

Town of Worcester
Local Law No. 1 of 2018
Solar Energy Systems

I. Title:

This local law shall be referred to as the “Local Law to Regulate Solar Energy Systems in the Town of Worcester

II. Enactment:

This local law is adopted and enacted pursuant to the authority and power granted by Articles 2 and 3 of the New York State Home Rule Law, Article 2 of the New York Statute of Local Governments and Article 16 of the New York State Town Law.

A. Purpose and Intent:

1. The Town of Worcester recognizes that solar energy is a clean, readily available, and renewable energy source. It further recognizes that energy generated from solar systems can be used to offset energy demand on the grid. Further, the Town recognizes the commercial potential for solar systems.
2. The Town of Worcester has determined that comprehensive regulations regarding the development of residential and commercial solar energy systems are necessary to protect the interests of the Town, its residents and its businesses. This local law aims to accommodate solar energy systems; balancing the potential impact on neighbors while preserving the rights of property owners. This local law is intended to promote the effective and efficient use of solar energy resources; set provisions for the placement, design, construction and operation of these systems to be consistent with Town of Worcester’s Comprehensive Plan; to uphold the public health, safety and welfare; and to ensure that those systems will not have a significant adverse impact on the environment and on the aesthetic qualities and character of the Town
3. It is not the intent of this law to repeal or impair permits previously issued relating to the use of buildings or premises, or to interfere with any easements, covenants or agreements existing between parties. This law imposes a greater regulation upon use of building or premises than is required by existing provisions of law, ordinance, regulations or permits

B. Definitions

The following terms have meanings as indicated.

1. Building-Integrated Photovoltaic (BIPV) System. A solar energy system that consists of integrating photovoltaic modules into the building structure, such as the roof or the façade and which does not alter original construction design such as solar conducting shingles.
2. Building-Mounted Solar Energy System. A solar energy system that is affixed to the roof or sides of a building or other structures either directly or by means of support structures or other mounting devices.
3. Code Enforcement Officer. The appointed official responsible for enforcing land use and building codes within the Town of Worcester.
4. Ground-Mounted Solar Energy System. A solar energy system that is affixed to the ground either directly or by support structures or other mounting devices and that is not attached to an existing structure. Pole mounted solar energy systems shall be considered ground mounted solar energy systems for the purpose of this law.
5. Net-Metering. A billing arrangement that allows solar customers to get credit for excess electricity that they generate and deliver back to the grid. They pay for their net electrical usage at month’s end
6. Planning Board. The appointed Town of Worcester Planning Board..
7. Reflector. A device for which the sole purpose is to increase the solar radiation received by the solar collector.

8. Small Scale Solar Energy System. Any solar energy system that cumulatively meets the following provisions
 - a. Is an accessory use or structure, designed and intended to generate electricity primarily for principal use located on site
 - b. Produces up to 10Kw/hour of solar energy and does not provide direct energy to any buildings or structures beyond the lot in which the system is housed.
9. Solar Collector. A solar or photovoltaic cell, plate, panel, film, array, or other structure affixed to the ground, building or other structure that harnesses solar radiation directly or indirectly to generate thermal, chemical, electrical or other usable energy or that reflects or concentrates solar radiation to a solar or photovoltaic cell, plate, panel, film, array, reflector or other device that directly or indirectly generates usable energy.
10. Solar Energy System. A complete system intended for the collection, inversion, storage and/or distribution of solar energy and that directly or indirectly generates thermal, chemical, electrical or other usable energy. A solar system consists of, but is not limited to, solar collectors, mounting devices, energy storage devices and distribution systems as well as accessories, buildings, inverters, combiner boxes, meters, transformers and all other mechanical structures and devices
11. Solar Panel. A photovoltaic device for the direct conversion of solar energy into electricity.
12. Utility-Scale Solar Energy System or Solar Farm. A ground mounted energy generation facility or area of land principally used to convert solar energy into electricity, whether by photovoltaic's, concentrating solar devices or other solar technologies, designed and intended to supply energy into the utility grid for sale to the general public.

C. Applicability

1. The requirements of this local law shall apply to all solar energy systems and equipment installations modified or installed after its effective date.
2. Solar energy system installations for which a valid building permit has been issued prior to enactment of this law shall not be required to meet its requirements.
3. Solar energy systems that have been installed without a building permit or variance must be inspected for safety by the Code Enforcement Officer within six months of enactment of this law. Failure to do so shall result in removal of the system. There will be no fee to the owner of the solar energy system for this inspection.
4. All solar energy systems shall be designed, erected and installed in accordance with all applicable NYS State Codes and the National Electrical Codes.
5. The Town of Worcester adopts the New York Unified Solar Permit for use in reviewing applications and performing inspections regarding solar energy systems.

D. Requirements for Small-Scale Solar Energy Systems

1. No small-scale solar energy system shall be installed or operated in the Town of Worcester except in compliance with this local law.
2. The installation of solar collector or panel, whether attached to main structure, accessory structure or as a detached, free standing or ground mounted solar collector are permitted as an accessory use, shall meet all requirements of this sub-section and shall require a building permit
3. All solar collectors and related equipment are to be surfaced, designed and sited so as to not reflect glare onto adjacent properties and roadways
4. Small scale solar system 's solar panels and associated equipment are restricted to side and rear yards and must be installed in accordance with set-back requirements set forth in the Town of Worcester Land Use Law (Local Law #1 of 1976) as amended
5. Ground mounted or free standing solar collector height shall not exceed 20 feet when oriented at its maximum tilt.
6. All solar collectors and their associated support elements, shall, at the time of installation be designed according to generally accepted engineering practice to withstand wind

- pressures from any direction, to minimize the migration of light and to minimize the development of sight obstructions for adjacent structures or land parcels.
7. Photovoltaic systems that are integrated directly into building materials such as roof shingles and that are a permanent and integral part of, and not mounted on the building or structure are exempt from the requirements of this local law. However all applicable building codes shall be met and necessary permits obtained.
 8. In order to ensure firefighter or other emergency responder safety there shall be a minimum three foot perimeter area around the edge of the roof and the solar collector panels.
 9. Free standing or ground mounted solar collectors are permitted as an accessory structure subject to the following additional conditions:
 - a. a lot must have a minimum of 43,850 square feet (one acre) in order for a ground-mounted or freestanding solar energy system to be permitted.
 - b. Screening shall be provided from adjoining lots through the use of architectural features, earth berms landscaping, fencing or other screening which will harmonize with the character of the property and surrounding area. The proposed screening must be approved by the Town of Worcester Planning Board prior to issuance of a building permit
 - c. The total surface areas of all ground-mounted and free standing solar collectors shall not exceed the area of the ground covered by the by the parcels largest building structure measured exterior wall to exterior wall not including patios and decks.
 10. No reflector may be used in a small scale solar energy system
 11. Appropriate warning signage shall be posted and clearly visible.

E. Requirements for Utility-Scale Solar Energy Systems/Solar Farms

1. Applicability
 - a. Any utility-scale solar energy system erected, constructed, modified or operated in the Town of Worcester after the effective date of this local law shall be in compliance with this Section.
 - b. A site plan review by the Planning Board shall be required and approved for all utility-scale solar energy systems prior to issuance of a building permit
 - c. In order to promote innovative design and encourage the inclusion of alternative energy systems within the overall design of a building, solar energy systems determined by Code Enforcement Officer to be building-integrated photovoltaic (BIPV) systems, as defined herein, are exempt from the requirements of this section. BIPV systems are still required to meet applicable building codes and obtain all necessary permits.
2. Applications, Permits and Approvals Required
 - a. All applications for utility-scale solar energy systems shall be consist of an application for a solar permit and a site plan review and all applicable fees as may be established by the Worcester Town Board. Both site plan and solar permit reviews and approvals by Planning Board are required prior to issuance of a building permit. The Planning Board shall review the site plan and application concurrently.
 - b. All Applications for utility scale solar energy systems shall include the following:
 1. Plans and drawings for the solar energy system installation signed by a professional engineer registered in the state of New York showing the proposed layout of the entire solar energy system along with a description of all components, whether on-site or off-site, existing vegetation and proposed cleaning and grading of al sites involved. Clearing and/or grading activities shall not commence until Planning Board review and approval.

2. An electrical diagram detailing the solar installation, associated components and electrical interconnection methods, with all disconnects and over current devices also to be supplied to the Worcester Fire Department or East Worcester Fire Department, as applicable
3. Documentation of access to the project sites including all access roads, gates, parking areas and the like
4. Plan for clearing and grading the site
5. A storm water pollution prevention plan as per New York State Department of Environmental Conservation requirements to detail storm water runoff management and erosion control plans for the site if deemed necessary by the Planning Board
6. Documentation of utility notification, including electrical service order number,
7. Decommissioning plan that satisfies the Planning Board outlining the anticipated life of the project, method and process of removing all components of the solar energy system and returning the site to its pre-existing condition and the estimated decommissioning cost including any salvage value.
8. The Town shall require any applicant to pay all associated costs for any application review, including but not limited to engineering, legal, environmental, planning and the review under New York's State Environmental Quality Review Act (SEQRA). When Planning Board determines that a review will require engineering, legal or planning costs, it shall provide an estimate to the applicant. Subsequently, such payment shall be made prior to commencement of any further Planning Board review.
9. Photographic simulations shall be included showing the proposed solar energy system in relation to the buildings and structures, property lines, other natural characters. Elevations views, dimensions, manufacturers specs and photos of the proposed solar energy system, solar collectors and all other components shall also be included.
10. Details of the noise anticipated that may be generated by inverter fans shall be declared. Planning Board may require noise analysis to determine adverse noise impacts
11. Detail outline of mitigation plans for sight pollution affecting neighbors including any vegetation, earth berms or fencing shall be included.
12. Copies of any lease or rental agreements for real property on which utility scale solar energy system will be located shall be included.
13. Copies of any lease or rental agreements for equipment or devices used in the operation and maintenance of utility scale solar energy system shall be included.

3. General Provisions for Utility-Scale Solar Energy Systems

All applicants for utility-scale solar energy systems shall be in accordance with the following:

- a. Town of Worcester building, plumbing, electrical and fire codes
- b. A minimum parcel size of ten (10) acres is required for utility-scale solar energy systems
- c. Lands which have the highest ecological values as evidenced by large, contiguous areas of forest, undisturbed drainage areas, wetlands or NYS DEC identified critical habitats or rare plant and animal populations shall be avoided
- d. There shall be a minimum 100 foot buffer between any component of an utility-scale solar energy system and the parcel boundary.
- e. Any site containing a utility-scale solar energy system may be required to be enclosed by non reflective perimeter fencing acceptable to the Planning Board to restrict unauthorized access.
- f. Previously cleared or disturbed areas are preferred location for solar panel array. The clearing of additional lands to accommodate a proposed utility-scale solar energy

facility may be permitted, provided the percentage of newly cleared land on any parcel does not exceed 30% of existing woodlands on that parcel.

- g. When proposed on an active farm in Worcester, a utility-scale energy system may occupy 20% of any farmed parcel but in no case shall exceed 10 acres. Arrays shall be located on a parcel in such a manner as to avoid, to the maximum extent feasible soils classified as prime farmland by the United States Department of Agriculture (USDA) or by New York State Department of Agriculture and Markets.
- h. Native grass and vegetation shall be maintained below the arrays.
- i. The solar facility, including any proposed off-site infrastructure, shall be located and screened in such way as to avoid or minimize visual impacts as viewed from:
 - 1. Publically dedicated roads and highways including I-88 and New York State Route 7.
 - 2. Existing residential dwellings located on contiguous parcels

A berm, landscape screen or other opaque enclosure or any combination thereof acceptable to the Town Planning Board capable of fully screening the site shall be provided.

