

BOROUGH OF ORWIGSBURG
SCHUYLKILL COUNTY, PENNSYLVANIA

ORDINANCE NO. 457

AN ORDINANCE TO AMEND THE ORWIGSBURG BOROUGH ZONING ORDINANCE BY ADDING OR AMENDING THE DEFINITIONS OF ACCESSORY SOLAR ENERGY SYSTEMS, BUILDING COVERAGE, FINANCIAL SECURITY, GLARE, IMPERVIOUS COVERAGE, IMPERVIOUS SURFACE, LOT COVERAGE, PRINCIPAL SOLAR ENERGY SYSTEM, SOLAR ENERGY AND SOLAR RELATED EQUIPMENT; AMENDING SECTIONS 6.03, 6.13, 6.23, 6.33, 6.43 AND 7.02 RELATING TO LOT WIDTH, LOT AREA AND YARD REQUIREMENTS; AMENDING SECTION 8.03.B TO RELATING TO DETACHED NON-RESIDENTIAL BUILDINGS AND USES; AMENDING SECTIONS 9.03 AND 9.03.B RELATING TO MAXIMUM BUILDING AND IMPERVIOUS COVERAGE IN THE INDUSTRIAL ZONING DISTRICT; AMENDING SECTIONS 6.02.G.7, 6.12.I.9, 6.22.H.9, 6.32.K.9, 6.42.K.9 AND 7.01.M.13 RELATING TO RECREATION COURTS; AMENDING SECTIONS 6.02.G, 6.10.I, 6.22.H, 6.32.K, 6.42.K AND 7.01.M TO ADD ACCESSSSORY SOLAR ENERGY SYSTEMS; AMENDING SECTIONS 6.02.H, 6.10.J AND 6.22.I TO ADD PRINCIPAL SOLAR ENERGY SYSTEMS AS A SPECIAL EXCEPTION USE; AMENDING SECTIONS 8.02.T, 9.02.J AND 9.12.L TO ADD PRINCIPAL SOLAR ENERGY SYSTEMS AS A CONDITIONAL USE; AMENDING SECTION 10.01 RELATING TO ACCESSORY BUILDINGS AND STRUCTURES; ADDING A NEW SECTION 10.40 RELATING TO SOLAR ENERGY SYSTEMS; AND PROVIDING FOR A REPEALER, PROVISIONS REGARDING VALIDITY AND THE EFFECTIVE DATE OF THE ORDINANCE.

BE IT ENACTED AND ORDAINED by the Borough Council of the Borough of Orwigsburg, Schuylkill County, Pennsylvania, and it is hereby enacted and ordained by authority of the same as follows:

Section 1. Section 2.02 is hereby amended to add and or modify the following definitions:

ACCESSERY SOLAR ENERGY SYSTEM (ASES). An area of land or other area used for solar collection system principally used to capture solar energy with the intention of converting and supplying electrical or thermal power: (1) primarily; or (2) solely for on-site use. Ground mounted of freestanding Solar Energy Systems with an output size of not greater than 10kW shall be considered Accessory Solar Energy Systems. Roof or wall mounted solar energy systems on the roofs or walls of buildings on-site used primarily for on-site use shall have no limit as to power output. An ASES consists of one (1) or more free-standing ground, wall, or roof mounted solar arrays or modules, or solar related equipment and is intended to primarily reduce on-site consumption of utility power for use on-site by the generator.

BUILDING COVERAGE. The aggregate of the maximum horizontal cross-section areas of all buildings on a lot, excluding cornices, eaves, and gutters projecting not more than eighteen (18) inches.

FINANCIAL SECURITY. A form of security including a cash deposit, surety bond, irrevocable letter of credit, cashier's check, or escrow account from a federal or Commonwealth chartered lending institution.

GLARE. The effect produced by light with an intensity sufficient to cause annoyance, discomfort, or loss in visual performance and visibility.

IMPERVIOUS COVERAGE. Any portion of a lot covered by impervious surfaces.

IMPERVIOUS SURFACE. Any surface that has been compacted or covered over with a building, structure or layer of material so that it is highly resistant to infiltration by water. It includes surfaces such as compacted sand, limerock, or clay, as well as stone/graveled driveways and parking areas and most conventionally surfaced streets, roofs, sidewalks, parking lots and other similar structures and paved areas.

LOT COVERAGE. See Building Coverage.

PRINCIPAL SOLAR ENERGY SYSTEM (PSES). An area of land or other area used for a solar collection system principally used to capture solar energy, convert it to electrical energy or thermal power and supply electrical or thermal power primarily for off-site use. Principal Solar Energy Systems consist of one (1) or more free-standing ground or roof-mounted solar collection devices, solar related equipment and other accessory structures and buildings including light reflectors, concentrators, and heat exchangers, substations, electrical infrastructure, transmission lines and other appurtenant structures.

