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BOROUGH OF MOOSIC

ORDINANCE NO. 4 of 2026

AN ORDINANCE OF THE BOROUGH OF MOOSIC, LACKAWANNA COUNTY, PENNSYLVANIA AMENDING CHAPTER 300 OF THE CODE OF THE BOROUGH OF MOOSIC ZONING TO RECOGNIZE COMPUTER DATA CENTERS **AND HIGH DENSITY COMPUTING FACILITIES AS A USE REQUIRING SPECIAL REGULATION; PROVIDING DEFINITIONS; ALLOWING DATA CENTERS BY SPECIAL EXCEPTION IN THE MANUFACTURING (M) ZONES, ESTABLISHING PERFORMANCE STANDARDS; PROVIDING FOR THE REPEAL OF INCONSISTENT ORDINANCES; PROVIDING FOR THE SEVERABILITY OF THE ORDINANCE; AND PROVIDING FOR AN EFFECTIVE DATE OF THE ORDINANCE**

WHEREAS, the Borough of Moosic, is a duly authorized political subdivision of the Commonwealth of Pennsylvania; and

WHEREAS, the Borough of Moosic is committed to protecting the health, safety, and welfare of its residents through thoughtful and responsible land use regulation; and

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

WHEREAS, data centers warrant special consideration related to energy and water utilization as well as noise and air pollution; and

WHEREAS, the Borough Council deems it to be in the best interest and general welfare of the residents of the Borough of Moosic to update and amend provisions of the Moosic Borough Zoning Ordinance (MBZO) to provide for and regulate Data Centers, **High Density Computing Facilities** and Data Center Accessory Uses; and

WHEREAS, the Borough Council of the Borough of Moosic desires to establish comprehensive standards and regulations to the Zoning Ordinance relating to Data Centers, **High Density Computing Facilities** and Data Center Accessory Uses.

NOW, THEREFORE, BE IT ORDAINED AND ENACTED, by the Council of Borough of Moosic as follows:

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Section I: Section 300-30 of the Moosic Borough Zoning Ordinance is hereby amended as follows:

1. §300-30.3 Data Centers and Data Centers Accessory Uses.

A. **Definitions.** As used in this section, the following terms shall have the meanings indicated:

i. Data Center: A building or buildings which are occupied primarily by computers, high-density computing clusters, artificial intelligence (AI) processing systems, and/or telecommunications and related equipment where digital information is processed, transferred and/or stored, primarily to and from offsite locations. This use does not include computers or telecommunications related equipment that is secondary and customarily incidental to an otherwise permitted use on the property, such as servers associated with an office building. This use shall also include cryptocurrency mining, blockchain transaction processing, large scale learning facilities and server farms.

ii. High Density Computing Facility. A building or buildings containing high-density computing clusters and servers where each data rack or cabinet in the facility consumes more than 10 kW or if the facility consumes 150 Watts per square foot.

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

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B. Amendment to Table 1 Land Use Classifications.

Table 1 of the MBZO is hereby amended insofar as it references the “Manufacturing Zone” section of Table 1, insert the following uses as special exceptions:

Use	CN	R-1	R-2	C-1	C-2	M
Data Center, High Density Computing Facilities and Data Center Accessory use	—	—	—	---	---	SE

3. Section 300-58 (Definitions) of the Moosic Borough Zoning Ordinance is hereby amended to include the definitions of Data Centers, **High Density Computing Facilities** and Data Center Accessory Use as set forth in Section 1.(a)(i) and (ii) herein.

C. Amendment to Table 4 Area, Bulk, and Density Standards.

Table 4 of the MBZO is hereby amended insofar as it references the “Manufacturing Zone” section of Table 4, to require M zoned properties comprised of thirty (30+) plus acres of land have a setback of five hundred (500’) feet.

Standards	CN	R-1	R-2	C-1	C-2	M
Properties 30+ acres:	—	—	—	---	---	—
Yard						—
Front						500’
Rear						500’
Side 1						500’
Side 2						500’

Section II: Article 5 of the MBZO (Supplementary regulations for Special Exceptions and Other Uses) is amended to add Section 300-30.3, Data Centers, HDCF and Data Center Accessory Uses for proposed or existing structures meeting the setback requirements of this Ordinance:

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A. Data Centers and High Density Computing Facilities shall be permitted by Special Exception in Manufacturing (M) Zoning Districts on parcels containing thirty (30) acres of land or more, when approved in compliance with the procedures, standards, and criteria contained in this section.

B. For purposes of this section, sensitive receptors shall be defined as residential uses, schools, preschools, daycare centers, in-home daycares, long-term care facilities, **hospitals, in-patient medical facilities**, retirement and nursing homes, community centers, places of worship, parks, recreational facilities, agricultural lands, conservation lands and campgrounds.

C. **Dimensional Standard:** The dimensional standards of Data Centers, **High Density Computing Facilities** and Data Center Accessory Uses shall be in accordance with Article III (Permitted Uses) and Article IV (Supplementary Lot, Height and Yard Regulations) of the MBZO with the following exceptions:

1. The maximum building height for a Data Center and HDCF shall be forty-five (45') feet, inclusive of roof-mounted equipment such as cooling and ventilation systems, HVAC units, cooling towers, and solar facilities.
2. The maximum height of Data Center Accessory Uses shall be no greater than the height of the principal building.
3. Data Centers, HDCF and Data Center Accessory Uses shall be set back Five Hundred (500') feet from the boundary of any Residential District (R-1 and R-2); a Planned Development Zone (PDZ) or the lot line of any property developed with a sensitive receptor. Setbacks for other adjacent zones shall be as detailed in the zoning requirements for that specific zone.

D. **Landscape Buffer:** A landscape buffer is required between Data Centers, HDGC and Data Center Accessory uses and any adjoining residential zoning district, PDZ, sensitive receptor, or public roadway. The landscape buffer shall comply with the following requirements:

1. The landscape buffer shall be at least one hundred (100') feet in width and may be part of the minimum setback distance.
2. Buffer plantings shall consist of native species planted as follows:
 - a. One (1) large evergreen tree per 25 linear feet of buffer. The size of large evergreen trees shall be a minimum of eight (8) feet in height at the time of planting.
 - b. One (1) deciduous canopy (shade) tree per 75 linear feet of buffer. Size of canopy (shade) trees shall be a minimum of 2½ inch caliper at the time of planting.
 - c. One ornamental/flowering tree per 50 linear feet of buffer. The size of ornamental/flowering trees shall be a minimum of eight (8) feet in height for multi-stemmed varieties, or 2½ inch caliper at the time of planting for single-stemmed varieties.

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- d. Five (5) shrubs per 25 linear feet of buffer. Size of shrubs shall be fully branched and minimum of three feet in height at the time of planting. Shrubs shall be a combination of evergreen and deciduous species, with a minimum of 50% being evergreen.

3. In the event that existing vegetation is adequate to meet the intent of the required buffer yard to screen the Data Center, HDCF and Data Center Accessory Uses from adjoining residential zoning districts, PDZs, sensitive receptors, and public roadways, the Zoning Hearing Board, upon recommendation by the Borough Engineer and Planning Commission, may determine that existing topography and/or vegetation constitutes all or part of the required buffer yard.

E. Screening and Fencing:

1. To provide visual screening and reduce noise levels, ground-mounted and roof-mounted equipment used for cooling, ventilating, or otherwise operating the facility, including power generation or other power supply equipment, that is located within five hundred (500) feet of a public roadway, a Residential Zoning District, a PDZ, or the lot line of any sensitive receptor must be fully enclosed, except where not mechanically feasible based on the manufacturer's specifications. If it is not mechanically feasible to fully enclose the equipment, it must be fully screened from view using one or more of the following means:

- a. The landscape buffer required by subsection (D) above.
- b. By existing vegetation that will remain on the property.
- c. By the principal Data Center, **HDCF building** or an accessory building.
- d. A berm averaging a minimum of five (5) feet in height above the adjacent average ground level with a maximum side slope of 3:1, provided that the berm shall be covered by a well-maintained all season natural ground cover and any required screening plantings shall be arranged on the outside and top of the berm.
- e. A visually solid fence, screen wall or panel, parapet wall, or other visually solid screen that shall be constructed of materials compatible with those used in the exterior construction of the principal building.

2. In the case where berms are not feasible due to utilities, topography, or other valid constraints, the following alternative screening methods may be approved:

- a. Decorative walls with integrated landscaping (minimum of six (6) feet in height), as approved during the application process.
- b. Dense evergreen hedge planting (minimum of eight (8) feet in height at maturity).

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c. Combination of existing vegetation preservation and supplemental planting.

3. Fencing of the property is permitted, provided that fencing along public and private roadways and shall be constructed of good quality and visually appealing materials such as ornamental steel or other durable security-grade materials, is not chain-link, with or without slatted inserts, and does not include barbed wire or other similarly visibly intrusive deterrence device. An applicant shall not be required to comply with this requirement if fencing is fully screened from view by one or more of the means identified in subparagraph 1 above. Fences shall be six (6') in height at a minimum and may not exceed ten (10') feet in height.

F. Noise and Vibration:

1. The applicant shall demonstrate through a sound study, which shall be submitted with the zoning application, including, at a minimum, a detailed acoustic study showing the amount of noise to be produced by normal operations and strategies to minimize noise and achieve a neutral impact on the surrounding properties, conducted by a professional acoustical expert **and shall demonstrate compliance with the following limits:**

- A. **Daytime Noise Limits (7:00 a.m.–8:00 p.m. Monday–Friday) Maximum daytime noise levels shall be 65 dBA Leq and 70 dBA Lmax, measured at both (1) the property line and (2) the nearest sensitive receptor.**
- B. **Nighttime and Weekend Noise Limits (8:00 p.m.–7:00 a.m. Monday–Friday and all day Saturday and Sunday) Maximum nighttime noise levels shall be 55 dBA Leq. A nighttime Lmax limit shall also apply and shall not exceed Leq + 5 dB (i.e., 60 dBA Lmax). Measurements shall be taken at both (1) the property line and (2) the nearest sensitive receptor.**
- C. **Pure Tone Adjustment: If a pure tone is present, as defined by ANSI S1.13, a 5 dBA penalty shall be added to the measured Leq and Lmax values for compliance purposes.**
- D. **Low-Frequency Noise Restriction: Noise levels shall not exceed 50 dBC at the property line or nearest sensitive receptor during any hour.**
- E. **All sound studies shall be conducted using ANSI S1.4-2104 compliant meters and generally accepted methodology.**
- F. A sound study shall be conducted at the following phases:
 - a. A preliminary study shall be conducted as part of the special exception and land development process. The preliminary sound study shall include recommended sound reducing materials or systems as needed to meet the aforesaid sound limits.

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b. An interim sound study shall be conducted during the building permit approval process based upon the proposed user or users of the Data Center, **HDCF** and Data Center Accessory Uses depicted on the building plans. Any sound reducing materials or systems recommended by interim sound study shall be incorporated into the construction plans for the use.

c. An as-built sound study shall be conducted six months after issuance of the certificate of occupancy and prior to the final escrow release for any land development phase. An as-built sound study may also be required thereafter by the borough. If it is determined by the as-built sound study that there is a violation of the aforesaid noise limits, it shall be considered a violation of this Ordinance.

2. Maximum decibel levels specified herein shall not apply during times of power outage, however the sound studies shall also evaluate, and report anticipated decibel levels when all emergency power generation equipment is running, including backup generators.

3. The applicant shall provide a vibration study prepared by a qualified professional that demonstrates that no vibration from the Data Center, **High Density Computer Facility**, Data Center Accessory Uses, or associated equipment will be perceptible to the human sense of feeling beyond the property line but **not to exceed a Peak Particle Velocity (PPV) limit of 0.02 inches per second, measured at the property line.**

G. Water and Sewer:

1. A Water Utilization Report shall be submitted with the zoning application detailing, at a minimum the total daily intake volume and source(s) of that water, discharge volumes and destinations, cooling system type and efficiency, and shall demonstrate compliance with the borough's stormwater ordinances and regulations. The report shall be prepared and certified by a professional engineer. The report shall be subject to review and comment by the Borough. The Borough shall have the right to require supplemental or amended reports based upon comments by the Borough prior to any zoning approval.

2. If the use will be served by a public water supply, the applicant shall submit documentation from the public authority or utility certifying that the public authority or utility will supply the water needed.

3. If the use is to rely upon nonpublic sources of water, the applicant shall provide a water feasibility study. The purpose of the study is to determine if there is an adequate supply of water for the proposed use and to estimate the impact of the use on existing wells, groundwater, and surface waters in the vicinity. No Data Center **or HDCF** shall be approved unless the water feasibility study demonstrates that the anticipated water supply yield is adequate for the project and that the proposed water withdrawals and discharges will not endanger or adversely affect the quantity or quality of groundwater supplies or surface waters in the vicinity. The water feasibility study shall include the following information at a minimum:

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- a. The projected water demands of the Data Center or HDFC;
 - b. The source of water to be used;
 - c. A description of how water will be used, including the amount or proportion of water to be used for each purpose (e.g. cooling, humidity control, fire suppression, and domestic usage);
 - d. The long-term safe yield of the water source;
 - e. A description of the amount or portion of water withdrawn that will be recycled or discharged and by what means;
 - f. A geologic map of the area with a radius of at least one mile from the site;
 - g. The location of all existing and proposed wells within 1,000 feet of the property boundary, with a notation of the capacity of all high-yield wells;
 - h. The location of all surface waters, including perennial and intermittent streams, rivers, lakes, reservoirs, ponds, wetlands, springs, natural seeps, and estuaries, within 1,000 feet of the property boundary;
 - i. A determination of the effects of the proposed water supply system on the quantity and quality of water in nearby wells, surface waters, and the groundwater table;
 - j. A statement of the qualifications and the signature(s) of the person(s) preparing the study.
4. The applicant shall provide proof of review and approval from the Susquehanna River Basin Commission for projects proposing:
- a. Water withdrawals of **100,000 gallons per day (GPD)** or more over a 30-day average from any source or combination of sources within the Susquehanna River Basin; or
 - b. Any consumptive water use of **20,000 gpd or more** over a 30-day average from any water source.
5. The applicant shall demonstrate that adequate means of wastewater disposal, including domestic wastewater and wastewater used for cooling or industrial purposes, have been provided and approved by the Sewage Enforcement Officer and/or the Pennsylvania Department of Environmental Protection.

H. Power Supply:

1. An Energy Management Plan shall be submitted with the zoning application detailing at a minimum, annual electricity demand, what supply sources will be utilized, energy storage capacity (if applicable) and efforts made to maximize use of renewable or clean energy. The Plan will be prepared and certified by a professional engineer. The Energy Management Plan shall be subject to review and comment by the borough. The borough shall have the right to require supplemental or amended plans based upon comments by the borough prior to any zoning approval.

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2. If the applicant proposes to connect the Data Center **or HDCF** to the electric grid, the applicant shall provide documentation from the applicable electric service provider certifying that that the necessary capacity is available and that electric service provider will serve the Data Center **or HDCF**. Known impacts on electric rates or availability for other uses directly attributable to the Data Center **or HDCF** project shall be noted.

3. Any energy generation system designed or used to supply power directly to a Data Center **or HDCF** during normal operations, including solar, wind, fossil fuel, or nuclear energy generating systems shall be considered part of the Data Center **or HDCF** use.

4. Data Centers **and HDCFs** shall make good faith efforts to maximize use of renewable and/or clean energy for all electrical and cooling needs, either through on-site generation or verifiable Power Purchase Agreements (PPA).

I. Emergency Management:

1. A detailed Emergency Response Plan shall be submitted with the **preliminary land development plan**, showing at a minimum that the data center has a plan in effect to deal with emergencies resulting from flood, fire, explosion, and catastrophic weather events. The Emergency Response Plan shall be subject to review and comment by the borough and shall:

- a. Be reviewed and accepted by the Borough fire chief, emergency management services and Lackawanna County Emergency Management Agency as part of the special exception process;
- b. Include detailed procedures and plans for fire suppression, containment, ventilation, evacuation, and **refrigerant leak response (chiller, ammonia, HFOs)**;
- c. Include an evaluation of the access roads and hydrant locations within the site to ensure suitable access for emergency equipment within the site;
- d. Ensure that all first responders receive adequate operator-funded training specific to the installed system **with said training occurring on an annual basis**.
- e. 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 **or HDCF**.

2. Any Data Center **or HDCF** use proposing battery storage or any other device or group of devices capable of storing energy in order to supply electrical energy at a later time, whether the energy is stored for use on-site or off-site, shall demonstrate compliance with National Fire Protection Association (NFPA) Standard 855, Installation of Stationary Energy Storage Systems, or similar standards and must include fire suppression systems designed specifically for battery storage.

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3. No Data Center or HDCF 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 in meeting, or exceeding the standards set forth in the National Fire Protection Association (NFPA) Standard 855, Installation of Stationary Energy Storage Systems

J. Thermal Impact and Heat Dissipation Study:

1. The applicant shall demonstrate through a Thermal Impact and Heat Dissipation Study, which shall be submitted with the zoning application, including, at a minimum, a detailed study showing the amount of heat to be produced and released into the atmosphere during normal operations and strategies to minimize heat dissipation and achieve a neutral impact on the surrounding properties, conducted by a professional Thermal Heat expert. A sound study shall be conducted at the following phases:

- a. A preliminary study shall be conducted as part of the special exception and land development process. The preliminary thermal study shall include recommended heat reducing materials or systems.
- b. An interim thermal study shall be conducted during the building permit approval process based upon the proposed user or users of the Data Center, HDCF and Data Center Accessory Uses depicted on the building plans. Any heat reducing materials or systems recommended by interim thermal study shall be incorporated into the construction plans for the use.
- c. An as-built thermal study shall be conducted six months after issuance of the certificate of occupancy and prior to the final escrow release for any land development.

2. The Thermal Impact study shall address the following categories:

- A. How the exhaust air affects the health of the required Landscape Buffer as set forth in § II(D) herein.
- B. The impact of thermal plumes on local weather and the surrounding environment of the facility (ie. Fog/icing on adjoining roadways).
- C. The impact of the “Heat Island” effect on the adjoining properties.

K. Aesthetics:

1. Any Data Center, HDCF or Data Center Accessory Use building façade that faces a road, residential district, PDZ, or existing residential use must incorporate at least two of the following design elements every 150 horizontal feet:

- a. A change in building material, pattern, texture, or color;
- b. A change in building height;

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c. Building step-backs or recesses having a minimum depth of five (5) feet;

L. Parking: Section 300-28(A)(3) of the Moosic Borough Code of Ordinances is amended as follows:

1. Data Centers and HDCF are to be provided with at least one parking space per 3,000 square feet of floor area designed and intended to be accessible regularly by employees and visitors.

M. Floodplain Exclusion:

1. No Data Center or HDCF shall be located within any 100-year floodplain as shown in the most recent Flood Insurance Map Rate Maps prepared by the Federal Emergency Management Agency for the Borough.

N. Air Quality:

1. Back-up power equipment and facility emissions shall be designed using best available technology to shall minimize air pollutant emissions and meet or exceed applicable state and federal laws regulating emissions for the equipment proposed to be used. In the case that backup generators are used, EPA Tier 4 emissions standards, or equivalent, must be achieved.

2. Annual testing shall be performed, and reports shall be provided to the Borough and other relevant state and federal agencies to ensure that data center equipment is performing as designed and emissions from the data center do not exceed allowable limits.

O. Decommissioning/Repurposing Plan:

1. A detailed Decommissioning or Repurposing Plan shall be submitted with the zoning application demonstrating that the data center has a plan in effect to deal with the decommissioning or repurpose of the facility at its end of life. The Decommissioning/Repurposing Plan shall be subject to review and comment by the Borough and shall:

- a. detail what event(s) will trigger the closing of the facility;
- b. detail the length of time the decommissioning or repurposing process will take to complete;
- c. detail the amount of site restoration that will be required, the length of time site restoration will take to complete,
- d. detail the potential decommissioning or repurposing plan for the buildings and ground structures on the site;
- e. detail the plan for Phase I Environmental Site Assessment (ESA) post decommissioning or repurposing of the site;

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f. detail the plan for utility coordination during the decommissioning **or repurposing** process.

Section III. Severability:

The provisions of this Ordinance are severable. If any section, clause, sentence, part or provision of this Ordinance shall be determined to be illegal or invalid by any court or competent jurisdiction, such decision shall not impair or affect the remaining terms, sections and clauses of this Ordinance.

Section IV. Repealer:

All ordinances or resolutions or parts of ordinances or resolutions insofar as they are inconsistent herewith are hereby repealed and rescinded.

Section V. Codification:

Pursuant to the Moosic Borough Code and the Pennsylvania Municipalities Planning Code, the Moosic Borough Zoning Ordinance shall hereby be codified to incorporate the above-referenced amendments.

Section VI. Effective Date:

This Ordinance shall take effect ten (10) days following the date of enactment.

DULY ENACTED AND ORDAINED into law this ____ day of _____, 2026.

Borough of Moosic,

Marilyn French, Council President

Attested:

Andrew Kudzinowski, Borough Secretary

Approved the ____ day of _____, 2026.

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Robert Bennie, Mayor.