

**PLAINFIELD TOWNSHIP
NORTHAMPTON COUNTY, PENNSYLVANIA**

ORDINANCE NO _____

AN ORDINANCE OF THE PLAINFIELD TOWNSHIP BOARD OF SUPERVISORS WHICH AMENDS PLAINFIELD TOWNSHIP ORDINANCE NO. 422 BY AMENDING CHAPTER 27 ENTITLED “ZONING” OF THE CODE OF ORDINANCES OF PLAINFIELD TOWNSHIP ESTABLISHING REGULATIONS FOR ROOF INSTALLATION AND GROUND ARRAY INSTALLATION OF SOLAR ENERGY SYSTEMS AND AMENDING CHAPTER 22 ENTITLED “SUBDIVISION AND LAND DEVELOPMENT” OF THE CODE OF ORDINANCES OF PLAINFIELD TOWNSHIP TO PROVIDE LAND DEVELOPMENT REVIEW WHEN A PRINCIPAL SOLAR ENERGY PRODUCTION FACILITY IS PROPOSED.

WHEREAS, the Board of Supervisors of the Township of Plainfield has determined that:

1. Solar energy is an abundant, renewable, and nonpolluting energy resource.
2. Converting solar rays to electricity or heat will help to reduce the Township’s dependence on nonrenewable energy resources and decrease air and water pollution resulting from the use of conventional energy sources;
3. Solar energy systems will help to reduce peak power demands from the electric power grid and help diversify the Commonwealth’s energy supply portfolio; and
4. Solar energy systems promote competition in the electricity supply market by promoting customer choice; and
5. Ordinance No. 422 defining Solar Energy Systems shall be further developed and amended.

WHEREAS, the Board finds that it is appropriate to standardize the requirements for solar energy systems, so that this clean, renewable energy resource can be utilized in a cost-effective and appropriate manner in Plainfield Township.

NOW, THEREFORE, pursuant to the Pennsylvania Municipalities Planning Code, Act of 1968, P.L. 805, No. 247 as reenacted and amended it is hereby ordained and enacted by the Plainfield Township Board of Supervisors as follows:

SECTION 1. TITLE.

This Chapter shall be known as the Solar Energy Systems Ordinance for Plainfield Township.

SECTION 2. PURPOSE.

The purpose of this Chapter is to promote the use of Solar Energy and to provide for the land planning, installation and construction of Solar Energy Systems in Plainfield Township subject to reasonable conditions that will protect the public health, safety and welfare.

SECTION 3. CLASSIFICATION.

1. Solar Energy Systems shall be allowed as set forth in this Ordinance. This ordinance applies to Solar Energy Systems to be installed and constructed for residential, commercial and institutional uses.

2. Solar Energy Systems that are the primary use of a lot are governed by this Section of this Zoning Ordinance and the Subdivision and Land Development Ordinance.

SECTION 4. DEFINITIONS.

Chapter 27, Zoning. The following sections shall be added in their entirety to Section 202 the definitional section of the Zoning Ordinance:

1. **“Accessory Solar Energy System”** – A solar collection system consisting of one or more roof and/or ground mounted solar collector devices and solar related equipment, which has a lot coverage area of less than or equal to one thousand five hundred (1,500) square feet, and is intended to primarily reduce and/or supplement on-site consumption of utility power. A system is considered an accessory solar energy system only if it supplies electrical power solely for on-site use, except that when a property upon which the facility is installed also receives electrical power supplied by a utility company, excess electrical power generated and not presently needed for on-site use may be used by the utility company.

2. **“Capacity Rating”** – The rating given to a PV system by its manufacturer denoting the load the system is able to meet or supply when operating at full capacity. For a solar PV system, this will occur when the system is in direct sunlight with no shade.

3. **“Kilowatt (kW)”** – A unit of electrical power equal to 1,000 Watts, which constitutes the basic unit of electrical demand. The Watt is a metric measurement of power (not energy) and is the rate (not the duration) at which electricity is used. 1,000 kW is equal to 1 megawatt (MW).

4. **“Kilowatt-Hour (kWh)”** – A unit of electrical energy, equivalent to the use of 1 kilowatt of electricity for one full hour. Utilities measure customer’s electric energy usage on the basis of kilowatt-hours, and electricity rates are most commonly expressed in cents per kilowatt-hour.

5. **“Megawatt (MW)”** – Unit of electric power equal to 1,000 kW, or 1 million Watts.

6. **“Photovoltaic (PV)”** – The technology that uses a semiconductor to convert light directly into electricity.

7. **“Power Purchase Agreements (PPA)”** – A contract to purchase energy. PPA’s are usually established between a power plant and a purchaser of electrical energy, such as a utility. A PPA may be a contract written between a building owner that wants to use solar energy and a third party developer who will install, maintain and own the PV system used to generate the electricity on the building’s structure, then sell the solar energy produced by the system to the building owner at a pre-determined rate.

8. **“Prime Farmland”** – Properties consisting of 25 acres or more currently enrolled in Act 319 (Clean and Green), or aerial imagery showing evidence of cultivated fields, pasture, hay production, or other agricultural use within the previous 5 years.

9. **“Principal Solar Energy System”** – A solar collection system consisting of one or more roof and/or ground mounted solar collector devices and solar related equipment, which has a lot coverage area of more than one thousand five hundred (1,500) square feet. Principal Solar Energy Systems shall include the term Grid Scale Solar Energy System.

10. **“Roofline”** – The highest elevation point of the roof. A roof shall be defined as the outside top covering of a building.

11. **“Solar Energy System”** – means any solar collector or other solar energy device, or any structural design feature, mounted on a building or on the ground, and whose primary purpose is to provide for the collection, storage and distribution of solar energy for space heating or cooling, for water heating or for electricity.

12. **“Solar Related Equipment”** – Items including a solar photovoltaic cell, panel, or array, or solar hot air or water collector device panels, lines, pumps, batteries, mounting brackets, framing and possibly foundations used for or intended to be used for collection of solar energy.

SECTION 5. ACCESSORY SOLAR ENERGY SYSTEM – IMPERVIOUS COVERAGE

The Accessory Solar Energy System surface of a ground mounted solar energy panel (s), regardless of the mounted angle, shall be calculated as part of the overall lot coverage and be deemed impervious coverage. Impervious coverage shall be determined by calculating the total square footage area of all combined solar collector panels or the total square footage area of all combined footprint bases of the solar collector panels. Whichever calculation produces the greater square footage area shall be the impervious coverage area. **SECTION 6. PERMITTED USE IN ALL ZONING DISTRICTS**

Accessory Solar Energy Systems shall be permitted as an accessory use in all zoning districts subject to 27-318. J. (Accessory Uses) as follows:

1. Section 27-305.5.B(22) – Accessory Solar Energy System (FF)
2. Section 27-306.5.B(15) – Accessory Solar Energy System (SR)
3. Section 27-307.5.B(15) – Accessory Solar Energy System (PR)

4. Section 27-308.4.B(16) – Accessory Solar Energy System (VR)
5. Section 27-309.4. B(17) – Accessory Solar Energy System (VC)
6. Section 27-310.4.B(14) – Accessory Solar Energy System (HI)
7. Section 27-311.4.B(14) – Accessory Solar Energy System (GC)
8. Section 27-312.4.B(13) – Accessory Solar Energy System (CI)
9. Section 27-313.4.B(11) – Accessory Solar Energy System (I-BP)
10. Section 27-314.5.B(11) – Accessory Solar Energy System (GI)
11. Section 27-315.4.B(11) – Accessory Solar Energy System (BMC)

SECTION 7. SPECIAL EXCEPTION USE IN THE FARM & FOREST ZONING DISTRICT.

“Principal Solar Energy Systems” shall be added to the Farm & Forest Zoning District as a special exception use as set forth in Section 27-305 of the Plainfield Township Zoning Ordinance, as follows:

1. Section 27-305.3.DD – Principal Solar Energy Systems.

SECTION 8. SECTION 27-317 (Special Exception Uses).

The following Section shall be added to 27-317.5. and shall read as follows:

Section 27-317.5.AAAA. Principal Solar Energy Systems:

1. A new Principal Solar Energy System, or any upgrades, modification, or structural changes that alters the size or placement of an existing solar energy system, shall comply with the provisions of this section.
2. A Principal Solar Energy System shall be a special exception use in the Farm & Forest Zoning District and is subject to the specific criteria as set forth in Subsection 6 below.
3. Notwithstanding any provision herein to the contrary, Principal Solar Energy Systems shall be prohibited on lands classified as “prime” or on land which is subject to a conservation or agricultural preservation easement.
4. A Principal Solar Energy System which is permitted by special exception in any zoning district is subject to the specific criteria listed below in Subsection 6.

