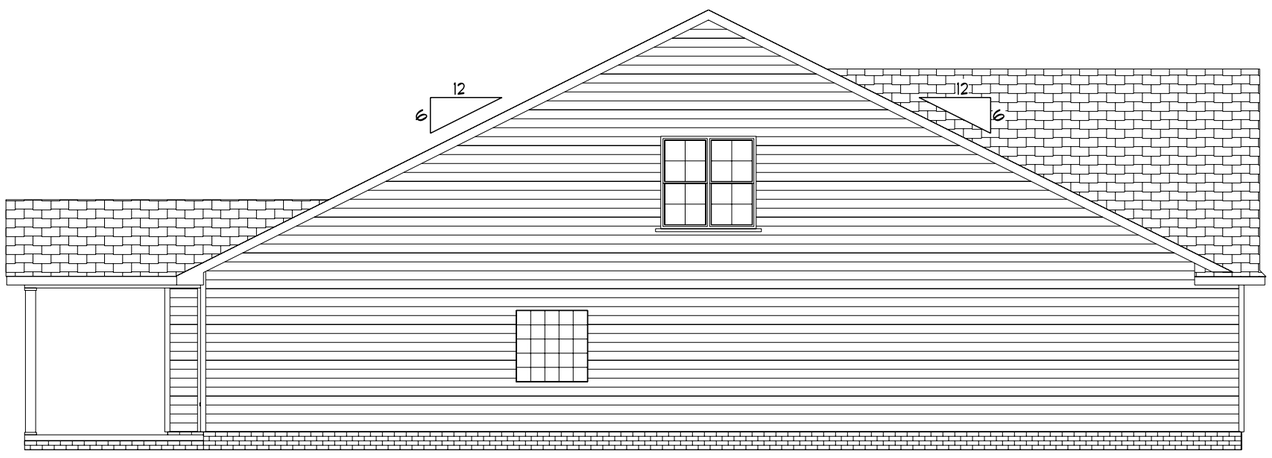
Front Elevation
Scale: 1/4"= 1'0"



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

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

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

09/22/2022

Harnett COUNTY NORTH CAROLINA

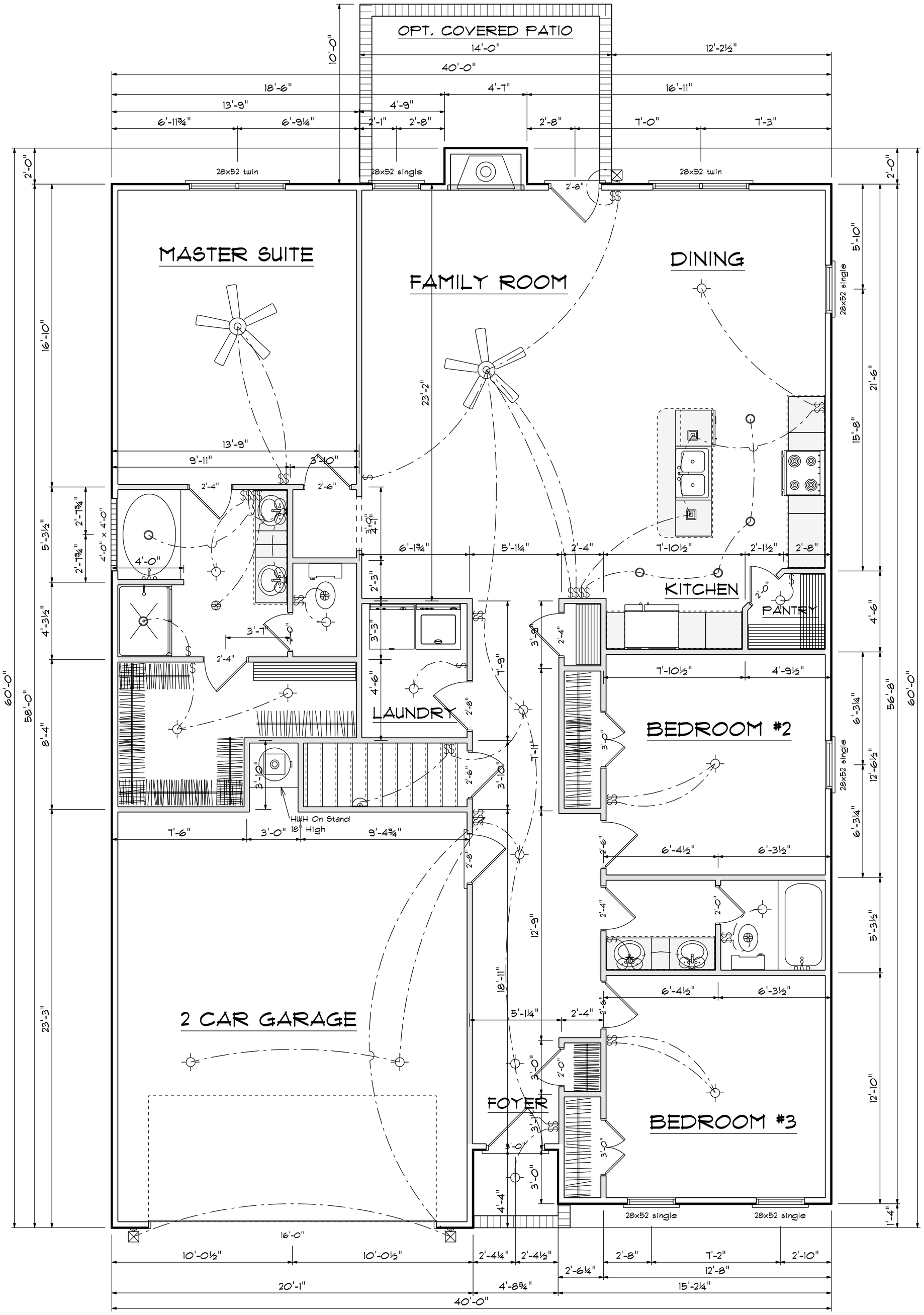
Right Elevation
Scale: 1/8"= 1'0"

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

Wellco Contractors Inc.

