

THE CLAYTON NORTH CAROLINA

SQUARE FOOTAGES

FIRST FLOOR (HTD.) = 1304 sf SECOND FLOOR (HTD.) = $\frac{660 \text{ sf}}{1964 \text{ sf}}$ GARAGE = $\frac{478 \text{ sf}}{1964 \text{ sf}}$

FRONT PORCH = 176 sf

TOTAL = 2618 sf

REAR DECK / PATIO *OPTION* + 100 sf

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● 31 DECEMBER 2024

COVER SHEET

A1.0

COLUMN NOTES

COLUMNS TO BE: AFCO OR COLUMN OF EQUAL BEARING CAPACITY. (6000 # MINIMUM) TOP CONNECTION: (2) #8 - ½" x 3" STAINLESS STEEL SCREWS PER SIDE INSERTED INTO BEAM. BOTTOM CONNECTION: (3) UBS - #18043 BRACKETS FASTENED WITH (2) 1/2" x 1 1/2" 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.

STAIR NOTES

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

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

DOOR & WINDOW LEGEND

HEIGHT: 6'-8" WIDTH: 3'-0" DOORS: P = POCKET SH = SINGLE HUNG WINDOWS:

T = TRANSOM 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 REQUIRED 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 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 VERIFY THAT EACH BEDROOM TO HAVE A MINIMUM OF ONE WINDOW WHICH MEETS EMERGENCY EGRESS AS REQUIRED BY PER 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

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 IRC (R807.1) MINIMUM NET CLEAR OPENING OF 20" x 30". ALL ATTIC ACCESS STAIRS TO BE WEATHER STRIPPED & SEALED WITH R-VAI UES THAT CONFORM WITH LOCAL AUTHORITIES BASED ON N1102.2.4. G.C. 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

GENERAL NOTES

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

-GENERAL CONTRACTOR SHALL VERIEY AND COMPLY TO ALL LOCAL & NATIONAL BUILDING CODES. CONTACT ARCHITECT IF INSPECTORS REQUIRE REVISIONS OR ALTERATIONS TO

-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 4.0 SQ. FT. NET CLEAR OPENING.

MINIMUM 20" WIDTH.

MINIMUM 22" HEIGHT.

MAXIMUM 44" SILL HEIGHT GARAGE / HOUSE CEILING / ASSEMBLY: (IRC 702)

½" 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

FLOOR PLAN LEGEND

_		
	58	5 SHELVES
	1R 2\$	1 ROD, 2 SHELVE
	2R 2S	2 ROD, 2 SHELVE
	HR	HANGING ROD
	CO	CASED OPENING
	W D	WASHER, DRYER
	D/W	DISH WASHER
	FRIG	REFRIGERATOR
	LS	LAZY SUSAN
	M	MIRROR
	-	SHOWER HEAD

INSULATION NOTES

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

CLIMATE ZONE 4A

TABLE N1	102.1.2	TABLE N1	102.1.2
CEILING:	R-38	CEILING:	R-38
FLOOR:	R-19	FLOOR:	R-19
WALL:	R-15	WALL:	R-15
CI AR-	D.A	SI AR-	D_1

CLIMATE ZONE 3A

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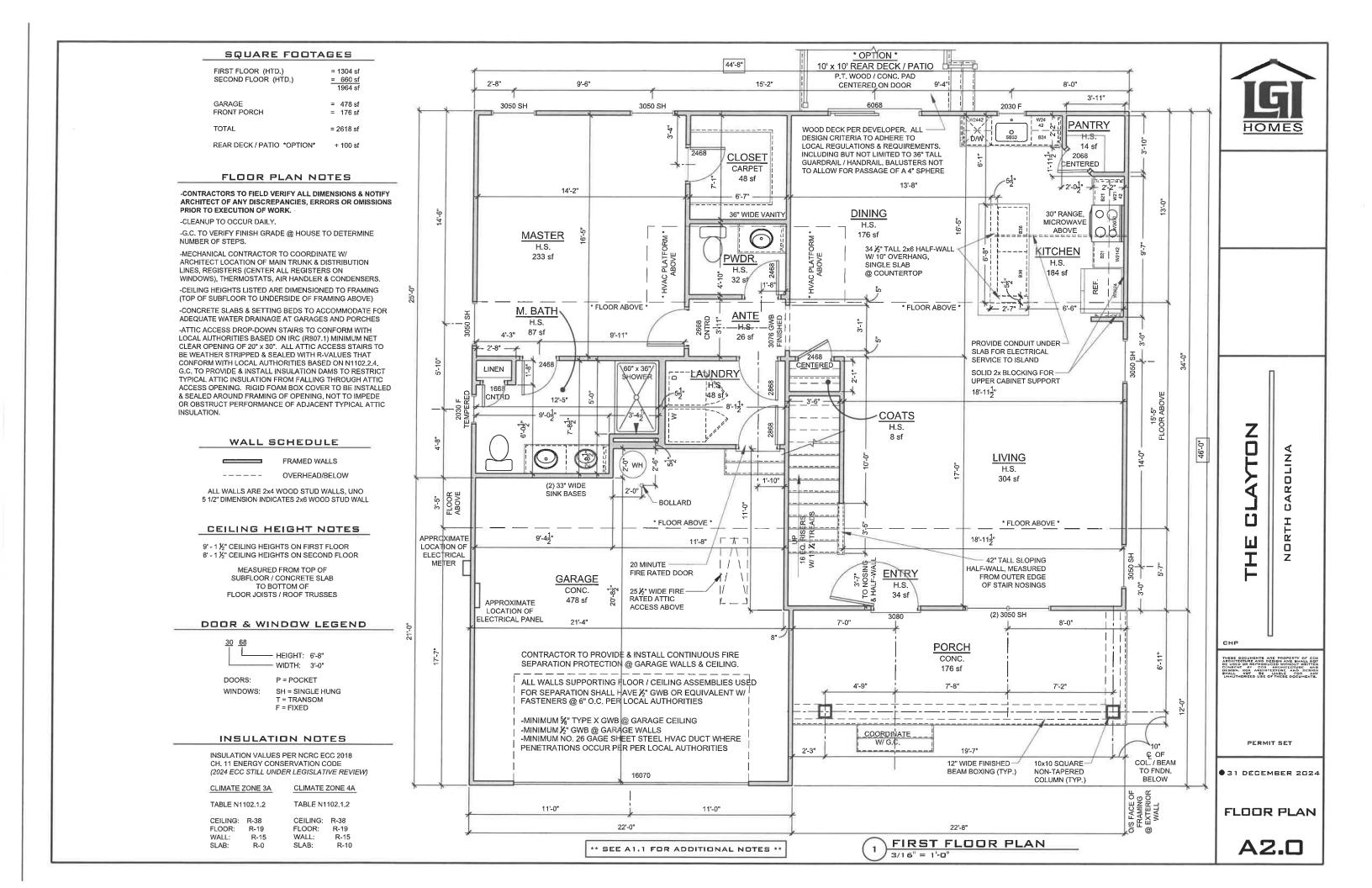
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● 31 DECEMBER 2024

GENERAL NOTES

A1.1



SQUARE FOOTAGES

FIRST FLOOR (HTD.) = 1304 sf SECOND FLOOR (HTD.) = 660 sf 1964 sf

GARAGE = 478 sf FRONT PORCH = 176 sf

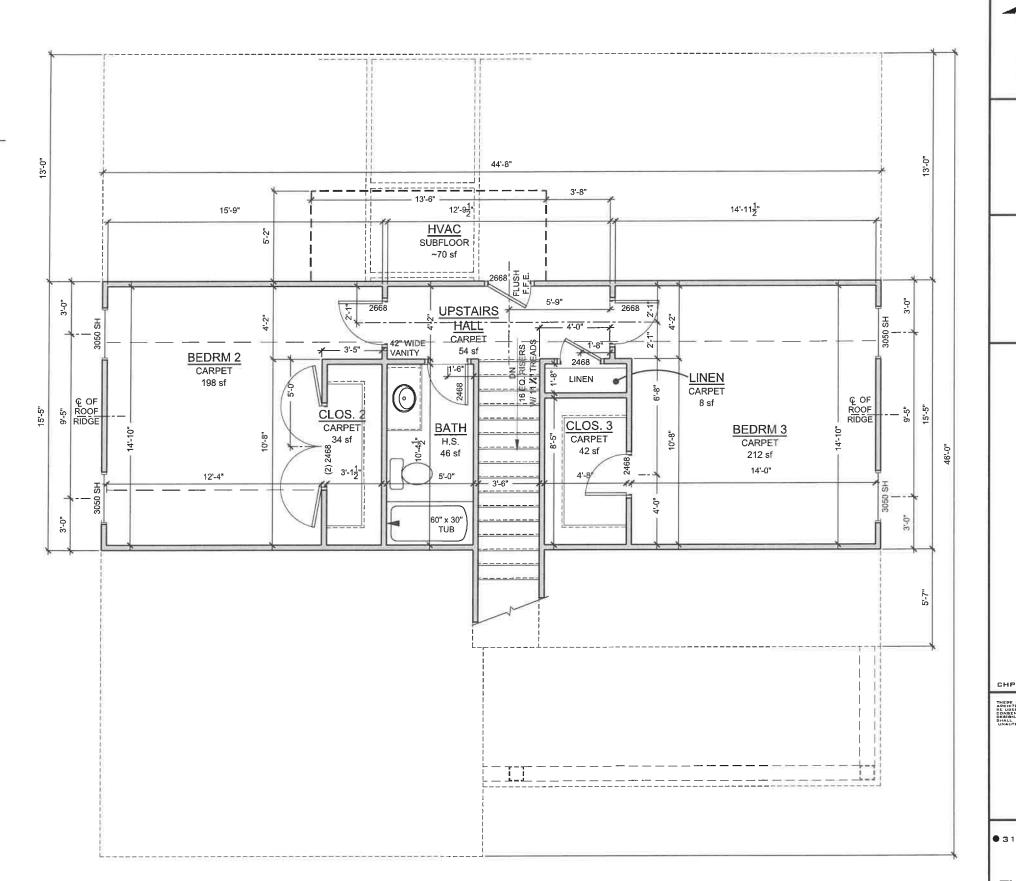
TOTAL = 2618 sf

REAR DECK / PATIO *OPTION* + 100 sf

CEILING HEIGHT NOTES

9' - 1 $\frac{1}{2}$ " CEILING HEIGHTS ON FIRST FLOOR 8' - 1 $\frac{1}{2}$ " CEILING HEIGHTS ON SECOND FLOOR

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



SECOND FLOOR PLAN

3/16" = 1'-0"



THE CLAYTON

PERMIT SET

FLOOR PLAN

A2.1

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

INSULATION NOTES

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

CLIMATE	ZONE 3A	CLIMATE	CLIMATE ZONE 4A	
TABLE N1102,1,2		TABLE N1102.1.2		
CEILING: FLOOR: WALL: SLAB:	R-38 R-19 R-15 R-0	CEILING: FLOOR: WALL: SLAB:	R-38 R-19 R-15 R-10	

1/8" = 1'-0"

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 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. TOWNHOME CONSTRUCTION SHALL MEET ADDITIONAL REQUIREMENTS OF SECTIONS R302.2.5 AND R302.2.6.

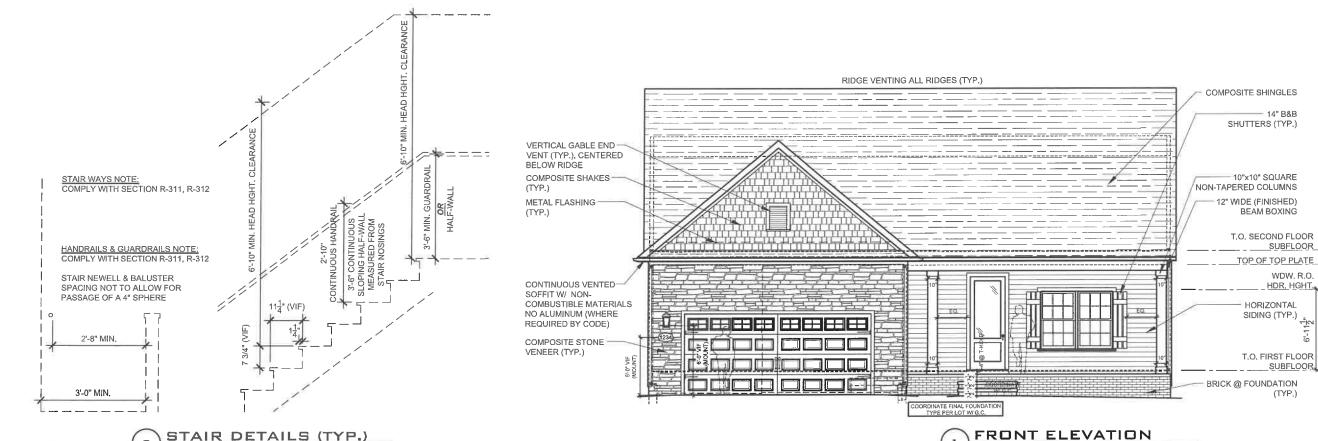
CEILING HEIGHT NOTES

9' - 1 ½" CEILING HEIGHTS ON FIRST FLOOR 8' - 1 1/2" CEILING HEIGHTS ON SECOND 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) 1/2" x 1 1/2" SCREWS INTO COLUMN & (2) 1/4" x 3 3/4" CONCRETE SCREWS THROUGH FASTENER INTO CONCRETE



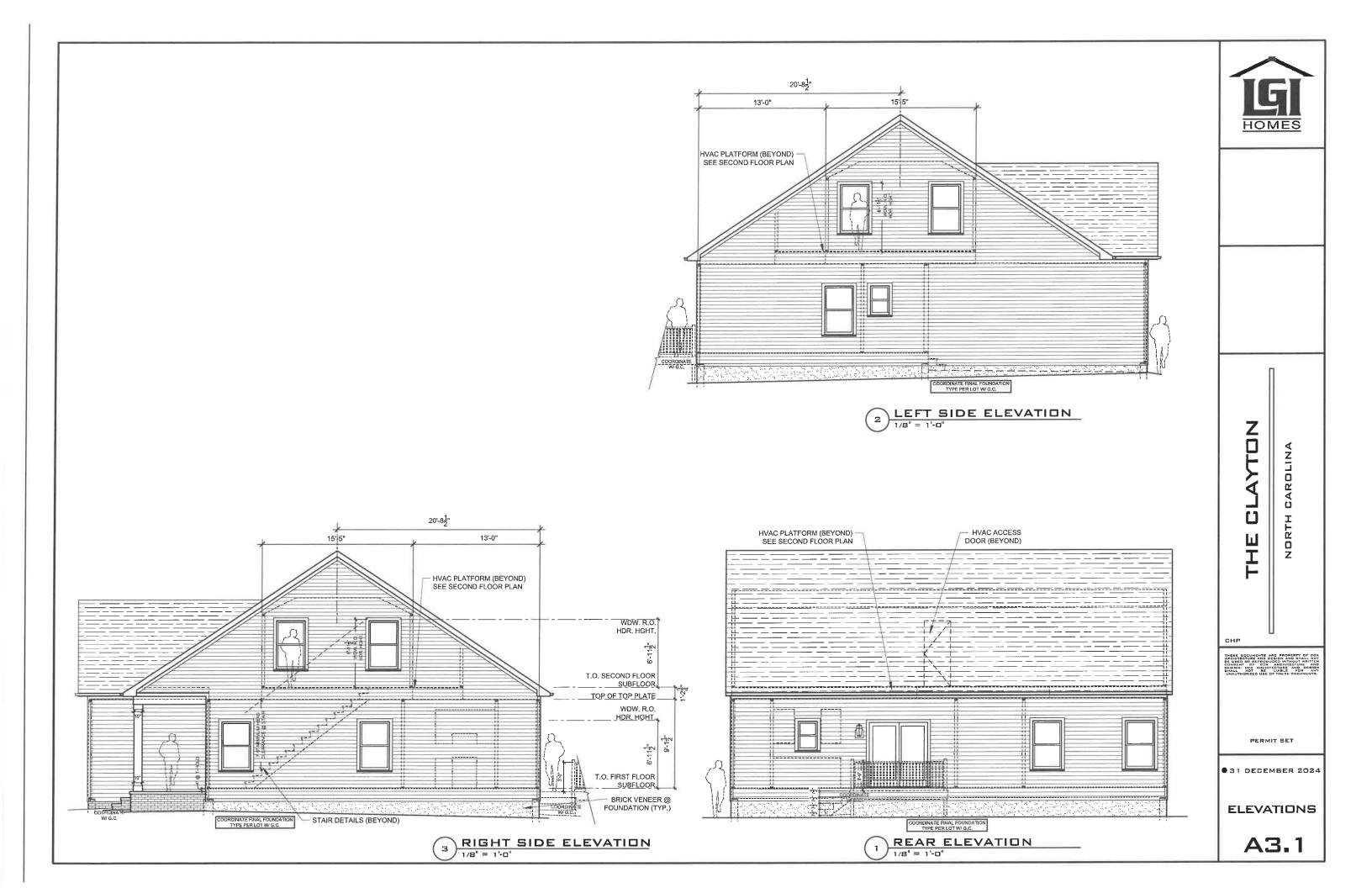
STAIR DETAILS (TYP.)

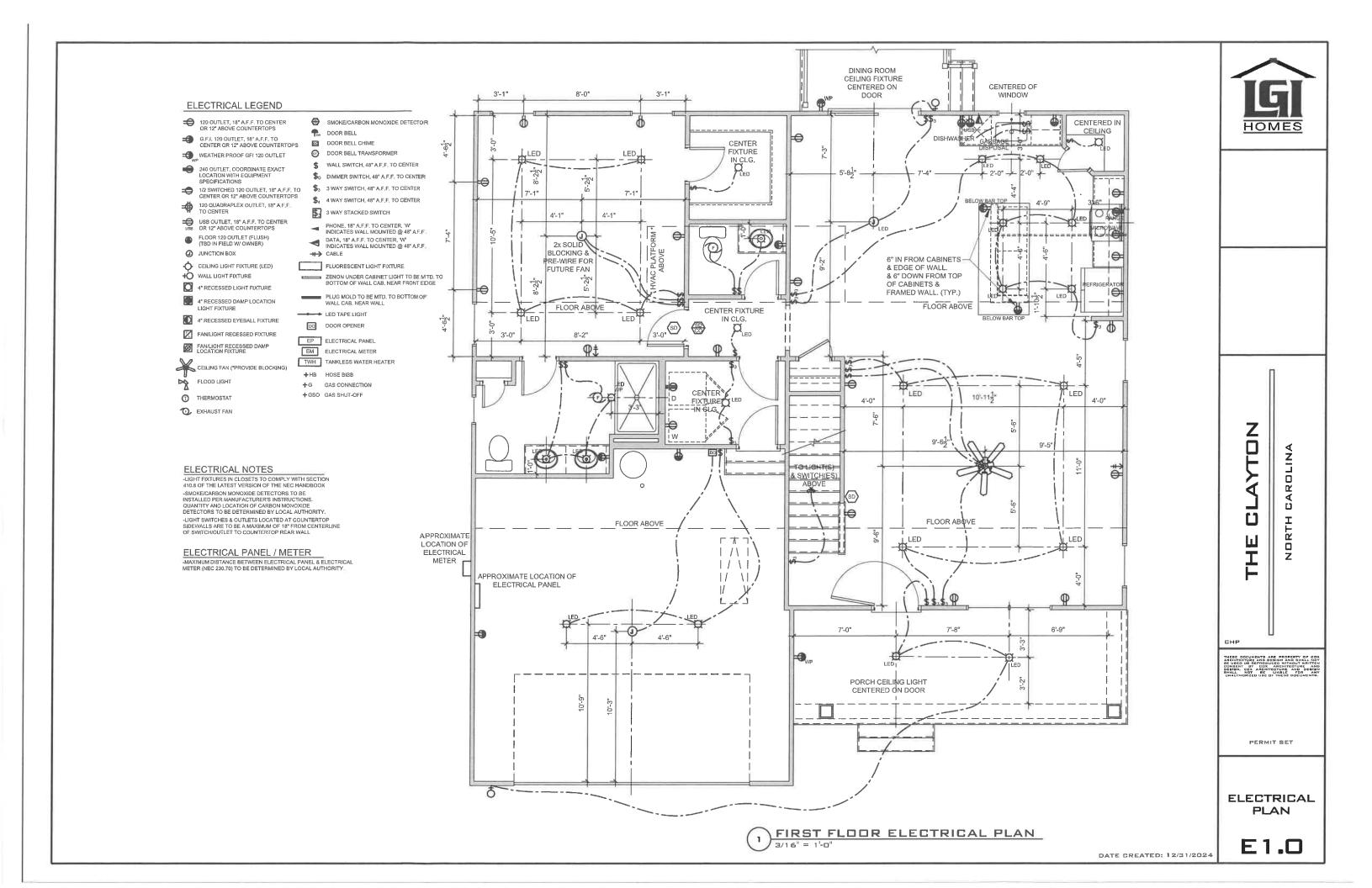
3/8" = 1'-o"

