

#1258

ORDINANCE OF THE TOWNSHIP OF HADDON, COUNTY OF CAMDEN AND STATE OF NEW JERSEY SUPPLEMENTING, AMENDING AND REVISING CHAPTER 142-38 OF THE TOWNSHIP OF HADDON ENTITLED, “CONDITIONAL USES”

WHEREAS, The Township of Haddon (“Township”) is a municipal entity organized under the laws of the State of New Jersey and located in Camden County; and

WHEREAS, the Board of Commissioners of the Township of Haddon has determined the following:

1. Wind and solar energy are an abundant, renewable, and nonpolluting energy resource.
2. Converting wind and solar rays to electricity will reduce dependence upon nonrenewable energy resources and decrease air and water pollution that results from the use of conventional energy sources; and
3. Wind and solar energy systems should be a conditional use in all zoning districts in the Township.

WHEREAS, it is the purpose of this Ordinance to promote the safe, effective and efficient use of solar and wind energy systems to reduce the on-site consumption of utility-supplied electricity; and

WHEREAS, the Board of Commissioners finds that it is in the best interest of the public health, safety and general welfare to standardize and streamline the requirements for wind and solar energy systems so that clean, renewable energy resources can be utilized in a cost-effective and timely manner in the Township; and

WHEREAS, the Municipal Land Use Law, N.J.S.A. 40:55D-2(n) provides that to promote utilization of renewable energy resources is a purpose of zoning; and

NOW THEREFORE, be it Ordained by the Mayor and Board of Commissioners of the Township of Haddon, County of Camden, State of New Jersey that Chapter 142-38 entitled, “Conditional Uses” of the Code of the Township of Haddon is hereby revised, supplemented and amended as follows:

SECTION 1 – Add the following new Section 142-38H:

142-38H. Wind and Solar Systems.

I. Definitions:

Wind Energy System – means a wind energy conversion system consisting of a wind turbine, associated poles/towers and support structures, and associated control or conversion of electronics, which has a rated capacity consistent with applicable construction codes which will be used for on-site consumption but not including large diameter windmills.

Solar Energy System – means a solar energy system and all associated equipment which converts solar energy into a usable electrical energy, heats water or produces hot air or other similar function through the use of solar panels.

Solar Panels - a structure containing one or more receptive cells, the purpose of which is to convert solar energy into usable electrical energy by way of a solar energy system.

Wind Turbine – means equipment that converts energy from the wind into electricity. This term includes the rotor, blades and associated mechanical and electrical conversion components necessary to generate, store and/or transfer energy.

II. Wind Energy Systems and Solar Energy Systems shall be permitted if the following

conditions are met:

A. Wind Applications

- i. Due to the nature of the small residential lot sizes associated with Haddon Township, large diameter, tall wind mills shall not be permitted to be constructed in the Township.
- ii. Wind generating systems shall be restricted to vertical – axis wind turbine technology.
- iii. Vertical – axis wind turbines shall meet the following criteria:

[1] The system shall generate no more than 10 kilowatts of power per residential dwelling or commercial building, or be sized to generate more power than what is required by said structure.

[2] Only one vertical – axis wind turbine per property shall be permitted. Multiple wind turbines on a single lot shall not be permitted.

[3] A wind study prepared by a qualified individual shall be performed to verify that the property conditions will produce the intended power generation by the wind turbine being considered.

[4] The size of the vertical – axis wind turbine shall be no more than 48 inches in diameter and 72 inches tall.

[5] The height shall be restricted to 41 feet above the ground surface to the top of the wind turbine unit.

[6] Support poles/towers and support foundations shall be designed by a licensed engineer in the state of New Jersey. In the event that a vertical – axis wind turbine unit is mounted to, or is constructed on top of, an existing dwelling or building, detailed calculations and engineering drawings of the mounting must be provided by a licensed engineer in the state of New Jersey. Cables shall not be permitted to support towers, monopoles or roof mounted units.

