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ORDINANCE No. 2024-D

AN ORDINANCE OF THE BOARD OF SUPERVISORS OF CONEWAGO TOWNSHIP, ADAMS COUNTY, PENNSYLVANIA, AMENDING THE ZONING ORDINANCE OF CONEWAGO TOWNSHIP, CHAPTER 155 OF THE CONEWAGO TOWNSHIP CODE OF ORDINANCES, BY AMENDING SECTION 155-13, "DEFINITIONS," AND BY ADDING SECTIONS 155-128.1, "PRINCIPAL SOLAR ENERGY SYSTEMS," AND 155-128.2, "ACCESSORY SOLAR ENERGY SYSTEMS."

WHEREAS, Conewago Township (the "Township") seeks to promote the general health, safety and welfare of the community by adopting and implementing an amendment to the Zoning Ordinance better providing for and regulating the uses of solar energy systems in the appropriate locations of the Township; and

WHEREAS, the purpose of this Ordinance is to amend the Zoning Ordinance to provide for the above-referenced uses as permitted uses within the Industrial Zoning District; and

WHEREAS, the Township further desires to delete, amend, and supplement certain definitions contained in the Zoning Ordinance to better clarify and distinguish the above-referenced uses.

NOW THEREFORE BE IT ENACTED AND ORDAINED by the Board of Supervisors of the Township of Conewago, Adams County, Pennsylvania, and it is enacted and ordained as follows:

SECTION 1: Section 155-13 of the Conewago Township Code of Ordinances (the "Code"), entitled "Definitions" shall be amended by adding the following terms and definitions:

ACCESSORY SOLAR ENERGY SYSTEM (ASES): An area of land or other area used for a solar energy system used to capture solar energy, convert it to electrical energy or thermal power and supply electrical or thermal power primarily for on-site use. Ground mounted or freestanding Solar Energy Systems with an output size of not greater than 10kw shall be considered Accessory Solar Energy Systems. Roof Mounted Solar Energy Systems on the roofs of buildings on-site used primarily for on-site use shall have no limit as to energy output. An accessory solar energy system consists of one (1) or more free-standing ground, or roof mounted solar arrays or modules, or solar related equipment and is intended to primarily reduce on-site consumption of utility power or fuels.

AGRIVOLTAICS: The co-development of the same area of land for both solar photovoltaic power and conventional agriculture.

PRINCIPAL SOLAR ENERGY SYSTEM (PSES): An area of land or other area used for a solar collection system principally used to capture solar energy, convert it to electrical energy or thermal power and supply electrical or thermal power primarily for off-site use. Principal solar energy systems consist of one (1) or more free-standing ground, or roof mounted solar collector devices, solar related equipment and other accessory structures and buildings

including light reflectors, concentrators, and heat exchangers, substations, electrical infrastructure, transmission lines and other appurtenant structures.

SOLAR EASEMENT: A solar easement means a right, expressed as an easement, restriction, covenant, or condition contained in any deed, contract, or other written instrument executed by or on behalf of any landowner for the purpose of assuring adequate access to direct sunlight for solar energy systems.

SOLAR ENERGY: Radiant energy (direct, diffuse and/or reflective) received from the sun.

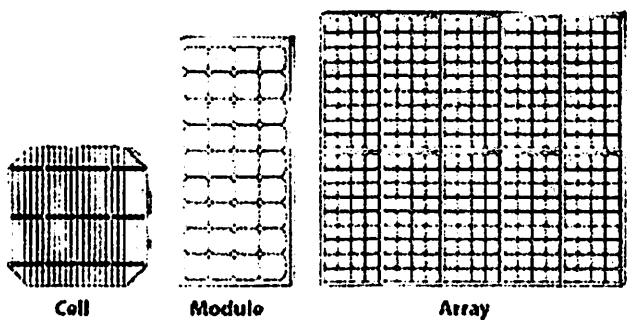
SOLAR ENERGY SYSTEM: An area of land used for a solar collection system principally to capture solar energy, convert it to electrical energy or thermal power and supply electrical or thermal power. This shall include all other accessory structures related to the Solar Energy System including buildings, structures, substations, electrical infrastructure, transmission lines, and other appurtenant structures and facilities.

SOLAR PANEL: That part or portion of a solar energy system containing one or more receptive cells or modules, the purpose of which is to convert solar energy for use in space heating or cooling, for water heating and/or for electricity.

SOLAR PROJECT AREA: The total area of land including the Principal Solar Energy System, the space between solar arrays, stormwater management area, access drives, fencing and internal access roads. The Solar Project Area does not include any area outside of the fenced facility set aside for agricultural uses and designed to be adequate for the maneuverability of typical farm equipment.

SOLAR RELATED EQUIPMENT: Items including a solar photovoltaic cell, module, panel, or array, or solar hot air or water collector device panels, lines, pumps, batteries, mounting brackets, framing and possibly foundations or other structures used for or intended to be used for collection of solar energy.

1. SOLAR CELL: The smallest basic solar electric device which generates electricity when exposed to light.
2. SOLAR MODULE: A grouping of solar cells with the purpose of harvesting solar energy.
3. SOLAR ARRAY: A grouping of multiple solar modules with purpose of harvesting solar energy.



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SECTION 2: Section 155-128.1, "Principal Solar Energy Systems," of the Code shall be created and provide as follows:

§ 155-128.1 Principal Solar Energy Systems.

Within the (I) Industrial Zone, Principal Solar Energy Systems are permitted by conditional use, provided that the applicant has met his/her burden of proof that the proposed use meets all applicable regulations contained within this chapter, including but not limited to those general criteria contained within § **155-185B**, and specifically as follows:

A. Solar energy systems constructed prior to the effective date of this Section shall not be required to meet the terms and conditions of this Ordinance. Any physical modification to an existing solar energy system, whether or not existing prior to the effective date of this Section that materially alters the solar energy system shall require approval under this Ordinance. Routine maintenance or like-kind replacements do not require a permit.

B. A land development plan submission and approval in accordance with the Conewago Township Subdivision and Land Development Ordinance is required for all solar energy systems that are not considered Accessory Solar Energy Systems.

C. The Solar energy system layout, design and installation shall conform to applicable industry standards, such as those of the American National Standards Institute (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), Electrical Testing Laboratory (ETL), Florida Solar Energy Center (FSEC) or other similar certifying organizations.

D. The applicant for a building permit and land use permit shall submit certificates of design compliance obtained by the applicable equipment manufacturers listed above.

E. The Solar Energy System shall be constructed to comply with the PA Uniform Construction Code Act 455 of 1999 as amended, and any regulations adopted by the Pennsylvania Department of Labor and Industry as they relate to the uniform Construction Code except where an applicable standard has been approved by the Department of Labor and Industry under its regulatory authority, and as enforced by Conewago Township and with all other applicable fire and life safety requirements. The manufacturer specifications for the key components of the system shall be submitted as part of the application.

F. Upon completion of installation, the solar energy system shall be maintained in good working order in accordance with standards of the Conewago Township codes under which the solar energy system was constructed. Failure of the owner to maintain the solar energy system in good working order is grounds for appropriate enforcement actions by Conewago Township in accordance with applicable ordinances.

G. All on-site power transmission and collection lines shall be placed underground to the maximum extent feasible.

H. Glare

(1) All solar energy systems shall be placed such that concentrated solar radiation or glare does not project onto nearby structures or roadways. Exterior surfaces shall have a non-reflective finish.

(2) The applicant has the burden of proving that any glare produced does not have significant adverse impact on neighboring or adjacent uses either through siting or mitigation.

I. No portion of the solar energy system shall contain or be used to display advertising. The manufacturer's name and equipment information or indication of ownership shall be allowed on any equipment of the solar energy system provided they comply with the prevailing sign regulations.

J. No trees or other landscaping otherwise required by Conewago Township ordinances or attached as a condition of approval of any plan, application, or permit may be removed for the installation or operation of a solar energy system.