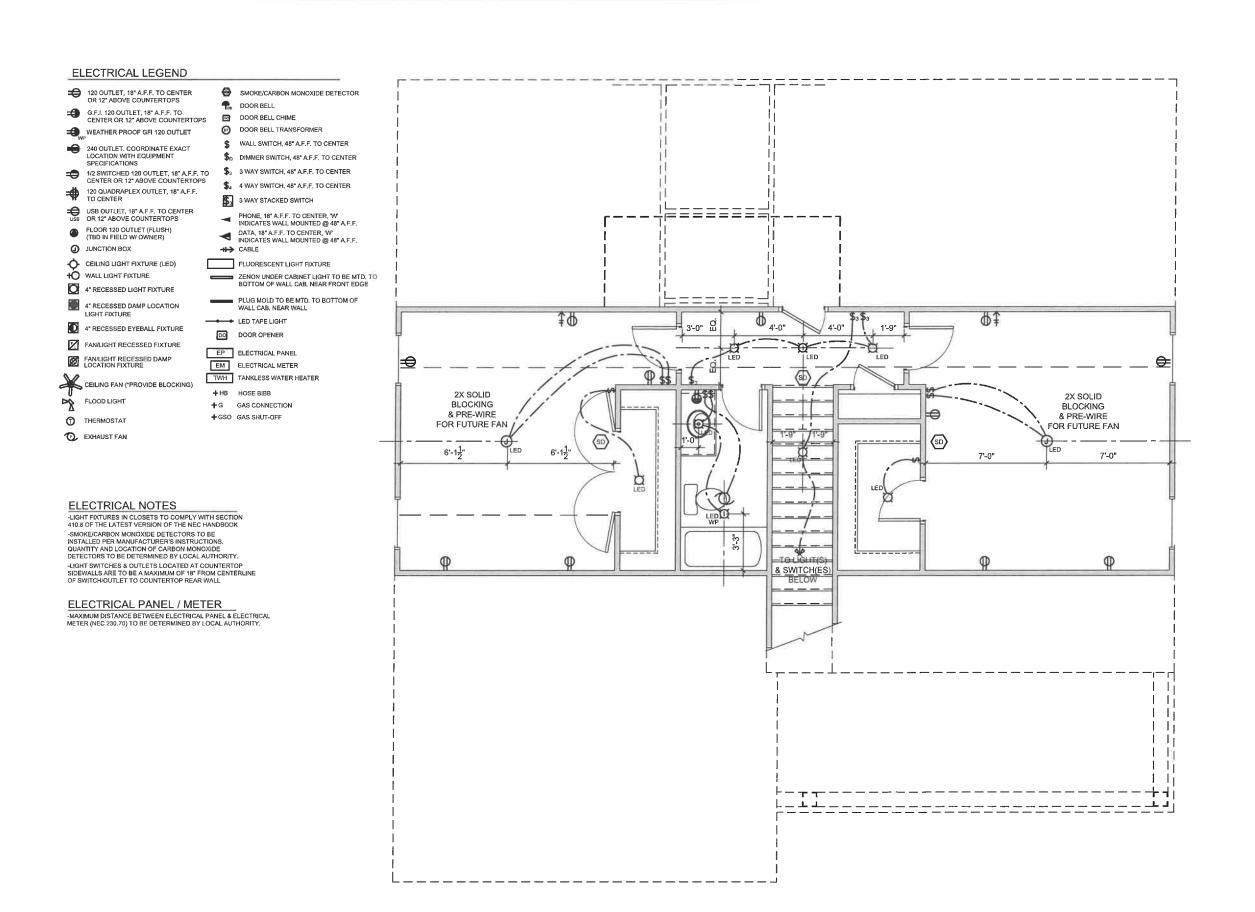
1 P I PERMIT SET 31 DECEMBER 2024

ELEVATIONS

A3.0







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SECOND FLOOR ELECTRICAL PLAN
3/16" = 1'-0"

GENERAL STRUCTURAL NOTES:

- THESE DRAWNOS 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 OC IS STRICTLY PROHIBITED.
- THE ENGINEER'S NAME PRESENT ON THE SEAL OF THESE DRAWINGS IS THE ENGINEER OF RECORD (EOR). 3. 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
- 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.

 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 REFORE 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.

 2. NO EXCAVATION SHALL OCCUR WITHIN A 45 DEGREE LINE PROJECTED FROM THE BOTTOM OF THE BUILDING FOUNDATION IS PERMITTED, UNLESS IT IS
- 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
- 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.
 HE PLACING OF ALL CONCRETE SHALL BY 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 COMPUES 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 CLAR COVER SHALL BE PROVIDED OVER REINFORCING BARS:

 2.1. CONCRETE EXPOSED TO EARTH = 3"

 1. CONCRETE EXPOSED TO EARTH = 3"

 1. LIVE TO EARTH = 1"

 1. LIVE TO EXPOSE TO EXPOSE TO EXPOSE TO EARTH = 1"

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 - CONCRETE EXPOSED TO WEATHER = 1-1/2 2.3 SLABS NOT EXPOSED TO WEATHER = 3/4"
 - 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
- 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.
- ALL FASTEMERS 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).

 LVL ENGINEERED WOOD SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES:
- E = 1,900,000 PSI FB = 2600 PSI FV = 285 PSI
- = 1555 PSI
- 5. PSL ENGINEERED WOOD SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES:
 - E = 2,000,000 PSI FB = 2900 PSI
 - = 290 PSI
- = 1755 PS
- LSL ENGINEERED WOOD SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES: 6.1.
 - E = 1,550,000 PSI FB = 2250 PSI FV = 400 PSI FT = 1075 PSI 6.2. 6.3.
- 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 2-224.

 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
- 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
- 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-RIR NO.2 GRADED MATERIAL.

 15. UNLESS OTHERWISE NOTED, FOUR-PLY LIVL 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.

- 1.1. ALL ROOF TRUSSES MUST BE BUILT IN ACCORDANCE WITH THE TRUSS MANUFACTURER'S REQUIREMENTS. TIE-DOWN CONNECTIONS TO RESIST LIPTIET 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 (SCSI) 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.
- 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.
- CEILING JOISTS WHEN ERECTED PARALLEL TO RAFTERS MUST BE SISTERED TO RAFTERS AND SECURED AS PER TABLE R802.5.1(A) OF THE 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
- INSTALL MINIMUM 7/16" OSB ROOF SHEATHING.



CONSULTING AND DESIGN, PLLC

STRUCTURAL PLANS PREPARED FOR:

CLAYTON - LH VERSION

PROJECT ADDRESS:

5511 CAPITAL CENTER DRIVE, SUITE 560 RALEIGH, NC 27603

DESIGNER:

QUEEN CITY CONSULTING AND DESIGN, PLLC. 2459 WILKINSON BLVD, SUITE 300 CHARLOTTE, NC 28208

Revision No.	Date	Description
0	05.17.24	ORIGINAL ENGINEERING
1	09.02.24	CHANGED 11.875" FLOOR JOIST TO 14" FLOOR JOIST
2	12.26.24	ADDED STEMWALL FOUNDATION AND REAR PATIO OPTION, ALSO ADDED REAR STEMWALL PATIO OPTION FOR CRAWLSPACE.
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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)

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.

THE ARCHITECTURAL PLANS USED FOR STRUCTURAL DRAWINGS AND ANALYSIS HAVE BEEN PROVIDED BY COX ARCHITECTURE AND DESIGN, PLLC AND HAVE BEEN COMPLETED/REVISED ON 05/01/24. NOTIFY QC OF ANY ALTERATIONS MADE TO THE PLANS AFTER THE DATE SHOWN HEREIN.

	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
ATTICS WITHOUT STORAGE	10 PSF
GROUND SNOW LOAD	15 PSF

	DEAD LOADS
CONVENTIONAL 2X ROOF	15 PSF
ROOF TRUSS	20 PSF
CONVENTIONAL 2X FLOOR	10 PSF
I-J0IST	15 PSF
FLOOR TRUSS	15 PSF

Page Symbol	DESCRIPTION
CS	COVER SHEET, SPECIFICATIONS, REVISIONS
F-1m	MONOLITHIC SLAB FOUNDATION
F-1s	STEMWALL FOUNDATION
F-1c	CRAWLSPACE FOUNDATION
S-1	FIRST FLOOR FRAMING PLAN
S-2	SECOND FLOOR FRAMING PLAN
D-1m	MONOLITHIC SLAB DETAILS
D-1s	STEMWALL DETAILS
D-1c	CRAWLSPACE DETAILS
D-1f	FRAMING DETAILS







SKE SHEET NAME: COVER

CHENT LCI Homes

PLAN NAME: CLAYTON-LH VERSION

NEIGHBORHOOD:

LOT AND ADDRESS: LOT #

PROJECT NUMBER: LGI240014

DRAWN BY-EO & MSB

DATE: 12.26.2024

SCALE: 1/4"=1'-0" ON 22"x34" 1/8"=1'-0" ON 11"x17"

PAGE:

CS

STEMWALL 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
- CONTRACTOR TO YEARTY THE SOIL BEARING CAPACITY FROM TO CONCRETE PLACEMENT. CONTRACT QC IF DESIRED BEARING CAPACITY IS NOT ACHIEVED. ALL POURED CONCRETE IS TO HAVE A MINIMUM COMPRESSIVE STRENGTH 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 ALL FOOTINGS SHALL BE A MINIMUM OF 12" BELOW GRADE.
- MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASDNRY WALLS IS 4'. FOR GREATER THAN 4', REFER TO SECTION R404.1 OF 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 MINMUM 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.
- DIMENSIONS SHOWN ON FOUNDATION DRAWINGS ARE TO EDGE OF FRAMING AND NOT TO EDGE 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.
 CONCRETE SLABS SHALL BE 4" THICK AND CONSTRUCTED OUT OF 3000 PSI MIN. COMPRESSIVE STRENGTH WITH 6"46" WI 14-4WI 1.4 WELDED WINE FABRIC OR FIBERMESH 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" WIDE

 MAXIMUM UNBALANCED FILL FOR UNGROUTED CMU WALLS SHALL NOT EXCEED
- 4'-0". REFER TO SECTION R404 IN THE 2018 NCRC.
- ABBREVIATIONS:

 DJ = DOUBLE JOIST

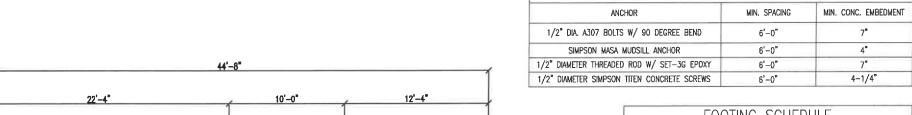
 GT = GIRDER TRUSS

 SC = STUD COLUMN
- ST = SINGLE JOIST FT = FLOOR TRUSS

 OR = DOUBLE RAFTER

 TR = TRIPLE RAFTER
- EE = EACH END TJ = TRIPLE JOIST
- OC = ON CENTER
 PLFA = POINT LOAD FROM ABOVE
 NTS = NOT TO SCALE COL = COLUMN UNO = UNLESS NOTED OTHERWISE PT = PRESSURE TREATED
- J = JACK STUD CONT = CONTINUOUS K = KING STUD MANUF = MANUFACTURER

