

**Woodstock Solar One, LLC**

**Petition for Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need is Required for the Proposed Construction, Operation and Maintenance of a 3.0 MW AC Ground-Mounted Solar Photovoltaic Electric Generating Facility Located at 11 Castle Rock Road in Woodstock, Connecticut**

**Prepared for  
The Connecticut Siting Council**

**March 4, 2024**



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## 1.0 Introduction

This is a Petition for Declaratory Ruling (“Petition”), pursuant to Connecticut General Statutes §§4-176 and 16-50k, that no Certificate of Environmental Compatibility and Public Need (“Certificate”) is required for the, construction, operation, and maintenance of a proposed solar photovoltaic project proposed by Woodstock Solar One, LLC (“Woodstock Solar One” or “Petitioner”) in the Town of Woodstock, Connecticut (the “Project”). The Project consists of the development of a 3.0-megawatt (“MW”) alternating current (“AC”) ground-mounted solar photovoltaic (“PV”) facility located on a 38.3 acre parcel at 11 Castle Rock Road, Woodstock, Connecticut (“Property”). See Figure 1 – Site Location Map.

The Project was selected and awarded a twenty (20)-year contract to participate in Connecticut’s Shared Clean Energy Facility (“SCEF”) program. Through the State of Connecticut’s SCEF program, at least sixty percent of the total capacity of the Facility will be supplied to low- and moderate-income customers and/or low-income service organizations. The Project’s output will be used to help Connecticut meet its emissions reduction targets via the State of Connecticut’s Renewable Portfolio Standards and Governor Lamont’s Greenhouse Gas (“GHG”) reduction goals.

Authorization by the Connecticut Siting Council (“Council”) via approval of this Petition would allow the Petitioner to construct the Project and assist the State of Connecticut in achieving its goal of energy conservation and sustainability. Pending approvals, the Project will commence financing, detailed engineering, procurement, and construction efforts in 2024, with commercial operation planned for the Project by the Spring of 2025.

The Project is located on an approximately 14-acre portion (the “Project Site”) of the Property fronting on Castle Rock Road, within the Town of Woodstock’s Community zoning district. The Property is owned by John D. Chapman. See Figure 2 – Property Card and Figure 3 – Site Survey.

## 2.0 Petitioner

Woodstock Solar One, LLC is a limited liability company with its principal place of business at 124 LaSalle Road in West Hartford, Connecticut. Woodstock Solar One is a subsidiary of Verogy Holdings, LLC (“Verogy”). Verogy is a professional renewable energy business with decades of experience in the solar industry; the core of its business is developing, financing, constructing, managing, and operating solar projects. The management team at Verogy has constructed over 250 megawatts of solar projects across the United States.

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All four individuals consent to electronic mailings of all Council and Petition-related correspondence.

## 3.0 Proposed Project

### 3.1 Project Site Overview

The Property is located at 11 Castle Rock Road, Woodstock, Connecticut in the southeast portion of Woodstock. The Town of Woodstock's Assessor's Office has the parcel listed as MBL – 6395/64/08. See Figure 2 – Property Card.

The Property is bounded to the south by Castle Rock Road, to the east by residential properties, and to the north and west by undeveloped forest that is part of two parcels owned by the nearby Woodstock Academy School.

#### 3.1.1 Existing Land Use

The current land use of the Property consists of agricultural fields, a single-family residence, and forested wetlands. The forested wetlands generally run north to south and bisects the parcel into two separate farm fields. According to Woodstock's Zoning Map, the parcel is in the community zoning district. See Figure 3 – Site Survey.

#### 3.1.2 Surrounding Land Use

The area surrounding the Project Site consists of single-family residences to the east and northeast and undeveloped forest to the north and west. There is a single residential parcel (85 Castle Rock Road) located directly to the south of the aforementioned forested wetland between the two separate farm fields on the Property. On the south side of Castle Rock Road opposite the Property are additional parcels containing a single residence and current agricultural uses for crop growing and livestock activities.

#### 3.1.3 Project Site Selection

The Project Site was selected by Woodstock Solar One after the evaluation of several key criteria, including but not limited to availability, suitability, proximity to utility infrastructure, and potential impacts to the environment and surrounding areas. The

Project Site was selected because it was determined to be suitable for the development of the Project with its proximity to suitable electrical grid access and minimal adverse impacts to natural resources and the environment.

