Lehigh Valley Planning Commission

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March 13, 2026

Belinda Roberts, Manager
Bushkill Township
1114 Bushkill Center Road
Nazareth, PA 18064

Re: Zoning Ordinance Amendment – Cryptocurrency Mining Facility, Data Center, Solar Energy Facility and Membership Clubs
Bushkill Township
Northampton Township

Dear Ms. Roberts,

The Lehigh Valley Planning Commission (LVPC) will consider the subject application at its Comprehensive Planning Committee and Full Commission meetings, pursuant to the requirements of the Pennsylvania Municipalities Planning Code (MPC). Discussion on agenda items largely happens during the Committee meeting, and we welcome your participation. Meeting participation details are below:

LVPC Comprehensive Planning Committee Meeting:	**LVPC Full Commission Meeting:**
March 24, 2026, at 12:00 PM (Virtual) https://lvpc.org/lvpc-meetings	March 26, 2026, at 7:00 PM (In-person) 615 Waterfront Drive, Suite 201 LVPC Conference Center

The proposal amends the Bushkill Township Zoning Ordinance by adding Definitions and regulations for Cryptocurrency Mining Facilities, Data Centers, Data Center Accessory Uses, and Solar Energy Facilities. All of the above uses will be allowed as a special exception in the General Commercial/Industrial District (GC/I).

Data Centers
Data Centers are essential components of modern technological infrastructure, enabling everyday devices to send and receive digital data needed for video streaming, online shopping, cloud storage, and communicate with other devices. With the growth of digital device and technology usage, hyperscale data centers have been expanding across Pennsylvania and are an emerging land use in the Lehigh Valley. When sited appropriately and connected to adequate infrastructure capacity, data centers can support the continuation of the region's technological evolution, economic base and resilience (of Policy 4.1). Bushkill Township's proposed ordinance both aligns with best

practices for regulating data centers and contains opportunities to improve the ordinance to support public health, safety and welfare.

The following aspects of the proposed ordinance align with *FutureLV: The Regional Plan* and best practices for regulating data centers:

- **Definitions:** The ordinance clearly distinguishes between Data Centers, Data Center Accessory Uses, and Cryptocurrency Mining Facilities. The Township's definition of Data Centers includes cryptocurrency mining and blockchain transaction processing operations. Providing definitions encourages clarity and minimizes impacts of regionally significant land uses (of Policy 1.4).

- **Emergency Planning:** The provision requiring an Emergency Response Plan aligns with *FutureLV* by enhancing planning and emergency response capabilities (of Policy 5.1). The LVPC encourages continued coordination between the applicant, Township and local emergency service providers to ensure adequate site design that supports preparedness and response capabilities.

- **Parking:** Because data centers typically have fewer employees than other types of industrial uses, applying parking minimum standards that are typical of other types of industrial uses may lead to overbuilt, unused impervious surfaces that exacerbate stormwater impacts. The proposed parking requirement of one space per 8,000 square feet of floor area supports best-practice contextual standards that match development intensity with appropriate infrastructure capacity (of Policy 1.1) and reduce impervious surfaces and protect water sources (of Policy 3.3). The Township may also wish to add "1 space per employee, whichever is lesser" to the existing regulation to help prevent excessive parking for very large data centers.

The LVPC offers additional recommendations for the Township's consideration to further strengthen its regulations and promote public health, safety and welfare:

- **Conditional Use:** The LVPC recommends the Township permit Data Centers in the GC/I District as a Conditional Use. Permitting data centers as a conditional use allows the Township's governing body additional oversight to evaluate project impacts on a case-by-case basis to determine community needs and sensitivities and balance those needs with the demand for modern technological infrastructure. This approach supports an efficient development process that is responsive to regional needs and minimizes the impacts of regionally significant land uses (of Policy 1.4).

- **Aesthetics:** Including aesthetic standards such as facade articulation and roofline and material variation help to minimize the visual impacts of the scale of

buildings on neighboring properties and 'promote context-specific design solutions' (of Policy 5.4).

- **Sustainable Infrastructure/Building Design:** The LVPC recommends the Township include provisions in the ordinance that encourage energy-efficient design standards such as LEED certification and roof-mounted solar energy systems for Data Center buildings, which supports 'sustainable building, site design and community design practices' (of Policy 3.4).

- **Setbacks:** The LVPC recommends that the ordinance include setback standards of 500 feet, especially where the data center borders any residential use, sensitive receptor, or public roadway to minimize noise and visual impacts on adjacent property owners (of Policy 3.2).

- **Landscaping and Screening/Fencing:** To promote clarity and efficiency in the land development process (of Policy 1.4), the Township should clarify the permissible plant species in Section 3JJJ(4). Encouraging the use of 'native, climate-adaptive and carbon sequestering' species is a best practice (of Policy 3.4).

- **Noise:** The LVPC recommends the Township set a specific noise limit for Data Centers, such as 55 decibels, measured at the property line, especially where the Data Center borders residential uses or other sensitive users (of Policy 3.2). Since Data Centers are operational 24/7 and noise levels are unlikely to change throughout the day unlike other kinds of industrial uses, this limit should apply at all hours of the day. When proper noise abatement measures are taken by the developer (such as installing sound attenuation walls), noise level at the property line can be significantly reduced.

- **Power Supply:** The ordinance requires that documentation be submitted of agreement with utility providers to serve potential data centers and that the necessary capacity is available, with the details of any known impacts on rates or availability for other users. In addition to these requirements, documentation of the projected annual electricity demand and supply source(s) should be provided. The Township should also require applicants to document efforts made to maximize the use of renewable and/or clean energy for their electrical and cooling needs, either through on-site generation or verifiable power purchase agreements. These efforts 'reduce greenhouse gas emissions' and 'promote energy conservation' (of Policy 3.4).

    - **Back Up Power:** The ordinance should specify that any backup power equipment minimize air pollutant emissions in accordance with EPA Tier 4 emissions standards and require annual testing to minimize air quality impacts (of Policy 3.2). Detailed specifications on emissions controls and fuel storage safety measures such as spill-prevention and secondary

containment should also be included to ensure public health and environmental safety.

- **On-site Energy Generation:** The LVPC recommends including provisions for on-site power generation uses such as fuel-cell power stations, geothermal, and solar photovoltaics. These are viable alternative and supplemental energy options for technology-based land uses which are highly energy-consumptive. By regulating on-site energy generation, the Township can further 'integrate efficiency measures and emerging technologies', 'improve the utility and mobility infrastructure of the region' (of Policy 1.1), and 'minimize and mitigate the impacts of utility expansion associated with technological advancements' (of Policy 3.2).

- **Cooling:** As part of the project approval process, the applicant should specify the type of cooling method proposed, whether predominantly water-cooled or air-cooled, to 'encourage an efficient development process' (of Policy 1.4). Changes to the proposed cooling method after approval is granted will alter the required water/sewer and power requirements and change the required utility infrastructure to support it.

- **Water Supply:** The ordinance requires a Water Resources Impact Study be submitted that identifies the source of water to be used and whether an adequate supply is available. The additional oversight of a Water Resources Impact Report supports the 'protection of the quality and quantity of surface water and groundwater' (of Policy 3.2). The LVPC recommends that this report also include modeling of water use at peak-stress conditions to ensure year-round feasibility as well as proof of review and approval from the Delaware River Basin Commission (DRBC) where applicable. If utilizing a public water/sewer source, the applicant should model projected daily and peak stress water demand. User agreements should also demonstrate adequate means of wastewater disposal that includes all necessary approvals.

Solar Energy Facilities

The proposal includes Solar Energy Facilities (principal use) as a Special Exception in the General Commercial/Industrial District. Utility-scale solar, often referred to as "solar arrays", produce electricity for transmission into the power grid for use offsite. Proactively zoning for solar energy supports the goals of *FutureLV* to 'reduce greenhouse gas emissions', and 'supports renewable energy and diversification of sources', helping to 'reduce climate change impacts through mitigation and adaptation' (of Policy 3.4).

The LVPC offers the following comments:

- **Decommissioning:** The LVPC commends the inclusion of restoration and reseeding of the land as part of the decommissioning process, which supports

the goal of *FutureLV* to ‘preserve natural resources in the land development process’ (of Policy 3.1).

- **Fencing and Buffering**: To ‘promote habitat connectivity’ and ‘sustainable stewardship of natural lands, water resources, and open space’ (of Policy 3.1), the Township is encouraged to specify that fencing requirements incorporate wild-life friendly fencing or unfenced passageways and to use ‘native, climate-adaptive and carbon-sequestering’ (of Policy 3.4) vegetation in buffering requirements.

- **Emergency Management:** The LVPC recommends the ordinance include provisions for proper emergency access to the site and for applicants to submit an emergency management plan for use by police and fire to ‘enhance planning and emergency response efforts among emergency management personnel’ (of Policy 5.1).

- **Agrivoltaics:** The LVPC encourages the Township to include consideration for agrivoltaics to allow grazing animals, such as sheep, and other solar-compatible agricultural or ecological practices to make beneficial use of the land under and around the solar array to be allowed as incidental to the solar energy facility as a primary use, especially where solar energy facilities are to be located on agricultural lands. These practices serve as a means to preserve farm functionality and diversify income sources for the landowner, ‘supporting agriculture as an essential component of the regional economy’ (of Policy 4.4).

Municipalities, when considering zoning ordinance amendments, should reasonably attempt to be consistent with *FutureLV: The Regional Plan*, as required by the Pennsylvania Municipalities Planning Code (MPC) [Article 1§105, Article III§303, §304 & §306(a), Article VI§603(j)].

The LVPC has copied representatives of the *Nazareth Area Multi-Municipal Comprehensive Plan* to ‘coordinate land use decisions across municipal boundaries’ (Policy 1.4).

Sincerely,



Mary Grace Collins
Community and Regional Planner

Cc: Bradford T. Flynn, Bath Borough Manager; John Defassio, Chapman Borough Secretary; Mark Hudson, Hanover Township Manager; Lori Stauffer, Lower Nazareth Township Manager; Stephen Nowroski, Moore Township Manager; Paul Kokolus, Nazareth Borough Secretary/Treasurer;

Candace Keller, Stockertown Borough Secretary/Treasurer; Mark Saginario, Tatamy Borough Manager; Lisa Klem, Upper Nazareth Township Manager