

February 20, 2023

Town of Dalton
Planning Board
462 Main Street
Dalton, MA 01226

**Re: Site Plan Review and Special Permit Application – Follow-up Information
Warren Farms Solar, LLC
Proposed Large Scale Solar Facility
Bridle Road, Dalton, Massachusetts
Dalton, Massachusetts**

Dear Planning Board:

On behalf of Warren Farms Solar, LLC (Applicant), TRC Companies (TRC) is pleased to present this additional information associated with the Site Plan Review and Special Permit Application to the Town of Dalton Planning Board for a proposed 2.66-Megawatt (MW) alternating current (AC) ground-mounted solar photovoltaic (PV) system and 2.1 MW battery energy storage system installation project (the Project). The Special Permit Application was submitted on January 4, 2023 pursuant to the Large Scale Solar Photovoltaic Installations bylaw (§ 350-37.1) and Article XI of the Town of Dalton Zoning Bylaw. The proposed Project is located on the closed and capped private landfill, known as Warren Farms Landfill, at Bridle Road in Dalton, Massachusetts (Site). The Town of Dalton Planning Board public hearing for the Project was held on February 15, 2023 at which time requests for additional information were made and responses are provided herein.

Responses to Richard Hall's comments as they relate to the Solar bylaw, which he presented during the public hearing and submitted electronically to the Town on February 16th, as follows:

1. *§ 350-37.1, Section E, Site control.* Documentation of site control is provided through the Memorandum of Lease and Easement Agreement between Warren Farms Solar LLC and Greysky, LLC dated February 7, 2022 included as **Attachment 1**.
2. *§ 350-37.1, Section G, Financial surety.* As part of the Massachusetts Department of Environmental Protection (MassDEP) Post-Closure Use Permit, the Project will be required to provide decommissioning bond or other acceptable Financial Assurance Mechanism (FAM) for decommissioning at the end of the solar photovoltaic project life cycle. The MassDEP has an established decommissioning cost estimate of \$90,000 per MWAC for the purposes of establishing a FAM amount, which would extrapolate to approximately \$239,400 for this Project. The MassDEP typically works closely with the host municipality for the maintenance and restoration of landfills under the state Solid Waste program, therefore the Town will be afforded the protections under this FAM, should it be needed in the future. Warren Farms Solar, LLC will coordinate the details of the FAM type and specific coverage with the MassDEP and the Town of Dalton as part of final pre-construction activities once discretionary permitting is achieved.
3. *§ 350-37.1, Section H(9), Emergency response plan.* An Emergency Response Plan (ERP) will be prepared, with input from the Fire Department, prior to start of construction. The ERP will cover both the 2.66 MWAC solar project and the 2.1MW battery energy storage system (BESS). Battery storage is a requirement for new solar projects under the Massachusetts SMART incentive program. The proposed BESS will be a lithium-ion solid-state battery system which is a proven technology with wide application in

Massachusetts and across the US. The current BESS technology is a modular container system, in which the batteries are hermetically sealed in a series of cabinets inside the larger container. This modular/container system provides physical secondary containment with built-in monitors, ventilation/cooling, controls, and even fire suppression systems to isolate and contain a potential thermal event within the BESS container.

Concurrently with the evolution of the BESS technology, has been the evolution of the thermal runaway testing, fire protection and controls, and fire code for battery storage technologies. Commercially available battery technology is typically UL tested and listed for safety performance. In addition, the BESS related to the Warren Farm project will be designed to substantially conform to the fire protection code NFPA 855 (Standard for the Installation of Stationary Energy Storage Systems). These details will be incorporated into the ERP for the Project.

While a lithium-ion battery could be subject to a thermal event in extreme cases of short-circuit or overheating conditions, there are multiple and redundant control systems in place to isolate equipment if abnormal conditions (including short-circuit and overheating) are present. The BESS will have a number of key safety systems to prevent a battery fire from occurring, including:

- Continuous remote monitoring of the Project equipment including monitoring of voltage and current irregularities and battery core temperature which ensure operation of the BESS equipment within safe parameters. BESS component operation outside normal conditions of voltage, current and temperature will cause the BESS controls to reduce power or under certain conditions immediately cease operation of the equipment to prevent a hazardous condition;
- Gas (e.g., hydrogen, carbon monoxide, and total hydrocarbons) detection and ventilation;
- Use of side panels between battery racks in accordance with UL9540A testing;
- Visual monitoring of system conditions: Monthly inspections and equipment regular maintenance approximately twice per year.

In addition, there are fire suppression systems incorporated into the BESS container unit (typically aerosol and/or water-based) that would be activated if the multiple safety and control systems do not successfully prevent/eliminate the thermal event. The ability to isolate a fire to one of the battery container units and prevent the spread to other units, nearby electrical equipment, or vegetation will be incorporated into our ERP. The proposed access road will provide access for emergency vehicles to the BESS in the case that additional active containment of a thermal event is warranted. In addition, site-specific protocols, training, and coordination with the Town of Dalton Fire Department will be included in the ERP.

4. § 350-37.1, *Section I(1), Contact information.* The property owner's contact information is as follows:

Greysky, LLC
32 Coleman Drive
Wolcott, CT 06716
Ph: (203) 879-1684
Email: apothccrn@aol.com

5. § 350-37.1, *Section I(3)(f), Delineation of wetland resources and associated buffer areas.* The Project is located outside of mapped wetland resources and associated buffer areas. As discussed in the Site Plan Review and Special Permit Application, the pond area to the south of the landfill is an engineered stormwater basin constructed as part of the landfill closure. However, as a conservative measure, the project is maintaining a 100' buffer from this stormwater basin. Therefore, the applicant is of the opinion that the project is not jurisdictional under the Massachusetts Wetlands Protection Act. To provide additional assurance, the Applicant has reached out to the Town of Dalton Conservation Commission to determine if a site visit or additional information is required to confirm this opinion.

6. § 350-37.1, Section 1(3)(i), *Engineering controls*. Comment specifically addressed the existing gravel access road located on the Town's abutting parcel which the Project proposes to use. As required by the Permitting Drawing Set, this existing gravel road will be compacted, resurfaced, and widened as needed for construction of the Project. Additional engineering controls shall be used during construction, such as stabilized construction entrances to limit sediment track-out. In accordance with a Stormwater Pollution Prevention Plan (SWPPP) to be prepared prior to construction, authorized personnel shall be inspecting the Project Site throughout and at the conclusion of construction to ensure that engineering controls are adequate, and the existing road is maintained. After construction, the access road will have limited use by light-duty vehicles because of Project. The Stormwater Management System Long-Term Operation and Maintenance Plan requires that the access road continues to be inspected and maintained.
7. § 350-37.1, Section 1(4)(b), *One-line or three-line electrical diagram*. A one-line electrical diagram is provided as **Attachment 2** and includes details for the proposed solar photovoltaic system and battery energy storage system. The electrical design presented in this document is preliminary and prepared for interconnection planning purposes. Actual equipment type, layout, and configuration will depend on the completed system impact study, other applicable studies/reviews, permitting approvals, and availability at the time of equipment procurement. However, these systems will be designed in accordance with applicable National Electric Code requirements and applicable fire codes. Detailed operation and maintenance plan and emergency response plan will be prepared prior to construction to ensure that the Project will perform safely and to the desired specifications.
8. § 350-37.1, Section 1(4)(c), *Documentation of the major large scale solar components*. The site plan includes the proposed layout of the array and major solar components. The specification sheets as part of the site plan include additional details on the equipment components, racking systems, and foundation systems. Additional details about the electrical components, relays, protections and wiring are included in the one-line electrical diagram is provided as **Attachment 2**. As discussed above, the actual equipment type, layout, and configuration will depend on the completed system impact study, other applicable studies/reviews, permitting approvals, and availability at the time of equipment procurement. The applicant anticipates submitting construction-level plans with these additional details as part of the Town of Dalton building permit application.
9. § 350-37.1, Section J, *Technical review*. Documentation of the proposed solar photovoltaic system and battery energy storage system have been provided with this submittal and the Applicant welcomes the opportunity to answer any additional questions that the Planning Board may have. Additionally, this Project undergoes a thorough technical review as part of the application process for the Massachusetts Department of Environmental Protection Post-Closure Use Permit.

Additional questions were fielded during the public hearing. Many questions were associated with the comments presented by Richard Hall above and others were adequately addressed during the meeting.

Please contact Max Lamson at 978.770.1060 or mlamson@trccompanies.com if you have any questions or comments.

TRC



Max Lamson
Senior Director, Renewable Energy



Enclosures:

- Attachment 1: Memorandum of Lease and Easement Agreement
- Attachment 2: One-Line Electrical Diagram

CC: Emily Byrne (Citizens Energy Corporation)

Attachment 1: Memorandum of Lease and Easement Agreement

Berkshire Middle District Registry of Deeds

Electronically Recorded Document

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Recording Information

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Number of Pages(including cover sheet)	: 6
Receipt Number	: 181083
Recording Fee	: \$105.00

Berkshire Middle District Registry of Deeds
Patricia M. Harris, Register
44 Bank Row
Pittsfield, MA 01201
413-443-7438
berkshiremiddlededs.com

RECORDING REQUESTED BY AND
WHEN RECORDED RETURN TO:

Warren Farms Solar LLC
88 Black Falcon Avenue
Center Lobby, Suite 342
Boston, MA 02210
Attn: Brian Morrissey
Phone: 617-951-0405

(Space above this line for Recorder's use only)

MEMORANDUM OF LEASE AND EASEMENT AGREEMENT

THIS MEMORANDUM OF LEASE AND EASEMENT AGREEMENT is made and entered into as of February 7, 2021 (this "Memorandum"), by and between WARREN FARMS SOLAR LLC, a Massachusetts limited liability company (the "Tenant"), and GREYSKY, LLC, a Massachusetts limited liability company (the "Landlord").

WHEREAS:

A. On the date hereof, Tenant and Landlord have entered into a Lease and Easement Agreement (the "Agreement") which by its terms grants to Tenant, its successors and assigns, a leasehold and easement interest in certain land located in Dalton, Berkshire County, Massachusetts, which is more particularly described on Exhibit "A" attached hereto and incorporated herein by reference (the "Premises") for exclusive solar energy development and related rights, transmission lines and communication facilities, solar and weather monitoring, together with easements rights on, over, under and across the larger parcel of which the Premises are a part (the "Property"), as more particularly described in the Agreement.

B. The Development Term of this Agreement shall commence on the Effective Date and shall run until the earlier of (i) two (2) years, or (ii) the Commercial Operation Date (defined below) (the "Development Term"). Provided that the Commercial Operation Date has occurred prior to the end, or has triggered the end, of the Development Term, the Initial Term of this Agreement shall commence on the Commercial Operation Date and shall run for twenty (20) years (the "Initial Term") and thereafter, the Initial Term shall automatically be extended by up to three (3) terms of five (5) years each (the "Renewal Terms"), unless Tenant gives Landlord written notice of its intent not to renew at least sixty (60) days prior to expiration of the Initial Term or Renewal Term then in effect. The Development Term, the Initial Term and the Renewal Terms are sometimes collectively referred to herein as the "Term".

41 Off High Street, Dalton, MA

C. The Parties desire to enter into this Memorandum which is to be recorded in order that third parties may have notice of the existence of the Agreement, of the leasehold and easement interests of Tenant in the Property, and related rights granted to Tenant in the Property as part of the Agreement.

NOW, THEREFORE, in consideration of the rents and covenants^{*} provided in the Agreement to be paid and performed by Tenant, Landlord hereby leases the Premises to Tenant and Tenant leases the Property from Landlord. Landlord further grants to Tenant those easements and related rights on, over, under and across the Property on the terms and conditions set forth in the Agreement. All of the terms, conditions, provisions and covenants of the Agreement are hereby incorporated into this Memorandum by reference as though fully set forth herein, and the Agreement and this Memorandum shall be deemed to constitute a single instrument or document. Should there be any inconsistency between the terms of this Memorandum and the Agreement, the terms of the Agreement shall prevail.

*no monetary consideration

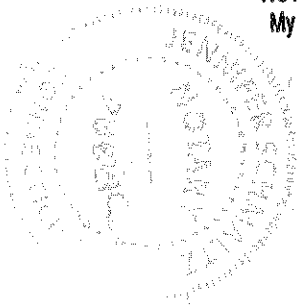
The Solar Farm, including the Solar Farm Equipment, as defined in the Agreement, installed and operated by Tenant at the Premises shall not be deemed a fixture. The Solar Farm, including Solar Farm Equipment, are Tenant's personal property and Landlord has no right, title or interest in the Solar Farm. Further, Landlord has waived any and all rights it may be deemed to have to place a lien on the Solar Farm, including the Solar Farm Equipment.

The Parties have executed this Memorandum of Lease and Easement Agreement as of the date set forth above.

For Landlord's title to the Property, see Corrective Deed into Landlord from Fred L. Warren, dated July 30, 1992, recorded at the Berkshire Middle County Registry of Deeds in Book 1368, Page 1029 and deed into Landlord recorded at said Deeds in Book 7086 Page 135.

Sworn to and subscribed
before me this
25th day of January, 2022

JENNIFER SCHMALTZ
NOTARY PUBLIC OF CONNECTICUT
My Commission Expires 6/30/2022




"LANDLORD"

GREYSKY, LLC, a Massachusetts
limited liability company

By: Linda Warren
Linda Warren
Its Authorized Signatory

"TENANT"

WARREN FARMS SOLAR LLC,
a Massachusetts limited liability company

By: 
Name: PETER F. SMITH
Its: MANAGER

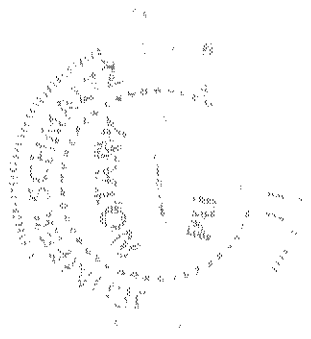
COMMONWEALTH / STATE OF Connecticut)

COUNTY OF New Haven)

On this 25th day of January, 2021², before me, the undersigned notary public, personally appeared Linda Warren, the duly authorized signatory on behalf of **GREYSKY, LLC**, who proved to me through satisfactory evidence of identification, which was a current driver's license / a current U.S. passport / my personal knowledge of the identity of the principal, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he / she signed it voluntarily, in such capacity, for its stated purpose.

JENNIFER SCHMALTZ
NOTARY PUBLIC OF CONNECTICUT
My Commission Expires 8/30/2022

Jennifer Schmalz
Notary Public
My commission expires: 6/30/2022



COMMONWEALTH / STATE OF MASSACHUSETTS)

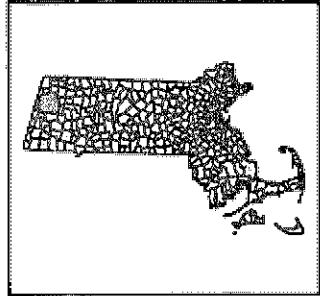
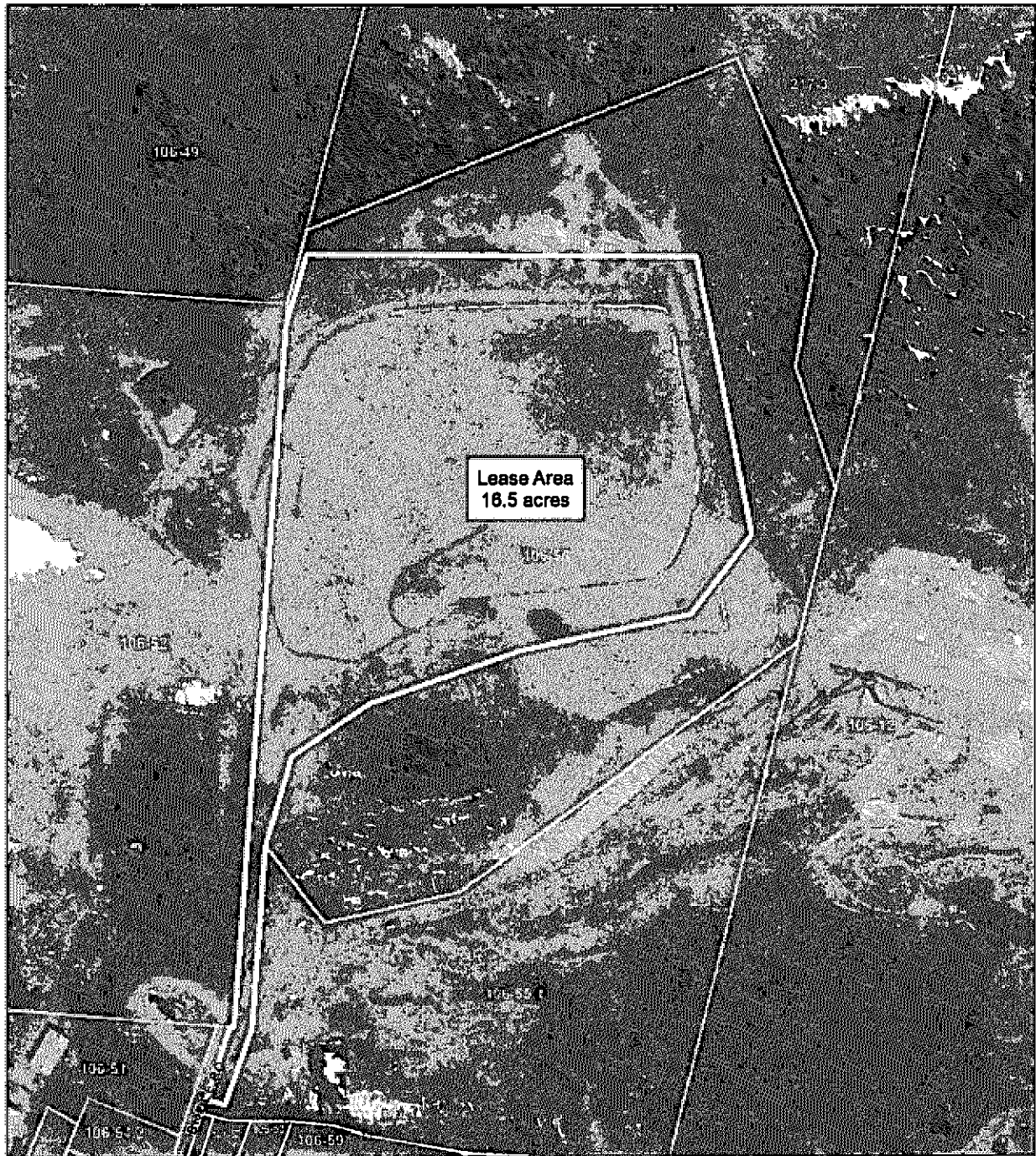
COUNTY OF SUFFOLK)

On this 7th day of FEBRUARY, 2021² LCF, before me, the undersigned notary public, personally appeared PETER F. SMITH, the duly authorized signatory on behalf of **Warren Farms Solar LLC.**, who proved to me through satisfactory evidence of identification, which was a current driver's license / a current U.S. passport / my personal knowledge of the identity of the principal, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he / she signed it voluntarily, in such capacity, for its stated purpose.

Lu-Ann C Fiore
Notary Public LU-ANN C FIORE
My commission expires: Feb 17, 2022



EXHIBIT A



Lease Area
Parcel Boundary

0 500 Feet

Warren Farms Landfill
Bridle Road
Dalton, MA
Date: 3/23/2021

Attachment 2: One-Line Electrical Diagram