K. Prior to the issuance of a zoning or land use permit, solar energy system applicants must acknowledge in writing that the issuing of said permit shall not and does not create in the property owner, its, his, her or their successors and assigns in title or, create in the property itself;

(1) The right to remain free of shadows and/or obstructions to solar energy caused by development of adjoining or other property or the growth of any trees or vegetation on such property; or

(2) The right to prohibit the development on or growth of any trees or vegetation on such property.

This acknowledgement shall be submitted to Conewago Township and placed on any required subdivision and/or land development plans.

L. Other provisions of this chapter and the Conewago Township Subdivision and Land Development Ordinance notwithstanding, for a solar energy system permitted under this chapter, the following regulations shall apply:

(1) Minimum setback requirements shall be:
  (a) Front: 50 Feet
  (b) Side: 25 Feet
  (c) Rear: 25 Feet

(2) There shall be no requirement for a minimum amount of open space.

(3) All solar equipment/infrastructure that generates noise, including, but not limited to, inverters, transformers, etc., shall be located a minimum of 200 feet from all property lines and at least 400 feet from any residence.

M. Solar Easements

(1) Where a subdivision or land development proposes a solar energy system, solar easements may be provided. Said easements shall be in writing and shall be subject to the same conveyance and instrument recording requirements as other easements.

(2) Any such easements shall be appurtenant; shall run with the land benefited and burdened; and shall be defined and limited by conditions stated in the instrument

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of conveyance. Instruments creating solar easement shall include but not be limited to:

(a) A description of the dimensions of the easement including vertical and horizontal angles measured in the degrees or the hours of the day, on specified dates, during which direct sunlight to a specified surface or structural design feature may not be obstructed;

(b) Restrictions on the placement of vegetation, structures, and other objects which may impair or obstruct the passage of sunlight through the easement;

(c) Enumerate terms and conditions, if any, under which the easement may be revised or terminated;

(d) Explain the compensation for the owner of the real property subject to the solar easement for maintaining the easement and for the owner of the real property benefiting from the solar easement in the event of interference with the easement.

(3) If necessary, a solar energy system owner and/or operator must obtain any solar easements necessary to guarantee unobstructed solar access by separate civil agreement(s) with adjacent property owner(s).

N. Stormwater Requirements

(1) Stormwater management for the solar energy system shall be in accordance with the Conewago Township Stormwater Management Ordinance and the Pennsylvania Department of Environmental Protection (DEP) FAQ Document entitled "Chapter 102 Permitting for Solar Panel Farms", dated January 2, 2019 as applicable and as most recently revised. In the event that criteria within the PA DEP FAQ document discussed above cannot be fully met, a detailed stormwater analysis including post construction stormwater management (PCSM) and BMP requirements will be required.

(2) The surface area of the arrays of a solar energy system, regardless of the mounted angle of any solar panels, shall be considered impervious from a zoning perspective and calculated in the lot coverage of the lot on which the system is located.

(3) The applicant shall submit a Stormwater Management Plan that demonstrates compliance with Conewago Township stormwater management regulations.

(4) The individual solar modules within an array are arranged in a fashion that:

(a) Allows the passage of runoff between each module, minimizing the creation of concentrated runoff

(b) Individual solar panels shall not exceed one meter in width to allow for adequate vegetative cover to be established and maintained.

O. Agrivoltaics are permitted when:

(1) Only shade-tolerant crops are permitted.

(2) Plowing is prohibited, no-till application is required.

(3) Cutting or mowing is limited to a height of no less than 4 inches.

(4) Application of chemical fertilization or herbicides/pesticides is limited to the agronomic needs of the crop(s).

P. A single identification sign of a maximum of six square feet per sign side shall be permitted at each PSES site.

Q. Plan Requirements. A report and plan highlighting the existing conditions of the property shall be included in the submission to Conewago Township. The information should highlight existing vegetation, topography, and other existing natural features.

(1) Ground mounted PSES require submission and approval of a land development plan in accordance with the Conewago Township Subdivision and Land Development Ordinance if the solar project is considered a principal use of the property.

(2) Roof mounted PSES do not require submission of a land development plan.

R. Permit Requirements

(1) PSES shall comply with the Conewago Township Subdivision and Land Development Ordinance requirements through submission of a land development plan. The installation of PSES shall be in compliance with all applicable permit requirements, codes and regulations.

