TOWNSHIP OF LOWER MOUNT BETHEL
NORTHAMPTON COUNTY, PENNSYLVANIA
ORDINANCE #2026- __

AN ORDINANCE OF THE TOWNSHIP OF LOWER MOUNT BETHEL, NORTHAMPTON COUNTY, PENNSYLVANIA AMENDING CHAPTER 27 (ZONING) OF THE CODE OF LOWER MOUNT BETHEL BY ESTABLISHING THE DIGITAL INFRASTRUCTURE OVERLAY DISTRICT PROVIDING FOR THE REGULATION OF DIGITAL INFRASTRUCTURE FACILITIES, HYPER DIGITAL INFRASTRUCTURE FACILITIES, AND DIGITAL INFRASTRUCTURE ACCESSORY USES; PROVIDING DEFINITIONS, CONDITIONAL USE REQUIREMENTS, PERFORMANCE STANDARDS AND RELATED REGULATIONS; AND AMENDING THE OFFICIAL ZONING MAP ACCORDINGLY.

SECTION 1 – STATEMENT OF LEGISLATIVE FINDINGS

WHEREAS, the Township of Lower Mount Bethel, Northampton County, Pennsylvania (the "Township") is a Pennsylvania township of the second class organized and existing under and pursuant to the Second-Class Township Code and various other laws of the Commonwealth of Pennsylvania and is governed by a five (5) member Board of Supervisors (the "Board of Supervisors"); and

WHEREAS, the Pennsylvania Municipalities Planning Code (the "MPC"), Act of Jul. 31, 1968, P.L. 805, No. 247, as reenacted and amended, 53 P.S. §10601 et seq., including Article VI thereof, authorizes the Supervisors to enact, amend, and repeal zoning ordinances applicable within the Township; and

WHEREAS, the MPC further authorizes municipalities to establish, amend, and maintain official zoning maps and overlay zoning districts as part of their zoning ordinances; and

WHEREAS, the Township's Comprehensive Plan, dated December 12, 2022, promotes the preservation of prime agricultural land, the protection of natural and environmental resources, the compatibility of future land uses with existing agricultural operations, and the preservation of the Township's rural character through thoughtful land planning; and

WHEREAS, these planning objectives are best advanced by directing land uses to appropriate locations and by establishing reasonable standards that ensure new development is compatible with surrounding land uses and the character of the Township; and

WHEREAS, the Board of Supervisors finds that the use of an overlay zoning district is an appropriate planning tool under the MPC because it permits supplemental land use regulations to be applied uniformly within specifically designated geographic areas while preserving the underlying zoning district and its otherwise applicable regulations; and

WHEREAS, the Board of Supervisors recognizes that, in accordance with applicable law, municipalities may not unreasonably exclude lawful land uses and that the appropriate exercise of

zoning authority is to provide for such uses in appropriate zoning districts, subject to objective performance standards and public review; and

WHEREAS, the Board of Supervisors finds that Digital Infrastructure Facilities, Hyper Digital Infrastructure Facilities, and associated Digital Infrastructure Accessory Uses constitute distinct land uses because their operational characteristics and infrastructure demands differ materially from traditional office, warehouse, manufacturing, logistics, and light industrial uses, including but not limited to substantial electrical demand, backup power generation, fuel storage, cooling systems, telecommunications infrastructure, noise, lighting, and continuous operations; and

WHEREAS, the Board of Supervisors finds that the scale of electrical demand, water consumption, cooling infrastructure, and associated utility improvements required to serve Digital Infrastructure Facilities may materially affect surrounding properties, public infrastructure, and municipal services, and therefore warrant supplemental land use regulations and objective performance standards beyond those generally applicable within the Industrial District

WHEREAS, the Board of Supervisors determines that the boundaries of the Digital Infrastructure Overlay District have been established in a manner consistent with the Township's Comprehensive Plan and based upon compatibility with surrounding land uses, environmental constraints, and other legitimate and objective land use planning considerations; and

WHEREAS, permitting Digital Infrastructure Facilities only as a Conditional Use within the Digital Infrastructure Overlay District provides a reasonable opportunity for the establishment of such uses while ensuring that each proposal is evaluated on a site-specific basis for compatibility with surrounding land uses, available infrastructure, emergency services, and other impacts affecting the public health, safety, and welfare; and

WHEREAS, the Board of Supervisors finds that the regulations applicable within the Digital Infrastructure Overlay District are intended to supplement, and not replace, the regulations otherwise applicable to the underlying zoning district except where this Ordinance expressly provides otherwise; and

WHEREAS, the Board of Supervisors finds that the Conditional Use process established by the MPC is the appropriate mechanism for evaluating compliance with the objective standards of this Ordinance and for imposing reasonable conditions authorized by law to address site-specific impacts; and

WHEREAS, objective, measurable, and enforceable performance standards governing Digital Infrastructure Facilities are necessary to protect the public health, safety, and welfare while advancing the goals and recommendations of the Township's Comprehensive Plan, prepared in conformance with FUTURELV: The Regional Plan, adopted by the Lehigh Valley Planning Commission in November 2019;

WHEREAS, it is in the best interests of Township residents to establish definitions and regulations for Digital Infrastructure Facilities and Digital Infrastructure Accessory Uses; and

WHEREAS, the Township is a predominantly rural municipality with limited roadway capacity, emergency response resources, public utility infrastructure, and water resources in certain areas; and

WHEREAS, the Board of Supervisors finds that these local conditions warrant supplemental review and objective performance standards to ensure that Digital Infrastructure Facilities are designed, located, and operated in a manner that protects the public health, safety, and welfare;

WHEREAS, objective performance standards and Conditional Use standards addressing, among other matters, noise, setbacks, buffering, stormwater management, traffic, emergency access, utility infrastructure, and decommissioning obligations constitute a reasonable exercise of the Township's authority to regulate land uses and the intensity thereof;

WHEREAS, large-scale cooling systems and water demands associated with certain Digital Infrastructure Facilities may affect groundwater resources, private wells, baseflow in the local watersheds, and related environmental resources depending upon site-specific hydrogeologic conditions; and

WHEREAS, the Township is underlain by fractured bedrock and karst limestone aquifers that may exhibit variable groundwater yields, making sustainable groundwater withdrawal a necessary consideration in evaluating proposed Digital Infrastructure Facilities;

WHEREAS, disclosure of the maximum designed electrical demand of a proposed Digital Infrastructure Facility at full build-out, regardless of phasing, is necessary to evaluate the ultimate intensity of the proposed land use, cumulative infrastructure impacts, compatibility with surrounding land uses, and potential off-site utility improvements; and

WHEREAS, the Township's electrical distribution system is rural in character and is served primarily by radial feeders and limited substation capacity, such that concentrations of large electrical loads may require additional utility infrastructure improvements that must be evaluated as part of the land development and zoning review process; and

WHEREAS, rural electric grid capacity, groundwater yield, roadway capacity, and emergency response capability vary throughout the Township and should therefore be evaluated on a site-specific basis through the Conditional Use process; and

WHEREAS, Digital Infrastructure Facilities commonly include battery energy storage systems, emergency generators, fuel storage, high-voltage electrical equipment, and continuous operations that may require specialized emergency response planning, coordination with emergency service providers, and appropriate fire protection measures; and

WHEREAS, the Board of Supervisors finds that financial security for decommissioning and site restoration is necessary to ensure that obsolete or abandoned Digital Infrastructure Facilities and associated infrastructure are removed and the property restored without imposing financial burdens upon the Township or its taxpayers; and

WHEREAS, the Board of Supervisors finds that the Industrial District is the most appropriate location within the Township to accommodate Digital Infrastructure Facilities because of its intended industrial character, while recognizing that such facilities require additional site-specific review and supplemental performance standards due to their operational characteristics and infrastructure demands; and

WHEREAS, the Board of Supervisors further determines that this amendment to the Township Zoning Ordinance, including the establishment of the Digital Infrastructure Overlay District, represents a reasonable exercise of the Township's police powers and zoning authority by permitting Digital Infrastructure Facilities within designated areas of the Township while protecting surrounding properties, preserving the Township's rural character, advancing the goals of the Township's Comprehensive Plan, and safeguarding the public health, safety, and welfare through objective and uniformly applicable land use standards.

