

**NORTH BEAVER TOWNSHIP**  
**ORDINANCE NO. 21-1-4-1 OF**  
**2021**

**AN ORDINANCE OF NORTH BEAVER TOWNSHIP, LAWRENCE COUNTY, PENNSYLVANIA,  
AMENDING THE NORTH BEAVER TOWNSHIP ZONING ORDINANCE, CHAPTER 425, BY  
ESTABLISHING REQUIREMENTS FOR SOLAR ENERGY SYSTEMS.**

**WHEREAS**, the Pennsylvania Municipalities Planning Code, Act 247 of July 31, 1968, as amended, 53 P.S. §§ 10101 *et seq.*, enables the Township, through its zoning ordinance, to regulate the use of property and to promote the conservation of energy through access to, and use of, renewable energy resources; and

**WHEREAS**, North Beaver Township seeks to promote the general health, safety and welfare of the community by adopting and implementing an amendment to the Zoning Ordinance providing for access to, and use of, solar energy systems; and

**WHEREAS**, the purpose of this Ordinance is to set forth requirements for solar energy systems.

**NOW, THEREFORE, BE IT ORDAINED AND ENACTED** by the Board of Supervisors of North Beaver Township, Lawrence County, Commonwealth of Pennsylvania, as follows:

**SECTION 1: DEFINITIONS**

**ACCESSORY SOLAR ENERGY SYSTEM (ASES):** An area of land, or other area, used for a solar collection system used to capture solar energy, convert it to electrical energy or thermal power, and supply electrical or thermal power primarily for personal on-site use consumption and not for regeneration to another party. An accessory solar energy system consists of one (1) or more free-standing ground, or roof-mounted solar energy arrays or modules, or solar-related equipment and is intended to primarily reduce on-site consumption of utility power or fuels.

**GLARE:** The effect produced by light with an intensity sufficient to cause annoyance, discomfort or loss in visual performance and visibility.

**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 system consists of one (1) or more free-standing ground, or roof-mounted collective 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 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 RELATED EQUIPMENT:** Items, including a solar photovoltaic cell, module, panel or array, or solar hot air/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 ARRAY:** A grouping of multiple solar modules with purpose of harvesting solar energy.
2. **SOLAR CELL:** The smallest basic solar electric device which generates electricity when exposed to light.
3. **SOLAR MODULE:** A grouping of solar cells with the purpose of harvesting solar energy.

## **SECTION 2: ACCESSORY SOLAR ENERGY SYSTEMS (ASES)**

### **A. Regulations Applicable to All Accessory Solar Energy Systems (ASES):**

1. ASES shall be permitted as a use by right in all zoning districts.
2. Exemptions
  - a. ASES with an aggregate collection and/or focusing area of 100 square feet or less are exempt from these regulations.
  - b. ASES constructed prior to the effective date of this Ordinance shall not be required to meet the terms and conditions of this Ordinance. Any physical modifications to an ASES constructed prior to the effective date of this Ordinance that materially alters the ASES shall be required to address the standards established in this Ordinance. Routine maintenance or like-kind replacements do not require a permit.
3. The ASES layout, design, installation and on-going maintenance 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), or other similar certifying organizations; and shall comply with the PA Uniform Construction Code (UCC) as enforced by the 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.

Upon completion of installations, the ASES shall be maintained in good working order in accordance with the standards of North Beaver Township codes under which the ASES was constructed. Failure of the property owner to maintain the ASES in good working order is grounds for appropriate enforcement by the Township in accordance with all applicable Ordinances.

4. ASES installers must certify to the Zoning Officer they are listed as a certified installer on the PA Department of Environmental Protection (DEP) approved solar installer list, or that they meet, or exceed, the criteria to be a DEP-approved installer.

