

Ordinance No. 2026-568

AN ORDINANCE TO AMEND THE CITY OF NEW CASTLE ZONING CODE TO ESTABLISH STANDARDS FOR THE REVIEW, SITING, AND OPERATION OF DATA CENTERS

WHEREAS, the Council of The City of New Castle (“City Council”) possesses the authority to adopt, amend, modify, and repeal the City of New Castle Municipal Code (“City Code”); and

WHEREAS, the City Council has determined that it is in the best interests of the City and its residents to proactively regulate data center development to ensure compatibility with surrounding land uses and to protect public health, safety, and welfare; and

WHEREAS, data centers present unique siting and operational considerations, including energy demand, backup power systems, cooling systems, noise, and potential environmental impacts; and

WHEREAS, it is in the public interest to adopt clear standards governing buffers from sensitive receptors, noise performance, cooling technologies, air quality, electrical capacity coordination, abandonment, and decommissioning security; and

WHEREAS, this Ordinance proposes standards addressing data center siting, noise, cooling systems, generator technology, utility coordination, abandonment, and financial assurances, which the City finds instructive for adaptation of data centers and application within the City of New Castle; and

WHEREAS, the City Council further finds that the provisions of this Ordinance are rationally and reasonably related to, substantially advance, and are narrowly tailored to achieve its goal of protecting and preserving legitimate governmental interests, including, but not limited to, the protection and preservation of the public health, safety, prosperity, general welfare and quality of life.

NOW, THEREFORE, making the express finding that the provisions of this Ordinance enhance and promote the health, safety, and welfare of the City of New Castle, be it ordained by the Council of the City of New Castle Council as follows:

SECTION 1. City Code Chapter 230, Zoning, Section 230-1(B), is hereby amended by adding the following definitions to correspond with the alphabetical order of the current list of definitions (with deleted text identified by bold, strikethrough and new language identified by bold, underlined text):

B. Definitions

Data Center. **A facility, campus, building, or portion thereof designed, constructed, or operated primarily for the processing, storage, management, transmission, distribution, exchange, or recovery of digital data and information through networked computers, servers, storage systems, telecommunications equipment, networking equipment, and related information technology systems. A Data Center includes all supporting and integral infrastructure necessary for its operation, whether located within or outside the principal building, including but not limited to electrical infrastructure; utility service equipment; substations; transformers; switchgear; power distribution equipment; uninterruptible power supply (UPS) systems; battery energy storage systems; backup power systems; emergency generators and associated fuel storage and delivery systems; cooling, ventilation, air conditioning, heat rejection, and other mechanical systems; water and thermal management systems; fire detection and suppression systems; monitoring, security, and building management systems; telecommunications and fiber infrastructure; and all other ancillary equipment, structures, and improvements that support the continuous and reliable operation of the facility.**

SECTION 2. City Code, Chapter 230, Zoning, Section 230-25(B), Industrial District I, is hereby amended as follows (with deleted text identified by bold, strikethrough and new language identified by bold, underlined text):

B. The following uses may be permitted as special exceptions upon approval of the Board of Adjustment in accordance with §230-57B of this chapter:

(3) Data Centers subject to the following requirements:

- (a) **No portion of any Data Center, including but not limited to, generators, cooling equipment, fuel storage, and equipment yards, may be located within one thousand (1,000) feet of:**

- (i) any residentially zoned property;
 - (ii) the property line of any lot with an existing school; or
 - (iii) the property line of any lot with an existing daycare center.
- (b) Visual screening in the form of walls or fencing in combination with suitable landscaping must be provided to reasonably shield the Data Center use from residential property. The visual screening must consist of a combination of an opaque wall, decorative fence, berm, or similar screening feature together with a landscape buffer designed to provide effective year-round screening of buildings, equipment, parking areas, loading areas, and other operational features of the Data Center from adjacent properties. The landscape buffer must include a mixture of evergreen trees, evergreen shrubs, and other plant materials sufficient to create a continuous visual screen. Evergreen trees must be installed at a minimum height of five (5) feet at the time of planting and must be spaced no more than fifteen (15) feet on center, or an equivalent planting arrangement that achieves a continuous year-round screen within three (3) years of installation.
- (c) Rooftop mechanical equipment and other appurtenances must be concealed or integrated within the roof such that they are not visible at ground level from public rights of way.
- (d) The site must be designed to minimize noise impacts on neighboring residential properties, schools, and daycares through siting, shielding, enclosures, and comparable measures.
- (e) A noise study prepared by a qualified acoustical professional must be submitted with the Board of Adjustment application. The study must establish pre-development ambient noise levels at the property lines of the nearest residential properties, schools, daycare centers, and other sensitive receptors; model operational noise from all Data Center equipment and infrastructure, including but not limited to

backup generators, cooling systems, transformers, substations, electrical infrastructure, HVAC equipment, battery energy storage systems, and other mechanical or electrical equipment; and demonstrate that operation of the Data Center will not increase pre-development ambient noise levels by more than five (5) dBA at the nearest residential property lines, schools, daycare centers, or other sensitive receptors. The study must also include an analysis of low-frequency noise and infrasound generated by all major operational equipment, evaluating octave-band sound pressure levels between one (1) Hz and two hundred (200) Hz and identifying any tonal, impulsive, or periodic characteristics. The difference between unweighted sound levels (dBZ) and A-weighted sound levels (dBA) at the nearest residential property line, school, daycare center, or other sensitive receptor must not exceed twenty (20) decibels during normal operations unless the Applicant demonstrates through a site-specific acoustical analysis that no adverse impacts will occur. Any approved Data Center will be subject to a condition that the City may require post construction acoustical testing upon receiving a Complaint. Additionally, any approved Data Center will be subject to a condition that the City may require mitigation measures, including acoustical enclosures, barriers, equipment relocation, or operational limitations, as necessary to achieve compliance. Upon receipt of a documented complaint, the City may require post-construction acoustical testing by a qualified acoustical professional, and if noncompliance is demonstrated, the owner must implement corrective measures within a timeframe established by the City. Compliance with the standards of this section must be maintained throughout the operational life of the Data Center.

(f) The Board of Adjustment may require that a Data Center incorporate site-specific noise attenuation and screening techniques, including, but not limited to, the following measures:

(i) Vibration Isolation Systems: including spring and

- neoprene isolators to prevent structure-borne noise transmission from generators, chillers, or HVAC units.
- (ii) Acoustic Fencing and Walls: solid or composite barriers with a minimum Sound Transmission Class (STC) rating of 35, extending fully above the line of sight between the noise source and the property line.
 - (iii) Building Orientation and Shielding: siting of Data Center buildings or equipment yards so that structures themselves block direct noise paths toward residential or institutional uses.
- (g) Water Supply. The Applicant must submit a written statement from the applicable water utility confirming the availability of adequate water service and sufficient system capacity to serve the proposed Data Center. The Applicant must also submit a Water Management Plan that identifies estimated daily and annual water consumption, projected peak demand, anticipated sources of supply, water conservation measures, cooling system efficiency, and contingency measures for drought conditions, utility interruptions, emergencies, or other events that could affect the availability of water resources. The Board of Adjustment may require modifications to the plan or additional mitigation measures to minimize impacts on public utilities and ensure the reliable and efficient operation of the facility.
- (h) Energy Supply. The Applicant must submit a written statement from the applicable energy utility confirming the availability of adequate energy service and sufficient system capacity to serve the proposed Data Center. The Applicant must also submit an Energy Management Plan that identifies estimated daily and annual energy consumption, projected peak demand, anticipated sources of supply, energy conservation measures, and contingency measures for utility interruptions, emergencies, or other events that could affect the availability of energy resources. The Board of Adjustment may require modifications to the plan or additional mitigation measures to minimize impacts on public utilities and ensure the reliable and efficient operation of the facility.

- (i) The Data Center must use closed-loop cooling systems for process and equipment cooling, meaning a system in which the cooling medium is contained within a piping circuit for reuse, unless the Board of Adjustment approves an open-loop or once-through cooling system after coordination with applicable state agencies.**
- (j) The Applicant must submit to the Board of Adjustment a written statement from the applicable local electric utility confirming either the availability of sufficient grid capacity to meet projected connected and peak loads for all proposed phases, or documentation of onsite generation meeting or exceeding projected load.**
- (k) Any emergency/backup generator must be certified Tier IV or utilize natural gas with Selective Catalytic Reduction (SCR) and achieve equivalent or superior emissions performance to Tier IV diesel. Emergency generators will be used solely to provide backup electrical power during utility outages, emergency conditions, routine maintenance, and periodic testing necessary to ensure operational readiness. Routine generator testing will be permitted only between the hours of 8:00 a.m. and 6:00 p.m. Emergency generators will not be used for peak shaving, demand response programs, commercial power generation, or the sale or export of electricity to the electrical grid, except as may be necessary during an actual utility outage or emergency event.**
- (l) The Applicant must submit a Hazardous Materials Management Plan with the Board of Adjustment application identifying all hazardous materials proposed to be stored, used, or maintained on the site, including but not limited to fuels, battery energy storage systems, batteries, refrigerants, lubricants, chemicals, and other regulated substances. The plan must identify the type, quantity, and location of each material and describe all storage, secondary containment, spill prevention, leak detection, fire protection, inspection, and emergency response procedures. The plan must also identify the facility's emergency response personnel, provide**

current emergency contact information, and describe coordination procedures with local fire, emergency medical, and hazardous materials response agencies. The plan must be updated as necessary to reflect material changes in operations or hazardous material storage throughout the life of the facility.

(m) Site lighting must be designed and shielded to achieve zero (0) footcandles at adjoining residential property lines.

(n) Prior to the issuance of a Certificate of Occupancy, the owner or operator must submit a Decommissioning Plan for review and approval by the City. The plan must describe the procedures for the removal of all buildings, structures, equipment, generators, battery energy storage systems, fuel storage facilities, utility infrastructure, foundations, and other improvements associated with the Data Center upon permanent cessation of operations. The plan must also describe the restoration of the site to a safe and stable condition in accordance with applicable federal, state, and local laws and regulations. The approved Decommissioning Plan must be maintained throughout the operational life of the facility and updated as necessary to reflect significant modifications to the site or its operations.

(o) Approved Data Centers must include a condition requiring that the operator or property owner must provide written notice to the Building Official whenever the use approved as a Special Exception under this Section is out of active operation for more than six (6) consecutive months. Should the Data Center cease operation for a period of one (1) year or longer, it will be deemed abandoned, unless the Board of Adjustment grants an extension for good cause shown. After a Data Center is deemed abandoned, the operator or property owner must, within six (6) months, either: (a) schedule a site inspection with the Building Official to verify compliance with all applicable approval conditions and use requirements prior to recommencing operation; or (b) remove all equipment, structures, systems, and associated improvements related to the approved Data Center use in

accordance with a decommissioning plan approved by the Building Official.

(p) Periodic Compliance Report. As a condition of Board of Adjustment approval, the owner or operator must submit a compliance report to the City every three (3) years following the issuance of the Certificate of Occupancy. The report must be prepared and certified by the owner or operator and must demonstrate continued compliance with all applicable conditions of approval and the requirements of this Ordinance, including but not limited to noise, lighting, landscaping and screening, hazardous materials management, operational conditions, generator operation, electric consumption, water consumption, and any other applicable Special Use Permit or Board of Adjustment conditions. The City may require supporting documentation, studies, or inspections as necessary to verify compliance.

(3) (4) Any other industrial use not permitted as a matter of right which would not violate the intent of this section.

SECTION 3. If any section, subsection, sentence, clause or phrase of this Ordinance is for any reason held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions of this Ordinance.

SECTION 4. In the event any existing Ordinances or parts of Ordinances are in conflict herewith, the provisions of this Ordinance shall control.

SECTION 5: This Ordinance shall become effective immediately upon its adoption by City Council.

First Reading

Second Reading

Signed this _____ day of _____, 2026

_____, President of City Council

Attest: _____, City Clerk

Approved: _____, Mayor

DRAFT