

ZONING ORDINANCE NO. _
LONDON TOWNSHIP

AMENDMENT TO LONDON TOWNSHIP ZONING ORDINANCE
(ADOPTED {DATE})

At a regular meeting of the Township Board of London Township, Monroe County, Michigan, held at the London Township Hall on _____, 20__, at _____ p.m., Township Board Member _____ moved to adopt the following Ordinance, motion was seconded by Township Board Member _____;

An Ordinance to amend the London Township Zoning Ordinance to authorize Large Solar Energy Systems as a special use in the Agricultural-Conservation District (AG-1) and Agricultural-Reserve District ("AG-2"), and to establish standards for this use.

THEREFORE, THE TOWNSHIP BOARD OF THE TOWNSHIP OF LONDON, MONROE COUNTY, MICHIGAN, ORDAINS:

SECTION 1. AMENDMENT TO ZONING ORDINANCE ARTICLE 3, SECTION 3.02: Zoning Ordinance, Article 3, is amended to add "Large Solar Energy System" to the LAND USE TABLE as a Special Use in AG-1 and AG-2 under the section titled OTHER USES. Zoning Ordinance, Article 3, is further amended to add "Electric substations, collector lines, and interconnection transmission or distribution lines, that are accessory to the special use of a Large Solar Energy System" to the LAND USE TABLE as an Accessory Use in all zoning districts under the section titled OTHER USES.

SECTION 2. AMENDMENT TO ZONING ORDINANCE ARTICLE 18, SECTION 18.02: Zoning Ordinance, Article 18, Section 18.02, is amended to add definitions for the following terms, and shall read as follows:

Large Solar Energy System. A utility-scale solar energy system in which the principal use of the land is to generate electric energy or other energy by converting sunlight, whether by Photovoltaic Devices or other conversion technology, for the sale, delivery or consumption of the generated energy with a capacity greater than one megawatt (MW).

Photovoltaic Device. A system of components that generates electric energy from incident sunlight by means of the photovoltaic effect, whether or not the device is able to store the electric energy produced for later use.

Solar Array. Any number of Photovoltaic Devices connected to provide a single output of electric energy or other energy.

SECTION 3. AMENDMENT TO ZONING ORDINANCE ARTICLE 11, SECTION 11.04:
 Zoning Ordinance, Article 11, is amended to add Section 11.04, entitled "Large Solar Energy Systems," providing as follows:

Section 11.04 Large 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 Large Solar Energy Systems.
1. Large Solar Energy Systems are allowed in all zoned Agriculture 1-Prime Conservation, Agriculture 2-Reserve, Industrial Research.
- B. Site Plan Drawing and Supporting Materials: All applications for a Large Solar Energy Systems 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 12 of the London Township Zoning Ordinance.
 2. Copy of valid certified survey by a licensed surveyor in the State of Michigan
 3. All lot lines and dimensions, including a legal description of each lot on which the Large Solar Energy System is proposed to be located along with adjacent owners, names and addresses outside of the Large Solar Energy System
 4. Names of owners of each lot or parcel within London Township that is proposed to be within the Large Solar Energy System.
 5. Vicinity map showing the location of all surrounding land uses.
 6. Location and height of all existing and proposed Solar Array(s), buildings, structures, electrical tie lines and transmission lines, security fencing, and all above-ground structures and utilities associated within a Large Solar Energy System. NAVD 88 Datum
 7. Horizontal and vertical (elevation) 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 which the Large Solar Energy System is proposed to be located.
 8. Location of all existing and proposed overhead and underground electrical transmission or distribution lines within the Large Solar Energy System and within one hundred (100) feet of all exterior lot lines on parcel(s) which the Large Solar Energy System is proposed to be located
 9. Proposed dimensions from the Solar Array(s) to all existing and proposed structures on which the Large Solar Energy System is proposed to be located.

10. Land elevations for the Solar Array(s) location and the relationship to the land elevations of all existing and proposed structures within the Large Solar Energy System at a minimum of two (2) foot contours.
11. Dimensions, composition, and maintenance schedule of Access driveways within, and to the Large Solar Energy System shall be provided. All access drives, and entrances 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 and access during the construction, operation, removal, maintenance or repair of the Large Solar Energy System.
13. A written description of the maintenance program to be used for the Solar Array and other components of the Large Solar Energy System, including decommissioning and removal. The description shall include maintenance schedules, types of maintenance to be performed, and decommissioning and removal procedures and schedules if the Large Solar Energy System is decommissioned.
14. A written description of the operational life of the Solar Array(s) proposed and other components of the Large Solar Energy System.
15. Planned lightning protection measures.
16. Photometric Plan is required.
17. Additional detail(s) and information as required by the special use requirements of the London Township Zoning Ordinance, or as required by the Planning Commission.

C. Application Escrow Account: An escrow account shall be deposited with the Township by the Applicant when the Applicant applies for a special use for a Large Solar Energy System. The monetary amount deposited by the Applicant in escrow with the Township shall be the amount of \$15,000, to cover all reasonable costs and expenses associated with the special use application review and approval process, which costs shall include, but are not limited to, reasonable fees of the Township Attorney, Township Planner and Township Engineer, as well as costs for any reports or studies that are reasonably related to the zoning review process for the application. Such escrow amount shall be in addition to any filing or application fees established by resolution. At any point during the special use application review process, the Township may require that the Applicant place additional funds into escrow with the Township if the existing escrow amount deposited by the Applicant is deemed insufficient by the Township. If the escrow account needs replenishing and the Applicant refuses to do so within thirty (30) days, the special use application 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 within a timely manner upon request. Any funds remaining within the escrow after approval of the special use application shall be returned in a timely manner to the Applicant.

- D. Compliance with the Michigan State Construction Codes and National Electric Safety Code: Construction of a Large Solar Energy System shall comply with the National Electric Safety Code and Michigan State Construction Codes (as shown by approval by the London Township Building Official, or London Township Building Inspector) as a condition of any special use under this section.
- E. 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 ("EIL"), or other similar certification organization if the similar certification organization is approved by the Township, which approval shall not be unreasonably withheld.
- F. Height: Maximum height of a Solar Array, other collection device, components or buildings of the Large Solar Energy System, excluding substation and electrical transmission equipment, shall not exceed twenty (20) feet (as measured from the natural grade at the base at install) at any time or location on the property. Substation and electrical transmission equipment shall not exceed one hundred (100) feet.
- G. Lot Size: A Large Solar Energy System shall be located on one or more parcels with an aggregate area of ten (10) acres or greater.
- H. Setbacks: A minimum setback distance of fifty (50) feet from all lot lines of any vacant non-participating parcels, existing public roads, and railroad rights-of-way to be measured from the full operating width of the Solar Panel Array of the Large Solar Energy System. Setback shall be one hundred (100) feet from all lot lines of non-participating lots that have a dwelling.
1. Large Solar Energy Systems must have a setback distance of seventy five (75) feet from all structures on participating lots.
 2. Fencing shall be setback thirty (30) feet from all non-participating lot lines, existing public roads and railroad rights-of-way.
 3. The evergreen or native vegetative buffer at time of planting shall be setback fifteen (15) feet from all non- participating lot lines, existing public roads and railroad rights-of-way.
 4. When an adjacent property is participating in the Large Solar Energy System, there shall be no required setback for Solar Arrays from the shared lot line
- I. Lot Coverage: A Large Solar Energy System is exempt from any maximum lot coverage limitations.
- J. Screening/Security: A Large Solar Energy System shall be completely enclosed by perimeter security fencing to restrict unauthorized access in accordance with Federal guidelines. Such fencing shall be at least seven (7) feet in height. Use of razor or barbed wire, electrified fences, spikes, and similar security materials shall be prohibited. The perimeter of Large Solar Energy Systems shall also be screened and buffered by installed evergreen or native vegetative plantings whenever existing natural vegetation does not otherwise reasonably obscure the Large Solar Energy System from adjacent residential structures, subject to the following requirements:
1. The Large Solar Energy Systems shall be exempt from the Screening and Land Use Buffers requirements of Article 8.

2. The evergreen or native vegetative buffer shall be composed of native or evergreen trees expected to reach a mature height equal to the height of the Solar Panel Array at maximum tilt, and be a minimum of four (4) feet in height at the time of planting. Shrubs shall be minimum two (2) feet in height. The evergreen trees shall be spaced no more than fifteen (15) feet apart on center (from the central trunk of one plant to the central trunk of the next plant), native trees shall be placed no more than thirty (30) feet apart on center and shrubs shall be spaced no more than seven (7) feet apart on center. All unhealthy (sixty (60) percent dead or greater) and dead material shall be replaced by the Applicant within one (1) year, or the next appropriate planting period, whichever occurs first.
 3. All plant materials shall be installed between March 15 and November 15. Applicant is unable to plant during the installation period, the Applicant will provide the Township with 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 that the Township shall hold until the next planting season. After all plantings have occurred, the Township shall return the financial guarantee.
 4. Failure to install or continuously maintain the required vegetative buffer shall constitute a violation of this Ordinance and any special use may be subject to revocation.
- K. Signage: No advertising or non-project related graphics shall be on any part of the Solar Arrays or other components of the Large Solar Energy System. 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.
- L. Noise: No component of any Large Solar Energy System shall emit noise exceeding sixty-five (65) dBA as measured at either the exterior lot line or at the existing ROW line. These limitations do not apply to construction, decommissioning or repairs to the Large Solar Energy System.
- M. Lighting: All lighting for parking lots, driveways, external illumination of buildings, or the illumination of signs shall be directed away from and be shielded from adjacent properties and shall be so arranged as to not adversely affect driver visibility on adjacent public roads.
- N. Location of Solar Array(s) and related facilities: Solar Array(s) shall be permitted only in the AG-1 and AG-2 districts. Electric substations, collector lines, and interconnection transmission or distribution lines, that are accessory to the special use of a Large Solar Energy System, shall be permitted in all zoning districts as an Accessory Use as included in Article 3 of this Ordinance.
- O. Distribution, Transmission and Interconnection: All collection lines and interconnections from the Solar Array(s) to any electrical substations shall be located and maintained underground inside the Large Solar Energy System, except in areas where technical or physical constraints make it preferable to install equipment above ground. This requirement excludes transmission equipment meant to connect the project substation to the local transmission system.
- P. Abandonment and Decommissioning: Following the operational life of the project, the Applicant shall perform decommissioning and removal of the Large Solar Energy System and all its components. The Applicant shall prepare a decommissioning plan and submit it

to the Planning Commission for review and approval prior to issuance of the special use. Under this plan, all structures, concrete, piping, facilities, and other project related materials above grade and any structures up to forty-two (42) inches below-grade shall be removed and taken offsite for disposal. 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, and taken offsite under the decommissioning plan. The ground must be restored to its original 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 test must be performed in the same manner as the most recent soil test to the time of application. If no soil test exists prior to application for Special Use, soil testing must be performed in acre grids equal to twenty five (25) percent net land area. Soil shall be brought back to pre-development state within three hundred sixty-five (365) days of abandonment or decommissioning.

1. The applicant will obtain a surety bond for reclamation in an amount to be determined by Township Engineer as a condition of site plan approval.
2. The Engineer will be able to review the size of the parcel(s) and the number of solar panels that will be installed. The amount of the surety bond would fluctuate depending on the size of the farm. The applicant will provide confirmation and details of the surety bond. This may be a condition of site plan approval.
3. The surety bond is to remain in place for the length of the leases/contracts with consideration for the rate of inflation to the time of decommissioning.

- Q. General Standards: The Planning Commission shall not approve any Large Solar Energy System special use unless it finds that all of the general standards for special uses contained in Article 12 of this Ordinance are met.
- R. Approval Time Limit and Extension: Special use and Site Plan approvals, under this Section, shall be valid for one (1) year beginning on the date of approval by the Planning Commission. Once commenced, should construction cease for period of twelve (12) consecutive months, the special use and Site Plan approvals shall be considered null and void. If construction begun prior to the expiration date established by Planning Commission approval, the special use and Site Plan approvals shall remain in force as long as construction continues toward a reasonable date of completion. However, if requested by the Applicant prior to the expiration date established on the approval of the Planning Commission, the applicant may submit an application to revise the approved site plan for the Planning Commission to consider an additional one-year period upon showing of good cause for the extension.
- S. Conditions and Modifications: Any conditions and modifications approved 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. After approval, at least two (2) copies of the final approved Site Plan shall be signed and dated by the Chair of the Planning Commission and authorized representative of the Applicant. One copy shall be kept on file by the Township Clerk, and one copy shall be returned to the Applicant's authorized representative.

- T. 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 Large Solar Energy System is located. The Zoning Administrator, code enforcement officer or designated representative of the Township shall make up to four (4) inspections of the Large Solar Energy System per calendar year, to ensure conformance with the requirements of this Ordinance. The applicant shall pay inspection fee for such inspections pursuant to the fee schedule established by the Township Board. Inspections must be coordinated with, and escorted by, the Applicant's operations staff at the Large Solar Energy Facility to ensure compliance with the Occupational Safety and Health Administration (OSHA), NEBC and all other applicable safety guidelines.
- U. Maintenance and Repair: Each Large Solar Energy System must be kept and maintained in good repair and condition at all times. If the Zoning Administrator, Code Enforcement Officer, Building Inspector, Building Official or designated representative of the Township determines that a Large Solar Energy System is in violation of the requirements of this Ordinance and the special use approval, or that it poses a safety hazard, they shall provide notice to the Applicant requesting the violation and/or safety hazard be corrected. If, after a reasonable correction period (not to exceed 7 days), the violation(s) and/or 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 Large Solar Energy System must be shut down, Applicant shall immediately shut down the Large Solar Energy System and not operate, start or restart the Large Solar Energy System 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. Applicant shall keep all sites within the Large Solar Energy System neat, clean and free of refuse, waste or unsightly, hazardous or unsanitary conditions.
- V. Roads: Any material damages to a public road located within the Township resulting from the construction, maintenance or operation of a Large Solar Energy System shall be repaired at the Applicant's expense. In addition, the Applicant shall submit to the Monroe County Road Commission, and/or MDOT 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 Monroe County Road Commission and/or MDOT requirements regarding the use and/or repair of County roads.
- W. Continuing Security: If any Large Solar Energy System is approved for construction under this Section, Applicant shall post decommissioning security prior to the start of construction (in a mutually agreed upon form) for an amount necessary to accomplish the work specified in the decommissioning plan as agreed upon by the Planning Commission and Applicant. The amount shall be reasonably sufficient to restore the property to its previous condition prior to construction and operation of the Large Solar Energy System. Such financial security shall be kept in full force and effect during the entire time that the Large Solar Energy System exists or is in place, and such financial security shall be irrevocable and non-cancelable.
1. Continuing Obligations: Failure to keep any required financial security in full force and effect at all times while a Large Solar Energy System exists or is in place shall constitute a violation of the special use and this Ordinance, and will subject the Large Solar Energy System 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.

X. Other Requirements: Each Large Solar Energy System shall also comply with all applicable federal, state and county requirements, in addition to other applicable Township Ordinances.

I, _____, do hereby certify that I am the duly elected and acting Township Clerk of the Township of London, and I do hereby certify that this Ordinance was adopted by the Township Board of the Township of London, Monroe County, Michigan, at a regular meeting of the Township Board held at the London Township Hall, London, Michigan, on the _____ day of _____, 20__.

THE TOWNSHIP BOARD, LONDON
TOWNSHIP, COUNTY OF MONROE,
STATE OF MICHIGAN

By: _____

London Township Clerk

AUTHENTICATED:

London Township Supervisor

_____, 20__