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



F(DOTING SCHED	ULE
LABÉL 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

ANCHORAGE SCHEDULE







CLENT: LG HOW

SHEET NAME: STEMWALL FOUNDATION

CLIENT: LGI Homes

PLAN NAME: CLAYTON-LH VERSION

NEIGHBORHOOD: TBD

LOT AND ADDRESS: LOT # TBD

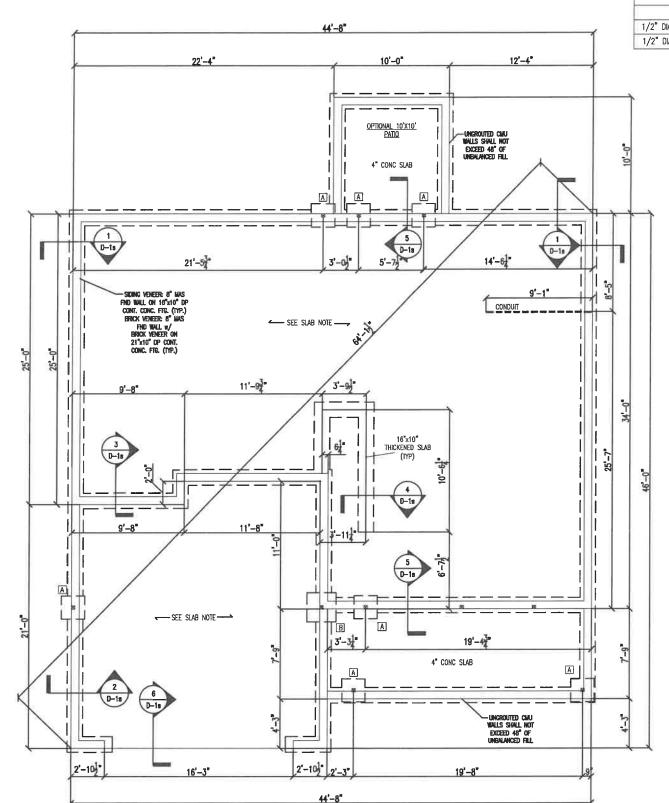
PROJECT NUMBER: LGI240014

DRAWN BY: EO & MSB

DATE: 12.26.2024

SCALE: 1/4"=1 -0" ON 22"x34" 1/8"=1 -0" ON 11"x17"

F-1.1s





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- ALL 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 R404.1 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE, OR CONTACT OC FOR ADDITIONAL ENGINEERING. PERIMETER INSULATION IS TO BE INSTALLED PER THE 2018 NCRC AND PER
- LOCAL MUNICIPALIFY.

 WOOD SILL PLATES AT LOAD BEARING AND BRACED WALLS SHALL BE ANCHORED

 TO THE FOUNDATION WITH 1/2" DIAMETER BOLTS SPACED AT A MAXAMIN 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 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%
- ALL FOUNDES & SUBSTREE DEVELOPMENT OF CODE OFFICIAL DIMENSIONS SHOWN ON FOUNDATION DRAWINGS ARE TO EDGE OF FRAMING AND NOT TO EDGE 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.

 PILASTERS SHALL BE BONDED WITH THE EXTERIOR FOUNDATION WALL.
- THE CENTER OF EACH PIER SHALL BEAR IN THE MIDDLE THIRD OF ITS RESPECTIVE FOOTING, EACH GIRDER SHALL BEAR IN THE MIDDLE THIRD OF EACH
- CRAWLSPACE VENTS SHALL BE INSTALLED PER SECTION R408 OF THE 2018 NCRC. THE MINIMUM NET AREA OF VENTILATION SHALL BE NOT LESS THAN 1 SQUARE FOOT FOR EACH 150 SQUARE FEET OF CRAWLSPACE GROUND AREA. LOCATE A CRAWLSPACE VENT WITHIN 3' FROM EACH CORNER OF THE BUILDING.
- ALL PIERS TO BE 16"x16" MASONRY AND ALL PILASTERS TO BE 8"x16" MASONRY BEARING ON 24"X24"X10" CONCRETE FOOTINGS, TYPICAL (UNO)
- 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 FIBERNESS COMPACTED WILL, VERIFIED BY EITHER ENGINEER OR CODE OFFICIAL.
- FILL, VENIFIED BY EITHER ENGINEER OR CODE OFFICIAL.

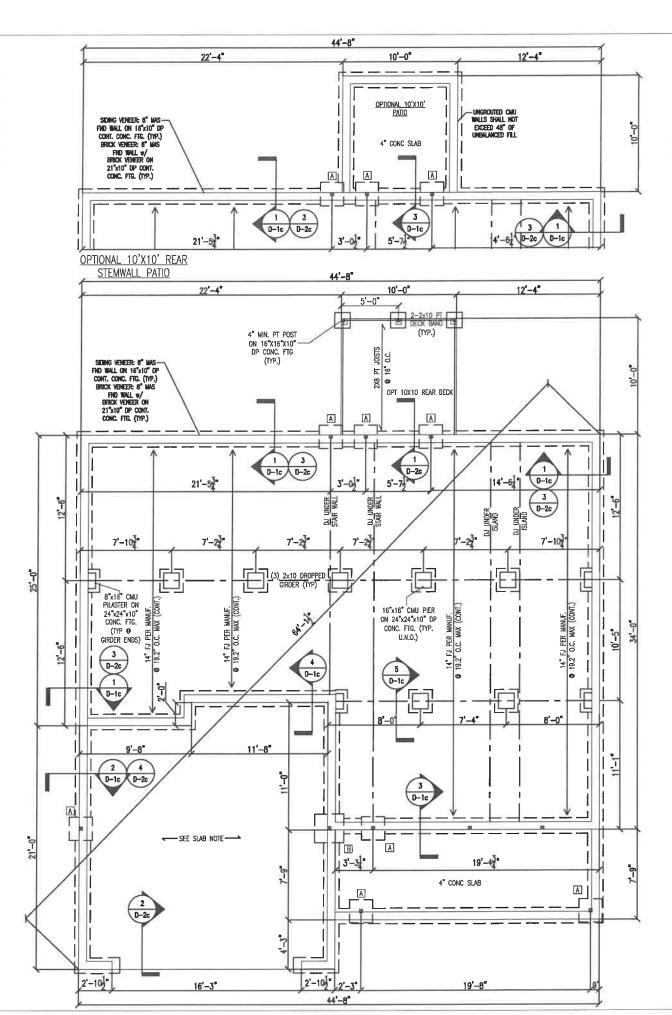
 CONCRETE CURBS THAT ARE USED TO SUPPORT PORTAL FRAME WALLS SHALL BE
 A MINIMUM OF 8" WIDE
 MAXIMUM UNBALANCED FILL FOR UNGROUTED CMU WALLS SHALL NOT EXCEED
- 4'-0". REFER TO SECTION R404 IN THE 2018 NCRC.
- PROVIDE A MANMOUM 18"X24" OPENING FOR CRAML SPACE.
 THE UNSUPPORTED HEIGHT OF MASONRY PIERS SHALL NOT EXCEED 10 TIMES
 THEIR LEAST DIMENSION PER R404.1.5.4 IN THE 2018 NCRC.
- DJ = DOUBLE JOIST
- GT = GIRDER TRUSS SC = STUD COLUMN
- EE = EACH END TJ = TRIPLE JOIST CI = CENTERLINE
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TERMITE TREATMENT NOTE: CONTRACTOR IS TO INSTALL PROTECTION AGAINST SUBTERRANEAN TERMITES PER SECTION R318 OF THE 2018 NCRC.





ANCHORAGE	SCHEDULE	
ANCHOR	MIN. SPACING	MIN, CONC. EMBEDMENT
1/2" DIA A307 BOLTS W/ 90 DEGREE BEND	6'-0"	7"
SIMPSON MASA MUDSILL ANCHOR	6'-0"	4"
1/2" DIAMETER THREADED ROD W/ SET-3G EPOXY	6'-0"	7°
1/2" DIAMETER SIMPSON TITEN CONCRETE SCREWS	6'-0"	4-1/4"

F	FOOTING SCHEDULE		
LABEL SIZE		REBAR	
Α	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	







SHEET NAME CRAWLSPACE FOUNDATION

CLIENT: LGI Homes

PLAN NAME: CLAYTON-LH VERSION

NEIGHBORHOOD: TBD

LOT AND ADDRESS: LOT #

PROJECT NUMBER: LGI240014

DRAWN BY: EO & MSB

DATE:

12.26.2024

SCALE: 1/4"=1"-0" ON 22"x34" 1/8"=1"-0" ON 11"x17"

PAGE:

F-1.1c

- REFER TO COVER PAGE FOR ADDITIONAL NOTES
 ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH
 CARQUINA RESIDENTIAL CODE (NCRC), 2018 EDITION, PLUS ALL LOCAL CODES AND
- REGULATIONS,
 THE EOR SHALL REVIEW EWP AND TRUSS LAYOUTS FOR ACCURACY PRIOR TO CONSTRUCTION.
 SOLID BLOCKING IS TO BE INSTALLED AT ALL POINT LOADS 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
- BULT-UP WOOD COLUMNS CONSISTING OF MULTIPLE STUDS SHALL HAVE EACH LAMINATION NAILED WITH 16D MAILS SPACED AT 9" O.E. FOR BUILT-UP COLUMNS CONSISTING OF (4) PLES OR MORE, SECURE PLES TOGETHER WITH HORIZONTAL SIMPSON CS-16 COIL STRAPS LOCATED AT QUARTER POINTS.

 CONTRACTOR SHALL ENSURE THAT ALL BEAMS, HEADERS, AND STRUCTURAL COMPONENTS ARE FULLY BEARING ON THE SUPPORTING MEMBERS. ANY CAPS IN THE FRAMINGS SHALL BE SHAMED APPROPRIATELY WITH ETHER METAL SHANS OF MOOD SHIMS AS INCESSARY, HEADER SIZES SHOWN ON PLAIS ARE MINIMUMS. ANY HEADERS INSTALLED THAT ARE GREATER IN SIZE ARE AN ADEQUATE REPLACEMENTS PROVIDED THE METERAL IS OF THE SAME OR GREATER STRUCTURAL PROPERTIES.

 WHERE TOP PLATE HAS BEEN CUT TO ACCOMMODIATE FLUSH HEADERS/BEAMS, INSTALL A MINIMUM 16" LONG HORIZONTAL CS-16 STRAP EXTENDING 12" PAST THE BREAK ON FACH
- MINIMUM 16" LONG HORIZONTAL CS-16 STRAP EXTENDING 12" PAST THE BREAK ON EACH
- SIDE.

 SI
- OF THE BEAM.
 ALL LOAD BEARING WALLS TO BE 2X4 U.N.O.
 ABBREVIATIONS:
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 DJ = DOUBLE JOIST
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- UNO = UNLESS NOTED OTHERWISE J = JACK STUD CONT = CONTINUOUS MANUF = MANUFACTURER

#J # OF JACK STUDS STUD COLUMN

- POINT LOAD FROM ABOVE LOAD BEARING WALL
- NON LOAD BEARING WALL

LABEL	SIZE	
A	2x6 W/ (1) JACK STUD E.E.*	
В	2x8 W/ (2) JACK STUDS E.E.*	
С	2x10 W/ (2) JACK STUDS E.E.*	
D	2x12 W/ (2) JACK STUDS E.E.*	
E	9-1/4" LVL W/ (3) JACK STUDS E.E.*	
F	11-7/8" LVL W/ (3) JACK STUDS E.E. *	

*THE AMOUNT OF PLYS FOR THE HEADER IS DETERMINED BY THE WIDTH OF THE WALL (2X4 WALL=2 PLYS, 2X6 WALL=3 PLYS, ETC.). AMOUNT OF JACK STUDS SHOWN ON PLAN TAKE PRECEDENCE OVER TABLE

KING	STUD	SCHEDULE

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

- 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. 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'-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" O.C./12" O.C.
25'-0"	(2) 2X6	12" O.C.

