

**GENERAL NOTES:**

1. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THAT ALL DIMENSIONS, ROOF PITCHES, AND SQUARE FOOTAGE ARE CORRECT PRIOR TO CONSTRUCTION. K&A HOME DESIGNS, INC. IS NOT RESPONSIBLE FOR ANY DIMENSIONING, ROOF PITCH, OR SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.
2. ALL WALLS SHOWN ON THE FLOOR PLANS ARE DRAWN AT 4" UNLESS NOTED OTHERWISE.
3. ALL ANGLED WALL SHOWN ON THE PLANS ARE 45 DEGREES UNLESS NOTED OTHERWISE.
4. STUD WALL DESIGN SHALL CONFORM TO ALL NORTH CAROLINA STATE BUILDING CODE REQUIREMENTS.
5. DO NOT SCALE PLANS. DRAWING SCALE MAY BE DISTORTED DUE TO COPIER IMPERFECTIONS.
6. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NORTH CAROLINA RESIDENTIAL STATE BUILDING CODE, 2018 EDITION.

**SQUARE FOOTAGE**

HEATED SQUARE FOOTAGE		UNHEATED SQUARE FOOTAGE	
FIRST FLOOR=	1944	GARAGE=	619
SECOND FLOOR=	899	FRONT PORCH=	289
THIRD FLOOR=	N/A	SCREEN PORCH=	216
BASEMENT=	N/A	3 <sup>rd</sup> . CAR GAR.=	240
		STORAGE=	N/A
<b>TOTAL HEATED=</b>	<b>2843</b>	<b>TOTAL UNHEATED=</b>	<b>1364</b>

**CRAWL SPACE VENTILATION CALCULATIONS**

-VENT LOCATIONS MAY VARY FROM THOSE SHOWN ON THE PLAN BUT SHOULD BE PLACED TO PROVIDE ADEQUATE VENTILATION AT ALL POINTS TO PREVENT DEAD AIR POCKETS.

-100% VAPOR BARRIER MUST BE PROVIDED WITH 12" MIN. LAP JOINTS.

-THE TOTAL AREA OF VENTILATION OPENINGS MAY BE REDUCED TO 1/1500 AS LONG AS REQUIRED OPENINGS ARE PLACED SO AS TO PROVIDE CROSS-VENTILATION OF THE SPACE. THE INSTALLATION OF OPERABLE LOUVERS SHALL NOT BE PROHIBITED. (COMPLY WITH NC CODE MIN. WITH REGARD TO VENT PLACEMENT FROM CORNERS)

1944 SQ. FT. OF CRAWL SPACE/1500

1.2 SQ. FT. OF REQUIRED VENTILATION

PROVIDED BY: 3 VENTS AT 0.45 SQ. FT. NET FREE

VENTILATION EACH= 1.35 SQ. FT. OF VENTILATION

**\*\*FOUNDATION DRAINAGE- WATERPROOFING PER SECTIONS 405 & 406.**

**ATTIC VENTILATION CALCULATIONS**

- CALCULATIONS SHOWN BELOW ARE BASED ON VENTILATORS USED AT LEAST 3 FT. ABOVE THE CORNICE VENTS WITH THE BALANCE OF VENTILATION PROVIDED BY EAVE VENTS.

- CATHEDRAL CEILINGS SHALL HAVE A MIN. 1" CLEARANCE BETWEEN THE BOTTOM OF THE ROOF DECK AND THE INSULATION.

3307 SQ. FT. OF ATTIC/300= 11.02

EACH OF INLET AND OUTLET REQUIRED.

**\*WALL AND ROOF CLADDING DESIGN VALUES**

- WALL CLADDING IS DESIGNED FOR A 24.1 SQ. FT. OR GREATER POSITIVE AND NEGATIVE PRESSURE.

- ROOF VALUES BOTH POSITIVE AND NEGATIVE SHALL BE AS FOLLOWS:

45.5 LBS. PER SQ. FT. FOR ROOF PITCHES OF 0/12 TO 2.25/12

34.8 LBS. PER SQ. FT. FOR ROOF PITCHES OF 2.25/12 TO 7/12

21 LBS. PER SQ. FT. FOR ROOF PITCHES OF 7/12 TO 12/12

**\*\*MEAN ROOF HEIGHT 30' OR LESS**



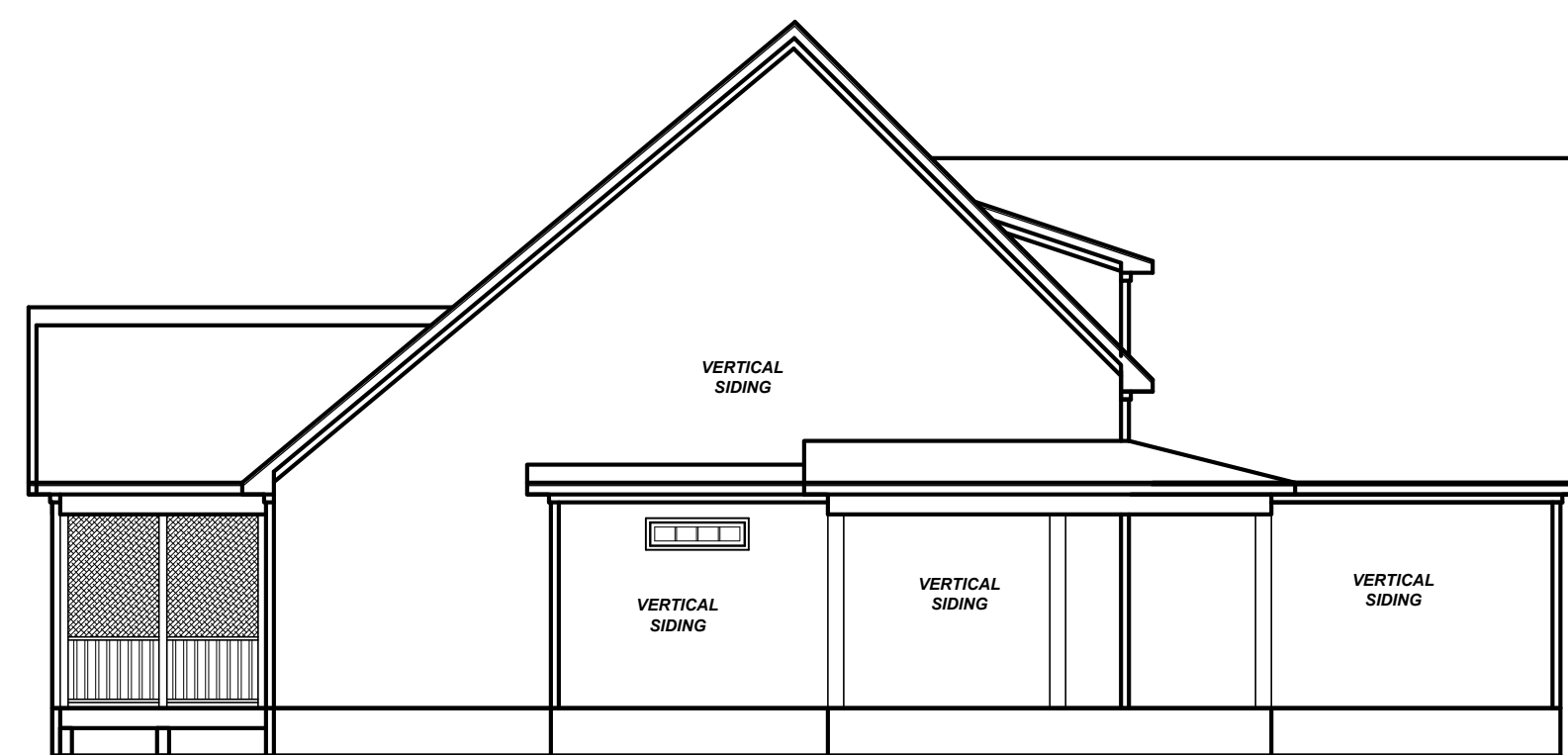
**FRONT ELEVATION**

1/4" = 1'-0"



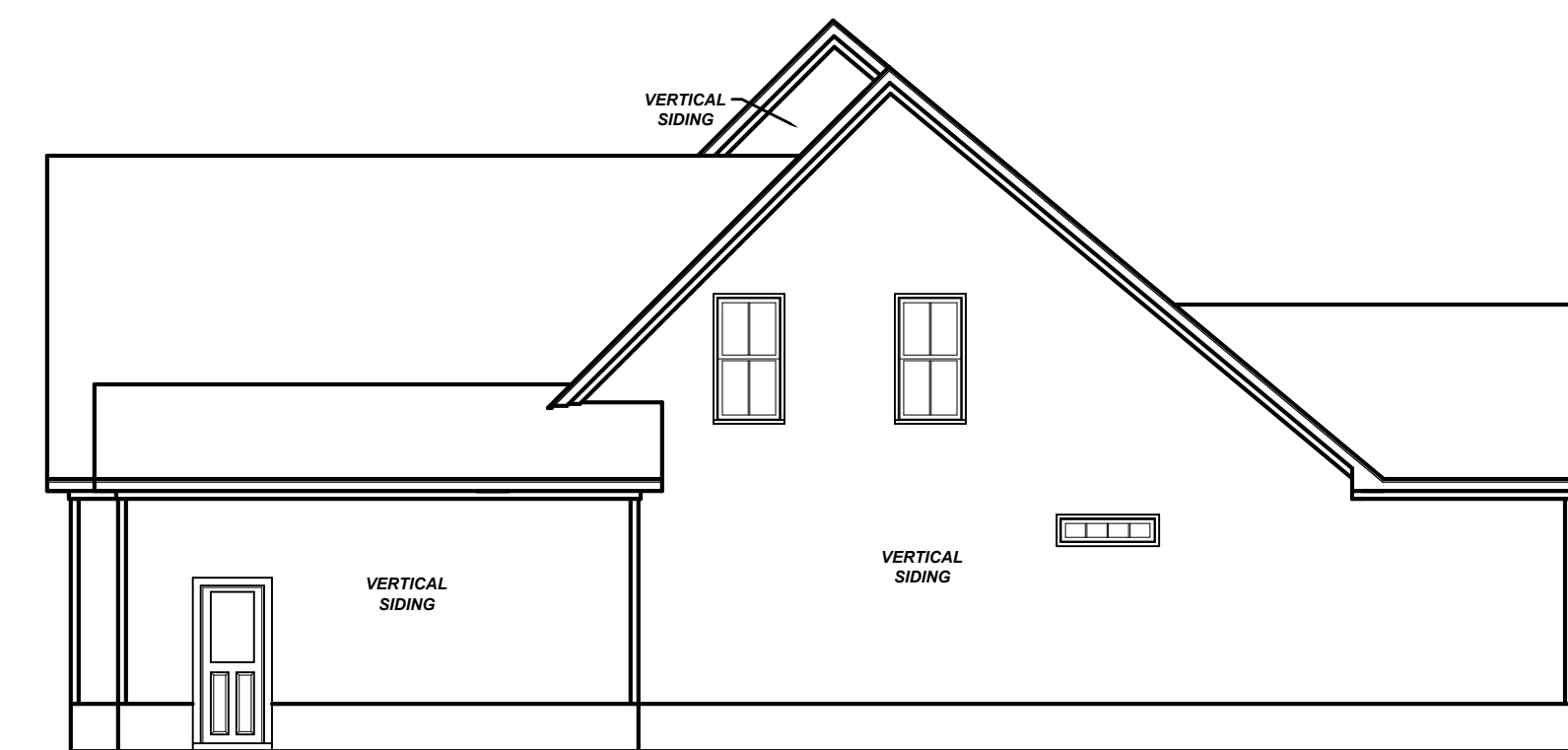
**REAR ELEVATION**

1/8" = 1'-0"



