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August 23, 2023

VIA ELECTRONIC MAIL AND HAND DELIVERY
Melanie Bachman
Executive Director/Staff Attorney
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

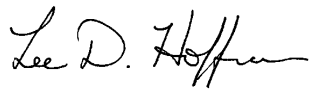
Re: Petition of USS Somers Solar, LLC for a Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need is Required for the Proposed Construction, Operation and Maintenance of a 3.0 +/- MW AC Solar Photovoltaic Electric Generating Facility Located at 360 Somers Road, Ellington, Connecticut

Dear Ms. Bachman:

I am writing on behalf of my client, USS Somers Solar, LLC, which is submitting the enclosed Petition for a facility to be located at the above-referenced location in Ellington, Connecticut. With this letter, I am enclosing the original and fifteen copies of the Petition, including Appendices A-C for the Petition. I am also enclosing a check for $625.00, made payable to the Connecticut Siting Council.

I will send you an e-mail under separate cover with a link to an electronic version of the Petition and Appendices. Should you have any questions concerning this submittal, please contact me at your convenience.

Sincerely,



Lee D. Hoffman
Enclosures

cc: Town Clerk, Town of Ellington, Connecticut

Petition of USS Somers Solar, LLC for a 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 Solar Photovoltaic Electric Generating Facility Located at 360 Somers Road, Ellington, Connecticut

Prepared for the Connecticut Siting Council

Submitted by:
USS Somers Solar, LLC
2150 Post Road, Suite 505
Fairfield, CT 06824

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I. Introduction

A. Purpose and Statutory Authority

Pursuant to the Connecticut General Statutes ("CGS") §§ 4-176 and 16-50k(a) and Regs. Conn. State Agencies § 16-50j-38 *et seq.*, USS Somers Solar, LLC (the "Petitioner" or "USS") respectfully requests that the Connecticut Siting Council (the "Council") approve, by declaratory ruling, USS's proposed installation and development of a +/- 3.0 megawatt alternating current ("MW") solar-based electric generating facility (the "Project") located at 360 Somers Road, Ellington, Connecticut (the "Project Site" or the "Site").

CGS § 16-50k(a) provides, in pertinent part:

> *Notwithstanding the provisions of this chapter or title 16a, the council shall, in the exercise of its jurisdiction over the siting of generating facilities, approve by declaratory ruling . . . (B) the construction or location of any . . . grid-side distributed resources project or facility with a capacity of not more than sixty-five megawatts, as long as such project meets air and water quality standards of the Department of Energy and Environmental Protection[.]*

In accordance with CGS § 16-50k(a), USS respectfully requests that the Council approve this Project by declaratory ruling. As detailed below and demonstrated herein, the proposed Project will result in no air emissions, has been designed to minimize natural resource impact(s), and complies with the applicable air and water quality standards of the Connecticut Department of Energy and Environmental Protection ("CTDEEP"). In addition, the Project will not have a substantial environmental effect in the State of Connecticut and will help support the State's renewable energy goals.

B. Project Overview / Key Project Elements

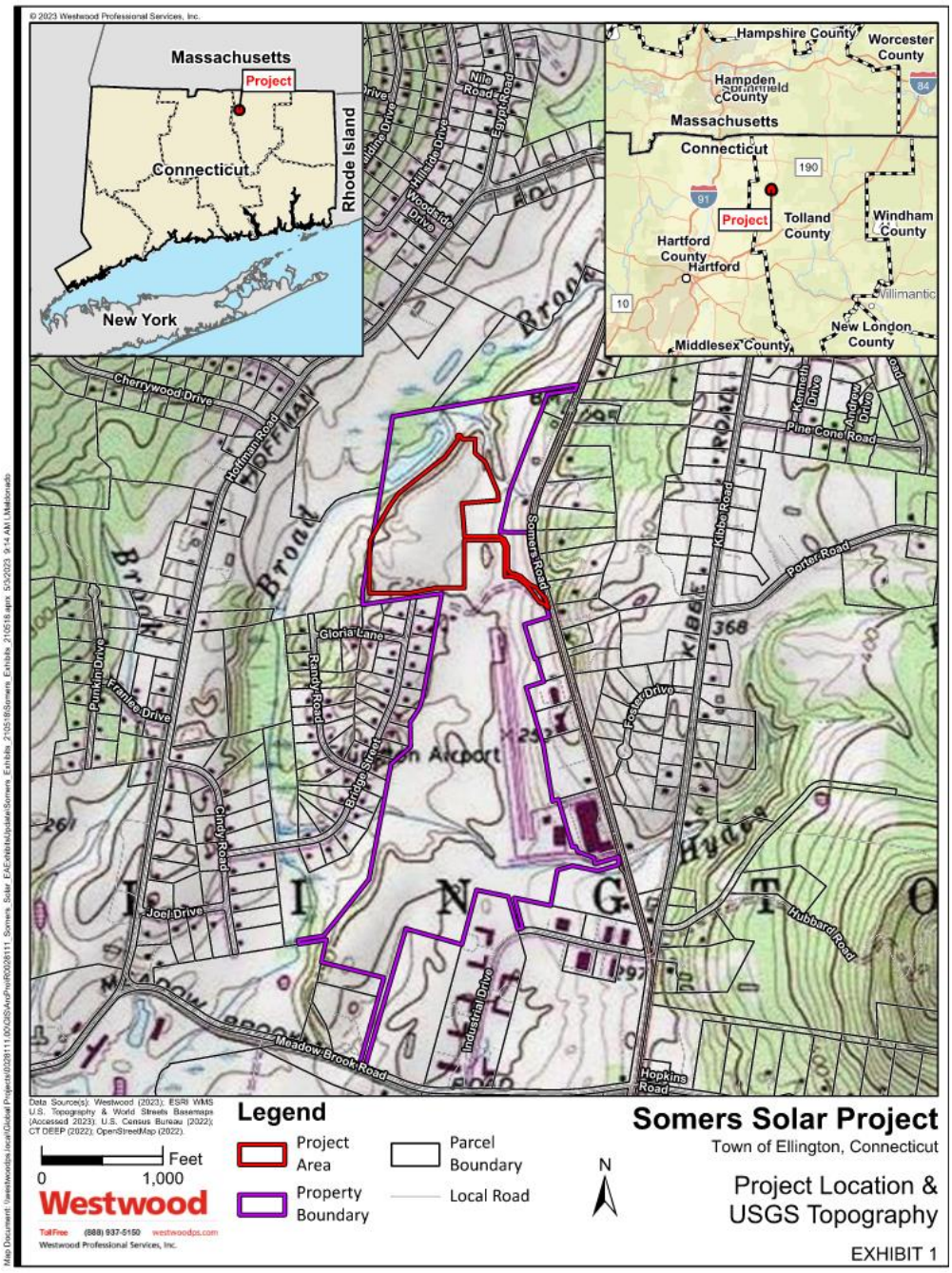
1. Site

The Project will be located on a 19.2 acre portion of the Site (the "Project Area"). The Site consists of a mixed use, including an airport facility with related development, open space, buildings, and impervious surfaces (the "Ellington Airport"), agricultural/cultivated crops, hay fields/grassland, and deciduous and evergreen wooded (mixed forest) areas. The Site is privately-owned and zoned Industrial (I) under the Town of Ellington's (the "Town") Zoning Regulations.

The surrounding land use is characterized by residential, commercial, agricultural, and industrial development, with Somers Road (State Route 83) to the east. Undeveloped land becomes more prevalent farther to the east beyond the commercial, industrial, and residential uses abutting Somers Road, while there are primarily

residential and agricultural areas in all other directions. The Ellington town center (intersection of State Route 286 and Main Street) is located approximately 1.5 miles south of the Site.

Figure 1, *Site Location*, depicts the location of the Site and surrounding area.



2. Electrical Connection

The Project's proposed electrical interconnection will be to an existing Eversource utility pole located along the Somers Road right-of-way near the existing driveway entrance to the Site. The existing driveway entrance will also be utilized for access to the Project from Somers Road. The interconnection will be performed in accordance with Eversource's technical standards and State of Connecticut, ISO-New England ("ISO-NE"), and Federal Energy Regulatory Commission ("FERC") requirements.

3. Community and Governmental Outreach

USS has been in communication with and has engaged State and Local regulators in the design and development of the Project. On December 2nd, 2022, USS sent the Town's Planning and Zoning Commission (the "Commission") its initial 4 MW AC site plan rendition. The Town responded on January 10th, 2023 with its comments. In response, USS downsized its array by 25% (1 MW AC) to cooperate with the Town and the local parachute group that utilizes the Ellington Airport for practice and landing. USS removed the entirety of the original southern portion of the 4 MW AC array, utilizing only the northern space for the array, while maintaining a 1,000 foot setback from the end of the existing runway.

Additionally, USS filed a Federal Aviation Administration study under the provisions of 49 U.S.C. § 44718. The study revealed that the array would have no substantial adverse impact on the safe and efficient utilization of the navigable airspace by aircraft and would not be a hazard to air navigation. USS provided the Town with the Federal Aviation Administration ("FAA") "No Hazard Determination" in response to their safety concerns.

USS notified all immediate abutters to the property regarding the proposed project on December 5, 2022 via certified mail, and again on August 8, 2023.

USS presented the downsized, 3 MW AC site plan to the Town during a meeting held on July 24, 2023 with the Commission. The Town responded with the same comments, as well as concerns regarding sound emission from inverters tied to the array.

See Appendix A, *Governmental and Public Outreach,* for additional information.

II. Legal Name and Address of Petitioner and Contact Information

The legal name of the Petitioner is USS Somers Solar, LLC. USS Somers Solar, LLC is a Connecticut limited liability company with its principal place of business in Fairfield, Connecticut. USS Somers Solar, LLC is a subsidiary of United States Solar Corporation ("US Solar") which maintains offices in Connecticut, Minnesota, Virginia and Massachusetts. US Solar develops, owns, and operates solar projects and seeks to make the benefits of solar more accessible. US Solar coordinates all Project details, including site acquisition, development, interconnection, permitting, finance, construction, operations, and maintenance.

Mailing Address: USS Somers Solar, LLC
2150 Post Road, Suite 505
Fairfield, CT 06824

Internet Address: www.us-solar.com

Correspondence and other communications concerning the Project are to be addressed to, and notices, orders and other papers may be served upon the following:

US Solar
Attn: Dan Csaplar
100 N 6th Street, Suite 410B
Minneapolis, MN 55403
dan.csaplar@us-solar.com

Lee D. Hoffman
Pullman & Comley, LLC
90 State House Square
Hartford, CT 06095
lhoffman@pullcom.com

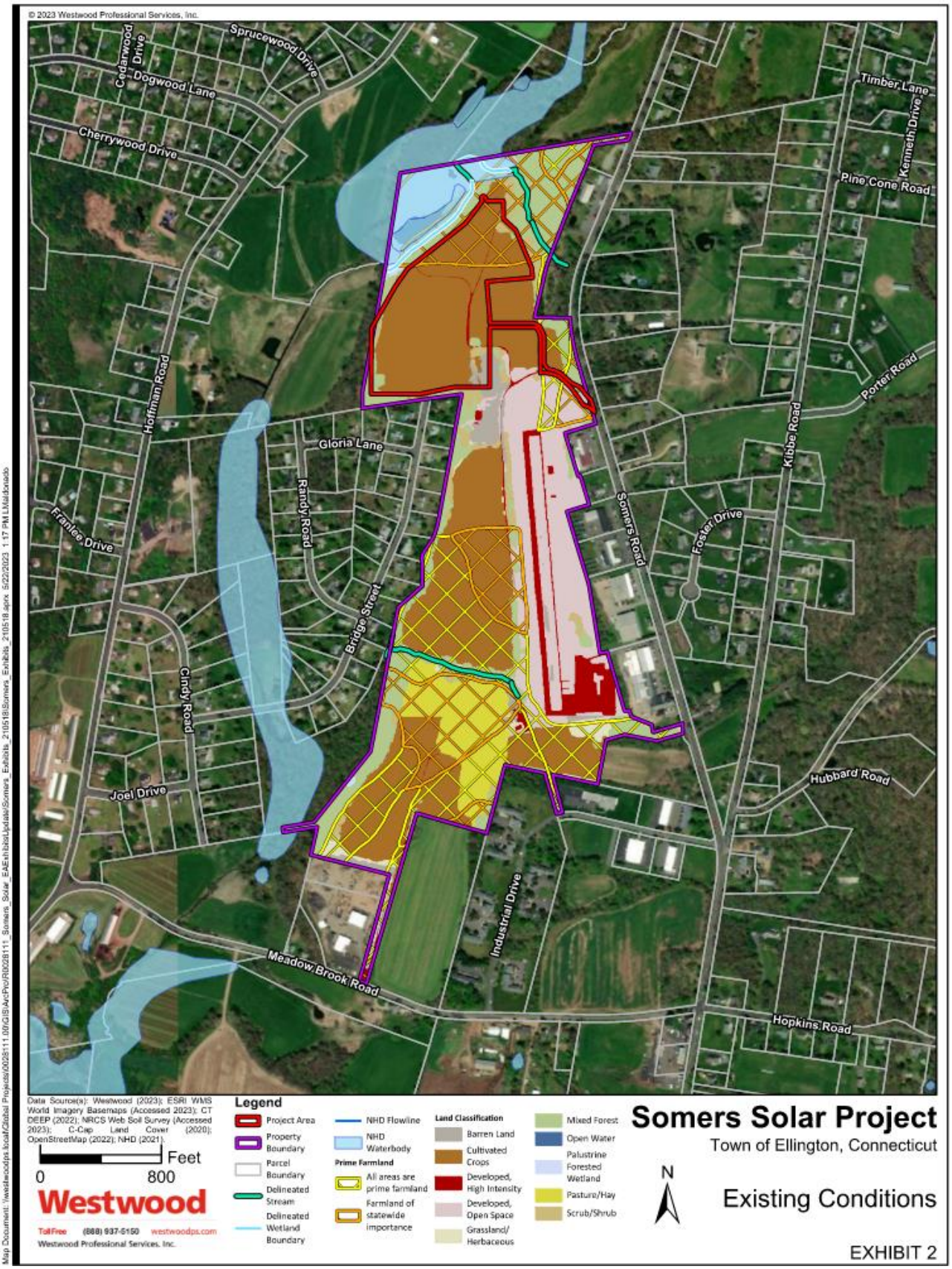
All of the listed individuals consent to electronic mailings of all Council and Petition-related correspondence.

III. Description of Proposed Project

A. Property Description

The Site is located on the western side of Somers Road (CT Route 83) and consists of the Ellington Airport, agricultural/cultivated crops, hay fields/grassland, and deciduous and evergreen wooded (mixed forest) areas. The Site is privately-owned and zoned Industrial (I) under the Town of Ellington's Zoning Regulations.

Overall, the Site gently slopes from the east to the west. There are steeper slope areas that are present in the wooded northeastern portion of the Site. The Project will be located within two existing agricultural fields north and west of the airport facility located on the Site and will occupy approximately 19.2 acres of predominantly cultivated crop and hay area. Within the northern Project Area, elevations range from approximately 255 feet AMSL along the eastern Project boundary near Somers Road to approximately 235 along the western and northwestern Project boundary near Broad Brook. Figure 2, *Existing Conditions*, depicts current conditions on the Site.


© 2023 Westwood Professional Services, Inc.
Sprucewood Drive
Cedarwood Drive
Dogwood Lane
Cherrywood Drive
Timber Lane
Kenneth Drive
Pine Cone Road
Porter Road
Hoffman Road
Gloria Lane
Randy Road
Somers Road
Kibbe Road
Foster Drive
Frankee Drive
Bridge Street
Cindy Road
Joel Drive
Hubbard Road
Industrial Drive
Meadow Brook Road
Hopkins Road
Legend
Project Area
Property Boundary
Parcel Boundary
Delineated Stream
Delineated Wetland Boundary
NHD Flowline
NHD Waterbody
Prime Farmland
All areas are prime farmland
Farmland of statewide importance
Land Classification
Barren Land
Cultivated Crops
Developed, High Intensity
Developed, Open Space
Grassland/ Herbaceous
Mixed Forest
Open Water
Palustrine Forested Wetland
Pasture/Hay
Scrub/Shrub
Data Source(s): Westwood (2023); ESRI WMS World Imagery Basemaps (Accessed 2023); CT DEEP (2022); NRCS Web Soil Survey (Accessed 2023); C-Cap Land Cover (2020); OpenStreetMap (2022); NHD (2021).
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800
Feet
Westwood
TollFree (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.
Somers Solar Project
Town of Ellington, Connecticut
N
Existing Conditions
EXHIBIT 2
Map Document: \\westwoodps.local\Global Projects\0028111.00\GIS\ArcPro\RI\20211_Somers_Solar_EAExhibitsUpdate\Somers_Exhibits_210518\Somers_Exhibits_210518.aprx 5/22/2023 1:17 PM LMaldonado

B. Proposed Project Description

The Project consists of the installation of over 7,000 photovoltaic modules and associated ground equipment and one (1) interconnection point. It is anticipated that the Project will have a useful life of thirty-five (35) years. Additional information, including proposed Development Drawings are provided in Appendix B, *Environmental Assessment*.

1. Solar Panels and Related Ground Equipment

As presently designed, this solar energy generating facility (the "Facility") will consist of approximately 7,074 Jinko Solar Eagle 72HM G6B photovoltaic modules, 18 Ginlong Solis-185k-EHV-5G-US inverters, one (1) switchboard and transformer pad, and approximately 1,300 linear feet ("lf") of new gravel access roads. There will be approximately 1,200 lf of underground medium voltage electrical cables connecting to one (1) service interconnection.

The Facility will be surrounded by a seven (7)-foot tall woven wire security fence. The northern and southern development areas will be individually fenced. The Facility will occupy approximately 19.2 acres within its perimeter fence lines. The array area will occupy a total of approximately 12 acres, including the open space between racks. The remaining area within the fence lines will be utilized for storm water and drainage facilities, any necessary transition grading, and general areas needed for operations and maintenance.

The leading edge of the panels will be approximately thirty-six (36) inches above the existing ground surface when they are at full tilt, which will provide adequate room for any accumulating snow to "sheet" off. Any production degradation due to snow build-up has already been modeled into the annual system output and performance calculations. The Petitioner does not anticipate the need for any snow removal operations, rather, the snow will be allowed to melt or slide off.

There will be approximately 1,200 lf of underground medium voltage electrical cables connecting to one (1) service interconnection. The underground alignment will follow the proposed Project access roads and the existing gravel access road extending to Somers Road The proposed electrical interconnection will be located near the Site's existing gravel entrance from Somers Road and will interconnect with Eversource's electrical system in the Somers Road right-of-way. The aboveground portion of this proposed interconnection will require the installation of pad mounted electrical switchgear equipment and three (3) new utility poles.

2. Service Life and Capacity Factor

The Facility's panels and inverters have an anticipated service life of thirty-five (35) years. Solar PV has an expected net AC capacity factor of approximately twenty-four (24) percent.

3. Site Access

The Facility will be accessed from the east, utilizing the existing gravel access road from Somers Road, which abuts the Site to the east. A gravel access road will be constructed to connect the array development areas to the existing gravel access road.

Improvements will be made as necessary to the existing access road within the Project Area. A new ±1,300-foot gravel road will be constructed to provide access into the Project Area for construction, service, and maintenance vehicles. Both the improvements to the existing access road and the new access road will require minimal grading and consist primarily of gravel resurfacing. The gravel access to the airport facilities will remain as currently configured following construction activities. See Figure 3, *Proposed Conditions* and Appendix B, *Environmental Assessment*.

4. Interconnection

The proposed electrical interconnection will be located near the Site's existing gravel entrance from Somers Road and will interconnect with Eversource's overhead electrical system in the Somers Road right-of-way. The proposed interconnection will require the installation of three (3) new utility poles and electrical switchgear equipment mounted on a ground level concrete pad adjacent to the Site's access driveway. From the ground mounted equipment, the interconnection will extend underground to the proposed solar fields with approximately 2,640 lf of underground medium voltage electrical cables. The underground alignment will follow the proposed Project access roads and the Site's existing gravel access road.

The interconnection will be performed in accordance with Eversource's technical standards and State of Connecticut, ISO-NE, and FERC requirements.

5. Construction Schedule and Phasing

Pending regulatory approvals, Project construction is anticipated to begin in the 2nd quarter of 2024 and will take approximately seven (7) months to complete. Construction activities within the Project Area will include minor tree clearing of less than 1 acre of trees and brush, installing erosion and sedimentation ("E&S") control measures, grading, incorporating stormwater basins and best management practices, racking and module installation, electrical trenching, landscape screening installation, and new access road development. Tree clearing beyond the fenced area will generally not be required to facilitate construction. Some minor tree and branch trimming outside of the fenced area may be necessary. Existing grades throughout the Project Area will generally remain except in areas of the stormwater management/E&S features and the grass berms, which will require some manipulation (cuts/fills) and regrading along with transitions to existing grades. It is anticipated that construction hours will be from 7am to 7 pm, Monday through Saturday. The Petitioner's preliminary construction plans are as follows:

Phase 1:

1. Identification of clearing and grading limits, delineation of sensitive areas and wetlands prior to construction. Installation of protection measures to ensure all wetlands are protected before the major construction occurs; and
2. Installation of perimeter E&S controls as identified by Project plans/approvals and any necessary site-specific modifications as identified on the Project plans.

Phase 2:

1. Completion of tree clearing, grubbing and topsoil stockpiling and installation of diversion berms and bypasses and temporary stormwater treatment facilities. Removal and disposal of demolition debris off-site in accordance with applicable laws;
2. Performance of earthwork, access road work, and initial seeding and stabilization of exposed soils not under construction for 30 days;
3. Construction/installation of permanent stormwater treatment facilities;
4. Installation of the racking posts, ground mounted solar array and electrical components;
5. After substantial completion of the installation of the solar panels and electrical components, completion of remaining site work, including any required landscape screening and security fencing around the array areas; and seeding and stabilization of all disturbed areas with permanent seed and mulch;
6. Completion of fine grading, permanent seeding and stabilization of all remaining disturbed areas; and
7. After the Project is stabilized, and upon receipt of necessary regulatory/local approvals, removal of the perimeter E&S controls.

6. Project Maintenance

Required maintenance of the Project will be minimal. It is anticipated that the unstaffed Facility will require routine maintenance of the electrical and mechanical equipment one (1) time per year. Annual maintenance will typically involve two (2) technicians for one to two days. Repairs will be made on an as-needed basis. Vegetation restoration within the Project Area is to be a CTDEEP-approved meadow grass mix and will include pollinator species. Mowing within the Project Area will be completed approximately two (2) to three (3) times a year to allow for establishment, growth, and germination of the meadow seed mix. The Petitioner does not anticipate the need for any snow removal operations, rather, the snow will be allowed to melt or slide off.

7. Project Decommissioning

In accordance with the terms of the Petitioner's lease with the subject landowner, at the end of the Project's lifespan, the Petitioner will fully decommission and remove the Project from the Site. Once such clearing and removal activities have been completed, the Petitioner will restore the Site to its original condition as nearly as possible.

IV. Project Benefits

If approved, the Project will provide a wide range of environmental and economic benefits to the State of Connecticut and the Town. The Project will provide the State's electrical system with additional generating capacity that will help to meet demand using renewable energy and will contribute to grid stability. The Project will generate the majority of its power during the summer electrical peak and will provide peaking resources when the State has its greatest need. This reduction in energy demand during peak usage will, in turn, decrease energy costs for ratepayers statewide.

The Project will also represent a source of both direct and indirect revenue contribution to the community. The Petitioner anticipates using local labor, as practical, for construction and installation. As such, the Project will provide municipal tax revenues to the Town, with no additional burden on Town services or infrastructure. Additionally, by producing clean, renewable energy, the Project will help the state to offset its carbon footprint and meet its progressive renewable energy targets.

V. Potential Environmental Effects

As demonstrated below, the Project, if approved, will not pose any material public health or safety concerns, nor will it have an undue adverse effect on the existing environment, wildlife, and ecology. No wetlands, watercourses, or vernal pools will be directly impacted by the development of the Project, nor will the scenic, historic, and recreational resources located within the vicinity of the Project Site be affected thereby.

A. Public Health and Safety

The Project will meet or exceed applicable local, state, national, and industry health and safety standards and requirements related to electric power generation. The Facility will not consume any raw materials, will not produce any by-products and will be unstaffed during normal operating conditions. No potable water use(s) or sanitary discharges are planned in connection with the operation of the Facility. During construction and post-construction operations and maintenance, Project workers and personnel will follow all health and safety standards applicable to solar energy generating facilities.

The Facility will be enclosed by a seven (7)-foot tall woven wire fabric fence. The main entrance to the Facility will be gated, limiting access to authorized personnel only. USS will coordinate with regional emergency response personnel to develop an appropriate means for accessing the Facility in case of emergency. The system will be remotely monitored and will have the ability to remotely de-energize in case of an emergency.

B. Local, State, and Federal Land Use, Conservation, and Development Plans

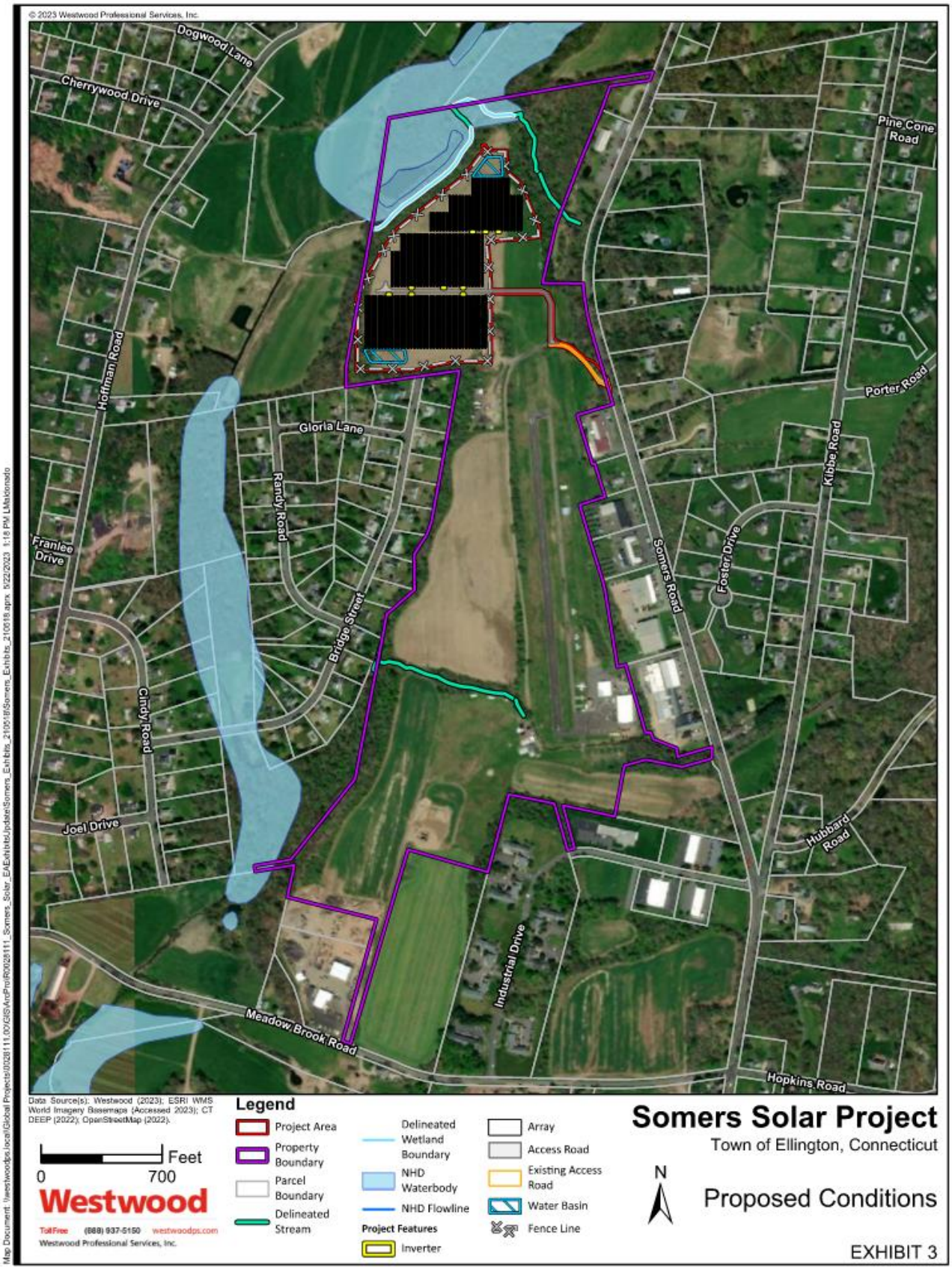
The Project is consistent with local, State and Federal policies and will support the State's energy goals by developing a renewable energy resource while not having a substantial adverse environmental effect. Although local land use requirements do not apply to this Project, it has been designed to meet the intent of the Town's land use regulations, to the extent feasible. The Site is located within the Town's Industrial (I) Zone.

Additionally, the Project supports the Town's goal to create a sustainable and resilient community. The Town's 2019 Plan of Conservation & Development Chapter 2 "seeks to create a dynamic balance between social wellbeing, economic opportunity, and environmental quality of the community within the context of the authority granted to the Planning and Zoning Commission under Connecticut State law." The Project will benefit the local community by improving electrical service and grid stability for existing and future development in the Town through the availability of enhanced local generating capacity that does not rely on the congested regional electrical transmission networks.

C. Ecological, Vegetation, Wildlife Habitat, and Natural Diversity Database and Endangered Species

This section provides an overview of the current environmental conditions at the Site and an evaluation of the Project's potential impacts on the environment. The results of this assessment demonstrate that the Project will comply with CTDEEP's air and water quality standards and will not have an undue adverse effect on the existing environment and ecology.

Refer to Figure 3, *Proposed Conditions,* for a depiction of the Project and its compatibility with the Site resources discussed herein.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Dogwood Lane
Cherrywood Drive
Pine Cone Road
Hoffman Road
Gloria Lane
Porter Road
Kibbe Road
Randy Road
Franlee Drive
Somers Road
Foster Drive
Bridge Street
Cindy Road
Joel Drive
Hubbard Road
Industrial Drive
Meadow Brook Road
Hopkins Road
Data Source(s): Westwood (2023); ESRI WMS World Imagery Basemaps (Accessed 2023); CT DEEP (2022); OpenStreetMap (2022).
Legend
Project Area
Property Boundary
Parcel Boundary
Delineated Stream
Delineated Wetland Boundary
NHD Waterbody
NHD Flowline
Project Features
Inverter
Array
Access Road
Existing Access Road
Water Basin
Fence Line
Feet
0
700
Westwood
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.
Somers Solar Project
Town of Ellington, Connecticut
N
Proposed Conditions
EXHIBIT 3
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1. Habitats

Five (5) habitat types (vegetative communities) have been identified on the Site and are fully described in the attached Appendix B, *Environmental Assessment (EA) Report*. The varied habitats identified in the EA are: Active Agriculture/Cultivated Crops, Grasslands, Upland Forest – Scrub-Shrub Edge Ecotones, Wetland Forest, and Developed. As the following demonstrates, the Project's expected impacts to existing habitats are minimal.

Active Agriculture/Cultivated Crop habitat, located throughout the Site, is generally composed of row crops (active corn production) with some areas fallow. During the site review in March 2021, the corn areas were unvegetated while the fallow fields were vegetated with mostly cool season grasses and forbs. The majority of the Project is located in areas that are currently active agriculture/cultivated crop. Overall impacts to this habitat type will be minimized since open field meadow vegetation (cool and warm season grasses) will replace the active agricultural areas and will subsist in between the proposed arrays following construction. The proposed vegetation will be subject to similar vegetation management practices as existing management of the fallow field/hayfield portions of this habitat. The proposed vegetation maintenance will be less intrusive than the existing row crop/agricultural area management.

Grassland communities are located around the airfield portion of the Site. This area is actively managed by the airport to maintain low growing grassland vegetation. These communities are mostly a mix of warm and cool season grasses and forbs. Weed species such as red clover (*Trifolium pratense*), common and English plantain (*Plantago major* and *P. lanceolata*), and sheep sorrel (*Rumex acetosella*) are common. The Project will be developed within areas of this habitat. However, the impacts should not be significant since the post-construction vegetation will consist of warm and cool season grasses and forbs and will be subject to vegetation management practices similar to the existing management of this habitat.

Upland Forest – Scrub-Shrub Edge Ecotones occur along the majority of the Project Boundary, mainly along the edges of the agricultural and grassland fields. Additionally, some small upland, forested – scrub-shrub upland areas are centrally located within the parcel. Upland species observed include red oak (*Quercus rubra*), red maple (*Acer rubrum*), cottonwood (*Populus spp.*), and Big-toothed aspen (*Populus grandidentia*) canopy tree species. The invasive plant species observed includes multiflora rose (*Rosa multiflora*) and oriental bittersweet (*Celastrus orbiculatus*), found primarily along the tree line. Approximately one (1) acre of centrally located habitat will be removed during Project development. Additional impacts to this habitat type will be minimal and will not likely result in a significant negative impact to Site resources.

Wetland Forest habitat containing Broad Brook is present in the extreme north and western sides of the property, most of this system extends off property to the west and northwest. The predominant wetland vegetation observed includes red maple (*Acer rubrum*), cottonwood (*Populus spp.*), big-toothed aspen (*Populus grandidentia*), spicebush (*Lindera benzoin*), sensitive fern (*Onoclea sensibilis*), skunk cabbage (*Symplocarpus foetidus*), and

marsh marigold (*Caltha palustris*). Hydes Brook, which flows east to west, is found on the southern section of Site. All of this habitat is outside of the Project development area and will not be impacted by the Project.

Developed Areas consist of areas where pavement, gravel, exposed earth, or buildings are present. Developed areas are centrally located within the Site and within the airport development area. The Project would have no substantial adverse impact on developed areas of the Site.

2. Wildlife

While a diversity of habitat is present on the Site, in general, the size of these habitats and surrounding development characteristics creates a limiting factor for utilization by wildlife. Despite their relatively small size, the complexity of habitats on Site do provide higher quality habitat for species that are more tolerant of human disturbance, habitat fragmentation and 'edge' effects. Generalist wildlife species, including several songbirds and mammals such as raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), grey squirrel (*Sciurus carolinensis*), Virginia opossum (*Didelphus virginiana*), and eastern chipmunk (*Tamias striatus*), could be expected to use these areas on the Site. Additional discussion regarding rare, threatened, and endangered ("RTE") species is included in Section 3 below.

3. State Listed/Threatened Species

a. Natural Diversity Database

The CTDEEP Natural Diversity Database ("NDDB") program performs environmental reviews to determine the impact of proposed development projects on state listed species and to help landowners conserve the state's biodiversity. CTDEEP also developed mapping to serve as a pre-screening tool to help applicants determine if there are potential project-related impacts to state-listed species.

In conformance with CTDEEP and Council requirements, Westwood Surveying and Engineering, P.C. ("Westwood"), on behalf of the Petitioner, submitted a Request for NDDB State Listed Species Review to DEEP on June 11, 2021. A response from DEEP was received on June 25, 2021 stating that records indicate that two State-listed Special Concern species exist in the vicinity of the Site: Eastern box turtle (*Terrapene carolina carolina*) and Savannah sparrow (passerculus sanwichensis). Copies of USS's submission and CTDEEP's response are provided in Appendix B, *Environmental Assessment.* A renewal of the original NDDB Determination was submitted and an updated response from CTDEEP was received on May 12, 2023 stating that records indicate that only one State-listed Special Concern species exists in the vicinity of the site: Savannah sparrow (passerculus sanwichensis).

Savannah sparrow: CTDEEP identified the Site and Project as potential habitat for the Savannah sparrow, a state special concern species, and CTDEEP is recommending site management strategies to promote the development of suitable habitat. Savannah sparrows are grassland birds that require open grassy areas to forage,

breed and nest with the species being most sensitive to disturbance between April 1 – August 30. As a result of CTDEEP's correspondence, Westwood conducted a site study on June 29, 2021 to determine the presence/absence of Savannah sparrows within the areas to be disturbed by the Project. The site survey did not identify any Savannah sparrows within the proposed Project limits. As one of the site management strategies, CTDEEP recommended utilizing several warm season grass species to promote development of suitable grassland habitat. Due to the potential growing height of the grasses and the interference with the proposed arrays, planting of these recommended species would need to occur outside of the array operation areas. The Petitioner will look to implement the recommended site management recommendations where possible. This will include utilizing meadow grass seed mix within the array areas that is compatible with the solar operation to promote potential development of Savannah sparrow habitat as well as pollinator species.

b. Natural Diversity Database

Westwood, on behalf of the Petitioner, submitted an Information for Planning and Consultation (IPaC) request using U.S Fish & Wildlife Service's ("USFWS") online project planning tool on June 1, 2021 and updated requests on January 12, 2022 and May 18, 2023. The most recent IPaC results listed two species further discussed below.

