# **Wind Energy Ordinance**

### **ORDINANCE NO. 6284**

AN ORDINANCE AMENDING SECTION 10 OF ORDINANCE NO. 4647; PROVIDING A PENALTY CLAUSE, A SAVINGS CLAUSE, AND A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE. BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GARLAND, TEXAS:

#### Section 1

That the schedule of uses contained in Section 10-200 of Ordinance No. 4647, the comprehensive zoning ordinance of the City of Garland, Texas is hereby amended by: (1) adding, as a land use under the division "Residential" a land use for "Wind Energy System";

(2) designating "Wind Energy System" as an allowed use in the Single Family-16, Single Family-7, Duplex, and Central Area 2 zoning districts.

#### Section 2

and

That Section 10 of Ordinance No. 4647, the comprehensive zoning ordinance of the City of Garland, Texas is hereby amended by adding a new subsection 10-315 to read as follows:

## "10-315 Wind Energy Systems

- (A) **Definition.** In this section, Wind Energy System or System means a wind-driven energy conversion system that converts wind energy into electricity though the use of wind energy that drives a wind turbine, that has a rated capacity of not more than 10kw output at any given time, and that is intended for on-site production and consumption of electricity.
- **(B) General Regulations.** The following general regulations apply to all Wind Energy Systems located within any approved district. A Wind Energy System lawfully in existence at the time of the enactment of this section shall not be required to meet the requirements established herein. Nothing contained in this section is intended to supersede the provisions of any applicable deed restrictions.
- (1) Required Plans and Specifications. In addition to the submittals otherwise required upon making application for a building permit, the application for a building permit for a Wind Energy System must be accompanied by:
- (a) A site plan of the proposed Wind Energy System, which shall include:
- (i) A survey or a scaled drawing of the site on which the proposed Wind Energy System will be constructed;
- (ii) A plan view layout of the proposed Wind Energy System clearly showing:
- The location of the System in respect to the property on which the System will be built;
- All components of the System; the distance of the System to property lines; required setbacks;

existing structures on the site; and natural features such as watercourses and trees; (iii) Elevation drawings that include:

- The design and height of the proposed Wind Energy System;
- Detailed drawings of all System components;
- Screening requirements; and
- (iv) A line drawing of the electrical components of the System in sufficient detail to allow for a determination that the manner of installation conforms with the edition of the National Electrical Code in effect at the time of construction;
- (b) Standard installation drawings of the wind turbine structure, including the tower, base, and footings, if any.
- (c) If the System is mounted on a tower, either an engineering analysis of the tower or a copy of the manufacturing specifications demonstrating compliance of the System with the edition of the International Residential Code in effect at the time of construction. An engineering analysis shall be certified by a licensed professional engineer registered in the State of Texas.
- (d) Evidence of the notice to the utility company as required by subsection (B)(1O) below.
- (2) Construction Standards. A Wind Energy System shall be installed according to the manufacturer's recommendations or under the seal of a professional engineer registered by the State of Texas.
- (3) Maximum Height. Subject to the height limitations imposed by the setback requirements proscribed in Section (B)(4), below, for other than a roof-mounted installation, the maximum height of the System shall not exceed 40 feet from ground level to the topmost portion of the System inclusive of the turbine and blades. For horizontally-mounted (vertically-spinning) turbines, the measurement of maximum height shall be made by measuring to the center of the turbine shaft and then adding the length of a blade. Additionally, no System when installed shall exceed the height recommended by the manufacturer or the distributor of the System.
- (4) Location and Setback. A tower-mounted Wind Energy System shall be anchored only in the rear yard of the lot on which the System is located. A tower-mounted System may not be located nearer to a side or rear lot line than the height of the System, inclusive of turbine blades. No part of a Wind Energy System, including blades or guy wire anchors, may protrude across a property line.
- (5) Primary Structure Required. A Wind Energy System may exist only as a secondary use. A Wind Energy System may not be erected on a lot until a primary structure has been constructed.
- (6) Sound Pressure Levels. Sound pressure levels produced by the operation of a Wind Energy System shall not exceed the limitations set forth in Sec. 22.69 of the Code of Ordinances.
- (7) Lighting. All lighting not required by Federal Aviation Administration ("FAA") regulation is prohibited not including, however, operational lighting installed by the manufacturer of the system as original equipment. When obstruction lighting is required by FAA regulations, such lighting shall not exceed the minimum requirements of those regulations. If so required, a Wind Energy System tower structure may be artificially lighted ONLY with steady-burning red obstruction lights (FAA type L-810) or flashing red obstruction lights (FAA type L0864), flashing no faster than 20flashes per minute. Upward lighting, flood lights or other lighting not strictly required by the FAA is prohibited.
- (8) Signs. No advertising or other signs shall be placed on a Wind Energy System.
- (9) Prohibited in Easements. No portion of a Wind Energy System shall be located in, on or across a public easement unless authorized by the easement holder.
- (10) Notice to utility company on grid-interconnected systems. No gridinterconnected Wind

Energy System shall be installed until evidence has been provided to the City that the appropriate electric power provider has been informed of the customer's intent to install a grid-connected customerowned Wind Energy System and that the customer's system meets the utility's approved specifications for interconnection. If a System will interconnect through Garland Power and Light, the System shall conform to the provisions of Ordinance No. 5886 and such other interconnection requirements applicable thereto. Off-grid systems are exempt from this requirement.

- (11) State or Federal Requirements. A Wind Energy System shall meet or exceed current standards and regulations of the FAA and any other agency of the State or Federal government with the authority to regulate Wind Energy Systems. If such standards and regulations are changed, and if the controlling State or Federal agency mandates compliance, then the owner of the Wind Energy System shall bring such Wind Energy System into compliance with those revised standards and regulations within six (6) months of the effective date of such standards and regulations, unless a different compliance schedule is mandated by the controlling State or Federal agency.
- (12) Public hearing. Prior to the installation of a System, other than a roof- mounted installation, an application for a Wind Energy System must be approved by the Plan Commission after a public hearing. At the hearing, the applicant may request a variance from the provisions of Section (B)(3) or (B)(4), subject to the restrictions of this Section. If the application or the variance is denied by the Plan Commission, an appeal may be made to the City Council after application to the Director of Planning within fifteen days of the date of denial. An application for approval of a Wind Energy System shall be made to the Director of Planning and shall be accompanied by payment of an application fee in the amount of \$300.00. Prior to the hearing, the Director shall mail written notice of the hearing to all owners of property located within 400 feet of the site of the proposed Wind Energy System by using the last known address as listed on the City's tax rolls. If the applicant requests a variance, the applicant must establish at the hearing(s) a hardship relating specifically to the proposed location of the System. A hardship may not be based upon the personal or financial needs of the applicant, but must be based upon conditions unique to that location including elevation, topography, slope, lot size, and the presence of trees, buildings or other obstacles to the movement of wind at the proposed location of the System. (13) Roof Mounted Systems. Any system designed to be mounted on the roof of a structure that does not extend more than sixty (60) inches above the roof line shall not be required to comply with the provisions of Sections (B)(1)(a)(i), (B)(1)(a)(ii), (B)(3) and (B)(4) of this ordinance.

#### (C) Maintenance and Abandonment:

- (1) A Wind Energy System shall be maintained at all times according to the manufacture's specifications.
- (2) A Wind Energy System that has become unstable, leans significantly out-of-plumb, or that poses a danger of collapse shall be removed or brought into repair within 60 days following notice by the Building Official to the owner of the lot upon which the System is located. The Building Official may order immediate repairs in the event of imminent collapse. Failure to make the required repairs within the time provided is an offense.
- (3) If the owner of a Wind Energy System plans to abandon or discontinue, or is required to discontinue, the operation of the System, the owner shall notify the Building Official by certified U. S. mail of the proposed date of abandonment or discontinuation. Such notice shall be given no less than 30 days prior to abandonment or discontinuation.

- (a) In the event that an owner fails to give such notice, the Wind Energy System shall be considered abandoned if the Wind Energy System is not operated for a continuous period of six (6) months.
- (b) Upon abandonment or discontinuation of use, the property owner shall physically remove the Wind Energy System within 90 days from the date of abandonment or discontinuation of use. "Physically remove" includes, without limitation, the actual, complete removal of the tower, turbine and all other components of the Wind Energy System from the site of the original installation."

#### Section 3

That a violation of any provision of this Ordinance shall be a misdemeanor punishable in accordance with Sec. 10.05 of the Code of Ordinances of the City of Garland, Texas.

#### Section 4

That Ordinance No. 4647, as amended, shall be and remain in full force and effect save and except as amended by this Ordinance.

#### **Section 5**

That the terms and provisions of this Ordinance are severable and are governed by Sec. 10.06 of the Code of Ordinances of the City of Garland, Texas.

#### Section 6

That this Ordinance shall be and become effective immediately upon and after its passage and approval. PASSED AND APPROVED this the 18<sup>th</sup> of November, 2008.

ATTEST: