



GEORGIA VERMONT

Application for Zoning Permit

Recording Information

- ⇒ For any change of use on State Highways (Route 7 & 104A) contact VTRANS
- ⇒ Post **Permit Poster** so it is visible to the road immediately as the Permit is appeal-able within 15 days of issuance.
- ⇒ Complete a Certificate of Occupancy application upon completion of project.
- ⇒ Provide a diagram showing the proposed project, well location, septic location and setbacks from the property line.
- ⇒ Property information & forms are available at townofgeorgia.com or using the [Georgia VT Parcel Map](#).

Application Approval Date 10/3/23
Appeal Period Expires 10/18/23
Zoning District AR-3
Permit Number BP-073-23

A

Parcel Number: 110470000

Property Address (E911): 182 Meadowood Drive

Applicant Name: Matthew Markham

Applicant Address: 68 Gold St Agawam MA 01001

Applicant Phone: [REDACTED] Applicant Email: [REDACTED]

Owners Name (if different): Thomas Palermo

Property Owner Authorization: *The undersigned property owner hereby certifies that the information submitted in this application regarding the property line is true, accurate, and complete. The Applicant has full authority to request approval for the proposed use of the property and any proposed structure.*

Date: 09/20/2023 Owner's Signature: [REDACTED]

B

Proposed Construction

Dimensions: (1) L x W x H (2) L x W x H Total ft²

of floors: # of Bedrooms # of Bathrooms

C

Property Information

Lot Size ^{2.18} acres Lot road frontage ± 141 ft

Proposed Setbacks (in feet)

Center of Road ± 237' Right Side ± 161' Left Side ± 50' Rear ± 40'

D

Previous Permits / Subdivision Name / Driveway Permit / DRB Application

 /

 /

E

Septic Information: Applicants should visit the Agency of Natural Resources Department of Environmental Conservation to determine if a wastewater and Potable Water Supply Permit is required in accordance with 10 V.S.A. Chapter 64.

Website: <https://dec.vermont.gov/water/forms/www-systems-permits>

☒ Changes are not proposed to the building or to the use which will increase the amount of wastewater disposal. (i.e. adding bedroom or change of use)

☐ Wastewater & Potable Supply Permit is required. State Permit #

F

VT Building Energy Standards Certificate (RBES): The Vermont Residential Building Energy Standard (RBES) - 30 V.S.A. § 51 affects all new homes built after July 1, 1998. It is the energy code for all residential buildings 3 stories or less above grade in Vermont. RBES Disclosure Statement must be filled out and recorded with the town prior to the issuance of a Certificate of Occupancy. Applicant must certify the following:

☒ Structure which is subject of this application DOES NOT require an RBES Certificate

☐ Structure which is subject of this application DOES require an RBES Certificate

G

Check box(es) which describe proposed use or construction (circle choice in parenthesis)

N = New A = Addition R = Remodel

Residential:	N	A	R
Single Family	☐	☐	☐
Two-family (Duplex)	☐	☐	☐
Multi-family	☐	☐	☐
Condominium / Townhouse	☐	☐	☐
Manufactured Home	☐	☐	☐
Seasonal Camp	☐	☐	☐
ADU (accessory dwelling unit)	☐	☐	☐
Inclusions or Additions:			
Garage ☐ attached ☐ detached Addition	☐	☐	☐
Porch ☐ enclosed ☐ open	☐	☐	☐
Deck / Patio	☐	☐	☐
Pool ☐ in ground ☐ above	☐	☐	☐
Shed / Play House / Coop	☐	☐	☐
Barn ☐ residential ☐ agriculture	☐	☐	☐
Greenhouse ☐ residential ☐ agriculture	☐	☐	☐
Fence (< 5' in height no permit required)	☐	☐	☐
☒ Other: <u>solar</u>			
Non-Residential:			
Commercial / Industrial	☐	☐	☐
Sign	☐	☐	☐
Other:			
Change in Use	☐		
Home Occupation	☐		
Permit Renewal Appeal	☐		
Variance / Waiver	☐		

H

Please check the appropriate box for the following:

Additional Property Information	Yes	No
Is there a stream or wetland on property?	☐	☐
Is the property in a Special Flood Hazard Area?	☐	☐
Is the property in an LI zone on Lake Champlain?	☐	☐
Is the property in the South Village?	☐	☐
Project involve work in town right of way?	☐	☐
Project involve a change in the # of bedrooms?	☐	☒
Project involve demolition / renovation?	☐	☐
Have you attached a drawing of project?	☒	☐
Is this a primary residence?	☒	☐
Is there an HOA (Home Owners Association)?	☐	☐
Property have a E911 sign at end of driveway?	☐	☐
Is there an increase in impervious surface?	☐	☐
(includes roof, deck, porch, pavement, patio etc.)		
If yes total square feet <u> </u> ft ²		

Property Owner Acknowledgement: *The undersigned applicant hereby affirms that the information provided in this application is true, accurate, and complete. I understand if this application is approved, I must post the building poster provided on the property in public view and allow a 15 day appeal period before work begins. I understand Vermont law allows 30 days to find this application complete. I understand that my signature on this application constitutes permission for on-site inspection of the property by the town of Georgia, in accordance with § 3 of the Georgia Development Regulations.*

Applicant Signature: [REDACTED] Date 09/20/2023 Co-Applicant Signature: Date / /



OFFICIAL USE ONLY — ZONING ADMINISTRATOR ACTION — OFFICIAL USE ONLY

Date Application Received: 7/26/23 Zoning District: AR-3

Project Description: Free Standing Subv

Additional Action Needed:

Variance / Waiver: _____

Meeting date with DRB: / /

Appeal: _____

Meeting date with DRB: / /

Conditional Use Res: _____

Meeting date with DRB: / /

Conditional Use Com: _____

Meeting date with DRB: / /

Concept / Sketch Plan: _____

Meeting date with DRB: / /

Site Plan: _____

Meeting date with DRB: / /

BLA: _____

Meeting date with DRB: / /

Amend / Renew: _____

Meeting date with DRB: / /

Final Zoning Administrator Action

ZONING PERMIT



Approved

Date: 10/3/23

Zoning Administrator: _____

Permit EFFECTIVE date: 10/19/23

Permit EXPIRATION date: 10/3/24

CONDITIONS of Approval: must be screened from adjoining properties



RBES Required



Certificate of Occupancy Required



VTRANS Permit Required



Driveway Permit



ROW Permit



Class 4 Road Agreement



Other: solar - cannot cast glare on adjoining properties



E911 Sign



Denied

Date: / /

Zoning Administrator: _____

Reason for Denial: _____

Fees

Permit Fee: \$ 400.50

Recording Fee: \$ 60

RBES Record: \$ _____

VTRANS Record: \$ _____

Driveway Permit: \$ _____

ROW Permit: \$ _____

Road Inspection: \$ _____

Cert. of Occupancy: \$ 225.75

Cert of Occ Record: \$ _____

Impact Town: \$ _____

Impact School: \$ _____

Other: \$ _____

Total Fees Zone: \$ 625.25

Total Record: \$ 60

Total Highway: \$ _____

Total Impact Town: \$ _____

Total Permit Fees: \$ 685.25

Notice of Appeal Rights: Any interested person may appeal this decision by filing a written Notice of Appeal with the Zoning Administrator or DRB Clerk within 15 days of the date of this decision. (Title 24 VSA ch. 117 Section 4465)

This permit does not authorize commencement of any development activity approved by the permit until the permit takes effect as set forth above.

Site modifications and improvements made prior to this permit becoming effective may be subject to removal and site restoration if a timely appeal is commenced.

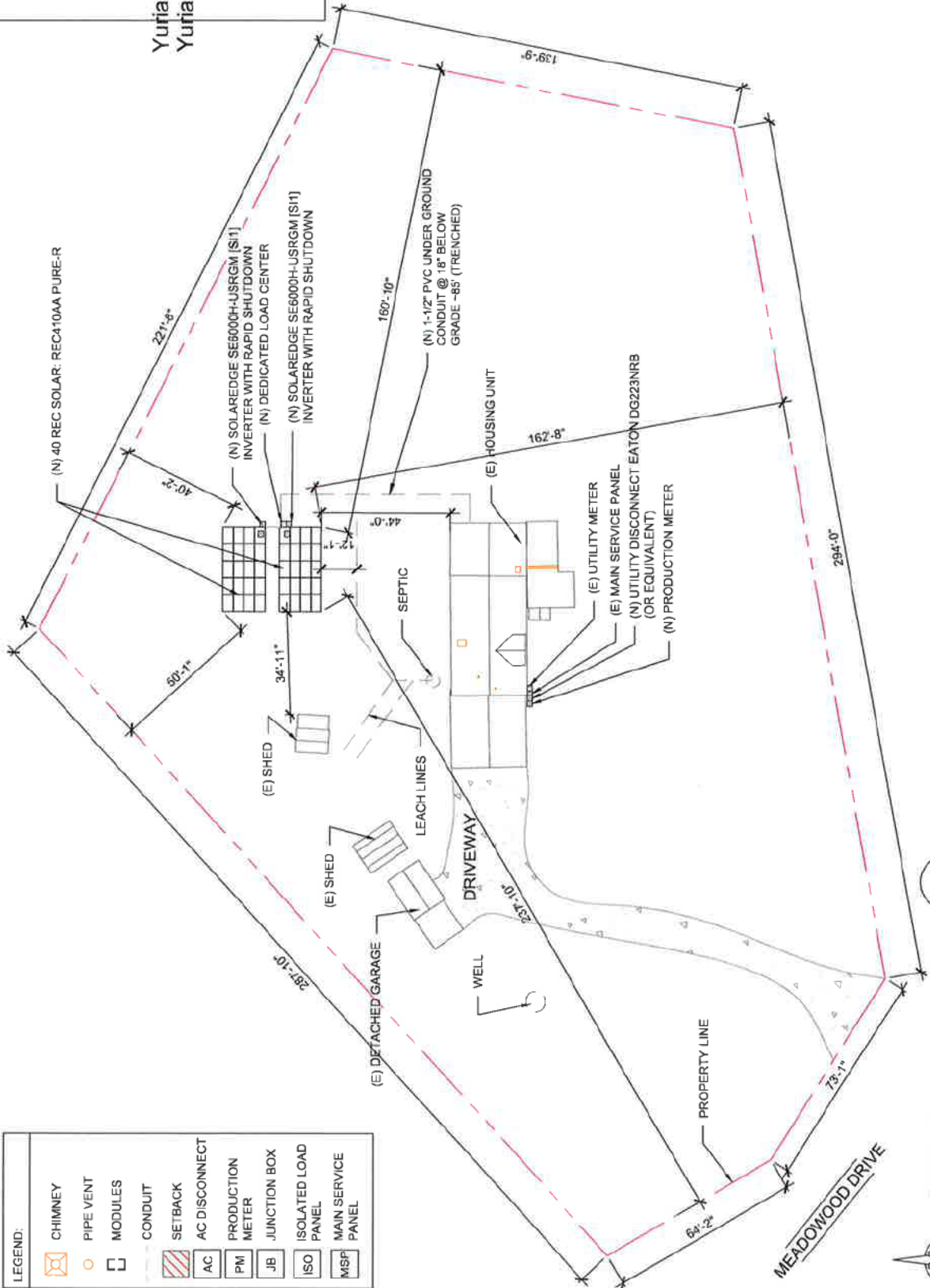
Expiration: This permit expires one year from the date of issue or date listed at top of permit and may be extended one additional year upon application.

