

**LEHIGH TOWNSHIP
NORTHAMPTON COUNTY, PENNSYLVANIA**

ORDINANCE NO. 2026-2

AN ORDINANCE OF THE BOARD OF SUPERVISORS OF LEHIGH TOWNSHIP, NORTHAMPTON COUNTY, PENNSYLVANIA, AMENDING THE LEHIGH TOWNSHIP ZONING ORDINANCE, ORDINANCE NO. 2009-07, AS AMENDED FROM TIME TO TIME BY DEFINING AND ADDING SPECIFIC REQUIREMENTS FOR DATA CENTERS AND DATA CENTER ACCESSORY USES.

WHEREAS, Article VI of the Pennsylvania Municipalities Planning Code, 53 P.S. § 10601, *et seq.*, authorizes Lehigh Township to enact, amend and repeal Zoning Ordinances within Lehigh Township; and

WHEREAS, the Board of Supervisors deems it to be in the best interest and general welfare of the residents of Lehigh Township to update and amend provisions of the Lehigh Township Zoning Ordinance to provide for Data Centers and Data Center Accessory Uses; and

WHEREAS, the Board of Supervisors of Lehigh Township desires to add provisions to the Zoning Ordinance relating to Data Centers and Data Center Accessory Uses;

NOW, THEREFORE, BE IT ORDAINED AND ENACTED, by the Board of Supervisors of Lehigh Township as follows:

Section 1. Section 180-15 of the Lehigh Township Zoning Ordinance, entitled Definitions, is amended to add the following definitions:

Data Center: A building or buildings which are occupied primarily by computers and/or telecommunications and related equipment where digital information is processed, transferred and/or stored, primarily to and from offsite locations. This use does not include computers or telecommunications related equipment that is secondary and customarily incidental to an otherwise permitted use on the property, such as servers associated with an office building. This use shall also include cryptocurrency mining, blockchain transaction processing, and server farms. A Data Center may include Data Center Accessory Uses.

Data Center Accessory Use: Ancillary uses or structures secondary and incidental to a Data Center use, including but not limited to: administrative, logistical, fiber optic, storage, and security buildings or structures; sources of electrical power such as generators used to provide temporary power when the main source of power is interrupted; electrical substations; utility lines; domestic and non-contact cooling water and wastewater treatment facilities; water holding facilities; pump stations; water towers; environmental controls (air conditioning or cooling towers, fire suppression, and related equipment); security features, provided such data center accessory uses/structures are located on the same tract or assemblage of adjacent parcels developed as a unified development with a Data Center. The use shall not

include energy generation systems used or intended to be used to supply power to the Data Center during normal operations.

Section 2. Data Centers and Data Center Accessory Uses Shall Be Permitted By Conditional Use in the Industrial (I) Zoning District at Section 180-22.D.

Section 3. Section 180-54 (Standards for Specific Uses) is amended to add Section 180-72.1, Data Centers and Data Center Accessory Uses as follows:

Section 180-72.1 – Data Centers and Data Center Accessory Uses

- A. Data Centers shall be permitted by conditional use in the Industrial (I) Zoning District when approved in compliance with the procedures, standards, and criteria contained in this section.
- B. For purposes of this section, sensitive receptors shall be defined as residential uses, schools, preschools, daycare centers, in-home daycares, long term care facilities, retirement and nursing homes, community centers, places of worship, parks (excluding trails), campgrounds, prisons, and dormitories.
- C. **Dimensional Standards.** The dimensional standards of Data Centers and Data Center Accessory Uses shall be in accordance with Section 180-22E.(1), with the following exceptions:
 - 1. Minimum lot area: 5 acres.
 - 2. The tract or assemblage of parcels developed as a unified development shall have direct access to an arterial, connector, or collector road, as defined in Chapter 180 Zoning, Article 7, Definitions.
 - 3. The maximum building height for a Data Center shall be 60 feet, inclusive of roof-mounted equipment such as cooling and ventilation systems, HVAC units and cooling towers.
 - 4. The maximum height of Data Center Accessory Uses shall be no greater than the height of the principal building.
 - 5. Data Centers and Data Center Accessory Uses shall be set back 250 feet from the boundary of Residential Zoning Districts or the lot line of any property developed with a sensitive receptor.
- D. **Buffer Yard.** A landscaped buffer yard is required between Data Centers and Data Center Accessory uses and any adjoining residential zoning district, sensitive receptor, or public roadway. The buffer yard shall comply with the following requirements:
 - 1. The buffer yard shall be at least 100 feet in width and may include the required yard area.
 - 2. The buffer yard width shall be measured perpendicular to the property line or street right-of-way line. Where a lot line drainage or utility easement is required, the buffer yard shall be measured from the inside edge of the easement.

3. The buffer yard shall be a landscaped area free of roads, sidewalks, driveways, parking lots, storage, buildings, and structures of any kind, except for emergency access roads or pathways and/or sidewalks as may be required by Township ordinances or fire or safety regulations and/or as may be required and/or approved by the Board of Supervisors.
4. The buffer yard shall be landscaped with evergreen trees, deciduous trees, flowering trees, and shrubs.
5. All areas of the buffer yard not covered with plantings shall be covered by a well-maintained, all-season vegetative ground cover, such as turf grass.
6. Earthen berms shall be constructed within buffer yards in accordance with Subsection E, Berm Requirements, herein.
7. Minimum planting requirements in buffer yards:
 - a. Trees and shrubs shall be planted in the following minimum quantities per 100 lineal feet of buffer yard, as measured parallel to the buffer yard.
 - b. Ten (10) evergreen trees having a minimum height of six (6) feet.
 - c. Five (5) deciduous trees having a minimum trunk caliper of two inches measured three feet above the top of the root ball and a minimum height of 12 feet.
 - d. Three (3) flowering trees having a minimum height of seven feet.
 - e. Ten (10) shrubs having a minimum height of 36 inches.
 - f. Minimum heights shall be as measured from finished grade after planting.
 - g. Plantings shall be arranged on the outside and top of the berm.
 - h. Plantings shall be arranged to provide a complete visual screen of the Data Center and accessory uses of at least 14 feet in height (measured in addition to the height of the berm) within three years.
 - i. Buffer yard plantings shall be provided in addition to any landscaping required by other Township regulations.
8. In the event that existing vegetation is adequate to meet the intent of the required buffer yard to screen the Data Center and Data Center Accessory Uses from adjoining residential zoning districts, sensitive receptors, and public roadways, the Board of Supervisors, upon recommendation by the Township Engineer and Planning Commission, may determine that existing topography and/or vegetation constitutes all or part of the required buffer yard.
9. The following note shall be placed on the conditional use plans and on the recorded land development plan: "Plant materials shall be permanently maintained and any plant material which dies shall be replaced by the landowner."

E. Berm Requirements

1. An earthen berm shall be constructed along the full length of required buffer yards between Data Centers and Data Center Accessory uses and any adjoining residential zoning district, sensitive receptor, or public roadway.
2. The berm shall have a minimum average height of 14 feet measured above existing grade on the outside of the berm. The berm shall not have a uniform height but shall vary in height by one or two feet along the length of the berm.
3. The berm shall have maximum side slopes of three horizontal feet to one vertical foot.
4. The berm shall have a minimum top width of 10 feet.
5. Fencing of the property is permitted, provided that fencing along public and private roadways is not chain-link, with or without slatted inserts, and does not include barbed wire or other similarly visibly intrusive deterrence device. An applicant shall not be required to comply with this requirement if fencing is fully screened from view by the berm.

