



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: [siting.council@ct.gov](mailto:siting.council@ct.gov)

Web Site: [portal.ct.gov/csc](http://portal.ct.gov/csc)

### VIA ELECTRONIC MAIL & CERTIFIED MAIL RETURN RECEIPT REQUESTED

August 2, 2024

Carrie Larson Ortolano, Esq.  
General Counsel  
LSE Libra LLC  
c/o Lodestar Energy LLC  
40 Tower Lane  
Suite 201  
Avon, CT 06001  
[cortolano@lodestarenergy.com](mailto:cortolano@lodestarenergy.com)

RE: **PETITION NO. 1627** – LSE Libra LLC (Lodestar Energy) petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a 1.5-megawatt AC solar photovoltaic electric generating facility and associated equipment located at 410 Denslow Hill Road, Hamden, Connecticut, and associated electrical interconnection. **Final Decision.**

Dear Attorney Ortolano:

At a public meeting held on August 1, 2024, the Connecticut Siting Council (Council) considered and denied the above-referenced petition for a declaratory ruling that was submitted to the Council on April 12, 2024, with supplemental information submitted on July 9, 2024, on the basis that development of the proposed facility site would have a substantial adverse environmental effect regarding forest clearing.

The Council considered and identified adverse effects associated with the total acreage of forest clearing that is required to develop the proposed facility site.

Enclosed for your information is a copy of the staff report on this project.

Please do not hesitate to contact our office if you should have any questions.

Sincerely,

Melanie A. Bachman  
Executive Director

MAB/RDM/dll

Enclosure: Staff Report dated August 1, 2024

c: The Honorable Lauren Garrett, Mayor, Town of Hamden ([lgarrett@hamden.com](mailto:lgarrett@hamden.com))  
Service List, dated April 12, 2024  
CGS §16-50j(g) State Agency Comment List

STATE OF CONNECTICUT )

: ss. Southington, Connecticut August 2, 2024

COUNTY OF HARTFORD )

I hereby certify that the foregoing is a true and correct copy of the Decision and Staff Report in Petition No. 1627 issued by the Connecticut Siting Council, State of Connecticut.

ATTEST:



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Melanie A. Bachman  
Executive Director  
Connecticut Siting Council

STATE OF CONNECTICUT )

: ss. New Britain, Connecticut August 2, 2024

COUNTY OF HARTFORD )

I certify that a copy of the Connecticut Siting Council Decision and Staff Report in Petition No. 1627 has been forwarded by Certified First Class Return Receipt Requested mail, on August 2, 2024, to each party and intervenor, or its authorized representative, as listed on the attached service list, dated April 12, 2024.

ATTEST:



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Dakota LaFountain  
Office Assistant  
Connecticut Siting Council

**LIST OF PARTIES AND INTERVENORS**  
**SERVICE LIST**

| <b>Status<br/>Granted</b> | <b>Document<br/>Service</b>                | <b>Status Holder<br/>(name, address &amp; phone<br/>number)</b> | <b>Representative<br/>(name, address &amp; phone number)</b>  |
|---------------------------|--|---|---|
| <b>Petitioner</b>         | <input checked="" type="checkbox"/> E-mail | LSE Libra LLC<br>(Lodestar Energy)                              | Carrie Larson Ortolano, Esq.<br>General Counsel<br>LSE Libra LLC<br>c/o Lodestar Energy LLC<br>40 Tower Lane<br>Suite 201<br>Avon, CT 06001<br><a href="mailto:cortolano@lodestarenergy.com">cortolano@lodestarenergy.com</a><br><br>Jeffrey J. Macel<br>LSE Libra LLC<br>c/o Lodestar Energy LLC<br>40 Tower Lane<br>Suite 201<br>Avon, CT 06001<br><a href="mailto:jmacel@lodestarenergy.com">jmacel@lodestarenergy.com</a> |
|                           |  |   |   |



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### **Petition No. 1627**

### **LSE Libra LLC**

### **1.5 MW AC Solar Photovoltaic Electric Generating Facility**

### **410 Denslow Hill Road, Hamden**

### **Staff Report**

**August 1, 2024**

### **Notice**

On April 12, 2024, the Connecticut Siting Council (Council) received a petition from LSE Libra LLC (Lodestar) for a declaratory ruling pursuant to Connecticut General Statutes (CGS) §4-176 and §16-50k for the construction, operation and maintenance of a 1.5 megawatt (MW) alternating current (AC) solar photovoltaic electric generating facility and associated equipment located at 410 Denslow Hill Road in Hamden, Connecticut, and associated electrical interconnection (Petition or Project).

Pursuant to Regulations of Connecticut State Agencies (RCSA) §16-50j-40 on or about April 12, 2024, Lodestar notified Town of Hamden (Town) officials, state officials and agencies, and abutting property owners of the proposed Project. No comments were received.

Pursuant to CGS §4-176(e) of the Uniform Administrative Procedure Act, an administrative agency is required to take an action on a petition for a declaratory ruling within 60 days of receipt. During a regular meeting held on June 6, 2024, pursuant to CGS §4-176(e), the Council voted to set the date by which to render a decision on the Petition as no later than October 9, 2024, which is the 180-day statutory deadline for a final decision under CGS §4-176(i).

On June 18, 2024, the Council issued interrogatories to Lodestar. Lodestar submitted responses to the Council's interrogatories on July 9, 2024, one of which included photographic documentation of site-specific features intended to serve as a "virtual" field review of the Project site.

### **Municipal Consultation**

Lodestar met with the Town Planning and Zoning Commission on August 29, 2023 to discuss the Project. Lodestar sent revised site plans to the Town on March 4, 2024. The Town expressed concerns regarding the amount of tree clearing necessary to develop the Project.

On April 12, 2024, the Council sent correspondence to the Town stating that the Council has received the Petition and invited the Town to contact the Council with any questions or comments by May 12, 2024.

On April 26, 2024, the Town Mayor submitted correspondence to the Council in opposition to the Project due to concerns regarding increased water flow from the site, proximity of the site to a nearby dam, construction traffic, and tree clearing. On May 7, 2024, the Town Tree Commission submitted correspondence to the Council in opposition of the Project due to tree clearing. On May 30, 2024, the Town Legislative Council submitted correspondence in opposition to the Project due to tree clearing and the Project's financial benefit only to West Haven.

### State Agency Comments

On April 12, 2024, pursuant to RCSA §16-50j-40, the Council sent correspondence requesting comments on the proposed Project from the following state agencies by May 12, 2024: Department of Energy and Environmental Protection (DEEP); Department of Agriculture (DOAg); Department of Public Health (DPH); Council on Environmental Quality (CEQ); Public Utilities Regulatory Authority (PURA); Office of Policy and Management (OPM); Department of Economic and Community Development (DECD); Department of Emergency Services and Public Protection (DESPP); Department of Labor (DOL); Department of Administrative Services (DAS); Department of Transportation (DOT); the Connecticut Airport Authority (CAA); and the State Historic Preservation Office (SHPO).

In response to the Council's solicitation, CEQ submitted comments on April 24, 2024 related to core forest, visibility, and groundwater.<sup>1</sup> DEEP submitted comments on May 13, 2024 related to core forest, noise, visibility and fencing.<sup>2</sup>

No other state agencies provided written comments on the Project.

While the Council is obligated to consult with and solicit comments from state agencies by statute, the Council is not required to abide by the comments from state agencies.<sup>3</sup>

State Senator Jorge Cabrera (17th District)<sup>4</sup>, State Representative Mary Mushinsky (85th District)<sup>5</sup>, State Senator Martin Looney (11th District)<sup>6</sup>, and State Representative Liz Linehan (103th District)<sup>7</sup> submitted comments on April 30, May 10, May 17, and May 29, 2024, respectively, in opposition to the proposed Project.

### Public Act 17-218

Public Act 17-218<sup>8</sup> requires, "for a solar photovoltaic facility with a capacity of two or more megawatts, to be located on prime farmland or forestland, excluding any such facility that was selected by DEEP in any solicitation issued prior to July 1, 2017, pursuant to section 16a-3f, 16a-3g or 16a-3j, the DOAg represents, in writing, to the Council that such project will not materially affect the status of such land as prime farmland or DEEP represents, in writing, to the Council that such project will not materially affect the status of such land as core forest."

The proposed solar facility has a generating capacity of 1.5 MW; therefore, it is exempt from the provisions of Public Act 17-218.

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<sup>1</sup> [https://portal.ct.gov/-/media/csc/3\\_petitions-medialibrary/petitions\\_medialibrary/mediapetitionnos1601-1700/pe1627/stateagencycomments/pe1627\\_statememo-commentsrecd\\_ceq\\_a.pdf](https://portal.ct.gov/-/media/csc/3_petitions-medialibrary/petitions_medialibrary/mediapetitionnos1601-1700/pe1627/stateagencycomments/pe1627_statememo-commentsrecd_ceq_a.pdf)

<sup>2</sup> [https://portal.ct.gov/-/media/csc/3\\_petitions-medialibrary/petitions\\_medialibrary/mediapetitionnos1601-1700/pe1627/stateagencycomments/pe1627\\_statememo-commentsrecd\\_deep\\_a.pdf](https://portal.ct.gov/-/media/csc/3_petitions-medialibrary/petitions_medialibrary/mediapetitionnos1601-1700/pe1627/stateagencycomments/pe1627_statememo-commentsrecd_deep_a.pdf)

<sup>3</sup> *Corcoran v. Conn. Siting Council*, 284 Conn. 455 (2007)

<sup>4</sup> [https://portal.ct.gov/-/media/csc/3\\_petitions-medialibrary/petitions\\_medialibrary/mediapetitionnos1601-1700/pe1627/stateagencycomments/pe1627\\_pubform\\_senatorcabrera\\_a.pdf](https://portal.ct.gov/-/media/csc/3_petitions-medialibrary/petitions_medialibrary/mediapetitionnos1601-1700/pe1627/stateagencycomments/pe1627_pubform_senatorcabrera_a.pdf)

