

Minutes - Woodbury County Board of Adjustment – August 5, 2024

The Board of Adjustment meeting convened on the 5th of August 2024 at 6:00 PM in the Board of Supervisors' meeting room in the Basement of the Woodbury County Courthouse. The meeting was also made available for public access via teleconference.

Meeting Audio:

For specific content of this meeting, refer to the recorded video on the Woodbury County Board of Adjustment "Committee Page" on the Woodbury County website:

- County Website Link:
 - o https://www.woodburycountyiowa.gov/committees/board_of_adjustment/
- YouTube Direct Link:
 - o <https://www.youtube.com/watch?v=SigpXD4Nkqs>

BA Members Present:	Daniel Hair, Doyle Turner, Pam Clark, Tom Thiesen, Ashley Christensen
County Staff Present:	Dan Priestley, Dawn Norton
Public Present:	Shelly McCoy Sadler, Bruce Sadler, Dan Bittinger, Jeremy Lane, Mr. Robertson, Gabriel Diaz Ellis, JoAnn Sadler, Brian Sadler, Tony Ashley, Aziah Ashley, Mary Wortman, Anthony Wortman

Call to Order

Chair Daniel Hair formally called the meeting to order at 6:01 PM.

Public Comment on Matters Not on the Agenda

None

Approval of Minutes

The June 3, 2024 minutes were approved. Motion by Clark to approve; Second by Thiesen. Motion passed 5-0.

Action Item: Public Hearing – Consideration of a Conditional Use Permit Application: Data Processing Business on Parcel #884403400009.

Hair opened the public hearing, and Priestley read the staff summary into the record. AUR Correctionville LLC (Applicant) and the property owners, Ashley Acres Family Limited Partnership, filed a Conditional Use Permit (CUP) application to place a demand response load resource next to the substation in collaboration with the local electric utility, supporting grid resiliency for a proposed data processing business. Priestley clarified that the site would be used for Bitcoin mining. No written comments were received from stakeholders, but Priestley did receive a phone call from JoAnn Sadler, a landowner within the 500-foot notification area. A notification letter sent to Kendall Ashley was returned due to an incorrect address.

The proposed site is located on Parcel #884403400009 in T88N R44W (Wolf Creek Township), approximately 6.2 miles southeast of Merville and 7.7 miles southwest of Correctionville. The Woodbury County Zoning Ordinance's Land Use Summary Table (Section 3.03.4) does not reference data processing or the applicant's specific request. However, under Section 3.03.3, data processing can be interpreted as a comparable utility or industrial use, similar to research and development laboratories, making it a conditional use in the Agricultural Preservation (AP) Zoning District. Based on the submitted information and zoning requirements, the proposal could meet the criteria for approval.

On July 22, 2024, the Woodbury County Zoning Commission voted 4-0 to recommend approval to the Board of Adjustment, with the conditions that the applicants mitigate noise from the facility and provide adequate security measures, including fencing and lighting. Priestley recommended the same, emphasizing the importance of noise mitigation.

Jeremy Lane from AUR presented a slideshow and stated that the Correctionville facility would resemble the one built on Calhoun Ave the previous year. Clark inquired about decommissioning, and Lane explained that the facility is not permanent, with an expected lifespan of 10 years, possibly longer with equipment upgrades. The land would be leased, and decommissioning would be managed with the landowner. The site was placed to allow farm equipment access and direct noise toward a northwest field, away from neighboring landowners. When Turner

asked about noise mitigation, Lane mentioned they would likely use direct drive or hydro cooling fans to minimize noise, estimating levels between 60-70 decibels at 300 feet, similar to normal conversation.

Clark asked Lane to explain the facility in simpler terms. Lane described it as a high-powered system that processes data to mine Bitcoin and other cryptocurrencies. The facility could reduce its energy load during peak demand, operating like a battery to support the electric grid. It would employ two full-time workers, earning approximately \$27/hour with benefits, and generate about \$12,000 in sales tax for the county.

Hair moved to accept additional materials from Lane, seconded by Turner. The motion carried 5-0. (See appendix). Hair then asked about the decision to switch cooling systems, and Lane confirmed they were opting for a closed-loop system with lower maintenance and noise. When asked about internet service, Lane said they would use a local provider, with Starlink as a backup, and assured that the site wouldn't interfere with surrounding landowners' internet or TV connections.

Turner inquired about the temperature of the exiting air, which Lane estimated to be between 120-140 degrees, depending on external conditions. When asked if trees would be used to reduce noise, Lane explained the plan involved using rock and fencing, without vegetation. Hair questioned why the term "Bitcoin" wasn't used more openly, and Lane suggested it tends to have negative associations.

JoAnn Sadler voiced concerns about the project. She questioned the comparison of the facility to research and development, emphasizing that Bitcoin mining does not fit that definition. In response to Sadler's concerns, Priestley acknowledged that Bitcoin mining is not specifically listed in the ordinance but explained that the Zoning Ordinance is not a comprehensive list of all possible land uses. He emphasized that Section 3.03.3 allows the evaluation of comparable uses when a proposed use is not explicitly mentioned. In this case, while the Bitcoin facility is not a utility, data processing involved in cryptocurrency mining is comparable to research and development laboratories in the sense of technological data analysis.

Priestley stated that the interpretation is about technological research and development in terms of data analysis, in the sense of being, analyzed, and ultimately treated as a digital product, much like data research or collection. He compared the data "mining" process to mining for gold in the past, where an asset is sought, collected, as a valuable asset. He also pointed out that last year's Calhoun site was similarly evaluated, drawing on these comparable aspects of data analysis. Sadler indicated that comparing Bitcoin mining to research and development was a stretch and not a fair representation of what the facility does. She also does not think the previous site should have been approved.

Turner, seeking more insight from Sadler, asked her to clarify her concerns about the site itself and the specifics of her objections. Sadler raised concerns about transparency, noting that the number of servers planned for the site was unclear, and she referenced the noisy operations of a similar Bitcoin mining facility in Grundy Center. Sadler highlighted that the Grundy Center facility operates 1,900 servers and consumes 54 million kilowatts of energy annually, more than the entire county of Grundy, equivalent to powering 4,900 homes. She worried that the Correctionville site could similarly expand its energy consumption and noise levels, asking who would regulate future growth if the number of servers doubled or tripled. She also expressed concern over the lack of oversight, stating that while the Board of Adjustment sets the initial conditions, there is no "Board of Adjustment police" to monitor compliance or future changes, especially as board and staff members change over time.

Tony Wortman from Stanton County also spoke, sharing his negative experience living near a data center with eight pods. He noted that, despite being a hydro-cooled system, noise still travels through trees and buildings, rattling homes. Wortman described the project as a "Ponzi scheme," stating that such sites often promise more jobs than they deliver and referenced complaints about noise and energy use.

Tony Ashley, the landowner of the proposed site, expressed his support for the project, stating it would bring economic benefits to the county, including lower energy costs, job creation, and additional tax revenue. He assured that he was involved in the site's planning and noise mitigation efforts and noted that, since he owns the land adjacent to the facility, he would be the first to notice any issues with noise.

Hair moved to close the public hearing, seconded by Thiesen. The motion carried 5-0. Turner noted a key difference between this site and the Calhoun site is the lack of nearby neighbors at the Calhoun location. He requested more details on the plans and potential noise mitigation measures. Hair expressed concerns and stated

that more information is needed before making a decision. Lane provided details on the noise levels, stating that the decibel readings are as follows: 72 at 1 meter, 69 at 3 meters, and 59 at both 15 and 45 meters—lower than normal conversation levels. He explained that the fans would be hydro-cooled, with three different vendors being considered to supply them.

Thiesen asked Priestley if there had been any noise complaints at the Calhoun site, to which Priestley responded no. Turner noted that the closest home to the Calhoun site is 2,500 feet away. Brian Sadler mentioned that his house is 1,100 feet from the proposed site, with the property line being even closer. Priestley confirmed that, according to Beacon, the distance is approximately 1,100 to 1,200 feet. The closest home to the Calhoun site is 2,300 feet away. Turner added that comparing different sites is challenging due to varying topographies, as seen with wind turbine research.

Ashley properties are generally well-maintained, but Turner emphasized the need to inform neighboring landowners about noise mitigation efforts. Clark supported deferring the decision to gather more information and provide more assurances to the community. Lane explained that a similar project in Stanton County is four times larger and in a less suitable location. He reassured the Board that the proposed project will use hydro-cooling, point sound away from homes, and generate lower decibel levels.

Clark raised concerns about potential future expansion, to which Lane responded that any expansion would require the utility company's involvement. Hair suggested that expansion could be included as a condition in the Conditional Use Permit (CUP). Priestley reminded the Board that they have 35 days to make a decision and work with the applicant to clarify details and establish a timeline. Hair asked about the process for selecting the site, but Lane said he wasn't involved in that aspect.

Clark then motioned to defer the decision until the next Board meeting to allow for more data collection and information gathering. Priestley noted that the next meeting falls on Labor Day, and the Board agreed to reschedule it for Wednesday, September 4th, at 6:00 p.m. in the Courthouse basement meeting room. Clark amended her motion to defer the decision on the CUP to allow for additional fact-finding and clarification, with a final decision to be made on September 4th. Turner seconded the motion.

Lane requested specifics on what additional information should be gathered. Clark further amended her motion to direct Priestley to compile a list of items for investigation, such as noise levels and their impact on residents. Priestley outlined the needed information, including the system type and brand, structure, footprint, noise rating, and distance measurements. Lane asked if the decision could be delayed beyond 35 days, to which Priestley replied that CUPs are decided on a case-by-case basis, and distance and decibel levels would need to be specified.

Clark made a final motion to defer the decision on the CUP until September 4th at 6:00 p.m., empowering staff to collect more information, including schematics of the system, structure details, noise mitigation measures, footprint, and projected noise levels. Christensen seconded the motion, which carried 5-0.

Information Item: Nuclear Energy Reiv of Zoning Regulations Direction to the Zoning Commission from the Board of Supervisors

Priestley provided a summary. At their July 2, 2024 meeting, the Woodbury County Board of Supervisors voted to instruct the Zoning Commission to explore the possibility of adding nuclear energy as an option for the county. This update outlines the Commission's upcoming tasks. Key considerations include whether nuclear power is suitable for Woodbury County, potential locations for a plant, and the type of facility. Local involvement in regulating a nuclear plant would be limited, as federal and state regulations would apply. The Board of Adjustment will not make decisions on this matter, but information will be shared with the Board and the public. Stakeholder feedback will be critical during the early informational stages.

Information Item: Home Occupation Signs Zoning Regulations, Summary

The Zoning Commission has been asked if they would like to see policy change on regulations to the Home Occupation sign ordinance. Zoning Commission and Board of Supervisors have authority to start conversations about ordinance changes.

Public Comment on Matters Not on the Agenda

None

Staff Update

Priestley suggested listening to the Zoning Commission meetings and looking at agenda items.

Board Member Comment or Inquiry

None

Motion To Adjourn

Hair motioned. Second by Christensen. Carried 5-0. Meeting adjourned at 7:56 PM.

APPENDIX

Product Specifications

GIGA



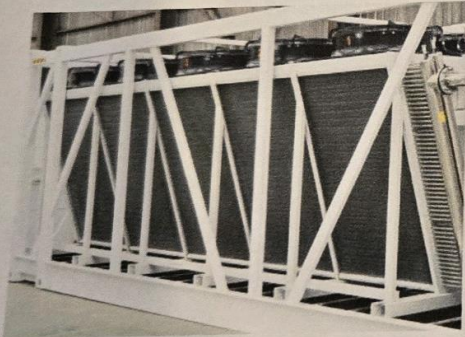
Cooling Distribution Unit (CDU)

- N+1 redundant main water pumps with an additional auxiliary pump to maintain system pressure
- Heater for maintaining humidity levels
- Buffer tanks, filtration, and main water bypass
- Sensors to measure flow, conductivity, pH, pressure, TRT, and temperature levels
- 15" HMI display & Siemens PLC
 - Digital controls for electrical, dry cooler, and CDU



Server Racks

- Hidden piping sub-flooring design
- Integrated Giga PDUs
- 48U server rack cabinets (Whatsminer)
- Seal-welded Goodyear EPDM hoses
- Lankelec hydro quick connects
- Leak sensor multi point leak sensor system
- Stainless steel manifolds with welded hose barb adapter, automatic bleeder valve, individual valves for each miner, and drain cock



Dry Cooler

- Pre-installed cooling system
- Galvanized steel structure
- Epoxy coated aluminum fins
- Stainless steel coolant tubes
- ZIEHL-ABEGG 3.25kW fans, motors, and control units
- Single closed-loop cooling system
- Cooling 10° C (Normal) or 14° C (High Performance)
- Rated Ambient Temp: 40° C



Electrical System

- Input Voltage: 480 - 415V
- 2kVA 120V auxiliary transformer
- Exterior facing electrical cabinet
- Schneider main disconnect, feeder breakers
- Schneider EasyLogic PM2100 Power Meter
- 400A server rack bus bar connections
- Passive cooling cabinet air louver
- Phase loss protection
- Transient voltage surge suppressor (TVSS)

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Price	\$149,999	\$279,999	\$539,999
Power Capacity	750 kW	Up to 1,440 kW	2,660 kW
Container Size	40' HC	45' HC	(2) 45' HC*
Antminers	—	224	Contact us
Whatsminers	72	120	240
Dry Cooler	40°C Ambient		

*The XL Series Giga Box Hydro is (1) 45' data center with an additional 45' dry cooler stacked on top.

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