



Conway Township Planning Commission

Monday, March 11, 2024 | 7:00pm

Conway Township Hall | 8015 N. Fowlerville Road, Fowlerville, Michigan 48836

1. **CALL TO ORDER / PLEDGE**
2. **ROLL CALL**
3. **CALL TO THE PUBLIC**
4. **APPROVAL OF PLANNING COMMISSION MEETING March 11, 2024 AGENDA**
5. **APPROVAL OF THE February 12, 2024 MEETING MINUTES**
6. **COMMUNICATIONS**
 - a. Zoning Administrator's Report
 - b. Livingston County Planning Commission Update/Report
7. **OLD BUSINESS**
 - a. Wind Ordinance – LCPC sent back with recommendations
 - b. Cargo Container – Ordinance 2023-05
 1. Marked up ordinance.
 2. Clean version
 - c. Planner Update
 - d. Master Plan
 - e. Planning Commission by-laws
 - f. Community Survey
8. **NEW BUSINESS**
 - a. Zoning Ordinance Update
 1. Section 14.05 A
9. **PLANNING COMMISSION MEMBER DISCUSSION**
10. **2nd CALL TO THE PUBLIC**
11. **ADJOURNMENT**

Any person may speak for up to 3 minutes during the public comment period.

Next Meeting will be Monday, April 8, 2024



Conway Township Planning Commission Meeting Minutes
 Monday, February 12, 2024 | 7:00pm EST
 Conway Township Hall | 8015 N. Fowlerville Road, Fowlerville, MI 48836

Agenda	Items Discussed	Actions to be Taken
Attendees	PC Members Present: George Pushies - Ex-Officio, Shawn Morrison, Sarah Porter, Mike Brown- Vice Chair, Mike Stock, Lucas Curd- Chair, and Kayla Poissant-Secretary Zoning Administrator – Becky Dockery Livingston County Planning Commissioner: Dennis Bowdoin Township Attorney (Both Absent): Abby Cooper, JD, Michael D. Homier	None
Call to Order/Pledge	Chair, L. Curd called the Conway Township Planning Commission meeting to order at 7:00pm and led the Pledge of Allegiance.	None
Approval of Agenda	Motion to accept the meeting agenda as amended for February 12, 2024. Motion by M. Brown. Support L. Curd. Motion Approved.	Motion Approved
Approval of January 2024 Minutes	Motion to accept meeting minutes from January 8, 2024. Motion by S. Morrison. Support by M. Brown. Motion Approved.	Motion Approved
Call to the Public	Steve Smith- Robb Rd.- He congratulated S. Porter for being selected for the Planning Commission. He also stated that he is concerned about the general height of the wind turbines mentioning farmers using planes for crop dusting purposes. He stated that this particular issue may not be thought about, and he is interested to hear what Rick Swanson, from the Building Department, has to say on the cargo containers ordinance. He also mentioned that he was traveling on his tractor and was barely able to see a cargo container hidden behind some trees.	None
Communications	<i>a. Zoning Administrator Report:</i> B. Dockery stated that there were two Land Use Permits last month, one for a house, one for a reroof.	None

	<p><i>b. Livingston County Planning Commission Report:</i> D. Bowdoin stated that the LCPC will be looking at the Wind Ordinance this month.</p>	None
<p>Old Business</p>	<p><i>a. Cargo Container discussion with Rick Swanson – Livingston County Building Department</i></p> <p>R. Swanson discussed with the PC that when he was originally contacted about cargo containers, it was a phone conversation with a representative, and did not intend for what was stated to become part of an ordinance. He clarified that his comments via that call was his comments about the situation, nothing more. He stated the Building Department, is concerned about the placement on the property, and that the Building Department does consider them regulated because the containers are repurposed from their original use. He stated that once the container is over 200 sq ft, they would regulate the placement of the container, and support beneath it, and anchors. For codes/regulations, they would use the Michigan Residential Code for enforcement, and he stated that containers at this time do not have any codes relating to making it a livable space. He stated that the containers are in the Michigan Commercial Code, but not in the Residential Code as of yet. He discussed the possible foundations of concrete or gravel base, and the anchors for them are part of that foundation. When discussing the electrical portion of the ordinance, R. Swanson mentioned using surface mount conduits, and he said as long as the homeowner had a permit and it was inspected, there should be no issues. He also stated that referencing state building and electrical codes would be useful in the ordinance. He stated that the Commercial code goes over mostly foundation, and the modification of the structures. He clarified that containers under 200 sq ft are not regulated in the county. The number of containers per each property was discussed, as well as commercial usage/purposes and the enforceability of the ordinance itself. R. Swanson discussed how Assessors and the Building Department look at the containers differently, taxation vs. safety. As for the anchors, he said they would generally have two tie-downs at</p>	

	<p>opposite corners of the containers 200 sq ft or over. Discussion continued.</p> <p><i>b. Cargo Container – Ordinance 2023-05</i> Discussion continued. M. Stock brought up the enforcement issue, as well as the possible blight that could come of it. G. Pushies said he sees both sides of the possible usage of them. M. Brown brought up putting a maximum number and size to help control the blight issue. It was brought up that the Township allowed Accessory Buildings to be built before the principal building to allow homeowners to store their belongs as they were building, as well as the Township is a complaint-based Township. It was discussed that there are two cargo containers next to the VFW hall in downtown Fowlerville. S. Morrison discussed and showed two cargo containers with truces on top of them, showing another use for them. The visibility of the containers was discussed, as well as the placement/location. The process for the ordinance in general was discussed due to it being sent back to the PC from the Township Board. One suggestion from another Township, Big Rapids Township, brought up by S. Porter was...</p> <ul style="list-style-type: none"> 1-5 acres- 1 container up to 20 ft long 5-10 acres- 2 containers up to 40 ft each 10+ acres- 4 containers up to 40 ft each <p>S. Porter discussed her research from other Townships regarding the containers. It was also discussed how to simplify and clarify the ordinance. “Grandfathered” containers were discussed. The PC discussed having each member come back with clear points to finish discussing next meeting. The new Accessory Building ordinance that was recently passed was discussed.</p> <p>Motion to table discussion regarding the cargo containers until next month’s meeting with Attorney Abby Cooper. Motion by M. Brown. Support by M. Stock. Motion Approved.</p> <p><i>c. Update on Wind Ordinance – Submitted to LCPC</i> The Wind Ordinance was sent to the LCPC, and they will be reviewing it this month at their next meeting.</p>	<p>Motion Approved</p>
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	<p><i>d. Planner Update</i></p> <p>L. Curd stated that Rowe Professional Services got in touch with him, and they should have a price and a quote to them by next month for the open Planner Position.</p>	
<p>New Business</p>	<p><i>a. Addressing the Master Plan</i></p> <p>It was discussed that the Census, the solar/wind ordinances, and the commercial districts need to be completed soon, and then work on the rest of the Master Plan. It was discussed to get as much information for the above topics and start putting it together. The current commercial nodes were discussed and their locations.</p> <p><i>b. Survey of Conway Township Citizens – What questions should be included in the citizens survey.</i></p> <p>The Commission discussed the survey questions that will be included with the Master Plan. It was discussed about the open public meeting to get input from the residents on their concerns in addition to the survey questions.</p> <p>Motion to review and find an approach to the Master Plan at next month’s meeting. Motion by S. Porter Support by G. Pushies. Motion Approved.</p> <p><i>c. Update Planning Commission Bylaws</i></p> <p>K. Poissant brought up the Secretary’s section of the Bylaws stating that there needed to be clarification to that position. Other sections of Bylaws were discussed including records keeping, attendance records, etc. The Township’s record keeping policy was discussed. The PC Training Policy was discussed to be added into the Bylaws, as well as what classes and trainings are appropriate to be included in the trainings. It was discussed who would make the final decision on what trainings, classes, or webinars are appropriate to takes. G. Pushies asked whether anyone on the PC received any list of approved classes/webinars or guidance on the topic, and the entire Commission replied no. The MTA login information was discussed. It was decided to review the Bylaws more in depth and come back to review it next month. L. Curd made a suggestion that the PC trainings could span</p>	<p>Motion Approved</p>

	<p>over two years so that if a class is over the 6 hours, it could then be use towards the following year's training requirements. Spelling errors and deleted sections were discussed, and past versions and why they were listed was discussed.</p>	
<p>Commission Discussion</p>	<p>S. Porter brought up why the PC is including the Township Attorney's on their emails. She stated that this could be a financial issue, and should look into this. It was discussed that the PC Chair, PC Secretary, Township Supervisor, and Township Clerk were the ones to contact the attorneys. She would like to see the attorneys used as needed and simplify the process.</p> <p>It was discussed that if there is a quorum of PC members at the Township meeting if official minutes needed to be taken.</p> <p>S. Porter also brought up sending a PC Member to the LCPC meetings when there are Conway PC topics on the LCPC agenda. It was discussed that it could be a rotation or volunteer based, and that it should be compensated. D. Bowdoin stated that another Township has a representative at the LCPC meetings every month, and takes detailed notes back to their Township to discuss.</p>	<p>None</p>
<p>Last Call to the Public</p>	<p>Steve Smith- Robb Rd.- He asked about the webinar discussed at the last month's meeting and would like to discuss what was said in that webinar next meeting. He also mentioned that the Township should work towards lowering the costs as much as possible for their residents. He said he would talk about this topic at another meeting.</p>	<p>None</p>
<p>Adjournment</p>	<p>Motion to adjourn at 9:13pm. Motion by G. Pushies. Support by M. Brown. Motion Approved.</p>	<p>Motion Approved</p>

Respectfully Submitted:

Approved:

Kayla Poissant,
PC Secretary

Lucas Curd,
PC Chair



Livingston County Department of Planning

February 22, 2024

Conway Township Board of Trustees
c/o Elizabeth Whitt, Clerk
8015 N. Fowlerville Road
P.O. Box 1157
Fowlerville Michigan 48836

Scott Barb
AICP, PEM
Director

Re: Livingston County Planning Commission Review of Zoning Ordinance Amendments:

Z-05-24: Text Amendments, Wind Energy Overlay District

Robert A. Stanford
AICP
Principal Planner

Dear Board Members:

Martha Haglund
Principal Planner

The Livingston County Planning Commission met on Wednesday, February 21, 2024, and reviewed the zoning ordinance text amendment referenced above. The County Planning Commissioners made the following recommendations:

Z-05-24: TAKE NO ACTION, ENCOURAGE FURTHER REVIEW

There are a few proposed amendments that, in general, do not appear to be suitable, nor compatible with Public Act 233 of 2023. As noted, Vertical Axis Wind Turbines (VAWT) are not used in utility-scale wind energy facilities. They do not provide the necessary inherent power generating capacity needed for large, utility-scale power generation systems (kWh generation for VAWT-style turbines versus MWh generation for horizontal axis-style turbines). Additionally, restricting the height of permitted VAWT to an overall height of 200 feet is not compliant with current technology, and virtually eliminates any assemblage of a reasonable, reliable, and applicable utility-scale wind energy system that is currently in place or being used as a standard utility-scale wind energy system by any major utility or energy generation entity operating in the State.

Staff also found a few instances where the proposed ordinance would be stricter than the State law, which would nullify it with respect to compliance with PA 233 of 2023. In general, the voluminous nature of the ordinance and its complexity regarding the vast amount of additional required elements contained within also could pose unintended regulatory hurdles to the township in its ability to rely on this as a "reasonable", "workable", or even enforceable ordinance in a practical sense of the terms. This remains to be seen, if and when a wind energy applicant / developer approaches the township in the future. Administering, overseeing, and most importantly, enforcing compliance with an ordinance, especially one of such magnitude, will be an extraordinarily challenging task for any township zoning official to efficiently and effectively manage. The ability to practically and effectively enforce a local ordinance is the most important aspect of land use regulation, regardless of an ordinance's scale and context.

Therefore, it is recommended that the township conduct a comprehensive final review and assessment of the issues highlighted in the review prior to any final approval by the Township Board, to ensure that this level of detail and complexity is truly the desired direction for the township regarding wind energy system regulation. Staff would also recommend that the Township consult its lead/primary township legal counsel in this endeavor as well.

Department Information

Administration Building
304 E. Grand River Avenue
Suite 206
Howell, MI 48843-2323

•
(517) 546-7555
Fax (517) 552-2347

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Web Site
<https://milivcounty.gov/planning/>

Conway Township Board of Trustees
Z-05-24
February 22, 2024

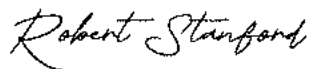
Regulating this land use activity continues to be new and challenging territory for many local communities. It remains to be seen if the provisions of this proposed ordinance amendment will adequately and effectively govern the use to the complete satisfaction of state law, the township, and its residents in the future. County Planning Staff encourages townships to continue to explore adopting compatible renewable energy ordinances (CREO) as well as exploring avenues to reasonably retain some form of workable local control. The township should also consider the level of risk and reward it is willing to accept in including a such large quantity of additional requirements beyond those in the law and CREO compliancy, and to think creatively about using host community agreements to protect local regulatory control and township residents. As the situation currently appears, adopting a CREO is the only option to guarantee that the developer must first go through the local zoning process.

Commissioners also indicated the following items should be addressed during the Planning Commission meeting:

- Section 6.24.C.2.c.1 & 2: Required Security Deposits - What entity determines the level of "sufficient funds"? This is not clearly explained.
- Section 6.24.C.2.w: Insurance – This item should include a sentence that states the insurance carrier will inform within 30 days.
- Section 6.24.C.25.b: Decommissioning – Section mentions "third party financial consultant". This should be strictly a structural or mechanical engineer. A financial consultant does not have the necessary expertise.

Copies of the staff review and draft Livingston County Planning Commission meeting minutes are enclosed. Do not hesitate to contact our office should you have any questions regarding this county action.

Sincerely



Robert Stanford
Principal Planner

Enclosures

c: Lucas Curd: Chair, Conway Township Planning Commission
Becky Dockery, Zoning Administrator

Meeting minutes and agendas are available:
<https://milivcounty.gov/planning/commission/>

ZONING/MASTER PLAN AMENDMENT FORM

Livingston County Planning Commission, 304 East Grand River, Suite 208, Howell, MI 48843-2323

LOCAL CASE NUMBER _____ COUNTY CASE NUMBER Z-05-24The Conway Township Planning Commission is submitting the following amendment for review and comment.**REZONING (MAP AMENDMENT)** Property description and location (attach a map of the proposed amendment as required by law).

Size: _____ Property tax identifier: _____
 Location: _____
 Existing Zoning District is: _____ Proposed Zoning District: _____
 Name of Petitioner: _____ Name of Property Owner: _____
 Purpose of Change: _____
 Existing Land Use: _____

ZONING ORDINANCE TEXT AMENDMENT The following Article(s) and Section(s) to be amended:

Article Number(s): New 2, 6 Article Name(s): Wind Energy Systems Overlay District; add definitions
 Section Number(s): 6.01, 6.24 Section Name(s): Amend 6.01, Replace 6.24 with Wind Energy Systems

Please attach a copy of the proposed zoning ordinance changes.

PUBLIC NOTICE AND PUBLICATION SCHEDULE

Legal notice of the public hearing was published on December 24, 2023 in the Fowlerville News and Views
(within 15 days before the public hearing per Michigan Zoning Enabling Act, Act 113 of 2006, MCL 125.3103)
 _____ Newspaper, which has general circulation in the jurisdiction. The Conway Township Planning
 Commission held a public hearing on January 8, 2024 to hear the views of the public on the proposed amendment.

MINUTES OF PUBLIC HEARING (Please check "a" or "b" below)

- a. The meeting minutes are attached.
 b. The minutes of the meeting will be sent later. The case information has been sent so that the Livingston County Planning Department staff can be working on the case while the minutes are being prepared. The facts brought out at the hearing are: (use additional sheets as necessary)

MASTER PLAN

- Adoption of new or revised plan Amendment (Section/Chapter) _____

Note: For all master plan cases, the municipality must submit a statement signed by the Planning Commission Secretary stating that all of the necessary legislative bodies have been sent notice of the public hearing and copies of the proposed language/map, along with the name and address of each, and date of submital.

PUBLIC NOTICE AND PUBLICATION SCHEDULE

Legal notice of the public hearing was published on _____
(not less than 15 days before the public hearing per Michigan Planning Enabling Act, Act 33 of 2008, MCL 125.3543)
 In the _____ Newspaper, which has general circulation in the jurisdiction.
 The Conway Township Planning Commission held a public hearing on _____ to hear the
 views of the public on the proposed amendment. (date)

MINUTES OF PUBLIC HEARING (Please check "a" or "b" below)

- a. The meeting minutes are attached.
 b. The minutes of the meeting will be sent later. The case information has been sent so that the Livingston County Planning Department staff can be working on the case while the minutes are being prepared. The facts brought out at the hearing are: (use additional sheets as necessary)

LOCAL JURISDICTION PLANNING COMMISSION ACTION

The recommendation of the Conway Township Planning Commission, at its meeting of January 8, 2024, was:
 Approval Disapproval Approval under the following conditions: (use additional sheets as necessary)

[Signature]
 (Chair Signature)

LIVINGSTON COUNTY PLANNING COMMISSION ACTION

Date Received _____ Date of LCPC Meeting 2-21-24
 The Commission on the above meeting date took the following action:
 Approval Approval with conditions stated in attachment Disapproval No action-encourage further review
[Signature] (Chair Signature) *[Signature]* (Director Signature)

LOCAL JURISDICTION BOARD ACTION

Date of Meeting _____ The Conway Township Board at a legally constituted meeting held on the above date: PASSED PASSED WITH AMENDED LANGUAGE DID NOT PASS NO ACTION-ENCOURAGE FURTHER REVIEW the recommended change contained herein.
 Please sign and return one completed copy of this form to the Livingston County Planning Department.
 _____ (Clerk)





Livingston County Department of Planning

LIVINGSTON COUNTY PLANNING COMMISSION MEETING

Wednesday, February 21, 2024 – 6:30 p.m.

Administration Building, Board of Commissioners Chambers
304 East Grand River, Howell, MI 48843

Please note that this is a hybrid meeting with County Planning Commissioners and staff meeting in-person. Audience participants are welcome to attend in-person or via Zoom by using the meeting link at the bottom of the agenda.

Scott Barb
AICP, PEM
Director

Robert A. Stanford
AICP
Principal Planner

Martha Haglund
Principal Planner

Agenda

1. Call to Order
2. Pledge of Allegiance to the Flag
3. Roll and Introduction of Guests
4. Approval of Agenda – February 21, 2024
5. Approval of Meeting Minutes – January 17, 2024
6. Call to the Public
7. Zoning Reviews
 - A. Z-04-24: Marion Township Text Amendment, Section 3 Definitions, Section 6 Wellhead Protection.
 - B. Z-05-24: Conway Township Text Amendment, Sections 6.01, 6.21, & 6.24 Wind Energy System Overlay District.
 - C. Z-06-24: Hartland Township Text Amendment, Section 3 Pharmacies in GC, NSC, and LC Districts.
8. Old Business:
9. New Business:
10. Reports
 - A. 2025 Master Plan
 - B. Annual Capital Improvements Plan Overview
 - C. Housing Catalysts/Planning Sample ADU Ordinance
 - D. Renewable Energy Petition (added to amended Agenda)
11. Call to the Public
12. Adjournment

Department Information

Administration Building
04 E. Grand River Avenue
Suite 206
Howell, MI 48843-2323

(517) 546-7555
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Web Site

<https://milivcounty.gov/planning/>



DRAFT
LIVINGSTON COUNTY
PLANNING COMMISSION
MEETING MINUTES

February 21, 2024

6:30 p.m.

Hybrid In-Person and Virtual Zoom Meeting

Zoom Virtual Meeting Room Meeting ID: 399-700-0062 / Password: LCBOC
<https://zoom.us/j/3997000062?pwd=SUdLYVFFcmozWuExbm0vcHRjWkVIZz09>

*Due to technical difficulties, participation via Zoom was not available for this meeting.

PLANNING COMMISSION			
COMMISSIONERS PRESENT:	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> Bill Anderson Matt Ikle Dennis Bowdoin Margaret Burkholder </td> <td style="width: 50%; border: none;"> Jason Schrock Bill Call Paul Funk </td> </tr> </table>	Bill Anderson Matt Ikle Dennis Bowdoin Margaret Burkholder	Jason Schrock Bill Call Paul Funk
Bill Anderson Matt Ikle Dennis Bowdoin Margaret Burkholder	Jason Schrock Bill Call Paul Funk		
COMMISSIONERS ABSENT:			
STAFF PRESENT:	Scott Barb Rob Stanford Martha Haglund		
OTHERS PRESENT:	Bruce Powellson, Marion Township; Clint Beach, Cohoctah Township; Sara Porter, Conway Township; Mike Brown, Conway Township; Tim Boal, Howell Township; Michael Stock, Conway Township.		

1. **CALL TO ORDER:** Meeting was called to order by Planning Commissioner Anderson at 6:28 PM.
2. **PLEDGE OF ALLEGIANCE TO THE FLAG**
3. **ROLL AND INTRODUCTION OF GUESTS:** None.
4. **APPROVAL OF AGENDA:**

After discussion with Commissioner Funk, the Planning Commission Chair, Bill Anderson amended the agenda to include 10 D Reports: Petition for Local Control of Solar Siting and Zoning.

Commissioner Action: IT WAS MOVED BY COMMISSIONER IKLE TO APPROVE THE AMENDED AGENDA, DATED FEBRUARY 21, 2024, SECONDED BY COMMISSIONER SCHROCK.

All in favor, motion passed 7-0.

5. APPROVAL OF PLANNING COMMISSION MEETING MINUTES

Commissioner Action: IT WAS MOVED BY COMMISSIONER CALL TO APPROVE THE MINUTES, DATED JANUARY 17, 2024, SECONDED BY COMMISSIONER IKLE.

All in favor, motion passed 6-0-1

(Commissioner Funk Abstained – Absent for the meeting)

6. CALL TO THE PUBLIC: None

7. ZONING REVIEWS:

A. Z-04-24: MARION TOWNSHIP AMENDMENTS TO THE ZONING ORDINANCE: ARTICLE 3: DEFINITIONS, ARTICLE 6: GENERAL PROVISIONS, ARTICLE 12A: WELLHEAD PROTECTION OVERLAY DISTRICT.

The Marion Township Planning Commission proposes amendments to Article 3: Definitions, Article 6: General Provisions, and Article 12A: Wellhead Protection Overlay District of the Marion Township Zoning Ordinance, related to the establishment of a wellhead protection overlay district, and establish procedures and enforcement for wellhead protection.

Township Recommendation: Approval. The Marion Township Planning Commission recommended Approval of this zoning amendment at its November 28, 2023, public hearing. There were no public comments noted in the minutes.

Staff Recommendation: Approval With Conditions. The proposed amendments related to the establishment of a wellhead protection overlay district, and the establish of procedures and enforcement for wellhead protection in Marion Township appear to be suitable and reasonable. It is recommended that as Conditions of Approval, the township is encouraged to consider making the revisions identified in the Staff review prior to taking any final approval and adoption.

Commission Discussion: Commissioner Burkholder inquired about Use by Right. Commissioner Ikle questioned the repair, replacement, and capacity of the treatment plants in the proposed ordinance. Performance standards are noted as having different timetables in the ordinance. Commissioner Call noted that all the inspections appear to be self-reporting in nature and who is responsible for such inspections needs to be clarified.

Public Comment: None.

Commission Action:

Commissioner Action: IT WAS MOVED BY COMMISSIONER IKLE TO RECOMMEND APPROVAL WITH CONDITIONS, SECONDED BY COMMISSIONER BOWDOIN.

Motion passed: 7-0

B. Z-05-24: CONWAY TOWNSHIP AMENDMENTS TO THE ZONING ORDINANCE: ARTICLE 2: DEFINITIONS, SECTION 6.01: ESTABLISHMENT OF DISTRICTS, SECTION 6.24: WIND ENERGY SYSTEMS AND ARTICLE 21: WIND ENERGY SYSTEM OVERLY DISTRICT.

The Conway Township Planning Commission proposes amendments to Article 2: Definitions, Section 6.01: Establishment of Districts, Section 6.24: Wind Energy Systems and a new Article 21: Wind Energy System Overly District of the Conway Township Zoning Ordinance, related to the establishment of a wind energy system overlay district, and to establish procedures and enforcement regulations for such district.

Township Planning Commission Recommendation: Approval. The Conway Township Planning Commission recommended Approval of this zoning amendment at its January 8, 2024, public hearing. There was one public comment noted in the minutes.

Staff Recommendation: Take No Action, Encourage Further Review. There are a few proposed amendments that, in general, do not appear to be suitable, nor compatible with Public Act 233 of 2023. As noted, Vertical Axis Wind Turbines (VAWT) are not used in utility-scale wind energy facilities. They do not provide the necessary inherent power generating capacity needed for large, utility-scale power generation systems (kWh generation for VAWT-style turbines versus mWh generation for horizontal axis-style turbines). Additionally, restricting the height of permitted VAWT to an overall height of 200 feet is not compliant with current technology, and virtually eliminates any assemblage of a reasonable, reliable, and applicable utility-scale wind energy system that is currently in place or being used as a standard utility-scale wind energy system by any major utility or energy generation entity operating in the State.

In general, the voluminous nature of the ordinance and its complexity regarding the vast amount of additional required elements contained within also could pose unintended regulatory hurdles to the township in its ability to rely on this as a “reasonable”, “workable”, or even enforceable ordinance in a practical sense of the terms. This remains to be seen, if and when a wind energy applicant / developer approaches the township in the future. Administering, overseeing, and most importantly, enforcing compliance with an ordinance, especially one of such magnitude, will be an extraordinarily challenging task for any township zoning official to manage efficiently and effectively. The ability to enforce a local ordinance practically and effectively is the most important aspect of land use regulation, regardless of an ordinance’s scale and context.

Therefore, it is recommended that the township conduct a comprehensive final review and assessment of the issues highlighted in the review prior to any final approval by the Township Board, to ensure that this level of detail and complexity is truly the desired direction for the township regarding wind energy system regulation. Staff would also recommend that the Township consult its lead/primary township legal counsel in this endeavor as well.

Regulating this land use activity continues to be new and challenging territory for many local communities. It remains to be seen if the provisions of this proposed ordinance amendment will adequately and effectively govern the use to the complete satisfaction of state law, the township, and its residents in the future. County Planning Staff encourages townships to continue to explore adopting compatible renewable energy ordinances (CREO) as well as exploring avenues to reasonably retain some form of workable local control. The township should also consider the level of risk and reward it is willing to accept in including a such large quantity of additional requirements beyond those in the law and CREO compliancy, and to think creatively about using host community agreements to protect local regulatory control and township residents. As the situation currently appears, adopting a CREO is the only option to guarantee that the developer must first go through the local zoning process.

Commission Discussion: Commissioner Burkholder inquired about the MDARD livestock registry and how it affects the proposed ordinance. Commissioner Ikle stated that the proposed ordinance does not indicate who determines the value for security deposits on (page 15 of the PC Review); Commissioner Ikle suggested it should be similar to the decommissioning requirements on (page 33 in the PC Review); that a 3rd party be responsible for determining the value. It was also noted that a 30-day inform period should be indicated by an insurer to the insured party. Commissioner Ikle would like to include these issues in the Township letter.

Public Comment: Sarah Porter inquired about availability of PC review materials to the public prior to the meeting date. Mike Brown, Conway Township Planning Commissioner, verified that they are using the area near Maple Grove Airport to stunt potential wind turbine height requirements regarding the overlay district.

Commission Action:

Commissioner Action: IT WAS MOVED BY COMMISSIONER IKLE TO RECOMMEND NO ACTION, ENCOURAGE FURTHER REVIEW, SECONDED BY COMMISSIONER BURKHOLDER.

Motion passed: 7-0

**C. Z-06-24 HARTLAND TOWNSHIP AMENDMENTSTO THE ZONING ORDINANCE:
ARTICLE 3: PRINCIPAL PERMITTED USES: PHARMACIES IN GC, NSC, & LC DISTRICT.**

Hartland Township Planning Commission is proposing to amend the Zoning Ordinance to Permit Pharmacies as a Principal Permitted Use in the General Commercial, Neighborhood Service Commercial, and Limited Commercial Districts.

Township Planning Commission Recommendation: Approval. The Hartland Township received a request to establish a pharmacy within an existing multi-tenant building in the GC (General Commercial District). Pharmacies are not permitted uses in the GC District. The Township Ordinance Committee reviewed this matter and recommended approving a zoning amendment to include pharmacies as a permitted use within the General Commercial District. The Hartland Planning Commission initiated the above text amendments during their work session on December 14, 2023. Additionally, the Township Planner recommended to include pharmacies as a permitted use with size limitation within the NSC (Neighborhood Service Commercial) and LC (Limited Commercial). The size limitation is the same as the existing language permitting pharmacies (less than 2000 sq ft) within OS (Office Service). A Public Hearing was held on January 25, 2024. There were no public comments heard.

Staff Recommendation: Approval. The additional permitted use of pharmacies within the General Commercial, Limited Commercial, and Neighborhood Service Commercial to the Hartland Township Zoning Ordinance is appropriate and consistent with other permitted uses within these zoning districts.

Commission Discussion: Commissioner Funk asked if Hartland was getting an onslaught of pharmacies and what the reasons are for addressing the zoning at this time? Commissioner Burkholder inquired about the definition of what a pharmacy is within the Township Ordinance.

Public Comment: None.

Commission Action:

Commissioner Action: IT WAS MOVED BY COMMISSIONER CALL TO RECOMMEND APPROVAL. SECONDED BY COMMISSIONER BOWDOIN.

Motion passed: 7-0

8. OLD BUSINESS: None.

9. NEW BUSINESS: None.

10. REPORTS:

- A. 2025 Livingston County Master Plan** – Commissioners were asked to complete a survey indicating their participation in the 2025 Master Plan process.
- B. Annual Capital Improvements Plan Overview** – Principal Planner Stanford gave an overview of the process with an April 12, 2024, deadline for submissions into the CIP.
- C. Housing Catalysts/Planning Sample ADU Ordinance** – Staff gave a brief presentation on our involvement with the Housing Catalyst organization and the sample rural/urban ADU ordinances that are being worked on.
- D. Petition for Local Control of Solar Siting and Zoning** – Commissioner Funk gave an overview of the petition to maintain local control over solar siting and zoning in Michigan rather than having the MPSC control the issue with local governments.

11. CALL TO THE PUBLIC: Clint Beach, Cohoctah Township, spoke in favor of local zoning control.

12. ADJOURNMENT:

Commissioner Action: IT WAS MOVED BY COMMISSIONER IKLE TO ADJOURN THE MEETING AT 8:10 PM., SECONDED BY COMMISSIONER SHROCK.

Motion passed: 7-0

DRAFT





Livingston County Department of Planning

MEMORANDUM

TO: Livingston County Planning Commissioners and the
Conway Township Board of Trustees

FROM: Robert Stanford, Principal Planner

DATE: January 24, 2024

SUBJECT: Z-05-24 Amendments to Zoning Ordinance Articles -
Article 2: Definitions, Section 6.01: Establishment of Districts,
Section 6.24: Wind Energy Systems and Article 21: Wind Energy
System Overlay District

Scott Barb
AICP, PEM
Director

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Principal Planner

Martha Haglund
Principal Planner

The Conway Township Planning Commission proposes amendments to Article 2: Definitions, Section 6.01: Establishment of Districts, Section 6.24: Wind Energy Systems and a new Article 21: Wind Energy System Overlay District of the Conway Township Zoning Ordinance, related to the establishment of a wind energy system overlay district, and to establish procedures and enforcement regulations for such district.

Proposed additions to existing text are noted as so, deletions in strikethrough.

BACKGROUND

Effective November 29, 2024, the Governor of the State of Michigan signed into law Public Act 233 on November 29, 2023, which establishes a set of standards that regulate solar, wind and energy storage facilities in the following applications (Section 222 of PA 233):

Application:

- Any solar energy facility with a nameplate capacity of 50 megawatts or more.
- Any wind energy facility with a nameplate capacity of 100 megawatts or more.
- Any energy storage facility with a nameplate capacity of 50 megawatts or more and an energy discharge capability of 200 megawatt hours or more.

In these applications, the State places regulatory permitting responsibility into the hands of the Michigan Public Service Commission (MPSC). Wind Energy Facilities with a nameplate capacity of more than 100 megawatts will be regulated by the State unless a local community opts-in to regulate those facilities under its zoning.

It's very important to note that, as stipulated by the state law, PA 233, no local ordinance provision or requirement can be stricter than the State regulations (Section 226 (8)). Wind and solar energy facilities that generate less energy than the limits described in the bill are still subject to local zoning.

Each type of utility project will have different setbacks and regulations. Generally, for wind energy systems, these are:

Department Information

Administration Building
304 E. Grand River Avenue
Suite 206
Howell, MI 48843-2323

•

(517) 546-7555
Fax (517) 552-2347

•

Web Site
milivcounty.gov/planning/



Setbacks:

- 2.1 times the maximum blade tip height from residences on nonparticipating properties.
- 1.1 times the maximum blade tip height from buildings on participating properties.
- 1.1 times the maximum blade tip height from the center line of an overhead utility line easement
- 1.1 times the maximum blade tip height from the center line of a public roadway.

Shadow Flicker: No more than 30 hours of shadow flicker on nonparticipating residences.

Maximum Height: Only limited by a Determination of No Hazard to Air Navigation by the Federal Aviation Administration.

Lighting: The wind energy facility is equipped with a functioning light-mitigating technology. To allow proper conspicuity of a wind turbine at night during construction, a turbine may be lighted with temporary lighting until the permanent lighting configuration, including the light-mitigating technology, is implemented. The wind energy facility meets any standards concerning radar interference, lighting, or other relevant issues as determined by the commission. **Dark sky friendly lighting solutions**—may vary by project.

Noise: No louder than 55 average hourly decibels on the A-weighted scale at the wall of the nearest nonparticipating dwelling.

PA 233 of 2023:

The local community government must decide if they are aiming for state, CREO, or "workable" renewable energy ordinances.

Three main avenues for approval:

1. Reasonable or "Workable" local ordinances (but there are risks to the local unit).
2. Use Michigan Public Service Commission (MPSC) process.
3. Compatible Renewable Energy Ordinance (CREO) – (has limits to the local unit).

The risks associated with adopting a "reasonable/workable" ordinance mostly concern the possibility that an applicant/developer simply chooses to go the MPSC approval route, as there are potentially less hoops to jump through, even though the process is a big longer. In addition, there could be the potential for the local governmental unit to risk forfeiture of any funds associated with grant funding for contested case costs, as well as the fact that the applicant/developer would not be obligated to enter a "host community" agreement, which removes a good deal of flexibility to the local governmental unit. Conversely, the MPSC and CREO options are fairly strict and inflexible in their context and do pose some limits on local governmental units that wish to require additional regulatory provisions.

- Provides the option for local unit of government to adopt a compatible renewable energy ordinance (CREO).
- CREO is an ordinance adopted by all local units transferring permitting authority to them instead of the State/MPSC.
- CREO cannot be more restrictive on any of the items listed in Section 226 (8).
- All affected local governments must have a CREO in order for applicant to be required to use it. This includes any townships, counties, villages, or cities where project is located.
- CREO process is extremely fast - Township must approve or deny entire application within 120 days.
- Covers the expansion and repowering of existing facilities not just new construction.



DEVELOPER OPTIONS- ACT 233

- The law gives developers a new option to go through the MPSC process.
- A local unit of government exercising zoning may request the MPSC to require an electric provider or independent power producer to obtain a certificate through the commission (MCL 460.1222 (2)).
- Adopting a CREO is the only option to guarantee the developer must first go through the local process.
- The law does not prohibit a developer from going through local zoning (without CREO, however, if an ordinance is unworkable, they can go through the MPSC process).

VERTICAL AXIS TURBINES ^a

The township has identified vertical axis turbines as the only style of wind turbine that will be allowable within its ordinance. The following is a brief summary of information related to vertical axis turbines.

- Vertical-axis turbines look like egg-beaters.
- Vertical-axis turbines have blades that are attached to the top and the bottom of a vertical rotor. The most common type of vertical-axis turbine—the Darrieus wind turbine, looks like a giant, two-bladed eggbeater. Some versions of the vertical-axis turbine are 100 feet tall and 50 feet wide. **Very few vertical-axis wind turbines are in use today in large, utility-scale energy systems because they do not perform as well as horizontal-axis turbines.**
- The average power of VAWT is 7.4 kW, and the most commonly used turbines generate power of 2.5 kW. Among the 157 VAWT models, 88% of the models exhibit a capacity of less than 10 kW, and the capacity of 75% of the models is less than 5 kW. In comparison, per the U.S. Wind Turbine Database, the mean capacity of horizontal axis wind turbines that achieved commercial operations in 2020 is 2.75 megawatts (MW).^b At a 42% capacity factor (i.e., the average among recently built wind turbines in the United States, per the 2021 edition of the U.S. Department of Energy's Land-Based Wind Market Report), that average turbine would generate over 843,000 kWh per month—enough for more than 940 average U.S. homes. To put it another way, the average horizontal axis wind turbine that came online in 2020 generates enough electricity in just 46 minutes to power an average U.S. home for one month.
- With the average American home consuming 900 kWh a month or 30 kWh a day, that brings the total yearly usage to around 10,800 kWh. This means that most wind energy systems will need to be large enough to produce this many kWh's in a given year. Depending on the average wind speed in the area, a wind turbine rated in the range of 5–15 kilowatts would be required to make a significant contribution to even meet the demand for a single residence, let alone contribute in a major way to the utility scale energy grid.

WHAT TO DO BETWEEN NOW AND NOVEMBER 2024? IMPLEMENT A TRIGGER PROVISION:

Even though all renewable energy statutes have been signed into law, there are still many questions to be asked, discussions to be had, and decisions to be made at the state level. Likewise, the situation is the same at the local level, with virtually all Local Units of Government (LUGs) being affected by this legislation, and which dictates the need for new and revised zoning ordinance developments to take place in the very immediate future to make the "effective date" deadlines.

^a US Energy Information Administration: "Wind explained: Types of wind turbines", found online at: <https://www.eia.gov/energyexplained/wind/types-of-wind-turbines.php>.

^b US Wind Turbine Database, found online at: <https://eerscmap.usgs.gov/uswtodb/>.



Even as there are still so many questions and issues to work through, many of the communities have begun tackling how best to bring their renewable energy ordinance ordinances into compliance and bridge the timeline gap between now and when the statutes take effect on November 29, 2024.

Implementation of a "Trigger Provision" in the local renewable zoning ordinance could be a fairly feasible, and simple solution which solves the issue of compliance in this interim period communities find themselves in. The language is placed at the beginning of each renewable energy section of the ordinance (so essentially three locations in the document if pursuing a CREO) and kicks in for just those provisions that would make it compatible for the energy facilities it applies to, if and when PA 233 of 2023 takes effect.

The benefit of this solution is that it avoids the need for a community to go back and amend their renewable energy ordinances, depending on what happens on or after November 29, 2024. It's also date specific and nameplate specific. Here's how it works:

The opening provision of each renewable energy facility section in the ordinances begins with this paragraph:

On or after November 29, 2024, if PA 233 of 2023 is in effect, then the following provisions apply to utility-scale solar energy with a nameplate capacity of 50 Mw (or 100 Mw for wind) or more.

The next paragraph reads as follows:

To the extent that these provisions conflict with other provisions of the township zoning ordinance, then these provisions control as to such utility-scale (solar, wind) energy systems. This subsection does not apply if PA 233 of 2023 does not take effect and does not apply to solar energy facilities with a nameplate capacity of less than 50 Mw (or less than 100 Mw for wind).

Therefore, implementing this provision allows the community to not have to have two separate ordinances going forward in the interim. It also allows the community to leave in place, regulatory provisions in the ordinance that are not specifically addressed in PA 233. For example:

- For wind energy facilities, the statute only addresses the following items (Section 226.8(b)):
 - Setbacks, shadow flicker, sound, height, and lighting

This is where the "Trigger Provision" kicks in.

- PA 233 does not speak to:
 - Location, decommissioning, drainage, insurance, greenbelts, or any of the other protections in the solar and wind ordinance.

One theory of implementing this provision is that having these additional requirements as part of a local ordinance does not necessarily conflict with PA 233 because PA 233 is silent on these issues. This is somewhat supported by case law dealing with the marijuana issue in the state.



STAFF REVIEW

The Conway Township Planning Commission proposes the following amendments to the Conway Township Zoning Ordinance to amend and add several provisions related to the establishment of a wind energy system overlay district, and establish regulatory and enforcement ordinance for said wind energy systems, in the following manner:

ITEM 1. AMENDMENT OF ARTICLE 2: DEFINITIONS

The following definitions are added to Article 2 of the Township Zoning Ordinance, consistent with the existing ordering of definitions in that section, as follows:

A. Adverse Sound Character: Sounds or noise that cause building rattle, is impulsive, tonal, and includes amplitude modulation, or has a low-frequency bass rumble.

B. Ambient: Ambient is defined as the sound pressure level exceeded 90% of the time over a 96- hour measurement period with daytime/nighttime division.

C. Anemometer Tower: A freestanding tower containing instrumentation such as anemometers that is designed to provide present moment wind data for use by the supervisory control and data acquisition (SCADA) system which is an accessory land use to a Wind Energy System.

D. ANSI: the American National Standards Institute.

E. dBA: The A-weighted sound level.

F. FAA: The Federal Aviation Administration.

G. GIS: Geographic Information System and is comparable to GPS (global positioning system) coordinates.

H. IEC: The International Electrotechnical Commission.

I. ISO: The International Organization for Standardization.

J. Lmax (LAmax or LCmax): The maximum dB(A) or dB(C) sound level measured using the "fast response" setting of the sound meter (equivalent to 0.125 second exponential averaging time).

K. NEC: National Electrical Code.

L. Noise: A sound that causes disturbance that exceeds 40 dBA Lmax or 35 dBA Lmax.

M. Non-Participating Property: A property that is not subject to a Wind Energy System lease or easement agreement at the time an application is submitted for the purposes of constructing a Wind Energy System.

N. Owner/Operator: A person, firm, corporation, company, limited liability corporation or other entity, as well as their agents, contractors, successors, assigns and/or transferees, who applies for Township approval to construct, repair, maintain, decommission and/or operate a WES and/or WES Testing Facility. An



Owner/Operator must have the legal authority to represent and bind the owner of the Participating Property or lessee to the terms or conditions of any approvals for a permitted WES or WES Testing Facility. The duties and obligations regarding approval for any approved WES or WES Testing Facility shall be jointly and severally binding upon the Owner/Operator of the WES or WES Testing Facility. "Owner/operator," even when used in the singular, may refer to more than one person or entity if there are multiple applicants, owners, or operators, or if the WES or WES Testing Facility is owned and operated by different entities.

O. Participating Property: A property that participates in a lease or easement agreement, or other contractual agreement, with or that is owned by an entity submitting an application for the purpose of developing a WES. Participating Property also includes any property upon which is located a WES like in the case of a Private WES.

P. Private Wind Energy System (Private WES): A Wind Energy System used exclusively for private purposes and not used for any commercial resale of any energy, except for the sale of surplus electrical energy back to the electrical grid.

Q. SCADA (supervisory control and data acquisition): A computer system that monitors and controls WES.

R. Shadow Flicker: Alternating changes in light intensity caused by the moving blades of wind turbines on the ground and stationary objects, including but not limited to a window of a dwelling.

S. Sound level meter: An instrument for the measurement of sound levels that meets the ANSI requirements of S1.4-1983 (or later revision) for Type 1 or 2 instruments. For frequency analysis, octave and 1/3 octave filters shall conform to ANSI S1.11-1986 (or later revision).

T. Sound Pressure: An average rate at which sound energy is transmitted through a unit area in a specified direction (equivalent to 0.125 second exponential averaging time) See LMax. The pressure of the sound measured at a receiver.

U. Sound Pressure Level: The sound pressure mapped to a logarithmic scale and reported in decibels (dB).

V. Strobe Effect: The effect resulting from the flashing of reflected light, which can be visible from some distance, from the surface finish of turbine blades.

W. Tip Height: The height of a Private WES with a blade at the highest vertical point or the tallest point of a vertical axis wind turbine.

X. Utility-Scale Wind Energy System (Utility-Scale WES): A Wind Energy System consisting of a vertical axis wind turbine in which the principal design, purpose, or use is to provide energy to off-site uses or the wholesale or retail sale of generated electricity to any person or entity.

Y. Vertical Axis Wind Turbine (VAWT): A vertical axis wind turbine is a type of wind turbine where the main rotor shaft is set transverse to the wind while the main components are located at the base of the turbine.

Z. Wetland: As used in this Ordinance, wetland shall mean the areas defined as such by Michigan law (see Part 301 Inland Lakes and Rivers and Part 303 Wetlands Protections of the Natural Resources and Environmental Protection Act, last revised effective 3-29-19), and regulated by the Michigan Department of



Natural Resources, and the Michigan Department of Environment, Great Lakes, and Energy.

AA. Wind Energy System (WES): Any part of a system that collects or stores wind energy for the purpose of transforming it into any other form of usable energy and includes any combination of the following: A mill or machine operated by wind acting on oblique vanes or sails that radiate from a horizontal or vertical shaft; a surface area such as a blade, rotor, or similar device, either variable or fixed, for utilizing the wind for electrical or mechanical power; a shaft, gearing, belt, or coupling utilized to convert the rotation of the surface area into a form suitable for driving a generator, alternator, or other electricity or energy producing device; the generator, alternator, or another device to convert the energy of the wind into electrical or other usable energy; the tower, pylon, or other structure upon which any, all, or some combination of the above are mounted; and any other components not listed above but associated with the normal construction, operation, and maintenance of a WES.

BB. Wind Energy System Testing Facility (WES Testing Facility): A structure and equipment such as a meteorological tower for the collection of wind data and other meteorological data and transmission to a collection source, shall not be deemed to be a communication tower.

CC. Wind Energy System Facility (WES Facility): Clusters of two or more Utility Scale WES placed upon a lot or parcel with the intent to sell or provide electricity to a site or location other than the premises upon which the WES Facility is located. A WES Facility may or may not be owned by the Owner of the Participating Property upon which they are placed.

ITEM 2. ADOPTION OF NEW ARTICLE 21: WIND ENERGY SYSTEM OVERLAY DISTRICT

New Article 21, entitled "Wind Energy System Overlay District," is added to the Zoning Ordinance and reads as follows:

Section 21.01. Purpose and Findings

A. Purpose. The Wind Energy System Overlay District (the "District") is intended to provide suitable locations for utility-scale wind energy systems that are otherwise authorized under state law and the Township's Code of Ordinances and Zoning Ordinance to meet a reasonable demonstrated need for this land use in the Township. It is the intent of the Township to permit these systems to the extent a demonstrated need exists for the land use by regulating the siting, design, construction, operation, monitoring, modification, and removal of such systems to protect the public health, safety, and welfare, and to ensure compatibility of land uses in the vicinity of wind energy systems. The Township seeks to preserve its rural character and agricultural heritage. To these ends, the lands included in this District are within reasonable proximity to existing electric power transmission infrastructure.

B. Findings. In establishing this overlay district, the Township of Conway finds as follows:

1. It is necessary and reasonable to permit utility-scale wind energy systems in the Township to the extent that there is a demonstrated need for that land use.



2. Land use for utility-scale wind energy systems beyond a reasonable and legitimate demonstrated need to provide for the Township's energy needs would have needless adverse effects on surrounding businesses and residences, and be detrimental to the health, safety, welfare, and prosperity of the Township and its residents.
3. The Township wishes to preserve its existing topography and rural character, maintain property values, and protect and preserve the quality and pace of rural life of its residents while preserving the environment and protecting wildlife.
4. Wind Energy Systems can adversely impact the health, safety, welfare, and prosperity of the community, including existing property values, especially when in proximity to farms, forests, and residential properties.
5. Wind Energy Systems must be carefully managed to reduce the adverse long-term effects such land use can have on the productivity of farmland. See University of Michigan Graham Sustainability Institute & Michigan State University Extension, "Planning & Zoning for Wind Energy Systems."
6. Several Michigan communities have suffered, or are suffering, from fiscal uncertainty due to litigation and rule changes concerning taxation arising from rural renewable energy production.
7. Conway Township contributes significant storm water runoff into adjacent municipalities because of relative elevations, and therefore the Township values low-impact development to better manage its stormwater runoff.
8. Impervious surfaces such as wind turbines may channel stormwater runoff, and support structures and trenching are more likely to damage drain tiles. Thus, Wind Energy Systems must be carefully sited, designed, and limited in scope.
9. The Township adopts these land use regulations to balance any demonstrated need for Wind Energy Systems in the Township with the public, health, and safety impacts identified above.

Section 21.02. Delineation of the Wind Energy System Overlay District

- A. The Wind Energy System Overlay District overlays existing zoning districts delineated on the official Conway Township Zoning Map. The boundaries of the Wind Energy System Overlay District are depicted on Map A, incorporated herein by reference, and are generally described as follows:

An area of land consisting of approximately 136 acres, comprised of the following:

1. That portion of Parcel No. 01-12-100-003 located south of the Conway Cohoctah Union Drain as depicted on Map A;
2. That portion of Parcel No. 01-11-200-002 located south and east of the Conway Cohoctah Union Drain; and
3. A northerly portion of Parcel No. 01-11-400-002, as depicted on Map A, the southern boundary of which is located 1,750 feet north of the Section 11/Section 14 line.



MAP A
OVERLAY DISTRICT BOUNDARIES





Section 21.03. Permitted Uses.

There are no uses permitted by right in the Wind Energy System Overlay District, other than uses permitted by right in the underlying zoning districts.

Section 21.04. Special Land Uses.

The following uses are permitted following approval by the Planning Commission as a Special Land Use in the Wind Energy System Overlay District as regulated by Article 13 (special land uses) and Article 14 (site plan review).

Utility-Scale Wind Energy System

Section 3. Amendment of Section 6.01 of the Zoning Ordinance

Section 6.01 of the Zoning Ordinance, entitled "Establishment of Districts," is amended to read as follows:

ARTICLE 6. GENERAL AND SUPPLEMENTARY REGULATIONS

Section 6.01 Establishment of Districts

For the purpose of the ordinance, Conway Township is hereby divided into the following zoning districts:

<u>Zoning District</u>	<u>Article</u>
AR Agricultural Residential District	7
R Residential District	8
MHP Manufactured Housing Park District	9
C Commercial District	10
I Industrial District	11

For purposes of innovative and flexible residential development, Conway Township has established the following overlay district applicable to the AR Agricultural Residential District and the R Residential District:

<u>Overlay District</u>	<u>Article</u>
Open Space Community	12

For purposes of innovative and flexible development, Conway Township has established the following overlay district:

Overlay District

WES Wind Energy System



Section 4. Replacement of Current Section 6.24, entitled "Wind Energy System."

New Section 6.24, entitled "Wind Energy System," is added to the Township's Zoning Ordinance and reads as follows:

Section 6.24 Wind Energy System (WES).

A. General Provisions. All WES are subject to the following requirements:

- 1. All WES, including towers, shall conform to the provisions of this Ordinance and all local, county, state, and federal regulations and safety requirements, including applicable building codes and applicable industry standards, including those of ANSI, FAA, Michigan Airport Zoning Act, Michigan Tall Structures Act, Underwriter Laboratory (UL), NEC, National Fire Protection Association (NFPA), and the most current Michigan Uniform Building Code adopted by the enforcing agencies. An interconnected Utility Scale WES shall comply with any applicable Michigan Public Service Commission (MPSC) and Federal Energy Regulatory Commission (FERC) standards.**
- 2. If an applicant, Owner, Operator, or Participating Property Owner of a WES fails to comply with this Ordinance, the Township, in addition to any other remedy under this Ordinance, may revoke any approvals after giving notice and an opportunity to be heard. Additionally, the Township may pursue any legal or equitable action to abate a violation and recover all costs, including the Township's actual attorney fees and costs.**
- 3. All WES, prior to construction, must obtain a no hazard determination from the FAA.**
- 4. Wind turbines that exceed two hundred (200) feet in total height are considered obstructions to air traffic and are subject to the approval of the FAA. The FAA requires that obstructions to air traffic be illuminated with the appropriate FAA approved flashing red, flashing white, or steady burning red light lighting as described in FAA Advisory Circular AC 70/7460-1K, titled Obstruction Lighting and Marking.**

B. Private Wind Energy System (Private WES).

- 1. Administrative Review. Except as provided in subsection (d) below, all Private WES require administrative approval as follows:**
 - a. Application to Zoning Administrator. An applicant who seeks to install a Private WES shall apply to the Zoning Administrator on a form approved by the Township Board, including the payment of the required application fee.**
 - b. Application Requirements. The application shall include:**
 - 1. A site plan depicting setbacks, turbine size, and the location of property lines, buildings, fences, greenbelts, and road right of ways. The site plan shall be drawn to scale.**
 - 2. Photographs of the property's existing condition.**



3. Renderings or catalogue cuts of the proposed WES.
 4. A certificate of compliance demonstrating that the system has been tested and approved by Underwriters Laboratories (UL) or other approved independent testing agency acceptable to Township.
 5. A copy of the manufacturer's installation directions.
- c. Zoning Administrator Authority. The Zoning Administrator is authorized to approve, approve with conditions, or deny applications for Private WES. An aggrieved party may appeal the Zoning Administrator's decision to the Zoning Board of Appeals pursuant to Article 6 of the Zoning Ordinance.
- d. Exclusions from Administrative Review. Administrative review is not required for repair of existing WES if there is no expansion of the size or area of the WES. Any replacement of WES must be approved in the same manner as the original WES.
2. Accessory Use. Private WES are permitted in all zoning districts as an accessory use, subject to administrative approval as set forth in this section and subject to the following requirements:
- a. Safety. A Private WES shall be installed, maintained, and used only in accordance with the manufacturer's instructions, and it shall comply with this Ordinance, all applicable construction code and electric code (including the most current version of the Michigan Uniform Building Code), FAA, Michigan Airport Zoning Act, Michigan Tall Structures Act, and NEC adopted by the enforcing agencies.
 - b. Building Permit. A building permit is required.
 - c. Maximum Height. The Tip Height of a Private WES must not exceed 50 feet. The minimum clearance from ground level to the blade at its lowest point must be at least 30 feet. Tip Height is measured from the average grade at the base of the tower or structure supporting the WES. Notwithstanding any other provision in this Zoning Ordinance, the Tip Height restriction in this section applicable to Private WES shall apply.
 - d. Location. The minimum setback of a Private WES from any property line or road right-of-way must equal three times the Tip Height of the WES.
 - e. Noise. Private WES must comply with the noise limits set forth in Section 6.24 C.13 of this Ordinance.
 - f. Abandonment. If a Private WES has been abandoned for a period of six months, the Owner shall remove it within three months after the date of abandonment. The Zoning Administrator may request proof of power or usable energy generation for purposes of abandonment analysis.
 - g. Inspection. The Zoning Administrator may inspect a Private WES for compliance with this Ordinance upon providing reasonable notice to the Owner or occupant.



- h. *Underground Transmission. All power transmission or other lines, wires, or conduits from a Private WES to any building or other structure shall be located underground. If batteries are used as part of the Private WES, they shall be placed in a secured container or enclosure.*
- i. *Shadow Flicker. Private WES shall not produce any shadow flicker on any Non-Participating Property. Measures to eliminate all effects of shadow flicker on Non-Participating Property, such as stopping the WES from rotating during times when shadow crosses Non-Participating Property, shall be required.*
- i. *Non-Conforming Wind Energy Systems. WES existing on the date of adoption of this Ordinance shall constitute a legal non-conforming use.*

C. Utility-Scale Wind Energy Systems. *Utility-Scale WES are permitted by Special Land Use approval in the Wind Energy System Overlay District and require a special land use permit under Article 5 and site plan approval under Article 4. Utility-Scale WES are also subject to the following requirements:*

- 1. **Findings:** *This Ordinance has been developed with the intention of obtaining an appropriate balance between the desire for renewable energy resources and the need to protect the public health, safety, and welfare of the community and the character and stability of the Township's residential, agricultural, recreational, commercial and/or industrial areas and preserving and protecting the Township's important and sensitive environmental and ecological assets and areas, open space, viewsapes and aesthetics, wetlands, and other ecological and environmentally sensitive areas.*

Based on evidence presented in this State and others concerning the adverse secondary effects of Utility Scale WES on communities, including, but not limited to, findings from the Wind Turbine Health Impact Study: Report of Independent Expert Panel, prepared for the Massachusetts Department of Environmental Protection (2012); Strategic Health Impact Assessment on Wind Energy Development in Oregon, prepared for the State of Oregon (2012); Noise and Human Health: A Review of Scientific Literature, Wind Turbines, prepared for the State of Vermont's Department of Health (2017); Analysis of the Research on the Health Effects from Wind Turbines, Including Effects From Noise, prepared for the Maine Department of Health and Human Services (2012); Jeffrey et al, Adverse Health Effects of Industrial Wind Turbines, 59 Can Fam Physician 473-475 (2013); Salt, A., and Kaltenbach, J, Infrasound From Wind Turbines Could Affect Humans, 31(4) Bulletin Science, Technology and Society, 296-302 (2011), Sample Zoning for Wind Energy Systems, for Michigan State University Extension (March 2017), and Environmental Noise Guidelines for the European Region, prepared for the World Health Organization Regional Office for Europe (2018), the following are among the potential harmful secondary effects of Utility Scale WES:

- a. *Falling ice or "ice throws" is physically harmful and measures should be taken to protect the public from the risk of "ice throws."*
- b. *Nighttime wind turbine noise can cause sleep disturbance. Generally, sleep disturbance can adversely affect mood, cognitive functioning and one's overall sense of health and wellbeing. Chronic stress and sleep disturbance could increase the risk for cardiovascular disease, decreased immune function, endocrine disorders, and mental illness. In addition, possible health effects include increased heart rate, insomnia, fatigue, accidents, reduction in performance and*



depression.

- c. Noise from Utility Scale WES could potentially impact people's health and wellbeing if it increases background sound levels by more than 10 dB(A) or results in long term outdoor community sound levels above 35-40 dB(A) Lmax.
 - d. There is evidence that Utility Scale WES sound is more noticeable, annoying, and disturbing than other community industrial sounds at the same level of loudness, due to its adverse sound character.
 - e. Alternating changes in light intensity caused by the moving blades of WES on the ground and stationary objects, also known as shadow flicker, may cause health issues.
 - f. The Township desires to protect ecological and environmentally sensitive areas in the Township including, but not limited to, habitats for endangered species or heavily used migration routes for species of waterfowl and other migratory birds (some of which are protected species), including eagles, tundra swans, and sand hill cranes. Thus, the Township has determined that WES sites can adversely impact wildlife and their habitats and makes evaluation of proposed WES sites essential. The Township finds that any WES sites should have the lowest potential for negative impacts on wildlife resources and avoid locations with higher concentrations of migratory birds. Further, any WES sites that would fragment sensitive habitat areas, like rivers, streams, and wetlands, should be avoided.
 - g. The general welfare, health, and safety of the citizens of the Township will be promoted by the enactment of this Ordinance.
- 2. Special Land Use Permit Application Requirements. In addition to the requirements of Article 13, the applicant for a Utility-Scale WES shall provide the Township with all of the following:**
- a. Application fee in an amount set by resolution or fee schedule approved by the Township Board.
 - b. A deposit for an escrow account in an amount set by resolution or fee schedule approved by the Township Board. The escrow account is used to cover all costs and expenses associated with the special land use review and/or approval process, which costs can include, but are not limited to, review fees of the Township Attorney, Township Planner, Township Engineer, and other Township qualified professional consultants in the areas of electrical, acoustics, environmental, and health and safety, as well as any reports or studies which the Township anticipates will be required during the review and/or approval process for the application. At any point during the review process, the Township may require that the applicant place additional monies into escrow with the Township if the existing escrowed funds on account with the Township will be insufficient, in the sole determination of the Township, to cover any remaining costs or expenses with the review and/or approval process. If additional funds are required by the Township to be placed in escrow and the applicant refuses to do so within 14 days after receiving notice, the Township will cease the zoning review and/or approval process until and unless the applicant makes the required escrow deposit. Any escrow amounts more than actual cost will be returned to the applicant. An itemized billing of all expenses will be provided to the applicant upon request.



- c. Required Security Deposits. Following approval, but prior to the issuance of a special land use permit for the construction of any Utility Scale WES, the following security deposits shall be deposited with the Township.

 1. Sufficient funds to decommission and remove the WES in the event of abandonment.
 2. Sufficient funds to repair the anticipated damage to roadways during construction of the WES.
 3. A \$15,000 escrow account to cover the costs of complaint investigation, mitigation, and resolution.
- d. A map including all parcel numbers that depicts all Participating Property to be used by the Utility-Scale WES; documentation establishing ownership of each parcel; and any and all lease or option agreements (including "good neighbor" agreements), easements, or purchase agreements for the subject parcels, together with any attachments to such agreements or easements.
- e. An operations agreement setting forth the operations parameters, the name and contact information of the Owner/Operator, the Owner/Operator's inspection protocol, emergency procedures, and general safety documentation.
- f. Federal Employer Identification Number for the Owner/Operator is required at the time of application.
- g. A written emergency response plan detailing the Owner/Operator's plan for responding to emergencies, including fire emergencies, and analyzing whether adequate resources exist to respond to fires and other emergencies. If adequate resources do not exist, the Owner/Operator shall identify its plan for providing those resources. The emergency plan shall include identification of potential hazards to adjacent properties, public roadways, and to the community in general that may be created, as well as plans for immediate cleanup, long-term monitoring, and continued mitigation efforts following an emergency.
- h. A written description of the fire suppression system that will be installed, which shall identify the manufacturer of the fire suppression system and generally describe its operations and capacity to extinguish fires.
- i. A written description of specialized training and/or equipment necessary for handling fires and/or other emergencies. All training and/or equipment will be paid for by the Owner/Operator. The training plan must include, at a minimum, mandatory annual emergency response training for local firefighters and other local emergency personnel at the site of a Utility-Scale WES.
- j. A complete set of photographs, video, and topography map of the entire Participating Property prior to construction.
- k. A copy of any power purchase agreement or other written agreement that the Owner/Operator has with an electric utility or any agreement or approval for interconnection between the proposed Utility-Scale WES and an electric utility or transmission company.



- l. A written plan conforming to the requirements of this Ordinance for maintaining the subject property, including a plan for maintaining and inspecting drain tiles and addressing stormwater management.
- m. A decommissioning and land reclamation plan describing the actions to be taken following the abandonment or discontinuation of the Utility-Scale WES, including evidence of proposed commitments with property owners to ensure proper final reclamation, repairs to roads, and other steps necessary to fully remove the Utility-Scale WES and restore the subject parcels to as near as possible to the condition the subject parcels were in prior to being used as a Utility-Scale WES.
- n. Financial security that meets the requirements of this Ordinance.
- o. A plan for resolving complaints regarding but not limited to noise, glare, maintenance, shadow flicker, vibrations, ice throws, lighting, and drainage from the public or other property owners concerning the construction and operation of the Utility-Scale WES.
- p. Identification of and a plan for managing any hazardous waste.
- q. A transportation plan for construction and operation phases, including any applicable agreements with the Livingston County Road Commission and Michigan Department of Transportation.
- r. An attestation that the Owner/Operator of the subject property will indemnify and hold the Township and its officials, elected or appointed, harmless from any costs or liability arising from the approval, installation, construction, maintenance, use, repair, or removal of the Utility-Scale WES.
- s. Utility-Scale WES shall be a vertical axis wind turbine constructed in accordance with the manufacturer's specifications and directions and shall be inspected by a third-party engineer retained by the Township and paid for out of the escrow maintained by the applicant. As built plans shall be provided to the Township upon completion of construction. A copy of the manufacturer's directions, instruction manual, and specification sheets for each model of turbine in the Utility-Scale WES, including any unredacted safety manuals and Safety Data Sheets (SDS), for installing, maintaining, and using the Utility-Scale WES. The safety manuals and SDS should include standard details for an industrial site such as materials, chemicals, fire, access, safe distances during Utility-Scale WES failure, processes in emergencies, etc.
- t. A ground cover vegetation establishment and management plan that complies with this Ordinance.
- u. Proof of environmental compliance, including compliance with:
 - 1. Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act; (MCL 324.3101 et. Seq.);
 - 2. Part 91, Soil Erosion and Sedimentation Control (MCL 324.9101 et. Seq.) and any corresponding County ordinances;
 - 3. Part 301, Inland Lakes and Streams, (MCL 324.30101 et. Seq.);



4. Part 303, Wetlands (MCL 324.30301 et. Seq.);
 5. Part 365, Endangered Species Protection (MCL324.36501 et. Seq.); and
 6. Any other applicable laws and rules in force at the time the application is considered by the Township.
- v. Any additional information or documentation requested by the Planning Commission, Township Board, or other Township representative.
- w. Insurance. Proof of the Owner/Operator's public liability insurance shall be provided at the time of application. If the Owner/Operator is approved, proof of insurance shall be provided to the Township annually thereafter. The policy shall provide for bodily injury, property damage, livestock damage, and future earnings loss and shall name Conway Township and each Participating Property owner as an additional insured with the right to be notified of cancellation and/or significant reduction of coverage. The Owner/Operator shall insure for liability, for the utility scale wind system until removed for at least \$25,000,000 per occurrence to protect the Owner/Operator, Township, and Participating Property owner. Proof of a current policy is required annually and shall be provided each year to the Township prior to the anniversary date of the special land use permit. Aggregate policies are allowed if minimum coverage per Utility-Scale WES is satisfied, and coverage is provided for every site where owner/operator's equipment is located.
- x. Compliance with the Michigan Uniform Building Code and National Electric Safety Code: Construction of a Utility-Scale WES shall comply with the most current version of the Michigan Uniform Building Code and National Electrical Code adopted by the enforcing agencies as a condition of any special land use permit under this section.
- y. Conceptual plan. A graphical computer-generated depiction of how the Utility-Scale WES will appear from all directions.
- z. The Owner/Operator shall also submit a written explanation of the design characteristics and the ability of the structure(s) and attendant facilities to withstand winds, ice and other naturally occurring hazards, as well as information regarding health, welfare and safety in areas including, but not limited to, noise, vibration, shadow flicker, and blade ice deposits. This information shall also address the potential for the WES to structurally fail or collapse, and what results should be expected in such an event.



STAFF COMMENT: Revisiting the three main avenues for approval that have been highlighted at the beginning of this review, utility-scale renewable energy ordinance can take the form of one of the following:

- Reasonable or "Workable" local ordinances (but there are risks to the local unit)
- Use Michigan Public Service Commission (MPSC) process.
- Compatible Renewable Energy Ordinance (CREO) – (has limits to the local unit)

While extremely comprehensive, this initial section of the proposed ordinance presents a special land use application ordinance that is not compatible strictly with the MPSC process, nor could it be considered a CREO, as it does not align directly with any of the established standards of the state statute, and as the statute states, a local ordinance cannot be restrictive than the provisions of PA 233 Section (8).

Whether it could possibly be considered part of a "reasonable" or "workable" local ordinance would be determinant on the willingness of an applicant to initially accept these provisions and be willing to work with the township exclusively throughout the entire process. Again, with this regulatory path comes certain risks to the township, as highlighted at the beginning of this review.

3. Site Plan Application Requirements.

- a. Contents of Site Plan. In addition to the requirements in Article 4, the applicant shall, at its expense, provide a detailed application and site plan drafted to a scale of 1 inch = 200 feet with the following:
1. Location of all proposed structures, turbines, equipment, transformers, and substations.
 2. Depiction of all setbacks, property lines, fences, signs, greenbelts, screening, drain tiles, easements, flood plains, bodies of water, proposed access routes, and road rights of way.
 3. Indication of how and where the system will be connected to the power grid.
 4. Plan for any land clearing and grading required for the installation and operation of the system.
 5. Plan for ground cover establishment and management.
 6. Anticipated construction schedule and completion date. As a condition of any special land use or site plan approval, hours of construction shall be limited to Monday through Friday from 7:00 a.m. to 5:00 p.m. with no construction on Saturday, Sunday, or any federally recognized holiday.
 7. Sound modeling study including sound isolines extending from the sound sources to the property lines of Participating Property.
 8. Any additional studies requested by the Planning Commission, including but not limited to the following:



- a. Visual Impact Assessment: A technical analysis by a third-party qualified professional acceptable to the Township, of the visual impacts of the proposed project, including a description of the project, the existing visual landscape, and important scenic resources, plus visual simulations that show what the project will look like (including proposed landscaping and other screening measures), a description of potential project impacts, and mitigation measures that would help to reduce the visual impacts created by the project.
- b. Environmental Analysis: An analysis by a third-party qualified professional acceptable to the Township, to identify and assess any potential impacts on the natural environment including, but not limited to, removal of trees, wetlands and other fragile ecosystems, wildlife, endangered and threatened species. If required, the analysis will identify all appropriate measures to minimize, eliminate or mitigate adverse impacts identified and show those measures on the site plan, where applicable.
- c. Stormwater Study: An analysis by a third-party qualified professional acceptable to the Township, studying the proposed layout of the Utility-Scale WES and how the spacing, row separation, and slope affects stormwater infiltration, including calculations for a 100-year rain event. Percolation tests or site-specific soil information shall be provided to demonstrate infiltration on-site without the use of engineered solutions.
- d. Glare Study: An analysis by a third-party qualified professional acceptable to the Township, to determine if glare from the Utility-Scale WES will be visible from nearby airports, air strips, residences, and roadways. The analysis will consider the changing position of the sun throughout the day and year and its influences on the Utility-Scale WES.
- e. Conceptual Layout Plan. Owner/Operator shall submit a conceptual layout plan for review prior to submission of a formal site plan. The conceptual site plan shall be reviewed by the Planning Commission to allow for discussion and feedback.
- f. Background Sound Analysis. A background (ambient) sound analysis shall be performed by an independent third-party acoustician acceptable to the Township and a report provided which indicates Leq 1 second, L10, and L90 sound levels using A-weighting and C-weighting. Data shall be collected at midpoints along property lines of adjoining Non-Participating Property and Participating Property. Measurement procedures are to follow the most recent versions of ANSI S12.18 and ANSI S12.9, Part 3 guideline (with an observer present). Measurements shall be taken using an ANSI or IEC Type 1 Precision Integrating Sound Level Meter. The study must include a minimum of four four-day (96 hour) testing periods, include one Sunday, and divide data by daytime and nighttime. One of the four-day testing periods must occur between December 1 and March 1, one must occur between March 1 and June 1, one must occur between June 1 and September 1, and one must occur between September 1 and December 1. The sound background study shall report for the period of the monitoring topography, temperature, weather patterns, sources of ambient sound, and prevailing wind direction.



- a. *Economic Impact: The Owner/Operator shall fund and provide an economic impact analysis performed by an independent third-party acceptable to the Township. Such a study shall include probable financial impact regarding jobs, tax revenue, lease payments and property values at a minimum and average set-backs distances. Business and residential growth potential shall be considered.*
- h. *Wind Assessment Analysis. A wind assessment analysis conducted within a potential project area shall be completed within 18 months of the date of application for a Utility-Scale WES and shall be performed by an independent third-party acceptable to the Township. The study must show analysis for a period of time no less than one (1) year. The height of an anemometer (or similar) device measuring wind availability shall be placed within the potential vertical swept blade area of the proposed Utility-Scale WES. The anemometer shall be decommissioned in accordance with this Ordinance, including the provision of a security bond covering decommissioning costs.*
- i. *Shadow Flicker Impact Analysis. A copy of a shadow flicker analysis shall be performed by an independent third-party acceptable to the Township at Non-Participating Property lines to identify the locations of shadow flicker that may be caused by any Utility-Scale WES and the expected durations of the flicker at these locations from sunrise to sunset over the course of a year. The site plan shall identify problem areas where shadow flicker may affect the owners and/or occupants of Non-Participating Property and show measures that shall be taken to eliminate shadow flicker.*
- j. *A copy of a site suitability analysis by a third-party qualified professional acceptable to the Township to identify and assess any potential impacts to or hazardous conditions resulting from proximate existing uses and conditions. The suitability analysis must include:*

 - (i) *A flight pattern analysis and impact statement.*
 - (ii) *A subsurface mine analysis and impact statement.*
 - (iii) *An oil and gas lease analysis and impact statement.*
 - (iv) *Other local site conditions identified by Planning Commission.*
9. *Approvals from Other Agencies. Final site plan approval may be granted only after the Owner/Operator receives all required federal, state and local approvals, including any applicable approval by the state historic preservation office. Owner/Operator shall provide copies of all review letters, final approved plans, and reports issued by any other governing agencies to the Township.*
10. *The site plan must show the existing topographical grades in two-foot intervals and conditions of all Participating Property at the time of application.*
11. *A baseline soil test with a minimum of 1 core sample within 10 feet of each turbine foundation, including Cation Exchange Capacity (CEC), shall be provided to the Township prior to any construction.*



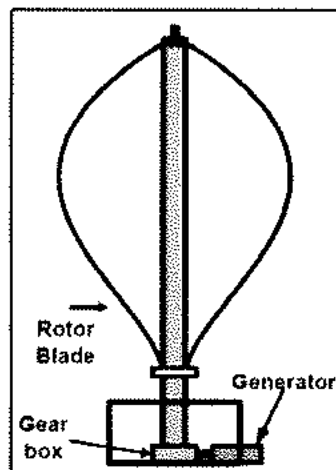
12. A written description of how the applicant will address dust control during construction. Such plan shall, at a minimum, consist of water applications at least three times per day unless it has rained in the preceding three hours of the planned application.
13. Water Usage and Cleaning. The Owner/Operator shall detail the methodology planned for cleaning the wind turbines, frequency, and listing of any and all detergents, surfactants, chemical solutions used for each cleaning, and sources of water used to facilitate turbine restoration and maintenance.
14. Repair Documentation: Owner/Operator must provide a detailed policy and process book for the repair, replacement, and removal of malfunctioning, defective, worn, or noncompliant Utility-Scale WES. Sections of the process book should consider any ordinance requirement or Utility-Scale WES performance deficiency. The process book shall also include a detailed maintenance schedule.
15. Documentation that noise emissions, construction code, tower, and safety requirements have been reviewed by the appropriate third-party professional and the submitted site plan is prepared to show compliance with these issues.
16. A description of the routes to be used by construction and delivery vehicles and of any road improvements that shall be necessary to accommodate construction vehicles, equipment or other deliveries, and an agreement or bond which guarantees the repair of damage to public roads and other areas caused by construction of the Utility-Scale WES.
17. Access Driveways: Geographic information system (GIS) mapping location of Utility-Scale WES and WES Testing Facility access driveways together with details regarding dimensions, composition, and maintenance of the proposed driveways and be filed with the township and recorded at the Livingston County Register of Deeds as an easement. The site plan shall include traffic routes, time of the year use, staging areas, and any other physical sites related to Utility-Scale WES. Construction of the Access Driveway that serves a Utility-Scale WES or WES Testing Facility is required to protect the public health, safety, and welfare by offering an adequate means by which governmental agencies may readily access the site in the event of an emergency. All such roads shall be constructed to allow access at all times by any emergency service vehicles, such as fire, police, and repair. Access driveways must meet Fowlerville Township Fire Department regulations and grant permanent access easement to the Township to be recorded at the Livingston County Register of Deeds.
18. All new infrastructure above and below ground related to the project, including transmission line locations.
19. A contact for the Owner/Operator to which any notice of complaint, as defined by this Ordinance, may be sent.
20. Building Siting: Geographic information system (GIS) mapping of locations and height of all proposed buildings, structures, electrical lines, towers, guy wires, guy wire anchors, security fencing, and other aboveground structures associated with the Utility Scale WES.



21. Nearby Building Siting and Airports: Geographic information system (GIS) mapping locations of any existing airport located within 5 miles of a proposed Utility-Scale WES and the location and height of all existing adjacent buildings, structures, and existing or proposed above ground and underground utilities located within 2500 feet of the property lines of any Participating Property, including the location of all overhead and underground electrical transmission or distribution lines, whether utilized or not by the Utility-Scale WES or WES Testing Facility.
 22. Site Lighting: A lighting plan for each Utility-Scale WES and WES Testing Facility. Such plan must describe all lighting that will be utilized and documentation that FAA requirements are met. RADAR activated lighting shall be utilized if allowed by FAA. Such a plan shall include but is not limited to, the planned number and location of lights, light color, activation methods, effect on Township residents and whether any lights blink. Due to complexity in describing lighting effects for health, welfare, and safety, Owner/Operator shall, if available, provide example locations with product descriptions, where similar, or proposed, lighting solutions are currently deployed. Lighting shall be fully shielded from ground, be FAA compliant, and be of most current design, to minimize lighting blinking and brightness nuisance.
 23. Supplemental: Additional detail(s) and information as requested by the Planning Commission.
4. Application Items as Substantive Requirements. The information, plans, documents, and other items identified as application requirements in this Ordinance, including the site plan and special land use permit, are substantive requirements for obtaining approval for a Utility-Scale WES. The Planning Commission shall review the sufficiency of the application materials and the required standards and findings under Section 13.05 of this Ordinance. If the Planning Commission determines that the substance of any application item is insufficient, the Planning Commission shall deny approval on that basis.

5. System and Location Requirements.

- a. Utility-Scale WES shall be limited to vertical axis wind turbines similar to the depiction below, as opposed to a horizontal axis wind turbine, and shall only be located in the Wind Energy System Overlay District.





STAFF COMMENT: Vertical Axis Wind Turbines (VAWT) are not used in large, utility-scale wind energy systems, as they lack the inherent ability to generate the necessary power as a viable utility-scale energy source. VAWT generate power in Kilowatts/hour, rather than Megawatts per hour for horizontal axis-style turbines. VAWTs are generally used in much smaller-scale energy systems, such as residential, or in a single-entity commercial or industrial environment.

- b. Setback: The following setback, measured from the outside edge (the point furthest from the tower as it rotates) of the blades, not from the tower itself, shall be observed. The minimum setback from any property line of a Non-Participating Property or any public or private road right-of-way is 500 feet for non-participating and 750 from public road rights of way. Additionally, each turbine must be located at least 1 mile from the nearest inland lake as defined by the Natural Resources and Environmental Protection Act, Act 451 of 1994 and shall not raise the descent minimums of any approach procedure to any airport, or otherwise limit operations at an airport. If a single Utility-Scale WES is located on more than one property, or if the adjacent property is owned by the same owner as the property on which the Utility-Scale WES is located, then the lot line setbacks of this subsection do not apply to the lot lines shared by those properties.*

STAFF COMMENT: PA 233 of 2023 requirements for setbacks are as follows:

Section 226 (8)(b)(i)

The following minimum setback distances, measured from the center of the base of the wind tower:

Setback Description	Setback Distance
Occupied community buildings and residences on nonparticipating properties.	2.1 times the maximum blade tip height to the nearest point on the outside wall of the structure.
Residences and other structures on participating Properties.	1.1 times the maximum blade tip height to the nearest point on the outside wall of the structure.
Nonparticipating property lines.	1.1 times the maximum blade tip height.
Public road right-of-way.	1.1 times the maximum blade tip height to the center line of the public road right-of-way.
Overhead communication and electric transmission, not including utility service lines to individual houses or outbuildings.	1.1 times the maximum blade tip height to the center line of the easement containing the overhead line.

If utilizing the proposed 200-foot height requirement from item 5.c. below, the setback distances would calculate as:

PA 233 Setback description: "Occupied community buildings and residences on nonparticipating properties" and **Setback distance:** "2.1 times the maximum blade tip height to the nearest point on the outside wall of the structure."

Calculation: $2.1 \times 200 \text{ feet} = 420 \text{ feet to the nearest point on the outside wall of the structure, or 220 feet from a nonparticipating property line.}$

As proposed, the setback requirement reads as follows: "The minimum setback from any property line of a Non-Participating Property or any public or private road right-of-way is 500 feet for non-participating [properties]." While the proposed regulation is far greater than the State statute minimum setback distance, the regulation appears to comply in general with PA 233.



Setback description: "Public road right-of-way". **Setback distance:** "1.1 times the maximum blade tip height to the center line of the public road right-of-way".

Calculation: $1.1 \times 200 \text{ feet} = 220 \text{ feet}$ from a public road right-of-way.

As proposed, the setback requirement reads as follows: "...and 750 [feet] from public road rights of way". As with the previously highlighted situation, the proposed regulation far exceeds the minimum State standard, however, in general, the regulation appears to comply with PA 233.

- c. The height of a Utility-Scale WES with the blade fully extended must not exceed 200 feet.
- d. The minimum clearance from ground level to the blade at its lowest point must be at least 50 feet.
- e. Rotor blades of a Utility-Scale WES must have a minimum of 100 feet of clearance from any structure, other than another WES.

STAFF COMMENT: PA 233 of 2023 requirements for height are as follows:

Section 226 (8)(b)(iii)

- (iii) Each wind tower blade tip does not exceed the height allowed under a Determination of No Hazard to Air Navigation by the Federal Aviation Administration under 14 CFR part 77.

STAFF COMMENT: As shown on the following page, in an excerpt taken from the recent wind energy report entitled "Land Based Wind Market Report 2022"^c, the average overall height of modern wind turbines is approximately 508 feet (90m hub + .5*130m rotor). In reality, the major of turbines are just short of 500 feet, and a few are in the 600 feet range.

In addition, utilizing the dataset found on the United States Wind Turbine Database (USWTDB)^d, of the 2,992 turbines nationwide that were installed in 2022, only 67 of them were UNDER 490 feet (149m), and of these, the shortest was 130m (426 feet). All were a horizontal axis-style turbine.

The combination of the township only permitting Vertical Axis Wind Turbines in a utility-scale energy system, at an overall height not to exceed 200 feet, virtually eliminates any assemblage of a reasonable, reliable, and applicable utility-scale wind energy system that is currently in place or being used as a standard utility-scale wind energy system by any major utility or energy generation entity operating in the State. All known utility-scale wind energy turbines in current operation in the State are horizontal axis turbines over 500 feet in height.

^c Source: Found online at https://www.energy.gov/sites/default/files/2022-08/land_based_wind_market_report_2202.pdf

^d Source: Found online at: <https://eerscmapp.usgs.gov/uswtodb/data/>

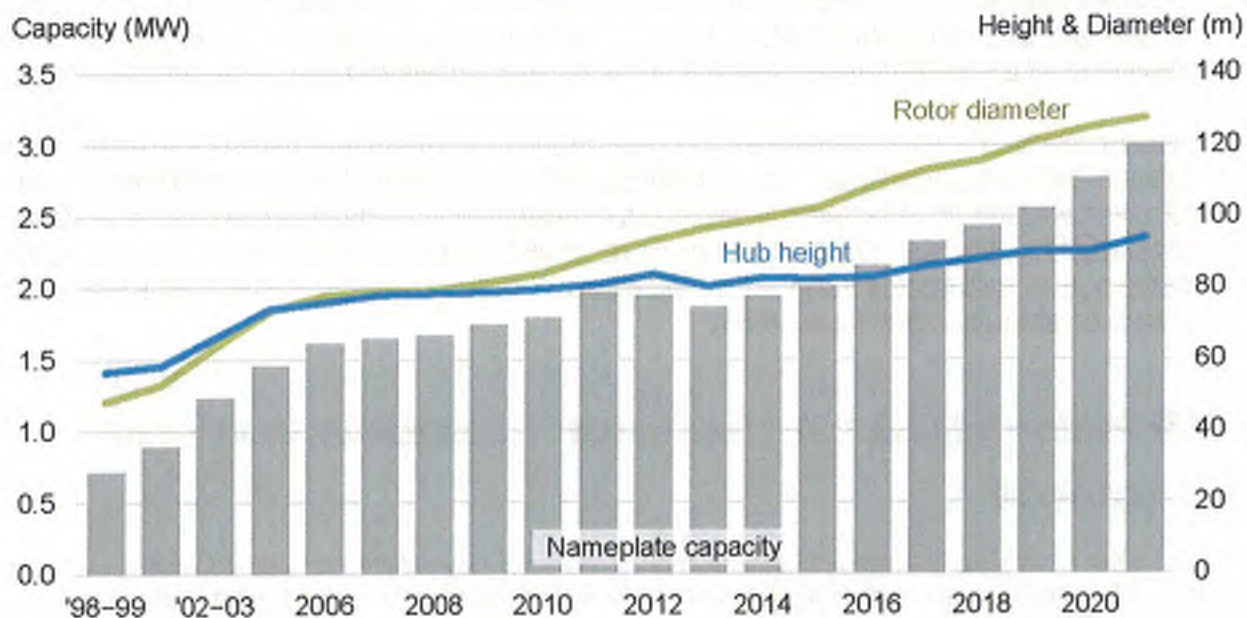


Land-Based Wind Market Report

4 Technology Trends

Turbine capacity, rotor diameter, and hub height have all increased significantly over the long term

The average nameplate capacity of newly installed wind turbines in the United States in 2021 was 3.0 MW, 9% larger than in 2020 and up 319% since 1998–1999 (Figure 24).²³ The average hub height of turbines installed in 2021 was 93.9 meters, 4% larger than in 2020 and up 66% since 1998–1999. The average rotor diameter in 2021 was 127.5 meters, 2% larger than in 2020 and up 164% since 1998–1999. Trends in rotor scaling in particular, but also hub height, are two of several factors impacting the project-level capacity factors highlighted later in this report.



Sources: ACP, Berkeley Lab

Figure 24. Average turbine nameplate capacity, hub height, and rotor diameter for land-based wind projects

Figure 25 presents these same trends since 2011, but with additional detail on the relative distribution of turbines with different capacities, hub heights, and rotor diameters. For example, 2021 saw an increase in the proportion of turbines installed in the 2.75–3.5 MW range, while the proportion of turbines at 3.5 MW or larger also increased. The percentage of turbines with hub heights larger than 100 meters increased in 2021, to 28%—up from just 15% in 2020. Finally, the steady progression toward larger rotors continued. In 2011, no turbines employed rotors that were 115 meters in diameter or larger, while 89% of newly installed turbines featured such rotors in 2021 (and 23% of those were at least 130 meters).



- f. Each Utility-Scale WES must be equipped with a braking or equivalent device, capable of stopping the Utility-Scale WES operation in high winds with or without SCADA control. The braking system must be effective during complete grid power failure when Utility-Scale WES are unable to communicate with SCADA control or receive power.*
- g. All Utility-Scale WES may be required to be equipped with technology that automatically de-ices the turbine blades. Such system must detect ice and heat the blades, such as through the use of built-in carbon heating mats or through the circulation of hot air.*
- h. The size of a Participating Property to be used for a Utility Scale WES shall be sufficient to comply with all setback requirements in this section.*
- 6. Vibrations: No Utility-Scale WES shall create vibrations that are detectable by humans on Non-participating Property. No Utility-Scale WES shall generate or permit to be generated any vibration in the low-frequency range of 0.1 to 20 Hz, including the 1, 2, 4, 8, and 16 Hertz octave bands that is perceivable by human sensation or exceeds an rms acceleration level of 50 dB(unweighted) re 1 micro-g at any time and for any duration either due to impulsive or periodic excitation of structure or any other mechanism at a Non-Participating Property line or at any point within a Non-Participating Property.*
- 7. Shadow Flicker: Zero hours of Shadow Flicker may fall on or in a Non-Participating Property or on public roads or highways. Site plan and other documents and drawings shall show mitigation measures to eliminate potential impacts from shadow flicker, as identified in the Shadow Flicker Impact Analysis. Measures to eliminate all effects of shadow flicker on all Non-Participating Property beginning at the property lines, such as programming the Utility-Scale WES to stop rotating during times when shadow crosses property lines, shall be required.*

STAFF COMMENT: PA 233 of 2023 requirements for shadow flicker are as follows:

Section 226 (8)(b)(ii)

- (ii) Each wind tower is sited such that any occupied community building or nonparticipating residence will not experience more than 30 hours per year of shadow flicker under planned operating conditions as indicated by industry standard computer modeling.

From Staff's research, there are some limited techniques and technologies available that would allow near-zero hours of shadow flicker to occur on non-participating properties.

- 8. Substations and accessory buildings: Structures related or accessory to a Utility-Scale WES shall be subject to the dimensional and locational standards of structures in the zoning district in which they are located. Where structures are visible from Non-Participating Property, vegetation or manmade screening shall be required to minimize visual impact off-site.*
- 9. Permits: All required local, county, state, and federal permits shall be obtained before the Utility-Scale WES begins operating, including, but not limited to, a tall structures permit pursuant to the Michigan Tall Structures Act (Act 259 of 1959, MCL 259.481 et seq.).*



10. Appearance: All Utility-Scale WES must be painted a non-obtrusive, neutral color, such as beige, gray, or off-white and must be non-reflective. All bases and rotor blades of Utility-Scale WES must be the same color and must be consistent with the color of other Utility-Scale WES in the Township. No advertisements, graphics, or striping are permitted on the Utility-Scale WES. The Owner/Operator is encouraged to select anti-icing paint that prevents the formation of ice on the rotor blades of the Utility-Scale WES.
11. Lighting: Lighting of the Utility-Scale WES is limited to the minimum light necessary for safe operation. Utility-Scale WES may be lit only to the minimum extent required by the FAA.

STAFF COMMENT: PA 233 of 2023 requirements for lighting are as follows:

Section 226 (8)(b)(v)-(vi)

- (v) The wind energy facility is equipped with a functioning light-mitigating technology. To allow proper conspicuity of a wind turbine at night during construction, a turbine may be lighted with temporary lighting until the permanent lighting configuration, including the light-mitigating technology, is implemented. The commission may grant a temporary exemption from the requirements of this subparagraph if installation of appropriate light mitigating technology is not feasible. A request for a temporary exemption must be in writing and state all of the following:
- (A) The purpose of the exemption.
 - (B) The proposed length of the exemption.
 - (C) A description of the light-mitigating technologies submitted to the Federal Aviation Administration.
 - (D) The technical or economic reason a light-mitigating technology is not feasible.
 - (E) Any other relevant information requested by the commission.
- (v) The wind energy facility meets any standards concerning radar interference, lighting, subject to subparagraph (v), or other relevant issues as determined by the commission.

It appears that this proposed element would generally comply with the provisions of PA 233.

12. Security Fencing:

- a. Security fencing may be required by the Planning Commission to be installed around all electrical equipment related to the Utility-Scale WES, including any transformers. Fencing shall be at least seven feet tall and be composed of woven agricultural wire. Barbed and razor wire is prohibited.
- b. A containment system shall surround any transformers in case of hazardous waste or oil spills.
- c. Appropriate warning signs shall be posted at safe intervals at the entrance and around the perimeter of the Utility-Scale WES.
- d. Gate posts and corner posts shall have a concrete foundation.



- e. Gates shall be the same height and constructed of the same material as the fencing. Access, such as Knox box, shall be provided for emergency responders.
 - f. The Township may allow or require a fence design to allow for the passage of wildlife upon a finding that adequate access control and visual screening will be preserved.
 - g. Security fencing is subject to setback requirements. The security fence shall be locked, and a self-locking device shall be used. Lock boxes and keys (may be electronic such as keypad opener if the passcode is provided to the Township and central dispatch for 911 service) shall be provided at locked entrances for emergency personnel access. Electric fencing is not permitted. A safety plan shall be in place and updated regularly with the local fire department having jurisdiction over the Utility-Scale WES.
13. Noise: All sound measurements are to be instantaneous and shall not be averaged. The noise generated by a Utility-Scale WES shall not exceed the following limits:
- a. 40 dBA Lmax, as measured at the property line of the Participating Property, between the hours of 7:00 a.m. and 9:00 p.m.
 - b. 35 dBA Lmax, as measured at the property line of the Participating Property, between the hours of 9:00 p.m. and 7:00 a.m.
 - c. The Owner/Operator of the Utility Scale WES shall annually provide for a sound analysis or modeling, conducted by an auditory expert chosen by the Township, at the expense of the Owner/Operator.

STAFF COMMENT: PA 233 of 2023 requirements for noise are as follows:

Section 226 (8)(b)(iv)

- (iv) The wind energy facility does not generate a maximum sound in excess of 55 average hourly decibels as modeled at the nearest outer wall of the nearest dwelling located on an adjacent nonparticipating property.

Regulation of noise in land-use settings is a difficult task. Regarding noise regulation in association with wind energy systems, Staff would refer the township to the following excerpt, taken from the Michigan State University Extension Land Use Series entitled: "Sample Zoning for Wind Energy Systems"⁹, as further guidance.

⁹ Source: "Sample Zoning for Wind Energy Systems", 2017-2020, p. 38-40. Found online at:
https://www.canr.msu.edu/outreach/uploads/files/wind%20sample%20zoning%2010062020_FINAL.pdf



Sound Descriptors

It is important to consider the sound descriptor and sound level together when writing regulation. The regulation should be based on current studies, such as the WHO recommendation, peer reviewed research, and other studies specific to wind energy. Sound descriptors are the way in which sound is quantified, analyzed, and described. Leq and L50 are the descriptors most commonly used for wind energy.

Some Michigan communities have adopted regulation using the Lmax descriptor, which is a different standard than Leq or other sound descriptors that average sound pressure over a period of time (such as 10 minutes or one hour). Lmax measures the instantaneous, loudest sound coming from a WES, such as within 1 second.

Communities adopting a lower sound level maximum (40 dB or lower) in combination with an Lmax descriptor are adopting a standard that is not supported by long-term studies.

By design, long-term noise studies that describe the impact of WES on health (sleep, annoyance) are based on descriptors that average sound (Leq, outside which is the Leq over the entire night) and use measurements over the course of hours, days, and years—not seconds.

Those seeking to regulate with Lmax descriptor should first consult with an acoustician and review Tuscola Wind III, LLC, v. Almer Charter Township.

Common Sound Descriptors:

- dB means decibels.
- dBA means A-weighted decibels, relative loudness of sounds reducing low frequency sounds because the human ear is less sensitive to low audio frequencies.
- L means sound level.
- Lmax means the maximum sound pressure level associated with an individual noise event. The Lmax, or Maximum Sound Level, descriptor is the highest sound level measured during a single noise event (such as a vehicle pass by), in which the sound level changes value as time goes on. The maximum sound level is important in judging the interference caused by a noise event with common activities. Lmax ignores the number and duration of these events, and cannot be totaled into a one-hour or a 24-hour cumulative measure of impact.
- Leq means equivalent sound level over a given period of time (e.g., one hour) – average of all sound. For example, Leq 1 hour is the average noise level over one hour. The Leq(t), or Time-Equivalent Sound Level, descriptor accounts for noise fluctuations from moment to moment by averaging the louder and quieter moments, and giving more weight to the louder moments. It represents the equivalent continuous sound pressure level over a given period of time. Leq is SEL over some time period normalized by that time. It can be obtained using short-term measurements.



Sound Levels and Measurement

When selecting a maximum sound level, a community should ask if it is defensible, reasonable, and supported by evidence or research. After a sound level is determined, it should be accompanied by a testing methodology that can verify compliance with the regulation. Wind turbine noise measurement for compliance purposes is a highly sophisticated endeavor requiring specific sound measurement equipment, a knowledge of complex mathematical calculations, and experience applying ANSI and ISO standards to measure wind turbine noise. Measuring noise from WES poses unique challenges different from measuring other kinds of noise. Relatively few acousticians have this expertise. A local enforcement official will not have the expertise or tools to measure wind turbine noise for making a determination of compliance or non-compliance. However, a local zoning enforcement officer may be an asset to help diagnose a complaint and inform the need for additional sound testing by an acoustic expert (often from out-of-state and at some expense). For example, some zoning administrators in Michigan have worked under the guidance of an acoustician to take short term measurements using a Type 1 sound level meter. These short-term measurements helped to provide more clarity and direction as to whether an acoustician was needed to perform additional testing. A local zoning administrator may also be helpful in scouting measurement locations for post-construction studies for access or other obvious issues that may interfere with sound testing, such as a barking dog.

Sound Measurement to the Dwelling or Property Line

Communities in Michigan typically measure sound from either the property line, near the exterior wall of a dwelling, or other distance defining a curtilage around the perimeter of dwelling. The required setback to the wind turbine (being from the house or property line) is often mirrored for the noise regulation. For example, if a participating property setback from a wind turbine is measured to the dwelling, sound is also measured at the dwelling. Sound maximums measured to property lines would preserve the existing soundscape when outside in a yard or walking the property and may support future development options. Measuring sound levels at the dwelling protects the place where people spend the most time and provides a greater level of flexibility in locating wind turbines. Some standards apply at the residence at the most exposed facade, such as the WHO's, which includes sleep disturbance as a measured health outcome. Another approach is to measure noise at a distance of about 50 feet toward the wind tower from the dwelling. This 50-foot buffer would be considered the curtilage. This avoids excessive regulation of noise on large parcels where no one resides, but still covers a dwelling and a defined area around the house where people may spend time outside on their decks, in their gardens, etc. It also satisfies the typical requirement of acoustical measurement standards to stay away from large reflective surfaces, such as a building.

The number and location of sites used in compliance testing must be consistent with the regulation, such as measuring at the dwelling if the ordinance specifies the sound maximum is measured at the dwelling.



Whatever noise standard or measurement is used, it is important that the regulation has the following attributes:

- **Relevant.** The regulation is based on adopted ordinance or other law that is within requirements of substantive due process and reflects the way humans hear and react to sound.
- **Repeatable.** It is important for the method for taking sound measurements produce similar results under similar conditions, including when measured by other parties.
- **Predictable.** This is so that, during the design, the developer and community have a reasonable expectation of the noise standard requirement and resulting noise which can be modeled with a high degree of confidence.
- **Implementable.** An acoustician experienced in wind turbine sound will perform sound compliance testing and sound modeling. Consider the possibility of using both attended and unattended measurements in order to obtain enough data to determine compliance.

Opportunities for compliance testing are dictated by meteorological conditions and are relatively limited during the course of a year. Consultants look for periods with low ground wind combined with high hub height winds, so the turbines are operating at full power with limited extraneous noise at ground level. Sound testing is avoided on a typical windy day or stormy/gusty day where winds are high at ground level. Low-level ground wind is a prerequisite of acceptable testing methodology. Testing is also generally done at night to avoid other background noise, such as traffic and the activities of residents.

14. Underground Transmission: Except for power switchyards, the areas within a substation, or for interconnection with a regulated transmission line, all power transmission, communication, or other lines, wires, or conduits from a Utility-Scale WES to any building or other structure shall be located underground and in compliance with current NEC standards. Burial depth shall be at a depth that causes no known environmental, land use, or safety issues, but not less than 6 feet below grade or deeper than drain tile on the Participating Property, whichever depth is greater.

15. Road Damage: The Owner/Operator shall inform the Livingston County Road Commission (LCRC) and the Township of all the roads they propose to use as haul routes for construction, repair, or decommissioning for each Utility-Scale WES. This shall be done prior to beginning any work at any site. A third-party road inspector will be retained, with mutual approval of the Township, the Owner/Operator, and the LCRC or the Michigan Department of Transportation (MDOT) if a state highway is involved. The road inspector will determine any precautions to be taken (including videotaping and physical inspections) during the process, to determine any damage that may be caused by Owner/Operator, and then determine the appropriate road standards and measures to be taken to repair the damage. The cost of the third-party road inspector and/or any other required third-party assistance, and of all repairs necessitated to restore the roads [and related property which may be damaged by the Owner/Operator], shall be the responsibility of the Owner/Operator, and shall in no case be the responsibility of the Township.



16. Fire Suppression: The Utility-Scale WES shall include a fire suppression system that is specifically designed to immediately suppress and extinguish fires in any part of the WES. The Owner/Operator shall provide documentation establishing the effectiveness of the fire suppression system and the results of a third-party independent inspection of the fire suppression system.
17. Battery Storage: Commercial grid storage batteries or capacitor banks storing or returning supplemental power to the grid are not permitted. Use of Batteries in commercial applications is only permitted as emergency backup for safety lighting and related computer infrastructures.
18. Electronic Interference: A Utility-Scale WES must not interfere with any radio, television, or other communication systems. If the Township or the Owner/Operator of the Utility-Scale WES receive a complaint about communication interference, the Owner/Operator must resolve the interference immediately and provide proof that the interference has been resolved within 90 days.

STAFF COMMENT: PA 233 of 2023 requirements regarding interference are as follows:

Section 226 (8)(b)(vi)

- (vi) The wind energy facility meets any standards concerning radar interference, lighting, subject to subparagraph (v), or other relevant issues as determined by the commission.

It appears that this proposed element would generally comply with the provisions of PA 233.

19. Stray Voltage Assessments: No stray voltage originating from a Utility-Scale WES may be detected on any Participating Property or Non-Participating Property. A preconstruction stray voltage test shall be conducted on all Michigan Department of Agriculture & Rural Development (MDARD) registered livestock facilities located within a one-mile radius of the Participating Property. The tests shall be performed by an investigator approved by the Township. A report of the tests shall be provided to the owners of all property included in the study area. The Owner/Operator shall seek written permission from the property owners prior to conducting testing on such owners' property. Owner/Operator shall not be required to perform testing on property where the owners have refused to grant permission to conduct the testing. The owner of any Participating Property shall not refuse the stray voltage testing if they have a MDARD registered livestock facility on the Participating Property.
20. Drainage: Drainage on Participating Property shall be maintained in a manner consistent with, or improved upon, existing natural drainage patterns. Any disturbance to drainage or water management practices shall be managed within the Participating Property and on-site in order to not negatively impact surrounding properties as a result of the development. This shall be maintained for the duration of the operation of the Utility-Scale WES and shall be able to be returned to pre-existing conditions following decommissioning. Any existing drainage tiles that are identified on Participating Property shall be shown on the as-built drawings submitted following construction. Prior to the start of construction, any existing drain tile shall be inspected by robotic camera and the imagery submitted to the Township for baseline documentation on tile condition. Any damage shall be repaired, and a report submitted to the property owner and Township. While the Utility-Scale WES is in operation, the Owner/Operator shall reinspect the drain tiles every two (2) years by robotic camera for any damage and shall repair any damage within 60 days of discovery. The Owner/Operator shall report the inspection, along with any damage and repair, to the Township within 90 days after each two-year deadline. The Township



reserves the right to have the Building Inspector, Livingston County Drain Commissioner, or other agent present at the time of repair. WES support structures and/or foundations shall be constructed to preserve any drainage field tile or system.

21. Access Routes: Access drives are subject to the approval of the Livingston County Road Commission to the extent of the Road Commission's jurisdiction. All access drives and roads within the site shall be adequately maintained for emergency vehicle use, including winter maintenance.
22. As-Built Drawings: The Owner/Operator shall submit "as built" drawings with dimensions relative to Participating Property lines of all new structures including Utility-Scale WES and buried cable both inside and outside fenced areas upon completion and before any power is generated by any Utility-Scale WES. The as built drawings shall be a scale of 1 inch = 200 feet.
23. Signs: Signs are permitted but shall comply with Article 22. Each Utility-Scale WES shall include at least one sign identifying the Owner/Operator and providing a 24-hour emergency contact telephone number.
24. Emergency Action Plan and Training: Before the Utility-Scale WES is operational, the Owner/Operator shall provide the necessary training, equipment, or agreements specified in the application to Township or other emergency personnel.
25. Decommissioning and/or Abandonment:
 - a. If a Utility-Scale WES is abandoned or otherwise non-operational for a period of six months, the Owner/Operator shall notify the Township and shall remove the Utility-Scale WES within six months after the date of abandonment. Removal requires receipt of a demolition permit and full restoration of the site in accordance with the provisions of this Ordinance and to the satisfaction of the Zoning Administrator. The site shall be filled and covered with topsoil and restored to a state compatible with the surrounding vegetation. The requirements of this subsection also apply to a Utility-Scale WES that is never fully completed or operational if construction has been halted for a period six months.
 - b. The decommissioning plan shall be written to provide security to the Township equal to at least 125% of the cost to remove and dispose of all Utility-Scale WES, removal of all wiring, footings, and pilings, (regardless of depth), and restoration of the land to its original condition. The value of decommissioning shall be determined by a third-party financial consultant or engineer selected by the Township and paid for by the Owner/Operator. The cost of decommissioning shall be exclusive of any estimated salvage value. The decommissioning security shall be paid in cash to the Township. Once the value of decommissioning is determined, it shall be updated on a periodic basis of not less than every 2 years and additional security shall be required based on the average of the Consumer Price Index published from time to time by the Bureau of Labor Statistics for the preceding 2 years.
 - c. All abandonment and decommissioning work shall be done when soil is dry.
 - d. Participating Property shall be restored to its original topography within three hundred sixty-five (365) days of abandonment or decommissioning. An extension may be granted if a good faith effort has been demonstrated and any delay is not the result of actions or inaction of the Owner/Operator.



- e. If land balancing is required, all topsoil will be saved and spread evenly over balanced area according to the existing topography map provided at the time of application.
 - f. An annual report shall be provided to the Zoning Administrator showing continuity of operation and the Owner/Operator shall notify the Zoning Administrator if the use is to cease, prior to decommissioning, or abandonment.
 - g. Continuing Obligations: Failure to keep any required financial security in full force and effect at all times while a Utility-Scale WES exists or is in place shall constitute a material and significant violation of the special land use permit, and this Ordinance, and will subject the Owner/Operator (jointly and severally, if more there is more than one owner or operator) to all remedies available to the Township, including any enforcement action, civil action, request for injunctive relief, and revocation of the special land use permit.
 - h. The Township shall have the right to seek injunctive relief to effect or complete decommissioning, as well as the right to seek reimbursement from the Owner/Operator for decommissioning costs in excess of the amount deposited in escrow and to file a lien against any real property of the Owner/Operator for the amount of the excess, and to take all steps allowed by law to enforce said lien.
 - i. At the time of decommissioning, the Planning Commission may allow deviations from the above decommissioning requirements following notice and a public hearing in accordance with Section 103 of the Zoning Enabling Act.
26. Complaint Resolution: Utility-Scale WES shall provide a complaint resolution process, as described below:
- a. Participating Property upon which a Utility-Scale WES is located shall have signs posted with contact information to collect complaints.
 - b. A log shall be kept by the Owner/Operator of all complaints received and shall be available to Township officials for review at the Township's request.
 - c. The Owner/Operator shall respond to complainants within ten (10) business days and shall provide notification to the Zoning Administrator.
 - d. Any resolution shall include lawful and reasonable solutions consistent with this Ordinance, which shall also be provided to the Zoning Administrator. If the mitigation plan is determined to be satisfactory, the Owner/Operator must implement the mitigation within 30 days.
 - e. If the Owner/Operator fails to implement the mitigation plan, the Planning Commission shall hold a public hearing for the purpose of considering revocation of the special land use permit pursuant to the process under Section 13.06.E of this Ordinance. If the Owner/Operator implements the mitigation plan prior to the hearing date, the hearing may be cancelled.
 - f. If the Owner/Operator requests that the Zoning Board of Appeals review the complaint it must do so within thirty (30) days following the date the Owner/Operator is notified of the complaint. Upon



the timely request of the Owner/Operator, the Zoning Board of Appeals shall hold a public hearing and shall hear evidence from both the complainant, and the Owner/Operator. Following the public hearing, the Zoning Board of Appeals shall make one of the following determinations:

1. The Owner/Operator is in compliance with the Ordinance and all conditions of approval, and no further action is needed.
 2. The Owner/Operator is out of compliance with either the Ordinance, or the conditions of approval, or both, and the Owner/Operator must submit a mitigation plan to the Zoning Administrator within 60 days. If no mitigation plan is submitted, the Zoning Administrator shall notice a public hearing of the Planning Commission for the purpose of revoking the special land use permit. If the special land use permit is revoked, the abandonment process shall begin.
 - a. The Owner/Operator shall provide an annual report to the Zoning Administrator that details all complaints received, the status of complaint resolution, and actions taken to mitigate complaints.
27. Required Escrow Account: The Owner/Operator of a Utility-Scale WES shall be required, as a condition of the operation, to fund an escrow account in the amount of \$15,000 for investigation of complaints, including but not limited to, noise, glare, maintenance, shadow flicker, vibrations, ice throws, lighting, stray voltage, signal interference, and drainage. The escrow established by this subsection may be used at the discretion of the Township to pay for third-party investigative services. Funds shall be deposited with the Township Treasurer, or with a third-party fiduciary, at the discretion of the Township. When the escrow account balance is below \$5,000 the Township shall notify the Owner/Operator and the Owner/Operator shall replenish the account to an amount of \$15,000 within 45 days.
28. Maintenance and Repair:
- a. Each Utility-Scale WES shall be kept and maintained in good repair and condition at all times and the site shall be neat, clean, and free of refuse, waste, or unsightly, hazardous, or unsanitary conditions. All Utility-Scale WES damaged beyond repair or use shall be replaced and removed from the project site within seven (7) days and shall be disposed of off-site in accordance with any state or federal requirements.
 - b. If the Zoning Administrator or Planning Commission determines that a Utility-Scale WES fails to meet the requirements of this Ordinance or the special land use permit, the Zoning Administrator or Planning Commission shall provide notice to the Owner/Operator of the non-compliance, and the Owner/Operator has 14 days to cure the violation. If the violation is a safety hazard as determined by the Zoning Administrator or Planning Commission, then the Owner/Operator has 7 days to cure the violation. If the Owner/Operator has not remedied non-compliance issues in the aforementioned time periods, the Owner/Operator shall immediately shut down the Utility-Scale WES and shall not operate, start or restart the Utility-Scale WES until the issues have been resolved. If the Owner/Operator fails to bring the Utility-Scale WES into compliance, the Township may seek relief at law or equity to abate the nuisance and may also issue a municipal civil infraction citation. Each violation for which the Owner/Operator is deemed responsible shall result in a \$500.00 fine.



- c. The Owner/Operator shall keep a maintenance log on each Utility-Scale WES, which shall be available for the Township's review within 48 hours of such request.
 - d. At the time of the Special Land Use application, the Owner/Operator shall submit two (2) third-party contractor bids for construction of all fencing, landscaping, and drainage improvements associated with the utility scale wind energy system. A performance bond in the amount of 125% of the higher bid shall be provided to the Township to ensure completion. The Township may use the bond to complete or repair any landscaping, fencing, or drainage infrastructure (including drain tiles).
29. Extraordinary Events: If the Utility-Scale WES experiences a failure, fire, leakage of hazardous materials, personal injury, or other extraordinary or catastrophic event, the Owner/Operator shall notify the Township within 8 hours.
30. Annual Report: The Owner/Operator shall submit a report on or before January 1 of each year that includes all of the following:
- a. Amount of electric generation;
 - b. Current proof of insurance with the Township and Participating Property owner(s) shown as named insured;
 - c. Verification of financial security; and
 - d. A summary of all complaints, complaint resolutions, and extraordinary events. Additionally, the Owner/Operator shall appear before the Planning Commission annually to report on the Utility-Scale WES and address questions or concerns from the Planning Commission.
31. Inspections: The Township may inspect a Utility-Scale WES at any time by providing 24 hours advance notice to the Owner/Operator.
32. Transferability: A special land use permit for a Utility-Scale WES is transferable to a new owner. The new owner shall register its name, Federal Employer Identification Number, and business address 30 days prior to the transfer date with the Township and shall comply with this Ordinance and all approvals and conditions issued by the Township.
- a. In the event of a sale or transfer of ownership and/or operation of the wind facility, the original security bond or escrow shall be maintained throughout the entirety of the process and shall not be altered. The estimated costs of decommissioning shall be resubmitted, and the security bond adjusted to account for the new estimate.
 - b. Any proposed amendments to the approved site plan of the special land use permit shall be submitted to the Zoning Administrator pursuant to Section 13.07 of this Ordinance and, except as provided below, shall follow the process therein.



33. Amendments:

a. Major site plan amendments shall follow the same process for the original approval, including a public hearing and include any of the following:

1. Changes of the location of turbines, fencing, buildings, or ancillary equipment by 10 feet or more.
2. Any increase in the height of wind turbines.
3. Any variance request.
4. Any other change not included below as a minor site plan amendment.

b. Minor site plan amendments may be approved by the Zoning Administrator and include the following:

1. Changes of the location of a Utility-Scale WES, fencing, buildings, or ancillary equipment by less than 10 feet.

33. Remedies. If an Owner/Operator fails to comply with this Ordinance, the Township, in addition to any other remedy under this Ordinance, shall revoke the special land use permit and site plan approval after giving the Owner/Operator notice and an opportunity to be heard. Additionally, the Township may pursue any legal or equitable action to abate a violation and recover any and all costs, including the Township's actual attorney fees and costs.

STAFF COMMENT: Item "33. Remedies" above should be changed and renumbered to read as "34. Remedies" for numerical consistency.

Township Recommendation: Approval.

The Conway Township Planning Commission recommended Approval of this zoning amendment at its January 8, 2024, public hearing. There was one public comment noted in the minutes.

Staff Recommendation: Take No Action, Encourage Further Review.

There are a few proposed amendments that, in general, do not appear to be suitable, nor compatible with Public Act 233 of 2023. As noted, Vertical Axis Wind Turbines (VAWT) are not used in utility-scale wind energy facilities. They do not provide the necessary inherent power generating capacity needed for large, utility-scale power generation systems (kWh generation for VAWT-style turbines versus mWh generation for horizontal axis-style turbines). Additionally, restricting the height of permitted VAWT to an overall height of 200 feet is not compliant with current technology, and virtually eliminates any assemblage of a reasonable, reliable, and applicable utility-scale wind energy system that is currently in place or being used as a standard utility-scale wind energy system by any major utility or energy generation entity operating in the State.



Staff also found a few instances where the proposed ordinance would be stricter than the State law, which would nullify it with respect to compliance with PA 233 of 2023.

In general, the voluminous nature of the ordinance and its complexity regarding the vast amount of additional required elements contained within also could pose unintended regulatory hurdles to the township in its ability to rely on this as a “reasonable”, “workable”, or even enforceable ordinance in a practical sense of the terms. This remains to be seen, if and when a wind energy applicant / developer approaches the township in the future. Administering, overseeing, and most importantly, enforcing compliance with an ordinance, especially one of such magnitude, will be an extraordinarily challenging task for any township zoning official to efficiently and effectively manage. The ability to practically and effectively enforce a local ordinance is the most important aspect of land use regulation, regardless of an ordinance’s scale and context.

Therefore, it is recommended that the township conduct a comprehensive final review and assessment of the issues highlighted in the review prior to any final approval by the Township Board, to ensure that this level of detail and complexity is truly the desired direction for the township regarding wind energy system regulation. Staff would also recommend that the Township consult its lead/primary township legal counsel in this endeavor as well.

Regulating this land use activity continues to be new and challenging territory for many local communities. It remains to be seen if the provisions of this proposed ordinance amendment will adequately and effectively govern the use to the complete satisfaction of state law, the township, and its residents in the future. County Planning Staff encourages townships to continue to explore adopting compatible renewable energy ordinances (CREO) as well as exploring avenues to reasonably retain some form of workable local control. The township should also consider the level of risk and reward it is willing to accept in including a such large quantity of additional requirements beyond those in the law and CREO compliancy, and to think creatively about using host community agreements to protect local regulatory control and township residents. As the situation currently appears, adopting a CREO is the only option to guarantee that the developer must first go through the local zoning process.

CONWAY TOWNSHIP

ORDINANCE NO. 2023-

05

AN ORDINANCE TO AMEND THE ZONING ORDINANCE
TO DEFINE AND REGULATE CARGO CONTAINERS

The Township of Conway ordains:

Section 1. Addition of Definitions to Article 2 of the Township Zoning Ordinance

The following definitions are added to Article 2 of the Township Zoning Ordinance, consistent with the existing ordering of definitions in that section:

Cargo Container. Any metal or primarily metal container designed or constructed to ship, store, or handle bulk goods or items, or which appears substantially similar to such containers in appearance. Such containers include reusable steel boxes, freight containers, and bulk shipping containers; originally, a standardized reusable vessel that was designed for and used in the parking, shipping, movement, transportation or storage of freight, articles of goods or commodities; generally capable of being mounted or moved on a rail car, or loaded on a ship.

Portable/Temporary Storage Container. A portable or moveable, weather resistant receptacle designed and used for the storage or shipment of household goods, wares, valuables or merchandise (i.e. PODS or MODS), and which is typically leased on a short-term basis for temporary storage purposes.

Section 2. Addition of New Section 6.18, entitled "Cargo Containers and Portable Storage Containers."

New Section 6.18, currently designated as "Reserved," entitled "Cargo Containers and Portable Storage Containers," is added to the Township's Zoning Ordinance and reads as follows:

Section 6.18 - Cargo Containers and Portable Storage Containers

A. **Cargo Containers.** Cargo containers are permitted as an accessory use in all zoning districts subject to the requirements of this Section. The following regulations apply to all permanent, portable/temporary cargo container use in all zoning districts:

1. Cargo containers shall not be stacked above the height of a single container device.
2. ~~Cargo containers shall meet all required setbacks.~~
3. ~~Cargo containers shall be located in rear yards with the exception that cargo containers may be allowed in the side yard but not forward of the front building.~~
4. ~~Cargo containers must be screened so as to not be visible from the street or nearby buildings, drives, and roads.~~
5. No plumbing may be run or connected to a cargo container.

6. Cargo containers shall not be used to store hazardous materials, as defined by the Michigan Fire Prevention Code, 1941 PA 207, MCL 29.1 *et seq.*
7. Cargo containers shall not occupy required off-street parking, emergency access, ingress, egress, or loading ~~or landscaping~~ areas.
8. Cargo containers shall not be located on any utility, right of way, or easement.
9. No cargo container shall be placed in a location which may cause hazardous conditions or constitute a threat to public safety.
10. No cargo container may be used as living quarters.
11. No structural modifications may be made to cargo containers with the exception of electrification for lighting. All electrical wiring to the container must be placed underground.
12. Applicant must obtain proper electrical permits from Township and Livingston County Building Department for lighting.
13. No livestock or pets may be stored in cargo containers.
14. Cargo containers associated with an approved building construction project shall be permitted to remain on-site until the approval of the lesser of the project's final building inspection or the expiration of the building permit. At the time a cargo container is no longer intended for temporary use, the owner must apply for a land use permit for a cargo container for permanent storage as described in section B of this ordinance.

B. **Cargo Containers for Permanent Storage.** Cargo containers may be permanently placed on the property for storage purposes upon issuance of a land use permit from the Zoning Administrator and shall adhere to the following restrictions:

C. . The following regulations shall also apply:

1. Permanent Cargo Containers are limited in quantity as follows:
 - a. On a parcel between two (2) to five (5) acres, one (1) cargo container with a maximum of two hundred (200) square feet.
 - b. On a parcel of five (5) to ten (10) acres, up to two (2) cargo containers with a maximum of two hundred (200) square feet per container, not to exceed four hundred (400) total square feet.
 - c. On a parcel of ten (10) plus acres, up to four (4) cargo containers with a maximum of three hundred sixty (360) square feet per container, not to exceed one thousand four hundred forty (1,440) total square feet. Permanent accessory structures that are over two hundred (200) square feet require additional permitting with the Livingston County Building Department.
2. Cargo containers shall meet all required setbacks of Section 6.06.
3. Cargo containers shall be located in rear yards with the exception that cargo containers may be allowed in the side yard but not forward of the rear wall of the principal structure.
4. Cargo containers must be screened with shrubbery, trees, privacy fencing and/or natural surrounding so as to not be visible from the street/road and/or neighboring properties.
5. All applicable county building regulations ~~are~~ must be followed when cargo containers exceed two (200) square feet.
6. A solid foundation (road base material/gravel or better) is required.
7. Cargo containers shall be painted in solid colors (colors which blend into the surrounding area).
8. Cargo containers shall not be used for any advertising purpose and shall be kept clean of all alpha-numeric signage and writing.
9. Any writing or graffiti that may be placed on the container is the responsibility of the property owner and shall be promptly removed.

~~D. Cargo Containers for Temporary Use.~~ Property owners will be required to obtain a temporary land use permit (Section 6.09) from the Zoning Administrator for the temporary use of cargo containers. The following regulations shall also apply:

- ~~1. Cargo containers shall be removed from the property within 180 calendar days from the date of initial placement. Property owners are allowed one additional period of up to 180 days.~~
- ~~2. Cargo containers associated with an approved building construction project shall be permitted to remain on site until the earlier occurrence of approval of the project's final building inspection or the expiration of the building permit.~~

E. **Portable/Temporary Storage Containers.** Portable/**Temporary** storage containers are permitted as an accessory use in all zoning districts upon issuance of a temporary land use permit (Section 6.09) from the Zoning Administrator and shall adhere to the following restrictions:

- ~~1. No portable storage container may be stacked on top of another or on top of any other object.~~
- ~~2. Portable storage containers shall not be used to store hazardous materials, as defined by the Michigan Fire Prevention Code, 1941 PA 207, MCL 29.1 et seq.~~
- 3. No structural modifications may be made to portable/temporary cargo containers.**
- ~~4. No electricity or plumbing may be run or connected to a portable storage container.~~
5. Portable/**temporary** storage containers used in a residential district or associated with a residential use must be placed on a driveway or paved area.
- ~~6. Portable storage containers used in a non-residential district or associated with a nonresidential use shall not occupy required off-street parking, loading or landscaping areas.~~
- ~~7. No portable storage container shall be placed in a location which may cause hazardous conditions or constitute a threat to public safety.~~
- ~~8. No portable storage container may be used for living quarters.~~
- ~~9. No livestock or pets may be stored in a portable storage container.~~
- ~~10. Portable storage containers may not be placed on a vacant lot, unless that lot is associated with an approved building construction project.~~
- ~~11. Time Limits:~~
 - ~~a. Portable storage containers shall be removed from the property within 180 calendar days from the date of initial placement. Property owners are allowed one additional period of up to 180 days.~~
 - ~~b. Portable storage containers associated with an approved building construction project shall be permitted to remain on site until the earlier occurrence of approval of the project's final building inspection or the expiration of the building permit.~~

F. **Referral to Planning Commission.** At any time after receipt of an application for a cargo container or portable storage container pursuant to this Section, the Zoning Administrator may elect to refer the application for review and approval by the Planning Commission at no additional cost to the applicant.

G. **Right of Entry and Inspection. The Township reserves the right to inspect all storage containers during each permitting period to ensure that such structures are compliant**

with all applicable ordinances and that public safety and other properties are not jeopardized by the condition or deterioration of said structures. It is the duty of the applicant and/or property owner to schedule and complete all necessary inspections. The scheduling of inspections must occur within thirty (30) days from obtaining a land use permit.

H. Civil Infraction. Any person violating any of the provisions of this ordinance shall be responsible for a civil infraction according Section 5 – Schedule of Civil Fines/Costs of the Municipal Civil Infraction Ordinance.

Section 3. Validity and Severability.

If any portion of this Ordinance is found invalid for any reason, such holding will not affect the validity of the remaining portions of this Ordinance.

Section 4. Repealer.

All other ordinances inconsistent with the provisions of this Ordinance are hereby repealed to the extent necessary to give this Ordinance full force and effect.

Section 5. Effective Date.

This Ordinance takes effect seven days after publication as provided by law.

CONWAY TOWNSHIP

ORDINANCE NO. 2023-05

**AN ORDINANCE TO AMEND THE ZONING ORDINANCE
TO DEFINE AND REGULATE CARGO CONTAINERS**

The Township of Conway ordains:

Section 1. Addition of Definitions to Article 2 of the Township Zoning Ordinance

The following definitions are added to Article 2 of the Township Zoning Ordinance, consistent with the existing ordering of definitions in that section:

Cargo Container. Any metal or primarily metal container designed or constructed to ship, store, or handle bulk goods or items, or which appears substantially similar to such containers in appearance. Such containers include reusable steel boxes, freight containers, and bulk shipping containers; originally, a standardized reusable vessel that was designed for and used in the parking, shipping, movement, transportation or storage of freight, articles of goods or commodities; generally capable of being mounted or moved on a rail car, or loaded on a ship.

Portable/Temporary Storage Container. A portable or moveable, weather resistant receptacle designed and used for the storage or shipment of household goods, wares, valuables or merchandise (i.e. PODS or MODS), and which is typically leased on a short-term basis for temporary storage purposes.

Section 2. Addition of New Section 6.18, entitled "Cargo Containers and Portable Storage Containers."

New Section 6.18, currently designated as "Reserved," entitled "Cargo Containers and Portable Storage Containers," is added to the Township's Zoning Ordinance and reads as follows:

Section 6.18 - Cargo Containers and Portable Storage Containers

A. **Cargo Containers.** Cargo containers are permitted as an accessory use in all zoning districts subject to the requirements of this Section. The following regulations apply to all permanent, portable/temporary cargo container use in all zoning districts:

1. Cargo containers shall not be stacked above the height of a single container device.
2. No plumbing may be run or connected to a cargo container.
3. Cargo containers shall not be used to store hazardous materials, as defined by the Michigan Fire Prevention Code, 1941 PA 207, MCL 29.1 *et seq.*
4. Cargo containers shall not occupy required off-street parking, emergency access, ingress, egress, or loading areas.
5. Cargo containers shall not be located on any utility, right of way, or easement.
6. No cargo container shall be placed in a location which may cause

hazardous conditions or constitute a threat to public safety.

7. No cargo container may be used as living quarters.
8. No structural modifications may be made to cargo containers with the exception of electrification for lighting. All electrical wiring to the container must be placed underground.
9. Applicant must obtain proper electrical permits from Township and Livingston County Building Department for lighting.
10. No livestock or pets may be stored in cargo containers.
11. Cargo containers associated with an approved building construction project shall be permitted to remain on-site until the approval of the lesser of the project's final building inspection or the expiration of the building permit. At the time a cargo container is no longer intended for temporary use, the owner must apply for a land use permit for a cargo container for permanent storage as described in section B of this ordinance.

B. Cargo Containers for Permanent Storage. Cargo containers may be permanently placed on the property for storage purposes upon issuance of a land use permit from the Zoning Administrator and shall adhere to the following restrictions:

1. Permanent Cargo Containers are limited in quantity as follows:
 - a. On a parcel between two (2) to five (5) acres, one (1) cargo container with a maximum of two hundred (200) square feet.
 - b. On a parcel of five (5) to ten (10) acres, up to two (2) cargo containers with a maximum of two hundred (200) square feet per container, not to exceed four hundred (400) total square feet.
 - c. On a parcel of ten (10) plus acres, up to four (4) cargo containers with a maximum of three hundred sixty (360) square feet per container, not to exceed one thousand four hundred forty (1,440) total square feet. Permanent accessory structures that are over two hundred (200) square feet require additional permitting with the Livingston County Building Department.
2. Cargo containers shall meet all required setbacks of Section 6.06.
3. Cargo containers shall be located in rear yards with the exception that cargo containers may be allowed in the side yard but not forward of the rear wall of the principal structure.
4. Cargo containers must be screened with shrubbery, trees, privacy

fencing and/or natural surrounding so as to not be visible from the street/road and/or neighboring properties.

5. All applicable county building regulations must be followed when cargo containers exceed two (200) square feet.
6. A solid foundation (road base material/gravel or better) is required.
7. Cargo containers shall be painted in solid colors (colors which blend into the surrounding area).
8. Cargo containers shall not be used for any advertising purpose and shall be kept clean of all alpha-numeric signage and writing.
9. Any writing or graffiti that may be placed on the container is the responsibility of the property owner and shall be promptly removed.

C. Portable/Temporary Storage Containers. Portable/Temporary storage containers are permitted as an accessory use in all zoning districts upon issuance of a temporary land use permit (Section 6.09) from the Zoning Administrator and shall adhere to the following restrictions:

1. No structural modifications may be made to portable/temporary cargo containers.
2. Portable/temporary storage containers used in a residential district or associated with a residential use must be placed on a driveway or paved area.

D. Referral to Planning Commission. At any time after receipt of an application for a cargo container or portable storage container pursuant to this Section, the Zoning Administrator may elect to refer the application for review and approval by the Planning Commission at no additional cost to the applicant.

E. Right of Entry and Inspection. The Township reserves the right to inspect all storage containers during each permitting period to ensure that such structures are compliant with all applicable ordinances and that public safety and other properties are not jeopardized by the condition or deterioration of said structures. It is the duty of the applicant and/or property owner to schedule and complete all necessary inspections. The scheduling of inspections must occur within thirty (30) days from obtaining a land use permit.

F. Civil Infraction. Any person violating any of the provisions of this ordinance shall be responsible for a civil infraction according Section 5 – Schedule of Civil Fines/Costs of the Municipal Civil Infraction Ordinance.

Section 3. Validity and Severability.

If any portion of this Ordinance is found invalid for any reason, such holding will not affect

the validity of the remaining portions of this Ordinance.

Section 4. Repealer.

All other ordinances inconsistent with the provisions of this Ordinance are hereby repealed to the extent necessary to give this Ordinance full force and effect.

Section 5. Effective Date.

This Ordinance takes effect seven days after publication as provided by law.

logical sequence so that any individual phase will not depend in any way upon a subsequent phase for adequate access, public utility services and drainage or erosion control.

O. Fencing and Buffers.

1. Landscaping, fencing and walls are provided and maintained in accordance with the objectives of this ordinance.
2. The Planning Commission shall have some latitude in specifying the walls, fences, greenbelts and other buffers as they apply to a phased development if the particular phase of development and construction work is far enough removed from adjacent properties to afford the screening and buffers as otherwise required.

P. Natural Features.

1. Adequate assurances are received that clearing the site of topsoil, trees and other natural features before the commencement of building operations will occur only in those areas approved for the placement of physical improvements.
2. The development will not detrimentally affect or destroy natural features such as ponds, streams, wetlands, hillsides or wooded areas, but will preserve and incorporate such features into the development's site design.

Section 14.05 Action on Site Plans

- A. Submission of Site Plan.** Twelve (12) copies of the site plan and related information shall be presented to the Zoning Administrator by the property owner or petitioner at least twenty one (21) days prior to the meeting at which the site plan is to be reviewed.
- B. Planning Commission Action.** The Planning Commission shall disapprove, approve, or approve with conditions the site plan contingent upon the site plan review standards being met. Any conditions required by the Planning Commission, together with the reasons for those conditions, shall be provided in writing to the applicant.
- C. Approval of Site Plans for Special Uses.** The Planning Commission, after review of a site plan prepared for a special use permit, shall reject or grant approval and regulate any conditions for special use permits. Provisions regulating approvals of site plans prepared for special use permits are presented in Article 13.
- D. Notification of Approval or Disapproval.** The Planning Commission shall review and communicate its approval, disapproval or recommend site plan modifications to the applicant within forty-

five (45) days after receipt of the site plan.

- E. Site Plan Modifications.** Any modifications to the site plan desired by the Planning Commission shall be recorded in the minutes of the Planning Commission meeting and a copy of the minutes shall be furnished to the applicant. In cases where modifications have been recommended, the applicant shall resubmit a site plan incorporating these modifications to the Planning Commission for their review.
- F. Modified Site Plan Approval or Disapproval.** Upon receipt of the modified site plan, the Planning Commission shall evaluate the changes which have been made and if deemed acceptable, shall communicate its approval of the site plan to the applicant within forty-five (45) days after receipt of the modified site plan. Such modified site plan may be disapproved for any inadequacy found to be detrimental to the public health, safety or the general welfare.

Section 14.06 Appeal

The decision of the Planning Commission with respect to the site plan may be appealed to the Township Board. Written request by the property owner or petitioner for a hearing before the Township Board shall be filed within sixty (60) days after the decision is rendered by the Planning Commission. If no appeal is filed, the decision of the Planning Commission becomes and remains final.

Section 14.07 Approval Expiration and Revocation

The approval of a site plan shall expire one (1) calendar year from the date of such approval unless construction has begun in accordance with the plan. Any site plan approval may be revoked when the construction of said development is not in conformance with the approved plans, in which case the Township shall give the applicant notice of intention to revoke such land use permit at least ten (10) days prior to review hearing of the permit by the Planning Commission. After conclusion of such review the Township may revoke its approval of the development if the Planning Commission feels that a violation in fact exists and has not been remedied prior to such hearing.

Section 14.08 Amendment of an Approved Site Plan

- A. Request.** A developer may request a change in an approved site plan. A change in an approved site plan which results in a major change as defined in this Section shall require a plan amendment. Amendments shall follow the procedures and conditions required for original plan submittal and review. A change that results in a minor change, as defined in this Section, shall not require a revision to the plan.
- B. Content of Request.** A request to change an approved site plan shall be made in writing to the Planning Commission. The request shall state clearly the reasons for the change. The reasons may be based upon