<sup>5</sup> [https://portal.ct.gov/-/media/csc/3\\_petitions-medialibrary/petitions\\_medialibrary/mediapetitionnos1601-1700/pe1627/stateagencycomments/pe1627\\_pubform\\_staterepmushinsky\\_a.pdf](https://portal.ct.gov/-/media/csc/3_petitions-medialibrary/petitions_medialibrary/mediapetitionnos1601-1700/pe1627/stateagencycomments/pe1627_pubform_staterepmushinsky_a.pdf)

<sup>6</sup> [https://portal.ct.gov/-/media/csc/3\\_petitions-medialibrary/petitions\\_medialibrary/mediapetitionnos1601-1700/pe1627/stateagencycomments/pe1627\\_pubform\\_senatorlooney\\_a.pdf](https://portal.ct.gov/-/media/csc/3_petitions-medialibrary/petitions_medialibrary/mediapetitionnos1601-1700/pe1627/stateagencycomments/pe1627_pubform_senatorlooney_a.pdf)

<sup>7</sup> [https://portal.ct.gov/-/media/csc/3\\_petitions-medialibrary/petitions\\_medialibrary/mediapetitionnos1601-1700/pe1627/stateagencycomments/pe1627\\_linehan\\_a.pdf](https://portal.ct.gov/-/media/csc/3_petitions-medialibrary/petitions_medialibrary/mediapetitionnos1601-1700/pe1627/stateagencycomments/pe1627_linehan_a.pdf)

<sup>8</sup> Codified at Conn. Gen. Stat. §16-50k(a) and §16a-3k (2023)

### **Public Benefit**

The Project would be a distributed energy resource facility as defined in CGS § 16-1(a)(49). CGS § 16a-35k establishes the State's energy policy, including the goal to "develop and utilize renewable energy resources, such as solar and wind energy, to the maximum practicable extent." The state Comprehensive Energy Strategy (CES) examines future energy needs and identifies opportunities to reduce ratepayer costs, ensure reliable energy availability, and mitigate public health and environmental impacts. CES Strategy No. 3 is "Grow and sustain renewable and zero-carbon generation in the state and region." The state Integrated Resource Plan assesses the state's future electric needs and a plan to meet those future needs, including, but not limited to, pathways to achieve a 100 percent zero carbon electric supply by 2040. Furthermore, the Governor's Executive Orders and Council on Climate Change examine existing policies and identify new strategies to combat climate change. The proposed facility will contribute to fulfilling the State's Renewable Portfolio Standard and Global Warming Solutions Act as a zero emission Class I renewable energy source.

The Project was selected in the Non-Residential Renewable Energy Solutions (NRES) Program, which is a competitive procurement process administered by the state's electric distribution companies to develop the state's Class I renewable energy objectives and to encourage participation by customers in underserved and environmental justice communities.<sup>9</sup> New or incremental Class I renewable generation projects ranging in size from 100 to 5,000 kW (AC) are eligible to bid into the NRES Program for a Tariff Terms Agreement (TTA) with a 20-year term. The electricity and renewable energy credits produced by the facility would be sold to the United Illuminating Company (UI) in accordance with the TTA.

The total capacity of the facility would be supplied to the City of West Haven.

At the conclusion of the 20-year NRES contract, Lodestar would continue to operate the facility and seek other revenue mechanisms.

Lodestar would not participate in an ISO New England, Inc. (ISO-NE) Forward Capacity Auction because UI would own the capacity rights to the facility under the NRES Program. However, at the conclusion of the 20-year NRES contract, Lodestar might participate in the ISO-NE FCA or other capacity program that is available at that time.

### **Proposed Site**

Pursuant to CGS §16-50x, the Council has exclusive jurisdiction over the proposed solar electric generating facility "site." Under RCSA §16-50j-2a(29), "site" means a contiguous parcel of property with specified boundaries, including, but not limited to, the leased area, right-of-way, access and easements on which a facility and associated equipment is located, shall be located or is proposed to be located. The Council does not have jurisdiction or authority over any portion of the host parcel beyond the boundaries of the Project "site." This includes portions of the parcel retained by the landowner and portions of the parcel the landowner may lease to third parties. Once a facility is decommissioned, the Council no longer has jurisdiction or authority over the Project "site."

Under a lease agreement with the property owner, Lodestar proposes to construct the solar facility on an approximate 8-acre site within a 11-acre host parcel located at 410 Denslow Hill Road in Hamden. The host parcel is an undeveloped rear lot accessed by an approximate 52-foot wide, 210-foot-long access

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<sup>9</sup> The NRES Program is a successor program to the Low Emission Renewable Energy Credit and Zero Emission Renewable Energy Credit (LREC/ZREC) and Virtual Net Metering (VNM) programs.

corridor extending west from Denslow Hill Road. The rear portion of the host parcel is zoned residential R-1. The access corridor to the host parcel is zoned residential R-3.

A majority of the site slopes downgradient from east to west with an elevation range of 170 feet to 126 feet above mean sea level.

Land use surrounding the site consists primarily of single-family residences to the north along Brook Hill Road and east along Denslow Hill Road and undeveloped woodland owned by the State of Connecticut to the west, and an electric transmission line right-of-way to the south.

