Fabius Township
St. Joseph County, Michigan

Solar Energy Amendments to Township Zoning Ordinance

Adopted: _____

Effective: _____

The Township of Fabius Ordains:

SECTION I
AMENDMENT TO SECTION 46.3 "DEFINITIONS"

A new category entitled "Solar Energy: is hereby added to Article I "Definitions" of the Fabius Township Zoning Ordinance to read as follows:

"Solar Energy. The following definitions shall apply to solar energy provisions in this Ordinance:

Accessory Ground-Mounted Solar Energy System: A ground-mounted solar energy system with the purpose primarily of generating electricity for the principal use on the site.

Ancillary Solar Equipment: Any accessory part or device of a solar energy system that does not require direct access to sunlight, such as batteries, electric meters, converters, or water heater tanks.

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

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

- **Pollinator Habitat:** Solar sites designed to meet a score of 76 or more on the Michigan Pollinator Habitat Planning Scorecard for Solar Sites. Alternatively, the Tier 2 Pollinator Scorecard developed by the Rights- of-Way as Habitat Working Group can be used to evaluate pollinator habitat and management practices.

- **Conservation Cover:** Solar sites designed in consultation with conservation organizations that focus on restoring native plants, grasses, and prairie with the aim of protecting specific species (e.g., bird habitat) or providing specific ecosystem services (e.g., carbon sequestration, soil health).
- **Forage for Grazing:** Solar sites that incorporate rotational livestock grazing and forage production as part of an overall vegetative maintenance plan.
- **Agrivoltaics:** Solar sites that combine raising crops for food, fiber, or fuel, and generating electricity within the project area to maximize land use.
- Dual use does not include the use of solar arrays on parcel or lots that already have an established use such as dwellings, commercial buildings etc.

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

Large Solar Energy System: A utility-scale solar energy system where the primary use of the land is to generate electric energy or other energy by converting sunlight, whether by Photovoltaic Devices or other conversion technology, for the sale, delivery, or consumption of the generated energy with a capacity greater than one megawatt (MW).

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

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

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

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

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

Principal-Use Solar Energy System: A commercial, ground-mounted solar energy system that converts sunlight into electricity for the primary purpose of off-site use through the electrical grid or export to the wholesale market.

Principal-Use (Large) Solar Energy System: A Principal-Use SES generating more than 5,000 KWh/5Mw for the primary purpose of off-site use through the electrical grid or export to the wholesale market

Accessory-Use (Small) Solar Energy System: An accessory SES generating up to and including 5,000 KWh/5Mw per month for the primary purpose of serving an individual residence or structure; with any minor generated excess available to place on the grid.

Property Owner or Lessor: Any person, agent, firm, corporation, limited liability company, or partnership that alone, jointly, or severally with others: (1) has legal or equitable ownership or title to any premises, dwelling, or dwelling unit, with or without accompanying actual possession thereof; or (2) has charge, possession care, or control of any premises, dwelling or dwelling unit, as an agent of the owner or as executor, administrator, trustee, or guardian of the estate of the beneficial owner. The person shown on the records of the St. Joseph County Register of Deeds to be the owner of a particular property shall be presumed to be the person who owns or is in control of that property.

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

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

Small-Scale Solar Energy Collector: A solar energy collector primarily intended to provide energy for on-site uses and to provide power for use by owners, lessees, tenants, residents, or other occupants of the lot on which it is erected. It may be comprised of the following: building-integrated photovoltaic systems ("BIPV"), ground-mounted solar energy collectors, and/or building-mounted solar energy collectors.

Solar Array: A photovoltaic panel, solar thermal collector, or collection of panels or collectors in a solar energy (electric energy or other energy) system that collects solar radiation.

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

Solar Collector Surface: Any part of a solar energy system that absorbs solar energy for use in the system's transformation process. The collector surface does not include frames, supports, and mounting hardware.

Solar Energy: Radiant energy received from the sun that can be collected in the form of heat or light by a solar energy system.

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

Solar Thermal System: A system of equipment that converts sunlight into heat.

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U L List: Refers to the Underwriters Laboratory product certification database.

Utility Scale Solar Energy System: A Large Solar Energy System that meets one or more of the following:

A. It is primarily used for generating electricity for sale and/or distribution off site to an authorized public utility or other firm for use in the electrical grid.

B. The total surface area of all solar collector surfaces exceeds 1,500 square feet: and/or

C. It is n ot considered an accessory use or structure by the Township Zoning Administrator.

Weed: Native or non-native plant that is not valued in the place where it is growing.

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

SECTION 2.
AMENDMENT TO ARTICLE VII "SUPPLEMENTAL REGULATIONS" OF THE FABIUS TOWNSHIP ZONING ORDINANCE

A new subsection identified as Section 664 is hereby added to Article VII "Supplemental Regulations" of the Fabius Township Zoning Ordinance to read as follows:

"Section 664 – Large Solar Energy Systems.
Large Scale Solar Energy Systems are permitted only in the Solar Overlay District Zoning Classification as defined by this Ordinance, see Article VI. "Conditional and Special Land Uses. "Large Scale Solar Energy Systems".

SECTION 3.
AMENDMENT TO ARTICLE VI "SPECIAL LAND USES" OF THE FABIUS TOWNSHIP ZONING ORDINANCE

Article VI "Special Land Uses" Sections 46.620, 621 "Special Use Provisions for Particular Special Land Uses" is hereby amended by the addition of a new 46.623 to read as follows:

Large Solar Energy System(s).

A. **Purpose and Intent:** The purpose and intent of this Section is to establish standards for the siting, installation, operation, repair, decommissioning and removal of Large Solar Energy Systems.

B. **Application Escrow Account:** An escrow account shall be deposited with the Township by the Applicant when the Applicant applies for a Special Land Use for a Large Solar Energy System. The monetary amount deposited by the Applicant in escrow with the Township shall be the amount of $15,000, to cover all reasonable costs and expenses associated with the Special Land Use 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 Land Use 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 within thirty (30) days, the Special Land Use 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. The Township shall provide a summary of all account activity to the Applicant within a timely manner upon request. Any funds remaining within the escrow after approval of the Special Land Use shall be returned in a timely manner to the Applicant.

B. **Compliance with the State Construction 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 Code (consisting of Building, Electrical, Mechanical and Plumbing Codes) as administered and enforced by Fabius Township as a condition of any Special Land Use under this section. In the event of a conflict between the Local Building Code and National Electric Safety Code (NESC), the more restrictive shall apply.

C. **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 ("EIL"), Underwriters Laboratories (UL), National Fire Protection Association (NFPA), and the National Electrical Code (NEC) or other similar certification organization if the similar certification organization is approved by the Township, which approval shall not be unreasonably withheld.

E. **Height:** Maximum height of a Solar Array, other collection device, components or buildings of the Large Solar Energy System, excluding substation and electrical transmission equipment, shall not exceed fifteen (15) feet (as measured from the natural grade at the base of improvements) at any time or location on the property. Substation and electrical transmission equipment shall not exceed one hundred (100) feet in height.

F. **Setbacks:** A minimum setback distance of fifty (50) feet from all exterior property lines, bodies of water, delineated wetlands, or any other type of protected land or water of the Large Solar Energy System and existing public roads and railroad rights-of-way shall be required for all buildings and Solar Arrays, provided that a setback of two hundred and fifty (250) feet shall be required adjacent to any parcel line of a property containing a residential structure. Contiguous parcels which are all part of a single large Solar Energy Project need not maintain side yard setbacks for the panels/array so long as the planning commission approves the elimination of the side yard setback in its statement of conditions.

G. **Lot Coverage:** A Large Solar Energy System is exempt from maximum lot coverage limitations. Setbacks must be complied with.

H. **Screening and Security**.

A Large Solar Energy System shall be completely enclosed by perimeter security fencing to restrict unauthorized access. Such fencing shall be at least six (6) feet in height. Barbed wire, razor wire and electric fencing is not permitted. The perimeter of Large Solar Energy Systems shall also be screened and buffered by installed evergreen or native vegetative plantings whenever existing natural vegetation does not otherwise reasonably obscure the Large Solar Energy System from adjacent residential structures, subject to the following requirements:

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, dead, or dying plant or tree material shall be replaced by the Applicant within one (1) year, or the next appropriate planting period, whichever occurs first. In case of a question, the Township Zoning Administrator shall make the determination as to whether a plant or tree must be replaced.

