

LOCAL LAW NUMBER #X OF 2021

**A LOCAL LAW OF THE TOWN OF CAROLINE
RELATING TO SOLAR ENERGY SYSTEMS AND BATTERY ENERGY STORAGE SYSTEMS
PROPOSED TO BE SITED IN THE TOWN OF CAROLINE, NEW YORK**

The Town Board of The Town of Caroline, New York, pursuant to Resolution dated _____, 2021, does hereby adopt and pass this Local Law Number #X of 2021, and therefore, be it so enacted as follows:

SHORT TITLE – This local law shall be known as the “Solar Energy and Battery Energy Siting Law” or, herein, as “this local law.”

[Section 1 to be revised.]

SECTION 1 – AUTHORITY: This Local Law is adopted pursuant to the powers granted by §§ 130, 261, and 263 of the Town Law of the State of New York, and Municipal Home Rule Law § 10, which authorize the Town of Caroline to adopt local laws that advance and protect the health, safety and welfare of the community. Further, this local law does not affect the provisions or requirements of any other federal, state, or local law or regulations. Where this local law is in conflict with any other such law or regulation, the more restrictive shall apply.

SECTION 2 – PURPOSE: The purpose of this local law is to facilitate and regulate the development and operation of certain renewable energy systems based upon the use of sunlight or upon the electrochemical processes of batteries and fuel cells; to increase employment and business development in the Town of Caroline, to the extent reasonably Practicable, by furthering the installation of Solar Energy Systems and Battery Energy Storage Systems; to mitigate the impacts of such systems upon environmental resources, such as important agricultural lands, forests, wildlife and other protected resources; and to provide a regulatory scheme for the designation of properties most suitable for the location, construction and operation of such systems. It is in the public interest to allow for and encourage renewable energy systems in accordance with the Town of Caroline Comprehensive Plan.

SECTION 3 – APPLICABILITY: The requirements of this law apply to all Solar Energy Systems and Battery Energy Storage Systems proposed, modified, or installed after the effective date of this local law. This law does not apply to such systems that are lawfully in existence as of the date this local law becomes effective, except for modifications of existing uses or structures as specified in §5 and §9. Any use which would otherwise be subject to this law, which has been discontinued for a period of one (1) year or more, shall be subject to review pursuant to the terms of this law before such use is resumed. Any use or structure shall be considered to be in existence provided the same has been substantially commenced as of the effective date of this local law and fully constructed and completed within one (1) year from the effective date of this local law.

SECTION 4 – DEFINITIONS:

Accessory Structure—A structure incidental and subordinate to a principal building or use in terms of area and function on the same lot, and used for purposes that are customarily found in association to those of the principal use.

Agricultural Monitor—An individual hired to monitor and assess implementation of agricultural protection measures, measures designed to mitigate damage to agricultural lands, and measures designed to restore agricultural lands.

Agricultural Land—land area under perennial crops, under permanent pastures, under annual crops, meadows for mowing or for pasture, and land temporarily fallow.

Agriculturally Sensitive Areas—Agricultural Land, Prime Farmlands, Prime Farmlands if Drained, or Farmlands of Statewide Importance.

Applicant—A property owner, an entity or individual holding an option or contract to purchase a property, or any other affiliate or operator authorized in writing to act for such persons, who submits an application under the provisions of this Code.

Battery Energy Storage System—A rechargeable or other energy storage system consisting of electrochemical or other types of storage or cyclable batteries, battery chargers, controls, power conditioning systems and associated electrical equipment designed to provide electrical power to a building, other structure, facility or the electrical grid.

Building-Mounted —A system or facility whose components are attached to the building envelope of any legally permitted building or structure, such as vertical facades, skylights, roofing materials and shading over windows.

Chapter—These land use regulations of the Town as set forth in the Code.

Code—The local laws, ordinances, codes, and policy requirements of processes, rules, and procedures of the Town of Caroline.

Code Officer—The Town of Caroline Code Officer

Commissioning—A systematic process that provides documented confirmation that a system functions according to the intended design criteria and complies with applicable code requirements.

Common Birds in Steep Decline—Those species of birds occurring in the Town that are identified by Partners in Flight as of concern because their numbers are declining rapidly.

Critical Environmental Areas—Areas which have been designated by the Town or a state agency to recognize a specific geographical area and to alert Applicants that special resources or dangers in the area require careful attention.

Decommissioning—A systematic process for removing a Battery Energy Storage System and/or Solar Energy System and restoring the land.

Decommissioning and Site Restoration Plan—A written plan that specifies how a system will be withdrawn from service and disposed of and how the site occupied by the system will be restored.

Endangered Species—Any plant or animal species so designated by the State of New York.

Environmentally Sensitive Areas—Critical Environmental Areas, Federally-designated wetlands, or NYS-regulated wetlands, waterbodies or streams.

Environmental Monitor—An individual hired to monitor and assess implementation of environmental protection and environmental damage mitigation measures.

Facility—Small, Medium or Large Solar Energy Facility or Small or Large Battery Energy Storage Facility, as appropriate for the section.

Farmlands of Statewide Importance—Land designated as such by the State of New York; such lands may be included in NRCS maps and databases.

Grid-Tied—An electrical generation or energy storage system connected to the main electric grid. Grid-Tied systems may be designed to disconnect from the main electric grid (typically during a power outage) but are intended to primarily operate while connected to the main electric grid.

Ground-Mounted—A system of facility whose components are attached to a mounting system anchored to the ground (including by static weighting) and detached from any other structure.

Important Views—Distinctive Views and Noteworthy Views as enumerated in the Tompkins County Scenic Resources Inventory and Town of Caroline Scenic Resources Inventory.

Large Battery Energy Storage Facility—A Battery Energy Storage System with a Nameplate Capacity greater than or equal to 600kWh.

Large Solar Energy Facility—A Solar Energy System with a Nameplate Capacity greater than 25kW and whose components cover an area of 2.5 acres or more.

Medium Solar Energy Facility—A Solar Energy System with a Nameplate Capacity greater than 25kW and whose components cover an area of less than 2.5 acres.

Nameplate Capacity—For a Solar Energy System: the manufacturer's output power rating of the system under industry standard test conditions, typically given in kW or MW. For a Battery Energy Storage System: the manufacturer's energy storage rating of the system, typically given in kWh or MWh.

Non-Participating Property—Any property where the owner of such property has not agreed in writing with the owner or operator of a Solar Energy System or Battery Energy Storage System to allow certain uses to be sited adjacent to or in proximity to such non-participating property, or granting access to wind, light or air; or waiving any noise or setback requirements.

Non-Participating Residence—Any residence, building or structure expected or intended for human occupation or use, including as a workplace, where the owner of such residence, building, or structure has not agreed in writing with the owner or operator of a Solar Energy System or Battery Energy Storage System to allow certain uses to be sited adjacent to or in proximity to such non-participating structure; such a lease, license, or easement allowing a Tower Fall Zone to overlay their residence, building, or structure, or granting access to wind, light or air; or waiving any noise or setback, or zoning requirements.

NYSDAM—New York State Department of Agriculture and Markets

NYSDEC—New York State Department of Environmental Conservation

Participating Residence—Any residence or building or structure expected or intended for human occupation or use, including as a workplace, where the owner of such residence, building, or structure has agreed in writing with the owner or operator of a Solar Energy System or Battery Energy Storage System to allow certain uses to be sited adjacent to or in proximity to such participating structure; such a lease, license, or easement granting access to wind, light or air; or waiving any noise, setback, or zoning requirements.

Permittee—An Applicant who has been granted a permit under the provisions of this law.

Practicable—Capable of satisfying the overall project purposes, after taking into consideration cost, time, technology and logistics.

Prime Farmlands—Land designated as such by USDA/NRCS in Natural Resources Conservation Service (NRCS) maps and databases.

Prime Farmlands if Drained—Land designated as such by USDA/NRCS in Natural Resources Conservation Service (NRCS) maps and databases.

Review Board—The Town of Caroline Review Board.

Right-Of-Way—The total width of any land reserved or dedicated as a thoroughfare, alley, pedestrian or bicycle way, railway, waterway, or utility line.

Screen Planting Plan—A plan describing and illustrating the locations and species to be planted. The intent of screen plantings is to improve the visual appearance of a Solar Energy System by screening all or part of the system from view.

Site Plan Review Law—The Town of Caroline Site Plan Review Local Law of 2018 or successors to that law, as appropriate.

Small Battery Energy Storage Facility—A Battery Energy Storage System with a Nameplate Capacity less than 600kWh.

Small Solar Energy Facility—A Solar Energy System with a Nameplate Capacity of 25kW or less.

Solar Panel—A photovoltaic device capable of collecting and converting solar energy into electrical energy.

Solar Energy System—An energy system (such as a photovoltaic system, solar thermal power system, or based on any other technology) that converts solar energy into electrical energy. The system includes the solar energy collection devices, related balance of system equipment, and other associated infrastructure.

Solar Photovoltaic System or Solar PV System—An energy system that consists of one or more photovoltaic collection devices, solar energy related balance of system equipment, and other associated infrastructure with the primary intention of generating electricity, storing electricity, or otherwise converting solar energy to a different form of energy.

Solar Thermal Power System—An energy system that consists of one or more reflectors, receivers, and related balance of system equipment to collect and concentrate sunlight to produce high temperature heat which is then used to generate electricity.

Species of Special Concern—Any plant or animal species so designated by the State of New York.

Stand-Alone—An electrical generation or energy storage system that is not Grid-Tied.

Threatened Species—Any plant or animal species so designated by the State of New York.

Unique Natural Area—Areas so designated by the Tompkins County Environmental Management Council. Unique Natural Areas have outstanding geological or environmental qualities.

Visual Impact Assessment—A report prepared by a registered Landscape Architect or other qualified professional that includes a Visual Assessment Form pursuant to SEQRA and TEQRA, and visually illustrates and evaluates the relationship of proposed new structures or alterations to nearby natural landscapes and to pre-existing structures in terms of visual character and intensity/scale of use (e.g., scale, materials, color, door and window size and locations, setbacks, roof and cornice lines, and other major design elements). Such an assessment also includes an analysis of the visual impacts on neighboring properties from the proposed development and alterations, and of the location and configuration of proposed structures, parking areas, open space, and gradient changes. Photo-simulations or balloon tests may be required as part of the Visual Impact Assessment.

SECTION 5 – SOLAR ENERGY SYSTEMS, IN GENERAL:

- 5.0** The Town Board shall by resolution periodically set a fee schedule for an Application Fee for the review and processing of Site Plan applications for Solar Energy Systems and a Monitoring Fee for the inspection of such systems during construction and until Commissioning of the system.
- 5.1** The requirements of this law apply to all Solar Energy Systems proposed, modified, or installed upon any lands or structures, excluding routine or minor general maintenance and repair. However, “routine or minor general maintenance and repair” shall not in any one situation or case involve the replacement or repair of 50% or more of the area or square footage of land occupancy of the use, or 50% of the value of the facility. The determination as to whether a given action or application qualifies as “routine or minor general maintenance and repair” shall be determined in each case and for all lands, parcels, and uses, by the Code Officer by written opinion, duly filed.
- 5.2** If a modification or expansion of an existing Solar Energy System is such that it would cause a change in class from a smaller to a larger class facility as defined in Section 4, the modification or expansion requires Site Plan review and approval by the Review Board as set forth below for the applicable new size class.
- 5.3** If a modification or expansion of an existing Medium Solar Energy Facility is such that the originally-approved area is increased by 15% or more, the modification or expansion requires Site Plan review and approval by the Review Board. If a modification or expansion of an existing Large Solar Energy Facility is such that the originally-approved area is increased by one (1) acre or more, the modification or expansion requires Site Plan review and approval by the Review Board.
- 5.4** In no case may a project be divided up or segmented for the purpose of avoiding review of the project as a whole. Separate simultaneous applications from the same applicant will only be allowed if the applications are for significantly discontinuous regions of the Town. The Review Board shall use its discretion in determining “significantly discontinuous.”
- 5.5** All Solar Energy Systems shall be designed, erected, and installed in accordance with all applicable codes, regulations, and industry standards as referenced in the NYS Uniform Fire Prevention and Building Code (“Building Code”), the NYS Energy Conservation Code (“Energy Code”), and Town of Caroline Codes.
- 5.6** The installation of any Solar Energy System does not carry with it any right to a clear line of sight to the sun. It is understood that an Applicant, installer, or developer has the responsibility to make sure that the Solar Energy System(s) are positioned in such a way that they will achieve the optimal energy production Practicable. It is the responsibility of the Applicant, installer, or developer to obtain any and all rights, easements, or agreements as are or may be necessary to acquire and maintain a line of sight to the sun, if necessary.
- 5.7** No Solar Energy System or required screening shall be located in a manner that will unreasonably reduce or impede the amount of sunlight available to any adjacent lot.
- 5.8** No Solar Energy System shall be located in a manner as to reduce or impede the function of any other pre-existing Solar Energy System or any radio or microwave communication device.
- 5.9** No Grid-Tied Solar Energy System shall be installed until the Applicant has submitted evidence that the utility company has been informed of the customer’s intent to install an interconnected customer-owned generator or meter, such a system, including the receipt of documentation from said utility that it will connect the system.

5.10 All Building-Mounted Solar Energy Systems require a Building Permit (whether or not they are exempted in Section 6.6 from other provisions of this law).

5.11 The Code Officer is authorized to issue Stop Work orders during the construction of Solar Energy Systems.

SECTION 6 – SMALL SOLAR ENERGY FACILITIES

6.1 Small Solar Photovoltaic Systems that qualify to use the Unified Solar Permit do not require Site Plan review by the Review Board but should instead submit a Unified Solar Permit to the Code Officer.

6.2 Small Solar Photovoltaic Systems that the Code Officer determines do not qualify for a Unified Solar Permit require review by the Review Board. The Review Board will base its review on the information in the Unified Solar Permit plus any additional materials the Review Board deems necessary.

6.3 Small Solar Energy Facilities that are not Solar Photovoltaic Systems require review by the Review Board. The Applicant should submit information equivalent to that in the Unified Solar Permit (modified as appropriate for the technology in question) plus any additional materials the Review Board deems necessary.

SECTION 7 – MEDIUM SOLAR ENERGY FACILITIES

7.1 Site Plan Review. All Medium Solar Energy Facilities require Site Plan review and approval by the Review Board. Site Plan review will follow the procedures and requirements of the Site Plan Review Local Law, augmented as described in this section.

7.2 Application Requirements.

- (a) **Sketch Plan.** The Sketch Plan shall include the requirements set forth in the Site Plan Review Law plus any additional materials deemed necessary by the Review Board.
- (b) **Preliminary Site Plan Review.** The Permit Fee is due at the time materials are submitted for a preliminary Site Plan Review. Materials for the preliminary Site Plan Review shall include those set forth in the Site Plan Review Law, any additional materials deemed necessary by the Review Board, and the following:
 - (i) A State Environmental Quality Review Act (“SEQRA”) environmental assessment form (Short form or Full form, as appropriate) and a Town Environmental Quality Review (“TEQR”) environmental assessment form, substantially completed, with accompanying data, schedules and mappings as reasonably requested by the Town.
 - (ii) If the property of the proposed project is to be leased, copies of the legal consent between all parties, including easements and other agreements, specifying the use(s) of the land for the life of the project. The life of the project herein means from the beginning of construction until the end of decommissioning and site restoration.
 - (iii) An emergency response plan.
 - (iv) Site drawings showing any potential shading of and from nearby structures or vegetation.
 - (v) Documentation of solar collector type including but not limited to equipment specification sheets for all Solar Panels and collectors, significant components, mounting systems, and inverters that are to be installed, and a calculation of the Nameplate Capacity.
 - (vi) In addition to features specified in the Site Plan Review Law, maps of Environmentally Sensitive Areas and Important Views as defined in this local law.
 - (vii) If construction will occur in an Environmentally Sensitive Area, a document explaining why construction in that area could not be avoided. The document should reference the best practices that will be followed and the mitigation measures that will be implemented.
 - (viii) An operation and maintenance plan, including description of continuing Solar Energy System maintenance and property upkeep, safe access to the installation, as well as general procedures for operational inspections and maintenance of the installation.