Lodestar selected the site due to availability, environmental and topographic review, and proximity to a suitable electrical interconnection. NRES bid criteria do not allow for alternative sites within each bid. Pursuant to CGS §16-50p(g), the Council has no authority to compel a parcel owner to sell or lease property, or portions thereof, for the purpose of siting a facility.<sup>10</sup>

The lease agreement with the property owner includes provisions related to decommissioning and site restoration at the end of the Project's useful life. The lease term is for 25 years with the option for two 5-year extensions. At the end of the lease, Lodestar will decommission the Project and restore the site to substantially the same condition as the existing conditions.

### **Proposed Facility and Associated Equipment**

The proposed 1.5 MW solar facility consists of 2,704 solar panels rated at 540 Watts. The panels would be installed on a fixed tilt racking system facing south at a 25-degree angle. The panels would be approximately 11 feet above grade at the highest point and 3 feet above grade at the lowest point. The panel rows would be separated by an approximate 13.7-foot wide vegetated aisle. The racking posts would be installed to a depth of 10 feet.

Other equipment includes six 125-kW inverters mounted on posts and one 1,250 kVA transformer (7.1' x 6' x 6.2') and switchgear (8.2'x 6.4' x 5.2') mounted on a 25-foot by 35-foot concrete pad in the northeast portion of the site.

Panel row wiring would generally extend along the racking system to reduce potential damage from weather events, maintenance activities or animals. In areas where wiring is not run along the racking, it would be installed underground in conduit.

The proposed electrical interconnection would run underground from the electrical equipment pad along the access drive to Lodestar's pad-mounted switch and meter equipment. From Lodestar's meter, the interconnection would transition to overhead, via three new 30 to 40 foot high utility poles spaced 35 feet apart to support UI breaker and recloser equipment, and connect to the existing 13.8-kV distribution system on the west side of Denslow Hill Road. The existing distribution circuit (feeder 1692) interconnects to UI's Mix Avenue Substation.

UI reviewed and approved the interconnection design. An interconnection agreement would be developed. No off-site upgrades to facilitate the interconnection are necessary. A review by ISO-NE is not required.

The projected capacity factor for the proposed solar facility is approximately 19 percent. The power output would decline over time with an anticipated annual power output loss of approximately 0.3-0.5 percent. A battery storage system is not proposed at this time.

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<sup>10</sup> *Corcoran v. Conn. Siting Council*, 284 Conn. 455 (2007); CGS §16-50p(g) (2023).

Access to the site will be via a new 15-foot wide, 500-foot long gravel drive extending west from Denslow Hill Road. The access drive would terminate at a turnaround area adjacent to the equipment pad.

The solar facility would be enclosed by a seven-foot tall chain link fence with one locked vehicle access gate.

Construction of the facility would disturb approximately 8 acres, inclusive of the solar array, equipment pad, access road and electrical interconnection.

The nearest off-site residence is located approximately 131 feet to the north of the Project fence at 80 Brook Hill Road. The nearest property line from the Project fence is 30 feet to the north at 74 Brook Hill Road.

Site clearing would occur up to the property line at 74 Brook Hill Road and 80 Brook Hill Road to develop the solar array and within a few feet of the property line at 420 Denslow Hill Road to develop the access drive.

The solar racking would generally be installed on existing grades which range from 0 to 15%. Excavation would be required to install the stormwater management system.

Lodestar is proposing to construct the site in one phase.

Construction would occur over an approximately six to nine month period. Typical construction hours and workdays of the week are Monday – Saturday, 7:00 AM to 5:00 PM. Lodestar anticipates construction would commence during the second quarter of 2025.

The estimated cost of the Project is \$2.55 million.

### **Public Health and Safety**

The Project would comply with the current National Electrical Code (NEC), National Electrical Safety Code, Connecticut State Fire Prevention Code and National Fire Protection Association codes and standards, as applicable.

The nearest federally obligated airport is Tweed New Haven Airport, located approximately 7.6 miles southeast of the Site. The Federal Aviation Administration (FAA) notice criteria tool determined notice to the FAA is not required for the solar facility. The FAA does not require a glare analysis for solar installations that are located on non-airport land. Notice to FAA is not required for use of a crane at this site per the FAA Notice Criteria Tool.

The proposed facility would be remotely monitored through a 24/7 data acquisition system (DAS). The DAS could send alarms identifying issues with communication, power generation or safety. A dedicated on-call service team would be dispatched to address any issues.

A manual disconnect switch would be located on-site. Lodestar would provide facility operation and safety training for local emergency responders. The nearest fire hydrant is approximately 40 feet south of the access drive entrance. The methods of fire response will be determined by the fire department. No specialized equipment would be required for fire suppression the Project.

The transformer would contain a non-toxic, biodegradable insulating oil (FR3). Secondary containment and leak detection are not typically installed when using FR3 oil.



Electric and Magnetic Fields (EMF) produced from solar facility electrical components would dissipate quickly with distance and therefore would be similar to pre-existing EMF background levels at the property lines.

The proposed seven-foot high chain link perimeter fence complies with the NEC fencing requirements<sup>11</sup>.

The proposed facility would be in compliance with DEEP Noise Control Standards. Noise modeling using the inverse square law indicates noise from the operation of the Project would be approximately 49 dBA from the equipment pad to the nearest residential property line located 125 feet to the east at 420 Denslow Hill Road. Construction noise is exempt from DEEP Noise Control Standards.

The site is not located within a Federal Emergency Management Agency designated 100-year or 500-year flood zone.

Blasting is not anticipated. If bedrock is encountered, the racking posts would be installed with a rock drill or rock screws.

## **Environmental Effects and Mitigation Measures**

### *Air and Water Quality*

The Project would not produce air or water emissions as a result of operation.

Lodestar performed a carbon debt analysis using the United States Environmental Protection Agency carbon sequestration data and conversion factors for the loss of forest cover to develop the site. The analysis indicates the Project would have a net benefit in carbon reduction within 40 days, using a national average of forest carbon sequestration (Connecticut specific data was not available).

The site is not within a DEEP-designated Aquifer Protection Area or Public Water Supply Watershed. The surrounding properties are served by a public water system. The installation of the posts for the racking system is not expected to impact groundwater. Lodestar has also provided a Spill Prevention and Materials Storage Plan for the Project to protect groundwater.

No wetlands or vernal pools were identified on the host parcel. Wilmot Brook, a perennial watercourse with bordering wetlands, is located 125 feet to the west on an abutting parcel.

Lodestar would establish erosion and sedimentation controls in accordance with the applicable *Connecticut Guidelines for Soil Erosion and Sediment Control* (E&S Guidelines).

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<sup>11</sup> Section 691.4(2) of the National Electrical Code (NEC), 2020 Edition notes that, "Access to PV electric supply stations shall be restricted by fencing or other adequate means in accordance with 110.31..." Section 110.31 notes that for over 1,000 Volts, "...a wall, screen, or fence shall be used...A fence shall not be less than 7 feet in height or a combination of 6 feet or more of fence fabric and a 1 foot or more...utilizing barbed wire or equivalent."

### Stormwater

Pursuant to CGS Section 22a-430b, DEEP retains final jurisdiction over stormwater management and administers permit programs to regulate stormwater discharges. DEEP regulations and guidelines set forth standards for erosion and sedimentation control, stormwater pollution control and best engineering practices.

The DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (General Permit) requires implementation of a Stormwater Pollution Control Plan (SWPCP) to prevent the movement of sediments off construction sites into nearby water bodies and to address the impacts of stormwater discharges from a proposed project after construction is complete. In its discretion, DEEP could require an Individual Permit for discharges and hold a public hearing prior to approving or denying any General or Individual Permit (Stormwater Permit) application.

Construction of the Project would require approximately 8 acres of ground disturbance and thus, a DEEP-issued Stormwater Permit is required prior to commencement of construction. The Stormwater Permit and associated SWPCP incorporates Project designs consistent with the applicable E&S Guidelines and the *Connecticut Stormwater Quality Manual*.

Lodestar met with the DEEP Water Permitting & Enforcement Division on February 26, 2024, to discuss the Project. DEEP confirmed the preliminary stormwater management design conformed to the requirements of Stormwater Permit Appendix I and did not recommend changes to the stormwater analysis prepared by Lodestar. The analysis concluded that two permanent stormwater detention basins, one in the northwestern portion of the site and one in the southern portion of the site, are necessary to improve post-construction site conditions over existing drainage conditions.

DEEP recommended a two-phase construction sequence (clearing, grubbing and seeding) with Phase I occurring in the steeper, northern portion of the site, followed by Phase II in the southern portion of the site. Lodestar designed the site to include clearing and grubbing as one phase due to a natural hydrological divide that separates flows between the two portions of the site.

Lodestar filed an application for a Stormwater Permit without the recommended phasing approach on or about April 12, 2024. The permit application is under review.

Construction of the Project would not increase flows off-site to Wilmot Brook and a downstream flood control dam. The stormwater analysis accounts for increased runoff from a forest condition to meadow by diverting stormwater run-off into the two stormwater basins, thus retaining and mitigating peak run-off.

Construction soil erosion and sediment control measures include but are not limited to the installation of a sediment barrier along the downgradient edge of disturbance, the installation of woody debris berms along the contours in steep sections of the site to slow and maintain sheet flow, and the retention of stumps outside of the perimeter fence (shade management area) to reduce soil disturbance and the potential for erosion.

In compliance with DEEP Stormwater Appendix I Stormwater Management at Solar Array Construction Projects, Lodestar would maintain a minimum 50-foot wetland buffer from stormwater control features and a minimum 100-foot wetland buffer from the solar panels.

### *Forests and Parks*

Approximately 8-acres of tree clearing, including 0.1-acre of core forest, would be required to develop the site. The small patch of core forest is not ecologically significant and would not support wildlife intolerant of forest edge effects.

Material from tree clearing and stump removal would be chipped for use during construction. Excess forest material would be removed from the site by the tree clearing contractor. An effort would be made to distribute salvage logs to local wood-working vendors.

There are no state parks or forests within 0.5 miles of the site.

### *Fish, Aquaculture and Wildlife*

The proposed site is not within a DEEP-designated Cold Water Habitat area. Wilmot Brook, located on the abutting property to the west, is not classified as a cold water stream or supporting drainage basin to a cold water stream.

The site is not located within a DEEP Natural Diversity Database (NDDDB) buffered area.

The northern long-eared bat (NLEB), a federal-listed and state-listed Endangered Species occurs in Connecticut. However, there are no known occurrences of NLEB in Hamden. Lodestar submitted a NLEB determination form to the U.S. Fish and Wildlife Service (USFWS) on April 1, 2024. By correspondence dated April 11, 2024, the USFWS indicated it has no additional concerns regarding the Project and no further consultation is necessary.

Lodestar would install four bat boxes within the shade management area in the western portion of the site to promote bat roosting.

Disturbed areas within the solar array would be seeded with Enrst Northeast Solar Pollinator Buffer Mix (or equivalent) which contains pollinator-friendly species.

Areas outside the solar array would be maintained in a shrub state (shade management area). Lodestar would remove invasive species from the shade management area to encourage growth of native species. The stormwater detention basins would be seeded with a wetland plant mix.

The solar facility perimeter fence would have a six-inch gap at the bottom to allow for small animal movement.

### *Agriculture*

The proposed site does not contain prime farmland soils. The host parcel is not enrolled in the Public Act 490 Program for agricultural land tax abatement.

### *Scenic, Historic and Recreational Values*

SHPO submitted correspondence to Lodestar on May 31, 2024, indicating that the proposed Project would not affect historic properties or archaeological resources.

The State of Connecticut Department of Public Works owns the abutting properties to the south and west as flood control mitigation areas for Wilmot Brook. An electric transmission line extends east-west across the southern abutting parcel, extending to an overlook on Paradise Hill Road to the west. The Project may be seasonally visible from this overlook.

There are no national, state and/or locally designated scenic roads within 0.5-mile of the site.

There are no “blue-blazed trails” maintained by the Connecticut Forest and Parks Association located proximate to the site.

The nearest publicly-accessible recreational area is the Farmington Canal Trail approximately 0.9 mile east of the site. The Project is not likely to be visible from this recreational area due to distance and intervening vegetation.

### Visibility

Seasonal visibility of the Project would occur from residential areas along Denslow Hill Road to the east and Brook Hill Road to the north. To mitigate views of the facility, Lodestar would be willing to install an agricultural style fence and install landscape plantings around the equipment pads located along the access drive.

No exterior facility lighting is proposed.

### **Operations and Maintenance**

A post-construction Operations and Maintenance Plan has been developed that includes provisions for periodic inspections of physical site features and structural and electrical components.

An evaluation of the facility and performance of preventative maintenance measures would be conducted in accordance with manufacturer’s specifications and would occur at least once per year. The evaluation would include the electrical system/components, physical infrastructure, and site vegetation.

The inverters have an operational life of approximately ten years and would be replaced as necessary. Replacement modules would not be stored on-site.

Snow on the panels will be allowed to slide off. When necessary, the solar modules would be cleaned using non-toxic substances.

Vegetation management would be performed mechanically and is expected to occur 2-3 times annually. The stormwater system would be inspected at least once per year.

### **Decommissioning**

The Project has an operational life of 20+ years. At the end of the Project’s useful life, it would be decommissioned, and the site restored to a meadow condition.

It is anticipated that the steel racking system, electrical component and wiring and solar modules would be recycled as applicable. All recyclable materials would be transported to appropriate recycling facilities. Any non-recyclable materials will be properly disposed of in accordance with applicable permits and regulations.

The transformer, equipment pads and gravel access drive would be removed. Disturbed areas would be backfilled with soil and seeded. The stormwater management basins would remain in place. The overhead UI interconnection and associated utility poles would be removed if requested by the landowner at the time of decommissioning.

The selected solar panels for the Project meet current Toxicity Characteristic Leaching Procedure (TCLP) criteria for characterization as nonhazardous waste in the event the solar panels are not recycled at the end of the Project's life.

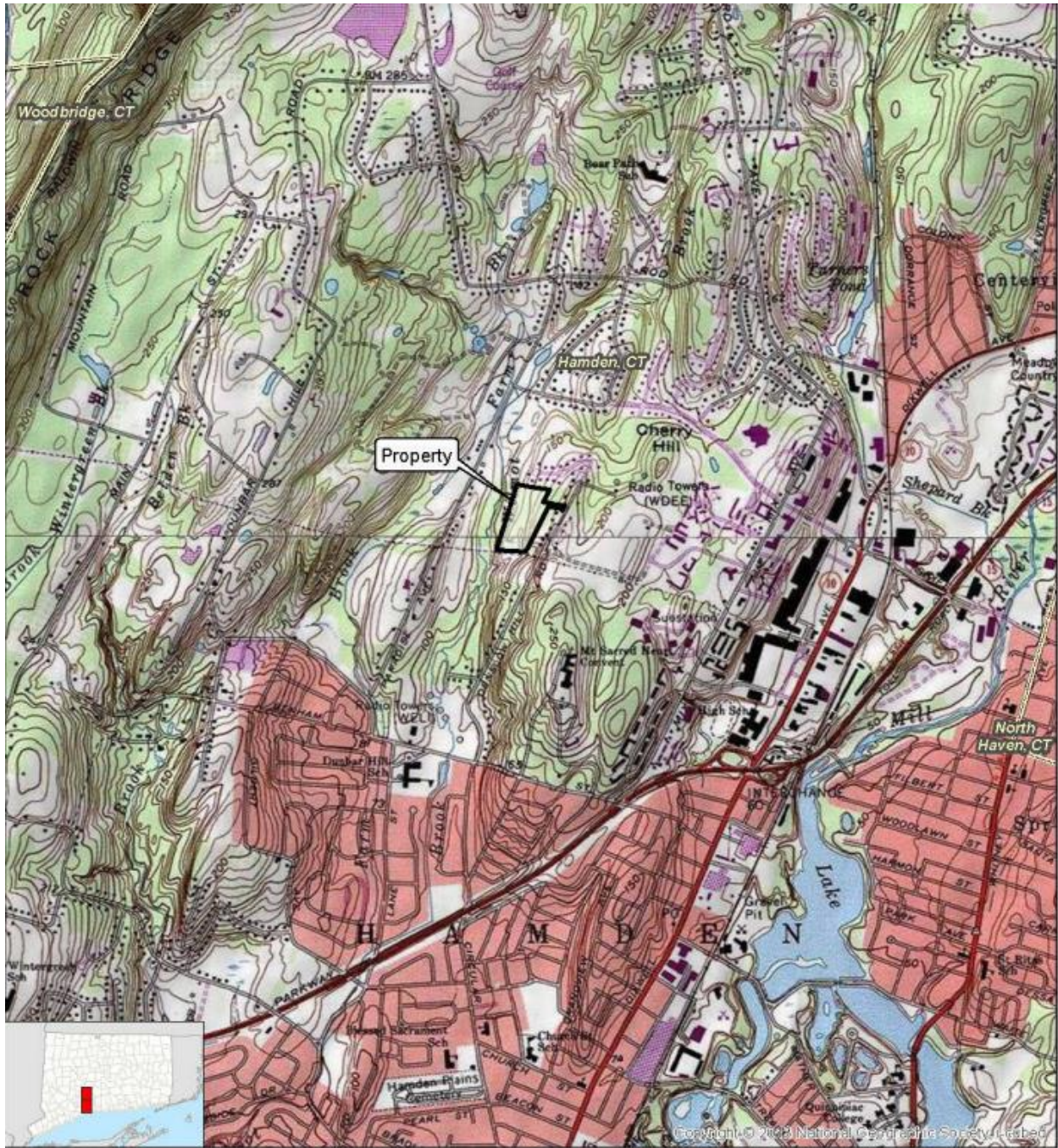
### **Conclusion**

The Project is a grid-side distributed energy resource with a capacity of not more than sixty-five megawatts, meets DEEP air and water quality standards, and would not have a substantial adverse environmental effect. The proposed Project will not produce air emissions, will not utilize water to produce electricity, was designed to minimize environmental impacts, and furthers the State's energy policy by developing and utilizing renewable energy resources and distributed energy resources. Furthermore, the Project was selected in the State's NRES Program.

If approved, staff recommends the following conditions:

1. Approval of any Project changes be delegated to Council staff;
2. Submit a copy of the DEEP Stormwater Permit prior to the commencement of construction;
3. Submit the final structural design for the racking system stamped by a Professional Engineer duly licensed in the State of Connecticut prior to commencement of construction;
4. Submit a Landscaping Plan including, but not limited to, plantings along the northeast portion of the site and in the area of the equipment pads located along the access drive;
5. Submit a final Spill Prevention, Control, and Countermeasures Plan with updated construction contractor and spill response information and appropriate reporting forms;
6. Provide a copy of the final Emergency Response Plan to local emergency responders with specific site shutdown procedures and response information prior to facility operation and provide emergency response training; and
7. Submit a post-construction operational noise study and any required mitigation measures.

### Site Location



- Legend**
- Property
  - Municipal Boundary

*Map Notes:*  
Base Map Source: USGS 7.5 Minute Topographic  
Quadrangle Map, Mount Carmel, CT (1984) and  
New Haven, CT (1984)  
Map Scale: 1 inch = 2,000 feet  
Map Date: April 2024



**Figure 1**  
**Location Map**  
Proposed Solar Facility  
Denslow Hill Solar  
410 Denslow Hill Road  
Hamden, Connecticut



### Existing Conditions



**Legend**

- Property
- Site
- Approximate Parcel Boundary
- Approximate Wetland Boundary
- Statewide Important Farmland Soils
- Habitat**
- Upland Forest

Map Notes:  
Base Map Source: 2019 Aerial Photograph (CTECC)  
Map Scale: 1 inch = 750 feet  
Map Date: April 2024



**Figure 2**  
**Existing Conditions**

Proposed Solar Facility  
Denslow Hill Solar  
410 Denslow Hill Road  
Hamden, Connecticut



