

TOWN OF DAYTON
SOLAR ENERGY SYSTEMS ORDINANCE

Section I. PURPOSE

The purpose of this Ordinance is to facilitate the effective and efficient use of Solar Energy Systems while protecting the public health, safety and welfare of Dayton citizens; also preserving the rural identity of the area.

Section II. AUTHORITY

This ordinance is adopted and enacted pursuant to Title 30-A MRSA 3013 and Title 33 Chapter 28-A MRSA 1423

Section III. EFFECTIVE DATE

This ordinance shall take effect upon its enactment by the Town of Dayton. This ordinance shall become effective immediately upon its adoption and enactment by vote of the legislative body of the town at a town meeting.

Section IV. APPLICABILITY

- A. The requirements of this Ordinance shall apply to all small, medium, and large-scale Solar Energy Systems modified or installed after _____ 2020.
- B. All Solar Energy Systems shall be designed, erected, and installed in accordance with all applicable local, state and federal codes, regulations and standards.
- C. Any modification, upgrade, or structural change that materially alters the size, placement or output of an existing Solar Energy System shall comply with this ordinance.

Section V. PERMITTING

- A. Solar Energy Systems or devices shall be installed or operated in Dayton in compliance with this ordinance and any other applicable local, state and federal regulations or codes.
- B. Solar thermal, building-integrated photovoltaic, building mounted photovoltaic, roof mounted, and small-scale ground mounted Solar Energy Systems shall obtain a building permit through the Code Enforcement Officer.
- C. Medium and large-scale ground-mounted Solar Energy Systems are prohibited in the Village District (VD), Resource Protection Overlay District (RP), Shoreland Overlay District (Sho) and River Buffer District (RBD) but are permitted in all the other Zoning Districts. Such Solar Energy Systems shall require approval of the Planning Board as a conditional use permit after application fees, site plan review, performance guarantees, dimensional requirements and performance standards of this ordinance prior to obtaining a building permit through the Code Enforcement Officer.
- D. Historic Buildings. All Solar Energy Systems proposed to be on Historic Buildings require Planning Board Approval prior to receiving a building permit from the Code Enforcement Officer.

Section VI. DIMENSIONAL REQUIREMENTS

A. Height

1. Building-integrated photovoltaic systems and roof-mounted Solar Energy Systems shall not exceed the maximum allowed building height or peak of the roof, whichever is greater, in the district they are proposed to be located. Regarding non-residential uses, roof-mounted Solar Energy Systems shall be considered comparable to a building appurtenance and, for purposes of height measurement, shall be consistent with other building-mounted mechanical devices or similar building appurtenances as determined by the Code Enforcement Officer and Planning Board.
2. Small-scale ground-mounted Solar Energy Systems on residential property (Title 33, Chapter 28-A, MRSA 1421, Definition) in all zoning districts shall not exceed twelve (12) feet in height when oriented at minimum tilt to the vertical.
3. Ground-mounted Solar Energy Systems in all zoning districts shall conform to the building/structure height requirements of the zoning district(s) in which they are permitted in.
4. Pole Mounted Energy systems must comply with height restrictions of the district.

B. Setbacks

1. All ground-mounted Solar Energy Systems shall be regulated by the dimensional setback regulations stipulated in the Zoning Ordinance, Article 5, Dimensional Requirements, or prescribed in other sections of this ordinance.
2. Ground-mounted Solar Energy Systems shall not be located in front yards in any Zoning District unless they are sited at least fifty (50) feet from the front property line(s).

C. Initial Coverage/Calculating Small, Medium or Large Solar Energy Systems Surface Area

Regarding small, medium or large scale Solar Energy Systems, lot coverage and surface area square footage (or solar collector coverage/horizontal projected area) shall be calculated by measuring the total surface area of the solar collector at maximum tilt to the vertical that occupies a given space or mounting surface. See figure VI-C.1 below.

