Local Law No. ______. A Local Law amending Chapter Section 139, The "Zoning Law of the Town of Lysander, New York".

Be it enacted by the Town Board of the Town of Lysander, Onondaga County, New York, as follows:

Section 1. That Chapter 139, The "Zoning Law of the Town of Lysander, as amended, is further amended to add the following new Article XXX, as follows:

ARTICLE XXX On-Site Use Solar Energy Systems [Added ______ 2016, by L.L. No. _____]

Section 139-90. Purpose.

The Town of Lysander, through these regulations, seeks to promote the safe, effective, and efficient use of on-site-use solar energy systems in order to reduce on-site and offsite consumption of utility-supplied energy, and to balance the use of such solar energy systems with potential impacts on the health, safety and welfare of the residents of the Town of Lysander and to preserve and protect the aesthetic qualities of the Town of Lysander.

Section 139-91. Definitions.

As used in this Article, the following terms shall have the meanings indicated, unless the context or subject matter requires otherwise. The definitions contained in this Article XXX are intended specifically for this Article and not any other section of the Lysander Code.

BUILDING-INTEGRATED PHOTOVOLTAIC (BIPV) SYSTEMS – 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 the relief of the roof.

COLLECTIVE SOLAR – Solar installations owned collectively through subdivision homeowner associations, college student groups, "adopt-a-solar-panel" programs, or other similar arrangements.

FLUSH MOUNTED SOLAR PANEL – A photovoltaic panel or tile that is installed flush to the surface of a roof and which cannot be angled or raised.

FREESTANDING OR GROUND-MOUNTED SOLAR ENERGY SYSTEM – a solar energy system that is directly installed in the ground and is not attached or affixed to an existing structure. Pole mounted solar energy systems shall be considered Freestanding or Ground Mounted Solar Energy Systems for purposes of this Local Law.

PERMIT GRANTING AUTHORITY – The Town Code Enforcement Office, which is charged with granting permits for the operation of solar energy systems.

PHOTOVOLTAIC (PV) SYSTEMS – A solar energy system that produces electricity by the use of semiconductor devices, called photovoltaic cells that generate electricity whenever light touches them.

QUALIFIED SOLAR INSTALLER – A person who has skills and knowledge related to the construction and operation of solar electrical equipment and installations and has received safety training on the hazards involved. Persons who are on the list of eligible photovoltaic installers maintained by the New York State Energy Research and Development Authority (NYSERDA), or who are certified as a solar installer by the North American Board of Certified Energy Practitioners (NABCEP), shall be deemed to be qualified solar installers for the purposes of this definition. Persons who are not NYSERDA's list of eligible installers or NABCEP's list of certified installers may be deemed to be qualified solar installers if the Town Code Enforcement Officer or such other Town officer or employee as the Town Board designates determines such persons have had adequate training to determine the degree and extent of the hazard and the personal protective equipment and job planning necessary to perform the installation safely. Such training shall include the proper use of special precautionary techniques and personal protective equipment, as well as the skills and techniques necessary to distinguish exposed energized parts from other parts of electrical equipment and to determine the nominal voltage of exposed live parts.

ROOFTOP OR BUILDING MOUNTED SOLAR SYSTEM – A solar power system in which solar panels are mounted on top of the structure of a roof either as a flush-mounted system or as modules fixed to frames which can be tilted toward the south at an optimal angle.

SETBACK – The distance from a front lot line, side lot line or rear lot line of a parcel within which a free standing or ground mounted solar energy system is installed.

SMALL-SCALE SOLAR – For purposes of this Chapter, the term "small-scale solar" refers to solar photovoltaic systems that produce up to ten kilowatts (kW) per hour of energy or solar thermal systems which serve the building to which they are attached, and do not provide energy for any other buildings.

SOLAR COLLECTOR – A solar photovoltaic cell, panel, or array, or solar hot air or water collector device, which relies upon solar radiation as an energy source for the generation of electricity or transfer of stored heat.

