GENERAL SITEPREP NOTES

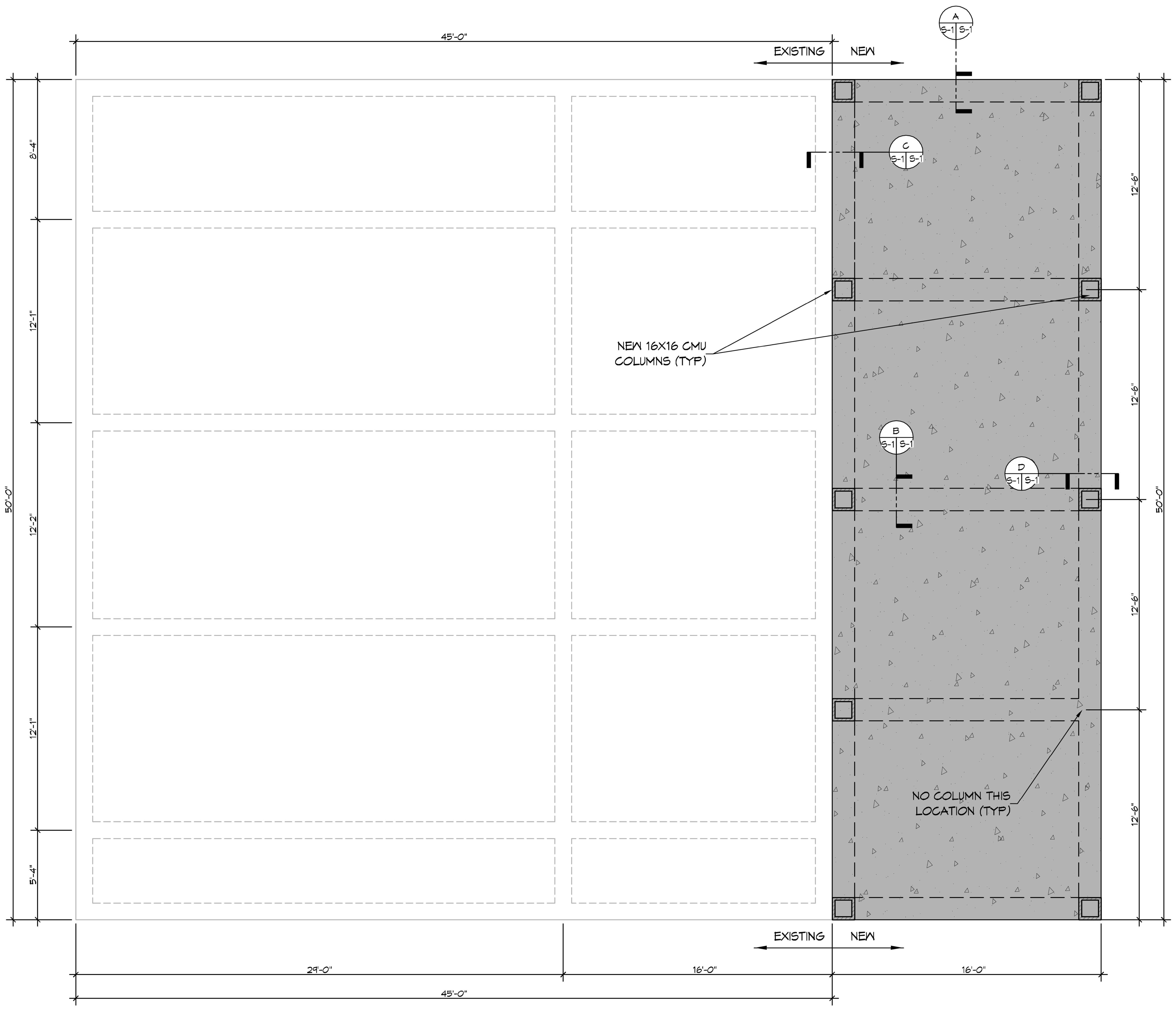
1. REMOVE EXISTING NEAR SURFACE TOPSOIL WITH ORGANICS AND OTHER DELETERIOUS MATERIALS, APPROXIMATELY 8 TO 10 INCHES.
2. NEW STRUCTURAL FILL SHALL BE SELECT, NONORGANIC AND DEBRIS-FREE SILTY CLAYS (CL) THAT HAVE A PLASTICITY INDEX (PI) WITHIN THE RANGE OF 10 TO 24 AND A LIQUID LIMIT (LL) LESS THAN 45. NEW FILL SHALL BE PLACED IN MAXIMUM LIFTS OF EIGHT (8) INCHES OF LOOSE MATERIAL, COMPACTED WITHIN THE RANGE OF ONE (1) PERCENTAGE POINT BELOW TO THREE (3) PERCENTAGE POINTS ABOVE THE OPTIMUM MOISTURE CONTENT VALUE. IF WATER MUST BE ADDED, IT SHALL BE UNIFORMLY APPLIED AND THOROUGHLY MIXED INTO THE SOIL BY DISKING OR SCARIFYING. IN-PLACE DENSITY MEASUREMENTS SHALL BE TAKEN AND RECORDED TO ASSURE THAT THE ABOVE DEGREE OF COMPACTION IS ACHIEVED.
3. ALL RUNOFF WATER MUST BE CARRIED AWAY FROM THE SLAB TO PREVENT SATURATION OF THE SUB-BASE.
4. ALL TREES WITHIN CLOSE PROXIMITY SHALL BE REMOVED TO PREVENT THE ROOTS FROM EXTENDING UNDER THE SLAB.
5. PROVIDE AND MAINTAIN IMMEDIATE SITE DRAINAGE BEFORE, DURING, AND AFTER CONSTRUCTION. PROVIDE GRADING, SWELLS, AND SUMP PUMPS AS MAY BE REQUIRED TO IMMEDIATELY DRAIN ALL RAINWATER FROM THE CONSTRUCTION AREA. FOOTING EXCAVATIONS SHOULD BE OBSERVED AND CONCRETE PLACED AS QUICKLY AS POSSIBLE TO AVOID EXPOSURE OF THE FOOTING BOTTOMS TO WETTING AND DRYING. SURFACE RUNOFF WATER SHOULD BE DRAINED AWAY FROM THE EXCAVATIONS AND NOT BE ALLOWED TO POND PRIOR OR AFTER CONCRETE PLACEMENT. IF IT IS REQUIRED THAT A FOOTING EXCAVATIONS BE LEFT OPEN FOR MORE THAN ONE DAY, THEY SHOULD BE PROTECTED TO REDUCE EVAPORATION OR ENTRY OF MOISTURE.

GENERAL FOUNDATION NOTES

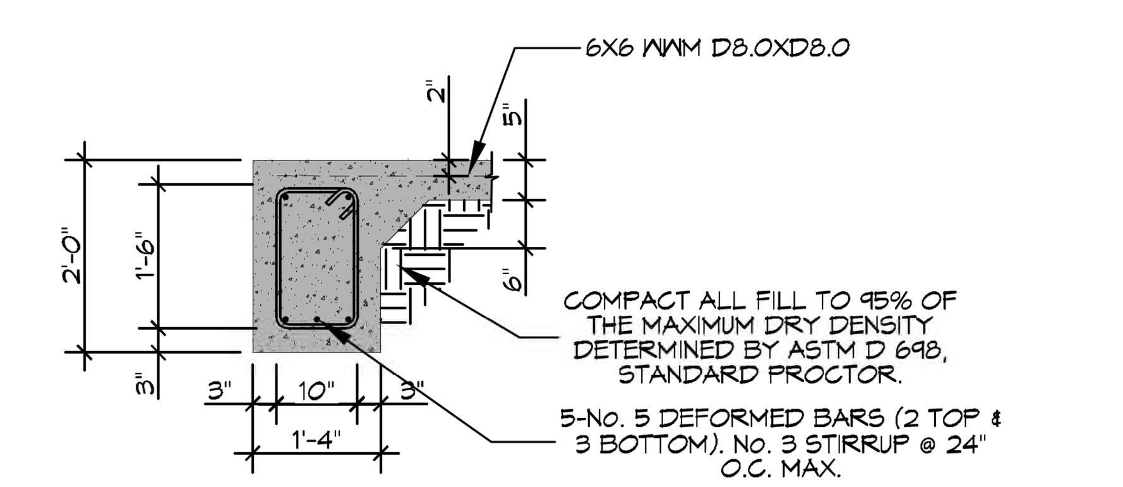
1. THE CONCRETE MIX SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. CONCRETE MIX SHALL BE IN ACCORDANCE WITH ACI-318.
2. ALL CONVENTIONAL REINFORCING SHALL MEET ASTM-A615 (GRADE 60).
3. ALL REINFORCING STEEL AND MESH SHALL BE SECURELY SUPPORTED TO PREVENT BOTH VERTICAL AND HORIZONTAL MOVEMENT DURING CONCRETE PLACEMENT.
4. THE CONTRACTOR SHALL VERIFY ALL DROPS, OFFSETS, CMU LEDGES, DIMENSIONS, AND CONFIGURATIONS. CONTRACTOR MUST BE RESPONSIBLE FOR SAME.
5. GRADE BEAM SIZES MAY VARY BY -5% TO +20%.
6. ALL SUBGRADE FILL SHALL BE SELECT GRANULAR MATERIAL COMPACTED TO 95% STANDARD PROCTOR DENSITY IN A MAXIMUM OF 6" LIFTS.
7. ALL RUNOFF WATER MUST BE CARRIED AWAY FROM THE SLAB TO PREVENT SATURATION OF THE SUB-BASE.
8. ALL TREES WITHIN CLOSE PROXIMITY SHALL BE REMOVED TO PREVENT THE ROOTS FROM EXTENDING UNDER THE SLAB.
9. PROVIDE AND MAINTAIN IMMEDIATE SITE DRAINAGE BEFORE, DURING, AND AFTER CONSTRUCTION. PROVIDE GRADING, SWELLS, AND SUMP PUMPS AS MAY BE REQUIRED TO IMMEDIATELY DRAIN ALL RAINWATER FROM THE CONSTRUCTION AREA. FOOTING EXCAVATIONS SHOULD BE OBSERVED AND CONCRETE TO BE PLACED AS QUICKLY AS POSSIBLE TO AVOID EXPOSURE OF THE FOOTING BOTTOMS TO WETTING AND DRYING. SURFACE RUNOFF WATER SHOULD BE DRAINED AWAY FROM THE EXCAVATIONS AND NOT BE ALLOWED TO POND PRIOR TO OR AFTER CONCRETE PLACEMENT. IF IT IS REQUIRED THAT A FOOTING EXCAVATION BE LEFT OPEN FOR MORE THAN ONE DAY, IT SHOULD BE PROTECTED TO REDUCE EVAPORATION OR ENTRY OF MOISTURE.

DESIGN CRITERIA

THE CONSTRUCTION FOR SAID RESIDENCE, WHERE BASIC WIND SPEED IS 130 MILES PER HOUR, WIND EXPOSURE ZONE C, IS DESIGNED IN ACCORDANCE WITH: AMERICAN FOREST AND PAPER ASSOCIATION (AF&PA) WOOD FRAME CONSTRUCTION MANUAL FOR ONE AND TWO FAMILY DWELLINGS (WFCM) 2015 EDITION AS WELL AS THE INTERNATIONAL RESIDENTIAL CODE (IRC) 2015 EDITION



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



A SECTION
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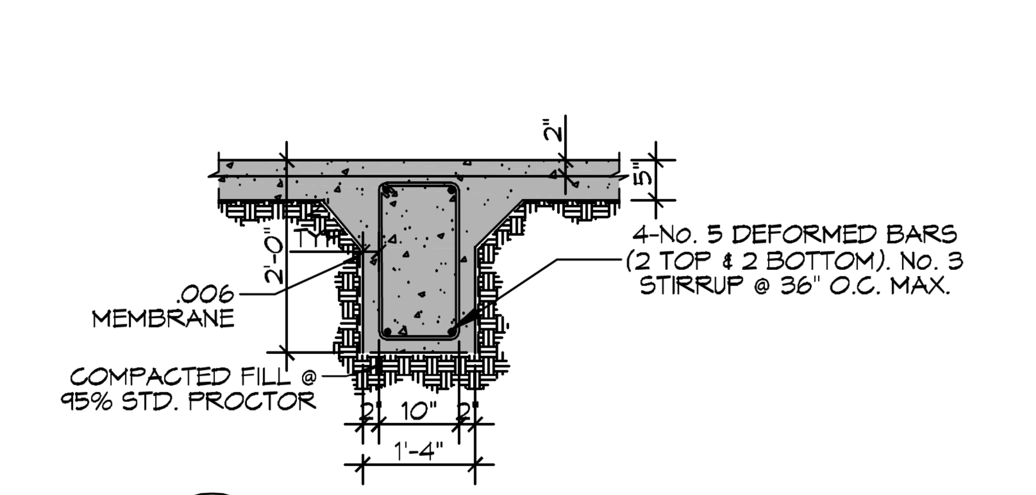

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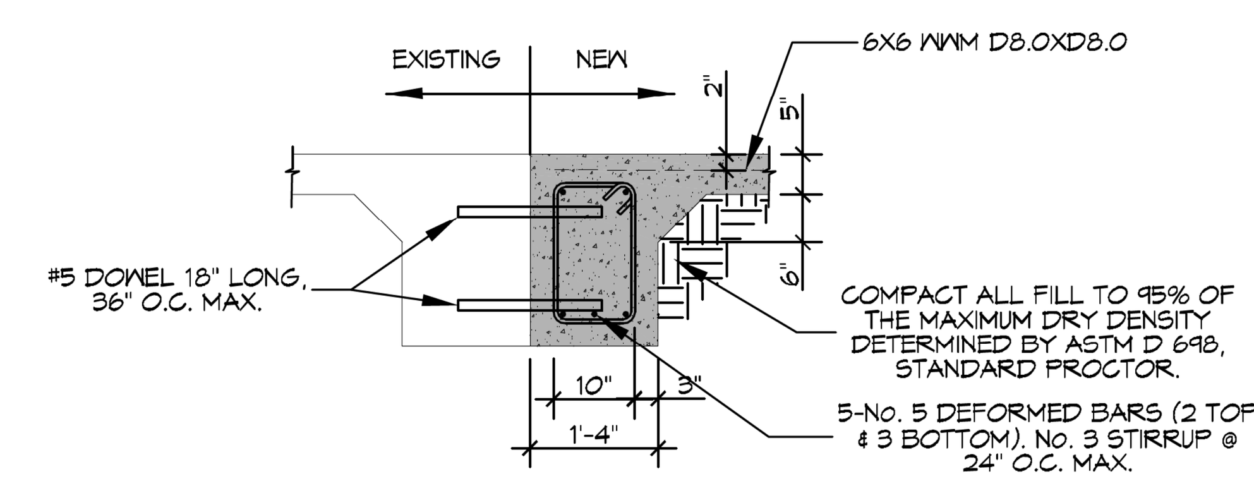

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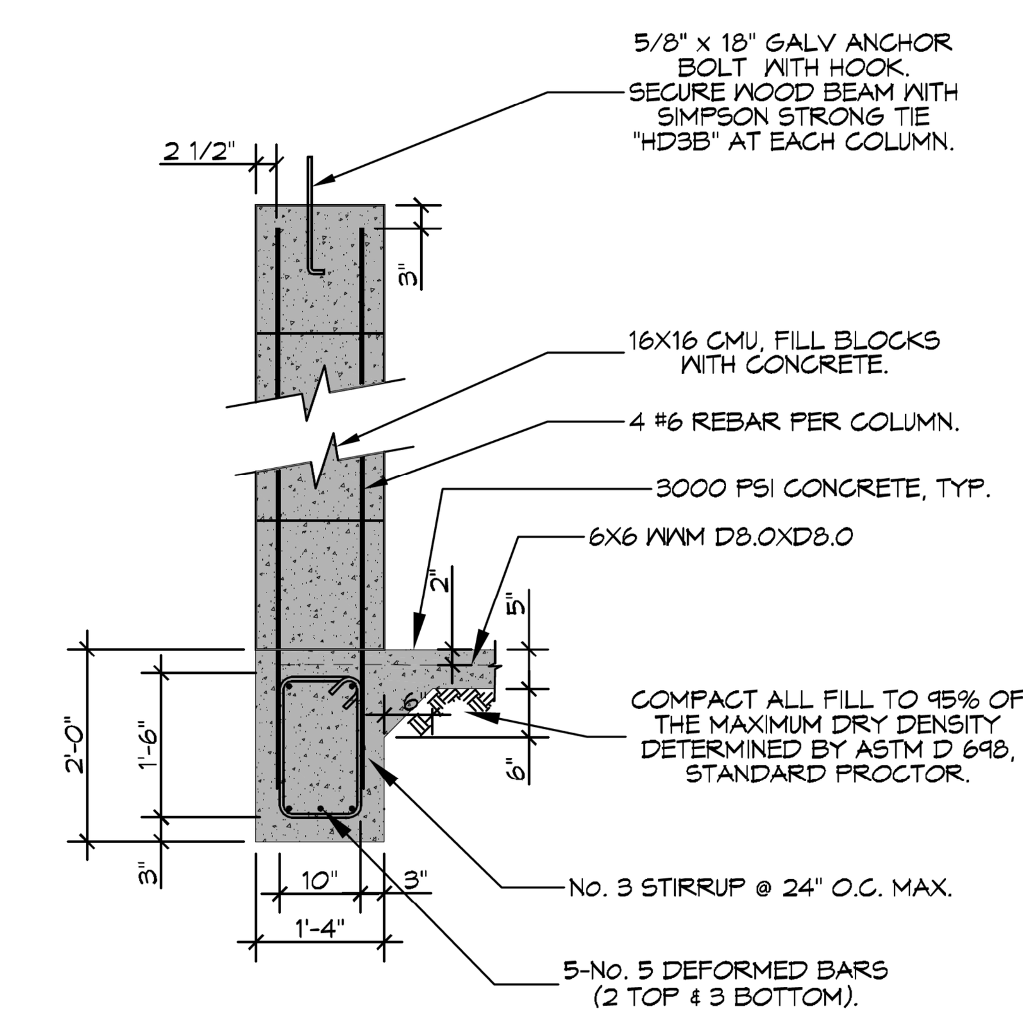

