CHAMPAIGN COUNTY ZONING BOARD OF APPEALS NOTICE OF REGULAR MEETING

Date: November 12, 2009

Time: 6:30 P.M.

Place: Lyle Shields Meeting Room

Brookens Administrative Center

1776 E. Washington Street

Urbana, IL 61802

Note: NO ENTRANCE TO BUILDING FROM WASHINGTON STREET PARKING LOT AFTER 4:30 PM.
Use Northeast parking lot via Lierman Ave.. and enter building through Northeast

If you require special accommodations please notify the Department of Planning & Zoning at (217) 384-3708

door.

EVERYONE MUST SIGN THE ATTENDANCE SHEET - ANYONE GIVING TESTIMONY MUST SIGN THE WITNESS FORM

AGENDA

- 1. Call to Order
- 2. Roll Call and Declaration of Quorum
- 3. Correspondence
- 4. Approval of Minutes (October 15, 2009 and October 29, 2009)
- 5. Continued Public Hearings

Case 634-AT-08 Part B. Petitioner: Zoning Administrator

Request: Amend the Champaign County Zoning Ordinance as follows:

- 1. Add definitions for "SMALL WIND TURBINE TOWER" and "BIGWIND TURBINE TOWER," and revise the definition for "WIND FARM."
- 2. Amend subsection 4.2.1. to allow BIG WIND TURBINE TOWER as a second principal use on lots in the AG-1 and AG-2 Zoning Districts.
- 3. Amend paragraph 4.3.1E. to add new height regulations that apply to "SMALL WIND TURBINE TOWER" and "BIG WIND TURBINE TOWER."
- 4. In Section 5.2 replace "wind turbine" with "BIG WIND TURBINE TOWER", and indicate BIG WIND TURBINE TOWER is only authorized as a second principle use on lots in certain Zoning Districts.
- 5. In Section 6.1.3 add new standard conditions for "BIG WIND TURBINE TOWER" that are similar to the standard conditions for a WIND FARM.

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Case 634-AT-08, Part B. cont:

6.

- Add new subsection 7.7 making "SMALL WIND TURBINE TOWER" an authorized accessory use by-right in all zoning districts and add requirements including but not limited to:
 - a. the turbine must be located more than one and one half miles from the nearest municipal zoning jurisdiction; and
 - b. minimum required yards that are the same as for other accessory structures in the district provided that the overall height is not more than 100 feet; and
 - c. an overall height limit of 200 feet provided that the separation from the nearest property line is at least the same as the overall height and authorize private waivers of the separation by adjacent neighbors; and
 - d. a limit of no more than two turbine towers per lot; and
 - e. allowable noise limits; and
 - f. a requirement for engineer certification; and
 - g. a requirement to notify the electrical power provider if interconnected to the electrical grid; and
 - h. a requirement that no interference with neighboring TV, radio, or cell phone reception; and
 - i. a requirement for the removal of inoperable wind turbines.
- 7. In Section 9.3.1 add fees for SMALL WIND TURBINE TOWER and BIG WIND TURBINE TOWER.
- 8. In Section 9.3.3 add application fees for BIG WIND TURBINE TOWER Special Use Permit.
- 6. New Public Hearings

*Case 657-V-09 Petitioner: Larry Lambright

Request: Authorize the use of an existing two story detached accessory

storage building with a second story deck with a side yard of three feet in lieu of the required ten feet side yard for accessory structures in the AG-2 Agriculture zoning district, and an average height of 16 feet in lieu of the maximum allowed 15 feet average height for residential accessory structures on lots less than one acre in area in the AG-2 Agriculture zoning district.

Location: Lot 1 of Cook's Replat of Tract B of the K.D. Headlee Subdivision

in Section 14 of Mahomet Township and commonly known as the

house at 206B Lake of the Woods, Mahomet.

7. Staff Report

8. Other Business

A. Tentative 2010 Champaign County Planning and Zoning Calendar

- 9. Audience Participation with respect to matters other than cases pending before the Board
- 10. Adjournment

^{*} Administrative Hearing. Cross Examination allowed.

MINUTES OF REGULAR MEETING

CHAMPAIGN COUNTY ZONING BOARD OF APPEALS

4 1776 E. Washington Street

Urbana, IL 61802

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DATE: October 15, 2009 PLACE:

Lyle Shields Meeting Room

1776 East Washington Street

TIME: 7:00 p.m. Urbana, IL 61802

MEMBERS PRESENT:

Doug Bluhm, Catherine Capel, Thomas Courson, Roger Miller, Melvin

Schroeder, Eric Thorsland, Paul Palmgren

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MEMBERS ABSENT:

None

16 STAFF PRESENT: Connie Berry, John Hall, J.R. Knight

OTHERS PRESENT:

Ben McCall, Phillip Geil, Herb Schildt, Sherry Schildt, Birgit McCall,

Steve Burdin

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1. Call to Order

The meeting was called to order at 7:01 p.m.

SUBJECT TO APPROVAL

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2. Roll Call and Declaration of Quorum

The roll was called and a quorum declared present.

3. Correspondence

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None

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4. Approval of Minutes (July 16, 2009 and October 1, 2009)

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Mr. Thorsland moved, seconded by Mr. Miller to approve the July 16, 2009 and October 1, 2009, minutes as submitted. The motion carried by voice vote.

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5. **Continued Public Hearing**

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44 45 Case 634-AT-08 Part B Petitioner: Zoning Administrator Request: Amend the Champaign County Zoning Ordinance as follows: 1. Add definitions for "SMALL WIND TURBINE TOWER" and "BIG WIND TURBINE TOWER," and revise the definition for "WIND FARM"; and 2. Amend subsection 4.2.1. to allow "BIG WIND TURBINE TOWER" as a principal use on lots in the AG-1 and AG-2 Zoning Districts; and 3. Amend paragraph 4.3.1E. to add new height regulations that

- 46 apply to "SMALL WIND TURBINE TOWER" AND "BIG WIND TURBINE TOWER"; and 4.
- 47 In Section 5.2 replace "wind turbine" with "BIG WIND TURBINE TOWER" and indicate BIG
- 48 WIND TURBINE TOWER is only authorized as a second principle use on lots in certain Zoning
- 49 Districts; and 5. In Section 6.1.3 add new standard conditions for "BIG WIND TURBINE

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TOWER" that are similar to the standard conditions for a WIND FARM; and 6. Add new subsection 7.7 making "SMALL WIND TURBINE TOWER" an authorized accessory use byright in all zoning districts and add requirements including but not limited to: (a) the turbine must be located more than one and one half miles from the nearest municipal zoning jurisdiction; and (b) minimum required yard that are the same as for other accessory structures in the district provided that the overall height is not more than 100 feet; and (c) an overall height limit of 200 feet provided that the separation from the nearest property line is at least the same as the overall height and authorize private waivers of the separation by adjacent neighbors; and (d) a limit of no more than two turbine towers per lot; and (e) allowable noise limits; and (f) a requirement for engineer certification; and (g) a requirement to notify the electrical power provider if interconnected to the electrical grid; and (h) a requirement that no interference with neighboring TV, radio, or cell phone reception; and (i) a requirement for the removal of inoperable wind turbines. 7. In Section 9.3.1.add fees for SMALL WIND TURBINE TOWER and BIG WIND TURBINE TOWER; and 8. In Section 9.3.3 add application fees for BIG WIND TURBINE TOWER Special Use Permit.

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Mr. Hall distributed a Supplemental Memorandum dated October 15, 2009, and a Preliminary Draft Finding of Fact and Final Determination dated October 15, 2009, to the Board for review. He said that the case was readvertised to reflect the changes indicated in Attachments A through E of the October 9, 2009, Supplemental Memorandum. He said that Attachment A indicates a revision to Section 3.0 changing the definition of WIND FARM and WIND FARM TOWER and coordinates the definition of BIG WIND TURBINE TOWER and SMALL WIND TURBINE TOWER. The revision makes it clear that a SMALL WIND TURBINE TOWER is simply a wind turbine tower which is not more than 200 feet in overall height and a BIG WIND TURBINE TOWER is a wind turbine tower which is more than 200 feet in overall height, but the energy produced has to be principally used on site by another principal use on the same property and, to a much lesser extent, may be sold to a utility. He said that anything that does not meet these two definitions will be considered, by definition, a wind farm tower. He said that staff has finally tightened up any loopholes that someone could use to skirt the wind farm requirements by claiming that their structure is a BIG WIND TURBINE TOWER. He said he does not know if there will ever be a request for a BIG WIND TURBINE TOWER but it is possible. He said that Attachment B indicates a revision to subparagraph 4.2.1C. He said that there is a general prohibition in the Zoning Ordinance which indicates that it shall be unlawful to erect or establish more than one MAIN or PRINCIPAL STRUCTURE or BUILDING per LOT or more than one PRINCIPAL USE per lot in the AG districts and by definition a BIG WIND TURBINE TOWER is not an accessory use because it is much too big and the impacts are too significant therefore it has to be authorized as a second principal use on a lot. He said that Attachment C indicates a revision to subparagraph 4.3.1E. He said that the revision makes it clear that a SMALL WIND TURBINE TOWER can go up to 200 feet in height. He said that Attachment D includes a revision to Section 5.2 indicating the insertion of BIG WIND TURBINE TOWER (1-3 BIG WIND TURBINE TOWERS) in the Table of Principal Uses and adds a footnote 17 which indicates that a BIG WIND TURBINE TOWER must be located on the same property as another principal use for the purpose of producing electrical energy that shall primarily be used onsite by that other principal use. He noted that this revision makes it part of the use description therefore it is not subject to a variance. He said that Attachment E indicates the requirements for a BIG WIND TURBINE TOWER and they remain unchanged. He said that Attachment F indicates changes to

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subsection 7.7. He said that after the last meeting it is staff's understanding that the Board was inclined to allow SMALL WIND TURBINE TOWERS to be 200 feet tall provided the necessary requirements are met. He said that a new 7.7.B.6 was added indicating the following: the above limits on maximum allowable height notwithstanding, the maximum height of a SMALL WIND TURBINE TOWER on a LOT in a subdivision shall not exceed 75% of the minimum required AVERAGE LOT WIDTH when any adjacent and bordering LOT is vacant. He said that once there are no more vacant lots in a subdivision the height could be as it is described in paragraph B. He said that 7.7.C refers to rotor diameters and for a rotor diameter greater than 24 feet staff has introduced a factor that requires greater separation. He said that at the last hearing the Board was interested in providing for larger rotor diameters and the size of the property was discussed. He said that after reviewing some of the concerns raised by the City of Champaign's staff regarding shadow flicker it occurred to him that perhaps staff was not being careful enough with shadow flicker created by the larger small wind rotors. He said that revised 7.7C.3 proposes a separation distance of 8.3 times the rotor diameter therefore a 75 feet diameter rotor would have to be 622.5 feet away from the nearest dwelling on other land. He said that he is unhappy that the increase in distance is not proportional to the increase in rotor area but if it is made proportional to rotor area the separation becomes 2,000 feet which is almost twice as much as that required for a wind farm turbine. He said that staff has no way to analyze shadow flicker although there is a tool available on the internet which generates a map but staff has not been able to get the program to work with the County's network.

Mr. Hall stated that staff relocated some items to create a better ordinance and reduce review issues in the office. He said that the text from Paragraph 7.7.F was moved to Paragraph 7.7.B.2. He said that a new item 7.7.N.1 was added to indicate the removal of climbing rungs, if possible, to a height of 12 feet, provided that the SMALL WIND TURBINE TOWER is unclimbable without the rungs. He said that Item 7.7.P was revised to indicate derelict rather than inoperable and or/not in operation. He said that Item 7.7.Q was revised to remove the extensive requirements regarding identification of possible EMI effects and replaced with new Item 7.7Q.1 indicating that all wind turbines shall comply with the FCC requirements for EMI including FCC Part 15 and new Item 7.7.Q.2 indicates that metal blades shall not be used. He said that later in the meeting he will discuss an additional change to Item 7.7.Q. included in the October 15, 2009, Supplemental Memorandum. He said that the way that the October 9th memo went out to the Board it made it clear that there should not be any significant electromagnetic interference which has a clear implication of an obligation on the County's part if there was interference. He said that he agrees with the Board's discussion at the previous hearing that this is such a difficult situation and if the County can possibly stay out of those types of disagreements the better off the County will be. He said that Item 7.7.R. requires that someone retrofitting a replacement turbine on an old tower has to insure that the tower is safe and complies with all manufacturer's safety recommendations and requirements.

Mr. Hall stated that Attachment G indicates revisions to subparagraph 9.3.1D.H. and 9.3.1.D.I regarding fees. He said that the fee for a BIG WIND TURBINE TOWER is the same as for a WIND FARM TOWER because the amount of work is almost the same. He said that when almost as much work is done for a wind farm as on one wind turbine tower it could be argued that the fee should be higher for a BIG WIND TURBINE TOWER. He said that the fees for SMALL WIND TURBINE TOWERS are a

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required in approving SMALL WIND TURBINE TOWERS is two or three times as much as what is currently done. He said that a fee of \$700 for a SMALL WIND TURBINE TOWER that is 200 feet in height appears to be fairly high but in comparison to the cost of such a wind turbine the fee is reasonable. He said that the County Board established a minimum fee of \$20,000 for a WIND FARM TURBINE TOWER so that enough money was collected to pay for any consultants that were needed for review of the application and staff time. He said that a BIG WIND TURBINE TOWER is going to be a significant public hearing which will require a lot of effort and by definition there can be no more than three therefore he proposed a fee of \$3,300 per turbine and if the maximum of three turbines is proposed then the fee would be \$9,900. He said that if three turbines are proposed which do not meet the definition of small or big then the request would be considered a wind farm and the minimum fee is \$20,000. He said that, not to bias the Board, he included an attachment to the October 9, 2009, Supplemental Memorandum from the American Wind Energy Association which discusses issues with wind turbines. He said that he also included as an attachment to the October 9, 2009, Supplemental Memorandum an article from Windustry, a pro wind industry website, discussing community wind. He said that if the Board could read all of the articles available on the web regarding community wind the Board might begin to think that they are different than a wind farm but in fact all they are is a wind farm and under the County's Ordinance they would have the same effects as a wind farm.

Mr. Hall stated that after the October 9, 2009, Supplemental Memorandum went out in the mailing he received a call from an interested observer who was concerned if enough care was being taken with the big and small wind. He said that Attachment A of the October 15th Supplemental Memorandum indicates additional changes to subsection 7.7. He said that Item 7.7.B.4. indicates a height limit of up to 150 feet on any lot with less than three acres of lot area and 7.7.B.5. indicates a height limit of more than 150 feet and up to 200 feet on any lot with at least three acres of lot area and provided that the SMALL WIND TURBINE TOWER is no closer than the following minimum distances from any airport or heliport that is either available for public use and listed in the FAA Directory of the current Airman's Information Manual or that is under construction and on file with the FAA and indicated for public use:

(a) no closer than 4 miles to the nearest point of the nearest runway of any airport; and (b) no closer than 5,000 feet to the nearest point of the nearest landing and takeoff area of any heliport. He said that the FAA standard is not 4 miles but is 20,000 feet and he believes that it is reasonable to round the 20,000 feet to 4 miles because standard sections of the zoning map are one mile.

Mr. Hall stated that he included as attachments to the October 15, 2009, Supplemental Memorandum the relevant FAA standards plus a printout from their online directory of airports. He said that there are four airports in Champaign County and they are as follows: U of I Willard, Frasca Field, Rantoul National Aviation Center, and Homer Airport. He said that this does not apply to RLA's or residential airports but does apply to airport and heliports and there are no heliports in Champaign County that he is aware of. He said that it does apply to any airport or heliport outside of Champaign County which is within 4 miles or the 5,000 foot mile radius in our jurisdiction.

Mr. Hall stated that renumbered paragraph 7.7.I. should be modified to indicate the following: SMALL WIND TURBINE TOWERS shall comply with all applicable regulations of the FAA. Evidence of FAA approval shall be required for any SMALL WIND TURBINE TOWER taller than 150 feet when it is within four miles of an airport.

Mr. Hall stated that also included as an attachment to the October 9, 2009, Supplemental Memorandum is a copy of the 2007 Wind Turbine Buyer's Guide. He said that he included the buyer's guide because it has rated RPM's of selected turbine units from 1,000 rpm's to 50 rpm's. He said that 50 rpm's are for the larger end units such as the Vestas V-17 with a 56 foot diameter rotor. He said that regarding the concern about shadow flicker it is his understanding that what influences shadow flicker is the diameter and height of the rotor, speed of the rotor, and sun angle. He said that the high end of small wind appears to have the same rpm ratings as wind farm turbines. He said that 75 feet is approximately onequarter as large as the rotor on a wind farm tower and 330 feet is the high end of standard wind farm towers therefore a small wind tower is much smaller. He said that it could be no more than 200 feet high which is about one-half the height of a contemporary wind farm turbine therefore in regards to the three physical things that the Board has control over, height and diameter would be much smaller than a wind farm tower but it would have the same speed. He said that he still does not know what that means in terms of shadow flicker and he does not know if the separation based on the 8.3 factor is enough separation and he has no way to analyze it. He said that he suggested in the cover memo that the Board may want to increase the factor from 8.3 to a greater number. He said that if the Board increased the 8.3 by 50% up to a factor of 12.5 a 75 foot diameter rotor would require a separation of 937 feet which is what the model ordinance requires for wind farms but is still less than the 1,200 feet that the County requires for a wind farm turbine.

Mr. Hall stated that original paragraph 7.7.I. had been stricken which discussed the installation of safety balls on guy cables. He said that the draft that went out in the mail included the original paragraph 7.7.I but after more thought he decided to strike the original paragraph. He said that the Board may decide to retain original paragraph 7.7.I. but if it is kept the Board needs to provide better guidance on where the safety balls would go. He said that Bill Fabian testified at the last hearing and raised the issue that he was unclear if guy cables on a small turbine could accommodate safety balls. He said that the attachment that went out in the mail indicated that Ecoenergy uses a combination of safety balls, high visibility flags and high visibility sleeves on their met towers. He said that a met tower does not have a turbine sitting on top of it therefore making it more difficult to see and it has more guy cables than what a small wind turbine would making it more of a hazard for aircraft.

Mr. Hall stated that renumbered paragraph 7.7.P. indicates that if the wind turbine is FCC compliant and there are no metal blades then by definition there could be no significant interference.

Mr. Hall stated that attached to the October 15, 2009, Supplemental Memorandum are three attachments regarding net metering. He said that Eric McKeever, representative for Arends Brothers, gave good testimony at a previous public hearing as to what net metering is and some people might wonder why large diameter rotors would be needed because the net metering allowance is only up to 40 kilowatts. He said that the Endurance 35 kilowatt unit had a rotor diameter of 69 feet therefore even units below the net metering threshold require large diameters. He said that, according to Mr. McKeever's testimony, if you are not in the area served by Ameren or ComEd but are in a co-op then net metering does not apply although if you are a big energy user there maybe some incentive to get bigger than 40 kilowatts and still be small wind. He said the last attachment is a handout submitted by Eric McKeever at a public hearing.

Mr. Hall stated that the Preliminary Draft Summary of Evidence is not complete but if the Board is happy with one of the versions that is before them then the case is ready for final action. He said that the Chair of ELUC informed him that ELUC will be so busy in November that even if the Board takes final action tonight ELUC will not review it in November. He said that no requests or applications have been received for small wind turbines and perhaps that is because people are holding off until this case is finalized.

Mr. Palmgren stated the Mr. Hall previously indicated that staff would confer with the City of Champaign and the City of Urbana to see what they were going to do with wind units.

Mr. Hall stated that staff had one meeting with the City of Champaign and the City of Urbana and it is very clear that the County is going to be less restrictive than what either of those two entities will require. He said that Urbana is genuinely trying to put forth a good effort to make sure that they are as liberal as possible in their unincorporated ETJ in developing different standards but as far as he can tell Champaign is not trying to establish different standards.

Mr. Bluhm asked the Board if there were any questions for Mr. Hall and there were none.

Mr. Bluhm called Mr. Phillip Geil to testify.

Mr. Phillip Geil, who resides at 2060B CR 125E, Mahomet stated that he has a wind turbine and he believes that the current version of the ordinance is well written and he has no objections. He said that although he is agriculture and is not affected he is concerned about the size of the permit fee.

Mr. Bluhm asked the Board if there were any questions for Mr. Geil and there were none.

Mr. Bluhm asked if staff had any questions for Mr. Geil and there were none.

Mr. Bluhm called Mr. Herb Schildt to testify.

Mr. Herb Schildt, who resides at 398 CR 2500N, Mahomet stated that he is the Chairman of the Newcomb Township Planning Commission and noted that they only received the updated copy of the proposed ordinance a couple days prior to their last Monday meeting; therefore, it is still under review with the commission.

Mr. Schildt stated that he would now speak personally. He said that he was impressed with the information included in the packet and felt that a lot of improvements had been made. He said that there were three things that did cause concern and made him very uncomfortable and one of those things was the change for the electromagnetic interference. He said that it has been frustrating to work through this in his own mind because he does understand what Mr. Hall has said and he does not see the County being able to rationally put itself in an enforcement position but yet it could be a serious issue. He said that he does tend to agree with Mr. Hall in that the County should not enforce this issue but the new language raises a separate issue in his mind and he does not believe that it was intended. He said that if

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he was to write renumbered paragraph 7.7.P. he would add the following text at the end: for the purposes of this Ordinance. He said that someone who would come in to apply for a small wind turbine would not believe that somehow they magically complied with every conceivable regulation.

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Mr. Schildt stated that another issue that he has been wrestling with is the tower height and the rotor diameter and where small wind changes to big wind or medium wind. He said that when he thinks about a 200 feet tower with a 75 feet rotor he could imagine many situations where that would be good and fine without a problem but he could also imagine situations where even though it would technically meet the setbacks it could have a significant impact on property values or quality of life for adjacent landowners. He said that he has tried to determine what would be a safe rotor diameter or height and he could not confidently come up with either one. He said that the current maximum height for an antenna tower is 100 feet therefore he would say that any wind turbine up to 100 feet in height with a 24 feet or smaller rotor diameter would be "by-right" but anything over 100 feet in height and a rotor diameter of 25 feet to 75 feet would require a special use permit. He said that by requiring a special use permit the County would have the ability to judge those cases where perhaps a 200 feet tower is not appropriate and it would give adjoining landowners the opportunity to protest the request. He said that he could imagine situations where a 200 feet tower would be fine but he could also imagine situations where it is not and it would get the County out of the situation of deciding when small wind becomes big wind. He requested that the Board consider his proposal.

Mr. Bluhm asked the Board if there were any questions for Mr. Schildt and there were none.

Mr. Bluhm asked if staff had any questions for Mr. Schildt.

Mr. Hall asked Mr. Schildt if he believes that anything over 100 feet in height, regardless of rotor diameter, should be a special use permit.

Mr. Schildt stated yes. He said that the special use permit should be triggered if the height is over 100 feet or if the rotor diameter is over 24 feet or if it is over and greater than both because it is outside the norm that the ordinance currently has in terms of height. He said that he thinks of Mr. Geil's turbine and others in the area and their rotational speeds and he does not know anyone who is not fascinated by small wind therefore those folks should be enabled to put up a small wind turbine without a lot of red tape but when the turbines start getting bigger then the effects go past the property line.

Mr. Hall stated that even though the way the ordinance is written currently the height is limited by how close the neighbor's dwelling is located to the turbine.

Mr. Schildt stated that the setbacks that are currently in the ordinance should not be altered or increased but his proposal should be in lieu of the setbacks. He said that if you are not the person who is interested in installing small wind at least you would know that it can't be any closer to you than that. He said that perhaps there is someone who has enough acreage to install a Vestas V-17 but the impacts could be great if they are close to either a park, cluster of houses, or rural specialty business. He said that a special use permit allows both sides to weigh in as the Board decides on a case by case basis and because the expense is so great he doubts that there will be a lot of these cases.

Mr. Hall stated that staff does know that there are plenty of good reasons why 100 feet is not adequate and asked Mr. Schildt if he still believes that a special use permit is necessary.

Mr. Schildt stated that if he was writing the ordinance he would write it at 100 feet. He said that he perfectly understands what Mr. McKeever and Mr. Geil discussed about the additional allowance of height but is it the neighbor's obligation to suffer a loss of quality of life so that someone else can have a little more wind. He said that the ordinance allows 100 feet already therefore there could be the expectation that a neighbor could install a 100 feet tower.

Mr. Hall stated that he assumes that Mr. Schildt is skeptical that staff could ever identify these separations that would actually be adequate.

Mr. Schildt stated that he is skeptical only because he could imagine situations in both directions. He could imagine separations that would be perfectly adequate and separations that would be inadequate. He said that the implementation of the special use permit would allow neighbors to give input and argue the case and ultimately the Board can decide who is right. He said that the special use permit process is not unreasonable when someone is putting up a structure that is that large and could affect so many people beyond the boundaries of the property line.

Mr. Hall stated that the cost of the Vestas V-17 installed is \$180,000.

Mr. Schildt stated that there are people in Newcomb Township that could probably afford such a structure.

Mr. Geil requested the opportunity to return to the witness stand.

Mr. Bluhm allowed Mr. Geil to return to the witness stand.

Mr. Geil stated that he wouldn't be concerned if the ordinance was written at 150 feet but is concerned about 100 feet because it includes the distance to the tip of the blade as well. He said that on his tower, which he could only purchase in tower sections 20 feet long, and his blade is 11 feet long he would be limited to an 80 feet tower plus the turbine on top and that is too low to be productive. He said that he should have had a 120 feet tower plus the 11 feet which would have put it up to 131 feet in total height. He said that he could not see anyone putting in one of the Vestas V-17 turbines due to the cost and if someone has that much money then they should install a solar system because it is half the price and supplies more electricity.

Mr. Bluhm asked Mr. Geil to indicate the height of his tower.

Mr. Geil stated that his tower is 100 feet with the turbine on top of that therefore he is actually 115 feet.

Mr. Hall reminded the Board that they could easily decide that there is enough justification for a special use permit for anything over 150 feet but if the Board feels that the separations of 175 feet or 200 feet

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are adequate then public hearings should not be held if they are not truly necessary.

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Mr. Bluhm called Mr. Steve Burdin to testify.

Mr. Steve Burdin, who resides at 2527 CR 455E, Mahomet submitted a prepared statement as a Document of Record. Mr. Burdin stated that before he read his prepared statement he wanted to address Mr. Hall's comments regarding rpm's and how some of the smaller units go down to 50 rpm's. He said that in September, 2008, he took a tour of the Twin Groves Wind Farm and his notes indicate that the rotation of those turbines was 18 rpm's, although he is going to round it to 20 rpm's to make calculations easier. He said that there are three blades on each turbine therefore there will be 60 passes per minute, one per second and divided by three is about 20 seconds for every blade to go around.

Mr. Burdin stated that his analogy from the July 16, 2009, public hearing was not properly reproduced in regard to interference with communications. He said that the image that he tried to create was that if you hold a toothpick at arm's length how much does it block your vision of something beyond. He said that he would like to comment on the Supplemental Memorandum dated October 9, 2009. He said Attachment A. includes the definitions of small and big wind towers and the paragraphs still mention the use or primary use of the power that is generated from the turbines. He said that if he were reading this text with an eye toward putting up a turbine he would be compelled to ask a few questions. He asked how anyone would be able to determine whether the majority of power is consumed on site or if it is placed onto the grid. He said that considering the varying power demand of any landowner at different times of the day and the differing wind conditions it appears that it will be very hard to tell. He said that given the varying conditions what time period (sampling period) will be used to determine whether the "majority" is consumed instead of placed onto the grid. He asked what are the criteria that would be used for proving that that this land use should be allowed. He said that it might be easier to simply define the use of a turbine as "to generate electrical energy" because he is not sure that the County wants to regulate, through the Ordinance, as to how the electricity is to be used.

Mr. Burdin stated that he finds that the use of terms such as "to much lesser extent" as ambiguous at best in order to describe the relationship between the majority and the minority. He asked if the Ordinance is being written to be clear or to defer assessment to a later time, person or authority that's undefined at the moment. He said that Attachment F, Paragraph B.2. discusses the setback from transmission lines. He said that he would presume that this text is referring to the above ground third party electrical transmission lines and he just mentioned this in case the Board deems it useful to have this clarification. He said that in regard to Attachment F, he was glad to see that the electromagnetic noise paragraphs had been stricken. He said that it seems that it is not useful to protect, by the Ordinance, against effects whose likelihood is vanishingly, small, as in the case of electromagnetic interference with communications.

Mr., Burdin stated that Attachment I, Section vi, refers to lightning strikes. He said that the description in the second paragraph is technically accurate and, with respect to small wind, turbines are indeed not more likely to be struck by lightning due to the reasons given. He said that even considering their height, they are less susceptible to strikes than trees. He said that the protection devices mentioned in the third paragraph are slightly dated but are correct and are routinely and effectively used for transient

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voltage suppression, including lightning protection.

Mr. Burdin stated that he has had time to thing about this since the last meeting and he would ask the Board to reconsider a prohibition of homemade units. He said that it's difficult to predict where the next improvements to turbines may come from and who is to say that it wouldn't come from a home-based inventor. He said that the County should not stifle development and creativity and the ordinance should not prohibit someone from erecting a turbine on their property and possibility having it fail or fall because this could happen to commercially manufactured systems as well. He said that the function of the ordinance is to require some baseline of quality and to protect others from this activity and the proposed ordinance will accomplish this. He said that as homeowners we all have a responsibility to our neighbors and we incur liability if we cause damage to their property. He said that there is a mechanism in place in our society that takes care of this but it is not done by the County. He suggested that we leave this to the liability folks, insurance companies and attorneys, and not mandate it by the County.

Mr. Burdin stated that he would like to briefly mention tower collapse because he is in favor of reasonable setbacks. He said that it is unlikely that towers would fall like trees and to say that if a tower were to topple, pivoting at the bottom, he would not think that it's likely that it can stay structurally intact because it would probably buckle and fold. He said that towers that are guyed are constrained from falling over like this unless the guy wires fail. He said that he does not think that the towers are designed to support the weight of a turbine on one end while they're horizontal or off vertical although he is not an expert in this area but folks who know about the towers could be posed the question. He said that this information could provide guidance for setbacks, safety margins and the like.

Mr. Burdin stated that lest any of us be bold enough to think that there's little or no chance for design improvements a couple of things should be noted. He said that modern vertical axis turbines work in light wind and are actually better in turbulent rather than low wind and they are bird friendly because they appear as a solid cylinder and the birds do not fly into them. He said that more recently a chemical engineer, who moonlights as a wind energy consultant, has recently developed a new turbine design which works down to a wind speed of two miles per hour and it is very quiet. He said that this new turbine design is being developed and marketed by a Honeywell company and he has attached references to this document.

Mr. Bluhm asked the Board if there were any questions for Mr. Burdin and there were none.

Mr. Bluhm asked if staff had any questions for Mr. Burdin.

Mr. Hall stated that he would not propose any changes but he does agree with Mr. Burdin's comments regarding the definitions. He said that the intention for small and big wind is that these things that are part of a larger development. He said that the energy that is produced by these units has to go through the dwelling before it gets to the grid therefore perhaps some description of that connection would be a better way than worrying about how much energy is used on site. He asked Mr. Burdin if he could provide such a description.

Mr. Burdin stated that he could provide such a description. He said that it is reasonably basic and as the

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ZBA

Ordinance indicates the landowner will have to coordinate with the utility provider to make sure that the power is appropriate to be placed on the grid and an inverter and other hardware will be required. He said that he will construct the appropriate description and submit it to staff for review.

Mr. Bluhm asked the Board if there were any questions for Mr. Burdin and there were none.

Mr. Schildt requested the opportunity to return to the witness stand.

Mr. Bluhm allowed Mr. Schildt to return to the witness stand.

Mr. Schildt stated that he always appreciates Mr. Burdin's expertise at the meetings. He said that Mr. Burdin is correct in that the Vestas V-80 is about 18 rpm's but this unit is one of the first turbines used on a large scale in the wind farm developments. He said that in regard to Attachment I, it is his opinion that small wind, anything less than 24 feet in diameter, will turn quickly and cause less shadow flicker. He said that lightning strikes are a real issue on turbines and those strikes regularly damage the blade tips on the turbines located in McLean County. He said that if you visit the Twin Groves Wind Farm you will hear a whistle type sound which is caused by a blade that has been damaged by lightning and requires replacement. He said that icing is not an issue on a 12 feet rotor but it is an issue on a 75 feet rotor therefore he would argue that some of the information in Attachment I is not applicable to the larger turbines and he would still argue for special use permit approval.

Mr. Geil clarified that if the unit is grid tied the electricity has to go through the homeowner's meter and their system.

Mr. Bluhm called Mr. Ben McCall to testify.

Mr. Ben McCall, who resides at 1085 CR 2200N, Champaign stated that there have been a lot of great improvements in the current draft. He said that as someone who is considering purchasing one or more small wind turbines he has two concerns. He said that the size of the fee that has been proposed is at a level that does not encourage people to install small wind turbines and this is a use that should be encouraged rather than discouraged in our society. He said that he is concerned about the limitation, under any circumstance, of only being allowed two small wind turbines on a property yet that same someone would be allowed to have three big wind turbines with a special use permit. He said that this is an issue which may need to be reconsidered due to the new developments in small wind turbines in that someone might want to have ten small units on 30 foot towers.

Mr. Hall stated that someone could request to have more than two small wind turbines located on their property through the variance process. He said that the petitioner would be required to submit a noise study to deal with the combined effects of 10 small wind turbines on one property.

Mr. McCall stated that if he desired to have three 100 foot towers he would also need to request a variance.

Mr. Hall stated yes. He said that Mr. Schildt has concerns as to whether the separation distances are

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accurate and he believes that a special use permit should be required. He said that he has suggested to the Board that they may not have to worry about that in the context of multiple units until there are more than two units on one property. He said that he does not want the Board to believe that three units can be constructed on a property and never have a problem.

Mr. Bluhm informed Mr. McCall that there is a mechanism in place, the variance process, in order to request more than two small wind turbines on a property but that process is done through the Board and is not "by-right."

Mr. Hall stated that each time he attends a County Board committee meeting it is impressed upon him that the County does not have the resources to encourage small wind and the County needs to recoup all of its expenses and he is fairly confident that the fees will accomplish that goal.

Mr. McCall stated that it is his understanding that the Federal government has a 30% tax credit for small wind but the State of Illinois does not have such an incentive.

Mr. Courson stated that he believes that the State of Illinois does have an incentive for small wind.

Mr. McCall stated that the State of Illinois did have one at one time but due to the budget crisis the incentive has been lost.

Mr. Thorsland stated that technology is rapidly changing and as Mr. McCall stated there may be a request for more than two small wind turbines on one property therefore perhaps a height threshold should be considered so that someone could place as many small wind turbines on one property as desired. He said that the Board should consider the durability of the Ordinance as technology changes. He said that there is a possibility that technology will produce a very small productive unit and someone may want to place more than two of those units on their land for energy production. He said that perhaps the variance process will take care of such a request but it is also possible that it will not.

Mr. Hall stated that he thought the elimination of all references to kilowatt ratings was a fantastic development.

Mr. Thorsland stated that it was a great development.

Mr. Hall stated that one strength and weakness of the Ordinance is that the rotor diameter is equated to something that is very durable, height of the accessory structures based on the size of the property, and more than the 200 feet height clearly requires a special use permit each and every time.

Mr. Thorsland stated that realistically the possibility of a request for a Vestas turbine on private property is very limited in Champaign County unless it is someone who is very wealthy. He said that the County is more than likely going to see the small wind turbines and limiting to two maybe the one thing that becomes very problematic without a variance.

Mr. Bluhm stated that if numerous variances are requested for more than two small turbines on any one

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property then the Ordinance can be revisited and amended at that time. He said that if new technology indicates that many variances are being requested for more than two small wind turbines on 40 feet poles then perhaps the Ordinance should change because technology has changed.

ZBA

Mr. Hall stated that perhaps we will find out that there is no concern regarding noise regardless of how many small wind turbines are placed on a property but until we have a way to analyze noise the Ordinance should probably stay as proposed.

Mr. Thorsland stated that after attending the ELUC meeting on Monday night it would not be beneficial to take final action at this time. He said that he is comfortable with the Ordinance as it is currently written.

Mr. Bluhm stated that it was implied that the definitions require further revision.

Mr. Hall stated that he would be happy to work with Mr. Burdin regarding the definition and remove any ambiguities. He said that Mr. Schildt's suggestion regarding 7.7.P. is a good change because he does not want people to believe that they do not need to worry about FCC regulations if they meet our Ordinance.

Mr. Bluhm requested the Board's preference regarding a requirement of a special use permit for any unit over 150 feet in total height.

Mr. Hall stated that the whole reason that the Board has reviewed this case in the last four meetings is to relieve the private sector from the 100 feet limit that is in the current Ordinance and documented proof has been received to indicate that the 100 feet height is inadequate. He said that the evidence does not support requiring a special use permit for anything over 100 feet and the evidence is much more supportive for anything up to 150 feet provided that the Board is comfortable with the primary determinant being the distance to the nearest adjacent dwelling or principal building or structure. He said that if the Board is comfortable with that then we will be the only County with such rules and this would be a tremendous freeing up of the rules even if a special use permit was required for anything over 150 feet.

Mr. Bluhm requested the Board's comments for anything over 150 feet. He said that a unit which has a height of 100-150 feet is covered under the ordinance but a unit which is within the 151-200 feet range would require a special use.

Mr. Thorsland stated that the ordinance as written addresses the taller units and the expense would be a limitation.

Mr. Courson stated that most of the small turbines would have a tilt-type base but a larger unit would require guy wires and that would require a lot of land.

Mr. Thorsland stated that he believes that it will only be on a rare occasion that the County will see a request for a private unit which is 151-200 feet in total height. He said that he also believes that

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technology will reduce the required height for sufficient energy production and maintenance.

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Mr. Bluhm stated that he believes that he also believes that requests for 151-200 feet private wind towers will be far and few between therefore perhaps a special use permit would be appropriate so that the request can be reviewed for placement.

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Mr. Thorsland stated that a small wind turbine with a rotor diameter below 24 feet will not be placed on a 151-200 feet tower.

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Mr. Hall stated that the current ordinance would allow a 75 feet diameter rotor to be placed on up to a 200 feet tower, "by-right," if it meets all of the separation requirements.

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13 Mr. Thorsland stated that such a tower would go on a large property that could meet all of the setbacks.

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15 Mr. Hall stated that such a tower could go on a three-acre parcel but the Board could require a five-acre 16 parcel.

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Ms. Capel stated that if her neighbor wanted to put a 200 feet tower on his five-acre lot she would like him to have to go through the special use permit process because it would be pretty close to her house. She said that it would make a significant difference at her home whereas if it were only 150 feet tall the effect would be much smaller therefore even if such a request was a rare occasion it should be reviewed and approved through the special use permit process.

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Mr. Bluhm stated that some of the smaller rotors are at a 23.6 feet diameter therefore perhaps anything over a 24 foot diameter should be considered under the special use permit process.

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Mr. Courson stated that his personal wind turbine is a relatively small unit and is on a 40 feet tower. He said that it is the only unit that he sees as being marketed to private homeowners other than the Whisper 100 and it is hardly worth placing on a home. He said that if someone is comparing the cost of such a unit the Skystream 3.7 could be installed for around \$10,000.

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Mr. Hall asked Mr. Courson what the overall height of a Skystream 3.7 would be.

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Mr. Hall stated that the permit fee for such a unit would be \$100.00

Mr. Courson stated that the overall height would be around 52 feet.

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> Mr. Bluhm stated that Arends Brothers indicated that they have a 100 kilowatt turbine located at their Ashmore store and they believed that they would sell some units of that type.

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39 40 41 Mr. Hall stated that Arends Brothers has indicated that they have a residential customer interested in

42 purchasing the 100 feet unit. 43

44 Mr. Hall asked Mr. Courson if just because the turbine is bigger does not mean that it has to be higher.

Mr. Courson stated that it depends on the wind resources at any particular location. He said that he has lowered his personal turbine from 80 feet to 40 feet and has received much better performance from his unit. He said that after lowering his unit he has noticed some shadow flicker but it is not bothersome.

Mr. Hall asked Mr. Courson to indicate the rotor diameter of his unit.

Mr. Courson stated that he has the Whisper 500 and it has a 15 feet diameter rotor.

Mr. Hall asked Mr. Courson if, as a ZBA member, he believes that shadow flicker should be a concern for an adjacent neighbor.

Mr. Courson stated that if the shadow flicker came through a neighbor's window and it could be bothersome but it wouldn't be anything that curtains or blinds could not remedy.

Mr. Hall asked Mr. Courson if he believes that shadow flicker may just be part of reality in 2009 and it is something that neighbor's just deal with.

Mr. Courson stated that there is always something that a neighbor could complain about whether it is car lights, noise, etc. He said that when he is in his bedroom at night he can see car lights traveling down the road through his bedroom windows.

Mr. Bluhm stated that some of the shadow flicker is not much different than car lights occasionally shining in a window.

Mr. Courson stated that he would not mind seeing a requirement of a special use permit for any unit over 150 feet in height. He said that he does not believe that there will be a lot of units over 150 feet because of the cost and when a cost analysis is done the winds are not feasible in this area for the unit that is being installed.

Mr. Hall asked if someone wanted to install a unit that is over 150 feet and the setbacks are adequate from their own property lines should the special use permit process be imposed on that person.

Mr. Bluhm stated that it is not known what the shadow flicker will be for that unit.

Mr. Courson stated that he would assume that the noise would be less from such a unit.

Mr. Thorsland stated that the effects on other people that do not desire to have a wind turbine and do not want to look at someone else's. He said that the Board carefully tries to weigh all of the pro's and con's of another house or three houses and the effects of those homes travels a much greater distance than any shadow flicker and noise created by a wind turbine. He said that there is no recourse for a person who is on a road that is on its way to a subdivision unless it is an RRO, which has a public hearing, but if it is a "by-right" lot then it is just how it is. He said that a wind turbine stands straight up in the air and everyone can see it but a house is just another house even though the overall impact of that house over

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time is probably greater than the wind turbine. He said that the probability of everyone in rural Champaign County putting up a 150 feet tower is unlikely therefore this issue should be weighed carefully. He said that perhaps a special use permit should be allowed for a unit over 150 feet because it would provide notice to adjacent landowners. He said that the Board is being very careful with the wind issue because it is a very visible item but the Ordinance needs to be consistent with other things as to the impact on the entire County.

 ZBA

Mr. Hall asked Mr. Courson if he is aware if the wind turbine manufacturer provides any data on shadow flicker.

Mr. Courson stated no and he hadn't heard about shadow flicker until the public hearings began. He said that the biggest thing that he has heard about is the concern about bird kills and noise. He said that his turbine is a little noisy but he has never seen a dead bird at the foot of his tower.

Mr. Hall stated that if the Board desires to require special use permits for these structures he would assume that shadow flicker and noise would be an issue and if these things are not an issue then what would be an issue so that a special use permit would be required.

Mr. Bluhm stated that he would assume that there would be a lot more criteria required if someone had a three acre parcel and all of the lots around them were also three acres and that landowner wanted to install a 150 feet tower.

Mr. Thorsland stated that if someone wanted to put up a 151 feet tower then they would need to apply for a special use permit once they went over three acres but it is a different story when it is farmer who wants to put a tower up on his 200 acres parcel.

Mr. Hall clarified that a farmer on 200 acres would fall under the agricultural exemption.

Mr. Thorsland stated that someone who dried lumber in his shed in the woods and desired to install a 200 feet tower where no one would care would also be required to go through the special use permit process. He said that maybe there is a subdivision which has ten houses within a one-quarter mile then such a unit would trigger the special use permit process but it is not triggered if there is a density that is lower.

Ms. Capel asked Mr. Hall if someone could obtain a variance for a tower that is 151-200 feet in overall height.

Mr. Hall stated yes.

Ms. Capel stated that this would be less work than a special use permit but it would give the Board the opportunity to review the placement.

Mr. Hall stated that a variance would make more sense and he does not know why the Ordinance was written so that a special use permit is required for something that is taller because the Board is well

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aware that the findings for a special use permit when it is something that only the homeowner is going to use is very difficult. He said that he would argue that the standards, other than for public convenience, are the same. He said that a variance could be required for a small wind unit that is over 150 feet but a limit of 200 feet in height.

ZBA

Mr. Thorsland stated that he agrees.

Mr. Hall asked the Board about rotor diameter.

Mr. Bluhm stated that perhaps the 151 feet but a limit of 200 feet should include the rotor diameter. He asked Mr. Hall what the fee would be for a variance for such a unit.

Mr. Hall stated that the fee list needs to be updated. He asked the Board to comment on the separation for rotor diameter that is greater than 24 feet and at a height of 150 feet.

Mr. Thorsland stated that the 150 feet limit would also limit the rotor size. He said that Mr. Courson has a small wind turbine unit on a small tower and at a lower height it appears to work better.

Mr. Hall asked Mr. Knight if he had anything that required more guidance from the Board.

Mr. Knight stated no.

Mr. Bluhm asked Mr. Hall what would happen if a school district who does not have enough room or land desired to put up a wind tower for their use at a different location. He asked if there would be additional costs incurred because of the Vestas V-17 and the wires that must be run to the school.

Mr. Hall stated that if the turbine is close enough that they could interconnect and clearly prove that the energy produced was only for the school then a joint lot development permit could be allowed. He said that the problem is that many times the wiring becomes cost prohibitive. He said that if there is no doubt that it is connected to the school, factory or village hall then language could be written to provide for that situation but if it is not connected to it then it is a free standing wind turbine.

Mr. Bluhm stated that more than likely it will be a village or city giving permission to construct such a unit because it will be within their ETJ.

Mr. Hall stated that probably the schools that are in the County's jurisdiction are surrounded by farmland therefore hopefully they could connect directly to the school.

Mr. Bluhm asked the Board if there were any other changes or concerns for staff.

Mr. Hall stated that the Board had made progress which will require another meeting but it is also significant in whittling out the more than 150 feet height that would require a special use permit which is really a variance.

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1 Mr. Bluhm asked the audience if anyone desired to sign the witness register to present testimony for Case 634-AT-08, Part B. and there was no one.

Mr. Bluhm closed the witness register.

Mr. Bluhm requested a continuance date.

Mr. Hall stated that no application has been received for Case 542 on November 12th and frankly he would rather leave as much room as possible for the case scheduled for October 29th.

Mr. Thorsland moved, seconded by Mr. Courson to continue Case 634-AT-08, Part B. to November 12, 2009. The motion carried by voice vote.

6. New Public Hearings

None

7. Staff Report

Mr. Hall stated that the wind farm developer's consultant has begun reviewing the County's application and he would imagine that this review will take through October. He said that the meetings that the Board has set aside in January are still within the six week lead time. He said that he has not placed this item on a ZBA agenda to date but he is arguing for ELUC to authorize money for a noise consultant for the first wind farm application and he does not know how much luck he is having. He said that, if as a ZBA member you feel that this review is necessary, it is important for ZBA members to discuss this issue with their County Board members. He said that he has explained to ELUC that when a wind farm application is received he cannot advise them about noise because he is not an acoustical expert which also means he cannot advise the ZBA about noise. He said that three proposals have been received and unless he is directed otherwise when a wind farm application is received he will obtain three estimates for providing the noise review but at the October ELUC meeting he may be told that this will not be necessary.

8. Other Business

9. Audience Participation with respect to matters other than cases pending before the Board

None

None

42 10. Adjournment

The meeting adjourned at 8:43 p.m.

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2 3 MINUTES OF REGULAR MEETING CHAMPAIGN COUNTY ZONING BOARD OF APPEALS 4 1776 E. Washington Street 5 Urbana, IL 61801 6 7 DATE: PLACE: October 29, 2009 Lyle Shields Meeting Room 8 1776 East Washington Street 18 Urbana, IL 61802 TIME: 7:00 p.m. 11 **MEMBERS PRESENT:** Doug Bluhm, Catherine Capel, Thomas Courson, Roger Miller, Melvin 12 Schroeder, Eric Thorsland, Paul Palmgren 13 14 None **MEMBERS ABSENT:** 15 16 **STAFF PRESENT:** Connie Berry, John Hall, J.R. Knight 17 18 **OTHERS PRESENT:** Steve Burdin, Judy Warmbier, Jim Meadows, Gerald Warmbier 28 1. 21 Call to Order 22 23 The meeting was called to order at 7:00 p.m. 24 25 2. Roll Call and Declaration of Quorum 26 27 The roll was called and a quorum declared present. 28 29 3. Correspondence 30 31 None 32 33 4. **Approval of Minutes** 34 35 None 36 37 5. **Continued Public Hearing** 38 39 None

6. New Public Hearings

Case 655-S-09 Petitioner: Judith K. and Gerald T. Warmbier Request: Authorize a Kennel as a Special
Use Permit in the AG-1 Zoning District with a waiver of the standard conditions for: (1) a minimum
separation of 200 feet between outdoor animal exercise areas and any adjacent residential use; and (2)
a minimum side yard of 200 feet and a minimum rear yard of 200 feet. Location: A five acre tract in
the East Half of the Southeast Quarter of the Northwest Quarter of Section 17 of Hensley Township
and commonly known as the house and outbuildings at 2173 CR 750E, Champaign.

Mr. Bluhm informed the audience that this is an Administrative Case and as such the County allows anyone the opportunity to cross examine any witness. He said that at the proper time he will ask for a show of hands for those who would like to cross examine and each person will be called upon. He requested that anyone called to cross examine go to the cross examination microphone to ask any questions. He said that those who desire to cross examine are not required to sign the witness register but are requested to clearly state their name before asking any questions. He noted that no new testimony is to be given during the cross examination. He said that attorneys who have complied with Article 6.5 of the ZBA By-Laws are exempt from cross examination.

Mr. Hall distributed a Supplemental Memorandum dated October 26, 2009, and a three page collection of web pages from www.petfinder.com regarding Prairieland Anti-Cruelty Spay/Neuter Program for the Board's review. He said that the Supplemental Memorandum dated October 26, 2009, contain better copies of the photos which were included in the October 23, 2009, Preliminary Memorandum.

Mr. Hall stated that on April 9, 2007, staff received a complaint about the subject property regarding the presence of approximately 100 cats on the property. He said that during this time staff did notice advertisements for a new dog kennel located between Mahomet and Champaign but did not have a chance to follow up on it. He said that on December 22, 2008, another complaint was received indicating that the property owners were apparently running a kennel on the subject property and staff attempted to contact the

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1 property owners. He said that staff was able to contact the property owners in February and informed them

that a Special Use Permit was required for their operation and the appropriate information and application

was sent out that same day.

Mr. Hall stated that the petitioners submitted their application for a Special Use Permit on August 19, 2009, and after several attempts to get accurate descriptions for the public hearing and staff finally advertised the case. He said that after the advertisement was submitted staff realized that there were some outstanding questions as to if this was a kennel, veterinary facility, or a rescue facility and hopefully that information can be addressed tonight. He said that attached to the October 23, 2009, Preliminary Memorandum is a letter from the closest neighbors, who did not submit the complaint, indicating that they had no complaints and supported the Warmbier's operation. He said that other missing information relates to the amount of remodeling that was necessary to turn an agricultural building into the kennel facility. He said that the

degree of the *Environmental Barriers Act* is based on the dollar value of remodeling as a percentage of the

replacement cost of the structure. He said that it may be that all of the remodeling was made completely

accessible but at this time it is unknown. He said that the accessibility code is not a County ordinance but is

a State of Illinois requirement and the County cannot waive any portion of it. He said that the Zoning

Administrator is responsible for its enforcement therefore it is something that is taken very seriously. He

said that the accessibility information and compliance does not have to be received at tonight's meeting but

it will need to be submitted prior to the issuance of a Zoning Use Permit.

Mr. Hall distributed the color photos submitted by the Petitioners, black and white copies were included in the memorandums, for the Board's review.

Mr. Bluhm asked the Board if there were any questions for Mr. Hall and there were none.

- Mr. Hall noted that somehow staff overlooked sending out notice for this case to nearby landowners and relevant jurisdictions until October 19, 2009, which is less than the 15 days required by the *Zoning Ordinance* so no final action should be taken at this meeting. He said that the subject property is within the one and one-half mile extraterritorial jurisdiction of the Village of Mahomet and the Village has been

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notified but no comments have been received. He said that the Village does not have protest rights, but their comments are welcome. He said that the subject property is also in Hensley Township which has a plan commission. He said that townships with plan commissions do not have protest rights on SUP cases but they are invited to provide comment. He said that Hensley Township has been notified of this request but no

comments have been received to date.

7 Mr. Bluhm called Ms. Judy Warmbier to testify.

Mr. Judy Warmbier, who resides at 2173 CR 750E, Mahomet stated that they are basically a spay/neuter service for low income people. She said that she has been involved in this service for over 30 years with the same veterinarian. She said that they have three different veterinarians that assist with the operation and a surgical room has been set up in the structure that used to be a flower shop. She said that the veterinarians are not at the facility on a daily basis but may only be present once every two weeks, depending upon the schedule and number of animals present at that time and they also utilize clinics. She said that the operation will never get rich working with low income customers and waiting on donations. She said that she lived in Mahomet for 25 years and had four runs where she boarded dogs and kept very busy and she did not realize that she needed approval to operate her program at the current subject property. She said that since she is not very knowledgeable about computers she couldn't think of anything to do to make extra money for the program so she decided that she could board animals and turn 1/3rd of the agricultural building into a kennel. She said that there are nine, 5' x 15' runs attached to the building and there are volunteers who come to the facility during the day to assist her in keeping the facility clean. She noted that heated floors have been installed for the dogs comfort.

Mr. Bluhm asked the Board if there were any questions for Ms. Warmbier.

Mr. Palmgren asked Ms. Warmbier to indicate what other types of animals, other than dogs, are dealt with at the facility.

Ms. Warmbier stated that they service cats and dogs.

2 Mr. Palmgren asked Ms. Warmbier if there were truly 100 cats present at the facility.

3

- 4 Ms. Warmbier stated that she does have approximately 50 cats currently at the facility. She said that she is
- 5 licensed with the State of Illinois and has been for many years without a violation. She said that they do not
- 6 allow the cats to multiply and when a mother and kittens are brought to the facility they spay and neuter the
- 7 kittens when they weigh two pounds. She said that she has found that people will spend more money on
- 8 their dogs, being willing to put down a co-payment, than people with cats and many times the cat owners are
- 9 not even interested in having their cat spayed or neutered. She said that she does not just service Champaign
- 10 County but travels to Newman and Villa Grove to pick up cats.

11

- Mr. Thorsland asked Ms. Warmbier to indicate how many volunteers would be present at the facility at one
- time.

14

- 15 Ms. Warmbier stated that generally there is only one volunteer at the facility at a time unless the hours
- overlap a little. She said that in the early hours of the morning they take animals to other clinics for service
- and when they return they begin cleaning the facility.

18

Mr. Bluhm asked the Board if there were any additional questions for Ms. Warmbier and there were none.

20

21 Mr. Bluhm asked if staff had any questions for Ms. Warmbier.

22

Mr. Hall asked Ms. Warmbier to indicate if there are clinics held at the property.

24

- Ms. Warmbier stated that they spay and neuter the animals at the clinic which is located in the structure that
- used to be a flower shop. She said that there are three different veterinarians who offer their services for
- 27 each clinic.

28

Mr. Hall asked Ms. Warmbier to indicate how often the spay/neuter clinics are held.

28 the one veterinarian that they pay has volunteered at the program for many years and even though she is not

26

27

29

going to get rich from the program they have decided to reimburse her for her services.

Ms. Warmbier stated that they do pay one of the veterinarians and the others are volunteers. She said that

2 Mr. Hall stated that the floor plan of the studio only shows simple rectangles and indicates that one of the

3 rooms is a surgical room.

4

5 Ms. Warmbier stated that surgeries are performed on one side of the studio and surgery preparations are done

6 on the other side.

7

8 Mr. Hall recommended that the Board requests a more detailed floor plan of the studio.

9

Ms. Warmbier stated that the small side, indicated on the floor plan, is the surgical room.

11

Mr. Hall asked Ms. Warmbier if any plumbing was present at the studio.

13

Ms. Warmbier stated yes, there is a toilet and a tub.

15

16 Mr. Hall asked Ms. Warmbier if she also has a facility in Oakwood.

17

18 Ms. Warmbier stated no.

19

20 Mr. Hall informed Ms. Warmbier that the dogs that are boarded at her facility are lucky in that they have

21 heated floors.

22

Ms. Warmbier stated that she is aware that some facilities only offer wood floors and no elevated space for

24 the animals to lie on. She said that if anyone spends much time on concrete they will find that it never gets

warm and she decided that her facility would have heated floors for the animals.

26

25

27 Mr. Hall asked Ms. Warmbier if the kennel building originally consisted of a white rock floor or was there a

28 concrete floor when it was purchased.

29

ZBA DRAFT SUBJECT TO APPROVAL DRAFT 10-29-09 1 Ms. Warmbier stated that a mud type floor existed in the pole barn. She said that she visited many facilities 2 to gain an idea of what she would like to have. She said that she has placed a plastic wallboard on the walls 3 of the facility for easily cleaning and used removable tongue and grooved slats for the runs. 4 5 Mr. Hall asked Ms. Warmbier if the kennel building had a bathroom. 6 7 Ms. Warmbier stated yes. 8 9 Mr. Hall asked Ms. Warmbier if the bathroom was connected to the existing septic system for the home. 10 11 Ms. Warmbier stated yes. 12 13 Mr. Hall asked Ms. Warmbier to indicate the use of the trench beside the dog runs which is indicated in the 14 floor plan of the kennel. 15 16 Ms. Warmbier stated that she picks up the solid waste located in the runs and then she cleans and rinses the 17 runs. 18 19 Mr. Hall asked Ms. Warmbier if the trench drain is connected to the existing septic system for the home. 20 21 Ms. Warmbier stated yes. 22 23 Mr. Hall asked Ms. Warmbier if the existing septic system existed when she purchased the home or did she 24 have a new septic system installed. 25 26 Ms. Warmbier stated that the existing septic system was there when they purchased the property. 27 28 Mr. Bluhm asked Ms. Warmbier to indicate the disposal process for the solid waste.

29

1	ZBA DRAFT SUBJECT TO APPROVAL DRAFT 10-29-09 Ms. Warmbier stated that the solid waste is bagged and placed in garbage cans at the kennel and once full the
2	cans are emptied into a dumpster that is kept besides the studio building and picked up by a disposal service.
3	
4	Mr. Hall stated that Ms. Warmbier indicated that she has flexible hours for pickup and drop-offs. He asked
5	Ms. Warmbier if she prefers that people call before they pickup or drop-off.
6	
7	Ms. Warmbier stated that she does prefer that people call before they pickup or drop-off because she does
8	not want to be at the facility 24 hours per day. She said that when you deal with the public at an operation
9	that is located on your property the public believes that since you are home you are available for any services
10	that they require.
11	
12	Mr. Bluhm asked the Board if there were any additional questions for Ms. Warmbier and there were none.
13	
14	Mr. Bluhm asked the audience if there were any questions for Ms. Warmbier and there were none.
15	
16	Mr. Bluhm called Mr. Steve Burdin to testify.
17	
18	Mr. Burdin stated that he erroneously signed the witness register for this case and is only in attendance to
19	address Addendum Item #8.A.
20	
21	Mr. Bluhm asked the audience if anyone desired to sign the witness register to present testimony regarding
22	Case 655-S-09 and there was no one.
23	
24	Mr. Bluhm closed the witness register for Case 655-S-09.
25	
26	Mr. Hall requested that Ms. Warmbier return to the witness stand for additional questions.
27	
28	Mr. Hall stated that the last two goals of the Anti-Cruelty Program indicate that they desire to educate people
29	in appropriate care and the importance of spaying and neutering their animals. He asked Ms. Warmbier if

1	she does this education when people bring their animals to the facility or are classes conducted at the facility.
2	
3	Ms. Warmbier stated that they do not hold classes at the facility. She said that the education is done on a
4	one-to-one basis. She said that her son has developed a game that can be modified to different age groups
5	educating them about appropriate care of their animals. She said that they deal with so many people at Pet
6	Smart and even though those folks are there to purchase pet supplies they also require education about their
7	pets.
8	
9	Mr. Hall asked Ms. Warmbier to indicate if only one-half of the kennel building is utilized for kennel space
10	and the remaining one-half is used for storage.
11	
12	Ms. Warmbier stated that Mr. Hall was correct. She said that the area for storage is filled with crates, dog
13	traps and other supplies. She said that the storage area has shelving and is organized and all of the items in
14	storage are used for the facility.
15	
16	Mr. Hall asked Ms. Warmbier if she had any exterior signs.
17	
18	Ms. Warmbier stated no. She said that after she received the notice of violation she was afraid to install any
19	signs for fear she would get in further trouble.
20	
21	Mr. Hall informed Ms. Warmbier that if she desired to install a sign in the future then it should be indicated
22	on the site plan along with dimensions and placement. He said that staff can provide the sign requirements
23	for Ms. Warmbier's information.
24	
25	Ms. Warmbier stated that she will consider this information.
26	
27	Mr. Hall stated that Ms. Warmbier's application indicated breeding and he requested that she indicate
28	whether she intends to breed at the facility or did she only indicate such because of the definition of a kennel.
29	

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ZBA

1	ZBA DRAFT SUBJECT TO APPROVAL DRAFT 10-29-09 Ms. Warmbier stated that she did not indicate that she intends to do any breeding at the facility and she finds
2	it hard to believe that she would indicate such. She said that if the application indicates such then it is
3	incorrect. She said that at one time she owned some of the top German Shepherds in the nation and she is
4	not against people that breed quality dogs but she is against the breeding of purebred dogs with the dog
5	across the street just because they can. She said that she has bred a couple of litters of shepherds and she
6	does own a few shepherds but she did not purchase the building for breeding.
7	
8	Mr. Bluhm asked the Board if they had any questions that they would like answered at the next public
9	hearing.
10	
11	Mr. Thorsland asked Mr. Hall if it is important to know the estimated capacity of the existing septic system
12	since three buildings are being dumped into one existing system.
13	
14	Mr. Hall stated that he is not aware of how many bedrooms exist in the home but if it was a four bedroom
15	septic system originally and the only people who currently live in the home are Mr. and Mrs. Warmbier then

Mr. Hall stated that he is not aware of how many bedrooms exist in the home but if it was a four bedroom septic system originally and the only people who currently live in the home are Mr. and Mrs. Warmbier then even with the kennel activities it is possible that the septic system is experiencing less loading than it should have been seeing. He asked if the Board would like staff to clarify if the system is being used at an appropriate level. He said that staff's discussion with Mr. Jeff Blackford, Champaign County Public Health Department, indicated that this is an issue for the Health Department because they are using the existing home's septic system for the kennel. He said that the only way to really know if this will result in a problem is to have the Health Department investigate it or the Board could impose a condition that if a septic system problem develops the owners will need to work with the Health Department to put in an adequately sized appropriate system.

Mr. Thorsland agreed with such a proposed condition. He said that he passes the property many times and he has never seen a backhoe on the property.

Ms. Warmbier stated that there is a backhoe on the property currently because they are trying to remove a concrete step on the property.

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the door must be accessible.

Mr. Hall stated that he does still have concerns regarding accessibility. He said that he will speak with Mr.

and Mrs. Warmbier prior to the next public hearing and review the thresholds in the *Environmental Barriers*

Act. He said that at the most it would involve investigating if the existing door into the kennel was the door

that was there originally and is it accessible. He said that the Environmental Barriers Act may indicate that

1 Ms. Capel asked Mr. Hall if the bathroom must be accessible.

Mr. Hall stated yes, because the bathroom is all brand new. He said that it appears that there has been some significant remodeling done at the property therefore staff will need to make an appointment with Mr. and Mrs. Warmbier to investigate whether or not the bathroom and the rest of the facility are accessible. He said that it is his understanding that the dogs are kept in at night and he would recommend that this be made a condition. He said that the number of animals that can be taken care of is presumably limited by the amount of space that Mr. and Mrs. Warmbier have to do it in and that space is fixed by what is indicated on the plans before the Board. He said that the space cannot be enlarged without obtaining a new special use permit and staff must make sure that Mr. and Mrs. Warmbier understand this information. He said that any expansion would be unauthorized and would be a violation. He said that a classic problem with any special use permit is to make it big enough to accommodate any foreseeable needs but do not make it so big that it is hard to obtain approval. He said that if nine dog runs is all that will be required for the foreseeable future then that is a pretty modest number and the cat room may also be adequate. He said that if any addition space is required for the cat room then it needs to be included on the current plans.

17 Ms. Capel asked if it would be feasible to discuss a limit on the number of cats at the facility at one time.

Mr. Hall stated that it is up to the Board.

21 Ms. Capel stated that it makes sense to limit the number of cats that can be on the property at any given time.

Mr. Hall asked Ms. Warmbier how many cats are normally in the cat room and is there a maximum that shedesires currently.

Mr. Palmgren asked Ms. Warmbier if the cats in the cat room are running free or are they in cages.

Ms. Warmbier stated that she has no plans to add on. She said that some of the cats are caged and some of them run free and they have a 20' x 20' concrete run to the outside that they can access. She said that she

1	ZBA DRAFT SUBJECT TO APPROVAL DRAFT 10-29-09 would desire to only have 10 cats but that is not a feasible number therefore she would imagine that 50 or 60
2	cats would be a good maximum. She said that some of the cats go to Pet Smart every month and it may take
3	a year before they are found a home. She said that she will not say that she does not believe in euthanasia
4	and some groups will tell you that they never euthanize an animal, which in her opinion, is a bunch a
5	bologna. She said that no one likes to euthanize an animal but sometimes they have to do it. She said that it
6	doesn't take very many mother cats to have a litter of kittens and just last night she traveled to Newman
7	where she received six kittens and two adult cats. She said that they are licensed as a shelter and it is hard to
8	be in the animal business and tell someone that the facility is full.
9	
10	Mr. Thorsland asked Ms. Warmbier if the licensing process limits the number of animals that can be at the
11	facility.
12	
13	Ms. Warmbier stated yes. She said that the inspector investigates the facility to make sure that all records
14	are present and current and that all of the animals are as healthy as possible.
15	
16	Mr. Thorsland asked Ms. Warmbier if she is below the limit.
17	
18	Ms. Warmbier stated that she would say that she is probably right at the limit. She said that she has been
19	licensed for years and has also been a licensed investigator therefore she tries to stay within the limits.
20	
21	Mr. Hall asked Ms. Warmbier if the inspections were annual.
22	
23	Ms. Warmbier stated that a facility is not notified by the inspectors as to when they are going to arrive for an
24	inspection. She said that she has had one person constantly complain about the facility and this person has
25	contacted everyone that they can think of to investigate the property and they have with no findings. She
26	said that they are not a big facility and she does not desire to get any bigger.
27	
28	Mr. Bluhm asked Ms. Warmbier if there is a disposal service that picks up the euthanized animals.

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1	Ms. Warmbier stated yes.
2	
3	Ms. Capel stated that she believes that 75 cats would be a reasonable number present at the facility at one
4	time.
5	
6	Ms. Warmbier stated that she agrees with a limit of 75 cats.
7	
8	Mr. Bluhm asked Ms. Warmbier to indicate the fee charged for the adoption of a cat.
9	
10	Ms. Warmbier stated that the fee for a kitten is \$115 and the fee includes spaying or neutering, distemper
11	shots, worming, blood work, etc. She said that a normal veterinary clinic would charge \$200 for everything
12	that the kittens will have had at \$115.
13	
14	Mr. Hall stated that pertinent information was received tonight regarding how big the veterinarian activities
15	are in comparison to the boarding and he is relieved to know that Adopt-a-thons are not being held at the
16	subject property. He said that if the Board does not include a condition about no Adopt-a-thons does the
17	Board have any concerns about any events that might occur on the property. He reminded the Board that this
18	is a use that will be there even when the Warmbiers are gone and they have already put in a significant
19	investment into the property but any conditions that are imposed will constrain any future owners.
20	
21	Mr. Courson asked Mr. Hall if since the Warmbiers live on the subject property could the facility be
22	considered a home based business therefore qualifying for a home occupation permit
23	
24	Mr. Hall stated that the special use becomes the principal use and the dwelling becomes the accessory use.
25	He said that the basic perimeter is that the number of the dog runs, the size of the cat room, the number of
26	cats will be affixed to the special use and any expansion would require new approval. He said that perhaps it
27	is at the point that the Board believes that there will not be any problems with someone buying the kennel
28	and operating it in the same manner with nine dog runs, the same sized cat room and the same number of
29	cats.

He reminded the Board that the December 17th meeting will be held in Meeting Room 2 and it is also a

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1 meeting that the Board has considered cancelling.

2

- 3 Mr. Thorsland moved, seconded by Mr. Palmgren to continue Case 655-S-09, Judith and Gerald
- 4 Warmbier to the December 17, 2009, meeting. The motion carried by voice vote.

5

6 Mr. Bluhm reminded the Board that the December 17th meeting is at 6:30 p.m.

7

8 7. Staff Report

9

10 None

11

- 12
- 13 8. Other Business
- 14 A. Addendum: Request for ELUC approval of Zoning Administrator's request to hire
- professional consultant to review wind farm noise studies.

16

29

17 Mr. Hall distributed a memorandum dated October 29, 2009, which reviews this issue. He said that he 18 wanted to make it clear that this is only for the Board's information and if after reviewing the memorandum 19 the Board desires to take action then it is entirely up to the Board. He said that the distributed memorandum 20 includes two memorandums that were submitted to the Environment and Land Use Committee. He said that 21 the Wind Farm Amendment was adopted in May and at the end of May it occurred to him that staff must get 22 geared up for the first wind farm application. He said that the Board may recall that several times during the 23 wind farm amendment hearings he referred to the County's need for consultants to review the wind farm 24 noise study, the bird and bat mortality study, and the estimate of decommissioning costs. He said that 25 special fees were included in the amendment and after the ZBA made a recommendation ELUC adjusted 26 those fees to a minimum of \$20,000 to make sure that there were sufficient fees for the special studies. He 27 said that the Ordinance identifies the staff of the Planning and Zoning Department as the consultant to the 28 ZBA but staff is of no use to the ZBA on a noise study because staff is not qualified to review a noise study

prepared by a qualified noise consultant. He said that on June 4, 2009, he prepared a memorandum for

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ELUC because he wanted them to be on board with spending the money even though they had authorized the fees. He said that he quickly found out that ELUC was not on board with spending the money even though they authorized the fees and they had concerns about how much the noise study would cost and if qualified consultants could be obtained at an affordable price. He said that since ELUC's response he has decided to mainly focus on the noise consultant because frankly that is one of his biggest concerns. He said that in regard to the bird and bat mortality study he intends to see if he can get researchers from the University of Illinois or the Natural History Survey to assist. He said that in regard to the decommissioning costs he plans to contact other counties to see what they have been using and hopefully obtain a more detailed breakdown of those costs. He noted that he could actually hire a noise consultant without obtaining ELUC's approval and the cost is very modest and well within the authority that he is authorized as a department head although he does really enjoy meeting with the ZBA on every other Thursday night and he would like to continue to do so in the future therefore it is important that ELUC is on board.

Mr. Hall stated that the County is not obligated to hire a qualified consultant and Champaign County could do like virtually every other county in Illinois does and accept the wind farm developer's assertions and let the citizens come in and make their comments at the public hearing and the ZBA can make their recommendation to the County Board. He said that he does not believe that this is the best way and it is not what he would recommend but he is trying to get the Board to determine whether or not a noise consultant is necessary.

Mr. Hall said that he has been working with ELUC since June and the October 13, 2009, memorandum to ELUC discusses the Request for Qualifications for a wind farm noise consultant. He said that in an attempt to get better cost information for ELUC and to address their concerns in not obtaining a consultant from far away he did identify three consultants with offices in the State of Illinois who are all experienced in reviewing wind farm noise submittals and were all willing to work with Champaign County. He said that he contacted many consultants who had no interest in helping a local government review a wind farm noise application because they did not want to lose the chance to do future wind farms and did not want to take the chance in upsetting the wind farm developers. He said that the only way that he could get cost information was to send out a Request for Qualifications, as suggested by the County Administrator, and an

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advertisement was placed. He said that the three firms that he had contacted did submit proposals therefore staff is aware of what the hourly costs are and one of the firms went so far as to submit a Not-to-Exceed Estimate. He said that Page 2 of the October 13, 2009, memorandum explains the next steps in the RFO and these steps will be taken, if ELUC approves, when the first wind farm application is received, expected in November. He said that the RFO steps are as follows: 1. Up to four qualified consultants, three have been identified, will be selected and will be notified by telephone by October 23, 2009; and 2. Upon receipt of the wind farm application, expected in November, the selected consultants will be provided copies of the relevant noise related application materials and asked to provide Not-to-Exceed Cost Estimate for review of the wind farm; and 3. Not to Exceed Cost Estimates must be provided to the Director of Planning and Zoning no later than two weeks after receipt of the application materials; and 4. The County shall designate a Consultant no later than one week after the first regularly scheduled ELUC meeting after receipt of the Not-to-Exceed Estimates; and 5. The designated consultant shall provide a written report within three weeks after designation; and 6. The Consultant will probably be required to appear at least one ZBA meeting for the wind farm.

Mr. Hall stated that if the wind farm application is received by November 9, 2009, the Not-to-Exceed Estimates should be available for review at the regularly scheduled December 14, 2009, ELUC meeting. He said that if the wind farm application is received after November 9th, then the Not-to-Exceed Estimates could not be reviewed with ELUC unless either a Special ELUC meeting would be held or the wind farm review could be delayed. He said that staff is trying to get a Not-to-Exceed estimate and a decision to proceed so that the wind farm hearing that will begin in January will be completed by sometime in February and the ZBA would have gotten the benefit of the review of a noise study by a qualified consultant.

Mr. Hall asked the Board if they felt strongly about having a noise consultant available and if so then the Board should indicate such by a memorandum or letter to ELUC. He said that if the Board strongly does not feel that a noise consultant is necessary then that should also be included in a memorandum or letter to ELUC. He said that if the Board does not feel strongly about a noise consultant either way then he will inform ELUC of that decision also because ELUC should know what the ZBA's preference is regarding this issue. He said that he does not expect the ZBA to side with the Zoning Administrator and this is not what

1	this discussion is about but he would like the Board to decide within their own minds what they would like
2	to have available when they are faced with a wind farm application.
3	
4	Ms. Capel asked Mr. Hall if there was a possibility of a civil suit if a neighbor is unhappy with the sound and
5	there is essentially no backup information.
6	
7	Mr. Hall stated that anyone can sue anyone for anything at any given time and the Board does not need to
8	fear that they need to hire a consultant for that reason because the County may well get sued anyway.
9	
10	Ms. Capel stated that it just seems like having a consultant is part of due diligence as a Board.
11	
12	Mr. Hall stated that it is due diligence on his part to bring it to the Board's attention.
13	
14	Ms. Capel stated that due diligence is part of the permitting process.
15	
16	Mr. Hall stated that certain members of ELUC believe that other counties in Illinois are getting by without
17	spending this money therefore why would Champaign County need to spend it. He said that this is not the
18	view of all of the members of ELUC but it is a strong view. He said that just because the ZBA recommends
19	a consultant does not mean that a consultant will be hired.
20	
21	Mr. Thorsland stated that staff and the Board worked amazingly hard on the Ordinance and a lot of public
22	testimony was taken and considered. He said that after a good Ordinance was put forth ELUC did what they
23	normally do in that they made changes to the Ordinance. He said that there will be people who will be dead
24	set against wind farms and it would be nice for the ZBA to have a noise study to refer to with people who are
25	not as opposed but do have concerns. He said that he has come into possession of a report that was
26	completed on one of the Horizon Wind Farms and there is a table which indicates the octave bands and
27	indicates houses by number and how they would realize the sound created by the wind farm. He said that
28	there may be a point in the hearing where a non-participating landowner indicates that they are concerned
29	about noise and the Board could indicate what type of noise they might experience through the noise study

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ZBA

1	ZBA DRAFT SUBJECT TO APPROVAL DRAFT 10-29-09 provided by the consultant. He said that he believes that having a noise consultant is a good idea and ELUC
2	has provided for fees to pay for those services.
3	
4	Mr. Hall asked Mr. Thorsland if the study that he has in his possession is the study that was submitted on
5	behalf of the wind farm.
6	
7	Mr. Thorsland stated yes. He said that the very first line indicates that the consultant was hired by Horizon
8	to complete the noise study but that does not mean that they would come back with any different results.
9	
10	Mr. Palmgren stated that he would assume that those numbers would have some value but they are site
11	specific and there will be some ambient noise differences.
12	
13	Mr. Thorsland stated that the way that he interprets this study is that the consultants were given the data on
14	the turbine, the location of the turbines and the houses and they know the wind speed and the noise
15	produced. He said that this was completed before the wind farm was constructed so that they could find any
16	problems before any would arise.
17	
18	Mr. Palmgren stated that a 500 foot tower with a 1,200 foot separation distance from a non-participating
19	landowner would create some noise. He said that he supports the hiring of a noise consultant.
20	
21	Mr. Bluhm stated that he also supports the hiring of a noise consultant. He said that Mr. Hall has drafted a
22	letter indicating the Board's support of hiring a wind farm noise consultant.
23	
24	Mr. Hall distributed the draft letter indicating the ZBA's support of the Zoning Administrator's request to
25	hire a wind farm noise consultant for the Board's review and approval.
26	
27	Mr. Schroeder stated that he supports the request.
28	
29	Mr. Bluhm suggested that the second sentence in the letter should indicate that the ZBA strongly supports

ZBA DRAFT SUBJECT TO APPROVAL DRAFT 10-29-09 the Zoning Administrator's request to hire a qualified wind farm noise consultant to review the wind farm noise submittals in order to verify compliance with the *Zoning Ordinance* requirements. Mr. Bluhm called Mr. Steve Burdin to testify.

