BLUE LAKE TOWNSHIP

COUNTY OF KALKASKA
STATE OF MICHIGAN

ORDINANCE NO. _____

ADOPTED: _____

EFFECTIVE: _____

AN ORDINANCE TO AMEND THE BLUE LAKE TOWNSHIP ZONING ORDINANCE TO PROVIDE ZONING REGULATIONS FOR SOLAR ENERGY SYSTEMS WITHIN THE TOWNSHIP.

BLUE LAKE TOWNSHIP, KALKASKA COUNTY, MICHIGAN, ORDAINS:

SECTION 1
AMENDMENT TO ARTICLE II OF THE TOWNSHIP ZONING ORDINANCE

Article II Section 2.02 of the Blue Lake Township Zoning Ordinance is hereby amended to add new definitions related to solar energy systems, in alphabetical order, to read as follows:

Accessory System: A solar energy system that is an accessory to the primary use of a property, such as a residence or a commercial building, and that provides electricity intended for use by a primary structure located on the same parcel as the SES. Accessory systems can range in size and configuration. They typically range from being small enough to power an exterior light fixture to being large enough to power electricity for multiple buildings, for instance livestock or equipment barns. Accessory systems can be affixed to the roof or wall of a building or can be freestanding, ground-mounted structures.

Accessory Ground-Mounted Solar Energy System: A ground-mounted Accessory System.

Building-Integrated Solar Energy System: A solar energy system that is an integral part of a primary or accessory building or structure (rather than a separate mechanical device), replacing or substituting for an architectural or structural component of the building or structure. Building-integrated systems include, but are not limited to, photovoltaic or hot water solar energy systems that are contained within roofing materials, windows, skylights, and awnings.

Dual Use: A solar energy system that employs one or more of the following land management and conservation practices throughout the project site:

- **Pollinator Habitat:** Solar sites designed to meet a score of 76 or more on the Michigan Pollinator Habitat Planning Scorecard for Solar Sites.
- **Conservation Cover:** Solar sites designed in consultation with conservation organizations that focus on restoring native plants, grasses, and prairie with the aim of protecting specific species (e.g., bird habitat) or providing specific ecosystem services (e.g., carbon sequestration, soil health).
- **Forage:** Solar sites that incorporate rotational livestock grazing and forage production as part of an overall vegetative maintenance plan.
- **Agrivoltaics:** Solar sites that combine raising crops for food, fiber, or fuel, and generating electricity within the project area to maximize land use.

Ground-Mounted Solar Energy System: A solar energy system mounted on support posts, like a rack or pole, that are attached to or rest on the ground.

Invasive Plant: Non-native (or alien) to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

Kilowatt (KW): A unit of electrical power equal to one thousand (1,000) watts.

Maximum Tilt: The maximum angle of a solar array (i.e., most vertical position) for capturing solar radiation as compared to the horizon line of the natural grade immediately beneath the solar array.

Megawatt (MW): A unit of electrical power equal to one million (1,000,000) watts.

Minimum Tilt: The minimal angle of a solar array (i.e., most horizontal position) for capturing solar radiation as compared to the horizon line of the natural grade immediately beneath the solar array.

Nameplate Capacity: means the designed full-load sustained generating output of a solar energy system. Nameplate capacity shall be determined by reference to the sustained output of a solar energy system even if components of the system are located on different lots, whether contiguous or noncontiguous. Nameplate capacity shall also include components of the system that are inoperable or designed and part of the site plan but not yet constructed.

Non-Participating Lot(s): One or more lots for which there is not a signed lease or easement for development of a principal-use SES associated with the applicant project.

Participating Lot(s): One or more lots under a signed lease or easement for development of a principal-use SES associated with the applicant project.

Photovoltaic (PV) System: A semiconductor material that generates electricity from sunlight.

Principal-Use Solar Energy System: A ground-mounted solar energy system that captures and converts solar energy into electricity, for the purpose of sale or for use in locations other than solely the solar energy system property, and with a nameplate capacity of 50 megawatts or more. A principal-use solar energy system may be located on more than 1 parcel of property, including noncontiguous parcels, but shares a single point of interconnection to the grid. Principal-use solar energy systems with a nameplate capacity of less than 50 megawatts are not permitted.

Repowering: Reconfiguring, renovating, or replacing an SES to maintain, increase, or decrease the power rating of the SES within the existing project footprint.

Roof-Mounted Solar Energy System: A solar energy system mounted on racking that is attached to or ballasted on the roof of a building or structure.

Solar Array: A photovoltaic panel or collection of panels and/or collectors in a solar energy system that collects solar radiation.

Solar Carport: A solar energy system of any size that is installed on a structure that is accessory to a parking area, and which may include electric vehicle supply equipment or energy storage facilities. Solar panels affixed on the roof of an existing carport structure are considered a Roof-Mounted SES.

Solar Energy System (SES): A photovoltaic system for generating electricity, including all above and below ground equipment or components required for the system to operate properly and to be secured to a roof surface, the ground or building integrated. This includes any necessary operations and maintenance building(s), but does not include any temporary construction offices, substation(s) or other transmission facilities between the SES and the point of interconnection to the electric grid.

Wildlife-Friendly Fencing: A fencing system with openings that allow wildlife to traverse over or through a fenced area.

SECTION 2
AMENDMENT TO ARTICLE III TO ADD A NEW SECTION 3.22 TO PROVIDE GENERAL SOLAR ZONING REQUIREMENTS

Article III of the Blue Lake Township Zoning Ordinance is hereby amended to add a Section 3.22 titled "Accessory Use Solar Energy Systems" to read as follows:

Section 3.22 Accessory Use Solar Energy Systems

Roof-Mounted SES, Accessory Ground-Mounted SES, and Building-Integrated SES are a permitted use by right in all zoning districts where structures of any sort are allowed, and shall meet the following requirements:

A. ROOF-MOUNTED SES

1. **Height:** Roof-Mounted SES shall not exceed 1 foot above the finished roof and are exempt from any rooftop equipment or mechanical system screening.

2. **Application:** All SES applications must include site plan. Applications for Roof-Mounted SES must include horizontal and vertical elevation drawings that show the location and height of the SES on the building and dimensions of the SES.

B. ACCESSORY GROUND-MOUNTED SES

1. **Height:** Ground-Mounted SES shall not exceed 16 feet measured from the natural grade of the ground immediately beneath the SES to the top of the system when oriented at maximum tilt.

2. **Setbacks:** A Ground-Mounted SES must comply with the zoning districts setbacks for structures. Setback distance is measured from the property line to the closest point of the SES at minimum tilt.

3. **Lot Coverage:** The area of the solar array shall not exceed the lot coverage restrictions for accessory structures within the zoning district.

4. **Visibility (Residential):** A Ground-Mounted SES in residential districts shall be located in the side or rear yard to minimize visual impacts from the rights-of-way.

5. **Application:** All SES applications must include a site plan. Applications for Ground Mounted SES must include drawings that show the location of the system on the property, height, tilt features (if applicable), the primary structure, accessory structures, and setbacks to property lines. Accessory use applications that meet the ordinance requirements shall be granted administrative approval.

C. BUILDING-INTEGRATED SES

1. Building-Integrated SES are subject only to zoning regulations applicable to the structure or building and not subject to accessory ground or roof-mounted SES permits.

SECTION 3
AMENDMENT TO ARTICLE VII OF THE BLUE LAKE TOWNSHIP ZONING ORDINANCE TO ADD A NEW SECTION 7.01.17 TO PROVIDE STANDARDS FOR PRINCIPAL-USE SOLAR ENERGY SYSTEMS AS A SPECIAL LAND USE

Article VII of the Blue Lake Township Zoning Ordinance is hereby amended by adding a new Section 7.01.17 titled "Principal-Use Solar Energy Systems" to read as follows:

Section 7.01.17 Principal-Use Solar Energy Systems:

A principal-use SES is a special land use in the Conservation Resource, Agricultural, and Commercial and Industrial zoning districts specifically and is not permitted in any other zoning districts. A principal-use SES shall meet all the following requirements:

1. **Height:** Total height for a large principal-use SES shall not exceed the maximum height of 16 feet when measured from the natural grade of the ground immediately below the system to the top of the system when oriented at maximum tilt. However, other structures aside from the solar panel shall not exceed twenty-five (25) feet measured from the ground to the highest point of the structure.

2. **Setbacks:** Setback distance shall be measured from the property line or road right-of-way to the closest point of the solar array at minimum tilt or any other SES components and as follows:

a. One hundred (100) feet from any property line of a non-participating lot.

b. One hundred (100) feet from any public or private right-of-way or easement.

c. Three hundred (300) feet from any existing non-participating dwelling unit.

d. A principal-use SES is not subject to property line setbacks for common property lines of two or more participating lots, except that road right-of-way setbacks shall apply.

e. Four hundred (400) feet from a stream, river, pond, lake, wetland, drain, or lands located within a 100-year floodplain as identified by the Federal Emergency Management Agency.

3. **Application:** All Principal-Use Solar Energy System applications also require site plan review. In addition to the application general requirements for special land use and site plan review, the following must also be included:

A. The complete name, address, and telephone number of the applicant.

B. The planned date for the start of construction and the expected duration of construction.

C. A description of the energy facility, including a site plan as described in Section 224 of the Clean and Renewable Energy Waste Reduction Act, 2008 PA 295, MCL 460.1224. The following items must be shown on the site plan:

i. A map of all properties upon which any component of a facility or ancillary feature would be located, and all properties within one thousand (1,000) feet of those components or features. This should indicate the location of all existing structures within that range and shall identify such structures as occupied or vacant.

ii. Lot lines and required setbacks shown and dimensioned including horizontal and vertical elevation drawings that show the location and height of the Solar Energy System on the land and dimensions of the Solar Energy System.

iii. Size and location of existing and proposed water utilities, including any proposed connections to public or private community sewer or water supply systems.

iv. A map of any existing overhead and underground major facilities for electric, gas, or telecommunications transmission within the facility and surrounding area.

v. The location and size of all surface water drainage facilities, including source, volume expected, route, and course to final destination.

vi. A map depicting the proposed facilities, adjacent properties, all structures within participating and adjacent properties, property lines, and the projected sound isolines along with the modeled sound isolines including the limit described in this Ordinance.

D. A description of the expected use of the energy facility.

E. Expected public benefits of the proposed energy facility.

F. The expected direct impacts of the proposed energy facility on the environment and natural resources and how the applicant intends to address and mitigate these impacts.

G. Information on the effects of the proposed energy facility on public health and safety.

H. A description of the portion of the community where the energy facility will be located.

I. A statement and reasonable evidence that the proposed energy facility will not commence commercial operation until it complies with applicable state and federal environmental laws, including, but not limited to, the Natural Resources and Environmental Protection Act, 1994 PA 451, MCL 324.101 to 324.90106.

J. Evidence of consultation, before submission of the application, with the Department of Environment, Great Lakes, and Energy and other relevant state and federal agencies before submitting the application, including, but not limited to, the Department of Natural Resources and the Department of Agriculture and Rural Development.

K. The Soil and Economic Survey Report under Section 60303 of the Natural Resources and Environmental Protection Act, 1994 PA 451, MCL 324.60303, for the county where the proposed energy facility will be located.

L. Interconnection queue information for the applicable regional transmission organization.

M. If the proposed site of the energy facility is undeveloped land, a description of feasible alternative developed locations, including, but not limited to, vacant industrial property and brownfields, and an explanation of why they were not chosen.

N. If the energy facility is reasonably expected to have an impact on television signals, microwave signals, agricultural global position systems, military defense radar, radio reception, or weather and doppler radio, a plan to minimize and mitigate that impact. Information in the plan concerning military defense radar is exempt from disclosure under the Freedom of Information Act, 1976 PA 442, MCL 15.231 to 15.246, and shall not be disclosed by the Township or the electric provider or independent power producer except pursuant to court order.

O. A stormwater assessment and a plan to minimize, mitigate, and repair any drainage impacts at the expense of the applicant. The applicant shall make reasonable efforts to consult with the county drain commissioner before submitting the application and shall include evidence of those efforts in its application.

P. A fire response plan and an emergency response plan.

   i. The fire response plan (FRP) shall include:

      1. Evidence of consultation or a good faith effort to consult with local fire department representatives to ensure that the FRP is in alignment with acceptable operating procedures, capabilities, resources, etc. If consultation with local fire department representatives is not possible, provide evidence of consultation or a good faith effort to consult with the State Fire Marshal or other local emergency manager.

      2. A description of all on-site equipment and systems to be provided to prevent or handle fire emergencies.

      3. A description of the anticipated types of fire emergencies likely to occur on or related to the project and contingency plans to be implemented in response to those emergencies.

      4. A commitment to review and update the FRP with fire departments, first responders, and county emergency managers at least once every three (3) years.

      5. An analysis of whether plans to be implemented in response to a fire emergency can be fulfilled by existing local emergency response capacity. The analysis should include identification of any specific equipment or training deficiencies in local emergency response capacity and recommendations for measures to mitigate deficiencies.

      6. Other information the applicant finds relevant.

ii. The emergency response plan (ERP) shall include:

1. Evidence of consultation or a good faith effort to consult with local first responders and county emergency managers to ensure that the ERP is in alignment with acceptable operating procedures, capabilities, resources, etc.

2. An identification of contingencies that would constitute a safety or security emergency (fire emergencies are to be addressed the separate fire response plan);

3. Emergency response measures by contingency;

4. Evacuation control measures by contingency;

5. Community notification procedures by contingency;

6. An identification of potential approach and departure routes to and from the facility site for police, fire, ambulance, and other emergency vehicles;

7. A commitment to review and update the ERP with fire departments, first responders, and county emergency managers at least once every three (3) years;

8. An analysis of whether plans to be implemented in response to an emergency can be fulfilled by existing local emergency response capacity, and identification of any specific equipment or training deficiencies in local emergency response capacity; and

9. Other information the applicant finds relevant.

Q. A report detailing the sound modeling results along with mitigation plans to ensure that sound emitted from the facilities will remain below the limit in this Ordinance throughout the operational life of the facilities.

R. Any other information regarding compliance with the requirements herein.

S. Any other information the Applicant deems relevant or wishes to present in support of its application.

4. **Fencing:** A large principal-use SES shall be secured with perimeter fencing to restrict unauthorized access. Perimeter fencing shall be at least seven (7) feet in height but no more than ten (10) feet in height. All access doors to principal-use SES and related components and structures shall be locked to prevent entry by unauthorized persons. Fencing is not subject to setbacks as a component of the principal-use SES. The Planning Commission may require wildlife-friendly fencing with openings that allow wildlife to traverse over or through a fenced area or Knox boxes and keys for emergency personnel access.

5. **Screening/Landscaping:** The Planning Commission shall require reasonable measures to minimize visual impacts by preserving existing natural vegetation, requiring new

vegetative screening or other appropriate measures. The Planning Commission shall determine such visual screening measures as may be required on a site-specific basis pursuant to the standards for Special Lands (or "Special land use") approval as specified in Article VI of this Ordinance, as most applicable to the circumstances. In making this determination the Planning Commission is specifically authorized to consider whether additional visual screening measures are appropriate where a system is proposed to be located on property adjacent to a residential use and/or a residential district zoning classification. All screening/landscaping shall be properly maintained throughout the life of the project including replacement of any dead landscaping within six months.

6**. Ground Cover:** A large principal-use SES shall include the installation of ground cover vegetation maintained for the duration of operation until the site is decommissioned. The applicant shall include a ground cover vegetation establishment and management plan as part of the site plan. Vegetation establishment must include control and prevention of invasive plant species (and noxious weed if local regulation applies). The following standards apply:

a. Ground cover at sites not enrolled in PA 116 shall be accomplished through a Dual Use, as defined in this ordinance.

b. Project sites that are included in a brownfield plan adopted under the Brownfield Redevelopment Financing Act, PA 381 of 1996, as amended, that contain impervious surface at the time of construction or soils that cannot be disturbed, are exempt from ground cover requirements.

7. **Lot Coverage:** A large principal-use SES shall not count towards the maximum lot coverage or impervious surface standards for the district.

8. **Land Clearing:** Land disturbance or clearing shall be limited to what is minimally necessary for the installation and operation of the system and to ensure sufficient all-season access to the solar resource given the topography of the land. Topsoil disturbed during site preparation (grading) on the property shall be retained on site.

9**. Environmental Impact**: The Planning Commission shall review potential impacts on wildlife, water, and other environmental factors present on the site and may impose additional requirements to preserve and protect endangered species or prevent negative impacts to adjacent parcels, including but not limited to requirements of EGLE and/or US Fish and Wildlife Service. All surface water runoff shall be effectively managed on-site.

10. **Access Drives:** New access drives within the SES shall be designed to minimize the extent of soil disturbance, water runoff, and soil compaction on the premises. The use of geotextile fabrics and gravel placed on the surface of the existing soil for the construction of temporary drives during the construction of the SES is permitted, provided that the geotextile fabrics and gravel are removed once the SES is in operation or completion of construction, whichever occurs first.

11. **Wiring:** SES wiring (including communication lines) shall be buried underground where practicable. Any above-ground wiring within the footprint of the SES shall be installed in accordance with all applicable codes and regulations.

12. **Lighting:** Principal-use SES lighting shall be limited to inverter locations only. Light fixtures shall have downlit shielding and be placed to keep light on-site and glare away from adjacent properties, bodies of water, and adjacent roadways. Flashing or intermittent lights are prohibited.

13. **Glare**: All solar energy system location/tilt components shall be designed, maintained and operated to avoid glare and reflection of sunlight and other artificial lighting which may affect adjacent properties, navigation by air, water, and roadway. Solar energy system designs shall comply with all Federal Aviation Administration siting requirements.

14. **Public Safety:** The ERP and FRP shall provide reasonable protection of the public health, welfare and safety, including but not limited to: an emergency shutdown procedure in place and safety plans to include electrical, fire, smoke, and hazardous materials release, emergency response protocols and identification of typical hazards related to, electrical, fire, smoke and hazardous materials pertinent to the facility. Upon request, all principal-use SES facilities shall provide first responder training at the site.

15. **Signage:** An area up to 120 square feet may be used for signage at the project site. Any signage shall meet the setback, illumination, and materials/construction requirements of the zoning district for the project site.

16. **Sound:** The sound pressure level of a large principal-use SES and all ancillary solar equipment shall not exceed 55 dBA (Leq (1-hour)) as measured at the property line of any adjoining non-participating lot. The site plan shall include modeled sound isolines extending from the sound source to the property lines. Within three (3) months after commercial operation begins, the Applicant shall be required to obtain an independent third-party sound monitoring report detailing the actual sound pressure levels of the SES and equipment to verify compliance with modeled sound plans. Where the report finds sound pressure levels above the limits in this Section, the Applicant must present a remediation plan to the Zoning Administrator and implement such plans within three (3) months of the approval of the plan by the Zoning Administrator. The Applicant may be required to obtain further sound monitoring reports to prove the effectiveness of remediation.

17. **Repowering/Upgrading:** In addition to repairing or replacing SES components to maintain the system, a principal-use SES may at any time be repowered, without the need to apply for a new special land use permit, by reconfiguring, renovating, or replacing the SES to increase the power rating within the existing project footprint. A proposal to change the project footprint of an existing SES shall be considered a new application, subject to the site plan application requirements and review procedure contained in the Township Zoning Ordinance and in effect at the time of the request. Legal services and other studies

resulting from an application to modify an SES will be reimbursed to the Township by the SES owner in compliance with established escrow policy to alter the footprint of the SES.

18. **Decommissioning:** A decommissioning plan is required at the time of application. An approved decommissioning plan shall be put into a recordable decommissioning agreement acceptable to the township attorney or designated agent.

a. The decommissioning plan shall include:

i. The anticipated manner in which the project will be decommissioned, including a description of which above-grade and below-grade improvements will be removed, retained (e.g., access drive, fencing), or restored for viable reuse of the property consistent with the zoning district. Pursuant to this requirement, the decommissioning plan shall be required to include that any structures up to forty-eight (48) inches below-grade shall be removed for disposal.

ii. The projected decommissioning costs shall reflect the actual cost of decommissioning the project. Salvage value shall not be included in the cost of decommissioning the project.

iii. The method of ensuring that funds will be available for site decommissioning and stabilization (in the form of surety bond or cash deposit).

b. A review of the amount of the surety bond, based on inflation, and current removal costs shall be completed every 4 years, for the life of the project, and approved by the Planning Commission. A SES owner may at any time:

i. Proceed with the decommissioning plan approved by the Planning Commission, and remove the system as indicated in the most recent approved plan; or

ii. Amend the decommissioning plan with Planning Commission approval and proceed according to the revised plan.

c. Decommissioning of a SES must commence when the soil is dry to prevent soil compaction and must be complete within 18 months after abandonment. A SES that has not produced electrical energy for 12 consecutive months shall prompt an abandonment hearing.

i. Restoration shall include bringing soil and topography of the land to their pre-development composition where possible. Where restoring the original pre-development composition is unduly expensive or impossible, the soil and topography shall be returned to a form usable for permitted uses in the zoning district, including the removal of any contamination created as a result of the project. Soil tests shall be required as part of the

decommissioning plan both before development and prior to the decommissioning.

19. **Transfers**. No transfer in ownership of the SES shall occur prior to providing 60 days' notice to the Township and upon Township approval verifying that the new owner agrees to carry out the terms of the special land use and site plan approval. The Applicant shall be required in their application to provide a guarantee that they shall receive written agreement from any new owner that the new owner will abide by all restrictions and conditions described in this Ordinance, the special land use plan, and site approval.

20. **Host Community Agreement**. A principal-use SES special land use permit holder shall enter into a host community agreement with the Township prior to the start of commercial operation of the project. The host community agreement shall require that, upon commencement of any operation, the energy facility owner must pay the Township $3,000.00 per megawatt of nameplate capacity located within the Township. The payment shall be used by the Township for police, fire protection, public safety, or infrastructure. The Township and permit holder may agree to dedicate all or a portion of the funds to another lawful public purpose.

21. **Fee**. By resolution, the Township may establish an application fee and escrow policy to cover the Township's reasonable costs of review and processing of the site plan, including but not limited to staff, attorney, engineer, planning, environmental, or other professional costs.

SECTION 4
SEVERABILITY OF INVALID PROVISIONS

If any section, paragraph, clause, or provision of this Ordinance shall be held invalid, its invalidity shall not affect any other provisions of this Ordinance that can be given effect without the invalid section, paragraph, clause, or provision, and for this purpose, the sections, paragraphs, clauses, and provisions of this Ordinance are hereby declared to be severable.

SECTION 5
REPEAL

All other ordinances, resolutions, orders, or parts of ordinances herewith in effect that are in conflict with this ordinance are hereby repealed only to the extent necessary to give this Ordinance full force and effect.

SECTION 6
EFFECTIVE DATE

Pursuant to Section 401 of the Michigan Zoning Enabling Act (MCL 125.3401), this Ordinance shall take effect eight (8) days after publication of this Ordinance, or a summary of the regulatory effect thereof, which publication shall occur in a newspaper of general circulation in the Township within fifteen (15) days after adoption.

This Ordinance is hereby declared to have been passed and adopted by Blue Lake Township, County of Kalkaska, State of Michigan, at a regularly scheduled meeting thereof duly called and held on this ____ day of _____, 2025.