS		
CLIMATE ZONE 3A	CLIMATE ZONE 4A	
TABLE N1102.1.2	TABLE N1102.1.2	

CEILING: R-38

R-19

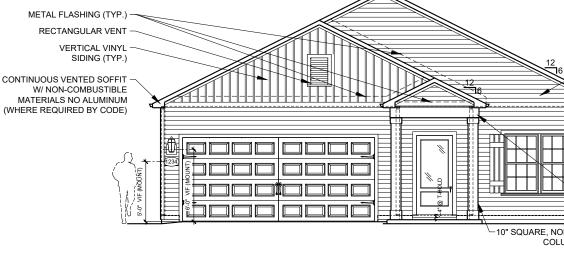
R-15

R-10

FLOOR.

WALL:

SLAB:



SEPARATION DISTANCE BETWEEN SHALL COMPLY WITH LOCAL AUTHORITIES BASED ON IRC (R302.1.1): IN CONSTRUCTION USING VINYL OR ALUMINUM SOFFIT MATERIAL. THE FOLLOWING APPLICATION SHALL APPLY. SOFFIT ASSEMBLIES MUST BE SECURELY ATTACHED TO FRAMING MEMBERS AND APPLIED OVER FIRE-RETARDANT-TREATED WOOD, 23/32-INCH WOOD SHEATHING OR 5/8-INCH EXTERIOR GRADE OR MOISTURE RESISTANT GYPSUM BOARD. VENTING REQUIREMENTS SHALL BE PROVIDED IN BOTH SOFFIT AND UNDERLAYMENT. VENTS SHALL BE EITHER NOMINAL 2-INCH CONTINUOUS OR EQUIVALENT INTERMITTENT AND SHALL NOT EXCEED THE MINIMUM NET FREE AIR REQUIREMENTS ESTABLISHED IN SECTION R806.2 BY MORE THAN 50 PERCENT. TOWNHOME CONSTRUCTION SHALL MEET ADDITIONAL REQUIREMENTS OF SECTIONS R302.2.5 AND R302.2.6.

ELEVATION NOTES

-ALL REPRESENTATIONS OF GRADE LEVELS ARE FOR DRAWING PURPOSES ONLY, AND TO BE VERIFIED IN FIELD.

-ALL EXTERIOR ELEVATION DIMENSIONS ARE FRAMING DIMENSIONS, UNO. G.C. TO FILED VERIFY DIMENSIONS LOCATED AT SLOPED FRAMING AND / OR CONCRETE SLABS & PADS

-ALL TRUSS PROFILE DIMENSIONS TO BE VERIFIED BY TRUSS MANUFACTURER. TRUSS MANUFACTURER TO NOTIFY ARCHITECT IF TRUSS PROFILES / DIMENSIONS CHANGE.

-ALL BUILDINGS CONSTRUCTED WITH LESS THAN A 10' FIRE

CEILING HEIGHT NOTES

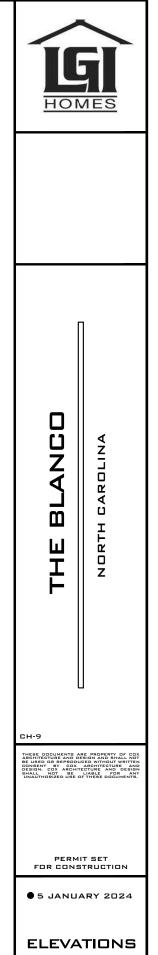
9' - 1 ½" CEILING HEIGHTS ON FIRST FLOOR

MEASURED FROM TOP OF SUBFLOOR / CONCRETE SLAB TO BOTTOM OF FLOOR JOISTS / ROOF TRUSSES

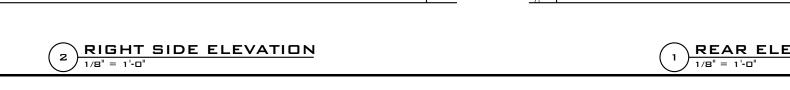
COLUMN NOTES

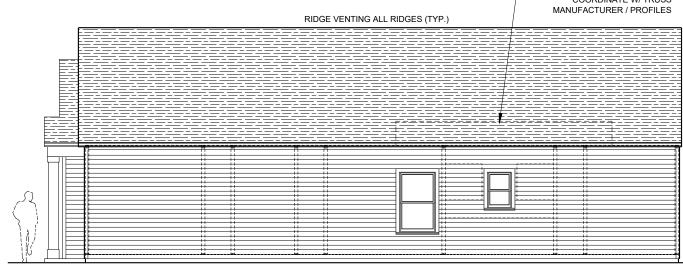
COLUMNS TO BE: AFCO OR COLUMN OF EQUAL BEARING CAPACITY. (6000 # MINIMUM) TOP CONNECTION: (2) #8 - $\frac{1}{4}$ " x 3" STAINLESS STEEL SCREWS PER SIDE INSERTED INTO BEAM. BOTTOM CONNECTION: (3) UBS - #18043 BRACKETS FASTENED WITH (2) 1/4" x 1 1/4" SCREWS INTO COLUMN & (2) 1/4" x 3 3/4" CONCRETE SCREWS THROUGH FASTENER INTO CONCRETE

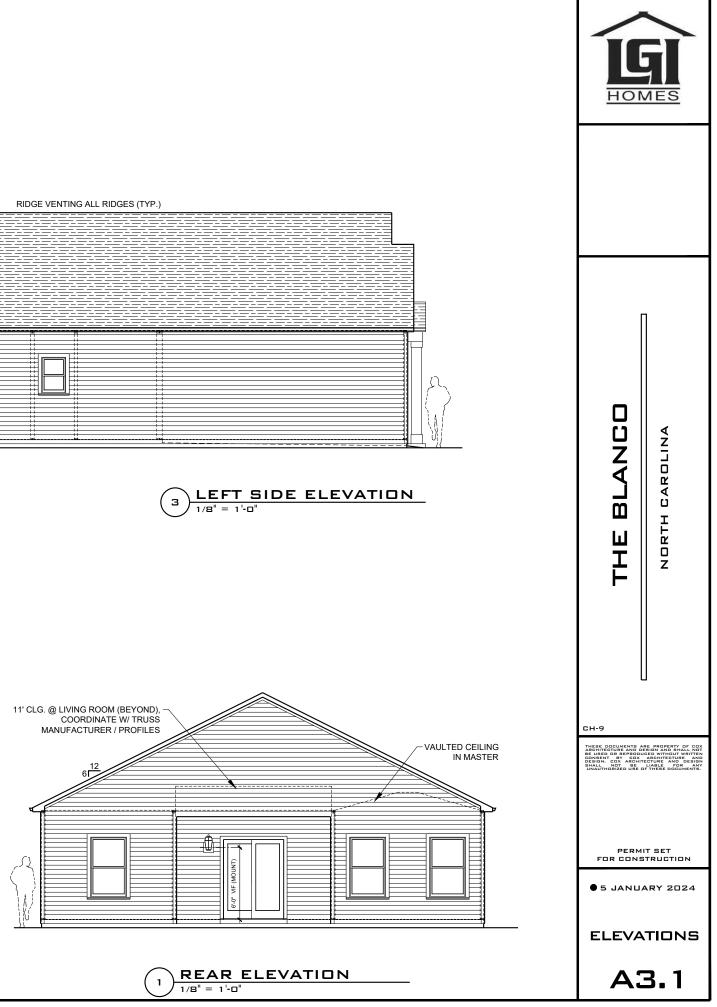
	HORIZONTAL VINYL SIDING (TYP.) 14" VINYL B&B SHUTTERS (TYP.) TOP OF TOP PLATE	
		9'-1 <u>7</u> "
N-TAPERED JMNS (TYP.)	12" WIDE BEAM BOXING (TYP.)	

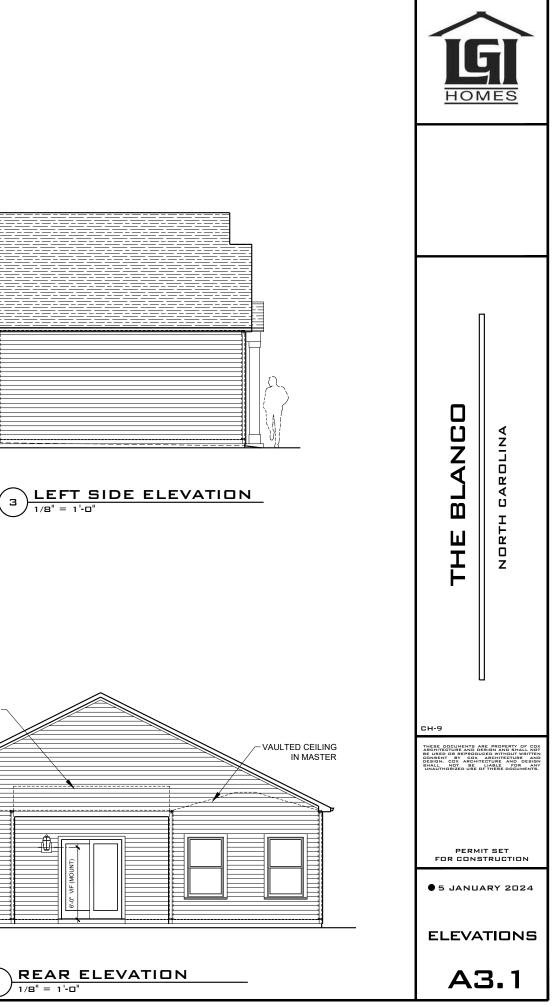


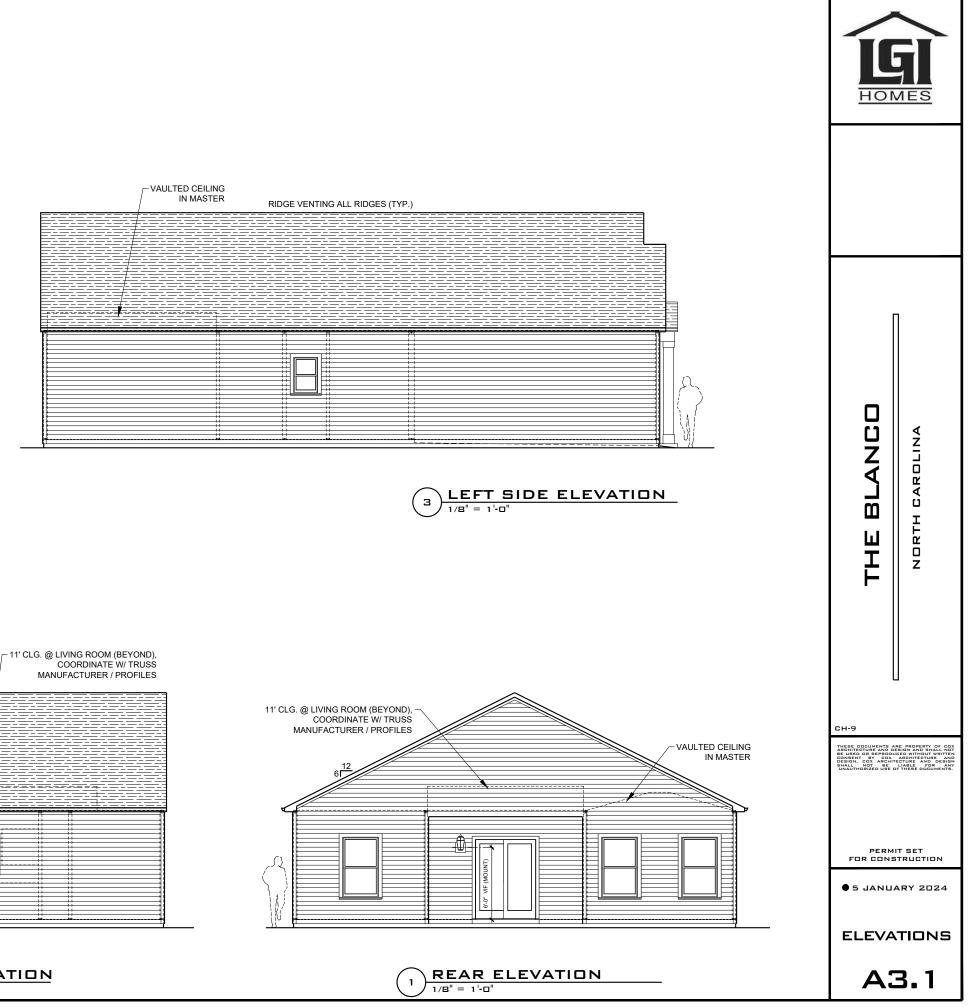
A3.0

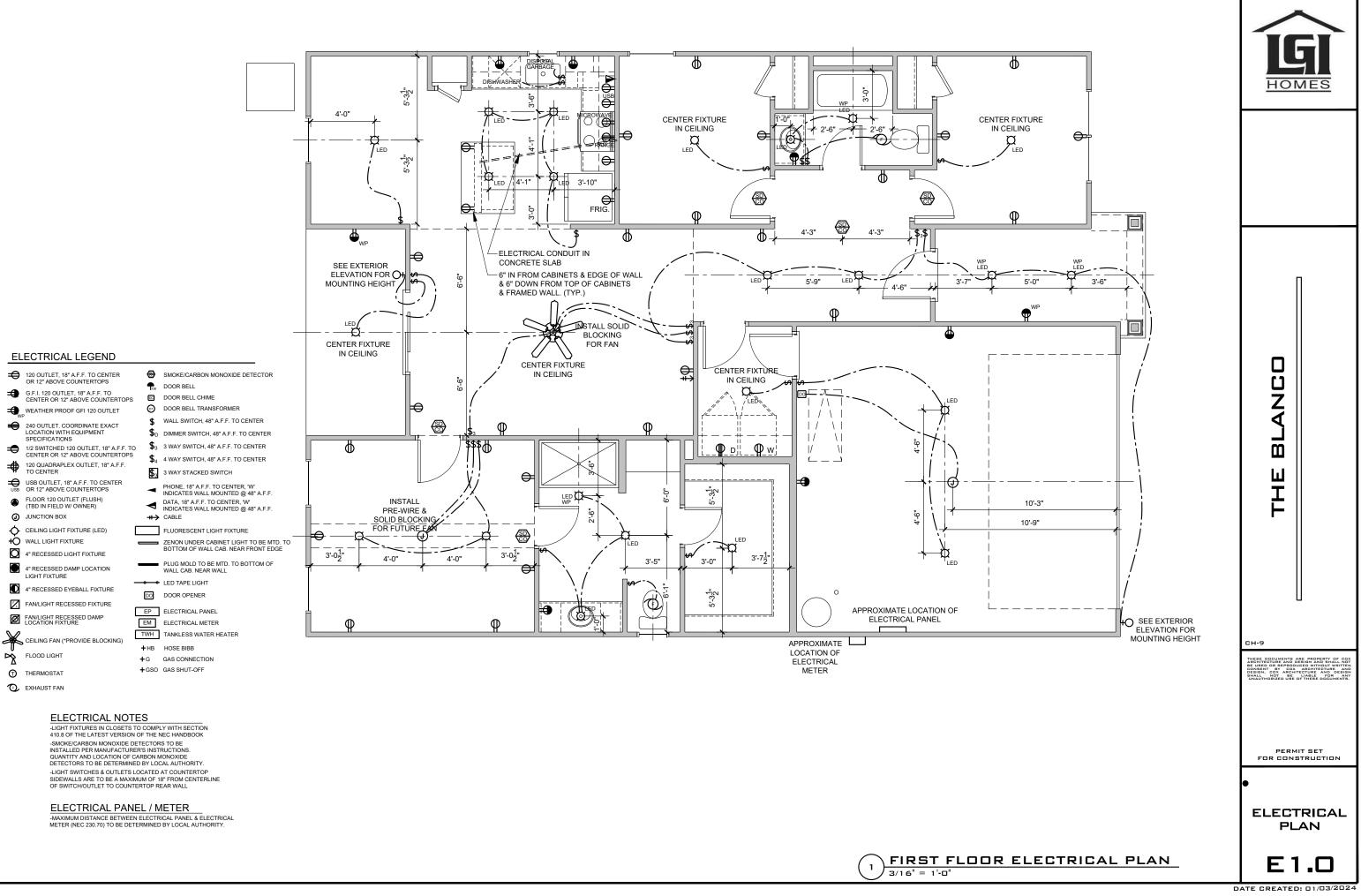












GENERAL STRUCTURAL NOTES

- These drawings and its contents are the property of Queen City Consulting and Design, PLLC, (QC) and the client as noted on this page. Distribution to any other parties for purposes other than those directly concerned with the titled project without prior written consent from QC is strictly prohibited.
- The engineer's name present on the seal of these drawings is the engineer of record (EOR).
- Details noted as "Typical" shall be used whenever applicable. Refer to specifications for information not covered by these notes or drawings.
- 4. It is the responsibility of the contractor to verify all dimensions prior to construction. Furthermore, QC will not be held responsible for the contractor's failure to conform to the construction documents, including this structural set, should any non-conformities occur.
- 5. The contractor shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety of all persons and
- property. 6. Any omissions and conflicts between the various elements of the structural drawings and/or specifications shall be brought to the attention of, and resolved with, the engineer before proceeding with any work so involved.
- All construction shall conform to the latest requirements of the North Carolina Residential Code (NCRC), 2018 Edition, plus all local codes and regulations. Seismic design shall be per section R301.2.2 of the 2018 NCRC and is based off of local seismic design categories. 8

FOOTING AND FOUNDATION NOTES:

- Foundation Design is based on a minimum allowing bearing capacity of 2,000 PSF. Contact the EOR if bearing capacity is not achieved.
- No excavation shall occur within a 45 degree line projected from the bottom of the building foundation is permitted, unless it is specifically approved by the EOR.
- The bottom of all footings shall extend below the frost line for the region, as specified by the local municipality. However, the bottom of all footings shall be a minimum of 12" below grade.
- Contractor to ensure that all drainage is directed away from the exterior footings (Min. 2% slope).
- Excavations of footings shall be temporarily protected with a 10 mil polyethylene membrane if concrete is not placed within 24 hours of excavation. Do not place concrete or other cementitious materials against subgrade with any deleterious materials present, including but not limited to: water, ice, frost, or loose
- material 7. All footings are to have minimum 2" projection on each side of foundation walls (except for monolithic slab foundations).

CONCRETE

- Poured concrete is to have a minimum compressive strength of 3000 psi at 28 days.
- Aggregates for normal weight concrete shall conform to ASTM C33.
- All materials used for concrete shall conform to ACI 318, ACI 301, or ASTM C1157.
- The placing of all concrete shall be in accordance with ACI 318 and ASTM C94 requirements
- Admixtures may be used with prior approval of the EOR. Admixtures shall comply with ASTM C494 and C1017.
- Concrete slabs-on-grade shall be constructed in a manner that complies with ACI 302.1R-96.
- Control or saw cut joints shall be cut to a minimum of 1/4 of the thickness of the respective concrete element. Control joints located within interior and exterior slabs-on-grade shall be spaced at a maximum of 12' O.C. Control joints shall comply with ACI 301.

CONCRETE REINFORCEMENT:

- Bar reinforcement shall be conform to ASTM A615, grade 60 steel.
- The following minimum clear cover shall be provided over reinforcing bars:
- 2.1. Concrete exposed to earth = 3"
- 2.2. Concrete exposed to weather = 1-1/2"
- 2.3. Slabs not exposed to weather = 3/4"
- 2.4. Concrete Beams & Columns = 1-1/2"
- Brick and/or porous material shall not be used to support footing steel off the ground. Plastic rebar chairs or precast concrete dobies may be used.
- Splices in reinforcing steel shall be a minimum of 45x the diameter, up to a #6 rebar. Rebar larger than #6 requires a minimum lap splice of 56x the diameter. All concrete walls shall be doweled to their supporting footings, beams, pads, etc. with bars of the same size and spacing as the vertical bars located within the wall. unless otherwise noted. Anchorage of dowels shall be the equivalent of a bar splice.

GENERAL WOOD FRAMING:

- 1. All wood framing members are designed to be Spruce-Pine-Fir (SPF) #2, unless otherwise noted on the plan. Grade marks shall be made by a recognized grading
- 2. Framing members exposed to weather or in direct contact with soil, concrete, or masonry shall be pressure treated Spruce-Pine-Fir #2 and shall comply with the AWPA standard C-15.
- 3. All fasteners such as nails, bolts, screws, anchor bolts, etc. attaching pressure treated or fire-retardant treated wood shall be hot-dipped zinc coated galvanized or stainless steel (ASTM A153).
- 4. LVL engineered wood shall have the following minimum design values:
 - = 1,900,000 psi 4.1.E
 - 4.2. Fb = 2600 psi 4.3. Fv = 285 psi
 - 4.4.Ft = 1555 psi
- 5 PSL engineered wood shall have the following minimum design values:
- 5.1.E = 2.000.000 psi
 - 5.2. Fb = 2900 psi
 - 5.3. Fv 5.4. Ft = 290 psi
 - = 1755 psi

6. LSL engineered wood shall have the following minimum design values:

- 6.1.E = 1,550,000 psi
- 6.2. Fb = 2250 psi
- 6.3. Fv = 400 psi 6.4. Ft = 1075 ps
- 7. All bearing headers to be 2-2x6 supported with minimum (1) 2x4 jack stud and (1) 2x4 king stud at each end, unless noted otherwise on the plans. Non-load bearing headers shall be minimum 2-2x4.
- Solid blocking is to be installed at all point load through floor levels to the foundation or to the nearest structural element
- All wood structural members that are specified are minimum sizes. Contractor may install larger sizes for ease of construction, if desired.
- 10. All nails shall be common nails, unless noted otherwise on plans and details.
- 11. All lag screws are to be predrilled. Drill diameter is to be 60 percent of the shank diameter. In addition, lag screws shall comply with ANSI/ASME standard B18.2.1-1981.
- 12. All bolt heads and nuts bearing on wood shall have standard cut washers. Holes for bolts shall be bored 1/16" larger than the nominal bolt diameter
- 13. Provide full bearing where all beams meet supporting framing members.
- 14. Unless otherwise noted on plans, size, height, and spacing of wood studs shall be in accordance with section R602.3.1 of the 2018 North Carolina Residential Code. Wood framed walls shall consist of Spruce-Pine-Fir No.2 graded material.
- 15. Unless otherwise noted, four-ply LVL beams shall have plies fastened together with two rows of 1/2" diameter bolts spaced at 16" o.c. The bolts shall be located a minimum of 2-1/2" and a maximum of 3-1/2" from the top of bottom of the beam

ROOF FRAMING NOTES:

- Truss Built Roofs
- 1.1. All roof trusses must be built in accordance with the truss manufacturer's requirements. Tie-down connections to resist uplift shall be installed where required. When roof truss manufacturers do not provide the required connectors, it is the responsibility of the contractor to notify the roof truss engineer or the EOR to provide an adequate connection
- 1.2. Roof truss layouts are to be in compliance with the overall design specified on the plans. All deviations are to be brought to the attention of the EOR prior to installation.
- 1.3. Roof trusses shall be braced per the manufacturer's instructions and per the SBCA Building Component Safety Information (BCSI) Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Roof Trusses.
- 1.4. Provide 2x4 ladder framing spaced at 24" o.c. between adjacent roof trusses where false dormers are located.
- 1.5. Install minimum 7/16" OSB roof sheathing.
- 1.6. Install roof trusses per section R802.10 in the 2018 NCRC. Where truss heels exceed 9-1/4" and are located over braced wall panels, blocking is to be installed per section R602.10.5 of the 2018 NCRC.
- 2 Stick Framed Roofs
 - 2.1. Collar ties shall be 2x6 spaced at 48" o.c. at all ridges unless noted otherwise and connected in the upper third of the attic space using (3) 10d common nails. 2.2. Fur down all ridges as needed so that rafters have full contact.

2.3. Ceiling joists when erected parallel to rafters must be sistered to rafters and secured as per table R802.5.1(a) of the 2018 North Carolina Residential Code. 2.4. In addition to the NCRC fastener schedule, unless noted otherwise on the plan, roof members shall be tied down with additional metal connectors. Install a Simpson H2.5A connector at every rafter to fasten the lower end of the rafter to the top plate or beam below. 2.5. Install minimum 7/16" OSB roof sheathing.



STRUCTURAL PLANS PREPARED FOR:

BLANCO - LH VERSION

OWNER: LGI Home:

7201 Creedmore Rd. Suite 147 Raleigh, NC 27613

DESIGNER: Queen City Consulting and Design, PLLC. 2039 Jesup Dr Charlotte, NC 28208

PROJECT ADDRESS:

Revision No.	Date	Description

DESIGN SPECIFICATIONS:

- Construction Type: Residential
- Applicable Building Codes
- 2018 North Carolina Residential Building Code with All Loc Amendments
- ASCE 7-10: Minimum Design Loads for Buildings and Other Structures

Ultimate Design Wind Speed: 130MPH, EXPOSURE B

Assumed Soil Bearing Capacity: 2000psf

Component and Cladding loads shall be derived per Tables R301.2(R301.2(3)

SEAL APPLIES TO STRUCTURAL ONLY

ENGINEERING SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY. QC ASSUMES NO LIABILITY FOR CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCES, PROCEDURES, SAFETY PRECAUTIONS, O DEVIATIONS/DISCREPANCIES THAT MAY OCCUR IN THE PLAN. ANY DEVIATIONS OR DISCREPANCIES ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF QUEEN CITY CONSULTING AND DESIGN PLIC

THE ARCHITECTURAL PLANS USED FOR STRUCTURAL DRAWINGS AN ANALYSIS HAVE BEEN PROVIDED BY COX ARCHITECTURE AND DESIGN, PLLC AND HAVE BEEN COMPLETED/REVISED ON 1/22/24. NOTIFY QC OF ANY ALTERATIONS MADE TO THE PLANS AFTER THE DATE SHOWN HEREIN

Page Symbol	Description
CS	Cover Sheet, Specifications, Revisions
F-1m	Monolithic Slab Foundation
S-1	First Floor Framing Plan
D-1m	Monolithic Slab Details
D-1f	Framing Details

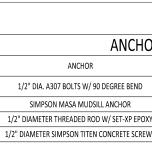
		LIVE LOADS
	Roof 2x Conventional	20 PSF
	Roof Truss	20 PSF
	Attic Roof Truss	60 PSF
	Floor Live Typ. Dwelling	40 PSF
	Sleeping Areas	30 PSF
	Decks	40 PSF
	Passenger Vehicle Garage	50 PSF
nd	Balconies	40 PSF
	Attics with Storage	20 PSF
	Attics without Storage	10 PSF
[Ground Snow Load	15 PSF
ſ		
	Roof 2x Conventional	DEAD LOADS
		15 PSF
	Roof Truss	20 PSF
	Conventional 2x Floor	10 PSF
	I-Joist	15 PSF
	Floor Truss	15 PSF

SLEEN OTV SUSSAILTING AND DEMON, PLLC DF AVI-
OPHICESSIGNE
CLIENT: LGI Homes
SHEET NAME: COVER SHEET
CLIENT: LGI Homes
PLAN NAME: BLANCO - LH VERSION
NEIGHBORHOOD: TBD
LOT AND ADDRESS: LOT # TBD
PROJECT NUMBER: LG1240008
DRAWN BY: CTB
DATE: 1/22/2024 SCALE: 1/4"=1'-0" ON 22"×34" 1/8"=1'-0" ON 11"×17"
PAGE: CS

MONOSLAB FOUNDATION NOTES:

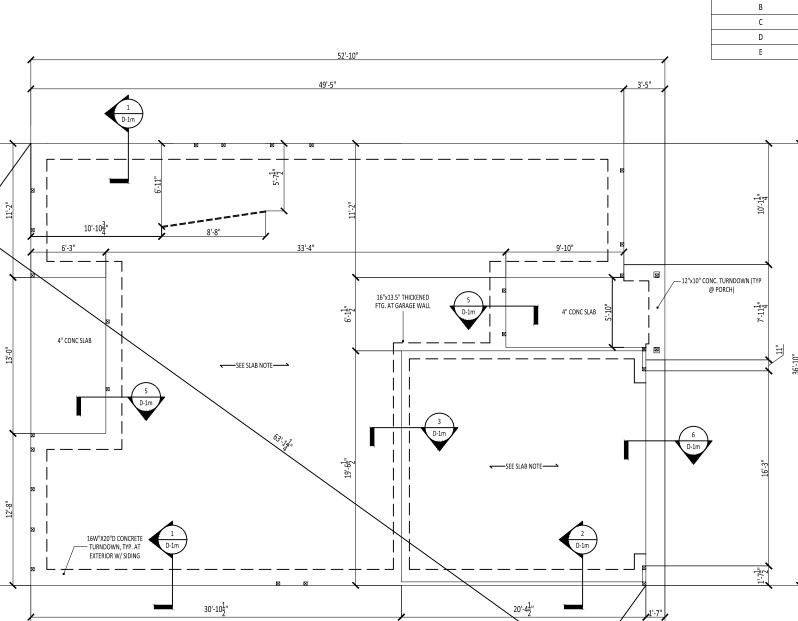
- DISCLAIMER: ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH
- CARQUIN RESIDENTIAL CODE, 2018 EDITION, PLUS ALL LOCAL CODES AND REGULATION IN INFINI-THE FOUNDATION HAS BEEN DESIGNED WITH AN ASSUMED 2000 PSF MINIMUM ALLOWABLE SOIL BEARING CAPACITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOIL BEARING CAPACITY PRIOR TO CONCRETE PLACEMENT. CONTACT QC IF DESIRED BEARING CAPACITY IS NOT ACHIEVED.
- ACHIEVED. ALL POURED CONCRETE IS TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. PLACE CONCRETE IN ACCORDANCE WITH ACI STANDARD 318. THE BOTTOM OF ALL FOOTINGS SHALL EXTEND BELOW THE FROST LINE FOR THE REGION, AS
- SPECIFIED BY THE LOCAL MUNICIPALITY, HOWEVER, THE BOTTOM OF <u>ALL</u> FOOTINGS SHALL BE A MINIMUM OF 12" BELOW GRADE. MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS IS 4'. FOR GREATER THAN 4',
- REFER TO SECTION R404.10 THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE, OR CONTACT QC FOR ADDITIONAL ENGINEERING. PERIMETER INSULATION IS TO BE INSTALLED PER THE 2018 NCRC AND PER LOCAL MUNICIPALITY.
- WOOD SILL PLATES AT LOAD BEARING AND BRACED WALLS SHALL BE ANCHORED TO THE FOUNDATION WITH 1/2" DIAMETER BOLTS SPACED AT A MAXIMUM OF 6' O.C. THERE SHALL BE A MINIMUM OF TWO BOLTS PER PLATE SECTION. BOLTS SHALL EXTEND A MINIMUM OF 7" INTO CONCRETE AND SHALL BE LOCATED WITHIN THE MIDDLE THIRD OF THE PLATE. BOLTS TO BE LOCATED NOT MORE THAN 12" FROM ANY CORNERS OR BREAKS WITHIN THE SILL PLATE. ALL FOOTINGS & SLABS ARE TO BEAR ON UNDISTURBED SOIL OR 95% COMPACTED FILL, VERIFIED BY
- ENGINEER OR CODE OFFICIAL
- ENVINCEN UN CUDE UPFICIAL. DIMENSIONS SHOWN ON FOUNDATION DRAWINGS ARE TO EDGE OF FRAMING AND <u>NOT</u> TO EDGE OF BRICK VENEER.
- OF BRICK VENEER. WITH CLASS 1 SOILS (TABLE R405.1), A 4" CRUSHED STONE BASE COURSE IS NOT REQUIRED. ALL GRADING AND FOUNDATION WORK MUST BE OBSERVED AND APPROVED PRIOR TO PLACEMENT OF CONCRETE.
- UP CUNCRE IE. CONCRETE SLABS SHALL BE 4" THICK AND CONSTRUCTED OUT OF 3000 PSI MIN. COMPRESSIVE STRENGTH WITH 6"Sr6" W1.4xW1.4 WELDED WIRE FABRIC OR FIBERMESH CONCRETE OVER 10 MIL. THICK VAPOR BARRIER ON 95% COMPACTED FLUX, VERIFIED BY EITHER ENGINERE OR COED GFICIAL. CONCRETE CURBS THAT ARE USED TO SUPPORT PORTAL FRAME WALLS SHALL BE A MINIMUM OF 8"
- WIDE

ABBREVIATIONS:	
DJ = DOUBLE JOIST	SJ = SINGLE JOIST
GT = GIRDER TRUSS	FT = FLOOR TRUSS
SC = STUD COLUMN	DR = DOUBLE RAFTER
EE = EACH END	TR = TRIPLE RAFTER
TJ = TRIPLE JOIST	OC = ON CENTER
CL = CENTERLINE	PLFA = POINT LOAD FROM ABOVE
COL = COLUMN	NTS = NOT TO SCALE
PT = PRESSURE TREATED	UNO = UNLESS NOTED OTHERWISE
J = JACK STUD	K = KING STUD
CONT = CONTINUOUS	MANUF = MANUFACTURER



LABEL

А



52'-10"

ORAGE SCHEDULE				
	MIN. SPACING	MIN. CONC. EMBEDMENT		
	6'-0"	7"		
	6'-0"	4"		
ХҮ	6'-0"	7"		
WS	6'-0"	4-1/4"		

FOOTING SCHEDULE		
	SIZE	REBAR
	24"x24"x10"	N/A
	30"X30"X10"	N/A
	36"X36"X12"	#4 @ 8" O.C. EA WAY
	42"X42"X12"	#4 @ 8" O.C. EA WAY
	48"X48"X12"	#5 @ 8" O.C. EA WAY

SLEEN STY BERREN FLL DE REN PARTY DE REN PAR
SEAL 052215 052215 052224 052222 052215 052215 052212 052010 052212 05200 05200 05200 05200 05200 05200 0500000000
CLIENT: LGI Homes
SHEET NAME: MONOLITHIC SLAB FOUNDATION
CLIENT: LGI Homes
PLAN NAME: BLANCO - LH VERSION
NEIGHBORHOOD: TBD
LOT AND ADDRESS: LOT # TBD
PROJECT NUMBER: LGI240008
DRAWN BY: CTB
DATE: 1/22/2024 SCALE:
1/4"=1'-0" ON 22"x34" 1/8"=1'-0" ON 11"x17" PAGE:
F-1.1m

FRAMING NOTES:

- REFER TO COVER PAGE FOR ADDITIONAL NOTES ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA
- ALL CONTINUE TO BE INTERNET OF THE OFFENT OF
- FOUNDATION OR TO THE NEAREST STRUCTURAL ELEMENT. BLOCKING SHALL BE EQUAL TO OR GREATER THAN THE SUPPORT ABOVE.
- BUILT-UP WOOD COLUMNS CONSISTING OF MULTIPLE STUDS SHALL HAVE EACH LAMINATION NAILED WITH 16D NAILS SPACED AT 9" O.C. FOR BUILT-UP COLUMNS CONSISTING OF (4) PLIES OR MORE, SECURE PLIES TOGETHER WITH HORIZONTAL SIMPSON CS-16 COIL STRAPS LOCATED AT QUARTER POINTS.
- CONTRACTOR SHALL ENSURE THAT ALL BEAMS, HEADERS, AND STRUCTURAL COMPONENTS ARE CUT NOT A STARLE TO THE SUPPORTING MEMBERS. ANY GAPS IN THE FRAMING SHALL BE SHIMMED APPROPRIATELY WITH EITHER METAL SHIMS OF WOOD SHIMS AS NECESSARY. HEADER SIZES SHOWN ON PLANS ARE MINIMUMS. ANY HEADERS INSTALLED THAT ARE GREATER IN
- SIZE ARE AN ADEQUATE REPLACEMENTS PROVIDED THE MATERIAL IS OF THE SAME OR GREATER STRUCTURAL PROPERTIES.
- S INDU LONAL FROPENIES. WHERE TOP PLATE HAS BEEN CUT TO ACCOMMODATE FLUSH HEADERS/BEAMS, INSTALL A MINIMUM 16⁻¹ LONG HORIZONTAL C5-16 STRAP EXTENDING 12⁺¹ PAST THE BREAK ON EACH SIDE. UNLESS OTHERWISE NOTED, FOUR-PLY LVL BEAMS SHALL HAVE PUES FASTENED TOGETHER WITH TWO (2) ROWS OF 1/2⁻¹ DIAMETER BOLTS SPACED AT 16⁻¹ O.C. THE BOLTS SHALL BE LOCATED A MINIMUM OF 2-1/2" AND A MAXIMUM OF 3-1/2" FROM THE TOP AND BOTTOM OF THE BEAM. ALL LOAD BEARING WALLS TO BE 2X4 U.N.O.

•	ABBREVIATIONS:	
	DJ = DOUBLE JOIST	SJ = SINGLE JOIST
	GT = GIRDER TRUSS	FT = FLOOR TRUSS
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	EE = EACH END	TR = TRIPLE RAFTER
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TJ = TRIPLE JOIST OC = ON CENTER	
CL = CENTERLINE PLFA = POINT LOAD FROM ABOVE	
COL = COLUMN NTS = NOT TO SCALE	
PT = PRESSURE TREATED UNO = UNLESS NOTED OTHERWISE	
J = JACK STUD K = KING STUD	
CONT = CONTINUOUS MANUF = MANUFACTURER	

LEVEND	
#J	# OF JACK STUDS
\boxtimes	STUD COLUMN
	POINT LOAD FROM ABOV
	LOAD BEARING WALL

		NON LOAD BEARING WALL
HEADER SCHEDUILE		

I	HEADER SCHEDULE:	
	LABEL	SIZE
l	A	2x6 W/ (1) JACK STUD E.E.*
l	В	2x8 W/ (2) JACK STUDS E.E.*
l	C	2x10 W/ (2) JACK STUDS E.E.*
l	D	2x12 W/ (2) JACK STUDS E.E.*
l	E	9-1/4" LVL W/ (3) JACK STUDS E.E.*
l	F	11-7/8" LVL W/ (3) JACK STUDS E.E. *
	WIDTH OF THE WALL (2X4	LYS FOR THE HEADER IS DETERMINED BY THE WALL=2 PLYS, 2X6 WALL=3 PLYS, ETC.). AMOUNT OI N ON PLAN TAKE PRECEDENCE OVER TABLE.
Ľ,		

KING STUD SCHEDULE:

Ш		
l	HEADER SPAN	MINIMUM KING STUDS E.E.
l	3'-0" OR LESS	(1)
l	3'-0" TO 6'-0"	(2)
l	6'-0" TO 9'-0"	(3)
l	9'-0" TO 12'-0"	(4)
Ш	12'-0" TO 16'-0"	(6)

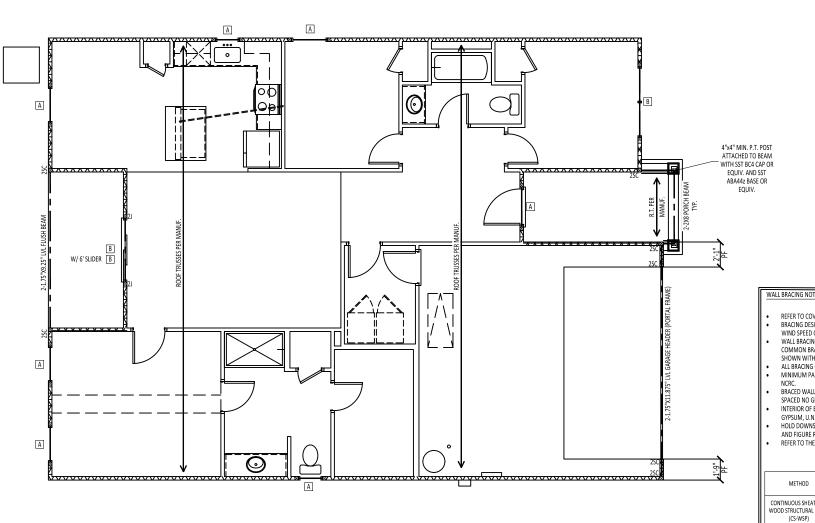
WALL STUD NOTES:

- ALL STRUCTURAL LOAD BEARING WALLS SHALL BE CONSTRUCTED OUT OF 2X4 OR 2X6 STUDS AT 16" O.C. U.N.O. FOR UP TO 10' WALLS
- ALL NON LOAD BEARING WALLS SHALL BE CONSTRUCTED OUT OF 2X4 OR 2X6 STUDS AT 24" O.C.
- ALL NON COND BALL WALLS SHALL BE CONSTRUCTED WITH 2X4 STUDS AT 12" O.C. OR 2X6 STUDS AT 14" O.C. OR 2X6 STUDS AT 16" O.C. WITH CROSS BRACING AT 6-0" O.C. VERTICALLY OR ACCORDING TO THE CHART BELOW:

HEIGHT (PLATE TO PLATE)	STUD SIZE	SPACING
12'-0"	2X4	12" O.C.
15'-0"	2X6	16" O.C.
17'-0"	(2) 2X4/2X6	12" O.C./12" O.C.
21'-0"	(2) 2X6/2X8	16" 0.C./12" 0.C.
25'-0"	(2) 2X6	12" O.C.

B	RICK LINTEL SCHEDULE:		
	SPAN	HEIGHT OF BRICK	LINTEL
	3'-0" OR LESS	20' MAX	L3"x3"x1/4"
	3'-0" TO 6'-0"	6' MAX 12' MAX 20' MAX	L3"x3"x1/4" L4"x3"x1/4" L5"x3-1/2"x5/16"
	6'-0" TO 12'-0"	6' MAX 12' MAX	L5"x3-1/2"x5/16" L6x3-1/2"x5/16"
	12'-0" TO 16'-0"	12' MAX	L8"x4"x1/2"
•	ATTACH ALL LINTELS TO THE SUPP 3.5" LONG 1/2" DIAMETER LAG SCI ENDS OF LINTEL SHALL BEAR AT LE	REWS AT 16" C).C.

NOTE: WALL BRACING HAS BEEN ANALYZED USING CS-WSP PER SECTION R602.10 OF THE 2018 NCRC. MIXED METHODS PER TABLE R602.10.1 ARE DESIGNATED ON THE PLAN.



	TYPICAL HANGERS FOR JOIST & BEAMS				
	MEMBER	5	-SIMPSON- HANGER		
	2x8 2x10 2x12		LUS28 LUS210	JUS28 JUS210 JUS210	
	2-2x8 2-2x10		HUS28-2 HUS210-2	JUS210 JUS28-2 JUS210-2	
	2-2x12 3-2x8		HUS212-2 LUS28-3	JUS212-2 JUS28-3	
	3-2x10 3-2x12		LUS210-3 HU212-3 MI		
	2-1¾*x9¼* 2-1¾*x9½*	LVL	HGUS410 HGUS410	THDH410 THDH410	
	2-1½"x11½ 2-1½"x11½ 2-1½"x14"	" LVL	HGUS412 HGUS412 HGUS414	THDH412 THDH412 THDH414	
	2-124 ×14 2-134"×16" 2-134"×18"	.VL	HGUS414 HGUS414 HGUS414	THDH414 THDH414	
	2-1¾"x24" 3-1¾"x9¼"	.VL	HGUS414 HGUS5.50/1	THDH414	
	3-1½"x9½" 3-1½"x11½	LVL	HGUS5.50/1 HGUS5.50/1	0 THDH610	
	3-1¾"x11¾ 3-1¾"x14"	' LVL	HGUS5.50/1 HGUS5.50/1		
	3-1¾"x16" 3-1¾"x18"	.VL	HGUS5.50/1 HGUS5.50/1		
	3-1¼"x24" 4-1¾"x9¼"	LVL	HGUS5.50/1 HGUS7.25/1		
	4-1¾"x9½" 4-1¾"x11½	" LVL	HGUS7.25/1 HGUS7.25/1	2 THDH7212	
	4-1¾"x11¾ 4-1¾"x14"	LVL	HGUS7.25/1 HGUS7.25/1	4 THDH7214	
	4-1¾"x16" 4-1¾"x18"		HGUS7.25/1 HGUS7.25/1		
		NOTE: ALL HANGER - NAME EQUIVALEN		G TIE CO., INC. (BRAND	
	MAX. UPLIFT	RUSS UPLIFT (FLOOR TO		
	600 LBS	H2.5A	PER WA	LL SHEATHING & FASTENERS	
	1200 LBS 1450 LBS	(2) H2.5A HTS20	CS16 (ENI CS16 (ENI		
	2000 LBS	(2) MTS20	(2) CS16 (Ef		
Т	2900 LBS	(2) HTS20	(2) CS16 (Ef	ND = 11") HTT4	
/I IR	3685 LBS	LGT3-SDS2.5	MSTO	252 HTT4 ALENT PRODUCTS MAY BE USED F	
		<u>S LEGEND:</u>) 2X4 STUD COLUMN /N, OR EQUIVALENT H :ED WALL		WITH SST LTTP2	
VALL BRACING NOTES:					
 REFER TO COVER PAGE BRACING DESIGN COT WIND SPEED OF 1301 WALL BRACING FASI COMMON BRACING FASI COMMON BRACING FASI ALL BRACING COMPC MINIMUM PAREL LEP NCRC. BRACED WALL PANEL SPACED WALL PANEL SPACED WALL PANEL SPACED WALL PANEL AND GREATER INTENIOR OF EXTENDIC GYPSUM, UN.O. HOLD DOWNS SHALL AND FIGURE R602.100 REFER TO THE CHART 	NFORMS TO THE 2 MPH AND SEISMIC BEEN ANALYZED PI METHOD USED, W LE R602.10.1 ARE (DNENTS SHALL CO NENTS SHALL BE 24 J.S SHALL BE WITHII THAN 21'. DR BRACED WALLS BE INSTALLED FOF J.3(3) OF THE 2018	D18 NCRC AND ALL LC ZONES A-C IF SECTION REGO.10 O HERE APPLICABLE. MI PESIGNATED ON THE MPLY TO SECTION REG 'OR THE MINIMUM / V 12'-0' FROM THE EI SHALL BE SHEATHED I BRACED WALL END I NCRC.	DF THE 2018 NCR XED METHODS, C PLAN. J2.10.1 OF THE 2C SS STATED IN R60 NDS OF A BRACED CONTINUOUSLY 1 CONDITIONS PER	C. CS-WSP IS THE THER THAN CS-WSP, 118 NCRC. 2.10.1 OF THE 2018 WALL LINE AND WITH 1/2" THICK SECTION R602.10.4	
	MATERIAL	MIN. THI	CKNESS	REQUIRED CONNECTION	
METHOD				DMMON NAILS AT 6" O.C. ON IGE AND 12" O.C. ON FIELD	
CONTINUOUS SHEATHING	WOOD STRUCTUR	ALPANEL 3/8	EL	1	
CONTINUOUS SHEATHING WOOD STRUCTURAL PANEL	WOOD STRUCTUR		Edi	COOLER NAILS AT 7" O.C. ON EDGE AND FIELD	
CONTINUOUS SHEATHING WOOD STRUCTURAL PANEL (CS-WSP) GYPSUM BOARD (GB)		IRD 1/2	_= 5d 0		
CONTINUOUS SHEATHING WOOD STRUCTURAL PANEL (CS-WSP) GYPSUM BOARD (GB) WOOD STRUCTURAL PANEL	GYPSUM BOA	AL PANEL 3/8	2" 5d 0 3" 6d Cl BD	EDGE AND FIELD	

> DO NOT CUT OR ALTER ROOF TRUSSES. ROOF TRUSS MANUFACTURER SHALL VERIFY AND DESIGN FOR POSITION OF PULL DOWN STAIRS AND ATTIC PLATFORM.

WHERE TRUSS HELLS EXCEED 9-1/4" AND ARE LOCATED OVER BRACED WALL PANELS AS SHOWN ON THE PLANS, BLOCKING SHALL BE INSTALLED PER SECTION R602.10.5 OF THE 2018 NCRC.

ALEBICITY GUESSAITNE AND BERBACK PLD BERBACK PLD GF AMILIA
SEAL OS2215 SEAL SEAL SEAL SEAL SEAL SEAL SEAL SEAL
CLIEMT: LGI Homes
SHEFT NAME: FIRST FLOOR FRAMING PLAN
CLIENT: LGI Homes
PLAN NAME: BLANCO - LH VERSION
NEIGHBORHOOD: TBD LOT AND ADDRESS:
LOT # TBD
PROJECT NUMBER: LGI240008
DRAWN BY: CTB DATE:
1/22/2024 SCALE:
1/4"=1'-0" ON 22"x34" 1/8"=1'-0" ON 11"x17" PAGE:
S-1.1

GENERAL STRUCTURAL NOTES:

- These drawings and its contents are the property of Queen City Consulting and Design, PLLC, (QC) and the client as noted on this page. Distribution to any other parties for purposes other than those directly concerned with the titled project without prior written consent from QC is strictly prohibited.
- The engineer's name present on the seal of these drawings is the engineer of record (EOR).
- Details noted as "Typical" shall be used whenever applicable. Refer to specifications for information not covered by these notes or drawings.
- 4. It is the responsibility of the contractor to verify all dimensions prior to construction. Furthermore, QC will not be held responsible for the contractor's failure to conform to the construction documents, including this structural set, should any non-conformities occur.
- 5. The contractor shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety of all persons and property.
- 6. Any omissions and conflicts between the various elements of the structural drawings and/or specifications shall be brought to the attention of, and resolved with, the engineer before proceeding with any work so involved. All construction shall conform to the latest requirements of the North Carolina Residential Code (NCRC), 2018 Edition, plus all local codes and regulations.
- 8. Seismic design shall be per section R301.2.2 of the 2018 NCRC and is based off of local seismic design categories.

FOOTING AND FOUNDATION NOTES:

- Foundation Design is based on a minimum allowing bearing capacity of 2,000 PSF. Contact the EOR if bearing capacity is not achieved.
- No excavation shall occur within a 45 degree line projected from the bottom of the building foundation is permitted, unless it is specifically approved by the EOR. The bottom of all footings shall extend below the frost line for the region, as specified by the local municipality. However, the bottom of all footings shall be a minimum
- 12" below grade.
- 4. Contractor to ensure that all drainage is directed away from the exterior footings (Min. 2% slope).
- 5. Excavations of footings shall be temporarily protected with a 10 mil polyethylene membrane if concrete is not placed within 24 hours of excavation. 6. Do not place concrete or other cementitious materials against subgrade with any deleterious materials present, including but not limited to: water, ice, frost, or loose material.
- 7. All footings are to have minimum 2" projection on each side of foundation walls (except for monolithic slab foundations).

CONCRETE:

- 1. Poured concrete is to have a minimum compressive strength of 3000 psi at 28 days.
- Aggregates for normal weight concrete shall conform to ASTM C33.
- All materials used for concrete shall conform to ACI 318, ACI 301, or ASTM C1157.
- The placing of all concrete shall be in accordance with ACI 318 and ASTM C94 requirements
- Admixtures may be used with prior approval of the EOR. Admixtures shall comply with ASTM C494 and C1017.
- Concrete slabs-on-grade shall be constructed in a manner that complies with ACI 302.1R-96.
- Control or saw cut joints shall be cut to a minimum of 1/4 of the thickness of the respective concrete element. Control joints located within interior and exterior slabs-on-grade shall be spaced at a maximum of 12' O.C. Control joints shall comply with ACI 301.

CONCRETE REINFORCEMENT:

- Bar reinforcement shall be conform to ASTM A615, grade 60 steel.
- The following minimum clear cover shall be provided over reinforcing bars:
 - 2.1. Concrete exposed to earth = 3"
 - 2.2. Concrete exposed to weather = 1-1/2"
 - 2.3. Slabs not exposed to weather = 3/4"
 - 2.4. Concrete Beams & Columns = 1-1/2"
- 3. Brick and/or porous material shall not be used to support footing steel off the ground. Plastic rebar chairs or precast concrete dobies may be used.
- 4. Splices in reinforcing steel shall be a minimum of 45x the diameter, up to a #6 rebar. Rebar larger than #6 requires a minimum lap splice of 56x the diameter.
- 5. All concrete walls shall be doweled to their supporting footings, beams, pads, etc. with bars of the same size and spacing as the vertical bars located within the wall, unless otherwise noted. Anchorage of dowels shall be the equivalent of a bar splice.

GENERAL WOOD FRAMING:

- All wood framing members are designed to be Spruce-Pine-Fir (SPF) #2, unless otherwise noted on the plan. Grade marks shall be made by a recognized grading agency. 2. Framing members exposed to weather or in direct contact with soil, concrete, or masonry shall be pressure treated Spruce-Pine-Fir #2 and shall comply with the AWPA
- standard C-15.
- 3. All fasteners such as nails, bolts, screws, anchor bolts, etc. attaching pressure treated or fire-retardant treated wood shall be hot-dipped zinc coated galvanized or stainless steel (ASTM A153)
- 4. LVL engineered wood shall have the following minimum design values:
 - 4.1.E = 1,900,000 psi
 - 4.2.Fb = 2600 psi
 - 4.3. Fv = 285 psi
 - 4.4. Ft = 1555 psi
- 5. PSL engineered wood shall have the following minimum design values:
 - 5.1.E = 2.000.000 psi
 - 5.2. Fb = 2900 psi
 - 5.3. Fv = 290 psi 5.4. Ft = 1755 psi
- 6. LSL engineered wood shall have the following minimum design values:
 - 6.1.E = 1.550.000 psi
 - 6.2. Fb = 2250 psi
 - 6.3. Fv = 400 psi
 - 6.4. Ft = 1075 psi
- 7. All bearing headers to be 2-2x6 supported with minimum (1) 2x4 jack stud and (1) 2x4 king stud at each end, unless noted otherwise on the plans. Non-load bearing headers shall be minimum 2-2x4.
- 8. Solid blocking is to be installed at all point load through floor levels to the foundation or to the nearest structural element.
- All wood structural members that are specified are minimum sizes. Contractor may install larger sizes for ease of construction, if desired.
- All nails shall be common nails, unless noted otherwise on plans and details.
- 11. All lag screws are to be predrilled. Drill diameter is to be 60 percent of the shank diameter. In addition, lag screws shall comply with ANSI/ASME standard B18.2.1-1981.
- 12. All bolt heads and nuts bearing on wood shall have standard cut washers. Holes for bolts shall be bored 1/16" larger than the nominal bolt diameter.
- 13. Provide full bearing where all beams meet supporting framing members.
- 14. Unless otherwise noted on plans, size, height, and spacing of wood studs shall be in accordance with section R602.3.1 of the 2018 North Carolina Residential Code. Wood framed walls shall consist of Spruce-Pine-Fir No.2 graded material.
- 15. Unless otherwise noted, four-ply LVL beams shall have plies fastened together with two rows of 1/2" diameter bolts spaced at 16" o.c. The bolts shall be located a minimum of 2-1/2" and a maximum of 3-1/2" from the top of bottom of the beam.

ROOF FRAMING NOTES:

- 1. Truss Built Roofs
 - 1.1. All roof trusses must be built in accordance with the truss manufacturer's requirements. Tie-down connections to resist uplift shall be installed where required When roof truss manufacturers do not provide the required connectors, it is the responsibility of the contractor to notify the roof truss engineer or the EOR to provide an adequate connection
 - 1.2. Roof truss layouts are to be in compliance with the overall design specified on the plans. All deviations are to be brought to the attention of the EOR prior to installation.
 - 1.3. Roof trusses shall be braced per the manufacturer's instructions and per the SBCA Building Component Safety Information (BCSI) Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Roof Trusses.
 - 1.4. Provide 2x4 ladder framing spaced at 24" o.c. between adjacent roof trusses where false dormers are located.
 - 1.5. Install minimum 7/16" OSB roof sheathing.

 - 1.6. Install roof trusses per section R802.10 in the 2018 NCRC. Where truss heels exceed 9-1/4" and are located over braced wall panels, blocking is to be installed per section R602.10.5 of the 2018 NCRC.
- 2. Stick Framed Roofs
 - 2.1. Collar ties shall be 2x6 spaced at 48" o.c. at all ridges unless noted otherwise and connected in the upper third of the attic space using (3) 10d common nails. 2.2. Fur down all ridges as needed so that rafters have full contact.

2.3. Ceiling joists when erected parallel to rafters must be sistered to rafters and secured as per table R802.5.1(a) of the 2018 North Carolina Residential Code. 2.4. In addition to the NCRC fastener schedule, unless noted otherwise on the plan, roof members shall be tied down with additional metal connectors. Install a Simpson H2.5A connector at every rafter to fasten the lower end of the rafter to the top plate or beam below.

2.5. Install minimum 7/16" OSB roof sheathing.





STRUCTURAL PLANS PREPARED FOR:

STANDARD DETAILS

DESIGNER Queen City Consulting and Design, PLLC. 2039 Jesup Dr Charlotte, NC 28208

DESIGN SPECIFICATIONS:

Construction Type: Residential

Applicable Building Codes:

 2018 North Carolina Residential Building Code with All Local Amendments ASCE 7-10: Minimum Design Loads for Buildings and Other Structures

Ultimate Design Wind Speed: 130MPH, EXPOSURE B

Assumed Soil Bearing Capacity: 2000psf

Component and Cladding loads shall be derived per Tables R301.2(2) and R301.2(3)

SEAL APPLIES TO STRUCTURAL ONLY

ENGINEERING SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY. QC ASSUMES NO LIABILITY FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, SAFETY PRECAUTIONS, OR DEVIATIONS/DISCREPANCIES THAT MAY OCCUR IN THE PLAN. ANY DEVIATIONS OR DISCREPANCIES ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF QUEEN CITY CONSULTING AND DESIGN, PLLC.

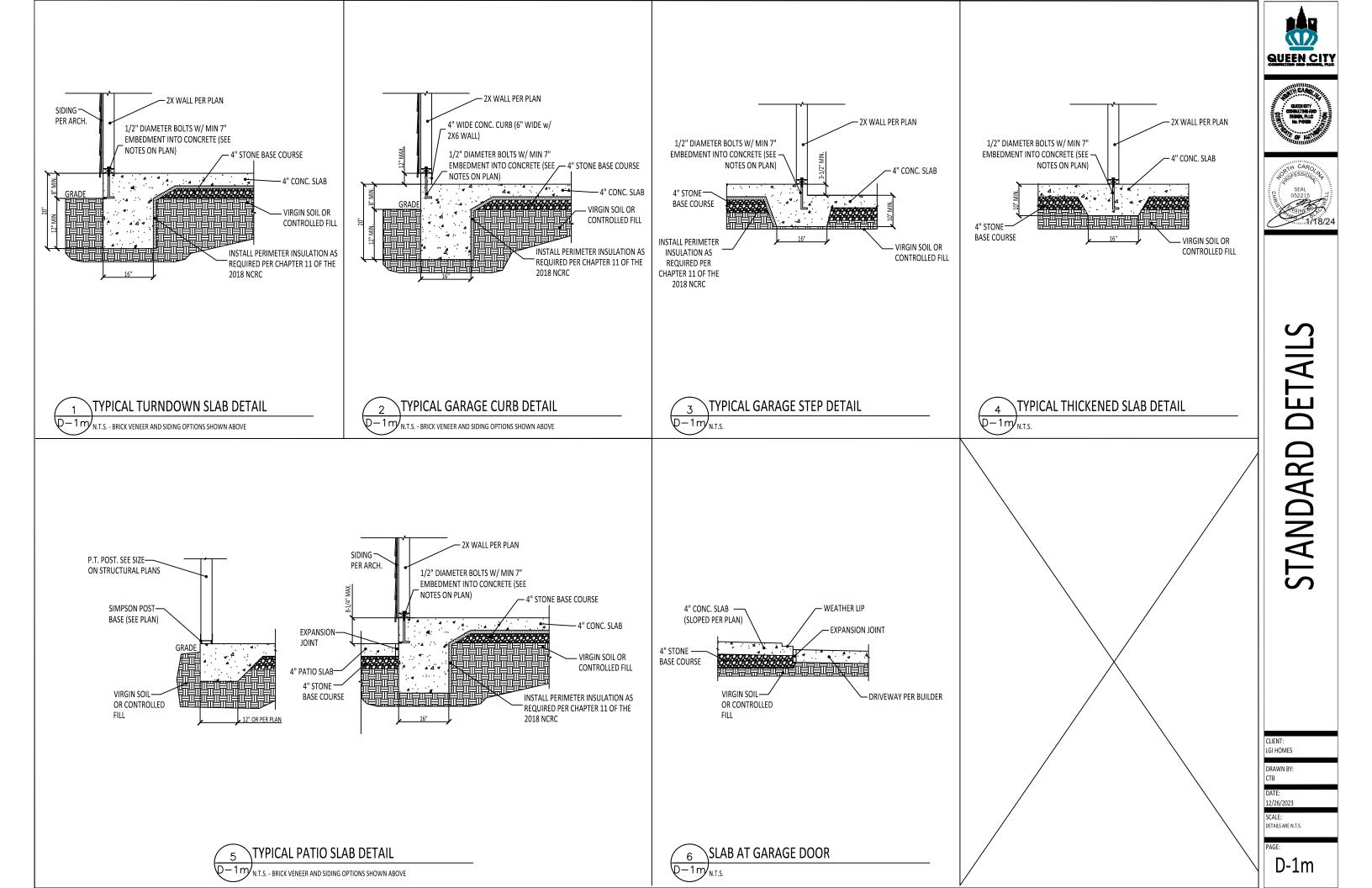
	LIVE LOADS	
Roof 2x Conventional	20 PSF	
Roof Truss	20 PSF	
Attic Roof Truss	60 PSF	
Floor Live Typ. Dwelling	40 PSF	
Sleeping Areas	30 PSF	
Decks	40 PSF	
Passenger Vehicle Garage	50 PSF	
Balconies	40 PSF	
Attics with Storage	20 PSF	
Attics without Storage	10 PSF	
Ground Snow Load	35 PSF	

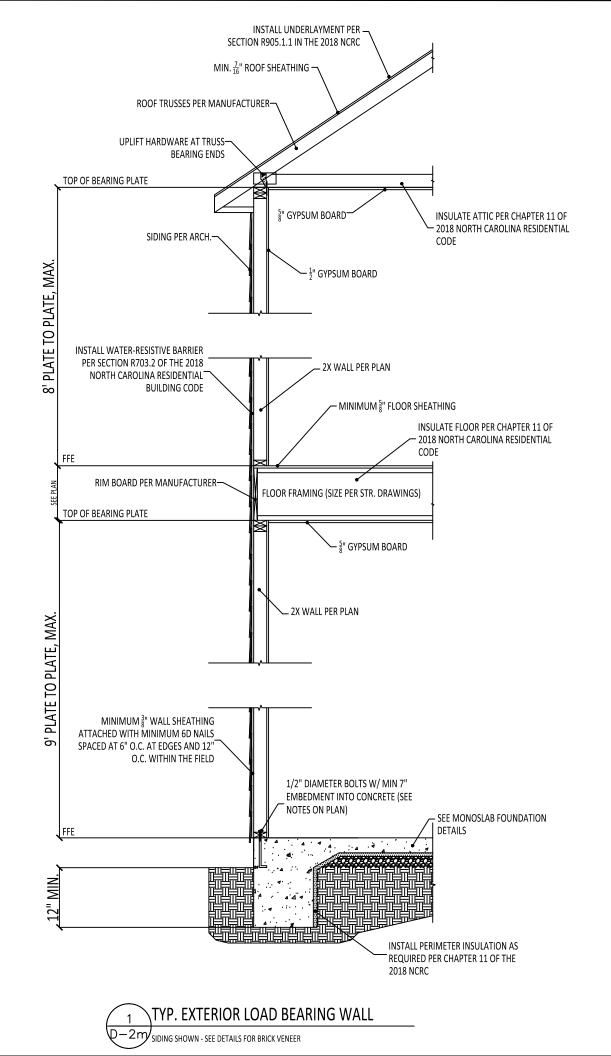
	DEAD LOADS
Roof 2x Conventional	15 PSF
Roof Truss	20 PSF
Conventional 2x Floor	10 PSF
I-Joist	15 PSF
Floor Truss	15 PSF

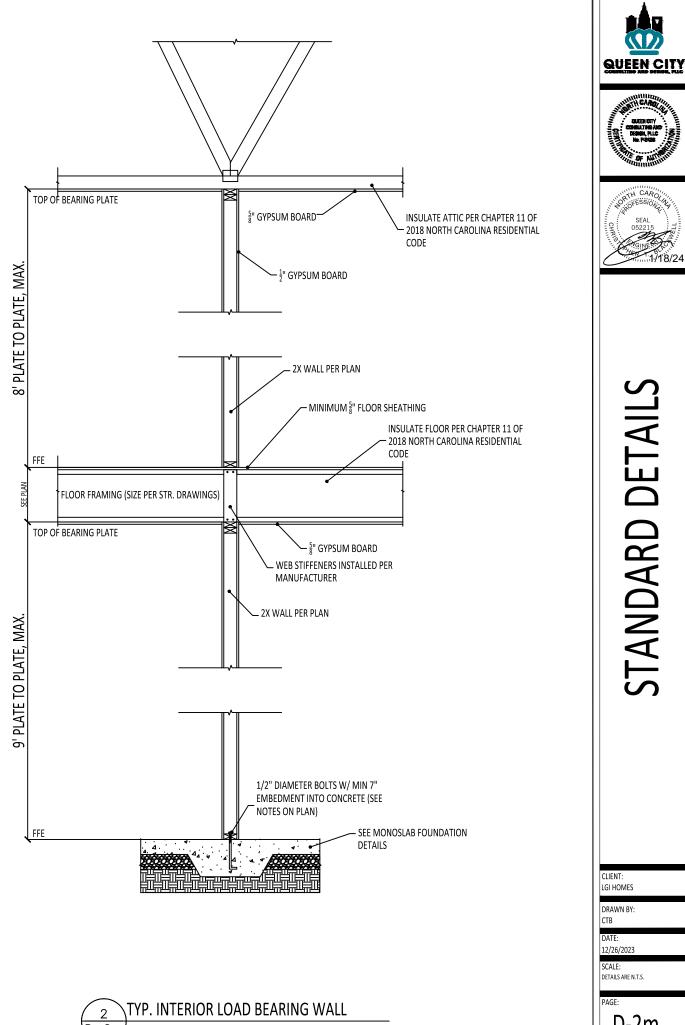


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			DRAWN BY: CTB DATE: 12/26/2023 SCALE: DETAILS ARE N.T.S.

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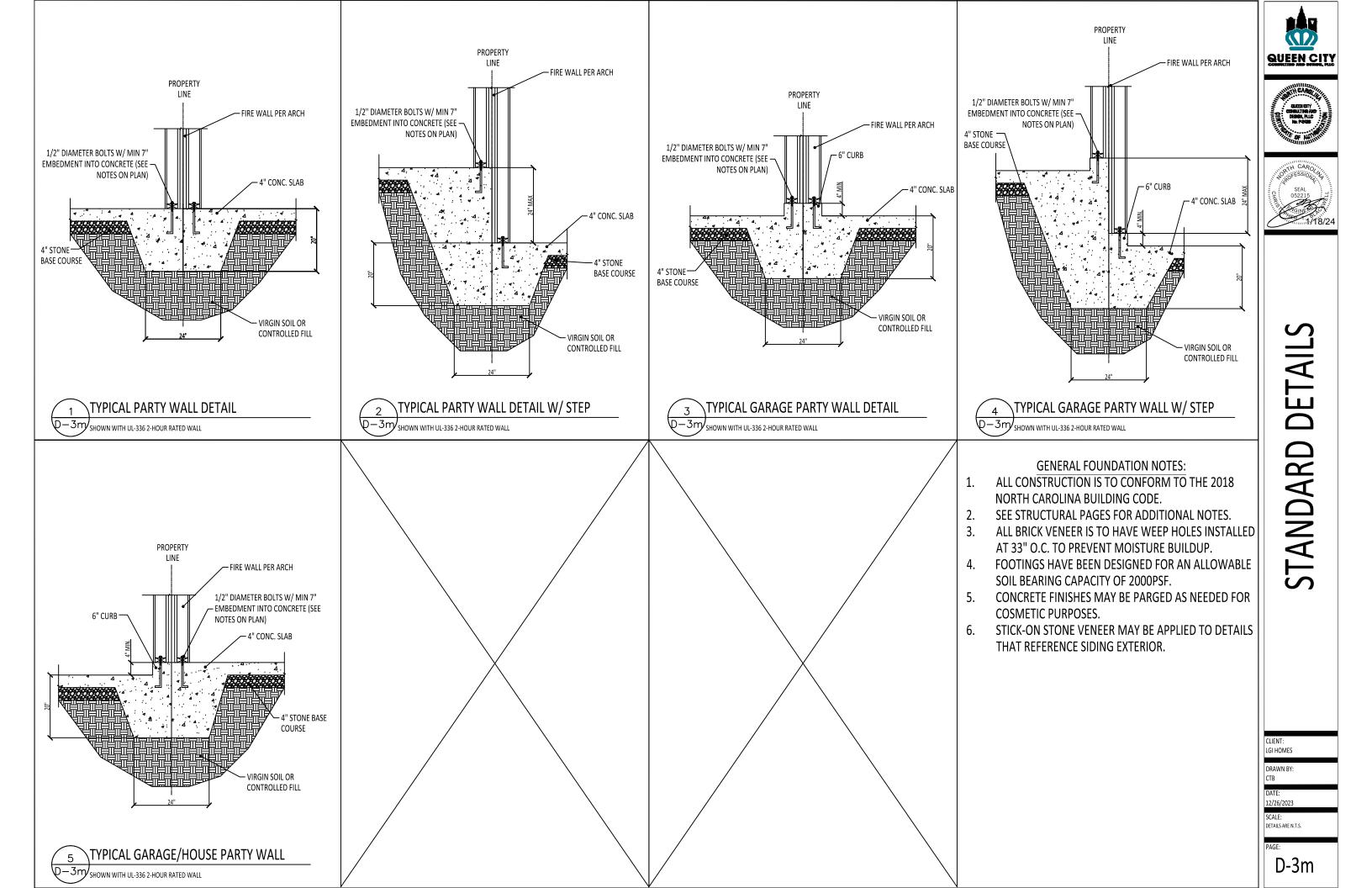
Q-2m/N.T.S.

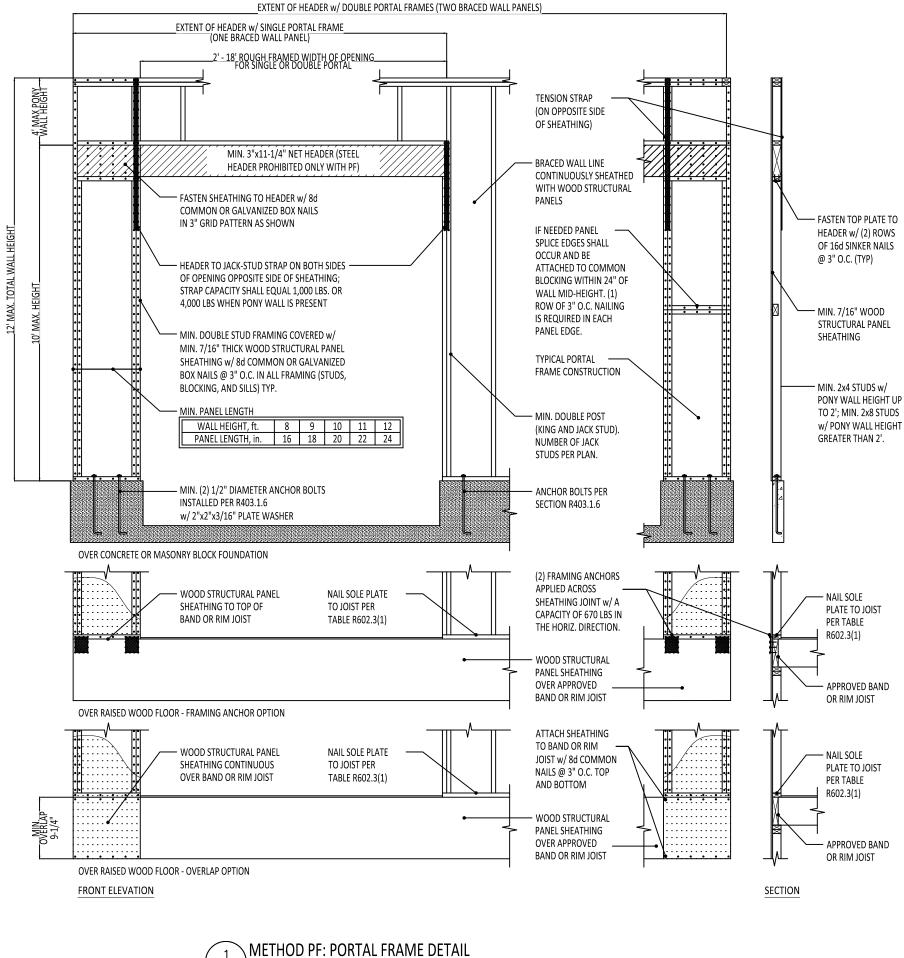
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D-2m

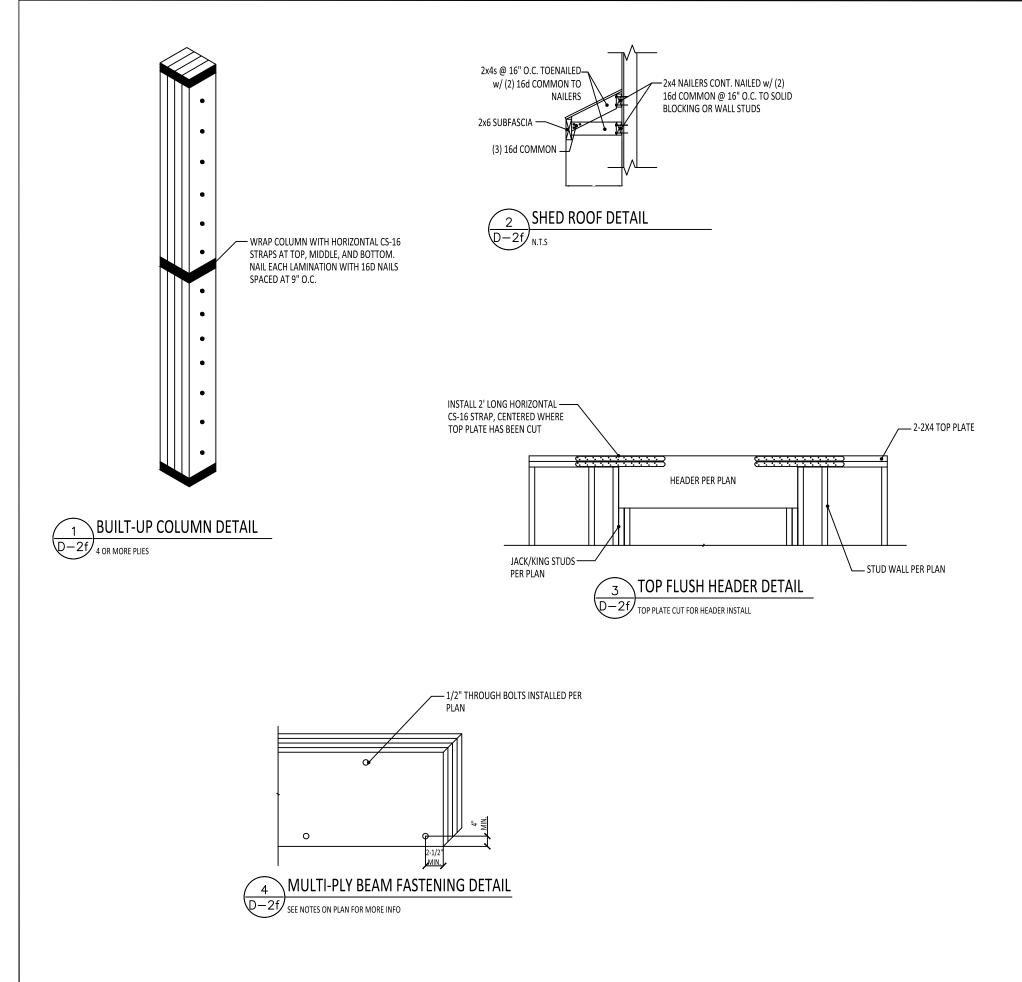




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