**LEFT ELEVATION**

1/8" = 1'-0"



**RIGHT ELEVATION**

1/8" = 1'-0"

Project #:	23-183
Date:	6-1-23
Drawn/Design By:	KBB
Scale:	REFER TO ELEV.

REVISIONS		
No.	Date	Remarks
1		
2		
3		
4		

9101 Ten-Ten Rd.  
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Website: www.KandAHomeDesigns.com

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**Lot 59, Cotton Farms**

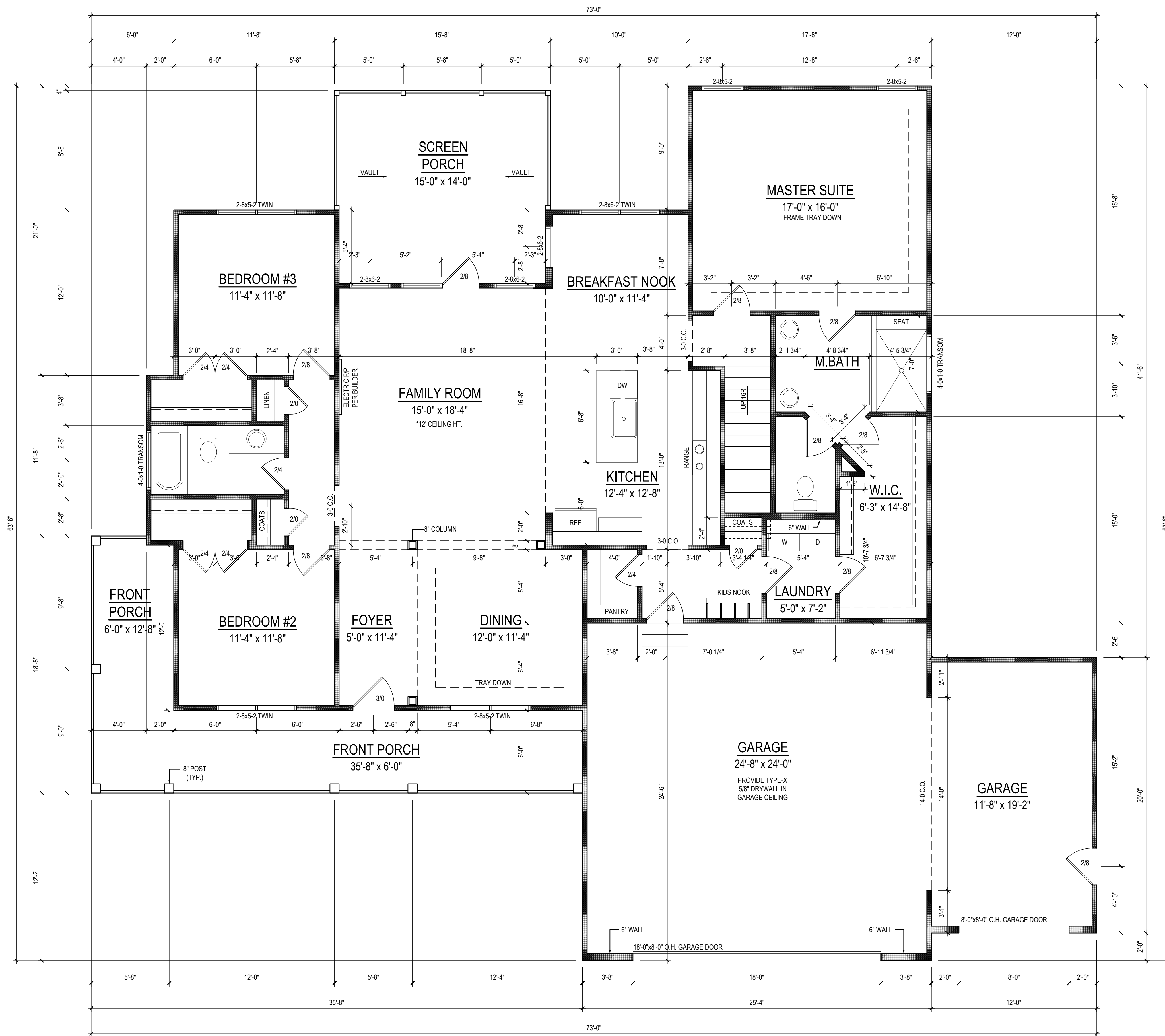
**Paramount Homes**  
9904 Wishing Willow Dr.  
Raleigh, NC 27603

ELEVATIONS

Sheet Number

1

of 3



**FIRST FLOOR PLAN**  
 1/4" = 1'-0" CEILING HT. = 9'-0"

Project No.	23-183
Date	6-1-23
Drawn/Design By.	KBB
Scale	1/4" = 1'-0"

REVISIONS		
No.	Date	Remarks
1		
2		
3		
4		

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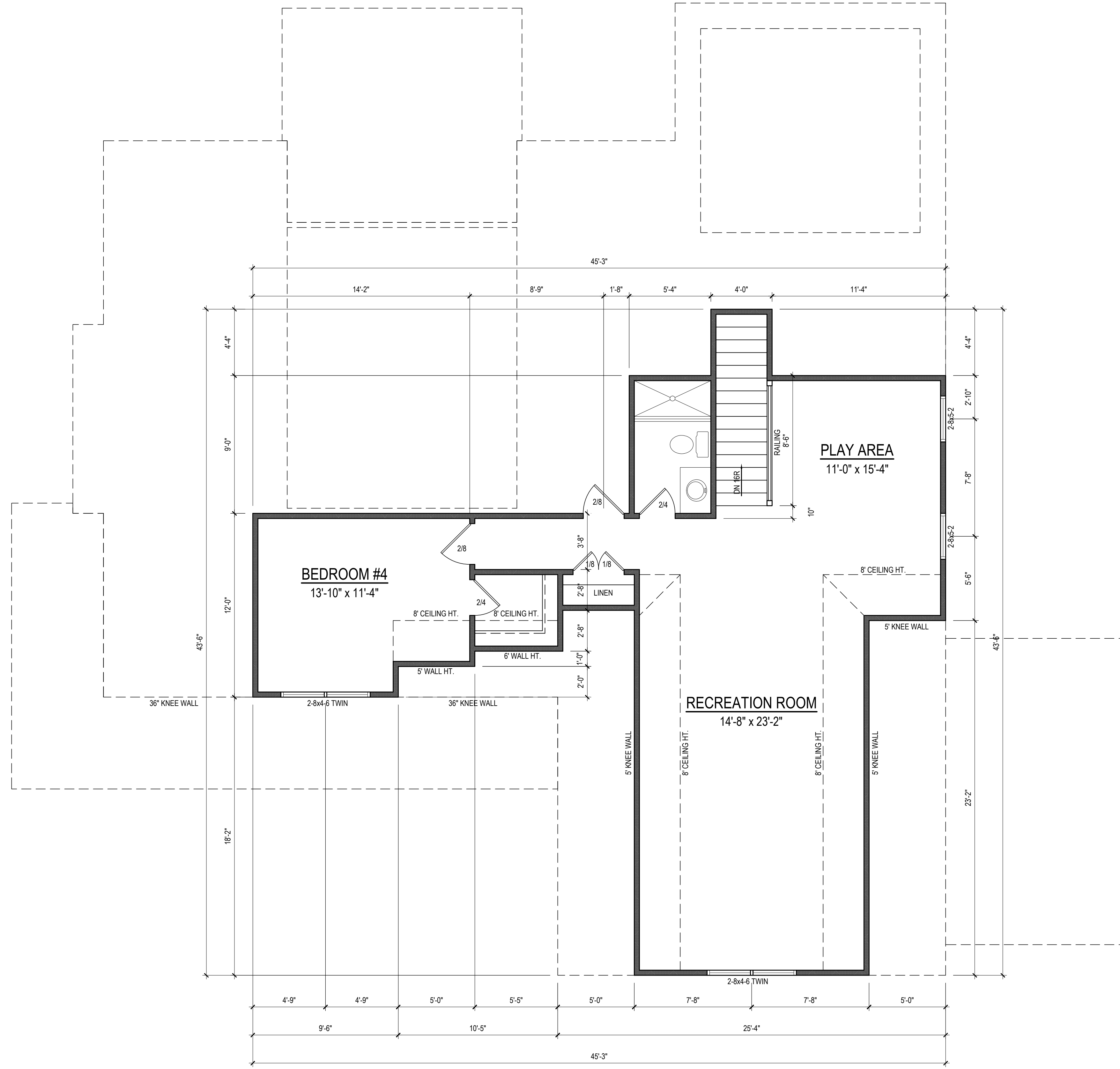
Email: Kent@KandHomeDesigns.com

