Chapter 7: Special Use Permits

Note: *The following text is excerpted from Chapter 7 of the Merritt Township zoning ordinance.*

SECTION 7.23 WIND POWER

Please see the Michigan Guidelines for Wind Energy Systems as amended for siting principles.

a. On Site Use Wind Energy Systems: An On Site Use wind energy system is intended to primarily serve the needs of the consumer. An On Site Use wind energy system with a tower higher than 20 meters shall be considered a Special Land Use. On Site Use wind energy systems with no towers or towers 20 meters or less shall be a Permitted Use in all zoning classifications where structures of any sort are allowed subject to the following requirements. Anemometer towers more than 20 meters in height used to conduct a wind site assessment for possible installation of an On Site Use wind energy system shall also be a Special Land Use.

   Prior to the installation of an On Site Use wind energy system with a tower higher than 20 meters, an application for a Special Land Use permit shall be filed with the local government that will include:

   a) applicant identification,
   b) a site plan,
   c) documentation that sound pressure level, construction code, tower, interconnection (if applicable), and safety requirements have been met, and
   d) proof of the applicant's public liability insurance.

   1) Property Set-back: The distance between an On Site Use wind energy system and the owner's property lines shall be at least 1 ½ times the height of the wind energy system tower including the top of the blade in its vertical position. The distance between an anemometer tower and the owner's property lines shall be at least 1 ½ times the height of the tower. No part of the wind energy system structure, including guy wire anchors, may extend closer than ten feet to the owner's property lines.

   2) Sound Pressure Level: On Site Use wind energy systems shall not exceed 55 dB(A) at the property line closest to the wind energy system. This sound pressure level may be exceeded during short-term events such as utility outages and/or severe wind storms. If the ambient sound pressure level exceeds 55 dB(A), the standard shall be ambient dB(A) plus 5 dB(A).

3) Construction Codes, Towers, & Interconnection Standards: On Site Use wind energy systems including towers shall comply with all applicable state construction and electrical codes and local building permit requirements. On Site Use wind energy systems including towers shall comply with Federal Aviation Administration requirements, the Michigan Airport Zoning Act (Public Act 23 of 1950, MCL 259.431 et seq.), the Michigan Tall Structures Act (Public Act 259 of 1959, MCL 259.481 et seq.), and local jurisdiction airport overlay zone regulations. An interconnected On Site Use wind energy system shall comply with Michigan Public Service Commission and Federal Energy Regulatory Commission standards. Off-grid systems are exempt from this requirement.

4) Safety: An On Site Use wind energy system shall have automatic braking, governing, or a feathering system to prevent uncontrolled rotation or over speeding. All wind towers shall have lightning protection. If a tower is supported by guy wires, the wires shall be clearly visible to a height of at least six feet above the guy wire anchors. The minimum vertical blade tip clearance from grade shall be 20 feet for a wind energy system employing a horizontal axis rotor.

b. Wind Site Assessment for Utility Grid Wind Energy Systems: Prior to construction of a Utility Grid wind energy system, a wind site assessment is conducted to determine the wind speeds and the feasibility of using the site. Installation of anemometer towers also known as meteorological or "Met" towers shall be considered a Special Land Use.

Prior to the installation of the tower, an application for a Special Land Use permit shall be filed with the local government that wilt include:

1) applicant identification,

2) a site plan,

3) a copy of that portion of the applicant's lease with the land owner granting authority to install the Met tower and requiring the applicant to remove all equipment and restore the site after completion of the wind site assessment, and

4) proof of the applicant's public liability insurance. The distance from the center of a Met tower and the property lines between the leased property and the non-leased property shall be at least the height of the Met tower. Leased property can include more than one piece of property and the requirement shall apply to the combined properties.

c. Utility Grid Wind Energy Systems: A Utility Grid wind energy system is designed and built to provide electricity to the electric utility grid. Utility Grid wind energy systems shall be considered a Special Land Use. Prior to the installation of a Utility Grid wind energy system, an application for a Special Land Use permit shall be filed with the local government and shall include the following:

1) Applicant Identification: Applicant name, address, and contact information.

2) Project Description: A general description of the proposed project including a legal description of the property or properties on which the project would be located and an anticipated construction schedule.

3) Site Plan: The site plan shall include maps showing the physical features and land uses of the project area, both before and after construction of the proposed project.

   The site plan shall include

   a) the project area boundaries,

   b) the location, height, and dimensions of all existing and proposed structures and fencing,

   c) the location, grades, and dimensions of all temporary and permanent on-site and access roads from the nearest county or state maintained road,

   d) existing topography,

   e) water bodies, waterways, wetlands, and drainage channels, and

   f) all new infrastructure above ground related to the project.

4) Insurance: Proof of the applicant's public liability insurance.

5) Consent Documents: Copies of any written waivers from neighboring property owners.

6) Sound Pressure Level: Copy of the modeling and analysis report.

7) Certifications: Certification that applicant has complied or will comply with all applicable state and federal laws and regulations. Copies of all such permits and approvals that have been obtained or applied for at time of the application.

8) Visual Impact: Visual simulations of how the completed project will look from four viewable angles.

9) Environmental Impact: Copy of the Environmental Impact analysis.

10) Avian and Wildlife Impact: Copy of the Avian and Wildlife Impact analysis.

11) Shadow Flicker: Copy of the Shadow Flicker analysis.

12) Manufacturers' Material Safety Data Sheet(s): Documentation shall include the type and quantity of all materials used in the operation of all equipment including, but not limited to, all lubricants and coolants.

13) Decommissioning: Copy of the decommissioning plan.

14) Complaint Resolution: Description of the complaint resolution process.

15) Application Fee: An applicant shall remit an application fee in the amount specified in the fee schedule adopted by the local government. This schedule shall be based on the cost of the application review and may be adjusted from time to time. All review costs, meeting costs, Township expenses, and professional assistance pertaining to a Utility grid wind energy application shall be covered by the applicant's required escrow fee that must accompany the application fee.

d. The Utility Grid wind energy system project shall meet the following standards and requirements:

1) Overlay Zone: If the site of the proposed project is subject to an overlay zone, the proposed project shall meet or exceed the applicable standards in the overlay zone.

2) Property Set-Back:

a. Setbacks from Habitable Structures:

i. The distance between a Utility Grid wind energy system and habitable structures located on leased property shall be at least one thousand four hundred feet (1,400').

ii. The distance between a Utility Grid wind energy system and habitable structures located on property that is not leased and not participating in a Utility grid wind energy system shall be at least two thousand six hundred forty feet (2,640').

b. The distance between a Utility Grid wind energy system and the nearest edge of adjacent road rights of way shall be at least thirteen hundred and twenty feet (1320').

c. Property Line Setbacks:

i. Leased Property: The distance between a utility grid wind energy system and the property lines of leased property shall be at least 1.0 times the height of the turbine including the height of the rotor.

ii. Non-Leased Property: The distance between a utility grid wind energy system and the property lines of non-leased and non-participating property shall be at least thirteen hundred and twenty feet (1320').

d. The distance between a Utility Grid wind energy system and the nearest edge of the right of way for state highway M-15 shall be at least two thousand six hundred forty feet (2,640').

e. The distance between a Utility Grid wind energy system and the nearest edge of the right of way for state highway M-138 shall be at least two thousand six hundred forty feet (2,640').

f. The distance between a Utility Grid wind energy system and the nearest railroad shall be at least 1.0 times the height of the turbine including the height of the rotor.

3) SCADA (supervisory control and data acquisition) or meteorological (Met) towers shall also comply with the property set-back requirement. The set-back shall be at least the height of the SCADA or Met tower. An Operations and Maintenance Office building, a sub-station, or ancillary equipment shall comply with any property set-back requirement that may be applicable to that type of building or equipment. Overhead transmission lines and power poles shall comply with the set-back requirements applicable to public utilities.

4) Sound Pressure Level: The sound pressure level generated by a Utility Grid wind energy system shall not exceed 40 dB(A) measured at the property lines between leased and non-leased property. This sound pressure level shall not be exceeded for more than 3 minutes in any hour of the day. If the ambient sound pressure level exceeds 40 dB(A), the standard shall be ambient dB(A) plus 5 dB(A).

As part of the application and prior to installation, the applicant shall provide modeling and analysis that will confirm that the Utility Grid wind energy system will not exceed the maximum permitted sound pressure levels. Modeling and analysis shall conform to IEC 61400 and ISO 9613. After installation of the Utility Grid wind energy system, sound pressure level measurements shall be done by a third party, qualified professional according to the procedures in the most current version of ANSI S12.18. All sound pressure levels shall be measured with a sound meter that meets or exceeds the most current version of ANSI S1.4 specifications for a Type II sound meter. Documentation of the sound pressure level measurements shall be provided to the local government within 60 days of the commercial operation of the project.

5) Construction Codes, Towers, and Interconnection Standards: Utility Grid wind energy systems including towers shall comply with all applicable state construction and electrical codes and local building permit requirements. Utility Grid wind energy systems including towers shall comply with Federal Aviation Administration requirements, the Michigan Airport Zoning Act (Public Act 23 of 1950, MCL 259.431 et seq.), the Michigan Tall Structures Act (Public Act 259 of 1959, MCL 259.481 et seq.), and local jurisdiction airport overlay zone regulations. The minimum FAA lighting standards shall not be exceeded. All tower lighting required by the FAA shall be shielded to the extent possible to reduce glare and visibility from the ground. The tower shaft shall not be illuminated unless required by the FAA. Utility Grid wind energy systems shall comply with applicable utility, Michigan Public Service Commission, and Federal Energy Regulatory Commission interconnection standards.

6) Safety: All Utility Grid wind energy systems shall be designed to prevent unauthorized access to electrical and mechanical components and shall have access doors that are

kept securely locked at all times when service personnel are not present. All spent lubricants and cooling fluids shall be properly and safely removed in a timely manner from the site of the wind energy system. A sign shall be posted near the tower or Operations and Maintenance Office building that will contain emergency contact information. Signage placed at the road access shall be used to warn visitors about the potential danger of falling ice. The minimum vertical blade tip clearance from grade shall be 20 feet for a wind energy system employing a horizontal axis rotor.

7) Visual Impact: Utility Grid wind energy system projects shall use tubular towers and all Utility Grid wind energy systems in a project shall be finished in a single, non-reflective matte finished color. A project shall be constructed using wind energy systems of similar design, size, operation, and appearance throughout the project. No lettering, company insignia, advertising, or graphics shall be on any part of the tower, hub, or blades. Nacelles may have lettering that exhibits the manufacturer's and/or owner's identification. The applicant shall avoid state or federal scenic areas and significant visual resources listed in the local unit of government's comprehensive plan.

8) Environmental Impact: The applicant shall have a third party, qualified professional conduct an analysis to identify and assess any potential impacts on the natural environment including, but not limited to wetlands and other fragile ecosystems, historical and cultural sites, and antiquities. The applicant shall take appropriate measures to minimize, eliminate or mitigate adverse impacts identified in the analysis.

   The applicant shall identify and evaluate the significance of any net effects or concerns that will remain after mitigation efforts. The applicant shall comply with applicable parts of the Michigan Natural Resources and Environmental Protection Act (Act 451 of 1994, MCL 324.101 et seq.) including but not limited to Part 31 Water Resources Protection (MCL 324.3101 et seq.), Part 91 Soil Erosion and Sedimentation Control (MCL 324.9101 et seq.), Part 301 Inland Lakes and Streams (MCL 324.30101 et seq.), Part 303 Wetlands (MCL 324.30301 et seq.), Part 323 Shoreland Protection and Management (MCL 324.32301 et seq.), Part 325 Great Lakes Submerged Lands (MCL 324.32501 et seq.), and Part 353 Sand Dunes Protection and Management (MCL 324.35301 et seq.). The applicant shall be responsible for making repairs to any public roads damaged by the construction of the Utility Grid wind energy system.

9) Avian and Wildlife Impact: The applicant shall have a third party, qualified professional conduct an analysis to identify and assess any potential impacts on wildlife and endangered species. The applicant shall take appropriate measures to minimize, eliminate or mitigate adverse impacts identified in the analysis. The applicant shall identify and evaluate the significance of any net effects or concerns that will remain after mitigation efforts.

   Sites requiring special scrutiny include wildlife refuges, other areas where birds are highly concentrated, bat hibernacula, wooded ridge tops that attract wildlife, sites that are frequented by federally and/or state listed endangered species of birds and bats, significant bird migration pathways, and areas that have landscape features known to attract large numbers of raptors.

At a minimum, the analysis shall include a thorough review of existing information regarding species and potential habitats in the vicinity of the project area. Where appropriate, surveys for bats, raptors, and general avian use should be conducted. The analysis shall include the potential effects on species listed under the federal Endangered Species Act and Michigan's Endangered Species Protection Law.

The analysis shall indicate whether a post construction wildlife mortality study will be conducted and, if not, the reasons why such a study does not need to be conducted. Power lines should be placed underground, when feasible, to prevent avian collisions and electrocutions. All above-ground lines, transformers, or conductors should comply with the Avian Power Line Interaction Committee (APLIC, http://www.aplic.org/) published standards to prevent avian mortality.

10) Electromagnetic Interference: No Utility Grid wind energy system shall be installed in any location where its proximity to existing fixed broadcast, retransmission, or reception antennae for radio, television, or wireless phone or other personal communication systems would produce electromagnetic interference with signal transmission or reception unless the applicant provides a replacement signal to the affected party that will restore reception to at least the level present before operation of the wind energy system. No Utility Grid wind energy system shall be installed in any location within the line of sight of an existing microwave communications link where operation of the wind energy system is likely to produce electromagnetic interference in the link's operation unless the interference is insignificant.

11) Shadow Flicker: The applicant shall conduct an analysis on potential shadow flicker at occupied structures. The analysis shall identify the locations of shadow flicker that may be caused by the project and the expected durations of the flicker at these locations from sun-rise to sun-set over the course of a year. The analysis shall identify problem areas where shadow flicker may affect the occupants of the structures and describe measures that shall be taken to eliminate or mitigate the problems.

12) Decommissioning: The applicant shall submit a decommissioning plan. The plan shall include:

a) the anticipated life of the project,

b) the estimated decommissioning costs net of salvage value in current dollars,

c) the method of ensuring that funds will be available for decommissioning and restoration, and 4) the anticipated manner in which the project will be decommissioned and the site restored.

13) Complaint Resolution: The applicant shall develop a process to resolve complaints from nearby residents concerning the construction or operation of the project. The process may use an independent mediator or arbitrator and shall include a time limit for acting on a complaint. The process shall not preclude the local government from acting on a complaint. During construction the applicant shall maintain and make available to nearby residents a telephone number where a project representative can be reached during normal business hours.

Chapter 7

Special Use Permits

Add the following text to the end of Table 2 for uses in the Agricultural (AG) District:

Chapter 3 – District Regulations

Uses By Special Permit
Use: Solar Energy Systems, Large
Regulated In: Section 7.26 – Solar Energy Systems, Large

Uses By Special Permit
Use: Solar Energy Systems, Small
Regulated In: Section 7.27 – Solar Energy Systems, Small

Add the following text as Section 7.26:

Section 7.26 – Solar Energy Systems, Large

The purpose and intent of these regulations is to allow and promote the use of renewable energy as an alternative energy source and to provide associated place, land development, installation, and construction regulations for large solar energy systems facilities subject to reasonable conditions that will protect the public health, safety, and welfare. These regulations establish minimum requirements for large solar farm facilities while promoting a renewable energy source in a safe, effective, and efficient manner.

1. Minimum Lot Size and Placement: A minimum of ten (10) acres of land is required. Large solar energy systems shall be located within two (2) miles of an electrical substation in existence at the time of adoption of these regulations.

2. Height Restrictions: All photovoltaic panels solar devices and support structures located on a large solar energy system facility shall be restricted to a maximum height of ten (10) feet when orientated at a maximum tilt as measured from the existing grade.

3. Road Frontage Setback: All photovoltaic solar devices and support structures associated with such facilities, including perimeter fencing, shall be setback a minimum of three hundred (300) feet from any road right-of-way line. This road frontage setback area may be occupied by other uses as allowed within the designated zoning district of the subject property.

4. Property Line Setbacks: Inaddition to the required road frontage setback, all photovoltaic solar devices and support structures associated with such facilities, including perimeter fencing, shall be setback a minimum of three hundred (300) feet from all other property lines.

5. Landscape Greenbelt: Landscaping shall consist of a minimum twenty (20) foot wide vegetated greenbelt around the entire perimeter of the facility. Such greenbelt shall be outside of any perimeter fencing associated with the facility. Landscaping within the greenbelt shall consist of (70) percent evergreen trees and (30) percent deciduous trees of a minimum of six (6) feet in height at the time of planting. All plantings shall be native species. All trees shall be planted a minimum of ten (10) feet apart measured on center and have a minimum projected height of twenty (20) feet. Existing vegetation within the greenbelt may be used as a substitute for the required plantings, upon approval of the Planning Commission. A landscape berm, a minimum of three (3) feet high to assist in screening may be required. The requirement of providing a berm will be recommended and approved by the Planning Commission. The landscape greenbelt shall be maintained and irrigated in accordance with Chapter 4.6(Landscaping).

6. Maintenance of Setback Areas and Landscape Greenbelt. The Solar Farm owner is responsible for maintaining (mowing, etc.) the required setback areas and landscape greenbelt. Adequate access and space shall be provided to facilitate the maintenance of these areas. All plant material shall be maintained in a healthy condition to provide the intended screening and shall be replaced upon death or disease.

7. Maximum Lot Coverage: Maximum lot coverage restrictions shall not apply to solar devices; the size of the facility shall include all area within the perimeter fencing required by Subsection 8 below.

8. Safety/Access: The site must be secured by a fence along all exterior sides of the facility that is a minimum of six (6) feet in height with a gate and locking mechanism that will always allow for emergency access. The fencing shall consist of durable materials which shall be approved by the Planning Commission. The fencing must be located between the required landscape greenbelt and all photovoltaic solar devices and support structures associated with the facility.

9. Vehicular Access Drives and Parking Areas. Vehicular access drives and parking areas may be gravel surfaced. All parking and vehicular traffic surfaces shall be maintained in sound condition and free of weeds, dust, trash, and debris. All parking areas shall meet the minimum requirements of the applicable state and federal ADA accessibility codes.

10. Noise: No large solar energy systems shall exceed forty-five (45) dBA as measured at the property line.

11. Glare: Large solar energy system facilities shall be placed such that concentrated solar radiation or solar glare shall not be directed onto nearby properties and public roads. Anti-reflective coatings are required.

12. Electrical Interconnections: Use of above ground transmission lines are prohibited within the site except as may otherwise be required by a public utility.

13. No storage buildings or equipment compounds shall be allowed on site.

14. A Professional Engineer registered in the State of Michigan shall certify that the construction and installation of a large solar energy system meets or exceeds the manufacturer's safety, construction, and installation standards. Such certification shall be provided to the Zoning Administrator prior to the issuance of a zoning permit.

15. All electrical components, compartments, wire conduit and interconnections with private structures shall conform with applicable national and local electrical codes. The installation of large solar energy systems shall also comply with local building permit requirements.

16. The surface area beneath any solar panel or array of panels shall be continually maintained and the pervious surface condition of such land area shall remain unbuilt. Additionally, in no instance shall the peak flow rate of storm water runoff from the site (also known as overland flow) exceed the predevelopment runoff rate. Development shall comply with Bay County Drain Commissioner requirements.

17. Additional Special Use Permit Criteria: In addition to the Special Use and site plan requirements found in Chapter 7 (Special Use Permit and Chapter 8 (Site Plan Review), the applicant shall address the following topics in the application for large solar energy system applications:

    a. Project Description and Rationale: Identify the type, size, rated power output, performance, safety, and noise characteristics of the system including the transmission line/grid connection for the project. Identify the project construction time frame, project life, developmental phases (and potential future expansions) and expected markets for the generated energy. Describe the proposed property maintenance program.

    b. Visual Impacts: Graphically demonstrate the visual impact of the project using photos and renditions of the project with consideration given to setbacks and proposed landscaping.

    c. Environmental Analysis: Identify impacts on County drains

and/or established natural and private drainage features in the area existing environmental features, such as topography, hydrology, geology, and cultural resources.

d. Waste: Identify any solid or hazardous waste generated by the project.

e. Lighting: Provide plans showing all lighting within the facility. No light may adversely affect adjacent parcels. Site lighting shall not exceed 0.2 footcandles at the front property line and no light shall reach side or rear property lines.

f. Transportation Plan: Provide a proposed access plan during construction and operational phases. Show proposed project service road ingress and egress locations onto adjacent roadways and the layout of the facility service road system. Due to infrequent access following construction, it is not required to pave or curb solar panel access drive(s).

g. Prime Farmland: Identify potential loss of prime farmland as defined by the soil survey for Merritt Township or United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS).

h. Public Safety: Identify emergency and normal shutdown procedures annually with the Merritt Township Fire Department and appropriate emergency management officials. Identify potential hazards to adjacent properties, public roadways, and to the general public that may be created.

i. Sound Limitations: Identify noise levels at the property lines of the project when completed and operational.

j. Telecommunications Interference: There will be no telecommunications interference allowed.

k. Reporting: Provide semi-annual product output report to Merritt Township, or upon Township request. A board approved third-party engineering firm will review and approve report. Solar applicant responsible for third party expenses. Solar energy system will generate at least 50% of original rated output at time of permit application, if drops below 50% during any period of twelve (12) consecutive months will be presumed to be at the end of its useful life and will have to be abandoned upon written notice by the Township.

l. Abandonment and Decommissioning: Following the operational life of the project, or at the time the project becomes obsolete or an Abandoned Solar Energy System, as determined by the Zoning Administrator or any other expert or specialist to be

designated by the Township to make such a determination, the applicant shall perform decommissioning and removal of the Large Solar Energy System and all its components. The Applicant shall prepare a Decommissioning Plan and submit it to the Planning Commission for review and approval prior to issuance of a Special Use Permit. Under this plan, all structures and facilities shall be removed, including any structures below-grade, and removed offsite for disposal. No concrete, piping and other materials may be left in place. Any Solar Array or combination of Photovoltaic Devices that become an Abandoned Solar Energy System shall be removed under the Decommissioning Plan. The ground must be restored to its original condition within 180 days of becoming an Abandoned Solar Energy System, or decommissioning, whichever occurs first. If solar array is abandoned by applicant, landowner is responsible for cleanup within a 180-day period. If decommissioning is not completed within a 180-day period, the Township Board shall have the authority to complete any decommissioning and restoration activities necessary to restore the property to the condition in existence prior to the installation of the Large Solar Energy System or any components thereof. Any costs incurred by the Township in pursuing such activities shall be at the expense of the Applicant and or landowner, including the Applicant's continuing restoration security as provided by this Section.

(1) Prior to issuance of a Special Use Permit, the applicant must provide the Planning Commission a certified cost estimate for decommissioning. The decommissioning cost shall be certified by an engineer that is licensed to practice in the State of Michigan. A performance guarantee must be in the form of certified check (no bonds or performance guarantees are acceptable). The amount of the certified check will be equal to one and a quarter (1.25) times the decommissioning cost or $50,000.00, whichever is greater. Estimates for decommissioning the site, which does not incorporate salvage value into the estimate, shall be determined by a professional engineer or a general contractor licensed to practice in the State of Michigan. A new estimate must be submitted to Merritt Township each year verifying that the cash held in escrow is an adequate amount to ensure compliance with the ordinance and to ensure that it has been properly renewed. The full amount of decommissioning must remain in escrow until the facility is decommissioned and any necessary site restoration is complete and inspected and approved by the Merritt

Township Zoning Administrator.

After approval of the Special Use Permit, but prior to the final electrical inspection, the decommissioning plan shall be recorded at the Bay County Register of Deeds Office and a recorded copy provided to Merritt Township to notify the township. In the event of a change of ownership of the facility, the new owner of the facility must provide a plan to conform to previous plan and an updated signed decommissioning plan prior to change of ownership.

m. Complaint Resolution

(1) The Solar Energy Facility Applicant shall submit a detailed, written complaint resolution process developed by the Solar Energy Facility Applicant to resolve complaints concerning the construction or operation of the Solar Energy facility. The complaint resolution process must be approved by the Planning Commission as a condition of approval of the Special Use permit application.

(2) The Planning Commission shall be appraised of all complaints and shall receive a report outlining the issues, the progress, and the resolution of each such complaint. Such report shall be presented every six months by the applicant to the Planning Commission.

n. Continuing Security and Escrow: If any Large Solar Energy System is approved for construction under this Section, the applicant shall be required to post continuing security and a continuing escrow deposit prior to commencement of construction, which shall remain in effect until the Large Solar Energy System has been finally removed, as provided below:

(1) Continuing Restoration Security: If a Special Use Permit is approved pursuant to this section, the Township Board shall require security in the form of a certified check, which will be furnished by the applicant to the Township to ensure full compliance with this section and all conditions of approval. When determining the amount of the required security, the Township may also require an annual escalator or increase based on the Consumer Price Index (or the equivalent or its successor). Such financial guarantee shall be deposited or filed with the Township Clerk after a Special Use Permit has been approved but before construction commences on the Large

Solar Energy System. At a minimum, the financial security shall be equal to the certified cost estimate for decommissioning, as described above, to be reasonably sufficient to restore the property to its previous condition prior to construction and operation of the Large Solar Energy System. Such financial security shall be kept in full force and effect during the entire time that the Large Solar Energy System exists or is in place, and such financial security shall be irrevocable and non-cancelable. In addition, the party operating a Large Solar Energy System approved by the Township shall inform the Township in the event the system, or a material portion of the system is sold to a third party, and any such sale shall require the purchasing party to provide the Township with the security described by this section, along with relevant contact information.

(2) Continuing Obligations: Failure to keep any required financial security and escrow deposit in full force and effect at all times while a Large Solar Energy System exists or is in place shall constitute a material and significant violation of the Special Use Permit and this Ordinance, and will subject the Large Solar Energy System applicant, owner and operator to all remedies available to the Township, including revocation of the Special Use Permit. A review by the Clerk and then Township Attorney of security and escrow requirements shall occur no less than annually to determine compliance with this section.

o. Transfer of Ownership/Operation: Prior to a change in the ownership or operation of a Large Solar Energy System, including, but not limited to, by the sale or lease of that System or the underlying property, the current owner or operator shall provide written notice to the Township at least sixty (60) days prior to that change becoming effective. This notice shall inform the Township of the intended transfer of control of the Large Solar Energy System and include a copy of the instrument or agreement effecting that transfer. Such an instrument or agreement shall include an express statement that the new owner or operator of the Large Solar Energy System shall not be permitted to operate that System until compliance with the terms of this Ordinance, including requirements for continuing security and escrow funds, has been established.

p. Township Review: Because of the ever-changing technical capabilities of solar devices and of new technology in general, the Township Planning Commission shall have the authority to review and consider alternatives in both the dimensional and physical requirements in this

Section as a part of the Special Use Permit approval process.

q. All site improvements (landscaping, fencing, buildings, etc.) must be maintained in good condition until the facility is dismantled and removed from site.

r. Solar components must have a UL listing, or a listing from an alternative testing agency accepted by the jurisdiction having authority over the project.

s. All construction parking must be located outside of the rights-of-way of the public streets.

t. The applicant must provide written authorization from the local utility company acknowledging and approving connection to the local utility company's grid and submit a copy to Merritt Township.

Add the following text as Section 7.27:

Section 7.27 – Solar Energy Systems, Small

The purpose of these regulations is to regulate the construction, location, and operation of Small Solar Energy Systems) that are accessory uses to a site's primary use and subject to reasonable conditions that will protect the public health, safety, and welfare.

1. In General.

   a. Small solar energy systems may be building integrated, ground-mounted, roof-mounted, or wall-mounted systems, as defined in this Ordinance.

   b. The review and approval process for small solar energy systems shall be as follows:

      (1) Building-integrated small solar energy systems – No zoning approval is required.

      (2) Roof-mounted and/or wall-mounted small solar energy systems – Administrative review and approval by the Zoning Administrator shall be required, subject to the requirements of this Section.

      (3) Ground-mounted small solar energy systems – Review and approval by the Planning Commission shall be required as a use permitted subject to special conditions in accordance with Chapter 7 (Special Use Permits).A site plan shall be submitted concurrently with the special use application which includes the required information

per Chapter 8 (Site Plan Review) ,and any other supporting statements, evidence, data, information and exhibits necessary to demonstrate compliance with the requirements of this Section.

(4) All solar energy systems installed per manufacture recommendation.

2. Roof-mounted systems.

   a. Roof-mounted systems are permitted to face any rear or side yard.

   b. Roof-mounted systems shall be designed to be in harmony with the architectural style of the building to which it is attached, and not obviously appearing as a separate mechanical structure that appends or appears to interrupt the uniform surface of a roof.

   c. Roof-mounted systems on an angled roof shall appear to be flush mounted.

   d. The highest point of the roof-mounted system shall not exceed the highest point of the roof to which it is attached. For installations on a flat roof, the highest point of the system shall be permitted to extend up to 6-feet above the roof to which it is attached; however, it shall be so located or architecturally concealed by a parapet wall or screen so that the system is not visible from abutting rights-of-way or private road easements.

   e. For non-residential uses, no roof-mounted system shall be installed in a manner that would cause the shedding of ice or snow from the roof onto a stoop, porch, deck, stairwell, or pedestrian travel area.

3. Wall-mounted systems.

   a. Wall-mounted systems are permitted to face any rear or side yard.

   b. Wall-mounted systems shall be designed to be in harmony with the architectural style of the building to which it is attached and not obviously appearing as a separate mechanical structure that appends or appears to interrupt the design character of the wall to which it is attached.

4. Ground-mounted systems.

   a. A minimum of one (1) acre of land is required.

   b. For residentially zoned parcels, ground mounted systems shall not exceed 1,000 square feet in area utilized for solar panels and electrical equipment. For all other zoning districts, ground mounted systems shall not exceed 10,000 square feet in area utilized for solar panels and electrical equipment.

c. Ground-mounted systems cannot be constructed in any required setback area. Greenbelts, landscape screening and/or fencing shall be required to screen the ground-mounted system from adjoining properties and roadways.

d. Ground-mounted systems shall be accessory to a principal use and located on the same zoning lot as the principal use. Locating ground-mounted systems within a general common element or other similarly shared space held in common ownership is expressly prohibited.

e. All exterior electrical lines shall be buried below the surface of the ground.

f. Photovoltaic panels, devices and support structures shall be restricted to a maximum height of six (6) feet when orientated at a maximum tilt as measured from the existing grade.

g. The surface area beneath any solar panel or array of panels shall be continually maintained and the pervious surface condition of such land shall remain unbuilt.

5. Public Safety.

a. Public Safety: Identify emergency and normal shutdown procedures annually with the Merritt Township Fire Department and appropriate emergency management officials. Identify potential hazards to adjacent properties, public roadways, and to the general public that may be created.

6. Abandonment and Decommissioning.

a. Following the operational life of the project, or at the time the project becomes obsolete, the applicant shall perform decommissioning and removal of the small solar energy system and all its components.

Add the following text to Chapter 2:

Definitions:

Abandoned Solar Energy System: Any solar energy system that remains nonfunctional or inoperative to the extent that it is not used to generate energy for a continuous period of 180 days.

Building Integrated Solar Energy System: A solar energy system that consists of integrating photovoltaic devices into the building structure, such as the roof or the wall, and which does not alter the relief of the roof or wall.

Ground-Mounted Solar Energy System: A solar energy system that is directly installed in the ground and is not attached or affixed to an existing structure.

Photovoltaic Device: A system of components that generates electrical energy from incidental sunlight by means of photovoltaic effect, whether or not the device is able to store the electric energy produced for later use. For purposes of this ordinance, a photovoltaic device shall also be known as a solar device.

Roof-Mounted Solar System: A solar energy system in which solar panels are mounted to a roof of a building, either as a flush-mounted system or as modules fixed to frames which can be tilted.

Solar Array: Any number of devices connected together to provide a single output of electrical energy or other energy.

Solar Energy System, Large: A utility-scale solar energy system intended to generate electric energy or other energy by converting sunlight, whether by solar devices or other conversion technology, for the sale, delivery, or consumption of the generated energy by more than one end-user, and typically the power output of that system is equal to or greater than 1 megawatt. Large solar energy systems may be a principal use or an accessory use.

Solar Energy System, Small: A solar energy system where the sole use is to generate electric energy or other energy by converting sunlight, whether photovoltaic devices or other conversion technology, primarily for consumption by a single end user at the same property upon which the solar energy system is located. The power output of the system shall not exceed 1 megawatt. Small solar energy systems shall only be an accessory use to a principal use.

Wall-Mounted Solar Energy System: A solar energy system that is mounted to a wall of a building, either as a flush-mounted system or as modules fixed to frames which can be tilted.

Solar Glare: The effect produced by sunlight reflecting from a solar panel with an intensity sufficient to cause a loss in visibility.

MERRITT TOWNSHIP
BAY COUNTY, MICHIGAN
AMENDMENT TO ZONING ORDINANCE NO.: 51
ADDENDUM TO ORDINANCE NO.: 55
THE TOWNSHIP ZONING ORDINANCE

THE TOWNSHIP OF MERRITT HEREBY ORDAINS:

Section 1

That ordinance 51 being an amendment to ordinance 55, which is the Township Zoning Ordinance shall amend Section 7.27 entitled "Solar Energy Systems, small as follows: ~~red for dclctions~~ look like this; blue for replacements look like this. The purpose of these regulations is to regulate the construction, location and operation of small solar energy systems that are excessive uses to a site's primary use and subject to reasonable conditions that will protect the public health, safety, and welfare.

Section 2

Subsections 1, 2, and 3 remain unchanged.

Section 7.27 – Solar Energy Systems, Small

1. Remains unchanged.

2. Remains unchanged.

3. Remains unchanged.

Section 4 - Ground mounted systems

a. Remains unchanged.

b. Remains unchanged.

c. Remains unchanged.

d. Remains unchanged.

e. Remains unchanged.

f. Photovoltaic panels, devices and support structures shall be restricted to a maximum height of ~~six (6)~~ ten (10) feet when oriented at a maximum tilt as measured from the existing grade.

g. Remains unchanged.

Section 5 – Public Safety.

Remains unchanged.

Section 6 – Abandonment and Decommissioning

Remains unchanged.

That all penalties and fines shall remain the same as originally indicated in Ordinance 51 and/or Ordinance 55.

Section III: Penalty

That all penalties and fines shall remain the same as originally indicated in Ordinance 51 and/or Ordinance 55.

Section IV: Severability

If any provision or part of this ordinance is declared by any court of competent jurisdiction to be invalid or unenforceable, such declaration shall not affect the validity or enforceability of any other provision or part, which shall remain in full force and effect.

Section V: Repeal

Ordinance 51 and 55, and all amendments thereto in their entirety, and all resolutions, ordinances, orders or parts thereof that are in conflict in whole or in part with any provisions of this Ordinance are, to the extent of such conflict, hereby repealed.

Section VI: Effective Date

This Ordinance shall after its adoption, be published in a newspaper circulated within the Township of Merritt, Bay County, Michigan and shall become effective upon the 1st day of publication, unless no notice of intent to file a petition is timely filed with the township clerk in which case it shall become effective upon the 30th day after publication.

Motion:
Schabel

Seconded:
Fleischmann

AYES:
Schabel
Parrent
fleischmann
Mead
Lynch III

NAYS:

None

ABSENT:

None

ADOPTED: 55-A
Sept. 12, 2023

TOWNSHIP OF MERRITT,
BAY COUNTY, MICHIGAN
Dave Schabel
Dave Schabel, Supervisor

Kathy Parrent
Kathy Parrent, Clerk

Publication:
10.11.2023

Effective Date:
Sept. 21, 2023