SOLAR ENERGY EQUIPMENT/SYSTEM – Solar collectors, controls, energy storage devices, heat pumps, heat exchangers, and other materials, hardware or equipment necessary to the process by which solar radiation is collected, converted into another form of energy, stored, protected from unnecessary dissipation and distributed. Solar systems include solar thermal, photovoltaic and concentrated solar.

SOLAR FARM OR SOLAR POWER PLANT – Energy generation facility or area of land principally used to convert solar energy to electricity, whether by photovoltaics,

concentrating solar thermal devices or various experimental solar technologies, with the primary purpose of wholesale or retail sales of electricity.

SOLAR PANEL - A device for the direct conversion of solar energy into electricity.

SOLAR –THERMAL SYSTEMS – Solar thermal systems directly heat water or other liquid using sunlight. The heated liquid is used for such purposes as space heating and cooling, domestic hot water, and heating pool water.

Section 139-92 APPLICABILITY.

- A. All requirements of this local law shall apply to all solar energy systems and equipment installations modified or installed after the effective date of this local law.
- B. Solar energy system installations for which a valid building permit has been issued or, if no building permit was required when the installation has commenced before the effective date of this local law shall not be required to meet the requirements of this local law.
- C. All solar energy systems shall be designed, erected and installed in accordance with applicable codes, regulation and industry standards as referenced in the New York State Uniform Fire Prevention and Building Code (the "State Code"), as amended from time to time, and the Town Code.
- D. Solar collectors, unless part of a Solar Farm or Solar Power Plant, shall be permitted only to provide power for use by owners, lessees, tenants, residents, or other occupants of the premises on which they are erected, but nothing contained in this Article shall prohibit "collective solar" installations or the sale of excess power through a "net billing" or "net-metering" arrangement in accordance with New York Public Service Law Section 66-j or similar state and federal statute.

Section 139-93 PERMITS.

- A. No Small Scale solar energy system or device shall be installed or operated in the Town except in compliance with this Article, and the New York State Unified Solar Permit for small scale solar systems, which is hereby adopted and made part of the Code of the Town of Lysander.
- B. Rooftop and Building-Mounted Solar Collectors: Rooftop and building mounted solar collectors are permitted in all zoning districts in the Town subject to the following conditions:
 - 1. Building permits shall be required for installation of all rooftop and building-mounted solar collectors.

- 2. Rooftop and Building-Mounted Solar Collectors shall not exceed the height of the structure in any zoning district on pitched roofs. Building mounted solar collectors on flat roofs shall not exceed the height of the structure by more than 15'.
- 3. In order to ensure firefighter and other emergency responder safety, there shall be a minimum perimeter area around the edge of the roof and structurally supported pathways to provide space on the roof for walking around all Rooftop and Building-Mounted Solar Collectors. Additionally, installations shall provide for adequate access and spacing in order to:
 - i. Ensure access to the roof
 - ii. Provide pathways to specific areas of the roof
 - iii. Provide smoke ventilation opportunity areas
 - iv. Provide emergency egress from the roof

In the event any of the standards in this subsection 139-____ are more stringent than the "State Code"), they shall be deemed to be installation guidelines only and the standards of the State Code shall apply.

- C. Building-Integrated Photovoltaic (BIPV) Systems: BIPV systems are permitted in all zoning districts and shall be shown on the plans submitted for the building permit application for the building containing the system.
- D. Freestanding and ground mounted solar collectors: Free standing or ground mounted solar collectors are prohibited in the following residential zoning districts: Residential-10,000 (R-10), Residential-12,500 (R-12.5), Residential-20,000 (R-20), Agricultural-Residential (AR-40), lots less than 80,000 square feet, or residential portions of Planned Unit Development (PUD's).

In all other zoning districts, free standing or ground mounted solar collectors are considered accessory structures and are allowed under the following conditions:

- 1. Building permits are required for the installation of all ground-mounted and free standing solar collectors.
- In the AR-40,000 (AR-40) Agricultural (A), Industrial (I), General Commercial (GC) or General Business (GB) Districts, a lot must have a minimum size of 80,000 square feet in order for a ground mounted or free standing solar collector to be permitted.
- 3. The location of the ground mounted or free standing solar collector shall meet the setback requirements for Accessory Buildings, L.L. No. 2-1995.

- 4. The height of the solar collector and any mounts shall not exceed 20 feet when oriented at a maximum tilt.
- 5. Ground mounted and freestanding solar collectors shall be screened to the greatest extent practicable from adjoining lots and street rights-of-way through the use of architectural features, earth berms, landscaping, fencing or other screening which will harmonize with the character of the property and surrounding areas and at the discretion of the Code Enforcement Officer. The proposed screening shall not interfere with normal operation of the solar collectors.
- 6. Solar energy equipment shall be located in a manner to reasonable minimize view blockage for surrounding properties and shading of property to the north, while still providing adequate solar access for collectors.
- 7. Solar energy equipment shall not be located within any required buffer area or public easement.
- 8. The total surface area of all ground-mounted and free standing solar collectors on a lot shall not exceed the area of the ground covered by the building structure of the largest building on the lot measured from the exterior walls, excluding patios, decks, balconies, screened and open porches and attached garages, provided that non-residential placements exceeding this size may be approved by the Planning Board, subject to site plan review.
- 9. The area beneath ground mounted and free standing solar collectors shall be included in calculating whether the lot meets maximum permitted Lot Coverage requirements for the applicable zoning district, notwithstanding that the collectors are not 'buildings."
- E. Solar-Thermal Systems: Solar-thermal systems are permitted in all zoning districts subject to the following conditions:
 - 1. Building permits are required for the installation of all solar-thermal systems.
 - 2. Ground mounted and free standing solar-thermal systems shall be subject to the same requirements set forth in Subsection D above as for Ground Mounted and Free standing Solar Collectors.
- F. Solar energy systems and equipment shall be permitted only if they are determined by the Town to not present any unreasonable safety risks, including, but not limited to, the following:
 - 1. Weight load
 - 2. Wind resistance
 - 3. Ingress or egress in the event of fire or other emergency
- G. Solar energy systems and related equipment shall be surfaced, designed and sited so as not to reflect glare onto adjacent properties and roadways.

Section 139-94 Safety.

- A. All solar collector installations must be performed by a qualified solar installer, as defined in section 139-93.
- B. Prior to operation, electrical connections must be inspected by a Town code Enforcement Officer and by an appropriate electrical inspection person or agency, as determined by the Town.
- C. Any connection to the public utility grid must be inspected by the appropriate public utility.
- D. Solar energy systems shall be maintained in good working order.
- E. Rooftop and building-mounted solar collectors shall meet the State Code.
- F. If solar storage batteries are included as part of the solar collector system, they must be placed in a secure container or enclosure meeting the requirements of the State Code when in use and when no longer used shall be disposed of in accordance with the laws and regulations of the Town and other applicable laws and regulations.
- G. If a solar collector ceases to perform its originally intended function for more than twelve (12) consecutive months, the property owner shall remove the collector, mount and associated equipment by no later than ninety (90) days after the end of the twelve-month period.
- H. Solar Energy Systems and Equipment shall be marked in order to provide emergency responders with appropriate warning and guidance with respect to isolating the solar electric system. Materials used for marking shall be weather resistant. For a residential application, the marking may be placed with the main service disconnect. If the main service disconnect is operable with the service panel closed, then the marking should be placed on the outside cover. For commercial application, the marking shall be placed adjacent to the main service disconnect in a location clearly visible from the location where the lever is operated. In the event any of the standards in this subsection H for markings are more stringent than applicable provisions of the State Code, they shall be deemed to be guidelines only and the standards of the State Code shall apply.

Section 139-95 Solar Farms and Solar Power Plants.

Solar Farms and Solar Power Plants shall be permitted in the Agricultural (A) and AR-40 Districts exclusive of Incentive Zoning Overlay areas as an "Electric Generating" use subject to site plan review by the Planning Board, subject to the following supplementary regulations:

A. Solar Farms and Solar Power Plants in Agricultural Districts can only be located on lots of twenty (20) acres or larger with a maximum coverage of 50% of the lot.