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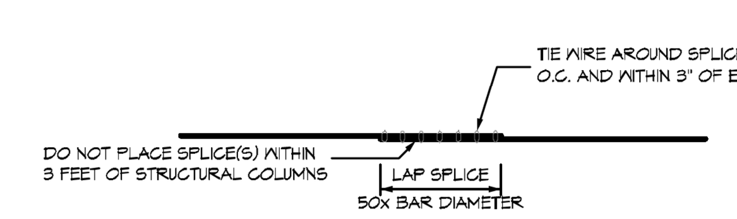

SPLICE DETAIL
SCALE: 3/4" = 1'-0"

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2/24/2021
PROFESSIONAL ENGINEER

2nd FLOOR ADDITION
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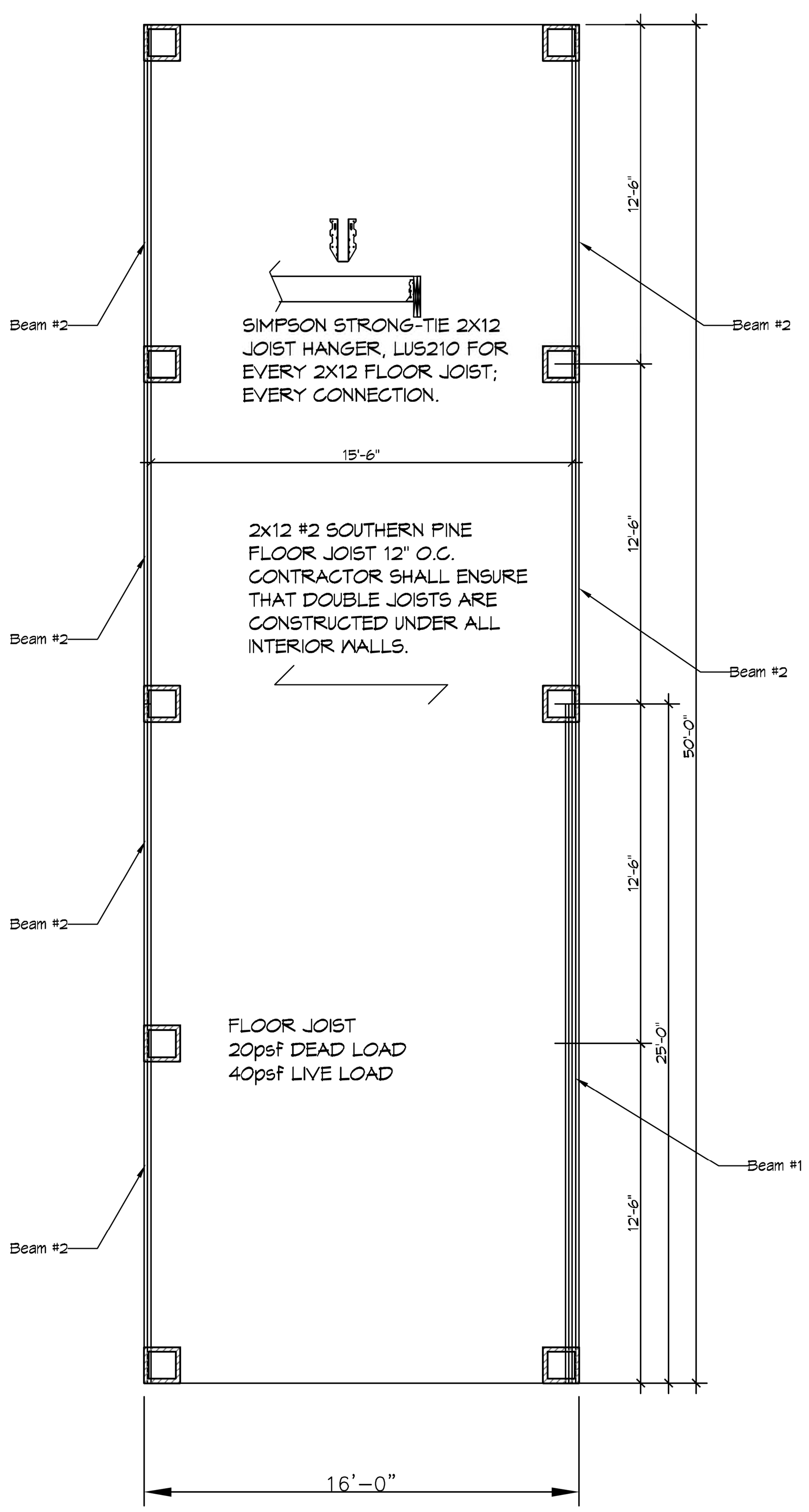
108 EBONY DR.
SLIDELL LA.

JOB No:	2021-7	DATE:	02-23-2021
DRAWN BY:	DD	CHECKED BY:	BAM

SHEET TITLE: FOUNDATION PLAN

DRAWING NUMBER: S-1

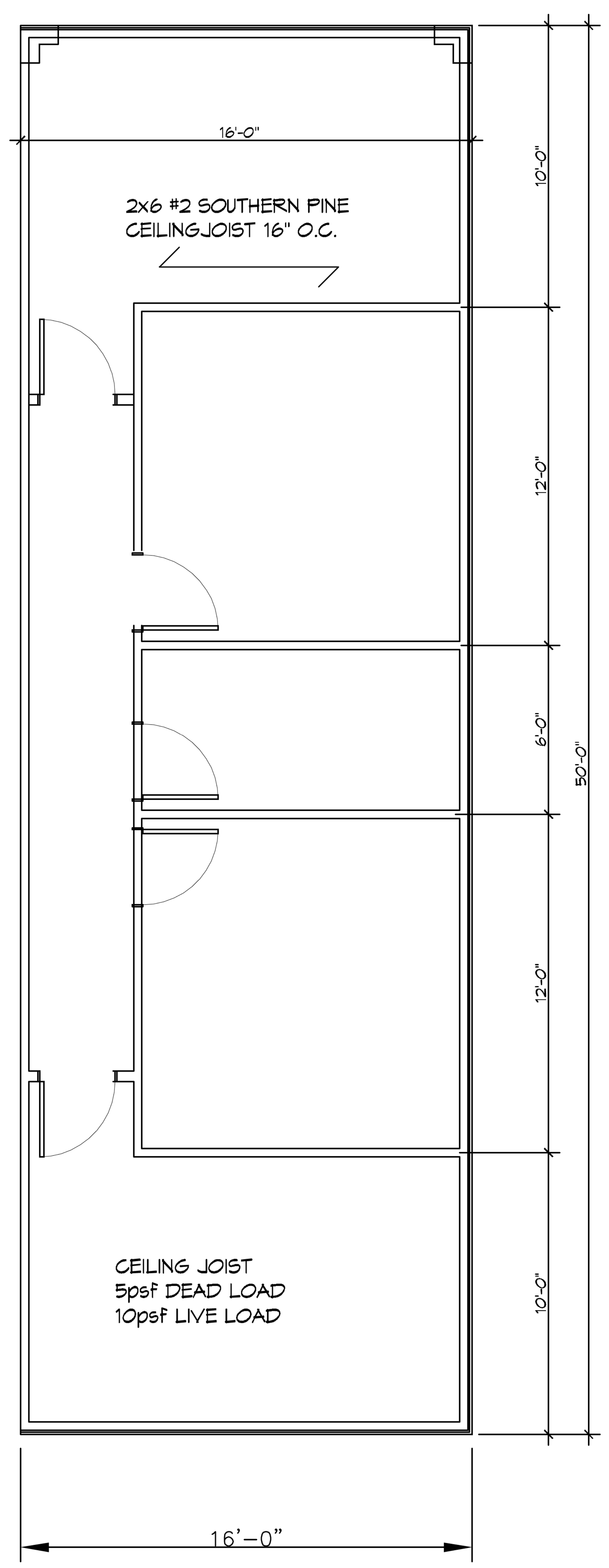
SHEET No: 1 of 3



2 FLOOR FRAMING PLAN

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

BEAM #1 VERSA-LAM QUADRUPLE PLY 1.25"x18"x25' LONG
BEAM #2 VERSA-LAM DOUBLE PLY 1.25"x18"x12.5' LONG



3 CEILING SUPPORT PLAN

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

FLOOR FRAMING NOTES

1. DO NOT SCALE DRAWINGS. USE ONLY DIMENSIONS SHOWN ON DRAWINGS. IF DIMENSIONS ARE IN QUESTION, THE BUILDER SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATIONS BEFORE CONTINUING WITH CONSTRUCTION. BUILDER SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT JOBSITE.
2. INSTALL ALL BRIDGING AND PERMANENTLY FASTEN JOISTS INTO PLACE BEFORE APPLYING ANY LOADS EXCEPT THE WEIGHT OF THE ERECTORS.
3. DECKS SHALL BEAR UNIFORMLY ALONG THE TOP CHORDS OF THE JOISTS.
4. FLOOR DECK SHALL BE 3/4" EXPOSURE T&G STURDI-FLOOR PLYWOOD.
5. HOLD FLOOR DECKING PANELS APART AS RECOMMENDED BY DECKING MANUF.
6. HOLD FLOOR DECK PANELS AWAY FROM ITEMS PENETRATING FLOOR DECK AS RECOMMENDED BY FLOOR DECK MANUF. TO ALLOW FOR EXPANSION AND CONTRACTION OF FLOOR DECK.
7. INSTALL DOUBLE JOISTS UNDER WALLS PARALLEL TO JOISTS. INSTALL SOLID BRIDGING BETWEEN FLOOR JOISTS UNDER WALLS PERPENDICULAR TO JOISTS. PROVIDE X OR SOLID BRACING AT 8'-0" MAX. FOR FLOOR JOISTS. DOUBLE HEADER JOISTS AND TRIMMERS AT ALL FLOOR OPENINGS WHERE JOISTS TERMINATE.

