

TOWN OF FREEPORT
STAFF REVIEW BOARD AGENDA
TUESDAY, February 27TH, 2024
1:00 PM
TOWN HALL COUNCIL CHAMBERS
30 Main Street, Freeport, Maine

ITEM I: Mainely Custard Solar Installation – Site Plan Amendment. The applicant is seeking approval of a Site Plan amendment for the addition of ground mounted solar PV panels to their existing property on 150 US Route One. Zoning District: Commercial District 1 (C-1). Tax Assessor Map 20, Lot 66 ETC (150 US Route One). Veggie Life, LLC, applicant and owner; Laura MacMahon, Assured Solar Energy, representative.

ITEM II: Adjourn

ADA NOTICE: Requesting Reasonable Accommodations

Please contact the Planning Department at (207) 865-4743 option 5 or by email at csmith@freeportmaine.com prior to scheduled meetings or events to discuss auxiliary aids or services needed to participate in Board activities.

The Town of Freeport is an equal opportunity employer and service provider that celebrates diversity and is committed to creating an inclusive environment for our employees and those we serve.



**Town of Freeport
Planning Department
30 Main Street
Freeport, ME 04032
(207) 865-4743 ext. 107**

1. SUBMISSIONS

- Twelve (12) copies each of the completed application form and a copy of the recorded deed(s) for the property. If the applicant is not the property owner, a purchase and sale agreement or a lease agreement shall also be submitted to show that the applicant has a serious interest in the project and sufficient title, right, and/or interest to complete the project. *The amount being paid for the property may be blacked out.*
- For applications to the Project Review Board, you must also submit twelve (12) copies of all other supplemental materials collated into individual packets which will fit into a large manila envelope. Please clip materials together; do not use special binding or binders. If copies of plans are being submitted, please include 2 full size sets (24" x 36") and 10 copies reduced to 11" x 17". The scale of any site plans shall be sufficient to allow review under the Criteria and Standards of Section 602.G of the Freeport Zoning Ordinance, but at not more than 50 feet to the inch for that portion of the total tract of land being proposed for development. **All plan sheets must also be submitted electronically in a pdf format.** For a complete list of detailed submission requirements, please refer to the applicable ordinance(s) which may include the Design Review Ordinance, the Subdivision Ordinance or the Zoning Ordinance (Section 602 – Site Plan Review).

For applications to the Planning Board, you must also submit eight (8) copies of all other supplemental materials.

- Payment of application fee and abutter fee (if applicable)
- This application form, along with the required accompanying materials, must be submitted to the Town Planner at least 21 days prior to the meeting at which it is to be considered.
- The applicant or an agent needs to be present at the meeting to present the application to the Board. If the applicant is going to be represented by someone other than themselves, they must submit a signed letter of authorization.

2. ABUTTERS

Abutters will be notified as required by State and Town regulations. Abutters will be determined by the Freeport Planning Department using most recent Assessing Records. If there are other people that you would like notified of the meeting, their contact information (either mailing address or email address) must be submitted with the application form. A fee of \$2.50 per abutter will be charged.

3. FEES

Refer to current fee schedule.

**Town of Freeport
Planning Department**

Application for Review

Project Type: (check all applicable)

Site Plan Review Design Review Certificate Subdivision
 Zoning Ordinance Amendment Other (please explain) _____

Name of Project: Solar Installation Project at Mainely Custard

Proposed Use of Property: Addition of roof and ground mounted solar PV panels to existing property

1) Applicant Information:

Name: Veggie Life, LLC. Owner: Jaime Shaw. project Rep: Laura MacMahon Tel: 2072212916 ex 9208
(If a Company, provide name of person also)

Address: 150 US-1, Freeport, Maine

Email: laura@assuredsolar.com

2) Interest in Property: Please attach a copy of the recorded deed for the property. If the applicant is not the property owner, a purchase and sale agreement or a lease agreement shall also be submitted to show that the applicant has a serious interest in the project and sufficient title, right, and/or interest to complete the project. The amount being paid for the property may be blacked out. This application will not be processed without this information.

3) Do you own any abutting property? Yes No

If yes, please explain: _____

4) Property Information:

Present Use of Property Commercial kitchen and food takeaway

Location: Street Address 150 US-1, Freeport, Maine

Assessor's Office Map: _____

Lot: _____

Size of Parcel (acres): _____

Zoning District (s): _____

5) Design Review Information (please circle one from each category)

Design Review District: One Two Not in the Design Review District

Building Class, as designated on the Design Review District Map(s): A B C

Is this building in the Color Overlay District: Yes No

Please describe the proposed changes: No site prep needs to be done to make the area ready for the installation. Ground screws will be used to secure the racking to the ground. There will be no cement pad.

6) Other Information:

Proposed # of Buildings: N/A Gross Square Footage of Non-Residential Buildings: _____

Is Zoning Board of Appeals Approval Required? Yes No

If YES, provide reason _____

7) Subdivision Approval or a Subdivision Amendment: (if applicable)

Proposed Number of Lots N/A

Does the applicant intend to request any waivers of Subdivision or Site Review provisions?

NO _____ YES _____

If YES, list and give reasons why _____

8) Applicant's Engineer, Land Surveyor, Landscape Architect and/or Planner:

Name: Assured Solar Energy, LLC - Owner Rob Taisey Tel: 2072212916

Address: 460 Mountfort Rd North Yarmouth, ME 04097

Email: laura@assuredsolar.com

9) Billing Contact (If different than applicant information)

Name: Assured Solar Energy Attn Laura MacMahon Tel: 2072212916

Address: P.O. Box 1199 Yarmouth, ME

Email: laura@assuredsolar.com

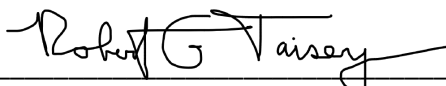
Application Fee: \$ _____ **Abutter Fee:** \$ _____

Submission: *This application form, along with required accompanying materials, must be submitted to the Town Planner at least 21 days prior to the meeting at which it is to be considered.*

The undersigned, being the applicant, owner or legally authorized representative, states that all information in this application is true and correct to the best of his/her knowledge and hereby does submit the information for review by the town and in accordance with applicable ordinances, statutes and regulations of the Town, State and Federal governments.

