

ORDINANCE NO. ____

AN ORDINANCE TO AMEND THE ZONING ORDINANCE OF HOPE TOWNSHIP, MIDLAND COUNTY, MICHIGAN.

The Township of Hope, County of Midland, Michigan ordains, pursuant to the authority vested in it by Act 110 of 2006 of the Public Acts of the State of Michigan as amended, the following amendments to the Hope Township Zoning Ordinance.

PART A.

Chapter 2, Definitions, Section 2.2, Definitions, is hereby amended to insert the following new solar energy-related definitions:

Section 2.2 Definitions

For the purpose of their use in this Ordinance, the following terms and words are hereinafter defined:

Solar Energy Definitions:

- a. **Commercial Solar Energy Generation Facility.** A large freestanding array of photovoltaic cells and ancillary equipment and structural elements needed to capture and utilize the energy of the sun to generate electrical power, which is intended for use off-site or otherwise intended or used for the purpose of commercial power generation or the selling of energy to a public utility. Such facilities also include all associated land areas occupied or intended to be occupied by the array, electrical inverters, storage buildings, access roads, screening, fencing, and all subsystems and transmission components.
- b. **Glare.** The effect produced by light reflecting from a flat or curved surface, such as an array of photovoltaic cells, with an intensity sufficient to cause annoyance, discomfort, disorientation or loss of visual performance and visibility.
- c. **Solar Energy Devices, Attached.** An array of photovoltaic cells and ancillary equipment and structural elements needed to capture and utilize the energy of the sun to generate electrical power principally for on-site use on the premises associated with the device, which is secured to the exterior walls or roof of a principal building, or a pole barn, private garage or similar accessory structure.
- d. **Solar Energy Devices, Small Freestanding.** An array of photovoltaic cells and ancillary equipment and structural elements needed to capture and utilize the energy of the sun to generate electrical power principally for on-site use on the premises associated with the device.

PART B.

Chapter 5, District Regulations, Section 5.5, Agricultural District (AG), subsection 5.5.5, Accessory Structures and Uses, is hereby amended to add the following solar energy-related land uses:

Section 5.5.5 Accessory Structures and Uses

Any use or structure incidental to a permitted principal use not otherwise regulated by this Ordinance is allowed by right. Accessory structures shall generally be located in side or rear yards. Accessory structures may be used for home occupations as prescribed by this Ordinance.

The maximum height for an accessory structure shall be thirty-five (35) feet.

[Solar Energy Devices, Attached and Solar Energy Devices, Small Freestanding shall be allowed as accessory uses \(also see section 4.22\).](#)

PART C.

Chapter 5, District Regulations, Section 5.6, Forested District (FR), subsection 5.6.5, Accessory Structures and Uses, is hereby amended to add the following solar energy-related land uses:

Section 5.6.5 Accessory Structures and Uses

Any use or structure incidental to a permitted principal use not otherwise regulated by this Ordinance is allowed by right. Accessory structures may be used for home occupations as prescribed by this Ordinance.

[Solar Energy Devices, Attached and Solar Energy Devices, Small Freestanding shall be allowed as accessory uses \(also see section 4.22\).](#)

PART D.

Chapter 5, District Regulations, Section 5.7, Residential District (R), subsection 5.7.5, Accessory Structures and Uses, is hereby amended to add the following solar energy-related land uses:

Section 5.5.5 Accessory Structures and Uses

Any use or structure incidental to a permitted principal use not otherwise regulated by this Ordinance is allowed by right. Accessory structures may not be used for home occupations. No accessory structure shall be larger than 1,200 square feet or exceed 15 feet in overall height unless approved by Special Use Permit.

[Solar Energy Devices, Attached and Solar Energy Devices, Small Freestanding shall be allowed as accessory uses \(also see section 4.22\).](#)

PART E.

Chapter 5, District Regulations, Section 5.8, Commercial District (C), subsection 5.8.2, Conditional Uses, paragraph “A” is hereby amended to add the following land use:

Section 5.8.2 Conditional Uses

[Commercial Solar Energy Generation Facilities \(see section 4.22\)](#)

PART F.

Chapter 5, District Regulations, Section 5.8, Commercial District (C), subsection 5.8.5, Accessory Structures and Uses, is hereby amended to add the following solar energy-related land uses:

Section 5.5.5 Accessory Structures and Uses

Any use or structure incidental to a permitted principal use not otherwise regulated by this Ordinance is allowed by right and must be located in a side or rear yard only.

[Solar Energy Devices, Attached and Solar Energy Devices, Small Freestanding shall be allowed as accessory uses \(also see section 4.22\).](#)

PART G.

Chapter 4, General Provisions, is hereby amended to add a new Section 4.22, Solar Energy Facilities and Devices, as follows:

Section 4.22 Solar Energy Facilities and Devices

The location, construction, operation, and maintenance of solar energy facilities and devices in the Township shall be subject to the following requirements:

A. Intent.

The intent of this Section is to provide a means for allowing the construction, installation, and operation of solar energy devices and facilities, as defined in Section 2.2, Definitions, in a manner that protects the public health, safety, and welfare; preserves the rural character of the Township, as expressed in the Master Plan; and minimizes adverse impacts to forestry and agricultural lands, adjacent land uses, and the function and safety of road and aeronautical transportation networks.

B. Review Procedures and Required Information.

The following requirements shall apply to any application for approval of a solar energy device or facility under this Section, in addition to the other applicable requirements of this Ordinance:

1. Solar Energy Devices shall be subject to administrative review and approval in accordance with the requirements of this Section and Chapter 10, Administration and Enforcement.
2. Commercial Solar Energy Generation Facilities shall be subject to Planning Commission review and approval in accordance with the requirements of Chapter 8, Special Uses, and Chapter 9, Development Site Plan Review.
3. The following additional information shall be required as part of any application for approval of a solar energy device or facility under this Section and Ordinance:
 - a. Specifications of the proposed technology, including types, heights, lengths, fixed-mounted verses solar-tracking, number of panels, and angles of orientation; and a copy of the manufacturer's instructions and design prints.
 - b. Detailed descriptions of site security measures and all proposed grading, filling, and tree or woodland clearing.
 - c. Detailed evaluation and analysis of potential light reflection, concentration, and glare impacts from the device or facility on adjacent land, structures, uses, road rights-of-way, navigable watercourses, and aeronautical operations and flight patterns in the area; and the short- and long-term effectiveness of any proposed impact mitigation measures.
 - d. Documentation of compliance with applicable requirements of this Section for the type of device or facility.
4. The Township, within its reasonable discretion, may retain the services of a solar energy expert to assist with review of the application or any site inspections. The expense thereof shall be the responsibility of the applicant.

C. General Standards for All Solar Energy Facilities and Devices.

The following requirements shall apply to all solar energy devices and facilities in the Township:

1. The applicant(s), landowner(s), and all other responsible parties with ownership interest shall be jointly and severally responsible for the responsibilities, obligations, and liabilities associated with constructing, maintaining, operating, and removing the solar energy device or facility in compliance with this Ordinance; and for correcting conditions that violate requirements of this Ordinance.
2. The Township reserves the right to require submittal of evidence of ongoing operation of a device or facility at any time.
3. Solar energy devices and facilities shall:
 - a. Conform to the manufacturer's installation instructions and all applicable State Construction Code and Fire Code requirements.
 - b. Not cause a concentration of light or glare impacts on adjacent land, structures, uses, road rights-of-way, navigable watercourses or aeronautical operations and flight patterns.
 - c. Comply with all applicable Federal Communications Commission (FCC) guidelines, and shall not cause electromagnetic interference or stray voltage impacts.
4. On-site power lines between solar panels and inverters shall be placed underground. If the device or facility includes use of batteries for energy storage, documentation of compliance with all applicable battery storage rules and regulations shall be provided.
5. The manufacturers or installer's identification and appropriate weather-resistant warning signage and markings shall be posted on or near the panels in a clearly visible manner to provide emergency responders with appropriate warning and guidance with respect to isolating the solar electric system. Emergency contact information signage shall also be posted and maintained at each entrance.

D. Additional Standards for Solar Energy Devices.

The following additional standards shall apply to Solar Energy Devices:

1. Solar Energy Devices, Small Freestanding shall not encroach into the required yard setbacks or exceed the height allowed for accessory structures in the zoning district where the devices are located.
2. Solar Energy Devices, Attached shall not exceed the height of the building or accessory structure by more than ten (10) feet, and shall not encroach into the required yard setbacks or exceed the maximum height allowed in the zoning district.

E. Additional Standards for Commercial Solar Energy Generation Facilities.

The following additional standards shall apply to Commercial Solar Energy Generation Facilities:

1. Commercial Solar Energy Generation Facilities are limited to parcels with a minimum of 30 acres of lot area, and shall be prohibited on land enrolled in a Farmland Development Rights Agreement under the State of Michigan's PA 116 program.
2. Commercial Solar Energy Generation Facilities shall be secured within a six (6) foot high perimeter fence constructed of steel, aluminum or other materials of similar durability and strength as accepted by the Planning Commission, which shall be designed to restrict unauthorized access.
3. A copy of the application to or agreement with the utility company that will be purchasing electricity from the proposed site shall be provided to the Township.
4. An affidavit or evidence of an agreement between the landowner and applicant confirming permission to apply for facility approval.
5. Commercial Solar Energy Generation Facilities shall conform to the minimum required yard setbacks and maximum height standards for the zoning district, and the following:
 - a. A minimum required setback of 100 feet shall be provided between the facility and any road right-of-way or boundary of an adjacent lot occupied by an existing residential use.
 - b. A landscaped buffer shall be provided within this 100-foot setback area, which shall be of sufficient width and density of plantings to provide immediately effective, year-round screening of the facility.

- c. The landscaped buffer shall include a mix of evergreen and deciduous trees planted in staggered rows to maximize buffering effects at time of planting. Sufficient variation of tree species shall be provided to minimize potential loss of buffering due to species-specific pests; and all species shall be hardy, native to Michigan, suitable for soil conditions, and not attractive to deer. Use of arborvitae is prohibited.
 - d. Existing vegetation within the buffer area may be used to provide all or part of the required screening, subject to Planning Commission approval.
 - e. Dead or diseased trees and vegetation shall be replaced within one planting season.
 - f. The standards of Section 4.17, Landscaping, Screening, Buffers, and Fencing shall also apply.
6. Commercial Solar Energy Generation Facilities shall conform to the requirements of the Airport Zoning Act (P.A. 23 of 1950, as amended), airport approach plan(s) adopted by the Michigan Aeronautics Commission, and applicable Federal Aviation Administration (FAA) regulations.
7. For consideration of potential impacts to aeronautical operations and flight patterns, notification of intent to construct a Commercial Solar Energy Generation Facility shall be provided to the airport zoning authority for the Gladwin and Midland airports, MBS International Airport, and any private airfield or airstrip within five (5) miles of the device or facility's lot boundaries at least 65 calendar days before any Planning Commission hearing on the application. Notification shall include a complete copy of all application materials and plans, and a request for review with written responses to be provided to the Planning Commission within 65 calendar days.
8. Following approval and prior to the start of facility construction on the site, the landowner(s) or the responsible party with ownership interest shall:
- a. Deposit a performance guarantee with the Township in an amount sufficient to ensure complete facility removal and site restoration, as certified by a licensed engineer and accepted by the Township. The guarantee shall be in the

form of cash, certified check, bond, irrevocable bank letter of credit from a bank with offices in Michigan or other surety acceptable to the Township Board.

- b. Submit copies of applicable permits and approvals required by all outside agencies with jurisdiction.
- c. Submit a certificate of insurance to the Township with a minimum of \$1,000,000 liability coverage per occurrence and naming Hope Township and its officials, employees, and agents as additional insured. An expired insurance certificate or an unacceptable liability coverage amount shall constitute grounds for revocation of any special use permit and removal of the facility.

F. Inspection.

The Township shall have the right upon issuing the required permits or approvals to inspect the premises on which the solar energy device or facility is located at all reasonable times for the purpose of verifying compliance with the requirements of this Section and Ordinance.

G. Abandonment.

Any solar energy device or facility that ceases to produce energy on a continuous basis for 365 calendar days shall be determined by the Zoning Administrator to be abandoned. Upon determination of abandonment, the Zoning Administrator shall provide the landowner(s) and the responsible party with ownership interest in the device or facility with written notice of the determination and an order to remove the device or facility per the requirements of Section 4.22.F., Removal.

- 1. The order shall be rescinded upon receipt of written documentation from a landowner or responsible party demonstrating that the device or facility remains in operation to produce energy.
- 2. Upon acceptance of written documentation from a landowner or responsible party demonstrating that the device or facility will be returned to full operation within 180 calendar days, the Zoning Administrator shall place a corresponding hold on the order. Failure to return the device or facility to full operation within the designated timeframe shall constitute grounds for the Township to seek removal per the requirements of Section 4.22.F., Removal.

H. Removal.

The landowner(s) or the responsible party with ownership interest shall remove a Commercial Solar Energy Generation Facility for which a required special use permit approval has been rescinded and any solar energy device or facility determined by the Township to be abandoned in accordance with the following requirements:

1. A signed and notarized removal agreement for the future removal of the device or facility in accordance with this Section shall be provided with the application for approval.
1. The device or facility shall be removed within 90 calendar days of receipt of a written removal order from the Zoning Administrator.
2. Failure by the owner to remove the device(s) as ordered or in accordance with an approved removal agreement shall be grounds for the Township to remove the device at the owner’s expense, and to make use of any performance guarantee or other security provided for that purpose.
3. Removal of the device shall include removal of any foundation, including concrete footings, support structures or other appurtenances to a depth of 48 inches below grade, removal of all non-utility owned equipment, conduit, structures, fencing, roads, and equipment, and restoration of the land to its pre-development grade and condition.

PART H.

All ordinances and amendments thereto that are in conflict with this Ordinance are hereby repealed.

PART I.

This ordinance shall become effective on the eighth (8th) day following publication thereof. Adopted by the Township Board, Township of Hope, Midland County, Michigan, at a meeting of the Township Board held on the _____ day of _____, 20_____.

Dated: _____, 20_____

Andy Kobisa, Supervisor

JoAnn Wilke, Clerk

CERTIFICATION

The above Ordinance No. ____ was adopted at a meeting of the Hope Township Board on the _____ day of _____, 20____, and published in the Midland Daily News, a newspaper of general circulation in the Township of Hope, on the _____ day of _____, 20_____.

JoAnn Wilke
Clerk, Hope Township