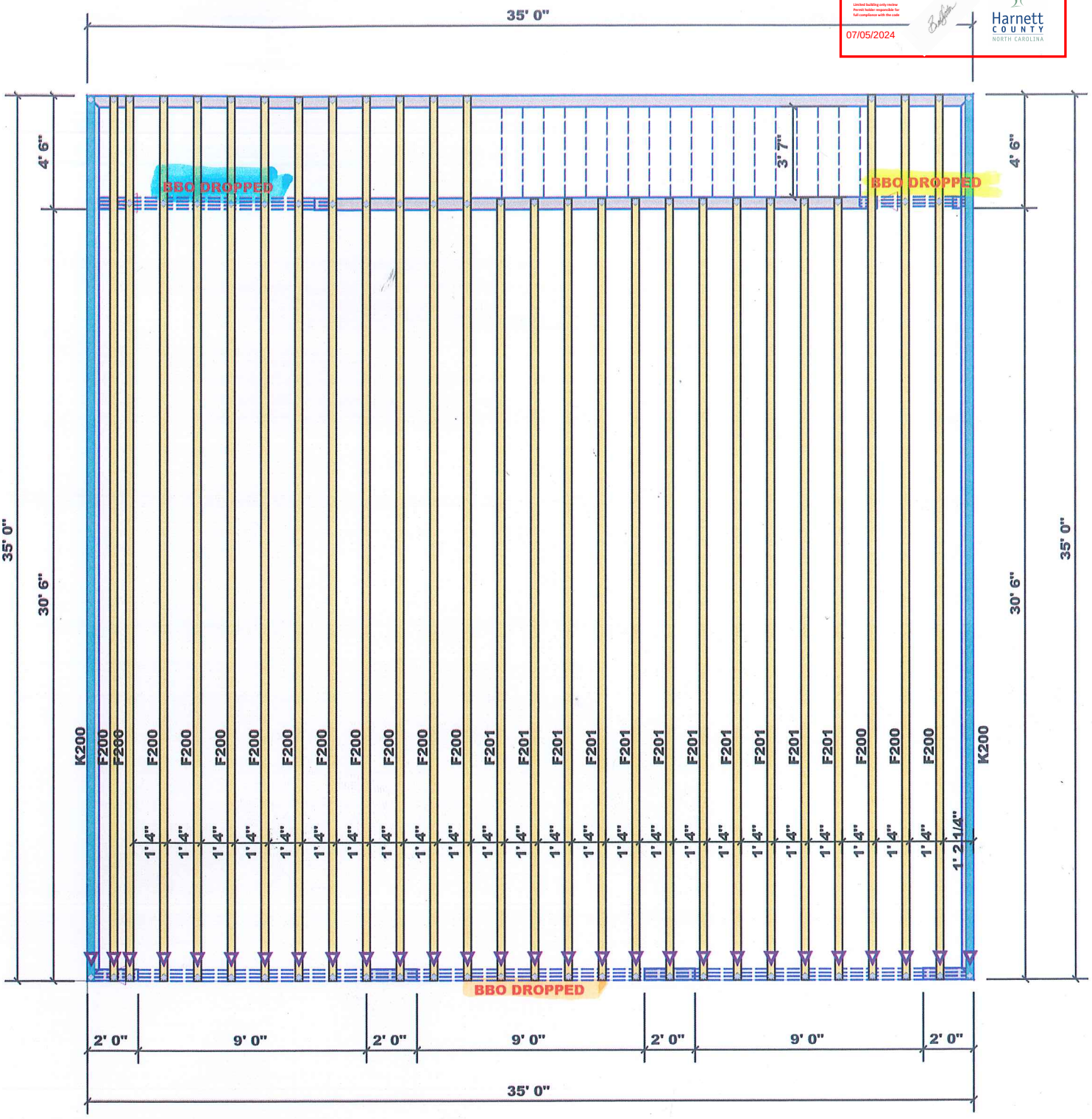


NO ROOF LOADS ON FLOOR TRUSSES

GENERAL NOTES
1. BBO BEAMS PROVIDED BY OTHER

Truss Placement Plan
SCALE: NTS

= Indicates Left End of Truss
(Reference Engineered Truss Drawing)
Do NOT Erect Truss Backwards

LOAD CHART FOR JACK STUDS

1700	1	2550	1	3400	1		
3400	2	5100	2	6800	2		
5100	3	7650	3	10200	3		
6800	4	10200	4	13600	4		
8500	5	12750	5	17000	5		
10200	6	15300	6				
11900	7						
13600	8						

BUILDER	PBS/R&D INVESTMENTS	CITY / CO.	DUNN / Johnston
JOB NAME	STRICKLAND GARAGE	ADDRESS	38 WILLOWCROFT COURT
PLAN	35X35	MODEL	FLOOR
SEAL DATE	Seal Date	DATE REV.	04/30/24
QUOTE #	B0424-2524	DRAWN BY	Michael Turner
JOB #	J0424-2524	SALES REP.	Paul Hawkins

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.
These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI B1 and BCSI B3 provided with the truss delivery package or online @ tpiindustry.com

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature Michael Turner
Michael Turner

COMTECH
ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park
Fayetteville, N.C. 28309
Phone: (910) 864-8787
Fax: (910) 864-4444

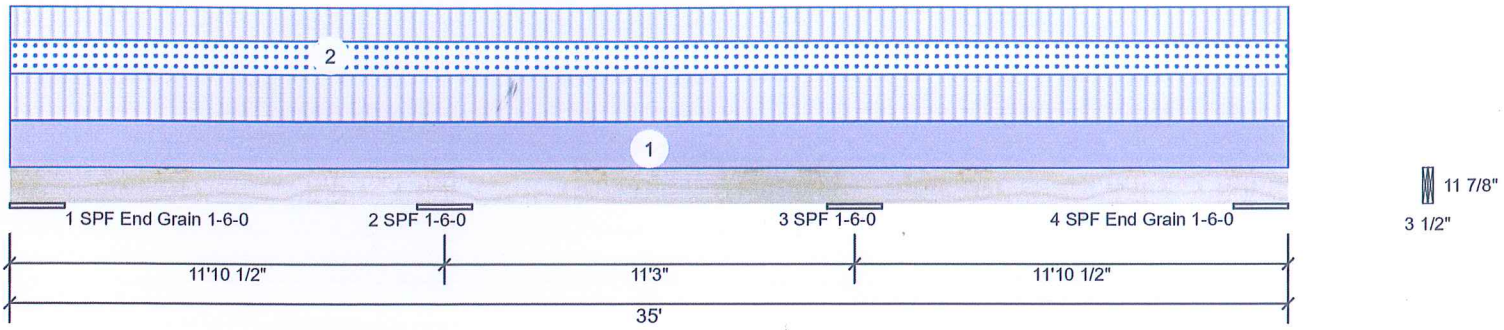
isDesign

Client:
Project:
Address:

Date: 6/26/2024
Input by: Joe Ciferni
Job Name:
Project #:

BBO-3 onCENTER 2.1E LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IRC 2018
Deflection LL:	480	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		
General Load			
Floor Live:	40 PSF		
Dead:	12 PSF		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	4774	2843	1999	0	0
2	Vertical	10276	6118	4301	0	0
3	Vertical	10276	6118	4301	0	0
4	Vertical	4774	2843	1999	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	18.000"	Vert	18%	2833 / 5550	8383	L_L	D+0.75(L+S)
2 - SPF	18.000"	Vert	67%	6128 / 11699	17827	LL_	D+0.75(L+S)
3 - SPF	18.000"	Vert	67%	6128 / 11699	17827	_LL	D+0.75(L+S)
4 - SPF End Grain	18.000"	Vert	18%	2833 / 5550	8383	L_L	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-17648 ft-lb	11'10 1/2"	21278 ft-lb	83%	D+L	LL_
Unbraced	-17648 ft-lb	11'10 1/2"	17675 ft-lb	100%	D+L	LL_
Pos Moment	13813 ft-lb	5'11 1/16"	21278 ft-lb	65%	D+L	L_L
Unbraced	13813 ft-lb	5'11 1/16"	13835 ft-lb	100%	D+L	L_L
Shear	6465 lb	10'1 5/8"	7897 lb	82%	D+L	LL_
LL Defl inch	0.208 (L/602)	28'6 3/4"	0.261 (L/480)	80%	0.75(L+S)	L_L
TL Defl inch	0.293 (L/428)	6'4 3/16"	0.522 (L/240)	56%	D+0.75(L+S)	L_L

Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2 Girders are designed to be supported on the bottom edge only.
3 Multiple plies must be fastened together as per manufacturer's details.
4 Top loads must be supported equally by all plies.
5 Top must be laterally braced at a maximum of 6'2 15/16" o.c.
6 Bottom must be laterally braced at a maximum of 4'3 1/2" o.c.
7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	500 PLF	500 PLF	0 PLF	0 PLF	0 PLF	Floor Truss Above
2	Uniform			Top	0 PLF	360 PLF	360 PLF	0 PLF	0 PLF	Roof Truss Above
	Self Weight				12 PLF					

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 2/14/2027

Manufacturer Info

BlueLinx
1950 Spectrum Circle, Suite 300
Marietta, GA 30067
877-914-7770
www.buildoncenter.com
ICC-ES: ESR-2909, ESR-2913, ESR-1210

Professional Builders Supply
3941 US Hwy. 421 North, NC 28401
910-386-4300

Professional BUILDERS SUPPLY
It's about the service!!

CSD DRAW DESIGN BUILD

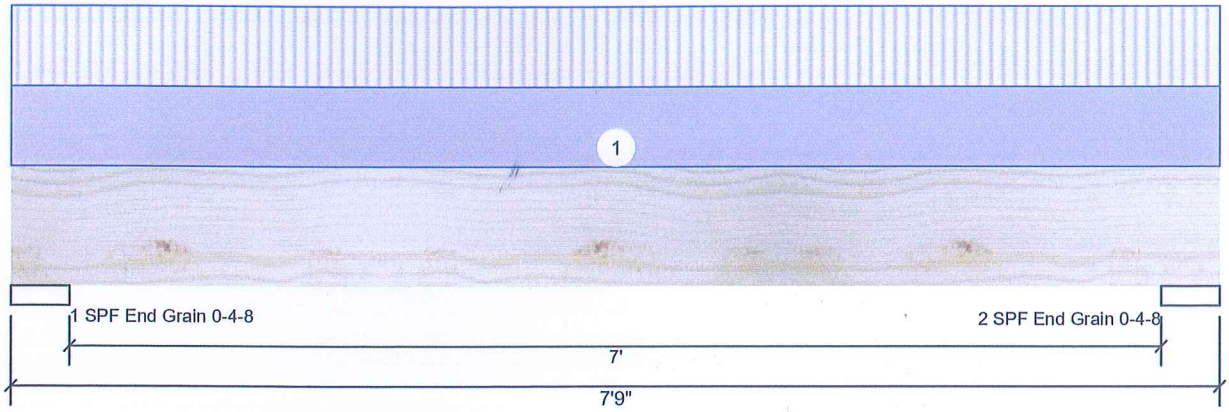
iStruct Design

Client:
Project:
Address:

Date: 6/26/2024
Input by: Joe Ciferni
Job Name:
Project #:

BBO-2 onCENTER 2.1E LVL 1.750" X 9.250" 3-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	3	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IRC 2018
Deflection LL:	480	Load Sharing:	Yes
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		
General Load			
Floor Live:	40 PSF		
Dead:	12 PSF		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	4534	4588	0	0	0
2	Vertical	4534	4588	0	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	4.500"	Vert	51%	4588 / 4534	9122	L	D+L
2 - SPF End Grain	4.500"	Vert	51%	4588 / 4534	9122	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	14938 ft-lb	3'10 1/2"	20780 ft-lb	72%	D+L	L
Unbraced	14938 ft-lb	3'10 1/2"	14949 ft-lb	100%	D+L	L
Shear	6425 lb	6'7 1/4"	9227 lb	70%	D+L	L
LL Defl inch	0.110 (L/777)	3'10 9/16"	0.178 (L/480)	62%	L	L
TL Defl inch	0.221 (L/386)	3'10 9/16"	0.356 (L/240)	62%	D+L	L

Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings.
2 Girders are designed to be supported on the bottom edge only.
3 Multiple plies must be fastened together as per manufacturer's details.
4 Top loads must be supported equally by all plies.
5 Top must be laterally braced at a maximum of 6'10 3/16" o.c.
6 Bottom must be laterally braced at end bearings.
7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	1170 PLF	1170 PLF	0 PLF	0 PLF	0 PLF	Floor Truss Above
	Self Weight				14 PLF					

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 2/14/2027

Manufacturer Info

BlueLinx
1950 Spectrum Circle, Suite 300
Marietta, GA 30067
877-914-7770
www.buildoncenter.com
ICC-ES: ESR-2909, ESR-2913, ESR-1210

Professional Builders Supply
3941 US Hwy. 421 North, NC 28401
910-386-4300

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CSD DRAW DESIGN BUILD

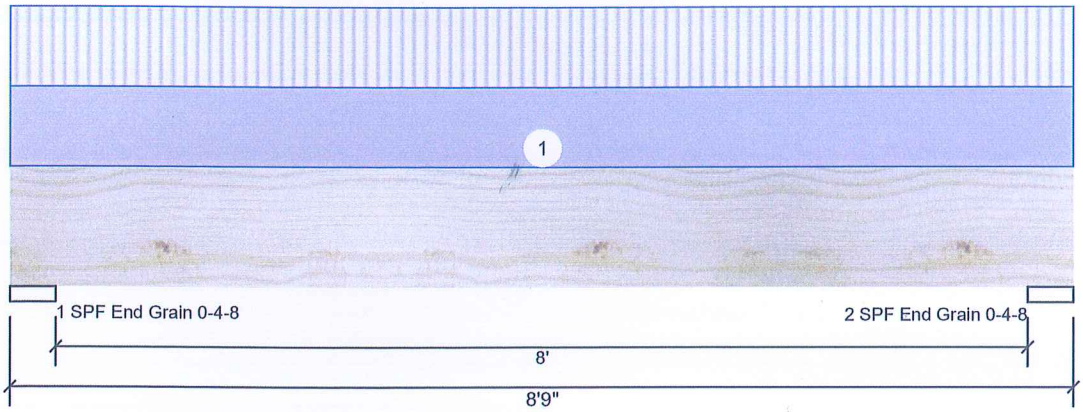
isDesign

Client:
Project:
Address:

Date: 6/26/2024
Input by: Joe Ciferni
Job Name:
Project #:

BBO-1 onCENTER 2.1E LVL 1.750" X 11.875" 3-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	3	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IRC 2018
Deflection LL:	480	Load Sharing:	Yes
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		
General Load			
Floor Live:	40 PSF		
Dead:	12 PSF		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	5119	5198	0	0	0
2	Vertical	5119	5198	0	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	4.500"	Vert	58%	5198 / 5119	10317	L	D+L
2 - SPF End Grain	4.500"	Vert	58%	5198 / 5119	10317	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	19459 ft-lb	4'4 1/2"	33194 ft-lb	59%	D+L	L
Unbraced	19459 ft-lb	4'4 1/2"	19468 ft-lb	100%	D+L	L
Shear	7099 lb	1'4 3/8"	11845 lb	60%	D+L	L
LL Defl inch	0.092 (L/1065)	4'4 9/16"	0.203 (L/480)	45%	L	L
TL Defl inch	0.185 (L/528)	4'4 9/16"	0.406 (L/240)	45%	D+L	L

Design Notes

1 Provide support to prevent lateral movement and rotation at the end bearings.
2 Girders are designed to be supported on the bottom edge only.
3 Multiple plies must be fastened together as per manufacturer's details.
4 Top loads must be supported equally by all plies.
5 Top must be laterally braced at a maximum of 6'9 1/2" o.c.
6 Bottom must be laterally braced at end bearings.
7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	1170 PLF	1170 PLF	0 PLF	0 PLF	0 PLF	Floor Truss Above
	Self Weight				18 PLF					

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
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Marietta, GA 30067
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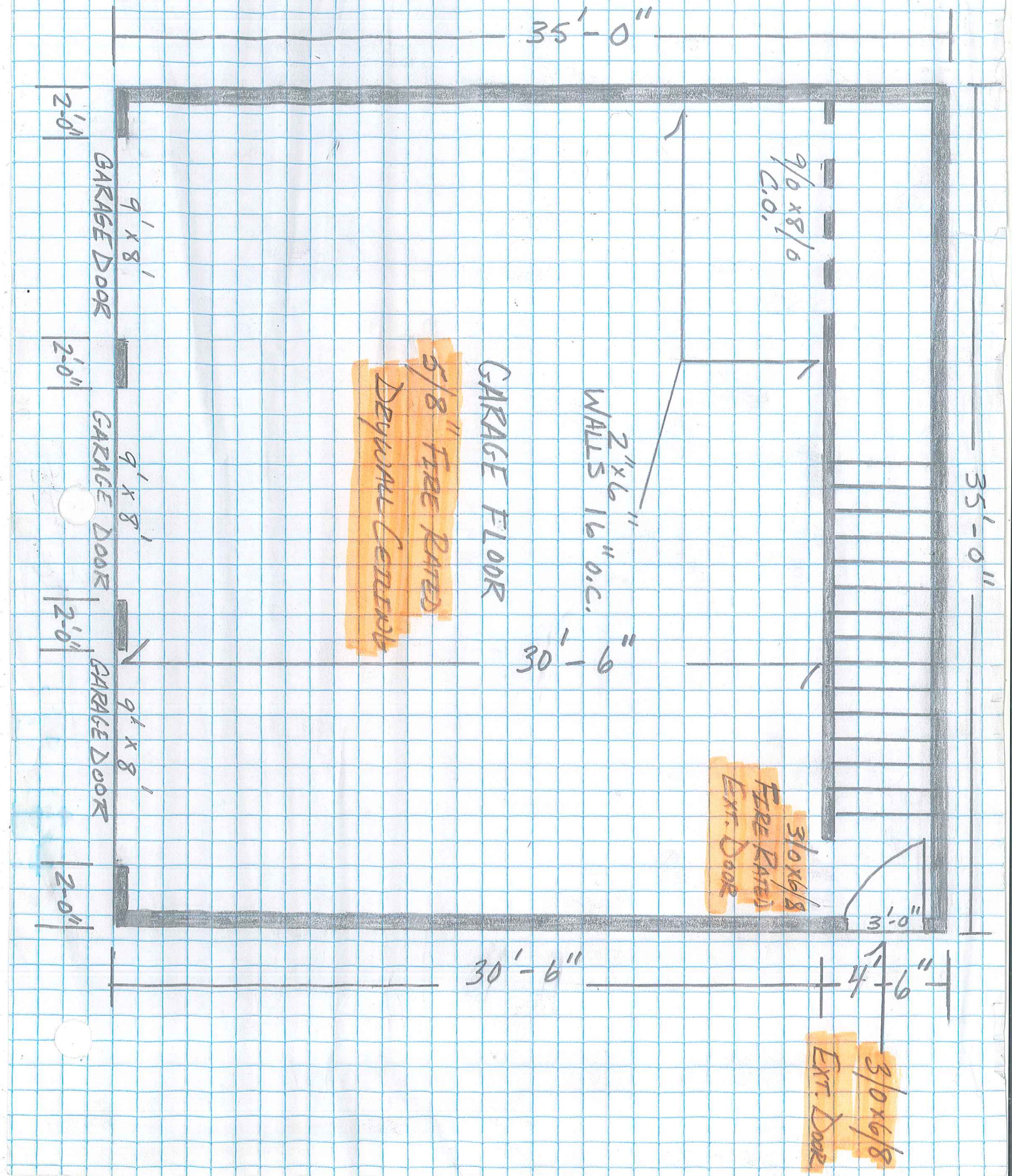
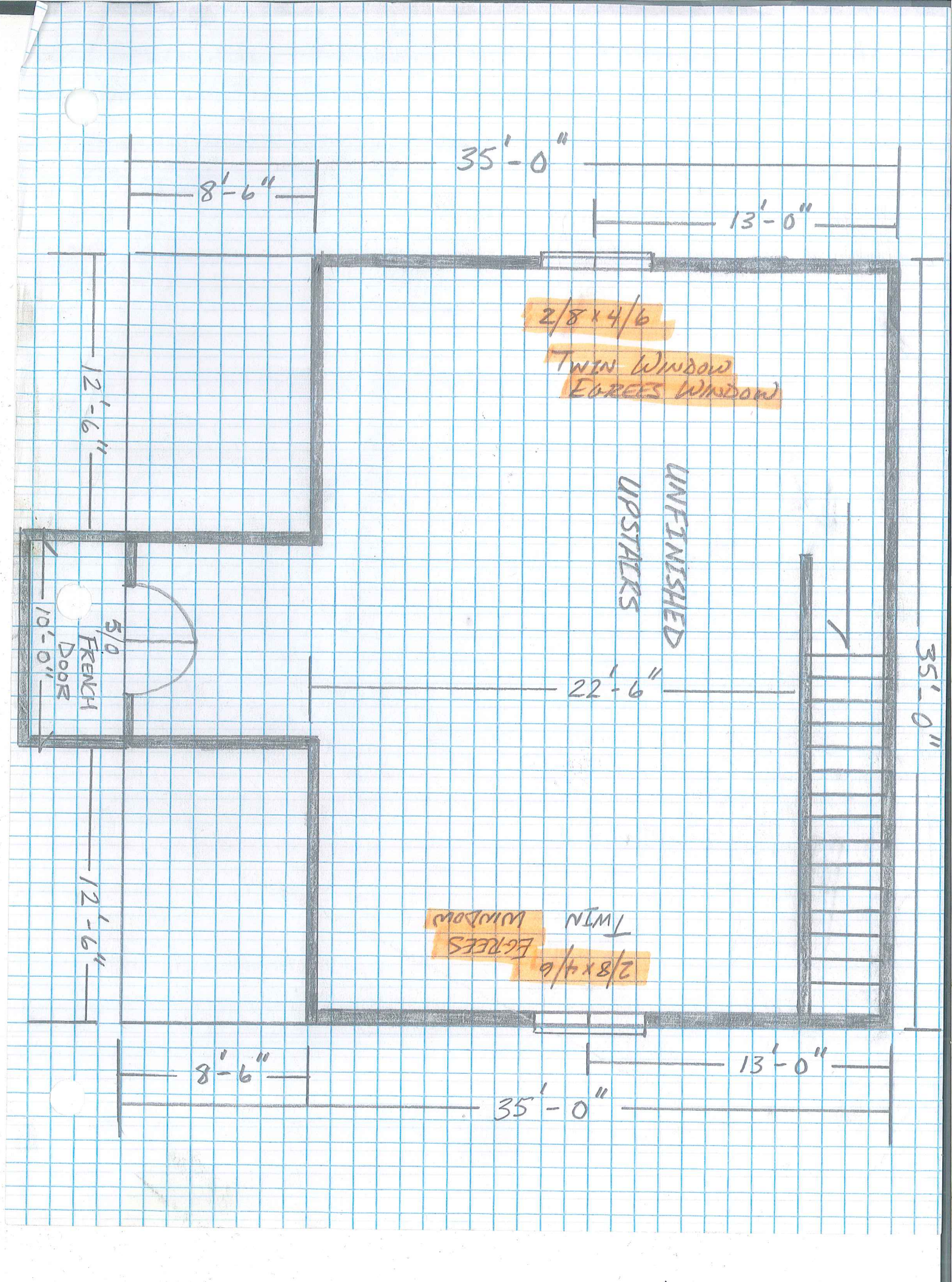
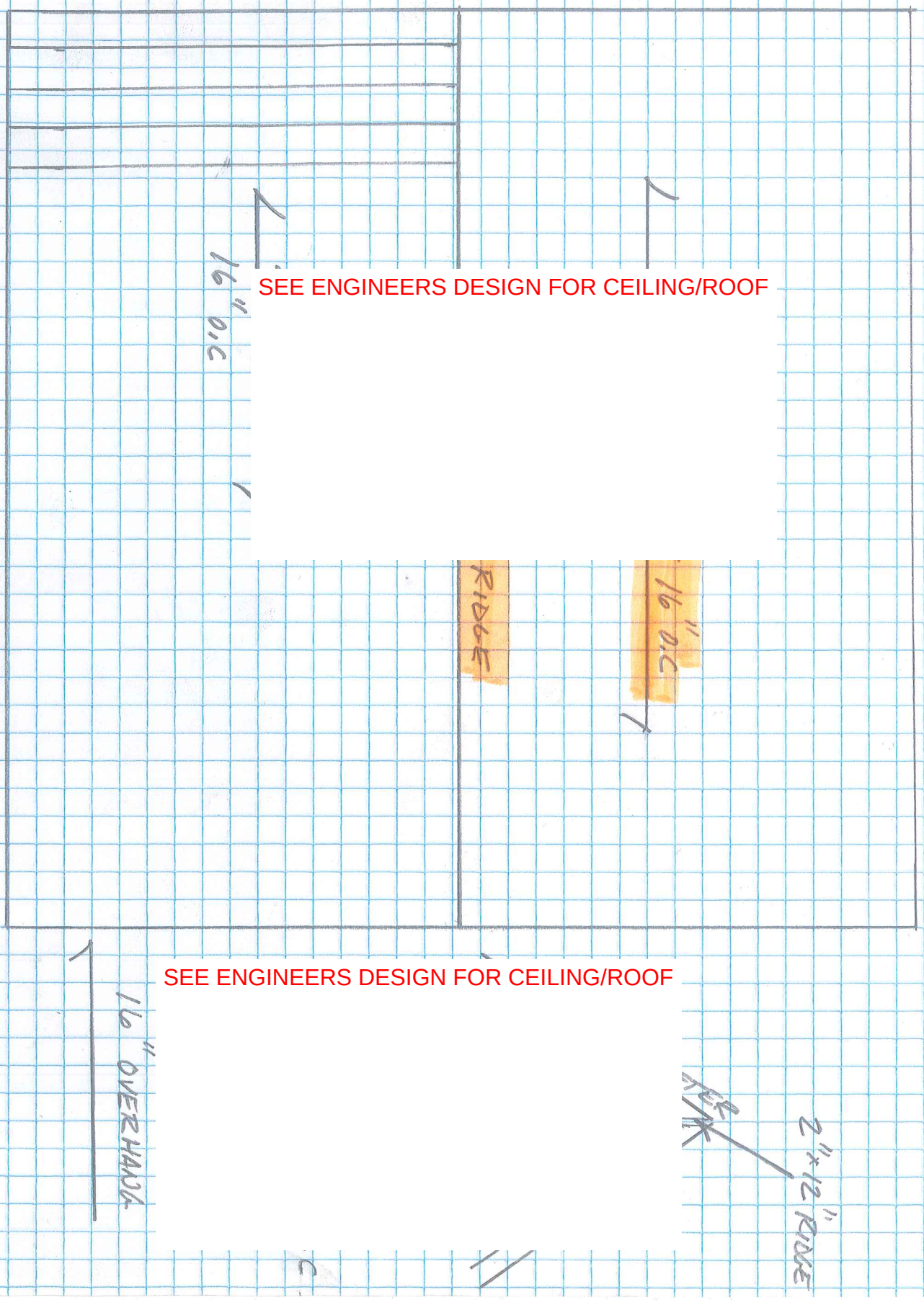
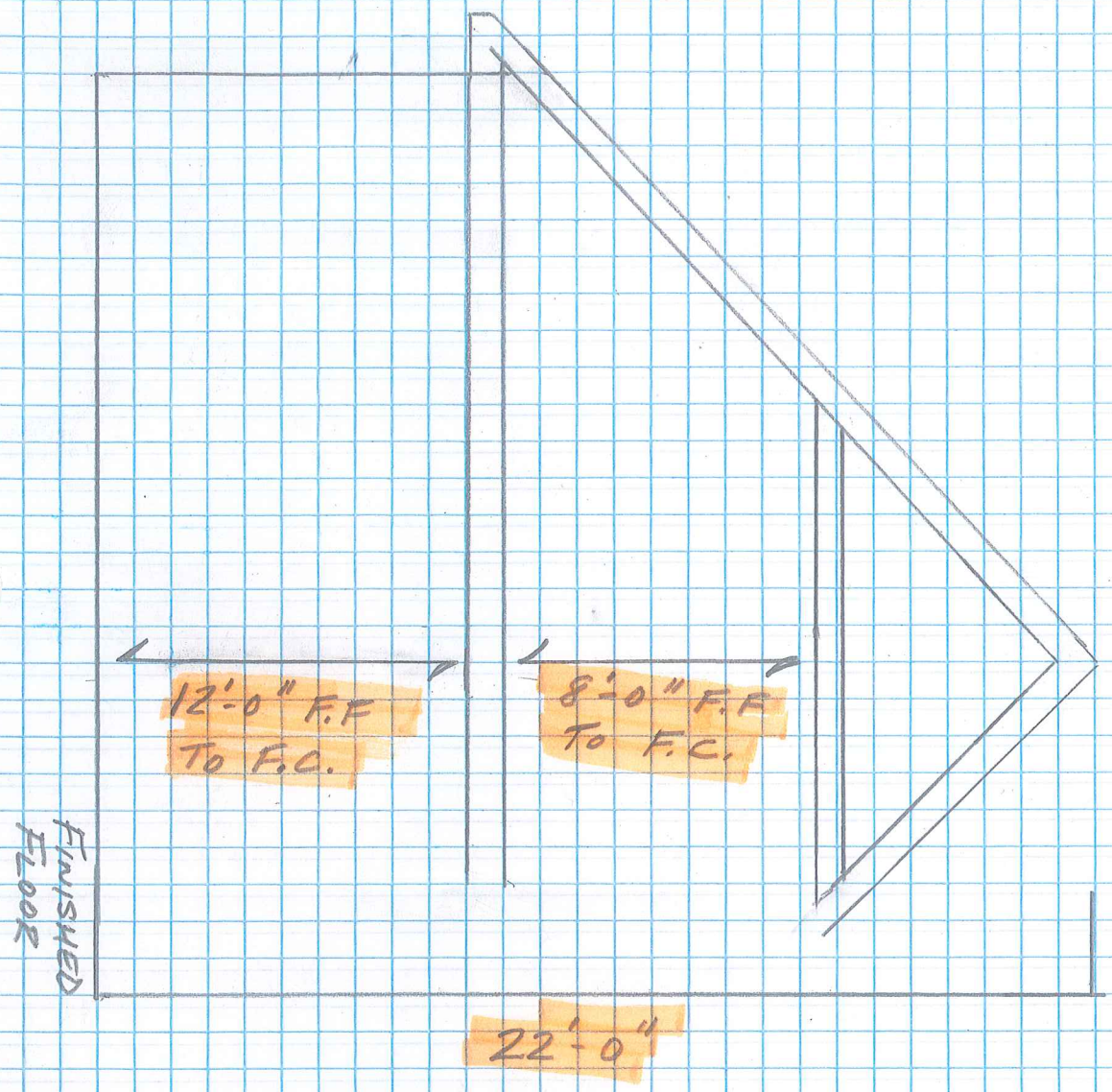
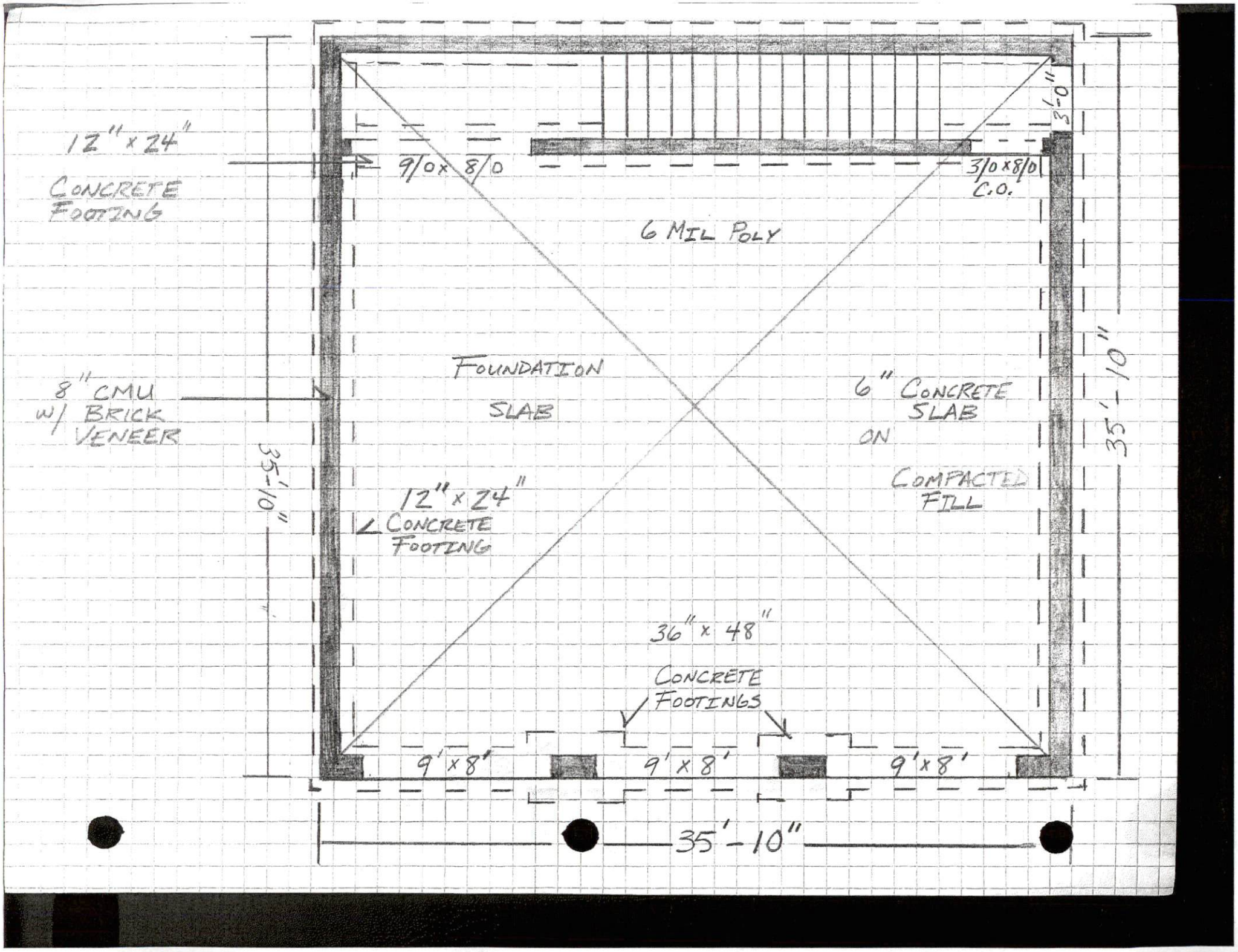
CSD DRAW DESIGN BUILD