(2) The PSES owner and/or operator shall repair, maintain and replace the PSES and related solar equipment during the term of the permit in a manner consistent with industry standards as needed to keep the PSES in good repair and operating condition.

S. Decommissioning

(1) The developer of a solar energy system shall enter into a decommissioning agreement, with such agreement being in a form acceptable to the Conewago Township Solicitor.

(2) The solar energy system owner shall, at the end of each calendar year or fiscal year, provide information concerning the amount of energy generated by the solar energy system in the last 12 months.

(3) The solar energy system owner is required to notify Conewago Township immediately upon cessation or abandonment of the operation. The solar energy system shall be presumed to be discontinued or abandoned if no electricity is generated by such system for a period of six (6) continuous months.

(4) The solar energy system owner shall then have 12 months from abandonment in which to completely dismantle and remove the solar energy system including all solar related equipment or appurtenances related thereto, including but not limited to buildings, cabling, electrical components, roads, foundations and other associated facilities from the property. The decommissioning shall be conducted in a manner so that any agricultural ground upon which the solar energy system is located is again tillable and suitable for agricultural use, unless the landowner requests in writing, that the access roads or other land surface areas not be restored. All posts, foundations, framing, fencing, and all structural components of the solar energy system shall be fully removed, as well as all electrical and communications cabling that is less than 42" in depth. If the owner fails to dismantle and/or remove the solar energy system within the established timeframes, Conewago Township may complete the decommissioning at the owner's expense.

(5) At the time of issuance of the permit for the construction of the PSES, the owner shall provide financial security in the form and amount acceptable to Conewago Township to secure its obligations under this Section. Initial performance security for decommission shall be $100,000.00 per megawatt proposed to be generated. Performance security may be in the form of an escrow account with a federal or

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Commonwealth of Pennsylvania chartered lending institution or held by the Township, an irrevocable letter of credit issued by a federal or Commonwealth of Pennsylvania chartered lending institution, or a bond issued by a bonding company authorized to conduct such business in the Commonwealth of Pennsylvania. The approved amount and form of performance security shall be submitted to the Township no later than the submission of the application for a building or electric permit (where required and whichever is submitted first) or 30 calendar days prior to the start of development of the lot for the use, whichever occurs first.

(a) The PSES Developer shall, at the time of application, provide Conewago Township with an estimate of the cost of performing the decommissioning activities required herein, together with an administrative and inflation factor of 25% to account for the cost of obtaining permits to complete said activities. The estimate may include an estimated salvage and resale value, discounted by a factor of 20%. The decommissioning cost estimate formula shall be: Gross Cost of decommissioning activities + Administrative Factor of 25% - Salvage and resale credit of 80% = the decommissioning cost estimate.

(b) On every 5th anniversary of the date of providing the decommissioning financial security the PSES Owner with the help of a Pennsylvania licensed engineer shall provide an updated decommission cost estimate, utilized the formula set forth above with adjustments for inflation and cost and value changes. If the decommissioning security amount changes, the PSES Owner shall remit the increased financial security to Conewago Township within 30 days of the approval of the updated decommissioning security estimate by Conewago Township.

(c) Decommissioning security estimates shall be subject to review and approval by Conewago Township and the PSES Developer/ Owner shall be responsible for administrative, legal, and engineering costs incurred by Conewago Township for such review.

(d) At no time shall the financial security be an amount less than $500,000.00.

(e) The decommissioning security may be in the form of cash, letter of credit, or an investment grade corporate guarantee rated BBB-/Baa3 or better by S&P, Moody's, or AM Best, as applicable.

(f) Prior to approval of any plan or permit for a PSES, the PSES Developer shall enter into a Decommissioning Agreement with Conewago Township outlining the responsibility of the parties under this Agreement as to the Decommissioning of the PSES.

T. Environmental Protection

(1) All PSES must be set back a distance of 25 feet from any area designated as a wetland, a FEMA Floodplain, or an area containing 15% slope or greater.

(2) All PSES shall be set back 100 feet from a property listed on, or eligible for listing on the National Register of Historic Places as designated by the State Historic Preservation Office of the National Park Service.

U. Ground mounted PSES shall be screened from adjoining residential uses or zones according to the standards found in Section 140-32 of the Conewago Township Zoning ordinance.

V. Landscape screening shall be provided along all roads rights-of-way and shall visually screen the solar energy system from the roadway. Landscaping shall be installed between the solar energy system fencing and road right-of-way and shall consist of one evergreen tree and one deciduous tree for every 20 feet of road frontage adjacent to the solar energy system. The required screening shall be planted in a staggered manner and shall have a mixture of varieties. Landscaping shall also blend in with existing treelines and existing vegetation, wherever possible. All coniferous trees shall be a minimum of six feet in height at time of planting, and all deciduous trees shall not be less than two-inch caliper at time of planting.

W. PSES shall not be placed within any legal easement or right-of-way location, or be placed within any storm water conveyance system or in any other manner that would alter or impede storm water runoff from collecting in a constructed storm water conveyance system. This shall include any agricultural BMPs that are still required to be maintained within the lifespan of the practice, unless approval is obtained by the funding agency for any impact associated with the PSES project.

X. The solar energy system shall be sited in such a way that it presents minimal impact to traffic and no impact to public health and safety.

Y. The structures comprising the solar energy system shall be constructed and located in a manner so as to minimize the necessity to remove existing trees upon the lot, and in no event shall wooded acreage comprising more than 2% of the deed acreage of the lot or portion of the lot devoted to the solar energy system use be removed without demonstrating that such removal is necessary for the reasonable construction and efficient performance of the use.

Z. Security

(1) All ground-mounted PSES shall be completely enclosed by a minimum eight (8) foot and maximum ten foot (10) high fence with a self-locking gate to prevent or restrict unauthorized persons or vehicles from entering the property. The fence shall meet setback requirements noted in this section.

(2) A clearly visible warning sign shall be placed at the base of all pad-mounted transformers and substations and on the fence, barrier, or facility perimeter surrounding the PSES informing individuals of potential voltage hazards.

AA. Access

(1) At a minimum, a 25' wide access road must be provided from a state or municipal roadway for at least 100' into the site. Access points must be designed to accommodate the largest construction traffic that will be entering the site.

(2) Between the solar arrays, an emergency access drive shall be provided to allow access for maintenance vehicles and emergency management. The width of this aisle/drive shall be confirmed with the local EMS providers but in no case shall it be less than 12 feet in width. Emergency access width is the distance between the bottom edge of a solar panel to the top edge of the solar panel directly across from it.

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(3) If the PSES is exempt from stormwater requirements as specified in this section, vegetation must be maintained or replaced after maintenance and/or emergency use.
(4) Access to the PSES shall comply with all access requirements in the Conewago Township Subdivision and Land Development Ordinance.
(5) All access points, whether temporary or permanent, shall be required to obtain a PennDOT or Township Roadway Occupancy Permit.
(6) All sites shall be designed such that the construction traffic, to the greatest degree possible, shall utilize access points from state highways instead of local Township roadways.

BB. PSES shall not be artificially lighted except to the extent required for safety or applicable federal, state, or local authority. This shall include any indicator lights/beacons which shall not be visible beyond the property line of the project site, whether solid or flashing.

CC. The owner of a PSES shall provide Conewago Township with written confirmation that the public utility company to which the PSES will be connected has been informed of the customer's intent to install a grid connected system. The written confirmation shall include a statement of capacity and approval of the proposed connection.
(1) Roof and Wall Mounted Principal Solar Energy Systems:
(a) For roof and wall mounted systems, the applicant shall provide evidence that the plans comply with the Uniform Construction Code and adopted building code of Conewago Township that the roof or wall is capable of holding the load imposed on the structure.
(b) PSES mounted on the roof or wall of any building shall be subject to the maximum height regulations of the underlying zoning district.

SECTION 3: Section 155-128.2, "Accessory Solar Energy Systems," shall be created and provide as follows:

§ 155-128.2 Accessory Solar Energy Systems.

