# CHARTER TOWNSHIP OF FLUSHING

6524 N. SEYMOUR ROAD FLUSHING, MICHIGAN 48433

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PLANNING COMMISSION MEETING

DATE: JUNE 8, 2009 TIME: 7:00 P.M. WEB ADDRESS http://www.flushingtownship.com

### MEMBERS OF PLANNING COMMISSION

Mark J. Newman, Chair Richard Buell
Jerome Doyle, Vice Chair Ronald Flowers
Eric Swanson, Secretary David Gibbs
Mark Purkey, Board of Trustee Representative

Julia A. Morford, Recording Secretary

PRESENT: Newman, Doyle, Swanson, Buell, Flowers, Gibbs, Purkey, and Morford

ABSENT: None

**OTHERS PRESENT**: 1 other individual

- I. MEETING CALLED TO ORDER at 7:00 p.m. by Planning Commission Chair MARK NEWMAN with Roll Call and the Pledge to the American Flag.
- II. ADOPTION OF AGENDA: FLOWERS MOVED, seconded by Purkey to adopt the Agenda as submitted. MOTION CARRIED.
- **III. APPROVAL OF MINUTES OF MAY 11, 2009: BUELL MOVED,** seconded by Purkey to approve the Minutes of May 11, 2009 as amended. MOTION CARRIED

### IV. UNFINISHED BUSINESS:

# 1. <u>Discussion Regarding Wind Turbines</u>

**NEWMAN** made reference to a Wind Energy Resource Zone Board which had been established in December 2008 pursuant to PA 295, also known as the "Clean, Renewable and Efficient Energy Act." The report, designed to be a recommendation to the Michigan Public Service Commission, would identify regions of the state with the highest wind energy production potential. The proposed report would be provided directly to local governments – counties, townships, cities and villages – in the regions identified by the Board. <u>Local governments will have sixty-three (63) days to comment on the report</u>. The Board must hold at least one public hearing before issuing a final report. MTA will provide additional details as the report is made

public, including instructions on how township officials can provide comment. (Published in the Michigan Townships Association (MTA) Weekly Legislative Report – May 15, 2009)

# WIND TURBINE ISSUES:

- The Flushing Township Planning Commission will be looking at individuals and property owners. The State will be looking at wind farms (commercial) areas.
- Areas have been identified where the State will be proposing that wind farms be installed: Bay Area; Essexville; Port Austin; and Traverse City.
- The current draft proposed "Small Wind Energy Systems" could be adjusted in the future.
- Dangers from wind turbines:
  - 1. creates a hazardous situation.
  - 2. concern with placing "wet cell" batteries in basements.
- Some turbines are noisy and some are quiet.
- Vertical turbine units are being installed
- Several turbine units could be placed on an individual's property.
- Ten (10) kilowatts would be sufficient for one house; an individual could put three (3) to eight (8) kilowatt units all under the proposed draft ordinance but the intention wasn't that way. There could be an accumulative generator capacity of almost a commercial operation.
- A building structure in Chicago, Illinois has turbines built into the side of the building.

\* \* \* \* \*

# DRAFT ORDINANCE SMALL WIND ENERGY SYSTEMS\* CHARTER TOWNSHIP OF FLUSHING

### Section 1

### Purpose:

It is the purpose of this ordinance to promote the safe use of small wind energy systems that are designed to reduce the on-site consumption of utility-supplied electricity.

This ordinance applies to all wind energy systems constructed and operated in Flushing Township whether or not the system is capable of feeding produced energy into the local utility grid.

\*DUE TO THE EPHEMERAL NATURE OF THE WIND RESOURCE IN FLUSHING TOWNSHIP, THOSE INTERESTED IN CONSTRUCTION OF A SMALL WIND ENERGY SYSTEM, ARE ENCOURAGED TO DO A CAREFUL PRELIMINARY STUDY OF SUSTAINED WINDS BEFORE SEEKING A PERMIT.

#### Section 2

Definitions of terms used in this ordinance:

<u>Wind Energy System</u> – A wind energy system consists of a wind turbine, tower, and associated conversion electronics which has a rated capacity of not more than 10 KW and which is intended to reduce on-site consumption of utility power.

<u>Tower</u> – The vertical component of a wind energy system, whether guyed or freestanding, that elevates the wind turbine/generator and attached blades or rotors above the ground. The term "tower" may also refer to the structure that elevates a wind anemometer for the purpose of feasibility studies preliminary to placement of a wind energy system. (Tower requirements are also subject to provisions outlined in the "Tower Ordinance" of Flushing Township).

# THE SERVICE LADDER SHALL BE A MINIMUM OF TWELVE (12) FEET FROM THE GROUND IN ORDER TO ELIMINATE CHILDREN CLIMBING THE LADDER.

