

**A Resolution of the Garden Township Board to Approve and Support the attached Wind Energy Ordinance to be included in the Delta County Updated Master Plan and Zoning Ordinance.**

**Upon motion made by Richard Pichette, seconded by Lisa Pichette, the following resolution was adopted:**

“Resolved, Garden Township supports the enclosed wind energy ordinance to be included in the updated Delta County Master Plan and Zoning Ordinance. We support its intent to allow the development of sustainable energy source while providing regulations that limit the impact of these systems on the community and the environment as follows: 1.) Protect the visual character of the community 2.) Protect neighboring property owners from noise, nuisance, and safety impacts 3.) Protect ecological and cultural environments 4.) Protect migratory flyways and 5.) Ensure structures do not impact aviation safety.”

**The following aye votes were recorded: 3**

**The following nay votes were recorded: 2**

I, Brenda Lester, Clerk of the Township of Garden, Michigan, do hereby certify that the above is a true and correct copy of the Resolution supporting the wind energy ordinance and was adopted by the Garden Township at a meeting held on March 12, 2019.



Brenda Lester, Clerk  
Garden Township

Date: March 12, 2019

Delta County Proposed Ordinance  
Renewable Energy Generation  
Large-Scale Utility Wind Energy System

A. Purpose. It is the purpose of this section to detail regulations for the safe, effective, and efficient use of wind energy systems.

B. Intent. The intent is to allow development of sustainable energy sources while providing regulations that limit the impact of these systems on the community and environment as follows:  
Protect the visual character of neighborhoods;  
Protect neighboring property owners from noise, nuisance, and safety impacts;  
Protect ecological and cultural environments;  
Protect migratory flyways; and  
Ensure structures do not impact aviation safety.

C. Definitions. The terms used in this section have the following meanings:

Height. The vertical distance from grade level adjacent to the base of the structure to the center of the hub for a horizontal axis wind turbine or the highest point of a vertical axis wind turbine.

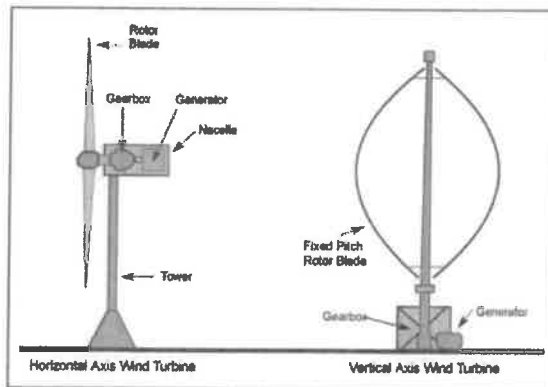
L<sub>max</sub>. The highest instantaneous sound emission level measured in decibels.

Decibels. A unit used to measure the intensity of a sound, represented herein as dB(A).

Utility Wind Energy System. A wind energy system consisting of a wind turbine, tower or axis, blades or blade system, and associated control or conversion electronics primarily intended to provide wholesale or retail energy to the electric utility grid.

Horizontal axis wind turbine: The rotating axis of the wind turbine is horizontal, or parallel with the ground.

Vertical axis wind turbine: The rotating axis of the turbine stands vertical or perpendicular to the



ground.

**FIGURE 6: HORIZONTAL AND VERTICAL AXIS TURBINES**

Shadow Flicker: Shadow flicker is a term used to describe what happens when rotating wind turbine blades pass between the viewer and the sun, causing an intermittent shadow that repeats as a flicker.

D. Where Permitted.

Utility Wind Energy Systems may be permitted in District I, RP and AP provided that the requirements of this section are met. Utility Wind Energy Systems or Large-Scale Wind Energy Systems are not permitted in any other district.

#### E. Review Procedures and Standards.

The review process for any utility wind energy system shall follow the Special Land Use Permit approval process and meet the standards outlined herein.

#### F. Standards: The following requirements are applicable to all Utility Wind Energy Systems.

1. **Noise.** A wind energy system shall not generate a noise level of more than 41dB(A) Lmax, measured at the property line. Noise resulting from a wind energy system will not be detectable beyond the property line. Manufacturer's specifications indicating the operating noise levels of the wind energy system at full RPM shall be provided with the application. A sound evaluation by a qualified professional following installation will be required to determine compliance with the requirements of this Section.
2. **Shadow Flicker.** The application for a wind energy system shall include shadow flicker consideration, demonstrating locations where shadow flicker will occur, along with measures the applicant will take to eliminate shadow flicker. Shadow flicker will not be detectable beyond the property line. A shadow flicker analysis must be conducted and included in the application.
3. **Lighting.** When required by the Federal Aviation Administration, applicant will use radar activating lights or equivalent technology to activate lights only when aircraft are in the area. No other lighting is permissible.
4. **Vibration.** Resulting vibration from a wind energy system will not be detectable beyond the property line.
5. **Spacing.** The minimum distance between two (2) wind turbines shall be equal to or greater than the combined height of both turbines.
6. **Rotor Clearance.** Minimum blade or rotor clearance from the ground shall be twenty (20) feet.
7. **Signs.** All signs other than the manufacturer or installer's identification, appropriate warning signs, or owner identification signs are prohibited.

**Electrical Wires.** All electrical wires associated with a wind energy system other than wire necessary to connect the wind generator to the tower wiring, the tower wiring to the disconnect junction box, and grounding wires shall be located underground. All associated transmission lines within Delta County connecting the system to the grid shall be located underground.

**Compliance with Electrical Code.** Building permit applications for wind energy systems shall be accompanied by line drawings of the electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the National Electrical Code.

**Minimum Site Area.** Utility wind energy systems may only be developed on a non-residential zoning lot with an area of forty (40) acres or greater.

**Height.** The permitted maximum total height of a wind energy system unit shall be one hundred (100) feet.

**Setbacks.** Any Utility Wind Energy System shall be set back a distance equal to four times the height of the unit measured from the ground to the tip including blade height from any property line, road right-of-way, or overhead utility line.

**Towers.** Utility wind energy systems shall use tubular monopole towers, and shall not contain lettering, company insignia, advertising, or graphics on the tower or turbine that are visible beyond the property boundaries.

**Climbing Devices.** Towers shall not have a permanent attached tower climbing device.

Environmental and Cultural Impacts. The applicant shall submit environmental and cultural impact analysis prepared by a qualified third party assessing any potential impacts on the natural and/or cultural environments including, but not limited to wetlands, migratory flyways, and other ecosystems, historical and cultural sites, wildlife, and antiquities. The impact analysis shall seek feedback and input from appropriate agencies including the United States Fish and Wildlife Service (USFWS), State Historic Preservation Office (SHPO), Michigan Department of Natural Resources (M-DNR), and Michigan Department of Environmental Quality (M-DEQ). Comments and recommendations of the reviewing agencies shall be binding. The applicant shall take appropriate measures to minimize, eliminate, or mitigate adverse impacts identified. If the adverse impacts cannot be sufficiently mitigated or eliminated, the Planning Commission shall deny the application for the utility wind energy system.

Braking Systems. Wind turbines shall be equipped with automatic braking systems, or governing device capable of keeping the turbine operation in high winds within eighty percent (80%) of its survival wind speed.

Radio Interference. The wind energy system shall be designed, constructed, and operated so as not to cause radio and television interference. In the event that electromagnetic interference is experienced, the applicant must provide alternate service to each individual resident or property owner affected.

Community Impact. The applicant shall be responsible for repairing any public roads or other public infrastructure damaged or otherwise worn beyond typical usage by the construction of the utility wind energy system.

Decommissioning. The applicant shall submit a decommissioning plan, including the following items of information:

- a. The anticipated life of the project.
- b. The estimated decommissioning costs and net salvage value in present dollars.
- c. The method of ensuring funds will be available for decommissioning and removal of towers, and restoration of the site to a pre-construction condition.
- d. Anticipated manner in which the project will be decommissioned, and the site restored.
- e. Purchase of a bond in the amount of removal costs to be used for removal at the end of the project life

Complaint Resolution. The applicant shall develop a process to resolve any potential complaints from nearby residents concerning the construction and operation of the project. The process may use an independent mediator or arbitrator and shall include a time limit for acting upon a complaint not to exceed 5 business days. The process shall not preclude any governmental body from acting on a complaint. The applicant shall maintain and make available to nearby residents a toll-free telephone number or texting service where a project representative can be reached during normal business hours.

