

ORDINANCE NO. 5814-7-10

AN ORDINANCE AMENDING SECTION 1248.02.21, 1252, 1242.04(e) & Chapter 1244
OF THE CODIFIED ORDINANCES OF THE CITY OF EDWARDSVILLE
(Scope of Regulations, Definitions & Light Manufacturing District)

WHEREAS, it has been determined that it is in the best interests of City of Edwardsville residents to amend Section 1248.02.21 of the Codified Ordinances concerning Satellite Signal Receivers by including regulations regarding Solar Panels and Wind Turbines;

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Edwardsville, Madison County, Illinois, as follows:

SECTION 1. PURPOSE: It is the purpose of this regulation to promote the safe, effective and efficient use of solar and small wind energy systems installed to reduce on-site consumption of utility supplied electricity.

SECTION 2. FINDINGS: The City of Edwardsville finds that wind and solar energy is an abundant, renewable, and nonpolluting energy resource and that its conversion to electricity will reduce our dependence on nonrenewable energy resources and decrease the air and water pollution that results from the use of conventional energy sources. Solar and wind energy systems will also enhance the reliability and power quality of the power grid, reduce peak power demands, and help diversify the State's energy supply portfolio. Solar and wind systems also make the electricity supply market more competitive by promoting customer choice.

The State of Illinois has enacted a number of laws and programs to encourage the use of small-scale renewable energy systems.

Therefore, we find that it is necessary to standardize and streamline the proper issuance of building permits for solar and wind energy systems so that this clean, renewable energy resource can be utilized in a cost-effective and timely manner.

SECTION 3. RECITALS. The facts and statements contained in the preamble to this Ordinance are found to be true and correct and are hereby adopted as part of this Ordinance.

SECTION 4. AMENDMENT. The Codified Ordinances of the City of Edwardsville, Part 12 – Planning and Zoning Code, Chapter 1252 The Codified Ordinances of the City of Edwardsville, Part 12 – Planning and Zoning Code, Chapter 1252 – Definitions, Section 1252.02 Selected Definitions is hereby amended by:

The addition of the following definitions:

SOLAR ENERGY SYSTEM: A solar energy conversion system consisting of solar panels, support structure, and associated controller or conversion electronics, which has a rated capacity of not more than 100 kW and which is intended to primarily reduce on-site consumption of utility power

TOWER HEIGHT: The height above grade of the fixed portion of the wind energy tower, excluding the wind turbine itself.

WIND ENERGY SYSTEM: A wind energy conversion system consisting of a wind turbine, a tower, and associated control or conversion electronics, which has a rated capacity of not more than 100 kW and which is intended to primarily reduce on-site consumption of utility power.

SECTION 5. AMENDMENT. The Codified Ordinances of the City of Edwardsville, Part 12 – Planning and Zoning Code, Chapter 1248 – Zoning – Scope of Regulations, Section 1248.02.21 – Satellite Signal Receivers are hereby amended in its entirety as follows:

1248.02.21 SATELLITE SIGNAL RECEIVERS, SOLAR PANELS, AND WIND TURBINES

(A) SATELLITE SIGNAL RECEIVERS: Receiving dishes are allowable as an accessory use provided they comply with required height and setback restrictions. Other restrictions include:

- (1) A dish antenna and accessory structure may not occupy more than forty percent (40%) of the yard area in which they are located.
- (2) No form of advertising or identification is allowed on the dish or framework other than the manufacturer's small identification plate.
- (3) All lot requirements shall apply when a satellite receiving dish is located on a corner lot.
- (4) In the R-1 District, satellite receiving dishes can be mounted on any structure subject to applicable restrictions.

(B) SOLAR AND WIND ENERGY

(1) GENERAL REQUIREMENTS All Solar and Wind Energy systems must comply with the following:

- (a) Compliance with International Building Code: Building permit applications for solar and wind energy systems shall be accompanied by standard drawings of the support structure, including the tower, base, and footings. An engineering analysis of the tower or support structure showing compliance with the International Building Code and certified by a licensed professional engineer shall also be submitted. This analysis is frequently supplied by the manufacturer. Wet stamps shall not be required.
- (b) Compliance with Federal Aviation Administration (FAA) Regulations: wind energy systems must comply with applicable FAA regulations, including any necessary approvals for installations close to airports.
- (c) Compliance with International Building Code : Building permit applications for solar and wind energy systems shall be accompanied by a line drawing of the electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the International Building Code. This information is frequently supplied by the manufacturer.
- (d) Utility Notification: No solar or wind energy system shall be installed until evidence has been given that the utility company has been informed of the customer's intent to install an interconnected customer-owned generator. Off-grid systems shall be exempt from this requirement.
- (e) Liability Insurance Required: The owner of any wind tower must carry a minimum of \$1,000,000.00 comprehensive general liability insurance. A Certificate of insurance naming the city and the property owner where the tower is situated as additional insureds must accompany the application.

(2) SOLAR ENERGY SYSTEM REQUIREMENTS

All Solar Energy Systems must comply with the following:

(a) Roof Mounted. So long as the solar energy system conforms to the height regulations of the zoning district in which the property where the solar energy system is to be installed is located, solar energy systems located on the roof of an existing structure shall not require a site plan. However, a City of Edwardsville issued electrical permit and compliance with Section 1248.02.21(B)(4) is required.

(b) Freestanding. Solar panels located on the ground shall be classified as accessory structures, must comply with Section 1242.02.2(b)(3) relating to maximum yard coverage area for accessory uses in residential areas, and shall require the issuance of a special use permit in compliance with the following:

1. Design.

a) The proposed system is no larger than necessary to provide 120 percent of the electrical and/or thermal energy requirements of the structure to which it is accessory as determined by a licensed electrical contractor or engineer in good standing with the State of Illinois and verified by City of Edwardsville Public Works staff.

b) The solar panels and supporting framework do not extend more than six feet above the existing grade unless a variance has been granted by the Zoning Board of Appeals.

2. Location.

a) The solar energy system including any appurtenant equipment is not located within any required setback areas or easements;

b) If the solar panels are visible from off-site, the solar panels are not to be located within 150 feet of a dwelling located on a lot other than the lot on which the solar energy system is located unless:

1) There are appropriate facades, walls, fences or landscaping equal to or greater than 80% opacity on a year-round basis that screen the solar panels and supporting framework from unobstructed view.

2) Taller screening and landscaping equal to or greater than 80% opacity is used on the north side of panels to screen the panels from uphill views without reducing the efficiency of the system.

3) Reflection angles from collector surfaces are oriented away from neighboring windows.

4) The panels are mounted as close as possible to the ground to match the slope of the hillside while allowing adequate drainage and preventing vegetation from shading the panels.

5) The system may be located on a designated historical landmark only with an approved Certificate of Appropriateness from the Historic Preservation Commission as provided for in Section 284 of the City Ordinances.

c) Visibility. To insure that glare is minimized, the solar panels are not visible from a public right-of-way that abuts the lot on which the solar energy system is located, or, if visible, they are installed within one foot of the natural ground topography.

d) Government entities are exempt from the requirements of this section.

(3) WIND ENERGY SYSTEM REQUIREMENTS

Wind Energy Systems shall only be allowed in Manufacturing (M-1) zoning districts and shall require the issuance of a special use permit from the Zoning Board of Appeals. Wind Energy Systems shall comply with the following:

a) Wind energy systems located on the ground shall be classified as accessory structures.

b) Height: For property sizes between one (1) acre and one point ninety-nine (1.99) acres, the tower height shall be limited to 80 ft. For property sizes of two (2) acres or more, tower height is limited to 200 feet, except as otherwise restricted by FAA regulations.

c) Set-back: Ground-based wind energy systems on towers must be set back a distance equal to at least 100% of the height of the facility from any adjoining lot line.

d) Noise: Wind energy systems shall not exceed 60 Dba (decibels), as measured at the closest neighboring inhabited dwelling. The level, however, may be exceeded during short-term events such as utility outages and/or severe wind storms.

e) Wind Turbines: Wind turbines must have been approved under the Emerging Technologies program of the California Energy Commission or any other small wind certification program recognized by the American Wind Energy Association.

f) Roof-mounted wind energy systems are prohibited.

g) Fencing: Towers shall be enclosed by security fencing or wall not less than eight (8) feet in height and shall also be equipped with an acceptable anti-climbing device or design; provided, however, that the Zoning Board of Appeals may waive such requirements as they deem appropriate.

h) Landscape: The tower shall be landscaped with a buffer of plant materials that effectively screen the view of the base of the facility and any turbine-related equipment located at the base of the facility. The standard buffer shall consist of a landscaping planted with minimum six-foot (6') high evergreen trees. Landscaping must be well-maintained and provide a minimum of 80 percent opacity on a year-round basis within 3 growing seasons.

Existing mature tree growth and natural land forms on the site shall be preserved to the maximum extent possible. In cases where towers are located on lots where natural growth or land forms such as berms provide a visual barrier to the base of the turbine tower and related equipment, the

applicant may request and Zoning Board of Appeals may allow for an existing buffer equivalent to 80 percent opacity up to six-feet in height to serve as the landscape buffer.

i) No tower shall be located on a wetland as designated by local, state or federal authorities.

4) APPLICATION:

Every applicant for a solar or wind energy system shall submit to the Zoning Administrator in written narrative and/or graphic form an application which includes all the items of information listed below:

- 1) Name, address and telephone number of property owner and the name, address and telephone number of the installer of system.
- 2) Description of the proposed solar or wind energy system indicating the following:
 - a) plan showing the proposed location of the system on the lot;
 - b) system dimensions and specifications;
 - c) landscape screening plan;
 - d) evidence showing compliance with applicable setback requirements;
 - e) distance of the structure or facility to property lines;
 - f) distance to any roads or overhead utility lines;
- 3) Compliance with the requirements listed in Section 1248.02.21(B)(1) relating to General Requirements for Solar and Wind Energy systems;.
- 4) Compliance with the requirements of either 1248.02.21(B)(2) for Solar Energy Systems or 1248.02.21(B)(3) for Wind Turbine Systems

SECTION 6: AMENDMENT. The Codified Ordinances of the City of Edwardsville, Part 12 – Planning and Zoning Code, Chapter 1242 – Zoning Districts; Regulations, Section 1242.04(e) – LIGHT MANUFACTURING (M-1) Special Uses is hereby amended by:

The modification and addition of the following items:

- (8) Any other use not specifically permitted (ord.4892-2-96. Passed 2-20-1996) Wind energy systems
- (9) Any other use not specifically permitted (ord.4892-2-96. Passed 2-20-1996)

SECTION 7: AMENDMENT. The Codified Ordinances of the City of Edwardsville, Part 12 – Planning and Zoning Code, Chapter 1244 – Administration and Enforcement, Section 1244.02(c) – Limitations of Variations is hereby amended by:

The addition of the following item:

(9) To permit a solar panel and supporting framework to extend more than six feet above the existing grade.

SECTION 8: CONFLICT. Any ordinance in conflict with this amendment is hereby repealed.

SECTION 9: SEVERABILITY. Each section and each part of each section of this Codified Ordinance is hereby declared to be an independent section or part of a section, and if any such section or part of a section, or any provision thereof is held to be invalid, the remaining sections or parts of sections shall not be affected thereby.

SECTION 10: EFFECTIVE DATE. This Ordinance shall be in full force and effect after its passage, approval and publication as provided by law.

ADOPTED by the City Council of the City of Edwardsville, Madison County, Illinois this 20th day of July, 2010, pursuant to a roll call vote as follows:

AYES: Aldermen Haroian, Butts, Walker, Mallon, Twombly, Stamer, Rezabek


NAYS:

ABSENT:

ABSTENTION:

APPROVED by me this 20th day of July, 2010

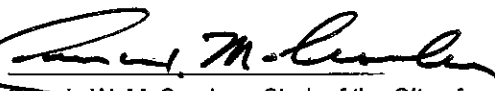
By:


Gary D. Niebur, Mayor of the
City of Edwardsville, Madison
County, Illinois

ATTESTED, Filed in my office,

this 21st day of July, 2010

By:


Dennis W. McCracken, Clerk of the City of
Edwardsville, Madison County, Illinois.