## 3.2 Project Description

### 3.2.1 Site Access

There will be two primary access points to the Project Site, due to the project's separation into two portions, located to the east and west of the wetland that bisects the Property. Each access point for the Project Site will utilize existing access points, currently being utilized for on-site farming activities, at existing openings in the stone wall that lines the northern side of Castle Rock Road. The Petitioner would construct only a small amount of internal gravel roadways within the Project Site to provide access to the proposed facility equipment pads and utility service interconnection poles. The Petitioner proposes the construction of these roadways on prepared subgrades with a gravel topping which would match existing grades to the greatest extent feasible. See Figure 4 – Proposed Project Layout and Appendix A – Sheet 2.0 Layout and Materials Plan.

### 3.2.2 Solar Facility Design and Layout

As currently designed, the 3.0 MW AC Project will consist of 8,390 First Solar Model FS-6465A-P-B, 465-Watt solar modules, 24 CPS 600V 125kW (SCH125KTL-DO/US-600) inverters, AC panel boards and/or switchgear, and two 1500 kVa transformers. The panels will be secured to a fixed tilt ground mounted steel racking structure, with the rows of panels extending due east-west. The steel racking structure will be anchored to the ground with driven posts or ground screws, to a depth to attain sufficient structural capacity to resist the loads from the weight of the panels, as well as environmental loads including snow, wind, and seismic forces. The array of solar panels and the equipment will be surrounded by a minimum seven-foot-high agricultural fence meeting applicable electrical codes. The proposed utility interconnection service poles, owned and operated by Eversource will be located near the southeast corner of the Project Site, where the existing eastern access point to Castle Rock Road is being utilized. The eastern and



western portions of the array will be connected electrically by a medium voltage service cable that will cross the forested wetland above ground by either a pipe bridge or overhead service poles, to avoid any direct impact to the existing wetland area.

First Solar is a leading American solar company that manufactures advanced thin film photovoltaic modules. First Solar has performed a Toxicity Characteristic Leaching Procedure (“TCLP”) test on their Series 6 solar modules and has determined that the panels are not characterized as hazardous waste. See Appendix B for project specifications and the Analytical Report summarizing the Toxicity Characteristic Leaching Procedures (“TCLP”) for the solar panel that the Petitioner intends to install as part of the Project.

The Facility has an anticipated service life of thirty-five (35) years. The total 3.0 MW AC system will have an expected net AC capacity factor of approximately 19.67%. The Project is expected to produce more than 5,169,880 Kilowatt-Hours (kWh) of energy in the first year of operation, enough energy to power 703 homes. Energy produced by the Project will be sold to Eversource as part of the Connecticut SCEF Program. The SCEF Program, passed by the legislature and signed into law by Governor Lamont in 2018 (Public Act 18-50), is a six-year competitive energy procurement program, supporting up to 150 MW of clean energy. The Petitioner was a successful bidder in year four of the program for the Project’s 3.0 MW AC system. The SCEF Program seeks to deploy new and incremental Class 1 renewable generation projects ranging in size from 100 to 5,000 kW (AC) for a contract term of at least twenty (20) years.

### 3.2.3 Electrical Interconnection

The interconnection application for the solar array was submitted to Eversource Energy on January 3, 2022, and it was subsequently determined by Eversource that a Distribution and Transmission Impact Study would be necessary. The Distribution Impact study, with an indication of no impact to the distribution grid, was completed by Eversource. These results, provided on August 25, 2023, indicate that a new service, consisting of an on-site pole-mounted primary meter and pole mounted recloser, will be required, along with upgrading of the service lines and poles along Castle Rock Road up

to the point of connection, to provide three phase service. It is anticipated that a formal Interconnection Agreement will be issued by Eversource sometime in the spring of 2024, upon completion of the Transmission Impact Study. Woodstock Solar One intends to sign and return the Interconnection Agreement with Eversource promptly upon receipt.

### 3.2.4 Fencing and Site Security

The Petitioner proposes installing a minimum 7-foot-high agricultural fence around the perimeter of the Project Site to provide site security, as well as to address National Electric Code requirements. In addition, the entrance to the Project Site will be gated—limiting access to authorized personnel and vehicles. Town emergency service personnel will be provided access to the Project Site via a Knox lockbox (emergency key box). Importantly, the Petitioner notes that the Project Site and facility operations will be monitored remotely. The Petitioner will have the ability to de-energize all or some portion of the Facility in the event of an emergency. See Appendix A – Sheet C-2.0 - Layout and Materials Plan.