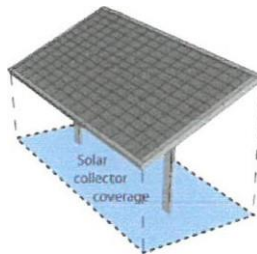


Figure: VI-C.1

Section VII. STANDARDS FOR BUILDING INTEGRATED, BUILDING-MOUNTED, PHOTOVOLTAIC ROOF-MOUNTED AND SMALL-SCALE GROUND MOUNTED SOLAR ENERGY SYSTEMS

- A. All wiring must comply with the National Electrical Code, most recent edition.
- B. Prior to operation, electrical connections must be inspected by a licensed electrician.
- C. Any connection to the public utility grid must be inspected by the appropriate public utility unless waived by the public utility.
- D. Roof-mounted and building-mounted solar collectors shall meet all applicable fire safety and building code standards.
- E. All Solar Energy installations shall have properly rated lightning protected electric circuits.

Section VIII. STANDARDS FOR MEDIUM AND LARGE-SCALE GROUND-MOUNTED SOLAR ENERGY SYSTEMS

In addition to the standards above, medium and large-scale ground-mounted Solar Energy Systems shall comply with the following:

- A. Utility Connections — Reasonable efforts, as determined by the Planning Board, shall be made to place all utility connections from the solar photovoltaic installation underground, depending on appropriate soil conditions, shape, and topography of the site and any requirements of the utility provider.
- B. Safety — The Solar Energy System owner shall provide a copy of the site plan review application to the Fire Chief for their comment. All means of shutting down the Solar Energy System shall be clearly marked on the plan.
- C. Visual Impact — Reasonable efforts, as determined by the Planning Board, shall be made to minimize visual impacts by preserving natural vegetation, screening abutting properties, and protecting scenic resources.
- D. Glare — Solar panel placement shall be prioritized to minimize or negate any solar glare onto nearby properties, public gathering places or roadways without unduly impacting the functionality or efficiency of the Solar Energy System.
- E. Natural resources — Reasonable efforts, as determined by the Planning Board, shall be made to protect wetlands, watersheds, working agricultural lands, surface waters, slopes greater than twenty percent (20%), as well as Undeveloped Habitat Blocks, High Value Plant and Animal Habitats and Focus Areas of Ecological Significance as mapped by the Maine Department of Inland Fisheries and Wildlife's Beginning with Habitat.
- F. If an herbicide is used in controlling ground cover of the area the herbicide needs to be ~~MOFGA (Maine Organic Farmers and Gardeners Association) approved.~~ **permitted by the Maine Board of Pesticides Control.**

Section IX. ADDITIONAL STANDARDS FOR ALL SOLAR ENERGY SYSTEMS

- A. Operations & Maintenance Plan - as part of a medium and/or large-scale ground-mounted Solar Energy System the applicant of the site plan shall include an operation and maintenance plan, which shall include measures for Solar Energy Ordinance DRAFT 11-28-2020

maintaining safe access to the installation as well as other general procedures for operational maintenance of the installation.

- B. Signage - Signs on medium and/or large-scale ground-mounted Solar Energy Systems shall comply with all applicable standards in this zoning ordinance and shall be required, at minimum, to identify the owner and provide a 24-hour emergency contact phone number.
- C. Emergency Services - The owner or operator of a medium and/or large-scale ground-mounted Solar Energy System shall provide a copy of the project summary, electrical schematic, and site plan to the Fire Chief. Upon request the owner or operator shall cooperate with the Fire Department in developing an emergency response plan. All means of shutting down the system shall be clearly marked on the plan. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation.
- D. Installation Conditions - The owner or operator of a medium and/or large-scale ground-mounted Solar Energy System 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 the Fire Chief. The owner or operator shall be responsible for the cost of maintaining the access road(s), unless the road(s) is accepted as a public way. A performance bond shall be established with the Town prior to operation or issuance of a building permit, in a form and amount found suitable by the Town, to cover the total cost plus 10% contingency for site stabilization and the cost to decommission and revegetate the site.
- E. Removal – Any medium and/or large-scale ground-mounted Solar Energy System which has reached the end of its useful life or has been abandoned consistent with this ordinance shall be removed. The owner or operator shall physically remove the installation no more than one year after the date of discontinued operations. The owner or operator shall notify the Code Enforcement Officer by certified mail of the proposed date of discontinued operations and plans for removal. Decommissioning shall consist of:
 - 1. Physical removal of all Solar Energy Systems, structures, equipment, security barriers and transmission lines from the site.
 - 2. Disposal of all solid and hazardous waste in accordance with local, state, and federal waste disposal regulations.
 - 3. Stabilization or re-vegetation of the site as necessary to minimize erosion. The Code Enforcement Officer may allow the owner or operator to leave landscaping or designated below-grade foundations in order to minimize erosion and disruption to vegetation.
- F. Abandonment.
 - 1. Absent notice of a proposed date of decommissioning or written notice of extenuating circumstances, a medium and/or large-scale ground-mounted Solar Energy System shall be considered abandoned when it fails to generate electricity for more than one year without having first obtained the written consent of the Code Enforcement Officer. Determination of abandonment shall be made by the Code Enforcement Office.
 - 2. If the owner or operator of the medium and/or large scale ground mounted Solar Energy System fails to remove the installation in accordance with the requirements of this section within one year of abandonment or the proposed date of decommissioning, the Town retains the right to use any and all legal or available means necessary to cause an abandoned, hazardous, or decommissioned medium and/or large-scale ground-mounted Solar Energy System to be removed. The performance guarantee (Bond) will be used by the town to rectify the situation.

