SHEET:

P-1

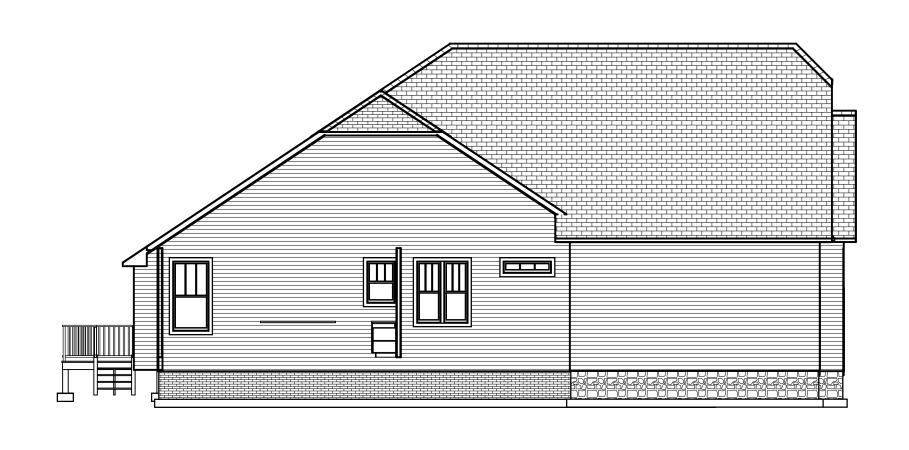
RIDGE VENTING FER BUILDER

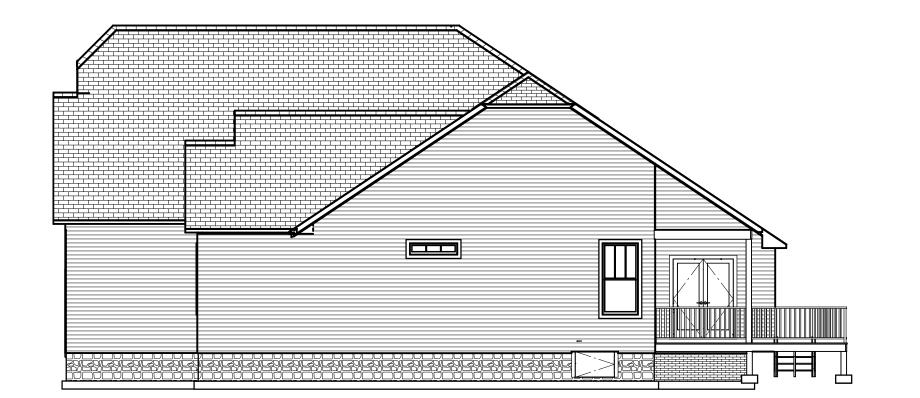
NOTES: Grade per SITE conditions per BUILDER, CRAWLSPACE Masonry FOUNDATION, ELEVATION set by BUILDER to SITE conditions, Steps and Railings per site CONDITIONS per BUILDER, VINYL siding, STACKED STONE elevation per GRADE and adjusted by BUILDER

Exterior Elevation Front

SCALE 1/4"=1'