5. All on-site utility, transmission lines, and plumbing shall be placed underground to the extent feasible.
6. The owner of an ASES shall provide written confirmation to the Township Zoning Officer that the public utility company to which the ASES will be connected has been informed of the customer's intent to install a grid-connected system and such connection has been approved. Off-grid systems shall be exempt from this requirement.
7. The display of advertising is prohibited except for reasonable size identification of the manufacturer of the system as approved by the Zoning Officer.
8. All ASES shall be placed such that concentrated solar radiation or glare does not project onto adjacent structures, ~~or~~ roadways or adjoining property owners.
9. Solar Easements
  - a. Where a subdivision or land development involves the use of solar energy systems, 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.
  - b. Any such easement shall be appurtenant; shall be run with the land benefitted and burdened; and shall be defined and limited by conditions stated in the instrument of conveyance. Instruments creating solar easement shall include, but not be limited to:
    - i. A description of the dimensions of the easement including vertical and horizontal angles measured in the degrees or hours of the day, on specified dates, during which direct sunlight to a specified surface or structural design feature may not be obstructed;
    - ii. Restrictions on the placement of vegetation, structures, and other objects which may impair or obstruct the passage of sunlight through the easement;
    - iii. Enumerate terms and conditions, if any, under which the easement may be revised or terminated;
    - iv. 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 benefitting from the solar easement in the event of interference with the easement;
    - v. Owner information, deed book volume and page number or document number, along with the parcel identification number.
  - c. If required, an ASES owner and/or operator must obtain any solar easements necessary to guarantee unobstructed solar access by separate agreement(s) with adjacent property owner(s).

10. By accepting a permit issued by the Township for the ASES, the applicant shall be deemed to have acknowledged and agreed that the issuance of said permit for a solar energy system 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: (a) the right to remain free of shadows and/or obstructions to solar energy caused by development of adjoining property or other property or the growth of any trees or vegetation on such property; or (b) the right to prohibit the development on or growth of any trees or vegetation on such property.

11. Decommissioning

- a. Each ASES and all solar-related equipment shall be removed within twelve (12) months of the date when the use has been discontinued or abandoned by the system owner and/or operator, or upon termination of the useful life of same.
- b. The ASES shall be presumed to be discontinued or abandoned if no electricity is generated by such solar collector for a period of twelve (12) months.
- c. The ASES owner shall, at the request of the Township, provide information concerning the amount of energy generated by the ASES in the last twelve (12) months.

12. 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 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 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 violations 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 or wall mounted ASES may be located on a principal or accessory structure.

2. ASES mounted on roofs or walls of any structure shall be subject to the maximum height regulations specified for principal and accessory structures within the underlying Zoning District.
3. Wall mounted ASES shall comply with the setbacks for principal and accessory structures in the underlying Zoning District.
4. For roof and wall mounted systems, the applicant shall provide evidence that the plans comply with the PA Uniform Construction Code (PA UCC) and adopted Building Codes of the Township that the roof or wall is capable of bearing the load imposed on structure.

C. Ground Mounted Accessory Solar Energy Systems

1. Setbacks

- a. Ground mounted ASES are prohibited in front yards between the principal structure and the street.
- b. A ground mounted ASES may be located in the portion of the front yard, not between the principal structure and the street, provided that: (1) the applicant demonstrates that, due to solar access limitations, no other location exists on the property where the ASES can function effectively; and (2) vegetative screening is provided.

2. Height

- a. Freestanding ground mounted ASES shall not exceed the maximum accessory structure height in the underlying Zoning District and Stormwater Management Ordinance.

3. Coverage

- a. The area beneath the ground mounted ASES is considered pervious cover. However, use of impervious construction materials under the system could cause the area to be considered impervious and subject to the impervious surfaces limitations for the applicable Zoning District.

4. Screening

- a. Ground mounted ASES shall be screened from any adjacent property that is zoned, or used, for residential purposes. The screen shall consist of plant materials which provide a visual screen. In lieu of a vegetative screen, a decorative fence meeting the Zoning Ordinance requirements may be used.

