



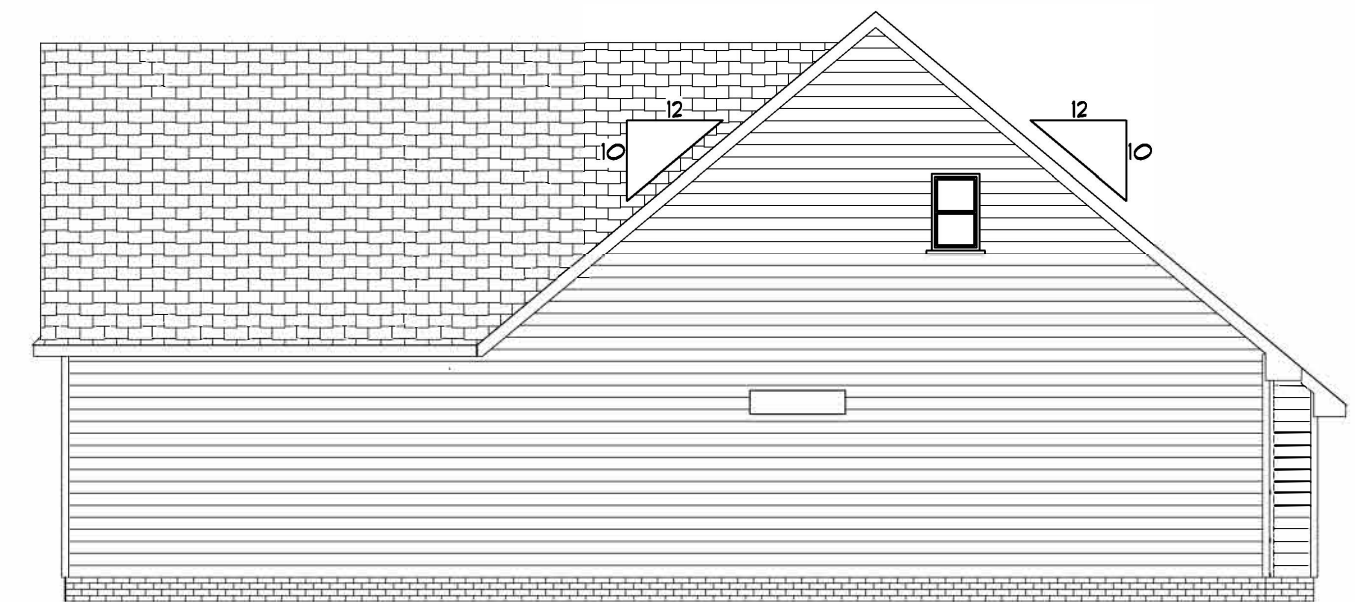
Front Elevation  
Scale: 1/4" = 1'0"



Rear Elevation  
Scale: 1/8" = 1'0"



Left Elevation  
Scale: 1/8" = 1'0"



Right Elevation  
Scale: 1/8" = 1'0"



DATE: 12/6/2024

REVISED

DRAWING#

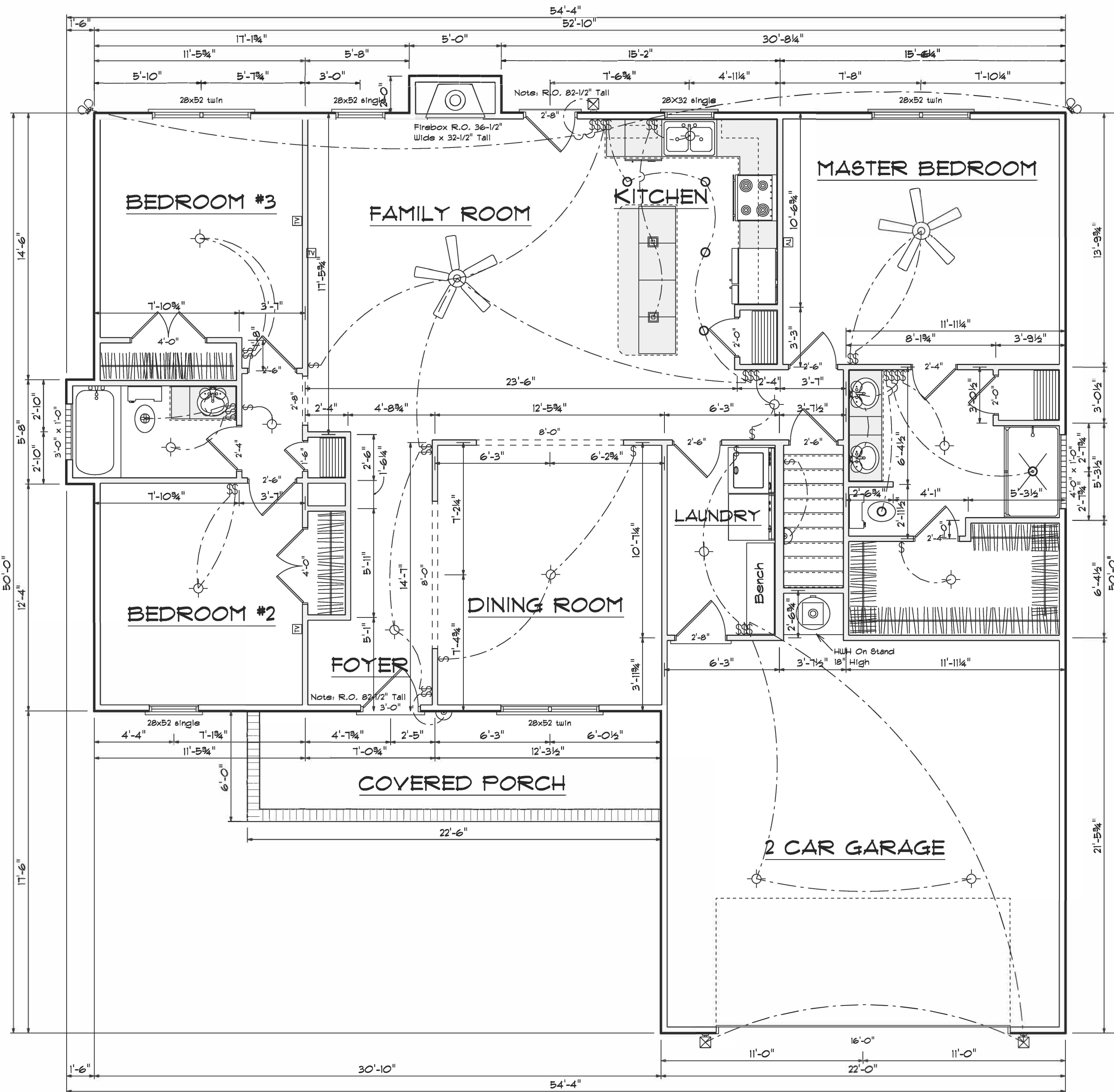
SCALE: 1/4"