[7] Setbacks:

- a. No vertical – axis wind turbine support pole or tower shall be constructed in the front yard or side yard of any property.
- b. Support poles and towers, including height of the wind turbine unit, shall be set back a distance equal to its total height from:
 - i. Any public road right-of-way.
 - ii. Any overhead utility lines.
 - iii. All property boundary lines.
- c. Support poles, towers and turbine units shall be factory finish, color to be approved by the reviewing board. No signs, other than manufacturers warning signs and labels shall be permitted.
- d. All units and unit installation shall be in accordance with all applicable state construction and electric codes, as well as the National Electric Code. All units must be grid tied. All wiring must be concealed, under roof lines, below the roof deck structure or underground.
- e. Noise energy levels shall not exceed 55 decibels at a common

property line. These levels may be exceeded during short-term events such as utility outages and severe windstorms.

iv. Submittal Requirements:

[1] All applications to the reviewing board must be accompanied by a plot plan which includes the following:

- a. Current property survey prepared by a licensed professional surveyor in the state of New Jersey.
- b. Location of all structures on the property.
- c. Location of the proposed wind turbine tower or support pole.
- d. Right-of-way line and location of utility lines.
- e. Wind system specifications, wind study and design calculations for turbine, pole, foundation, roof mounting, etc.

v. Additional Requirements:

[1] All electrical and structural design criteria shall meet the requirements of the State Uniform Construction Code. All ground-mounted wind energy systems shall not be artificially lighted except to the extent required by the FAA or other applicable authority.

[2] Wind turbines contained in the wind energy system shall be designed with an automatic brake or other similar device to prevent over-speeding and excessive pressure on the tower structure.

[3] All ground-mounted electrical and control equipment shall be labeled and secured to prevent unauthorized access.

[4] All moving parts of the wind energy system shall be a minimum of ten (10) feet above ground level.

[5] The blades on the wind energy system shall be constructed of a corrosive-resistant material.

[6] All guy wires or any part of the wind energy system shall be located on the same lot as the wind energy system.

[7] The wind energy system shall remain painted or finished in the color or finish that was originally applied by the manufacturer unless a different color or finish is approved by the reviewing board. All components of the system shall be maintained in accordance with the most current requirements maintained within the Property Maintenance Code and Uniform Construction Code adopted by the Township of Winslow.

[8] Wind energy systems shall comply with New Jersey's net metering and interconnection standards.

[9] The applicant shall provide proof that it has met any and all New Jersey Board of Public Utility guidelines in connection with wind energy systems.

B. Solar Energy Systems

- i. Flat roof mounted solar energy systems shall be permitted on residential dwellings. Solar panels mounted to the roof of garages and accessory structures will also be permitted. Structurally attached solar energy systems installed on a building with a sloped roof shall not project vertically above the peak of the roof and/or shall comply with the height regulations of the zone. Roof-mounted solar energy systems shall not exceed a height of three (3) feet from the rooftop at any point. Structurally attached solar energy systems installed on a building with a flat roof shall not project vertically more than 5 feet above the roof and/ or shall comply with the height regulations of the zone.
- ii. Freestanding or ground mounted solar energy systems shall be considered a structure and shall be subject to the regulations of the zone for such, together with all other applicable building codes and ordinances. Ground mounted or free standing solar energy systems shall not be permitted to be constructed in the front yard of any property in any zone. The height of any ground mounted or free standing solar energy system shall not exceed 6 feet. Ground solar energy systems shall be located so that any reflection is directed away or is properly buffered from an adjoining property.
- iii. All of the rules and regulations of the Haddon Township Shade Tree Commission shall be met regarding the construction of solar energy systems. Tree clearing and/or removal will not be permitted for the construction of solar energy systems, or to create a path to allow sunlight to reach the solar energy systems.
- iv. Solar energy systems may consist of photovoltaic cells, hot water collector applications and hot air applications.
- v. Roof mounted solar energy systems are discouraged from being erected on the front roof of a structure which faces a street. Solar energy systems shall be located on a rear-or side-facing roof, as viewed from any adjacent street, unless such installation is proven to be ineffective or impossible. The removal of potential obstructions such as interceding vegetation shall not be sufficient cause for permitting a front-facing installation. Front-facing installation may be permitted in accordance with the following provisions:
 - [1] Applicant must indicate valid reasons as to why this is the only effective or possible means for utilizing solar energy on the property. Such information shall be certified by a professional deemed qualified by the Board and reviewed by the Township Engineer and any other Professional that the Township deems necessary.
 - [2] Solar panels must be flush mounted to the roof.
- vi. Solar energy systems installations for the purpose of generating electricity shall conform to the following criteria:
 - [1] The solar energy systems shall generate no more than 10 kilowatts of power per residential dwelling or commercial building, or be sized to generate more power than what is required by said structure. All solar energy systems shall be grid tied.
 - [2] A study, prepared by a qualified individual, shall be performed to verify

