RAVENNA TOWNSHIP
DAKOTA COUNTY, MINNESOTA
Ordinance No. 01-2016

AN ORDINANCE AMENDING THE RAVENNA TOWNSHIP ZONING ORDINANCE REGARDING SOLAR ELECTRIC SYSTEMS

The Board of Supervisors of the Town of Ravenna ordains:

Article I. Definitions. Section 040 of the Ravenna Township Zoning Ordinance is hereby amended by adding the following new definitions:

Photovoltaic (PV) Device	A system of components that generates electricity from incident sunlight by means of the photovoltaic effect, whether or not the device is able to store the energy produced for later use.
Photovoltaic (PV) Effect	The phenomenon that occurs when photons, the "particles" in a beam of light, knock electrons loose from the atoms they strike. When this property of light is combined with the properties of semiconductors, electrons flow in one direction across a junction, setting up a voltage. With the addition of circuitry, current will flow and electric power will be available.
Photovoltaic (PV) Module (PV Panel)	The essentially planar assembly of solar cells and ancillary parts, such as interconnections, terminals, (and protective devices such as diodes) intended to generate direct current or alternating current in direct and diffuse sunlight.
Photovoltaic (PV) System	A complete set of components for converting sunlight into electricity by the photovoltaic process, including the array and balance of system components.
Solar Energy	Electromagnetic energy transmitted from the sun (solar radiation).
Solar Electric System	A set of photovoltaic devices whose primary purpose is to collect solar energy and convert (and possibly store) it into electric power by means of any combination of collecting, transferring, or converting solar-generated energy.

Solar Electric System, Commercial	A solar electric system established for the primary purpose of generating electricity and selling it directly to a third party (e.g. electric utility company).
Solar Electric System, Residential	A solar electric system established for the primary purpose of meeting all or part of the electric energy needs of a residential building.
Solar Panel	See Photovoltaic (PV) module.

Article II. RR-1 District. The list of permitted uses in Section 101.2 of the Ravenna Township Zoning Ordinance is hereby amended by adding the following:

14. Residential Solar Electric System, subject to the requirements of section 575.

Article III. FP Overlay District. The list of permitted uses in Section 103.2 of the Ravenna Township Zoning Ordinance is hereby amended by adding the following:

6. Residential Solar Electric System, subject to the requirements of section 575.

Article IV. The Ravenna Township Zoning Ordinance is hereby amended by adding a new Section 575 as follows:

SECTION 575: SOLAR ELECTRICAL SYSTEMS

All solar electrical systems shall comply with the following standards.

575.1 Site Plan Review Requirements

A detailed site plan is required for residential solar electric systems. Town Board shall review and make recommendations on site plans. No permits shall be issued prior to the Town Board's approval of site plans. Site plans shall include the following minimum information, unless waived by the Zoning Administrator:

1. Legal description and ownership of the property.
2. A narrative description of the proposed property uses.
3. Scaled drawings of the property including property dimensions, the locations of all existing easements, the locations and setbacks of all existing buildings, and the locations and setbacks of all other structures and uses, such as driveways, parking areas, private sewage systems, and private wells, as well as setbacks from all bluff lines.
4. Scaled drawings of the proposed uses, easements, and buildings including all dimensions and property setbacks, including bluff line setbacks.
5. Legal descriptions of proposed easements.
6. Scaled drawings of building elevations.

7. Scaled locations and descriptions of any proposed fencing, screening, landscaping, or site lighting.
8. Scaled delineations of any wetlands or floodplain areas.
9. Identification of any wetland or floodplain encroachments and detailed mitigation plans.
10. The Town Board may request additional information necessary to process the permit application. The Town Board may also waive information not deemed necessary to process the permit application.

575.2 Residential Solar Electric Systems

Residential Solar Electric Systems are allowed in all zoning districts, subject to the following standards and requirements:

1. The installation, placement, or expansion of a residential solar electric system may only occur upon the issuance of a zoning permit from the Township.
2. Rooftop residential solar electric systems shall be allowed on residential dwellings. Rooftop residential solar electric systems shall be mounted parallel to the plane of the roof, shall not extend more than one foot above the plane of the roof, shall not be located any closer than three feet from any side, top or bottom edge of the roof, and shall not occupy more than 75 percent (75%) of the area of the roof plane it is affixed to.
3. Residential solar electric systems located on agricultural structures may include rooftop systems. Rooftop systems shall not project more than four feet above the plane of the roof nor be located closer than six feet from the outer edge of the roof top.
4. Ground mounted residential solar electric systems shall be permitted on parcels of land. Ground mounted residential solar electric systems shall not exceed fifteen feet in height, shall not be located in any required yard area, and shall not be located closer than 50 feet to an existing adjacent residence.
5. No solar energy equipment or residential solar electric systems shall create or cause unreasonable glare on other property or public roadways. Unreasonable glare shall mean a degree of glare that creates a nuisance for other property owners or that creates a public safety hazard for those traveling on public roadways as determined by the Town Board or the appropriate roadway authority.
6. No solar energy equipment or residential solar electric system shall be allowed to create interference with television, cable, radio, telephone, internet, computers or other electronic devices and services on neighboring properties, or be allowed to otherwise constitute a public nuisance.
7. Electric power lines within all ground mounted residential solar electric systems shall be buried underground.
8. All residential solar energy systems shall be consistent with applicable State Building Codes, State Electrical Codes, State Plumbing Codes and all other applicable state and federal requirements.

9. All applicable solar energy equipment shall be certified by either the Underwriters Laboratories (UL) or Canadian Electrical Code (CSA 22.1), or the Solar Rating and Certification Corporation (SRCC) for thermal systems.
10. All solar electric systems unused, abandoned or inoperable for more than twelve months shall be removed by the system owner or the property owner.
11. Fencing, landscaping, and other screening may be required for any ground mounted solar electric system. Deviations from dimensional standards (including setbacks) may be considered by the Town Board for permitting, based upon mitigation of off-site impacts through fencing, landscaping, screening, or other mitigation measures.
12. All permit applications for ground mounted residential solar electric systems shall include a description of the vegetation or material under the solar system components and the method of ground care and vegetative maintenance.
13. Residential solar electric systems lawfully installed prior to the effective date of this ordinance are allowed to continue without a zoning permit, except that the expansion or replacement of any such residential solar electric system shall require a zoning permit from the Township.

575.3 Commercial Solar Electric Systems

Commercial solar electric systems are a prohibited use in all zoning districts.

Article V. Incorporation of Amendments. The Town Clerk-Treasurer is hereby authorized and directed to incorporate these amendments into the text of the Ravenna Township Zoning Ordinance, renumber sections as needed, post it as the official current version of the ordinances on the Town's website, and to complete the required ordinance formalities.

Article VI. Effective Date. This ordinance shall be effective upon the first day of publication after adoption.

Adopted on the 12 day of May, 2016.

BY THE TOWN BOARD

Carl Reuter, Chairperson

Attest: _____
Caroline Spurgeon, Clerk-Treasurer

CAROLINE ANN SPURGEON
Notary Public
Minnesota
My Comm. Expires
[illegible] 31, 2019