

BETHANY TOWNSHIP
ZONING ORDINANCE AMENDMENT

ORDINANCE NO. _____

An Ordinance to amend the Bethany Township Zoning Ordinance to create the Solar Energy Overlay District, to amend regulations for Solar Energy Systems, to amend regulations for Large Solar Energy Systems, and to provide standards for rezoning agricultural land for the use of Large Solar Energy Systems.

BETHANY TOWNSHIP, GRATIOT COUNTY, MICHIGAN, ORDAINS:

SECTION 1. AMENDMENT TO ZONING ORDINANCE ARTICLE 7: Zoning Ordinance Article 7: Agricultural (AG) District shall be amended to add Section 7.5, Solar Energy Overlay District, providing as follows:

A. Purpose

The Solar Energy Overlay District is intended to provide for Solar Energy Systems within appropriate open spaces within the Township while preserving and protecting farmland within the Township.

B. Solar Energy Overlay District

The Solar Energy Overlay District is established and may be located as an overlay district over portions of the Agricultural District, AG, as may be designed and adopted by the Township under the Michigan Zoning Enabling Act. Land located within such overlay district may be developed with uses according to the provisions of the underlying zoning district or according to the provisions of this Section.

C. Uses Permitted by Special Use Permit

1. Solar Energy System (Large)

D. Required Notice for Solar Farm Energy Systems

In order to facilitate public notice and the unique nature of Large Solar Energy Systems, an applicant or property owner of any property considered for a Large Solar Energy System shall erect on each parcel a sign or signs in a place clearly visible and available to the public at least 15 days before a public hearing describing the nature of the request; the address of the property subject to the request, if any; and the date, time, and place of the public hearing. The Township will mail notice with the information under this subsection to all property within 1,500 feet of the property line of the proposed Large Solar Energy System to the address as shown on the most recent assessment roll.

E. Standards for Rezoning

In addition to standards set forth in Article 18: Amendments and Rezoning, a request for a Solar Energy Overlay District reviewed and processed by the Planning Commission and Township Board shall be governed by at least consideration and satisfaction of the following principles and standards for determining whether to grant or deny a rezoning:

1. Physical obstacles to agricultural operation(s) or essential agricultural practices within the surrounding area of the request.
2. Natural physical or other changes to farmland that irreversibly, permanently limit, or substantially impair the productivity of the farmland, including as a result of stormwater management concerns, present or projected soil condition impacts, drain tile destruction, and other similar characteristics.
3. Substantially alters the natural character of open space land or agricultural use within the surrounding area of the request and within the request.
4. Impact on residential dwellings, local farm economics, pollinator habitat and soil cover, including U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), Class I and II soils.
5. Ability to maximize the use of lands other than farmland within the Township and surrounding area, other available areas of non-farmland that remain undeveloped within the Township and surrounding area, and the demonstrated need for the proposed use.

SECTION 2. AMENDMENT TO ARTICLE 15, SECTION 15.13, SUBSECTION R:

Zoning Ordinance Article 15, Section 15.13, Subsection R shall be amended to read as follows:

R. SOLAR ENERGY

1. Solar Energy Systems, General Regulations
 - a. Any Small Solar Energy System mounted on the ground shall comply with those requirements applicable to an accessory building, or those requirements applicable to an accessory building within the zoning district in which the Solar Energy System is located, whichever are more stringent.
 - b. A site plan shall be prepared and submitted to the Zoning Administrator for approval prior to commencing installation. The site plan shall include the proposed location and an elevation drawing showing the proposed height and foundation details.

- c.** Small Solar Energy Systems shall not be constructed or installed in the front yard of any lot, absent a showing that the Solar Energy System cannot be operated efficiently on any other location on the property, and that such operation will not unreasonably interfere with adjacent properties.
- d.** Any Small Solar Energy System erected on a building shall not extend beyond the peak of the roof, provided that a Small Solar Energy System erected on a flat roof shall otherwise comply with the other requirements of this Section. In no event shall any portion of a Solar Energy System extend beyond the lesser of either thirty(30) feet or the maximum building height permitted within the district in which that Solar Energy System is located. A building-integrated Small Solar Energy System is subject only to zoning regulations applicable to the structure or building.
- e.** Any Solar Energy System mounted on the roof of a property must be installed with a minimum three (3) foot setback from the edges of the roof, the peak, the eave, or the valley.
- f.** A roof mounted or building integrated small energy system installed on a nonconforming building, structure, or use shall not be considered an expansion of the nonconformity.
- g.** No Solar Energy System shall be installed in such a way as to pose an Unreasonable Safety Hazard.
- h.** All Solar Energy Systems must conform to all applicable federal, state and county requirements, in addition to other applicable Township Ordinances, as well as any applicable industry standards.
- i.** All Solar Energy Systems must be installed in a manner ensuring that concentrated solar glare shall not be directed onto nearby properties or roadways.
- j.** Any Small Solar Energy System mounted on the ground shall be sufficiently screened from the view of adjacent properties or roadways through the use of solid fencing consistent, or the installation of a wall, hedge, or other vegetation not less than four (4) feet and no more than eight (8) feet in height.
- k.** All power transmission lines from a ground-mounted Solar Energy System to any building or other structure shall be located underground. The Planning Commission may waive this requirement, or may limit it through conditions, if it determines that it would be impractical or unreasonably expensive to install, place or maintain such transmission lines underground.
- l.** Any Solar Energy System and the surrounding premises must be kept and maintained in good repair and condition at all times and must continuously conform with all applicable building and electrical codes. This shall include, but is not limited to, ensuring that any fencing is maintained to provide sufficient protection and

screening, that the property is kept clear of trash and other debris, that all aspects of the Solar Energy System are maintained according to industry standards, and that no portion of the Solar Energy System is in a blighted, unsafe, or substandard manner.

- m.** An Abandoned Solar Energy System shall be removed by the property owner within six (6) months.

2. Large Solar Energy Systems

- a.** Purpose and Intent: The purpose and intent of this Subsection is to establish standards for the siting, installation, operation, repair, decommissioning and removal of Large Solar Energy Systems as a special use.
- b.** Site Plan Drawing and Supporting Materials: All applications for a Large Solar Energy System must be accompanied by detailed site plans, drawn to scale and dimensioned and certified by a registered engineer licensed in the State of Michigan, displaying the following information, in addition to the information required by Article 16:
 - i.** A site plan.
 - ii.** All lot lines and dimensions, including a legal description of each lot or parcel comprising the Large Solar Energy System.
 - iii.** Names of owners of each lot or parcel within the Township that is proposed to be within the Large Solar Energy System.
 - iv.** Vicinity map showing the location of all surrounding land uses.
 - v.** Location and height of all proposed Solar Array(s), buildings, structures, electrical tie lines and transmission lines, security fencing, and all above-ground structures and utilities associated with the Large Solar Energy System.
 - vi.** Horizontal and vertical (elevation) scale drawings with dimensions that show the location of the proposed Solar Array(s), buildings, structures, electrical tie lines and transmission lines, security fencing and all above ground structures and utilities on the property.
 - vii.** Location of all existing and proposed overhead and underground electrical transmission or distribution lines within the Large Solar Energy System and within one thousand (1,000) feet of the outside perimeter of the Large Solar Energy System.
 - viii.** Proposed setbacks from the Solar Array(s) to all boundary lines and all existing and proposed structures within the Large Solar Energy System.

- ix.** Land elevations for the Solar Array(s) location and the relationship to the land elevations of all existing and proposed structures within the Large Solar Energy System.
- x.** Access driveways within and to the Large Solar Energy System, together with a detailed narrative regarding dimensions, composition, and maintenance of each proposed driveway. All access drives shall be subject to Gratiot County Road Commission or Michigan Department of Transportation approval as appropriate and shall be planned so as to minimize the use of lands for that purpose.
- xi.** Planned security measures to prevent unauthorized trespass and access and to warn of potential dangers during the construction, operation, removal, maintenance or repair of the Large Solar Energy System.
- xii.** A written description of the maintenance program to be used for the Solar Array(s) and other components of the Large Solar Energy System, including decommissioning and removal procedures when determined by the Township to be obsolete, uneconomic or an Abandoned Solar Energy System. The description shall include maintenance schedules, types of maintenance to be performed, and decommissioning and removal procedures and schedules if the Large Solar Energy System becomes obsolete, uneconomical or an Abandoned Solar Energy System.
- xiii.** A copy of the manufacturer's safety measures.
- xiv.** Planned lighting protection measures.
- xv.** The environmental impact of the Large Solar Energy System, as reflected in an environmental impact study, including, but not limited to, a review of the following factors including appropriate measures to minimize, eliminate or mitigate adverse impacts identified and show those measures on the site plan, where applicable:
 - a)** Impact on area water resources;
 - b)** Impact on air quality;
 - c)** Noise impacts caused by the Solar Energy System;
 - d)** Impact on utilities and infrastructure;
 - e)** Protection of neighboring property owners and children;
 - f)** Impacts on resident and migratory wildlife, specifically including analysis

on consideration of typical use patterns of the wildlife in the project area, including impacts on wildlife corridors for animals to migrate through and around the Solar Energy System;

- g)** Impacts on hunting;
 - h)** Effects on floodplains and wetlands;
 - i)** Unique farmlands or soils;
 - j)** A geotechnical report prepared by a professional engineer licensed in the State of Michigan which shall include geotechnical soil borings demonstrating the in-situ soil conditions prior to the proposed development;
 - k)** Areas of aesthetic or historical importance;
 - l)** Archeological or cultural concerns; and
 - m)** Any other environmental factors typically evaluated by other members of the commercial energy industry when evaluating locations for a proposed power-generating facility.
- xvi.** A Ground cover vegetation establishment and management plan, including invasive plant species and noxious weed control:
- a)** Properties within the project area that are subject to a farmland development rights agreement under PA 116, a plan for following the Michigan Department of Agriculture and Rural Developments policy for allowing commercial solar panel development on PA 116 lands.
 - b)** Ground cover for sites not enrolled in PA 116 use of pollinator habitat, conservation cover, forage, or agrivoltaics.
- xvii.** A written analysis of the Solar Energy System's impact on farmlands that:
- a)** Expressly identifies the acreage of the proposed project that is located on farmland and non-farmland and indicates how the applicant intends to preserve use of farmland.
 - b)** Outlines the location and condition of private drain tile on any lands to be used for the project and specifies a plan to make any repairs to private drain tile caused by construction and operation of the project.

- c) Develops a plan to utilize lands not under project improvements (e.g., fencing or Solar Array) to be continued to be used for agricultural purposes, if applicable, such as continued growth of crop cultivation or livestock grazing.
 - d) Siting to avoid isolating areas of the farm operation such that they are no longer viable or efficient for agricultural production, including, but not limited to, restricting the movement of agricultural vehicles/equipment for planting, cultivation, and harvesting of crops, and creating negative impacts on support infrastructure such as irrigation systems or drains.
 - e) Minimizing soil compaction through ground mounting of panels by screw, piling, or a similar system that does not require a footing, concrete, or other permanent mounting.
 - f) Identifies the current soil conditions within each property included in the project in relation to then-industry standards for testing soil for its crop cultivation productivity (i.e., testing similar to testing evaluated by farmers for identifying nutrient applications annually or at other periodic intervals to maintain bioavailable nutrients for crop cultivation).
 - g) the economic impact of conversion of farmland from its current use to a Solar Energy System on the Township, which shall consist of the economic value derived from the farmland for the Township and community if it continued in its current state in comparison to the economic value derived from the farmland after its use for a Solar Energy System.
- xviii.** Written analysis and report by an expert in the field of agricultural studies providing an analysis and conclusion as to the specific method during and after decommissioning that will demonstrate how farmland used within the project will be returned to the productive agricultural status prior to the project and each step and the duration of time necessary for such farmland to return to such status, including an analysis of the bushel per acre productivity of corn, soybeans, and wheat produced before the project and estimated production of such crop cultivation for the first five years following decommissioning of all or part of the project. If crop production was not occurring on the farmland prior to the project, then the written analysis and report should use estimates based on industry available data at the time the farmland was first used in the project.
- xix.** Information indicating how long the Large Solar Energy System is planned to operate before decommissioning and repowering, including addressing any purchase or lease terms and renewals that support or impact the length of such use.

- xx.** Information indicating that if the Large Solar Energy System is decommissioned, how each component and piece of the Large Solar Energy System will be repurposed or properly disposed of.
- xxi.** A written complaint resolution plan that will be utilized by the owner or operator of the Large Solar Energy System that includes a publicly available permanent phone number and contact information for residents to make complaints regarding the Large Solar Energy System related to violations of the Zoning Ordinance or any zoning approvals. Such process must: (1) include a form available to the public to submit complaints which shall also be made available online and be provided to the Township for distribution to residents; (2) require reporting of complaints and resolutions to the complaints to the Township Clerk on a monthly basis; (3) require resolutions to complaints within 30 days unless unfeasible; and (4) not require a deposit from either a complainant or the Township for the owner or operator to investigate a complaint related to compliance with the Zoning Ordinance or a zoning approval. Those complaints that are not resolved within 30 days under subsection (2) above shall be forwarded to the Township Board.
- xxii.** A solar glare study such as a glint and glare assessment that is prepared by a professional engineering firm or other qualified third party expert that analyzes whether glare will be directed by the Large Solar Energy System onto any nearby properties or roadways, including the amount of glare that nearby properties or roadways will receive.
- xxiii.** A visual impact analysis prepared by a third-party qualified professional that analyzes the visual impacts of the proposed project, including a description of the project, the existing visual landscape, and important scenic resources, plus visual simulations that show what the project will look like (including proposed landscape and other screening measures) after construction.
- xxiv.** A written description of measures to be taken to support the flow of rainwater throughout the Large Solar Energy System, including any measures to promote the growth of vegetation beneath the arrays and/or otherwise limit the impacts of storm water runoff. The measures shall be subject to the approval of the Gratiot County Drain Commissioner.
- xxv.** A Hazardous Material Disclosure Statement including the following:
 - a)** A disclosure of all hazardous materials used to manufacture the solar energy system;
 - b)** A disclosure of all hazardous materials planned to be used for the maintenance and cleaning of the solar energy system;
 - c)** A release prevention plan detailing how a release of hazardous chemicals

into the environment will be prevented and how hazardous materials will be removed from the environment should a release occur.

- xxvi.** A written contract with any energy provider or other purchaser of the energy produced by the Large Solar Energy System, demonstrating a commitment to purchase said energy. If this information is considered a confidential trade secret, the Township, upon written request from an energy provider, will keep such information confidential to the extent and through the means authorized by Public Act 442 of 1976.
 - xxvii.** The applicant shall submit to the Township a report with images of all existing drainage tile to establish a baseline condition of the tile. The applicant shall identify all drainage tile impacted and the applicant's proposed repair, replacement or restoration of the same to maintain proper drainage of soils in the Township.
 - xxviii.** If the parcels on which the system is proposed is to be leased, rather than owned, by the owner of the Solar Energy System, all property within the system boundary must be included in a recorded easement(s), lease(s), or consent agreement(s) specifying the applicable uses for the duration of the system. All such agreements must be in place prior to commencing construction of the system, unless otherwise specified in the final approval.
 - xxix.** Additional detail(s) and information as required by the special land use requirements of the Zoning Ordinance, or as required by the Township.
- c.** Application Escrow Deposit: An escrow deposit shall be paid to the Township by the applicant when the applicant applies for a special use permit for a Large Solar Energy System. The monetary amount deposited by the applicant in escrow with the Township shall be the amount estimated by the Township to cover all reasonable costs and expenses associated with the special use permit review and approval process, which costs shall include, but are not limited to, reasonable fees of the Township Attorney, Township Planner and Township Engineer, as well as costs for any reports or studies that are reasonably related to the zoning review process for the application. Such escrow amount shall be in addition to any filing or application fees established by resolution. At any point during the special use permit review process, the Township may require that the applicant place additional funds into escrow with the Township if the existing escrow amount deposited by the applicant is deemed insufficient by the Township. If the escrow account needs replenishing and the applicant refuses to do so promptly, the special use permit process shall cease unless, and until, the applicant makes the required additional escrow deposit. Any applicable zoning escrow resolutions or other ordinances adopted by the Township must also be complied with by the applicant.

- d. Compliance with the State Building Code and the National Electric Safety Code: Construction of a Large Solar Energy System shall comply with the National Electric Safety Code and the state construction codes as administered and enforced by the local authority having jurisdiction as a requirement of any special use permit under this section.
- e. Certified Solar Array Components: Components of a Solar Array shall be approved by the Institute of Electrical and Electronics Engineers (“IEEE”), Solar Rating and Certification Corporation (“SRCC”), Electronic Testing Laboratories (“ETL”), or other similar certification organization acceptable to the Township.
- f. Height: Maximum height of a Solar Array shall not exceed fifteen (15) feet. Other collection devices, components or buildings of the Large Solar Energy System shall not exceed thirty-five (35) feet, or the maximum building height permitted within the district in which that Solar Energy System is located, whichever is less, at any time or location on the property. The height shall be measured from the natural grade at the base of the Solar Array, device, component or building measured. The Planning Commission may waive or modify these height requirements for certain aspects of a Solar Energy System (such as structures associated with above-ground transmission lines) through the implementation of conditions when appropriate.
- g. Lot Size: A Large Solar Energy System shall be located on one or more contiguous parcels with an aggregate area of eighty (80) acres or greater.
- h. Setbacks on Farmland: The following minimum setbacks, measured from the outside edge of the solar panel, or other structure accessory to a Large Solar Energy System, shall be required. The setbacks listed below shall apply to all structures comprising a Large Solar Energy System located on farmland.
 - i. From the lot line abutting a lot that is not participating in the solar project and does not contain a residential dwelling unit: 100 feet.
 - ii. From a non-participating residential dwelling unit existing at the time of Special Use approval for the Large Solar Energy System: 500 feet from the nearest corner of the dwelling unit, and 150 feet from all property lines of a non-participating lot containing a dwelling unit. In a case where a Large Solar Energy System already exists, and a landowner proposes to build a dwelling unit nearby, this setback shall not be applied to the dwelling unit.
 - iii. From a public or private roadway: 275 feet, or the required front setback for the zoning district in question, whichever is greater.
 - iv. From a county drain, river, stream, or similar watercourse as determined by the Planning Commission: 100 feet, or the required front setback for the zoning district in question, whichever is greater.

- v. There shall be no setback requirement from the lot line of a participating parcel. However, if any solar panel structures are proposed to be placed such that the panel and/or the support structure crosses a property line, the lease agreements for the parcel in question must be submitted to the Township for review and determination of whether the agreement creates any legal, planning, or safety hazard for the Township or its residents. If the agreement does not create a hazard, in the opinion of the Township Board, the agreement to allow a structure to cross property lines shall be approved.
- vi. Any of the setbacks listed may be waived by property owners through a written agreement. The written agreement shall be in recordable form and submitted to the Township for review and determination of whether the agreement effectuates a waiver of any specific setback during project review or creates any legal, planning, or safety hazard for the Township or its residents.
- i. Setbacks on Non-Farmland: The following minimum setbacks, measured from the outside edge of the solar panel, or other structure accessory to a Large Solar Energy System, shall be required. The setbacks listed below shall apply to all structures comprising a Large Solar Energy System located on non-farmland.
 - i. From the lot line abutting a lot that is not participating in the solar project and does not contain a residential dwelling unit: 50 feet.
 - ii. From a non-participating residential dwelling unit existing at the time of Special Use approval for the Large Solar Energy System: 500 feet from the nearest corner of the dwelling unit, and 150 feet from all property lines of a non-participating lot containing a dwelling unit. In a case where a Large Solar Energy System already exists, and a landowner proposes to build a dwelling unit nearby, this setback shall not be applied to the dwelling unit.
 - iii. From a public or private roadway: 50 feet, or the required front setback for the zoning district in question, whichever is greater.
 - iv. From a county drain, river, stream, or similar watercourse as determined by the Planning Commission: 100 feet, or the required front setback for the zoning district in question, whichever is greater.
 - v. There shall be no setback requirement from the lot line of a participating parcel. However, if any solar panel structures are proposed to be placed such that the panel and/or the support structure crosses a property line, the lease agreements for the parcel in question must be submitted to the Township for review and determination of whether the agreement creates any legal, planning, or safety hazard for the Township or its residents. If the agreement does not create a hazard, in the opinion of the Township Board, the agreement to allow a structure to cross property lines shall be approved.

- i. Any of the setbacks listed may be waived by property owners through a written agreement. The written agreement shall be in recordable form and submitted to the Township for review and determination of whether the agreement effectuates a waiver of any specific setback during project review or creates any legal, planning, or safety hazard for the Township or its residents.
 - a) Lot Coverage: A Large Solar Energy System is exempt from maximum lot coverage limitations.
 - b) Ground Cover: A Large Solar Energy System shall include the installation of ground cover vegetation maintained for the duration of operation until the project is decommissioned. Vegetation establishment must include invasive plant species and noxious weed control. The following standards apply:
 - 1. Properties within the project area that are subject to a farmland development rights agreement under PA 116 must follow the Michigan Department of Agriculture and Rural Development's policy for allowing commercial solar panel development on PA 116 lands.
 - 2. Ground cover at properties within the project must meet one or more of the four types of dual use:
 - a. Pollinator Habitat: Solar sites designed to meet a score of 76 or more on the Michigan Pollinator Habitat Planning Scorecard for Solar Sites.
 - b. Conservation Cover: Solar sites designed in consultation with and approval of 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).
 - c. Forage: Solar sites that incorporate rotational livestock grazing and forage production as part of an overall vegetative maintenance plan.
 - d. Agrivoltaics: Solar sites that combine raising crops for food, fiber, or fuel, and generating electricity within the project areas to maximize land use.
 - e. Projects 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.

3. Screening/Security: A Large Solar Energy System shall be completely enclosed by perimeter security fencing to restrict unauthorized access, unless waived by the Township. Such fencing shall be 8 feet in height as measured from the natural grade of the fencing perimeter. Electric fencing is not permitted, except to the extent that this does not prohibit electric fencing being used within the project area for one of the dual use agricultural activities comprised of foraging of livestock animals. The perimeter of Large Solar Energy Systems shall also be screened and buffered by greenbelts whenever existing natural forest vegetation does not otherwise continuously obscure the Large Solar Energy System's entire perimeter from adjacent parcels, subject to the following requirements:
 - a. Unless screened and buffered at all times by natural forest vegetation meeting the minimum spacing and height requirements, and having a substantially similar obscuring effect of an evergreen vegetative buffer installed pursuant to this Section, a continuous evergreen vegetative buffer shall be installed and maintained at all times at the perimeter of all Large Solar Energy Systems, including without limitation between such Large Solar Energy Systems and adjacent residential or agricultural areas (where those areas exist outside the project area and abut such systems) and public or private highways, or streets. Any required screening and landscaping shall be placed outside the perimeter fencing. Nothing contained herein shall be construed to prevent reasonable access to any Large Solar Energy System as approved by the special use permit.
 - b. The evergreen or native vegetative buffer shall be composed of native or evergreen trees that at planting shall be a minimum of four (4) feet in height and shrubs two (2) feet in height. The evergreen trees shall be spaced no more than fifteen (15) feet apart on center (from the central trunk of one plant to the central trunk of the next plant), native trees shall be placed no more than thirty (30) feet apart on center and shrubs shall be spaced no more than seven (7) feet apart on center. All unhealthy (60 percent dead or greater) and dead material shall be replaced by the applicant within six (6) months, or the next appropriate planting period, whichever occurs first, but under no circumstances should the applicant allow unhealthy or dead material to remain in place for more than six (6) consecutive months. Failure to maintain the required evergreen vegetative buffer as required by this section shall constitute a violation of this Ordinance and sufficient grounds for revocation of any special use permit previously granted.

- c. Screening requirements may be reduced or waived provided that any such adjustment is in keeping with the intent of the Ordinance including agricultural preservation, minimizing negative impacts to drain tiles, buffering and screening of Large Solar Energy Systems to prevent aesthetic and visual impacts to adjacent residential uses, and reuse of the property.
 - d. All plant materials shall be installed between March 15 and November 15. If the applicant is unable to plant during the first installation period at the time that final zoning approvals are provided by the Township, the applicant will provide the Township with a letter of credit, surety or corporate guarantee for an amount equal to one and a half (1.5) times the cost of any planting deficiencies that the Township shall hold until the next planting season. After all plantings have occurred, the Township shall return the financial guarantee.
4. Signage: No lettering, company insignia, advertising, graphics or other commercially-oriented inscriptions or designs shall be on any part of the Solar Arrays or other components of the Large Solar Energy System. This section does not prohibit signs reasonably necessary to inform the public of potential safety hazards associated with the Large Solar Energy System, nor does it prohibit any other signs that may be required by this Ordinance, the special use permit or other applicable law.
 5. Noise: No component of any Large Solar Energy System shall emit noise exceeding fifty (50) dBA as measured at the outside perimeter of the project.
 6. Lighting: All lighting for parking lots, driveways, external illumination of buildings, or the illumination of signs shall be directed away from and be shielded from adjacent properties and shall be so arranged as to not adversely affect driver visibility on adjacent public roads.
 7. Glare: All solar panels shall be placed such that concentrated solar glare shall not be directed onto nearby properties or roadways.
 8. Distribution, Transmission and Interconnection: All collection lines and interconnections from the Solar Array(s) to any electrical substations shall be located and maintained underground inside the Large Solar Energy System. The Planning Commission may waive this requirement, or modify it with appropriate conditions, if it determines that it would be impractical, not align with the Township's land use development goals and Master Plan, or unreasonably expensive to install, place or maintain such collection lines and interconnections underground.

9. Abandonment and Decommissioning: Following the operational life of the project, or at the time the project becomes obsolete, uneconomic or an Abandoned Solar Energy System, as determined by the Township Engineer 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 prior to issuance of the 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 one hundred and eighty days (180) days of becoming an Abandoned Solar Energy System, or decommissioning, whichever occurs first or as otherwise approved by the Township Board. Original condition will be based upon the soil testing and analysis, as well as the drain tile mapping, as reviewed and presented to the Township or as otherwise incorporated by specific findings or conditions in the issuance of a special use permit.
10. General Standards: The Planning Commission shall not recommend for approval any Large Solar Energy System special use permit unless it finds that all of the applicable standards for special use permit contained in this Ordinance are met.
11. Safety: The Planning Commission shall not recommend for approval any Large Solar Energy System special use permit if it finds the Large Solar Energy System will pose an Unreasonable Safety Hazard to the occupants of any surrounding properties or area wildlife.
12. Conditions and Modifications: Any conditions and modifications approved by the Planning Commission shall be recorded in the Planning Commission's meeting minutes. The Planning Commission may, in addition to other reasonable conditions, require landscaping, walls, fences and other improvements that are reasonable in relation to and consistent with the nature of the applicable or adjacent zoning districts. After approval, at least two (2) copies of the final approved Site Plan shall be signed and dated by the Township Supervisor and authorized representative of the applicant. One copy shall be kept on file by the Township Clerk, and one copy shall be returned to the applicant's authorized representative.
13. Inspection: The Township shall have the right at any reasonable time to

inspect the premises on which any Large Solar Energy System is located. The Township may hire one or more consultants to assist with any such inspections, at the applicant's or project owner's expense.

14. Maintenance and Repair: Each Large Solar Energy System must be kept and maintained in good repair and condition at all times. If the Township Zoning Administrator determines that a Large Solar Energy System fails at any time to meet the requirements of this Ordinance and the special use permit, or that it poses a potential Unreasonable Safety Hazard, the applicant shall shut down the Large Solar Energy System within forty-eight (48) hours after notice by the Zoning Administrator and not operate, start or restart the Large Solar Energy System until the condition has been corrected. Applicant shall keep a maintenance log on the Solar Array(s), which shall be available for the Township's review on a monthly basis. Applicant shall keep all sites within the Large Solar Energy System neat, clean and free of refuse, waste or unsightly, hazardous or unsanitary conditions.
15. Roads: Any material damages to a public road located within the Township resulting from the construction, maintenance or operation of a Large Solar Energy System shall be repaired at the applicant's expense. In addition, the applicant shall submit to either the Gratiot County Road Commission or MDOT (as appropriate) a description of the routes to be used by construction and delivery vehicles; any road improvements that will be necessary to accommodate construction vehicles, equipment or other deliveries; and a performance guarantee acceptable to the appropriate agency in an amount necessary to assure repair of any damage to the public roads caused by construction of the Large Solar Energy System or any of its elements.
16. Continuing Security and Escrow: If any Large Solar Energy System is approved for construction under this Section, 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.
17. Continuing Restoration Security: If a special use permit is approved pursuant to this section, the Planning Commission shall require security in the form of a cash deposit, letter of credit, or surety bond acceptable to the Township in form and/or from an approved financial institution, which will be furnished by the applicant to the Township in order to ensure full compliance with this section and all conditions of approval. When determining the amount of each required security, the Township may also require an annual escalator or increase based on the Consumer Price Index (or its equivalent or 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 in an amount determined by the Township to be reasonably sufficient to restore the property to its previous condition prior to construction and operation of the Large Solar Energy System (inclusive of efforts to restore the soil condition and drain tiles for productive farmland if such land was previously farmland prior to project commencement). As part of restoring the ground to its original condition prior to construction and operation, new drain tiles shall be installed within each property within the project area where improvements were installed at a distance of no greater than 66 feet apart. This obligation applies to any farmland regardless of any proposed repairs or maintenance of drain tile during the operation and commencement of the project, and retiling shall be an obligation of the applicant and included as part of the costs of restoration within the financial security. 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 that System, or a material portion of that 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. The Township may require a written agreement to further set forth the terms and conditions that control restoration, abandonment and decommissioning.

- 18. Continuing Compliance and Enforcement Escrow Deposit:** A continuing escrow deposit shall be held by the Township and shall be funded by a cash deposit, letter of credit, or surety bond by the applicant prior to the commencement of construction of any Large Solar Energy System and shall be maintained by the owner or operator until the Large Solar Energy System has been permanently decommissioned and removed. The monetary amount placed by the applicant in escrow with the Township shall be estimated by the Township to cover all reasonable costs and expenses associated with continuing enforcement of this Ordinance and the terms of the special use permit, which costs can include, but are not limited to, reasonable fees for the Township Attorney, Township Planner and Township Engineer, as well as costs for any reports or studies that the Township determines are reasonably related to enforcement of the Ordinance and the special use permit. If the Township is required to expend any portion of the escrow deposit or if the existing escrow amount paid by the applicant proves to be insufficient to cover the Township's enforcement costs, the Township may require the applicant to place additional monies into escrow with the Township.

- 19. 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 enforcement action and revocation of the special use permit. A review of security and escrow requirements shall occur no less than annually to determine compliance with this section.
- 20. Conditions:** In addition to the requirements of this Section, the Planning Commission may impose additional reasonable conditions on the approval of a Large Solar Energy System as a special land use.
- 21. Completion of Construction:** The construction of any Large Solar Energy System must commence within a period of one (1) year from the date a special use permit is granted, and must be completed within a period of three (3) consecutive years from the date a special use permit is granted. The Planning Commission may grant an extension not to exceed one (1) year, provided the applicant requests the extension prior to the date of the expiration of the special land use approval. Failure to complete construction within the permitted time period shall result in the approved special use permit being rendered null and void.
- 22. Quarterly Reports:** The owner or operator of a Large Solar Energy System shall provide the Zoning Administrator with quarterly reports on trends and usage of that System as set by the Planning Commission. If this information is considered a confidential trade secret, the Township, upon written request from an energy provider, will keep such information confidential to the extent and through the means authorized by Public Act 442 of 1976.
- a. **Transfer of Ownership/Operation:** Prior to a change in the ownership or operation 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 shall 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.

23. Continued Soil Testing: The current owner or operator shall provide an updated soil study every three years identifying the current soil conditions within each property included in the project in relation to then-industry standards for testing soil for its crop cultivation productivity (i.e., testing similar to testing evaluated by farmers for identifying nutrient applications annually or at other periodic intervals to maintain bioavailable nutrients for crop cultivation).
24. Drain Tile: While the Solar Energy System is in operation, all drain tiles shall be inspected every three years in the same manner as reflected and approved the Township upon issuance of any special use permit and all images and a report of any damage or failure shall be submitted to the landowner and the Township. Tiles shall be repaired within 60 days and such repairs shall be documented and a report submitted to the landowner and Township. The Township reserves the right to be present and verify such repairs.

SECTION 3. AMENDMENT TO ARTICLE 2: DEFINITIONS AND RULES OF CONSTRUCTION, SECTION 2.2: Zoning Ordinance Article 2: Definitions and Rules of Construction Section 2.2 shall be amended to include the following definitions in alphabetical order:

Concentrated Solar Glare: A continuous source of bright light over a minimum 60 second timeframe reflecting or refracting off a surface in a Solar Farm Energy System or Small Solar Energy System.

Farmland: Land used to farm as defined under the Michigan Right to Farm Act, Public Act 93 of 1981, Section 286.472.

Hazardous Waste: That term as defined in the Natural Resources and Environmental Protection Act, Public Act 451 of 1994, Section 324.11103.

Release: In the context of a release of hazardous materials, that term as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. § 9601.

Remove: In the context of removal of hazardous materials, that term as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. § 9601.

SECTION 4. REPEAL. All ordinances or parts of ordinances in conflict herewith are hereby repealed.

SECTION 5. SAVINGS CLAUSE. The remainder of the Township Zoning Ordinance is unaffected. Except as expressly amended by this ordinance amendment, the rest of the Township Zoning Ordinance remains unchanged and in full force and effect.

SECTION 6. SEVERABILITY. Should a court of competent jurisdiction determine that any portion of this ordinance amendment (or any portion thereof) is invalid or unconstitutional, that shall not affect any other portions of this ordinance amendment, which shall remain in full force and effect.

SECTION 7. EFFECTIVE DATE. This ordinance amendment shall become effective seven (7) days after this ordinance amendment or a summary thereof appears in the newspaper as provided by law.

YEAS: _____

NAYS: _____

ABSENT: _____

ORDINANCE DECLARED ADOPTED

Bethany Township Supervisor

CERTIFICATION

I hereby certify that the above is a true copy of an ordinance that was:

1. Adopted by the Bethany Township Board at the time, date, and place specified above pursuant to the required statutory procedures;
2. Published by summary following its adoption in the _____ newspaper, a newspaper that circulates within Bethany Township, on _____, 2023;
3. Recorded one (1) week after such publication in a book of Ordinances kept by me for that purpose, including the date of passage of the Ordinance, the names of the members of the Township Board voting, and how each member voted; and
4. Filed as an attested copy with the Gratiot County Clerk on _____, 2023.

Respectfully submitted,

Bethany Township Clerk