Plan# 2

SCALE: 1/4"		DATE: 2/16/2022	
DRAWN BY		REVISED	
APPROVED		DRAWING#	



First Floor Plan

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

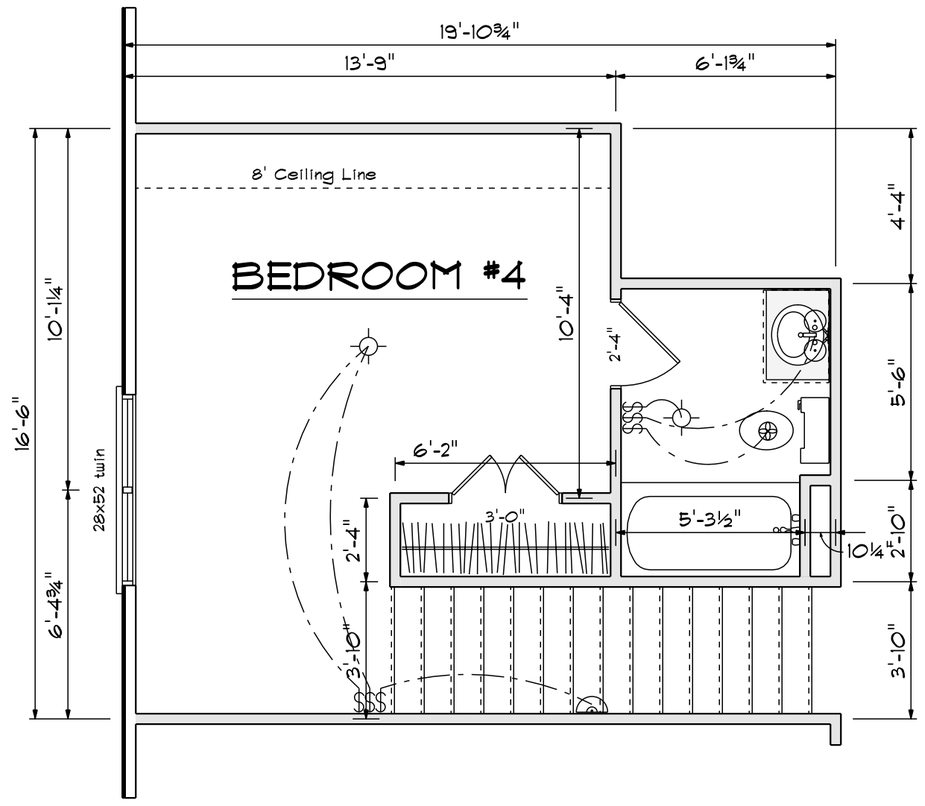
Areas

First Floor	1818
Second Floor	245
Total Heated	2063
Garage	486
Front Porch	26
Rear Opt. Porch	145

Wellco Contractors Inc.