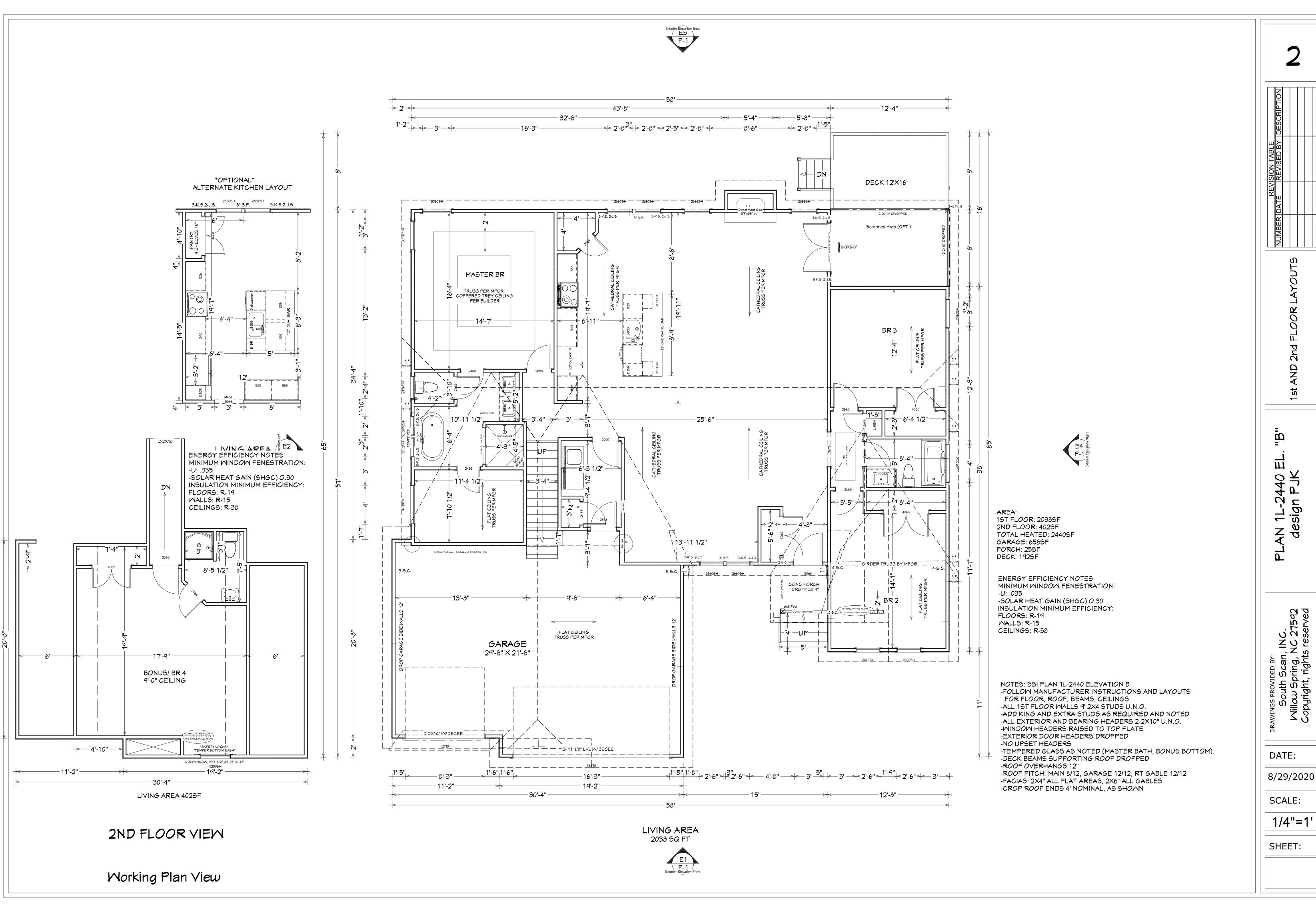


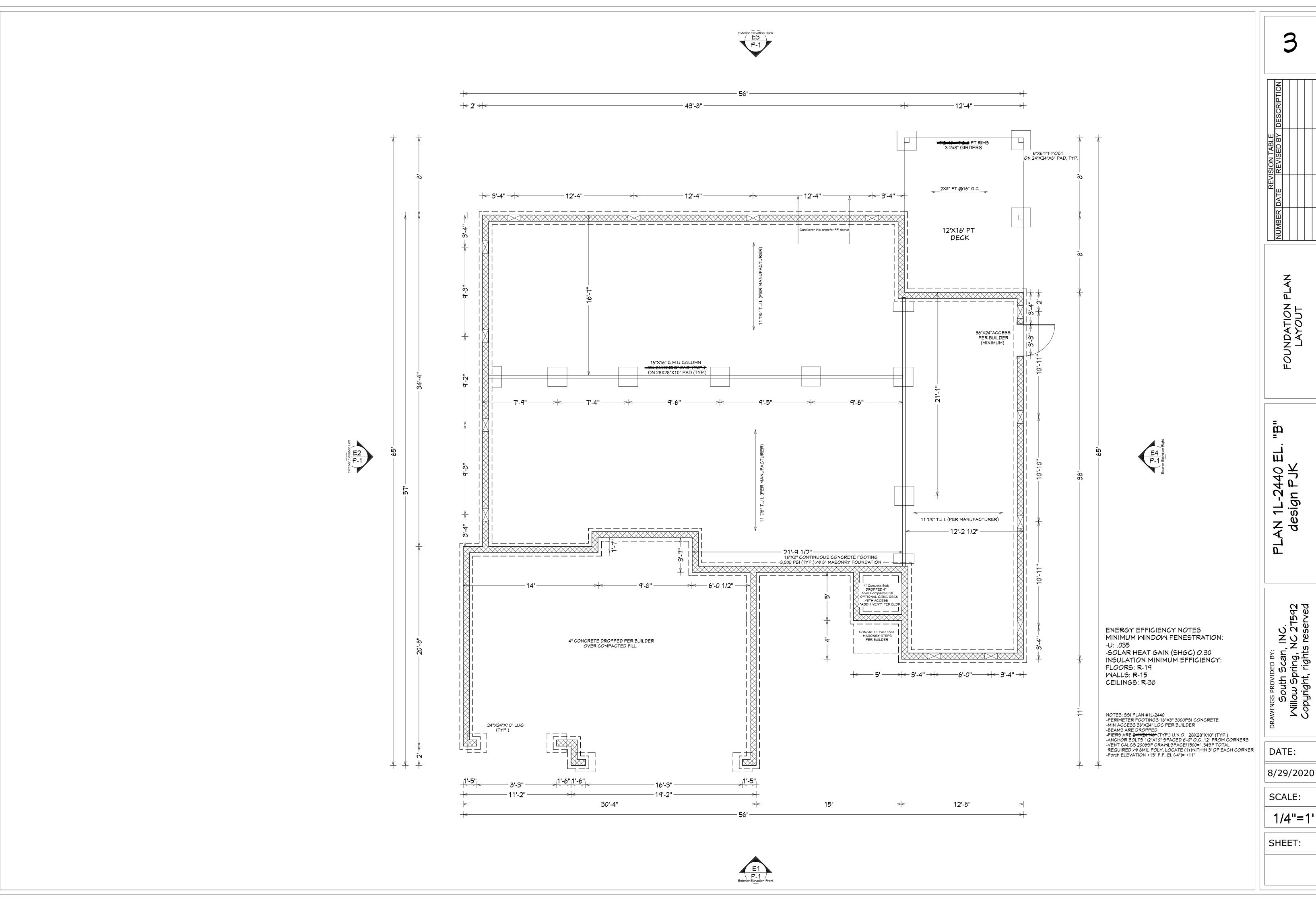
Exterior Elevation Left

Exterior Elevation Back

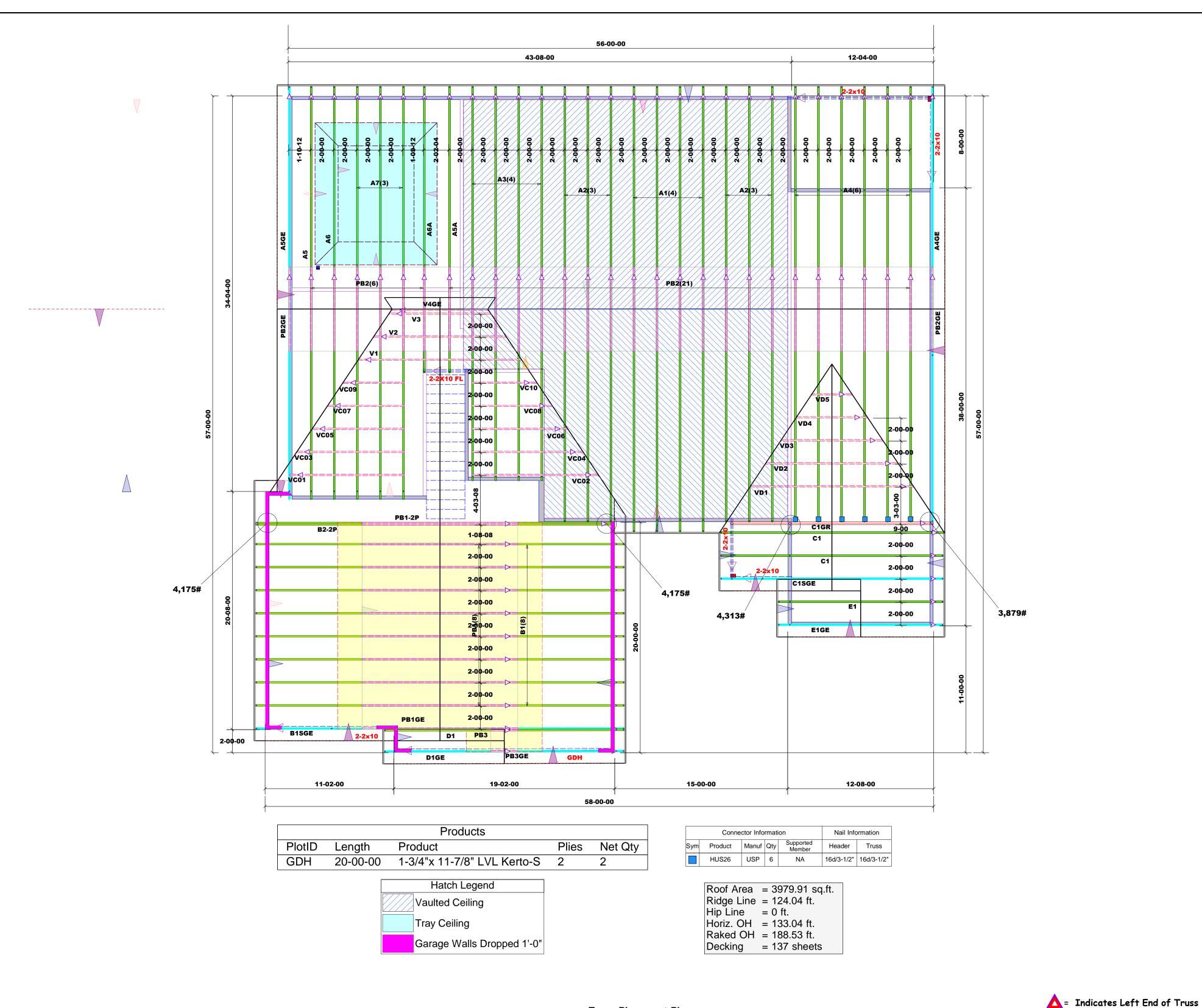
SCALE 1/8"=1'

Exterior Elevation Right





8/29/2020



COMTECH **ROOF & FLOOR**

TRUSSES & BEAMS

Reilly Road Industrial Park Fayetteville, N.C. 28309 Phone: (910) 864-8787 Fax: (910) 864-4444

aring reactions less than or equal to 3000# are med to comply with the prescriptive Code uirements. The contractor shall refer to the inched Tables (derived from the prescriptive Code uirements) to determine the minimum foundation and number of wood studs required to support ctions greater than 3000# but not greater than 3000# A registered design professional shall be eactions greater than 3000# but not greater than 5000#. A registered design professional shall be etained to design the support system for any action that exceeds those specified in the attach ables. A registered design professional shall be stained to design the support system for all sactions that exceed 15000#.

Bob Lewis

Bob Lewis

LOAD CHART FOR JACK STUDS (BASED ON TABLES R502.5(1) & (b)) NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

		HEADEK/	PIKUEN		
END REACTION (UP TO)	REQ'D STUDS FOR (2) PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (3) PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR
1700	1	2550	1	3400	1
3400	2	5100	2	6800	1 2 3 3 4
5100	3	7650	3	10200) 3
6800	4	10200	4	13600	
8500	5	12750	5	17000) 5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

CITY / CO	CITY / CO. Site Address - City / County
ADDRESS	Site Address
WODEL	Roof
DATE REV	DATE REV . 05/09/23
DRAWN BY	DRAWN BY Bob Lewis
SALES REF	SALES REP. Bob Lewis

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 design at the specification of the building design at the specification of the building 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 @ sbcindustry.com

SEAL DATE

QUOTE;

South Builder

JOB NAME

Site Name

BUILDER

(Reference Engineered Truss Drawing) Do NOT Erect Truss Backwards

1L-2440 EL



DB₁

Client: Project: Address:

1 Story

Great South Bldr.

5/9/2023 Date:

Input by:

Job Name: J0423-1840 Beams Project #: J0423-1840

3-Ply - PASSED Kerto-S LVL 1.750" X 9.250"

Level: Level

Dir.

Vert

Vert

Vert

Vert

Vert

Vert

Bearing Length

1-SPF 8.000"

2 - SPF 16.000"

3-SPF 16.000"

4 - SPF 16.000"

5 - SPF 16.000"

6 - SPF 8.000"

End

End

Fnd

End Grain

Fnd

Grain

 L_LL_L

Grain

Grain

Grain

Cap. React D/L lb

753 / 3341

1744 / 7786

2028 / 9043

2261 / 9794

2409 / 9917

954 / 4136

12%

27%

16%

17%

14%

Total Ld. Case

4094 L L L

9529 LL_L_

11071 LL L

12055 L_LL_

12326 _L_LL

5091 L_L_L

Ld. Comb.