Conditions: Conditions imposed by the Zoning Administrator, Planning Commission, DRB, or Selectboard are hereby incorporated into this permit and are binding on the permittee.

Note: The applicant retains the obligation to identify, apply for, and obtain relevant state permits for this project. Call (802) 477-2241 to speak with a regional Permit Specialist.

LEGEND:

	CHIMNEY
	PIPE VENT
	MODULES
	CONDUIT
	SETBACK
	AC DISCONNECT
	PRODUCTION METER
	JUNCTION BOX
	ISOLATED LOAD PANEL
	MAIN SERVICE PANEL



1

SITE PLAN
SCALE: 1/32" = 1'-0"



Yurianto
Yurianto

By Yuri at 7:17:59 PM, 9/19/2023
[Structural Aspects Only]
M.P. Design & Engineering, LLC
Support, Anchor & Foundation

VT
STATE OF VERMONT
Professional Engineer
Yurianto Yurianto
No. 015.013477
Professional Engineer
Mechanical
150 North Main Street
Suite 100
Winooski, VT 05404

ARRAY AREA: 827.68 SQ FT	CLIENT: PALENOG 175 MEADOWOOD DRIVE, GEORGIA, VT 05468 A.H. TOWN OF GEORGIA (VT) UTILITY CMP - GREEN MOUNTAIN POWER (VT) APN: 6144161 PHONE: (802) 998-3638 EMAIL: PALENOG@COMCAST.NET	SYSTEM: SYSTEM SIZE (DC): 40 X 410 = 16,400 KW SYSTEM SIZE (AC): 10 X 100 = 1,000 KW MODULES: 40 X REC SOLAR REC410AA PULC-N OPTIMIZERS: 40 X SOLAREGE SE6000H-USRGM INVERTER 1: SOLAREGE SE6000H-USRGM INVERTER 2: SOLAREGE SE6000H-USRGM [S11]	REVISIONS NO. REVISED BY DATE	DESIGNED BY: DATE	freedom FREEDOMFOREVER, LLC 43445 BUSINESS PARK DR #110, TEMECULA, CA 92590 Tel: (800) 386-1075 BREGAL BRIGHT CONTRACTOR LICENSE MASTER ELECTRICIAN 10417945	SITE PLAN JOS NO: 381565 DATE: 9/13/2023 DESIGNED BY: E.C.R. SHEET: PV2
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ARRAY DETAILS:

SYSTEM DISTRIBUTED WEIGHT: 2.28 LBS

MODULE QUANTITY	EXISTING GRADE	ARRAY PITCH	AZIMUTH	ARRAY AREA
20	0	15	180	416.38 SQ FT
20	0	15	180	416.38 SQ FT
				SQ FT
				SQ FT
				SQ FT
				SQ FT
				SQ FT
				SQ FT
				SQ FT
				SQ FT
				SQ FT

CLIENT:
THOMAS PALERMO
1575 MEADOWOOD DRIVE, GEORGIA, VT
03602
AHL, TOWN OF GEORGIA (VT)
UTILITY: GMP - GREEN MOUNTAIN POWER (VT)
METER: 6144181
METER LOCATION: 1575 MEADOWOOD DRIVE, GEORGIA, VT 03602
PHONE: (802) 893-9506
EMAIL: PALERMOTS@COMCAST.NET

SYSTEM:
SYSTEM SIZE (DC): 40 X 410 - 16,400 WATT
SOLAR PANELS: 40 X 410 WATT
WIRE: 40 X 12 AWG
PULSES: 40 X 12 AWG
OPTIMIZERS: 40 X SOLAREXCEL P205
INVERTER 1: SOLAREXCEL SE6000H-USRQM
INVERTER 2: SOLAREXCEL SE6000H-USRQM (S11)

NO.	REVISIONS	DATE
1	DESIGNED BY	9/19/2023
2		
3		
4		

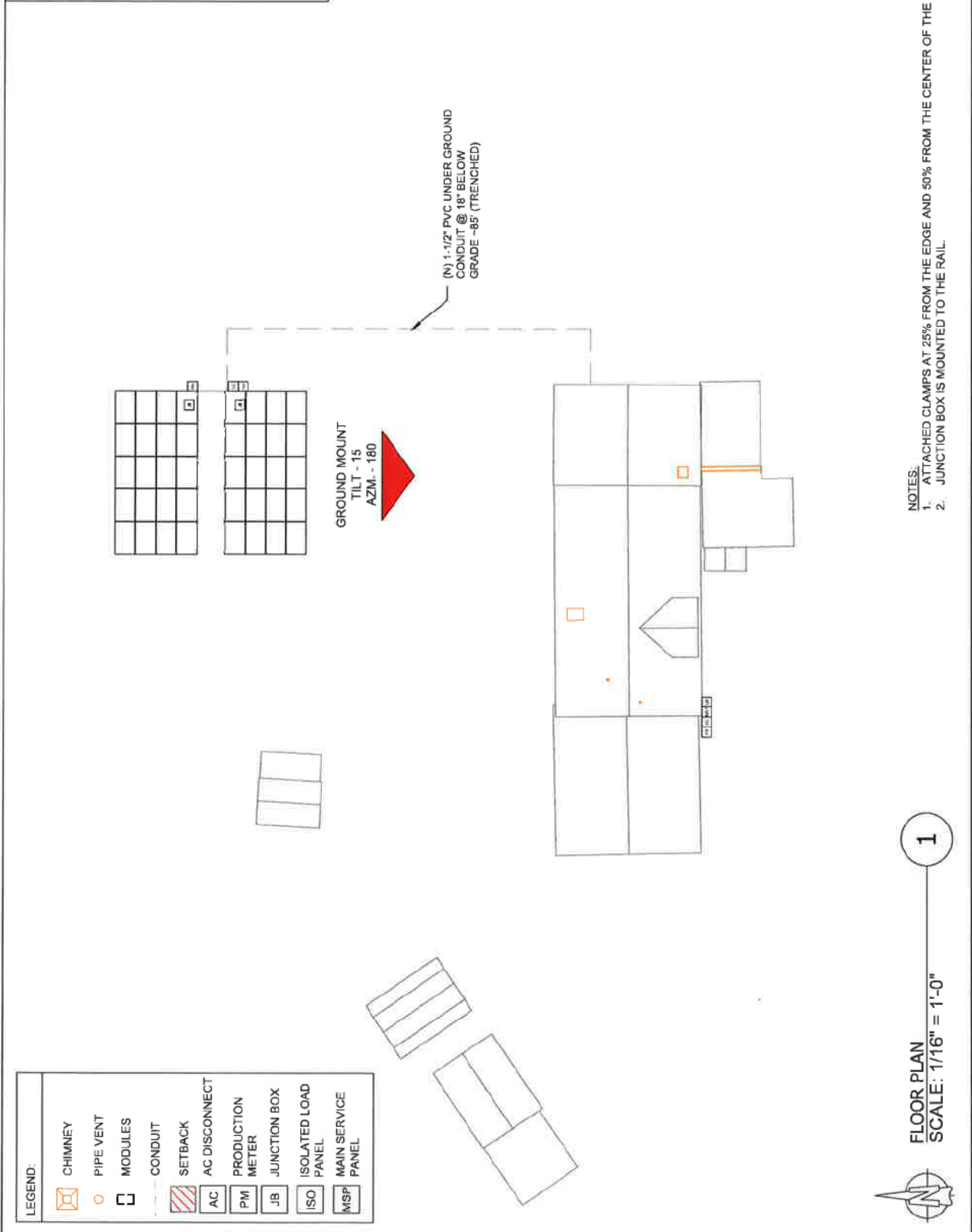
freedom
SOLAR
FREEDOM SOLAR LLC
93446 BUSINESS PARK DRIVE, WHITE, MICHIGAN
CA 92290
Tel: (800) 365-1079
GREG ALBRIGHT
Greg Albright
CONTRACTOR LICENSE
MASTER ELECTRICIAN #107068

ROOF DETAILS			
JOB NO.	DATE	DESIGNED BY	SHEET
381586	9/19/2023	E.C.R.	PA-2B

LEGEND:

	CHIMNEY
	PIPE VENT
	MODULES
	CONDUIT
	SETBACK
	AC DISCONNECT
	PRODUCTION METER
	JUNCTION BOX
	ISOLATED LOAD PANEL
	MAIN SERVICE PANEL

By Yuri at 7:18:05 PM, 9/19/2023



FLOOR PLAN
 SCALE: 1/16" = 1'-0"

- NOTES:**
1. ATTACHED CLAMPS AT 25% FROM THE EDGE AND 50% FROM THE CENTER OF THE MODULES
 2. JUNCTION BOX IS MOUNTED TO THE RAIL.

CLIENT:
 THOMAS PALERMO
 15 REDWOOD DRIVE, GEORGIA, VT
 05448
 AHI TOWN OF GEORGIA (VT)
 UTILITY: GMP - GREEN MOUNTAIN POWER
 (VT) TEL: 800.644.0181
 APN: 23-076-11322
 PHONE: (802) 698-3536
 EMAIL: PALERMOT@COMCAST.NET

SYSTEM:
 SYSTEM SIZE (DC): 40 X 410 = 16,400 W
 SYSTEM SIZE (AC): 12,000 W @ 240V
 INVERTER: 40 X 410 W @ 240V
 PURCHASER: 40 X 410 W @ 240V
 OPTIMIZERS: 40 X SOLAREEDGE P96S
 INVERTER 1: SOLAREEDGE SE6000H-USRGM
 INVERTER 2: SOLAREEDGE SE6000H-USRGM
 (S11)

ARRAY AREA: 828 SQ FT

freedom
 FREEDOM EGRESS LLC
 43445 BUSINESS PARK DR #101, TEMECULA
 CA 92590
 Tel: (800) 365-1075
 DREG ALBRIGHT
 CONTRACTOR LICENSE
 MASTER ELECTRICIAN #M07068

REVISIONS		DATE
NO.	REVISION BY	

ARRAY PLAN WITH MODULES LAYOUT	
JOB NO:	DESIGNED BY:
301565	9/13/2023
E C R:	PK-24G
SHEET:	

GROUND MOUNT PHOTOVOLTAIC SYSTEM

CODES:

THIS PROJECT COMPLIES WITH THE FOLLOWING:
2018 INTERNATIONAL BUILDING CODE
2018 INTERNATIONAL RESIDENTIAL CODE
2018 INTERNATIONAL FIRE CODE
2018 INTERNATIONAL ENERGY CONSERVATION CODE
2018 INTERNATIONAL EXISTING BUILDING CODE
2018 INTERNATIONAL FUEL GAS CODE
2018 INTERNATIONAL MECHANICAL CODE
2018 INTERNATIONAL PLUMBING CODE
2017 NATIONAL ELECTRICAL CODE
AS ADOPTED BY TOWN OF GEORGIA (VT)

CONSTRUCTION NOTES:

CONDUIT AND CONDUCTOR SPECIFICATIONS ARE BASED ON MINIMUM CODE REQUIREMENTS AND ARE NOT MEANT TO LIMIT UP-SIZING AS REQUIRED BY FIELD CONDITIONS.

ALL SOLAR ENERGY SYSTEM EQUIPMENT SHALL BE SCREENED TO THE MAXIMUM EXTENT POSSIBLE AND SHALL BE PAINTED A COLOR SIMILAR TO THE SURFACE UPON WHICH THEY ARE MOUNTED.

MODULES SHALL BE TESTED, LISTED AND IDENTIFIED WITH FIRE CLASSIFICATION IN ACCORDANCE WITH UL 2703. SMOKE AND CARBON MONOXIDE ALARMS ARE REQUIRED PER SECTION R314 AND 315 TO BE VERIFIED AND INSPECTED BY INSPECTOR IN THE FIELD. DIG ALERT (811) TO BE CONTACTED AND COMPLIANCE WITH EXCAVATION SAFETY PRIOR TO ANY EXCAVATION TAKING PLACE

PHOTOVOLTAIC SYSTEM GROUND WILL BE TIED INTO EXISTING GROUND AT MAIN SERVICE FROM DC DISCONNECT/INVERTER AS PER 2017 NEC SEC 250.166(A).

SOLAR PHOTOVOLTAIC SYSTEM EQUIPMENT WILL BE INSTALLED IN ACCORDANCE WITH REQUIREMENTS OF ART. 690 OF THE 2017 NEC

UTILITY COMPANY WILL BE NOTIFIED PRIOR TO ACTIVATION OF THE SOLAR PV SYSTEM
TERMINALS OF THE DISCONNECTING MEANS MAY BE ENERGIZED IN THE OPEN POSITION

VICINITY MAP:



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PV-3AG	GROUND MOUNT ATTACHMENT DETAILS
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PV-7	LABELS
PV-7A	SITE PLACARD
PV-8	OPTIMIZER CHART
PV-9	SAFETY PLAN
PV-10	SAFETY PLAN
APPENDIX	MANUFACTURER SPECIFICATION SHEETS

CLIENT:
THOMAS PALERMO
182 MADDOCK DRIVE, GEORGIA VT
05638
TOWN OF GEORGIA (VT)
UTILITY: GMP - GREEN MOUNTAIN POWER (VT)
WRITER: 4144181
APRIL 23, 2024 11:32Z
PHONE: (802) 982-3838
EMAIL: PALERMO.TS@COMCAST.NET

SYSTEM:
SYSTEM SIZE (DC): 40 X 410 = 16,400 W
SYSTEM SIZE (AC): 5000 W
MODULES: 40 X REC SOLAR REC 410W
PANELS: 40 X REC SOLAR REC 410W
OPTIMIZERS: 40 X SOLAREDGE P550
INVERTER 1: SOLAREDGE SE6000H-USRGM
INVERTER 2: SOLAREDGE SE6000H-USRGM
(811)

REVISIONS		DATE
NO.	REVISED BY	
1		
2		
3		
4		

freedom
FREEDOM ELECTRICAL
48445 BUSINESS PARK DR #110, TEMECULA
CA 92590
Tel: (909) 365-1075
GREG ALBRIGHT
CONTRACTOR LICENSE
MASTER ELECTRICIAN EM01265

SITE LOCATION		SHEET
JOB NO.	DATE	DESIGNED BY
361566	9/13/2023	ECR
		PV-1

BARUN CORP

September 19, 2023

RE:

CERTIFICATION LETTER

Project Address:

THOMAS PALERMO (Ground Mount PV System)
182 MEADOWOOD DRIVE
GEORGIA, VT 05468

Design Criteria:

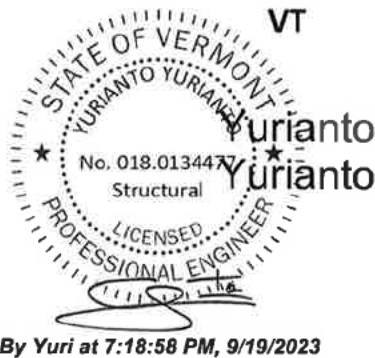
- Applicable Codes = 2018 IEBC/IBC, 2018 IRC & ASCE 7-16
- Risk Category = I
- Wind Speed = 105 mph, Exposure Category B, Open Structure Method
- Ground Snow Load = 40 psf

To Whom It May Concern,

A project specific information for a ground mount job located at the address indicated above was provided. A structural analysis for Osprey PowerRack ground mount system was carried out on the specified configuration based on the site inspection observations and the design criteria listed above. Soil bearing capacity has been assumed to be 1500 psf.

Based on this evaluation, I certify that the ground mount structure supporting the PV system meets the requirements of the applicable existing building and/or new building provisions adopted/referenced above. The installation of the ground mount system shall be in accordance with the manufacturer's guidelines. The manufacturer's specifications for connections are considered to be adequate for the proposed system.

Sincerely,



Digitally signed by Yurianto Yurianto
DN: cn=Yurianto Yurianto, c=US, o=Unaffiliated, ou=A01410D00000176B07, CBF250000A7A2
Reason: I am the author of this document
Location:
Date: 2023-09-19 19:19-05:00

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BARUN CORP

LOAD CALCULATION

Array 1&2

THOMAS PALERMO RESIDENCE, 182 MEADOWOOD DRIVE, GEORGIA, VT 05468

PV SYSTEM DATA

Panel Length	= 5.68 ft
Panel Width	= 3.68 ft
Panel Orientation	Landscape
No. of rails per panel	= 2
Mounting Rail Tributary	= 2.84 ft

PV SYSTEM DEAD LOAD (PV-DL)

PV module weight	= 2.50 psf
Hardware assembly weight	= 0.50 psf
Total PV System Dead Load	PV-DL = 3.00 psf
Total PV System Dead Load on Rail	PV-DL = 8.52 plf

SNOW LOAD

Ground Snow Load	$p_g = 40.00 \text{ psf}$
Effective Slope	15°
Snow Importance Factor	$I_s = 0.80$
Snow Exposure Factor	$C_e = 0.90$
Snow Thermal Factor	$C_t = 1.20$
Minimum Flat Roof Snow Load	$p_{f-min} = 0.00 \text{ psf}$
Flat Roof Snow Load	$p_f = 24.19 \text{ psf}$

SLOPED ROOF SNOW LOAD ON PV PANEL (Unobstructed Slippery Surfaces)

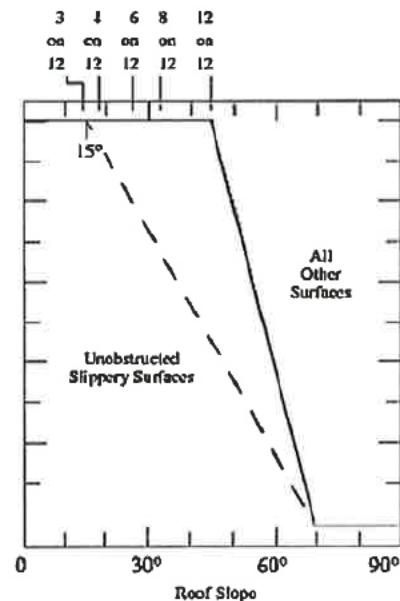
Roof Slope Factor	$C_{s-pv} = 1.00$
Sloped Roof Snow Load on PV Panel	$p_{s-pv} = 24.19 \text{ psf}$
Total Snow Load on Rails	$p_{s-pv} = 68.70 \text{ psf}$

Table 7.3-1 Exposure Factor, C_e

Surface Roughness Category	Exposure of Roof ^a		
	Fully Exposed	Partially Exposed	Sheltered
B (see Section 26.7)	0.9	1.0	1.2
C (see Section 26.7)	0.9	1.0	1.1
D (see Section 26.7)	0.8	0.9	1.0
Above the tree line in windswept mountainous areas	0.7	0.8	NA
In Alaska, in areas where trees do not exist within a 2-mi (3-km) radius of the site	0.7	0.8	NA

Table 7.3-2 Thermal Factor, C_t

Thermal Condition ^a	C_t
All structures except as indicated below	1.0
Structures kept just above freezing and others with cold, ventilated roofs in which the thermal resistance (R-value) between the ventilated space and the heated space exceeds $25^\circ\text{F} \times h \times \text{ft}^2/\text{Btu}$ ($4.4 \text{ K} \times \text{m}^2/\text{W}$)	1.1
Unheated and open air structures	1.2
Freezer building	1.3
Continuously heated greenhouses ^b with a roof having a thermal resistance (R-value) less than $2.0^\circ\text{F} \times h \times \text{ft}^2/\text{Btu}$ ($0.4 \text{ K} \times \text{m}^2/\text{W}$)	0.85



7-2c: Cold roofs with $C = 1.2$ or larger

BARUN CORP

LOAD CALCULATION

Array 1&2

THOMAS PALERMO RESIDENCE, 182 MEADOWOOD DRIVE, GEORGIA, VT 05468

WIND LOAD

SITE INFORMATION

Ultimate Wind Speed (mph) =	105.00 mph	$K_e =$	0.986
Risk Category =	I	$K_d =$	0.85
Exposure Category =	B	$K_{zt} =$	1
Pitch (deg.) =	15°	$K_z =$	0.57
Wind Velocity Press. (q_z) =	$0.00256 * K_z * K_{zt} * K_d * K_e * V^2 =$		13.48 psf

MWFRS Design Wind Pressure Calculations (Coefficients per ASCE 7)

Wind Direction	0° Direction		180° Direction	
Load Case	Case A	Case B	Case A	Case B
Windward pressure coefficient = C_{NW}	-0.90	-1.90	1.30	1.80
Leeward pressure coefficient = C_{NL}	-1.30	0.00	1.60	0.60
Windward pressure $q_w = q_z * G * C_{NW}$	-10.31	-21.78	14.90	20.63
Windward load on mounting rail (plf) = $q_w * a$	-29.3	-61.8	42.3	58.6
Leeward pressure $q_l = q_z * G * C_{NL}$	-14.90	0.00	18.34	6.88
Leeward load on mounting rail (plf) = $q_l * a$	-42.3	0.0	52.1	19.5

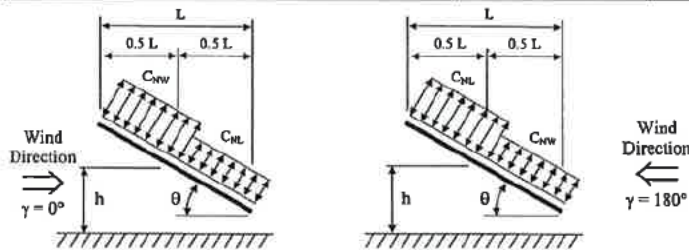


Table 26.6-1 Wind Directionality Factor, K_d

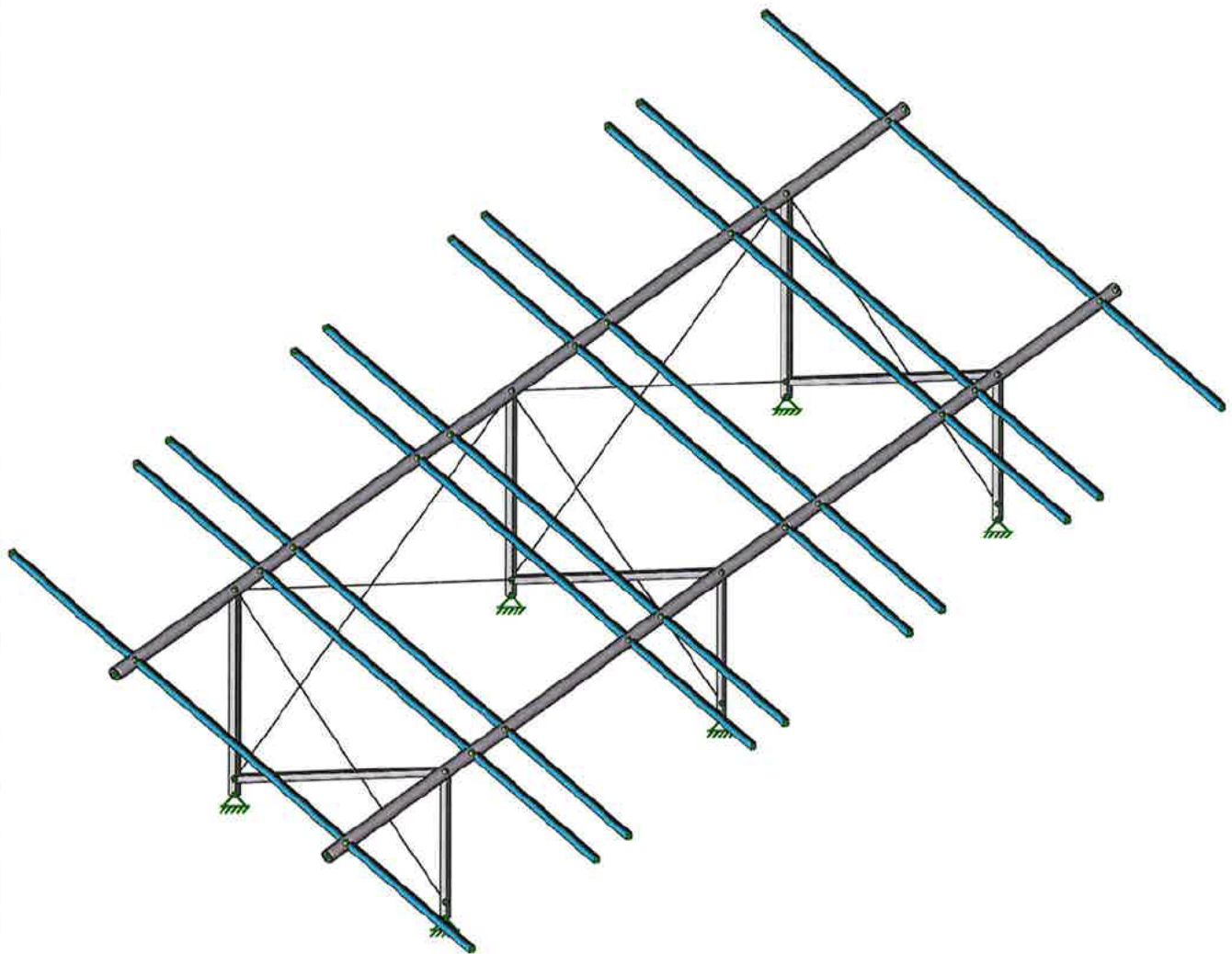
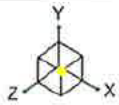
Structure Type	Directionality Factor K_d
Buildings	
Main Wind Force Resisting System	0.85
Corridors and Chalking	0.85
Unroofed Roofs	0.85
Circular Towers	1.0*
Chimneys, Tanks, and Similar Structures	1.0**

Table 26.10-1 Velocity Pressure Exposure Coefficients, K_z and K_{zt}

Height above ground level, z	Exposure	K_z	K_{zt}
0-15	B	0.85	1.0
15-20	B	0.90	1.0
20-25	B	0.95	1.0
25-30	B	1.00	1.0
30-35	B	1.05	1.0
35-40	B	1.10	1.0
40-45	B	1.15	1.0
45-50	B	1.20	1.0
50-55	B	1.25	1.0
55-60	B	1.30	1.0
60-65	B	1.35	1.0
65-70	B	1.40	1.0
70-75	B	1.45	1.0
75-80	B	1.50	1.0
80-85	B	1.55	1.0
85-90	B	1.60	1.0
90-95	B	1.65	1.0
95-100	B	1.70	1.0
100-105	B	1.75	1.0
105-110	B	1.80	1.0
110-115	B	1.85	1.0
115-120	B	1.90	1.0
120-125	B	1.95	1.0
125-130	B	2.00	1.0
130-135	B	2.05	1.0
135-140	B	2.10	1.0
140-145	B	2.15	1.0
145-150	B	2.20	1.0
150-155	B	2.25	1.0
155-160	B	2.30	1.0
160-165	B	2.35	1.0
165-170	B	2.40	1.0
170-175	B	2.45	1.0
175-180	B	2.50	1.0
180-185	B	2.55	1.0
185-190	B	2.60	1.0
190-195	B	2.65	1.0
195-200	B	2.70	1.0
200-205	B	2.75	1.0
205-210	B	2.80	1.0
210-215	B	2.85	1.0
215-220	B	2.90	1.0
220-225	B	2.95	1.0
225-230	B	3.00	1.0
230-235	B	3.05	1.0
235-240	B	3.10	1.0
240-245	B	3.15	1.0
245-250	B	3.20	1.0
250-255	B	3.25	1.0
255-260	B	3.30	1.0
260-265	B	3.35	1.0
265-270	B	3.40	1.0
270-275	B	3.45	1.0
275-280	B	3.50	1.0
280-285	B	3.55	1.0
285-290	B	3.60	1.0
290-295	B	3.65	1.0
295-300	B	3.70	1.0
300-305	B	3.75	1.0
305-310	B	3.80	1.0
310-315	B	3.85	1.0
315-320	B	3.90	1.0
320-325	B	3.95	1.0
325-330	B	4.00	1.0
330-335	B	4.05	1.0
335-340	B	4.10	1.0
340-345	B	4.15	1.0
345-350	B	4.20	1.0
350-355	B	4.25	1.0
355-360	B	4.30	1.0
360-365	B	4.35	1.0
365-370	B	4.40	1.0
370-375	B	4.45	1.0
375-380	B	4.50	1.0
380-385	B	4.55	1.0
385-390	B	4.60	1.0
390-395	B	4.65	1.0
395-400	B	4.70	1.0
400-405	B	4.75	1.0
405-410	B	4.80	1.0
410-415	B	4.85	1.0
415-420	B	4.90	1.0
420-425	B	4.95	1.0
425-430	B	5.00	1.0
430-435	B	5.05	1.0
435-440	B	5.10	1.0
440-445	B	5.15	1.0
445-450	B	5.20	1.0
450-455	B	5.25	1.0
455-460	B	5.30	1.0
460-465	B	5.35	1.0
465-470	B	5.40	1.0
470-475	B	5.45	1.0
475-480	B	5.50	1.0
480-485	B	5.55	1.0
485-490	B	5.60	1.0
490-495	B	5.65	1.0
495-500	B	5.70	1.0
500-505	B	5.75	1.0
505-510	B	5.80	1.0
510-515	B	5.85	1.0
515-520	B	5.90	1.0
520-525	B	5.95	1.0
525-530	B	6.00	1.0
530-535	B	6.05	1.0
535-540	B	6.10	1.0
540-545	B	6.15	1.0
545-550	B	6.20	1.0
550-555	B	6.25	1.0
555-560	B	6.30	1.0
560-565	B	6.35	1.0
565-570	B	6.40	1.0
570-575	B	6.45	1.0
575-580	B	6.50	1.0
580-585	B	6.55	1.0
585-590	B	6.60	1.0
590-595	B	6.65	1.0
595-600	B	6.70	1.0
600-605	B	6.75	1.0
605-610	B	6.80	1.0
610-615	B	6.85	1.0
615-620	B	6.90	1.0
620-625	B	6.95	1.0
625-630	B	7.00	1.0
630-635	B	7.05	1.0
635-640	B	7.10	1.0
640-645	B	7.15	1.0
645-650	B	7.20	1.0
650-655	B	7.25	1.0
655-660	B	7.30	1.0
660-665	B	7.35	1.0
665-670	B	7.40	1.0
670-675	B	7.45	1.0
675-680	B	7.50	1.0
680-685	B	7.55	1.0
685-690	B	7.60	1.0
690-695	B	7.65	1.0
695-700	B	7.70	1.0
700-705	B	7.75	1.0
705-710	B	7.80	1.0
710-715	B	7.85	1.0
715-720	B	7.90	1.0
720-725	B	7.95	1.0
725-730	B	8.00	1.0
730-735	B	8.05	1.0
735-740	B	8.10	1.0
740-745	B	8.15	1.0
745-750	B	8.20	1.0
750-755	B	8.25	1.0
755-760	B	8.30	1.0
760-765	B	8.35	1.0
765-770	B	8.40	1.0
770-775	B	8.45	1.0
775-780	B	8.50	1.0
780-785	B	8.55	1.0
785-790	B	8.60	1.0
790-795	B	8.65	1.0
795-800	B	8.70	1.0
800-805	B	8.75	1.0
805-810	B	8.80	1.0
810-815	B	8.85	1.0
815-820	B	8.90	1.0
820-825	B	8.95	1.0
825-830	B	9.00	1.0
830-835	B	9.05	1.0
835-840	B	9.10	1.0
840-845	B	9.15	1.0
845-850	B	9.20	1.0
850-855	B	9.25	1.0
855-860	B	9.30	1.0
860-865	B	9.35	1.0
865-870	B	9.40	1.0
870-875	B	9.45	1.0
875-880	B	9.50	1.0
880-885	B	9.55	1.0
885-890	B	9.60	1.0
890-895	B	9.65	1.0
895-900	B	9.70	1.0
900-905	B	9.75	1.0
905-910	B	9.80	1.0
910-915	B	9.85	1.0
915-920	B	9.90	1.0
920-925	B	9.95	1.0
925-930	B	10.00	1.0
930-935	B	10.05	1.0
935-940	B	10.10	1.0
940-945	B	10.15	1.0
945-950	B	10.20	1.0
950-955	B	10.25	1.0
955-960	B	10.30	1.0
960-965	B	10.35	1.0
965-970	B	10.40	1.0
970-975	B	10.45	1.0
975-980	B	10.50	1.0
980-985	B	10.55	1.0
985-990	B	10.60	1.0
990-995	B	10.65	1.0
995-1000	B	10.70	1.0

Net Pressure Coefficient, C_N

Roof Angle, θ	Load Case	Wind Direction, $\gamma = 0^\circ$				Wind Direction, $\gamma = 180^\circ$			
		Clear Wind Flow		Obstructed Wind Flow		Clear Wind Flow		Obstructed Wind Flow	
		C_{NW}	C_{NL}	C_{NW}	C_{NL}	C_{NW}	C_{NL}	C_{NW}	C_{NL}
0°	A	1.2	0.3	-0.5	-1.2	1.2	0.3	-0.5	-1.2
	B	-1.1	-0.1	-1.1	-0.6	-1.1	-0.1	-1.1	-0.6
7.5°	A	-0.6	-1.0	-1.0	-1.5	0.9	1.5	-0.2	-1.2
	B	-1.4	0.0	-1.7	-0.8	1.6	0.3	0.8	-0.3
15°	A	-0.9	-1.3	-1.1	-1.5	1.3	1.6	0.4	-1.1
	B	-1.9	0.0	-2.1	-0.6	1.8	0.6	1.2	-0.3
22.5°	A	-1.5	-1.6	-1.5	-1.7	1.7	1.8	0.5	-1.0
	B	-2.4	-0.3	-2.3	-0.9	2.2	0.7	1.3	0.0
30°	A	-1.8	-1.8	-1.5	-1.8	2.1	2.1	0.6	-1.0
	B	-2.5	-0.5	-2.3	-1.1	2.6	1.0	1.6	0.1
37.5°	A	-1.8	-1.8	-1.5	-1.8	2.1	2.2	0.7	-0.9
	B	-2.4	-0.6	-2.2	-1.1	2.7	1.1	1.9	0.3
45°	A	-1.6	-1.8	-1.3	-1.8	2.2	2.5	0.8	-0.9
	B	-2.3	-0.7	-1.9	-1.2	2.6	1.4	2.1	0.4



BARUN CORP

BarunCorp

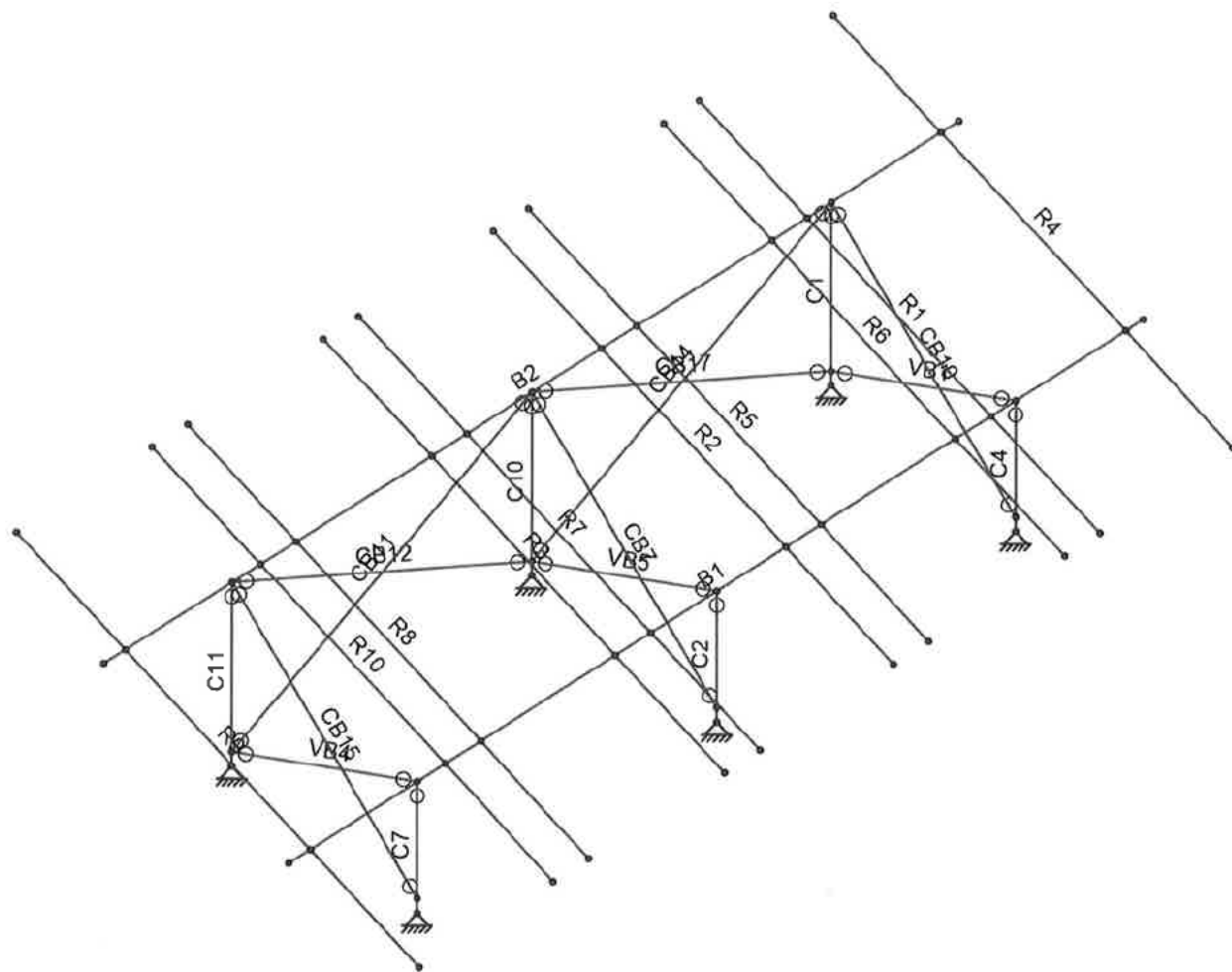
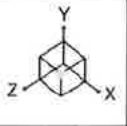
Sharath Chandra

Ground Mount

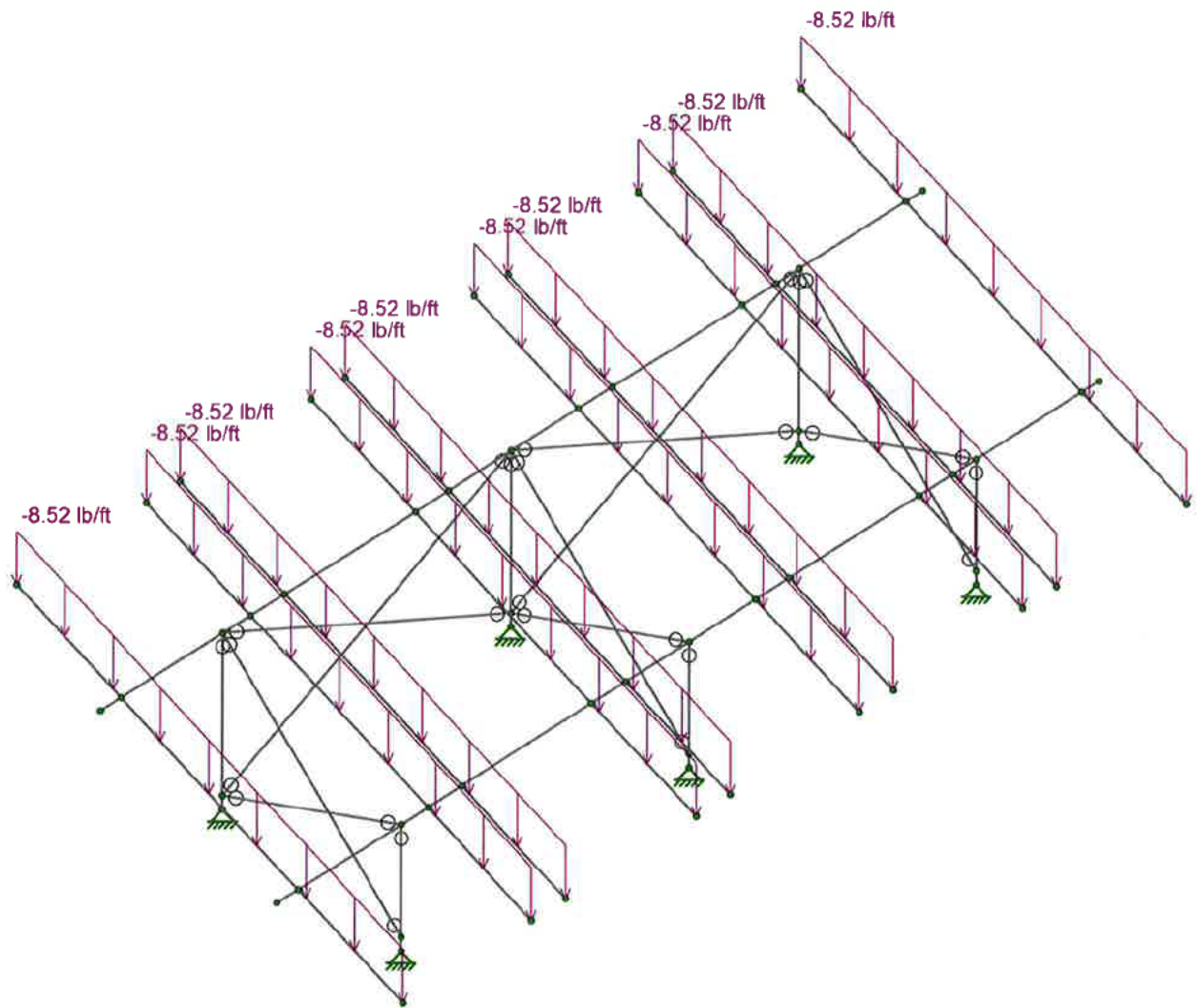
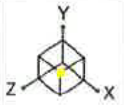
SK-1

Sep 19, 2023 at 10:06 PM

GM.r3d



BARUN CORP www.baruncorp.com	BarunCorp	Ground Mount	SK-2
	Sharath Chandra		Sep 19, 2023 at 10:07 PM
			GM.r3d



Loads: BLC 1, DL

BARUN CORP

BarunCorp

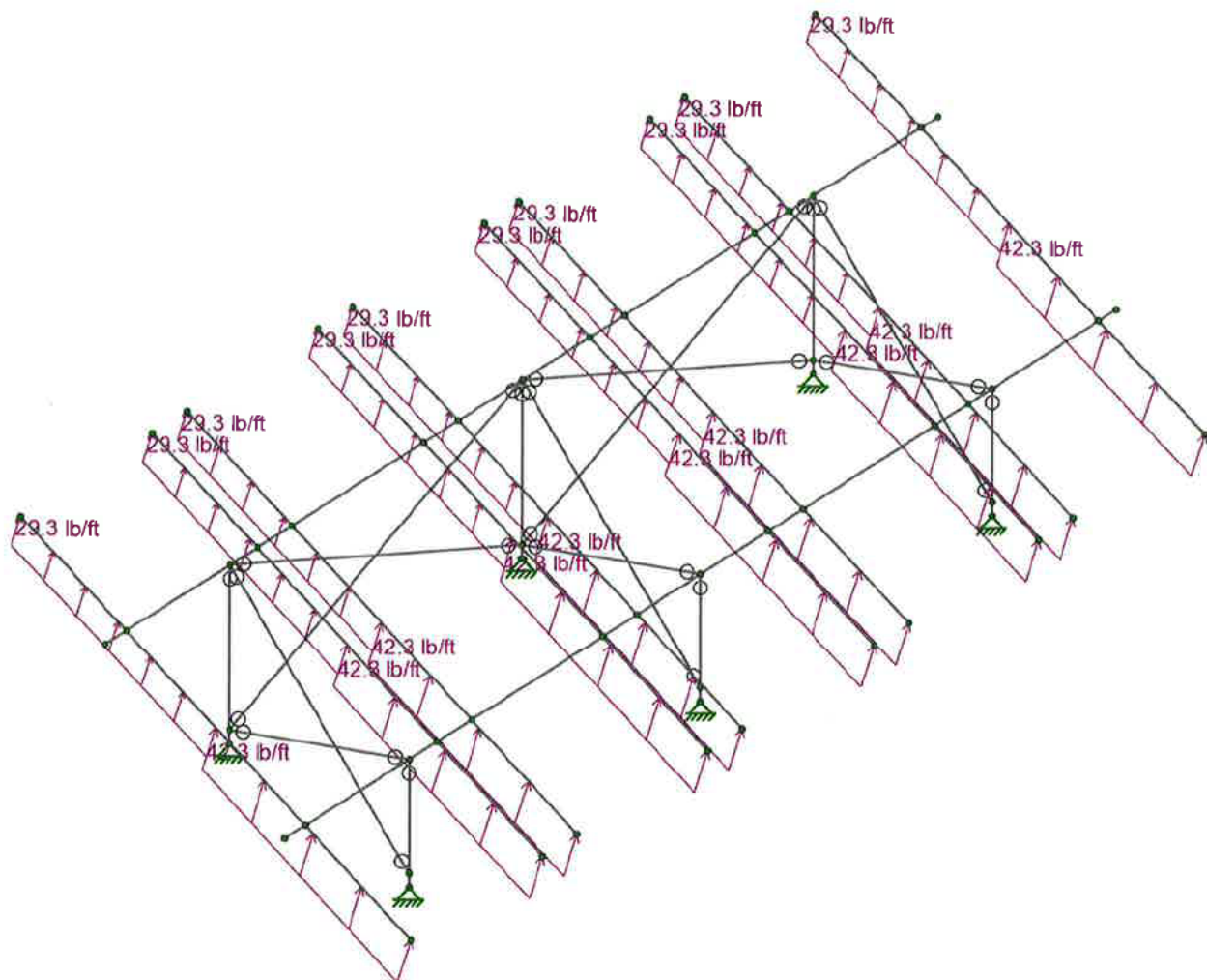
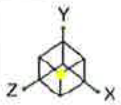
Sharath Chandra

