

Section 719.155 – Medium Solar Energy Systems

- A. Medium solar energy systems may be installed and operated in the districts that refer to this section, provided the systems meet setback and other standards, as provided in this section.
- B. Medium-sized solar energy systems may be approved through the Site Plan approval process, which requires action by the Planning Commission.
- C. Roof-mounted photovoltaic solar energy systems, including solar water or swimming pool heating systems, may extend up to five (5) feet above the roof surface even if this exceeds the maximum height limit for the principal structure for the district in which it is located, or if this exceeds the height limit of an accessory structure, subject to the following:
 - 1. Solar panels may not be cantilevered beyond the ridge of a pitched roof.
 - 2. The total area of solar panels may not exceed the total area of the roof. Where panels are mounted on one slope of a pitched roof, their total area may not exceed the total area of that slope.
 - 3. Roof-mounted solar panels placed on a residential structure must be parallel to the surface of the roof.
- D. Excluding solar collection panels, solar energy system equipment may be installed within the required side and rear yard, but shall not be closer than five (5) feet to any property line.
- E. Ground-mounted solar collection panels shall comply with existing regulations for accessory structures.
- F. Medium solar facilities proposed in agricultural (AG) and recreation zones (REC) are encouraged to locate on predominantly (more than 60 percent) non-prime farm lands. If they do not meet this standard, the use shall be deemed a Special Land Use, which requires a public hearing. The Application for a Special Land Use permit shall include an analysis of the potential for agricultural use on the subject site by an expert in agriculture or soil science, as determined by the Planning Commission.
- G. Ground-mounted solar facilities shall meet the front, rear, and side yard setback requirements of the zone in which they are located, with the following exception: In all zones abutting a residential district (including AG) or residential

use, the setbacks shall be at least 50 feet from all property lines adjoining said district(s) or use.

- H. Ground-mounted solar facilities shall meet the height limit requirements of the zone in which they are located.
- I. Any mechanical equipment used as part of the solar system shall be screened from view from any public street, residential district, or agricultural district by use of a masonry screen wall, evergreen vegetation, or other screening of a similar effectiveness and quality, as determined by the Planning Commission.
- J. Solar panels shall be placed such that concentrated solar radiation or solar glare shall not be directed onto nearby properties or roadways. Traffic safety shall be protected, and adjacent properties shall be protected from unreasonable glare and radiation. The applicant shall submit documentation to verify compliance with this section. When deemed appropriate, the Planning Commission may require a report from a registered civil engineer or other professional the Planning Commission finds to be qualified to address this issue.
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- L. The application shall include a drainage plan prepared by a registered civil engineer showing how stormwater runoff will be managed and demonstrating that runoff from the site will not exceed the agricultural runoff rate or otherwise cause undue flooding. If detergents will be used to clean solar panels, details on the type of detergent, frequency and quantity of use, quantity and source of water, and stormwater quality protection measures shall be provided. Any necessary permits from outside agencies for off-site discharge shall be provided. Applicant shall demonstrate that the use of well water shall not negatively impact the function of existing wells in the area.
- M. If the solar energy system ceases to operate or is abandoned for a period of six months or is deemed by the Building Official to be unsafe or not consistent with code, the Applicant shall repair and restore the system to good working order within a reasonable time set by the Building Official or, if no longer operating or no longer in compliance with federal, state or local codes, it shall remove the system in its entirety. This shall include removing posts, equipment, panels, foundations, and other items so that the ground is restored to its preconstruction state and is ready for development as another land use.

- N. The Applicant shall post a performance guarantee (cash, letter of credit, or bond deemed suitable by the Township attorney) to cover the cost of removal of the equipment, structures and foundations related to the solar system in the event of abandonment or failure to comply with federal, state or local laws (after being given a reasonable time to remedy the problem).
- O. When a ground-mounted solar panel(s) is located adjacent to a residential or agricultural district or public right-of-way, a 26-foot wide (minimum) greenbelt shall be constructed to provide a buffer between the panels and the adjacent residential/agricultural or public property. Planning Commission may waive or reduce the greenbelt requirement upon a determination that the solar panels are located more than 200 feet from an adjacent property zoned residential or agricultural or from any public right-of-way. Planning Commission may waive or reduce the greenbelt requirement if the adjacent residential or agricultural property is likely to remain undeveloped, or existing natural features will remain to provide adequate screening. Greenbelts shall be planted as part of an approved site plan and shall thereafter be maintained in a healthy, growing condition to provide a screen to abutting properties. Specific planting requirements for greenbelts are as follows:
 - 1. The planting strip shall be no less than twenty-six (26) feet in width.
 - 2. Plant materials shall not be placed closer than four (4) feet from the property line.
 - 3. A minimum of one (1) evergreen tree shall be planted at twenty (20) foot intervals (on average).
 - 4. A minimum of three (3) intermediate shrubs shall be placed between the spaced evergreen trees.