1/23/2024

DATE



SIGNATURE OF APPLICANT/OWNER/REPRESENTATIVE

DLN: 1002140168674

QUITCLAIM DEED
(with Covenant)

MAINE REAL ESTATE TAX-Paid

FCT HOLDINGS, LLC, a Maine limited liability company with a place of business in Freeport, Maine and a mailing address of 5 Lake Brook Drive, Kennebunk, ME 04043 grants to **VEGGIE LIFE, LLC**, a Maine limited liability company with a place of business in The Forks Plantation, Maine, and a mailing address of 2777 U.S. Route 201, The Forks Plantation, ME 04985, the real property located in Freeport, Cumberland County, Maine, more particularly described on Exhibit A.

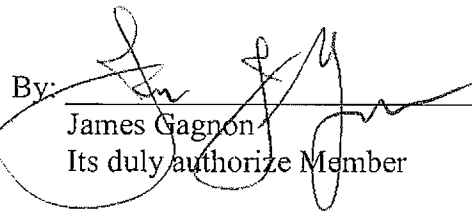
Meaning and intending to convey and hereby conveying the property described in the deed from American Classics Chevrolets, LLC to FCT Holdings, LLC, which deed is dated August 14, 2015, and recorded in the Cumberland County Registry of Deeds in Book 32519, Page 103.

IN WITNESS WHEREOF, the Grantor has executed this deed under seal this 22nd day of October, 2021.

FCT Holdings, LLC



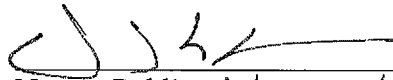
Witness

By: 
James Gagnon
Its duly authorize Member

State of Maine
County of Cumberland, ss

Date: October 22, 2021

Then personally appeared before me the above-named James Gagnon, duly authorized Member of FCT Holdings, LLC and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said company.


Notary Public / *Attorney-at-Law*
Print Name: DAVID E. CURRIER

Date Commission Expires: 1/6/23
ME BAR # 2571

Exhibit A
FCT Holdings, LLC to Veggie Life, LLC
Page 1 of 1

A certain lot or parcel of land, with the buildings thereon, situated on the Northwesterly side of U.S. Route 1 in the Town of Freeport, County of Cumberland and State of Maine being more particularly described as follows:

Beginning at a 5/8" capped rebar (#1328) set in the ground on the Northwesterly sideline of U.S. Route 1 at the easterly corner of land now or formerly of FTC Holdings, LLC (23188/279);

Thence N 41° 10' 35" W along land of the said FTC Holdings, LLC 168.74 feet to a 5/8" capped rebar (#1328) set in the ground on the Southeasterly sideline of Interstate 295;

Thence N 54° 14' 10" E along the said sideline of Interstate 295 a distance of 336.89 feet to a 5/8" capped rebar (#1328) set in the ground;

Thence S 36° 04' 37" E across land now or formerly of American Classics Chevrolets, LLC 166.49 feet to a 5/8" capped rebar (#1328) set in the ground on the said sideline of U.S. Route 1;

Thence S 53° 58' 10" W along the said sideline of U.S. Route 1 a distance of 321.89 feet to the point of beginning. Containing 55,093 square feet.

This conveyance is made subject to a 50-foot-wide access easement running Northwesterly from the said U.S. Route 1 along the entire Northeasterly sideline of the above-described lot.

This conveyance is made subject to and together with rights in and to a 20' wide drainage easement centered onto a 38" diameter culvert crossing both the above-described lot and land of now or formerly of American Classics Chevrolets, LLC, running from U.S. Route 1 toward Interstate 295.

This drainage easement is for maintenance and repair of the said 38" culvert.

All bearings are Magnetic of the year 2000.

From: [Jaime Shaw](#)
To: [Caroline Pelletier](#)
Subject: Fwd: Freeport Permitting
Date: Monday, January 22, 2024 5:46:45 PM

**** CAUTION EXTERNAL EMAIL ****

Hi Caroline,

I grant permission for Laura MacMahon from Assured Solar Energy to represent the project referenced below for 150 US Rte 1, Freeport, on my behalf at the planning board.

Please let me know if you need anything else.

Thank you!

Jaime Shaw

Cell: 207-504-0791

www.veggielifefoods.com

@veggielifefoods

Sent from my Verizon Wireless 5G Phone

----- Forwarded message -----

From: Laura MacMahon <laura@assuredsolar.com>

Date: Jan 23, 2024 1:50 AM

Subject: Freeport Permitting

To: jaime@veggielifefoods.com

Cc: Cooper Bramble <cooper@mainestreetcapital.com>, Joe at Three Rivers
<joe@threeriversfun.com>

Good Morning Jaime,

I have been working with the Town of Freeport to get all the permits that we need completed. We will need to go before the Planning Board for approval of the ground mounted array.

1. In order for me to fill out and submit these permits on your behalf, the Town of Freeport needs an email from you saying that you grant me permission to represent this project on your behalf. If you wouldn't mind sending an email to that end to Caroline Pelletier CPelletier@freeportmaine.com I would appreciate it.

2. In order to complete the Planning Board Application, I also need a copy of the deed for the property. Can you please provide this ASAP?

Thank you,

Laura

--

Laura MacMahon

Assured Solar Energy

Customer Service Manager

Operation Systems Manager

| (207) 221-2916 x 9208



ASSOCIATED DESIGN PARTNERS INC.
 Office: (207) 878-1751
 (207) 878-1788
 80 Leighton Road
 Falmouth, Maine 04105
 E-Mail: adp@adpengineering.com

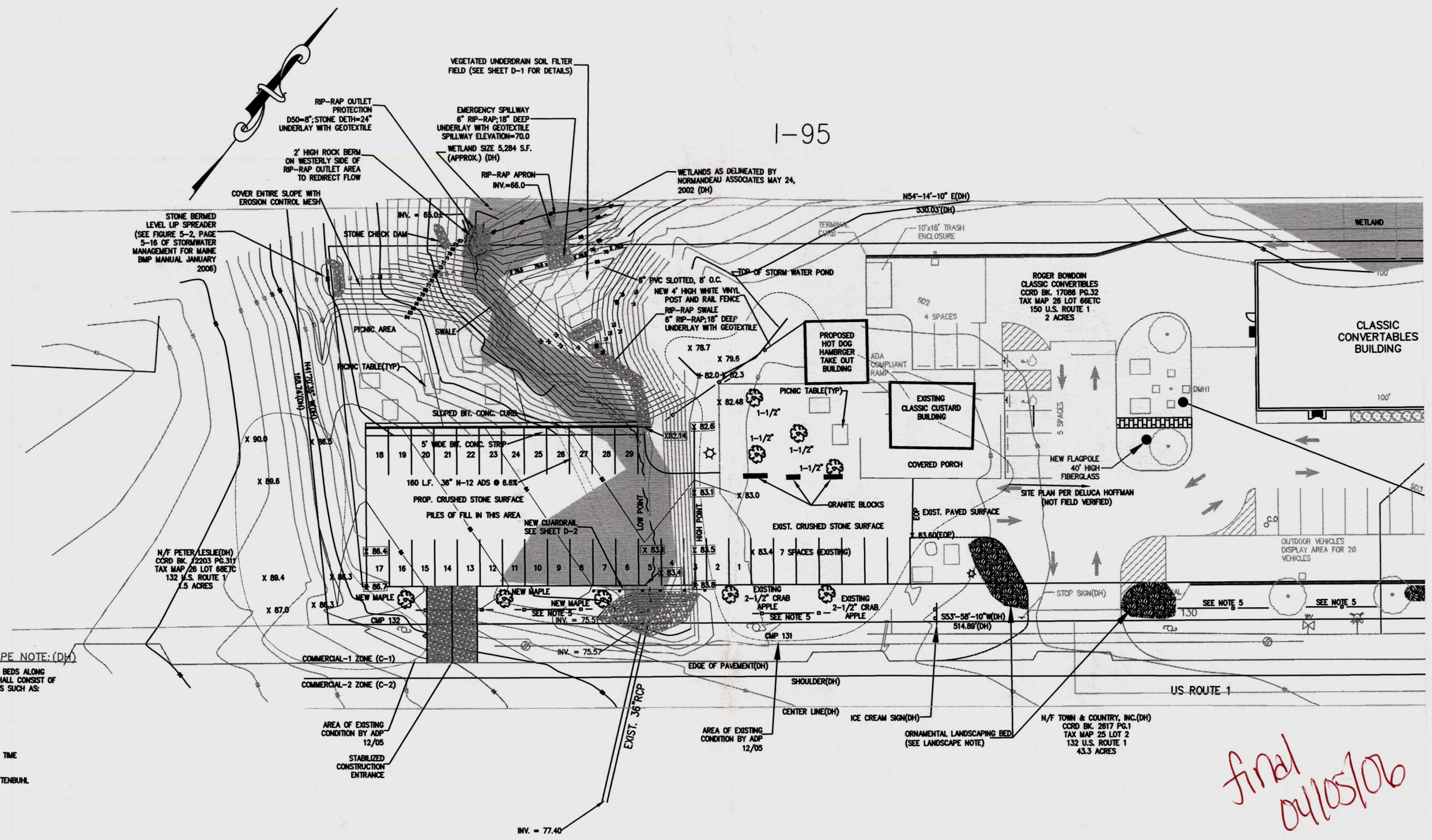
THIS DRAWING, DESIGN AND EXHIBITS FILE ARE THE PROPERTY OF ASSOCIATED DESIGN PARTNERS, INC. THE REPRODUCTION, COPYING OR ANY OTHER USE OF THIS DOCUMENT WITHOUT WRITTEN CONSENT IS PROHIBITED.

PROJECT: **CLASSIC CUSTARD**
US ROUTE 1
FREEPORT, MAINE
CUMBERLAND COUNTY
 SHEET TITLE: **SITE PLAN-PARKING LOT EXPANSION**

ISSUED	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		

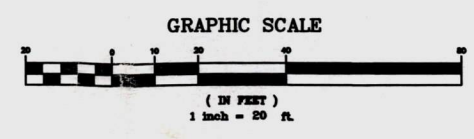
DATE: 1-18-06
 SCALE: 1"=20'
 DESIGN BY: AJC
 DRAWN BY: AJC
 PROJECT NUMBER:
05306
 SHEET NO:
C-1

1-95



LANDSCAPE NOTE: (DH)
 ORNA-MENTAL BEDS ALONG FRONTAGE SHALL CONSIST OF SPRING BULBS SUCH AS:
 -DAFFODILS
 -CROCUS
 -TULIPS
 -HOSTA
 -DAY LILYS
 -ASTERS
 -MOTHER OF TIME
 -IBERIS
 -DIANTHUS
 -DOCTOR KITTENBUHL

- NOTES:**
1. THIS SITE PLAN IS BASED UPON AN ELECTRONIC FILE PROVIDED BY DELUCA HOFFMAN.
 2. BOUNDARY OF THE PROJECT PARCEL IS BASED UPON PLAN PROVIDED BY DELUCA HOFFMAN. BOUNDARY HAS NOT BEEN VERIFIED BY ADP.
 3. NOTES SHOWN ON THIS PLAN, FOLLOWED BY (DH), ARE NOTES FROM THE ORIGINAL APPROVED SITE PLAN BY DELUCA HOFFMAN.
 4. AN AS-BUILT SURVEY WAS ONLY CONDUCTED IN THE AREA IMMEDIATELY ADJACENT TO THE PROPOSED PARKING LOT EXPANSION AREA.
 5. A 4' HIGH WHITE VINYL SPLIT RAIL FENCE WILL BE USED BETWEEN SHADE TREES IN LIEU OF FLOWER BEDS.
 6. TOTAL WETLAND IMPACT FOR PROJECT IS 6,965 S.F.. TIER 1 PERMIT REQUIRED.

