CAROLINA SEASONS K3 - 279 PONDEROSA TRAIL, CAMERON

ELEVATION NOTES:
GRADE ELEVATIONS SHOWN DO NOT NECESSARILY REFER TO THIS OR ANY OTHER LOT. THEY ARE
FOR DIAGRAMMATIC PURPOSES ONLY AND MAY VARY. BUILDER IS RESPONSIBLE FOR ADAPTING THIS PLAN
TO SUIT THE EXISTING TOPOGRAPHY OF THE SITE.

ROOF VENTILATION TO BE DETERMINED BY BUILDER AS PER CODE.

ALL EGRESS OR RESCUE WINDOWS FROM SLEEPING ROOMS MUST HAVE A MIN.
NET CLEAR OPENING OF 4.0 SQ FT. THE MIN NET CLEAR OPENING HEIGHT
DIMENSION SHALL BE 22". THE MIN NET CLEAR OPENING WIDTH SHALL BE 20".

EACH EGRESS WINDOW FROM SLEEPING ROOMS MUST HAVE A SILL HIGHT OF
NO MORE THAN 44" FROM THE FLOOR. ALL WINDOW SIZES ARE NOMINAL AND
ARE TO BE VERIFIED WITH MANUFACTURER FOR AVAILABILITY AND CONFORMITY
TO STATE AND LOCAL CODE REQUIREMENTS.

PORCHES, BALCONIES, OR RAISED FLOOR SURFACES LOCATED MORE THAN 30"
ABOVE THE FLOOR OR GRADE BELOW SHALL HAVE GUARDRAILS NOT LESS THAN
32" IN HEIGHT.

I ASSUME NO RESPONSIBILITY FOR ANY DISTANCES AFTER START OF CONSTRUCTION.

CONTRACTOR/BUILDER SHALL CONSULT WITH HOME OWNER ON ALL INTERIOR AND EXTERIOR MOLDINGS, TRIMS, COLORS, FINISHES, CABINET LAYOUTS, AND MANUFACTORS BEFORE CONSTRUCTION BEGINS.

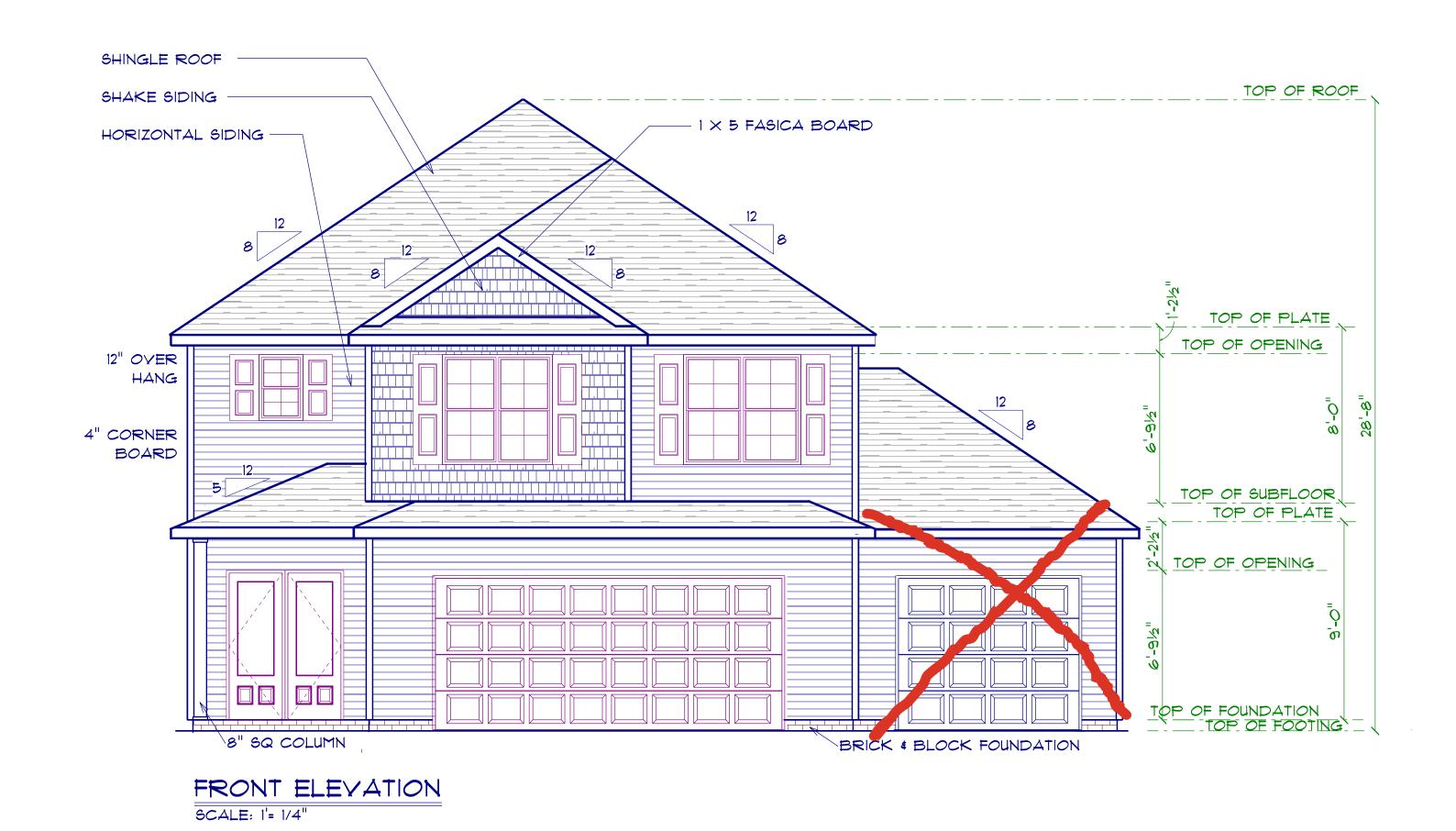
ALL BEAMS AND FRAMING MEMBERS ARE SIZED BY OTHERS.

1.1 This plan has been drawn to comply with the 2018 NC Building Code

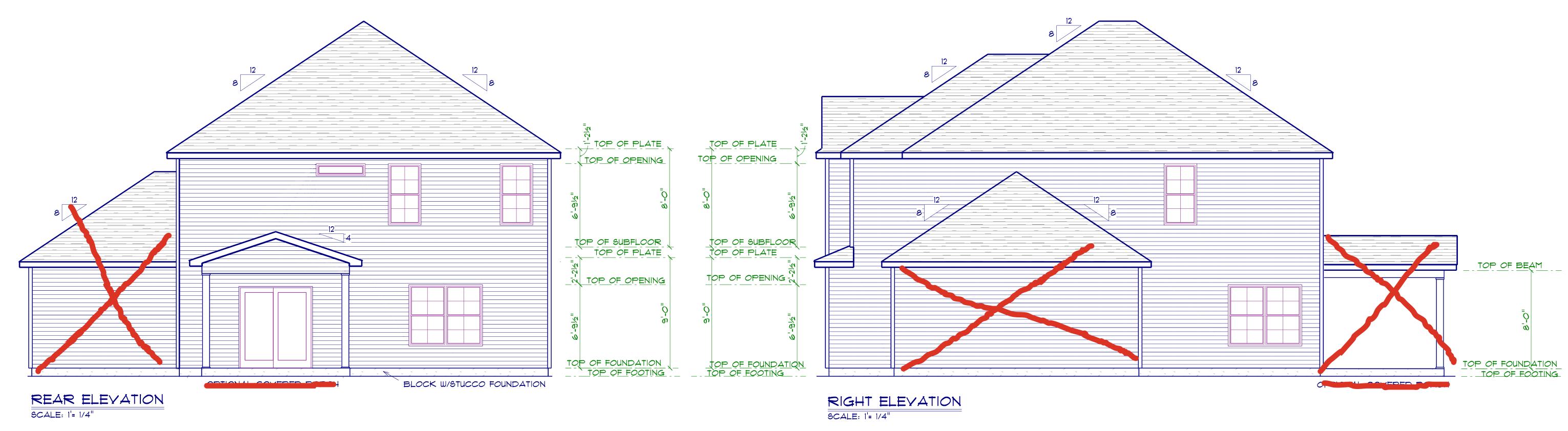
1.2 Minimum Design Loads for Building and Other Structures ASCE 7-9B Roof Dead Load 3 Roof Live Load 20 PSF 4 Typical Floor Dead Load 10 PSF 5 Floor Live Loads 5.1 Rooms other than sleeping rooms 40 PSF 5.2 Sleeping Rooms 30 PSF 5.3 Stairs 40 PSF 5.4 Decks 40 PSF 5.5 Exterior Balconies 60 PSF 6 Wind Loads 6.1 Ultimate Design Wind Speeds 15 MPH 6.2 Wind Importance Factor, IW 1.00 6.3 Exposure B 6.4 Walls (Component and Cladding) 25 PSF 6.5 Roofs (Component and Cladding) 6.5.1 Roof Slopes 2.25/12 to 7/12 34.8 PSF 6.5.2 Roof Slopes 7/12 to 12/12 21 PSF

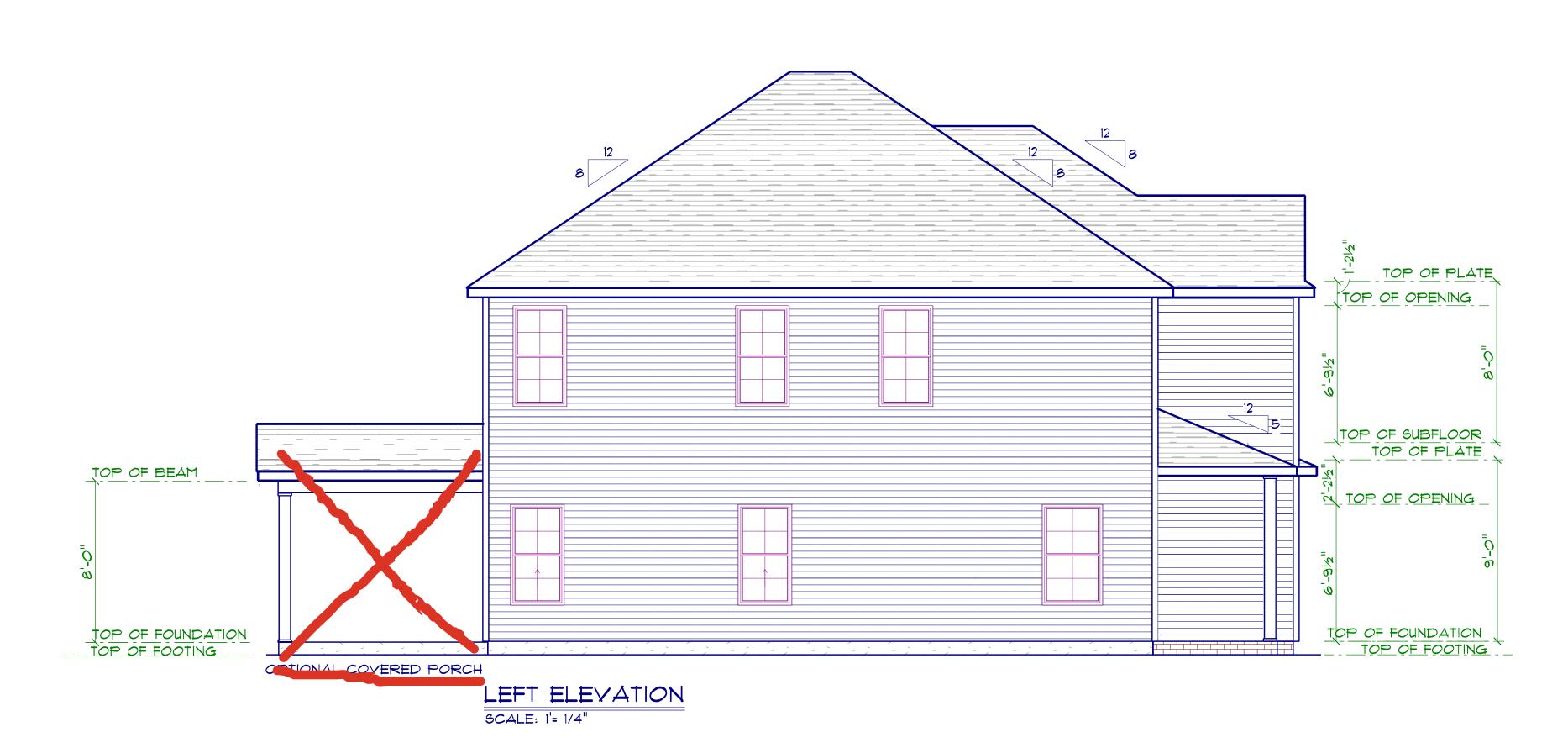
It is the sole responsibility of the Contractor and/or Builder to conform to all standards, provisions, requirements, methods of construction and uses of materials provided in buildings and/or structures as required by NC Uniform Building Code, Local Agencies and in accordance with good engineering practices. Verify all dimensions prior to construction.