5. If a facility is classified and defined as a “Principal Solar Energy System” it shall be deemed a principal use.

6. **Principal Solar Energy System:**

A. **Principal Solar Energy System may be roof mounted or ground mounted;**

B. **Roof Mounted Solar Energy Systems:**

i. In no instance shall any part of a roof mounted solar energy system extend beyond the edge of the roof.

ii. The solar panels shall not exceed the height of the roof line on a pitched roof. On a flat roof, the solar panels shall be angled such that they are not more than three (3) feet above the roof line, and the height of the solar panels shall not exceed the height requirements for the non-residential or residential zoning district in which the solar energy system is located.

iii. The design of solar energy systems shall, to the extent reasonably possible, use materials, colors, textures, screening and landscaping that will blend the facility into the natural setting and existing environment.

iv. For any solar panel to be constructed on the rooftop of a new building or structure, the applicant must demonstrate that the solar panels are not visible from the ground level of any neighboring property within five hundred 500 feet of the nearest proposed rooftop solar panel.

C. **Ground Array Solar Energy Systems:**

i. Ground arrays shall not exceed a height of fifteen (15) feet above the ground.

ii. Ground arrays are subject to a setback distance of no less than 100 feet from the front, rear and side yards.

iii. All ground arrays shall be enclosed with fencing in order to provide for the security and safety of the solar energy system and the public.

iv. Applicant must make reasonable provisions for emergency lighting for purposes of security and safety. The ground array shall not be artificially lighted for any other purpose.

- v. The surface of a ground mounted solar energy panel(s), regardless of the mounted angle, shall be calculated as part of the overall lot coverage and be deemed impervious coverage. Impervious coverage shall be determined by calculating the total square footage area of all combined solar collector panels or the total square footage area of all combined footprint bases of the solar collector panels. Whichever calculation produces the greater square footage area shall be the impervious coverage area.
- vi. All ground mounted solar energy mechanical equipment shall be screened from any adjacent property that is used for residential purposes. The screen shall consist of shrubbery, trees or other non-invasive plant species as set forth in Section 27-404.4. to provide a visual screen from any adjacent property that is zoned or used for residential and/or commercial purposes. If the panels are fixed, screening shall be to the base of the panel. The remaining sides shall be fully screened. If the panels rotate with the sun, the panels shall be screened to the base of the panel in all rotational directions. Screening shall not be located in the utility easement area. There shall not be a display of advertising except for the reasonable identification of the panel, inverter or other equipment manufacturer.
- vii. If a ground mounted solar energy system is removed, any earth disturbance as a result of the removal shall be graded and reseeded.
- viii. If a ground mounted solar energy system is defective or deemed unsafe by the Building Code Official, the solar energy system shall be repaired or removed by the owner to meet the then current federal, state and local safety standards. If the owner fails to remove or repair the defective and/or abandoned solar energy system, the Township may pursue legal action to have the system removed at the owner's expense.
- ix. The Applicant shall provide a decommissioning plan (acceptable to the Township Engineer) and sufficient financial security to cover the costs to Decommission the ground array solar energy system according to all applicable state and federal regulations.

D. **Requirements Applicable to Rooftop Solar Energy Systems and Ground Array Solar Energy Systems.**

- i. Any glare from a solar panel shall be directed away from an adjoining property and shall not project glare onto the adjoining roadways.

- ii. Solar panels shall be covered with anti-reflective surface materials or coatings. If there is a concern about glare for a specific location, the developer shall prepare a glint and glare study.
- iii. The installation of a solar energy system shall conform to the extent applicable to the Pennsylvania Uniform Construction Code regulations adopted by the Pennsylvania Department of Labor and Industry, and to applicable industry standards, including those of the American National Standards Institute. Manufacturer's data and certificates of design compliance shall be submitted with the land development plan.
- iv. The design of solar energy systems shall, to the extent reasonably possible, use materials, colors, textures, screening and landscaping that will blend the facility into the natural setting and existing environment.
- v. The applicant shall demonstrate that reasonable efforts have been taken to avoid any disruption, interference with, or loss of radio, telephone, television or similar signals and shall mitigate any such harm caused by the solar energy system.
- vi. The Applicant shall submit a plan in accordance with applicable Subdivision and Land Development (SALDO) regulations.

E. **Decommissioning of the Ground Array Solar Energy System.**

- i. The facility owner and/or operator of a ground array solar energy system shall, at its expense, complete decommissioning of the facility within six (6) months after the facility is abandoned or at the end of its useful life. Such a facility will be presumed to be abandoned or at the end of its useful life if no electricity is generated for a continuous period of twelve (12) months.
- ii. Decommissioning shall include the removal of the ground array solar energy system and any other associated facilities and the cleaning and restoration of the site.
- iii. If the decommissioning has not been completed within a six (6) month period, then the Township shall give written notice to the landowner and/or facility owner and operator, to accomplish the decommissioning within thirty (30) days.
- iv. If the decommissioning has not been completed within thirty (30) days of written notice by the Township, then the Township may

accomplish said decommissioning and charge the landowner and/or facility owner and operator for all the costs and expenses, including reasonable court and attorney's fees for collection.

