

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

3430 Courthouse Drive

Ellicott City, Maryland 21043

410-313-235

Lynda Eisenberg, Director

FAX 410-313-3467

HOWARD COUNTY AGRICULTURAL PRESERVATION BOARD February 24, 2025

Staff Report

Owner:

John Carroll, Genevieve Carroll and Thomas Carroll

c/o John Carroll 3855 Manor Lane Ellicott City, MD 21042

Farm Location:

Manor Lane

Tax Map 23, Parcel 130; 330 +/- acres

Easement Designation:

Howard County easement HO-96-04-E

Request:

Advisory review of the proposed Carroll Commercial Solar Facility

Summary:

John Carroll, Genevieve Carroll and Thomas Carroll are the currents owners of the subject property which was placed in the Howard County Agricultural Land Preservation Program (ALPP) by Mary Carter Carroll Ziegler, et al. on October 3, 1996. The property transferred to the current owners on September 29, 2008. The current request is for the APB to provide advisory review of the proposed commercial solar facility (CSF) regarding consistency with the APB Commercial Solar Facility policy.

Background:

In October 2016, the Howard County Council approved legislation to amend the Zoning Regulations to allow CSFs of up to 75 acres on properties in the ALPP. Council Bill 59-2016 requires the APB to provide advisory comments for Conditional Use Petitions for CSFs prior to submission to the County. The APB's recommendation is based on whether a proposal meets the following criteria, as set forth in Section 131 of the Howard County Zoning Regulations:

- 1. "The siting of the CSF on the parcel or parcels is an ancillary business which supports the economic viability of the farm, or
- 2. The siting of the CSF on the parcel or parcels supports the primary agricultural purpose of the easement property."

The APB subsequently developed standards of review in its Commercial Solar Facilities policy to determine if each proposal meets one or both of the aforementioned criteria. Pursuant to the policy, the Board will apply the following standards to the CSF Conditional Use Petition criteria:

1. In determining if the CSF is ancillary to the primary farming operation, the commercial solar operational area must be a maximum of 16 acres or 20% of the Property's size, whichever is less, up to a maximum of 2 megawatts, and the petitioner must provide substantive proof that the CSF use is ancillary to their farming operation. The commercial solar operational area is defined as the entire area of the CSF (including any equipment, spacing, structures or other uses that support the CSF) and any new roads that must be constructed in order to access the CSF. Existing roads being used to access the new facility are not included within the operational area (i.e. existing dirt, gravel, or paved farm lanes).

- a. Per Section 131.N.52 of the Howard County Zoning Regulations, the maximum size of a "Solar Collector Facility, Commercial Ground Mount" shall be 16 acres or 20%, whichever is less.
- b. However, a facility on an Agricultural Preservation Parcel can be increased to a maximum of 34% of the parcel by the Hearing Authority if the Hearing Authority finds that the use shall not interfere with farming operations or limit future farming production. The Hearing Authority shall consider the following:

(1)

- a) At least 60% of the acreage outside of the ground-mount solar collector facility area is viable for a farm operation, inclusive of farm buildings needed for the farm operation; and
- b) The remaining soils capability are more than 50% USDA Classes I—III and more than 66% USDA Classes I—IV or;
- (2) The additional acreage above the allowable 20% for the CSF is unsuitable for farming.
- 2. In determining if the siting of the CSF supports the primary agricultural purpose of the Property, the portion not included in the commercial solar operational area must have a soils capability of more than 60% USDA Classes I-III and more than 66% USDA Classes I-IV.
- 3. In addition, at least one of the following will be required in conjunction with the CSF:
 - a. Pollinator or native grass habitats;
 - b. Livestock grazing, such as sheep;
 - c. Agrivoltaics (i.e. crop production under or directly adjacent to an installation, edible landscape barriers, tree crops);
 - d. Other suitable alternatives, as proposed by the applicant.
- 4. In addition, the petitioner must be an owner operator. In farming, an "owner operator" refers to a person who both owns the farmland and actively manages its operations, meaning they are responsible for all aspects of running the farm, including planting crops, raising livestock, and making day-to-day decisions, essentially being both the landowner and the farmer on their own land; unlike situations where a landowner might lease their land to a separate operator to run the farm.

Other standards the APB may consider include:

- 1. If possible, the prescribed landscape buffer should be placed within the 50-foot conditional use setback. Landscaping should only be required alongside public road frontage, and not along sidelines or the Property's interior. When present, existing vegetation should be used as a landscaped buffer (i.e. hedgerows, fencerows, trees, shrubs, etc.).
- 2. Placement of the commercial solar operational area will minimize impact on existing environmental features (for example: Green Infrastructure Network, streams, wetlands, etc.)
- 3. In general, the commercial solar operational area should maintain the integrity and spirit of the Agricultural Land Preservation Program and the applicant must demonstrate that they are making a good faith effort regarding the placement of the CSF, with the least impact on soils, slopes and existing agricultural operations.

Staff Analysis:

This is the first of a two-step APB review process. The preliminary review gives the APB an opportunity to provide guidance on the placement of the CSF and other details of the project before a solar company invests in developing the required documents for a conditional use permit. At the preliminary review phase, the petitioner should submit at least two potential CSF sites, to allow the APB an opportunity to advise on the best placement to minimize negative impacts on the farming operation.

The current APB Commercial Solar Facilities policy regarding maximum acreage coverage is 16 acres or 20% of the property's size, whichever is less. The first-choice CSF location (Option 1 on the staff maps) is 34.47 acres, or just over 10% of the total property size. The second-choice CSF location (Option 2 on the staff maps) is 15.45 acres, or just over 4.5% of the total property size. The Option 1 acreage significantly exceeds the APB policy, but the coverage is less than 20% due to the property's large size. Option 2 is consistent with the APB policy because both the acreage and percent coverage are less than allowed.

Regarding the soils requirements, for Option 1, approximately 90% of the soils capability of the land not included in the solar operational area would be USDA Classes I-III and 94% would be USDA Classes I-IV. For Option 2, approximately 91% of the soils capability of the land not included in the solar operational area would be USDA Classes I-III and 95% would be USDA Classes I-IV. Both options exceed the minimum requirements of the APB policy of 60% Classes I-III and 66% Classes I-IV outside of the CSF and are therefore consistent with the policy. The soils analysis and mapping, as provided by Bowman Consulting, is attached to this report.

According to Mr. Caroll, the farming operation consists of corn, soybeans, rye, winter wheat and hay, and the installation of the CSF will not affect the continued ag production. Mr. Carroll is the owner-operator of the property, which is custom-farmed by Ricky Bauer. According to Mr. Carroll in the attached letter, he and Mr. Bauer carefully chose the proposed Option 1 location to encompass two areas of the property that are not suitable for farming. One area is the site of the landfill the owners created over their uncle's "stump dump" which they inherited and have been reclaiming over the years. Mr. Carroll states that the CSF is the perfect use for the flatland they have created but cannot yet farm in the stump dump footprint. The chosen CSF location also contains one of their worst farming fields, plagues with slopes and lots of rocks exposed by decades of runoff. Mr. Carroll states that he believes that the value this portion of the farm could have as part of the solar array far outweighs the current farming value. According to Mr. Carroll, the CSF project will include pollinator friendly and native grass habitats in the array to help reduce runoff and promote pollination. The Carrolls will review the possibility of using sheep to reduce the amount of mowing, with guidance from CI Renewables.

The APB CSF policy permits up to a maximum of 2 megawatts (MW). According to Bowman Consulting, the CSF is proposed to be 6 MW, which, due to the size of the parcel, remains an ancillary use of the property related to the principal use of agriculture. In the last few years, there have been advancements in CSF technology that have rapidly improved the power production and energy yield per "PV Module". This allows for more power from relatively less land.

As shown on the access map provided by Bowman, for Option 1, the entirety of the access road to the CSF location is Paul's Lane. For Option 2, the proposed new access road to the CSF from the existing farm lane is very short.

Date: 2/18/21

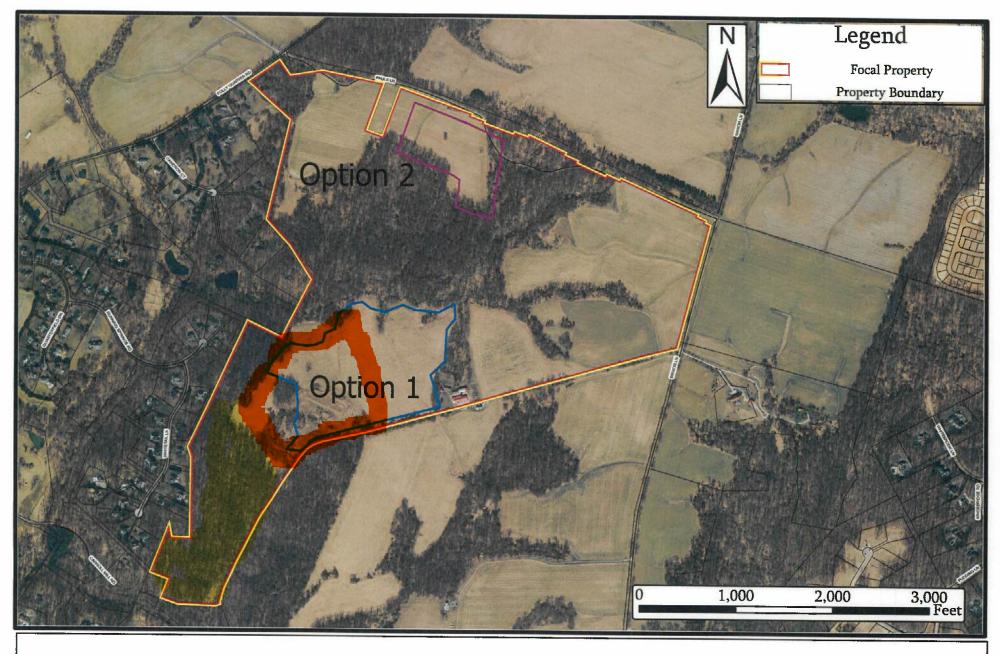
Prepared by:

Joy Levy, Administrator

Agricultural Land Preservation Program

Attachments:

Aerial, Soils, Preservation and Slopes Maps APB Commercial Solar Facilities policy Letters from the Property Owners, including Schedule F tax form Soils analysis and mapping from Bowman Consulting/CI Renewables



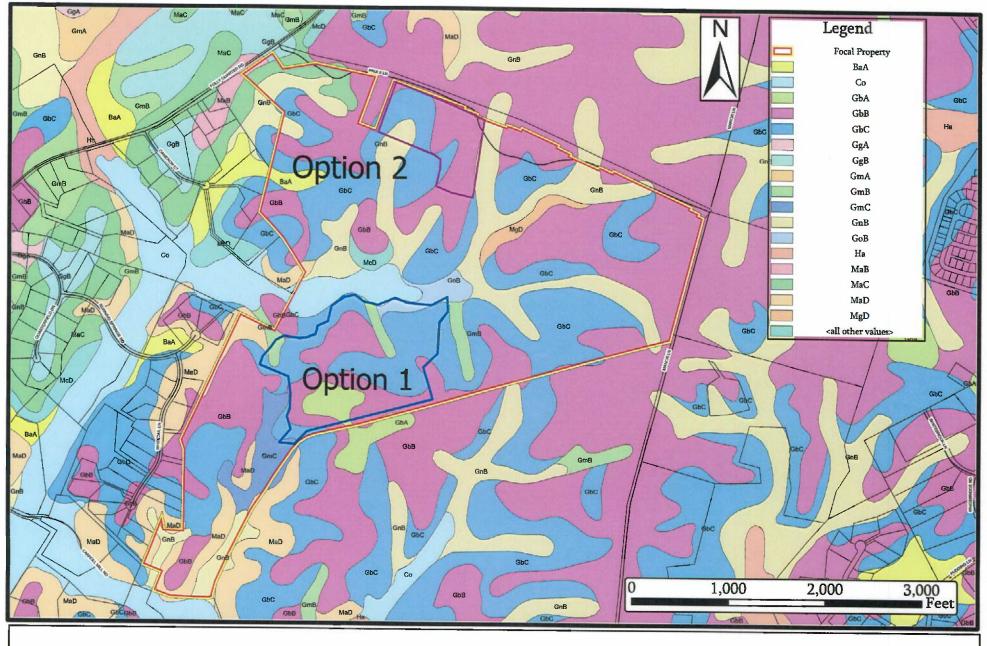
Carroll, Tax Map 23 Parcel 71, Lot A

Howard County Planning and Zoning Resource Conservation Division February 2025

Howard County

Aerial

Scale 1:12,000



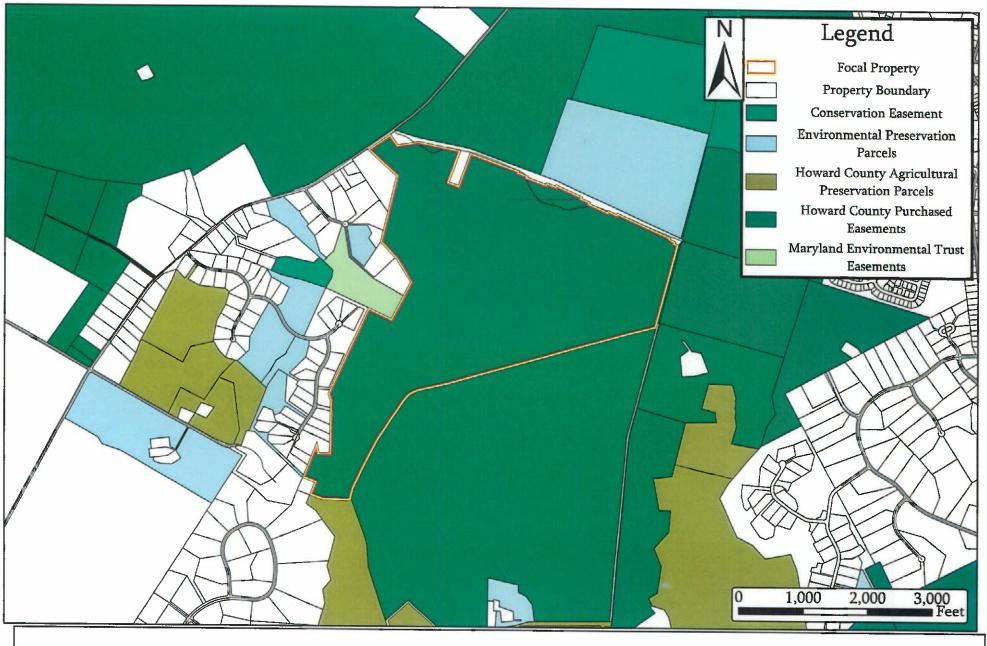
Carroll, Tax Map 23 Parcel 71, Lot A

Howard County Planning and Zoning Resource Conservation Division February 2025



Soils

Scale 1:12,000



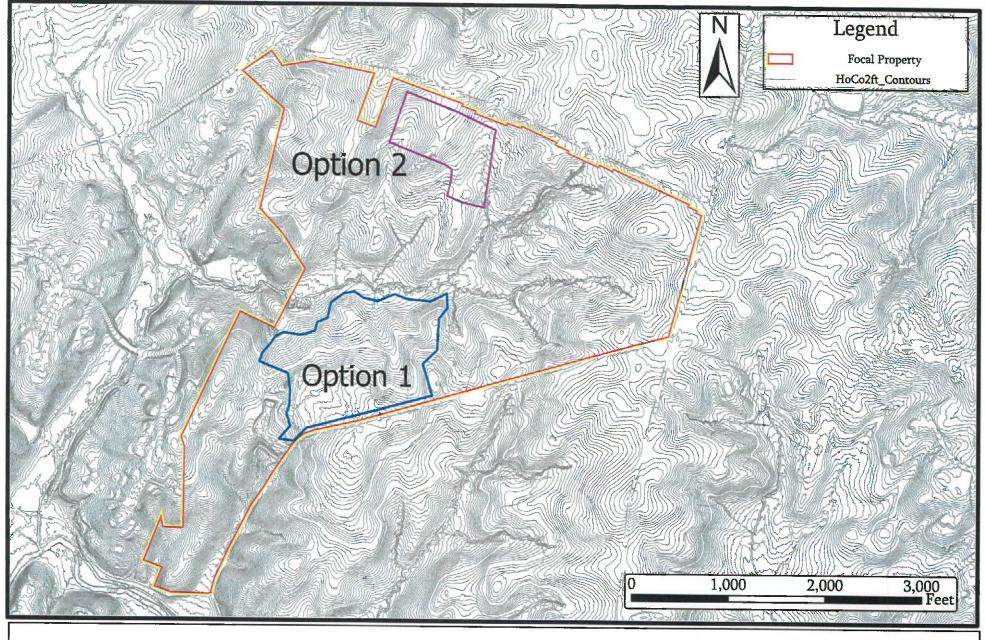
Carroll, Tax Map 23 Parcel 130, Lot A

Howard County Planning and Zoning Resource Conservation Division February 2025



Preservation

Scale 1:18,000



Carroll, Tax Map 23 Parcel 71, Lot A

Howard County Planning and Zoning Resource Conservation Division February 2025

Howard County
MARYLAND

Slopes

Scale 1:12,000



Agricultural Land Preservation Program Howard County, Maryland



COMMERCIAL SOLAR FACILITIES

AGRICULTURAL PRESERVATION BOARD REVIEW POLICY

The purpose of this policy is to explain the process by which the Agricultural Preservation Board (APB) will review applications for a commercial solar facility (CSF) on land that is encumbered with a Howard County Agricultural Land Preservation Program (ALPP) easement ("the Property"). A CSF is a collection of photovoltaic solar panels that generate electrical power by harnessing radiant light from the sun. This policy was initially developed pursuant to Council Bill 59-2016 (CB 59-16), which allows a CSF of up to 75 acres in size on ALPP properties.

The intent of CB 59-16 was to: 1) support Policy 4.12 of *PlanHoward 2030*, which called for the County to develop an energy plan that prepares for different future energy scenarios, examines options for various kinds of future energy sustainability, promotes conservation and renewable resources, and sets targets to reduce greenhouse gases, and 2) to help ensure that Howard County's farms remain economically viable into the future through diversification, to the benefit of both farmers and county residents.

CB 59-16 requires the APB to provide advisory review of Conditional Use Petitions for CSFs prior to submission to the County. The advisory review should determine whether a proposal meets the following criteria, as set forth in Section 131.N.52 of the Howard County Zoning Regulations (linked here: SECTION 131.0: - Conditional Uses | Zoning | Howard County, MD | Municode Library):

- 1. "The siting of the CSF on the parcel or parcels is an ancillary business which supports the economic viability of the farm, or
- 2. The siting of the CSF on the parcel or parcels supports the primary agricultural purpose of the easement property."

In order to fairly and consistently review CSF proposals, the following policy outlines the APB review process and lists the standards developed by the APB to be applied during review of a CSF Conditional Use Petition.

Upon submission of a CSF proposal, the ALPP Administrator will prepare a technical analysis and ensure that all necessary information is available for the APB to review each criterion. The ALPP Administrator will present the proposal to the APB for consideration.

The APB will apply the following standards of review to the CSF Conditional Use Petition criteria:

- 1. In determining if the CSF is ancillary to the primary farming operation, the commercial solar operational area must be a maximum of 16 acres or 20% of the Property's size, whichever is less, up to a maximum of 2 megawatts, and the petitioner must provide substantive proof that the CSF use is ancillary to their farming operation. The commercial solar operational area is defined as the entire area of the CSF (including any equipment, spacing, structures or other uses that support the CSF) and any new roads that must be constructed in order to access the CSF. Existing roads being used to access the new facility are not included within the operational area (i.e. existing dirt, gravel, or paved farm lanes).
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 - d. Other suitable alternatives, as proposed by the applicant.
- 4. In addition, the petitioner must be an owner operator. In farming, an "owner operator" refers to a person who both owns the farmland and actively manages its operations, meaning they are responsible for all aspects of running the farm, including planting crops, raising livestock, and making day-to-day decisions, essentially being both the landowner and the farmer on their own land; unlike situations where a landowner might lease their land to a separate operator to run the farm.

Other standards the ALPB may consider include:

- 1. If possible, the prescribed landscape buffer should be placed within the 50-foot conditional use setback. Landscaping should only be required alongside public road frontage, and not along sidelines or the Property's interior. When present, existing vegetation should be used as a landscaped buffer (i.e. hedgerows, fencerows, trees, shrubs, etc.).
- 2. Placement of the commercial solar operational area will minimize impact on existing environmental features (for example: Green Infrastructure Network, streams, wetlands, etc.).
- 3. In general, the commercial solar operational area should maintain the integrity and spirit of the Agricultural Land Preservation Program and the applicant must demonstrate that they are making a good faith effort regarding the placement of the CSF, with the least impact on soils, slopes and existing agricultural operations.

This Policy is applied exclusively to County agricultural preservation easement properties (ALPP Purchased and ALPP Dedicated), as set forth in Section 106.1 of the Howard County Zoning Regulations.

Losing this small area would only save our equipment and deny the deer forage. The last third in the middle does not have the rocks but does have contentious slopes and does not yield well. We believe the value it could have as part of the solar array far outweighs the current farming value.

The rotation of our corn, soybean, wheat, rye and hay will not be affected by the loss of these fields and CI Renewables understands the nature of our operation and has been making every effort to work with us to minimize the impact on our operations and limit disturbance to our property and forested areas. We have acquired a large berm of earth over the years that now will be applied to grading operations that will mitigate the runoff issue on the slopey hills while providing a good surface for placing the panels properly. It is also my understanding that they will be using pollinator friendly and native grasses in the array to further reduce runoff and promote pollination -an activity we pursue on other parts of the farm through mini-meadows. We will review the possibility of using sheep to reduce the amount of mowing but will need some guidance in this area that CI is prepared to provide.

Overall, we see this project as a very positive thing for the County and the Planet and feel it continues the work you have done for so many decades in supporting farming and the forward-looking partnership of farmer and farms. We hope you agree with this and will assist CI Renewables in any way you can.

Best,

Ian

John L. Carroll Jr Vineyard Farms 3855 Manor Lane Ellicott City MD 21042

Dear Joy, 12/10/2024

I am writing on behalf of my brother and sister, as well as myself. All of us are firmly in support of the Commercial Solar Facility Application for the project on our preserved farm. The project has been submitted by CI Renewables and their engineering team Bowman.

Natalie, her sisters and my family all feel solar is the way of the future. Natalie was the first to get panels for her new house and we followed suit. Our house uses only geothermal heat and air and was built with every amenity to avoid a fossil fuel dependency. We are thrilled with the opportunity to provide clean energy to such a worthy partner as the Univ of Md, whom we have long partnered with on the agricultural side and feel share our belief in being a part of global change if possible.

The tide of NIMBYs that has arisen to hamper other projects such as Rickys, astounds and confuses us. Fortunately, we are in position to place a large array on a part of the property that is well screened from our neighbors, while using up land that has negligible value to our farming operation.

Natalie, Ricky and I chose our sites carefully so as to have the least impact on the farming operations. As you can see, a full third occupies the landfill we created over my uncle's "Stump Dump" which we inherited and have been reclaiming over the years. This is a perfect use for the flatland we have created but cannot yet farm in the SD footprint. The third at the other end of the field is one of our worst farming fields, plagued with slopes and lots of rocks exposed by decades of runoff.