DRAWN BY

APPROVED

Plan #1

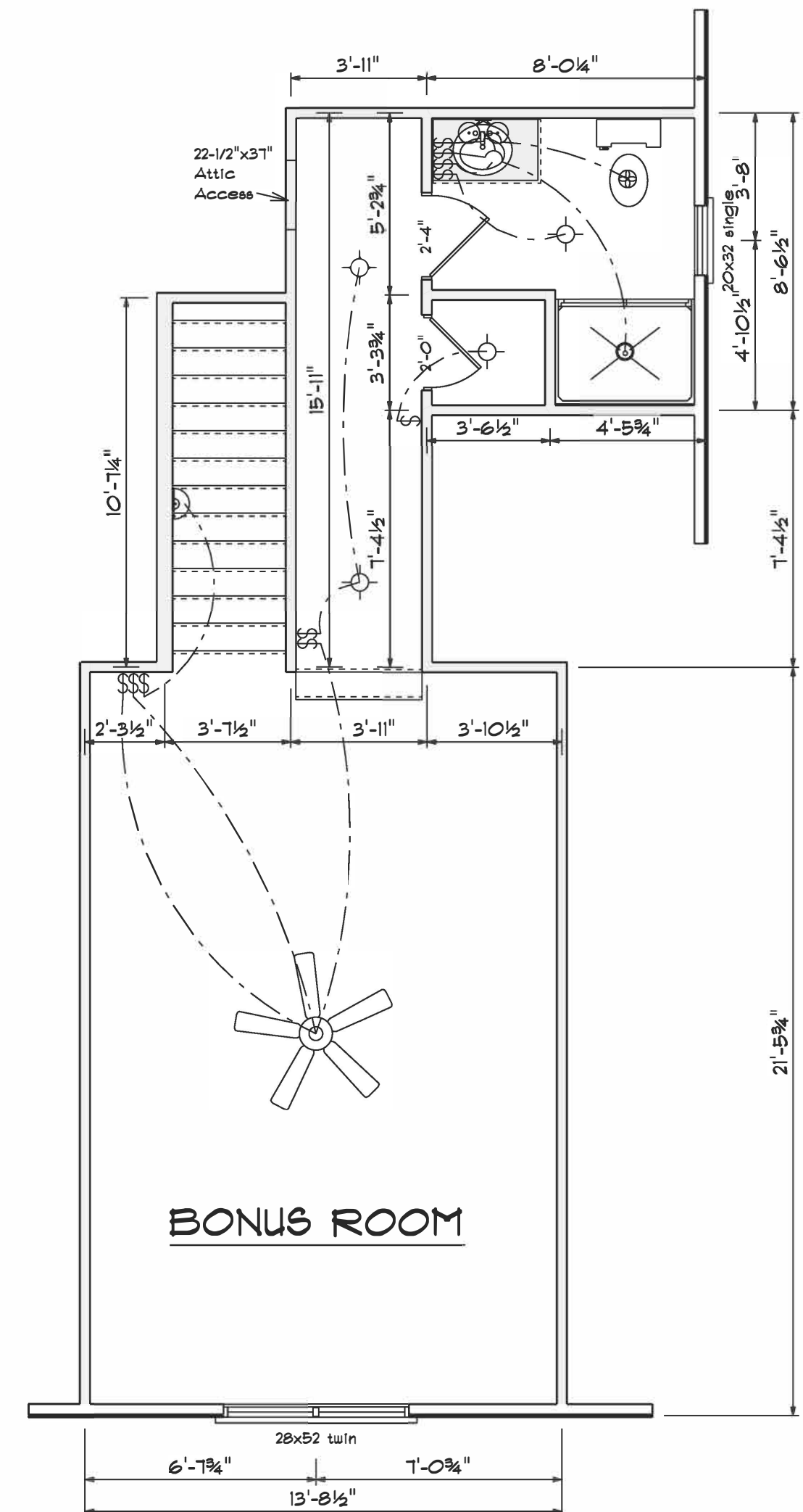




## Areas

Main Floor 1650  
Bonus Room 445

Total Heated 2095  
Garage 479  
Front Porch 146



DATE: 12/6/2024

REVISED

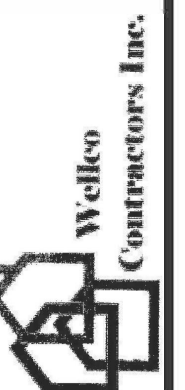