SOLAR ENERGY. Radiant energy (direct, diffuse, and/or reflective) received from the sun.

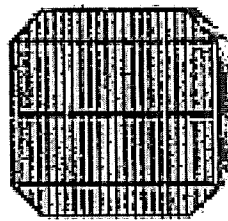
SOLAR RELATED EQUIPMENT:

SOLAR ARRAY. A grouping of multiple solar modules with purpose of harvesting solar energy.

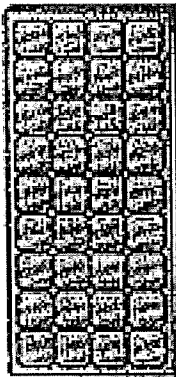
SOLAR CELL. The smallest basic solar electric device which generates electricity when exposed to light.

SOLAR MODULE. A grouping of solar cells with the purpose of harvesting solar energy.

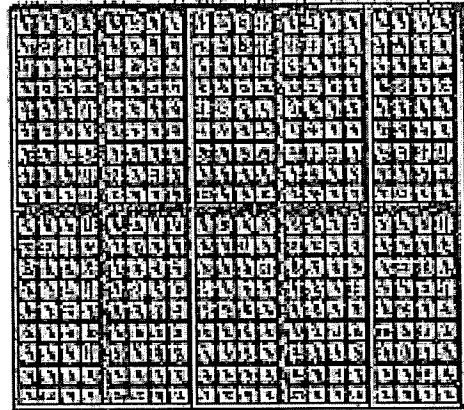
SOLAR PANEL. That part or portion of a solar energy system containing one or more receptive cells or modules, the purpose of which is to convert solar energy for use in space heating or cooling, for water heating and/or electricity.



Cell



Module



Array

Section 2. Section 6.03 is hereby amended to read as follows:

SECTION 6.03 - LOT WIDTH, LOT AREA AND YARD REQUIREMENTS. Lot width, lot area and setbacks of not less than the dimension shown in the following table shall be provided for every dwelling unit and/or principal non-residential building hereafter erected or altered for any use permitted in this district: (Amended October 9, 2013)

SINGLE-FAMILY DETACHED DWELLINGS AND PERMITTED NON-RESIDENTIAL USES	
Minimum Lot Area*	1 acre (43,560 square feet)
Minimum Lot Width	150 feet
Setback Requirements	
Required Front Yard – Single Family Dwellings	40 feet
Required Front Yard – Non-Residential Uses	30 feet
Required Rear Yard	30 feet
Required Side Yard	20 feet
Building coverage (maximum) – including accessory structures	30%
Impervious Coverage (maximum – including accessory structures)	40%
* Minimum lot area based on availability of public sewer service. Where on-lot sewage disposal is required, lot area in addition to stated minimum may be required, subject to PaDEP approval.	

Certain uses may have additional dimensional requirements from those noted above.

Section 3. Section 6.13 is hereby amended to read as follows:

SECTION 6.13 - LOT WIDTH, LOT AREA AND YARD REQUIREMENTS. Lot width, lot area and set-backs of not less than the dimension shown in the following table shall be provided for every dwelling unit and/or principal non-residential building hereafter erected or altered for any use permitted in this district.

SINGLE-FAMILY DETACHED DWELLINGS AND PERMITTED NON-RESIDENTIAL USES	
Minimum Lot Area*	1 acre (43,560 square feet)
Minimum Lot Width	150 feet
Setback Requirements	
Required Front Yard	40 feet
Required Rear Yard	30 feet
Required Side Yard	20 feet
Building coverage (maximum) – including accessory structures	30%
Impervious coverage (maximum) – including accessory structures	40%
* Minimum lot area based on availability of public sewer service. Where on-lot sewage disposal is required, lot area in addition to stated minimum may be required, subject to PaDEP approval.	

Certain uses may have additional dimensional requirements from those noted above.

Section 4. Section 6.23 is hereby amended to read as follows:

SECTION 6.23 - LOT WIDTH, LOT AREA AND YARD REQUIREMENTS. Lot width, lot area and set-backs of not less than the dimension shown in the following table shall be provided for every dwelling unit and/or principal non-residential building hereafter erected or altered for any use permitted in this district.