(ix) A Decommissioning and Site Restoration Plan.

- (c) **Final Site Plan Review.** Any Monitoring Fee and securitization for the Decommissioning and Site Restoration Plan (as further set forth in Section 7.8 and Section 12) are due at the time materials are submitted for the final Site Plan Review.

7.5 Design Guidelines for Medium Solar Energy Facilities

- (a) **Fencing.** Fences not exceeding eight (8) feet in height, including open-weave and solid fences, shall be permitted for the purpose of screening or enclosing the Solar Energy System. If utilized, fences should draw on the agricultural aesthetic of the Town, for example by using livestock-type fencing and wooden posts. Chain link, barbed, razor, and concertina wires, electrically charged wire, railroad ties, concrete masonry units, scrap metal, tarped, and cloth fences and accessory parts are strongly discouraged. Temporary interior electric fences for the purpose of managing grazing animals are acceptable. Any gates or other locked or secured/inaccessible areas require a lock-box for emergency and fire access as required by Code.
- (b) **Signage.** If the system is fenced, signs with the manufacturer's or installer's identification, emergency contact information, and appropriate warning signage shall be posted at any access point to the system. If the system is not fenced, signs with the manufacturer's or installer's identification, emergency contact information, and appropriate warning signage shall be posted at the site in a manner that makes the signs clearly visible. Solar equipment shall not be used for displaying any advertising. All signs, flag, streamers, or similar items, both temporary and permanent, are prohibited on solar equipment except: (i) manufacturer's or installer's identification; (ii) appropriate warning signs and placards; (iii) signs that may be required by a federal agency; and (iv) signs that provide a 24-hour emergency contact phone number and warn of any danger.
- (c) **Height.** If the Small-Scale Solar Energy System is Ground-Mounted, no components shall exceed 20 feet above finished grade when the system is oriented at maximum tilt from horizontal.
- (d) **Lighting.** Motion-activated or staff-activated security lighting may be installed in the Solar Energy System, provided that such lighting meets International Dark-Sky Association or similar standards and does not produce unreasonable fugitive light or glare from the project site. If the system is fenced, such lighting should only be activated when the area within the fenced perimeter has been entered; if not fenced, when the area that might reasonably have been fenced has been entered.
- (e) **Noise.** The Solar Energy System shall be designed to meet the following maximum noise limits:
- (i) Forty-five (45) dBA Leq (8-hour) at the outside of any existing Non-Participating Residence
 - (ii) Fifty-five (55) dBA Leq (8-hour) at the outside of any existing Participating Residence
 - (iii) Fifty-five (55) dBA Leq (8-hour) across any portion of a Non-Participating Property
- (f) **Utilities.** Practicable efforts, as determined by the Review Board, shall be made to place all utility connections for the Facility underground, depending on appropriate soil conditions, shape, and topography of the site and any requirements of the utility provider. When aboveground cables and transmission lines must cross agricultural fields, utility poles that provide longer spanning distances should be located on field edges to the greatest extent Practicable to avoid poles being situated in agricultural lands. Electrical transformers for utility interconnections may be above ground if required by the utility provider.
- (g) **Revegetation and Vegetation Maintenance.** Land underneath solar panels within Agriculturally Important Areas should be maintained as vegetative cover. The Town encourages the use of non-invasive, native ground cover under and between the rows of solar panels. Vegetative cover shall be low-maintenance, drought-resistant, non-fertilizer-dependent and, to the extent Practicable, shall be pollinator-friendly to provide habitat for bees. Species used for vegetative cover should be non-toxic to animals that might likely be used for site maintenance via grazing (for example, fescue species with endosymbionts should not be used as they are toxic to sheep). Preferred vegetation maintenance methods are, in order of preference, (1) grazing and (2) mowing or other mechanical means. General use of herbicides or other chemical methods of vegetation control is strongly discouraged; spot application for controlling the establishment of harmful invasive species is acceptable.
- (h) **Stormwater Management.** The solar energy facility shall be designed with a ground cover pervious to the maximum extent Practicable so that stormwater moves as sheet flow (i.e. not channelized) across the

system and infiltrates the soil. The following criteria should be met in order to establish a pervious cover: (i) panels must be positioned to allow water to run off their surfaces; (ii) soil with adequate vegetative cover must be maintained under and around the panels; (iii) the area around each panel must be adequate to ensure proper, sufficient and effective vegetative growth under and between the panels.

- (i) **Building-Mounted Systems.** If the Medium Solar Energy Facility is Building-Mounted the system must:
 - (i) Be mounted or integral to a lawfully-permitted building or structure.
 - (ii) To the maximum extent Practicable, not obscure architectural details or features.

7.6 Construction Requirements for Medium Solar Energy Facilities

- (a) Prior to the Permittee's commencement of construction, the Permittee shall stake or flag the boundaries of any Environmentally Sensitive Areas in or close to the construction area.
- (b) The Permittee will handle and store all hazardous materials in accordance with industry best practices.

7.7 Operation Requirements for Medium Solar Energy Facilities

- (a) The Permittee will inform the Code Officer when the Facility is completed and submit a signed commissioning report to the town.
- (b) Upon Commissioning and periodically thereafter, noise and light levels should be measured to ensure compliance with the limits listed in Sections 7.5(c) and 7.5(d) and remedial action taken to attain compliance if the measured levels exceed the allowed levels.
- (c) Equipment and vehicles not used in direct support, renovations, additions or repair of the Facility must not be stored or parked on the Facility site.

7.8 Abandonment and Decommissioning. A Decommissioning and Site Restoration Plan shall be submitted with each Application in accordance with Section 12. The Decommissioning and Site Restoration Plan must meet the approval of the Review Board.

SECTION 8 – LARGE SOLAR ENERGY FACILITIES

8.1 Site Plan Review. All Large Solar Energy Facilities require Site Plan review and approval by the Review Board. Site Plan review will follow the procedures and requirements of the Site Plan Review Local Law, augmented as described in this section.

8.2 Community Meeting. No less than thirty (30) days before the date on which an Applicant files materials for a preliminary Site Plan review, the Applicant shall conduct at least one meeting for community members who may be adversely impacted by the siting of the Facility. The purpose of the meeting is to educate the public about the proposed project, including the anticipated application date and likely construction timetable. The applicant shall provide notice of the meeting no sooner than twenty-one (21) days and no later than seven (7) days prior to the meeting.

8.3 Application Requirements.

- (a) **Sketch Plan.** The Sketch Plan shall include the requirements set forth in the Site Plan Review Law plus any additional materials deemed necessary by the Review Board.
- (b) **Preliminary Site Plan Review.** The Permit Fee is due at the time materials are submitted for a preliminary Site Plan Review. Materials for the preliminary Site Plan Review shall include those set forth in the Site Plan Review Law, any additional materials deemed necessary by the Review Board, and the following:
 - (i) A State Environmental Quality Review Act ("SEQRA") environmental assessment form (Short form or Full form, as appropriate) and a Town Environmental Quality Review ("TEQR") environmental assessment form, substantially completed, with accompanying data, schedules and mappings as reasonably requested by the Town.
 - (ii) If the property of the proposed project is to be leased, copies of the legal consent between all parties, including easements and other agreements, specifying the use(s) of the land for the life of the project. The life of the project herein means from the beginning of construction until the end of decommissioning and site restoration.