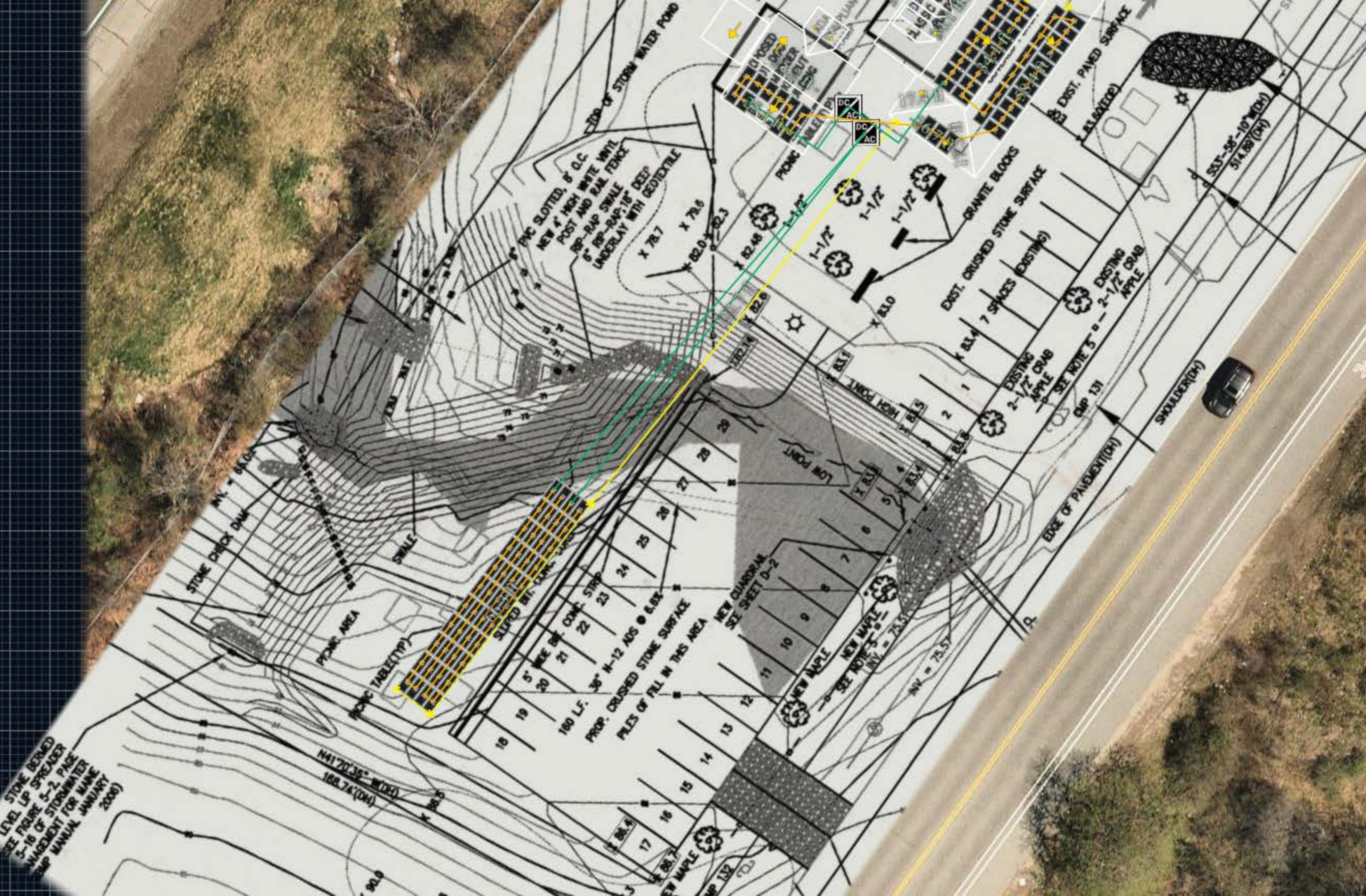


LEGEND

☆	POLE MOUNTED LIGHT	-SF-	PROPOSED SILTFENCE
⊕	UTILITY POLE	⊗	DECIDUOUS TREE
OP	EDGE OF PAVEMENT	⊕	CONIFEROUS TREE
-OH-	OVERHEAD UTILITY LINE	⊖	WETLAND
-UB-	BELOW GROUND ELECTRIC		
■	EXIST. CATCH BASIN		
⊙	SANITARY MANHOLE		
x 83.30	EXISTING SPOT GRADE		
x 83.30	EXISTING SPOT GRADE BY ADP		
-S-	SANITARY LINE		
-W-	EXISTING WATER LINE		
- - -	SETBACK		
- - - 23 - - -	EXISTING CONTOUR		
- - - 80 - - -	PROPOSED CONTOUR		
84x40	PROPOSED SPOT ELEVATION		

final 04/10/06

STONE BERMED
LEVEL UP SPREADER
SEE FIGURE 5-2, PAGE
5-16 OF STORMWATER
MANAGEMENT FOR MAINE
EMP MANUAL JANUARY
2008



SHOULDER(DH)

EDGE OF PAVEMENT(DH)

GRANITE BLOCKS

DIST. CRUSHED STONE SURFACE

DIST. PAVED SURFACE

DIST. CRUSHED STONE SURFACE

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From: [Laura MacMahon](#)
To: [Caroline Pelletier](#)
Subject: Re: Mainly Custard PV Array
Date: Wednesday, February 21, 2024 1:46:03 PM

**** CAUTION EXTERNAL EMAIL ****

Surface area of the panels themselves (which will be mounted at a 35* angle on racking): 13.8 ft x 66.3 ft. Which equals 917.15 sqft. The bottom of the panel will be ~3ft off the ground.

Ground plane area: 10.9 x 66.3 which equals 722.67 sqft

We will not be doing any grading.

On Wed, Feb 21, 2024 at 1:30 PM Caroline Pelletier <CPelletier@freeportmaine.com> wrote:

Can you please provide me the approximate dimension of the solar panel area?

Are you doing any grading?

Caroline Pelletier

Town Planner

Town of Freeport

30 Main Street

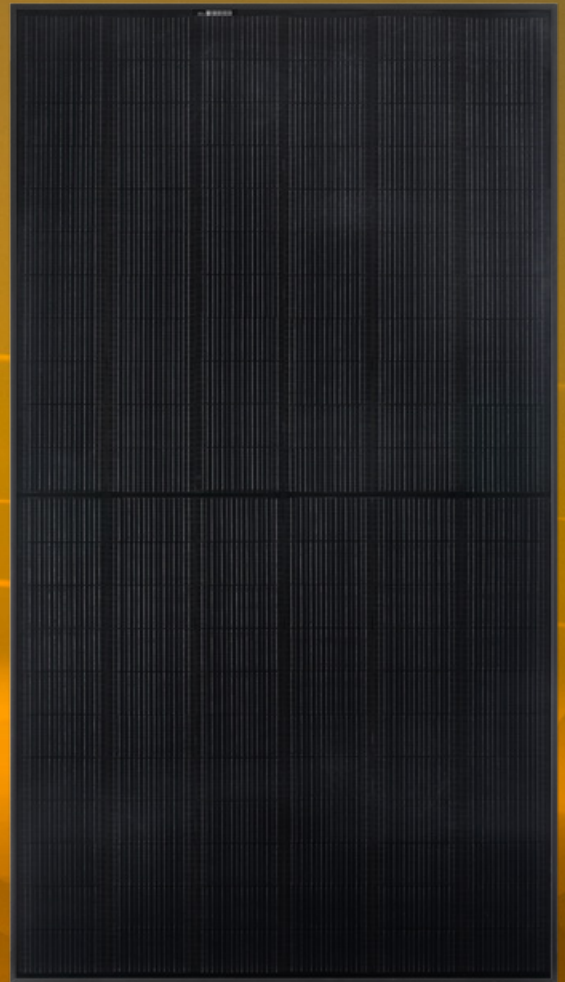
Freeport, ME 04032

207-865-4743 ext. 107

From: Laura MacMahon <laura@assuredsolar.com>
Sent: Monday, February 12, 2024 11:10 AM
To: Caroline Pelletier <CPelletier@freeportmaine.com>
Subject: Re: Mainly Custard PV Array

**** CAUTION EXTERNAL EMAIL ****

SOLAR'S MOST TRUSTED



REC ALPHA[®] PURE SERIES

PRODUCT SPECIFICATIONS

405 WP
20.3 W/FT²



ELIGIBLE

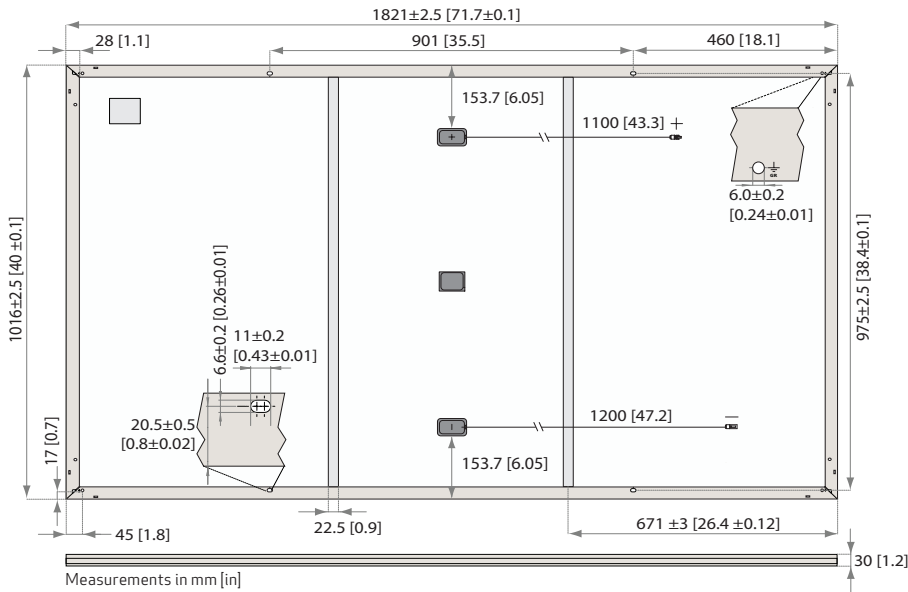


LEAD-FREE
ROHS COMPLIANT

EXPERIENCE



PERFORMANCE



CERTIFICATIONS

IEC 61215:2016, IEC 61730:2016, UL 61730	
IEC 62804	PID
IEC 61701	Salt Mist
IEC 62716	Ammonia Resistance
UL 61730	Fire Type Class 2
IEC 62782	Dynamic Mechanical Load
IEC 61215-2:2016	Hailstone (35mm)
IEC 62321	Lead-free acc. to RoHS EU 863/2015
ISO 14001:2004, ISO 9001:2015, OHSAS 18001:2007, IEC 62941	



WARRANTY

	Standard		REC ProTrust	
	No	Yes	Yes	Yes
Installed by an REC Certified Solar Professional	No	Yes	Yes	Yes
System Size	All	≤25 kW	25-500 kW	
Product Warranty (yrs)	20	25	25	
Power Warranty (yrs)	25	25	25	
Labor Warranty (yrs)	0	25	10	
Power in Year 1	98%	98%	98%	
Annual Degradation	0.25%	0.25%	0.25%	
Power in Year 25	92%	92%	92%	

See warranty documents for details. Conditions apply

MAXIMUM RATINGS

Operational temperature:	-40 ... +185°F (-40 ... +85°C)
Maximum system voltage:	1000 V
Maximum test load (front):	+7000 Pa (146 lbs/sq ft)*
Maximum test load (rear):	-4000 Pa (83.5 lbs/sq ft)*
Max series fuse rating:	25 A
Max reverse current:	25 A

*See installation manual for mounting instructions. Design load = Test load / 1.5 (safety factor)

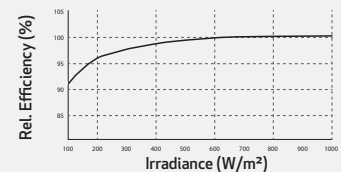
TEMPERATURE RATINGS*

Nominal Module Operating Temperature:	44°C (±2°C)
Temperature coefficient of P _{MAX} :	-0.26 %/°C
Temperature coefficient of V _{OC} :	-0.24 %/°C
Temperature coefficient of I _{SC} :	0.04 %/°C

*The temperature coefficients stated are linear values

LOW LIGHT BEHAVIOUR

Typical low irradiance performance of module at STC:



GENERAL DATA

Cell type:	132 half-cut REC heterojunction cells with lead-free, gapless technology 6 strings of 22 cells in series	Connectors:	Stäubli MC4PV-KBT4/KST4, 12AWG (4mm ²) in accordance with IEC 62852 IP68 only when connected
Glass:	0.13 in (3.2 mm) solar glass with anti-reflection surface treatment	Cable:	12AWG (4mm ²) PV wire, 43+47 in (1.1+1.2m) accordance with EN 50618
Backsheet:	Highly resistant polymer (black)	Dimensions:	71.7 x 40 x 1.2 in (1821 x 1016 x 30 mm)
Frame:	Anodized aluminum (black)	Weight:	45 lbs (20.5 kg)
Junction box:	3-part, 3 bypass diodes, IP68 rated in accordance with IEC 62790	Origin:	Made in Singapore