F. Noise and Vibration

1. The applicant shall demonstrate through a sound study conducted by a professional acoustical expert that the sound generated by a Data Center and/or Data Center Accessory Uses during normal operations shall be limited to a maximum daytime (7:00 a.m. to 8:00 p.m. Monday-Friday) decibel level of 67 dB(A) and a maximum nighttime and weekend (8:00 p.m. to 7:00 a.m. Monday-Friday and all day Saturday and Sunday) decibel level of 57 dB(A) as measured from the property line of the use. Such sound study shall be conducted using Sound Level Meters described in ANSI S1.4-2104 and generally accepted methodology. A sound study shall be conducted at the following phases:
 - a. A preliminary study shall be conducted as part of the conditional use process. The preliminary sound study shall include recommended sound reducing materials or systems as needed to meet the aforesaid sound limits.
 - b. An interim sound study shall be conducted during the building permit approval process based upon the proposed user or users of the Data Center and Data Center Accessory Uses depicted on the building plans. Any sound reducing materials or systems recommended by interim sound study shall be incorporated into the construction plans for the use.
 - c. An as-built sound study shall be conducted six months after issuance of the certificate of occupancy and prior to the final escrow release for any land development phase. An as-built sound study may also be required thereafter by the Township. If it is determined by the as-built sound study that there is a violation of the aforesaid noise limits, it shall be considered a violation of this Ordinance.
2. Maximum decibel levels specified herein shall not apply during times of power outage, however the sound studies shall also evaluate and report anticipated decibel levels

when all emergency power generation equipment is running, including backup generators.

3. The applicant shall provide a vibration study prepared by a qualified professional that demonstrates that no vibration from the Data Center, Data Center Accessory Uses, or associated equipment will be perceptible to the human sense of feeling beyond the property line.

G. Water and Sewer

1. To reduce potential impacts of Data Centers on local water resources, the use of open, evaporative cooling systems shall be prohibited. Instead, Data Centers shall use closed-loop cooling systems (such as direct-to-chip liquid, immersion, dry, air, geothermal, or Adiabatic cooling processes), unless the developer can prove by "clear and convincing evidence" that a closed-loop system or alternate water conserving technology is infeasible.
2. If the use will be served by a public water supply, the applicant shall submit documentation from the public authority certifying that the public authority will supply the water needed.
3. If the use is to rely upon nonpublic sources of water, the applicant shall provide a water feasibility study. The purpose of the study is to determine if there is an adequate supply of water for the proposed use and to estimate the impact of the use on existing wells, groundwater, and surface waters in the vicinity. No Data Center shall be approved unless the water feasibility study demonstrates that the anticipated water supply yield is adequate for the project and that the proposed water withdrawals and discharges will not endanger or adversely affect the quantity or quality of groundwater supplies or surface waters in the vicinity. The water feasibility study shall include the following information at a minimum:
 - a. The projected water demands of the Data Center;
 - b. The source of water to be used;
 - c. A description of how water will be used, including the amount or proportion of water to be used for each purpose (e.g. cooling, humidity control, fire suppression, and domestic usage);
 - d. The long-term safe yield of the water source;
 - e. A description of the amount or portion of water withdrawn that will be recycled or discharged and by what means;
 - f. A geologic map of the area with a radius of at least one mile from the site;
 - g. The location of all existing and proposed wells within 1,000 feet of the property boundary, with a notation of the capacity of all high-yield wells;
 - h. The location of all surface waters, including perennial and intermittent streams, rivers, lakes, reservoirs, ponds, wetlands, springs, natural seeps, and estuaries, within 1,000 feet of the property boundary;

- i. A determination of the effects of the proposed water supply system on the quantity and quality of water in nearby wells, surface waters, and the groundwater table;
 - j. A long-term groundwater level monitoring plan for facilities that will provide water by means of a private supply well for uses other than domestic consumption (i.e., process, cooling, fire protection). For purposes of this section, area of influence (AOI) shall mean the greater of the horizontal extent of the production well(s)' cone of depression, as determined by the hydrogeologic report, or the area within 3,000 feet of the property boundary of the proposed project, or, in the case of an assemblage of parcels, within 3,000 feet of the exterior lines of the assemblage of parcels.
- (1) **Groundwater Monitoring Plan.** The applicant shall submit a Groundwater Monitoring Plan prepared by a professional licensed hydrogeologist with expertise in groundwater resource planning and management or another qualified professional or professionals approved by Lehigh Township. The Groundwater Monitoring Plan shall include:
- (2) An inventory of existing wells, springs, and other groundwater resources within the Area of Influence ("AOI"), including information on the location, ownership, depth to water, and usage for all wells;
 - (3) Description of a groundwater monitoring system that ensures accurate characterization of groundwater flow, groundwater quantity and quality, and flow systems within the AOI. The system shall consist of the following at a minimum:
 - i. At least one monitoring well at a point hydraulically upgradient from the point(s) of withdrawal in the direction of increasing static head that is capable of providing representative data of groundwater not affected by the facility, except when the facility occupies the most upgradient position in the flow system. In that case, sufficient downgradient monitoring wells shall be placed to determine the extent of adverse effects on groundwater from the facility; and
 - ii. At least three monitoring wells at points hydraulically downgradient in the direction of decreasing static head from the point(s) of withdrawal.
 - (4) Benchmark data collected prior to commencement of water withdrawal against which the impact of the water withdrawal may be compared in the future. Benchmark data shall include groundwater levels in all

monitoring wells recorded as a distance from the elevation at the well head referenced to mean sea level based on United States Geological Survey datum.

- i. Any additional information Lehigh Township deems necessary to effectively assess the impact of the proposed development on groundwater supplies.
 - ii. A statement of the qualifications and the signature(s) of the person(s) preparing the study.
4. The applicant shall provide proof of review and approval from the Delaware River Basin Commission for projects proposing:
 - a. Water withdrawals of 100,000 gallons per day (gpd) or more over a 30-day average from any source or combination of sources within the Delaware River Basin; or
 - b. Any consumptive water use of 20,000 gpd or more over a 30-day average from any water source.
5. The applicant shall demonstrate that adequate means of wastewater disposal, including domestic wastewater and wastewater used for cooling or industrial purposes, have been provided and approved by the Sewage Enforcement Officer and/or the Pennsylvania Department of Environmental Protection.
6. **Reporting.** The Data Center Operator shall submit to Lehigh Township annual reports on forms and in a manner prescribed by Lehigh Township. Reports shall include the following:
 - a. The quantity of all withdrawals, measured by means of a continuous-recording device, flow meter, or other method accurate to within 5% of actual flow, on a daily basis or such other frequency as may be approved by Lehigh Township;
 - b. Groundwater levels at all monitoring wells; measured on a daily basis or such other frequency as may be approved by Lehigh Township;
 - c. Precipitation data, measured on a daily basis or such other frequency as may be approved by Lehigh Township;
 - d. Certification of the accuracy of all measuring devices and methods to within 5% of actual flow;
 - e. Any loss of measuring or recording capabilities that occurred during the reporting period;
 - f. A running comparison of monitoring data comparing the data for the

recording period to the data for the same period in each of the previous five years;

- g. Any additional information Lehigh Township deems necessary to determine whether the data center's water withdrawal adversely impacts water supply. Any other information required by the state Department of Environmental Protection (DEP) and the Public Utility Commission (PUC).

H. Power Supply

1. If the applicant proposes to connect the Data Center to the electric grid, the applicant shall provide documentation from the applicable electric service provider certifying that the necessary capacity is available, and that electric service provider will serve the Data Center. Known impacts on electric rates or availability for other uses directly attributable to the Data Center project shall be noted.
2. Any energy generation system designed or used to supply power directly to a Data Center during normal operations, including solar, fossil fuel, or nuclear energy generating systems, shall not be considered part of the Data Center use. Such systems shall be considered a separate use and shall be approved according to the zoning regulations applicable to such use.

