

TOWNSHIP OF LOWER, COUNTY OF CAPE MAY, STATE OF NEW JERSEY

ORDINANCE NO. 2009-13

AN ORDINANCE REPLACING CHAPTER 400, SECTION 41 OF THE CODE OF THE TOWNSHIP OF LOWER TO UPDATE AND CLARIFY THE REPEALED STANDARDS AND PROCEDURES FOR APPROVING THE CONSTRUCTION OF A WIND ENERGY CONVERSION SYSTEM (ALSO KNOWN AS A WINDMILL) IN THE TOWNSHIP OF LOWER.

WHEREAS, Section 400-41 repealed of the Code of Township of Lower (Code) had established the review and approval procedure for an application to construct a wind energy conversion system (WECS) also known as a windmill or turbine, in the Township of Lower before it was repealed by Lower Township Ordinance #2008-25; and

WHEREAS, the Township Council desires rewrite, update and clarify the standards and procedures set forth in the repealed Wind Energy Ordinance; and

WHEREAS, the Township Council holds that a landowner or lessee of real property who desires to build and/or operate a WECS is required to obtain approval from the Construction Official, and the Planning/Zoning Official or the Planning Board as required herein for the benefit of public health, safety, general welfare, comfort and convenience; and

NOW, THEREFORE, BE IT ORDAINED by the Council of the Township of Lower, County of Cape May and the State of New Jersey as follows:

Section 1. Section 400-41, repealed, of the Code entitled "Wind Energy Conversion Systems" is hereby replaced with the following language to be known as 400-41X Wind Energy Conversion Systems

§ 400-41X. Wind Energy Conversion Systems.

A. Definitions.

- (1) Wind Energy Conversion Systems: Any device that converts wind energy to mechanical or electrical energy (herein referred to as WECS) commonly known as a windmill or wind turbine. WECS is inclusive of the turbine, support pole or structure and foundation system.
- (2) Small WECS: A single wind energy conversion system limited to generation of not more than 10 kw consisting of a wind turbine, a tower, and associated control or conversion electronics shall be permitted by right.
- (3) Large WECS: A wind energy conversion system consisting of one or more wind turbines, towers or systems of conversion electronics with a rated capacity of more than 10 kw. Large WESC shall not be permitted in the W-1 Mainland Island Medium Density Residential Overlay Zone.
- (4) Height of WECS: The height above grade to the tip of the turbine blade when it reaches its highest elevation.
- (5) Turbine: The parts of the wind energy system including the blades, generator and tail.

- (6) State: The State of New Jersey.
- (7) Permitted kw shall equal manufacturer's rated capacity or rated power.
- (8) Public Purpose Use Wind Farm: shall be permitted in all zoning districts. Maximum height permitted: 450 feet. Maximum total kw permitted: No limit.

B. Overlay Zoning: The following overlay zones, as delineated on the Lower Township Zoning Map, shall determine the maximum height of all windmills.

(1) Overlay Zone

	Maximum Height	Maximum Permitted Total kw Permitted
W-1 Mainland and Island Medium Density Residential	100 feet	10 kw
W-2 Low Density Residential	150 feet	20 kw
W-3 - Industrial	150 feet	No Limit
W-4 - Marine Development	300 feet No Limit	
W -5 (C) Conservation District	450 feet	No Limit
Wind Farm		

C. WECS Requirements:

A WECS shall be a use subject to the requirements and conditions set forth in this section.

- (1).S Height Small WECS: The maximum height permitted shall be one-hundred (100) feet, when located in the W-1 (R-3) Mainland Island Medium Density Residential Overlay Zone, unless otherwise prohibited by any State or Federal rules and regulations. The minimum distance between the ground and any protruding blades utilized on a WECS shall be 15 feet as

measured when the tip of the turbine blade reaches its lowest elevation.

- (1).L Height Large WECS: The maximum height permitted shall be one hundred fifty(150) feet, three hundred feet (300) or four hundred fifty (450) feet as specifically permitted in the overlay zones, unless otherwise prohibited by any State or Federal rules and regulations. The minimum distance between the ground and any protruding blades utilized on a WECS shall be 15 feet as measured when the tip of the turbine blade reaches its lowest elevation.
- (2) Setbacks. The structural design shall comply with all the standards set forth for safety and stability in all applicable codes then in effect in the State of New Jersey and all sections referred to herein. The installation may then thereafter be erected not less than one rotor radius plus fifteen feet from any property line or right-of-way for overhead electrical transmission or distribution lines.
- (3) Non-residential buffer. Non-residential uses shall be required to provide a minimum buffer area of two-hundred (200) feet in width along any common property line with a residential district or residential use in addition to the required setback.
- (4) Noise. The maximum level of noise permitted to be generated by a wind energy conversion system shall be in accordance with N.J.A.C 7:29-1.2, Chapter 441 of the Township Code as measured from any point on the property line on which the WECS exists.
- (5) Construction. WECS construction shall be in accordance with all applicable laws as adopted by the Township of Lower, State of New Jersey, and the Federal Government. All applications and revisions to the same shall be first approved by the Construction Official before building of the project begins. This includes but is not limited to approval of the foundation of the WECS.
- (6) Planning/Zoning Board Approval.
 - A. Residential WECS. Residential Wind Energy Conversion Systems shall not require a site plan or any Planning or Zoning Board approval.
 - B. Non-residential WECS. Major site plan shall be required.
- (7) Electromagnetic Interference. All components, parts and other

facilities related to WECS use shall not create emissions that interfere with radio and/or television broadcasting or reception.

- (8) Compliance with FAA Regulations. All WECS shall comply with applicable FAA regulations, including any necessary approvals for installations close to airports. Evidence of compliance or non-applicability shall be submitted.
- (9) Visual Obtrusiveness. All WECS shall maintain a galvanized, or stainless steel finish or be painted to conform to the surrounding environment, to reduce visual obtrusiveness.
- (10) Utility Company Notification. No WECS shall be installed until evidence has been provided that Atlantic City Electric (or another appropriate utility company) has been notified in writing of the proposed interface with that company's grid.

- (11) Removal of Defective or Abandoned Systems. The tower and generating unit of the WECS shall be kept in good repair and sound condition. Upon abandonment of the use, the tower and related structure shall be dismantled and removed from the property within sixty (60) days.
- (12) Power Lines and Wires, Equipment and Storage. All electric lines and utility wires shall be buried under ground. Any equipment associated with the operation of the WECS shall be enclosed with a six (6) foot fence unless the base of the tower is not climbable for a distance of twelve (12) feet.
- (13) Lighting. A WECS shall not be lighted unless required by the Federal Aviation Administration (FAA) or is required by the Planning Board for public safety purposes.

When a building is necessary for storage cells or related mechanical equipment, the building may not exceed one-hundred and fifty (150) square feet in area, nor fifteen (15) feet in height, and the building must be located at least forty (40) feet from any property line.

D. Application Requirements for Residential Uses.

All applications regarding WECS for residential use shall be submitted to the Planning/Zoning Official and shall set forth the following information:

- (1) An accurate dated sealed survey, of the property, done by a New Jersey Licensed Land Surveyor, showing all structures, easements, site improvements, as well as, the location of the WECS and all system components, and all, property lines and right-of-ways.
- (2) One set of detailed plans, from the manufacturer(s) of the WECS as to the structural integrity of the WECS and its components, parts and facilities.
- (3) A certification, at the applicant's expense, from a professional engineer licensed to practice in the State of New Jersey that the plans comply with the Township's code regarding WECS, including but not limited to structural integrity, rated capacity and setback requirements. Certification shall be provided on the Official Township of Lower Engineer Certification form.
- (4) A description of the location where the WECS project is proposed (lot, block and zone.)

E. Planning Board Application Requirements, for Non-Residential Uses.

All applications regarding WECS for non-residential use shall be submitted to the Planning/Zoning Board for site plan approval and shall set forth the following information:

- (1) An accurate dated sealed survey, of the property, done by a New Jersey Licensed Land Surveyor, showing all structures, easements site improvements, as well as, the location of the WECS and all system components, and all, property lines and right-of-ways.
- (2) A certification, at the applicant's expense, from the manufacturer(s) of the WECS as to the structural integrity of the WECS and its components, parts and facilities.
- (3) A certification, at the applicant's expense, from a professional engineer licensed to practice in the State of New Jersey that the plans comply with the Township's code regarding WECS, including but not limited to the setback requirements.
- (4) A description of the location where the WECS project is proposed (lot, block and zone.)
- (5) A certification, at the applicant's expense, from an engineer licensed to practice in the State of New Jersey, that the foundation of the WECS - and the foundation of any components, parts, or facilities - complies with all of the standards set forth for safety and stability in all applicable codes in effect in the State of New Jersey. The foundation design shall include an analysis of the actual soil conditions below the proposed structure(s).
- (6) The application shall meet all the requirements of a building permit and shall include standard drawings and an engineering analysis of the system's tower, foundation, and connection design certified by a professional mechanical, structural, or civil engineer licensed to practice in the State of New Jersey.

F. Planning/Zoning Board Approvals.

All approvals shall be based upon consideration of the following factors:

- (1) Proposed plan's impact on the health, safety, and welfare of the general public.
- (2) Proposed plan's impact on the health, safety, and welfare of the surrounding properties.

- (3) Compatibility with the Township Master Plan.
- (4) Compatibility with the surrounding properties.
- (5) Proposed plan's benefit to the community as a whole.
- (6) Proposed plan's benefit to the surrounding properties.
- (7) Compliance with the terms and conditions stated herein throughout this Section.

Section 2. All other Ordinances in conflict or inconsistent with this Ordinance are hereby repealed, to the extent of such inconsistency.

Section 3. Should any section, paragraph, sentence, clause or phrase of this Ordinance be declared unconstitutional or invalid for any reason, the remaining portions of this Ordinance shall

not be affected thereby and shall remain in full force and effect, and to this end the provisions of this Ordinance are hereby declared to be severable.

Section 4. Upon final passage and publication according to law, a copy of the Ordinance shall forthwith be certified by an appropriate officer of the Township of Lower filed with the Secretary of State.

Section 5. This Ordinance shall take effect twenty (20) days after final passage and publications as provided by law.

Thomas Conrad, Council Member

Wayne Mazurek, Council Member

Glenn Douglass, Council Member

Kevin Lare, Council Member

Michael Beck, Mayor

Attest: _____
Claudia R. Kammer, Township Clerk

Adopted: _____, 2009