



CONNECTICUT DEPARTMENT OF AGRICULTURE

450 Columbus Blvd, Suite 701 | Hartford, Connecticut 06103 | 860.713.2500  
Office of the Commissioner  
An Equal Opportunity Employer



January 17, 2024

Melanie A. Bachman  
Executive Director  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051

Re: GCE – Middlefield Road in Durham, Proposed 3-Megawatt AC Solar Generating Facility –  
NMA Letter from Agency

Dear Executive Director Bachman:

Pursuant to 16-50k(a) of the Connecticut General Statutes, we have reviewed the above cited project with respect to agricultural impacts, specifically, to determine whether "...such project will not materially affect the status of such land as prime farmland..."

This project will be located on Middlefield Road in Durham, on land owned by Nelson and Donna Prue. The entire 23.37-acre parcel contains approximately 17.98 acres of prime farmland soils. The proposed solar facility would occupy approximately 11.5 acres, of which 8.2 are prime farmland soils.

In a letter to the Department of Agriculture, dated November 14, 2023, the Petitioner (Greenskies Clean Energy LLC) has agreed to design and manage commercial herb farming, a pollinator habitat and a honeybee apiary within the Project Site.

Based on preliminary information provided to the Agency (enclosed), and the successful implementation of the co-uses described above, the Department of Agriculture concludes this project **will not** materially affect the status of project land as prime farmland.

This letter is conditioned upon all dual use plans being fully implemented and operational for the duration of the solar installation. If the Petitioner sells the solar project to another entity, dual use programing and decommissioning responsibilities must carry over to the new owner.

Should any changes raise concerns to the Agency, we reserve the right to modify our position on this project, including opposing it, as detailed plans are provided by the Petitioner. Nothing in this letter relieves the Petitioner of other obligations under applicable federal, state, and local law that may be necessary as part of the proposed project design and implementation.

If you have any questions, please feel free to contact Eileen Underwood of my staff. Eileen can be reached at [eileen.underwood@ct.gov](mailto:eileen.underwood@ct.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Bryan P. Hurlburt". The signature is fluid and cursive, with the first name being the most prominent.

Bryan P. Hurlburt  
Commissioner

Enc.

Cc: Katie Dykes, Commissioner, Department of Energy and Environmental Protection  
Jean-Paul Lamarche, Greenskies Clean Energy LLC

**VIA ELECTRONIC**

**MAIL** November 14, 2023

Eileen Underwood

Holly Lalime

State of Connecticut Department of Agriculture 450 Columbus Blvd., Suite 701

Hartford, CT 06103

**Re: Solar and Agricultural Use Considerations for Middlefield Road, Durham, Connecticut**

Dear Ms. Underwood and Ms. Lalime:

Greenskies wishes to pursue a petition for declaratory ruling before the Siting Council in connection with this proposed project. As you know, section 16-50k(a) of the Connecticut General Statutes requires that for a solar photovoltaic facility with a capacity of two or more megawatts to pursue such a petition, the Department of Agriculture must represent, in writing, to the Connecticut Siting Council that such project will not materially affect the status of such land as prime farmland. It is our hope that once the Department has reviewed the information contained in this letter, it will agree that the project will not materially affect the current status of land as prime farmland.

For ease of review, we are enclosing a map depicting the overall property itself as well as the site/footprint of the solar facility. We are providing this information in accordance with the CT Department of Agriculture's Solar Energy Project Considerations guidance, dated January 16, 2020. Our answers to the Department's request for information are provided in the responses below.

**Farm/Property Information** - Provide a description of the farm property, including but not limited to the following (include appropriate maps and surveys to allow evaluation):

- a. Farm owner(s), farm name and location:  
*The property is located at Middlefield Road, Durham, Connecticut. The landowners are Nelson and Donna Prue.*
- b. Total acreage, identification of prime, statewide and/or locally important farmland soils & acreage:  
*The parcel is 23.37 acres, of which 17.98 acres are considered prime farmland soils and 4.68 acres are farmland soils or local importance, with 0.73 acres are not farmland. The project area is approximately 11.5 acres, 8.2 acres of which are prime farmland, and 3.3 acres of which are soils of local importance. The scope of the prime farmland soils is shown on the enclosed document Farmland Soils Map Exhibit A.*
- c. Current production agriculture on the farm and the approximate location of crops, farm buildings, etc. used to support the farming operation:  
*The project area is a previously overgrown former farm. It has not been an active farm since the early 1990s. The property was left fallow and allowed to overgrow with brush and trees. Greenskies has no intention of impacting the existing residence on the property. All designs have been made with this consideration in mind. There is no current agricultural production from the location.*