The northern long-eared bat ("NLEB"), *Myotis septentrionalis,* is a federally-listed endangered species (updated from threatened status on November 30, 2022) known to occur in the vicinity of the Site. The NLEB's range encompasses the entire State of Connecticut, and suitable NLEB roost habitat includes trees (live, dying, dead, or snag) with a diameter at breast height ("DBH") of three (3) inches or greater.

The *Northern long-eared bat areas of concern in Connecticut to assist with Federal Endangered Species Act Compliance Map* (March 6, 2019) was reviewed to determine the locations of any known maternity roost trees or hibernaculum in the state. This map indicates that there are currently no known NLEB maternity roost trees in Connecticut. The nearest NLEB habitat resource to the Site is located in East Granby, approximately 13 miles to the west.

The Project will result in the removal of several trees with greater than three (3) inches DBH. Since tree removal activities can potentially impact NLEB habitat, Westwood completed a determination of compliance with Section 7 of the Endangered Species Act of 1973 ("ESA") for the Project. In accordance with the USFWS's criteria for assessing NLEB, the Project will not likely result in an adverse effect or incidental take of NLEB and does not require a permit from USFWS. A letter confirming compliance was received by USFWS on January 9, 2020. Thus, no further consultation with USFWS is required.

The Monarch butterfly, *Danaus plexippus,* is a federally-listed candidate species that has the potential to occur within the Project's vicinity. Candidate species are those for which the USFWS has sufficient information on their biological status and threats to propose them as endangered or threatened under the ESA, but for which

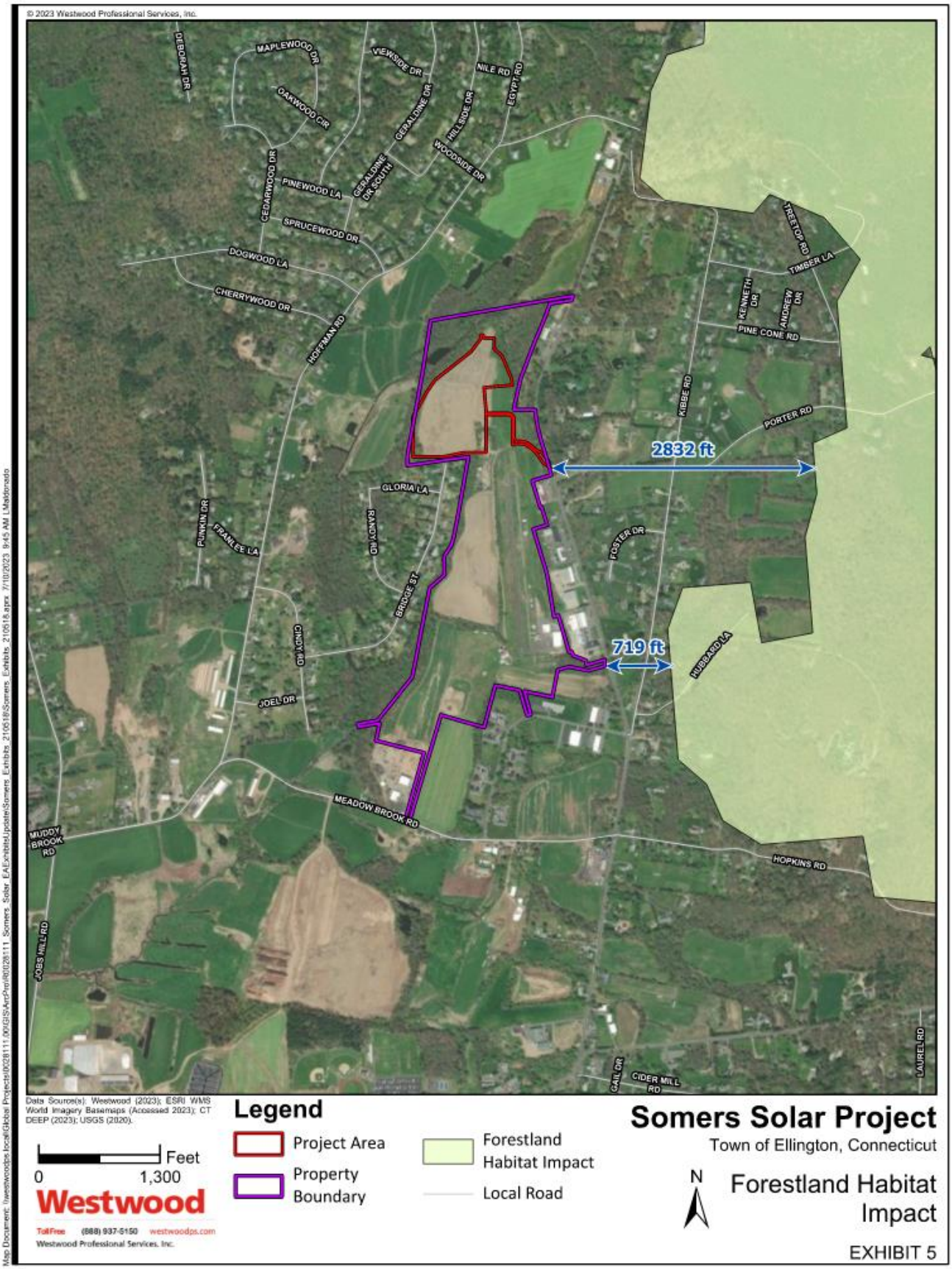
development of a proposed listing regulation is precluded by other higher listing activities. Candidate species receive no statutory protection under the ESA. The USFWS encourages cooperative conservation efforts for these species because they are, by definition, species that may warrant future protection under the ESA. While not required, the Project's incorporation of grasses and pollinator species within the array areas will provide potential opportunities for Monarch butterfly compatible habitat.

Additional information and related agency correspondence is included in Appendix B, *Environmental Assessment.*

4. Core Forest

Westwood evaluated the size and extent of the contiguous interior forest habitat ("core forest") present within and adjacent to the Project using CTDEEP's Bureau of Natural Resources screening tool "Forestland Habitat Impact Map". Based on the review of the database mapping, core forest areas are not located on the Site or within the Project Area. The closest mapped core forest is more than 2,800 feet east of the proposed development area, see Figure 5, *Forestland Habitat Impact*. This is consistent with Westwood's site analysis, which indicates that no core forest will be impacted by the Project.

In accordance with CGS 16-50k(a) and based on the proposed energy generating capacity of the Project (>2.0 MW), correspondence was sent to the CTDEEP Bureau of Natural Resources in March of 2022 documenting the results of the Site visit and the assessment that the Project will not materially affect core forest. Response from the Bureau of Natural Resources confirmed that core forest will not be impacted by the Project.


© 2023 Westwood Professional Services, Inc.
2832 ft
719 ft
Legend
Project Area
Property Boundary
Forestland Habitat Impact
Local Road
Somers Solar Project
Town of Ellington, Connecticut
Forestland Habitat Impact
EXHIBIT 5
Feet
0
1,300
Westwood
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.
Data Source(s): Westwood (2023); ESRI WMS World Imagery Basemaps (Accessed 2023); CT DEEP (2023); USGS (2020).
N
DEBORAH DR
MAPLEWOOD DR
VIEWSIDE DR
NILE RD
EGYPT RD
OAKWOOD CIR
GERALDINE DR
HILLSIDE DR
WOODSIDE DR
CEDARWOOD DR
PINEWOOD LA
GERALDINE DR SOUTH
SPRUCEWOOD DR
DOGWOOD LA
CHERRYWOOD DR
HOFFMAN RD
TREETOP RD
TIMBER LA
KENNETH DR
ANDREW DR
PINE CONE RD
KIBBE RD
PORTER RD
GLORIA LA
PUNKIN DR
FRAMLEE LA
CANDY LN
FOSTER DR
BRIDGE ST
CINDY LN
JOEL DR
HUBBARD LA
MEADOW BROOK RD
MUDDY BROOK RD
HOPKINS RD
JOBS MILL RD
GAIL DR
CIDER MILL RD
LAUREL RD

5. Soils and Geology

Once vegetative clearing and topsoil stripping activities are completed, grading for the proposed stormwater management basins and swales will occur. Any stripped topsoil will be stockpiled and will be re-spread on the site during re-vegetation of the disturbed areas. The construction of the stormwater management basins will be generally balanced from a cut/fill basis so that the excavated materials generated from the pool areas will be utilized to construct the perimeter berms of the basins and the proposed stormwater berms along the western property lines. The grass berms will assist in directing stormwater to the proposed swales and basins. Additionally, minor site grading may be necessary in various areas across the Project Area to create stormwater drainage swales and to transition any proposed grades into existing Site grades. The reuse of this material onsite will result in a balanced site resulting in approximately zero (0) cubic yards net cut/fill for the Site. This will reduce the amount of truck traffic entering and leaving the site.

Once the proposed stormwater best management practices are installed, minimal grading is required for construction of the remainder of the Project. Some minor grading may be required in connection with installation of the gravel access road and concrete equipment pads. See the Project Plans in Appendix B, *Environmental Assessment,* for site grading and construction plans.

Surficial materials on and within the vicinity of the Project are comprised primarily of sand and gravel overlying sand. The surficial materials along the Broad Brook corridor are described as alluvium overlying undifferentiated coarse deposits. Soils located within the Project are identified as the Udorthents-Pits complex, Manchester gravelly sandy loam, and Ellington silt loam. Udorthents-Pit complex is a moderately well drained gravelly sand. Manchester gravelly sandy loam is an excessively drained sandy and gravelly glaciofluvial deposit derived from sandstone, shale, and/or basalt. Ellington silt loam is a moderately well drained coarse-loamy eolian deposit over sandy and gravelly glaciofluvial deposits derived from sandstone and shale and/or basalt.

Bedrock geology beneath the Site is identified as Portland Arkose. Portland Arkose is described as a reddish-brown to maroon micaceous arkose and siltstone and red to black fissile silty shale. The Petitioner does not anticipate encountering bedrock during Project development.

All exposed soils resulting from construction activities will be properly and promptly treated in accordance with the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control*.

6. Prime Farmland Soils

In accordance with the Code of Federal Regulations, CFR Title 7, part 657, farmland soils include land that is defined as prime, unique, or farmlands of statewide or local importance based on soil type. The USDA NRCS defines Prime Farmland as soils most suitable for producing food, feed, fiber, forage, and oil seed crops.

According to the Connecticut Environmental Conditions Online Resource Guide, the Site contains Prime Farmland Soils located primarily within the southern portion of the parcel with small areas extending into the Project Area. The Site also contains several areas designated as Statewide Important Farmlands which are located in the northern, northeastern, and southern portions of the parcel. No Locally Important Farmland soils are mapped on the Project Site. See Figure 2, *Existing Conditions*, for farmland soils mapping.

The northern half of the northern Project Area and the majority of the southern Project Area has remained undeveloped and has been used as agricultural land for over 80 years. Development within the central portion of the Site, including the southern portion of the northern Project Area, began between 1960 and 1965 and correlates with the construction of the runway and related buildings on the Site. The central portion has been used for storage, soil borrow, and non-agricultural uses since the early 1960s and buildings have been present in the central portion of the Site for the past 35 years. These continued activities have subjected the majority of the Project Area to compaction from equipment and vehicles.

The southeastern portion of the southern Project Area extends into an area of soil mapped as Statewide Important Farmland. The northernmost portion of the northern Project Area extends into an additional area of mapped Statewide Important Farmland soil.

Recognizing that the Project has a useful life and could be considered temporary in nature, the Petitioner has proposed using minimally intrusive methods for construction of the Facility. The use of a ground-mounted racking system for the installation of the solar panels and associated equipment minimizes the need for substantive grading. Along the northern Project Area's eastern fence line, the construction of a stormwater drainage swale and access road will require minor excavation and grading within an area mapped as Prime Farmland Soils. The stormwater management controls allow the project to be in compliance with CTDEEP's stormwater and erosion and sediment control requirements. Topsoil removed from these areas will be segregated from underlying horizons and either stockpiled or spread elsewhere as top dressing for reestablishing vegetation. No topsoil will leave the Site.

Additionally, the proposed seed mixture to be utilized for revegetation will contain a mix of native meadow grass and pollinator species to promote the preservation and creation of pollinator habitats. Planting pollinator-friendly vegetation in solar farms provides multiple ecological benefits to stakeholders and can provide habitat diversity, help nearby agricultural land to be pollinated, recharge groundwater, and reduce erosion. In addition to the use of pollinator seed mixtures, the Petitioner is proposing the use of rotational sheep grazing and beehives to offset the impacts to Prime Farmland and Farmland of Statewide Importance. At the end of the Facility's life cycle, removal of the installed equipment will allow the potential return of the property to agricultural use. The proposed implementation of these design strategies demonstrates that the Project will not materially affect Prime Farmland and Farmland of Statewide Importance Soils.

In accordance with CGS §16-50k(a), the Petitioner initiated consultation with the Connecticut Department of Agriculture ("DOA") in March of 2022 to provide Project details and discuss the presence of Prime Farmland Soils on the Site and within the Project footprint. On October 14, 2022, the Petitioner revised the initial outreach letter to include a grazing plan and sent it to the DOA and is awaiting a written response from the agency. The grazing plan proposed the potential use of rotational sheep grazing and the use of pollinator seed mixtures and beehives to offset impacts to Prime Farmland and Farmland of Statewide Importance.

Table 1, *Farmland Soils Assessment and Impacts Table* provided below details the amount of mapped farmland soils located on the Site parcel and the proposed impact from the Project.

Table 1 Farmland Soils Assessment and Impacts Table

Farmland Soil Classification	Total Area within 127-acre Site Parcel (acre +/-)	Impacted Area within Project Limits (acre +/-)
Prime Farmland Soils	33.52	0.09*
Farmland of Statewide Importance	29.94	4.28

*indicated impact area is an existing gravel access road for the airport facility that will be utilized for access to the proposed development

See Figure 2, *Existing Conditions,* in Section III.A. Property Description above for mapping of the farmland soils in relation to the proposed development area. Additional information, including the correspondence with the DOA, is contained in Appendix B, *Environmental Assessment*. In addition, the DOA sent its analysis of the situation to the Council on August 2, 2023.

D. Wetlands and Vernal Pools

Portions of one (1) wetland, two (2) named watercourses (Hydes Brook and Broad Brook), and one (1) unnamed watercourse were identified on or proximate to the Site during a field inspection and wetland delineation assessment ("Assessment") completed on March 25, 2021. The purpose of the Assessment was to determine the presence or absence of regulated wetlands or watercourses under CGS Section 22a-35 through 22a-45 as well as Waters of the U.S. as defined under Section 404 of the Federal Clean Water Act. All of the wetlands and watercourses are outside of the proposed Project development area. The results of the field delineation are summarized below, and additional information, including the *Wetland and Watercourse Assessment Report,* is provided in Appendix B, *Environmental Assessment*. The locations of these resources are also depicted on the previously present Figure 2, *Existing Conditions*.

2B Series Watercourse and Wetland are located in the northern section of the Site in the wooded area. The 2B-Series consists of an unnamed watercourse that feeds into Broad Brook and the adjacent off-site wetland that flows north to south. The unmanned watercourse had no watercourse flow present at the time of the survey and the streambed was mostly dry. The streambed substrate appeared to be largely comprised of sandy substrate. The

channel was observed to be 1-3 feet wide and only marginally channelized into the floor of the adjacent upland forest. The predominant wetland vegetation observed included red maple, cottonwood, big tooth aspen, Spicebush, sensitive fern, skunk cabbage, and marsh marigold. The assessment concluded that the wetland is predominantly a forested wetland and potentially extends to the north and northwest away from the project development area. Soils for this wetland are mapped as Ellington silt loam, 0 to 5 percent slopes which were consistent with Site soil observations.

B-Series Watercourse is located in the southern section of Site, south of the Project area, and consists of Hydes Brook which flows east to west. The streambed substrate consisted largely of sand and gravel with small to large cobbles. The bank was majority unvegetated with a steep drop from the top of the bank to the top of the water. Adjacent vegetation included red oak, red maple, cottonwood, and big tooth aspen. Soil mapped for this area is Manchester gravelly sandy loam, 3 to 15 percent slopes which is consistent with Site soil observations. No wetland areas were found along the edges of this watercourse.

No wetlands or watercourses will be directly impacted by the Project's construction.

The wetland resource areas were assessed for indications of vernal pool resources. Based on a lack of seasonally flooded areas observed, it does not appear that any potential vernal pool breeding habitat exists on the Site within proximity to the Project Area. Therefore, the Project will not result in any impacts to vernal pool resources.

E. Water Resources and Stormwater Management

1. Floodplain Areas

Westwood reviewed the United States Federal Emergency Management Agency ("FEMA") Flood Insurance Rate Maps ("FIRM") for the Site. A FIRM is the official map of a community on which FEMA has delineated both the special hazard areas and risk premium zones applicable to the community.

FEMA has completed a study to determine flood hazards for the Site and Project vicinity and floodplain mapping is contained on FIRM PANEL #0901580005C, dated February 5, 1997. This FIRM with an overlay of the approximate Site boundary is included in Appendix B, *Environmental Assessment*. A small area in the northwestern portion of the Site is within a FEMA Zone AE flood hazard zone. A FEMA Zone AE flood hazard is a 100-year flood hazard with base flood elevation determined. No preliminary or pending FEMA changes are proposed within the Project Area. This depicted floodplain area borders the Project development area to the northwest. Based on the analysis completed to date, the Project is outside the influence of 100-year floodplains and will have no effect on the resources. No special considerations or precautions relative to flooding are required for the Project.

2. Groundwater

Groundwater underlying the Site is classified by CTDEEP as "GA". This classification indicates that groundwater within the area is presumed to be suitable for human consumption without treatment. Based upon a review of available CTDEEP mapping, the Site is not located within a mapped preliminary or final Aquifer Protection Area.

The Project will have no adverse environmental effect on ground water quality.

3. Surface Water

Based upon a review of CTDEEP mapping, the majority of the Site is located in the Major Drainage Basin 4 (Connecticut River), Regional Basin 42 (Scantic River), and Broad Brook Sub Regional Drainage Basin 4206 (Broad Brook). The northern portion of the Site, including the majority of the Project Area, is located in Local Drainage Basin 4206-00-1, while the southern portion of the Site is located in Local Drainage Basin 4206-01-1.

