I. MEETING CALLED TO ORDER at 7:00 p.m. by Planning Commission Vice Chair JEROME DOYLE (DOYLE) with Roll Call and the Pledge to the American Flag.

II. ADOPTION OF AGENDA: BUELL MOVED, seconded by Purkey to adopt the Agenda as submitted. MOTION CARRIED.

III. APPROVAL OF MINUTES OF APRIL 20, 2009: FLOWERS MOVED, seconded by Buell to approve the Minutes of April 20, 2009 as written. MOTION CARRIED

IV. UNFINISHED BUSINESS:

1. “Changes Affecting Local Zoning” Seminar Sponsored by Rowe Inc.
   Four (4) members of the Planning Commission recently attended a Planning Commission Seminar entitled “Change Affects Local Zoning” which was sponsored by Rowe Inc and held at Mott Community College Regional Technology Center. The topics discussed were: 1) Wind Energy; 2) Digital Signs; 3) Medical Marijuana; and 4) Adaptive Reuse.

   All the members in attendance felt the seminar was great and a lot of information was received. DOYLE stated the marijuana issue has not been settled as to the use of property.

V. NEW BUSINESS:
1. Status on the Building Department

SUPERVISOR DON SCHWIEMAN (SCHWIEMAN) stated the State of Michigan would be doing the temporary building inspections and permits from May 7 through August 7, 2009. The township attorney has drafted an ordinance that would allow the State of Michigan to do the inspections/permits. Schwieman stated the State’s involvement would be temporary until the Board of Trustees determined how to proceed with issues such as the number of hours needed in the office and discussion with the Union. DOYLE stated he preferred to work with JERRY FITCH (FITCH) rather than having another building inspector. SCHWIEMAN stated the idea of sharing services with other municipalities had been mentioned. There could be a possibility of the building inspector working four (4) mornings a week. DOYLE wanted to know if there were other possibilities such as working with Shiawassee County. Whatever happened, the rules would be followed.

2. Discussion Regarding Wind Turbines

The discussion on Wind Turbines continued with comments and recommendations.

- ** GibbS** wanted to know if Flushing Township was in an area that could use wind turbines.
- ** Doyle** felt that wind turbines could be listed under “Conditional Use” which would dictate where the turbine would be placed.
- ** Doyle** felt the Planning Commission could go in different directions in order to get the wording for a Wind Turbine Ordinance that would be appropriate for Flushing Township:
  a. Accept someone else’s ordinance
  b. Have Rowe Inc draft an ordinance
  c. Go with the information that had been obtained from the State.
- ** Flowers** felt information that had been obtained from all the handouts, should be reviewed and then draft an ordinance specifically for Flushing Township.
- ** Buell** felt the Planning Commission was spinning their wheels and should proceed ahead. Chester Township could be “tweaked” and it would fit Flushing Township.
- ** Purkey** felt Chester Township was mainly for wind farms.
- ** Doyle** felt the Chester Township Ordinance could be used. The material could be brought to the next meeting and continue to add to the information on wind turbines.
- ** Doyle** felt there should be an ordinance for the “small” units. If there wasn’t an ordinance, then people would do whatever they wanted. Sometimes the ordinances have been extended out so far that it has been hard for the individual to figure out what could and could not be done.
- ** Flowers** passed out a four (4) page “SWWP Model Zoning Ordinance” that had great definitions.
- ** Swanson** felt the Planning Commission should go through the different ordinances that had been received and take out and put in the issues that would pertain to Flushing Township.
- ** Buell** recommended getting four (4) or five (5) characteristics and get a resolution for such items as:
a. Minimum lot size  
b. Maxim height  
c. Maximum rotor height  
d. Maximum decibels  

- **BUELL** stated if the Planning Commission would settle on some of the characteristics, he would take the Chester Township Ordinance and fill in the parameters for Flushing Township.
- **SWANSON** stated the Planning Commission could do research when they (Commission) were at home and then bring back to the next meeting.
- **DOYLE** stated there were two (2) height systems:
  a. A private turbine would be a certain height  
  b. Turbines larger than the specified height (private), would be considered commercial.  
     (This would be a large turbine to support a building).
- **PURKEY/GIBBS** stated that a wind farm would be considered commercial.
- **BUELL** stated that a turbine that produced more than twenty-five (25) kilowatts would be considered “commercial” and therefore be restricted to commercial districts of the township.
- **DOYLE** stated you couldn’t tell residents what they could not do because it would stop development.
- **BUELL** felt the height could be restricted to sixty (60) foot high.
- **GIBBS** wanted to know if his property would be considered “commercial” property.
- **PURKEY** felt the Commission should start at the beginning and continue through the ordinances until the Commission had the information that was desired for the ordinance.
- **FLOWERS** made reference to the sample zoning amendments for Wind Energy Systems that had been obtained from the State.
- **BUELL** mentioned that shadow flickering was a big problem with the blades on the turbines.
- **SWANSON** stated the only way to limit the noise would be to place the requirements in an ordinance.
- **GIBBS** wanted to proceed with getting an ordinance drafted and the information could always be “tweaked” later.

**DOYLE REVIEWED THE INFORMATION OBTAINED FROM ROWE INC ENTITLED “MICHIGAN LAND USE GUIDELINES FOR SITING WIND ENERGY SYSTEMS:**

**Page 6:**

**Setbacks:**

- **GIBBS** stated that one issue that caught his attention was: “There are no recorded injuries to passers-by or neighbors from wind energy systems. As many as twenty-five (25) people have been killed while installing or servicing wind turbines.”
- **FLOWERS** mentioned that “cold weather icing of generator blades and turbine components is a possibility in Michigan…”
“it is prudent, to require a horizontal setback at least equal to the vertical height of the system in case of a tower collapse.”