Ground Mount

SK-3

Sep 19, 2023 at 10:07 PM

GM.r3d



Loads: BLC 2, 0 WL Case A

BARUN CORP
www.baruncorp.com

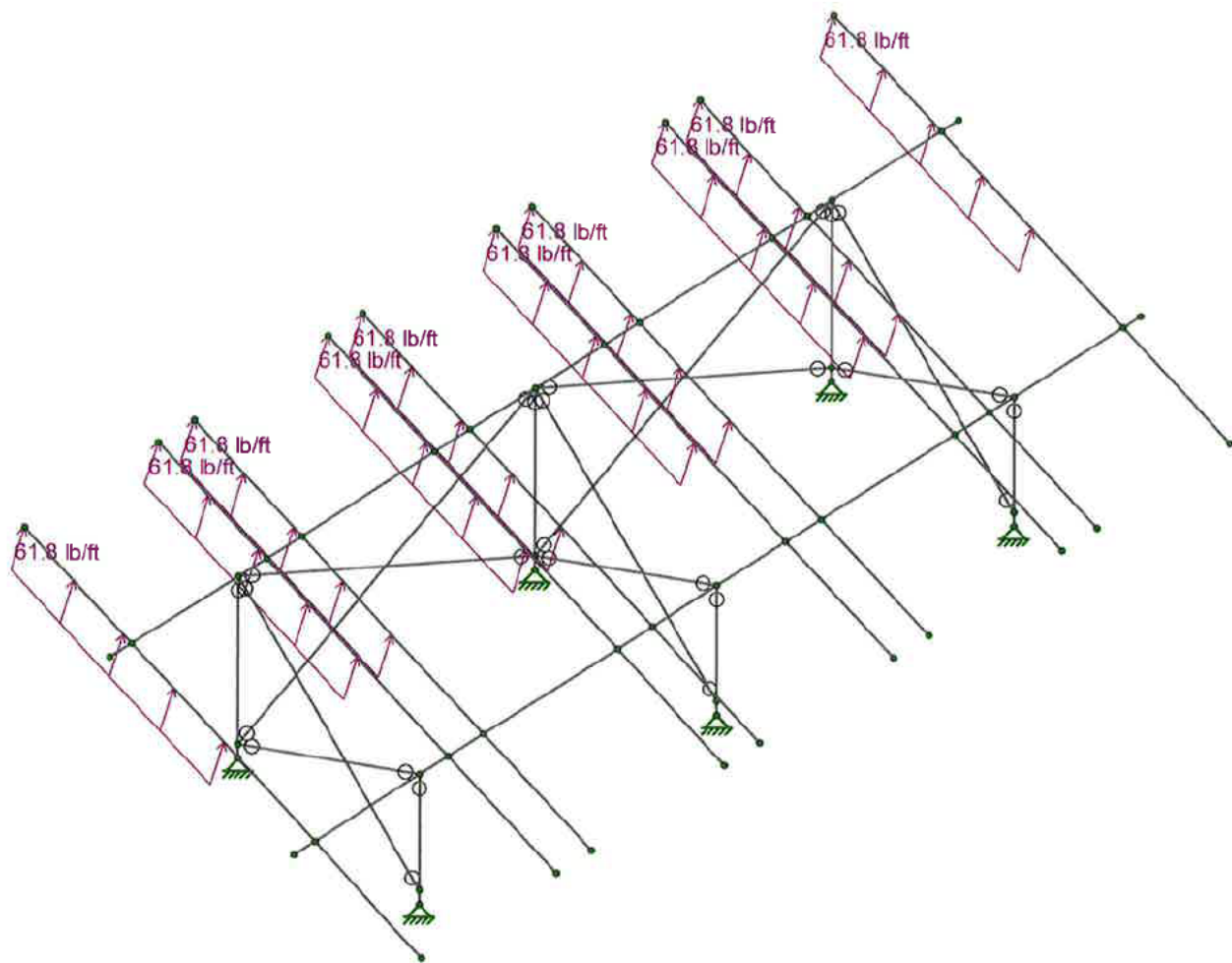
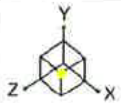
BarunCorp
Sharath Chandra

Ground Mount

SK-4

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GM.r3d



Loads: BLC 3, 0 WL Case B

BARUN CORP

BarunCorp

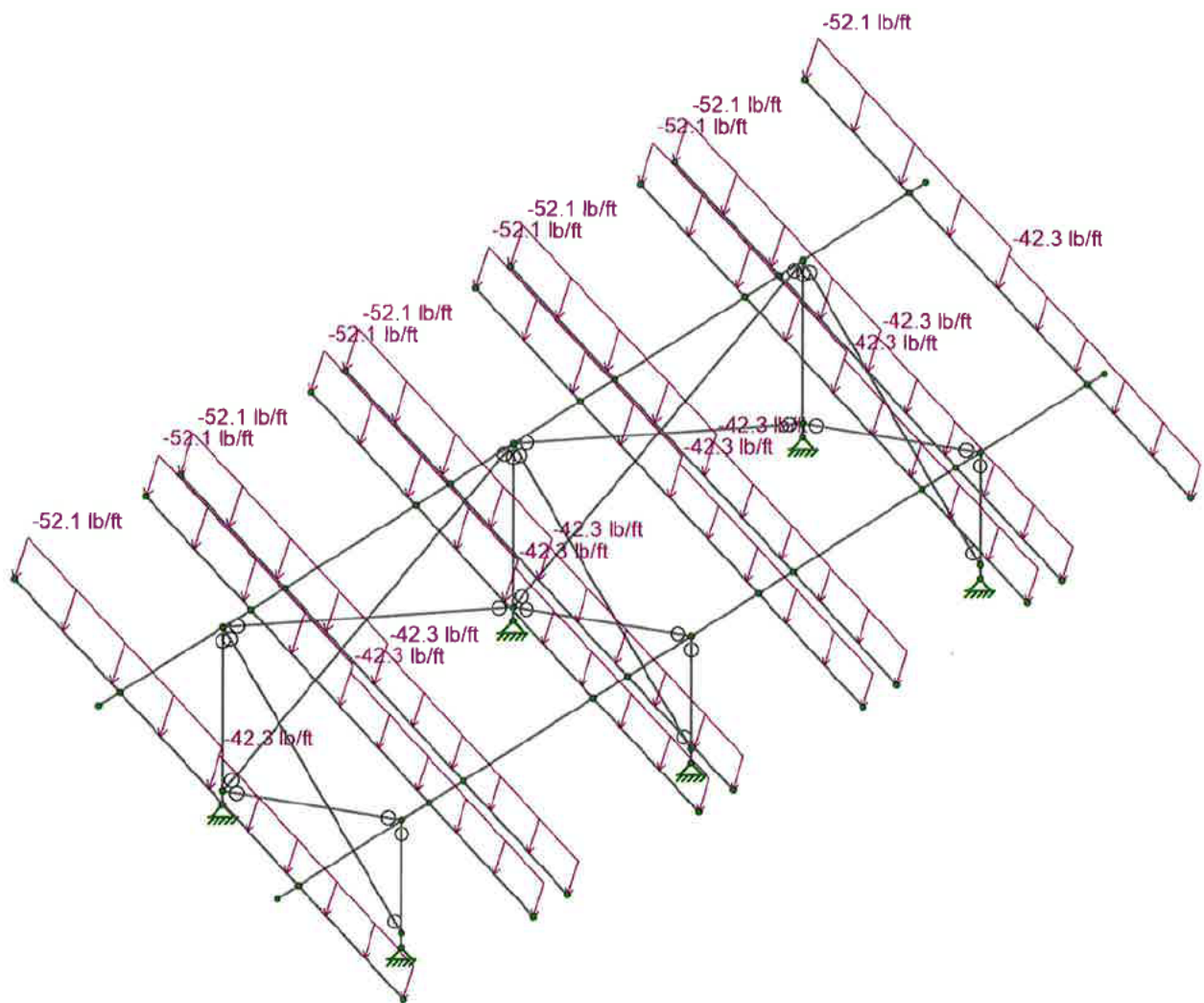
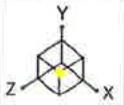
Sharath Chandra

Ground Mount

SK-5

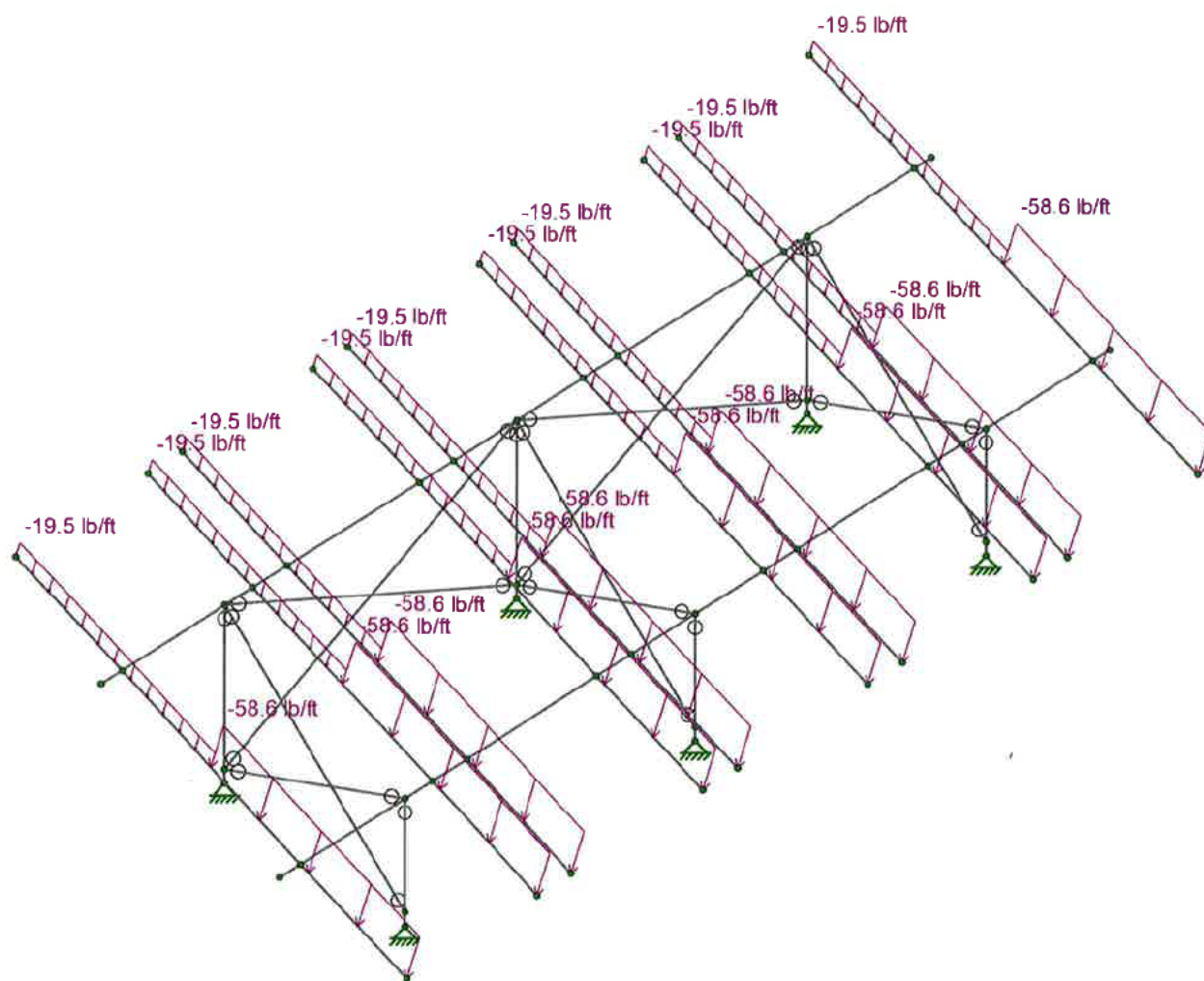
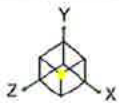
Sep 19, 2023 at 10:08 PM

