

ASTGU ANNUAL REPORT - 2022

Godfrey Dual Use Solar – 13A Gate Street, Carver, MA

PURPOSE

This Annual Report form is required to be completed and submitted annually for all projects with the MA Department of Energy Resources (DOER) which received qualification as an Agricultural Solar Tariff Generation Unit (ASTGU) under the SMART program. The form is provided to demonstrate conformance with the general provisions required for ASTGUs in 225 CMR 20.00; in particular pertaining to Section 20.06(1)(d) therein as well as associated ASTGU Guidelines; and specifically pertaining to annual reporting requirements.

The completed form will be reviewed by DOER and the MA Department of Agricultural Resources (MDAR) to determine that the farm is in conformance with all ASTGU provisions in general under the SMART Program, although more specifically to the annual production requirements.

BASIC FARM INFORMATION

Farm Contact Person Name: Hank Ouimet ☒ Farm Owner

Bill Manganello ☒ Farm Operator

Farm Name: Brookside Farm c/o REDP Services, LLC

Legal Structure: ☐ Sole Proprietor ☒ LLC ☐ Corporation
☐ Partnership ☐ Other _____

Mailing Address: 99 Derby Street, Suite 200 Hingham, MA 02043

Street Address (if different): 13A Gate Street, Carver, MA

Contact Phone: Bill 781-831-8496 Hank 603-770-5034

Contact E-mail: Bill Wjmang@hotmail.com Hank [houimet@redpllc.com](mailto:hhouimet@redpllc.com)

Check all that apply: ☐ Solar facility owner ☐ Landowner ☒ Applicant

Current Type of ASTGU Farm Operation (Check all that apply):

☐ Vegetables ☐ Fruit ☐ Livestock ☐ Poultry ☒ Hay
☐ Nursery ☐ Other _____

Total Acreage in ASTGU Farm Production: approximately 12 acres

Gross Annual Revenue for ASTGU Farm Production: \$2,400 _____

Are any major modifications to the farm business expected in the next 5 years? ☒ Yes ☐ No
(Check all that apply.)

☐ Business Legal Structure ☐ Operation Type ☐ Expansion ☒ Diversification
☐ Retirement ☐ Sale ☐ Subdivision ☐ Other _____

BASIC SOLAR PROJECT INFORMATION

Solar System Company Owner: Standard Solar, Inc.

Solar System Company Address: 530 Gaither Road, Suite 900 Rockville, MD 20850
Solar Company Contact Person/email/tel#:
Jay Smith/jay.smith@standardsolar.com/301.944.5177

ASTGU Project Start-Up/History Information:

Date ASTGU Approved by DOER: 11/30/2018

Date Solar Portion of ASTGU Project Commenced Construction: 8/1/2020

Date Solar Portion of ASTGU Project was Completed & Operational: 6/11/2022

Date Original Agricultural Portion of the ASTGU Project Commenced: 5/1/2021

Date Original Agricultural ASTGU Portion of Project Harvested/Sowed Products:

Sowed: 5/1/2021

Over Seeding: 9/5/21

First Mowing: 9/6/21 (grass left to decompose and create more organic matter)

First Harvest: 7/5/2022

Second Harvest: 10/1/2022

How many complete years, that is both solar and agricultural production, has the ASTGU been in operation? Less than one

SOLAR ARRAY DESIGN – PLEASE PROVIDE AS-BUILT SYSTEM INFORMATION

Please provide the following information regarding the solar array design:

Nameplate capacity AC (in MW): 2.0 MWac (Note: 1 MW=1000 kW)

Expected annual generation AC (MWh): 2.7 MWh (Note: 1 MWh=1000 kWh)

Acreage of farmland over which array is to be installed: approximately 12 acres

System type: ☒ Fixed ☐ Tracking ☐ Other _____

Height of lowest panel edge (in feet): 8' above grade

Height of lowest elevated horizontal mounting (in feet): N/A

Type of mounting (mono poles, racking, etc.):

Steel racking system supported by steel piles (see attached photos)

Description of materials and process to be used for ground penetration:

Galvanized steel piles (see attached photos)

Number of panels, capacity per panel, and panel spacing:

7,344 JA Solar 385W PV modules.

Module spacing along rows <2"; module spacing between rows ~25'

If you wish to provide additional descriptive information regarding the solar array design, including any system changes since original completion, you may include this information below, or in a typed attachment labeled "Solar Array Design."

The solar array was constructed as permitted by the Town of Carver and approved by DOER.

AGRICULTURAL PLAN FOR DUAL-USE AREA

Planned agricultural use, Year 1. Check all that apply.

☐ Vegetable, fruit, grains, for human consumption

☒ Hay

☐ Livestock production

☐ Poultry production

☐ Horticulture

☐ Floriculture

☐ Aquaculture

☐ Other, please describe: _____

Please fill the Crop Table results following this section for horticulture, flowers, vegetable, fruit, grain, and hay crops for your present year of operation. Fill out one Crop Narrative for each crop, detailing anticipated crop management (planting, irrigation, soil amendments, harvesting) and equipment to be used. **Crop Table – Current Season** follows this section. Also, please also fill out a **Crop Table – Next Season** and corresponding narrative at the end of this section with your best information available.

Please fill out the Grazing Table results following this section for livestock and poultry production for your present year of operation. Please also fill out the Grazing Narrative, detailing anticipated pasture and animal management and equipment to be used. **Grazing Table – Current Season** follows the Crop Table section. Also please fill out a **Grazing Table – Next Season** and corresponding narrative at the end of this section with your best information available.

Additional comments regarding agricultural production for Year 1:

How did the Agricultural Production perform versus expectations? Please explain why/why not if you can:

Agricultural production was in line with expectations for this first season. As explained below, the growth of our initial cover crop after we completed our initial soil amendment process exceeded our expectations. Installation of the PV facility after the cover crop was established

resulted in some compaction of the soils which we addressed with a light tilling during the planting of the permanent hay crop and subsequent overseeding after the crop matured. While the agricultural production in the first season was satisfactory, we expect the production to improve as we continue with planned soil amendments and ultimately incorporate regenerative farming practices into the operation.

Did you plant the crops/graze the animals as you originally intended when your Pre-Determination Application was approved? If not please explain.

Our original PDA contemplated a wide variety of potential agricultural uses over the 20+ year lifespan of the project, with the intent to support new and first-generation farmers or potential farming populations needing a low economic entry barrier to farming. As stated in our PDA, the project has resulted in the creation of new, arable farmland in an area that had previously served as a fallow sandpit for the adjacent cranberry farm. The SMART dual use program allowed this low utility agricultural land to be converted into an actively cultivated area. Given MDAR's requirement for an "existing" farming operation to farm the Swan Holt site, REDP partnered with Brookside Farm in Plympton for both the Godfrey site and the Swan Holt site. Brookside Farm operates a local grass-fed beef operation, and needs hay and forage area in order to expand its operation. Accordingly, growing forage grasses was selected as the initial crop plan.

Were the products marketable anticipated? Please explain how the production values (weight/bushels etc) were determined.

Initial planting of the permanent hay crop was conducted in May 2021 and consisted of a mixture of Timothy, Orchard Grass, Tall Fescue, Ryegrass and White Clover. Overseeding with Red Clover, Hairy Vetch and Alfalfa was done in September of 2021 using a rotary spreader in advance of mowing the site. In order to help build organic matter and foster germination of seedlings, Brookside Farm left the mowed grass in place instead of baling it. The first cut of marketable hay was harvested July 5th, 2022 and a second cut of marketable hay was harvested October 1st, 2022. Total yield was 300 bales of hay, at an average weight of 50 lbs/bale.

What occurred during the current season that wasn't anticipated? Positive & Negative.

Per our original plan, the organic planting material had been spread and graded prior to PV system installation; lime was applied; and a cover crop was planted to both enrich and stabilize the soil prior to construction. During PV installation, portions of the planting area – especially between the PV rows – were compacted by construction vehicle traffic despite the use of low ground pressure equipment. As a remedial measure, we planted the initial hay crop using a specialized Collari seeding machine (see photos) that lightly tilled the soil during the seeding process. Overall, we were satisfied with how well the initial hay crop grew despite the compaction to the organic planting material that occurred during the installation of the PV system. (Note that as a result of this experience, for our 2nd project of this nature we applied a ~2-4" layer of woodchips to the organic planting layer prior to PV installation to minimize soil compaction, and the results so far have been highly successful).

We have also been challenged by frequent trespassing onto and surrounding the dual use area by ATVs and dirt bikes. They have caused some crop damage and rutting within the planting area which required repeated repairs. We expect to resolve this issue with the installation of perimeter fencing as outlined below.

What Changes/Modifications do you expect to make to improve on production if needed?

During the next growing season, we expect to install a 7' high perimeter fence entirely around the eastern PV array, and around a portion of the western array. This perimeter fence is being installed primarily to facilitate future livestock grazing by Brookside Farm, but it will also serve to prevent trespassing and crop damage by ATVs and dirt bikes as noted above. Furthermore, the perimeter fence will deter deer and other pests from the new crops proposed beneath the western array as discussed in the next section.

In addition, in the coming season we expect to install an irrigation well and distribution system for the farm. The initial distribution system will provide watering areas for livestock within the eastern array and a water source for crop irrigation in the western area.

Do you expect to grow the same crops on the land in years 2 and 3? Briefly describe your crop rotation plan and what you expect to be growing on the land for the next 5 years. Will the same equipment be used? If not, is current array design compatible with future crop management needs and equipment?

In years 2 and 3, Brookside Farm expects to continue to grow mixed grasses for hay and forage in the eastern area and a portion of the western area. The same equipment will continue to be used for cutting, tedding, raking and baling the hay. It is Brookside Farm's goal to introduce their grass-fed livestock for rotational grazing within the eastern area in the next 2 to 3 years. Prior to the introduction of livestock, electric fencing will be installed beneath the PV array along the western ends of the rows of PV modules to prevent the livestock from damaging the PV equipment and cabling located at the western end of each row.

In years 2 and 3, we also expect to begin a partnership with the landowner's cranberry farming employees to grow mixed vegetables within a portion of the western area. As discussed during our on-site visit with MDAR staff in early 2022, we have been in discussion with the landowner regarding the establishment of a "community garden" for the benefit of the landowner's farmworkers. These farmworkers are primarily southeast Asian farmworkers who live in urban areas in southeastern MA and do not typically have access to cultivated land for their personal use, and who likely are facing the food insecurity challenges that are on the rise nationwide. The current plan is to install a perimeter fabric fence around a 1-2 acre portion of the western array to deter deer and other pests, and to provide seed, fertilizer, irrigation access and farming tools and equipment to the farmworkers. The farmworkers will select the vegetable crops based on their needs and expertise and will dictate the planting and cultivation methods. Discussions with the landowner and farmworkers to review and agree upon logistics for the upcoming growing season are planned within the next several weeks as the workers return to the bogs for the season. We expect to provide details on the implementation of this plan in our next annual report.

Table A: Crop Production – Current Season					
Crop	Area planted (Row length and width or acreage, as appropriate)	Planting date(s) (approximate)	Harvest date(s) (approximate)	Expected productivity, total pounds harvested with dual use	Actual productivity, pounds, with dual use
Mixed Grasses*	12 acres	May 1st, 2021,	July 5th, 2022 October 1st, 2022	15,600 lbs**	15,000 lbs

***Mixed grasses include the following species: Climax Timothy, Orchard Grass VNS, Teton II Tall Fescue, TetraSween Perennial Ryegrass (Tetraploid), White Clover (Stamina Intermediate) – OMRI Nitro Coated.**

****As noted in our Swan Holt application, Brookside Farm typically expects a hay yield of approximately 0.93 tons/acre from its existing 40 acres of managed hay fields. A reduction factor of 30% has been applied to account for PV system impacts (beneath the columns, shading, etc.) as well as slower biomass accumulation for a new hay field.**