Page 10:
Noise Levels:
• “A decibel level of 55 dB(A) measured at the property line should not be exceeded for more than three (3) minutes in any hour of the day.”

Page 11:
Shadow Flicker:
• “Shadow flicker is a term used to describe what happens when rotating wind turbine blades come between the viewer and the sun, causing an intermittent shadow. For residents close to wind turbines, shadow flicker can occur under certain circumstances (most notably near sunrise and sunset) and can be annoying when trying to read or watch television.”

Birds, Bats, and Avian Impacts:
• SWANSON stated bird migration studies had been done in the State of California. “Virtually all construction on the land is capable of damaging habitat of birds and bats, altering flight patterns and causing mortality.”

COMMENTS FROM THE PLANNING COMMISSION:
BUELL stated in trying to decide something for the ordinance, and after reviewing Page 16 of the “Catalog of Michigan Communities with Wind System Planning/Zoning Code Language and after reviewing the first three (3) columns specific items to consider, the following should be considered:
• Braking system
• Migration of birds
• 55 decibels in Flushing Township
  a. Page 10, “Most indoor conversation is in the range of 55 to 60 decibels.”
• Setback – one and one-half times height (Page 7 – “setback = but height + blade diameter x 150%)
  a. Height = the height of the tower plus the height of the blade at the extreme height of the vertical position of the blade. (Page 6)
• BUELL wanted to know if there would have to be a building permit obtained.
• DOYLE stated the ordinance would have to be arranged so it would be something the individual would have to come to the Planning Commission.
• BUELL wanted to know if there would have to be a site plan.
• PURKEY stated the plans would have to show where the property lines etc were located.
• GIBBS stated the issue should be a special use and require a permit. The wind turbines are all new to the Planning Commission.
• BUELL stated the lot size would not have to be specified because the setback height would determine the size.
• PURKEY stated some of the turbine units were made to sit on the roof and didn’t require a tower.
• FLOWERS stated the property size would determine itself by the tower.
• DOYLE stated the tower would have to state that it was from the ground to the top of the blade. (Page 6).
• PURKEY wanted to know if the sound pressure would be documented.
• FLOWERS felt there should be an overview of where the wind turbine would be placed on the property. There also needed to be a machine that would determine the wind speed.
• PURKEY wanted to know that even though there was a height setback established, would the Planning Commission want to establish a maximum height setback?
• SWANSON stated the system height would be determined by Bishop Airport because the airport was only eight (8) miles from Flushing Township.
• PURKEY wanted to know if the wording could state the height would have to be consistent with the local Flushing Township tower ordinance or the FAA.
• FLOWERS stated the Flushing Tower Ordinance stated “an Ordinance to establish general guidelines for the siting of wireless communications towers and antennas. . .”
• DOYLE stated the actual height could be set.
• PURKEY recommended having the height set as to the FAA regulations.
• GIBBS stated anything over one hundred (100) foot had to have a light on the top of the tower.
• BUELL wanted to know if the Planning Commission was only targeting small operations in the township.
• PURKEY stated that if the Planning Commission started putting in four hundred (400) to four hundred fifty (450) foot wind turbines, it would not work.
• DOYLE felt that eighty (80) foot or less would be the maximum.
• BUELL was in the Lower Upper Michigan recently and stated there wasn’t any noise with the wind turbines along the area. The turbines were huge.
• PURKEY wanted to know if eighty (80) foot would be the maximum system height to the top of the blade.
• DOYLE stated it would have to be twenty (20) foot from the ground.
• SWANSON stated it would depend upon where the sun was coming from regarding the shadow flicker.
• BUELL stated it would be annoying as the seasons change.
• PURKEY stated if the setbacks were correct, the remedy would be to put trees along the property line. (Page 11)
• BUELL wanted to know if there needed to be a part of the ordinance that discussed an anemometer device to do a wind study of the area.
• FLOWERS felt property owners needed to check the wind before they installed towers. Some areas recommended no more than twenty (20) foot above the tree top.
ISSUES TO BE CONSIDERED:
1. Braking system
2. Migration of birds
3. 55 decibels in Flushing Township
4. Site Plan:
   a. Property size/height (setbacks)
   b. Review of wind speed
   c. Report on soil conditions
   d. Certification of noise
   e. No advertising
   f. Decommission of turbine
5. Anti shadow flicker
6. Comply with Construction Codes
7. Guide wires visible up to six (6) foot from the ground
8. The issue will be a “Special Use”

BUELL WILL DRAFT A ROUGH COPY OF THE ORDINANCE WITH THE ABOVE MENTIONED ISSUES AND THEN RETURN TO THE NEXT PLANNING COMMISSION FOR FURTHER DISCUSSED.

VI. PUBLIC COMMENTS:

8:50 P.M. – OPENED TO THE PUBLIC FOR NON-AGENDA ITEMS
8:50 P.M. – CLOSED TO THE PUBLIC FOR NON-AGENDA ITEMS

VII. BOARD COMMENTS:

VIII. MEETING SCHEDULE:

REGULAR SCHEDULED MEETING – MONDAY, JUNE 8, 2009 AT 7:00 P.M.
REGULAR SCHEDULED MEETING – MONDAY, JULY 13, 2009 AT 7:00 P.M.
REGULAR SCHEDULED MEETING – MONDAY, AUGUST 10, 2009 AT 7:00 P.M.
IX. ADJOURNMENT: Due to lack of business matters, DOYLE adjourned the meeting at 8:50 p.m.

JEROME DOYLE, Vice Chair

ERIC SWANSON, Secretary

JULIA A. MORFORD, Recording Secretary

Date of Approval

Planning minutes 05/11/09