### 3.3 Stormwater Management

The Petitioner prepared a Stormwater Management Report (the “Stormwater Report”) in accordance with the 2004 State of Connecticut Stormwater Quality Manual and the Connecticut General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (“Stormwater General Permit”) as modified November 25, 2022. A copy of the Stormwater Report is attached as Appendix E.

The Petitioner reviewed online soil mapping and hydrology and no permanent stormwater basins are proposed; therefore, no in-situ soil testing is currently proposed. As indicated in the attached Stormwater Management Report, predevelopment drainage patterns have been maintained to the greatest extent feasible in an effort to maintain pre-development flows to off-site areas.

The majority of the site generally drains to the north and into a contiguous wetland system that is associated with Little Brook off the subject parcel. Five (5) temporary sediment

traps are proposed around the perimeter of the solar array discharging stormwater in the directions that they drain under existing conditions. The proposed sediment traps do not exceed 3 acre-feet of impoundment above existing grade; thus, a Connecticut Department of Energy and Environmental Protection (“CT DEEP”) Dam Safety permit is not anticipated to be required.

The Petitioner developed a HydroCAD model, using TR-55 methodology, to evaluate the existing and proposed drainage conditions of the Property. The results of the analysis demonstrate that there would not be an increase in peak stormwater runoff rates for the 2-, 25-, 50-, and 100-year storm events to any sub-watershed. The Project proposes a de minimis amount of impervious cover and the promotion of long-term vegetation across the Project Site in lieu of the prior farming operations will ensure that water quality and sediment transport will be improved upon existing conditions.

### 3.4 Construction Schedule and Phasing of Construction

The Petitioner anticipates that construction of the Project will begin in late 2024 and will take approximately six (6) months to complete. Construction activities within the Project Site will include: erosion and sedimentation (“E&S”) control measures, and racking and module(s) electrical trenching; the installation of interconnection infrastructure; and, new access road construction. Existing grades throughout the Project Site will remain unchanged, except in areas where the Project’s E&S control measures are proposed. For those areas, some temporary regrading (i.e., cuts/fills) will be required. Upon completion of construction the areas will be returned to existing.

Initial work would involve the installation of erosion and sediment control measures, including installation of sediment traps, and construction of access roads. It is anticipated that temporary staging areas would be located in open areas to the south of the Project Site, between the Project Site and Castle Rock Road, adjacent to each access point.

Upon completion of the installation of the erosion control measures, the Project will commence construction of the small amount of gravel access road and begin racking installation. Upon completion of the racking installation the modules and other electrical

equipment will be installed. Final site stabilization, testing, and commissioning would be expected to be completed in the Spring of 2025. Construction activities would be expected to occur 7:00AM to 6:00PM Monday through Friday and Saturday between the hours of 8:00 a.m. and 5:00 p.m.

A Storm Water Pollution Control Plan (SWPCP) would also be developed and implemented by the Project's civil engineer and will include regular inspection and reporting of erosion control measures to prevent sedimentation or water quality impacts. The Petitioner will also apply for a General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities from CT DEEP. The Stormwater Management Report (Appendix E) provides Erosion and Sedimentation Control Best Management Practices – Maintenance/Evaluation Checklists for Construction Practices and Long-Term Practices. Construction sequencing is described in detail on sheet C-4.0 in Appendix A.

### 3.5 Operation and Maintenance

The required maintenance of the Project will be minimal. The Petitioner proposes to use sheep grazing to maintain field grass that will be established within the limits of the Project Site. Routine maintenance of the electrical equipment will typically occur one (1) time per year and will typically involve two (2) technicians. The facility would be monitored remotely 24 hours a day, 7 days a week. The Petitioner does not expect that any snow removal operations will be necessary for the Project, given that the selective positioning of the facility's panels allow for any accumulating snow to "sheet" off. Repairs to the Facility components will be made on an as-needed basis. See Appendix C – Operation & Maintenance Documentation.

### 3.6 Decommissioning

At the end of its useful life, the Project will be decommissioned in accordance with the requirements of the Petitioner's land lease agreement and the Project's Decommissioning and Restoration Plan. See Appendix D – Decommissioning and Restoration Plan.

## 4.0 Project Benefits and Needs

The State of Connecticut has committed to developing its renewable energy market and mitigate the negative environmental impacts associated with traditional electric power generation. In so doing, it has set aggressive targets to reduce greenhouse gas (“GHG”) emissions and to increase the deployment of Class I renewable energy.

The Governor’s Council on Climate Change (“GC3”) recommendation is that the Connecticut’s Renewable Portfolio Standard (“RPS”) reach a target of 40 percent Class I renewable energy sources by 2030, with an aim to reduce the carbon intensity of the RPS to achieve the State’s decarbonization goals. Additionally, Governor Lamont has set a 100 percent zero carbon target for the energy sector by 2040. Owners of renewable-electricity generation projects receive one renewable energy certificate (REC) for every megawatt-hour of renewable electricity they produce. Those RECs are traded in a regional market for state RPS compliance. Connecticut establishes the required annual REC percentages from three classes of renewable energy resources.

If approved, Project will provide a wide range of environmental and economic benefits to the State of Connecticut and the Town of Woodstock, respectively, including:

- Through the State of Connecticut’s SCEF program, at least sixty percent of the total capacity of the Facility will be supplied to low- and moderate-income customers and/or low-income service organizations.
- Once operational, the Project will generate approximately 5,170 MWh of clean renewable energy per year. This is enough renewable energy to power 703 homes for an entire year and would effectively offset 3,612 metric tons of carbon dioxide annually—the same amount as 59,719 tree seedlings grown for ten (10) years, or 406,394 gallons of gasoline consumed.
- Reduction in energy demand during peak usage will decrease energy costs for ratepayers Statewide.
- The creation of construction jobs in the region; and
- The Project will effectively increase new annual municipal tax revenues for Woodstock with no additional burden on town services.

## 5.0 State and Local Outreach/Input

Woodstock Solar One has been in communication with and has engaged state and local officials regarding the design and development of the project.

On February 9, 2023, the Petitioner emailed Woodstock's First Selectman Jay Swan, to advise on the intent to submit a bid to the SCEF program for this site & to discuss the Project but did not receive any response. The Petitioner sent a follow-up email on December 6, 2023, with additional Project information, an indication of our intent to submit this project for review by the Council, and an offer to meet to discuss this Project and answer any questions. In a follow-up conversation with the First Selectman's office on February 7, 2024, they indicated that they did not have any questions for the Petitioner or need to discuss this project further.

On February 16, 2024, Woodstock Solar One sent a Project Fact Sheet and other related information about the Project to the abutting property owners and established a Project-specific website ([www.verogy.com/Woodstock-solar-one](http://www.verogy.com/Woodstock-solar-one)) to keep the public informed about the Project. See Appendix I – Public Outreach Documentation for copies of Woodstock Solar One's Project Fact Sheet and a sample letter sent to abutting landowners as well as a list of the abutting landowners notified.

In addition, pursuant to the requirements of R.C.S.A. § 16-50j-40(a), Woodstock Solar One has sent notice concerning this Petition to all abutters and applicable governmental officials by Certificate of Mailing. Information summarizing this outreach effort is included in Appendix I.

## 6.0 Potential Environmental Effects/Impacts

### 6.1 Site/Community Setting and Scenic Character and Values

The Project is located in the western and central portions of the Property and will occupy approximately 14 of the 38.3 acres with approximately 19 acres of total limits of

disturbance. The overall land use of the Property consists primarily of two open farm fields that are separated by a forested wetland that generally runs north to south in the central part of the Property. The surrounding land use is primarily agricultural & residential in nature with parcels that are currently being utilized for both farming and livestock uses, with ancillary structures and single-family residences. To the north, both adjacent parcels are owned by the Woodstock Academy, with the smaller parcel containing a residence and undeveloped wooded areas, and the larger parcel containing undeveloped woodlands (adjacent to the Project Site) behind the developed school facilities.

## 6.2 Public Health and Safety

The proposed Project is not expected to create any adverse impact regarding public health or safety issues. The proposed Project will meet or exceed all local, state, national and industry health and safety standards and requirements. During construction and post-construction operations and maintenance, workers and personnel would follow all health and safety standards applicable to solar energy generating facilities.

