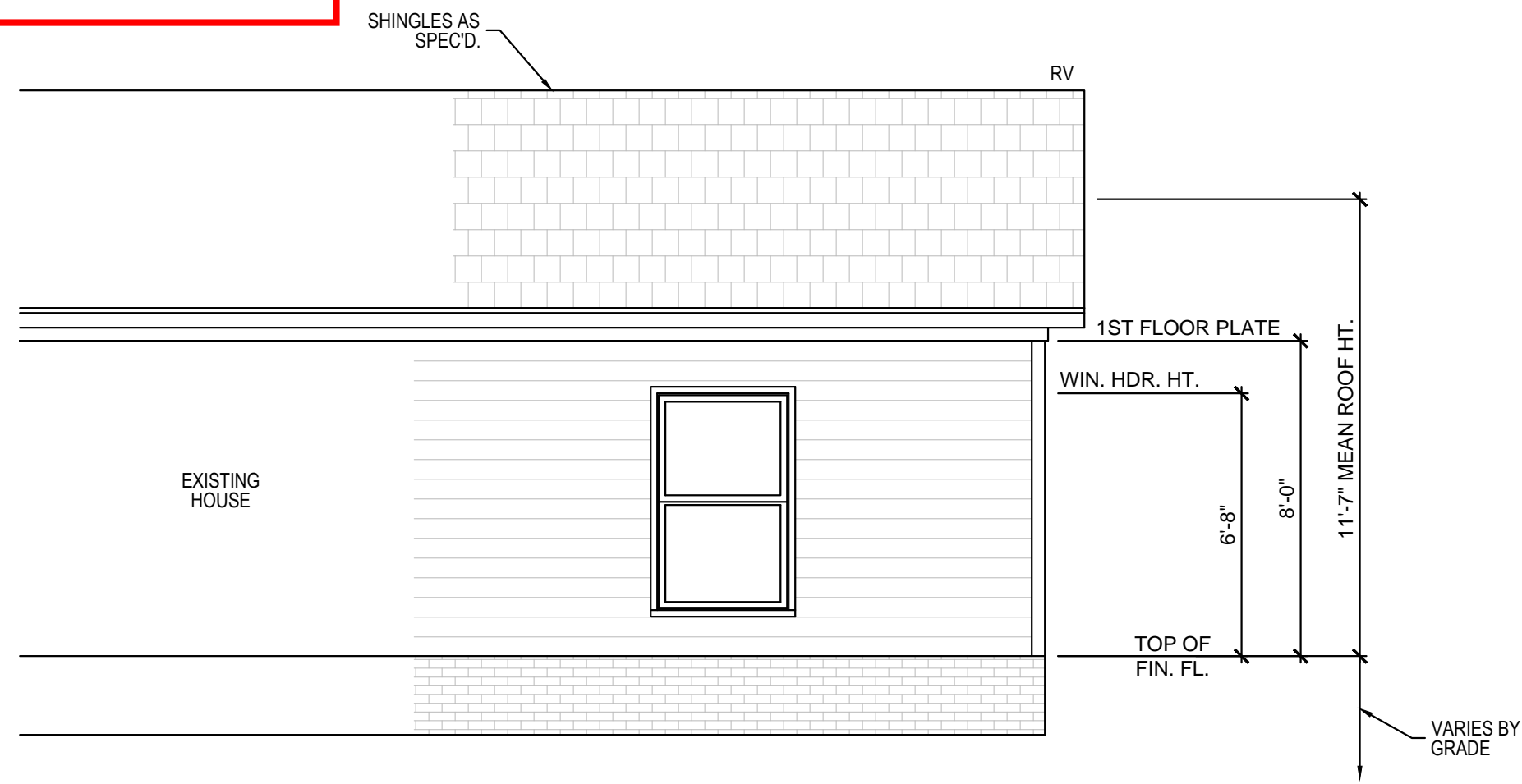


NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.

APPROVED
Limited building only review
Permit holder responsible for full compliance with the code

07/20/2020





FRONT ELEVATION

1/4" = 1'-0"

*ALL LUMBER TO BE #2 SYP, UNO



REAR ELEVATION

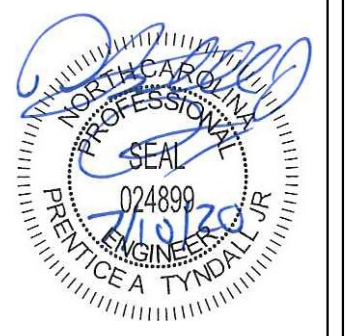
1/4" = 1'-0"




RIGHT ELEVATION

1/4" = 1'-0"

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<p>Client:</p> <p>JON TAYLOR</p>	<p>Date:</p> <p>ADDITION TO MOBILE HOME</p>
---	--

ELEVATIONS

Project #:	2001-010283
Date:	6/25/20
Drawn/Design By:	IJE
DWG. Checked By:	PAT
Scale:	SEE PLAN

