I. GENERAL

1) DESIGN BUILDING CODE: 2018 NORTH CAROLINA RESIDENTIAL CODE.
2) THE CONTRACTOR SHALL COORDINATE ALL DIMENSIONS AND ELEVATIONS SHOWN ON THESE DRAWINGS WITH THE ARCHITECTURAL AND OTHER TRADES DRAWINGS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGNER OF ANY DISCREPANCIES OR OMISSIONS PRIOR TO CONSTRUCTION.
3) THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY BRACING AND SHORING, AS REQUIRED, TO INSURE VERTICAL AND LATERAL STABILITY OF THE ENTIRE STRUCTURE OR PORTION THEREOF DURING CONSTRUCTION. THE DESIGN PROCEDURES SHALL CONFORM TO ALL GOVERNING CODES AND SAFETY REQUIREMENTS. TEMPORARY BRACING AND SHORING SHALL BE IN CONFORMANCE WITH OSHA REGULATIONS.
4) ALL VERTICAL ELEMENTS (WALLS, COLUMNS) ARE DESIGNED AS LATERALLY BRACED BY THE FLOOR AND ROOF SYSTEMS. CONTRACTOR SHALL ENSURE THAT WALLS ARE ADEQUATELY BRACED DURING CONSTRUCTION.
5) THE PURPOSE OF THIS ENGINEERING PROJECT IS TO MAKE CHANGES TO THE ORIGINAL STRUCTURAL PLANS. THE ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL ITEMS SPECIFICALLY ADDRESSED IN THIS PROJECT, AND STRUCTURAL SPECIFICATIONS PROVIDED ARE DESIGNED TO MEET THE INTENT OF THE NC RESIDENTIAL CODE, 2018 EDITION..
6) ANY SUBCONTRACTOR WHICH AGREES TO CONSTRUCT THE PROJECT PURSUANT TO THESE PLANS FULLY ASSUMES THE RISK OF ALL ERRORS AND OMISSIONS WHICH SHOULD HAVE BEEN DETECTED BY A CAREFUL REVIEW BY A KNOWLEDGEABLE LICENSED CONTRACTOR, THAT WHICH FOR ANY REASON WERE NOT RESOLVED DURING THE BIDDING OR NEGOTIATION PROCESS. FURTHER, THE CONTRACTOR SHALL CAREFULLY REVIEW THESE PLANS AS THE WORK PROGRESSES IN ORDER TO IDENTIFY ANY SIGNIFICANT ERRORS AND OMISSIONS AND TO ASCERTAIN ALL NECESSARY INFORMATION BEFORE PROCEEDING WITH THE AFFECTED WORK, AND ASSUMES THE RISK OF ANY AND ALL LOSS, INCLUDING DELAY, WHICH MAY BE CAUSED OR CONTRIBUTED TO BY THE FAILURE TO ASCERTAIN CORRECT OR NECESSARY INFORMATION IN A TIMELY MANNER.
7) THE PLANS SHALL BE REVIEWED FOR DIMENSIONAL & EXISTING SITE CONFORMANCE WITH THE PLANS BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE ARCHITECT & ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES.
8) THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS IN THE FIELD; AND ALL QUESTIONS AS TO DIMENSIONS AND FIELD CONDITIONS SHALL BE RESOLVED BEFORE THE AFFECTED WORK PROCEEDS. NO DIMENSIONS SHALL BE OBTAINED BY SCALING THESE PLANS.
9) CONTRACTOR SHALL HIRE A PROFESSIONAL ENGINEER TO INSPECT CONSTRUCTION OF PROPOSED FLOOR FRAMING, FOUNDATION, WALL BRACING PANELS AND OTHE PROPOSED STRUCTURAL ELEMENTS TO ENSURE THE RECOMMENDATIONS MADE ON THESE PLANS ARE STRICTLY FOLLOWED.
10) CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR DIMENSIONS AND CONDITIONS OF THE JOB.

II. SITE VERIFICATION WORK

1) BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 1'-0" BELOW EXTERIOR GRADE, UNLESS NOTED OTHERWISE (UNO).
2) VERIFY EXISTING UTILITIES PRIOR TO START OF ANY EXCAVATION WORKS. COORDINATE WITH CIVIL DRAWINGS FOR WORKS RELATED TO UTILITIES. DO NOT PLACE UTILITY LINES THROUGH OR BELOW ANY FOUNDATIONS WITHOUT THE APPROVAL OF THE DESIGNER OF RECORD.
3) ALL FOOTINGS SHALL PROJECT AT LEAST 1 FT INTO UNDISTURBED NATURAL SOIL OR COMPACTED STRUCTURAL FILL. ALL BEARING STRATA SHALL BE ADEQUATELY DRAINED BEFORE FOUNDATION CONCRETE IS POURED. NO EXCAVATION SHALL BE CLOSER THAN AT A SLOPE OF 1.5:1 (ONE AND HALF HORIZONTAL TO ONE VERTICAL). FOOTINGS SHALL NOT BE FOUNDED ON EXISTING FILL, LOOSE OR WET SOIL. STEP FOOTINGS WITH A RATIO OF 2 HORIZONTAL TO 1 VERTICAL.

III. CAST-IN-PLACE CONCRETE (AS APPLICABLE)

1) ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI -301, ACI-318 AND ACI -302.
2) REINFORCING STEEL
   i. DEFORMED BILLET STEEL: ASTM A615 - GRADE 60
   ii. WELDED WIRE FABRIC (WWF): ASTM A185
3) ALL REINFORCING SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH THE "MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES (ACI-315)". DETAILS OF REINFORCEMENT SHALL CONFORM TO ACI-318, ACI-315 AND CRSI STANDARDS.
4) REINFORCEMENT SPLICES SHALL BE LAP SPLICES WITH A MINIMUM LAP OF 48 BAR DIAMETERS UNLESS NOTED OTHERWISE.
5) CAST-IN-PLACE CONCRETE SHALL BE READY-MIX PER ASTM-C94. THE MIX SHALL BE PROPORTIONED WITH:
   i. PORTLAND CEMENT: ASTM C150
   ii. AGGREGATES (3/4 IN MAXIMUM SIZE): ASTM C33
   iii. NO CALCIUM CHLORIDE SHALL BE PERMITTED
   iv. AIR ENTRAINMENT: ASTM C260
   v. WATER REDUCING ADMIXTURE: ASTM C494
   vi. FLY ASH CLASS F (20% MAXIMUM BY WEIGHT): ASTM C618
   v. WATER: CLEAN AND POTABLE
6) RESTRICT THE ADDITION OF WATER AT THE JOB SITE. DO NOT ADD WATER WITHOUT THE APPROVAL OF CONCRETE MIX DESIGNER AND DO NOT EXCEED SLUMP LIMITATIONS. USE COLD WATER FROM THE TRUCK TANK AND REMIX TO ACHIEVE CONSISTENCY. THE REPORTS SHALL INDICATE HOW MUCH WATER WAS ADDED AT THE JOB SITE. CONCRETE SHALL BE PLACED WITHIN 90 MINUTES OF BATCH TIME.
7) PROVIDE CONTINUOUS MOISTURE TO CONCRETE IN ACCORDANCE WITH ACI-301 AND ACI-308. APPLY A 30% SOLIDS LIQUID MEMBRANE FORMING CHEMICAL CURING COMPOUND IN ACCORDANCE WITH ASTM C-309. LIQUID MEMBRANE MUST NOT ADVERSELY AFFECT SURFACE FOR BONDING OF FUTURE FINISHES.
8) CONCRETE COMPRESSIVE STRENGTH AT 28 DAY CURE SHALL BE 3000 PSI.
9) SLUMP: 4" PLUS OR MINUS 1" AT THE POINT OF DISCHARGE INTO THE FORMS.
10) WATER CEMENT RATIO SHALL NOT EXCEED 0.45 FOR ALL AIR ENTRAINED CONCRETE
11) ALL CONCRETE EXPOSED TO WEATHER SHALL HAVE A MINIMUM AIR ENTRAINMENT OF 6% ±1.5 PER ACI-318 CLAUSE 4.4.1.
12) PROVIDE CORNER BARS 3'-0" x 3'-0" AT ALL WALL AND FOOTING INTERSECTIONS TO MATCH CONTINUOUS REINFORCING. ALL LAPS SHALL BE A MINIMUM OF 30 BAR DIAMETER.
13) PROVIDE PROPERLY TIED SPACERS, CHAIRS, BOLSTERS, ETC, AS REQUIRED AND NECESSARY TO ASSEMBLE, PLACE AND SUPPORT ALL REINFORCING IN PLACE. USE WIRE BAR TYPE SUPPORTS COMPLYING WITH CRSI RECOMMENDATIONS. USE PLASTIC TIP LEGS ON ALL EXPOSED SURFACES.
14) SEE STRUCTURAL DRAWINGS FOR REQUIRED CONCRETE FINISHES.

IV. WOOD

1) UNLESS NOTED OTHERWISE, MINIMUM GRADES, FOR DIMENSIONED LUMBER, SHALL BE SP#2 GRADE AS DEFINED BY THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, NFPA. ALL WOOD MEMBERS SHALL BE MANUFACTURED TO COMPLY WITH PS20 OF "AMERICAN SOFTWOOD LUMBER STANDARDS".
   i. MOISTURE CONTENT SHALL BE 19% MAXIMUM.
   II. LUMBER ON SITE SHALL BE PROTECTED FROM WEATHER AND STORED ABOVE GROUND WITH SUPPORTS. DRY-IN EACH BUILDING FRAME IMMEDIATELY ONCE FRAMING IS COMPLETE, AND COMMENCE BRICK INSTALLATION.
2) ALL LUMBER SHALL CONFORM TO NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION WITH 2015 SUPPLEME
3) LUMBER SHALL BE SOUND, SEASONED, AND FREE FROM WARP.
4) ALL STUDS SHALL BE INSTALLED IN ACCORDANCE WITH AF & PA (AMERICAN FOREST & PAPER ASSOCIATION) REQUIREMENTS. MEMBERS ARE NOT TO BE DRILLED IN EXCESS OF NDS OR LOCAL CODE REQUIREMENTS, WHICHEVER IS MORE STRINGENT. ALL POSTS AND STUDS SHALL STACK CONTINUOUSLY TO SOLID BEARING ON FOUNDATION WALLS OR BEAMS; PROVIDE SOLID BLOCKING AND/OR CRIPPLES AS REQUIRED BETWEEN FLOORS.
5) STUD BEARING WALLS AND EXTERIOR STUD WALLS SHALL BE CONTINUOUSLY BRIDGED WITH WOOD BLOCKING AT MID-SPAN VERTICAL SPACING BETWEEN FLOOR (AND ROOF) LEVELS. STUDS AND POSTS SHALL BE ONE-PIECE-CONTINUOUS BETWEEN FLOOR LEVELS AND BETWEEN FLOOR LEVEL AND ROOF DIAPHRAGMS. ALL DOUBLE STUDS SHALL BE NAILED TO EACH OTHER AT 8" MAXIMUM SPACING FULL- HEIGHT.
6) PLYWOOD SHALL BE IDENTIFIED WITH THE DFPA GRADE-TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION, AND SHALL BE INSTALLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
7) WALL SHEATHING: ALL EXTERIOR WALL SHEATHING SHALL BE $\frac{7}{16}$" PLYWOOD UNLESS OTHERWISE NOTED. ATTACH WALL SHEATHING TO FRAMING WITH 10D NAILS @ 4" O.C. AT PANEL EDGES AND 12" O.C. AT INTERIOR MEMBERS. PROVIDE SOLID BLOCKING AT PANEL EDGES (48" O.C.).
8) WOOD POSTS SHALL BE FRAMED TO TRUE END BEARINGS, AND SHALL BE POSITIVELY ANCHORED TO FOUNDATION WITH APPROVED POST BASES. SUPPORT POST SECURELY IN POSITION AND PROTECT BASE FROM DETERIORATION. POSTS OF TREATED WOOD MAY BE PLACED DIRECTLY ON CONCRETE OR MASONRY. USE TREATED WOOD FOR ALL FLOOR JOISTS AND BEAMS, WHICH ARE EXPOSED, OR WITHIN 18" OF THE GROUND, OR IN PERMANENT CONTACT WITH EARTH.
9) ROOF SHEATHING SHALL BE $\frac{7}{16}$" PLYWOOD OR ORIENTED STRAND BOARD (OSB), UNLESS OTHERWISE NOTED. ATTACH ROOF SHEATHING TO FRAMING WITH 8D NAILS @ 4" O.C. AT PANEL EDGES AND 12" O.C. AT INTERIOR MEMBERS. PROVIDE SOLID BLOCKING AT PANEL EDGES (48" O.C.).
10) SUB-FLOOR SHALL CONSIST OF ¾" PLYWOOD UNLESS OTHERWISE NOTED. FASTEN WITH 8D NAILS AT 4" O.C. AT PANEL EDGES, AND AT 12" O.C. AT INTERIOR SUPPORTS.
11) PROVIDE COMPATIBLE METAL FASTENERS AND METAL CONNECTORS FOR ACQ, CBA OR SBX TREATED WOOD MEMBERS. THE FOLLOWING FASTENER OR CONNECTOR PRODUCTS ARE RECOMMENDED:
   i. STAINLESS STEEL FASTENERS
   ii. Zmax (G185 HDG PER ASTM 653)
   iii. BATCH/POST HOT-DIPPED GALVANIZED (CONNECTORS PER ASTM A123 AND FASTENERS PER ASTM A153).
   CONTRACTOR SHALL COORDINATE WITH TREATED LUMBER MANUFACTURER AND FASTENER / CONNECTOR MANUFACTURER FOR COMPATIBILITY OF PRODUCT USED.
12) BEAR BEAMS AND GIRDERS AT LEAST 4" ON MASONRY OR CONCRETE. FLOOR JOISTS, CEILING JOISTS AND ROOF RAFTERS SHALL HAVE 4" MINIMUM BEARING ON WOOD OR WOOD PLATES ON METAL OR MASONRY.
13) PROVIDE 2" NOMINAL THICKNESS FULL DEPTH SOLID BLOCKING FOR JOISTS AND RAFTERS AT ENDS AND AT SUPPORTS. OMIT SOLID BLOCKING WHEN JOISTS ARE NAILED TO A CONTINUOUS HEADER. LAP JOISTS FRAMING FROM OPPOSITE SIDES OF A BEAM, GIRDER OR PARTITION AT LEAST 6". SECURE JOISTS FRAMED END TO END WITH METAL STRAPS. USE APPROVED FRAMING ANCHORS TO SUPPORT JOISTS FRAMING INTO THE SIDES OF WOOD OR STEEL BEAMS.
14) PROVIDE DOUBLED (OR EQUIVALENT CROSS- SECTION) TRIMMER AND HEADER JOISTS AROUND OPENINGS UNLESS NOTED OTHERWISE. SUPPORT HEADER JOISTS FROM FRAMING ANCHORS OR JOIST HANGERS UNLESS BEARING ON A BEAM, PARTITION OR A WALL.
15) JOISTS CARRYING PARTITIONS PERPENDICULAR TO JOISTS SHALL NOT BE OFFSET FROM SUPPORTING GIRDERS, WALLS OR PARTITIONS MORE THAN THE JOIST DEPTH. JOISTS CARRYING PARTITIONS PARALLEL TO JOISTS SHALL BE DOUBLED.
16) FLOOR DECKING SHALL BE APA RATED FLOOR SHEATHING, GLUED AND NAILED PER APA RECOMMENDATIONS FOR THE STURDI-FLOOR SYSTEM.
17) ALL WOOD EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND OR MASONRY SHOULD BE PRESSURE TREATED.
18) ALL FASTENERS EXPOSED TO WEATHER OR IN CONTACT WITH TREATED LUMBER SHOULD BE CORROSION RESISTANT.
19) ALL HANGERS AND OTHER MECHANICAL FASTENERS EXPOSED TO WEATHER OR IN CONTACT WITH TREATED LUMBER SHOULD BE HOT DIP GALVANIZED.
20) ALL WOOD STRUCTURAL PANEL (WSP) SHEATHING SHALL BE INSTALLED IN A STAGGERED OR RUNNING BOND PATTERN, UNLESS NOTED DETAILS.
21) ALL WOOD FRAMING MEMBERS INDICATED ARE NOMINAL SIZES. PROVIDE ACTUAL DRESSED SIZES, KILN-DRIED, WITH MAXIMUM IN-PLACE MOISTURE CONTENT OF 19%.
22) STUD WALLS ARE 2x4 @16" O.C. W/HORIZONTAL BLOCKING @10' O.C. MAX. UNO.
23) ALL BUILD UP BEAMS OR STRUCTURAL HEADERS OF DIMENSIONS LUMBER SHOULD BE FASTENED TOGETHER USING TWO ROWS OF 0.22"x... SDW TIMBER SCREWS, AT 18" O.C., STAGGERED AND ALTERNATING DRIVING SCREWS FROM OPPOSITE FACES.
24) OPPOSITE RAFTERS SHOULD BE CONNECTED USING COLLAR TIES. COLLAR TIES SHALL BE NOT LESS THAN 1 INCH BE 4 INCHES NOMINAL, SPACED NOT MORE THAN 4 FEET O.C., LOCATED IN THE UPPER THIRD OF THE ATTIC SPACE, AND FASTENED TO THE RAFTER USING (3) 10D COMMON NAILS.
25) MINIMUM NUMBERS OF JACK STUDS SHOULD BE THREE, UNLESS NOTED OTHERWISE.
26) ALL LVLS SHOULD HAVE A MINIMUM MODULUS OF ELASTICITY (E) OF 2.1X106PSI, A MINIMUM BENDING STRESS OF 3100PSI, AND A MINIMUM SHEAR STRESS OF 285 PSI
27) JACK AND KING STUDS SHOULD BE FASTENED TOGETHER USING 0.22” X ... SDWS TIMBER, OR EQUAL, SCREWS AT 18” O.C. ON THE CENTERLINE.
28) BUILT-UP BEAMS OF LVLS SHOULD BE FASTENED TOGETHER USING TWO ROWS OF ¼” X ... SIMPSON STRONG-TIE SDS HEAVY-DUTY CONNECTOR SCREWS, OR EQUAL, AT 18” O.C., STAGGERED, AND ALTERNATING DRIVING SCREWS FROM OPPOSITE FACES.

V. REINFORCED MASONRY (CMU) (AS APPLICABLE)

1. ALL MASONRY SHALL BE REINFORCED CONCRETE MASONRY UNIT IN ACCORDANCE WITH THE LATEST EDDITION OF ACI 530/ASCE 5/TMS 402.
2. MINIMUM MASONRY BLOCK (ASTM C90) STRENGTH SHALL (F'M) BE 2000 PSI.
3. TYP.E "S" MORTAR (ASTM C270) SHALL BE USED USING 3/8" FULL BEDDING REINFORCED W/ 9 GAGE GALVANIZED LADDER WIRE EVERY 2ND ROW.
4. FILLED CELLS SHALL BE REINFORCED WITH #4 REBARS @ 48" O.C. (UNLESS OTHERWISE IS SPECIFIED ON THE PLANS).
5. GROUT SHALL BE PEA ROCK PUMP MIX (ASTM C476) WITH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI (28 DAY) (ASTM C1019). TARGETED SLUMP SHALL BE 8"-11".

WARNING: THE STRUCTURAL INTEGRITY OF THE BUILDING SHOWN IN THESE PLANS DEPENDS ON COMPLETION ACCORDING TO THE PLANS AND SPECIFICATIONS. STRUCTURAL MEMBERS ARE NOT SELF-BRACING UNTIL PERMANENTLY AFFIXED TO THE STRUCTURE. THE DESIGNER ASSUME NO LIABILITY FOR THE STRUCTURE DURING CONSTRUCTION.

Vi. STRUCTURAL STEEL (AS APPLICABLE)

1) STRUCTURAL STEEL SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", LATEST EDITION, EXCEPT CHAPTER 4.2.1, CODE OF STANDARD PRACTICE.
2) ALL STRUCTURAL STEEL SHALL BE
   i. W SHAPES: ASTM 992 (WHERE AVAILABLE) OR ASTM A572 (GRADE 50)
   ii. PLATES, CHANNELS AND ANGLES: ASTM A572 (GRADE 50) OR A36
   iii. STRUCTURAL TUBES (HSS): ASTM A500 (GRADE B)
   iv. PIPE SECTIONS: ASTM A53 (STANDARD PIPE, UNO)
   v. BOLTS: ASTM A325 OR A490 BOLTS.
   vi. ANCHOR BOLTS: ASTM F1554 GRADE 55
3) NON-SHRINK GROUT SHALL BE NONMETALLIC SHRINKAGE-RESISTANT GROUT, PREMIXED, NONMETALLIC, NON-CORROSIVE, NON-STAINING PRODUCT CONTAINING SELECTED SILICA SANDS, PORTLAND CEMENT, SHRINKAGE COMPENSATING AGENTS, PLASTICIZING AND WATER-REDUCING AGENTS, COMPLYING WITH CE-CRD-C621.
4) WELDED CONNECTIONS SHALL CONFORM TO THE LATEST REVISED CODE OF THE AMERICAN WELDING SOCIETY, AWS D1.1. ALL WELDING SHALL BE PERFORMED USING E70XX, LOW HYDROGEN ELECTRODES, UNLESS NOTED OTHERWISE. ELECTRODES ARE TO BE PROTECTED FROM MOISTURE.
5) BOLTS AND BOLTED CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR STRUCTURAL JOINTS" AS APPROVED BY THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS. USE BEARING TYPE BOLTS WITH THREAD ALLOWED ACROSS THE SHEAR PLANE. SIZE AND USE OF HOLES: SEE AISC TABLE J3.1 U.N.O.
6) ALL MISCELLANEOUS STEEL CONNECTIONS SHALL BE WELDED ALL AROUND WITH 3/16" FILLET WELD UNLESS OTHERWISE NOTED, EXCEPT FOR SLOTTED CONNECTIONS.
7) ALL STEEL MEMBERS EXPOSED TO WEATHER OR LOCATED WITHIN 4" OF THE OUTSIDE FACE OF EXTERIOR WALL SHALL BE PAINTED WITH RUST INHIBITED PAINT IN THEIR ENTIRETY.

NO FIELD WELDING OF GALVANIZED MEMBERS IS PERMITTED.

NOTES:

a. REFER TO IRC TABLE R301.5 FOR MORE INFORMATION.
b. SNOW LOAD SPECIFIED IS GROUND SNOW LOAD ONLY.
c. A SINGLE CONCENTRATED LOAD APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP.
d. MECHANICAL EQUIPMENT LOADS IN EXCESS OF 200 LBS SHALL BE NOTIFIED TO STRUCTURAL ENGINEER.
e. PRE-FABRICATED STRUCTURAL COMPONENT SHALL COMPLY WITH DESIGN LOADS FROM APPLICABLE CODES/STANDARDS IN ADDITION TO LOADS SPECIFIED IN THESE NOTES.
f. WIND PRESSURE SPECIFIED IS FOR MAIN WIND FORCE RESISTING SYSTEM ONLY. WIND PRESSURE & LOADS FOR STRUCTURAL COMPONENTS AND CLADDING SHALL BE DETERMINED BY RESPECTIVE REGISTERED DESIGN PROFESSIONAL PER APPLICABLE STANDARDS/CODES.
g. THESE SOIL PROPERTIES SHALL BE FIELD VERIFIED BY A LICENSED GEOTECHNICAL ENGINEER, AS NECESSARY.

FASTENERS:

NO.	DESCRIPTION OF BUILDING ELEMENT	NUMBER AND TYPE OF FASTNER	SPACING AND LOCATION
1	BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	(3) 8d COMMON (2 1/2"x0.131")	TOE NAIL
2	CEILING JOISTS TO PLATE	(3) 8d COMMON (2 1/2"x0.131")	PER JOIST, TOE NAIL
3	CEILING JOISTS NOT ATTACHED TO PARALLEL RAFTER. LAPS OVER PARTITIONS	4-10d BOX (3"x0.128")	FACE NAIL
4	CEILING JOISTS ATTACHED TO PARALLEL RAFTER (HEEL JOINT) [SEE SECTIONS R802.3.1 AND R802.3.2 AND TABLE R802.5.1(9)]	TABLE R802.5.1(9)	FACE NAIL
5	COLLAR TIE RAFTER, FACE NAIL OR 1 1/4" x 20 GAGE RIDGE STRAP TO RAFTER	(3) 10d COMMON (3"x0.148")	FACE NAIL EACH RAFER
6	RAFTER OR ROOF TRUSS TO PLATE	(3) 10d COMMON NAILS (3 1/2"x0.148")	2 TOE NAILS ON ONE SIDE AND 1 TOE NAIL ON OPPOSITE SIDE OF EACH RAFTER OR TRUSS
7	ROOF RAFTERS TO RIDGE, VALLEY OR HIP RAFTER OR ROOF RAFTER TO MIN. 2" RIDGE BEAM	(3) 10d COMMON (3 1/2"x0.148")	TOE NAIL
		(2) 16d COMMON (3 1/2"x0.162")	END NAIL
8	STUD TO STUD (NOT BRACED WALL PANEL)	10d BOX (3"x0.128")	16" OC FACE NAIL
9	STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL PANEL)	16d COMMON (3 1/2"x0.135")	12" OC FACE NAIL
10	BUILT-UP HEADER. (2" TO 2" HEADER W/ 1/2" SPACER)	16d COMMON (3 1/2"x0.162")	16" OC EACH EDGE FACE NAIL
11	CONTINUOUS HEADER TO STUD (TOE NAIL)	(4) 8d COMMON (2 1/2"x0.131")	TOE NAIL
12	TOP PLATE TO TOP PLATE	16d COMMON (3"x0.162")	16" OC FACE NAIL
13	BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANEL)	16d COMMON (3 1/2"x0.162")	16" OC FACE NAIL
14	BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (AT BRACED WALL PANEL)	2-16d COMMON (3 1/2"x0.162")	2 EACH 16" OC FACE NAIL
15	TOP OR BOTTOM PLATE TO STUD	(4) 8d BOX (2 1/2"x0.113") OR (3) 16d (3 1/2"x0.135")	TOE NAIL
		(2) 16d COMMON (3 1/2"x0.162")	END NAIL
16	TOP PLATE. LAPS AT CORNERS AND INTERSECTIONS (FACE NAIL)	(3) 10d BOX (3"x0.128")	FACE NAIL
17	1" BRACE TO EACH STUD AND PLATE	(3) 8d BOX (2 1/2"x0.113") OR (2) STAPLES 1 3/4"	FACE NAIL
18	1" x 6" SHEATHING TO EACH BEARING	(2) 8d (2 1/2"x0.113") OR (2) STAPLES 1 3/4"	FACE NAIL
19	1" x 8" SHEATHING TO EACH BEARING	(3) 8d BOX (2 1/2"x0.113") OR (3) STAPLES, 1" CROWN, 16 GA, 1 3/4" LONG	FACE NAIL
20	WIDER THAN 1" x 8" SHEATHING TO EACH BEARING	(4) 8d BOX (2 1/2"x0.113") OR (3) STAPLES, 1" CROWN, 16 GA, 1 3/4" LONG	FACE NAIL
21	JOIST TO SILL OR GIRDER	(4) 8d BOX (2 1/2"x0.113")	TOE NAIL
22	RIM JOIST, BAND JOIST OR BLOCKING TO SILL OR TOP PLATE (ROOF APPLICATION ALSO)	8d COMMON (2 1/2"x0.131")	6" OC TOE NAIL
23	1" x 6" SUBFLOOR OR LESS TO EACH JOIST	(3) 8d BOX (2 1/2"x0.113") OR (2) STAPLES, 1" CROWN, 16 GA, 1 3/4" LONG	FACE NAIL
24	2" SUBFLOOR TO JOIST OR GIRDER	(3) 16d BOX (3 1/2"x0.135")	BLIND AND FACE NAIL
25	2" PLANKS (PLANK & BEAM - FLOOR & ROOF)	(3) 16d BOX (3 1/2"x0.135")	AT EACH BEARING, FACE NAIL
26	B AND OR RIM JOIST TO JOIST	(3) 16d COMMON (3 1/2"x0.162")	END NAIL
27	BUILT-UP GIRDERS & BEAMS. 2" LUMBER LAYERS	10d BOX (3"x0.128")	24" OC FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES
28	LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	(4) 16d BOX (3 1/2"x0.135")	AT EACH JOIST OR RAFTER, FACE NAIL
29	BRIDGING TO JOIST	(2) 10d (3 1/2"x0.128")	EACH END, TOE NAIL