- (iii) An emergency response plan.
 - (iv) A description of all on-site equipment and systems to be provided to prevent or handle fire emergencies and hazardous substance incidents in compliance with the fire code section of the New York State Uniform Fire Prevention and Building Code adopted pursuant to Article 18 of the Executive Law.
 - (v) Site drawings showing any potential shading of and from nearby structures or vegetation.
 - (vi) Documentation of solar collector type including but not limited to equipment specification sheets for all Solar Panels and collectors, significant components, mounting systems, and inverters that are to be installed, and a calculation of the Nameplate Capacity.
 - (vi) In addition to features specified in the Site Plan Review Law, maps of Environmentally Sensitive Areas and Important Views as defined in this local law.
 - (vii) If construction will occur in an Environmentally Sensitive Area, a document explaining why construction in that area could not be avoided. The document should reference the best practices that will be followed and the mitigation measures that will be implemented.
 - (viii) A survey of the area that will be disturbed during construction to identify any Threatened Species, Endangered Species, Common Birds in Steep Decline, or Species of Special Concern. The survey is to be conducted by a professional or professionals qualified to do such work and may draw on existing public information on species occurrence in addition to field surveys, as required.
 - (ix) If it is determined that Threatened Species, Endangered Species, Common Birds in Steep Decline, or Species of Special Concern visit or occupy some of the area that will be disturbed by construction, a document explaining why construction in that area could not be avoided. The document should contain a mitigation plan detailing how impacts on the Threatened Species, Endangered Species, Common Birds in Steep Decline, or Species of Special Concern will be minimized. Steps should include but are not limited to stopping or delaying work to avoid important breeding, nesting, spawning and fledging (as appropriate to the affected species) times.
 - (x) A Screen Planting Plan.
 - (xi) An operation and maintenance plan, including description of continuing Solar Energy System maintenance and property upkeep, safe access to the installation, as well as general procedures for operational inspections and maintenance of the installation.
 - (xii) A Decommissioning and Site Restoration Plan.
- (c) **Final Site Plan Review.** Any Monitoring Fee and securitization for the Decommissioning and Site Restoration Plan (as further set forth in Section 8.8 and Section 12) are due at the time materials are submitted for the final Site Plan review.

8.4 Community Benefits. The Permittee shall provide tangible community benefits, such as Payments in Lieu of Taxes (PILOTs), other payments pursuant to an agreement with the Town of Caroline, or support of other project(s) agreed to by the Town of Caroline.

8.5 Design Requirements for Large Solar Energy Facilities

- (a) **Facility Location.** To the greatest extent Practicable, the Facility should be located on the property or properties in question so as to reduce fragmentation of any remaining grassland and shrubland habitat. The intent is to minimize the Facility's impact on area-sensitive grassland and shrubland species.
- (b) **Hedgerows.** To the greatest extent Practicable, the Facility should avoid disturbance of existing hedgerows and trees lines between fields, pastures and meadows.
- (c) **Setbacks.** Solar facilities shall meet the setback requirements listed below. Compliance with these setbacks shall be shown in the materials submitted for the preliminary Site Plan Review. Fencing, collection lines, access roads and landscaping may occur within the setback.
 - (i) Centerline of Public Roads: 50 feet.
 - (ii) Non-Participating Property lines (nonresidential): 50 feet.
 - (iii) Non-Participating Property lines (residential): 100 feet.
 - (iv) Non-Participating Residence (if occupied): 250 feet.
- (d) **Height.** Solar collection devices shall have no components that exceed twenty (20) feet above finished grade when the system is oriented at maximum tilt from horizontal.

- (e) **Appurtenant structures.** All appurtenant structures of the Facility, including but not limited to equipment structures, storage facilities, Battery Energy Storage containers, transformers, and substations, must be architecturally compatible with each other. Whenever Practicable, structures should be screened from view by vegetation and joined or clustered to avoid or minimize adverse visual impacts.
- (f) **Visual Effect.** The Facility must have the least visual effect reasonably Practicable on the environment, as determined by the Review Board. The determination must be based on site specific conditions including topography, adjacent structures, and roadways. The Review Board may request that a Visual Impact Assessment be submitted. Solar panels shall have anti-reflective coatings. An appropriate methodology will be used to ensure that solar glare exposure at any Non-Participating residence, airport or public roadway will be avoided or minimized, and will not result in complaints, impede traffic movements or create safety hazards.
- (g) **Agriculturally Important Areas.** If any part of the Facility is sited on an Agriculturally Sensitive Area the maintenance plan of the Facility should be designed to maintain or improve the quality of the soil in the Agriculturally Sensitive Area. The Permittee may be required to seed up to twenty percent (20%) of the total surface area between and around the panels on the lot with native perennial vegetation designed to attract pollinators.
- (h) **Fencing.** Fences not exceeding eight (8) feet in height, including open-weave and solid fences, shall be permitted for the purpose of screening or enclosing the Facility. If utilized, fences should draw on the agricultural aesthetic of the Town, for example by using livestock-type fencing and wooden posts. Chain link, barbed, razor, and concertina wires, electrically charged wire, railroad ties, concrete masonry units, scrap metal, tarped, and cloth fences and accessory parts are strongly discouraged. Temporary interior electric fences for the purpose of managing grazing animals are acceptable. Warning signs with the owner's name and emergency contact information must be placed on any access point to the Facility.
- (i) **Signage.** If the system is fenced, signs with the manufacturer's or installer's identification, emergency contact information, and appropriate warning signage shall be posted at any access point to the system. If the system is not fenced, signs with the manufacturer's or installer's identification, emergency contact information, and appropriate warning signage shall be posted at the site in a manner that makes the signs clearly visible. Solar equipment shall not be used for displaying any advertising. All signs, flag, streamers, or similar items, both temporary and permanent, are prohibited on solar equipment except: (a) manufacturer's or installer's identification; (b) appropriate warning signs and placards; (c) signs that may be required by a federal agency; and (d) signs that provide a 24-hour emergency contact phone number and warn of any danger.
- (j) **Lighting.** Motion-activated or staff-activated security lighting around the equipment area of the Facility or Accessory Structure entrance may be installed, provided that such lighting meets International Dark-Sky Association or similar standards and does not produce unreasonable fugitive light or glare from the project site. If the Facility is fenced, such lighting should only be activated when the area within the fenced perimeter has been entered; if not fenced, when the area that might reasonably have been fenced has been entered.
- (k) **Noise.** The Facility shall be designed to meet the following maximum noise limits:
 - (i) Forty-five (45) dBA Leq (8-hour) at the outside of any existing Non-Participating Residence
 - (ii) Fifty-five (45) dBA Leq (8-hour) at the outside of any existing Participating Residence
 - (iii) Fifty-five (45) dBA Leq (8-hour) across any portion of a Non-Participating Property
- (l) **Screen Plantings.** Native species are preferred. A mix of deciduous and evergreen varieties is preferred.
- (m) **Revegetation and Vegetation Maintenance.** Land underneath solar panels within Agriculturally Important Areas should be maintained as vegetative cover. The Town encourages the use of non-invasive, native ground cover under and between the rows of solar panels. Vegetative cover shall be low-maintenance, drought-resistant, non-fertilizer-dependent and, to the extent Practicable, shall be pollinator-friendly to provide habitat for bees. Species used for vegetative cover should be non-toxic to animals that might likely be used for site maintenance via grazing (for example, fescue species with endosymbionts should not be used as they are toxic to sheep). Preferred vegetation maintenance methods are, in order of preference, (1) grazing and (2) mowing or other mechanical means. General use of herbicides or other chemical methods of vegetation control is strongly discouraged; spot application for controlling the establishment of harmful invasive species is acceptable.

