

**EAST MARLBOROUGH TOWNSHIP
CHESTER COUNTY, PENNSYLVANIA**

ORDINANCE NO. ____ – 2026

AN ORDINANCE OF THE TOWNSHIP OF EAST MARLBOROUGH, CHESTER COUNTY, PENNSYLVANIA, AMENDING THE EAST MARLBOROUGH TOWNSHIP ZONING ORDINANCE OF 2019, AS AMENDED JUNE 2022, CHAPTER 450 ZONING, SECTION 450-202 TITLED “DEFINITIONS OF TERMS” TO ADD DEFINITIONS FOR DATA CENTER, DATA CENTER ACCESSORY USE, DATA CENTER CAMPUS, PRINCIPAL FAÇADE, PRINCIPAL BUILDING FAÇADE AND SENSITIVE RECEPTOR; SECTION 450-1001 TITLED “LIMITED INDUSTRIAL DISTRICT (LI)” TO AMEND THE PURPOSE STATEMENT FOR THE INDUSTRIAL DISTRICT; SECTION 450-1002.B. TO ADD A SUBPARAGRAPH TO ALLOW DATA CENTER AND DATA CENTER CAMPUS BY CONDITIONAL USE IN THE LIMITED INDUSTRIAL DISTRICT; TO ADD A NEW SECTION 450-1003.J. TITLED “STANDARDS FOR DATA CENTER AND DATE CENTER CAMPUS”; AND TO AMEND SECTION 450-1812.A(2) TO ADD A PARKING REQUIREMENT FOR A DATA CENTER AND DATA CENTER CAMPUS.

BE IT ENACTED AND ORDAINED by the Board of Supervisors of East Marlborough Township that the East Marlborough Township Zoning Ordinance of 2019, as amended in 2022, is hereby further amended as follows:

SECTION 1. Section 450-202, titled “Definitions of terms,” shall be amended to add the Following definitions:

DATA CENTER

A building primarily used to house and operate computer systems and associated equipment, including servers, data storage and processing systems, and supporting 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; back-up power generators; environmental controls (air conditioning or cooling towers, fire suppression, and related equipment); and security features, provided that 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 structures and real estate owned, controlled, leased, or otherwise occupied primarily for use 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 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 for use, or intended for use.

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 designate the principal facade.

SENSITIVE RECEPTOR

Buildings used for residences (including institutional uses with a residential component), schools, day care centers, natural flora and fauna habitats, nursing homes, parks, preserved and restricted land, and medical facilities.

SECTION 2. Section 450-1001, titled “Limited Industrial District (LI)” shall be amended to state as follows:

§450-1001. Purpose and Specific Intent.

- A. The LI Limited Industrial District is designed primarily to provide for selected modern, non-nuisance research and industrial establishments, and data centers with a view to encouraging attractive, large-site, low-lot coverage development in areas which are particularly well suited for such uses.
- B. In promoting the general purposes of this chapter, the LI District intends to encourage only those types of industrial uses which would not constitute a hazard or nuisance to the population of the adjacent areas, and which would contribute to the continuation of appropriate development within and adjacent to the district.
- C. In the LI Limited Industrial District, all provisions of this article shall apply.

SECTION 3. Section 450-1002.B., titled “Use Regulations,” shall be amended to add a new subparagraph (16), which shall provide as follows: “§450-1002.B(16) Data Center and Data Center Campus subject to the provisions of Section 450-1003.J.”

SECTION 4. Section 450-1004, titled “Area and Bulk Regulations,” shall be retitled “Area and Bulk Regulations: General, All Uses Except Data Center and Data Center Campus”.

SECTION 5. A new Section 450-1003.J titled “Standards for Data Centers and Data Center Campuses shall be adopted and provided as follows:

§450-1003.J. Data Centers and Data Center Campuses. Data Centers and Data Center Campuses shall be permitted in the Industrial District by conditional use, as determined by the Board of Supervisors, subject to the applicant's compliance with the following criteria and standards.

(1) **AREA AND BULK REGULATIONS.** The area and bulk regulations in Section 450-1003. J. shall apply to a Data Center or a Data Center Campus.

