

**ANNUAL TOWN MEETING WARRANT
TOWN OF DRACUT
NOVEMBER 2023**

**ARTICLE 4
ZONING BY-LAW
SOLAR PHOTOVOLTAIC FACILITIES**

Summary:

The current Town of Dracut Zoning Bylaw omits any regulations for solar energy systems which means that this use isn't permitted in the Town of Dracut.

Chapter 40A Section 3 of the Massachusetts General Laws prevents local prohibition or unreasonable regulation of solar energy systems.

These two items together effectively mean we have no local controls over development of any Solar Energy Installations

What will a "YES" vote mean?

A "YES" vote will add solar energy regulations, definitions and entries to the Table of Uses, eliminating the current conflict with State Law.

What will a "NO" vote mean?

A "NO" vote would keep the current situation risking that a developer is allowed to install a solar energy system without any regulations imposed by the Town of Dracut.

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To see if the Town will Vote to Amend the Zoning Bylaw as follows:

- 1. Amend Section 2.4.2 Applicability by inserting at the existing 2.4.2.A.5 the following language:**

“Large Scale Solar Photovoltaic Facility” and renumbering the existing 2.4.2.A.5 as 2.4.2.A.6”

- 2. Amend Section 3.3 (Table of Permitted Uses) of the Zoning Bylaw by inserting the following row in Section titled Other Uses as follows:**

3.3 TABLE OF PRINCIPAL USES

Other Uses	Residential			Business					Industrial	
	R-1	R-2	R-3	B-1	B-2	B-3	B-4	B-5	I-1	I-2
Large Scale Solar Photovoltaic Facility	PB	0	0	0	0	0	PB	PB	PB	PB

- 3. Amend Section 3.4.1. Accessory Uses Permitted by inserting the following Sections.**

3.4.1.E.5 Roof Mounted and Small-Scale Solar Energy Systems accessory to a principal use are allowed in all zoning districts subject to all local and other government requirements.

3.4.1.E.6 Medium Scale Ground Mounted Solar Energy Systems accessory to a principal use are allowed by Special Permit from the Planning Board subject to all local and other government requirements.

- 4. Amend Section 3.5.3 Nonconforming Uses and Structures Applicability by inserting after the first sentence the following sentences:**

Improvements that do not change the use or the basic characteristics or appearance of the building or structure are allowed. Such improvements include but are not limited to the installation or replacement of roof mounted solar energy systems.

- 5. Add a new Section 8.7. Large Scale Ground-Mounted Solar Photovoltaic Facilities to read as follows:**

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8.7 LARGE-SCALE GROUND-MOUNTED SOLAR PHOTOVOLTAIC FACILITIES

8.7.1 Purpose.

The purpose of this section is to promote the creation of new large-scale ground-mounted solar photovoltaic installations by providing standards for the placement, design, construction, operation, monitoring, modification and removal of such installations that address public safety, minimize impacts on scenic, natural and historic resources and to provide adequate financial assurance for the eventual decommissioning of such installations. The provisions set forth in this section shall apply to the construction, operation, and/or repair of large-scale ground-mounted solar photovoltaic installations.

8.7.2 Applicability.

This section applies to large-scale ground-mounted solar photovoltaic installations proposed to be constructed after the effective date of this section. This section also pertains to physical modifications that materially alter the type, configuration, or size of these installations or related equipment.

8.7.3 General Requirements

The following requirements are common to all solar photovoltaic installations to be sited in designated locations.

- A. Compliance with laws, bylaws and regulations. The construction and operation of all large-scale solar photovoltaic installations shall be consistent with all applicable local, state and federal requirements, including but not limited to all applicable safety, construction, electrical, and communications requirements. All buildings and fixtures forming part of a solar photovoltaic installation shall be constructed in accordance with the State Building Code.
- B. Building permit and building inspection. No large-scale solar photovoltaic installation shall be constructed, installed or modified as provided in this section without first obtaining appropriate permits.
- C. Fees. The application for a building permit for a large-scale solar photovoltaic installation must be accompanied by the fee required for a building permit.
- D. Site plan review. Ground-mounted large-scale solar photovoltaic shall undergo Site Plan Review by the Planning Board prior to construction, installation or modification as provided in this section. Site Plan Review may be conducted concurrently with the Special Permit process.

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- E. General. All plans and maps shall be prepared, stamped and signed by a professional engineer licensed to practice in Massachusetts.

8.7.4 Required Documents.

Pursuant to the special permit and site plan review process, the project proponent shall provide the following documents in addition to those required in Sections 2.3.12 and 2.4. 5 respectively:

- I. Blueprints or drawings of the solar photovoltaic installation stamped and signed by a professional engineer licensed to practice in the Commonwealth of Massachusetts showing the proposed layout of the system and any potential shading from nearby structures or vegetation;
 - II. One- or three-line electrical diagram detailing the solar photovoltaic installation, associated components, and electrical interconnection methods, with all National Electrical Code compliant disconnects and overcurrent devices;
 - III. Documentation of the major system components to be used, including the PV panels, mounting system, and inverter;
 - IV. Name, address, and contact information for proposed system installer;
 - V. Name, address, phone number and signature of the project proponent, as well as all co-proponents or property owners, if any;
 - VI. The name, contact information and signature of any agents representing the project proponent; and
1. Documentation of actual or prospective access and control of the project site
 2. Zoning district designation for the parcel(s) of land comprising the project site [submission of a copy of a zoning map with the parcel(s) identified is suitable for this purpose];
 3. Proof of liability insurance;
 4. Description of financial surety that satisfies Planning Board requirements.
 5. Site control. The project proponent shall submit documentation of actual or prospective access and control of the project site sufficient to allow for construction and operation of the proposed solar photovoltaic installation. Fencing around installed equipment shall be provided to control access to a large-scale ground-mounted solar photovoltaic facility in order to prevent access to the facility. The fencing shall be compatible with the character of the Town and shall not consist of barbed wire or razor wire.
 6. The project proponent shall submit a plan for the operation and maintenance of the large-scale ground-mounted solar photovoltaic installation, which shall include measures for

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maintaining safe access to the installation, stormwater controls, as well as general procedures for operational maintenance of the installation.

7. Decommissioning Plan. The applicant shall submit with its application a decommissioning plan be implemented upon abandonment and/or in conjunction with removal of the facility. The owner or operator of the large-scale solar photovoltaic installation shall notify the Building Inspector in writing at least twenty days prior to when a solar large-scale solar photovoltaic installation will be decommissioned. Decommissioning of an abandoned or discontinued large-scale solar photovoltaic installation shall be completed within six months after the facility ceases operation.

The decommissioning plan shall include:

1. A narrative description of the activities to be accomplished, including who will perform that activity and at what point in time, for complete physical removal of all large-scale solar photovoltaic installation components, 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. The anticipated life of the large-scale solar photovoltaic installation;
4. The estimated decommissioning costs and how said estimate was determined;
5. The method of ensuring that funds will be available for decommissioning and restoration;
6. The method by which the decommissioning cost will be kept current;
7. The manner in which the site will be restored, including a description of how any changes to the surrounding areas and other systems adjacent to the large-scale solar photovoltaic installation, such as, but not limited to, structural elements, building penetrations, means of egress, and required fire detection suppression systems, will be protected during decommissioning and confirmed as being acceptable after the system is removed; and
8. A listing of any contingencies for removing an intact operational large-scale solar photovoltaic installation from service, and for removing a large-scale solar photovoltaic installation that has been damaged by a fire or other event.
9. Decommissioning Fund. The owner and/or operator of the large-scale solar photovoltaic installation, shall continuously maintain a fund or other surety acceptable to the Town, in a form approved by the Planning Board and Town Counsel, for the removal of the large-scale solar photovoltaic installation, in an amount to be determined by the Planning Board, for the period of the life of the facility. All costs of the financial security shall be borne by the applicant. The Town shall have the right to access the surety should the owner and/or operator fail to properly decommission large-scale solar photovoltaic installation.
10. Utility notification. No large-scale ground-mounted solar photovoltaic installation shall be constructed until evidence has been given to the Planning Board that the

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local electric utility has been informed of the solar photovoltaic installation owner or operator's intent to install an interconnected customer-owned generator. Off-grid systems less than 250 kW shall be exempt from this requirement. The Building Commissioner may issue a permit only if the large-scale ground-mounted solar photovoltaic device complies with this section.

8.7.5 Waivers.

The Planning Board may waive submission requirements of Site Plan or Special Permit Applications as it deems appropriate. However, if the device does not comply with one or more of the following requirements, the applicant shall be required to obtain a special permit from the Planning Board. If a special permit is not otherwise required, the Planning Board may waive such requirement(s), after finding that such waiver(s) will not derogate from the intent of this chapter or be detrimental or injurious to the public.

8.7.6 Dimension and Density Requirements.

Setbacks. For large-scale ground-mounted solar photovoltaic installations, front, side and rear setbacks shall be as follows:

- A. Front yard: The front yard depth shall be at least 50 feet.
- B. Side yard: Each side yard shall have a depth of at least 50 feet.
- C. Rear yard: The rear yard depth shall be at least 50 feet.
- D. Appurtenant structures. All appurtenant structures to large-scale ground-mounted solar photovoltaic installations shall be subject to reasonable regulations concerning the bulk and height of structures, lot area, setbacks, open space, parking and building coverage requirements. All such appurtenant structures, including, but not limited to, equipment shelters, storage facilities, transformers, and substations, shall be architecturally compatible with each other. Whenever reasonable, structures should be shaded from view by vegetation and/or joined or clustered to avoid adverse visual impacts.

8.7.7 Design standards.

- A. Lighting. Lighting of solar photovoltaic installations shall be consistent with local, state and federal law. Lighting of other parts of the installation, such as appurtenant structures, shall be limited to that required for safety, security, and operational purposes, and shall be reasonably shielded from abutting properties. Where feasible, lighting of the solar photovoltaic installation shall be directed downward and shall incorporate full cut-off fixtures to reduce light pollution.

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- B. Signage. Signs on large-scale ground-mounted solar photovoltaic installations shall comply with Section 6.2 of this Zoning Bylaw. A sign consistent with this Zoning Bylaw shall be required to identify the owner and provide a twenty-four-hour emergency contact phone number. Solar photovoltaic installations shall not be used for displaying any advertising except for reasonable identification of the manufacturer or operator of the solar photovoltaic installation.
- C. 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 electric utility. If an existing aboveground connection solution already exists, however, this can be used if it meets the requirements of the electric utility. Electrical transformers for utility interconnections may be aboveground if required by the electric utility.
- D. Stormwater management. Calculations of storm drainage to demonstrate and assure compliance with the requirements of all applicable federal, state and local regulations and guidelines including, but not limited to, the Department of Environmental Protection Stormwater Management Policy, as it may be amended, must be provided for any large-scale solar photovoltaic installation.

8.7.8 Safety and Environmental Standards.

- A. Emergency services. The large-scale solar photovoltaic installation owner or operator shall provide a copy of the project summary, electrical schematic, and site plan to the local fire chief and electric utility. Upon request, the owner or operator shall cooperate with local emergency services in developing an emergency response plan. All means of shutting down the solar photovoltaic installation shall be clearly marked. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation.
- B. Land clearing, soil erosion and habitat impacts. Clearing of natural vegetation shall be limited to what is necessary for the construction, operation and maintenance of the large-scale ground-mounted solar photovoltaic installation or otherwise prescribed by applicable laws, regulations, and bylaws.
- D. Mitigation for Loss of Carbon Sequestration and Forest Habitat. If land that is Forestland or has been Forestland within one year immediately preceding the filing of an application to install a Tier 2 BESS, the applicant shall demonstrate that they have made best efforts to preserve forest land and minimize loss of carbon sequestration. Monitoring and maintenance.
 - I. Solar photovoltaic installation conditions. The large-scale ground-mounted solar photovoltaic installation owner or 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

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acceptable to the local Fire Chief and emergency medical services. The owner or operator shall be responsible for the cost of maintaining the solar photovoltaic installation and any access road(s), unless accepted as a public way.

- II. Modifications. All material modifications to a solar photovoltaic installation made after issuance of the required building permit shall require approval by the Planning Board and the electric utility.

8.7.9 Abandonment

Abandonment. Absent notice of a proposed date of decommissioning or written notice of extenuating circumstances, the solar photovoltaic installation shall be considered abandoned when it fails to operate for more than one year without the written consent of the Planning Board. If the owner or operator of the large-scale solar photovoltaic installation fails to remove the installation in accordance with the requirements of this section upon any abandonment, the Town may, after compliance with any applicable state and federal constitutional requirements, enter the property and utilize the available bond and/or security for the removal of a solar photovoltaic installation and restoration of the site in accordance with the decommissioning plan.

Amend Section 9 Definitions by inserting the following in alphabetical order:

SOLAR ENERGY SYSTEM, GROUND-MOUNTED: A solar photovoltaic system on a parcel that is structurally mounted on the ground and is not roof-mounted,

SOLAR ENERGY SYSTEM, LARGE-SCALE: An Active Solar Energy System that has a rated minimum nameplate capacity of 250kW DC.

SOLAR ENERGY SYSTEM, MEDIUM-SCALE: An Active Solar Energy System that has a rated nameplate capacity of 10 - 250 kW DC.

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

SOLAR ENERGY SYSTEM, SMALL-SCALE: An Active Solar Energy System that has a rated nameplate capacity of 10 kW DC or less.

or take any action relative thereto.

Submitted by: Alison Manugian, Community Development Director

Recommendations: Approval Recommended (Planning Board)