



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

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### CERTIFIED MAIL RETURN RECEIPT REQUESTED

June 15, 2015

Philip M. Small, Esq.  
Brown Rudnick LLP  
185 Asylum Street  
Hartford, CT 06103

RE: **PETITION NO. 1150** – SolarCity Corporation petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed construction and operation of a 3.1 Megawatt Community Shared Solar Photovoltaic Electric Generating facility located on Brush Hill Road in Bozrah, Connecticut.

Dear Attorney Small:

At a public meeting held on June 11, 2015, the Connecticut Siting Council (Council) considered and ruled that the above-referenced proposal would not have a substantial adverse environmental effect, and pursuant to Connecticut General Statutes § 16-50k, would not require a Certificate of Environmental Compatibility and Public Need, with the following conditions:

- Submission of a Development and Management Plan for this site in compliance with sections 16-50j-60 through 16-50j-62 of the Regulations of Connecticut State Agencies that shall be served on the Town of Bozrah for comment and submitted to and approved by the Council prior to facility construction and shall include:
  - a) a final plan of site development to include specifications for the solar panels, supporting infrastructure, electrical equipment, equipment compound, access and maintenance roads, utility connections, and landscaping;
  - b) construction details for site clearing, site phasing, grading, water drainage, and erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended;
  - c) incorporation of a Wetland Protection Program as provided in Petition Exhibit 2, Appendix B;
  - d) construction work hours and days of work;
  - e) avoidance of site clearing activities from early May to early August, as described in the Breeding Bird Assessment, dated April 28, 2015; and
  - f) Decommissioning Plan.

- Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed within three years from the date of the mailing of the Council's decision, this decision shall be void, and the facility owner/operator shall dismantle the facility and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's decision shall not be counted in calculating this deadline. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The facility owner/operator shall provide written notice to the Executive Director of any schedule changes as soon as is practicable;
- Any request for extension of the time period to fully construct the facility shall be filed with the Council not later than 60 days prior to the expiration date of this decision and shall be served on all parties and intervenors, if applicable, and the Town of Bozrah;
- The facility owner/operator shall remit timely payments associated with annual assessments and invoices submitted by the Council for expenses attributable to the facility under Conn. Gen. Stat. §16-50v;
- This Declaratory Ruling may be transferred, provided the facility owner/operator/transferee is current with payments to the Council for annual assessments and invoices under Conn. Gen. Stat. §16-50v and the transferee provides written confirmation that the transferee agrees to comply with the terms, limitations and conditions contained in the Declaratory Ruling, including timely payments to the Council for annual assessments and invoices under Conn. Gen. Stat. §16-50v; and
- If the facility owner/operator is a wholly owned subsidiary of a corporation or other entity and is sold/transferred to another corporation or other entity, the Council shall be notified of such sale and/or transfer and of any change in contact information for the individual or representative responsible for management and operations of the facility within 30 days of the sale and/or transfer.

This decision is under the exclusive jurisdiction of the Council and is not applicable to any other modification or construction. All work is to be implemented as specified in the petition dated April 2, 2015 and supplemental information submitted on May 21, 2015.

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

Very truly yours,

*Robert Stein*<sup>MAB</sup>

Robert Stein  
Chairman

RS/RM/lm

Enclosure: Staff Report dated June 11, 2015

- c: The Honorable William E. Ballinger, First Selectman, Town of Bozrah  
Seymour Adelman, Planning and Zoning Chairman, Town of Bozrah  
Thomas J. Regan, Esq., Brown Rudnick LLP  
Robert Miller, SolarCity Corporation  
Julie D. Kohler, Esq., Cohen and Wolf, P.C.



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Petition No. 1150

SolarCity Corporation – 3.1 Megawatt Solar Project

Bozrah, Connecticut

Staff Report

June 11, 2015

### Introduction

On April 6, 2015, SolarCity Corporation (Petitioner) submitted a petition to the Connecticut Siting Council (Council) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need (Certificate) is required for the construction and operation of a 3.1 megawatt (MW) Solar Photovoltaic Generating facility located off Brush Hill Road in Bozrah, Connecticut. The project is being developed by the Connecticut Municipal Electric Energy Cooperative (CMEEC) and will provide customers of Bozrah Light and Power (BLP), a member of CMEEC, access to renewable energy at market rate pricing.