D+L

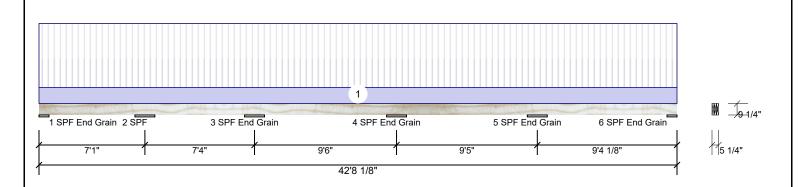
D+L

D+L

D+L

D+L

D+L



Member Infor	mation			Rea	ctions UNP	ATTERNED) lb (Uplift)		
Type:	Girder	Application:	Floor	Brg	Direction	Live	Dead	Snow	Wind	Const
Plies:	3	Design Method:	ASD	1	Vertical	2891	756	0	0	0
Moisture Conditio	n: Dry	Building Code:	IBC/IRC 2015	2	Vertical	6645	1738	0	0	0
Deflection LL:	480	Load Sharing:	Yes	3	Vertical	7756	2029	0	0	0
Deflection TL:	240	Deck:	Not Checked	4	Vertical	8665	2267	0	0	0
Importance:	Normal - II			5	Vertical	9171	2399	0	0	0
Temperature:	Temp <= 100°F			6	Vertical	3666	959	0	0	0
				Bea	rings					·

Analysis Results Comb. Case Analysis Actual Location Allowed Capacity Neg Moment -10749 ft-lb 0.549 (55%) D+L 33'4" 19565 ft-lb _L_LL Unbraced -10749 ft-lb 33'4" 10751 ft-lb 1.000 _L_LL (100%)Pos Moment 8433 ft-lb 38'2 7/8" 19565 ft-lb 0.431 (43%) D+L L_LL_L 0 999 8433 ft-lb 38'2 7/8" 8444 ft-lb D+L L_LL_L Unbraced (100%)34'9 1/4" 10360 lb Shear 4601 lb 0.444 (44%) D+L _L_LL LL Defl inch 0.154 (L/681) 37'10 1/4" 0.218 (L/480) 0.705 (70%) L L_LL_L

Design Notes

TL Defl inch 0.181 (L/578)

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.

37'10 7/8" 0.437 (L/240) 0.415 (42%) D+L

- 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 13'6 5/16" o.c.
- 6 Bottom must be laterally braced at a maximum of 10'3 3/4" 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			Тор	227 PLF	909 PLF	0 PLF	0 PLF	0 PLF	FJ1
	Self Weight				11 PLF					

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.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- **Handling & Installation**
- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code
- Damaged Beams must not be used
- Design assumes top edge is laterally restrained
 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 11/3/2024

301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us

Manufacturer Info

Comtech Reilly Road Industrial Park P.O. Box 40408, NO USA 28309 910-864-8787

Page 1 of 6







Client: Great South Bldr.

Project: Address:

1 Story

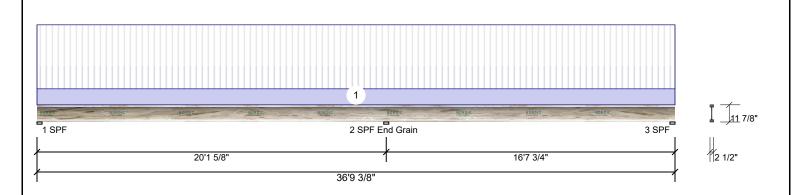
Date: 5/9/2023

Input by:

Job Name: J0423-1840 Beams Project #: J0423-1840

11.875" - PASSED FJ1 NI-40x

Level: Level



Member Information Application: Floor Type: Spacing: 19.2" o.c. Design Method: ASD Moisture Condition: Dry **Building Code: IBC/IRC 2015** Deflection LL: 480 Load Sharing: No Deflection TL: 240 Deck: Not Checked Importance: Normal - II Temperature: Temp <= 100°F

Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	519	130	0	0	0
2	Vertical	1455	364	0	0	0
3	Vertical	380	95	0	0	0
l .						

