

MANCHESTER TOWNSHIP ORDINANCE NO. 90

AN ORDINANCE TO AMEND THE MANCHESTER TOWNSHIP ZONING ORDINANCE BY ADDING SECTION 16.25 "SOLAR ENERGY SYSTEMS" TO ARTICLE 16.0 "SUPPLEMENTARY REGULATIONS AND STANDARDS".

MANCHESTER TOWNSHIP, WASHTENAW COUNTY, MICHIGAN, ORDAINS:

Section 1: Amendments, additions, and deletions to the Manchester Township Zoning Ordinance Article 16.0 "Supplementary Regulations and Standards.

That the Manchester Township Zoning Ordinance, Article 16.0, "Supplementary Regulations and Standards", is hereby amended by adding a new Section 16.25 "Solar Energy Systems" to read as follows:

SECTION 16.25 - SOLAR ENERGY SYSTEMS

A. Purpose and Prohibition

Manchester Township promotes the effective and efficient use of solar energy systems. It is the intent of the Township to permit these systems by regulating their siting, design, and installation to protect public health, safety, and welfare, and to ensure their compatibility with adjacent land uses. Building-mounted and ground-mounted solar energy systems, as defined in this Ordinance, shall comply with the provisions of this Section and are only permitted as authorized by this Section.

B. Definitions

1. **Ancillary Solar Equipment** shall mean any accessory part or device of a solar energy system that does not require direct access to sunlight, such as batteries, electric meters, converters, or water heater tanks.
2. A **Solar Collector Surface** shall refer to any part of a solar energy system that absorbs solar energy for use in the system's transformation process. The collector surface does not include frames, supports, and mounting hardware.
3. **Solar Energy** shall mean radiant energy received from the sun that can be collected in the form of heat or light by a solar energy system.
4. A **Solar Energy System (SES)** shall mean a system (including solar collectors and ancillary equipment) either affixed to a permanent principal or accessory building or functioning as a freestanding structure, that collects, stores, and distributes solar energy for heating or cooling, generating electricity, or heating water. Solar Energy Systems

include, but are not limited to, photovoltaic (PV) power systems and solar thermal systems.

- a. A **Personal-Scale SES** shall mean a solar energy system that is accessory to the principal use on the site. The total surface area of all Solar Collector Surfaces within a Personal-Scale SES shall not exceed 1,500 square feet. The sale and distribution of excess available energy, if permitted, to an authorized public utility for distribution shall be incidental to this type of system, and not its primary purpose. Sale of excess energy to anything other than an authorized public utility shall be prohibited.
- b. A **Utility-Scale SES** shall mean a solar energy system that meets one or more of the following:
 - i. Is primarily used for generating electricity for sale and distribution to an authorized public utility;
 - ii. The total surface area of all Solar Collector Surfaces exceeds 1,500 square feet; and/or
 - iii. Is not an accessory use or structure.
- c. A **Building-Mounted SES** shall mean a solar energy system affixed to a permanent principal or accessory building (i.e. roof or wall).
- d. A **Ground-Mounted SES** shall mean a freestanding solar energy system that is not attached to and is separate from any building on the parcel of land on which the solar energy system is located.

C. Standards for Personal-Scale SES

Personal-Scale SES shall be permitted as an accessory use/structure in all zoning districts, subject to the following standards:

1. Application for Zoning Compliance Permit of Personal-Scale SES

A Personal-Scale SES requires a Zoning Compliance Permit, except as stated in Section 16.25.C.2 below. An application for a Zoning Compliance Permit shall include the following:

- a. Photographs of the property's existing conditions.
- b. Renderings or catalogue cuts of the proposed solar energy system.
- c. Plot/Sketch plan to indicate where the solar energy system is to be installed on the property (or, if building-mounted, the system's location on the permanent building), including property setbacks and the total Solar Collector Surface area.
- d. Elevations showing the height of the solar energy system.
 - i. For ground-mounted solar systems, the height of the system above ground.

- ii. For pitched roof-mounted solar systems, the elevation must show the highest finished height of the system and the height of the finished roof surface on which it is mounted.
 - iii. For flat roof-mounted solar energy systems, the elevations shall show the highest finished height of the system and the highest point of the roof, including any parapets on the building.
- e. Description of the screening to be provided for ground or building-mounted solar energy equipment.

2. Exclusions from Zoning Compliance Permit for Personal-Scale SES

The following situations do not require a Zoning Compliance Permit, but shall still comply with all other standards of this Ordinance:

- a. The installation of one (1) building-mounted solar energy system with a total solar collector surface area of less than eight (8) square feet.
- b. The installation of one (1) ground-mounted solar energy system with a height of less than six (6) feet and a solar collector surface of less than eight (8) square feet.
- c. Repair and replacement of existing solar energy equipment, provided that there is no expansion of the size or coverage area of the solar energy system.

3. Ground-Mounted SES

Ground-mounted, personal-scale SES shall be subject to the following additional standards:

- a. **Setbacks:** In all Zoning Districts, ground-mounted solar energy systems shall be located only in the rear or side yard and shall be located at least ten (10) feet from the property line.
- b. **Height:** Ground-mounted solar energy systems shall not exceed sixteen (16) feet in height, measured from the ground at the base of such equipment to the highest point of the system.
- c. **Attachment:** Solar energy systems shall be permanently and safely attached to the ground. Proof of the safety and reliability of the means of such attachment, in the form of certification by a professional engineer or other qualified person, shall be submitted with the application.
- d. **Installation and Maintenance:** Solar energy systems shall be installed, maintained and used only in accordance with the manufacturer's directions. A copy of such directions shall be submitted with the site plan application.
- f. **Visual Impact:** The solar energy system shall not have a significant adverse visual impact on the natural features or neighborhood character of the surrounding area and shall be located to minimize glare on adjacent properties and roadways.

- g. **Compliance with Additional Codes:** Solar energy systems, and the installation and use thereof, shall comply with the Township/State construction code, the electrical code and other applicable Township and State codes. Installation of a solar energy system shall not commence until all necessary permits have been issued.
- 4. **Building-Mounted SES:** Building-mounted, personal-scale SES shall be subject to the standards of Section 16.25.E, in addition to the standards contained within this Section.
- 5. **Ancillary Solar Equipment:** Where feasible, ancillary solar equipment shall be located inside of a building or be screened from public view. All ancillary solar equipment such as, but not limited to, water tanks, supports, batteries, and plumbing shall be screened to the maximum extent possible without compromising the effectiveness of the solar collectors. When solar storage batteries are included as part of the solar collector system, they must be placed in a secure container or enclosure meeting the requirements of the State Building Code and when no longer in use shall be disposed of in accordance with applicable laws and regulations.

D. Standards for Utility-Scale SES

Utility-scale SES shall be permitted as a conditional use in the AR-Rural Agricultural and CM-Community Manufacturing districts, subject to the following standards:

- 1. **Conditional Land Use Approval Required**
 - a. Prior to the construction of a utility-scale solar system, an application for a conditional use permit must be filed and approved by the Planning Commission. The Planning Commission shall review the conditional use based on the provisions of this Section as well as the standards of Article 12.
 - b. The construction and operation of all utility-scale solar systems shall be consistent with all applicable local, state and federal requirements. All buildings and fixtures forming part of a utility-scale solar installation shall be constructed in accordance with the Michigan Building Code.
 - c. No utility-scale solar system shall be constructed, installed or modified as provided in this section without first obtaining all applicable permits.
 - d. Applications to build a utility-scale solar system in Manchester Township must be accompanied by the fees required for a conditional use permit and site plan review.

No utility-scale solar system shall be installed until evidence has been given to the planning commission that the owner has been approved by the authorized utility company to install an interconnected customer-owned generator. Off-grid systems are exempt from this requirement.

2. Standards for Ground-Mounted Utility-Scale SES

a. Setbacks

- i. **Front Yard:** Utility-scale solar energy systems shall be set back at least fifty (50) feet from the road right-of-way line.
- ii. Each side yard shall be at least twenty-five (25) feet. Where utility-scale solar energy systems abut a residentially-zoned (including AR) or used lot, the side yard shall not be less than fifty (50) ft.

The rear yard shall be at least twenty-five (25) feet. Where utility-scale solar energy systems abut a residentially-zoned (including AR) or used lot, the rear-yard shall not be less than fifty (50) feet.

- b. **Height:** Utility-scale ground-mounted solar energy systems shall conform to the maximum height standards of the zoning district in which it is located.
- c. **Minimum Lot Area:** Minimum lot area for a utility-scale solar energy system shall be five (5) acres.
- d. **Lighting:** On-site lighting shall meet the performance standards of Section 16.02.G. of the Zoning Ordinance. Lighting shall be limited to that required for safety and operational purposes, and shall be directed downward and shielded from abutting properties.
- e. **Signage:** Signs shall comply with the requirements described in Article 15. Further, utility-scale solar energy system installations shall not be used for displaying any advertising except for reasonable identification of the manufacturer or operator of the solar energy system.
- f. **Utility Connections:** All utility connections from the solar energy system shall be placed underground, depending on site conditions and any requirements of the utility provider.
- g. **Screening:** When a utility-scale solar energy system is adjacent to a residentially-zoned or used lot, side and rear yard screening may be required as determined by the Planning Commission to address specific site needs at the time of site plan review. Solar panels shall be placed such that concentrated radiation or solar glare shall not be directed onto nearby properties or roadways. When deemed appropriate, the Planning Commission may require a report from a registered civil engineer or other professional to address this issue.

3. **Building-Mounted SES:** Building-mounted, utility-scale SES shall be subject to the standards of Section 16.25.E. in addition to the standards contained within this Section.

4. **Other Conditional Use Permit Requirements for Utility-Scale SES**

- a. **Site Control:** The applicant shall submit documentation of actual or prospective access and control of the project site sufficient to allow for construction and operation of the proposed installation.
- b. **Operation and Maintenance Plan:** The applicant shall submit a plan for the operation and maintenance of the utility-scale system, which shall include measures for maintaining safe access to the installation, storm water controls, as well as general procedures of operational maintenance of the installation.
- c. **Emergency Services:** Upon request by Manchester Township, the owner/operator of the solar energy system shall cooperate with local emergency services in developing an emergency response plan. All means of shutting down the solar energy system shall be clearly marked. The owner/operator shall identify a responsible person for public inquiries throughout the life of the installation. An information sign shall be posted and maintained at the entrance(s) which lists the name and phone number of the operator.
- d. **SES Maintenance:** The utility-scale SES owner/operator shall maintain the facility in good condition. Maintenance shall include, but not be limited to, painting, structural repairs, and integrity of security measures. Site access shall be maintained to a level acceptable to local emergent response personnel. The owner/operator shall be responsible for the cost of maintaining the solar photovoltaic installation and any access road(s).
- e. **Site Clearing:** Clearing of natural vegetation shall be limited to what is necessary for the construction, operation, and maintenance of the installation.

5. Abandonment or Decommissioning

- a. Any utility-scale solar energy system which has reached the end of its useful life or has been abandoned consistent with this section of the Zoning Ordinance shall be removed and parcel owners shall be required to restore the site to its original condition. The owner/operator shall physically remove the installation no more than one-hundred and fifty (150) days after the date of discontinued operations. The owner/operator shall notify the Township and the Planning Commission by certified mail of the proposed date of discontinued operations and plans for removal.
- b. Absent notice of a proposed date of decommissioning or written notice of extenuating circumstances, the utility-scale SES shall be considered abandoned when it fails to operate for more than one year. If the owner/operator fails to remove the installation in accordance with the requirements of this Section within 150 days of abandonment of the proposed date of decommissioning, Manchester Township is permitted to enter the property and physically remove the installation.
- c. Decommissioning shall consist of:
 - i. Physical removal of all utility-scale solar energy systems, structures, equipment, security barriers, and transmission lines from the site.

- ii. Disposal of all solid and hazardous waste in accordance with local, state and federal waste disposal regulations.
 - iii. Stabilization or re-vegetation of the site as necessary to minimize erosion.
- 6. Ancillary Solar Equipment: Where feasible, ancillary solar equipment shall be located inside the building or be screened from public view. All ancillary solar equipment such as, but not limited to, water tanks, supports, batteries, and plumbing shall be screened to the maximum extent possible without compromising the effectiveness of the solar collectors. When solar storage batteries are included as part of the solar collector system, they must be placed in a secure container or enclosure meeting the requirements of the State Building Code and when no longer in use shall be disposed of in accordance with applicable laws and regulations.
- 7. Financial Surety: The applicant for a utility-scale solar energy system shall provide a form of surety, either through escrow account, bond or otherwise, to cover the cost of removal in the event Manchester Township must remove the installation, in an amount and form determined to be reasonable by the Planning Commission, but in no event to exceed more than 125 percent of the cost of removal and compliance with the additional requirements set forth herein, as determined by the applicant. The applicant shall submit a fully inclusive estimate of the costs associated with removal, prepared by a qualified engineer. The amount shall include a mechanism for calculating increased removal costs due to inflation.

E. Standards for all Building-Mounted SES

Personal-Scale and Utility-Scale building-mounted SES shall be subject to the following standards:

- a. **Height:** Solar energy systems that are mounted on the roof of a building shall not project more than five (5) feet above the highest point of the roof and, in any circumstances, shall not exceed the maximum building height limitation for the zoning district in which it is located, and shall not project beyond the eaves of the roof.
- b. **Weight:** Solar energy systems mounted on the roof of a building shall be only of such weight as can safely be supported by the roof. Proof thereof, in the form of certification by a professional engineer or other qualified person, shall be submitted to the Township Zoning Administrator prior to installation.
- c. **Attachment:** Solar energy systems that are roof-mounted, wall-mounted or are otherwise attached to a building or structure shall be permanently and safely attached to the building or structure. Proof of the safety and reliability of the means of such attachment shall be submitted to the Zoning Administrator prior to installation.
- d. **Wall-Mounted SES:** Solar energy systems that are wall-mounted shall not exceed the height of the building wall to which they are attached.
- e. **Installation and Maintenance:** Solar energy systems shall be installed, maintained and used only in accordance with the manufacturer's directions. Upon

request, a copy of such directions shall be submitted to the Township Zoning Administrator prior to installation.

- f. **Visual Impact:** The solar energy system shall not have a significant adverse visual impact on the natural features or neighborhood character of the surrounding area and shall be located to minimize glare on adjacent properties and roadways. Solar energy systems that are visible from the street must be either composed of building-integrated components (such as solar shingles) that are not readily evident, or be designed and mounted to match the shape, proportions, and slope of the roof.
- g. **Compliance with Additional Codes:** Solar energy systems, and the installation and use thereof, shall comply with the Township/State construction code, the electrical code, and other applicable Township and State codes. Installation of a solar energy system shall not commence until all necessary permits have been issued.

F. Solar Access

The Township makes no assurance of solar access other than the provisions of this Section. The applicant may provide evidence of covenants, easements or similar documentation for abutting property owners providing access to solar energy for the operation of a solar energy system.

Section 2: Severability.

If any clause, sentence, paragraph or part of this Ordinance shall for any reason be finally adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair or invalidate the remainder of this Ordinance but shall be confined in its operation to the clause, sentence, paragraph or part thereof directly involved in the controversy in which such judgment is rendered.

Section 3: Saving Clause

The Manchester Township Zoning Ordinance, except as herein or heretofore amended, shall remain in full force and effect. The amendments provided herein shall not abrogate or affect any offense or act committed or done, or any penalty or forfeiture incurred, or any pending fee, assessments, litigation, or prosecution of any right established, occurring prior to the effective date hereof.

Section 4. Effective Date

The ordinance changes shall take effect seven days after the publication of the notice of adoption unless petition procedures are initiated under MCL 125.3402. If petition procedures are initiated, the ordinance shall take effect in accordance with MCL 125.3402.

Gene DeRossett, Township Supervisor

Ann M. Becketl, Township Clerk

I, Ann M. Becketl, Clerk for Manchester Township, hereby certify that the foregoing is a true and correct copy of Ordinance No. 90 of Manchester Township, adopted by resolution at a meeting of the Township Board of Trustees held on Tuesday, February 9, 2016, the whole thereof is now in my custody, and that copies of the ordinance were transmitted and published as directed.

Ann M. Becketl, Township Clerk

A copy of the complete ordinance text may be inspected or purchased at the Manchester Township Hall, 275 South Macomb, Manchester, Michigan 48158. The office hours are 8:30 a.m. until noon Monday, Tuesday, Wednesday and Friday.

Adopted: 2/9/2016

Published: 2/18/2016

Effective: 2/25/2016, subject to PA 110 of 2006 as amended.