

**MILAN TOWNSHIP**  
**PROPOSED ZONING ORDINANCE AMENDMENT**  
Ord. No. 2008-\_\_\_\_; Date of Adoption \_\_\_\_\_

*This document includes the Milan Township Zoning Ordinance language that is proposed to be modified or amended. It is formatted as is typically done for zoning text amendments and once approved by the Planning Commission, will be referred to the Township Board for adoption. This is the “full text” version of the proposed text amendments.*

An Ordinance to amend ARTICLE 2, DEFINITIONS, Article 5 TABLE OF PERMITTED USES and SECTION 13.27 LARGE SOLAR ENERGY SYSTEMS of the Milan Township Zoning Ordinance in order to add regulations.

**Amendment of ARTICLE 2– DEFINITIONS**

The Milan Township Zoning Ordinance ARTICLE 2, DEFINITIONS is hereby amended as follows:

**Solar Energy System (SES):** A photovoltaic system or solar thermal system for generating and/or storing electricity or heat, including all above and below ground equipment or components required for the system to operate properly and to be secured to a roof surface or the ground. This includes any necessary operations and maintenance building(s), but does not include any temporary construction offices, substation(s) or other transmission facilities between the SES and the point of interconnection to the electric grid.

- **Principal-Use:** A commercial, ground-mounted solar energy system that converts sunlight into electricity for the primary purpose of off-site use through the electrical grid or export to the wholesale market.
- **Principal-Use (Large):** A Principal-Use SES generating more than \_\_\_ [e.g., 2] MW DC for the primary purpose of off-site use through the electrical grid or export to the wholesale market. **The Township Board needs to determine level of MW DC.**
- **Principal-Use (Small):** A Principal-Use SES generating up to and including \_\_\_ [e.g., 2] MW DC for the primary purpose of off-site use through the electrical grid or export to the wholesale market. **The Township Board needs to determine level of MW DC.**
- **Accessory Ground-Mounted:** A ground-mounted solar energy system with the purpose primarily of generating electricity for the principal use on the site.
- **Building-Integrated:** A solar energy system that is an integral part of a primary or accessory building or structure (rather than a separate mechanical device), replacing or substituting for an architectural or structural component of the building or structure. Building-integrated systems include, but are not limited to, photovoltaic or hot water solar energy systems that are contained within roofing materials, windows, skylights, and awnings.
- **Ground-Mounted:** A solar energy system mounted on support posts, like a rack or pole, that are attached to or rest on the ground.
- **Roof-Mounted:** A solar energy system mounted on racking that is attached to or ballasted on the roof of a building or structure.
- **Solar Carport:** A solar energy system of any size that is installed on a structure that is accessory to a parking area, and which may include electric vehicle supply equipment or energy storage facilities. Solar panels affixed on the roof of an existing carport structure are considered a Roof-Mounted SES.
- **Solar Thermal System:** A system of equipment that converts sunlight into heat.

**Weed:** A Native or non-native plant that is not valued in the place where it is growing.

**Wildlife-Friendly Fencing:** A fencing system with openings that allow wildlife to traverse over or through a fenced area.

### **Amendment of ARTICLE 13, SUPPLEMENTARY DISTRICT REGULATIONS**

The Milan Township Zoning Ordinance ARTICLE 13, SUPPLEMENTARY DISTRICT REGULATIONS, SECTION 13.27 LARGE SOLAR ENERGY SYSTEMS is hereby amended as follows:

#### **13.27 SOLAR ENERGY SYSTEMS**

- A. **Purpose and Intent:** The purpose and intent of this Section is to establish standards for the siting, installation, operation, repair, decommissioning and removal of Solar Energy Systems (SES).
- B. **Location of Solar Array(s) and Related Facilities:** Solar array(s) shall be permitted as a Special Use Approval in the existing I-1 and I-2 districts as of January 1, 2023. Electric collector lines, and interconnection transmission or distribution lines, that are affiliated and necessary for the SES, shall be permitted in any zoning district as an Accessory Use as provided in Article 5 of this Ordinance. Properties enrolled in PA 116 Farmland Development Rights Program,; Per the Michigan Department of Agriculture and Rural Development (MDARD) may be permitted to participate in solar energy development subject to MDARD policy and requirements. Properties that are not enrolled in the PA 116 program will be required to comply with the MDARD standards to return the land to pre-existing condition.
- C. **Site Plan Drawing and Supporting Materials:** All applications for a SES use must be accompanied by detailed site plans, drawn to scale and dimensioned and certified by a registered engineer licensed in the State of Michigan, displaying the following information:
1. All requirements for a site plan contained in Article 11 of the Milan Township Zoning Ordinance.
  2. A map showing all lot lines and dimensions, including a legal description of each lot or parcel comprising the SES.
  3. A document listing the names and contact information of the owners of each lot or parcel within Milan Township that is proposed to be within the SES.
  4. A document listing the names and contact information of persons responsible for the operation, construction and management of the SES.
  5. A vicinity map showing the ownership and location of all surrounding land uses and houses within 1,000 feet of the SES boundaries.
  6. A map showing the location and height of all proposed solar array(s), buildings, structures, electrical tie lines and transmission lines, security fencing, and all aboveground structures and utilities associated with a SES.
  7. A map showing the horizontal and vertical (elevation /NAVD88) to scale drawings with dimensions that show the location of the proposed solar array(s), buildings, structures, electrical tie lines and transmission lines, security fencing and all above ground structures and utilities on the property.
  8. A map showing the locations of all existing and proposed overhead and underground electrical transmission or distribution lines within the SES and within one hundred (100) feet of all exterior property lines of the SES.
  9. A map detailing the setbacks from the solar array(s) to all existing and proposed structures within the SES and within 500' of the SES property lines.
  10. A map showing the land elevations for the solar array(s) location and the relationship to the land

elevations of all existing and proposed structures and screening within the SES at a minimum of one (1) foot contours.

11. A map showing access driveways within and to the SES, together with a detailed narrative regarding dimensions, composition, and maintenance of each proposed driveway. All access drives shall be subject to Monroe County Road Commission approval and shall be planned so as to minimize the use of lands for that purpose.
12. Planned security measures to prevent unauthorized trespass, emergency response plans and public safety and access during the construction, operation, removal, maintenance or repair of the SES.
13. A written description of the maintenance program to be used for the solar array and other components of the SES, including decommissioning and removal. The description shall include maintenance schedules, types of maintenance to be performed, and decommissioning and removal procedures and schedules if or when the SES is decommissioned.
14. Planned lightning protection measures including a photometric plan.
15. Detailed projections for water usage and the water source(s) to be used.
16. Existing and proposed field drain tile schematics shall be provided.
17. Additional detail(s) and information as required by the Special Use Approval requirements of the Milan Township Zoning Ordinance, or as required by the Planning Commission.