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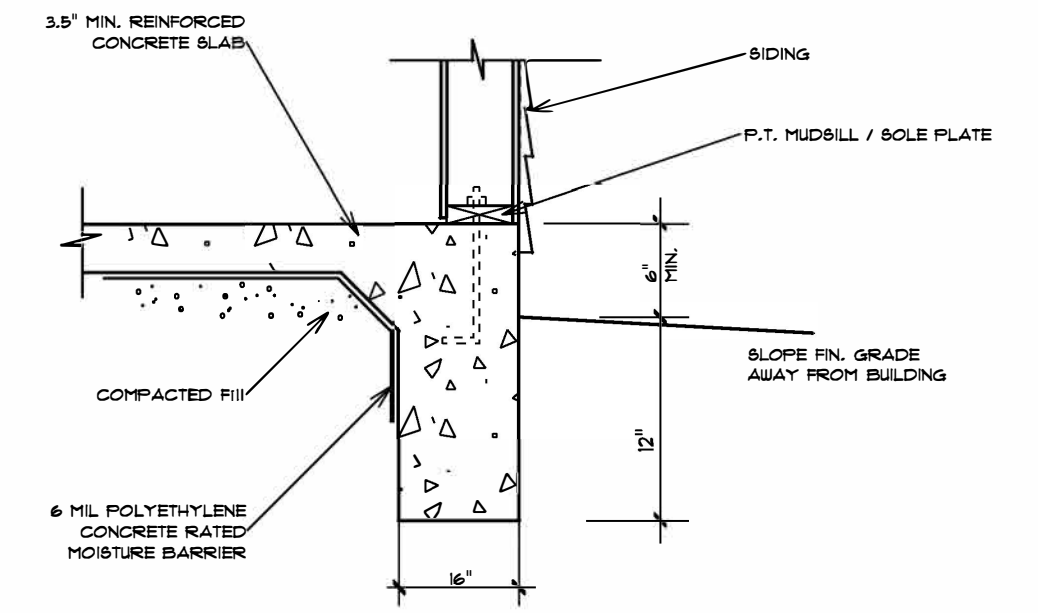
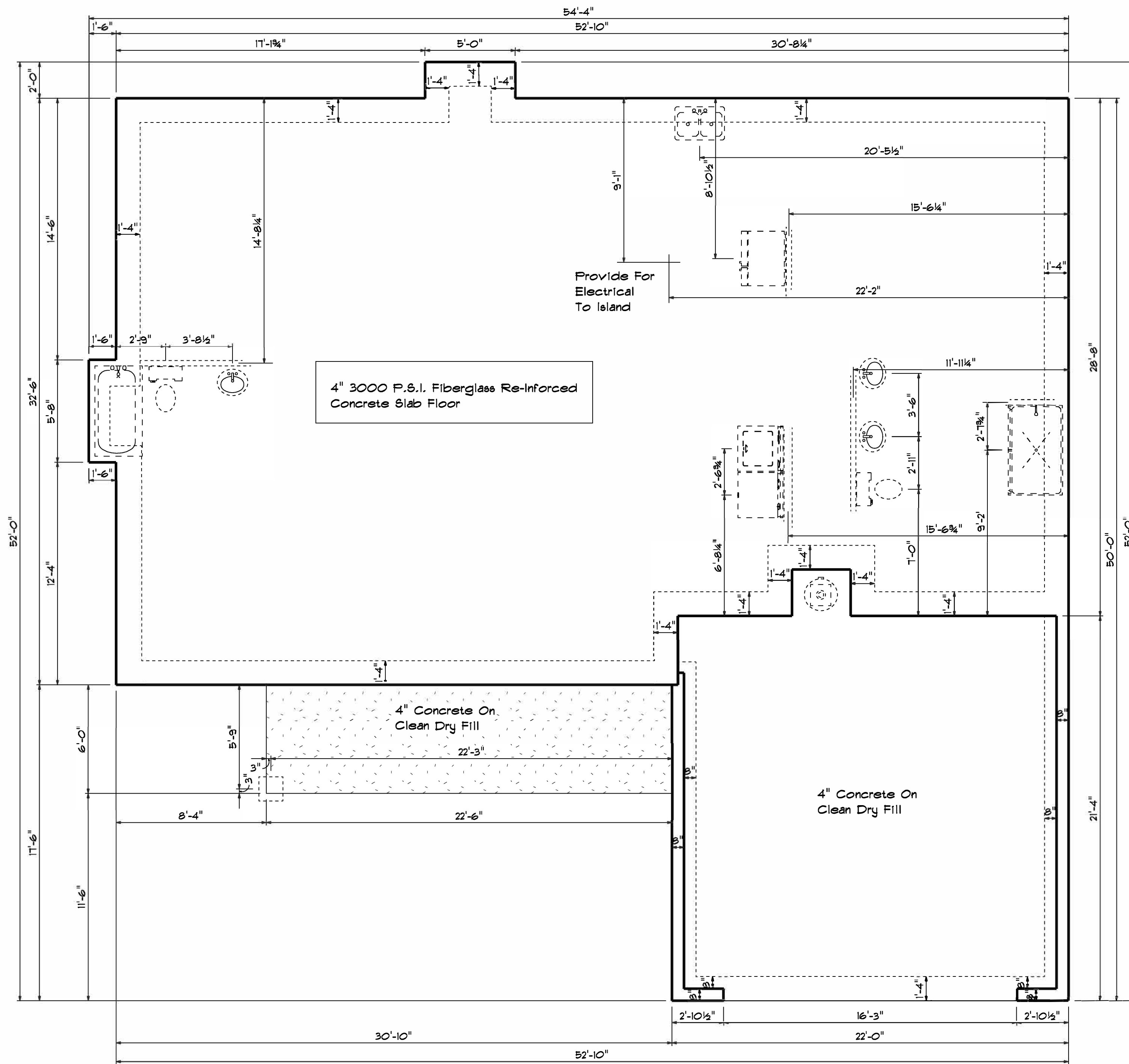
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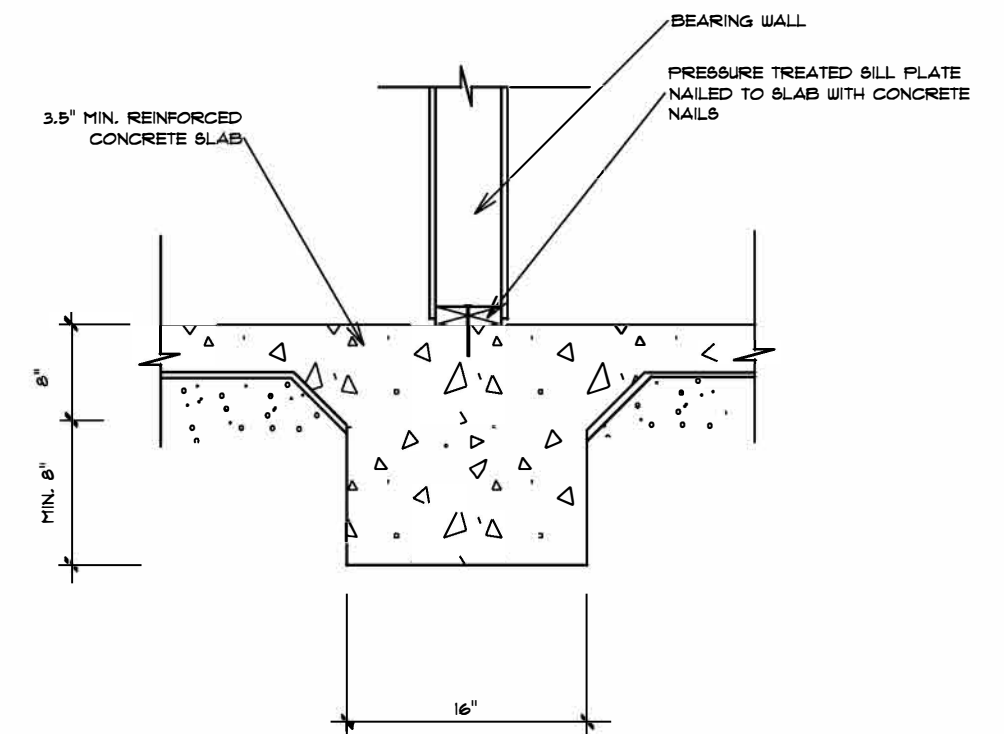
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Plan #1





