ORDINANCE NO. ___ OF 202_
TOWNSHIP OF PLAINS
LUZERNE COUNTY, PENNSYLVANIA

WHEREAS, Article VI of the Pennsylvania Municipalities Planning Code authorizes the Township of Plains to regulate the use of property to protect the health, safety, and welfare of people and property in the Township and to enact and repeal zoning ordinances and prepare amendments thereto within the Township of Plains; and

WHEREAS, advancements in data center and data center accessory use as well as innovations in other energy and technology uses necessitate updated Township regulations, a modified schedule of district regulations, and updated and new definitions to ensure these uses are effectively designed, planned, and managed to balance safety, community health, and welfare, and environmental protection; and

WHEREAS, the Township finds that said uses may involve substantial utility demands, emergency management considerations, noise generation, impact on existing resources, and other characteristics distinct from uses permitted in other Township districts, thereby warranting specialized zoning and performance standards to protect the rural characteristics of the Township, public health, safety, and welfare; and

WHEREAS, the Board of Commissioners of the Township of Plains seeks to promote the general health, safety and welfare of the residents of the Township by adopting and implementing this zoning amendment regulating various land uses in the Township; and

WHEREAS, the Board of Commissioners of the Township of Plains has given consideration to public comment and has determined that the adoption of this zoning amendment is in the best interests of the health, safety and welfare of the inhabitants of the Township and the general public. Technology- and energy- oriented uses and processes are assigned to locations consistent with the currently defined zoning district where industrial-oriented uses and activities are prescribed.

WHEREAS, for the purposes of evaluating the range of provisions associated with technology- and infrastructure oriented land uses and in context of plains township existing land use patterns, all lot lines, parcel boundaries, and property configurations were evaluated using the parcel data existing as of the effective date of this amendment, as obtained from the Luzerne County Geographic Information System (GIS), including the Luzerne County GIS Viewer and the Luzerne County Parcel Layer available through ArcGIS Online; and

NOW, THEREFORE, BE IT ORDAINED AND ENACTED, by the Board of Commissioners of the Township of Plains as follows:

Section 1: Zoning Ordinance.

1.1 Definitions.

Zoning Ordinance, Part 2, Section 202 (Definition of Terms) shall be amended to add and/or update the following terms and definitions:

Accessory solar energy system (ASES) - An area of land or other area used for a solar collection system principally used to capture solar energy, convert it to electrical energy or thermal power and supply electrical or thermal power: (a) primarily; or (b) solely for on-site use. An accessory solar energy system consists of one (1) or more free-standing ground, wall, or roof-mounted, solar arrays or modules, or solar related equipment and is intended to primarily reduce on-site consumption of utility power or fuels.

Agrivoltaics - The co-development of the same area of land for both solar photovoltaic power and "Normal Farming Operations as defined by P.L. 454, No. 133 (1982), the Protection of Agricultural Operations from Nuisance Suits and Ordinances Act," or any successor laws.

All Other Non-Residential Uses - Any non-residential use not specifically listed within the Township Zoning Ordinance as a use that is permissible by right, by conditional use, or by special exception.

Ancillary power generation system - An accessory energy system used to generate energy by solar, wind, geothermal, fossil fuel, or other means to supply electrical or similar power for primarily on-site use or consumption, usually consisting of one or more ground-mounted or building-mounted energy modules, and necessary energy generation related equipment.

Battery(ies) - A single cell or a group of cells connected together electrically in series, in parallel, or a combination of both, which can charge, discharge, and store energy electrochemically.

Battery Energy Storage System (BESS) - One or more batteries, assembled together into a system rated at 20 kWh or higher and including any enclosures, cabinets, and containers, capable of storing electrical energy for later use. The term does not include stand-alone 12-volt car batteries, electric motor vehicles, small store-bought batteries designed and used purely for household electronic items, or residential backup battery systems designed and used for a single residential property.

BESS, Facility-Scale - A Battery Energy Storage System (BESS) that is designed 1) to receive energy from the electric transmission or distribution grid or from another generation source and 2) to redistribute said energy specifically to the needs of a single nearby land use.

BESS, Utility-Scale - A Battery Energy Storage System (BESS) that is designed to receive from, temporarily store, and redistribute energy into the electric transmission or distribution grid for wholesale distribution.

Battery Management System - An electronic regulator that manages a battery energy

storage system; monitors individual battery module voltages and temperatures, container temperature and humidity, off-gassing of combustible gas, fire, ground fault, and DC surge; protects battery energy storage systems from operating outside their safe operating parameters; and disconnects electrical power to the battery energy storage system or places it in a safe condition if potentially hazardous temperatures or other conditions are detected.

Cell - The basic electrochemical unit, characterized by an anode and a cathode, used to receive, store, and deliver electrical energy.

Closed Loop Cooling System - Designed to circulate water within a closed circuit, allowing it to absorb heat from equipment and then release that heat through a heat exchanger. This system minimizes water loss and reduces environmental impact by reusing the same water repeatedly.

Community Benefits Package - Programs or contributions to public safety, health, education, community amenities, or infrastructure enhancements designed to offset project impacts and promote Municipal welfare. Must be proportional to project scope and impact, and enforceable via Developer's Agreement and in accordance with Commonwealth Pennsylvania permissions associated with community benefits agreements including but not limited to E.O. 2026-05.

Data Center - A building or buildings which are occupied primarily by computers and/or telecommunications and related equipment where digital information is processed, transferred and/or stored, primarily to and from offsite locations. This use does not include computers or telecommunications related equipment that is secondary and customarily incidental to an otherwise permitted use on the property, such as servers associated with an office building. This use shall not include cryptocurrency mining, blockchain transaction processing and server farms. The facility may also include air handlers, power generators, water cooling and storage facilities, utility substations, and other associated utility infrastructure to support sustained operations at the Data Center. A Data Center may include Data Center Accessory Uses.

Data Center, Modular - A mobile pre-engineered and/or prefabricated building, complete with power and cooling infrastructure, used to house computer servers and network equipment.

Data Center Accessory Use - Ancillary uses or structures secondary and incidental to a Data Center use, 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 non-contact cooling water and wastewater treatment facilities; water holding facilities; pump stations; water towers; environmental controls (air conditioning or cooling towers, fire suppression, and related equipment); security features, provided such data center accessory uses/structures are located on the same lot(s).

Data Center Electrical Substation - A facility used for the transformation or transmission and/or switching of voltages to distribution voltages which switches circuits and distributes usable/consumable electric power, specifically for Data Center users on the same or adjacent site, or on a site immediately across a road right-of-way.

Data Center Equipment - Equipment, systems, and appurtenances customarily associated with and incidental to the operations of a Data Center, including electrical switchgear; transformers; uninterruptible power supply (UPS) systems; battery energy storage systems (BESS) serving UPS or emergency functions; cooling and heat rejection equipment (including chillers, cooling towers, dry coolers, pumps, and related mechanical systems); standby/emergency generators; fuel storage tanks serving standby/emergency generators; and associated enclosures. Such equipment shall be subject to all applicable requirements of this Ordinance, including, but not limited to, noise, lighting, buffering/screening, stormwater management, environmental performance, and safety standards.

Data Center Campus - Two (2) or more Data Centers, together with associated Data Center Accessory Uses, Data Center Equipment (DCE), and supporting infrastructure, located on one parcel of land, planned and operated as an integrated facility pursuant to a development plan.

Disaster recovery facility - A building used to sustain operations of a data center during an emergency, such as a facility separate from the data center principal building used for the digital backup and storage of files.

Dedicated-Use BESS Building - A building that is built for the intention of housing battery energy storage systems and ancillary equipment. No less than 100 percent of the building area shall be used for battery energy storage.

Electrical Substation - An assemblage of equipment, including switches, circuit breakers, capacitators, buses, and transformers, through which electric power is passed for the purpose of switching or modifying the electrical energy's characteristics to increase or decrease voltage or control frequency. Electrical substations are used for transferring electric power rather than for its generation or utilization.

Decommissioning cost - The estimated cost to decommission the subject lot/parcels inclusive of applicable site restoration.

Disconnected impervious area - An impervious or impermeable surface that is disconnected from any stormwater drainage or conveyance system and is redirected or directed to a pervious area, which allows for infiltration, filtration, and increased time of concentration.

Emergency - Any occurrence or set of circumstances involving actual or imminent physical trauma or property damage.

Emergency work - Any work performed for the purpose of preventing or alleviating the physical trauma or property damage threatened or caused by an emergency.

Emerging technology - A technology still in development which may have a significant impact on society and in which, because of the technology's newness, such impacts are not yet fully known. Examples of emerging technologies include, but are not limited to, artificial intelligence and robotics.

Financial security - A form of security permitted by the Pennsylvania Municipalities Planning Code and subject to review and approval by the Township solicitor.

Generator - Any appliance or piece of equipment which operates during an electric power outage or shortage, whether automatically or manually, and which uses diesel, natural gas, or propane to fuel its operation. Generators can be further defined by the following two sub-types:

> Generator, backup/portable - A generator characterized by its portability (i.e., not permanently affixed to the ground) and which serves to provide temporary backup electric power on an as-needed basis.
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> Generator, standby/permanent - A generator affixed to the ground or to a building foundation, typically featuring automatic detection of an electric power outage, upon which the generator starts and runs until electric power returns, upon which it stops (i.e., returns to "standby" mode).

Glare - The effect produced by light with an intensity sufficient to cause annoyance, discomfort, or loss in visual performance and visibility.

HVAC - Heating, ventilation, and air conditioning.

Information Technology (IT) - The study, use, and application of computer and telecommunications systems for the purposes of storing, retrieving, processing, and transmitting information.

LEED - Leadership in Energy and Environmental Design, a certification system recognizing sustainability achievement in building design construction, and operation.

Module - A group of batteries connected together as an individual unit.

Muffler or sound-dissipative device - A device designed or used for decreasing or abating the level of sound escaping from an engine, machinery system, or other equipment.

NFPA - The National Fire Protection Association.

Operator - Any person, business entity, organization, institution, or other legal entity that owns, leases, manages, occupies, operates, controls, or is responsible for the operation of a land use, building, facility, structure, property, or activity, including any successor operator.

Outdoor BESS Installation - Battery energy storage systems that are not housed in dedicated-use BESS buildings.

