

**TOWNSHIP OF DALLAS
COUNTY OF CLINTON, MICHIGAN
ZONING ORDINANCE AMENDMENT**

**ORDINANCE 14, AMENDMENT #2
SOLAR ENERGY SYSTEM
(Within Zoning Ordinance #10)**

At a meeting of the Township Board of Dallas Township, Clinton County, Michigan, ("Township") held at the Dallas Township Hall on Monday, September 12, 2022, at 2:00 p.m., Township Board Member Stephanie Schafer moved to adopt the following amendment to the Dallas Township Zoning Ordinance, which motion was seconded by Township Board Member Ann Schafer:

An ordinance to amend Section 2.02 Definitions to include a definition for Drain Tile, Prime Farmland, Solar Community Gardens, and Solar Energy Systems, Non-Commercial; to amend Section 8.01 of the Zoning Ordinance to address the Township's interest in preserving Prime Farmland and agricultural uses; Section 8.02 of the Zoning Ordinance of Dallas Township to include setback requirements and parcel size requirements for non-commercial Solar Community Gardens; and to amend Section 8.04 of the Zoning Ordinance of Dallas Township, clarifying the maximum parcel size allowed for Commercial Solar Energy System, clarifying the setback and distance requirements for said systems, and adding a requirement for a Prime Farmland impact study, a drain tile study, and the creation of a wildlife corridor for all Commercial Solar Energy System Special Use Permit Applications.

THE TOWNSHIP OF DALLAS ORDAINS:

Section 1. Amendment to Section 2.02 of the Zoning Ordinance. Section 2.02 of the Dallas Township Zoning Ordinance shall be amended to add the following additional definitions:

Prime Farmland – Land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. It has the soil quality, growing season, and moisture supply needed to produce economically sustained high yields of crops when treated and managed according to acceptable farming methods, including water management.

Solar Community Garden – A type of non-commercial solar energy system which produces a net energy output for a group of farms or residences located within the Township for purposes of offsetting those farms' or residences' energy consumption. The power output of the system shall not exceed 500kW and shall be *designed* for the next metering.

Solar Energy System, Commercial – A utility-scale solar energy system where the primary use of the land is to generate electric energy and other energy by converting sunlight, whether by Photovoltaic Devices and other conversion technology, for the sale, delivery, or consumption of the generated energy by more than one end user outside of the Township. A system is considered "utility scale" when it serves one or more end-users inside or outside of the Township or the power output of the system exceeds 500kW.

Solar Energy Systems, Non-commercial – A solar energy system where the sole use of the Photovoltaic Devices or other conversion technology is either for personal consumption by a single-end user, or, in the case of Solar Community Gardens, the personal consumption of a cooperative group of end-users. The power output of the system shall not exceed 150kW in the case of a single end user and shall not exceed 500kW in the case of a single Solar Community Garden.

Section 2. Amendment to Section 8.01 of the Zoning Ordinance. Section 8.01 of the Dallas Township Zoning Ordinance shall be amended to add the following new and additional language, which shall read as follows:

Section 8.01 – Intent and Purpose. The intent and purpose of this Section is to establish standards for the siting, installation, operation, repair, decommissioning and removal of Solar Energy Systems within the Township, while maintaining and enhancing the rural agricultural quality of life currently existing within the Township and preserving agricultural activities, Prime Farmland, agricultural support services, and associated open spaces, as outlined in the Dallas Township Master Plan. Dallas Township recognizes that the following form the basis of the Township's legislative solar policy:

1. The Township is comprised primarily of agricultural land uses;
2. The Township's central planning strategy is to preserve large geographic areas of the Township for existing and future agricultural uses, agricultural activities, and agricultural support services, and to protect the Township's rural agricultural quality and the long-term economic viability of agriculture; and
3. Prime Farmland preservation is central to the economy and community of Dallas Township and the State of Michigan more generally. The Township makes the following findings:
 - a. According to the World Health Organization's 2018 report, food security is threatened by the impacts of climate change and a growing world population.
 - b. Michigan is the second most diverse agricultural industry in the nation and farming contributes more than \$37 billion dollars annually to the State's economy.
 - c. According to researchers at Michigan State University, field crops comprise the largest crop sector in the State in terms of acreage, farms, farmers, and income.
 - d. Michigan is among the top 10 states that have lost the most Prime Farmland since 2010, according to the United States Department of Agriculture.
 - e. Clinton County has been an agricultural community since its settlement in the early 1800s and has between 21% and 35% of its Prime Farmland enrolled in the Michigan Farmland Preservation Program.

