CHAMPAIGN COUNTY BOARD
DATA CENTER ACTIVITIES TASK FORCE
County of Champaign, Urbana, Illinois
Wednesday, October 07, 2026 - 6:30 p.m.

Shields-Carter Meeting Room
Bennett Administrative Center
102 E. Main St., Urbana

Committee Members:

Aaron Esry – Vice Chair
Carly McCrory-McKay
Andrew Rehn
Dirk Rice
Dennise Arres
Emily Rodriguez - Chair
Kevin Sage
Deb Newell
Amy Young

Agenda Items

I. Call to Order

II. Roll Call

III. Approval of Agenda/Addendum

IV. Public Input

V. New Business

a. Review of draft ordinance by topic with facilitated discussion (discussion only)
b. Presentation: Amanda Pankau, Director of Energy and Community Resiliency at Prairie Rivers Network (discussion only)
c. Review of noise limit and minimum separation (discussion only)
d. Review of Draft Letter of Concern Regarding Consideration of Data Center (discussion only)

VI. Communications

VII. Other Business

a. Date of next meeting (discussion only)
    i. Wednesday, October 14, 2026 – Focus: Review of draft ordinance

VIII. Chair's Report

IX. Adjournment

All meetings are at Bennett Administrative Center – 102 E. Main Street in Urbana – unless otherwise noted. Champaign County will generally, upon request, provide appropriate aids and services leading to effective communication for qualified persons with disabilities. Please contact Administrative Services, 217-384-3776, as soon as possible but no later than 48 hours before the scheduled meeting.

Champaign County
Department of
PLANNING &
ZONING

Bennett Administrative Center
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Urbana, Illinois 61801

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TO: **Data Center Activities Task Force**

FROM: **John Hall, Zoning Administrator**

DATE: **October 2, 2026**

RE: **Update to Draft Amendment for BIG DATA CENTER**

The Draft Amendment has been updated based on many of the comments received at the 9/21/2026 Task Force Meeting. See Attachment B.

A Proposed Decommissioning Requirement is included as Attachment A. The Task Force did not request this but the testimony at the 9/21/2026 meeting was compelling and so this was prepared for Task Force review. This does not include "site reclamation" as a requirement and is intended to make the buildings easier to convert to a different use if necessary.

The Revised Draft includes a draft noise requirement. The draft has been sent to Isaac Olds for review and may have to be revised when the results of that review are received.

ATTACHMENTS

A Proposed Decommissioning Requirement
B Revised Draft Amendment (without decommissioning)

R. Standard Condition for Decommissioning Plan for BIG DATA CENTER

A. Decommissioning plan for BIG DATA CENTER

1. The applicant shall submit a signed decommissioning plan.

2. The decommissioning plan shall be binding upon all successors of title, lessees, to any operator and/or owner of the BIG DATA CENTER, and to all parties to the decommissioning plan. Prior to the issuance of a SPECIAL USE Permit for a BIG DATA CENTER, the landowner or applicant shall also record a covenant incorporating the provisions of the decommissioning plan on the deed subject to the LOT, requiring that the reclamation work be performed and that a letter of credit be provided for financial assurance.

3. Cost estimates shall be provided by an Illinois Licensed Professional Engineer as follows:

a. Cost estimates provided shall be subject to approval of the BOARD.

b. The salvage value of the components of the BIG DATA CENTER shall not be credited to the cost estimates.

c. The decommissioning plan shall include cost estimates for the following:

(1) Removal of all computing and networking equipment and all other information technology equipment and associated racking and wiring; removal of all backup power generators; removal of any obsolete chillers; any necessary site grading; any necessary interim soil erosion control; and including all costs related to reuse (preferred) or recycling or lawful disposal of all removed equipment including transportation costs;

(2) Below-ground restoration that may be required, including final grading and surface treatment;

(3) anticipated repairs for any public STREET used for the purpose of decommissioning the BIG DATA CENTER.

(4) any environmental remediation required by State or Federal law;

(5) provision and maintenance of a letter of credit or an escrow account.

4. The decommissioning plan shall include the following:

a. A stipulation that the applicant shall notify the GOVERNING BODY by certified mail of the commencement of a voluntary or involuntary bankruptcy proceeding, naming the applicant as debtor, within ten days of commencement of the proceeding.

b. A stipulation that the applicant shall agree that the sale, assignment in fact or at law, or such other transfer of applicant's financial interest in the BIG DATA CENTER shall in no way affect or change applicant's obligation to continue to comply with the terms of this agreement. Any successor or assignee shall assume the terms, covenants and obligations of this Agreement and agrees to assume all reclamation liability and responsibility for the BIG DATA CENTER.

c. Authorization for the GOVERNING BODY and its authorized representatives for right of entry onto the BIG DATA CENTER premises for the purpose of inspecting the methods of reclamation or for performing actual reclamation if necessary.

d. A stipulation that at such time as decommissioning takes place, the Applicant or it's successors in interest are required to enter into a Roadway Use and Repair Agreement with the relevant highway authority.

e. A stipulation that the Applicant shall provide evidence of any new, additional, or substitute financing or security agreement to the Zoning Administrator throughout the operating lifetime of the project.

f. A stipulation that the Applicant shall be obliged to perform the work in the decommissioning plan before abandoning the BIG DATA CENTER other than in the ordinary course of business. This obligation shall be independent of the obligation to pay financial assurance, and shall not be limited by the amount of financial assurance. The obligation to perform the reclamation work shall constitute a covenant running with the land.

g. The decommissioning plan shall provide for payment of any associated costs that Champaign County may incur in the event that decommissioning is actually required. Associated costs include all administrative and ancillary costs associated with drawing upon

the financial assurance and performing the decommissioning work and shall include but not be limited to attorney's fees; construction management and other professional service fees; and the costs of preparing request for proposals and bidding documents required to comply with State law or Champaign County purchasing policies.

j. A stipulation that should the decommissioning plan be deemed invalid by a court of competent jurisdiction the BIG DATA CENTER SPECIAL USE Permit shall be deemed void.

k. A stipulation that the Applicant's obligation to complete the decommissioning plan and to pay all associated costs shall be independent of the Applicant's obligation to provide financial assurance.

l. A stipulation that the liability of the Applicant's failure to complete the decommissioning plan or any breach of the decommissioning plan requirement shall not be capped by the amount of the financial assurance.

5. No Zoning Use permit for such BIG DATA CENTER will be issued until the applicant provides the COUNTY with an irrevocable letter of credit or an escrow account to be drawn upon a federally insured financial institution within 200 miles of Urbana, Illinois, or reasonable anticipated travel costs shall be added to the amount of the letter of credit.

a. The irrevocable letter of credit shall be in the amount of two hundred ten percent (210%) of an independent engineer's cost estimate to complete the work described in Section 6.1.7A.3.c.

b. The provisions of this subparagraph notwithstanding, a different amount may be required as a special condition.

c. The letter of credit or a successor letter of credit or escrow account shall remain in effect and shall be made available to the COUNTY for a term specified as a standard condition elsewhere in this Ordinance, an indefinite term, or for a different term that may be required as a special condition.

B. Letter of Credit or Escrow Account

1. To comply with paragraph 6.1.7A.5., the applicant or owner shall provide financial assurance in the form of an irrevocable letter of credit or an escrow account as follows:

a. At the time of SPECIAL USE Permit approval the amount of financial assurance to be provided for the site reclamation plan shall be 210% of the decommissioning costs as determined in the independent engineer's cost estimate to complete the decommissioning work described in Section 6.1.7A.3.c.

b. Any and all financing and/or financial security agreements entered into by the Applicant shall expressly provide that the agreements are subject to the covenant required by Section 6.1.1A.2 that the reclamation work be done.

c. The Applicant shall provide in the decommissioning plan for legal transfer of the STRUCTURE to the decommissioner to pay the costs of decommissioning work, should the decommissioning work be performed.

2. The GOVERNING BODY has the right to require multiple letters of credit or escrow accounts based on the regulations governing federal insurance for deposits.

3. The Applicant shall adjust the amount of the financial assurance to ensure that it reflects current and accurate information as follows:

a. At least once every three years for the first 12 years of the financial assurance and at least once every year thereafter the Applicant shall use an independent Illinois Licensed Professional Engineer to provide updated estimates of decommissioning costs by including any changes due to inflation. The Applicant shall, upon receipt, provide a copy of the adjusted Professional Engineer's report to the Zoning Administrator.

b. At all times the total combined value of the irrevocable letter of credit and the escrow account shall equal or exceed the amount of the independent engineer's cost estimate as increased by known and documented rates of inflation since the BIG DATA CENTER was approved; and an amount for any future years left in the anticipated 25-year life span of the BIG DATA CENTER at an assumed minimum rate of inflation of 3% per year.

4. If an irrevocable letter of credit is provided as the original financial assurance, the applicant or BIG DATA CENTER owner shall gradually pay down the value of the irrevocable letter of credit by placing cash deposits in an escrow account over the first 13 years of the BIG DATA CENTER operation as follows:

a. The applicant or BIG DATA CENTER owner and the GOVERNING BODY shall agree on a mutually acceptable financial institution at which an escrow account shall be established.

b. The GOVERNING BODY shall be the beneficiary of the escrow account for the purpose of the decommissioning of the BIG DATA CENTER in the event that the BIG DATA CENTER owner is incapable of decommissioning the BIG DATA CENTER.

c. The applicant or BIG DATA CENTER owner shall grant perfected security in the escrow account by use of a control agreement establishing the County as an owner of record, pursuant to the Secured Transit Article of the Uniform Commercial Code, 810 ILCS 9/101 et seq.

d. If a letter of credit was the original financial assurance, the applicant or BIG DATA CENTER owner shall make annual deposits to the escrow account over a 12-year period and shall simultaneously provide a replacement irrevocable letter of credit that is reduced accordingly.

e. At all times the total combined value of the irrevocable letter of credit and the escrow account shall be increased annually as necessary to reflect actual rates of inflation over the life span of the BIG DATA CENTER and the amount shall be equal to or exceed the following:

(1) the amount of the independent engineer's cost estimate as increased by known and documented rates of inflation since the BIG DATA CENTER was approved; plus

(2) an amount for any future years left in the anticipated life span of the BIG DATA CENTER at an assumed minimum rate of inflation of 3% per year.

f. Any interest accrued on the escrow account that is over and above the total value required by subparagraph 6.1.7A.5. shall go to the BIG DATA CENTER owner.

g. In order to provide funding for decommissioning at the time of decommissioning, the BIG DATA CENTER applicant or owner may exchange a new irrevocable letter of credit in an amount equal to the amount in the escrow account in exchange for the GOVERNING BODY agreeing to a release of the full amount of the escrow account.

f. Should the decommissioning costs be adjusted upward pursuant to paragraph 6.1.7B.3., the amount to be placed in the escrow account shall be increased to reflect the adjustment, as if the adjusted estimate were the initial estimate.

C. One hundred eighty (180) days prior to the expiration date of an irrevocable letter of credit submitted pursuant to this Section, the Zoning Administrator shall notify the landowner or applicant in writing and request information about the landowner or applicant's intent to renew the letter of credit or remove the BIG DATA CENTER. The landowner or applicant shall have thirty (30) days to respond in writing to this request. If the landowner or applicant's intention is to remove the BIG DATA CENTER, the landowner or applicant will have a total of ninety (90) days from the date of response to remove it in accordance with Section 6.1.7A.3.c. At the end of ninety (90) days, the Zoning Administrator shall have a period of sixty (60) days to either:

1. confirm that the bank has renewed the letter of credit; or

2. inspect the subject property for compliance with Section 6.1.7A.3.c.;

3. draw on the letter of credit and commence the bid process to have a contractor decommission the BIG DATA CENTER pursuant to Section 6.1.7A.3.c.

D. The Zoning Administrator may find a BIG DATA CENTER abandoned in place. Factors to be considered in making this finding include, but are not limited to:

1. the nature and frequency of use as set forth in the application for SPECIAL USE;

2. the current nature and frequency of use:

3. whether the BIG DATA CENTER has become a public nuisance, or otherwise poses a risk of harm to the public health or safety;

4. whether the BIG DATA CENTER has been maintained in a manner which allows it to be used for its intended purpose, with no greater effects on surrounding properties and the public as a whole than was originally intended.