SINGLE-FAMILY DETACHED DWELLINGS AND PERMITTED NON-RESIDENTIAL USES	
Minimum Lot Area*	20,000 s.f.
Minimum Lot Width	100 feet
Setback Requirements	
Required Front Yard	30 feet
Required Rear Yard	30 feet
Required Side Yard	15 ft. each
Building coverage (maximum) – including accessory structures	30%

Impervious coverage (maximum) – including accessory structures	40%
* Minimum lot area based on availability of public sewer service. Where on-lot sewage disposal is required, lot area in addition to stated minimum may be required, subject to PaDEP approval.	

Certain uses may have additional dimensional requirements from those noted above.

Section 5. Section 6.33 is hereby amended to read as follows:

SECTION 6.33 - LOT WIDTH, LOT AREA AND YARD REQUIREMENTS. Lot width, lot area and set-backs of not less than the dimensions shown on the following table shall be provided for every dwelling unit and/or principal non-residential building hereafter erected or altered for any use permitted in the district.

PERMITTED RESIDENTIAL USES				
	SINGLE-FAMILY DETACHED	SINGLE-FAMILY SEMI-DETACHED	TWO-FAMILY DETACHED	TWO-FAMILY SEMI-DETACHED
Minimum Lot Area*	10,000 s.f.	** 8,000 s.f.	16,000 s.f.	**8,000 s.f.
Minimum Lot Width	80 feet	***60 feet	120 feet	***90 feet
Setback Requirements				
Required Front Yard	30 feet	30 feet	30 feet	30 feet
Required Rear Yard	25 feet	25 feet	25 feet	25 feet
Required Side Yard	10 ft. each	****20 feet	20 ft. each	****30 feet
Building coverage (max) – including accessory structures	40%	40%	40%	40%
Impervious coverage (max) - Including accessory structures	50%	50%	50%	50%
* Minimum lot area based on availability of public sewer service. Where on-lot sewage disposal is proposed, lot area in addition to stated minimum may be required, subject to PaDEP approval. ** Per dwelling unit *** Minimum lot width to party wall **** One property line is party wall				
PERMITTED NON-RESIDENTIAL USES				
Subject to the same dimensional requirements as single family detached dwellings.				

Certain uses may have additional dimensional requirements from those noted above.

Maximum Impervious Coverage may be increased by 25% if lot size is 12,000 square feet or less.

Section 6. Section 6.43 is hereby amended to read as follows:

SECTION 6.43 - LOT WIDTH, LOT AREA AND YARD REQUIREMENTS. Lot width, lot area and set-backs of not less than the dimensions shown on the following table shall be provided for every dwelling unit and/or principal nonresidential building hereafter erected or altered for any use permitted in this district.

PERMITTED RESIDENTIAL USES				
	SINGLE-FAMILY DETACHED	SINGLE-FAMILY SEMI-DETACHED	TWO-FAMILY DETACHED	TWO-FAMILY SEMI-DETACHED
Minimum Lot Area*	7,500 s.f.	**6,000 s.f.	12,000 s.f.	**6,000 s.f.
Minimum Lot Width	60 feet	***45 feet	90 feet	***75 feet
Setback Requirements				
Maximum Required Front Yard	15 feet	15 feet	15 feet	15 feet
Required Rear Yard	20 feet	20 feet	20 feet	20 feet
Required Side Yard	8 ft. each	****16 feet	16 ft. each	****24 feet
Building coverage (max) – including accessory structures	50%	50%	50%	50%
Impervious coverage (max) - Including accessory structures	60%	70%	60%	70%
<p>* Minimum lot area based on availability of public sewer service. Where on-lot sewage disposal is required, lot area in addition to stated minimum may be required, subject to PaDEP approval.</p> <p>** Per dwelling unit</p> <p>*** Minimum lot width to party wall</p> <p>**** One property line is party wall</p>				

Certain uses may have additional dimensional requirements from those noted above.

Maximum Impervious Coverage may be increased by 25% if lot size is less than 12,000 square feet.

Section 7. Section 7.02 is hereby amended to read as follows:

SECTION 7.02 - LOT WIDTH, LOT AREA AND YARD REQUIREMENTS. Lot width, lot area and set-backs of not less than the dimensions shown on the following table shall be provided for every dwelling unit and/or principal non-residential building hereinafter erected or altered for any use permitted in this district.

PERMITTED RESIDENTIAL USES				
	SINGLE-FAMILY DETACHED	SINGLE-FAMILY SEMI-DETACHED	TWO-FAMILY DETACHED	TWO-FAMILY SEMI-DETACHED
Minimum Lot Area*	5,000 s.f.	**4,000 s.f.	8,000 s.f.	**4,000 s.f.
Minimum Lot Width	40 feet	***30 feet	60 feet	***45 feet
Setback Requirements				
Maximum Required Front Yard	15 feet	15 feet	15 feet	15 feet
Required Rear Yard	20 feet	20 feet	20 feet	20 feet
Required Side Yard	8 ft. each	****8 feet	12 ft. each	****16 feet
Building coverage (max) – including accessory structures	50%	50%	50%	50%
Impervious coverage (max) - Including accessory structures	60%	70%	60%	70%
* Minimum lot area based on availability of public sewer service. Where on-lot sewage disposal is required, lot area in addition to stated minimum may be required, subject to PaDEP approval. ** Per dwelling unit *** Minimum lot width to party wall **** One property line is party wall				
Maximum Impervious Coverage may be increased by 25% if lot size is less than 12,000 square feet.				

Section 8. Section 8.03.B is hereby amended to add a new Subsection 8.03.B.6 and Subsection 8.03.B.7 to read as follows:

6. Detached non-residential buildings shall be located not closer than twenty (20) feet to any side property line abutting a residential district or lot used for residential purposes.
7. Each non-residential use shall have a maximum building coverage of 60% and a maximum impervious coverage of 80%.

Section 9. Section 9.03 is hereby amended to add a new Subsection 8.03.D to read as follows:

- D. Each use in the I-1 District shall have a maximum building coverage of 60% and a maximum impervious coverage of 80%.

Section 10. Section 9.13.B is hereby amended to add a new Subsection 9.13.B.5 to read as follows:

- 5. Each non-residential use shall have a maximum building coverage of 60% and a maximum impervious coverage of 80%.

Section 11. Section 6.02.G.7, Section 6.12.I.9, Section 6.22.H.9, Section 6.32.K.9, Section 6.42.K.9, and Section 7.01.M.13 are hereby amended to read as follows:

Recreation Courts, subject to Section 10.29.

Section 12. Section 6.02.G, Section 6.10.I, Section 6.22.H, Section 6.32.K, Section 6.42.K, & Section 7.01.M are hereby amended to add the following customary access use:

Accessory Solar Energy Systems (ASES), subject to Section 10.40.

Section 13. Section 6.02.H, Section 6.10.J, and Section 6.22.I are hereby amended to add the following Special Exemption Use:

Principal Solar Energy Systems (PSES), subject to Section 10.40.

Section 14. Section 8.02.T, Section 9.02.J, and Section 9.12.L are hereby amended to add the following Conditional Use:

Principal Solar Energy Systems (PSES), subject to Section 10.40.

Section 15. Section 10.01 is hereby amended in its entirety and shall read as follows:

SECTION 10.01 – ACCESSORY BUILDINGS AND STRUCTURES

- A. An accessory building attached to a principal building shall comply in all respects with the yard requirements of this Ordinance for the principal building.
- B. Detached accessory buildings and structures.
 - 1. Detached accessory buildings and structures shall be located to the rear of the front building line of the principal building and shall conform to the side yard requirements in respect to the principal building.

2. Detached accessory buildings constructed at the same time may be located in pairs or groups on contiguous lots in the required rear yards along the common side lot line or rear lot line.
3. Accessory buildings and structures for principal uses other than residential shall be located not closer than twenty (20) feet to any side or rear property line abutting a residential district or lot used for residential purposes.
4. Detached accessory buildings, structures, or uses in residential districts. In the R-E, R-S, R-1, R-2, R-3 and V Districts, the following additional regulations apply:
 - a. Detached accessory Building or Structure.
 - (1) Maximum building footprint:
 - (i.) Lot smaller than 43,560 sf (1 acre) in the R-E, R-S and R-1 Districts:

1,200 square feet. This maximum building footprint may be increased only through a special exception granted by the Zoning Hearing Board.
 - (ii.) Lot smaller than 43,560 sf (1 acre) in the R-2, R-3 and V Districts:

1,000 square feet. This maximum building footprint may be increased only through a special exception granted by the Zoning Hearing Board.
 - (iii.) If lot is between 43,560 sf (1 acre) and 87,120 sf (2 acres) in size, regardless of Zoning District, the maximum building footprint may be increased to 1,600 square feet as long as a single side is not in excess of 60 feet.
 - (iv.) If lot is greater than 87,120 sf (2 acres) in size, regardless of Zoning District, the maximum building footprint may be increased to 2,000 square feet as long as a single side is not in excess of 72 feet.
 - (2) Maximum Building Height (per Definition of Building Height located within this Ordinance)
 - (i) In the R-E, R-S, and R-1 Districts, Maximum height – twenty-four (24) feet.
 - (ii) In the R-2, R-3, and V Districts, Maximum height – eighteen (18) feet.

- (3) Accessory Structures located behind the front building line shall be located:
 - (i) a minimum of ten (10) feet from any property line in the R-E, R-S and R-1 Districts.
 - (ii) a minimum of one (1) foot from any side property line and a minimum of three (3) feet from any rear property line in the R-2, R-3 and V Districts.
 - (4) Storage Sheds and other accessory structures less than 180 square feet in floor shall be located to the rear of the front building line of the principal building and shall be located
 - (i) a minimum of five (5) feet from any property line in the R-E, R-S and R-1 Districts.
 - (ii) a minimum of one (1) foot from any side property line and a minimum of three (3) feet from any rear property line in the R-2, R-3 and V Districts.
 - (5) The minimum distance between any accessory building or structure and principal building shall be ten (10) feet.
 - (6) No temporary structures using substandard construction practices shall be permitted to function as an accessory structure or for dwelling purposes.
- b. Detached accessory buildings for permitted attached and semi-detached dwellings shall be located no closer than five (5) feet from any side lot line formed by a building party wall.
 - c. No more than four (4) accessory structures shall be permitted on a single lot.
 - d. Total combined building coverage of all on-lot structures including principal and all accessory structures may not exceed the building coverage regulations provided for each Zoning District.
 - e. Total combined impervious coverage of all on-lot improvements including all accessory structures may not exceed the impervious coverage regulations provided for each Zoning District.
5. Detached accessory buildings in non-residential districts. In the C, I-1 and I-2 Districts, the following additional regulations apply:

- a. In any non-residential district, an accessory building shall conform to the height regulations for principal buildings as provided for each Zoning District.
- b. Accessory buildings located in a rear yard area shall be a minimum of twenty (20) feet from the rear property line.
- c. Accessory structures located on existing residential use lots within non-residential districts must adhere to the accessory structure requirements of Section 10.01.B.4 above.
- d. Total combined building coverage of all on-lot structures including principal and all accessory structures may not exceed the building coverage regulations provided for each Zoning District.
- e. Total combined impervious coverage of all on-lot improvements including all accessory structures may not exceed the impervious coverage regulations provided for each Zoning District.

Section 16. Section 10.29 is hereby amended in its entirety and shall read as follows:

SECTION 10.29 - RECREATIONAL COURTS. Recreational courts, such as basketball courts, tennis courts, pickleball courts, etc. are permitted accessory uses in all Residential Zoning Districts, subject to the following:

- A. No tennis court or pickleball court facility shall be permitted unless it is protected by an open mesh permanent fence ten (10) feet in height behind each baseline extending ten (10) feet beyond the playing area in each direction.
- B. No facility, including fence, as necessary, shall be permitted to be located within ten (10) feet of any property line, nor exceed ten (10) feet in height, unless approved by special exception from the Zoning Hearing Board.
- C. No facility, including fence, shall be located closer to the front of the lot than the front wall of the principal building.
- C. If lighting is provided, it shall be arranged so that there is no objectionable glare on adjoining properties.

Section 17. Section 10.40 Solar Energy Systems is hereby added in its entirety and shall read as follows:

SECTION 10.40 – SOLAR ENERGY SYSTEMS

- A. It is the purpose of this regulation to promote the safe, effective, and efficient use of solar energy systems as a permitted accessory use while protecting the health, safety, and welfare

of adjacent and surrounding land uses through appropriate zoning and land use controls. A solar energy system shall be a permitted use, conditional use, or use by special exception as specified under each zoning classification and be subject to the specific criteria as set forth below. Where said general standards and specific criteria overlap, the specific criteria shall supersede the general standards.

B. Accessory Solar Energy Systems (ASES)

1. ASES constructed prior to the effective date of this Section shall not be required to meet the terms and conditions of this section. Any physical modifications to an existing ASES, whether or not existing prior to the effective date of this Section that materially alters the ASES, must meet the requirements of this Section.

2. The ASES layout, design and installation shall conform to applicable industry standards, such as those of the National Electric Code (NFPA 70), American National Standards Institute (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), Electrical Testing Laboratory (ETL), Florida Solar Energy Center (FSEC) or other similar certifying organizations, and shall comply with the Municipality's Building Code, and with all applicable fire and life safety requirements. The manufacturer specifications for the key components of the system shall be submitted as part of the application.

3. All on-site utility, transmission lines, and plumbing shall be placed underground to the greatest extent possible.

4. Ground mounted or free-standing ASES shall have a maximum power rating of not more than 10kW. Roof or wall mounted ASES on buildings on-site used primarily for on-site use shall have no limit as to power output. Ground mounted or free-standing ASES that have a power rating more than 10kW shall comply with the requirements of Principal Solar Energy Systems.

5. Signage shall comply with the prevailing sign regulations.

6. All solar energy systems should be designed and located to ensure solar access without reliance on and/or interference from adjacent properties.

7. All ASES shall be situated to eliminate concentrated glare onto nearby structures or roadways. The Applicant has the burden of proving that any glare produced does not have significant adverse impact on neighboring or adjacent uses either through siting or mitigation.

8. Roof Mounted and Wall Mounted Accessory Solar Energy Systems:

- a. A roof mounted or wall mounted ASES may be located on a principal or accessory structure.

- b. The total height of a building with an ASES shall not exceed by more than two (2) feet the maximum building height specified for a principal structure if mounted to a principal structure or shall not exceed by more than two (2) feet the maximum building height specified for an accessory structure if mounted to an accessory structure within the applicable zoning district.
 - c. Wall mounted ASES shall comply with the setbacks for principal structure if mounted to a principal structure or shall comply with the setbacks for accessory structures if mounted to an accessory structure in the u zoning districts.
 - d. Solar panels shall not extend beyond any portion of the roof edge.
 - e. For roof and wall-mounted systems, the applicant shall provide evidence that the plans comply with the Uniform Construction Code and adopted building code of the Borough and that the roof or wall is capable of holding the load imposed on the structure.
9. Ground Mounted Accessory Solar Energy Systems:
- a. Setbacks.
 - (1) The minimum setbacks from side and rear property lines shall be equivalent to the accessory building setbacks in the applicable zoning district.
 - (2) A ground mounted ASES shall be located to the rear of the front building line of the principal building.
 - (3) The Borough may authorize the installation of a ground mounted ASES in front of the front building line, outside the required front yard setback, if the application demonstrates that, due to solar access limitations, no locations exists on the property other than the area described above where the solar panel can perform effectively. If authorized, a vegetative screen shall be provided.
 - (4) Freestanding ground mounted ASES shall not exceed fifteen (15) feet in residential and village zones and twenty (20) feet in commercial and industrial zones in height above the ground elevation surrounding the systems.
 - b. Location.
 - (1) Ground-Mounted ASES shall not be placed within any legal easement or right-of-way or be placed within any stormwater conveyance system, or in any other manner that would alter or impede stormwater runoff from collecting in a constructed

stormwater conveyance system, unless the Applicant can demonstrate, to the satisfaction of the municipality, that the ASES will not impede stormwater management, or in any manner alter or impede stormwater runoff from collecting in a constructed stormwater conveyance system.

c. Removal.

- (1) If a Ground-Mounted ASES is removed, any earth disturbance as a result of the removal of the Ground-Mounted Solar Energy System shall be graded and re-seeded.

d. Coverage.

- (1) The area beneath the ground mounted ASES is considered pervious cover. However, use of impervious construction materials under the system could cause the area to be considered impervious and subject to the overall lot coverage requirement for the applicable zoning district.
- (2) The total surface area of the arrays of ground mounted ASES on the property shall be quantified and incorporated into the overall Maximum Impervious Coverage (%) calculation of the property in the applicable zoning district.

e. Screening.

- (1) Ground-mounted ASES installed as part of a commercial or industrial use shall be screened if the property is residentially zoned, abutting a residential zone, or abutting a lot used for residential purposes. The screen shall consist of plant materials which provide a visual screen. In lieu of a planting screen, a decorative fence meeting requirements of the Borough of Orwigsburg Zoning Ordinance may be installed.

f. Signage.

- (1) Appropriate safety/warning signage concerning voltage shall be placed at ground-mounted electrical devices, equipment, and structures. All electrical control devices associated with the ASES shall be locked to prevent unauthorized access or entry.

10. If connecting to a public utility company, the owner of a ASES shall provide the Municipality written confirmation that the public utility company to which the ASES will be connected has been informed of the customer's intent to install a grid connected system and approved of such connection. The owner shall provide

a copy of the final inspection report or other final approval from the utility company to the Borough prior to the issuance of a certificate of use and occupancy for the ASES.

11. Upon completion of installation, the ASES shall be maintained in good working order in accordance with the standards of the Township codes under which the ASES was constructed. Failure of the property owner to maintain the ASES in good working order is grounds for appropriate enforcement actions by the Township in accordance with applicable ordinances.
12. ASES installers must certify they are listed as a certified installer on the PA Department of Environmental Protection's (DEP) approved solar installer list or that they meet the criteria to be a DEP approved installer by meeting or exceeding one of the following requirements:
 - a. Is certified by the North American Board of Certified Energy Practitioners (NABCEP).
 - b. Has completed an Interstate Renewable Energy Council (IREC) Institute for Sustainable Power Quality (ISPQ) accredited PV training program or a PV manufacturer's training program and successfully installed a minimum of three PV systems.
 - c. For residential applications, a registered home improvement contractor with the Attorney General's Office.
13. The display of advertising is prohibited except for reasonable identification of the manufacturer of the system.
14. Permit Requirements.
 - a. Zoning/building permit applications shall document compliance with this Section and shall be accompanied by drawings showing the location of the system on the building or property, including property lines. Permits must be kept on the premises where the ASES is constructed.
 - b. The zoning/building permit shall be revoked if the ASES, whether new or pre-existing, is moved or otherwise altered, either intentionally or by natural forces, in a manner which causes the ASES not to be in conformity with this Ordinance.
 - c. The ASES must be properly maintained and be kept free from all hazards, including but not limited to, faulty wiring, loose fastenings, being in an unsafe condition or detrimental to public health, safety or general welfare. In the event of a violation of any of the foregoing provisions, the Zoning Officer shall give written notice specifying the violation to the owner of the ASES to conform or to remove the ASES.

15. Solar Easements.

- a. Where a subdivision or land development involves the use of solar energy systems, solar easements may be provided. Said easements shall be in writing and shall be subject to the same conveyance and instrument recording requirements as other easements.
- b. Any such easement shall be appurtenant; shall run with the land benefited and burdened; and shall be defined and limited by conditions stated in the instrument of conveyance. Instruments creating solar easement shall include, but not be limited to:
 - (1) A description of the dimensions of the easement including vertical and horizontal angles measured in the degrees or the hours of the day, on specified dates, during which direct sunlight to a specified surface or structural design feature may not be obstructed;
 - (2) Restrictions on the placement of vegetation, structures, and other objects which may impair or obstruct the passage of sunlight through the easement;
 - (3) Enumerate terms and conditions, if any, under which the easement may be revised or terminated;
 - (4) Explain the compensation for the owner of the real property subject to the solar easement for maintaining the easement and for the owner of the real property benefiting from the solar easement in the event of interference with the easement.
- c. If required, an ASES owner and/or operator must obtain any solar easements necessary to guarantee unobstructed solar access by separate civil agreement(s) with adjacent property owner(s).
- d. Prior to the issuance of a zoning permit, applicants must acknowledge in writing that the issuing of said permit for a solar energy system shall not and does not create in the property owner, its, his, her or their successors and assigns in title or, create in the property itself: (a) the right to remain free of shadows and/or obstructions to solar energy caused by development of adjoining or other property or the growth of any trees or vegetation on such property; or (b) the right to prohibit the development on or growth of any trees or vegetation on such property.

16. Decommissioning.

- a. Each ASES and all solar related equipment shall be removed within twelve (12) months of the date when the use has been discontinued or abandoned by system owner and/or operator, or upon termination of the useful life of same.
- b. The ASES shall be presumed to be discontinued or abandoned if no electricity is generated by such solar collector for a period of twelve (12) continuous months.
- c. The ASES owner shall, at the request of the Township, provide information concerning the amount of energy generated by the ASES in the last 12 months.

C. Principal Solar Energy Systems (PSES)

1. PSES constructed prior to the effective date of this Section shall not be required to meet the terms and conditions of this Section. Any physical modification to any existing PSES, whether or not existing prior to the effective date of this Section that expands the PSES shall require approval under this Section. Routine maintenance or replacements do not require a permit.
2. The PSES layout, design and installation shall conform to applicable industry standards, such as those of the National Electric Code (NFPA 70), American National Standards (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), Electrical Testing Laboratory(ETL), Florida Solar Energy Center (FSEC) or other similar certifying organizations, and shall comply with Municipality's Building Code, and with all other applicable fire and life safety requirements. The manufacturer specifications for the key components of the system shall be submitted as part of the application.
3. All on-site utility transmission lines and plumbing shall be placed underground to the greatest extent feasible.
4. The owner of a PSES shall provide the Municipality written confirmation that the public utility company to which the PSES will be connected has been informed of the customer's intent to install a grid connected system and approved of such connection. The owner shall provide a copy of the final inspection report or other final approval from the utility company to the Borough prior to the issuance of a certificate of use and occupancy for the PSES.
5. If a PSES is being used as an accessory use for commercial/industrial activity on another property, then the Borough shall be informed of the intent of the PSES.
6. Signage shall comply with the prevailing sign regulations.

