Residence for

Triple A Homes Allison Ann Lot 119 Serenity - Fuquay Varina, NC

INDEX TO DRAWINGS:

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SPECS STRUCTURAL SPECIFICATIONS

GENERAL NOTES:

ALL WORK IS TO BE DONE IN STRICT ACCORDANCE WITH NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE, 2018 EDITION (HEREWITH SHOWN AS N.C.S.R.B.C.).

- 2. DIMENSIONS SHOWN ON DRAWINGS GOVERN OVER SCALE..
- STUD WALL DESIGN SHALL CONFORM TO ALL N.C.S.R.B.C. REQUIREMENTS.
- CONTRACTOR SHALL USE TEMPERED SAFETY GLASS IN ALL LOCATIONS AS REQUIRED BY N.C.S.R.B.C., SECTION R308.4
- 5. ANY HABITABLE ROOM SHALL MEET ALL LIGHT/VENTILATION AND EGRESS AS REQUIRED BY N.C.S.R.B.C., SECTIONS R-303.1 AND R-310.1
- 6. ALL WALLS SHOWN ON FLOOR PLANS ARE 2x4 FRAME UNLESS NOTED OTHERWISE.
- ALL ANGLED WALLS SHOWN ON FLOOR PLANS ARE 45° UNLESS NOTED OTHERWISE.
- ALL WINDOWS SHALL HAVE A MINIMUM DPI RATING OF 25. BUILDER SHALL VERIFY WITH WINDOW MANUFACTURER THAT UNITS INSTALLED MEET THESE REQUIREMENTS AS PER N.C.S.R.B.C., TABLE 301.2(6).
- ENERGY EFFICIENCY REQUIREMENTS FOR THE SPECIFIC CLIMATE ZONE MHERE STRUCTURE IS BEING BUILT SHALL BE IN ACCORDANCE WITH CHAPTER II OF THE NORTH CAROLINA RESIDENTIAL BUILDING CODE, AS SHOWN IN TABLES NIIO1.2 AND NIIO2.1.
- IO. TERMITE TREATMENT BORATE APPLIED TO ALL FRAME MEMBERS WITHIN 24" AFF.

MATERIALS LEGEND

	EARTH/COMPACT FILL	FINISH WOOD
	CONCRETE	ROUGH WOOD
	BRICK	BLOCKING
	CONCRETE BLOCK/STONE	PLYWOOD
	STEEL	BATT INSULATION
	ALUMINUM	RIGID INSULATION

TOILET ACCESSORIES LEGEND

PROVIDE 2x4 BLOCKING IN THE WALL FOR THE FOLLOWING:

TB TOWEL BAR
TP TOLET PAPER HOLDER
TR TOWEL RING
MC MEDICINE CABINET
MR MAGAZINE RACK

THE PURPOSE OF THESE DRAWINGS IS TO SHOW THE INTENT OF THE DESIGN AND CONSTRUCTION OF THIS HOME. ANY ERRORS AND/OR OMISSIONS FOUND IN THIS SET SHOULD IMMEDIATELY BE REPORTED TO HOMES UNIQUE FOR CLARIFICATION OR CORRECTION. THE CONTRACTOR SHOULD VERIET ALL CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. ONCE A PERMIT HAS BEEN ISSUED FOR CONSTRUCTION, THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY AS TO THE ACCURACY OF THE PLANS AND TO ANY CHANGES MADE BY THE CONTRACTOR AND/OR THE OWNER.

DUE TO VARYING LOCAL AND STATE CODES, <u>HOMES UNIQUE</u> CANNOT BE HELD RESPONSIBLE FOR ANY REQUIREMENTS THAT EXISTING SITE CONDITIONS MAY CREATE.

RESIDENTIAL BUILDING CODE SUMMARY

- PLANS ARE DESIGNED TO THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.
- 2. HOUSE IS DESIGNED FOR 115 MPH, 3 SECOND GUST (89 MPH FASTEST WIND), EXPOSURE B.
- 3. ANCHOR BOLTS SHALL BE MIN. I/2" DIAMETER MITH STANDARD WASHER AND NUT AND SHALL EXTEND 7" MIN. INTO MASONRY OR CONCRETE. BOLTS TO BE NO MORE THAN 6' O.C. AND MITHIN I2" OF CORNERS. ALTERNATE ANCHOR STRAPS CAN BE USED INSTEAD OF ANCHOR BOLTS SPACED AT THE EQUIVALENT SPACING AND INSTALLED PER MANUFACTURER'S SPECIFICATION'S EXCEPT AT GARAGE LUG FTG.
- MEAN ROOF HEIGHT: 24'-0"

5. COMPONENT & CLADDING DESIGNED FOR THE FOLLOWING LOADS: MEAN ROOF HGT: UP TO 30' 30'-1"TO 35' 35'-1"TO 40' 40'-1"TO 45'

ZONE I	16.5, -18.0	17.3, -18.9	18.0, -19.6	18.5, -20.2
ZONE 2	16.5, -21.0	17.3, -22.1	18.0, -22.9	18.5, -23.5
ZONE 3	16.5, - 21.0	17.3, -22.1	18.0, -22.9	18.5, - 23.5
ZONE 4	18.0, -19.5	18.9, -20.5	19.6, -21.3	20.2, -21.8
ZONE 5	18.0, -24.I	18.9, -25.3	19.6, -26.3	20.2, -27.0

- 6. MINIMUM VALUES FOR ENERGY COMPLIANCE: ZONE 4
- 1. MAXIMUM GLAZING U-FACTOR: <u>0.35</u>
- 8. INSULATING VALUES: CEILING: R-30* / WALLS: R-15 / FLOOR: R-19 / SLABS: R-10. CODE REFERENCE: TABLE NIIO2.I (*R-30 ONLY IF UNCOMPRESSED, R-38 REQUIRED IF COMPRESSED)
- 9. FLASHING SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R703.8 OF THE N.C.R.B.C.
- IO. FIREBLOCKING SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R602.8 OF THE N.C.R.B.C.
- II. DRAFTSTOPPING SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R302.12 OF THE N.C.R.B.C.

AREA CALCULATIONS

HEATE	D:	UNHEATED:				
IST FLOOR:	2350	GARAGE:	968			
2ND FLOOR: 661		FRONT PORCH:	231			
TOTAL:	3011	SCREEN PORCH:	187			
		PATIO:	146			
		TOTAL:	1532			
WIDTH: 84'-6"						
DEPTH:	72'-4"					

FOUNDATION VENTING CALCULATIONS

(REFERENCE: N.C.S.R.B.C., 2018 EDITION, SECTION R408)

THE MINIMUM NET AREA OF VENTILATION OPENINGS SHALL BE NOT LESS THAN ONE (1) SQUARE FOOT FOR EACH ISO SQUARE FEET OF CRANL SPACE GROUND AREA AND ONE FOUNDATION VENT SHALL BE WITHIN THREE (3) FEET OF EACH CORNER OF THE BUILDING.

EXCEPTION: THE TOTAL AREA OF VENTILATION OPENINGS MAY BE REDUCED TO 1/1500 OF THE UNDER-FLOOR AREA WHERE THE GROUND SURFACE IS TREATED WITH AN APPROVED VAPOR RETARDER MATERIAL AND THE REQUIRED OPENINGS ARE PLACED SO AS TO PROVIDE CROSS-VENTILATION.

2350 SQUARE FEET OF CRAML SPACE AREA / 150 =

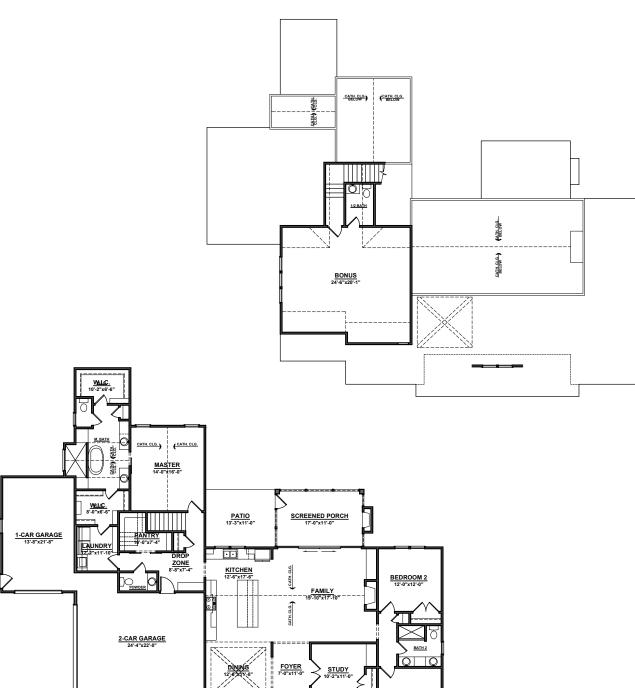
15.67 SQUARE FEET OF NET FREE AREA REQUIRED

ATTIC VENTILATION REQUIREMENTS

NATURAL ROOF VENTILATION	MECHANICAL ROOF VENTILATOR
36 SQ. FT. = 24.9 SQ. FT. VENT REQ'D.	3736 SQ. FT. = 2.45 SQ. FT. VENT REQ'D.
150	300

BUILDER TO PROVIDE APPROPRIATE VENTILATING AS REQUIRED PER CODE





COVERED PORCH

BEDROOM 3 12'-0"x12'-0"



1027 Hwy 70 West Suite 223

Garner, NC 27529 919-779-6005

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The purpose of these drawings is to show the intent of the design and construction of this home. Contractor should verify all conditions and dimensions prior to construction. Once a permit has been issued, contractor shall assume all responsibility to the accuracy of the plans and any changes made during construction.

TRIPLE A HOMES
Allison Ann

Cover Sheeet

PROJECT NUMBER 6074

DRAWN BY:

CHECKED BY:

REVISIONS:

DATE: 9/8/2023

SHEET:

C



NOTE - SLOPE ALL GRADES AWAY FROM HOUSE FOR POSITIVE DRAINAGE



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TRIPLE A HOMES
Allison Ann
Lot 119 Serenity
Fuquay-Varina, North Carolina

Elevations

PROJECT NUMBER:

DRAWN BY:

6074

J.A.D.

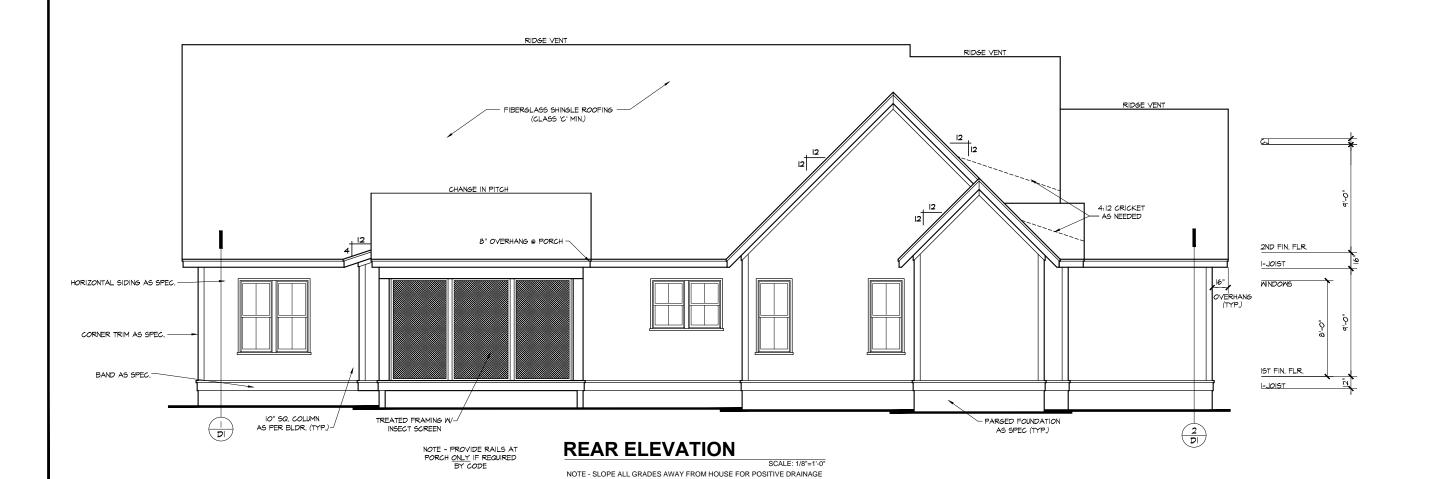
CHECKED BY: J.T.S.

REVISIONS:

DATE: 9/8/2023

SHEET:

1





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Allison Ann
Lot 119 Serenity
Fuquay-Varina, North Carolina

PROJECT INFO:

Elevations

PROJECT NUMBER: 6074

DRAWN BY:

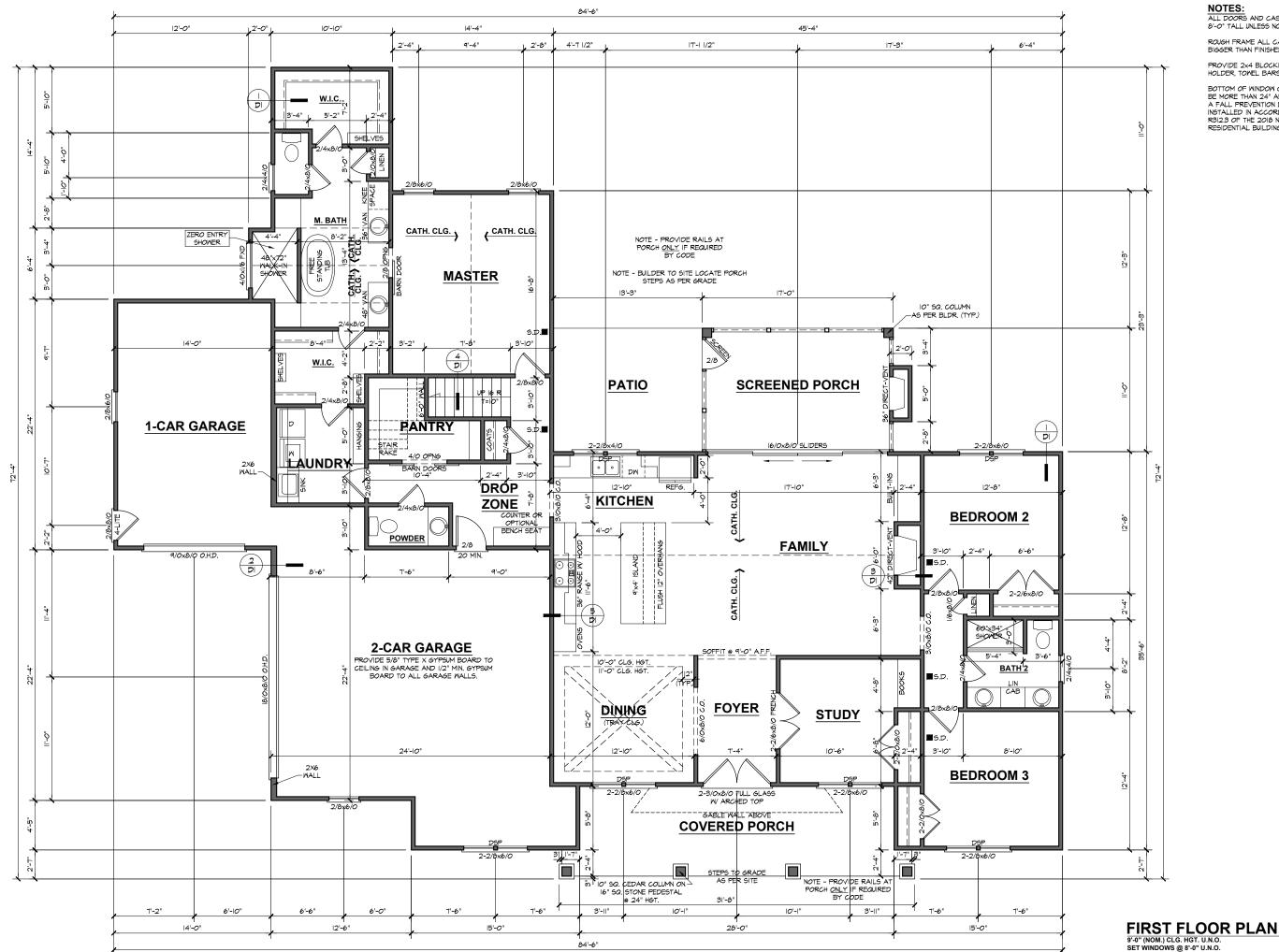
CHECKED BY:

REVISIONS:

DATE: 9/8/2023

SHEET:

2



NOTES:
ALL DOORS AND CASED OPENINGS TO BE 8'-0" TALL UNLESS NOTED OTHERWISE.

ROUGH FRAME ALL CASED OPENINGS 2" BIGGER THAN FINISHED OPENING CALL FOR

PROVIDE 2x4 BLOCKING FOR: TOILET PAPER HOLDER, TOWEL BARS, MEDICINE CABINETS

BOTTOM OF WINDOW CLEAR OPENINGS SHALL BE MORE THAN 24" ABOVE FINISH FLOOR OR A FALL PREVENTION DEVICE SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R312.3 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.



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TRIPLE A HOMES
Allison Ann
Lot 114 Serenity
Fuquay-Varina, North Carolina

Floor

PROJECT NUMBER: 6074

DRAWN BY: J.A.D.

CHECKED BY: J.T.S.

