



TOWN OF GUILFORD

PLANNING AND ZONING COMMISSION

50 BOSTON STREET

TOWN HALL SOUTH

GUILFORD, CONNECTICUT 06437

Action 4.6.1
Zoning Review for Solar

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August 23, 2019

Memorandum

To: Robin Campot, Sustainable Task Force Committee, Town of Guilford
From: Erin Mannix, Zoning Enforcement Officer
Re: Section 4.6.1 Streamline Solar Permitting for Small Solar Installations

Potential barriers in current code language:

Sec. 273-2 Word usage; definitions. This section of the zoning code does not define solar PV systems. Examples of potential definitions are as follows:

Accessory Roof-Mounted Solar Photovoltaic System: A solar photovoltaic system attached to any part or type of roof on a building or structure that is either the principal structure or an accessory structure on a recorded [lot/parcel/property] with the primary purpose of producing electricity for onsite consumption. This system also includes any solar photovoltaic-based architectural elements.

Accessory Ground-Mounted Solar Photovoltaic System: A solar photovoltaic system that is anchored to the ground via a pole or other mounting system and produces electricity primarily for onsite consumption. This system also includes any solar photovoltaic-based architectural elements.

Accessory Structure: A structure, the use of which is customarily incidental and subordinate to that of the principal building, and is located on the same lot or premises as the principal building. [Note: Your municipality could use your existing definition of “Accessory Structure”]

Building-Integrated Solar Photovoltaic System: A solar energy system that consists of integrating photovoltaic modules into the building structure, such as the roof or the façade and which does not alter the relief of the roof.

Passive Solar Energy Techniques: As defined in Connecticut General Statute 8-25 (b), these are site design techniques which maximize solar heat gain, minimize heat loss and provide thermal storage within a building during the heating season and minimize heat gain and provide for natural ventilation during the cooling season. The site design techniques shall include, but not be limited to: (1) House orientation; (2) street and lot layout; (3) vegetation; (4) natural and man-made topographical features; and (5) protection of solar access within the development.

Photovoltaic (PV): A semiconductor based device that converts light directly into electricity.

Principal Solar Photovoltaic System: A solar photovoltaic system that captures solar energy and converts it to electrical energy primarily for offsite use and is the primary land use of the property on which it is located. Some electricity may be used by an onsite building.

Solar Photovoltaic (PV)-based Architectural Element: Structural/architectural element that provides protection from weather that includes awnings, canopies, porches or sunshades and that is constructed with the primary covering consisting of solar PV modules, and may or may not include additional solar PV related equipment.

Solar Photovoltaic (PV) Related Equipment: Items including a solar photovoltaic cell, panel or array, lines, mounting brackets, framing and foundations used for or intended to be used for collection of solar energy.

Solar Photovoltaic (PV) System: A solar collection system consisting of one or more building systems, solar photovoltaic cells, panels or arrays and solar related equipment that rely upon solar radiation as an energy source for collection, inversion, storage and distribution of solar energy for electricity generation.

Solar Thermal System: A solar collection system that directly heats water or other liquid using sunlight. The heated liquid is used for such purposes as space heating and cooling, domestic hot water, and heating pool water.

This step would be Priority 1 in establishing zoning regulations for Solar PV systems.

Section 273-16 Residential districts. This section, referencing Table 4, does not address Solar PV systems as an allowed use in residential zones. An example to address this could be:

Accessory Roof-Mounted and Ground-Mounted Solar PV Systems are permissible in all zoning districts as an accessory use to any lawfully permitted principal use on the same [lot/parcel/property] upon issuance of the proper permit pursuant to [Section/Article] and upon compliance with all requirements of this section and as elsewhere specified in this Ordinance. Building-Integrated Solar Photovoltaic Systems that are integrated into the roof or the façade of a structure, and which do not alter the relief of the roof, are permitted outright in all zoning districts.

This step in the process of establishing zoning regulations would be a Priority 2.

Section 273-38 Residential Accessory uses, buildings, and structures This Section could be amended to include small scale solar PV systems as accessory structures or uses in a residential zone.

This step in the process of establishing zoning regulations would be a Priority 3.

Article V, Area, Location & Bulk Requirements Table 3 & 3B. This Section could be amended to include exemptions to bulk standards in residential and commercial zones are deemed appropriate. Some examples could be as follows:

Accessory Roof-Mounted Solar PV Systems shall be exempt from height restrictions pertaining to the principal structure so that the height of the rooftop solar PV system does not contribute to the total height of the principal structure [Alternatively, rooftop solar PV systems will not extend more than “X” feet from the highest point above the roof surface.2]

Accessory Roof-Mounted Solar PV Systems are exempt from zoning setbacks but may be subject to roof setbacks specific to solar PV in the State of Connecticut Building Code. Accessory Roof-Mounted Solar PV Systems will not extend beyond the edges of the roof on which they are mounted.

The surface area of Accessory Ground-Mounted Solar PV Systems will be exempt from contributing to the calculation of overall lot coverage.

The surface area of Accessory Ground-Mounted Solar PV Systems will be exempt from contributing to the calculation of overall impervious surface coverage. [Alternatively, only the footings4 of Accessory Ground-Mounted Solar PV Systems will contribute to the calculation of overall impervious surface coverage.]

This step in establishing zoning regulations for solar PV would be a priority 4.

Potential gaps in current code language:

As stated above, the current Guilford Zoning Code is silent with respect to solar PV systems. The above steps would resolve this gap.

Additional Notes:

The Town of Guilford is currently under contract with an outside consulting firm, Planimetrics, to re-write the Zoning Code and Subdivision Code. At this time, the Zoning Commission could review the need for language regarding regulations and potential streamlining of both small scale and large scale solar PV systems.

I, _____, as _____ of _____, _____,
(name) (title) (community) (state)

Have received the zoning review and read its findings.

Signature _____

Date _____

Zoning Commission could review the need for language regarding regulations and potential streamlining of both small scale and large scale solar PV systems.

Sustainable Task
Guilford Member/
Guilford Resident

I, Robin Canpot, as _____ of Guilford, CT,
(name) (title) (community) (state)

Have received the zoning review and read its findings.

Signature [Handwritten Signature] Date 8/23/19