Site Plan Requirements. Applicants shall comply with the Special Land Use Permit approval process of the Zoning Ordinance, and include the following information:

- a. Location and height of all proposed buildings, structures, electrical lines, towers, security fencing, and other above ground structures associated with the wind energy system.
- b. Locations and height of all adjacent buildings, structures, and above ground utilities located within three hundred (300) feet of the exterior boundaries of the lot or parcel where the proposed wind energy system will be located. Specific distances to other on-site buildings, structures, and utilities shall also be provided.
- c. The location of all existing and proposed overhead and underground electrical transmission or distribution lines shall be shown.

- d. Existing and proposed setbacks for the wind energy system from all structures located on the property where the wind energy system will be located.
- e. The site plan submittal shall contain a written description of the procedures to be used to maintain the wind energy system. The description shall include maintenance schedules, types of maintenance to be performed, procedures in the event the property is sold or changes ownership, and removal procedures and schedules in the event the wind energy system becomes obsolete or is abandoned.
- f. A copy of the manufacturer's installation instructions.
- g. Drawings and engineering calculations shall be certified by a registered engineer licensed in the State of Michigan.
- h. A noise modeling and analysis report showing noise levels at property lines at full RPM. Noise resulting from a wind energy system will not be detectable beyond the property line.
- i. A shadow flicker analysis shall be prepared. The analysis shall identify the locations of shadow flicker and the expected durations of the flicker at these locations from sun-rise to sun-set over the course of a year. The analysis shall identify problem areas where shadow flicker may affect residents, livestock, and/or traffic. The analysis shall include measures that will be taken to eliminate the problems. Shadow flicker is not permitted on adjacent properties.

## Planning and Zoning

A member of the township board must be appointed to serve on the township planning commission, and may also be called upon to serve on the zoning board of appeals. All elected officials, however, are involved in their township board capacity in directing the township's planning and zoning function. This chapter is provided to give a general overview of a township's planning and zoning authority. For more detailed information on planning and zoning, see the MTA publications, *A Township Guide to Planning & Zoning* and *Township Planning & Zoning Decision-making*.

"Planning and zoning" means publicly regulating the use of land, both as it is currently used, and as it will be used going forward into the future.

Townships have statutory authority to plan and zone for growth and development within their boundaries. Through the planning and zoning functions, townships can:

- Promote a desired community character
- Guide growth and development decisions
- Ensure that growth and development decisions are fiscally sound
- Protect property values and natural resources
- Ensure compatibility of land uses
- Prevent the creation of nuisances, overcrowding and inappropriate uses of property

A master plan is a comprehensive plan to guide a community's future growth and development. A zoning ordinance is the law that implements and enforces the master plan. Once a master plan and zoning ordinance are adopted, all future zoning decisions and changes must be consistent with the plan and ordinance.

### Planning

The Michigan Planning Enabling Act (MPEA), Public Act 33 of 2008, MCL 125.3801, *et seq.*, repealed the three municipal planning acts, including the Township Planning Act, and consolidated them into one enabling act. The MPEA authorizes townships to plan, create a planning commission, and regulate and subdivide land.

The township board may establish by ordinance a township planning commission with the power to make, adopt, extend, add to, or otherwise amend and carry out plans for the unincorporated portions of the township, as provided for in the MPEA. (MCL 125.3811)

The township board, upon recommendation of the planning commission, may employ a planning director or other planning personnel. (MCL 125.3825)

The act permits and mandates the planning commission to perform the following functions:

- Make and adopt a master plan
- Approve public improvements
- Review plats
- Master plan

The planning commission must make and adopt a master plan as a guide for the development of unincorporated portions of the township. (MCL 125.3831) The MPEA gives final authority to the

planning commission to adopt plans. However, the township board, by resolution, can reserve final authority for plan approval.

The general purpose of a master plan is to guide and accomplish, through planning, development that:

- Is coordinated, adjusted, harmonious, efficient, and economical;
- Considers the character of the planning jurisdiction and its suitability for particular uses, judged in terms of such factors as trends in land and population development;
- Will, in accordance with present and future needs, best promote public health, safety, morals, order, convenience, prosperity, and general welfare, and
- Includes, among other things, promotion of or adequate provision for one or more of the following:
  - 1) A system of transportation to lessen congestion on streets
  - 2) Safety from fire and other dangers
  - 3) Light and air
  - 4) Healthful and convenient distribution of population
  - 5) Good civic design and arrangement and wise and efficient expenditure of public funds
  - 6) Public utilities such as sewage disposal and water supply and other public improvements
  - 7) Recreation
  - 8) The use of resources in accordance with their character and adaptability

The master plan must include maps, plats and charts, and should show the planning commission's recommendations for the physical development of the unincorporated area of the township. The plan should include those of the following subjects that are reasonably considered pertinent to the future development of the township:

- 1) A land use plan and program, in part consisting of a classification and allocation of land for agriculture, residence, commerce, industry, recreation, ways and grounds, public buildings, schools, soil conservation, forest, wildlife refuges, and other uses and purposes.
- 2) The general location, character and extent of streets, roads, highways, railroads, bridges, waterways and waterfront developments; flood prevention works, drainage, sanitary sewers and water supply systems; works for preventing pollution maintaining water levels; and public utilities and structures.
- 3) Recommendations as to the general character, extent and layout for the redevelopment or rehabilitation of blighted districts and slum areas, and the removal, relocation, widening, narrowing, vacating, abandonment, changes of use or extension of ways, grounds, open spaces, buildings, utilities or other facilities.
- 4) Recommendations for implementing any of the plan's proposals. (MCL 125.3833)

When a township has a master plan, no street, square, park or other public way, ground or open space, or public building or structure may be constructed or authorized in the township until its location, character and extent has been submitted to and approved by the planning commission. (MCL 125.3861)

A planning commission may recommend to the township board provisions of an ordinance or rules governing the subdivision of land, as well as recommendations for a subdivision ordinance or rule addressing plat design. The recommendations may include the proper arrangement of streets in relation to other existing or planned streets and to the master plan; adequate and convenient open spaces for traffic, utilities, access of firefighting apparatus, recreation, light, and air; and the avoidance of congestion of population, including minimum width and area of lots. The recommendations may also address the extent to which streets shall be graded and improved and to which water and sewer and other utility mains, piping, or other facilities shall be installed as a condition precedent to the approval of a plat. If a municipality has adopted a master plan or master street plan, the planning commission of that municipality shall review and make recommendations on plats before action by the township board. (MGL 125.3871)

### Zoning

The Michigan Zoning Enabling Act (MZEA), Public Act 110 of 2006, MCL 125.3101, *et seq.*, repealed the Township Zoning, County Zoning, and City and Village Zoning acts, and replaced those acts with a combined law designed to promote consistency in zoning procedures and approvals. Zoning

Zoning involves adopting an ordinance that divides the community into various districts. Zoning specifies the permitted land uses within a district, such as residential, agricultural, commercial or industrial uses.

For example, a township zoning ordinance may limit the placement of multiple-unit residences to certain zones, and agricultural activity may be assigned to other zones, according to a master plan. Typical zoning regulations address things such as how land uses are implemented, density, building height, lot area, setbacks, parking, signs and more.

A township may choose not to zone. However, once the decision is made to adopt zoning regulations, the MZEA's dictates must be followed. The MZEA is very specific about the procedure for preparing, reviewing and adopting the zoning ordinance and making amendments to it. The act also specifies allowable zoning techniques that may be used, but are not required. If a township chooses to incorporate any or all of these tools into the zoning ordinance, the act contains specific procedures to follow in reviewing and approving requests.