Mr. Steve Burdin, who resides at 2527 CR 450E, Mahomet stated that he is a lot happier tonight than he was two nights ago when he was sitting at the last ELUC meeting and they struck this item from the agenda. He said that he does not know the experience of all of the people who will review the reports that come from the wind farm developers but considering how people might not be inclined to believe what the developers say it would be prudent to have independent evaluations of the submitted reports. He said that these will be models and these are number crunch results that the developers will submit that will indicate how these things will be once they are erected. He said that it certainly doesn't preclude someone from saying at a later date that the wind farm is too noisy and sue or request an evaluation however it appears that having an independent evaluation of what is submitted by the developer is entirely sensible. He said this service will not come cheap but he believes that it is a worth while expenditure and given that the fees were raised by ELUC they should cough up some of the money and hire the consultants. He suggested that the ZBA recommend support of the Zoning Administrator's request to hire a wind farm noise consultant.

Mr. Bluhm asked the Board if there were any recommended changes to Mr. Hall's drafted letter and there
 were no more.

Mr. Palmgren moved, seconded by Mr. Miller to approve Mr. Hall's drafted letter as amended and forward the letter to ELUC indicating support of the Zoning Administrator's request to hire a wind farm noise consultant. The motion carried by voice vote.

Mr. Hall thanked the Board and indicated that this will be an agenda item for the November 9, 2009, ELUC meeting.

Mr. Thorsland stated that the Board previously discussed a different process for public testimony when the

1	wind farm special use permit application hearings begin. He said that it was kicked around that the publication
2	hearings would be held on consecutive nights and when the witness register was closed the rest of th
3	meetings could be used for the Board to work on the case. He said that this would eliminate repetitive
4	testimony and the Board may want to consider such a process.
5	
6	Mr. Hall asked Mr. Thorsland if he is recommending two consecutive meetings for public testimony only
7	
8	Mr. Thorsland stated yes.
9	
10	Mr. Hall stated that this may be a good way to get the first mass of testimony but the Board will not be able
11	to go through the rest of the hearing process without receiving additional public testimony. He said that each
12	meeting will have to have a window for testimony at every meeting but the two consecutive meetings should
13	certainly take care of most of the public input.
14	
15	Mr. Thorsland stated that when the Board worked on the text amendment public testimony provided a
16	measure of the framework of what the Board did with the ordinance. He said that if the public testimony
17	could be received early then the Board could ponder upon that testimony while they worked through the
18	case.
19	
20	Mr. Hall stated that with the new schedule of County Board meeting with the new Committee of the Whole
21	approach it should be much easier for the ZBA to reserve this meeting room. He said that the Board could
22	tentatively reserve the meeting room but sooner or later the Board will have to go on record as holding a
23	special meeting and that only makes sense when the Board knows when those hearings will take place and to
24	date that information is unknown.
25	
26	Mr. Thorsland stated that he is only offering this option as a consideration.
27	
28	Mr. Bluhm asked Mr. Hall if he believes that the Lyle Shields Meeting Room will be large enough to hold
29	any anticipated crowd for the wind farm public hearings.

1

Mr. Hall stated that he has no reason to believe that the Lyle Shields Meeting Room will not be large enough to hold any anticipated crowds for the wind farm public hearings. He said that if the Board believes that it will not be large enough then other arrangements must be attempted but each time that he has tried to schedule the Brookens Gymnasium for meetings it has not been available. He said the meeting room had ample room for the text amendment hearings but he has no idea as to what kind of turnout might occur for

7 the first wind farm public hearing.

8

9 Mr. Thorsland stated that he assumes that people that are participating will not be as interested in attending10 as those who are not participating and oppose the wind farms.

11

Mr. Bluhm asked Mr. Hall if a five minute limit could be placed on individual public testimony. He said that this limitation was enforced at the CZR public hearings.

14

Mr. Hall stated that the State's Attorney is not comfortable with such a limitation but the Board can be rigorous in not accepting repetitive or rambling testimony but if someone is making points then the Board must allow that testimony to be heard in its entirety.

18

- Mr. Schroeder stated that the meeting room has a lot of unused seats and not everyone needs to be seated.
- He said that it appears that the meeting room would accommodate over 150 people.

21

Mr. Hall stated that the capacity of the room is approximately 150 people.

23

24 Mr. Bluhm stated that chairs have been provided during previous hearings.

25

Mr. Schroeder asked Mr. Hall if Meeting Room 2 has a sound system that could be utilized for overflow attendees.

28

29 Mr. Hall stated that Meeting Room 2 does have a sound system but the State's Attorney is not comfortable

ZBA DRAFT SUBJECT TO APPROVAL DRAFT 10-29-09 1 with people having to sit in another room where the public hearing is being conducted. 2 3 Mr. Bluhm stated that an application has to be received first and it is his understanding that the township has 4 not spoken to the wind farm developer regarding a road agreement. 5 6 Mr. Hall stated that he has spoken with the consultant and they are working on the proposed wind farm. He 7 said that it is his understanding that the wind developer intends to submit their application to Vermilion 8 County first and to date that application has not been submitted. 9 10 Ms. Capel asked Mr. Hall if Vermilion County had a wind farm ordinance. 11 12 Mr. Hall stated yes. He said that Vermilion County does not have a zoning ordinance but they do have a 13 wind farm ordinance. 14 15 Mr. Hall stated that the Board could rearrange the agenda and hold the public participation portion of the 16 meeting at the end but it must be included at each meeting. 17 18 Ms. Capel stated that during the text amendment the amount of public testimony that was received was 19 overwhelming therefore leaving very little time at the end of the meeting for the Board, who was tired at that 20 point, to work on the case. 21 Mr. Hall noted that the November 12th public hearing will begin at 6:30 p.m. He said that staff will place the 22 23 classic pink sticker on the front of the packet and the agenda indicating such. 24 25 Mr. Courson asked Mr. Hall if the Board could receive their information in digital form rather than in the 26 form of a mailing through the postal service. 27

Board that the packet is posted on the County website.

Mr. Hall indicated that staff could send the entire packet to the Board members by e-mail and informed the

28

29

1	ZBA DRAFI SUBJECT TO APPROVAL DRAFT 10-29-09
2	Ms. Capel stated that she does not need a mailing packet and an e-mail to each Board member indicating that
3	the packet is available on the County website would be sufficient.
4	
5	Mr. Thorsland stated that he picks his packet up at the office on mailing days but he may be interested in
6	receiving his packet digitally in the future.
7	
8	Mr. Palmgren stated that he still enjoys receiving a hard copy of the packet and he would be more than happy
9	to pick up the packet on each mailing day. He said that he would call to make sure that the packet is ready
10	and if staff does not hear from him then please place the packet in the mail.
11	
12	
13	9. Audience Participation with respect to matters other than cases pending before the Board
14	
15	None
16	
17	10. Adjournment
18	
19	The meeting adjourned at 8:27 p.m.
20	
21	Respectfully submitted
22	
23	
24	
25	
26	Secretary of Zoning Board of Appeals
27	
28	

CASE NO. 634-AT-08 Part B

SUPPLEMENTAL MEMORANDUM

November 6, 2009

Champuign County Department of



Brookens Administrative Center 1776 E. Washington Street Urbana, Illinois 61802

(217) 384-3708 FAX (217) 328-2426 Petitioner: Zoning Administrator

Prepared by: John Hall JR Knight

Zoning Administrator Associate Planner

Request: Amend the Champaign County Zoning Ordinance as follows:

- 1. Add definitions for "SMALL WIND TURBINE TOWER" and "BIG WIND TURBINE TOWER", and revise the definition for "WIND FARM."
- 2. Amend subsection 4.2.1. to allow BIG WIND TURBINE TOWER as a second principal use on lots in the AG-1 and AG-2 Zoning Districts.
- 3. Amend paragraph 4.3.1E. to add new height regulations that apply to "SMALL WIND TURBINE TOWER" and "BIG WIND TURBINE TOWER".
- 4. In Section 5.2 replace "wind turbine" with "BIG WIND TURBINE TOWER".
- 5. In Section 6.1.3 add new standard conditions for "BIG WIND TURBINE TOWER" that are similar to the standard conditions for WIND FARM.
- 6. Add new subsection 7.7 making "SMALL WIND TURBINE TOWER" an authorized accessory use by-right in all zoning districts and add requirements including but not limited to:
 - a. the turbine must be located more than one and one half miles from the nearest municipal zoning jurisdiction; and
 - b. minimum required yards that are the same as for other accessory structures in the district provided that the overall height is not more than 100 feet; and
 - c. an overall height limit of 200 feet provided that the separation from the nearest property line is at least the same as the overall height and authorize private waivers of the separation by adjacent neighbors; and
 - d. a limit of no more than two turbine towers per lot; and
 - e. allowable noise limits; and
 - f. a requirement for engineer certification; and
 - g. a requirement to notify the electrical power provider if interconnected to the electrical grid; and
 - h. a requirement for no interference with neighboring TV, radio, or cell phone reception; and
 - i. a requirement for the removal of inoperable wind turbines.
- 7. In Section 9.3.1 add fees for SMALL WIND TURBINE TOWER and BIG WIND TURBINE TOWER.
- 8. In Section 9.3.3 add application fees for BIG WIND TURBINE TOWER Special Use Permit.

STATUS

This case was continued from the October 15, 2009, meeting. Draft minutes of that meeting are included separately.

Revisions have been made to the proposed amendment following the direction from the last meeting. Staff also recommends a prohibition on variances for rotor diameters larger than 75 feet for small wind turbine towers. See the brief discussion below and in Attachment I.

Attachment J is a table that compares the three types of wind turbine towers and their respective requirements.

All parts of the proposed amendment (including those with no revisions) are attached. A Revised Draft Finding of Fact is included separately. The case is ready for a final determination.

REVISIONS TO THE PROPOSED AMENDMENT

Numerous small changes have been made to the amendment and are indicated throughout. The most significant changes to the amendment since the last meeting are as follows:

- Clarification of definitions. The definitions for "small wind turbine tower" and "big wind turbine tower" have been revised following the suggestions of Steve Burdin at the last meeting. The revisions have eliminated ambiguities and appear to be much more accurate than the previous definitions. See Attachment A.
- Revised maximum height limits. At the last meeting the Board determined to limit the by-right height of small wind turbine towers to 150 feet and require a variance for anything more than 150 feet tall. The revisions do that. See Attachments C and F.
- Prohibition of variance for small wind turbine tower rotor diameter greater than 75 feet. Some limit on the amount of variance for small wind turbine tower rotor diameter is warranted in order to prevent a loophole in the small wind regulations big enough for a big wind turbine tower. Prohibiting variances for rotor diameters larger than 75 feet seems reasonable since 75 feet is larger than any rotor diameter reviewed in the public hearing for any 100 kilowatt or less wind turbine.
- Clarified relationship of the Zoning Ordinance standard for electromagnetic interference versus FCC compliance. Paragraph 7.7 P. which limits electromagnetic interference has been clarified to make it clear that the standards only relate to compliance with the Zoning Ordinance. See Attachment F.

COMPARISON TABLE

Attachment J is a table that compares the three types of wind turbine towers and their respective requirements.

ATTACHMENTS

- A Revised Changes To Section 3
- B Proposed Changes to Par. 4.2.1 C.
- C Proposed Changes To Subpar. 4.3.1 E
- D Proposed Changes To Subsection 5.2
- E Proposed Addition to Subsection 6.1.3
- F Revised New Subsection 7.7
- G Proposed Changes to Par. 9.3.1 D.
- H Proposed Changes to Par. 9.3.3 B.
- I Proposed Changes to Par. 9.1.9 B.
- J Table Comparing Types of Wind Turbine Towers And The Requirements for Each
- K Draft Minutes of October 15, 2009 (included separately)
- L Draft Finding of Fact (included separately)

Attachment A. Case 634-AT-08 Part B REVISED Draft Proposed Changes To Section 3 NOVEMBER 6, 2009

1. Revise the following in Section 3.0 Definitions:

(Note: strike out and underlining indicate changes from the current Ordinance)

WIND FARM: A unified development of WIND FARM TOWERS and all other necessary components including cabling, transformers, a common switching station, and maintenance and management facilities which are intended to produce electricity by conversion of wind energy and to deliver the electricity to the power grid and having a name plat capacity of more than 10 megawatts (MW). A WIND FARM is under a common ownership and operating control even though the individual WIND FARM TOWERS may be located on land that is leased from many different landowners. A WIND TURBINE TOWER or WIND TURBINE TOWERS that do not conform to the definitions of either a SMALL WIND TURBINE TOWER or a BIG WIND TURBINE TOWER shall by definition be considered a WIND FARM and may only be authorized as a WIND FARM.

WIND FARM TOWER: A wind turbine nacelle and rotor and the supporting tower structure that are part of a WIND FARM development and intended to produce electricity for the power grid or any WIND TURBINE TOWER that does not conform to the definitions of either a SMALL WIND TURBINE TOWER or a BIG WIND TURBINE TOWER.

2. Add the following in Section 3.0 Definitions (revisions from last memo are indicated):

(Note: strike out and underlining indicate changes from the previous version)

WIND TURBINE TOWER, BIG: A wind turbine nacelle and rotor and the supporting tower structure and associated control or conversion electronics that is owned (or leased to be owned) by the owner of land on which it is located for the purpose of producing electrical energy that shall primarily to be used onsite by another principal use on the same property or that may also, to a much lesser extent, be sold to a utility provided that any energy not used onsite may be sold to the electric power provider and which is not more than 200 500 feet in overall height measured to the tip of the highest blade and that is not connected to or part of a system of more than two other BIG WIND TURBINE TOWERS.

WIND TURBINE TOWER, SMALL: A wind turbine nacelle and rotor and the supporting tower structure and associated control or conversion electronics that is owned (or leased to be owned) by the owner of land on which it is located and which produces electrical energy primarily to be used onsite by the principal use on the same property or that may also, to a much lesser extent, be sold to a utility provided that any energy not used onsite may be sold to the electric power provider and which is not more than 200 feet in overall height measured to the tip of the highest blade and with a rotor diameter of not more than 75 feet.

Attachment B. Case 634-AT-08 Part B Draft Proposed Changes To Subpar. 4.2.1 C. NOVEMBER 6, 2009

1. Add new subparagraph 4.2.1 C.3. as follows:

23. Up to three BIG WIND TURBINE TOWERS may be authorized as a second PRINCIPAL USE on a LOT as a Special Use Permit in the AG-1 Agriculture and AG-2 Agriculture DISTRICTS.

Attachment C. Case 634-AT-08 Part B Draft Proposed Changes To Subpar. 4.3.1 E NOVEMBER 6, 2009

1. Revise subparagraph 4.3.1 E. as follows:

(Note: strike out and underlining indicate changes from the current Ordinance)

- E. Any tower (including antenna) over 100 feet in HEIGHT shall be subject to the SPECIAL USE requirements in the DISTRICT in which it is located except for the following:
 - (1) any tower that meets the requirements of Section 4.3.1 C.; or
 - (2) any TEST WIND TOWER that does not exceed 200 feet in HEIGHT; or
 - (3) any WIND FARM TOWER except as HEIGHT regulations are required as a standard condition in Section 6.1.4.; or
 - (4) any SMALL WIND TURBINE TOWER that is no more than 200 feet in HEIGHT (measured to the tip of the highest blade) provided that it meets the following:
 - (a) the required YARD and separations from property lines based on HEIGHT in paragraph 7.7 B.; and
 - (b) provided that it complies with Footnote 11 in Section 5.3.

Attachment D. Case 634-AT-08 Part B REVISED Draft Proposed Changes To Section 5.2 OCTOBER 9, 2009

- 1. In Section 5.2 replace "Wind Turbine (1-3 wind turbines)" with "BIG WIND TURBINE TOWER (1-3 BIG WIND TURBINE TOWERS)".
- 2. Add footnote 17 to the indication for special use permit in all Districts where BIG WIND TURBINE TOWER (1-3 BIG WIND TURBINE TOWERS) is authorized (AG-1, AG-2, I-1, and I-2).
- 3. Add the following footnote 17 in Section 5.2
 - 17. A BIG WIND TURBINE TOWER must be located on the same property as another principal use for the purpose of producing electrical energy that shall primarily be used onsite by that other principal use.

Attachment E. REVISED Draft Proposed Addition to Subsection 6.1.3 OCTOBER 9, 2009

1. Add "BIG WIND TURBINE TOWER" to Subsection 6.1.3 and indicate the following standard conditions:

(Note: strike out and underlining indicate changes from the previous version)

- 1. No minimum fencing is required.
- 2. The Minimum lot size is the same as applicable in the zoning DISTRICT.
- 3. The Maximum HEIGHT is the same as par. 6.1.4 D. 6.
- 4. The minimum required YARDS are the following:
 - (a) The front setback is the same as par. 6.1.4 C.5.
 - (b) The SIDE and REAR YARDS are the same as par. 6.1.4 C.6.
- 5. Add the following explanatory provisions:
 - (a) No BIG WIND TURBINE shall be located in the following areas:
 - (1) Less than one-and-one-half miles from an incorporated municipality that has a zoning ordinance.
 - (2) In any area leased for underground gas storage or under easement for same, unless the lease or easement requires that gas injection wells and other above-ground appurtenances be located in conformance with paragraph 6.1.4 C.9.
 - (3) Less than one mile from the CR Conservation Recreation Zoning District.
 - (b) The special use permit for a BIG WIND TURBINE TOWER shall include all land area within 1,320 feet of a public STREET right of way that is also within 1,000 feet from the base of each BIG WIND TURBINE TOWER except that in the case of BIG WIND TURBINE TOWER in compliance with the minimum STREET separation required by paragraph 6.1.4 C. 5. in which case land on the other side of the public STREET right of way does not have to be included in the SPECIAL USE Permit.
 - (c) The requirements of paragraphs 6.1.4 C. through 6.1.4 S. with the exception of paragraphs 6.1.4 E., L., and Q. shall apply.
 - (d) For purposes of applying paragraphs 6.1.4 C. through 6.1.4 S. to a BIG WIND TURBINE TOWER, PARTICIPATING DWELLING or PARTICPATING PRINCIPAL USE shall mean a DWELLING or PRINCIPAL USE that is on the same land and under the same ownership as the BIG WIND TURBINE TOWER and NON- PARTICIPATING DWELLING or NON- PARTICPATING PRINCIPAL USE shall mean a DWELLING or PRINCIPAL USE that is not on the same land as the BIG WIND TURBINE TOWER and is under different ownership than the BIG WIND TURBINE TOWER.

1. Add the following new subsection 7.7:

7.7 SMALL WIND TURBINE TOWER

A SMALL WIND TURBINE TOWER shall be allowed as an ACCESSORY USE by Zoning Use Permit in all DISTRICTS as follows:

- A. No SMALL WIND TURBINE TOWER shall be located less than one-and-one-half miles from an incorporated municipality that has a zoning ordinance.
- B. The maximum allowable HEIGHT of a SMALL WIND TURBINE TOWER (measured to the tip of the highest rotor blade) shall be the smaller of the following dimensions:
 - 1. A dimension equal to 90% of the minimum distance from the base of the proposed SMALL WIND TURBINE TOWER to the nearest DWELLING, PRINCIPAL STRUCTURE, or PRINCIPAL BUILDING under different ownership; or
 - 2. A dimension equal to 90% of the minimum distance from the base of the proposed SMALL WIND TURBINE TOWER to the nearest third party above-ground electrical transmission lines, communication towers, railroad right of way, or public street right of way. This limit on height may be reduced upon submission of a PRIVATE WAIVER signed by the owner of said electrical transmission line or communication tower or the relevant railroad or public street maintenance jurisdiction. The PRIVATE WAIVER must specify the agreed minimum separation and maximum height; or
 - 3. A dimension that for any SMALL WIND TURBINE TOWER that must be assembled on the ground and tilted vertically into final position, is no greater than the maximum length that can fit within the LOT LINES prior to being tilted into final position, as measured from the actual point of tilt up; or
 - 4. Up to 150 feet; provided that on any LOT with less than three acres of LOT AREA; or
 - 5. More than 150 feet and up to 200 feet on any LOT with at least three acres of LOT AREA and provided that the SMALL WIND TURBINE TOWER is no closer than the following minimum distances from any airport or heliport that is either available for public use and listed in the Federal Aviation Administration's Airport (FAA) Directory of the current Airman's Information Manual or that is under construction and on file with the FAA and indicated for public use:

- (a) no closer than 4 miles to the nearest point of the nearest runway of any airport; and
- (b) no closer than 5,000 feet to the nearest point of the nearest landing and takeoff area of any heliport.

(Note: At the October 15, 2009, meeting the Board decided that any small wind turbine tower between 150 feet and 200 feet tall should be a variance. The revised Sec. 4.3.1 specifies that a small wind turbine tower more than 200 feet tall requires a special use permit.)

- 65. The above limits on maximum allowable height notwithstanding, the maximum HEIGHT of a SMALL WIND TURBINE TOWER on a LOT in a subdivision shall not exceed 75% of the minimum required AVERAGE LOT WIDTH when any adjacent and bordering <u>subdivision</u> LOT is vacant; and also provided that
- 6. A SMALL WIND TURBINE TOWER taller than 150 feet must be authorized by VARIANCE.

(Note: Discussion by the Board at the July 16, October 15, 2009, meeting indicated that the Board was inclined to allow the 200 150 feet maximum height for any turbine. Note that the minimum required separation to power lines and other third-party facilities has been relocated to this section to reduce the risk of error in height determinations. Paragraph has been added to limit heights greater than 150 feet to properties that are a minimum of three acres in area. Paragraph 5 has been added to minimizes conflict between wind turbines and home construction in new subdivisions. Paragraph 6 has been added to clarify that a small wind turbine tower taller than 150 feet must be authorized by variance.)

- C. The maximum allowable rotor diameter for a SMALL WIND TURBINE TOWER shall be as follows:
 - 1. 15 feet on a LOT with less than one acre LOT AREA.
 - 2. 24 feet on a LOT with one acre or more of LOT AREA.

(Note: These heights are the same height limits that apply to residential accessory structures that are found in Footnote 4 of Section 5.3 of the Zoning Ordinance)

- 3. Rotor diameter greater than 24 feet may be authorized as follows:
 - (a) when the separation distance from the SMALL WIND TURBINE TOWER to the nearest DWELLING under other ownership is a minimum of 8.3 times the rotor diameter, up to a maximum diameter of 75 feet; and
 - (b) when the LOT AREA is three acres or larger.

4. VARIANCES for a maximum SMALL WIND TURBINE TOWER rotor diameter larger than 75 feet shall be prohibited.

(Note: The height limits for non-residential accessory structures are the same as for principal structures and varies by district between 35 feet and 150 feet and is 75 feet for the Light Industrial District. This revision no longer distinguishes between residential and non-residential turbines and requires a greater separation distance for any rotor larger than 24 feet in diameter and requires at least three acres of lot area. The requirement that rotors larger than 24 feet require a separation distance to the nearest dwelling (under other ownership) that is 8.3 times the rotor diameter is intended to minimize nuisance effects (including shadow flicker) from the larger rotors. A 200 feet separation is 8.3 times as long as a 24 feet diameter rotor. The American Wind Energy Association asserts that smaller rotors spin much faster than wind farm rotors and thus the flicker effect is less noticeable. However, even with no shadow flicker there is reason enough to require a greater separation from neighboring dwellings for larger rotors. With this revision even a residential turbine could have a rotor diameter of 75 feet if there is no other dwelling closer than 622.5 feet. Wind farm turbines generally have rotors that are not over 330 feet in diameter. The 1,200 feet separation required by the Zoning Ordinance is only about 3.6 times the diameter of 330 feet rotor but wind farms also have to mitigate shadow flicker if there will be more than 30 hours annually. The prohibition on variances for rotor diameter is to make sure there is no loophole in the regulations that would allow what is essentially a big wind turbine tower from being authorized either by variance rather than by special use permit or in a district where it could not be authorized by special use permit.)

- D. A SMALL WIND TURBINE TOWER (including any guy cables and anchors) shall be allowed within any YARD in all DISTRICTS subject to the following:
 - 1. The provisions of Section 7.2 that establish the minimum YARD requirements for ACCESSORY STRUCTURES; and
 - 2. A required separation distance to the nearest PRINCIPAL STRUCTURE or PRINCIPAL BUILDING under different ownership that is equal to at least a distance of 1.11 times the overall HEIGHT (measured to the tip of the highest rotor blade) of the SMALL WIND TURBINE TOWER.
 - 3. The blades of the SMALL WIND TURBINE TOWER shall not cross the property line.
- E. The number of SMALL WIND TURBINE TOWERS that shall be allowed per LOT is as follows:
 - 1. Only one SMALL WIND TURBINE TOWER shall be authorized on a lot with less than three acres of LOT AREA.
 - 2. No more than two SMALL WIND TURBINE TOWERS shall be authorized on a lot with three acres or more LOT AREA provided however that no more than one non-residential ACCESSORY SMALL WIND TURBINE TOWER shall be authorized less than 1,200 feet from the

nearest DWELLING that is under different ownership and conforming to USE.

- 3. One roof-mounted or wall-mounted wind turbine shall be authorized in addition to the above limits. The roof-mounted or wall-mounted wind turbine shall not be more than 15 feet higher than any other portion of the STRUCTURE on which it is mounted. Roof and wall-mounted wind turbines are not required to meet the requirements of paragraphs 7.7 A. through F. but shall meet the requirements of paragraphs 7.7 P. through 7.7 Q.
- F. The noise level from the SMALL WIND TURBINE TOWER shall not exceed the regulatory standards set by the Illinois Pollution Control Board. The SMALL WIND TURBINE TOWER shall be considered a Class C land use for the purposes of the Illinois Pollution Control Board regulations. This maximum noise level shall apply at the property line regardless of the number of SMALL WIND TURBINE TOWERS.
- G. The SMALL WIND TURBINE TOWER shall have an automatic over speed control to render the system inoperable when winds are blowing in excess of the speeds for which the system is designed and a manually operable method to render the system inoperable in the event of a structural or mechanical failure of any part of the system.
- H. SMALL WIND TURBINE TOWERS shall comply with all applicable regulations of the FAA. Evidence of FAA approval shall be required for any SMALL WIND TURBINE TOWER within four miles of an airport.
- I. No illumination of the SMALL WIND TURBINE TOWER shall be allowed unless required by the Federal Aviation Administration.
- J. The SMALL WIND TURBINE TOWER shall either be the color supplied by the manufacturer or else painted white or gray or another non-reflective, unobtrusive color that shall be specified in the Zoning Use Permit application.
- K. There shall be a minimum clearance of 15 feet between the ground and the lowest arc of the rotor blades for a SMALL WIND TURBINE TOWER.
- L. Any SMALL WIND TURBINE TOWER in a Residential Zoning District must be protected from unauthorized climbing by any of the following means:
 - removal of climbing rungs, if possible, to a height of 12 feet, provided that the SMALL WIND TURBINE TOWER is unclimbable without the rungs; or

- Devices such as fences at least six feet high with locking portals or anticlimbing devices 12 feet vertically from the base of the SMALL WIND TURBINE TOWER.
- M. The SMALL WIND TURBINE TOWER shall not cause any significant electromagnetic interference with any radio, television, microwave communication, or satellite navigation on other properties and compliance with the following shall be deemed to be full compliance for the purposes of this Ordinance:
 - 1. All wind turbines shall comply with the Federal Communication Commission (FCC) requirements for electromagnetic interference including FCC Part 15. The applicant shall provide a copy of the wind turbine manufacturer's certification of compliance with FCC requirements with the Zoning Use Permit Application.
 - 2. Metal blades shall not be used.

(Note: Non-FCC compliant wind turbines will require a variance.)

N. In the event of destruction by any means, wind turbine towers and wind turbines located more than one-and-one-half miles from an incorporated municipality that has a zoning ordinance and that were duly authorized by an approved Zoning Use Permit prior to {effective date} shall be allowed to be reconstructed to the original dimensions and in the original location pursuant to a new Zoning Use Permit provided that the reconstruction complies with all manufacturer's safety recommendations and requirements.

(Note: This change is intended to ensure that before a new turbine is mounted to an existing pole, the applicant must be able to prove that the pole is adequate for the turbine just as would be necessary for any wholly new assembly.)

- O. If a wind turbine is derelict for six consecutive months the owner shall be notified that they must, within six months of receiving the notice, restore their system to operating condition. If the owner(s) fails to restore their system to operating condition within the six-month time frame, then the owner shall be required, at his expense, to remove the wind turbine from the tower and also remove the tower if it has guy cables, for safety reasons. If the owner fails to remove the wind turbine within one month the Zoning Administrator shall send a notice that the wind turbine is in violation of the Zoning Ordinance and subject to a daily fine as provided for in Section 10.
- P. The Zoning Use Permit application for the SMALL WIND TURBINE TOWER shall include the following:
 - 1. A copy of the manufacturers standard drawings of the wind turbine structure and stamped engineering drawings of the tower, base, footings, and/ or foundations as provided by the manufacturer sufficient to prove that

the wind turbine tower is safe for the use intended. Wet stamps shall not be required.

- 2. Evidence must be given that the utility company has been informed of the customer's intent to install an interconnected customer-owned generator. Off-grid systems shall be exempt from this requirement.
- 3. Such evidence and documentation as required to verify that the SMALL WIND TURBINE TOWER meets all other Zoning Ordinance requirements.

Attachment G. Case 634-AT-08 Part B Draft Proposed Changes To Subpar. 9.3.1 D. OCTOBER 9, 2009

1. Revise subparagraph 9.3.1 D. H.as follows:

H. WIND FARM TOWER or BIG WIND TURBINE TOWER\$4500

2. Add new subparagraph 9.3.1 D. I. as follows:

I.	SMALL	WIND	TURBINE	TOWER

1. Not over 50 feet in HEIGHT.....\$100

2. greater than 50 feet in HEIGHT......\$100 plus \$80 for each

20 feet in excess of 50 feet in height (round to next highest 20 feet increment)

(Note: The proposed fees are essentially a doubling of the current fees for towers. Under the current fee structure, tower fees begin at \$33 for up to 50 feet in height and \$40 is added per each 20 feet in excess of 50 feet in height so that the following heights would require the following fees (the fees in parentheses are the proposed fees for small wind turbine towers of the same height; does not include \$33 compliance certificate and reflects current practice in rounding to next highest 20 feet increment):

Not over 50 feet in HEIGHT	\$ 33 (\$100)
100 feet in HEIGHT	\$ 133 <u>153</u> (\$ 300 340)
150 feet in HEIGHT	\$233 (\$500)
200 feet in HEIGHT	\$333(\$700)

The U.S. Department of Energy handout <u>Small Wind Electric Systems</u> (undated) that was included with the July 10, 1999, Supplemental Memorandum stated that small turbines cost anywhere from \$3,000 to \$50,000 installed depending upon size and other considerations and that a typical 10kW home wind system costs approximately \$32,000. Thus, the erected cost of a wind turbine and tower will generally far exceed the cost of a two-car garage and, in terms of the work required for the Department in permitting a turbine, will take much more time than a simple garage. Fees that are double the current fees for towers are clearly justified.)

Attachment H. Case 634-AT-08 Part B Draft Proposed Changes To Subpar. 9.3.3 OCTOBER 9, 2009

1. Revise subparagraph 9.3.3 as follows:

9.3.3 Zoning Case Filing Fees

A. General Provisions

- 1. No zoning case filing shall be accepted until the filing fee has been paid.
- 2. No zoning case filing fee shall be waived unless the Zoning Administrator determines that the petition is the only means reasonably available to bring a property into compliance with the provisions of this ordinance and the non-compliance is due solely to staff error.
- 3. No zoning case filing fee shall be refunded after required legal notice has been made by mail or publication unless the Zoning Administrator determines such filing to have been based solely upon staff error.
- 4. No amendment to any petition which requires new legal notice shall be considered until an amended petition fee has been received unless the Zoning Administrator determines such amendment to be required due solely to staff error.
- 5. The fee for SPECIAL USE permits shall be determined based on the larger of the following (except for County Board WIND FARM Special Use Permits):
 - a. the area of farmland taken out of production as a result of the SPECIAL USE; or
 - b. when farmland will not be taken out of production as a result of the SPECIAL USE, the land area taken up by the existing STRUCTURES and all proposed CONSTRUCTION proposed in the SPECIAL USE application.
- 6. When some combination of VARIANCE, SPECIAL USE and Map Amendment cases is required simultaneously for the same property, the total filing fee shall include the following (except for County Board WIND FARM Special Use Permits):
 - a. The standard fee for the most expensive individual zoning case; and
 - b. one-half of the standard fee for any other required VARIANCE, SPECIAL USE, or Map Amendment provided that
 - c. no additional fees shall be included for multiple zoning cases of the same type that can be advertised in the same legal advertisement.

Attachment H. Case 634-AT-08 Part B Draft Proposed Changes To Subpar. 9.3.3 OCTOBER 9, 2009

B.	Fees 1.	VARIANCES.
		a. ADMINISTRATIVE VARIANCES \$100
		b. Minor or Major VARIANCES \$200
	2	SPECIAL USE permits and Map Amendments (except for County Board WIND FARM Special Use Permit and a map amendment to the WIND FARM Overlay Zoning District)
		a. Two acres or less and Base Fee for larger areas \$400
		 b. More than two acres but no more than 12 acres add \$40 per acre to Base Fee for each acre over two acres c. More than 12 acres add \$10 per acre for each acre over 12 acres and add to fees in a. and b. above
	3.	Appeals and Interpretations\$200
	4.	Change of Nonconforming Use\$100
	5.	Amendment to Petitions (requiring new legal notice) \$100
	6.	County Board WIND FARM Special Use Permit
	7	BIG WIND TURBINE TOWER Special Use Permit

Attachment I. Case 634-AT-08 Part B Draft Proposed Changes To Par. 9.1.9 B. NOVEMBER 6, 2009

1. Revise paragraph 9.1.9 B. as follows:

B. Prohibited VARIANCES

At no time shall the BOARD or the Hearing Officer grant a VARIANCE in the following instances:

- 1. To grant a VARIANCE to allow a USE not permissible under the terms of this ordinance in the DISTRICT involved, or any USE expressly or by implication prohibited by the terms of this ordinance in said DISTRICT.
- 2. To waive compliance with any municipal, state, or federal regulation incorporated into this ordinance.
- 3. To waive compliance with any procedural requirement contained in this ordinance.
- 4. To waive compliance with regulations pertaining to NONCONFORMING LOTS, STRUCTURES, or USES, except as specifically authorized in Section 8.
- 5. To authorize any USE or CONSTRUCTION prohibited by Section 14.2.1.
- 6. To authorize a SMALL WIND TURBINE TOWER rotor diameter larger than 75 feet.

(Note: Without this prohibition or at least some limit on the amount of variance for a small wind turbine tower rotor diameter, it would be possible to propose what would in fact be a big wind turbine tower in zoning districts where it is not authorized simply by requesting variances to height and rotor diameter for a small wind turbine tower.)

Attachment J. Table Comparing Types of Wind Turbine Towers And The Requirements for Each Case 634-AT-08 Part B November 6, 2009

Parameter	Small Wind Turbine Tower	Big Wind Turbine Tower	Wind Farm & Wind Farm Tower
Type of use	Accessory (must serve a principal use such as a dwelling)	Principal but must be located on same property as another principal use and must provide power for that other principal use	Principal use
Purpose	Produce energy for use onsite and sell unused power to electric power provider	Produce energy for use onsite and sell unused power to electric power provider	Produce energy to sell to the national electric grid
Anticipated use	Residential, business, industrial, institutional	Industrial, institutional	Wind farm development
Agriculture exemption	Yes	If justified	No
Anticipated power rating	Approx. 5 kilowatt typical; 100 kilowatt max. w/ current technology	Same as wind farm	Approx. 1.5 to 3.0 megawatt per turbine
Authorized zoning districts	Any zoning district	AG-1, AG-2, I-1, I-2	AG-1 only
Type of authorization	By right (zoning use permit)	Special use permit plus zoning use permit	County Board special use permit plus zoning use permit for each wind farm turbine
Authorized within 1.5 miles of zoned municipality	No	No	No
Limits on physical size of turbine tower	150 feet maximum height if all separations are met**; rotor diameter based on lot area but not larger than 75 feet**	Same as wind farm	500 feet maximum height
Limits on number of towers	Two	Three	As authorized by the Board
Minimum separation			
to nearby dwellings	1.11 times the overall height (7.7 B.1.); more if rotor diameter exceeds 24 feet	Same as wind farm	1,000 feet to participating and 1,200 feet to non-participating (6.1.4 C. 1. & 2.)
to property line	Same as accessory structure (10 feet in AG-1, AG-2)	Same as wind farm	1.1 times height for wind farm property and 1.5 times height for non-wind farm property (6.1.4 C. 4. & 6.)
to third party power lines, public street, railroad	1.11 times the overall height (7.7 B.2.)	Same as wind farm	Varies; 1.1 to 1.5 times height (6.1.4 C. 5. & 7.)
to other features	NR	Same as wind farm	Yes
to CR zoning district	NR	Same as wind farm	Yes- one mile
Safety certification	Yes (7.7 P.1.)	Same as wind farm	Yes (6.1.4 D. 1.)
Minimum type of pole	NR	Same as wind farm	Monopole (6.1.4 D.4.)
Compliance w/ FAA req'ts	Yes(7.7H.)	Same as wind farm	Yes (6.1.4 D.7.)
Brakes and overspeed controls	Yes (7.7 G.)	Same as wind farm	Yes (6.1.4 D.2.)
Color requirements	Yes (7.7 J.; manuf. color or unob.)	Same as wind farm	Yes (6.1.4 D.7.;unobtrusive as appr. by Board)
Prevent unauthorized climbing	Yes in Residential districts (7.7 L.)	Same as wind farm	Yes (6.1.4 D.9.)

Attachment J. Table Comparing Types of Wind Turbine Towers And The Requirements for Each

Case 634-AT-08 Part B

November 6, 2009

Parameter	Small Wind Turbine Tower	Big Wind Turbine Tower	Wind Farm & Wind Farm Tower
Mitigate damage to farmland	NR	NR (may be special condition)	Yes (6.1.4 E.)
Requirements for street access	NR	Same as wind farm*	Yes (6.1.4 F.)
Coordinate with fire protection district	NR	Same as wind farm	Yes (6.1.4 G.)
Limits on electromagnetic interference	Yes (7.7 M.)	Same as wind farm	Yes (6.1.4 H.)
Limits on permissible noise	Yes (7.7F.)	Same as wind farm	Yes (6.1.4 l.)
Required noise study	NR	Same as wind farm	Yes (6.1.4 l.)
Endangered species consultation	NR	Same as wind farm	Yes (6.1.4 J.)
Historic resource review	NR	Same as wind farm	Yes (6.1.4 K.)
Limits on wildlife impacts	NR	NR	Yes (6.1.4 L.)
Wildlife studies	NR	NR	Yes (6.1.4 L.)
Limits on shadow flicker	NR	Same as wind farm	Yes (6.1.4 M.)
Required shadow flicker study	NR	Same as wind farm	Yes (6.1.4 M.)
Requirement for liability insurance	NR	Same as wind farm	Yes (6.1.4 N.)
Operational requirements	NR	Same as wind farm	Yes (6.1.4 O.)
Requirement for decommissioning plan and reclamation agreement	NR	Same as wind farm	Yes (6.1.4 P.)
Requirement for complaint hotline	NR	NR	Yes (6.1.4 Q.)
Expiration of special use permit	NR	Same as wind farm	Yes (6.1.4 R.)
Application fees	\$100 for first 50 feet and \$80 for each 20 feet increment plus \$33 compliance certificate (\$100 for 50 feet; \$300 for 100 feet; \$533 for 150 feet)	SUP- \$ 3,300 per tower and \$10,000 maximum ZUP- \$4,500 per tower	SUP-\$20,000 min or \$440 per tower, whichever is greater ZUP- \$4,500 per tower

Notes

NR= no requirement

^{*} Road access permits for a big wind turbine tower may be much simpler than for a wind farm and waivers may be requested for specific requirements.

^{**} A variance can be requested for height of a small wind turbine tower but not for a rotor diameter greater than 75 feet.

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634-AT-08 Part B

FINDING OF FACT AND FINAL DETERMINATION

of

Champaign County Zoning Board of Appeals

Final Determination: {RECOMMEND ENACTMENT/ RECOMMEND DENIAL}

Date: October 15, 2009

Petitioner: Zoning Administrator

Request: Amend the Champaign County Zoning Ordinance as follows:

- Add definitions for "SMALL WIND TURBINE TOWER" and "BIG WIND TURBINE TOWER," and revise the definition for "WIND FARM".
- Amend subsection 4.2.1. to allow BIG WIND TURBINE TOWER as a second principal use on lots in the AG-1 and AG-2 Zoning Districts.
- 3. Amend paragraph 4.3.1 E. to add new height regulations that apply to "SMALL WIND TURBINE TOWER" and "BIG WIND TURBINE TOWER".
- 4. In Section 5.2 replace "wind turbine" with "BIG WIND TURBINE TOWER", and indicate BIG WIND TURBINE TOWER is only authorized as a second principle use on lots in certain Zoning Districts.
- 5. In Section 6.1.3 add new standard conditions for "BIG WIND TURBINE TOWER" that are similar to the standard conditions for a WIND FARM.
- 6. Add new subsection 7.7 making "SMALL WIND TURBINE TOWER" an authorized accessory use by-right in all zoning districts and add requirements including but not limited to (a) the turbine must be located more than one and one half miles from the nearest municipal zoning jurisdiction; and (b) minimum required yards that are the same as for other accessory structures in the district provided that the overall height is not more than 100 feet; and (c) an overall height limit of 200 feet provided that the separation from the nearest property line is at least the same as the overall height and authorize private waivers of the separation by adjacent neighbors; and (d) a limit of no more than two turbine towers per lot; and (e) allowable noise limits; and (f) a requirement for engineer certification; and (g) a requirement to notify the electrical power provider if interconnected to the electrical grid; and (h) a requirement for no interference with neighboring TV, radio, or cell phone reception; and (i) a requirement for the removal of inoperable wind turbines.
- 7. In Section 9.3.1 add fees for SMALL WIND TURBINE TOWER and BIG WIND TURBINE TOWER.
- 8. In Section 9.3.3 add application fees for BIG WIND TURBINE TOWER Special Use Permit.

FINDING OF FACT

From the documents of record and the testimony and exhibits received at the public hearing conducted on **April 16, 2009, June 11, 2009, July 16, 2009, October 15, 2009, and November 12, 2009,** the Zoning Board of Appeals of Champaign County finds that:

1. The petitioner is the Zoning Administrator.

Cases 634-AT-08 Part B

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- 2. The need for the amendment came about as follows:
 - A. The current *Zoning Ordinance* authorizes wind turbines (or any tower) 100 feet or less in height by-right. However, wind turbines over 100 feet in height are only authorized as a Special Use Permit.
 - B. Eric McKeever, representative of Arends Bros., submitted a letter from Arends Bros. that indicated the following:
 - (1) They would like to see no height limit placed on small wind turbine towers.
 - (2) They would instead suggest making the minimum separation from lot lines equal to the overall height of the wind turbine.
 - (3) At the June 11, 2009, ZBA meeting Mr. McKeever testified that even a small increase in height can create a large increase in average wind speed and a wind turbine's output.
 - C. At the July 16, 2009, ZBA meeting Bill Fabian, owner of Mid-State Renewable Energy Services testified, as follows:
 - (1) Mid-State Renewable Energy Services contracts solar and small wind energy systems throughout central Illinois.
 - (2) He has been involved in the business since 1998 and established it as an incorporated business in 2002.
 - (3) He commended Planning and Zoning staff for proactively addressing many concerns related to residential small scale wind turbines.
 - (4) He has had to address many of the Board's concerns on his own over his years of working with residential scale units.
 - D. The Zoning Board of Appeals took final action on Part A on March 26, 2009, and Ordinance No. 848 (Zoning Case 634-AT-09 Part A) was enacted by the County Board on May 21, 2009. Part C was subsequently withdrawn by the Zoning Administrator.
 - E. Part B is necessary to allow for smaller wind turbines that do not require the same restrictions as large, industrial turbines. Part B has been amended to also include regulations for construction of one to three industrial turbines.
- 3. Municipalities with zoning and townships with planning commissions have protest rights on all text amendments and they are notified of such cases.

GENERALLY REGARDING THE EXISTING ZONING REGULATIONS

4. Existing Zoning regulations regarding the separate parts of the proposed amendment are as follows:

- A. Requirements for wind turbine facilities were added to the *Zoning Ordinance* by Ordinance No. 617 (Case 236-AT-00) on October 24, 2000. Ordinance No. 617 specifically authorized the following:
 - (1) The current *Zoning Ordinance* only authorizes wind turbines 100 feet or less in height as by-right uses, anything over 100 feet in height requires a Special Use Permit.
 - (2) Development of up to three wind turbines by Special Use Permit (approved by the Zoning Board of Appeals (ZBA)) in the AG-1 Agriculture, AG-2 Agriculture, I-1 Light Industry, and I-2 Heavy Industry Zoning Districts.
 - (3) Development of more than three wind turbines is authorized only in the I-2 Heavy Industry Zoning District and then only with a Special Use Permit (approved by the ZBA).
 - (4) Ordinance No. 617 did not distinguish between large, industrial turbines and small wind turbines used for private homes or business uses. Ordinance No. 617 was only concerned with the number of turbines on a property.
- B. A related Ordinance No. 625 (Case 273-AT-00 Part B) added requirements for reclamation agreements on May 22, 2001. It is anticipated that any wind turbine tower would be considered a "non-adaptable structure" and the ZBA would require a reclamation agreement as part of any discretionary approval.
- C. Ordinance No. 848 (Zoning Case 634-AT-08 Part A) was adopted on May 21, 2009, and added requirements for industrial scale wind farms. Wind farms are a County Board Special Use Permit in the AG-1 District only. Standard conditions for wind farms are described in Subsection 6.1.4 of the *Zoning Ordinance*. The definition of wind farm that was added in Case 634-AT-08 Part A is proposed to be revised in this case.
- D. The following definitions from the *Zoning Ordinance* are especially relevant to this amendment (capitalized words are defined in the Ordinance):
 - (1) "ACCESSORY STRUCTURE" is a STRUCTURE on the same LOT with the MAIN OR PRINCIPAL STRUCTURE, or the main or principal USE, either DETACHED from or ATTACHED to the MAIN OR PRINCIPAL STRUCTURE, subordinate to and USED for purposes customarily incidental to the MAIN OR PRINCIPAL STRUCTURE or the main or principal USE.
 - (2) "ACCESSORY USE" is a USE on the same LOT customarily incidental and subordinate to the main or principal USE or MAIN or PRINCIPAL STRUCTURE.
 - (3) "AGRICULTURE" is the growing, harvesting and storing of crops including legumes, hay, grain, fruit and truck or vegetable crops, floriculture, horticulture, mushroom growing, orchards, forestry and the keeping, raising and feeding of livestock or poultry, including dairying, poultry, swine, sheep, beef cattle, pony and horse production, fur farms, and fish and wildlife farms; farm BUILDINGS used for growing, harvesting and preparing crop products for market, or for use on the farm; roadside stands, farm

BUILDINGS for storing and protecting farm machinery and equipment from the elements, for housing livestock or poultry and for preparing livestock or poultry products for market; farm DWELLINGS occupied by farm OWNERS, operators, tenants or seasonal or year-round hired farm workers. It is intended by this definition to include within the definition of AGRICULTURE all types of agricultural operations, but to exclude therefrom industrial operations such as a grain elevator, canning or slaughterhouse, wherein agricultural products produced primarily by others are stored or processed. Agricultural purposes include, without limitation, the growing, developing, processing, conditioning, or selling of hybrid seed corn, seed beans, seed oats, or other farm seeds.

- (4) "BUILDING, MAIN or PRINCIPAL" is the BUILDING in which is conducted the main or principal USE of the LOT on which it is located.
- (5) "NON-ADAPTABLE STRUCTURE" is any STRUCTURE or physical alteration to the land which requires a SPECIAL USE permit, and which is likely to become economically unfeasible to remove or put to an alternate USE allowable in the DISTRIC (by-right or by SPECIAL USE).
- (6) "WIND FARM" is a unified development of WIND FARM TOWERS and all other necessary components including cabling, transformers, a common switching station, and maintenance and management facilities which are intended to produce electricity by conversion of wind energy and to deliver the electricity to the power grid and having a name plate capacity of more than 10 megawatts (MW). A WIND FARM is under a common ownership and operating control even though the individual WIND FARM TOWERS may be located on land that is leased from many different landowners.
- (7) "WIND FARM TOWER" is a wind turbine nacelle and rotor and the supporting tower structure that are part of a WIND FARM development and intended to produce electricity for the power grid.

SUMMARY OF THE PROPOSED AMENDMENT

5. The proposed amendment establishes standards for construction of non-wind farm turbines (SMALL WIND TURBINE TOWERS) not over 200 150 feet tall, and construction of one to three industrial-scale turbines (BIG WIND TURBINE TOWERS) that are serving another principal use on the same property. A copy of the proposed amendment is attached.

GENERALLY REGARDING THE LAND USE GOALS AND POLICIES

6. The Land Use Goals and Policies (LUGP) were adopted on November 29, 1977, and were the only guidance for amendments to the Champaign County Zoning Ordinance until the Land Use Regulatory Policies-Rural Districts were adopted on November 20, 2001, as part of the Rural Districts Phase of the Comprehensive Zoning Review (CZR) and subsequently revised on September 22, 2005. The relationship of the Land Use Goals and Policies to the Land Use Regulatory Policies is as follows:

- A. Land Use Regulatory Policy 0.1.1 gives the Land Use Regulatory Policies dominance over the earlier Land Use Goals and Policies.
- B. The Land Use Goals and Policies cannot be directly compared to the Land Use Regulatory Policies because the two sets of policies are so different. Some of the Land Use Regulatory Policies relate to specific types of land uses and relate to a particular chapter in the land use goals and policies and some of the Land Use Regulatory Policies relate to overall considerations and are similar to general land use goals and policies.

REGARDING SPECIFICALLY RELEVANT LAND USE POLICIES

- 7. There are policies for a variety of land uses in the Land Use Goals and Policies, but only some are relevant to the proposed amendment. Specifically relevant policies include two agricultural policies, one residential policy, one commercial policy, one industrial policy, and one conservation policy, as follows:
 - A. Policy 1.2 of the Land Use Goals and Policies relates to agricultural land use and states that the Board of Appeals and the County Board will restrict non-agricultural uses to non-agricultural areas or those areas served by adequate utilities, transportation facilities and commercial services or those areas where non-agricultural uses will not be incompatible with existing agricultural uses.

The proposed amendment {CONFORMS} to Policy 1.2 because of the following:

- (1) "Small" wind turbine towers are only authorized as accessory uses on a lot with a principal use, as follows:
 - (a) Wind turbines SMALL WIND TURBINE TOWERS that serve agricultural uses would be considered agricultural uses themselves, however, most agricultural uses do not require the amount of power that a BIG WIND TURBINE TOWER provides so only a pro-rated agricultural exemption would be allowed in those cases.
 - (b) Wind turbines that serve an authorized principal use in the AG-1, AG-2, B-1, or CR zoning districts are associated with a use that has been determined to not be incompatible with surrounding agriculture.
 - (c) Changes to subparagraph 4.3.1 E. allow SMALL WIND TURBINE TOWERS to exceed 100 feet in height and be up to 200 150 feet in height, but only if they meet the yard and separation requirements of proposed subsection 7.7, as follows:
 - A SMALL WIND TURBINE TOWER must be 110% of the overall height of the turbine away from the nearest dwelling, or principal structure or use under different ownership, or third-party above ground power line.
 - ii. A tilt-up wind turbine can be no taller than the maximum height that can fit within the lot lines of the property on which it is located.
 - iii. On a lot less than three acres in area the maximum height is 150 feet.

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- iv. 75% of the minimum required AVERAGE LOT WIDTH in a subdivision where any adjacent lot is vacant.
- v. If the standards listed above are met or would allow a tower greater than 200 feet in height, the maximum height for a small wind turbine tower is 200 feet. The standards listed above allow towers up to 150 feet in height. Heights greater than 150 feet must be authorized by a variance.
- (2) "Big" wind turbine towers are only authorized as a second principal use on a lot with another principal use, as follows:
 - (a) The turbine is intended to be subordinate to the first principal use.
 - (b) Wind turbines that serve an authorized principal use in the AG-1, AG-2, <u>or</u> B-1, <u>or CR</u> zoning districts are associated with a use that has been determined to not be incompatible with surrounding agriculture.
 - (c) Subparagraph 4.2.1 C. is revised to authorize BIG WIND TURBINE TOWERS as a second principal use on lots in the AG-1, AG-2, I-1, and I-2 zoning districts, but only as a Special Use Permit.
 - (d) New Footnote 17 to subsection 5.2 is proposed to limit the placement of BIG WIND TURBINE TOWERS on to lots with another principal use already existing and only for the subordinate purpose of generating electricity for that principal use. only if the BIG WIND TURBINE TOWER is owned or leased to be owned by the owner of the land on which it is located for the purpose of producing electrical energy to be used onsite, provided that any energy not used onsite may be sold to an electric power provider.
- B. Policy 1.3 of the Land Use Goals and Policies relates to agricultural land use and states that the Environment and Land Use Committee and the Board of Appeals will work towards applying the concepts of development rights transfer, planned unit development, cluster development and special use permits to insure, when and where necessary, that development of non-agricultural uses is compatible to adjacent agricultural activities.

The proposed amendment {CONFORMS} to Policy 1.3 because BIG WIND TURBINE TOWERS are proposed to be authorized only as Special Use Permits in the AG-1 and AG-2 Zoning Districts, as follows:

(1) Requirements in revised subparagraphs 4.2.1 C. and 4.3.1 E. make it clear that a BIG WIND TURBINE TOWER is only authorized as a subordinate second principal use on a lot with an already existing principal use, and only for the purpose of generating electricity primarily for that use to be used onsite, provided that any excess energy may be sold to an electric power provider.

- (2) BIG WIND TURBINE TOWER is proposed to be added to subsection 6.1.3, the Table of Standard Conditions for Specific Special Uses with several standard conditions, as follows:
 - (a) BIG WIND TURBINE TOWERS are large-scale, industrial size wind turbines that are similar to wind farm towers. Many of the standard conditions listed below were originally drafted for wind farm towers in Case 634-AT-09 Part A.
 - (b) The maximum height and minimum required yard <u>and separations</u> are the same for a BIG WIND TURBINE TOWER as for a wind farm tower.
 - (c) The special use permit for a big wind turbine tower must include an area surrounding the tower that is similar to what is required around a wind farm tower.
 - (d) The standard conditions for BIG WIND TURBINE TOWERS in subsection 6.1.3 incorporate standard conditions from 6.1.4, including: minimum separations; design and installation safety; road usage; coordination with fire protection; mitigation of electromagnetic interference; maximum noise level; endangered species; historical review; shadow flicker; liability; operational safety; decommissioning agreement; expiration of the SUP; and application requirements because a BIG WIND TURBINE TOWER has similar impacts to those of a wind farm tower.
 - (e) The standard conditions for BIG WIND TURBINE TOWERS in subsection 6.1.3 do not incorporate certain standard conditions from 6.1.4, including: mitigation of damage to farmland; wildlife impacts; and a complaint hotline because one to three BIG WIND TURBINE TOWERS should not have the same level of impact as a whole wind farm development in these cases.
- C. Policy 2.5 of the Land Use Goals and Policies relates to residential land use and states that the Zoning Board of Appeals, the Environment and Land Use Committee and the County Board will only support the development of residential areas separated from incompatible non-residential uses, unless natural or man-made buffering is provided.

The proposed amendment {CONFORMS} to Policy 2.5 because of the following:

- (1) Subparagraph 7.7 B includes height limits for SMALL WIND TURBINE TOWERS based on their proximity to other nearby land uses, as reviewed in Item 7.A.(1)(b).
- (2) Discussion by the Board at the July 16, 2009 October 15, 2009, meeting indicated that the Board was inclined to allow the 200 150 feet maximum height for any turbine (i.e. residential or industrial) provided that the turbine meets the standards reviewed in Item 7.A.(1)(b), and included in the amendment as new paragraph 7.7 B. However, the Board also indicated that turbines over 150 feet in height could be authorized by variance.

- (3) Subparagraph 7.7 C. includes limits on rotor diameter based on the size of the lot and separation of the turbine tower from other land uses, as follows:
 - (a) The maximum rotor diameter limit on lots less than one acre in area is 15 feet. This is the same limit on the height of residential accessory buildings on lots less than one acre in area in Footnote 4 of subsection 5.3.
 - (b) The maximum rotor diameter limit on lots one acre or more in area is 24 feet. This is the same limit on the height of residential accessory buildings on lots one acre or more in area in Footnote 4 of subsection 5.3.
 - (c) The current revision no longer distinguishes between residential and non-residential turbines and requires a greater separation distance for any rotor larger than 24 feet in diameter and requires at least five three acres of lot area. The requirement that rotors larger than 24 feet require a separation distance to the nearest dwelling (under different ownership) that is 8.3 times the rotor diameter is intended to minimize nuisance effects (including shadow flicker) from the larger rotors. A 200 feet separation is 8.3 times as long as a 24 feet diameter rotor. Staff is continuing to fine tune the separations based on rotor diameter and new information will be available at the October 15, 2009, ZBA meeting.
- (4) Small Wind Electric Systems A U.S. Consumer's Guide indicates the following regarding the use of small wind turbine towers for residential use:
 - (a) A typical home uses approximately 10,000 kilowatt-hours (kWh) of electricity per year.
 - (b) A wind turbine must be rated in the range of five to 15 kW to make a significant contribution to this demand, depending on local average wind speed.
 - (c) A small wind turbine can cost anywhere from \$3,000 to \$50,000 installed depending on size, application, and service agreements.
 - (d) The American Wind Energy Association states that a comparable photovoltaic system could cost as much as \$80,000.
 - (e) Based on testimony during the public hearing, multiple small wind turbines would probably be necessary to generate enough power for a dwelling to go "off the grid."
- (5) Wind Turbine Buyer's Guide by Mick Sagrillo and Ian Woofenden indicates the following regarding small wind turbine towers:
 - (a) Many people are surprised to learn that the wind turbine cost can range from only 10% to 40% of the total cost of the entire wind system.
 - (b) A Vestas V-17 (considered a 90 kW turbine) typically costs \$180,000 installed on a 132 foot tall tower.

- (6) As indicated by the *Small Wind Electric Systems* consumer guide and testimony from representatives of small wind turbine retailers, a 100 feet height limit would likely be inadequate for many users of small wind turbine towers in this area, as follows:
 - (a) At the June 11, 2009, ZBA meeting Philip Geil testified as follows:
 - He requested that the maximum height be adjusted to accommodate more than 100 feet. He said that the power of the wind turbine increases along with the cube of the height and wind speed and he wishes he had built a 120 feet tower rather than the 100 feet tower.
 - ii. He said that the 120 feet tower with 15 feet blades would have taken the height to around 135 feet and the company that he purchased his tower from can go up to a 140 feet tower. He said that assuming that someone has sufficient land to support it such a tower would justify a reasonable limitation of an increased height although a 200 feet tower would be excessive for an ordinary private turbine.
 - iii. He said that other issues with the height limitation of a 100 feet tower are existing tree heights, proximity of the trees and the wind turbulence that they produce and personally an additional 20 feet to his tower would have assisted him with his tower in regards to these issues.
 - (b) At the June 11, 2009, ZBA meeting Eric McKeever, representative of Arends Bros., testified as follows:
 - i. He said that Mr. Geil is exactly right when he indicated that the higher the tower the better the wind. He said that at a previous meeting he indicated that increasing the average annual wind speed by 1 mph you achieve the cubed root efficiency effect as an output. He said that there is proof that at 30 meters and at 50 meters there is a difference in the average wind for this area or any other area.
 - ii. He said that Mr. Geil had also mentioned that he wished that he had gone up to 120 feet and one of the general rules of thumb is that the bottom of the tip of the blade should be 20 feet higher than the closest obstacle. He said that a 105 feet tall tower with 9 feet blades is right at 96 feet and 20 feet below that is 76 feet therefore most trees that are 60 or 70 feet tall would not be an obstruction but if there is a grain leg in the area its height could be over 100 feet high.
 - (c) At the June 11, 2009, ZBA meeting Birgit McCall testified that making the setback too large will restrict a lot of people from getting small wind and if she is going to put \$35,000 in a turbine she is not going to stick it on a 40 foot tower because she might as well throw her money away if she can't go 100 to 120 feet.

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- D. Policy 3.6 of the Land Use Goals and Policies relates to commercial land use and states that the County Board will strongly discourage proposals for new commercial development not making adequate provisions for drainage and other site considerations.
 - The proposed amendment {CONFORMS} to Policy 3.6 based on the review of Policy 2.5, which addresses issues similar to Policy 3.6.
- E. Policy 4.6 of the Land Use Goals and Policies relates to industrial land use and states that the Environment and Land Use Committee will examine the use of zoning techniques such as special use permits and planned industrial development to permit and regulate new development. The Environment and Land Use Committee will examine existing lands zone for industrial uses to determine the desirability of retaining such industrial zoning.
 - The proposed amendment {CONFORMS} to Policy 4.6 based on the review of Policy 1.3, which addresses similar issues to Policy 4.6.
- E. Policy 5.7 of the Land Use Goals and Policies relates to conservation of natural resources, clean air and water, open space, recreation, and historic preservation and states that the County Board and the Environment and Land Use Committee will encourage the preservation of natural areas and will cooperate with the County Forest Preserve District and other interested groups in a preservation and restoration program.
 - The proposed amendment {CONFORMS} to Policy 5.7 because BIG WIND TURBINE TOWERS are proposed to be only authorized in the AG-1, AG-2, I-1, and I-2 zoning districts and not less than one mile from the CR Conservation-Recreation zoning district.
- F. None of the Transportation, <u>Industrial</u>, or Utilities Land Use Policies appear to be relevant to the proposed amendment.

REGARDING SPECIFICALLY RELEVANT LAND USE GOALS

- 8. There are goals for a variety of land uses in the Land Use Goals and Policies, but only some are relevant to the proposed amendment. Specifically relevant goals include one commercial land use goal and one conservation goal, as follows:
 - A. The third commercial land use goal is commercial areas designed to promote compatibility within non-commercial uses and at the same time provide ease of access.
 - The proposed amendment {ACHIEVE} the third commercial land use goal based on the conformance with Policies 2.5 (see Item 7.D.) and 3.6 (see Item 7.E.). because of limits on rotor size for small wind turbine towers and the separations from dwellings required for big wind turbine towers which are similar as those required for wind farm towers.
 - B. The first goal related to conservation of natural resources, clean air and water, open space, recreation, and historical preservation is protection and conservation of publicly designated environmental and natural resources and historical site through open space reservation,

conservation, zoning, easement, development rights, tax exemption policy, public acquisition and performance standards for commercial and industrial development.

The proposed amendment {ACHIEVES} the first goal related to conservation of natural resources, clean air and water, open space, recreation, and historical preservation based on the conformance with Policy 5.7 (see Item 7.F.).

C. None of the Agricultural Land Use Goals, Residential Land Use Goals, Industrial Land Use Goals, Transportation Land Use Goals, or Utility Goals appear to be relevant to the proposed amendment.

REGARDING THE GENERAL LAND USE GOALS AND POLICIES

- 9. Regarding the General Land Use Goals and Policies:
 - A. The first, third, fourth, and fifth General Land Use Goals appear to be relevant to the proposed amendment, as follows:
 - (1) The first General Land Use Goal is:

Promotion and protection of the health, safety, economy, convenience, appearance, and general welfare of the County by guiding the overall environmental development of the County through the continuous comprehensive planning process

The proposed amendment {ACHIEVES} the first General Land Use Goal because of the following:

- (a) Based on the review of the preceding Goals and Policies relating to specific types of land uses (see Items 7 & 8).
- (b) A standard condition for big wind turbines incorporates the requirements of paragraph 6.1.4 I. that requires conformance with the Illinois Pollution Control Board noise regulation.
- (c) Regarding the requirement in proposed paragraph 7.7 A that no small wind turbine tower be located less than one-and-one-half-mile from an incorporated municipality that has a zoning ordinance, state law which was recently changed indicates that a zoned municipality has jurisdiction over wind conversion devices within one-and-one-half-miles of their zoning jurisdiction.
- (d) Regarding the requirement in proposed paragraph 7.7 B of the maximum allowable height for a small wind turbine tower see the discussion of the specific requirements in Item 7.A.(1)(b).
- (e) Regarding the requirements in proposed paragraph 7.7 C for maximum allowable rotor diameter:

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- i. Maximum rotor diameters and separations to nearby principal land uses are intended to mitigate nuisance conditions, in particular, noise and shadow flicker.
- ii. A variance to allow rotor diameters greater than 75 feet for small wind turbine towers is prohibited due to concerns that noise and shadow flicker, as well as other nuisance conditions, may not be adequately mitigated by the requirements for small wind turbine towers and should instead be subject to site specific review provided by the Special Use Permit requirements for big wind turbine towers.
- (f) Regarding the requirement in proposed paragraph 7.7 D, the proposed amendment allows a small wind turbine tower to be placed in required yards, subject to certain limitations, which will allow a tower to fall on an accessory structure on neighboring properties, but not on a dwelling or other principal structure.
- Regarding the requirement in proposed paragraph 7.7 E, the limit on numbers of small wind turbine towers is intended to protect against the unknown effects that multiple small wind turbine towers could produce. A variance from the maximum allowed number may be authorized if land owner can prove there will be no harmful effects on the district.
- (h) The following requirements in proposed subsection 7.7 relate to the safe operation of a small wind turbine tower and prevent most nuisance conditions as well:
 - i. Paragraph 7.7 F. requires all small wind turbine towers to conform to the Illinois Pollution Control Board standards for noise.
 - ii. Paragraph 7.7 G. requires that all small wind turbine towers have an automatic over speed control.
 - iii. Paragraph 7.7 H. requires that all small wind turbine towers shall comply with the requirements of the FAA.
 - iv. Paragraph 7.7 I. requires that all small wind turbine towers shall have no illumination unless required by the FAA.
 - v. Paragraph 7.7 J. requires that all small wind turbine towers shall be the manufacturer's supplied color or else an unobtrusive, non-reflective color.
 - vi. Paragraph 7.7 K. requires that all small wind turbine towers have a minimum 15 feet clearance between the lowest sweep of the rotors and the ground.

- vii. Paragraph 7.7 L. requires that all small wind turbine towers located in a residential zoning district be protected from unauthorized climbing to a height of 12 feet.
- viii. Paragraph 7.7 M requires that all small wind turbine towers not cause any significant electromagnetic interference by complying with FCC Part 15.
- ix. Paragraph 7.7 N requires that all small wind turbine towers that have been destroyed and were approved before the adoption of the proposed amendment can be reconstructed to their previous dimension provided they apply for a Zoning Use Permit that certifies that the reconstruction complies with all manufacturer's safety recommendations and requirements.
- x. Paragraph 7.7 O requires that all small wind turbine towers that are derelict for six consecutive months must be removed within six months of receiving notice from the Zoning Administrator.
- xi. Paragraph 7.7 P requires that all small wind turbine tower permits shall be accompanied by certified drawings from the manufacturer to prove that the small wind turbine tower is safe for the intended use, and certification that the utility company has been informed of the customer's intent to install an interconnected system.
- (2) The third General Land Use Goal is:

Land uses appropriately located in terms of utilities, public facilities, site characteristics, and public services

The proposed amendment {ACHIEVES} the third General Land Use Goal based on achievement of the Third Commercial Land Use Goal (see Item 8.A.).

(3) The fourth General Land Use Goal is:

Arrangement of land use patterns designed to promote mutual compatibility

The proposed amendment {ACHIEVES} the fourth General Land Use Goal based on achievement of the Third Commercial Land Use Goal (see Item 8.A.) and achievement of the First Conservation Goal (see Item 8.B.).

(4) The fifth General Land Use Goal is:

Establishment of processes of development to encourage the development of the types and uses of land that are in agreement with the Goals and Policies of this Land Use Plan

The proposed amendment {ACHIEVES} the fifth General Land Use Goal because it creates a process of development for both small wind turbine towers and big wind turbine towers, which are in agreement with the Land Use Goals and Policies as reviewed in this finding of fact.

B. None of the General Land Use Policies appear to be relevant to the proposed amendment.

GENERALLY REGARDING COMPLIANCE WITH THE LAND USE REGULATORY POLICIES—RURAL DISTRICTS

- 10. The LURP's were originally adopted on November 20, 2001 as part of the Rural Districts Phase of the Comprehensive Zoning Review. The LURP's were amended September 22, 2005, but the amendment contradicts the current Zoning Ordinance and cannot be used in concert with the current Zoning Ordinance. The LURP's adopted on November 20, 2001, remain the relevant LURP's for discretionary approvals (such as map amendments) under the current Zoning Ordinance. Land Use Regulatory Policy 0.1.1 gives the Land Use Regulatory Policies dominance over the earlier Land Use Goals and Policies.
- 11. Regarding compliance with relevant Land Use Regulatory Policies (LURP's):
 - A. LURP 1.4.1 states that non-agricultural land uses will not be authorized unless they are of a type not negatively affected by agricultural activities or else are located and designed to minimize exposure to any negative effect caused by agricultural activities.
 - The proposed amendment {ACHIEVES} this policy because big wind turbine towers are not negatively affected by agricultural activities.
 - B. LURP 1.4.2 states that non-agricultural land uses will not be authorized if they would interfere with farm operations or would damage or negatively affect the operation of agricultural drainage systems, rural roads or other agriculture-related infrastructure.

The proposed amendment {ACHIEVES} this policy because of the following:

- (1) The presence of a big wind turbine tower does not appear to create the same degree of difficulty in aerial spraying that a wind farm does and a big wind turbine tower is unlikely to increase the costs of aerial application on adjacent fields. Shadow flicker caused by the turbine rotors on adjacent farmland may be a nuisance but it is not clear how significant it is. Paragraph 6.1.4.M. requires a shadow flicker analysis and limits the amount of flicker.
- (2) The separation distances proposed in paragraph 6.1.4 C. should mitigate the impacts to aerial spraying that do occur on neighboring farms.
- C. LURP 1.5.2 states that development that requires discretionary review will not be allowed on best prime farmland unless the site is well suited, overall, for the proposed land use.
 - The proposed amendment {ACHIEVES} this policy because a Special Use Permit will be required, which will allow for site specific review for a proposed big wind turbine tower which will ensure that any site approved for a big wind turbine tower would be well suited.

- D. LURP 1.5.3 states that development that requires discretionary review will not be allowed if the existing infrastructure, together with the improvements proposed, is inadequate to support the proposed development effectively and safely without undue public expense.
 - The proposed amendment {ACHIEVES} this policy because standard conditions are proposed that require improvements to existing infrastructure without undue public expense.
- E. LURP 1.5.4 states that development that requires discretionary review will not be allowed if the available public services are inadequate to support the proposed development effectively and safely without undue public expense.
 - The proposed amendment {ACHIEVES} this policy because a standard condition is proposed in Paragraph 6.1.4.G. to ensure that the local fire protection district is notified of the proposed site plan for a proposed big wind turbine tower and that the district can request help creating an emergency response plan for the big wind turbine tower.
- F. LURP's 1.6.1 states that in all rural areas, businesses and other non-residential uses will be allowed if they support agriculture or involve a product or service that is provided better in a rural area than in an urban area.

The proposed amendment {ACHIEVES} this policy because of the following:

- (1) Big wind turbine towers are not compatible with any land use that requires a structure to be located within 1.1 times the height of the turbine tower, which makes them incompatible with urban areas.
- (2) Although big wind turbine towers do not support surrounding agricultural uses directly they will be most used by large businesses or institutional uses in the rural area, most of which support agriculture.
- G. LURP 1.6.2 states that on the best prime farmland, businesses and other non-residential uses will not be authorized if they take any best prime farmland out of production unless they also serve the surrounding agricultural uses or an important public need; and cannot be located in an urban area or on a less productive site; or the uses are otherwise appropriate in a rural area and the site is very well suited to them.

The proposed amendment {ACHIEVES} this policy because of the following:

- (1) A Special Use Permit will be required, which will allow for site specific review for a proposed big wind turbine tower.
- (2) Although big wind turbine towers do not serve surrounding agricultural uses directly they will be most used by large businesses or institutional uses in the rural area, most of which support agriculture.

- (3) Big wind turbine towers are not compatible with any land use that requires a structure to be located within 1.1 times the height of the turbine tower, which makes them incompatible with urban areas.
- H. LURP 1.7.2 states that development in rural areas will be permitted only if there has been reasonable effort to determine if especially sensitive and valuable features are present, and all reasonable effort has been made to prevent harm to those features.

The proposed amendment {ACHIEVES} this policy because of the following:

- (1) A standard condition is proposed in Paragraph 6.1.4.J. that requires big wind turbine tower developers to apply for Endangered Species Consultation with the Illinois Department of Natural Resources.
- (2) The standard conditions for big wind turbine towers in Subsection 6.1.3 of the proposed amendment require big wind turbine towers to be at least one mile from the CR District and the CR District is where natural areas are found.
- (3) A standard condition is proposed in paragraph 6.1.4.K. that requires a big wind turbine tower developer to apply for consultation with the State Historic Preservation Officer of IDNR.
- I. LURP 1.1 states that commercial agriculture is the highest and best use of land in the areas of Champaign County that are by virtue of topography, soil and drainage, suited to its pursuit. Other land uses can be accommodated in those areas provided that:
 - a. the conversion of prime farmland is minimized;
 - b. the disturbance of natural areas is minimized;
 - c. the sites are suitable for the proposed use;
 - d. infrastructure and public services are adequate for the proposed use; and
 - e. the potential for conflicts with agriculture is minimized.

The proposed amendment {ACHIEVES} this policy because of the following:

- (1) The conversion of prime farmland is minimized because the proposed amendment requires big wind turbine towers to be located on an existing lot with another principal use already established. Big wind turbine towers are proposed to be authorized by Special Use Permit which will include site specific review to prevent the conversion of prime farmland.
- (2) The disturbance of natural areas is minimized by the following:
 - (a) Achievement of the third commercial land use goal and the first conservation goal (see Item 8.).
 - (b) Conformance with Policy 5.7 (see Item 7.G.)

- (3) The sites are suitable for the proposed use because a big wind turbine tower is a non-agricultural use that is proposed to be a Special Use Permit with standard conditions to ensure that a proposed wind farm will be compatible with adjacent agricultural activities.
- (4) Infrastructure and public services are adequate for the proposed use because the impact of one to three big wind turbine towers is much less than for a wind farm and there is a standard condition requiring cooperation with local fire protection districts.
- (5) The potential for conflicts with agriculture is minimized by the following:
 - (a) General conformance with Policy 1.2 (see Item 7.A.).
 - (b) Conformance with Policy 1.3 (see Item 7.B.).
- 12. Regarding fees proposed to be charged for big wind turbine tower Special Use Permit applications and for Zoning Use Permit Applications for small wind turbine towers and big wind turbine towers:
 - A. Regarding the Zoning Use Permit fees for a SMALL WIND TURBINE TOWER:
 - (1) The U.S. Department of Energy handout *Small Wind Electric Systems* (undated) that was included in the July 10, 2009, Supplemental Memorandum stated that small turbines cost anywhere from \$3,000 to \$50,000 installed depending on size and other considerations and that a typical 10 kWh home wind system costs approximately \$32,000.
 - The erected cost of a wind turbine and tower will generally far exceed the cost of a twocar garage and, in terms of the work required for the Department in permitting a turbine, will take much more time than a simple garage because of the effort required to verify the maximum allowable height and to review all of the documentation that must be submitted.
 - The proposed fees are essentially a doubling of the current fees for towers. Under the current fee structure, tower fees begin at \$33 for up to 50 feet in height and \$40 is added per each 20 feet in excess of 50 feet in height so that the following heights would require the following fees (the fees in parentheses are the proposed fees for small wind turbine towers of the same height; does not include \$33 compliance certificate and reflects current practice in rounding to next highest 20 feet increment):
 - (a) Not over 50 feet in HEIGHT.....\$ 33 (\$100)

 - (c) 150 feet in HEIGHT......\$233 (\$500)
 - B. At the October 15, 2009, ZBA meeting John Hall, Zoning Administrator, testified regarding case filing fees for big wind turbine towers that a BIG WIND TURBINE TOWER is going to be a significant public hearing which will require a lot of effort and by definition there can be no more than three therefore he proposed a fee of \$3,300 per turbine and if the maximum of three turbines is proposed then the fee would be \$9,900, which is nearly half of the minimum \$20,000 cost for a wind farm.

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DOCUMENTS OF RECORD

- 1. Application for Text Amendment from Zoning Administrator, dated September 11, 2008
- 2. As Approved Finding of Fact for Case 634-AT-08 Part A
- 3. Champaign County Ordinance No. 848
- 4. Supplemental Memorandum for Case 634-AT-08 Part B, dated April 9, 2009, with attachment:
 - A Legal Ad for Case 634-AT-08
- 5. Supplemental Memorandum for Case 634-AT-08 Part B, dated June 5, 2009, with attachments:
 - A Proposed Changes to Section 3
 - B Proposed Changes to Subpar. 4.3.1 E
 - C Proposed Changes to Section 5.2
 - D Proposed Changes to Subsection 6.1.3
 - E Proposed New Subsection 7.7
 - F Excerpt from In Public Interest How and Why to Permit for Small Wind Systems A Guide for State and Local Governments. American Wind Energy Association. September 2008.
- 6. Supplemental Memorandum for Case 634-AT-08 Part B, dated June 11, 2009, with attachment:
 - A Excerpts of relevant Paragraphs of Subsection 6.1.4
- 7. Written statement and information from Herb Schildt, handed out at June 11, 2009, ZBA meeting
- 8. Letter from Arends Brothers and brochures for sample wind turbines, submitted by Eric McKeever
- 9. Supplemental Memorandum for Case 634-AT-08 Part B, dated July 10, 2009, with attachments:
 - A Revised Changes to Section 3
 - B Revised Changes to Subpar. 4.3.1
 - C Revised Changes to Section 5.2
 - D Revised Addition to Subsection 6.1.3
 - E Revised New Subsection 7.7
 - F Comparison of Small Wind Requirements in Other Illinois County Zoning Ordinances
 - G Illustration of Obstruction of the Wind by a Building or Tree excerpted from Small Wind Electric Systems A U.S. Consumer Guide
 - H Table of Wind Turbines, Rated Output, and Rotor Diameter from Focus on Energy submitted by Herb Schildt on June 11, 2009
 - I Manufacturer's Information about the Endurance S-343 wind turbine submitted by Eric McKeever on June 11, 2009
 - J Manufacturer's Information about the Endurance G-3120 wind turbine submitted by Eric McKeever on June 11, 2009
 - K Manufacturer's Information about the Endurance E-3120 wind turbine submitted by Eric McKeever on June 11, 2009

- L Manufacturer's information about the remanufactured Vestas V17-90kW wind turbine submitted by Herb Schildt on June 11, 2009
- Manufacturer's Information about the Northwind 100 wind turbine submitted by Eric McKeever M on June 11, 2009
- N Small Wind Electric Systems A U.S. Consumer's Guide. U.S. Department of Energy. (included separately)
- 10. Supplemental Memorandum for Case 634-AT-08 Part B, dated October 9, 2009, with attachments:
 - Revised Changes to Section 3 A
 - Revised Changes to Par. 4.2.1 C В
 - C Revised Changes to Subpar. 4.3.1 E
 - D Revised Changes to Subsection 5.2
 - E Revised Addition to Subsection 6.1.3
 - F Revised New Subsection 7.7
 - G Proposed Changes to Par. 9.3.1 D
 - Н Proposed Changes to Par. 9.3.3 B
 - I Excerpt regarding "non issues" from In the Public Interest How and Why to Permit for Small Wind Systems A Guide for State and Local Governments. American Wind Energy Association. September 2008
 - Community Wind overview from www.windustry.org J
 - K EcoEnergy Met Tower Visibility Markings
 - L Draft Minutes of July 16, 2009 (included separately
- 11. Supplemental Memorandum for Case 634-AT-08 Part B, dated October 15, 2009, with attachments:
 - Revised New Subsection 7.7 A
 - В Excerpts from Part 77 of Section 14 of the Code of Federal Regulations regarding Objects Affecting Navigable Airspace
 - \mathbf{C} Wind Turbine Buyer's Guide from home power, June & July 2007
 - D Section 465.50 Electricity Provider for Eligible Customers (excerpted from 83 Ill. Admin. Code Part 465
 - E Ameren information on net metering
 - F Ameren Application for Net Metering Services
 - Handout from Arends Brothers (date not certain) G
 - Draft Finding of Fact (included separately) Η
- 12. Prepared statement by Steve Burdin submitted on October 15, 2009
- 13. Supplemental Memorandum for Case 634-AT-08 Part B, dated November 6, 2009, with attachments:
 - Revised Changes To Section 3 <u>A</u>
 - <u>B</u> <u>C</u> <u>D</u> Proposed Changes to Par. 4.2.1 C.
 - Proposed Changes To Subpar. 4.3.1 E
 - Proposed Changes To Subsection 5.2
 - Proposed Addition to Subsection 6.1.3

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Revised New Subsection 7.7
Proposed Changes to Par. 9.3.1 D.
Proposed Changes to Par. 9.3.3 B.
Proposed Changes to Par. 9.1.9 B.
Table Comparing Types of Wind Turbine Towers And The Requirements for Each

<u>K</u> <u>L</u> Draft Minutes of October 15, 2009 (included separately)

Draft Finding of Fact (included separately)

FINAL DETERMINATION

Pursuant to the authority granted by Section 9.2 of the Champaign County Zoning Ordinance, the Zoning Board of Appeals of Champaign County determines that:

The Zoning Ordinance Amendment requested in Case 634-AT-08 Part B should {BE ENACTED / NOT BE ENACTED} by the County Board in the form attached hereto.

The foregoing is an accurate and complete record of the Findings and Determination of the Zoning Board of Appeals of Champaign County.

SIGNED:
Doug Bluhm, Chair Champaign County Zoning Board of Appeals
Champaigh County Zohnig Board of Appeals
ATTEST:
Secretary to the Zoning Board of Appeals
Date

CASE NO. 657-V-09

PRELIMINARY MEMORANDUM

November 6, 2009

Petitioners:

Diane Larry &

Lambright; and Scott Lambright

Department of PLANNING & ZONING

Champaign

County

Brookens **Administrative Center** 1776 E. Washington Street Urbana, Illinois 61802

> (217) 384-3708 FAX (217) 328-2426

approx. 27,000 feet Site Area:

Time Schedule for Development: N/A

Prepared by: J.R. Knight

Associate Planner

John Hall

Zoning Administrator

Request: Authorize the use of an existing two story detached accessory storage building with a second story deck with a side yard of three feet in lieu of the required ten feet side yard for accessory structures in the AG-2 Agriculture zoning district, and an average height of 16 feet in lieu of the maximum allowed 15 feet average for residential height accessory structures on lots less than one acre in area in the AG-2 Agriculture Zoning District.

Location: Lot 1 of Cook's Replat of Tract B of the K.D. Headlee Subdivision in Section 14 of Mahomet Township and commonly known as the house at 206B Lake of the Woods Road, Mahomet.

BACKGROUND

The background of Case 657-V-09 is as follows:

- On November 6, 2007, the petitioners applied for Zoning Use Permit Application (ZUPA) 310-07-01. The permit authorized a detached garage 12 feet in height with no deck on it, and was approved on November 20, 2007.
- On November 20, 2007, the petitioners submitted an application (NHO-07-29) to register Lambright Construction and Maintenance, Inc. as a Neighborhood Home Occupation (NHO). The registration was approved on December 12, 2007.
- On February 19, 2008, staff received a complaint regarding the subject property, which indicated that a rusty propane tank was delivered to the subject property and outdoor storage of construction materials was also occurring. The complaint also indicated that a newly constructed storage building was taller than the two story house.
- On February 26, 2008, staff received another complaint regarding the subject property, which indicated that an old flat bed truck with a flat tire was sitting on the property and was loaded with junk. The complaint indicated that there was still a great deal of outdoor storage occurring on the subject property and that the shared driveway on the subject property was blocked.
- On July 1, 2009, staff received another complaint regarding the subject property, which indicated that outdoor storage was still occurring on the subject property and that access via the shared driveway was still limited.
- On July 6, 2009, staff was notified that co-petitioner Scott Lambright was building a second story deck onto the existing detached accessory storage building.

- On July 10, 2009, Jamie Hitt, Zoning Officer, performed a compliance inspection for ZUPA 310-07-01, which originally permitted a one-story detached accessory storage building, and found that the storage building authorized by the permit had been constructed to be taller than authorized in the permit and that the second story deck, which was not part of the original permit appeared to be only three feet from the property line. She also discovered outdoor storage occurring on the property.
- On July 15, 2009, Jamie Hitt, Zoning Officer, spoke with co-petitioner Scott Lambright on the phone to inform him that he needed to either apply for a variance for the second story deck or modify it so that it conformed to the accessory structure side yard requirement of 10 feet. She also told Mr. Lambright that no outdoor storage should occur on the property.
- On July 21, 2009, Jamie Hitt, Zoning Officer, sent a letter to co-petitioners Scott and Larry Lambright as a
 follow-up to her phone conversation with Scott Lambright on July 15, 2009. The letter reiterated the need
 for a variance for the second story deck and indicated August 5, 2009, would be the deadline to clean up
 the subject property.
- On August 7, 2009, Jamie Hitt, Zoning Officer, inspected the subject property and found that significant
 progress was being made towards correcting all the violations. She spoke with Scott Lambright and again
 reminded him of the necessity to apply for a variance. Based on the progress made at this time the
 petitioners were given some additional time to continue making progress towards correcting all the
 violations before enforcement was started.
- On September 2, 2009, the Zoning Officer re-inspected the property and was told that the petitioners were now proposing to modify the deck so that a variance would not be necessary.
- On September 11, 2009, the Department received a new complaint regarding large chunks of concrete that had been dumped on the subject property.
- On September 18, 2009, due to the lack of progress in modifying the second story deck or completing the clean up of the subject property a First Notice of Violation was sent to the petitioners.
- On October 5, 2009, a Variance application was submitted by the petitioners. The site plan was found to be inadequate and a request was made on October 7, 2009, to the petitioners to provide a clearer and more accurate site plan.
- On October 13, 2009, as part of the continuing enforcement action against the petitioners a Final Notice of Violation was sent to the petitioners.
- On October 19, 2009, the petitioners submitted a revised and clearer site plan of the subject property.

EXTRATERRITORIAL JURISDICTION

The subject property is within the one and one-half mile extraterritorial jurisdiction (ETJ) of the Village of Mahomet. Municipalities with zoning do not have protest rights in variance cases and they are not notified of such cases.

EXISTING LAND USE AND ZONING

Table 1. Land Use and Zoning in the Vicinity

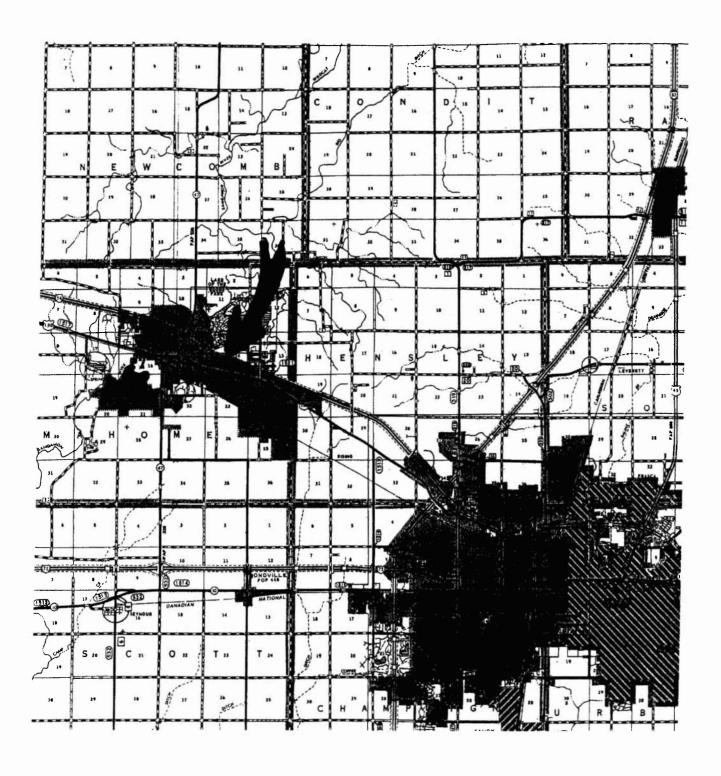
Direction	Land Use	Zoning
Onsite	Single Family Dwelling	AG-2 Agriculture
North	Single Family Dwelling	CR Conservation-Recreation
East	Single Family Dwelling	R-1 Single Family Dwelling
West	Single Family Dwelling	Village of Mahomet Zoning
South	Single Family Dwelling	AG-2 Agriculture

ATTACHMENTS

- A Case Maps (Location, Land Use, Zoning)
- B Revised site plan received on September 19, 2009
- C Zoning Use Permit 310-07-01
- D Final Notice of Violation sent to Scott and Larry Lambright on October 13, 2009
- E Draft Summary of Evidence for Case 657-V-09
- F Photographs of subject property taken by staff (included separately)

ATTACHMENT A. LOCATION MAP Case 657-V-09

NOVEMBER 6, 2009



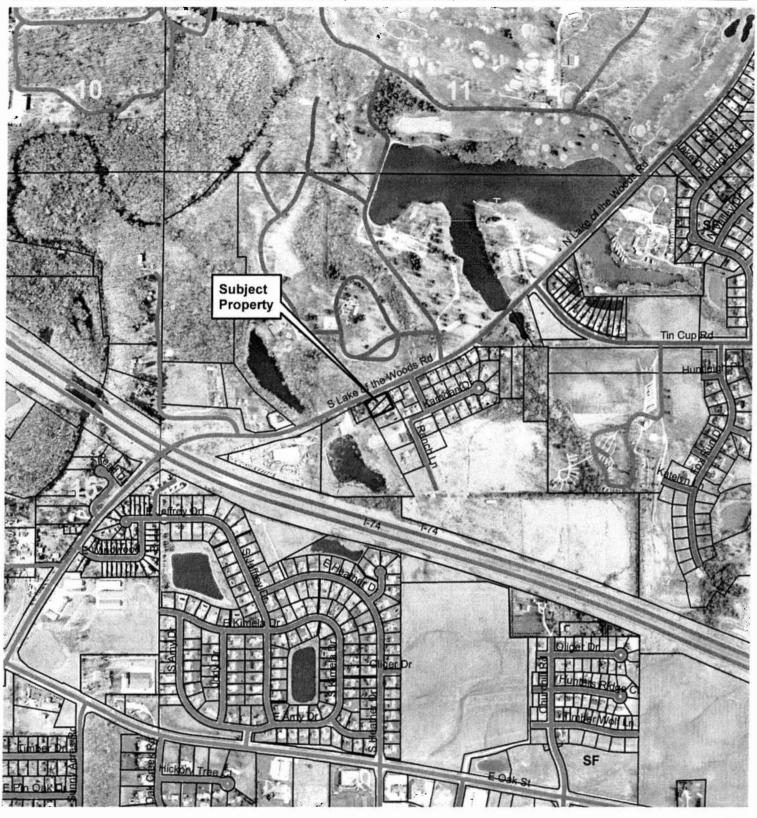


Champaign County Department of

PLANNING & ZONING

ATTACHMENT A. LAND USE MAP Case 657-V-09

NOVEMBER 6, 2009



	Area of Concern	
SF	Single Family	
FS	Farmstead	

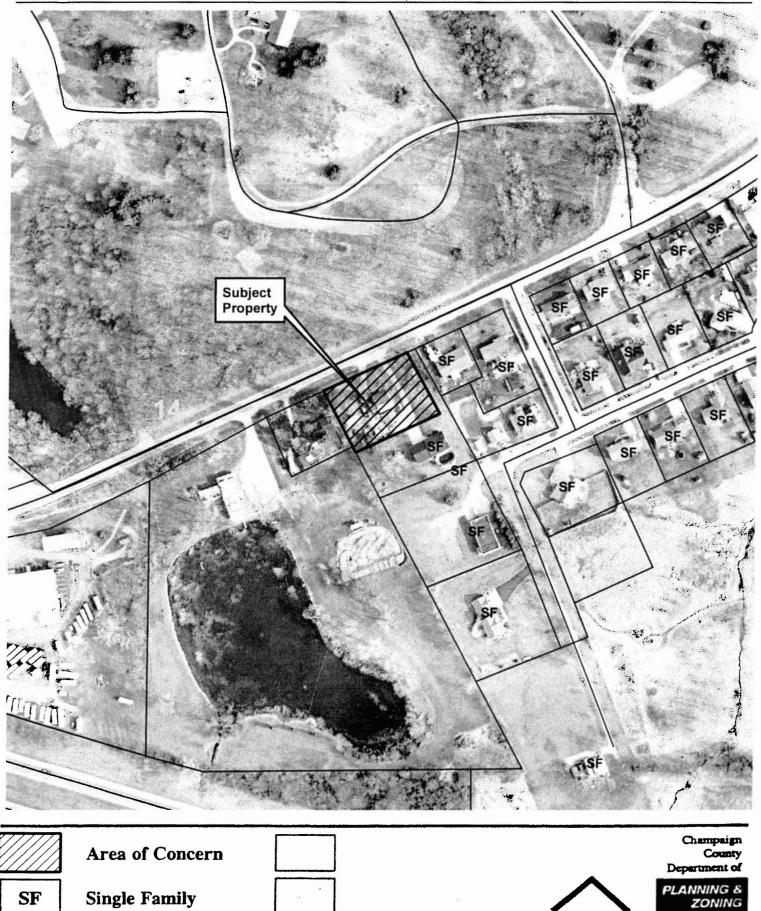


Champaign County Department of PLANNING & ZONING

1 inch = 800 feet

ATTACHMENT A. DETAIL LAND USE MAP Case 657-V-09

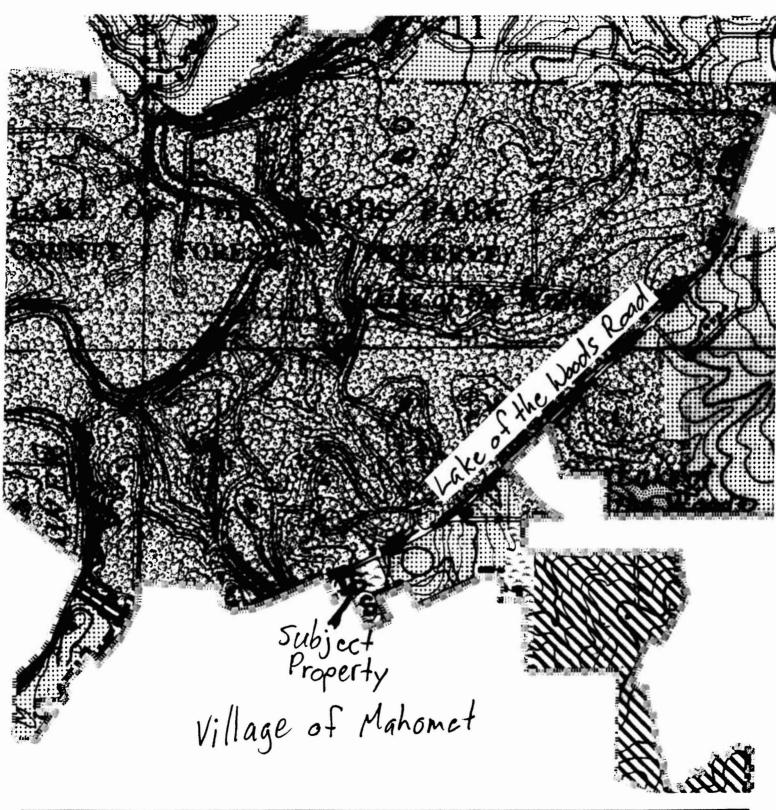
NOVEMBER 6, 2009

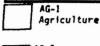


1 inch = 200 feet

FS

Farmstead





AG-2 Agriculture



Conservation-Recreation



R-1 Single Family Residence



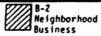
Single Family Residence

















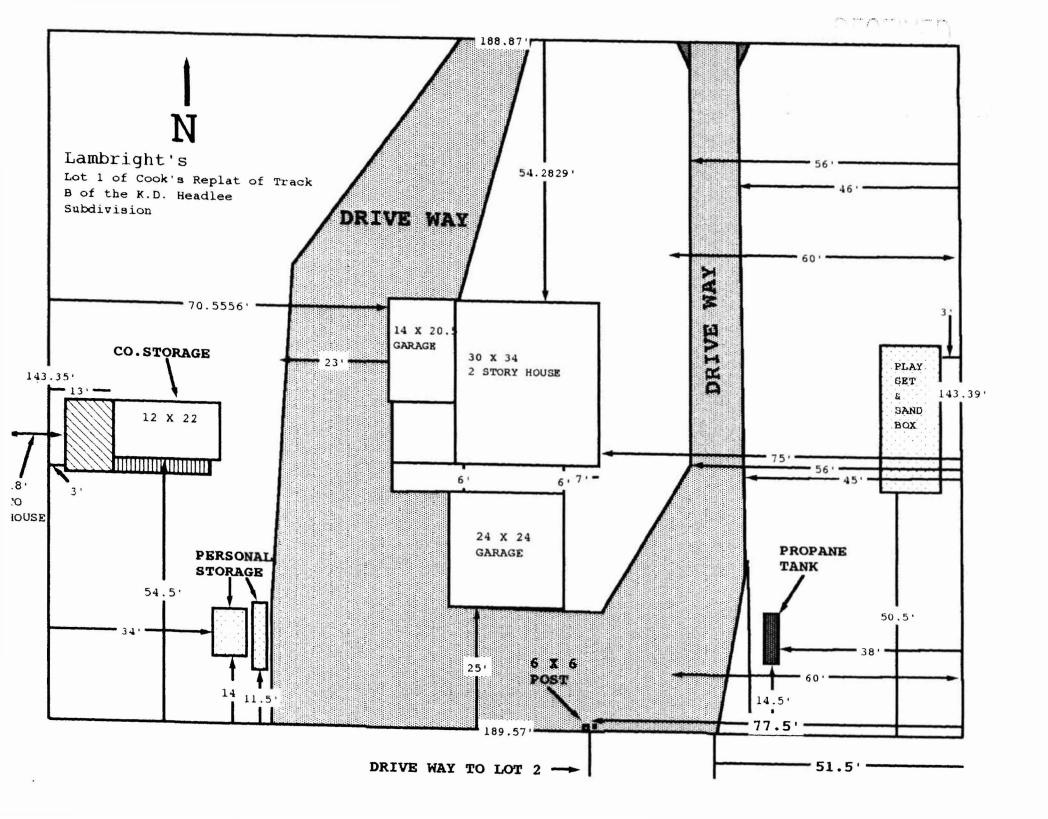
Heavy

Industry









CHAMPAIGN COUNTY, ILLINOIS

ZONING USE PERMIT

Application Date: 11/06/07

310-07-01

No.:

Township: Mahomet Section: 14 Receipt #: 3342

P.I.N.: 15-13-14-176-007 Fee: \$81.00

Location (Address, directions, etc.): 206B South Lake of the Woods Road, Mahomet, Illinois

Owner/s: Larry Lambright

Issued to: Owner: X Agent: Zoning District: AG-2 Lot Area: 27,222 sq.ft.

Legal Description: Lot #: Block #: Subdivision:

or; Lot 1 of Cook's Replat of Tract B of the K.D. Headlee Survey

Project Is To: construct a detached garage

Use Is: Accessory: X Principal: Conforming: X Non-Conforming:

By: Appeal #: Special Use #: Variance #:

Remarks:

Conditions

- 1. This permit is issued with the understanding that all construction, use and occupancy will be in compliance with the application as filed with the Planning and Zoning Department, and with all provisions of the Champaign County Zoning Ordinance.
- 2. This Zoning Use Permit expires if the work described in the application has not begun within 180 consecutive days from issuance or if the work is not substantially completed within 365 consecutive days from issuance.