REVISIONS		
No.	Date	Remarks

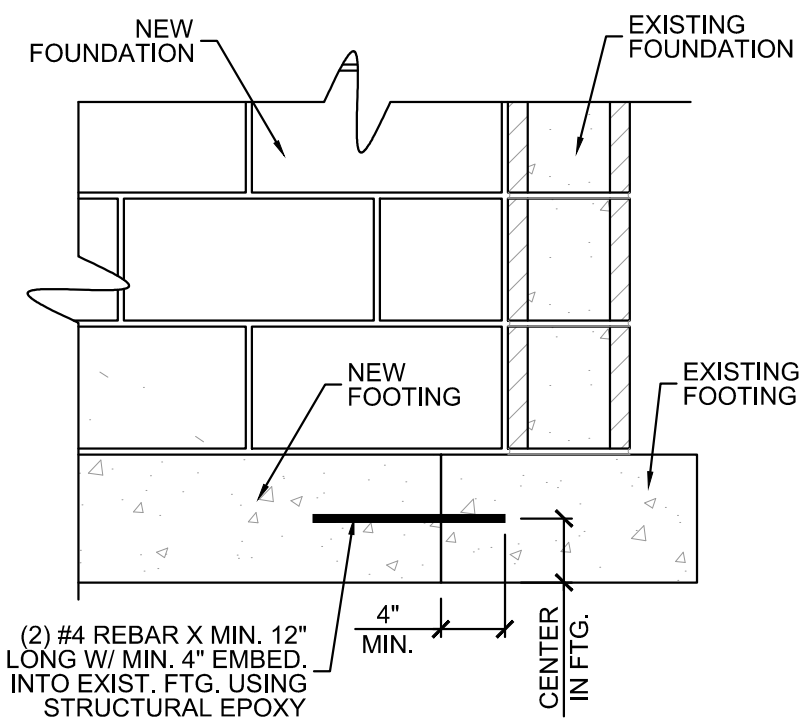
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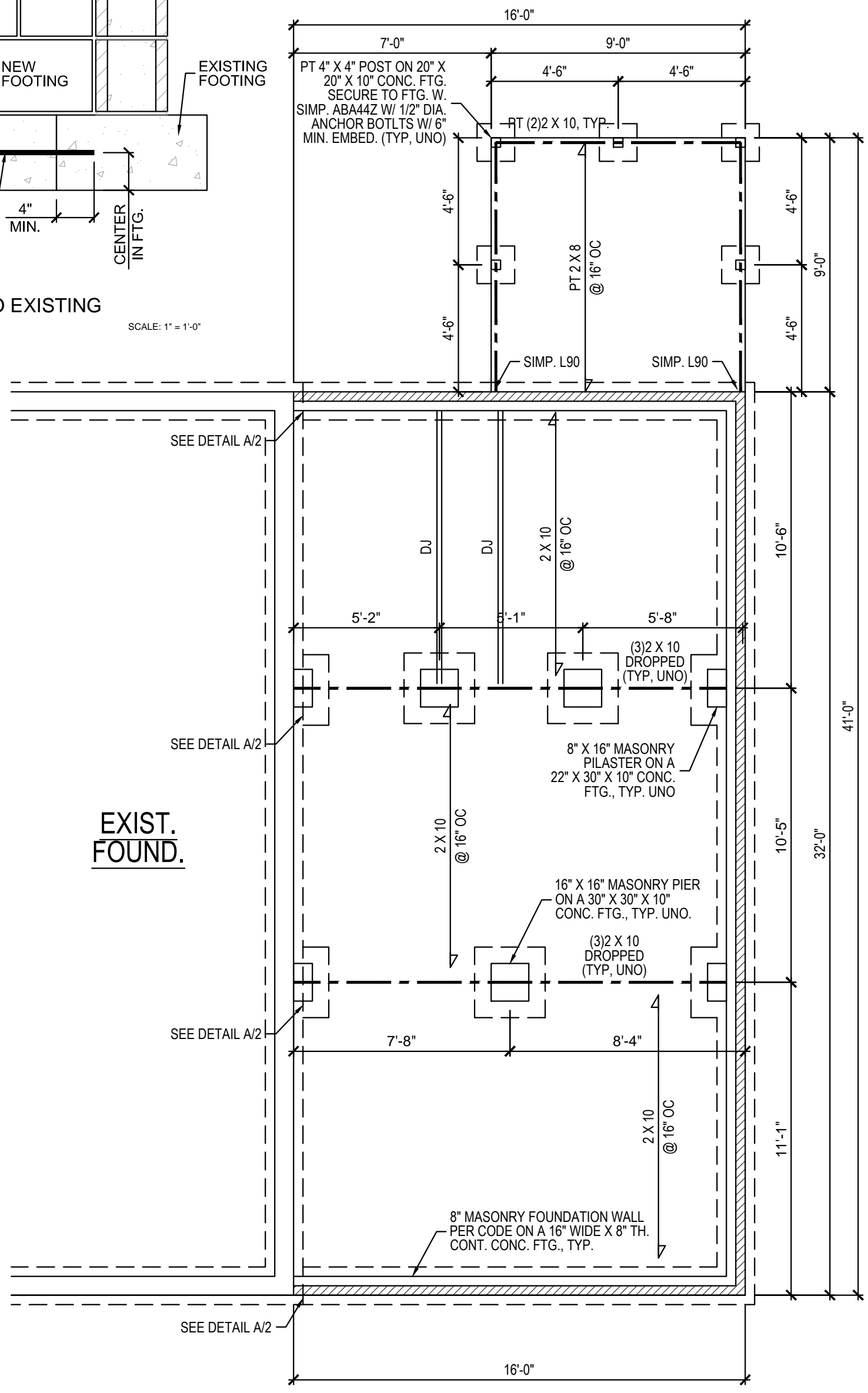
of 5

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FILENAME: Z:\RESIDENTIAL_ENG\2020 STRUCTURAL PROJECTS\2001-010283 - JON TAYLOR - ADDITION TO MOBILE HOME\2001-010283.LWG SAVED BY: PRODDICE TYNDALL LAST PLOT DATE: 7/10/2020 3:08 PM

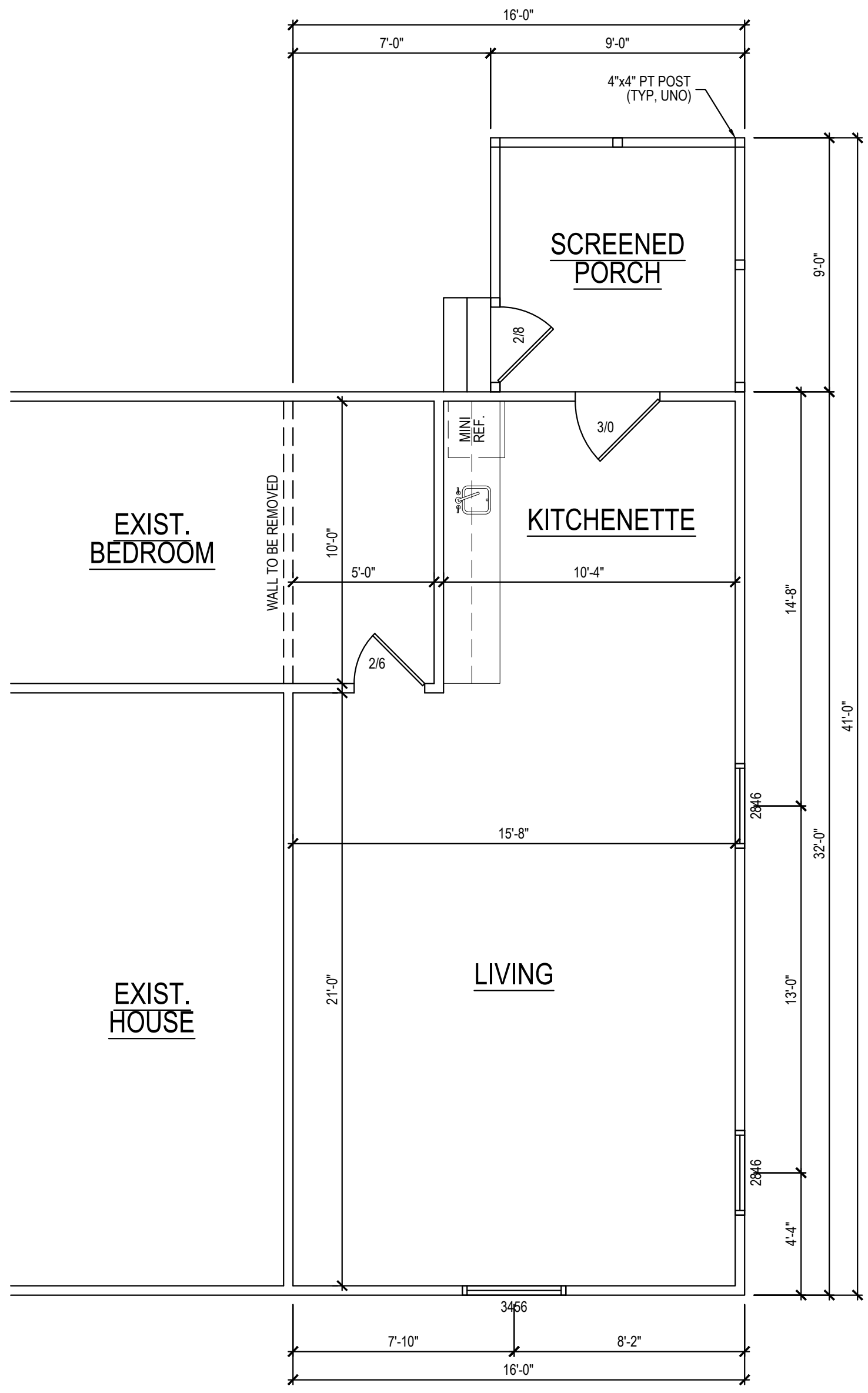


A NEW TO EXISTING
SCALE: 1" = 1'-0"