Power generation facility - Any energy generation system used to supply power directly to one or more other principal land uses during normal operations, including solar, wind, fossil fuel, fuel cells, or nuclear energy generating systems.

Sensitive Receptors – Includes residential uses, schools, preschools, daycare centers, in-home daycares, long term care facilities, retirement and nursing homes, hospitals, animal rescues, animal hospitals, kennels, community centers, places of worship, cemeteries, historical sites, parks/park land (including trails/water trails), recreational facilities, agricultural lands, conservation lands (including state forests and state game lands), PA Fish and Boat Commission "Class A" and "Exceptional Value (EV)" waters, fisheries, fish farms, campgrounds, prisons, and dormitories, and any residence, situated within or directly adjoining Plains Township, where such residence is not located on a parcel with an existing industrial, commercial, or unpermitted use.

Solar applicant - The individual or entity seeking approval for a solar energy system pursuant to this Ordinance. The Applicant must be the owner or the equitable owner of the property where the ASES or SEF is being constructed.

Solar array - A grouping of multiple solar modules/panels with the purpose of harvesting solar energy.

Solar easement - A right, expressed as an easement, restriction, covenant, or condition contained in any deed, contract, or other written instrument executed by or on behalf of any landowner for the purpose of assuring adequate access to direct sunlight for Solar Energy Systems.

Solar energy - Radiant energy (direct, diffuse and/or reflective) received from the sun.

Solar energy facility (SEF) - An area of land used for a solar collection system principally to capture solar energy, convert it to electrical energy or thermal power and supply electrical or thermal power primarily for off-site use.

Solar energy system - A solar photovoltaic cell, module/panels, or array, or solar hot air or water collector device, which relies upon solar radiation as an energy source for collection, inversion, storage, and distribution of solar energy for electricity generation or transfer of stored heat.

Solar facility connection - The high-voltage electric conveyance lines which connect a Solar Energy Facility to the Solar Project Connection.

Solar panel - That part or portion of a Solar Energy System containing one or more receptive cells or modules, the purpose of which is to convert solar energy for use in space heating or cooling, for water heating and cooling, and/or for electricity.

Solar project connection - The electric conveyance lines which connect a Solar Energy Facility to the high-voltage electric interconnection grid.

Solar-related equipment - Items including a solar photovoltaic cell, module, or array, or solar hot air or water collector device panels, lines, pumps, energy storage equipment, mounting brackets, framing and possibly foundations or other structures used or intended to be used for collection of solar energy.

Viewshed analysis - A type of analysis showing the locations visible and non-visible in all of the areas surrounding the SEF.

Switchyard - A junction in an electric power system that serves as the point of interconnection where various circuits and transmission lines are connected and electric power is routed.

Telecommunications Hub - A facility that serves as a junction or interchange point for internet traffic exchange, providing a centralized location for network interconnections between multiple service providers, such as telecommunications carriers, internet service providers (ISPs), cloud providers, and content delivery networks (CDNs). Also commonly known as a "carrier hotel" or "colocation center." For the purpose of this Ordinance, a Telecommunications Hub shall be considered a Data Center.

Transformer Facility - An area or group of equipment used to transform electric power from one voltage to another or from one circuit to another.

Warehousing and distribution - A use engaged in storage, wholesale and distribution of manufactured products, supplies and equipment where said use shall not include, in whole or in portion thereof, off-site data storage/processing and/or the bulk storage of material that are inflammable, explosive, hazardous or commonly recognized as offensive.

1.2 Zoning Ordinance, Part 5, Section 508 I-1 Industrial District, 3. Conditional Uses shall be amended to include the following:

I. Data Center
J. Battery Energy Storage System
K. Power Generation (>30mW)
L. Utility-scale Solar Energy Facilities
M. All Other Non-Residential Uses.
N. Accessory Uses to the above.

1.3 Remove and/or amend any existing conflicting or incongruent language, as applicable, in association with All Other Non-residential Uses as found throughout the Zoning Ordinance in other non-residential zoning districts.

1.4 Zoning Ordinance, Part 7, Sections 706.1 and 706.2 Supplemental Standards shall be added as follows:

706.1 Supplemental Standards. For specified uses in Section 716 - Data Center Uses and 717 - Battery Energy Storage, the following shall apply:

A. Landscape buffer.

(1) A landscape buffer yard shall be provided between proposed use and:

[a] Any property outside the Industrial (I-1) District;

[b] Existing residential uses;

[c] Sensitive Receptors; and

[d] Public roads and rights-of-way.

(2) Utilities and equipment shall not be located within the required landscape buffer except where necessary to cross the buffer using the shortest practicable route. Any disturbed screening shall be restored or supplemented to maintain the required visual buffer.

(3) Buffer plantings shall consist of native, non-invasive species and consist of pollinator habitat restoration to offset all habitat loss and shall be planted as follows:

No. of trees per distance mentioned	**Size of the tree at the time of planting**
One (1) large evergreen tree per twenty-five (25) linear feet of buffer	Minimum of eight (8) feet in height
One (1) deciduous canopy (shade) tree per seventy-five (75) linear feet of buffer	Size of canopy (shade) trees shall be a minimum of two and one half (2½) inch caliper
One ornamental/flowering tree per fifty (50) linear feet of buffer	Minimum of eight (8) feet in height for multi-stemmed varieties, or two and one half (2½) inch caliper at the time of planting for single-stemmed varieties.
Five (5) shrubs per twenty-five (25) linear feet of buffer (50% Evergreen and 50% deciduous species)	Fully branched and at a minimum of three feet in height

B. Existing Vegetation.

(1) Existing vegetation, including mature trees with a minimum caliper of six (6) inches, shall be preserved to the maximum extent practicable.

(2) Upon recommendation of the Township Engineer and Planning Commission, the Township Board of Commissioners may credit existing vegetation and topography toward the required landscape buffer where equivalent visual screening is provided.

C. Screening and Fencing.

(1) Mechanical Equipment Screening.

[a] Ground-mounted and rooftop mechanical equipment used for cooling, ventilation, emergency power generation, electrical supply, or other operational functions located within:

[i] Five hundred (500) feet from any lot within a residential zoning district or within a conservation zoning district or a sensitive receptor;
[ii] One hundred (100) feet from all other lot lines.
[iii]Adjacent to a Sensitive Receptor, shall be fully enclosed where mechanically feasible and consistent with the manufacturer's specifications.

[b] Where full enclosure is not mechanically feasible, equipment shall be screened using one or more of the following:

[i] The required landscape buffer;
[ii] Existing vegetation approved for preservation;
[iii]The principal or an accessory building;
[iv]An earthen berm with an average minimum height of fifteen (15) feet and a maximum side slope of 3:1, stabilized with permanent vegetation and any required screening plantings; or
[v] A visually opaque fence, screen wall, parapet wall, or other architectural screen constructed of materials compatible with the principal building.

(2) Alternative Screening.

Where earthen berms are not feasible as reviewed by the Township Engineer, due to utilities, topography, or other site constraints acceptable to the Township, one or more of the following alternative screening methods may be approved:

[a] Decorative walls with integrated landscaping having a minimum height of six (6) feet;

[b] Dense evergreen hedges having a minimum mature height of eight (8) feet; or

[c] A combination of preserved existing vegetation and supplemental landscaping, provided the Applicant submits:

[i] Documentation demonstrating substantially equivalent year-round visual screening;
[ii] A Landscape Plan identifying vegetation and topographic features to remain;

[iii] Construction protection measures, including limits of disturbance and tree protection; and

[iv] Supplemental landscaping is necessary to maintain equivalent screening. Any credited vegetation removed or damaged shall be replaced to maintain compliance with this Section.

Where existing vegetation is insufficient to provide the required screening, supplemental landscaping shall be installed in accordance with the planting standards of Section 706.1.A

D. Noise and Vibrations.

(1) Sound Study.

[a] As a part of the conditional use application the Applicant shall demonstrate compliance with the noise standards of this Section through a Sound Study prepared by a qualified third-party acoustical expert.

[b] Sound levels shall be measured at the lot line and shall not exceed the following limits:

Time Period	**Maximum Sound Level**
Monday–Friday, 8:00 a.m. – 5:00 p.m.	60 dBA
Monday–Friday, 5:00 p.m. – 8:00 a.m.; Saturdays, Sundays, and Holidays	50 dBA
Increase above ambient sound level	10 dBA maximum
Low-frequency sound (dBC)	15 dB above the applicable dBA limit
Pure tone sound	50 dBZ

[c] Ambient Noise Standard: Sound levels shall not exceed pre-development ambient noise levels for the initial application, or existing ambient noise levels for subsequent monitoring, by more than ten (10) dBA.

(2) Measurement Standards. Sound measurements shall:

[a] Utilize Sound Level Meters meeting ANSI S1.4-2014 (or successor standard);

[b] Follow generally accepted acoustical measurement practices;

[c] Be conducted with microphones positioned four (4) to five (5) feet above grade; and

[d] Be conducted during suitable meteorological conditions of no precipitation; and sustained wind speeds at the microphone not exceeding twelve (12) miles per hour.

(3) Required Sound Studies.

Sound studies shall be completed at the following project milestones:

Study	**Timing**
Preliminary Sound Study	With Conditional Use Application
Interim Sound Study	With Building Permit Review
As-Built Sound Study	Six (6) months following issuance of the Certificate of Occupancy and prior to final escrow release
Ongoing Monitoring	Annually thereafter

[a] If it is determined by the as-built sound study that there is a violation of the aforesaid noise limits, it shall be considered a violation of this ordinance.

[b] Where recommended by any Sound Study, sound attenuation measures shall be incorporated into the project design or construction documents.

(4) Emergency Power.

Although the maximum sound limits shall not apply during times of power outage, each Sound Study shall evaluate and report anticipated sound levels during operation of all emergency power generation equipment, including backup generators.

(5) Vibration Study.

The Applicant shall submit a Vibration Study along with each sound study prepared by a qualified professional demonstrating that vibration generated by the principal use, accessory uses, or associated equipment will not be perceptible beyond the lot line and will not adversely affect adjacent properties, wildlife, or pollinator habitats.

(6) Tonal Noise.

[a] Each Sound Study shall include a narrow-band frequency analysis to identify audible tonal noise.

[b] Audibility shall be determined in accordance with ISO/TS 20065:2022, Acoustics Objective Method for Assessing the Audibility of Tones in Noise Engineering Method, or its successor.

[c] Where the decisive audibility of any narrow-band spectrum is ten (10) dB or greater, a six (6) dB penalty shall be added to the measured A-weighted sound level for determining compliance with this Section.

(7) Monitoring.

The requirements of this Section shall apply:

[a] As part of the initial Conditional Use Application;

[b] During project construction and occupancy as required by this Section; and

[c] Every two (2) years following approval of the Final Plan, or more frequently if required by the Township to verify continued compliance.

E. Water Supply, Wastewater, and Containment.

(1) Water Conservation.

[a] Unless non-water-reliant cooling or operational technologies are utilized, the use shall employ closed-loop cooling systems.

[b] Closed-loop systems shall incorporate water conservation measures, including recirculation technologies or equivalent systems designed to minimize potable water consumption.

[c] Sludge or other waste generated from the operation or maintenance of closed-loop cooling systems shall be disposed of at a facility certified and authorized to receive such materials in accordance with all applicable Federal and State regulations.

(2) Water Supply.

[a] The use shall be served by a public water system and the Applicant shall submit documentation from the public water provider certifying that adequate water service is available for the proposed use.

[b] The Applicant shall also provide the Township with copies of all water service requests and applications submitted to the public water provider.

[c] The Applicant shall demonstrate that adequate means of wastewater disposal, including domestic wastewater and wastewater used for cooling or industrial purposes, have been provided and approved by the Sewage Enforcement Officer and/or the Pennsylvania Department of Environmental Protection.

[d] A Drought Contingency Plan shall be submitted if the Township declares a water shortage due to a drought emergency.

F. Emergency Management and Site Access.

(1) Emergency Coordination

[a] A 911 address shall be assigned prior to issuance of a Certificate of Occupancy.

[b] A copy of the approved Emergency Response Plan shall be provided to all responding emergency agencies.

[c] Twenty-four-hour emergency contact information shall be permanently posted at the primary site entrance and include:
(i) Facility name;
(ii) Owner or operator;
(iii) Twenty-four-hour emergency telephone number; and
(iv) Electric utility contact information.

[d] Where required by the Township, emergency preparedness information shall be provided to residents located within one (1) mile of the facility.

(2) Emergency Response Plan.

The Applicant shall submit an Emergency Response Plan (ERP) prepared by a qualified professional. The ERP shall:

[a] Be prepared in accordance with the International Fire Code, as adopted by Plains Township, and all other applicable federal, state, and local regulations.

[b] Be reviewed and accepted by the Plains Township Fire Department, Emergency Medical Services, and municipalities providing mutual aid services.

[c] Include procedures for:
(i) Fire suppression;
(ii) Fire containment;
(iii) Ventilation;
(iv) Evacuation;
(v) Emergency shutdown of facility systems; and
(vi) Coordination with responding emergency agencies.

[d] Demonstrate that emergency responders have access to specialized equipment, extinguishing agents, chemicals, and other resources necessary to respond to facility

emergencies.

[e] Establish continuous monitoring procedures for critical facility systems and protocols for notification and coordination with emergency responders.

[f] Provide procedures for annual fire safety inspections conducted by a qualified professional.

[g] Provide procedures for training Plains Township emergency responders and mutual aid agencies prior to facility operation and thereafter as necessary.

G. Communications and Security.

(1) The Applicant shall demonstrate adequate radio coverage throughout the facility for emergency responders utilizing the Public Safety Radio Communications System. Where coverage is inadequate, approved radio signal enhancement systems shall be installed prior to operation.

(2) A Security Plan shall be prepared in consultation with the Plains Township Police Department and applicable mutual aid agencies.

H. Equipment Safety.

(1) Electrical equipment shall be housed in electrically grounded, pre-engineered enclosures having a minimum thirty (30)-minute fire-resistance rating and automatic fire baffles or equivalent systems that function independently of electrical power.

(2) Proposed use shall comply with NFPA 855, or an approved equivalent, and shall incorporate:
[a] Fire suppression;
[b] Thermal runaway mitigation;
[c] Continuous monitoring;
[d] Hazard containment; and
[e] Other applicable life-safety measures.

I. Building and Environmental Performance Standards.
To ensure development upholds the established rural character of the community, uses shall incorporate sustainable site design, resource conservation, and environmental performance measures to minimize impacts on natural resources and promote long-term environmental sustainability.

(1) Sustainable Site Design

Development shall be designed to minimize impacts on natural resources and adjoining properties by:

[a] Avoiding development within wetlands, floodplains, steep slopes, and other environmentally sensitive areas to the maximum extent practicable Disturbance to streams, wetlands, and other drainage corridors shall be in accordance with the regulations of and approval of the Pennsylvania Department of Environmental Protection (PA DEP).

[b] Minimizing site disturbance inclusive of preserving existing trees and native vegetation to the maximum extent practicable.

[c] Minimizing impervious surface coverage while maintaining safe facility operations and required emergency access.

[d] Minimizing nuisance impacts, including noise, glare, vibration, heat emissions, and similar effects on adjoining properties and public rights-of-way.

(2) Resource and Energy Efficiency.

Development shall incorporate resource conservation and energy efficiency measures including, where applicable:

[a] Building orientation that maximizes opportunities for passive cooling and daylighting.

[b] Renewable or alternative energy systems, including solar, wind, hydroelectric, or other approved technologies.

[c] Energy storage systems used to optimize renewable energy generation and reduce peak electrical demand.

[d] Technologies that reduce energy consumption, water use, and material waste.

[e] Fuel storage facilities designed to prevent leaks, spills, and environmental contamination.

[f] Water-efficient landscaping and irrigation practices.

[g] High-efficiency cooling technologies that minimize water consumption and environmental impacts, including air-cooled, free-air cooling, or equivalent systems.

(3) Green Roof Systems.

[a] Green roof systems are encouraged to be designed and located on all buildings to:
(i) Reduce stormwater runoff;
(ii) Mitigate urban heat island effects;
(iii) Improve building energy efficiency;
(iv) Offset impacts associated with large building footprints and impervious surfaces; and
(v) Integrate with the approved stormwater management system.

[b] Green roof systems shall be designed, installed, and maintained in accordance with current ASTM, ANSI/SPRI, Green Roof Organization (GRO), or successor industry standards.

(4) Environmental Performance.

The landowner and/or developer shall:

[a] Implement operational measures that improve energy efficiency, reduce carbon emissions, and minimize resource consumption using nationally recognized best practices, including the U.S. Department of Energy Better Buildings Initiative, LEED, or approved equivalent standards.

[b] Submit an Environmental Impact Statement as per Section 22-708 along with the Conditional Use Application identifying anticipated environmental impacts and proposed mitigation measures.

(5) Additional Environmental Performance Standards.

Except where this Chapter establishes more restrictive standards, proposed shall comply with all applicable Township performance standards governing:

[a] Electrical disturbances;
[b] Erosion and sedimentation;
[c] Fire protection;
[d] Glare;
[e] Information and communications systems;
[f] Noise;
[g] Odors;
[h] Smoke and air pollution;
[i] Vibration; and
[j] Water pollution.

J. Lighting.
All exterior lighting shall comply with the lighting standards of this Ordinance and shall:

(1) Be limited to the minimum illumination necessary for safety, security, and operational purposes.

(2) Utilize fully shielded, downward-directed fixtures designed to prevent glare, light trespass, and direct illumination onto adjoining properties and public rights-of-way.

(3) Comply with Dark Sky principles as published by the International Dark Sky Association through the use of full-cutoff or equivalent fixtures and other approved lighting practices.

K. Parking.

(1) Parking Areas shall be included with the impervious surfaces calculations.

(2) The maximum parking ratio shall be 1.5 spaces per peak-hour employee.

L. Community Benefits (Host Community) and Developer's Agreements.

(1) Host Community Agreement and Developer's Agreement Affidavit(s).

[a] The Applicant shall acknowledge, in writing as an Affidavit, as a condition of approval that future submission during land development of the Development Agreement shall include a Host Community Agreement addressing operational commitments that extend beyond the requirements of this Ordinance.

[b] As required by the Township as part of the land development process, the Host Community Agreement may include provisions related to:
(i) Environmental performance;
(ii) Site design and maintenance;
(iii) Emergency management and public safety;
(iv) Community engagement and complaint response procedures;
(v) Local hiring, workforce development, or educational partnerships;
(vi) Public reporting and operational transparency; and
(vii) Other community benefit commitments mutually agreed upon by the Township and Applicant.

(2) Change of Owner/Tenant or modifications to the project

[a] The Applicant will need to re-apply for Building Permit when proposed occupancy will result in any modification to the approved Zoning Permit, Conditional Use Approval, Development Agreement, or approved Site Plan, including, but not limited to:
(i) Electrical demand;
(ii) Water demand;
(iii) Backup power generation;

(iv) Cooling systems;
(v) Traffic generation;
(vi) Noise levels;
(vii) Hazardous materials storage or use;
(viii) Emergency response requirements; or
(ix) Other operational characteristics that may affect compliance with this Ordinance.

[b] The Township shall determine whether the re-applied building/use permit:
(i) Is consistent with the approved proposed use and all applicable approvals;
(ii) Constitutes a Change of Use requiring additional zoning, land development, or other municipal approvals; or
(iii) Requires amendments to the approved Site Plan, Conditional Use Approval, Development Agreement, or other applicable permits.

[c] No new tenant shall commence operations until the Township has determined that all applicable approvals have been obtained and the proposed occupancy complies with this Ordinance.

(3) Developments of Regional Significance

Projects determined to constitute a Development of Regional Significance pursuant to the Pennsylvania Municipalities Planning Code shall be evaluated in consultation with municipalities providing mutual aid services and other affected governmental agencies, as applicable.

M. Decommissioning Plan

(1) The Applicant shall acknowledge, in writing as an Affidavit, as a condition of approval that future submission during land development of a decommissioning plan shall be required that establishes detailed inventory, timelines, management and removal of physical equipment, disposal of recycling materials, and plans for future use or restoration of the site.

(2) Standards for Decommissioning:

1. Hazardous materials, including, but not limited to, batteries, fuel, or refrigerants, shall be disposed of in compliance with state and federal law.