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OR REPRODUCED. THESE PLANS CAN NOT BE BUILT BY
ANYONE BUILDER OTHER THAN CRH HOMES



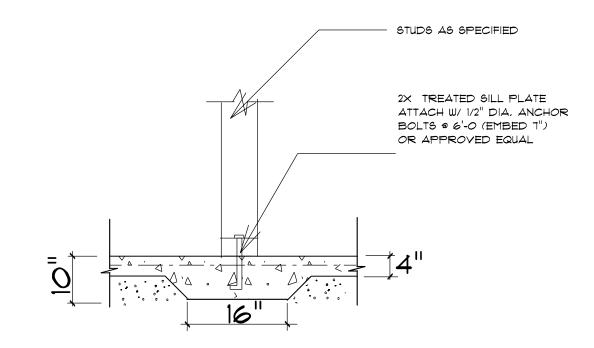




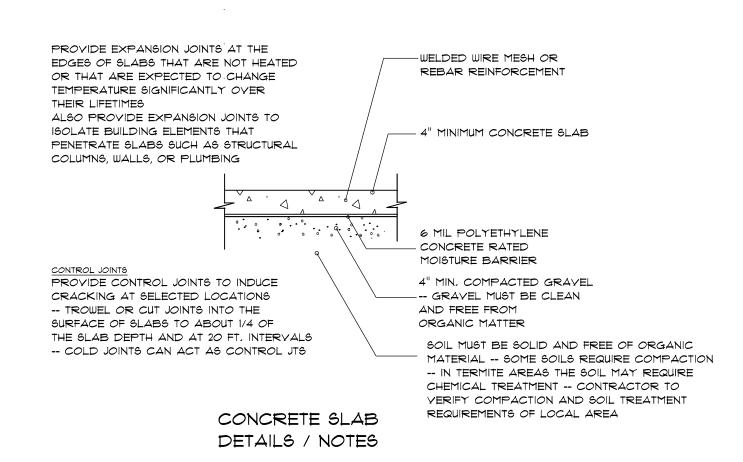


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STEM WALL FOUNDATION Detail not to scale



TYPICAL THICKENED SLAB



FOUNDATION NOTES:
ALL FOOTINGS SHALL BEAR ON ORIGINAL UNDISTURBED SOIL.
THE 28 DAY COMPRESSIVE STRENGTH OF ALL FOOTINGS IS 3000 PSI

PROVIDE WATER PROOFING AND PERIMETER DRAINS AS REQUIRED.

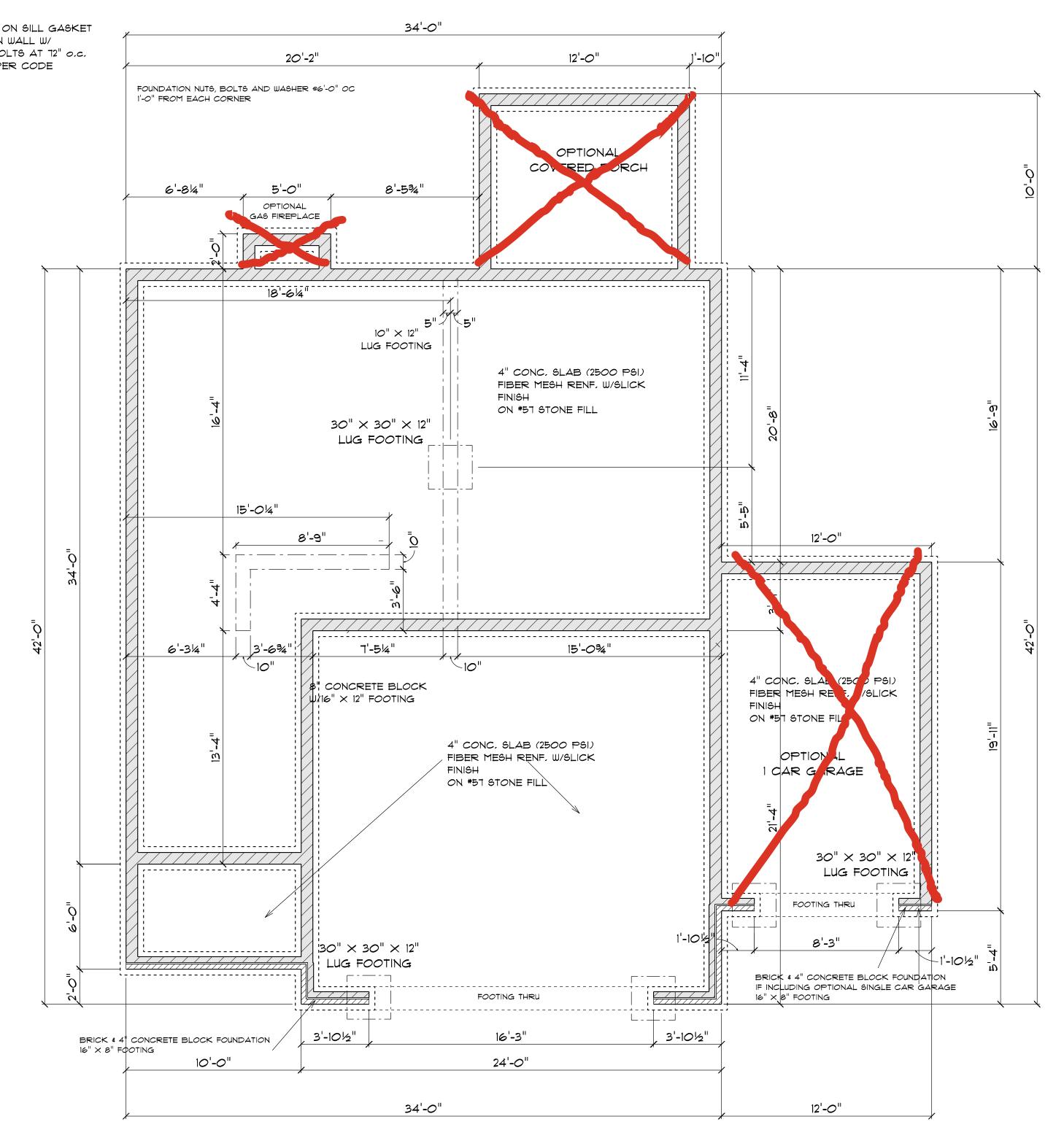
FOUNDATION CONCRETE MIX TO HAVE 1-1/2" MAX AGGREGATE SIZE. CONCRETE
FILL MIX TO HAVE 1/2" MAX AGGREGATE SIZE.

FOOTING WIDTHS ARE BASED ON A LOAD-BEARING SOIL CAPACITY OF 2000 PSI.

PROVIDE 6 MIL POLY VAPOR BARRIER TO COVER GROUND SURFACE IN CRAWL SPACE

ALL ANCHOR BOLTS TO BE 12" LONG, 1/2" DIA. A36 UNO ANCHOR BOLTS SHALL BE SPACE AT A MAX OF 6' OC AND NO MORE THAN 1' FROM EA CORNER.

Termite Soil Treatment: Treat entire slab area soil or crawl space surface before vapor barrier is installed and slab is poured with a state approved termiticide. Termiticide should be applied by a licensed and certified pest control professional by the state of North Carolina.

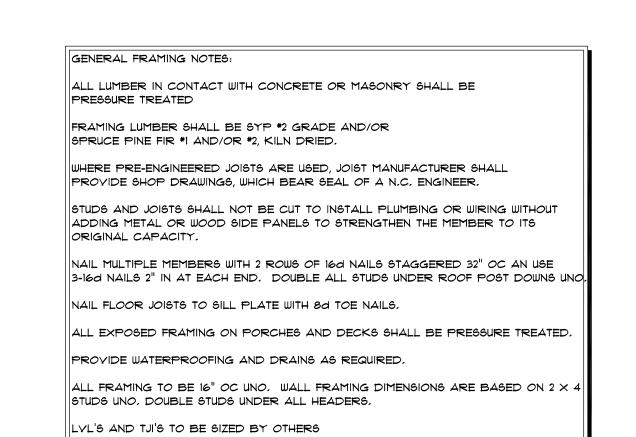


STEM WALL FOUNDATION

FOUNDATION PLAN

SCALE: 1'= 1/4"

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ANYONE BUILDER OTHER THAN CRH HOMES



OPENING SCHEDULE										
SIZE COUNT LIBRARY NAME R.O. WIDTH R.O. HE										
6'-0"	1	Exterior Door\Patio	72"	80-1/2"						
2'-8" x 5'-0"	5	Window\Single Hung	32"	60"						
2'-8" x 5'-0" Twin	1	Window\Single Hung	64-1/2"	60"						