FOUNDATION PLAN

1/4" = 1'-0"
*ALL LUMBER TO BE #2 SYP, UNO
FIELD CONFIRM ALL DIMENSIONS PRIOR
TO CONSTRUCTION

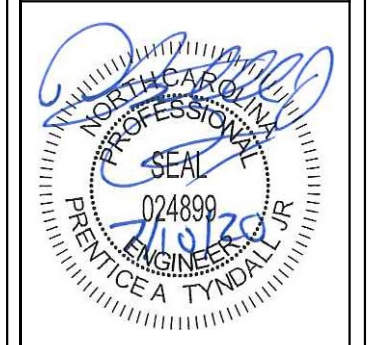


FIRST FLOOR PLAN

1/4" = 1'-0" CLG. HGT. = MATCH EXIST.
*ALL LUMBER TO BE #2 SYP, UNO
ALL WALLS TO BE 4" THICK
FIELD CONFIRM ALL DIMENSIONS PRIOR
TO CONSTRUCTION

HEATED SF Addition	512
UNHEATED SF Screened Porch	81

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Client: **JON TAYLOR**
Title: **ADDITION TO MOBILE HOME**

FOUNDATION & 1ST FLOOR PLAN

Project #:	2001-010283
Date:	6/25/20
Drawn/Design By:	IJE
DWG. Checked By:	PAT
Scale:	SEE PLAN

REVISIONS		
No.	Date	Remarks

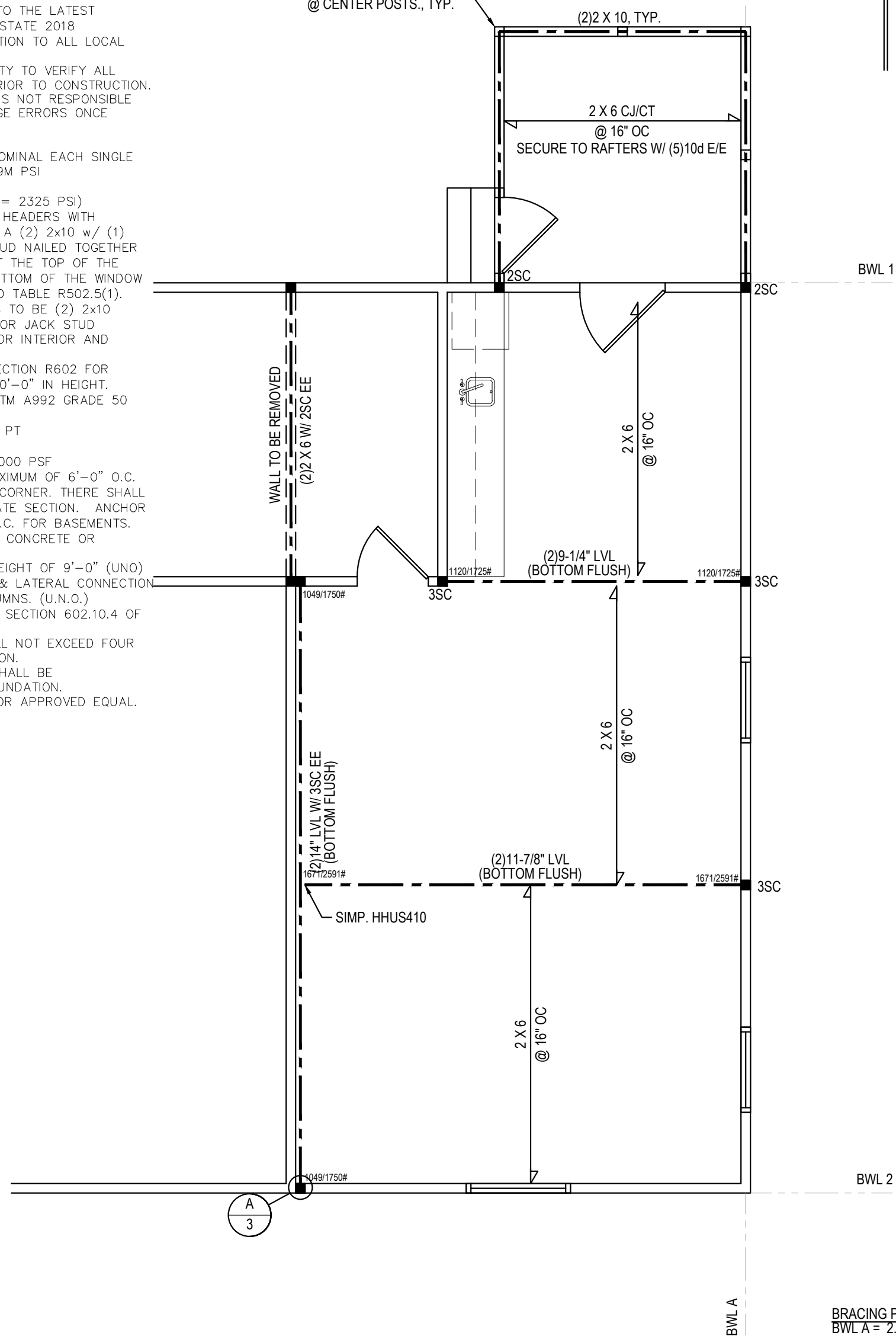
DESIGN LOADS

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION	
			LL	TL
FLOOR (primary)	40	10	L/360	L/240
FLOOR (secondary)	40	10	L/360	L/240
ATTIC (w/ storage)	20	10	L/240	L/180
ATTIC (no access)	10	5	L/240	L/180
EXTERNAL BALCONY	40	10	L/360	L/240
ROOF	20	10	L/240	L/180
ROOF TRUSS	20	20	L/240	L/180
WIND LOAD	BASED ON 120 MPH (EXPOSURE B)			
SEISMIC	BASED ON SEISMIC ZONES A, B & C			

STRUCTURAL NOTES:

- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, PA IS NOT RESPONSIBLE FOR DIMENSIONS AND SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.
- ALL LUMBER SHALL BE SYP #2 (UNO)
ALL LVL LUMBER TO BE 1.75" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2600 PSI, E = 1.9M PSI (I.E. ILEVEL MICROLAM)
ALL LSL LUMBER IS TO BE 1.55E (Fb = 2325 PSI)
- ALL LOAD BEARING EXTERIOR WINDOW HEADERS WITH MAXIMUM SPAN OF 5'-6" SHOULD BE A (2) 2x10 w/ (1) 2x4 KING STUD AND (1) 2x4 JACK STUD NAILED TOGETHER w/ (2) 10d @ 8" O.C. PROVIDED THAT THE TOP OF THE WINDOW HEIGHT IS 6'-8", MINIMUM BOTTOM OF THE WINDOW HEIGHT IS 1'-6", OTHERWISE REFER TO TABLE R502.5(1).
- ALL INTERIOR LOAD BEARING HEADERS TO BE (2) 2x10 (U.N.O.) REFER TO TABLE R502.5(1) FOR JACK STUD REQUIREMENTS FOR HEADER SPANS FOR INTERIOR AND EXTERIOR LOAD CONDITIONS (UNO)
- REFER TO 2018 NC BUILDING CODE SECTION R602 FOR CONSTRUCTION OF ALL WALLS OVER 10'-0" IN HEIGHT.
- ALL STRUCTURAL STEEL SHALL BE ASTM A992 GRADE 50 Fy = 50 KSI MIN. (UNO)
- ALL EXTERIOR LUMBER TO BE #2 SYP PT
- ALL CONCRETE, fc = 3000 PSI MIN.
- PRESUMPTIVE BEARING CAPACITY = 2000 PSF
- 1/2" Ø ANCHOR BOLTS SPACED AT MAXIMUM OF 6'-0" O.C. AND NOT MORE THAN 12" FROM THE CORNER. THERE SHALL BE A MINIMUM OF (2) BOLTS PER PLATE SECTION. ANCHOR BOLTS SHALL BE SPACED AT 3'-0" O.C. FOR BASEMENTS. ANCHOR BOLT SHALL EXTEND 7" INTO CONCRETE OR MASONRY.
- PSL COLUMNS DESIGNED WITH MAX. HEIGHT OF 9'-0" (UNO)
- PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (U.N.O.)
- PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.4 OF THE 2018 IRC.
- MAXIMUM MASONRY PIER HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION.
- UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY ANCHORED TO THE FOUNDATION.
- METAL HANGERS SHALL BE SIMPSON OR APPROVED EQUAL.

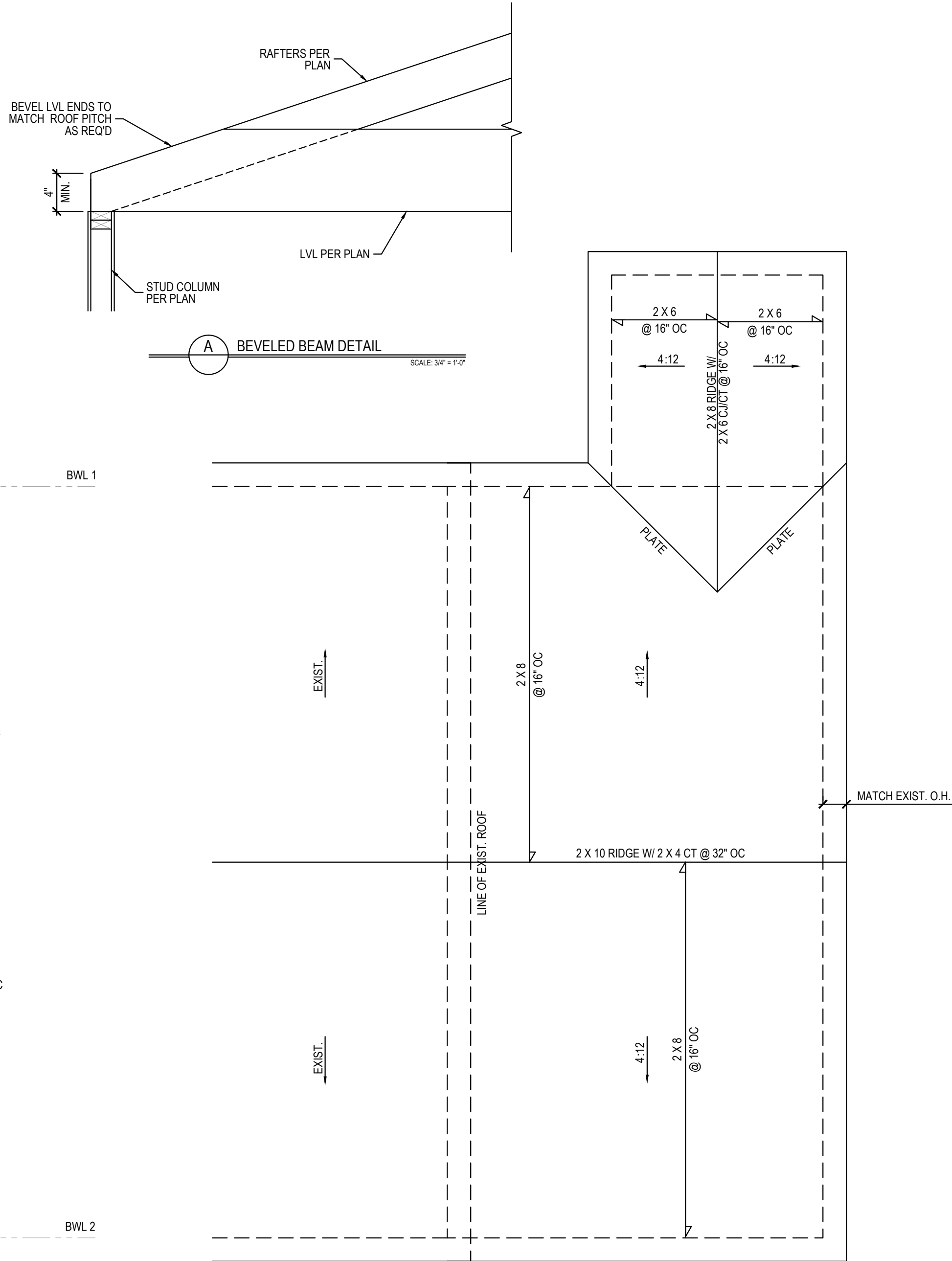
PT 4" X 4" POSTS W/ (2) SIMP. LCE4Z @ CORNER POSTS + (2) SIMP. ACAZ @ CENTER POSTS., TYP.



FIRST FLOOR PLAN

1/4" = 1'-0" CLG. HGT. = MATCH EXIST.

*ALL LUMBER TO BE #2 SYP, UNO
ALL WALLS TO BE 4" THICK
FIELD CONFIRM ALL DIMENSIONS PRIOR TO CONSTRUCTION



ROOF PLAN

1/4" = 1'-0"

*ALL LUMBER TO BE #2 SYP, UNO
BUILDER MAY USE ROOF TRUSSES. TRUSS DESIGN, LAYOUT, AND ENGINEERING TO BE PROVIDED BY TRUSS MANUFACTURER

BRACING PANEL LENGTHS REQUIRED:
BWL A = 2.0 FT
BWL 1 = 3.5 FT
BWL 2 = 3.5 FT

BRACING PANEL LENGTHS PROVIDED:
BWL A = 26.0 FT CS-WSP
BWL 1 = 13.0 FT CS-WSP
BWL 2 = 12.3 FT CS-WSP

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Client: JON TAYLOR

Date: ADDITION TO MOBILE HOME

STRUCT. PLAN & ROOF PLAN

Project #: 2001-010283

Date: 6/25/20

Drawn/Design By: IJE

DWG. Checked By: PAT

Scale: NOT TO SCALE

REVISIONS		
No.	Date	Remarks

Sheet Number

3

of 5

STRUCTURAL NOTES

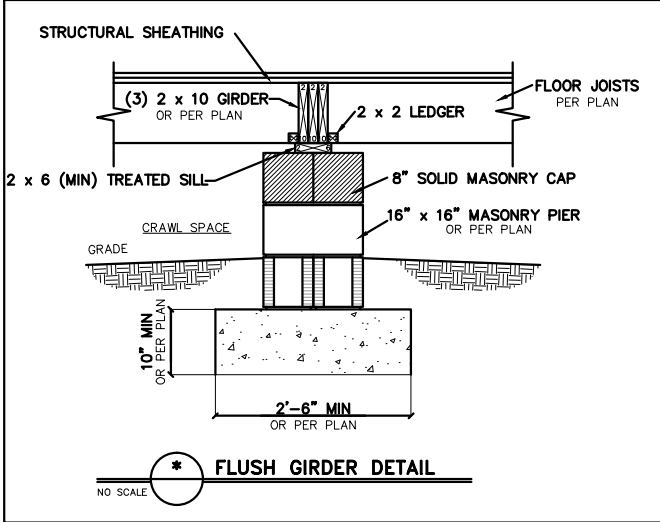
1) ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.

Table with columns: DESIGN LOADS, LIVE LOAD (PSF), DEAD LOAD (PSF), DEFLECTION (LL, TL), and various load categories like ALL FLOORS, ATTIC, EXTERNAL BALCONY, ROOF TRUSS, WIND LOAD, and SEISMIC.

- 3) MINIMUM ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF
4) CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF FIVE INCHES UNLESS NOTED OTHERWISE. (U.N.O.)
5) MAXIMUM DEPTH OF UNBALANCED FILL AGAINST FOUNDATION WALLS TO BE LESS THAN 4'-0" WITHOUT USING SUFFICIENT WALL BRACING...

DEFINITIONS FOR COMMON ABBREVIATIONS

Table listing abbreviations such as ALT, CANT, CJ, CMU, CONC, CONT, CT, DBL, DIA, DJ, DR, EA, EE, FJ, FND, FTG, GALV, HORIZ, HT, MANUF and their corresponding full names.



1) MAXIMUM HEIGHT OF DECK SUPPORT POSTS AS FOLLOWS:

Table with columns: POST SIZE, MAX. POST HEIGHT, and categories for 4x4, 6x6, and over 20'-0" posts.

- * THIS TABLE IS BASED ON NO. 2 TREATED SOUTHERN PINE POSTS. MAXIMUM TRIBUTARY AREA IS BASED ON 128 TOTAL SQUARE FEET WHICH MAY BE LOCATED AT DIFFERENT LEVELS.
** FROM TOP FOOTING TO BOTTOM OF GIRDER
*** DECKS WITH POST HEIGHTS OVER 20'-0" SHALL BE DESIGNED AND SEALED BY A PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT.

Table with columns: POST SIZE, MAX. TRIBUTARY AREA, MAX. POST HEIGHT, EMBEDMENT DEPTH, and CONCRETE DIAMETER.

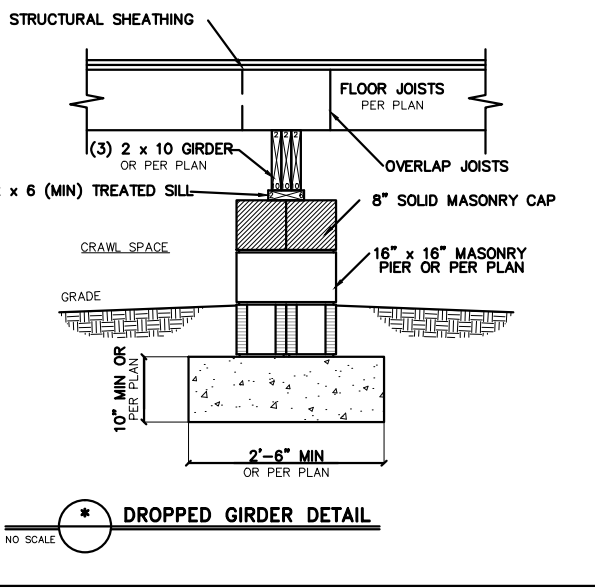
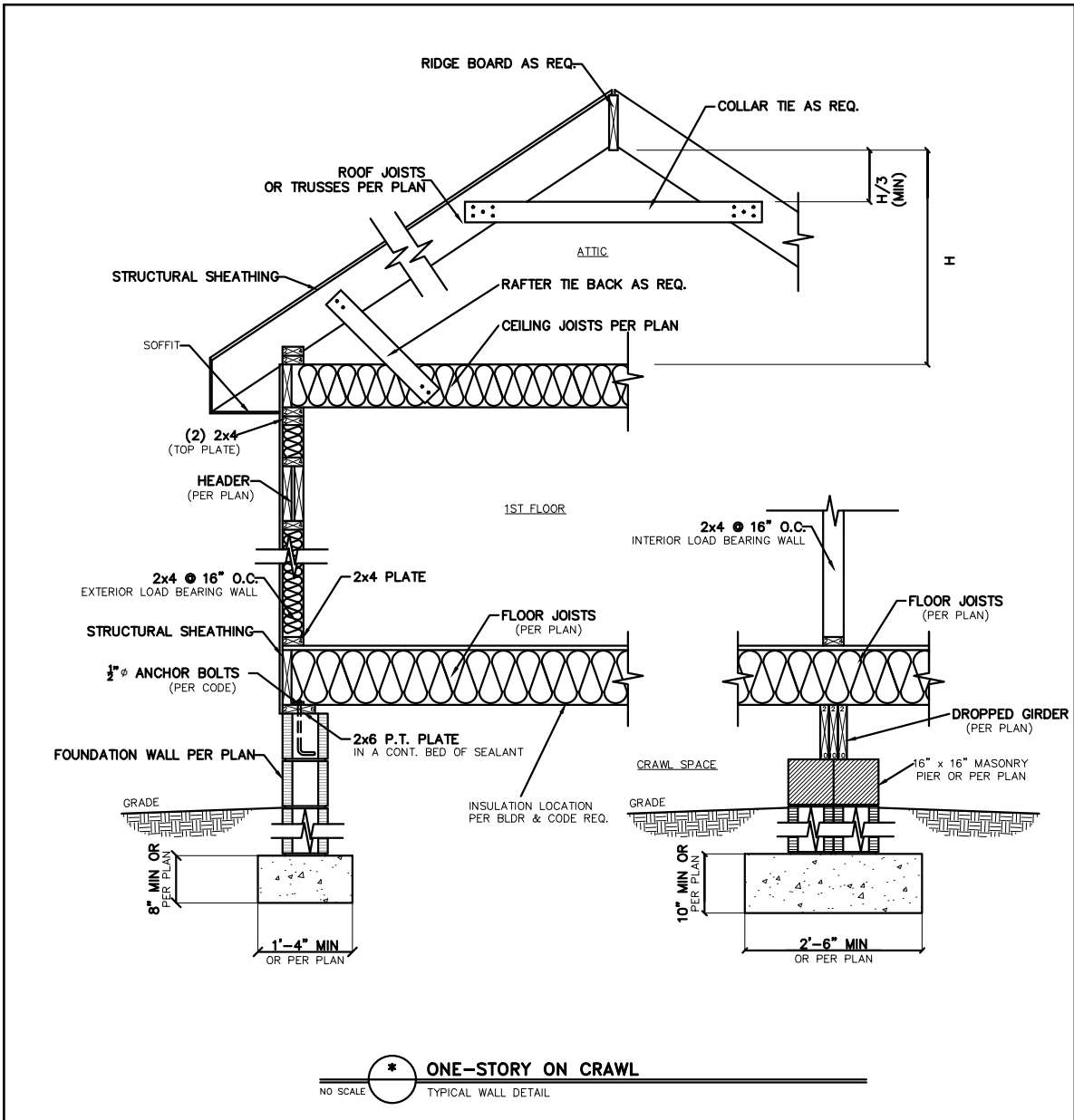
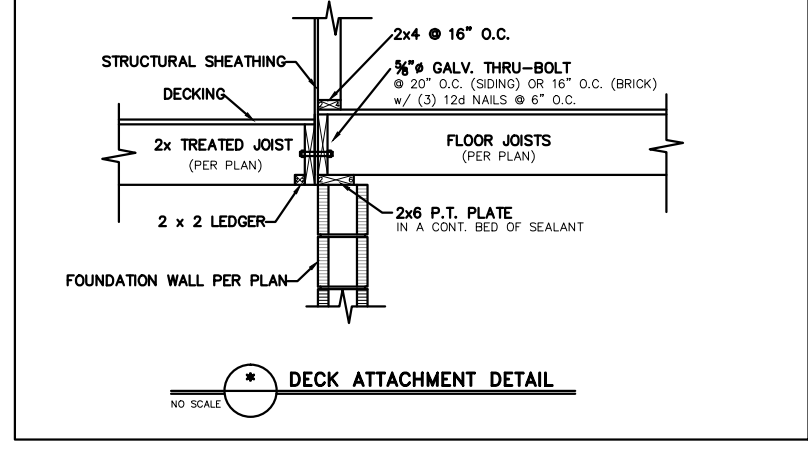