Based upon CTDEEP mapping, two (2) named watercourses (Broad Brook and Hydes Brook) and one (1) unnamed watercourse (tributary to Broad Brook) are in proximity to the Site. The Site's watershed area encompasses approximately 11 square miles that generally slopes to the west. Broad Brook flows southwest to the north and west of the Project Area. The unnamed tributary to Broad Brook, located northeast of the Project Area, flows to the north and merges into Broad Brook north of the northern Project Area. Hydes Brook flows west through the Site, south of the southern Project Area. Hydes Brook merges with Broad Brook in the southwest corner of the Project Boundary. All three watercourses are classified by CTDEEP as Class A.

The Project will have no adverse environmental effect on surface water quality.

4. Stormwater Management

The Project has been designed to meet the current version of the *2004 Connecticut Stormwater Quality Manual* and CTDEEP's *General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, Appendix I, Stormwater Management at Solar Array Construction Projects*, issued December 30, 2020. The requirements include having stormwater practices to infiltrate 1 inch of runoff for the site and to control the post-development peak discharge rates. Gravel access roads and transformer pads will be included in the effective impervious cover when calculating the Water Quality Volume. Solar panels are not considered impervious cover if the post-construction slopes are less than 15% and proper stabilization practices are put in place. Any increases in stormwater runoff within the Project Area, including those resulting from CTDEEP's on-Site soils Hydrologic Soil Group reduction requirements, will be mitigated through the installation of stormwater management basins and/or other approved best management practices ("BMPs").

See Figure 3, *Proposed Conditions* and the Project Plans included in Appendix B, *Environmental Assessment* for additional information. For more detail regarding stormwater management, please refer to Appendix C, *Stormwater Management Report*.

Portions of the Project Area that will be cleared and grubbed during construction will be stabilized with a low growth meadow seed mix, New England semi-shade grass and forbs mix or equal. To safeguard water resources from potential impacts during construction, the Petitioner is committed to implementing protective measures in the form of a Stormwater Pollution Control Plan ("SWPCP") to be finalized and submitted to the Council, pending approval by CTDEEP Stormwater Management. The SWPCP includes monitoring of established E&S controls that will be installed and maintained in accordance with the 2002 *Connecticut Guidelines for Soil Erosion and Sediment Control*. The Petitioner will also apply for a *General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities* from CTDEEP. Therefore, with the incorporation of adequate protective measures, stormwater runoff from Project development will not result in an adverse impact to water quality associated with nearby surface water bodies.

F. Air Quality

The Project Area is currently undeveloped and as such, no air emissions are generated. Due to the nature of a solar energy generating facility, no air emissions will be generated during operations and, therefore, the operation of the Project will have no adverse effects on air quality and no permit is required. The existing airport operation, and the associated air emissions related to the airport, occurring on other portions of the Site, will remain unchanged with the proposed development.

Temporary, potential, construction-related mobile source emissions will include those associated with construction vehicles and equipment. Any potential air quality impacts related to construction activities will be temporary and will be controlled by appropriate mitigation measures. Mitigation measures would include, but not be limited to, 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 will meet the latest standards for diesel emissions, as prescribed by the United States Environmental Protection Agency and USS will consider reducing exhaust emissions by utilizing effective controls.

G. Historical and Archaeological Resources

EAC/Archaeology, Inc. ("EAC/A") was contracted by Westwood on behalf of the Petitioner to complete cultural resources reconnaissance and consultation for the Project with the Connecticut State Historic Preservation Office ("SHPO"). The work completed by EAC/A complies with the Environmental Review Primer for Connecticut's Archaeological Resources and the Project Review Process set out by SHPO.

EAC/A, on behalf of the Petitioner, submitted Project and Site historic/cultural information, including a Cultural Resources Reconnaissance Report, dated June 14, 2021, to SHPO for agency review and comment on June 28, 2021. Comments were received from SHPO on July 30, 2021 which recommended the completion of an archaeological reconnaissance survey in areas that were determined to retain moderate potential to contain intact archaeological deposits in the subsoil as well as a refined analysis of the potential direct and indirect Area of Potential Visual Effects ("APE-Visual") impacts resulting from the proposed Project.

In October of 2021, on behalf of the Petitioner, EAC/A completed an Archaeological Identification Survey and Built Environment Reconnaissance Study. The archaeological survey consisted of conducting 258 shovel test pits ("STPs") within a 34-acre area of the Project LOD. The Built Environment Study utilized an APE-Visual defined for the project which included 182 acres. No prehistoric material was recovered, and no archaeological sites were identified by the archaeological survey.

The archaeological survey included the excavation of 258 STPs and photo-documentation. It documented shallow soil profiles consistent with past stripping and soil deflation. An artifact assemblage of 45 artifacts was recovered from 30 test locations. The assemblage was primarily non-diagnostic container glass fragments and overall was consistent with field scatter. No prehistoric material was recovered. No archaeological sites were identified.

The Built Environment Study identified six structures within the APE-Visual which were greater than 50 years in age. One structure located at 368 Somers Road was determined to have no clear line of sight and the remaining five structures located at 360 Somers Road, 381 Somers Road, 389 Somers Road, 403 Somers Road, and 406 Somers Road were examined and determined to have been extensively altered through time and did not retain integrity. No resources meeting National Register criteria of eligibility were identified by the Reconnaissance Study.

Based on the findings of these studies, there are no archaeological or historic resources potentially impacted by the proposed Project, and no further cultural resources study is recommended. The Archaeological Identification Survey and Built Environment Reconnaissance Study, dated December 2, 2021, was submitted to SHPO on December 14, 2021. Response from SHPO was issued on January 20, 2022. SHPO concurs with the findings that no additional archaeological testing of the Project Area is warranted, and no historic properties will be affected by the proposed solar development.

Copies of the SHPO correspondence, Cultural Resources Reconnaissance, and Archaeological Identification Survey and Built Environment Reconnaissance conducted for the Project are included in the report and related appendices of Appendix B, *Environmental Assessment*.

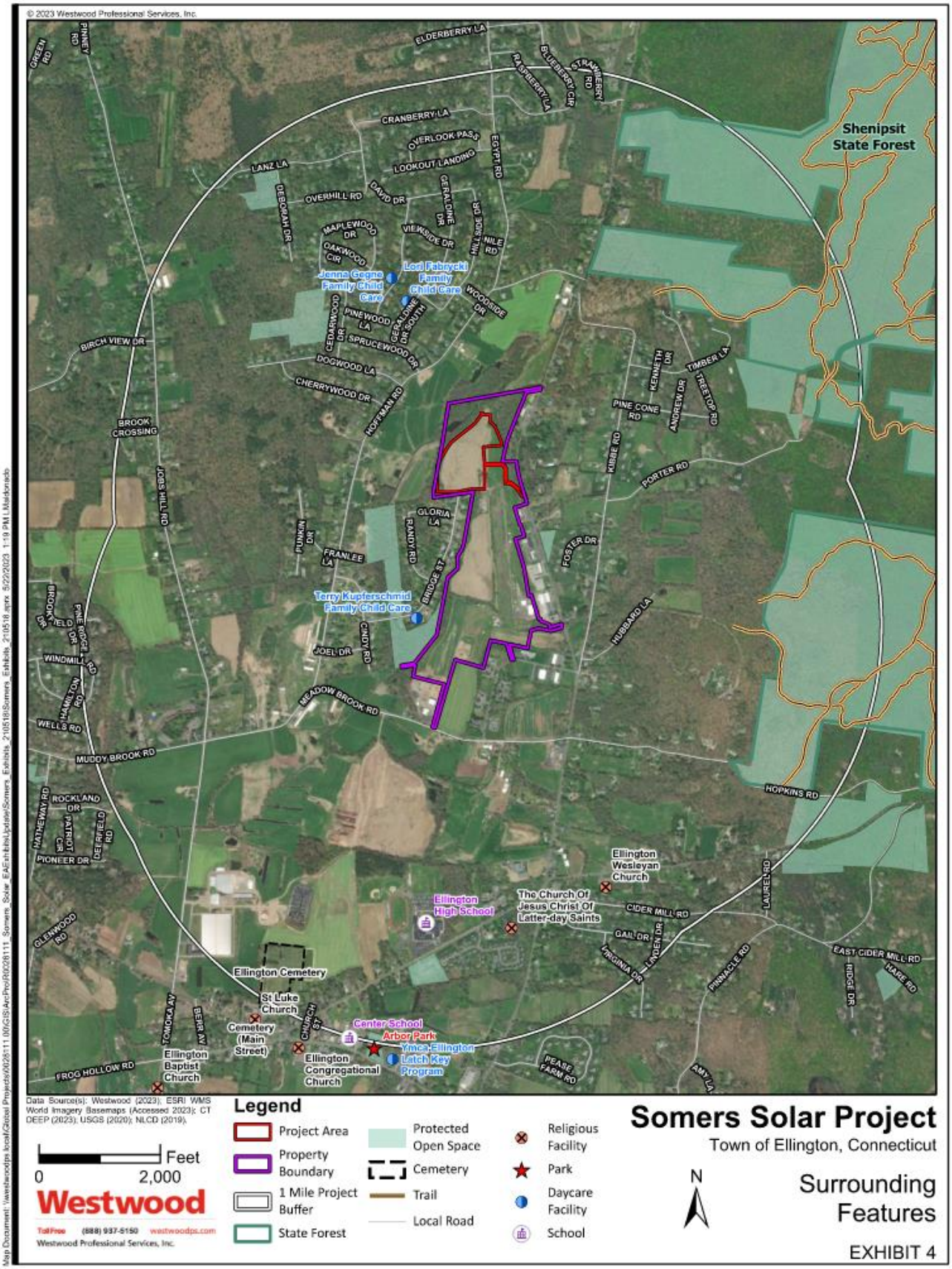
H. Scenic and Recreational Areas

A review of scenic and recreational resources located within one-mile of the Project was conducted. Identified features include public and privately-owned open space and recreational areas in Ellington.

The nearest open space, Meadow Brook Estates Open Space, is located southwest of the Project, off of Bridge Street, and consists of approximately 15.3 acres of undeveloped open space with no trails or facilities. The property's closest point to the proposed solar development is approximately 735 feet. Trees and vegetation are present between the open space property and the proposed development area.

No state designated scenic roads or scenic areas are located near the Site. The nearest recreational areas are properties associated with Shenipsit State Forest located approximately 0.5 mile to the north. These properties are separated from the Project by forests and developed properties. See Figure 4, *Surrounding Features*, for community features located within one-mile of the Site.

No designated scenic roads, open spaces, or recreational areas will be physically or visually impacted by development of the Project.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Jenna Gegne Family Child Care
Lori Fabrycki Family Child Care
Terry Kupterschmid Family Child Care
Ellington High School
Ellington Cemetery
St Luke Church
Cemetery (Main Street)
Ellington Congregational Church
Ellington Baptist Church
Center School
Arbor Park
Ymca Ellington Latch Key Program
Ellington Wesleyan Church
The Church Of Jesus Christ Of Latter-day Saints
ELDERBERRY LA
CRANBERRY LA
OVERLOOK PASS
LOOKOUT LANDING
LANZ LA
OVERHILL RD
DAVID DR
MAPLEWOOD DR
OAKWOOD CIR
VIEWSIDE DR
WOODSIDE DR
PINEWOOD LA
SPRUCEWOOD DR
DOGWOOD LA
CHERRYWOOD DR
BIRCH VIEW DR
BROOK CROSSING
HOFFMAN RD
JOBS HILL RD
GLORIA LA
FRANLEE LA
RANDY RD
BRIDGE ST
CINDY RD
JOEL DR
FOSTER DR
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PORTER RD
KIRBY RD
PINE CONE RD
ANDREW DR
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KENNETH DR
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MUDDY BROOK RD
WELLS RD
WINDMILL RD
HOPKINS RD
CIDER MILL RD
EAST CIDER MILL RD
GAIL DR
LINDEN DR
VIRGINIA DR
PINNACLE RD
RIDGE DR
HARE RD
LAUREL RD
PEARE FARM RD
AMY LA
FROG HOLLOW RD
CHURCH ST
TOMOKA AV
BEER AV
GLENWOOD RD
ROCKLAND DR
PATRIOT CIR
DEERFIELD RD
PIONEER DR
HATHEWAY RD
BROOKFIELD DR
PINE RIDGE RD
HAMILTON RD

I. Noise

The Ellington Airport occupies a portion of the Site and noise sources for this use include occasional small aircrafts and helicopters in addition to car and truck vehicles operating in and around the airport buildings located along Somers Road. These noise sources will remain unchanged with the proposed development. The Town does not have a CTDEEP approved municipal noise ordinance. As such, the Project will comply with Regulations of Connecticut State Agencies ("RCSA") Control of Noise, §§ 22a-69-1 through 22a-69-7.4.

During construction of the Project, temporary higher levels of noise may occur. However, all work will be conducted during normal working hours and the levels of noise are not anticipated to exceed State noise standards or limits.

The Project is located on an industrial (I) zoned parcel with airport transportation facilities and related operations as well as agricultural uses and the parcel abuts residential parcels. The Project would be considered a CTDEEP Class C (Industrial) Land Use noise emitter to CTDEEP Class A (Residential) Land Use receptor. As such, it is subject to noise standards of 61 dBA during the daytime and 51 dBA at night.

The only noise generating equipment planned at the Facility are the inverters, transformers, and tracker motor operators. Based on the most conservative information provided by specified equipment manufacturers, the loudest pieces of proposed equipment are the 2,000 kVA transformers that will generate a maximum sound level of approximately 61 dBA (measured at 1-foot away).

Sound reduces with distance and the inverters, tracker motors, and transformers are inactive at night. The closest property line relative to the nearest inverter/transformer is approximately 315 feet to the west of the southern array development area. The parcels along the Project's western property line are zoned Rural Agricultural Residential ("RAR") and are currently developed with single family residences that front Bridge Street to the west of the residential parcels.

Westwood applied the Inverse Square Law to evaluate the relative sound level of the largest transformer at the nearest property lines. Based on these calculations, nearby receptors are of sufficient distances from the Project equipment and noise levels during Facility operation will be below the applicable CTDEEP noise standards at surrounding property lines.

J. Lighting

The Project Area is undeveloped; thus, no light sources currently exist. The overall Site contains the Ellington Airport which has existing buildings with exterior lighting and uses associated with airport operations. The existing light sources will remain unchanged with the planned development.

No exterior lighting is planned for the Facility. There will be some small, non-intrusive lighting fixtures within the equipment enclosures to aid in maintenance. The Petitioner does not expect that such lighting will affect nearby properties.

K. FAA Determination

The Petitioner submitted relevant Project information to the FAA for an aeronautical study to evaluate potential hazards of the Project to air navigation. The information included the submission of twenty-three (23) Notices of Proposed Construction or Alteration (FAA Form 7460-1, "Notice") to the FAA for Obstruction Evaluation/Airport Airspace Analysis (OE/AAA). Twenty (20) of the Notices were selected to define the perimeter of the proposed Project and the remaining three (3) Notices defined the utility poles to be installed at the electrical interconnection to the existing overhead lines along Somers Road. The FAA provided a Determination of No Hazard to Air Navigation ("Determination") for the twenty (20) locations that defined the Project's solar arrays and fence lines.

Although the Project's proposed utility poles are to be located within the vicinity of existing mature trees and utility poles near Somers Road, the FAA provided notification that the three (3) proposed utility poles exceeded obstruction standards. As part of the process, the Petitioner requested FAA perform additional aeronautical study under the provisions of 49 U.S.C., § 44718 and, if applicable, Title 14 of the Code of Federal Regulations, CFR part 77. FAA completed the additional aeronautical study and issued a Determination for the three (3) utility poles (FAA Aeronautical Study Numbers: 2021-ANE-5690-OE, 2021-ANE-5990-OE and 2021-ANE-5991-OE) on February 11, 2022. The Determinations indicated that the proposed poles would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. The Determinations are conditioned on the requirement that each pole structure is to be marked/lighted in accordance with FAA Advisory Circular 70/7460-1 M, Obstruction Marking and Lighting, red lights-Chapters 4, 5(Red), & 15.

The Petitioner will comply with the indicated conditions of the FAA Determinations. Appendix B, *Environmental Assessment*, contains the FAA related correspondence.

L. Visibility Evaluation

The Project is not expected to present any substantive visual/visibility issues. As currently designed, the Facility itself will consist of 7,074 non-reflective solar panels measuring approximately 12 feet above final grade surrounded by a seven (7) foot tall security fence. The proposed electrical interconnection to the existing electrical distribution line located on Somers Road will require the installation of up to three (3) new wood utility poles for the placement of electrical disconnect equipment. A majority of the perimeter of the proposed Project Area is

screened from adjacent residential properties by a vegetated buffer of deciduous and evergreen trees, shrubs and undergrowth that ranges from 30 feet to over 150 feet in width.

Year-round visibility of the proposed Facility will be confined to areas within the immediate vicinity of the Project, primarily directly southeast from the airport operations area and the Industrial-zoned properties along Somers Road. Limited seasonal views, when the leaves are off the deciduous trees and shrubs, would include abutting properties to the east and west and could extend as far as approximately 0.25 mile in all directions. In general, views beyond the immediate area would be minimized by a combination of the Facility's relatively low height and the presence of intervening vegetation and infrastructure.

The solar modules are designed to absorb incoming solar radiation and minimize reflectivity, such that only a small percentage of incidental light will be reflected off the panels. This incidental light is significantly less reflective than common building materials, such as steel, or the surface of smooth water. The panels will track the sun from east to west rotating on a north-south aligned facing axis. The panels will tilt through angles ranging from facing east at 52 degrees from vertical at sunrise to facing west at 52 degrees from vertical at sunset, thereby further reducing reflectivity.

VI. Conclusion

As demonstrated by the foregoing, the Project satisfies the standards set forth in C.G.S. § 16-50k(a). Specifically, the Project will comply with the CTDEEP air and water quality standards, will not have an undue adverse effect on the existing environment and ecology, and will not affect the scenic, historic, and recreational resources located within the vicinity of the Project Site. Because the Project satisfies the requisite standards, and considering the anticipated benefits this Project will provide, USS Somers Solar, LLC respectfully requests that the Council approve this Petition for the Project, as it is currently designed.

Respectfully submitted,
USS Somers Solar, LLC

By Lee D. Hoffman

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Liana Feinn
Pullman and Comley, LLC
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860-424-4300
Its Attorneys