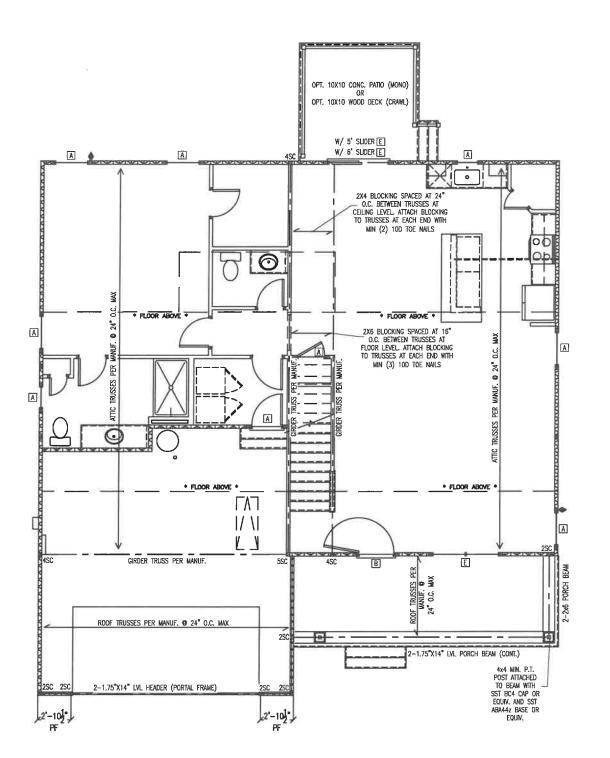
RICK	LINTEL	SCHEDUL	

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 OF
- 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 BRICK

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.



	-SMPSON-	-USP-
MEMBERS	HANGER	HANGER
2x8	LUS28	JUS28
2x10	LUS210	JUS210
2x12	LUS210	JUS210
2-2x8	HUS28-2	JUS28-2
2-2x10	HU\$210-2	JUS210-2
2-2x12	HUS212-2	JUS212-2
3-2x8	LUS28-3	JUS28-3
3-2x10	LUS210-3	JUS210-3
3-2x12	HU212-3 MPL	JUS212-3 MIN
2-1% x9%" LVL	HGUS410	THOH410
2-134"x915" LVL	HGUS410	THDH410
2-1% x11% LVL	HGUS412	THDH412
2-134"x1136" LVL	HGUS412	THDH412
2-134°x14° LVL	HGUS414	THDH414
2-11/4"x18" LVL	HGUS414	THOH414
2-13/2"x18" LVL	HGUS414	THDH414
2~134"x24" LVL	HGUS414	THDH414
3-13/4"x9/4" LVL	HGUS5.50/10	THDH610
3-134°x95° LVL	HGUS5.50/10	THDH610
3-134"x1114" LVL	HGUS5.50/12	THDH612
3-1%"×11%" LVL	HGUS5.50/12	THDH612
3-1%"x14" LVL	HGUS5.50/14	THDH614
3-1%*x16" LVL	HGUS5.50/14	THDH614
3-1% x18" LVL	HGUSS-50/14	THDH614
3-134"x24" LVL	HGUS5.50/14	THDHB14
4-1% x9K LVL	HGUS7.25/10	THDH7210
4-1%"x96" LVL	HGUS7.25/10	THDH7210
4_434°-4414° 118	HOUST 25 /12	THINTS

TYPICAL HANGERS FOR JOIST & BEAMS

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")	D1T2Z
1450 LBS	HTS20	CS16 (END = 11")	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

ALL PRODUCTS LISTED ARE SIMPSON STRONG—TIE. EQUIV.
MAY BE USED PER MANUFACTURER'S SPECIFICATIONS.

2. UPLIET VALUES LISTED ARE FOR SFF \$\rightarrow{2}{2}\$ CRADE 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. OMERGIE THOSE LISTED ABOVE.

4. CONTACT OF 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

WALL BRACING NOTES:

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 R602.10 OF THE 2018 NCRC. CS-WSP IS THE COMMON BRACING METHOD LISED, WHERE APPLICABLE, MIXED METHODS, OTHER THAN CS-WSP, SHOWN WITHIN TABLE R602.10.1 ARE

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.

METHOD	MATERIAL	MIN. THICKNESS	REQUIRED CONNECTION
METHOD	MATERIAL	MIN. INICKNESS	REQUIRED CONNECTION
CONTINUOUS SHEATHING WOOD STRUCTURAL PANEL (CS-WSP)	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS AT 6" O. ON EDGE AND 12" O.C. ON FIELD
CYPSUM BOARD (GB)	GYPSUM BOARD	1/2"	5d COOLER NAILS AT 7" O.I ON EDGE AND FIELD
WOOD STRUCTURAL PANEL (WSP)	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS AT 6" O. ON EDGE AND 12" O.C. OF FIELD
PORTAL FRAME (PF)	WOOD STRUCTURAL PANEL	7/16"	SEE DETAIL 1/0-1f

TRUSSED ROOF FRAMING NOTES:

- 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 IS GREATER.
- 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.
- 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 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.







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FLOOR NG PLAN SHEET NAME: FIRST FLC FRAMING

CLIENT: LGL Homes

PLAN NAME: CLAYTON-LH VERSION

NEIGHBORHOOD: TBD

LOT AND ADDRESS: LOT #

PROJECT NUMBER: LGI240014

EO & MSB

DATE-12.26.2024

SCALE. 1/4"=1'-0" ON 22"x34" 1/8"=1'-0" ON 11"x17"

- REFER TO COVER PAGE FOR ADDITIONAL NOTES
 ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH
 CAROLINA RESIDENTIAL CODE (NCRC), 2018 EDITION, PLUS ALL LOCAL CODES AND
- THE EOR SHALL REVIEW EWP AND TRUSS LAYOUTS FOR ACCURACY PRIOR TO CONSTRUCTION
- THE EOR SHALL REVIEW EMP AND TRUSS LAYOUTS FOR ACCURACY PROR TO CONSTRUCTION.

 SOLID BLOCKING IS TO BE INSTALLED AT ALL POINT LOADS THROUGH FLOOR LEVELS TO THE
 FOUNDATION OR TO THE WEAREST STRUCTURAL ELEMENT. BLOCKING SHALL BE EQUAL TO OR
 GREATER THAN THE SUPPORT AGOVE.

 BULT-UP WOOD COLLIANS CONSISTING OF MULTIPLE STUDS SHALL HAVE EACH LAMINATION
 NAILED WITH 150 NAILS SPACED AT 9° C.C. FOR BUILT-UP COLLIANS CONSTRING OF (4)
 PLIES OR MORE, SECURE PLIES TOGETHER WITH HORIZONTAL SIMPSON CS-16 COIL STRAPS

 LOCATED AT JUNETED BOAINS.
- FILES ON MORE, SECURE FILES INSERIENT WITH TUTALURINE SIMPSON LS—18 CUIT STIMPS LCOATED AT QUARTER POINTS. THAT ALL BEAUS, HEADERS, AND STRUCTURAL COMPONENTS ARE FULLY BERNING ON THE SUPPORTING MEMBERS. ANY GAPS IN THE FRAMING SHALL BE SHIMMED APPROPRIMELY WITH ETHER METAL SHUSS OF WOOD SHIMS AS NECESSARY. HEADER SIZES SHOWN ON PLANS ARE MINIMILIES, MAY HEADERS INSTALLED THAT ARE
- GREATER IN 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 16" LONG HORIZONTAL CS-16 STRAP EXTENDING 12" PAST THE BREAK ON EACH
- UNIESS OTHERWISE NOTED, FOUR-PLY LVL BEAMS SHALL HAVE PLIES FASTENED TOGETHER WITH TWO (2) 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 and bottom
- OF THE BEAM. ALL LOAD BEARING WALLS TO BE 2X4 U.N.O.
- - ABBREVIATIONS: DJ = DOUBLE JOIST GT = GIRDER TRUSS SJ = SINGLE JOIST FT = FLOOR TRUSS SC = STUD COLUMN EE = EACH END DR = DOUBLE RAFTER
 TR = TRIPLE RAFTER
- OC = ON CENTER
 PLFA = POINT LOAD FROM ABOVE TJ = TRIPLE JOIST TJ = TRIPLE JOIST
 CL = CENTERLINE
 COL = COLLIMAN
 PT = PRESSURE TREATED
 J = JACK STUD
 CONT = CONTINUOUS NTS = NOT TO SCALE
 UNO = UNLESS NOTED OTHERWISE
- K = KING STUD

 MANUF = MANUFACTURER

LEGEND: #J # OF JACK STUDS STUD COLUMN POINT LOAD FROM ABOVE LOAD BEARING WALL NON LOAD BEARING WALL

HEADER SCHEDULE:

LABEL	SIZE
A	2x6 W/ (1) JACK STUD E.E.*
В	2x8 W/ (2) JACK STUDS E.E.*
C	2x10 W/ (2) JACK STUDS E.E.*
D	2x12 W/ (2) JACK STUDS E.E.*
E	9-1/4" LVL W/ (3) JACK STUDS E.E.*
F	11-7/8" LVL W/ (3) JACK STUDS E.E. *

*THE AMOUNT OF PLYS FOR THE HEADER IS DETERMINED BY THE WIDTH OF THE WALL (2X4 WALL=2 PLYS, 2X6 WALL=3 PLYS, ETC.). MOUNT OF JACK STUDS SHOWN ON PLAN TAKE PRECEDENCE OVER TABLE.

HEADER SPAN	MINIMUM KING STUDS E.E.
3'-0" OR LESS	(1)
3'-0" TO 6'-0"	(2)
6'-0" TO 9'-0"	(3)
9'-0" TO 12'-0"	(4)
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" D.C. LLN.O. FOR UP TO 10' WALLS
- 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'-0" O.C. VERTICALLY OR

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" 0.C./12" 0.C.
21'-0"	(2) 2X6/2X8	16" D.C./12" O.C.
25'-0"	(2) 206	12" O.C.

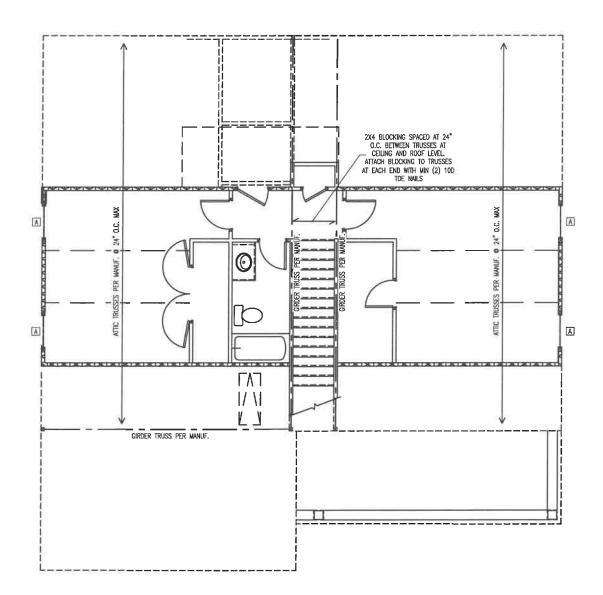
BRICK	LINTE	. SCHED	Į

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 OF
- 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 BRICK

NOTE: WALL BRACING HAS BEEN ANALYZED USING CS-WSP PER SECTION R602.10 DF 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 JOIS	T & BEAMS
		-SMPSON-	-USP-
	MEMBERS	HANGER	HANGER
	2x8	LUS28	JUS28
	2x10 2x12	LUS210 LUS210	JUS210 JUS210
	2-2xB	HUS28-2	JUS28-2
	2-2x10	LILICOTA 2	##C210.2
	2-2x12	HUS212-2 HUS212-2 LUS28-3 LUS210-3 HUZ12-3 MN. HG ISA10	JUS212-2
	3-2x8	LUS28-3	JUS28-3
	3-2x10	LUS210-3	JUS210-3
	3-2x12	HU212-3 MM.	JUS212-3 MIN.
	2-1% x9% LVL		
	2-1%"x9½" LVL	HGUS410	THDH410
	2-1¾"x11¼" LVL	HGUS412	THDH412
	2-1% x11% LVL	HGUS412	THDH412
	2-1% x14" LVL	HGUS414	THDH414
	2-1%("x16" LVL		THDH414
	2-1% x18" LVL	HGUS414	THDH414
	2-17("x24" LVL	HGUS414	THDH414
	3-1¾"x9¼" LVL 3-1¾"x9½" LVL	HGUS5.50/10	THDH610
	3-11/4"x91/4" LVL	HGUS5.50/10	THDH610
	3-1% x11% LVL	HGUSS.50/12	THDH812
	3-1% X11% LVL 3-1% X16 LVL 3-1% X16 LVL 3-1% X18 LVL 3-1% X24 LVL 4-1% X26 LVL	HGUS5.50/12	THOH612
	3-1%[x14] LVL	HOUS5-50/14	THDH614
١	3-134"x16" LVL	HGUS5.50/14	THDH614
1	3-1% x18" LVL	HGUS5.50/14	THDH614
	3-114"x24" LVL	HGUS5.50/14	THDH614
1	4-1% x9% LVL	HGUS7.25/10	THDH7210
	J-124 YS/2 FAF	11003122710	THDH7210
	4-1% x11% LVL	HGUS7.25/12	THDH7212
1	4-1% x11% LVL	HGUS7.25/12	THDH7212
-1	4-1% x14" LVL	HGUS7.25/14	THDH7214
1	4-1% x16" LVL	HGUS7.25/14	THDH7214
	4_13K*v18* FVI	HGIS7.25/14	THD4/7214

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
1450 LBS	HTS20	CS16 (END = 11")	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

NAY BE USED PER MANUFACTURER'S SPECIFICATIONS.

2. UPURT VALUES LISTED ARE FOR SPF \$2 GRADE MEMBERS.

3. REFER TO RUSUS LAYOUT PER MANUF. FOR UPURT 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

WALL BRACING LEGEND:

ATTACH (2) 2X4 STUD COLUMN TO FOUNDATION WITH SST LITTP2 HOLD DOWN, OR EQUIVALENT HARDWARE. BRACED WALL

WALL BRACING NOTES:

LISTED ABOVE

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 R602.10 OF THE 2018 NCRC.

CS-WSP IS THE COMMON BRACING METHOD USED, WHERE APPLICABLE, MIXED METHODS, OTHER THAN CS-WSP, SHOWN WITHIN TABLE R602.10.1 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 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.

METHOD	MATERIAL	MIN, THICKNESS	REQUIRED CONNECTION
CONTINUOUS SHEATHING WOOD STRUCTURAL PANEL (CS-WSP)	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS AT 6" O. ON EDGE AND 12" O.C. ON FIELD
GYPSUM BOARD (GB)	GYPSUM BOARD	1/2"	5d COOLER NAILS AT 7" O.O ON EDGE AND FIELD
WOOD STRUCTURAL PANEL (WSP)	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS AT 6" O. ON EDGE AND 12" O.C. OF FIELD
PORTAL FRAME (PF)	WOOD STRUCTURAL PANEL	7/16"	SEE DETAIL 1/D-1f

- 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 IS GREATER.
 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,
- NISTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES.

 DO NOT CUT OR ALTER ROOF TRUSSES.

 ROOF TRUSS MANUFACTURER SHALL VERIEY AND DESIGN FOR POSITION OF PULL DOWN STARS
- AND ATTIC PLATFORM.
- 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.







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FLOOR PLAN SHEET NAME: SECOND FRAMING

CLIENT: LGI Homes

PLAN NAME: CLAYTON-LH VERSION

NEIGHBORHOOD: TBD

LOT AND ADDRESS: LOT #

PROJECT NUMBER: LGI240014

EO & MSB

DATE: 12.26.2024

SCALE. 1/4"=1'-0" ON 22"x34" 1/8"=1'-0" ON 11"x17"

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
- 2. 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.

 Any omissions and conflicts between the various elements of the structural drawings and/or specifications shall be brought to the attention of, an
- 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
- 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
- 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).

- 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 bors:
 2.1. Concrete exposed to earth = 3*
 - Concrete exposed to earth
 - Concrete exposed to weather = $1-1/2^{\circ}$
 - Slabs not exposed to weather = 3/4" 2.3.
 - Concrete Beams & Columns = 1-1/2"
- 3. Brick and/or porous material shall not be used to support facting steel off the ground. Plastic rebar chairs or precast concrete dobies may be
- Splices in reinforcing steel shall be a minimum of 45x the diameter, up to a #6 rebor. Rebar larger than #6 requires a minimum lap splice of
- 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 bor 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.

 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.

 All fasteners such as nails, botts, screws, anchor botts, 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
 - E = 1,900,000 psi Fb = 2600 psi 4.2.

 - Ft = 1555 psi 4.4
- 5. PSL engineered wood shall have the following minimum design values
- E = 2,000,000 psi Fb = 2900 psi Fv = 290 psi Ft = 1755 psi
- 6. LSL engineered wood shall have the fallowing minimum design values:

 - E = 1,550,000 psi Fb = 2250 psi Fv = 400 psi 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.

 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 atherwise on plans and details.
 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/ASIAE. standard B18.2.1-1981.
- 12. All bott heads and nuts bearing on wood shall have standard cut washers. Holes for botts shall be bored 1/16" larger than the nominal bott
- 13. Provide full bearing where all beams meet supporting framing members.
- 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 RB02.10 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
 - using (3) 10d common rails. Fur down all ridges as needed 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 2018 North
 - 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.



QUEEN CITY CONSULTING AND DESIGN, PLLC

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

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 LUADS
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
0	Roof Truss	20 PSF
	Conventional 2x Floor	10 PSF
	I-Joist	15 PSF
	Floor Truss	15 PSF



Description

ORIGINAL ENGINEERING

Added Stem Wall Details

ADDED BRICK CRAWL SPACE DETAILS

ADDED STAIR DETAIL AND TURNDOWN DETAIL

ADDED RASEMENT DETAILS

Revision

Date

12.26.23

05.05.24

05.16.24

08 30 24

12.11.24





CONSULTING AN DESIGN, PLLC No. P-2426

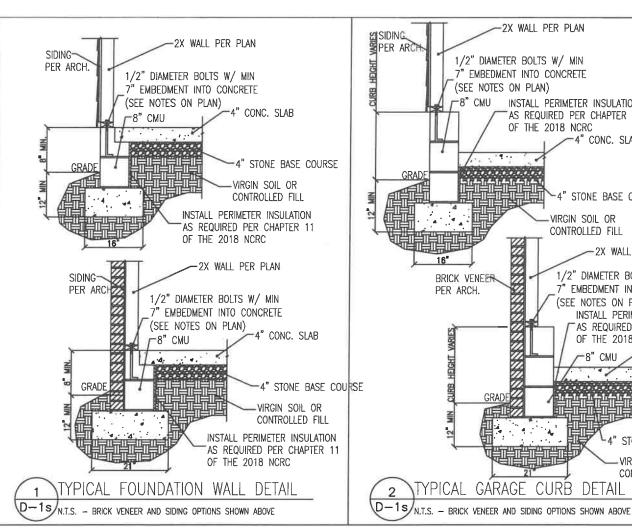
STANDARD

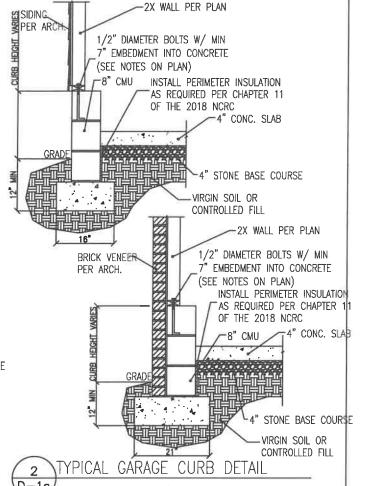
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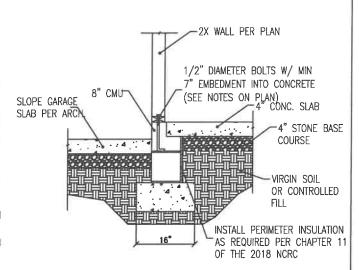
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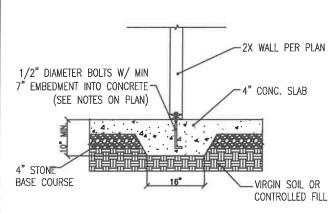
12/11/2024

SCALE: DETAILS ARE N.T.S.



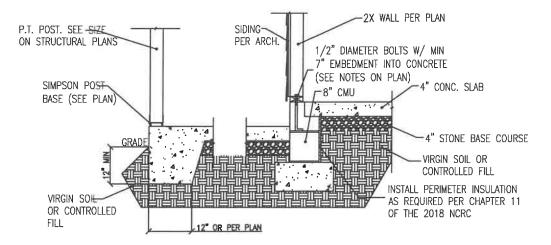




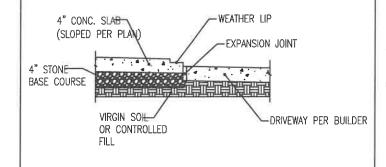




TYPICAL GARAGE STEP DETAIL D-1s/N.T.S.







SLAB AT GARAGE DOOR D-1s N.T.S.

GENERAL FOUNDATION NOTES:

- 1. ALL CONSTRUCTION IS TO CONFORM TO THE 2018 NORTH CAROLINA BUILDING CODE.
- SEE STRUCTURAL PAGES FOR ADDITIONAL NOTES.
- ALL BRICK VENEER IS TO HAVE WEEP HOLES INSTALLED AT 33" O.C. TO PREVENT MOISTURE BUILDUP.
- FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE SOIL BEARING CAPACITY OF 2000PSF.
- CONCRETE FINISHES MAY BE PARGED AS NEEDED FOR COSMETIC PURPOSES.
- STICK-ON STONE VENEER MAY BE APPLIED TO DETAILS THAT REFERENCE SIDING EXTERIOR.









QUEEN CITY



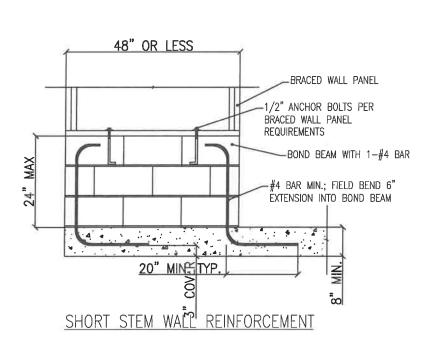
STANDARD DETAILS

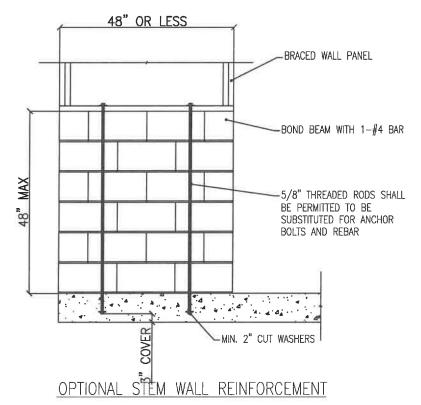
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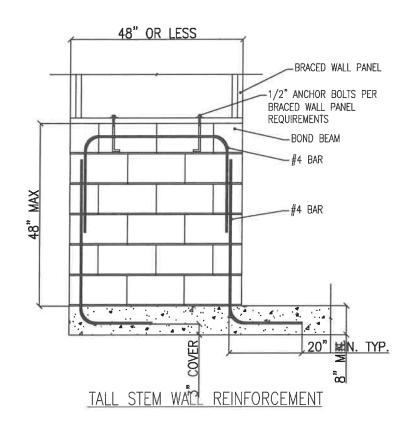
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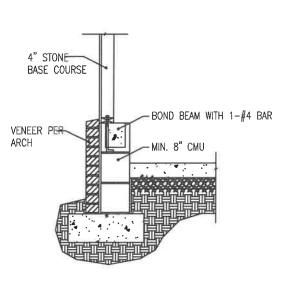
DATE: 12/11/2024

SCALE: DETAILS ARE N.T.S.









TYPICAL STEM WALL SECTION

NOTE: GROUT BOND BEAMS AND ALL CELLS THAT CONTAIN REBAR, THREADED RODS, AND MASONRY STEM WALLS SUPPORTING BRACED WALL PANELANCHOR BOLTS

 $\sqrt{-2}$ Install detail at portal frames at garage wingwalls. Figure R602.10.9









STANDARD

LGI HOMES

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DETAILS ARE N.T.S.











STANDARD

CLIENT: LGI HOMES

-DROPPED GIRDER (SIZE PER

-VIRGIN SOIL OR

CONTROLLED FILL

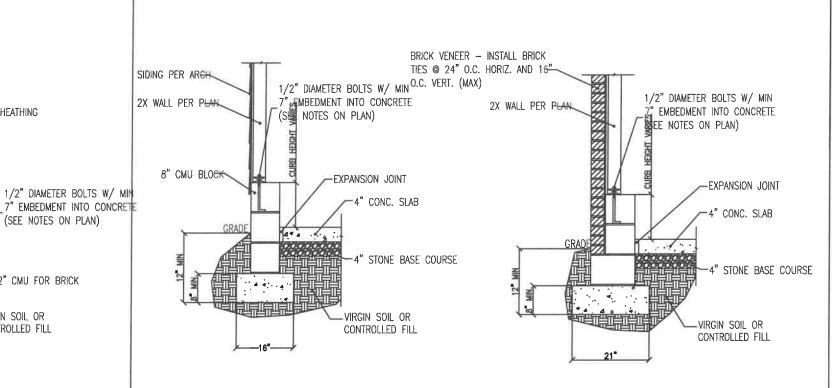
PLAN) ABOVE P.T. PLATE

-CMU PIER

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PAGE: D-1c



TYPICAL GARAGE CURB DETAIL

FLOOR FRAMING

TYPICAL PIER DETAIL

D-1c $_{
m N.T.S.}$ - Brick veneer and siding options shown above

TYPICAL FOUNDATION WALL DETAIL $D-1c/_{N.T.S.}$ - Brick veneer and siding options shown above

BRICK VENEER - INSTALL BRICK

O.C. VERT. (MAX)

1/2" DIAMETER BOLTS W/ MIN

7" EMBEDMENT INTO CONCRETE

(SEE NOTES ON PLAN)

VIRGIN SOIL OR

CONTROLLED FILL

=FLOOR SHEATHING

FLOOR FRAMING

TIES @ 24" O.C. HORIZ. AND 15"

2X WALL PER PLAN

RIM BOARD-

FLOOR SHEATHING

(SEE NOTES ON PLAN)

12" CMU FOR BRICK

-VIRGIN SOIL OR

CONTROLLED FILL

FLOOR FRAMING

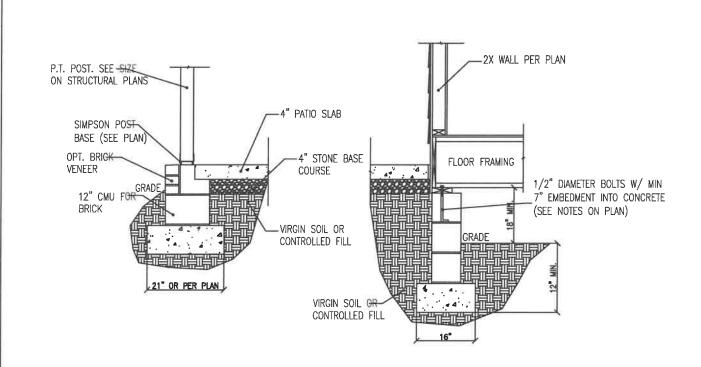
SIDING PER ARCH

2X WALL PER PLAN

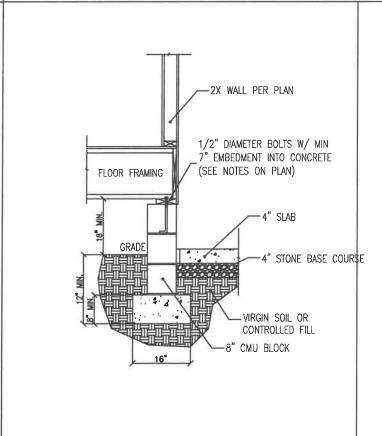
RIM BOARD-

8" CMU BLOCK

GRADI



YPICAL PATIO SLAB DETAIL



HOUSE-GARAGE WALL DETAIL D-1c/_{N.T.S.}









STANDARD



-DRIVEWAY PER BUILDER

TYPICAL DECK ATTACHMENT DETAIL $D-2c/_{
m N.T.S.}$ – Brick veneer and siding options shown above

BRICK VENEER - INSTALL BRICK TIES @ 24" O.C. HORIZ. AND 16"

2X WALL PER PLAN

ATTACH DECK BAND TO

HOUSE BAND W/ (1) 8"
GALVANIZED BOLT SPAGER

DECK FRAMING

FLOOR FRAMING

1/2" DIAMETER BOLTS W/ MIN

(SEE NOTES ON PLAN)

-VIRGIN SOIL OR CONTROLLED FILL

" EMBEDMENT INTO CONCRETE

AT 16" O.C.

O.C. VERT. (MAX)

1/2" DIAMETER BOLTS W/ MIN

7" EMBEDMENT INTO CONCRETE

VIRGIN SOIL OR CONTROLLED FILL

(SEE NOTES ON PLAN)

FLOOR FRAMING

ATTACH DECK BAND TO HOUSE BAND W/ (1) §"
GALVANIZED BOLT SPACED

P.T. 2X2 LEDGER

ATTACHED TO

BAND W/ MIN

(3) 10D NA PÉR JOIST

DECK FRAMING

AT 16" O.C.

SLAB AT GARAGE DOOR D-2c/N.T.S.

4" CONC. SLAB

4" STONE BASE COURSE

(SLOPED PER PLAN)

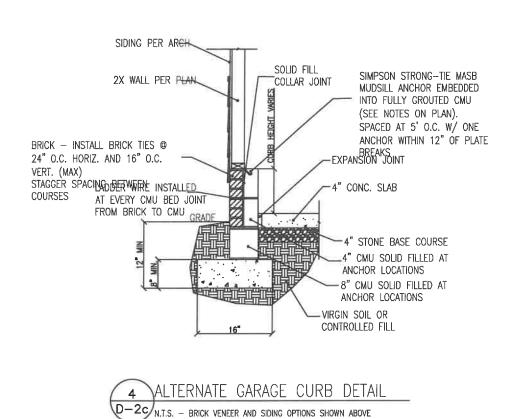
VIRGIN SOIL

OR CONTROLLED

SIDING PER ARCH 2X WALL PER PLAN -FLOOR SHEATHING RIM BOARD-FLOOR FRAMING BRICK - INSTALL BRICK TIES @ SIMPSON STRONG-TIE MASB 24" O.C. HORIZ. AND 16" O.C. VERT. (MAX) MUDSILL ANCHOR EMBEDDED SOLID FILE INTO FULLY GROUTED CMU STAGGER SPACING BETWEEN INSTALLED COLLAR JOIN (SEE NOTES ON PLAN). AT EVERY CMU BED JOINT SPACED AT 5' O.C. W/ ONE FROM BRICK TO CMU ANCHOR WITHIN 12" OF PLATE 4" BORELAKSOLID FILLED AT ANCHOR LOCATIONS 8" CMU SOLID FILLED AT ANCHOR LOCATIONS VIRGIN SOIL OR CONTROLLED FILL

ALTERNATE FOUNDATION WALL DETAIL

 $D-2c/_{
m N.T.S.}$ - Brick veneer and siding options shown above



GENERAL FOUNDATION NOTES:

- 1. ALL CONSTRUCTION IS TO CONFORM TO THE 2018 NORTH CAROLINA BUILDING CODE.
- SEE STRUCTURAL PAGES FOR ADDITIONAL
- ALL BRICK VENEER IS TO HAVE WEEP HOLES INSTALLED AT 33" O.C. TO PREVENT MOISTURE BUILDUP.
- 4. FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE SOIL BEARING CAPACITY OF 2000PSF.
- CONCRETE FINISHES MAY BE PARGED AS NEEDED FOR COSMETIC PURPOSES.
- STICK-ON STONE VENEER MAY BE APPLIED TO DETAILS THAT REFERENCE SIDING EXTERIOR.