Table with columns: CLIMATE ZONES, PENETRATION U-FACTOR, SKYLIGHT U-FACTOR, GLAZED PENETRATION SHGC, CEILING R-VALUE, FRAMED WALL R-VALUE, MASS WALL R-VALUE, FLOOR R-VALUE, BASEMENT WALL R-VALUE, SLAB R-VALUE AND DEPTH, CRAWL SPACE R-VALUE.

TABLE N1102.1 CLIMATE ZONES 3-5
NO SCALE
a. R-VALUES ARE MINIMUM U-FACTORS AND SHGC ARE MAXIMUMS. WHEN INSULATION IS INSTALLED IN A CAVITY WHICH IS LESS THAN THE LABEL OR DESIGN THICKNESS OF THE INSULATOR, THE INSTALLED R-VALUE OF THE INSULATION SHALL NOT BE LESS THAN THE R-VALUE SPECIFIED IN THE TABLE.

___ SQ. FT. OF CRAWL SPACE / 150 = ___ SQ. FT. OF REQ'D VENTILATION WITHOUT CROSS VENTILATION
___ SQ. FT. OF VENTILATION REQ'D / 0.45 SQ.FT. PER VENT = ___ VENTS REQ'D!
-OR-
___ SQ. FT. OF CRAWL SPACE / 1500 = ___ SQ. FT. OF REQ'D VENTILATION WITH CROSS VENTILATION



___ SQ. FT. OF ATTIC / 300 = ___ SQ. FT. INLETS/OUTLETS REQUIRED
1) CALCULATION BASED ON VENTILATORS USED AT LEAST 3'-0" ABOVE THE CORNER JOINTS WITH THE BALANCE OF VENTILATION PROVIDED BY EAVE VENTS.
2) CATHEDRAL CEILING SHALL HAVE A 1" MINIMUM CLEARANCE BETWEEN THE BOTTOM OF THE ROOF DECK AND THE INSULATION.

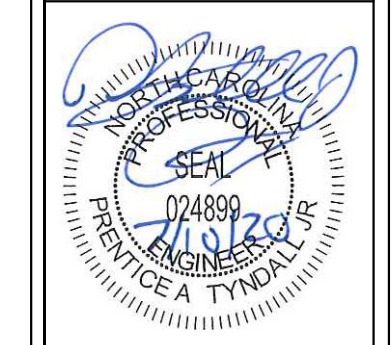
Professional Engineer Seal for Jon Taylor, License No. 024899, State of North Carolina.

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Project information: Project #: 2001-010283, Date: 6/25/20, Drawn/Design By: IJE, DWG. Checked By: PAT, Scale: NOT TO SCALE.

STANDARD DETAILS logo, REVISIONS table, and Sheet Number D1 of 5.

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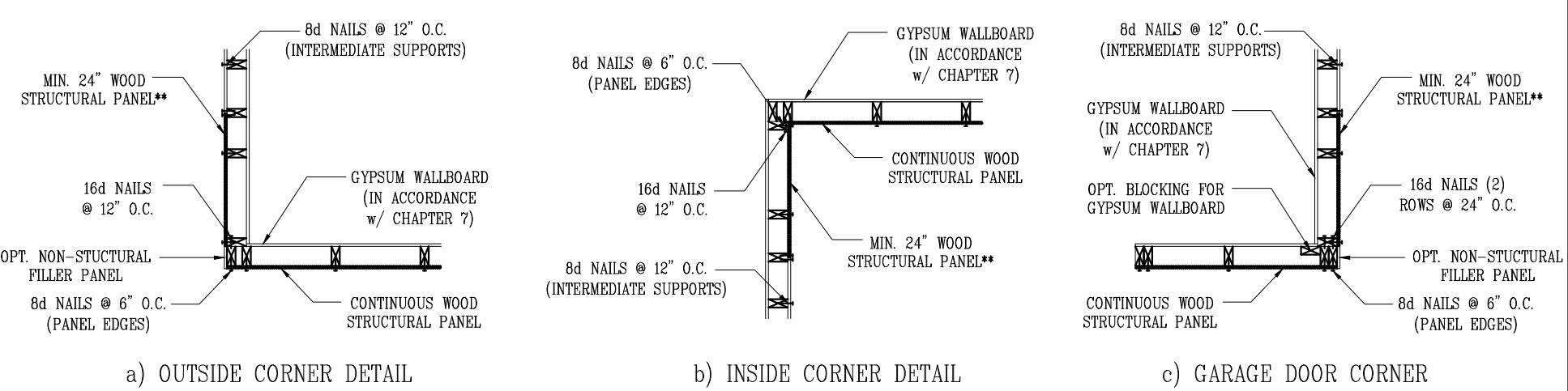
Project: 2001-010283
 Date: 6/25/20
 Drawn/Checked By: IJE
 DWG. Checked By: PAT
 Scale: NOT TO SCALE

SHEATHING DETAILS

Project #: 2001-010283
 Date: 6/25/20
 Drawn/Checked By: IJE
 DWG. Checked By: PAT
 Scale: NOT TO SCALE