Solar Farms and Solar Power Plants in AR-40 Zones can only be located on lots of thirty (30) acres or larger with a maximum coverage of 30% of the lot.

- B. All solar farms and solar power plants shall comply with all setbacks within the zoning district. However, in addition, all solar panels and related equipment shall be setback at least two-hundred (200) feet from all property lines, public roads, power lines and preexisting and future structures, unless full visual screening is provided. Additional setbacks may be required by the Planning Board in order to provide for the public's safety, health and welfare.
- C. Solar farms and solar power plants shall be enclosed by perimeter fencing to restrict unauthorized access at a height of not less than 8 feet.
- D. The solar manufacturer's or installer's identification and appropriate warning signage shall be posted on the perimeter of the security fence every 100' and clearly visible.
- E. Solar farm and solar power plant buildings and accessory structures shall, to the extent reasonably possible, use materials, colors, and textures that will blend the facility into the existing environment.
- F. Appropriate landscaping and/or screening materials may be required to help screen the solar farm or solar power plant and accessory structure from major roads and neighboring residences.
- G. The average height of the solar panel arrays on any given lot shall not exceed twenty (20) feet.
- H. Solar Farm and Solar Power Plant panels and equipment shall be surfaced, designed and located so as not to reflect glare onto adjacent properties and roadways.
- I. On-site power lines shall be placed underground.
- J. The following requirements shall be met for decommissioning:
 - 1. A reclamation bond in an amount to be determined by a local third party demolition contractor at prevailing wage rates shall be filed with the Town Clerk to cover the costs of reclamation of any and all solar system installation components whether above or below ground. In addition, should the solar system be nonoperational for any continuous six-month period or if the bond expires and is not renewed, the approvals granted shall be deemed void and the solar system shall be decommissioned subject to a new approval under this section. Such bond shall be in place prior to the issuance of a building permit. The Codes Office shall review the bonding requirement to obtain an updated demolition estimate from a local third party demolition contractor at prevailing wage rates every 5 years after issuance of site plan approval to establish an updated bonding requirement.

- 2. Solar Farms and Solar Power Plants which have not been in active and continuous service for a period of one (1) year shall be removed at the owner or operator of the solar farms expense.
- 3. The site shall be restored to as natural a condition as possible within six (6) months of removal.

Section 139-96 Appeals.

- A. If a person is found to be in violation of the provisions of this Local Law, the permit may be revoked if violations are not cured within thirty days (30) of notice of violation.
- B. If a building permit for a solar energy device is denied based upon a failure to meet the requirements of this Local Law, the applicant may seek relief from the Zoning Board of Appeals in accordance with the established procedures and time limits of the Lysander Code and New York State Town Law.

Section 139-97 Building Permit Fees.

The fees for all building permits required pursuant to this Local Law as required by Chapter Section 139, Article, shall be paid at the time each building permit application is submitted in such reasonable amount as the Town Board may by resolution establish and amend from time to time.

Section 139-98 Severability.

If any word, phrase, sentence, part, section, subsection, or other portion of this Law or any application thereof to any person or circumstance is declared void, unconstitutional, or invalid for any reason, then such word, phrase, sentence, part, section, subsection, or other portion, or the prescribed application thereof, shall be severable, and the remaining provisions of this Law, and all applications thereof, not having been declared void, unconstitutional, or invalid, shall remain in full force and effect.

Section 139-99 Conflict with Other Laws.

Where this law differs or conflicts with other Laws, rules and regulations, unless the right to do so is preempted or prohibited by the County, State or Federal government, the more restrictive or protective of the Town and the public shall apply.

Section 139-100 Effective Date.

This Law shall become effective upon filing with the New York State Secretary of State.

Section 139-101 Authority.

This Local Law is enacted pursuant to the Municipal Home Rule Law. This Local Law is intended to supersede any inconsistent provisions of Town Law to the extent permitted by the New York State Constitution, the Municipal Home Rule Law, or any other applicable statute.