CROP NARRATIVE – Current Season

*Please detail the crop management for this past season, including approximate **dates** and **equipment** used. The purpose of this form is to provide empirical data regarding compatible equipment usage and crop management needs. If you need additional space, please include a typed attachment labeled “Crop Narrative.”*

Crop: Mixed grasses for hay

Planting Plan:

Prior to PV system installation in 2020, the area was graded and the soils were amended as described below. Upon completion of the soil amendment process, a cover crop of Ryegrass was planted to stabilize the organic soils and prevent erosion as well as to improve microbial soil health. The cover crop was mowed immediately prior to PV installation and left to decompose to contribute to soil health. Following the installation of the PV system, the area was seeded with the desired forage grass mix in May of 2021. Due to some compaction of the soils during PV system installation, the forage grass mix was seeded using a specialized Collari machine that lightly tilled the soil and allowed better seed-to-soil contact. The results were excellent. The area was overseeded in September 2021, and the crop was cut and left to decay to help germination and to build organic matter.

Soil Amendment Plan:

As anticipated in the PDA for the project, REDP invested a considerable amount of effort and expense in the soil amendment plan for the site. Prior to the start of the project, most of the site had been mined for sand for use on the adjacent cranberry bogs (see 2016 Google Aerial image and other photos). The resulting exposed subgrade was mostly sandy and rocky soils, with a number of exposed and partially buried boulders in the western area. Piles of vegetation covered organic soils from the previous overburden layer that had been removed prior to the sand mining operation were scattered throughout the site. The balance of the site was forested and slated for future sand mining. At the start of the project, we cleared the remaining forested area, stripped and stacked the organic overburden, removed boulders from the western area and mined approximately 20,000 yards of sand for the bog owner’s use. Approximately 10,000 yards of sand were hauled directly from the ASTGU site to an adjacent six-acre cranberry bog that was being renovated by the bog owner. The remaining 10,000 yards were stockpiled adjacent to the bogs for future cranberry bog use. We then spread and graded the native organic soils over the entire site, grading the site to minimize runoff and to encourage infiltration. To amend the organic but sandy native soils prior to grading, we excavated peat from an on-site irrigation reservoir (improving the storage capacity and function of the reservoir), and placed the peat within the farming area. We then incorporated the peat into the existing soils with heavy

equipment while grading the site. At the completion of site grading, we tilled the entire site with a Agriworld FPR2300.25 stone crusher pulled by a JD 300hp tractor. The tilling operation crushed and mixed the native organic materials, cobbles, peat and the residual woody materials from the cleared portion of the site to a depth of 12"-14", and left a uniform surface for the planting of the cover crop. Finally, we applied powdered lime to the farming area and incorporated it to increase the soil pH level and to prepare the soils for seeding of the hay crop. To further condition the soil, pelletized lime at a rate of 500 lbs/ac was applied to the area in spring 2021 and again in spring of 2022. Lastly, 50lbs/ac of 19-19-19 slow-release fertilizer was applied to the ASTGU area in the Spring of 2022.

Cultivation Plan:

Cultivation activities consisted of overseeding in the fall of 2021 followed immediately by mowing so that the new seedlings would germinate more quickly and that the nutrients from the decomposing grass would filter down into the soil. Overseeding in October using the original Timothy, Orchard Grass, Tall Fescue, Ryegrass and White Clover mix occurred in areas of weaker growth under the ASTGU.

Irrigation Plan:

No irrigation was used during the first year as the irrigation system has not yet been installed. Healthy grass growth throughout the growing season as well as spot soil moisture checks indicated that irrigation was not necessary during the first season. The irrigation system is planned to be installed this year, and the "no-irrigation" hay yields will be used as a baseline to compare with future yields should irrigation be required.

Pesticide/Herbicide Plan:

Given the healthy grass growth and the lack of substantial pest or disease damage, no pesticides or herbicides were applied during the first season.