#### Section 3

### Regulations:

Construction of wind energy systems shall be permitted in Flushing Township subject to the requirements outlined in section (??) for obtaining a special use permit.

Wind energy installations are required to have a building permit.

Maximum height of a freestanding wind energy installation shall be eighty (80) feet to the top of the blade at the maximum vertical position. Installations, which are attached to existing structures in excess of fifty (50) feet in height, may exceed the eighty foot limitation.

The minimum height for blade ground clearance shall be twenty feet.

Setback to the base of the tower shall be no less than one and a half times the total height of the installation. Any guy wire anchors may be no closer than ten feet from any property boundary. (It is noted that for safety reasons, this setback requirement restricts the placement of wind energy systems to relatively large lot sizes).

Noise level associated with a wind energy installation shall be limited to a maximum of 55 decibels.

All wind energy installations must be equipped with manual and automatic over speed controls to limit the blade speed to the engineered design limits of the installation.

A wind energy installation that is non-functional for a period of **12** consecutive months shall be promptly removed by the owner.

A wind energy installation shall not contain advertising.

Installations of wind energy systems of more than ten (10) KW will be considered on an individual basis.

# \*NOTE: THE BOLD PRINT INDICATES A CHANGE OR NEW ADDITION TO THE PROPOSED DRAFT ORDINANCE.

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# ISSUES ALREADY ADDRESSED IN THE PROPOSED DRAFT ORDINANCE:

Most of the provisions addressed at the May Planning Commission Meeting and the inventory of other townships provisions were addressed and added to the proposed draft:

- Commercial wind farms are not addressed in the proposed draft ordinance.
- Existing structures over fifty (50) feet high could be taller than eighty (80) feet and has been mentioned in the ordinance.
- The higher the wind turbines the more wind is aloft and the more success.
- Shadow flicker was not addressed in the proposed draft but should be due to the flicker of the sun.
- Birds and wildlife were not mentioned in the proposed draft ordinance; if a residential
  installation was addressed, the likelihood of any significant damage to wildlife would be
  negligible.
- If a big wind turbine should be installed, the Planning Commission would consider the request on an individual basis.

# OTHER ISSUES TO BE CONSIDERED FOR THE PROPOSED DRAFT ORDINANCE:

- Recommended starting the process for the Wind Turbine Ordinance. If someone should come to Flushing Township and request a permit, the proposed ordinance would protect the Township. The issue should be reviewed by Attorney Moulton or Rowe Inc.
- INSERT IN PROPOSED ORDINANCE UNDER SECTION 2 END OF PARAGRAPH Service ladder must be at lease twelve (12) feet from the ground in order to eliminate children climbing on the ladder.
- Recommended that individuals come before the Planning Commission with a wind study report that would show there was enough wind for any type of generator.
- The Planning Commission should make a statement that the process is not ordinarily done without understanding all the expense involved.
- You can't always protect an individual's decision.
- What happens when you have a lot of generators along the side of a house, especially in subdivisions, that are not working properly and could be very noisy?
- Wind Turbines would be to listed in the ordinance as a "special use permit" because there would be conditions to abide by.
- Consumers Energy doesn't like the turbine system!
- RECOMMENDED TO BE PLACED AT END OF SECTION 1.

• INSERT AT END OF SECTION 1 - \*Due to the ephemeral nature of the wind resource in Flushing Township, those interested in construction of a small wind energy system, are encouraged to do a careful preliminary study of sustained winds before seeking a permit

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### REVIEW LIST COMPILED BY DOYLE:

- a. Public health, safety, and welfare of the community.
- b. A separate "special use permit" should be for commercial and residential.
- c. Site plan/map of boundaries
- d. Location and height of turbine
- e. Grades of the roads that go into the area where the turbine is locaed
- f. Structures and fences that normally would not be on the site plan
- g. Topography of the property
- h. Size and type (3-10 kilowatts)
- Reference made to <u>Article XVIII</u>, <u>Section 20-1800 through Section 20-1803</u> stating that all applicants must first comply with the requirements.
- The permit, for the wind turbine, would run with the land but the individual would still have to comply with the laws.
- If mounting a small roof turbine, should a site plan be requested. Issues: how far from the boundary; building codes; weight load on the roof, etc.
- Should commercial turbines be defined as anything accumulative over ten (10) kilowatts; there could be twenty (20) units in a subdivision and could be stated that it wasn't commercial. Residential and Commercial should be defined separate. A lot of people could be drawing from one (1) unit in a condominium unit.
- Should the kilowatts be higher than ten (10).
- There would be a problem if an individual had a D.C. generator outside and was charging twelve (12) volt batteries in his basement for use later. There would not be any other electricity to draw from if the individual doesn't use the excess that he has produced during a windy period.
- Most generators are set up to feed back into the power grid. Consumers is selling wholesale and buying back the power retail.
- An newspaper article was recently published that told about sprinkler systems being required to be installed in all new single-family homes in the State of Michigan per the building code; in rural areas where homes have normal water home owners, they would be forced to purchase expensive power packet systems to keep water pumps so sprinkling operations would not stop.
- At a recent Zoning Seminar presented by Rowe Inc. (Mott Community College) there had been an issue with the size and type of wind energy "on site also called residential "small" accessory use. . . normally three (3) to ten (10) kilowatts with twenty (20) to thirty (30) meters in height."
- Also mentioned (at the Zoning Seminar) were "Utility Grids", also called industrial or principa, use normally seven hundred (700) kilowatts and from fifty (50) to ninety (90) meters.