(2) **MINIMUM LOT AREA.**

Data Center

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

A lot with a Data Center building footprint greater than 100,000 square feet in Area – 10 acres minimum.

(3) **MINIMUM SETBACKS.** Data Centers and Data Center Accessory Uses shall be set back a minimum of 500 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 set back a minimum of 250 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 shall be 35 feet. Data Center Accessory Uses not installed on the rooftop shall not exceed 15 feet in height.

(5) **SCREENING OF MECHANICAL EQUIPMENT.** Data Center Accessory Uses, including ground-level and rooftop mechanical equipment used for cooling, ventilating, or otherwise operating the Data Center, shall be screened from view on all sides or set back adequately from the building edge so as not to be visible from adjoining properties and public roads. Such a screen may incorporate perforated surfaces as necessary to permit ventilation of the equipment.

(6) **BUFFERING, LANDSCAPING, AND MAIN ENTRANCE FEATURES.** The landscaping and buffering requirements provided for in Section 450-1812 D (2) of the Zoning Ordinance shall apply to the Data Center and Data Center Accessory Uses.

(7) **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.

(d) Along any rear or side property line which abuts a Sensitive Receptor, residential district or Township boundary line, a buffer yard shall be provided which shall be not less than 100 feet in width. This required yard shall be measured from the boundary line or from the street line where a street constitutes the boundary.

(8) **ENERGY USAGE.** An applicant for a Data Center and Data Center Campus shall prepare a Utility Impact Study, prepared by a licensed civil engineer, electrical engineer, or specialized utility coordination and consulting firm, which shall be submitted with the conditional use application. The Study shall include an energy usage plan, 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.

(9) **POWER GENERATION FACILITIES.**

(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. They shall be approved in accordance with all applicable state and federal regulations, as well as 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. The power generation plans shall be subject to review and comment

by the Township. The Township has the right to require supplemental or amended reports or plans in response to its comments before issuing conditional use approval.

(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 in the required front yard. On-site substations do not require a buffer or screening between the Data Center Principal and the Building and the substation.

(c) Data Center electric utility substations visible from an arterial roadway must include screening compliant with section 450-1812-D(2)(c), and in addition, a fence or wall behind the screening (so as not to be visible from public view) that is a minimum height of six feet.

(d) Power lines serving the property must be buried underground.

(e) Substations abutting a district boundary other than Industrial and/or a parcel containing a sensitive receptor shall be set back a minimum of 800 feet from the property line. If abutting another Industrial-zoned parcel and use, substations shall meet the requirements for accessory uses in the underlying zoning district.

(f) The Data Center electric utility substation shall be subject to applicable zoning district setback requirements. Setbacks shall be measured from the edge of the substation enclosure to the property boundary of the lot it occupies.

(g) Energy supply.

(1) 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:

(a) Annual electricity demand.

(b) Energy sources to be utilized.

(c) Energy storage capacity (if applicable).

(d) Proposed sources of back-up power.

(e) Documentation that there will be no impact on the electricity rates of the surrounding community for a period of five years from the date the certificate of occupancy is anticipated to be issued. The report shall be subject to review and comment by the Township. The Township has the right to require

supplemental or amended reports in response to its comments before issuing conditional use approval.

(f) 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.

(g) If interconnecting to the energy grid, documentation of the energy utility interconnection approval process, and provide the following:

(i) Documentation that an application for the project has been filed with the electric utility provider, and the required fee has been paid.

(ii) Documentation that all necessary parties have signed a transmission security agreement.

(iii) The date that the electric utility provider provided for the proposed energization of the data center.

(h) The Township has the right to require supplemental or amended energy reports in response to its comments before issuing conditional use approval.

(2) If the Data Center intends to use backup generators, the following criteria shall apply.

(a) Diesel generators shall meet Tier 4 emission standards of the U.S. Environmental Protection Agency.

(b) 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.

(c) Emergency energy generation that is diesel, gasoline, or similarly fueled shall be used only when the primary source of energy is not available due to an emergency outage.

(d) Data center backup generators may run a test once a month for up to sixty minutes under a partial electrical load to ensure mechanical reliability. Additionally, operators may perform a comprehensive annual load bank test lasting up to four hours to simulate a full power outage. The total maximum hours for all backup generators at a data center in a calendar year shall be capped at 20 hours.

(e) 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.)

(f) The applicant shall design and locate the emergency energy generation systems to limit noise and visual impacts as much as possible.

(g) 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.

(10) NOISE AND VIBRATION.

(a) 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 45 dB(A) and 60 dB(C) 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 40 dB(A) and 50 dB(C) as measured from the property line of Use. Such a sound study shall be conducted using Sound Level Meters described in ANSI S1.4-2104 and generally accepted technology.

(b) The applicant shall submit a pre-construction low-frequency noise and vibration study with the conditional use application, prepared and sealed by a qualified professional with expertise in acoustic and vibration analysis. The study shall establish baseline ambient noise and vibration levels and predict noise and vibration levels at different times of day. The noise study shall include a narrative describing anticipated operational impacts on sound levels and an octave band analysis. It shall predict noise and vibration levels from the operation of the Data Center and account for any proposed electrical substations, on-site power generation facilities, and other data center accessory uses that may generate noise. Sound shall be measured at all property lines. The studies shall use full-spectrum modeling to address low-frequency noise. If the pre-construction Noise Study establishes a baseline ambient noise level that exceeds the maximum sound level permitted under this Chapter, the Post-Construction Study shall demonstrate that operations of the proposed use do not materially increase the baseline ambient noise level as measured at the property line. Any increase above the

established baseline shall be deemed a violation unless specifically authorized as a condition of 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 with expertise in acoustic and vibration analysis using applicable ANSI standards and generally accepted criteria.

[2] Include sound measurements taken at all property lines.

[3] Include measurements taken during normal operations, peak cooling load, and during the operation of emergency generators under load.

[4] Use full-spectrum modeling to address low-frequency noise.

[5] Demonstrate that vibration from the Data Center and all accessory uses does not exceed the following standards when measured at or beyond the property line:

(a) Ground vibration shall not exceed a peak particle velocity (PPV) of 0.02 inches per second at or beyond the property line, measured in accordance with U.S. Bureau of Mines Report of Investigations 8507 (RI 8507) or successor standard; and

(b) Vibration levels shall not exceed the threshold of human perception as defined in ISO 2631-1 (Evaluation of Human Exposure to Whole-Body Vibration) or successor standard.

(c) Identify all measurement locations, instrumentation used, calibration documentation, testing methodology, operational conditions during testing, and meteorological conditions.

[6] Identify all measurement locations, instrumentation used, calibration documentation, testing methodology, operational conditions during testing, and meteorological conditions.

(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) 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.

Data Center Noise Standards Tables

The following tables establish objective noise limits, modeling requirements, and enforcement procedures applicable to Data Center use.

Table 1: Low-Frequency Noise Criteria

<u>Parameter</u>	<u>Requirement</u>
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
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 2: Modeling and Study Requirements

<u>Requirement</u>	<u>Standard</u>
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 generators or cooling systems are used

Table 3: Measurement Procedures

<u>Element</u>	<u>Requirement</u>
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 before construction.

Table 4: Compliance

<u>Item</u>	<u>Requirement</u>
Material Increase Definition	An increase of > 3 dBA or > 2 dBC above the 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

(11) WATER.

(a) A Data Center shall be connected to metered public water with a reduced-pressure principle assembly or a double-check valve assembly, as directed by the water provider. The Data Center shall provide the Township with all requested flow usage within a prescribed timeframe (e.g., 1 week).

(b) The applicant shall provide detailed estimates of daily and annual water usage.

(c) The applicant shall provide documentation from the public water provider confirming that sufficient water is available to serve the Data Center without affecting water pressure or the availability of water to other users in the Township or to those with onsite wells. 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 affect water pressure or the availability of water to other users in the Township on public water and onsite water wells.

(d) The applicant shall provide on an annual basis the sources and volumes of water used.

[i] When a state imposes a water restriction for drought purposes, the user/operator shall provide the Township with the reduced flow data to demonstrate that it is complying with state regulations.

(e) The Data Center shall not use groundwater or direct withdrawals from surface watercourses as its source of cooling water.

(f) 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; the Township must approve any such alternative.

(g) The applicant shall submit a drought response plan to demonstrate compliance with state, water supplier, and local drought declaration requirements.

(h) The Data Center shall provide the Township with reports of its use of groundwater or direct withdrawals from surface watercourses every six months, within a month of the close of each six-month reporting period. During drought periods, the Data Center shall provide these reports monthly to demonstrate adherence to its drought response plan and compliance with governing authorities' water-use restrictions. The purpose of these reports is

to ensure that the Data Center's use of groundwater or direct withdrawals from surface watercourses for non-cooling purposes does not adversely affect residents in the township, particularly during periods of drought.

(i) If the data center will use nonpublic water sources, the applicant shall provide a water feasibility study prepared by a qualified professional. The purpose of the water feasibility study is to determine whether an adequate water supply is available to support the proposed data center's water use and to evaluate potential adverse effects on the quantity and quality of existing wells or nearby surface waters. The water feasibility study shall, at a minimum, include the following information:

- i. Calculations of projected water needs, including seasonal fluctuations.
- ii. A geologic map of the proposed project area within a radius of at least one mile from the site property boundary.
- iii. The location of all existing and proposed wells within 1,000 feet of the site property boundary, with a notation of the capacity of all high-yield wells.
- iv. The location of all surface waters within 1,000 feet of the site property boundary and all known point sources of pollution.
- v. A determination of the long-term safe yield of the water source.
- vi. A determination that the proposed water supply system poses no adverse impacts on the quantity and quality of water in nearby wells, streams, and the groundwater table.
- vii. Identification of how water will be recycled, treated, or released into surrounding water bodies.
- viii. A statement of the qualifications and the signature(s) of the person(s) preparing the study.

(j) No approvals will be granted until all required state and regional permits have been obtained (i.e., PADEP, SRBS, DRBC).

(12) WASTEWATER DISPOSAL.

(a) A Data Center shall be prohibited from discharging wastewater directly to stormwater systems, surface waters, or groundwater systems.

(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 wastewater discharge generated at the Data Center may not be discharged into stormwater systems, surface waters, or groundwater systems.

(d) The applicant shall submit documentation, certified by the licensed municipal sewer operator, demonstrating that the municipal wastewater treatment system can support the required conveyance and treatment. If the municipality cannot support the conveyance and/or treatment of the Data Center wastewater, the Data Center shall be responsible for the costs of upgrades required to support the conveyance and/or treatment of the Data Center wastewater, which may include reduced-pressure principle assemblies or double-check valve assemblies, as directed by the wastewater engineer.

(e) Treatment of the Data Center wastewater will include regular measurement and reporting of bacteria, chemicals, and metals present in the wastewater. The Data Center will be responsible for remediation costs if it is identified as the source of contamination or corrosion that damages the municipal wastewater conveyance or treatment system or endangers the health and safety of any residents, livestock, or wildlife.

(13) ALTERNATIVE INDEPENDENT WATER AND ENERGY SYSTEMS.

Any independent energy generation system designed or used to supply water and power directly to a Data Center during normal operations, including closed-loop, geothermal, solar, fossil-fuel, or other energy-generating systems, shall be considered part of the Data Center use. If such systems are proposed for later addition, any Conditional Use approval granted must be amended at that time to allow such use. Such systems require an independent review by Township consultants to ensure their safety and compliance with the applicable standards of this Chapter, all other applicable chapters of the Township Code, and all applicable federal, state, and local regulations. To the extent that these alternative systems safely reduce strain on local resources, they may be encouraged, provided they comply with the regulations outlined in Section 450-1812 of this Chapter and all other conditional use requirements.

(14) ENVIRONMENTAL AND COMMUNITY IMPACT.

(a) The applicant shall provide a traffic impact study conducted by an independent traffic engineer who shall demonstrate their qualifications to the Township. The study shall be sufficient to enable the Board to assess the likely impacts of the proposed data center use(s) on the Township's existing transportation network and surrounding areas. The study shall identify any traffic problems likely to result from the proposed data center use(s) related

to ingress/egress, road capacities, offsite traffic flow, public transportation, and pedestrian and other nonvehicular circulation. The Township shall review the study's methodology, assumptions, findings, and recommendations. The Board, upon the recommendation of the Township Engineer or its own traffic consultant, may impose additional improvements or conditions on the applicant that are deemed necessary to accommodate the impacts of the proposed data center use(s).

(b) The applicant shall submit an economic community impact study from an independent licensed real estate appraiser who will attest that the proposed Data Center and its accessories will not negatively impact the surrounding real estate property values.

(c) The applicant shall submit an Environmental Impact Study conducted by an independent environmental scientist, who shall provide documentation of their qualifications to the Township, to demonstrate that the Data Center and its accessories will not adversely affect wildlife habitat, threatened and endangered species, water quality and quantity, sensitive habitat, and wetlands.

(d) The applicant shall submit a Thermal Impact Mitigation Plan conducted by an independent professional engineer, containing a detailed analysis, at a minimum, that identifies:

- i. Primary sources of waste heat (air- and water-based).
- ii. Potential off-site thermal impacts (including plume/heat discharge and localized heat islands) under representative seasonal conditions.
- iii. Design measures to minimize heat impacts (e.g., equipment padding, shielding, landscaping, and cool roofs/paving where applicable).
- iv. Feasible opportunities for waste heat reuse. If reuse is not feasible, the reason(s) shall be provided, and alternative mitigation shall be identified (e.g., vegetative or green roof and/or site design modifications).
- v. A monitoring/verification approach, if required by the conditions of approval based on proximity to sensitive receptors or site constraints.

(e) Any use or activity producing air, dust, smoke, glare, exhaust, heat, or humidity in any form shall be carried on in such a manner that it is not perceptible at or beyond the property line.

(f) No artificial light source, beam, or glare shall be visible to the human eye beyond the property boundaries of the data center operation.

(15) EMERGENCY MANAGEMENT.

(a) The applicant shall submit an emergency response plan (ERP) with the conditional use application prepared by a qualified professional that shall comply with the International Fire Code (as of the adoption of this ordinance, the 2021 edition). The ERP shall:

[1] Be reviewed and accepted by the local fire department, emergency management services, and the 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 to ensure suitable access for emergency equipment.

[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) The applicant shall pay for all costs incurred in engaging a specialized service to develop a pre-incident plan for the fire chief, ensuring that first responders receive the vital information required to safely and skillfully approach a low-frequency, high-impact incident that may occur at the data center site.

(c) 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.

(d) Any Data Center proposing battery storage or any other device or group of devices capable of storing energy to supply electrical energy later, 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, must include fire suppression systems designed specifically for battery storage.

(e) 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.

(f) 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 name and telephone number of the corresponding local power company.

(g) 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.

(h) If the local fire companies that serve the township lack the specialized equipment required to combat a data center or BESS fire, as documented in the Emergency Response Plan Gap Analysis (including, but not limited to, high-volume thermal imaging cameras, specialized foam suppression agents, or heavy-duty ventilation fans), the applicant shall provide a financial contribution to the Township to purchase such equipment for the responding company.

(i) If public water pressure is insufficient to sustain a 4-hour fire, the applicant shall install a dedicated on-site fire pond or cistern with a minimum capacity of 100,000 gallons, accessible to the local fire companies via a dry hydrant.

(j) All emergency access roads and hydrant locations must be designed to accommodate the turning radius and weight of the heaviest fire apparatus responding.

(k) Post-Incident Environmental Remediation.

[i] Hazardous Debris Removal: In the event of a fire, explosion, or chemical release, including "Thermal Runaway" events in BESS units, the Owner shall be responsible for the immediate professional "scrubbing" and removal of all particulate matter, soot, and fire-suppression residues from the site, public rights-of-way, and any affected adjacent properties.

[ii] Post-Fire Environmental Audit: Within 48 hours of any fire event, the Owner shall fund the collection of samples by a third-party environmental firm for an environmental audit to test for air, soil, and water contamination, specifically for PFAS, Hydrogen Fluoride, and heavy metals, with a final report submitted to the Township immediately upon lab certification.

[iii] **Runoff Containment:** The facility must use a "Secondary Containment" system designed to capture 100% of the water used during a 4-hour fire suppression event to prevent toxic runoff from entering local creeks, streams, and local groundwater.