No.	Date	Remarks

Sheet Number
D2
 of 5

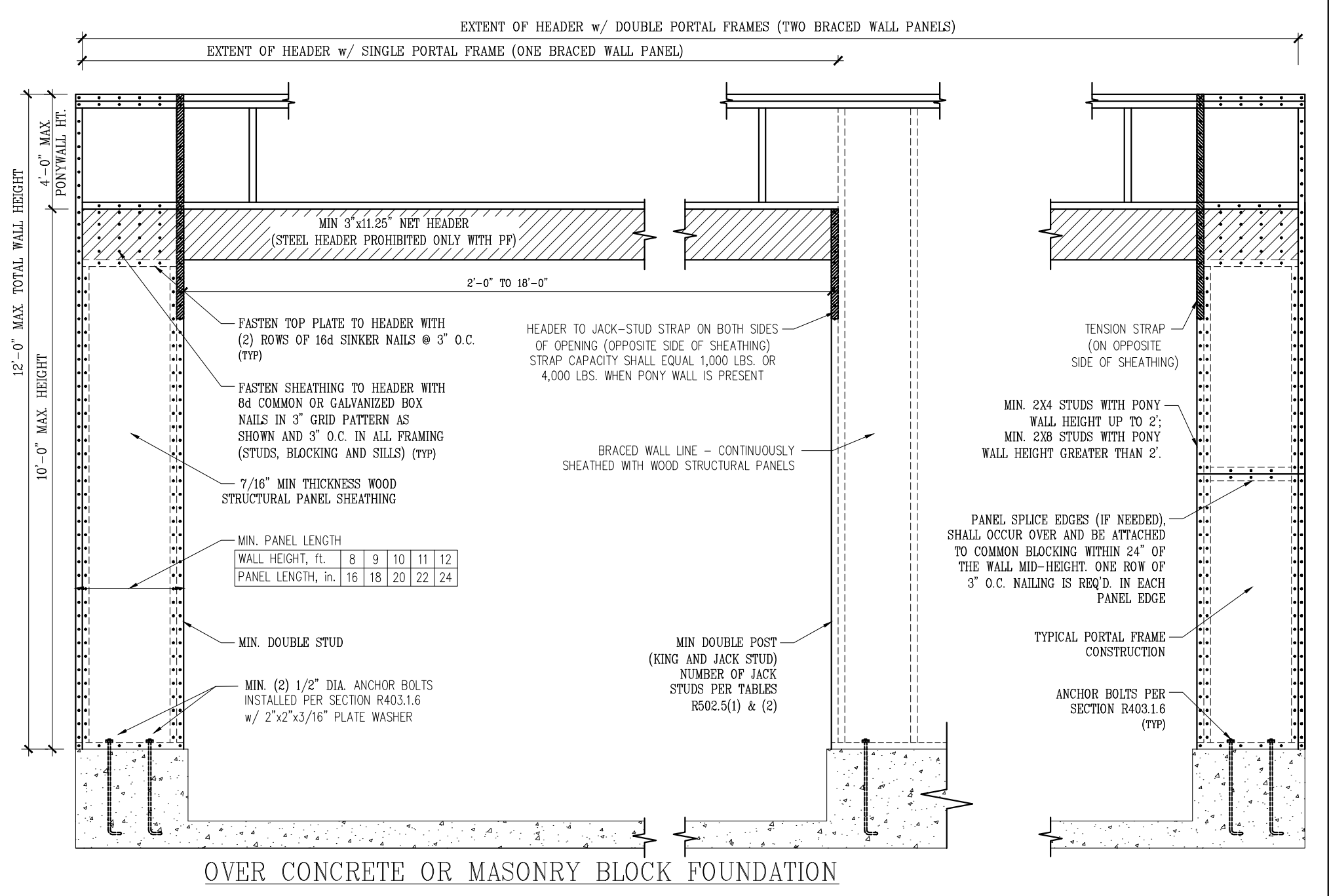


B1: TYPICAL EXTERIOR CORNER FRAMING FOR CONTINUOUS SHEATHING
 NO SCALE

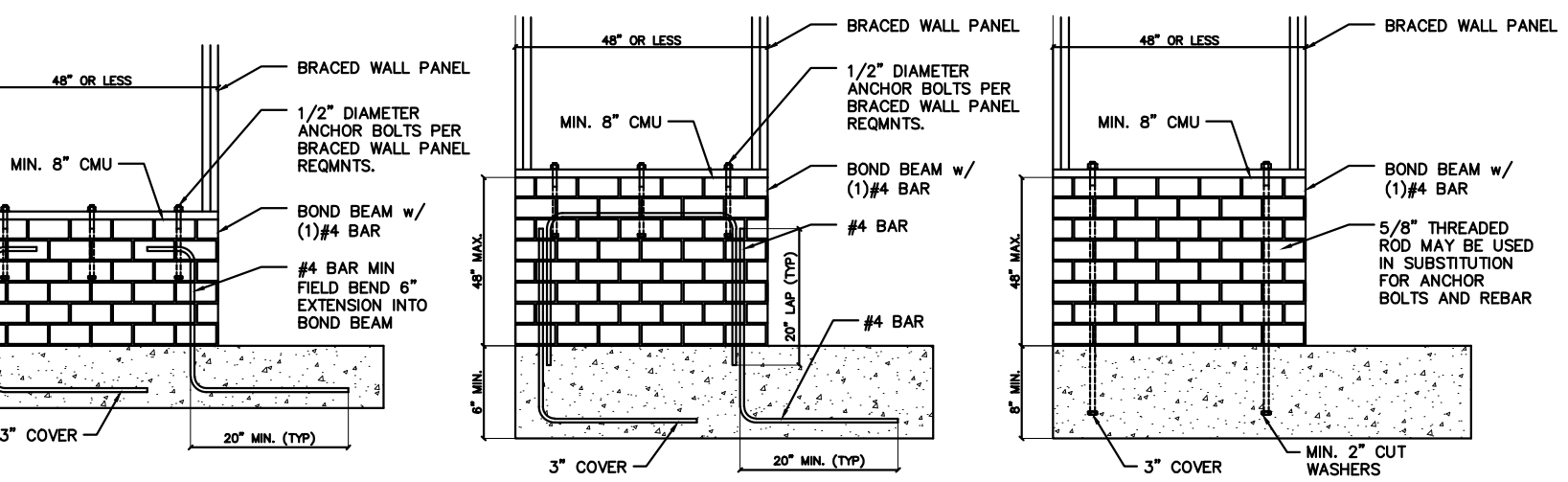
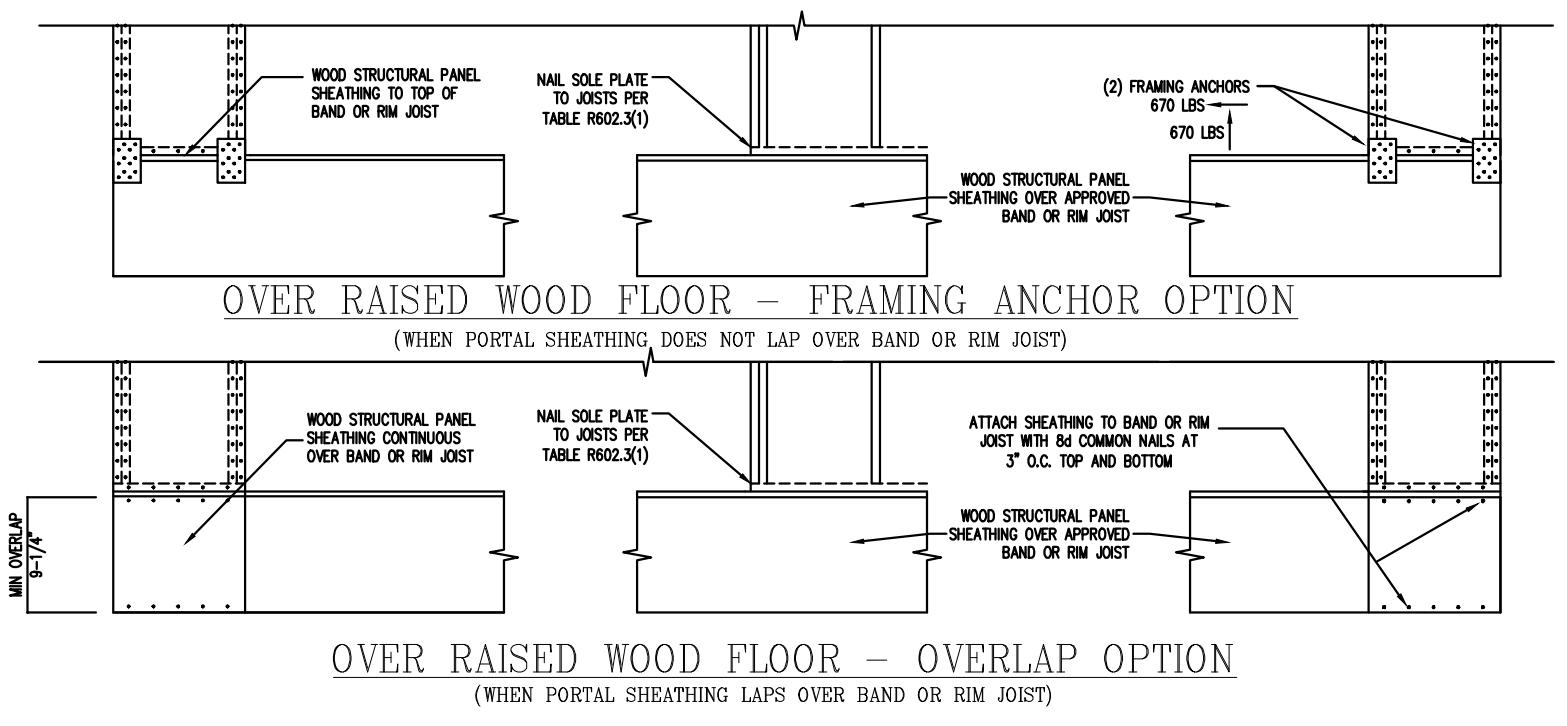
- STRUCTURAL SHEATHING NOTES**
- DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 120 MPH OR LESS.
 - WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE 2018 NRC.
 - BRACING REQUIREMENTS SHALL BE PER TABLE R602.10.3. REFER TO SECTION R602.10.4 FOR LOAD PATH DETAILS INCLUDING CONNECTIONS & SUPPORT OF BRACED WALL PANELS.
 - REFERENCE FIGURE R602.10.4.3 OF THE 2018 NRC.
 - INTERIOR BRACED WALL PANELS (BWP) INDICATED SHALL BE SHEATHED IN ACCORDANCE WITH THE GB METHOD OR WSP METHOD AS PRESCRIBED IN SECTION R602.10.1 (UNO)
 - 1/2" GYPSUM BOARD (GB) MINIMUM LENGTH OF 8'-0" (ISOLATED PANELS) OR 4'-0" (CONTINUOUS SHEATHING). SECURE W/ 5d COOLER NAILS (OR EQUAL PER TABLE R702.3.5) SPACED @ 7" O.C. AT PANEL EDGES, INCLUDING TOP AND BOTTOM PLATES & 7" O.C. AT INTERMEDIATE SUPPORTS.
 - 3/8" WOOD STRUCTURAL PANEL (WSP) SECURE W/ 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS.
 - EXTERIOR BRACED WALL PANELS (BWP) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.3 (UNO)
 - ALL SHEATHABLE SURFACES OF EXTERIOR WALLS (INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS) SHALL BE CONTINUOUSLY SHEATHED WITH WOOD STRUCTURAL PANEL (WSP) SHEATHING WITH A MINIMUM THICKNESS OF 3/8". SHEATHING SHALL BE SECURED WITH MINIMUM 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND SPACED AT 12" O.C. AT INTERMEDIATE SUPPORTS.
 - MINIMUM BRACED WALL PANEL LENGTHS WITH CS-WSP METHOD SHALL BE AS FOLLOWS:
 - 24" ADJACENT TO OPENINGS NOT MORE THAN 67% OF WALL HEIGHT
 - 30" ADJACENT TO OPENINGS GREATER THAN 67% AND LESS THAN 85% OF WALL HEIGHT.
 - 48" FOR OPENINGS GREATER THAN 85% OF WALL HEIGHT
 - SHEATH INTERIOR & EXTERIOR
 - FOR CS-WSP METHOD, A MINIMUM 24" BRACED WALL PANEL CORNER RETURN SHALL BE PROVIDED AT BOTH ENDS OF A BRACED WALL LINE IN ACCORDANCE WITH FIGURE R602.10.3(4). IN LIEU OF A CORNER RETURN, EITHER A MIN. 48" BRACED WALL PANEL SHALL BE PROVIDED AT THE CORNER OR A HOLD-DOWN DEVICE WITH A MINIMUM UPLIFT DESIGN VALUE OF 800# SHALL BE FASTENED TO THE EDGE OF THE BRACED WALL PANEL CLOSEST TO THE CORNER AND TO THE FOUNDATION OR FRAMING BELOW.
 - MINIMUM 800# HOLD-DOWN DEVICE

REQUIRED BRACED WALL PANEL CONNECTIONS				
METHOD	MATERIAL	MIN. THICKNESS	REQUIRED CONNECTION	
			@ PANEL EDGES	@ INTERMEDIATE SUPPORTS
CS-WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS @ 12" O.C.
GB	GYPSUM BOARD	1/2"	5d COOLER NAIL** @ 7" O.C.	5d COOLER NAIL** @ 7" O.C.
WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS @ 12" O.C.

**OR EQUIVALENT PER TABLE R702.3.5
B3: BRACE WALL PANEL CONNECTIONS
 NO SCALE



B2: METHOD CS-PF: CONTINUOUSLY SHEATHED PORTAL FRAME
 FIGURE R602.10.1



B4: MASONRY STEM WALL SUPPORTING BRACED WALL PANELS
 FIGURE R602.10.4.3 OF THE 2018 NRC
 NOTE: GROUT BOND BEAMS AND ALL CELLS WHICH CONTAIN REBAR, THREADED RODS AND ANCHOR BOLTS

FILENAME: Z:_RESOURCING\ENR\2020 STRUCTURAL PROJECTS\2001-010283 - JON TAYLOR - ADDITION TO MOBILE HOME\2001-010283.DWG
 PROJECT: 2001-010283 - JON TAYLOR - ADDITION TO MOBILE HOME
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