

ORDINANCE NO. 67 -

AN ORDINANCE TO AMEND THE ZONING ORDINANCE OF BRIDGEWATER TOWNSHIP, WASHTENAW COUNTY, MICHIGAN.

Pursuant to the authority vested in it by the Michigan Zoning Enabling Act, Public Act 110 of 2006, as amended, Bridgewater Township, Washtenaw County, Michigan ordains the following amendments to articles 11.0 (Special Development Procedures) and 19.0 (Definitions) of Zoning Ordinance No. 67 **for the purpose of inserting new and updated provisions for solar energy facilities and devices**, by authority of Public Act 110 of 2006, as amended.

BRIDGEWATER TOWNSHIP, WASHTENAW COUNTY, MICHIGAN, HEREBY ORDAINS:

PART A.

[Article 11.0 (Special Development Procedures) is hereby amended to add a new Section 11.39 entitled "Solar Energy Facilities and Devices" as follows:]

Section 11.39 Solar Energy Facilities and Devices.

The location, construction, operation, and maintenance of solar energy devices and facilities 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 19.03 (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 transportation networks.

B. Permitted Locations.

Solar energy devices and facilities shall only be allowed in the zoning districts specified in the following table and shall be prohibited in all other districts. Solar energy devices and facilities shall be subject to review and approval in accordance with the following:

Type of Solar Energy Device 10or Facility Installation or Alteration on a Single Lot	Zoning District							Additional Standards
	AG	R-2	R-3	BCD	C	I-1	PSP	
Attached Solar Energy Device	A	A	A	A	A	A	A	C - E, G - I
Small Freestanding Solar Energy Device	A	A	A	A	A	A	A	C - E, G - I
Commercial Solar Energy Generation Facility	S							C, D, F - I

Symbol	Approval Required
A	Zoning Administrator Approval
S	Special Use Permit Approval
	Prohibited in this Zoning District

- Zoning Administrator approval.** Solar energy devices as allowed in a zoning district shall be subject to review and approval of a certificate of zoning compliance in accordance with the applicable standards of this Section and Section 1.07 (Certificates of Zoning Compliance).

2. **Special use permit and site plan approval.** Commercial solar energy generation facilities as allowed in a zoning district shall be subject to review and approval in accordance with the requirements of this Section and articles 7.0 (Special Land Uses) and 8.0 (Site Plan Review). For facilities covering multiple parcels, each contiguous tract of land consisting of one (1) or more parcels not divided by a lake, river or road right-of-way shall be considered a separate site for purposes of application requirements.
3. **Planned Unit Development (PUD) District.** A solar energy device may be allowed as part of a Planned Unit Development (PUD) project, subject to the standards of this Section and Article 10.0 (Planned Unit Development District).
4. **Other permits and approvals.** Solar energy devices and facilities shall conform to all applicable federal, state, and local regulations, including compliance with the State Construction Code and applicable fire and electrical codes. Copies of all applicable outside agency permits and approvals shall be submitted to the Township prior to the start of construction.

C. Required Application Information.

The following information shall be required as part of any application for approval of a solar energy device or facility under this Section and Ordinance, in addition to the other applicable requirements of this Ordinance for the type of required review:

1. 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.
2. Detailed descriptions of site security measures and all proposed grading, filling, and tree or woodland clearing.
3. 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.
4. A signed and notarized removal agreement for the future removal of the device or facility in accordance with the requirements of this Section.
5. Documentation of compliance with applicable requirements of this Section for the type of device or facility.

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

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

1. The applicant(s), landowner(s), and all other responsible parties with ownership interest shall be jointly and severally responsible for constructing, maintaining, operating, and removing the solar energy device or facility in compliance with this Ordinance; and for correcting any conditions that violate 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.

