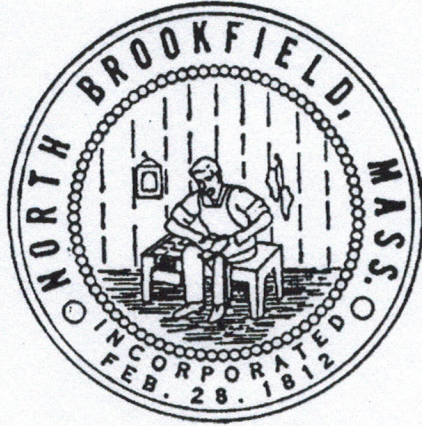


North Brookfield Zoning Bylaws — Solar



Adopted March 8, 1963
Amended May 11, 2018

North Brookfield Planning Board
North Brookfield, MA

facilitate the resolution of the grievance, and report its recommendations to the referring Town authority within an agreed upon time frame.

The Board of Health, except in cases of imminent danger or public health risk, may forward a copy of the grievance to the Agricultural Commission or its agent, which shall review and facilitate the resolution of the grievance, and report its recommendations to the Board of Health within an agreed upon time frame.

5. Livestock Fencing

Livestock kept on parcels used for farming shall be contained within the farm parcel. Any person operating a farm subject to this bylaw shall provide and continually maintain adequate fencing to prevent livestock from trespassing onto and damaging the property of others.

Violations of the provision shall be reported to the Police, who shall refer the fence inspection to the Agricultural Commission and Fence Viewer. Upon finding that fencing is either missing, in disrepair or broken, the Agricultural Commission and Fence Viewer shall provide their findings in writing to the Police Department. The farmer shall repair the deficient fence as needed to prevent a repeat occurrence.

Broken fencing caused by acts of nature, wildlife or loud noises such as fireworks spooking livestock are not considered reasons for invoking this part of the bylaw.

An affected farmer shall have the right to appeal any finding under this section to the Zoning Board of Appeals within 20 days of receipt of notice of the Selectmen's decision.

6. Severability Clause

If any part of this Bylaw is for any reason held to be unconstitutional or invalid, such decision shall not affect the remainder of this Bylaw. The Town of North Brookfield hereby declares the provisions of this Bylaw to be severable.

F. Commercial Solar Energy Bylaw:

1. Purpose:

The purpose of this bylaw is to promote the development of solar energy facilities by providing standards for the placement, design, construction, operation, monitoring, modification, and removal of such energy facilities, to protect public safety, to minimize impacts on scenic, natural and historic resources of North Brookfield, and to provide adequate financial assurance for the eventual decommissioning of such energy facilities.

2. Applicability

This bylaw applies to all ground-mounted solar energy facilities and to physical modifications that materially alter the type, configuration, or size of these facilities or related equipment. Ground-mounted solar energy facilities on municipal and school district properties are permitted in all districts upon site plan approval from the Planning Board. Solar facilities for the primary purpose of agriculture are exempt from this bylaw pursuant to MGL c. 40A, §3. Solar facilities for one and two family dwellings are also exempt from this bylaw.

The total number of commercial solar facilities in North Brookfield shall be limited to fourteen (14). Facilities constructed prior to this bylaw are counted in this total. Municipal solar facilities are not counted in this total.

Table 5- Commercial Solar Energy Zoning Restrictions

Facility Type	District					
	R-11	R-30	R-66	BC	BG	IND
Small Commercial Solar Energy Facility	N	N	SP	Y	Y	Y
Large Commercial Solar Energy Facility	N	N	SP	Y	Y	Y
Renewable/Alternative Energy R&D Facility	N	N	SP	Y	Y	Y
Renewable/Alternative Energy Manufacturing Facility	N	N	SP	Y	Y	Y
SP: Special Permit						