## Energy Project Information

- a. Describe the energy project, including but not limited to, the size of the project in megawatts (MW), the footprint being proposed as it relates to prime farmland on the property, # of panels (if known), and a description of infrastructure needed to support the project.  
*The overall, proposed system size of the energy project is slightly over 3 megawatt alternating current (AC). As Shown in Exhibit B, the project footprint is 11.5 acres and will be placed on 8.2 acres of prime farmland soils and 4.68 acres of soils of local importance. The solar project consists of approximately 6.507 modules. Required infrastructure included stormwater management features, and one concrete equipment pad. The access to the solar project will be a gravel road from Middlefield Road.*
- b. Describe what the energy will be used for and how it will benefit the farming operation.  
*This project was awarded through the Shared Clean Energy Facility (SCEF) Program. The energy will be available to SCEF subscribers and the lease payments will be made to the landowners as a result of the solar project being placed on their land.*
- c. Are there future plans to increase energy capacity beyond what is proposed? If so, please describe these future plans, and any impacts the increase may have on prime farmland or the overall farming operation  
*No.*

## Agricultural Resource Impacts

- a. Describe any production agriculture currently being conducted within the footprint of the solar project.  
*The project area is currently partially overgrown. The open area is covered in low laying grasses and numerous trees. There is no current agricultural use on the property and the owners currently have no intention of returning the land to agricultural use. Instead they would be more interested in our proposed solar + farming and if not that then other forms of development.*
- b. Describe overall how the project will impact production agriculture currently being conducted on the farm.  
*There will be no negative impact to production agriculture from the proposed project. As there is no agricultural use currently on the property, any form of use co-located within the PV system would be the first agricultural product of the land in almost three decades. There will be no decrease in productive agricultural acreage, only an increase. Greenskies' proposed solar + farming project will increase the amount of land being used for agricultural production. Regenerative practices would still be applied as preventative measures to ensure soil health is maintained.*
- c. Provide a description of any plans by the farm owner(s) to foster production agriculture within or as a result of the development (e.g., grazing animals in and around the solar project, providing pollinator habitat).  
*While the landowners have no intention of farming the land themselves they are in support of Greenskies' proposed solar + farming project that will bring agriculture back to their land. An agreement would be required to allow for a tenant farmer to come onto the land to provide. Through experience in developing Agrivoltaic projects, discussions with farmers, landowners, and researchers as well as performing in depth research Greenskies has*

*continued to create and improve methods for integrating agriculture into solar PV projects. This proposed project includes all of that learning and expertise and should allow for an efficient combination of farming and energy production. At the end of this letter are the details of the proposed project plan.*

### **3) Alternatives to Locating the Energy Project on Prime Farmland**

- a. Provide a description of any alternatives considered by the farm owner(s) to developing the project on prime farmland soils (e.g., the option of selling agricultural development rights for the farm instead of developing for solar, or as a mitigation measure to reduce the size of the solar development).

*The landowners are not farmers and have expressed no interest in selling the development rights outside of the solar array. The current property is not a farm, and would require clearing, logging, and a fair amount of restoration work in order to become a farm again. The landowners would be interested in other means of development, and have expressed interest in a brewery, or other forms of development. If the proposed use is denied it is possible other avenues of development would be pursued.*

- b. Describe any alternatives examined which might enable placement of some or all of the solar panels in locations other than on prime farmland (e.g., elsewhere on the property or on farm buildings)

*Due to the nature of the property and the required size of the solar array it is not possible to locate the project on non-farmland soils. The only area of the property that is not either Prime Farmland or soils of local importance are within the required wetland setback, and would additionally not provide sufficient size required for the solar array. The system is located on all available non-prime farmland, after respecting all required setbacks and environmental regulations pertaining to stormwater and wetland protection. Prime farmland must be used to achieve the system size.*

- c. Provide a description of any other form of mitigation considered by the farm owner(s) (e.g., farmland restoration, or a future commitment to preserve the farm).

