

THE AARON

NORTH CAROLINA

SQUARE FOOTAGES

FIRST FLOOR (HTD.)	= 1,172 sf
GARAGE FRONT PORCH	= 400 sf = 30 sf
TOTAL	= 1,602 sf
REAR PATIO	= +100 sf

INDEX OF SHEETS

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

INDEX OF SHEETS (CONT.)

- COVER SHEET, SPECIFICATIONS, REVS. CS
- F1.1m FOUNDATION PLAN MONOLITHIC CONC. SLAB
- FIRST FLOOR FRAMING & BRACING PLAN S1.1
- COVER SHEET STANDARD DETAILS CS-D
- D-1m DETAILS MONO. CONC. SLAB DETAILS - MONO. CONC. SLAB (CONT.) D-2m
- DETAILS FRAMING D-1f
- DETAILS FRAMING (CONT.) D-2f

GENERAL CONTRACTOR

LGI HOMES

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

ARCHITECT

COX ARCHITECTURE & DESIGN, PLLC

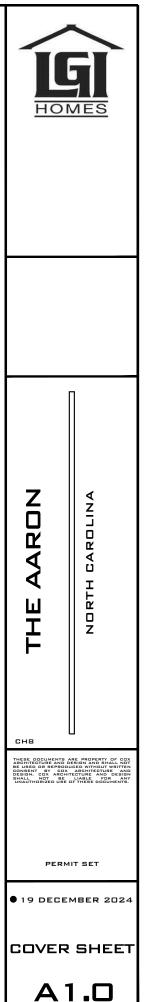
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GENERAL NOTES

-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: (2018 NCBC:R) "RESIDENTIAL" ONE & TWO FAMILY DWELLING CONSTRUCTION CLASS: (2018 NCBC:R) "RESIDENTIAL" HEIGHT & AREA LIMIT: (LOCAL ZONING) 35' MAXIMUM 2-STORY HEIGHT EMERGENCY ESCAPE: (2018 NCBC:R) 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: $\frac{1}{2}$ " GYPSUM WALL BOARD %" TYPE "X" GYPSUM BOARD CEILING WHERE LIVING IS ABOVE 20 MINUTE RATED GARAGE / HOUSE DOOR ATTIC VENTILATION: [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: [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

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	NORTH CAROLINA
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• 19 DECEMBER 2024 GENERAL NOTES	

FLOOR PLAN NOTES

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

-CLEANUP TO OCCUR DAILY

-G.C. TO VERIFY FINISH GRADE @ HOUSE TO DETERMINE NUMBER OF STEPS.

-MECHANICAL CONTRACTOR TO COORDINATE W/ ARCHITECT LOCATION OF MAIN TRUNK & DISTRIBUTION LINES, REGISTERS (CENTER ALL REGISTERS ON WINDOWS), THERMOSTATS, AIR HANDLER & CONDENSERS.

-CEILING HEIGHTS LISTED ARE DIMENSIONED TO FRAMING (TOP OF SUBFLOOR TO UNDERSIDE OF FRAMING ABOVE)

-CONCRETE SLABS & SETTING BEDS TO ACCOMMODATE FOR ADEQUATE WATER DRAINAGE AT GARAGES AND PORCHES

-ATTIC ACCESS DROP-DOWN STAIRS TO CONFORM WITH LOCAL AUTHORITIES BASED ON R807.1. MINIMUM NET CLEAR OPENING OF 20" x 30" ALL ATTIC ACCESS STAIRS TO BE WEATHER STRIPPED & SEALED WITH R-VALUES THAT CONFORM WITH LOCAL AUTHORITIES BASED ON N1102.2.4. GC TO PROVIDE & INSTALL INSULATION DAMS TO RESTRICT TYPICAL ATTIC INSULATION FROM FALLING THROUGH ATTIC ACCESS OPENING. RIGID FOAM BOX COVER TO BE INSTALLED & SEALED AROUND FRAMING OF OPENING, NOT TO IMPEDE OR OBSTRUCT PERFORMANCE OF ADJACENT TYPICAL ATTIC INSULATION

-HOSE BIBB(S) TO BE LOCATED 24" ABOVE FIRST FLOOR FINISHED FLOOR

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 THE FIELD.

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

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

-G.C. AND WINDOW SUPPLIER TO VERIEV THAT EACH BEDROOM TO HAVE A MINIMUM OF ONE WINDOW WHICH MEETS EMERGENCY EGRESS AS REQUIRED BY LOCAL AUTHORITIES. WINDOW SUPPLIER TO ADD EGRESS HARDWARE TO CASEMENT WINDOWS IF NECESSARY.

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

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 REQUIRED BY LOCAL CODE.

DOOR & WINDOW LEGEND

<u>30 68</u>		
	- HEIGHT:	6'-8"
	- WIDTH:	3'-0"
DOORS:	P = POCH	КЕТ

WINDOWS: SH = SINGLE HUNG F = FIXED

INSULATION NOTES

INSULATION VALUES PER NCRC ECC 2018 CH. 11 ENERGY CONSERVATION CODE (2024 ECC STILL UNDER LEGISLATIVE REVIEW)

CLIMATE ZONE 3A	CLIMATE ZONE 4A
TABLE N1102.1.2	TABLE N1102.1.2
CEILING: R-38 FLOOR: R-19 WALL: R-15 SLAB: R-0	CEILING: R-38 FLOOR: R-19 WALL: R-15 SLAB: R-10

SQUARE FOOTAGES

FIRST	FLOOR (HTD.)	= 1	1,172 sf
GARA	(400 sf 30 sf
τοτα	L	= 1	l,602 sf
REAR	PATIO	= +	⊦100 sf

FLOOR PLAN LEGEND

5S	5 SHELVES
1R 2S	1 ROD, 2 SHELVES
2R 2S	2 ROD, 2 SHELVES
HR	HANGING ROD
CO	CASED OPENING
W D	WASHER, DRYER
D/W	DISH WASHER
FRIG	REFRIGERATOR
LS	LAZY SUSAN
М	MIRROR
	SHOWER HEAD

WALL SCHEDULE

FRAMED WALLS

OVERHEAD/BELOW

ALL WALLS ARE 2x4 WOOD STUD WALLS, UNO 5 1/2" DIMENSION INDICATES 2x6 WOOD STUD WALL

STAIR NOTES

-STAIR FABRICATOR / INSTALLER TO VERIEY THAT STAIRS MEET ALL REQUIRED CODES

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

CEILING HEIGHT NOTES

8' - 1 ½" CEILING HEIGHTS ON FIRST FLOOR

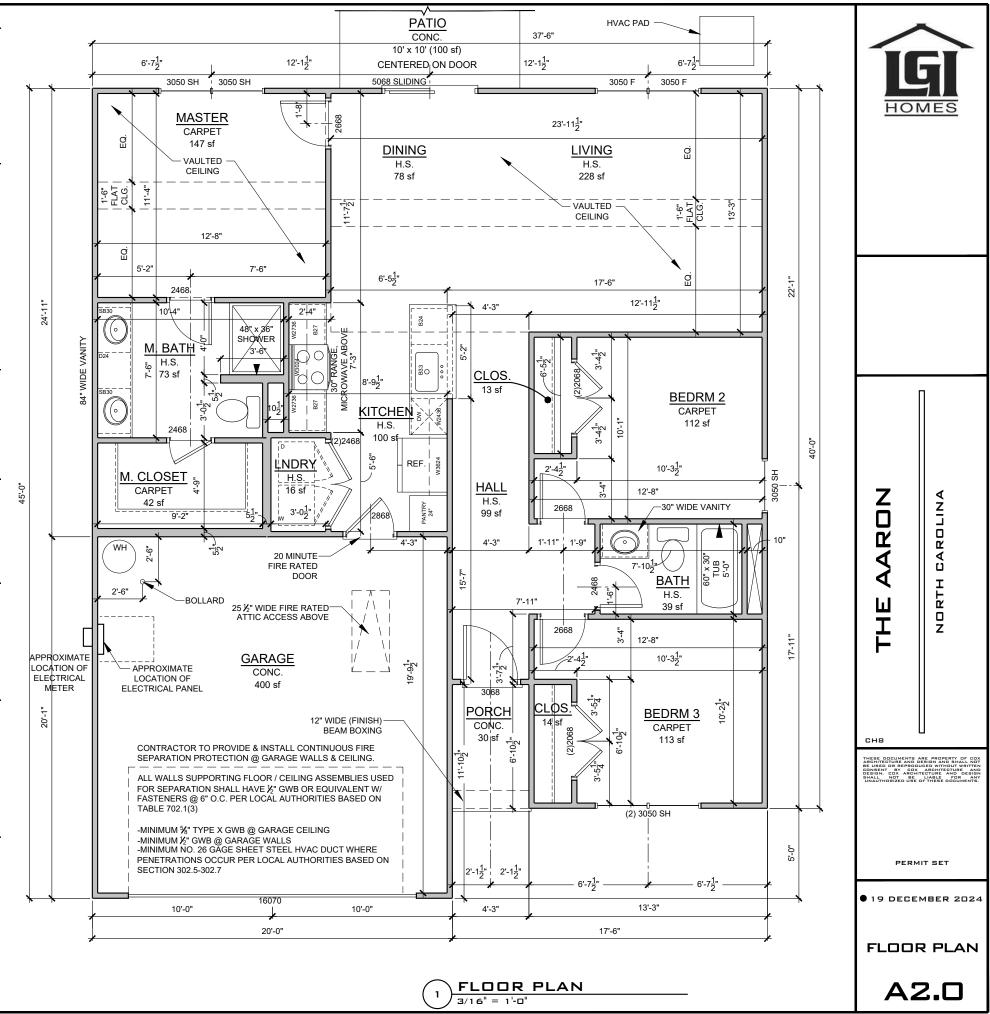
MEASURED FROM TOP OF SUBFLOOR / CONCRETE SLAB TO BOTTOM OF FLOOR JOISTS / ROOF TRUSSES