DEFLECTION CRITERIA:

DESCRIPTION	TOTAL LOAD	LIVE LOAD
ROOF TRUSSES/RAFTERS/CEILING JOISTS	L/240	L/360 OR 1/2" MAX
FLOOR JOISTS/FLOOR TRUSSES	L/240	L/600 OR 1/4" MAX
MEMBERS SUPPORTING BRICK/HORIZONTAL MASONRY MEMBERS	L/600 OR 0.3" MAX	
JOISTS/TRUSSES SUPPORTING CERAMIC TILE	L/720	

DESIGN LOADS:

DESCRIPTION	DEAD LOAD	LIVE LOAD	SNOW LOAD (b)
ROOF	15 PSF	20 PSF	15 PSF
FLOOR	15 PSF	40 PSF	-
ATTIC W/O STORAGE	10 PSF	10 PSF	-
ATTIC W/ LIMIT STORAGE	10 PSF	20 PSF	-
HABITABLE ATTICS & ATTICS W/ FIXED STAIR	10 PSF	30 PSF	-
SLEEPING ROOMS	15 PSF	30 PSF	-
BALCONIES & DECKS	10 PSF	40 PSF	-
STAIRS	10 PSF	40 PSF	-
GUARD RAILS & HAND RAILS	-	200 LBS (c)	-

WIND LOADS:
- WIND SPEED: 116 MPH
- WIND EXPOSURE CATEGORY: B

FOUNDATION DESIGN LOADS (g):
- SOIL BEARING CAPACITY: 1500 PSF (ASSUMED DEFAULT)
- LATERAL EARTH PRESSURE: 60 PSF/FT (AT REST)

EARTHQUAKE LOADS:
- SEISMIC DESIGN CATEGORY: B
- SITE CLASS: D (ASSUMED DEFAULT)

FASTENERS:

NO.	BUILDING MATERIALS	NUMBERS AND TYPE OF FASTNER	SPACING OF FASTNERS	
			EDGES	INTERMEDIATE SUPPORTS
WOOD STRUCTURAL PANELS, SUB-FLOOR, ROOF AND INTERIOR WALL SHEATHING TO FRAMING & PARTICLE BOARD WALL SHEATHING TO FRAMING				
30	3/8" - 1/2"	6d (2"x0.113") COMM0N NAIL (SUBFLOOR, WALL) (J)	6"	12" (g)
		8d (2 1/2"x0.131") COMM0N NAIL (ROOF)		
31	5/16" - 1/2"	6d (2"x0.113") COMM0N NAIL (SUBFLOOR, WALL)	6"	12" (g)
		8d (2 1/2"x0.131") COMM0N NAIL (ROOF)(F)		
32	19/32" - 1"	8d (2 1/2"x0.131") COMM0N NAIL	6"	12" (g)
33	1 1/8" - 1 1/4"	10d (3"x0.148") COMMON NAIL OR 8d (2 1/2"x0.131") DEFORMED NAIL	6"	12"
OTHER WALL SHEATHING (h)				
34	1/2" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	1/2" GALVANIZED ROOFING NAIL. 7/16" CROWN OR 16 GAGE STAPLE. 1" CROWN & 1 1/4" LONG	3"	6"
35	25/32" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	1 3/4" GALVANIZED ROOFING NAIL. 7/16" CROWN OR 16 GAGE STAPLE. 1" CROWN & 1 1/2" LONG	3"	6"
36	1/2" GYPSUM SHEATHING (d)	1 1/2" GALVANIZED ROOFING NAIL OR 1 1/2" LONG GALVANIZED STAPLES, OR 1 1/4" SCREWS TYPE W OR S	7"	7"
37	1/2" GYPSUM SHEATHING (d)	1 3/4" GALVANIZED ROOFING NAIL OR 1 5/8" LONG GALVANIZED STAPLES, OR 1 5/8" SCREWS TYPE W OR S	7"	7"
WOOD STRUCTURAL PANELS, COMBINATION OF SUB-FLOOR UNDERLAYMENT TO FRAMING				
38	3/4" OR LESS	8d (2 1/2"x0.131") COMMON NAIL OR 6d (2"x0.120") DEFORMED NAIL	6"	12"
39	7/8" - 1"	8d (2 1/2"x0.131") COMMON NAIL OR 8d (2"x0.120") DEFORMED NAIL	6"	12"
40	1 1/8" - 1 1/4"	10d (3"x0.148") COMMON NAIL OR 8d (2 1/2"x0.120") DEFORMED NAIL	6"	12"

FASTNER SCHEDULE PER INTERNATIONAL RESIDENTIAL CODE

ABBREVIATIONS:

ARCH=	ARCHITECTURAL	B.E.W=
	BOTTOM EACH WAY	
BM=	BEAM	
BRG=	BEARING	COL=
	COLUMN	CONC=
	CONCRETE	
CONT=	CONTINUOUS	DBL=
	DOUBLE	EA=
	EACH	EE=
	EACH END	EXP=
	EXPANSION	EXT=
	EXTERIOR	FDN=
	FOUNDATION	FTG=
	FOOTING	GT=
	GIRDER TRUSS	
GDR=	HEADER	
INT=	INTERIOR	
INFO=	INFORMATION	J=
	JACK STUD	K=
	KING STUD	
MANUF=	MANUFACTURER	MIN=
	MINIMUM	MAX=
	MAXIMUM	
NTS=	NOT TO SCALE	OC=
	ON CENTER	PLYWD=
	PLYWOOD	
PT=	PRESSURE TREATED	
PA=	POST FROM ABOVE	
REQD=	REQUIRED	
SPF=	SPRUCE PINE FIR	
SP=	SOUTHERN PINE	
STL=	STEEL	
TYP=	TYPICAL	
W/=	WITH	
WD=	WOOD	
WWF=	WELDED WIRE FABRIC	
UNO=	UNLESS NOTED OTHERWISE	

CONCRETE CLEAR COVERS:

DESCRIPTION			MIN. COVER (IN.)
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH			3"
CONCRETE EXPOSED TO EARTH OR WEATHER	#6 THROUGH #18 BARS		2"
	#5 BAR, W31 OR D31 WIRE AND SMALLER		1 1/2"
CONCRETE NOT EXPOSED TO EARTH OR WEATHER	SLAB, WALLS, JOISTS		3/4"
	BEAMS, COLUMNS (PRIMARY REINF., TIES, STIRRUPS, SPIRALS		1 1/2"
	SHELLS, FOLDED PLATES	#6 BARS AND LARGER	3/4"
		#5 BAR W31 OR D31 WIRE AND SMALLER	1/2"

SET PRINT SIZE TO SCALE: 11x17 LANDSCAPE

REVISIONS

NO.	DATE	DESCRIPTIONS
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CODES, NOTES

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EEI EQUAGEN
ENGINEERING & INSPECTIONS
FIRM # P-1869
8045 ARCO CORPORATE DR.,
RALEIGH, NC 27617
PHONE:919.267.3004
EMAIL:INFO@EQUAGEN.COM

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DATE:	07/14/2022
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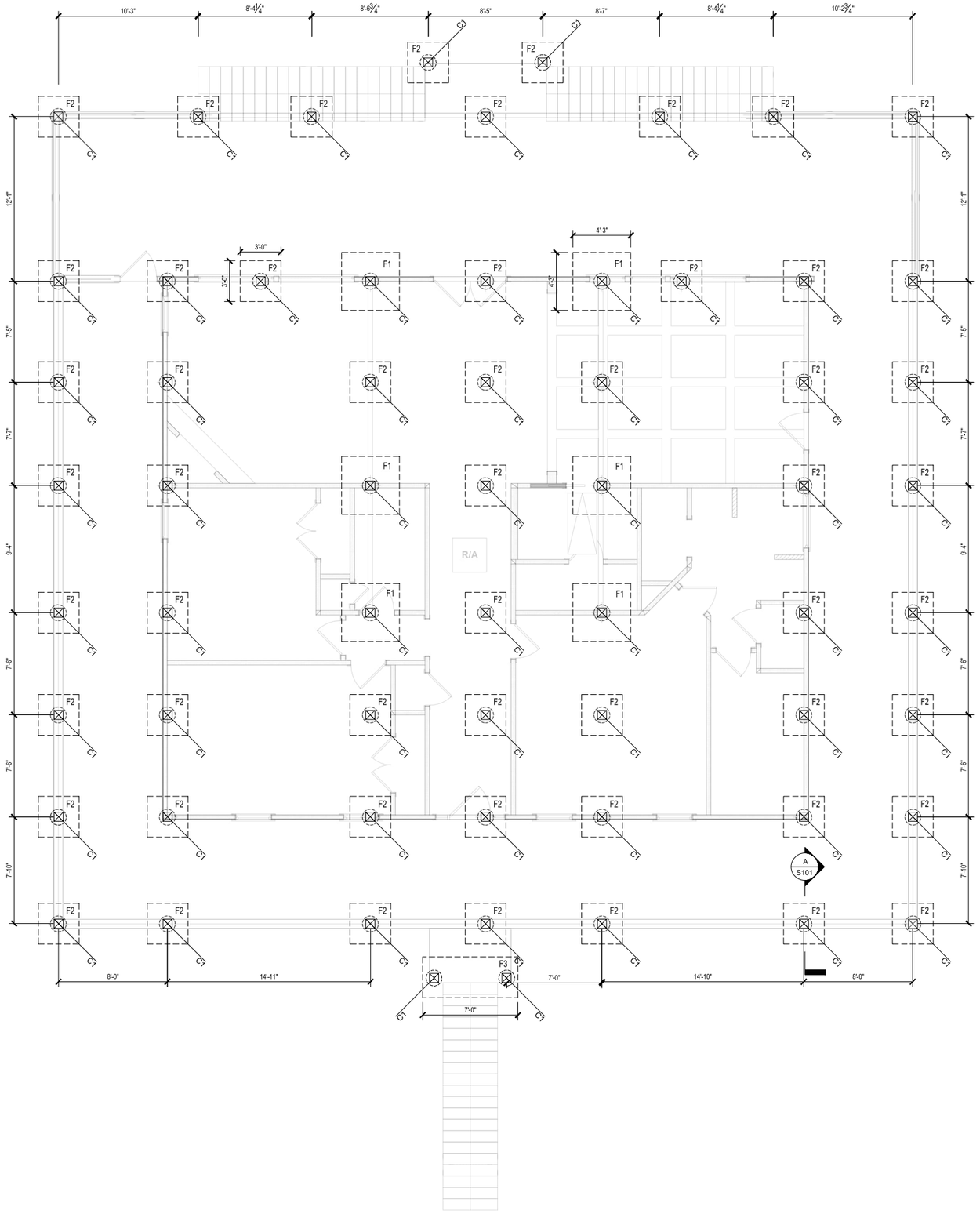
T1.0	22-3009



1 FOUNDATION PLAN

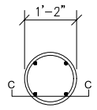
SCALE :1/4" = 1'-0"

NOTES:

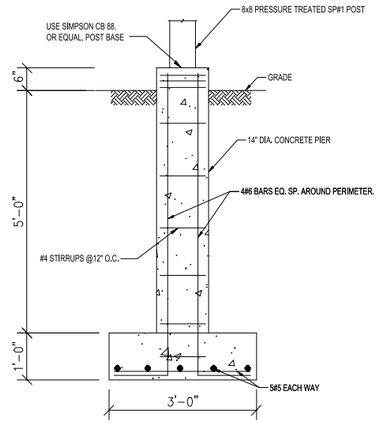
1. USE SIMPSON CB88, OR EQUAL, POST BASE FOR ALL POSTS.
2. THE BOTTOM OF ALL FOOTINGS ARE 6'-0" BELOW GRADE.