A site-specific construction health and safety plan is typically developed prior to initiation of any on-site Project-related tasks. During the construction phase of development, all contractors, sub-contractors, and personnel will be appropriately trained and briefed on any potential site health and safety issues. There will be a designated construction manager, site safety officer, or representative present at all times during construction, and such an individual will be responsible for overseeing/implementing the site construction health and safety plan.

Construction traffic relative to the Project Site includes standard construction trucks, small earth moving equipment, and all-terrain forklift equipment. Vehicle trips would be relative to scheduled deliveries of the major materials such as solar racking, solar panels, electrical equipment to serve the Facility, and fencing materials to be installed around the perimeter of the solar field. Construction activity and associated traffic would generally take place from 7:00 AM to 6:00 PM daily Monday through Friday and 8:00 AM to 5:00 PM Saturday.



Some hazardous substances are required to be used or stored on the Property during construction or operation of the Project. Namely, gasoline or diesel-powered equipment will be in regular use during construction activities, requiring some on-Property fuel storage. Further, the inverter step-up transformers located at each equipment pad will use biodegradable oil for cooling. Accordingly, a Spill Prevention, Control, and Countermeasure (“SPCC”) Plan and an Operations and Maintenance (“O&M”) Plan have been developed for the Project. See Appendix L – Spill Prevention Control, and Countermeasure Plan.

### 6.3 Noise

#### 6.3.1 Noise Level Guidelines and Regulatory Requirements

Potential Project-related noise is regulated by Connecticut General Statutes section 22a-69 and Regulations of Connecticut State Agencies (RCSA) Section 22a-69 et. seq.

The State Noise Regulations prohibit the emission of continuous excessive noise beyond the boundary of their Noise Zone. The Project is considered a Class C Land use with residential receptors to the south of the Project Site, thus requiring a maximum level of 61 dBA during daytime hours (defined as 7 AM to 10 PM) and 51 dBA during nighttime hours (defined as 10 PM to 7 AM). Construction noise is exempt from the noise regulations.

#### 6.3.2 Proposed Project-generated Noise

Due to the nature of the use, facility design, required equipment and distance from potential noise receptors, the proposed Project is expected to have no adverse noise-related impact on the surrounding area. Existing uses around the perimeter of the Project Site vary between agriculture uses, commercial/educational, and single-family residential development.

The selected inverter has an acoustic noise rating 65 dBA at a distance of one (1) meter, as noted on the inverter specification sheet provided in Appendix B. All other selected system equipment will typically generate the same or lower levels of noise.

The nearest residence, located at 65 Castle Rock Road, is the lot just to the south of the forested wetland that bisects the Project Site into the eastern and western arrays. This residence is located approximately 375 feet to the southeast of the closest equipment pad that serves the western array. The distance from this equipment pad to the nearest property line for this residential lot is approximately 185 feet. (Note the equipment pad for the eastern array is located more than 800 feet from the nearest property line for this same residence).

The eastern array inverter bank is located closest to an existing property line, approximately 86 feet, that abuts a residential property to the south on the other side of Castle Rock Road. Per a previously completed sound analysis, a combined inverter bank has a calculated sound power level of under 85 dBA at a distance of one (1) meter. This was for a total of 16 inverters and this inverter bank will only be 12 inverters. The Petitioner applied the Inverse Square Law to evaluate the relative sound level of the inverters to the nearest residential property line, and the calculations show that an 85 dBA at one meter would drop to approximately 57 dBA at a distance of 86 feet (26.2 meters), which is below the maximum allowable of 61 dBA residential receptor daytime limit. The inverters only operate during daytime hours and therefore no noise generation is anticipated at night.

#### 6.4 Air Quality

Because the Project is a solar energy generating facility, no air emissions will be generated during operations and, therefore, an air permit would not be required. Temporary, potential construction-related mobile source emissions would include those associated with construction vehicles and equipment. Any potential air quality impacts related to construction activities can be considered *de minimis*. Such emissions would be mitigated using available measures including limiting idling times of equipment; proper

maintenance of all vehicles and equipment and watering/spraying to minimize dust and particulate releases. In addition, all on-site and off-road equipment would meet the latest standards for diesel emissions, as prescribed by the United States Environmental Protection Agency (USEPA) and, with the above mitigation measures, should reduce the exhaust emissions.

