

MEMORANDUM

TO: APC Ordinance Committee
FROM: Larry Aukerman Planner
SUBJECT: **Small Wind Systems**
DATE: January 2, 2020

Recently staff was contacted by the Energy Manager for the Tippecanoe School Corporation. TSC is working with Purdue to investigate making schools less energy dependent. The discussion included small wind systems and solar panels. During this discussion, staff realized that small wind systems are not permitted as accessory structures to schools in residential zones.

Staff discussed options that will allow small wind systems on school properties in residential zones. **Small wind systems** have a total height of 140' or less and a swept area of 40' or less and are only allowed as accessory structures in **commercial, industrial** and **rural** zones. (As a reference, the CityBus wind towers are 155' in height and have a swept area of 70'.) All TSC schools are zoned residentially. Most are zoned R1, except Woodland which is zoned R1A, and Wyandotte which is R1B, (two schools are within the Shadeland corporation limits and not affected by this ordinance.) Instead of allowing small wind systems on all properties in residential zones, staff is proposing allowing these systems as accessory structures to "institutional uses in residential zones." The term, "institutional uses" is already found in the UZO in the sign section which defines them as uses found in SIC 801-972 which are also permitted under Section 3-2 (the permitted use table) in residential zones. SIC 801-972 include: nursing and personal care facilities; elementary and secondary schools; colleges, universities; libraries; museums, fire and police stations, etc.

Staff has also discussed the production limits placed on the towers of 50 KW per wind tower. Staff would like to get rid of the production limits placed on the definitions of large and small wind systems. The argument/reasoning is that if a tower can be created that meets the size limits of a small tower, then the energy produced should not be limited. Tower efficiency should not be stymied by our ordinance.

RECOMMENDATION:

A motion to forward this ordinance amendment to the full APC

ORDINANCE NO. _____

**AN ORDINANCE AMENDING CHAPTER _____
OF ORDINANCE NO. _____
BEING THE UNIFIED ZONING ORDINANCE
OF TIPPECANOE COUNTY.**

Be it ordained by the (County Commissioners of Tippecanoe County, Indiana; the Common Council of the City of Lafayette, Indiana; the Common Council of the City of West Lafayette, Indiana; the Town Council of the Town of Battle Ground, Indiana; the Town Council of the Town of Dayton, Indiana; and the Town Council of Clarks Hill, Indiana), that Ordinance No. _____, being the Unified Zoning Ordinance of Tippecanoe County is hereby amended as follows:

Section 1: Change **UZO Section 1-10-2 Words and Terms Defined** by amending the following two entries:

LARGE WIND SYSTEM. A **WECS** that has a nameplate capacity (manufacturer's rating) of more than 50 kilowatts per **wind tower**, or a **total height** of more than 140' or a **swept area** of more than 40'. Any **WECS** meeting one or more of these criteria shall be considered a **large wind system**.

And

SMALL WIND SYSTEM. A **WECS** that has a nameplate capacity (manufacturer's rating) less than or equal to 50 kilowatts per **wind tower**, and a **total height** of 140' or less, and a **swept area** of 40' or less.

Would both be amended to read as follows:

LARGE WIND SYSTEM. A **WECS** that has a **total height** of more than 140' or a **swept area** of more than 40'. Any **WECS** meeting one or both of these criteria shall be considered a **large wind system**.

SMALL WIND SYSTEM. A **WECS** that has a **total height** of 140' or less, and a **swept area** of 40' or less.

Section 2: Change **UZO Section 4-1(b) Additional Use Restrictions, Accessory Uses, Accessory Structures and Accessory Buildings** by adding the underlined phrase to read as follows:

(27) **small wind systems** (only in commercial, industrial and rural zones, and also at institutional uses in residential zones as regulated in 4-11-11):

This ordinance shall be in full force and effect from and after its passage.