ELECTRICAL DATA

Product Code*: RECxxxAA Pure

	385	390	395	400	405
Power Output - P _{MAX} (Wp)	385	390	395	400	405
Watt Class Sorting - (W)	0/+5	0/+5	0/+5	0/+5	0/+5
Nominal Power Voltage - V _{MPP} (V)	41.2	41.5	41.8	42.1	42.4
Nominal Power Current - I _{MPP} (A)	9.35	9.40	9.45	9.51	9.56
Open Circuit Voltage - V _{OC} (V)	48.5	48.6	48.7	48.8	48.9
Short Circuit Current - I _{SC} (A)	10.10	10.15	10.20	10.25	10.30
Power Density (W/sq ft)	19.3	19.6	19.8	20.1	20.3
Panel Efficiency (%)	20.8	21.1	21.3	21.6	21.9
Power Output - P _{MAX} (Wp)	293	297	301	305	309
Nominal Power Voltage - V _{MPP} (V)	38.8	39.1	39.4	39.7	40.0
Nominal Power Current - I _{MPP} (A)	7.55	7.59	7.63	7.68	7.72
Open Circuit Voltage - V _{OC} (V)	45.7	45.8	45.9	46.0	46.1
Short Circuit Current - I _{SC} (A)	8.16	8.20	8.24	8.28	8.32

Values at standard test conditions (STC: air mass AM1.5, irradiance 10.75 W/sq ft (1000 W/m²), temperature 77°F (25°C), based on a production spread with a tolerance of P_{MAX}, V_{OC} & I_{SC} ±3% within one watt class. Nominal module operating temperature (NMOT: air mass AM1.5, irradiance 800 W/m², temperature 68°F (20°C), windspeed 3.3 ft/s (1 m/s). *Where xxx indicates the nominal power class (P_{MAX}) at STC above.

Founded in 1996, REC Group is an international pioneering solar energy company dedicated to empowering consumers with clean, affordable solar power. As Solar's Most Trusted, REC is committed to high quality, innovation, and a low carbon footprint in the solar materials and solar panels it manufactures. Headquartered in Norway with operational headquarters in Singapore, REC also has regional hubs in North America, Europe, and Asia-Pacific.



Power Optimizer For Residential Installations

S440, S500



POWER OPTIMIZER

Enabling PV power optimization at the module level

- Specifically designed to work with SolarEdge residential inverters
- Mitigates all types of module mismatch loss, from manufacturing tolerance to partial shading
- Detects abnormal PV connector behavior, preventing potential safety issues*
- Faster installations with simplified cable management and easy assembly using a single bolt
- Module-level voltage shutdown for installer and firefighter safety
- Flexible system design for maximum space utilization
- Superior efficiency (99.5%)
- Compatible with bifacial PV modules

* Functionality subject to inverter model and firmware version

/ Power Optimizer

For Residential Installations

S440, S500

	S440	S500	UNIT
Rated Input DC Power ⁽¹⁾	440	500	W
Absolute Maximum Input Voltage (Voc)	60		Vdc
MPPT Operating Range	8 - 60		Vdc
Maximum Short Circuit Current (Isc) of Connected PV Module	14.5	15	Adc
Maximum Efficiency	99.5		%
Weighted Efficiency	98.6		%
Overvoltage Category	II		
OUTPUT DURING OPERATION			
Maximum Output Current	15		Adc
Maximum Output Voltage	60		Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM INVERTER OR INVERTER OFF)			
Safety Output Voltage per Power Optimizer	1		Vdc
STANDARD COMPLIANCE			
EMC	FCC Part 15 Class B, IEC61000-6-2, IEC61000-6-3, CISPR11, EN-55011		
Safety	IEC62109-1 (class II safety), UL1741		
Material	UL94 V-0, UV Resistant		
RoHS	Yes		
Fire Safety	VDE-AR-E 2100-712:2013-05		
INSTALLATION SPECIFICATIONS			
Maximum Allowed System Voltage	1000		Vdc
Dimensions (W x L x H)	129 x 155 x 30		mm
Weight (including cables)	655 / 1.5		gr / lb
Input Connector	MC4 ⁽²⁾		
Input Wire Length	0.1		m
Output Connector	MC4		
Output Wire Length	(+) 2.3, (-) 0.10		m
Operating Temperature Range ⁽³⁾	-40 to +85		°C
Protection Rating	IP68 / NEMA6P		
Relative Humidity	0 - 100		%

(1) Rated power of the module at STC will not exceed the Power Optimizer Rated Input DC Power. Modules with up to +5% power tolerance are allowed

(2) For other connector types please contact SolarEdge

(3) For ambient temperature above +70°C / +158°F power de-rating is applied. Refer to Power Optimizers Temperature De-Rating Technical Note for more details

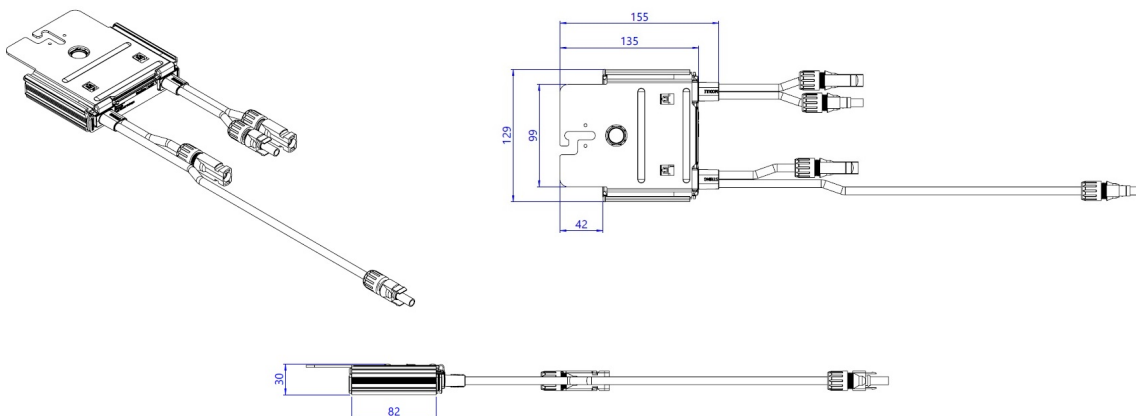
PV System Design Using a SolarEdge Inverter		Single Phase HD-Wave	Three Phase	Three Phase for 277/480V Grid	
Minimum String Length (Power Optimizers)	S440, S500	8	16	18	
Maximum String Length (Power Optimizers)		25	50		
Maximum Nominal Power per String ⁽⁴⁾		5700	11250 ⁽⁵⁾	12750 ⁽⁶⁾	W
Parallel Strings of Different Lengths or Orientations		Yes			