GM.r3d



Loads: BLC 4, 180 WL Case A

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			GM.r3d



Loads: BLC 5, 180 WL Case B

BARUN CORP

BarunCorp

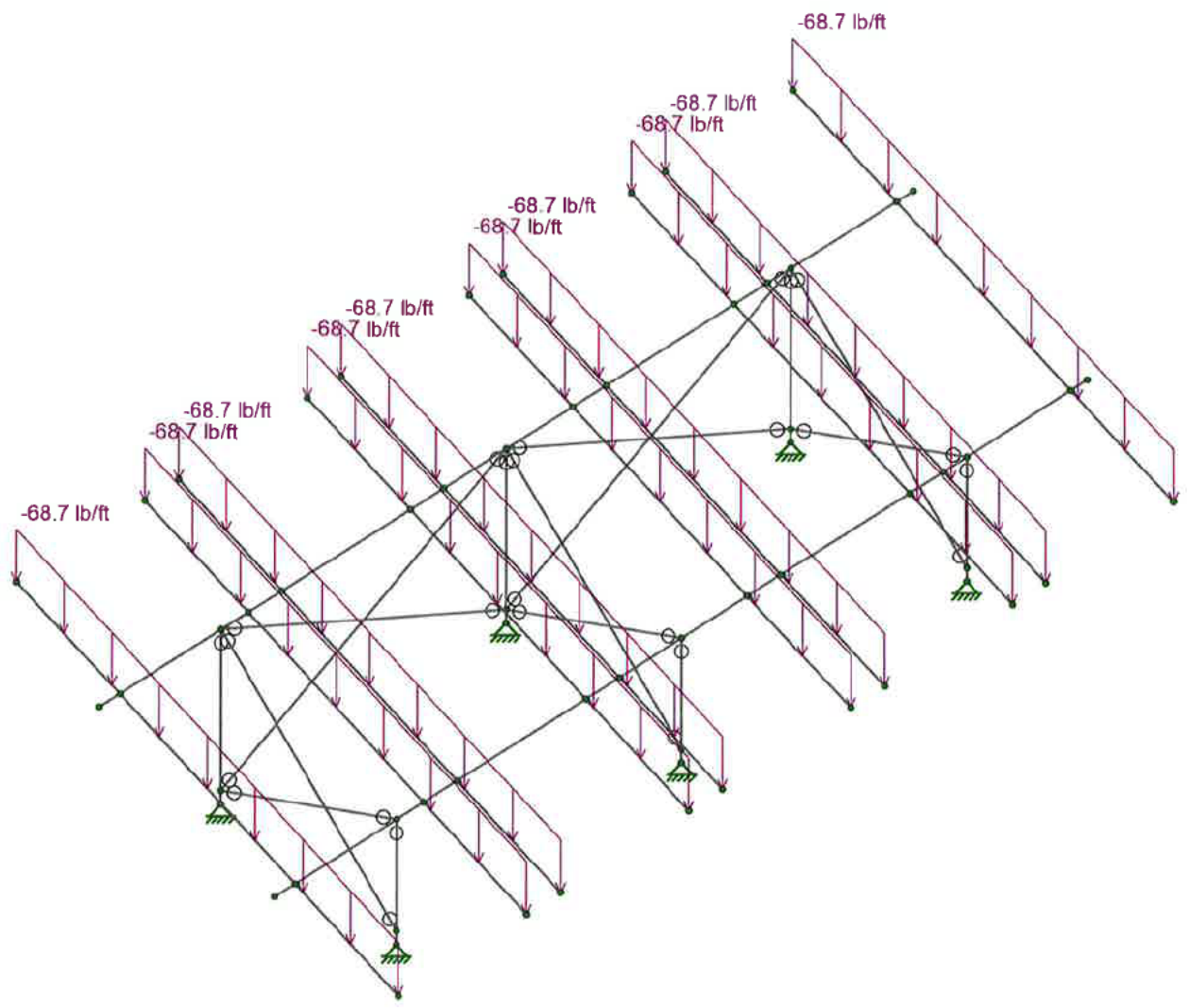
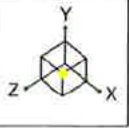
Sharath Chandra

Ground Mount

SK-7

Sep 19, 2023 at 10:08 PM

GM.r3d



Loads: BLC 6, SL

BARUN CORP www.baruncorp.com	BarunCorp	Ground Mount	SK-8
	Sharath Chandra		Sep 19, 2023 at 10:08 PM
			GM.r3d

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e ⁻⁶ F ⁻¹]	Density [k/ft ³]	Yield [ksi]	Ry	Fu [ksi]	Rt
1	A992	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	0.3	0.65	0.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	0.3	0.65	0.527	42	1.4	58	1.3
5	A500 Gr.B RECT	29000	11154	0.3	0.65	0.527	46	1.4	58	1.3
6	A500 Gr.C RND	29000	11154	0.3	0.65	0.527	46	1.4	62	1.3
7	A500 Gr.C RECT	29000	11154	0.3	0.65	0.527	50	1.4	62	1.3
8	A53 Gr.B	29000	11154	0.3	0.65	0.49	35	1.6	60	1.2
9	A1085	29000	11154	0.3	0.65	0.49	50	1.4	65	1.3
10	A913 Gr.65	29000	11154	0.3	0.65	0.49	65	1.1	80	1.1
11	HR Grade 51.5	29000	11154	0.3	0.65	0.49	51.5	1.5	65	1.2
12	Cable	29000	11154	0.3	0.65	0	150	1.5	160	1.2

Cold Formed Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e ⁻⁶ F ⁻¹]	Density [k/ft ³]	Yield [ksi]	Fu [ksi]
1	A653 SS Gr33	29500	11346	0.3	0.65	0.49	33	45
2	A653 SS Gr50/1	29500	11346	0.3	0.65	0.49	50	65

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in ²]	Iyy [in ⁴]	Izz [in ⁴]	J [in ⁴]
1	Cable Brace	3.0MMCABLE	VBrace	BAR	Cable	Typical	0.011	1e-5	1e-5	1.9e-5
2	HSS4"x11GA	HSS4"x11GA	Beam	Pipe	HR Grade 51.5	Typical	1.415	2.671	2.671	5.343
3	HSS2.375x14GA	HSS2.375"x14GA	Column	Tube	HR Grade 51.5	Typical	0.734	0.645	0.645	0.967
4	HSS2"x14GA	HSS2"x14GA	Column	Tube	HR Grade 51.5	Typical	0.614	0.378	0.378	0.566
5	HSS2"x14GA Brace	HSS2"x14GA	VBrace	Tube	HR Grade 51.5	Typical	0.614	0.378	0.378	0.566

Cold Formed Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in ²]	Iyy [in ⁴]	Izz [in ⁴]	J [in ⁴]
1	NS Purlin	NSPURLIN	Beam	CS	A653 SS Gr50/1	Typical	0.846	0.607	0.361	0.004

Basic Load Cases

	BLC Description	Category	Y Gravity	Distributed
1	DL	DL	-1	10
2	0 WL Case A	WL		20
3	0 WL Case B	WL		10
4	180 WL Case A	WL		20
5	180 WL Case B	WL		20
6	SL	SL		10

Load Combinations

	Description	Solve P-Delta	BLC Factor	BLC Factor	BLC Factor	BLC Factor	BLC Factor	BLC Factor	BLC Factor	BLC Factor	BLC Factor
1	Deflection 1	Yes	Y	1	1						
2	Deflection 2	Yes	Y	1	0.6	2	0.6				
3	Deflection 3	Yes	Y	1	0.6			3	0.6		
4	Deflection 4	Yes	Y	1	0.6				4	0.6	
5	Deflection 5	Yes	Y	1	0.6					5	0.6
6	DL+0.6WL (0 Case A)	Yes	Y	1	1	2	0.6				
7	DL+0.6WL (0 Case B)	Yes	Y	1	1			3	0.6		

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
8	DL+0.6WL(180 Case A)	Yes	Y	1	1					4	0.6				
9	DL+0.6WL(180 Case B)	Yes	Y	1	1							5	0.6		
10	DL+SL	Yes	Y	1	1									6	1
11	DL+0.75S+0.45WL (0 Case A)	Yes	Y	1	1	2	0.45							6	0.75
12	DL+0.75S+0.45WL (0 Case B)	Yes	Y	1	1			3	0.45					6	0.75
13	DL+0.75S+0.45WL (180 Case A)	Yes	Y	1	1					4	0.45			6	0.75
14	DL+0.75S+0.45WL (180 Case B)	Yes	Y	1	1							5	0.45	6	0.75

Envelope Node Reactions

Node Label	X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
1 N5 max	359.703	8	2554.608	13	-0.011	6	0	14	0	14	0	14
2 min	-289.601	2	-984.214	3	-2.029	3	0	1	0	1	0	1
3 N7 max	27.38	4	2192.596	14	0.004	7	0	14	0	14	0	14
4 min	-0.129	2	-205.416	2	-0.324	13	0	1	0	1	0	1
5 N11 max	339.978	4	2509.57	13	0.74	13	0	14	0	14	0	14
6 min	-289.551	6	-995.627	3	-0.085	2	0	1	0	1	0	1
7 N13 max	32.693	4	2225.411	14	0.005	7	0	14	0	14	0	14
8 min	-0.131	2	-207.809	2	-0.331	13	0	1	0	1	0	1
9 N17 max	351.754	8	2506.511	13	2.018	3	0	14	0	14	0	14
10 min	-284.181	2	-966.221	3	0.072	6	0	1	0	1	0	1
11 N19 max	27.971	4	2153.732	14	0.004	7	0	14	0	14	0	14
12 min	-0.124	2	-201.166	2	-0.323	13	0	1	0	1	0	1
13 Totals: max	1136.112	4	13335.53	13	0	6						
14 min	-861.712	6	-1914.473	2	0	13						

Envelope AISC 15TH (360-16): ASD Member Steel Code Checks

Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	Pnc/om [lb]	Pnt/om [lb]	Mnyy/om [lb-ft]	Mnzz/om [lb-ft]	Cb	Eqn	
1	B1	HSS4"X11GA	0.55	24.386	14	0.132	24.089	14	24571.588	43649.365	4498.368	4498.368	1	H1-1b	
2	B2	HSS4"X11GA	0.537	24.386	13	0.127	24.089	13	24571.588	43649.365	4498.368	4498.368	1	H1-1b	
3	C2	HSS2"X14GA	0.17	0.525	14	0.006	0.477	y	4	13086.45	18947.066	1137.482	1137.482	1.534	H1-1b*
4	C11	HSS2.375"X14GA	0.184	0	13	0.057	0.468	y	8	13608.533	22647.665	1621.509	1621.509	1.571	H1-1b*
5	C4	HSS2"X14GA	0.168	0.525	14	0.005	0.477	y	4	13086.45	18947.066	1137.482	1137.482	1.534	H1-1b*
6	C1	HSS2.375"X14GA	0.188	0	13	0.058	0.468	y	8	13608.533	22647.665	1621.509	1621.509	1.571	H1-1b*
7	C10	HSS2.375"X14GA	0.184	0	13	0.055	0.468	y	4	13608.533	22647.665	1621.509	1621.509	1.571	H1-1b*
8	C7	HSS2"X14GA	0.165	0.525	14	0.005	0.477	y	4	13086.45	18947.066	1137.482	1137.482	1.534	H1-1b*
9	CB15	3.0MMCABLE	0.043	9.076	4	0	9.076	13	0.127	982.275	2.03	2.03	1	H1-1b*	
10	CB10	3.0MMCABLE	0.042	9.076	4	0	9.076	13	0.127	982.275	2.03	2.03	1	H1-1b*	
11	CB7	3.0MMCABLE	0.05	9.076	4	0	9.076	13	0.127	982.275	2.03	2.03	1	H1-1b*	
12	CB11	3.0MMCABLE	0.003	11.623	3	0.001	11.623	10	0.077	982.275	2.03	2.03	1	H1-1b*	
13	CB12	3.0MMCABLE	0.003	11.623	3	0	11.623	6	0.077	982.275	2.03	2.03	1	H1-1b*	
14	CB17	3.0MMCABLE	0.003	11.623	3	0	11.623	6	0.077	982.275	2.03	2.03	1	H1-1b*	
15	CB14	3.0MMCABLE	0.003	11.623	3	0.001	11.623	10	0.077	982.275	2.03	2.03	1	H1-1b*	
16	VB5	HSS2"X14GA	0.07	0	8	0.003	7.996	y	13	6173.534	18947.066	1137.482	1137.482	1.136	H1-1b*
17	VB1	HSS2"X14GA	0.074	0	8	0.01	7.996	y	13	6173.534	18947.066	1137.482	1137.482	1.136	H1-1b*
18	VB4	HSS2"X14GA	0.073	0	8	0.007	7.996	y	13	6173.534	18947.066	1137.482	1137.482	1.136	H1-1b*

Envelope AISI S100-16: ASD Member Cold Formed Steel Code Checks

Member	Shape	Code Check	Loc [ft]	LC	Shear Check	Loc [ft]	Dir	LC	Pn/om [lb]	Tn/om [lb]	Mnyy/om [lb-ft]	Mnzz/om [lb-ft]	Vnyy/om [lb]	Vnzz/om [lb]	Cb	Eqn
1 R1	NSPURLIN	0.703	11.302	14	0.041	11.464	z	14	5260.797	25343.563	1136.951	1109.125	2343.75	8498.438	1	H1.2-1
2 R4	NSPURLIN	0.732	11.302	14	0.041	11.464	z	14	5260.797	25343.563	1136.951	1043.077	2343.75	8498.438	1	H1.2-1
3 R5	NSPURLIN	0.691	11.302	14	0.041	11.464	z	14	5260.797	25343.563	1136.951	1043.077	2343.75	8498.438	1	H1.2-1
4 R6	NSPURLIN	0.719	11.302	14	0.041	11.464	z	14	5260.797	25343.563	1136.951	1109.125	2343.75	8498.438	1	H1.2-1

Envelope AISI S100-16: ASD Member Cold Formed Steel Code Checks (Continued)

Member	Shape	Code Check	Loc[ft]	LC Shear Check	Loc[ft]	Dir	LC Pn/Om[lb]	Tn/Om[lb]	Mnyy/Om[lb-ft]	Mnzz/Om[lb-ft]	Vny/Om[lb]	Vnz/Om[lb]	Cb	Eqn	
5	R7	NSPURLIN	0.709	11.30214	0.041	11.464	Z	145260.797	25343.563	1136.951	1109.125	2343.75	8498.438	1	H1.2-1
6	R2	NSPURLIN	0.708	11.30214	0.041	11.464	Z	145260.797	25343.563	1136.951	1043.077	2343.75	8498.438	1	H1.2-1
7	R8	NSPURLIN	0.719	11.30214	0.041	11.464	Z	145260.797	25343.563	1136.951	1043.077	2343.75	8498.438	1	H1.2-1
8	R3	NSPURLIN	0.694	11.30214	0.041	11.464	Z	145260.797	25343.563	1136.951	1109.125	2343.75	8498.438	1	H1.2-1
9	R9	NSPURLIN	0.726	11.30214	0.041	11.464	Z	145260.797	25343.563	1136.951	1109.125	2343.75	8498.438	1	H1.2-1
10	R10	NSPURLIN	0.707	11.30214	0.041	11.464	Z	145260.797	25343.563	1136.951	1043.077	2343.75	8498.438	1	H1.1-2

FOUNDATIONS FOR REAR POSTS

Inputs:

Length of Baseplate	=	18 in.
Width of Baseplate	=	18 in.
Thickness of Baseplate	=	0.25 in.
Yield strength	=	50000 psi
Width of Column	=	2.75 in.
Total Number of Anchors	=	2
Angle between vertical and anchor	=	10°
Maximum Vertically downward load per 3D Analysis	=	2555 lbs
Maximum Lateral force per 3D analysis	=	246 lbs
Maximum Uplift force per 3D analysis	=	996 lbs

Bearing Pressure Check:

Pressure on base plate due to Vertical Load	=	1136 psf	
Allowable Bearing Pressure	=	1500 psf	
Demand vs Capacity	=	75.73%	OK

Baseplate check:

Max. bearing pressure on the baseplate	=	1136 psf	
Cantilever length of the plate	=	7.625 in.	
Bending Moment at the face of column	=	229.3 lb-ft	
Thickness required	=	0.214 in.	OK

Anchor Check:

Lateral force per 3D analysis	=	246 lbs	
Tension in the anchor due to Lateral force	=	1417 lbs	
Downward Load on Baseplate due to lateral force	=	1395 lbs	
Uplift force per 3D analysis	=	996 lbs	
Net vertical load on baseplate	=	399 lbs	Acting Downwards
Assuming, coefficient of friction between anchor and soil	=	0.25	(Conservatively)
Frictional force resisting the lateral force	=	100 lbs	
Net Lateral force in anchor	=	146 lbs	
Resultant tension due to lateral force	=	841 lbs	
Tension in each anchor due to Uplift force	=	505.5 lbs	
Total Tension in the anchor	=	1346.5 lbs	
Factor of safety considered for anchor capacity	=	1.5	
Test Load required for anchor	=	2100 lbs	

BARUN CORP	FOUNDATION DESIGN
	Array 1&2
THOMAS PALERMO RESIDENCE, 182 MEADOWOOD DRIVE, GEORGIA, VT 05468	
FOUNDATIONS FOR FRONT POSTS	

Inputs:

Length of Baseplate	=	18 in.
Width of Baseplate	=	18 in.
Thickness of Baseplate	=	0.25 in.
Yield strength	=	50000 psi
Width of Column	=	2.75 in.
Total Number of Anchors	=	1
Angle between vertical and anchor	=	10°
Maximum Vertically downward load per 3D Analysis	=	2225 lbs
Maximum Lateral force per 3D analysis	=	0 lbs
Maximum Uplift force per 3D analysis	=	208 lbs

Bearing Pressure Check:

Pressure on base plate due to Vertical Load	=	989 psf	
Allowable Bearing Pressure	=	1500 psf	
Demand vs Capacity	=	65.93%	OK

Baseplate check:

Max. bearing pressure on the baseplate	=	989 psf	
Cantilever length of the plate	=	7.625 in.	
Bending Moment at the face of column	=	199.7 lb-ft	
Thickness required	=	0.2 in.	OK

Anchor Check:

Lateral force per 3D analysis	=	0.131 lbs	
Tension in the anchor due to Lateral force	=	1 lbs	
Downward Load on Baseplate due to lateral force	=	1 lbs	
Uplift force per 3D analysis	=	207.809 lbs	
Net vertical load on baseplate	=	-206.809 lbs	
Assuming, coefficient of friction between anchor and soil	=	0.25	Acting upwards (Conservatively)
Frictional force resisting the lateral force	=	0 lbs	
Net Lateral force in anchor	=	0.131 lbs	
Resultant tension due to lateral force	=	1 lbs	
Tension in each anchor due to Uplift force	=	211 lbs	
Total Tension in the anchor	=	212 lbs	
Factor of safety considered for anchor capacity	=	1.5	
Test Load required for anchor	=	400 lbs	

FOUNDATIONS SUMMARY				
	Baseplate	No. of Anchors	Anchor Angle w/vertical	Anchor Test Load (lbs)
Rear Posts	18in. x 18in. x 0.25in.	2	10°	2100
Front Posts	18in. x 18in. x 0.25in.	1	10°	750

*All anchors shall be tested for above test loads during installation.



GEORGIA

VERMONT

Date: 10/31/23

Applicant: Matthew Markum
182 Meadowcroft Dr
Milton, VT 05478

Zoning District: AR-3
Parcel Tax ID #: 110470000
Permit # BP-073-23
Project Description: subur

Dear Applicant,

Your Town of Georgia Zoning Permit Application has been approved.

This permit will take effect on 10/19/23 or until final adjudication of any appeals.

An appeal may be filed until 10/18/23.

This Zoning Permit will expire one year from the date of issue unless extended. An extension of the Zoning Permit may be extended by the Zoning Administrator when substantial construction or due diligence is evidenced, provided a written request for extension is submitted prior to the expiration of the permit. Zoning Permits for accessory structures will not be extended beyond the original one-year permit period.

The Zoning Administrator shall be allowed reasonable access to private or public property for the purpose of inspecting and investigating conditions relating to any Zoning Permit or application for a Zoning Permit. An application for a Zoning Permit may be denied if reasonable access is not provided.

Finishing your project does not mark the end of the Permitting Process. The town must review all municipal permits for compliance in order for the property to be sold at any point in the future. The town uses a Certificate of Occupancy issued by the Zoning Administrator before use or occupancy of the land or structure which requires the Zoning Permit. An application for a Certificate of Occupancy form may be obtained from the Town of Georgia website or at the Town Hall and submitted with any supporting documentation. Fees for the Occupancy Permit and recording were submitted at the time of the Zoning Application. Further documentation required for issuance of the Occupancy Permit are listed below:

- ☐ Vermont Residential Building Energy Standards Certificate (RBES)
- ☐ State of Vermont Wastewater and Potable Water Supply Permit.
- ☐ Septic system certification letter issued by your licensed septic designer.
- ☐ US Department of Housing HUD 309 form for manufactured home.

If you have any questions, or I may be of further assistance to you, please do not hesitate to contact me.

Sincerely,


Douglas Bergstrom
Zoning Administrator
DRB, Planning and E911 Coordinator
Floodplain Manager
zoning@townofgeorgia.com