5. A court of law, an arbitrator, mediator, or any State or Federal agency charged with enforcing State or Federal law has made a finding that either said BIG DATA CENTER or the structures supporting said BIG DATA CENTER and/or any related site grading and soil erosion controls or lack of same, constitutes a public nuisance or otherwise violates State or

Federal law, or any State or Federal agency charged with enforcing State or Federal law has made a final determination either imposing an administrative sanction on any person associated with the BIG DATA CENTER relating to its use or denying the BIG DATA CENTER a permit necessary for its lawful operation.

E. Once the Zoning Administrator has made a finding that a BIG DATA CENTER is abandoned in place, the Zoning Administrator shall issue notice to the land owner at the owner's last known address, lessees, any operator and/or owner of the BIG DATA CENTER, and to all parties to the decommissioning plan, that the COUNTY will draw on the performance guarantee within thirty (30) days unless the owner appeals the Zoning Administrator's finding, pursuant to Section 9.1.8 or enters into a written agreement with the COUNTY to decommission the BIG DATA CENTER in accordance with Section 6.1.7A.3.c. within ninety (90) days.

F. Once the letter of credit or escrow account has been drawn upon, and the decommissioning plan has been completed, as certified by the Zoning Administrator, the covenant entered into pursuant to Section 6.1.7A.2. shall expire, and the COUNTY shall act to remove said covenant from the record of the property at the Recorder of Deeds within forty-five (45) days.

G. The proceeds of the letter of credit or escrow account may only be used by the COUNTY to do the following:

a. decommission the BIG DATA CENTER in accordance with the most recent decommissioning plan submitted and accepted in relation to the BIG DATA CENTER;

b. pay all administrative and ancillary costs associated with drawing upon the financial assurance and performing the reclamation work, which shall include, but not be limited to, attorney's fees; construction management and other professional service fees; and the costs of preparing request for proposal and bidding documents required to comply with State law or Champaign County purchasing policies; and

c. remove any covenants placed on the title in conjunction with Section 6.1.7A.2.

d. The balance of any proceeds remaining after the decommissioning shall be returned to the issuer of the letter of credit or the escrow account.

H. The Zoning Administrator may also draw on the funds for decommissioning for the following reasons:

a. If no response is received from the land owner within thirty (30) days from initial notification by the Zoning Administrator;

b. If the land owner does not enter, or breaches any term of a written agreement with the COUNTY to remove said BIG DATA CENTER as provided in Section 6.1.7E.;

c. For any breach or performance failure of any provision of the decommissioning plan;

d. If the owner of record has filed a bankruptcy petition, or compromised the COUNTY's interest in the letter of credit or escrow account in any way not specifically allowed by the decommissioning plan;

e. If a court of law has made a finding that the BIG DATA CENTER constitutes a public nuisance;

f. If the owner of record has failed to replace an expiring letter of credit within the deadlines set forth in Section 6.1.1C.; or

g. For any other conditions to which the COUNTY and the land owner mutually agree, as set forth in the decommissioning plan.

h. In the event that any component of the BIG DATA CENTER ceases to be functional for more than six consecutive months and causes a public nuisance and the Owner is not diligently repairing the component.

i. In the event that the Owner declares any component of the BIG DATA CENTER to be functionally obsolete for tax purposes.

j. There is a delay in the construction of the BIG DATA CENTER of more than 6 months after construction on the BIG DATA CENTER begins.

k. The BIG DATA CENTER appears to be in a state of disrepair or imminent collapse and/or creates an imminent threat to the health or safety of the public or any person.

l. The BIG DATA CENTER is otherwise derelict for a period of 6 months.

m. The BIG DATA CENTER is in violation of the terms of the SPECIAL USE permit for a period exceeding ninety (90) days.

n. The Applicant or owner has failed to maintain financial assurance in the form and amount required by the SPECIAL USE Permit or compromised the COUNTY's interest in the decommissioning plan.

o. The COUNTY discovers any material misstatement of fact or misleading omission of fact made by the Applicant in the course of the SPECIAL USE Permit zoning case.

I. No dispute as to the necessity or reasonableness of any costs of performing the decommissioning work identified in Section 6.1.7A.3.c. shall impair the ability of Champaign County to draw on the Financial Assurance.

J. In accordance with the provisions of the Illinois Mechanics Lien Act, 770 ILCS 60/1 and 60/7, the Applicant or successors in interest agree that any contractor retained by Champaign County to perform the decommissioning work in Section 6.1.7A.3.c., shall have a lien upon the project to the full extent of all costs performing the decommissioning work identified in Section 6.1.7A.3.c.., and that such lien shall be superior to any claim or lien of any other creditor, incumbrancer or purchaser.

K. Upon transfer of any property subject to a letter of credit pursuant to this Section, the new owner or applicant of record shall submit a new irrevocable letter of credit or escrow account of same or greater value to the Zoning Administrator, prior to legal transfer of title, and shall submit a new decommissioning plan. Once the new owner or applicant of record has done so, the letter of credit or escrow account posted by the previous owner or applicant shall be released, and the previous owner shall be released from any further obligations under the decommissioning plan.

L. The Applicant shall provide evidence of any new, additional, or substitute financial assurance to the Zoning Administrator throughout the operating lifetime of the BIG DATA CENTER.

M. Should the decommissioning plan, or any part of it, be deemed invalid by a court of competent jurisdiction, the associated SPECIAL USE Permit shall be deemed void.

N. The decommissioning plan shall be included as a condition of approval by the BOARD and the signed and executed irrevocable letter of credit or escrow account must be submitted to the Zoning Administrator prior to any Zoning Use Permit approval.

1. Add the following to Section 3 Definitions:

A-WEIGHTED SOUND LEVEL: 10 times the logarithm to the base 10 of the square of the ratio of the A-weighted (and time-averaged) sound pressure, to the reference sound pressure of 20 micropascals. The frequency and time weighting must be specified in compliance with ANSI/ASA S1.4-2014/Part 1/IEC 61672:1-2013 "American National Standard Electroacoustics Sound Level Meters-Part 1: Specifications (a nationally adopted international standard", incorporated by reference at Section 900.106. The unit of sound level is the decibel (dB) with the letter (A) appended to the decibel unit symbol to indicate the frequency weighting and written as dB(A).

DATA CENTER: A facility where computing and networking equipment is concentrated for the purpose of collecting, storing, processing, distributing or allowing access to large amounts of data (collectively referred to as processing) and that has less than 10,000 square feet of processing area and that has a total power rating less than 24 megawatts. Processing area shall include the area of any building that is principally used for processing. This definition does not include facilities owned or leased by a single organization to house its own Information Technology infrastructure including servers, data storage, and network equipment so long as the DATA CENTER is co-located with other facilities of that organization.

DATA CENTER, BIG: A facility where computing and networking equipment is concentrated for the purpose of collecting, storing, processing, distributing or allowing access to large amounts of data (collectively referred to as processing) and that has at least 10,000 square feet of processing area or a total power rating of 24 megawatts or greater. Processing area shall include the area of any building that is principally used for processing. Multiple BIG DATA CENTERS may be authorized under one County Board SPECIAL USE Permit

DECIBEL or dB: a unit of measure, on a logarithmic scale to the base 10, of the ratio of a sound pressure magnitude to a standard reference pressure, which, for purposes of this Ordinance, is 20 micronewtons per square meter ($\mu N/m^2$) or 20 micropascals (μPa).

dB(A): A-weighted decibels (see the definition of "A-WEIGHTED SOUND LEVEL").

PURE TONE: A sound occurring at a discrete frequency, as determined by a Fast Fourier Transform measurement (narrow band analysis) of a sound using a dynamic analyzer with at least 1 Hz resolution, a Hanning window, and sufficient averaging to determine the magnitude of the tone level exceeded 5% of the time (L5).

PURE TONE LEVEL (LPTL): The magnitude in decibels of a PURE TONE, with no frequency weighting applied.

2. Amend Section 5.2 as follows:

SECTION 5.2 TABLE OF AUTHORIZED PRINCIPAL USES

BIG DATA CENTER would be a new land use allowed by County Board Special Use Permit in the AG-2 Agriculture, B-4 General Business, and I-1 Light Industry Zoning Districts, as shown in the table below

Principal USES	Zoning DISTRICTS														
	CR	AG-1	AG-2	R-1	R-2	R-3	R-4	R-5	B-1	B-2	B-3	B-4	B-5	I-1	I-2
DATA CENTER			**S**									**S**		**S**	
BIG DATA CENTER[34]			**B**									**B**		**B**	

3. Add new Footnote 34 under Section 5.2 as follows:

34. A BIG DATA CENTER is subject to the requirements of Section 6.1.7 of the Zoning Ordinance.

4. Add new Section 6.1.7 as follows:

6.1.7 BIG DATA CENTER

A BIG DATA CENTER County Board SPECIAL USE Permit may only be authorized in the AG-2 Agriculture Zoning DISTRICT, B-4 General Business, or I-1 Light Industry Zoning District, subject to the following standard conditions.

A. General Standard Conditions

(1) The area of the BIG DATA CENTER County BOARD SPECIAL USE Permit must include the following minimum areas:

a. All land that will be exposed to a noise level greater than that authorized to Class A land as established by 35 Ill. Admin. Code Parts 900, 901 and 910 under paragraph 6.1.5I.

b. All necessary access lanes or driveways and any required new PRIVATE ACCESSWAYS. For purposes of determining the minimum area of the SPECIAL USE Permit, access lanes or driveways shall be provided a minimum 40 feet wide area.

c. All necessary BIG DATA CENTER STRUCTURES and ACCESSORY STRUCTURES including electrical distribution lines, inverters, transformers, common switching stations, and substations not under the ownership

of a PUBLICLY REGULATED UTILITY and all water wells that will provide water for the BIG DATA CENTER. For purposes of determining the minimum area of the SPECIAL USE Permit, underground cable installations shall be provided a minimum 40 feet wide area.

(2) Interconnection to the power grid

a. The BIG DATA CENTER County Board SPECIAL USE permit application shall include documentation that the applicant or BIG DATA CENTER is in the queue to acquire an interconnection agreement to the power grid.

b. Documentation of an executed interconnection agreement with the appropriate electric utility shall be provided prior to issuance of a Zoning Compliance Certificate to authorize operation of the BIG DATA CENTER.

(3) Right to farm

a. The owners of the subject property and the Applicant, its successors in interest, hereby recognize and provide for the right of agricultural activities to continue on adjacent land consistent with the Right to Farm Resolution 3425.

B. Minimum LOT Standards

(1) There are no minimum LOT AREA, AVERAGE LOT WIDTH, or maximum LOT COVERAGE requirements for a BIG DATA CENTER notwithstanding other requirements of Section 5.3.

(2) There is no maximum LOT AREA requirement on BEST PRIME FARMLAND.

(3) Multiple BIG DATA CENTERS may be authorized on the same LOT under one County Board SPECIAL USE Permit.

C. Minimum Standard Conditions for Separations for BIG DATA CENTER from adjacent USES and STRUCTURES

The location of each BIG DATA CENTER shall provide the following required separations as measured from the exterior of the above ground portion of the BIG DATA CENTER STRUCTURES and equipment including fencing:

(1) BIG DATA CENTER fencing shall be set back from the street centerline a minimum of 40 feet from a MINOR STREET and a minimum 55 feet from a COLLECTOR STREET and a minimum of 60 feet from a MAJOR STREET unless a greater separation is required for screening pursuant to Section 6.1.5M.2.a. but in no case shall the perimeter fencing be less than 10 feet from the RIGHT OF WAY of any STREET.

(2) Each BIG DATA CENTER BUILDING shall have FRONT, SIDE and REAR YARDS that are equivalent to the HEIGHT of the BUILDING notwithstanding other requirements of Section 5.3.

