

# Butler Township - Solar Energy Systems (DRAFT)

## A. Purpose and Intent.

In order to preserve the natural, rural beauty of the Township, the viability of the Township's farmland, the ecosystems contained within the Township, the health, safety, and welfare of the Township's residents, the regulations of this section shall govern the development of solar energy facilities within the Township.

1. On-site solar energy systems provide ecological and economic benefits, at a scale that is desirable in a rural community and with fewer impacts on the immediate surroundings than utility-scale solar energy systems. However, the impacts that they do have must be managed through zoning regulations.
2. Utility-scale solar energy systems ("solar farms") should be developed with careful consideration of the impacts on local ecosystems, farmland, rural beauty, and the health, safety, and welfare of the Township's residents.

## B. Accessory solar energy systems capable of producing a maximum of 5,000 kWh per month shall be subject to the following regulations:

1. All solar panels and other structures associated with the solar energy system shall be set back at least 20 feet from all lot lines.
2. No more than 20% of any lot may be covered by an accessory solar energy system.
3. Solar energy systems shall be designed and located to avoid glare or reflection onto adjacent lots and adjacent roadways, and shall not interfere with traffic or create a safety hazard off-site.
4. Zoning and building permits shall be required for any solar energy system.
5. No homeowners' agreement, covenant, common interest community, or other contract between multiple lot owners within a subdivision shall restrict or limit accessory solar energy systems.

## C. The following shall apply to all solar energy facilities, regardless of the maximum kWh capacity:

1. Rooftop and building mounted solar energy systems are subject to the following regulations:
  - a) Roof mounted systems shall not extend more than 4 feet above the surface to which it is affixed. Roof mounted systems that do not extend more than 3 inches above the surface of the roof shall be accessory solar energy systems, regardless of the kWh capacity.
  - b) No solar energy system may protrude beyond the edge of the roof.
2. Ground mounted and freestanding solar energy systems are subject to the following regulations:
  - a) All solar energy systems shall have a defensible space for fire protection, as required by the fire department with jurisdiction over the site.
  - b) Height.

The height of the solar panel and any mounts shall not exceed 14 feet when oriented at maximum tilt.

If the solar energy system is an accessory use located in the front yard between the required front setback line and front building wall of the principal building, the maximum height for the system shall be 42 inches (3.5 feet). Evergreen landscaping that is sufficient to completely block the equipment from view from dwelling units or public right-of-way but that will not obstruct the energy collecting surface from solar energy shall be provided.

### 3. Batteries.

When batteries are included as part of the solar collector system, they must be placed in a secure container or enclosure when in use, and when no longer used shall be disposed of in accordance with applicable laws and regulations.

## D. Solar farms shall be subject to the following regulations, in addition to the general standards for special uses:

### 1. Definition of "Participating" and "Non-Participating":

As used in this Section, the following terms shall have the following meanings:

#### a) Participating Lot:

A lot where the landowner has leased land to the solar applicant, OR a landowner that has any other written and signed agreement with the solar applicant with regard to the solar farm, including "good neighbor" agreements and other agreements that do not necessarily allow the placement of solar panels on the lot.

#### b) Non-Participating Lot:

Any lot that does not meet the definition of "Participating Lot".

### 2. Setbacks.

All solar panels and other structures associated with the solar farm shall meet the following minimum setback requirements.

Non-participating parcels without a dwelling unit:

a) From a lot line abutting a lot that is not participating in the solar project, and does not contain a residential dwelling unit: 50 feet

Non-participating parcels with a dwelling unit:

b) From a lot line abutting a lot that is not participating in the solar project, and contains a residential dwelling unit: the minimum setback shall be 200 feet from the lot line. If the non-participating parcel is surrounded by more than two sides, the setback shall be 1,000 feet from the third side lot line. The 1000 foot setback shall not apply across public rights-of-way.

c) From a residential dwelling unit existing at the time of Special Use approval for the solar farm: 500 feet from nearest corner of the dwelling unit. This setback requirement shall apply across public rights-of-way.

d) From a public or private roadway: 50 feet, or the required front setback for the zoning district in question, whichever is greater. In order to create corridors through the solar farm for the passage of wildlife, there shall be a 10 foot setback requirement from the lot line of a participating parcel. The Township Board may waive this setback entirely upon determining that the applicant has created sufficient wildlife corridors through the solar farm that the setback is unnecessary.

### 3. No solar panels associated with a solar farm shall be located within the boundaries of a wetland delineated by the State of Michigan.

#### **4. Landscaping, Ground Cover, and Buffering**

##### **a) Buffering/Screening:**

**(1)** The following screening requirements must be met along all property lines meeting at least one of the following criteria:

- (i) The adjacent parcel is non-participating
- (ii) The adjacent parcel contains one or more dwelling units

**(2)** When landscape screening is required, it may be planted anywhere within the required setback, and shall meet the following requirements:

(i) Evergreen trees, planted in a staggered double row designed to form a dense visual screen while still allowing for healthy development of the trees. The trees must be at least 6 feet in height at the time of planting

(ii) The required evergreen trees shall be a mixture of some or all of the following species: White Cedar, White Pine, Colorado Blue Spruce, Norway Spruce, Black Hills Spruce, and White Spruce. The applicant must submit a description of the height and spread of each proposed species at maturity, as well as an estimated timeline for each species to reach maturity.

(iii) The Township Board shall determine at the time of approval whether the proposed plantings constitute a “dense visual screen” at the time of planting and whether the design also allows for the “healthy development of the trees.” The Township Board may require additional plantings, or other design changes to the landscape plan, as a condition of Special Land Use Approval. In making their determination, the Township Board may request the opinion of a landscape architect, arborist, or other expert, with costs to be paid by the applicant.

##### **(3) Existing Trees and Woodlands:**

Existing trees shall be preserved within areas where screening is required. The Township Board may waive or alter Subsection 2 above upon determining that existing foliage on a participating lot provides a sufficient screen from neighboring residential uses.

**b) Ground Cover:** Between the solar panels, the ground must be covered by natural vegetation which may include, but is not limited to:

- (1) Native Grasses, including, but not limited to bluestem, sedge, and bottlebrush.
- (2) Grazing Grasses, including, but not limited, to switchgrass, gamma, and Indiangrass.
- (3) Pollinator Habitat, including, but not limited to, sunflower, milkweed, and black-eyed susan.

##### **c) Maintenance:**

All plantings shall be installed in a design that supports their long- term health and vitality. All plantings shall be maintained in a sound health and vigorous growing condition. The Township may require dead, diseased, damaged, or destroyed species within the required setback area to be replaced with new plantings. The new plantings must comply with this Ordinance and must result in an overall landscape screen that complies with this Ordinance.

#### **5. Noise.**

Noise emanating from solar panels or other structures associated with the solar farm shall not exceed 55 decibels (dB), as measured at any residence on a non-participating lot.

#### **6. Drainage.**

a) Prior to approval of the Special Use permit by the Township Board, the solar farm applicant must obtain written confirmation from the County Drain Commissioner that stormwater drainage will not be impacted,

or that any impacts will be mitigated without negative impacts on any nearby lots (participating or non-participating).

b) Any damage to underground drainage tiles, or other stormwater infrastructure or County Drains caused during the installation of the solar farm shall be repaired by the solar farm owner within 90 days of discovery of the damage. The Township Board may extend this deadline upon determination that the solar farm owner has made good faith progress towards the repair.

#### **7. Glare.**

No solar farm shall produce glare, as defined by this Ordinance, that causes negative impacts on any adjacent lot (participating or non-participating), or causes a danger to motorists on any roadway.