Section X. DEFINITIONS

SOLAR COLLECTOR: A device, such as a PV cell or a solar thermal collector that absorbs solar radiation from the sun and transforms it into electricity or heat.

SOLAR ENERGY SYSTEM: Any active Solar Energy System which uses mechanical, physical, or chemical means to convert energy collected from sunlight into an alternative form of energy. Solar Energy Systems include, but are not limited to: photovoltaic cells, solar hot water heaters, etc.

SOLAR ENERGY SYSTEM, BUILDING-INTEGRATED PHOTOVOLTAIC (BIPV): Any Solar Energy System that consists of photovoltaic cells and/or panels which are fully integrated into the exterior structure of a building.

SOLAR ENERGY SYSTEM, BUILDING MOUNTED PHOTOVOLTAIC: Any Solar Energy System that consists of photovoltaic cells and/or panels which are affixed to the exterior of a building such as the façade (see definition of Solar Energy System, Roof-Mounted).

SOLAR ENERGY SYSTEM, GROUND-MOUNTED: Any Solar Energy System that is structurally mounted to the ground and is not attached to a building; may be of any size (small-, medium- or large-scale).

SOLAR ENERGY SYSTEM, LARGE SCALE: A Solar Energy System which occupies more than 40,000 square feet of surface area; surface area shall be measured by the total surface area of the solar collector at maximum tilt to the vertical that occupies a given space or mounting surface, also referred to as the projected area of the array. See Figure VI-C.1 for an example of measuring surface area.

SOLAR ENERGY SYSTEM, MEDIUM-SCALE: A Solar Energy System which occupies more than 1,750 square feet but less than 40,000 square feet of surface area; surface area shall be measured by the total surface area of the solar collector at maximum tilt to the vertical that occupies a given space or mounting surface, also referred to as the projected area of the array. See Figure VI-C.1 for an example of measuring surface area.

SOLAR ENERGY SYSTEM PHOTOVOLTAIC (PV): A Solar Energy System that produces electricity by the use of semiconductor devices, called photovoltaic cells, which generate electricity when exposed to sunlight. A PV system may be roof mounted, ground-mounted, or pole-mounted.

SOLAR ENERGY SYSTEM, ROOF-MOUNTED: Any Solar Energy System that is mounted on the roof of a building or structure; may be of any size (small-, medium- or large-scale).

SOLAR ENERGY SYSTEM, SMALL-SCALE: A Solar Energy System which occupies no more than 1,750 square feet or less of surface area; surface area shall be measured by the total surface area of the solar collector at maximum tilt to the vertical that occupies a given space or mounting surface, also referred to as the projected area of the array. See Figure VI-C.1 for an example of measuring surface area. **Small-scale solar energy systems do not include low-voltage landscape lights (12 volts or less); or systems that produce 400 watts or less, that do not exceed 14 square feet in surface area, and are not connected to a grid and instead charge a battery or battery bank.**

SOLAR THERMAL SYSTEM (Solar Hot Water or Solar Heating Systems): A Solar Energy System that directly heats water or other liquid, or air, using sunlight.

TILT: The angle of the solar panels and/or solar collector relative to the vertical. Adjustable-tilt Solar Energy Systems can be manually or automatically adjusted throughout the year. Alternatively, fixed-tilt systems remain at a static tilt year-round.

Section XI. VALIDITY AND SEVERABILITY

Should any section or provisions of this Ordinance be declared by the courts to be invalid, such decision shall not invalidate any other section or provision of this Ordinance.

DRAFT