Project Name:  
**Lot 59, Cotton Farms**

Client Name:  
**Paramount Homes**  
 9904 Wishing Willow Dr.  
 Raleigh, NC 27603

FIRST FLOOR

Sheet Number  
**2**  
 of 3



**SECOND FLOOR PLAN**  
 1/4" = 1'-0" CEILING HT. = 8'-0"

Project No.  
 23-183  
 Date  
 6-1-23  
 Drawn/Design By.  
 KBB  
 Scale:  
 1/4" = 1'-0"

REVISIONS		
No.	Date	Remarks
1		
2		
3		
4		

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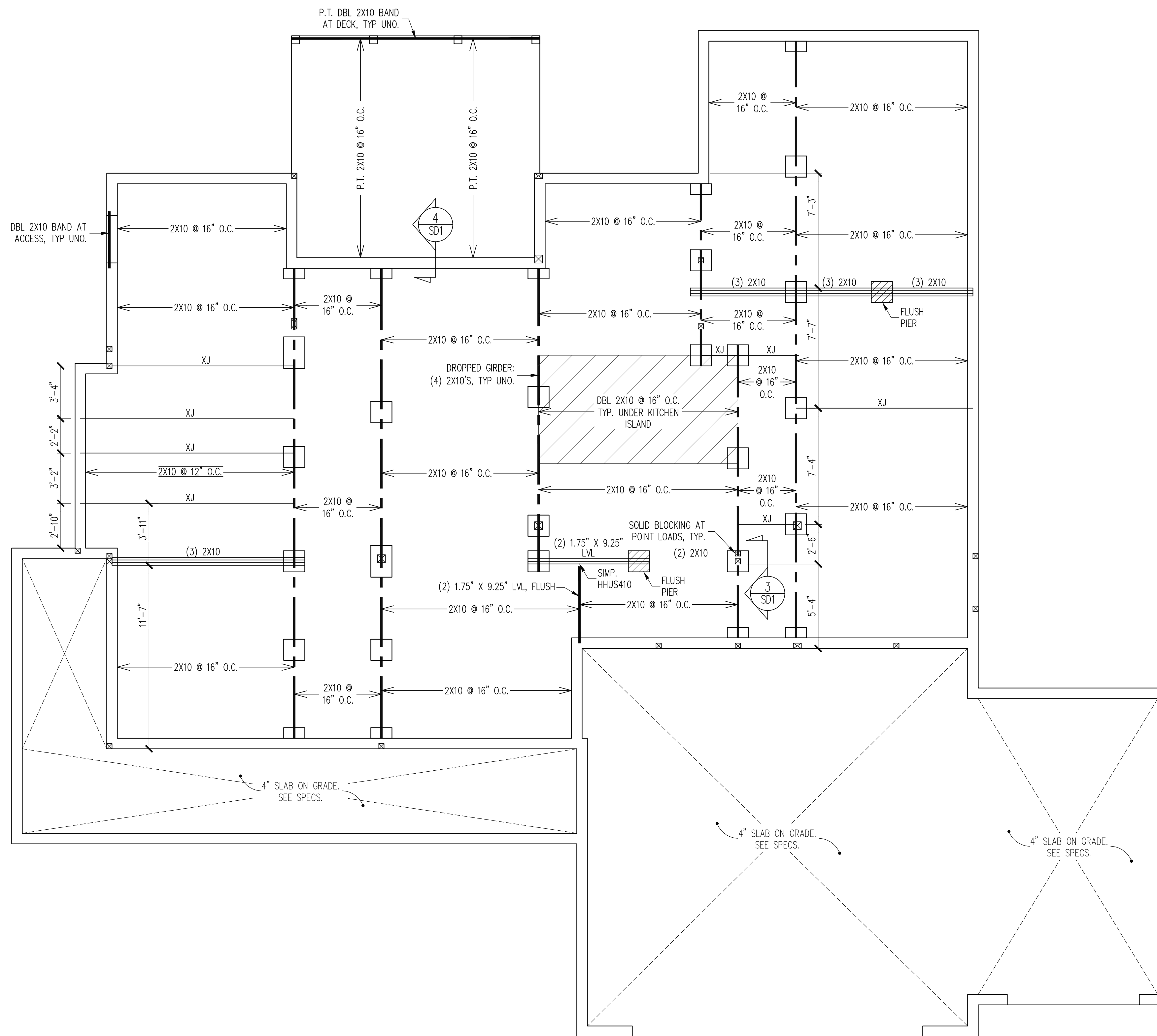
Project Name:  
**Lot 59, Cotton Farms**

Client Name:  
**Paramount Homes**  
 9904 Wishing Willow Dr.  
 Raleigh, NC 27603

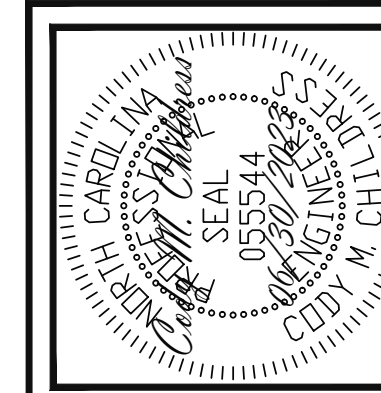
SECOND FLOOR

Sheet Number  
**3**  
 of 3





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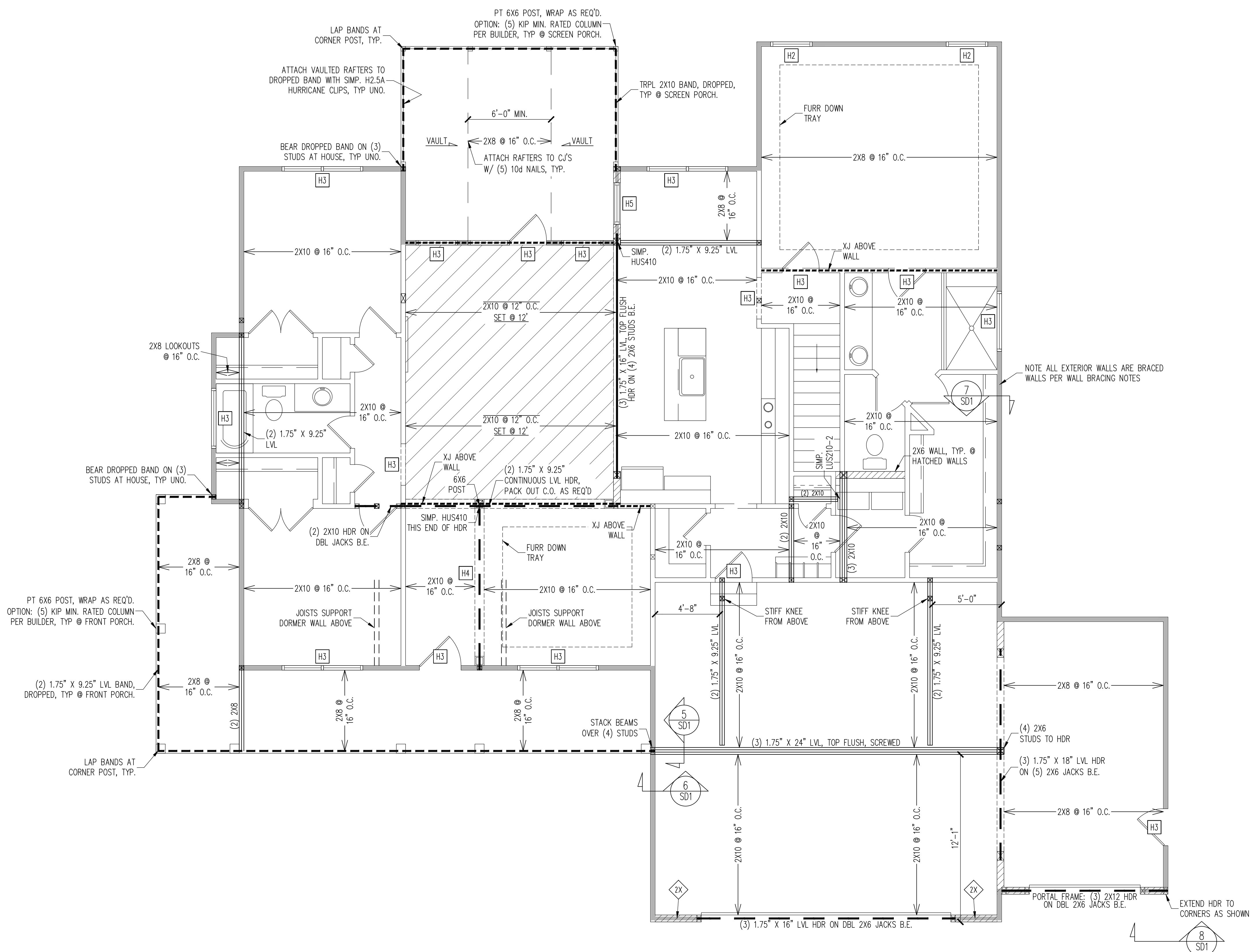
**Engineering Tech Associates, P.A.**  
 STRUCTURAL ENGINEERS  
 License No. C-3870  
 318 W Millbrook Rd. Unit 201  
 Raleigh, North Carolina 27609  
 Phone (919) 844-1661

PARAMOUNT HOMES	REV #	REF PROJ #	DATE
STRUCTURAL ADDENDUM			
SCOPE: 59 COTTON FARMS			
LOC:			

ENC: CIB/CMC  
 DATE: 06/30/2023

PROJECT NO.  
 23-65-159

SHEET NO.  
 S2  
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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 = 276' MIN.

2x - SHEATH BOTH SIDES OF STUD WALL WITH 7/16 APA RATED OSB, NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.

REFERENCE PART 16.02 OF CONSTRUCTION SPECIFICATIONS FOR GENERAL WIND BRACING INFORMATION.

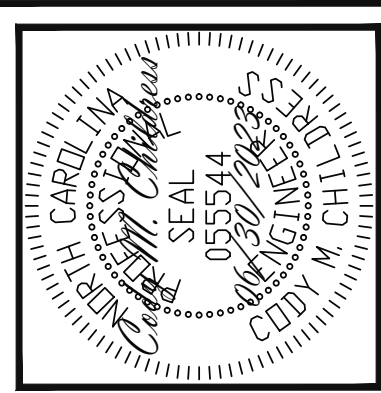
**HEADER SCHEDULE**

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

NOTES:  
-HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED.