#### **8. Fencing.**

Clusters of solar panels shall be surrounded by a six-foot-high fence with self-locking gate. The fence shall not be subject to setback requirements, except where necessary to preserve wildlife corridors. The design of the fence must be approved by the Township Board, and no design other than the approved design shall be installed.

#### **9. Public Safety**

The solar farm must be designed and operated to allow sufficient access for public safety vehicles in the event of an emergency, in the opinion of the fire department with jurisdiction.

#### **10. Power Transmission Lines**

All power transmission lines and other utility wires within the project boundary shall be located underground.

#### **11. Liability Insurance**

There shall be maintained a current general liability policy covering bodily injury and property damage (including damage to public roadways and non-participating properties) with limits of at least \$1 million per occurrence and \$1 million in the aggregate. The insurance policies shall be reviewed by the Township every five years, and the Township Board may require increases to the policy limits.

#### **12. Lease/Easement Agreements**

If the land on which the solar farm is proposed is to be leased, rather than owned, by the solar farm operator, all lots within the solar farm project boundary shall be included in a recorded easement, lease, or consent agreement specifying the applicable uses for the duration of the project. All necessary leases, easements, or other agreements between the solar farm operator and the affected parties shall be in place prior to commencing construction, unless specified otherwise by the special use permit conditions.

#### **13. Interconnection Agreement**

No solar farm shall be installed until evidence has been given to the Township that the electric utility company has agreed to an interconnection with the electrical grid or a power purchase agreement. The agreement must be submitted to the Township prior to construction.

#### **14. Approved Interconnection Agreement**

The owner of the solar energy system shall submit, as part of the Special Use application, written documentation that the proposed project has a valid interconnection application in process with the regional or local transmission provider. Off-grid systems shall be exempt from this requirement. The Special Use application shall not be approved without the required documentation. A copy of the approved interconnection agreement must be submitted to the Township prior to the start of construction.

## **15. Abandonment/Decommissioning**

Abandoned or unused solar panels and associated facilities shall be removed, by the owner of the solar panels. All decommissioned materials must be removed from Butler Township within 1 month of the completion of the removal process. No permanent storage or disposal of decommissioned solar panels or related equipment shall be permitted in the Township.

### **E. Required Application Information.**

Solar farms shall be required to submit all information listed below as part of the Special Use application. The Zoning Administrator may waive information requirements for accessory solar energy systems (but not for solar farms), upon determining that the information is not relevant to determining compliance with this Ordinance for the application in question. The Township may seek the advice and consultation of third-party experts to review the information listed below, and may require the applicant to submit funds to cover the cost of the expert review.

1. All information required for Special Use Approvals, including, but not limited to, owner contact information, a complete Site Plan, stormwater drainage information, and a comprehensive landscape plan.
2. Operational information, including power output, safety/security provisions, interconnection to transmission grid, lighting, potential telecommunications interference, and projected number of permanent jobs created in Butler Township.
3. Construction information, such as timeline, phasing, potential expansions, construction traffic/truck routes, temporary access roadways, and temporary construction jobs created.
4. Leases (and/or other agreements) for all participating parcels. Personal identifying information and financial information may be redacted.
5. Visual renderings of the proposed solar farm, as seen from all public roadways and non-participating parcels where the solar farm will be visible. Landscaping should be shown as it will appear at the time of planting, and as it is projected to appear 5 years after completion of construction.
6. A list of required approvals from County, State, and/or Federal entities with jurisdiction, and a description of the status of each approval. Proof of approval must be submitted prior to construction.
7. Information on hazardous waste storage, including battery locations and storage.
8. Insurance policies as required by this Section.
9. A Decommissioning Bond acceptable to the Planning Commission and approved by the Township Board.
10. A Tile Damage Bond acceptable to the Planning Commission and approved by the Township Board.
11. An escrow account as per the requirements of the Township Planning Commission and approval of the Township Board.
12. Any other information deemed necessary by the Township Planning Commission in order to determine whether the application meets the requirements of this Ordinance.