## TOWN OF HOOSICK ZONING BOARD OF APPEALS

## **REGULAR MEETING**

## **January 2, 2024**

# RESOLUTION GRANTING CONDITIONAL SPECIAL USE PERMIT APPROVAL REGARDING HAWTHORN SOLAR, LLC SOLAR ENERGY SYSTEM

- **WHEREAS,** Hawthorn Solar, LLC (a subsidiary of CS Energy, LLC) filed applications for special use permit, site plan, and area variances to construct, operate and maintain a solar energy system on 130 acres of land including a new 48,125-square-foot substation along Pine Valley Road and Fords Road within the Agricultural/Residential Zoning District; and
- **WHEREAS**, the Hawthorn Solar proposed solar energy system project site is on lands of Dale Ford (Tax Map Parcel No. 36.-1-9.2) and Timothy and Brittany Marbot (Tax Map Parcel Nos. 36.-1-10.1, 36.-1-11.1, and 46.-1-10.11); and
- **WHEREAS**, the Hawthorne Solar application materials included a Full Environmental Assessment Form ("FEAF") pursuant to the New York State Environmental Quality Review Act (hereinafter "SEQRA"); and
- **WHEREAS**, the Town of Hoosick Zoning Board of Appeals (hereinafter "Zoning Board") determined to undertake a coordinated environmental impact review pursuant to SEQRA; and
- **WHEREAS,** the Zoning Board served a notice of SEQRA lead agency coordination to all involved agencies concerning this action, indicating that it sought to be declared lead agency for this action; and
- **WHEREAS,** following service of the notice of SEQRA lead agency coordination, no other involved agency objected to the Zoning Board serving as SEQRA lead agency for this action; and
- **WHEREAS,** the Zoning Board declared itself lead agency pursuant to SEQRA through resolution at its August 7, 2023 meeting; and
- **WHEREAS**, the Zoning Board, in consultation with its designated technical review consultant, reviewed all Hawthorn Solar application materials to determine completeness of the applications for purposes of holding a public hearing; and
- **WHEREAS,** the Zoning Board determined such application materials to be complete and sought to hold a public hearing on such applications as required under the Town of Hoosick Land Use Regulations; and

- **WHEREAS,** the Zoning Board, through resolution, scheduled a public hearing on such applications to be held at its meeting to be held September 5, 2023; and
- **WHEREAS,** public notice of the public hearing, to be held September 5, 2023, was duly published, posted, and mailed by the Zoning Board in compliance with the requirements of the Town of Hoosick Land Use Regulations; and
- **WHEREAS,** the Zoning Board held a public hearing on such applications on September 5, 2023, at which public comment on such applications was received; and
- **WHEREAS,** the Zoning Board continued the public hearing on such applications on October 2, 2023, and accepted further public comment at that time; and
- WHEREAS, the Zoning Board closed the public hearing on such applications on October 2, 2023, but established a 14-day period for submission of any additional written comments on such applications through and including October 16, 2023; and
- **WHEREAS,** the 14-day period for written submission of any additional written comments on such applications ended on October 16, 2023; and
- **WHEREAS,** additional written comments were received, considered by the Zoning Board, and provided to the applicant; and
- **WHEREAS,** the Zoning Board required the applicant to respond to all public hearing comments and all written comments in writing; and
- **WHEREAS**, the applicant thereafter submitted written responses to all public hearing comments and written comments; and
- **WHEREAS**, the applicant reviewed its written responses to all public hearing comments and written comments at the Zoning Board's November 6, 2023 meeting; and
- **WHEREAS,** the Zoning Board considered the applicant's written responses to the public comments and the applicant's presentation of the same at its November 6, 2023 meeting, and further deliberated on such applications at the November 6 meeting, including but not limited to the issues of screening and potential visual impacts; and
- **WHEREAS**, the Zoning Board thereafter received and considered additional information from the applicant on tree planting species and a revised planting plan; and
- WHEREAS, the Zoning Board has fully reviewed all application materials, including the site layout map and plan, the project narrative, the FEAF, all supporting technical information, public comments, agency comments, applicant responses to comments, and recommendation of the Rensselaer County Department of Economic Development and Planning, and has considered the comments of its designated technical review consultant; and

**WHEREAS,** the Zoning Board has adopted a Negative Declaration pursuant to SEQRA for this action; and

**WHEREAS,** following review of the complete record and upon due deliberation, and considering the review comments of the Zoning Board's designated technical review consultant, the Zoning Board makes the following findings with respect to the special use permit general requirements set forth in Hoosick Code Section 247-59(B):

- 1. If the property of the proposed project is to be leased, legal consent between all parties, specifying the use(s) of the land for the duration of the project, including easements and other agreements, shall be submitted.
  - An Agency Designation Form was resubmitted on 8.7.23 for tax parcel 36.-1-9.2 and
    was signed by Dale Ford to authorize Hawthorn Solar, LLC to act as representative and
    agent in connection with any proceeding to application for ZBA special permit and
    variances and application for Planning Board subdivision, special permit, and/or
    variances within the solar lease area.
  - An Agency Designation Form was resubmitted on 8.7.23 for tax parcels 36.-1-10.1, 36.-1-11.1, and 46.-1-10.11 and was signed by Timothy and Brittany Marbot to authorize Granada Solar, LLC (now Hawthorn Solar, LLC) to act as representative and agent in connection with any proceeding to application for ZBA special permit and variances and application for Planning Board subdivision, special permit, and/or variances within the solar lease area.
  - A Memorandum of Option was signed by Dale Ford on 1.20.23 and resubmitted on 8.7.23 to lease 42.35 acres of tax parcel 36.-1-9.2.
  - A Memorandum of Option was signed by Timothy and Brittany Marbot on 8.19.19 and resubmitted on 8.7.23 to lease approximately 200 acres of tax parcels 36.-1-11.1 and 36.-1-10.1.
  - A First Amendment to Option Agreement for Lease of Real property was submitted by Timothy and Brittany Marbot on 8.7.23 for the lease of approximately 200 acres between tax parcels 36.-1-11.1 and 36.-1-10.1 with the following Amendments:
    - The term of this agreement (the "option term") shall commence on the effective date and shall expire, unless earlier terminated pursuant to the terms of this agreement, at 11:59 p.m. E.S.T. on the fifth anniversary of the effective date. The parties may extend the option term by mutual agreement.
    - Option payments are non-refundable, except in case of Owner's uncured default, as provided in Para 6., Default, (b), below. Option payments shall be made throughout the option term unless and until the option is exercised, in which case payment or any portion of the option term which is less than one year, shall be paid pro rata. Operator expects the lease area and required easements to ultimately amount to approximately one hundred acres.