(3) For properties not participating in the BIG DATA CENTER, the minimum separation to the nearest NONPARTICIPATING PRINCIPAL BUILDING shall be 1,000 feet measured from the nearest BIG DATA CENTER structures and equipment to the PRINCIPAL BUILDING except that no roof mounted chillers may be located less than 1,500 feet from the nearest PRINCIPAL BUILDING. This separation may be reduced by a PRIVATE WAIVER signed by the owner of the PRINCIPAL BUILDING. No minimum separation shall be required to a building on an electrical substation property or to a building on a PARTICIPATING PV SOLAR FARM or a PARTICIPATING WIND FARM.

(4) Additional separation may be required to ensure that the noise level required by ~~35 Ill. Admin. Code Parts 900, 901 and 910~~ Section 6.1.7H.(1) is not exceeded or for other purposes deemed necessary by the BOARD.

(5) A separation of at least 500 feet between substations and transmission lines of greater than 34.5 kVA to adjacent dwellings and residential DISTRICTS.

D. Standard Conditions for Design and Installation of any BIG DATA CENTER.

(1) Any building that is part of a BIG DATA CENTER shall include as a requirement for a Zoning Compliance Certificate, a certification by an Illinois Professional Engineer or Illinois Licensed Structural Engineer or other qualified professional that the constructed building conforms to Public Act 103-0510 regarding building code compliance and also conforms to the Illinois Accessibility Code.

(2) Electrical Components

a. All electrical components of the BIG DATA CENTER shall conform to the National Electrical Code as amended and shall comply with Federal Communications Commission (FCC) requirements.

b. Burying power and communication wiring underground shall be minimized consistent with best management practice regarding BIG DATA CENTER construction and minimizing impacts on agricultural drainage tile.

(3) Maximum Height. The height limitation established in Section 5.3 shall not apply to a BIG DATA CENTER. The maximum height of all above ground STRUCTURES shall be identified in the application and as approved in the County Board SPECIAL USE Permit.

(4) Required PARKING SPACES.

a. There shall be one PARKING SPACE provided per each employee based upon the maximum number of employees employed during any work period.

b. There shall be a minimum of one additional PARKING SPACE identified as a visitor PARKING SPACE.

c. All PARKING SPACES shall be surfaced with an all-weather dustless material.

d. Required parking SCREENS shall be as required by Section 7.4.1C.4.

(5) Warnings. A reasonably visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and substations.

(6) No construction may intrude on any easement or right-of-way for a GAS PIPELINE or HAZARDOUS LIQUID PIPELINE, an underground water main or sanitary sewer, a drainage district ditch or tile, or any other public utility facility unless specifically authorized by a crossing agreement that has been entered into with the relevant party.

(7) Backup power generators.

a. All backup power generators must at a minimum comply with the standards set forth in the Municipal and Cooptative Electric Utility Transparent Planning Act (220 ILCS 31), or as subsequently amended, including but not limited to final Tier 4 emission standards in 415 ILCS 5.39(a).

b. Roof-mounted backup power generators are prohibited.

c. All backup power generators must be equipped with vibration isolation systems and critical-grade mufflers and sound attenuating enclosures or canopies.

d. Sound attenuation walls and sound absorption panels on the exterior of building walls shall be provided around all backup power generators if necessary to meet the noise requirements. Sound attenuation walls shall be equal in height to, or taller than, the tallest ground mounted generator.

e. Testing of backup power generators may only occur between the hours of 9:00 a.m. and 5:00 p.m. Monday through Friday and not on holidays. No more than two generators can be tested simultaneously. Logs of testing times shall be maintained and provided if requested by the Zoning Administrator.

f. Backup power generators shall only operate during bona fide power outages or during testing or when required by the grid operator.

g. Fuel system installations for backup power generators shall meet the requirements of the Illinois State Fire Marshal. Secondary containment shall be provided for diesel fuel storage.

(8) Control of vibrations

a. A BIG DATA CENTER must have continuous vibration monitoring at a spacing interval of not less than 500 feet along all property lines within 1,000 feet of any residential, hospital, or educational use.

b. The BIG DATA CENTER SPECIAL USE Permit shall not be affected by the subsequent establishment of future land uses on adjacent properties.

c. No BIG DATA CENTER activity or operation shall cause or create earth borne vibrations in excess of the displacement values given below. Continuous measurement of earth borne vibrations shall be made at the BIG DATA CENTER lot line, as described below:

(a) Vibration displacements shall be measured with an instrument or complement of instruments capable of simultaneously measuring in three mutually perpendicular directions.

(b) The maximum vector shall be less than the maximum allowed vibration displacement.

(c) For the purpose of this Section, steady state vibrations are vibrations which are continuous, or vibrations in discrete impulses more frequent than one hundred impulses per minute. Discrete impulses which do not exceed one hundred impulses per minute shall be considered impact vibrations.

(d) The maximum allowed vibration displacement shall be determined by the following formula:

$D = K / f$

D = displacement in inches

K = a constant to be determined by reference to Table 6.1.7D.(7)(e)

f = the frequency of the vibration transmitted through the ground expressed in cycles per second.

Table 6.1.7D.(7)(e) K value to be used in measuring ground vibrations

On any neighboring lot:	K
Steady state	0.008
Impulsive	0.015
Less than 8 pulses per 24-hour period	0.037
In any Residential District or for any hospital or educational use:	K
Steady state	0.003
Impulsive	0.006
Less than 8 pulses per 24-hour period	0.015

d. Post-construction verification of BIG DATA CENTER operational ground vibrations:

(a) Any application for a BIG DATA CENTER ZONING USE permit shall include a fee for a Post-construction BIG DATA CENTER Vibration Study to be conducted after each phase. The fee for the Post-construction BIG DATA CENTER Vibration Study shall be held by the COUNTY and used to pay for a qualified vibration consultant to conduct the Post-construction BIG DATA CENTER Vibration Study. Any excess fees shall be refunded to the applicant upon the approval of the Vibration Study for the last phase and any additional fees necessary to cover the full cost of the Vibration Study will be billed to the BIG DATA CENTER owner.

(b) Within the first year of BIG DATA CENTER operation for each phase, the BIG DATA CENTER owner shall allow and cooperate with the COUNTY to conduct a post-construction vibration study including vibration monitoring, data analysis, and preparation of a report intended to verify if the vibration generated by the BIG DATA CENTER is in general compliance with the BIG DATA CENTER approval. The COUNTY shall select a

qualified vibration consultant to conduct the Post-construction BIG DATA CENTER Vibration Study.

(c) The Post-construction BIG DATA CENTER Vibration Study shall be performed following nationally recognized best practices.

(d) Vibration monitoring timing and duration.

i. Vibration monitoring shall occur continuously during both daytime and nighttime in whatever season is considered to be the most problematic for generation and control of vibration.

ii. Every effort should be made to conduct vibration monitoring during times of maximum BIG DATA CENTER operation including simultaneous operation of all back-up power generators and air conditioning systems.

(e) The entire post-construction vibration study shall be documented in a written final report that shall be approved by the GOVERNING BOARD upon a recommendation from the Champaign County Board's Environment and Land Use Committee. Approval of the written final report shall not confer approval of any exceedance of the allowable vibration level.

i. The final report shall include a written narrative conclusion regarding how well the monitored results compare to the allowable vibration level and the predicted vibration levels for the BIG DATA CENTER. Explain any unfavorable results or exceedances of the allowable vibration level.

(f) After construction of the BIG DATA CENTER, the Zoning Administrator shall take appropriate enforcement action as necessary to investigate vibration complaints in order to determine the validity of the complaints and take any additional enforcement action as warranted to stop any violation that is occurring, including but not limited to the following:

i. The Zoning Administrator shall make the Environment and Land Use Committee aware of complaints about violation that have been received by the Complaint Hotline.

ii. If the Environment and Land Use Committee determines that the vibration is excessive, the Environment and Land Use Committee and/or the County Board shall require the Owner or Operator to take reasonable steps to investigate and mitigate the excessive vibration including a vibration verification study.

iii. The County Board reserves the right to hire a vibration consultant to determine if the vibration produced by the BIG DATA CENTER is consistent with the approved SPECIAL USE Permit.

iv. In the event that a violation of the SPECIAL USE Permit is identified the Zoning Administrator may require the BIG DATA CENTER owner to take whatever actions are necessary to stop the violation and comply with the vibration limits. The Zoning Administrator may seek direction from the Environment and Land Use Committee regarding the actions necessary to stop the violation.

(9) Ground mounted and roof mounted mechanical equipment must be enclosed by sound attenuating walls equal in height to, or taller than, the tallest ground mounted or roof mounted mechanical equipment.

(10) Safety standards. A BIG DATA CENTER shall meet the following standards as applicable:

a. NFPA 13 (Standard for Installation of Sprinkler Systems)

b. NFPA 75 (Standard for the Fire Protection of Information Technology Equipment)

c. NFPA 110 (Standard for Energy and Standby Power Systems)

d. NFPA 1142 (Standard on Water Supplies for Suburban and Rural Firefighting)

E. Standard Conditions to Protect Agricultural Drainage

a. The applicant shall endeavor to locate all existing agricultural drainage tile prior to establishing any construction staging areas, construction of any necessary BIG DATA CENTER access lanes or driveways, construction of any BIG DATA CENTER STRUCTURES, any common switching stations, substations, and installation of underground wiring or cabling. The applicant shall contact affected landowners and tenants and the Champaign County Soil and Water Conservation District and any relevant drainage district for their knowledge of tile line locations prior to the proposed construction. Drainage districts shall be notified at least two weeks prior to disruption of tile.

b. The location of drainage district tile lines shall be identified prior to any construction and drainage district tile lines shall be protected from disturbance as follows:

(a) All identified drainage district tile lines and any known existing drainage district tile easement shall be staked or flagged prior to construction to alert construction crews of the presence of drainage district tile and the related easement.

(b) Any drainage district tile for which there is no existing easement shall be protected from disturbance by a 30 feet wide no-construction buffer on either side of the drainage district tile. The no-construction buffer shall be staked or flagged prior to the start of construction and shall remain valid for the lifetime of the BIG DATA CENTER County Board SPECIAL USE Permit and during any deconstruction activities that may occur pursuant to the BIG DATA CENTER County Board SPECIAL USE Permit.

(c) Construction shall be prohibited within any existing drainage district easement and also prohibited within any 30 feet wide no-construction buffer on either side of drainage district tile that does not have an existing easement unless specific construction is authorized in writing by all commissioners of the relevant drainage district. A copy of the written authorization shall be

provided to the Zoning Administrator prior to the commencement of construction.

c. Any agricultural drainage tile located underneath construction staging areas, access lanes, driveways, any common switching stations, and substations shall be replaced as required in Section 6.3 of the Champaign County Storm Water Management and Erosion Control Ordinance.

d. Any agricultural drainage tile that must be relocated shall be relocated as required in the Champaign County Storm Water Management and Erosion Control Ordinance.

e. Conformance of any relocation of drainage district tile with the Champaign County Storm Water Management and Erosion Control Ordinance shall be certified by an Illinois Professional Engineer. Written approval by the drainage district shall be received prior to any backfilling of the relocated drain tile and a copy of the approval shall be submitted to the Zoning Administrator. As-built drawings shall be provided to both the relevant drainage district and the Zoning Administrator of any relocated drainage district tile.

f. All tile lines that are damaged, cut, or removed shall be staked or flagged in such manner that they will remain visible until the permanent repairs are completed.

g. All exposed tile lines shall be screened or otherwise protected to prevent the entry into the tile of foreign materials, loose soil, small mammals, etc.

h. Permanent tile repairs shall be made within 14 days of the tile damage provided that weather and soil conditions are suitable or a temporary tile repair shall be made. Immediate temporary repair shall also be required if water is flowing through any damaged tile line. Temporary repairs are not needed if the tile lines are dry and water is not flowing in the tile provided the permanent repairs can be made within 14 days of the damage.

i. All damaged tile shall be repaired so as to operate as well after construction as before the construction began.

j. Following completion of the BIG DATA CENTER construction, the applicant shall be responsible for correcting all tile line repairs that fail, provided that the failed repair was made by the Applicant.