2. Disturbed soils shall be stabilized and revegetated.

3. All utility providers must be notified of the discontinuation of operations.

(3) Before occupancy permit may be issued or upon the transfer of ownership of the property and continued use under this conditional use, financial security in the form of bonds, letters of credit, escrow accounts, cash, or other financial instruments will be a requirement for the decommissioning plan. In no event shall the security be less than one hundred ten percent (110%) of the estimated cost of decommissioning. The owner shall provide the Township a new estimate of the cost of decommissioning every five (5) years following permit approval or substantial change in equipment and/or change in tenancy and increase its security if the cost increases.

(4) All abandoned facilities shall be removed in accordance with, but not limited to the following standards: a) Dispose of hazardous materials per law, b) Stabilize/revegetate soils, c) Disconnect/cap utilities at the point of connection, d) Restore site to conditions compatible with surrounding uses or the most restrictive adjacent zoning district as reviewed and approved by Township.

706.2 Supplemental Standards for Section 716, 717, 718, 719 and 720 within General Industrial District I-1.

A. Dimensional Requirements. The following criteria shall apply in addition to that specified in Section 508.4.

(1) Minimum setback for structures as measured from any lot within a residential zoning district or within a conservation zoning district or a sensitive receptor shall be five hundred (500) feet.
(2) Minimum setback for structures as measured from all other lot lines shall be one hundred (100) feet.
(3) In the case of an application with multiple lot(s), required setback dimensions shall be measured from all lot lines of each individual lot unless said lots are consolidated in accordance with the Township Subdivision and Land Development Ordinance to the conditional use application. In the case of lots being consolidated prior to the conditional use application, required setbacks shall be measured from the perimeter of the lot on which proposed conditional use is proposed.
(4) For the purpose of this Section, impervious cover also includes all structures and buildings associated with utility-scale solar systems.

B. Submission Requirements.

(1) As a part of any application for a use and in addition to the submission requirements of Township Subdivision and Land Development, the following supporting documents must be submitted to the Township unless otherwise specified:

a. Site Plan of the proposed project
b. Declaration of on-site energy production, renewables, alternatives, etc.
c. Plans for electricity and water infrastructure

d. Emergency Response Plan also including a to-scale drawing illustrating a minimum of one location(s) of access from a public right(s)-of-way and legal documentation/ agreement affirming the said access.
e. Decommissioning Plan
f. Developer's Agreement Affidavit
g. Community Benefits Package Affidavit as part of a Conditional Use application approval
h. Documentation from a Certified Facility stating any wastewater associated with industrial processes, including but not limited to closed loop cooling system flush-out and/or backwash waste, shall be disposed off-site in accordance with any applicable local and PA DEP-approved water reclamation plan(s).
i. PUC Certificate of Convenience, Holder Will Serve Letter, and/or authorized Federal Agency's Letter of Interconnection, or other similar written agreement from a public electric utility.

(2) A revised plan shall be provided when a substantial change in equipment and/or change in tenancy occurs.

(3) Determination of application completeness: No Conditional Use Application for is deemed complete until all of the required documents listed in Subsection (1) and (2) are provided in full, without any omissions.

(4) Any cost to the Township for such removal, which is not satisfied per the owner's financial security posted with the Township, the Township is granted the right to seek injunctive relief to effect or complete decommissioning, as well as the Township's right to seek reimbursement from the owner or owner successor for decommissioning costs in excess of the amount deposited in the account and to file a lien against any real estate owned by the owner or owner successor, or in which they have an interest, for the amount of the excess, and to take all steps allowed by law to enforce said lien.

C. The requirements, standards, and provisions of this amendment shall supersede those of the Industrial zoning districts, unless the underlying district requirements are more restrictive. In case of conflict, the more restrictive criteria shall take precedence.

1.5 Zoning Ordinance, Part 7, Conditional Uses shall be amended to include Section 716, 717, 718, 719 and 720:

716 Data Center Use.

1. Use Requirements.

A. Setbacks, Dimensional and Form Standards.

Data Centers and Data Center Accessory Uses shall be in accordance with the following:

Maximum height of ground-mounted Data Center Accessory Uses	No greater than the height of any principal building/structure
Minimum setbacks for loading bays, truck entries, truck drive aisles, and refuse collection points, other accessory structures	One hundred (100) feet from a lot in a residential zoning district or within a conservation zoning district or a Sensitive Receptor
Minimum setback for single-story guardhouse/security kiosk at the primary entrance driveway if it: (i) is not closer than two hundred (200) feet to any other exterior boundary of the parcel; (ii) does not exceed four hundred (400) square feet of gross floor areas; (iii) contains no fuel storage and no power generation equipment; and (iv) complies with applicable sight-distance and clear-sight triangle requirements.	Twenty-five (25) feet from the street right-of-way
Landscape Buffer	Minimum 25-foot width May count toward required setback.
Fences	Minimum 6 feet; Maximum 10 feet
Electric Utility Substations/BESS	(i) A minimum of five hundred (500) feet from any lot within a residential zoning district or within a conservation zoning district or a sensitive receptor; (ii) A minimum of one hundred (100) feet from all other lot lines.
Roof-Mounted Equipment	Screening no less than the height of the roof-mounted equipment

Minimum Lot Area	10 acres

B. Power Supply.

(1) Energy generation systems designed solely to serve the Data Center during normal operations shall be considered accessory uses and shall be reviewed as part of the Data Center application. Energy generation systems intended to provide power to off-site users or the electric grid shall be considered separate principal uses and shall comply with all applicable zoning requirements.

(2) Energy Usage Plan.

[a] The Applicant shall submit an Initial Energy Usage Plan prepared and certified by a Professional Engineer licensed in the Commonwealth of Pennsylvania. Said document shall be submitted in Final form as part of Land Development approval.

[b] The Initial Energy Usage Plan shall identify, at a minimum:

i. Anticipated annual electrical demand and anticipated peak demand;

ii. Anticipated energy supply sources to be utilized;

iii. Anticipated energy storage capacity, if applicable;

iv. Anticipated proposed sources of backup power;

v. Anticipated cooling technologies and associated energy requirements.

[c] The Energy Usage Plan shall document the Applicant's evaluation of energy efficiency measures, renewable and clean energy opportunities, green roof systems, and energy storage technologies intended to reduce overall energy consumption and impacts on the electrical grid. The Plan shall identify the alternatives considered, the feasibility of implementation, and the reasons for selecting or rejecting such measures.

[d] Where Battery Energy Storage Systems (BESS) are proposed as an accessory use, the Energy Usage Plan

shall identify the safety measures and operational protocols to be utilized, including fire prevention and suppression systems, thermal runaway mitigation measures, emergency response procedures, containment systems, monitoring systems, and compliance with applicable industry standards and codes.

[e] The Township may require supplemental studies, analyses, or amended plans based upon comments received during the review process.

(3) Electric Utility Substations.

Electric Utility Substations serving a Data Center shall comply with the following requirements:

[a] Substations shall be located on the side or rear of the principal Data Center building, shall not be located within a required front yard, and shall maintain a minimum setback of five hundred (500) feet from any lot within a residential zoning district or within a conservation zoning district or a sensitive receptor; and minimum of one hundred (100) feet from all other lot lines. Setbacks shall be measured from the edge of the substation compound to the lot line.

[b] Substations shall be screened from public view by year-round opaque landscaping, an opaque screen wall not less than eight (8) feet in height, or a combination thereof to minimize visual impacts. Screening shall not be required between the principal Data Center building and an on-site substation serving that building.

[c] Substations shall be designed and located to minimize visual impacts on adjacent properties and public rights-of-way.

(4) All new on-site electric transmission and distribution lines shall be installed underground unless the Applicant demonstrates that underground installation is technically infeasible. All on-site power lines rated at two hundred forty-nine (249) kV or less shall be installed underground. Requests for a waiver shall be submitted in writing as part of the Land Development application.

(5) All generators, whether portable or fixed/permanent, shall be equipped with functioning mufflers and enclosures to comply with the noise limits in §609.D and all other applicable noise restrictions

contained within the Township Zoning Ordinance except where the conditional use requirements are more restrictive. Furthermore, all generators shall be Tier IV or greater diesel certified generators.

(6) Non-residential or non-light commercial portable or backup generators shall not be operated between 5:00 p.m. and 8:00 a.m. except during declared emergencies as ordered by Township and/or grid/utility operator with applicable authority unless the facility is deemed essential for safety and security.

(7) Renewable energy sources are encouraged to be utilized to offset energy consumption from offsite sources. Rooftop solar and onsite windmills less than 120 feet high can be implemented to minimize power consumption from other sources and reduce strain on the power grid said structures shall not be located within required setback.

(8) All Bulk Fuel Storage facilities shall be developed in full compliance with all applicable federal, state and insurance regulations.

C. Form.

(1) To retain compatibility with the established rural character throughout the Township, any Data Center and Data Center Accessory Use building façade that faces a road, or existing residential use must incorporate at least two of the following design elements every one hundred fifty (150) horizontal feet to ensure no uninterrupted blank wall façades shall be visible from a public right-of-way or a residential area. Design variations on long exterior walls shall be employed in order to create visual interest. Examples of such design variations include, but are not limited to, banding, windows, scoring of building facades, color changes, texture or material changes, and a variety in building height across a single building.

[a] External building materials shall be of colors that are low-reflective, subtle, or earth tone. Fluorescent and metallic colors shall be prohibited as exterior wall colors.

[b] A change in building material, pattern, texture, or color;

[c] A change in building height;

[d] Building step-backs or recesses having a minimum depth of five (5) feet. Exterior walls shall incorporate elements that create patterns of façade recession,

offsets, and extrusions along the entire length of the façade. a recession, offset, and/or extrusion must be incorporated at a minimum of twenty (20) feet in length and five (5) in depth.

(2) On all four sides of each building, roof-mounted equipment shall be screened with materials that are consistent with the building's façade and character. Such screening shall be provided in order to conceal the equipment from off-site view and to buffer sound generated by such equipment.

D. General Financial Security.

(1) Unless otherwise stipulated by the Pennsylvania Municipalities Planning Code or Laws of the Commonwealth of Pennsylvania, financial security in the form of bonds, letters of credit, escrow accounts, cash, or other financial instruments in an amount sufficient to cover the cost(s) of requirements of all provisions not explicitly defined in this ordinance and/or for the purpose of any financial cost(s) or liabilities incurred by the Township as a result of negligence to provide any such documentation, report, study, or improvement, etc. by the Applicant/developer.

E. Change in Tenant Occupancy.

(1) The owner or operator shall notify the Township of any new tenant occupying all or a portion of the Data Center. Prior to commencement of operations by the new tenant, the owner or operator shall submit a Tenant Occupancy Review Application demonstrating whether the proposed tenant's operations will result in changes to previously approved Zoning Permit, including but not limited to energy demand, water demand, backup power generation, cooling systems, traffic, noise, hazardous materials storage, emergency response requirements, or other operational characteristics. The Townships shall determine whether the proposed occupancy is consistent with the approved Data Center use and whether additional permits, approvals, or plan amendments are required.

F. When Conditional Use approval is required:
(1) Establishment of a new use.

(2) Modification, retrofit, or replacement of a use that:
a. Increases the approved discharge duration or power rating;
b. Changes chemistry.

2. Conditional Use Application Requirements.

Conditional Use Applications for the use shall provide the following documentation:

Required Document
General Site Plan
General Layout Diagram
Typical Building Elevations
Manufacturer Specifications
Power and Fire Safety Information
Existing Site Photographs
Emergency Management Plan
Utility Will-Serve Letter or equivalent agency approval
Sound Study
Visual Impact Study
Transportation Study
Hazardous Materials and Electronic Waste Plan
Heat Mitigation Plan
Lighting Plan
Operations and Maintenance Manual
Decommissioning Plan

717. Battery Energy Storage Systems.

1. Purpose and Applicability.

A. This Section.

(1) Is intended to regulate the siting, design installation, and operation of Battery Energy Storage Systems (BESS) in Plains Township. These standards permit the efficient and effective operation of BESS within the Township while mitigating their potential negative impacts and ensuring their compatibility with adjacent land uses in order to protect public health, safety, and welfare.

(2) Sets forth Conditional Use requirements for BESS in addition to those required by 706.1.

(3) Sets forth Conditional Use requirements for ancillary power infrastructure uses, including Electrical Substations, Switchyards, and Transformer Facilities.

B. Modifications to, retrofits, or replacements of an existing BESS shall be subject to this Article and the Conditional Use requirements herein.

2. Permitted Locations.

A. Battery Energy Storage Systems (BESS), Electrical Substations, Switchyards, and Transformer Facilities shall be permitted within the Industrial (I-1) District, subject to approval as Conditional Use, as follows:

Use	**Permitted As**
Facility-Scale BESS	Conditional Use
Utility-Scale BESS	Principal Use
Electrical Substation	Principal or Accessory Use
Switchyard	Principal or Accessory Use
Transformer Facility	Principal or Accessory Use

3. Dimensional Requirements.
Unless otherwise provided herein, all Battery Energy Storage Systems (BESS) shall comply with the following dimensional requirements.

A. Outdoor BESS Installations.

Standard	**Facility-Scale BESS**	**Utility-Scale BESS**
Minimum Lot Area	10 acres	10 acres
Setback from any lot within a residential zoning district or within a conservation zoning district or a sensitive receptor*	500 feet	500 feet
Abutting Utility Use Setback**	100 feet	250 feet
Setback from all Other Lot Lines *	100 feet	100 feet
Maximum Height of Supporting Equipment	20 feet	20 feet

* Measured from the required perimeter security fence enclosing the BESS.
** Measured from the required perimeter security fence to the lot line of an abutting use directly connected by transmission or distribution lines

B. Dedicated-Use BESS Buildings.

Standard	**Facility-Scale BESS**	**Utility-Scale BESS**
Minimum Lot Area	3 acres	5 acres
Maximum Building Footprint	60,000 sq. ft.	60,000 sq. ft.
Maximum Number of Buildings	One building per 3 acres	One building per 3 acres

Setback from any lot within a residential zoning district or within a conservation zoning district or a sensitive receptor*	500 feet	500 feet
Abutting Utility Use Setback**	250 feet	250 feet
Setback from all Other Lot Lines *	100 feet	100 feet
Maximum Height of Supporting Equipment	20 feet	20 feet

* Measured from the exterior building wall.
** Measured from the exterior building wall to the lot line of an abutting use directly connected by transmission or distribution lines.

C. Transmission Towers.
Transmission and distribution towers supporting electric power lines shall be exempt from the maximum height requirements, provided they consist solely of monopole weathered steel towers.

4. Certification and Regulatory Compliance.

A. BESS and associated equipment shall be listed by a Nationally Recognized Testing Laboratory to UL 9540 (Standard for Battery Energy Storage Systems and Equipment) or approved equivalent, with subcomponents meeting each of the following standards as applicable:

(1) UL 1973 (Standard for Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail Applications).

(2) UL 1642 (Standard for Lithium Batteries).

(3) UL 1741 or UL 62109 (Inverters and Power Converters).

(4) Certification under the applicable electrical, building, and fire prevention codes as required.

B. All BESS shall be designed, erected, and installed in accordance with all applicable provisions of the Building Code, all applicable state and federal regulations (including applicable environmental standards), and all applicable standards in the Plains Township Zoning Ordinance and Subdivision and Land Development Ordinance.

C. BESS, and the installation and use thereof, shall comply with the Building Code, Fire Code, and other applicable Township, County, and State codes. Installation of a BESS shall not commence until all necessary permits have been obtained.

D. All plans, manuals, and procedures required of the BESS owner and/or operator shall be compliant with the standards of NFPA 855 (Standard for the Installation of Stationary Energy Storage Systems).

5. Conditional Use Application Requirements.

A. When Conditional Use approval is required:

(3) Establishment of a new Facility-Scale or Utility-Scale BESS.

(4) Establishment of an Electrical Substation, Switchyard, or Transformer Facility as either a principal use or an accessory use to a BESS.

(5) Modification, retrofit, or replacement of a BESS that:
a. Increases the approved discharge duration or power rating;
b. Changes the battery chemistry; or
c. Converts a Facility-Scale BESS to a Utility-Scale BESS through direct connection to the electric grid.

(6) Change in ownership of a BESS or the property upon which it is located.

B. Conditional Use Applications for a BESS shall provide the following documentation:

Required Document
General Site Plan
General Layout Diagram
Typical Building Elevations
Manufacturer Specifications
Battery Management and Fire Safety Information
Existing Site Photographs
Emergency Management Plan
Utility Will-Serve Letter or equivalent agency approval
Sound Study
Visual Impact Study
Transportation Study
Hazardous Materials and Electronic Waste Plan
Heat Mitigation Plan
Lighting Plan
Operations and Maintenance Manual
Decommissioning Plan

C. Supplemental Information.

Where applicable, the following shall also be submitted:

(1) Battery Management System information, including system operation, alerts, and automatic shutdown capabilities.

(2) Fire prevention and thermal management information, including fire suppression, smoke detection, ventilation, exhaust, and deflagration venting systems.

(3) Containment measures for chemicals, fire suppression agents, PFAS, and other hazardous materials to prevent contamination of soil, groundwater, and surface waters.

D. Application Completeness.

A Conditional Use Application shall not be deemed complete until all required application materials have been submitted. General Requirements and Standards

E. Signage.

(1) A small sign at the BESS vehicular entrance gate is required to state the owner of the BESS, emergency contact information including address information and a current operating phone number that is answered 24 hours per day, seven (7) days per week.

(2) During construction, the name and emergency contact information for the general contractor shall also be posted at the entrance gate.

(3) The manufacturer's name and equipment information or indication of ownership shall be allowed on BESS equipment provided that such signage complies with the applicable sign regulations of this Zoning Ordinance.

(4) A clearly visible warning sign shall be posted on-site informing individuals of potential hazards.

(5) No portion of the BESS shall contain or be used to display advertising.

6. Electric Utility Will-Serve Letter.

A. Prior to the commencement of construction, applicants for all BESS, Electrical Substations, Switchyards, and Transformer Facilities must provide the Township with a copy of the Applicant's will-serve letter, power purchase agreement, and/or authorized Federal Agency's Letter of Interconnection, or other similar written agreement from a public electric utility showing approval of an interconnection with the

proposed use, including documentation showing that the utility has the necessary capacity to serve the use without compromising service to existing land uses.

7. Impact Studies and Operational Plans.

   A. Sound Study: The Applicant shall identify in a Sound Study all building and power systems which make noise that can be heard outdoors and shall further identify all sound-dissipative devices or enclosures that are to be used to prevent such systems from exceeding the maximum permitted sound levels specified for this use. The Sound Study shall be amended whenever additional noise-generating equipment is to be deployed or at the direction of the Township.

   B. Visual Impact Study: The Applicant shall submit a viewshed analysis prepared by a Pennsylvania-registered architect or landscape architect illustrating the areas from which any BESS installations will be visible.

   C. Construction and Major Maintenance Transportation Study. The Applicant for a BESS, or any BESS owner and/or operator thereafter, shall provide the Township with a transportation plan for construction, including any applicable agreements with the Pennsylvania Department of Transportation, which is subject to Township review and approval. Such transportation plan shall also be required when major maintenance activities are to take place on-site that involve significant truck traffic.

   D. Hazardous Materials and Electronic Waste Plan: The Applicant for a BESS shall provide the Township with a plan for managing any hazardous waste, including procedures for the lawful disposal of electronic waste and battery components.

   E. Heat Mitigation Plan: A Heat Mitigation Plan shall be submitted and include, at a minimum, strategies for waste heat reuse or dissipation and vegetative or green roof and/or site design to offset urban heat island effects. The plan shall be prepared and certified by a professional engineer and shall be subject to review and comment by the Township. The Township shall have the right to require supplemental or amended plans based upon comments emerging from the review prior to Conditional Use Approval.

   F. Lighting Plan: Such plan shall be submitted demonstrating consistency with the requirements listed in the International Dark Sky Association Model Lighting Ordinance.

   G. Operations and Maintenance Manual: Such plan shall describe continuing BESS commissioning and maintenance, as well as property upkeep, design construction, installation, and testing information, and

shall meet all requirements set forth in the Fire Code, Electric Code, and Building Code.

8. Ancillary Power Infrastructure.

A. Ancillary power generation systems must be constructed to comply with the Pennsylvania Uniform Construction Code (UCC) Act of 1999, as amended and as the Township has adopted, and any regulations adopted by the Pennsylvania Department of Labor and Industry as they relate to the UCC, except where an applicable industry standard has been approved by the Pennsylvania Department of Labor and Industry under its regulatory authority.