**1ST FLOOR FRAMING PLAN**  
WALLS AND CEILING: 1/4" = 1'-0"

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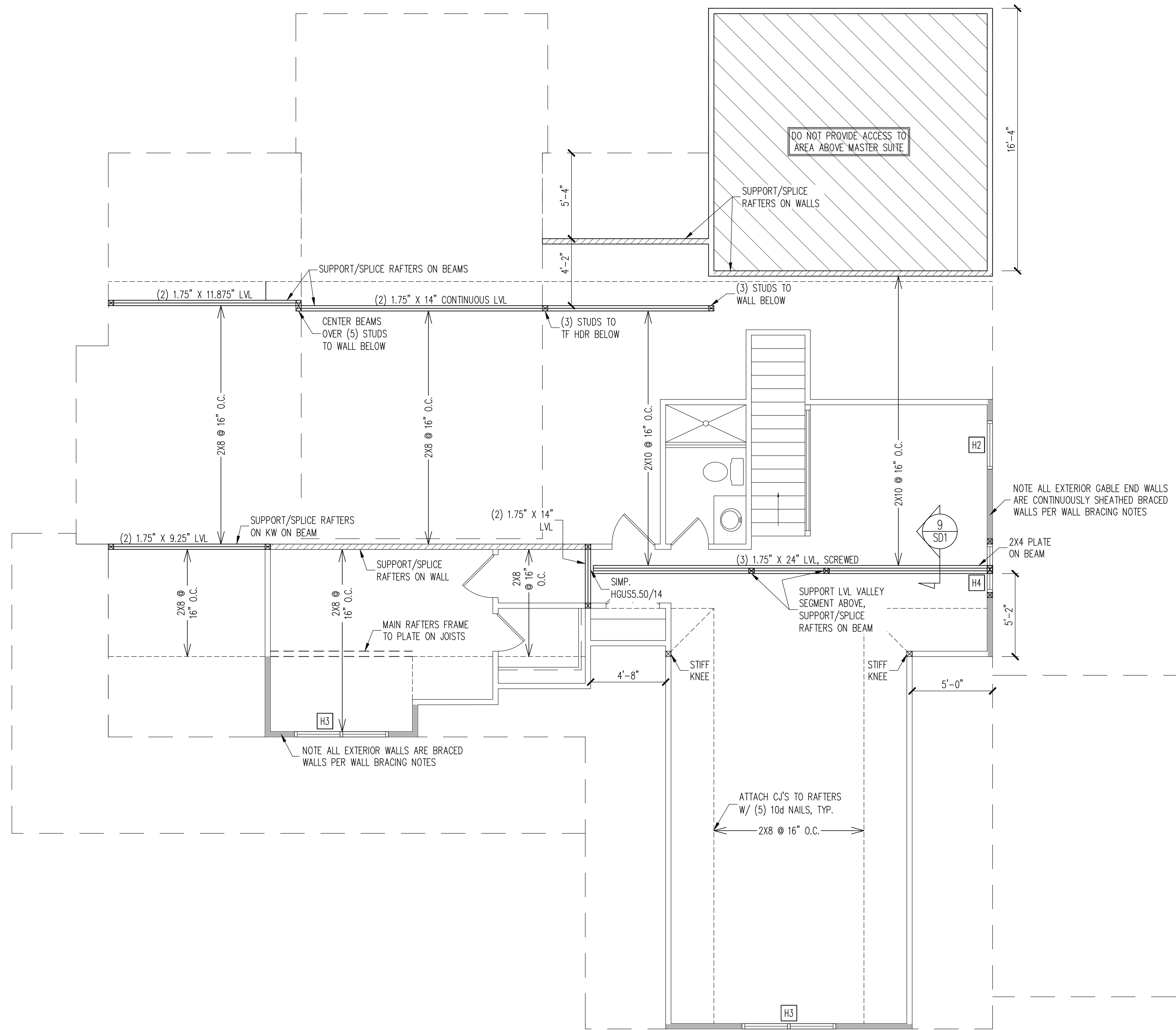


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PARAMOUNT HOMES	REVISION #	DATE
STRUCTURAL ADDENDUM	REF PROJ #	
SCOPE:	59 COTTON FARMS	
LOC:		

ENC:	CIB/CMC
DATE:	06/30/2023
PROJECT NO.:	23-65-159
SHEET NO.:	S3
	3 of 6



**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 = 48" MIN.

REFERENCE PART 16.02 OF CONSTRUCTION SPECIFICATIONS FOR GENERAL WIND BRACING INFORMATION.

**HEADER SCHEDULE**

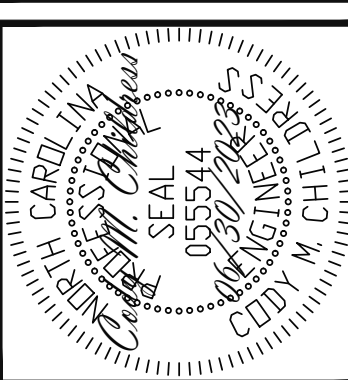
H1	SINGLE 2X4 TURNED FLAT (A)
H2	(2) 2X4'S ON SINGLE JACKS (B)
H3	(2) 2X10'S ON SINGLE JACKS (C)
H4	(2) 1.75" X 9.25" LVL'S ON DBL JACKS
H5	(3) 2X10'S ON SINGLE JACKS

NOTES:  
--HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED.

**2ND FLOOR FRAMING PLAN**

WALLS AND CEILING: 1/4" = 1'-0"

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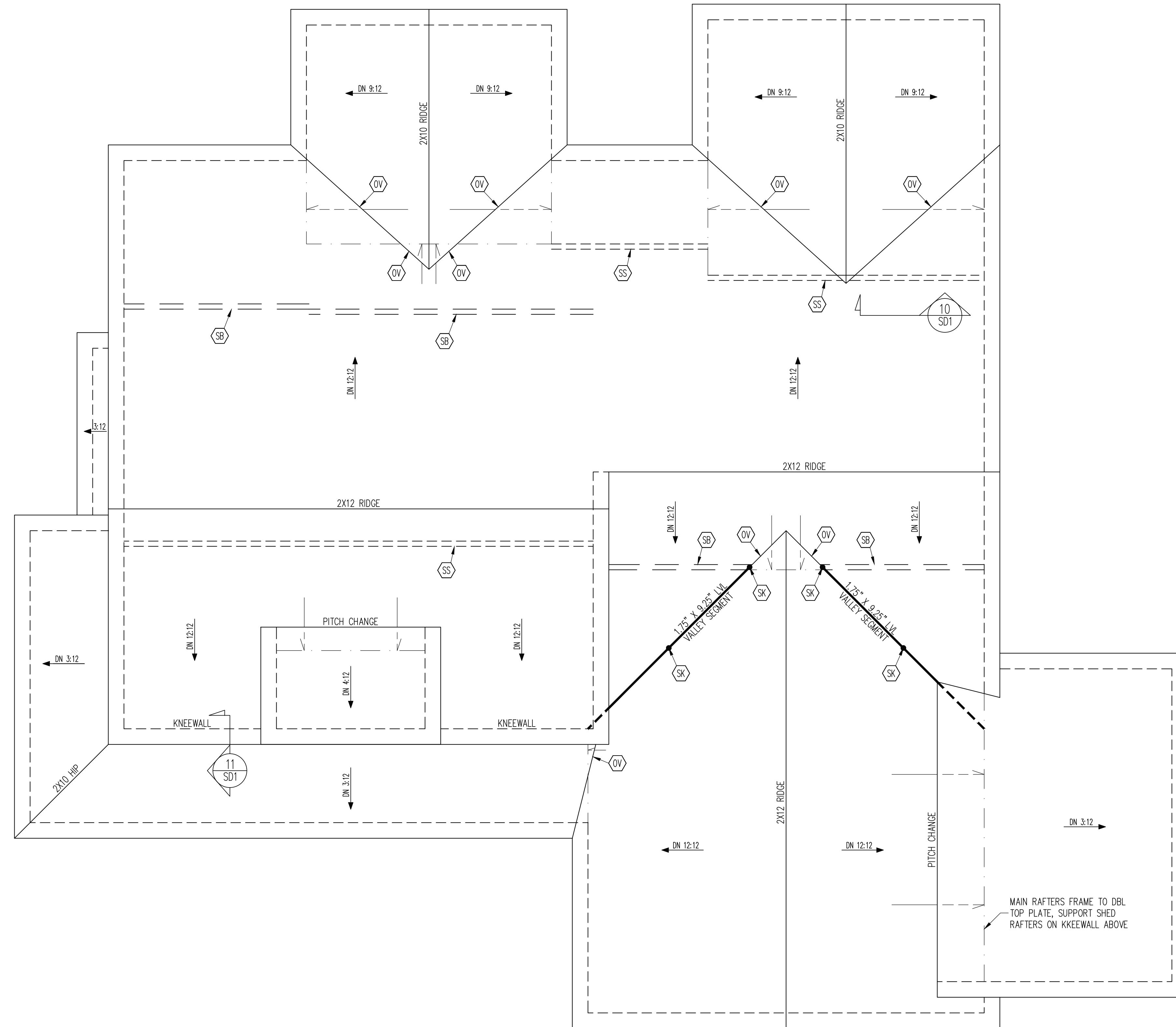
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SCOPE:	PARAMOUNT HOMES
	STRUCTURAL ADDENDUM
LOC:	59 COTTON FARMS
REV #	REF PROJ #
DATE	

ENC: CIB/CMC  
 DATE: 06/30/2023

PROJECT NO.  
 23-65-159

SHEET NO.  
 S4  
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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  
 OV OVERFRAME VALLEY ( 2X10 SLEEPER )  
 SB SUPPORT/SPLICE RAFTERS ON BEAM BELOW  
 SK DBL 2X4 STIFF KNEE  
 SS SUPPORT/SPLICE RAFTERS ON KNEEWALL BELOW

**ROOF FRAMING PLAN**

1/4" = 1'-0"

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 DATE: 06/30/2023

PROJECT NO.  
 23-65-159

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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:

1) THE WORKING PLANS DO NOT BEAR THE SEAL OF THE EOR
2) 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

Table with 4 columns: Abbreviation, Description, Abbreviation, Description. Includes terms like ABOVE, BOTH ENDS, BETWEEN, CAST IN PLACE, CONCRETE, CONTINUOUS SHEATHING, DIAMETER, DOUBLE, DOUBLE JOIST, DBL. STUD POCKET, EQUAL, EACH, FLANGE, FLUTCH PLATE, FLOOR, FINISH, FOOTING, GALVANIZED, HANGER, LAMINATED VENEER LUMBER, NOT TO SCALE, ON CENTER, PARALLEL STRAND LUMBER, PRESSURE TREATED, QUAD JOIST, SPACE (OR SPACING), SINGLE STUD POCKET, SQUARE, TRIPLE JOIST, TRIPLE, TRIPLE STUD POCKET, UNLESS NOTED OTHERWISE, EXTRA JOIST.

DECK SPECIFICATIONS

- 1. 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.
2. SUPPORT POSTS SHALL BE SUPPORTED BY A FOOTING.
3. 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.

Table with 2 columns: JOIST SPAN, DECKING. Lists joist spans (12' O.C., 16' O.C., 24' O.C., 32' O.C.) and corresponding decking (1" S4S, 1" T&G, 1 1/4" S4S, 2" S4S).

Table with 2 columns: POST SIZE, MAX POST HEIGHT. Lists post sizes (4x4, 6x6, ENGINEERED) and max post heights (8', 20', 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.

- 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:
Table with 5 columns: POST SIZE, TRIBUT. AREA, POST HEIGHT, EMB. DEPTH, CONC. DIAM.

- D. 2X6 DIAGONAL VERTICAL CROSS BRACINGS 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" 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 1 1/2".
3) NAILS MUST PENETRATE THE SUPPORTING STRUCTURE BAND A MINIMUM OF 1 1/2".

CONSTRUCTION SPECIFICATIONS

PART 1: GENERAL
1.01 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.

PART 2: DESIGN LOADS
2.01 DESIGN LOADS SHALL CONFORM WITH THE TABLE BELOW:

Table with 3 columns: USE, LIVE LOAD (PSF), DEAD LOAD (PSF). Lists uses like BALCONIES, DECKS, ATTICS WITH FIXED STAIR ACCESS, DWELLING UNITS INCLUDING ATTICS WITH FIXED STAIR ACCESS, STAIRS, FIRE ESCAPES, GARAGES (PASSENGER CARS ONLY), ATTICS (NO STORAGE, LESS THAN 5' HEADROOM), ATTICS (WITH STORAGE), ROOF.

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 ENGINEER UNDER THESE CONDITIONS.

2.02 INTERIOR WALLS: 5 PSF LATERAL.
2.03 BASIC WIND DESIGN VELOCITY OF 120 MPH.
2.04 SOIL BEARING CAPACITY 2000 PSF (PRESUMPTIVE).

PART 3: STRUCTURAL STEEL
3.01 WIDE FLANGE BEAMS AND TEE SECTIONS SHALL CONFORM TO ASTM A992 MINIMUM GRADE.
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.

3.05 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
4.01 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 WEIGHT, 4-CM AIR ENTRAINMENT, FOR EXTERIOR CONCRETE AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS TYP UNO. ALL 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 IN 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 1/2 LBS/CU YD. SLABS 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
6.01 REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615 GRADE 60 TYP UNO.
6.02 LAP SPICES SHALL BE CLASS B AS DEFINED BY ACI 318, TYP UNO.
6.03 WIRE REINFORCEMENT SHALL BE #9 GA AND SHALL CONFORM TO ASTM A1064.

PART 7: MASONRY
7.01 CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 AND C55, NORMAL WEIGHT, /M = 1,500 PSI MIN

7.02 CLAY MASONRY UNITS SHALL CONFORM TO ASTM C62-17 GRADE SW
7.03 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 ASS. STANDARD HOLES UNO.
8.02 LAG SCREWS SHALL CONFORM TO ANS/ASME STANDARD B18.21-1981. 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.
8.03 ANCHOR BOLTS 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
9.01 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 SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SPRUCE PINE FIR OR SYP #2 FOR JOISTS, RAFTERS, GRIDDERS, BEAMS, STUDS, ETC. MINIMUM ALLOWABLE DESIGN PROPERTIES ARE AS FOLLOWS:
E = 1,400,000 PSI, Fc, app = 425 PSI, Fv = 285 PSI, SPECIFIC GRAVITY = 0.42 MIN
Fb = 875 PSI FOR 2X4, 2X6, 2X8, Fb = 800 PSI FOR 2X10'S, 750 PSI FOR 2X12'S

PART 11: ENGINEERED LUMBER
11.01 LVL OR PSL MINIMUM ALLOWABLE DESIGN PROPERTIES ARE AS FOLLOWS:
E = 1,900,000 PSI, Fc = 2600 PSI, Fv = 285 PSI, Fc, app = 750 PSI
LSL MINIMUM ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS:
E = 1.3 X 10E6 PSI, Fc = 1700 PSI, Fv = 400 PSI, Fc, app = 680 PSI
11.02 LVL OR PSL MEMBERS MAY BE RIPPEL FROM DEEPER MEMBERS TO MATCH THE DEPTH 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 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 FLUTCH PLATE BEAMS
13.01 FLUTCH 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" BOLT 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
14.01 STEEL, ENGINEERED LUMBER, AND FLUTCH 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 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.
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 TRPL STUD GANGED COLUMN TYP UNO.

14.02 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 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.
14.03 EXTRA JOISTS BEARING ON A STUD WALL PERPENDICULAR TO OR SKEWED RELATIVE TO THE BEAM SHALL BE SUPPORTED BY ONE ADDITIONAL STUD.
14.04 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.

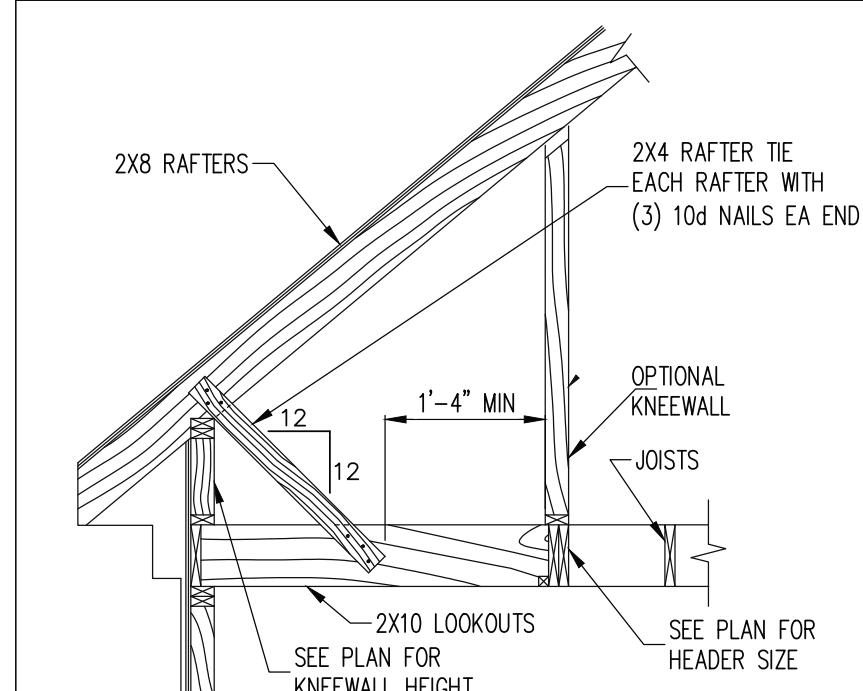
PART 15: NAILING OF MULTI-PLY WOOD BEAMS
15.01 SOLID SAWN LUMBER JOISTS THAT ARE GANGED TO FORM A BEAM SHALL HAVE ADJACENT MEMBERS IN THE BEAM NAILED TOGETHER WITH THREE ROWS OF 10d NAILS @ 16" O.C. FOR 2X10 OR LARGER, TWO ROWS OF 10d NAILS @ 16" O.C. FOR 2X8, ONE ROW OF 10d NAILS @ 16" O.C. FOR 2X6 OR SMALLER. STAGGER ROWS 5" MIN.
15.02 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
16.01 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, INCLUSIVE OF SOLE PLATE AND DBL TOP PLATE AND 7/16" OSB EXTERIOR BRACING AND ROW OF 2X4 PURLINS AT 4" 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"

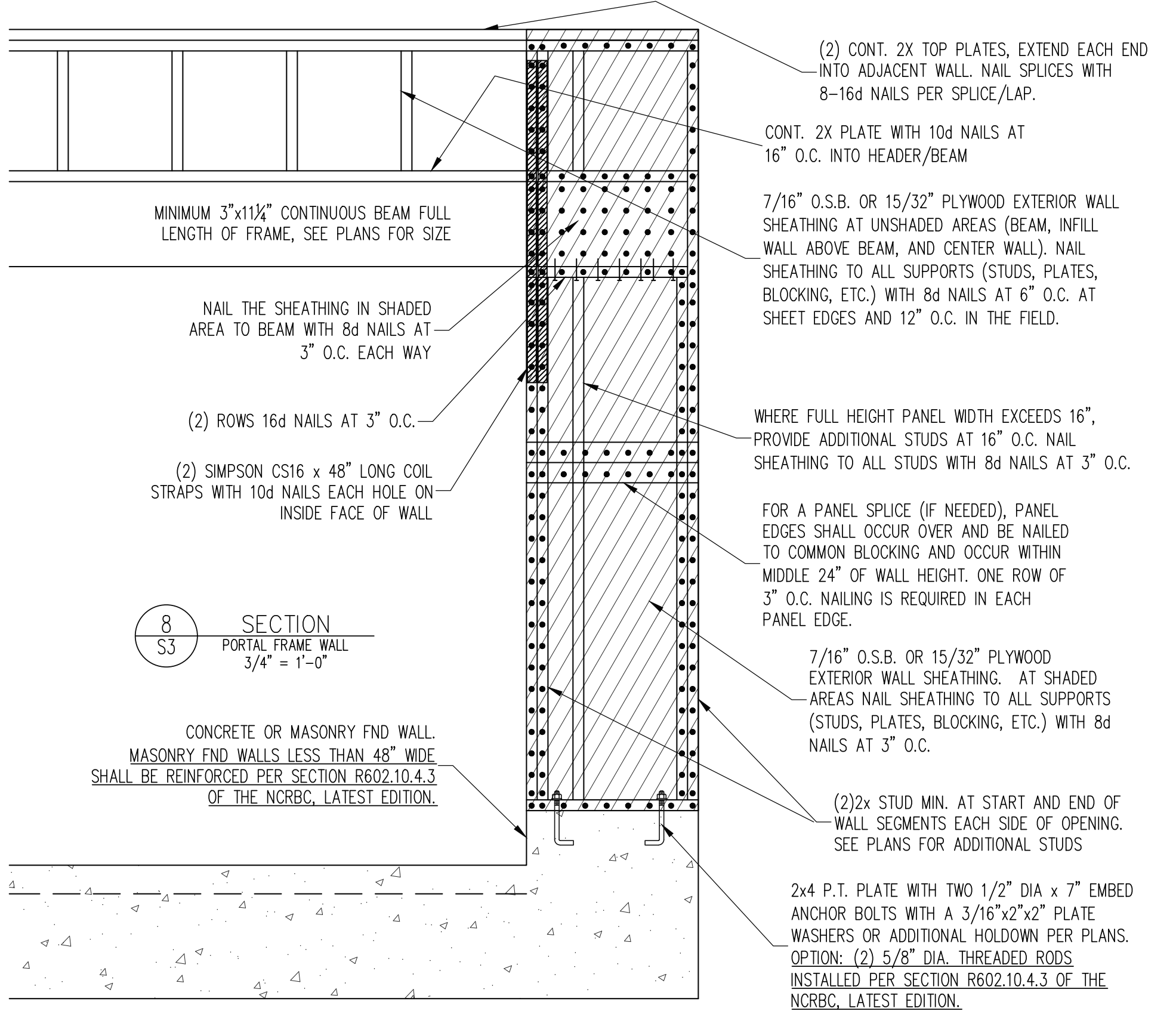
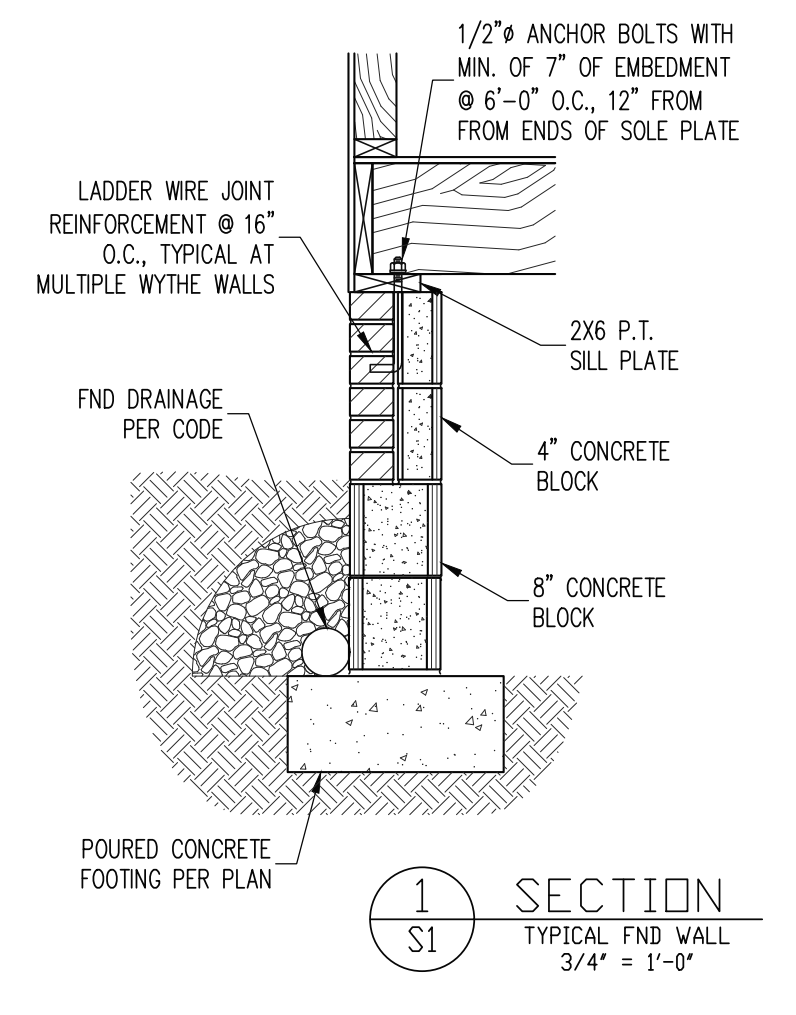
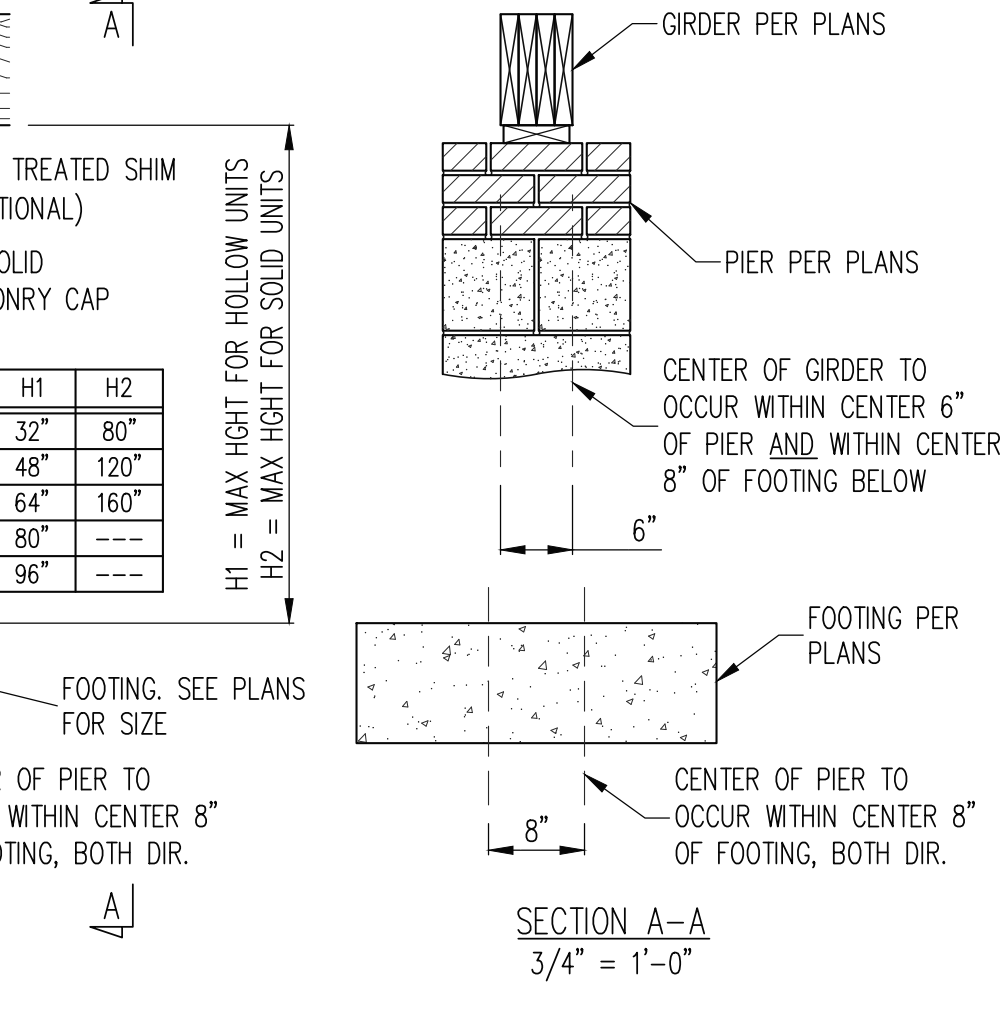
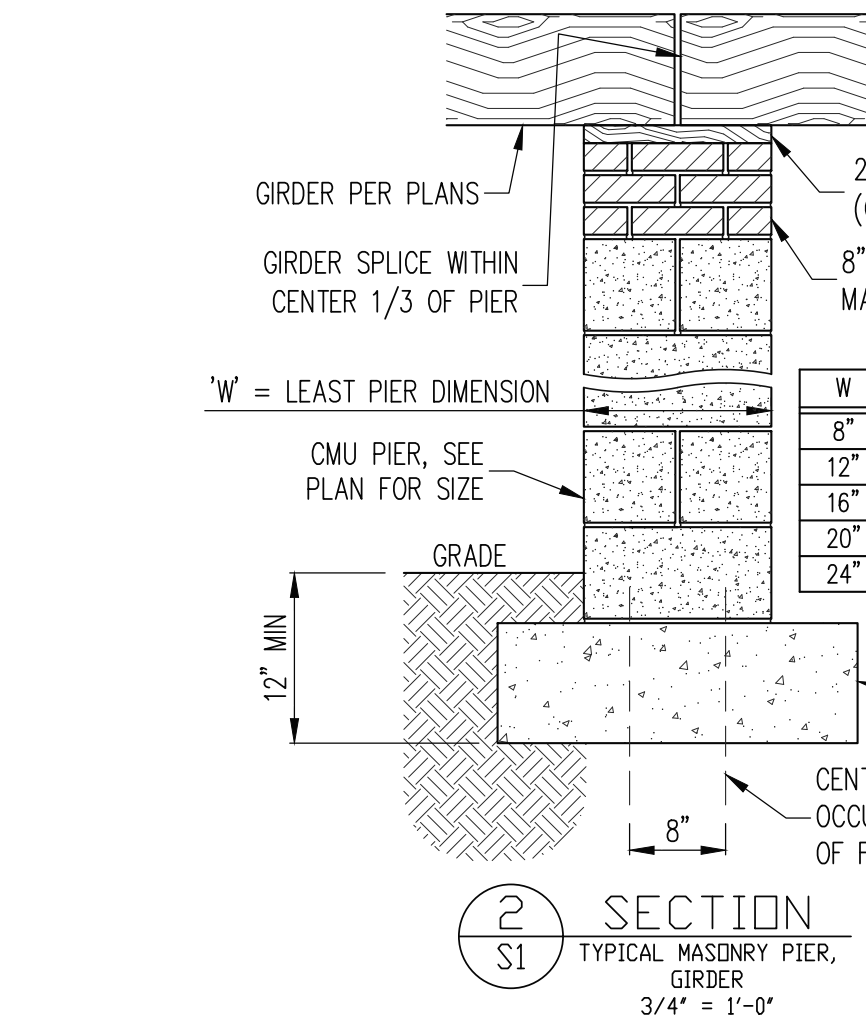
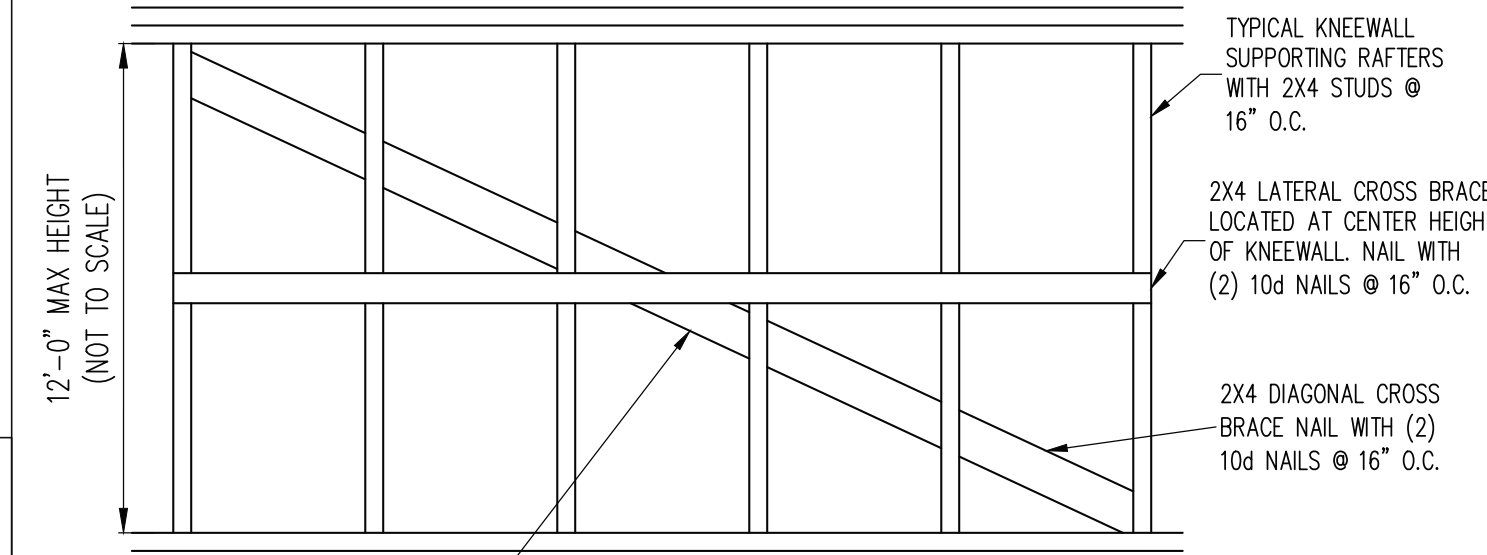
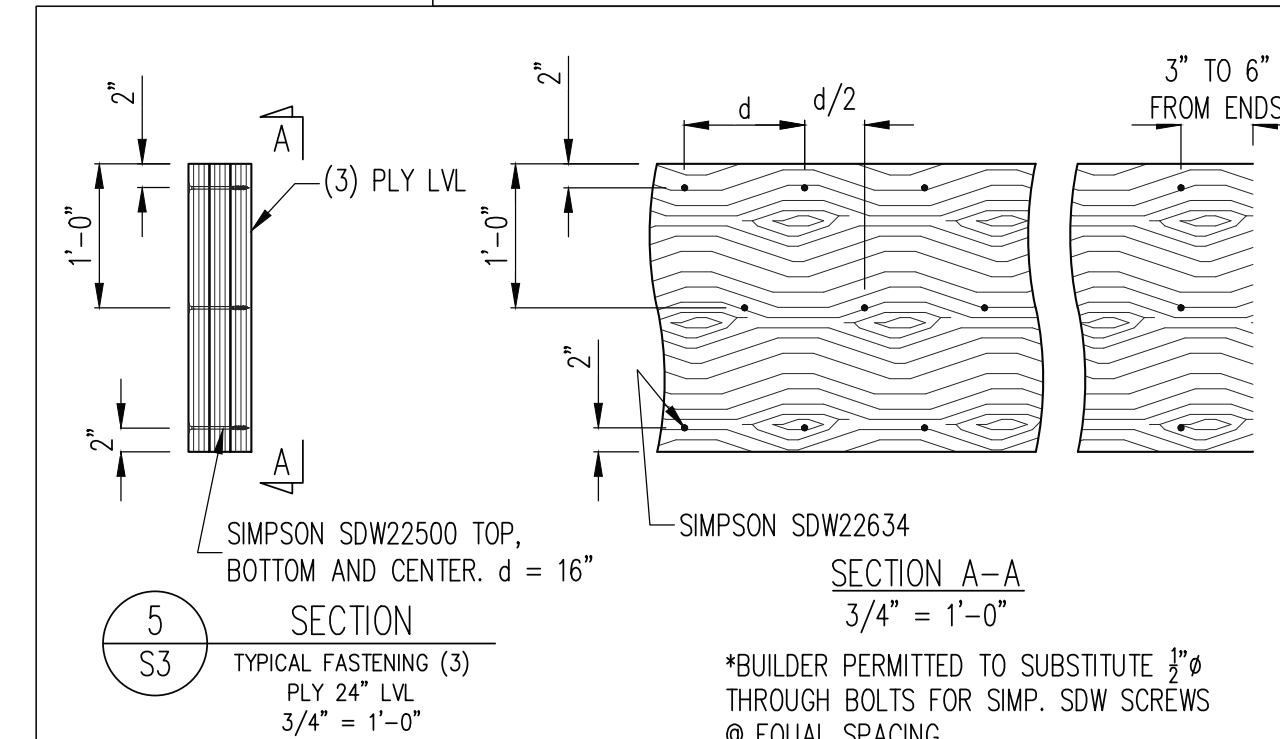
16.02 FOR WALL BRACING THE FOLLOWING SHALL APPLY:
-BLOCKING AT UNSUPPORTED PANEL EDGES IS REQUIRED TYP UNO.
-WALL BRACING IS BY ENGINEERED DESIGN AND NOT PRESCRIPTIVE PER SECTION 602.10 OF THE 2018 NRC. CONTINUOUS SHEATHING HAS BEEN PROVIDED, ALONG WITH ALTERNATIVE METHODS TO INSURE THE MINIMUM INTENT OF SECTION 602.10 OF THE 2018 NRC 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 NRC608.3.5 AND 802.11 UNLESS NOTED OTHERWISE ON STRUCTURAL PLANS.
-MAY SUBSTITUTE WSP FOR OSB.
16.03 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 SHAVED WALLS, UNO.