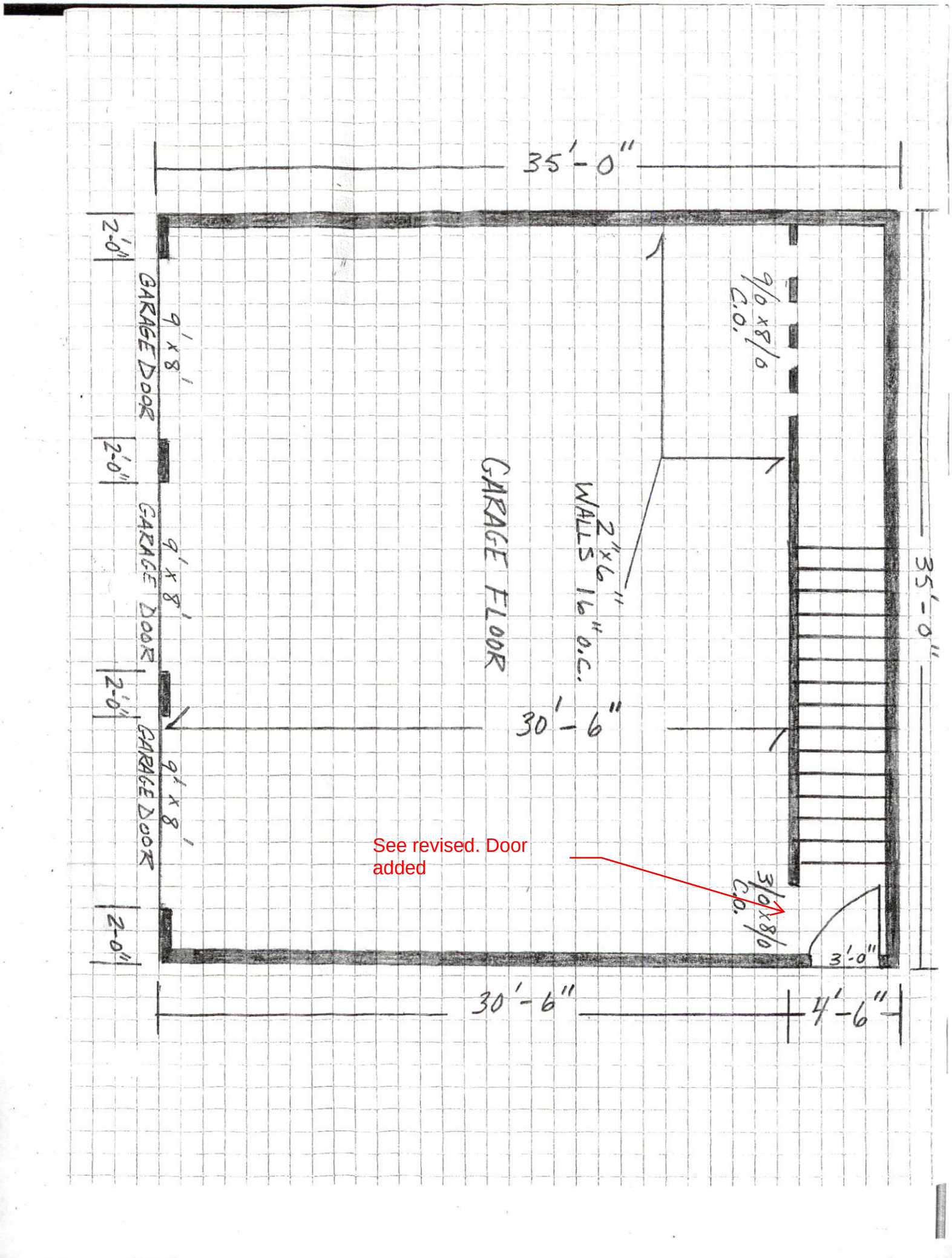

35'-0"
35'-0"
2'-0"
GARAGE DOOR
9' x 8'
2'-0"
GARAGE DOOR
9' x 8'
2'-0"
GARAGE DOOR
9' x 8'
2'-0"
GARAGE DOOR
9' x 8'
2'-0"
9'0 x 8'0 C.O.
2"x6" WALLS 16" O.C.
GARAGE FLOOR
5/8" FIRE RATED DRYWALL CEILING
30'-6"
3'0 x 6'8 FIRE RATED EXT. DOOR
3'-0"
30'-6"
4'-6"
3'0 x 6'8 EXT. DOOR

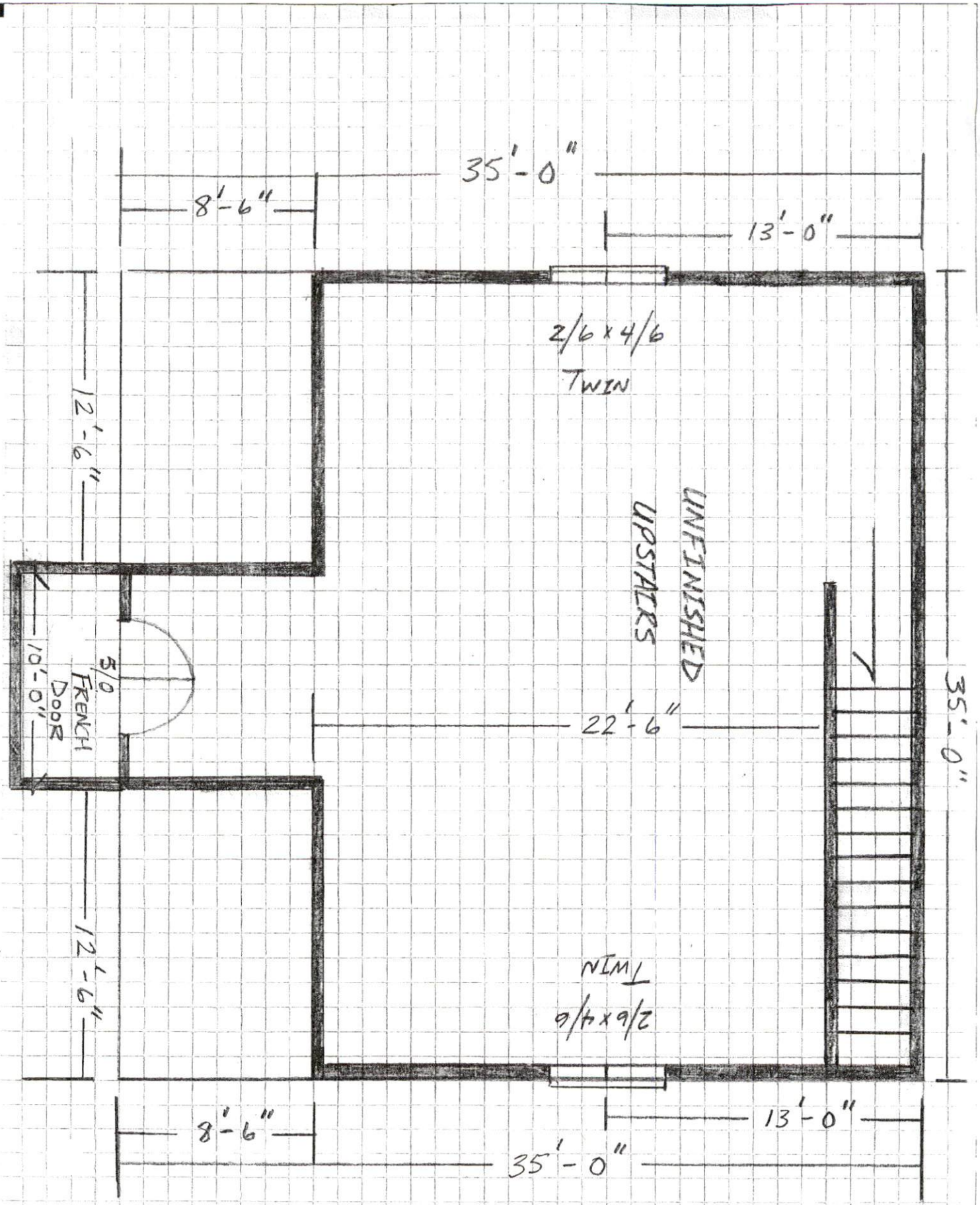

35'-0"
8'-6"
13'-0"
2/8 x 4/6
TWIN WINDOW
EGRESS WINDOW
12'-6"
UNFINISHED
UPSTAIRS
5'0
FRENCH
DOOR
10'-0"
22'-6"
35'-0"
12'-6"
TWIN
2/8 x 4/6
EGRESS
WINDOW
8'-6"
13'-0"
35'-0"

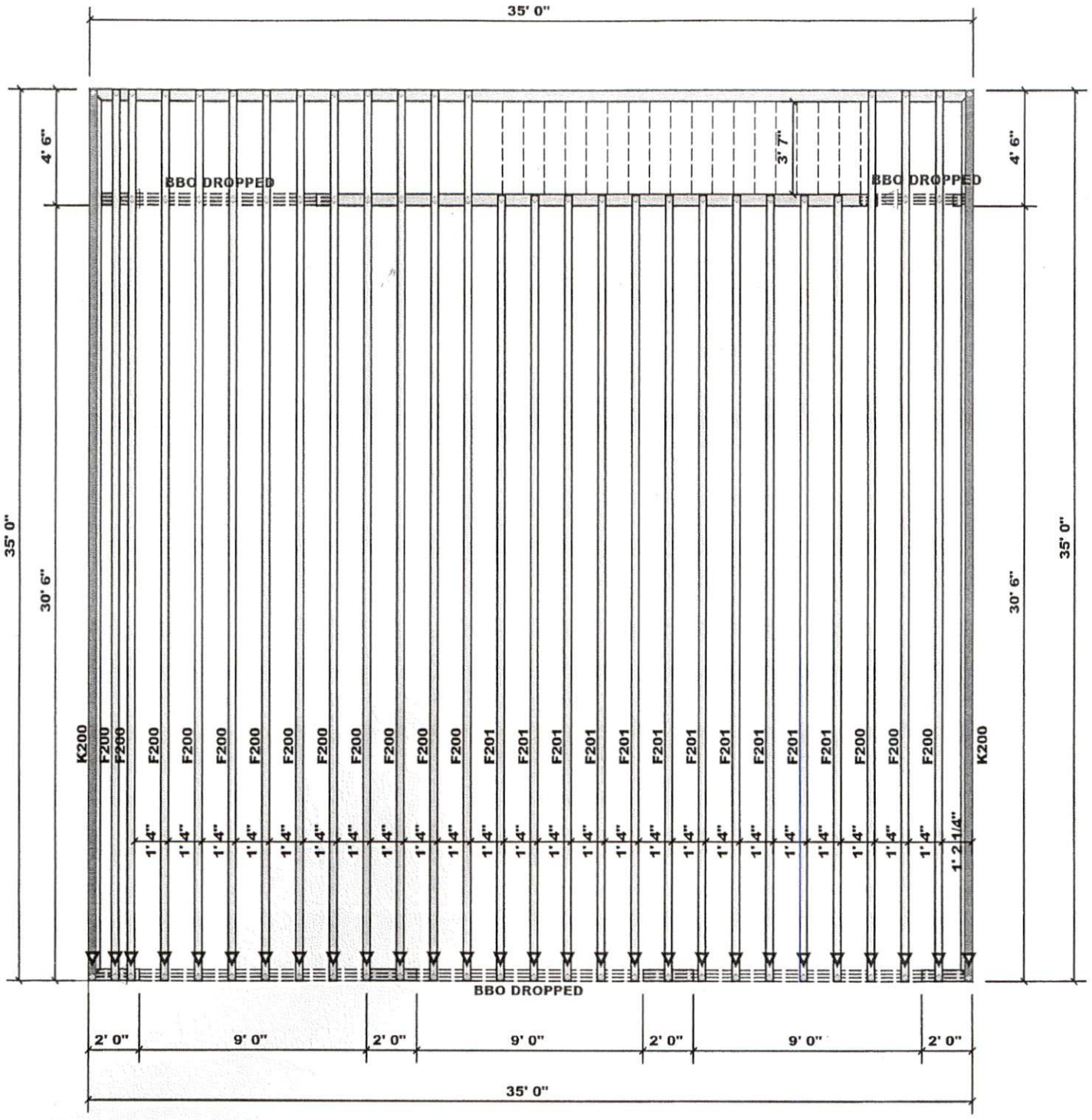

16" O.C
SEE ENGINEERS DESIGN FOR CEILING/ROOF
RIDGE
16" O.C
SEE ENGINEERS DESIGN FOR CEILING/ROOF
16" OVERHANG
2"x12" RIDGE


12'-0" F.F
To F.C.
8'-0" F.F
To F.C.
FINISHED
FLOOR
22'-0"


12" x 24"
CONCRETE FOOTING
9/0 x 8/0
3/0 x 8/0 C.O.
3'-0"
6 MIL POLY
8" CMU w/ BRICK VENEER
FOUNDATION SLAB
6" CONCRETE SLAB ON COMPACTED FILL
35'-10"
12" x 24" CONCRETE FOOTING
36" x 48" CONCRETE FOOTINGS
9' x 8'
9' x 8'
9' x 8'
35'-10"


35'-0"
35'-0"
30'-6"
4'-6"
GARAGE FLOOR
2"x6" WALLS 16" O.C.
9'x8' GARAGE DOOR
9'x8' GARAGE DOOR
9'x8' GARAGE DOOR
2'-0"
2'-0"
2'-0"
2'-0"
9'0 x8'0 C.O.
3'0 x8'0 C.O.
3'-0"
See revised. Door added


35'-0"
8'-6"
13'-0"
2/6 x 4/6
TWIN
12'-6"
UNFINISHED
UPSTAIRS
5/0
FRENCH
DOOR
10'-0"
22'-6"
35'-0"
12'-6"
2/6x4/6
TWIN
8'-6"
13'-0"
35'-0"



NO ROOF LOADS ON FLOOR TRUSSES

GENERAL NOTES
1. BBO BEAMS PROVIDED BY OTHER

Truss Placement Plan
SCALE: NTS

▲- Indicates Left End of Truss
(Reference Engineered Truss Drawing)
Do NOT Erect Truss Backwards

LOAD CHART FOR 2ACE STUDS

BUILDER	PBS/R&D INVESTMENTS	CITY / CO.	DUNN / Johnston	THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult DSB1 and BCSI B3 provided with the trusses delivery package or online @ sbcindustry.com	COMTECH ROOF & FLOOR TRUSSES & BEAMS
JOB NAME	STRICKLAND GARAGE	ADDRESS	38 WILLOWCROFT COURT		
PLAN	35X35	MODEL	FLOOR	Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached tables (derived from the prescriptive Code requirements) to determine the minimum knee/sidewall size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for all reactions that exceed 15000# specified in the attached tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#	Reilly Road Industrial Park Fayetteville, N.C. 28309 Phone: (910) 864-8787 Fax: (910) 864-4444
SEAL DATE	Seal Date	DATE REV.	04/30/24		
QUOTE #	B0424-2524	DRAWN BY	Michael Turner		
JOB #	J0424-2524	SALES REP.	Paul Hawkins	Signature: Michael Turner Michael Turner	

Job	Truss	Truss Type	Qty	Ply	STRICKLAND GARAGE
B0424-2524	F200	FLOOR	15	1	Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 Run: 8.430 s May 12 2021 Print: 8.430 s May 12 2021 MiTek Industries, Inc. Tue Apr 30 16:23:37 2024 Page 1
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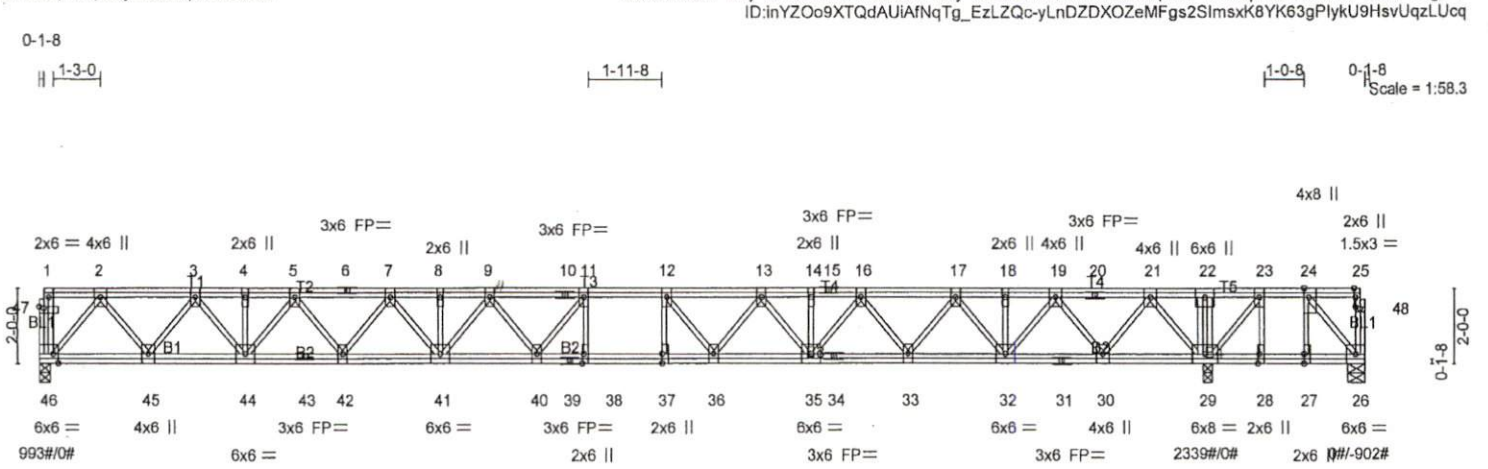


Plate Offsets (X,Y)-- [24:0-3-0,Edge], [25:0-3-0,Edge], [27:0-3-0,0-0-0], [28:0-3-0,Edge], [37:0-3-0,0-0-0], [38:0-3-0,Edge], [46:0-1-8,Edge], [47:0-1-8,0-0-7], [48:0-1-8,0-0-8]

LOADING (psf)		SPACING-	1-4-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.60	Vert(LL)	-0.25	38	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.49	Vert(CT)	-0.34	38	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.05	29	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 313 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 46=0-3-8 (min. 0-1-8), 26=0-5-8 (min. 0-1-8), 29=0-3-0 (min. 0-1-8)
Max Uplift26=-902(LC 3)
Max Grav46=993(LC 10), 29=2339(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 26-48=-252/0, 25-48=-252/0, 2-3=-1363/0, 3-4=-2405/0, 4-5=-2405/0, 5-6=-3150/0, 6-7=-3150/0, 7-8=-3640/0, 8-9=-3640/0, 9-10=-3835/0, 10-11=-3835/0, 11-12=-3796/0, 12-13=-3512/0, 13-14=-2955/0, 14-15=-2955/0, 15-16=-2955/0, 16-17=-2095/0, 17-18=-990/0, 18-19=-990/0, 19-20=0/442, 20-21=0/442, 21-22=0/2189, 22-23=0/2189, 23-24=0/1034
BOT CHORD 45-46=0/786, 44-45=0/1926, 43-44=0/2841, 42-43=0/2841, 41-42=0/3445, 40-41=0/3812, 39-40=0/3796, 38-39=0/3796, 37-38=0/3796, 36-37=0/3796, 35-36=0/3280, 34-35=0/2568, 33-34=0/2568, 32-33=0/1611, 31-32=-3/378, 30-31=-3/378, 29-30=-1195/0, 28-29=-1034/0, 27-28=-1034/0, 26-27=-1022/0
WEBS 2-46=-1236/0, 2-45=0/993, 3-45=-970/0, 3-44=0/798, 5-44=-727/0, 5-42=0/531, 7-42=-508/0, 7-41=0/325, 21-29=-1573/0, 21-30=0/1296, 19-30=-1274/0, 19-32=0/1109, 17-32=-1037/0, 17-33=0/835, 16-33=-816/0, 16-35=0/646, 13-35=-544/0, 13-36=0/506, 12-36=-680/0, 9-41=-287/0, 9-40=-145/262, 11-40=-313/349, 11-38=-275/111, 12-37=-92/293, 24-26=0/1601, 23-29=-1843/0, 23-28=0/629, 24-27=-548/0

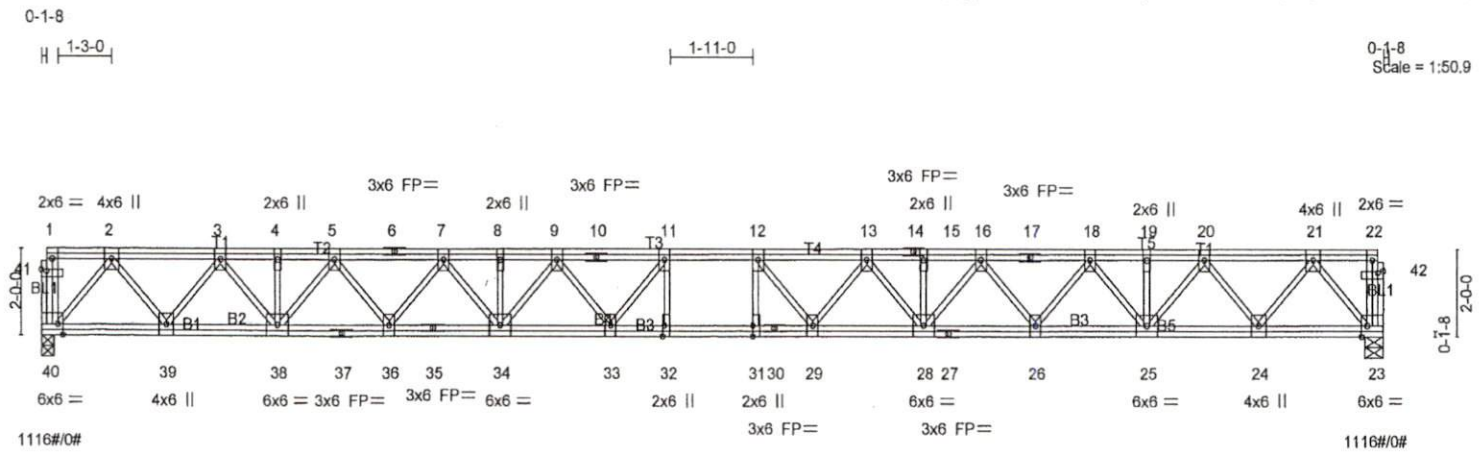
NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x6 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 902 lb uplift at joint 26.
5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	STRICKLAND GARAGE
B0424-2524	F201	FLOOR	11	1	Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309

Run: 8.430 s May 12 2021 Print: 8.430 s May 12 2021 MiTek Industries, Inc. Tue Apr 30 16:23:38 2024 Page 1
ID:inYZOo9XTQdAUiAfNqTg_EzLZQc-QXLbnZY0KyU6I0dfsTNAtM5cqS0q1SOdNxbT0GzLUcp



30-11-0
30-11-0

Plate Offsets (X,Y)-- [23:0-1-8,Edge], [31:0-3-0,0-0-0], [32:0-3-0,Edge], [40:0-1-8,Edge], [41:0-1-8,0-0-7], [42:0-1-8,0-0-7]

LOADING (psf)	SPACING-	1-4-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC	0.15	Vert(LL)	-0.31	31-32	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC	0.47	Vert(CT)	-0.43	31-32	>860	360		
BCLL 0.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.07	23	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 274 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 23=0-5-0 (min. 0-1-8), 40=0-3-8 (min. 0-1-8)
Max Grav 23=1116(LC 1), 40=1116(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1550/0, 3-4=-2770/0, 4-5=-2770/0, 5-6=-3693/0, 6-7=-3693/0, 7-8=-4366/0, 8-9=-4366/0, 9-10=-4739/0, 10-11=-4739/0, 11-12=-4860/0, 12-13=-4739/0, 13-14=-4366/0, 14-15=-4366/0, 15-16=-4366/0, 16-17=-3693/0, 17-18=-3693/0, 18-19=-2770/0, 19-20=-2770/0, 20-21=-1550/0
BOT CHORD 39-40=0/886, 38-39=0/2200, 37-38=0/3298, 36-37=0/3298, 35-36=0/4076, 34-35=0/4076, 33-34=0/4613, 32-33=0/4860, 31-32=0/4860, 30-31=0/4860, 29-30=0/4860, 28-29=0/4613, 27-28=0/4076, 26-27=0/4076, 25-26=0/3298, 24-25=0/2200, 23-24=0/886
WEBS 21-23=-1394/0, 21-24=0/1143, 20-24=-1119/0, 20-25=0/950, 18-25=-879/0, 18-26=0/680, 16-26=-659/0, 16-28=0/483, 2-40=-1394/0, 2-39=0/1143, 3-39=-1119/0, 3-38=0/950, 5-38=-879/0, 5-36=0/680, 7-36=-659/0, 7-34=0/483, 9-34=-413/0, 9-33=-39/396, 11-33=-513/187, 13-28=-413/0, 13-29=-39/396, 12-29=-513/187

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x6 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	STRICKLAND GARAGE
B0424-2524	K200	Floor Supported Gable	2	1	Job Reference (optional)

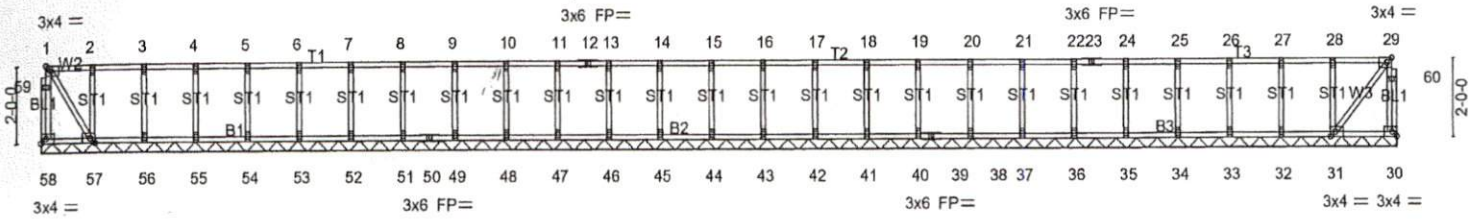
Comtech, Inc., Fayetteville, NC 28309

Run: 8.430 s May 12 2021 Print: 8.430 s May 12 2021 MiTek Industries, Inc. Tue Apr 30 16:23:39 2024 Page 1
ID:inYZOo9XTQdAUlAfNqTg_EzLZQc-ukvz_vZe5FczwACrQBuPQZeoksTjm1XncbL0ZlzLUco

0-1-8

0-1-8

Scale = 1:57.0



35-0-0
35-0-0

Plate Offsets (X,Y)– [29:0-1-8,Edge], [31:0-1-8,Edge], [57:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.00	31	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 185 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
10-0-0 oc bracing: 57-58,30-31.

REACTIONS. All bearings 35-0-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 58, 30, 57, 56, 55, 54, 53, 52, 51, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 38, 37, 36, 35, 34, 33, 32, 31

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 1-4-0 oc.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

TYNDALL
ENGINEERING & DESIGN, P.A.

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250 Shipwash Drive, Suite 104 ▪ Garner ▪ North Carolina ▪ 27529
www.tyndallengineering.com

July 2, 2024
Revised: 7/3/2024

Jeremy Strickland
Po Box 429
Dunn, NC 28334
Email: jmstrickland83@yahoo.com

Reference: Engineering Services
38 Willowcroft Court
Dunn, NC 28334
TE&D Project No.: 2401-020581-R

To Whom It May Concern;

As requested by the client, a representative of Tyndall Engineering & Design, PA (TE&D) provided analyses for the following items:

1. Assessment of proposed roof framing for proposed detached garage.

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The following conclusions and recommendations were noted:

1. We understand the garage roof is to be framed with 2 x 8 at 16" o.c. rafters spanning front to back. Rafters will bear on the existing exterior walls and a 2 x 12 ridge above with 2 x 8 collar ties/ceiling joists at 32" o.c.

   Based on our analyses, the proposed roof framing will be inadequate to support the anticipated loading conditions. We recommend the roof framing be modified per page 2 of this report.

Upon completion, the above-mentioned modifications will provide the required support for the anticipated loading conditions. We appreciate being able to assist you during this phase of the project. If you need further assistance or require additional information, please do not hesitate to contact us.

Sincerely,
Tyndall Engineering & Design

Tripp Amos
PT III | 2401-020581-R

Prentice Tyndall Jr., P.E.

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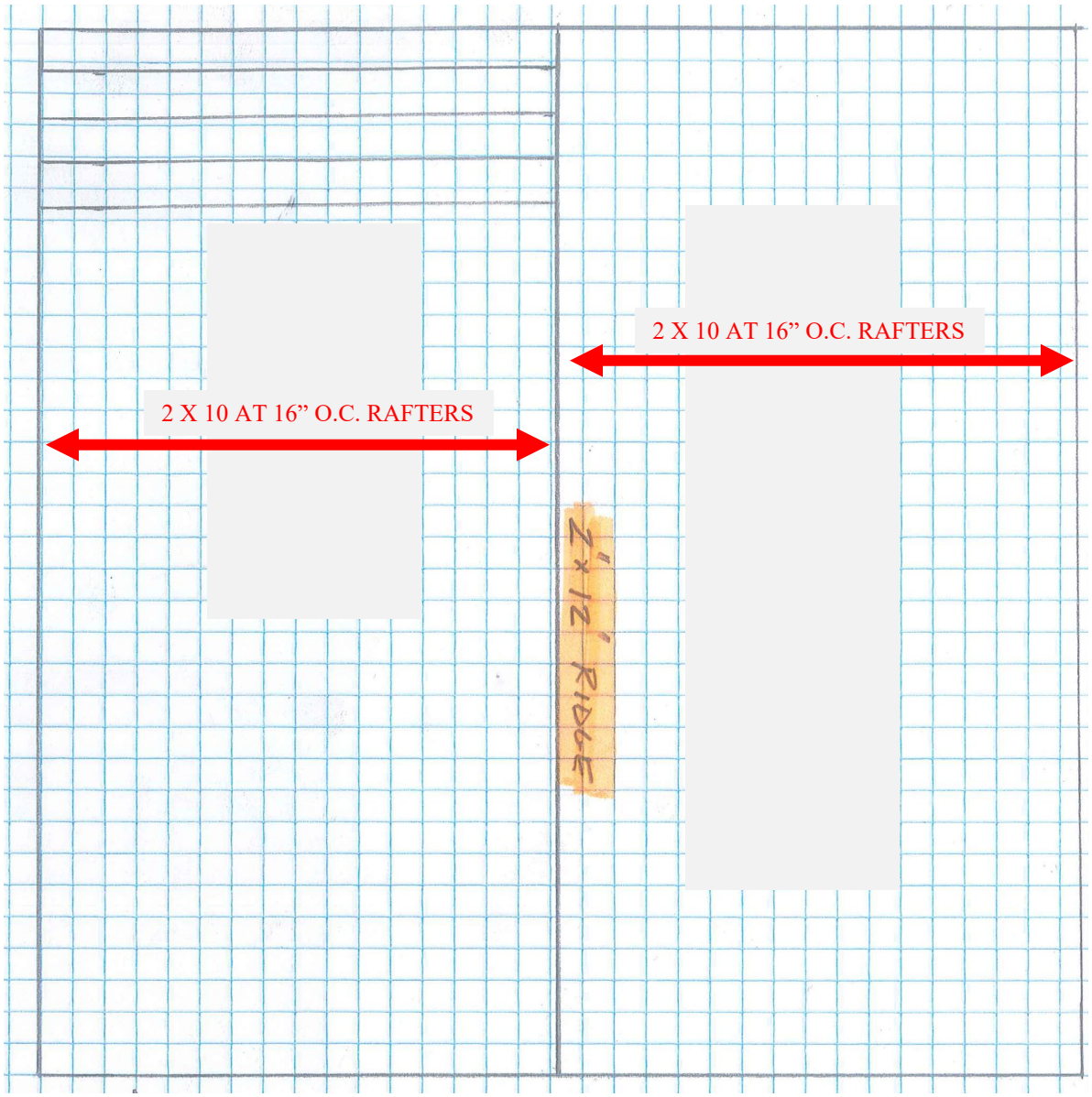

PLAN COURTESY OF CLIENT
NOT TO SCALE

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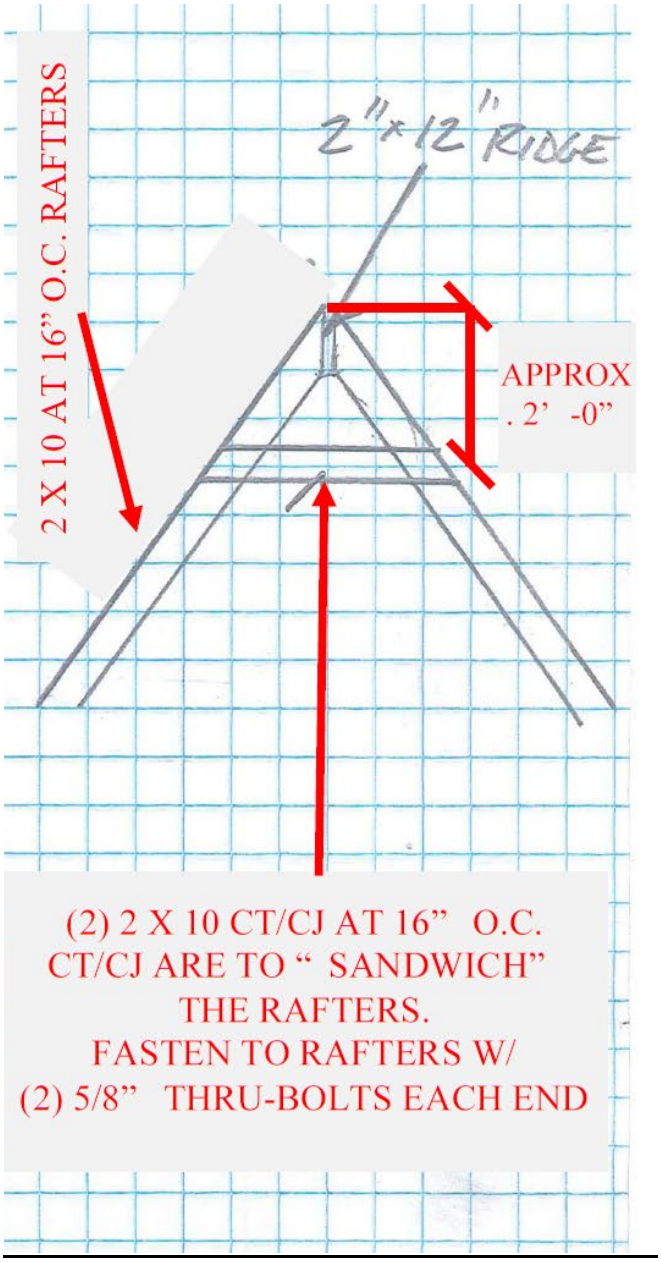

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2/3/24