*The landowners have no interest in a farmland restoration program. Greenskies will be responsible for ensuring the land has been converted from the currently fallow, sparsely forested land into a piece of land capable of being farmed. At the end of the project a decommissioning plan will be enacted to ensure there are no lasting detrimental effects to the underlying soils.*

## Proposed Agricultural Co-use Plan

There will be no negative impact to production agriculture from the proposed project. The new use, the creation of a solar project with regenerative herb farming, will be a change in use but will not reduce the amount of acreage in service of agriculture and will not harm soils in any way. As the current site is not an active farm and has not been in 30 years the proposed project will actually increase the amount of prime farmland being actively used for agriculture and be more protective of the soils than the current use. Soil health will actually be improved by the regenerative practices employed on the solar site. Without the proposed solar + farming project the landowner would develop the site for non-agricultural purposes.

Greenskies also wants to make clear that there will be no grading or earthmoving on site for the installation of the solar project. The only exception to this is that a small amount of earthwork will need to be completed in very limited locations to install the stormwater control basins that are required to satisfy the Connecticut State General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. Chris Stone from DEEP can confirm this statement as well.

The slopes of the project are between 2% and 12% and multiple sediment traps and stormwater basins are being proposed. We fully intend to maintain the 100ft setbacks from the solar panels, as well as the required 50ft setbacks from the edge of disturbance to wetland areas. The proposed project will require a stormwater permit, and GCE intends to fulfil all requirements of the permit. The requirements of the approval required by DEEP are for the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities and the specific solar requirements are defined in Appendix I

We are proposing four stormwater basins, 4 ft deep, with side slopes of a ratio of 3:1 and lengths of 50ft, 50ft 110ft, and 150ft. The total moved earth is 1307 cubic yards. They all will have a 3 ft high berm on the downslope side.

The total footprint of the basins is just under 1/3 acre.

Greenskies Clean Energy proposes regenerative land management of a Solar + Farming project through 1) planting of perennial herbs and botanical plants that would be harvested and sold, 2) planting of perennial cold season grasses, and 3) planting of pollinator friendly flowers and management of a honeybee apiary for honey sales. At a very high level, maintenance would include the following:

- Delayed mowing, which would ensure that the selected plants can reach harvest stage and flowering stage and provide nutritional value to the pollinators
- Harvesting of agricultural products of plants and honey
- Overseeding as needed to maintain sufficient land coverage of plants
- Removal of invasive plants as needed
- General monitoring and upkeep of the soil, plant, and bee health

A mix of herbs, botanicals, pollinator friendly flowers, nitrogen fixing plants, and grasses is proposed within the project boundary fence line. This use will protect the soils and replenish them for future agricultural use once the solar project components are removed.

Potential herbaceous plants being considered are: mint, dandelion, mullien, oregano, purslane, red clover, rosemary, thyme, yarrow and lavender. In addition to the herbs that will be used for agricultural production, Greenskies will also review the Xerces Society guidance Pollinator Plants for Northeast Region and Pollinator Habitat Installation Guide to select supplemental plants for the project. The planting mix will also perform well for stormwater controls. Allowing these plants to grow for years will improve soil health and maintain prime farmland soils. The deep roots of the perennial plants will improve water infiltration to the soils.

In addition to the farming aspect of this project, the solar electric facility will be designed in such a way that it will enable the successful implementation of the proposed farming activities. The project is being designed to accomplish this goal through three specific attributes:

- 1) The lowest point of the solar modules will be raised higher than is needed for solar only to allow for increased sunlight to the area below the modules as well as increased accessibility for farmers. The leading edge of the modules will be a minimum of 3.5 feet, but at places will be higher depending on topography. This minimum clearance was established based on prior experience with seeing improved sunlight for ground crops at that higher height, needing to balance the required strength of the racking system, and in connection to the row spacing and required production level for the solar project.
- 2) The spacing in between rows is being designed to allow for sufficient acreage to grow plants, provide sufficient area of high sunlight levels, and provide workability for farmers while again balancing needs of required solar capacity. The current design has a relatively high row to row spacing of 26.5 feet.
- 3) The site is being designed with farmer's safety in mind. All electrical feeders will be either secured to the modules/racking directly or be underground. There will be increased signage and fencing to ensure that farm workers are never exposed to unsafe conditions.

