Town of Lee Massachusetts Planning Board

Proposed Amendments to Zoning Bylaw Regarding Solar Installations

I. Add Definitions:

Add the following definitions to chapter 14 of the Zoning Bylaw, interspersed within that section in alphabetical order.

SUBCHAPTER 14. DEFINITIONS

- (xx) Collector means a device with the primary purpose to collecting solar radiant energy and converting it into thermal, chemical, or electrical energy.
- (xx) **Photovoltaic System or** Photovoltaic Installation means an active solar energy system that uses collectors to convert solar energy into electricity.
- (xx) Small Solar Photovoltaic Installation means a solar photovoltaic system that is entirely roof-mounted or that, excluding whatever portion is roof-mounted, covers a ground area of not more than 500 square feet.
- (xx) Medium Solar Photovoltaic Installation means a solar photovoltaic system that, excluding whatever portion is roof-mounted, covers a ground area of not more than one acre.
- (xx) Large Solar Photovoltaic Installation means a solar photovoltaic system that, excluding whatever portion is roof-mounted, covers a ground area of more than one acre.
- (xx) Area of a solar photovoltaic system means the horizontal area covered by solar photovoltaic equipment, including areas between rows of collectors and areas covered by related access roads, accessory structures and electrical equipment.
- (xx) Roof-Mounted Solar Photovoltaic Installation means a solar photovoltaic system or portion of a system that is mounted on the roof of a building used for other purposes.
- (xx) Inverter means electrical apparatus that converts direct current to alternating current.

II. Classify Permit Requirements and Uses in Each Zone:

Add Section 10.4 to the existing zoning bylaw as follows:

10.4 SOLAR PHOTOVOLTAIC INSTALLATIONS

(A) <u>In the various zones, solar photovoltaic installations of various sizes (as defined in subchapter 14) either are permitted without board review, are permitted after site plan review, require a special permit, or are prohibited, as follows:</u>

| Zone | Permitted without Board Review | Permitted After Site Plan Review | Special Permit Required | Prohibited |
|---------------|-----------------------------------|--|-------------------------------|---------------|
| R-20 and R-30 | Roof, Small | | Medium | Large |
| RA-40 | Roof, Small, Medium | | Large | |
| RM | Roof, Small, Medium | | Large | |
| CR | Roof, Small, Medium | | Large | |
| RB | Roof, Small, Medium | | Large | |
| BM | Roof, Small, Medium | | | Large |
| CBC | Roof, Small | | | Medium, Large |
| DCBC | Roof, Small | | | Medium, Large |
| PCVC | Roof, Small, Medium | | Large | |
| I | Roof, Small, Medium | | Large | |
| OPLI | Roof | Small, Medium | | Large |

(B) Where a special permit is required only under this section, the Planning Board is the special permit granting authority.

III. Add Site Plan Review Procedures for PV Installations:

Amend Section 13.3(D) of the existing zoning bylaw as follows:

13.3 SITE PLAN REVIEW

(D) Required Site Plan Contents.

- (3) <u>Solar Photovoltaic Installations.</u> In addition to information required <u>under subdivision (1) above, and except where the planning board waives one or more requirements, a site plan review applications for:</u>
 - (a) <u>A Medium or Large Solar Photovoltaic Installation shall include</u> the following information:

- (i) <u>Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, screening vegetation or structures.</u>
- (ii) Locations of any active farmland and prime farmland soils, wetlands, permanently protected open space, or priority habitat areas recognized by state or federal agencies.
- (iii) <u>Locations of floodplains or inundation areas for moderate or high hazard dams.</u>
- (iv) Locations of local or National Historic Districts.
- (v) <u>Blueprints or drawings of the installation including</u> potential shading from nearby structures.
- (vi) If the installation will be interconnected with the electric grid, a statement from a transmission provider or the local utility that interconnection discussions have begun.
- (vii) A decommissioning plan showing which facilities will be removed.
- (b) <u>A Large Solar Photovoltaic Installation shall also include the</u> following information:
 - (i) <u>Documentation of actual or prospective access and</u> <u>control of the project site sufficient to allow for construction and</u> operation.
 - (ii) An electrical diagram showing the installation's components and its electrical interconnection methods including disconnects and overcurrent devices;
 - (iii) <u>Documentation of major system components, including</u> the photovoltaic panels, mounting system, and inverter.
 - (iv) An operation and maintenance plan, describing measures for maintaining safe access to the installation, storm water controls, and general procedures for operational maintenance.
 - (v) An emergency response plan including all means of shutting down the installation and signs indicating shutdown procedures.
 - (vi) <u>Proof of liability insurance.</u>
 - (vii) A public outreach plan, including a project development timeline indicating how the project proponent will inform abutters and the community.