that the property conditions will produce the intended solar power generation based on property location, surrounding structures, and building orientation. Solar ground mounted or freestanding solar energy systems shall be set back a minimum distance of 20 feet from all property lines.

[3] Solar energy systems shall be designed by a licensed engineer of the State of New Jersey. In the event that the solar energy system is to be mounted to, or is constructed on top of, an existing dwelling or building, detailed calculations and engineered drawings of the mounting must be provided by a licensed engineer of the State of New Jersey. Electric cables must be concealed below the roof line.

[4] All units and unit installation shall be in accordance with all applicable state construction and electric codes, as well as the National Electric Code.

[5] All wiring leading to and from the panels shall be installed below the roof structure or shall be installed under ground.

III. Abandonment and removal of solar and wind energy systems.

- A. Any solar or wind energy system permitted under this Chapter which has not been in active and continuous service for a period of one (1) year shall be removed from the property to a place of safe and legal disposal.
- B. All support structures and structural enclosures accessory to the wind or solar energy system shall be completely removed from the property to a place of safe and legal disposal.
- C. The former wind or solar energy site shall be restored to as natural condition within six (6) months of the removal from the property.
- D. Solar and wind energy systems shall not be used for displaying any advertising except for reasonable identification of the manufacturer or operator of the system. In no case shall any identification be visible from the property line.
- E. The design of solar and wind energy systems shall, to the extent reasonably possible, use materials, colors, textures, screening and landscaping that will blend the system into the natural setting and existing environment.

SECTION 2: All Ordinances or parts of Ordinances inconsistent with this Ordinance are hereby repealed to the extent of such inconsistency.

SECTION 3: If the provisions of any section, subsection, paragraph, subdivision, or clause of this Ordinance shall be judged invalid by a court of competent jurisdiction, such order of judgment shall not affect or invalidate the remainder of any section, subsection, paragraph, subdivision, or clause of this Ordinance.

SECTION 4: This Ordinance shall take effect immediately upon final passage and publication in

accordance with law.

BOARD OF COMMISSIONERS

BY: _____
RANDALL W. TEAGUE, MAYOR

BY: _____
PAUL C. DOUGHERTY, COMMISSIONER

BY: _____
JOHN FOLEY, COMMISSIONER

Adopted:
ATTEST:

DENISE P. ADAMS, TOWNSHIP CLERK

The foregoing Ordinance was introduced by the Mayor and Commissioners at the regular meeting held on April 27, 2010. This Ordinance will be considered for adoption on final reading and public hearing to be held on May 25, 2010 at 7:00 p.m. in the Meeting Room, Haddon Township Municipal Building, 135 Haddon Avenue, Westmont, New Jersey.

The purpose of this Ordinance is to allow for wind and solar energy systems as a conditional use in all zoning districts in the Township of Haddon. A copy of this Ordinance is available at no charge to the general public between the hours of 8:30 AM to 4:30 PM, Monday through Friday (Legal Holidays excluded), at the Office of the Township Clerk, Haddon Township Municipal Building, 135 Haddon Avenue, Westmont, New Jersey.