B. All wiring must comply with applicable electrical codes and specifications.

C. The system must be constructed to comply with any applicable fire safety codes.

D. The system shall not be placed in the established front yards and shall be subject to the same side and rear yard setbacks as other accessory structures. The required setbacks are measured from the lot line to the nearest part of the system. No part of a ground-mounted system shall extend into the required setbacks due to a tracking system or other adjustment of equipment of parts.

E. Notwithstanding the height limitations of the zoning district:

(1) Any height limitations shall comply with all existing building codes for the structures that may be required after compliance with existing zoning and land development ordinances or laws. All soil analysis that may be required shall be part of any required stormwater plan or other permits that are engineering based.

(2) For a building-mounted system installed on a sloped roof, the highest point of the system shall not exceed the highest point of the roof to which it is attached.

(3) For a building-mounted system installed on a flat roof, the highest point of the system shall not exceed six feet above the roof to which it is attached.

(4) Ground-mounted systems may not exceed 10 feet in height, measured from the tallest part of the structure when installed.

F. The footprint of the ground-mounted energy generation system shall not exceed the square footage of permitted buildings on the property where

the energy is to be used but shall never exceed 25% of the lot area where it is to be placed.

G. Vacation, abandonment, and/or decommissioning. To ensure general public safety, the owner shall remove all operational equipment and components upon abandonment of the use.

9. Administration and Enforcement.

A. Construction of an approved BESS must begin within one (1) year after Conditional Use Approval is granted. The Township Elected Officials may extend this timeline at the request of the Applicant without requiring a new Conditional Use Application.

B. Approved BESS Conditional Use Permits may not be transferred to another landowner without another Conditional Use Approval.

C. Approved BESS shall remain in compliance at all times with the standards of the Conditional Use Permit and all documentation submitted with and affirmations made in the Conditional Use Application. No changes may be made to the Conditional Use Permit by the BESS owner and/or operator without the written agreement of the Township.

D. Minor changes to an approved BESS may be reviewed and approved by the Zoning Officer or their designee. The Zoning Officer may, at their discretion, determine that a proposed change to the BESS constitutes a major change that requires a new Conditional Use Approval. The following changes shall be considered minor.

(1) Technical changes to the following application documents:

[a] Construction documents.

[b] The Emergency Management Plan.

[c] The Operations and Maintenance Manual.

(2) Modifications to, retrofits, or replacements of an existing BESS that do not substantially increase the total designed discharge duration or power rating, or that do not substantially increase the lot coverage of the BESS.

E. For any complaints associated with potentially degraded water well conditions within 1,250 feet of the lot lines of the BESS property, if it is

determined that well conditions have degraded, it shall be upon the BESS owner and/or operator to complete any remediation to restore the quality to the baseline determined by a Wellfield Quality Study which identifies testing of all inventoried wells completed to establish the baseline water quality of the wells prior to the establishment of the BESS.

F. Any violation of this Article shall be subject to the same enforcement requirements, including the civil and criminal penalties, provided for in the Township Code of Ordinances.

718. Utility Scale Solar Systems.

A. Regulations/criteria applicable to all solar energy facilities ("SEF"):

(1) SEFs are permitted by conditional use provided that the SEF is not located in or on the following:

[a] Floodways, as identified in the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM);

[b] Regulated natural and/or man-made drainage corridors, extending twenty-five (25) feet from the top of bank as defined by Pennsylvania Department of Environmental Protection (PA DEP) centerline of any such drainage feature, unless approved by the PA DEP;

[c] Cemeteries;

[d] Public and/or utility rights-of-way;

[e] Private rights-of-way (unless written permission is received from servient property owner(s)); and/or

[f] Setback areas.

(2) Standards. The SEF layout, design and installation shall comply with applicable industry standards, including those of the American National Standards Institute (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), Electrical Testing Laboratory (ETL), Florida Solar Energy Center (FSEC) or other equivalent certifying organizations. It shall also comply with the PA Uniform Construction Code, Act 45 of 1999, as amended, and any regulations adopted by the Pennsylvania Department of Labor and Industry as they relate to the Uniform Construction Code (UCC), except where

another applicable industry standard has been approved by the Department of Labor and Industry under its regulatory authority.

(3) The SEF layout, design and installation shall comply with all other applicable fire and life safety requirements. This includes those of the American National Standards Institute. The Applicant shall submit certificates of design compliance obtained by the equipment manufacturers from Underwriters Laboratories (UL), Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), Electrical Testing Laboratory (ETL), Florida Solar Energy Center (FSEC) or other equivalent certifying organizations.

(4) Solar panels must pass the United States Environmental Protective Agency (US EPA) Toxicity Characteristic Leaching Procedure Test (TCLP) to evidence their non-toxic status and be UL listed. It is also encouraged that the Applicant purchase the solar panels from a manufacturer that participates in the US Solar Industry Association recycling program or has another specific recycling contract. The manufacturer specifications for the key components of the SEF shall be submitted as part of the application, including composition, toxicological information and the physical and chemical properties of all panels and energy storage devices.

(5) A gravel berm shall be installed extending at least thirty (30) feet under and around any storage structure and shall be of sufficient size to serve as a fire break.

(6) Installers. SEF installers must certify that they are listed as a certified installer on the PA Department of Environmental Protection's (DEP) approved solar installer list or that they meet the criteria to be a DEP approved installer by meeting or exceeding one of the following requirements:

[a] Is certified by the North American Board of Certified Energy Practitioners (NABCEP); or

[b] Has completed an Interstate Renewable Energy Council (IREC) Institute for Sustainable Power Quality (ISPQ) accredited PV training program or a PV manufacturer's training program.

(7) Utility Lines. All on-site electric lines and plumbing shall be placed underground to the greatest extent feasible.

(8) DC voltage Solar Array Connections may be located above ground. AC Solar Facility Connections should be located underground unless

Developer proves that due to environmental impacts, underground AC Solar Facility Connections are not feasible.

(9) The Applicant shall include a Construction Transportation Plan that shows all roadways that will be utilized to access the SEF. The plan shall address conditions for repair or replacement if damage to Township roads occurs during construction activities. The plan shall require the Applicant and its contractors to enter into a road maintenance agreement with the Township and bond Township roads. The Construction Transportation Plan shall be approved by the Township prior to construction. Traffic control is required to ensure resident safety and to allow continued flow of traffic, particularly during any construction activities. Furthermore, prior to commencement of construction, the SEF Owner/Operator shall contact the School District to coordinate construction and equipment traffic to avoid construction traffic during school drop-off and pick-up times.

(10) The Applicant shall collaborate with emergency service professionals servicing the location of the SEF. These emergency service professionals shall include, but are not limited to the Township Zoning Officer, Fire Chief, Assistant Fire Chief and the Township Manager. The Applicant shall prepare an Emergency Response Plan and ensure that emergency service professionals can safely, effectively, and reasonably respond to an emergency involving an SEF. The Emergency Response Plan shall include site orientation, location and review of Safety Data Sheet documentation, review of emergency vehicle access, location of significant structures including the Emergency Shut-off Devices (ESD) and what is rendered safe by activating these devices, and other matters as deemed necessary by the Township. The Emergency Response Plan must be submitted with Applicant's Conditional Use Application materials. The SEF Owner/Operator must provide training to emergency service professionals regarding implementation of the Emergency Response Plan. All costs associated with specialized training and any necessary specialized equipment required to implement the Emergency Response Plan shall be paid for by the SEF Owner/Operator.

(11) If the SEF is being used as an accessory use to commercial/industrial activity on another property, then the Township shall be informed of the intent of the SEF in the Applicant's application materials.

(12) No Advertising. No portion of the SEF shall contain or be used to display advertising. A small sign at the SEF vehicular entrance gate is required to state the owner of the SEF, emergency contact

information including a current operating phone number that is answered 24 hours/day, 7 days/week, and address information. During construction, the name and emergency contact information for the general contractor shall also be posted at the entrance gate. The manufacturer's name and equipment information or indication of ownership shall be allowed on any equipment of the SEF provided that such signage complies with the applicable Township sign regulations.

(13) All SEFs shall be designed and located to ensure solar access without reliance on and/or interference with adjacent properties.

(14) By accepting a permit issued by the Township for the SEF, the Applicant shall be deemed to have acknowledged and agreed that the issuance of said permit shall not, and does not, create in the property owner, its/his/her successors and assigns in title or permit, create in the property itself:

[a] The right to remain free of shadows and/or obstructions to solar energy caused by development of adjoining property or other property or the growth of any trees or vegetation on such property; or

[b] The right to prohibit the development or growth of any trees or vegetation on such adjacent property, and that any such rights would need to be acquired by other means such as a solar easement.

(15) Noise/Noise Management. An acoustical study that addresses noise produced during construction and during the SEF's operation shall be included with the permit application for review and approval by the Township.

[a] The plan, at a minimum, shall separately address noise during construction and facility operations and include proposed mitigation measures, an assessment of the noise that will emanate at the perimeter fence, and the contact information for the individual(s) who is/are responsible for implementation and compliance both during construction and operations.

[b] During operation of the SEF, ambient sound, as measured at the lot line, shall not exceed fifty [50] decibels, whether or not such noise is intermittent or steady.

(16) Glare. The Applicant has the burden of proving that any glare produced by the SEF does not have adverse impacts on neighboring or adjacent uses either through siting or through mitigation. The Applicant shall provide a completed Glare Study ensuring that glare created by the SEF does not fall into the "red category" of glare as used in Sandia's Solar Glare Hazard Analysis Tool (SGHAT) or equivalent commercially available glare analysis tool as approved by the Township, with a one-minute interval over the course of an entire year. All adjacent roads and non-participating property owners' residences within [1,000] feet must be included in the Glare Study.

(17) Decommissioning. The following requirements apply to decommissioning:

[a] The SEF owner/operator is required to notify the Township immediately upon permanent cessation or abandonment of the operation of the SEF. The SEF shall be presumed to be discontinued or abandoned if no commercial production of commercial quantities of electricity is generated by such system for a period of twelve (12) continuous months.

[b] The SEF Owner/Operator shall have eighteen (18) months within which to dismantle and remove the SEF, including all solar-related equipment or appurtenances related thereto, including but not limited to buildings, cabling, electrical components, roads, foundations, solar facility connections and the associated facilities in accordance with industry practice.