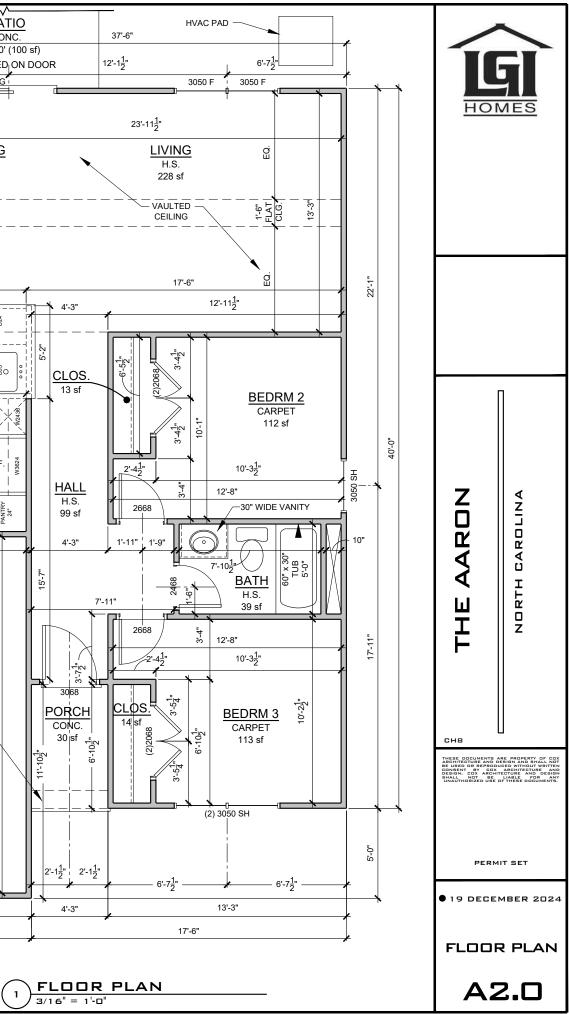
COLUMN NOTES

COLUMNS TO BE: AFCO OR COLUMN OF EQUAL BEARING CAPACITY. (6000 # MINIMUM) TOP CONNECTION: (2) #8 - ¼" 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.





CEILING HEIGHT NOTES

8' - 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

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 LOCAL 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 CODES

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

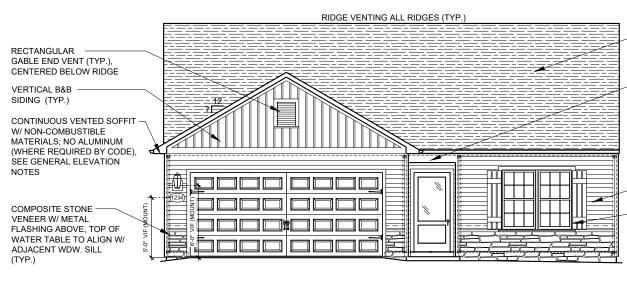
-ALL TRUSS PROFILE DIMENSIONS TO BE VERIFIED BY TRUSS MANUFACTURER. TRUSS MANUFACTURER TO NOTIFY ARCHITECT IF TRUSS PROFILES / DIMENSIONS CHANGE.

-ALL BUILDINGS CONSTRUCTED WITH LESS THAN A 10' FIRE SEPARATION DISTANCE BETWEEN SHALL COMPLY WITH LOCAL AUTHORITIES BASED ON 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.

CLIMATE ZONE 3A

TABLE N1102 1 2

CEILING:	R-38
FLOOR:	R-19
WALL:	R-15
SLAB:	R-0



FRONT ELEVATION 1 1/8" = 1'-0"

ELEVATION NOTES

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

INSULATION NOTES

INSULATION VALUES PER NCRC ECC 2018 CH. 11 ENERGY CONSERVATION CODE (2024 ECC STILL UNDER LEGISLATIVE REVIEW)

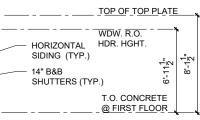
CLIMATE ZONE 4A

TABLE N1102.1.2

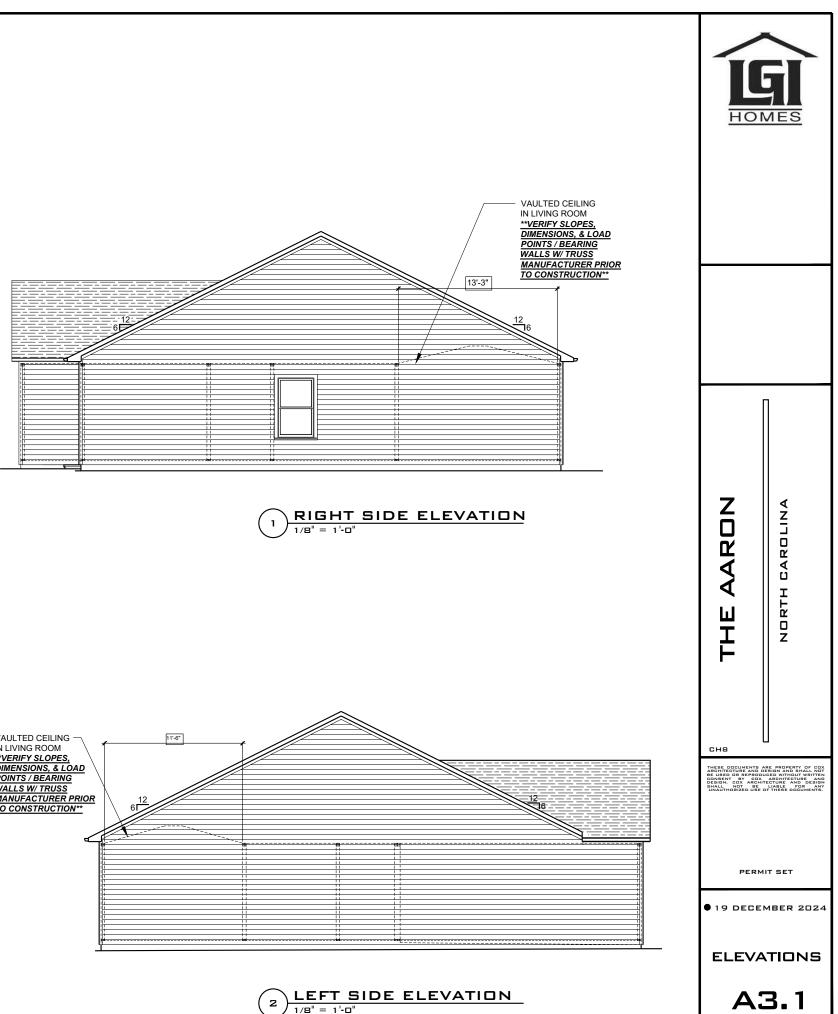
CEILING:	R-38
FLOOR:	R-19
WALL:	R-15
SLAB:	R-10

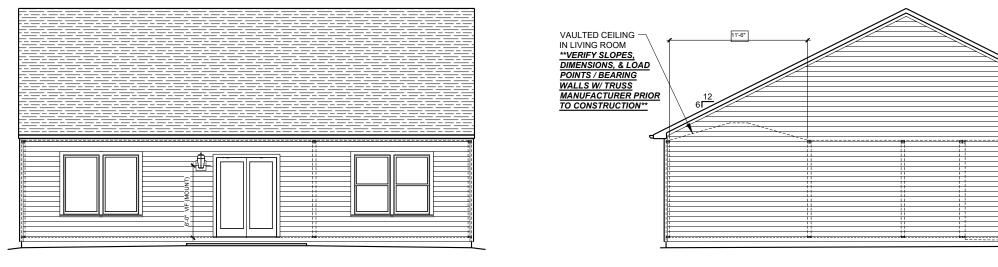
_	COMPOSITION SHINGLES
	(TYP.)

12" WIDE (FINISH) BEAM BOXING

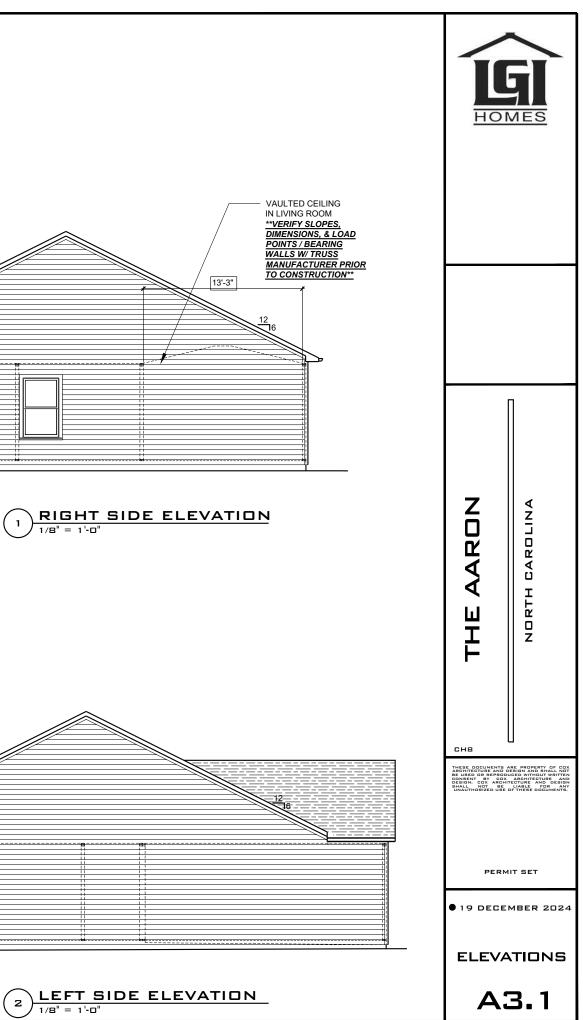


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● 19 DECEMBER 2024	
ELEVATIONS	
A3	3.0









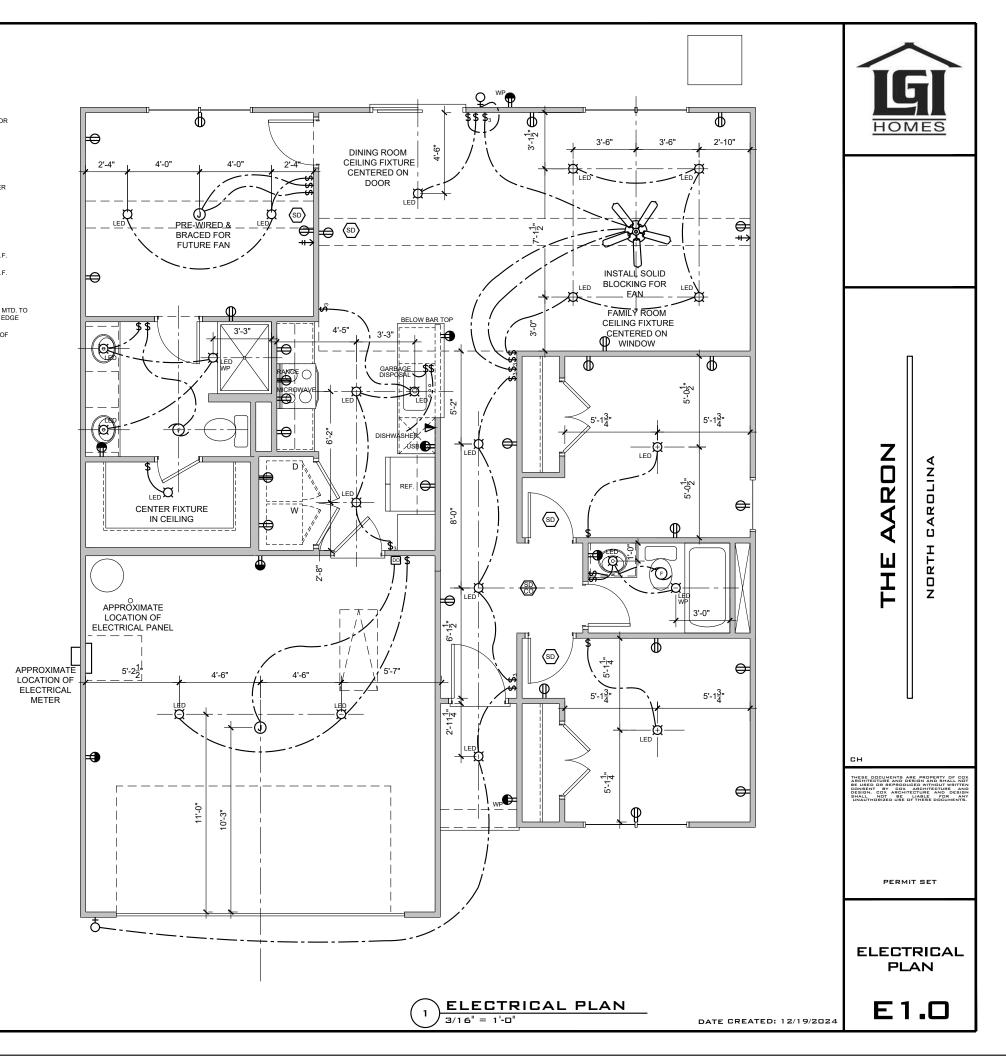






LIGHT FIXTURES IN CLOSETS TO COMPLY WITH SECTION 410.8 OF THE LATEST VERSION OF THE NEC HANDBOOK SMOKE/CARBON MONOXIDE DETECTORS TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS. QUANTITY AND LOCATION OF CARBON MONOXIDE DETECTORS TO BE DETERMINED BY LOCAL AUTHORITY. -LIGHT SWITCHES & OUTLETS LOCATED AT COUNTERTOP SIDEWALLS ARE TO BE A MAXIMUM OF 18" FROM CENTERLINE OF SWITCH/OUTLET TO COUNTERTOP REAR WALL

ELECTRICAL PANEL / METER



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: 1. 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.
- 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: 1. BAR REINFORCEMENT SHALL BE CONFORM TO ASTM A615, GRADE 60 STEEL.

- 2. THE FOLLOWING MINIMUM CLEAR COVER SHALL BE PROVIDED OVER REINFORCING BARS:
 - CONCRETE EXPOSED TO EARTH = 3" 2.1.
 - 22 CONCRETE EXPOSED TO WEATHER = $1-1/2^{*}$
 - 2.3. SLABS NOT EXPOSED TO WEATHER = 3/4"
 - CONCRETE BEAMS & COLUMNS = $1-1/2^{\circ}$
- 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 SPICE 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.
- FRAIING 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 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:
 - E = 1,900,000 PSI FB = 2600 PSI FV = 285 PSI FT = 1555 PSI 4.1.
 - 4.2. 4.3.
 - 44
- 5. PSL ENGINEERED WOOD SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES: 5.1. E = 2,000,000 PSI 5.2. FB = 2,900,000 PSI
- FV = 290 PSI 5.4. = 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

 - FV = 400 PSI FT = 1075 PSI 63
- 6.4. ALL BEARING HEADERS TO BE 2-226 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. SOLD 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 THE REST UPLIES 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 MANUFACTURERS OR NOT 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 WANUFACTURER'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. INSTALL MINIMUM 7/10" OSB ROOF SHEATHING.
 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
- COLLAR TIES SHALL BE 2X6 SPACED AT 48" O.C. AT ALL RIDGES UNLESS NOTED OTHERWISE AND CONNECTED IN THE UPPER THIRD OF 2.1. THE ATTIC SPACE USING (3) 10D COMMON NAILS.
- FUR DOWN ALL RIDGES AS MEEDED SO THAT RAFTERS HAVE FULL CONTACT. CEILING JOISTS WHEN ERECTED PARALLEL TO RAFTERS MUST BE SISTERED TO RAFTERS AND SECURED AS PER TABLE R802.5.1(A) OF THE 2.3. 2018 NORTH CARDINA REPERING THE REPEATED FOR THE WALL OF T
- 2.4. 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:

AARON - LH VERSION

Revision No.	Date	Description
0	06.10.24	ORIGINAL ENGINEERING
-		

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 BUILDING
- AND OTHER STRUCTURES

ULTIMATE DESIGN WIND SPEED: 130MPH, EXPOSURE B

ASSLIMED	SUIL	REARING	CAPACITY:	2000PSF
ASSUMED	JUIL	DLANING	CAFACITI.	2000531

COMPONENT AND CLADDING LOADS SHALL BE DERIVED PER TABLES R301.2(2) AND R301.2(3)

ENGINEERING SEAL APPLIES TO STRUCTURAL COMPONENTS

QC ASSUMES NO LIABILITY FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, SAFETY PRECAUTIONS. OR DEVIATIONS/DISCREPANCIES THAT MAY OU IN THE PLAN ANY DEVIATIONS OR DISCREPANCIES ARE TO BROUGHT TO THE IMMEDIATE ATTENTION OF QUEEN CITY CONSULTING AND DESIGN PLUC

THE ARCHITECTURAL PLANS USED FOR STRUCTURAL DRAWIN AND ANALYSIS HAVE BEEN PROVIDED BY COX ARCHITECTUR AND DESIGN, PLLC AND HAVE BEEN COMPLETED/REVISED 06/04/24 NOTIFY OC 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

PROJECT ADDRESS: TBD	OWNER: LGI HOMES 7201 CREEDMORE RD, SUITE 147 RALEIGH, NC 27613
DESIGNER: QUEEN CITY CONSULTING AND DE 2039 JESUP DR CHARLOTTE, NC 28208	SIGN, PLLC.

		LIVE LOADS
	CONVENTIONAL 2X ROOF	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
NLY	ATTICS WITHOUT STORAGE	10 PSF
	GROUND SNOW LOAD	15 PSF
		DEAD LOADS
CUR	CONVENTIONAL 2X ROOF	15 PSF
BE	ROOF TRUSS	20 PSF
	CONVENTIONAL 2X FLOOR	10 PSF
		15 PSF
S	FLOOR TRUSS	15 PSF

QUEEN CITY BUEEN CITY SHERICITY BERRICITY BERRICITY BERRICITY SALENCON BERRICITY SALENCON BERRICITY SALENCON SEAL DECENSION SEAL SEAL SEAL SEAL SEAL SEAL SEAL SEAL
CLENT: LGI HOMES
sheft name: COVER SHEET
CLIENT: LGI HOMES PLAN NAME:
AARON-LH VERSION NEIGHBORHOOD: TBD
LOT AND ADDRESS:
PROJECT NUMBER: LGI240014
DRAWN BY: MSB DATE: 06.10.2024 SCALE: 1/4"=1'-0" ON 22"x34" 1/8"=1'-0" ON 11"x17"
PAGE: CS

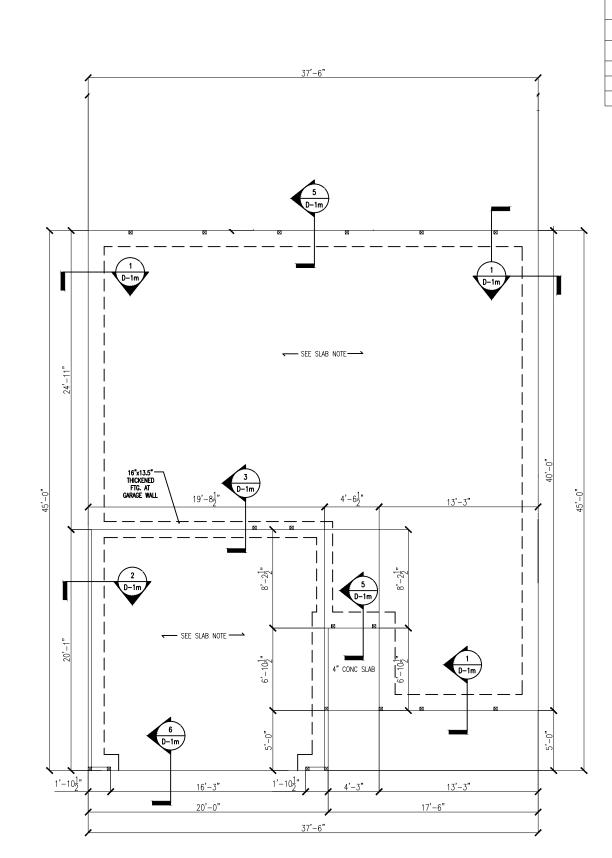
MONOSLAB FOUNDATION NOTES:

- DISCLAIMER: ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION, PLUS ALL LOCAL CODES AND REGULATIONS. 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.
- PLACEMENT. CURIACI OC IF DESIRED BEARING CAPACITY IS NOT ACHIEVED. ALL POURCE 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 WINICIPALITY. HOWEVER, THE BOTTOM OF ALL FOOTINGS SHALL BE A MINIMUM OF 12" BELOW GRADE.
- MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS IS 4'. FOR
- RESIDENTIAL BUILDING CODE, OR CONTACT QC FOR ADDITIONAL ENGINEERING. PERIMETER INSULATION IS TO BE INSTALLED PER THE 2018 NCRC AND PER
- PERIMIETER INSULATION IS TO BE INSTALLED PER THE 2018 NURCE 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 $7^{\prime\prime}$ INTO CONCRETE AND SHALL BE LOCATED WITHIN THE MIDDLE THIRD OF THE PLATE. BOLTS TO BE LOCATED NOT MORE THAN 12"

- THE MUDLE THING OF THE PLACE, BULLS 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 DIMENSIONS SHOWN ON FOUNDATION DRAWINGS ARE TO EDGE OF FRAMING AND NOT TO EDGE OF BRICK VENEER.
- INCL IN EUGE OF DRIVER VENEER. WITH CLASS 1 SOILS (TABLE R405.1), A 4" CRUSHED STONE BASE COURSE IS NOT REQUIRED.
- NOT REQUIRED. ALL GRADING AND FOUNDATION WORK MUST BE OBSERVED AND APPROVED PRIOR TO PLACEMENT OF CONCRETE. CONCRETE SLABS SHALL BE 4" THICK AND CONSTRUCTED OUT OF 3000 PSI MIN. COMPRESSIVE STRENGTH WITH 6"x6" W1.4xW1.4 WELDED WIRE FABRIC OR FIBERMEST CONCRETE OVER 10 MIL. THICK VAPOR BARRIER ON 95% COMPACTED FILL, VERIFIED BY EITHER ENGINEER OR CODE OFFICIAL CONCRETE CURBS THAT ARE USED TO SUPPORT PORTAL FRAME WALLS SHALL BE A MINIMUM OF 8" WIFE
- A MINIMUM OF 8" WIDE

ADDREVIATIONS:	
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

TERMITE TREATMENT NOTE: CONTRACTOR IS TO INSTALL PROTECTION AGAINST SUBTERRANEAN TERMITES PER SECTION R318 OF THE 2018 NCRC.