	OPENING SCHEDULE	LVL'S AND TJI'S TO BE SIZED BY OTHERS	34'-0"	
	SIZE COUNT LIBRARY NAME R.O. WIDTH R.O. HEIGHT	EXTERIOR WALLS IN LIVING AREAS ARE 2 × 4	₹	>
	2'-8" x 5'-0" 7 Window\Single Hung 32" 60"		20'-2" 12'-0" 1'-10	
	2'-0" x 3'-0" 1 Window\Single Hung 24" 36"		<u> </u>	1
	2'-8" x 5'-0" Twin 2 Window\Single Hung 64-1/2" 60"			
	4'-0" x 1'-0" 1 Window\Transom 48" 12"			
			OPTIONAL COVERED	=_
			12'-0½" PORCH	Q
			3'-2" 3'-6¼" 5'-0" 3'-6¼" 3'-2" 1'-9½" 7'-10"	<u> </u>
	34'-0"			
	2'-51/2" 11'-31/2" 2'-53/4" 2'-6"	15'-3¼" 	2'-8" × 5'-0"	
	2'-8" × 5'-0" 4'-0" × 1'-0"			
2-5%"	=		OPTIONAL GAS FIREPLACE	
2	15'-7¼" 5'-0" 5'-			
			18'-2¼" 15'-1¾"	
	74 9-42		FAMILY FAMILY FAMILY FAMILY	
		$\frac{1}{4}$ $\frac{\omega}{2}$ $\frac{\omega}{2}$ $\frac{\omega}{2}$		×
	MASTER SUITE	7'-9¼"		<u>'</u>
			34-1/2" WALL HGHT	
	$ \hat{q} $		3-STUD / COLUMN	
			8'-4"	
= 4		PLAY ROOM =	6'-2½" 2'-3½" KITCHEN	
<u> </u>	CHASE CHASE			X 6 WALL)
	ATTIC ACCESS	14,-1134,,	12'-81/2"	
$\begin{vmatrix} \omega \\ 4 \end{vmatrix} = 4$		IF ADDING 3RD GARAGE BAY ELIMINATE THIS WINDOW		
4			4 2'-8"	= 0
$\left \begin{array}{c} \bullet \\ \bullet \end{array} \right $	- in	;" 8'-6'4"	8'-4 7/16" 12'-2 15/16"	
		$\frac{1}{2}$		
	m			<u> </u>
4	2'-4"			
	BATH > // >			H TIONAL =
	5'-034"	8-64"	GARAGE GARAGE	1 CAR GARAGE
	LAUNDRY			
<u>%</u>				
00	9'-31/2" 4'-2"		9-8 1/16" 23'-5"	13,-0
		74 % -4 -1 -1 -1 -4		
	BEDROOM #3	BEDROOM #2 -4		
\			5'-0" 4'-10½"	
	11'-1½"	11'-1194"		
			$\begin{vmatrix} \dot{c} \\ \dot{c} \end{vmatrix}$	8'-0"
	$\left\ \begin{array}{c c} -\frac{1}{2} \end{array} \right\ = \left\ \begin{array}{c c} -\frac{1}{2} \end{array} \right\ $		BEAM 0	8'-0" = 4
00			BEAM	$\begin{vmatrix} \dot{a} \\ \dot{a} \end{vmatrix}$
			COLUMN	,
<u> </u>		2-8" x 5-0" Twin	4'-0" 16'-0" 4'-0"	<u> </u>
	2'-8" × 5'-0" Twin 3'-9½" 6'-2½" 5'-9" 5'-11"		10'-0"	
	e > e > e > e > e	6'-0½" 6'-3½"	34'-0"	12'-0"
	10'-0")"·	 	*

2ND FLOOR PLAN

SCALE: 1'= 1/4"

AREA SCHEDULENAMEAREAHeated1302.4 sq ft.

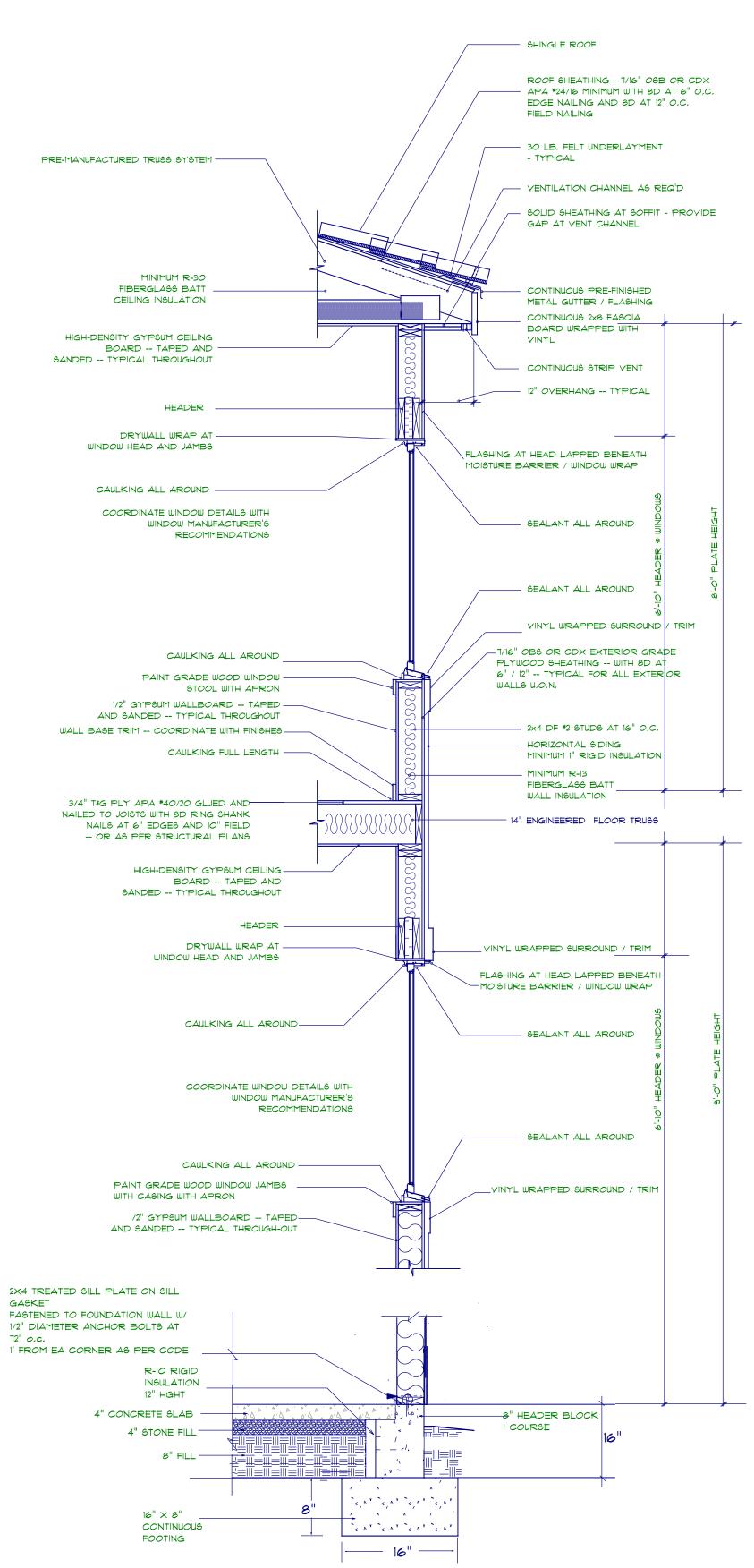
34'-0"

SCALE: 1'= 1/4"

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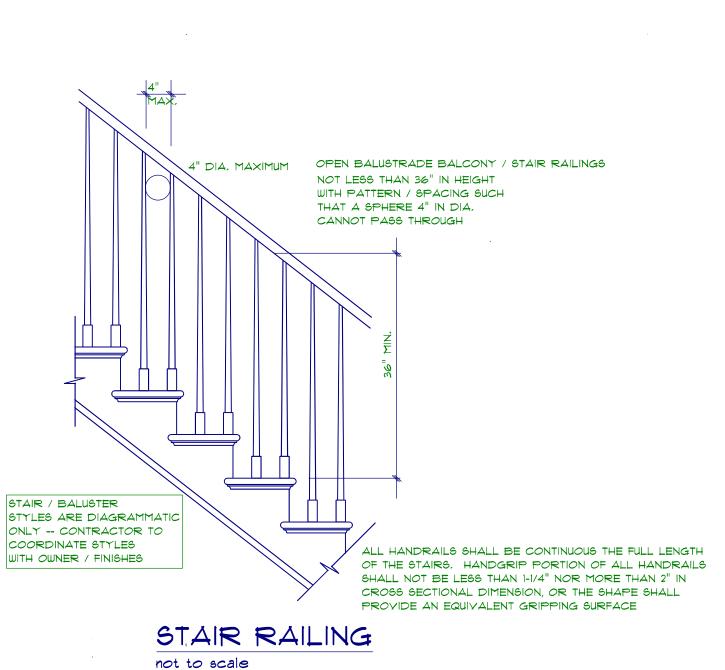
AREA SCHEDULE								
AREA	NAME							
841.2 sq ft.	Heated							
505.8 sq ft.	Garage							
244.5 sq ft.	Optional 1 Car Garage							
58.3 sq ft.	Covered Porch							
120 sq ft.	Opt Covered Porch							

Diane Rives Designs	banford, N.C. 27332	golfwoman@charter.net
SCALE: 1'= 1/4"	DRAWN BY:	DATE: 10/1/2024
	e	



2×4 WITH 8" BLOCK STEM WALL FOUNDATION not to scale

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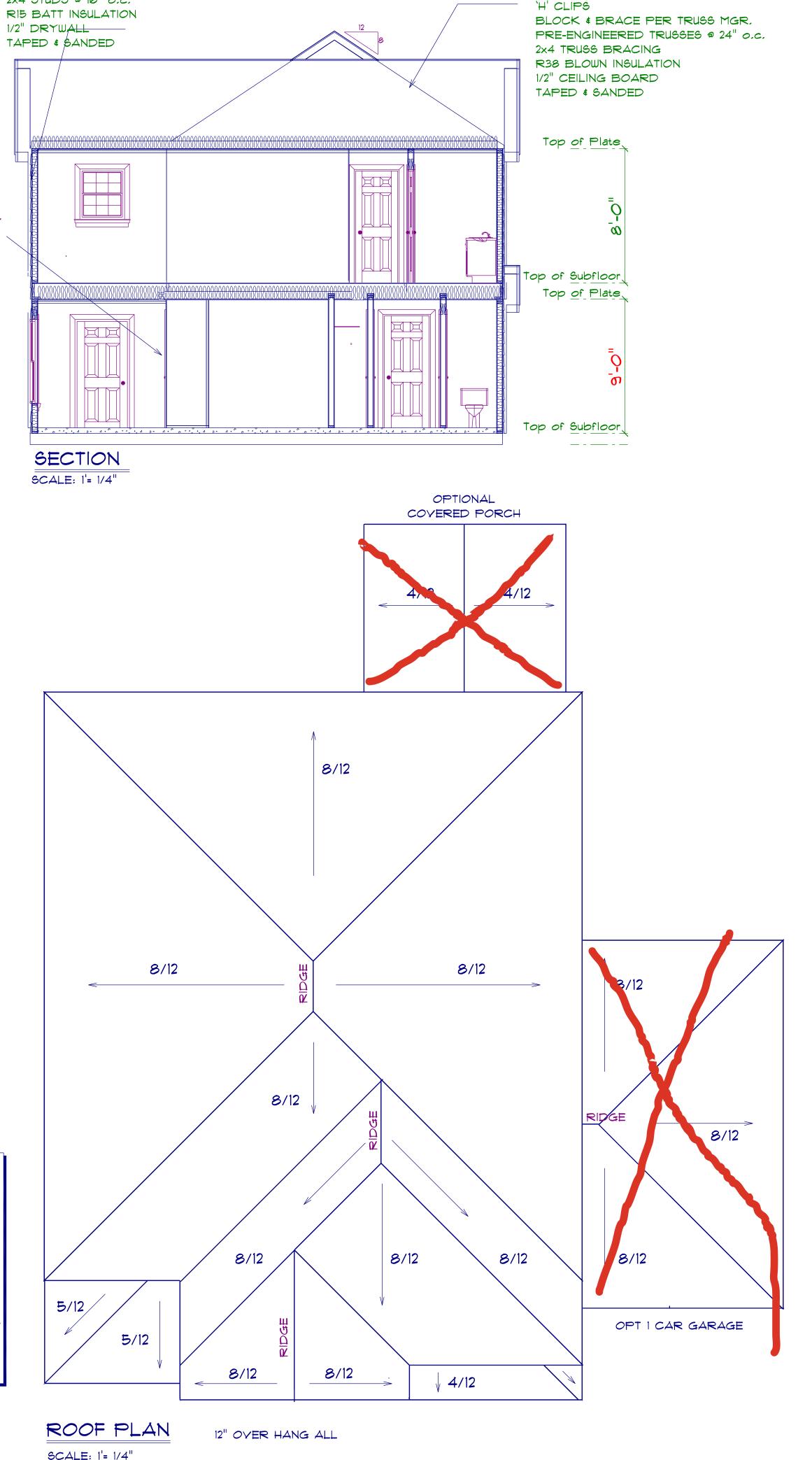


TRUSSES, BRACINGS, BRIDGING AND CONNECTORS ARE TO BE DESIGNED BY THE TRUSS MANUFACTURER.