The Petitioner notified the Town of Bozrah, appropriate state agencies, and abutting property owners of the proposed project. The State Department of Public Health commented to the Council, indicating the facility does not appear to be located in a public water supply area. No other State agencies commented on the proposal.

Council members Robert Hannon and James Murphy, Council staff member Robert Mercier, Bozrah First Selectman William Ballinger, Bozrah Town Planner Richard Serra and Petitioner representatives, including but not limited to, Philip Small, Alex Sarly, and Dean Gustafson, among others, conducted a field review of the site on April 29, 2015. No members of the public or property abutters attended the field review.

The abutter to the south contacted the Petitioner and requested some landscaping along their property line. Supplemental information based on a discussion at the field review was submitted to the Council and Town of Bozrah (Town) on May 21, 2015 and included landscaping for the abutter to the south.

### Municipal Consultation

Prior to the submission of the Petition to the Council, the Petitioner discussed the project with the Town. The Petitioner designed the project to meet the intent of the Town's Planning and Zoning regulations. After the field review, the Petitioner continued discussions with the Town regarding certain project design features, including review of the revised site plans by the Planning and Zoning Commission, Inland Wetlands Commission and the Town Engineer.

The Town submitted correspondence to the Council on May 20, 2015 with comments regarding vegetative buffers, hours of equipment delivery, blasting, stormwater control, and an off-site vernal pool. The Town's comments were addressed in the Petitioner's supplemental filing of May 21, 2015.

### Public Benefit

The project would be a "grid-side distributed resources" facility, as defined in Connecticut General Statutes (CGS) § 16-1(a)(37). 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 extent possible." The 2013 Connecticut Comprehensive Energy Strategy emphasizes low- or no-emission sources of electric



generation and development of more distributed generation, such as the proposed facility. The proposed facility will contribute to fulfilling the State's Renewable Portfolio Standard as a zero emission Class I renewable energy source. The Petitioner intends to begin ground construction in the summer of 2015 and is required to have the project operational by December 31, 2016 in accordance with its power purchase agreement.

### **Proposed Site**

The project is located on an undeveloped 25.2-acre parcel on the east side of Brush Hill Road in Bozrah. The property, zoned industrial, is identified in Town records as Assessor's Map 4, Lot 006A1. The majority of the parcel is forested, interspersed with exposed ledge and four seasonal intermittent water channels. A 5.8-acre old field area is located in the western portion of the property, separated from Brush Hill Road by a narrow row of trees. A dirt access way extends from Brush Hill Road through the field area to the edge of the forest.

Site topography consists of a central ridge with gradual slopes in the western portion and steeper slopes in the eastern portion, particularly where the ridge slopes to the north and south. Grades in the development area range from one to eight percent. Elevations range from 374 feet above mean sea level (amsl) along Brush Hill Road to 290 feet amsl along the east property boundary.

Development in the immediate area includes a residence and woodland to the south, Brush Hill Road and a residence to the west, an egg farm to the northwest, agricultural property to the north and woodland to the east.

### **Proposed Project**

The solar facility would occupy 15.8 acres of the parcel, mostly along the central ridge. The solar field, consisting of the solar arrays, access road and electrical equipment, would comprise 11.5 acres of the development area.

Access to the site would be from a new 20-foot wide, 1,475 foot long gravel drive extending east from Brush Hill Road along the south edge of the solar field area before terminating at a roundabout on the eastern portion of the parcel. Construction of the access drive would require grading and filling of an existing 200-foot section of steep slope to create a manageable 3:1 access drive side slope. The remaining access drive extends along mostly gentle grades, requiring minimal grading.

The solar field would consist of 10,206 photovoltaic solar modules, each measuring 6.4 feet by 3.25 feet. The modules would be installed on a GameChange rack system mounted on concrete anchor ballasts. The ballasts consist of plastic tubs filled with concrete placed on the ground.

Once the support racks are set into the concrete anchors, support framing would arrange the panels in linear rows, with solar modules installed at a 25 degree angle. The support racks would be constructed so that a 24 inch minimum ground clearance would be maintained from the bottom of the modules. The modules would be wired together in groups of 18 and routed to one of four inverters mounted on concrete pads on the site.

The four inverters convert the solar generated DC power to AC power so that it can be supplied to the local electric distribution system. The inverters would be connected to switchgear located in a separate fenced area adjacent to the access drive entrance. One new utility wood pole would be required to connect the switchgear to the BLP electric distribution line located on the west side of Brush Hill Road. The petitioner is working with BLP to finalize an interconnection agreement.

The solar field would be surrounded by a six-foot high chain link fence using concrete footings installed below grade. The fence would be of two-inch mesh except for fencing installed within 100 feet of Brush Hill

Road where a 1.5 inch non-climbable mesh would be used. A 20-foot wide swing gate would be installed at the access drive entrance.

The Petitioner is proposing a ten day on, four day off construction schedule with hours 7:00 a.m. to 6:00 p.m., including weekends. Construction is anticipated to take 12 weeks.

### **Erosion and Sediment Control**

As part of a detailed construction phasing plan, the Petitioner would clear the forested area and chip the logged trees to construct wood berms for use as perimeter erosion and sediment control. The 2.5 foot high berms would be six feet wide at the bottom tapering to one foot wide at the top. Similar berms have been used with success on State Department of Transportation projects. The Petitioner would use woven fabric silt fencing in place of berms, where necessary.

Once the berms/silt fence is in place and security fencing installed, the Petitioner would proceed to construct the access drive and two storm water basins along the south edge of the access drive. The basins, two to three feet deep, would serve as temporary sediment traps during construction and would be checked regularly for sediment during construction. Basin outlets would consist of riprap outfalls with temporary straw bales. Stone check dams would be used to slow down flows, as necessary. Seeding/mulching of finished slopes in this area would occur once final access drive grading is complete.

Once the berms are established and the access drive constructed, the Petitioner would perform stump removal and site grading in two phases: Phase 1, a 4.9 acre area comprising the eastern half of the solar field, and Phase 2, a 4.3 acre area in the western half of the solar field. The remaining 1.8 acre area of the solar field, located along the property line in the western side of the property, does not require any earthwork, only mowing to prepare the area for construction. Stumps in cleared areas outside the fence line would remain in place to reduce soil disturbance. Usable topsoil stripped from the construction areas would be temporarily stockpiled in specified areas prior to reuse.

Site work for each phase would also include construction of storm water infiltration trenches where specified along the perimeter of the solar field. The trenches would be composed of crushed stone enclosed with geotextile wrap. Where necessary, the trenches would have rip rap protected PVC pipe outfalls.

Construction is anticipated to be completed by October 2015, too late in the season for final seeding. In the alternative, the Petitioner would mulch the site to prevent soil erosion. Final seeding of the site would occur in April 2016 using a low growth grass mixture that, once established, would require mowing approximately four times per year.

### **Environmental Considerations**

No wetlands were identified on-site although four seasonal intermittent water channels were identified on the property, two in the northeast corner, and two in the southeast portions of the property. Several investigations of these water channels in 2011, 2014 and 2015 determined all four lack the necessary characteristics to meet State regulated inland wetlands/watercourse criteria. Despite this analysis, the Petitioner has avoided construction within these areas to prevent degradation of the water quality functions and associated wildlife values of these intermittent water channels. Clearing to accommodate one of the storm water basins would occur 15 feet from one of the identified areas, referred to as "Wetland 3," a shallow depressed area in the southeast area of the property. Construction activities would be at least 60 feet from the other three seasonal intermittent watercourse areas.

A vernal pool analysis was conducted in the Spring of 2015 and determined that a previously identified potential vernal pool on adjacent property to the north did not support vernal pool obligate species. The

analysis did however identify a vernal pool on adjacent property to the east, approximately 570 feet east of the proposed solar field area and 380 feet from the property line, respectively. This wetland supports vernal pool obligate species and thus an analysis of the vernal pool's Critical Terrestrial Habitat (CTH), an area located 100 feet to 750 feet from the edge of a vernal pool, was examined. In order to maintain populations of vernal pool obligate amphibian species, development within the CTH should not exceed 25 percent. Existing development within CTH is approximately five percent. The proposed project would add another five percent of development to the CTH, thus, it would not exceed the recommended 25 percent maximum development area. Best Management Practices for protection of vernal pool obligate species have been developed that includes an environmental monitor and the use of silt fence barriers to isolate the work area.

Site development would require the removal of nine acres of woodland, mostly on the eastern half of the property. The woodland is mostly even aged, composed primarily of beech, birch, maple and hemlock. The Department of Energy and Environmental Protection (DEEP) reviewed the project and found no records of State endangered, threatened, or special concern species in the project area. Although no such species were found, DEEP recommended that tree cutting and other land clearing activities be limited to November 1 to March 30 to avoid any potential disruption to sensitive wildlife species of conservation concern including bats and breeding birds. DEEP also recommends the use of solar modules with non-polarizing, white cell borders to reduce potential negative effects on aquatic breeding insects.

Based on DEEP's comments, the Petitioner conducted a breeding bird assessment of the parcel for birds that could potentially use the area and determined the project site and adjacent area comprise a contiguous forest block of 139 acres, too small to be considered a core upland forest (minimum 250 acres) suitable for interior forest bird species, and thus is most likely to support generalist species. Additionally, the meadow area of the property does not have a developed shrub layer to support shrub specific species. The bird assessment recommended no clearing and other site disturbing activities from early May to early August to avoid most breeding birds that may use the project site.

The project would not produce air or water emissions as a result of operation. A carbon debt analysis accounting for the loss of trees, manufacture of the equipment, and site operation indicates net carbon reduction would begin after 2.5 years of site operation.

The nearest historic area to the site is the Fitchville Historic District, located approximately a half-mile south of the site. The State Historic Preservation Office indicated the project would have no effect on the district or on other properties eligible for or listed on the National Register of Historic Places. There are no scenic roads or recreation areas proximate to the site.

Noise from site operations would primarily originate from the inverters. A noise study indicates sound levels from the project would be below 40 dBA at the nearest property line, below State regulatory daytime (55 dBA) and nighttime criteria (45 dBA).

The site is in a relatively undeveloped area with one residence abutting the site to the south and one to the west, across Brush Hill Road. Visibility of the project appears limited to these areas. The Petitioner proposes to install a row of five-foot tall arborvitae along the south property line between the residence and the solar field fence. Landscaping consisting of American Holly shrubs would be installed along Brush Hill Road.

