

9

cc: Adm.
Plan.

Township of Chester

1 Parker Road
Chester, NJ 07930

(908) 879-5100 Ext. 810
(908) 879-8281 Fax
www.chestertownship.org



February 10, 2012

Municipal Clerk:

Washington Township
Mount Olive Township
Randolph Township
Roxbury Township
Mendham Township

Chester Borough
Tewksbury Township
Peapack Gladstone Township
Bedminster Township
Morris County Planning Board
Chester Township Planning Board

NOTICE OF PENDING ORDINANCE

2012-5

An Ordinance to Amend Chapter 113, "Land Use" to Add Language to Reserved Article 39, of the Code of Chester Township Pertaining to Renewable Energy Facilities

The Ordinance herewith was introduced and passed upon first reading at a meeting of the Township Council of the Township of Chester, in the County of Morris, State of New Jersey, held on **February 7, 2012**. It will be further considered for final passage after a public hearing thereon, at a meeting of said Township Council to be held in the Township of Chester Municipal Building in said Township on **March 20, 2012** at 7:30 pm and during the week prior to and up to and including the date of such meeting, copies of said Ordinance will be made available at the Clerk's Office in said Township of Chester Municipal Building to the members of the general public who shall request the same.

Carol Isemann
Township Clerk/Administrator

Introduction: February 7, 2012
Public Hearing: March 20, 2012

CHESTER TOWNSHIP

ORDINANCE 2012-5

An Ordinance to Amend Chapter 113, "Land Use" to Add Language to Reserved Article 39, of the Code of Chester Township Pertaining to Renewable Energy Facilities.

WHEREAS, the Municipal Land Use Law (NJSA 40:55D-2.n) provides intent to promote utilization of renewable energy resources; and

WHEREAS, the Municipal Land Use Law (NJSA 40:55D-66.11) provides that a renewable energy facility on a parcel or parcels of land comprising 20 or more contiguous acres that are owned by the same entity shall be a permitted use within every industrial district of a municipality; and

WHEREAS, the above requirements have encouraged the development of alternative energy facilities, in particular alternative solar photovoltaic energy facilities which can consume large amounts of land; and

WHEREAS, the Township has determined that there exists the need to regulate the use and placement of alternative energy facilities in light of the current trend toward the development of renewable energy generating systems and that existing zoning regulations do not address this emerging trend as it may impact the land owners residing in Chester Township; and

WHEREAS, the Township has considered recent legislation enacted in the State of New Jersey declaring certain alternative and renewable energy generating systems inherently beneficial uses to the citizens of this State and the Township believes there is a need to balance the development of these uses with local land use goals and objectives to protect the citizens of Chester Township from negative esthetic impacts while allowing for the development of alternative solar photovoltaic energy facilities in an orderly way; and

WHEREAS, existing ordinance standards do not adequately provide for the orderly use and development of lands in the Township of Chester for solar and photovoltaic facilities including installations on building roofs and on the ground; and

WHEREAS, the Planning Board held a public hearing on October 25, 2011 regarding an ordinance to permit Solar Energy Systems as an accessory use in all zones in Chester Township; and

WHEREAS, after deliberation at the October 25th hearing the Board recommended that Chapter 113 of the Code of Chester Township be amended to include Solar Energy Systems as permitted accessory uses in all zoning districts under certain standards; and

WHEREAS, the governing body of Chester Township has concluded that the recommendations of the Planning Board regarding the recommended amendments will help to promote development of renewable energy sources, which is in the best interest of the citizens of Chester Township.

NOW THEREFORE, BE IT ORDAINED by the Council of the Township of Chester, County of Morris, and State of New Jersey that Article 39 of the Land Use Ordinance for Chester Township is hereby amended as follows:

SECTION ONE. Chapter 113, Land Use is hereby amended to add language to Article 39, which heretofore was reserved for future use.

ARTICLE 39

Renewable Energy Facilities

§ 113-258. Solar energy systems.

The Township of Chester desires to permit the installation of solar energy systems to promote the utilization of a renewable, clean, safe and available source of power. This solar energy system ordinance governs the installation of such systems.

A. Purpose.

The purpose of this ordinance is to provide for the installation of solar energy systems in a manner that will minimize the adverse visual impact that solar energy systems may have on abutting residential dwellings and residentially zoned lands.

B. Definitions.

Definitions as used in this Section shall be as follows:

Occupied Area- The total contiguous or noncontiguous area(s) supporting the solar energy generation facilities and related infrastructure. The total area calculation shall include land devoted to the solar energy generation facilities; nonfarm roadways; roadway or utility easements accessing the solar generation facilities; any areas of the farm used for underground piping or wiring to transmit solar energy or heat where the piping or wiring is less than three feet from the surface; and any other buildings or site amenities deemed necessary for the production of solar energy on the farm.