- D. **Application Escrow Account:** An escrow account shall be deposited with the Township along with each application for a Special Use Approval for a SES. The monetary amount deposited in escrow with the Township shall be the amount of \$100,000 or an amount that is deemed to be reasonable by the Township Board in order to cover all reasonable costs and expenses associated with the SES project review. Such escrow amount shall be in addition to any filing or application fees established by resolution. The escrow account will be maintained as a non-interest bearing account and must continue to be replenished while the SES project is in operation. The Township may draw from the escrow account to pay any costs incurred in enforcing this Ordinance or the Special Use agreement with respect to the SES including legal fees and expenses. The Township may require that additional funds be placed into escrow with the Township if the existing escrow amount deposited is deemed to be insufficient by the Township. If the escrow account needs replenishing and the applicant refuses to do so within thirty (30) days, the Special Use Approval process shall cease unless and until the applicant makes the required additional escrow deposit. Any other Ordinances adopted by the Township must also be complied with by the applicant. The Township shall provide a summary of all account activity to the applicant upon request. Any funds remaining within the escrow that exceed the Township's actual costs after the application is denied, or after the SES is decommissioned, shall be returned within 90 days to the applicant.
- E. **Compliance:** Compliance with the Michigan Building Code, the National Electric Safety Code and National Electric Code (NEC): Construction of a SES shall comply with the National Electric Safety Code and the state construction codes.
- F. **Certified Solar Array Components:** Components of a solar array shall be approved by the Institute of Electrical and Electronics Engineers ("IEEE"), Solar Rating and Certification Corporation ("SRCC"), Electronic Testing Laboratories ("ETL"), or other similar certification organization if the similar certification organization is approved by the Township, which approval shall not be unreasonably withheld. Solar panels installed must be certified as being compliant with the Environmental Protection Agency's Toxicity Characteristic Leaching Procedure (TCLP) and not classified as hazardous waste. Solar panels are to be manufactured within the United States of America.
- G. **Height:** Maximum height of a solar array, other collection device, components or buildings of the SES, excluding inverters, and electrical transmission equipment, shall not exceed twelve (12) feet (as

measured from the natural grade at the base of improvements) at any time or location on the property. Inverters, and electrical transmission equipment shall not exceed twenty (20) feet.

- H. **Setbacks:** Setback distances are defined as the distance from either the property line or road right-of-way to the solar panels. A minimum setback distance of three hundred (300) feet from all property boundaries of the SES and fifty (50) feet from existing public roads and railroad rights-of-way shall be required for all buildings and solar arrays. Setbacks may be modified to mitigate noise, visual and glare impacts, or to provide for designated road or utility corridors, as identified through the Special Approval process.
- I. **Lot Coverage:** A SES is exempt from maximum lot coverage limitations as detailed in the Article 6.0, Schedule of Regulations.
- J. **Security Fencing:** A SES shall be completely enclosed by perimeter security fencing to restrict unauthorized access in accordance with Federal guidelines. Such fencing shall be seven (7) feet in height. Use of razor or barbed wire, electrified fences, spikes, and similar security materials shall be prohibited. Fencing shall be maintained in good repair.
- K. **Landscaping and Screening:** The perimeter of the-SES shall also be screened and buffered by installed evergreen or native vegetative plantings whenever existing natural vegetation does not otherwise reasonably obscure the SES from adjacent residential structures, subject to the discretion of Planning Commission with the following requirements:
1. The SES shall be exempt from the Greenbelts, Landscape Material and Screening requirements of Section 16.01.
  2. The screening buffer shall be composed of non-invasive native shrubs and trees. At the time of planting, trees shall be a minimum of eight (8) feet in height and planted in staggered rows exterior to the perimeter fencing. The screening plan shall have the goal to utilize a diverse tree and vegetative habitat to encourage desirable insects and wildlife along with providing a visual barrier. The Planning Commission may modify the screening requirements upon request from adjacent or participating property owners. The Applicant shall replace all unhealthy and dead material within one (1) year, or the next appropriate planting period, whichever occurs first with like vegetation of equal height of the existing plantings.
  3. Require an annual inspection, by an approved arborist, of the vegetation screening regarding health and management. An annual report shall be submitted to the Township.
  4. All plant materials shall be installed between March 15 and November 15. If the applicant is unable to plant during the installation period, the applicant will deposit with the Township Treasurer a letter of credit, surety or corporate guarantee for an amount equal to one and one-half (1.5) times the cost of any planting deficiencies, as determined by the Township's Landscape consultant. After all plantings have occurred, the Township shall return the financial guarantee.
  5. Ground Cover: SES shall include the installation of perennial ground cover vegetation maintained for the duration of operation until the site is decommissioned. Plantings shall include non-invasive or native grasses as well as pollinator plantings. The applicant shall include a ground cover vegetation establishment and management plan, consistent with PA 116 guidelines, as part of the site plan.
  6. Failure to install or continuously maintain the required vegetative buffer shall constitute a violation of this Ordinance and any Special Use Approval may be subject to revocation. The Township may use funds from the maintenance escrow account to repair or maintain the screening vegetation.
- L. **Signage:** No advertising or non-project related graphics shall be on any part of the solar arrays or other components of the SES. This exclusion does not apply to entrance gate signage or notifications

containing points of contact or any and all other information that may be required by authorities having jurisdiction for electrical operations and the safety and welfare of the public.

- M. **Noise:** No component of any SES shall emit noise exceeding forty-five (45) dBA as measured at the exterior property boundary or the existing right-of-way line. This limitation does not apply to construction, decommissioning or repairs to the SES. During the site plan review, the developer will certify that the equipment will be able to meet this requirement.
- N. **Lighting:** No light shall leave the site. No SES shall produce glare, as defined by this ordinance that causes impact on any adjacent lot or causes a danger or risk to motorists on the roadway. The applicant shall provide lighting and glare analysis to demonstrate compliance with this standard.
- O. **Drainage:** During construction of the solar project, care should be taken as to not damage natural drainage patterns. Drain tiles on the SES site rendered non-functioning directly as a result of construction or operation on the SES will be replaced or repaired so as not to create any drainage changes or issues on the SES site or on adjacent and surrounding properties. After construction is completed, field drain tiles are to be inspected and repaired in order to certify that the drain tiles are functional. Storm water runoff analysis may be required, per Planning Commission discretion. Any damage to field tiles during construction, operation or decommissioning shall be repaired within three (3) months at the cost of the SES project owner.
- P. **Water Usage and Sourcing:** No new wells will be allowed within the SES boundaries. For onsite water usage, water shall be supplied from offsite locations.
- Q. **Distribution, Transmission and Interconnection:** All collection lines and interconnections from the solar array(s) to any electrical inverters shall be located and maintained underground inside the SES, except in areas where technical or physical constraints make it impossible (as confirmed by the Township engineer) to install equipment above ground. This requirement includes transmission lines meant to connect the project to the offsite local transmission system.
- R. **Abandonment and Decommissioning:** Following the operational life of the project, the owner of the SES shall perform decommissioning and removal of the SES and all of its components. Prior to decommissioning, each landowner may petition the township for approval to keep some or all of the non-solar components or infrastructure. A detailed statement will be presented to the Planning Commission for their review and recommendation to the Township Board. The approved request will be added to the decommissioning plan. This request may be submitted any time prior to decommissioning. The Applicant shall prepare a decommissioning plan and submit it to the Planning Commission for their review and recommendation prior to the Township Board's approval of the Special Use Approval. Under this plan, all structures, concrete, piping, facilities, and other project related materials above grade and below-grade shall be removed offsite for disposal. Per MDARD standards, this land must be able to be returned to agricultural uses following the end of the solar development agreement or if/when the solar development is decommissioned for any reason. Any solar array or combination of photovoltaic devices that is not operated for a continuous period of twelve (12) months shall be considered abandoned and shall be removed under the decommissioning plan. The ground must be restored to its original condition and topography within three hundred sixty-five (365) days of abandonment or decommissioning. Restoration shall also include bringing soil to its pre-development composition to ensure agricultural use upon restoration. Soil tests shall be required as a part of the Decommissioning Plan both before development and prior to decommissioning. Soil shall be brought back to pre-development state within three hundred sixty-five (365) days of abandonment or decommissioning.
  - 1. In addition to any required escrowed funds, the applicant will provide the Township with a surety bond prior to the start of construction, to insure reclamation of the land upon abandonment or at

the end of the life of the SES. The bond shall be in an amount to be determined by the Township as a condition of site plan approval.

2. The value of the decommissioning surety bond shall be determined by a third-party financial consultant, engineer or appropriate professional selected by the Township and paid for by the developer, based on non-salvage value. Once the value is determined; it shall be updated on periodic bases not more than every three (3) years. The applicant will provide the Township with an acceptable surety bond as a condition for site plan approval.
3. The surety bond is to be kept in effect until all of the properties are restored to their original condition. Such financial security shall be irrevocable and non-cancelable. If the owner of the SES is financially unable to fulfill the decommissioning plan, the Township may use the surety bond to complete the decommission plan.

**S Approval Time Limit and Extension:** Special Use Approval and Site Plan approvals, under this Section, shall be valid for one (1) year beginning on the date of Township Board's approval. Once construction has begun, should construction cease for period of twelve (12) consecutive months, the Special Use Approval and Site Plan approvals shall be considered null and void. If construction begins prior to the expiration date established by Township Board's approval, the Special Use Approval and Site Plan approvals shall remain in force as long as construction continues toward completion per the approved site plan timing. However, if requested by the applicant prior to the expiration date established by Township Board's approval, the Township Board may consider an additional one-year period upon showing of good cause for the extension.

**T Conditions and Modifications:** Any conditions and modifications recommended by the Planning Commission shall be recorded in the Planning Commissions' meeting minutes. The Planning Commission may, in addition to other reasonable conditions, require landscaping, walls, fences and other improvements that are reasonable in relation to and consistent with the nature of the applicable or adjacent zoning districts or within the intent of this ordinance. After the Township Board's approval, at least two (2) copies of the final approved Site Plan shall be signed and dated by the Township Clerk and authorized representative of the applicant. The Township Clerk shall keep one copy on file and one copy shall be returned to the applicant's authorized representative.

**U Inspection:** The Township shall have the right at any reasonable time, to provide a twenty-four (24) hour notice prior to the desired inspection to the applicant to inspect the premises on which any SES is located. The Township may hire one or more consultants, to assist with inspections at the applicant's or project owner's expense. Inspections must be coordinated with, and escorted by, the Applicant's operations staff at the SES to ensure compliance with the Occupational Safety and Health Administration (OSHA), NEC and NESC and all other applicable safety guidelines.

**V Maintenance and Repair:** Each SES must be kept and maintained in good repair and condition at all times. If the Zoning Administrator determines that a SES fails to meet the requirements of this Ordinance, the Special Use Approval, or that it poses a safety hazard, the Zoning Administrator, or his or her designee, shall provide notice to the applicant of the safety hazard. If, after a reasonable cure period (not to exceed 24 hours), the safety hazards are not corrected, the applicant is entitled to a hearing before the Township Board. If the Township Board determines that the safety hazard requires that the SES must be shut down, applicant shall immediately shut down the SES and not operate, start or restart the SES until the issues have been resolved. Applicant shall keep a maintenance log on the solar array(s), which shall be available for the Township's review within 48 hours of such request. The applicant shall keep all sites within the SES neat, clean and free of refuse, waste or unsightly, hazardous or unsanitary conditions.

- W Roads and Access Drives: Any material damages to a public road located within the Township resulting from the construction, maintenance or operation of a SES shall be repaired within 30 days at the Applicant's expense. In addition, the Applicant shall submit to the appropriate County agency a description of the routes to be used by construction and delivery vehicles; any road improvements that will be necessary to accommodate construction vehicles, equipment or other deliveries. The applicant shall abide by all County Road Commission requirements regarding the use and/or repair of County roads. New access drives within the SES shall be designed to minimize the extent of soil disturbance, water runoff and soil compaction on the premises. Any materials placed on the surface of existing soil for temporary roadways during construction or decommissioning shall be removed once the SES is in operation or decommissioning is complete.
- X. Emergency Response Plan. A written document outlining how the applicant or operator will respond to emergencies during construction, operation, and decommissioning of the project including fire suppression, general emergency/disaster response, police protection, and injuries to persons related to the project. Applicants shall provide copies of the plan to the applicable fire suppression, police protection, and emergency medical service providers. The applicant will be responsible for any expense related to training or additional equipment that may be needed to respond to emergencies.
- Y. Continuing Obligations: Failure to keep any required financial security (escrow and surety bonds) in full force and effect at all times while a SES exists or is in place shall constitute a material and significant violation of the Special Use Approval and this Ordinance, and will subject the SES applicant, owner and operator to all remedies available to the Township, including any enforcement action, civil action, request for injunctive relief, and revocation of the Special Use Approval.
- Z. Change in ownership. The sale, transfer, or conveyance of the entity granted by the Special use Permit shall not void the Special Use agreement. The Township Board shall be notified of any change in ownership. The new owner shall be required to maintain the existing escrow and surety bonds or provide a new escrow account and surety bond, as detailed in this ordinance. The applicant shall provide the township with copies of agreements made with those entities that will be purchasing the electrical production of the SES project.
- AA COMPLAINT RESOLUTION: The SES applicant shall submit a detailed, written complaint resolution process developed by the SES applicant to resolve complaints from the Township Board or the property owners or residents concerning construction or operation of the SES facility. The complaint resolution process must be approved by the Township Board as a condition of approval of the Special Use Approval permit application.  
The Township Board shall appoint a 3-member complaint resolution committee to oversee and participate in all complaint resolution discussions or meetings between the property owner or resident and the SES facility owner. The complaint resolution committee shall consist of (1) Township Board member, (1) Planning Commission member, and (1) qualified elector chosen by the Township Board from the community.
- In the event the SES owner is determined at fault for a violation following the complaint resolution discussions/process, the owner shall be responsible for all costs incurred by the Township in coming to a resolution, in addition to any other penalties for violations of the Township's Zoning Ordinance. This section is not a waiver of the Township's authority to seek any relief at law or equity to abate such violations. The Township Board shall be kept apprized of all complaints and shall receive a report outlining the issues, the progress, and the resolution of each such complaint. The Township Board shall be authorized to enforce any resolution of each complaint.
- BB. Other Requirements: Each SES shall also comply with all applicable federal, state and county requirements, in addition to other applicable Township Ordinances.

CC. Definitions:

**Dual Use:** A solar energy system that employs one or more of the following land management and conservation practices throughout the project site:

1. **Pollinator Habitat:** Solar sites designed to meet a score of 76 or more on the Michigan Pollinator Habitat Planning Scorecard for Solar Sites. Alternatively, the Tier 2 Pollinator Scorecard developed by the Rights-of-Way as Habitat Working Group can be used to evaluate pollinator habitat and management practices.
2. **Conservation Cover:** Solar sites designed in consultation with conservation organizations that focus on restoring native plants, grasses, and prairie with the aim of protecting specific species (e.g., bird habitat) or providing specific ecosystem services (e.g., carbon sequestration, soil health).
3. **Forage for Grazing:** Solar sites that incorporate rotational livestock grazing and forage production as part of an overall vegetative maintenance plan.
4. **Agrivoltaics:** Solar sites that combine raising crops for food, fiber, or fuel, and generating electricity within the project area to maximize land use.

**Maximum Tilt:** The maximum angle of a solar array (i.e., most vertical position) for capturing solar radiation as compared to the horizon line.

**Minimum Tilt:** The minimal angle of a solar array (i.e., most horizontal position) for capturing solar radiation as compared to the horizon line.

**Non-Participating Lot(s):** One or more lots for which there is not a signed lease or easement for development of a principal-use SES associated with the applicant project.

**Participating Lot(s):** One or more lots under a signed lease or easement for development of a principal-use SES associated with the applicant project.

**Photovoltaic (PV) System:** A semiconductor material that generates electricity from sunlight.

**Repowering:** Reconfiguring, renovating, or replacing an SES to maintain or increase the power rating of the SES within the existing project footprint.

**Solar Array:** A photovoltaic panel, solar thermal collector, or collection of panels or collectors in a solar energy system that collects solar radiation.