- The Operator to have the right to extend the Lease Agreement Term for three additional five-year periods.
- Exhibit 1: Description of Property no longer includes leased lands on tax parcel 46.-1-10.11.
- 2. Blueprints showing the layout of the Tier 3 Solar Energy System signed by a Professional Engineer or Registered Architect shall be required.
  - An AC Electrical Diagram was created on 2.8.21 and resubmitted on 8.7.23.
  - A Proposed Site Plan was created on March 22, 2023 and revised and resubmitted on 7.31.23 including the following required elements:
    - . Boundary and Topographic Survey Map C-200
    - i. Removals and Tree Clearing Plan C-201
    - ii. Erosion, Layout, and Materials Plan C-300
    - iii. Drainage and Grading Plan C-400
    - iv. Construction Road Profile C-500
    - v. Access Road Profiles C-502
    - vi. Site Details C-500-503
    - vii. Landscaping and Buffer Plan L-100-105
- 3. The equipment specification sheets shall be documented and submitted for all photovoltaic panels, significant components, mounting systems, and inverters that are to be installed.
  - a. Solar Panels Specification Sheet was resubmitted on 8.7.23.
  - b. Tracker Specification Sheet was resubmitted on 8.7.23.
  - c. Inverter Specification Sheet was resubmitted on 8.7.23.
- 4. Property Operation and Maintenance Plan. Such plan shall describe continuing photovoltaic maintenance and property upkeep, such as mowing and trimming.
  - The Operation and Maintenance Plan was revised and resubmitted on 8.7.23 to include the following elements per the Town Designated Engineer's request:
    - Overview
    - Systems and Site Description
    - Property Operation
    - System Maintenance
    - Safety Guidelines

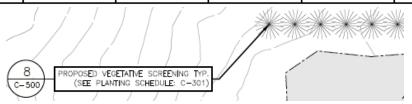
- Preventative Maintenance
- Data Acquisition System (DAS) To be established prior to completion.
- Supervisory Control and Data Acquisition (SCADA) To be established prior to completion.
- System Specifications and Operations To be added when specifications have been finalized.
- Vendor Documentation To be added once established.
- Commissioning Reports To be added once established.
- Warranties and Product Certification To be added once established.
- As-Built Construction Drawings To be added once construction is complete.
- 5. Decommissioning Plan. To ensure the proper removal of such Solar Energy Systems, a Decommissioning Plan shall be submitted as part of the application.
  - The Decommissioning Agreement was revised and resubmitted on 8.7.23 per the ZBA's request and includes the following additional elements:
    - Schedule 1 includes the Decommissioning Security Amounts.
    - Exhibit A1 includes the Form of Decommissioning Performance Bond.
    - Exhibit A2 includes the Form of Decommissioning Standby Letter of Credit.
    - Exhibit B includes the Decommissioning Plan.
    - Exhibit C includes the Form of Owner Decommissioning Notice.
    - Exhibit D includes the Form of Town Decommissioning Notice.
  - A. Compliance with this plan shall be made a condition of the issuance of a special use permit under this Section.
    - This shall be made a condition of the issuance of a special use permit as part of this resolution.
  - B. The Decommissioning Plan must specify that after the Solar Energy System can no longer be used or has not been used for a period of 12 months, it shall be removed by the applicant or any subsequent owner.
    - The Applicant states that "The Parties agree that the decommissioning process, as described in the Decommissioning Plan, may commence for the following reasons: b. The Project ceases to be operational for more than twelve (12) consecutive months."

- C. The plan shall demonstrate how the removal of all infrastructure and the remediation of soil and vegetation shall be conducted to return the parcel to its original state prior to construction.
  - Temporary erosion and sedimentation control best management practices will be used, a SWPPP will be required, control features will be regularly inspected, and control features will be removed at the end of the process.
  - The Material Removal Process will include switching off equipment, disconnecting from the grid, PV module recycling/disposal or returned to the manufacturer, removal and recycling of all cabling and all other above and underground equipment, disconnection and recycling of combiner boxes, removal and disposal/recycling of inverters and transformers, dismantling, removal and recycling of racking materials and fencing, breakup and removal of concrete foundation pads, and dismantling and recycling/disposal of remaining electrical and support equipment.
  - The Access Road Removal process will include the removal and replacement of all road material with topsoil.
  - NYS Department of Agriculture and Markets Construction Guidelines include the onsite monitoring and reporting of soil disturbance activities by a qualified third party, soil decompaction, and other best practices generally intended to preserve and protect topsoil and other agricultural resources.
- D. The plan shall also include an expected timeline for execution.
  - The Decommissioning Terms state that the project shall be decommissioned within 180 days of the end of the Project's operation life, areas disturbed during the decommissioning phase will be seeded with a drought-tolerant grass seed mix appropriate for the area, and the land will be returned to a meadow-like condition or the return of the land to its pre-construction use.
- E. A cost estimate detailing the projected cost of executing the Decommissioning Plan shall be prepared by a Professional Engineer or Contractor. Cost estimations shall take into account inflation.
  - Schedule 1 includes the Decommissioning Security Amount of \$560,613 in 2023 dollars at one year after completion and to be reviewed and increased based on a re-estimation every five years.
- F. Removal of such Solar Energy Systems must be completed in accordance with the Decommissioning Plan.
  - The removal of the Solar Energy System will comply with all provisions of the ZBA-approved Decommissioning Plan submitted on 8.7.23.