E. Additional Standards for Solar Energy Devices.

The following additional standards shall apply to solar energy devices:

1. Attached solar energy devices installed parallel to and directly adjacent to the roofline or integrated into the roof structure shall not exceed the maximum height allowed for the type of building or structure in the zoning district.
2. Attached solar energy devices installed parallel to and directly adjacent to a wall of the structure or integrated into the wall structure shall not encroach into the required yard setbacks, and shall not extend beyond the top of the wall.
3. Small freestanding solar energy devices shall also conform to the requirements of Section 6.03 (Accessory Structures).

F. Additional Standards for Commercial Solar Energy Generation Facilities.

The following additional standards shall apply to all commercial solar energy generation facilities in the Township:

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1. **Location limitations.** Facilities shall be limited to lots located in the following areas of the Township traversed by high voltage electrical transmission lines:
 - a. Eastern half of section 3;
 - b. Sections 10 and 15;
 - c. Southeast quarter of Section 20;
 - d. Sections 22 and 23;
 - e. Northeast, northwest, and southwest quarters of section 24;
 - f. Southwest quarter of Section 27;
 - g. Northern half of Section 28; and
 - h. Northeast quarter of Section 29;

2. **Height limitations.** The maximum height of commercial solar energy generation facilities shall conform to the requirements of Article 3.0 (Dimensional Standards), except where the Planning Commission sets a more restrictive height standard as a condition of special use permit approval.
3. **Required setbacks.** The facility shall conform to the requirements of Article 3.0 (Dimensional Standards) and the following additional setback requirements:
 - a. Where a facility is proposed to be located on a tract of land that includes multiple contiguous lots not under single ownership or control, the tract of land shall be treated as if it is a single lot for purposes of applying setback requirements.
 - b. For a lot or contiguous tract of land up to 30.0 acres in gross lot area, a minimum setback of 100 feet shall be required between the facility and any road right-of-way or perimeter lot boundary.
 - B** c. For a lot or contiguous tract of land exceeding 30.0 acres in gross lot area, a minimum setback of 200 feet shall be required between the facility and any road right-of-way or perimeter lot boundary.
 - d. A minimum setback of 100 feet shall be required between the facility and any agricultural or residential buildings on the same lot.
4. **Required screening.** To ensure that the facility and any associated substation does not impair the visual character of the Township's rural environment or adversely impact adjacent uses or residents, adequate screening shall be provided in accordance with the following minimum requirements:
 - a. The screening shall be located within the required perimeter setback area, unless the Planning Commission determines that an alternative location will provide for improved screening of the facility from adjacent lots and road rights-of-way.
 - b. At a minimum, the screening shall include a mix of evergreen and deciduous trees planted in staggered rows of sufficient width and density of plantings to provide immediately effective, year-round screening.
 - (1) Tree species and sizes shall conform to the requirements of Section 11.10 (Landscaping and Screening), and shall be hardy, native to Michigan, suitable for soil conditions, and not attractive to deer. Use of arborvitae shall be prohibited.
 - (2) Existing vegetation and topography may be used to provide all or part of the required screening, subject to Planning Commission approval.
 - c. Berms to provide screening shall be limited to incidental use only where other forms of screening will not conform to Ordinance standards. Berms shall be subject to the requirements of Section 11.10D.4. (Berm) and shall not impact surface water drainage patterns.
5. **Required perimeter fencing.** The Planning Commission may require the facility to be secured within a perimeter fence to restrict unauthorized access, which shall be allowed up to a maximum of seven feet in height. Such fencing shall be

constructed of steel, aluminum or other materials of similar durability. Use of barbed or razor wire shall be prohibited.

6. **Protection of the land and soils.** The commercial solar energy generation facility shall be designed, constructed, and maintained in a manner that maximizes protection of the land and soils for future agricultural use, subject to the following requirements:

a. The network of underground agricultural drainage tiles shall be protected during facility construction, and promptly repaired or replaced as necessary to maintain adequate drainage conditions on the lot and for surrounding land.