SCHEDULE OF POSTS		
MARK	SIZE	REMARK
C1	8 x 8	PRESSURE TREATED, SP#1 OR BETTER

FOOTING SCHEDULE			
TYPE	DIMENSION	DEPTH	REINF. (BOT) EW
F1	4'-3"X 4'-3"	1'-0"	7 #5 EACH WAY
F2	3'-0"X 3'-0"	1'-0"	5 #5 EACH WAY
F3	3'-0"X 7'-0"	1'-0"	4 #5 SHORT WAY, 10 #5 LONG WAY



PLAN



SECTION A - A

SCALE: NTS

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FOUNDATION PLAN

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ENGINEERING & INSPECTIONS
FIRM LIC. # 1869
8045 ARCO CORPORATE DR.,
RALEIGH, NC 27617
PHONE:919.267.3004
EMAIL:INFO@EQUAGEN.COM

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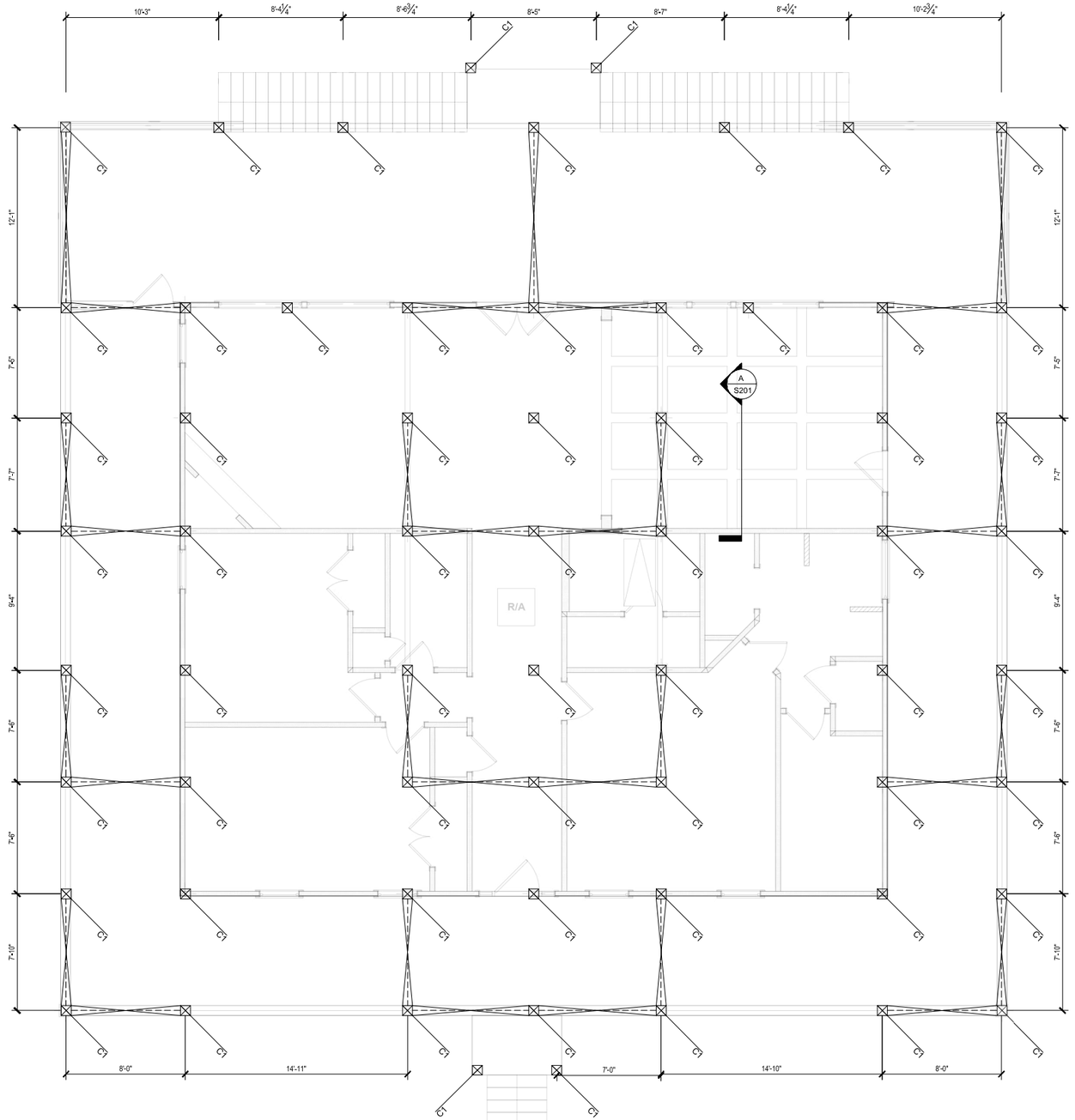
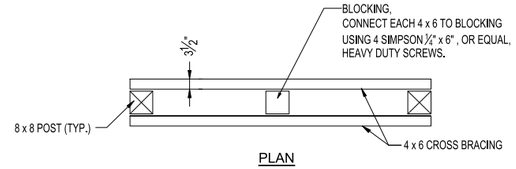
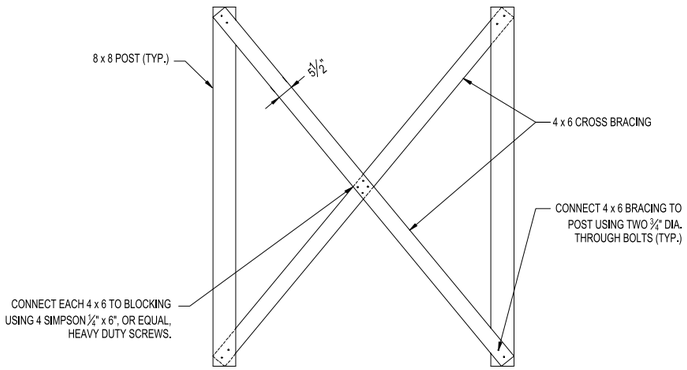


1 BRACING OF POSTS UNDERNEATH FIRST FLOOR
SCALE : 1/4" = 1'-0"



PLAN



ELEVATION (SECTION A - A)
SCALE: NTS

CROSS BRACING DETAILS

NO.	DATE	REVISIONS
0	07/14/2022	FOR SUBMITTALS

BRACING PLAN

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FIRM LIC. # 1869
8045 ARCO CORPORATE DR.,
RALEIGH, NC 27617
PHONE:919.267.3004
EMAIL:INFO@EQUAGEN.COM

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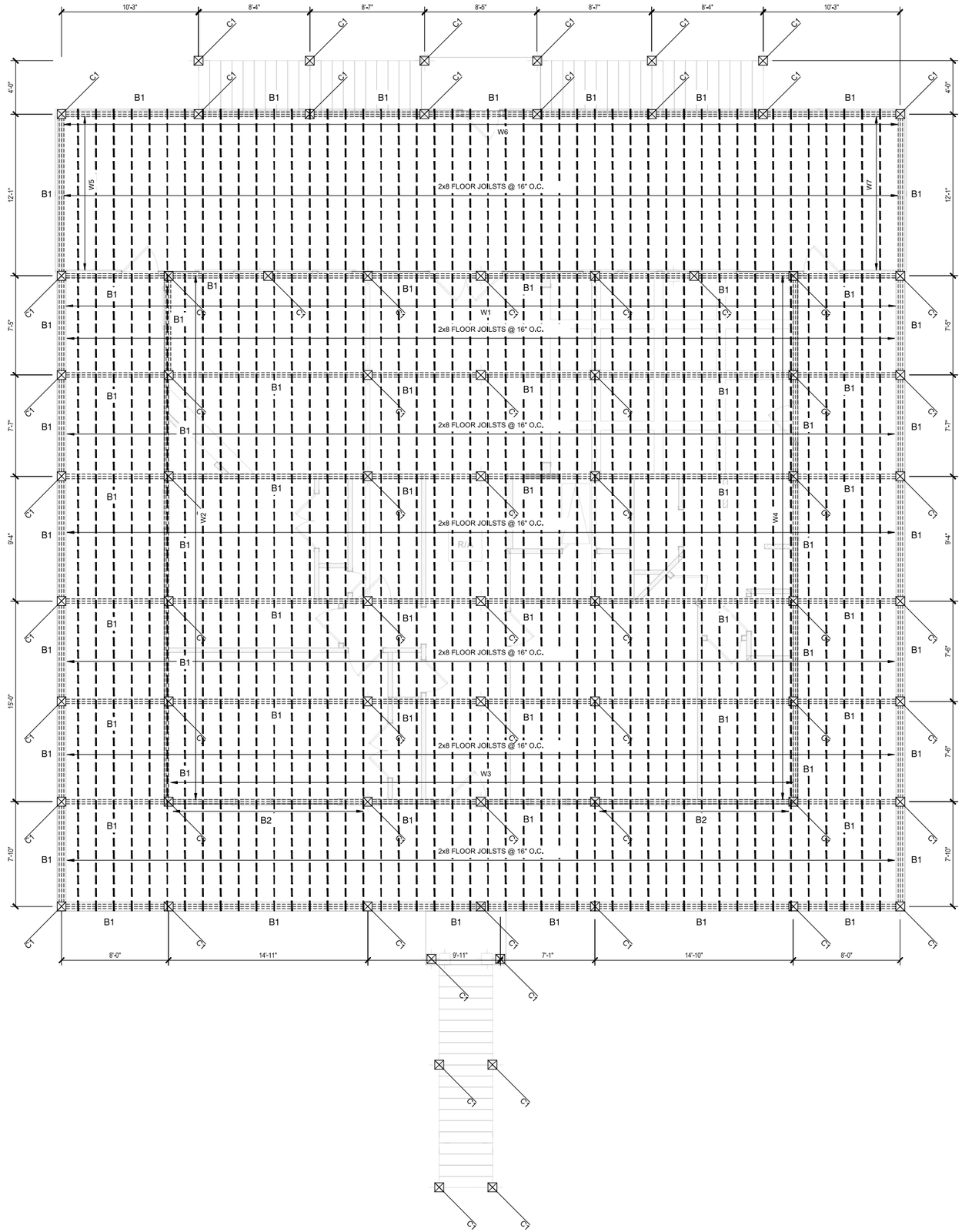

1 FIRST FLOOR FRAMING PLAN

SCALE :1/4" = 1'-0"

NOTES:

1. CONNECT 2x8 JOISTS TO BEAMS USING SIMPSON IUS28, OR EQUAL, HANGERS.
2. ALL POSTS BELOW SHALL BE PRESSURE TREATED SP#1.
3. USE SIMPSON POST CAPS, OR APPROVED EQUAL, FOR DIFFERENT CONFIGURATION AS FOLLOWS:

CCQ 48 SDS 2.5	B1 — C1 — B1
CCQ 7,1 -6 SDS 2.5 (USE SHIM AS NEEDED)	B1 — C1 — B2
CCTQ -8 SDS 2.5 (NEED TO ORDER)	B1 — C1 — B1
CCTQ -5DS 2.5 (NEED TO ORDER)	B1 — B2 — C1 — B1
ECC LRQ - SDS 2.5 (NEED TO ORDER)	B1 — B1 — C1
CCCQ - SDS 2.5 (NEED TO ORDER)	B1 — B1

4. ON ALL WALLS W1 TO W7, USE SIMPSON MSTA18, OR EQUAL, STRAP TIE TO TIE THE BOTTOM OF EACH STUD TO BEAM BELOW.

SCHEDULE OF BEAMS AND POST		
MARK	SIZE	REMARK
B1	(2) 1 ¾" x 11 ⅞"	FLUSH BEAM (SEE WOOD NOTES FOR ATTACHMENT)
B2	(4) 1 ¾" x 11 ⅞"	FLUSH BEAM (SEE WOOD NOTES FOR ATTACHMENT)
C1	8 x 8	PRESSURE TREATED SP#1 OR BETTER POST BELOW.

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1ST FLOOR FRAMING PLAN

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ENGINEERING & INSPECTIONS
FIRM LIC. # 1869
8045 ARCO CORPORATE DR.,
RALEIGH, NC 27617
PHONE:919.267.3004
EMAIL:INFO@EQUAGEN.COM

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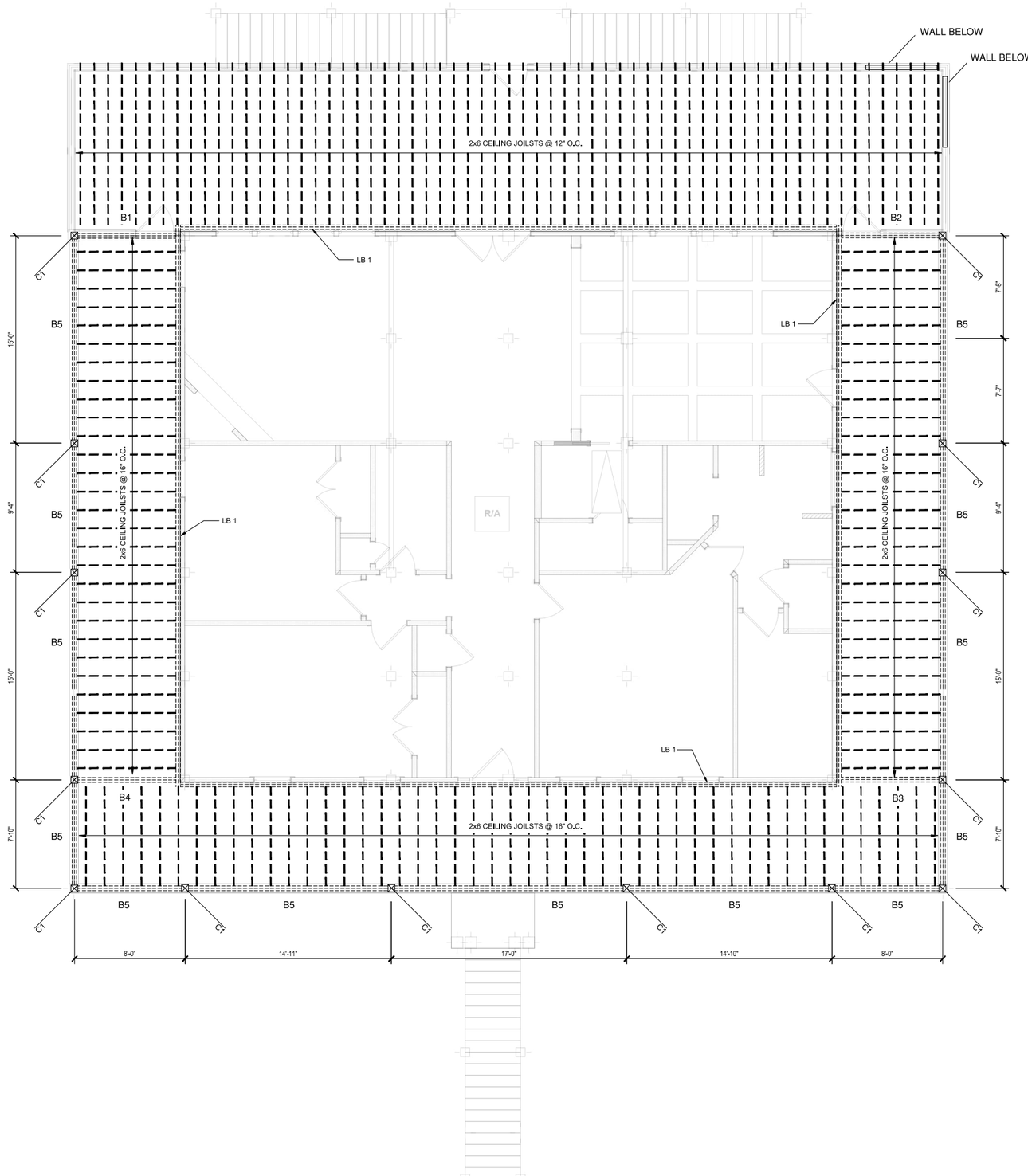

