

CLARK TOWNSHIP
MACKINAC COUNTY, MICHIGAN

ORDINANCE NO. 2026-02

**AN ORDINANCE TO AMEND THE CLARK TOWNSHIP ZONING ORDINANCE TO
REGULATE**

**DATA CENTERS, ARTIFICIAL INTELLIGENCE DATA CENTERS, AND
CRYPTOCURRENCY DATA MINING FACILITIES AS SPECIAL LAND USES
IN INDUSTRIAL DISTRICTS ONLY; TO ESTABLISH APPLICATION
REQUIREMENTS,
PERFORMANCE STANDARDS, FINANCIAL SECURITY, INSPECTION,
AND ENFORCEMENT PROVISIONS.**

THE TOWNSHIP OF CLARK ORDAINS:

RECITALS

WHEREAS, Clark Township is a general law township organized under MCL 41.1 et seq., vested with zoning authority under the Michigan Zoning Enabling Act (MZEA), MCL 125.3101 et seq.;

WHEREAS, MCL 125.3201 authorizes townships to regulate land use, the placement of structures, and the use of land to promote and protect the public health, safety, and general welfare;

WHEREAS, MCL 125.3301 authorizes the establishment of special land use procedures requiring Planning Commission review and written findings prior to Township Board approval;

WHEREAS, the Township Board has determined, upon the basis of the legislative findings set forth herein, that Data Centers, Artificial Intelligence Data Centers, and Cryptocurrency Data Mining Facilities present extraordinary land-use intensity, utility demands, environmental impacts, and infrastructure burdens that are materially incompatible with the Township's rural-residential,

agricultural, waterfront, and conservation land-use character unless subject to rigorous performance standards and conditional approval;

WHEREAS, the Township has engaged in a deliberate, record-based legislative process, including review of utility capacity studies, environmental assessments, and community character documentation, in furtherance of the Township's adopted Master Plan;

WHEREAS, Clark Township's sewer infrastructure operates as a lagoon-based biological treatment system serving residential and small commercial users, its electrical grid was designed for rural residential and agricultural loads, its road network was designed for local traffic, and its emergency services were sized and funded for residential and agricultural emergencies — none of which are capable of absorbing the industrial-scale demands of High-Intensity Digital Infrastructure without substantial public cost and risk;

WHEREAS, this Ordinance is adopted pursuant to the Township's police powers under the Michigan Constitution of 1963, Article VII, Section 22, and the MZEA, and constitutes a lawful exercise of the Township's authority to regulate land use in the interest of public health, safety, and general welfare;

NOW, THEREFORE, the Township Board of Clark Township, Mackinac County, Michigan, does hereby ordain as follows:

SECTION 1. SHORT TITLE AND AUTHORITY

1.1 Short Title

This Ordinance shall be known and may be cited as the Clark Township Data Center and Cryptocurrency Mining Facilities Zoning Ordinance.

1.2 Authority

This Ordinance is enacted pursuant to:

- The Michigan Zoning Enabling Act, MCL 125.3101 et seq.;
- MCL 125.3201 (zoning authority; classification of uses);
- MCL 125.3301 (special land use procedures);
- MCL 125.3501 (nonconforming uses);
- MCL 41.181 et seq. (general township ordinance authority);
- The Michigan Constitution of 1963, Article VII, Section 22 (home rule and police powers);
- and

- The Clark Township adopted Master Plan.

1.3 Purpose

The purpose of this Ordinance is to:

- Regulate Data Centers, Artificial Intelligence Data Centers, and Cryptocurrency Data Mining Facilities as a distinct land-use category based upon their objectively measurable physical, environmental, utility, infrastructure, and community-character impacts;
- Protect the Township's rural-residential, agricultural, waterfront, and conservation land-use character and the Great Lakes watershed within which the Township is situated;
- Prevent the shift of extraordinary infrastructure upgrade costs to Township ratepayers and residents;
- Ensure that facilities, where conditionally permitted, satisfy demonstrated utility capacity, environmental, noise, thermal, and infrastructure standards before any approval;
- Protect the long-term viability of tourism, outdoor recreation, and waterfront land uses that constitute the economic and community foundation of Clark Township; and
- Exercise the Township's MZEA authority to impose reasonable, evidence-based zoning conditions compatible with Michigan land-use law.

SECTION 2. LEGISLATIVE FINDINGS

The Township Board, having reviewed land-use studies, utility assessments, environmental documentation, and community character findings, adopts the following legislative findings as the factual basis for this Ordinance. These findings are grounded in objectively measurable land-use, infrastructure, environmental, and community-character impacts, and shall constitute the evidentiary record supporting this Ordinance in any legal proceeding.

2.1 Electrical Infrastructure Findings

- Data Centers and Cryptocurrency Data Mining Facilities generate continuous, uninterrupted electrical loads that may exceed by orders of magnitude the aggregate demand of residential, agricultural, or commercial uses in the Township;
- Facilities exceeding five (5) megawatts of continuous electrical demand routinely require major transmission line upgrades, dedicated substation construction, and transformer replacements that impose capital costs on ratepayers and public utility infrastructure;
- Such facilities impair electrical grid resilience by creating concentrated load points that increase vulnerability to outages affecting the broader municipal and regional grid;
- Unplanned or under-regulated electrical infrastructure expansion is incompatible with the Township's rural utility infrastructure, designed to serve residential, small commercial, and agricultural load profiles; and

- Utility upgrade costs, if not fully internalized by developers, are transferred to existing ratepayers, constituting an inequitable subsidy;
- The Electric Power Research Institute (EPRI) projects that U.S. data centers may consume approximately nine to seventeen percent (9–17%) of all U.S. electricity by 2030, compared to approximately four percent (4%) today, with AI computing being the principal driver of demand growth;
- Large AI data centers may individually require between one hundred (100) and one thousand (1,000) megawatts of continuous electrical demand, a level of demand comparable to the electricity consumption of a mid-sized city;
- Concentrated AI data center loads may materially alter regional generation, transmission, and distribution planning and may require long-lead infrastructure investments that exceed the planning assumptions of rural utilities such as those serving Clark Township;
- Utilities and regulators have identified "phantom demand" risks whereby proposed data center projects reserve grid capacity that may never materialize, creating planning uncertainty and potentially inducing unnecessary infrastructure expansion at ratepayer expense; and
- The Township finds that extraordinary electrical loads of the type described in this Section constitute a unique land-use impact justifying heightened review and cost-internalization requirements under this Ordinance.

2.1(F) Grid Resilience and Load Flexibility Finding

The Township finds that AI data centers can affect grid reliability during peak demand periods and that load flexibility, demand response participation, and curtailment capability are reasonable conditions of approval where technically feasible. This finding is implemented through the operational standards set forth in Section 5.1(E).

2.2 Water Resource and Great Lakes Watershed Findings

- Industrial cooling systems associated with these facilities may consume substantial water volumes, including withdrawal from Great Lakes tributary watersheds and groundwater sources within the Township;
- The Township lies within the Lake Huron basin and is subject to the Great Lakes–St. Lawrence River Basin Water Resources Compact (MCL 324.32901 et seq.), which imposes water withdrawal assessment requirements that large computing facilities may trigger;
- Thermal discharge from industrial cooling operations poses a risk of measurable temperature increases in surface water, groundwater, and Lake Huron tributary systems, adversely affecting cold-water fisheries, aquatic habitat, and drinking water quality;
- Evaporative and open-loop cooling systems may deplete groundwater resources serving residential wells in the Township; and

- Chemical additives used in industrial cooling systems may introduce contaminants into the Township's soil and groundwater resources.

2.3 Sewer and Wastewater Infrastructure Findings

- These facilities may discharge process water, chemical cooling effluents, and industrial wastewater into Township sewer systems not designed for industrial effluent volumes or chemical composition;
- The Township's sewer system operates as a lagoon-based biological treatment system designed exclusively for domestic sewage; it has no technical capacity to receive, neutralize, or treat industrial process water, chemical cooling effluents, or elevated-temperature discharges without violating the Township's EGLE discharge permit and impairing treatment performance; and
- Industrial wastewater discharge into undersized municipal systems may result in permit violations under the Clean Water Act (33 U.S.C. § 1251 et seq.) and EGLE discharge permits, creating regulatory liability for the Township.

2.4 Noise, Vibration, EMF, and Community Character Findings

- These facilities operate continuously, twenty-four hours per day, seven days per week, generating sustained industrial noise levels from cooling towers, HVAC systems, diesel emergency generators, and mechanical plant operations;
- Continuous industrial noise is incompatible with the rural-residential, agricultural, tourism, waterfront, and conservation land-use character of Clark Township and reduces property values, disrupts wildlife habitat, and impairs the enjoyment of waterfront, recreational, and residential properties;
- Ground vibration from construction, heavy hauling, and continuous mechanical operations poses particular risk to Clark Township's older residential structures, shallow foundations, septic systems, private wells, and shoreland soils, which were not designed to absorb industrial vibration loads;
- Electromagnetic field emissions and power-quality degradation from high-density electrical infrastructure can adversely affect nearby residences, wells, farm equipment, medical devices, and other sensitive uses in a rural community not designed around industrial electrical loads; and
- The Township's character as a rural waterfront community on the Les Cheneaux Islands and Lake Huron shoreline constitutes a legitimate and independently defensible land-use interest under Michigan zoning law.

2.5 Emergency Services and Infrastructure Burden Findings

- These facilities generate extraordinary emergency planning requirements, including fire suppression for lithium-ion battery storage, chemical hazmat planning, and large diesel fuel storage hazards;
- Township emergency services were planned and funded to serve residential, agricultural, and small commercial uses, and are not scaled for industrial emergency response; and
- Road infrastructure serving potential facility sites was not designed for heavy construction traffic, ongoing delivery vehicles, and fuel transport, and developer-funded cost internalization is a necessary precondition for any conditional approval.

2.6 Master Plan Consistency Finding

Data Centers, Artificial Intelligence Data Centers, and Cryptocurrency Data Mining Facilities as defined herein are incompatible with the land-use classifications, environmental protection objectives, community character goals, and infrastructure capacity limitations documented in the Clark Township Master Plan.

SECTION 3. DEFINITIONS

As used in this Ordinance, the following terms shall have the meanings set forth in this Section. All other terms shall have the meanings assigned in the Clark Township Zoning Ordinance or the Michigan Zoning Enabling Act.

Data Center. A structure, facility, or portion thereof that houses information technology infrastructure, servers, networking equipment, data storage equipment, cooling systems, backup power systems, or related equipment for storing, processing, managing, distributing, or transmitting digital data. This term includes Artificial Intelligence Data Centers as defined below.

Artificial Intelligence (AI) Data Center. A data center designed, marketed, operated, or contracted for artificial intelligence model training, inference, high-performance computing, large-scale data aggregation, or similar computational workloads.

Cryptocurrency Data Mining Facility. A facility dedicated to operating data processing equipment for commercial cryptocurrency mining, blockchain transaction verification, digital ledger validation, or similar digital asset computation.

Electrical Substation. A facility used for transformation, switching, or distribution of electrical power necessary to serve a Data Center or Cryptocurrency Data Mining Facility, excluding any energy generation facility designed to serve as the primary or continuous power source for the facility.

Industrial Cooling System. A mechanical, liquid, immersion, evaporative, chiller, cooling tower, direct-to-chip, or similar system used for continuous thermal management of computing or electronic infrastructure.

Applicant. The property owner, operator, lessee, developer, or other person or entity seeking approval under this Ordinance.

Special Land Use. A land use authorized under MCL 125.3301 that is not permitted by right but may be approved by the Township Board following Planning Commission review, public hearing, and affirmative written findings that all applicable standards are satisfied.

Utility Capacity Certification. Written certification from the applicable licensed electric utility, municipal or private sewer system operator, and municipal or private water supply system operator that existing infrastructure has confirmed capacity to serve the proposed facility's projected maximum demand without requiring upgrades to shared infrastructure, or documentation of developer-funded upgrade agreements acceptable to the Township Board.

Electromagnetic Field (EMF). Electric and magnetic fields generated by electrical equipment, transmission lines, substations, transformers, and related infrastructure. For purposes of this Ordinance, EMF includes extremely low frequency (ELF) magnetic and electric fields, power-quality disturbances including harmonics, transients, stray voltage, and ground current, and radiofrequency (RF) emissions from wireless or antenna equipment associated with a facility.

Emergency Infrastructure Plan. A written plan, prepared by a licensed professional engineer and reviewed by the Clark Township Fire Chief, documenting emergency response requirements, resource needs, mutual aid agreements, and developer-funded resource commitments associated with a proposed facility.

SECTION 4. ZONING CLASSIFICATION AND PERMITTED USES

4.1 Prohibited Uses by Right

Data Centers, Artificial Intelligence Data Centers, and Cryptocurrency Data Mining Facilities of any scale are prohibited by right in all zoning districts within Clark Township, including but not limited to:

- Agricultural (AG);
- Residential (R1);
- Rural Residential (R2);
- Resort Districts (RS);
- Mobile Home (MH);
- Commercial (C);
- Light Industrial (LM);
- Public (PD);
- Shore Strip (SS); and
- Downtown (D).

No permit, variance, or administrative approval shall authorize any such facility in the foregoing districts. The incompatibility of such facilities with the land-use character, utility capacity,

environmental sensitivity, and community character of these districts is an independent and sufficient basis for exclusion under Michigan zoning law.

4.2 Special Land Use in Industrial Districts Only

Data Centers, Artificial Intelligence Data Centers, and Cryptocurrency Data Mining Facilities may be considered solely as Special Land Uses within designated Industrial Districts under the Clark Township Zoning Ordinance, subject to all of the following:

1. The parcel is located within a designated Industrial District;
2. The applicant has filed a complete Special Land Use application as prescribed in Section 6;
3. The Planning Commission has held a public hearing and issued written findings as required in Section 6;
4. The Township Board has reviewed the Planning Commission recommendation and issued affirmative written findings demonstrating satisfaction of all performance standards in Section 5; and
5. Township Board approval is by affirmative vote of a majority of the Board following the foregoing procedures.

4.3 No Approval Without Affirmative Findings

Approval shall not be granted unless the Township Board makes affirmative written findings that each and every performance standard set forth in Section 5 has been demonstrated to be satisfied by the applicant's submitted evidence. The burden of proof rests entirely with the applicant. Failure to satisfy any individual standard is an independent and sufficient basis for denial.

SECTION 5. PERFORMANCE STANDARDS

All Data Centers, Artificial Intelligence Data Centers, and Cryptocurrency Data Mining Facilities proposed as Special Land Uses shall satisfy each and every performance standard set forth in this Section. These standards constitute minimum necessary findings, and the Township Board retains full discretion to impose additional site-specific conditions under MCL 125.3361.

5.1 Electrical Infrastructure Standards

- The applicant shall provide a Utility Capacity Certification from the licensed electric utility confirming that the facility's continuous maximum demand can be accommodated without upgrades to shared transmission, distribution, or substation infrastructure that would impose costs on existing ratepayers, or alternatively, a signed, Township-Board-approved infrastructure upgrade agreement fully funded by the developer;

- No facility shall be approved that requires the construction of new high-voltage transmission lines, substations, or switching stations to be funded in whole or in part by public utility ratepayers or Township revenues;
- The applicant shall provide an independent licensed electrical engineer's analysis of grid resilience impacts at the proposed site, including load concentration risk and contingency planning; and
- All backup power generation equipment, including diesel generators or battery storage systems, shall comply with applicable air quality, noise, and fuel storage standards. Diesel generators shall meet EPA current Tier 4 emission standards. Battery energy storage systems shall comply with NFPA 855 fire safety standards;
- The applicant shall submit a utility Integrated Resource Assessment identifying all generation, transmission, substation, and distribution upgrades attributable to the project;
- The applicant shall disclose whether the facility is capable of demand response, load curtailment, or flexible computing operations, and shall participate in utility demand-response programs whenever requested by the serving utility and technically feasible; and
- The applicant shall disclose all requested interconnection capacity and all reserved but unused electrical capacity, so that the Township and serving utility can assess "phantom demand" risk to shared infrastructure planning.

5.1(E) Grid Reliability and Flexible Operations

The Township Board may require operational curtailment protocols during declared grid emergencies or reliability events, provided such protocols are coordinated with the serving utility and do not impair public safety. Compliance with this Section is a continuing condition of Special Land Use approval.

5.2 Water Resource and Great Lakes Watershed Standards

- Open-loop cooling systems withdrawing water from Lake Huron, its tributaries, or groundwater sources within the Township are prohibited;
- All cooling systems shall use closed-loop designs with zero or minimal consumptive withdrawal from surface water or groundwater sources;
- The applicant shall provide a Water Withdrawal Assessment completed pursuant to the Michigan Water Withdrawal Assessment Tool (Part 327, MCL 324.32701 et seq.) and the Great Lakes–St. Lawrence River Basin Water Resources Compact (MCL 324.32901 et seq.);
- Thermal discharge shall not increase the temperature of any receiving water body by more than one (1) degree Fahrenheit above ambient temperature at the point of discharge; and
- An independent licensed hydrogeological assessment of groundwater impacts shall be required for all facilities proposing any water withdrawal;

- The applicant shall disclose both direct water consumption at the facility and indirect water consumption associated with electricity generation used to power the facility; and
- The operator shall provide annual reporting of water-use effectiveness (WUE), cooling technology employed, and consumptive water losses, and shall demonstrate that water withdrawals will not adversely affect nearby residential wells, fisheries, wetlands, or cold-water resources.

5.3 Sewer and Wastewater Standards

Clark Township's sewer system operates as a lagoon-based biological treatment system. This design is effective for domestic sewage but has no capacity to receive, neutralize, or treat industrial process water, chemical cooling effluents, elevated-temperature discharges, or non-biological waste streams associated with data center operations. The following standards reflect that physical limitation.

- The applicant shall provide a Utility Capacity Certification from the applicable sewer system operator confirming capacity to accommodate the facility's maximum projected wastewater discharge volume and composition without requiring upgrades to shared infrastructure;
- The applicant shall provide a complete characterization of all process water discharges, including chemical composition, pH, temperature, and volume. Because the Township's lagoon-based treatment system is designed exclusively for biological treatment of domestic sewage, any discharge containing chemicals, industrial effluent, elevated temperatures, or non-domestic waste composition shall be presumed incompatible unless the applicant provides independent engineering certification that the discharge will not impair lagoon treatment performance, EGLE permit compliance, or public health. All applicable NPDES and EGLE discharge permits shall be obtained prior to Township Board approval;
- No facility shall be approved that would require capital upgrades to shared sewer infrastructure funded by public revenues, and no approval shall result in degraded sewer service or increased compliance risk for the Township and other sewer customers; and
- The applicant shall execute a Sewer Use Agreement with the applicable sewer authority, reviewed and approved by Township counsel, prior to approval.

5.4 Noise Standards

- All facilities shall comply with the following maximum exterior noise standards, measured at the nearest residential, agricultural, or conservation district boundary, or the shoreline of Lake Huron, whichever yields the lowest permissible limit:
 - a. Daytime (7:00 a.m. to 10:00 p.m.): not to exceed the lower of (i) forty-five (45) dBA Leq, or (ii) pre-project ambient L90 plus five (5) dBA;
 - b. Nighttime (10:00 p.m. to 7:00 a.m.): not to exceed the lower of (i) forty (40) dBA Leq, or (ii) pre-project ambient L90 plus five (5) dBA;

- c. A five (5) dBA penalty shall be added to any measured or predicted facility noise level that is tonal, impulsive, or contains a repetitive low-frequency hum, consistent with BS 4142 methodology;
 - d. In addition to the A-weighted limits above, facility noise shall not exceed sixty-five (65) dBC (C-weighted) at any sensitive receptor, to account for low-frequency cooling-tower and transformer noise that travels disproportionately far over open water.
 - The applicant shall provide a pre-construction acoustical study prepared by a licensed acoustical engineer demonstrating, by measurement or simulation, that the proposed facility will satisfy the foregoing standards;
 - The required pre-construction acoustical study shall establish a documented ambient noise baseline (day and night, Leq and L90) at each measurement location prior to any site work, and post-energization compliance shall be measured against that baseline;
 - Generator testing is permitted only Monday through Friday between 9:00 a.m. and 5:00 p.m., excluding holidays;
 - All mechanical equipment, including cooling towers, HVAC systems, and generators, shall be enclosed or screened with acoustically rated materials sufficient to achieve compliance.
- Ground vibration is separately regulated under Section 5.5.

5.5 Ground Vibration Standards:

5.5(A) Purpose. To protect public roads, dwellings, historic structures, wells, utilities, shoreland soils, foundations, and quiet residential use within Clark Township, no data center, cryptocurrency mining facility, high-density computing facility, or related construction, transportation, or utility installation activity shall create ground vibration exceeding the limits in this Section.

5.5(B) Regulated Activities. This Section applies to all vibration caused by:

- Site clearing, grading, excavation, blasting, pile driving, caisson drilling, trenching, vibratory rolling, compaction, hoe-ramming, pavement breaking, directional drilling, utility work, and foundation work;
- Delivery, staging, loading, hauling, or movement of transformers, generators, cooling equipment, modular data halls, fuel tanks, heavy trucks, cranes, and other oversize or overweight loads; and
- Operational vibration from generators, chillers, pumps, cooling towers, transformers, turbines, fans, battery systems, or backup power equipment during facility operations.

5.5(C) Measurement Standard. Ground vibration shall be measured as peak particle velocity (PPV) in inches per second, using a calibrated seismograph or vibration monitor installed at the nearest affected structure, property line, public road edge, utility corridor, wellhead, shoreline protection area, or other location required by a Township-hired engineer.

5.5(D) Maximum Vibration Limits. No regulated activity shall exceed the following PPV limits:

Receptor / Condition	Maximum PPV (in/sec)
Extremely fragile historic structures, ruins, stone foundations, old masonry, cemeteries, monuments, or structures in poor condition	0.08
Fragile buildings, older masonry, plaster/lath interiors, shallow foundations, wells, septic systems, or structures within 500 feet of shoreland or wet soils	0.10
Historic or older residential buildings in sound condition	0.12
Ordinary residential structures, public buildings, schools, churches, and small commercial buildings	0.20
Modern engineered industrial or commercial buildings only if certified by a licensed structural engineer	0.30
Continuous operational vibration after construction — measured at the nearest occupied structure or property line	0.035

The Township may impose limits lower than those set forth above where soils, groundwater, shoreline conditions, foundations, nearby wells, historic structures, or resident health concerns warrant additional protection.

5.5(E) Conservative Default Rule. Where the applicant has not completed a Township-approved vibration study, the applicable limit shall be 0.08 in/sec PPV for all structures within five hundred (500) feet of construction activity, haul routes, utility corridors, or heavy-load staging areas.

5.5(F) Pre-Construction Requirements. Before any regulated construction activity begins, the applicant shall submit:

- A vibration impact assessment prepared by a licensed professional engineer;
- A pre-construction photographic and written condition survey of all structures, roads, wells, culverts, buried utilities, shoreland areas, and historic resources within five hundred (500) feet of regulated work or haul routes;
- Baseline ambient vibration measurements;
- A construction traffic and heavy-haul vibration plan; and
- A monitoring plan with warning thresholds, stop-work thresholds, reporting procedures, and emergency contacts.

5.5(G) Real-Time Monitoring and Stop-Work. Continuous real-time vibration monitoring is required during pile driving, blasting, vibratory compaction, heavy excavation, heavy hauling, utility

trenching, and generator or equipment testing. A warning alert shall be triggered at seventy-five percent (75%) of the applicable PPV limit. Work shall immediately stop upon any exceedance and shall not resume until the Township Engineer authorizes resumption in writing.

5.5(H) Prohibited or Restricted Methods. The Township may prohibit or restrict blasting, impact pile driving, vibratory pile driving, vibratory rollers, hoe-rams, pavement breakers, dynamic compaction, nighttime heavy hauling, or repeated overweight truck movements where safer methods are reasonably available.

5.5(I) Transportation and Haul Routes. The applicant shall not use Township roads for repeated heavy-haul traffic unless the Township approves a route-specific vibration and road-impact plan. The Township may require lower speed limits, haul-time restrictions, road reinforcement, escort vehicles, road-condition monitoring, reimbursement bonds, or alternate routes.

5.5(J) Operational Vibration Limit. Permanent facility equipment shall be mounted, isolated, dampened, and maintained so that vibration from generators, chillers, pumps, transformers, turbines, cooling systems, and backup power equipment does not exceed 0.035 in/sec PPV at any occupied structure or property line at any time during facility operations.

5.5(K) Financial Assurance. The Township may require a bond, escrow, insurance endorsement, or other financial assurance sufficient to cover road damage, foundation damage, well damage, utility damage, historic-resource damage, monitoring costs, engineering review, and enforcement costs attributable to vibration from regulated activities.

5.5(L) Enforcement. Any exceedance of a limit established in this Section constitutes a violation of this Ordinance. Available remedies include stop-work orders, permit suspension, permit revocation, civil fines, restoration orders, third-party engineering review at applicant expense, and recovery of Township costs.

§.6 Electromagnetic Field, Power Quality, and Electrical Infrastructure Standards

5.6(A) Purpose. The purpose of this Section is to protect public health, safety, welfare, property values, residences, schools, parks, conservation lands, and public infrastructure from avoidable electromagnetic field (EMF) exposure and power-quality degradation associated with data centers, cryptocurrency mining facilities, substations, transformers, switchgear, high-capacity feeders, transmission lines, distribution upgrades, backup generation systems, and related electrical infrastructure.

5.6(B) Applicability. This Section applies to any data center, cryptocurrency mining facility, high-density computing facility, or artificial intelligence computing facility requiring new, expanded, or upgraded electrical service, including all on-site and off-site electrical infrastructure constructed, upgraded, relocated, or operated primarily to serve the facility.

5.6(C) Required EMF and Power Quality Study. No Special Land Use approval, building permit, grading permit, or certificate of occupancy shall be issued until the applicant submits an independent Electromagnetic Field and Power Quality Impact Study prepared by a qualified professional engineer with demonstrated experience in EMF measurement, electrical distribution, harmonics, grounding, and power-quality analysis. The study shall include:

- Existing baseline EMF measurements before any construction or energization;
- Modeled ELF magnetic-field levels under average, peak, emergency, and maximum buildout load conditions;
- Measurements and modeling at property boundaries; nearest residences; schools, childcare facilities, playgrounds, parks, libraries, churches, and medical facilities; public rights-of-way; and transmission, distribution, and feeder-line corridors;
- Identification of all proposed substations, transformers, feeder lines, transmission lines, distribution upgrades, grounding systems, neutral return paths, harmonic filters, inverters, variable-frequency drives, battery systems, and RF-emitting equipment;
- Harmonic and power-quality modeling at the point of common coupling and at nearby affected distribution circuits;
- Evaluation of supraharmonics, transients, stray voltage, ground current, neutral imbalance, and other power-quality disturbances where technically measurable; and
- A mitigation plan demonstrating that avoidable EMF and power-quality impacts have been reduced to the lowest reasonably achievable level.

5.6(D) Precautionary Magnetic-Field Performance Standard. The applicant shall design, construct, and operate the facility so that facility-related ELF magnetic-field contribution does not exceed:

- 0.5 milligauss (mG) above the pre-project baseline at any residence, school, childcare facility, playground, park, public building, or other sensitive receptor; and
- 2.0 milligauss (mG) above the pre-project baseline at the exterior property boundary, unless the Planning Commission determines, after independent engineering review, that a lower level is reasonably achievable.

Where existing background levels already exceed these values, the applicant shall not increase the pre-project baseline at any sensitive receptor unless the Planning Commission makes written findings that no feasible alternative exists and imposes additional mitigation, monitoring, and setback requirements.

5.6(E) Setbacks and Routing. Electrical infrastructure serving the facility shall be sited to maximize separation from occupied and sensitive uses:

- New substations, transformers, switchyards, and high-capacity electrical equipment shall not be located within one thousand (1,000) feet of a residence, school, childcare facility, playground, park, medical facility, library, church, or similar sensitive receptor, unless the applicant proves that magnetic-field levels at such receptor will meet the performance standards of Section 5.6(D);
- New high-voltage transmission or distribution corridors serving the facility shall not be routed through or adjacent to residential neighborhoods, school properties, parks, conservation lands, wetlands, shorelands, or public recreation areas where a feasible alternative route exists; and
- The Planning Commission may require greater setbacks where modeling shows elevated magnetic fields, harmonic distortion, stray voltage, or cumulative exposure from multiple facilities.

5.6(F) Undergrounding and Engineering Controls. All new or upgraded feeder, distribution, or transmission lines serving the facility shall be placed underground unless the applicant demonstrates that undergrounding is technically infeasible and that an overhead alternative provides equal or better EMF reduction. Required mitigation measures may include:

- Underground routing of lines;
- Optimized phase configuration and compact line geometry;
- Cancellation design and increased conductor spacing from occupied areas;
- Balanced loading and corrected neutral return paths;
- Elimination of stray current and ground-current pathways;
- Shielding or relocation of transformers, busbars, and switchgear;
- Harmonic filters, active filters, or isolation transformers; and
- Relocation of substations and transformers away from occupied or sensitive structures.

5.6(G) Harmonics and Power Quality. The facility shall not degrade electrical service to surrounding properties:

- The facility shall comply with IEEE Standard 519 or any successor standard at the point of common coupling;
- The Township may impose stricter limits where necessary to protect residences, schools, municipal facilities, emergency services, wells, pumps, medical devices, farm equipment, communications systems, or other sensitive uses;
- Total voltage harmonic distortion, individual harmonic distortion, transients, flicker, supraharmonics, stray voltage, ground current, and neutral imbalance shall be independently monitored at the point of common coupling, facility boundary, nearest residences, nearest

school or sensitive receptor, and any other location required by a Township-hired engineer; and

- If monitoring shows any exceedance, degradation, nuisance, interference, or abnormal power-quality condition, the operator shall immediately reduce load, install corrective equipment, or suspend operations as directed by the Township until compliance is restored.

5.6(H) RF-Emitting Equipment. No antenna, microwave transmitter, cellular equipment, wireless backhaul system, or other RF-emitting equipment shall be installed on any data center building, tower, substation, transmission structure, or related facility component unless disclosed in the original application or subsequently approved by amended site plan. The applicant shall provide RF modeling, FCC compliance documentation, and post-installation verification measurements. To the extent not preempted by federal law, the Township may regulate placement, concealment, setbacks, structural safety, backup power, cumulative infrastructure impacts, and compatibility with surrounding land uses.

5.6(I) Independent Testing and Public Reporting. The operator shall fund independent third-party EMF and power-quality testing conducted by a firm selected or approved by the Township. Testing shall occur:

- Before any construction begins;
- Before initial energization;
- Within thirty (30) days after energization;
- At fifty percent (50%), seventy-five percent (75%), and one hundred percent (100%) of approved operational load;
- Annually thereafter; and
- After any major equipment change, load increase, utility upgrade, or complaint-based investigation.

All reports shall be submitted to the Township and made publicly available in plain-language format, including maps, measurement locations, dates, load conditions, equipment used, results, and corrective actions taken.

5.6(J) Adaptive Management. If EMF, harmonic, stray-voltage, RF, or power-quality impacts exceed approved levels or create a nuisance, interference, health concern, or public-safety concern, the Township may require additional testing, operational curtailment, load reduction, equipment replacement, additional setbacks or shielding, undergrounding or rerouting, harmonic filtering, correction of grounding or neutral-return defects, or suspension of the certificate of occupancy. Special Land Use approval may be revoked following notice and hearing pursuant to Section 7.6.

5.6(K) Continuing Condition of Approval. Compliance with this Section is a continuing condition of Special Land Use approval, site-plan approval, and certificate of occupancy. Failure to maintain compliance constitutes a zoning violation and public nuisance subject to enforcement, injunctive relief, civil fines, and any other remedy available under this Ordinance or applicable law.

5.7 Thermal Standards

- No facility shall generate surface thermal plumes or elevated ambient air temperatures that are measurably above pre-construction baseline conditions at any residential, agricultural, waterfront, or conservation district boundary, as determined by post-construction monitoring;
- The applicant shall provide a thermal impact assessment prepared by a licensed mechanical or environmental engineer; and
- The Township shall retain independent authority to commission ongoing thermal monitoring at developer expense during facility operations.

5.8 Infrastructure Cost Internalization Standards:

The applicant shall execute, prior to Township Board approval, a Township-approved Developer Infrastructure Agreement. The Agreement shall provide for all of the following, each of which is an independent and mandatory condition of approval:

- Full developer funding of all utility upgrades, including electrical, sewer, and water infrastructure, necessitated by the facility. No upgrade cost shall be passed to Township taxpayers, utility ratepayers, or other utility customers;
- A performance bond in an amount set by the Township Board, not less than one hundred percent (100%) of estimated infrastructure upgrade costs, to secure completion of required improvements;
- A Road Use and Maintenance Agreement addressing all impacts of construction and operational vehicle traffic on Township and county roads, including developer-funded road restoration, weight limit compliance, and post-construction road condition verification;
- An Emergency Services Reimbursement Agreement providing for developer funding of all incremental emergency response costs attributable to the facility, including specialized equipment, personnel training, mutual aid agreements, and annual cost-of-service reviews; and
- A decommissioning fund, held in a Township-approved escrow account, equal to one hundred twenty-five percent (125%) of the estimated cost of complete site remediation and restoration, as independently estimated and approved by the Township. The decommissioning fund shall be subject to mandatory review every two (2) years. At each review, the Township Board shall commission an updated independent cost estimate and shall require the operator to increase the escrow balance to maintain the one hundred twenty-

five percent (125%) coverage ratio, accounting for inflation, changes in facility scale or equipment, changes in remediation requirements, and any deferred maintenance or site conditions identified during compliance monitoring. Performance bonds and other financial instruments required under this Agreement shall be subject to the same biennial review and adjustment obligation.

5.9 Fire Protection Standards

- Before any construction begins, the Clark Township Fire Chief shall review and approve the fire protection plan submitted with the application;
- The applicant shall fund all specialized equipment, training, water supply, fire suppression, fire watch, early detection, venting, and mutual aid measures required by the Fire Chief;
- The facility shall contain an internal fire suppression system reviewed and tested once every twelve (12) months by a third-party contractor approved by the Fire Chief; and
- The applicant shall maintain property/casualty and commercial general liability insurance in an amount of not less than five million dollars (\$5,000,000) per occurrence, naming the Township as additional insured.

5.10 Site Design and Security Standards

- All structures, mechanical equipment, and outdoor operational areas shall be set back a minimum of five hundred (500) feet from any residential, waterfront, or conservation district boundary;
- Security fencing shall be installed around all electrical and operational equipment. Fencing shall be a minimum of seven (7) feet tall and shall use materials, colors, textures, screening, and landscaping compatible with the natural setting;
- Any on-site substation shall be screened to provide year-round opacity from public roads and neighboring residential or agricultural properties;
- Lighting shall be the minimum necessary for safety and security, fully shielded, and directed downward. No measurable off-site glare shall be permitted;
- A 24-hour emergency contact sign shall be posted at the facility entrance identifying the operator, emergency contact, telephone number, and serving electric utility contact;
- All power transmission, communication lines, wires, and conduits between facility components shall be underground except within substations or areas specifically approved by the Township; and
- Drain tile systems shall be inspected before operation and at least once every three (3) years using a robotic camera. Damage shall be repaired within sixty (60) days after discovery.

5.11 Master Plan Consistency Standard

No Special Land Use approval shall be granted unless the Township Board makes an affirmative written finding that the proposed facility, with all proposed conditions, is consistent with the Clark Township Master Plan, including its land-use classification, environmental protection, utility capacity, and community character objectives.

5.12 Ratepayer Protection Standard

No approval shall be granted unless the applicant demonstrates that all facility-specific generation, transmission, substation, distribution, road, water, sewer, emergency service, and interconnection costs will be borne by the developer and not socialized to existing ratepayers or taxpayers. The Township Board, in its discretion, may establish a maximum permitted electrical demand threshold within any zoning district or utility service area unless the applicant's capacity studies demonstrate no adverse effect upon existing customers or public infrastructure.

5.13 Lake Huron Shoreline Setback

The Township's character as a rural waterfront community on the Les Cheneaux Islands and Lake Huron shoreline, and the proximity of the industrial zoning district to the Lake Huron shoreline in places, require a dedicated buffer between data center facilities and the Lake to protect water quality, shoreline character, and the residences located on nearby islands.

- No data center building, cooling tower, substation, transformer, backup generator, fuel storage tank, battery energy storage system, or other primary or accessory structure or equipment associated with a data center use shall be located within one thousand (1,000) feet of the Ordinary High Water Mark (OHWM) of Lake Huron, as established by the U.S. Army Corps of Engineers and the Michigan Department of Environment, Great Lakes, and Energy (EGLE);
- Within the landward-most two hundred (200) feet of this setback, existing natural vegetation shall be retained undisturbed, except as necessary for permitted shoreline access consistent with applicable state and local shoreline regulations;
- The Planning Commission may require a setback greater than one thousand (1,000) feet where the applicant's noise, EMF, thermal-discharge, or visual-impact studies demonstrate that facility impacts would otherwise reach the shoreline, open water, or inhabited islands (including the Les Cheneaux Islands) at levels exceeding the standards of Sections 5.4, 5.6, or 5.7; and
- For purposes of Sections 5.4 (Noise Standards), 5.6 (Electromagnetic Field, Power Quality, and Electrical Infrastructure Standards), and 5.7 (Thermal Standards), the nearest occupied structure on an island in Lake Huron shall be treated as a sensitive receptor, and the applicant's required studies shall model facility impacts at that location notwithstanding open water separating it from the facility site.

SECTION 6. SPECIAL LAND USE APPLICATION AND REVIEW PROCEDURE

6.1 Application Requirements

A complete Special Land Use application shall include, at minimum, all of the following:

- A completed Township Special Land Use application form, application fee, and escrow deposit in amounts established by Township Board resolution;
- List of all parcels involved, proof of ownership, and any lease agreements, easements, purchase agreements, utility agreements, and operator agreements;
- An operations agreement identifying the operator, owner, emergency contacts, operating parameters, equipment type, power demand, cooling method, inspection protocol, maintenance schedule, complaint process, and emergency procedures;
- Current photographs of the property;
- Scaled site plan prepared by a licensed professional engineer or architect, showing all structures, equipment, substations, generators, batteries, cooling systems, fencing, screening, lighting, signage, setbacks, access roads, drainage, wetlands, floodplains, water bodies, wells, septic systems, sewer connections, easements, and utility interconnections;
- Water use and wastewater discharge plan identifying anticipated water source, daily and peak water use, cooling water use, wastewater volume, discharge temperature, discharge location, and all required permits;
- Decommissioning and land reclamation plan;
- Hazardous materials and waste management plan;
- Power outage and backup power plan;
- Security plan providing 24-hour on-site or remote monitored security;
- Fire protection plan approved by the Fire Chief prior to Township Board action;
- Transportation plan for construction and operation, including proposed haul routes and any required agreements with the Mackinac County Road Commission or MDOT;
- Indemnification agreement holding the Township harmless from costs or liability arising from approval, construction, operation, maintenance, repair, removal, or decommissioning;
- Proof of environmental compliance, including applicable requirements under NREPA Parts 31, 91, 301, 303, 327, and 365, and any other applicable county, state, or federal law;
- Noise and sound study demonstrating compliance at all property lines;
- Vibration impact assessment, pre-construction condition survey, baseline ambient vibration measurements, heavy-haul vibration plan, and monitoring plan, all as required by Section 5.5(F);
- Electromagnetic Field and Power Quality Impact Study as required by Section 5.6(C), including baseline measurements, load modeling, mitigation plan, and RF disclosure;
- Traffic impact study prepared by a qualified professional engineer;
- Utility Capacity Certification as defined in Section 3;
- Independent licensed electrical grid resilience analysis as required by Section 5.1;

- Water Withdrawal Assessment as required by Section 5.2;
- Thermal impact assessment as required by Section 5.7;
- Environmental site analysis addressing wetlands, streams, woodlands, wildlife habitat, air quality, groundwater, surface water, shoreline resources, and nearby residential or agricultural properties;
- Community and infrastructure impact statement evaluating effects on emergency services, roads, water resources, wastewater systems, noise, vibration, air emissions, visual character, property compatibility, and public utility capacity;
- A limited computational-use disclosure identifying whether the facility is designed or contracted for artificial intelligence model training, inference, high-performance computing, cryptocurrency mining, government data processing, financial transaction processing, identity systems, behavioral analytics, or other high-intensity computing workloads;
- Documentation of all applicable federal, state, and local permits, or a permit timeline demonstrating the applicant's plan to obtain all required permits prior to Township approval becoming effective;
- Evidence of proposed decommissioning escrow funding as required by Section 5.8; and
- Any additional information reasonably requested by the Planning Commission, Township Board, Zoning Administrator, Township Attorney, or Fire Chief.

6.2 Planning Commission Review and Public Hearing

- Upon receipt of a complete application, the Zoning Administrator shall schedule the matter for Planning Commission review consistent with statutory public notice requirements under MCL 125.3103;
- The Planning Commission shall hold a public hearing pursuant to MCL 125.3301(2);
- The Planning Commission shall prepare written findings addressing each performance standard set forth in Section 5, and shall issue a written recommendation to the Township Board of approval, conditional approval, or denial; and
- The Planning Commission may retain independent technical consultants, at applicant expense pursuant to MCL 125.3302, to review any element of the application.

6.3 Township Board Action

- The Township Board shall consider the Planning Commission recommendation and the complete application record at a public meeting;
- The Township Board shall issue written findings addressing each performance standard set forth in Section 5;
- Approval shall require affirmative written findings that each and every performance standard has been satisfied and that approval is consistent with the Master Plan;

- The Township Board may impose site-specific conditions under MCL 125.3361, and all conditions shall be reduced to writing as part of the approval decision; and
- Denial shall be in writing, stating the specific grounds for denial with reference to the applicable performance standards.

6.4 Approval Effective Upon Execution of Agreements

Any Township Board approval shall not become effective until the applicant has executed, and the Township has countersigned, all required agreements — including the Developer Infrastructure Agreement, Road Use Agreement, Emergency Services Reimbursement Agreement, and Sewer Use Agreement — and has deposited all required bonds and escrow funds with the Township.

SECTION 7. MONITORING, COMPLIANCE, ANNUAL REPORTING, AND REVOCATION

7.1 Ongoing Compliance Monitoring

All facilities operating under a Special Land Use approval shall be subject to annual compliance review by the Zoning Administrator, including:

- Noise measurement verification at facility boundaries;
- Ground vibration measurement verification at facility boundaries and nearest occupied structures;
- EMF and power-quality compliance verification at facility boundaries and nearest sensitive receptors, as required by Section 5.6;
- Review of utility consumption and discharge records;
- Review of all state and federal environmental permit compliance filings;
- Site inspection for compliance with all conditions of approval; and
- Confirmation of current, adequate decommissioning escrow funding.

7.2 Annual Report

The operator shall submit an annual report to the Township by January 31 of each year, including:

- Current proof of insurance;
- Verification of financial security;
- A summary of all complaints, complaint resolutions, and extraordinary events;
- Total electrical consumption, water use, and wastewater discharge for the prior year, including total electricity consumption in megawatt-hours (MWh), peak demand in megawatts (MW), and load factor;
- Water-use effectiveness (WUE) and demand-response program participation for the prior year, and greenhouse-gas emissions attributable to purchased electricity, if available;

- Results of all EMF, power-quality, noise, and ground vibration testing conducted during the prior year, including dates, load conditions, and corrective actions taken; and
- Confirmation of current ownership and operator contact information.

7.3 Extraordinary Event Reporting

Any fire, explosion, hazardous material release, battery failure, cooling system failure, personal injury, power failure affecting public systems, or other extraordinary event shall be reported to the Township within twenty-four (24) hours of occurrence.

7.4 Inspections

The Township may inspect any facility at any time by providing twenty-four (24) hours advance notice to the applicant or operator, or immediately in the event of an emergency.

7.5 Independent Monitoring Authority

The Township retains authority, at all times and at developer expense, to commission independent third-party monitoring of noise, ground vibration, electromagnetic fields, power quality, thermal discharge, water withdrawal, wastewater discharge, and electrical demand to verify compliance. Developer refusal to fund or facilitate such monitoring shall constitute grounds for revocation under Section 7.6.

7.6 Revocation of Special Land Use Approval

Special Land Use approval may be revoked by the Township Board, following notice and an opportunity for a hearing pursuant to MCL 125.3407, upon a finding that the facility operator has:

- Violated any performance standard set forth in Section 5 and failed to cure the violation within thirty (30) days of written notice;
- Violated any condition of the Special Land Use approval;
- Failed to maintain required permits, bonds, agreements, or escrow funding in good standing;
- Provided materially false or misleading information in the application; or
- Failed to permit or fund required monitoring under Section 7.5.

7.7 Transferability

A Special Land Use approval may be transferred to a new owner or operator only if the new owner or operator registers with the Township at least thirty (30) days before the transfer date, assumes all conditions of approval in writing, maintains all required financial security, and provides updated operational disclosures.

7.8 Triennial Community Impact Review

In addition to the annual compliance review required under Section 7.1, every facility operating under a Special Land Use approval shall be subject to a comprehensive community impact review by the Planning Commission not less frequently than once every three (3) years. The triennial review shall reassess electrical demand growth, grid resilience and demand-response performance, water-use effectiveness, cumulative EMF and power-quality conditions, ground vibration and noise compliance history, emergency-service cost experience, and consistency with the then-current Master Plan. The Planning Commission may recommend, and the Township Board may impose, updated or additional conditions of approval based on the findings of the triennial review, consistent with MCL 125.3361.

SECTION 8. DECOMMISSIONING AND NONCONFORMING USES

8.1 Decommissioning

If a facility is abandoned, discontinued, or nonoperational for a period of one (1) year, the owner or operator shall notify the Township and shall remove the facility within six (6) months. Removal shall include all structures, foundations, equipment, wiring, fencing, cooling systems, generators, batteries, and related improvements, followed by site restoration to a state compatible with the surrounding vegetation and zoning district. The requirements of this section also apply to a facility that is never fully completed or operational if construction has been halted for one (1) year.

8.2 Nonconforming Uses

Any facility operating within Clark Township on the effective date of this Ordinance that does not comply with the provisions hereof is declared a nonconforming use subject to MCL 125.3501 et seq. Such nonconforming uses shall not be expanded, enlarged, or increased in electrical load, floor area, or cooling capacity. Any abandonment or discontinuation of operations for a continuous period of twelve (12) months shall extinguish nonconforming use status and prohibit resumption of operations without full compliance with this Ordinance.

SECTION 9. ENFORCEMENT AND PENALTIES

9.1 Enforcement Authority

This Ordinance shall be enforced by the Zoning Administrator, in coordination with the Township Board, Township attorney, and local law enforcement, pursuant to the enforcement authorities of the MZEA, MCL 125.3407, and MCL 125.3601 et seq.

9.2 Civil Penalties

Violation of any provision of this Ordinance, including operation of a facility without a valid Special Land Use approval or in violation of any condition of approval, shall be a municipal civil infraction subject to a civil fine of not less than five hundred dollars (\$500) and not more than five thousand dollars (\$5,000) per day of continuing violation, as authorized by MCL 125.3407. Each performance standard constitutes a separate and independently enforceable requirement. Concurrent violation of multiple standards shall constitute separate violations, each subject to a separate civil fine.

9.3 Injunctive and Equitable Relief

The Township may seek injunctive relief, mandamus, abatement, stop work orders, permit suspension, permit revocation, or other equitable remedies in the Mackinac County Circuit Court to enforce this Ordinance or to abate violations. Proof of actual damages shall not be required for injunctive relief where a violation is established.

9.4 Costs and Attorneys' Fees

In any enforcement action in which the Township prevails, the Township shall be entitled to recover its reasonable attorneys' fees, expert witness fees, and costs of enforcement as provided by MCL 125.3407(4).

SECTION 10. AMENDMENT TO TABLE OF PERMITTED USES

The Clark Township Zoning Ordinance Table of Permitted Uses is amended to add 'Data Centers, Artificial Intelligence Data Centers, and Cryptocurrency Data Mining Facilities' as a Special Land Use only in Industrial Districts, subject to this Ordinance. Such uses are prohibited in all other districts.

SECTION 11. SEVERABILITY

The provisions of this Ordinance are severable. If any section, subsection, sentence, clause, phrase, or provision of this Ordinance is adjudged invalid or unconstitutional by a court of competent jurisdiction, such adjudication shall not affect the validity of the remaining provisions. The Township Board declares that it would have adopted this Ordinance and each provision thereof irrespective of the fact that any one or more provisions may be declared invalid or unconstitutional.

SECTION 12. REPEALER

All prior Clark Township ordinances or ordinance provisions in direct conflict with the provisions of this Ordinance are hereby repealed to the extent of such conflict. This Ordinance shall be

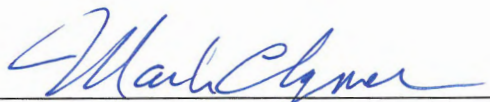
construed, to the greatest extent possible, in harmony with existing Clark Township zoning ordinance provisions applicable to Industrial Districts and Special Land Uses.

SECTION 13. EFFECTIVE DATE

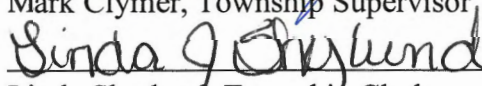
This Ordinance shall take effect seven (7) days following publication in a newspaper of general circulation within Clark Township, as required by MCL 125.3401.

ADOPTION

- Adopted by the Clark Township Board of Trustees at a duly noticed regular meeting held on August 19, 2026.
- Planning Commission approval occurred at a duly noticed and published Public Hearing held on August 11, 2026



Mark Clymer, Township Supervisor



Linda Sherlund, Township Clerk

Publication date: September 2, 2026
Effective date: September 9, 2026

APPENDIX A

ATTORNEY-FACING INFRASTRUCTURE RISK FINDINGS

NON-CODIFIED EXPLANATORY APPENDIX

NOTICE: This Appendix is adopted as explanatory legislative background and does not independently create enforceable permit standards or zoning requirements. The operative provisions of this Ordinance are contained in Sections 1 through 13. No provision of this Appendix may be invoked as an independent legal basis for denial or approval of any application, and no provision of this Appendix enlarges, restricts, or modifies the operative provisions of this Ordinance.

A.1 Why Clark Township Is Acting Now

Data centers and cryptocurrency mining facilities are emerging faster than state statutes and case law. The absence of mature case law does not mean the absence of risk. It means the legal system is behind the technology. That is a normal feature of every major infrastructure transition: railroads preceded mature railroad law; automobiles preceded traffic and insurance regimes; telecommunications preceded privacy doctrine; social media preceded platform-liability doctrine. AI infrastructure is now preceding municipal data-center law.

The conservative legal principle that follows is: where the risk is novel, the evidentiary record must be stronger, not weaker. Municipalities should not act recklessly. They should act carefully, using traditional zoning tools — land-use compatibility, utility capacity, water protection, noise control, emergency services, road impacts, cost internalization, and Master Plan consistency — applied to a new category of industrial use. That is precisely what this Ordinance does.

A.2 The Immediate and Legally Sufficient Municipal Risk

The Township need not prove that a proposed data center will be used for surveillance, artificial intelligence governance, or financial monitoring in order to regulate it. The legally sufficient basis is simpler: these facilities may impose extraordinary electrical, water, sewer, thermal, noise, road, fire, and emergency-service burdens on a rural Great Lakes township.

The following are the documented, objectively measurable burdens that justify special land use review:

- Continuous electrical loads potentially exceeding the entire aggregate demand of all existing residential, agricultural, and commercial uses combined;
- Transmission, substation, and transformer upgrades that shift capital costs to ratepayers;
- Groundwater and Great Lakes watershed impacts in a compact jurisdiction;
- Thermal discharge into cold-water fishery systems;
- Sewer and wastewater capacity absorption beyond current design parameters;
- 24/7 industrial noise incompatible with rural waterfront and residential character; and
- Emergency service demands — particularly lithium-ion battery fire response — for which Township fire departments were neither equipped nor funded.