TURN-DOWN FOOTING DETAIL



INTEGRAL SLAB FOOTING DETAIL AT BEARING WALL

OPENING SCHEDULE				
PRODUCT CODE	SIZE	HINGE	REVERSED	COUNT
36X80 COLONIAL A 1	3'-0"	L	NO	1
32X80 FRENCH A 1	2'-8"	R	NO	1
192X84 - 1 PANEL GARAGE DOOR	16'-0"	U	NO	1
1-6 Door Unit	1'-6"	L	NO	1
2-0 Door Unit	2'-0"	R	NO	1
2-0 Door Unit	2'-0"	L	NO	1
2-4 Door Unit	2'-4"	L	NO	3
2-6 Door Unit	2'-6"	R	NO	2
2-6 Door Unit	2'-6"	L	NO	2
2-8 Door Unit	2'-8"	L	NO	1
2-8 Door Unit	2'-8"	R	NO	1
4-0 Doublehung Door Unit	4'-0"	LR	NO	2
28X32 single	2'-8" x 3'-2"	N	NA	1
28x52 single	2'-8" x 5'-2"	N	NA	2
28x52 twin	5'-4" x 5'-2"	NN	NA	3
4X8 GLASS BLOCK	3'-0" x 1'-0"	N	NA	1
4X8 GLASS BLOCK	4'-0" x 1'-0"	N	NA	1

# Foundation Plan

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

DATE: 12/6/2024

REVISED

DRAWING#

SCALE: 1/4"

DRAWN BY

APPROVED

Plan #1





ROOF & FLOOR  
TRUSSES & BEAMS

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

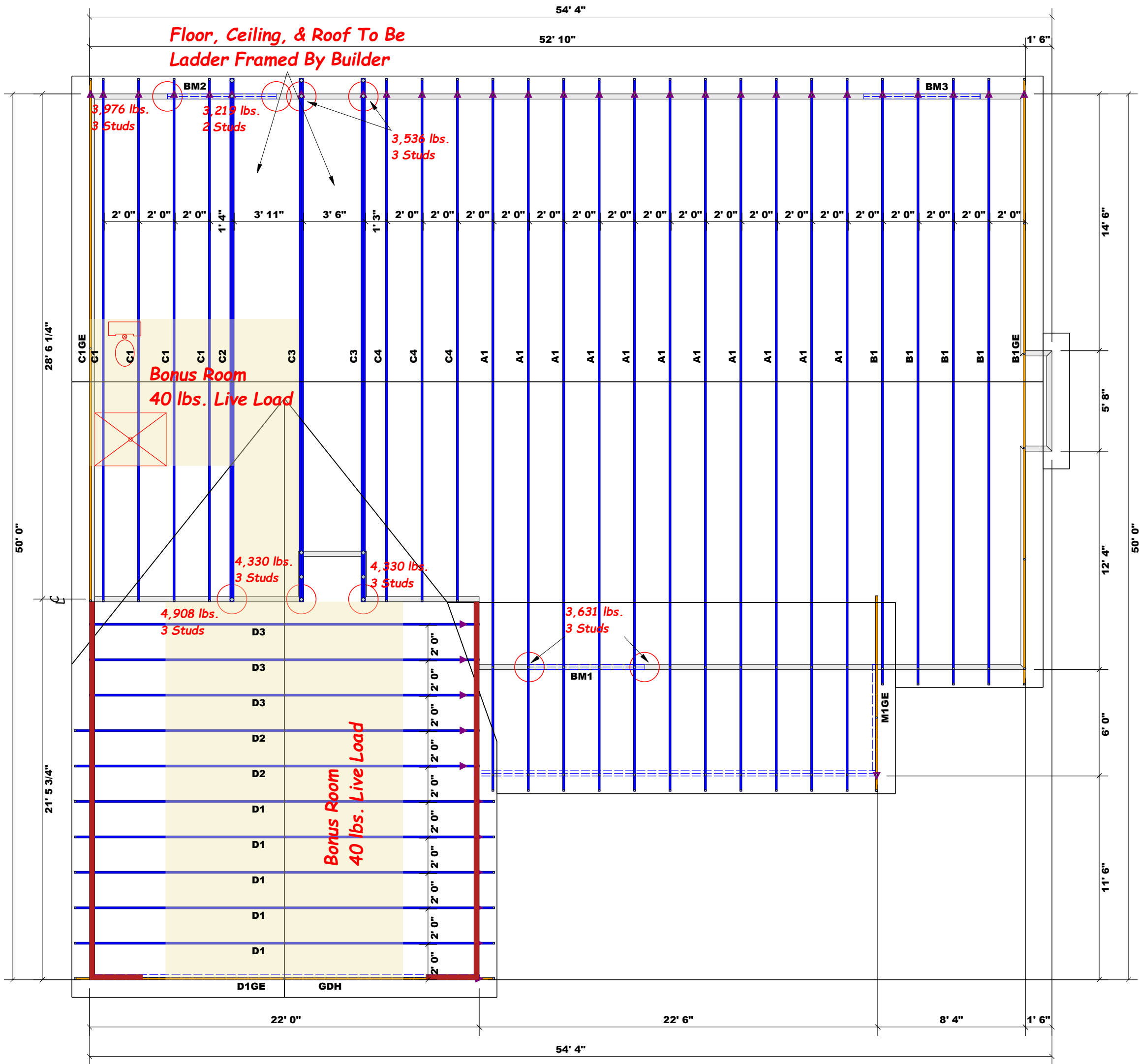
Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables ( derived from the prescriptive Code requirements ) to determine the minimum foundation size and number of wood studs required to support reactions 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 Curtis Quick