- G. If the Solar Energy System is not decommissioned after being considered abandoned, the municipality may remove the system and restore the property and impose a lien on the property to cover these costs to the municipality. The applicant has proposed the following:
  - If Owner does not fully decommission the Project within one-hundred and eighty (180) days after either the Owner Decommissioning Notice or the Discontinued Operations Date, as applicable, the Town shall provide written notice to Owner (the "Town Decommissioning Notice", a template for same attached and incorporated herein as Exhibit D) requesting that the Project be decommissioned in accordance with the Decommissioning Plan.
  - If Owner fails to provide a reasonable explanation for the delay in the decommissioning activities of the Project within thirty (30) day of receiving the Town Decommissioning Notice, the Town may call on the Decommissioning Security and use the proceeds of the Decommissioning Security to proceed with the decommissioning of the Project in accordance with the Decommissioning Plan.
  - If Owner does provide a reasonable explanation for the delay in the decommissioning activities and is continuing to work towards the decommissioning of the Project, then the Owner shall continue the work required to proceed with the decommissioning of the Project and the Town shall not call on the Decommissioning Security nor shall the Town use any proceeds of the Decommissioning Security to proceed with the decommissioning of the Project. The previous sentence notwithstanding, if, under any circumstance, Owner does not fully decommission the Project in accordance with the Decommissioning Plan within one-hundred and eighty (180) days of its receipt of the Town Decommissioning Notice, then the Town may call on the Decommissioning Security and use the proceeds of the Decommissioning Security to proceed with the decommissioning of the Project.
- 6. A landscape plan that will provide neatly situated screening consistent with the line of sight and flow of the terrain to shield the solar panels from sight as much as is practicable as shall be determined by the Zoning Board.
  - The original Planting Plan was submitted on 4.28.23 on Site Plan Sheets L-100-105. The first revision of the Planting Plan was submitted on 8.7.23 with substantially greater depth, with the vegetation staggered, and with a variety of species. The second revision was submitted on 12.4.23 with an alternative species for each proposed species.

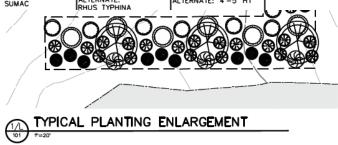
• Original Vegetative Screening Plan and Planting Schedule (4.28.23):

PLANTING SCHEDULE						
KEY	COMMON	BOTANICAL	SIZE	NO.	SPACING	
*	EASTERN WHITE PINE	PINUS STROBUS	3*-4* HT	346	15° O.C.	



Revised Vegetative Screening Plan and Planting Schedule (12.4.23):

		PLANTING	SCHEDULE		
KEY	COMMON	BOTANICAL	SIZE	NO.	SPACING
	PROPOSED: WINTERBERRY ALTERNATE: BAYBERRY	PROPOSED: ILEX VERTICILLATA ALTERNATE: MYRICA PENNSYLVANICA	PROPOSED/ALTERNATE: 3 GAL	419	6' O.C. & STAGGERED
	PROPOSED: SCARLET OAK ALTERNATE: BLACK BIRCH	PROPOSED: QUERCUS COCCINEA ALTERNATE: BETULA LENTA	PROPOSED: 12'-14' HT ALTERNATE: 6-7' HT	73	45' O.C.
	PROPOSED: HIGHBUSH BLUEBERRY ALTERNATE: RED OSIER DOGWOOD	PROPOSED: VACCINIUM CORYMBOSUM ALTERNATE: CORNUS SERICEA	PROPOSED/ALTERNATE: 5-7 GALLON	235	6' O.C. & STAGGERED
	PROPOSED: EASTERN RED CEDAR*** ALTERNATE: NANNYBERRY VIBURNUM	PROPOSED: JUNIPERUS VIRGINIANA ALTERNATE: VIBURNUM LENTAGO	PROPOSED: 6'-8' HT ALTERNATE: 3'-4' HT	158	18' O.C.**
0	PROPOSED: PITCH PINE ALTERNATE: CRANBERRY BUSH	PROPOSED: PINUS RIGIDA ALTERNATE: VIBURNUM TRILOBUM	PROPOSED: 8-10' Ht ALTERNATE: 2- 3'	150	20' O.C. & STAGGERED
\$	PROPOSED: SCRUB OAK ALTERNATE: STAGHORN SUMAC	PROPOSED: QUERCUS ILICIFOLIA ALTERNATE: IRHUS TYPHINA	PROPOSED: 3'-4' HT ALTERNATE: 4'-5' HT	73	45* O.C.



- The Fuzz and Buzz Seed Mix pricing sheet was submitted on 11.29.23 to provide the list of vegetative cover species proposed for the meadow portion of the site. This seed mix was developed by Ernst Conservation Seeds in conjunction with Cornell Cooperative Extension and the American Solar Grazing Association to address the unique nutritional needs of sheep while providing a low-growing, easily maintained, and sustained vegetation solution for solar installations in the northeast United States.
- A Landscape Locations Map was submitted by the applicant to easily demonstrate the
  vegetative screening location throughout the entire project site to the ZBA and the
  public.
- 7. An appropriate plan of access and training shall be submitted to and approved by the Planning Board for allowing access and providing safety training to all applicable EMS, Fire Departments, Police Departments, and any other applicable responsive agencies.
  - The Safety and Access Plan was submitted on 8.7.23 which covered the following elements:
    - The General Project Safety section states that "CS Energy is committed to ensuring Hawthorn Solar is developed, constructed, and operated following all applicable safety standards for solar."
    - Access will be limited only to landowners and tenants with gated access roads
      into the completely fenced solar array areas which will be kept locked when
      maintenance activities are not occurring. Emergency responders will have
      access to the site and all emergency cutoff locations through a mutually agreedupon method of access, which shall be included in their training.
    - Emergency Cutoff Locations will be accessible from project access roads. A
      map of project-wide emergency cutoff locations with cutoff procedures for
      project personnel will be provided to local emergency responders prior to
      project operations.
    - On-site training will be conducted for all local emergency responders at least three months prior to the commercial operation date and appropriate training of first responders will take place at regular intervals throughout the project's operations lifetime.
  - The Hanwha Q-Cell Product Safety Data Sheet was submitted on 11.29.23 and provides the following information:
    - Applicable Products: Q.PLUS-G4.X, Q.PLUS BFR-G4.X, Q.PLUS L-G4.X, Q.PEAK-G4.X, Q.PEAK BLK-G4.X, Q.PEAK L-G4.X, Q.PLUS DUO-G5, Q.PLUS DUO BLK-G5, Q.PLUS DUO L-G5, Q.PLUS DUO-G5.X, Q.PLUS DUO BLK-G5.X, Q.PLUS DUO L-G5.X, Q.PEAK DUO-G5, Q.PEAK DUO BLK-G5, Q.PEAK DUO L-G5, Q.PEAK DUO-G5.X, Q.PEAK DUO BLK-G5.X, Q.PEAK DUO L-G5.X, Q.PEAK DUO-G6, Q.PEAK DUO BLK-G6,

# Q.PEAK DUO L-G6, Q.PEAK DUO-G6.X, Q.PEAK DUO BLK-G6.X, Q.PEAK DUO L-G6.X

## Safety Risks

- "Hanwha Q CELLS solar PV modules do not pose any risk of hazardous chemicals. Hazard symbols and precautionary hazard statements for hazardous chemicals are not applicable."
- Risk of death from electrocution.
- In rare cases, solar PV modules can cause fire due to worn electrical contacts which result in electrical arching.
- Solar PV modules can reach high temperatures which can cause skin burns.
- Sharp edges, corners, and broken glass can cause injuries.
- Solar PV modules can cause Injuries due to their weight.
- Falling solar PV modules can cause injuries.
- Lifting solar PV modules can cause injuries.

## • Composition/Information on Ingredients

#### FRAME

- Aluminum = 8%-16% not hazardous
- Silicone = <2% not hazardous

## • LAMINATE

- Glass = 60%-80% not hazardous
- Plastics = 8%-16% no hazards known
- Silicon = 2%-4% not hazardous
- Metals = 1%-3% not hazardous
- Lead = <0.1% hazardous
- Silver = <0.05% not hazardous

#### First-Aid Measures

- In the event a person is electrocuted or affected by electrical energy of the solar PV module, CALL 911. Before attempting rescue, SHUTDOWN THE POWER SOURCE.
- Remove the victim from the power source using only insulated tools ONLY IF CONTACT WITH LIVE ELECTRICAL COMPONENTS CAN BE PREVENTED.

- Carefully move the injured from the zone of danger.
- After moving to a safe location, check heartbeat, respiration, and consciousness of the injured person.
- Apply appropriate life-saving measures (CPR) accordingly before taking care of minor injuries.
- Consult a medical professional even if there are no visible injuries.

## • <u>Fire-Fighting Measures</u>

- Hanwha Q CELLS solar PV modules are fire-rated as Class C according to IEC and UL 1703 as well as Type 1 according to UL 1703.
- Hanwha Q CELLS solar PV modules are extensively tested at the factory to ensure electrical safety of the product before shipment.
- In rare cases, solar PV modules as any other electrical device can cause fire due to worn electrical contacts which result in electrical arching.
- In case solar PV modules which are not part of an array are on fire, USE FIRE EXTINGUISHERS RATED FOR ELECTRICAL EQUIPMENT, Class C.
- IN CASE A SOLAR PV MODULE ARRAY IS PRESENT, ANY FIRE SHOULD ONLY BE FOUGHT BY PROFESSIONAL FIREFIGHTERS. FIREFIGHTERS
- NEED TO TAKE PRECAUTIONS FOR ELECTRICAL VOLTAGES UP TO 1,500 VOLTS (DC).
- Some components of the modules can burn. Potential combustion products include oxides of carbon, nitrogen, and silicon.
- In case of prolonged fire, solar PV modules may lose their structural integrity.

## Handling and Storage

- Before installing the module, read the Installation and Operation Manual for Q CELLS modules carefully.
- Noncompliance with the instructions may result in damage and physical injury or death.
- Only qualified and authorized specialists may install modules and put them into operation.
- Details about transport and storage of palletized Hanwha Q CELLS solar PV modules can be found in the Packaging and Transport Information of the respective module type.