F. Standard Conditions for Use of Public Streets

Any BIG DATA CENTER Applicant proposing to use any County Highway or a township or municipal STREET for the purpose of transporting BIG DATA CENTER or Substation parts and/or equipment for construction, operation, or maintenance of the BIG DATA CENTER or Substation(s), shall identify all such public STREETS and pay the costs of any necessary permits and the costs to repair any damage to the STREETS caused by the BIG DATA CENTER construction, as follows:

(1) Prior to the close of the public hearing before the BOARD, the Applicant shall enter into a Roadway Upgrade and Maintenance agreement approved by the County Engineer and State's Attorney; or Township Highway Commissioner; or municipality where relevant, except for any BIG DATA CENTER for which the relevant highway authority has agreed in writing to waive the requirements of subparagraphs 6.1.9F.1, 6.1.9F.2, and 6.1.9F.3, and the signed and executed Roadway Upgrade and Maintenance agreements must provide for the following minimum conditions:

a. The applicant shall agree to conduct a pre- BIG DATA CENTER construction baseline survey to determine existing STREET conditions for assessing potential future damage including the following:

(a) A videotape of the affected length of each subject STREET supplemented by photographs if necessary.

(b) Pay for costs of the County to hire a consultant to make a study of any structure on the proposed route that the County Engineer feels may not carry the loads likely during the BIG DATA CENTER construction.

(c) Pay for any strengthening of STREET structures that may be necessary to accommodate the proposed traffic loads caused by the BIG DATA CENTER construction.

b. The Applicant shall agree to pay for costs of the County Engineer to hire a consultant to make a study of any structure on the proposed route that the County Engineer feels may not carry the loads likely during the BIG DATA CENTER construction and pay for any strengthening of structures that may be necessary to accommodate the

proposed traffic loads caused by the BIG DATA CENTER construction.

c. The Applicant shall agree upon an estimate of costs for any other necessary roadway improvements prior to construction.

d. The Applicant shall obtain any necessary approvals for the STREET improvements from the relevant STREET maintenance authority.

e. The Applicant shall obtain any necessary Access Permits including any required plans.

f. The Applicant shall erect permanent markers indicating the presence of underground cables.

g. The Applicant shall install marker tape in any cable trench.

h. The Applicant shall become a member of the Illinois statewide One-Call Notice System (otherwise known as the Joint Utility Locating Information for Excavators or "JULIE") and provide JULIE with all of the information necessary to update its record with respect to the BIG DATA CENTER.

i. The Applicant shall use directional boring equipment to make all crossings of County Highways for the cable collection system.

j. The Applicant shall notify the STREET maintenance authority in advance of all oversize moves and crane crossings.

k. The Applicant shall provide the County Engineer with a copy of each overweight and oversize permit issued by the Illinois Department of Transportation for the BIG DATA CENTER construction.

l. The Applicant shall transport the BIG DATA CENTER loads so as to minimize adverse impact on the local traffic including farm traffic.

m. The Applicant shall schedule BIG DATA CENTER construction traffic in a way to minimize adverse impacts

on emergency response vehicles, rural mail delivery, school bus traffic, and local agricultural traffic.

n. The Applicant shall provide as much advance notice as in commercially reasonable to obtain approval of the STREET maintenance authority when it is necessary for a STREET to be closed due to a crane crossing or for any other reason. Notwithstanding the generality of the aforementioned, the Applicant will provide 48 hours notice to the extent reasonably practicable.

o. The Applicant shall provide signs indicating all highway and STREET closures and work zones in accordance with the Illinois Department of Transportation Manual on Uniform Traffic Control Devices.

p. The Applicant shall establish a single escrow account and a single Irrevocable Letter of Credit for the cost of all STREET upgrades and repairs pursuant to the BIG DATA CENTER construction.

q. The Applicant shall notify all relevant parties of any temporary STREET closures.

r. The Applicant shall obtain easements and other land rights needed to fulfill the Applicant's obligations under this Agreement.

s. The Applicant shall agree that the County shall design all STREET upgrades in accordance with the most recent edition of the IDOT Bureau of Local Roads and Streets Manual.

t. The Applicant shall provide written Notice to Proceed to the relevant STREET maintenance authority by December 31 of each year that identifies the STREETS to be upgraded during the following year.

u. The Applicant shall provide dust control and grading work to the reasonable satisfaction of the County Engineer on STREETS that become aggregate surface STREETS.

v. The Applicant shall conduct a post- BIG DATA CENTER construction baseline survey similar to the pre- BIG DATA CENTER construction baseline survey to identify the

extent of repairs necessary to return the STREETS to the pre- BIG DATA CENTER construction condition.

w. The Applicant shall pay for the cost of all repairs to all STREETS that are damaged by the Applicant during the construction of the BIG DATA CENTER and restore such STREETS to the condition they were in at the time of the pre- BIG DATA CENTER construction inventory.

x. All BIG DATA CENTER construction traffic shall exclusively use routes designated in the approved Transportation Impact Analysis.

y. The Applicant shall provide liability insurance in an acceptable amount to cover the required STREET construction activities.

z. The Applicant shall pay for the present worth costs of life consumed by the construction traffic as determined by the pavement management surveys and reports on the roads which do not show significant enough deterioration to warrant immediate restoration.

aa. Provisions for expiration date on the agreement.

bb. Other conditions that may be required.

(2) A condition of the County Board SPECIAL USE Permit approval shall be that the Zoning Administrator shall not authorize a Zoning Use Permit for the BIG DATA CENTER until the County Engineer and State's Attorney, or Township Highway Commissioner, or municipality where relevant, has approved a Transportation Impact Analysis provided by the Applicant and prepared by an independent engineer that is mutually acceptable to the Applicant and the County Engineer and State's Attorney, or Township Highway Commissioner, or municipality where relevant, that includes the following:

a. Identify all such public STREETS or portions thereof that are intended to be used by the Applicant during construction of the BIG DATA CENTER as well as the number of loads, per axle weight of each load, and type of equipment that will be used to transport each load.

b. A schedule of the across road culverts and bridges affected by the project and the recommendations as to actions, if

any, required with respect to such culverts and bridges and estimates of the cost to replace such culverts and bridges.

c. A schedule of the anticipated STREET repair costs to be made in advance of the BIG DATA CENTER construction and following construction of the BIG DATA CENTER.

d. The Applicant shall reimburse the County Engineer, or Township Highway Commissioner, or municipality where relevant, for all reasonable engineering fees including the cost of a third-party consultant, incurred in connection with the review and approval of the Transportation Impact Analysis.

(3) At such time as decommissioning takes place, the Applicant or its successors in interest shall enter into a Roadway Use and Repair Agreement with the appropriate highway authority.

G. Standard Conditions for Coordination with Local Fire Protection District

(1) The Applicant shall submit to the local fire protection district a copy of the site plan.

(2) Upon request by the local fire protection district, the Owner or Operator shall cooperate with the local fire protection district to develop the fire protection district's emergency response plan.

(3) Nothing in this section shall alleviate the need to comply with all other applicable fire laws and regulations.

H. Standard Conditions for Allowable Noise Level

(1) Noise levels from any BIG DATA CENTER shall be limited as follows:

a. Noise limits at the property line shall be in compliance with the applicable Illinois Pollution Control Board (IPCB) regulations (35 Illinois Administrative Code, Subtitle H: Noise, Parts 900, 901, 910); provided that

b. Noise limits at adjacent LOTS that are 10 acres or less in area, or at DWELLINGS or other PRINCIPAL BUILDINGS or areas of public gathering on adjacent LOTS that are larger than 10 acres in area, shall be limited as follows:

(a) The noise level shall be limited to no more than 45 dB(A); and

(b) Octave-band sound pressure levels shall be less than 65 dB at 16, 31.5, and 63 Hz mid-band frequencies; and

(c) No PURE TONE generated by the BIG DATA CENTER shall exceed the maximum allowable PURE TONE LEVEL set forth in Table 6.1.7H. Each identified PURE TONE shall be evaluated independently; where more than one PURE TONE is present, compliance shall be determined separately for each tone, and logarithmic averaging of tonal levels across frequencies shall not be used.

Table 6.1.7H. Maximum Allowable Pure Tone Noise Level by Octave Band Center Frequency

Maximum Allowable Noise Level	Octave Band Frequency (Hz) of Pure Tone									
	16 Hz	32 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
45 dB(A)	65 dB	64 dB	58 dB	52 dB	46 dB	41dB	37 dB	33 dB	29 dB	25 dB

(d) The above noise limits shall not apply to railroad property or electrical substation property.

(2) The Applicant shall submit manufacturer's sound power level characteristics and other relevant data regarding noise characteristics of proposed BIG DATA CENTER equipment including back-up power generators and HVAC equipment and any other sound producing equipment necessary for a competent noise analysis.

(3) The Applicant, through the use of a qualified professional, as part of the siting approval application process, shall appropriately demonstrate compliance with the above noise requirements as follows:

a. The SPECIAL USE Permit application for a BIG DATA CENTER shall include a noise analysis that includes the following:

(a) The pre-development 24-hour ambient background sound level shall be identified at representative locations near the site of the proposed BIG DATA CENTER including all LOTS that are 10 acres or less in area and at all DWELLINGS and other

PRINCIPAL BUILDINGS and areas of public gathering on adjacent LOTS that are larger than 10 acres in area.

(b) Computer modeling shall be used to generate the anticipated sound level resulting from the operation of the proposed BIG DATA CENTER within 1,500 feet of the proposed BIG DATA CENTER. The modeling shall assume that all back-up power generators are running and the HVAC equipment and any other sound producing equipment are running at the maximum.

(c) Results of the ambient background sound level monitoring and the modeling of anticipated sound levels shall be clearly stated in the application and the application shall include a map of the modeled noise contours within 1,500 feet of the proposed BIG DATA CENTER.

(d) The application shall also clearly state the assumptions of the computer model's construction and algorithms so that a competent and objective third party can as simply as possible verify the anticipated sound data and sound levels.

(e) The noise analysis shall include a narrow-band (FFT) review of the manufacturer's sound emission data for all major mechanical equipment, including chillers, cooling fans, transformers, and back-up power generators, identifying any PURE TONES, and shall demonstrate modeled compliance with Table 6.1.7H at each location where compliance with the allowable noise level is modeled.

(4) Post-construction verification of BIG DATA CENTER operational noise level:

a. Any application for a BIG DATA CENTER ZONING USE permit shall include a fee for a Post-construction BIG DATA CENTER Noise Study to be conducted after each phase. The fee for the Post-construction BIG DATA CENTER Noise Study shall be held by the COUNTY and used to pay for a qualified noise consultant to conduct the Post-construction BIG DATA CENTER Noise Study. Any excess fees shall be refunded to the applicant upon the approval of the Noise Study for the last phase and any additional

fees necessary to cover the full cost of the Noise Study will be billed to the BIG DATA CENTER owner.

b. Within the first year of BIG DATA CENTER operation for each phase, the BIG DATA CENTER owner shall allow and cooperate with the COUNTY to conduct a post-construction noise study including noise monitoring, data analysis, preparation of a report intended to verify if the noise generated by the BIG DATA CENTER is in compliance with the Allowable Noise Level and in general compliance with the BIG DATA CENTER approval. The COUNTY shall select a qualified noise consultant to conduct the Post-construction BIG DATA CENTER Noise Study.

c. The post-construction noise study shall include noise monitoring as near as possible to each PRINCIPAL STRUCTURE within 1,500 feet of the BIG DATA CENTER. The locations shall be agreeable to the COUNTY and to the BIG DATA CENTER owner.

d. Noise monitoring timing and duration.

(a) Noise monitoring shall occur continuously during both daytime and nighttime in whatever season is considered to be the most problematic for generation and control of noise.

(b) Every effort should be made to conduct noise monitoring during times of maximum BIG DATA CENTER operation including simultaneous operation of all back-up power generators and air conditioning systems.

(c) Sound pressure level, audio recordings, and meteorological data should be collected at each monitoring location.

(d) Pre-development ambient noise shall also be monitored and analyzed and included in the report.

e. Noise measurement standards.

(a) American National Standards Institute (ANSI) S1.4-1983 (R2006) American National Standard Specifications for Sound Level Meters.

(b) ANSI S1.13-2005 (R2010) American National Standard Measurement of Sound Pressure Level in Air.