Date:

- 3. As evidenced in the Zoning Use Permit Application, the owner has expressly granted permission for representatives of the Champaign County Department of Planning & Zoning to enter the premises at reasonable times for the purpose of inspection to ensure compliance with the Champaign County Zoning Ordinance.
- 4. A Zoning Compliance Certificate must be obtained from the Department of Planning and Zoning, in writing, prior to occupancy or use of the work or structures covered by this permit (Section 9.1.3).

Signed Ry:

Zoning Administrator Authorized Agent

Phone: (217)384-3708 T.D.D.: (217)384-3896 Fax: (217)328-2426

FINAL NOTICE

Champaign County Department of

October 13, 2009

Case: ZN-09-80/13

LE GUI



Larry Lambright 2110 Pheasant Ridge Mahomet, Illinois 61853

Administrative Center 1776 E. Washington Street Urbana, Illinois 61802 Scott Lambright 206B South Lake of the Woods Road Mahomet, Illinois 61853

(217) 384-3708

RE:

Violations of the Champaign County Zoning Ordinance and Champaign County Public Nuisance Ordinance on Lot 1 of Cook's Replat of Tract B of the K.D. Headlee Subdivision, Section 14, Mahomet Township, with an Address of 206B S. Lake of the Woods Road, Mahomet, Permanent Index No. 15-13-14-176-007.

Dear Mssrs. Lambright:

Final Notice is hereby given that the violations described in your First Notice remain unresolved and you must contact me on or before October 20, 2009, regarding this Notice. This is the last administrative notice that you will receive, and if you do not meet this deadline, this matter will be immediately referred to the Champaign County State's Attorney's Office for further action and a case will be filed in Champaign County Circuit Court.

On September 18, 2009, you were sent a First Notice of Violation by this Department. The Notice informed you that you were in violation of the following sections of the Champaign County Zoning Ordinance and the Champaign County Public Nuisance Ordinance:

- Zoning Ordinance, Section 7.1.1B., which requires that all business activities
 for a Neighborhood Home Occupation be conducted entirely indoors, and
 limited to the dwelling and no more than one accessory building located on
 the lot. The dwelling or accessory building cannot be modified and no
 display or activity can be conducted that would indicate from the exterior
 that it is being used for any purpose other than that of a residential dwelling
 or residential accessory building; and
- 2. Zoning Ordinance, Section 7.1.1J., which prohibits outdoor storage or display for a Neighborhood Home Occupation; and
- 3. Zoning Ordinance, Section 7.2.1B, which requires that a detached accessory building or structure be located no less than 10 feet from a side lot line; and
- 4. Zoning Ordinance, Section 7.2.1C, which requires that a detached accessory building or structure be located no less than 10 feet from a rear lot line; and

- 5. Nuisance Ordinance, Section 3.2A.1., which prohibits the deposition, accumulation, maintenance or disposal other than in properly permitted and/or licensed facilities of garbage and debris; and
- 6. Nuisance Ordinance, Section 3.2B.1., which prohibits the storage outside of a fully enclosed building of building materials, recyclable materials, and equipment.

The First Notice reviewed the basis of that Notice and the action required to resolve the outstanding violations. The Notice required you to correct the outstanding violations on or before October 5, 2009, or this matter would be referred to the Champaign County State's Attorney for further action.

On October 5, 2009, you filed a Variance application with the Planning and Zoning Department. The variance requested is for the construction and use of a detached shed/barn with an attached two-story deck that is located 3 feet to the side lot line in lieu of the required 10 feet and to allow the average height of the barn to be 16 feet in lieu of the maximum 15 feet average height limit on lots less than one acre in area.

On October 7, 2009, I contacted you to inform you that the site plan that was submitted with the Variance application was not complete and that you must submit to the Planning and Zoning Department a complete and accurate site plan. The site plan must indicate the dimensions of the property, the location of all building/structures on the property with dimensions (including the propane tank and children's play area), and the dimensions to all property lines. Please also note on the site plan which storage buildings/sheds on your property are used for personal use and which ones are used for business use.

Additional inspections of the property have not been done, however prior to the public hearing in Case 657-V-09 an inspection will be performed so that the Champaign County Zoning Board of Appeals will be informed as to whether or not the property is in compliance with all other Zoning Ordinance and Nuisance Ordinance regulations. Pursuant to Section 13.2.1, the Zoning Board of Appeals cannot approve the requested variances if other violations are occurring on the property.

ACTION REQUIRED TO CORRECT VIOLATIONS

You must do the following on or before October 20, 2009, in order to resolve the outstanding violations that are occurring on your property:

- 1. Submit a complete and accurate site plan of your entire property as indicated above so that your variance request can be docketed for public hearing; and
- 2. Remove and store inside a fully enclosed building all business related equipment and materials including but not limited to the large tan metal toolbox sitting next to the garage; and
- 3. Move the small detached storage shed that is sitting on your north property line so that it meets the minimum 10 foot side and rear yard requirements; and
- 4. Move the unconnected propane tank to be located no closer than 10 feet to any property line and the propane tank must have a hood and lock on the regulator; and

- 5. Remove and properly dispose of or store inside a fully enclosed building all garbage and debris from the property including but not limited to the garbage cans, barrels or containers filled with scrap pieces of metal and vinyl siding, tires, and any miscellaneous other garbage and debris that may be on the subject property; and
- 6. Either remove and properly dispose of the large chunks of broken concrete that have been dumped on the property **or** provide the Planning and Zoning Department with a letter indicating how you intend to use the large chunks of broken concrete and specify how long the project will take; and
- 7. Either completely remove the Lambright Construction and Maintenance, Inc. construction trailer from the property or remove or cover up Lambright Construction and Maintenance, Inc., on the Ford F-350 with Illinois license plates 41752B, at all times when the truck is on the subject property.
- 8. After you have completed everything listed above you must contact me to let me know the violations have been resolved and then you must allow me to inspect the property for compliance within the required time frame.

If you do not do what is listed above and you do not contact me, it will be assumed that the violations continue to exist. If you do not meet this deadline, this matter will be immediately referred to the Champaign County State's Attorney's Office for further action and a case will be filed in Champaign County Circuit Court.

This is the last administrative notice that you will receive.

I look forward to working with you to resolve these matters. Please contact me at 384-3708 if you have any questions or if I can be of any other assistance to you.

Sincerely,

Jamie Hitt Zoning Officer

Janu Hitt

violations/zn-09-80/13.fnl

PRELIMINARY DRAFT

657-V-09

FINDING OF FACT AND FINAL DETERMINATION

of

Champaign County Zoning Board of Appeals

Final Determination: { GRANTED / DENIED }

Date: November 12, 2009

Petitioners: Larry & Diane Lambright; and Scott Lambright

Request: Authorize the use of an existing two story detached accessory storage building with a

second story deck with a side yard of three feet in lieu of the required ten feet side yard for accessory structures in the AG-2 Agriculture zoning district, and an average height of 16 feet in lieu of the maximum allowed 15 feet average height for residential accessory structures on lots less than one acre in area in the AG-2 Agriculture Zoning

District

SUMMARY OF EVIDENCE

From the documents of record and the testimony and exhibits received at the public hearing conducted **November 12, 2009**, the Zoning Board of Appeals of Champaign County finds that:

- 1. The co-petitioners, Larry & Diane Lambright, own the subject property. Co-petitioner Scott Lambright lives and operates Lambright Construction and Maintenance, Inc. as a Neighborhood Home Occupation (NHO) on the subject property.
- 2. The subject property is Lot 1 of Cook's Replat of Tract B of the K.D. Headlee Subdivision in Section 14 of Mahomet Township and commonly known as the house at 206B Lake of the Woods Road, Mahomet.
- 3. The subject property is located within the one and one-half mile extraterritorial jurisdiction of the Village of Mahomet. Municipalities do not have protest rights in variance cases and are not notified of such cases.

GENERALLY REGARDING LAND USE AND ZONING IN THE IMMEDIATE VICINITY

- 4. Regarding land use and zoning on the subject property and adjacent to it:
 - A. The subject property is zoned AG-2 and is in use as a single family dwelling and Lambright Construction and Maintenance, Inc. operated as a Neighborhood Home Occupation.
 - B. Land to the north of the subject property is zoned CR Conservation-Recreation and is in use as single family dwellings.

PRELIMINARY DRAFT

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- C. Land to the east is zoned R-1 Single Family dwelling and is in use as single family dwellings.
- D. Land to the west is inside the corporate limits of the Village of Mahomet.
- E. Land to the south is zoned AG-2 Agriculture and is in use as a single family dwelling.

GENERALLY REGARDING THE PROPOSED SITE PLAN

- 5. The proposed site plan was submitted on October 19, 2009, and describes the property as follows:
 - A. A two-story house with an attached garage is located centrally on the subject property, and a detached garage is located six feet south of the existing house.
 - B. The east 60 feet of the subject property is covered by an easement allowing access to the property south of the subject property. A play set and sand box and propane tank are located on the east side of the driveway covered by the easement, but conform to the requirements of the *Zoning Ordinance*.
 - C. Two personal storage sheds are located 14 and 11.5 feet from the south property line, respectively. They are both less than 150 feet in area and are currently conforming with all requirements of the *Zoning Ordinance*.
 - D. The existing detached accessory storage building is located approximately 55 feet from the south property line and 13 feet from the west property line. However, it was modified after it was constructed by adding a second story deck on the west side which extends to approximately three feet from the west property line, which is nonconforming with the requirements of the *Zoning Ordinance*. The petitioners have also indicated that the average height of the building is 16 feet which is also nonconforming with regards to the *Zoning Ordinance*.

GENERALLY REGARDING SPECIFIC ORDINANCE REQUIREMENTS AND ZONING PROCEDURES

- 6. Regarding specific Zoning Ordinance requirements relevant to this case:
 - A. The following definitions from the *Zoning Ordinance* are especially relevant to the requested variance (capitalized words are defined in the Ordinance):
 - (1) "ACCESSORY BUILDING" is a BUILDING on the same LOT with the MAIN or PRINCIPAL STRUCTURE or the main or principal USE, either detached from or attached to the MAIN OR PRINCIPAL STRUCTURE, and subordinate to and used for purposes customarily incidental to the MAIN OR PRINCIPAL STRUCTURE, or the main or principal USE.
 - (2) "ACCESSORY STRUCTURE" is a STRUCTURE on the same LOT with the MAIN or PRINCIPAL STRUCTURE, or the main or principal USE, either DETACHED from or ATTACHED to the MAIN or PRINCIPAL STRUCTURE, subordinate to and USED for purposes customarily incidental to the MAIN or PRINCIPAL STRUCTURE or the main or principal USE.

- (3) "BUILDING, MAIN or PRINCIPAL" is the BUILDING in which is conducted the main or principal USE of the LOT on which it is located.
- (4) "BUILDING RESTRICTION LINE" is a line usually parallel to the FRONT, side, or REAR LOT LINE set so as to provide the required YARDS for a BUILDING or STRUCTURE.
- (5) "HOME OCCUPATION, NEIGHBORHOOD" is any activity conducted for gain or support by a member or members of the immediate FAMILY, residing on the premises, as an ACCESSORY USE entirely within the resident's DWELLING UNIT or ACCESSORY BUILDING not exclusively devoted to such activity.
- (6) "LOT" is a designated parcel, tract or area of land established by PLAT, SUBDIVISION or as otherwise permitted by law, to be used, developed or built upon as a unit.
- (7) "LOT LINES" are the lines bounding a LOT.
- (8) "VARIANCE" is a deviation from the regulations or standards adopted by this ordinance which the Hearing Officer or the Zoning Board of Appeals are permitted to grant.
- (9) "YARD" is an OPEN SPACE, other than a COURT, of uniform depth on the same LOT with a STRUCTURE, lying between the STRUCTURE and the nearest LOT LINE and which is unoccupied and unobstructed from the surface of the ground upward except as may be specifically provided by the regulations and standards herein.
- (10) "YARD, SIDE" is a YARD situated between a side LOT LINE and the nearest line of a PRINCIPAL STRUCTURE located on said LOT and extending from the rear line of the required FRONT YARD to the front line of the required REAR YARD.
- B. Paragraph B. in Subsection 7.2.1 of the *Zoning Ordinance* specifies the required minimum side yard for detached accessory buildings or structures in the AG-1, AG-2, and CR Districts as follows:

SIDE YARD

No DETACHED ACCESSORY BUILDING or STRUCTURE shall be located less than 10 feet from any side LOT LINE.

- C. The Department of Planning and Zoning measures yards and setbacks to the nearest wall line of a building or structure and the nearest wall line is interpreted to include overhanging balconies, projecting window and fireplace bulkheads, and similar irregularities in the building footprint. A roof overhang is only considered if it overhangs a property line.
- D. Paragraph 9.1.9 D. of the *Zoning Ordinance* requires the ZBA to make the following findings for a variance:

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PRELIMINARY DRAFT

- (1) That the requirements of Paragraph 9.1.9 C. have been met and justify granting the variance. Paragraph 9.1.9 C. of the *Zoning Ordinance* states that a variance from the terms of the *Champaign County Zoning Ordinance* shall not be granted by the Board or the hearing officer unless a written application for a variance is submitted demonstrating all of the following:
 - (a) That special conditions and circumstances exist which are peculiar to the land or structure involved which are not applicable to other similarly situated land or structures elsewhere in the same district.
 - (b) That practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied prevent reasonable and otherwise permitted use of the land or structures or construction on the lot.
 - (c) That the special conditions, circumstances, hardships, or practical difficulties do not result from actions of the Applicant.
 - (d) That the granting of the variance is in harmony with the general purpose and intent of the *Ordinance*.
 - (e) That the granting of the variance will not be injurious to the neighborhood, or otherwise detrimental to the public health, safety, or welfare.
- (2) That the variance is the minimum variation that will make possible the reasonable use of the land or structure, as required by subparagraph 9.1.9D.2.
- E. Paragraph 9.1.9.E. of the *Zoning Ordinance* authorizes the ZBA to prescribe appropriate conditions and safeguards in granting a variance.

GENERALLY REGARDING SPECIAL CONDITIONS THAT MAY BE PRESENT

- 7. Generally regarding the Zoning Ordinance requirement of a finding that special conditions and circumstances exist which are peculiar to the land or structure involved which are not applicable to other similarly situated land or structures elsewhere in the same district:
 - A. The Petitioners have testified on the application that, "Requesting variance for height restriction and sideline setback for deck on shed."
 - B. Regarding the sequence of events that lead to Case 657-V-09:
 - (1) On November 6, 2007, the petitioners applied for Zoning Use Permit Application (ZUPA) 310-07-01. The permit authorized a detached garage 12 feet in height with no deck on it, and was approved on November 20, 2007.
 - (2) On November 20, 2007, the petitioners submitted an application (NHO-07-29) to register Lambright Construction and Maintenance, Inc. as a Neighborhood Home Occupation (NHO). The registration was approved on December 12, 2007.

- (3) On February 19, 2008, staff received a complaint regarding the subject property, which indicated that a rusty propane tank was delivered to the subject property and outdoor storage of construction materials was also occurring. The complaint also indicated that a newly constructed storage building was taller than the two story house.
- (4) On February 26, 2008, staff received another complaint regarding the subject property, which indicated that an old flat bed truck with a flat tire was sitting on the property and was loaded with junk. The complaint indicated that there was still a great deal of outdoor storage occurring on the subject property and that the shared driveway on the subject property was blocked.
- (5) On July 1, 2009, staff received another complaint regarding the subject property, which indicated that outdoor storage was still occurring on the subject property and that access via the shared driveway was still limited.
- (6) On July 6, 2009, staff was notified that co-petitioner Scott Lambright was building a second story deck onto the existing detached accessory storage building.
- (7) On July 10, 2009, Jamie Hitt, Zoning Officer, performed a compliance inspection for ZUPA 310-07-01, which originally permitted a one-story detached accessory storage building, and found that the storage building authorized by the permit had been constructed to be taller than authorized in the permit and that the second story deck, which was not part of the original permit appeared to be only three feet from the property line. She also discovered outdoor storage occurring on the property.
- (8) On July 15, 2009, Jamie Hitt, Zoning Officer, spoke with co-petitioner Scott Lambright on the phone to inform him that he needed to either apply for a variance for the second story deck or modify it so that it conformed to the accessory structure side yard requirement of 10 feet. She also told Mr. Lambright that no outdoor storage should occur on the property.
- (9) On July 21, 2009, Jamie Hitt, Zoning Officer, sent a letter to co-petitioners Scott and Larry Lambright as a follow-up to her phone conversation with Scott Lambright on July 15, 2009. The letter reiterated the need for a variance for the second story deck and indicated August 5, 2009, would be the deadline to clean up the subject property.
- (10) On August 7, 2009, Jamie Hitt, Zoning Officer, inspected the subject property and found that significant progress was being made towards correcting all the violations. She spoke with Scott Lambright and again reminded him of the necessity to apply for a variance. Based on the progress made at this time the petitioners were given some additional time to continue making progress towards correcting all the violations before enforcement was started.

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PRELIMINARY DRAFT

- (11) On September 2, 2009, the Zoning Officer re-inspected the property and was told that the petitioners were now proposing to modify the deck so that a variance would not be necessary.
- (12) On September 11, 2009, the Department received a new complaint regarding large chunks of concrete that had been dumped on the subject property.
- (13) On September 18, 2009, due to the lack of progress in modifying the second story deck or completing the clean up of the subject property a First Notice of Violation was sent to the petitioners.
- (14) On October 5, 2009, a Variance application was submitted by the petitioners. The site plan was found to be inadequate and a request was made on October 7, 2009, to the petitioners to provide a clearer and more accurate site plan.
- (15) On October 13, 2009, as part of the continuing enforcement action against the petitioners a Final Notice of Violation was sent to the petitioners.
- (16) On October 19, 2009, the petitioners submitted a revised and clearer site plan of the subject property.
- C. Regarding the variance for the height of the detached accessory storage building, the variance is within the amount that could be authorized by administrative variance if another variance were not also required.
- D. If the second story deck was shortened to three feet in depth there would be no need for a variance.

GENERALLY REGARDING ANY PRACTICAL DIFFICULTIES OR HARDSHIPS RELATED TO CARRYING OUT THE STRICT LETTER OF THE ORDINANCE

- 8. Generally regarding the Zoning Ordinance requirement of a finding that practical difficulties or hardships related to carrying out the strict letter of the regulations sought to be varied prevent reasonable and otherwise permitted use of the land or structures or construction on the lot:
 - A. The Petitioners have testified on the application that, "The average height of the shed is 16'. It was built for head clearance for 2nd story. Peak does not exceed 2-story house on lot. When built, it was our understanding that it was not to exceed the height of the house. Regarding the lot line variance, the deck was built to be used for moving material in and out of the 2nd story of shed."
 - B. The petitioners constructed the subject building in a conforming location and then altered it after construction so that it was no longer conforming to its original permit or the *Zoning Ordinance* in the misunderstanding they had done everything that was required of them. However, they did not contact the Department at the time of the modification of the accessory building.

- C. Regarding the side yard variance:
 - (1) The second story deck is located 18 feet from the nearest structure on a neighboring property which is the minimum amount of total separation two structures would have if authorized by administrative variance. This amount of separation should provide adequate access for fire-fighting.
 - (2) The enclosed portion of the structure is located 13 feet from the west lot line, which is a conforming distance, and the portion of the structure that is nonconforming is an open structure that creates less danger in terms of conflagration of structures, collapse, etc...

GENERALLY PERTAINING TO WHETHER OR NOT THE PRACTICAL DIFFICULTIES OR HARDSHIPS RESULT FROM THE ACTIONS OF THE APPLICANT

- 9. Generally regarding the Zoning Ordinance requirement for a finding that the special conditions, circumstances, hardships, or practical difficulties do not result from the actions of the Applicant:
 - A. The Petitioners have testified on the application that, "The guidelines for height restrictions for the shed and setback restrictions for the deck were misunderstood. It was our understanding that the height should not exceed the height of the house. We did not realize there was a setback requirement for a deck."
 - B. The petitioners constructed the subject building in a conforming location and then altered it after construction so that it was no longer conforming to its original permit or the *Zoning Ordinance* in the misunderstanding they had done everything that was required of them. However, they did not contact the Department at the time of the modification of the accessory building.
 - C. The Zoning Ordinance does not require a Zoning Use Permit for an open deck. However, a deck that is high enough above the ground to allow the underneath space to be enclosed for some other use is required to have a permit.

GENERALLY PERTAINING TO WHETHER OR NOT THE VARIANCE IS IN HARMONY WITH THE GENERAL PURPOSE AND INTENT OF THE ORDINANCE

- 10. Generally regarding the Zoning Ordinance requirement for a finding that the granting of the variance is in harmony with the general purpose and intent of the Ordinance:
 - A. The Petitioners did not provide any testimony on the application.
 - B. The Zoning Ordinance does not clearly state the considerations that underlay the side and rear yard requirements. In general, the side and rear yards are presumably intended to ensure the following:
 - (1) Adequate light and air: The detached accessory structure is an accessory structure and does not appear to negatively affect the amount of light and air available on the subject property or the neighboring property.
 - (2) Separation of structures to prevent conflagration: Structures in the rural zoning districts are generally located farther from fire protection stations than structures in the urban

PRELIMINARY DRAFT

districts and the level of fire protection service is generally somewhat lower given the slower response time. The subject property is in the Cornbelt Fire Protection District and the station is approximately two road miles from the subject property. The storage building is located away from other structures on the subject property and is 18 feet from the nearest structure on the neighboring property.

- (3) Aesthetics may also play a part in minimum yard requirements.
- C. The proposed side yard of three feet is 30% of the required 10 feet for a variance of 70%.
- D. The subject property meets all other requirements of the Zoning Ordinance.
- E. The requested variance is not prohibited by the *Zoning Ordinance*.

GENERALLY PERTAINING TO THE EFFECTS OF THE REQUESTED VARIANCE ON THE NEIGHBORHOOD AND THE PUBLIC HEALTH, SAFETY, AND WELFARE

- 11. Generally regarding the Zoning Ordinance requirement for a finding that the granting of the variance will not be injurious to the neighborhood, or otherwise detrimental to the public health, safety, or welfare:
 - A. The Petitioners have testified on the application that, "The height of the shed nor the deck are detrimental to the neighborhood or public health, safety or welfare. The adjoining neighbors to the west have told us they do not have any problems with the shed or the deck."
 - B The detached accessory structure is located away from other structures on the subject property and is 18 feet from the nearest structure on a neighboring property.
 - C. The Fire Protection District has received notice of this variance, but no comments have been received.
 - D. The Township Highway Commissioner has also received notice of this variance, but no comments have been received.
- 12. Elsewhere on the application the petitioners testified that, "It would be a major cost and a large project to lower the roof and the shed would be less functional for our needs. The depth of the deck makes it more convenient to handle material."

DOCUMENTS OF RECORD

- 1. Variance application from Albert & Barbara Knox, received on December 3, 2008, with attachments:
 - A Site plan
- 2. Revised site plan received on September 19, 2009
- 3. Preliminary Memorandum for Case 657-V-09, with attachments:
 - A Case Maps (Location, Land Use, Zoning)
 - B Revised site plan received on September 19, 2009
 - C Zoning Use Permit 310-07-01
 - D Final Notice of Violation sent to Scott and Larry Lambright on October 13, 2009
 - E Draft Summary of Evidence for Case 657-V-09

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PRELIMINARY DRAFT

FINDINGS OF FACT

From the documents of record and the testimony and exhibits received at the public hearing for zoning case 657-V-09 held on November 12, 2009, the Zoning Board of Appeals of Champaign County finds that:

varied {W	difficulties or hardships created by carrying out the strict letter of the regulations sought to be VILL / WILL NOT} prevent reasonable or otherwise permitted use of the land or structure or ion because:
	al conditions, circumstances, hardships, or practical difficulties {DO / DO NOT} result from the applicant because:
	ested variance {SUBJECT TO THE PROPOSED CONDITION} {IS / IS NOT} in harmony general purpose and intent of the Ordinance because:
	ested variance {SUBJECT TO THE PROPOSED CONDITION} {WILL / WILL NOT} be to the neighborhood or otherwise detrimental to the public health, safety, or welfare because:
	sted variance {SUBJECT TO THE PROPOSED CONDITION} {IS / IS NOT} the minimum that will make possible the reasonable use of the land/structure because:

FINAL DETERMINATION

The Champaign County Zoning Board of Appeals finds that, based upon the application, testimony, and other evidence received in this case, that the requirements of Section 9.1.9.C {HAVE/HAVE NOT} been met, and pursuant to the authority granted by Section 9.1.6.B of the Champaign County Zoning Ordinance, the Zoning Board of Appeals of Champaign County determines that:

The Variance requested in Case 657-V-09 is hereby {GRANTED/GRANTED WITH CONDITIONS/DENIED} to the petitioners, Larry & Diane Lambright; and Scott Lambright, to authorize the use of an existing two story detached accessory storage building with a second story deck with a side yard of three feet in lieu of the required ten feet side yard for accessory structures in the AG-2 Agriculture zoning district, and an average height of 16 feet in lieu of the maximum allowed 15 feet average height for residential accessory structures on lots less than one acre in area in the AG-2 Agriculture Zoning District.

The foregoing is an accurate and complete record of the Findings and Determination of the Zoning Board of Appeals of Champaign County.

Doug Bluhm, Chair Champaign County Zoning Board of Appeals ATTEST:

Secretary to the Zoning Board of Appeals

Date

SIGNED:



