

Residence for Triple A Homes Lot 18 Cotton Farms Fuquay-Varina, North Carolina



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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 to any changes made during construction.

PROJECT INFO:
TRIPLE A HOMES
Lot 18 Cotton Farms
Fuquay-Varina, North Carolina

TITLE:
Cover Sheet

PROJECT NUMBER:
6469

DRAWN BY:
J.A.D.

CHECKED BY:
J.T.S.

REVISIONS:

DATE:
3/26/2024

SHEET:

C



INDEX TO DRAWINGS:

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REAR AND RIGHT SIDE ELEVATIONS		
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CONSTRUCTION DETAILS		

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.).
- 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
- 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
- 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 WHERE STRUCTURE IS BEING BUILT SHALL BE IN ACCORDANCE WITH CHAPTER 11 OF THE NORTH CAROLINA RESIDENTIAL BUILDING CODE, AS SHOWN IN TABLES N1101.2 AND N1102.1.
- TERMITE TREATMENT - BORATE APPLIED TO ALL FRAME MEMBERS WITHIN 24" AFF.

RESIDENTIAL BUILDING CODE SUMMARY

- PLANS ARE DESIGNED TO THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.
- HOUSE IS DESIGNED FOR 115 MPH, 3 SECOND GUST (89 MPH FASTEST WIND), EXPOSURE B.
- ANCHOR BOLTS SHALL BE MIN. 1/2" DIAMETER WITH STANDARD WASHER AND NUT AND SHALL EXTEND 7" MIN. INTO MASONRY OR CONCRETE. BOLTS TO BE NO MORE THAN 6' O.C. AND WITHIN 12" 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"
- 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 1	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, -24.1	18.9, -25.3	19.6, -26.3	20.2, -27.0
- MINIMUM VALUES FOR ENERGY COMPLIANCE: ZONE 4
- MAXIMUM GLAZING U-FACTOR: 0.35
- INSULATING VALUES: CEILING: R-30* / WALLS: R-15 / FLOOR: R-19 / SLABS: R-10. CODE REFERENCE: TABLE N1102.1 (*R-30 ONLY IF UNCOMPRESSED, R-38 REQUIRED IF COMPRESSED)
- FLASHING SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R703.8 OF THE N.C.R.B.C.
- FIREBLOCKING SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R602.8 OF THE N.C.R.B.C.
- DRAFTSTOPPING SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R302.12 OF THE N.C.R.B.C.

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	TOILET BAR
TP	TOILET PAPER HOLDER
TR	TOILET 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 VERIFY 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, HOMES UNIQUE CANNOT BE HELD RESPONSIBLE FOR ANY REQUIREMENTS THAT EXISTING SITE CONDITIONS MAY CREATE.

AREA CALCULATIONS

	HEATED:	UNHEATED:
1ST FLOOR:	2731	GARAGE: 458
TOTAL:	2731	FRONT PORCH: 186
		REAR PORCH: 174
		TOTAL: 1318

WIDTH: 59'-0"
DEPTH: 83'-10"

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 150 SQUARE FEET OF CRAWL 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.

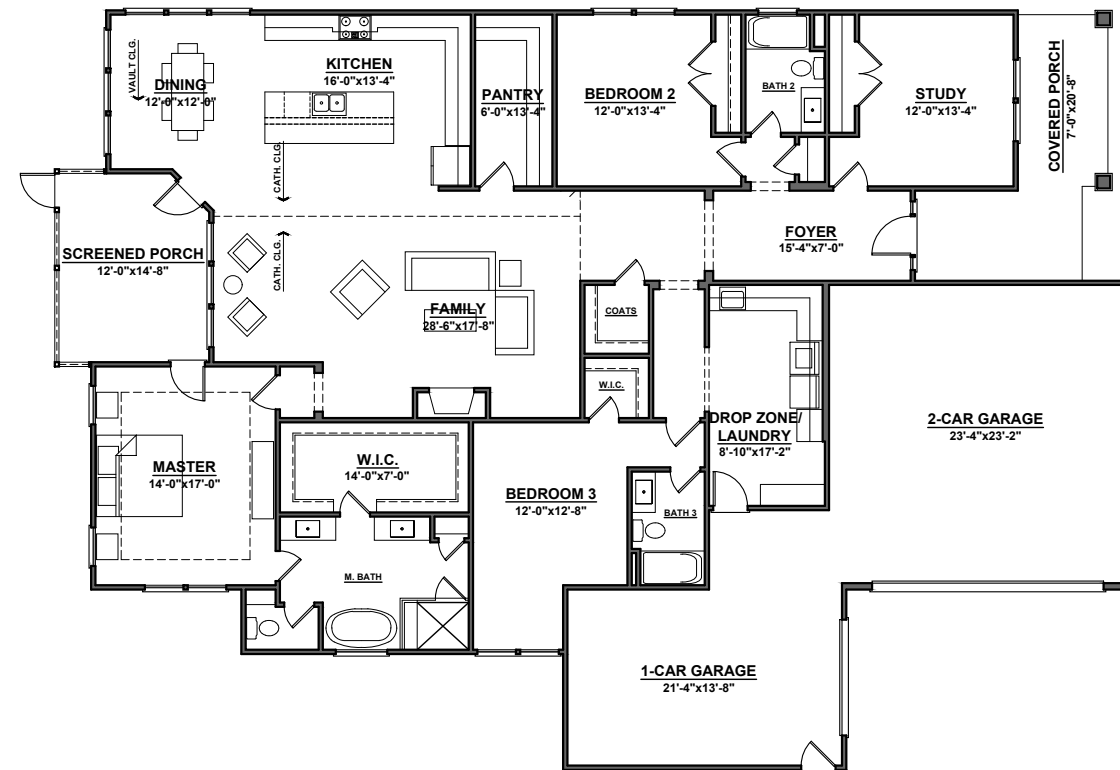
$$\frac{3196 \text{ SQUARE FEET OF CRAWL SPACE AREA}}{150} =$$

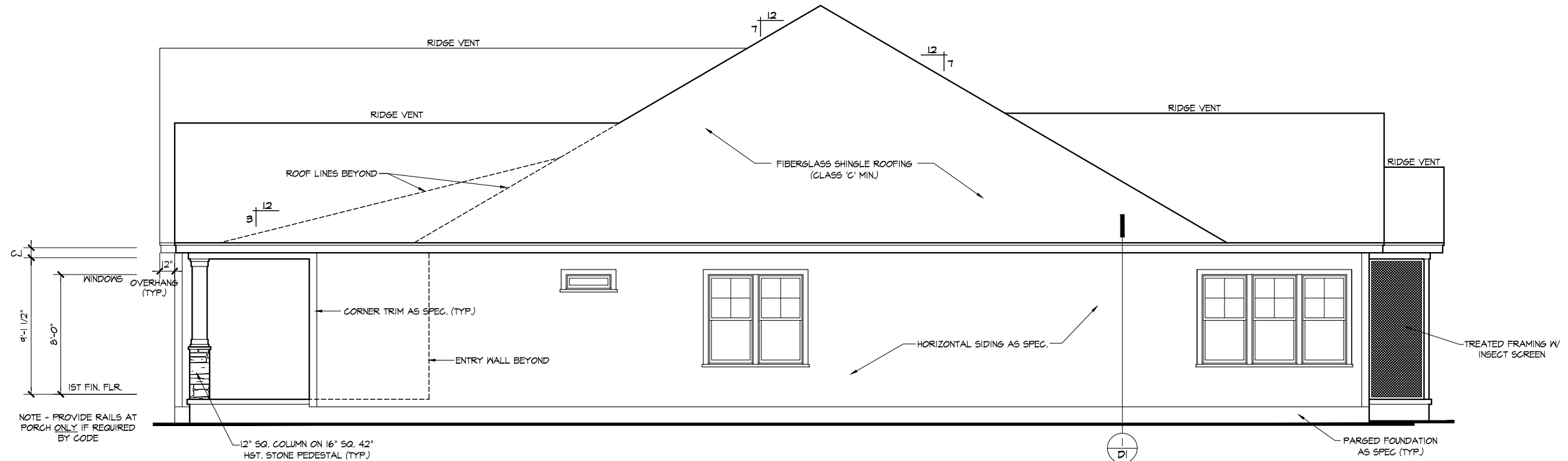
$$\underline{21.31} \text{ SQUARE FEET OF NET FREE AREA REQUIRED}$$

ATTIC VENTILATION REQUIREMENTS

NATURAL ROOF VENTILATION	MECHANICAL ROOF VENTILATOR
4049 SQ. FT.	4049 SQ. FT.
150 = 26.99 SQ. FT. VENT REQ'D.	300 = 13.50 SQ. FT. VENT REQ'D.