NOW, THEREFORE, BE IT HEREBY ENACTED AND ORDAINED by the Board of Supervisors of the Township of Lower Mount Bethel. Northampton County, Pennsylvania, as follows:

SECTION 2 – AMENDMENTS TO CHAPTER 27 (ZONING)

Chapter 27 (Zoning) of the Code of the Township of Lower Mount Bethel is hereby amended as follows:

2.1 Section 27-202 (Definitions) is hereby amended by adding the following definitions, which shall be inserted alphabetically:

DIGITAL INFRASTRUCTURE FACILITY (DIF). A principal use of land consisting of one or more buildings or structures primarily designed and used for the housing, operation, and maintenance of computer servers, data storage equipment, or digital processing hardware, together with associated support infrastructure necessary to maintain continuous digital operations, including but not limited to electrical distribution equipment, backup power generation systems, battery energy storage systems, fuel storage, cooling systems, and water withdrawal infrastructure. This term shall include all types of data centers, including crypto mining, and shall not include:

1. Customary office uses where data processing is incidental to administrative functions;
2. Personal or consumer telecommunications equipment accessory to residential or commercial uses;
3. Facilities regulated as public utilities under Pennsylvania law; or
4. Wireless communication facilities regulated under federal telecommunications laws for commercial uses.

DIGITAL INFRASTRUCTURE FACILITY ACCESSORY USE. Ancillary uses or structures secondary and incidental to Digital Infrastructure Facility or Hyper-Digital Infrastructure Facility uses, including, but not limited to:

administrative, logistical, fiber optic, storage, and security buildings or structures; sources of electrical power such as generators used to provide temporary power when the main source of power is interrupted; electrical substations; utility lines; domestic and pon-contact cooling water and wastewater treatment facilities; water holding facilities; pump stations; water towers; environmental controls (air condition or cooling towers, fire suppression, and related equipment); security features, provided such Digital Infrastructure Facility Accessory uses/structures are located on the same tract or assemblage of adjacent parcels developed as a unified development with a Digital Infrastructure Facility or Hyper Digital Infrastructure Facility use, The use shall not include energy generation systems used or intended to be used to supply power to the Digital Infrastructure Facility or Hyper Digital Infrastructure Facility during normal operations.

HYPER DIGITAL INFRASTRUCTURE FACILITY (HYPER-DIF). A Digital Infrastructure Facility with a maximum designed electrical demand at full build-out of fifty (50) megawatts or greater, including all IT load, cooling systems, and supporting infrastructure. For purposes of zoning and land development review, classification as a Hyper Digital Infrastructure Facility or Digital Infrastructure Facility shall be based on the maximum designed electrical demand disclosed by the applicant, regardless of phased construction or initial deployment. A Hyper-DIF is characterized by:

1. The potential requirement for new or expanded electrical substations or transmission infrastructure;
2. Large- scale backup power generation and fuel storage systems;
3. Continuous 24-hour operations; and/or
4. Site impacts that materially exceed those of traditional office, warehouse, or light industrial uses.

2.2 **Section 27-301(B) (Overlay Districts) is hereby amended to add a new Overlay District, designated as follows:**

DIO - Digital Infrastructure Overlay District

2.3 **The Official Zoning Map is hereby amended as provided in Section __ of this Ordinance.**

2.4 **Chapter 27 (Zoning) is hereby amended by adding a new Part __, entitled "Digital Infrastructure Overlay District," to read as follows:**

Part _____

DIGITAL INFRASTRUCTURE OVERLAY DISTRICT

§27-____ Purpose. The purpose of the Digital Infrastructure Overlay District is to establish uniform regulations governing the location, design, construction, operation, expansion, and decommissioning of Digital Infrastructure Facilities, Hyper Digital Infrastructure Facilities, and associated Digital Infrastructure Accessory Uses within designated areas of the Township. The regulations of this Part are intended to supplement the requirements of the underlying zoning district and to ensure compatibility with surrounding land uses while protecting the public health, safety, and welfare. This Part is further intended to conserve the Township's natural, scenic, historic, and environmental resources consistent with Article I, Section 27 of the Pennsylvania Constitution.

§27-____ Applicability.

A. The provisions of this Part shall apply to all property located within the Digital Infrastructure Overlay District as depicted on the Official Zoning Map.

B. The regulations of this Part are supplemental to the regulations applicable to the underlying zoning district.

§27-____ Overlay District Boundaries.

A. **Establishment**. The Digital Infrastructure Overlay District ("DIO District") is hereby established as an overlay zoning district and shall apply only to those lands designated as the Digital Infrastructure Overlay District on the Official Zoning Map of the Township

B. **Underlying Zoning District**. The DIO District is superimposed upon the underlying Industrial District.

C. **Official Zoning Map**. The Official Zoning Map of the Township is hereby amended to establish the Digital Infrastructure Overlay District as depicted on the map attached hereto as Exhibit A, which is incorporated herein by reference.

§27-____ Relationship to Underlying Industrial District.

A. The Digital Infrastructure Overlay District supplements the regulations otherwise applicable to the underlying Industrial District.

B. Except as expressly modified by this Part, all applicable requirements of the underlying Industrial District and all other applicable provisions of Chapter 27 shall remain in full force and effect.

C. In the event of a conflict between the provisions of this Part and the regulations applicable to the underlying Industrial District, the provisions of this Part shall

govern with respect to Digital Infrastructure Facilities, Hyper Digital Infrastructure Facilities, and Digital Infrastructure Accessory Uses.

§27-____ Authorized Uses.

A. The following uses shall be permitted within the Digital Infrastructure Overlay District only as a Conditional Use, subject to the requirements of this Part and all other applicable provisions of Chapter 27:

1. Digital Infrastructure Facilities
2. Hyper Digital Infrastructure Facilities

B. Digital Infrastructure Accessory Uses shall be permitted only as accessory uses customarily incidental and subordinate to an approved Digital Infrastructure Facility or Hyper Digital Infrastructure Facility and shall not be established as independent principal uses or require separate Conditional Use approval unless otherwise required by this Chapter.

C. Nothing in this Part shall alter the uses permitted within the underlying Industrial District except as specifically provided for Digital Infrastructure Facilities, Hyper Digital Infrastructure Facilities, and Digital Infrastructure Accessory Uses.

D. The provisions of this Part apply only to Digital Infrastructure Facilities, Hyper Digital Infrastructure Facilities, and Digital Infrastructure Accessory Uses. Except as expressly provided herein, all other uses and regulations applicable to the underlying Industrial District shall remain in full force and effect.

§27-____ Conditional Use Approval.

A. Digital Infrastructure Facilities and Hyper Digital Infrastructure Facilities require Conditional Use approval by the Board of Supervisors in accordance with this Part, the general Conditional Use standards contained in Chapter 27, and the MPC.

B. The applicant shall bear the burden of demonstrating compliance with all applicable requirements of this Part

C. In addition to the information otherwise required by this Chapter, the applicant shall identify the proposed end user or users, if any, and shall describe the primary intended purpose, function, and operational characteristics of the proposed Digital Infrastructure Facility and any associated Digital Infrastructure Accessory Uses. Such description shall be of sufficient detail to enable the Board of Supervisors to evaluate the proposed use for compliance

with the requirements of this Part and all other applicable provisions of Chapter 27.

D. The applicant shall demonstrate compliance with all applicable provisions of this Part, the general Conditional Use standards contained in § 27-1705, and all other applicable provisions of Chapter 27 through competent evidence presented as part of the Conditional Use application and hearing.

E. Where development is proposed in phases, the applicant shall demonstrate compliance with the applicable requirements of this Part for each phase of development and for the proposed facility at full build-out, unless a particular standard expressly applies only to an individual phase.

F. The Board of Supervisors shall approve a Conditional Use application only upon determining, based upon the record, that the applicant has demonstrated compliance with the applicable provisions of this Part, the general Conditional Use standards contained in § 27-1705, and all other applicable provisions of Chapter 27.

G. Approval of a Conditional Use under this Part shall not relieve the applicant of the obligation to obtain all other permits, approvals, and authorizations required by applicable federal, state, county, or local laws, ordinances, or regulations, nor shall such approval relieve the applicant of the obligation to comply with all applicable provisions of this Chapter.

H. **Expansion of Approved Electrical Demand**. Any expansion of a Digital Infrastructure Facility or Hyper Digital Infrastructure Facility that increases the maximum approved electrical demand beyond that approved as part of the Conditional Use shall require amendment of the Conditional Use approval in accordance with the requirements of this Chapter.

§27-____ Development and Performance Standards. The following Development and Performance standards shall apply to all Digital Infrastructure Facilities, Hyper Digital Infrastructure Facilities, and Digital Infrastructure Accessory Uses.

A. **General Compliance**. Digital Infrastructure Facilities, Hyper Digital Infrastructure Facilities, and associated Digital Infrastructure Accessory Uses shall comply with the performance standards set forth in this Section, in addition to all other applicable provisions of Chapter 27. The standards of this Section are continuing requirements and shall be maintained throughout the operation of the facility unless otherwise expressly provided herein.

B. **Scope and Intent**. The Development and Performance standards contained in this Section are intended to establish objective and uniformly applicable land

use regulations governing the location, design, construction, operation, expansion, and decommissioning of Digital Infrastructure Facilities, Hyper Digital Infrastructure Facilities, and associated Digital Infrastructure Accessory Uses. These standards are intended solely to regulate land use and land development impacts and shall not be construed to regulate telecommunications services, utility rates, electric generation, electric transmission, or energy markets, which are governed by applicable federal and state law

C. **Demonstration of Compliance**. Compliance with the Development and Performance standards of this Section shall be demonstrated through the plans, studies, reports, analyses, certifications, and other information required by this Part and shall be evaluated as part of the Conditional Use application.

D. **Electrical Demand and Infrastructure Capacity**.

1. The applicant shall provide the total electrical demand of the proposed facility at full build-out, regardless of phasing, expressed in megawatts (MW), including IT load, cooling systems, backup power systems, and all other supporting infrastructure.

2. Electrical demand information shall be used solely for evaluating land-use impacts, infrastructure planning, and compliance with this Part and shall not constitute approval or denial of utility service.

3. The applicant shall demonstrate, through competent evidence, that adequate electrical infrastructure capacity is available or will be available to serve the proposed facility at full build-out. Such demonstration shall include documentation from the applicable electric utility, together with any supporting engineering analyses necessary to evaluate the anticipated land use impacts of the proposed development.

4. Compliance with this subsection shall be demonstrated through the Electrical Utility Impact Study required by § 27-____ and any supporting documentation required by this Part.

E. **Utility Infrastructure Improvements**.

1. The applicant shall identify any required new or expanded electrical substations, transmission lines, utility upgrades, and other utility improvements necessary to serve the proposed development.

2. The applicant shall provide written documentation identifying the financial responsibility for such improvements and any known or anticipated infrastructure capacity constraints.

3. Nothing in this Part shall be construed to require the Township to approve or deny utility interconnections, utility service, or utility infrastructure owned or regulated by another governmental agency or public utility.

F. **Traffic and Construction Impacts**. The applicant shall submit a traffic impact analysis addressing construction-phase traffic, including oversized equipment deliveries. Where impacts are identified, the Township may require reasonable traffic management or mitigation measures.

G. **Emergency and Coordination Plan**. The applicant shall submit an emergency services coordination plan addressing fire protection, HAZMAT response, battery systems, and fuel storage. Site design shall provide adequate emergency access and safety features consistent with applicable adopted Township codes.

H. **Compliance with Ordinance Requirements**. The applicant shall demonstrate compliance with all applicable provisions of this Part and Chapter 27 governing Digital Infrastructure Facilities, Hyper Digital Infrastructure Facilities, and Digital Infrastructure Accessory Uses.

§27-____ Environmental Impact Assessment.

A. **Assessment Required.** An Environmental Impact Assessment ("EIA") shall be prepared and submitted as part of the Conditional Use application for a Digital Infrastructure Facility or Hyper Digital Infrastructure Facility. The Environmental Impact Assessment shall be prepared by a qualified professional, including a professional engineer, ecologist, environmental planner, or other individual possessing expertise appropriate to the matters addressed in the assessment.

B. **Purpose.** The Environmental Impact Assessment shall include a description of the proposed use, including its location, relationship to surrounding development and other existing or proposed infrastructure, and sufficient data and analysis to evaluate the anticipated environmental impacts of the proposed development. The assessment shall also include a comprehensive description of the existing environmental conditions, the probable environmental effects of the proposal, and appropriate mitigation measures. The assessment shall focus on those environmental resources most likely to be affected by the proposed development, including potential cumulative impacts and ecological interrelationships.

C. **Minimum Contents.** At a minimum, the Environmental Impact Assessment shall include an analysis of the following:

1. **Air Quality.** Air pollution impacts associated with primary and backup power sources, electrical equipment, cooling equipment, vehicle operations, and construction activities, including truck idling. The applicant shall identify all stationary and mobile sources of fine particulate matter (PM2.5), volatile organic compounds (VOC), nitrogen oxides (NOx), and other regulated pollutants. The assessment shall identify best management practices proposed to minimize air emissions. The applicant shall submit copies of all air quality permit applications submitted to any federal or state agency as part of the Conditional Use application and shall provide copies of all final permits prior to commencement of operations requiring such permits.

2. **Public Nuisance Impacts.** Potential impacts associated with facility operations and construction activities, including truck traffic, noise, glare, lighting, visual impacts, dust, vibration, and other potential nuisances affecting adjacent properties.

3. **Stormwater Management.** A Stormwater Management Plan demonstrating compliance with the Township's Stormwater Management Ordinance and Act 167 Stormwater Management Plan.

4. **Historic and Cultural Resources.** A PA-SHARE Report identifying potential impacts to historic, archaeological, and cultural resources.

5. **Comprehensive Plan Consistency.** An assessment of the consistency of the proposed development with the goals and objectives of the Township and County Comprehensive Plans. Where inconsistencies are identified, the applicant shall describe proposed mitigation measures to minimize adverse impacts upon public resources.

6. **Alternative Analysis**.

    i. Alternatives considered.
    ii. Adverse impacts that cannot reasonably be avoided.

    iii. Proposed mitigation measures, construction practices, and design features intended to minimize environmental impacts during and after construction.

7. **Critical Environmental Resources.** Identification and evaluation of environmentally sensitive resources, including but not limited to floodplains, riparian buffers, streams, wetlands, slopes exceeding 15%,

highly erodible or highly acidic soils, hydric soils, areas of seasonal high groundwater, aquifer recharge and discharge areas, and mature stands of native vegetation.

The assessment shall describe the anticipated impacts to such resources, identify adverse impacts that cannot reasonably be avoided, and describe proposed measures to avoid, minimize, or mitigate such impacts.

D. **Threatened and Endangered Species.**

1. The applicant shall submit a Pennsylvania Natural Diversity Inventory (PNDI) receipt dated not more than two (2) years prior to submission of the first application for either Conditional Use approval or subdivision and land development approval, whichever occurs first, together with all agency correspondence and clearance letters required by the PNDI review process.

2. The applicant shall comply with all avoidance, minimization, mitigation, monitoring, or other requirements imposed by the applicable reviewing agencies.

E. **Relationship to Other Requirements.** Submission of an Environmental Impact Assessment shall not relieve the applicant of the obligation to demonstrate compliance with all other applicable provisions of this Part, including all applicable development standards, performance standards, operational standards, and application requirements.

§27-____ Dimensional Standards.

A. **General**. Digital Infrastructure Facilities, Hyper Digital Infrastructure Facilities, and Digital Infrastructure Accessory Uses shall comply with the dimensional standards applicable to the underlying Industrial District set forth in § 27-1003 of Chapter 27, except as modified or supplemented by this Section. Where the standards of this Section conflict with those of the underlying Industrial District, the standards of this Section shall control.

Commented [KB1]: In the drafts we have been working off of, there is no height restriction or set back provided for DIF or Hyper DIF, only Digital Infrastructure Accessory Uses. This means it defaults to the requirements of the Industrial District. As to height, is that the intention? I do not believe that is the intent as to setbacks, so included it in this section (See B).

B. **Maximum Height of Digital Infrastructure Accessory Uses**.

1. The maximum height of any Digital Infrastructure Accessory Use shall not exceed forty-five (45) feet, inclusive of all roof-mounted equipment, including, but not limited to, cooling systems, ventilation equipment, HVAC units, cooling towers, and similar appurtenances.

2. In no event shall a Digital Infrastructure Accessory Use exceed the height of the principal building to which the use is accessory.

C. **Minimum Setback**. Digital Infrastructure Facilities, Hyper Digital Infrastructure Facilities, and Digital Infrastructure Accessory Uses shall be located no closer than five hundred (500) feet to any property line.

§27-____ Parking and Loading.

A. **Off-Street Parking.** Digital Infrastructure Facilities and Hyper Digital Infrastructure Facilities shall provide off-street parking in the lesser of the following amounts:

1. One (1) parking space for each employee assigned to the facility; or

2. One and two-tenths (1.2) parking spaces for each employee on-site during the largest work shift.

B. **Design Standards.** All parking areas, loading areas, drive aisles, and associated improvements shall comply with the applicable requirements of Chapter 27 and the Township Subdivision and Land Development Ordinance (SALDO), as each may be amended.

§27-____ Signage. All signs associated with a Digital Infrastructure Facility, Hyper Digital Infrastructure Facility, or associated Digital Infrastructure Accessory Uses shall comply with the applicable sign regulations of Chapter 27.