The special land use standard properly places the burden on the applicant to prove compatibility, not on the Township to prove danger. This Ordinance codifies that burden-shifting framework.

A.3 Why Data Centers Are Not Ordinary Industrial Uses

A factory produces a product. A warehouse stores goods. A data center hosts computation. That distinction matters because computation at industrial scale has a different character than physical manufacturing or storage.

The International Energy Agency has documented that global data center electricity consumption is on a trajectory to roughly double by 2030, driven by AI workloads and cloud computing. Large individual facilities can consume water volumes comparable to small municipalities. These are not hypothetical projections: they are engineering specifications that appear in publicly available facility design documents.

The Electric Power Research Institute (EPRI) has similarly documented that data centers are emerging as a new category of electrical demand requiring integrated utility planning and flexible operations, and has reported that in some states, data centers already account for more than twenty percent (20%) of total electricity demand — illustrating the potential for concentrated infrastructure dependency even at the state level. The Township finds that AI infrastructure should operate within the carrying capacity of local electrical, water, ecological, and emergency-response systems, and that this Ordinance's performance standards are calibrated to that principle.

The proper municipal question is therefore not whether opponents can prove a specific facility is dangerous. The proper question — consistent with the special land use standard under Michigan law — is whether the applicant has proven that the proposed use is compatible with Clark Township's land-use plan, utility capacity, water resources, emergency services, roads, ratepayers, and rural waterfront community character. If the applicant cannot prove compatibility, denial is appropriate.

A.4 The Larger Context: Data Centers as AI Governance Infrastructure

This section is provided for policy context and to inform the Township Board's understanding of the landscape in which it is acting. It does not create additional legal standards and should not be cited as a legal basis for permit decisions.

Modern data centers — particularly AI data centers and large federal contracting facilities — are not merely warehouses for servers. At sufficient scale, they are physical infrastructure for systems that can affect the practical exercise of constitutional rights and the structure of government accountability. Legal practitioners and board members reviewing this ordinance may find the following framework useful in understanding why township-level action is timely.

What practitioners have begun to describe as a 'Layer IV' or 'AI infrastructure control layer' refers to the integration of data center capacity, cloud infrastructure, AI-enabled targeting and decision systems, biometric identification, predictive analytics, cross-agency data fusion, and automated administrative action into a single operational layer that can function faster than constitutional process. This layer includes:

- Cloud infrastructure hosting government and commercial databases;
- AI-enabled targeting and administrative decision systems;
- Biometric identity and facial recognition systems;
- Predictive policing and behavioral scoring platforms;
- Cross-agency data fusion and intelligence-to-policy pipelines;
- Automated eligibility systems for public benefits, financial access, and travel;
- Digital financial monitoring infrastructure; and
- Military-civilian technology integration programs.

Key Structural Observation: The constitutional danger of this layer is functional, not theatrical. No legislative action is required to abolish due process if an automated system can deny, delay, flag, score, classify, or route a person before due process begins. No repeal of federalism is required if local governments become dependent endpoints of centralized digital infrastructure. The legal system is not defeated; it is outpaced.

The value of this observation for municipal attorneys is not that it creates a new legal theory, but that it explains the urgency of building conventional land-use records now — before infrastructure is installed, utility systems are committed, and the practical window for local action has closed.

A.5 The Conservative Legal Framing for Skeptical Counsel

The most durable objections to municipal data center regulation come from attorneys who correctly note that: (1) local zoning cannot regulate federal programs; (2) there is limited data-center-specific

case law; and (3) banning uses based on speculative harms invites preemption and takings challenges. Each of these concerns is legitimate. None of them argues against this Ordinance.

The conservative case for this Ordinance rests on six propositions:

6. Property rights include neighboring property rights. A data center applicant has property interests. So do adjacent landowners, waterfront owners, farmers, residents, tourism businesses, and ratepayers. Zoning exists to order these competing interests under law.
7. Local government exists to prevent incompatible uses. Zoning is not anti-business. It is the lawful ordering of land uses to prevent one use from destroying the value, safety, or character of another.
8. Infrastructure costs must not be socialized. If a private facility requires grid, road, sewer, water, or emergency upgrades, the developer should internalize those costs. The ratepayer protection function is among the most traditional functions of municipal land-use regulation.
9. Rural municipalities are not obligated to become compute colonies. A township designed for residential, agricultural, and waterfront uses is not required by law to accept industrial-scale data infrastructure. The Master Plan, properly maintained, provides the framework for that determination.
10. Constitutional government requires time. Deliberation, notice, hearing, evidence, findings, appeal, and accountability are not obstacles to governance. They are the structure of legitimate governance. AI infrastructure compresses time. This Ordinance defends the deliberative process before it is bypassed.
11. The attorney's duty is to defend process before process becomes obsolete. If machine-speed systems become the default operating layer of government, attorneys will still exist — but increasingly as after-the-fact damage-control technicians rather than guardians of constitutional order. The moment to build a lawful record is before the infrastructure is in the ground.

A.6 Seven Municipal Risk Categories — Summary for Practitioners

The following summary condenses the infrastructure risk framework into seven attorney-relevant categories. Each corresponds to a section of this Ordinance's operative performance standards.

Risk Category	Municipal Exposure / Ordinance Response
Infrastructure Capture	Electrical load, grid dependency, water withdrawal, sewer discharge, thermal output, emergency-service burden, ratepayer cost shifting. Addressed in Sections 5.1–5.6.
Governance Speed	Machine-speed governance gap; automated decision systems that precede judicial review. Addressed by requiring full process and findings before any approval (Sections 6.2–6.4).

Data Control	Biometric capture, cross-agency data fusion, cloud dependency, predictive scoring, public-private vendor control. Addressed by computational-use disclosure requirement (Section 6.1).
Federalism Erosion	State preemption pressure, federal grant coercion, loss of local veto capacity. Addressed by grounding this Ordinance in MZEA authority and Master Plan consistency (Sections 1.2, 5.9).
Economic Substitution	Tax-base seduction, job-creation exaggeration, infrastructure subsidy concealment, externalization of long-term costs. Addressed by cost internalization and financial security standards (Sections 5.6, 5.7).
Constitutional Function	Fourth, Fifth, and First Amendment bypass risk; separation-of-powers bypass; jury and community review bypass. Addressed by preserving deliberation, notice, findings, and revocation authority (Sections 6, 7).
Local Resilience	Local food, water, energy, and emergency independence; township veto capacity; Master Plan integrity; analog fallback systems. Addressed throughout this Ordinance and supported by companion procurement and privacy ordinances.

A.7 State and Federal Advocacy

The Township Board encourages and reserves its right to pursue, through appropriate legislative, regulatory, and intergovernmental channels, advocacy for state and federal policies that address broader questions of artificial intelligence governance, digital infrastructure siting standards, ratepayer protection from infrastructure cost shifting, and community sovereignty in land-use planning.

The Township recognizes that certain concerns implicated by large-scale digital infrastructure deployment — including data privacy, algorithmic governance, and federal technology procurement — are matters of state and federal law appropriately addressed through legislative and regulatory channels rather than local zoning ordinance. Nothing in this Ordinance shall be construed as an attempt to regulate matters of federal preemption, federal procurement, or state-level technology policy.

A.8 The Practical Rule for Planning Commission and Township Board

The proper special land use question is not: 'Can opponents prove this facility is dangerous?' The proper question is: 'Has the applicant proven this facility is compatible with Clark Township's land-use plan, utility capacity, water resources, emergency services, roads, ratepayers, and rural community character?' If the answer is no, denial is appropriate.

END OF APPENDIX A

END OF ORDINANCE NO. 2026-02
Clark Township, Mackinac County, Michigan