1 CEILING FRAMING PLAN (PORCHS' AREA)

SCALE : 1/4" = 1'-0"

NOTES:

1. CONNECT LB1 TO 4x4 POSTS IN THE WALL USING TWO ½" THROUGH BOLTS WITH WASHERS AND NUTS, AND CONNECT LB1 TO WALL STUDS USING TWO ROWS OF SIMPSON ¼"x 4 ½" SDS, OR EQUAL, SCREWS. SEE " CEILING FRAMING PLAN (HOME AREA) FOR LOCATIONS OF 4x4 POSTS.
2. USE SIMPSON LUS 26, OR EQUAL, HANGER TO CONNECT 2x6 JOISTS TO BEAMS.
3. USE SIMPSON LCE4Z, OR EQUAL, COLUMN CAPS FOR THE CORNERS, AND USE SIMPSON CCQ46 SDS 2.5, OR EQUAL, COLUMN CAPS FOR OTHER LOCATIONS.
4. USE SIMPSON HUS210-2, OR EQUAL, HANGERS TO CONNECT B1, B2, B3, B4 TO BEAMS ON EACH END.

SCHEDULE OF BEAMS AND POST

MARK	SIZE	REMARK
B1, B2, B3, B4	(2) 2x 12	FLUSH BEAM (SEE WOOD NOTES FOR ATTACHMENT)
B5	(2) 1 ¾" x 11 ⅞"	LVL, FLUSH BEAM (SEE WOOD NOTES FOR ATTACHMENT)
C1	6 x 6	POST BELOW
LB1	1 ¾ x11 ⅞"	LVL

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CEILING FRAMING PLAN (PORCHS' AREAS)

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EEI EQUAGEN
ENGINEERING & INSPECTIONS
FIRM LIC. # 1869
8045 ARCO CORPORATE DR.,
RALEIGH, NC 27617
PHONE:919.267.3004
EMAIL:INFO@EQUAGEN.COM

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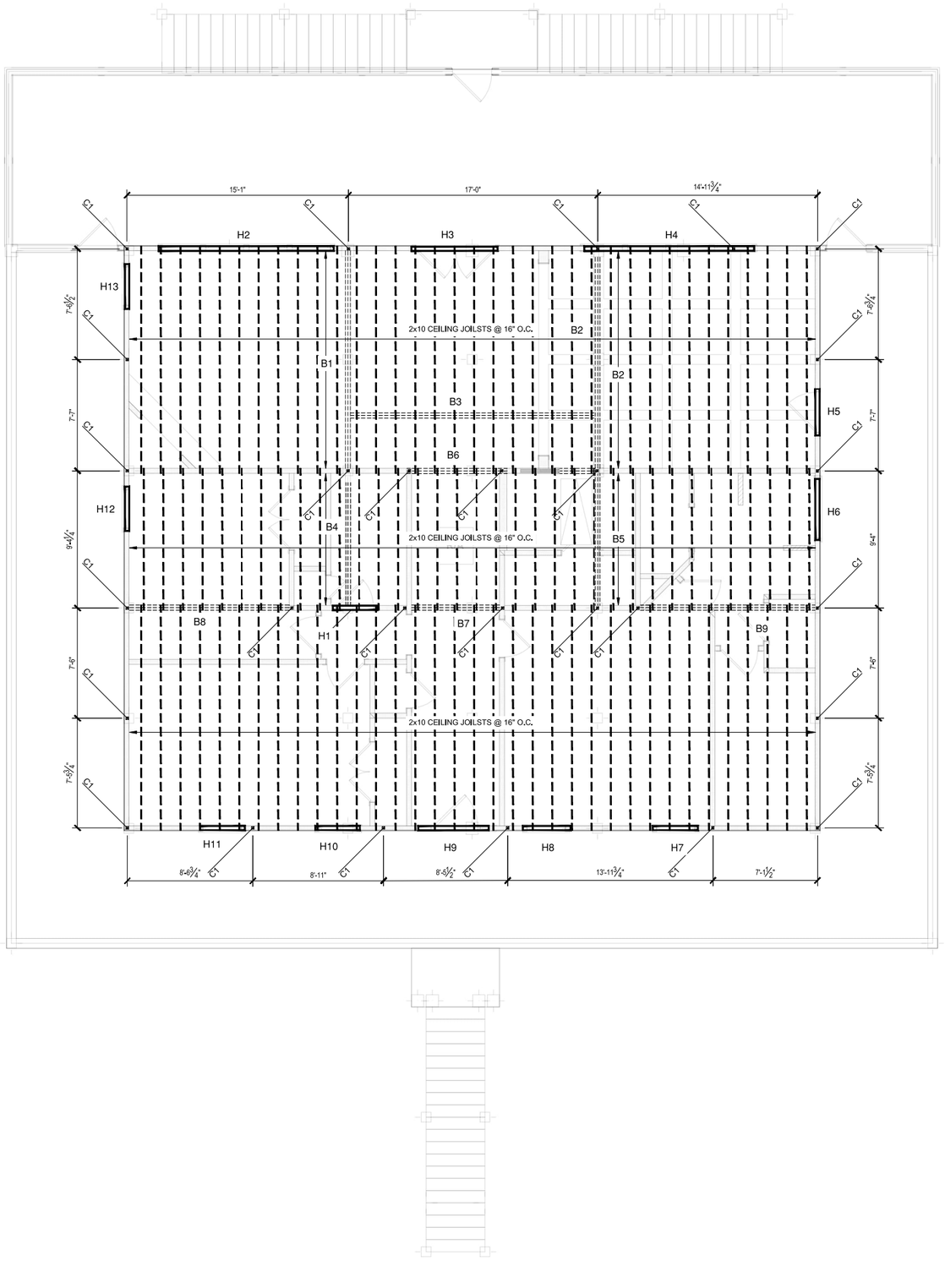

1 CEILING FRAMING PLAN (HOUSE AREA)

SCALE : 1/4" = 1'-0"

GENERAL ROOF FRAMING PLAN NOTES:

1. CONNECT JOISTS TO BEAMS/HEADER USING SIMSON LUS210, OR EQUAL, HANGER.
2. CONNECT B3 TO B1 AND B2 USING SIMPSON HHGU5.5-SDS, OR APPROVED EQUAL, HIGH CAPACITY GIRDER HANDER.
3. USE SIMPSON CCQ64SD52.5, OR APPROVED EQUAL, COLUMN CAPS AT THE LOCATIONS B1 & B4 AND B2 & B5 SIT ON 4x4 POST. FOR THE OTHER LOCATIONS WHERE B1, B2, B4, B5 SIT ON A 4x4 POST, USE ECCQ64SD2.5, OR APPROVED EQUAL, COLUMN CAPS.
4. TO SATISFY LATERAL STABILITY OF HEADERS, USE SIMPSON H2.5A, OR EQUAL HURRICANE TIE TO CONNECT JOISTS TO HEADERS.
5. FOR H2 AND H4: USE (3) 2x4 JACK STUDS AND (6) 2x4 KING STUDS. FOR OTHER HEADERS, USE (2) 2x4 JACK STUDS AND (3) 2x4 KING STUDS.

SCHEDULE OF HEADER BELOW		
MARK	SIZE	REMARKS
H1, H3, H5,....H14	(2) 1¾ x 9¼"	LVL (SEE WOOD NOTES FOR ATTACHMENT)
H2, H4	(2) 1¾ x 16"	LVL (SEE WOOD NOTES FOR ATTACHMENT)

SCHEDULE OF BEAMS AND POST		
MARK	SIZE	REMARK
B1, B2, B3, B4, B5	(3) 1 ¾" x 16"	LVL, FLUSH BEAM (SEE WOOD NOTES FOR ATTACHMENT)
B6, B7, B8, B9	(2) 1 ¾" x 9 ¼"	LVL, FLUSH BEAM (SEE WOOD NOTES FOR ATTACHMENT)
C1	4 x 4	(TYP.) POST BELOW

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CEILING FRAMING PLAN (HOME AREA)

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FIRM LIC. # 1869
8045 ARCO CORPORATE DR.,
RALEIGH, NC 27617
PHONE:919.267.3004
EMAIL:INFO@EQUAGEN.COM

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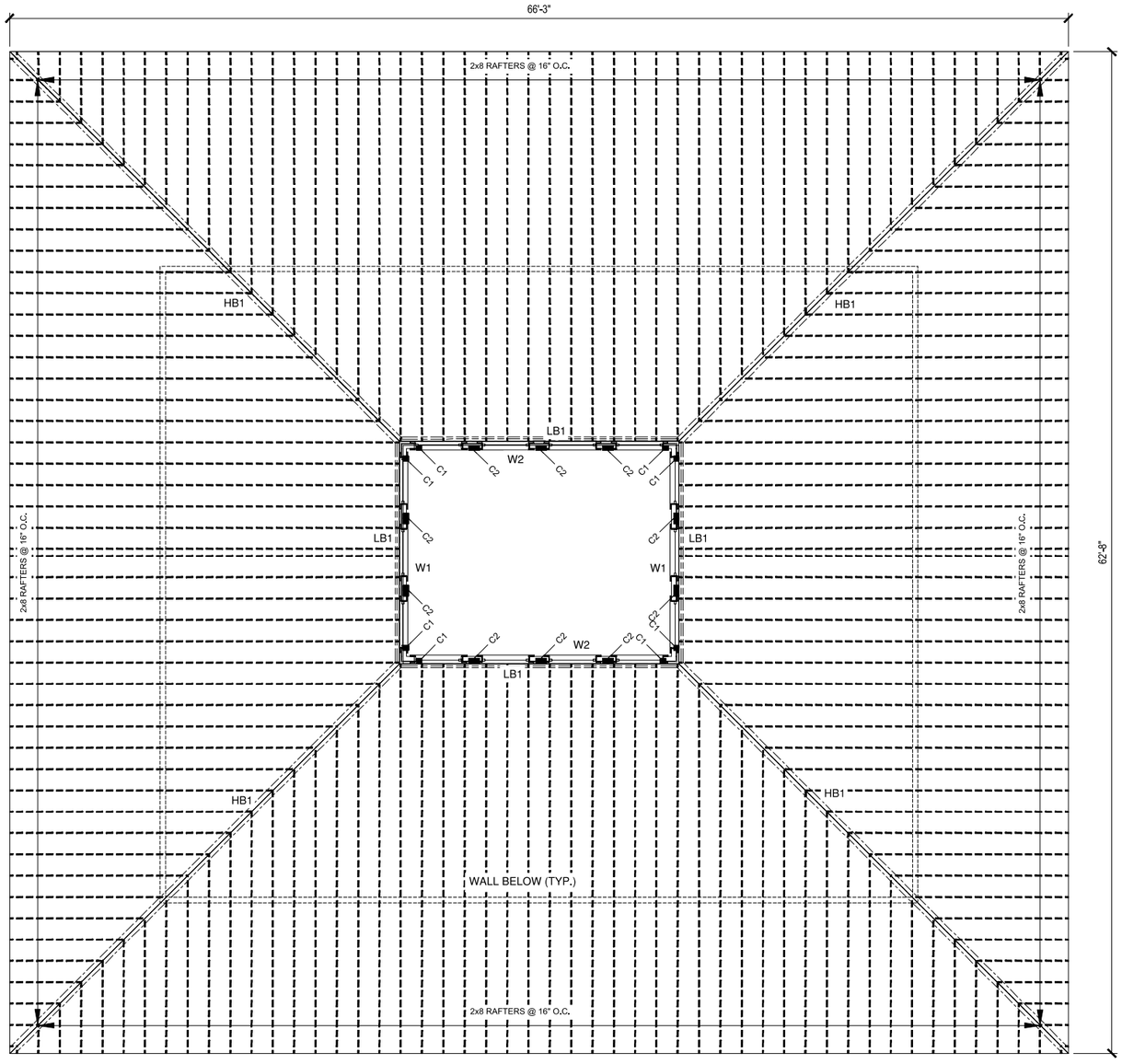

1 ROOF FRAMING PLAN

SCALE :1/4" = 1'-0"

GENERAL ROOF FRAMING PLAN NOTES:

1. AS SHOWN IN "ATTIC FLOOR FRAMING PLAN (TOP LEVEL ROOF)", INSTALL (6) 4x4 ALONG EACH WALL 1 AND (8) 4x4 ALONG EACH WALL. CONNECT LB1 TO EACH 4x4 USING TWO ¾" DIA. THROUGH BOLTS WITH WASHERS AND NUTS.
2. USE SIMPSON LRU28Z, OR EQUAL, HANGERS TO CONNECT RAFTERS TO LB1. USE (6) SD# 10x2 ½ CONNECTORS ON FACE AND (5) SD# 10x2 ½ ON JOIST.
3. THE 2x8 RAFTERS ARE SITTING ON "WALL BELOW", I.E. TRANSFERRING LOADS.
4. USE SIMPSON H2.5A, OR EQUAL, HURRICANE TIE ON "EACH" RAFTER TO CONNECT RAFTERS TO ALL WALLS "AND" BEAMS BELOW.
5. AT THE BOTTOM OF ALL W1 & W2 WALLS, USE SIMPSON PSQ218, OR EQUAL, STRAP TIES TO TIE ALL 4x4 POSTS TO BEAMS BELOW WALLS. ALSO, USE SIMPSON MSTA18 OR EQUAL, STRAPS TO TIE ALL POSTS AND STUDS TO WALL BELOW.

SCHEDULE OF BEAMS		
MARK	SIZE	REMARK
LB1	(2)1 ¾ x14 "	LVL (SEE WOOD NOTES FOR ATTACHMENT)
HB1	(4) 2 x 12	SEE WOOD NOTES FOR ATTACHMENT.

NO.	DATE	REVISIONS
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ROOF FRAMING PLAN (LOWER LEVEL ROOF)

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FIRM LIC. # 1869
8045 ARCO CORPORATE DR.,
RALEIGH, NC 27617
PHONE:919.267.3004
EMAIL:INFO@EQUAGEN.COM

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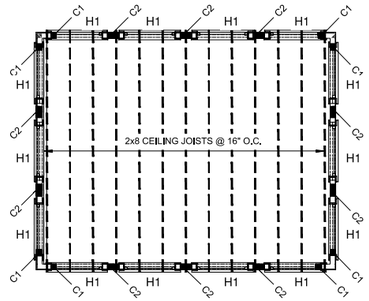

1 ATTIC FLOOR FRAMING PLAN (TOP LEVEL ROOF)
SCALE : 1/4" = 1'-0"

NOTES:

1. SEE NOTE 1 OF "ROOF FRAMING PLAN (LOWER LEVEL ROOF)" FOR CONNECTION OF C1 & C2 POSTS TO LB1.
2. AS SHOWN IN "ATTIC FLOOR FRAMING PLAN (TOP LEVEL ROOF)", INSTALL (6) 4X4 ALONG EACH WALL 1 AND (6) 4X4 ALONG EACH WALL 2; CONNECT LB1 TO EACH 4X4 USING TWO ½" DIA. THROUGH BOLTS WITH WASHERS AND NUTS.

SCHEDULE OF POSTS AND HEADER

MARK	SIZE	REMARK
C1	4 x 4	POST BELOW
C2	(2) 4 x 4	POST BELOW
H1	(2) 2 x 10	HEADER BELOW (SEE WOOD NOTES FOR ATTACHMENT

ATTIC FLOOR FRAMING PLAN (TOP LEVEL ROOF)

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EEI EQUAGEN ENGINEERING & INSPECTIONS
FIRM LIC. # 1869
8045 ARCO CORPORATE DR.,
RALEIGH, NC 27617
PHONE:919.267.3004
EMAIL:INFO@EQUAGEN.COM

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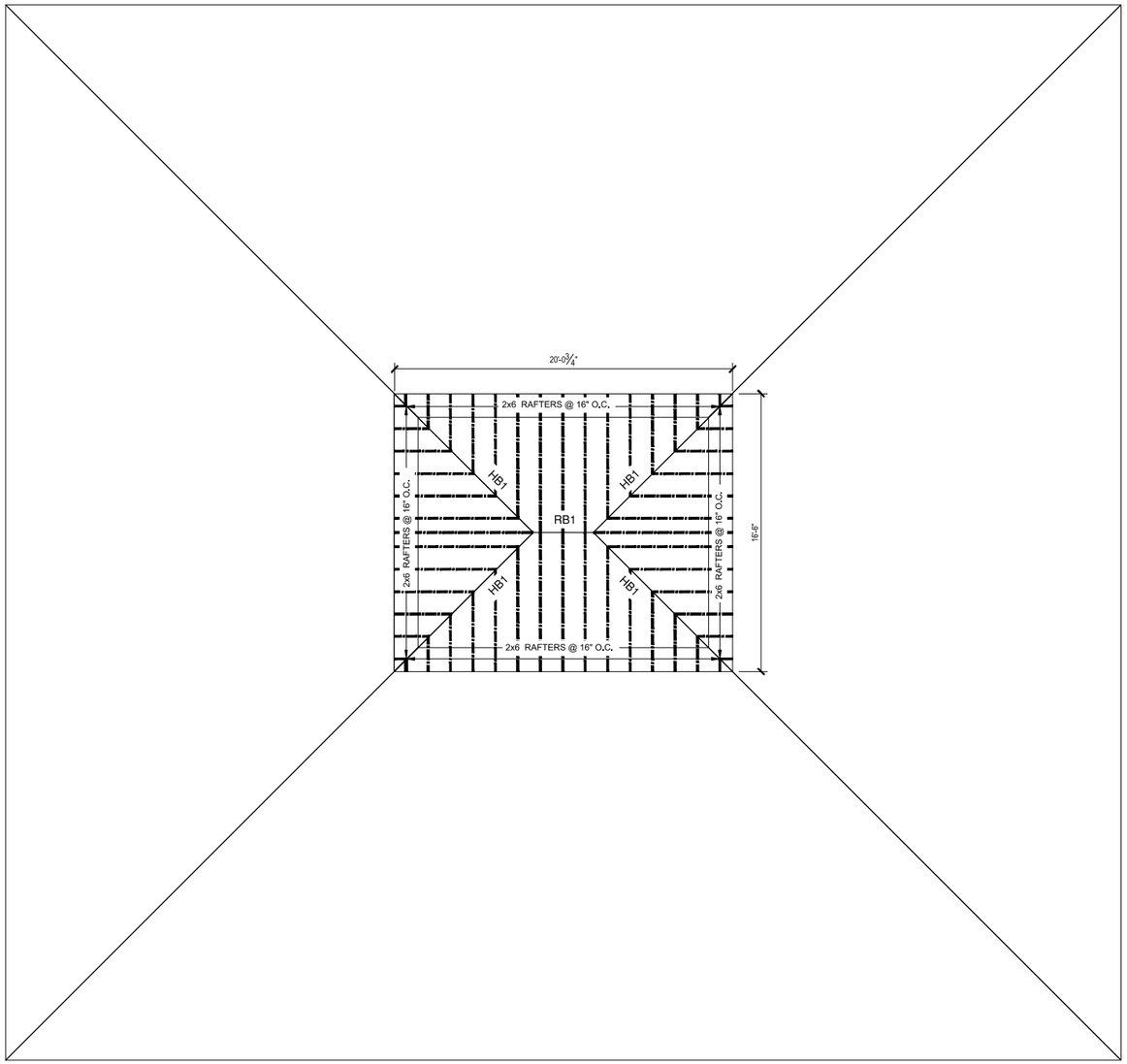

1 ROOF FRAMING PLAN (TOP LEVEL)
SCALE :1/4" = 1'-0"

NOTES:

1. USE SIMPSON H2.5A, OR EQUAL, HURRICANE TIE ON "EACH" RAFTER TO FASTEN RAFTERS TO THE TOP OF WALLS BELOW.

SCHEDULE OF BEAMS		
MARK	SIZE	REMARK
RB1	2X8	RIDGE
HB1	(2) 2X8	HIP (SEE WOOD NOTES FOR ATTACHMENT)

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ROOF FRAMING PLAN
(TOP LEVEL)

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EQUAGEN
ENGINEERING & INSPECTIONS
FIRM LIC. # 1869
8045 ARCO CORPORATE DR.,
RALEIGH, NC 27617
PHONE:919.267.3004
EMAIL:INFO@EQUAGEN.COM

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WALL BRACING PER IRC 2015
PRESCRIPTIVE METHOD

LOCAL WIND / **SEISMIC DESIGN CATEGORY: B**

BRACED WALL PANEL LEGEND:

WSP (XX)
- LENGTH OF WALL PANEL IN INCHES

AT EXTERIOR FACE OF WALL:
WOOD STRUCTURAL PANEL: 7/16" OSB WALL SHEATHING w/ 8d COMMON NAILS (2 1/2"x0.131") AT 4" OC AT EDGES & 12" OC AT INTERMEDIATE SUPPORTS
AN ALTERNATIVE:
16 GAUGE x 1 3/4" STAPLES AT 3" OC AT EDGES & 6" OC AT INTERMEDIATE SUPPORTS

AT INTERIOR FACE OF WALL:
1/2" GYPSUM BOARD/SHEATHING WITH 5d COOLER NAILS AT 4" OC AT EDGES AND INTERMEDIATE SUPPORTS.

GB (XX)
- LENGTH OF WALL PANEL IN INCHES

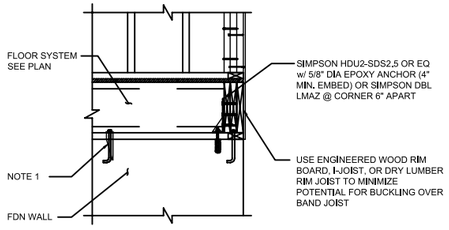
1/2" GYPSUM SHEATHING W/ 13 GAUGE, 1 3/8" LONG, 19/64" HEAD NAIL OR 0,098" DIA, 1 1/4" LONG, ANNULAR-RINGED NAIL OR 5d COOLER NAIL, 0,086" DIA, 1 5/8" LONG, 15/64" HEAD, OR GYPSUM BOARD NAIL W/ 0,086" DIA, 1 5/8" LONG, 9/32" HEAD @ 4" OC AT EDGES AND INTERMEDIATE SUPPORTS, OR 1 1/4" SCREWS TYPE W OR S, 12" OC W/ 4" AT EDGES AND INTERMEDIATE SUPPORTS W/ MIN 5/8" PENETRATION TO WOOD FRAMING.

NOTE:
WSP = WOOD STRUCTURAL PANEL | CS = CONTINUOUSLY SHEATHED
PF = PORTAL FRAME | GB = GYPSUM BOARD

FOR CONTINUOUS SHEATHING BRACED WALL METHOD, PROVIDE:

1. AT EXTERIOR FACE OF WALL:
   7/16" OSB WITH 8d NAILS AT 4" OC ON EDGES AND 12" OC ON FIELD.
2. AT INTERIOR FACE OF WALL:
   1/2" GYPSUM BOARD/SHEATHING WITH 5d COOLER NAILS AT 4" OC AT EDGES AND INTERMEDIATE SUPPORTS.

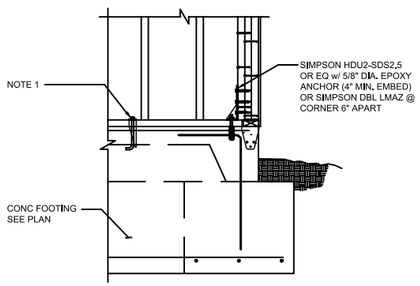
SHEATHING SHALL BE EXTENDED CONTINUOUS 12" ABOVE AND BELOW THE FLOOR SYSTEM.



FOUNDATION WALL CONDITION

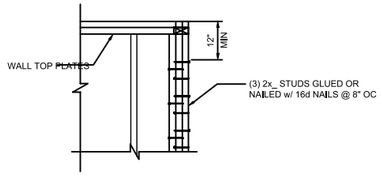
NOTE 1:
1/2" DIA ANCHOR BOLTS (7" MIN EMBED) w/ 2"x2"x3/16" WASHER PLATES @ 4'-0" OC MAX AT 12" MAX FROM EA END OF WALL.

AN ALTERNATIVE: USE SIMPSON STRAPS LMA4/LMA6 @ 3'-0" OC, TYP.

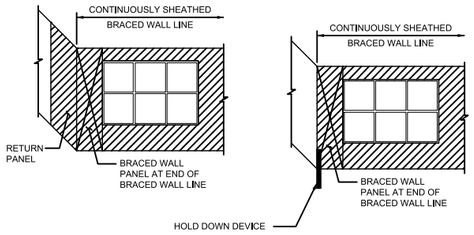


SLAB ON GRADE CONDITION

1 HOLD-DOWN DETAIL
SCALE : NTS — AT CONCRETE FOUNDATION

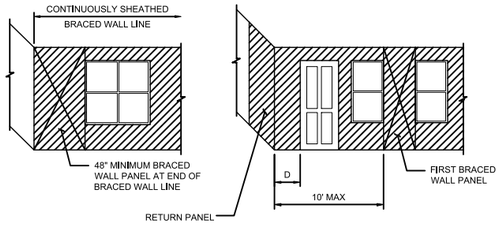


2 HOLD-DOWN DETAIL
SCALE : NTS — AT RAISED WOOD FLOOR



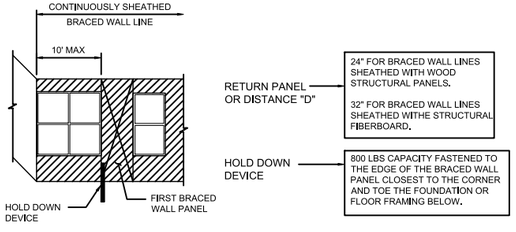
END CONDITION - 1

END CONDITION - 2



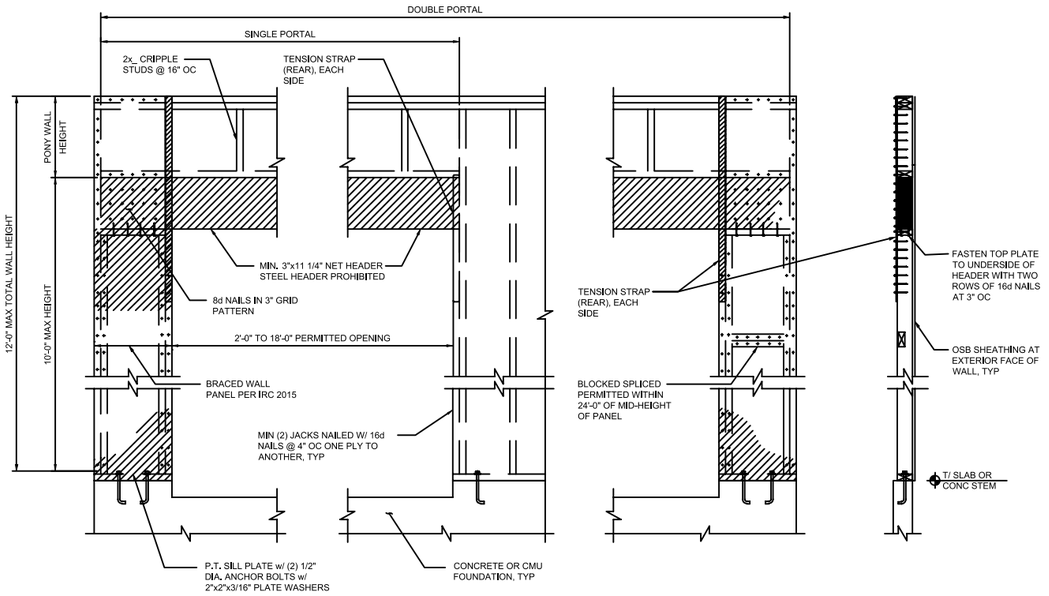
END CONDITION - 3

END CONDITION - 4

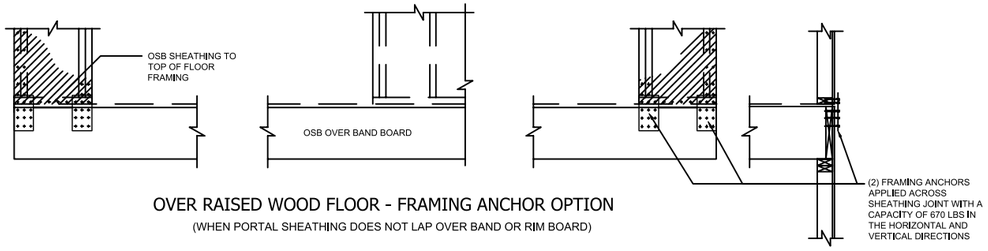


END CONDITION - 5

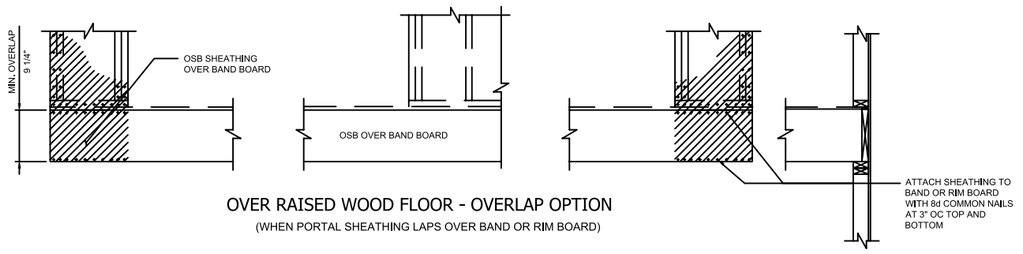
3 END CONDITIONS FOR BRACED WALL LINES WITH CONTINUOUS SHEATHING METHOD
SCALE : NTS



OVER CONCRETE OR MASONRY BLOCK FOUNDATION



OVER RAISED WOOD FLOOR - FRAMING ANCHOR OPTION
(WHEN PORTAL SHEATHING DOES NOT LAP OVER BAND OR RIM BOARD)



OVER RAISED WOOD FLOOR - OVERLAP OPTION
(WHEN PORTAL SHEATHING LAPS OVER BAND OR RIM BOARD)

FRONT ELEVATION — SECTION

4 CONTINUOUS SHEATHING PORTAL FRAME (CS-PF)
SCALE : NTS — REFERENCE: IRC 2015 FIG. R602.10.6.4

PORTAL FRAME REQUIREMENTS

MIN. SIZE & GRADE OF WALL STUDS	MAX. PONY WALL HEIGHT (FEET)	MAX. TOTAL WALL HEIGHT (FEET)	MAX. OPENING WIDTH (FEET)	REQUIRED TENSION CAPACITY OF STRAP (LBS)	MIN. SIZE & GRADE OF WALL STUDS	MAX. PONY WALL HEIGHT (FEET)	MAX. TOTAL WALL HEIGHT (FEET)	MAX. OPENING WIDTH (FEET)	REQUIRED TENSION CAPACITY OF STRAP (LBS)
2x4 SPF #1/# 2 GRADE	0	10	18	1000	2x4 # 2 GRADE	2	12	18	3850
	1	10	9	1000		4	12	9	2350
			16	1000				16	DESIGN REQUIRED
			18	1200	2x6 STUD GRADE	2	12	9	1000
	2	10	9	1000				16	2050
			16	2025				18	2450
			18	2400		4	12	9	1500
	2	12	9	1200				16	3150
			16	3200				18	3675

NO.	DATE	DESCRIPTIONS
0	07/14/022	PERMIT

REVISIONS

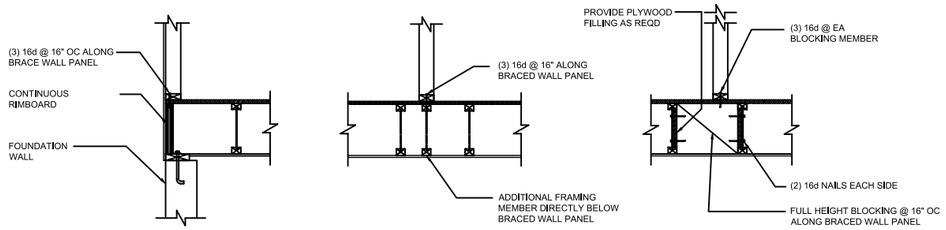
TYPICAL WALL BRACING DETAILS

SITE ADDRESS:
80 BAY ST.
FUQUAY-VARINA, NC 27526

PROFESSIONAL SEAL

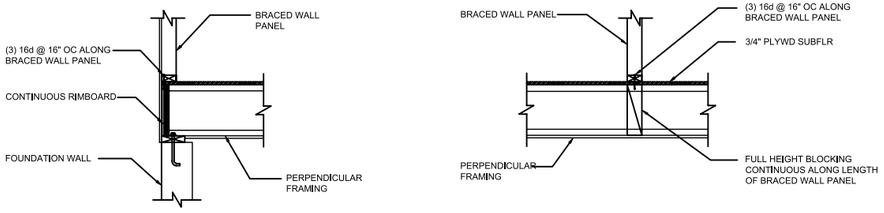
EEI EQUAGEN ENGINEERING & INSPECTIONS
FIRM # P-1869
8045 ARCO CORPORATE DR.,
RALEIGH, NC 27617
PHONE:919.267.3004
EMAIL:INFO@EQUAGEN.COM

DRAWN BY:	DG
CHECKED BY:	MKC
DATE:	07/14/2022
SCALE:	AS SHOWN
S901	22-3009



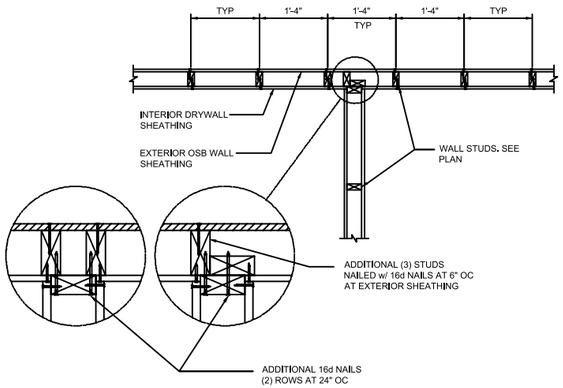
1 BRACED WALL PANEL CONNECTION WHEN PARALLEL TO FLOOR/CEILING FRAMING

SCALE : NTS — TYPICAL FLOOR/CEILING FRAMING CONNECTIONS



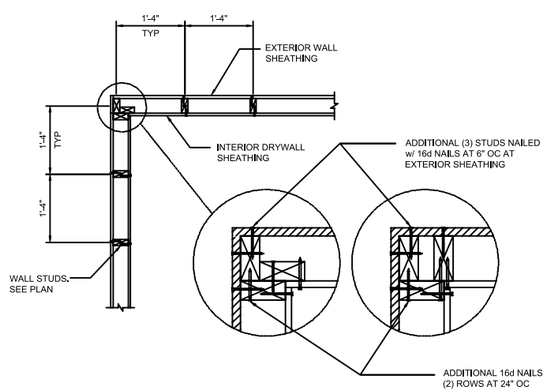
2 BRACED WALL PANEL CONNECTION WHEN PERPENDICULAR TO FLOOR/CEILING FRAMING

SCALE : NTS — TYPICAL FLOOR/CEILING FRAMING CONNECTIONS



6 FRAMING DETAIL AT WALL INTERSECTIONS

SCALE : NTS



7 FRAMING DETAIL AT WALL CORNERS

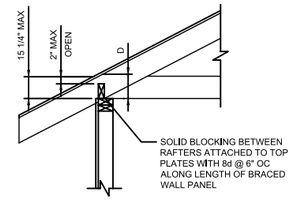
SCALE : NTS

NOTE: USE WOOD TO METAL SCREWS @ 2" o.c. FOR CORNER HSS POST AND STUD WALL CONNECTION

ROOF FRAMING BLOCKING

DISTANCE, D	REQUIREMENT	REF. DETAIL
0 - 9 1/4"	NO BLOCKING REQUIRED	NONE
9 1/4" - 11 1/4"	SOLID 2x_ BLOCKING BETWEEN RAFTERS OR TRUSSES	DETAIL 3
11 1/4" - 48"	SOFFIT BLOCKING OR VERTICAL BLOCKING PANEL	DETAIL 4 OR DETAIL 5
OVER 48"	ENGINEERED DESIGN REQUIRED	NONE

NOTE:
D: DISTANCE FROM TOP OF BRACING UNIT TO TOP OF ROOF SHEATHING



3 BLOCKING BETWEEN ROOF FRAMING MEMBERS

SCALE : NTS — TYPICAL ROOF FRAMING CONNECTIONS

NO.	DATE	DESCRIPTIONS
0	07/14/2022	PERMIT

REVISIONS

TYPICAL WALL BRACING & TYPICAL ROOF DETAILS

SITE ADDRESS:
80 BAY ST.
FUQUAY-VARINA, NC 27526

PROFESSIONAL SEAL

EEI EQUAGEN ENGINEERING & INSPECTIONS
FIRM # P-1869
8045 ARCO CORPORATE DR.,
RALEIGH, NC 27617
PHONE:919.267.3004
EMAIL:INFO@EQUAGEN.COM

DRAWN BY:	DG
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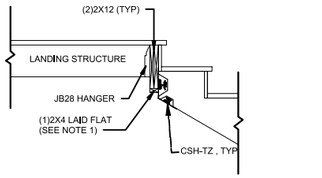
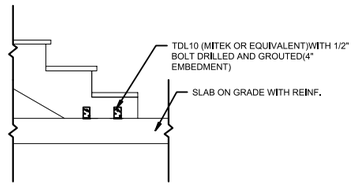
DATE:	07/14/2022
SCALE:	AS SHOWN
S902	22-3009



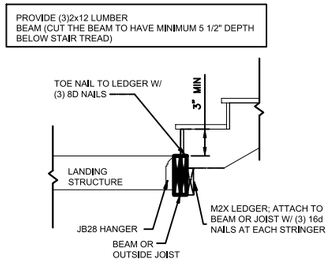
NOTE:
1. PROVIDE (4) 1/4" LAG SCREWS TO CONNECT (1) 2X4 TO BS2 AT BS3/BS4 LOCATION. IN BETWEEN PROVIDE (2)1/4" LAG SCREWS

1 STRINGER BEAM CONN. TO GIRDER
SCALE : NTS



NOTE: SEE DETAIL 05 FOR EXTENT OF STRINGER BEAM TO BE NOTCHED

2 STRINGER BEAM SUPPORT AT FIRST FLOOR LVL
SCALE : NTS



3 STRINGER BEAM DETAIL -2
SCALE : NTS

NO.	DATE	DESCRIPTIONS
0	07/14/022	PERMIT

REVISIONS

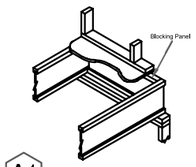
TYPICAL DETAILS

SITE ADDRESS:
80 BAY ST.
FUQUAY-VARINA, NC 27526

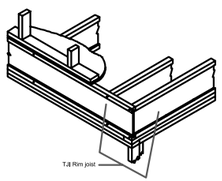
PROFESSIONAL SEAL

EQUAGEN ENGINEERING & INSPECTIONS
FIRM # P-1869
8045 ARCO CORPORATE DR.,
RALEIGH, NC 27617
PHONE:919.267.3004
EMAIL:INFO@EQUAGEN.COM

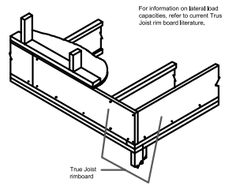
DRAWN BY:	DG
CHECKED BY:	MKC
DATE:	07/14/2022
SCALE:	AS SHOWN
S903	22-3009



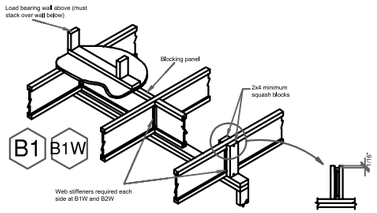
A1



A2 Must have 1 3/4" minimum joist bearing at ends

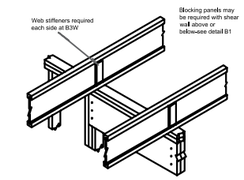


A3 Must have 1 3/4" minimum joist bearing at ends

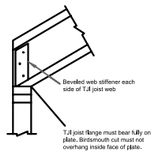


B1 B1W

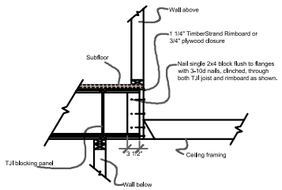
B2 B2W



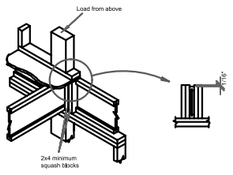
B3 B3W INTERMEDIATE BEARINGS NO LOAD BEARING WALL ABOVE



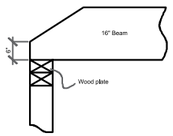
BC BIRDSMOUTH CUT allowed
BC at low end of joist only



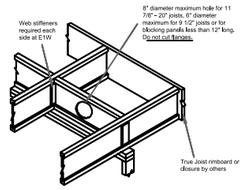
C1 INTERIOR CANTILEVER SUPPORTING LOW CEILING



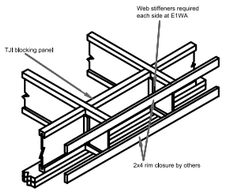
CS Use 2x4 minimum squash blocks to transfer load from above to bearing plate below



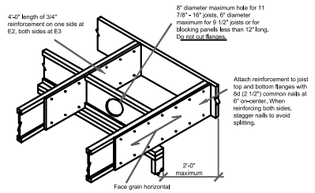
D TAPERED END CUT



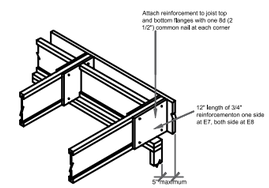
E1 E1W



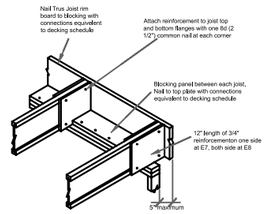
E1 E1WA CANTILEVER DETAIL
AT BRICK LEDGE CANTILEVER ONLY



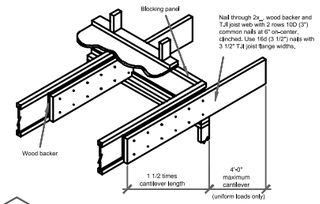
E2 E3



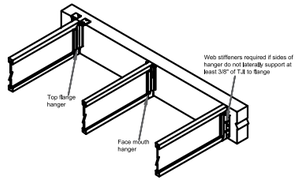
E5 E6



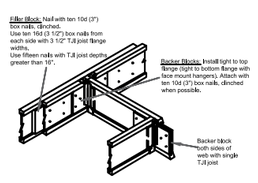
E7 E8



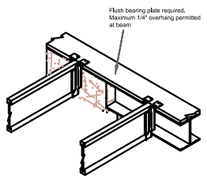
F1



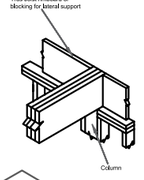
H1 Hanger height must be a minimum of 60% of joist depth



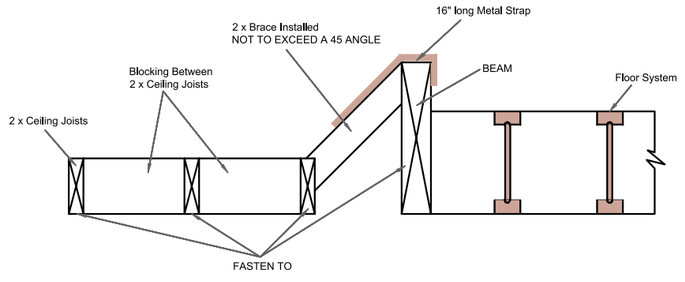
H2



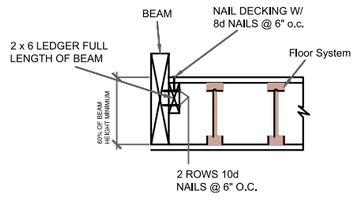
H3



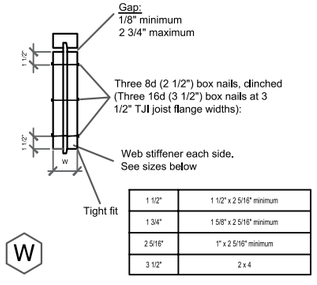
L1



LB Lateral Brace (@ 32" o.c.)

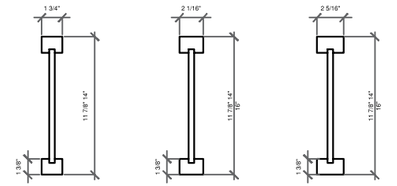


LB1 Lateral Brace



1 1/2"	1 1/2" x 2 5/16" minimum
1 3/4"	1 5/8" x 2 5/16" minimum
2 5/16"	1" x 2 5/16" minimum
3 1/2"	2 x 4

W



NO.	DATE	DESCRIPTIONS
0	07/14/022	PERMIT

REVISIONS

TYPICAL FRAMING DETAILS

SITE ADDRESS:
80 BAY ST.
FUQUAY-VARINA, NC 27526

PROFESSIONAL SEAL

EEI EQUAGEN ENGINEERING & INSPECTIONS
FIRM # P-1869
8045 ARCO CORPORATE DR.,
RALEIGH, NC 27617
PHONE:919.267.3004
EMAIL:INFO@EQUAGEN.COM

DRAWN BY:	DG
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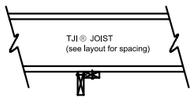
DATE:	07/14/2022
SCALE:	AS SHOWN
S904	22-3009



Install a continuous 2x_stiff-back in the middle of each joist span. Attach the stiff-back to each joist and to the end wall or foundation. Attach to each joist with two (qty) 10 d nails

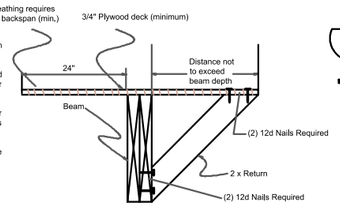
NOTES:
1) Provide a minimum of 3.5" bearing in concrete pockets at the end of beams.

2) Provide a minimum of 6" bearing at the end of each beam when beams butt at pier location.

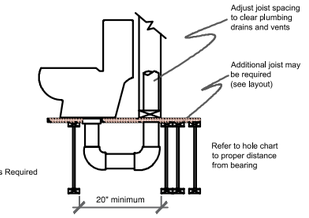
3) Provide a minimum of 12" bearing at pier locations when beams run continuous across pier.

4) All bearing surfaces for beams to be treated 2x_material.

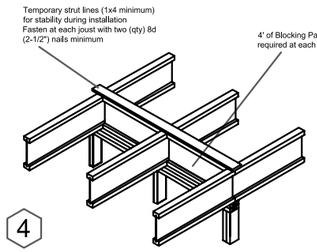
1 STIFF-BACK DETAIL (TYP.)



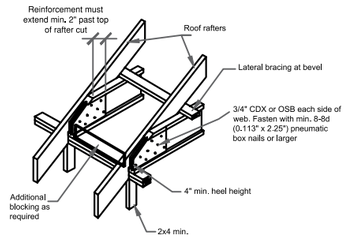
2 BALCONY DETAIL



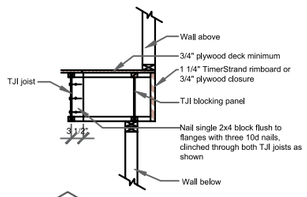
3 DO NOT CUT FLANGES
WATER CLOSET DETAIL



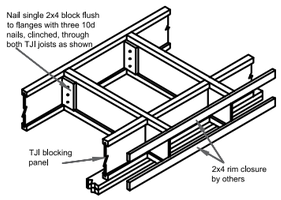
4



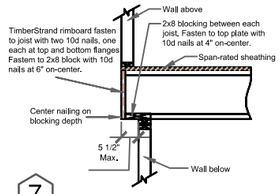
5 Standard rafter cut detail
your local Trus Joist rep



6 Outlooker Detail



6A OUTLOOKER DETAIL
AT BRICK LEDGE CANTILEVER
ONLY



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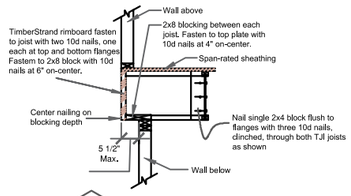

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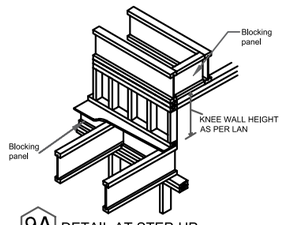
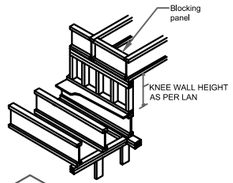
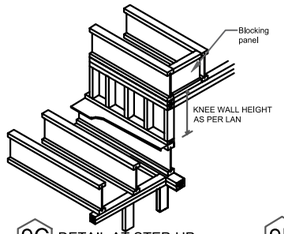


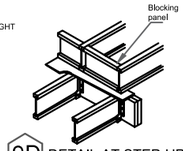
9A DETAIL AT STEP-UP



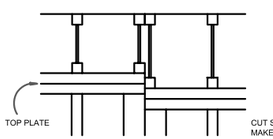
9B DETAIL AT STEP-UP



9C DETAIL AT STEP-UP



9D DETAIL AT STEP-UP



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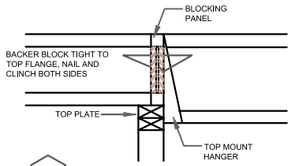

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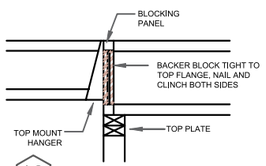

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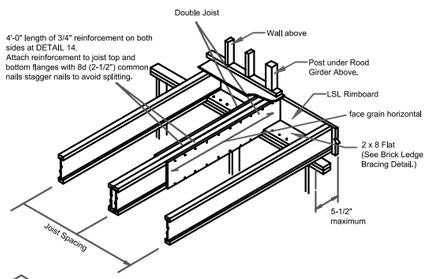
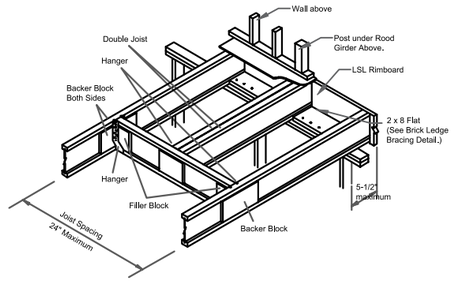
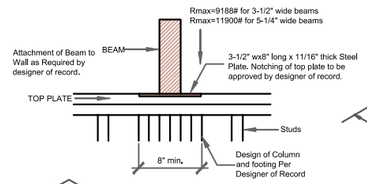


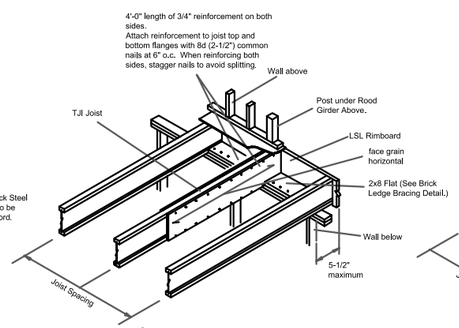
15 LOAD BEARING BRICK
BRICK LEDGE BRACING



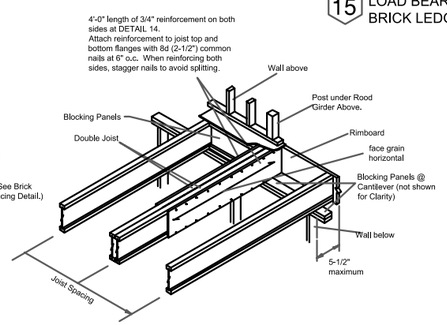
16 LOAD BEARING BRICK
LEDGE BRACING



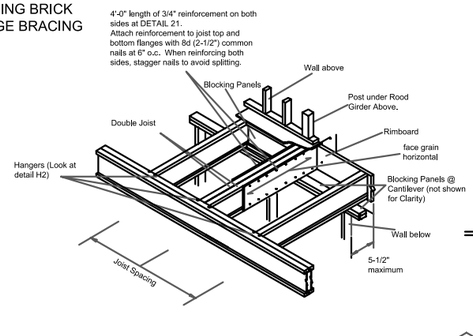
17 BEAM SUPPORT



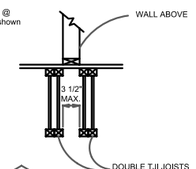
18 LOAD BEARING BRICK
BRICK LEDGE BRACING



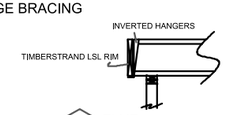
20 LOAD BEARING BRICK
BRICK LEDGE BRACING



21 LOAD BEARING BRICK
BRICK LEDGE BRACING



22 JOIST PLACEMENT DETAIL



23 FLUE
OPENING-INVERTED
HANGERS
N.T.S.

NO.	DATE	DESCRIPTIONS
0	07/14/022	PERMIT

REVISIONS

TYPICAL FRAMING
DETAILS

SITE ADDRESS:
80 BAY ST.
FUQUAY-VARINA, NC 27526

PROFESSIONAL SEAL

EEI EQUAGEN
ENGINEERING & INSPECTIONS
FIRM # P-1869
8045 ARCO CORPORATE DR.,
RALEIGH, NC 27617
PHONE:919.267.3004
EMAIL:INFO@EQUAGEN.COM

DRAWN BY:	DG
CHECKED BY:	MKC
DATE:	07/14/2022
SCALE:	AS SHOWN
S905	22-3009