

DRAFT

SECTION xxxx - SOLAR ENERGY

June 8, 2017

SYSTEMS A. Intent

The City of Ann Arbor promotes the effective and efficient use of solar energy systems. It is the intent of the City 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. 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. In R1 and R2 Zoning Districts, A **Personal-Scale SES** shall mean a solar energy system that is accessory to the principal residential use on the site. 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.
 - b. 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 SES -

In Zoning Districts other than R1 or R2, A SES is permitted subject to the standards of Accessory Buildings, Section 5:59. In R1 and R2 Zoning Districts, Personal-Scale SES shall be permitted 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 xxxx below. An application for a Zoning Compliance Permit shall include the following:

- a. Renderings and/or specifications of the proposed solar energy system.
- b. Plot plan or survey to indicate where the solar energy system is to be installed on the property, including property setbacks and the total Solar Collector Surface area, and total footprint of SES.
- c. Elevations showing the height of the SES.
- d. Description of the screening to be provided for ground-mounted solar energy equipment.

2. 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 can be located in the rear or side yard and shall be located at least three (3) feet from the property line.

A Solar Energy System may be permitted in the front yard, but not the Required Front Setback Area. The SES and all related equipment shall cover no more than 35% of the front yard area outside of the Required Front Setback Area. Within the front yard, the SES must adhere to side setback requirements for the zoning district.

- b. **Height:** Ground-mounted SES shall not exceed six (6) feet in height in the front yard and shall not exceed 21 feet in height in the rear or side yard, measured from the ground at the base of such equipment to the highest point of the system.
- c. **Screening:** Ground-mounted SES shall be screened when located in the front yard. Screening shall consist of fencing, wall, evergreen vegetation, berm or combination thereof with a minimum of 80% opacity.
- d. **Installation and Maintenance:** SES shall be installed, maintained and used only in accordance with the manufacturer's specifications.
- e. **Compliance with Additional Codes:** SES, and the installation and use thereof, shall comply with the State construction code, the electrical code and any other applicable State codes. Installation of a SES shall not commence until all

necessary permits have been issued.

h. **Lot coverage:** Solar energy systems shall not occupy greater than 35% of the required rear setback area.

3. **Building Mounted SES**

- a. **Setbacks:** In all Zoning Districts, building-mounted SES shall comply with Area, Height, and Placement requirements for Principal Building or Accessory Building Standards, as applicable to placement of SES.
- b. **Installation and Maintenance:** SES shall be installed, maintained and used only in accordance with the manufacturer's specifications.
- c. **Compliance with Additional Codes:** SES, and the installation and use thereof, shall comply with the State construction code, the electrical code and any other applicable State codes. Installation of a SES shall not commence until all necessary permits have been issued.

4. **Ancillary Solar Equipment:** Ancillary solar equipment shall be located inside of a building or 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.