§27-____ Water and Sewer Service Standards.

A. **Public Water Supply**. Where a proposed Digital Infrastructure Facility or Hyper Digital Infrastructure Facility will be served by a public water supply, the applicant shall submit written documentation from the public water authority providing such service certifying that adequate water service is available and will be provided to the proposed development.

B. **Private Water Supply**. Where a public water supply is unavailable or is not proposed, the applicant shall submit a Water Feasibility Study prepared by a qualified independent licensed professional geologist. The Water Feasibility Study shall include, at a minimum, the following:

1. The projected water demand of the proposed use.

2. Identification of each proposed source or sources of water together with a description of the anticipated water uses, including the amount or proportion of water to be used for cooling, humidity control, fire suppression, domestic use, and any other significant purpose.

3. Because portions of the Township are underlain by fractured bedrock and karst limestone geology, any proposal utilizing high-capacity groundwater withdrawal wells shall include a hydrogeologic investigation prepared by an independent licensed geologist demonstrating that the proposed withdrawals will not create an unreasonable risk of sinkhole formation, groundwater depletion, or other adverse hydrogeologic impacts.

4. A determination of the long-term safe yield of the proposed water source, including an aquifer study where necessary to evaluate sustainable groundwater withdrawal.

5. A description of the amount or proportion of withdrawn water that will be recycled, consumptively used, or discharged, together with the proposed method of discharge or disposal.

6. A hydrogeologic map and report extending at least one (1) mile from the boundaries of the subject property.

7. The location of all existing and proposed wells within one thousand (1,000) feet of the property boundaries, together with the reported capacity of all known high-capacity wells.

8. The location of all surface waters within one thousand (1,000) feet of the property boundaries, including perennial and intermittent streams, rivers, lakes, reservoirs, ponds, wetlands, springs, natural seeps, and similar water resources.

9. The Water Feasibility Study shall bear the signature and professional seal of the independent licensed professional geologist who prepared the study and shall be reviewed by the Township Engineer.

C. **Delaware River Basin Commission**. Where applicable, the applicant shall demonstrate compliance with all applicable Delaware River Basin Commission (DRBC) requirements by providing documentation of any required approvals for:

1. Water withdrawals averaging one hundred thousand (100,000) gallons per day or more over any consecutive thirty (30) day period from any source or combination of sources within the Delaware River Basin; or

2. Consumptive water use averaging twenty thousand (20,000) gallons per day or more over any consecutive thirty (30) day period from any water source.

D. **Domestic Wastewater Disposal**. The applicant shall demonstrate that adequate means of domestic wastewater disposal have been provided and approved by the Township Sewage Enforcement Officer or other agency having jurisdiction.

E. **Industrial Process Water and Cooling Water Disposal**. The applicant shall demonstrate that adequate means have been provided for the treatment, reuse, recycling, or disposal of industrial process water, cooling water, and similar wastewater streams and shall provide documentation of all approvals required by the Pennsylvania Department of Environmental Protection (PADEP) and any other agency having jurisdiction.

§27-____ Utility Infrastructure Coordination.

A. **Infrastructure Identification**. The applicant shall identify all existing, proposed, or required utility infrastructure improvements necessary to serve the proposed Digital Infrastructure Facility, Hyper Digital Infrastructure Facility, or associated Digital Infrastructure Accessory Uses, including, but not limited to, electrical substations, transmission facilities, distribution facilities, on-site electrical yards, switchgear, utility corridors, and interconnection facilities.

B. **Infrastructure Adequacy Determination**. The applicant shall demonstrate that adequate utility infrastructure capacity is available or will be available to serve the proposed development. Such demonstration shall be based upon objective evidence, including written confirmation from the serving electric utility identifying the available electrical capacity at the proposed interconnection point and any anticipated or required system upgrades necessary to serve the proposed development.

C. **Furnishing of Information Concerning Applications or Requests to Utility Providers**. The applicant, property owner, or operator of the proposed Digital Infrastructure Facility or Hyper Digital Infrastructure Facility, as applicable, shall provide to the Township copies of all applications, requests, engineering studies, and written correspondence submitted to or received from any utility provider relating to requests for new, expanded, or modified utility service for the proposed Digital Infrastructure Facility or Hyper Digital Infrastructure Facility.

D. **Non-Regulation of Utilities**. Nothing herein shall be construed to regulate utility service provision, interconnection approval, or energy markets, which remain under the jurisdiction of applicable utility providers and regulatory agencies.

§27-____ Electrical Utility Impact Study.

A. **Study Requirement**. The applicant shall submit an Electrical Utility Impact Study prepared by a qualified independent professional engineer or qualified utility consultant. The study shall demonstrate compliance with the electrical demand, infrastructure capacity, and utility infrastructure requirements of this Part.

B. **Minimum Study Contents.** At a minimum, the Electrical Utility Impact Study shall include:

1. The maximum designed electrical demand of the proposed Digital Infrastructure Facility or Hyper Digital Infrastructure Facility at full build-out, expressed in megawatts (MW).

2. Identification of all required new or expanded electrical substations, switching stations, transmission facilities, distribution facilities, interconnection facilities, on-site electrical yards, or other utility infrastructure necessary to serve the proposed development.

3. The location, size, and land area requirements of all proposed substations, switching stations, on-site electrical yards, and other major electrical infrastructure.

4. A description of the anticipated construction activities, construction sequencing, and estimated duration associated with the installation of the proposed electrical infrastructure.

5. An evaluation of the anticipated land use, noise, visual, traffic, public safety, and other impacts associated with the proposed electrical infrastructure.

C. **Hyper Digital Infrastructure Facilities.** In addition to the requirements of subsection B, an Electrical Utility Impact Study for a Hyper Digital Infrastructure Facility shall:

1. Evaluate the cumulative impacts of all proposed electrical infrastructure at full build-out.

2. Identify alternative substation locations, configurations, or design options, where practicable, to minimize land use impacts.

3. Evaluate proposed redundancy and resiliency infrastructure, including additional substations, switching stations, transmission facilities, distribution facilities, or backup electrical systems, and identify any associated land use impacts.

§27-____ Fiber and Telecommunications Infrastructure Disclosures.

A. **Disclosure Requirement.** The applicant shall provide information concerning all on-site and off-site fiber-optic infrastructure necessary to serve the proposed Digital Infrastructure Facility, Hyper Digital Infrastructure Facility, or associated Digital Infrastructure Accessory Uses.

B. **Minimum Disclosures. At a minimum, the applicant shall identify:**

1. Proposed fiber routes, conduits, vaults, handholes, interconnection points, and related telecommunications infrastructure.

2. The location of any new or expanded fiber corridors within Township rights-of-way or utility easements.

3. Proposed construction methods, including trenching, directional boring, aerial installation, or other installation techniques.

4. Anticipated impacts upon public roads, sidewalks, drainage facilities, utilities, and other public infrastructure.

5. Proposed restoration methods for disturbed rights-of-way, easements, and private property.

6. The party or parties responsible for installation, maintenance, repair, and restoration of the fiber infrastructure.

C. **Non-Regulation of Telecommunications.** Nothing contained in this Part shall be construed to regulate telecommunications services, telecommunications providers, or telecommunications rates. Township review shall be limited to the physical infrastructure and associated land use impacts of the proposed development.

§27-____ Additional Standards for Hyper Digital Infrastructure Facilities.

A. **Applicability.** The requirements of this Section shall apply only to Hyper Digital Infrastructure Facilities.

B. **General Compliance.** Hyper Digital Infrastructure Facilities shall comply with all applicable requirements governing Digital Infrastructure Facilities, together with the additional requirements set forth in this Section.

C. **Maximum Build-Out Disclosure.** The applicant shall disclose the maximum designed electrical demand at full build-out, expressed in megawatts (MW), including all information technology equipment, cooling systems, backup power systems, and supporting infrastructure, regardless of phased construction, modular deployment, or initial operating capacity.

D. **Phasing Plan.** Where a Hyper Digital Infrastructure Facility is proposed to be constructed or expanded in phases, the applicant shall submit a Phasing Plan identifying:

1. The electrical demand associated with each phase, expressed in megawatts (MW).
2. The anticipated timing of each phase.
3. The cumulative electrical demand and anticipated site impacts at full build-out.

§27-____ Backup Power Generation and Fuel Storage.

A. **Generator Capacity Disclosure**. The applicant shall provide the following information concerning all proposed backup power generation equipment:
   1. The total number of backup generators;
   2. The combined standby generating capacity, expressed in megawatts (MW);
   3. The location of all backup generators on the subject property.

B. **Fuel Storage Disclosure**. The applicant shall provide the following information concerning all proposed fuel storage systems:
   1. The total on-site fuel storage capacity, expressed in gallons.
   2. The type or types of fuel to be stored.
   3. The proposed fuel storage configuration, including the location and type of all storage tanks.

C. **Fuel Storage Standards**
   1. All fuel storage areas shall comply with applicable federal, state, and local laws and regulations.
   2. Fuel storage areas shall be located no closer than one thousand (1,000) feet from any property line.

D. **Natural Gas Service**. Where natural gas is supplied by pipeline, the applicant shall provide documentation demonstrating compliance with all applicable federal and Commonwealth of Pennsylvania laws and regulations governing the design, construction, operation, and maintenance of natural gas transmission or distribution facilities. Such documentation shall be subject to review by the Township Engineer.

E. **Generator Testing**.

1. The applicant shall identify the anticipated generator testing schedule, frequency, and duration.

2. Noise generated by routine generator testing shall not exceed the maximum permissible sound levels established in § 27-____ of this Part.

3. Routine generator testing shall not occur between the hours of 9:00 p.m. and 7:00 a.m.

§27-____ On-Site Energy Generation and Storage.

A. **Applicability.** The provisions of this Section shall apply to all on-site energy generation systems associated with a Digital Infrastructure Facility, Hyper Digital Infrastructure Facility, or associated Digital Infrastructure Accessory Uses, including, but not limited to, stationary fuel cell power systems, battery energy storage systems, emergency generators, cogeneration systems, and similar energy generation or storage facilities.

B. **Fire and Life Safety Review.** All proposed on-site energy generation systems shall be reviewed by the Fire Chief or the Fire Chief's designee as part of the Conditional Use and land development review processes. The applicant shall submit a Safety Plan in accordance with this Section.

C. **Safety Plan**. The applicant shall submit a Safety Plan prepared by a qualified professional. At a minimum, the Safety Plan shall address:

i. A description of the proposed on-site energy generation system and its operation.

ii. Fire protection and suppression systems.

iii. Hazardous materials management, including fuel storage and handling procedures.

iv. Battery energy storage systems, where applicable.

v. Emergency shutdown procedures.

vi. Emergency access, emergency responder staging areas, and emergency vehicle circulation.

vii. Coordination procedures with local emergency service providers.

viii. Site-specific emergency response procedures.

ix. Emergency contact information for facility personnel responsible for emergency response.

x. A demonstration that the proposed system has been designed in accordance with all applicable federal, state, and local laws, regulations, ordinances, and codes, including, where applicable, standards promulgated by the American National Standards Institute (ANSI), American Society of Mechanical Engineers (ASME), ASTM International (ASTM), International Electrotechnical Commission (IEC), the International Fire Code (IFC), the National Fire Protection Association (NFPA), the National Renewable Energy Laboratory (NREL), the National Electrical Code (NEC), and other applicable industry standards governing the proposed energy generation system.

D. **Annual Recertification.** The property owner or operator shall annually certify that the Safety Plan remains accurate and current and shall permit the Fire Chief or the Fire Chief's designee to conduct site inspections, upon reasonable notice, for the purpose of identifying emergency response vulnerabilities and verifying continued compliance with the Safety Plan.

E. **Stationary Fuel Cell Power Systems**.

1. Stationary Fuel Cell Power Systems shall comply with the setback requirements otherwise applicable to the principal use within the underlying zoning district at the time application for the fuel cell system is submitted.

2. The applicant shall certify that the design and construction of any Stationary Fuel Cell Power System is under the responsible charge of a qualified design professional and complies with the standards identified in this Section.

3. Stationary Fuel Cell Power Systems shall be permitted only as accessory uses customarily incidental and subordinate to an approved Digital Infrastructure Facility or Hyper Digital Infrastructure Facility and shall not be established as independent principal uses.

§27-____ Cooling System Standards.

A. **Best Available Cooling Technology (BACT).** Digital Infrastructure Facilities, Hyper Digital Infrastructure Facilities, and associated Digital Infrastructure

Accessory Uses shall utilize the Best Available Cooling Technology (BACT). Compliance with this requirement shall be demonstrated by competent engineering evidence submitted as part of the Conditional Use and land development applications. For purposes of this Section, Best Available Cooling Technology (BACT) shall mean the cooling system or combination of cooling systems that:

1. Achieves the lowest reasonably achievable Power Usage Effectiveness (PUE);

2. Minimizes potable water consumption through the use of water-efficient technologies;

3. Demonstrates commercial availability and proven technical feasibility for Digital Infrastructure Facility applications; and

4. Minimizes environmental impacts, including, but not limited to, energy demand, water consumption, wastewater generation, waste heat, and site-specific climatic conditions.

B. **Closed-Loop Cooling Systems.** Digital Infrastructure Facilities, Hyper Digital Infrastructure Facilities, and associated Digital Infrastructure Accessory Uses shall utilize closed-loop cooling systems to the maximum extent practicable. Cooling water shall be recirculated and reused to minimize water withdrawals and wastewater discharges. Continuous once-through cooling systems shall be prohibited except as expressly permitted by this Section.

   For purposes of this Section, a closed-loop cooling system is a cooling system that circulates coolant or cooling water within a closed or recirculating system to remove heat from information technology equipment while minimizing potable water withdrawals and wastewater discharges.

C. **Cooling System Disclosure**. The applicant shall provide the following information:

1. The proposed cooling system type and operating method.

2. Whether cooling will occur through evaporation, blowdown, heat exchange, or other mechanisms.

3. The maximum anticipated annual water demand, expressed in gallons per year.

4. The anticipated source or sources of water supply.

5. The anticipated quantity of water to be recycled, reused, consumptively used, and discharged.

D. **Infrastructure Compatibility**. The applicant shall demonstrate that the proposed cooling system and associated water demands are compatible with available public utilities, water supplies, wastewater facilities, and the environmental characteristics of the site.

E. **Once-Through Cooling**. Once-through cooling systems shall be prohibited unless the applicant demonstrates through competent engineering evidence that:

1. A closed-loop cooling system is not reasonably feasible because of documented site-specific or operational constraints;

2. The proposed water withdrawals and discharges will not adversely affect groundwater resources, surface waters, wetlands, or other environmental resources; and

3. All non-contaminated cooling water shall be discharged only to a naturalized surface basin equipped with aeration prior to discharge off-site or infiltration, unless an alternative method is approved by the Pennsylvania Department of Environmental Protection or other agency having jurisdiction.

F. **Process Water Containment**. All process water, coolant, and chemical-containing liquids associated with facility operations shall be managed in a manner that prevents discharge to the ground or stormwater management system. At a minimum, the applicant shall provide:

1. Secondary containment for all chemical and coolant storage areas;

2. Spill prevention and spill response procedures; and

3. Documentation demonstrating compliance with all applicable federal, state, and local environmental requirements.

G. **Water Reuse and Recycling**. The applicant shall submit a Water Reuse and Recycling Plan describing the methods by which water will be reused or recycled on-site to minimize total water withdrawals and wastewater discharges.

H. **Cooling System Operations and Maintenance Plan.** The applicant shall submit an Operations and Maintenance Plan addressing inspection procedures, sediment control, thermal controls, maintenance activities, and emergency

response procedures applicable to cooling return flows and associated infrastructure.

§27-____ Stormwater System Resiliency and Cooling Return Flows.

A. **Purpose.** The purpose of this Section is to ensure that stormwater management systems remain functional and resilient where Digital Infrastructure Facilities, Hyper Digital Infrastructure Facilities, or associated Digital Infrastructure Accessory Uses utilize cooling systems that generate blowdown, return flows, or process water.

B. **Cooling Return Flow Discharge**. The applicant shall disclose:

1. The proposed cooling system type.

2. Expected cooling return flow volumes, expressed in gallons per day and gallons per year.

3. The anticipated temperature and water quality characteristics of return flows.

4. The proposed discharge locations, discharge methods, and timing of all return flows.

C. **Stormwater Design Standards**. The applicant shall demonstrate that stormwater management facilities have been designed to:

1. Isolate cooling return flows from the stormwater management system where appropriate.

2. Prevent thermal impacts and water quality degradation of receiving waters.

3. Accommodate anticipated cooling return flows without reducing the design capacity of the stormwater management system.

4. Maintain stormwater management performance during applicable design storm events.

D. **Hyper Digital Infrastructure Facilities**. Applicants proposing a Hyper Digital Infrastructure Facility shall additionally demonstrate:

1. Redundant containment for process water and cooling system fluids.

2. That cooling return flows will not adversely affect stormwater management facilities during extreme weather events.

3. Emergency shutdown, containment, and spill response procedures for cooling systems.

§27-____ Construction Traffic Management Plan.