Eric Metcalf

From:

John L. Carroll Jr. <johnlcarrolljr@msn.com>

Sent:

Sunday, February 9, 2025 3:41 PM

To:

Eric Metcalf

Subject:

RE: Vineyard Solar - ALPB

Attachments:

VF Schedule F 2024 tax return.pdf

Dear Ag Board, Vineyard farm has been operating under this name or that of South Manor Farm since my grandmother's death in 1989. It is a family farm, owned by myself, my sister Genevieve Carroll and my brother Thomas Carroll, both of whom do not live on the farm, so I am the owner-operator. We raise Corn, Soybeans, Rye, Winter Wheat and Hay. We have no livestock and two tenants on the farm. My siblings and I have long been interested in producing alternate forms of energy and believe we have found solid partners in CI Renewables. The location we have selected is optimal from our perspective, as it not only utilized land that contains a reclaimed Stump Dump that we cannot farm, but also a hilly and rocky field that has always been unprofitable as well as a small amount of hilly but less rocky and more productive acres to the west of the tenant house and barns. If you have any further questions, I would be happy to answer them.

Sincerely,

Ian Carroll

PS attached is our Schedule F

SCHEDULE F (Form 1040)

Department of the Treasury Internal Revenue Service

Profit or Loss From Farming

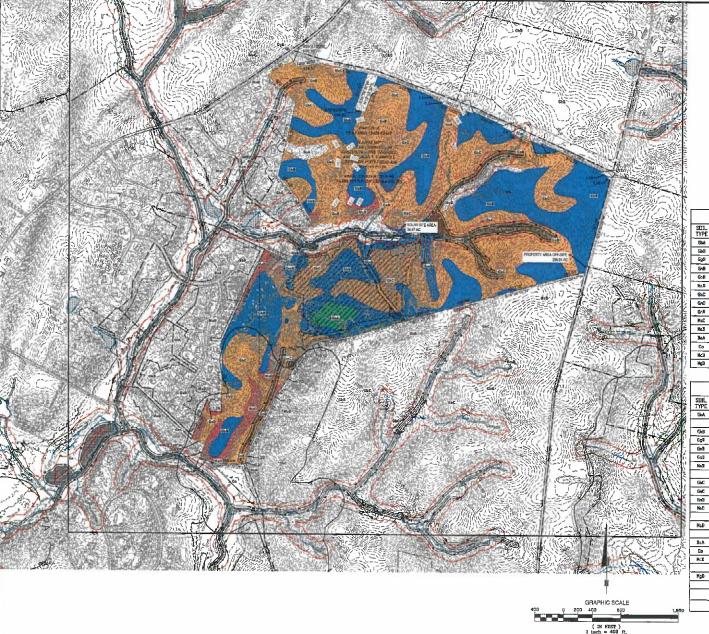
Attach to Form 1040, 1040-SR, 1040-SS, 1040-NR, 1041, or 1065. Go to www.irs.gov/ScheduleF for instructions and the latest information.

OMB No. 1545-0074

2023

Attachment Sequence No. 12

Name of proprietor								Social sec	rity num	ber (SSN)	
VINEYARD	FARMS										
A Principal crop o	or activity	22.0	B Enter code from	n Part IV	C Accounti	ing met	hod:	D Emplo	ver ID nu	mber (EIN) (see ins	str.)
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G If 'Yes,' did	you or will you file requ	ired Form(s) 1099?							\(\sum_{Yes} \)	No
And the second s	rm Income — Cash										
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b Cost or ot	her basis of purchased	livestock or	other items repo	rted on lir	ie 1a	1b					
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12 Conservati	on expenses			a Vel	nicles, mad	chine	ry, equipment		24a		
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	ZDIL	TYPES		_
SDIL TYPE	DESCRIPTION	SLOPE	HYDROLOGIC SOIL GROUP	CAPABILITY
5bA	GLADSTONE LOAN	0-3	A	1
Ediz	GLADSTONE LOAK	3-8	A	п
Gg9	GLENELG LEAN	3-8	B	п
5nB	CLENVILLE STAT LEAN	3-8	C/D	н
GaB	GLENVILLE-CHIERUS SILT LIDANS	0-0	C	11
Ha.B	HANDR LEIAM	3-B	3	11
GloC	GLADSTENE LIDAN	B-19	A .	m
GnC	GLENVILLE SILT LOAM	8-15	C/2	m
Gn™	GENVELE-BASE SET LEARS	0-8	C	ш
MaC	HANDR LITAN	8-13	3	ш
Hall	HANDR LOAM	15-25	9	IV
BaA	NAME SOLT LOAK	9-3	0/0	v
Co	CORDINATE DRINGTERS GIVE SURGED	0-3	C	V
Исш	HANDR LOAK	15-25	В	v
Мар	NAMER-BANNERTOWN SANDY LOAKS	(5-29	B	Vt