IV. Define Construction and Operation Standards:

Add Section 9.12 to the existing bylaw as follows:

9.12 STANDARDS FOR SOLAR PHOTOVOLTAIC INSTALLATIONS

(A) Applicability of other requirements.

- (1) Except as provided below, all solar photovoltaic installations shall meet the requirements of this chapter, including those concerning the bulk and height of structures, lot area, open space, parking, signs, surface water runoff, and building coverage requirements.
- (2) <u>Additional Standards.</u> The following additional standards shall apply to solar photovoltaic installations during site plan reviews and special permit proceedings.
 - (a) <u>Clearing</u>. For Large Solar Photovoltaic Installations, clearing of natural vegetation shall be limited to that necessary for construction, operation and maintenance. Where steep slopes will be disturbed, suitable erosion control measures shall be taken.
 - (b) <u>Setbacks</u>. Front, side and rear setbacks applicable in each zone apply, except that for Small Solar Photovoltaic Installations, side and rear setbacks shall not exceed 10 feet.
 - (c) <u>Lot Coverage.</u> For purposes of determining compliance with maximum lot coverage requirements, ground-mounted solar collectors mounted above pervious surfaces are not buildings.
 - (d) Screening. Within Medium and Large Solar Photovoltaic
 Installations, reasonable efforts shall be made to minimize visual impacts
 by preserving natural vegetation, screening abutting properties, or other
 appropriate measures. A full perimeter fence shall be required for
 security purposes, which shall be opaque where necessary to improve
 screening. Buildings and accessory structures should be joined or
 clustered to minimize adverse visual impacts.
 - (e) <u>Height</u>. Ground-mounted collectors within Solar Photovoltaic <u>Installations shall not exceed a height of 15 feet.</u>
 - (f) <u>Lighting</u>. Lighting of Medium and Large Solar Photovoltaic <u>Installations</u>, including appurtenant structures, shall be limited to that required for safety and operational purposes, and shall be reasonably

- shielded from abutting properties. Where feasible, lighting shall be directed downward and shall employ full cut-off fixtures.
- (g) Signs. Solar photovoltaic installations shall not include any advertising signs except for one sign, of not more than four square feet, identifying the operator of the installation. Medium and Large Solar Photovoltaic Installations shall include a small sign at the perimeter providing a 24-hour emergency contact phone number.
- (h) <u>Site Access.</u> Site access shall be sufficient for fire prevention and control.
- (i) <u>Safety</u>. Roof-mounted Solar photovoltaic installations shall not cause the shedding of ice or snow from the roof into a porch, stairwell or pedestrian travel area.

(3) **Abandonment and Removal.**

- (a) Any Medium or Large Solar Photovoltaic Installation which has reached the end of its useful life or has been abandoned shall be decommissioned by the owner or operator within six months. A Medium or Large Solar Photovoltaic Installation shall be deemed to have been discontinued if it has not been in service for a continuous period of 12 months.
- (b) As a condition of site plan approval or a special permit, the owner and operator of a Medium or Large Solar Photovoltaic Installation shall be required to consent that the town may enter and decommission the installation if and when it has been abandoned for more than nine months, with the costs of decommissioning to be recovered from the owner, the operator, or the land.

(c) Decommissioning shall consist of:

- (i) Physical removal of all ground-mounted solar photovoltaic installations, structures, equipment, security barriers and transmission lines from the site. The owner or operator may leave undisturbed existing landscaping and below-grade foundations in order to minimize erosion and disruption to vegetation.
- (ii) <u>Disposal of all solid and hazardous waste in accordance with law.</u>
- (iii) <u>Stabilization or re-vegetation of the site as necessary to</u> minimize erosion.

- (d) <u>If the owner or operator fails to remove the installation within</u> six months of abandonment:
 - (i) The owner or operator shall be in violation of this chapter and subject to fines as provided in subchapter 11.
 - (ii) <u>Having obtained a court order to enforce a condition of approval as mentioned above, the Building Commissioner may enter the premises and decommission the installation.</u>
 - (iii) The town may recover decommissioning costs from the owner, operator, or land.

V. Expand Non-Conforming Use Exceptions:

Amend Section 6.1 as follows:

6.1 NON-CONFORMING STRUCTURES, USES AND LOTS

(A) **Exemptions.** Exemptions shall be as follows:

(3) Any alteration, reconstruction, extension or structural change to a one-family or two-family structure, provided that this does not increase the nonconforming nature of such structure. In the following circumstances an alteration, reconstruction, extension or structural change to a one-family or two-family structure shall not be considered an increase in the nonconforming nature of the structure and shall be permitted as of right:

(f) Addition of Roof-Mounted Solar Photovoltaic Collectors.