IDENTIFY LUMBER BY OFFICIAL GRADE MARKINGS.

DO NOT CUT OR REMOVE CHORDS OR OTHER TRUSS MEMBERS. DO NOT NOTCH OR DRILL TRUSS MEMBERS.

WHERE PRE-ENGINEERED ROOF TRUSSES ARE USED, TRUSS MANUFACTURER SHALL PROVIDE SHOP DRAWINGS, WHICH BEAR SEA OF A N. C. REGISTERED ENGINEER.



TYPICAL TRUSS ROOF:

7/16" ROOFING PLYWOOD c/w

SHINGLES

SCALE: 1'= 1/4"

TYPICAL 2x4 SIDING EXTERIOR WALL:

7/16" PLYWOOD SHEATHING

VINYL SIDING

TYPICAL 2x4 WALL:

TAPED & SANDED

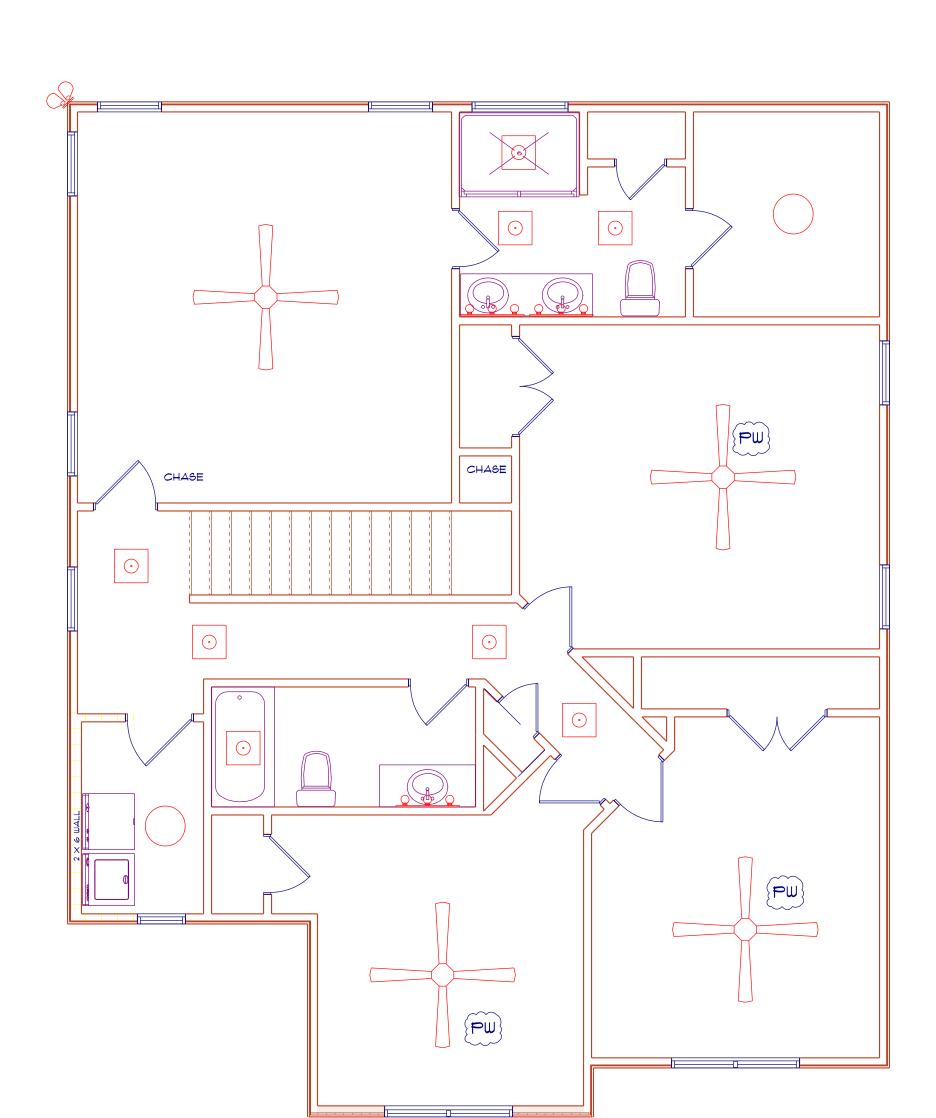
TAPED & SANDED

2x4 STUDS @ 16" o.c.

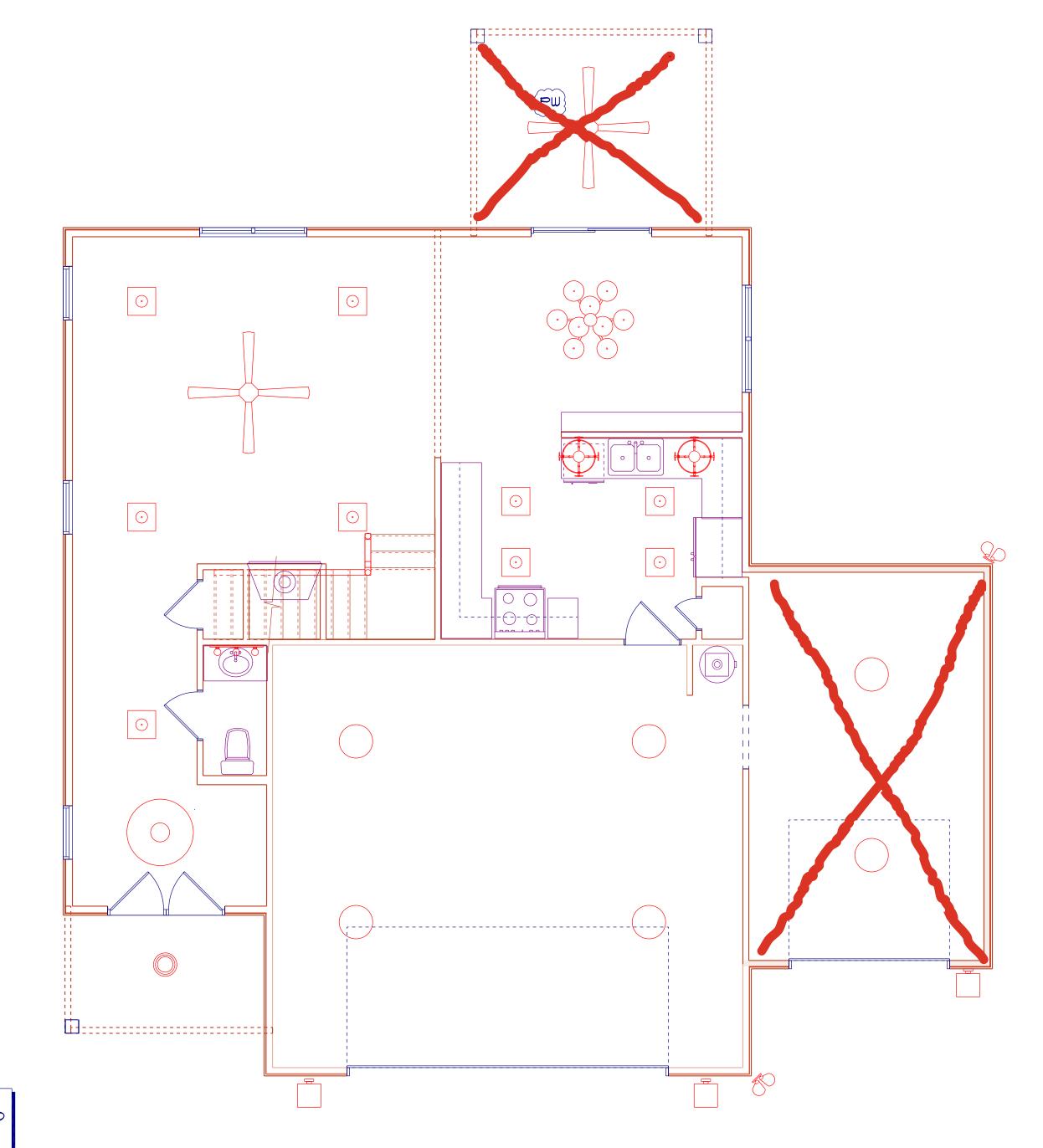
1/2" DRYWALL

1/2" DRYWALL

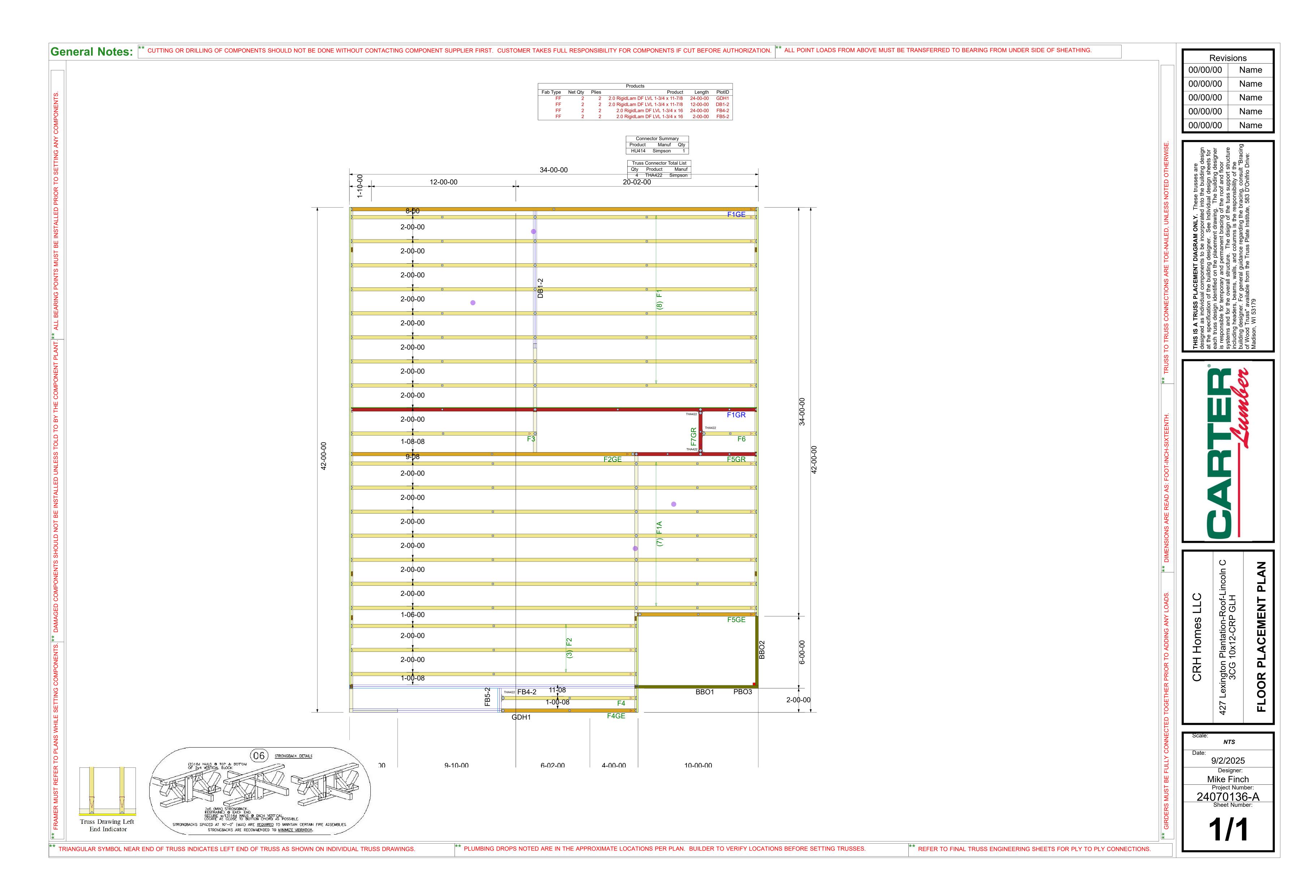
2×4 STUDS @ 16" o.c.



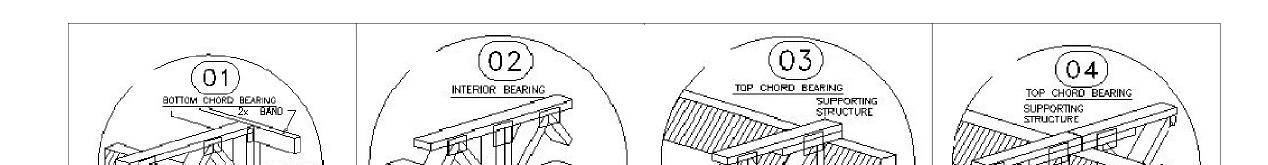
ELECTRI	CAL LEGE	ND
ELECTRICAL	COUNT	SYMBOL
ceiling fan	2	
10" led	8	
7" led	17	\odot
foyer light	1	
dinning room light	1	
coach light	3	
exterior over head	1	
flood light	3	<u>Q</u>
vanity bar light	4	000
wall sconce		
pendant light	2	

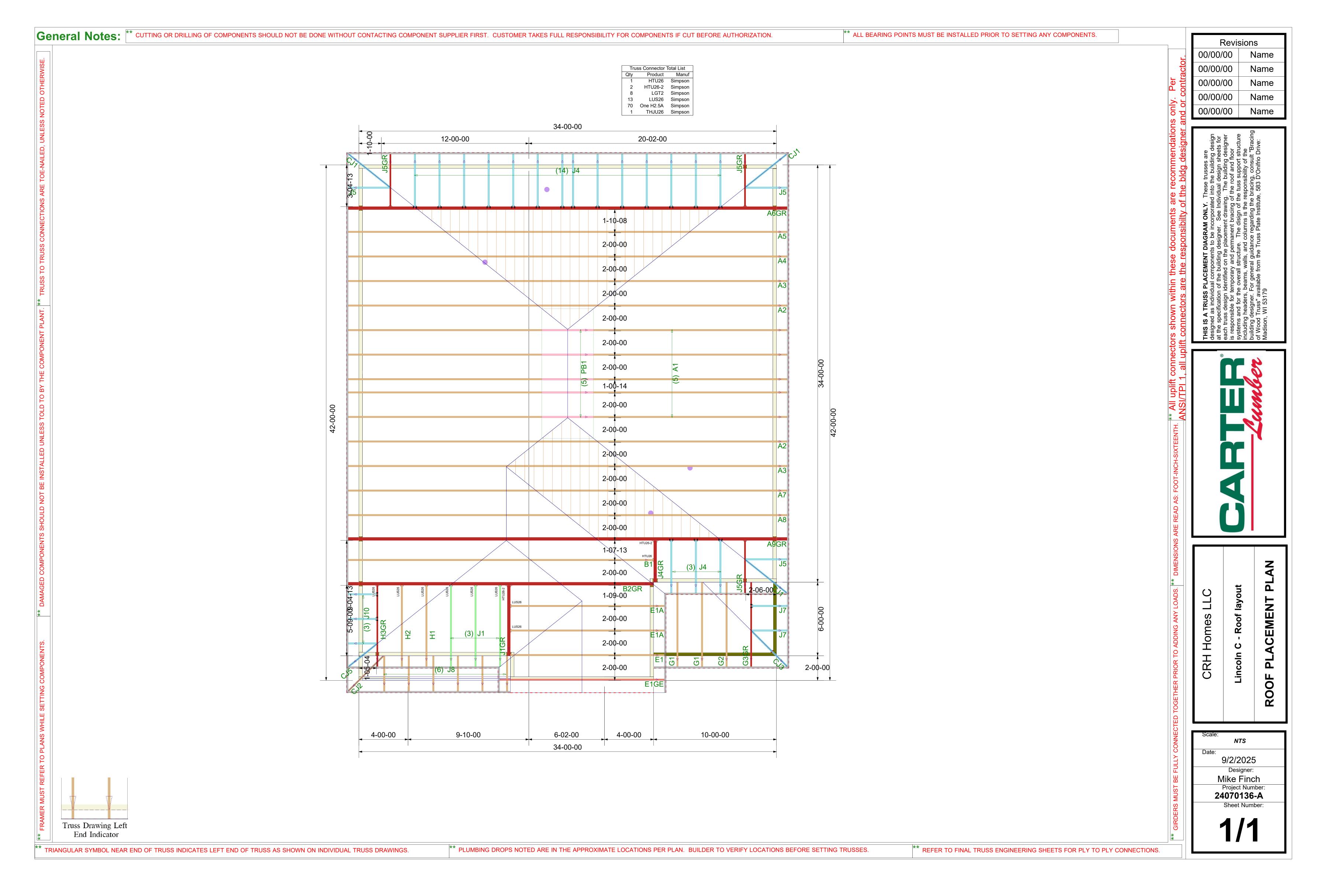


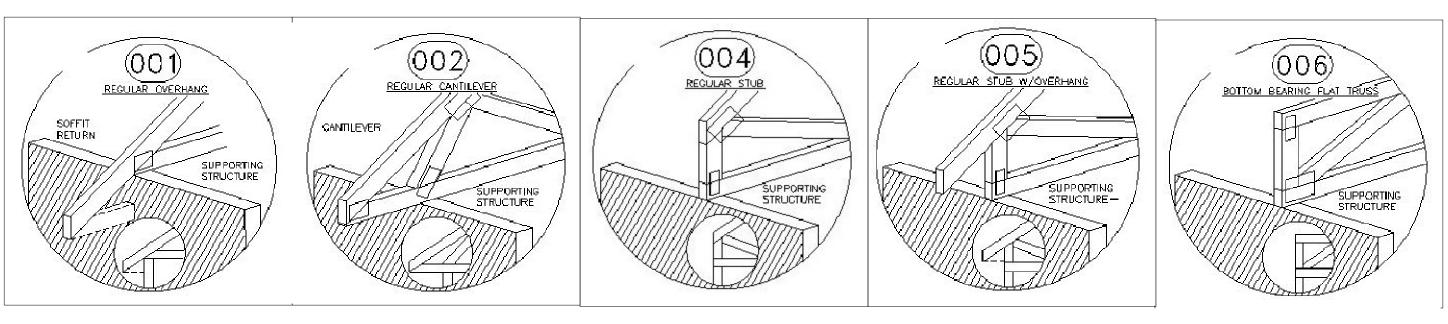
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FB# - Flush Beam
DB# - Dropped Beam
BBO - Beam that is not
supplied by the
component plant







FB# - Flush Beam
DB# - Dropped Beam
BBO - Beam that is not
supplied by the
component plant



Illustration Not to Scale. Pitch: 0/12

Customer Ph..

Job Name: B

Level: 1st FLOOR
Label: GDH2 - i28
Type: Beam

2 Ply Member 2.0 RigidLam DF LVL 1-3/4 x 11-7/8

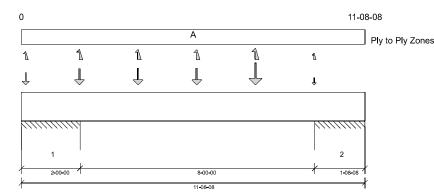
Report Version: 2023.09.18

Status: Design

Design Passed

09/11/2024 15:36

Designed by Single Member Design Engine in MiTek® Structure Version 8.7.3.303.Update13.26



DESIGN INFORMATION a

Building Code: IRC 2021 Design Methodology: ASD

Risk Category: II (General Construction)

Residential

Service Condition: Dry System Spacing: -

LL Deflection Limit: L/360, 0.75" (absolute)
TL Deflection Limit: L/240, 1.00" (absolute)

Lateral Restraint Requirements:

Both ends of the member and the outer supports must be laterally restrained. Top and bottom edges of the member must be fully restrained or have the following maximum unbraced length:

Top: 1'- 10 1/2" Bottom: 11'- 8 1/2"

Bearing Stress of Support Material:

- 1323 psi Wall @ 0'- 1 1/2"
- 1323 psi Wall @ 1'- 10 1/2"
- 1323 psi Wall @ 10'- 1 1/2"
- 1323 psi Wall @ 11'- 7"

ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Max Pos. Moment:	5'- 11 3/4"	D + Lr	1.15	1827 lb ft	24296 lb ft	Passed - 8%
Max Neg. Moment:	10'- 1 1/2"	D + Lr	1.15	2575 lb ft	22324 lb ft	Passed - 12%
Max Shear:	9'- 1/8"	D + Lr	1.15	1710 l b	9241 lb	Passed - 19%
Total Load (TL) Pos. Defl.:	6'- 11/16"	D + Lr		0.015"	L/240	Passed - L/999

SUF	SUPPORT AND REACTION INFORMATION										
ID	Input Bearing Length	Controlling Load Combination	LDF	Downward Reaction	Uplift Reaction	Resistance of Member	Resistance of Support	Result			
1 1	5-04	0.6D + 0.6W	1.60	143 lb		19174 lb	24310 lb	Passed - 1%			
1	5-04	D + Lr	1.15		-965 lb	=	-				
1	1-06-00	D + Lr	1.15	3550 lb		47250 lb	83349 lb	Passed - 8%			
1	1-06-00	0.6D + 0.6W	1.60		-540 lb	-	-				
2	1-01-12	D + Lr	1.15	3620 lb		36094 lb	63669 lb	Passed - 10%			
2	1-01-12	0.6D + 0.6W	1.60		-355 lb	-	-				
2	6-12	0.6D + 0.6W	1.60	177 l b		24652 lb	31256 lb	Passed - 1%			
2	6-12	D + Lr	1.15		-1756 lb	-	-				

l	LOADI	NG								
l	Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
l	Self Weight	0'	11'- 8 1/2"	Self Weight	Тор	11 lb/ft	-	-	-	-
ı	Point	0'- 1 3/4"	0'- 1 3/4"	C1(c01)	Top	316 lb	-	162 l b	234 l b	82/-317 lb
ı	Point	1'- 11 3/4"	1'- 11 3/4"	C1(c02)	Тор	409 lb	-	291 lb	421 lb	148/-574 lb
ı	Point	3'- 11 3/4"	3'- 11 3/4"	C2(c01)	Тор	419 lb	-	304 l b	440 lb	134/-568 lb
ı	Point	5'- 11 3/4"	5'- 11 3/4"	C3(c01)	Тор	419 lb	-	304 l b	440 lb	134/-534 lb
ı	Point	7'- 11 3/4"	7'- 11 3/4"	C4GR(c01)	Тор	698 I b	-	415 lb	628/-15 l b	182/-690 lb
١	Point	9'- 11 3/4"	9'- 11 3/4"	J9(c01)	Тор	55 lb	-	49 lb	71 l b	32/-131 lb