(c) ANSI S2.9-Part 3- 2013 American National Standard Quantities and Procedures for Description and

Measurement of Environmental Sound- Part 3: Short-Term Measurements with an Observer Present.

(d) ANSI S12.18-1994 (R2009) Outdoor Measurement of Sound Pressure Level.

(e) ANSI S12.100 American National Standard Methods to Determine and Measure the Residual Sound in Protected Natural and Quiet Residential Areas.

(f) ANSI S12.9- 2005/ Part 4. American National Standard Quantities and Procedures for Description and Measurement of Environmental Sound- Part 4: Noise Assessment and Prediction of Long-term Community Response.

(g) 35 Ill. Admin. Code ~~910. 105 and 106~~ 900. and 910, where not in conflict with any of the above.

f. Data analysis.

(a) Care must be taken to exclude any ambient noise that may interfere with measurement of noise from the BIG DATA CENTER. Examples include noise from agricultural harvesting activities and noise from vehicular and train traffic. Exclusion of such data should be documented in the final report.

(b) Noise measurements should be excluded at wind speeds above 5 meter per second (11 miles per hour). Each monitoring location should have an anemometer.

(c) "Spikes" of sporadic noise, such as a motorized vehicle passing by, or a clap of thunder, or a dog barking may be eliminated from the data as long as an explanation with validation is included in the final report.

(d) Best practices shall be used in the analysis of the noise monitoring data.

(e) The analysis shall include narrow-band (FFT) measurement at each monitoring location sufficient to identify and quantify all PURE TONES generated by the BIG DATA CENTER. Each identified PURE TONE shall be compared against Table 6.1.7H, and the comparison shall be documented in the final report. If no PURE TONES are

identified at a monitoring location, the final report shall so state and shall include the narrow-band data supporting that finding.

g. Data reporting.

(a) The entire post-construction noise study shall be documented in a written final report that shall be approved by the GOVERNING BOARD upon a recommendation from the Champaign County Board's Environment and Land Use Committee. Approval of the written final report shall not confer approval of any exceedance of the allowable noise level.

(b) The final report shall at a minimum include the following:

i. Scaled maps of all the BIG DATA CENTER PREMISES, all monitoring locations, all residences and/or PRINCIPAL STRUCTURES or BUILDINGS within one mile of the BIG DATA CENTER PREMISES.

ii. Continuous sound measurements at all wind speeds that occurred during monitoring and charts illustrating the time series measurements.

iii. One-third octave band analysis of data recorded at each monitoring location.

iv. Use monitoring results to assess sound measurements over the range of sound frequencies to estimate the total noise level while the BIG DATA CENTER is in operation. Present these results in charts and tables as appropriate.

v. Compare the monitoring results to the allowable noise level and highlight any exceedances.

vi. Include a written narrative conclusion regarding how well the monitored results compare to the allowable noise level and the predicted sound levels for the BIG DATA CENTER. Explain any unfavorable results or exceedances of the allowable noise level.

h. Amend the Special Use Permit. Any exceedance of the allowable noise levels in Section 6.1.7H.(1)a. or b. or c. shall require an amendment to the BIG DATA CENTER SPECIAL USE permit. The amendment to the BIG DATA CENTER SPECIAL USE permit shall include any changes to BIG DATA CENTER operation that are necessary to comply with the allowable noise level. An application for any required amendment to the BIG DATA CENTER SPECIAL USE permit shall be received (with full application fees) within 180 days of the County Board approval of the post-construction noise study.

(5) After construction of the BIG DATA CENTER, the Zoning Administrator shall take appropriate enforcement action as necessary to investigate noise complaints in order to determine the validity of the complaints and take any additional enforcement action as warranted to stop any violation that is occurring, including but not limited to the following:

a. The Zoning Administrator shall make the Environment and Land Use Committee aware of complaints about noise that have been received by the Complaint Hotline.

b. If the Environment and Land Use Committee determines that the noise is excessive, the Environment and Land Use Committee and/or the County Board shall require the Owner or Operator to take reasonable steps to investigate and mitigate the excessive noise including a noise verification study.

(a) The County Board reserves the right to hire a noise consultant to determine if the noise produced by the BIG DATA CENTER is consistent with ~~the Illinois Pollution Control Board (IPCB) regulations (35 Illinois Administrative Code Subtitle H: Noise Parts 900, 901, 910)~~ the allowable noise levels in Section 6.1.7H.(1).

(b) In the event that a violation of the ~~IPCB noise regulations~~ allowable noise levels in Section 6.1.7H.(1) is identified the Zoning Administrator ~~may~~ shall require the BIG DATA CENTER owner to take whatever actions are necessary to stop the violation and comply with the noise regulations. The Zoning Administrator may seek direction from the Environment and Land Use Committee regarding the actions necessary to stop the violation.

(c) In the event that a violation of ~~IPCB noise regulations~~ the allowable noise levels in Section 6.1.7H.(1) is identified the

BIG DATA CENTER owner shall reimburse to the County the cost of the noise consultant.

I. Standard Conditions for Endangered Species Consultation

(1) The Applicant shall apply for consultation with the Illinois Department of Natural Resources per the Illinois Endangered Species Protection Act (510 ILCS 10/11) and the Illinois Natural Areas Preservation Act (525 ILCS 30/17) and Title 17 of the Illinois Administrative Code Part 1075. This includes the IDNR consultation through the EcoCAT tool or equivalent consultation process. The Application shall include any results, reports, and/or letters that result from the IDNR consultation process and/or EcoCAT tool.

(2) The Environment and Land Use Committee and/or the County Board may require the Applicant to implement the avoidance, minimization, and mitigation measures, surveys, setbacks, or any other recommendations that are provided through consultation with IDNR in any results, reports, letters, and/or EcoCAT natural resource review results.

J. Standard Conditions for Historic and Archaeological Resources Review

The Applicant shall apply for consultation with the State Historic Preservation Officer of the Illinois Department of Natural Resources. The Application shall include a copy of the Agency Action Report for the State Historic Preservation Officer of the Illinois Department of Natural Resources.

K. Standard Conditions for Acceptable Wildlife Impacts

The BIG DATA CENTER shall be located, designed, constructed, and operated so as to avoid and if necessary mitigate the impacts to wildlife to a sustainable level of mortality.

L. Screening and Fencing

(1) Perimeter fencing

a. BIG DATA CENTER equipment and structures shall be fully enclosed and secured by a fence with a minimum height of 7 feet.

b. Knox boxes and keys shall be provided at locked entrances for emergency personnel access.

c. Vegetation between the fencing and the LOT LINE shall be maintained such that NOXIOUS WEEDS ae controlled or eradicated consistent with the Illinois Noxious Weed Law (505 ILCS 100/1 et. seq.). Management of the vegetation shall be explained in the application.

(2) Screening

a. A visual screen shall be provided around the perimeter of the BIG DATA CENTER as follows:

(a) The visual screen shall be provided for any part of the BIG DATA CENTER that is visible to and located within 1,000 feet of an existing DWELLING or residential DISTRICT except that the visual screen may not be required within the full 1,000 feet of an existing DWELLING or residential DISTRICT provided the Applicant submits a landscape plan prepared by an Illinois Registered Landscape Architect and the BOARD finds that the visual screen in the landscape plan provides adequate screening. However, the visual screen shall not be required if the BIG DATA CENTER is not visible to a DWELLING or residential DISTRICT by virtue of the existing topography.

(b) The visual screen shall be waived if the owner(s) of a relevant DWELLING(S) have agreed in writing to waive the screening requirement and a copy of the written waiver is submitted to the BOARD or GOVERNING BODY.

(c) The visual screen shall be a vegetated buffer as follows:

i. A vegetated visual screen buffer that shall include a continuous line of native evergreen foliage and/or native shrubs and/or native trees and/or any existing wooded area and/or plantings of tall native greases and other native flowering plants and/or an area of agricultural crop production that will conceal the BIG DATA CENTER from view from adjacent abutting property may be

authorized as an alternative visual screen subject to specific conditions.

ii. Any vegetation that is part of the approved visual screen buffer shall be maintained in perpetuity of the BIG DATA CENTER. If the evergreen foliage below a height of 7 feet disappears over time, the screening shall be replaced.

iii. The continuous line of native evergreen foliage and/or native shrubs and/or native trees shall be planted at a minimum height of 5 feet tall and shall be planted in multiple rows as required to provide a 50% screen within 2 years of planting. The planting shall otherwise conform to Natural Resources Conservation Service Practice Standard 380 Windbreak/Shelterbreak Establishment except that the planting shall be located as close as possible to the BIG DATA CENTER fence while still providing adequate clearance for maintenance.

iv. A planting of tall native grasses and other native flowing plants may be used as a visual screen buffer for any BIG DATA CENTER installation that is no more than 8 feet tall provided that the width of planting shall be authorized by the BOARD and the planting shall otherwise be planted and maintained per the recommendations of the Natural Resources Conservation Service Practice Standard 327 Conservation Cover and further provided that the BIG DATA CENTER perimeter fence is opaque.

v. An area of agricultural crop production may also be authorized by the BOARD as an alternative visual screen buffer with a width of planting as authorized by the BOARD provided that the BIG DATA CENTER perimeter fence is opaque. Any area of crop production that is used as a vegetated visual screen shall be planted annually and shall be replanted as necessary to ensure a crop

every year regardless of weather or market conditions.

vi. Any vegetated screen buffer shall be detailed in a landscape plan drawing that shall be included with the BIG DATA CENTER County Board SPECIAL USE Permit application.

M. Standard Condition for Liability Insurance

(1) The Owner or Operator of the BIG DATA CENTER shall maintain a current general liability policy covering bodily injury and property damage with minimum limits of at least $~~5~~ 20 million per occurrence and $~~5~~ 40 million in the aggregate.

~~(2) The general liability policy shall identify landowners in the SPECIAL USE Permit as additional insured.~~

(2) All insurance policies shall be in the name of the facility owner. The original certificate of insurance shall be provided to the county zoning administrator upon prior to the issuance of a building permit, and at each subsequent renewal, at least annually thereafter. Additionally, the facility owner shall promptly increase policy limits if the amount required under this ordinance is increased, upon written notice from the county, and the facility owner shall thereafter provide proof of the increased policy to the county zoning administrator.

(3) The facility owner and operator shall defend, indemnify and hold harmless the county and its officers, appointed and elected officials, employees, attorneys, engineers and agents (collectively and individually, the indemnified parties) from and against any and all claims, demands, losses, suits, causes of action, damages, injuries, costs, expenses and liabilities whatsoever, including reasonable attorney's fees relating to or arising out of the issuance of the special use permit or the construction, operation, maintenance and removal of the and affiliated equipment including, without limitation, liability for property damage or personal injury (including death or illness), whether said liability is premised on contract or on tort (including without limitation strict liability or negligence) or any acts or omissions of the facility owner and/or the operator under this ordinance or the special use permit, except to the extent any such claims, demands, losses, suits, causes of action, damages, injuries, costs, expenses and liabilities arise from the negligence or intentional acts of such

indemnified parties. This general indemnification shall not be construed as limiting or qualifying the county's other indemnification rights or immunities available under the law.

N. Standard Condition for Water Use and Cooling

(1) The use of ground water and/or use of water from a PUBLIC WATER SUPPLY SYSTEM for cooling the processors, other equipment, and the buildings in the BIG DATA CENTER shall be limited to closed-loop cooling systems. No evaporative chillers, adiabatic coolers, evaporative coolers, or open-cell cooling towers shall be allowed.

(2) Maximum water usage effectiveness. Water usage effectiveness (WUE) is the ratio of total potable building water consumption (in liters) to Information Technology equipment energy use (in kilowatt-hours). The maximum water usage effectiveness is 0.2 liters per kilowatt hour. The SPECIAL USE Permit application shall include a proposed WUE that is not more than .2 liters per kilowatt hour and that WUE shall be included as a special condition of approval. Water metering shall be included in the BIG DATA CENTER such that water usage can be documented appropriately.

(3) Any water well capable of withdrawing water at or above 70 gallons per minute (gpm) must comply with all requirements (including annual reporting requirements) of the Water Use Act of 1983 (525 ILCS 45).

(4) The SPECIAL USE Permit application shall include the following:

a. A description of the proposed cooling system for the processors, other equipment, and the buildings in the BIG DATA CENTER.

b. An estimate of the Total Direct Water Usage for cooling the processors, other equipment, the buildings, humidification, fire suppression, and occupant demand in the BIG DATA CENTER. The estimate shall identify the proposed source of water and include the amounts of ground water and/or water from a PUBLIC WATER SUPPLY SYSTEM to be used for cooling the processors, other equipment, the buildings, humidification, fire suppression, and occupant demand. The estimate shall include estimated average daily water demand (gallons per day); estimated peak daily

water demand; estimated annual water consumption; and expected seasonal variability in water use.

c. A water withdrawal plan detailing proposed ground water withdrawals and use.

d. A written explanation by an Illinois Professional Engineer of how the use of ground water and/or the use of water from a PUBLIC WATER SUPPLY SYSTEM shall be minimized as much as possible for the purposes of cooling the processors, other equipment, and the buildings in the BIG DATA CENTER ~~shall be minimized as much as possible~~.

e. An explanation of any chemical additives proposed to be added to the cooling water and how water used for cooling will be disposed of and how often it will be disposed of and how disposal of coolant water will be consistent with National Pollutant Discharge Elimination System (NPDES) standards and requirements. The source of any make-up water for the cooling system shall also be explained.

f. The BOARD may request copies of well records from the Illinois State Water Survey and may require an estimate by a qualified hydrogeologist of the likely impact on adjacent water wells.

(5) After the BIG DATA CENTER begins operation, an annual report on water usage shall be submitted to the Environment and Land Use Committee.

a. The report shall explain the amount of Total Direct Water Use for cooling the processors, other equipment, the buildings, humidification, fire suppression, and occupant demand by month and for the year.

b. The report shall include the average daily water demand (gallons per day); the peak daily water demand; the annual water consumption; and observed seasonal variability in water use.

c. The report shall include documentation of the water usage effectiveness (WUE) which is the ratio of total potable building water consumption in liters to the energy usage by information technology equipment. The water usage

effectiveness shall be no more than 0.2 liters per kilowatt hour.

d. The report shall also document any changes to the water for the closed-loop cooling system and document compliance of those changes with water-quality requirements.

e. Any reporting required for compliance with the Water Use Act of 1983 (525 ILCS 45).

f. Any exceedance of the required maximum Water Usage Effectiveness (WUE) shall require either adjustments in water usage sufficient to achieve the maximum Water Usage Effectiveness in the next year or an amendment to the BIG DATA CENTER SPECIAL USE permit. The amendment to the BIG DATA CENTER SPECIAL USE permit shall include any changes to BIG DATA CENTER operation that are necessary to comply with the maximum WUE. An application for any required amendment to the BIG DATA CENTER SPECIAL USE permit shall be received (with full application fees) within 180 days of the ELUC review of the annual water usage report.

O. Standard Conditions for Energy Use and Impact on the Electrical Grid

(1) A BIG DATA CENTER shall be connected to the electrical grid from which it shall draw all power that is not provided by renewable energy sources or backup power generators during bona fide power outages or during testing or when required by the grid operator.

(2) Energy ~~efficient buildings~~ efficiency.

a. All BIG DATA CENTER buildings shall comply with the most recent or previous International Energy Conservation Code.

b. Compliance with this requirement shall be certified in writing by an Illinois Licensed Architect to be submitted prior to the issuance of a Zoning Use Permit.

c. Power Usage Effectiveness (PUE) is the ratio of total building energy consumption divided by the total energy consumed by all Information Technology equipment (servers, switches, storage devices, etc.). A BIG DATA CENTER shall be designed to achieve a PUE of no more

than 1.2. The SPECIAL USE Permit application shall include a proposed PUE that is not more than 1.2 and that PUE shall be included as a special condition of approval. Power metering shall be included in the BIG DATA CENTER such that power usage can be documented appropriately.

d. After the BIG DATA CENTER begins operation, an annual report on energy usage shall be submitted to the Environment and Land Use Committee. The report shall identify the PUE for the previous year and shall report the number of hours that backup power generators were run.

e. Any exceedance of the required maximum Power Usage Effectiveness (PUE) shall require either adjustments in power usage sufficient to achieve the maximum Power Usage Effectiveness in the next year or an amendment to the BIG DATA CENTER SPECIAL USE permit. The amendment to the BIG DATA CENTER SPECIAL USE permit shall include any changes to BIG DATA CENTER operation that are necessary to comply with the maximum PUE. An application for any required amendment to the BIG DATA CENTER SPECIAL USE permit shall be received (with full application fees) within 180 days of the ELUC review of the annual water usage report.

(3) Renewable Energy and Resilience requirements. A BIG DATA CENTER shall install and operate one of the following:

a. Renewable Energy.

(a) On-site renewable energy generation with a nameplate capacity sufficient to supply not less than 50% of the facility's peak electrical demand as demonstrated in the approved electrical load study. The on-site renewable energy generation shall be a separate SPECIAL USE Permit and Zoning Use Permit even though it shall be an ACCESSORY USE; or

(b) On-site renewable energy generation with a nameplate capacity sufficient to supply not less than 25% of the facility's peak electrical demand as demonstrated in the approved electrical load study and off-site renewable energy generation with a nameplate capacity sufficient to supply not less than

25% of the facility's peak electrical demand as demonstrated in the approved electrical load study. The off-site renewable energy generation may either be located in the COUNTY or any county adjacent to Champaign COUNTY. Off-site renewable energy generation may be provided as follows:

i. The applicant shall be a documented owner or co-owner in an off-site renewable energy generation project or have a power purchase agreement with an off-site renewable energy generation project for as long as the BIG DATA CENTER is in operation.

ii. The applicant shall submit suitable documentation of the off-site renewable energy generation project or the power purchase agreement at the time of application for the SPECIAL USE Permit and additional documentation at the time of application for a Zoning Use Permit.

iii. A special condition of approval of the BIG DATA CENTER SPECIAL USE Permit shall require the off-site renewable energy generation to be in operation by the time that a Zoning Compliance Certificate is issued for the BIG DATA CENTER.

b. On-site Resilience Storage. As an alternative to renewable energy generation (either on or off-site), on-site Battery Energy Storage System (BESS) ~~energy storage~~ may be provided that is capable of supplying not less than 50% of the BIG DATA CENTER's peak electrical demand for a minimum duration of 15 minutes for purposes of including electrical grid stabilization, brownout mitigation, and peak-load support. Energy storage systems shall be configured to prioritize discharge during utility-declared peak events and grid emergencies to reduce localized voltage sag, transformer overload, and outage risk in the surrounding region. The on-site resilience storage shall be a separate SPECIAL USE Permit and Zoning Use Permit even though it shall be an ACCESSORY USE.

(4) Modular nuclear reactors, small modular reactors, or any other nuclear-based on-site energy production methods are prohibited.

(5) The SPECIAL USE Permit application shall include a written explanation of the anticipated impacts that the proposed BIG DATA CENTER may have on electric power grid reliability and electricity pricing as follows:

a. The report shall be written by a third-party consultant with at least 20-years of experience in power grid management, energy project development, commodity procurement, and utility regulation.

b. The report shall address the following:

(a) Whether the local service network can accommodate the increased load arising from the BIG DATA CENTER.

(b) Whether in the event of a grid blackout retail customers will be prioritized for service by the local utility instead of the BIG DATA CENTER.

(c) Whether the regional power transmission grid may be overstrained by operation of the BIG DATA CENTER.

(d) Whether there is enough power generating capacity in the region to serve the BIG DATA CENTER.

(e) Whether existing power grid users will be forced to pay any interconnection costs related to the BIG DATA CENTER.

(f) Whether power delivery rates for existing utility customers will likely increase because of the BIG DATA CENTER.

(g) Whether increased demand for electricity caused by the BIG DATA CENTER will likely increase regional costs in central Illinois.

P. Operational Standard Conditions

(1) Maintenance

a. The Owner or Operator of the BIG DATA CENTER must submit, on an annual basis, a summary of operation and

maintenance reports to the Environment and Land Use Committee and any other operation and maintenance reports as the Environment and Land Use Committee reasonably requests.

b. Any physical modification to the BIG DATA CENTER that increases the number of solar conversion devices or structures and/or the land area occupied by the BIG DATA CENTER shall require a new County BOARD SPECIAL USE Permit. Like-kind replacements shall not require recertification nor will replacement of transformers, cabling, etc. provided replacement is done in fashion similar to the original installation.

(2) Materials Handling, Storage and Disposal

a. All solid wastes related to the construction, operation and maintenance of the BIG DATA CENTER shall be removed from the site promptly and disposed of in accordance with all Federal, State and local laws.

b. All hazardous materials related to the construction, operation and maintenance of the BIG DATA CENTER shall be handled, stored, transported and disposed of in accordance with all applicable local, State and Federal laws.

(3) Vegetation management

a. The BIG DATA CENTER SPECIAL USE Permit application shall include a weed control plan for the total area of the SPECIAL USE Permit including areas both inside of and outside of the perimeter fencing.

b. The weed control plan shall ensure the control and/or eradication of NOXIOUS WEEDS consistent with the Illinois Noxious Weed Law (55 ILCS 100/1 et. seq.).

c. The weed control plan shall be explained in the application.

Q. Complaint Hotline

(1) Prior to the commencement of construction on the PV SOLAR FARM and during the entire term of the COUNTY Board SPECIAL USE Permit and any extension, the Applicant and

Owner shall establish a telephone number and email hotline for the general public to call or contact with any complaints or questions.

(2) The telephone number hotline shall be publicized and posted at the operations and maintenance center and the construction marshalling yard. The hotline signs shall also include the Department of Planning and Zoning phone number and email address for complaints.

(3) The telephone number hotline shall be manned during usual business hours and shall be an answering recording service during other hours.

(4) Each complaint call to the telephone number hotline shall be logged and identify the name and address of the caller and the reason for the call.

(5) All calls shall be recorded and the recordings shall be saved for transcription for a minimum of two years.

(6) A copy of the telephone number hotline log shall be provided to the Zoning Administrator on a monthly basis.

(7) The Owner shall take necessary actions to resolve all legitimate complaints in a timely manner.

X. Community benefit agreements are preferred and encouraged by Champaign County. To the extent that any community benefit agreements are entered into, those agreements shall be with local non-profit entities for the utilization of community spaces or programs designed to benefit or be available to benefit all residents of Champaign County.

X. Project labor agreements with local union labor organizations are preferred and encouraged by Champaign County.

R. Standard Conditions for Expiration of BIG DATA CENTER COUNTY Board SPECIAL USE Permit

A BIG DATA CENTER COUNTY Board SPECIAL USE Permit designation shall expire in 10 years if no Zoning Use Permit is granted.

S. Application Requirements

(1) In addition to all other information required on the SPECIAL USE Permit application and required by Section 9.1.11A.2., the

application shall contain or be accompanied by the following information:

a. A BIG DATA CENTER Project Summary, including, to the extent available:

(a) A general description of the project, including its approximate AC generating capacity; the maximum number and type of processors, and the potential equipment manufacturer(s).

(b) The specific proposed location of the BIG DATA CENTER including all tax parcels on which the BIG DATA CENTER will be constructed.

(c) The specific proposed location of all tax parcels required to be included in the BIG DATA CENTER COUNTY Board SPECIAL USE Permit.

(d) A description of the Applicant, Owner and Operator, including their respective business structures.

(e) The proposed phases of construction and/or planned expansion of capacity towards the ultimate capacity as authorized in the SPECIAL USE Permit.

b. The name(s), address(es), and phone number(s) of the Applicant(s), Owner and Operator, and all property owner(s) for the BIG DATA CENTER COUNTY Board SPECIAL USE Permit.

a. A site plan for the BIG DATA CENTER indicating the following:

(a) The approximate planned location of all BIG DATA CENTER STRUCTURES, property lines (including identification of adjoining properties), required separations, public access roads and turnout locations, access driveways, solar devices, electrical inverter(s), electrical transformer(s), cabling, switching station, electrical cabling from the BIG DATA CENTER to the Substation(s), ancillary equipment, screening and fencing, third party transmission lines, meteorological station, maintenance and management facilities, and layout

of all structures within the geographical boundaries of any applicable setback.

(b) The site plan shall clearly indicate the area of the proposed BIG DATA CENTER COUNTY Board SPECIAL USE Permit as required by subparagraph 6.1.5A.(1).

(c) The location of all below-ground wiring.

(d) The location, height, and appearance of all above-ground wiring and wiring structures.

(e) The separation of all BIG DATA CENTER structures from adjacent DWELLINGS and/or PRINCIPAL BUILDINGS or uses shall be dimensioned on the approved site plan and that dimension shall establish the effective minimum separation that shall be required for any Zoning Use Permit. Greater separation and somewhat different locations may be provided in the approved site plan for the Zoning Use Permit provided that the greater separation does not increase the noise impacts and/or glare that were approved in the BIG DATA CENTER COUNTY Board SPECIAL USE Permit. BIG DATA CENTER structures include substations, third party transmission lines, maintenance and management facilities, or other significant structures.

d. All other required studies, reports, certifications, and approvals demonstrating compliance with the provisions of this Ordinance.

e. The BIG DATA CENTER SPECIAL USE Permit application shall include documentation that the applicant has provided a complete copy of the SPECIAL USE Permit application to any municipality within one-and-one-half miles of the proposed BIG DATA CENTER as required by Section 6.1.5B.(2)a.(b).

f. A municipal resolution regarding the BIG DATA CENTER by any municipality located within one-and-one-half miles of the BIG DATA CENTER must be submitted to the Zoning Administrator prior to the consideration of the BIG DATA CENTER SPECIAL USE Permit by the Champaign

COUNTY Board or, in the absence of such a resolution, the Zoning Administrator shall provide documentation to the COUNTY Board that any municipality within one-and-one-half miles of the BIG DATA CENTER was provided notice of the meeting dates for consideration of the proposed BIG DATA CENTER FARM SPECIAL USE Permit for both the Environment and Land Use Committee and the COUNTY Board as required by Section 6.1.5B.(2)a.(c).

g. Documentation of an executed interconnection agreement with the appropriate electric utility shall be provided prior to issuance of a Zoning Compliance Certificate to authorize operation of the BIG DATA CENTER as required by Section 6.1.5B.(3)b.

(2) The Applicant shall notify the COUNTY of any changes to the information provided above that occurs while the COUNTY Board SPECIAL USE Permit application is pending.

5. Add the following new Zoning Use Permit fees to Section 9.3.1:

L. BIG DATA CENTER~~….same fee per megawatt as a PV SOLAR FARM Zoning Use permit but~~ ……..$250,000 plus an additional fee of $10,000 per megawatt of nameplate capacity for energy anticipated to be utilized from the power grid based on the direct current nameplate capacity and also include an initial payment of $60,000 per phase for the cost of a post-construction BIG DATA CENTER Noise Study and $60,000 per phase for the cost of a post-construction BIG DATA CENTER Vibration Study for each proposed phase of the BIG DATA CENTER and plus any additional fees for the amount by which the costs billed to the COUNTY exceed the initial payment, or a refund of any unspent fee, due upon approval of the Noise Study and the Vibration Study. Also:

(1) Fees for the accessory power generation or accessory energy storage shall be the full amount.

(2) Any and all fees collected for BIG DATA CENTER permitting (including SPECIAL USE Permit fees but excepting fees for sound and vibration studies) are held in reserve in a separate fund, the Zoning Legal Defense Fund, and are to be used in the event the County needs to initiate testing, investigation, or review of a zoning violation by a BIG DATA CENTER, and any subsequent legal proceedings for those violations. Once the fund reaches $500,000 per each BIG DATA CENTER, any further revenue can be diverted to the General Fund, as long as the Zoning Legal Defense Fund remains at a minimum of $500,000 through permit

revenue. Any funds remaining in the Zoning Legal Defense Fund after all BIG DATA CENTERS are decommissioned shall be placed in the General Fund.

6. Add the following new Special Use Permit fees to Section 9.3.3B.:

(10) BIG DATA CENTER….~~same fee per megawatt as a PV SOLAR FARM SPECIAL USE Permit.~~ ……..$250,000. Also:

(1) Fees for the accessory power generation or accessory energy storage shall be the full amount.

(2) Any and all fees collected for BIG DATA CENTER permitting (including SPECIAL USE Permit fees) are held in reserve in a separate fund, the Zoning Legal Defense Fund, and are to be used in the event the County needs to initiate testing, investigation, or review of a zoning violation by a BIG DATA CENTER, and any subsequent legal proceedings for those violations. Once the fund reaches $500,000 per each BIG DATA CENTER, any further revenue can be diverted to the General Fund, as long as the Zoning Legal Defense Fund remains at a minimum of $500,000 through permit revenue. Any funds remaining in the Zoning Legal Defense Fund after all BIG DATA CENTERS are decommissioned shall be placed in the General Fund.

Champaign County
Department of
PLANNING &
ZONING

Bennett Administrative Center
102 East Main Street
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(217) 384-3708
zoningdept@co.champaign.il.us
www.co.champaign.il.us/zoning

TO: **Data Center Activities Task Force**

FROM: **John Hall, Zoning Administrator**

DATE: **September 30, 2026**

RE: **Noise Limit and Minimum Separation for BIG DATA CENTER**

The Task Force is considering recommending a noise limit for big data centers of 45 dB(A) at all DWELLINGS and other PRINCIPAL BUILDINGS and areas of public gathering with a minimum separation of /BIG DATA CENTER STRUCTURES of 1,000 feet to 1,500 feet (with roof mounted chillers) from all DWELLINGS and other PRINCIPAL BUILDINGS and areas of public gathering. The noise study from the Sangamon County data center (C1 Sangamon 1 LLC) was reviewed for any insights it could provide regarding the proposed Champaign County noise limits and minimum separations. Analysis of the Sangamon County data center noise study revealed the following:

- The proposed noise limit of 45dB(A) will apparently require a separation to the nearest principal building of more than 1,850 feet. A separation of 2,200 feet is recommended.

- The proposed noise limit of 45dB(A) is essentially the same as the nighttime ambient noise level in Champaign County as identified in three separate zoning cases.

C1 Sangamon 1 LLC Noise Study

The following summarizes relevant aspects of the C1 Sangamon 1 LLC Noise Study (see attached C1 Sangamon 1 LLC Noise Study):

- The Sangamon County data center was required to meet the Illinois Pollution Control Board (IPCB) noise limits which are divided into nine octave bands but can be generalized as 61 dB(A) daytime and 51 dB(A) nighttime for Class C land (the data center) to Class A land (residential uses).

- The noise study specifies the following assumptions regarding noise modeling of the data center operation:
  - Modeling of daytime noise levels assumed testing of two backup power generators per building (four buildings total) in addition to all rooftop chillers and rooftop units operating at full load.

  - Modeling of nighttime noise levels assumed only chillers and rooftop units at full load with no backup power generators in operation.

- No information was provided regarding ambient pre-development noise levels.

- Separation distances between the identified "receiver locations" and proposed data center buildings and backup power generators were scaled from the site plan that had been adjusted to be one inch equals 600 feet. The one mile distance indicated on the Annotated Figure 1 (see attached) was scaled from the one inch equals 600 feet scale plan. The separation distance for the receiver locations are estimated to be as follows:

  - 1,500 feet between R1 and the data center backup power generators
  - 1,400 feet between R2 and the data center backup power generators
  - 4,300 feet between R3 and the data center backup power generators
  - 1,850 feet between R4 and the data center backup power generators
  - 1,680 feet between R5 and the data center backup power generators

- Projected (modeled) data center noise levels were presented in Table 2 of the CI Sangamon 1 LLC noise study (see attached). The modeled noise levels are well below the IPCB noise limits.

Insights Into Proposed Champaign County Amendment

The daytime noise levels modeled for the Sangamon County data center are most useful for providing insight regarding the proposed Champaign County noise limits because the assumptions (parameters) that guided the modeling of daytime noise limits are comparable in many ways to the requirements of the proposed noise study requirements in the Champaign County amendment (for both daytime and nighttime) except that the noise limits are much different. Comparing the modeling results for the Sangamon County data center to the proposed requirements for Champaign County reveals the following:

- A noise limit of 45dB(A) would apparently require a separation somewhat greater than the 1,850 feet of separation for R4. Based on a comparison of the noise at R3 versus R4, the separation to achieve a noise level of 45dB(A) would be approximately 2,343 feet. Based on a comparison of R4 versus R5, the separation would be approximately 1,900 feet. There is considerable inconsistency in these numbers and an average would be 2,121.5 feet and that could be rounded to 2,200 feet.

Champaign County Noise Design Parameters

Section 6.1.7H.(3)b. of the proposed amendment requires the modeling of the noise to "…assume that all back-up power generators are running and the HVAC equipment and any other sound producing equipment are running at the maximum." (emphasis added) and that is much different than the parameters that were used in modeling the noise of the Sangamon County data center or the modeling required by the City of Aurora. The requirement of Section 6.1.7H.(3)b. was based on the fact that we know that big data centers are sometimes asked to use back-up power when the power demands on the electrical grid are at or beyond the maximum, such as during times of high summer temperatures. The Task Force can change the required

parameters for the noise study if these separation distances parameters are unreasonable. Eliminating the requirement for the noise study to assume that all backup power generators are running would result in a required separation of less than the 1,500 feet separation for Receiver R1 on the C1 Sangamon 1 LLC Noise Study.

Champaign County Ambient Noise Level

There was no ambient (the existing pre-development) noise level reported for the Sangamon County location. Ambient noise levels have been studied at three locations in Champaign County as follows:

Zoning Case	Township	Daytime ambient noise	Nighttime ambient noise
Zoning Case 696-S-11 (California Ridge wind farm)	Compromise Township	52dBA	44 dBA
Zoning Case 898-S-18 (BayWa solar farm)	Sidney Township	(not provided)	(not provided)
Zoning Case 162-S-25 (Summit Ridge solar farm)	Mahomet Township	54dBA	46dBA

The proposed noise limit of 45 dB(A) would have the effect of requiring a big data center to not exceed the ambient nighttime noise level.

ATTACHMENTS

A C1 Sangamon 1 LLC Noise Study
B C1 Sangamon 1 LLC Noise Study Figure 1 Annotated

EXHIBIT
K

Trinity Consultants

January 29, 2026

Laura Cottrell
CyrusOne Data Centers

Ref: CyrusOne Sangamon
AHJ Noise Study
Trinity Project #252601.0044

This memo evaluates noise levels from the proposed CyrusOne data center site in Sangamon, IL, with respect to local noise regulations. Our analysis considers projected sound levels from data center cooling equipment, back-up generators, and other auxiliary equipment.

1.0 Applicable Noise Codes

The project site is located in unincorporated Sangamon County, IL. As such, Noise Codes outlined by the Sangamon County Zoning Code and Illinois State Pollution Control Board will apply to the project.

Sangamon County Noise Code

Chapter 17.39 of the Sangamon County Zoning Code outlines noise requirements for Data Center developments below:

17.39.020 – Special Requirements (F)
Noise levels measured at the property line shall not exceed fifty (50) decibels when located adjacent to an existing residence or residential district. Noise levels shall be enforced by both the State of Illinois and Sangamon County.

We are assuming adjacent implies a shared property line between the source site and the receiver site. The project site is located adjacent to agriculturally zoned land with no residences built on them. As there are no adjacent residential districts or properties, the project is expected to be compliant with the Sangamon County Noise Code.

Illinois State Noise Code

The Illinois Pollution Control Board specifies allowable noise levels based on the land use classifications of both the noise source and the receiving property. This state-wide Code includes specific octave-band sound levels. However, at this stage of early design, we have focused on achieving overall dBA requirements. Detailed octave-band tuning will be addressed with the attenuation manufacturers as design progresses. We understand that the CyrusOne property will be classified as Class C.

Title 35: Environmental Protection – Subtitle H: Noise – Ch. 1: Pollution Control Board

A person must not cause or allow the emission of sound from any property-line noise source located on any Class A, B, or C land to any receiving Class A land that exceeds any allowable octave band sound pressure level specified in the following table, when measured at any point within the receiving Class A land. Sound pressure levels must be measured at least 25 feet from the property-line noise source.

Table 1: Maximum Sound Levels to Class A Land

Frequency (Hz)	Allowable Octave-Band Sound Pressure Level (dB)					
	C to A		B to A		A to A	
	Day	Night	Day	Night	Day	Night
31.5	75	69	72	63	72	63
63	74	67	71	61	71	61
125	69	62	65	55	65	55
250	64	54	57	47	57	47
500	58	47	51	40	51	40
1000	52	41	45	35	45	35
2000	47	36	39	30	39	30
4000	43	32	34	25	34	25
8000	40	32	32	25	32	25
Overall dBA:	***61***	***51***	***55***	***44***	***55***	***44***

"Daytime hours" means any continuous 16 hour period between 6:00 a.m. and 11:00 p.m. local time. "Nighttime hours" means the 8 hours between 10:00 p.m. and 7:00 a.m. that are not part of the 16 continuous daytime hours.

As the project is classified as Class C, an overall sound level of 61/51 dBA must be achieved during daytime/nighttime at Class A (residential) receivers, located further from the site. Remaining receivers surrounding the site are classified as Class C, which do not have noise limits under the Illinois State Code. There are currently no Class B receivers in the vicinity of the site.

The Illinois State Code additionally prohibits the emission of any prominent discrete tone from any property-line noise source located on Class A, B, or C land to any receiving Class A, B, or C land, when measured at any point within the receiving land, at least 25 feet from the property-line noise source. The impact of discrete tones will be studied as attenuation requirements are coordinated.

The Illinois State Code does not include an exemption for sound emissions during an emergency situation except for "emergency warning devices and unregulated safety relief valves." We assume sound produced from generators during a power-outage scenario is exempt from Noise Code requirements. Noise emissions from routine generator testing must comply with Code.

2.0 Data Center Parameters

At full build-out, the project site will consist of four data center buildings. Each building includes air-cooled chillers, RTUs, back-up generators, and UPS fans. Acoustic attenuation measures such as solid acoustic barriers, sound attenuators, and sound-rated generator enclosures are included to reduce operational noise levels and will be further coordinated as design progresses.

3.0 Results

The figure and table below summarize projected operational noise levels at various receiver locations, with land classifications overlaid for reference with the Illinois State Noise Code.

Daytime noise levels assume testing of two backup generators per building, in addition to all rooftop chillers and RTUs operating at full load. Nighttime modeling assumes only the chillers and RTUs at full load, as generator testing is anticipated to occur only during daytime hours.

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Final noise levels may vary as coordination with equipment manufacturers continues; however, compliance with applicable Code limits will be maintained. Noise levels are modeled at 5 feet above the ground. Noise levels at existing nearby buildings with taller occupied floor elevations are expected to be quieter.

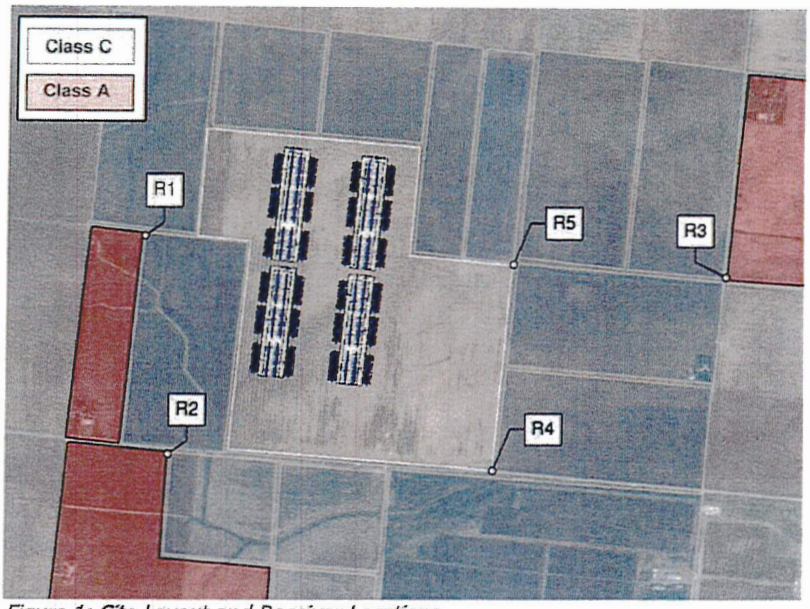


Figure 1: Site Layout and Receiver Locations

Table 2: Projected Data Center Noise Levels

Time Period	Data Center Noise Level at Receiver (dBA)				
	R1**	R2**	R3**	R4	R5
Daytime	53	54	41	46	50
Nighttime	42	40	32	38	32
Day / Night Code Limit*	61 / 51	61 / 51	61 / 51	-	-

**Octave-band code limits will be designed for compliance as design progresses.*
***C to A day/night limit conservatively applied to nearby properties containing residences used for Class C (agricultural) purposes.*

Based on our understanding of applicable Noise Codes, the project site is projected to be Code compliant at all surrounding receivers.

This concludes our comments at this time. Should you have any questions, comments, or concerns please do not hesitate to contact us.

Thank you,

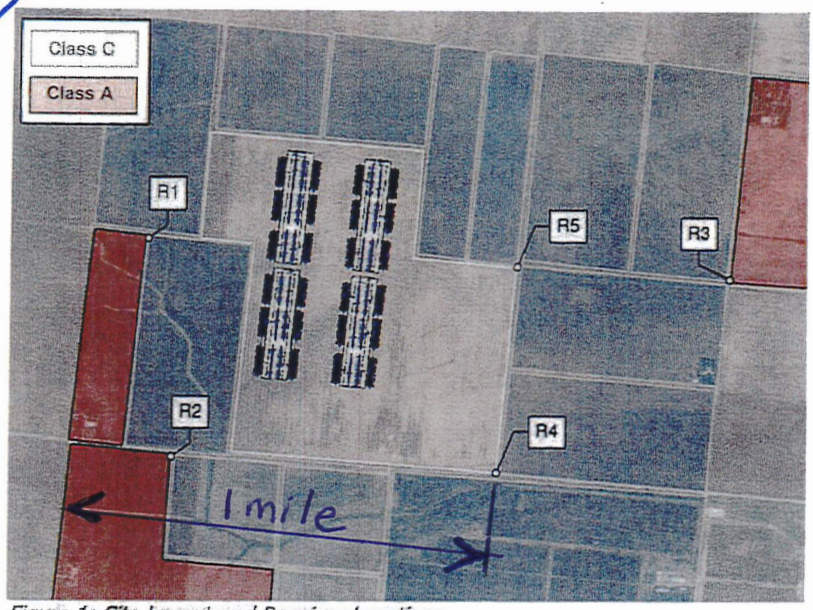
Josh Cassarino
Associate Principal

Lucas Schwartz
Associate

Trinity Consultants

Final noise levels may vary as coordination with equipment manufacturers continues; however, compliance with applicable Code limits will be maintained. Noise levels are modeled at 5 feet above the ground. Noise levels at existing nearby buildings with taller occupied floor elevations are expected to be quieter.

ANNOTATED



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This concludes our comments at this time. Should you have any questions, comments, or concerns please do not hesitate to contact us.

Thank you,

Josh Cassarino
Associate Principal

Lucas Schwartz
Associate

To: Village of Mahomet Board of Trustees

Honorables Jason S. Tompkins, Bruce Colravy, Andy Harpst, Bill Oliger, Brian Metzger, Toby Willard, and Bill Schriver

From:
Members of the Champaign County Board Data Center Activities Task Force:

Members of the Environment and Land Use Committee:

Members of the Champaign County Board:

Re: Concern regarding consideration of large scale data center proposal

-DRAFT LETTER FOR DATA CENTER TASKFORCE INPUT-

Honorable Members of the Village of Mahomet Board of Trustees,

We, the undersigned, write to formally submit our concerns regarding the ongoing review of a draft proposal for a large scale data center currently within unincorporated areas of Champaign County. We have heard from many residents in and outside of the Village of Mahomet. In this letter, we seek to formally detail concerns about the process and intention of ongoing talks.

Local news reports published on September 28, 2026 demonstrate that for some time officials elected to serve the Village of Mahomet have been actively considering a proposal to build a large-scale data center in the unincorporated area of Champaign County. Currently, Champaign County has a moratorium in place on any data center projects in unincorporated parts of Champaign County. We took this prudent action to draft regulations before any consideration of a proposal. It is our understanding that non-disclosure agreements were signed by members of your body to expedite the consideration of this draft proposal.

We understand that the plan seeks to circumvent the current moratorium by annexing the area from Champaign County for this project. The draft proposal is fairly developed, and has already been redlined by a handful of folks. The editing process has thus far been sheltered from any review in a publicly noticed meeting.

Members of the Champaign County Board unanimously agree that any large scale data center in Champaign County will impact all Champaign County residents. Six months ago, the Board created a taskforce to carefully consider the terms by which Champaign County would consider a proposal for a data center. Since then, the members of the Data Center Taskforce have met ten times, meetings typically lasting three hours with a total estimated twelve hours of public input. These meetings were improved by hours of testimony from a half dozen experts on noise,

land use, energy grid issues, cooling mechanisms, health concerns, water use, excess heat, battery considerations, and back up generator considerations. Members of this taskforce have dedicated serious time to codifying those suggestions made by experts and community members. Once our work concludes, our draft will undergo a rigorous process of review and editing from multiple levels of government. The Zoning Board of Appeals, the Environmental and Land Use Committee, and finally, the Champaign County Board will be tasked with the review and approval of these regulations.

It is our understanding that your process of review will take a different course. We understand there will be no policymaking process; you have moved onto the approval process.

The chosen process puts all of Champaign County at risk in the following ways: You will consider a proposal created by Clean Cloud Energy, without outside research to justify decisions, without scrutiny, and few opportunities of public input. These deficits in Mahomet's chosen process has put Champaign County Residents at a disadvantage to engage the village of Mahomet Trustees with any sincerity. Indeed, note again that members of the Village Board of Trustees have signed non-disclosure agreements intended to fast track consideration of this proposal and minimize public input. It is our understanding that unelected staff of the Village of Mahomet have had the most influence on the outcome of this project.

We are deeply concerned by the course of action and object to the signing of non-disclosure agreements as bad governance. We note the following additional objections to the project as described via emails:

> **--Reduced public review by handling this project mainly administratively:** Final plans that stayed within specified development-envelope limits would be reviewed administratively by Village staff without further action by the Plan and Zoning Commission or Village Board.
>
> **--Lack of regulations for building height and sound:** The proposal allowed buildings up to 75 feet tall, which can fit up to 7-8 stories, plus rooftop equipment extending up to 25 feet above the structural roof deck. It would permit mechanical cooling equipment to emit up to 75 dBA at the property line, which is as loud as having a vacuum running next to you, even from 700 feet away. Our current regulations have a 45dBA limit after multiple meetings with experts and discussion using different regulations that already exist on sound disturbance, nationally and internationally.
>
> **--Generator exemptions for sound limits:** Emergency backup generators would be exempt from the ill-considered 75 dBA, a sound limit, which far exceeds disturbing noise levels already, and will likely exacerbate utility interruptions, grid instability and emergencies, as well as during routine maintenance and testing. Routine

maintenance generally would be limited to 7 a.m. to 10 p.m. and would be disturbing to sleep, even for those who are almost a mile away.

– Loose limits on electric utility taxes: The project requires limits on "hyperscale electricity consumption" with no meaningful route to enforcement, nor a comprehensive enough definition of "hyper scale."

– Misleading Project Labor Agreement requirements: PLA's such as the one noted in the released documents can be stated as a preference, but cannot be guaranteed by developers such as Clean Cloud Energy.

We urge the honorable members of the Village of Mahomet Board of Trustees to reconsider the undemocratic process for this project to the benefit of all of East Central Illinois. We emphasize the lack of concern for community impact, the secrecy, and depriving residents a voice.

We submit for your review our most recent draft of our data center policy. We ask that leadership consider a path toward drafting policy with public input before approving a proposal.

Sincerely,