



BOROUGH OF TATAMY

NORTHAMPTON COUNTY, PENNSYLVANIA

423 BROAD STREET PO BOX 218
TATAMY, PA 18085-0218
PHONE: 610.252.7123 FAX: 610.252.2747
BOROUGH.OFFICE@TATAMYPA.COM

ORDINANCE NO. 314-2026

(Duly Adopted 7th day of September 2026)

AN ORDINANCE AMENDING THE TATAMY BOROUGH ZONING ORDINANCE TO ADD PROVISIONS REGULATING MICRO AND MINI DATA CENTERS; ESTABLISHING DEFINITIONS FOR MICRO DATA CENTERS, MINI DATA CENTERS, AND ACCUMULATED TONAL NOISE EFFECTS; AMENDING THE MAIN STREET COMMERCIAL DISTRICT AND BUSINESS OVERLAY DISTRICT TO PERMIT MICRO AND MINI DATA CENTERS SOLELY AS A SPECIAL EXCEPTION USE; PROVIDING STRICT ENVIRONMENTAL PERFORMANCE STANDARDS FOR NET-ZERO EMISSION ENERGY SELF-GENERATION, NET-ZERO WATER CONSUMPTION, STRINGENT LOW-FREQUENCY AND HUMMING NOISE MITIGATION, AND CONTRACTOR CONSTRUCTION PRE-QUALIFICATION MANDATES; PROVIDING FOR SEVERABILITY; REPEALER; AND ENACTMENT.

WHEREAS, the Borough Council of the Borough of Tatamy provides for regulations that promote the health, safety, and welfare of the residents of Tatamy; and

WHEREAS, the Borough of Tatamy recognizes that digital infrastructure and data storage facilities serve a critical purpose in the modern economy, but acknowledges that their intense resource consumption and operational impacts pose unique development challenges within a small, densely settled municipal community; and

WHEREAS, the Borough Council has determined it to be in the best interest of the community to highly regulate, rather than prohibit, small-scale localized data center

TATAMY BOROUGH ORDINANCE 314-2026

structures to ensure absolute protection of the environment, residential utility rate structures, and neighborhood peace.

NOW, THEREFORE, BE IT ORDAINED AND ENACTED by the Borough Council of the Borough of Tatamy, Northampton County, Pennsylvania, as follows:

SECTION 1. AMENDMENT TO DEFINITIONS

The Tatamy Borough Zoning Ordinance is hereby amended to add the following definitions:

- **Micro Data Center:** A highly localized, self-contained, containerized or modular data processing facility containing an integrated system of computing, data storage, telecommunications, power distribution, and cooling components, occupying a total gross floor or footprint area of less than 2,500 square feet. This use includes decentralized edge-computing nodes and block-chain processing units but excludes minor server rooms customarily incidental to a permitted standard office use.
- **Mini Data Center:** A physical facility housing computer servers, telecommunications networks, and digital storage hardware systems occupying a gross floor or footprint area between 2,501 square feet and 10,000 square feet. Large-scale data centers exceeding 10,000 square feet are explicitly prohibited due to the geographic size limitations of the Borough.
- **Full-Scale Data Center:** Any data processing, server farm, or digital storage facility occupying a building footprint or gross floor area exceeding 10,000 square feet or requiring a centralized campus infrastructure. Due to the high-density nature and

TATAMY BOROUGH ORDINANCE 314-2026

geographic limitations of the Borough, a Full-Scale Data Center is recognized as a heavy-impact utility infrastructure use.

- **Tonal Noise / Low-Frequency Hum:** Continuous acoustic emissions characterized by a single continuous frequency component or a narrow band of frequencies (such as those generated by commercial HVAC fans, cooling towers, transformers, and power inverters) that generate a distinct, audible humming, buzzing, or high-pitched whine that stands out against the ambient background sound levels.
- **Net-Zero Operational Utilities:** An operational standard whereby a facility produces, captures, or independently generates 100% of the energy and water volumes required to sustain its continuous standard and peak municipal operations, resulting in a net-neutral impact on external public utility grids and community aquifers.

SECTION 2. DISTRICT REGULATIONS AND ZONING DISTRICT AMENDMENTS

The Tatamy Borough Zoning Ordinance is amended to include **Micro Data Centers** and **Mini Data Centers** as an allowed use **solely via Special Exception** within the following districts:

1. **Main Street Commercial District**
2. **Business Overlay District**

No data center use of any tier shall be permitted as a use-by-right in any zoning district within the Borough of Tatamy.

SECTION 3. SPECIAL EXCEPTION AND ENVIRONMENTAL PERFORMANCE STANDARDS

Any application for a Micro or Mini Data Center in the Main Street Commercial District or Business Overlay District must receive Special Exception approval from the Zoning Hearing Board and must strictly comply with the following mandatory conditions:

A. Architectural Scale, Footprint, and Blending

1. The maximum building or footprint size for any single Mini Data Center shall not exceed 10,000 square feet. Micro Data Center structures shall not exceed 2,500 square feet.
2. The exterior facade of any data center structure visible from a public right-of-way must be structurally designed to mimic standard commercial architectural finishes prevalent in the Main Street Commercial District (e.g., brick, stone, decorative masonry). Blind concrete blocks or exposed industrial shipping container walls are prohibited.
3. All equipment, including outdoor cooling units, backup generators, and electrical infrastructure, must be entirely screened from public view using a continuous 100% evergreen landscape screening buffer combined with decorative acoustic shielding panels.

B. Acoustic Control and Tonal Noise Mitigation (Anti-Humming)

1. **Maximum Sound Thresholds:** Sound levels generated by the facility's continuous cooling systems, venting infrastructure, and electrical hardware shall not exceed 45

TATAMY BOROUGH ORDINANCE 314-2026

dBA during daytime hours (6:00 AM to 10:00 PM) and 40 dBA during nighttime hours (10:00 PM to 6:00 AM) when measured at the property line.

2. **Tonal/Humming Adjustments:** To eliminate high-pitched whines or low-frequency ambient humming, if the noise emitted contains a noticeable continuous tonal component (such as a hum, whine, or buzz), the maximum permissible sound levels specified above shall be reduced by an additional 5 dBA.
3. **Mandatory Acoustic Attenuation:** All cooling towers, exhaust fans, and condensing equipment must be outfitted with professional-grade sound attenuators, silencers, or acoustic blankets.
4. **Acoustic Audits:** The applicant must submit an initial predictive acoustic modeling study by a certified acoustical engineer. Following construction, mandatory semi-annual noise compliance monitoring reports must be submitted to the Office of the Borough Manager.

C. Net-Zero Energy Generation Mandate

1. **Self-Generation Requirement:** The data center must provide 100% of its normal and peak electricity consumption through dedicated, on-site or directly connected clean energy generation systems (such as integrated rooftop/canopy solar arrays or localized non-combustive hydrogen cells).
2. **Grid Protection:** Connection to the public electric utility grid shall be strictly limited to emergency fallback or backup safety systems. The facility is prohibited from drawing normal operating power from the localized public grid, ensuring that data center

TATAMY BOROUGH ORDINANCE 314-2026

consumption does not trigger regional utility rate hikes or brownouts for residential Borough residents.

3. **Emergency Storage:** Any localized battery backup energy storage system (BESS) must comply with NFPA Standard 855 and be housed in an blast-mitigated, climate-controlled enclosure approved by the Borough Fire Chief.

D. Net-Zero Water Generation and Consumption Mandate

1. **Closed-Loop System Mandate:** Liquid cooling systems must utilize 100% closed-loop, continuous evaporative-recirculation cooling infrastructure that recycles all operational water.
2. **Self-Contained Supply:** The data center is prohibited from drawing public municipal tap water or extracting from local underlying aquifers for continuous primary cooling processes.
3. **Rainwater and On-Site Containment:** Any water required to offset evaporative drift or system losses must be sourced entirely from on-site rainwater harvesting, cistern collections, or pre-purchased, trucked-in non-potable industrial water supplies. The applicant must prove a net-zero extraction footprint on Tatamy's public water system.

E. Qualified Contractor Construction Mandate

1. To prevent substandard municipal construction, infrastructure failure, or prolonged right-of-way disruption, the applicant must mandate that all general and secondary

TATAMY BOROUGH ORDINANCE 314-2026

contractors responsible for building, utility execution, and system integration are pre-qualified and certified.

2. **Pre-Qualification Criteria:** The general contracting company must submit a portfolio demonstrating a minimum of five (5) consecutive years of verified experience in commercial mechanical infrastructure or specialized digital technology/industrial facility construction.
3. **Bonds:** The developer must post a Land Development Performance and Infrastructure Protection Bond equal to 110% of the total estimated construction cost, to be held by the Borough until the system passes full operational engineering inspections.

F. Lot Area and Dimensional Mandates for Scale Differentiation

1. **Full-Scale Minimum Acreage:** In order to protect the high-density residential and commercial corridors of the Borough from industrial sprawl, any proposed Full-Scale Data Center must possess a contiguous minimum lot area of **40 acres**.
2. **Statutory Acknowledgement of Land Capacity:** The Borough Council formally recognizes that available vacant parcels meeting this acreage threshold do not currently exist within the Main Street Commercial District or the Business Overlay District. Consequently, any data center development within the Borough is effectively restricted to the Micro Data Center or Mini Data Center classifications.
3. **Micro and Mini Lot Thresholds:** Any proposed Micro Data Center (under 2,500 sq. ft.) or Mini Data Center (2,501 to 10,000 sq. ft.) allowed by Special Exception must be situated on a parcel with a minimum lot size of **1.5 acres** to accommodate the

mandatory 100% net-zero solar arrays, battery storage blast screening, and the acoustic attenuation buffers required by this Ordinance.

G. Residential Boundary Screening, Sound Mitigation, and Setbacks (Eighth Street Corridor)

1. **Enhanced Setbacks:** Where a Micro or Mini Data Center parcel directly faces or sits adjacent to a residential zoning district or a residential lot boundary line (specifically including the Eighth Street municipal corridor), the baseline structural setback for all mechanical equipment, structural envelopes, and cooling towers shall be a minimum of one hundred and fifty (150) feet.
2. **Impenetrable Visual Buffer:** Along any property line directly facing a residential area or a public street separating the facility from a residential tier, a dense, multi-tiered vegetated screening buffer is mandatory. This buffer yard shall be a minimum of fifty (50) feet wide and must feature 100% evergreen tree species (such as Arborvitae, Norway Spruce, or Cryptomeria) planted at an initial height of no less than eight (8) feet. The planting density must guarantee a continuous, opaque, and impenetrable visual screen ten (10) feet high within five (5) years of installation.
3. **Acoustic Fencing Mandate:** In addition to the vegetated screen, a continuous, heavy-duty sound-absorptive structural wall or sound-barrier fence (with a minimum Sound Transmission Class [STC] rating of 32) must completely encapsulate all exterior mechanical chillers and transformer yards to reflect sound wave generation away from nearby residences.

H. Ground-Transmission Vibration Regulations & Pre-Online Testing

1. **Vibration Limit Thresholds:** No data center machinery, server rack backup ventilation fans, or infrastructure elements shall create continuous earth-borne vibrations noticeable without instruments at any point along a residential property line.
2. **Mandatory Pre-Operational Certification:** Prior to receiving a final Certificate of Occupancy or going live on the network, the applicant must retain an independent, licensed seismological or structural engineer in Pennsylvania to conduct rigorous continuous operational load testing.
3. **Submission of Certified Test Results:** The certified engineering test results must formally prove that peak operational frequencies produce zero harmonic ground acceleration or physical transmission waves beyond the parcel limits. These certified results must be officially filed with the Office of the Borough Manager and the Code Enforcement Officer before any equipment begins commercial operation.

I. Hydrogeological Protections, Monitoring Wells, and Yearly Hydrologic Budgets

1. **Mandatory Monitoring Well Network:** To guarantee that local underlying aquifers and neighboring residential properties are completely protected from localized drawdown or heat-sink plume contamination, a minimum network of four (4) permanent, dedicated groundwater monitoring wells must be engineered and installed on the site perimeter.
2. **Baseline Testing and Sentinel Monitoring:** Initial water table level elevations and chemical water quality baselines must be established during the Land Development process. Following construction, the developer must conduct quarterly testing of

TATAMY BOROUGH ORDINANCE 314-2026

these sentinel wells and immediately report the results to the Office of the Borough Manager to verify that ground water levels have not been compromised.

3. **Annual Hydrologic Budget Submission:** On or before January 31st of each calendar year, the data center operator must submit a formal Hydrologic Budget study signed and sealed by a licensed professional hydrogeologist. This annual study must analyze localized recharge rates against system operation metrics to verify a verifiable net-zero extraction impact on the regional water table under drought conditions.

J. Mandatory Sanitary Sewer Interconnection

1. **Prohibition of On-Lot Industrial Disposal:** To protect the Borough's soil and water tables, all non-contact cooling bleed-off water, condensed fluid waste, and administrative graywater must explicitly interconnect directly with the existing municipal sanitary sewer system.
2. **Pre-Treatment and Capacity Verification:** The applicant must prove to the Borough Sewer Authority Engineer that the temperature, chemical composition, and volume of the discharged water fully comply with regional treatment plant regulations and will not overtax or degrade existing sewer line materials. On-lot drainage fields or retention basin discharges for industrial process wastewater are strictly prohibited.

SECTION 4. OFF-STREET PARKING AND LOADING STANDARDS

The Tatamy Borough Zoning Ordinance is hereby amended to establish the following specific off-street parking ratios for Micro and Mini Data Centers, specifically mirroring neighboring regional Council of Government (COG) framework parameters to preserve low-density traffic flows:

TATAMY BOROUGH ORDINANCE 314-2026

1. **Data Center Use Parking Allocation:** Because data center operations are intensely hardware-focused and require minimal routine staff presence compared to traditional commercial spaces, parking stalls shall be allocated at a ratio of exactly **one (1) off-street parking space per 1,500 square feet of total gross floor area** that is designed and intended to be accessible regularly by daily operational employees.
2. **Additional Stalls:** In addition to the primary floor area calculation, a minimum of two (2) dedicated spaces must be explicitly reserved and labeled for temporary IT contractor/service vehicle use, plus one (1) space per maximum shift employee present on-site during peak maintenance operations.
3. **Loading Docks:** A minimum of one (1) fully enclosed or heavily screened off-street loading berth must be provided on-site for server replacement freight deliveries, designed to prevent any idling vehicles or staging from blocking municipal rights-of-way or corridors like Eighth Street.

SECTION 5. SEVERABILITY

If any section, clause, provision, or portion of this Ordinance shall be held invalid or unconstitutional by any court of competent jurisdiction, such decision shall not affect any other section, clause, provision, or portion of this Ordinance.

SECTION 5. REPEALER

All ordinances or parts of ordinances inconsistent herewith are hereby repealed to the extent of such inconsistency.

TATAMY BOROUGH ORDINANCE 314-2026

SECTION 6. ENACTMENT

This Ordinance shall become effective five (5) days after its final adoption and enactment by the Borough Council.

DULY ENACTED AND ORDAINED this 7th day of September 2026, by the Council of Tatamy Borough.

ATTEST:

BOROUGH OF TATAMY:

Mark A. Saginario, Secretary

Robert Hayes, Council
President

Approved this 7th day of September 2026.

ATTEST:

BOROUGH OF TATAMY

Mark A. Saginario, Secretary

James Pallante, Mayor

Municipal Seal



TATAMY BOROUGH ORDINANCE 314-2026