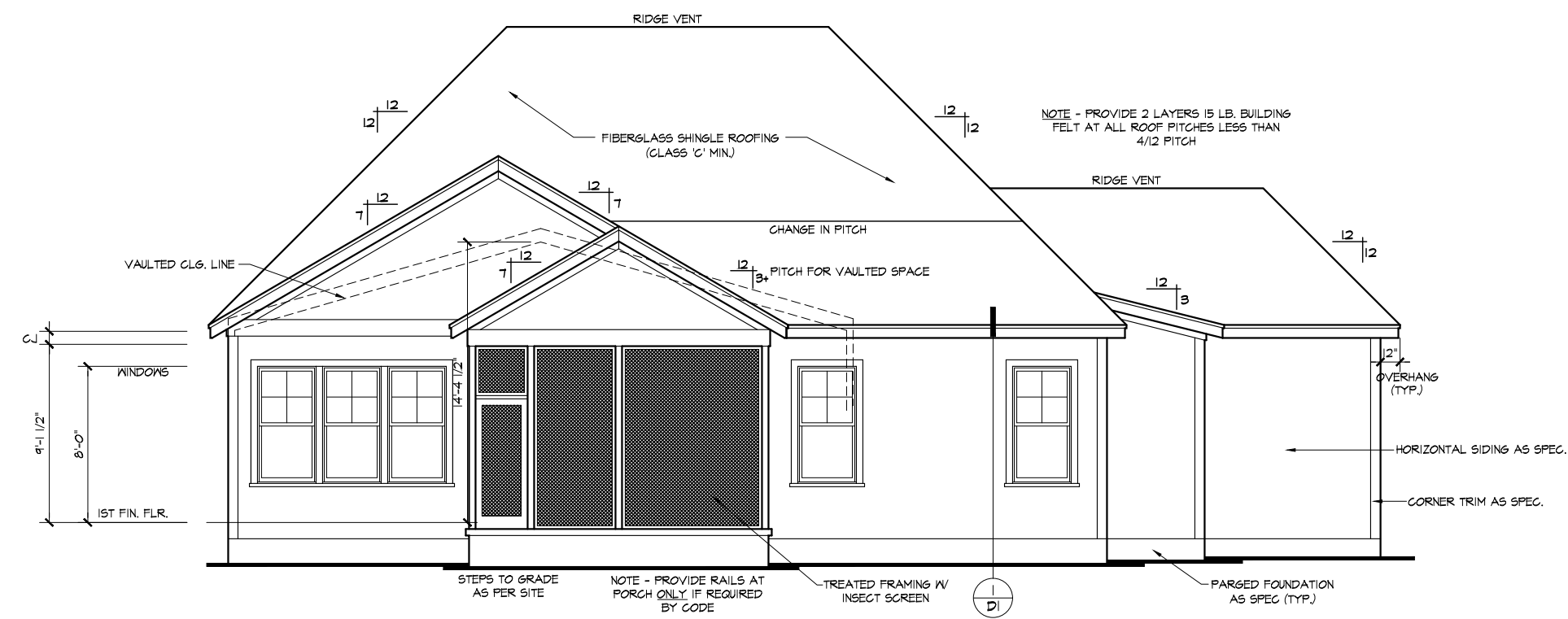
BUILDER TO PROVIDE APPROPRIATE VENTILATING AS REQUIRED PER CODE





RIGHT SIDE ELEVATION

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



REAR ELEVATION

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

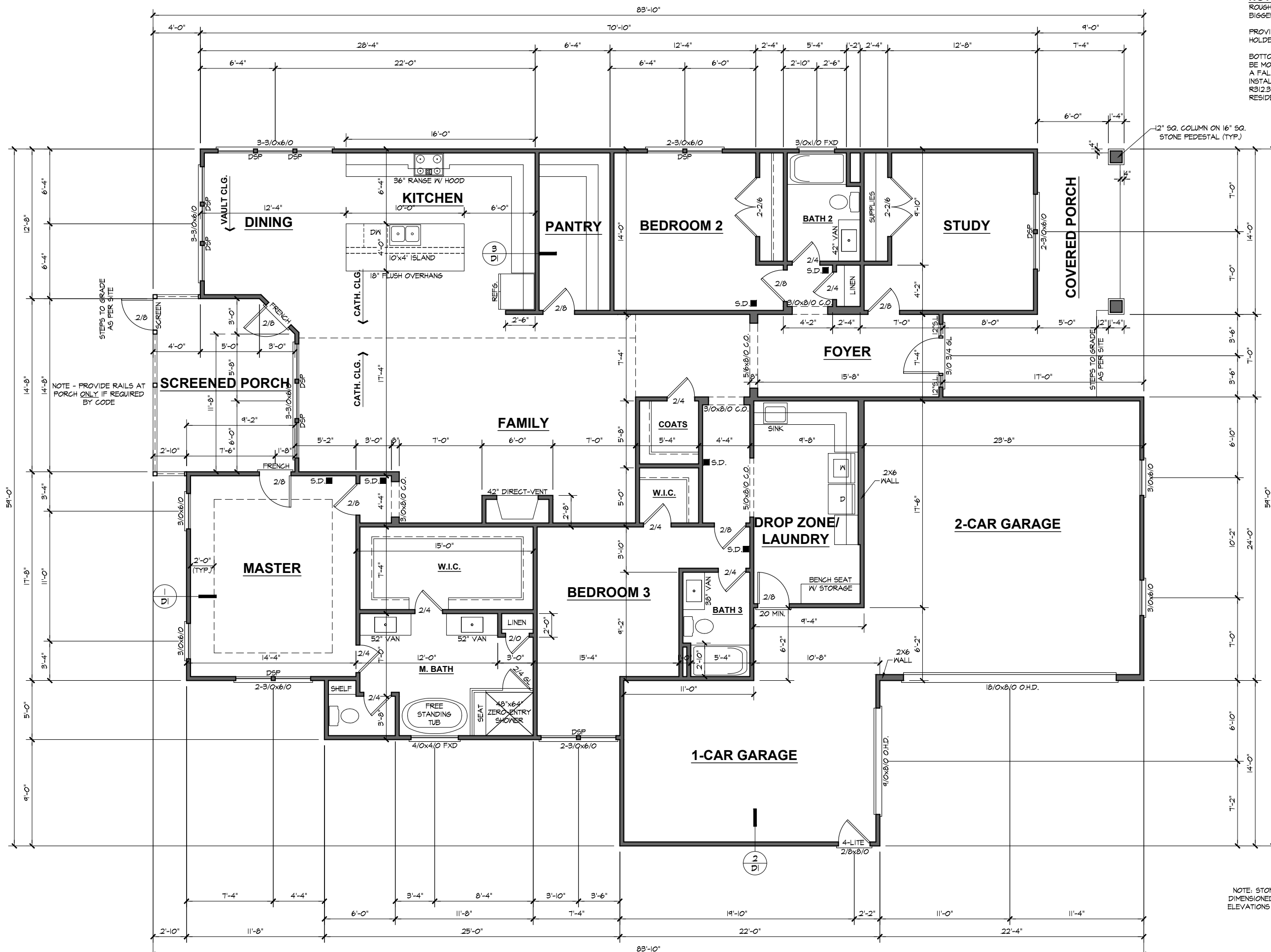
NOTE - SLOPE ALL GRADES AWAY FROM HOUSE FOR POSITIVE DRAINAGE

PROJECT INFO:
TRIPLE A HOMES
Lot 18 Cotton Farms
Fuquay-Varina, North Carolina

Elevations

TITLE:
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6469
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J.T.S.
REVISIONS:

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3/26/2024
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NOTES:
 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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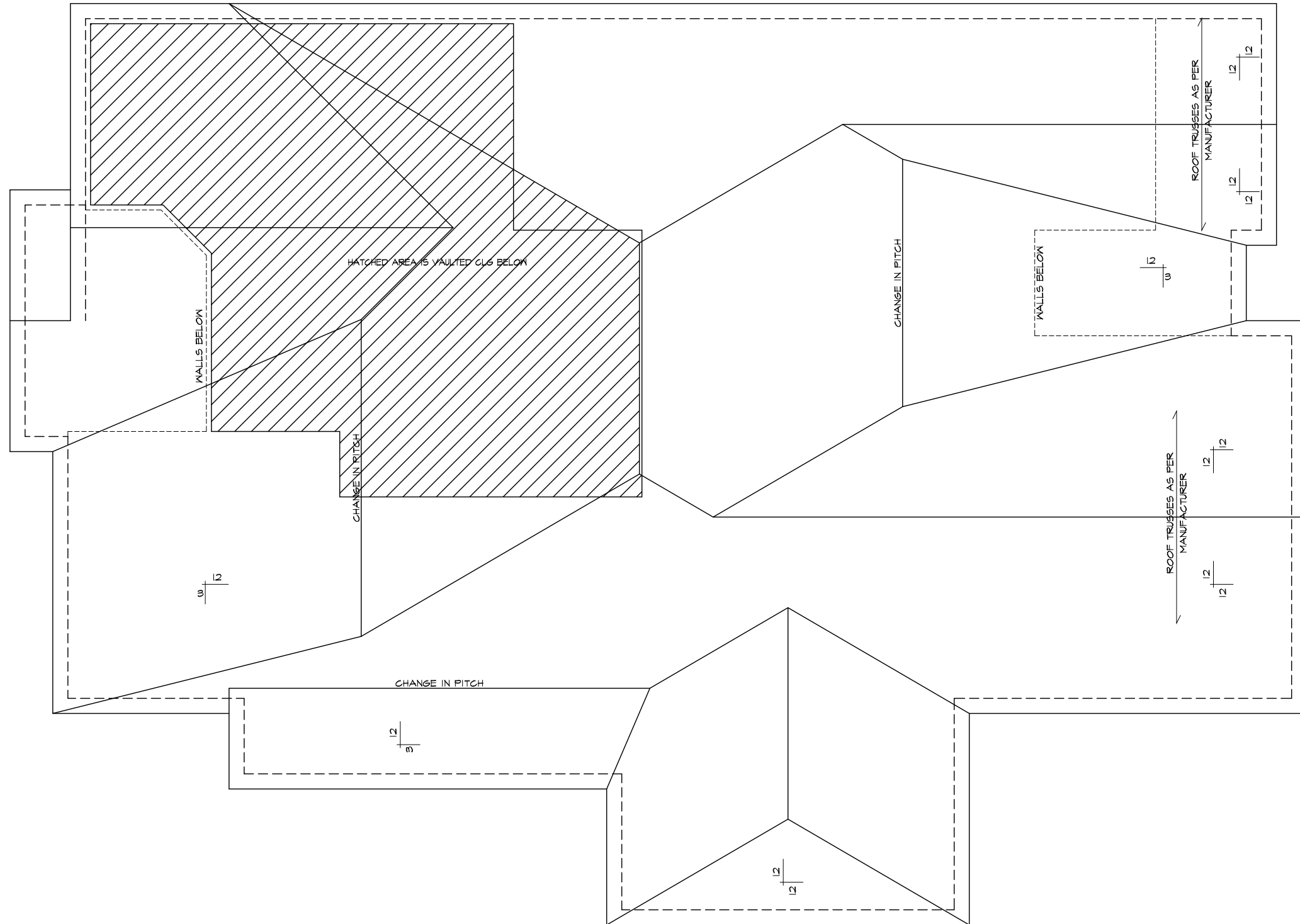
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NOTE - PROVIDE RAILS AT PORCH ONLY IF REQUIRED BY CODE



NOTE: STONE VENEER NOT DIMENSIONED ON PLANS, SEE ELEVATIONS FOR LOCATIONS

PROJECT INFO:
TITLE: Floor Plan
PROJECT NUMBER: 6469
DRAWN BY: J.A.D.
CHECKED BY: J.T.S.
REVISIONS:
DATE: 3/26/2024
SHEET: 3



NOTE - PROVIDE 2 LAYERS 15 LB. BUILDING FELT AT ALL ROOF PITCHES LESS THAN 4/12 PITCH

ROOF PLAN

NOTE 1 - ALL ROOF PITCHES TO BE 7/12 U.N.O.
NOTE 2 - ALL ROOF OVERHANGS TO BE 12" U.N.O.

