

PARMA TOWNSHIP
ZONING ORDINANCE AMENDMENT

ORDINANCE NO. 2018-8

An Ordinance to amend the Parma Township Zoning Ordinance, as amended, to classify farmlands potentially available to be used for Large Solar Arrays; and establish a strong preference for site locations on marginalized farmland; in order to maintain the public health, safety and welfare of the residents and visitors to Parma Township.

PARMA TOWNSHIP, JACKSON COUNTY, MICHIGAN, ORDAINS:

SECTION 1. AMENDMENT TO ZONING ORDINANCE ARTICLE II, SECTION 2.5: Zoning Ordinance Article II, Section 2.5, is amended to add a definition for “Prime Farmland” and “Marginalized Farmland,” and shall read as follows:

Section 2.5

2.5.1 Abandoned Solar Energy System: Any Solar Energy System, Solar Array or combination of Photovoltaic Devices that remains nonfunctional or inoperative to the extent that it not used to generate electric energy for a continuous period of six months.

2.5.2 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.

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

2.5.4 Solar Energy System, Large: A utility-scale solar energy system where the primary 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 by more than one end user, and typically the power output of that system is equal to or greater than 1 megawatt.

2.5.5 Solar Energy System, Small: A solar energy system where the sole use is to generate electric energy or other energy by converting sunlight, whether by Photovoltaic Devices or other conversion technology, primarily for personal consumption by a single end user at the same property upon which the solar energy system is located. The power output of the system shall not exceed 150 kilowatts.

2.5.6 Unreasonable Safety Hazard: Any condition which could reasonably be expected to create, cause, or compound the substantial likelihood that death, illness or personal injury may occur to any member of the general public, including but not limited to trespassers or emergency services personnel. Adherence by the property owner to industry standards for safeguarding against such risks will be taken into consideration in determining whether a condition poses an unreasonable safety hazard.

2.5.7 Marginal Farmland: Land that is of little agricultural value due to poor soil, a lack of irrigation or moisture, erosion, or other undesirable characteristics.

2.5.8 Prime Farmland: Land that has the best combination of physical and chemical characteristics for producing food, fiber, feed, forage and oil seed and is also available for those uses; land having the soil quality, growing season and moisture supply needed to produce economically sustained high yield crops when treated and managed according to acceptable farming methods.

SECTION 2. AMENDMENT TO ZONING ORDINANCE ARTICLE VIII, SECTION 8.19:
Zoning Ordinance, Article VIII, Section 8.19 is amended to read as follows:

8.19 Large Solar Energy Systems.

- A. Purpose and Intent: The purpose and intent of this Subsection is to establish standards for the siting, installation, operation, repair, decommissioning and removal of Large Solar Energy Systems within the Agricultural District as a Conditional Land Use.
- B. Site Plan Drawing and Supporting Materials: All applications for a Large Solar Energy System 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 VII of the Township Zoning Ordinance.
 2. All lot lines and dimensions, including a legal description of each lot or parcel comprising the Large Solar Energy System.
 3. Names of owners of each lot or parcel within the Township that is proposed to be within the Large Solar Energy System.
 4. Vicinity map showing the location of all surrounding land uses.
 5. Location and height of all proposed Solar Array(s), buildings, structures, electrical tie lines and transmission lines, security fencing, and all above-ground structures and utilities associated with the Large Solar Energy System.
 6. Horizontal and vertical (elevation) 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.
 7. Location of all existing and proposed overhead and underground electrical transmission or distribution lines within the Large Solar Energy System and within 1,000 feet of the outside perimeter of the Large Solar Energy System.
 8. Proposed setbacks from the Solar Array(s) to all boundary lines and all existing and proposed structures within the Large Solar Energy System.
 9. 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.
 10. Access driveways within and to the Large Solar Energy System, together with a detailed narrative regarding dimensions, composition, and maintenance of each proposed driveway.

All access drives shall be subject to Jackson County Department of Transportation or Michigan Department of Transportation approval as appropriate, and shall be planned so as to minimize the use of lands for that purpose.

11. Planned security measures to prevent unauthorized trespass and access and to warn of potential dangers during the construction, operation, removal, maintenance or repair of the Large Solar Energy System.
12. A written description of the maintenance program to be used for the Solar Array(s) and other components of the Large Solar Energy System, including decommissioning and removal procedures when determined by the Township to be obsolete, uneconomic or an Abandoned Solar Energy System. 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 becomes obsolete, uneconomic or an Abandoned Solar Energy System.
13. A copy of the manufacturer's safety measures.
14. Planned lighting protection measures.
15. The environmental impact of the Large Solar Energy System, as reflected in an environmental impact study, including, but not limited to, a review of the following factors:
 - a. Impact on area water resources
 - b. Impact on air quality
 - c. Noise impacts caused by the Solar Energy System
 - d. Impact on utilities and infrastructure
 - e. Protection of neighboring property owners and children
 - f. Impact on wildlife
 - g. Effects on floodplains and wetlands
 - h. Unique farmlands or soils
 - i. Areas of aesthetic or historical importance
 - j. Archeological or cultural concerns
 - k. Any other environmental factors typically evaluated by other members of the commercial energy industry when evaluating locations for a proposed power-generating facility

16. A written description of measures to be taken to support the flow of rainwater throughout the Large Solar Energy System, including any measures to promote the growth of vegetation beneath the arrays and/or otherwise limit the impacts of storm water runoff. The measures shall be subject to the approval of the Jackson County Drain Commission.
17. A written contract with any energy provider or other purchaser of the energy produced by the Large Solar Energy System, demonstrating a commitment to purchase said energy. If this information is considered a confidential trade secret, the Township, upon written request from an energy provider, will keep such information confidential to the extent and through the means authorized by Public Act 442 of 1976.
18. Additional detail(s) and information as required by the Conditional Land Use requirements of the Zoning Ordinance, or as required by the Planning Commission.

- C. Application Escrow Deposit: An escrow deposit shall be paid to the Township by the applicant when the applicant applies for a Conditional Land Use Permit for a Large Solar Energy System. The monetary amount deposited by the applicant in escrow with the Township shall be the amount estimated by the Township to cover all reasonable costs and expenses associated with the Conditional Land Use Permit 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 Conditional Land Use Permit 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 promptly, the Conditional Land Use Permit process shall cease unless and until the applicant makes the required additional escrow deposit. Any applicable zoning escrow resolutions or other ordinances adopted by the Township must also be complied with by the applicant.
- D. Compliance with the State Building Code and the National Electric Safety Code: Construction of a Large Solar Energy System shall comply with the National Electric Safety Code and the state construction codes as administered and enforced by the Township (as shown by approval by the Township) as a condition of any Conditional Land Use Permit 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 (“ETL”), or other similar certification organization acceptable to the Township.
- F. Height: Maximum height of a Solar Array shall not exceed fifteen (15) feet. Other collection devices, components or buildings of the Large Solar Energy System shall not exceed thirty-five (35) feet, or the maximum building height permitted within the district in which that Solar Energy System is located, whichever is less, at any time or location on the property. The height shall be measured from the natural grade at the base of the Solar Array, device, component or building measured. The Township Board may waive or modify these height requirements for certain aspects of a Solar Energy System (such as structures associated with above-ground transmission lines) through the implementation of conditions when appropriate.

- G. Lot Size: A Large Solar Energy System shall be located on one or more parcels with an aggregate area of 10 acres or greater.
- H. Setbacks: A minimum setback distance of forty (40) feet from all property boundaries on the outside perimeter of the Large Solar Energy System shall be required for all buildings and Solar Arrays except for property boundaries where the applicable adjoining owner(s) agree to lessen or increase that setback distance by executing a signed written waiver of this requirement in recordable form, provided no such waiver shall act to permit less than the required minimum setback of the applicable zoning district.
- I. Lot Coverage: A Large Solar Energy System is exempt from maximum lot coverage limitations.
- J. Screening/Security: A Large Solar Energy System shall be completely enclosed by perimeter security fencing to restrict unauthorized access. Such fencing shall be 8 (eight) feet in height as measured from the natural grade of the fencing perimeter. Electric fencing is not permitted. The perimeter of Large Solar Energy Systems shall also be screened and buffered by installed evergreen vegetative plantings whenever existing natural forest vegetation does not otherwise continuously obscure the Large Solar Energy System's entire perimeter from adjacent parcels, subject to the following requirements:
1. Unless screened and buffered at all times by natural forest vegetation meeting the minimum spacing and height requirements, and having a substantially similar obscuring effect of an evergreen vegetative buffer installed pursuant to this Section, a continuous evergreen vegetative buffer shall be installed and maintained at all times at the perimeter of the all Large Solar Energy Systems, including without limitation between such Large Solar Energy Systems and adjacent residential or agricultural areas and/or public highways or streets. Nothing contained herein shall be construed to prevent reasonable access to any Large Solar Energy System as approved by the Conditional Land Use Permit.
 2. The evergreen or native vegetative buffer shall be composed of native or evergreen trees that at planting shall be a minimum of four (4) feet in height and shrubs 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 six (6) months, or the next appropriate planting period, whichever occurs first, but under no circumstances should the applicant allow unhealthy or dead material to remain in place for more than six (6) consecutive months. Failure to maintain the required evergreen vegetative buffer as required by this section shall constitute a violation of this Ordinance and sufficient grounds for revocation of any Conditional Land Use Permit previously granted.
 3. All plant materials shall be installed between March 15 and November 15. If the applicant requests a Final Certificate of Occupancy from the Township and the 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.