A. **Construction Traffic Management Plan.** The applicant shall submit a construction Traffic Management Plan as part of the Conditional Use application.

B. **Minimum Contents.** The plan shall identify, at a minimum:

1. Proposed construction haul routes.

2. Hours of construction vehicle operation.

3. Equipment staging areas.

4. Temporary traffic control measures, including flagging operations where necessary.

5. Measures to protect public safety and minimize impacts upon adjacent roadways, neighborhoods, and businesses.

§27-____ Noise Standards.

A. The purpose of this Section is to establish objective and uniformly applicable noise standards governing Digital Infrastructure Facilities, Hyper Digital Infrastructure Facilities, and Digital Infrastructure Accessory Uses. Compliance with this Section shall be demonstrated as part of the Conditional Use application and maintained throughout the operation of the facility.

B. **Noise Study Requirements**.

1. An applicant seeking Conditional Use approval for a Digital Infrastructure Facility, Hyper Digital Infrastructure Facility, or associated Digital Infrastructure Accessory Use shall demonstrate, through a sound study prepared by an independent qualified acoustical professional, that sound generated by the proposed facility during normal operations will comply with the maximum sound level limitations established by this Section.

2. **Preliminary Sound Study.** A preliminary sound study shall be submitted as part of the Conditional Use application. The study shall identify existing ambient sound levels, evaluate anticipated operational

sound levels, and identify all recommended sound attenuation measures, materials, equipment, or design features necessary to achieve compliance with the maximum sound level limitations established by this Section.

3. **Interim Sound Study.** An interim sound study shall be submitted with the building permit application and shall evaluate the proposed end user or users, if any, and the specific purpose, function, and operational characteristics of the proposed Digital Infrastructure Facility, Hyper Digital Infrastructure Facility, and associated Digital Infrastructure Accessory Uses as reflected on the building permit plans. Any sound attenuation measures recommended by the interim sound study shall be incorporated into the final construction plans.

    i. The interim sound study shall not be required if:

        1. The proposed end user or users, if any, and the specific purpose, function, and operational characteristics of the proposed facility were identified during preparation of the preliminary sound study; and

        2. The proposed end user or users, if any, and the proposed operational characteristics remain unchanged.

4. **As-Built Sound Study.** An as-built sound study shall be completed no sooner than six (6) months and no later than nine (9) months following issuance of the certificate of occupancy for the principal building and prior to the release of final financial security for the applicable land development phase. For phased developments, an updated as-built sound study shall be completed within six (6) months following substantial completion of each phase and prior to release of the final financial security applicable to that phase.

5. Failure of the as-built sound study to demonstrate compliance with the maximum sound level limitations established by this Section shall constitute a violation of this Ordinance. The Township may pursue all enforcement remedies authorized by this Chapter and applicable law until compliance has been achieved.

C. **Study Scope**. The required sound studies shall evaluate and model worst-case operating conditions, including, at a minimum:

1. Continuous equipment operation;

2. Simultaneous operation of all backup generators during routine testing or emergency operation; and

3. The cumulative sound generated by equipment, cooling systems, electrical infrastructure, and all other significant noise-producing components of the facility.

D. **Noise Modeling Standards**. Noise modeling shall be prepared using industry-standard predictive software and accepted engineering methodologies, including applicable ISO or Federal Highway Administration (FHWA) methodologies, as appropriate. The analysis shall account for, at a minimum:

1. Existing topography and terrain;

2. Ground absorption characteristics;

3. Existing vegetation;

4. Proposed landscaping, berms, walls, fences, and structures;

5. Existing and proposed structures; and

6. Distance to Sensitive Receptors. "Sensitive Receptors" means all residential uses, agricultural uses including farm animals and wildlife, schools (including commercial schools), preschools, daycare facilities, nursing homes and assisted living facilities, recreational facilities (public or private), places of worship, public parks (including trails), campgrounds, restaurants with outdoor dining, municipal/government facilities with outdoor recreation facilities, and scenic byways.

E. **Maximum Permissible Sound Levels**.

1. Sound generated by a Digital Infrastructure Facility, Hyper Digital Infrastructure Facility, or associated Digital Infrastructure Accessory Use shall not exceed:

i. 7:00 pm to 7:00 am:
    1. 40 dB(A)
    2. 50 dB(C)

ii. 7:00 am to 7:00 pm:
    1. 45 dB(A)
    2. 55 dB(C)

2. dB(A) means that unit used to measure sound intensity levels that have been adjusted to mimic the human ear's sensitivity to specific frequencies or wavelengths.
3. dB(C) means an unweighted measure of the intensity of the sound regardless of frequency or wavelength.

4. Sound measurements shall be taken at a height of 1.5 meters above grade at the property line in accordance with ANSI S1.13-2020, or any successor standard recognized by the Township.

5. Where the documented preconstruction ambient sound level exceeds the maximum sound levels established by this Section, sound generated by the facility shall not exceed the documented ambient sound level at the property line.

6. The required sound studies shall evaluate and report anticipated sound levels under simultaneous operation of all emergency power generation equipment, including all backup generators.

7. Compliance with the maximum sound level limitations established by this Section shall constitute a continuing operational requirement.

§27-____ Vibration Standards.

A. **Maximum Vibration Levels**. No construction activity associated with a Digital Infrastructure Facility, Hyper Digital Infrastructure Facility, or associated Digital Infrastructure Accessory Uses, nor the operation of such facilities or uses, shall cause ground vibration levels to exceed a peak particle velocity (PPV) of 0.2 inches per second, measured at the nearest property line or at any point on an off-site structure.

B. **Vibration Study Requirements**.

1. **Pre-Construction and Post-Construction Studies.** For any Digital Infrastructure Facility, Hyper Digital Infrastructure Facility, or associated Digital Infrastructure Accessory Uses located within one thousand (1,000) feet of a residential zoning district, residential use, or Sensitive Receptor, the applicant shall submit pre-construction and post-construction vibration studies prepared by a qualified independent professional, subject to review by the Township Engineer.

i. The pre-construction vibration study shall establish baseline vibration conditions and shall be submitted as part of the Conditional Use application.

ii. The initial post-construction vibration study shall be submitted no later than six (6) months following issuance of the certificate of occupancy and commencement of commercial operations and shall demonstrate compliance with the vibration standards of this Section.

2. **Study Scope.** The vibration studies shall evaluate anticipated and measured vibration levels associated with construction activities, commissioning, mechanical equipment, electrical equipment, backup power generation equipment, and other vibration-producing operations of the proposed facility.

3. **Methodology.** Vibration measurements and analysis shall utilize recognized industry standards and accepted engineering methodologies appropriate for measuring peak particle velocity (PPV).

C. **Operational Monitoring.** To verify continued compliance with this Section, the Township may require periodic vibration monitoring during construction, commissioning, or the facility's operation.

D. **Vibration Control Measures.** All ground-mounted mechanical equipment, electrical equipment, backup power generation equipment, and other vibration-producing equipment shall be installed upon anti-vibration foundations, isolation pads, or equivalent vibration mitigation systems designed to minimize vibration transmission to the ground and adjacent structures.

E. **Remediation.** If a post-construction vibration study or other vibration monitoring required by this Section demonstrates that the vibration standards of this Section have been exceeded, the owner or operator shall promptly implement corrective measures necessary to achieve compliance. Failure to achieve compliance with the vibration standards of this Section shall constitute a violation of this Ordinance.

§27-____ Electromagnetic Field (EMF) and Electromagnetic Interference (EMI) Standards.

A. **Purpose.** The purpose of this Section is to protect the public health, safety, and welfare by ensuring that electromagnetic field (EMF) emissions from Digital Infrastructure Facilities, Hyper Digital Infrastructure Facilities, associated Digital Infrastructure Accessory Uses, and related electrical infrastructure do not exceed generally accepted standards for human exposure and do not cause electromagnetic interference (EMI) with nearby electronic devices or communication systems.

B. **EMF Exposure Standards.** All Digital Infrastructure Facilities, Hyper Digital Infrastructure Facilities, associated Digital Infrastructure Accessory Uses, and related electrical transmission and distribution equipment shall comply with the exposure limits established by the Institute of Electrical and Electronics Engineers (IEEE) Standard C95.6 and the International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines, as each may be amended or superseded.

C. **Measurement and Monitoring.**

1. Electromagnetic field (EMF) levels shall not exceed two (2) milligauss (mG) above ambient background levels, measured at the nearest property line or at any location accessible to the general public.

2. EMF measurements shall be performed by a qualified independent professional using properly calibrated instrumentation and recognized IEEE or ICNIRP measurement methodologies, subject to review by the Township Engineer.

3. The applicant shall submit pre-construction baseline EMF measurements as part of the Conditional Use application and shall submit post-construction verification measurements no later than six (6) months following issuance of the certificate of occupancy and commencement of commercial operations demonstrating compliance with the requirements of this Section.

D. **EMF Management Plan.** As part of the Conditional Use application, the applicant shall submit an EMF Management Plan identifying anticipated electromagnetic field strengths, proposed mitigation measures, monitoring procedures, and design features intended to minimize EMF emissions.

E. **Design and Mitigation Standards**.

1. Electrical equipment, substations, switchgear, transformers, conductors, and associated electrical infrastructure shall be designed and configured to minimize EMF emissions through appropriate shielding, grounding, conductor separation, and other recognized engineering practices.

2. To the maximum extent practicable, underground cable routing, phase balancing, equipment orientation, and similar engineering methods shall be utilized to reduce EMF exposure at adjacent properties and Sensitive Receptors.

F. **Electromagnetic Interference (EMI)**. Digital Infrastructure Facilities, Hyper Digital Infrastructure Facilities, and associated Digital Infrastructure Accessory Uses shall be operated and maintained so as not to cause electromagnetic interference with radio, television, telecommunications, emergency communications, or other electronic equipment located on nearby properties.

G. **Corrective Action**.

1. Where EMF measurements or verified EMI complaints demonstrate noncompliance with this Section, the owner or operator shall promptly implement corrective measures necessary to achieve compliance.

2. Corrective measures may include equipment shielding, rerouting of conductors or cables, modification of grounding systems, equipment reconfiguration, or other engineering measures appropriate to eliminate or reduce EMF or EMI impacts.

3. Any corrective measures undertaken pursuant to this Section shall be subject to review by the Township Engineer.

§27-____ Lighting Standards.

A. **Exterior Lighting**. All exterior lighting shall utilize full-cutoff, fully shielded, dark-sky-compliant luminaires directed downward and designed to prevent glare, light trespass, and sky glow onto adjacent properties and public rights-of-way. All exterior lighting shall also comply with all other applicable provisions of Chapter 27 and any other applicable Township ordinances.

B. **Photometric Plan.** The applicant shall submit a photometric plan prepared by a qualified professional demonstrating compliance with the lighting requirements of this Section and all other applicable Township ordinances.

C. **Maximum Illumination at Property Lines.** Except at approved driveway crossings and other points of ingress and egress, illumination attributable to the proposed Digital Infrastructure Facility, Hyper Digital Infrastructure Facility, or associated Digital Infrastructure Accessory Uses shall not exceed 0.0 foot-candles at any property line.

§27-____ Air Quality Standards.

A. **Emissions Standards.** Backup power generation equipment and all other equipment generating regulated air emissions shall comply with all applicable federal and Commonwealth of Pennsylvania air quality laws and regulations. Where backup generators are utilized, such generators shall meet or exceed the applicable United States Environmental Protection Agency (EPA) Tier 4 emissions standards, or any successor standard.

B. **Emissions Testing and Reporting.** The owner or operator shall perform any emissions testing required by applicable federal or state law. At a minimum, the owner or operator shall submit to the Township an annual certification, together with any emissions testing reports required by applicable law, demonstrating continued compliance with this Section.

C. **Pennsylvania Air Pollution Control Act.** All emissions associated with the operation of a Digital Infrastructure Facility, Hyper Digital Infrastructure Facility, or associated Digital Infrastructure Accessory Uses shall comply with the Pennsylvania Air Pollution Control Act, 35 P.S. §§ 4001–4015, as amended, and all regulations promulgated thereunder.

§27-____ Solar Design Standards.

A. **Solar-Ready Construction.** All principal buildings shall be designed and constructed as solar-ready buildings, including structural design, roof layout, conduit pathways, electrical capacity, and other building features reasonably necessary to facilitate the future installation of rooftop solar photovoltaic (PV) systems.

B. **Cool Roof Standards.** Any portion of a principal building roof not occupied by rooftop solar photovoltaic panels, mechanical equipment, cooling equipment, or other rooftop utilities shall be constructed using roofing materials having a minimum Solar Reflectance Index (SRI) of seventy-eight (78), or such greater value as may be required by applicable building or energy codes. The required Solar Reflectance Index shall be maintained for the life of the building.

C. **Rooftop Solar Photovoltaic Systems.** For principal buildings that have a gross floor area exceeding two hundred fifty thousand (250,000) square feet, rooftop solar photovoltaic systems shall be installed on all roof areas reasonably suitable for such installation after accounting for mechanical equipment, cooling systems, required access pathways, structural limitations, fire code requirements, and other demonstrated operational constraints.

The applicant shall identify the proposed rooftop solar photovoltaic system, or those portions of the roof determined not to be reasonably suitable for such installation, as part of the Conditional Use application.

The applicant shall provide supporting engineering documentation demonstrating that any roof area proposed to be excluded from rooftop solar installation is not reasonably suitable based upon the factors identified in this subsection.

§27-____ Emergency Services and Public Safety.

A. **Emergency Services Coordination Plan.** The applicant shall submit an Emergency Services Coordination Plan addressing the following, at a minimum:

1. Fire protection;
2. Hazardous materials (HAZMAT) response;
3. Battery energy storage systems;
4. Backup power generation;
5. Fuel storage; and
6. Coordination with local emergency service providers.

B. **Emergency Access and Safety Features.** Site design shall provide adequate emergency access, fire protection measures, and other life safety features consistent with all applicable federal, state, and local laws, regulations, and adopted Township codes.

C. **Emergency Communications.** The applicant shall coordinate with the Northampton County 911 Control Center to evaluate emergency responder radio coverage throughout the proposed facility. Where existing radio coverage is determined to be inadequate, the applicant shall install such communications equipment or infrastructure as may be reasonably necessary to provide emergency responder radio coverage consistent with applicable public safety requirements.

§27-____ Building Design Standards.

A. **Purpose.** The purpose of this Section is to encourage high-quality itectural design and reduce the visual impacts of large Digital Infrastructure Facilities and Hyper Digital Infrastructure Facilities.

B. **Building Articulation.** Principal building façades shall incorporate architectural design elements at intervals not exceeding one hundred fifty (150) horizontal feet. Such elements may include one or more of the following:

1. Changes in building materials, textures, patterns, or colors.
2. Variations in building height.
3. Building recesses or step-backs having a minimum depth of five (5) feet.

4. Window treatments, architectural detailing, or other façade articulation designed to reduce the appearance of uninterrupted wall surfaces.

C. **Blank Walls.** Large, uninterrupted concrete or masonry wall surfaces shall be avoided through architectural detailing, material changes, fenestration, screening, landscaping, or other design treatments compatible with the proposed building.

D. **Architectural Elevations.** The applicant shall submit colored architectural elevations, renderings, or comparable graphic materials depicting the exterior appearance of all principal buildings and major accessory structures as part of the Conditional Use application.

§27-____ Landscaping, Buffering, and Screening Standards.

A. **Purpose**. The purpose of the following standards is to mitigate visual, noise, environmental, and operational impacts of Digital Infrastructure Facilities, Hyper Digital Infrastructure Facilities, or associated Digital Infrastructure Accessory Uses to ensure compatibility with adjacent land uses.

B. **Applicability**. The requirements of this Section shall apply to all Digital Infrastructure Facilities, Hyper Digital Infrastructure Facilities, and associated Digital Infrastructure Accessory Uses and are in addition to all other applicable requirements of Chapter 27.

C. **Relationship to Other Requirements**. Where the requirements of this Section conflict with any other landscaping, buffering, screening, or related requirements of Chapter 27, the more restrictive requirement shall govern.

D. **Buffer Yard Requirements**.

1. **Buffer Triggers**.

i. **Type I Buffer**. A Type I Buffer shall be required along any property line adjoining a residential property, a Sensitive Receptor, or any adjoining lot containing a Sensitive Receptor.

ii. **Type II Buffer**. A Type II Buffer shall be required along any public street or public right-of-way.

2. **Minimum Buffer Widths**. Unless a greater buffer is required elsewhere in this Chapter:

i. Type I Buffers shall have a minimum width of five hundred (500) feet adjacent to residential property lines and three hundred (300)

feet adjacent to nonresidential property lines adjoining a Sensitive Receptor.

ii. Type II Buffers shall have a minimum width of fifty (50) feet along any public street or public right-of-way.

