

2013 DRAFT ZONING ARTICLE

**AMEND ZONING BYLAW –
SOLAR POWER INSTALLATIONS**

(Two-thirds vote)

To see if the Town will vote to amend the Zoning Bylaw as follows:

- A. Delete the words “solar systems;” from subsection 3.8.1.1 under Section 3.8.1 (Accessory Uses permitted in the Residential Districts and dwellings in Non-residential Districts),
and

Insert under section 3.8.3 (Accessory Uses permitted in any Zoning District) the following new subsections 3.8.3.8 and 3.8.3.9:

- 3.8.3.8 Solar photovoltaic and thermal energy systems and devices that primarily benefit and support the PRINCIPAL USE(S) on the same LOT, including but not limited to roof -, wall -, ground -, and pole-mounted installations, and canopy installations above parking lots or driveways.
- 3.8.3.9 Solar photovoltaic and thermal energy systems and devices that, without limitation, may benefit all energy users provided such systems are roof mounted or wall mounted installations, or canopy installations above parking lot or driveways.

- B. In Section 3, Table of Principal Uses, insert the following new lines and footnotes:

		RESIDENTIAL DISTRICTS				VILLAGE DISTRICTS					OFFICE DISTRICTS	
PRINCIPAL USES		R-2 R-4 R-8 R-8/4 R-10 R-10/8	R-A	R-AA	VR	EAV	EAV-2	NAV	SAV	WAV	OP-1	OP-2
3.2 INDUSTRIAL USES												
3.6.5	Ground-Mounted Neighborhood Solar Photovoltaic Installation (12)	Y	Y	Y	N	N	N	N	N	N	Y	Y
3.6.6	Ground-Mounted Industrial Solar Photovoltaic Installation (12)	SPP	SPP	SPP	N	N	N	N	N	N	Y	Y

		BUSINESS DISTRICTS			INDUSTRIAL DISTRICTS				SP. DIST.		
PRINCIPAL USES		KC	LB	PM	GI	LI	LI-1	SM(1)	TD	ARC	SITE PLAN
3.2 INDUSTRIAL USES											
3.6.5	Ground-Mounted Neighborhood Solar Photovoltaic Installation (12)	N	Y	Y	Y	Y	Y	Y	Y	Y	NR
3.6.6	Ground-Mounted Industrial Solar Photovoltaic Installation (12)	N	SPP	SPP	Y	Y	Y	Y	Y	Y	NR

(12) Refer to Section 3.11 for specific standards, requirements, exemptions and special permit criteria for Ground-Mounted Solar Photovoltaic Installations.

C. In section 3.6 (Industrial Use Definitions) insert the following new subsections:

3.6.5 Ground-Mounted Neighborhood Solar Photovoltaic Installation - A solar photovoltaic installation with a layout that is not more than one (1) acre in size and that is primarily designed to benefit the energy needs of USES in the immediately surrounding area or neighborhood. Layout shall mean the total area of the vertical projection on the ground of all panels in the installation's most horizontal tilt position and shall include all spaces between the panels. Ground-Mounted shall mean that installations are structurally mounted to the ground in any manner, including but not limited to ground anchored pole, rack, or rail installations, or non-

ground penetrating ballasted installations; not roof-mounted installations or canopy installations above parking lots or driveways.

- 3.6.6 Ground-Mounted Industrial Solar Photovoltaic Installation - A solar photovoltaic installation with a layout that is of any size and that is primarily designed to benefit all energy users regardless of location or vicinity to the installation. The words 'layout' and 'ground-mounted' shall have the same meaning as in section 3.6.5 above.