- K. Signage: No lettering, company insignia, advertising, graphics or other commercially-oriented inscriptions or designs shall be on any part of the Solar Arrays or other components of the Large Solar Energy System. This section does not prohibit signs reasonably necessary to inform the public of potential safety hazards associated with the Large Solar Energy System, nor does it prohibit any other signs that may be required by this Ordinance, the Conditional Land Use Permit or other applicable law.
- L. Noise: No component of any Large Solar Energy System shall emit noise exceeding forty-five (45) dBA as measured at the outside perimeter of the project.
- 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. Glare: All solar panels shall be placed such that concentrated solar glare shall not be directed onto nearby properties or roadways.
- 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. The Township Board may waive this requirement, or modify it with appropriate conditions, if it determines that it would be impractical or unreasonably expensive to install, place or maintain such collection lines and interconnections underground.
- P. Abandonment and Decommissioning: Following the operational life of the project, or at the time the project becomes obsolete, uneconomic or an Abandoned Solar Energy System, as determined by the Township Engineer or any other expert or specialist to be designated by the Township to make such a determination, 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 prior to issuance of the Conditional Land Use Permit. Under this plan, all structures and facilities shall be removed, including any structures below-grade, and removed offsite for disposal. No concrete, piping and other materials may be left in place. Any Solar Array or combination of Photovoltaic Devices that become an Abandoned Solar Energy System shall be removed under the Decommissioning Plan. The ground must be restored to its original condition within 180 days of becoming an Abandoned Solar Energy System, or decommissioning, whichever occurs first.
- Q. General Standards: The Planning Commission shall not recommend for approval any Large Solar Energy System Conditional Land Use Permit unless it finds that all of the applicable standards for Conditional Land Uses contained in Article VI of this Ordinance are met.
- R. Safety: The Planning Commission shall not recommend for approval any Large Solar Energy System Conditional Land Use Permit if it finds the Large Solar Energy System will pose an Unreasonable Safety Hazard to the occupants of any surrounding properties or area wildlife.
- S. Conditions and Modifications: Any conditions and modifications approved by the Planning Commission shall be recorded in the Planning Commission's 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 Chairman 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 inspect the premises on which any Large Solar Energy System is located. The Township may hire one or more consultants to assist with any such inspections, at the applicant's or project owner's expense.
- U. Maintenance and Repair: Each Large Solar Energy System must be kept and maintained in good repair and condition at all times. If the Township Zoning Administrator determines that a Large Solar Energy System fails at any time to meet the requirements of this Ordinance and the Conditional Land Use Permit, or that it poses a potential Unreasonable Safety Hazard, the applicant shall shut down the Large Solar Energy System within 48 hours after notice by the Zoning Administrator and not operate, start or restart the Large Solar Energy System until the condition has been corrected. Applicant shall keep a maintenance log on the Solar Array(s), which shall be available for the Township's review on a monthly basis. 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 either the Jackson County Department of Transportation or MDOT (as appropriate) 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; and a performance guarantee acceptable to the appropriate agency in an amount necessary to assure repair of any damage to the public roads caused by construction of the Large Solar Energy System or any of its elements.
- W. Continuing Security and Escrow: If any Large Solar Energy System is approved for construction under this Section, applicant shall be required to post continuing security and a continuing escrow deposit prior to commencement of construction, which shall remain in effect until the Large Solar Energy System has been finally removed, as provided below:
 - 1. Continuing Restoration Security: If a Conditional Land Use Permit is approved pursuant to this section, the Township Board shall require security in the form of a cash deposit, letter of credit, or surety bond acceptable to the Township, which will be furnished by the applicant to the Township in order to ensure full compliance with this section and all conditions of approval. When determining the amount of each required security, the Township may also require an annual escalator or increase based on the Consumer Price Index (or its equivalent or successor). Such financial guarantee shall be deposited or filed with the Township Clerk after a Conditional Land Use Permit has been approved but before construction commences on the Large Solar Energy System. At a minimum, the financial security shall be in an amount determined by the Township to 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. In addition, the party operating a Large Solar Energy System approved by the Township shall inform the Township in the event that System, or a material portion of that system is sold to a third party, and any such

sale shall require the purchasing party to provide the Township with the security described by this section, along with relevant contact information.