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

PROJECT INFO:

TRIPLE A HOMES
Lot 18 Cotton Farms
Fuquay-Varina, North Carolina

Roof Plan

TITLE:

PROJECT NUMBER:
6469

DRAWN BY:
J.A.D.

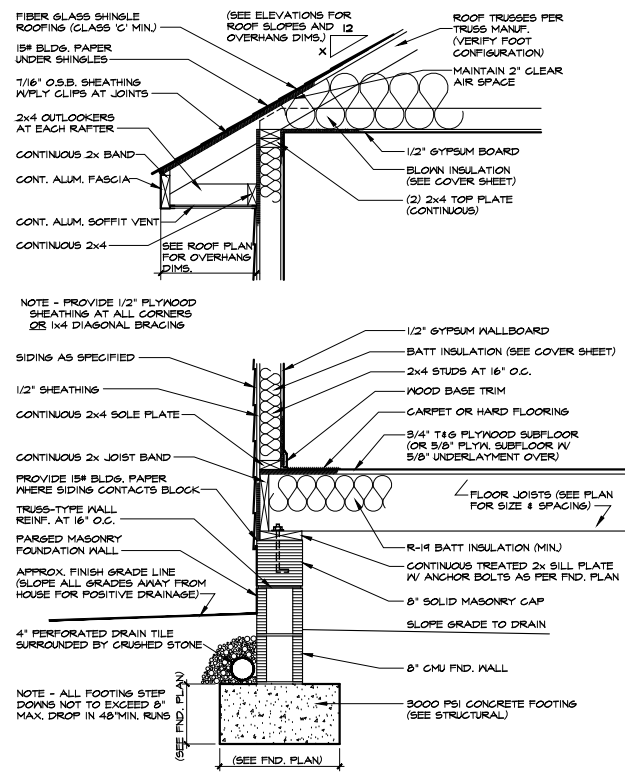
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J.T.S.

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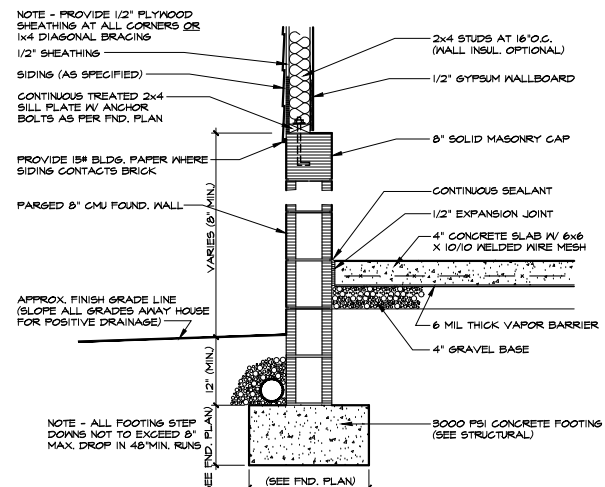
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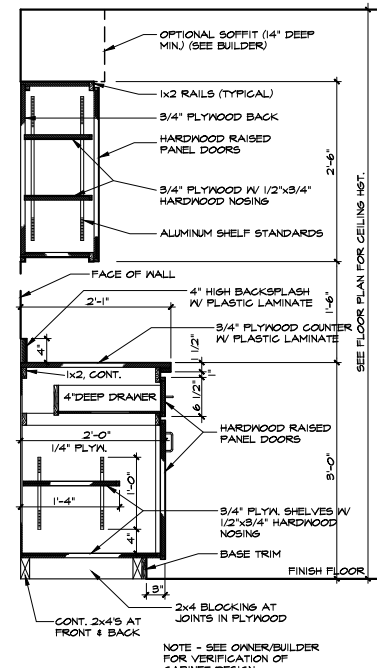
4



1 TWO STORY WALL SECTION
SCALE: 3/8"=1'-0"
(PARSED MASONRY FOUNDATION)

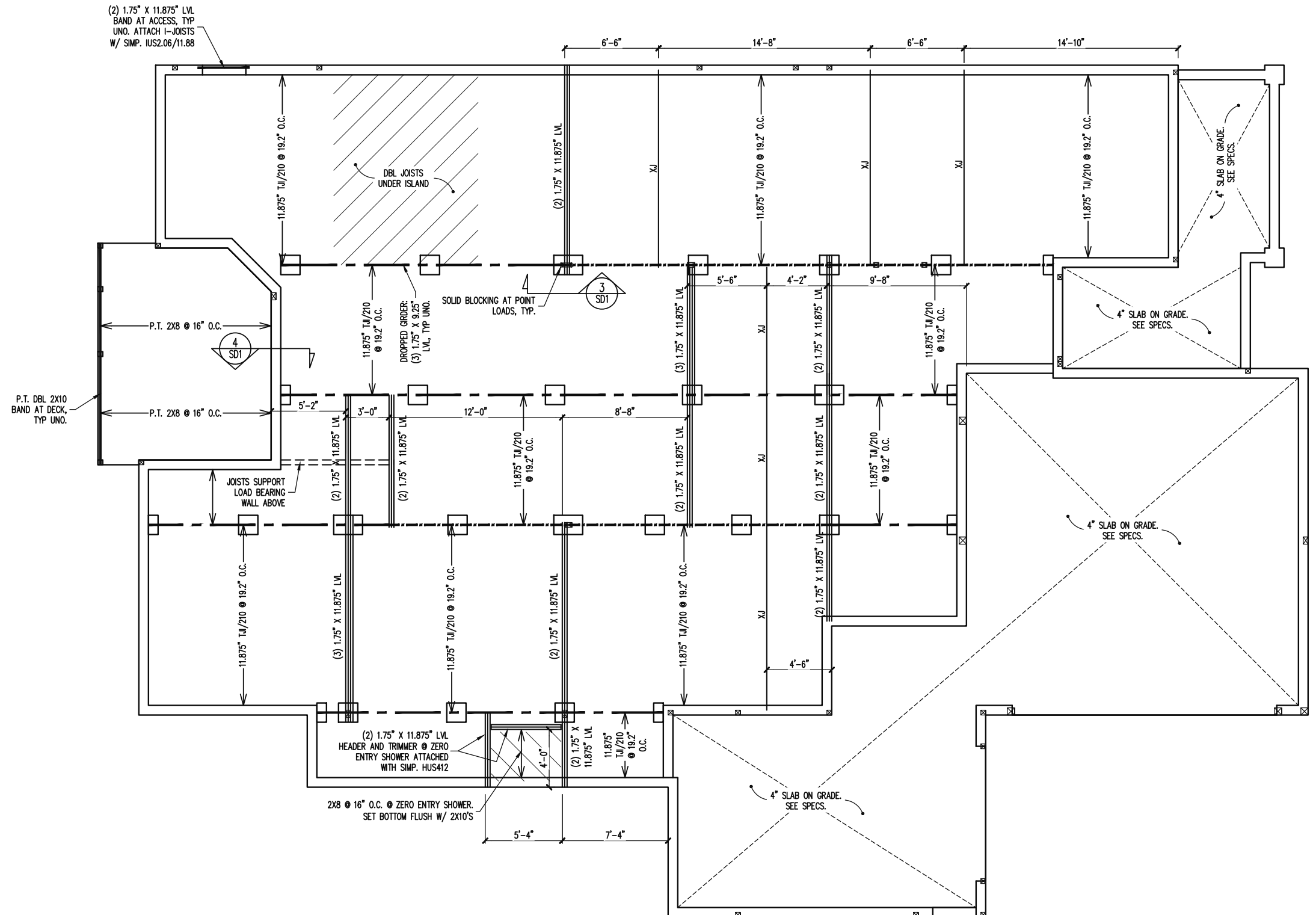
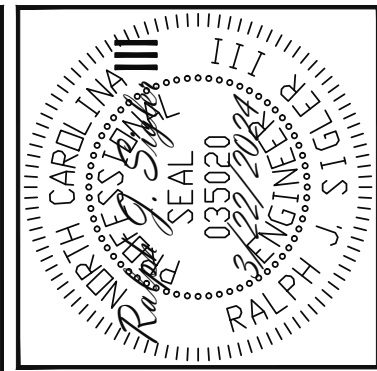


2 GARAGE WALL SECTION
SCALE: 3/8"=1'-0"
(PARSED MASONRY FOUNDATION)



3 CABINET DETAIL
SCALE: 3/8"=1'-0"

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GIRDER LEGEND	
ALL GIRDERS (4) 2X10'S, TYP UNO, BOLTING NOT REQUIRED FOR DROPPED GIRDERS.	---
I-JOIST SQUASH BLOCKING REQUIRED	---
NOT REQUIRED	---

CRAWLSPACE PLAN
1/8" = 1'-0"