5. 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.
6. Ground mounted ASES shall not be placed within any legal easement or right-of-way location.
7. Ground mounted ASES shall not be placed within any stormwater conveyance system or in any other manner that would alter or impeded stormwater runoff from collecting in a constructed stormwater management system.

### **SECTION 3: PRINCIPAL SOLAR ENERGY SYSTEMS (PSES)**

#### **A. Regulations Applicable to All Principal Solar Energy Systems:**

1. PSES shall be permitted as a Conditional Use in the ~~"A-1—Agricultural/Conservation" and "I—Industrial" Zoning Districts~~ District.
2. PSES constructed prior to the effective date of this Ordinance shall not be required to meet the terms and conditions of this Ordinance. Any physical modifications to a PSES constructed prior to the effective date of this Ordinance that materially alters the PSES shall be required to address the standards established in this Ordinance. Routine maintenance or like-kind replacements do not require a permit.
3. The PSES layout, design, installation and on-going maintenance 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), or other similar certifying organizations; and shall comply with the PA Uniform Construction Code (UCC) as enforced by the 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.
4. PSES installers must certify they are listed as a certified installer to the Zoning Officer on the PA Department of Environmental Protection (DEP) approved solar installer list, or that they meet the criteria to be a DEP-approved installer by meeting or exceeding one of the following requirements:
  - a. Is certified by the North American Board of Certified Energy Practitioners (NABCEP).
  - b. Has completed an Interstate Renewable Energy Council (IREC) Institute for Sustainable Power Quality (IS PQ) accredited PV training program or a PV manufacturer's training program and successfully installed a minimum of three PV systems.

5. All on-site transmission and plumbing lines inside of the fence line of the PSES shall be placed underground or out of sight from public streets and neighboring properties, to the extent feasible.
6. The developer of a PSES shall provide the Township Zoning Officer written confirmation that the public utility company to which the PSES will be connected has been informed of the developer's intent to install a grid-connected system and such connection has been approved.
7. No portion of the PSES shall contain or be used to display advertising. The manufacturer's name and equipment information or indication of ownership shall be permitted on any equipment of the PSES provided they comply with all existing sign regulations.
8. All ASES shall be placed such that concentrated solar radiation or glare does not project onto adjacent structures or roadways or adjoining property owners.
9. A noise study, conducted by an independent noise study expert, and paid for by the applicant, shall be included in the application. Noise from the operation of a PSES shall not exceed 50dba, as measured at the property line of the nearest property that is not participating (by means of a lease, easement, solar easement or other agreement) in the development and/or operation of the PSES.
10. No trees or other landscaping otherwise required by the Township for previous developments may be removed for the installation or operation of a PSES, except to the extent provided in the approved land development plan for the PSES.
11. The PSES owner and/or operator shall provide the Township with a phone number and identify an individual responsible to act as a contact for the public with inquiries or complaints throughout the life of the project.
12. Decommissioning
  - a. The PSES owner is required to notify the Township within thirty (30) days following permanent cessation or abandonment of the operation. The PSES shall be presumed to be discontinued or abandoned if no electricity is generated by such system for a period of twelve (12) continuous months and the owner of the PSES has evidenced its intent to permanently discontinue operation of the PSES.
  - b. The PSES owner shall then have twelve (12) months in which to dismantle and remove the PSES, 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, except to the extent the owner of the property agrees that roads and foundations may remain in place. If the PSES-owner fails to dismantle and remove the PSES to the extent required by this paragraph within the established time frames, the Township may complete the decommissioning at the PSES-owner's expense. The costs of such decommissioning together with a penalty of

ten (10%) percent to be charged upon the land upon which the PSES exists as a municipal lien, or alternatively to recover such costs and penalty together with reasonable attorney fees incurred by the Township, in a suit at law against the owner or owners, but, failing to recover same, the judgment therefore shall be charged upon the land as a lien; and, this subsection is separate from and in addition to the fine, penalty, and costs which may be imposed by any other subsection of this Ordinance.

- c. Prior to the issuance of a permit by the Township, the owner shall provide financial security in the form of cash, a letter of credit or bond, acceptable to the Township. ~~The amount of the financial security shall be equal to 110~~eighty-five percent (85%) of the estimated net costs-cost of decommissioning based on an estimate provided by a professional engineer registered in the Commonwealth of Pennsylvania to secure the expense of dismantling and removing the PSES and stabilizing the land for storm water management purposes as determined by a professional engineer registered in the Commonwealth of Pennsylvania after taking into account the estimated salvage value of the PSES; provided, however, that in no event shall the amount of the financial security be less than \$25,000. The net ~~The decommissioning cost estimate (taking into account salvage value)~~ shall be updated by a professional engineer registered in the Commonwealth of Pennsylvania at the developer/owner's expense every five (5) years thereafter and the financial security shall be adjusted accordingly.

13. By accepting a permit issued by the Township for the PSES, the applicant shall be deemed to have acknowledged and agreed that the issuance of said permit for a solar energy system 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: (a) the right to remain free of shadows and/or obstructions to solar energy caused by development of adjoining property or other property or the growth of any trees or vegetation on such property; or (b) the right to prohibit the development on or growth of any trees or vegetation on such property, and that any such rights would need to be acquired by means of a solar easement.

#### 14. Solar Easements

- a. Where a subdivision or land development involves the use of solar energy systems, 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.
- b. Any such easement shall be appurtenant; shall be run with the land benefitted and burdened; and shall be defined and limited by conditions stated in the instrument of conveyance. Instruments creating solar easement may include, but not be limited to:
- i. A description of the dimensions of the easement including vertical and horizontal angles measured in the degrees or hours of the day, on specified dates, during which direct sunlight to a specified surface or structural design feature may not be obstructed;
  - ii. Restrictions on the placement of vegetation, structures, and other objects which may



Impair or obstruct the passage of sunlight through the easement;

- iii. Enumerate terms and conditions, if any, under which the easement may be revised or terminated;
- iv. 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 benefitting from the solar easement in the event of interference with the easement;
- v. Owner information, deed book volume and page or document number, along with the parcel identification number.

15. Permit Requirements

- a. PSES shall comply with the Township's Subdivision and Land Development Ordinance. The installation of a PSES shall be in compliance with all applicable permit requirements, codes and regulations.
  - b. 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.
- B. Ground Mounted Principal Solar Energy Systems: A PSES, and any associated accessory equipment (other than fencing, collection lines, transmission lines and similar installations) shall comply with the following area and dimensional requirements with respect to the PSES and any such associated accessory equipment as a whole, and lot lines of separate parcels of land included therein that are interior to the facility and not outside of the perimeter of the facility shall not be subject to the following minimum lot size and setback requirements. The setback requirements can also be satisfied by submission to the Township of a written setback waiver executed by the affected adjoining landowner irrevocably consenting to installation and operation of the solar related equipment and any associated accessory equipment closer to the property line than otherwise permitted by this Ordinance.

Minimum Lot Area (square feet)	Minimum Lot Width	Minimum Front Setback	Minimum Side Yard	Minimum Rear Yard	Maximum Height	Maximum Lot Coverage
32,000	150 ft.	50 <u>20</u> ft.	15 ft.	15 ft.	15 ft.	N/A

Substation improvements, poles and wires shall not be subject to the foregoing height limitation.

The area beneath the ground mounted PSES is considered pervious cover. However, use of impervious construction materials under the system could cause the area to be considered impervious and be required to meet the lot coverage limitation for the use providing the highest maximum lot coverage limitation in the applicable Zoning District.

1. Screening

Any areas of a ground mounted PSES that are directly adjacent to a parcel containing an occupied residence and are within the line of sight from the residential structure (other than a residence of the owner participating in the PSES) shall provide a suitable landscaping buffer area at least ten (10) feet in width of evergreen-type plants that shall be of a kind, or used in such a manner, so as to provide a continuous opaque screen within 36 months of commencement of operations in such line-of-sight area to be screened. In lieu of a vegetative screen, a decorative fence meeting the Zoning Ordinance requirements may be used.

2. Ground mounted PSES shall not be placed within any legal easement or right-of-way location if such placement would violate the terms and conditions of such easement or right-of-way.

3. Ground mounted PSES shall not be placed in any stormwater conveyance system in any manner that would impede stormwater runoff from collecting in a constructed conveyance system.

4. Security

a. All ground mounted PSES (excluding transmission lines) shall be completely enclosed by a minimum seven foot (7') high fence.

b. A clearly visible warning sign shall be placed at the base of all pad-mounted transformers and substations and on the fence on the surrounding PSES informing individuals of potential voltage hazards.

5. Access

a. A minimum twenty (20) foot wide access road, from a public roadway, shall be provided to the site.

b. Maintenance roads, a minimum of twelve (12) feet in width, shall be provided between solar arrays to permit access for maintenance and emergency vehicles.

6. The ground mounted PSES shall not be artificially lighted except to the extent required by applicable federal, state or local authority or as required for safety purposes.

7. When a ground mounted PSES is removed, any earth disturbance resulting from the removal shall be graded and re-seeded.

C. Roof and Wall Mounted Principal Solar Energy Systems:

1. For roof and wall mounted PSES, the applicant shall provide evidence that the plans comply with the PA UCC and the adopted Township Building Code.

2. PSES mounted on the roof or wall of any structure shall be subject to the maximum height restrictions of the underlying Zoning District.

**Section 4: PENALTIES AND ENFORCEMENT**

Any person, partnership or corporation who or which has violated or permitted the violation of the provisions of this Ordinance shall, upon being found liable therefor in a civil enforcement proceeding commenced by North Beaver Township, pay a judgment of not more than five hundred dollars (\$500) plus all court costs, including reasonable attorney's fees, incurred by North Beaver Township as a result thereof. No judgment shall commence or be imposed, levied or payable until the date of the determination of a violation by the Magisterial District Judge. If the defendant neither pays nor timely appeals the judgment, North Beaver Township may enforce the judgment pursuant to the applicable Rules of Civil Procedure. Each day that a violation continues shall constitute a separate violation, unless the Magisterial District Judge determining that there has been a violation further determines that there was a good faith basis for the person, partnership or corporation violating the ordinance to have believed that there was no such violation, in which event there shall be deemed to have been only one such violation until the fifth day following the date of the determination of a violation by the Magisterial District Judge, and thereafter each day that a violation continues shall constitute a separate violation. All judgments, costs and reasonable attorney's fees collected for the violation of the Ordinance shall be paid over to North Beaver Township.

**Section 45: ~~Severability~~ SEVERABILITY**

The provisions of this Ordinance are declared to be severable, and if any provision of this Ordinance shall, for any reason be held to be invalid, such invalidity shall not affect the Ordinance as a whole or any other part or part thereof. If any provisions of this Ordinance shall conflict with or be inconsistent with other provisions of the Zoning Ordinance, the provisions of this Ordinance shall control.

**Section 56: ~~Repealer~~ REPEALER**

Any and all ordinances/resolutions, or parts thereof, conflicted herewith, are repealed insofar as the matters herein are affected.

**Section 67: ~~Effective Date~~ EFFECTIVE DATE**

This Ordinance shall become effective five (5) days after enactment.

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ORDAINED AND ENACTED this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

ATTEST: NORTH BEAVER TOWNSHIP  
BOARD OF SUPERVISORS

\_\_\_\_\_

\_\_\_\_\_

Arin Crawford, Township Secretary

Jerry Tilla, Chairman, Board of Supervisors

Scott Barth, Supervisor

Grant McKinley, Supervisor