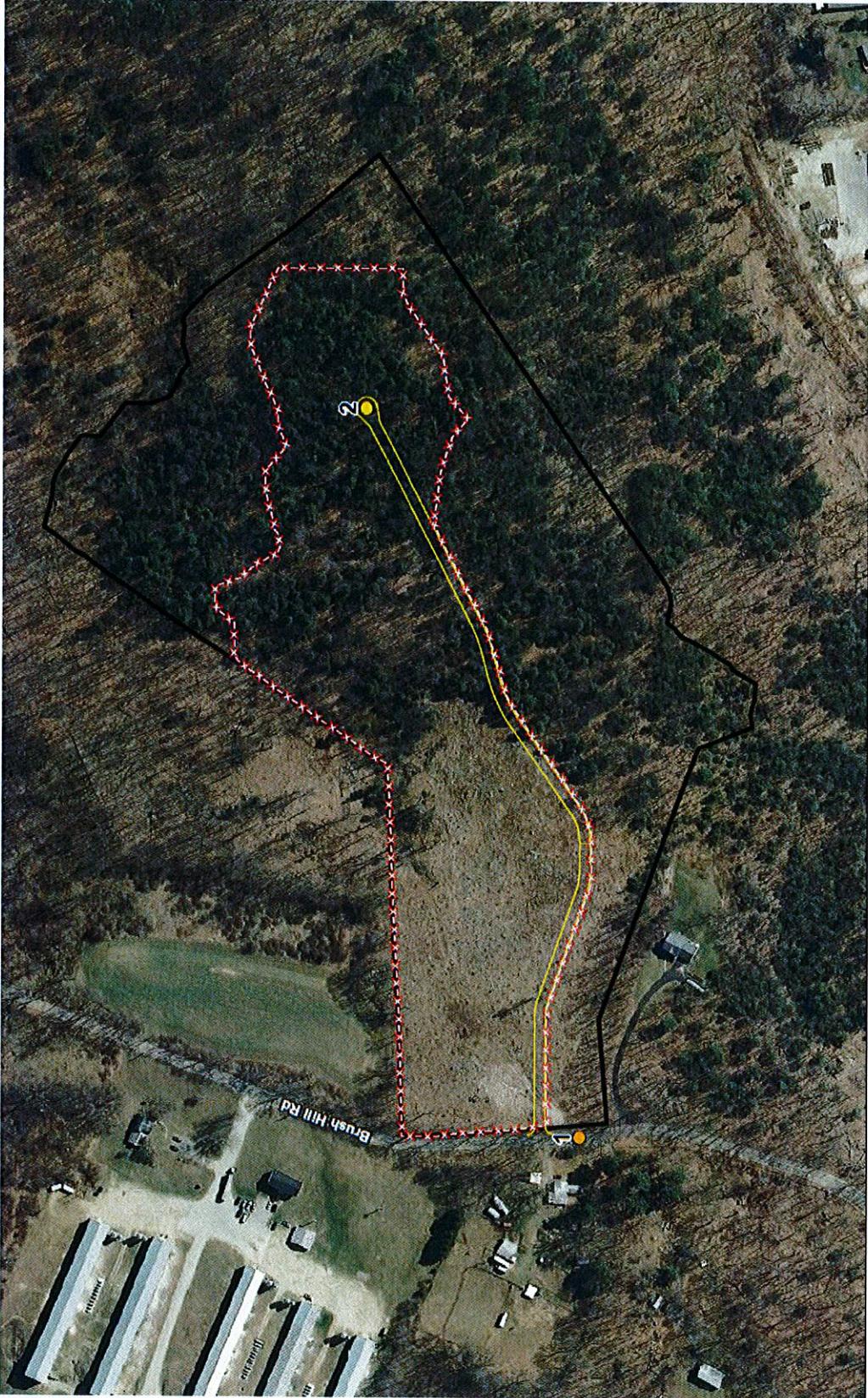
### **Conclusion**

Pursuant to CGS § 16-50k(a), the Siting Council shall approve by declaratory ruling the construction or location of "any customer-side distributed resources project or facility or 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." The Petitioner contends that the proposed project meets these criteria. The proposed project will not produce air emissions,

will not utilize water to produce electricity, was designed to minimize wetland impacts, will employ a stormwater management plan that will result in no net increase in runoff to any surrounding properties, and furthers the State's energy policy by developing and utilizing renewable energy resources and distributed energy resources. In addition, as demonstrated above, the proposed project will not have a substantial adverse environmental effect.

Staff recommends approval with the condition that the Petitioner prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-60 through 16-50j-62 of the Regulations of Connecticut State Agencies. The D&M Plan shall be served on the Town of Bozrah for comment and submitted to and approved by the Council prior to the commencement of facility construction and shall include:

- a) a final plan of site development to include specifications for the solar panels, supporting infrastructure, electrical equipment, equipment compound, access and maintenance roads, utility connections, and landscaping;
- b) construction details for site clearing, site phasing, grading, water drainage, and erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended;
- c) incorporation of a Wetland Protection Program as provided in Petition Exhibit 2, Appendix B;
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- e) avoidance of site clearing activities from early May to early August, as described in the Breeding Bird Assessment, dated April 28, 2015; and
- f) a facility decommissioning plan.



**x-x-x** Fence  
**—** Proposed 20' Gravel Access Drive

**□** Subject Property (+/- 25.20 Acres)

125 62.5 0 125 Feet

Figure 1: Site location on Brush Hill Road.