Plan# 2

SCALE: 1/4"		DATE: 2/16/2022	
DRAWN BY		REVISED	
APPROVED		DRAWING#	

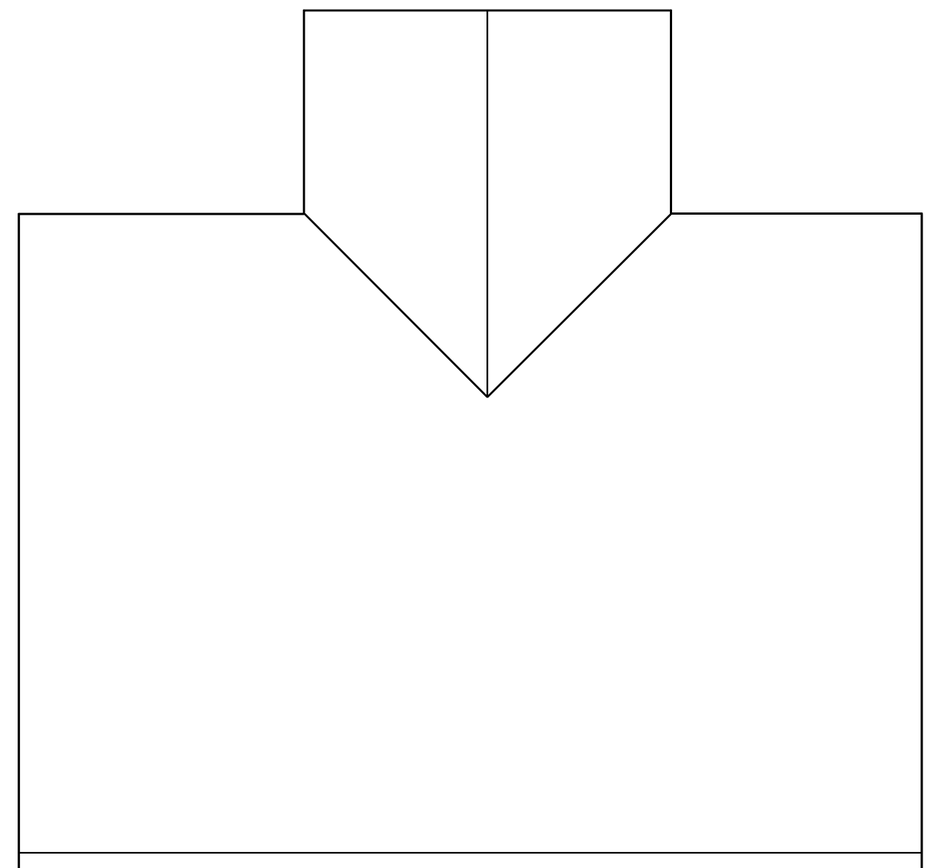


Second Floor Plan

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

FIRST FLOOR 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 - 8 PANEL - GARAGE DOOR	16'-0"	U	NO	1
2-0 Door Unit	2'-0"	R	NO	1
2-0 Door Unit	2'-0"	L	NO	3
2-4 Door Unit	2'-4"	R	NO	1
2-4 Door Unit	2'-4"	L	NO	3
2-6 Door Unit	2'-6"	R	NO	3
2-6 Door Unit	2'-6"	L	NO	1
2-8 Door Unit	2'-8"	L	NO	1
2-8 Door Unit	2'-8"	R	NO	1
3-0 Doublehung Door Unit	3'-0"	LR	NO	1
3-0 Doublehung Door Unit	3'-0"	LR	NO	1
28x52 single	2'-8" x 5'-2"	N	NA	5
28x52 twin	5'-4" x 5'-2"	NN	NA	2
4X8 GLASS BLOCK	4'-0" x 4'-0"	N	NA	1

SECOND FLOOR OPENING SCHEDULE				
PRODUCT CODE	**SIZE**	**HINGE**	**REVERSED**	**COUNT**
2-4 Door Unit	2'-4"	L	NO	1
3-0 Doublehung Door Unit	3'-0"	LR	NO	1
28x52 twin	5'-4" x 5'-2"	NN	NA	1

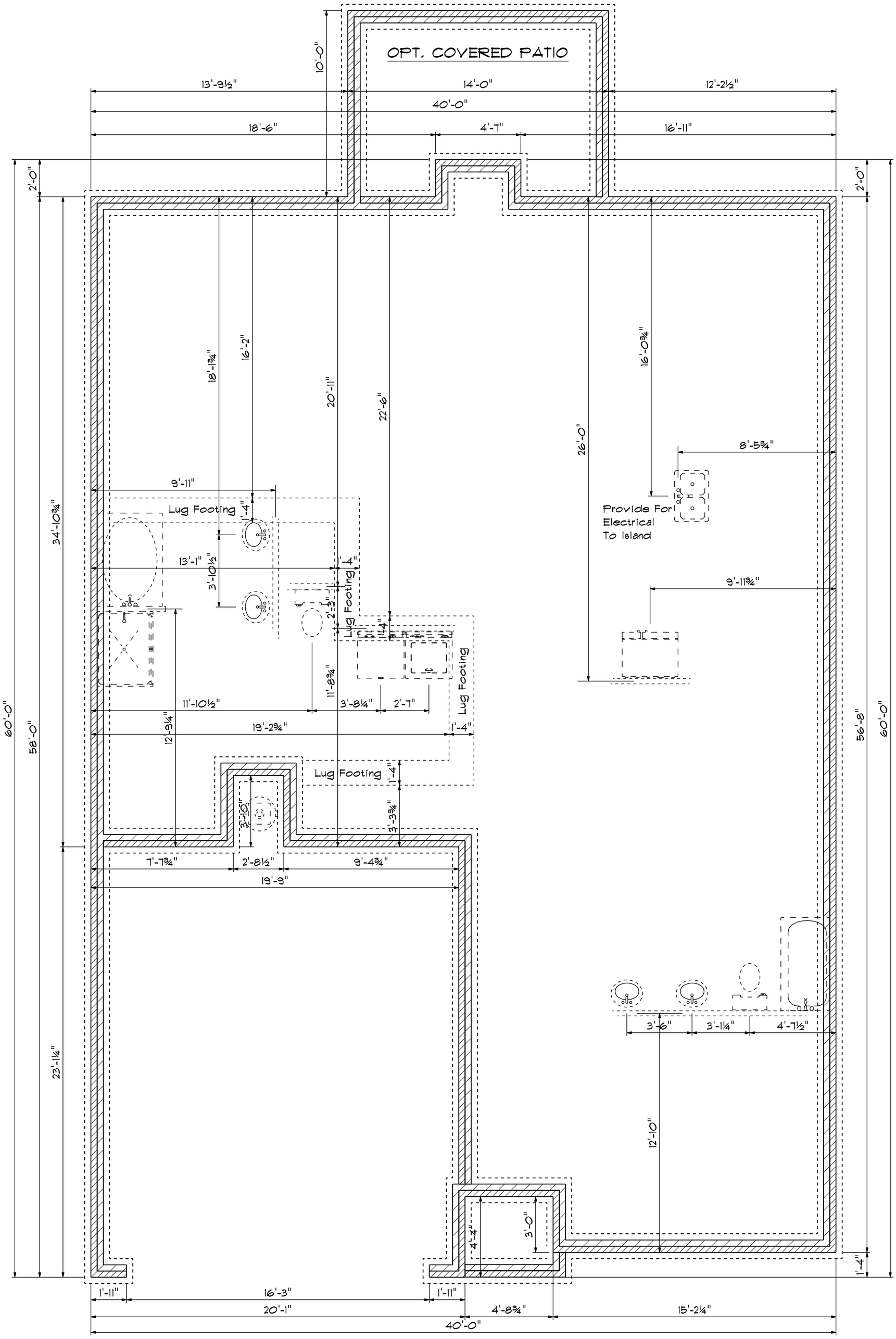


Roof Plan

Wellco Contractors Inc.

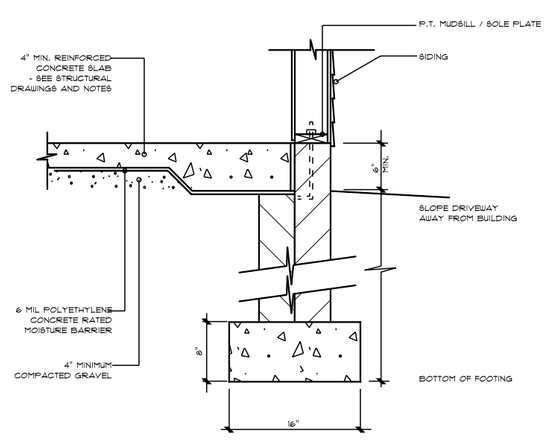
Plan# 2

SCALE: 1/4"		DATE: 2/16/2022	
DRAWN BY		REVISED	
APPROVED		DRAWING#	

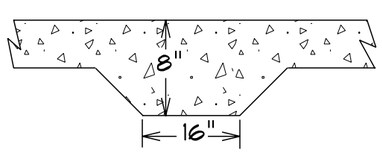


Foundation Plan

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



STEM WALL FOOTING DETAIL

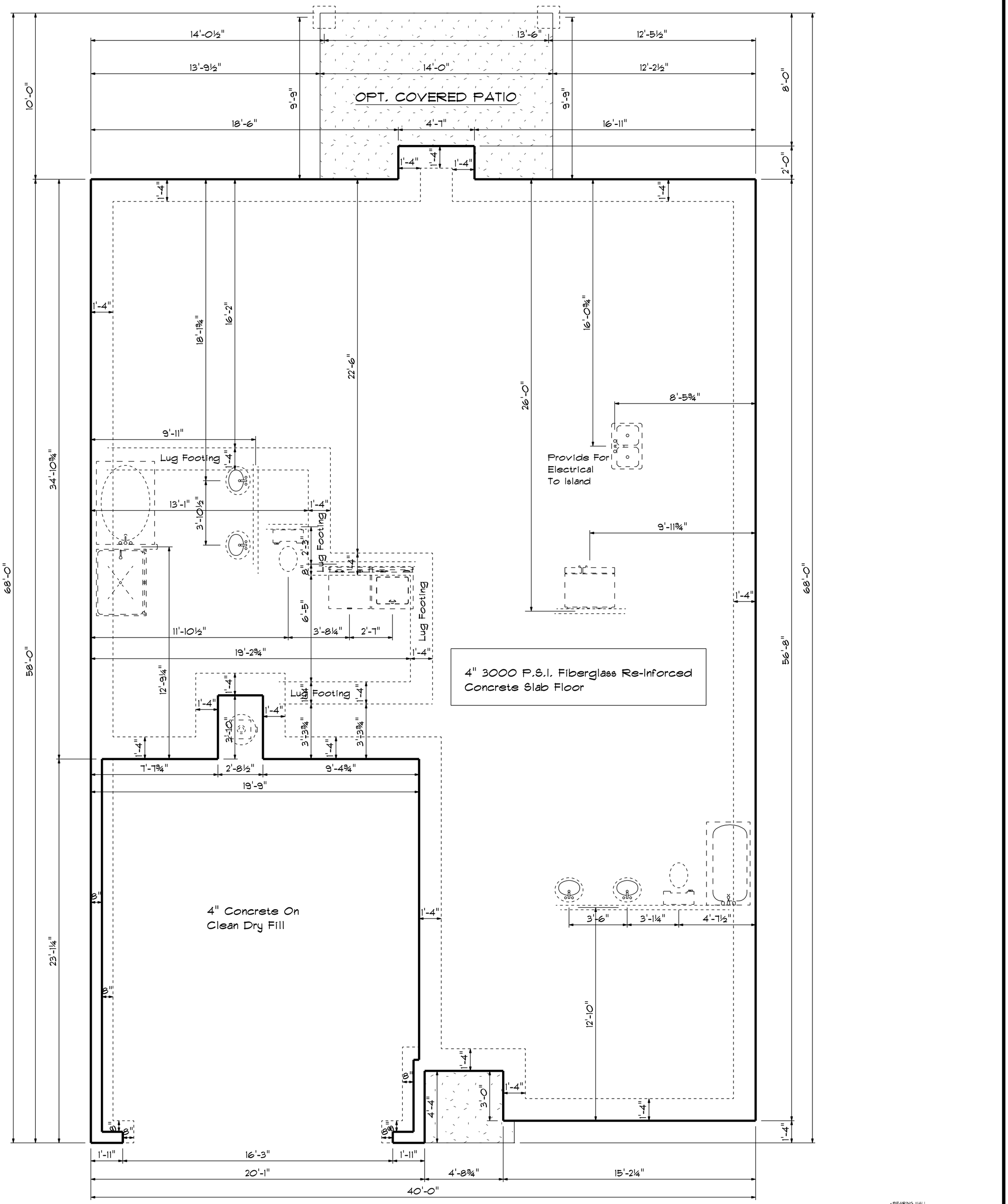


LUG FOOTING DETAIL

Welco Contractors Inc.

Plan# 2

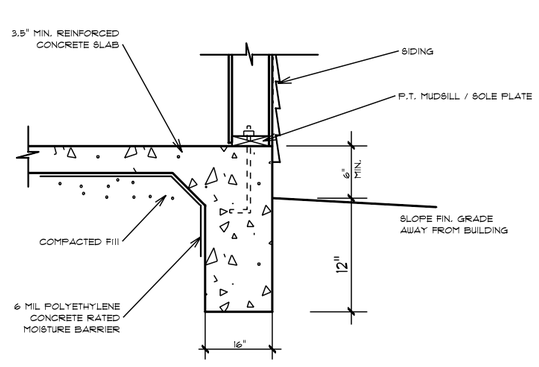
SCALE: 1/4"		DATE: 2/16/2022	
DRAWN BY		REVISED	
APPROVED		DRAWING#	



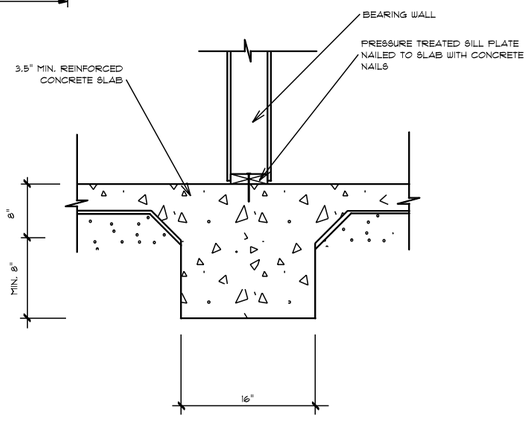
4" 3000 P.S.I. Fiberglass Re-Inforced Concrete Slab Floor

Foundation Plan

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



TURN-DOWN
FOOTING DETAIL

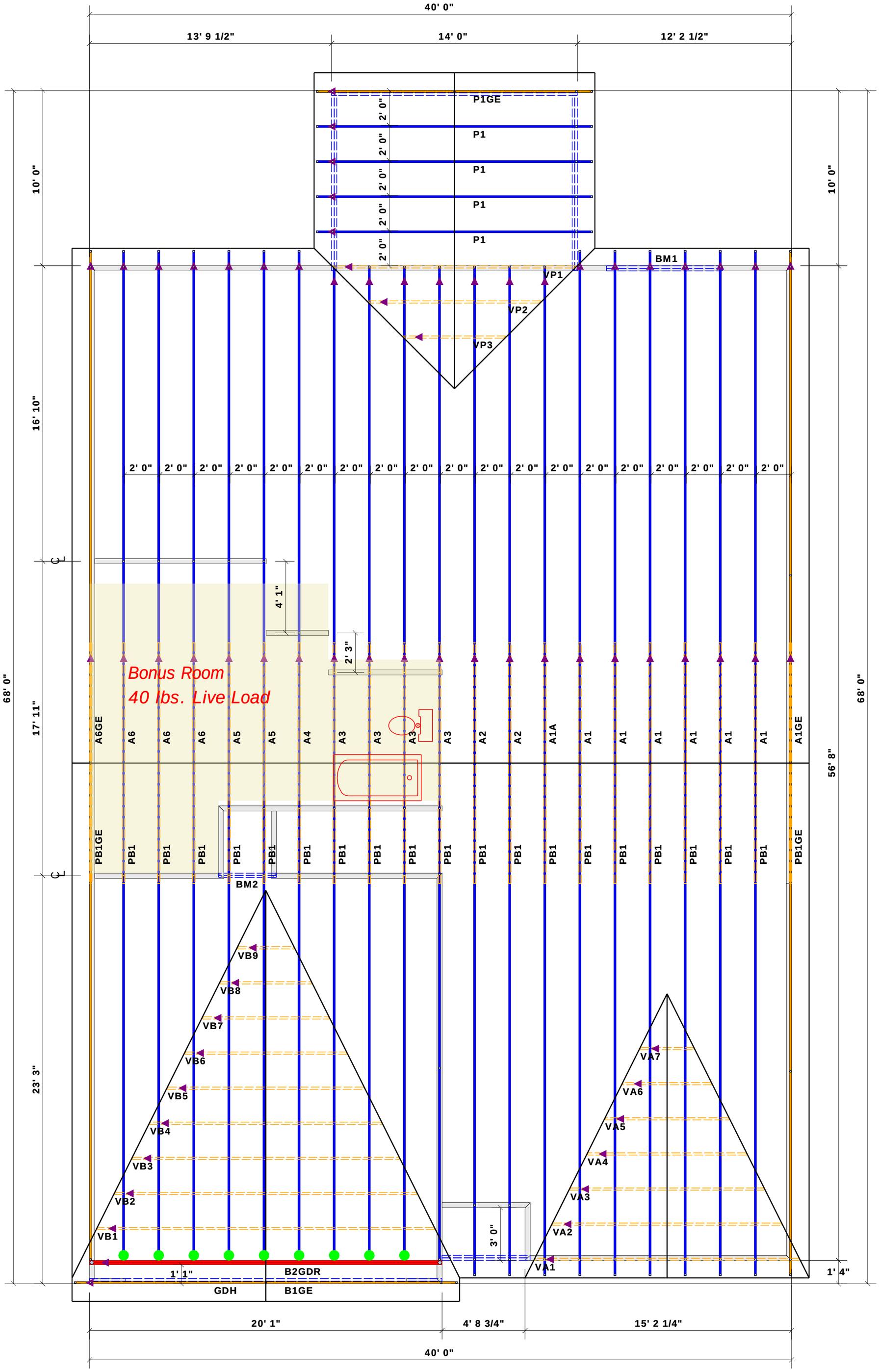


INTEGRAL SLAB FOOTING
DETAIL AT BEARING WALL

Welco Contractors Inc.

Plan# 2

SCALE: 1/4"		DATE: 2/16/2022	
DRAWN BY		REVISED	
APPROVED		DRAWING#	



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

HANGER LEGEND

● = USP HUS26 / Single 2x Hanger

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
GDH	21' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2	FF
BM2	4' 0"	2x8 SPF No.2	2	2	FF

LOAD CHART FOR JACK STUDS

LIVE & ACCION (LF TO)	REQ'D # STUDS FOR (1) JACK (1) HEADER	LIVE & ACCION (LF TO)	REQ'D # STUDS FOR (2) JACK (1) HEADER	LIVE & ACCION (LF TO)	REQ'D # STUDS FOR (3) JACK (1) 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				

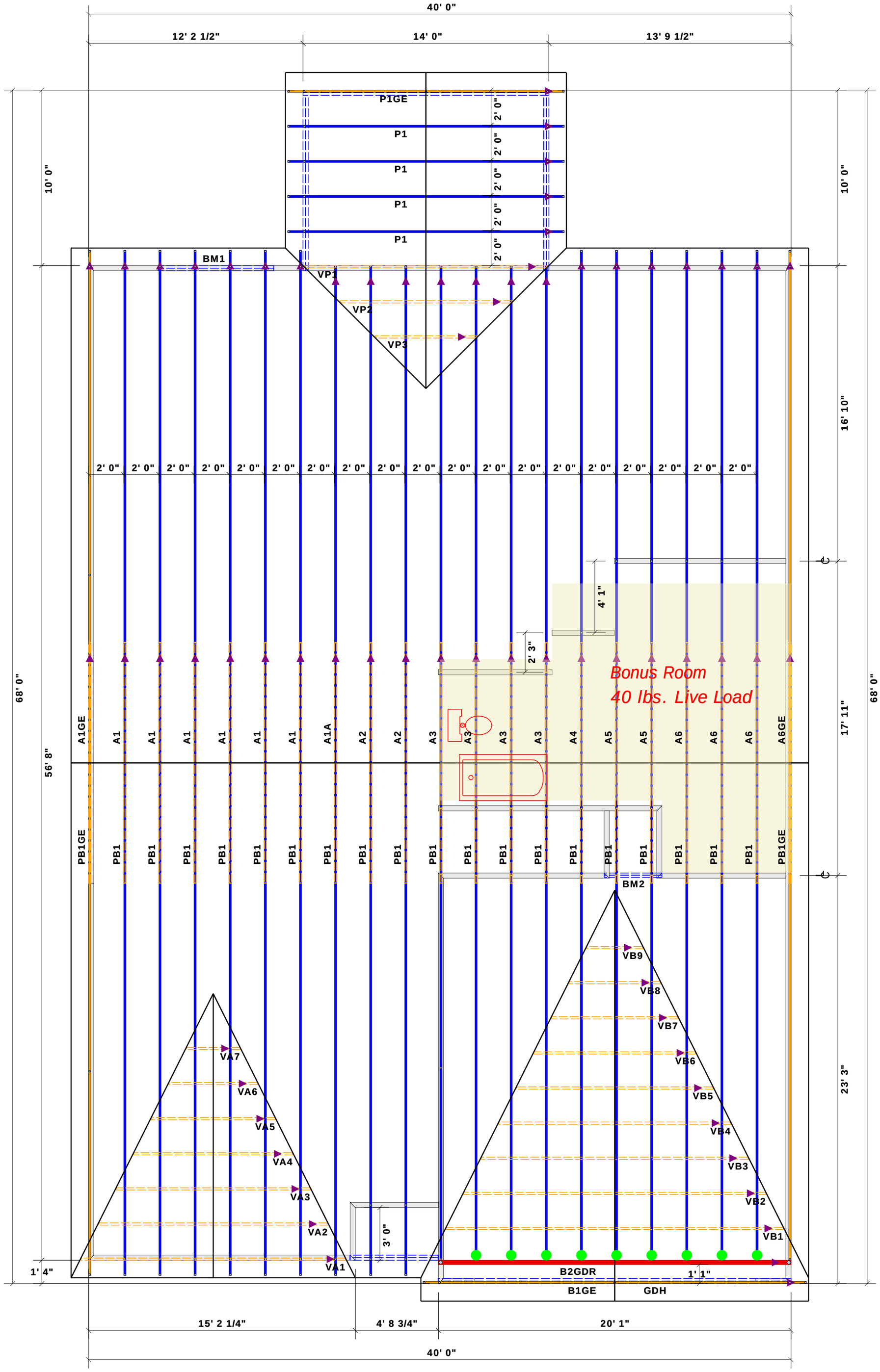
BUILDER	Wellco Contractors	CITY / CO.	Spring Lake / Harnett
JOB NAME	Lot 148 Hidden Lakes	ADDRESS	Lot 148 Hidden Lakes
PLAN	Plan 2	MODEL	Model
SEAL DATE	Seal Date	DATE REV.	09/13/22
QUOTE #	B0522-2881	DRAWN BY	Curtis Quick
JOB #	J0822-4434	SALES REP.	Lenny Norris

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 @ sbcindustry.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 Curtis Quick
Curtis Quick

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



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

HANGER LEGEND

●	= USP HUS26 / Single 2x Hanger

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
GDH	21' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2	FF
BM2	4' 0"	2x8 SPF No.2	2	2	FF

LOAD CHART FOR JACK STUDS

END REACTION (LB)	NO. JACK STUDS REQ'D FOR (1) 1¾" WIDE HEADER	END REACTION (LB)	NO. JACK STUDS REQ'D FOR (2) 1¾" WIDE HEADER	END REACTION (LB)	NO. JACK STUDS REQ'D FOR (3) 1¾" WIDE 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				

BUILDER	Wellco Contractors	CITY / CO.	Spring Lake / Harnett
JOB NAME	Lot 148 Hidden Lakes	ADDRESS	Lot 148 Hidden Lakes
PLAN	Plan 2	MODEL	Model
SEAL DATE	Seal Date	DATE REV.	09/13/22
QUOTE #	B0522-2881	DRAWN BY	Curtis Quick
JOB #	J0822-4434	SALES REP.	Lenny Norris

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.
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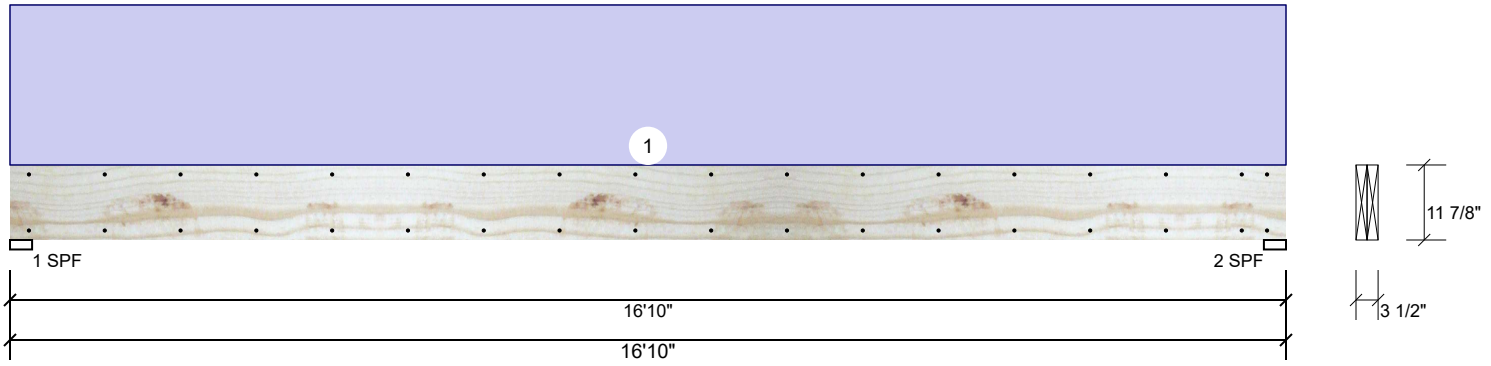
Signature Curtis Quick
Curtis Quick

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

Client:	Wellco Contractors	Date:	7/15/2022
Project:		Input by:	Curtis Quick
Address:		Job Name:	Plan 2 Beams
		Project #:	

GDH Kerto-S 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:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

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

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. Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
3. Refer to last page of calculations for fasteners required for specified loads.
4. Girders are designed to be supported on the bottom edge only.
5. Top loads must be supported equally by all plies.
6. Top must be laterally braced at a maximum of 10'8 15/16" o.c.
7. Bottom must be laterally braced at end bearings.
8. 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 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 11/3/2024

Manufacturer Info

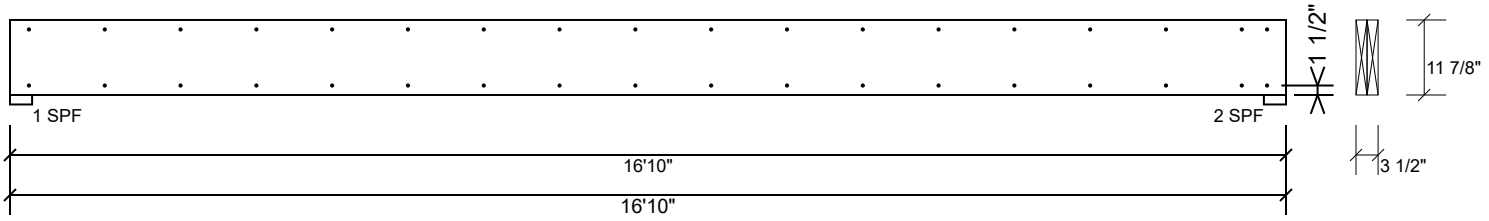
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us

Comtech, Inc.
1001 S. Reilly Road, Suite #639
Fayetteville, NC
USA
28314
910-864-TRUS

Client:	Wellco Contractors	Date:	7/15/2022
Project:		Input by:	Curtis Quick
Address:		Job Name:	Plan 2 Beams
		Project #:	

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.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

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.

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Manufacturer Info

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(800) 622-5850
www.metsawood.com/us

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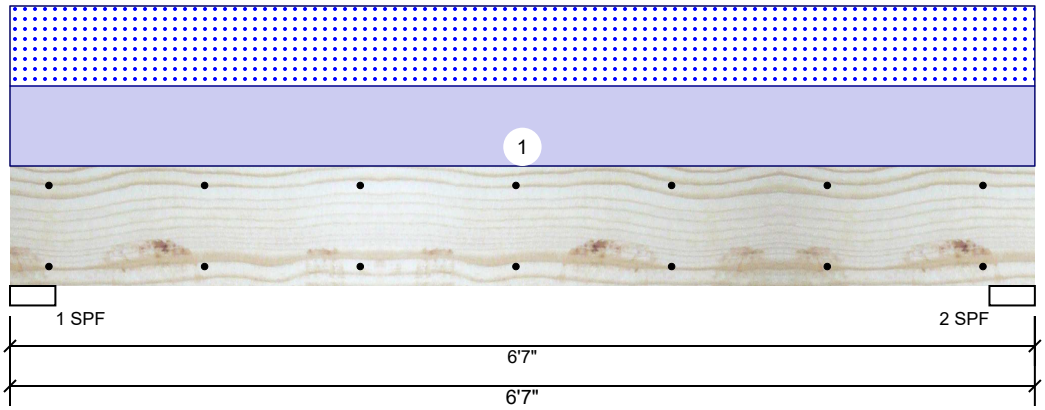
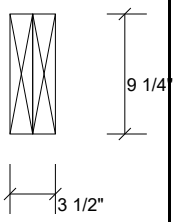
Client:	Wellco Contractors	Date:	7/15/2022
Project:		Input by:	Curtis Quick
Address:		Job Name:	Plan 2 Beams
		Project #:	

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

Level: Level





Member Information

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:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	2015	1991	0	0
2	Vertical	0	2015	1991	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	77%	2015 / 1991	4007	L	D+S
2 - SPF	3.500"	Vert	77%	2015 / 1991	4007	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5708 ft-lb	3'3 1/2"	14423 ft-lb	0.396 (40%)	D+S	L
Unbraced	5708 ft-lb	3'3 1/2"	10451 ft-lb	0.546 (55%)	D+S	L
Shear	2719 lb	1' 3/4"	7943 lb	0.342 (34%)	D+S	L
LL Defl inch	0.052 (L/1425)	3'3 1/2"	0.153 (L/480)	0.337 (34%)	S	L
TL Defl inch	0.104 (L/708)	3'3 1/2"	0.204 (L/360)	0.508 (51%)	D+S	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 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
3 Refer to last page of calculations for fasteners required for specified loads.
4 Girders are designed to be supported on the bottom edge only.
5 Top loads must be supported equally by all plies.
6 Top must be laterally braced at end bearings.
7 Bottom must be laterally braced at end bearings.
8 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	605 PLF	0 PLF	605 PLF	0 PLF	0 PLF	A1
	Self Weight				7 PLF					

Notes

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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
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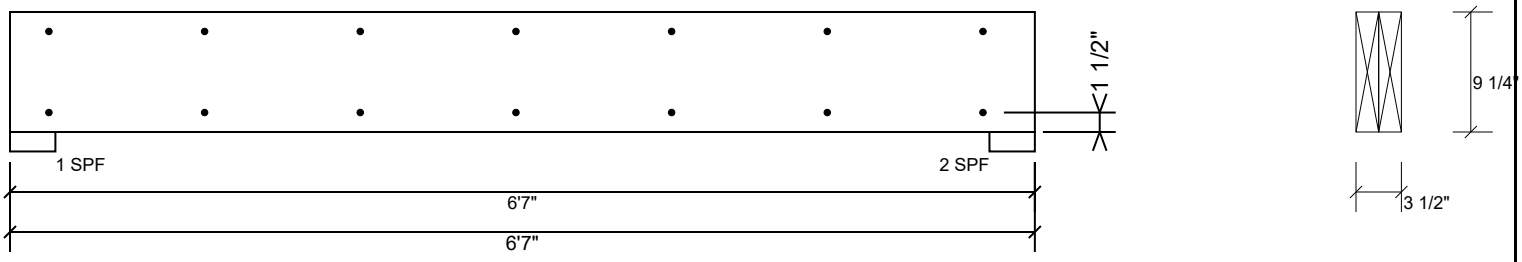
Client:	Wellco Contractors	Date:	7/15/2022
Project:		Input by:	Curtis Quick
Address:		Job Name:	Plan 2 Beams
		Project #:	

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.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

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Handling & Installation

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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

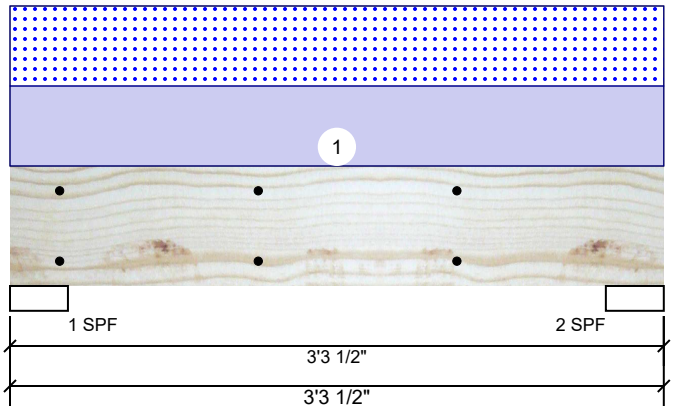
Manufacturer Info

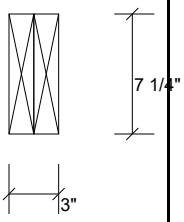
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us

Comtech, Inc.
1001 S. Reilly Road, Suite #639
Fayetteville, NC
USA
28314
910-864-TRUS

BM2 S-P-F #2 2.000" X 8.000" 2-Ply - PASSED

Level: Level





Member Information

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:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	397	397	0	0
2	Vertical	0	397	397	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	18%	397 / 397	793	L	D+S
2 - SPF	3.500"	Vert	18%	397 / 397	793	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	484 ft-lb	1'7 3/4"	2645 ft-lb	0.183 (18%)	D+S	L
Unbraced	484 ft-lb	1'7 3/4"	2586 ft-lb	0.187 (19%)	D+S	L
Shear	362 lb	2'4 3/4"	2251 lb	0.161 (16%)	D+S	L
LL Defl inch	0.003 (L/12977)	1'7 3/4"	0.071 (L/480)	0.037 (4%)	S	L
TL Defl inch	0.005 (L/6488)	1'7 3/4"	0.094 (L/360)	0.055 (6%)	D+S	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 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
3 Refer to last page of calculations for fasteners required for specified loads.
4 Girders are designed to be supported on the bottom edge only.
5 Top loads must be supported equally by all plies.
6 Top must be laterally braced at end bearings.
7 Bottom must be laterally braced at end bearings.
8 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	241 PLF	0 PLF	241 PLF	0 PLF	0 PLF	A5

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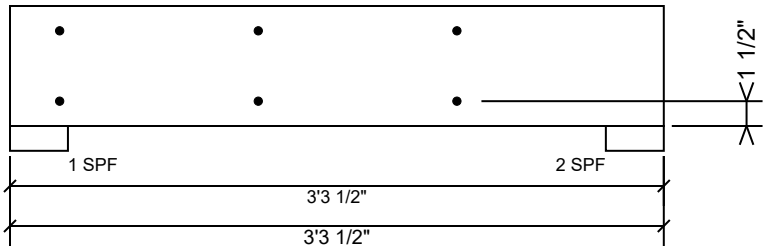
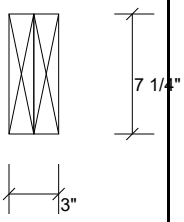
BM2 S-P-F #2 2.000" X 8.000" 2-Ply - PASSED

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	157.4 PLF
Yield Limit per Fastener	78.7 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

This design is valid until 11/3/2024

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