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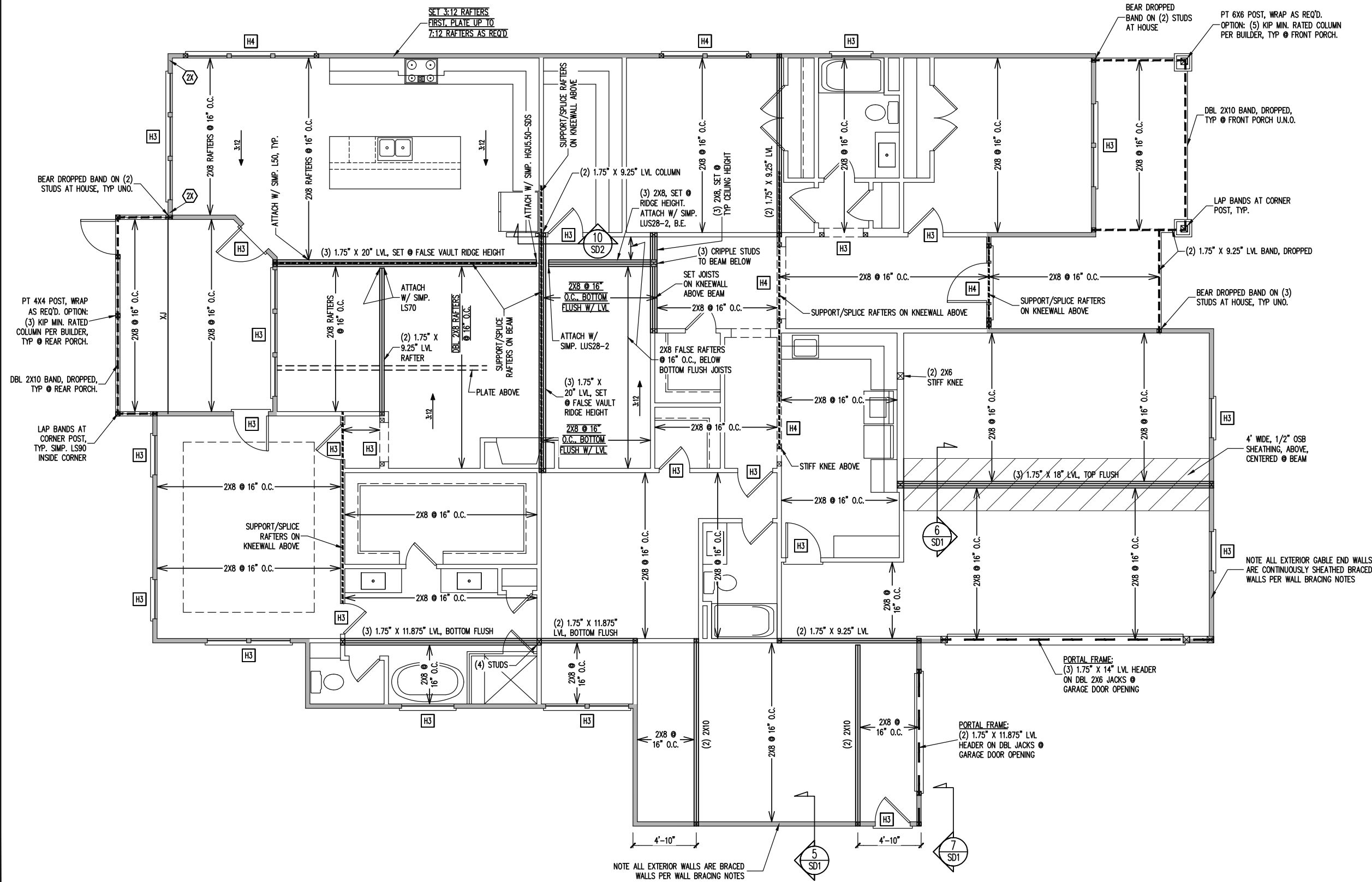
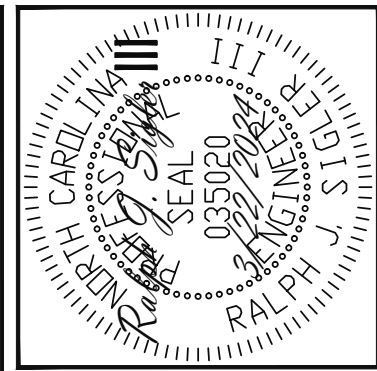
SCOPE	REV #	REF PROJ #	DATE
TRIPLE A HOMES STRUCTURAL ADDENDUM			
18 COTTON FARMS			

ENG: RJS/JKM
DATE: 3/22/2024

PROJECT NO.
24-28-011

SHEET NO.
S2
2 of 7

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WALL BRACING
 SHADED WALLS:
 ALL EXTERIOR STUD WALLS, EXTERIOR SIDE, ARE TO BE CONTINUOUSLY SHEATHED WITH 7/16 APA RATED OSB NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.
 NOTES:
 PROVIDED CONTINUOUS SHEATHING = 309' MIN.
 REFERENCE PART 16.02 OF CONSTRUCTION SPECIFICATIONS FOR GENERAL WIND BRACING INFORMATION.

HEADER SCHEDULE

H1	SINGLE 2X4 TURNED FLAT (A)
H2	(2) 2X4'S ON SINGLE JACKS (B)
H3	(2) 2X10'S ON SINGLE JACKS (C)
H4	(2) 1.75" X 9.25" LVL'S ON DBL JACKS
H5	(3) 2X10'S ON SINGLE JACKS

(A) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPENING 38" MAX.
 (B) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPNG 38" TO 74" MAX.
 (C) TYPICAL FOR ALL CONDITIONS NOT LISTED IN (A) OR (B) UNO.
 NOTES:
 -HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED.

1ST FLOOR FRAMING PLAN
 WALLS AND CEILING 1/8" = 1'-0"

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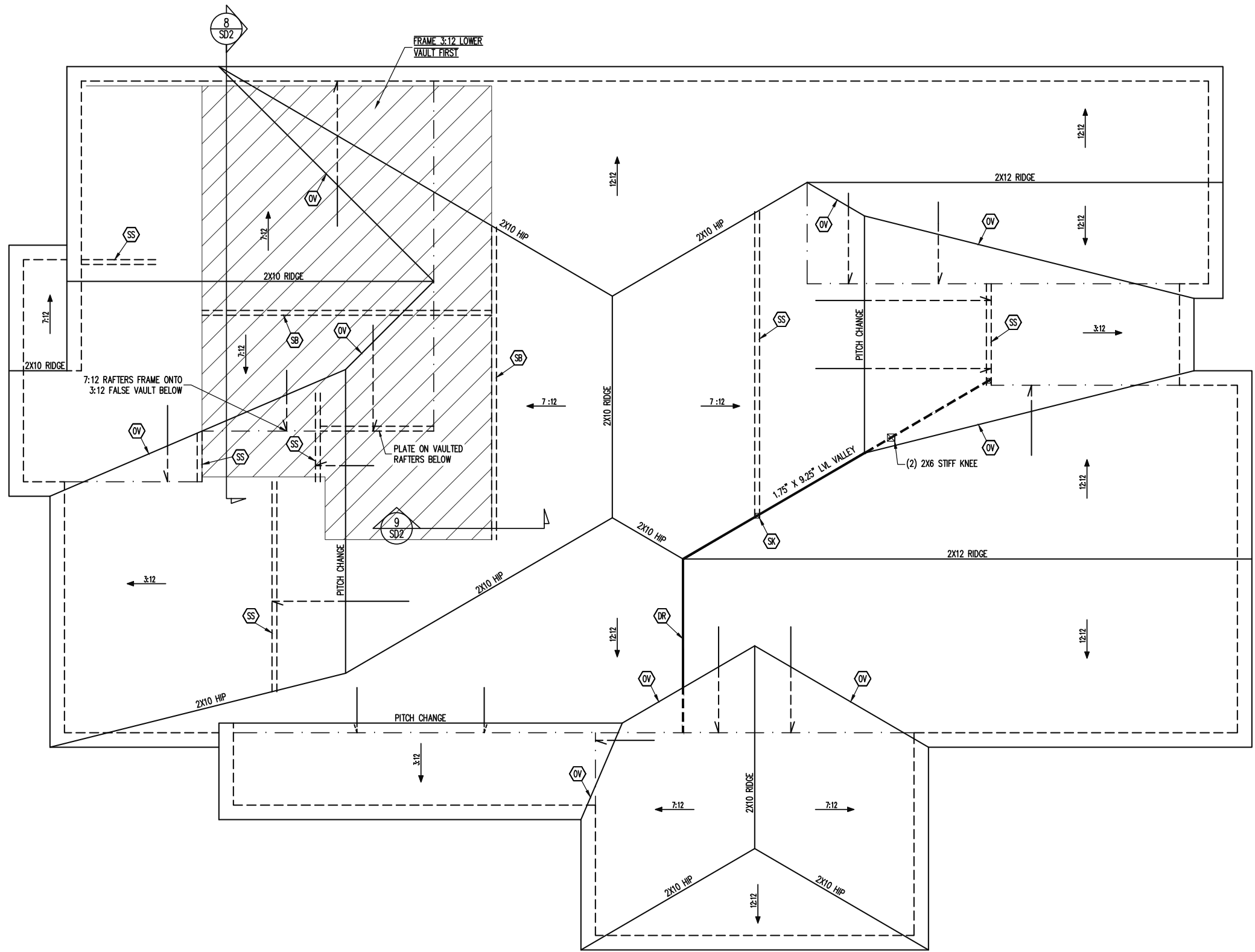
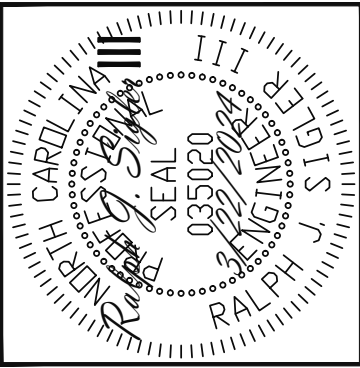
TRIPLE A HOMES	REV #	REF PROJ #	DATE
STRUCTURAL ADDENDUM			
SCOPE	18 COTTON FARMS		
LOC			

ENG: RJS/JKM
 DATE: 3/22/2024

PROJECT NO.
 24-28-011

SHEET NO.
 S3
 3 of 7

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FRAMING NOTES
 ROOF ONLY
 -COMMON RAFTERS 2X8 @ 16" O.C. TYP U.N.O.
 -COLLAR TIES 2X4 EVERY 3RD SET OF RAFTERS TYP U.N.O.
 -VERIFY ROOF PITCHES, OVERHANG LENGTHS, AND KNEEWALL FRAMING HGTS WITH ARCHITECTURAL DRAWINGS, TYPICAL.

FRAMING SCHEDULE
 ROOF ONLY
 DR DOUBLE RAFTER
 OV OVERFRAME VALLEY (2X10 SLEEPER)
 SK DBL 2X4 STIFF KNEE
 SS SUPPORT/SPLICE RAFTERS ON KNEEWALL BELOW

ROOF FRAMING PLAN
 1/8" = 1'-0"

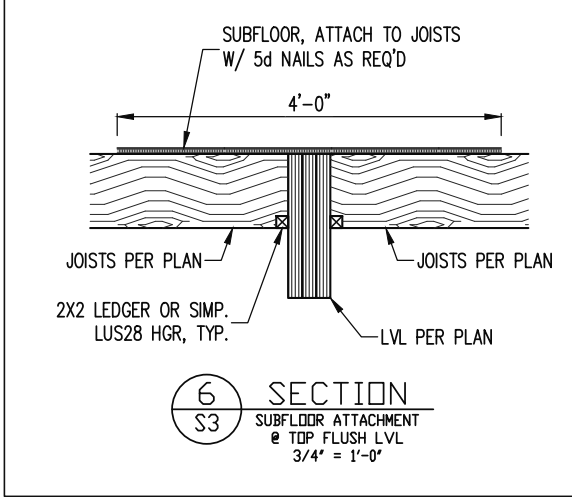
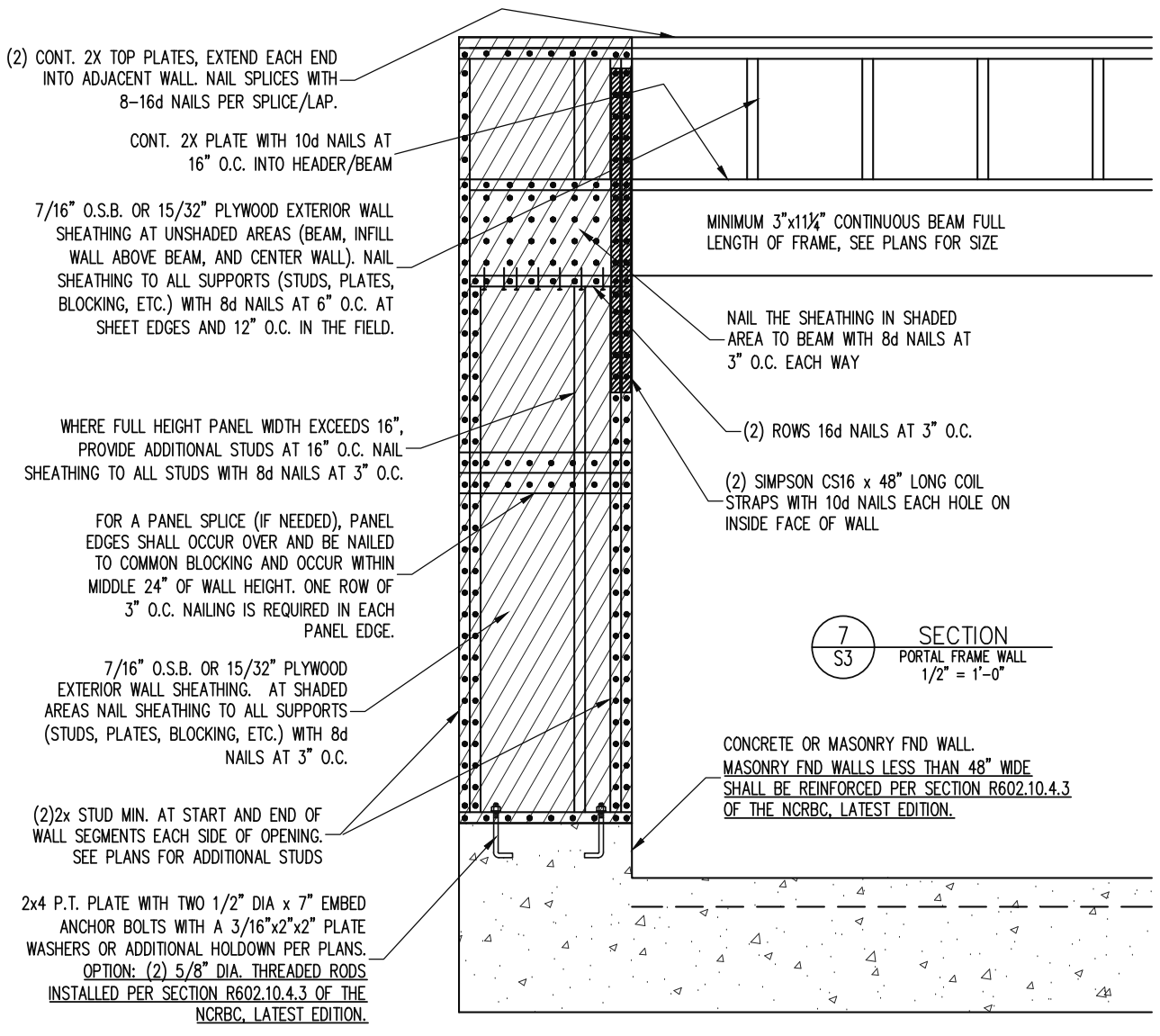
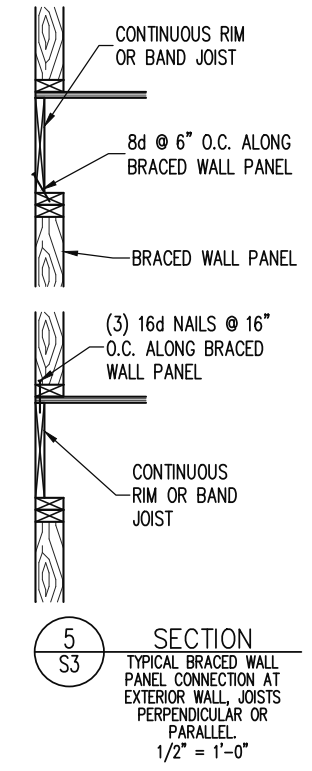
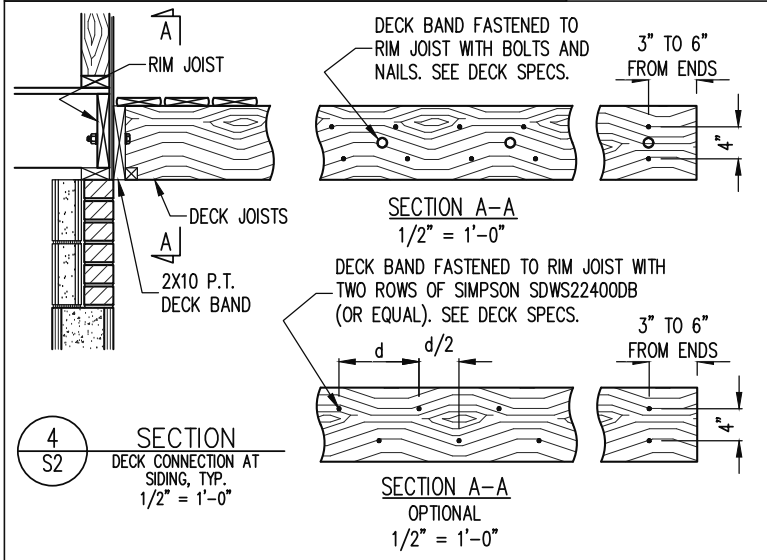
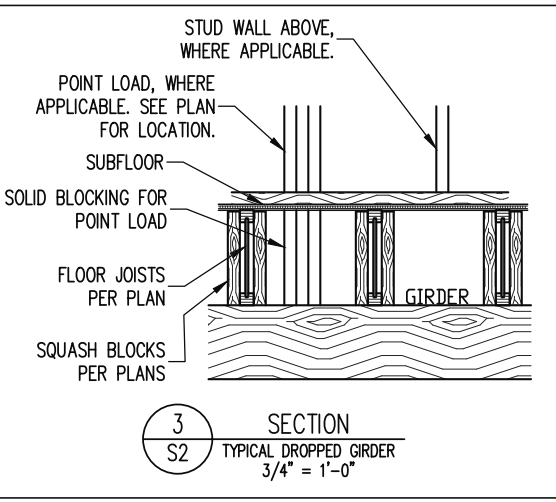
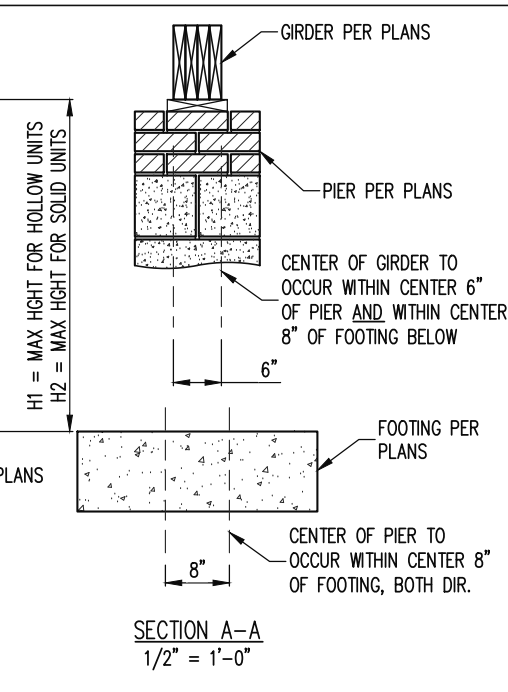
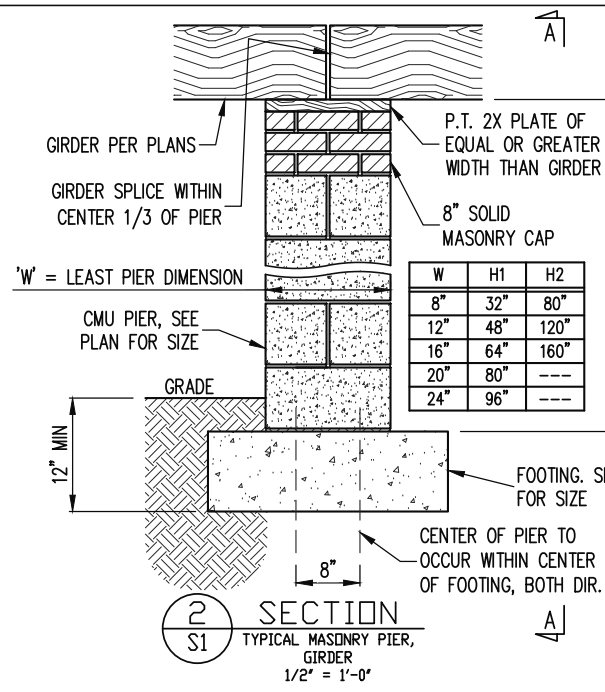
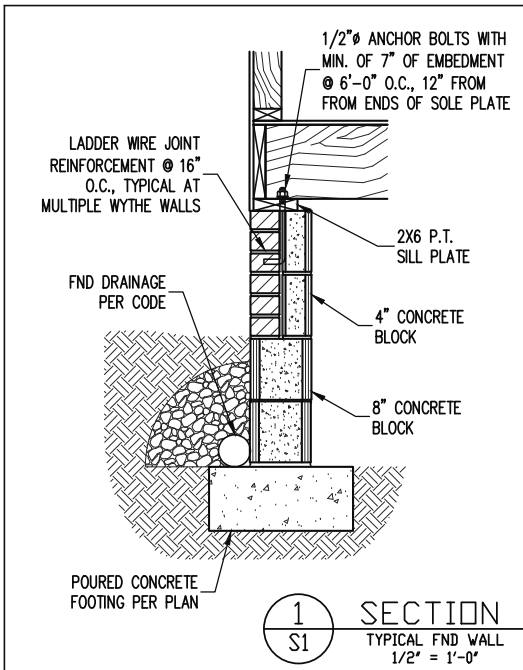
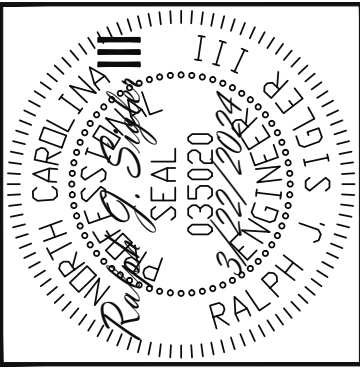
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TRIPLE A HOMES	REV #	REF PROJ #	DATE
STRUCTURAL ADDENDUM			
SCOPE	18 COTTON FARMS		
LOC			

ENG: RJS/JKM
 DATE: 3/22/2024

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 24-28-011

SHEET NO.
 S4
 4 of 7



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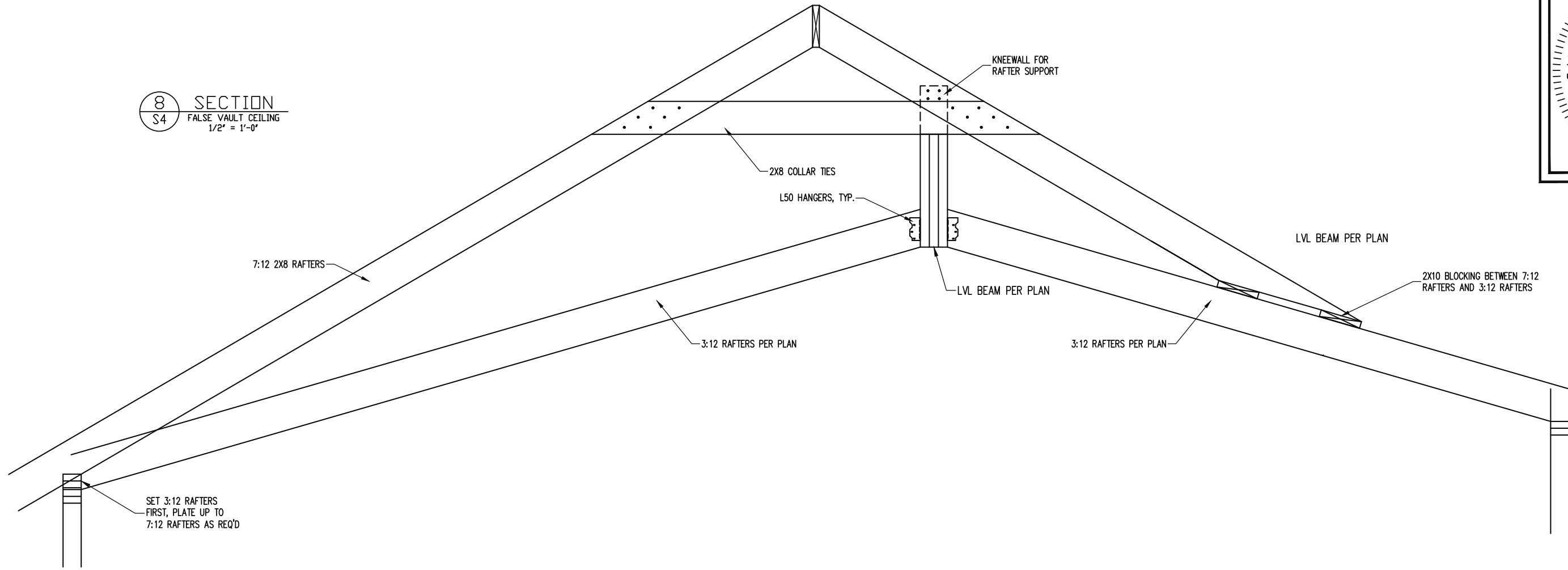
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LOC	18 COTTON FARMS
REV #	REF PROJ #
DATE	

ENG: RJS/JKM
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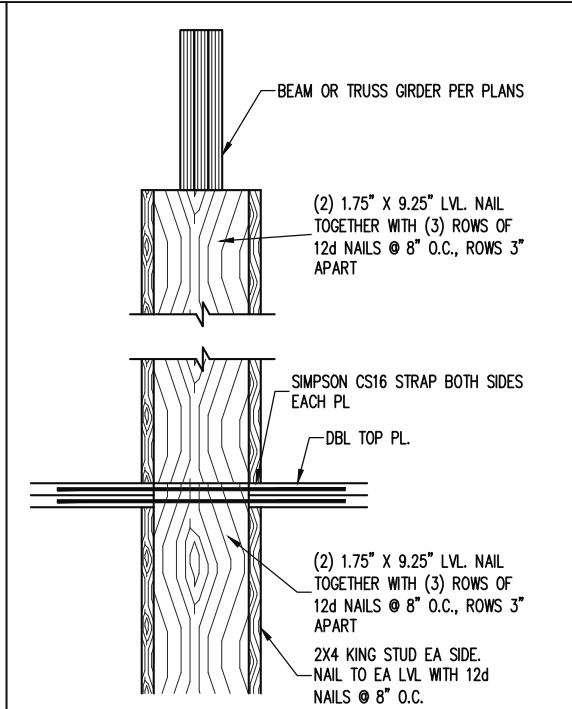
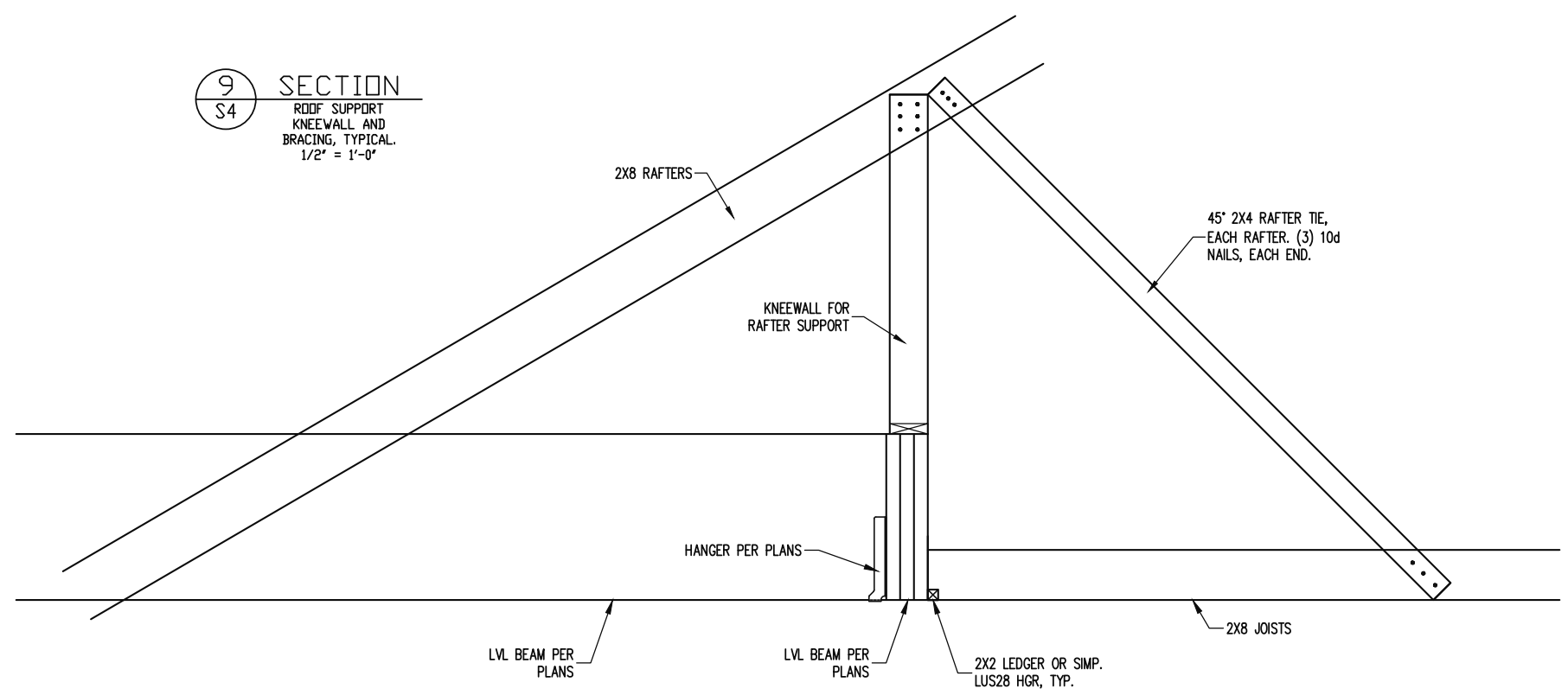
PROJECT NO.
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SD1
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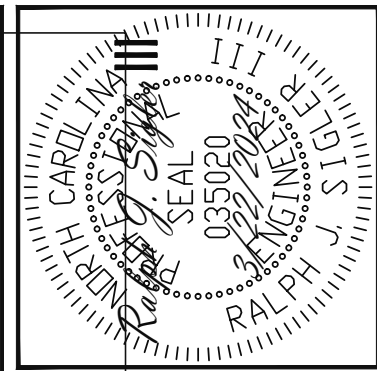
8 SECTION
S4 FALSE VAULT CEILING
1/2" = 1'-0"