Solar Energy System- An energy system which converts solar energy to usable thermal or electrical energy to meet all or a significant part of a building's energy requirements. As used in this Chapter, the primary application of a solar energy system is the conversion of solar radiation to either thermal energy to meet all or part of a building's or swimming pool's heating and domestic hot water requirements or electricity to meet all or part of a building's electrical energy requirements.

Solar Panel- An elevated panel or plate, or a canopy or array thereof, that captures and converts solar radiation to produce power, and includes flat plate, focusing solar collectors, or photovoltaic solar cells and excludes the base or foundation of the panel, plate, canopy, or array.

C. Solar Energy Systems

- (1) The primary purpose of a solar energy system shall be to provide a source of power for the principal and accessory permitted uses of the property where the system is to be located and shall not be for the generation of power for commercial purposes.
- (2) Solar energy systems are intended to be supportive of the principal and accessory permitted uses in the zone district within which they are allowed. A solar energy system shall be considered accessory to the principal use and shall be located on the same lot as the principal use it is to serve.
- (3) Solar energy systems shall be permitted in any zoning district as regulated hereafter provided such systems comply with all applicable standards set forth herein.

- (4) All residential and nonresidential solar energy systems shall be installed on buildings, structures or the ground in conformance with the minimum required setback or yard for a principal building as specified in Schedule I, Schedule of Area, Yard and Building Requirements, and Schedule II, Schedule of Requirements for Conditional Uses in R-1, R-2, R-3, R-5 and R-10 Zones.
- (5) A solar energy system installed on the ground shall not exceed an area of 1,200 SF, which area shall be established by measuring the surface area of the solar array.
 - (a) This limitation shall not apply to solar energy systems installed on preserved or commercial farms, which are regulated herein by Section F.
 - (b) No such area limitation shall apply to roof installations.
- (6) The installation of a solar energy system shall be in compliance with the National Electric Code as adopted by the NJ Department of Community Affairs.
- (7) Energy systems that connect to the electric utility shall comply with the New Jersey Net Metering and Interconnection Standards for Class I Renewable Energy Systems and as required by the electric utility servicing the parcel.

D. Installation Standards for Solar Energy Systems

- (1) Residential Roof Installations WR, RC, R-1, R-2, R-3, R-5 and R-10 Zones.
 - (a) The solar panels and all accessory equipment shall not extend beyond the edge of the roofline or twelve inches above the roof surface if installed on a pitched roof or three feet if installed on a flat roof.
 - (b) The combined height of the building and attached solar panels and supportive structures shall not exceed the maximum permitted height of the zone district for the type of building upon which the panels are located.
 - (c) All supportive structures, fixtures and piping shall be concealed from view by architectural details or located within the supporting building.
 - (d) Exposed hardware, supporting structures, fixtures and piping shall be finished in non-reflective surfaces compatible with the color scheme of the roof.
- (2) Residential Ground Installation WR, RC, R-1, R-2, R-3, R-5 and R-10 Zones
 - (a) No ground installation of a solar energy system shall be permitted in the WR-Woodland/Residential Zone or RC-Residential Cluster Zone.
 - (b) No solar energy collection panels shall be located in any public right-of-ways, conservation or other easements.
 - (c) Solar panels shall not be mounted on trees.
 - (d) Freestanding solar panels shall be located a minimum distance of 10 feet from the principal building.
 - (e) In the case of a lot having frontage on a street or a corner lot having frontage on more than one street, no solar panels shall be located in the area of the lot between the

street and the face of the building fronting on a street unless the solar panels are set back a minimum of 80 feet from the front street line.