3. General Requirements

- a. Site Plan Review: All solar energy facilities, except for those explicitly exempted pursuant to Section IV.G.2 shall undergo site plan review by the Planning Board prior to construction, installation, or modification as provided in this section.
- b. Required Documents: In addition to the submission requirements in the Planning Board's Site Plan Review Regulations, the applicant shall provide the following documents:

- (1) Plans and drawings of the solar energy facility signed and stamped by a Professional Engineer licensed to practice in Massachusetts showing the proposed layout of the system
 - (2) An electrical diagram detailing the solar energy facility, associated components, and electrical interconnection methods, with all National Electrical Code compliant disconnects and over current devices;
 - (3) Technical specifications of the major system components, including the solar arrays, mounting system, and inverter
 - (4) A glare analysis and proposed mitigation, if any, to minimize the impact of glare on affected properties
 - (5) The name, address, and contact information of the owner, proposed installer, and operator
 - (6) Proof of actual or proposed control of access ways and the project site sufficient to allow for installation and use of the proposed facility
 - (7) An operation and maintenance plan
 - (8) Proof of liability insurance
 - (9) Financial surety that satisfies Subsection 5.D. of this Bylaw
- c. Operation & Maintenance Plan: The applicant shall submit a plan for the operation and maintenance of the solar energy facility, which shall include measures for maintaining safe access, storm water controls, and general procedures for operating and maintaining the energy facility.
- d. Utility Notification: The applicant shall submit evidence satisfactory to the Planning Board that he has informed the utility company in writing of his intent to install a solar energy facility and that the utility company has responded in writing to the interconnection notice. Off-grid systems are exempt from this requirement.
- e. Dimension and Density Requirements
- (1) Setbacks: Ground-mounted solar energy facilities shall have a setback from front, side and rear property lines and public ways of at least One Hundred Feet (100') in Residential districts and Fifty Feet (50') in Business and Industrial districts. Twenty Percent (20%) of a parcels total square footage may be used for a solar facility.

- (2) Natural Buffer for Large Solar Projects: The site plan shall provide a natural vegetative buffer of One Hundred Feet (100') between a large solar energy facility and a property in residential use, including houses across a street. If the applicant establishes, to the satisfaction of the Planning Board, that the visual buffer would have a detrimental effect on the ability to generate power, the Planning Board may grant a waiver from this requirement.
- (3) Appurtenant Structures: All appurtenant structures, including but not limited to, equipment shelters, storage facilities, transformers, and substations shall be subject to reasonable regulations concerning bulk and height, setbacks, parking, building coverage, and vegetative screening to avoid adverse impacts on the neighborhood or abutting properties.

f. Design Standards

- (1) Lighting: Lighting shall be limited to that required for safety and operational purposes, and shall not be intrusive in any way on abutting properties. Lighting shall incorporate full cut-off fixtures to reduce light pollution.
- (2) Signage: The solar energy facility shall have one sign not exceeding thirty-two (32) square feet in area. Such sign shall identify the operator and provide a 24-hour emergency contact telephone number. Solar energy facilities shall not display any advertising except for reasonable identification of the manufacturer or operator of the facility. The site may have a secondary sign not exceeding sixteen (16) sq. ft. in area providing educational information about the facility and the benefits of renewable energy
- (3) Utility Connections: The applicant shall place all wiring from the solar energy facility underground, except in extraordinary circumstances where the Planning Board finds that soil conditions, shape, and topography of the site make such wiring unfeasible.
- (4) Screening: Where a commercial solar facility abuts one or more residences and/or public ways, a landscape architectural plan by a registered landscape architect shall be provided for review and Planning Board approval. The plan's objective shall be to minimize, to the greatest extent possible, the visual impact of the facility. The plan shall show how through the use of mature plantings of trees and other vegetation, berms, fencing with vegetation, land contouring and strategic placement of solar modules and appurtenant structures, the facility will be screened from view of abutting residences and public ways during all seasons of the year, so that the visual impact is negligible to all affected properties.

- g. **Emergency Services:** The operator shall provide a copy of the operation and maintenance plan, electrical schematic, and site plan to the North Brookfield Fire Chief and Police Chief. The operator shall cooperate with local emergency services in developing an emergency response plan; this plan shall be reviewed annually with local emergency officials and revised as necessary. All means of shutting down the solar energy facility shall be clearly marked. The premises shall identify a qualified contact person to provide assistance during an emergency; the operator shall change the contact information immediately and so notify the North Brookfield Fire Chief and Police Chief whenever there is a change in the contact person.

4. Monitoring and Maintenance

- a. **Maintenance:** The operator shall maintain the facility in good condition. Maintenance shall include, but not be limited to, painting, structural repairs, and integrity of security measures. The operator shall be responsible for maintaining access for emergency vehicles that is determined to be adequate by the North Brookfield Fire Chief, Police Chief, and any other local emergency services, and for maintaining adequate access for any maintenance equipment. No herbicides or synthetic chemicals may be used to control vegetation within and immediately adjacent to any fenced solar facility.
- b. **Modifications:** After issuance of the Building Permit, any material modification to the facility requires approval of the Planning Board unless exempt under this bylaw. The operator may apply to the Planning Board for a determination as to whether a proposed modification is material.

5. Discontinuance, Decommissioning, Abandonment and Removal

- a. **Removal Requirements:** Any solar energy facility that has reached the end of its useful life or has been discontinued, decommissioned, or abandoned, as defined below in Section IV.G. 5. c. shall be removed. The owner or operator shall physically remove the facility within one hundred fifty (150) days after the date of discontinued or abandoned operations or decommissioning in compliance with the requirements of the Building Inspector. The owner or operator shall notify the Planning Board by certified mail of the proposed date of discontinued operations or decommissioning and submit the plans for removal. A decommissioning plan shall be submitted to the Planning Board/Building Inspector at the time of application and shall be approved before special permit/building permit is issued.

- b. Removal: Removal shall consist of physical removal of all of the equipment from the site, including, but not limited to, the solar arrays, structures, equipment, security barriers, and electrical transmission lines. The concrete foundation of all solar module support structures shall be fully removed from the ground.

At the property owner's discretion, if trees were harvested to construct solar facility, the same area shall be replanted with similar tree species at the density that will sustain itself and minimize erosion that were originally present. If cropland has been developed, then this area shall be seeded with grasses that the same as those that were originally present. If both types of vegetation are involved, then the existing proportion of each before solar construction shall be provided. All plantings shall be according to USDA best management practices.

- c. Abandonment: Absent notice to the Planning Board, as provided above in Section IV.G.5.a. of a proposed date of discontinuance or decommissioning or written notice requesting an extension due to extenuating circumstances, the solar facility shall be considered abandoned when it fails to operate or operations are discontinued for more than one year without the written consent of the Planning Board. If the owner or operator fails to remove the energy facility in accordance with the requirements of Section IV.G.5.b. within one hundred fifty (150) days of abandonment or discontinuance or the proposed date of decommissioning, the Town may, to the extent it is otherwise duly authorized by law, enter the property and physically remove the facility.
- d. Financial Surety: The proposed form of surety shall be submitted to the Planning Board/Building Inspector at time of application and shall be approved before special permit/building permit is issued. The amount of the surety purchased shall reflect the size of the approved solar facility. Prior to commencing construction of the facility, the applicant shall provide a form of surety, either through a cash deposit, bond or otherwise, in an amount determined by the Planning Board to cover the cost of removal and site restoration. The applicant shall submit a fully inclusive estimate of the costs associated with removal, prepared by a qualified engineer in agreement with the planning board consulting engineer. The amount shall include an escalator for calculating increased removal costs due to inflation. Applicant shall provide annual evidence of surety by January 20th of each year to the Planning Board.

G. Site Plan Review

1. Purpose and Intent

This section of the North Brookfield Zoning Bylaw is enacted under the authority of M.G.L. Chapter 40A to protect the health, safety, convenience and general welfare of