D. Insert a new Section 3.11 as follows:

3.11 Special Requirements for Ground-Mounted Solar Photovoltaic Installations

- 3.11.1 Purposes – To provide reasonable regulations pertaining to public health, safety and welfare for Ground-Mounted Solar Photovoltaic Installations in accordance with Massachusetts General Law Chapter 40A, Section 3.
- 3.11.2 Applicability – This Section 3.11 shall apply to all Ground-Mounted Neighborhood and Industrial Solar Photovoltaic Installations, including related BUILDINGS, STRUCTURES, and equipment, and to physical modifications of such installations that materially alter their type, configuration, or size. For regulations on solar energy systems as ACCESSORY USES, see Section 3.8.3 of this bylaw.
- 3.11.3 Standard and Requirements – Except where specifically stated otherwise, the following provisions shall apply to all Ground-Mounted Neighborhood and Industrial Solar Photovoltaic Installations in all zoning districts. They shall not apply to solar energy systems as ACCESSORY USES under Section 3.8.3.
- 3.11.3.1 Setbacks – The layout of an installation and all related STRUCTURES, BUILDINGS and equipment shall comply with the front, side and rear yard requirements of the zoning district in which they are located, except for power feed and distribution lines and equipment where underground installation is not possible.
- 3.11.3.2 Landscaping, Screening, and Panel Orientation and Tilt – Landscaping or architectural screening shall be provided to reduce the visual impact of installations and specifically to protect nearby receptors from danger, harm, or nuisance that may result from reflective solar glare of photovoltaic panels. Where necessary, panels shall be oriented or tilted in a manner to prevent such glare upon receptors.
- 3.11.3.3 Lighting – Night Lighting is prohibited except for security lighting controlled by motion detectors or infrared sensors with an on-time of no more than ten (10) minutes per activation.
- 3.11.3.4 Utility Connections - All utility connections, conduits, cables, power lines transformers and inverters shall be placed underground, except (a) where otherwise required by the Massachusetts State Building Code or the utility provider; (b) in adverse ground conditions such as ledge or excess water; or (c) for connection to

existing above ground utility lines. Wiring within the installation's layout shall follow industry standards.

- 3.11.3.5 SIGNS – SIGNS shall comply with the requirements of Section 7 of this Bylaw. However, in Residential Districts not more than one (1) sign up to six (6) square feet in display area may be installed with the names, current telephone numbers, websites and trademarks of the installer, manufacturer, owner, and operator of the installation. In addition, pedestrian scale educational displays are permitted, which may include the names and contact information of the display sponsors, and directions and contacts for additional information.
- 3.11.3.6 Water Management and Conservation – To the largest extent possible, the ground shall remain pervious to rain water. Where necessary, adequate provision shall be made for groundwater recharge and to prevent site run-off and erosion.
- 3.11.3.7 Protection of Forest Land – Not more than 1 acre of land shall be deforested for any one Ground-Mounted Industrial Solar Photovoltaic Installation, and no such installation shall be placed on such land that was deforested within the prior 5 years.
- 3.11.3.7 Exemptions from Zoning Requirements – Ground-Mounted Solar Photovoltaic Installations shall be exempt from requirements of this Bylaw pertaining to LOT area, FLOOR AREA RATIO, Impervious Cover, OPEN SPACE, vehicular parking.
- 3.11.3.8 Solar Access - The owners and operators of Ground-Mounted Solar Photovoltaic Installations are advised to acquire solar access easements from abutters where access to sunlight could be impacted from an allowed use on an abutting parcel.
- 3.11.4 Special Permit for Certain Ground-Mounted Industrial Solar Photovoltaic Installations where required in the Table of Principal USES – The Planning Board may grant Special Permits for Ground-Mounted Industrial Solar Photovoltaic Installations in certain zoning districts as indicated in the Table of Principal USES. When granting such special permit, the Planning Board shall vote in the affirmative the Mandatory Findings for special permits required in Section 10.3 of this Bylaw, and, in addition, find that:
 - 3.11.4.1 In the case of a Residential District location, the visual impact of the installation on its immediate abutters and on the nearby neighborhood has been effectively neutralized through appropriate designs, landscaping, or structural screening; or
 - 3.11.4.2 In the case of a Business District location, the specific site of the installation does not detract from or interrupt the vitality of the business district, or impede its further business development; and that the visual impact of the installation been sufficiently mitigated through appropriate designs, landscaping, or structural screening.
- 3.11.5 Special Permit for Certain Ground-Mounted Solar Photovoltaic Installations – The Planning Board may grant Special Permits for Ground-Mounted Solar Photovoltaic

Installations that do not meet the standards set forth in section 3.11.3 above, or any of its subsections. When granting such special permit, the Planning Board shall vote in the affirmative the Mandatory Findings for special permits required in Section 10.3 of this Bylaw, and, in addition, find that:

- 3.11.5.1 The benefit of installing solar photovoltaic power at the installation site as proposed by the application substantially outweighs the public health, safety, and welfare concerns that Section 3.11.3 requirements are intended to protect; or
- 3.11.5.2 That the particular design, mitigation measures, offsets, agreements, or other provisions for the proposed installation address such concerns in an alternative and satisfactory manner.

, or take any other action relative thereto.

SUMMARY

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Direct inquiries to: Roland Bartl, Planning Director: planning@acton-ma.gov / (978) 929-6631
Selectman assigned:

Board of Selectmen:

Finance Committee:

Planning Board: