ZONING ORDINANCE KEARNEY TOWNSHIP ANTRIM COUNTY MICHIGAN

ARTICLE III GENERAL PROVISIONS

Section 3.01 PURPOSE. General regulations apply to all districts except as noted herein. Where requirements of a general regulation differ, the more restrictive requirement shall prevail.

Section 3.02 STREETS, ALLEYS AND RAILROAD RIGHTS OF WAY. All streets, alleys and railroad rights of way, if not otherwise specifically designated, shall be deemed to be in the same zone as the property immediately abutting upon such alleys, streets, or railroad right of way. Where the center line of a street or alley serves as a district boundary, the zoning of such street or such alley, unless otherwise specifically designated, shall be deemed to be the same as that of the abutting property up to such center line.

<u>Section 3.03 ALTERATIONS ON DWELLINGS.</u> No building or structure shall be erected, converted, enlarged, reconstructed or structurally altered, nor shall any building or land be used for any purpose other than is permitted in the district in which the building is located.

Section 3.04 BUILDING HEIGHTS EXCEPTIONS. No building or structure shall be erected, converted, enlarged, reconstructed or structurally altered to exceed the height limit herein established for the district in which the building is located except that penthouses or roof structures for the housing of elevators, stairways, tanks, ventilating fans or similar equipment required to operate and maintain the building, and fire or parapet walls, skylights, towers, steeples, flagpoles, chimneys, smokestacks, radio and television aerials or antennas, wireless masts, water tanks, or similar structures may be erected to exceed by more than twenty five (25) feet the height limits of the district in which it is located, except that aerials or antennas designed to aid home television reception may be erected to a height not to exceed sixty (60) feet from the ground level provided said aerial or antenna is attached to the building or erected in the rear yard area. In addition, all districts in this ordinance are zoned in accordance with Federal Air Regulation, Part 77.

<u>Section 3.05 OPEN SPACE REQUIREMENTS.</u> No space which for the purpose of a building or dwelling group has been counted or calculated as part of a side yard, rear yard, front yard, court or other open space required by this Ordinance, may, by reason of change in ownership or otherwise, be counted or calculated to satisfy or comply with a yard, court or other open space requirement of or for any other building.

Section 3.06 EASEMENT TO HIGHWAY. No building shall be constructed or erected upon a lot, or parcel of land, which does not abut upon a public highway or permanent easement of access to a public highway, which easement shall have a minimum width of twenty five (25) feet unless an easement of lesser width was of record prior to the adoption of this Ordinance.

<u>Section 3.07 VISIBILITY OBSTRUCTIONS.</u> No wall, fence, or shrubbery shall be erected, maintained or planted on any lot which unreasonably obstructs or interferes with traffic visibility on a curve or at any highway intersection.

<u>Section 3.08 "M" DISTRICT DWELLINGS.</u> A dwelling shall not be erected in the "M" Manufacturing District; however, the sleeping quarters of watchman or caretaker are permitted.

<u>Section 3.09 LAKE SHORE BOAT STRUCTURES.</u> No structure for the storage or protection of a boat, or boats may be built on the shore of any lake or river unless its location and plans have been approved in advance by the Zoning Administrator who shall take into account in such approval the possible effects of such a structure on erosion of the shoreline, interference with the view, or other use of the waterfront by neighbors, and contamination of water. Aerators or bubblers shall not encroach on public accesses.

Section 3.10 SHORELINE PROTECTION STRIP. In compliance with the township master plan goal, to protect surface water quality, no building or structure, except docks or launch ramps shall be erected closer than fifty (50) feet from the shoreline at normal high water level of any lake, river or stream within the township. To help control water quality and temperature, a strip of land not less than twenty five (25) feet in width from the normal high water level of said lakes, rivers and streams is to remain in its natural state of trees and shrubs. However, a one time cut per parcel of thirty (30) percent of all living trees and shrubs may be removed by cutting them flush with the ground surface. The removal of said thirty (30) percent of trees and shrubs is to be calculated along the entire length of the shoreline, not one small area. Trees and shrubs may be pruned to afford a filtered view of the water, clear cutting in the natural vegetation is prohibited. No removal or excavation of any roots or stumps will be allowed at any time within the protection strip. The only exceptions will be that of a boat ramp, providing it's an approved private access site. A road, path or walkway may be constructed to the water's edge no more than twelve (12) feet in width. Fill materials shall not be allowed to enter the water either by erosion or mechanical means.

Section 3.11 GRADE LEVELS. All dwellings in any zone and all business places shall, subsequent to adoption of this Ordinance, conform to all established and determined grade levels. In areas where there are two (2) or more dwellings or other structures within two hundred (200) yards on the same road, on the same side of the road, the average of the grade level thereof shall determine the grade level for that area. It shall be unlawful to erect or construct a building in any zone with the top of the foundation or basement walls, together with the plates thereof, more than twenty four (24) inches above the established or determined grade level except that where the building is set back further than the required distance an additional rise of one (1) foot for each two (2) feet additional of setback shall be required.

<u>Section 3.12 BUILDING RESTRICTIONS ON LOT OF RECORD.</u> In any district in which single family dwellings are permitted, notwithstanding other limitations imposed by other provisions of this Ordinance, a single family dwelling and customary accessory building may be erected on any single lot of record at the effective date of adoption or amendment of this Ordinance, subject to the following conditions:

- 1. Height of the structure shall not exceed two and one-half $(2\frac{1}{2})$ stories or thirty-five (35) f e e t, whichever is lesser. The height shall be measured from the established grade level.
- 2. Setbacks may be reduced by the same percentage that the area of such lot bears to its zone district requirements provided that minimum setbacks will be fifty (50) feet on the front a n d lakeside, fifteen (15) feet on the rear and ten (10) feet on the sides.

3. If two (2) or more lots or combinations of lots with continuous frontage in single ownership are of record at the time of passage or amendment of this Ordinance, and if all or part of the lots do not meet the requirements for lot width and area, said lots shall not be used for residential purposes unless they comply with the height and area requirements of this Chapter or unless approved by the Board of Appeals.

Section 3.13 BUILDING DAMAGED.

- 1. A building damaged by fire or other casualty to such an extent that the cost or repair and reconstruction exceeds one hundred percent (100%) of the assessed valuation for taxes on the building at the time the damage occurred, shall not be repaired or reconstructed unless made to comply in all respect with the provisions of this act relative to such buildings thereafter erected.
- 2. A building damaged by wear and tear, deterioration and depreciation to such an extent that the cost of repair and rehabilitation to place it in a safe, sound and sanitary condition exceeds one hundred percent (100%) of the assessed valuation for taxes at the time when the repairs or rehabilitation are to be made, shall not be so repaired or rehabilitated unless the building is made to comply in all respect with the provisions of this act relative to such building hereafter erected. A building so damaged by wear and tear, deterioration, and depreciation to such an extent that the cost of repair and rehabilitation shall exceed the assessed valuation for taxes, shall be deemed unfit for occupation and use unless repaired and rehabilitated pursuant to the provisions of this Ordinance, and incase such building so damaged is not so repaired and rehabilitated, it shall be vacated and not again occupied. Before any reconstruction of any such building shall be commenced, a zoning permit must be secured as provided in Article VI. It shall be the duty of the Zoning Administrator to determine the extent of such destruction, deterioration or depreciation before issuing a zoning permit.

<u>Section 3.14 GREENBELT.</u> A Greenbelt, as defined herein, shall be required for any commercial or industrial use that abuts a residential or agricultural use on either the side yard or the rear yard. In all instances, this shall be provided as part of the side or rear yard requirements. If waived in writing by the adjacent residential or agricultural property owners, the Greenbelt may be omitted or a fence substituted for the Greenbelt if, after public hearing and notice, the Planning Commission finds that there would be no adverse effects upon the neighboring property resulting from the waiver or omission.

<u>Section 3.15 CONTINUED CONFORMANCE WITH REGULATIONS.</u> The maintenance of yards, open spaces, lot areas, height and bulk limitations, fences, walls, clear vision areas, parking and loading spaces, and all other requirements, including the proper maintenance and repair of screening arrangements, for a building or use specified within this Ordinance shall be a continuing obligation of the owner of such building or property on which such building or property or use is located.

<u>Section 3.16 HIGHWAY INTERSECTIONS.</u> At intersections of highway, setback lines are hereby established across each sector between the intersecting highways. Such setback lines shall be straight lines connecting points on the intersecting highway right of way lines. At intersections of any Antrim County Primary Road or any Michigan State trunk line highway with any other highway, said connection points shall be located one hundred (100) feet distant from the intersections of the highway

right of way lines. At the intersection of any highway which is not included in either the Antrim County or Michigan State trunk line system with any other such highway, said points shall be located fifty (50) feet distant from the intersection of the highway right of way lines.

Section 3.17 BUILDING SETBACKS. No building or structure of any kind except: necessary highway and traffic signs and open fences through which there shall be clear vision, shall hereafter be constructed, erected or moved into the space within such setback lines. Except as herein provided, no building or structure, except necessary highway and traffic signs, presently existing within such setback lines shall be renewed or replaced hereafter in any way, except outside the setback lines. No building or structure within the established setback lines, except necessary highway and traffic signs and open fences herein before mentioned, shall be altered, enlarged or added to in any way which will increase or prolong the permanency of any portion within the established setback lines. When any highway, or part thereof, is officially adopted into the Antrim County Primary Road or the Michigan State Trunk line system, such highway shall automatically be subject to the provisions of this Ordinance.

Section 3.18 ESSENTIAL SERVICES. Essential Services are those services as defined in Article I, Section 1.04 and as such are permitted by right in this Ordinance except that radio towers, electric substations, telephone exchange buildings and gas regulator stations are permitted by special use permit under Article V of this Ordinance. Telecommunication towers, Alternative Tower Structures and antennas shall be regulated and permitted pursuant to this Ordinance and shall not be regulated or permitted as essential services, public utilities or private utilities.

<u>Section 3.19 STORAGE USE.</u> No yard or open space lot shall hereafter be used for the open air parking disposition, storage, wrecking, dismantling, accumulation, or abandonment, for a period of more than thirty (30) days, of disused, discarded, worn out, wrecked, or dismantled vehicles, machinery, implements, apparatus, furniture, appliances, junk or other personal property unless screened. Without limiting the meaning of junk, the term shall include used or salvaged metals and their compounds, or combinations, used or salvaged lumber, ropes, bags, paper, glass, rubber and similar articles and materials.

Section 3.20 STORAGE OF VEHICLES. Storage or parking for a period of more than thirty (30) days of an unoccupied house trailer, camper, camping trailer or boat trailer which is the property of the occupant of the dwelling and in the rear or side yard when located not less than ten (10) feet from side lot lines and at least twenty (20) feet from the highway right of way, is permitted.

<u>Section 3.21 INOPERATIVE OR DISMANTLED CARS, TRUCKS AND BUSES.</u> The storage of dismantled, unlicensed, wrecked or inoperative vehicles within any district is expressly prohibited unless stored for financial security reasons or contained within a junk yard or an enclosed structure or provided said storage does not exceed one (1) month.

Section 3.22 DWELLING STANDARDS.

1. Every dwelling hereafter erected in a zoning district permitting such use shall comply with the height, floor area, and width requirements contained in Table 1 of the Appendix to this Ordinance. Utility rooms and rooms intended for living, eating, or sleeping purposes that are roughed in and are to be completed within one year from the date construction began may be included when computing this minimum square footage requirement. However, cellars,

basements, open porches, garages, and other areas not used frequently or during extended periods for living, eating, or sleeping purposes shall not be included when computing this minimum square footage requirement.

2. In addition to the requirements of paragraph 1 above, multiple family dwellings shall comply with the requirements of Article IV, Section 4.04 of this Ordinance.

<u>Section 3.23 PERMITTED USES.</u> The following uses are specifically permitted in any zone:

- 1. Telecommunication towers and Alternative Tower Structures located on property owned, leased, or otherwise controlled by Kearney Township provided a license or lease authorizing such telecommunication tower or Alternative Tower Structure has been approved by Kearney Township.
- 2. Antenna, if said antenna are co-located on telecommunications towers or Alternative Tower Structures which have received a special use permit which included review of the standards set forth in Section 5.01 L(1) of this Ordinance.

Section 3.24 TEMPORARY DWELLINGS.

- 1. The Zoning Administrator may issue a zoning permit, pursuant to the procedures of this section, to allow a temporary dwelling within any zoning district on the same lot or parcel as a permanent dwelling under any of the following circumstances:
 - A. Where a permanent dwelling is destroyed or damaged by fire, wind, or other natural causes to the extent it is no longer habitable, a temporary dwelling may be placed on the same lot or parcel as the permanent dwelling during the time the permanent dwelling is repaired.
 - B. A temporary dwelling may be placed on a lot or parcel while the property owner is constructing a permanent dwelling on the same lot or parcel.
 - C. A temporary dwelling may be placed on the same lot or parcel as a permanent dwelling when the property owner establishes by written documentation from the treating physician involved that the property owner or a person residing with or intending to reside with the property owner suffers from a medical condition that necessitates full-time residential care and a temporary dwelling is needed for the person with the medical condition, the care-giver, or their families.
- 2. When requesting a zoning permit for a temporary dwelling, the property owner shall file an application with the Zoning Administrator and pay the fee established by the township board pursuant to Section 6.06 of this Ordinance. The application shall specify the grounds under subsection 1 above for the temporary dwelling and shall include the information needed to allow the Zoning Administrator to make the findings required under subsection 3 below.

- 3. Before issuing a zoning permit for a temporary dwelling, the Zoning Administrator shall find that the proposed temporary dwelling will meet all of the following standards:
 - A. In the case of repairs to or construction of a permanent dwelling, the property owner shall possess a valid building permit for the contemplated repairs or construction issued by the Antrim County Building Department.
 - B. The temporary dwelling shall meet all height and setback requirements for the zoning district in which it is located.
 - C. The temporary dwelling shall be connected to safe, sanitary, and effective systems for the supply of potable water and the disposal of sewage wastes.
 - D. Adequate off-street parking shall be provided for the occupants of the temporary dwelling.
- 4. The Zoning Administrator may attach reasonable conditions to a zoning permit for temporary dwelling to ensure compliance with the above standards.
- 5. The use of a temporary dwelling shall be limited to one (1) year, or the completion of repairs to or construction of the permanent dwelling or the termination of the medical condition that gave rise to the need for the temporary dwelling under subsection 1 above, whichever comes first. The Zoning Administrator shall grant annual extensions of the zoning permit for a temporary dwelling based on a medical condition upon the filing each year of a written statement by the property owner from the treating physician involved that the circumstances giving rise to the original need for the temporary dwelling continue to exist. The Zoning Administrator shall grant a one-time, one (1) year extension of the zoning permit for a temporary dwelling based on the repairs to or construction of a permanent dwelling upon the filing of a written statement by the property owner that the circumstances giving rise to the original need for the temporary dwelling continue to exist. If the property owner desires to continue the use of a temporary dwelling based on the repairs to or construction of a permanent dwelling beyond the time of the zoning permit extension, he or she shall file a request for a temporary dwelling zoning permit, which shall then be processed by the Zoning Administrator in the same manner as a new application.
- 6. A temporary dwelling shall be removed from the lot or parcel on which it was placed within thirty (30) days after the expiration of the zoning permit for the temporary dwelling, and the lot or parcel shall be restored to its condition immediately prior to the placement of the temporary dwelling. Provided, however, this provision shall not require the removal of a travel trailer or recreational vehicle used as a temporary dwelling from the lot or parcel, but shall require that the travel trailer or recreational vehicle no longer be used as temporary dwelling.

<u>Section 3.25 ANIMALS IN ZONED AREAS:</u> The keeping of animals shall be permitted in the zones R1, R2, & R3 where the lot size is five (5) acres or larger with a minimum width of two hundred (200) feet and where an enclosure of fencing is provided. Two (2) animals will be permitted on five (5) acres with one (1) animal allowed per each additional acre. All qualifying property must comply with the applicable generally accepted agricultural and management practices, (GAAMP). This restriction

shall not prohibit the keeping of ordinary household pets in any zone.

Section 3.26 WIND ENERGY SYSTEMS.

WIND ENERGY DEFINITIONS:

Accessory Wind Turbines. A turbine placed on an existing structure, of which the turbine would be a secondary use of that structure.

Ambient. Ambient is defined as the sound pressure level exceeded ninety (90) percent of the time.

Anemometer. A device used to measure wind speed.

<u>DB(A).</u> The sound pressure levels in decibels. Refers to the "a" weighted scale defined by ANSI. A method for weighting the frequency spectrum to mimic the human ear.

<u>Decibel.</u> The unit of measure used to express the magnitude of sound pressure and sound intensity.

<u>Hub Height.</u> The distance measured from the ground level to the center of the turbine hub.

<u>Wind Energy Systems (Small On-site)</u>. A wind energy conversion system consisting of a wind turbine (horizontal or vertical axis), a tower, and associated control of conversion electronics which has a rated capacity of not more than one hundred (100) kW and which is intended to primarily reduce onsite consumption of utility power.

<u>Shadow Flicker.</u> Alternating changes in light intensity caused by the moving blade of a wind turbine casting shadows on the ground and stationary objects, such as windows of a dwelling.

Sound Pressure. Average rate at which sound energy is transmitted through a unit area in a specified direction. The pressure of the sound measured at a receiver.

Sound Pressure Level. The sound pressure mapped to a logarithmic scale and reported in decibels (dB).

<u>Wind Energy Facility.</u> A power generating facility consisting of one or more wind turbines under common ownership or operation control, and included substations, towers, cables/wires, and other buildings accessory to such facility, whose main purpose is to supply electricity to off-site customers.

<u>Wind Energy Generator.</u> A wind energy conversion system which converts wind energy into power. Includes a tower, pylon, or other structure, including all accessory facilities, upon which any, all, or some combination of the following are mounted:

- 1. A wind vane, blade, or series of wind vanes or blades, or other devices mounted on a rotor for the purpose of converting wind into electrical or mechanical energy.
- 2. A shaft, gear, belt, or coupling device used to connect the rotor to a generator, alternator, or other electrical or mechanical energy-producing device.

3. A generator, alternator, or other device used to convert the energy created by the rotation of the rotor into electrical or mechanical energy.

Wind Turbine Generator Total Height.

- 1. **Horizontal Axis Wind Turbine Rotors.** The distance between the ground and the highest point of the wind turbine generator, plus the length by which the rotor wind vanes or blades mounted on a horizontal axis wind turbine rotor exceeds the height of the wind turbine generator.
- 2. <u>Vertical Axis Wind Turbines.</u> The distance between the ground and the highest point of the wind turbine generator including the top of the blade in its vertical position.

Section 1: SMALL ON-SITE WIND ENERGY SYSTEMS.

- 1. <u>Small On-Site Wind Energy Systems.</u> A wind energy conversion system which is intended to primarily serve the needs of the property upon which it is located shall be considered an accessory structure.
- 2. <u>Small On-Site Wind Energy Systems up to one hundred (100) feet in height.</u> Shall be permitted by right in the (A) Agricultural district only.
- 3. <u>Small On-Site Wind Energy Systems over one hundred (100) feet in height.</u> Shall require a Special Use Permit in all districts.
- 4. <u>All Small On-Site Wind Energy Systems.</u> Shall require a Special Use Permit in the following districts: R1, R2, RR, C, M & PD.

Section 1.1: ACCESSORY WIND TURBINES.

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- 1. **Accessory Wind Turbine Regulations:** In addition to the regulations contained in Section 2, Accessory Wind Turbines are subject to the following specific regulations:
 - A. **Location:** Accessory Wind Turbines are permitted by right in all zoning districts.
 - B. **Number:** There shall be no more than one (1) Accessory Wind Turbine located on a structure.
 - C. **Height:** All Accessory Wind Turbines are subject to a maximum height of the overall height of the structure it is attached to, plus ten (10) feet. (See Appendix Page 3)

Section 2: SITE STANDARDS:

1. A site plan is required for approval of installation. Upon approval the site plan is valid for

twelve (12) months, and is not transferable to any other person. The site plan shall include the following standards in Sections 2 and 3:

- A. Site Plan: Site Plan requirements should include a map of the following:
 - 1. The project area boundaries including required setbacks.
 - 2. The location, height and dimensions of all existing and proposed structures and fencing.
 - 3. The location, grades and dimensions of all temporary and permanent roads.
 - 4. Existing topography.
 - 5. Water bodies and wetlands.
 - 6. All new above ground infrastructure related to the project.
- B. <u>Blade Clearance:</u> There shall be a minimum vertical blade tip clearance from the ground of twenty (20) feet. (See Appendix Page 3)
- C. <u>Guy Wires:</u> If the small wind energy system is supported by guy wires, such wires shall be covered with a high visibility material so as to make it visible to a height of at least six (6) feet above the ground.
- D. <u>Noise:</u> Wind Energy systems shall not cause a sound pressure level in excess of fifty-five (55) dB(A) or in excess of five (5) dB(A) above the background noise, whichever is greater, as measured at the nearest property line. This level may be exceeded during short-term events such as utility outages and severe wind storms.
- E. **Potential Ice Throw:** The potential ice throw or ice shedding for wind turbine generator shall not cross the property lines of the site nor impinge on any right-of-way or overhead utility line.

F. Safety:

- 1. All collection system wiring shall comply with all applicable safety and stray voltage standards.
- 2. Wind Turbine towers shall not be climbable on the exterior.
- 3. All access doors to wind turbine towers and electrical equipment shall be lockable.
- 4. Appropriate warning signs shall be placed on wind turbine towers, electrical equipment, and facility entrances.

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- 5. All wind turbine generators shall be equipped with controls to control the rotational speed of the blades within design limits for the specific wind turbine generator.
- G. **Setbacks:** Each proposed wind turbine generator or anemometer tower shall meet the following applicable setback requirements:
 - 1. **Setback from Property Line:** Each wind turbine generator shall be set back from any adjoining lot line a distance equal to the total height of the wind turbine generator including the top structures, the wind turbine of the blade in its vertical position. The Planning Commission may reduce this setback to no less than one hundred (100) feet; providing the adjoining property is owned or leased by the applicant or an easement is obtained. If the adjoining property that is owned or leased by applicant includes more than one (1) parcel, the properties may be considered in combination in determining setback relief. The amount of setback relief approved by the Planning Commission will be based on data provided by the applicant and prepared by a qualified professional. Such data shall satisfy the Planning Commission that any potential blade and ice throw will not cross the property line and that sound levels will not exceed fifty-five (55) decibels on the dB(A) scale at the property line from the proposed setback. Data provided shall be specific to the proposed tower in the proposed location taking into consideration prevailing winds, topography, existing vegetation and other relevant factors.
 - 2. **Setback from Road:** In addition to the above, a wind turbine generator shall, in all cases, be set back from a public or private road right-of-way a minimum distance equal to the height of the wind turbine generator total height as defined in the Ordinance.
 - 3. **Setback from Structure:** Each wind turbine generator shall be setback from the nearest inhabited structure a distance not less than one and one-half $(1\frac{1}{2})$ times the total height of the wind turbine generator.
 - 4. <u>Setback from Communication and Power Lines</u>: Each wind turbine shall be set back from the nearest above-ground public electric power line or telephone line a distance of no less than four hundred (400) feet or one and one-half (1½) times the total tower height, whichever is greater, determined from the existing power or communication lines.
 - 5. **Building Setbacks:** Setbacks for buildings accessory to a wind turbine generator shall conform to the setbacks of the district.

H. Shadow Flicker:

1. The wind turbine generator shall be designed in such a manner as to minimize shadow flicker on a roadway. The wind turbine generator shall be designed in

such a manner as to prevent shadow flicker on any existing structures located off the property on which the wind turbine generator is located. If necessary to prevent shadow flicker from crossing occupied structures, the wind turbine generator may be programmed to stop rotating during times when the wind turbine generator shadow crosses these structures. The wind turbine generator operator may obtain written agreements which allow shadow flicker to cross an occupied structure.

- 2. The Planning Commission may require the applicant to conduct an analysis of potential shadow flicker at occupied structures if it deems such an analysis necessary. The analysis shall identify the locations of shadow flicker that may be caused by the project and the expected durations of the flicker at these locations from sunrise to sunset over the course of a year. The analysis shall identify problem areas where shadow flicker may affect the occupants of the structures and describe measures that shall be taken to eliminate or mitigate the problems.
- I. <u>Signal Interference:</u> No wind turbine generator shall be installed in any location where its proximity with existing fixed broadcast, retransmission, or reception antennas for radio, television, navigation, wireless phone or other personal communication systems would produce electromagnetic interference with signal transmission or reception. No wind turbine generator shall be installed in any location along the major axis of an existing microwave communications link where its operation is likely to produce electromagnetic interference with the link's operation.

Section 3: REGULATIONS FOR INSTALLATION, MAINTENANCE AND REMOVAL OF WIND ENERGY SYTEMS.

- 1. Wind Energy Facilities and Anemometer Towers: Anemometer towers and wind energy facilities consisting of one (1) or more wind turbines whose main purpose is to supply electricity to off-site customers shall be allowed as a Special Use and shall adhere to the following requirements in addition to the requirements contained in Sections 1 and 2 of this ordinance:
 - A. <u>Approvals:</u> All required approvals from other local, regional, state or federal agencies must be obtained prior to approval of a site plan. In the case where site plan approval is a requirement for other local, regional, state or federal agency approval, evidence of such shall be submitted with the site plan.
 - B. **Equipment Replacement:** Major components of the wind turbine generator may be replaced without a modification of the Special Use Permit provided all regulations contained herein are adhered to.
 - C. **Hazard Planning:** An application for a wind turbine generator shall be accompanied by a hazard prevention plan. Such plan shall contain:
 - 1. Certification that the electrical wiring between turbines and the utility right-of-way does not pose a fire hazard.

- 2. Location of landscaping to be designed to avoid spread of fire from any source on the turbine; such preventative measures may address the types and locations of vegetation below the turbine and on the site.
- 3. A listing of any hazardous fluids that may be used on site shall be provided, including Material Safety Data Sheets (MSDS).
- 4. Certification that the turbine has been designed to contain any hazardous fluids shall be provided.
- 5. A statement certifying that the turbine shall be routinely inspected to ensure that no fluids are released from the turbine.
- D. <u>Height:</u> Regarding wind turbine height, the applicant shall demonstrate compliance with the Michigan Tall Structures Act (P.A. 259 of 1959, as amended), FAA guidelines, and Michigan Aeronautics Commission guidelines as part of the approval process.
- E. <u>Maximum Vibrations:</u> Any proposed wind turbine generator shall not produce vibrations through the ground humanly perceptible beyond the parcel on which it is located.
- F. Minimum Ground Clearance: The lowest point of the arc created by rotating wind vanes or blades on a wind turbine generator shall be no less than twenty (20) feet.
- G. <u>Minimum Site Area:</u> The minimum site area for a wind turbine generator or an anemometer tower erected prior to a wind turbine generator shall be as necessary to meet required wind energy setbacks and other standards of this Article.
- H. Noise: Wind energy systems shall not cause a sound pressure level in excess of fifty-five (55) dB(A) or in excess of five (5) dB(A) above the background noise, whichever is greater, as measured at the nearest property line. This level may be exceeded during short-term events such as utility outages and severe wind storms.
- I. <u>Potential Ice Throw:</u> The potential ice throw or ice shedding, the wind turbine generator shall not cross the property lines of the site nor impinge on any right-of-way or overhead utility line.
- J. Principal or Accessory Use: A wind energy facility or anemometer tower may be considered either a principal or an accessory use. A different existing use or an existing structure on the same parcel shall not preclude the installation of a wind energy facility or a part of such facility on such parcel. Wind energy facilities that are constructed and installed in accordance with the provisions of this Article shall not be deemed to constitute the expansion of a nonconforming use or structure.
- **K.** Removal of Wind Turbine Generators:

- 1. The applicant shall submit a decommissioning plan at the time of the application for the site plan approval. The plan shall include:
 - a. The anticipated life of the project.
 - b. The estimated decommissioning costs in current dollars. Such costs shall not include credit for salvageable value of any materials.
 - c. The method of ensuring that funds will be available for decommissioning and restoration.
 - d. The anticipated manner in which the project will be decommissioned and the site restored.
- 2. Any wind turbine generator or anemometer tower that is not operational for a continuous period of twenty-four (24) months shall be considered abandoned, and the owner of such wind turbine generator or anemometer shall remove the same within one hundred eighty (180) days of abandonment. Failure to remove an abandoned wind turbine generator or anemometer tower within the one hundred eighty (180) day period provided in this subsection shall be grounds for the Township to remove the wind turbine generator or anemometer tower at the owner's expense.
- 3. In addition to removing the wind turbine generator, or anemometer tower, the owner shall restore the site of the wind turbine generator or anemometer tower to its original condition prior to location of the wind turbine generator or anemometer tower, subject to reasonable wear and tear. Any foundation associated with a wind generator or anemometer tower shall be removed to a minimum depth of five (5) feet below the final grade and site vegetation shall be restored.
- 4. The Planning Commission shall require the owner of the wind turbine generator to deposit a performance guarantee in an amount equal to the estimated costs associated with the removal of the wind turbine generator or anemometer tower and all associated equipment and accessory structures and restoration of the site to a reusable condition which shall include the removal of all underground structures to a depth of five (5) feet below the natural ground level at that location. The amount of the performance guarantee shall be reviewed every five (5) years. The amount of the performance guarantee shall be increased based on inflation rate equal to the average of the previous ten (10) years Consumer Price Index. The performance guarantee shall be in the form of a cash deposit, certified check, irrevocable bank letter of credit, or surety bond acceptable to the Township.

L. Safety:

1. All collection system wiring shall comply with all applicable safety and stray

- 2. Wind turbine towers shall not be climbable on the exterior.
- 3. All access doors to wind turbine towers and electrical equipment shall be lockable.
- 4. Appropriate warning signs shall be placed on wind turbine towers, electrical equipment, and facility entrances.
- 5. All wind turbine generators shall be equipped with controls to control the rotational speed of the blades within design limits for the specific wind turbine generator.
- M. <u>Setbacks:</u> Each proposed wind turbine generator or anemometer tower shall meet the following applicable setback requirements:
 - 1. **Setback from Property Line:** Each wind turbine generator shall be set back from any adjoining lot line a distance equal to the total height of the wind turbine generator including the top of the blade in its vertical position. The Planning Commission may reduce this setback to no less than one hundred (100) feet; provided the adjoining property is owned or leased by the applicant or an easement is obtained. If the adjoining property that is owned or leased by the applicant includes more than one (1) parcel, the properties may be considered in combination in determining setback relief. The amount of setback relief approved by the Planning Commission will be based on data provided by the applicant and prepared by a qualified professional. Such data shall satisfy the Planning Commission that any potential blade and ice throw will not cross the property line and that sound levels will not exceed fifty-five (55) decibels on the dB(A) scale at the property line from the proposed setback. Data provided shall be specific to the proposed tower in the proposed location taking into consideration prevailing winds, topography, existing vegetation, and other relevant factors.
 - 2. **Setback from Road:** In addition to the above, a wind turbine generator shall, in all cases, be set back from a public or private road right-of-way a minimum distance equal to the height of the wind turbine generator total height as defined in the Ordinance.
 - 3. <u>Setback from Structure:</u> Each wind turbine generator shall be set back from the nearest inhabited structure a distance not less than one and one-half $(1\frac{1}{2})$ times the total height of the wind turbine generator.
 - 4. **Setback from Communication and Power Lines:** Each wind turbine generator shall be set back from the nearest above-ground public electric power line or telephone line a distance of no less than four hundred (400) feet or one and one-half (1½) times the total tower height, whichever is greater, determined from the

existing power or communications lines.

5. **Building Setbacks:** Setbacks for buildings accessory to a wind turbine generator shall conform to the setbacks of the district.

N. Shadow Flicker:

- 1. The wind turbine generator shall be designed in such a manner as to minimize shadow flicker on a roadway. The wind turbine generator shall be designed in such a manner as to prevent shadow flicker on any existing structures located off the property on which the wind turbine generator is located. If necessary to prevent shadow flicker from crossing occupied structures, the wind turbine generator may be programmed to stop rotating during times when the wind turbine generator shadow crosses these structures. The wind turbine generator operator may obtain written agreements which allow shadow flicker to cross an occupied structure.
- 2. The Planning Commission may require the applicant to conduct an analysis of potential shadow flicker at occupied structures if it deems such an analysis necessary. The analysis shall identify the locations of shadow flicker that may be caused by the project and the expected durations of the flicker at these locations from sunrise to sunset over the course of a year. The analysis shall identify problem areas where shadow flicker may affect the occupants of the structures and describe measures that shall be taken to eliminate or mitigate the problems.
- O. <u>Signal Interference:</u> No wind turbine generator shall be installed in any location where its proximity with existing fixed broadcast, retransmission, or reception antennas for radio, television, navigation, wireless phone or other personal communication systems would produce electromagnetic interference with signal transmission or reception. No wind turbine generator shall be installed in any location along the major axis of an existing microwave communications link where its operation is likely to produce electromagnetic interference with the link's operation.
- P. <u>State or Federal Requirements:</u> Any proposed wind turbine generator anemometer shall meet or exceed any standards and regulations of the Federal Aviation Administration (FAA), Michigan Aeronautics Commission (MAC), the Michigan Public Service Commission, National Electric Safety Code, Federal Energy Regulatory Commission, and any other agency of the state or federal government with the authority to regulate wind turbine generators or other tall structures in effect at the time the Special Land Use approval is approved.
- Q. <u>Sufficient Wind Resources:</u> The proposed site shall have documented annual wind resources sufficient for the operation of the proposed wind turbine generator; provided, however, this standard shall not apply to an anemometer tower. No wind turbine generator shall be approved without submission of a wind resource study documenting wind resources on the site. Said study shall indicate the long term commercial economic viability of the project. The township may retain the services of an independent,

recognized expert to review the results of the wind resource study prior to acting on the application for special approval.

R. <u>Tower Separation:</u> Wind turbine separation distance shall be based on 1) industry standards, 2) manufacturer recommendations, and 3) the characteristics (prevailing wind, topography, etc.) of the particular site location. At a minimum, there shall be a separation between the towers of not less than three (3) times the turbine rotor diameter. Documents shall be submitted by the developer/manufacturer confirming specifications of tower separation.

S. <u>Visual Impact, Lighting, and Power Lines:</u>

- 1. Wind turbines shall be mounted on tubular towers. All turbines shall maintain a galvanized steel finish on the exterior, or be painted a neutral white, gray, or pale blue, unless otherwise regulated by the FAA. The appearance of turbines, towers, and buildings shall be maintained throughout the life of the wind energy facility pursuant to industry standards, (i.e. condition of exterior paint, signs, landscaping). A certified registered engineer and authorized factory representative shall certify that the construction and installation of the wind energy facility meets or exceeds the manufacturer's construction and installation standards.
- 2. The design of the wind energy facility's buildings and related structures shall, to the extent reasonably possible, use materials, colors, textures, screening, and landscaping that will blend facility components with the natural setting and the environment existing at the time of installation.
- 3. Wind turbine generators shall not be artificially lighted, except to the extent required by the FAA, or the MAC or other applicable authority, or otherwise necessary for the reasonable safety and security thereof. If lighting is required, the lighting alternatives and design chosen:
 - a. Shall be the intensity required under State or Federal regulations.
 - b. Shall not be strobe lighting or other intermittent white lighting fixtures, unless expressly required by State or Federal regulations. Such intermittent lighting shall be alternated with steady red lights at night if acceptable to State or Federal regulations.
 - c. May be a red top light that does not pulsate or blink.
 - d. All tower lighting required by State or Federal regulations shall be shielded to the extent possible to reduce glare and visibility from the ground.
- 4. Wind turbines shall not be used to display any advertising except the reasonable identification of the manufacturer or operator of the wind energy facility.

- 5. The electrical collection system shall be placed underground within the interior of each parcel at a depth designed to accommodate the existing agricultural land to the maximum extent practicable. The collection system may be placed overhead adjacent to State and County roadways, near substations or points of interconnection to the electric grid or in other areas as necessary.
- T. Other Regulations: All wind energy systems shall comply with all applicable State construction and electrical codes, Federal Aviation Administration requirements, Michigan Aeronautics Commission requirements, the Michigan Tall Structures Act (P.A. 259 of 1959, as amended), and the Michigan Public Safety Service Commission and Federal Energy Regulatory Commission Standards.

<u>Section 3.27 ACCESSORY BUILDING AS PRINCIPAL USE.</u> An accessory building shall be allowed as the principal use of a lot in all zoning districts, provided that all of the following applicable requirements are met:

- 1. The accessory building is devoted to a use that is accessory to a principal use authorized by right or by special use permit in the zoning district in which the lot under consideration is located.
- 2. The accessory building is not used for dwelling, lodging, or sleeping purposes.
- 3. The accessory building on the lot under consideration is in full compliance with all applicable setback requirements for the district in which the lot is located.
- 4. The accessory building is located on the lot under consideration in such a location that a future development envelope is preserved on the lot within which a principal building or use may be constructed or established in full compliance with all applicable setback requirements for the district in which the lot is located. This requirement, however, shall not be applicable if the future development envelope for the principal building or use will be located on another lot as provided in subsection 5 below.
- 5. If the lot on which the accessory building is located does not have sufficient lot area for the future development envelope as required in subsection 4 above, then the accessory building may be constructed on the lot under consideration only if the owner of the lot owns another lot with sufficient lot area for the future development envelope that is either contiguous to the lot under consideration or is separated from the lot under consideration by a public or private road and the owner of the two lots records deed restrictions (or other legal instruments) acceptable to the township attorney with the Register of Deeds Office requiring the two lots to be used and/or sold as one development site.