

Site Plan Regulations

I. Add Section 22.19 Stormwater Management for Solar Collection Systems

22.19 Storm Water Management for Solar Collection Systems: *Solar collection systems shall be designed to manage their storm water runoff impacts in accordance with the requirements of Section 22, Storm Water Management. In certain conditions (such as on gently sloping land) and with proper design and maintenance, solar collection systems are not expected to have a negative effect on runoff quality or quantity. The layout for these systems usually consists of several rows of panels separated by grassed access rows and, therefore, simulates the “disconnected impervious” method of storm water control.*

(1) General Requirements

- (a)** *A hydrologic analysis will be required for all sites where any portion of the existing land cover is brush, forested, or other land cover with a curve number less than that for grass or pasture land cover (in “good condition”) as specified in Technical Release 20 (TR-20), Soil Conservation Service.*
- (b)** *A hydrologic analysis is not required if the existing ground cover has a curve number that is equal to or greater than that for grass or pasture land cover (in “good condition,” TR-20), if the land slope is $\leq 12\%$, runoff will not be redirected, and if the system implements the best management practices (BMP’s) listed below.*
- (c)** *An Inspection and Maintenance Plan is required for all solar collection systems.*

(2) Best Management Practices (Land slopes $\leq 5\%$)

- (a)** *The width of the space between rows (“access rows”) of panels is equal to or greater than the width of the panel rows. For solar panels not installed in rows, the separation between panels is equal to or greater than the width or length of the panel, as applicable.*
- (b)** *The ground cover of the access rows and the area under the solar panels consists of well-maintained vegetation (grass covering at least 85% of the space).*
- (c)** *Runoff sheet flows onto and across vegetated areas.*
- (d)** *Soils can support a strong vegetative growth, will be amended to support a strong vegetative growth, or a vegetated buffer strip (meadow or native shrub plantings) is provided at the downhill side of the system. If a buffer strip is provided it has a minimum width equal to 15 percent of the length of the system.*

(3) Best Management Practices (Land slopes $> 5\%$ and \leq to 12%)

- (a)** *The BMP’s for land slopes $\leq 5\%$ are provided.*
- (b)** *When drip edges do not run parallel to the land contours, level spreaders/energy dissipators (stone trenches, berms, etc.) are provided and spaced at 100 feet (maximum) intervals.*

- (c) *The need for stone drip edge protection is evaluated based on existing soils, panel orientation, and land slope.*
- (d) *A buffer strip consisting of meadow or native shrub plantings and a width equal to 15% of the length of the system is provided at the downhill side of the system.*

II. Section 26, Add Section 26.06, and amend ~~26.06~~ **26.07** Maintenance

26.06 *Buffers and Screening of Solar Collection Systems: Setbacks in accordance with Section 28-4-1(d) and (h) of the Zoning Ordinance shall be adhered to. Existing or supplemental vegetation or topography shall be utilized for screening to minimize adverse visual impacts to the street, abutting properties, and scenic vistas.*

Potential glare on to abutting structures and roadways shall be minimized. Mitigation to minimize impacts shall include angle of panels, anti-reflective panel coating, or additional screening. Anti-reflective panel coating shall be required for all installations within the Concord Airport flight path, or as required by FAA requirements.

III. Amend **Section 27** as follows:

Section 27 Landscaping and ~~Erosion Control~~ **Environmental Considerations** (it is correct in the Table of Contents)

27.10 *Solar Collection System Environmental Considerations and Requirements*

- (1) *No topsoil shall be disturbed or removed from the property except as necessary for the installation of the facility and as approved by the Planning Board.*
- (2) *Solar Collection Systems shall be sited to minimize the need for clearing of forest, site grading, or reduction of active agricultural operations.*
- (3) *Systems shall be sited to minimize impacts to wildlife corridors, bird migratory routes, and rare and endangered species habitat.*
- (4) *Systems located on agricultural lands shall minimize impacts to Prime and other Important Farmlands, as defined and delineated by the USDA Natural Resources Conservation Service (NRCS).*
- (5) *The land beneath any solar panels shall remain open and useable for one or more agricultural purpose including, but not limited to, growing crops, bee-keeping, or grazing. Co-location of agricultural operations is encouraged where practicable.*
- (6) *All disturbed soils shall be properly stabilized and re-vegetated with native seed mix that supports wildlife and pollinator habitat.*

~~27.10~~ **27.11** *Site Stabilization Guarantee*

27.12 Abandonment and Decommissioning of Solar Collection Systems: *Solar Collection Systems shall be deemed abandoned if operations have discontinued for more than 6 months without written consent from the City. Decommission and site restoration shall be required for all systems. A decommissioning and abandonment plan shall be required for systems 1 MW or larger.*

IV. Amend appropriate sections of **Section 29 Lighting**, as follows:

29.06 Solar Collection System Lighting: *On-site lighting shall be minimal and limited to access and safety requirements only.*

~~29.06~~ **29.07 Nuisance and Glare**

~~29.07~~ **29.08 Temporary Lighting**

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