### Township planning and zoning meetings and records are public

The MZEA and MPEA specifically require township planning and zoning bodies to notice and conduct their meetings in compliance with the OMA and to maintain their records as public records. (MCLs 125.3701 and 125.3821) J.

### How to avoid zoning litigation

Governments are always open to lawsuits, regardless of the methods used to reach a decision. Disputes between landowners and municipalities are bound to occur, but there are some actions that can strengthen a township's legal position in planning and zoning matters.

- Make sure that all zoning decisions are based on the standards provided in the zoning ordinance and master plan
- Keep the master plan and zoning ordinance current
- Read all information submitted concerning a zoning request
- Conduct an orderly public hearing on a zoning request



- Keep a written record of the decision-making process
- Avoid common mistakes such as relying on an outdated master plan, ignoring existing land use patterns or basing a decision solely on public opinion
- Base decisions on the ordinance and facts of the situation
- Know the rules of procedure and consistently follow them
- Ensure all parcels have at least one reasonable use
- Accomplish public objectives without enacting unreasonable regulations
- If you seek professional planning and legal advice, follow it
- Know the authorities and limitations of the planning commission and zoning board of appeals
- Steer clear of all potential conflict of interest situations

TO: GARDEN TOWNSHIP BOARD MEMBERS

FROM: RICHARD PICHETTE, SUPERVISOR

SUBJECT: INDUSTRIAL WIND TURBINE ORDINENCE

DATE: MARCH 12, 2019

THE ATTACHED DOCUMENTS ARE FOR YOUR CONSIDERATION AND VOTE ON MARCH 12, 2019.

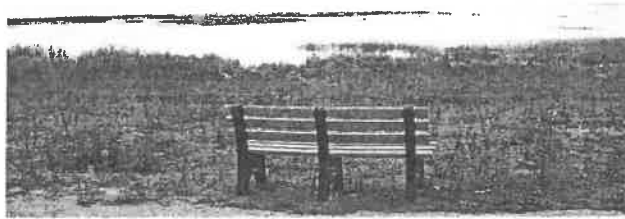
I HAVE ATTACHED THE FOLLOWING:

1. Copy of the Planning and Zoning Chapter from the MTA Supervisors manual for your reading. I know we do not do the Planning and Zoning for our township but we do have influence on it. This chapter explains the duties and responsibilities of this commission. I thought it would be a good reminder for us.
2. I am putting this on the agenda for approval or disapproval. I know what a lightning rod this subject is, but since the Delta County Zoning and Planning commission are working on the new Master Plan this would be the right time to submit this. I would like a yes or no vote at the March 12, 2019 meeting.
3. The proposed ordinance. This was prepared by Christine Williams of the City of Escanaba. This, if approved for them will be their new ordinance. This was taken from the Schoolcraft County and other ordinance. Much work and effort went into this final presentation.
4. I have drafted a letter to the Chairman of the Delta County Planning Commission as well as the Administrator for the Zoning Commission if this resolution is approved will submit at the meeting for approval.

Each Board member has to decide within themselves as to their decision in this matter. If you think this is what is best for our community then vote yes if not then vote no.

I have passed this out to all of you 11 days before our meeting so you will have time to read and consider and be ready for the vote on the 12<sup>th</sup> of March 2019.

# GARDEN TOWNSHIP



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Garden, MI 49835  
Ph. /Fax: (906) 644-7602  
TDD (800) 649-3777

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March 13, 2019

Delta County Planning Commission  
Attn: Chairman Benny Herioux  
310 Ludington Street  
Escanaba, MI 49829

Dear Chairman Herioux,

The Garden Township Board is requesting that the current Wind Turbine Ordinance be amended as stated in the attachment. This was voted on at the March 12, 2019 Board Meeting and approved for this submission.

Please let us know when this action will be voted on. A copy has been sent to Dan Menacher of the Delta County Zoning Office.

Thank you for your consideration in this matter.

Sincerely,

Richard Pichette  
Garden Township Supervisor  
906-450-6010

RP: bl  
Enclosure