**ORDINANCE NO. 1317**

**AN ORDINANCE OF THE CITY OF BROKEN BOW, NEBRASKA, AMENDING THE ZONING ORDINANCE TO ESTABLISH DEFINITIONS, CONDITIONAL USE PERMIT REQUIREMENTS, STRICT PERFORMANCE STANDARDS, MANDATORY NOISE LIMITATIONS AND ACOUSTICAL STUDIES, WATER CONSERVATION AND COOLING SYSTEM RESTRICTIONS, MANDATORY RESIDENTIAL SETBACKS, OPERATOR-EXCLUSIVE DECOMMISSIONING LIABILITY, FINANCIAL TRANSPARENCY CRIMINAL BACKGROUND CHECKS, AND ENFORCEMENT PROVISIONS FOR HIGH-DENSITY DATA PROCESSING FACILITIES INCLUDING DATA CENTERS AND DIGITAL ASSET MINING OPERATIONS; AND PROVIDING FOR AN EFFECTIVE DATE.**

**BE IT ORDAINED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF BROKEN BOW, NEBRASKA:**

## SECTION 1. PURPOSE AND LEGISLATIVE FINDINGS

The City Council finds that high-density data processing facilities, including cryptocurrency mining operations and large-scale data centers, create unique and significant impacts upon surrounding properties, residential neighborhoods, and municipal infrastructure, including:

1. Continuous, high-frequency, and elevated industrial noise;
2. Severe electrical demand and utility infrastructure stress;
3. Increased demand on emergency and fire response services;
4. Land-use incompatibility concerns when sited adjacent to residential areas;
5. Critical impacts to groundwater, municipal water supplies, and wastewater systems;
6. Industrial-scale mechanical impacts including vibration, light pollution, and heat generation.

The City Council further finds that these regulations are intended to protect the public health, safety, and welfare; preserve the quiet enjoyment of residential property; maintain the reliability of municipal utility systems; protect finite groundwater resources; and ensure that future taxpayers are not burdened with infrastructure or decommissioning costs associated with high-density data processing facilities. And further finds these regulations in combination with all applicable State statutes will hereby meet the listed requirements.

## SECTION 2. DEFINITIONS

a) **Data Center:** A facility primarily engaged in the processing, storage, hosting, or transmission of digital data through centralized computing and networking equipment, including but not limited to associated accessory structures such as cooling equipment, and related utility infrastructure.

b) **Digital Asset Mining Operation:** Any facility, room, structure, or specialized mobile container unit utilizing specialized electronic computing equipment for blockchain transaction validation, cryptocurrency mining, or similar high-density computational processing activities.

c) **High-Density Data Processing Facility:** Any Data Center or Digital Asset Mining Operation with a connected electrical service capacity or peak power demand of sixty-five kilowatts (65 kW) or greater.

d) **Residential Structure or District:** Any property zoned for residential use under the Broken Bow Zoning Ordinance, or any property containing an existing lawful residential dwelling.

e) **Closed-Loop Liquid Cooling System:** A cooling architecture in which a liquid coolant circulates entirely within a permanently sealed, continuous internal piping network to absorb and dissipate heat. This system recycles the fluid indefinitely and, by design, requires zero continuous freshwater consumption, zero evaporative water loss, and zero continuous wastewater discharge during standard operations.

f) **Direct-to-Chip Liquid Cooling:** A highly efficient, specialized closed-loop cooling configuration where a liquid coolant is piped directly to sealed metal cold plates mounted directly on top of heat-generating electronic processing components (such as Central Processing Units or Graphics Processing Units) to capture and transfer heat away via direct conduction, without relying on evaporative fluid loss or municipal water consumption.

## SECTION 3. CONDITIONAL USE PERMIT REQUIRED & BACKGROUND CHECKS

a) **Conditional Use Permit.** Any High-Density Data Processing Facility shall require approval of a Conditional Use Permit ("CUP") prior to construction, installation, structural expansion, or operation.

b) **Mandatory FBI Criminal Background Check.** Prior to the scheduling of any public hearing before the Planning Commission or City Council for a CUP application, all corporate officers, LLC members holding a ten percent (10%) or greater financial or ownership interest in the proposed facility, and on-site facility managers must submit to, and successfully pass, a national Federal Bureau of Investigation (FBI) fingerprint-based criminal background check at their own expense.

c) **Disqualification Criteria.** A history of conviction, a plea of guilty, or a plea of nolo contendere by any principal partner, officer, or managing member within the past fifteen (15) years for any financial crime—including but not limited to wire fraud, securities fraud, money laundering, embezzlement, tax evasion, or bank fraud—shall result in the immediate denial of the Conditional Use Permit application.

d) **Foreign Ownership and Control Disclosure.** Prior to the scheduling of any public hearing before the Planning Commission or City Council for a CUP application, the applicant shall disclose, under oath, its complete beneficial ownership structure, including the identity of any parent company, subsidiary, or affiliated entity, and shall specifically identify any ownership, control, or beneficial interest of ten percent (10%) or greater held directly or indirectly by: (i) a foreign government or foreign government-owned or foreign government-controlled entity; or (ii) an entity organized under the laws of, headquartered in, or controlled by a country designated as a "foreign adversary" under 15 C.F.R. § 7.4, as may be amended, or any successor designation.

e) **Disqualification Based on Foreign Adversary Ownership or Control.** An application shall be denied if the disclosure required by subsection (d) reveals that a foreign government, a foreign government-controlled entity, or an entity organized under the laws of, headquartered in, or controlled by a country designated as a foreign adversary under 15 C.F.R. § 7.4 holds a direct or indirect ownership, control, or beneficial interest of ten percent (10%) or greater in the applicant. Failure to make the disclosure required by subsection (d), or submission of a materially false or incomplete disclosure, shall likewise result in denial of the application and, if discovered after CUP issuance, shall constitute grounds for immediate revocation of the CUP under Section 8.

**Application Submittal Requirements.** Applicants shall submit the following materials at their own expense:

a) Full site plan and architectural building/container elevations;
b) Comprehensive electrical load analysis prepared by a professional engineer licensed in Nebraska;
c) Pre-development predictive noise impact study (per Section 4);
d) Cooling and ventilation system engineering specifications;
e) Certified fire prevention and suppression plan approved by the local fire authority;
f) Decommissioning plan explicitly acknowledging sole operator liability.

**Utility Infrastructure and Deposit Requirements.** Prior to the issuance of a building permit or commencement of operations, the applicant shall satisfy the following municipal utility conditions:

a) 100% Operator Responsibility for Upgrades: The operator shall bear one hundred percent (100%) of all financial and legal responsibility for any and all municipal utility infrastructure upgrades including but not limited to electrical substations, transformers, high-capacity wiring, transmission lines, water mains, and wastewater system modifications required to safely accommodate the facility's

operational load. The city shall not subsidize infrastructure expansions for high-density data processing operations.

b) Three-Month Utility Deposit: The operator shall submit and maintain a continuous cash deposit or irrevocable letter of credit equivalent to three (3) months of estimated peak utility consumption (electricity, water, and sewer combined) as determined by the City's utility department, to secure payment for municipal services.

c) The billed kW demand shall be adjusted when the metered power factor (PF) is less than 95%. The metered KW will then be multiplied by the ratio of (95% / PF%), where PF% is the metered power factor expressed as a percentage.

## SECTION 4. PERFORMANCE STANDARDS

### Noise Standards and Ceilings

a) **Decibel Limits:** No facility governed by this Ordinance shall emit a continuous, sound-pressure level exceeding the following thresholds when measured at any point along the property line of any existing residential structure, Residential District, public park, church, or school:

   a. **55 dBA**
   b. **70 C-weighted decibels (70 dBC)**

b) The measured C-weighted sound level shall not exceed the simultaneously measured A-weighted sound level by more than fifteen (15) decibels ($dBC - dBA \leq 15\ dB$)

c) **Acoustic Character:** All sound measurements shall be taken using ANSI-compliant equipment utilizing equivalent continuous sound levels. Tonal, high-frequency, impulsive, or repetitive mechanical noise (such as fan whine) is strictly prohibited from radiating across property lines and must be fully mitigated via engineering enclosures or acoustic baffling.

d) **Mandatory Sound Dampening Features:** All facilities governed by this Ordinance shall install permanent, engineered physical sound-dampening structures to suppress operational noise. This infrastructure shall include, but is not limited to, specialized exterior sound walls, acoustic barriers, or earthen berms strategically designed and situated between the primary noise-producing equipment (such as exhaust fans, blowers, and chillers) and any adjacent boundaries. The precise engineering specifications, height, and materials of these dampening structures must be detailed in the applicant's pre-development plans.

**Noise Studies and Auditing**

a) **Pre-Development Study:** The applicant's predictive sound analysis must model the maximum potential noise output of each individual computer and cooling unit operating simultaneously at 100% capacity under peak summer heat loads. Noise shall be measured as an A-weighted and C-weighted equivalent continuous sound level (Leq) over a continuous one-hour period using a Type 1 or Type 2 sound level meter meeting ANSI S1.4 or IEC 61672 standards.

b) **Post-Construction Auditing:** Within ninety (90) days after commencement of operations, the operator shall provide a post-construction field-verified sound report prepared by an independent certified acoustical engineer confirming compliance.

c) **Ongoing Enforcement Testing:** Once every year, or upon receipt of documented complaints, the City may require additional independent sound testing at the operator's expense.

d) **Enforcement and Shutdown for Non-Compliance**: Compliance with the noise standards in this Section is a continuous condition of operation. If post-construction field testing, annual audits, or city enforcement testing show any violation of these sound limits, the facility shall be subject to immediate operational shutdown or utility disconnection under Section 8(C) until compliance is verified by direction of Mayor or authorized City delegate.

**Cooling and Water Conservation Regulations**

a) **Mandatory Systems:** All High-Density Data Processing Facilities must utilize Direct-to-chip liquid cooling, a closed-loop liquid cooling system, or an alternative air-cooling system that consumes no municipal or ground water during standard operations.

b) **Prohibited Systems:** Once-through cooling systems, open-loop systems, or any cooling configuration requiring continuous freshwater consumption, evaporative water loss, or continuous wastewater discharge for mechanical heat mitigation are strictly prohibited.

**Lighting and Glare**

a) Exterior lighting shall be strictly shielded and directed downward to eliminate glare and light pollution onto adjacent properties and public rights-of-way.

**Annual Operations and Compliance Reporting to the City of Broken Bow**

a) **Electrical Demand Metrics:** The documented annual average electrical demand and peak electrical demand (measured in kilowatts or megawatts) placed upon the utility grid by the facility is to be given to City of Broken Bow by June 1st annually.

b) **Emergency Contact Registry:** Current, up-to-date name, telephone number, and email information for a local, 24-hour emergency representative authorized to act on behalf of the operator and respond on-site to utility, noise, or public safety emergencies within two hours of notification.

c) **Operator Certification of Compliance:** A formal, written certification signed under penalty of perjury by a principal corporate officer or managing member shall be provided annually, stating that the facility remains in full and continuous compliance with all terms, performance standards, and special conditions specified within the approved Conditional Use Permit, this Ordinance, and State law.

d) **Change of Ownership.** Any change of ownership of ten percent (10%) or more in the operator or facility, occurring after the initial issuance of a Conditional Use Permit, shall be reported in writing to the City Clerk within thirty (30) days of the effective date of the transfer. Following any such change of ownership, the Mayor or an authorized City delegate may, in their discretion, require the operator to submit a new Conditional Use Permit application.

e) **Expansion of Approved Facility.** Any proposed expansion of an existing, approved High-Density Data Processing Facility, including but not limited to an increase in connected electrical service capacity or peak power demand, additional structures or specialized mobile container units, additional cooling infrastructure, or an increase in the physical footprint of the facility beyond that approved in the original Conditional Use Permit, may require approval of a new Conditional Use Permit prior to commencement of the expanded operation.

**MANDATORY EMERGENCY LOAD CURTAILMENT AND INTERRUPTION**

a) The City of Broken Bow reserves the right to immediately suspend, interrupt, or mandate the reduction of electrical service and operations to any High-Density Data Processing Facility governed by this Ordinance in the event of an infrastructure emergency.

b) An infrastructure emergency shall be defined as any event or condition that threatens municipal utility operations, including but not limited to:
    a) imminent threat to electric system reliability,
    b) transformer overload,
    c) substation failure,
    d) declared utility emergency,
    e) emergency ordered by the Mayor or authorized City delegate.

**SECTION 5. MANDATORY SETBACKS**

a) **Air-Cooling Residential Setback.** Any facility that relies solely on a dry-air cooling system (non-liquid high-velocity fans, blowers, or exterior HVAC units) shall be subject to a strict, mandatory minimum setback of one-half (1/2) mile (2,640 feet) from the property line of any Residential District or existing residential structure.

b) **Setback Reduction.** The mandatory one-half mile setback for any facility that relies solely on dry-air cooling may be reduced if the applicant proves through the engineering and predictive noise studies required by this ordinance that the facility will fully meet all sound and performance requirements established in Section 4. In no event shall the setback be reduced to less than 500 feet.

**c) Closed-loop System Setback.** Setbacks will be determined by the results of the required sound study established in Section 4. There shall be a minimum of 6 feet between all Data Center structures and existing property lines.

**SECTION 6. FIRE SAFETY AND STORAGE OF HAZARDOUS MATERIALS**

a) **Emergency Action Plan.** Prior to operation, all facilities shall obtain written approval from all applicable fire authorities, and the Custer County Emergency Manager confirming compliance with advanced fire suppression systems, dedicated emergency utility disconnects, and hazardous material storage standards.

b) **Absolute Battery Storage Prohibition.** The installation, integration, or utilization of Battery Energy Storage Systems (BESS) or industrial-scale battery banks on-site is strictly prohibited. This restriction does not apply to low-capacity, localized Uninterruptible Power Supplies (UPS) integrated internally within server racks exclusively for the prevention of data corruption during safe equipment shutdowns.

**c) On-Site Power Generation Prohibition.** No operator shall install, operate, or maintain any localized, on-site energy production infrastructure for the purpose of powering data-processing, crypto-mining, or mechanical cooling operations outside of city provided electric utilities.

## SECTION 7. ABANDONMENT AND DECOMMISSIONING

a) **Abandonment.** A facility shall be deemed abandoned if operational data-processing activity ceases for a continuous period of twelve (12) months. For purposes of this Section, intermittent, token, or de minimis operation, including but not limited to operation at less than twenty percent (20%) of the facility's permitted electrical load, or operation for fewer than thirty (30) cumulative days within any consecutive twelve (12) month period, shall not constitute continuing operation and shall not toll or reset the abandonment period described in this subsection. The operator bears the burden of demonstrating, through utility billing records and metered load data, that the facility's operation during the relevant period exceeds this threshold.

b) **100% Operator Liability.** Within one hundred eighty (180) days after abandonment, the operator of the facility shall bear one hundred percent (100%) of the legal and financial liability to completely decommission the site. This includes the mandatory removal of all non-utility equipment, specialized computing machinery, specialized container units, substations, transformers, and cooling infrastructure, and restoring the real property to a clean, safe, and orderly vacant condition at their sole expense.

c) **Mandatory Decommissioning Surety Bond.** Prior to executing a conditional use permit or building on-site, the operator shall file with the City Clerk a performance surety bond, an irrevocable letter of credit, or an escrow account in an amount equal to one hundred fifty percent (150%) of the estimated cost of full site decommissioning and restoration, as verified by an independent structural engineer licensed in Nebraska. This bond shall secure the operator's performance under subsection (B) and ensure the city incurs zero clean-up liability.

d) **Periodic Re-evaluation and Inflation Adjustments.** To ensure the financial security remains sufficient against the effects of inflation, technological changes, and fluctuating salvage values, the decommissioning cost estimate and accompanying surety amount shall be re-evaluated every three (3) years from the date of the initial permit issuance.

e) **Operator Obligation.** The operator shall, at their sole expense, retain an independent professional engineer licensed in the State of Nebraska to conduct the triennial re-evaluation and submit an updated, certified decommissioning cost report to the City Council.

f) **Adjustments to Financial Assurance.** If the updated engineering report indicates that the cost of decommissioning has increased, or if the Consumer Price Index

(CPI) for the Midwest region reflects a cumulative upward inflationary shift, the operator shall increase the value of the surety bond, letter of credit, or escrow account to match 150% of the newly established cost within sixty (60) days of the report's approval by the City. Failure to secure the adjusted financial assurance within this timeframe shall constitute a material violation of the Conditional Use Permit and subject the facility to immediate operational shutdown or utility disconnection as provided in Section 8 of this Ordinance.

**SECTION 8. ENFORCEMENT AND PENALTIES**

a) **Violations.** Violation of any provision of this Ordinance, or non-compliance with the specific conditions of an approved CUP, shall constitute a zoning violation.

b) **Penalties.** Any person or corporation violating this Ordinance shall be subject to a fine of not exceeding one hundred dollars ($100) per offense, as authorized under Neb. Rev. Stat. § 19-913. Each day a violation continues following official written notice from the City shall constitute a separate and distinct offense.

c) **Immediate Revocation.** Continued non-compliance with noise thresholds, background check requirements, or water consumption bans following a standard 30-day notice-to-cure window and written notice and confirmation by independent testing, the City may suspend the Conditional Use Permit until compliance is achieved.

**SECTION 9. SEVERABILITY**

If any section, subsection, sentence, clause, or phrase of this Ordinance is held invalid or unconstitutional by a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance.

**SECTION 10. EFFECTIVE DATE**

**PASSED AND APPROVED BY THE CITY COUNCIL OF BROKEN BOW, NEBRASKA, THIS 8th DAY OF September, 2026.**

CITY OF BROKEN BOW CORPORATE SEAL NEBRASKA

Rodney W. Sonnichsen, Mayor

ATTEST:

Jennifer A. Waterhouse, City Clerk