



MCKENNA

March 22, 2022

Planning Commission
Fulton Township
3425 W. Cleveland Road
Perrinton, Michigan 48871

via email to: denisesupervisor@fultontwp.com

Subject: Heartland Farms Wind Energy Project

Dear Planning Commissioners:

I am writing to you on behalf of Defever Farms, located at 7606 South Jerome Road, as well as residents throughout Fulton Township who would be impacted by the Heartland Farms Wind Energy Project. I am a professional community planner from McKenna, a planning firm located in downtown Northville, Michigan.

Upon reviewing the Heartland Farms proposal, it is my professional opinion that it is in conflict with the Fulton Township Zoning Ordinance and Master Plan. I have come to this conclusion after studying the impacts the project would have on Defever Farms and several other residences in the Township.

In the case of Defever Farms, sheet FU12 in the site plan package indicates that there would be a 499-ft. tall wind turbine (T86) approximately 1,500 ft. from the Defever's front door. In addition, there would be a 300-ft. tall meteorological (MET) tower only 770 ft. from the Defever residence. On the last two pages of this letter I have attached a table that provides similar information for other residences in the Township.

Invenergy's engineers and attorney have prepared a very thorough proposal package for your consideration, which your own planner, the Spicer Group, has reviewed in detail. I do not wish to rehash material already discussed elsewhere, but rather focus on some very critical special land use and site plan considerations that have not received the attention they deserve.

CRITICAL SPECIAL LAND USE CONSIDERATIONS

To begin the discussion of special land use, I wish to first direct your attention to the definition of Special Land Use in Article 15 of the Zoning Ordinance:

Special Land Use – A use that would be inconsistent with or detrimental to other uses permitted in the same zoning district unless carefully considered as to number, area, size, exterior design, location or relation to the adjacent properties and to the neighborhood and may be permitted if proper conditions are applied and safeguards are applied.

The words “may be permitted” are particularly significant because they mean that the Planning Commission and Township Board must use their discretion in making a decision on a special land use. In fact, using the criteria in the Zoning Ordinance, you may find that a special land use is appropriate in one location under one set of conditions, but totally inappropriate in another location in the same zoning district. In other words, **after evaluating a special land use proposal, you may find that denial is in the best interest of the Township.**

Of course, a decision involving a special land use must be based on sound planning and zoning criteria. Section 604(A) of the Zoning Ordinance provides these criteria, stating that approval of a special land use shall be

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granted “only upon a finding of compliance with each of the following standards . . . as well as applicable standards established elsewhere in this Ordinance.” In other words, **the Planning Commission and Township Board cannot approve a special land use unless it finds that it complies with all seven standards in Section 604.**

The following table provides a review of the Heartland Farms Wind Energy Project with respect to the seven special land use standards.

Section 604 Special Land Use Standards	Discussion	Conclusion
<p>1. The proposed use, activities, processes, materials, equipment, and conditions of operation will not be detrimental to the public welfare, persons or property by reason of excessive noise, fumes, dust, glare, traffic or objectionable odors.</p>	<p>Sheet FU12 shows that the 45 dBA sound contour is close to the Defever Farms property. The table on the last two pages of this letter reveals that many other residences would be in a similar situation. Studies by expert acousticians show that at the 45 dBA level, a significant proportion of the population will be highly annoyed. Further, 10 to 15 percent of the population will be affected by inaudible pressure pulsations in the infrasound range, causing such ailments as sleep disturbance, dizziness, nausea, tinnitus, vertigo, and migraine headaches.</p> <p>Dr. Paul Schomer, Director Emeritus of the Acoustical Society of America’s Standards Committee, recommends limiting the maximum sound level at non-participating parcels property lines to 36-38 dBA.¹ To reduce human health hazard, it is further recommended that wind turbines be set back a minimum distance of one mile from non-participating parcels property lines, or a distance of 10 times the</p>	<p><u>NOT IN COMPLIANCE</u> (Although the project may comply with the standards for Wind Energy Conversion Systems in Section 731, the project fails to comply with the standards in Section 604 because of the annoying and debilitating noise and flicker impacts many residents will have to live with forever.)</p>

¹ According to a report by acoustician David Hessler, wind turbine noise varies +/-5 dBA around the predicted sound level. He even noted short-lived spikes on the order of 15 to 20 dBA above the mean. In consideration of these anticipated fluctuations and spikes, a maximum sound level of 36-38 dBA is entirely reasonable.



Section 604 Special Land Use Standards	Discussion	Conclusion
	<p>height of the turbine, whichever is greater.</p> <p>The background sound level in rural areas is typically only about 25 dBA. An increase to 40 or 45 dBA is a huge increase that will be very noticeable and annoying.² The quietude and stillness of Fulton Township will be lost forever.</p> <p>Sheet FU12 also shows that the 30-hr. shadow flicker contour crosses the corner of the Defever property, further impacting the parcel. The table on the last page of this letter reveals that other residences would be in a similar situation.</p>	
2. Essential public facilities and services such as roads, fire and police protection, drainage facilities, refuse disposal, and schools are adequate for the proposed use or are capable of being adequately provided for.	The adequacy of public facilities and services focuses primarily on roads, which must sustain heavy construction and delivery traffic. Heartland Farms indicates it will obtain proper approvals from the Gratiot County Road Commission and Michigan Department of Transportation. Page 37 of the application states that “if public roads are damaged during the course of deliveries and construction, repairs will be coordinated with the local municipality.” (Note: In Michigan, townships do not have jurisdiction over roads; thus, the statement regarding damaged road should indicate repairs will be coordinated with the appropriate road authority.)	IN COMPLIANCE (assuming commitments in application are kept)

² Decibels are measured on a logarithmic scale, so a 10 db increase means 10 times louder; a 20 db increase means 100 times louder.



Section 604 Special Land Use Standards	Discussion	Conclusion
3. Requirements for additional public services and facilities that will be created by the proposed use will not be detrimental to the economic welfare of the community.	Road improvements are the primary public facility requirement associated with Heartland Farms, as noted above.	IN COMPLIANCE (assuming commitments in application are kept)
4. All standards set forth in this Ordinance will be complied with, including any standards set forth in this Ordinance for a particular use.	Section 506 of the Zoning Ordinance sets forth standards for review of site plans. As noted later in this letter, the Heartland Farms Wind Energy Project fails to comply with several site plan review standards.	<u>NOT IN COMPLIANCE</u>
5. All administrative requirements pertaining to issuance of a special land use approval have or will be complied with.	Page 39 of the Heartland Farms application lists a surprising number of proposed conditions of approval. Many of these conditions involve project details that normally would be settled at the time of site plan review, but are instead being pushed out for future administrative review. These details include final locations of the turbines, final locations of collector lines and access roads, size of the performance bond, routes of delivery and construction vehicles, location of the laydown yard, and final location of the MET towers. In our opinion, this is a huge number of items being left for administrative review. These issues should be resolved in front of the Planning Commission and public at the time of site plan review.	<u>INCONCLUSIVE</u>
6. The proposed use, activities, processes, materials and equipment and conditions of operation shall be consistent with the goals, objectives and policies of the Master Plan.	The 2017 Gratiot County-Wide Master Plan serves as the Master Plan for Fulton Township. Although the Plan speaks in general terms about the benefits of wind energy in the County as a whole, wind energy is not mentioned once in the more specific Goals, Objectives, and Vision for Fulton Township. The Vision Statement talks about offering a “family oriented small-town atmosphere,” “a beautiful place that is progressive, yet honors tradition.” The Goals and	<u>NOT IN COMPLIANCE</u>



Section 604 Special Land Use Standards	Discussion	Conclusion
	Objectives focus on enhancing neighborhoods, strengthening downtowns, and developing recreational assets. A utility-scale wind energy project clearly was not envisioned in Fulton Township's future by Township representatives who drafted the Goals, Objectives and Vision.	
7. The proposed land use or activity is compatible with the adjacent uses of land and natural environment.	The rural countryside the residents of Fulton Township have enjoyed for decades will be replaced by totally discordant and unappealing sights and sounds of wind turbines. In the case of Defever Farms, it would be hard to imagine anything more incompatible than a 499-foot wind turbine and 300-foot MET tower on adjacent land. The table on the last two pages show that many other residents face the same predicament.	<u>NOT IN COMPLIANCE</u>

To reiterate, compliance with **all** the standards in Section 604(A) is required. The table above shows that Heartland Farms cannot comply with at least four standards (and possibly one other). Thus, solely on the basis of Section 604(A), **a recommendation of denial of the special land use proposal is appropriate.**

SITE PLAN REVIEW CONSIDERATIONS

Special Land Use Standard No. 4 indicates that the proposal must comply with “all standards set forth in this Ordinance,” which would include the 14 Site Plan Standard for Review in Section 506(A) of the Zoning Ordinance. Four of these standards stand out as being particularly relevant to the Heartland Farms project, as noted in the following table.

Section 506 Site Plan Review Standards	Discussion	Conclusion
Standard No. 2: The proposed development shall conform to all regulations of the Ordinance for the district in which it is located and to the Master Plan.	As noted in the above table, the Heartland Farms project is clearly in conflict with the specific Goals, Objectives, and Vision for Fulton Township as set forth in the 2017 Gratiot County-Wide Master Plan.	<u>NOT IN COMPLIANCE</u>
Standard No. 6: The proposed development will be harmonious with, and not harmful, injurious, or objectionable to,	As noted in the above table, the wind turbines are not harmonious within the bucolic rural setting in which they are	<u>NOT IN COMPLIANCE</u>



Section 506 Site Plan Review Standards	Discussion	Conclusion
existing and future uses in the immediate area. If the site plan is not found to meet the standard, reasonable conditions of approval may be applied to meet the standard.	proposed. More significantly, for many residents listed in the table on the last two pages the wind turbines will be exceptionally objectionable and harmful. There are no conditions of approval that could be considered that would alleviate the detrimental sights and sounds of a proposed wind turbine. In addition, homeowners would suffer a severe economic impact resulting from the decrease in value of their residences, which would become substantially less desirable because of their proximity to the towers.	
<u>Standard No. 8:</u> The proposed development shall be adequately coordinated with improvements serving the subject property and other neighboring or adjacent developments. If the site plan is not found to meet the standard, reasonable conditions of approval may be applied to meet the standard.	There is no evidence in the application that Heartland Farms made any attempt to coordinate its proposed improvements with neighboring or adjacent developments.	<u>NOT IN COMPLIANCE</u>
<u>Standard No. 14:</u> Construction, structures and buildings (including both principal and accessory) shall be in harmony with the general character of the area.	As noted previously, the proposed development is not in harmony with the bucolic rural character of the area. The first line of the Fulton Township Master Plan Summary states succinctly: "Representatives of Fulton Township would like to preserve the community's small town feel and rural character."	<u>NOT IN COMPLIANCE</u>

The table above shows that Heartland Farms cannot comply with at least four site plan review requirements in Section 506(A) of the Zoning Ordinance. Thus, **denial of the site plan is appropriate.**

CONCLUSION

In response to the Spicer Group’s review letter, James R. Griffin from Schain Banks wrote the following regarding the number of years Heartland Farms will operate (*italics and underlining added*):

“Project operating years estimate. *The project does not have an expected termination date for operations.* Heartland Farms expects the project will have a minimum lifespan of 25 years, which is the length of the initial lease term with the participating owners. However, the lease term may be extended. Additionally, turbine equipment and components with an expected lifespan of 40 years may be replaced



during project operations, extending the useful life of such components and the operational period for the project.”

The enormity of the decisions before you are staggering because, as Mr. Griffin has implied, if approved Heartland Farms will change the landscape of Fulton Township permanently. Society’s need for renewable sources of electricity will not end in 25, 40, or 50 years.

Many communities in Gratiot County, under different circumstances, have embraced wind energy and have planned for it. In many cases, the population in those communities is lower than Fulton Township’s, resulting in less impact. Fulton Township has not planned for wind energy and has charted a different path for its future, which is an entirely reasonable approach.

This letter has revealed that the Heartland Farms Wind Energy Project does not comply with several mandatory Special Land Use Standards in Section 604(A) and Site Plan Review Standards in Section 506(A) of the Fulton Township Zoning Ordinance.

Consequently, we recommend that the Planning Commission recommend to the Township Board that the Special Land Use proposal for the Heartland Farms Wind Energy Project be denied.

Section 501(B) appears to give final site plan review authority to the Planning Commission. Thus, we recommend that the Planning Commission deny approval of the site plan for the Heartland Farms Wind Energy Project.

Thank you for this opportunity to present our findings and recommendations to you.

Respectfully submitted,

McKENNA

Christopher J. Doozan, AICP
Community Planning Consultant

cc: Kathleen M. Defever, Esq.



Analysis of Impact of Proposed Wind Turbines on Individual Residences ¹						
Section No.	Turbine No.	Property Owner	Road Location	Approximate Distance from Residence to Turbine ²	Relationship to 45 dB Contour ⁴	Relationship to 30 Hour Shadow Flicker Contour ⁴
1	T11	Jeremy Bosley ³	Wells Rd.	1,211 ft.	Within 45 dB Contour	Within 30 Hr. Contour
1	T11	William Foster	Wells Rd.	1,500 ft.	Very close to 45 dB Contour	Very close to 30 Hr. Contour
1	T55	Jeremy Bosley ³	Wells Rd.	1,300 ft.	Within 45 dB Contour	Within 30 Hr. Contour
1	T55	Carl Verstaen	S. State Rd.	1,235 ft.	Within 45 dB Contour	Very close to 30 Hr. Contour
2	T42	James Legrow	Grant Rd.	1,552 ft.	Within 45 dB Contour	In compliance
2	T43	James Ohaw	S. Jerome Rd.	1,939 ft.	Close to 45 dB Contour	In compliance
2	T52	Joel Gillespie	W. Garfield Rd.	1,353 ft.	Very close to 45 dB Contour	In compliance
2	T52	Scott Wilson	W. Garfield Rd.	1,370 ft.	Close to 45 dB Contour	In compliance
2	T52	Michael Schmittendorf	W. Garfield Rd.	1,460 ft.	In compliance	In compliance
3	T74	Troy Goblentz	W. Grant Rd.	1,547 ft.	Within 45 dB Contour	Close to 30 Hr. Contour
3	T58	W. Wilson	S. Begole Rd.	1,420 ft.	Very close to 45 dB Contour	Very close to 30 Hr. Contour
3	T58	Randy Vinton (vacant site)	S. Begole Rd.	750 ft.	Within 45 dB Contour	Within 30 Hr. Contour
3	T58	Randy Vinton ³	W. Garfield Rd.	1,179 ft.	Within 45 dB Contour	In compliance
3	T46	Brian Hector	W. Garfield Rd.	1,118 ft.	Within 45 dB Contour	In compliance
3	T46	Richard Weaver ³	W. Garfield Rd.	1,500 ft.	Within 45 dB Contour	In compliance
11	T86	Harold Defever	S. Jerome Rd.	1,500 ft.	Close to 45 dB Contour	Close to 30 Hr. Contour
11	T86	Gary Hoffer ³	S. Jerome Rd.	1,970 ft.	In compliance	In compliance
12	T86	John Reynolds	Cleveland Rd.	1,362 ft.	Very close to 45 dB Contour	In compliance
12	T86	Kevin Fraker ³	Cleveland Rd.	1,540 ft.	Close to 45 dB Contour	In compliance



Analysis of Impact of Proposed Wind Turbines on Individual Residences ¹						
Section No.	Turbine No.	Property Owner	Road Location	Approximate Distance from Residence to Turbine ²	Relationship to 45 dB Contour ⁴	Relationship to 30 Hour Shadow Flicker Contour ⁴
12	T54	Mary Toth	Cleveland Rd.	1,500 ft.	Very close to 45 dB Contour	In compliance
18	T95	Thomas Todd	S. Ely Hwy.	1,071 ft.	Within 45 dB Contour	Very close to 30 Hr. Contour
18	T95	Cory Reynolds	W. Roosevelt Rd.	1,330 ft.	In compliance	In compliance

Table Footnotes

- 1 This analysis is based on review of the site plan drawings submitted for Heartland Farms. There are additional residences beyond the margins of the drawings that will be impacted by the wind turbines.
- 2 Except where a measurement was provided on the drawing, the distances shown were scaled from the drawings and are therefore approximate.
- 3 Denotes a Participating Parcel.
- 4 The term “Very Close” means the contour is illustrated on the site plan within approximately 100 feet of the residence. The term “Close” means the contour is illustrated on the site plan within approximately 100 and 200 feet of the residence.