Curtis Quick

LOAD CHART FOR JACK STUDS

(BASED ON TABLES R502.5(1) & (b))					
NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER					
END REACTION (UP TO)	REQ'D STUDS FOR (1) PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (3) PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (4) PLY HEADER
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				
15300	9				



Hatch Legend

Garage Walls Dropped 1'

All Truss Reactions are Less than 3,000 lbs. Unless Noted Otherwise.

-- Denotes Reaction Greater than 3,000 lbs.

Truss Placement Plan  
SCALE: 1/4" = 1'

Beam Legend

PlotID	Length	Product	Plies	Net Qty	Fab Type
BM1	7' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2	FF
BM2	7' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2	FF
BM3	7' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2	FF
GDH	22' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2	FF

▲ = Denotes Left End of Truss  
(Reference Engineered Truss Drawing)  
Do Not Erect Trusses Backwards

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 @ sbcindustry.com

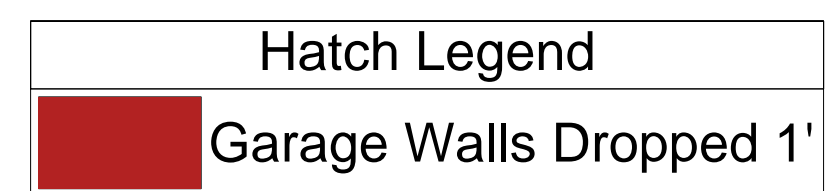
Wellco Contractors	Spring Lake / Harnett				
Lot 102 Hidden Lakes North	Lot 539 Overhills Creek				
Plan 1	Model				
Seal Date	04/15/25				
Quote #	Curtis Quick				
JO425-1921	Lenny Norris				



Signature Curtis Quick  
Curtis Quick


<b>CITY / CO.</b>	Spring Lake / Harnett
<b>ADDRESS</b>	Lot 539 Overhills Creek
<b>MODEL</b>	Model
<b>DATE REV.</b>	04/15/25
<b>DRAWN BY</b>	Curtis Quick
<b>SALES REP.</b>	Lenny Norris

**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 at [sbcsindustrv.com](http://sbcsindustrv.com)



Beam Legend						
PlotID	Length	Product	Plies	Net Qty	Fab Type	
BM1	7' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2	FF	
BM2	7' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2	FF	
BM3	7' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2	FF	
GDH	22' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2	FF	

*All Truss Reactions are Less than 3,000 lbs. Unless Noted Otherwise.*

 -- Denotes Reaction Greater than 3,000 lbs.

**Truss Placement Plan**  
**SCALE: 1/4" = 1'**



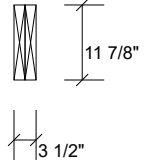
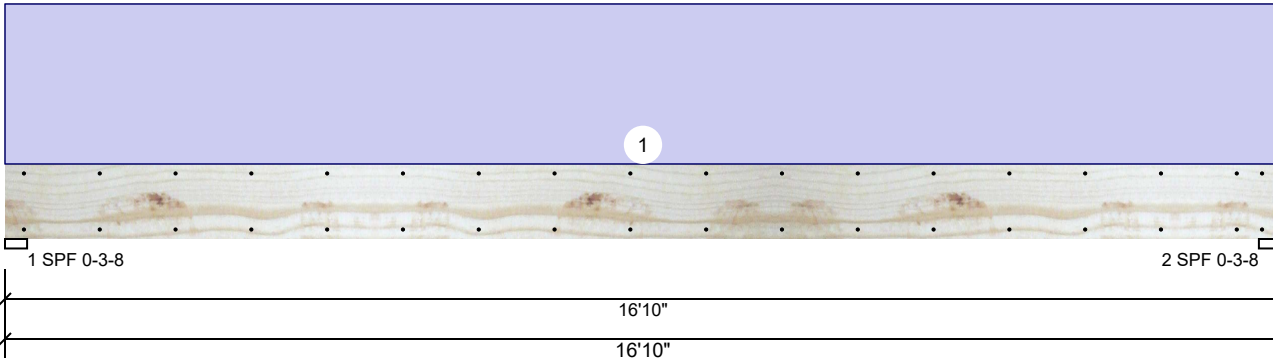
Client: Wellco Contractors  
Project:  
Address:

Date: 4/15/2025  
Input by: Curtis Quick  
Job Name: Plan 1 Beams  
Project #:

Page 1 of 9

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

Level: Level



### Member Information

Type: Girder  
Plies: 2  
Moisture Condition: Dry  
Deflection LL: 480  
Deflection TL: 360  
Importance: Normal - II  
Temperature: Temp <= 100°F

Application: Floor  
Design Method: ASD  
Building Code: IBC/IRC 2015  
Load Sharing: No  
Deck: Not Checked

### Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	2182	0	0	0
2	Vertical	0	2182	0	0	0

### Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	42%	2182 / 0	2182	Uniform	D
2 - SPF	3.500"	Vert	42%	2182 / 0	2182	Uniform	D

### Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	8689 ft-lb	8'5"	17919 ft-lb	0.485 (48%)	D	Uniform
Unbraced	8689 ft-lb	8'5"	8702 ft-lb	0.998 (100%)	D	Uniform
Shear	1859 lb	15'6 5/8"	7980 lb	0.233 (23%)	D	Uniform
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
TL Defl inch	0.453 (L/433)	8'5 1/16"	0.546 (L/360)	0.831 (83%)	D	Uniform

### Design Notes

- 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.
- Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- Refer to last page of calculations for fasteners required for specified loads.
- Girders are designed to be supported on the bottom edge only.
- Top loads must be supported equally by all plies.
- Top must be laterally braced at a maximum of 10'8 15/16" o.c.
- Bottom must be laterally braced at end bearings.
- 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	250 PLF	0 PLF	0 PLF	0 PLF	0 PLF	
	Self Weight				9 PLF					

### Notes

Calculated Structural 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

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

chemicals

### 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
- 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 6/28/2026

### Manufacturer Info

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



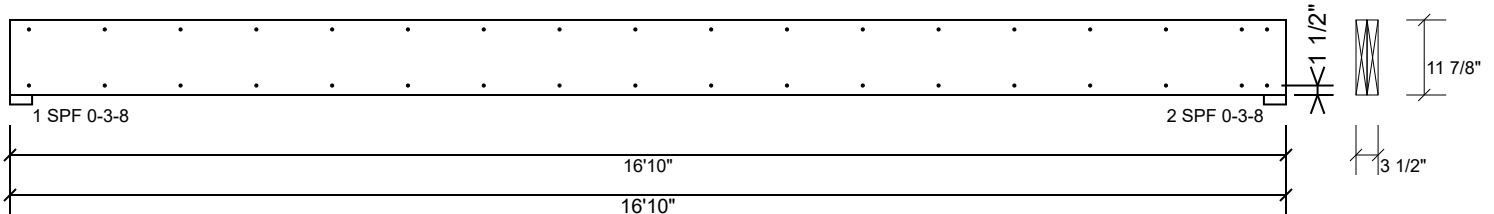
Client: Wellco Contractors  
Project:  
Address:

Date: 4/15/2025  
Input by: Curtis Quick  
Job Name: Plan 1 Beams  
Project #:

Page 2 of 9

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

Level: Level



### Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
C <sub>m</sub>	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

### Notes

Calculated Structural 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

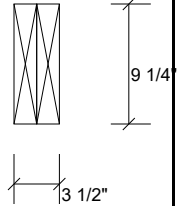
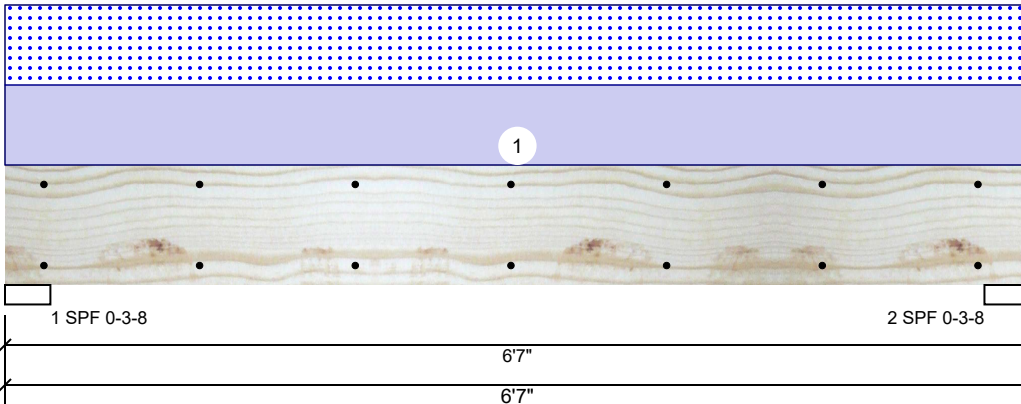
This design is valid until 6/28/2026

### Manufacturer Info

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

# BM1 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



## Member Information

Type: Girder  
Plies: 2  
Moisture Condition: Dry  
Deflection LL: 480  
Deflection TL: 360  
Importance: Normal - II  
Temperature: Temp <= 100°F

Application: Floor  
Design Method: ASD  
Building Code: IBC/IRC 2015  
Load Sharing: No  
Deck: Not Checked

## Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	1828	1804	0	0
2	Vertical	0	1828	1804	0	0

## Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	70%	1828 / 1804	3631	L	D+S
2 - SPF	3.500"	Vert	70%	1828 / 1804	3631	L	D+S

## Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5173 ft-lb	3'3 1/2"	14423 ft-lb	0.359 (36%)	D+S	L
Unbraced	5173 ft-lb	3'3 1/2"	10451 ft-lb	0.495 (50%)	D+S	L
Shear	2465 lb	1' 3/4"	7943 lb	0.310 (31%)	D+S	L
LL Defl inch	0.047 (L/1573)	3'3 1/2"	0.153 (L/480)	0.305 (31%)	S	L
TL Defl inch	0.094 (L/781)	3'3 1/2"	0.204 (L/360)	0.461 (46%)	D+S	L

## Design Notes

- 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.
- Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- Refer to last page of calculations for fasteners required for specified loads.
- Girders are designed to be supported on the bottom edge only.
- Top loads must be supported equally by all plies.
- Top must be laterally braced at end bearings.
- Bottom must be laterally braced at end bearings.
- 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	548 PLF	0 PLF	548 PLF	0 PLF	0 PLF	A1
	Self Weight				7 PLF					

## Notes

Calculated Structural 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

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

## 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
- 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 6/28/2026

## Manufacturer Info

Metsä Wood  
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Norwalk, CT 06851  
(800) 622-5850  
[www.metsawood.com/us](http://www.metsawood.com/us)





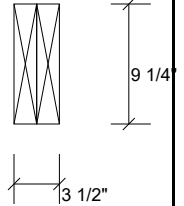
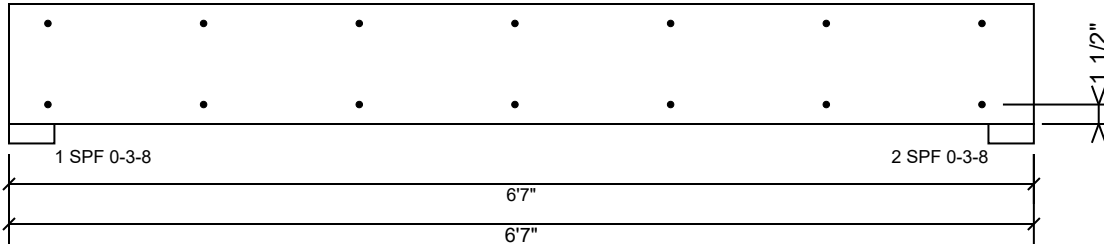
Client: Wellco Contractors  
Project:  
Address:

Date: 4/15/2025  
Input by: Curtis Quick  
Job Name: Plan 1 Beams  
Project #:

Page 4 of 9

## BM1 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



### Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
C <sub>m</sub>	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

#### Notes

Calculated Structural 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

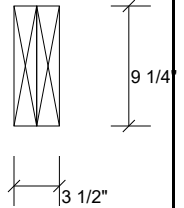
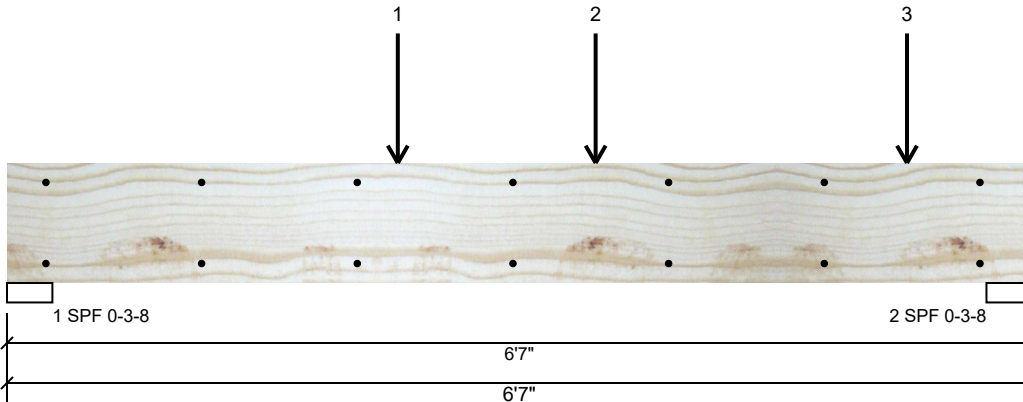
This design is valid until 6/28/2026

#### Manufacturer Info

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

# BM2 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



## Member Information

Type: Girder  
Plies: 2  
Moisture Condition: Dry  
Deflection LL: 480  
Deflection TL: 360  
Importance: Normal - II  
Temperature: Temp <= 100°F

Application: Floor  
Design Method: ASD  
Building Code: IBC/IRC 2015  
Load Sharing: No  
Deck: Not Checked

## Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	1621	1598	0	0
2	Vertical	0	2000	1976	0	0

## Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	62%	1621 / 1598	3219	L	D+S
2 - SPF	3.500"	Vert	76%	2000 / 1976	3976	L	D+S

## Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	7321 ft-lb	2'6 1/8"	14423 ft-lb	0.508 (51%)	D+S	L
Unbraced	7321 ft-lb	2'6 1/8"	10451 ft-lb	0.701 (70%)	D+S	L
Shear	3386 lb	5'6 1/4"	7943 lb	0.426 (43%)	D+S	L
LL Defl inch	0.062 (L/1192)	3'2 1/16"	0.153 (L/480)	0.403 (40%)	S	L
TL Defl inch	0.124 (L/593)	3'2 1/16"	0.204 (L/360)	0.607 (61%)	D+S	L

## Design Notes

- 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.
- Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- Refer to last page of calculations for fasteners required for specified loads.
- Girders are designed to be supported on the bottom edge only.
- Top loads must be supported equally by all plies.
- Top must be laterally braced at end bearings.
- Bottom must be laterally braced at end bearings.
- 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	Point	2-6-2		Top	1834 lb	0 lb	1834 lb	0 lb	0 lb	C2
	Bearing Length	0-3-8								
2	Point	3-9-6		Top	870 lb	0 lb	870 lb	0 lb	0 lb	C1
	Bearing Length	0-3-8								
3	Point	5-9-6		Top	870 lb	0 lb	870 lb	0 lb	0 lb	C1

Continued on page 2...

## Notes

Calculated Structural 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

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

chemicals

## 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
- 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

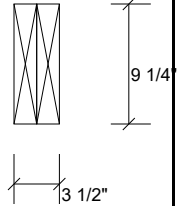
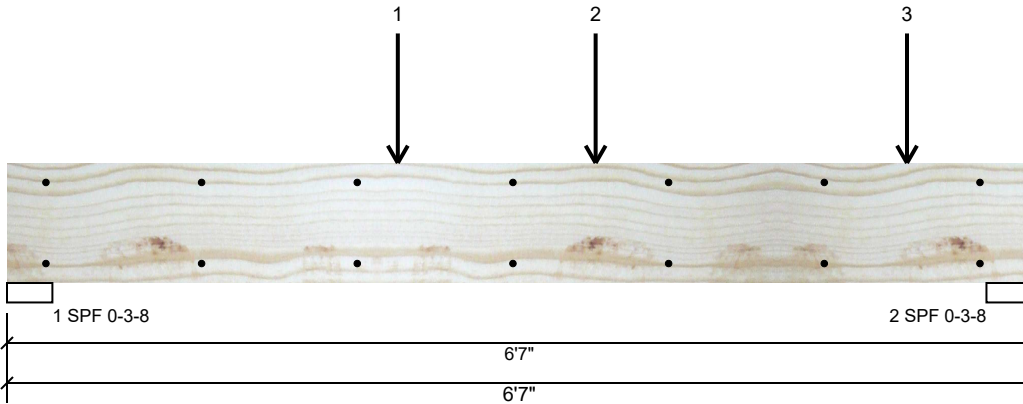
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## Manufacturer Info

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Norwalk, CT 06851  
(800) 622-5850  
www.metsawood.com/us

## BM2 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



...Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
	Bearing Length	0-3-8								
	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.