- (n) **Stormwater Management.** The solar energy facility shall be designed with a ground cover pervious to the maximum extent Practicable so that stormwater moves as sheet flow (i.e. not channelized) across the system and infiltrates the soil. The following criteria should be met in order to establish a pervious cover: (i) panels must be positioned to allow water to run off their surfaces; (ii) soil with adequate vegetative cover must be maintained under and around the panels; (iii) the area around each panel must be adequate to ensure proper, sufficient and effective vegetative growth under and between the panels.
- (o) **Utilities.** Practicable efforts, as determined by the Review Board, shall be made to place all utility connections for the Facility underground, depending on appropriate soil conditions, shape, and topography of the site and any requirements of the utility provider. When aboveground cables and transmission lines must cross agricultural fields, utility poles that provide longer spanning distances should be located on field edges to the greatest extent Practicable to avoid poles being situated in agricultural lands. Electrical transformers for utility interconnections may be above ground if required by the utility provider.
- (p) **Ingress and Egress.** Any new on-site vehicular paths within the site shall be designed to minimize the extent of impervious materials and soil compaction; they should not be more than sixteen (16) feet in width and should be constructed at grade. If a locked gate at the intersection of the access way and a public road is required to obstruct entry by unauthorized vehicles, such gate must be located entirely upon the lot and not on the public Right-of-Way. Any gates or other locked or secured/inaccessible areas require a lock-box for emergency and fire access as required by Code.

8.6 Construction Requirements for Large-Scale Solar Energy Systems

- (a) **Notice.** At least fourteen (14) business days prior to the Permittee's commencement of construction date, the Permittee shall notify the public of the intended construction as follows:
 - (i) Provide notice by mail in plain language reasonably understandable to the average person to host landowners and landowners within one (1) mile;
 - (ii) Provide notice in plain language reasonably understandable to the average person to local Town and County officials and emergency personnel.
- (b) **Construction Hours.** Construction and routine maintenance activities on the facility shall be limited to 7 a.m. to 8 p.m. Monday through Saturday and 8 a.m. to 8 p.m. on Sunday and national holidays, with the exception of construction and delivery activities, which may occur during extended hours beyond this schedule on an as-needed basis. If, due to safety or continuous operation requirements, construction activities are required to occur beyond the allowable work hours, the Permittee shall notify the affected landowners and the Code Officer. Such notice shall be given at least twenty-four (24) hours in advance, unless such construction activities are required to address emergency situations threatening personal injury, property, or severe adverse environmental impact that arise less than twenty-four (24) hours in advance. In such cases, as much advance notice as is practical shall be provided.
- (c) **Flagging.** At least two (2) weeks before tree clearing or ground disturbing activities, the Permittee shall stake or flag the planned limits of disturbance (LOD), the boundaries of any Environmentally Sensitive Areas and known archeological sites in the LOD, all on or off ROW access roads, limits of clearing and other areas needed for construction, including, but not limited to, solar array work areas, proposed infiltration areas for post-construction stormwater management, and laydown and storage areas. In addition, archeological sites shall be surrounded with construction fencing and a sign stating restricted access.
- (d) **Preservation of Vegetation.** Tree and vegetation clearing shall be limited to the minimum necessary for facility construction and operation. All Practicable efforts must be made to preserve natural vegetation during the construction process, unless vegetation removal is required to minimize the shading of solar collectors.
- (e) **Dig Safely.** Prior to the commencement of construction, the Permittee shall become a member of Dig Safely New York. The Permittee shall require all contractors, excavators, and operators associated with its facilities to comply with best practices for protecting underground facilities.
- (f) **Air Emissions.** To minimize air emissions during construction, the Permittee shall:
 - (i) Prohibit contractors from leaving generators idling when electricity is not needed and from leaving diesel engines idling when equipment is not actively being used.

- (ii) Implement dust control procedures to minimize the amount of dust generated by construction activities.
- (iii) Use construction equipment powered by electric motors where feasible, or by ultra-low sulfur diesel.
- (iv) Dispose or reuse cleared vegetation in such a way that that minimizes greenhouse gas emissions (e.g., lumber production or composting).
- (g) **Construction Debris.** Any debris or excess construction materials shall be removed to a facility duly authorized to receive such material. No burying of construction debris or excess construction materials is allowed.
- (h) **Environmentally Sensitive Areas.** The mitigation plan required by Section 8.3(b)(vii) shall be implemented. If the Code Officer determines that the mitigation plan is not being adequately followed, an Environmental Monitor, paid for by the Permittee, will be hired to ensure future compliance. If deemed necessary by the Code Officer, a Stop Work order will be issued until an Environmental Monitor is in place.
- (i) **Threatened Species, Endangered Species, Common Birds in Steep Decline and Species of Special Concern.** The mitigation plan required by Section 8.3(b)(ix) shall be implemented. If the Code Officer determines that the mitigation plan is not being adequately followed, an Environmental Monitor, paid for by the Permittee, will be hired to ensure future compliance. If deemed necessary by the Code Officer, a Stop Work order will be issued until an Environmental Monitor is in place.
- (j) **Agriculturally Important Areas.** If construction of the Facility temporarily or permanently affects an Agriculturally Important Area, the Facility shall be constructed consistent with the NYSDAM “Guidelines for Solar Energy Projects-Construction Mitigation for Agricultural Lands”, dated 10/18/2019. If the Code Officer determines that the NYSDAM guidelines are not being adequately followed, an Agricultural Monitor, paid for by the Permittee, will be hired to ensure future compliance. If deemed necessary by the Code Officer, a Stop Work order will be issued until an Agricultural Monitor is in place.
- (k) **Environmental Monitor and Agricultural Monitor.** The Environmental Monitor and the Agricultural Monitor are each authorized to issue Stop Work orders. If both an Environmental Monitor and an Agricultural Monitor are needed, the same individual may do both jobs if he or she is qualified to do both kinds of monitoring.
- (l) **Hazardous Materials.** The Permittee will handle and store all hazardous materials in accordance with industry best practices.
- (m) **Contact Information.** Prior to the completion of construction, the Permittee shall provide the Code Officer with the contact name, telephone number, email and mailing address of the facility operations manager.
- (n) **Restoration Requirements.** If the Facility is located in an Agriculturally Important Area, prior to commissioning post-construction site restoration shall take place as described in the NYSDAM “Guidelines for Solar Energy Projects-Construction Mitigation for Agricultural Lands”, dated 10/18/2019.

8.7 Operation Requirements of Large Solar Energy Facilities

- (a) The Permittee will inform the Code Officer when the Facility is completed and submit a signed commissioning report to the town.
- (b) In the event of any catastrophic incident involving the Facility and its associated equipment, the Permittee shall notify the Code Officer no later than twelve (12) hours following such an event.
- (c) Noise levels and light levels should be monitored periodically to ensure compliance with the limits listed in Sections 8.5(h) and 8.5(i) or the Site Plan Review Law, whichever applies. Remedial action shall be taken to attain compliance if the measured levels exceed the allowed levels.
- (d) The Permittee shall retain a qualified landscape architect, arborist, or ecologist to inspect the screen plantings for two (2) years following installation to identify any plant material that did not survive, appears unhealthy, and/or otherwise needs to be replaced. The Permittee shall remove and replace plantings that fail in materials, workmanship or growth within two (2) years following the completion of installing the plantings.

- (e) Equipment and vehicles not used in direct support, renovations, additions or repair of the Facility must not be stored or parked on the Facility site.

8.8 Abandonment and Decommissioning. A Decommissioning and Site Restoration Plan shall be submitted with each Application in accordance with Section 12. The Decommissioning and Site Restoration Plan must meet the approval of the Review Board.

SECTION 9 – BATTERY ENERGY STORAGE SYSTEMS, IN GENERAL

- 9.1** The Town Board shall by resolution periodically set a fee schedule for the review and processing of Site Plan applications for Battery Energy Storage Systems and a Monitoring Fee for the inspection of such systems during construction and until Commissioning of the system.
- 9.2** The requirements of this law apply to all Battery Energy Storage Systems proposed, modified, or installed upon any lands or structures, excluding routine general maintenance, minor repair, improvements for efficiency or a change in battery housing. The determination as to whether a given action or application qualifies as a material modification shall be determined in each case and for all lands, parcels, and uses, by the Code Officer by written opinion, duly filed.
- 9.3** If a modification or expansion of an existing Battery Energy Storage System is such that it would cause a change in class from a small to a large class facility as defined in Section 4, the modification or expansion requires Site Plan review and approval by the Review Board as set forth below for Large Battery Energy Storage Systems.
- 9.4** Any firefighting chemicals required for controlling and extinguishing a fire at a Battery Energy Storage System installation shall be stored on site in sufficient quantities for local firefighters to use in the event of a fire. Batteries will not be allowed on site prior to the completion of training of a sufficient number of local firefighters for the specific battery technology proposed by the Applicant. In all cases, changes in the type of energy storage technology must be reported to the Code Officer for determination of material modification and to the Fire District Chief for completion of firefighter training requirements prior to being installed.
- 9.5** All Battery Energy Storage Systems shall be designed, erected, and installed in accordance with all applicable codes, regulations, and industry standards as referenced in the NYS Uniform Fire Prevention and Building Code (“Building Code”), the NYS Energy Conservation Code (“Energy Code”), and Town of Caroline Codes.
- 9.6** The Code Officer is authorized to issue Stop Work orders during the construction of Solar Energy Systems.

SECTION 10 – SMALL BATTERY ENERGY STORAGE FACILITIES: Small Battery Energy Storage Systems do not require Site Plan review. Applicants should instead submit a general building permit application and a Battery Energy Storage System Permit Application with its supporting documentation to the Code Officer.

SECTION 11 – LARGE BATTERY ENERGY STORAGE FACILITIES

- 11.1 Site Plan Review.** All Large Battery Energy Storage Facilities require Site Plan review and approval by the Review Board. Site Plan review will follow the procedures and requirements of the Site Plan Review Local Law, augmented as described in this section.
- 11.2 Community Meeting.** No less than thirty (30) days before the date on which an Applicant files materials for a preliminary Site Plan review, the Applicant shall conduct at least one meeting for community members who may be adversely impacted by the siting of the Facility. The purpose of the meeting is to educate the public about the proposed project, including the anticipated application date and likely construction timetable. The

applicant shall provide notice of the meeting no sooner than twenty-one (21) days and no later than seven (7) days prior to the meeting.

11.3 Application Requirements

- (a) **Sketch Plan.** The Sketch Plan shall include the requirements set forth in the Site Plan Review Law, a Battery Energy Storage System Permit, and any additional materials deemed necessary by the Review Board.
- (b) **Preliminary Site Plan Review.** The Permit Fee is due at the time materials are submitted for a preliminary Site Plan Review. Materials for the preliminary Site Plan Review shall include those set forth in the Site Plan Review Law and any additional materials deemed necessary by the Review Board, including but not limited to the following:
 - (i) A State Environmental Quality Review Act (“SEQRA”) environmental assessment form (Short form or Full form, as appropriate) and a Town Environmental Quality Review (“TEQR”) environmental assessment form, substantially completed, with accompanying data, schedules and mappings as reasonably requested by the Town.
 - (ii) An Emergency Operations Plan and Fire Safety Compliance Plan. The Fire Safety Compliance Plan shall document and verify that the system and its associated controls and safety systems are in compliance with the applicable fire prevention code. The Emergency Operations Plan shall include procedures for safe shutdown, reduction of hazards in the case of fire, explosion, release of liquids or vapors, damage to critical moving parts, or other potentially dangerous conditions, and safe start-up after an emergency. Additionally, the Emergency Operations Plan will include emergency notification procedures, any measures required to protect personnel and neighboring properties and occupants during an emergency, a schedule and procedures testing of safety mechanisms and for safety drills for personnel and local firefighters, instructions and for handling and removing damaged equipment from the Site.
 - (iii) A description of all on-site equipment and systems to be provided to prevent or handle fire emergencies and hazardous substance incidents in compliance with the fire code section of the New York State Uniform Fire Prevention and Building Code adopted pursuant to Article 18 of the Executive Law.
 - (v) Documentation of battery technology type including but not limited to equipment specification sheets for all significant Battery Energy Storage Facility components, enclosures, racking systems, and inverters that are to be installed, as well as proposed maximum daily power and energy production proposed for the Battery Energy Storage Facility and the basis for the calculations of the total hourly capacity and total area of the Battery Energy Storage Facility.
 - (vi) In addition to features specified in the Site Plan Review Law, maps of Environmentally Sensitive Areas and Important Views as defined in this local law.
 - (vii) If construction will occur in an Environmentally Sensitive Area, a document explaining why construction in that area could not be avoided. The document should reference the best practices that will be followed and the mitigation measures that will be implemented.
 - (viii) A survey of the area that will be disturbed during construction to identify any Threatened Species, Endangered Species, Common Birds in Steep Decline, or Species of Special Concern. The survey is to be conducted by a professional or professionals qualified to do such work and may draw on existing public information on species occurrence in addition to field surveys, as required.
 - (ix) If it is determined that Threatened Species, Endangered Species, Common Birds in Steep Decline, or Species of Special Concern visit or occupy some of the area that will be disturbed by construction, a document explaining why construction in that area could not be avoided. The document should contain a mitigation plan detailing how impacts on the Threatened Species, Endangered Species, Common Birds in Steep Decline, or Species of Special Concern will be minimized. Steps should include but are not limited to stopping or delaying work to avoid important breeding, nesting, spawning and fledging (as appropriate to the affected species) times.
 - (x) A Screen Planting Plan.

- (xi) An operation and maintenance plan, including description of continuing Battery Energy Storage System maintenance and property upkeep, safe access to the installation, as well as general procedures for operational inspections and maintenance of the installation.
 - (xii) A Decommissioning and Site Restoration Plan.
- (c) **Final Site Plan Review.** Any Monitoring Fee and securitization for the Decommissioning and Site Restoration Plan (as further set forth in Section 11.8 and Section 12) are due at the time materials are submitted for the final Site Plan review.

11.4 Community Benefits. The Permittee shall provide tangible community benefits, such as Payments in Lieu of Taxes (PILOTs), other payments pursuant to an agreement with the Town of Caroline, or support of other project(s) agreed to by the Town of Caroline.

11.5 Design Requirements for Large Battery Energy Storage Facilities

- (a) **Facility Location.** To the greatest extent Practicable, the Facility should be located on the property or properties in question so as to reduce fragmentation of any remaining grassland and shrubland habitat. The intent is to minimize the Facility's impact on area-sensitive grassland and shrubland species.
- (b) **Hedgerows.** To the greatest extent Practicable, the Facility should avoid disturbance of existing hedgerows and trees lines between fields, pastures and meadows.
- (c) **Setbacks.** Battery facilities shall meet the setback requirements listed below. Compliance with these setbacks shall be shown in the materials submitted for the preliminary Site Plan Review. Fencing, collection lines, access roads and landscaping may occur within the setback.
 - (i) Centerline of Public Roads: 50 feet.
 - (ii) Non-Participating Property lines (nonresidential): 50 feet.
 - (iii) Non-Participating Property lines (residential): 100 feet.
 - (iv) Non-Participating Residence (if occupied): 250 feet.
- (d) **Height.** Solar collection devices shall have no components that exceed 20 feet above finished grade when the system is oriented at maximum tilt from horizontal.
- (e) **Appurtenant structures.** All appurtenant structures of the Facility, including but not limited to equipment structures, storage facilities, Battery Energy Storage containers, transformers, and substations, must be architecturally compatible with each other. Whenever Practicable, structures should be screened from view by vegetation and joined or clustered to avoid or minimize adverse visual impacts, while not interfering with ventilation or exhaust ports.
- (f) **Visual Effect.** The Facility must have the least visual effect reasonably Practicable on the environment, as determined by the Review Board. The determination must be based on site specific conditions including topography, adjacent structures, and roadways. The Review Board may request that a Visual Impact Assessment be submitted.
- (g) **Agriculturally Important Areas.** If any part of the Facility is sited on an Agriculturally Sensitive Area the maintenance plan of the Facility should be designed to maintain or improve the quality of the soil in the Agriculturally Sensitive Area. The Permittee may be required to seed up to twenty percent (20%) of the total surface area between and around the structure(s) on the lot with native perennial vegetation designed to attract pollinators.
- (h) **Fencing.** Fences not exceeding eight (8) feet in height, including open-weave and solid fences, shall be permitted for the purpose of screening or enclosing the Facility. If utilized, fences should draw on the agricultural aesthetic of the Town, for example by using livestock-type fencing and wooden posts. Chain link, barbed, razor, and concertina wires, electrically charged wire, railroad ties, concrete masonry units, scrap metal, tarped, and cloth fences and accessory parts are strongly discouraged. Temporary interior electric fences for the purpose of managing grazing animals are acceptable. Warning signs with the owner's name and emergency contact information must be placed on any access point to the Facility.
- (i) **Lighting.** Motion-activated or staff-activated security lighting around the equipment area of the Facility or Accessory Structure entrance may be installed, provided that such lighting meets International Dark-Sky Association or similar standards and does not produce unreasonable fugitive light or glare from the project site. If the Facility is fenced, such lighting should only be activated when the area within the

fenced perimeter has been entered; if not fenced, when the area that might reasonably have been fenced has been entered.

- (j) **Noise.** The Facility shall be designed to meet the following maximum noise limits:
 - (i) Forty-five (45) dBA Leq (8-hour) at the outside of any existing Non-Participating Residence
 - (ii) Fifty-five (55) dBA Leq (8-hour) at the outside of any existing Participating Residence
 - (iii) Fifty-five (55) dBA Leq (8-hour) across any portion of a Non-Participating Property
- (k) **Screen Plantings.** Native species are preferred. A mix of deciduous and evergreen varieties is preferred.
- (l) **Vegetation Maintenance.** Preferred vegetation maintenance methods are, in order of preference, (1) grazing and (2) mowing or other mechanical means. General use of herbicides or other chemical methods of vegetation control is strongly discouraged; spot application for controlling the establishment of harmful invasive species, particularly those toxic to grazing animals, is acceptable.
- (m) **Utilities.** Practicable efforts, as determined by the Review Board, shall be made to place all utility connections for the Facility underground, depending on appropriate soil conditions, shape, and topography of the site and any requirements of the utility provider. When aboveground cables and transmission lines must cross agricultural fields, utility poles that provide longer spanning distances should be located on field edges to the greatest extent Practicable to avoid poles being situated in agricultural lands. Electrical transformers for utility interconnections may be above ground if required by the utility provider.
- (n) **Ingress and Egress.** Any new on-site vehicular paths within the site shall be designed to minimize the extent of impervious materials and soil compaction; they should not be more than sixteen (16) feet in width and should be constructed at grade. If a locked gate at the intersection of the access way and a public road is required to obstruct entry by unauthorized vehicles, such gate must be located entirely upon the lot and not on the public Right-of-Way. Any gates or other locked or secured/inaccessible areas require a lock-box for emergency and fire access as required by Code.

Possible add-backs from old Section 11:

- (x) Signage shall be in compliance with ANSI Z535 and shall include the type of technology associated with the battery energy storage systems, any special hazards associated therewith, the type of suppression system installed in the area of battery energy storage systems, and 24-hour emergency contact information. As required by the National Electrical Code, 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.
- (y) Areas within 10' feet on each side of Large-Scale Battery Energy Storage Systems shall be cleared of combustible vegetation and other combustible growth. Single specimens of trees, shrubbery, or cultivated ground cover such as green grass, ivy, succulents, or similar plants used as ground covers shall be permitted to be exempt provided that they do not form a means of readily transmitting fire. Removal of trees should be minimized to the extent Practicable.
- (z) The accumulation, collection, incineration, disposal, or storage of old, unusable, dead, or damaged batteries is expressly prohibited.

11.6 Construction Requirements for Large-Scale Battery Energy Storage Systems

- (a) **Notice.** At least fourteen (14) business days prior to the Permittee's commencement of construction date, the Permittee shall notify the public of the intended construction as follows:
 - (i) Provide notice by mail in plain language reasonably understandable to the average person to host landowners and landowners within one (1) mile;
 - (ii) Provide notice in plain language reasonably understandable to the average person to local Town and County officials and emergency personnel.
- (b) **Construction Hours.** Construction and routine maintenance activities on the facility shall be limited to 7 a.m. to 8 p.m. Monday through Saturday and 8 a.m. to 8 p.m. on Sunday and national holidays, with the exception of construction and delivery activities, which may occur during extended hours beyond this schedule on an as-needed basis. If, due to safety or continuous operation requirements, construction activities are required to occur beyond the allowable work hours, the Permittee shall notify the affected landowners and the Code Officer. Such notice shall be given at least twenty-four (24) hours in advance,

unless such construction activities are required to address emergency situations threatening personal injury, property, or severe adverse environmental impact that arise less than twenty-four (24) hours in advance. In such cases, as much advance notice as is practical shall be provided.

- (c) **Flagging.** At least two (2) weeks before tree clearing or ground disturbing activities, the Permittee shall stake or flag the planned limits of disturbance (LOD), the boundaries of any Environmentally Sensitive Areas and known archeological sites in the LOD, all on or off ROW access roads, limits of clearing and other areas needed for construction, including, but not limited to, solar array work areas, proposed infiltration areas for post-construction stormwater management, and laydown and storage areas. In addition, archeological sites shall be surrounded with construction fencing and a sign stating restricted access.
- (d) **Preservation of Vegetation.** Tree and vegetation clearing shall be limited to the minimum necessary for facility construction and operation. All Practicable efforts must be made to preserve natural vegetation during the construction process, unless vegetation removal is required to minimize the shading of solar collectors.
- (e) **Dig Safely.** Prior to the commencement of construction, the Permittee shall become a member of Dig Safely New York. The Permittee shall require all contractors, excavators, and operators associated with its facilities to comply with best practices for protecting underground facilities.
- (f) **Air Emissions.** To minimize air emissions during construction, the Permittee shall:
 - (i) Prohibit contractors from leaving generators idling when electricity is not needed and from leaving diesel engines idling when equipment is not actively being used.
 - (ii) Implement dust control procedures to minimize the amount of dust generated by construction activities.
 - (iii) Use construction equipment powered by electric motors where feasible, or by ultra-low sulfur diesel.
 - (iv) Dispose or reuse cleared vegetation in such a way that that minimizes greenhouse gas emissions (e.g., lumber production or composting).
- (g) **Construction Debris.** Any debris or excess construction materials shall be removed to a facility duly authorized to receive such material. No burying of construction debris or excess construction materials is allowed.
- (h) **Environmentally Sensitive Areas.** The mitigation plan required by Section 8.3(b)(vii) shall be implemented. If the Code Officer determines that the mitigation plan is not being adequately followed, an Environmental Monitor, paid for by the Permittee, will be hired to ensure future compliance. If deemed necessary by the Code Officer, a Stop Work order will be issued until an Environmental Monitor is in place.
- (i) **Threatened Species, Endangered Species, Common Birds in Steep Decline and Species of Special Concern.** The mitigation plan required by Section 8.3(b)(ix) shall be implemented. If the Code Officer determines that the mitigation plan is not being adequately followed, an Environmental Monitor, paid for by the Permittee, will be hired to ensure future compliance. If deemed necessary by the Code Officer, a Stop Work order will be issued until an Environmental Monitor is in place.
- (j) **Agriculturally Important Areas.** If construction of the Facility temporarily or permanently affects an Agriculturally Important Area, the Facility shall be constructed consistent with the NYSDAM “Guidelines for Solar Energy Projects-Construction Mitigation for Agricultural Lands”, dated 10/18/2019. If the Code Officer determines that the NYSDAM guidelines are not being adequately followed, an Agricultural Monitor, paid for by the Permittee, will be hired to ensure future compliance. If deemed necessary by the Code Officer, a Stop Work order will be issued until an Agricultural Monitor is in place.
- (k) **Environmental Monitor and Agricultural Monitor.** The Environmental Monitor and the Agricultural Monitor are each authorized to issue Stop Work orders. If both an Environmental Monitor and an Agricultural Monitor are needed, the same individual may do both jobs if he or she is qualified to do both kinds of monitoring.
- (l) **Contact Information.** Prior to the completion of construction, the Permittee shall provide the Code Officer and District Fire Chief with the contact name, telephone number, email and mailing address of the facility operations manager.

