

## SECTION 8.13- SOLAR ENERGY SYSTEMS (SES)

### A. Purpose:

To promote the use of Solar Energy within Palmyra Township as a clean alternative energy source to provide for the land development, installation and construction regulations for Level 3 Solar Energy Systems (SES) facilities subject to reasonable conditions that will protect the public health, safety and welfare. These regulations establish minimum requirements and standards for the placement, construction and modification of Level 3 SES facilities, while promoting a renewable energy source for our community in a safe, effective and efficient manner.

1. The owner of a solar farm (Level3) SES shall provide the Planning Commission with an operations agreement, which shall set forth the operations parameters, the name and contact information of the certified operator, inspection protocol, emergency procedures and general safety documentation.

### B. Criteria for the use of All Solar Energy Equipment:

1. Solar energy equipment shall be located in the least visibly obtrusive location where panels would be functional, as determined on the site plan.
2. Each system shall conform to applicable industry standards including those of the American National Standards Institute (ANSI).

### C. Application for Site Plan Review for Level 3 SES:

An applicant who seeks to install a Level 3 SES shall submit an application for Site Plan Review to the Township Clerk, before being sent to the Planning Commission for their recommendation to the Township Board. The application shall include the following:

1. Photographs of the property's existing condition.
2. Renderings of catalogue cuts of the proposed solar energy equipment.
3. Certificate of compliance demonstration that the system has been tested and approved by Underwriter laboratories (UL) or another approved independent testing agency.
4. Prior to installation of a ground mounted Solar Energy System, the property owner or representative shall submit a descriptive site drawing to the Zoning Administrator. This drawing shall include setbacks, panel size, and the location of the property lines; buildings, fences, greenbelts, road right of ways and a detailed decommissioning plan

for restoration after the SES ceases operation (See Section 8.13E). This site drawing must be drawn to scale.

5. Description of the screening to be provided for the ground or wall mounted solar energy equipment.
6. When authorizing a Special Land Use for a Solar Energy System (SES) in Level 3 SES's in districts where a Special Land Use is required, the Palmyra Township Board "shall" require a "surety in the form of a bond or irrevocable letter of credit" to ensure compliance with Special Land Use requirements for decommissioning the SES after operation ceases. The detailed decommissioning plan for restoration shall be set forth in the Application for Site Plan Review and the Special Land Use Application which shall be submitted to the Palmyra Township Planning Commission. The Palmyra Township Board shall fix the amount of the "surety". In fixing the amount of such "surety", the Palmyra Township Board shall limit the amount to reasonable improvements necessary for demolition, removal and restoration similar to the site's condition before the Special Land Use was granted. The Palmyra Township Board shall determine which type "surety" is necessary. The "surety" shall be released upon written certification of the Zoning Administrator that the restoration is complete and in compliance with the restoration plan.

D. Level 3 SES Solar Farms:

1. The owner of the solar farm shall provide the Planning Commission with an operations agreement, which shall set forth the operations parameters, the name and contact information of the certified operator, inspection protocol, emergency procedures and general safety documentation.
2. Minimum lot size: Level 3 SES facilities shall not be constructed on parcels less than one (1) acre.
3. Height Restrictions: All panels located in a solar farm shall be restricted to a height of fourteen (14) feet.
4. Setbacks: Must meet the requirements in Section 4.8.1 (See footnotes 3-6)
5. Maximum Lot Coverage: Maximum lot coverage restrictions shall not apply to solar panels. Any other regulated structures on the parcel are subject to maximum lot coverage restrictions. (See Section 4.8.1 footnotes 1 and 2)
6. Safety/Access: A security fence (height and material to be established through the special use permit process) shall be placed around the perimeter of the Level 3 SES

power plant and electrical equipment shall be locked. Knox boxes and keys shall be provided at locked entrances for emergency personnel access.

7. **Buffering Between Land Uses:** Upon any improvement for which a Site plan is required, a landscape buffer shall be required to create a visual screen at least six (6) feet in height along all adjoining boundaries whenever a Level 3 SES use abuts a nonparticipating residential property. A landscape buffer shall consist of plant materials so as to maintain a minimum opacity of at least eighty (80) percent. Opacity shall be measured by observation of any (2) square yard area of landscape screen between one (1) foot above the established grade of the area to be concealed and the top or the highest point of the required screen. Provided the minimum size of the plant material to be at six (6) feet in three (3) years, the opacity standard shall be met based upon reasonably anticipated growth over a period of three (3) years. The applicant shall agree in writing to install additional plantings after the expiration of three (3) years, in the event that the landscaping has not screened the view of areas as required.
8. **Local, State and Federal permits:** Level 3 SES facilities shall be required to obtain all necessary permits from the U.S. Government, State of Michigan, Palmyra Township, and comply with standards of the State of Michigan adopted codes.
9. **Electrical Interconnections:** All electrical interconnections or distribution lines shall comply with all applicable codes and standard commercial large-scale utility requirements and be underground.
10. **Performance Guarantee:** See Section 6.9
11. **Additional Special Use Land Criteria:** The following topics shall be addressed in a Special Use Land Permit application for Level 3 SESs in addition to the Special Use Land Review Criteria:
  - a. **Project description and rationale:** Identify the type, size, rated power output, performance, safety and noise characteristics of the system, including the name and address of the manufacturer, and model. Identify time frame, project life, development phases, likely markets for the generated energy, and possible future expansions.
  - b. **Analysis of onsite traffic:** Estimated construction jobs, estimated permanent jobs associated with the development.

- c. Visual inspections: Review and demonstrate the visual impact using photos or renditions of the project or similar projects with consideration given to tree plantings and setback requirements.
- d. Environmental analysis: Identify impact analysis on the water quality and water supply in the area, and dust from the project activities.
- e. Wildlife: Review potential impact on wildlife on the site.
- f. Waste: Identify solid waste or hazardous waste generated by the project.
- g. Lighting: Provide lighting plans showing all lighting within the facility. No light may adversely affect adjacent parcels. All lighting must be shielded from adjoining parcels, and light poles are restricted to eighteen (18) feet in height.
- h. Transportation plan: Provide access plan during construction and operation phases. Show proposed project service road and egress access onto primary and secondary routes, layout of the plant service road system. Due to infrequent access to such facilities after construction is completed, it is not required to pave or curb solar panel access drives. It will be necessary to pave and curb any driveway and parking lots used for occupied offices that are located on site.
- i. Public Safety: Identify emergency and normal shutdown procedures. Identify potential hazards to adjacent properties, public roadways, and to community in general that may be created.
- j. Telecommunications interference: Identify electromagnetic fields and communications interference generated by the project.

E. Abandonment and Decommissioning Plan:

- 1. Abandonment: A SES that ceases to produce energy on a continuous basis for a 12-month period will be considered abandoned unless the current responsible party (or parties) with ownership interest in the SES provides substantial evidence (updated every 6 months after a 12-month period of no energy production) to the Zoning Administrator of the intent to maintain and reinstate the operation of that facility. It is the responsibility of the responsible party (or parties) to remove all equipment and facilities and restore the Parcel to its condition prior to development of the SES.
  - a. Upon determination of abandonment, the Zoning Administrator shall notify the party (or parties) responsible that they must remove the SES and restore the site to

its condition prior to development of the SES within one hundred and eighty (180) days of notice by the Zoning Administrator.

- b. If the responsible party (or parties) fail to comply, the Zoning Administrator may remove the SES, sell any removed materials, and initiate judicial proceedings or take any other steps legally authorized against the responsible parties to recover the costs required to remove the SES and restore the site to a non-hazardous pre-development condition.
2. Decommissioning: A decommissioning plan signed by the party responsible for decommissioning and the landowner (if different) addressing the following shall be submitted prior to the issuance of the permit.
    - a. Defined conditions upon which decommissioning will be initiated (i.e., end of land lease, no power production for a 12-month-period, abandonment etc.)
    - b. Removal of all non-utility owned equipment, conduit, structures, fencing, roads, solar panels and foundations.
    - c. Restoration of property to condition prior to development of the SES.
    - d. The timeframe for completion of decommissioning activities.
    - e. Description of any agreement (i.e., lease) with landowner regarding decommissioning.
    - f. The party currently responsible for decommissioning.
    - g. Plans for updating the decommissioning plan.
    - h. Anticipated life of the project.
    - i. The estimated decommissioning cost net of salvage value in current dollars.
    - j. A bond or irrevocable letter of credit as a surety tool is obtained and maintained in an amount sufficient enough to decommission the solar array and to return the property to agricultural purposes. The financial surety must be in place for the entire deferment period and reviewed and updated every four (4) years. The cost is passed on to the Solar Company. The amount of the financial surety shall be calculated by two (2) licensed engineers; one (1) chosen by the Solar Company and one (1) chosen by the Palmyra Township Board. The Palmyra Township Board

shall choose which decommissioning and reclamation estimate to use. The surety shall be payable to Palmyra Township. Palmyra Township expects that this will be the Solar Project Company's responsibility under the commercial Solar Agreement.

- k. The site will require a Knox box to be located at the main entrance and auxiliary entrances to the site.

DRAFT - April 2021

### SECTION 4.8.1 – AREA; HEIGHT, BULK, AND PLACEMENT REQUIREMENTS

Zoning Districts	Lot Requirements			Minimum Yard Requirements (C)			Maximum Building Height (B)		Type of use
	Minimum Lot Area	Minimum Lot Width	Minimum Lot Coverage	Front	Side	Rear	Principal	Accessory	
Agricultural [AG] see note 1	2 Acres	400'	30%	70'	50'	50'	2-1/2 Story or 35'	100'	Single family [A]
	5 Acres								All other uses
Agricultural Residential [AR] see note 2,3,4,5	1 Acre	200'	30%	35'	25'	25'	2-1/2 Story or 35'	100'	Single family [A]
	5 Acres				35*				All other uses
Mobile Home Park [MH]	10 Acres 4000 Sq. Ft			In accordance with the Michigan Mobil Home Commission Act, PA 96 of 1987, as amended					Mobile Home Park Sit Within a MH Park
Office [O]	0.5 Acre	100'	50%	35'	10'-25' Total 35*	25'	2-1/2 Story or 35'	35'	All other uses
Commercial [C]	1 Acre	100'	50%	35'	20'	25'	2-1/2 Story or 35'	35'	All other uses
Light Industrial [LI]	3 Acres	300'	50%	50'	20'	25'	2-1/2 Story or 35'	35'	All other uses

General Industrial [GI]	3 Acres	300'	50%	50'	20'	25'	2-1/2 Story or 35'	35'	All other uses

\*Corner Lot

Footnote 1. In the AG District the Maximum Lot Coverage restriction shall not apply to Level 3 SES Solar Farms.

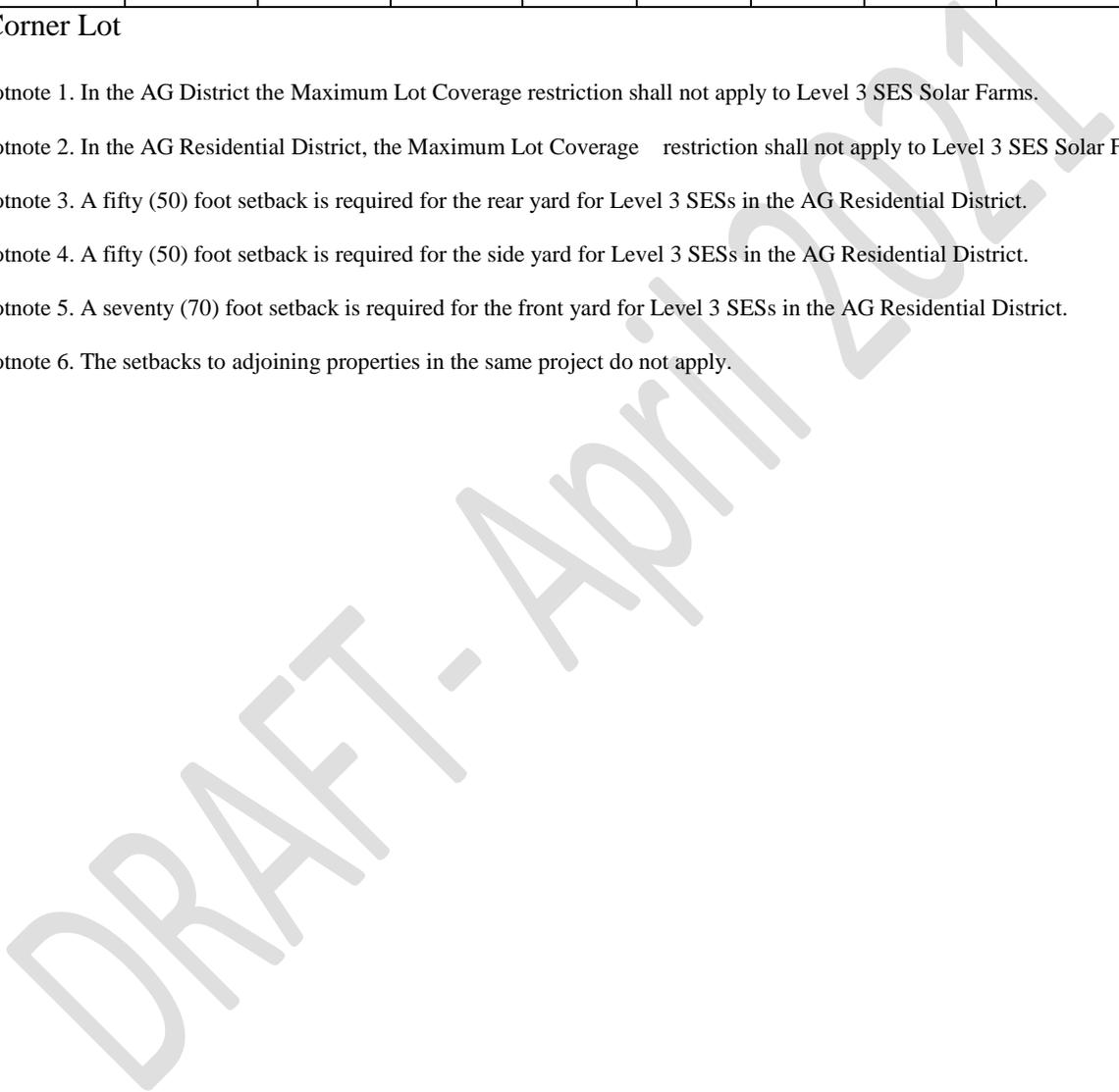
Footnote 2. In the AG Residential District, the Maximum Lot Coverage restriction shall not apply to Level 3 SES Solar Farms.

Footnote 3. A fifty (50) foot setback is required for the rear yard for Level 3 SESs in the AG Residential District.

Footnote 4. A fifty (50) foot setback is required for the side yard for Level 3 SESs in the AG Residential District.

Footnote 5. A seventy (70) foot setback is required for the front yard for Level 3 SESs in the AG Residential District.

Footnote 6. The setbacks to adjoining properties in the same project do not apply.



## SECTION 6.9 – PERFORMANCE GUARANTEE

In authorizing a conditional use permit, the Palmyra Township Board may require that a cash deposit, certified check, irrevocable bank letter of credit, or surety bond be furnished by the developer to insure compliance with an approved site plan and special approval use permit requirements. Such guarantee shall be deposited with the Palmyra Township Clerk at the time of the issuance of the conditional use permit. In fixing the amount of such performance guarantee, the Palmyra Township Board shall limit the amount to reasonable improvements required to meet the standards of this Ordinance and to protect the natural resources or the health, safety, and welfare of the residents of the township and future users or inhabitants of the proposed project or project area. These improvements may include, but are not limited to roadways, lighting, utilities, sewer, water, sidewalks, screening and drainage. The Palmyra Township Board and the project developer shall establish an agreeable procedure for the rebate of any cash deposits required under this section, in reasonable proportion to the ratio of the work completed on the required improvements as work progresses. Said agreement shall be written as an element of the conditions contained in the special approval use permit.