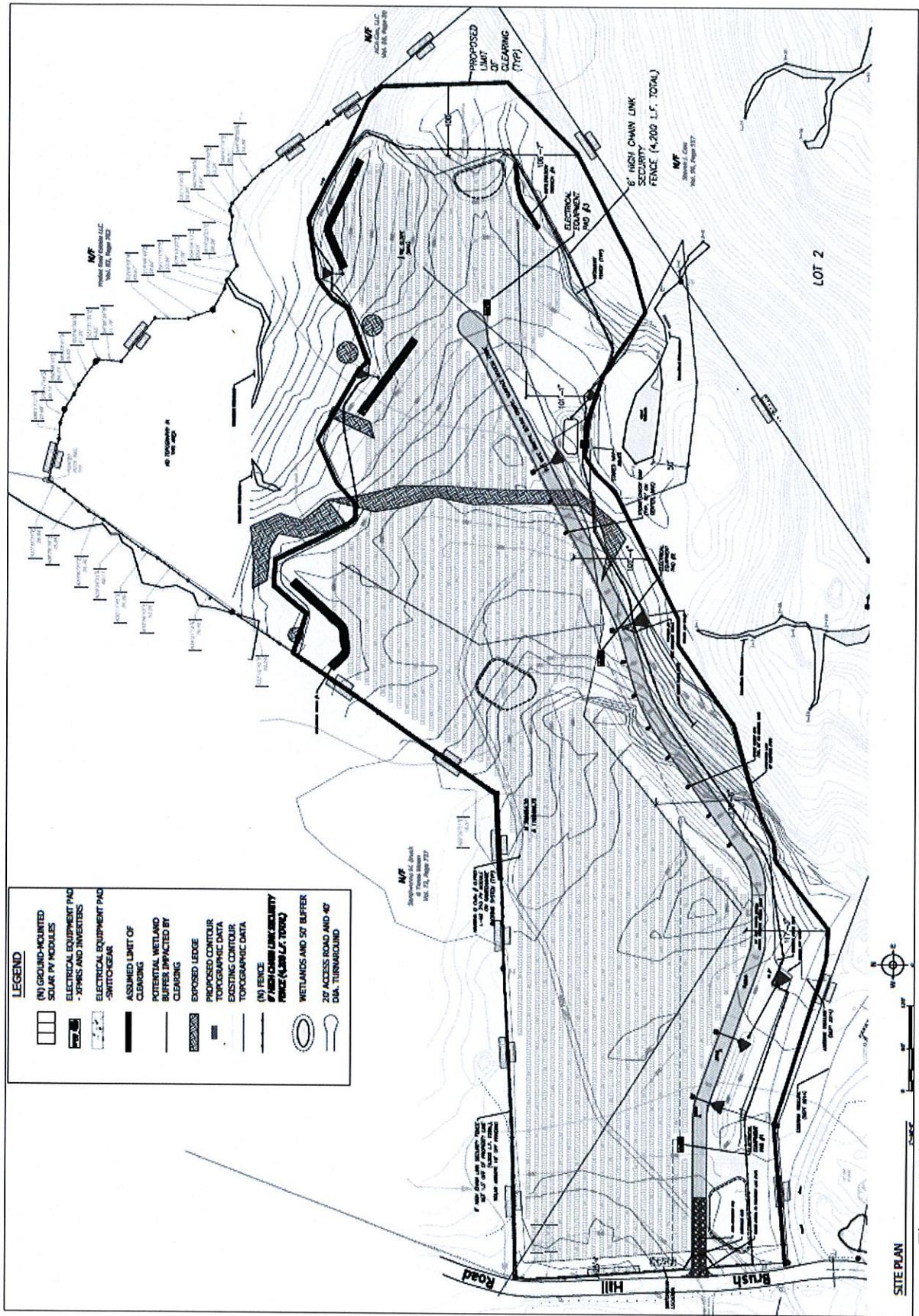


Figure 2: Proposed Site Plan



Figure 3: Photo-simulation of facility from Brush Hill Road. Proposed American holly bushes in front of fence not shown.