- f. According to the most recent Michigan agricultural census for Clinton County, the County has over 229,763 acres devoted to farmland, with a median farm size of 58 acres, with the majority of farms being under nine acres, necessitating the availability of Prime Farmland to produce crops and provide available acres for grazing with support from adjacent and nearby agricultural acreage.
- g. The economic impact of livestock and dairy products accounts for 37% of the total economic impact of Michigan's agricultural products, with Clinton County ranked number two in Michigan in economic value from milk from cows, number two in the number of cattle and calves, and number four in value of sales of cattle and calves, according to Michigan State University. This level of dairy product production necessitates significant acreage dedicated to pasturing and grazing, and production of supporting feed (including hay, wheat, alfalfa and corn).
- h. The market value of agricultural products in Clinton County alone is over \$262,630,000 according to a 2017 report from the United States Department of Agriculture.
- i. Clinton County is also a significant producer of soybeans, alfalfa/hay, wheat and small grains, ranking number 12 in soybean production, number eight in acres of wheat, and number seven in hay production, according to a 2017 report from researchers at Michigan State University.
- j. Options for traditional field crop production beneath solar panels is limited to crops typically grown and harvested by hand or with small machinery, according to researchers at the University of Wisconsin, Madison. Examples of crops appropriate for growth under solar panels are carrots, garlic, beets, radishes, and lettuce. None of those crops are regularly grown in Clinton County and are not widely known at this time for supporting livestock and dairy production.
- k. Crop cultivation often suffers from the adverse effects of high solar radiation and concomitant water losses, according to a 2019 study published in the Agronomy for Sustainable Development. These findings are becoming even more relevant, as water demand for irrigation is expected to increase from projected climatic conditions where Michigan has been identified as a top location for acreage in the future to continue to produce food to support area farms, animal husbandry, and human health.
- l. Dallas Township's 2017 Master Plan adopts policies and regulations which will reduce the rate of loss of existing Prime Farmland to development.
- m. Commercial Solar Energy Systems and Non-Commercial Solar Energy Systems pose unique challenges to preserving existing Prime Farmland within the Township when such systems are ground mounted. These challenges include, but are not limited to:

- i. The loss of the ability to utilize land for farming and livestock care, directly contravening Dallas Township's Master Plan;
- ii. Inhibiting the free movement of wildlife; and
- iii. The preservation of existing drainage systems so land may be returned to agricultural use after decommission;
- n. In recognition of the importance of green energy and reducing Dallas Township's reliance on traditional energy, this Ordinance encourages the use of noncommercial solar energy systems for single end users or noncommercial solar energy systems as part of a Solar Community Garden.
- o. Considering the size of the Township and the necessity to provide appropriate space for crop production and animal husbandry, it is necessary for the Township to limit the size of Commercial Solar Energy Systems and to enforce reasonable setbacks to ensure that farms adjacent to or near such systems can continue their current agricultural production uninterrupted.

The following rules and regulations are designed to ensure that any Solar Energy System built within the Township adheres to the stated planning goals.

