

**LONDON GROVE TOWNSHIP
CHESTER COUNTY, PENNSYLVANIA**

ORDINANCE NO. 231 – 2026

AN ORDINANCE OF THE TOWNSHIP OF LONDON GROVE, CHESTER COUNTY, PENNSYLVANIA, AMENDING THE LONDON GROVE TOWNSHIP ZONING ORDINANCE OF 2017, SECTION 27-202 TITLED “DEFINITION OF TERMS” TO ADD DEFINITIONS FOR DATA CENTER, DATA CENTER ACCESSORY USE, DATA CENTER CAMPUS, PRINCIPAL FAÇADE, PRINCIPAL BUILDING FAÇADE AND SENSITIVE RECEPTOR; SECTION 27-1201 TITLED “PURPOSE AND SPECIFIC INTENT” TO AMEND THE PURPOSE STATEMENT FOR THE INDUSTRIAL DISTRICT; SECTION 27-1203 TO ADD A SUBPARAGRAPH I TO ALLOW DATA CENTER AND DATA CENTER CAMPUS BY CONDITIONAL USE IN THE INDUSTRIAL DISTRICT; TO ADD A NEW SECTION 27-1847 TITLED “STANDARDS FOR DATA CENTER AND DATE CENTER CAMPUS”; AND TO AMEND SECTION 27-2009.E TO ADD A PARKING REQUIREMENT FOR A DATA CENTER AND DATA CENTER CAMPUS.

BE IT ENACTED AND ORDAINED by the Board of Supervisors of London Grove Township that the London Grove Township Zoning Ordinance of 2017, as amended, is hereby further amended as follows:

SECTION 1. Section 27-202, titled, “Definition of terms” shall be amended to add the following definitions:

DATA CENTER

A building primarily used for housing and operating computer systems and associated equipment, including servers, data storage and processing systems, and accessory infrastructure such as cooling systems, power generators, electrical substations, and network hardware.

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; 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 lot or assemblage of lots developed as a unified development with a Data Center.

DATA CENTER CAMPUS

All of the structures and real estate owned, controlled, leased or otherwise occupied primarily for the use and purpose as a Data Center, including (i) Data Centers; (ii) Data Center Accessory Uses; and (iii) all other systems, equipment, piping, conduit and other ancillary equipment, structures, and other appurtenances that are incidental to and/or needed for the construction, support, operation, repair, maintenance and/or protection of the Data Center or the Data Center Campus.

PRINCIPAL BUILDING

A structure in which the primary use of a lot is conducted, designed to be conducted or intended to be conducted.

PRINCIPAL FAÇADE

The facade of a building or structure along the street on which the building has frontage, excluding alleys and other rights-of-way. On a corner lot, the property owner shall select and declare which facade is the principal facade.

SENSITIVE RECEPTOR

Buildings used for residences (including institutional uses with a residential component), schools, day care centers, nursing homes, parks and hospitals.

SECTION 2. Section 27-1201, titled, "Purpose and Specific Intent" shall be amended to state as follows:

"§27-1201. Purpose and Specific Intent. The I District is intended to accommodate intensive agricultural uses, light industrial, data centers, wholesale and warehousing uses, contractor establishments and their respective accessory uses. These activities have certain characteristics in common, such as a requirement for good roads capable of accommodating truck traffic, and an independence from surrounding uses. These uses may have additional impacts upon surrounding uses beyond the traffic generated and aesthetics."

SECTION 3. Section 27-1203, titled, "Uses Permitted By Condition" shall be amended to add a new subparagraph I which shall provide as follows:

"§27-1203.I. Data Center and Data Center Campus subject to the provisions of Section 27-1847."

SECTION 4. Section 27-1206, titled, "Area and Bulk Regulations: General, All Uses" shall be retitled, "Area and Bulk Regulations: General, All Uses Except Data Center and Data Center Campus".

SECTION 5. A new Section 27-1847 titled "Standards for Data Centers and Data Center Campuses" shall be adopted and provide as follows:

“§27-1847. Data Centers and Data Center Campus. Data Centers and Data Center Campuses shall be permitted in the Industrial District by conditional use of the Board of Supervisors subject to the applicant proving compliance with the following criteria and standards.

1. Area and Bulk Regulations. The area and bulk regulations in Section 27-1206.1 shall not apply to a Data Center or a Data Center Campus. The area and bulk regulations in this Section 27-1847 shall apply to a Data Center and Data Center Campus.

2. Minimum Lot Area.

Lot with a Data Center building footprint of 100,000 square feet or less in area - 5 acres.

Lot with a Data Center building footprint greater than 100,000 square feet in area - 10 acres.

Data Center Campus - regardless of the size of the buildings used for Data Centers on the campus - 10 acres.

3. Minimum Setbacks. Data Centers and Data Center Accessory Uses shall be set back a minimum of 100 feet from a lot developed with a Sensitive Receptor and from a public street. All other Data Centers and Data Center Accessory Uses shall be setback a minimum of 50 feet from all property lines.
4. Maximum Height. The maximum height of a building used for a Data Center or buildings within a Data Center Campus Data shall be 50 feet. Data Center Accessory Uses not installed on the rooftop shall not exceed 25 feet.
5. Screening of mechanical equipment. Data Center Accessory Uses, including ground level and roof top mechanical equipment used for cooling, ventilating, or otherwise operating the Data Center, shall be screened from view on all sides or setback adequately from the building edge so as to not be visible from adjoining properties and public roads. Such screen may incorporate perforated surfaces as necessary to permit ventilation of the equipment.
6. Building Design Requirements. A building used as a Data Center shall adhere to the following design requirements. The applicant shall submit elevations/renderings of all buildings used for a Data Center with the conditional use application.
 - (a) The Principal Building Facade shall require a horizontal offset of at least ten feet at intervals of no more than 150 linear feet (measured horizontally).

- (b) No more than 80 percent of a Principal Building Facade shall consist of one building material or one color, texture, or pattern.
 - (c) The Principal Building Facade shall require fenestration, step-back(s), cantilever(s), projection(s), or architectural elements extending horizontally across at least 60 percent of the facade.
- 7. Energy Usage. An applicant for a Data Center and Data Center Campus shall prepare a Utility Impact Study in accordance with Section 27-1827 which shall be submitted with the conditional use application. The Study shall include an energy usage plan prepared by a professional engineer which provides the following information:
 - (a) Annual electricity demand for the Data Center.
 - (b) Source of energy supply for the Data Center.
 - (c) Energy storage capacity (if applicable).
 - (d) Proposed sources of back-up power to be installed.
- 8. Noise and Vibration.
 - (a) The applicant shall submit a pre-construction noise and vibration study with the conditional use application prepared and sealed by a qualified professional. Such qualified professional shall be an engineer licensed in the Commonwealth of Pennsylvania or other environmental or technical professional with demonstrated education, training and experience in acoustical noise or vibration analysis applicable to the scope of work being performed (defined herein as "Qualified Professional") to include the predicted noise and vibration levels from the operation of the Data Center.
 - (b) Simultaneous Operation Assumption. All noise evaluations, studies, modeling, and compliance determinations shall assume the concurrent operation of all generators, cooling systems, mechanical equipment, and other noise producing devices operating at maximum rated capacity, unless a more restrictive operating condition is required by approval.
 - (c) Within 180 days following issuance of a use and occupancy certificate and commencement of operations at the Data Center, the applicant shall submit to the Township an as-built post-construction noise and vibration study.

The study shall:

- (1) Be conducted by a Qualified Professional using applicable ANSI standards and generally accepted criteria.

- (2) Demonstrate compliance with all applicable noise regulations set forth in the Data Center Noise Standards Tables at the end of this section. Compliance shall be demonstrated using objective sound level limits expressed in A-weighted decibels (dBA), measured and evaluated in accordance with standardized methodologies acceptable to the Township.
 - (3) Include sound measurements taken at all property lines.
 - (4) Include measurements taken during normal operations, peak cooling load, and during operation of emergency generators under load.
 - (5) Address low-frequency noise impacts, including compliance with applicable dBC limits set forth in the Data Center Noise Standards Tables.
 - (6) Vibration Standards to be used in the study. Vibration shall be evaluated using two distinct criteria: (a) Building Damage: Ground vibration shall not exceed 0.2 to 0.5 inches per second peak particle velocity (PPV), measured in accordance with USBM RI 8507 or successor standard; and (b) Human Perception: Vibration levels shall not exceed 65 VdB, measured in accordance with ISO 2631-1 or successor standard.
 - (7) Identify all measurement locations, instrumentation used, calibration documentation, testing methodology, operational conditions during testing, and meteorological conditions.
 - (8) The timing of the post construction noise and vibration study shall not preclude enforcement by the Township at any time upon identification of a violation. The applicant shall provide reasonable access to monitoring data, equipment specifications, and operating conditions to the Township Engineer, designee or other consultant acting on behalf of the Township.
- (d) If the post construction study demonstrates non-compliance with any applicable noise or vibration standard, the applicant shall, within 30 days of written notice from the Township, submit a corrective action plan prepared by a Qualified Professional. All violations shall be fully remediated within a timeframe approved by the Township, but in no event later than 90 days following Township notice of non-compliance, unless extended by the Township for good cause shown.
- (e) If the pre-construction noise study establishes a baseline sound level in excess of the maximum sound level permitted under Data Center Noise Standards Tables, the post-construction study shall demonstrate that operations of the proposed use do not increase baseline ambient sound levels. Sound levels within 1 dBA of ambient sound levels will meet this requirement.

(f) Objective Noise Standards. Noise limits shall be established by land use category, measurement location, time-of-day, and averaging period, and shall include provisions for instrumentation and low-frequency noise evaluation.

(g) The Township may require additional noise and vibration testing upon receipt of substantiated complaints or following material modification, replacement, or addition of mechanical equipment, cooling systems, generators, or other vibration-generating equipment.

(h) If initial monitoring or complaints indicate a probable violation, the Township may require interim mitigation measures, which may include operational modifications, equipment limitations, or temporary curtailment of specific noise producing activities until compliance is demonstrated.

(i) Data Center Noise Standards Tables

Data Center Noise Standards Tables

The following tables establish objective noise limits, modeling requirements, and enforcement procedures applicable to Data Center use. These standards shall supersede noise standards set forth in any noise chapters or noise provisions of the Code for Data Centers only.

Table 1: Data Center Noise Limits, Measurement, and Compliance Requirements

Category	Requirement
Applicable Uses	Data Centers, including all accessory mechanical equipment, generators, cooling systems, and substations
Measurement Basis	A-weighted sound levels (dBA), unless noted otherwise for low-frequency noise
Receptor Locations	Measurements and modeling shall be conducted at or beyond the nearest property line and at Sensitive Receptors , when present
Operating Condition Assumption	All compliance evaluations shall assume simultaneous operation of all generators, cooling equipment, and other noise-producing devices at maximum rated capacity

Table 2: Numeric Noise Limits by Zoning Use

Receiving Land Use	Daytime (7:00 AM – 10:00 PM)	Nighttime (10:00 PM – 7:00 AM)
Residential or Sensitive Receptor	55 dBA Leq (1-hour)	45 dBA Leq (1-hour)
Mixed-Use / Commercial	60 dBA Leq (1-hour)	50 dBA Leq (1-hour)
Industrial	65 dBA Leq (1-hour)	55 dBA Leq (1-hour)

Short-term tonal or impulsive noise exceeding the above limits by 5 dBA or more shall constitute a violation.

Table 3: Low-Frequency Noise Criteria

Parameter	Requirement
Frequency Sensitivity	C-weighted sound levels (dBC), capturing enhanced sensitivity to low-frequency noise
Measurement Metric	Equivalent continuous sound level (Leq, 1-hour) in dBC
Measurement Locations	At the nearest property line and at Sensitive Receptors, when present
Daytime Limit (7:00 AM – 10:00 PM)	70 dBC Leq (1-hour)
Nighttime Limit (10:00 PM – 7:00 AM)	60 dBC Leq (1-hour)
Tonal / Narrowband Noise	Clearly perceptible low-frequency tonal noise shall require mitigation regardless of overall dBC compliance, as determined by the Qualified Professional or the Township based on clearly perceptible tonal characteristics
Applicability	Limits apply under simultaneous operation of all generators, cooling systems, and mechanical equipment

Table 4: Modeling and Study Requirements

Requirement	Standard
Pre-construction Study	Required with conditional use application
Post-construction Verification	Required within 180 days of commencement of operations
Prepared By	Qualified Professional with demonstrated noise expertise

Modeling Methodology	ISO 9613-2, CadnaA, SoundPLAN, or equivalent accepted industry model
Meteorological Assumptions	Downwind propagation, ISO-conservative conditions
Equipment Data	Manufacturer sound power levels and octave-band spectra
Low-Frequency Evaluation	Required where large generators or cooling systems are used

Table 5: Measurement Procedures

Element	Requirement
Instrumentation	Type 1 or Type 2 ANSI-certified sound level meter
Calibration	Pre- and post-measurement field calibration required
Measurement Duration	Minimum 15 minutes per location unless otherwise specified. Sound level limits expressed as hourly equivalent levels (Leq, 1-hour) may be evaluated using shorter-duration measurements, including the minimum durations identified in this table, where such measurements are conducted under steady-state operating conditions and are representative of normal operations.
Operating Conditions	Measurements shall include peak cooling load and generator operation under load
Background Noise	Baseline ambient levels documented prior to construction

Table 6: Compliance

Item	Requirement
Material Increase Definition	An increase of ≥ 3 dBA above baseline ambient sound level
Violation Determination	Exceedance of numeric limits or material increase
Retesting Authority	Township may require additional testing following substantiated complaints or equipment changes

9. Water.

- (a) A Data Center shall be connected to public water.

- (b) As part of the conditional use application, the applicant shall prepare a Utility Impact Study in accordance with Section 27-1827. The Study shall include a water usage plan for both direct and indirect water consumption.
- (c) The applicant shall provide documentation from the public water provider that there is sufficient water available to serve the Data Center without impacting water pressure or availability of water to other users in Township. No Data Center shall be approved unless the applicant demonstrates that the anticipated water supply yield is sufficient for the Data Center and will not adversely impact water pressure or availability of water to other users in the Township.
- (d) The Data Center shall not use groundwater or direct withdrawals from surface watercourses as its primary source of water for cooling purposes.
- (e) The Data Center shall be designed to include air-cooled or closed-loop water circulation systems to cool processing equipment. An applicant may propose an alternative cooling system that is demonstrated to use less water and energy than closed loop systems which alternative cooling system must be approved by the Township.
- (f) The applicant shall submit a drought response plan to demonstrate compliance with state, water supplier and local drought declaration requirements.
- (g) After the data center is operational, the applicant/owner shall provide annual reports to the Township which provide water usage records for the use.

10. Wastewater Disposal.

- (a) A Data Center shall be connected to public sewer.
- (b) The applicant shall submit an analysis of wastewater disposal needs with the conditional use application which indicates the quantity of wastewater generation expected from sewage and water discharge as part of the Data Center's HVAC system.
- (c) Any untreated discharge of wastewater generated at the Data Center may not be discharged to stormwater systems or surface waters.
- (d) The applicant shall submit documentation certified by the municipal authority that the municipal authority can support the conveyance and treatment needed.

11. Energy Supply.

- (a) The applicant for a Data Center shall provide with the conditional use application an energy usage plan which shall provide or identify, at a minimum:
 - (i) Annual electricity demand.
 - (ii) Energy supply sources that will be utilized.
 - (iii) Energy storage capacity (if applicable).
 - (iv) Proposed sources of back-up power.
 - (v) Documentation of efforts to maximize use of renewable and/or clean energy for all electrical and cooling needs, including those to reduce the need for new electric generation by incorporating the best available energy efficiency into the design of data center servers, cooling units, and the building structure.
 - (vi) If interconnecting to the energy grid, documentation of the energy utility interconnection approval process, and provide the following:
 - [1] Documentation that an application for the project has been filed with the electric utility provider, and the required fee has been paid.
 - [2] Documentation that a transmission security agreement has been signed by all necessary parties.
 - [3] The date that the electric utility provider provided for the proposed energization of the data center.
- (b) If the Data Center intends to use backup generators, the following criteria shall apply.
 - (i) Diesel generators shall meet Tier 4 emission standards of the U.S. Environmental Protection Agency.
 - (ii) Diesel generators shall undergo annual testing and reports shall be provided to the Township to ensure that the generators are performing as designed and that emissions do not exceed permitted limits.
 - (iii) Emergency energy generation that is diesel, gasoline, or similarly fueled shall be used only at the following times:
 - [1] When the primary source of energy is not available due to an emergency outage.
 - [2] During routine maintenance, or readiness testing for a short duration of time and capped at 100 hours per year.

[3] Routine maintenance testing of back-up fossil fuel-powered generators shall be restricted to the hours of 10:00 am through 4:00 pm Monday through Friday. (Use for peak shaving or supplying power to the grid is prohibited.)

- (iv) The applicant shall design and locate the emergency energy generation systems to limit noise and visual impacts as much as possible.
- (v) The operator shall maintain a public website announcing the times when the generators will be in operation. Any operation of the backup generators for testing purposes shall be announced on the website at least 24 hours in advance. The operator shall also notify the Township at least 24 hours in advance of a test. The operator shall provide the address of the website where the notices required by this Section are published.

12. Alternative Energy Systems.

- (a) Any energy generation system designed or used to supply power directly to a Data Center during normal operations, including solar, wind, fossil fuel, or nuclear energy generating systems, shall not be considered part of the Data Center use but shall be subject to existing municipal or utility regulations. Such systems shall be considered a separate principal use and shall be approved according to all applicable state and federal regulations along with municipal zoning regulations applicable to such use. The applicant shall select, design and locate the energy generation systems to limit noise, emissions, and visual impacts to adjacent and nearby uses as much as possible.
- (b) Electric Utility Substations on the same property as the Data Center they serve must be located on the side or rear of a Data Center principal building so they are screened from public view and shall not be located in a required front yard. On-site substations do not require a buffer or screening between the Data Center Principal Building and the substation.
- (c) Data Center electric utility substations visible from an arterial roadway must include a combination of year-round opaque landscaping and screening walls to minimize visual impact.
- (d) Burying power lines serving the property is strongly encouraged. On-site power lines of 34.5 kV and below must be buried.

13. Emergency Management.

- (a) The applicant shall submit an emergency response plan (ERP) with the conditional use application prepared by a qualified professional. The ERP shall:

- [1] Be reviewed and accepted by the local fire department, emergency management services and Township emergency management coordinator as part of the conditional use process;
 - [2] Include detailed procedures for fire suppression, containment, ventilation, and evacuation;
 - [3] Include an evaluation of the access roads and hydrant locations within the site to ensure suitable access for emergency equipment within the site;
 - [4] Ensure that all first responders receive adequate training specific to the installed system; and
 - [5] 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.
- (b) Costs incurred, including specialized training for fire and EMS personnel, shall be reimbursed by the applicant, including future ongoing training specific to the Data Center's ERP.
 - (c) Any Data Center 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 an equivalent standard and must include fire suppression systems designed specifically for battery storage.
 - (d) 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.
 - (e) Each Data Center shall provide 24-hour emergency contact signage that is visible at the main entrance. Such signage shall include the company name (if applicable), the owner/representative's name, the telephone number, and the corresponding local power company's name and telephone number.
 - (f) The applicant shall coordinate with the municipal emergency management coordinator to ensure there is adequate radio coverage for emergency responders within all on-site buildings and facilities, based upon existing coverage levels of the municipal public safety radio

communications system exterior to on-site buildings. The applicant shall install enhancement systems, as needed, to achieve compliance.

14. Construction Plans. Applicant shall coordinate with the Township and develop a construction plan which shall be adhered to by all vehicles and equipment involved in the construction of the Data Center including construction deliveries, equipment and contractors, to minimize disruption to the traffic in the vicinity of the subject property. This plan shall include appropriate times and locations for access by construction vehicles and anticipated delivery of large equipment. This construction plan must be approved by the Township as part of final land development plan approval. The Township shall have the authority to require more detailed information be added to the plans as well as consistent updates as the project progresses.
15. Electronic Waste. An Electronic Waste Plan shall be submitted with the conditional use application outlining procedures for safe removal and recycling and/or disposal of server infrastructure, hazardous materials, batteries, electronic waste, and related products that meet all state and federal requirements, which will apply in cases when the equipment within the data center is updated or decommissioned. The report shall be subject to review and comment by the Township. The Township shall have the right to require supplemental or amended reports based upon comments by the Township prior to issuance of conditional use approval.
16. Decommissioning.
 - (a) The applicant shall submit with the conditional use application a decommissioning plan prepared by a qualified professional. The plan shall outline the procedures for safe shutdown, removal of equipment, disposal or recycling of materials, and site restoration.
 - (b) The owner of the Data Center must submit a notification of closure if operations are permanently ceased.
 - (c) Decommissioning must begin within one year of cessation of Data Center operations, or upon notice of abandonment by the operator, whichever occurs first. Decommissioning shall be completed within 18 months thereafter, unless extended by the Township for good cause.
 - (d) Standards for Decommissioning.
 - [1] All above-ground structures, equipment, and accessory facilities shall be removed.
 - [2] Hazardous materials, including batteries, fuel, or refrigerants, shall be disposed of in compliance with state and federal law.

- [3] Disturbed soils shall be stabilized and re-vegetated.
 - [4] Any utility connections shall be safely disconnected and capped
 - [5] The site shall be restored to a condition compatible with surrounding land uses or consistent with the most restrictive adjacent zoning district.
- (e) The Township shall require financial security (with related agreements) to be posted to cover the full cost of decommissioning and site restoration if not done in a timely fashion by the operator/owner of the Data Center.”

SECTION 6. The Table in Section 27-2009.E shall be amended to add the following:

<u>Land Use Description</u>	<u>Parking Supply</u>
Data Center	1 space for every employee during largest shift

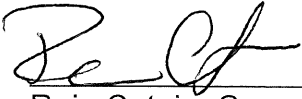
SECTION 7. SEVERABILITY. If any sentence, clause, section or part of this Ordinance is for any reason found to be unconstitutional, illegal or invalid, such unconstitutionality, illegality or invalidity shall not affect or impair any of the remaining provisions, sentences, clauses, sections, or parts hereof. It is hereby declared as the intent of the Board of Supervisors that this Ordinance would have been adopted had such unconstitutional, illegal or invalid sentence, clause, section or part thereof not been included herein.

SECTION 8. REPEALER. All Ordinances or parts of Ordinances conflicting with any provision of this Ordinance are hereby repealed insofar as the same affects this Ordinance.

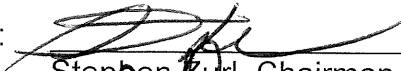
SECTION 9. EFFECTIVE DATE. This Ordinance shall be effective immediately as provided by law.

ENACTED AND ORDAINED this 9th day of September, 2026.

ATTEST:


Rain Catoia, Secretary

**BOARD OF SUPERVISORS OF
LONDON GROVE TOWNSHIP**

BY: 
Stephen Zurl, Chairman


David Connors, Member


Eric Sipple, Member