

**ORDINANCE NO. 2024 - \_\_\_\_**  
West Mead Township, Crawford County

AN ORDINANCE OF WEST MEAD TOWNSHIP OF CRAWFORD COUNTY, PENNSYLVANIA, TO AMEND THE ZONING ORDINANCE OF WEST MEAD TOWNSHIP TO SET FORTH REQUIREMENTS FOR SOLAR ENERGY SYSTEMS AND NEW CONDITIONAL USE STANDARDS

**WHEREAS**, the Pennsylvania Municipalities Planning Code, act of July 31, 1968, as amended, 53 P.S. §§ I0101 et seq., enables a municipality through its zoning ordinance to regulate the use of property and to promote the conservation of energy through access to and use of renewable energy resources; and

**WHEREAS**, the West Mead Township Supervisors seek to promote the general health, safety and welfare of the community by adopting and implementing an amendment to the Zoning Ordinance providing for access to and use of Solar Energy Systems; and

**WHEREAS**, the purpose of this Ordinance is to set forth requirements for Solar Energy Systems **as land uses where permitted;**

**NOW THEREFORE BE IT ENACTED AND ORDAINED** by the West Mead Township Supervisors of Crawford County, Pennsylvania, and it is enacted and ordained as follows:

**SECTION 1:** Article 3, Section 300 of the West Mead Township Zoning Ordinance, entitled “Definitions” shall be amended by adding the following definitions to those listed in Section 300 thereof, to be inserted in alphabetical order:

**ACCESSORY SOLAR ENERGY SYSTEM (ASES):** a Solar Energy System used to capture solar energy, convert it to electrical energy or thermal power and supply electrical or thermal power primarily for on-site use. Ground mounted or freestanding Solar Energy Systems with an output size of not greater than 10kw shall be considered Accessory Solar Energy Systems. Roof Mounted Solar Energy Systems on the roofs of buildings on-site used primarily for on-site use shall have no limit as to power output.

**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.

**SOLAR ARRAY:** A system of a group of solar panels connected together.

**SOLAR ARRAY CONNECTION:** The low-voltage electric lines which connects Solar Related Equipment.

**SOLAR EASEMENT:** A solar easement means 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 SYSTEM (SES) or PRINCIPAL SOLAR ENERGY SYSTEM (PSES):** 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. Principal Solar Energy Systems consist of one (1) or more free-standing ground, or roof mounted solar collector devices, solar related equipment and other accessory structures and buildings including light reflectors, concentrators, and heat exchangers, substations, electrical infrastructure, transmission lines and other appurtenant structures.

**SOLAR ENERGY PROJECT:** A grouping of two or more Solar Energy Systems which are held by owner or leased to a common lessor and which are part of a single solar energy production development project.

**SOLAR ENERGY PROJECT OWNER:** The individual, group or entity responsible for the permitting, construction and operation of a Solar Energy System or Solar Energy Project. (SES Developer)

**SOLAR SYSTEM CONNECTION:** The high-voltage electric conveyance lines which connect a Solar Energy System to the Solar Project Connection.

**SOLAR PROJECT CONNECTION:** The electric conveyance lines which connect a Solar Energy System to the high-voltage electric interconnection grid.

**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/or for electricity.

**SOLAR RELATED EQUIPMENT:** Items including a solar photovoltaic cell, module, panel, or array, or solar hot air or water collector device panels, lines, pumps, batteries, mounting brackets, framing and foundations or other structures used for or intended to be used for collection or storage of solar energy.

**SECTION 2:** Section 503, entitled “Agricultural District, A”, of Article 5 of the West Mead Township Zoning Ordinance, shall be amended by adding “Solar Energy Systems” as Conditional Uses subject to the standards set forth in Section 633 of the West Mead Township Zoning ordinance

**SECTION 3:** Section 504, entitled “Rural Residential District, RR”, of Article 5 of the West Mead Township Zoning Ordinance, shall be amended by adding “Solar Energy Systems” as Conditional Uses subject to the standards set forth in Section 633 of the West Mead Township Zoning.

**SECTION 4:**

A new section 633 entitled “Solar Energy Systems” shall be added to Article 6 of the West Mead Township Zoning Ordinance which shall read as follows:

## **633 SOLAR ENERGY SYSTEM (SES)**

**633.1. Location.** Solar Energy Systems shall be permitted as Conditional Uses in the Agricultural and Rural Residential Zoning Districts subject to the standards set forth in this section and the standards for granting a Conditional Use.

**633.2. Application.** An application for a Conditional Use shall include mapping that identifies the lands proposed for the facility, the proposed layout for the facility showing details about the location in reference to residences, streams, and other features of the land; and a Project narrative that shall include an overview of the project, project location, the approximate generating capacity, the number, representative types and heights of facilities to be constructed, dimensions, and description of any ancillary facilities of the solar-energy system. The application shall include information about the persons undertaking the development, their experience, and the intended use of the energy being generated. The application shall include information to demonstrate compliance with the requirements of this ordinance. Applicant shall provide information regarding the manner in which the Solar Energy System will be constructed, operated and maintained, and measures put in place to secure its proper and safe operation and maintenance. The application shall also include documentation of an agreement between the property owner(s) and the solar- energy facility owner or operator demonstrating permission to apply for necessary permits for construction and operation of a solar-energy facility. The application shall include with the project submission details of mitigation measures to be implemented to preserve wildlife corridors including between Solar Energy Systems of a Solar Energy Project.

**633.3. Design and Construction Standards.** Solar Energy Systems shall conform to all applicable industry, governmental, and fire & safety standards and codes; and shall be installed by a qualified contractor. The Township shall be provided with information about the regulatory standards applicable to the construction and operation of the SES. Appropriate safety/warning signage concerning voltage shall be placed at ground mounted electrical devices, equipment, and structures. All electrical control devices associated with the SES shall be secured against unauthorized access or entry.

**633.4. Operational Standards.** The Solar Energy System must be properly maintained and be maintained in safe condition that is not detrimental to public health, safety or general welfare.

**633.5. Emergency Response Planning.** Applicant shall have an Emergency Response Plan prepared and made available to Emergency Response providers, with attention to the available resources for emergency responses, and based on consultation with local emergency response

organizations. Plans must include information regarding means of access to the facility and dangers that may be encountered. Such information must be kept current.

*633.6. Compliance With Governmental Requirements.* All Solar Energy System developments must comply with all applicable Federal, State and local regulations and have permits required by any governmental regulatory agency with jurisdiction over any aspect of the development. Such requirements shall include, but shall not be limited to, Soil Erosion and Sedimentation Plans, and NPDES Plans. No construction may commence without required permits and approvals and except in accord with all such permits and approvals. The Township shall be provided with copies of such permits. In addition, before construction may commence, plans for the development meeting the requirements of the Township's Stormwater Management Ordinance, Subdivision and Land Development Ordinance, and Floodplain Management Ordinance, the Pennsylvania Uniform Construction Code, and all other applicable Township regulations must be submitted to the Township for review and approval, and all construction and development must comply with approved plans.

*633.7. Location Standards for Solar Energy System.*

(a) **Solar Energy Systems** may be located on prime agricultural soils lands only under the following conditions:

(1) **Location of Solar Related Equipment is permitted on only** 75% of the total Class I and II agricultural soils as defined by USDA Natural Resources Conservation Service, within the SES Development Area, unless the area will be devoted to Agrivoltaics activities, in which case 100% of the Class I and II soils may be included in the SES Development Area.

(2) For each parcel on which a SES, or a component of a SES, is proposed, a map shall be provided by the applicant detailing the SES Development Area, the **Areas in which Solar Development is restricted**. The Class I and II agricultural soils, and the Portion of the SES Development that is devoted to **Solar Related Equipment Solar Related Equipment** shall only be placed within that portion of any **parcel** that lies within the Portion of the SES Development that may be devoted to Solar Arrays.

(b) **Solar Related Equipment Arrays** shall not be located in:

(1) Floodways, as identified in the FEMA FIRM mapping.

(2) **Within 25' along either side of any regulated stream or regulatory wetland.**

(3) **Ground-mounted SES shall not be placed within any storm water conveyance system, or any other legal easement or right-of-way location without the express approval of the person(s) holding the Right of Way.**

(4) Wooded Areas primarily devoted to mature trees in excess of 2 acres that would require removal of greater than 20% of mature trees, For the purpose of this clause, brushes and shrubs are not considered trees.

(3) Road Rights-of-Way.

(c) **Solar Related Equipment** shall comply with the following setbacks:

**No Ground Mounted Solar Energy System facilities shall be located within 50 feet of a property line or the right of way of a public roadway. This shall not preclude the location of driveways or fencing which shall be setback a minimum of 10 feet from property and road right of way lines. This shall also not apply to the property line of an adjoining lot or lots on which the Solar Energy System is located**

#### *633.8. Height Limitations.*

- (a) All ground mounted solar panels shall comply with a maximum fifteen (15) foot height requirement.
- (b) All other SES components should comply with the underlying district maximum height requirement.
- (c) Heights in excess of the maximum height requirement may be permitted where the Applicant can demonstrate the necessity and benefit.

#### *633.9 Stormwater Management Standards*

Stormwater runoff from an SES shall be managed in accordance with the requirements of the West Mead Township Stormwater Management Ordinance

#### *633.10. Screening & Buffering.*

Ground mounted SES shall be screened and buffered in accordance with the following standards.

- (a) Vegetative buffering, to the extent practical, shall be installed around the entire perimeter of the SES installation, except where retention of existing trees within the vegetative buffering area may constitute the required vegetative buffer or where the solar panels cannot be viewed from a public roadway or residential building.
- (b) The vegetative buffering, shall be installed along the exterior side of the fencing. All required vegetative buffering shall be located within fifty (50) feet of the required fencing.
- (c) Vegetative buffering should be designed to emulate the mix of native species and appearance of existing tree lines, hedge rows, and wooded areas already in existence within the landscape where the SES is proposed. The applicant shall assess the species mix and characteristics found in existing tree lines, hedge rows, and wooded areas surrounding the SES and document that the

vegetative buffering is designed to emulate these characteristics. Arborvitae may be used as vegetative buffering.

- (d) No less than 20% of vegetative buffering plantings shall be pollinator friendly species.
- (e) Vegetative buffering shall be selected to provide year-round buffering and shall be of sufficient height, density, and maturity to screen the system from visibility, as set forth herein within thirty-six months of the installation of the SES.
- (f) A combination of Natural topography and vegetation can serve as a buffer, provided that the SES will not be visible from public roads, public parks or existing residences on surrounding properties. Earthen berms may not be created to serve as a buffer.

#### 633.11. *Security*

- (a) All ground-mounted SESs shall be completely enclosed by a minimum eight (8) foot high fence with a self-locking gate.
- (b) A clearly visible warning sign shall be placed at the base of all pad-mounted transformers and substations and on the fence on the surrounding of the SES informing individuals of potential voltage hazards.

#### 633.12. *Solar Array Connections.*

- (a) All on-site transmission lines shall be placed underground to the extent feasible. Any transmission lines that cross a highway shall be overhead and meet all applicable regulatory and safety standards.
- (b) Solar Project Connections may be located above ground where the Applicant can demonstrate that the overall environmental impacts would support above ground location and are consistent with applicable regulations, codes and laws.

#### 633.13. *Advertising.*

No portion of the SES shall contain or be used to display advertising. The manufacturer's name and equipment information or indication of ownership shall be allowed on any equipment of the SES provided they comply with the prevailing sign regulations.

#### 633.14. *Noise Management*

- (a) The volume of sound inherently and recurrently generated shall be controlled so as not to cause a nuisance to adjacent uses.
- (b) During operation of the SES, audible sound shall not exceed a maximum of 55 dBA during daytime hours and 45 dBA during nighttime hours as measured at the exterior of any occupied building on a non-participating landowner's property.

633.15. *Glare*

All SES shall be placed such that concentrated solar radiation or glare does not project onto nearby structures or roadways. Exterior surfaces shall have a non- reflective finish.

633.16 *Access*

At a minimum, a 14' wide stabilized access road must be provided from a state or township roadway to the SES site that is maintained in a dust free condition. The SES developer shall obtain a permit from the appropriate jurisdiction for the construction of the access road.

At a minimum, a 20' wide cartway shall be provided on the inside of the perimeter fencing between the fence and Solar Array.

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

633.17 *Lighting*

The ground mounted SES shall not be artificially lighted except to the extent required for safety or applicable federal, state, or local authority.

633.18 *Roof and Wall Mounted Principal Solar Energy System:*

(a) For roof and wall mounted systems, the applicant 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 and wall mounted system shall not exceed by more than 3 feet above the maximum building height specified for principal or accessory buildings within the applicable zoning district.

633.16. *Contact Information*

The SES owner and/or operator shall maintain a phone number and identify a person responsible for the public to contact with inquiries and complaints throughout the life of the project and provide this number and name to the West Mead Township Supervisors and also have this contact information at the site. Any change of ownership would need to be updated. The SES owner and/or operator shall make reasonable efforts to respond to the public's inquiries and complaint.

633.17. *Decommissioning*

- (a) The SES owner shall notify West Mead Township immediately upon cessation or abandonment of the operation. The SES shall be presumed to be discontinued or abandoned if no electricity is generated by such system for a period of twelve (12) continuous months.
- (b) Upon cessation or abandonment of the operation, the SES owner shall have eighteen (18) months in which to dismantle and remove the SES including all solar related equipment or appurtenances

related thereto, including but not limited to buildings, cabling, electrical components, foundations, solar system connections and other associated systems in accordance with agreements with landowners and good industry practice.

- (e) To the extent possible the materials shall be re-sold or salvaged. Materials that cannot be re-sold or salvaged shall be disposed of **in accord with regulatory requirements**.
- (d) Any soil exposed during the removal shall be stabilized in accordance with applicable erosion and sediment control standards.
- (e) Any **roadways, and driveways** from public roads **shall be removed** unless directed otherwise by the land owner.
- (f) The SES site area shall be restored to its pre-existing condition, suitable for its prior use, except the landowner may authorize, in writing, **that** any buffer landscaping or access roads installed to accommodate the SES to remain.
- (g) Any necessary permits, such as Erosion and Sedimentation and NPDES permits, shall be obtained prior to decommissioning activities.

*633.18. Financial Security for Decommissioning.*

- (a) In conjunction with the submission of a Land Development Plan, the owner shall provide Financial Security in the form and amount acceptable to West Mead Township, to secure the **decommissioning of the SES system**.
- (b) The SES Developer shall, at the time of **submission of the Land Development Plan**, provide West Mead Township with an estimate of the cost of performing the decommissioning activities required herein. The estimate may include an estimated salvage and resale value, discounted by a factor of 10%. The decommissioning cost estimate formula shall be: Gross Cost of Decommissioning Activities minus 90% credit of Salvage and resale value equals the decommissioning cost estimate.
- (c) **Before construction may begin, the Solar Project Owner shall provide financial security of 110% of the estimated cost of decommissioning. That Financial Security shall be in the form a cash deposit, surety bond, irrevocable letter of credit, cashier's check, or escrow account in a federal or Commonwealth chartered banking institution, satisfactory to West Mead Township, in the amount of 110% of the total proposed decommissioning costs.**
- (d) On every 5th anniversary of the date of providing the decommissioning financial security the SES Owner shall provide an updated decommission cost estimate, utilized the formula set forth above with adjustments for inflation and cost and value changes. If the decommissioning security amount increases, the SES Owner shall remit the increased financial security to West Mead Township within 30 days of the approval of the updated decommissioning security estimate by West Mead Township. If the decommissioning security amount decreases by greater than 10%, the West Mead Township Supervisors shall release from security any amounts held in excess of 110% of the updated decommission cost estimate.

- (e) Decommissioning security estimates shall be subject to review and approval by West Mead Township and the SES Developer/Owner shall be responsible for the reasonable administrative, legal, and engineering costs incurred by the West Mead Township for such review.
- (f) Prior to final approval of the Land Development Plans the SES Owner or Developer shall enter into a Decommissioning Agreement with West Mead Township outlining the responsibility of the parties under this Agreement as to the Decommissioning of the SES.

**SECTION 5:**

A new section 634 entitled “Accessory Solar Energy Systems” shall be added to Article 6 of the West Mead Township Zoning Ordinance which shall read as follows:

**634 ACCESSORY SOLAR ENERGY SYSTEM (SES)**

**634.1. Location.** Accessory Solar Energy Systems (ASES) shall be permitted as a use by right in all zoning districts subject to the requirements and standards set forth below.

**634.2 Design, Construction and Maintenance.** The ASES layout, design, installation, and ongoing maintenance 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), or other similar certifying organizations, and shall comply with the PA Uniform Construction Code, National Electrical Code (NEC) and with all other applicable fire and life safety requirements.

Upon completion of installation, the ASES shall be maintained in good working order in accordance with standards of the codes under which the ASES was constructed. Failure of the property owner to maintain the ASES in good working order is grounds for appropriate enforcement actions by West Mead Township Supervisors in accordance with applicable ordinances.

All on-site utility, connection lines, and plumbing shall be placed underground to the greatest extent reasonably possible.

**634.3 Glare.** All ASES shall be placed such that concentrated solar radiation or glare does not project onto nearby structures or roadways. Exterior surfaces shall have a non-reflective finish. The applicant has the burden of proving that any glare produced does not have significant adverse impact on neighboring or adjacent uses either through siting or mitigation.

**634.4 Roof Mounted and Wall Mounted Accessory Solar Energy Systems:**

- (a) A roof mounted or wall mounted ASES may be located on a principal or accessory building.

(b) The total height of a building with an ASES shall not exceed by more than 3 feet above the maximum building height specified for principal or accessory buildings within the applicable zoning district.

(c) Wall mounted ASES shall comply with the setbacks for principal and accessory structures in the underlying zoning districts.

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

(e) For roof and wall mounted systems, the applicant 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.

#### 634.5 Ground Mounted Accessory Solar Energy Systems:

*Setbacks.* The minimum yard setbacks from side and rear property lines shall be equivalent to the accessory structure setback in the applicable zoning district.

A ground mounted ASES shall not be located in the required front yard, unless the principal structure is set back more than 250 ft. from the Front Lot Line or road right of way, in which case, the ASES shall be set back not less than 200 ft. from the Front Lot Line or road right of way.

*Height.* Ground mounted ASES shall not exceed 15 feet in height above the ground elevation surrounding the systems.

### SECTION 7:

A new Article 9 entitled "CONDITIONAL USES" shall be substituted for the existing Article 9, and it shall read as follows:

**901 – Conditional Use.** A Conditional Use is a use which can be permitted in Zoning Districts where listed as such in this Ordinance, by action of the Board of Supervisors, if it meets the standards for such use as established by this Zoning Ordinance.

**902 – Application For Conditional Use.** An application for a Conditional Use shall be filed with the Zoning Officer. At a minimum the application shall contain the following information:

- (a) Name, address, phone number and contact information for applicant and landowners,
- (b) Location and description of the land including size, highway access, and its features.
- (c) Description of existing use and uses of the surrounding land.
- (d) Present zoning district.
- (e) Description of proposed use including type of activity involved, impact of employees, visitors, and traffic.
- (f) A plan of the proposed site for the conditional use showing the location and size of all existing and new buildings, parking and loading areas, and their setbacks from adjoining properties, traffic access and circulation, landscaping features, refuse and service areas, utility services, signs, yard areas and such other information as the

Township Supervisors may require to determine if the proposed use meets the requirements of this Ordinance.