I. Emergency Management

1. The applicant shall submit an Emergency Response Plan (ERP) prepared by a qualified professional. The ERP shall:
 - a. Be reviewed and accepted by the Township Emergency Management Coordinator as part of the conditional use process;
 - b. Include detailed procedures for fire suppression, containment, ventilation, and evacuation;
 - c. Include an evaluation of the access roads and hydrant locations within the site to ensure suitable access for emergency equipment within the site;
 - d. Include provisions for access by emergency responders such as exterior access stair towers, Knox Boxes, etc.
 - e. Ensure that all first responders receive adequate training specific to the installed system;
 - f. Include provisions for annual fire safety inspections demonstrating compliance with fire safety standards to be performed by a qualified professional on behalf of the Data Center.
2. Any Data Center use proposing battery storage or any other device or group of devices capable of storing energy in order to supply electrical energy at a later time, whether the energy is stored for use on-site or off-site, shall demonstrate compliance with National Fire Protection Association (NFPA) Standard 855, Installation of Stationary

Energy Storage Systems, or similar standards and must include fire suppression systems designed specifically for battery storage.

3. No Data Center shall be approved unless the applicant demonstrates that procedures for fire suppression, containment, ventilation, and evacuation are sufficiently protective of public health, safety and welfare.
- J. **Environmental Impact Assessment** – An environmental impact assessment shall be performed and submitted with the conditional use application. The Assessment shall be prepared by a professional environmental engineer, ecologist, environmental planner, or other qualified individual. An assessment shall include a description of the proposed use including location relationship to other projects or proposals, with adequate data and detail for the Township to assess the environmental impact. The assessment shall also include a comprehensive description of the existing environment and the probable future effects of the proposal. The description shall focus on the elements of the environment most likely to be affected as well as potential regional effects and ecological interrelationships. At a minimum, the assessment shall include an analysis of the items listed below regarding the impact of the proposed use and the mitigation of any such impacts. The assessment shall also include detailed examination of public resources most likely impacted by the development plan and include the following focus areas:
 1. The potential for public nuisance to residents resulting from operations, including noise, glare, light, and visual obstacles.
 2. A stormwater management plan, demonstrating compliance with Ordinance No. 2007-04, Chapters 138 and 139, Stormwater Management Ordinance.
 3. Consistency with the municipal and county comprehensive plan. The applicant shall submit an assessment report of the impact of the proposed use on the goals of the respective plans. Where the proposed use conflicts with the comprehensive plan, the assessment report shall identify mitigation measures which may be undertaken to offset any degradation, diminution, or depletion of public natural resources.
 4. Additional considerations. The following shall also be addressed:
 - a. Alternatives analysis. A description of alternatives to the impacts.
 - b. Adverse impacts. A statement of any adverse impacts which cannot be avoided.
 - c. Impact minimization. Environmental protection measures, procedures and schedules to minimize damage to critical impact areas during and after construction, including design considerations.
 - d. Mitigation steps. Listing of steps structural controls proposed to minimize damage to site before and after construction.
 5. Critical impact areas. In addition to the above, plans should include any area, condition, or feature which is environmentally sensitive or which if disturbed during construction would adversely affect the environment.
 - a. Critical impact areas include, but are not limited to, floodplains, riparian buffers, streams, wetlands, slopes greater than 15%, highly acid or highly erodible soils, hydric soils, hydrologic soil groups, areas of high-water table, and mature stands of native vegetation and aquifer recharge and discharge areas.
 - b. A statement of impact upon critical areas and of adverse impacts which cannot be avoided.

- c. Environmental protection measures, procedures and schedules to minimize damage to critical impact areas during and after construction.

K. Aesthetics

1. Any Data Center and Data Center Accessory Use building façade that faces a road, or existing residential use must incorporate at least two of the following design elements every 150 horizontal feet:
 - a. A change in building material, pattern, texture, or color;
 - b. A change in building height;
 - c. Building step-backs or recesses having a minimum depth of five (5) feet;

L. Parking

1. Data Centers are to be provided with at least one parking space per 8,000 square feet of floor area designed and intended to be accessible regularly by employees, or one and one-half parking spaces for every one employee, based on the maximum number of employees on site during the largest shift, whichever is lesser.

M. Other Requirements

1. All access points for Data Centers shall be to and from a collector or arterial roadway built to Township standards.
2. The use shall comply with the general performance standards set forth in Article III and all other applicable Township regulations.
3. A traffic impact study prepared by a professional engineer, licensed in the State of Pennsylvania, pursuant to ZO Section §180-41 Traffic Study Criteria.
4. Applicant shall submit with the conditional use application the following additional information, documentation, studies, and reports as specifically required below and as necessary to demonstrate consistency of the proposed use with each of the following topics:
 - a. A written project narrative describing the nature of all activities and operations to be conducted on the site, including the general scale of the operation, floor space requirements for each activity, the total number of employees on each shift, hours of operations, etc.;
 - b. General standards for a conditional use as set forth in § 180-128.
 - c. General performance standards set forth in Article IV relative to any environmental or other impacts (e.g., odor, noise, smoke, dust, litter, glare, vibration, electrical disturbance, wastewater, stormwater, solid waste, etc.) that are likely to result from the use and any specific measures to be employed to mitigate or eliminate any such negative impacts;

- d. A current Pennsylvania Department of Conservation and Natural Resources PNDI environmental review receipt for the project and additional evidence as necessary to demonstrate that no endangered species will be negatively impacted by the proposed use;
 - e. A traffic impact study as required elsewhere herein; and
 - f. Adequacy of proposed off-street parking accommodations for employees and other vehicles anticipated to access the site.
5. LEED (Leadership in Energy and Environmental Design) Certification is strongly encouraged as well as roof-mounted accessory solar energy systems.
- N. **Decommissioning and Site Restoration** – Upon cessation of operation of the Data Center or any Data Center Accessory Use for a period of at least eighteen (18) months, except where the owner or operator intends to recontinue such use in the future, the owner or operator of the use shall remove all generators, tanks, battery systems, electrical infrastructure, and related improvements associated with such use from the subject property. Said removal activities shall commence within one (1) year of the conclusion of the eighteen (18) month period referenced above and shall be completed no later than three (3) years following the commencement of the removal activities. To ensure removal as described in this Section, the applicant shall provide a Decommissioning and Site Restoration Bond or Letter of Credit, in a form acceptable to the Township and naming the Township as a beneficiary, sufficient to remove all generators, fuel tanks, battery systems, electrical infrastructure, and related improvements and to restore the site for future reuse. If the owner or operator of the use fails to comply with this Section, the Township may utilize such financial security to perform or cause the performance of the removal of all generators, fuel tanks, battery systems, electrical infrastructure, and related improvements associated with the abandoned use. Such financial security shall be maintained until the completion of the removal activities described in this Section and may be reviewed periodically by the Township to ensure that the amount of the security remains adequate to secure removal.

Section 4: Severability. If any sentence, clause, section, or part of this Ordinance or of the Zoning Ordinance is for any reason found to be unconstitutional, illegal or invalid, such unconstitutionality, illegality or invalidity shall not affect or impair any of the remaining provisions, sentences, clauses, sections, or parts hereof. It is hereby declared as the intent of the Board of Supervisors that this Ordinance and the Zoning Ordinance would have been adopted had such unconstitutional, illegal or invalid sentence, clause, section or part thereof not been included herein.

Section 5. Repealer. All Ordinances or parts of Ordinances conflicting with any provision of this Ordinance are hereby repealed insofar as the same affects this Ordinance.

Section 6. Codification. Pursuant to the Lehigh Township Zoning Ordinance and the Pennsylvania Municipalities Planning Code, the Lehigh Township Zoning Ordinance shall hereby be codified to incorporate the above-referenced amendments.

Section 7. Effective Date. This Ordinance shall take effect five (5) days after its adoption.

ENACTED AND ORDAINED, into law by the Township of Lehigh, Northampton

County, Pennsylvania, this ____ day of _____, 2026.

ATTEST:

TOWNSHIP OF LEHIGH
BOARD OF SUPERVISORS

Alice Rehrig, Township Manager

Michael Jones, Chairman