Harvest Plan:

The hay crop was harvested by Brookside Farm using their existing equipment, including a tractor-pulled mower, tedder, rake and baler. Brookside's equipment easily navigated the widely spaced rows of PV panels, and all grass up to within a foot or so on either side of each column line was successfully harvested.

A photographic chronology of our site preparation, planting and harvesting process is attached as Exhibit A.

Table B: Grazing Production – Current Season							
Type(s) of animal grazed	Area grazed (acreage)	Grazing pressure # animals per acre	Purpose (e.g. meat, dairy, eggs)	Grazing period(s)	Harvest date(s) if applicable	Expected productivity with solar array	Actual productivity with solar array
N/A							

GRAZING NARRATIVE – Current Season

*Please detail the past season animal and pasture management, including **dates** and **equipment** used. The purpose of this form is to provide empirical data regarding compatible equipment usage and production needs. If you need additional space, please include a typed attachment labeled “Grazing Narrative.”*

Type(s) of Animals Grazed: No grazing during past season

Pasture Management Plan: List any anticipated seeding, soil amendment, irrigation, pesticide, mowing, etc., including approximate dates and equipment used.

N/A

Animal Management Plan:

For each type of animal grazed, describe management regarding housing/shelter, water source, fencing, movement, disease treatment, harvest, etc. that was carried out within the solar array area. Describe equipment used in these activities.

N/A

Describe any modifications to the solar array design that were made in order to reduce the risk of animal damage to the solar array, or risk of electrocution to animals.

N/A

Table A: Crop Production – Next Season					
Crop	Area planted (Row length and width or acreage, as appropriate)	Planting date(s) (approximate)	Harvest date(s) (approximate)	Expected productivity, total pounds harvested without dual use	Expected productivity, total pounds, with dual use
Mixed grasses*	~11 acres	N/A	July and late-September	20,400 lbs**	14,300 lbs**
Mixed vegetables	~ 1 acre	May 2023	Throughout Summer	***	***

*** Mixed grasses include the following species: Climax Timothy, Orchard Grass VNS, Teton II Tall Fescue, TetraSween Perennial Ryegrass (Tetraploid), White Clover (Stamina Intermediate) – OMRI Nitro Coated.**

**** Expected yields are based on Brookside Farm’s typical hay yield of 0.93 tons/acre on its existing managed hay fields. A reduction factor of 30% has been applied to account for PV system impacts (unharvested growth near the columns, shading, etc.) as well as slower biomass accumulation for a new hay field.**

*****As noted in the narrative, specific vegetable crops in the farmworker community garden will be selected by the farmworkers. Yield estimates will be provided in consultation with the farmworkers and reported in the next annual report.**

CROP NARRATIVE – Next Season

*Please detail the crop management planned for next season, including approximate **dates** and **equipment** used. The purpose of this form is to provide planned data for the upcoming season regarding compatible equipment usage and crop management needs. If you need additional space, please include a typed attachment labeled “Crop Narrative.”*

Crop: Mixed grasses for hay (~11 acres) and potentially mixed vegetable row crops (~ 1acre)

Planting Plan:

Overseeding weaker areas will continue to take place in September of 2023, as warranted.

The planting plan for the community vegetable garden to be used by the bog owner’s employees will be determined by the bog employees themselves. It is expected that the existing grass crop will be mowed in advance of no-till planting of certain crops or uprooted as needed to allow for row planting. More detailed information will be provided in next year’s report based upon actual crops planted.

Soil Amendment Plan:

Pelletized lime at a rate of 500 lbs/ac will be applied in April 2023. 19-19-19 slow-release fertilizer is planned to be applied in May at a rate of 50 lbs/ac and Urea is planned to be applied after the first cut at a rate of 60 lbs/ac.

For the employee garden, additional organic matter may be incorporated into the soil based upon the selected vegetable crops.

Cultivation Plan:

For the hay crop, cultivation plan will continue to include monitoring for dirt bike and ATV damage, installation of a perimeter fence to allow for grazing of cattle on easterly array, and harvesting two cuts of hay using the typical mow, tedder, rake and bale process.

For the employee vegetable garden, the cultivation plan will include monitoring moisture, applying organic matter, turning the soil as necessary and weed management. The work to be performed is anticipated to be performed with small equipment and hand tools.

Irrigation Plan:

It is expected that an irrigation system will be installed for the eastern area this year. The timing of irrigation system installation is still to be determined, and will likely be following the growing season so as to not cause undue crop damage.

No irrigation is anticipated to be needed for the hay crop this year.

For the employee vegetable garden, temporary irrigation water will be provided by using a portable pump that withdraws water from an adjacent reservoir.

Pesticide/Herbicide Plan:

For the hay crop, no pesticide or herbicide application is anticipated.

For the employee vegetable garden, it is not anticipated that any pesticides or herbicides will be applied. Weeding and insect control will be done by hand.

Harvest Plan:

The hay crop will be harvested by Brookside Farm using their existing equipment, including a tractor-pulled mower, tedder, rake, and baler. It is anticipated that there will be at least 2 hay cuts.

It is anticipated that the employee vegetable garden will be harvested by hand using hoes, shovels, potato diggers, buckets and wheeled carts. More details of the actual harvest plan will be recorded and reported next year.

Table B: Grazing Production – Next Season							
Type(s) of animal grazed	Area grazed (acreage)	Grazing pressure # animals per acre	Purpose (e.g. meat, dairy, eggs)	Grazing period(s)	Harvest date(s) if applicable	Expected productivity without solar array	Expected productivity with solar array
N/A							

GRAZING NARRATIVE – Next Season

*Please detail the next season animal and pasture management, including **dates** and **equipment** used. The purpose of this form is to provide planned data for the upcoming season regarding compatible equipment usage and production needs. If you need additional space, please include a typed attachment labeled “Grazing Narrative.”*

Type(s) of Animals Grazed: No grazing is planned for next season

Pasture Management Plan: List any anticipated seeding, soil amendment, irrigation, pesticide, mowing, etc., including approximate dates and equipment used.

N/A

Animal Management Plan:

For each type of animal grazed, describe management regarding housing/shelter, water source, fencing, movement, disease treatment, harvest, etc. that was carried out within the solar array area. Describe equipment used in these activities.

N/A

Describe any modifications to the solar array design that were made in order to reduce the risk of animal damage to the solar array, or risk of electrocution to animals.

N/A

Waiver for Decreased Yield

i. Waiver for Decreased Yield

Due to unforeseen circumstances, such as but not limited to weather events, pests, or change in crops, the projected agricultural yield for any given year may be lower than stated in the agricultural plan or previous year's annual report. In these instances, an applicant can request a waiver to the Department for the decreased yields. The applicant must demonstrate to the satisfaction of the Department, and in consultation with MDAR, that a waiver is warranted for good cause. Waiver requests must be submitted by November 1st of the applicable calendar year and sent to DOER.SMART@mass.gov.

Response: With respect to the reporting obligations associated with qualification of this project as an Agricultural Solar Tariff Generation Unit (ASTGU) under the SMART program, we would note that this project was approved in November 2018 and is subject to the ASTGU guidelines in place at that time (Guideline effective date April 26, 2018). Accordingly, the project is not subject to this provision.

ii. Failure to Report

If the ASTGU fails to submit an annual report, the Department may declare the project ineligible for the ASTGU adder for one year. If the annual report is not completed for a second year, then the Department may permanently disqualify the ASTGU from continuing to receive the ASTGU Adder for the remainder of the STGU's tariff term.

SIGNATURES AND ATTESTATIONS

Prior to submitting the Pre-Determination Form, please read and sign as directed below.

Farm Operator and Farm Owner

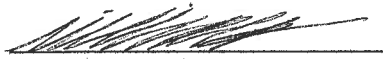
I/we hereby certify that the information submitted regarding the current farm conditions and practice and the Agricultural Plan for the Dual-Use Area is accurate and complete to the best of my/our knowledge and intentions, and that I/we have engaged with the University of Massachusetts Amherst Clean Energy Extension and thereby its agricultural extension service to review the Agricultural Plan and its compatibility with the solar array structures and shading. Further, I/we agree, conditional on being provided eligibility to the SMART program as an ASTGU, to submit a report, through a template provided by the University of Massachusetts Clean Energy Extension, annually throughout the duration of the SMART incentive with ASTGU adder, on the operations and productiveness of the solar array and agriculture along with any changes to the Agricultural Plan for the following year. I/we understand that failure to maintain productive agricultural activities and annual reporting may result in the disqualification of the facility as an ASTGU in the SMART program.



Hank Ouimet, Manager
REDP Services, LLC
Farm Owner

3-31-23

Date



Bill Manganello
Brookside Farm, LLC
Farm Operator

3/31/23

Date

Solar Facility Owner

I hereby certify that the information submitted regarding the Solar Array Description and inputs and outputs of the Shading Analysis is accurate and complete to the best of my/our knowledge and intentions.

Jay Smith, Director of Asset Management
Standard Solar, Inc.
Solar Facility Owner

Date

SIGNATURES AND ATTESTATIONS

Prior to submitting the Pre-Determination Form, please read and sign as directed below.

Farm Operator and Farm Owner

I/we hereby certify that the information submitted regarding the current farm conditions and practice and the Agricultural Plan for the Dual-Use Area is accurate and complete to the best of my/our knowledge and intentions, and that I/we have engaged with the University of Massachusetts Amherst Clean Energy Extension and thereby its agricultural extension service to review the Agricultural Plan and its compatibility with the solar array structures and shading. Further, I/we agree, conditional on being provided eligibility to the SMART program as an ASTGU, to submit a report, through a template provided by the University of Massachusetts Clean Energy Extension, annually throughout the duration of the SMART incentive with ASTGU adder, on the operations and productiveness of the solar array and agriculture along with any changes to the Agricultural Plan for the following year. I/we understand that failure to maintain productive agricultural activities and annual reporting may result in the disqualification of the facility as an ASTGU in the SMART program.



Hank Ouimet, Manager
REDP Services, LLC
Farm Owner

3-31-23

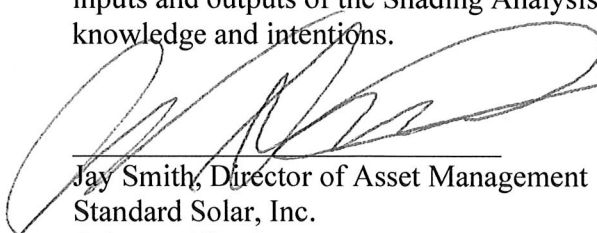
Date

Bill Manganello
Brookside Farm, LLC
Farm Operator

Date

Solar Facility Owner

I hereby certify that the information submitted regarding the Solar Array Description and inputs and outputs of the Shading Analysis is accurate and complete to the best of my/our knowledge and intentions.



Jay Smith, Director of Asset Management
Standard Solar, Inc.
Solar Facility Owner

3/29/2023

Date

Exhibit A

Photo chronology of the project

Godfrey - ASTGU



Proposed dual use areas shown on 2016 aerial



Pre-construction drone photo – western area

Godfrey - ASTGU

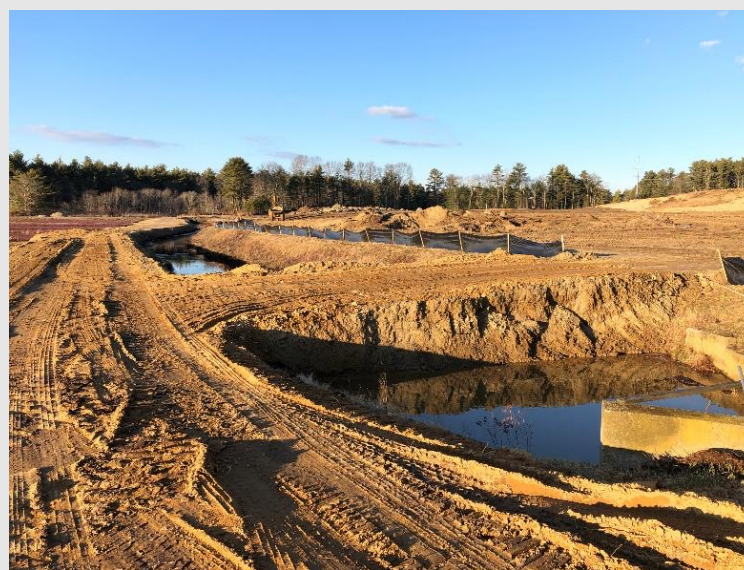


Pre-construction drone photo -
Entire site



Pre-construction photo showing exposed subgrade soils

Godfrey - ASTGU



Winter 2020

Bog sand excavation and grading – eastern area

Site grading – western area

Godfrey - ASTGU



Winter 2020

Site grading – western area

Boulder removal – western area

Godfrey - ASTGU



Peat excavated from bog reservoir



Winter 2020

Peat & native organics being spread – western area

Godfrey - ASTGU



Peat & organics being spread – eastern area



Initial tilling – western area

Late Winter 2020

Godfrey - ASTGU



Lime application – early spring 2020

Godfrey - ASTGU



Site tilling – early spring 2020

Godfrey - ASTGU



Site tilling after lime application
(early spring 2020)



Final planting layer after tilling
(depth > 12")

Godfrey - ASTGU



Farming area completed and ready for planting
(Spring 2020)



Cover crop planted prior to PV installation
(Spring 2020)

Godfrey - ASTGU



Cover crop prior to PV installation – western area
(August 2020)



Cover crop prior to PV installation – eastern area
(August 2020)

Godfrey - ASTGU



PV Array Construction – November 2020



PV Array Construction – November 2020

Godfrey - ASTGU



Post PV array installation – January 2021



Post PV array installation – April 2021

Godfrey - ASTGU



Seeding permanent hay crop with Collari machine – May 2021

Godfrey - ASTGU



Post-seeding – May 2021

Mix Analysis		Brookside Farm Plympton - Will - Horse						
Order #: 22-3825		Net Weight: _____ lbs Total _____ of 1						
Ship To: Brookside Farm Plympton - Will Manganoello 67 Pleasant St. Plympton, MA 02367 UNITED STATES		Total Weight: 126.0 lbs Acres: 5.0 Seeding Rate: 25.2 lbs/Acre Bushel Weight: 22.0						
Item / Description	lb/ac	% by wt	Lot Number	Origin	Hard Seed	Germ	Purity	Test Date
Climax Timothy	2.6	10.31 %	20-0117	OR	0 %	95 %	99.95 %	Dec-21
Orchard Grass VNS	10	38.60 %	L29-20-112	OR	0 %	95 %	97.27 %	Apr-22
Peton II Tall Fescue	5	19.53 %	L65-20-TE2	OR	0 %	94 %	98.45 %	Nov-21
PetraSweet Perennial Ryegrass (Tetraploid)	7	27.71 %	M6-20-1700	OR	0 %	95 %	99.74 %	Nov-21
White Clover (Stamina Intermediate) - OMRI Nitro Coated	0.6	2.38 %	L12-20-CL26-OCD	OR	23 %	71 %	64.09 %	Apr-22
Noxious Weeds:		Qty/Lb						
None Found		Inert	1.38 %					
		Weeds	0.03 %					
		Other	0.06 %					

Permanent Hay Crop – May 2021

Godfrey - ASTGU



Hay Mixture – July 2021 (2 months after planting)



Hay Mixture – Aug 2021 (3 months after planting)

Godfrey - ASTGU



Cutting for Decomposition – September 2021



Healthy Grass in Partial Shade

Godfrey - ASTGU



Overseeding – September 2021



Sprouting of Overseeding – September 2021

Godfrey - ASTGU



Mowing – 1st Cut – July 2022



Teddering – 1st Cut – July 2022

Godfrey - ASTGU



Raking – 1st Cut – July 2022



Baling – 1st Cut – July 2022

Godfrey - ASTGU



Godfrey Bogs (foreground) Godfrey Dual Use Solar (background)