9 SECTION
S4 ROOF SUPPORT
KNEEWALL AND BRACING, TYPICAL.
1/2" = 1'-0"



10 SECTION
S3 LVL COLUMN BELOW BEAM
SET @ FALSE VAULT RIDGE HEIGHT
1/2" = 1'-0"



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Engineering Tech
ASSOCIATES, P.A.

TRIPLE A HOMES	
STRUCTURAL ADDENDUM	REV # REF PROJ # DATE
SCOPE	18 COTTON FARMS
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SHEET NO.
SD2

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.
- SUPPORT POSTS SHALL BE SUPPORTED BY A FOOTING.
- 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 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 STRUCTURE, NEITHER FLASHING NOR A TREATED BAND FOR THE BRICK STRUCTURE IS REQUIRED. IN ADDITION, THE TREATED DECK BAND SHALL BE CONSTRUCTED IN CONTACT WITH THE 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:
 - ALL STRUCTURES EXCEPT BRICK STRUCTURES

JOIST LENGTH	
UP TO 8' MAX.	UP TO 16' MAX.
REQUIRED FASTENERS	ONE- 5/8" Ø BOLT @ 42" O.C. AND (2) ROWS OF 12d NAILS @ 8" O.C. OR TWO ROWS OF SIMPSON SDWS22400DB Ø d = 32" O.C. STAGGERED
	ONE- 5/8" Ø BOLT @ 20" O.C. AND (3) ROWS OF 12d NAILS @ 6" O.C. OR TWO ROWS OF SIMPSON SDWS22400DB Ø d = 16" O.C. STAGGERED
 - BRICK VENEER STRUCTURES

JOIST LENGTH	
UP TO 8' MAX.	UP TO 16' MAX.
REQUIRED FASTENERS	ONE- 5/8" Ø BOLT @ 28" O.C.
	ONE- 5/8" Ø BOLT @ 16" 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 JOISTS TO A TREATED STRUCTURE BAND
- GRIDERS SHALL BEAR DIRECTLY ON POSTS OR BE CONNECTED TO THE SIDES OF POSTS WITH 2- 5/8" Ø BOLTS
- FLOOR DECKING SHALL BE NO. 2 GRADE TREATED SOUTHERN PINE OR EQUIVALENT. THE MINIMUM FLOOR DECKING THICKNESS SHALL BE AS FOLLOWS:

JOIST SPAN	DECKING
12" O.C.	1" S4S
16" O.C.	1" T&G
24" O.C.	1 1/4" S4S
32" O.C.	2" S4S

9. MAXIMUM HEIGHT OF DECK SUPPORT POSTS IS AS FOLLOWS:

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 GRIDER.

10. DECKS SHALL BE BRACED TO PROVIDE LATERAL STABILITY BY ONE OF THE FOLLOWING METHODS:

A. WHEN THE DECK FLOOR HEIGHT IS LESS THAN 4'-0" AND THE DECK IS ATTACHED TO THE 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. THE KNEE 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 GRIDER AND THE POST WITH ONE - 5/8" Ø 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 6X6	48 SQ. FT. 120 SQ. FT.	4'-0" 6'-0"	2'-6" 3'-6"	1'-0" 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" Ø 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".

CONSTRUCTION SPECIFICATIONS

- PART 1: GENERAL**
- CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
 - DIMENSIONS SHOWN SHALL GOVERN OVER SCALE ON THESE DRAWINGS.
 - 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.

PART 2: DESIGN LOADS

2.01 DESIGN LOADS SHALL CONFORM WITH THE TABLE BELOW:

USE	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 VAULTS)

- NOTES: - INDIVIDUAL STAIR TREADS ARE TO BE DESIGNED FOR THE UNIFORMLY DISTRIBUTED LIVE LOAD OF 40 PSF OR A 300 LB. CONCENTRATED LOAD ACTING OVER AN AREA OF 4 SQ. WHICHEVER PRODUCES THE GREATER STRESS.
- BUILDER TO VERIFY DEAD LOAD DOES NOT EXCEED 10 PSF WHEN HEAVY FLOOR OR ROOF FINISHES SUCH AS TILE OR SLATE ARE UTILIZED. NOTIFY ENGINEERING UNDER THESE CONDITIONS

- INTERIOR WALLS: 5 PSF LATERAL.
- BASIC WIND DESIGN VELOCITY OF 115 MPH.
- SOIL BEARING CAPACITY 2000 PSF (PRESUMPTIVE).

PART 3: STRUCTURAL STEEL

- WIDE FLANGE BEAMS AND TEE SECTIONS SHALL CONFORM TO ASTM A992 MINIMUM GRADE
 - SQUARE AND RECTANGULAR TUBING SHALL CONFORM TO ASTM A500 GRADE B MINIMUM GRADE.
 - STEEL PIPE SHALL CONFORM TO ASTM A53 GRADE B, TYPE S, MINIMUM GRADE
 - ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 MINIMUM GRADE
 - STRUCTURAL STEEL CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
- PART 4: WELDING**
- WELDING ELECTRODES SHALL BE E70XX AND ALL WELDING SHALL BE PERFORMED BY AN AWS CERTIFIED WELDER
- PART 5: CONCRETE AND SLABS ON GRADE**
- CAST IN PLACE CONCRETE SHALL BE OF NORMAL WEIGHT, 6% AIR ENTRAINMENT, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS TYP UNO. ALL CONCRETE, INCLUDING CONCRETE FOR FOOTINGS, IS TO BE CAST IN PLACE, TYP UNO.
 - REINFORCED CAST IN PLACE CONCRETE SHALL BE PROPORTIONED, MIXED AND PLACED IN ACCORDANCE WITH THE SPECIFICATIONS OF ACI 318, LATEST EDITION.
 - SLABS ON GRADE, IF ANY, SHALL CONTAIN SYNTHETIC POLYPROPYLENE FIBRILLATED MICRO FIBERS, FIBER LENGTH 1 1/2", DOSAGE RATE 1 1/2 LBS/CU YD. SLAB TO BE PLACED ON A 6 MIL VAPOR BARRIER ON 4" MIN GRANULAR FILL ON SOIL WITH 90% MIN STANDARD PROCTOR DENSITY. VAPOR BARRIER MAY BE OMITTED FOR SLABS NOT IN ENCLOSED AREAS
- PART 6: REBAR AND WIRE REINFORCEMENT**
- REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615 GRADE 60 TYP UNO
 - LAP SPLICES SHALL BE CLASS B AS DEFINED BY ACI 318, TYP UNO
 - WIRE REINFORCEMENT SHALL BE 9 GA AND SHALL CONFORM TO ASTM A1064.

- PART 7: MASONRY**
- CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 AND C55, NORMAL WEIGHT, FM = 1,500 PSI MIN
 - 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.
 - MASONRY CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS OF ACI 530
 - LADDER WIRE REINFORCEMENT SHALL CONFORM TO ASTM A951. 6" MIN LAPS FOR CONTINUOUS WALL APPLICATIONS

PART 8: BOLTS AND LAG SCREWS

- 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
- 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 NDS SPECIFICATIONS. INSTALL STANDARD STEEL WASHERS (ASTM F844-07a) FOR SCREW HEAD
- 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

- SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SPRUCE PINE FIR OR SYP #2 FOR JOISTS, RAFTERS, GRIDERS, BEAMS, STUDS, ETC.

PART 11: ENGINEERED LUMBER

- LVL OR PSL MINIMUM ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS:
E = 1.9 X 106 PSI, Fb = 2600 PSI, Fv = 285 PSI, Fc = 750 PSI
LSL MINIMUM ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS:
E = 1.3 X 106 PSI, Fb = 1700 PSI, Fv = 400 PSI, Fc = 680 PSI
- LVL OR PSL MEMBERS MAY BE RIPPED FROM DEEPER MEMBERS TO MATCH THE MEMBER DEPTH SPECIFIED IN THE PLANS

PART 12: PRESSURE TREATED LUMBER

- LUMBER IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE PRESSURE TREATED IN ACCORDANCE WITH ANPA STANDARD C-15. ALL OTHER EXPOSED LUMBER SHALL BE TREATED IN ACCORDANCE WITH ANPA 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

- FLITCH PLATE BEAMS SHALL CONSIST OF A CONTINUOUS STEEL PLATE BOLTED BETWEEN TWO PIECES OF CONTINUOUS LUMBER AS SIZED ON THE PLANS. BOLT PICES TOGETHER USING 1/2" Ø BOLTS SPACED AT 24" O.C. STAGGERED TOP TO BOTTOM OF THE BEAM. MAINTAIN A 2" EDGE DISTANCE. PLACE TWO BOLTS, ONE ABOVE THE OTHER, 6" ± 2" FROM EACH END OF THE BEAM.

PART 14: STUD SUPPORTS FOR BEAMS

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

NUMBER OF KING STUDS		MAX. OPENING WIDTH				
		5'-0"	9'-0"	13'-0"	17'-0"	21'-0"
STUD SIZE	2x4	1	2	3	4	5
	2x6	1	1	2	2	2
	2x8	1	1	1	1	2
- 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 COLUMN WITH A NUMBER OF STUDS SUCH THAT THE STUD COLUMN IS AT LEAST AS WIDE AS THE TRUE WIDTH OF THE BEAM BEING SUPPORTED, WHICHEVER IS GREATER, TYP UNO. FOR THE SKEWED CONDITION PARTICULAR CARE SHALL BE TAKEN TO ENSURE STUD COLUMN IS CENTERED ON THE BEAM
- 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 TRPL STUD GANGED COLUMN TYP UNO.
- DIMENSIONAL LUMBER BEAMS BEARING ON A STUD WALL SHALL BEAR AS FOLLOWS:
 - WHEN THE BEAM IS PERPENDICULAR TO, OR SKEWED RELATIVE TO THE WALL, THE BEAM SHALL BEAR FULL WIDTH 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

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 TYP UNO.

- 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 @ 8" O.C. 3" APART FOR 2X8 OR 2X10 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 FLOOR JOISTS.

PART 15: NAILING OF MULTI-PLY WOOD BEAMS

- SOLID SAWN LUMBER JOISTS THAT ARE GANGED TO FORM A BEAM SHALL HAVE ADJACENT MEMBERS IN THE BEAM NAILED TOGETHER WITH THREE ROWS OF 10d NAILS @ 16" O.C. FOR 2X10 OR LARGER, TWO ROWS OF 10d NAILS @ 16" O.C. FOR 2X8, ONE ROW OF 10d NAILS @ 16" O.C. FOR 2X6 OR SMALLER. STAGGER ROWS 5" MIN.

- LVL MEMBERS THAT ARE GANGED TO FORM A BEAM SHALL HAVE ADJACENT MEMBERS IN THE BEAM FASTENED TOGETHER PER MANUFACTURERS RECOMMENDATIONS, TYP UNO

PART 16: WALL FRAMING AND BRACING

- STUD WALLS SHALL CONSIST OF 2X4 STUDS SPACED AT 16" O.C. UNO. STUDS SHALL BE CONTINUOUS FROM SOLE PLATE AT FLOOR TO DOUBLE TOP PLATE AT THE CEILING OR ROOF. NO INTERMEDIATE BANDS OR PLATES SHALL CAUSE DISCONTINUITIES IN A STUD WALL EXCEPT AS REQUIRED FOR DOOR OR WINDOW OPENINGS. THE KING STUDS FOR SUCH OPENINGS SHALL BE CONTINUOUS, TYP UNO.
MAX ALLOWABLE WALL HEIGHTS FOR EXTERIOR STUD WALLS, WITH SOLE PLATE AND DBL TOP PLATE AND 7/16" OSB EXTERIOR BRACING AND ROW OF 2X4 / 2X6 PURLINS AT 8' HEIGHT (AND AT 16' HEIGHT FOR TALL WALLS), TYP UNO:
2x4 @ 16" O.C.: 11'-1 1/2" 2x6 @ 16" O.C.: 17'-0"
2x4 @ 12" O.C.: 12'-1 1/2" 2x6 @ 12" O.C.: 18'-8"
DBL 2x4 @ 16" O.C.: 13'-4" DBL 2x6 @ 16" O.C.: 21'-0"

- FOR WALL BRACING THE FOLLOWING SHALL APPLY:
 - BLOCKING AT UNSUPPORTED PANEL EDGES IS REQUIRED TYP UNO.
 - WALL BRACING IS BY ENGINEERED DESIGN AND NOT PRESCRIPTIVE PER SECTION 602.10 OF THE 2018 NCR. CONTINUOUS SHEATHING HAS BEEN PROVIDED, ALONG WITH ALTERNATIVE METHODS TO INSURE THE MINIMUM INTENT OF SECTION 602.10 OF THE 2018 NCR HAS BEEN MET AND EXCEEDED.
 - BRACED WALL PANELS SHALL BE FASTENED IN ACCORDANCE WITH TABLE 602.3(1) TO PROVIDE CONTINUOUS PANEL UPLIFT RESISTANCE AND COMPLIANCE WITH NCRBC R602.3.5 AND R802.11 UNLESS NOTED OTHERWISE ON STRUCTURAL PLANS.
 - MAY SUBSTITUTE WSP FOR CB
 - SINGLE JOIST, CONTINUOUS RIM JOIST, OR BLOCKING OF EQUAL DEPTH IS REQUIRED ABOVE AND BELOW ALL BRACED WALLS. NAIL BLOCKING ABOVE WALL TO TOP PLATE WITH 16d TOE NAILS @ 6" O.C. NAIL SOLE PLATE OF BRACED WALL TO BLOCKING BELOW WITH (3) 16d NAILS @ 16" O.C. BLOCKING AT HORIZONTAL JOINTS IN BRACED WALL LINES ONLY REQUIRED AT SHADED WALLS, UNO.

PART 17: KING STUDS

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

NUMBER OF KING STUDS		MAX. OPENING WIDTH				
		5'-0"	9'-0"	13'-0"	17'-0"	21'-0"
STUD SIZE	2x4	1	2	3	4	5
	2x6	1	1	2	2	2
	2x8	1	1	1	1	2

PART 18: SUBSTITUTIONS

- MATERIAL OR MEMBER SIZE SUBSTITUTIONS OR PLAN DEVIATIONS REQUIRE THE WRITTEN AUTHORIZATION OF THE DESIGNER. 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 ETAL. THESE PLANS ARE FOR THE ONE TIME USE AT THE LOCATION INDICATED AND FOR THE CLIENT LISTED. ETA ASSUMES NO LIABILITY FOR THESE PLANS IF THEY ARE REPRODUCED IN WHOLE OR IN PART, FOR CONSTRUCTION AT ANY OTHER LOCATION WITHOUT WRITTEN PERMISSION FROM ETA

NOTES

THE BUILDER IS RESPONSIBLE FOR REVIEWING PLANS PRIOR TO CONSTRUCTION. THE BUILDER SHALL IMMEDIATELY CONTACT THE ENGINEER OF RECORD (EOR) BEFORE PROCEEDING IF THE FOLLOWING CONDITIONS ARE NOTED BEFORE OR DURING CONSTRUCTION:

- THE WORKING PLANS DO NOT BEAR THE SEAL OF THE EOR
- THE PLANS CONTAIN DISCREPANT OR INCOMPLETE INFORMATION

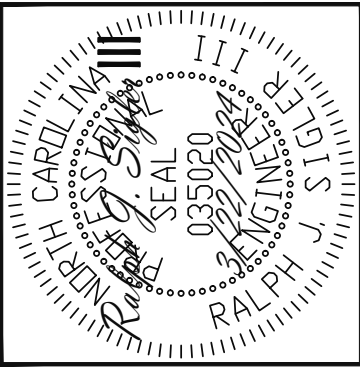
ANY ERRORS DUE TO A FAILURE TO FOLLOW THE ABOVE PROCEDURES SHALL NOT BE THE RESPONSIBILITY OF THE EOR. FURTHERMORE, IT IS THE RESPONSIBILITY OF THE BUILDER TO ENSURE THAT ANY REVISIONS ISSUED BY THE EOR ARE PROMPTLY DISTRIBUTED TO THE SUBCONTRACTORS

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. FINAL TRUSS DRAWING SHOULD BE SUBMITTED TO THE EOR FOR REVIEW

ABBREVIATIONS

ABV ABOVE	FND FOUNDATION	TJ TRIPLE JOIST
B. BOTH	FTG FOOTING	TYP TYPICAL
B.E. BOTH ENDS	HDG HOT DIPPED	TRPL TRIPLE
BTWN BETWEEN	GALV GALVANIZED	TSP TRIPLE STUD POCKET
CIP CAST IN PLACE	HGR HANGER	UNO UNLESS NOTED
CONC CONCRETE	LVL LAMINATED VENEER LUMBER	OTHERWISE
CS CONTINUOUS SHEATHING	NTS NOT TO SCALE	XJ EXTRA JOIST
DIA DIAMETER	O.C. ON CENTER	
DBL DOUBLE	PSL PARALLEL STRAND LUMBER	
DJ DOUBLE JOIST	PJ PRESSURE TREATED	
DSP DBL STUD POCKET	QT QUAD JOIST	
EQ EQUAL	SP STUD POCKET	
EA EACH	SQ SQUARE	
FLG FLANGE		
FL PL FLITCH PLATE		
FLR FLOOR		



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SCOPE	TRIPLE A HOMES	
	STRUCTURAL ADDENDUM	
LOC	18 COTTON FARMS	
	REV #	DATE
REF PROJ #		

ENG: RJS/JKM
DATE: 3/22/2024

PROJECT NO.
24-28-011

SHEET NO.
SPECS
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