ANC ANCHOR 1/2" DIA. A307 BOLTS W/ 90 DEGR SIMPSON MASA MUDSILL ANCH 1/2" DIAMETER THREADED ROD W/ SE 1/2" DIAMETER SIMPSON TITEN CONCRE LA

CHORAGE	SCHEDULE	
	MIN. SPACING	MIN. CONC. EMBEDMENT
REE BEND	6'-0"	7"
HOR	6'-0"	4"
ET-3G EPOXY	6'-0"	7"
RETE SCREWS	6'-0"	4-1/4"

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

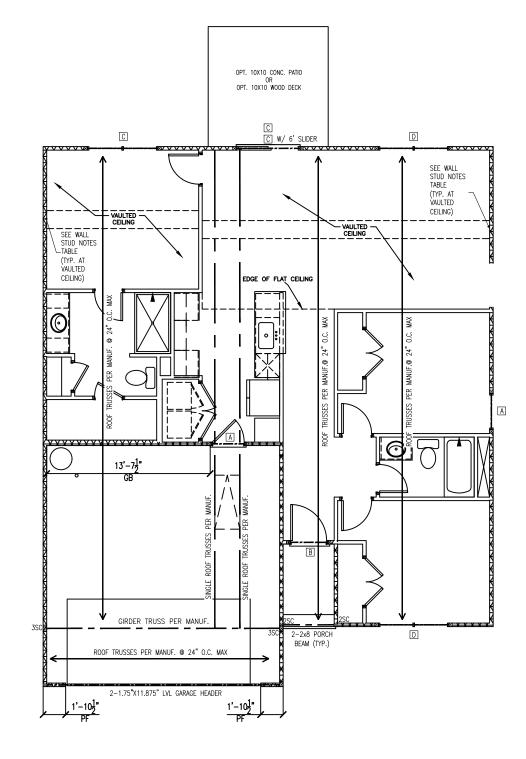


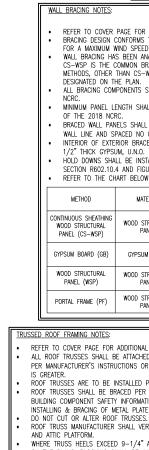
CAROLINA RESIDENTIAL CODE (NCRC), 2018 EDITION, PLUS ALL LOCAL CODES AND REGULTIONS. THE FOR SHALL REVIEW EVP AND TRUSS LAYOUTS FOR ACCURACY PRIOR TO CONSTRUCTION SOLD BLOCKING IS TO BE INSTALLED AT ALL POINT LODGS THROUGH FLOOR LEVELS TO THE FOUNDATION OR TO THE NEAREST STRUCTURAL ELEMENT. BLOCKING SHALL BE EQUAL TO OR GREATER THAN THE SUPPORT ABOVE. BUILT-UP WOOD COLUMNS CONSISTING OF MULTIPLE STUDS SHALL HAVE EACH LAMINATION NALLED WITH 16D NAILS SPACED AT 9° O.C. FOR BUILT-UP COLUMNS CONSISTING OF (1) PUES OR MORE, SCURE PLES TOGETHER WITH HORIZONTAL SUMPSON CS-16 COLL STARPS LOCATED AT QUARTER POINTS. CONTRACTOR SHALL ENSURE THAT ALL BEAMS, HEADERS, AND STRUCTURAL COMPONENTS ARE FULLY BRAING ON THE SUPPORTING WEMBERS, ANY CAPS IN THE FRAMMS SHALL BE SHIMMED APPROPRIATELY WITH EITHER MELL SHIMS OF WOOD SHIMS AS NECESSARY. HEADER SIZES SHOWN ON PLANS ARE MINIMUMS. ANY HEADERS INSTALLED THAT ARE GREATER TIN SIZE ARE AN ADEQUATE REPLACEMENTS PROVIDED THE MATERIAL IS OF THE SAME OR GREATER STRUCTURAL PROPERTIES. WHERE TOP PLATE HAS BEEN CUT TO ACCOMMODATE FLUSH HEADERS/BEAMS, INSTALL A MINIMUM ID* LONG HORIZONTAL CS-16 STRAP EXTENDING 12° PAST THE BREAK ON EACH SIDE. UNLESS OTHERWISE NOTED, FOUR-PLY LVL BEAMS SHALL HAVE PLES FASTENED TOGETHER WITH TWO (2) ROWS OF 1/2° DAMETER BOLTS SHALL HAVE PLES FASTENED TOGETHER WITH TWO (2) ROWS OF 1/2° DAMETER BOLTS SHALL HAVE PLES FASTENED TOGETHER WITH TWO (2) ROWS OF 1/2° DAMETER BOLTS SHALL HAVE PLES FASTENED TOGETHER WITH TWO (2) ROWS OF 1/2° DAMETER BOLTS SHALL HAVE PLES FASTENED TOGETHER UNLESS OTHERWISE NOTED, FOUR-PLY LVL BEAMS SHALL HAVE PLES FASTENED TOGETHER TO ERRING WALLS TO BE 2X4 U.N.O. ABBREVATIONS: DJ = DOUBLE JOIST SJ = SINGLE JOIST GT = GREADER TRUSS ST FT EFLOOR TRUSS SC = STUD COLUMN DR = DOUBLE RAFTER EE E EACH END TR = RIPLE AFTER EE E EACH END TR = RIPLE FARTER PLFA = POINT LOAD FROM ABOVE COL = COLUMN MIS TS NOTE DITHERWISE J = ACK STUD COLUMN MIS S NOTED DITHERWISE J = ACK STUD COLUMN MIS = MANUFACTURER				
LEGEND:				
#J # OF JACK ST ⊠ STUD COLUMN ■ POINT LOAD FF ► LOAD BEARING ■ NON LOAD BE/	ROM ABOVE WALL			
HEADER SCHEDULE:]	
LABEL		SIZE		
A		W/ (1) JACK STUD E.E.		
B C	2x8 V	I/ (2) JACK STUDS E.E W/ (2) JACK STUDS E.E		
		W/ (2) JACK STUDS E.E		
E		VL W/ (3) JACK STUDS		
F	· · ·	VL W/ (3) JACK STUDS		
		E HEADER IS DETERM 2 PLYS, 2X6 WALL=		
AMOUNT OF JACK STUD	S SHOWN ON	PLAN TAKE PRECEDE	INCE OVER TABLE.	
KING STUD SCHEDULE:				
HEADER SPA		MINIMUM KING STU	DS E.E.	
3'-0" OR LES	SS	(1)		
3'-0" TO 6'-		(2)		
6'-0" TO 9'- 9'-0" TO 12'-		(3)		
12'-0" TO 16'-		(6)	II	
WALL STUD NOTES:				
			CONSTRUCTED OUT OF 2X4 OR	
2X6 STUDS AT 1	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" 0.	ALL NON LOAD BEARING WALLS SHALL BE CONSTRUCTED OUT OF 2X4 OR 2X6 STUDS AT 24" O.C. U.N.O. FOR UP TO 10' WALLS			
 BALLOON FRAMED WALLS SHALL BE CONSTRUCTED WITH 2X4 STUDS AT 12" O.C. OR 2X6 STUDS AT 16" O.C. WITH CROSS BRACING AT 6'-O" O.C. VERTICALLY OR 				
OR 2X6 STUDS A ACCORDING TO T			AI 6'-0" O.C. VERTICALLY OR	
HEIGHT (PLATE TO	PLATE)	STUD SIZE	SPACING	
12'-0"		2X4	12" 0.0.	
15'-0"		2X6 (2) 2X4/2X6	16" 0.C. 12" 0.C./12" 0.C.	
21'-0"		(2) 2X6/2X8	16" 0.C./12" 0.C.	
25'-0"		(2) 2X6	12" O.C.	
BRICK LINTEL SCHEDU	<u>E</u> :			

REFER TO COVER PAGE FOR ADDITIONAL NOTES ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH

BRICK 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 SUPPORTING HEADER WITH (2) ROWS MINIMUM 3.5" LONG 1/2" DIAMETER LAG SCREWS AT 16" O.C. ENDS OF LINTEL SHALL BEAR AT LEAST 3.5" IN THE ADJACENT BRID ADJACENT BRID 			
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.			

NOTE: FLOOR JOISTS MAY INCLUDE FLOOR TRUSSES OR I-JOISTS, AS CONTRACTOR DESIRES.