[c] In the event that the present SEF Owner/Operator has temporarily ceased its operation but is in the process of transferring ownership and SEF management/operation, the present owner/operator has the responsibility of notifying the Township. The decommissioning financial security also must be maintained during this time.

[d] The SEF Owner/Operator is encouraged to resell or salvage materials to the fullest extent possible. However, materials that cannot be re-sold or salvaged shall be disposed of at a facility authorized to dispose of such materials in accordance with federal or state law.

[e] Any soil exposed during the removal shall be stabilized in accordance with applicable standards.

[f] Any paved access drives from public roads shall remain for future use unless directed otherwise by the landowner.

[g] Any necessary permits, including Erosion and Sedimentation and National Pollutant Discharge Elimination System (NPDES) permits, shall be obtained prior to decommissioning activities.

[h] Prior to the start of construction and prior to executing a Developer's Agreement with the Township, the SEF Owner/Operator shall submit a decommissioning plan prepared by a professional engineer or contractor and approved by the Township Engineer that provides the estimated cost to remove the SEF and related infrastructure, including but not limited to: (1) the cost to remove foundations; (2) cost to remove pads; (3) cost to remove and recycle the panels, wiring, and related components; (4) cost to remove underground collector lines; (5) cost to remove permanent roads built on the project parcels as part of the construction of the SEF all to a depth of four feet below the surface; and (6) estimated cost to restore the project parcel(s) to an environmentally stable condition substantially similar to the condition of the project parcel(s) prior to construction of the SEF.

[i] Prior to construction and prior to executing a Developer's Agreement with the Township, the SEF Owner/Operator shall post financial security in the amount of one-hundred and ten (110%) percent of the Decommissioning Cost, as approved by the Township Engineer, securing the decommissioning obligations of the SEF and naming the Township as beneficiary, the original of which security shall be delivered to the Township. The form of the financial security shall be subject to the review and approval of the Township Solicitor.

[j] Every five (5) years after the date of providing the decommissioning financial security, the SEF owner shall provide an updated decommission cost estimate to be approved by the Township Engineer. If the decommissioning financial security amount increases, the SEF owner shall remit the increased financial security to the Township within 30 days of the approval of the updated decommissioning financial security estimate by the Township. If the decommissioning financial security amount decreases by greater than 10%, the Township shall release any amounts held in excess of 110% of the updated decommission cost estimate.

[k] After the SEF is fully decommissioned and written certification is issued by the Township Engineer to the Board

of Commissioners that the project parcel(s) have been restored to an environmentally stable condition substantially similar to the condition they were in prior to construction of the SEF, the Township shall release the decommissioning financial security.

[l] The decommissioning financial security shall be in a form to be approved by the Township's Solicitor. If the SEF Owner/Operator fails to remove the SEF in accordance with the requirements of this section, the Township, shall have the authority to execute upon the decommissioning financial security, enter the property, physically remove the SEF, and restore the property to its original, pre-construction condition. The Owner/Operator shall be liable for all costs incurred by the Township associated with the decommissioning, including attorneys' fees and engineering fees and any costs or fees associated with drawing on the financial security.

[m] All SEF are required to comply with the Land Development processes and procedures set forth in the Township's Subdivision and Land Development Ordinance.

B. Ground-mounted SEF:

(1) The SEF development area is equal to the total acres of land subject to lease or owned by the SEF owner/operator. Where the area of land subject to the lease or owned is greater than 75% of the parcel, the entire parcel will be considered to be the SEF development area.

(2) Setbacks. Ground-Mounted SEFs shall be set back a minimum of 100 feet from lot lines and 500 feet from any non-participating owner's existing occupied residential structure. Additionally, all inverters shall be set back 500 feet from all adjacent non-participating owner's residential structures.

(3) Height. Ground-Mounted SEFs and associated components shall comply with the height regulations for the zoning district in which the SEF is located.

(4) Stormwater Management.

[a] Stormwater runoff from a Ground-Mounted SEF shall be managed in accordance with the requirements of the Township's Stormwater Management Ordinance, as

amended. See Township Ordinance No. 689, as amended.

[b] Where Solar Panels are mounted above the ground surface allowing for vegetation below the panels, the horizontal area of the panel may be considered a Disconnected Impervious Area (DIA), and therefore, will have no increase from the pre-development to post-development runoff coefficient (pervious surface). The horizontal area of the panel can only be considered a DIA if the following conditions apply:

[i] Where natural vegetative cover is preserved and/or restored utilizing low impact protection techniques from the Pennsylvania Department of Environmental Protection Stormwater Best Management Practices Manual, including, but not limited to the following: minimizing the total disturbed area, minimizing soil compaction in disturbed areas, and re-vegetating and re-foresting disturbed areas using native species.

[ii] Where the vegetative cover has a minimum uniform 80% perennial vegetative cover with a density capable of resisting accelerated erosion and sedimentation.

[iii] For panels located on slopes of 0 to 15%, a minimum 4” height of vegetative cover shall be maintained.

[iv] Vegetated areas shall not be subject to chemical fertilization or herbicide/ pesticide application, except for those applications necessary to establish the vegetative cover or to prevent invasive species and in accordance with an approved erosion and sedimentation control plan.

[v] Agrivoltaics may be used provided that:

i. only crops suitable for the conditions are used;

ii. a stormwater management plan is developed for agricultural plowing or tilling activities or a portion of the overall farm conservation plan identifies BMPs (best management practices) used;

iii. any grazing, cutting or mowing of the agricultural crop is limited to the accepted best management practice height for that crop;

iv. application of chemical fertilization or

herbicides/pesticides is limited to the agronomic needs of the crop(s);

v. if the property will be used for grazing of livestock, and/or manure application to crop land, a manure management plan must be developed.

[vi] Where the Solar Panels within a Solar Array are arranged in a fashion that:

i. allows the passage of stormwater runoff between each Solar Panel, thereby minimizing the creation of concentrated runoff; and/or

ii. allows for the growth of vegetation beneath the panel and between the Solar Arrays:

(a) The horizontal area of a Solar Panel or Solar Array that cannot meet all the conditions to be considered a disconnected impervious area (DIA) shall be treated as impervious area. These areas shall be included in the pre-development to post-development runoff analysis as impervious area to determine the need for Post-Construction Stormwater Management (PCSM) best management practices.

(b) Use of gravel is permissible under a panel or in the receiving downhill flow path; however, the use of gravel would not allow the horizontal area of the Solar Panel or Solar Array to be considered as a DIA.

(c) All impervious areas associated with SEF such as roadways and support buildings cannot be considered as DIAs and shall follow normal protocols when performing the PCSM stormwater analysis.

(d) Stormwater control must be maintained for the life of the development.

(5) Screening and Buffering. Ground-Mounted SEF shall be screened and buffered in accordance with the following standards:

[a] Vegetative buffering shall be installed around the

SEF in a manner which will, to the greatest extent feasible based upon the topography of the land, prevent the SEF from being seen from roadways adjacent to the SEF and/or any non-participating residential properties.

[b] The vegetative buffering shall be installed along the exterior side of the fencing. All required vegetative buffering shall be located in a manner to achieve the goal of preventing the SEF from being seen from roadways and/or adjacent residential buildings to the fullest extent practicable.

[c] Vegetative buffering should be designed to emulate the mix of non-invasive native species and appearance of existing tree lines, hedge rows, and wooded areas already in existence within the landscape where the SEF is proposed. The trees shall be of such a height when planted as to provide immediate screening and shall be a minimum of eight feet (8') in height. The trees shall be placed in close proximity to the fenced-in area while considering maintenance of the fencing and the trees.

[d] No less than 20% of vegetative buffering plantings shall be pollinator friendly species. Vegetative buffering shall be selected to provide year-round buffering and shall be of sufficient height, 0, and maturity to screen the facility from visibility, as set forth herein within thirty-six (36) months of the installation of the SEF.

[e] The SEF Owner/Operator is required to maintain (and if necessary, replace) all vegetative buffering plantings during the life of the development.

[f] Buffering shall be sufficient to manage glare on roads adjacent to the SEF so that the glare is not hazardous to drivers.

[g] The Applicant shall submit a Viewshed Analysis and Landscaping Plan with its application to show compliance with the above-listed screening and buffering provisions.

[h] Landscape plans shall include tree species, caliper size, initial planting height minimum, height at maturity, age of maturity, and spacing.

(6) Security.

[a] All Ground-Mounted SEFs shall be completely enclosed by fencing with a self-closing, locking gate. A fencing detail shall be submitted to the Township for review. The detail shall include location, height, type, gate location and details, and footing details.

[b] A clearly visible warning sign shall be placed at the base of all pad-mounted transformers and substations and on the fence surrounding the SEF informing individuals of potential voltage hazards.

[c] The entry gate shall be accessible 24 hours a day by emergency personnel and vehicles, whether by key, or access code, which shall be provided to the Township upon completion but before the SEF begins operation.

[d] An emergency shut off device (ESD) shall be installed near to the entry gate and also at the ancillary structures installed near the center of facility. This ESD shall shut off power generation and render the facility safe to allow for inspection, service, and emergency services and be usable by emergency personnel.

[e] The Township shall be provided the updated emergency contact information for all contractors, subcontractors and site-management agencies working on the construction of the SEF until its completion.

(7) Access.

[a] Stabilized access drives/roads that are maintained in a dust-free condition from a state, County or Township road are required in order to allow maintenance (including winter maintenance) and emergency management vehicles to access the SEF site. The roads, including minimum cartway width shall comply with applicable Township ordinances.

[b] Spacing between Solar Array rows shall allow access for maintenance and emergency vehicles.

(8) Lighting.

[a] Lighting at the SEF site, either temporary or permanent, shall

be directed downward and inward so as to minimize the glare on public roads and structures on adjacent, non-participating properties.

[b] A lighting plan that demonstrates compliance shall be submitted to the Township for review at the time of submittal of the Conditional Use application.

[c] Flickering or intense sources of light shall be so controlled as not to cause a nuisance across any lot lines.

(9) Maintenance. The Solar Energy Facility must be properly maintained and be kept free from all hazards including, but not limited to, faulty wiring, loose fastenings, being in an unsafe condition or detrimental to public health, safety or general welfare.

C. Roof and wall-mounted solar energy facilities.

(1) Roof and Wall-Mounted Solar Energy Facilities are permitted where the building upon which they will be mounted is a permitted use.

(2) In addition to the regulations set forth above, the Applicant must comply with the following requirements:

[a] The Applicant for a Roof and/or Wall-Mounted SEF shall provide evidence that the plans comply with the Uniform Construction Code, including that the roof or wall is capable of holding the load imposed on the structure.

[b] The total height of a building with a Roof or Wall-Mounted SEF shall not exceed by more than one foot above the maximum building height specified for principal or accessory buildings within the applicable zoning district.

1. Accessory Solar Energy Systems.

A. Regulations/Criteria Applicable to All Accessory Solar Energy Systems ("ASES"):

(1) Permitted Locations. ASES shall be permitted as a use by right [Insert Zoning Districts] in the Township but shall require a zoning permit from the Township Zoning Officer prior to construction/installation.

(2) Nonconformance. ASES constructed prior to the effective date of this Section shall not be required to meet the terms and conditions of this Section. Any physical modification to an existing ASES, whether or not existing prior to the effective date of this Chapter that materially alters the ASES after the effective date of this Section, shall require compliance with and approval under this Section. Routine maintenance or like-kind replacements do not require a permit.

(3) Standards. The ASES layout, design and installation shall conform to applicable industry standards, such as those of the American National Standards Institute (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), Electrical Testing Laboratory (ETL), Florida Solar Energy Center (FSEC) or other similar certifying organizations, and shall comply with the Township's Building Code (including a building permit, if required), and with all applicable fire and life safety requirements. The manufacturer specifications for the key components of the system shall be submitted as part of the application, including composition, toxicological information and the physical and chemical properties of all panels and energy storage devices.

(4) Installers. ASES installers must certify they are listed as a certified installer on the PA Department of Environmental Protection's (DEP) approved solar installer list or that they meet the criteria to be a DEP approved installer by meeting or exceeding one of the following requirements:

[a] Is certified by the North American Board of Certified Energy Practitioners (NABCEP); or

[b] Has completed an Interstate Renewable Energy Council (IREC) Institute for Sustainable Power Quality (ISPQ) accredited PV (Photovoltaic) training program or a PV manufacturer's training program and successfully installed a minimum of three PV systems; or

[c] For residential applications, the ASES installer must also be a registered home improvement contractor

with the PA Attorney General's Office.

(5) Emergency Power Shut-off. An exterior emergency shut-off device must be installed, operational and marked prominently with signage identifying the alternate power source.

(6) Maintenance. Upon installation, the ASES shall be maintained in good working order in accordance with the standards of the applicable codes under which the ASES was constructed. Failure of the property owner to maintain the ASES in good working order is grounds for enforcement action by the Township Zoning Officer.

(7) Energy Production. The ASES shall be designed so that the energy created by the ASES is either primarily or solely to be used on-site.

(8) Location of On-Site Utility Lines. All site-specific utility lines and distribution/transmission lines less than 230kV shall be placed underground. Privately-owned/operated, off-site transmission lines proposed to be in a public street right-of-way shall require Township approval and a right-of-way agreement with provisions indemnifying the Township from all liability related to the transmission lines.

(9) Advertising Prohibited. The display of advertising is prohibited except for reasonable identification of the manufacturer of the system, limited to application directly on system components, which shall comply with applicable Township sign regulations.

(10) No Reliance. All solar energy systems shall be designed and located to ensure solar access without reliance on adjacent properties.

(11) Glare Prevention. All ASES shall be situated to prevent glare onto nearby residences, structures, or roadways. Exterior surfaces shall have a non-reflective finish. The applicant/operator has the burden of proving that any glare produced does not have material adverse impacts on neighboring or adjacent uses either through siting or mitigation.

(12) Emergency Power Shut-Off Device (ESD). All ASES shall be equipped with an emergency power shut-off switch or similar mechanism to immediately stop power transmission from the

ASES to the main breaker and/or batteries. Plans for the ASES shall clearly indicate the location of the emergency power shut-off switch.

B. Regulations applicable to roof-mounted and wall-mounted accessory solar energy systems (ASES).

(1) A Roof-Mounted or Wall-Mounted ASES may be located on a principal or accessory building.

(2) The total height of a building with an ASES shall not exceed by more than 1 foot above the maximum building height specified for principal or accessory buildings within the applicable zoning district.

(3) The owner shall provide evidence certified by an appropriately licensed professional that the roof or wall-mounted system complies with the Uniform Construction Code and that the roof or wall is capable of holding the load of the ASES and applicable wind loads.

(4) Wall-Mounted ASES shall comply with the setbacks for structures in the applicable zoning district where the ASES will be located.

(5) Solar panels shall not extend beyond any portion of the roof edge.

(6) Solar panels shall be placed at least thirty (30) inches from the edge of the roof for emergency response purposes.

(7) Zoning/building permit applications shall document compliance with these provisions.

C. Regulations applicable to ground-mounted accessory solar energy systems.

(1) Setbacks.

[a] The minimum setbacks from side and rear lot lines

shall be the same as accessory building setbacks in the applicable zoning district plus an additional ten (10) feet.

[b] A Ground-Mounted ASES shall not be located in the front yard.

(2) Height. Freestanding Ground-Mounted ASES shall not exceed the permitted height of accessory structures in the applicable zoning district.

(3) Location. Ground-Mounted ASES shall not be placed within any utility easement, public right-of-way, within any stormwater conveyance system, or in any manner that would alter or impede stormwater runoff from collecting in a constructed stormwater conveyance system, unless the Applicant can demonstrate, to the satisfaction of the Township, that the ASES will not have a detrimental impact on stormwater management, or in any manner alter or impede stormwater runoff from collecting in a constructed stormwater conveyance system.

(4) Removal. If a Ground-Mounted ASES is removed, any earth disturbance as a result of the removal of the Ground-Mounted Solar Energy System shall be graded and re-seeded to return the disturbed area to its original condition.

(5) Stormwater Management.

[a] Stormwater runoff from an ASES shall be managed in accordance with the requirements of the Township's Stormwater Management Ordinance.

[b] All ground-mounted ASES shall have grass or other vegetation planted and maintained beneath the panels. No bare earth or gravel is permitted.

(6) Safety Signage. Appropriate safety/warning signage concerning voltage shall be placed at ground-mounted electrical devices, equipment, and structures. All electrical control devices associated with the ASES shall be secured to prevent unauthorized access or entry.

(7) Screening and Buffering. Vegetative buffering shall be installed around the Ground-Mounted ASES in a manner

which will, to the greatest extent feasible based upon the topography of the land, prevent the Ground-Mounted ASES from being seen from roadways adjacent to the Ground-Mounted ASES and/or any non-participating residential properties.

719. Power Generation Facilities.

1. Such power generation facility shall be considered a separate principal use and shall be approved according to all other conditional use requirements and applicable state and federal regulations.

2. Any power generation facility designed or used to supply power directly to another principal use during normal operations, including solar, wind, non-coal fossil fuel, fuel cells, or nuclear energy generating systems, shall not be considered part of that principal use but shall be subject to existing Township and utility regulations.

3. The applicant shall select, design, and locate the power generation facility to limit noise, emissions, and visual impacts to adjacent and nearby uses as much as possible.

720. All Other Non- Residential Uses Not Listed

All Other Non-Residential Uses Not Otherwise Listed. Any non-residential use not specifically listed within the Township Zoning Ordinance as a use that is permissible by right, by conditional use, or by special exception may be permitted by conditional use. The following criteria, at a minimum, shall be considered:

A. The proposed use shall:

(1) Be consistent with the comprehensive plan of the Township.

(2) Be consistent with the adjoining and surrounding zoning and uses.

(3) Be consistent with the scale and density of neighboring uses and structures.

(4) Comply with all applicable yard, setback, and signage regulations of the most restrictive criteria otherwise assigned to the Zoning District.

(5) Comply with parking and loading/unloading standards for related uses specified in this code.

B. The proposed use shall not:

(1) Substantially increase traffic congestion, create traffic safety hazards or endanger the safety of persons or property by improper location or design of facilities for ingress or egress

(2) Change the basic functional characteristics of the streets and lands on which it is located, as identified by the Township comprehensive plan and/or Street-related Ordinance(s).

(3) Increase any danger of fire or otherwise involve activities or processes which would tend to endanger the public health or safety.

(4) Overcrowd the land or create an undue concentration of population or structures

(5) Impair an adequate supply of light and air to adjacent property.

(6) Create stormwater hazards or drainage problem.

(7) Create vibrations, glare, heat, electrical disturbance, smoke, odor or noise which would jeopardize the integrity of pre-existing uses in the immediate vicinity.

(8) Unduly burden water, sewer, school, park or other facilities.

(9) Be detrimental to or adversely affect the reasonable use of adjacent property.

(10) Otherwise adversely affect the public health, safety, morals or general welfare.

(11) Unreasonably interfere with pre-existing or planned residential, historic or economic development.

Section 3: Repealer. All Ordinances or parts of Ordinances inconsistent herewith or in conflict with any of the specific terms enacted hereby, to the extent of said inconsistencies or conflicts are hereby repealed.

Section 4: Revisions. The Township of Plains Board of Commissioners does hereby reserve the right, from time, to time, to adopt supplements to or amendments of its Ordinance, including this provision.

Section 5: Severability. If any provision, sentence, clause, section or part of this Ordinance is for any reason found to be unconstitutional, illegal or invalid, such unconstitutionality, illegality or invalidity shall not affect or impair any of the remaining provisions, sentences, clauses, sections or parts hereof. It is hereby declared as the intent of the Board of Commissioners that this Ordinance would have been adopted had such unconstitutional, illegal or invalid provision, sentence, clause, section or part thereof not been included herein.

Section 6: Effective Date. This Ordinance shall become effective upon the date of adoption as provided by law.

Enacted and Ordained this _____ day of _____, 202_ by the Board of Commissioners of the Township of Plains, County of Luzerne and Commonwealth of Pennsylvania in a lawful session duly assembled.

ATTEST:

_____
Lynell Ent, Secretary

BOARD OF COMMISSIONERS

By: _____
Thomas Shubilla, Chairman

_____
Peter J. Biscontini, Esq., Vice Chairman

_____
Ciro Cinti, Member

_____
Robert Sax, Member

_____
Dennis Condusta, Member