



TOWN OF MILFORD, NH
OFFICE OF COMMUNITY DEVELOPMENT

1 UNION SQUARE, MILFORD, NH 03055

TEL: (603)249-0620

WEB: WWW.MILFORD.NH.GOV

STAFF MEMO

Date: December 27, 2021

To: Planning Board

From: Jason Cleghorn, Town Planner

Subject: Amendments to Zoning Ordinance Article VII – Section 7.11 Solar Collection Systems

The purpose of this memorandum is to discuss amendments to the Milford Zoning Ordinance by amending Article VII, Section 7.11 Solar Collection Systems by modifying the definition of Residential Solar collection system, clarifying submittal requirements as part of Conditional Use Permit review, and amending locational requirements for solar collection systems larger than 750 sf within the Residential ‘A’, ‘B’, ‘R’ zoning districts. The proposed modifications seek to increase the maximum size permitted for residential ground mounted units permitted by the Zoning Ordinance to more accurately reflect industry standards regarding size, reduce the regulatory/administrative burden on property owners/applicants, and mitigate potential visual impacts on abutting properties.

The proposed amendments were introduced and discussed at the November 2nd and November 30th Planning Board Work Session and voted by the Planning Board to post and publish at the December 7th Planning Board Meeting. At those meetings, the Planning Board discussed the appropriate minimum square foot area for a ground mounted solar collection system and eliminating the reference/requirement for maximum kW output for said systems.

ARTICLE II: BALLOT VOTE XX – ZONING ORDINANCE AMENDMENT SOLAR COLLECTION SYSTEMS

Are you in favor of adopting the following amendment to the Town of Milford Zoning Ordinance as proposed by the Planning Board?

To see if the Town will amend the Milford Zoning Ordinance, Article VII, Sections 7.11.3 Definitions, 7.11.4.A Table of Uses and B. Specific Solar System Requirements and Exceptions by adding a requirement for a Conditional Use Permit for ground mounted Residential Solar System located in the Residential ‘A’, ‘B’, ‘R’ zoning districts that exceed a maximum seven-hundred fifty (750) square feet and the placement of ground mounted units within the property by inserting the underlined text and renumbering accordingly to read as follows:

7.11.3 Definitions

Agriculture Solar - Accessory: Any ground-mounted or roof-mounted solar collection system designed to primarily reduce on-site consumption of utility power and without a limit to the rated nameplate capacity or solar land coverage provided the existing agricultural use is preserved at the time of installation.

Agriculture Solar - Primary: Any ground-mounted solar collection system that is partially used to reduce on-site consumption of utility power and with a rated nameplate capacity up to 1 MW AC in size or has a solar land coverage in excess of 5 acres provided the existing agricultural use is preserved at the time of installation.

Carport Mount: Any solar collection system of any size that is installed on the roof structure of a carport over a parking area.

Commercial Solar: A use of land that consists of one or more free-standing, ground-mounted solar collection systems with a rated nameplate capacity of up to 1 MW AC and that is less than 5 acres in solar land coverage.

Community Solar: A use of land that consists of one or more free-standing, ground-mounted solar collection systems regardless of nameplate capacity that is up to 100 kW AC and that is less than 1 acre of solar land coverage.

Ground Mount: A solar collection system and associated mounting hardware that is affixed to or placed upon (such as ballasted systems) the ground including but not limited to fixed, passive or active tracking racking systems.

Industrial Solar: A use of land that consists of one or more free-standing, ground-mounted solar collection systems regardless of nameplate capacity that is between 25 acres and 50 acres in solar land coverage.

Large Commercial Solar: A use of land that consists of one or more free-standing, ground-mounted solar collection systems with a rated nameplate capacity of between 1 MW and 5 MW that is between 5 and 25 acres in solar land coverage.

Rated Nameplate Capacity: Maximum rated alternating current (“AC”) output of solar collection system based on the design output of the solar system.

Residential Solar: Any ground-mounted or roof-mounted solar collection system primarily for on-site residential use, and consisting of one or more free-standing, ground or roof-mounted, solar arrays or modules, or solar related equipment, intended to primarily reduce on-site consumption of utility power. ~~and with a rated nameplate capacity of 10 kW AC or less and that is less than 500 square feet solar land coverage.~~

Roof Mount: A solar collection system that is structurally mounted to the roof of a building or other permitted structure, including limited accessory equipment associated with a system which may be ground-mounted. For purposes of calculating array sizes or solar land coverage under the solar definitions in this section, roof-mounted portions shall not be included if the system is made up of both roof and ground-mounted systems, the roof-

mounted portions shall also be excluded.

Solar Array: A grouping of multiple solar modules with purpose of harvesting solar energy.

Solar Cell: The smallest basic solar electric device which generates electricity when exposed to light.

Solar Collection System: Includes all equipment required to harvest solar energy to generate electricity. The Solar Collection System includes storage devices, power conditioning equipment, transfer equipment, and parts related to the functioning of those items. Solar Collection Systems include only equipment up to (but not including) the stage that connection is made to the utility grid or site service point.

Solar Glare: The potential for solar panels to reflect sunlight, with an intensity sufficient to cause annoyance, discomfort, or loss in visual performance and visibility.

Solar Land Coverage: Defined exclusively for the purposes of calculating the footprint of the land area occupied by the components of a solar array. The Solar Land Coverage is the land area that encompasses all components of the solar collection system including, but not limited to mounting equipment, panels and ancillary components of the system. This definition does not include access roads or fencing and is not to be interpreted as a measurement of impervious surface as it may be defined in this ordinance.

Solar Module: A grouping of solar cells with the purpose of harvesting solar energy.

Solar Power Generation Station: Any solar collection system that is over 30 MW in nameplate capacity. In no case shall a Solar Power Generation Station exceed 150 acres.

Utility Solar: A use of land that consists of one or more free-standing, ground-mounted solar collection systems regardless of nameplate capacity that is over 50 acres in solar land coverage and less than 30 MW in rated nameplate capacity.

7.11.4 District Regulations

A. Table of Uses:

	Zoning District				
	Residential R	Residential A, B	Commercial / Limited Commercial	ICI	ICI2 / Industrial
Residential Solar	P, <u>CUP</u>	P, <u>CUP</u>	P	P	P
Community Solar	P	X	P	P	P
Accessory Agricultural Solar	P	X	P	P	P
Primary Agricultural Solar	CUP	X	P	P	P
Commercial Solar	CUP	X	X	CUP	CUP
Large Commercial Solar	CUP	X	X	CUP	CUP
Industrial Solar	X	X	X	CUP	CUP
Utility Solar	X	X	X	X	CUP

Solar Power Generation Station	X	X	X	X	CUP
--------------------------------	---	---	---	---	-----

- P = Use permitted by right with building and electrical permit.
- CUP = Use permitted by Conditional Use Permit.
- X = Use prohibited.

B. Specific Solar Collection System Requirements and Exemptions:

1. Ground mounted Residential Solar Collection Systems over seven-hundred fifty (750) cumulative square feet within the Residential ‘R’, ‘A’, and ‘B’ Zoning Districts will require a Conditional Use Permit.
2. A ground-mounted Accessory Residential Solar system over 15 feet in height at any point or larger than seven-hundred fifty (750) square feet shall be located in the rear yard between the primary structure and the rear lot line. All other ground-mounted solar collection systems located in the front yard shall be reasonably screened from abutting residential properties.
3. Non-residential Carport Mounted solar collection systems over parking areas are permitted in all zones without a Conditional Use Permit. A site plan review shall be required in accordance with the Town Development Regulations.
4. Roof-mounted solar collection systems of any size are permitted in all zones without a Conditional Use Permit except within the Oval District Overlay.
5. Municipal Systems: All solar collection systems for municipal use are exempt from land use regulations pursuant to NH RSA 674:54.

And in connection therewith, amend the Milford Zoning Ordinance, Article VII, Section 7.11.5.B.2 to further clarify the submittal requirements for a Conditional Use Permit by inserting the underlined text to read as follows:

B. Application and Review Procedure:

1. An Application for a Conditional Use shall be initiated by filing with the Planning Board for an application for a Conditional Use Permit.
2. The applicant shall follow the requirements for specific uses as laid out in this Ordinance. The applicant shall submit an application in general accordance with the Minor Site Plan development regulations and shall include the following:
 - a. System Layout.
 - i. A detailed sketch or plan showing the installation area of the site and narrative demonstrating compliance with the requirements of the Zoning Ordinance.
 - ii. A detailed sketch of any land clearing or grading required for the installation and operation of the system.
 - iii. The location of all equipment to be installed on site including utility connection point(s) and equipment. To the maximum extent practical all wiring associated with the utility connection shall be underground.
 - iv. All equipment locations, except for utility connections, shall comply with the required setbacks.
 - v. An elevation drawing or picture of the system from the manufacturer of the proposed solar collection system.

Are you in favor of adoption of Amendment #X as proposed by the Milford Planning Board for the Town of Milford Zoning Ordinance as follows:

AMENDMENT #XX: Amend Article VII, Sections 7.11.3 Definitions, 7.11.4.A Table of Uses and B. Specific Solar System Requirements and Exceptions by requiring a Conditional Use Permit for ground mounted Residential Solar Collection Systems that exceed a maximum seven-hundred fifty (750) square feet in the Residential 'A', 'B', 'R' zoning districts and requirements for the placement of said systems within the property. In addition, amend Article VII, Section 7.11.5.B.2 to further clarify the submittal requirements for a Conditional Use Permit.

Topical Discussion of Proposed Amendment: The proposed amendments seek to address the potential visual impact of ground mounted solar collection systems within the Residential 'A', 'B', 'R' zoning districts by establishing a minimum square foot area that would require a Planning Board Conditional Use Permit and the placement of solar collection system on the property. The amendments also seek to clarify the application submittal requirements involving the project narrative and plan information.