(16) **CONSTRUCTION PLANS.** Applicants shall coordinate with the Township and develop a construction plan that 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 the anticipated delivery of large equipment. The Township must approve this construction plan as part of the final land development plan approval. The Township shall have the authority to require more detailed information to be added to the plans, as well as consistent updates as the project progresses.

(17) **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 has the right to require supplemental or amended reports in response to its comments before issuing conditional use approval.

(18) **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) Performance Security.

[1] Before issuance of any Building permit, the Applicant shall post a cash escrow or irrevocable letter of credit equal to 150% of the estimated gross cost of full demolition, removal of all Structures and equipment (including modular units, concrete pads, substations, battery systems, and any other infrastructure), site restoration to pre-development greenfield condition, and comprehensive soil/groundwater remediation. The 150% figure (excluding salvage value) is intended to account for inflation, environmental remediation, and technology-specific disposal costs. The cost estimate shall:

[i] Exclude any salvage value of equipment, materials, or scrap;

[ii] Be prepared by a qualified professional engineer or estimator approved by the Township Engineer;

[iii] Be updated annually for inflation, changes in labor/material costs, and technological advancements in decommissioning; and

[iv] Cover the full gross cost, including but not limited to removal of all foundations, underground utilities, concrete pads, and specialized electrical infrastructure.

(f) Additional Requirement

Every 2 years during operation (or upon any material equipment replacement exceeding 25% of installed capacity), the Owner shall fund a Phase I/II Environmental Site Assessment (at the Applicant's expense) to monitor for contamination (including but not limited to battery electrolytes, dielectric fluids, cooling chemicals, heavy metals, or PFAS from fire-suppression agents). Results shall be submitted to the Township within 60 days of completion. Any detected contamination shall trigger immediate remediation at the Owner's expense and an increase in the bond amount to cover the additional estimated cleanup costs, as determined by the Township Engineer.

(g) Reevaluation. The financial security balance shall be reviewed annually.

(h) Abandonment. Twelve consecutive months without active data processing operations shall constitute abandonment, regardless of ongoing maintenance, security, or minimal electrical use. Such abandonment shall authorize the Township to use the financial security to restore the site to a greenfield condition. Removal or deactivation of more than 50% of installed computing capacity shall trigger a mandatory review of decommissioning obligations. For purposes of decommissioning, "site restoration" includes the removal of all modular housing, ISO containers, concrete pads, and specialized electrical substations, regardless of whether such items are classified as real or personal property.

(19) GRID RELIABILITY AND RESIDENTIAL PRIORITY.

(a) The purpose of this section is to ensure that the high-density energy consumption of Data Center facilities does not degrade the reliability, stability, or cost-effectiveness of the electrical grid for township residents and critical emergency infrastructure.

(b) **Residential Priority Mandate.** As a condition of Conditional Use approval, the Applicant acknowledges that the Township's residential electrical consumers and critical public safety infrastructure (including but not limited to medical facilities, fire stations, and emergency communications) shall have priority over Data Center operations during periods of grid stress or emergency.

(c) **Mandatory Load-Shedding Agreement.** The Applicant shall provide a fully executed Curtailment Agreement or Load Shedding Contract with the utility provider (e.g., PECO) and/or PJM Interconnection.

(i) This agreement must mandate that, upon notification of a "Grid Emergency," "Peak Demand Event," or "Voltage Reductions," the facility shall automatically reduce its electrical draw to a "Maintenance Only" level (not to exceed 10% of nameplate capacity) within 15 minutes.

(ii) Proof of compliance with load-shedding requests shall be provided to the Township Zoning Officer annually.

(d) **Emergency Override:** The load-shedding and curtailment requirements established above may be waived during a declared state or federal emergency if the facility is providing critical services (e.g., emergency communications, disaster response coordination) as certified by the Pennsylvania Emergency Management Agency.

(20) RIGHT OF ENTRY AND INSPECTION

(a) **Right of Entry.** The Township Zoning Officer, Fire Marshal, or an appointed third-party engineer shall have the right to request to enter the Premises during

reasonable hours to conduct Noise/vibration testing or safety inspections. The Township shall provide 24-hour notice of such inspections when practicable.

(b) **Emergency and Complaint-Based Inspection.** Immediate inspection without notice may occur only where the Township determines that an Imminent Threat to public health or safety exists, or to investigate a verified, active complaint regarding Noise or vibration exceeding the performance standards of this Article.

(c) **Enforcement and Opportunity to Cure.**

[i] **Notice of Violation:** Except in emergencies involving an Imminent Threat to Life or safety, the Township shall provide written notice of any violation and a reasonable opportunity to cure, which shall not exceed 15 days for Noise/vibration violations and 48 hours for environmental or safety hazards.

[ii] **Cease and Desist:** If a violation is not remediated within the cure period, or if the Operator refuses entry for a mandated inspection, the Zoning Officer is authorized to issue a Cease-and-Desist order.

[iii] **Suspension of Operations:** Any order to cease operations shall be limited to the specific noncompliant equipment or subsystem, unless the violation is facility- wide or represents an unmitigated threat to the community.

(21) **ADMINISTRATIVE ESCROW AND CONSULTANT FEES.**

(a) **Administrative Escrow Account:** The Applicant for a Data Center Conditional Use shall, at the time of application, establish an Administrative Escrow Account with the Township.

[i] **Purpose:** This account shall be used to reimburse the Township for all reasonable expenses incurred for the services of professional consultants-including but not limited to acoustical engineers, hydrogeologists, fire protection engineers, historic preservationists, and legal counsel-to review the application, fact-check studies, and testify at public hearings.

[ii] **Initial Deposit:** The Applicant shall provide an initial Administrative Escrow deposit in an amount of ten percent of the fair market property purchase price for a Data Center with peak demand under 5MW, and an amount of twenty percent of the fair market property purchase price for a Data Center with peak demand of 5MW or greater. This deposit is intended to ensure that taxpayers do not bear the Township's professional review costs. If the complexity of the Environmental and Community Impact Analysis (ECEIA) results in the escrow balance

falling below 25% of the initial deposit, the Applicant shall replenish the account to its original balance within 15 days of notice.

[iii] **Automatic Stay:** If the escrow balance falls below 25% of the initial deposit, all reviews and hearings shall be stayed until the Applicant replenishes the account to its original balance.

(b) **Post-Occupancy Compliance Escrow:** Upon issuance of a Certificate of Occupancy, the Administrative Escrow shall be transitioned into a Long-Term Monitoring Escrow. This account shall be maintained at a minimum balance of \$100,000 for the life of the facility, representing a reasonable estimate of ongoing compliance costs for:

[i] Annual noise and vibration audits.

[ii] Independent proof of water consumption and discharge reports.

[iii] Annual Fire Marshal safety inspections.

(22) **VIOLATIONS AND PENALTIES.**

(a) **Continuous Violations.** Each day that a violation continues shall constitute a separate offense. For technical performance standards (Noise/water), each distinct 24-hour period of non-compliance shall be documented as a separate violation to the maximum extent permitted by the Pennsylvania Municipalities Planning Code.

(b) **Fine Schedule.** In accordance with Section 617.2 of the Pennsylvania Municipalities Planning Code (MPC), the following penalties shall apply:

[i] **Civil Penalties:** Any person or entity found to have violated the provisions of this Article shall be liable for a civil penalty not to exceed \$500 per violation.

(c) **Reimbursement of Enforcement Costs.** The Owner/Operator shall be liable for all costs incurred by the Township in documenting violations, including fees for third-party acoustical engineers, hydrogeologists, or other professional consultants, expert witness fees (hydrogeological), and reasonable attorney fees and court costs as permitted by Section 617.2 of the MPC.

(d) **Suspension of Conditional Use.** The Board, following a public hearing, may revoke or suspend the Conditional Use approval for any facility that demonstrates a pattern of "Habitual Non-Compliance," defined as three or more adjudicated violations within any 24 months.

- (e) **Tiered Mitigation and Curtailment Protocols.** Upon the logging of an equipment-driven exceedance, the facility Operator shall immediately initiate the following mandatory mitigation sequences:

[i] **Tier 1: Immediate Load Reduction.** Within two (2) hours of the initial logging interval indicating an exceedance, the Operator shall implement automated or manual computing load shedding and cooling re-routing sufficient to bring the property line and vertical elevation thermal profiles back into full compliance.

[ii] **Tier 2: Automatic Facility Curtailment.** If full compliance is not achieved and verified by the independent monitoring architecture within four (4) consecutive hours of the initial exceedance, the facility shall automatically curtail overall power consumption and data processing operations by a minimum of fifty percent (50%), or to a lower operational threshold designated by the Township Engineer, until the faulty equipment is isolated or repaired.

[iii] **Tier 3: Cessation of Non-Compliant Systems.** If the facility remains non-compliant after twenty-four (24) consecutive hours from the initial logged exceedance, the Operator shall completely cease operations of all data halls, power distribution units, and cooling loops associated with the non-compliant footprint. Operations shall not resume until the independent engineering firm certifies in writing that all necessary physical repairs have been executed, calibrated, and successfully tested under maximum simulated load conditions.

(23) WAIVER/EXEMPTION.

Any Applicant seeking a waiver, relief, or exemption from any aspect or requirement of this Ordinance may request it from the Township Supervisors, provided that the request is included in the original Application for a Permit or in a timely amendment to that Application submitted to the Township. Such relief may be temporary or permanent, partial or complete, at the discretion of the Township Supervisors. However, the burden of proving the need for the relief or exemption request rests solely with the Applicant, to the satisfaction of the Supervisors. The Applicant shall pay all costs incurred by the Township in considering the request for relief. No such waiver, relief, or exemption shall be approved unless the Applicant demonstrates that, if granted, it will have no significant adverse effect on health, safety, welfare, preservation of historical values, natural, scenic, or historical values, electricity usage or delivery rates, or public or private water supplies of the Township, its residents and property owners, electrical, and other service providers.

SECTION 6. PARKING. The applicant shall provide a parking study, prepared by an independent professional traffic engineering firm and approved by the Township Traffic Engineer, to determine the required number of parking spaces.

SECTION 7. SEVERABILITY. It is the express intention of the Board of Supervisors that the provisions of this Article be severable. If any section, subsection, sentence, clause, phrase, or specific performance metric (including, but not limited to, decibel limits, Setback distances, or fee amounts) is, for any reason, held unconstitutional, illegal, or invalid by a court of competent jurisdiction, that decision shall not affect or impair the validity of any remaining provisions of this Article. In addition, the standards herein are adopted pursuant to the Township's police powers under the Pennsylvania Municipalities Planning Code. If any fee, escrow requirement, or mitigation amount is held excessive or not roughly proportional to documented impacts, the reviewing court is encouraged to reduce the requirement to a permissible level rather than invalidate it entirely.

- (a) **Savings Clause.** The amendment of the East Marlborough Township Zoning Code by this Article shall not affect any act done, any right accrued, any duty imposed, any penalty incurred, or any legal proceeding commenced or pending under the Zoning Code before the effective date of this amendment.
- (b) **Presumption of Validity.** In the event of a "Substantive Validity Challenge" filed pursuant to the Pennsylvania Municipalities Planning Code (MPC), the burden of proof shall remain upon the challenger to demonstrate that the specific performance standards herein are not rationally related to the protection of the public health, safety, and welfare of the residents of East Marlborough Township.
- (c) **Police Powers Reserved.** Nothing in this Article shall be construed to be preempted by, or in conflict with, state or federal law where this Article imposes requirements that are more protective of public health, safety, or welfare and are within the Township's police powers under the Pennsylvania Municipalities Planning Code.

SECTION 8. REPEALER. All Ordinances, or parts of Ordinances, that conflict with any provision of this Ordinance are hereby repealed insofar as they affect this Ordinance.

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

ENACTED AND ORDAINED this ____ day of _____, 2026.

Attest:

BOARD OF SUPERVISORS

Neil G. Lovekin, Secretary / Manager

Ellen L. Sosangelis, Chair

Jake C. Elks, Vice-Chair

James M. Chance, Member

Steven W. Peuquet, Member

Chris Manning, Member