CHAMPAIGN COUNTY BOARD
DATA CENTER ACTIVITIES TASK FORCE
County of Champaign, Urbana, Illinois
Monday, July 13, 2026 - 6:30 p.m.

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

Committee Members:

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

Agenda Items

I. Call to Order

II. Roll Call

III. Approval of Agenda/Addendum

IV. Public Input

V. Communications (discussion only)

VI. New Business (discussion only)

a. Memorandum on Proposed requirements for back-up generators, noise, vibration, and minimum separations for a BIG DATA CENTER

VII. Other Business

a. Date of next meeting (discussion only)
    i. August 4, 2026 – Focus: Miscellaneous

VIII. Chair's Report

IX. Next Steps (discussion only)

X. Adjournment

Champaign County
Department of
PLANNING &
ZONING

Bennett Administrative Center
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TO: **Data Center Task Force**

FROM: **John Hall, Zoning Administrator**

DATE: **July 8, 2026**

RE: **Proposed requirements for back-up generators, noise, vibration, and minimum separations for a BIG DATA CENTER**

BACKGROUND

Attachment A is a proposed standard condition for separations for a BIG DATA CENTER. The strike-out and highlighted portion (Section (3)) has been changed from the version that ELUC reviewed at their meeting on 02/05/2026.

Attachment B was not included in the version that ELUC reviewed on 02/05/2026.

Attachment C is the standard condition for noise that ELUC reviewed on 02/05/2026 but the highlighted portion has been revised to more closely resemble the noise standard for wind farms. **NOTE THAT THIS USES THE IPCB NOISE STANDARDS.**

Attachment D is a newly proposed complaint hotline requirement similar to the hotline requirements for wind farms, solar farms, and battery storage systems.

Attachment E is an excerpt from the State of Illinois statutes that establish emission standards for data center backup generators including Tier 4 standards (the highest standards) for diesel generators. See pages 2 and 3 of that Attachment.

Attachment F is several excerpts from the Aurora requirements which form the basis for much of Attachments A and B.

Attachment G includes several excerpts from the application for the CyrusOne 634 MW Data Center that was approved in Sangamon County, Illinois earlier this year.

ATTACHMENTS

A **Proposed Standard Condition for Minimum Separations**

B **Proposed Standard Conditions for Back-up Power Generators, Control of Vibrations, and Sound Attenuation for Ground Mounted Mechanical Units**

C **Proposed Standard Condition for Allowable Noise Level**

D **Proposed Standard Condition for Complaint Hotline**

E **Excerpt of 415 ILCS 5.39(a)**

F **Excerpts of City of Aurora Data Center Requirements**
- **(1) Limited hours for testing of back-up generators**
- **(2) Vibration standards**
- **(3) Tier 4 emission standards for back-up Generators; minimum Separation (1,000 feet) to Residential, Hospital, and Educational Use; and noise standards; and continuous monitoring of vibration**

G **Excerpts from Special Use Permit Application for CyrusOne C1 Sangamon 1 LLC 634 MW Data Center in Sangamon County, Illinois**
- **(1) Excerpt from Project Overview regarding number of back-up generators**
- **(2) Excerpt from Application Appendix regarding secondary containment for fuel storage tanks**
- **(3) Excerpt from Application Appendix regarding residential structure setback**
- **(4) Noise Study**

ATTACHMENT A

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) For any adjacent LOT that is 10 acres or less in area (not including the STREET RIGHT OF WAY):

(a) For any adjacent LOT that is bordered (directly abutting and/or across the STREET) on no more than two sides by the BIG DATA CENTER, the separation shall be no less than 240 feet from the property line.

(b) For any adjacent LOT that is bordered (directly abutting and/or across the STREET) on more than two sides by the BIG DATA CENTER, the separation shall exceed 240 feet as deemed necessary by the BOARD.

~~(3) For any adjacent LOT that is more than 10 acres in area (not including the STREET RIGHT OF WAY), the separation shall be no less than 255 feet from any existing DWELLING or existing PRINCIPAL BUILDING and otherwise the perimeter fencing shall be a minimum of 10 feet from a SIDE or REAR LOT LINE. This separation distance applies to properties that are adjacent to or across a STREET from a BIG DATA CENTER.~~

(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. 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

ATTACHMENT 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 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.

ATTACHMENT B
(add to proposed Section 6.1.7D.Standard Conditions for Design and Installation of any BIG DATA CENTER)

(6) 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.

d. Sound attenuation 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.

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.

(7) 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:	K
Steady state	0.003
Impulsive	0.006
Less than 8 pulses per 24-hour period	0.015

ATTACHMENT B

(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 proves warranted to stop any violation that is occurring, including but not limited to the following:

i. If requested by the Zoning Administrator, the BIG DATA CENTER owner shall provide records of the continuous monitoring of earth born vibration levels at the property line.

ii. The Zoning Administrator may seek authorization from the County Board to hire a vibration consultant to investigate the vibration complaint in a manner consistent with best practice.

iii. The BIG DATA CENTER owner shall cooperate fully with the vibration consultant in the enforcement action including shutting down the BIG DATA CENTER to allow documentation of ambient vibration levels.

iv. In the event that a violation of the vibration regulations is identified, the BIG DATA CENTER owner shall take whatever actions are necessary to stop the violation and comply with the vibration regulations and reimburse to the County the cost of the vibration consultant and shall take reasonable actions to mitigate the earth born vibrations.

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

H. Standard Conditions for Allowable Noise Level

(1) Noise levels from any BIG DATA CENTER shall be in compliance with the applicable Illinois Pollution Control Board (IPCB) regulations (35 Illinois Administrative Code, Subtitle H: Noise, Parts 900, 901, 910).

(2) The Applicant shall submit manufacturer's sound power level characteristics and other relevant data regarding noise characteristics of proposed BIG DATA CENTER 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.

(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.

(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.

(4) 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 proves 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 shall require the Owner or Operator to take responsible steps to mitigate the excessive noise.~~

b. The Zoning Administrator may seek authorization from the County Board to hire a noise consultant to determine the noise produced by the BIG DATA CENTER in a manner consistent with the Illinois Pollution Control Board (IPCB) regulations (35 Illinois Administrative Code Subtitle H: Noise Parts 900, 901, 910).

c. The BIG DATA CENTER owner shall cooperate fully with the noise consultant and the Zoning Administrator in the enforcement action including shutting down the BIG DATA CENTER to allow documentation of ambient noise levels.

d. In the event that a violation of the IPCB noise regulations 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 noise regulations. The Zoning Administrator may seek direction from the Environment and Land Use Committee regarding the actions necessary to stop the violation.

e. In the event that a violation of IPCB noise regulations is identified the BIG DATA CENTER owner shall reimburse to the County the cost of the noise consultant.

ATTACHMENT D

(add as proposed Section 6.1.7Q.Standard Conditions for Complaint Hotline)

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 hotline for the general public to call 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.

(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.

Excerpt of 415 ILCS 5.39(a)

Sec. 39. Issuance of permits; procedures.

(a) When the Board has by regulation required a permit for the construction, installation, or operation of any type of facility, equipment, vehicle, vessel, or aircraft, the applicant shall apply to the Agency for such permit and it shall be the duty of the Agency to issue such a permit upon proof by the applicant that the facility, equipment, vehicle, vessel, or aircraft will not cause a violation of this Act or of regulations hereunder. The Agency shall adopt such procedures as are necessary to carry out its duties under this Section. In making its determinations on permit applications under this Section the Agency may consider prior adjudications of noncompliance with this Act by the applicant that involved a release of a contaminant into the environment. In granting permits, the Agency may impose reasonable conditions specifically related to the applicant's past compliance history with this Act as necessary to correct, detect, or prevent noncompliance. The Agency may impose such other conditions as may be necessary to accomplish the purposes of this Act, and as are not inconsistent with the regulations promulgated by the Board hereunder. Except as otherwise provided in this Act, a bond or other security shall not be required as a condition for the issuance of a permit. If the Agency denies any permit under this Section, the Agency shall transmit to the applicant within the time limitations of this Section specific, detailed statements as to the reasons the permit application was denied. Such statements shall include, but not be limited to, the following:

(i) the Sections of this Act which may be violated if the permit were granted;

(ii) the provision of the regulations, promulgated under this Act, which may be violated if the permit were granted;

(iii) the specific type of information, if any, which the Agency deems the applicant did not provide the Agency; and

(iv) a statement of specific reasons why the Act and the regulations might not be met if the permit were granted.

If there is no final action by the Agency within 90 days after the filing of the application for permit, the applicant may deem the permit issued; except that this time period shall be extended to 180 days when (1) notice and opportunity for public hearing are required by State or federal law or regulation, (2) the application which was filed is for any permit to develop a landfill subject to issuance pursuant to this subsection, or (3) the application that was filed is for a MSWLF unit required to issue public notice under subsection (p) of Section 39. The 90-day and 180-day time periods for the Agency to take final action do not apply to NPDES permit applications under subsection (b) of this Section, to RCRA permit applications under subsection (d) of this Section, to UIC permit applications under subsection (e) of this Section, or to CCR surface impoundment applications under subsection (y) of this Section.

The Agency shall publish notice of all final permit determinations for development permits for MSWLF units and for significant permit modifications for lateral expansions for existing MSWLF units one time in a newspaper of general circulation in the county in which the unit is or is proposed to be located.

After January 1, 1994 and until July 1, 1998, operating permits issued

under this Section by the Agency for sources of air pollution permitted to emit less than 25 tons per year of any combination of regulated air pollutants, as defined in Section 39.5 of this Act, shall be required to be renewed only upon written request by the Agency consistent with applicable provisions of this Act and regulations promulgated hereunder. Such operating permits shall expire 180 days after the date of such a request. The Board shall revise its regulations for the existing State air pollution operating permit program consistent with this provision by January 1, 1994.

After June 30, 1998, operating permits issued under this Section by the Agency for sources of air pollution that are not subject to Section 39.5 of this Act and are not required to have a federally enforceable State operating permit shall be required to be renewed only upon written request by the Agency consistent with applicable provisions of this Act and its rules. Such operating permits shall expire 180 days after the date of such a request. Before July 1, 1998, the Board shall revise its rules for the existing State air pollution operating permit program consistent with this paragraph and shall adopt rules that require a source to demonstrate that it qualifies for a permit under this paragraph.

Each air pollution construction permit for diesel powered backup generators to a source that is a data center, as defined in subsection (c) of Section 605-1025 of the Department of Commerce and Economic Opportunity Law of the Civil Administrative Code of Illinois, that is applied for 6 months after the effective date of this amendatory Act of the 104th General Assembly and that is required to have a federally enforceable State operating permit or a Clean Air Act Permit Program permit shall, in addition to any other applicable requirements, require each backup generator to: (i) meet standards at least as protective as Tier 4 standards for non-road diesel engines set out by the United States Environmental Protection Agency in 40 CFR 1039, as it exists on the effective date of this amendatory Act of the 104th General Assembly, and (ii) operate solely as an emergency or standby unit in accordance with 35 Ill. Adm. Code 211.1920, as it exists on the effective date of this amendatory Act of the 104th General Assembly. If a diesel powered backup generator becomes out of compliance with the Tier 4 standards for non-road compression-ignition engines during a power outage, the backup generator may (1) continue to operate for up to 24 sequential hours after becoming noncompliant with the Tier 4 standards or (2) operate when compliance is achieved. Notwithstanding any provision of law to the contrary, operation of the backup generator for up to 24 sequential hours after becoming noncompliant with the Tier 4 standards shall not be considered a violation of the permit.

Each air pollution construction permit for natural gas powered backup generators for a source that is a data center, as defined in subsection (c) of Section 605-1025 of the Department of Commerce and Economic Opportunity Law of the Civil Administrative Code of Illinois, that is applied for 6 months after the effective date of this amendatory Act of the 104th General Assembly and that is required to have a federally enforceable State operating permit or a Clean Air Act Permit Program permit shall, in addition to any other applicable requirements, require each backup generator to: (i) meet standards at least as protective as Tier 2 standards for non-road large spark-ignition engines set out by the United States Environmental Protection Agency in 40 CFR 1048, as it exists on the effective date of this amendatory Act of the 104th General Assembly, and (ii) operate solely as an emergency or standby unit in accordance with 35 Ill. Adm. Code 211.1920, as it exists on

the effective date of this amendatory Act of the 104th General Assembly. If a natural gas powered backup generator becomes out of compliance with the Tier 2 standards for non-road large spark-ignition engines during a power outage, the backup generator may (1) continue to operate for up to 24 sequential hours after becoming noncompliant with the Tier 2 standards or (2) operate when compliance is achieved. Notwithstanding any provision of law to the contrary, operation of the backup generator for up to 24 sequential hours after becoming noncompliant with the Tier 2 standards shall not be considered a violation of the permit.

CHAPTER 50: AURORA RESPONSIBLE DATA CENTER ORDINANCE

Section 50-1. Definitions.

a. Data Center: Has the same definition as in Section 49-103.3 of the Aurora Zoning Ordinance.

b. Greenhouse Gas (GHG): Any gas that contributes to atmospheric greenhouse effect, including CO_2, CH_4, N_2O, SF_6, HFCs, PFCs.

c. Power Usage Effectiveness (PUE): Has the same definition as Section 49-104.3(c)(25) of the Aurora Zoning Ordinance.

d. Water Usage Effectiveness (WUE): Has the same definition as Section 49-104.3(c)(25) of the Aurora Zoning Ordinance.

e. Noise Performance Standard: Has the same definition as Section 49-104.3(c)(25) of the Aurora Zoning Ordinance.

Section 50-2. Applicability.

This Chapter applies to all Data Centers within city limits.

Section 50-3. Performance Standards.

a. All Data Center Facilities developed after March 25, 2026, must meet the standards in Section 49-104.3(c)(25) of the Aurora Zoning Ordinance.

b. All generators providing back-up power for Date Center Facilities developed after March 25, 2026, must ~~continue to~~ meet the requirements outlined in 49-104.3(c)(25)(c) of the Aurora Zoning Ordinance. Unless the generators are supplying backup electrical supply during a power outage, testing of generators, regardless of

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whether installed before or after March 25, 2026, may only occur between the hours of 9:00 am and 5:00 pm Monday through Friday, and not on holidays. No more than two (2) generators may be tested simultaneously.

~~b.~~

c. Any replacement equipment, including but not limited to generators, chillers, and screening, must meet the standards in Section 49-104.3(c)(25) of the Aurora Zoning Ordinance for any Data Center Facilities developed after March 25, 2026.

~~c.~~

d. For purposes of this Section 50-3, "developed" means Data Center Facilities which do not have zoning entitlements pursuant to Chapter 49 of this Code as of March 25, 2026.

Section 50-4. Annual Reporting Required.

All Data Center Facilities must submit annually on or before April 1 of each year to the city's Department of Development Services the following:

a. An annual energy and water use data report via ENERGY STAR® Portfolio Manager for the previously calendar year; and

b. Third party tested noise level reports for the previous calendar year during both daytime hours and nighttime hours at the property line.

If the Data Center has not been operating for a full year, the data center must submit data for the months it has been in operation. The

CHAPTER 49: ZONING

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49-103.3 Definitions

3300 Warehouse, Distribution & Storage Services: This 3300 Use Category is comprised of establishments which primarily provide storage for general merchandise, refrigerated goods, other warehouse products ~~or computer systems and associated components~~. Uses in this category provide the facilities to store goods but do not sell the goods they handle. They may also provide a range of services related to the distribution of goods, such as labeling, breaking bulk, inventory control and management, light assembly, order entry and fulfillment, packaging, pick and pack, price marking and ticketing, or transportation arrangement ~~or processing and distribution of large amounts of data~~. This includes but is not limited to the following: Cartage (local), express hauling, ~~Electronic Storage Data Centers, cryptocurrency facilities,~~ and warehousing and distribution facilities, but excluding motor freight terminals. Motor Freight Terminals are categorized under 3310 Vehicle Terminals and Storage.

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(11) *Performance Standards.*

h. *Standards*

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5. Vibrations. ~~Vibration shall not be discernible at any property line to the human sense of feeling for three (3) minutes or more duration in any one (1) hour. No vibration at any time shall produce an acceleration of more than 0.1 gravities or shall result in any combination of amplitudes and frequencies beyond the "safe" range of Table 7 United States Bureau of Mines Bulletin No. 442 "Seismic Effects of Quarry Blasting", on any structure. The methods and equations of said Bulletin No. 442 shall be used to compute all values for the enforcement of this provision.~~No activity or operation shall cause or create earth borne vibrations in excess of the displacement values given below. Measurements shall be made at or beyond the adjacent lot line or the nearest residence district boundary line, as described below:

a. Vibration displacements shall be measured with an instrument or complement of instruments capable of simultaneously measuring in three (3) mutually perpendicular directions. The maximum vector shall be less than the vibration displacement permitted. For the purpose of this Section, steady state vibrations are vibrations which are continuous, or vibrations in discrete impulses more frequent than one hundred (100) per minute. Discrete impulses which do not exceed one hundred (100) per minute shall be considered impact vibrations.

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b. The maximum permitted displacements shall be determined by the following formula:

D = K / f

D = Displacement in inches

K = A constant to be determined by reference to the following tables

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

c. In the general industrial district, the maximum earth displacement permitted at the points described below shall be determined by use of the formula above and the appropriate K constant shown in Table 1 below:

Table 1

K Value to be Used in Measuring Vibrations

In any Neighboring Lot	**K**
Steady State	0.008
Impulsive	0.015
Less that 8 pulse per 24-hour period	0.037

In any Residential District	
Steady State	0.003
Impulsive	0.006
Less that 8 pulse per 24-hour period	0.015

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authorization of a conditional use for this purpose will not be affected by subsequent establishment of a residential, hospital or educational use within the restricted area established herein.

iv. Upon data center decommissioning and use change, obsolete roof-mounted or ground-mounted chillers and associated equipment must be removed.

c. Generators must be designed to meet with the following requirements.

i. Roof-mounted generators are prohibited.

ii. All generators must, at a minimum, comply with the state standards set forth in the Municipal and Cooptative Electric Utility Transparent Planning Act (Public Act 104-0458), or as subsequently amended, including but not limited to Tier 4 emission standards in 415 ILCS 5/39(a).

iii. All generators must be equipped with vibration isolation systems.

iv. Generators cannot be located within one thousand (1,000') feet of any residential, hospital or educational use, measured from the

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nearest part of the equipment yard to the property line of the residential, hospital or educational use. The authorization of a conditional use for this purpose will not be affected by subsequent establishment of a residential, hospital or educational use within the restricted area established herein.

v. Upon data center decommissioning and use change, obsolete generators and associated equipment must be removed.

d. Data Center Facilities must be designed to meet the following performance standards:

i. Noise Standards.

1. Data center facilities must comply with all federal and state regulations related to noise thresholds. In additional noise levels must not exceed the following constant-minimum noise thresholds as measured at the facility property line:

i. Daytime hours 57 dB (A) weighted 7am-7pm; and

ii. Nightime hours 47 dB (A) weighted 7pm-7am.

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ii. Vibrations Standards. Data center facilities must have continuous vibration monitoring at spacing of no less than 500 feet along all property lines within 1,000 feet of residential, hospital or educational uses.

iii. Energy Usage Standards.

1. Data center facilities must be designed to maintain a Power Usage Effectiveness of no more than one and two-tenths (1.2). As used in this Chapter "Power Usage Effectiveness" or "PUE" is defined as the ratio of total building energy consumption divided by the total Information Technology equipment (servers, switches, storage devices, etc.).

2. Data centers must be designed to comply with the energy code requirements specified in whichever of the following is most stringent:

i. The latest adopted International Energy Conservation Code (IECC);

ii. The latest published ASHRAE Standard 90.4 (Sections 6 & 8); or

to, or taller than, the tallest roof-mounted chiller or associated mechanical equipment, and must be designed to blend with the architectural style, materials, and color of the building.

ii. Ground Mounted Mechanical Equipment must be fully enclosed on all sides by a sound attenuating wall extension or other sound attenuating enclosure, subject to approval by the zoning administrator, equal in height to, or taller than, the tallest ground-mounted chiller and generator or associated mechanical equipment and must blend with the architectural style, materials, and color of the building.

f. On-Site Renewable Energy and Resilience Requirement.

i. All new or expanded data centers shall install and operate, at a minimum, one of the following:

1. On-Site Clean Energy: On-site renewable energy generation with a nameplate capacity sufficient to supply not less than twenty-five percent (25%) of the facility's peak electrical demand, as

CyrusOne prides itself on being a good corporate citizen and is seeking other opportunities to make a direct positive impact in Sangamon County. CyrusOne offers its employees paid volunteer days to allow them to support local causes important to them and make direct corporate contributions to local non-profit organizations that serve the community's needs. Through thoughtful leadership, design, and execution, the Applicant has designed a low-impact Project that will provide a significant number of benefits relative to other uses.

Each building at the data center campus will feature roof lines, mechanical equipment and screening that will range between 40 to 60 feet tall. Noise attenuation measures will be installed to maximize building performance while also improving the overall aesthetics of the buildings. Building designs may change over the course of the development timeline to meet technological advances and customer demands but are expected to remain within these height ranges. Cooling equipment for the facility will be located on the roof behind screening. Each building is currently designed to be supported by 105 backup electric generators, which will be housed outside of each building within sound attenuation enclosures. Buildings will be set back from the property boundaries to comply with the local data center regulations and to avoid the potential impact on neighboring land uses. 6(1)

The campus will include security fencing along the perimeter and will be secured 24/7. In addition to detention ponds on site, landscaping features will be included in the design to meet Sangamon County standards. A portion of the campus landscaping will include pollinator and wildlife friendly plants to meet the company's biodiversity standards established under their basis-of-design. Prior to applying for a building permit, the Applicant will consult the Illinois Pollinator-Friendly Solar Site Act to determine how it aligns with its current standards and determine opportunities to meet scoring metrics defined within those standards. All exterior lighting on the property will face downward with fixtures selected in accordance with dark sky compliance standards . A minimum of 272 parking spaces and 16 loading bays will be created on site with private roads and sidewalks providing circulation throughout the campus. A summary table showing the number of proposed parking spaces is shown at the top right-hand corner of the drawing labeled "Exhibit A". All internal roads and sidewalks will be constructed by CyrusOne.

The Applicant has coordinated with Sangamon County's Engineer to receive conceptual approval for the campus as demonstrated in the enclosed letter dated November 21, 2025 ("Exhibit F"). Upon receiving the requested Conditional Permitted Use approval, the Applicant will complete final engineering drawings and submit for the applicable permit approvals from the County Engineer's office. The Applicant's final plans will comply with all applicable Sangamon County and State of Illinois requirements where applicable.

The campus is designed to avoid impacts on neighboring properties and meets the county's special requirements for data centers and the standards for approval of a Conditional Permitted Use. Please see the following Section II that addresses key components of the Project and its operations. In addition, attached please see an Appendix that demonstrates how the Project will meet the comply with Sangamon County's zoning ordinance's standards for siting a data center and the standards for issuing a Conditional Permitted Use.

II. Compliance with Specific Key Issues

APPENDIX

RESPONSES TO STANDARDS FOR APPROVAL

17.58.080 Standards For Granting; Generally

No conditional permitted use shall be granted by the county board unless the conditional permitted use:

1. **Is the CPU so proposed that the proposed location, design and method of operation of such use will minimize the adjacent effects on the character of the surrounding area;**

   Response: The proposed data center campus is located directly north of a 4,000-acre utility scale solar farm that includes an existing substation interconnected to a MISO regulated 345 kV transmission system. Within a one-mile radius of the proposed campus, there is a total of seven residential structures with the two closest structures being either vacant or abandoned. The closest occupied structure is located ~3,450 feet (0.65 miles) northeast of the site.

   A data center campus is compatible with the utility scale solar farm, substation and transmission infrastructure that's immediately adjacent to the site. MISO has confirmed that the transmission system in the region is sufficient to serve the project and will not create an adverse impact on the region. The significant buffers and setbacks to residential buildings within one mile of the Project will ensure that the character of the surrounding area is maintained and that the use is compatible with the infrastructure that exists in the area today. Additionally, noise attenuation measures and dark-sky compliant lighting further confirm the minimization of adjacent effects to nearby residents.

   In addition, the Project will operate within applicable limits for environmental regulations, such as noise and air emissions, which will result in the Project operating in a low-impact manner.

2. **Is the CPU so proposed to be operated, designed and located so that public health, safety, and welfare will be protected?**

   Response: The Project will promote the general welfare of the Sangamon County by producing new construction jobs, long term employment opportunities and significant new tax revenue streams. The data center facility has been designed to be a good neighbor with minimal environmental impact – it will be set back from neighboring properties sufficiently to avoid impacting activities and uses on those properties. The Project is strategically located adjacent to existing infrastructure to minimize the need for large line extensions or upgrades. In addition, the facility will be completely fenced in and subject to security on a 24-hour basis.

   Operationally, the project will incorporate engineering controls and best management practices that are designed for compliance, safety, and minimizing environmental impacts. These include air pollution controls on emergency generators, secondary containment on fuel storage tanks, stormwater management features, routine inspections of equipment, standardized monitoring and maintenance procedures, and employee training on industry best practices.

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4. Taverns and liquor stores - that the following distances be maintained: 1) schools - one hundred (100) feet from the property line of the school to the property line of the tavern or liquor store; 2) churches - one hundred (100) feet from the church building to the tavern or liquor store building; and 3) residences - one hundred (100) feet from the tavern or liquor store property line to the residential structure or institutional care facility.

5. Adult-use cannabis business establishments as defined in Chapter 17.04:

    1. that the following distances be maintained from the principal structure of an adult-use cannabis business establishment to the property line of a use defined in Chapter 17.04 as a "sensitive area":

        1. Adult-use cannabis craft grower – 1,500 feet
        2. Adult-use cannabis cultivation center – 1,500 feet
        3. Adult-use cannabis dispensing organization (dispensary) – 250 feet
        4. Adult-use cannabis infuser organization (infuser) – 1,500 feet
        5. Adult-use cannabis processing organization (processor) – 1,500 feet
        6. Adult-use cannabis transporting organization (transporter) – 1,500 feet

    2. On-premise consumption of cannabis at cannabis dispensing organizations and smoking lounges in unincorporated Sangamon County is prohibited.

Response: None of these additional standards apply.

COMPLIANCE WITH SPECIAL REQUIREMENTS FOR DATA CENTERS

17.39.020 Special Requirements

Data Centers are subject to the following requirements:

A. Height. Shall not exceed one hundred (100) feet including any roof-mounted equipment or antennas.

Response: The building height inclusive of any roof-mounted equipment or antennas will not exceed 100 feet. The current building design utilized by CyrusOne features rooflines at 45 feet or less with mechanical equipment and enclosures at 60 feet or less.

B. Setbacks.

1. Perimeter Setback: The front, side, and rear yard setbacks shall be a minimum of one hundred fifty (150) feet from the property lines which form the outside perimeter of a Data Center Project Area.

Response: The current site plan more than complies with these minimum setbacks – the facility's infrastructure will be located at least 150 feet from neighboring property lines.

2. Residential Structure Setback: Data Centers of twenty-five (25) feet or less in height shall be setback seven hundred fifty (750) feet from the Data Center project property line to a residential structure. Data Centers greater than twenty-five (25) feet in height shall be setback from residential structures thirty (30) times the height of the Data Center. However, suppose the developer of the facility can obtain and record with the Sangamon County Recorder a written, signed, and notarized statement from the owner of the property containing said structure waiving this setback. In that case, the minimum setback from said structure shall be reduced to two hundred (200) feet.

Response: The proposed site plan complies with this requirement. The closest residential structure is an abandoned house located 1,855 feet from the property line. The actual data center building setback from this residence exceeds the minimum requirement of 1,800 feet using a maximum building height of 60 feet (30 x 60 feet = 1,800 foot setback from the nearest data center).

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C. Fencing. A fence of at least six (6) feet in height shall enclose and secure the Data Center and must comply with Chapter 17.44.

Response: Fencing will be 8 ft tall Ameristar Impasse II (or similar) fencing. The height, type and location of the fencing comply with Chapter 17.44.

D. Screening. A landscaping screen shall be provided for any part of the Data Center that is visible to and located within five hundred (500) feet of an existing dwelling. The landscaping screen shall be located between the required fencing and the perimeter of the Data Center Project Area. The screening shall include a continuous line of native evergreen foliage, and/or native shrubs, and/or native trees, and/or any existing wooded area. The landscaping shall not be required if the Data Center is not visible to a dwelling by virtue of the existing topography as determined by the Sangamon County Zoning Administrator.

Response: There are no dwellings within 500 feet of the Project. The closest residential structure is an abandoned house located 1,855 feet from the property line. A landscaping screen will be provided along the Thayer Road frontage outside of the curb cuts required for site and substation access and is called out on Exhibit B.

E. Lighting. If lighting is provided at the project, lighting shall be shielded and downcast such that the light does not spill onto the adjacent parcel.

Response: The Applicant's lighting plan will utilize dark sky compliant lighting fixtures and comply with this standard.

F. Noise. 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.

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EXHIBIT
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G(4)

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.

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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.

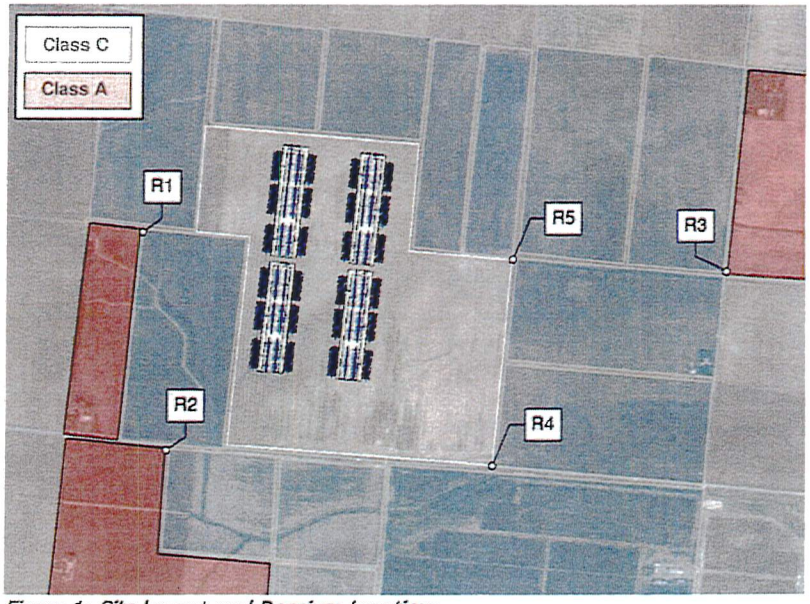

Figure 1: Site Layout and Receiver Locations

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