SUIL	DESCRIPTION CAPABILT		AREA (AD)	AREA (%)
GloA	ELADSTONE LOAM	1	0.46	0.16%
		LEZALO, CLASS I	9.46,	0.16X
GPB	CLADSTONE LINN		101'06	34.14%
GgT	GLENELIG LOWN	11	930	0.07X
GHB	GENVELE SET LEAN	12	4.60	1.55%
Golf	GLENVILLE-CUICIBUS SILT LIDAMS	п	3,40	112X
Mail	HANDR LIDAN	п	0.43	0.151
	SI	TOTETAL CLASS II	149.71	37.86X
GbC	GLADSTENE LEAN	m	9274	31.33%
GeC	GLENVILLE SELT LEAN	m	P.12	2.74X
En8	GLENVILLE-BAILE STLT LOAMS	773	51.76	17.48X
MaC	HANCE LEAN	m	4.89	1.65%
	SUI	TETAL, CLASS III	157.5P	53.252
HeD	HAHDR LIDAN	14	11.07	4.01%
	EUI	VI SZAJO "JATUTE	11.07	5.05X
BuA	BASE SET LOAN	V	218	1.74¥
Co	CODERUS AND HATBORD SILT LOAM	٧	8,97	3,03%
McD	HAHOR LIDAN	V	106	0.612
	St.	ETOTAL, CLASS V	12.97	4.387
MgD	HANDR-BANNERTOWN SANDY LIDAMS	VI	3.52	1,192
	2/1	TOTAL, CLASS VI	2.52	1.19X
	TOTAL SUN	, CLASS I-III	267.69	90.42%

Bowman

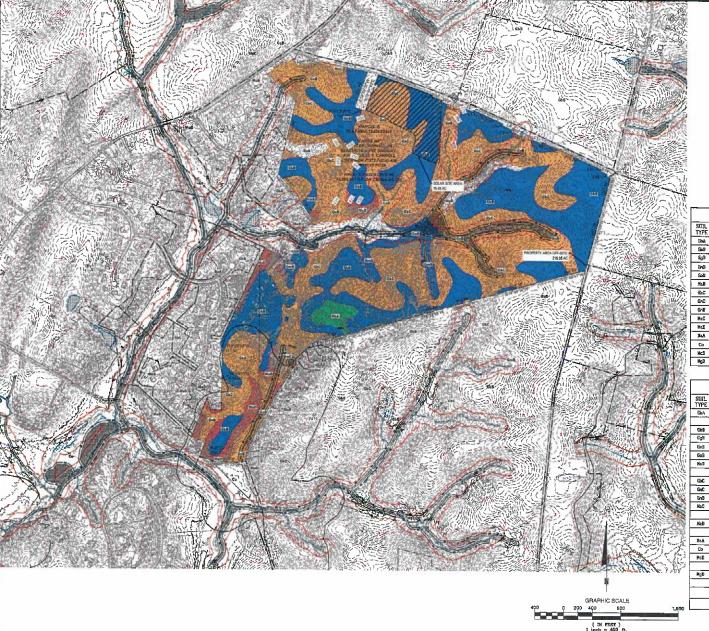
Suito 500 Herndon, VA 20171 Phone: (703) 494-1000 Fair (703) 481-9720 Sommon Committee

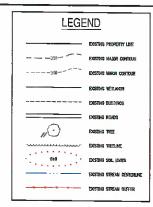
SOIL CLASSIFICATION ANALYSIS
VINEYARD SOLAR PHOTOVOLTAIC SYSTEM
TWX MAP: 0023, GRID: 0010, PARCEL-0130

PLAN &TED

EXHIBIT 12/03/2024

		_ 1
	LAN STATE	S
12/03/24	EXTENT	_
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	_	
	_	
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DATE	DESCRE	TION
EP	EG	EP
DESIGN	DRAWN	CHICO
SCALE	H: 1" =	400
JOB No.	140408-01	-001
DATE :	DECEMBE	FI, 2024
FILE No.	146408-D-0	P-001-SOI





	SDIL	TYPES	_	
SOIL Type	DESCRIPTION	SLOPE	HYDROLOGIC SOIL GROUP	CLASS
GbA	GLADSTENE LEIAK	0-3	A	I
GP33	GLADSTENE LOAK	3-8	A	п
GgB	GUENELG LEAN	3-8	3	п
GnB	GLENVILLE, STLT LDAN	3-8	C/3	
COB	GLENVILLE-COMMINS STAT LOANS	0-B	c	п
MaB	HANDR LUAN	3-8	1	
GLC	BLADSTONE LOAN	B-15	A	ш
GnC	CLENVILLE SILT LIAN	8-15	C/B	
GnB	GLENVILLE-BAILE SILT LUANS	6-B	c	ш
MaC	MANUR LIDAN	8-19)	m
HoE	NUMBER LIBAN	15-25)	IV
BaA	BAILE SILT LEAK	0-3	C/E	
Co	CONGRUS AND HAYBORD SILT LIDAKS	0-3	С	V
McD	KANDR LIDAK	15-25	3	٧
MgD	MANUR-BANNERITIVN SANBY LOAKS	(5-25	3	VI

Still Type	DESCRIPTION	CAPABILITY	AREA (AC)	AREA (%)
ShA	FLARSTONE LOAN	1	4.32	1.372
		I SZAJO "NTOTEUE	4.32	1.372
GbB	ELADSTÉRIE LEAN	12	105.31	33,43%
GgB	GLENELIG LOAN	п	635	0.072
Grill .	GLENVILLE SILT LOW	и	5,41	1,72%
GoB	GLENVILLE-CODORUS SILT LIIAMS	и	4.36	1.38X
Mall	HANDR LIGAN	п	0.43	0.142
		TI 22ALO LATOTOU	115.73	36,73%
ФC	GLADSTONE LOAM	m	104.63	33.21%
GNC	GLENVILLE SET LEAN	275	6.12	2.58%
GnB	GLENVILLE-BAILE SILT LIBMS	101	48,79	15.49%
Mac	MANTER LIDAN	ш	4.89	1,552
		UBTUTAL, CLASS ID	166.43	52.032
KaD	HANGE LEAN	īv	11.87	3.77%
		UBTOTAL, CLASS IV	11.87	3.77X
BaA	BAILE SILT LIMM	V	P.3B	8.69X
Co	CONTRUS AND HATBURD SILT LOAM	V	917	2.91%
HcB	KAHOR LIDAN	V	182	1587
	S	CLASS V	13.16	438%
MgT	HANGER-BANNERTOWN SANDY LIDARS	VI	3.52	1.12%
	Si	UBTUTAL, CLASS VI	352	115%
	TOTAL SL	M, CLASS I-III	286.48	90.93%
	17 IATHY	M, CLASS I-IV	298.35	94,70%

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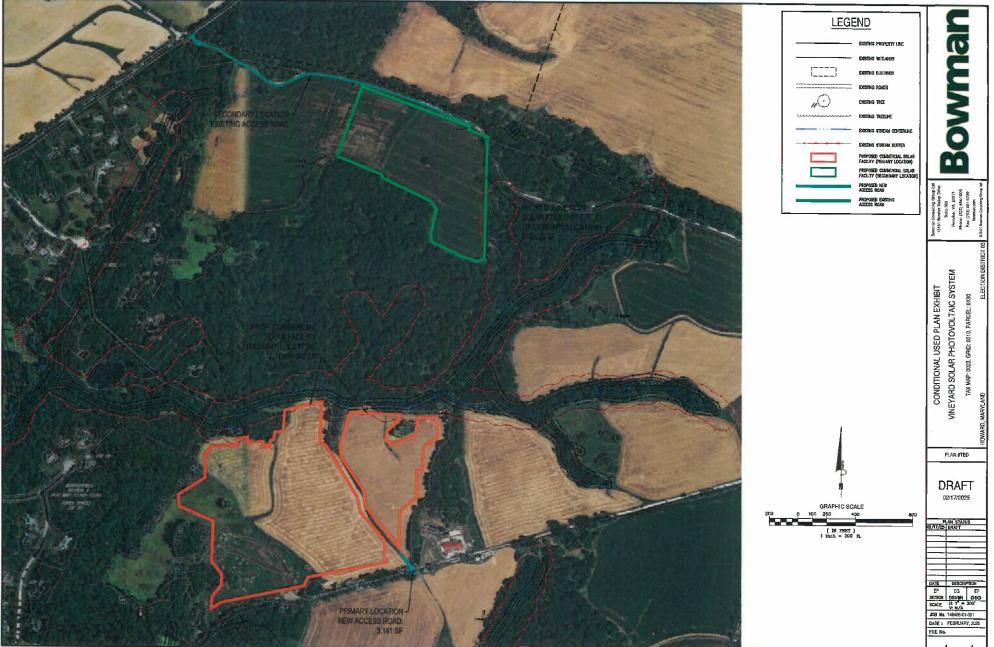
SOIL CLASSIFICATION ANALYSIS OPTION 2 VINEYARD SOLAR PHOTOWOLTAIC SYSTEM TXX NAP: 0222, GRID: 0010, PARCEL: 0120

VINEY

DRAFT

12/17/2024

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12/17/24	DRAFT					
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DESIGN	DRAWN	CHECO				
SCALE	H: 1" = V: N/A	400'				
JOB No. 140408-01-001						
DATE: AUGUST, 2024						
FILE No.						



HEET 1 OF