1. All plant materials shall be installed between March 15 and November 15.If the Applicant requests a Final Certificate of Occupancy from the Township and the Applicant is unable to plant during the installation period, the Applicant will provide the Township with a letter of credit, surety or corporate guarantee for an amount equal to one and one-half (1.5) times the cost of any planting deficiencies that the Township shall hold until the next planting season to ensure planting takes place. The Township may call the Board if plantings are not timely completed and use the proceeds to accomplish the required plantings. After all plantings have occurred, the Township shall return the financial guarantee.

2. Failure to install or continuously maintain the required vegetative buffer shall constitute a violation of this Ordinance and any Special Land Use may be subject to revocation.

I. **Signage:** No advertising or non-project related graphics shall be on any part of the Solar Arrays or other components of the Large Solar Energy System. This exclusion does not apply to entrance gate signage or notifications containing points of contact or all other information that may be required by authorities having jurisdiction for electrical operations and the safety and welfare of the public.

J. **Noise:** No component of any Large Solar Energy System shall emit noise exceeding sixty (65) dBA as measured at the exterior property boundary or the existing ROW line.

K. **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.

L. **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, except in areas where technical or physical constraints make it preferable to install equipment above ground. This requirement excludes transmission equipment meant to connect the project substation to the local transmission system.

M. **Abandonment and Decommissioning:** Following the operational life of the project, 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 the Special Land Use. Under this plan, all structures, concrete, piping, facilities, and other project related materials above grade and any structures up to seventy-two (72) inches below-grade shall be removed offsite for disposal. Any Solar Array or combination of Photovoltaic Devices that is not operated for a continuous period of twelve (12) months shall be considered abandoned and shall be removed under the Decommissioning Plan. The ground must be restored to its original topography within three hundred sixty-five (365) days of abandonment or decommissioning. Restoration shall also include bringing soil to its pre-development composition to ensure return to prior use is possible upon restoration. Soil tests shall be required as a part of the Decommissioning Plan both before development and prior to decommissioning. Soil shall be brought back to pre-development state within three hundred sixty-five (365) days of abandonment or decommissioning.

1. Continuing Security for Decommissioning: If any Large Solar Energy System is approved for construction under this Section, Applicant shall post decommissioning security prior to the start of construction (in a mutually agreed upon form) for an amount necessary to accomplish the work required to decommission the project as agreed upon by the Township and Applicant. The amount shall 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.

2. Continuing Obligations: Failure to keep any required financial security 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 Land Use and this Ordinance, and will subject the Large Solar Energy System Applicant, owner and operator to all remedies available to the Township, including any enforcement action, civil action, request for injunctive relief, and revocation of the Special Land Use.

N. **General Standards:** The Planning Commission shall not approve of any Large Solar Energy System Special Land Use unless it finds that all of the general standards for Special Exception Land Uses contained in Article XIII of this Ordinance are met.

O. **Township Board Oversight:** Upon Planning Commission approval, the record of approval, finding of fact and any conditions shall be forwarded to the Township Board for consideration at its next available meeting. The Township Board may require a development agreement with the applicant, which shall be in the form of a contract signed by both parties. The decommissioning agreement may be part of the development agreement, or it may be in a separate document. The Township Board has the authority to consider and approval all proposed agreements, and to authorize the supervisor or his or her designee to sign on behalf of the Township.

P. **Conditions and Modifications:** Any conditions and modifications approved by the Planning Commission shall be recorded in the Planning Commissions' 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 Chairperson of the Planning Commission 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.

Q. **Approval Time Limit and Extension:** Special Land Use and Site Plan approvals, under this Section, shall be valid for one (1) year beginning on the date of Township Board approval. Once commenced, should construction cease for period of twelve (12) consecutive months, the Special Land Use and Site Plan approvals shall be considered null and void. If construction begun prior to the expiration date established by Township Board approval, the Special Land Use and Site Plan approvals shall remain in force as long as construction continues toward a reasonable date of completion. However, if requested by the Applicant prior to the expiration date established by Township Planning Commission approval, the Township Board may consider an additional one-year period upon showing of good cause for the extension.

R. **Inspection:** The Township shall have the right at any reasonable time, to provide a twenty-four (24) hour notice prior to the desired inspection to the Applicant to inspect the premises on which any Large Solar Energy System is located. The Township may hire one or more consultants to assist with inspections at the Applicant's or project owner's expense. Inspections must be coordinated with, and escorted by, the Applicant's operations staff at the Large Solar Energy Facility to ensure compliance with the Occupational Safety and Health Administration (OSHA), NESC and all other applicable safely guidelines.