UNFAC	UNFACTORED REACTIONS											
ID	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)				
1	0'	2'	E14(i26)	1754/-285 lb	-	1172/-244 lb	1978/-631 l b	533 lb/ -2141 lb				
==>	0'- 1 1/2"	0'- 1 1/2"	E14(i26)	-285 l b	-	-244 l b	252/-612 lb	-				
==>	1'- 10 1/2"	1'- 10 1/2"	E14(i26)	1754 l b	-	1172 l b	1726/-19 l b	-				
2	10'	11'- 8 1/2"	E8(i5)	1876/-901 I b	-	1166/-569 lb	1739/ - 865 l b	533 lb/ -2141 lb				
==>	10'- 1 1/2"	10'- 1 1/2"	E8(i5)	1876 l b	-	1166 lb	1729/-22 lb	-				
==>	11'- 7"	11'- 7"	E8(i5)	-901 l b	-	-569 l b	10/-843 lb	-				

DESIGN NOTES

- CAUTION: The maximum net analysis reaction exceeds the user-defined maximum uplift value at one or more supports.
- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- Tributary Loads have been generated based on actual spacing between members in the model which may differ from the default system spacing. The actual loads applied to the member are shown in the Specified Loads table.
- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.
- This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct.
- Review all loads and reactions to ensure that the member/bearing/connector/structure can resist adequately. Unless already
 specified on this report, anchorage for uplift reactions to be specified by others. Installation of member and accessories (if
 required) as per manufacturer's instruction.
- Beam Stability Factor used in the calculation for Allowable Max Pos Moment (CL) = 0.99

PLY TO PLY CONNECTION



City:

Job Name: B

Level: 1st FLOOR Label: GDH2 - i28 Type: Beam 2 Ply Member 2.0 RigidLam DF LVL 1-3/4

x 11-7/8

Status:

Design
Passed

PLY TO PLY CONNECTION

• Zone A: Factored load = 0 plf. Use 12d (0.148"x3.25") nails. LDF = 1.00. Qty = 24. Row = 2, Spacing = 12" 12d (0.148"x3.25") nails properties: D = 0.148", L = 3.25". Fastener capacity = 117 lbs. X1 = 2.25", Y1 = 0.75", Y2 = 1.5" Install fasteners from one face.

X1 = Minimum end distance, X2 = Minimum edge distance, Y2 = Minimum row spacing.

FASTENER INSTALLATION – 2 ROWS (FROM ONE FACE)

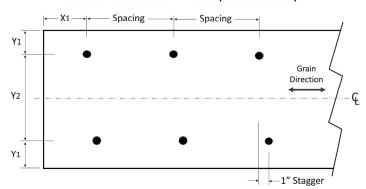




Illustration Not to Scale. Pitch: 0/12

City: Customer Ph.. Job Name: B

Level: 1st FLOOR Label: GDH1 - i29 Type: Beam 2 Ply Member 2.0 RigidLam DF LVL 1-3/4 x 11-7/8

Report Version: 2023.09.18

Status:

Design Passed

09/11/2024 15:36

Designed by Single Member Design Engine in MiTek® Structure Version 8.7.3.303.Update13.26



DESIGN INFORMATION a

Building Code: IRC 2021 Design Methodology: ASD

Risk Category: II (General Construction)

Residential

Service Condition: Dry System Spacing: -

LL Deflection Limit: L/360, 0.75" (absolute)
TL Deflection Limit: L/240, 1.00" (absolute)

Lateral Restraint Requirements:

Both ends of the member and the outer supports must be laterally restrained. Top and bottom edges of the member must be fully restrained or have the following maximum unbraced length:

Top: 11'- 2 3/4" Bottom: 23'- 6 3/4"

Bearing Stress of Support Material:

- 1323 psi Wall @ 0'- 1 1/2"
- 1323 psi Wall @ 3'- 8 3/4"
- 1323 psi Wall @ 19'- 11 3/4"
- 1323 psi Wall @ 23'- 5 1/4"

_							
l	ANALYSIS RESULTS						
l	Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
l	Max Pos. Moment:	11'- 4 1/2"	D + 0.75(L + Lr)	1.15	2513 lb ft	22480 lb ft	Passed - 11%
l	Max Neg. Moment:	3'- 8 3/4"	D + 0.75(L + Lr)	1.15	3419 lb ft	15816 lb ft	Passed - 22%
l	Max Shear:	4'- 10 1/8"	D + 0.75(L + Lr)	1.15	1341 lb	9241 lb	Passed - 15%
l	Live Load (LL) Pos. Defl.:	11'- 6 7/16"	0.75(L + Lr + 0.6W)		0.033"	L/360	Passed - L/999
ı	Total Load (TL) Pos. Defl.:	11'- 5 1/4"	D + 0.75(L + Lr + 0.6W)		0.081"	L/240	Passed - L/999

SUP	SUPPORT AND REACTION INFORMATION											
ID	Input Bearing Length	Controlling Load Combination	LDF	Downward Reaction	Uplift Reaction	Resistance of Member	Resistance of Support	Result				
1	9-12	0.6D + 0.6W	1.60	9 lb		35609 lb	45147 lb	Passed - 0%				
1	9-12	D + 0.75(L + Lr)	1.15		-746 lb	-	-					
1	1-06-00	D + 0.75(L + Lr)	1.15	2812 lb		47250 lb	83349 lb	Passed - 6%				
2	1-06-00	D + S	1.15	1839 lb		47250 lb	83349 lb	Passed - 4%				
2	1-06-00	0.6D + 0.6W	1.60		-220 lb	=	-					
2	1-00-08	0.6D + 0.6W	1.60	28 lb		45652 lb	57881 lb	Passed - 0%				
2	1-00-08	D + 0.75(L + Lr)	1.15		-715 lb	-	-					

Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
Self Weight	0'	23'- 6 3/4"	Self Weight	Тор	11 lb/ft	-	-	-	-
Uniform	12'- 9 1/2"	20'- 9 1/2"	Smoothed Load	Тор	29 lb/ft	-	28 lb/ft	41 lb/ft	12 lb/ft
Point	1'- 2 1/4"	1'- 2 1/4"	F4GE(c01)	Тор	170 l b	35 l b	44 lb	82 l b	27/ - 131 l b
Point	2'- 6 1/4"	2'- 6 1/4"	F4GE(c01)	Тор	167 l b	36 l b	39 lb	69 l b	20/-71 l b
Point	3'- 10 1/4"	3'- 10 1/4"	F4GE(c01)	Top	164 l b	37 lb	41 l b	81 l b	26/-145 l b
Point	5'- 2 1/4"	5'- 2 1/4"	F4GE(c01)	Тор	148 l b	37 lb	25 l b	58/-3 lb	13/-106 l b
Point	6'- 6 1/4"	6'- 6 1/4"	F4GE(c01)	Тор	166 l b	37 l b	38 lb	63 lb	16/-64 l b
Point	7'- 10 1/4"	7'- 10 1/4"	F4GE(c01)	Тор	162 l b	36 lb	40 l b	80 l b	26/-141 l b
Point	9'- 2 1/4"	9'- 2 1/4"	F4GE(c01)	Тор	159 l b	36 lb	31 lb	69 lb	19/-113 l b
Point	10'- 6 1/4"	10'- 6 1/4"	F4GE(c01)	Тор	135 l b	31/-1 l b	31 l b	67/-10 l b	20/-82 lb
Point	11'- 2 11/16"	11'- 2 11/16"	-	Тор	225 l b	127/-7 I b	68 l b	116/-19 l b	44/-255 l b
Point	11'- 9 1/2"	11'- 9 1/2"	J8(c01)	Тор	44 l b	_	36 l b	52 lb	15/-95 l b
Point	13'- 9 1/2"	13'- 9 1/2"	J8(c02)	Top	-	-	-	-	-150 lb
Point	15'- 9 1/2"	15'- 9 1/2"	J8(c03)	Top	-	-	-	-	-150 l b
Point	17'- 9 1/2"	17'- 9 1/2"	J8(c04)	Top	-	-	-	-	-150 l b
Point	19'- 9 1/2"	19'- 9 1/2"	J8(c01)	Top	-	-	-	-	-150 lb
Point	21'- 9 1/2"	21'- 9 1/2"	J8(c01)	Тор	54 l b	-	49 lb	71 l b	21/-127 l b

UNFA	CTORED RI	EACTIONS						
ID	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
1	0'	3'- 10 1/4"	E15(i27)	1834/-404 lb	465/ - 154 l b	471/-127 l b	938/-334 lb	153 lb/ -1121 lb
==>	0'- 1 1/2"	0'- 1 1/2"	E15(i27)	-404 l b	34/-146 l b	-127 l b	77/-299 l b	-
==>	3'- 8 3/4"	3'- 8 3/4"	E15(i27)	1834 I b	431/-8 l b	471 lb	861/-35 lb	-
2	19'- 10 1/4"	23'- 6 3/4"	E10(i7)	1074/-416 lb	201/-111 l b	473/-152 l b	789/-317 l b	153 lb/ -1121 lb
==>	19'- 11 3/4"	19'- 11 3/4"	E10(i7)	1074 l b	197/ - 7 I b	473 lb	752/-27 l b	-
==>	23'- 5 1/4"	23'- 5 1/4"	E10(i7)	-416 l b	4/-104 lb	-152 lb	37/-290 lb	-

DESIGN NOTES

LOADING

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.



Customer Ph...

Job Name: B

Level: 1st FLOOR Label: **GDH1 - i29** Type: Beam

2 Ply Member

2.0 RigidLam DF LVL 1-3/4 x 11-7/8 **Passed**

Status: Design

DESIGN NOTES

- Tributary Loads have been generated based on actual spacing between members in the model which may differ from the default system spacing. The actual loads applied to the member are shown in the Specified Loads table.
- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.
- This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct.
- Review all loads and reactions to ensure that the member/bearing/connector/structure can resist adequately. Unless already specified on this report, anchorage for uplift reactions to be specified by others. Installation of member and accessories (if required) as per manufacturer's instruction.
- Beam Stability Factor used in the calculation for Allowable Max Pos Moment (CL) = 0.83

PLY TO PLY CONNECTION

- Zone A: Factored load = 0 plf. Use 12d (0.148"x3.25") nails. LDF = 1.00. Qty = 48. Row = 2, Spacing = 12" 12d (0.148"x3.25") nails properties: D = 0.148", L = 3.25". Fastener capacity = 117 lbs. X1 = 2.25", Y1 = 0.75", Y2 = 1.5" Install fasteners from one face.
 - X1 = Minimum end distance, X2 = Minimum edge distance, Y2 = Minimum row spacing.

FASTENER INSTALLATION - 2 ROWS (FROM ONE FACE)

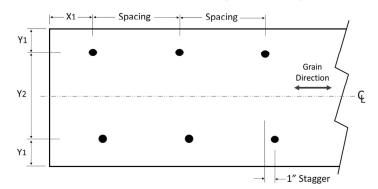




Illustration Not to Scale. Pitch: 0/12

Customer Ph..

Job Name: B

Level: 1st FLOOR DB1-2 - i30 Label: Type: Beam

2 Ply Member 2.0 RigidLam DF LVL 1-3/4 x 11-7/8

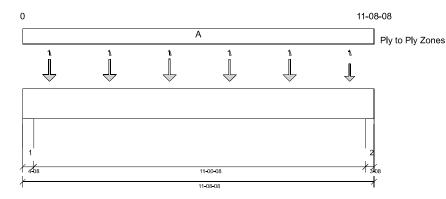
Report Version: 2023.09.18

Status:

09/11/2024 15:36

Design **Passed**

Designed by Single Member Design Engine in MiTek® Structure Version 8.7.3.303.Update13.26



DESIGN INFORMATION a

Building Code: IRC 2021 Design Methodology: ASD

II (General Construction) Risk Category:

Residential

Service Condition: Dry System Spacing:

LL Deflection Limit: L/360, 0.75" (absolute) TL Deflection Limit: L/240, 1.00" (absolute)

Lateral Restraint Requirements:

Both ends of the member and the outer supports must be laterally restrained. Top and bottom edges of the member must be fully restrained or have the following maximum unbraced length:

Top: 1'- 8 1/2" Bottom: 11'- 5"

Bearing Stress of Support Material:

- 1323 psi Wall @ 0'- 3 1/2"
- 1323 psi Wall @ 11'- 6"

ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Max Pos. Moment:	4'- 10 3/4"	D + L	1.00	18290 lb ft	21161 lb ft	Passed - 86%
Max Shear:	1'- 4 3/8"	D + L	1.00	5925 lb	8035 lb	Passed - 74%
Live Load (LL) Pos. Defl.:	5'- 10 5/8"	L		0.306"	L/360	Passed - L/433
Total Load (TL) Pos. Defl.:	5'- 10 5/8"	D + L		0.427"	L/240	Passed - L/310
SUPPORT AND REAC	TION INFORM	IATION				

ı	SUP	PORT AND I	REACTION	NEORMAIN	JN						
	ID	Input Bearing Length	Controlling Combina)⊢	nward action F		Resistance of Member	Resistance of Support	F	Result
l	1	4-08	D + L	1.0	00 70	47 l b		11813 lb	20837 lb	Pass	sed - 60%
l	2	3-08	D + L	1.0	00 64	84 l b		9188 lb	16207 lb	Pass	sed - 71%
l	LOA	DING									
l	Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L	_) Snow	(S) Roof Liv	/e (Lr)	Wind (W)
l	Self	. 0'	11'- 8 1/2"	Self Weight	Тор	11 lb/ft	-	-	-		-

п	Weight	=								
ı	Point	0'- 10 3/4"	0'- 10 3/4"	F1(c04)	Тор	644 I b	1693 l b	5 l b	7 l b	2/-11 l b
ı	Point	2'- 10 3/4"	2'- 10 3/4"	F1(c03)	Тор	644 I b	1695 l b	4 l b	6 lb	2/ - 9 I b
ı	Point	4'- 10 3/4"	4'- 10 3/4"	F1(c04)	Top	643 lb	1695 l b	3 lb	5 lb	2/ - 7 lb
ı	Point	6'- 10 3/4"	6'- 10 3/4"	F1(c05)	Тор	647 I b	1695 l b	6 l b	10/0 l b	3/-11 l b
ı	Point	8'- 10 3/4"	8'- 10 3/4"	F1(c06)	Тор	649 lb	1695 l b	9 lb	15/0 l b	5/ - 19 l b
ı	Point	10'- 10 3/4"	10'- 10 3/4"	F1(c01)	Тор	511 l b	1192 l b	0 l b	1 lb	0/-1 lb
ı	UNFAC	TORED R	EACTIONS							
ı	ID	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
1	1	0'	0'- 4 1/2"	4(i25)		1991 l b	5056 lb	14 l b	22 l b	2 lb/ -31 lb
1	2	11'- 5"	11'- 8 1/2"	E2(i3)		1875 l b	4609 lb	13 l b	22 l b	2 lb/ -31 lb

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- Tributary Loads have been generated based on actual spacing between members in the model which may differ from the default system spacing. The actual loads applied to the member are shown in the Specified Loads table.
- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.
- This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct.
- Review all loads and reactions to ensure that the member/bearing/connector/structure can resist adequately. Unless already specified on this report, anchorage for uplift reactions to be specified by others. Installation of member and accessories (if required) as per manufacturer's instruction.
- Beam Stability Factor used in the calculation for Allowable Max Pos Moment (CL) = 0.99

PLY TO PLY CONNECTION

- Zone A: Factored load = 0 plf. Use 12d (0.148"x3.25") nails. LDF = 1.00. Qty = 24. Row = 2, Spacing = 12" 12d (0.148"x3.25") nails properties: D = 0.148", L = 3.25". Fastener capacity = 117 lbs. X1 = 2.25", Y1 = 0.75", Y2 = 1.5"
 - X1 = Minimum end distance, X2 = Minimum edge distance, Y2 = Minimum row spacing.



Customer: Street 1: City: Customer Ph... Job Name: **B**

Level: 1st FLOOR
Label: DB1-2 - i30
Type: Beam

2 Ply Member

2.0 RigidLam DF LVL 1-3/4 x 11-7/8 Status:

Design
Passed

PLY TO PLY CONNECTION

FASTENER INSTALLATION – 2 ROWS (FROM ONE FACE)

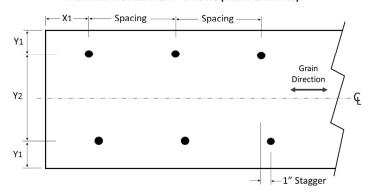




Illustration Not to Scale. Pitch: 0/12

Customer Ph..

Job Name: B

Level: 1st FLOOR
Label: FB4-2 - i39
Type: Beam

2 Ply Member 2.0 RigidLam DF LVL 1-3/4 x 16

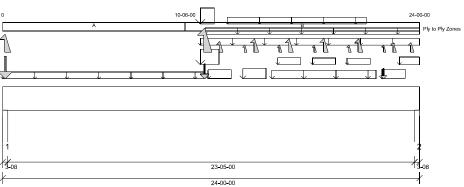
Report Version: 2023.09.18

Status:

Design Passed

09/11/2024 15:36

Designed by Single Member Design Engine in MiTek® Structure Version 8.7.3.303.Update13.26



DESIGN INFORMATION a

Building Code: IRC 2021 Design Methodology: ASD

Risk Category: II (General Construction)

Residential

Service Condition: Dry System Spacing: -

 $\begin{array}{lll} \text{LL Deflection Limit:} & \text{L/360, } 0.75\text{" (absolute)} \\ \text{TL Deflection Limit:} & \text{L/240, } 1.00\text{" (absolute)} \\ \end{array}$

Lateral Restraint Requirements:

Both ends of the member and the outer supports must be laterally restrained. Top and bottom edges of the member must be fully restrained or have the following maximum unbraced length:

Top: 0' Bottom: 0'

Bearing Stress of Support Material:

- 405 psi Beam @ 0'- 2 1/2"
- 425 psi Wall @ 23'- 9 1/2"

ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Max Pos. Moment:	12'- 3"	D + 0.75(L + Lr)	1.15	17644 lb ft	42799 lb ft	Passed - 41%
Max Shear:	22'- 4 1/2"	D + 0.75(L + Lr)	1.15	2680 lb	12451 l b	Passed - 22%
Live Load (LL) Pos. Defl.:	12'- 3 7/16"	0.75(L + Lr + 0.6W)		0.298"	L/360	Passed - L/944
Total Load (TL) Pos. Defl.:	12'- 4 7/16"	D + 0.75(L + Lr + 0.6W)		0.720"	L/240	Passed - L/390

Ш	SUP	PORT ANI	D REACTION INFORM	ATION					
	ID	Input Bearing Length	Controlling Load Combination	LDF	Downward Reaction	Uplift Reaction	Resistance of Member	Resistance of Support	Result
П	1	3-08	D + 0.75(L + Lr)	1.15	2238 lb		9188 lb	4961 lb	Passed - 45%
П	2	3-08	D + 0.75(L + Lr)	1.15	3056 lb		9188 lb	5206 lb	Passed - 59%
۱	LOA	DING							

Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
Self Weight	0'	24'	Self Weight	Тор	15 lb/ft	-	-	-	-
Uniform	0'	11'- 8"	FC1 Floor Decking (Plan View Fill)	Тор	10 lb/ft	40 lb/ft	-	-	-
Uniform	11'- 4 1/2"	24'	E18(i33)	Тор	65 lb/ft	_	_	_	_
Uniform	11'- 4 1/2"	12'- 5 1/2"	E18(i33)	Top	275 lb/ft	-	166 lb/ft	252 lb/ft	82 lb/ft
Uniform	11'- 4 1/2"	12'- 2 1/4"	E18(i33) FC1 Floor	Тор	276 lb/ft	=	188 l b/ft	273 lb/ft	89 lb/ft
Uniform	11'- 8"	24'	Decking (Plan View Fill)	Тор	6 lb/ft	24 lb/ft	-	-	-
Uniform	11'- 10"	13'- 2"	E18(i33)	Тор	79 lb/ft	-	47 lb/ft	73 lb/ft	44 lb/ft
Uniform	12'- 11 1/4"	20'- 11 1/4"	Smoothed Load	Front	16 lb/ft	-	10 lb/ft	18 lb/ft	4 lb/ft
Uniform	13'- 10"	15'- 2"	E18(i33)	Тор	98 lb/ft	-	72 lb/ft	112 lb/ft	66 lb/ft
Uniform	15'- 6"	21'- 6"	E18(i33)	Тор	66 lb/ft	-	50 lb/ft	77 l b/ft	25 lb/ft
Uniform	15'- 10"	17'- 2"	E18(i33)	Top	-	-	-	-	68 lb/ft
Uniform	17'- 10"	19'- 2"	E18(i33)	Тор	-	-	-	-	57 lb/ft
Uniform	19'- 10"	21'- 2"	E18(i33)	Top	-	-	-	-	16 lb/ft
Uniform	21'- 10"	23'- 2"	E18(i33)	Top	103 lb/ft	-	50 lb/ft	94 lb/ft	24 lb/ft
Uniform	22'- 10 1/16"	24'	E18(i33)	Тор	31 lb/ft	-	26 lb/ft	41 lb/ft	24 lb/ft
Point	11'- 7 1/2"	11'- 7 1/2"	-	Front	133 lb	143 l b	12/-3 lb	23/-14 lb	22/-660 lb
Point	13'- 11 1/4"	13'- 11 1/4"	J8(c02)	Front	-	-	-	-9 lb	-35 lb
Point	15'- 11 1/4"	15'- 11 1/4"	J8(c03)	Front	-	-	-	-9 l b	-35 lb
Point	17'- 11 1/4"	17'- 11 1/4"	J8(c04)	Front	-	-	-	-9 l b	-35 lb
Point	19'- 11 1/4"	19'- 11 1/4"	J8(c01)	Front	-	-	-	-9 lb	-35 lb
Point	21'- 11 1/4"	21'- 11 1/4"	J8(c01)	Front	61 lb	-	27 l b	50/-13 l b	12/-29 lb
Point	0'- 1 3/4"	0'- 1 3/4"	E21(i36)	Тор	239 lb	-	132 lb	190 lb	63/ - 451 l b
Point	12'- 6"	12'- 6"	E18(i33)	Тор	-	-	-	-	-178 l b
Point	14'- 6"	14'- 6"	E18(i33)	Тор	-	-	-	-	-278 l b
Point	16'- 6"	16'- 6"	E18(i33)	Тор	-	-	-	-	-282 l b
Point	18'- 6"	18'- 6"	E18(i33)	Тор	-	-	-	-	-293 l b
Point	20'- 6"	20'- 6"	E18(i33)	Тор	-	-	-	-	-274 l b
Point	22'- 6"	22'- 6"	E18(i33)	Тор	-	-	-	-23 lb	-107 l b
Point	23'- 6 1/16"	23'- 6 1/16"	E18(i33)	Тор	-	-	-	-	-136 l b

UNFAC	UNFACTORED REACTIONS												
ID	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)					
1	0'	0'- 3 1/2"	-	1321 l b	503 l b	467 l b	713/ - 20 l b	-					
++>	0'- 1/4"	0'- 1/4"	E12(i12)	189 l b	72 l b	67 lb	102/-3 lb	-					
++>	0'- 1 1/2"	0'- 1 1/2"	BBO1(i17)	1132 l b	431 l b	400 lb	611/-17 lb	-					
2	23'- 8 1/2"	24'	E9(i2)	1957 l b	400 l b	664 l b	1073/-66 l b	0 lb/ -184 lb					
DESIG	DESIGN NOTES												

• CAUTION: One or more plies are not supported properly at 1-12. At least 75% of every ply must be contacting support.