- j. The design, construction and maintenance of any utility-scale solar energy system shall prevent the misdirection and/or reflection of solar rays onto neighboring properties, public roads and public spaces such as parks or recreational areas in excess of what currently exists.
- k. All structures and devices that are used to support utility-scale solar energy facilities shall be not reflective and or painted a subtle or earth tone color to aid in the blending of the facility into the existing environment.
- l. All transmission lines and wiring associated with a utility-scale solar energy system shall be buried and include necessary encasement in accordance with the National Electrical Code, and all State and Town requirements. The Planning Board may waive this requirement if sufficient engineering data is submitted that underground transmission lines are not feasible or practical. The applicant is required to show the locations of all proposed overhead and underground electrical utility lines, including substations, and junction boxes and other electrical components for the project on the site plan. All transmission lines and electrical wiring shall be in compliance with the utility company's requirements for interconnection.
- m. Artificial lighting of s utility-scale solar energy system shall be limited to what is required for safety and operational purposes and shall be shielded from all neighboring properties and public roads
- n. Any signage shall be in accordance with Town and State regulations. Appropriate warning signage shall be posted at the site and clearly visible.
- o. The maximum height of a solar panel array shall not exceed fifteen feet
- p. Following the construction of an utility-scale solar energy system, all disturbed areas where soil has been exposed shall be reseeded with grass and/or replanted with low level vegetation capable of preventing soil erosion and airborne dust.
- q. Solar Permits granted for utility-scale solar energy system shall be assignable or transferable to future landowners as long as they are in full compliance with this article and all conditions. The Code Enforcement Officer must be notified of any property transfer at least fifteen days prior to transfer
- r. Any post-construction changes or alterations to the utility-scale solar energy systems shall require a new site review and permit subject to the requirements of this local law.
- s. After completion of utility-scale solar energy system, the applicant shall provide a post-construction certification from a professional engineer registered in New York State that the project complies with applicable codes and industry practices and has been constructed and is operating according to design plans. The applicant shall further provide certification from the utility that the facility has been inspected and connected.
- t. No reflector may be used in a utility scale solar energy system.

- u. Appropriate warning signage shall be posted and clearly visible.
 - v. The design, construction, maintenance and operation of a utility scale solar energy system shall be in compliance with Town of Worcester Flood Damage Prevention Law of 2017 including approval of a floodplain development permit in applicable.
- 4 Abandonment or Decommissioning of Utility-Scale Solar Energy Systems
- a. Utility-scale solar energy system which have **not** been active and in continuous service for a period of one year shall be removed at the owner's or operator's expense. Decommissioning shall include removal of all energy facilities, structures and equipment including any subsurface wires and footings from the parcel. Any access roads created for building or maintaining system shall be removed and replanted with vegetation.
 - b. Full restoration of the parcel is required unless restoration is unnecessary because the parcel is to put into active agricultural use or other development as approved by Planning Board
 - c. All safety hazards created by the installation and operation of the utility-scale solar energy system shall be eliminated and the site restored to its pre-existing condition within six months of removal of the solar energy system.
 - d. An estimate of the decommissioning costs shall be determined by a professional engineer, hired by the Planning Board and paid for by the applicant
 - e. The applicant shall secure financial assurances in the form of bond or escrow equal to the certified decommissioning estimate as determined by a professional engineer.
 - f. The method and manner with which the Town can access financial assurances shall be mutually identified and agreed upon prior to permit issuance and start of construction
 - g. Decommissioning plan shall be binding on all assignees, successors or heirs

III. Severability Clause

If any provision of this local law is held illegal or unenforceable in a judicial proceeding or controlling legal authority finding, such provision or clause shall be severed and shall be inoperative; the remainder of this local law shall remain operative and in effect.

IV. Effective Date

This local law shall take effect immediately upon filing with the Secretary of State of the State of New York.