3. **Encroachments**. Buffer yards shall remain free of buildings, structures, parking areas, loading areas, outdoor storage, generator pads, fuel storage facilities, substations, HVAC equipment, cooling yards, and other principal or accessory Digital Infrastructure Facility infrastructure, except for:

i. Driveways crossing the buffer at approximately right angles where no reasonable alternative exists;

ii. Utility facilities located within recorded easements; and

iii. Stormwater management facilities approved by the Township where planted screening is not materially reduced.

E. **Screening Requirements**.

1. **Continuous Visual Screen**. Type I Buffers shall provide a continuous visual screen designed to achieve year-round opacity.

2. **Screening Methods**. Screening shall be satisfied by a combination of at least two (2) of the following methods:

i. Evergreen planting screen;

ii. Berm with plantings;

iii. Solid fence or wall combined with plantings; and

iv. Existing mature vegetation preserved and supplemented as necessary.

3. **Minimum Opacity Standard**.

i. Seventy-five percent (75%) opacity within two (2) years after installation.

ii. Ninety percent (90%) opacity within five (5) years after installation, measured from ground level to a height of eight (8) feet.

4. **Roadway Screening**. Type II Buffers shall include landscaping sufficient to soften building mass and screen ground-mounted equipment visible from the public right-of-way.

5. **Additional Screening Standards**. Ground-mounted and roof-mounted equipment used for cooling, ventilation, power generation, or other facility operations located within five hundred (500) feet of a public roadway or a Sensitive Receptor shall be fully enclosed where mechanically feasible based upon the manufacturer's specifications.

   Where full enclosure is not mechanically feasible, such equipment shall be screened by one or more of the following:

   i. A landscaped berm having an average height of fourteen (14) feet above adjacent grade, with a maximum variation of two (2) feet and side slopes not exceeding three (3) horizontal to one (1) vertical. Berms shall be maintained with permanent vegetative cover, and required screening plantings shall be located on the side of the berm facing the protected property and along the top of the berm.

   ii. A visually solid fence, screen wall, parapet wall, panel system, or similar screening structure constructed of materials compatible with the principal building. Chain-link fencing (with or without slats), barbed wire, razor wire, or similar visually intrusive security features shall not be permitted along public or private road frontages unless completely screened from view by one or more of the methods permitted by this Section.

F. **Landscaping Requirements**.

1. **Type I Planting Density**. Within Type I buffers, plantings shall be installed at the following minimum rates per one hundred (100) linear feet (LF) of buffer length:

   i. Evergreen trees: minimum ten (10) trees (six to eight feet (6—8') height at planting);

   ii. Deciduous canopy trees: minimum four (4) trees (2.5—3 inch caliper);

iii. Large shrubs and understory plantings: minimum twelve (12).

2. **Type II Planting Density**. Plantings shall be installed at the following minimum rates for each one hundred (100) linear feet (LF) of Type II Buffer:

i. Evergreen trees: minimum six (6) trees;

ii. Deciduous canopy trees: minimum three (3) trees; and

iii. Large shrubs and understory plantings: minimum twelve (12).

3. **Native Species**. Plantings shall consist predominantly of native species suitable for the site. Invasive species are prohibited. Landscaping shall comply with the applicable landscaping and native planting requirements of the Township Subdivision and Land Development Ordinance.

4. **Existing Vegetation Credit**. Existing healthy vegetation may be credited toward compliance if preserved by easement or deed restriction and supplemented as necessary to meet opacity standards.

G. **Maintenance**.

1. All buffer plantings, berms, fences, walls, and screening materials shall be maintained in good condition.

2. Dead, diseased, or damaged plant materials shall be replaced within six (6) months after written notice from the Township.

3. Buffer areas shall not be used for any type of storage, staging, or snow dumping.

§27-____ Electronic Waste Management.

A. **Electronic Waste Management** Plan. The applicant shall submit an Electronic Waste Management Plan as part of the Conditional Use application.

B. **Minimum Contents.** The plan shall describe procedures for the safe removal, storage, recycling, reuse, or disposal of server equipment, batteries, hazardous materials, electronic equipment, associated electronic waste, and other components associated with the operation, modernization, replacement, or decommissioning of the facility.

C. **Compliance.** Electronic waste shall be managed in accordance with all applicable federal, state, and local laws and regulations.

§ 27-____. Continuing Operational Requirements.

A. **Notification of Change in Ownership or Operation.** The owner or operator shall notify the Township in writing within thirty (30) days after any change in ownership of, or operational control over, a Digital Infrastructure Facility, Hyper Digital Infrastructure Facility, or associated Digital Infrastructure Accessory Uses. Such notice shall identify the new owner or operator and provide current contact information for the person or entity responsible for ongoing compliance with this Part.

B. **Continuing Compliance.** Compliance with the requirements of this Part shall constitute a continuing condition of Conditional Use approval. Failure to maintain compliance with the requirements of this Part shall constitute a violation of Chapter 27 and shall be subject to the enforcement provisions of this Chapter and applicable law.

§27-____ Annual Technology Review and Report.

A. **Annual Report Required.** Beginning with the first January following commencement of commercial operations, and annually thereafter on or before January 31, the owner or operator of a Digital Infrastructure Facility or Hyper Digital Infrastructure Facility shall submit an Annual Technology Review Report to the Township.

B. **Report Contents.** At a minimum, the report shall summarize significant technological developments occurring during the preceding calendar year, to the extent applicable to the facility, in the following areas:

1. Industrial cooling technologies;

2. Noise and vibration reduction technologies;

3. Air pollution control and emissions reduction technologies;

4. Data processing, storage, and transmission technologies;

5. Renewable energy, energy efficiency, and Leadership in Energy and Environmental Design (LEED) or comparable sustainability practices; and

6. Stormwater management technologies.

C. **Facility Improvements.** The report shall identify any upgrades, modifications, or operational improvements implemented at the facility during the preceding calendar year that reflect the technological developments identified in subsection B. Where no such improvements have been implemented, the report shall briefly explain why no modifications were made.

D. **Equipment Upgrades.** Whenever any major cooling system, backup power generation equipment, electrical infrastructure, or other principal operational system is replaced, substantially upgraded, or expanded, the replacement or expanded equipment shall utilize shall utilize the best commercially available and reasonably feasible technology, including Best Available Cooling Technology (BACT), where applicable, applicable, that is commercially available and reasonably feasible at the time of such replacement, upgrade, or expansion, and shall comply with all applicable provisions of this Part.

§27-____ Decommissioning and Site Restoration.

A. **Decommissioning**. Upon cessation of operation of a Digital Infrastructure Facility, Hyper Digital Infrastructure Facility, or associated Digital Infrastructure Accessory Uses for a continuous period of eighteen (18) months, the owner or operator shall remove all generators, fuel storage facilities, battery energy storage systems, electrical infrastructure, buildings, structures, equipment, and other improvements associated with the facility, unless, prior to the expiration of such eighteen (18) month period, the owner or operator provides objective written documentation demonstrating a bona fide intent and ability to resume the approved use within a reasonable period of time.

   Objective written documentation may include, but is not limited to:

   1. Active utility service agreements;

   2. Executed construction, procurement, or equipment installation contracts;

   3. Valid building permit applications or permits;

   4. Financing commitments or other evidence of project funding;

   5. Lease agreements or occupancy agreements; or

   6. Other comparable documentation demonstrating that resumption of operations is actively being pursued.

B. **Removal Schedule**. Removal activities shall commence within one (1) year following the expiration of the eighteen (18) month cessation period and shall be completed within three (3) years after commencement of removal activities.

C. **Site Restoration.** Upon completion of decommissioning, the owner or operator shall restore the property to a safe, stable, and reusable condition in accordance with all applicable Township, county, state, and federal requirements.

D. **Financial Security**. In addition to any other financial security required by this Chapter, the applicant shall provide financial security, in a form acceptable to the Township, guaranteeing the performance of the decommissioning and site restoration requirements of this Section. The amount of such financial security shall be sufficient to cover the anticipated costs of decommissioning, removal, disposal, and site restoration. Such financial security shall be maintained until completion of the removal and site restoration activities required by this Section and may be reviewed periodically by the Township to ensure that the amount of the financial security remains adequate to secure performance of the requirements of this Section.

E. **Failure to Comply.** Failure to comply with this Section shall constitute a violation of this Chapter and shall subject the owner or operator to the enforcement remedies authorized by this Chapter and applicable law.

DULY ENACTED AND ORDAINED, this ___ day of ____, 2026, by the Board of Supervisors of the Township of Lower Mount Bethel, Northampton County, Pennsylvania, at a duly advertised public meeting.