PART 17: KING STUDS
17.01 KING STUDS FOR OPENINGS IN EXTERIOR WALLS SHALL BE AS FOLLOWS:
Table with 3 columns: MAX OPENING WIDTH, NUMBER OF KING STUDS, STUD SIZE. Lists opening widths (5'-0", 9'-0", 13'-0", 17'-0", 21'-0") and stud sizes (2X4, 2X6, 2X8).

PART 18: SUBSTITUTIONS
18.01 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
19.01 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 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.

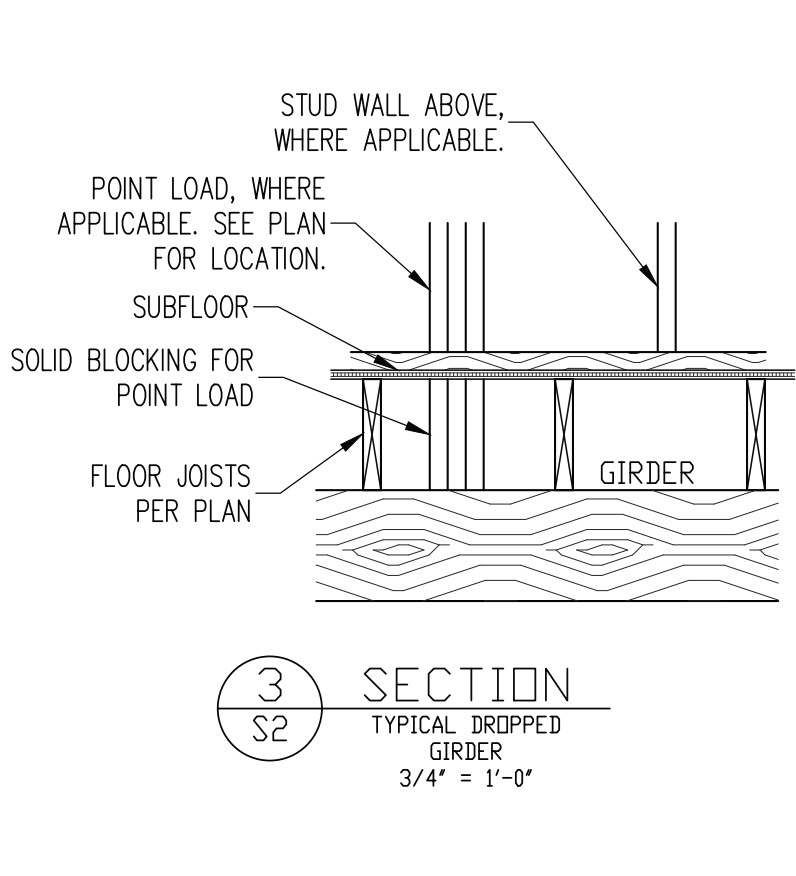
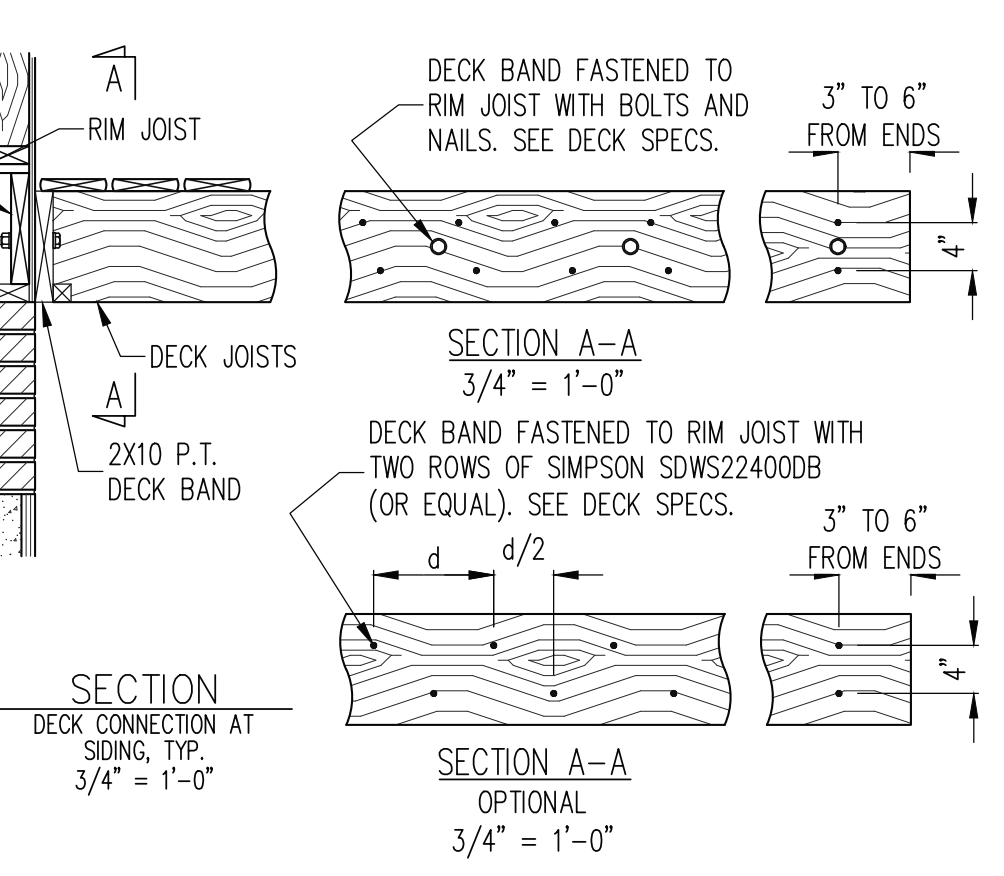
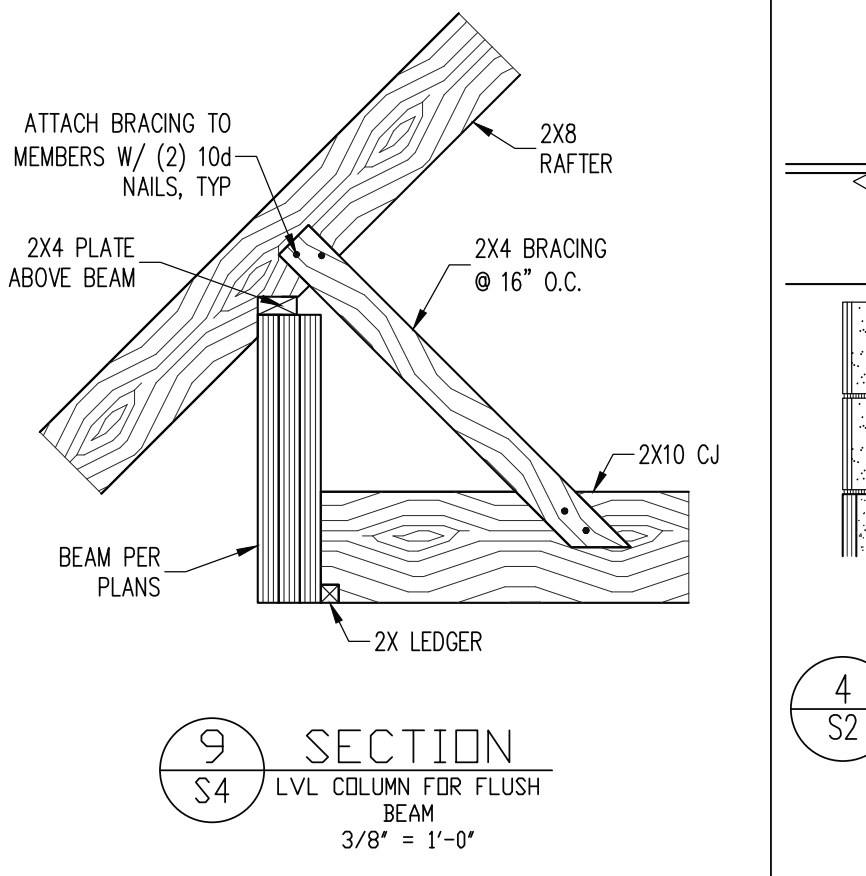
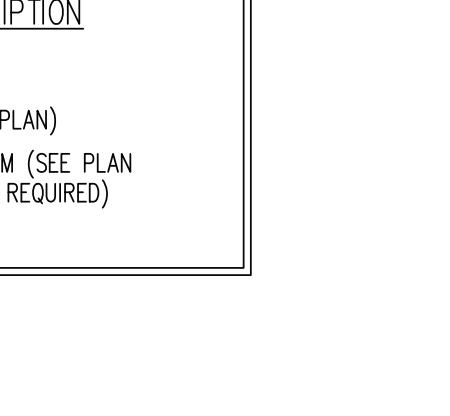
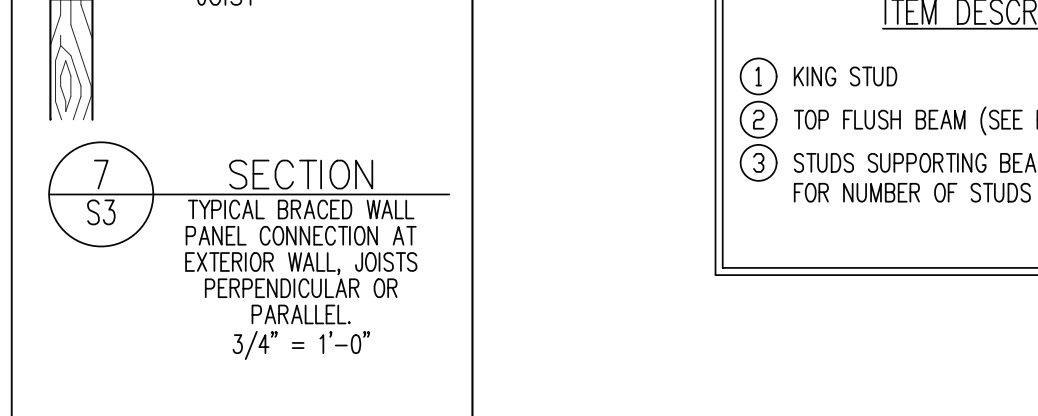
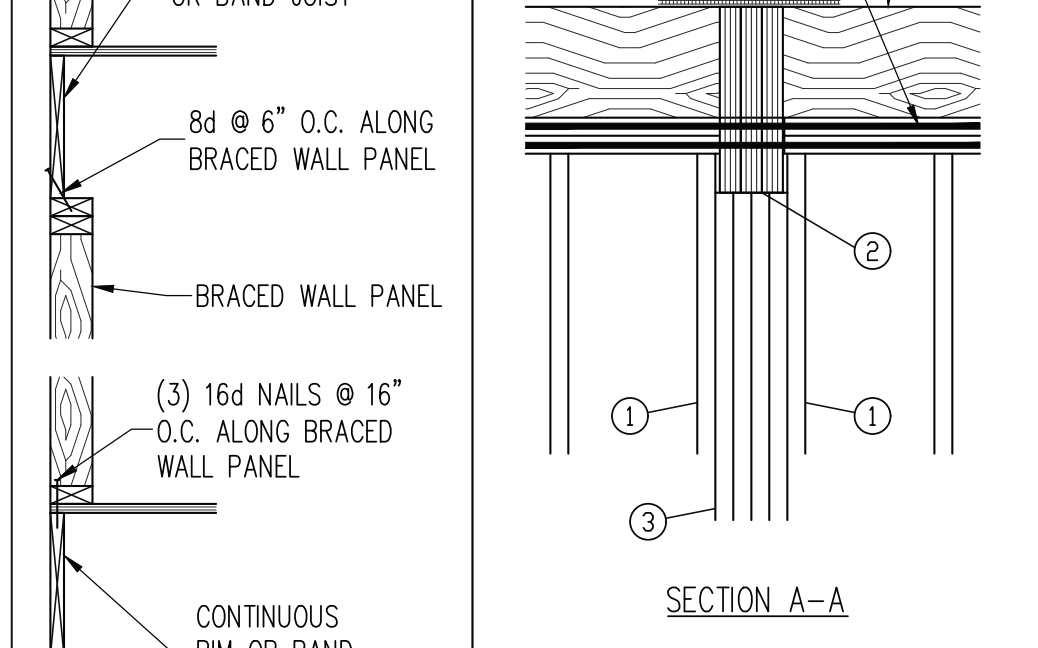


SECTION 11 KNEEWALL PERPENDICULAR TO JOIST 3/4" = 1'-0"

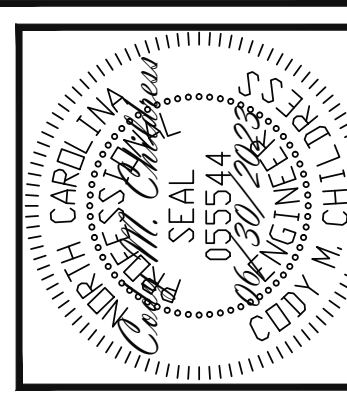


SECTION 5 TYPICAL FASTENING (3) PLY 24" LVL 3/4" = 1'-0"

SECTION 7 TYPICAL BRACED WALL PANEL CONNECTION AT EXTERIOR WALL JOISTS PERPENDICULAR OR PARALLEL 3/4" = 1'-0"



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PARAMOUNT HOMES STRUCTURAL ADDENDUM REV # REF PROJ # DATE

SCOPE: LOC: 59 COTTON FARMS

ENC: CIB/CMC DATE: 06/30/2023

PROJECT NO. 23-65-159

SHEET NO. SD1 6 of 6