

ORDINANCE NO. 10-02

AN ORDINANCE REGULATING THE USE OF WIND TURBINES WITHIN THE CITY LIMITS OF THE CITY OF HEBRON, MORTON COUNTY, NORTH DAKOTA.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF HEBRON, MORTON COUNTY, NORTH DAKOTA, AS FOLLOWS:

Section 1. Definitions. The following definitions represent the meanings of terms as they are used in these regulations:

Small Wind Energy System (SWES): A wind turbine of less than 25 kilowatts maximum output capacity and all appurtenant structures and equipment.

Section 2. Building Permit Required. In order to carry out the purposes of this title, the City Council finds it necessary to require that certain uses, because of unusual size, safety hazards, infrequent occurrence, effect on surrounding area, or other reasons, be reviewed by the city planning and zoning commission and building official (where allowed) prior to the City Council granting a building permit.

Section 3. The City Council is authorized to issue building permits for the following uses:

Small Wind Energy Systems. This section is intended to provide reasonable standards for the use of a Small Wind Energy System (SWES) which would allow electrical power consumers to supplement or replace their use of utility-provided electrical power without creating negative impacts to adjacent properties or the public.

1. For the purposes of this section, a SWES is defined as a wind turbine of less than 25 kilowatts maximum output capacity and all appurtenant structures and equipment. A SWES is incidental and accessory to a permitted principal use located on the same lot or parcel of land. A SWES is intended to produce electricity primarily for on-site consumption but excess electrical power may be transferred to a utility company power supply grid pursuant to utility company interconnection agreements.
2. A SWES may be permitted in any zoning district subject to the issuance of a building permit by the City Council. A building permit may be revoked at any time if the SWES is found to be in violation of any of the rules of this or other sections of the Hebron City Ordinances or in violation of any of the conditions imposed by the City Council in granting the building permit.
3. The minimum building setback distance shall be 150% of the height of the structure.

- A. The setback distance is the horizontal distance from the center of the supporting structure to the nearest property line or to the nearest overhead utility easement or underground petroleum product pipeline easement.
 - B. The height of the structure is the vertical distance from the ground surface to the highest point of a rotor blade when in an upright position.
4. The bottom of the rotor blade sweep shall be no closer than 35-feet above the ground surface. Blades may not extend over parking areas, driveways, or sidewalks.
 5. Sound produced by a SWES shall not exceed the following limits at the property line:

ZONING DISTRICTS	DAY	NIGHT
Residential Districts	55	45
Park and Recreational Districts	60	50
Commercial Districts	60	50
Industrial and Agricultural Districts	65	60

- A. Sound pressure level limits are measured in dB(A) as specified in the latest edition of the American National Standards Institute specifications.
 - B. Sound is measured at the property line of any receiving property.
 - C. Day is defined as the time period from 7:00 a.m. to 10:00 p.m. Night is defined as the time period from 10:00 p.m. to 7:00 a.m.
6. Additional rules regarding SWES's.
 - A. Sound Measurements. Following approval and installation of a SWES, the Building Official, Planning and Zoning Commission, or City Council may require the owner/operator of the SWES to engage a certified technician to perform sound measurements at the closest property line to determine and report ambient and operating decibel levels.
 - B. Braking Controls. A SWES shall be equipped with both automatic and manual braking controls to prevent uncontrolled rotation and to limit the rotation speed to the design limits of the SWES.
 - C. Insurance. The owner/operator of a SWES must provide proof of liability insurance at the time of application.

- D. Shadow Flicker. Shadow flicker shall not negatively impact any adjacent properties.
- E. Electronic Interference. The SWES shall not cause electronic or electromagnetic interference with signal receptions or transmission beyond the boundaries of the property upon which the SWES is located.
- F. Monopole Requirement. Within the corporate boundary of the City of Beulah, wind turbines are required to be mounted on monopole structures without guy wires. Within the extraterritorial zoning jurisdiction of the City of Beulah, monopole structures are not required for wind turbines and guy wires may be used.
- G. Roof-mounted SWES. A roof-mounted SWES is not allowed on residential structures.
- H. Color. To minimize off-site visibility to the greatest extent possible, the color of a structure shall be a neutral white or light gray and the surface finish shall be non-reflective.
- I. Lighting. The use of flood lights, laser lights, strobe lights, searchlights, beacons and similar lighting is prohibited unless required by the FAA.
- J. Signs. No signs are allowed on SWES structures except for safety or warning signs which are limited to three square feet in area.
- K. Climbing Apparatus. No climbing apparatus shall be located within 12-feet of the ground on any structure. All structures shall be designed to prevent climbing by unauthorized persons.
- L. Removal of Defunct Systems. Facilities shall be well maintained in an operational condition that poses no potential safety hazard.
 - 1. If a SWES remains nonfunctional for a continuous period of one-year, the system shall constitute a public nuisance and shall be removed.
 - 2. The owner shall remove a defunct system at the owner's expense.
 - 3. Removal includes the entire structure and related appurtenances including any foundation and transmission systems.

- M. Building Permit Required. Prior to installing a SWES, the applicant shall obtain a building permit from the City Council.
 - N. Compliance with all state and federal airport rules and regulations.
7. An application for a building permit for the placement of a SWES shall include the following:
- A.
 - 1. Dimensioned engineering drawings of the structure including the tower, base, and footings;
 - 2. Line drawing of the electrical components in sufficient detail to allow for a determination that the manner of installation will meet compliance with the electrical code; and
 - 3. Documentation certifying that the SWES will meet structural loading requirements for a 90 mph sustained wind. Windload certification shall be prepared by a professional structural engineer registered in the State of North Dakota.
 - B. Scaled and dimensioned site plan drawing showing features of the property and adjacent land within 300 feet of the subject parcel, including but not limited to:
 - 1. Location and height of the SWES;
 - 2. Property boundaries;
 - 3. Distances from a SWES to closest points on adjacent property boundaries;
 - 4. Location and dimensions of structures;
 - 5. Zoning districts of all adjacent properties;
 - 6. Owners of all adjacent properties;
 - 7. Locations, dimensions and descriptions of utility easements;
 - 8. Location of overhead utility lines;
 - 9. Location of underground petroleum pipelines; and
 - 10. Distances from the SWES to the closest points on utility easements.
 - C. Written information from the manufacturer on the proposed SWES stating the following:
 - 1. Compliance with noise standards established by this ordinance.
 - 2. Compliance with electronic interference standards established by this ordinance.

3. Evidence that the proposed SWES model has an operational history of at least one year; and
4. Shadow flicker properties.

D. Unless certified by the manufacturer as not causing shadow flicker in the proposed installation, a shadow flicker model and map showing:

1. Shadow flicker map coverage area of 1,000 feet from a SWES; and
2. Shadow flicker model representing locations affected, intensity, and duration.

E. Copies of letters of compliance of the proposed SWES from the following:

1. Federal Aviation Administration;
2. United States Fish and Wildlife Service; and
3. The local electrical utility company serving the subject property.

Section 4. **Procedure to Obtain Building Permit.** The City Council is authorized to issue building permits for a SWES only after the following procedure has been followed:

1. Applications for a building permit for the placement of a SWES shall be submitted to the City Auditor. The City Auditor shall confirm that the application is complete. If the application is incomplete, the City Auditor shall notify the applicant in writing that the application is incomplete and provide an explanation as to what is required to complete the application.
2. The City Auditor, upon confirmation that the application for building permit is complete, shall present such to the Planning and Zoning Commission at the next regular scheduled meeting at which time a time and date shall be set for the public hearing on the same.
3. The City Auditor shall notify the applicant of the time and date of the public hearing.
4. Notice of the public hearing shall be published by the applicant at least fifteen (15) days prior to said public hearing in the official newspaper of the municipality. Notice shall include the time, place, and purpose of the public hearing. Proof of publication of the notice for the public hearing shall be presented to the City Auditor and will thereafter be maintained on file in the City Auditor's Office.

5. Following the public hearing, the Planning and Zoning Commission shall submit its recommendation concerning the application for building permit to the City Council for a decision.
6. Upon receipt of the Planning and Zoning Commission's recommendation, the City Council shall set a final public hearing date for the application for building permit. The City Auditor shall inform the applicant of the time and date of said public hearing and notice shall again be published by the applicant, in the official newspaper of the municipality fifteen (15) days prior to said public hearing.
7. Following the public hearing before the City Council, the City Council shall have authority to approve the application for building permit at the sole discretion of the City Council.

Section 5. Severability. If any section, sentence, clause or phrase of this ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance.

Section 6. Effective Date. This ordinance shall take effect following final passage and adoption.

DATED this 6th day of December, 2010.


GRANT WALTH, Mayor

ATTEST:


LAUREL L. JOHNSON, City Auditor

Introduction and First Reading: 19 Nov 10
Second Reading: 6 Dec 10
Final Passage: 6 Dec 10
Publication Date: Not required