

DRAFT SOLAR LAW 10/8/2019

Town of Lyme Draft Solar Law 10-2-2019

A LOCAL LAW # ___ FOR THE YEAR _____
AMENDING THE ZONING ORDINANCE OF THE TOWN OF LYME, NEW YORK
TO REGULATE SOLAR ENERGY SYSTEMS

NOW THEREFORE, be it enacted by the Town Board of the Town of Lyme as follows:

Article II, Section 210 of the Town of Lyme Zoning Ordinance is hereby amended to include the following definitions:

BUILDING INTEGRATED PHOTOVOLTAIC SYSTEM: *(replace existing definition with this)* A combination of photovoltaic building components integrated into any building envelope system such as vertical facades including glass and other façade material, semitransparent skylight systems, roofing materials, and shading over windows.

GROUND-MOUNTED SOLAR ENERGY SYSTEM (ON-SITE): A solar panel system that is anchored to the ground and attached to a pole or other mounting system, detached from any other structure for the primary purpose of producing electricity for onsite consumption.

LARGE-SCALE SOLAR ENERGY SYSTEM: A Solar Energy System that is ground-mounted and produces energy primarily for the purpose of off-site sale or consumption. This includes a Community Distributed Solar Energy System.

LOT COVERAGE, SOLAR ENERGY SYSTEM: The area measured from the outer edge(s) of ground-mounted arrays, inverters, batteries, storage cells and all other mechanical equipment used to create solar energy, exclusive of fencing and roadways.

ROOF-MOUNTED SOLAR ENERGY SYSTEM: A solar panel system located on the roof of any legally permitted building or structure for the purpose of producing electricity.

SOLAR ENERGY EQUIPMENT: Electrical energy storage devices, material, hardware, inverters, or other electrical equipment and conduit of photovoltaic devices associated with the production of electrical energy.

SOLAR ENERGY SYSTEM: An electrical generating system composed of a combination of both Solar Panels and Solar Energy Equipment.

SOLAR PANEL: A Photovoltaic device capable of collecting and converting solar energy into electrical energy.

Article II, Section 210 of the Town of Lyme Zoning Ordinance is hereby amended to delete the following definitions:

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Photovoltaic (PV) Systems, Solar Access Area, Solar Array, Solar Collector, Solar Easement, Solar Energy System and Solar Thermal Systems.

Article IV, Section 405 of the Town of Lyme Zoning Ordinance is hereby amended as follows:

- B.12 change to Roof –Mounted Solar Energy Systems (SES)
- B.13 delete Solar Energy System (SEC)
- B.14 add Ground-Mounted Solar Energy System (On-Site)
- C.27 replace with Large-Scale Solar Energy System (SES)
- C.28 Delete
- C.29 renumber to C.28

Article IV, Section 410 of the Town of Lyme Zoning Ordinance is hereby amended as follows:

- B.9 change to Building Integrated Photovoltaic System
- B.10 change to Roof-Mounted Solar Energy Systems (SES)
- B11. Add Ground-Mounted Solar Energy System (On-Site)
- C.12 delete

Article IV, Section 412 of the Town of Lyme Zoning Ordinance, Use Schedule is hereby amended as follows:

- Solar Energy System (SES), Building Integrated Photovoltaic BIPV) (delete)
- Solar Energy System (SES), Commercial (delete)
- Solar Energy System, Ground Mounted/ Free Standing (delete)
- Solar Energy System (SES) Rooftop/ Building Mounted (delete)
- Roof-Mounted Solar Energy System: Zoning Permit in both WF and AR Districts (add)
- Ground-Mounted Solar Energy System (On-Site): Zoning Permit in both WF and AR Districts (add)
- Large -Scale Solar Energy Systems Solar Energy Systems: Not Permitted in WF District, Special Permit in AR District (add)

Section 775 in Article VII of the Zoning ordinance of the Town of Lyme shall be edited as follows:

- Replace title with Renewable Energy Systems - Biomass Energy Systems and Small Wind Energy Conversion
- A.2. Replace ZBA with Planning Board in the second sentence regarding pre-meetings.
- D. delete paragraphs D.1-D5
- E. renumber paragraphs E and F to D and E

Be it further enacted that Section 776 Solar Energy Systems (SES) is to be added to the Zoning Ordinance

- A. **PURPOSE:** The purpose of these Solar Energy regulation are to advance and protect the public health, safety, and welfare of the Town of Lyme including:

1. Taking advantage of a safe, abundant, renewable, and non-polluting energy resource;

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2. Decreasing the cost of energy to the owners of commercial and residential properties, including single-family houses; and
3. Increasing employment and business development in the region by furthering the installation of Solar Energy Systems.

B. APPLICABILITY

The requirements of this law shall apply to all Solar Energy Systems installed or modified after its effective date, excluding general maintenance and repair and Building-Integrated Photovoltaic Systems.

C. ROOF-MOUNTED SOLAR ENERGY SYSTEMS

1. Zoning Permit. Roof-Mounted Solar Energy Systems that use the electricity onsite or offsite are permitted as an accessory use when attached to any lawfully permitted building or structure. A valid Zoning Permit shall be obtained through the Town of Lyme Zoning Enforcement Officer, prior to installation.
2. Height. Roof-Mounted Solar Energy Systems shall not exceed the maximum height restrictions of the zoning district within which they are located and are provided the same height exemptions granted to building-mounted mechanical devices or equipment.
3. Aesthetics. Roof-Mounted Solar Energy System installations shall incorporate, when feasible, the following design requirements:
 - a. Panels facing the front yard must be mounted at the same angle as the roof's surface with a maximum distance of eighteen inches (18") between the roof and highest edge of the system.
 - b. Roof mounted structures shall be color-coordinated to harmonize with roof material and other dominant colors of the structure.
 - c. All solar collectors shall be installed so as to prevent any glare and heat that is perceptible beyond applicant property's lot lines.
4. Roof-Mounted Solar Energy Systems that increase the overall height of the structure by more than eighteen (18) inches, shall require a Special Use Permit by the Planning Board.

D. GROUND-MOUNTED SOLAR ENERGY SYSTEMS (ON-SITE)

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1. Zoning Permit. Ground-Mounted Solar Energy Systems that use the electricity onsite are permitted as accessory structures. A valid Zoning Permit shall be obtained through the Town of Lyme Zoning Enforcement Officer, prior to installation.
2. Height and Setback. Ground-Mounted Solar Energy Systems shall not exceed sixteen (16) feet in height when oriented at maximum tilt. Ground-mounted solar arrays shall meet the required setbacks for accessory structures. All solar collectors must be located in compliance with NYS Department of Environmental Conservation (DEC) and Federal Flood Plain regulations and specifications as they pertain to waterways, waterbodies, and designated wetlands.
3. Glare. All solar collectors shall be installed so as to prevent any glare and heat that is perceptible beyond subject property's lot lines. Particular attention shall be paid to panel orientation with regard to airport runway locations, and airplane flyover/approach patterns to minimize potential glare impacts on pilots.

E. LARGE SCALE SOLAR ENERGY SYSTEMS

1. Large-Scale Solar Energy Systems are permitted within the AR Zoning District through the issuance of a Special Use Permit subject to the requirements set forth in this Section. Applications for the installation of a Large-Scale Solar Energy System shall be reviewed by the Enforcement Officer and referred to the Planning Board for its review and action, which can include approval, approval on conditions, and disapproval.
 - a. All Large-Scale Solar Energy Systems shall be designed by a NYS licensed architect or licensed engineer and installed in conformance with the applicable International Building Code, International Fire Prevention Code and National Fire Protection Association (NFPA) 70 Standards.
 - b. All solar collectors must be located in compliance with DEC and Federal Flood Plain regulations and specifications as they pertain to waterways, waterbodies, and designated wetlands.
2. Application requirements for Large-Scale Solar Energy Systems. The following items are required as well as those required in Section 515.
 - a. 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.
 - b. Plans showing the layout of the Solar Energy System signed by a Professional Engineer or Registered Architect shall be required.