LGI HOMES

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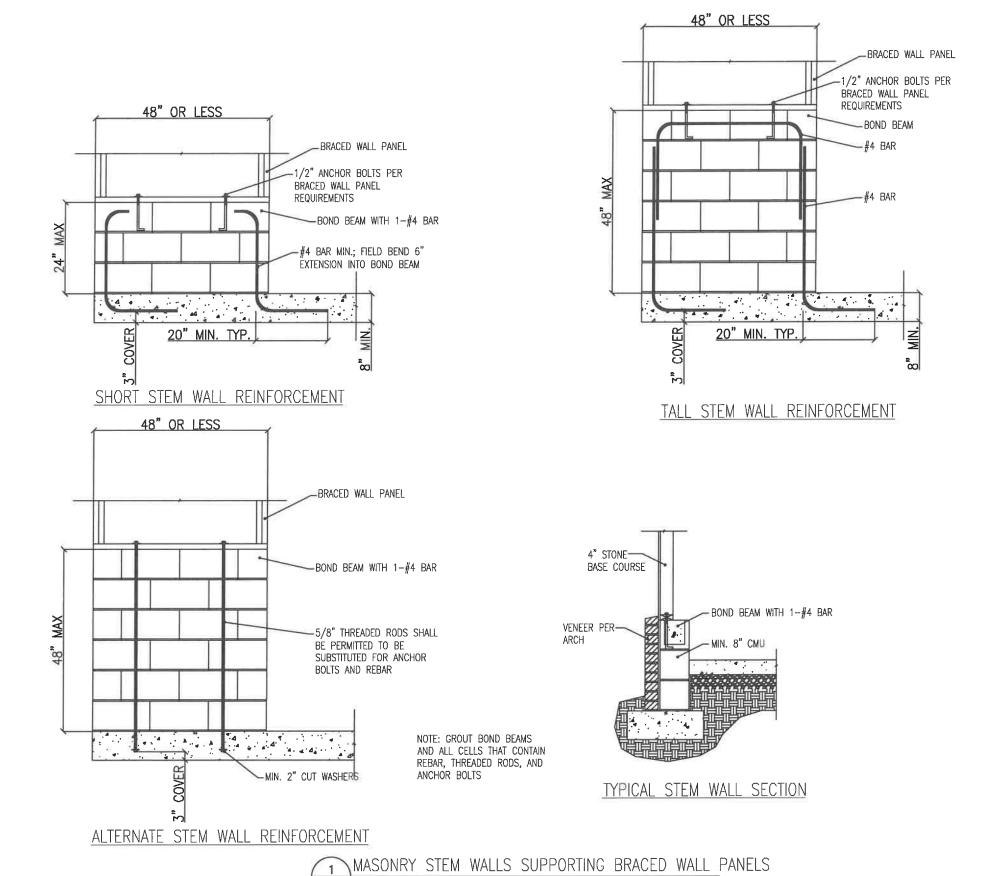
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 $\sqrt{2-3}$ Install detail at portal frames at garage wingwalls. Figure R602.10.9

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LGI HOMES

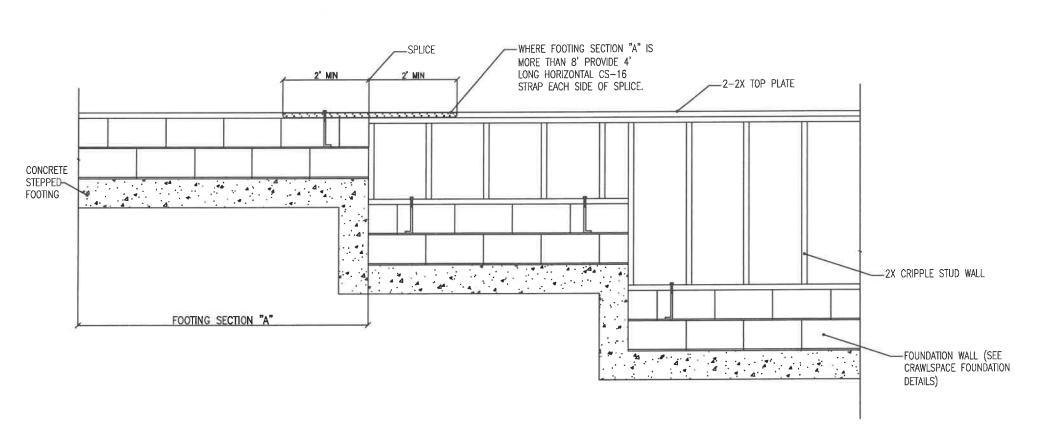
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NOTE: WHERE SECTION "A" IS LESS THAN 8' LONG IN A 25 FOOT LONG WALL, INSTALL BRACING AT CRIPPLE STUD WALL









STANDARD DETAILS

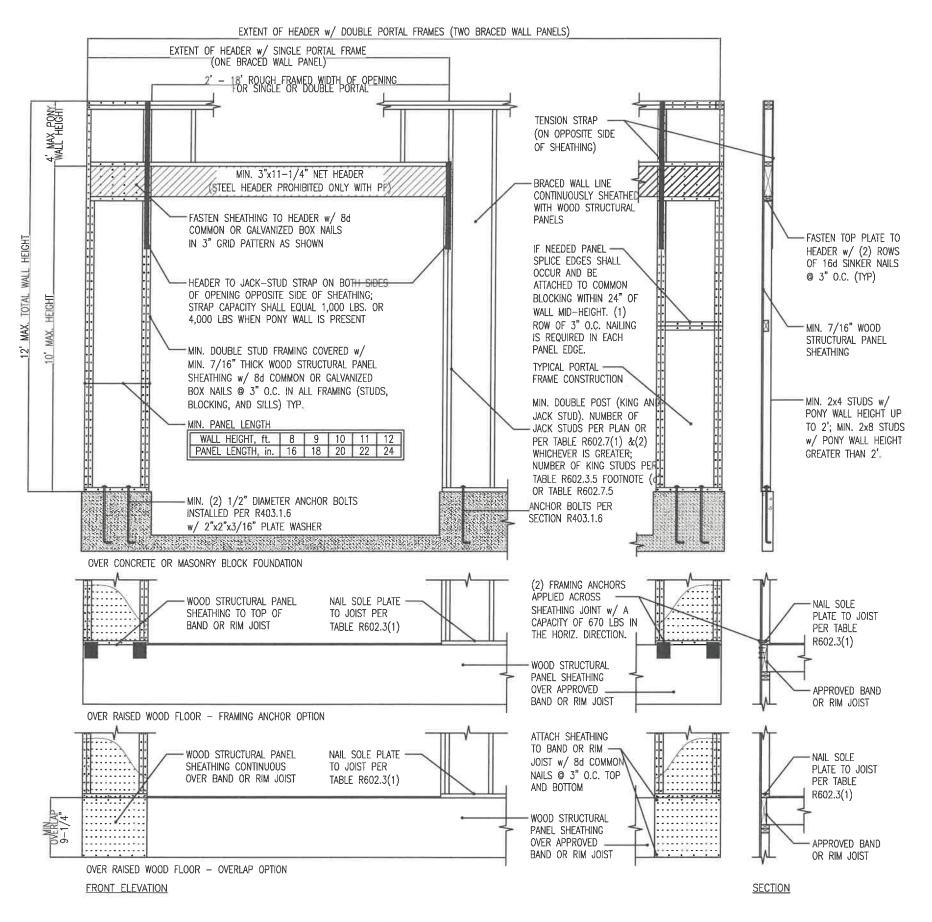
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LGI HOMES

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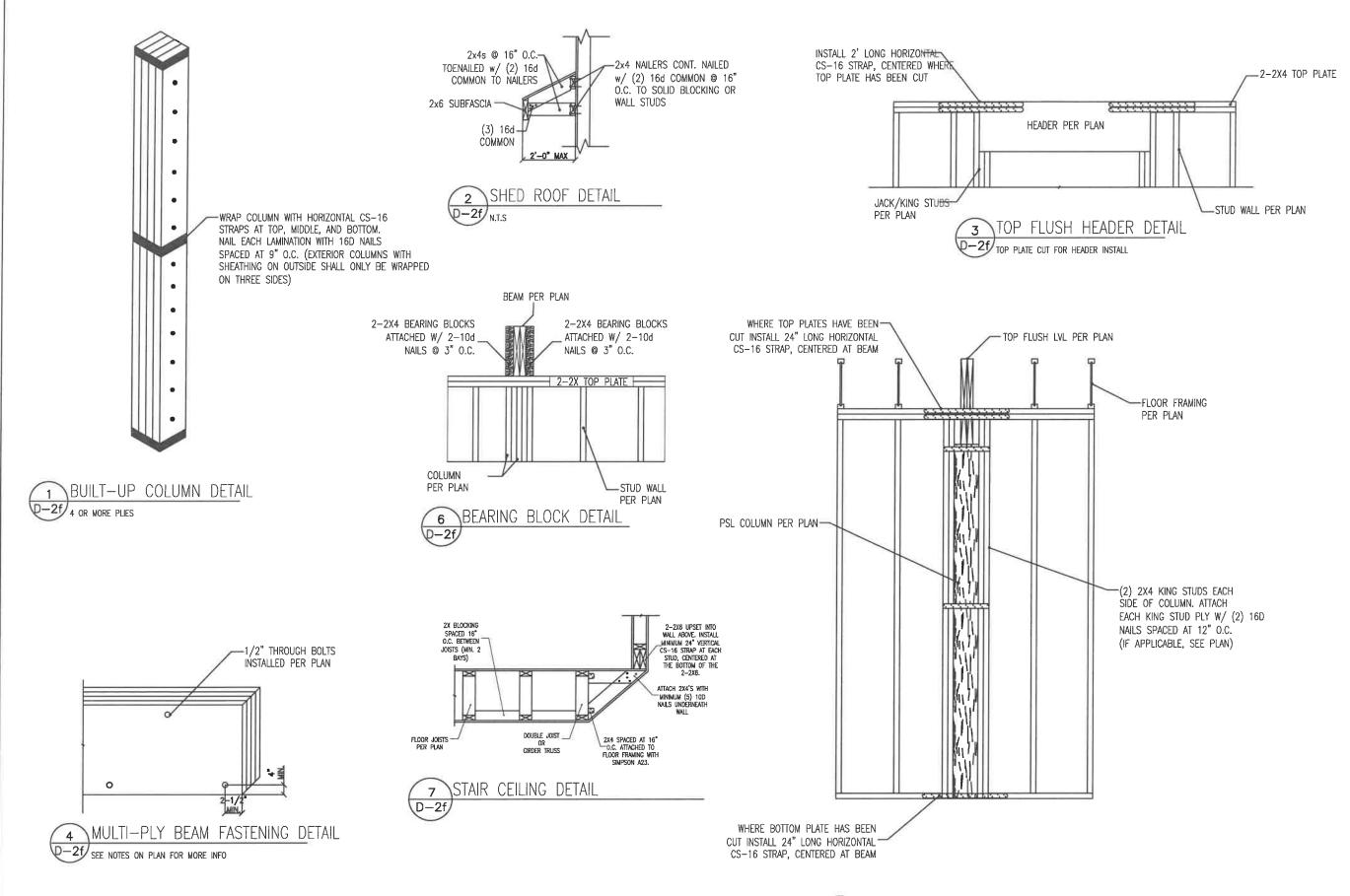
SCALE: DETAILS ARE N.T.S.

(1)

QUEEN CITY

HINTH CAROL

OLIZEN CITY CONSULTING AND DESIGN, PLUC No. P.2426



DIRECT BEARING DETAIL

(2-2f) see notes on plan for more info

DATE: 12/11/2024

CLIENT:

LGI HOMES

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SCALE: DETAILS ARE N.T.S.

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