2. Continuing Compliance and Enforcement Escrow Deposit: A continuing escrow deposit shall be held by the Township and shall be funded by a cash deposit, letter of credit, or surety bond by the applicant prior to the commencement of construction of any Large Solar Energy System and shall be maintained by the owner or operator until the Large Solar Energy System has been permanently decommissioned and removed. The monetary amount placed by the applicant in escrow with the Township shall be estimated by the Township to cover all reasonable costs and expenses associated with continuing enforcement of this Ordinance and the terms of the Conditional Land Use Permit, which costs can include, but are not limited to, reasonable fees for the Township Attorney, Township Planner and Township Engineer, as well as costs for any reports or studies that the Township determines are reasonably related to enforcement of the Ordinance and the Conditional Land Use Permit. If the Township is required to expend any portion of the escrow deposit or if the existing escrow amount paid by the applicant proves to be insufficient to cover the Township's enforcement costs, the Township may require the applicant to place additional monies into escrow with the Township.
 3. Continuing Obligations: Failure to keep any required financial security and escrow deposit in full force and effect at all times while a Large Solar Energy System exists or is in place shall constitute a material and significant violation of the Conditional Land Use Permit and this Ordinance, and will subject the Large Solar Energy System applicant, owner and operator to all remedies available to the Township, including enforcement action and revocation of the Conditional Land Use Permit. A review of security and escrow requirements shall occur no less than annually to determine compliance with this section.
- X. Conditions: In addition to the requirements of this Section, the Planning Commission may impose additional reasonable conditions on the approval of a Large Solar Energy System as a Conditional Land Use.
- Y. Completion of Construction: The construction of any Large Solar Energy System must commence within a period of one (1) year from the date a Conditional Land Use Permit is granted, and must be completed within a period of three (3) consecutive years from the date a Conditional Land Use Permit is granted. The Planning Commission may grant an extension not to exceed one (1) year, provided the applicant requests the extension prior to the date of the expiration of the Conditional Land Use approval. Failure to complete construction within the permitted time period shall result in the approved Conditional Land Use Permit being rendered null and void.
- Z. Quarterly Reports: The owner or operator of a Large Solar Energy System shall provide the Zoning Administrator with quarterly reports on trends and usage of that System as set by the Township Board. If this information is considered a confidential trade secret, the Township, upon written request from an energy provider, will keep such information confidential to the extent and through the means authorized by Public Act 442 of 1976.
- AA. Transfer of Ownership/Operation: Prior to a change in the ownership or operation a Large Solar Energy System, including, but not limited to, by the sale or lease of that System or the underlying property, the current owner or operator shall provide written notice to the Township at least sixty (60) days prior to that change becoming effective. This notice shall inform the

Township of the intended transfer of control of the Large Solar Energy System, and shall include a copy of the instrument or agreement effecting that transfer. Such an instrument or agreement shall include an express statement that the new owner or operator of the Large Solar Energy System shall not be permitted to operate that System until compliance with the terms of this Ordinance, including requirements for continuing security and escrow funds, has been established.

BB. Site Location Preferences: When considering an application for a Conditional Land Use, strong preference will be given to sites located on Marginal Farmland, with a strong preference against sites located on Prime Farmland.

SECTION 3. SEVERABILITY: The provisions of this Ordinance are hereby declared to be severable and if any provision, section or part of this Ordinance is declared invalid or unconstitutional by a court of competent jurisdiction, such decision shall only affect the particular provisions, section or part involved in such decision and shall not affect or invalidate the remainder of such Ordinance, which shall continue in full force and effect.

SECTION 4. EFFECTIVE DATE: This Ordinance shall become effective seven (7) days after its publication following final adoption or as required by law.

SECTION 5. REPEAL: All Ordinances or parts of Ordinances in conflict herewith are hereby repealed.

Following its introduction and publication prior to final adoption, the above Ordinance was offered for final adoption by Chamberlain and was supported by Engelton at a regular meeting of the Parma Township Board, held at the Parma Township Hall on the 13 day of aug, 2018, at 7:00 p.m., the vote being:

YEAS: Chamberlain, Engelton, Mohney, Spangler, Deemyer

NAYS: None

ABSENT/ABSTAIN: None

ORDINANCE DECLARED ADOPTED.

Wendy Chamberlain
Wendy Chamberlain, Township Supervisor