- (m) **Hazardous Materials.** The Permittee will handle and store all hazardous materials in accordance with industry best practices.

11.7 Operation Requirements of Large Battery Energy Storage Facilities

- (a) Where Commissioning is required by Code, Battery Energy Storage System Commissioning shall be conducted by a New York State Licensed Professional Engineer after the installation is complete but prior to final inspection and approval. A report describing the results of the system Commissioning and including the results of the initial acceptance testing required in the Uniform Code shall be provided to the Code Officer prior to final inspection and approval.
- (b) Final copies of the Emergency Operations Plan shall be given to the Fire District Chief and to facility personnel before the Facility begins operation.
- (c) The Permittee will inform the Code Officer when the Facility is completed and when it begins operation.
- (d) In the event of any catastrophic incident involving the Facility and its associated equipment, the Permittee shall notify the Code Officer no later than twelve (12) hours following such an event.
- (e) Noise levels and light levels should be monitored periodically to ensure compliance with the limits listed in Sections 11.5(h) and 11.5(i) or the Site Plan Review Law, whichever applies. Remedial action shall be taken to attain compliance if the measured levels exceed the allowed levels.
- (f) The Permittee shall retain a qualified landscape architect, arborist, or ecologist to inspect the screen plantings for two (2) years following installation to identify any plant material that did not survive, appears unhealthy, and/or otherwise needs to be replaced. The Permittee shall remove and replace plantings that fail in materials, workmanship or growth within two (2) years following the completion of installing the plantings.
- (g) Equipment and vehicles not used in direct support, renovations, additions or repair of the Facility must not be stored or parked on the Facility site.
- (f) If the owner of the battery energy storage system changes or the owner of the property changes, the use permit shall remain in effect. The successor owner or operator assumes in writing all of the obligations of the use permit, Site Plan approval, and the Decommissioning and Site Restoration Plan. A new owner or operator of the battery energy storage system shall notify the Code Officer in writing of the change in ownership or operator within [30] days of the ownership change. The use permit and all other local approvals for the Battery Energy Storage System will be voided if a new owner or operator fails to provide written notification to the Code Officer in the required timeframe. reinstatement of a void use permit will be subject to the same review and approval processes for new applications under this Local Law.

11.8 Abandonment and Decommissioning. A Decommissioning and Site Restoration Plan shall be submitted with each Application in accordance with Section 12. The Decommissioning and Site Restoration Plan must meet the approval of the Review Board.

SECTION 12 – ABANDONMENT AND DECOMMISSIONING OF SOLAR ENERGY FACILITIES AND BATTERY ENERGY STORAGE FACILITIES

- 12.1** A Decommissioning and Site Restoration Plan is for facility decommissioning and site restoration in the event the Facility cannot be completed, is considered abandoned, is no longer operating, or after the end of the useful life of the Facility.
- 12.2** A Decommissioning and Site Restoration Plan shall, at a minimum, contain the following elements and should describe how the following requirements will be met:
- (a) Specify when and what constitutes an event requiring decommissioning, including abandonment of the facility. In all cases, the violation of any site plan conditions, the lack of a current permit or violation of permit conditions, including but not limited to maintenance of any required decommissioning bond or security, shall be an event requiring decommissioning. In the absence of a maintenance plan approved by the Review Board allowing for an extended outage, the lack of production for 6 months (or for 12 of any 18 months) shall be an event requiring decommissioning.

- (b) Specify the form and type of notice required to the Town in the event of any abandonment, decommissioning, sale, transfer, partial transfer, assignment, or occurrence of any event which may result in an act or partial order requiring partial or complete decommissioning of the site.
- (c) All components of the Facility are to be removed (to a depth of four (4) feet below grade in agricultural land and three (3) feet below grade in non-agricultural land) and the site restored, as near as Practicable, to a state the average person would consider at least as good as pre-Facility conditions. Access roads shall be removed and the road area restored, unless a separate agreement is reached with the Town and/or landowner, as appropriate. The Review Board may allow the owner or operator to leave landscaping or designated below-grade foundations in place to minimize erosion and disruption to vegetation on a case-by-case basis.

Alt. Wording: The Review Board may allow the owner or operator to leave landscaping, or designated below-grade foundations, enclosures other than container structures, or concrete pads in place to minimize erosion and disruption to vegetation on a case-by-case basis.

- (c) The Town of Caroline strongly encourages that all reusable and recyclable components be sold for reuse or recycled to the greatest extent Practicable. The decommissioning plan should discuss recycling and reuse opportunities; if something is reusable or recyclable but the Applicant decides not to reuse or recycle it, the decommissioning plan should provide a valid rationale for that choice. It is understood that reuse and recycling options will change over time and hence it is expected that the reuse and recycling plan will need to be updated at the time of decommissioning.
- (d) All non-reusable and non-recyclable solid and hazardous waste shall be disposed of in accordance with local, state, and federal waste disposal regulations, including the removal of any damaged or contaminated soils. No designation of any facilities by a 'beneficial use declaration' shall be permitted to vary this clean-up and remediation/disposal rule.
- (e) Agriculturally Sensitive Areas shall be restored in accordance with the NYSDAM "Guidelines for Solar Energy Projects-Construction Mitigation for Agricultural Lands", dated 10/18/2019. If, at the time of Decommissioning, NYSDAM has revised its guidelines the Review Board may, at its discretion, require compliance with the revised guidelines.
- (f) An expected timeline for execution of the Decommissioning and Site Restoration Plan shall be described, together with a cost estimate detailing the projected cost of executing the plan, duly prepared and sealed by a Professional Engineer. Cost estimations must take inflation into account over the expected life of the project, and have a mechanism to ensure the periodic updating and securitization of decommissioning and restoration costs.

12.3 Removal of Solar Energy Facilities and Battery Energy Storage Facilities must be completed in accordance with the Decommissioning and Site Restoration Plan to the satisfaction of the Code Officer. If the Facility is not fully decommissioned after being considered abandoned, the municipality may remove the Facility and restore the property using the security required by Section 12.4 and impose a lien on the property to cover any remaining costs to the municipality to complete the Decommissioning and Site Restoration Plan.

12.4 An Applicant required to submit a Decommissioning and Site Restoration Plan shall provide a form of surety, either through Development Escrow Agreement, bond, letter or credit, or like form approved by the Review Board, to cover all costs of decommissioning and removal calculated at a minimum of 125% of the approved estimated cost of decommissioning and restoration. The estimate of costs shall be prepared by a licensed engineer and be sealed accordingly, and the annual cost shall take into account New York State prevailing wage rules and any inflationary rise in surety amounts covered, contain an evergreen clause, or otherwise account for increases in the cost of decommissioning and restoration in a manner as approved by the Review Board. At a minimum, at least once every 3 years after any approval or permit is issued by the Town, the Applicant or then future owner or operator of the facility shall provide an updated certified cost estimate for

decommissioning, removal, and restoration, and if the resulting 125% cost requirement shows that the existing security or bond is monetarily insufficient, then the owner shall update such bond or undertaking, or see to its replacement or supplementation in an amount to equal such updated minimum 125% of cost number.

SECTION 13—ENFORCEMENT: Any violation of this Local Law shall be enforced in accordance with this Chapter, the Code, or applicable law.

SECTION 14—SEVERABILITY: The invalidity or unenforceability of any section, subsection, paragraph, sentence, clause, provision, or phrase of the aforementioned sections as declared by the valid judgment of any court of competent jurisdiction to be unconstitutional must not affect the validity or enforceability of any other section, subsection, paragraph, sentence, clause, provision, or phrase, which must remain in full force and effect.

SECTION 15—EFFECTIVE DATE: This Local Law shall take effect immediately.