### Proposed Conditions

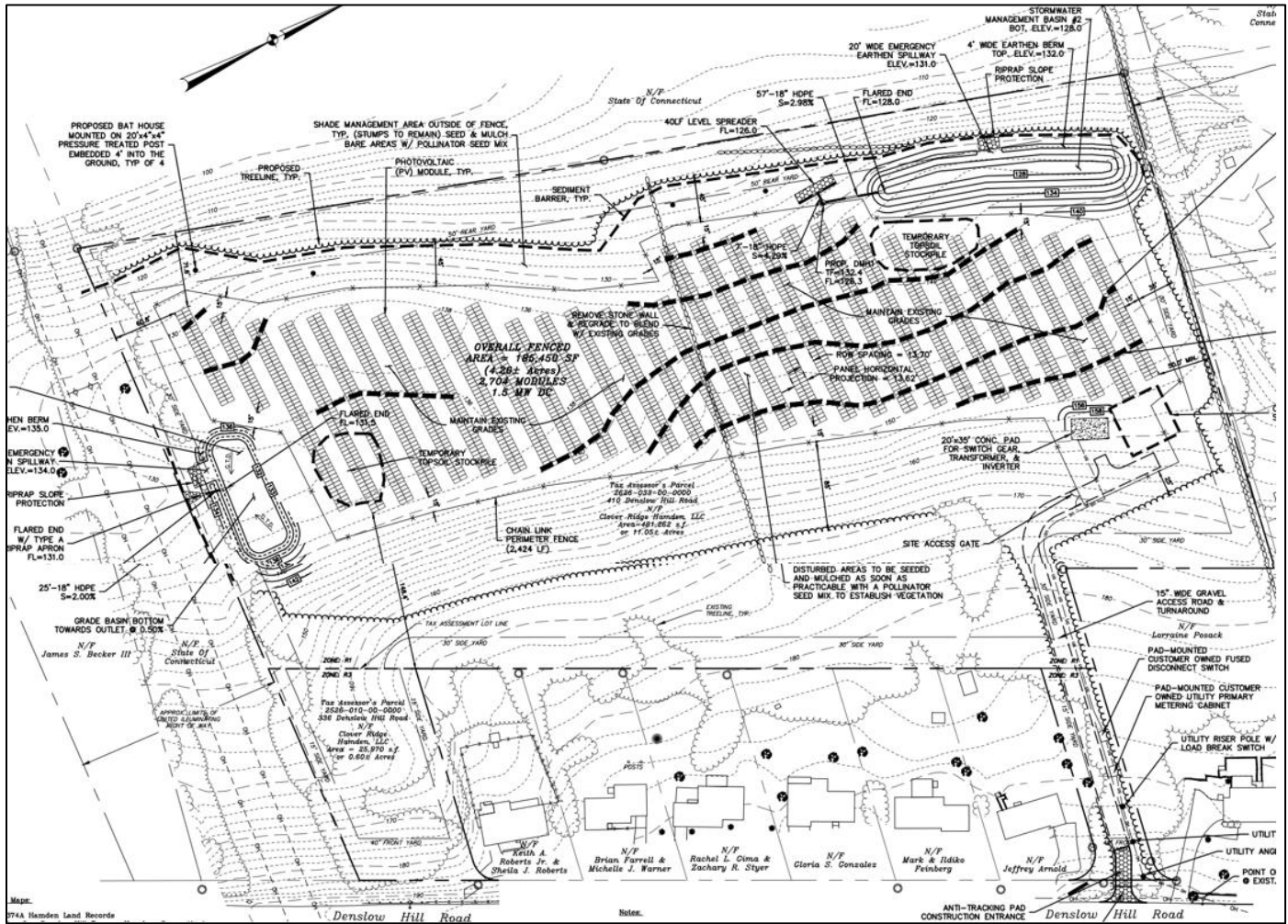


**Legend**

- |                       |                    |                              |
|-----------------------|--------------------|------------------------------|
| Property              | Solar Module       | Approximate Wetland Boundary |
| Utility Pole          | Stormwater Basin   | Approximate Parcel Boundary  |
| Access Drive          | Drainage Structure | Limit of Disturbance         |
| Riprap Area           | Concrete Pad       |                              |
| Fence                 |                    |                              |
| Treeline              |                    |                              |
| OH Electrical Utility |                    |                              |
| UG Electrical Utility |                    |                              |



### Construction Site Plan



**LEGEND**

|       |                                |
|-------|--------------------------------|
| ○     | EXISTING UTILITY POLE          |
| ●     | PROPOSED UTILITY POLE          |
| ⊙     | EXISTING LIGHT POLE            |
| —○—   | EXISTING OVERHEAD UTILITIES    |
| —○—   | PROPOSED OVERHEAD UTILITIES    |
| —○—   | PROPOSED UNDERGROUND UTILITIES |
| □     | EXISTING CATCH BASIN           |
| □     | PROPOSED DRAINAGE MANHOLE      |
| □     | PROPOSED STORM SEWER           |
| ⊕     | EXISTING SIGN                  |
| ⊕     | EXISTING MAILBOX               |
| ○     | EXISTING IRON PIN (FOUND)      |
| ○     | EXISTING SPOT GRADE            |
| 135.5 | PROPOSED SPOT GRADE            |
| 136   | EXISTING CONTOUR               |
| 136   | PROPOSED CONTOUR               |
| ○     | EXISTING STONE WALL            |
| ○     | EXISTING TREELINE              |
| ○     | PROPOSED TREELINE              |
| ○     | PROPERTY LINE                  |
| ○     | EASEMENT LINE                  |
| ○     | BUILDING LINE                  |
| ○     | STAKED HAYBALES OR SILT FENCE  |