TYPICAL HANGERS FOR JOIST & BEAMS -SIMPSON -USP -SIMPSON-HANGER LUS28 LUS210 LUS210 HUS210-2 HUS210-2 HUS210-2 HUS210-3 HU2210-3 HU212-3 MIN. JUS210 JUS210-JUS210-JUS210-ZUS200-ZU HGUS410 HGUS410 HGUS412 HGUS412 HGUS414 HGUS414 HGUS414 HGUS5.50/10 HGUS5.50/10 HGUS5.50/12 HGUS5.50/14 HGUS5.50/14 HGUS5.50/14 HGUS3.50/14 HGUS7.25/10 HGUS7.25/10 HGUS7.25/12 HGUS7.25/12 HGUS7.25/14 HGUS7.25/14 HGUS7.25/14 NOTE: ALL HANGERS BY SIMPSON STRONG TIE CO., INC. (BRAND - NAME EQUIVALENTS ACCEPTABLE) TRUSS UPLIFT CONNECTOR SCHEDULE MAX. UPLIFT ROOF TO WALL FLOOR TO FLOOR FLOOR TO FND 600 LBS H2.5A PER WALL SHEATHING & FASTENERS 1200 LBS (2) H2.5A CS16 (END = 11") DTT2Z CS16 (END = 11") 1450 LBS HTS20 DTT2Z 2000 LBS (2) MTS20 (2) CS16 (END = 11") DTT2Z 2900 LBS (2) HTS20 (2) CS16 (END = 11") HTT4 3685 LBS LGT3-SDS2.5 MSTC52 HTT4 1. ALL PRODUCTS LISTED ARE SIMPSON STRONG-TIE. EQUIVALENT PRODUCTS MAY BE USED PER MANUFACTURER'S SPECIFICATIONS. WH DE OSED FER WHAT AUTOREUS SECURATIONS. 2. UPLIET VALUES LISTED ARE FOR SPF ∯2 GRADE MEMBERS. 3. REFER TO TRUSS LAYOUT PER MANUE, FOR UPLIET VALUES AND TRUSS TO TRUSS CONNECTIONS. CONNECTORS SPECIFIED BY TRUSS MANUFACTURER OVERRIDE THOSE LISTED ABOVE. 4. CONTACT QC FOR REQUIRED CONNECTORS WHEN LOADS EXCEED THOSE LISTED ABOVE. WALL BRACING LEGEND: ▲ ATTACH (2) 2X4 STUD COLUMN TO FOUNDATION WITH SST LTTP2 HOLD DOWN, OR EQUIVALENT HARDWARE. BRACED WALL REFER TO COVER PAGE FOR ADDITIONAL NOTES. BRACING DESIGN CONFORMS TO THE 2018 NCRC AND ALL LOCAL AMENDMENTS FOR A MAXIMUM WIND SPEED OF 130 MPH AND SEISMIC ZONES A-C Wall BRACING HAS BEEN ANALYZED PER SECTION REQ2.10 OF THE 2018 NCRC. CS-WSP IS THE COMMON BRACING METHOD USED, WHERE APPLICABLE. MIXED METHODS, OTHER THAN CS-WSP, SHOWN WITHIN TABLE RE02.10.1 ARE DESIGNATED ON THE PLAN. ALL BRACING COMPONENTS SHALL COMPLY TO SECTION R602.10.1 OF THE 2018 MINIMUM PANEL LENGTH SHALL BE 24" OR THE MINIMUM AS STATED IN R602.10.1 OF THE 2018 NCRC. BRACED WALL PANELS SHALL BE WITHIN 12'-0" FROM THE ENDS OF A BRACED WALL LINE AND SPACED NO GREATER THAN 21'. INTERIOR OF EXTERIOR BRACED WALLS SHALL BE SHEATHED CONTINUOUSLY WITH 1/2" THICK GYPSUM, U.N.O. HOLD DOWNS SHALL BE INSTALLED FOR BRACED WALL END CONDITIONS PER SECTION R602.10.4 AND FIGURE R602.10.3(3) OF THE 2018 NCRC. REFER TO THE CHART BELOW FOR BRACED WALL METHODS AND CONNECTIONS. MATERIAL MIN. THICKNESS REQUIRED CONNECTION 6d COMMON NAILS AT 6" O.C. ON EDGE AND 12" O.C. ON FIELD WOOD STRUCTURAL 3/8" PANEL 5d COOLER NAILS AT 7" O.C. ON EDGE AND FIELD 1/2" GYPSUM BOARD 6d COMMON NAILS AT 6" O.C. WOOD STRUCTURAL PANEL 3/8" ON EDGE AND 12" O.C. ON FIELD WOOD STRUCTURAL PANEL SEE DETAIL 1/D-1f 7/16 REFER TO COVER PAGE FOR ADDITIONAL WOOD FRAMING NOTES ALL ROOF TRUSSES SHALL BE ATTACHED TO WALL PLATES WITH MINIMUM (1) SIMPSON H2.5A OR PER MANUFACTURER'S INSTRUCTIONS OR PER SECTION R802.11 OF THE 2018 NCRC, WHICHEVER ROOF TRUSSES ARE TO BE INSTALLED PER SECTION R802.10 IN THE 2018 NCRC ROOF TRUSSES SHALL BE BRACED PER THE MANUFACTURER'S INSTRUCTIONS AND PER THE SBCA BUILDING COMPONENT SAFETY INFORMATION (BCSI) GUIDE TO GOOD PRACTICE FOR HANDING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES. ROOF TRUSS MANUFACTURER SHALL VERIFY AND DESIGN FOR POSITION OF PULL DOWN STAIRS

WHERE TRUSS HEELS 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.

وگز QUEEN CITY BTH CARO ALIEN CIT ONSULTING AND Design_ Plls No. P-2426 HORTH CAROLINA SEAL 056484 06.10.24 CLIENT: LGI HOV PLAN FLOOR sheet name: FIRST FLC FRAMING CLIENT: LGI HOMES PLAN NAME: AARON-LH VERSION NEIGHBORHOOD: TRD LOT AND ADDRESS: LOT # TBD PROJECT NUMBER: LGI240014 DRAWN BY: MSB DATE: 06.10.2024 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. 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. 7. 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.
- 3. 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.
- 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:

- 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
 - Concrete exposed to weather = 1 1/222
 - Slabs not exposed to weather = 3/42.3. 24
 - 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 4. Solices 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:

- 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:
 - E = 1,900,000 psi Fb = 2600 psi
 - 4.2.
 - Fv = 285 psi Ft = 1555 psi 4.3. = 1555 psi 4.4.
- 5. PSL engineered wood shall have the following minimum design values:
- = 2,000,000 psi
 - 52 Fb = 2900 psi
 - 5.3. Fv = 290 psi
- = 1755 psi 5.4 Et
- 6. LSL engineered wood shall have the following minimum design values:
 - E = 1,550,000 psiFb = 2250 psi
 - 6.2. 6.3.
 - Fv = 400 psi Ft = 1075 psi 64
- 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: 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 contracto o 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
 - 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 2.1. using (3) 10d common nails.
 - Fur down all ridges as needed so that rafters have full contact. 2.2.
 - 23 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
 - 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

PROJECT ADDRESS:

OWNER:

DESIGNER: QUEEN CITY CONSULTING AND DESIGN, PLLC. 2459 WILKINSON BLVD SUITE 300 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

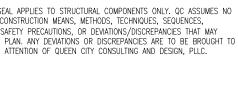
OCCUR IN THE PLAN. ANY DEVIATIONS OR DISCREPANCIES ARE TO BE BROUGHT TO

	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	15 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

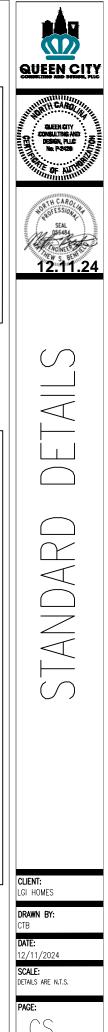


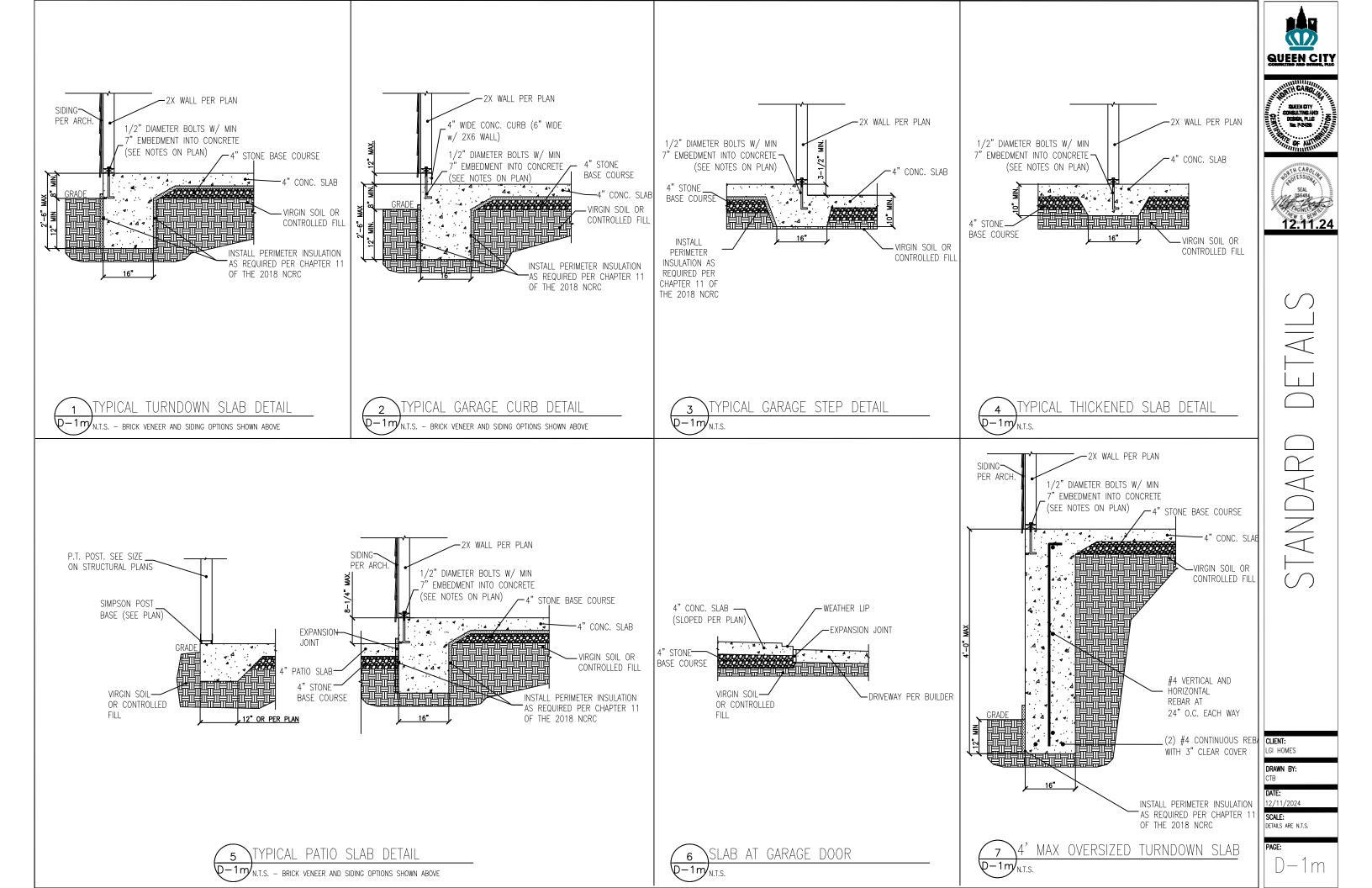
ENGINEERING SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY. QC ASSUMES NO LIABILITY FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, SAFETY PRECAUTIONS, OR DEVIATIONS/DISCREPANCIES THAT MAY THE IMMEDIATE ATTENTION OF QUEEN CITY CONSULTING AND DESIGN. PLLC.

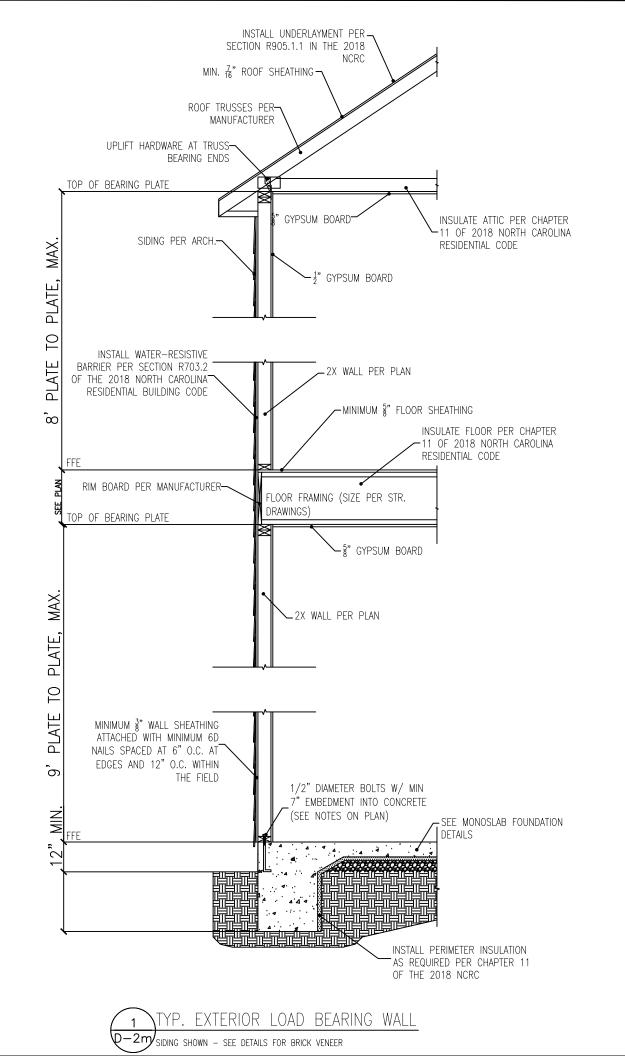


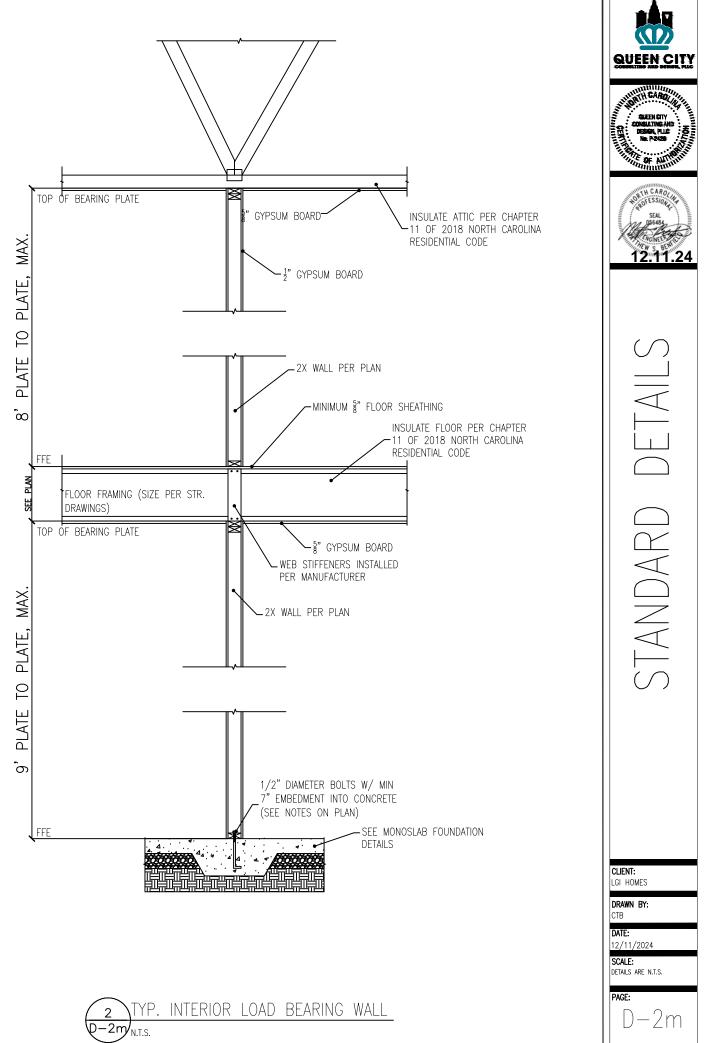
PAGE_LIST:		
Page Symbol	Description	
CS	Cover Sheet, Specifications, Revisions	
D-1m	Monolithic Slab Details	
D-1s	Stemwall Slab Details	
D-1c	Crawlspace Details	
D-1b	Basement Details	
D-1f	Framing Details	

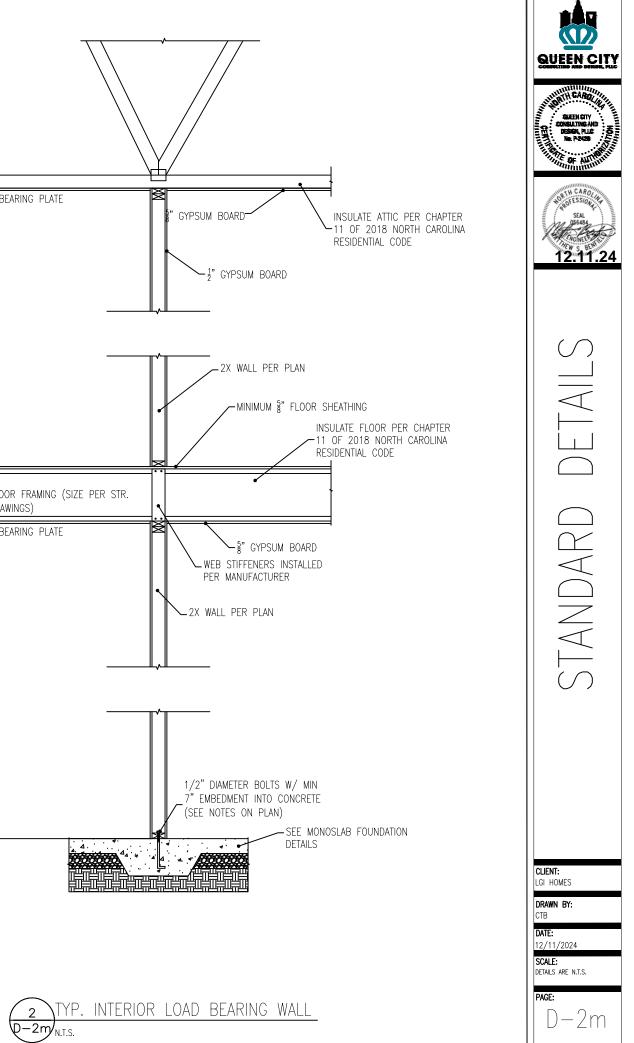
Revision No.	Date	Description	
0	12.26.23	ORIGINAL ENGINEERING	
1	05.05.24	Added Stem Wall Details	
2	05.16.24	ADDED BRICK CRAWL SPACE DETAILS	
3	08.30.24	ADDED STAIR DETAIL AND TURNDOWN DETAIL	
4	12.11.24	ADDED BASEMENT DETAILS	

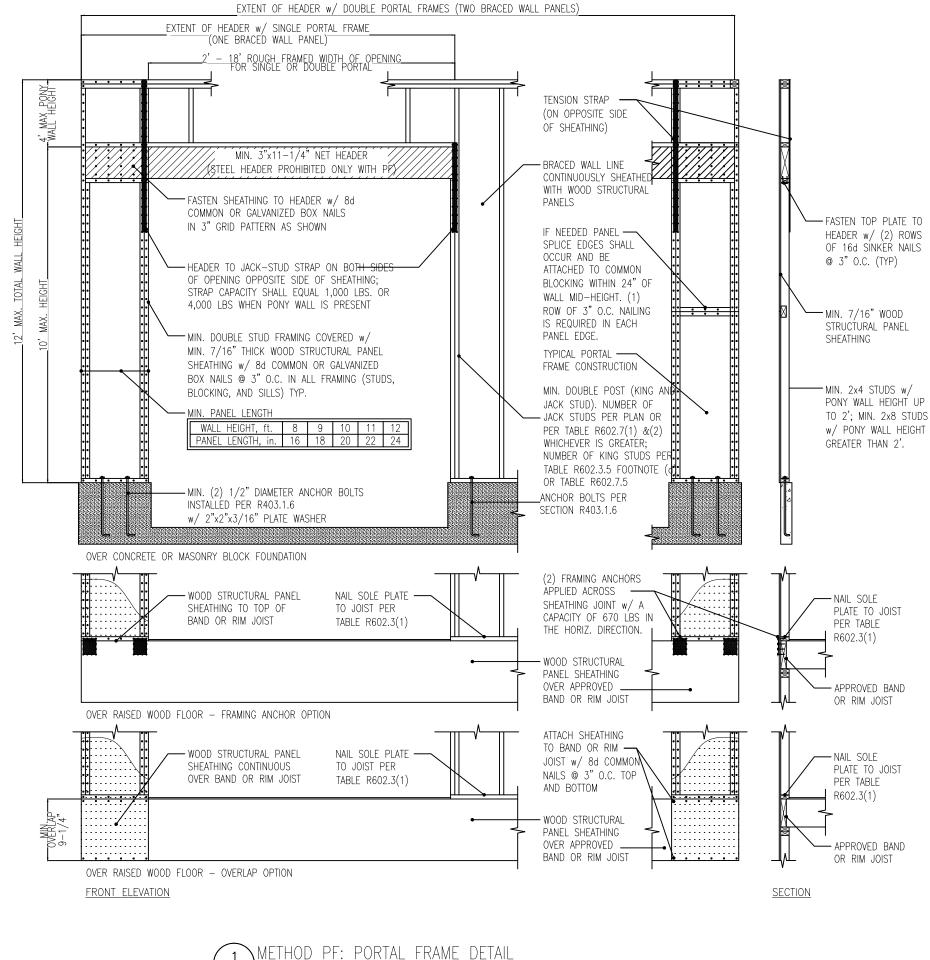






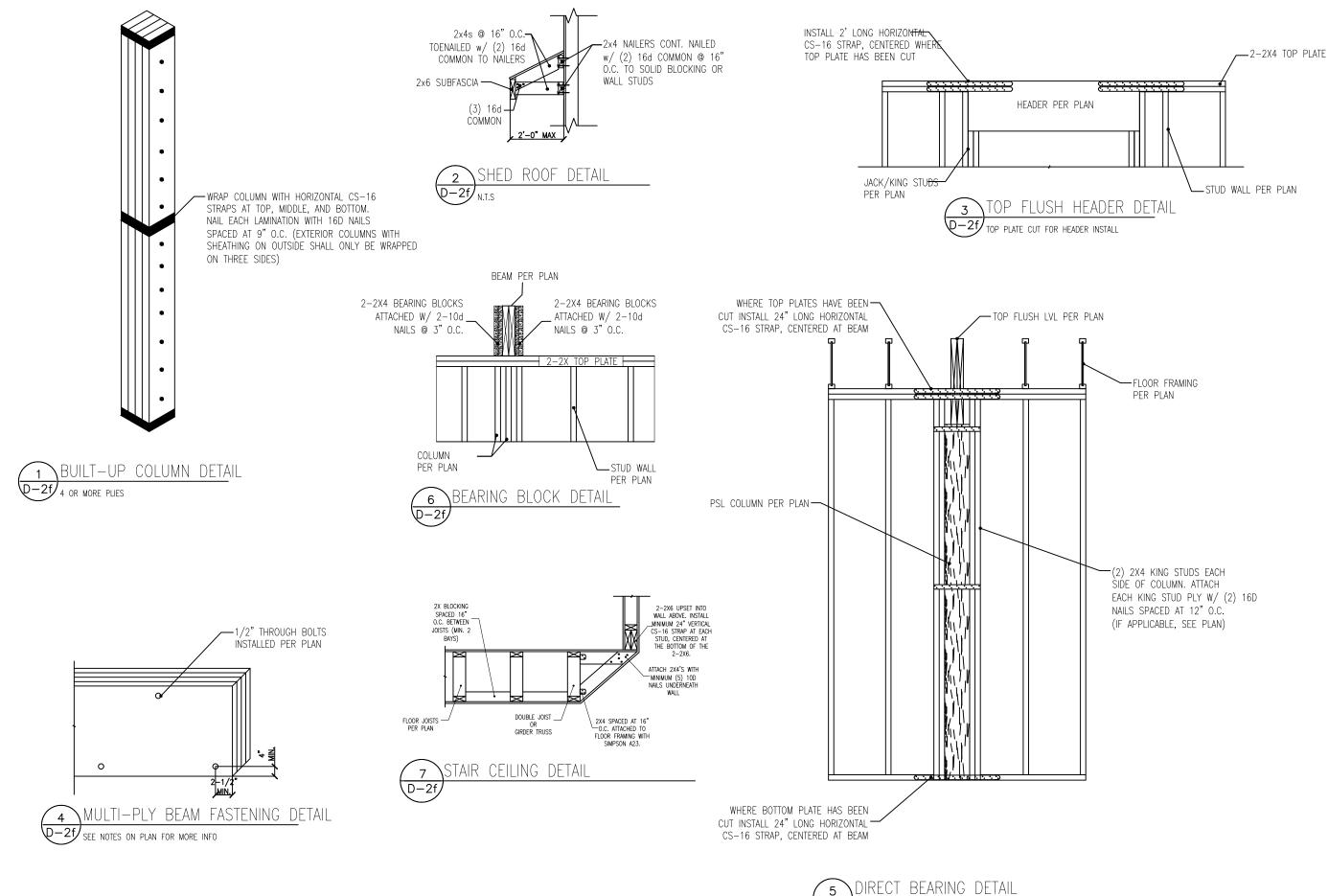






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