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- c. The equipment specification sheets shall be documented and submitted for all photovoltaic panels, significant components, mounting systems, and inverters that are to be installed.
- d. Property Operation and Maintenance Plan. Such plan shall describe continuing photovoltaic maintenance and property upkeep, such as mowing and trimming.
- e. Glint and Glare Report is required to determine potential impacts to the Watertown International Airport and Wheeler-Sack Army Airfield.
- f. Fort Drum. The applicant shall notify the Fort Drum Plans, Analysis, and Integration Office as soon as possible to determine potential impacts on Fort Drum airfield and training activities. The applicant must provide a letter from Fort Drum with comments.
- g. Watertown International Airport. The applicant shall notify the Airport Manager as soon as possible to determine potential impacts on the airport. The applicant must provide a letter from the Manager with comments.
- h. Decommissioning Plan. To ensure the proper removal of Large-Scale Solar Energy Systems, a Decommissioning Plan shall be submitted as part of the application. Compliance with this plan shall be made a condition of the issuance of a Special use permit under this Section. The Decommissioning Plan must specify that after the Large-Scale Solar Energy System can no longer be used, the applicant or any subsequent owner shall remove it. 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. The plan shall also include an expected timeline for execution. 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. Removal of Large-Scale Solar Energy Systems must be completed in accordance with the Decommissioning Plan. If the Large-Scale Solar Energy System is not decommissioned after being considered abandoned, the municipality may remove the system and restore the property and make a claim against the bond to cover these costs to the municipality.
- i. Sureties/Bond. The applicant shall be required to provide sureties, as set forth, for the removal of the large scale solar energy system. Pursuant to the execution of the decommissioning plan, the applicant shall provide the Town with a bond in an amount determined by the Planning Board, but in no case less than 100% of the component/material cost (adjusted 3% per year for inflation, 20 years into the future after installation) to cover the expense of removal of the system and remediation of the landscape, in the event the Town must remove the facility. The bond shall be in a form acceptable to the Town Attorney, which includes but are not limited to a letter of credit, perpetual bond, or any combination thereof. The amount shall be reviewed every three years, by the Planning Board and shall be adjusted if deemed necessary. If the bond is

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deemed to be adjusted, the applicant shall have 90 days from notice to provide an adjustment bond.

3. Review Standards for Large-Scale Solar Systems.

- a. Height and Setback. Large-Scale Solar Energy Systems shall not exceed sixteen (16) feet in height when oriented at maximum tilt. Any structure and equipment shall comply with all the minimum setbacks for principal structures established in the Town of Lyme Zoning Ordinance except that Large Scale Solar Energy System's structures and equipment shall be located at least 60 feet from any non-participating adjoining property line. Contiguous side and rear yard setbacks can be reduced to zero feet where participating parcels adjoin one another.
- b. Prime soils, prime if drained, and soils of statewide importance that are in agricultural production are a valuable and finite resource. Proposed Large-Scale & Community Distributed solar systems shall minimize the displacement of prime soils that are in agricultural production. The site plan shall depict the location and extent of prime soils, prime soils if drained, soils of statewide importance, and indicate whether the parcel(s) is/are receiving an agricultural valuation. The site plan shall also depict the location and extent of current agricultural uses on the land (e. g rotational crops, hay land, unimproved pasture, support lands, and fallow lands) the location of diversions and ditches, and areas where tile drainage has been installed.
- c. Roadways within the site shall be built along field edges and along elevation contours where practical, constructed at grade and have a minimum width that complies with the National Electric Code. Roadways shall not be constructed of impervious materials and shall be designed to minimize the extent of roadways constructed and soil compaction.
- d. Structures for overhead collection lines are to be located upon the nonagricultural areas and along field edges where possible. Electric interconnect cables and transmission lines are to be buried in agricultural fields wherever practical. Interconnect cables and transmission lines installed aboveground shall be located outside agricultural field boundaries. When above-ground cables and transmission lines must cross agricultural fields, taller structures that provide longer spanning distances and locate poles on field edges to the greatest extent practicable. All buried electric cables in cropland, hayland, and improved pasture shall have a minimum depth of 48 inches of cover. At no time is the depth of cover to be less than 24 inches below the soil surface.
- e. Fences. All Large-Scale Solar Energy Systems shall be enclosed by fencing to prevent unauthorized access. The type and height of fencing shall be determined by the Planning Board. Fences that enclose Large Scale Solar Energy Systems can exceed 4 feet within any required yard if reviewed and approved by the Planning Board as part of the Special Use Permit process; however, fencing shall not exceed ten feet in height. The Planning Board

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may require additional screening of the fencing and/or system via additional landscaping to avoid adverse aesthetic impacts.

- f. **Perimeter Screening.** All Large-Scale Solar Energy Systems shall have the least visual effect practical, as determined by the Planning Board. Based on site specific conditions, including topography, adjacent structures, and roadways, reasonable efforts shall be made to minimize visual impacts by preserving natural vegetation, and providing landscape screening to abutting residential properties, public roads, and from public sites known to include important views or vistas, but screening should minimize the shading of solar collectors. No more than seventy five (75) percent of the existing perimeter screening (within the 60 foot setbacks), including existing brush, trees, and vegetation may be removed in order to accommodate a solar farm unless newly proposed screening acceptable to the Planning Board is proposed and approved as part of the Special Use Permit. On sites without existing screening, new screening must be proposed, approved by the Planning Board and installed to screen the solar field as well as all appurtenant structures such as inverters, batteries, equipment shelters, storage facilities, transformers, and fencing.
- g. **Signage.** Warning signs with the owner's contact information shall be placed on the entrance and perimeter of the fencing. Solar equipment shall not be used for displaying any advertising. All signs, flags, 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-hours emergency contact phone number and warn of any danger.
- h. **Glare.** Solar panels shall be placed and arranged such that reflected solar radiation or glare shall not be directed onto adjacent buildings, properties, or roadways. Exterior surfaces of all collectors and related equipment shall have a non-reflective finish. Particular attention shall be paid to panel orientation with regard to airport runway locations, and airplane flyover/approach patterns to minimize potential glare impacts on pilots based on the Glint and Glare Study.
- i. **Noise.** Noise producing equipment such as substations and inverters shall be located to minimize noise impacts on adjacent properties. Their setback from property lines should achieve no discernable difference from existing noise levels at the property line.
- j. **Access and parking.** A road and parking will be provided to assure adequate emergency and service access. Maximum use of existing roads, public or private, shall be made.
- k. **Safety.** The owner/operator shall provide evidence that a copy of the site plan application has been submitted to the Fire Chief of the appropriate fire department. All means of shutting down the photovoltaic solar energy system shall be clearly marked on the site plan and building permit applications.

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- I. Any application under the Section shall meet any substantive provisions contained in the special use permit requirements in the zoning ordinance that, in the judgment of the Planning Board, are applicable to the system being proposed. If none of the special use permit requirements are applicable, the Planning Board may waive the requirement for Special Use permit.
 - m. The Planning Board may impose conditions on its approval of any Special use permit under this Section in order to enforce the standards referred to in this Section or in order to discharge its obligations under the State Environmental Quality Review Act (SEQRA).
4. Abandonment and Decommissioning - Solar Energy Systems are considered abandoned after twelve (12) months without electrical energy generation and must be removed from the property. Applications for extensions are reviewed by the Planning Board for a period of six months. The site shall be restored to as natural a condition as possible within one (1) year of removal.

F. Solar Rights

1. Pursuant to Chapter 263 of New York Town Law, all parcels within the Town of Lyme shall be permitted to enjoy access to direct sunlight.
2. No structure shall be constructed or vegetation installed that limits direct solar access greater than 50 percent of the ground surface of adjoining lots to less than six hours (per day) on any day of the year.

BE IT FURTHER RESOLVED THAT, this local law shall supersede all prior inconsistent local laws, ordinances or regulations.

BE IT FURTHER RESOLVED THAT, this local law shall take effect immediately upon filing with the Secretary of State of the State of New York.