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b. Site grading for the facility shall be limited to the minimum necessary for ingress and egress of vehicles, to maintain surface water drainage, and to provide for any required buildings or transformer pads. Removal or stockpiling of topsoil from the site shall be prohibited.

c. Use of the land within the perimeter of the facility for agricultural purposes shall be maintained to the maximum extent feasible.

d. At a minimum, a dense mix of groundcover plantings designed to attract a variety of pollinator species, including monarch butterflies, honeybees, and other native pollinator insects, shall be required to be maintained on all areas of the lot encumbered by the facility that are not in agricultural use. The mix of pollinator plant species shall be suitable for the soil type, drainage, and growing zone.

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7. **Protection of other natural features.** Impacts from the establishment of a commercial solar energy generation facility on watercourses, wetlands, floodplains, steep slopes, groundwater recharge areas, and existing trees and woodlands on the lot shall conform to all applicable requirements of Section 11.05 (Natural Features Protection).

8. **On-site battery storage.** On-site commercial battery power storage may be allowed as an accessory use to a commercial solar energy generation facility, subject to the provisions of Section 5.501 (Intensive Industrial Operations).

9. **Decommissioning plan.** Commercial solar energy generation facility projects shall include a decommissioning plan to ensure complete removal and site restoration upon the end of the project life or facility abandonment. The decommissioning plan shall include the following minimum provisions:

a. A detailed plan for removal of any foundation, including concrete footings, pilings, support structures, and other appurtenances below grade; removal of all non-utility owned equipment, conduit, structures, fencing, roads, and equipment; and restoration of the land to conditions suitable for agricultural use.

b. A detailed cost estimate of decommissioning, removal, and restoration costs prepared by a professional engineer, and identification of the financial resources to be used to accomplish decommissioning.

(1) This estimate shall be subject to Township Engineer review and Planning Commission acceptance.

- (2) The plan shall confirm that a performance guarantee for the accepted amount will be deposited with the Township per Section 1.11C (Performance Guarantees), which would allow the Township to fund the completion of this work if the owner fails to do so.
 - (3) Once every five (5) years after the date of special use permit approval, the Planning Commission may require the landowner(s) or the responsible party with ownership interest to prepare an updated cost estimate and deposit an amended performance guarantee with the Township.
 - c. Provision for all decommissioning, removal, and restoration activities to be completed within a maximum of 180 calendar days after the end of project life or facility abandonment, unless the Planning Commission authorizes an alternative completion schedule.
- 10. **Additional provisions.** The following additional provisions shall apply to all commercial solar energy generation facilities:
 - a. An affidavit or evidence of an agreement between the landowner and applicant confirming permission to apply for facility approval and a copy of the application to or agreement with the utility company that will be purchasing electricity from the proposed site shall be provided with the application for conditional use permit approval.
 - b. 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.
 - c. Facility construction activities shall be permitted only between the hours of 7:00 a.m. and 6:00 p.m., Monday through Friday, and between 7:00 a.m. and 12:00 noon on Saturday.
- 11. **Performance guarantee, insurance, and outside agency permits.** Following approval and prior to the start of facility construction, the landowner(s) or the responsible party with ownership interest shall:
 - a. Deposit the required performance guarantee with the Township in the amount as accepted by the Planning Commission.
 - 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 Bridgewater 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 conditional use permit and removal of the facility.

G. 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.

H. 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 11.39I (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 11.39I (Removal).

I. Removal.

The landowner(s) or the responsible party with ownership interest shall remove a commercial solar energy generation facility for which a 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 and procedures:

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.

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3. Removal of the device shall include removal of any foundation, including concrete footings, support structures or other appurtenances 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 B.

[Article 19.0 (Definitions), Section 19.03 (Definitions) is hereby amended to add new solar energy-related definitions, as follows:]

Section 19.03 Definitions.

Whenever used in this Ordinance, the following words and phrases shall have the meaning ascribed to them in this Section:

226a. **Solar energy generation.** The conversion of radiation from the Sun into electricity through the use of solar photovoltaic cells.

- 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. **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 accessory structure.
- c. **Solar energy devices, small freestanding.** An array of photovoltaic cells and ancillary equipment and structural elements of limited size and extent to capture and utilize the energy of the sun to generate electrical power principally for use on the premises associated with the device.