

ORDINANCE NUMBER 2021-06

AN ORDINANCE OF GREENWICH TOWNSHIP, BERKS COUNTY, COMMONWEALTH OF PENNSYLVANIA AMENDING THE GREENWICH TOWNSHIP ZONING ORDINANCE AS ADOPTED IN 1973, AND AMENDED THEREAFTER, TO REGULATE THE INSTALLATION OF SOLAR PANELS BY DEFINING THE TYPES OF SOLAR ENERGY SYSTEMS, AND SPECIFYING WHERE THEY MAY BE SITUATED UNDER CERTAIN CONDITIONS.

BE IT ENACTED AND ORDAINED, by the Board of Supervisors of Greenwich Township, Berks County, Pennsylvania (the "Township") and it is hereby ENACTED AND ORDAINED by the authority of the same as follows:

SECTION 301.4.

Accessory Solar Energy System (ASES): An alternative energy system consisting of one or more ground mounted, principal building mounted, or accessory building mounted solar collection devices and solar energy related equipment to generate electricity or otherwise convert solar energy into a different form of energy for the primary purpose of reducing on-site consumption of purchased power.

Principal Solar Energy System (PSES): An alternative energy system consisting of ground mounted solar collection devices and solar energy related equipment to generate electricity or otherwise convert solar energy into a different form of energy for the primary purpose of using the energy for commercial or other off-site use.

SECTION 401.9.

J. Accessory Solar Energy System.

SECTION 402.1(B).

9. Accessory Solar Energy System.

SECTION 403.1(B).

10. Accessory Solar Energy System.

SECTION 403.1(C).

7. Principal Solar Energy System.

SECTION 404.1(B).

5. Accessory Solar Energy System.

SECTION 405.1(B).

5. Accessory Solar Energy System.

SECTION 406.1(A)(2).

f. Accessory Solar Energy System.

SECTION 407.1(B).

7. Accessory Solar Energy System.

SECTION 408.1(A).

3. Principal Solar Energy System

SECTION 408.1(B).

4. Accessory Solar Energy System.

SECTION 409.3.

G. Accessory Solar Energy System.

SECTION 503.

503.35 ASES

- A. The placement of all features and system components constituting the ASES shall comply with the principal building setback, height, lot coverage, and other bulk requirements of the applicable underlying zoning district.
- B. ASES roof mounted systems shall not extend beyond the roof edge in any direction nor above the ridgeline of any sloped roof to which the system is attached.
- C. ASES ground mounted systems shall not exceed twelve (12) feet in height.

- D. The maximum permitted area, which is the combined surface area of all individual solar panels constituting the ASES, shall not exceed one thousand (1,000) square feet.
- E. All utilities, lines, cables, wires and other connections of, to or from the ASES and any related structure shall be at or below grade.
- F. The ASES shall be installed in compliance with all applicable building and construction code requirements.
- G. ASES ground mounted systems shall be deemed impervious cover requiring stormwater management design pursuant to the Greenwich Township Stormwater Management Ordinance. The landowner must maintain the stormwater management feature(s) in good working order so long as the system is installed.
- H. The actual surface area of all individual panels shall be considered in determining the amount of additional lot coverage the system creates.
- I. If required by the Code Enforcement Official, the applicant shall supply one year's worth of electrical consumption records for the subject property to serve as a benchmark for the anticipated amount of electrical energy proposed to be generated.
- J. The ASES shall comply with all federal and state laws, rules, and regulations, as well as the Greenwich Township laws, rules, and regulations, including but not limited to those for Fire Safety.

503.36 PSES

- A. The minimum lot size for placement of a PSES shall be twenty (20) acres.
- B. Within the I Zoning District, the placement of all features and system components constituting the PSES shall comply with the setback and maximum lot coverage requirements of the aforementioned district. If the PSES is upon a lot that adjoins another lot with an existing residential use then all features and system components shall be setback a minimum of fifty (50) feet from that shared boundary line.
- C. Within the R Zoning District, the placement of all features and system components constituting the PSES shall be setback a minimum of fifty (50) feet from all property lines and street right of way lines. Within the

aforementioned district, the maximum lot coverage of the PSES shall not exceed sixty-five percent (65%).

- D. All PSES features and system components that are impervious, including but not limited to panels and their actual surface area, buildings, roads, etc., shall be considered in the lot coverage determination.
- E. PSES ground mounted systems shall not exceed twelve (12) feet in height. Buildings constituting or relating to the PSES shall comply with the underlying zoning district requirements for maximum building height.
- F. The lot with the PSES may also have a single-family dwelling, which will be considered an accessory use.
- G. The PSES shall be enclosed with an eight (8) foot tall, chain-link fence having self-locking gates.
- H. As referenced in (D), the actual surface area of all panels shall be considered impervious and require stormwater management design complying with the Greenwich Township Stormwater Management Ordinance.
- I. Landscape screening shall include a minimum of two rows of native, green evergreen trees at least eight (8) feet in height at the time of planting, planted fifteen (15) feet on center and staggered, and shall be installed as follows:
 - i. Within the I Zoning District, along all of the property lines of the lot where the PSES is situated that abut or is across from an existing residential use; or
 - ii. Within the R Zoning District, along all of the property lines of the lot where the PSES is situated.
 - iii. Planting species shall be native, and the use of white pine is prohibited.
- J. Other Design, Installation and Operation Regulations.
 - i. The design, installation, and operation of PSES shall comply with all applicable federal, state, and local laws and regulations, including but not limited to building, construction, fire and life safety requirements, and conform to the applicable industry standards, including those of the American National Standards (ANSI),

Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), and other similar certifying organizations;

- ii. The PSES shall have conspicuously and clearly labeled warnings about voltage and other important electrical safety information upon all features and components;
- iii. The panels shall be positioned to prevent glare upon all neighboring properties, public streets, and private streets;
- iv. The panels shall be positioned to prevent additional heat load upon all neighboring properties;
- v. PSES ground mounted systems shall not have concrete footings;
- vi. The PSES shall not be located on soils designated as prime agricultural soils as determined by the current soil survey of the United States Department of Agriculture (USDA), Floodplain Area(s) as defined in the Greenwich Township Floodplain Ordinance No. 2012-004, wetlands, or slopes exceeding twenty-five percent (25%);
- vii. Clear cutting of wooded areas for placement of the PSES shall not be permitted; and
- viii. System components of the PSES shall be located on land, in descending order of desirability based upon the soil type classifications D, C, B, and A.

K. Submission Requirements. The applicant proposing to erect a PSES shall submit to the Township:

- i. A Land Development Plan conforming with the requirements of the Greenwich Township SALDO, which plan must be approved by the Township;
- ii. A project summary describing the overview of the project, which shall include: the proposed PSES and ancillary facilities; its approximate generating capacity, proposed location, and the location of any new electrical line(s) to and from such system and their off-site connection point(s) to the electrical grid; and the approximate number of panels to be installed, their representative

type, height/extent or range of heights/extent, generating capacity, dimensions, and manufacturer(s);

- iii. A glare analysis report prepared and sealed by an engineer licensed in the Commonwealth of Pennsylvania, which shows that glare will not be projected onto any public street or any building on a property, other than the property where the PSES is located, as a result of its installation;
- iv. Documents related to decommissioning, as more fully described below in Subsection 503.36(N), including but not limited to executed agreement(s), such as a Participating Landowner Agreement between the Township and PSES owner, operator, and/or landowner requiring such owner, operator, and/or landowner to obtain and post Financial Security for Decommissioning as described in Subsection 503.36(N); and
- v. Other relevant studies, reports, certifications, approvals, and agreements as may be reasonably requested by the Board of Supervisors to ensure compliance with this Ordinance, including but not limited to: an Interconnection Agreement to evidence approval by an electrical utility or other entity receiving the generated energy from the PSES; an Operations Agreement to set forth operations and management parameters and policies, require continually updated/submitted contact information for the PSES owner/operator, and mandate inspection protocol and emergency procedures; a Construction/Deconstruction Mitigation Plan with a traffic study for those periods of construction and deconstruction along with a schedule for when such activities are proposed to occur; and/or a Scenic Viewshed Mitigation Plan addressing if and how the outlooks along Kittatinny Ridge and the Appalachian Trail will be impacted.

L. Certifications and Inspections.

- i. National and State Standards. The applicant shall show that all applicable manufacturer's, Commonwealth of Pennsylvania and U.S. standards for the construction, operation and maintenance of the proposed PSES have been met, including without limitation, back feed prevention and lightning grounding. The PSES shall be built, operated and maintained to the applicable industry standards of the Institute of Electrical and Electronic Engineers (IEEE) and the American National Standards Institute (ANSI). The applicant for a

PSES shall furnish evidence, over the signature of a professional engineer licensed to practice in the Commonwealth of Pennsylvania, that such PSES complies with all above standards;

- ii. An annual inspection report prepared by an independent professional engineer licensed in the Commonwealth of Pennsylvania shall be obtained by the PSES owner/operator and submitted to the Township not later than thirty (30) days after each anniversary of the date on which the Township certified the PSES ready for operation. The inspection report shall certify the structural soundness and proper operation of the PSES; and
 - iii. No PSES shall commence operation until the Township has certified in writing that the conditions of Section 503.36 have been satisfied and the PSES has been constructed and installed in accordance with the approved plans and specifications.
- M. Local Emergency Services. The applicant shall provide a copy of the Land Development Plan and project summary to the local fire companies and the Township's fire safety consultant for their review and comment. Comments and recommendations from the above individuals and/or entities shall be addressed by the applicant to the satisfaction of the Township in subsequent plan revisions. Upon the Township's request, the applicant shall cooperate with emergency services to develop and coordinate implementation of an Emergency Response Plan for the PSES.
- N. Decommissioning.
- i. The PSES owner and operator shall, at its expense, complete decommissioning of the PSES within six (6) months after the end of its useful life or the useful life of the panel(s), whichever comes first. The PSES and panels are presumed no longer useful when either fails to generate electricity for a continuous period of six (6) month;
 - ii. Decommissioning shall include removal of all panels, buildings, cabling, electrical components, foundations, and any other associated features, facilities, or related components in their entirety whether above, equal to or below ground. Stormwater facilities and healthy landscaping shall remain undisturbed;
 - iii. Disturbed earth shall be graded and re-seeded unless the landowner requests in writing that the access roads or other land surface areas not be restored;

- iv. An independent, certified professional engineer licensed to practice in the Commonwealth of Pennsylvania shall be retained to estimate the total cost of decommissioning (the "Decommissioning Costs") without regard to salvage value of the equipment, and the cost of decommissioning net salvage value of the equipment (the "Net Decommissioning Costs"). Said estimates shall be submitted to the Township prior to final approval of the Land Development Plan, and after the first year of operation and every fifth year thereafter;
- v. The PSES owner or operator shall post and maintain Financial Security for Decommissioning in an amount equal to Net Decommissioning Costs (the "Financial Security for Decommissioning") before or contemporaneous with the Township's final approval of the Land Development Plan. At no point thereafter shall the Financial Security for Decommissioning be less than twenty-five percent (25%) of Decommissioning Costs. The funds for the Financial Security for Decommissioning shall be posted and maintained with a bonding company, or Federal or Commonwealth chartered lending institution chosen by the PSES owner, operator, or participating landowner posting the financial security, provided that the bonding company or lending institution is authorized to conduct such business within the Commonwealth and is approved by the Township;
- vi. The Financial Security for Decommissioning may be in the form of a performance bond, surety bond, letter of credit, corporate guarantee or other form of financial assurance as may be acceptable to the Township;
- vii. If the PSES owner or operator fails to complete decommissioning within the prescribed period, then the landowner shall have six (6) months to complete decommissioning;
- viii. If neither the PSES owner or operator nor the landowner complete decommissioning within the periods prescribed herein, then the Township may take such measures as necessary to complete decommissioning through the use of the Financial Security for Decommissioning provided by the PSES owner or operator. The entry into and submission of evidence of a Participating Landowner Agreement to the Township shall constitute consent of the parties to the agreement, their respective heirs, successors and assigns that the Township may take such action as necessary to implement the

decommissioning plan at the sole expense of the PSES owner, operator, and landowner; and


- ix. The escrow agent shall only release the Financial Security for Decommissioning to the PSES owner or operator when such individual(s) demonstrated, and the municipality concurs, that decommissioning has been satisfactorily completed, or upon written approval of the municipality in order to implement the decommissioning plan.

This Ordinance shall become effective in accordance with the law as ENACTED and ORDAINED this 11th of February, 2021.

BOARD OF SUPERVISORS
GREENWICH TOWNSHIP


Victor Berger, Chairman

ATTEST:


Jane Werley, Secretary


Alice Flyte, Supervisor


Dean Spohn, Supervisor