Bearings

I	Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
I	1 - SPF	3.500"	Vert	49%	130 / 567	697	L_	D+L
l	2 - SPF End Grain	3.500"	Vert	61%	364 / 1455	1818	LL	D+L
I	3 - SPF	3.500"	Vert	40%	95 / 482	577	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-3289 ft-lb	20'1 5/8"	3760 ft-lb	0.875 (87%)	D+L	LL
Unbraced	-3289 ft-lb	20'1 5/8"	3295 ft-lb	0.998 (100%)	D+L	LL
Pos Moment	2877 ft-lb	8'8 1/2"	3760 ft-lb	0.765 (77%)	D+L	L_
Unbraced	2877 ft-lb	8'8 1/2"	2891 ft-lb	0.995 (100%)	D+L	L_
Shear	961 lb	20'1 5/8"	1480 lb	0.650 (65%)	D+L	LL
LL Defl inch	0.466 (L/513)	9'7 5/8"	0.498 (L/480)	0.936 (94%)	L	L_
TL Defl inch	0.556 (L/430)	9'6 11/16"	0.995 (L/240)	0.559 (56%)	D+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 Top flange must be laterally braced at a maximum of 3'8" o.c.
- 3 Bottom flange must be laterally braced at a maximum of 2'10" o.c.

ID	Load Type	Location	Trib Width	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform		1-7-3	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	

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

Engineered Wood Products

Dry service conditions, unless noted otherwise
 No treatment with fire-retardant or other strength-reducing chemicals.

Handling & Installation

- Handling & Installation

 1. Engineered wood products must not be cut or drilled.
 Damaged products shall not be used.

 2. Refer to the latest version of the installation guide for construction details, hole specifications, multiplemember connections, and handling guidelines.

 3. Provide lateral support at bearing points to prevent lateral displacement and rotation.

 4. For flat roof, provide proper drainage to prevent ponding.
- ponding.

 5. Design assumes top flange to be laterally restrained

by attached sheathing or as specified in engineering notes.

This design is valid until 11/3/2024

Nordic Structures 1100 Avenue des Canadiens-de-Montréal, Suite 100 Montreal, Québec, Canada H3B 2S2 (866) 871-3418 www.nordic.ca APA PR-L274C

Manufacturer Info

Comtech Corniech Reilly Road Industrial Park P.O. Box 40408, NO USA 28309 910-864-8787

Page 2 of 6







Client: Great South Bldr.

Project:

1 Story Address:

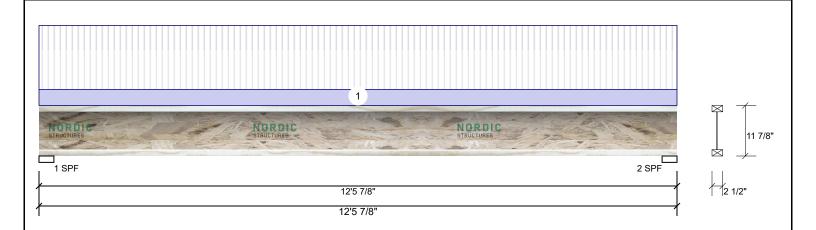
Date: 5/9/2023

Input by:

Job Name: J0423-1840 Beams

11.875" - PASSED FJ5 NI-40x

Project #: J0423-1840 Level: Level



Member Inform	nation	Reactions UNPATTERNED Ib (Uplift)								
Type:	Joist	Application:	Floor	Brg	Direction	Live	Dead	Snow	Wind	Const
Spacing:	16" o.c.	Design Method:	ASD	1	Vertical	333	83	0	0	0
Moisture Condition	: Dry	Building Code:	IBC/IRC 2015	2	Vertical	333	83	0	0	0
Deflection LL:	480	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal - II									
Temperature:	Temp <= 100°F									
				Bear	rings					
				Bea	aring Length	Dir.	Cap. React [)/L lb Tota	l Ld. Case	Ld. Comb.
				1-	SPF 3.500"	Vert	29% 83	/ 333 41	6 L	D+L
				2 -	SPF 3.500"	Vert	29% 83	/ 333 41	6 L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1206 ft-lb	6'2 15/16"	3760 ft-lb	0.321 (32%)	D+L	L
Unbraced	1206 ft-lb	6'2 15/16"	1217 ft-lb	0.991 (99%)	D+L	L
Shear	401 lb	2 3/4"	1480 lb	0.271 (27%)	D+L	L
LL Defl inch	0.083 (L/1744)	6'2 15/16"	0.301 (L/480)	0.275 (28%)	L	L
TL Defl inch	0.103 (L/1396)	6'2 15/16"	0.602 (L/240)	0.172 (17%)	D+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 Top flange must be laterally braced at a maximum of 6'11" o.c.
- 3 Bottom flange must be laterally braced at bearings.

ID	Load Type	Location	Trib Width	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments	
1	Uniform		1-4-0	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF		

Notes

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.

Engineered Wood Products

Dry service conditions, unless noted otherwise
 No treatment with fire-retardant or other strength-reducing chemicals.

Handling & Installation

- Handling & Installation

 1. Engineered wood products must not be cut or drilled.
 Damaged products shall not be used.

 2. Refer to the latest version of the installation guide for construction details, hole specifications, multiplemember connections, and handling guidelines.

 3. Provide lateral support at bearing points to prevent lateral displacement and rotation.

 4. For flat roof, provide proper drainage to prevent ponding.
- ponding.

 5. Design assumes top flange to be laterally restrained

This design is valid until 11/3/2024

by attached sheathing or as specified in engineering notes.

Manufacturer Info

Nordic Structures 1100 Avenue des Canadiens-de-Montréal, Suite 100 Montreal, Québec, Canada H3B 2S2 (866) 871-3418 www.nordic.ca APA PR-L274C

Comtech Reilly Road Industrial Park P.O. Box 40408, NC USA 28309 910-864-8787

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DB₂

Client: Project:

Address:

1 Story

Great South Bldr.

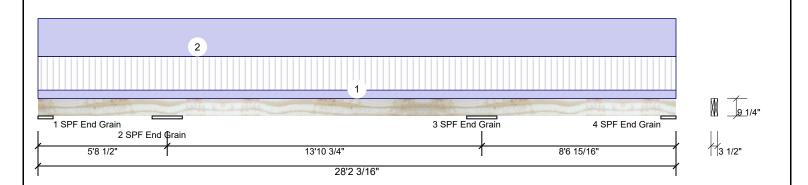
Date: 5/9/2023

Input by:

Job Name: J0423-1840 Beams Project #: J0423-1840

Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



Member Inform	nation		
Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

1	Analysis Results											
	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case					
	Neg Moment	-7068 ft-lb	19'7 1/4"	12542 ft-lb	0.564 (56%)	D+L	_LL					
	Unbraced	-7068 ft-lb	19'7 1/4"	7072 ft-lb	0.999 (100%)	D+L	_LLL					
	Pos Moment	5521 ft-lb	12'8 9/16"	12542 ft-lb	0.440 (44%)	D+L	_L_					
	Unbraced	5521 ft-lb	12'8 9/16"	5530 ft-lb	0.998 (100%)	D+L	_L_					
	Shear	2814 lb	7'1 3/4"	6907 lb	0.407 (41%)	D+L	LL_					

Design Notes

LL Defl inch 0.168 (L/990)

TL Defl inch 0.370 (L/451)

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.

12'9 1/16" 0.347 (L/480) 0.485 (49%) L

12'8 3/16" 0.695 (L/240) 0.532 (53%) D+L

- 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 Tie-down connection required at bearing 1 for uplift 275 lb (Combination D+L, Load Case _L_).
- 6 Top must be laterally braced at a maximum of 13'9" o.c.
- 7 Bottom must be laterally braced at a maximum of 10'5 1/8" o.c.
- 8 Lateral slenderness ratio based on single ply width.

Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	123	174	0	0	0
2	Vertical	2498	3521	0	0	0
3	Vertical	2647	3731	0	0	0
4	Vertical	594	837	0	0	0

Rearings

Bearings	5						
Bearing	Length	Dir.	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	8.000"	Vert	3%	155 / 665	820 (-275)	L_L	D+L(D+L)
2 - SPF End Grain	16.000"	Vert	13%	3544 / 2630	6175	LL_	D+L
3 - SPF End Grain	16.000"	Vert	14%	3731 / 2675	6406	_LL	D+L
4 - SPF End Grain	8.000"	Vert	7%	832 / 878	1710	L_L	D+L

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.

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

Handling & Installation

LVL beams must not be cut or drilled
Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

2 Damaged Beams must not be used

Design assumes top edge is laterally restrained
Provide lateral support at bearing points to avoid
lateral displacement and rotation

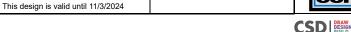
6. For flat roofs provide proper drainage to prevent ponding

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us

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Manufacturer Info

isDesign

Client: Great South Bldr.

Project:

Address:

1 Story

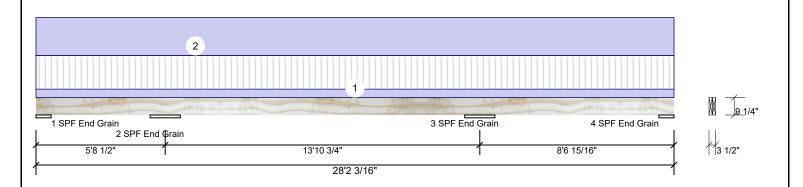
Date: 5/9/2023

Input by:

Job Name: J0423-1840 Beams Project #: J0423-1840

2-Ply - PASSED 1.750" X 9.250" **Kerto-S LVL** DB₂

Level: Level



ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments	
1	Uniform			Тор	52 PLF	208 PLF	0 PLF	0 PLF	0 PLF	FJ5	
2	Uniform			Тор	234 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall	
	Self Weight				7 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.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. IVI 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 11/3/2024

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us

Manufacturer Info

Comtech Reilly Road Industrial Park P.O. Box 40408, NC USA 28309 910-864-8787

Page 5 of 6







GDH

Client: Great South Bldr. Project:

Address:

1 Story

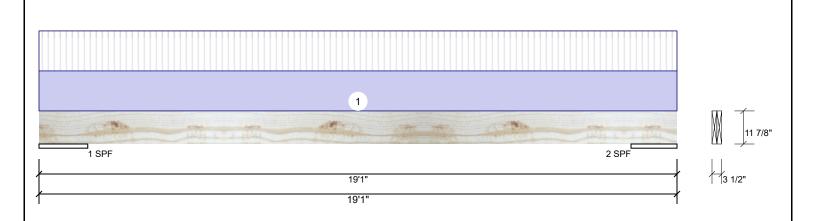
Date: 5/9/2023

Input by:

Job Name: J0423-1840 Beams Project #: J0423-1840

Kerto-S LVL 2-Ply - PASSED 1.750" X 11.875"

Level: Level



Member Information				Rea	Reactions UNPATTERNED lb (Uplift)								
Type:	Girder	Application:	Floor	Brg	Direction	Live	e Dead	Snow	Wind	Const			
Plies:	2	Design Method:	ASD	1	Vertical	2060	2149	0	0	0			
Moisture Condition	on: Dry	Building Code:	IBC/IRC 2015	2	Vertical	2043	3 2130	0	0	0			
Deflection LL:	480	Load Sharing:	No										
Deflection TL:	240	Deck:	Not Checked										
Importance:	Normal - II												
Temperature:	Temp <= 100°F			-									
				Bea	rings								
				Bea	aring Length	Dir.	Cap. React D/L II	o Total	Ld. Case	Ld. Comb.			
				1 -	SPF 17.500"	Vert	16% 2149 / 2060	4209	L	D+L			
	•-			2 -	SPF 16.500"	Vert	17% 2130 / 204	3 4173	L	D+L			

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	14722 ft-lb	9'7"	19911 ft-lb	0.739 (74%)	D+L	L
Unbraced	14722 ft-lb	9'7"	14755 ft-lb	0.998 (100%)	D+L	L
Shear	3143 lb	2'5 3/8"	8867 lb	0.355 (35%)	D+L	L
LL Defl inch	0.376 (L/523)	9'7 1/16"	0.409 (L/480)	0.919 (92%)	L	L
TL Defl inch	0.768 (L/256)	9'7 1/16"	0.819 (L/240)	0.938 (94%)	D+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 5'4 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			Тор	215 PLF	215 PLF	0 PLF	0 PLF	0 PLF	

9 PLF Self Weight

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.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

- IARIGUING & INSTALLATION

 LVL beams must not be cut or drilled

 Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beams trength values, and code approvals

 Damaged Beams must not be used

 Design assumes top edge is laterally restrained.

 Provide lateral support at bearing points to avoid lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us

Manufacturer Info

Comtech Corniech Reilly Road Industrial Park P.O. Box 40408, NO USA 28309 910-864-8787

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