City: Customer Ph... Job Name: B

Level: 1st FLOOR
Label: FB4-2 - i39
Type: Beam

2 Ply Member 2.0 RigidLam DF LVL 1-3/4 x 16 Status:

Design
Passed

DESIGN NOTES

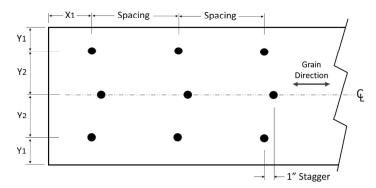
- CAUTION: One or more plies are not supported properly at 1-12. At least 75% of every ply must be contacting support.
- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- Tributary Loads have been generated based on actual spacing between members in the model which may differ from the default system spacing. The actual loads applied to the member are shown in the Specified Loads table.
- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.
- This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct.
- Review all loads and reactions to ensure that the member/bearing/connector/structure can resist adequately. Unless already
 specified on this report, anchorage for uplift reactions to be specified by others. Installation of member and accessories (if
 required) as per manufacturer's instruction.
- Beam Stability Factor used in the calculation for Allowable Max Pos Moment (CL) = 1.00
- Bearing length at support 1 was calculated based on the actual bearing area divided by the supported member width and
 may not match expected value when bearing is not rectangular or when the supported member is not supported by its full
 width.
- One or more plies are not properly supported at 1. Verify with structural engineer or EWP manufacturer if this condition is acceptable.

PLY TO PLY CONNECTION

Zone A: Factored load = 0 plf. Use 12d (0.148"x3.25") nails. LDF = 1.00. Qty = 33. Row = 3, Spacing = 12"
 Zone B: Factored load = 228 plf. Use 12d (0.148"x3.25") nails. LDF = 1.00. Qty = 42. Row = 3, Spacing = 12"
 12d (0.148"x3.25") nails properties: D = 0.148", L = 3.25". Fastener capacity = 117 lbs. X1 = 2.25", Y1 = 0.75", Y2 = 1.5" Install fasteners from one face.

X1 = Minimum end distance, X2 = Minimum edge distance, Y2 = Minimum row spacing.

FASTENER INSTALLATION - 3 ROWS (FROM ONE FACE)





Customer Ph..

Job Name: B

Level: 1st FLOOR
Label: FB5-2 - i40
Type: Beam

2 Ply Member 2.0 RigidLam DF LVL 1-3/4 x 16

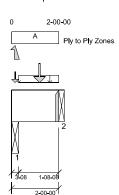
Report Version: 2023.09.18

Status: Design

Design Passed

09/11/2024 15:36

Illustration Not to Scale. Pitch: 0/12 Designed by Single Member Design Engine in MiTek® Structure Version 8.7.3.303.Update13.26



DESIGN INFORMATION a

Building Code: IRC 2021 Design Methodology: ASD

Risk Category: II (General Construction)
Residential

Service Condition: Dry
System Spacing: -

LL Deflection Limit: L/360, 0.75" (absolute)
TL Deflection Limit: L/240, 1.00" (absolute)

Lateral Restraint Requirements:

Both ends of the member and the outer supports must be laterally restrained. Top and bottom edges of the member must be fully restrained or have the following maximum unbraced length:

Top: 0' Bottom: 0'

Bearing Stress of Support Material:

- 750 psi Beam @ 0'- 2 1/2"
- 405 psi Beam @ 2'

ANA	ALYSIS RESU	JLTS						
	Design Criteria	a Location	Load	Combination	LDF	Design	Limit	Result
Max F	Pos. Moment:	1'- 2 1/4"		D+L	1.00	198 lb ft	37216 lb ft	Passed - 1%
SUP	PORT AND	REACTION INFORM	ATION					
ID	Input Bearing Length	Controlling Load Combination	LDF	Downward Reaction	Uplift Reaction	Resistance of Member		Result
1	3-08	D + L	1.00	288 lb		9188 lb	9188 lb	Passed - 3%
1	3-08	0.6D + 0.6W	1.60		-62 lb	-	-	
2	1-08	D + L	1.00	276 l b		3937 lb	-	Passed - 7%
CON	INFCTOR IN	EODMATION						

ID	Part No.	Manufacturer -	Na	iling Requirem	ents	Other Information or Requirement for
IU	Part No.	Manufacturer	Тор	Face	Member	Reinforcement Accessories
2	HU414	Simpson	-	-	-	Connector manually specified by the user.

* Connectors: Refer to manufacturer's specifications, fasteners requirements and installation instruction. Where header fasteners are longer than the width of the supporting member, install backer block or clinch header nails.

LOADII	NG								
Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
Self Weight	0'	2'	Self Weight	Тор	15 lb/ft	-	-	-	-
Uniform	0'- 3 1/2"	2'	E19(i31)	Тор	65 lb/ft	-	-	-	-
Point	1'- 2 1/4"	1'- 2 1/4"	F4(c01)	Back	121 l b	257 lb	-	-	-
Point	0'- 1 3/4"	0'- 1 3/4"	E20(i32)	Тор	46 lb	-	29 lb	44 l b	16/-233 lb
UNFAC	TORED RI	EACTIONS							
ID	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
1	0'	0'- 3 1/2"	GDH1(i29	9)	174 l b	114 lb	32 lb	48 l b	33 lb/ -290 lb
2	2'	2'	FB4-2(i39	9)	133 lb	143 l b	-3 l b	-4 lb	33 lb/ -290 lb

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- Tributary Loads have been generated based on actual spacing between members in the model which may differ from the
 default system spacing. The actual loads applied to the member are shown in the Specified Loads table.
- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.
- This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct.
- Review all loads and reactions to ensure that the member/bearing/connector/structure can resist adequately. Unless already
 specified on this report, anchorage for uplift reactions to be specified by others. Installation of member and accessories (if
 required) as per manufacturer's instruction.
- Beam Stability Factor used in the calculation for Allowable Max Pos Moment (CL) = 1.00

PLY TO PLY CONNECTION

- Zone A: Factored load = 209 plf. Use 12d (0.148"x3.25") nails. LDF = 1.00. Qty = 6. Row = 3, Spacing = 12"
 12d (0.148"x3.25") nails properties: D = 0.148", L = 3.25". Fastener capacity = 117 lbs. X1 = 2.25", Y1 = 0.75", Y2 = 1.5" Install fasteners from one face.
 - X1 = Minimum end distance, X2 = Minimum edge distance, Y2 = Minimum row spacing.



Customer Ph...

Job Name: **B**

Level: 1st FLOOR FB5-2 - i40 Label: Type: Beam

2 Ply Member

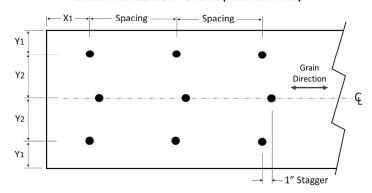
x 16

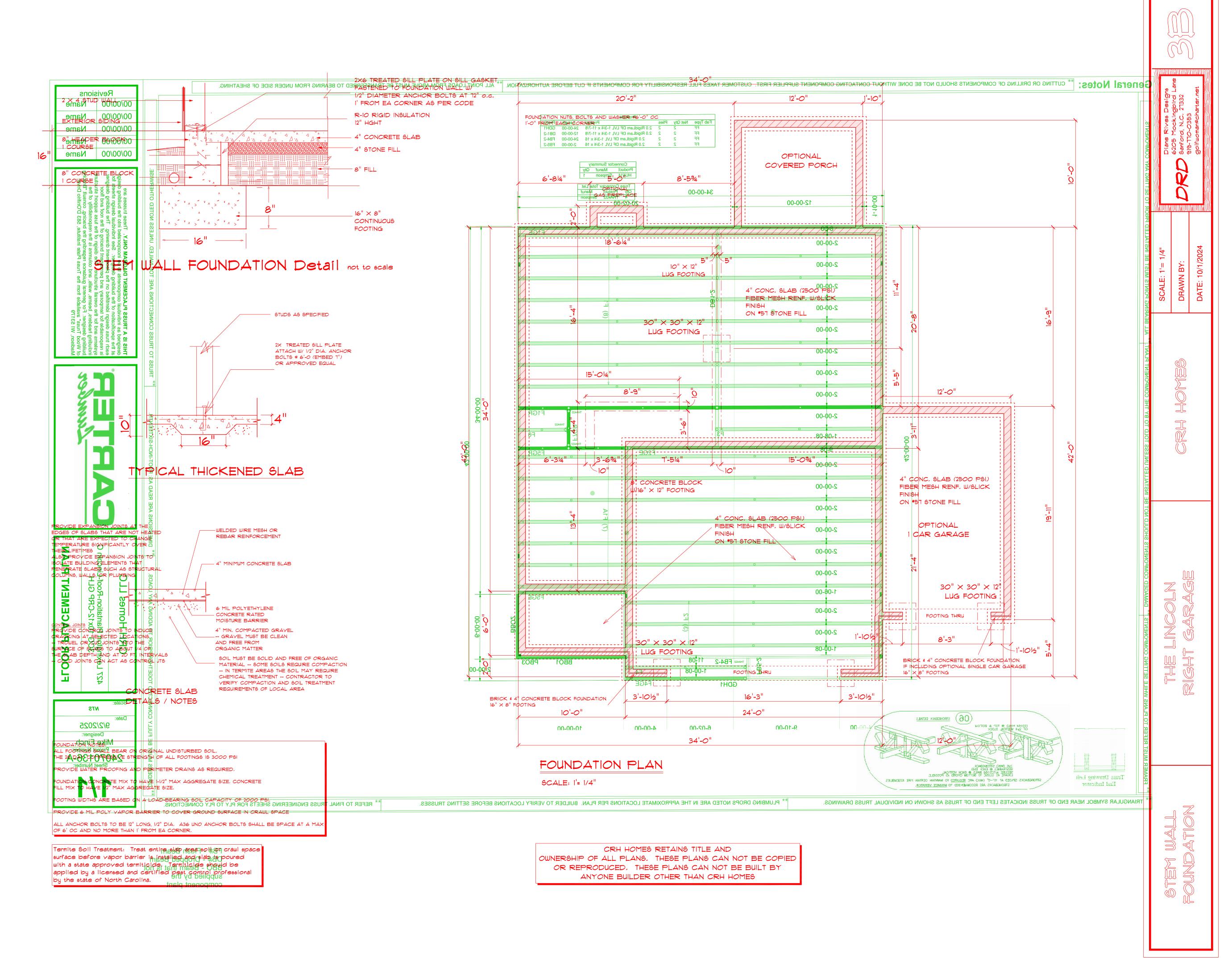
2.0 RigidLam DF LVL 1-3/4 Design Passed

Status:

PLY TO PLY CONNECTION

FASTENER INSTALLATION – 3 ROWS (FROM ONE FACE)





(02)
TOP CHORD BEARING
TOP CHORD BEARING
TOP CHORD BEARING
TOP CHORD BEARING