- Could a site condominium have up to six (6) kilowatts and what amount of wattage is needed? Would it be ten (10) kilowatts per tower? What would happen if three (3) generators would be needed to run the unit? The issue would still be considered residential.
- The last paragraph of the proposed draft ordinance was referenced: "Installation of wind energy systems of more than ten (10) KW will be considered on an individual basis." The wording could be stated that "this is not a commercial business."
- The only wording needed for the proposed draft would be the wording to cover what the Planning Commission felt was residential.
- Manufactured Communities were referenced due to a large number of homes being in one area.
- It was recommended between three (3) and ten (10) kilowatts would be "residential"; anything over ten (10) kilowatts would be "commercial".
- There could be five (5) home owners in a subdivision and each could have nine (9) kilowatts each home would be residential and have its own setbacks and requirements.
- Should there be ten (10) kilowatts per parcel of land.
- **BUELL**, who has been drafting the proposed ordinance, will add something that deals with regulation of shadow flicker.
- "Visual Impact Analyses" should be a part of the site plan and conditions would have to be added.
- If trees should be cut down for more wind energy, there wouldn't be any trees to shadow the flicker of the sun.
- A Tall Structure Ordinance is in effect. (NOTE: The State deals with land ordinances and the Federal deals with air ordinances).
- IT WAS RECOMMENDED TO CHANGE THE NUMBER OF MONTHS IN SECTION 3, REGULATIONS, PARAGRAPH 8 FROM EIGHTEEN (18) MONTHS TO TWELVE (12) MONTHS IN ORDER TO BE CONSISTENT WITH THE TOWER ORDINANCE.
- Would there be a problem with mounting a turbine on top of a house or attaching an antenna to the turbine?
- Should something be in the proposed draft ordinance pertaining to the color of the turbine and should there be advertising on the turbine? It was felt if there was advertising on the turbine, it would be considered commercial!
- Guide wires should be visible for the first six (6) feet. Should the power lines be in or above the ground?
- **BUELL** will update the draft with all the changes and recommendations of the Commission Members and bring back to the next regular scheduled meeting.

### V. NEW BUSINESS:

None

# VI. PUBLIC COMMENTS:

# 8:19 P.M. – OPENED TO THE PUBLIC FOR NON-AGENDA ITEMS

1. **Pat Drozdrowski, Deland Road, Flushing** – "mentioned a gentleman by the name of Bill Rend who was a Director and had been involved with wind turbines in Huron County. Also, if there should be any improvements, additions on top of a building, it would be considered part of the property so property taxes would have to be paid."

# 8:24 P.M. – CLOSED TO THE PUBLIC FOR NON-AGENDA ITEMS

# VII. BOARD COMMENTS:

- 1. **BUELL:** would like to get emails from all the Planning Commission members.
- 2. **PURKEY:** felt a lot had been accomplished on the Draft Wind Turbine Ordinance.
- 3. **DOYLE:** felt something had to be done to have someone work with the Planning Commission.
- 4. **SWANSON:** will not be in attendance at the July 13, 2009 meeting.

VIII. MEETING SCHEDULE: NEXT REGULAR SCHEDULED MEETING WILL BE HELD ON MONDAY, JULY 13, 2009 AT 7:00 P.M.

### **FUTURE MEETINGS:**

REGULAR SCHEDULED MEETING – MONDAY, AUGUST 10, 2009 AT 7:00 P.M. REGULAR SCHEDULED MEETING – MONDAY, SEPTEMBER 14, 2009 AT 7:00 P.M.

<b>IX.</b> A at 8:39 p.		Due to lack of business matters, <b>NEWMAN</b> adjourned the meetin
MARK J	. NEWMAN, Chair	JULIA A. MORFORD, Recording Secretar
	VANSON, Secretary	Date of Approval