Usually, at this stage of development, Greenskies has not yet selected an engineering, procurement, and construction (EPC) contractor, nor has Greenskies finalized its site design. Both of these activities would ordinarily take place in a project's development cycle after the initial round of permitting is completed. Nonetheless, Greenskies is developing this project with farming as a long term integral aspect of the project and is committed to having the farming use be parallel with the solar for the life of the project.

Greenskies does, however, understand the Department's need for assurances that agriculture will remain integrated with this project's design, development, construction, and operation throughout the life of the project. To further provide confidence that an established agriculture use will take place, Greenskies has a backup plan in the case that the primary plan is no longer able to function for any reason. The secondary farming use of the site is sheep grazing.

In the event that herb farming is not a viable option for this project, Greenskies will, instead, provide for sheep grazing at the project site. The project design aspects that enable the regenerative herb farming use will also enable the project to accommodate sheep grazing. Not every detail of the grazing requirements will be listed in this letter, but the sheep grazing will generally be performed within the previously provided for in the April of 2023 guidance from the Department of Agriculture: **Requirements for Solar Grazing Properties**. Sheep grazing will be rotational to ensure that the carrying capacity of the site is not exceeded and that soil health is maintained or

improved by the existence of sheep on the site. The key points to the proposed grazing activities are as follows:

1. Proper site preparation will be completed
2. Proper soil preparation will take place
3. Disclosure of any herbicides/pesticides used on site will be made
4. Site will be securely fenced
5. Interior areas will be fenced appropriately
6. Proper protection of livestock will be required of farmer
7. Site will have proper signage
8. Livestock health and wellness will be a priority and ensured by both farmer and solar project owner
9. Employees that access the site will have education on grazing and animals

Greenskies has and will continue to develop relationships with sheep farmers and shepherds that can be deployed to this proposed project in the event that the original Solar + Farming proposal is found to be untenable.

Soil health is improved by using regenerative methods and perennial plants. Use of perennial plants reduces negative impact to soils, keeps living roots in the ground, provides year round ground cover, and increases the absorption of water into soils. This approach also increases the micro and fungal biodiversity of the soil which improves its quality and the ability to nourish plants grown in the soil.

Greenskies is putting forward this project because it believes that it represents one of the best ways that solar and agriculture can co-exist. Sheep grazing is a valuable approach, to be sure, but there are other alternatives to grazing of livestock that should be considered. Traditional row cropped agriculture is one option, but is not the right approach for many sites, including this one. A more natural form of agriculture, such as the one being proposed here, is, we believe, one of the best approaches to allowing agricultural activities to exist with renewable energy projects.

Based on the foregoing, Greenskies would reiterate its request to the Department that it provide a letter to the Siting Council indicating that if Greenskies proceeds with its project in the fashion outlined above, it will not have an adverse impact on the prime farmland soils of the site

We look forward to working with the Department on this matter. Should you have any questions, please contact me at your convenience. Thank you in advance for your consideration.