FRAMING NOTES

1. ALL WOOD FRAMING, FABRICATION, AND ERECTION SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION BY THE NFPA, THE PLYWOOD DESIGN SPECIFICATION BY THE APA AND MEET THE REQUIREMENTS BELOW. UNLESS NOTED OTHERWISE, ALL WOOD CONNECTIONS SHALL BE IN ACCORDANCE WITH THE FASTENING SCHEDULE OF THE 2015 INTERNATIONAL RESIDENTIAL BUILDING CODE.
2. PROVIDE BLOCKING IN WALL TO SECURE MOUNTED MILLWORK, SHELVES, FIXTURES, MIRRORS, TOILET ACCESSORIES AND OTHER ITEMS REQUIRING A PERMANENT ATTACHMENT TO THE WALL.
3. WALLS SHALL BE 2x4 STUDS AT 16" O.C., UNLESS NOTED OTHERWISE. WHERE PLUMBING IS REQUIRED IN WALL, WALL SHALL BE 2x6 STUDS AT 16" O.C., UNLESS NOTED OTHERWISE.
4. BLOCK ALL STUD WALLS AT MID-HEIGHT.
5. FLOOR, ATTIC, AND ROOF FRAMING SHALL BE OF SIZES AS INDICATED ON FRAMING PLANS. PROVIDE WOOD CROSS BRIDGING WHERE INDICATED ON DRAWINGS OR WHEN JOIST EXCEEDS 8'. LOCATE (3)2x12'S BELOW BEARING WALLS OR FLOOR ABOVE AND/OR AS INDICATED ON FRAMING PLANS. BEAM SHALL BEAR ON ENTIRE WIDTH OF BEARING WALL TOP PLATES. LOCATE THREE STUDS AT BEAM BEARING POINTS BELOW DOUBLE TOP PLATE OR AS SHOWN ON PLAN. PROVIDE WOOD COLLAR BRACES AT EACH RAFTER 24" BELOW CROWN OF ROOF.
6. WIND BRACING-PROVIDE APA RATED 4'x8'x5/8" PLYWOOD ON ALL NEW EXTERIOR WALLS FROM FLOOR TO UNDERSIDE OF ROOF RAFTERS. NAIL PLYWOOD ACCORDING TO STRUCTURAL DETAIL.
7. COORDINATE FRAMING WITH HVAC, ELECTRICAL AND PLUMBING REQUIREMENTS.
8. BORED HOLES SHALL BE 2" CLEAR FROM TOP OR BOTTOM EDGE OF JOIST, NOT LARGER THAN 1-1/4" AND NOT IN MIDDLE OF SPAN.
9. STRAP ALL PLATES CUT AWAY FOR PLUMBING WITH 1-1/2" WIDE NO. 24 GAUGE GALVANIZED STRAPS 18" LONG, BOTH SIDES OF WALL-SPIKED TO PLATES.
10. EXISTING WALLS NEWLY SUPPORTING A SECOND OR THIRD FLOOR SHALL HAVE EXISTING STUD WALLS AT 16" O.C. SISTERED WITH AN ADDITIONAL 2x4 TRT'D STUD.
11. PROVIDE TERMITE TREATMENT DURING APPROPRIATE STAGE OF CONSTRUCTION.

DIMENSIONAL LUMBER FRAMING NOTES:

1. WOOD FRAME BUILDING SHALL BE CONSTRUCTED TO WITHSTAND 133 MPH WINDS, ROUGHNESS C, EXPOSURE C.
2. THE FOLLOWING DEFLECTIONS SHALL APPLY:
   A. EXTERIOR LOAD-BEARING WALL FRAMING: HORIZONTAL DEFLECTION OF 1/240 OF THE WALL HEIGHT.
   B. INTERIOR LOAD-BEARING WALL FRAMING: HORIZONTAL DEFLECTION OF 1/240 OF THE WALL HEIGHT UNDER A HORIZONTAL LOAD OF 5 LBF/SQ. FT.
   C. EXTERIOR NON-LOAD-BEARING FRAMING: HORIZONTAL DEFLECTION OF 1/240 OF THE WALL HEIGHT.
   D. ROOF RAFTER FRAMING: HORIZONTAL DEFLECTION OF 1/180 OF THE HORIZONTALLY PROJECTED SPAN.
   E. CEILING JOIST FRAMING: VERTICAL DEFLECTION OF 1/240 OF THE SPAN.
4. FRAMING SYSTEMS SHALL PROVIDE FOR MOVEMENT OF FRAMING MEMBERS WITHOUT DAMAGE OR OVERSTRESSING, SHEATHING FAILURE, CONNECTION FAILURE, UNDUE STRAIN ON FASTENERS AND ANCHORS, OR OTHER DETRIMENTAL EFFECTS WHEN SUBJECT TO A MAXIMUM AMBIENT TEMPERATURE CHANGE OF 120 DEG F.
5. FRAMING SYSTEM SHALL MAINTAIN CLEARANCES AT OPENINGS, TO ALLOW FOR CONSTRUCTION TOLERANCES, AND TO ACCOMMODATE LIVE LOAD DEFLECTION OF PRIMARY BUILDING STRUCTURE FOR UPWARD AND DOWNWARD MOVEMENT OF 1/2 INCH.
6. KILN-DRY LUMBER AFTER TREATMENT SHALL HAVE A MAXIMUM MOISTURE CONTENT OF 19%. DO NOT USE MATERIAL THAT IS WARPED OR DOES NOT COMPLY WITH REQUIREMENTS FOR UNTREATED MATERIAL. KILN-DRY PLYWOOD AFTER TREATMENT SHALL HAVE A MAXIMUM MOISTURE CONTENT OF 15%.
7. ALL WOOD-PRESERVATIVE-TREATED LUMBER SHALL MEET THE AWPA C2 GUIDELINES EXCEPT WHERE SUCH LUMBER THAT IS NOT IN CONTACT WITH THE GROUND AND IS CONTINUOUSLY PROTECTED FROM LIQUID WATER MAY BE TREATED ACCORDING TO AWPA C31 WITH INORGANIC BORON SBX.
8. ALL WOOD-PRESERVATIVE-TREATED LUMBER SHALL BE MARKED WITH A TREATMENT QUALITY MARK OF AN INSPECTION AGENCY APPROVED BY THE ALSC BOARD OF REVIEW.
9. WOOD-PRESERVATIVE-TREATED LUMBER SHALL BE USED AS INDICATED ON THE DRAWINGS AND ALSO THE FOLLOWING:
   A. WOOD CANTS, NAILERS, CURBS, EQUIPMENT SUPPORT BASES, BLOCKING, STRIPPING, AND SIMILAR MEMBERS IN CONNECTION WITH ROOFING, FLASHING, VAPOR BARRIERS, AND WATERPROOFING.
   B. WOOD SILLS, SLEEPERS, BLOCKING, FURRING, STRIPPING, AND SIMILAR CONCEALED MEMBERS IN CONTACT WITH CONCRETE.
   C. WOOD FRAMING AND FURRING ATTACHED DIRECTLY TO THE INTERIOR OF BELOW-GRADE EXTERIOR CONCRETE WALLS.
   D. WOOD FRAMING MEMBERS THAT ARE LESS THAN 18 INCHES ABOVE THE GROUND IN CRAWLSPACES OR UNEXCAVATED AREAS.
   E. WOOD FLOOR PLATES THAT ARE INSTALLED OVER CONCRETE SLABS-ON-GRADE.
   a. INSTALL SILL PLATE GASKETS AT ALL EXTERIOR WALLS BY ONE OF THE FOLLOWING MANUFACTURERS:
      1) OWENS CORNING FOAM SEAL R
      2) DOW WEATHERMATE SILL SEAL
10. IDENTIFY ALL FIRE-RETARDANT-TREATED WOOD WITH APPROPRIATE CLASSIFICATION MARKING OF A QUALIFIED TESTING AGENCY.
11. TREAT THE FOLLOWING WITH FIRE-RETARDANT-TREATED WOOD:
   A. CONCEALED BLOCKING.
   B. ROOF CONSTRUCTION.
   C. PLYWOOD BACKING PANELS.
12. INTERIOR PARTITIONS NOT INDICATED AS LOAD BEARING SHALL BE CONSTRUCTED WITH CONSTRUCTION GRADE OR NO. 2 GRADE SOUTHERN PINE LUMBER.
13. ALL LOAD BEARING INTERIOR AND EXTERIOR PARTITIONS SHALL BE NO. 2 GRADE SOUTHERN PINE.
14. OTHER FRAMING SHALL BE ANY SPECIES AND GRADE WITH A MODULUS OF ELASTICITY OF AT LEAST 1.400,000 AND AN EXTREME FIBER STRESS IN BENDING OF AT LEAST 1000 PSI FOR 2" NOMINAL THICKNESS AND 12" NOMINAL WIDTH FOR SINGLE MEMBER USE.
15. PROVIDE CONSTRUCTION GRADE OR NO 2 GRADE LUMBER OF ANY SPECIES FOR MISCELLANEOUS ITEMS SUCH AS:
   A. BLOCKING
   B. NAILERS.
   C. FURRING.
   D. GROUNDS.
16. FOR CONCEALED BOARDS, PROVIDE LUMBER WITH A 19% MAXIMUM MOISTURE CONTENT OF NO. 2 SOUTHERN PINE.
17. PROVIDE 3/4 INCH FIRE-RETARDANT TREATED PANELS FOR EQUIPMENT SUPPORT PANELS.
18. FASTENERS:
   A. PROVIDE FASTENERS OF SIZE AND TYPE INDICATED. WHERE ROUGH CARPENTRY IS EXPOSED TO WEATHER, IN CONTACT WITH THE GROUND, PRESSURE-PRESERVATIVE TREATED, OR IN AN AREA WITH HIGH RELATIVE HUMIDITY, PROVIDE FASTENERS WITH HOT-DIP ZINC COATING COMPLYING WITH ASTM A 153.
   B. POWER-DRIVEN FASTENERS SHALL COMPLY WITH NES ESR-1539
   C. STEEL BOLTS SHALL COMPLY WITH ASTM A 307, GRADE A; HEX NUTS SHALL COMPLY WITH ASTM A 563.
19. PROVIDE GLASS FIBER RESILIENT INSULATION, FABRICATED IN STRIP FORM FOR USE AS A SILL SEALER; 1" NOMINAL THICKNESS, COMPRESSIBLE TO 1/32" OR A CLOSED CELL NEOPRENE FOAM 1/4" THICK.
20. PROVIDE FLEXIBLE FLASHING AS A COMPOSITE, WITH SELF-ADHESIVE, FLASHING PRODUCT CONSISTING OF A PLIABLE, BUTYL RUBBER OR RUBBERIZED-ASPHALT COMPOUND, BONDED TO A HIGH-DENSITY POLYETHYLENE FILM, ALUMINUM FOIL, OR SPUNBONDED POLYOLEFIN TO PRODUCE AN OVERALL THICKNESS OF NOT LESS THAN 0.025".

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#	DESCRIPTION	DATE
REVISIONS		

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STATE OF LOUISIANA
BRIAN A. MISTICH
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2/24/2021
PROFESSIONAL ENGINEER

2nd FLOOR ADDITION
TIM MAKI
108 EBONY DR.
SLIDELL LA.

JOB No:	2021-7	DATE:	02-23-2021
DRAWN BY:	DD	CHECKED BY:	BAM

SHEET TITLE:
FRAMING PLAN

DRAWING NUMBER:
S-2

TABLE S3.7 - HEADER SPANS FOR INTERIOR LOAD-BEARING WALLS

		DROPPED HEADER			RAISED HEADER		
		BUILDING WIDTH (ft)			BUILDING WIDTH (ft)		
		12	24	36	12	24	36
HEADERS SUPPORTING	SIZE	MAXIMUM HEADER SPAN			MAXIMUM HEADER SPAN		
ONE FLOOR ONLY (SINGLE CENTER BEARING WALL)	(2) 2x4	4'-0"	2'-10"	2'-4"	4'-1"	2'-10"	2'-4"
	(2) 2x6	5'-11"	4'-3"	3'-5"	6'-1"	4'-4"	3'-6"
	(2) 2x8	7'-1"	5'-2"	4'-4"	7'-9"	5'-5"	4'-5"
	(2) 2x10	7'-11"	6'-0"	5'-0"	9'-2"	6'-6"	5'-3"
	(2) 2x12	8'-6"	6'-7"	5'-7"	10'-9"	7'-7"	6'-3"
	(3) 2x8	8'-5"	6'-4"	5'-3"	9'-8"	6'-10"	5'-7"
	(3) 2x10	9'-3"	7'-1"9'-10"	6'-0"	11'-5"	8'-1"	6'-7"
	(3) 2x12	9'-11"	7'-8"	6'-7"	13'-6"	9'-6"	7'-9"
	(4) 2x8	9'-5"	7'-2"	6'-0"	11'-2"	7'-11"	6'-5"
	(4) 2x10	10'-3"	7'-11"	6'-9"	13'-3"	9'-4"	7'-8"
	(4) 2x12	11'-0"	8'-7"	7'-4"	15'-7"	11'-0"	9'-0"

TABLE S3.8 - HEADER SPANS FOR EXTERIOR LOAD-BEARING WALLS RESISTING WIND LOADS EXP "C"

SIZE	120 MPH	130 MPH	140 MPH	150 MPH	160 MPH	170 MPH	180 MPH	195 MPH
(2) 2x4	5'-1"	4'-8"	4'-4"	4'-1"	3'-10"	3'-7"	3'-5"	3'-2"
(2) 2x6	6'-3"	5'-9"	5'-4"	5'-0"	4'-8"	4'-5"	4'-2"	3'-10"
(2) 2x8	6'-10"	6'-4"	5'-11"	5'-6"	5'-2"	4'-10"	4'-7"	4'-3"
(2) 2x10	7'-4"	6'-10"	6'-4"	5'-11"	5'-6"	5'-2"	4'-11"	4'-6"
(2) 2x12	7'-10"	7'-3"	6'-9"	6'-3"	5'-11"	5'-7"	5'-3"	4'-10"
(3) 2x8	8'-5"	7'-9"	7'-2"	6'-9"	6'-4"	5'-11"	5'-7"	5'-2"
(3) 2x10	9'-0"	8'-4"	7'-9"	7'-3"	6'-9"	6'-4"	6'-0"	5'-7"
(3) 2x12	9'-7"	8'-11"	8'-3"	7'-8"	7'-3"	6'-10"	6'-5"	5'-11"
(4) 2x8	9'-8"	9'-0"	8'-4"	7'-9"	7'-3"	6'-10"	6'-6"	6'-0"
(4) 2x10	10'-5"	9'-7"	8'-11"	8'-4"	7'-10"	7'-4"	6'-11"	6'-5"
(4) 2x12	11'-7"	11'-1"	10'-3"	9'-6"	8'-11"	8'-4"	7'-10"	6'-10"

TABLE S3.9 - SILL OR BOTTOM PLATE TO FOUNDATION CONNECTIONS RESISTING UPLIFT LOADS - 130 MPH WIND EXP "C"

BOTTOM PLATE TO FOUNDATION ANCHOR BOLT CONNECTION RESISTING	FOUNDATION SUPPORTING	MAXIMUM ANCHOR BOLT SPACING (INCHES)	
		8' END ZONES	INTERIOR ZONES
UPLIFT LOADS	1 - 3 STORIES	34 INCHES ON CENTER	40 INCHES ON CENTER
NOTE: A MINIMUM OF ONE ANCHOR BOLT SHALL BE PROVIDED WITHIN 6 TO 12 INCHES OF EACH END OF EACH PLATE			

TABLE S3.10 - BOTTOM PLATE TO FOUNDATION CONNECTIONS (ANCHOR BOLTS) RESISTING LATERAL & SHEAR LOADS - EXP "C"

BOTTOM PLATE TO FOUNDATION ANCHOR BOLT CONNECTION RESISTING	FOUNDATION SUPPORTING	MAXIMUM ANCHOR BOLT SPACING (INCHES)	
		1/2" Φ ANCHOR BOLTS	5/8" Φ ANCHOR BOLTS
UPLIFT LOADS	1 STORY	31 INCHES ON CENTER	48 INCHES ON CENTER

TABLE S3.11 - FULL HEIGHT STUD REQUIREMENT FOR HEADERS OR WINDOW SILL PLATES IN EXTERIOR WALLS EXP "C"

	WALL STUD SPACING (INCHES)		
	12" O.C.	16" O.C.	24" O.C.
HEADER SPAN (FEET)	NUMBER OF FULL HEIGHT STUD REQUIRED AT EACH END OF THE HEADER		
2	1	1	1
4	2	2	1
6	3	3	2
8	4	3	2
10	5	4	3
12	6	5	3
14	7	6	4
16	8	6	4

TABLE S3.5 - JACK STUD REQ - INT LOADBEARING WALLS

HEADER SUPPORTING	HEADER SPAN (FT)	ROOF SPAN (FEET)											
		12 FEET				24 FEET				36 FEET			
		HEADER WIDTH											
		3"	4.5"	5"	6"	3"	4.5"	5"	6"	3"	4.5"	5"	6"
		NUMBER OF JACK STUDS REQUIRED AT EACH END OF THE HEADER											
ONE FLOOR ONLY (CENTER BEARING)	2	1	1	1	1	1	1	1	1	1	1	1	1
	4	1	1	1	1	1	1	1	1	1	1	1	1
	6	1	1	1	1	1	1	1	1	2	1	1	1
	8	1	1	1	1	2	1	1	1	2	2	2	1
	10	1	1	1	1	2	2	1	1	3	2	2	2
	12	1	1	1	1	2	2	2	1	3	2	2	2
	14	2	1	1	1	3	2	2	2	4	3	3	2
	16	2	1	1	1	3	2	2	2	4	3	3	2
TWO FLOORS (CENTER BEARING)	2	1	1	1	1	1	1	1	1	2	1	1	1
	4	1	1	1	1	2	1	1	1	3	2	2	2
	6	2	1	1	1	3	2	2	2	4	3	2	2
	8	2	2	1	1	3	2	2	2	5	3	3	3
	10	2	2	2	1	4	3	3	2	6	4	4	3
	12	3	2	2	2	5	3	3	3	7	5	4	4
	14	3	2	2	2	6	4	4	3	8	5	5	4
	16	4	3	2	2	6	4	4	3	9	6	6	5

HEADER WIDTH - 3" (2-2x), 4.5" (3-2x), 5", 6.5" (4-2x) EACH W/ 1/2" PLYWOOD SPACER BETWEEN

TABLE S3.6 - JACK STUD REQ - EXTERIOR LOADBEARING WALLS

HEADER SUPPORTING	HEADER SPAN (FT)	ROOF LIVE LOAD 20 PSF				GROUND SNOW LOAD 30 PSF			
		3"	4.5"	5"	6"	3"	4.5"	5"	6"
		NUMBER OF JACK STUDS REQUIRED							
ROOF AND CEILING	2	1	1	1	1	1	1	1	1
	4	1	1	1	1	1	1	1	1
	6	2	1	1	1	2	1	1	1
	8	2	2	2	1	2	2	2	1
	10	3	2	2	2	3	2	2	2
	12	3	2	2	2	3	2	2	2
	14	4	3	2	2	4	3	2	2
	16	4	3	3	2	4	3	3	2
ROOF, CEILING, AND ONE CENTER BEARING FLOOR	2	1	1	1	1	1	1	1	1
	4	2	1	1	1	2	1	1	1
	6	2	2	2	1	3	2	2	2
	8	3	2	2	2	3	2	2	2
	10	4	3	2	2	4	3	3	2
	12	4	3	3	2	5	3	3	3
	14	5	4	3	3	5	4	3	3
	16	6	4	4	3	6	4	4	3

HEADER WIDTH - 3" (2-2x), 4.5" (3-2x), 5", 6" (4-2x) EACH W/ 1/2" PLYWOOD SPACER BETWEEN

TABLE S3.3 - NAILING SCHEDULE

DESCRIPTION	NUMBER OF COMMON NAILS	NUMBER OF BOX NAILS	SPACING
WALL FRAMING			
TOP PLATE TO TOP PLATE (FACE NAILED)	2-16d	2-16d	PER FOOT
TOP PLATE AT INTERSECTION (FACE)	4-16d	5-16d	JOINTS - EACH SIDE
STUD TO STUD (FACE-NAILED)	2-16d	2-16d	24" o.c.
HEADER TO HEADER (FACE NAILED)	16d	16d	16" o.c. EDGES
TOP OR BOTTOM PLATE TO STUD (END)	SEE TABLE	SEE TABLE	PER STUD
BOTTOM PLATE TO FLOOR JOIST, BANDJOIST, END JOIST OR BLOCKING	2-16d	2-16d	PER FOOT
ROOF SHEATHING			
WOOD STRUCTURAL PANELS	8d	10d	SEE TABLE S3.1
DIAGONAL BOARD SHEATHING			
1"x6" OR 1"x8"	2-8d	2-10d	PER SUPPORT
1"x10" OR WIDER	3-8d	3-10d	PER SUPPORT

TABLE S3.4 - BUILDING ENVELOPE REQUIREMENTS

OPAQUE ELEMENTS		ASSEMBLY MAXIMUM	INSULATION MIN. R-VALUE
ROOFS	INSULATION ENTIRELY ABOVE DECK	U-0.048	R-20.0 c.i.
	METAL BUILDING	U-0.065	R-19
	ATTIC AND OTHER	U-0.027	R-38
WALLS, ABOVE GRADE	MASS	U-0.151 @	R-5.7 c.i. @
	METAL BUILDING	U-0.113	R-13.0
	STEEL-FRAMED	U-0.124	R-13.0
	WOOD-FRAMED AND OTHER	U-0.089	R-13.0
FLOORS	MASS	U-0.107	R6-3 c.i.
	STEEL JOIST	U-0.052	R-19.0
	WOOD FRAMED AND OTHER	U-0.051	R-19.0
SLAB-ON-GRADE	UN-HEATED	F-0.730	NR
OPAQUE DOORS	SWINGING	U-0.700	NR
	NON-SWINGING	U-1.450	NR

c.i. = CONTINUOUS INSULATION; NR = NO INSULATION REQUIREMENT
@ = EXCEPTION APPLIES

ROOF UNDERLAYMENT NOTES

1. FOR ROOF SLOPES FROM TWO UNITS VERTICAL IN 12 UNITS HORIZONTAL (17-PERCENT SLOPE), UP TO FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (33-PERCENT SLOPE), UNDERLAYMENT SHALL BE TWO LAYERS APPLIED IN THE FOLLOWING MANNER:
   a. APPLY A 19 INCH STRIP OF UNDERLAYMENT FELT PARALLEL WITH AND STARTING AT THE EAVES, FASTENED SUFFICIENTLY TO HOLD IN PLACE. STARTING AT THE EAVE, APPLY 36 INCH WIDE SHEETS OF UNDERLAYMENT, OVERLAPPING SUCCESSIVE SHEETS 19 INCHES, AND FASTENED SUFFICIENTLY TO HOLD IN PLACE.
2. FOR ROOF SLOPES OF FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (33-PERCENT SLOPE) OR GREATER, UNDERLAYMENT SHALL BE ONE LAYER APPLIED IN THE FOLLOWING MANNER:
   a. UNDERLAYMENT SHALL BE APPLIED SHINGLE FASHION, PARALLEL TO AND STARTING FROM THE EAVE AND LAPPED 2 INCHES, FASTENED SUFFICIENTLY TO HOLD IN PLACE. END LAPS SHALL BE OFFSET BY 6 FEET.

SHINGLE APPLICATION & FASTENING NOTES

1. ASPHALT STRIP SHINGLES SHALL HAVE A MINIMUM OF SIX FASTENERS PER SHINGLE WHERE THE ROOF IS IN ONE OF THE FOLLOWING CATEGORIES:
   a. THE BASIC WIND SPEED IS 110 MPH OR GREATER AND THE EAVE IS 20 FEET OR HIGHER ABOVE GRADE.
   b. THE BASIC WIND SPEED IS 120 MPH OR GREATER.
   c. SPECIAL WIND ZONES.

GENERAL UPLIFT CONNECTION NOTES

ROOF ASSEMBLY TO WALL ASSEMBLY:
UPLIFT CONNECTIONS SHALL BE FROM RAFTER OR TRUSS TO WALL STUD. WHEN RAFTERS OR TRUSSES ARE NOT LOCATED DIRECTLY ABOVE STUDS, RAFTERS SHALL BE ATTACHED TO THE WALL PLATE AND THE WALL TOP PLATE SHALL BE ATTACHED TO THE WALL STUD WITH UPLIFT CONNECTIONS. UPLIFT CONNECTIONS SHALL BE IN ACCORDANCE WITH TABLE S3.10.

WALL ASSEMBLY TO WALL ASSEMBLY:
STORY TO STORY UPLIFT CONNECTIONS FROM UPPER STORY WALL STUD TO LOWER STORY WALL STUD. WHEN UPPER STORY WALL STUDS ARE NOT LOCATED DIRECTLY ABOVE LOWER WALL STUDS, THE STUDS SHALL BE ATTACHED TO A COMMON MEMBER IN THE FLOOR ASSEMBLY BY UPLIFT CONNECTIONS. UPLIFT CONNECTIONS SHALL BE IN ACCORDANCE WITH TABLE S3.11.

WALL ASSEMBLY TO FOUNDATION:
FIRST FLOOR WALL STUDS SHALL BE CONNECTED TO THE FOUNDATION, SILL, PLATE, OR BOTTOM PLATE. A MINIMUM OF A 1-1/4" x 20 GA. ASTM A653 GRADE 33 STEEL STRAP SHALL BE NAILED TO THE WALL STUDS AND HAVE A MINIMUM EMBEDMENT OF 7 INCHES IN CONCRETE FOUNDATIONS AND SLABS-ON-GRADE, 15 INCHES IN MASONRY BLOCK FOUNDATIONS, OR BE LAPPED UNDER THE BOTTOM PLATE, 3 INCH SQUARE WASHERS SHALL BE USED ON THE ANCHOR BOLTS AND ANCHOR BOLT SPACINGS SHALL NOT EXCEED THE REQUIREMENTS. STEEL STRAPS EMBEDDED IN OR IN CONTACT WITH SLAB-ON-GRADE OR MASONRY BLOCK FOUNDATIONS SHALL BE HOT-DIPPED GALV. AFTER FABRICATION, OR MANUF. FROM G185 OR Z450 GALV. STL. CONNECTIONS SHALL BE IN ACCORDANCE WITH TABLE S3.12.

TABLE S3.1 - ROOF SHEATHING OR CLADDING REQUIREMENT - 130 MPH WIND LOAD EXP "C"

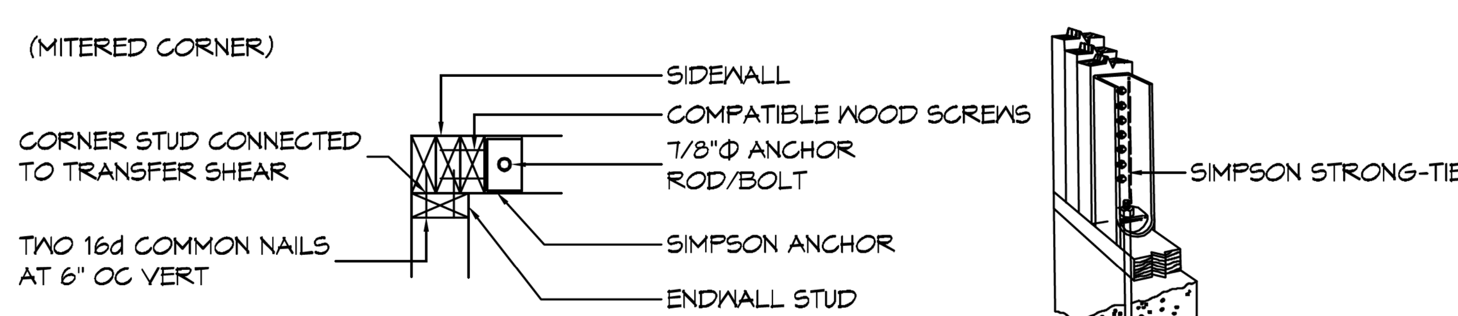
SHEATHING LOCATION	RAFTER / TRUSS SPACING	E	F
		MAX NAIL SPACING FOR 8d COMMON NAILS OR 10d BOX NAILS (INCHES OC)	
INTERIOR ZONE	12" OC	6	12
	16" OC	6	12
	24" OC	6	12
PERIMETER EDGE ZONE	12" OC	6	6
	16" OC	6	6
	24" OC	4	4

130 MPH WIND - EXPOSURE "C" TYPICAL
E = NAIL SPACING AT PANEL EDGES, INCHES.
F = NAIL SPACING AT INTERMEDIATE SUPPORTS IN THE PANEL FIELD, INCHES.

TABLE S3.2 - WALL SHEATHING OR CLADDING REQUIREMENT - 130 MPH WIND LOAD EXP "C"

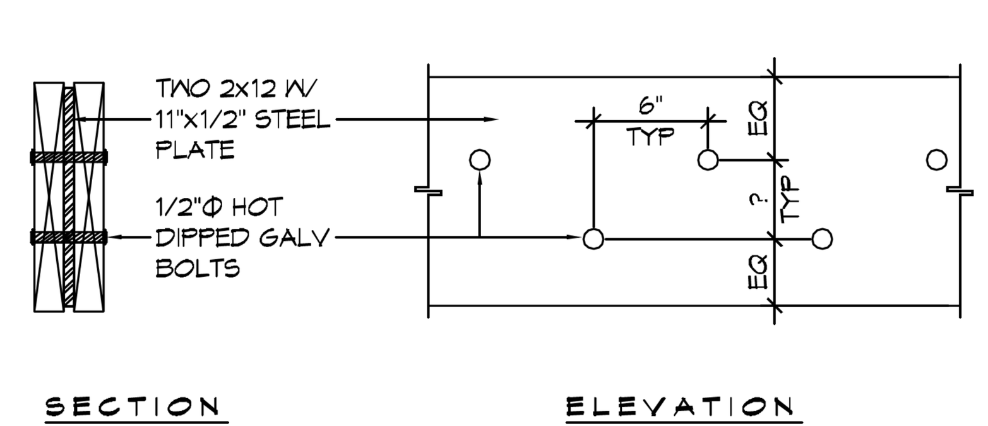
SHEATHING LOCATION	STUD SPACING	E	F
		MAX NAIL SPACING FOR 8d COMMON NAILS OR 10d BOX NAILS (INCHES OC)	
INTERIOR ZONE	12" OC	6	12
	16" OC	6	12
	24" OC	6	12
PERIMETER EDGE ZONE	12" OC	6	12
	16" OC	6	12
	24" OC	6	6

130 MPH WIND - EXPOSURE "C" TYPICAL
E = NAIL SPACING AT PANEL EDGES, INCHES.
F = NAIL SPACING AT INTERMEDIATE SUPPORTS IN THE PANEL FIELD, INCHES.

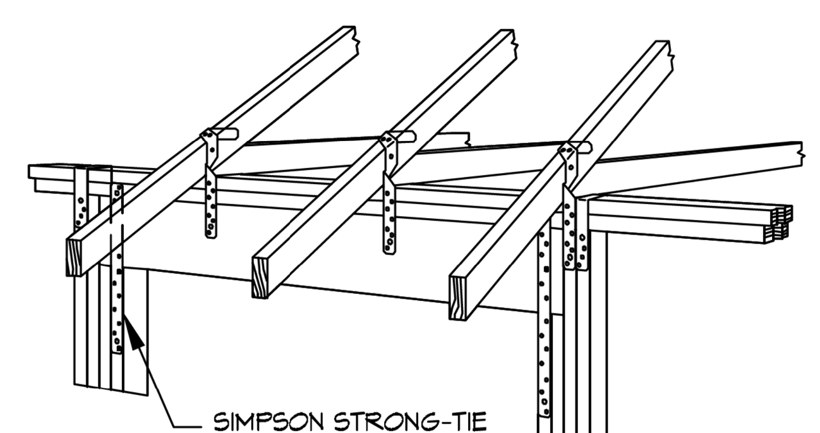


NOTE: HOLDDOWNS ARE REQUIRED AT THE END OF EACH SEGMENTED SHEARWALL SEGMENT OR AT THE EACH END OF A PERFORATED SHEARWALL. WHEN FULL HEIGHT SHEARWALL SEGMENTS MEET AT A CORNER, A SINGLE HOLDDOWN SHALL BE PERMITTED TO BE USED TO RESIST THE OVERTURNING FORCES IN BOTH DIRECTIONS WHEN THE CORNER FRAMING IN THE ADJOINING WALLS IS FASTENED TOGETHER TO TRANSFER THE UPLIFT LOAD.

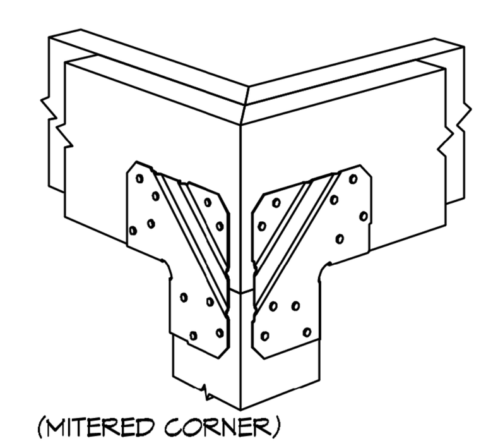
(P) CORNER HOLDDOWN



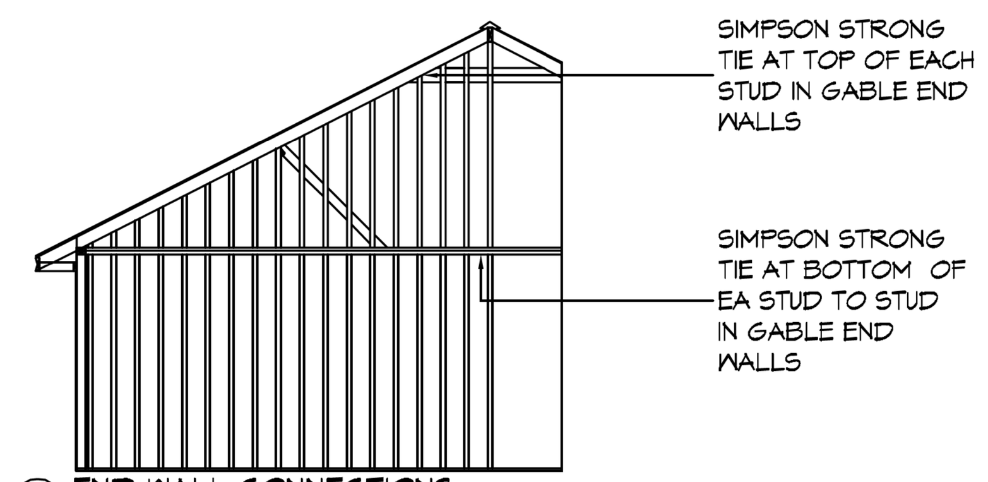
(N) FLITCH BEAM



(M) DWG NAME

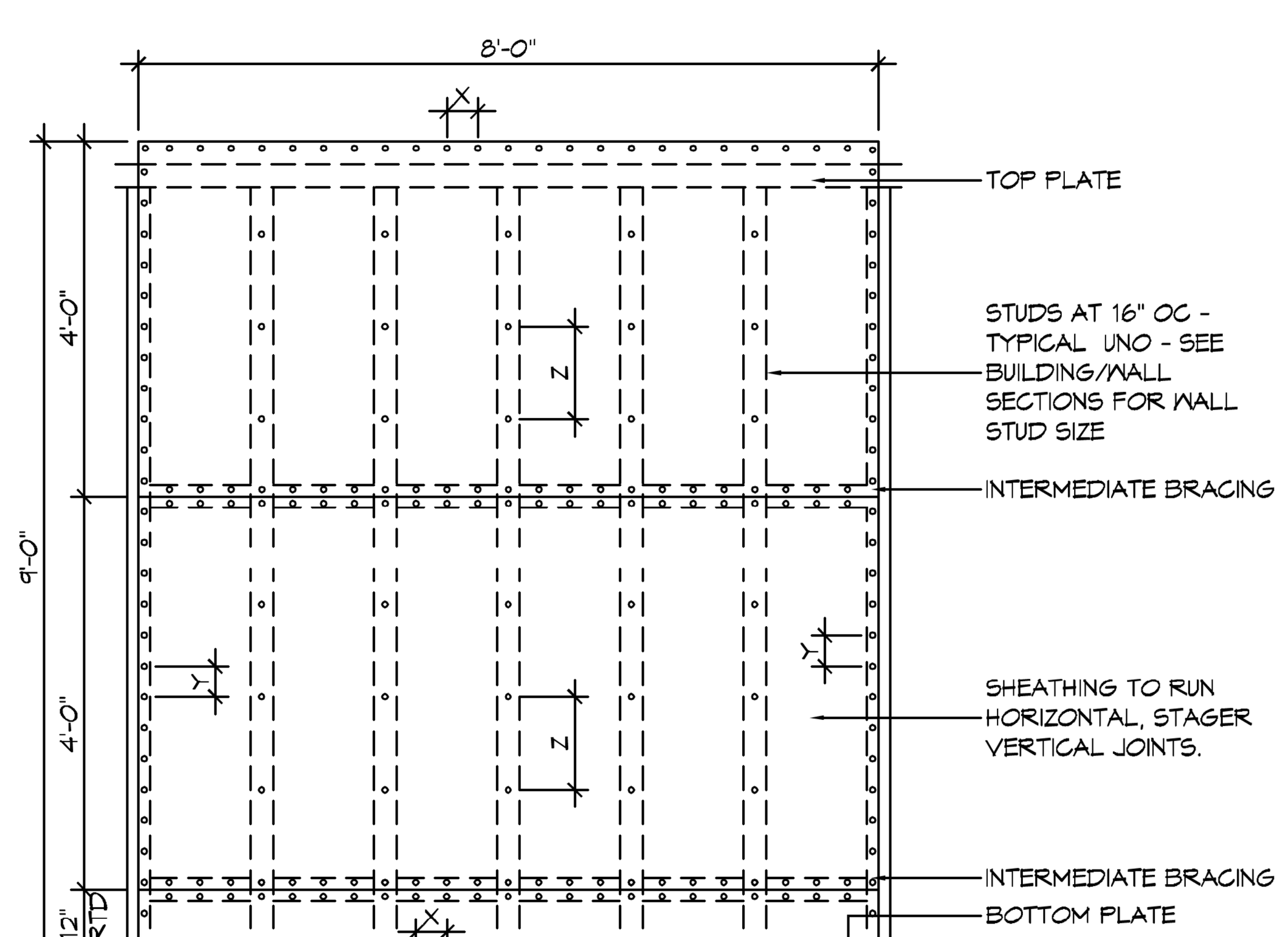


(L) POST TO BEAM



(K) END WALL CONNECTIONS

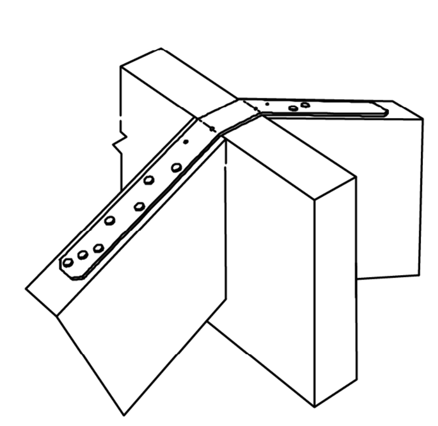
(J) SIMPSON MSTAM36



NAIL SPACING
X = 4" OC
Y = 4" OC
Z = 12" OC

X = PLATE EDGE NAIL SPACING
Y = LONG EDGE NAIL SPACING
Z = FIELD NAIL SPACING

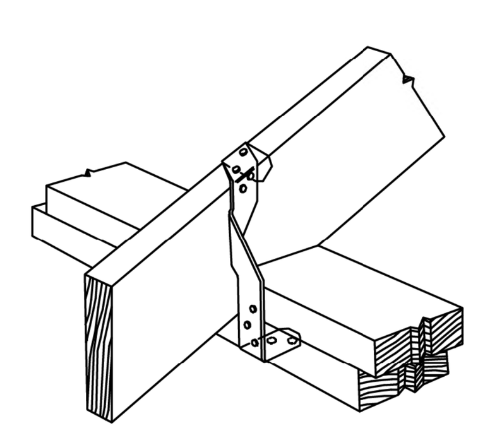
(H) SHEAR WALL EXTERIOR SHEATHING NAILING PATTERN



SIMPSON STRONG-TIE

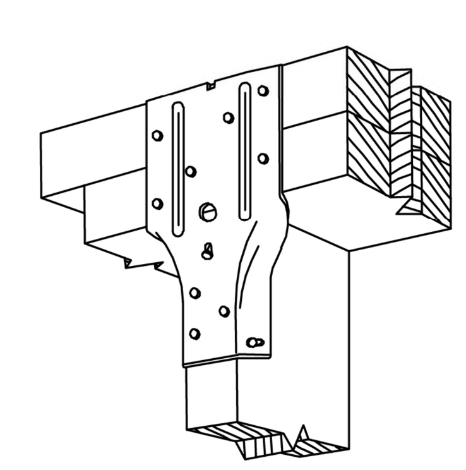
AT ALL RIDGE CONNECTIONS

(G) RIDGE BEAM/BOARD



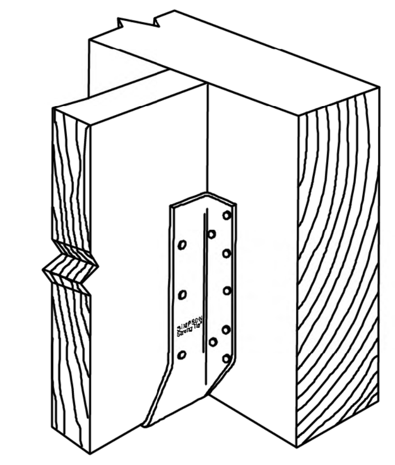
SIMPSON STRONG-TIE

(F) TOP PLATE TO RAFTER



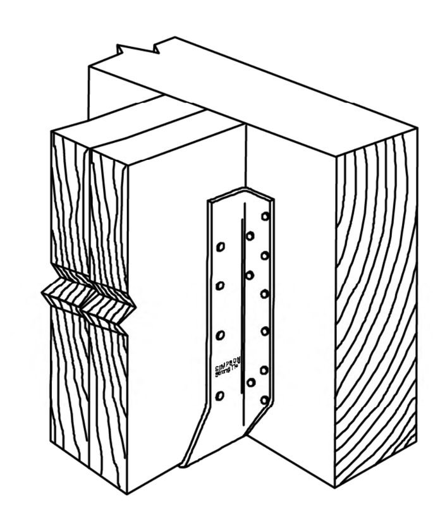
SIMPSON STRONG-TIE

(E) STUD TO TOP PLATE



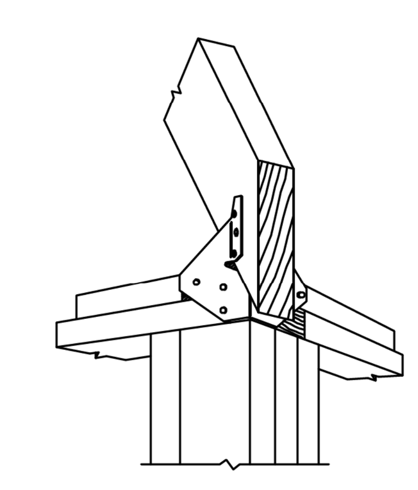
SIMPSON STRONG-TIE

(D) FLOOR JOIST



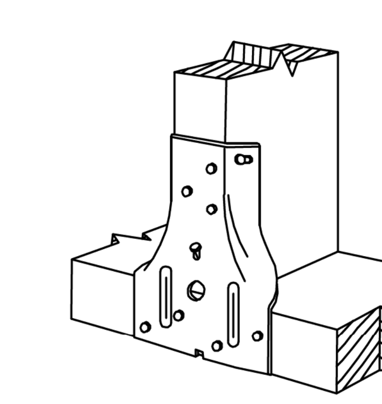
SIMPSON STRONG-TIE

(C) DBL FLOOR JOIST



SIMPSON STRONG-TIE

(B) HIP RAFTER



SIMPSON STRONG-TIE

(A) STUD TO SILL PLATE

1 (S3 | S3) TYPICAL CONNECTION DETAILS
SCALE: NTS

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REVISIONS
#	DESCRIPTION	DATE

SEAL:
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BRIAN A. MISTICH
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2/24/2021
PROFESSIONAL ENGINEER

2nd FLOOR ADDITION
TIM MAKI
108 EBONY DR.
SLIDELL LA.

JOB No:	2021-7	DATE:	02-23-2021
DRAWN BY:	DD	CHECKED BY:	BAM

SHEET TITLE:
TYPICAL CONNECTION DETAILS, SCHEDULES, AND NOTES

DRAWING NUMBER:
S-3