A. Regulations Applicable to All Accessory Solar Energy Systems:
(1) ASES shall be a permitted accessory use by right in all zoning districts.
(2) Permit Requirements
(a) Zoning /building permit applications shall document compliance with this Section and shall be accompanied by drawings showing the location of the system on the building or property, including property lines. Permits must be kept on the premises where the ASES is constructed.
(b) The zoning/building permit shall be revoked if the ASES, whether new or pre-existing, is moved or otherwise altered, either intentionally or by natural forces, in a manner which causes the ASES not to be in conformity with this Ordinance.
(c) The ASES must be properly maintained and be kept free from all hazards, including but not limited to, faulty wiring, loose fastenings, being in an unsafe condition or detrimental to public health, safety or general welfare. In the event of a violation of any of the foregoing provisions, the Zoning

Officer shall give written notice specifying the violation to the owner of the ASES to conform or to remove the ASES.

B. Roof Mounted and Wall Mounted Accessory Solar Energy Systems:
   (1) A roof mounted or wall mounted ASES may be located on a principal or accessory building.
   (2) ASES mounted on roofs or walls of any building shall be subject to the maximum height regulations specified for principal and accessory buildings within each of the underlying Zoning Districts.
   (3) Wall mounted ASES shall comply with the setbacks for principal and accessory structures in the underlying zoning districts.
   (4) Solar panels shall not extend beyond any portion of the roof edge.
   (5) Roof mounted solar panels shall be located only on rear or side-facing roofs as viewed from any adjacent street unless the applicant demonstrates that, due to solar access limitations, no location exists other than the street-facing roof, where the solar energy system can perform effectively.
   (6) For roof and wall mounted systems, the applicant shall provide evidence that the plans comply with the Uniform Construction Code and adopted building code of Conewago Township, that the roof or wall is capable of holding the load imposed on the structure.

C. Ground Mounted Accessory Solar Energy Systems:
   (1) Setbacks
      (a) The minimum yard setbacks from side and rear property lines shall be equivalent to the principal structure setback in the zoning district.
      (b) A ground mounted ASES shall not be located in the required front yard.
   (2) The total surface area of the arrays of ground mounted ASES on the property shall not exceed more than fifteen (15) percent of the lot area. The area of the ASES for the purposes of this coverage calculation would include the area of the panels/arrays and any drive aisle area between arrays.
   (3) Height: Ground mounted ASES shall not exceed 20 feet in height above the ground elevation surrounding the systems.
   (4) Appropriate safety/warning signage concerning voltage shall be placed at ground mounted electrical devices, equipment, and structures. All electrical control devices associated with the ASES shall be locked to prevent unauthorized access or entry.
   (5) Ground-mounted ASES shall not be placed within any legal easement or right-of-way location, or be placed within any storm water conveyance system or in any other manner that would alter or impede storm water runoff from collecting in a constructed storm water conveyance system.

SECTION 4. Repealer. All provisions of previous Ordinances of Conewago Township which are contrary to this Ordinance are expressly repealed.

SECTION 5. Savings Clause. In all other respects, the Conewago Township Code shall remain as previously enacted and ordained.

SECTION 6. Severability. The provisions of this Ordinance are declared to be severable, and if any section, subsection, sentence, clause or part thereof is, for any reason, held to be invalid to

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unconstitutional by a court of competent jurisdiction, such decision shall not affect the validity of any remaining sections, subsections, sentences, clauses or part of this ordinance.

SECTION 7. Effective Date. This Ordinance shall take effect immediately.

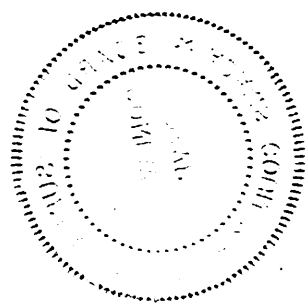
ENACTED AND ORDAINED this 21st day of October, 2024, by the Board of Supervisors of Conewago Township, Adams County, Pennsylvania.

ATTEST:

Tamara Bittle, Secretary

CONEWAGO TOWNSHIP

By: Charlotte M. Shaffer

Charlotte Shaffer, Chair

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