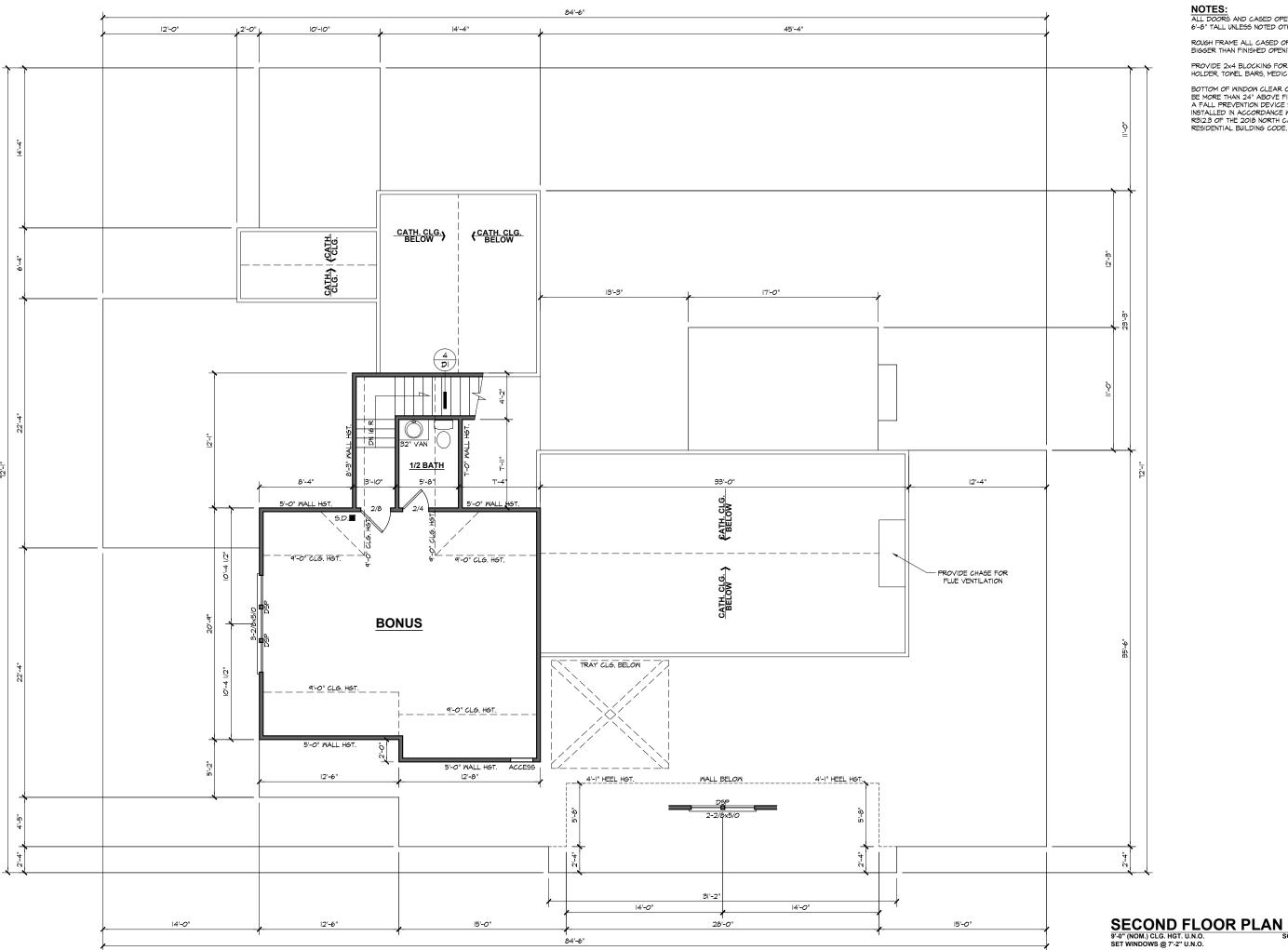
REVISIONS:

DATE:

9/8/2023

SHEET:

SCALE: 1/8"=1'-0"



NOTES: ALL DOORS AND CASED OPENINGS TO BE 6'-8" TALL UNLESS NOTED OTHERWISE.

ROUGH FRAME ALL CASED OPENINGS 2" BIGGER THAN FINISHED OPENING CALL FOR

PROVIDE 2x4 BLOCKING FOR: TOILET PAPER HOLDER, TOWEL BARS, MEDICINE CABINETS

BOTTOM OF MINDOW CLEAR OPENINGS SHALL BE MORE THAN 24" ABOVE FINISH FLOOR OR A FALL PREVENTION DEVICE SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R312.3 OF THE 2016 NORTH CAROLINA RESIDENTIAL BUILDING CODE.

inc residential design

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Allison Ann
Lot 114 Serenity
Fuquay-Varina, North Carolina

Floor

PROJECT NUMBER: 6074

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CHECKED BY: J.T.S.

REVISIONS:

DATE: 9/8/2023

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SCALE: 1/8"=1'-0"



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TRIPLE A HOMES
Allison Ann
Lot 114 Serenity
Fuquay-Varina, North Carolina

etails

PROJECT NUMBER:

6074

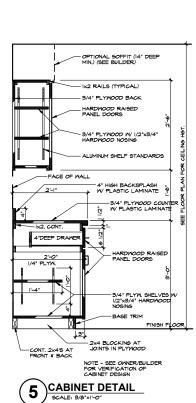
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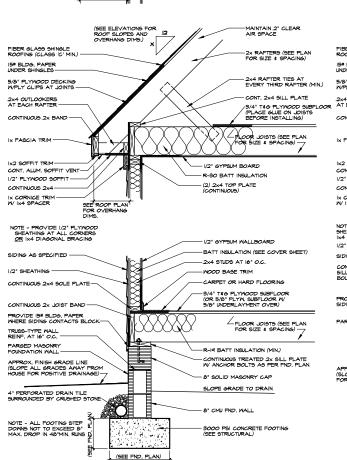
CHECKED BY: J.T.S.

REVISIONS:

DATE: 9/8/2023

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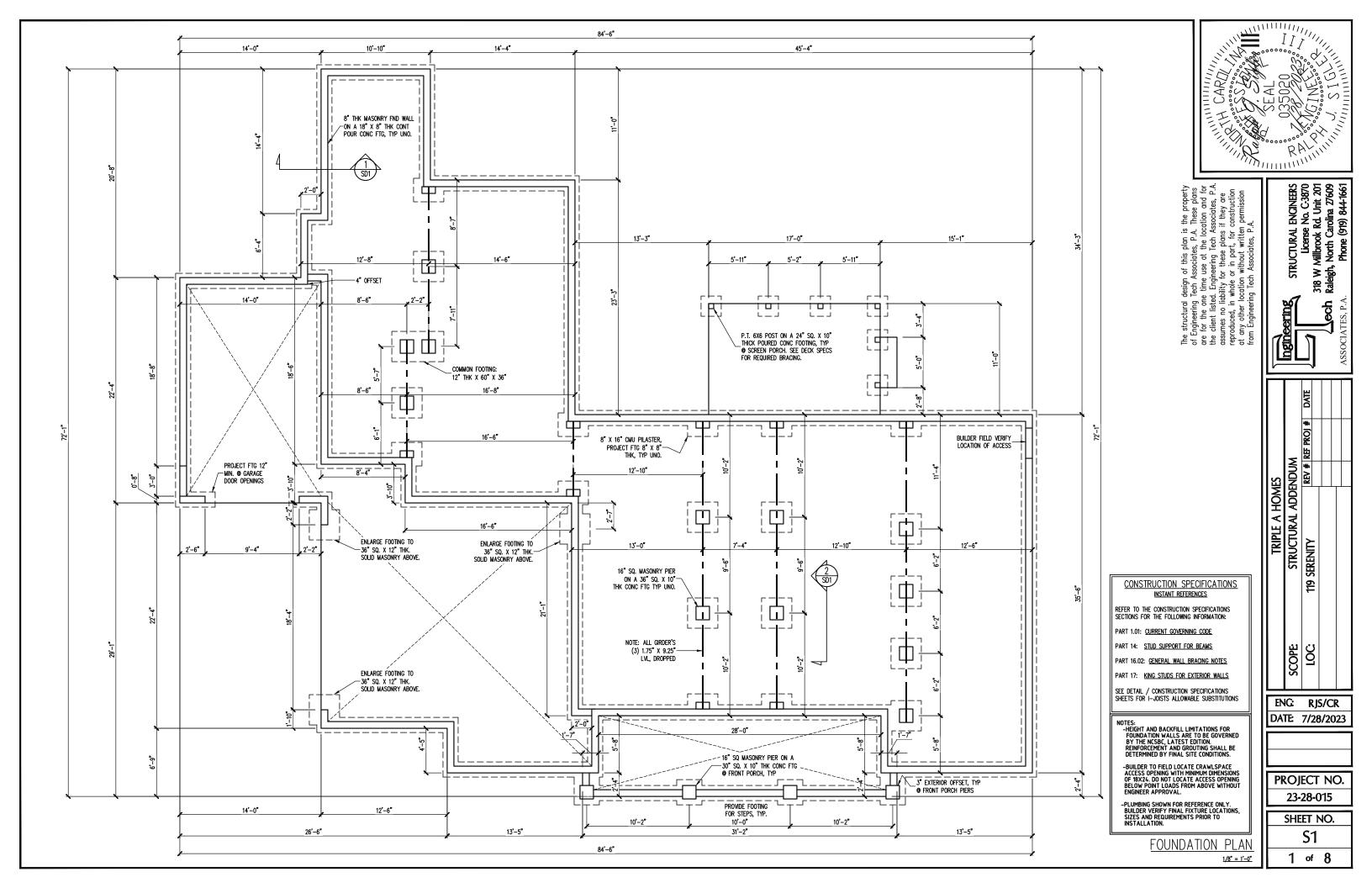


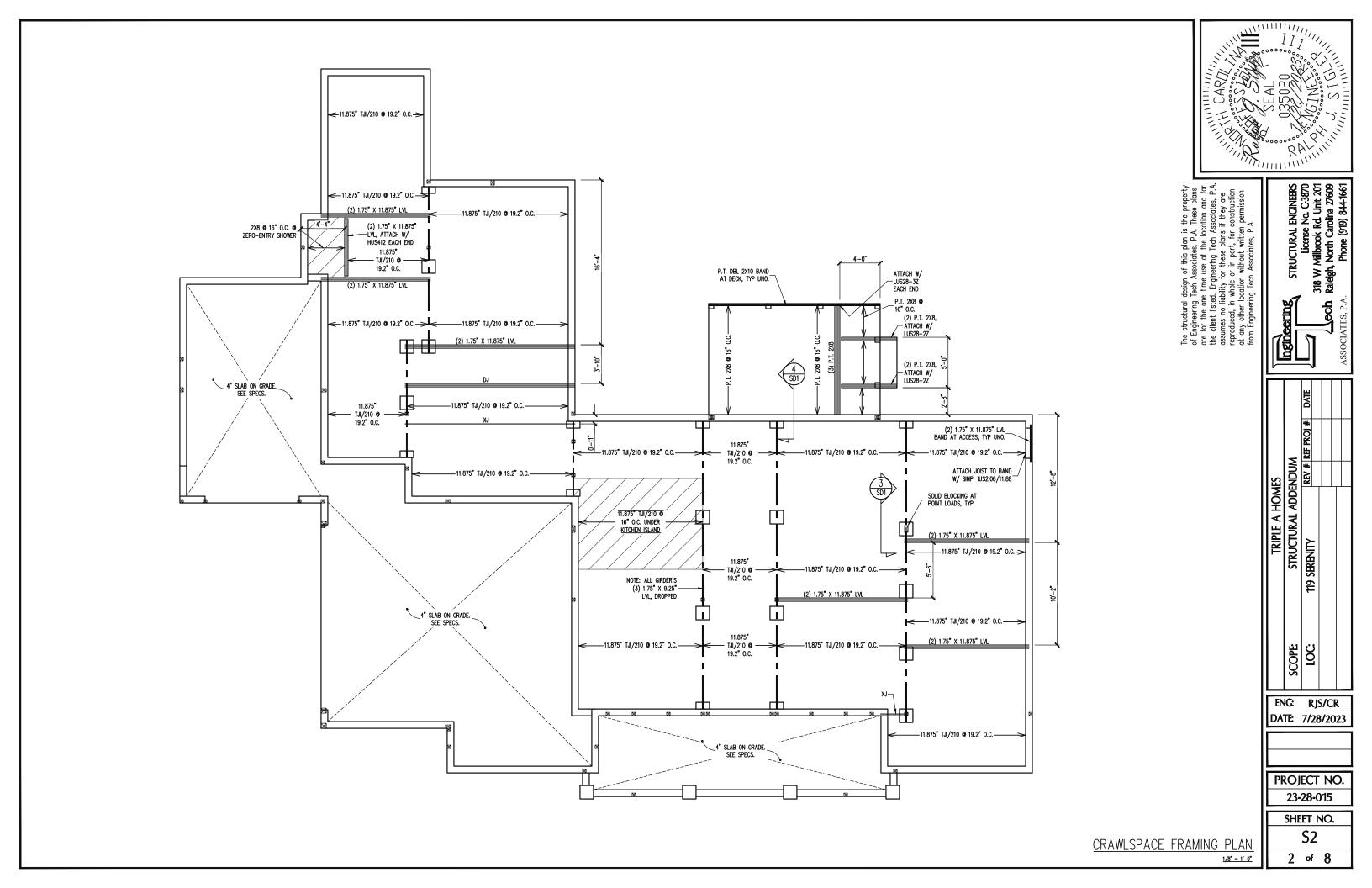
FIBER GLASS SHINGLE ROOFING (CLASS 'C' MIN.) 15# BLDG, PAPER UNDER SHINGLES —

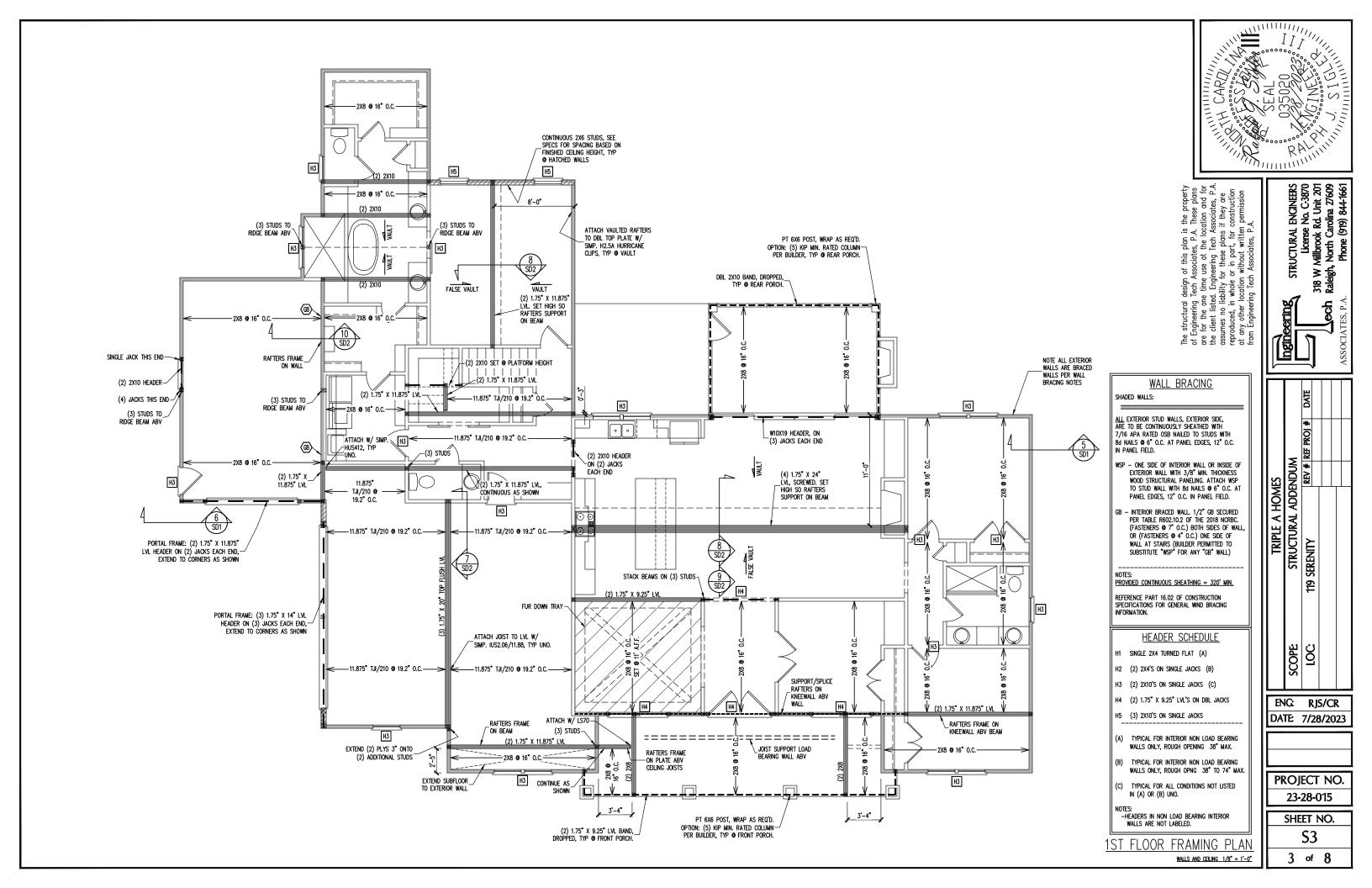
7/16" O.S.B. SHEATHING WPLY CLIPS AT JOINTS

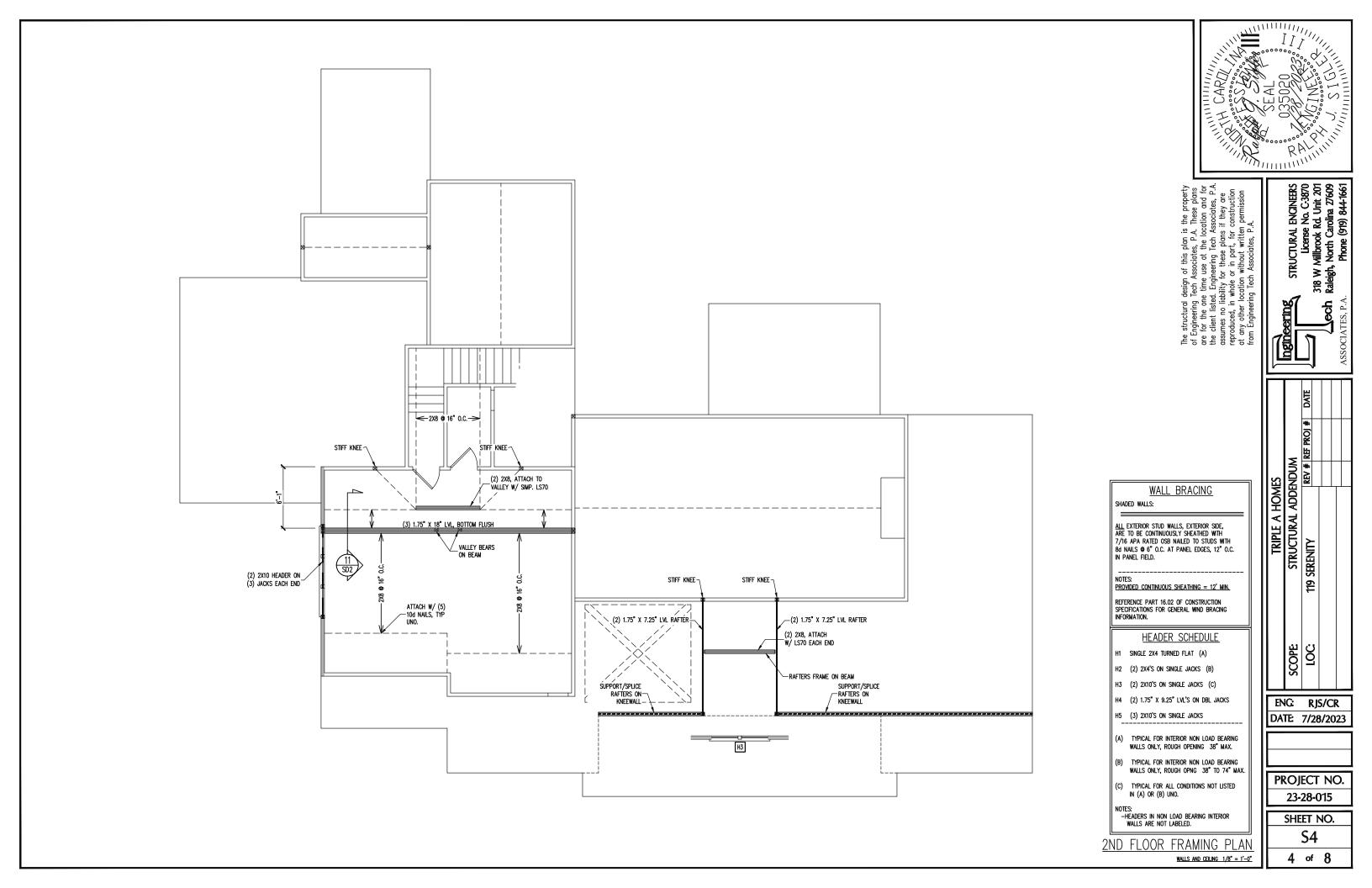
ROOF TRUSSES PER -TRUSS MANUF. (VERIFY FOOT CONFIGURATION)

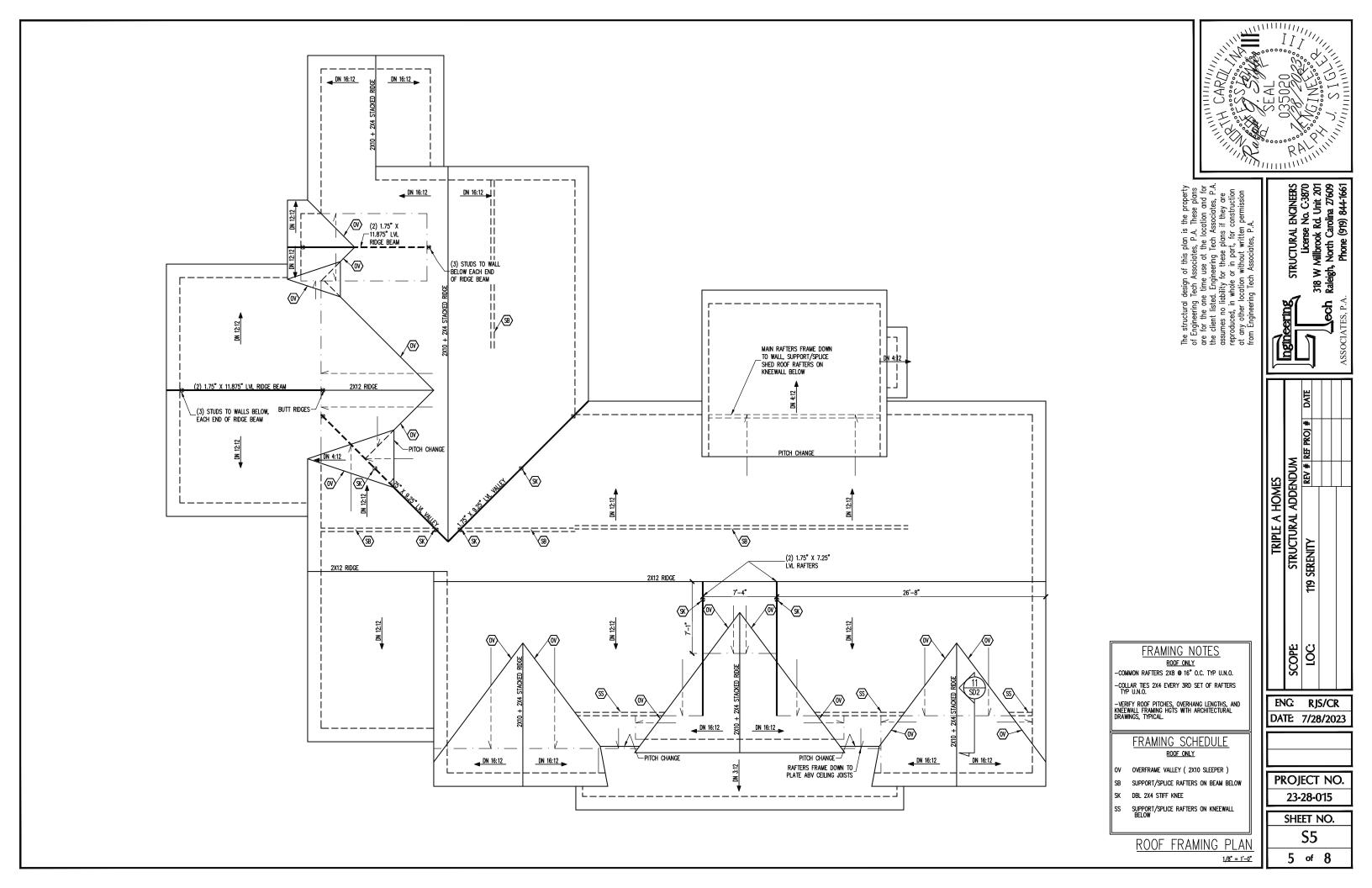
MAINTAIN 2" CLEAR AIR SPACE

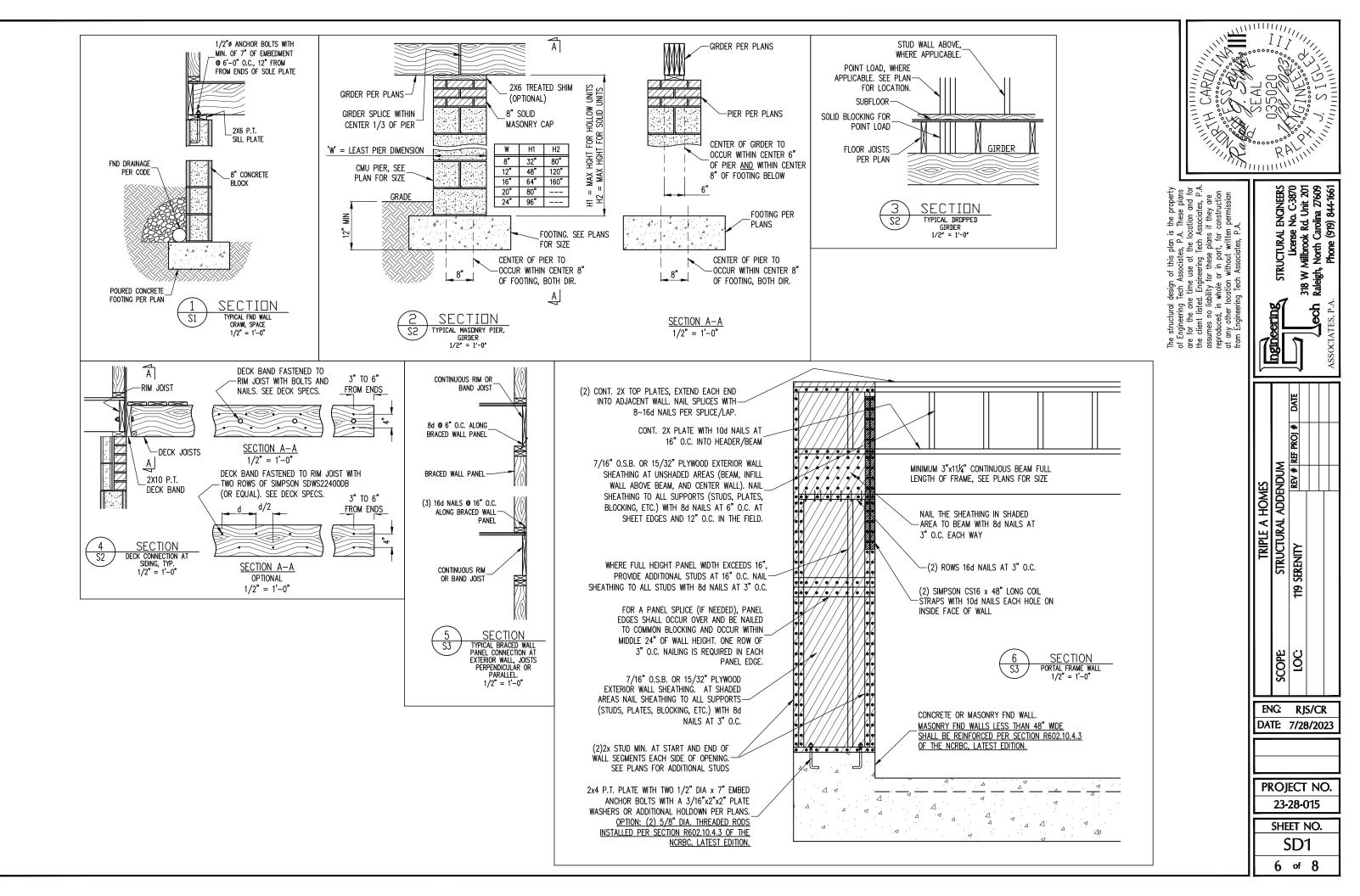


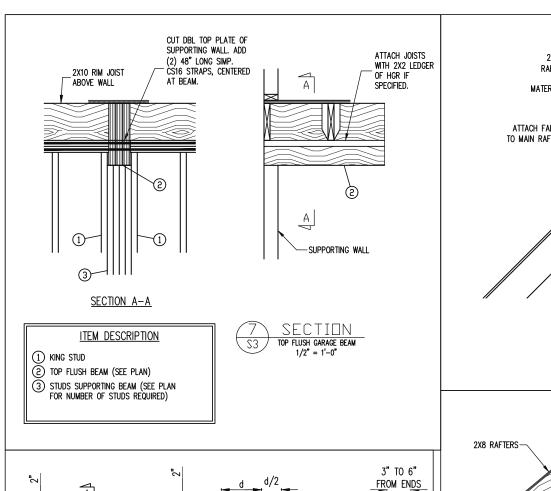


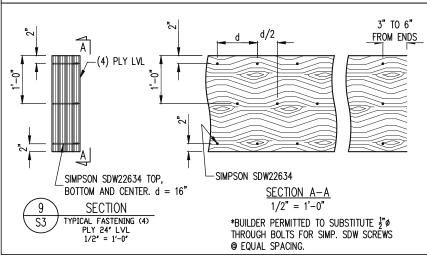


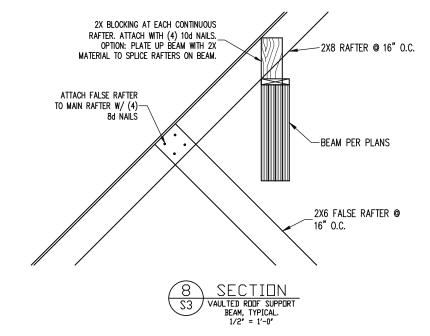


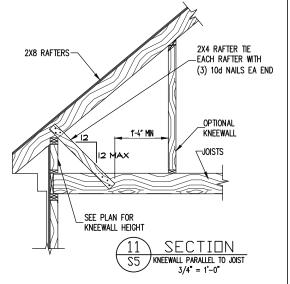


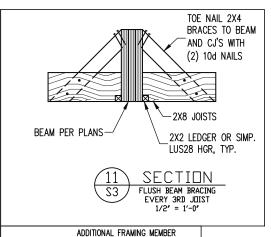


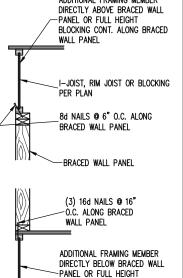












BLOCKING CONT ALONG BRACED

SECTION
TYPICAL BRACED WALL
PANEL CONNECTION AT
INTERIOR WALL, JOISTS
PERPENDICULAR OR

PARALLEL.

1/2" = 1'-0"

WALL PANEL

10 S3 The structural design of this plan is the propert of Engineering Tech Associates, P.A. These plans are for the one time use at the location and for the client listed. Engineering Tech Associates, P. assumes no liability for these plans if they are reproduced, in whole or in part, for construction at any other location without written permission of



ES	MDQN	REV # REF PROJ # DAT			
TRIPLE A HOMES	SCOPE STRUCTURAL ADDENDUM	I C TIO CEDENITY			1
		_	 . 10	<u></u>	

ENG: RJS/CR DATE: 7/28/2023

> PROJECT NO. 23-28-015

SHEET NO.

7 of 8

PART 1: GENERAL PART 2: DESIGN LOADS 2.02 INTERIOR WALLS: 5 PSF LATERAL. PART 3: STRUCTURAL STEEL 6.02 LAP SPLICES SHALL BE CLASS B AS DEFINED BY ACI 318, TYP UNO PART 7: MASONRY

CONSTRUCTION SPECIFICATIONS

CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE. 2018 EDITION.

- 1.02 DIMENSIONS SHOWN SHALL GOVERN OVER SCALE ON THESE DRAWINGS.
- 1.05 METHODS, PROCEDURES AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR, WHO SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND INSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.

2.01 DESIGN LOADS SHALL CONFORM WITH THE TABLE BELOW:

LIVE LOAD (PSF) DEAD LOAD (PSF)

BALCONIES, DECKS, ATTICS WITH FIXED STAIR ACCESS, DWELLING UNITS INCLUDING ATTICS WITH FIXED STAIR ACCESS, STAIRS, FIRE ESCAPES	40	10
GARAGES (PASSENGER CARS ONLY)	50	
ATTICS (NO STORAGE, LESS THAN 5' HEADROOM)	10	10
ATTICS (WITH STORAGE)	20	10
ROOF	20	10 (15 FOR VAUL

- Notes: Individual stair treads are to be designed for the Uniformly distributed Live Load of 40 ps? or a 300 lb. Concentrated Load acting over an area of 4 sq. Whichever produces the greater stress. Bulder to Verify Dead Load does not exceed 10 ps? When Heavy Floor or Roof Finishes such as tile or slate are utilized. Notify engineering under These Conditions
- 2.03 BASIC WIND DESIGN VELOCITY OF 120 MPH
- 2.04 SOIL BEARING CAPACITY 2000 PSF (PRESUMPTIVE).
- 3.01 WIDE FLANGE BEAMS AND TEE SECTIONS SHALL CONFORM TO ASTM A992 MINIMUM CRADE
- 3.02 SQUARE AND RECTANGULAR TUBING SHALL CONFORM TO ASTM A500 GRADE B MINIMUM GRADE.
- 3.03 STEEL PIPE SHALL CONFORM TO ASTM A53 GRADE B. TYPE S. MINIMUM GRADE
- 3.04 ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 MINIMUM GRADE

WELDING ELECTRODES SHALL BE E70XX AND ALL WELDING SHALL BE PERFORMED BY AN AWS CERTIFIED WELDER

PART 5: CONCRETE AND SLABS ON GRADE

- 5.01 CAST IN PLACE CONCRETE SHALL BE OF NORMAL MEIGHT, 4-6% AIR ENTRAINMENT, FOR EXTERIOR CONCRETE AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PS AT 28 DAYS TYP UNO. <u>ALL</u> ITEMS NOTED AS "CONCRETE" ARE TO BE CAST IN PLACE, TYP UNO.
- 5.02 REINFORCED CAST IN PLACE CONCRETE SHALL BE PROPORTIONED, MIXED AND PLACED II ACCORDANCE WITH THE SPECIFICATIONS OF ACI 318, LATEST EDITION.
- 5.03 SLABS ON GRADE, IF ANY, SHALL BE CAST IN PLACE, CONTAIN SYNTHETIC POLYPROPYLENE FIBRILLATED MICRO FIBERS, FIBER LENGTH 1 1/2", DOSAGE RATE 1 1/3 LBS/CU YD. SLAB TO BE PLACED ON A 6 MIL VAPOR BARRIER ON 4" MIN GRANULAR FILL ON SOIL WITH 90X MIN STANDARD PROCTOR DENSITY. VAPOR BARRIER MAY BE OMITTED FOR SLABS NOT IN ENCLOSED AREAS

PART 6: REBAR AND WIRE REINFORCEMENT

- 6.01 REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615 GRADE 60 TYP UNO
- 6.03 WIRE REINFORCEMENT SHALL BE 9 GA AND SHALL CONFORM TO ASTM A1064.

7.01 CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 AND C55, NORMAL WEIGHT,

NOTES

- 7.02 CLAY MASONRY UNITS SHALL CONFORM TO ASTM C62-17 GRADE SW
- MORTAR SHALL BE TYPE S. MORTAR AND GROUT SHALL CONFORM TO ASTM C476, MIN COMPRESSIVE STRENGTH OF 2000 PSI.
- 7.04 MASONRY CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS OF ACI 530
- 7.05 LADDER WIRE REINFORCEMENT SHALL CONFORM TO ASTM A951. 6° MIN LAPS FOR CONTINUOUS WALL APPLICATIONS

PART 8: BOLTS AND LAG SCREWS

- 8.01 BOLTS SHALL CONFORM TO ASTM A307 MINIMUM GRADE TYP UNO. INSTALL STANDARD STEEL WASHERS (ASTM F844-07a) FOR THE NUT / BOLT HEAD WHEN BOLTING WOOD MEMBERS. HOLES FOR BOLTS SHALL BE AISC STANDARD HOLES UNO
- 8.02 LAG SCREWS SHALL CONFORM TO ANSI/ASME STANDARD B18.2.1—1981. PILOT HOLES SHALL BE USED FOR LAG SCREW INSTALLATION AND SHALL BE BORED ACCORDING TO NOS SPECIFICATIONS. INSTALL STANDARD STEEL WASHERS (ASTM F844-070) FOR
- 8.03 ANCHOR RODS AND BOLTS SHALL CONFORM TO ASTM F1554-15 GRADE 36 UNO. BENT ANCHOR BOLTS SHALL HAVE A 2" MIN HOOK UNO

PART 9: DRIVEN FASTENERS

NAILS, SPIKES AND STAPLES SHALL CONFORM TO ASTM F 1667- 05. NAILS ARE TO BE COMMON WIRE OR BOX

PART 10: DIMENSIONAL LUMBER

10.01 SOULD SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SPRUCE PINE FIR OR SYP #2 FOR JUSTS, RAFTERS, GROERS, BEAMS, STUDS, ETC. MINIMUM ALLOWABLE DESIGN PROPERTIES ARE AS FOLLOWS:

E= 1,40,000 PS, Fp psp = 425 PSI, Fv = 285 PSI, SPECIFIC GRAVITY = 0.42 MIN F_b = 875 PSI FOR 2X4, 2X6, 2X8. F_b = 800 PSI FOR 2X10'S, 750 PSI FOR 2X12'S

- 11.01 LV. OR PSL MINIMUM ALLOWABLE DESIGN PROPERTIES ARE AS FOLLOWS: E= 1,900,000 PSI, $F_s=2600$ PSI, $F_s=2850$ PSI, $F_s=2500$ PSI LSL MINIMUM ALLOWABLE DESIGN SIFESSES ARE AS FOLLOWS: E= 1.3 X 10E6 PSI, $F_b=1700$ PSI, $F_s=400$ PSI, $F_c=ppp=680$ PSI
- 11.02 LVL OR PSL MEMBERS MAY BE RIPPED FROM DEEPER MEMBERS TO MATCH THE MEMBER DEPTH SPECIFIED IN THE PLANS

PART 12: PRESSURE TREATED LUMBER

12.01 LUMBER IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA STANDARD C-15. ALL OTHER EXPOSED LUMBER SHALL BE TREATED IN ACCORDANCE WITH AWPA STANDARD C-2 OR BY ANY METHOD GIVING EQUAL PROTECTION. THE BUILDING CODE OFFICE MAY ALSO APPROVE A NATURAL DECAY RESISTANT WOOD PER SECTION 19-6(A)

PART 13: STEEL FLITCH PLATE BEAMS

13.01 FLITCH PLATE BEAMS SHALL CONSIST OF A CONTINUOUS STEEL PLATE BOLTED BETWEEN TWO PIECES OF CONTINUOUS LUMBER AS SIZED ON THE PLANS. BOLT PIECES TOGETHER USING 1/2" & BOLTS SPACED AT 16" O.C. STAGGERED TOP TO BOTTOM OF THE BEAM. MAINTAIN A 2" EDGE DISTANCE. PLACE TWO BOLTS, ONE ABOVE THE OTHER, 16" MAX FROM EACH END OF THE BEAM. TYP UNO

PART 14: STUD SUPPORTS FOR BEAMS

4.01 STEEL, ENGINEERED LUMBER, AND FLITCH PLATE BEAMS BEARING ON A STUD WALL SHALL BEAR AS FOLLOWS:

- 1-WHEN THE BEAM IS PERPENDICULAR TO, OR SKEWED RELATIVE TO THE WALL, THE BEAM SHALL BEAR FULL WIDTH ON THE SUPPORTING WALL INDICATED AND SHALL BE SUPPORTED BY A MINIMUM OF THREE GANGED STUDS, OR A GANGED STUD OCULAIN WITH A NUMBER OF STUDS SUCH THAT THE STUD COLUAIN IS AT LEAST AS MIDE AS THE TRUE WIDTH OF THE BEAM BEING SUPPORTED, WHICHEVER IS GREATER, TYP UND. FOR THE SKEWED CONDITION PARTICULAR CARE SHALL BE TAKEN TO ENSURE STUD COLUMN IS CENTERED ON
- THE BEAM 2-BEAMS BEARING ONTO THE END OF A STUD WALL PARALLEL TO THE BEAM SHALL BEAR A MINIMUM OF 4 1/2" ONTO THE WALL AND BE SUPPORTED BY A TIPL STUD GANCED
- 4.02 DIMENSIONAL LUMBER BEAMS BEARING ON A STUD WALL SHALL BEAR AS FOLLOWS:
- 1-WHEN THE BEAM IS PERPENDICULAR TO, OR SKEWED RELATIVE TO THE WALL, THE BEAM SHALL BEAR <u>FULL WIDTH</u> ON THE SUPPORTING WALL INDICATED (LESS 1 1/2" TO ALLOW FOR A CONTINUOUS RIM JOIST WHERE APPLICABLE) AND SHALL BE SUPPORTED BY A GANGED STUD COLUMN THE SAME WIDTH AS THE BEAM TYP UNO. (E.G. A TRIPLE 2X10 IS TO BE SUPPORTED BY (3) STUDS). FOR THE SKEWED CONDITION PARTICULAR CARE SHALL BE TAKEN TO ENSURE STUD COLUMN IS CENTERED ON THE BEAM

ABBREVIATIONS

2—BEAMS BEARING ONTO THE END OF A STUD WALL PARALLEL TO THE BEAM SHALL BEAR A MINIMUM OF 3" ONTO THE WALL AND BE SUPPORTED BY A DBL STUD GANGED COLUMN

- 14.03 Extra joists bearing on a stud wall perpendicular to or skewed relative to the beam shall be supported by one additional stud.
 - STUDS THAT ARE GANGED TO FORM A COLUMN SHALL HAVE ADJACENT STUDS WITHIN THE COLUMN NAILED TOGETHER WITH ONE ROW OF 10d NAILS AT 8" O.C. (TWO ROWS OF 10d NAILS AD 8" O.C., 3" APART, FOR 2/8 OR 2/10 STUDS) ALL COLUMNS SHALL BE CONTINUOUS DOWN TO THE FOUNDATION OR OTHER PROPERLY DESIGNED STRUCTURAL ELEMENT SUCH AS A BEAM. COLUMNS TRANSFERRING LOADS THROUGH FLOOR LEVELS SHALL BE SOLIDLY BLOCKED FOR THE FULL WIDTH OF THE STUD COLUMN WITHIN THE CAVITY FORMED BY THE

PART 15: NAILING OF MULTI PLY WOOD BEAMS

- 15.01 SOUD SAWN LUMBER JOISTS THAT ARE GANGED TO FORM A BEAM SHALL HAVE ADJACENT MEMBERS IN THE BEAM NAILED TOGETHER WITH THREE ROWS OF 104 NAILS 40 16" O.C. FOR 2XIO OR LARGER, TWO ROWS OF 104 NAILS 40 16" O.C. FOR 2XIO ROW OF 10d NAILS @ 16" O.C. FOR 2X6 OR SMALLER. STAGGER ROWS 5" MIN.
- 15.02 LV. MEMBERS THAT ARE GANGED TO FORM A BEAM SHALL HAVE ADJACENT MEMBERS IN THE BEAM FASTENED TOGETHER PER MANUFACTURERS RECOMMENDATIONS, TYP

PART 16: WALL FRAMING AND BRACING

16.01 STUD WALLS SHALL CONSIST OF 224 STUDS SPACED AT 16" O.C. UND. STUDS SHALL BE CONTINUOUS FROM SOLE PLATE AT FLOOR TO DOUBLE TOP PLATE AT THE CELING OR ROOF. NO INTERNEDIATE BANDS OR PLATES SHALL CAUSE DISCONTINUITIES IN A STUD WALL SICEPT AS REQUIRED FOR DOOR OR MANDOW OPENINES. THE KING STUDS FOR SUCH OPENINES SHALL BE CONTINUOUS, TP UND.

MAX ALLOWABLE WALL HEIGHTS FOR EXTEROR STUD WALLS, INCLUSIVE OF SOLE PLATE AND DBI. TOP PLATE AND 7/16" OSS EXTERIOR BRACING AND ROW OF 2X4 2X6 PURLINS AT 8" HEIGHT (AND A116" HIGHT FOR TALL WALLS), TP UND:

2X4 • 0 16" O.C.: 11" – 1 1/2" 2X6 • 0 16" O.C.: 17" – 0"

2X4 • 0 16" O.C.: 13" – 4" DBI. 2X6 • 0 16" O.C.: 21" – 0"

16.02 FOR WALL BRACING THE FOLLOWING SHALL APPLY:

BLOCKING AT UNSUPPORTED PANEL EDGES IS REQUIRED TYP UNO.

WALL BRACING IS BY ENGEREED DESIGN AND NOT PRESCRIPTIVE PER SECTION 602.10 OF THE 2018 NORE. CONTINUOUS SHEATHING HAS BEEN PROVIDED, ALONG WITH ALTERNATIVE METHODS TO INSURE THE MINIMUM INTENT OF SECTION 602.10 OF THE 2018 NORE HAS BEEN MET AND EXCEEDING.

BRACED WALL PANELS SHALL BE FASTENED IN ACCORDANCE WITH TABLE 602.3(1) TO PROVIDE CONTINUOUS PANEL UPIT RESISTANCE AND COMPLIANCE WITH NORSE REQUIRED SHALL SHALL

PART 17: KING STUDS

7.01 KING STUDS FOR OPENINGS IN EXTERIOR WALLS SHALL BE AS FOLLOWS:

		NUMBER OF KING STUDS						
MAX OPENING	S WIDTH	5'-0"	9'-0"	13'-0"	17'-0"	21'-0"		
STUD SIZE	2X4 2X6 2X8	1 1 1	2 1 1	3 2 1	4 2 1	5 2 2		

PART 18: SUBSTITUTIONS

MATERIAL OR MEMBER SIZE SUBSTITUTIONS OR PLAN DEVIATIONS REQUIRE THE WRITTEN AUTHORIZATION OF THE DESIGNERS. UNAUTHORIZED DEVIATIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

PART 19: OWNERSHIP OF STRUCTURAL DESIGN

THE STRUCTURAL DESIGN OF THIS PLAN IS THE PROPERTY OF ENGINEERING TECH ASSOCIATES (ETA). THESE PLANS ARE FOR THE ONE TIME USE AT THE LOCATION NOICATED AND FOR THE CUENT LISTED. ETA ASSUMES NO LIABILITY FOR THESE PLANS I FIRLY ARE REPRODUCED, IN WHOLE OR IN PART, FOR CONSTRUCTION AT ANY OTHER LOCATION WITHOUT WRITTEN PERMISSION FROM ETA.

DECK SPECIFICATIONS

A DECK IS AN EXPOSED EXTERIOR WOOD FLOOR STRUCTURE WHICH MAY BE ATTACHED TO A STRUCTURE OR BE FREE STANDING. ROOFED PORCHES, OPEN OR SCREENED IN, MAY BE CONSTRUCTED USING THESE PROVISIONS.

WHEN ATTACHED TO A STRUCTURE, THE STRUCTURE TO WHICH ATTACHED SHALL HAVE A TREATED WOOD BAND FOR THE LENGTH OF THE DECK, OR CORROSION RESISTANT FLASHING 9 SHALL BE USED TO PREVENT MOISTURE FROM COMING IN CONTACT WITH THE UNTREATED FRAMING OF THE STRUCTURE. THE DECK BAND AND THE STRUCTURE BAND SHALL BE CONSTRUCTED IN CONTACT WITH EACH OTHER EXCEPT AT BRICK VENEER AND WHERE PLYWOOD SHEATHING IS REQUIRED AND PROPERLY FLASHED. SIDING SHALL NOT BE

INSTALLED BETWEEN THE STRUCTURE AND THE DECK BAND, IF ATTACHED TO A BRICK

WHEN THE DECK IS SUPPORTED AT THE STRUCTURE BY ATTACHING THE DECK TO THE STRUCTURE, THE FOLLOWING ATTACHMENT SCHEDULES SHALL APPLY FOR ATTACHING THE DECK BAND TO THE STRUCTURE:

JOIST LENGTH

ONE - 5/8" Ø BOLT @ 42" O.C. AND ONE - 5/8" Ø BOLT @ 20" O.C. AND (2) ROWS OF 12d NAILS @ 8" O.C. OR (3) ROWS OF 12d NAILS @ 6" O.C. OR

TWO ROWS OF SIMPSON SDWS22400DB TWO ROWS OF SIMPSON SDWS22400DB

JOIST LENGTH

UP TO 16' MAX.

@ d = 16" O.C. STAGGERED

UP TO 16' MAX.

ONE- 5/8" Ø BOLT @ 16" O.C.

STRUCTURE NEITHER FLASHING NOR A TREATED BAND FOR THE BRICK STRUCTUR STREQUIRED. IN ADDITION, THE TREATED BAND FOR THE BRICK STRUCTURE IS REQUIRED. IN ADDITION, THE TREATED DECK BAND SHALL BE CONSTRUCTED IN CONTACT WITH THE BRICK

SUPPORT POSTS SHALL BE SUPPORTED BY A FOOTING.

A. ALL STRUCTURES EXCEPT BRICK STRUCTURES

A . BRICK VENEER STRUCTURES

JOISTS TO A TREATED STRUCTURE BAND

WITH 2- 5/8" # BOLTS

REQUIRED

UP TO 8' MAX.

@ d = 32" O.C. STAGGERED

UP TO 8' MAX.

ONE- 5/8" Ø BOLT @ 28" O.C.

IF THE DECK BAND IS SUPPORTED BY A 1/2" MINIMUM MASONRY LEDGE ALONG THE FOUNDATION WALL, 5/8" Ø BOLTS SPACED @ 48" O.C. MAY BE USED FOR SUPPORT.

OTHER MEANS OF SUPPORT, SUCH AS JOIST HANGERS, MAY BE USED TO CONNECT DECK

GIRDERS SHALL BEAR DIRECTLY ON POSTS OR BE BE CONNECTED TO THE SIDES OF POST:

FLOOR DECKING SHALL BE NO. 2 GRADE TREATED SOUTHERN PINE OR EQUIVALENT. THE MINIMUM FLOOR DECKING THICKNESS SHALL BE AS FOLLOWS:

12" O.C.	1" S4S					
16" O.C.	1" T&G					
24" O.C.	1 1/4" S4S					
32" O.C.	2" S4S					
MAXIMUM HEIGHT OF DECK SUPPORT POSTS IS AS FOLLOWS:						

DECKING

JOIST SPAN

POST SIZE	MAX POST HEIGHT
4X4	8'
6X6	20'
ENGINEERED	20' +

NOTES: 1) THIS TABLE IS BASED ON NO. 2 TREATED SOUTHERN PINE POSTS. 2) THIS TABLE IS BASED ON A MAXIMUM TRIBUTARY AREA OF 128 SQ. FT. 3) POST HEIGHT IS FROM TOP OF FOOTING TO BOTTOM OF GIRDER.

DECKS SHALL BE BRACED TO PROVIDE LATERAL STABILITY BY ONE OF THE FOLLOWING

- WHEN THE DECK FLOOR HEIGHT IS LESS THAN 4'-0" AND THE DECK IS ATTACHED TO STRUCTURE IN ACCORDANCE WITH SECTION 4, LATERAL BRACING IS NOT REQUIRED.
- B. 4X4 WOOD KNEE BRACES MAY BE PROVIDED ON EACH COLUMN IN BOTH DIRECTIONS. 4X4 MOOD KINE BRACES SHALL ATTACH TO EACH POST AT A POINT NOT LESS THAN 1/3 OF THE POST LENGTH FROM THE TOP OF THE POST, AND THE BRACES SHALL BE ANGLED BETWEEN 45' AND 60' FROM THE HORIZONTAL KNEE BRACES SHALL BE ATTACHED AT THE ENDS TO THE GIRDER AND THE POST WITH ONE - 5/8" BOLT

C. FOR FREE STANDING DECKS WITHOUT KNEE BRACES OR DIAGONAL BRACING, LATERAL STABILITY MAY BE PROVIDED BY EMBEDDING THE POSTS IN CONCRETE IN ACCORDANCE WITH THE FOLLOWING:

POST SIZE	TRIBUT. AREA	POST HEIGHT	EMB. DEPTH	CONC. DIAM.
4X4	48 SQ. FT.	4'-0"	2'-6"	1'-0"
6X6	120 SQ. FT.	6'-0"	3'-6"	1'-8"

D. 2X6 DIAGONAL VERTICAL CROSS BRACING SHALL BE PROVIDED IN TWO PERPENDICULAR DIRECTIONS FOR FREE STANDING DECKS OR PARALLEL TO THE STRUCTURE AT THE EXTERIOR COLUMN LINE FOR ATTACHED DECKS. THE BRACES SHALL BE ATTACHED TO THE POSTS WITH ONE -5/8" ϕ bolt at each end of the brace.

NOTES: 1) ALL NAILS AND BOLTS ARE TO BE HOT DIPPED GALVANIZED. 2) MINIMUM EDGE DISTANCE FOR BOLTS IS 2 1/2".

3) NAILS MUST PENETRATE THE SUPPORTING STRUCTURE BAND A MINIMUM OF 1 1/2".

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SHEET NO. **SPECS**

PROJECT NO. 23-28-015

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ALLOWABLE I-JOIST SUBSTITUTION

HALL IMMEDIATELY CONTACT THE ENGINEER OF RECORD (EOR) BEFORE PROCEEDING IF THE B. BOTH	
OLLOWING CONDITIONS ARE NOTED BEFORE OR DURING CONSTRUCTION: B.E. BOTH ENDS	
1) THE WORKING PLANS DO NOT BEAR THE SEAL OF THE EOR BTWN BETWEEN	

2) THE PLANS CONTAIN DISCREPANT OR INCOMPLETE INFORMATION

ANY FRRORS DUE TO A FAILURE TO FOLLOW THE ABOVE PROCEDURES SHALL NOT BE THE ensure than any revisions issued by the Eor are promply distributed to the

THE EOR DOES NOT PERFORM FENESTRATION OR VENTING CALCULATIONS OR ANY OTHER CALCULATIONS THAT ARE NOT DIRECTLY RELATED TO STRUCTURAL ENGINEERING.

ROOF AND FLOOR TRUSSES TO BE DESIGNED BY AN ENGINEER REGISTERED BY THE STATE, FINA TRUSS DRAWING SHOULD BE SUBMITTED TO THE EOR FOR REVIEW

TJ TRIPLE JOIST
TYP TYPICAL
TRPL TRIPLE
TSP TRIPLE STUD POCKET FND FOLINDATION HDG HOT DIPPED GALVANIZED UNO UNLESS NOTED LVL LAMINATED VENEER
LUMBER NTS NOT TO SCALE DIA DIAMETER DBL DOUBLE O.C. ON CENTER DOUBLE JOIST PSI PARALIFI STRAND LUMBER
PT PRESSURE TREATED
QJ QUAD JOIST DBL STUD POCKET SP SPACE (OR SPACING)
SSP SINGLE STUD POCKET
SQ SQUARE FL PL FLITCH PLATE FLR FLOOR

NOTE: MAINTAIN JOIST DEPTH, DIRECTION, AND SPACING SPECIFIED OF

MANUFACTURER	DEPTH	SERIES	SIMPSON FACE MOUNT HGR	SIMPSON TOF
BLUELINX BOISE CASCADE BOISE CASCADE INTERNATIONAL	11.875" 11.875" 11.875" 11.875"	BLI 40 BCI 5000s BCI 6000s IB 400	IUS2.56/11.88 IUS2.06/11.88 IUS2.37/11.88 IUS2.56/11.88	ITS2.56/11.88 ITS2.06/11.88 ITS2.37/11.88 ITS2.56/11.8
BEAMS LP CORP NORDIC ROSEBURG WEYERHAEUSER WEYERHAEUSER	11.875" 11.875" 11.875" 11.875" 11.875"	LPI 20+ NI 40X RFPI 40s TJI 210 EEI-20	IUS2.56/11.88 IUS2.56/11.88 IUS2.56/11.88 IUS2.06/11.88 IUS2.37/11.88	ITS2.56/11.86 ITS2.56/11.86 ITS2.56/11.86 ITS2.06/11.86 ITS2.37/11.88

JOISTS NOT LISTED IN THE ABOVE TABLE MAY BE USED PROVIDED THEY MEET OR EXCEED THE PROPERTIES OF THOSE LISTED. SUBSTITUTE USP BRAND HANGERS WITH EQUIVALENT VALUES AS DESIRED.