- v. The decommissioning process shall be subject to a Decommissioning Agreement prepared by or approved by the Township Solicitor and the Township Engineer and shall require that financial security be posted in an amount necessary to facilitate the removal of all aspects of the Solar Energy System. Material salvage shall not be considered when determining the financial security amount.

SECTION 9. CHAPTER 22, SUBDIVISION AND LAND DEVELOPMENT.

The following sections shall be added for any Principal Solar Energy System:

A. Section 22-1024 Principal Solar Energy System.

1. Applications filed pursuant to this Ordinance for a principal solar energy system shall comply with the Subdivision and Land Development Ordinance (SALDO) of the Township. Applicant shall file a Land Development Plan which shall contain the following:

A. A narrative describing the proposed solar energy system, including an overview of the project; the project location; the approximate generating capacity of the solar energy system; the approximate number, representative types and height or range of heights of the panels or other solar energy systems equipment to be constructed, including their generating capacity, dimensions and respective manufacturers, and a description of all ancillary facilities.

B. An affidavit or similar evidence of an agreement between the landowner of the real property on which the solar energy system is to be located and the facility owner, demonstrating that the facility owner has permission of the landowner to apply for necessary permits or approvals for construction and operation of the solar energy system ("Participating Landowner Agreement").

C. Identification of the properties or portions thereof on which the proposed solar energy system will be located, and the properties adjacent to where the solar energy system will be located.

D. A site plan showing the planned location of each solar energy system, property lines, setback lines, access roads and turnout locations, substation(s), electrical cabling from the solar energy system to the substation(s) ancillary equipment, building and structures, including associated distribution and/or transmission lines, and layout of all structures without the geographical boundaries of any applicable setback.

E. Documents related to decommissioning, including a schedule for decommissioning.

F. Other relevant studies, reports, certifications and approvals as may be provided by the Applicant or required by the Township to ensure compliance with this Ordinance.

2. The design of the solar energy system shall conform to applicable industry standards, including those of the American National Standards Institute. The Applicant shall submit certificates for design compliance obtained by the equipment manufacturers from Underwriters Laboratories (UL), The Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), Electrical Testing Laboratories (ETL), or other similar certifying organizations.

3. The solar electric facility shall be construed to comply with the Pennsylvania Uniform Construction Code, Act 45 of 1999, as amended, and any regulations adopted by the Pennsylvania Department of Labor and Industry.

4. On-site transmission and power lines shall, to the maximum extent possible, be placed underground.

5. A solar energy system shall be situated in such a way that it presents no threat to traffic or to public health and safety.

SECTION 10. APPLICABILITY.

1. This ordinance applies to Solar Energy Systems to be installed and constructed after the effective date of the ordinance.

2. Solar Energy Systems constructed prior to the effective date of this ordinance shall not be required to meet the requirements of this ordinance.

3. Any upgrades, modifications or changes that alter the size or placement of an existing solar energy system shall comply with the provisions of this Chapter.

SECTION 11. ENFORCEMENT REMEDIES.

The enforcement and remedies provisions of Chapter 27 Zoning of the Code of the Township of Plainfield shall apply in all respects to the provisions of this ordinance.

SECTION 12. REPEALER.

All ordinances or parts of ordinances, including Ordinance No. 422, which are inconsistent herewith are hereby repealed.

SECTION 13. SEVERABILITY.

In the event any provision, section, sentence, clause or part of the ordinance shall be held to be invalid, such invalidity shall not affect or impair any remaining provision, section, sentence, clause or part of the ordinance, it being the intent of the Township that such remainder shall be in full force and effect.

SECTION 14. EFFECTIVE DATE. This Ordinance shall become effective immediately after enactment.

ENACTED AND ORDAINED this _____ day of _____, 2026.

ATTEST:

Amy Kahler, Secretary

PLAINFIELD TOWNSHIP

By: _____
Glenn Borger, Chairman

By: _____
Kenneth Field, Vice-Chairman

By: _____
Nolan Kemmerer, Supervisor

By: _____
Paul Levits, Supervisor

By: _____
Jane Mellert, Supervisor