### 6.5 Visual Impact Assessment

Petitioner anticipates that the location of the proposed Project, coupled with the design of the proposed solar energy facility, would significantly limit, if not eliminate, any potential views from any public viewsheds or private properties. The Project has been sited on land which is generally low visibility from surrounding roads, residences, and any designated public recreation area (i.e. playing fields, walking trails, or parks). Visual impacts of the Project from multiple directions are naturally mitigated due to a variety of distance, topography, and existing vegetation. A cross section displaying the proposed Project elements in relation to the nearest residence, situated between the two arrays, has been prepared in support of this Petition and is included in Appendix J.

The nearest public recreation area is the Holzer Preserve, located approximately 3,200 feet southeast of the Facility in Pomfret. The combination of distance, change in topography, and existing vegetation in between the two locations make it unlikely that there will be even seasonal views from this public recreation area.

The nearest state designated scenic road is Deerfield Road (Rt. 97) in Pomfret, located approximately 1.66 miles south of the Project Site. This scenic road is not visible from the project site. The nearest nationally designated scenic road is Norwich Worcester Turnpike (Rt. 169), located approximately 220 feet from the property limits and approximately 550 feet from the project limits.

### 6.6 Federal Aviation Administration Determination

The Petitioner used the Federal Aviation Administration (“FAA”) Notice Criteria Tool to screen the Project site to assess if the Project triggers the FAA Notice Criteria. The result

of the initial screening on October 24, 2023, is that no additional FAA notice is required. See Appendix K - FAA Consultation.

## 6.7 Site Soils and Geology

### 6.7.1 Existing Site Soils and Geology

A review of available NRCS online soils mapping indicated the presence of multiple fine sandy loam soils throughout the project area, with Hydrologic Soil Groups ranging from “C” to “D” and slopes generally ranging from 3 to 8%. Soils information is included in Figure 8 – NRCS Soils Information.

### 6.7.2 Preservation of Prime Agricultural Soils

The Project Site is currently undeveloped farmland and woodlands. A review of the USDA’s soil mapping for the area indicates that a majority of the development area is prime farmland. It is currently anticipated that no soil will be exported from the site and that any excess material will be reused on site. The CT Department of Agriculture (“DoAg”) has reviewed the Petitioner’s proposed solar development plan that includes the use of rotational sheep grazing for vegetative management. DoAg determined that the plan as presented will not materially affect the status of the Project Site as prime farmland, subject to adherence with the plans and information presented. See Appendix M – Prime Farmland Consultation.

## 6.8 Historic and Archaeological Resources

Heritage Consultants prepared a 1A Cultural Resources Assessment Survey in November 2023. Heritage found that 25.9 acres of the project parcel are archaeologically sensitive for intact cultural deposits and recommended that a Phase 1B study be performed within these areas. Petitioner is currently engaging Heritage Consultants to perform a Phase 1B shovel test in these areas. A copy of the Phase 1A report is included in Appendix F and the Petitioner will provide the results of the Phase 1B investigation, as well as any SHPO correspondence, to the Council.

## 6.9 Wetlands and Watercourses

### 6.9.1 Wetlands Delineation and Methodology

On October 10<sup>th</sup> and 23<sup>rd</sup>, 2023, soil scientists from VHB investigated the site to determine if regulated Inland Wetlands or Watercourses were present. In Connecticut, Inland Wetlands are defined by areas of poorly drained or very poorly drained soils or alluvial soils of any drainage class. The investigation was facilitated using a tile spade and soil augers that were used to examine soil profiles and evaluate drainage classes. A Wetlands Delineation Report dated December 19, 2023, was prepared outlining the survey process and findings. A copy of this report is included in Appendix G.

### 6.9.2 Existing Wetlands and Watercourses

A single wetland system, broken into three sub areas by the property boundary, was delineated as a result of this effort and is depicted in the report. Wetland area #1 is located in a forested area that separates the two open farm fields where the arrays will be constructed. Wetland area #2 parallels the northern property boundary in the northeast part of the Property. Wetland area #3 is located in the eastern portion of the Property limits, to the east of the Project Site. All delineated wetlands on site discharge to Little Brook, a tributary of Peake Brook. A more comprehensive analysis of the various wetland systems can be found in the Wetland Delineation Report included in Appendix G.

### 6.9.3 Vernal Pools

A potential vernal pool was observed within Wetland area #1 during the on-site field investigation in 2023. It is recommended by VHB soil scientists that a biological survey be conducted in the spring of 2024 at this location to determine if amphibian breeding is occurring in this area and identify any species that may occur in this location. The results of this study will be forwarded to the Council.

#### 6.9.4 Proposed Project and Mitigation

The Project has been designed to provide a vegetated buffer between the limits of disturbance and the described wetland systems to maintain an ecological edge zone that separates the solar development and stormwater features from the wetland communities. The wetlands will be further protected by incorporation of the inclusion of permanent vegetation at the site.

The Project's limits of disturbance are greater than 50-feet and the closest panel is over 100-feet from the existing wetland. These distances are in concurrence with CTDEEP Stormwater General Permit minimum suggested buffer requirements.

#### 6.10 Wildlife and Habitat

##### 6.10.1 Rare, Threatened and Endangered Plants and Wildlife

A Request for Natural Diversity Data Base (NDDDB) State Listed Species Review was completed and distributed to CTDEEP Wildlife Division for review. In return, a Final Determination dated October 11, 2023, was provided by CTDEEP Wildlife Division which found no species of concern in vicinity of the project.

The final determination letter approves construction as proposed. A copy of this letter is included in Appendix H.

##### 6.10.2 Potential Impacts and Mitigation

The Final Determination provided by CTDEEP Wildlife Division indicates no potential impacts and no need for mitigation or protective measures.

##### 6.10.3 Core Forest

Review of CTDEEP Forestland Habitat Impact Map indicates that adjacent core forest exists to the north, west, and southwest in proximity to the Project Site. However, no tree clearing is proposed or necessary for the development of the Project. A letter indicating

no material impact to core forest was received from the Connecticut Department of Energy and Environmental Protection on February 26, 2024. A copy of this letter is included as Appendix N.

## 6.11 Water Supply

No water is needed for the construction of the Project nor will any water be brought to the Property from either a well or utility connection. All water used for construction will be trucked to the Property. Although module cleaning is rarely necessary in Connecticut, if the solar modules were to experience enough soiling to adversely affect production, the modules would be cleaned using water brought in by tanker trucks.

## 6.12 Stormwater Management

### 6.12.1 Existing Conditions

Under existing conditions, untreated stormwater runoff from a majority of the Project Site generally flows northerly towards Little Brook and its associated wetlands. Finger wetlands of Little Brook extend into the site and receive runoff from portions of the development area.

All the Project Site is comprised of active farmland. Generally, the site is at its highest elevation within the central portions of each farm field, and slopes to the north, west, and east towards the adjacent wetland systems. The majority of terrain slopes in the Project Site range from 3% to 8%.

Information and computations regarding existing conditions hydrology is contained in the Stormwater Report. A copy is included in Appendix E.

### 6.12.2 Proposed Conditions

The proposed stormwater management system for the Project has been designed to meet State standards found within 2004 Connecticut Stormwater Quality Manual and CTDEEP

Stormwater General Permit as modified November 25, 2022. As the project contemplates seeding active farmland to create a grassy environment, stormwater runoff from the project will be reduced upon project completion. A seed mix of permanent turf forming grasses will be used to establish vegetation directly under the modules to help stabilize the topsoil from erosion, sequester nutrients and pollutants, and lower runoff rates. The only impervious surfaces created by the Project will be a small amount of gravel access road and equipment pads.

Post-construction stormwater runoff will follow existing drainage patterns. Information and computations regarding proposed conditions hydrology is contained in the Stormwater Report. A copy is included in Appendix E.



## 7.0 Conclusions

The Project clearly meets the standards set forth in Conn. Gen. Stat. §16-50k(a). Specifically:

- The Project meets CT DEEP's air and water quality standards, with no material emissions associated with either construction or operation, and water quality standards associated with construction and operational stormwater management a primary focus of the Project's design;
- The Project has been configured to avoid any substantial environmental impacts by largely utilizing land which has been subject to former agricultural uses; and
- The Project will not impact areas of prime farmland or core forest; and

In addition, the majority of Visual impacts of the Project from multiple directions are naturally mitigated due to a variety of distance, topography, and existing vegetation; nor will there be any impacts from noise.

Given the benefits this Project will provide to the State of Connecticut, Woodstock Solar One respectfully requests that the Council approve this Project as currently designed and issue a declaratory ruling that a Certificate is not required.