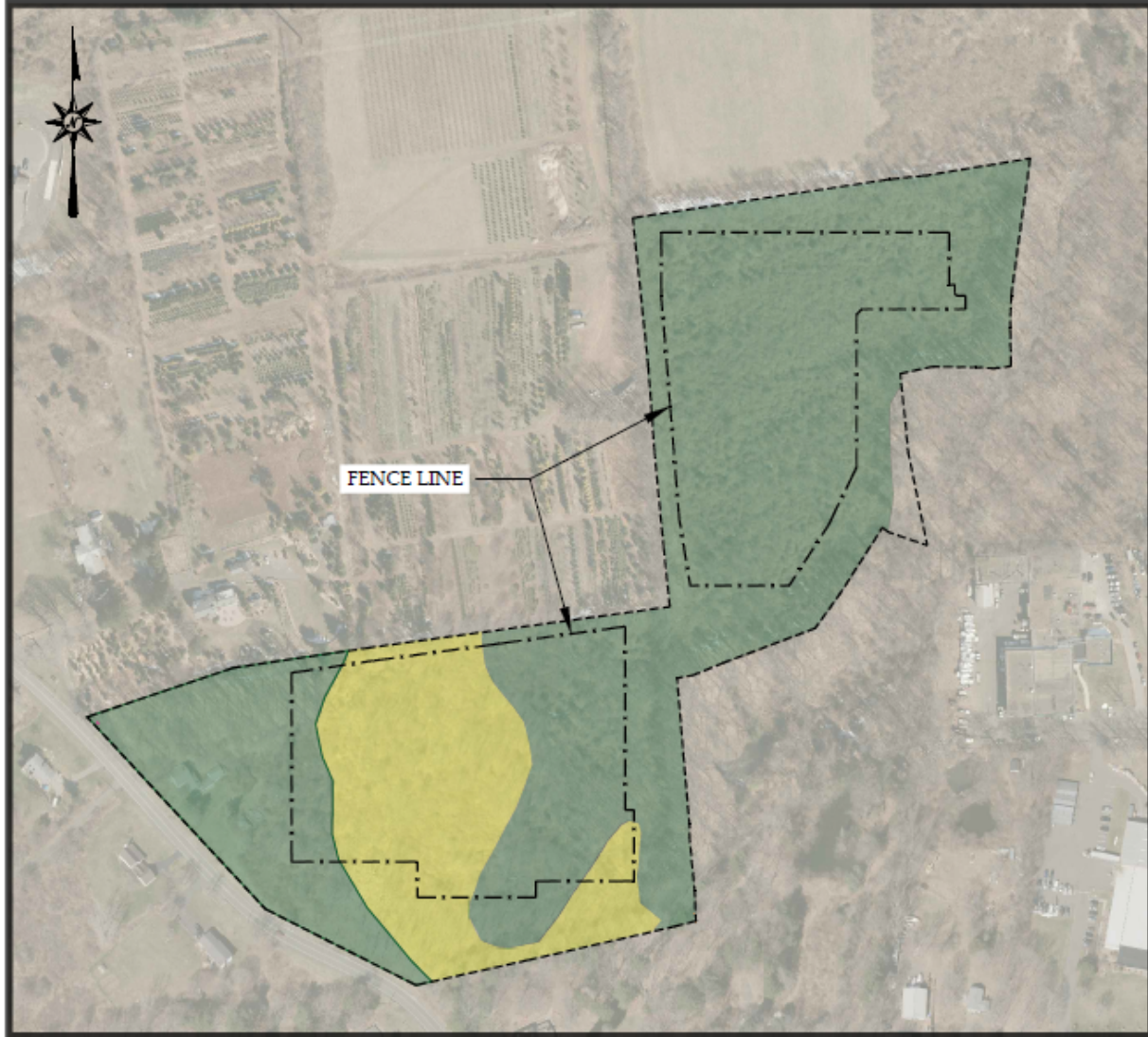
Sincerely



Jean-Paul La Marche  
VP Development  
Greenskies Clean Energy





**EXHIBIT A  
Prime Farmland Soil Map**



**GENERAL NOTES**

1. BASEMAP IMAGERY OBTAINED FROM CT ECO ON 08/29/2023.
2. LOCATION OF FARMLAND SOILS OBTAINED FROM CT ECO ON 08/29/2023.
3. EXISTING SITE BOUNDARY INFORMATION PROVIDED BY GIS.

**LEGEND**

-  PRIME FARMLAND
-  STATEWIDE IMPORTANCE

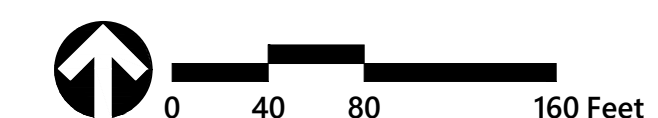
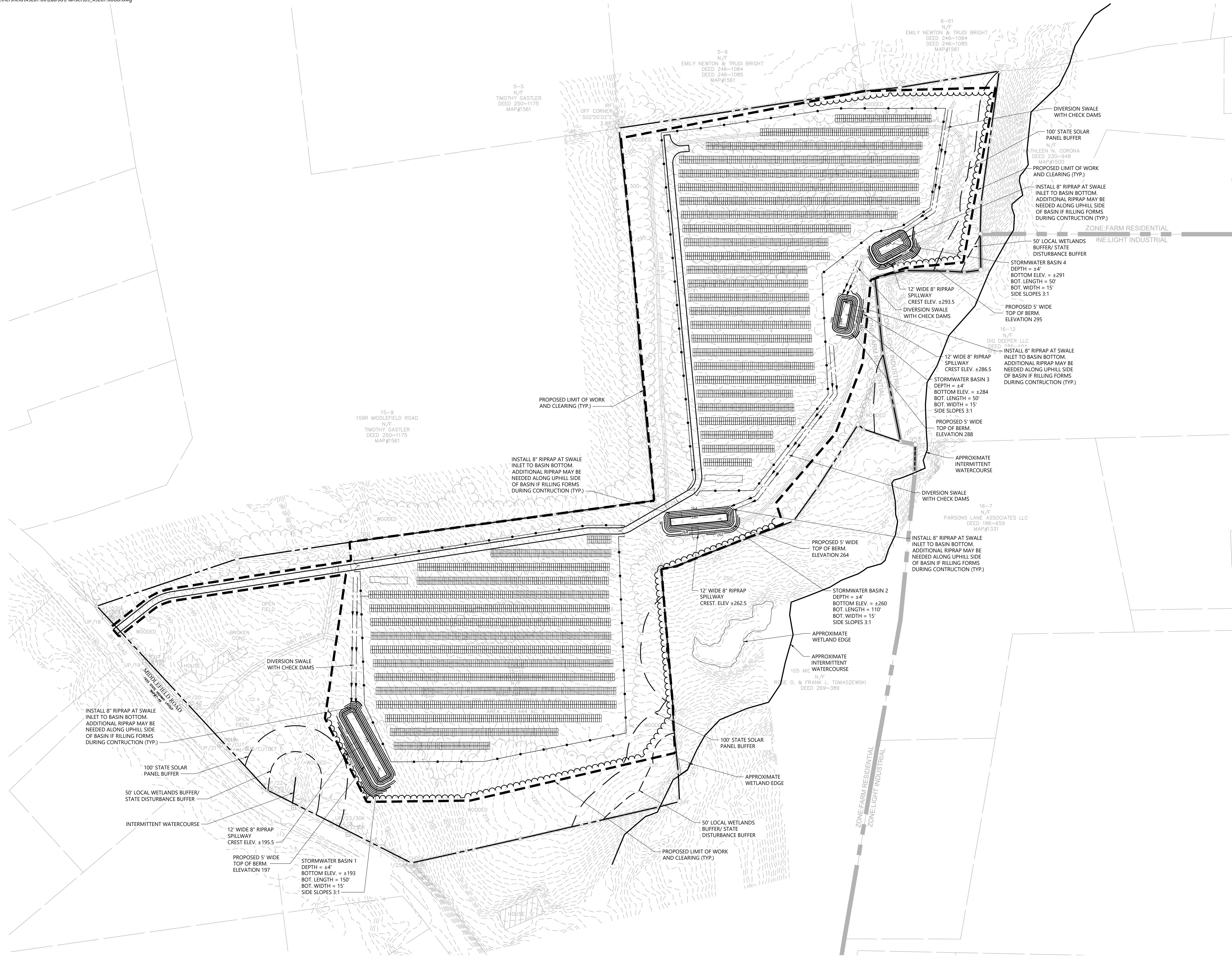


**EXHIBIT B**  
**Project Design**

See following pages



100 Great Meadow Road  
Suite 200  
Wethersfield, CT 06109  
860.807.4300



### GCE Durham Solar

141 Middlefield Road  
Durham, Connecticut

No.	Revision	Date	App'd.

Designed by **AMK** Checked by **SJK**

Issued for **Application** Date **November 10, 2023**

Not Approved For Construction

### Grading & Drainage Plan

Drawing Number  
**C-3.0**

Sheet **3** of **6**

Project Number  
**43287.00**