Section 3. Amendment to Section 8.02 of the Zoning Ordinance. Section 8.02 of the Dallas Township Zoning Ordinance shall be amended to add the following new and additional language, which shall read as follows:

Section 8.02 General Development Standards for Solar Energy Systems, Non-Commercial. All Non-commercial Solar Energy Systems, whether ground-mounted, roof mounted, or a Solar Community Garden, are subject to the following requirements:

1. A solar energy system must conform to all county, state, and federal laws.
2. Solar arrays shall be placed such that concentrated solar glare shall not be directed onto nearby properties or roadways.
3. Solar arrays erected on a building shall not extend more than two feet beyond the peak of a pitched roof.
4. Ground-mounted solar arrays and ancillary devices shall not exceed 20 feet off the natural grade.
5. A Solar Community Garden shall not exceed five acres and must comply with all applicable setbacks for the district within which it is constructed.
6. All power lines from a Solar Energy System to any building or structure shall be located underground.

7. In the event that a Solar Energy System has been abandoned (meaning not having been in operation for a period of one year), the system shall be removed by the property owner within six months from the date of abandonment.

Section 4. Amendment to Section 8.04 of the Zoning Ordinance. Section 8.04 of the Dallas Township Zoning Ordinance shall be amended to add the following new and additional language, which shall read as follows:

Section 8.04 – General Development Standards for Commercial Solar Energy System:

1. Compliance with the applicable Building Code and the National Electric Safety Code: Construction of a Commercial Solar Energy System shall comply with the National Electric Safety Code and the applicable Building Code.
2. 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 acceptable to the Township.
3. Height: Maximum height of a solar array, other collection device, components or buildings of the Commercial Solar Energy System shall not exceed 30 feet at any time or location on the property, as measured from the natural grade at the base of the solar array, device, component or building measured.
4. Maximum Parcel Size: A Commercial Solar Energy System shall be located on one parcel or multiple adjoining parcels with a maximum aggregate area of 80 acres or less.
5. Setbacks: A minimum setback distance of one hundred feet from all property boundaries shall be required for all buildings and solar arrays.
6. Separation Distance: No Commercial Solar Energy System shall be located within 5,280 feet of another Commercial Solar Energy System.
7. Lot Coverage: A Commercial Solar Energy System is exempt from maximum lot coverage limitations. This means that when a use typically requires a certain amount of the lot to remain open space, such requirement is not applicable to the location and density of a Commercial Solar Energy System on any specific lot.
8. Drainage: Along with the application, the applicant shall submit to the Township a report with images of all existing drainage tile to establish a baseline condition of the tile. Any damaged or inoperable tile shall be repaired prior to construction and such repairs shall be documented and an updated report submitted to the landowner and the Township indicating the location, nature, and satisfactory completion of such repairs. While the Commercial Solar Energy System is in operation, all drain tiles shall be inspected every three years in the same manner noted above and all images and a report of any damage or failure shall be

submitted to the landowner and the Township. Tiles shall be repaired within 60 days and such repairs shall be documented and a report submitted to the landowner and Township. The Township reserves the right to be present and verify such repairs.

9. Agreements/Easements. If the parcels on which the system is proposed is to be leased, rather than owned, by the owner of the Commercial Solar Energy System, all property within the system boundary must be included in a recorded easement(s), lease(s), or consent agreement(s) specifying the applicable uses for the duration of the system. All such agreements must be in place prior to commencing construction of the system, unless otherwise specified in the final approval.
10. Screening/Security: A Commercial Solar Energy System shall be completely enclosed by perimeter security fencing to restrict unauthorized access. Such fencing shall be six feet in height measured from the natural grade of the fencing perimeter. Electric fencing is not permitted. The perimeter of Commercial Solar Energy Systems shall also be screened and buffered by installed evergreen vegetative plantings whenever existing natural forest vegetation does not continuously obscure the Commercial Solar Energy System's entire perimeter from adjacent parcels, subject to the following requirements:
 - a. 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 Commercial Solar Energy System, including without limitation between such Commercial Solar Energy System and adjacent residential and/or public highways or streets. Nothing contained herein shall be construed to prevent reasonable access to any Commercial Solar Energy System.
 - b. The evergreen vegetative buffer shall be composed of evergreen trees or shrubs that at planting shall be a minimum of four feet in height. The evergreen trees or shrubs shall be spaced no more than 10 feet apart on center (from the central trunk of one plant to the central trunk of the next plant).
 - c. Failure to continuously maintain the required evergreen vegetative buffer shall constitute a violation of this Ordinance and sufficient grounds for revocation of any Special Land Use Permit previously granted.
11. Noise: No component of any Commercial Solar Energy System shall emit noise exceeding 45 dBA as measured at the property line of the parcel(s) approved for that system.
12. Lighting: All lighting for parking lots, driveways, external illumination of buildings or the illumination of signs shall be directed down and away from and be shielded from adjacent properties and shall be arranged so as to not produce glare on adjacent public roads or property.

13. 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 Commercial Solar Energy System. The Planning Commission may waive this requirement if it determines that it would be impractical or unreasonably expensive to install, place or maintain such collection lines and interconnections underground.
14. Complaint Resolution: The Commercial Solar Energy System applicant shall submit a detailed, written complaint resolution process developed by the Commercial Solar Energy System applicant to resolve complaints from the property owners or residents concerning the construction or operation of the Commercial Solar Energy System. The complaint resolution process must be approved by the Planning Commission as a condition of approval of the special land use 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 Township property owners or resident and the Commercial Solar Energy System owner. The complaint resolution committee shall consist of one Township Board member, one Planning Commission member, and one qualified elector chosen by the Township Board from the community. The Township Board shall be kept apprised of all complaints and shall receive a report outlining the issues, the progress, and the resolution of each complaint.
15. Abandonment and Decommissioning: Following the operational life of the system, the Applicant shall perform decommissioning and removal of the Commercial 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 the issuance of a special land use permit. Under this plan, all structures and facilities shall be removed, including any structures below-grade, and removed off site for disposal. No concrete piping or any other material may be left in place. Any solar array or combination of Photovoltaic Devices that is not operated for a continuous period of 12 months shall be considered abandoned and shall be removed under the previously submitted decommissioning plan. The ground must be restored to its original condition within 180 days of abandonment or decommissioning.
16. Prime Farmland Review: Each Applicant for a Commercial Solar Energy System must commission and submit a study, at their own expense, on the impacts of the Commercial Solar Energy System on Prime Farmland within the Township, including whether such a system will result in the conversion of any Prime Farmland, whether such land may be simultaneously used for animal grazing and/or farming in addition to housing the system, the availability of other Prime Farmland to support the Township's farms, and the economic impact of conversion of such Prime Farmland on the Township. The Planning Commission shall not approve any Commercial Solar Energy System if it finds that such a system will significantly impact the amount of available Prime Farmland within the Township.

17. Wildlife Corridor: Commercial Solar Energy Systems shall be arranged in such a manner that is conducive to wildlife travel through the system. Existing trees, wetlands, and other vegetation that link open areas within a proposed system site shall be preserved as wildlife cover.
18. Safety: The Planning Commission shall not approve any Commercial Solar Energy System unless it finds the Commercial Solar Energy System will not pose a safety hazard or unreasonable risk of harm to individuals of the Township, the occupants of any surrounding properties, or area wildlife.
19. Inspection: The Township shall have the right at any reasonable time to inspect the parcels on which any Commercial Solar Energy System is located. The Township may hire one or more consultants to assist with any such inspections at the Applicant's or system owner's expense.
20. Maintenance and Repair: Each Commercial Solar Energy System must be kept and maintained in good repair and condition at all times. If the Township Zoning Administrator determines that a Commercial Solar Energy System fails at any time to meet the requirements of this Ordinance and the Special Land Use Permit, or that it poses a potential safety hazard, the Applicant shall shut down the Commercial Solar Energy System within 48 hours after notice by the Zoning Administrator and not operate, start or restart the Commercial 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 Commercial Solar Energy System neat, clean and free of refuse, waste or unsightly, hazardous or unsanitary conditions.
21. Roads: Any material damages to a public road located within the Township resulting from the construction, maintenance or operation of a Commercial Solar Energy System shall be repaired 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; and a performance guarantee acceptable to the County and the Township in an amount necessary to assure repair of any damage to the public roads caused by construction of the Commercial Solar Energy System or any of its elements.
22. Continuing Security and Escrow: If any commercial 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 Commercial Solar Energy System has been finally removed, as provided below:
 - a. Continuing Security: If a Special Land Use Permit is approved pursuant to this Section, the Planning Commission shall require security in the form of a cash deposit, irrevocable 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 the equivalent or its successor). Such financial guarantee shall be deposited or filed with the Township Clerk after a Special Land Use Permit has been approved but before construction commences on the Commercial 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 Commercial Solar Energy System. Such financial security shall be kept in full force and effect during the entire time that the Commercial Solar Energy System exists or is in place, and such financial security shall be irrevocable and non-cancelable.

- b. Continuing Escrow Deposit: A continuing escrow deposit shall be held by the Township and shall be funded in cash by the Applicant prior to the commencement of construction of any Commercial Solar Energy System and shall be maintained by the owner or operator until the Commercial Solar Energy System has been permanently decommissioned and removed. The monetary amount placed by the Applicant or owner 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 Special 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 Special 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 Commercial Solar Energy System Applicant or owner to place additional monies into escrow with the Township.
 - c. Continuing Obligations: Failure to keep any required financial security and escrow deposit in full force and effect at all times while a Commercial Solar Energy System exists or is in place shall constitute a material and significant violation of the Special Land Use Permit and this Ordinance, and will subject the commercial Solar Energy System Applicant, owner and operator to all remedies available to the Township, including enforcement action and revocation of the Special Land Use Permit.
 - d. In recognition of inflation and rising costs, the Planning Commission reserves the right to revisit the amount deposited by the Applicant/owner every five years during the entirety of the system life.
23. Conditions: In addition to the requirements of this Section, the Planning Commission may impose additional reasonable conditions on the approval of a Commercial Solar Energy System as a Special Land Use Permit.

24. General Standards: The Planning Commission shall not approve any Commercial Solar Energy System Special Land Use Permit unless it finds that all of the general standards for Special Land Uses contained in Article 12 of this Ordinance are met.

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

Section 5. Repeal. All ordinances or parts of ordinances in conflict herewith are hereby repealed.

Section 6. Severability. The provisions of this Ordinance are hereby declared to be severable. If any clause, sentence, word, section, or provision is hereafter declared void or unenforceable for any reason by a court of competent jurisdiction, it shall not affect the remainder of this Ordinance which shall continue in full force and effect.

Section 7. Savings Clause. Except as expressly amended or repealed by this Ordinance, the balance of the Dallas Township ordinances, as amended, shall remain unchanged and in full force and effect.

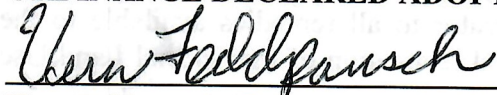
Section 8. Effective Date. This Ordinance shall become effective seven days after publication of a notice of adoption of this Ordinance unless referendum procedures are initiated under MCL 125.3402. If referendum procedures are initiated, this Ordinance will take effect in accordance with MCL 125.3402.

YEAS: V. Feldpausch; T. Koenigsknecht; A. Schafer; E. Marvel; S. Schafer

NAYS: _____

ABSENT/ABSTAIN: _____

ORDINANCE DECLARED ADOPTED.



Vern Feldpausch, Dallas Township Supervisor

CERTIFICATION

I hereby certify that:

1. The above is a true copy of the Amendment to the Zoning Ordinance adopted by the Dallas Township Board at a duly scheduled and noticed meeting of that Township Board held on Monday, September 12, 2022, pursuant to the required statutory procedures.
2. A summary of the above Ordinance was duly published in the Clinton County newspaper, a newspaper that circulates within Dallas Township, on Sunday, September 18, 2022.
3. Within one week after such publication, I recorded the above Ordinance in a book of ordinances kept by me for that purpose, including the date of passage of the Ordinance, the names of the members of the Township Board voting, and how each member voted.
4. I filed an attested copy of the above Ordinance with the Clinton County Clerk on Monday, September 19, 2022.


Therese Koenigsknecht, Dallas Township Clerk