### 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 6/28/2026

### Manufacturer Info

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



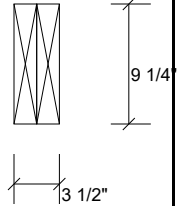
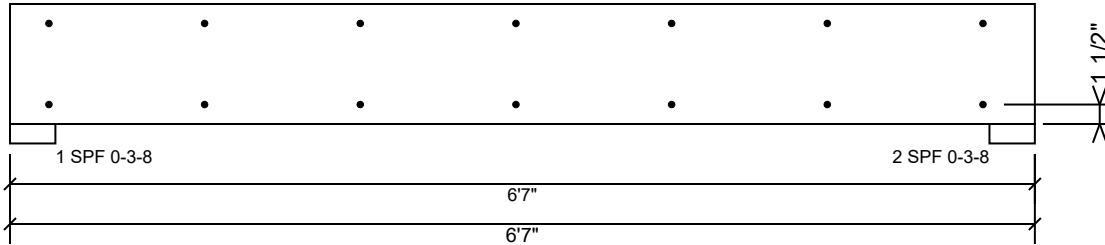
Client: Wellco Contractors  
Project:  
Address:

Date: 4/15/2025  
Input by: Curtis Quick  
Job Name: Plan 1 Beams  
Project #:

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**BM2 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED**

Level: Level



### Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
C <sub>m</sub>	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

### Notes

Calculated Structural 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
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chemicals

### Handling & Installation

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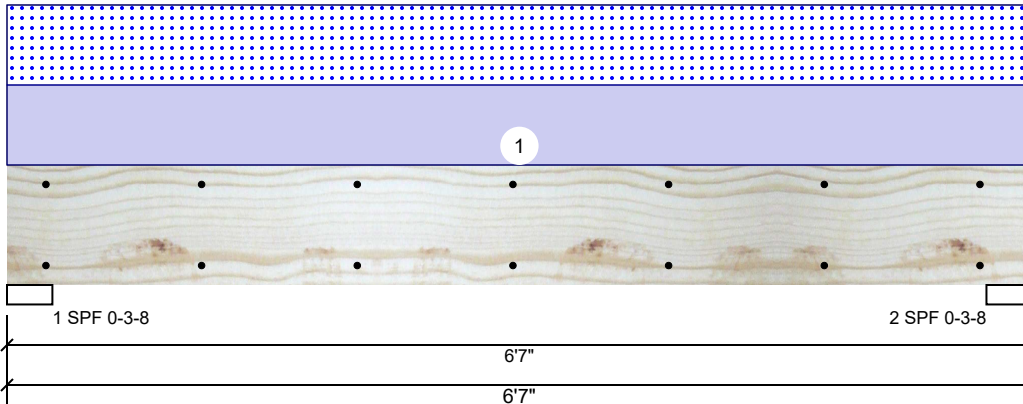
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# BM3 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



## Member Information

Type: Girder  
Plies: 2  
Moisture Condition: Dry  
Deflection LL: 480  
Deflection TL: 360  
Importance: Normal - II  
Temperature: Temp <= 100°F

Application: Floor  
Design Method: ASD  
Building Code: IBC/IRC 2015  
Load Sharing: No  
Deck: Not Checked

## Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	1439	1415	0	0
2	Vertical	0	1439	1415	0	0

## Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	55%	1439 / 1415	2855	L	D+S
2 - SPF	3.500"	Vert	55%	1439 / 1415	2855	L	D+S

## Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4067 ft-lb	3'3 1/2"	14423 ft-lb	0.282 (28%)	D+S	L
Unbraced	4067 ft-lb	3'3 1/2"	10451 ft-lb	0.389 (39%)	D+S	L
Shear	1939 lb	5'6 1/4"	7943 lb	0.244 (24%)	D+S	L
LL Defl inch	0.037 (L/2004)	3'3 1/2"	0.153 (L/480)	0.239 (24%)	S	L
TL Defl inch	0.074 (L/994)	3'3 1/2"	0.204 (L/360)	0.362 (36%)	D+S	L

## Design Notes

- 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.
- Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- Refer to last page of calculations for fasteners required for specified loads.
- Girders are designed to be supported on the bottom edge only.
- Top loads must be supported equally by all plies.
- Top must be laterally braced at end bearings.
- Bottom must be laterally braced at end bearings.
- 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	430 PLF	0 PLF	430 PLF	0 PLF	0 PLF	B1
	Self Weight				7 PLF					

## Notes

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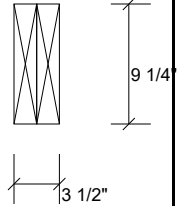
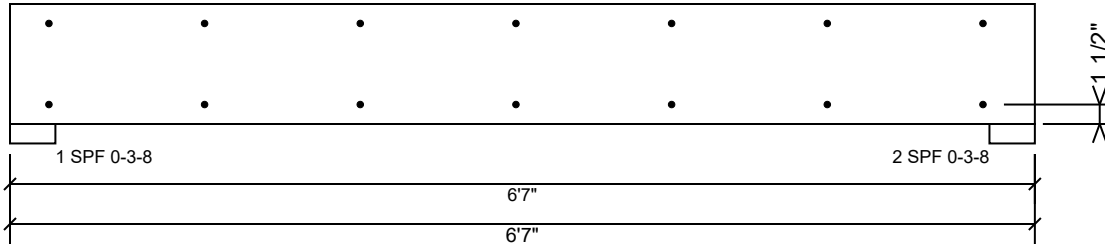
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## BM3 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



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