S. **Annual Reports**. The Large Solar Energy System operator shall submit an annual report to the Planning Commission by no later than October 1st of each year. The annual report shall document the amount of electricity produced each month for the reporting period in units of Megawatt-hours. The annual report shall list all complaints received regarding the Large Solar Energy Systems along with the status of the complaint resolution and the actions taken to mitigate the complaints. The report shall also contain a certification that the estimated decommissioning costs have not changed, and that any surety bond is still valid. If said report does not contain such certification, then the report shall include an update cost estimate for decommissioning and proof of a new and updated surety bond.

T. **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 to meet the requirements of this Ordinance and the Special Land Use, or that it poses a safety hazard, the Zoning Administrator, or his or her designee, shall provide notice to the Applicant of the safety hazard. If, after a reasonable cure period (not to exceed 7 days), the safety hazards are not corrected, the Applicant is entitled to a hearing before the Township Board. If the Township Board determines that the safety hazard requires that the Large Solar Energy System must be shut down, Applicant shall immediately shut down the Large Solar Energy System and not operate, start or restart the Large Solar Energy System until the issues have been resolved. Applicant shall keep a maintenance log on the Solar Array(s), which shall be available for the Township's review within 48 hours of such request. Applicant shall keep all sites within the Large Solar Energy System neat, clean and free of refuse, waste or unsightly, hazardous or unsanitary conditions.

U. **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 the appropriate County or State agency 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. The Applicant shall abide by all County and/or State requirements regarding the use and/or repair of County roads or State Highways.

V. **Other Requirements**: Each Large Solar Energy System shall also comply with all applicable federal, state and county requirements, in addition to other applicable Township Ordinances and the Michigan Land Division Act which includes MCL 560.102. In the case of such land division requirements the following will apply.

These conditions shall only apply to Large Scale (utility) Solar applications. Any other use of the land shall comply with the rules and regulations set forth by the Fabius Township Zoning Ordinance to which zoning district applies.

1. The property on which the Large Scale Solar Energy System is planned shall be exempt from the parcel size requirement of the Township Zoning Ordinance.
2. The property on which the Large Scale Solar Energy System is planned shall be exempt from the road frontage requirement of the Township Zoning Ordinance.
3. The property on which the Large Scale Solar Energy System is planned land shall be exempt from the 4 to 1 rule requirement of the Michigan Land Division Act and the Township Zoning Ordinance.
4. If such land division creates a landlock parcel, a dedicated easement of 40 feet in width for the purpose of ingress and egress must be recorded.
5. If the Large Scale Solar Energy System on a portion of a parcel is decommissioned and no longer in use, the land division approval shall be eliminated, and the parcel returned to a single parcel.

W. **Transfer of Ownership**: Any and all conditions that have been approved as a part of the approval process, shall remain in place in the event of transfer of ownership, or sale of the property. Any change of conditions would have to be recommended by the Fabius Township Planning after a public hearing is held to the Fabius Township Board for approval.

X. **Security**. Knox boxes and keys shall be provided at locked entrances for emergency personnel access. The Township shall be provided with a list of emergency contacts for the site. Such list shall be updated as needed by the owner and/or administrator of the Large Solar Energy System to ensure that said list always contains current and correct contacts.

Y. **Glare and Reflection**. The exterior surfaces of solar energy collectors shall be generally neutral in color and substantially non-reflective of light. A unit may not be installed or located so that sunlight or glare is reflected into dwellings on other lots or onto roads or private roads.

Z. **Storage**. If solar storage is included as part of the Large Solar Energy System, said storage must be placed in a security container or enclosure when in use in accordance with applicable laws and regulations, and when no longer used, shall be disposed of in accordance with applicable laws and regulations. Security containers or enclosures must also be in compliance with any and all local and state ordinances and codes.

B. Submittal Requirements.

1) Site Plan Requirements and Standards.

Site Plan Drawing and Supporting Materials: All applications for a Large Solar Energy Systems must be accompanied by detailed site plans, drawn to scale and dimensioned and certified by a registered engineer, architect or land surveyor licensed in the State of Michigan, displaying the following information:

1. All requirements for site plan application contained in Article II Division 2 of this Ordinance.

2. All parcel lines and dimensions, including a legal description of each lot or parcel comprising the Large Solar Energy System.

3. Names of owners of each lot or parcel within Fabius Township that is proposed to be within the Large Solar Energy System.

4. A vicinity map showing the location of all surrounding land uses and existing buildings on parcels included in the proposed Large Solar Energy System.

5. The 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 a Large Solar Energy System.

6. Horizontal and vertical (elevation) scaled 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.

7. Location of all existing and proposed overhead and underground electrical transmission or distribution lines within the Large Solar Energy System and within one hundred (100) feet of all exterior property lines of the Large Solar Energy System.

8. Proposed setbacks from the Solar Array(s) to all existing and proposed structures, road right of ways (public or private), property lines shall be consistent with Article XII (f).

9. 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 at a minimum of five (5) foot contours.

10. 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 St. Joseph County Road Commission or the Michigan Department of Transportation approval and shall be planned so as to minimize the use of lands for that purpose.

11. Planned security measures to prevent unauthorized trespass and access during the construction, operation, removal, maintenance or repair of the Large Solar Energy System.

12. A written description of the maintenance program to be used for the Solar Array and other components of the Large Solar Energy System, including decommissioning and removal. 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 is decommissioned.

13. Planned lightening protection measures.

14. Additional detail(s) and information as required by the Special Land Use requirements of the Fabius Township Zoning Ordinance, or as required by the Planning Commission.

15. Notarized written permission or copy of lease or deed establishing that the property owner authorizes the use of the property for a Large Solar Energy System.

16. Documentation of the pre-construction soil types and conditions. If the USDA Natural Resources Conservation Service Soil survey(s) is not available, provide agricultural soil test information and/or obtain from Michigan State University Extension

2. Operational Plan

An Applicant for a Large Scale Solar Energy System shall prepare and submit an operational plan supported by the following:

1. **Full Project Operational Plan.** In addition to those requirements and procedures established in Article II Division 2 any site plan must show the following:
    a. A project description and rationale which identifies the type, size, rated power output, performance, safety and noise characteristics of the system, including the transmission line/grid connection for the project, and which identifies the project construction time frame, project life, development phases (and potential future expansions).
    b. Estimated construction jobs and estimated permanent jobs associated with the development.
    c. Photos and/or renditions of the project that graphically demonstrate the visual impact of the project, including but not limited to setbacks and proposed landscaping.
    d. Any impacts on surface water quality and any impacts to county drains and/or established natural or private drainage features in the area.
    e. Any solid or hazardous waste generated by the project.
    f. Any emergency and normal shutdown procedures, and any potential hazards to adjacent properties, public roadways and to the general public that may be created.
    g. A fire suppression plan as required by this Ordinance.
    h. An operations plan describing the operation of the Large Solar Energy System, including, but not limited to, the proposed technology, type of Solar Panels, and maintenance schedule.
    i. Environmental Impact analysis if required by this Ordinance.
    j. Proof of public liability insurance for at least $2 million dollars covering the Large Solar Energy System and the property owner.

2. **Existing Conditions Site Plan**. The Operational Plan shall include a site plan of existing conditions is required and shall show:
    a. Existing property lines and property lines extending one hundred (100) feet from the exterior boundaries, including the names of the adjacent property owners and current use of those properties.
    b. Existing public and private roads, showing widths of the roads and any associated easements.
    c. Location and size of any known wells (including any abandoned wells), sewage treatment systems and dumps.
    d. Existing buildings and any impervious surface.
    e. Topography at five (5) foot intervals and source of contour interval. A contour map of the surrounding properties may also be required.
    f. Existing vegetation (list type and percent of coverage, i.e. grassland, plowed field, wooded areas, etc.)
    g. Waterways, watercourses, lakes and public water wetlands.
    h. Wetland boundaries, if applicable.
    i. The 100-year flood elevation and Regulatory Flood Protection Elevation, if available.
    j. Floodway, flood fringe, and/or general flood plain district boundary, if applicable.

k. The waterfront boundary, if any portion of the project is located along a natural or man-made lake, river, stream, pond or other waterway.
l. If any portion of the project is located along a natural or man-made lake, river, stream, pond or other waterway, the ordinary high-water level and the highest known water level.
m. If any portion of the project is located along a natural or man-made lake, river, stream, pond or other waterway, the toe and top of any bluffs within the project boundaries.
n. Mapped soils.
o. Surface water drainage patterns.

3. Solar Panels Operational and Site Plan. In addition to those requirements and procedures established in Article II Division 2, any site plan of proposed solar panels must show the following:

a. Location and spacing of Solar Panels.
b. Location of access roads.
c. Planned location of underground or overhead electric lines connecting the Large Solar Energy System to the building, substation or other electric load.
d. New electrical equipment other than at the existing building or substation that is the connection point for the Large Solar Energy System.
e. Proposed erosion and sediment control measures.
f. Proposed storm water management measures.
g. Sketch elevation of the premises accurately depicting the proposed solar energy conversion system and its relationship to structures on adjacent lots (if any).
h. A site lighting photometric plan for the Large Solar Energy System.
i. Proposed sign to be posted at the Large Solar Energy System, along with its proposed dimensions, location and manner of display.

SECTION 4
AMENDMENT TO ARTICLE III "ZONING DISTRICTS AND MAP" OF THE FABIUS TOWNSHIP ZONING ORDINANCE

A. Article II "Zoning Districts and Map" of the Fabius Township Zoning Ordinance, Section 46.166 "Zoning Districts" is hereby amended by adding the following to the bottom of the list thereon:

"S-1. Solar Overlay District".

B. Section 46.166 of Article III "Zoning Districts and Map" of the Fabius Township Zoning Ordinance is hereby amended by the addition of the following:

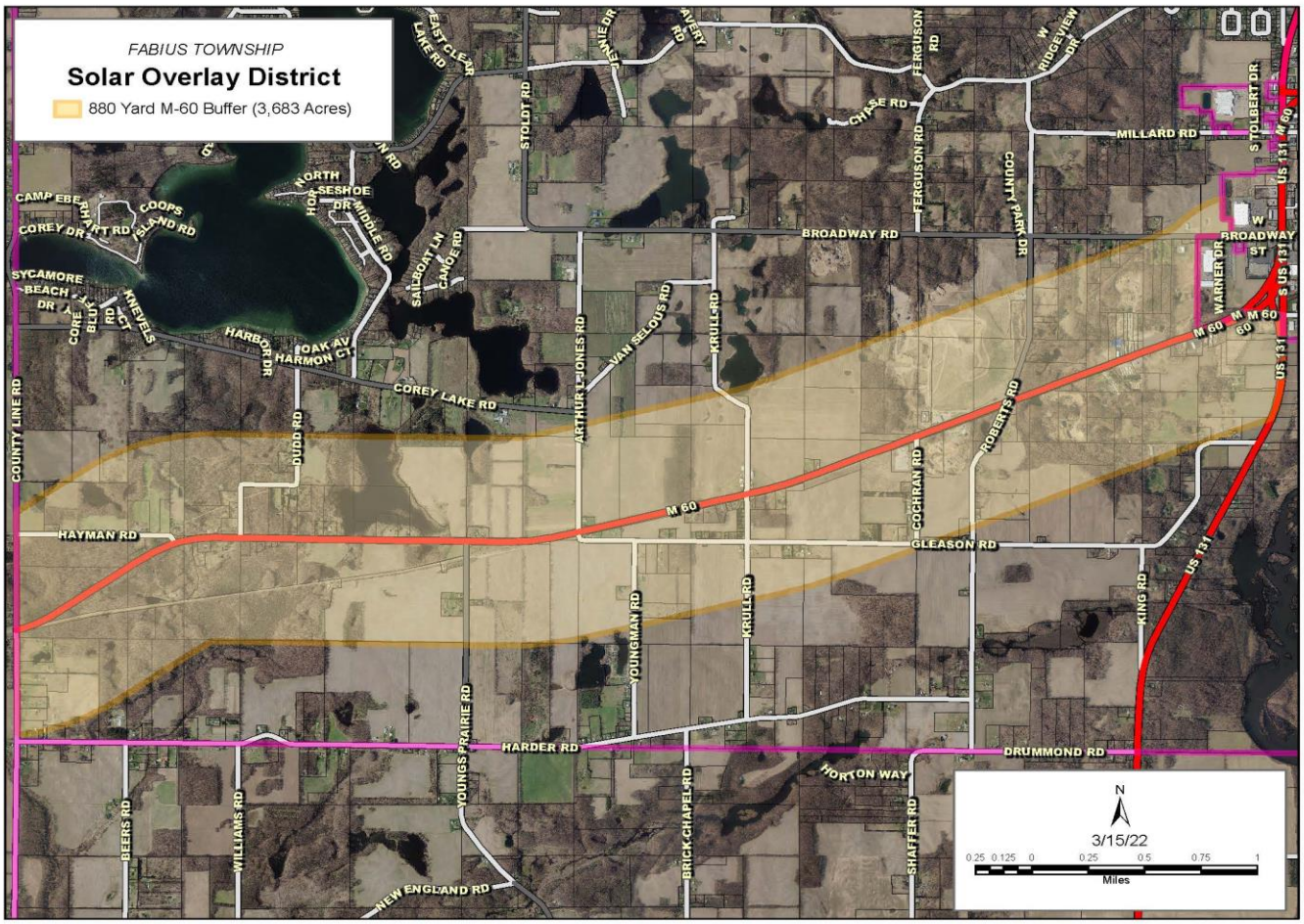
"There is hereby created a Solar Overlay District identified as S-1, the purpose of which is to facilitate the establishment of utility-scale solar energy collector systems by providing standards for their placement, design, construction, operation, monitoring, modification, and removal consistent with public safety, while minimizing negative impacts on adjacent and area property, and while promoting the Township's goals of preserving agricultural lands and open spaces. Minimizing loss of rural character and open spaces and the desire to preserve farms and agricultural-based activities are strongly supported in the Master Plan. To promote the preservation of the Township's rural character and agricultural heritage, the lands included in the Utility-Scale Solar Energy Collector Systems Overlay District are limited to portions of the Township that may not presently be used for agricultural purposes or production, are within reasonable proximity to existing major transportation infrastructure, and are within reasonable proximity to existing electric power transmission infrastructure including substations, utility easements, and transmission lines.

The Solar Overlay District is the only district in which a Large Scale Solar Energy System is authorized as a special land use. As an overlay district, the special land use is allowed, subject to the submittal and special land use requirements contained in this Ordinance. The underlying land use and zoning district is retained and shall apply to all parcels and portions of parcels that are not part of a Large Scale Solar Energy System special land use.

Such Overlay District has been designated in an area of the township that is located near a utility sub-station. Such area has been calculated to allow for a suitable area for utility solar arrays in a specific area while protecting the rural character and residential area within the Township. Said size and area of the parcel will be considered as it was described as of January 1, 2022"

C. Article III, Section 46.166 "Zoning Map and Use District Boundaries is hereby amended by the addition of a new subsection 6. to be entitled "District Boundaries of Solar Overlay District"

"6. District Boundaries of Solar Overlay District. The solar overlay district (S-1) is established within the purple boundaries of the attached map.



Fabius Township Solar Over

SECTION 5.
AMENDMENT TO ARTICLE VII "SMALL SCALE NON-UTILITY RESIDENTIAL OR COMMERCIAL USE SOLARTAL REGULATIONS" OF THE FABIUS TOWNSHIP ZONING ORDINANCE.

A new subsection identified as 46.665 is hereby added to Article VII "Supplemental Regulations" of the Fabius Township Zoning Ordinance to read as follows:

5.25 "Accessory Use Small Scale Solar Energy System: Small scale solar is design to either ground mount or roof mount solar arrays for the own personal use whether residential or commercial (private business) shall follow the Township Zoning Ordinance as it relates to accessory uses, and or accessory buildings or structures.

Accessory Use Small Scale Solar Energy Collectors Systems.

1. *Applicability.* This section applies to any system of small-scale personal use solar energy collector systems. This section does not apply to utility-scale solar energy collector systems. Nothing in this section shall be construed to prohibit collective solar installations or the sale of excess power through a net billing or net-metering arrangement.

2. **General requirements**.

   a. *Applications*. In addition to all other required application contents as listed in Article II Divisions 2 and Division 4 equipment and unit renderings, elevation drawings, and plot plans or site plans depicting the location and distances from lot lines and adjacent structures shall be submitted for review. No small-scale solar energy collector system shall be installed or operated except in compliance with this section. If such small-scale solar energy collector system to be designed as a roof mount system on a dwelling, building or structure, such small- scale solar energy collector system shall have stamped engineer licensed in the State of Michigan.

   b. *Glare and Reflection.* The exterior surfaces of solar energy collectors shall be generally neutral in color and substantially non-reflective of light. A unit may not be installed or located so that sunlight or glare is reflected into neighboring dwellings or onto adjacent roads or private roads.

   c. *Installation.*

      i. A solar energy collector shall be permanently and safely attached to the ground or structure. Solar energy collectors, and their installation and use, shall comply with building codes and other applicable Township and State and Federal requirements.

      ii. Solar energy collectors shall be installed, maintained, and used only in accordance with the manufacturer's directions. Upon request, a copy shall be submitted to the Township prior to installation.

   d. *Power Lines***.** On site power lines between solar panels and inverters shall be placed underground.

e. *Abandonment and Removal.* A solar energy collector system that ceases to produce energy on a continuous basis for twelve (12) months will be considered abandoned unless the responsible party with ownership interest in the system provides substantial evidence to the Township every six (6) months after the twelve (12) months of no energy production of the intent to maintain and reinstate the operation of that system. The responsible party shall remove all equipment and facilities and restore the lot to its condition prior to the development of the system within one (1) year of abandonment.

3. **Solar-Thermal Systems**. These systems may be established as accessory uses to principal uses in all zoning districts.
4. **Building-Mounted Solar Energy Collectors**. These systems may be established as accessory uses to principal uses in all zoning districts subject to the following conditions.
   a. Maximum Height. The maximum height of the zoning district in which the building-mounted solar energy collectors are located shall not be exceeded by more than three (3) feet.
   b. Obstruction. Building-mounted solar energy collectors shall not obstruct solar access to adjacent properties.

5. **Ground-Mounted Solar Energy Collectors**. These systems may be established as accessory uses to principal uses in all zoning districts subject to the following conditions.

a. *Location.*
   i. Rear and Side Yards. The unit may be located in the rear yard or the side yard but shall be subject to the setbacks for accessory structures.
   ii. Front Yard. The unit may be located in the front yard only if located no less than one hundred fifty (150) feet from the front lot line.
b. *Obstruction*. Ground-mounted solar energy collectors shall not obstruct solar access to adjacent properties.
c. *Vegetation.* All vegetation underneath solar energy infrastructure shall be properly maintained as to not block access to solar collectors and in accordance with the noxious weed ordinance.
d. *Maximum Number.*
   i. Residential uses. There shall be no more than one (1) ground-mounted solar energy collector unit per principal building on a lot.
   iii. Agricultural, Commercial, and Industrial uses. There shall be no limit to the number of ground-mounted solar energy collector units on a lot.

e. *Maximum Size.*

i. Residential uses. There shall be no more than one percent (1%) of the lot area up to one thousand five hundred (1,500) square feet of collector panels on a ground-mounted solar energy collector system unless a larger system is approved in accordance with this section.

ii. Agricultural, Commercial, and Industrial uses. There shall be no more than ten thousand (10,000) square feet of collector panels on a ground-mounted solar energy collector system unless a larger system is approved in accordance with this section.

f. *Maximum Height.*

i. Residential uses. The maximum height shall be six (6) feet, measured from the natural grade below the unit to the highest point at full tilt.

ii. Agricultural, Commercial, and Industrial uses. The maximum height shall be sixteen (16) feet, measured from the natural grade below the unit to the highest point at full tilt.

g. *Minimum Lot Area.* Two (2) acres shall be the minimum lot area to establish a ground-mounted solar energy collector system.

h. *Screening*. Screening shall be required in cases where a ground-mounted solar energy collector unit impacts views from adjacent residential properties. Screening methods may include the use of material, colors, textures, screening walls, and landscaping that will blend the unit into the natural setting and existing environment.

i. Applicants requesting ground-mounted solar energy collectors shall demonstrate the system's projected electricity generation capability, and the system shall not exceed the power consumption demand of the principal and accessory land uses on the lot. However, larger systems may be approved if greater electricity need is demonstrated to power on-site buildings and uses.

SECTION 6
EFFECTIVE DATE AND REPEAL OF CONFLICTING ORDINANCES

This Ordinance shall take effect eight (8) days following publication, following adoption. All Ordinances or parts of Ordinances in conflict herewith are hereby repealed.

Fabius Township
Carol Wilkins, Clerk