## • Exposure Controls/Personal Protection

- Before installing the module, read the Installation and Operation Manual carefully. Noncompliance with the instructions may result in damage and physical injury.
- Only qualified and authorized specialists may install modules and put them into operation. You can obtain the complete installation manual from your retailer.
- Silicones used in manufacturing release methanol during curing. Once cured, no additional methanol is released during use. Small amounts of these chemicals may be present in shipping cartons. Upon receipt, open container in a well-ventilated location and allow to stand for 5 minutes before removing units from cartons. Exposures above recommended limits for methanol of 200 ppm eight-hour time-weighted-average (TWA) will not occur.
- <u>Ecological Information</u>: Hanwha Q CELLS solar PV modules are designed to withstand outdoor operating conditions for 25 years. Biodegradation is not expected due to high chemical stability of the components.
- Physical and Chemical Properties, Stability and Reactivity, Toxicological Information, Disposal Considerations, Transport Information, and Regulatory Information has also been included in this data sheet.
- A report from the North Caroline Clean Energy Technology Center on the Health and Safety Impacts of Solar Photovoltaics from May, 2017 was submitted 11.29.23.
  - The report includes the following topics:
    - Project Installation/Construction
    - System Components
    - Construction and Durability
    - PV Technologies
    - Panel End-of-Life Management
    - Non-Panel System Components
    - Panel Washing and Vegetation Control
    - Electromagnetic Fields
    - Electric Shock and Arc Flash Hazards
    - Fire Safety

- The report concludes that Photovoltaic (PV) technologies and solar inverters are not known to pose any significant health dangers to their neighbors. The most important dangers posed are increased highway traffic during the relative short construction period and dangers posed to trespassers of contact with high voltage equipment. This latter risk is mitigated by signage and the security measures that industry uses to deter trespassing. As will be discussed in more detail below, risks of site contamination are much less than for most other industrial uses because PV technologies employ few toxic chemicals and those used are used in very small quantities.
- The 30 CFR § 47.91 List of Exemptions from the HazCom Standard was submitted on 11.29.23 to demonstrate that the PV module materials pose no risk to human health.
- 8. Underground Requirements. All on-site utility lines shall be placed underground to the extent feasible and as permitted by the serving utility, with the exception of the main service connection at the utility company right-of-way and any new interconnection equipment, including without limitation any poles, with new easements and right-of-way.
  - All on-site utility lines are shown to be underground on the 11.29.23 Site Plan submission with the exception of those from the main service connection at the substation.
- 9. Vehicular Paths. Vehicular paths within the site shall be designed to minimize the extent of impervious materials and soil compaction.
  - The proposed vehicular paths are proposed to be 15' wide covering an area of 3.17 acres as shown on the 11.29.23 Site Plan submission.
  - The temporary gravel access drive and gravel access road pavement are to be designed for lightly loaded vehicles.
  - Details of the temporary gravel access drive are shown in Sheet C-500 Detail 12 on the 11.29.23 Site Plan submission.
  - Details of the gravel access road are shown in Sheet C-503 Detail 1 on the 11.29.23 Site Plan submission.

## 10. Signage.

- A. No signage or graphic content shall be displayed on the Solar Energy Systems except the manufacturer's name, equipment specification information, safety information, and 24-hour emergency contact information. Said information shall be depicted within an area no more than 8 square feet and shall be exempt from the requirements of the Town of Hoosick Sign Law.
  - No additional signage is proposed for this project per the revised 11.29.23 submission materials.

- B. As required by National Electric Code (NEC), disconnect and other emergency shutoff information shall be clearly displayed on a light reflective surface. A clearly visible warning sign concerning voltage shall be placed at the base of all pad-mounted transformers and substations.
  - Sheet C-502 Detail 4 of the revised 11.29.23 Site Plan provides the specifications for the required warning sign.
- 11. Glare. All Solar Panels shall have anti-reflective coating(s).
  - The applicant provided the following response to Question #42 on page 17 of the Public Hearing Questions (10.23.2023) document: "There will be minimal impact to travelers. The panels will have little visibility from the road. Overall, the project will have little visibility and it is unlikely and generally not anticipated that drivers will be impacted on their commute. The project will have no glare impacts on roads or any residences or neighboring properties. The applicant has developed a landscape screening plan to minimize visibility, generally, around the entirety of the project. This will further mitigate any minor potential impacts caused by the project."
- 12. Lighting. Lighting of the Solar Energy Systems shall be limited to that minimally required for safety and operational purposes and shall be reasonably shielded and downcast from abutting properties.
  - Question D.2.n.i. of the revised FEAF from 8.11.23 states that "typically lighting is not incorporated into solar projects; however, in some instances, utility standards require lighting to be established in proximity to the substation. To the extent lighting is required by utility standards, it will be installed."
- 13. Tree-cutting. Removal of existing trees larger than 6 inches in diameter should be minimized to the extent possible.
  - The applicant provided the following response to Question #51 on page 19 of the Public Hearing Questions (10.23.2023) document: "Throughout development, the project intentionally worked to balance competing interests of siting on farmland and forested areas and by generally avoiding wetlands and locations where endangered or threatened species were located. In order to avoid agricultural land, the applicant must site in forested areas, and vice versa. That being said the removal of trees will have an impact on the environment, which will be at least in part mitigated through an estimated 25–plus years of clean energy production, reseeding efforts on decommissioning, and the trees planted through landscaping mitigation. The applicant will reseed areas where tree removal is necessary and will be planting additional trees around the project for vegetative screening. The applicant anticipates that over 1,000 trees will be planted around the project."

