

Ordinance 2013-21

BOROUGH OF HIGHTSTOWN
COUNTY OF MERCER
STATE OF NEW JERSEY

AN ORDINANCE OF THE BOROUGH OF HIGHTSTOWN, COUNTY OF MERCER, STATE OF NEW JERSEY, AMENDING, SUPPLEMENTING AND REVISING CHAPTER 28 OF THE “REVISED GENERAL ORDINANCES OF THE BOROUGH OF HIGHTSTOWN,” ENTITLED “ZONING.”

WHEREAS, it is the purpose of this Ordinance to promote the safe, effective and efficient use of solar and wind energy systems; and

WHEREAS, the New Jersey Municipal Land Use Law (N.J.S.A. 40:55D-1, *et seq.*), specifically at N.J.S.A. 40:55D-2(n) and N.J.S.A. 66.12, provides that the utilization of renewable energy resources is a purpose of zoning, and sets standards for Small Wind Energy Systems.

NOW, THEREFORE, BE IT ORDAINED, by the Borough Council of the Borough of Hightstown, in the County of Mercer and State of New Jersey, that the “Revised General Ordinances of the Borough of Hightstown” (also known as the Hightstown Borough Code) is hereby amended, supplemented and revised at Chapter 28 thereof, entitled, “Zoning,” in order to establish a new Section thereof, to be known as “Small Wind Energy Systems,” as follows:

Small Wind Energy Systems.

Section 1. Definitions:

Meteorological Tower (met tower) – includes the tower, base plate, anchors, guy wires and hardware, anemometers (wind speed indicators), wind direction vanes, booms to hold equipment for anemometers and vanes, data loggers, instrument wiring, and any telemetry devices that are used to monitor or transmit wind speed and wind flow characteristics over a period of time for either instantaneous wind information or to characterize the wind resource at a given location. For the purpose of this Ordinance, met towers shall refer only to those whose purpose are to analyze the environmental factors needed to assess the potential to install, construct or erect a Small Wind Energy System.

Modification – any change to the Small Wind Energy System that materially alters the size, type or location of the Small Wind Energy System. Like-kind replacements shall not be construed to be a modification.

Shadow Flicker – the visible flicker effect when rotating blades of the wind generator cast shadows on the ground and nearby structures causing a repeating pattern of light and shadow.

Small Wind Energy System – a wind energy conversion system consisting of a wind generator, a tower, and associated control or conversion electronics, which has a rated capacity of 5 kilowatts total or less and will be used primarily for onsite consumption only.

System Height – the vertical distance from ground level to the tip of the wind generator blade when it is at its highest point.



Tower – the monopole, guyed monopole or lattice structure that supports a wind generator.

Tower height – the height above grade of the fixed portion of the tower, excluding the wind generator.



Wind Generator – the blades and associated mechanical and electrical conversion components mounted on top of the tower whose purpose is to convert kinetic energy of the wind into rotational energy used to generate, store and transfer energy.

Section 2. Procedure for Review and Approval; Standards.

1. Zoning Permit. Only Small Wind Energy Systems shall be permitted and no Small Wind Energy System may be erected, constructed, or installed without first receiving a zoning permit from the Zoning Officer. A zoning permit shall be also required for any physical modification to an existing Small Wind Energy System. Site plan review by the Planning Board shall not be required prior to issuance of a zoning permit.

(a) Application: All applications submitted to the Zoning Officer shall contain an accurate plan including the following information:

- (1) Property lines and physical dimensions of the property.
- (2) Location, dimensions, and types of existing major structures on the property.
- (3) Location of the proposed Small Wind Energy System, foundations, guy anchors and associated equipment.
- (4) Any overhead utility lines.
- (5) Small Wind Energy System specifications, including manufacturer, model, rotor diameter, tower height, tower type, nameplate generation capacity.

- (6) A sound level analysis provided by the wind generator manufacturer or prepared by a qualified sound engineer.
- (7) Evidence of compliance or non-applicability of Federal Aviation Administration requirements.
- (8) Evidence of the structural stability of all elements of the Small Wind Energy System
- (9) A list of all neighboring property owners abutting the subject property.
 - (a) Notification. The Applicant shall notify all neighboring property owners by certified mail upon application for a zoning permit to construct a Small Wind Energy System. The public will be afforded 30 days to submit comments to the Zoning Officer prior to the issuance of the zoning permit. The Zoning Officer shall review the application for impacts per subsection 28-10-18c. If the application is determined to have potential adverse impacts, the Zoning Officer may deny the application or impose reasonable conditions. Appeals be submitted to the Planning Board pursuant to N.J.S.A 40:55D-66.12

2. Standards. The following standards shall apply to all Small Wind Energy Systems, and the Zoning Officer shall evaluate each application for compliance with said standards:

- (a) Setbacks. The setback shall be calculated by multiplying the Minimum Setback Requirement number by the system height and measured from the center of the tower base to property line, public roads, or nearest point on the foundation of a building.

Minimum Setback Requirements			
Occupied Buildings on Participating Landowner Property	Occupied Buildings on Abutting Property	Property Lines of Abutting Property and Utility Lines	Public Roads
0	1.5	1.1	1.5

- (b) Small Wind Energy Systems shall be deemed permitted accessory uses in all Zones but must meet all maximum height requirements for principal structures in the Zoning District in which the System is located.
- (c) Guy wires used to support the tower are exempt from the Small Wind Energy System setback requirements.

- (d) Sound level. The Small Wind Energy System shall not exceed sixty (60) decibels using the A scale (dBA), as measured at the subject site property line, except during short-term events such as severe wind storms and utility outages.
- (e) Shadow Flicker. Small Wind Energy Systems shall be sited in a manner that does not result in significant shadow flicker impacts. “Significant shadow flicker” is defined as more than thirty (30) hours per year on abutting occupied buildings. The applicant has the burden of proving that the shadow flicker will not have significant adverse impacts on neighboring or adjacent uses.
- (f) Signs. All signs including flags streamers and decorative items, both temporary and permanent, are prohibited on the Small Wind Energy System, except for manufacturer identification or appropriate warning signs which shall be affixed directly to the Small Wind Energy System.
- (g) Visual Impacts. It is inherent that Small Wind Energy Systems may pose some visual impacts due to the tower height needed to access wind resources. The purpose of this section is to reduce the visual impacts, without restricting the owner’s access to the optimal wind resources on the property.
- (h) The applicant shall demonstrate how the Small Wind Energy System’s visual impacts will be minimized for surrounding neighbors and the community. This may include, but not be limited to information regarding site selection, wind generator design or appearance, buffering, and screening of ground mounted electrical and control equipment. All electrical conduits shall be placed underground.
- (i) The color of the Small Wind Energy System shall either be the stock color from the manufacturer or painted with an approved non-reflective, unobtrusive color that blends in with the surrounding environment. Approved colors include but are not limited to white, off-white or gray. This list may be amended from time to time by the Zoning Officer.
- (j) A Small Wind Energy System shall not be artificially lit unless such lighting is required by the Federal Aviation Administration (FAA). If lighting is required, the applicant shall provide a copy of the FAA determination to establish the required markings and/or lights for the Small Wind Energy System.
- (k) Approved Wind Generators. The manufacturer and model of the wind generator to be used in the proposed Small Wind Energy System must have been approved by the California Energy Commission, the New York State Energy Research and Development Authority, or a similar list

approved by the State of New Jersey, if available. This list may be supplemented from time to time by the Zoning Officer.

- (l) Systems shall not interfere with television, microwave or radio reception.
 - (m) Access. The tower shall be designed and installed so as not to provide step bolts or a ladder readily accessible to the public for a minimum height of eight (8) feet above the ground. All ground-mounted electrical and control equipment shall be labeled and secured to prevent unauthorized access.
 - (n) All cables must be concealed below the roof line or wires shall be installed underground.
 - (o) Small Wind Energy Systems in the Historic District.
 - (1) In order to maintain the architectural detail and character of the Hightstown Historic District, Small Wind Energy Systems installed in the Historic District shall comply with the following conditions:
 - (a) Significant architectural details shall not be removed, damaged or covered by the installation of any Small Wind Energy System.
 - (b) Small Wind Energy Systems may not be installed in the front yard.
 - (c) Small Wind Energy Systems shall not be attached to the building façade or roof-mounted so as to be visible from the public right-of-way.
 - (d) If the proposed location for the Small Wind Energy System is not permitted by this Section, the installation shall be referred to the Hightstown Historic Preservation Commission for its consent to install, which decision shall be issued within thirty (30) days, unless extended for good cause.
3. Other Permits. All Small Wind Energy Systems shall obtain all other required permits, including construction and electric permits.
4. Expiration of Permits. All permits issued pursuant to the Ordinance shall expire if the System is not installed within two (2) years of Permit date or the System is out of service for a continuous twelve (12) month period, or is deemed unsafe by the Borough Construction Official.

Section 3. Abandonment.

1. At such time that a Small Wind Energy System is scheduled to be abandoned or discontinued, the applicant will notify the Zoning Officer by certified U.S. Mail of the proposed date of abandonment or discontinuation of operations.
2. Upon abandonment or discontinuation of use, the owner shall physically remove the Small Wind Energy System within ninety (90) days from the date of abandonment or discontinuation of use. This period may be extended at the request of the owner and at the discretion of the Zoning Officer. Physically remove shall include, but not be limited to removal of the wind generator and related above-grade structure.
3. Restoration of the location of the Small Wind Energy System to its natural condition, except that any landscaping, grading or below-grade foundation may remain in its same condition at initiation of abandonment.
4. In the event that an applicant fails to give such Notice as referenced above, the system shall be considered abandoned or discontinued if the System is out-of-service for a continuous twelve-month period. After twelve (12) months of inoperability, the Zoning Officer may issue a Notice of Abandonment to the owner of the Small Wind Energy System. The owner shall have the right to respond to the Notice of Abandonment within thirty (30) days from Notice receipt date. After review of the information provided by the owner, the Zoning Officer shall determine if the Small Wind Energy System has been abandoned. If it is determined that the Small Wind Energy System has not been abandoned, the Zoning Officer shall withdraw the Notice of Abandonment and notify the owner of the withdrawal.
5. If the owner fails to physically remove the Small Wind Energy System after the Notice of Abandonment procedure, the Zoning Officer may pursue legal action to have the Small Wind Energy System removed at the owner's expense, and the owner shall be subject to all penalties provided by Law.

Section 4. Violation and Enforcement.

1. It shall be unlawful for any person to construct, install, or operate a Small Wind Energy System that is not in compliance with this Ordinance or with any condition contained in a Zoning Permit or Construction Permit for the System.
2. This Ordinance may be enforced by the Zoning Officer or other designated Borough Official.
3. Small Wind Energy Systems installed prior to the adoption of this Ordinance are exempt from this Ordinance except when modifications are proposed to the Small Wind Energy System and if the System is abandoned.

4. Nothing in this section shall be construed to prevent the Borough of Hightstown from using any other lawful means to enforce this Ordinance and to prevent violations.

BE IT FURTHER ORDAINED, that the provisions of this Ordinance shall be severable, and the invalidity of any section, subdivision, paragraph or other part of this Ordinance shall not affect the validity or effectiveness of the remainder of the Ordinance.

BE IT FURTHER ORDAINED, that all other Ordinances or parts of Ordinances inconsistent herewith are hereby repealed to the extent of such inconsistencies.

BE IT FURTHER ORDAINED, that this Ordinance shall take effect on upon final passage and publication in accordance with the law.

Introduced: September 16, 2013

Adopted:

ATTEST:

Debra L. Sopronyi
Municipal Clerk

Steven Kirson
Mayor