- (f) No solar panel, supporting structures, fixtures or piping shall be greater than 8.0 feet in height.
 - (g) In the case of flag lots, no solar panels shall be located within 100 feet of a property line.
 - (h) Exposed hardware, supporting structures, fixtures and piping shall be finished in non-reflective surfaces.
 - (i) Ground arrays shall be located so that any glare is directed away from an adjoining property.
 - (j) Freestanding solar panels, supportive structures and piping shall be effectively screened with landscaping to obscure or shield the view of the solar structure from abutting properties. Where the back or front of a solar collection system faces a public street, landscaping or other screening shall be installed to obscure or shield the view of the solar structure from the street.
 - (k) Solar panels shall not be included in any calculation of impervious surface or impervious cover pursuant to the New Jersey Municipal Land Use Law (*NJSA 40:55D-38.1*).
 - (l) All electrical wires servicing a ground mounted solar system, other than the wires necessary to interconnect the solar panels and the grounding wires shall be located underground.
 - (m) The design of solar energy systems shall, to the extent reasonably possible, use materials, colors, textures, screening and landscaping that will blend into the natural setting and existing environment.
- (3) Nonresidential Roof Installation P, PO/R, B and LB Zones.
- (a) Where solar energy collection panels, supporting structures, frames, hardware and piping are visible from abutting residential dwellings or where they abut residential zone districts, appropriate screening materials shall be installed on the roof in a manner compatible with the building's architecture.
 - (b) The solar panels and all accessory equipment shall not extend beyond the edge of the roofline or twelve inches above the roof surface if installed on a pitched roof or three feet if installed on a flat roof.
 - (c) Exposed hardware, supporting structures, fixtures and piping shall be finished in non-reflective surfaces compatible with the color scheme of the roof.
- (4) Nonresidential Ground Installation P, PO/R, B and LB Zones
- (a) No solar energy collection panels, supporting structures, fixtures and piping shall be located in any public right-of-ways, conservation or other easements.
 - (b) Solar panels shall not be mounted on trees.

- (c) If the solar energy collection panels, supporting structures, fixtures and piping are visible to residential dwellings or abut residential zones, the solar energy system shall provide appropriate screening that will block the view of said panels, frames and piping from the abutting dwellings or residential zones.
- (d) Where the back or front of a solar collection system faces a public street, landscaping or other screening shall be installed to obscure or shield the view of the solar structure from the street.
- (e) Exposed hardware, supporting structures, fixtures and piping shall be finished in non-reflective surfaces.
- (f) Ground arrays shall be located so that any glare is directed away from an adjoining property.
- (g) Solar panels shall not be included in any calculation of impervious surface or impervious cover pursuant to the New Jersey Municipal Land Use Law (*NJSA 40:55D-38.1*).
- (h) All electrical wires servicing a ground mounted solar system, other than the wires necessary to interconnect the solar panels and the grounding wires shall be located underground.
- (i) The design of solar energy systems shall, to the extent reasonably possible, use materials, colors, textures, screening and landscaping that will blend into the natural setting and existing environment.

E. Site Plan/Zoning Permit Approval

- (1) Minor site plan approval is required for a ground installation of a solar energy system.
- (2) Site Plans and Zoning Permit applications for solar energy systems shall be accompanied by standard drawings of the solar panels, inverters, substations and any other required structures. The design shall be signed and sealed by a professional engineer, registered in the State of New Jersey, certifying that the design complies with all of the standards set forth in all applicable codes then in effect in the State of New Jersey and all sections referred to hereinabove.
- (3) No site plan approval shall be required to construct a solar energy system on a roof or where the combined surface area of the solar panels is 250 square feet or less provided such system is accessory to a principal use permitted in the zone district within which it is located and the applicant can demonstrate to the Zoning Official that the solar energy system can be constructed in conformance with the requirements of this Chapter of the Township Code.

F. Solar Energy Systems on Preserved or Commercial Farms

- (1) Solar energy systems installed on preserved farms shall be regulated pursuant to the New Jersey Agricultural Retention and Development Act (*NJSA 4:1C-11 et seq.*). Developers of solar energy systems on preserved farms shall comply with *P.L.2009, c.213 (C.4:1C-32.4 et al.)* and all of the following regulations:

- (a) Solar energy generation facilities, structures, and equipment shall be constructed or installed on no more than 10 acres of the farmland assessed and taxed pursuant to the “Farmland Assessment Act of 1964”, *P.L.1964, c.48 (C.54:4-23.1 et seq.)*, or one percent of the area of the entire farm including both the preserved portion and any portion excluded from preservation, whichever is less.
- (b) The power or heat generated by the solar energy generation facilities, structures, and equipment shall only be used to provide, either directly or indirectly but not necessarily exclusively, power or heat to the farm or agricultural or horticultural operations supporting the viability of the farm.
- (c) The following additional standards apply to energy generation:
- [1] Annual energy generation capacity is limited to the previous calendar year’s energy demand plus 10 percent, in addition to what is allowed under subsection (c) of this section, or alternatively at the option of the landowner;
 - [2] To occupying no more than one percent of the area of the entire farm including both the preserved portion and any portion excluded from preservation.
 - [3] Solar energy generation facilities shall generate no more than two megawatts of power on the 10 acres or less.
- (d) The limit on the annual energy generation capacity established pursuant to subparagraph [1] of paragraph (b) of this section shall not include energy generated from facilities, structures, or equipment existing on the roofs of buildings or other structures on the farm as of the date of enactment of *P.L.2009, c.213 (C.4:1C-32.4 et al.)*
- (e) The amount of acreage devoted to the solar energy generation facilities, structures, and equipment shall not exceed a ratio of one to five acres, or portion thereof, of land devoted to energy generation facilities, structures, and equipment and land devoted to agricultural or horticultural operations.
- (f) Ground-mounted solar energy generation facilities shall be constructed in compliance with the following system height, setback and screening standards:

Mounting	System Height	Size Of Occupied Area	Minimum Setback To an Adjacent Residence Existing at the Time of System Installation and Not Located on the Commercial Farm	Minimum Setback To Property Line or Public Roadway Right of Way	Required Screening
Ground	Up to two feet	Up to one acre	200 feet	100 feet	Not Required
Ground	Greater than two feet up to 10 feet	Up to one acre	300 feet	150 feet	Not Required
Ground	Up to 10 feet	Greater than one acre up to 10 acres	300 feet	150 feet	Required
			400 feet	300 feet	Not required
Ground	Greater than 10 feet up to 20 feet	Up to 10 acres	300 feet	300 feet	Required
			500 feet	400 feet	Not required

- (g) Solar energy generation facilities shall not exceed a maximum system height of 20 feet.
- (h) Solar energy generation facilities shall be located in a manner that minimizes views of the facilities from public roadways and existing residences not located on the commercial farm, by utilizing existing visual barriers including, but not limited to, buildings, trees, hedgerows and pre-existing natural topography to the maximum extent possible.
- (2) Solar energy systems installed on commercial farms shall be regulated pursuant to the provisions of *P.L.2009, c.213 (C.4:1C-32.4 et al.)* as applicable, *P.L.2009, c.213 (C.4:1C-9.2.)*, *P.L.2009, c.213 (C.54:4-23.3c)* and the following regulations:
- (a) The amount of acreage devoted to the solar energy generation facilities, structures, and equipment shall not exceed a ratio of one to five acres, or portion thereof, of land devoted to energy generation facilities, structures, and equipment and land devoted to agricultural or horticultural operations.
- (b) Solar energy generation facilities, structures, and equipment shall be constructed or installed on no more than 10 acres of the farmland assessed and taxed pursuant to the "Farmland Assessment Act of 1964", *P.L.1964, c.48 (C.54:4-23.1 et seq.)*.
- (c) Solar energy generation facilities shall generate no more than two megawatts of power on the 10 acres or less.
- (d) Ground-mounted solar energy generation facilities shall be constructed in compliance with the following system height, setback and screening standards:

Mounting	System Height	Size Of Occupied Area	Minimum Setback To an Adjacent Residence Existing at the Time of System Installation and Not Located on the Commercial Farm	Minimum Setback To Property Line or Public Roadway Right of Way	Required Screening
Ground	Up to two feet	Up to one acre	200 feet	100 feet	Not Required
Ground	Greater than two feet up to 10 feet	Up to one acre	300 feet	150 feet	Not Required
Ground	Up to 10 feet	Greater than one acre up to 10 acres	300 feet	150 feet	Required
Ground	Greater than 10 feet up to 20 feet	Up to 10 acres	400 feet	300 feet	Not required
			300 feet	300 feet	Required
			500 feet	400 feet	Not required

- (e) Solar energy generation facilities shall not exceed a maximum system height of 20 feet.
- (f) Solar energy generation facilities shall be located in a manner that minimizes views of the facilities from public roadways and existing residences not located on the commercial farm, by utilizing existing visual barriers including, but not limited to, buildings, trees, hedgerows and pre-existing natural topography to the maximum extent possible.

- (3) The installation of a solar energy system on a farm that does not qualify as a commercial or preserved farm shall be regulated pursuant to the provisions of the zoning district within which it is located.

SECTION TWO. All ordinances or part of ordinances inconsistent with this ordinance are hereby repealed to the extent of such inconsistency.

SECTION THREE. If any section, paragraph, subdivision, clause or provision of this ordinance shall be adjudged invalid, such adjudication shall apply only to the section, paragraph, subdivision, clause or provision and the remainder of this ordinance shall be deemed valid and effective.

SECTION FOUR. This ordinance shall take effect upon its passage and publication according to law.

February 7, 2012

TOWNSHIP COUNCIL OF THE
TOWNSHIP OF CHESTER

Carol Isemann
Municipal Clerk

William A. Cogger, Mayor