- (g) A narrative statement to include (1) an evaluation of the effect of noise, glare, odor, fumes, and vibrations on adjoining property; (2) discussion of the general compatibility with other properties in the district; and (3) an explanation of the relationship of the proposed use to the Township's Comprehensive Plan.
- (h) Any such other materials as may explain how the proposed use will comply with the requirements established in Section 904 of this Ordinance.

**903 – Procedure For Conditional Uses.** The completed application shall be filed with the Zoning Officer together with payment of an application fee in the amount set by Township Supervisors. The Zoning Officer shall refer the application to the Township Planning Commission and the Township Supervisors. The Planning Commission may review the proposal and forward its recommendations to the Supervisors. The Planning Commission shall forward its recommendation within 45 days of the date the application was accepted by the Zoning Officer as complete; failure to act within this allotted time shall be considered a favorable recommendation.

Within 60 days of the date the application was accepted by the Zoning Officer as complete; the Township Supervisors, after giving public notice, shall hold a hearing on the proposal. The Supervisors, within 45 days after the termination of the hearing, shall render a decision. When the application is contested or denied; the decision shall be accompanied by findings of fact and conclusions of law in support of its findings.

Upon approval by Township Supervisors the application shall be appropriately signed and all development, construction and use shall be in accordance with the approved application and accompanying plan unless a revised plan is submitted and approved. Any development contrary to the approved plan shall constitute a violation of this Ordinance. In initially approving a conditional use, where not in conflict with other provisions of this Ordinance, and where supported by appropriate documentation, future expansions of the use may be included in Supervisor's approval.

**904 – Criteria for Approval.** A conditional use shall be approved only if it meets the following criteria:

- (a) The purpose of the zone in which the requested Conditional Use is to be located and the compatibility of the requested Conditional Use with existing and potential land uses on adjacent tracts of ground;
- (b) whether the specific site is an appropriate location for the use, structure or condition;
- (c) whether the use developed will adversely affect the neighborhood;

- (d) whether the use will create undue nuisance or serious hazard to vehicles or pedestrians;
- (e) whether adequate and appropriate public utilities, road systems and public services and systems for storm drainage and sewage facilities, and public safety facilities exist or will be provided to ensure the proper and safe operation of the proposed use;
- (f) whether the use will create noise, glare, vibrations, electrical disturbances or odor that will have an adverse effect on the neighborhood and properties generally in the district; and,
- (g) whether satisfactory provision and arrangement has been made concerning the following:
  - (1) ingress and egress to the property and structure thereon with particular reference to automotive and pedestrian safety and convenience, traffic flow, control and access in case of fire or other emergency;
  - (2) off-street parking and loading areas;
  - (3) waste collection, storage and disposal;
  - (4) utilities, with reference to location, availability and compatibility;
  - (5) screening and buffering with reference to type, dimensions and character;
  - (6) signs, if any, and proposed exterior lighting with reference to glare, traffic safety, economic effect and compatibility and harmony with properties in the district; and,
  - (7) required yards and open spaces.

**905 – Review Conditions.** The Township Supervisors may, in addition to those specifically provided in this Ordinance, attach such reasonable conditions and safeguards as it determines is necessary to meet the intent of this Ordinance, to protect adjacent property and to further the public interest. All development, construction and use shall be in accordance with any approved plan and all attached conditions, unless a revised plan is submitted and approved. Any development contrary to the approved plan shall constitute a violation of this Ordinance.

**906 – Expiration Of Conditional Use Approval.** A conditional use approval shall be considered to authorize only one particular use as approved by Township Supervisors and if the improvements described in the approval have not begun within one year from the date of approval, the approval shall expire. If, for any reason, the conditional use shall cease or be abandoned for 1 year or more, it shall no longer be considered as authorized unless a new application is filed and approved.