- 14. Site Plan Application. For any Solar Energy system requiring a Special Use Permit, site plan approval shall be required.
  - A revised Site Plan was submitted on 11.29.23 which includes all of the information necessary within the application requirements and general site plan standards and considerations.
- 15. Special Use Permit Standards.
  - AR District Regulations have been included within the resubmitted Site Plan from 7.31.23.
  - The meeting or exceeding of the regulations has been demonstrated per the following:
    - Minimum Lot Area (1 acre) Sheet C-100 431.18 acres
    - Minimum Front Setback (50') Sheet C-100 54 feet
    - Minimum Side Setback (20') Sheet C-100 66 feet
    - Minimum Rear Setback (10') Sheet C-100 40 feet
    - Maximum Height (35') Sheet C-100 20 feet
    - Maximum Lot Coverage (*undefined*) Sheet C-100 28.5% (118.53 acres)
    - Fencing and Height (7') Sheet C-501 8 feet
    - Agricultural Resources (50% prime)— Sheet C-100 40.12% of fenced area
    - Screening and Landscaping Plan Sheet L-100
    - Visual Assessment
      - Visual Impact Assessment Preparation Memo provided on May 22, 2023
      - Viewshed Analysis provided on March 21, 2023
      - Visual Renderings provided on July 2023
- 16. Fencing Requirements. All solar panels, supportive structures, and mechanical equipment, including any structure for storage batteries, shall be enclosed by a 7-foot-high fence, as required by NEC, with a self-locking gate to prevent unauthorized access.
  - Sheet C-501 Detail 4 on the revised Site Plan from 11.29.23 provides the detail for an eight-foot fixed know farm fence to enclose the entire solar array area and substation.

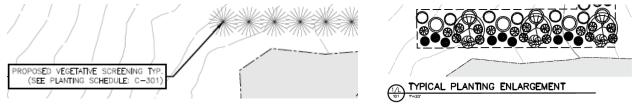
- Sheet C-501 Detail 7 on the revised Site Plan from 11.29.23 provides the detail for an eight-foot fixed knot farm fence double gate to be installed at the entrance to all access roads.
- Sheet C-501 Detail 9 on the revised Site Plan from 11.29.23 provides the detail for an eight-foot fixed knot farm fence personnel gate for non-vehicular access.
- 17. Screening and Visibility. Solar Energy Systems larger than 10 acres shall be required to:
  - A. Conduct a visual assessment of the visual impacts of the Solar Energy System on public roadways and adjacent properties. At a minimum, a line-of-sight profile analysis shall be provided. Depending upon the scope and potential significance of the visual impacts, additional impact analyses, including for example a digital viewshed report, may be required to be submitted by the applicant.
    - A Visual Impact Assessment was initially submitted on 5.22.23 which included a Viewshed Analysis and Planting Plan. The ZBA subsequently requested a Methodology Report and Visual Renderings to supplement the Visual Impact Assessment.
    - The initial Visual Impact Assessment was prepared as a desktop study via Google Earth depicting visibility within a two-mile radius along with line-ofsite visibility transects from 19 potentially sensitive locations. The assessment is based solely on topography and does not consider tree height. The results are as follows:
      - No portion of the array is visible from the Historic Barns of Nipmoose.
      - No portion of the array is visible from the Brownell-Cornell-Gibbs Farmstand.
      - No portion of the array is visible from the Cornell-Manchester Farmstand.
      - A small portion of the array is likely visible from certain vantage points within Tibbetts State Forest.
      - The majority of the array is visible from Home #1 (127 Fords Road), screening is proposed from this receptor.
      - The majority of the array is visible from Home #2 (198 Fords Road), no screening is proposed from this receptor due to the high elevation of the home.
      - The majority of the array is visible from Home #3 (69 Fords Road), a letter submitted from the homeowner was in support of the project.

- A small portion of the array is likely visible from certain vantage points from Home #4 (405 Spicer Road), screening is proposed from this receptor.
- The majority of the array is likely visible from Home #5 (402 Spicer Road), screening is proposed from this receptor.
- The majority of the array is likely visible from Home #6 (379 Spicer Road), screening is proposed from this receptor, however, a portion of the array will likely continue to be visible from certain vantage points.
- The majority of the array is likely visible from Home #7 (356 Spicer Road), screening is proposed from this receptor, however, a portion of the array will likely continue to be visible from certain vantage points.
- The majority of the array is likely visible from Home #8 (361 Spicer Road), screening is proposed from this receptor, however, a portion of the array will likely continue to be visible from certain vantage points.
- The majority of the array is likely visible from Home #9 (343 Spicer Road), screening is proposed from this receptor, however, a portion of the array will likely continue to be visible from certain vantage points.
- A portion of the array is likely visible from Home #10 (325 Spicer Road), screening is proposed from this receptor, however, a small portion of the array may continue to be visible from certain vantage points.
- A portion of the array is likely visible from Home #11 (321 Spicer Road), screening is proposed from this receptor, however, a small portion of the array may continue to be visible from certain vantage points.
- The majority of the array is likely visible from Home #12 (277 Spicer Road), screening is proposed from this receptor, however, a portion of the array will likely continue to be visible from certain vantage points.
- No portion of the array should be visible from Home #13 (26 Pine Valley Road) and screening is proposed from this receptor.
- The highest portion of the array (above 1000 ft) will be visible from Home #14 (101 Wagner Road), this portion of the array will continue to be visible from certain vantage points.

- The highest portion of the array (above 1050 ft) will be visible from Home #15 (53 Wagner Road), this small portion of the array will continue to be visible from certain vantage points.
- The Visual Renderings were completed for the initial proposed screening from two public vantage points along Pine Valley Road.
  - View #1 is to the west of Fords Road looking north. The proposed screening at ten years of growth blocks approximately 95% of array visibility.
  - View #2 is to the east of Fords Road looking north. The proposed screening at ten years of growth blocks approximately 50% of array visibility.
- Upon review of these materials the ZBA requested substantial revisions to the
  vegetative screening layout and species included within the landscaping plan.
  With the improved layout, any direct view of the vegetation will provide
  adequate screening of the array at or below the treetop line of site.
- B. Submit a screening and landscaping plan to show adequate measures to screen through landscaping, grading, or other means so that views of Solar Panels and Solar Energy Equipment shall be minimized as reasonably practical from public roadways and adjacent properties to the extent feasible. The screening and landscaping plan recommended by a landscape architect shall specify the locations, elevations, height, plant species, and/or materials that will comprise the structures, landscaping, and/or grading used to screen and/or mitigate any adverse aesthetic effects of the system, following the applicable rules and standards established by the Town.
  - This project is in a location that cannot be 100% screened from all views due to the underlying topography of the project site and the elevation of some surrounding homes and roads. Therefore, to the greatest extent practicable, the applicant is providing extensive screening from those public vantage points closest to the array, has revised the planting schedule to be more robust and use native species, and will work with individual landowners to further screen the project from view.
  - The applicant has provided the following statement on the potential Impact on Aesthetic Resources from this project within its Memorandum SEQR EAF Part 2 submitted on 7.5.23: "The Project will have minimal to no impact on Aesthetic Resources. The Project, when viewed from directly above (aerial) or from close proximity (on the parcels next to the proposed fencing), will be in sharp contrast to existing conditions. However, the general public would not

normally be in position to see the Project during routine travel or during recreational/tourist activities. The Project is located in an area with low population density and is adequately screened by existing wooded vegetation. Additionally, the Project will work with non-participating adjacent properties and install vegetative screenings and buffers to minimize any concerns of visual impact on their properties. These screenings will include proposed tree plantings included in Site Plan drawing L-100 which has been submitted to the Planning Board for review and comment."

- Additionally, the applicant has provided the following statement on the potential viewshed impact from this project within the Public Hearing Responses Summary submitted on 11.29.23: "The project is set back at least 250 feet from Pine Valley Road and on average over 600 feet from Pine Valley. In most locations along the project, the topography from Pine Valley Road will shield the view of the panels. Vegetative screening is proposed along the majority of the locations where the panels are visible from residential properties and public vantage points, including along Fords Road and Pine Valley Road. There will be minimal impact to travelers. The panels will have little visibility from the road and it is not anticipated that drivers will be impacted on their commute. The project will have no glare impacts on roads or any residences or neighboring properties. Through landscape mitigation, over 1,000 trees are anticipated to be planted during construction."
- The following images have been taken from the Vegetative Screening Plans submitted on 4.28.23 and 12.4.23, respectively:



- The 4.25.23 plan only included 346 eastern white pine trees, 3'- 4' tall, spaced in a single row at 15' on-center without an alternative.
- The 12.4.23 plan has been revised to include the following 1,108 trees and bushes:
  - 419 three-gallon winterberry bushes, spaced 6' on-center and staggered, with bayberry bushes as an alternative.
  - 73 scarlet oak trees, 12'- 14' tall, spaced 45' on-center with 6'- 7' tall black birch trees as an alternative.

- 235 five-seven gallon highbush blueberry bushes, spaced 6' on-center and staggered, with red osier dogwood bushes as an alternative.
- 158 eastern red cedar trees, 6'- 8' tall, spaced 18' on-center with 3'- 4' nannyberry viburnum trees as an alternative.
- 150 pitch pine trees, 8'- 10' tall, spaced 20' on-center and staggered with 2'- 3' cranberry bushes as an alternative.
- 73 scrub oak trees, 3'- 4' tall, spaced 45' on center with 4'- 5' staghorn sumac as an alternative.
- The applicant has provided a detail on the planting of a coniferous tree in detail #8 on page C-500 of the Site Plan Set submitted on 8.7.23.
- 18. Agricultural Resources. For projects located on agricultural lands:
  - A. Any Tier 3 Solar Energy System located on the areas that consist of Prime Farmland or Farmland of Statewide Importance shall not exceed 50% of the area of Prime Farmland or Farmland of Statewide Importance on the parcel. Tier 3 Solar Energy Systems on Prime Farmland or Farmland of Statewide Importance shall be required to seed a minimum of 20% of the total surface area of all solar panels on the lot with native perennial vegetation designed to attract pollinators.
    - This project will be disturbing 38.13 acres of prime farm soils and 34.06 acres of soils of statewide importance. The combined 72.19 acres accounts for 40.12% of the total 179.91 acres of significant farmland soils within the three parcels.
    - The applicant has provided the following statements on the potential Impact on Agricultural Resources from this project within its Memorandum SEQR EAF Part 2 submitted on 7.5.23: "The Project will have minimal impact to Agricultural Resources. The nature of this project will not eliminate or significantly alter the existing soil underneath solar panels in the same ways as other types of projects (housing, retail, or industrial developments) may. Instead, the underlying soil will be preserved in its natural state until the project is decommissioned. While the soil lies dormant, it would undergo the same process that occurs when farmers "rest" their fields or perform crop rotations. The soil underneath solar panels would likely be enhanced over time from the grasses to be planted and maintained during the life of this project. The installation of solar panels until decommissioning can be likened to "banking" the farmland for a future agricultural use."
  - B. To the maximum extent practicable, Tier 3 Solar Energy Systems located on Prime Farmland shall be constructed in accordance with the construction requirements of the New York State Department of Agriculture and Markets.

- The applicant has provided the following statement within its Memorandum SEQR EAF Part 2 submitted on 7.5.23: "The Project must follow the "Guidelines for Solar Energy Projects Construction Mitigation for Agricultural Lands" established by the New York State Department of Agriculture and Markets (NYSDAM) established in 2019. The Project must incorporate these into its development plans and applications for permitting and approval as a solar project that impacts agricultural lands. As part of the award process with NYSERDA, the Project had to assess its impacts to soils classified in Mineral Soil Groups 1 to 4. According to the New York State Department of Agriculture and Markets, approximately 38 acres of soils under the Project are classified in Mineral Soil Groups 1 to 4. Each parcel will have agricultural lands that will be outside of the fence line of the project and will remain in active agricultural use."
- C. Tier 3 Solar Energy System owners shall develop, implement, and maintain native vegetation to the extent practicable pursuant to a vegetation management plan by providing native perennial vegetation and foraging habitat beneficial to game birds, songbirds, and pollinators. To the extent practicable, when establishing perennial vegetation and beneficial foraging habitat, the owners shall use native plant species and seed mixes.
  - 100% of the exposed area of the site will be covered with the Fuzz and Buzz Seed Mix. The pricing sheet for this mix was submitted on 11.29.23 to provide the list of vegetative cover species proposed for the meadow portion of the site. This seed mix was developed by Ernst Conservation Seeds in conjunction with Cornell Cooperative Extension and the American Solar Grazing Association to address the unique nutritional needs of sheep while providing a low-growing, easily maintained, and sustained vegetation solution for solar installations in the northeast United States; and

WHEREAS, the general special use permit findings listed in Hoosick Code Section 247-35 pertaining to compatibility, vehicular access, circulation and parking, landscaping and screening, public facilities, lighting, and emergency access have been addressed above and also in findings made through resolution with respect to the site plan application in connection with this action, and such findings are expressly incorporated herein without full repetition; and the Zoning Board further finds that significant adverse air discharges will not result from this action, and will be limited in duration to the construction phase through vehicle and equipment use; and

**WHEREAS,** based upon such findings, and upon review of the complete application record, record of proceedings, public comments and responses thereto, the SEQRA record and Negative Declaration, and upon due consideration and deliberation, the Zoning Board is prepared to act upon the special use permit application;

**NOW, THEREFORE, BE IT RESOLVED,** by the Zoning Board of Appeals of the Town of Hoosick in regular session duly convened as follows:

- 1. The Town of Hoosick Zoning Board of Appeals approves the special use permit for the Hawthorne Solar, LLC commercial solar facility located along Pine Valley Road and Fords Road, subject to the following conditions:
  - a. Subject to posting and maintenance of financial security for decommissioning of the commercial solar facility equipment in form and amount acceptable to the Town of Hoosick. Decommissioning security amount shall be subject to periodic review as to amount adequacy as to be determined by the Town Board. Strict compliance with the decommissioning plan is required.
  - **b.** Subject to final comments of the Zoning Board of Appeals Reviewing Engineer and Town of Hoosick Water Department on final stormwater pollution prevention plan (SWPPP) for this facility, and Notice of Intent to comply with NYSDEC General Permit 0-15-002.
  - **c.** Coordination with local emergency services regarding on-site facilities, layout, equipment, and access; provide safety notices and safety training to such local emergency services; provision by the applicant, at applicant cost, of emergency response vehicle and equipment to the Hoosick Fire Department.
  - **d.** All panels used for the solar facility must have an anti-glare coating or consist of materials that will not produce offensive glare.
  - **e.** No further removal of any vegetation from the property without further review and approval by the Town of Hoosick Zoning Board of Appeals. Tree cutting on the site is limited to the tree clearing limits as shown on the Removals Plan, Sheet C-201 of the Site Plan Set submitted on 8.7.23.
  - **f.** All approvals of the Public Service Commission for this solar facility must be filed with the Town of Hoosick.
  - **g.** Access to the commercial solar equipment is limited to three access roads off of Fords Road and one access road off of Pine Valley Road as shown on Sheet C-300 of the Site Plan Set submitted on 8.7.23.

- **h.** All waste materials generated during site construction, including all packaging materials, must be contained and removed from the site within a reasonable time and no later than the issuance of a certificate of compliance.
- i. The security fence around the perimeter of the community solar facility shall be 7-foot high fixed knot farm fence, with a Knox box installed for emergency access at the entry gates.
- **j.** The solar facility equipment must be constructed and operated in compliance with all requirements of the National Electric Code.
- **k.** Use of pesticide and/or herbicide is prohibited in relation to operation and maintenance of the commercial solar facility and a note regarding such prohibition shall be added to the site plan.
- **l.** A Payment In Lieu of Taxes (PILOT) Agreement is required.
- **m.** A Stormwater Management Facilities Maintenance and Easement Agreement is required.
- **n.** A road use and repair agreement is required.
- **o.** Construction activities are limited to Monday through Friday, 7:00 a.m. 4:00 p.m.
- **p.** Strict compliance with the approved site plan set submitted on 8.7.23 is required.
- q. Strict compliance with the landscaping plan submitted on 12.4.23 is required; all vegetation/trees must comply with the approved species list, and the applicant/operator must replace/replant all vegetation/trees installed pursuant to the approved landscaping plan that do not survive during all periods of time that the facility is in operation.
- r. Subject to requirements under Nationwide Permit for land-based renewable energy generation facilities of the United States Army Corps of Engineers and determination from the Army Corps of Engineers that coverage is provided for this project thereunder.

 The foregoing Resolution, offered by, was duly put to a vote as follows:			
MEMBER ZIEHM	VOTING		
MEMBER BAILEY	VOTING		
MEMBER PIRIE	VOTING		
MEMBER SUSSMAN	VOTING		
CHAIDMAN HOAC	VOTING		

The foregoing Resolution was/was not thereupon declared duly adopted.

January 2, 2024