(4) If the inverters rated AC power \leq maximum nominal power per string, then the maximum power per string will be able to reach up to the inverters maximum input DC power Refer to: <https://www.solaredge.com/sites/default/files/se-power-optimizer-single-string-design-application-note.pdf>

(5) For the 230/400V grid: it is allowed to install up to 13,500W per string when the maximum power difference between each string is 2,000W

(6) For the 277/480V grid: it is allowed to install up to 15,000W per string when the maximum power difference between each string is 2,000W

(7) It is not allowed to mix S-series and P-series Power Optimizers in new installations



SINGLE DAY INSTALL

SunTurf[®] Ground Mount System



SunModo offers the next generation Ground Mount System with SunTurf. The streamlined design combines the strength of Helio Rails with steel pipes to create the perfect ground mount solution.

SurTurf is ideal for solar installers looking for a durable and cost-effective system that can accommodate a wide variety of soil conditions.

The SunTurf Ground Mount Advantage

- ✓ Easily scalable from kilowatts to multimegawatts PV Arrays.
- ✓ Foundation design solution for every soil condition.
- ✓ Online configuration tool available to streamline design process.
- ✓ Components optimized for strength, durability and fast installation.
- ✓ UL 2703 Listed by Intertek.

Key Features of SunTurf® Ground Mount System



SunTurf Ground Mount System easily integrate Helio Rails with Schedule 40 steel pipes. No drilling is required to attach the aluminum rails to the horizontal pipe. Optional bracing can provide additional structural rigidity for sites with high snow or wind load conditions. Anchor any ground mount installation using one of our fountain types including helical piles, precast ballasts and concrete piers.



Augers and Ground Screws

Our augers are suitable for use in weak to moderate strength soils and areas with a high-water table. Our ground screws are ideal for use in hard packed earth or soils with large amounts of cobble and gravel.



Technical Data

Application	Ground Mount
Material	High grade aluminum, galvanized steel and 304 stainless steel hardware
Module Orientation	Portrait and Landscape
Tilt Angle	Range between 10 to 50 degrees
Foundation Types	Post in concrete, helical earth auger, ground screw anchor and ballast
Structural Integrity	Stamped engineering letters available
Certificate	UL2703 listed by ETL
Warranty	25 years

energy as sure as sunrise

Assured Solar Energy



Wild Oats Bakery
REAP Grant Awardees, 2019

Brunswick, ME

A customized proposal for:

Jaime Shaw & Joe Christopher
150 US-1
Freeport, ME 04032

Designed By:

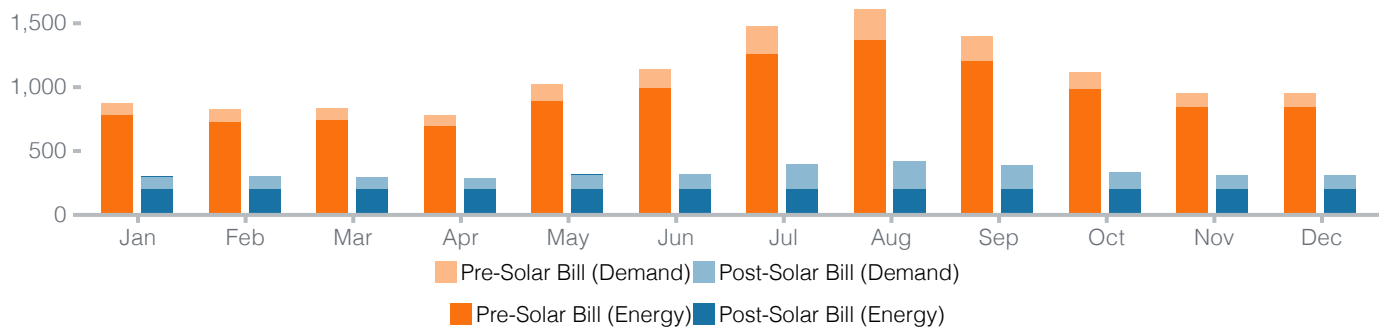
Olivia Houston
Assured Solar Energy
olivia@assuredsolar.com

Solar for Your Business

150 US-1
Freeport, ME 04032



Average monthly electric bill



Your System Components

Type	Manufacturer	Model	Quantity
Module	REC	REC405AA Pure	92
DC Optimizer	SolarEdge Technologies Inc.	S440	92
Inverter	SolarEdge Technologies Inc.	SE17.3KUS (208V)	2

Your Warranty Details for System Components

Optimizers and microinverters we offer and install carry a 25 year warranty.

REC Alpha modules carry a 25 year product, and performance warranty through the REC ProTrust Certified Solar Professional Program, which guarantees at least 92% of the rated power output after the 25th year. The REC modules carry a 25 year labor warranty for systems under 25kW and a 10 year labor warranty for systems 25 - 500kW.

SolarEdge Inverters carry an industry standard 12 year warranty with the option of buying an extended* 20 or 25 year warranty.

*Extended warranty is purchased separately and must be activated within 24 months of inverter shipment from SolarEdge.

Your customized solution



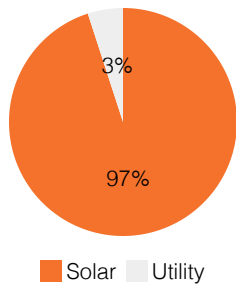
Annual Irradiance (lighter color means more exposure)



System summary

System size	37.26 kW
Year 1 Production	46,774 kWh
Year 1 Consumption	48,330 kWh

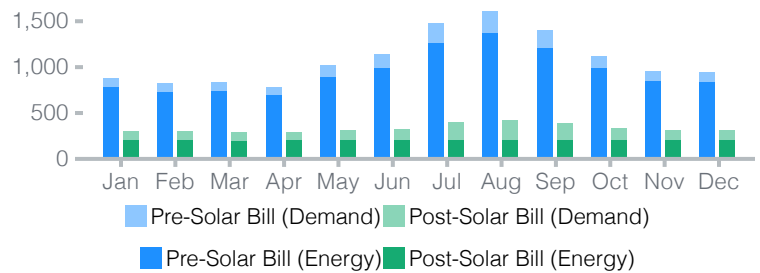
Electricity bill offset after one full year of solar production: **69%**



You would generate

97%

of your energy from solar



A responsible choice

Your system would offset emissions equivalent to



Planting 8,194 trees

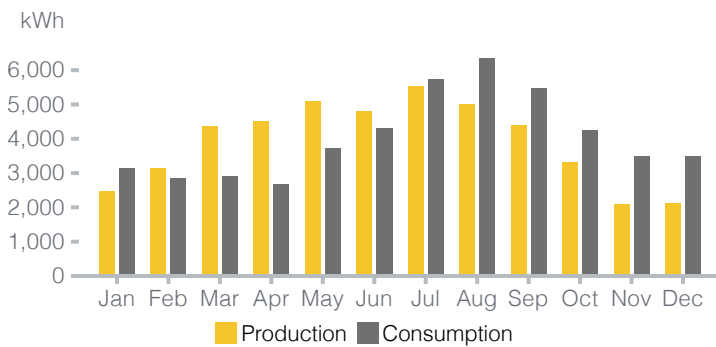


Driving 31,642 fewer miles per year



Taking 3 cars off the road

3



Let's Talk About REAP Grants



Maine Beer Company
REAP Grant Awardees, 2015, 2020

Freeport, ME

What is the benefit of REAP?

The USDA is providing grants for agricultural producers and rural small businesses through the Rural Energy for America program. Currently, the grant is being offered to up to 50% of customers' total project costs, before the federal tax incentives.

The deadline for each round of REAP grant applications are as follows:

June 30, 2023

September 30, 2023

December 31, 2023

March 31, 2024

June 30, 2024

September 30, 2024

Assured Solar Energy has helped several of our commercial customers apply for and receive REAP Grants over the years. Maine Beer Company in Freeport received 2, one for their original installation and one for their expansion. Our REAP grant & commercial sales team, led by Laura MacMahon, will walk you through every step of the process and assist you in your application.

System Cost and Incentives

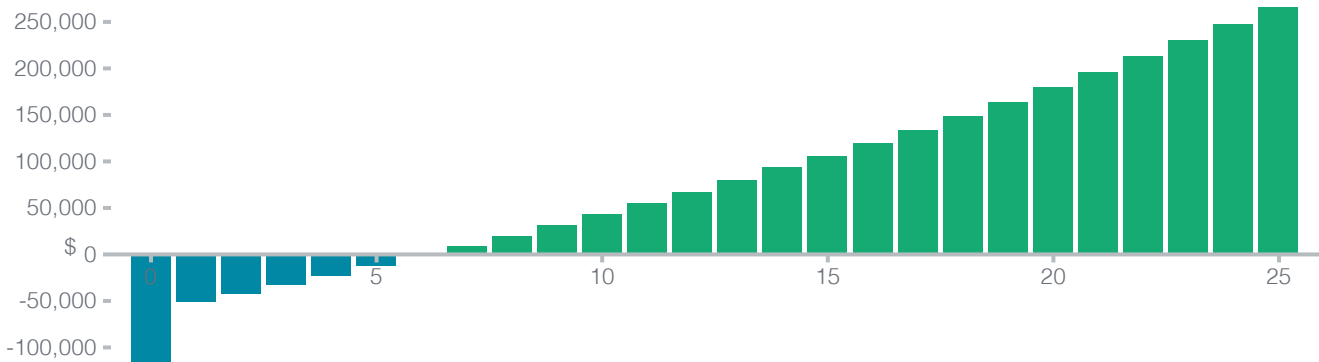


Gross System Cost: \$118,859

Federal Tax Credit of 30%: \$ 35,658

In addition to the Federal Investment Tax Credit, commercial properties are eligible for Bonus Depreciation on a federal and state level. This is a tax deduction. The amount of the deduction is based on 85% of the Gross System Cost. The value of the deduction depends on your federal and state income tax rates. Please seek more information from your tax advisor.

Cumulative Cashflow Over 25 Years



Lock in electric rates and hedge against inflation

The Levelized Cost of Energy (**LCOE**) for your system is \$ 0.09/kWh as compared to the Q2 2023 rate of \$0.26/kWh. This model assumes an energy price escalation of 4% per year by the utility company.

Energy prices are projected to increase every year. A solar investment protects you from these changing prices, at the LCOE. With today's rate locked in, your solar investment will keep generating more value in the future. It insulates you against both monetary inflation and energy price escalation, making it a smart business investment.

Year	Annual Bill Pre Solar	Annual Bill Post Solar	Annual Cashflows	Cumulative Cashflows
0	0	0	(118.9k)	(118.9k)
1	13k	3,966	67.5k	(51.4k)
2	13.3k	4,011	9,287	(42.1k)
3	13.6k	4,057	9,566	(32.5k)
4	14k	4,105	9,853	(22.6k)
5	14.3k	4,154	10.1k	(12.5k)
6	14.7k	4,205	10.5k	(2,048)
7	15k	4,258	10.8k	8,718
8	15.4k	4,311	11.1k	19.8k
9	15.8k	4,367	11.4k	31.2k
10	16.2k	4,424	11.8k	43k
11	16.6k	4,483	12.1k	55.1k
12	17k	4,544	12.5k	67.6k
13	17.5k	4,606	12.9k	80.5k
14	17.9k	4,670	13.2k	93.7k
15	18.4k	4,737	11.8k	105.5k
16	18.9k	4,805	14k	119.5k
17	19.3k	4,875	14.5k	134k
18	19.9k	4,948	14.9k	148.9k
19	20.4k	5,022	15.4k	164.2k
20	20.9k	5,099	15.8k	180.1k
21	21.5k	5,194	16.3k	196.3k
22	22k	5,315	16.7k	213k
23	22.6k	5,441	17.2k	230.2k
24	23.2k	5,573	17.7k	247.9k
25	23.8k	5,709	18.1k	266k

This proposal is valid for 30 days. Solar production is an estimate only. Weather and other occurrences may change your actual solar output. This proposal does not guarantee any specific production. The pricing of this proposal will be held for 30 days from the date listed. Date: October 23rd, 2023