7. All PSES shall be situated to eliminate concentrated glare onto nearby structures or roadways. The Applicant has the burden of proving that any glare produced does not have significant adverse impact on neighboring or adjacent uses either through sitting or mitigation.
8. All solar energy systems should be designed and located to ensure solar access without reliance on and/or interference from adjacent properties.
9. Ground Mounted Principal Solar Energy Systems:
 - a. Minimum Lot Size
 - (1) The PSES shall not be situated on a parcel smaller than one (1) acre.
 - b. Setbacks
 - (1) PSES shall comply with the setbacks for principal structures of the underlying zoning district.
 - c. Height
 - (1) Ground mounted PSES shall comply with the building height restrictions for principal structures of the underlying zoning district.
 - d. Impervious Coverage
 - (1) The following components of a PSES shall be considered impervious coverage and calculated as part of the impervious coverage limitations for the underlying zoning district:
 - (i) The surface area of the arrays of a ground mounted PSES, regardless of the mounted angle of any solar panels, shall be considered impervious and calculated in the overall impervious coverage requirement for the applicable zoning district.
 - e. Stormwater
 - (1) Stormwater runoff from an PSES shall be managed in accordance with the requirements of the Orwigsburg Borough Stormwater Management Ordinance.
 - (2) Where Solar Panels are mounted above the ground surface allowing for vegetation below the panels, the horizontal area of the

panel may be considered a Disconnected Impervious Area ("DIA") and therefore, will have no increase from the pre-development to post-development runoff coefficient. The horizontal area of the panel can only be considered a DIA if the following conditions apply:

- (i) Where natural vegetative cover is preserved and/or restored utilizing low impact construction techniques from the Pennsylvania Department of Environmental Protection Stormwater Best Management Practices Manual, including, but not limited to the following: minimizing the total disturbed area, minimizing soil compaction in disturbed areas, and re-vegetating and re-foresting disturbed areas using native species.
- (ii) Where the vegetative cover has a minimum uniform 70% perennial vegetative cover with a density capable of resisting accelerated erosion and sedimentation.
 - a. For panels located on slopes of 0 to 15% a minimum 4" height of vegetative cover shall be maintained.
 - b. Panels located on slopes greater than 15% cannot be considered DIA.
 - c. Vegetated areas shall not be subject to chemical fertilization or herbicide/pesticides application, except for those applications necessary to establish the vegetative cover or to prevent invasive species and in accordance with an approved Erosion and Sediment Control Plan.
 - d. Agrivoltaics, the co-development of the same area of land for both solar photovoltaic power and conventional agriculture, may be used provided that:
 - i. Only shade tolerant crops may be used.
 - ii. Crops must not be tilled in.
 - iii. A written erosion and sediment control plan must be developed for agricultural plowing or tilling activities, or a portion of the overall farm conservation plan must identify BMPs used.

iv. Any cutting or mowing of the agricultural crop is limited to a height of no less than 4 inches.

v. Application of chemical fertilization or herbicides/ pesticides is limited to the agronomic needs to the crop(s).

(iii) Where the Solar Panels within a Solar Array are arranged in a fashion that:

a. Allows the passage of runoff between each Solar Panel, thereby minimizing the creation of concentrated runoff.

b. Allows for the growth of vegetation beneath the panel and between the Solar Arrays.

(3) The horizontal area of any Solar Panel or Solar Array that cannot meet all the conditions to be considered DIA shall be treated as impervious area. These areas shall be included in the pre-development to post-development runoff analysis as impervious area to determine the need for Post Construction Stormwater Management ("PCSM") Best Management Practices.

(i) Use of gravel is permissible under a panel or in the receiving downhill flow path; however, the use of gravel would not allow the horizontal area of the Solar Panel or Solar Array to be considered as a DIA.

(ii) All impervious areas associated with the PSES such as roadways and support buildings cannot be considered a DIA and shall follow normal protocols when performing the PCSM stormwater analysis.

f. Screening

(4) Vegetative buffering, to the extent practical, shall be installed around the entire perimeter of the PSES installation, except where the Borough determines that the retention of existing trees within the vegetative buffering area may constitute the required vegetative buffer or where the Borough determines that the solar panels cannot be viewed from a public roadway or residential building.

(5) The vegetative buffering shall be installed along the exterior side of the fencing. All required vegetative buffering shall be located within fifty (50) feet of the required fencing.

- (6) Vegetative buffering should be designed to emulate the mix of native species and appearance of existing tree lines, hedge rows, and wooded areas already in existence within the landscape where the SEF is proposed. The applicant shall assess the species mix and characteristics found in existing tree lines, hedge rows, and wooded areas surrounding the SEF and document that the vegetative buffering is designed to emulate these characteristics. Arborvitae may be used as vegetative buffering.
 - (7) No less than 20% of vegetative buffering plantings shall be pollinator friendly species.
 - (8) Vegetative buffering shall be selected to provide year-round buffering and shall be of sufficient height, density, and maturity to screen the facility from visibility, as set forth herein within thirty-six months of the installation of the PSES.
 - (9) A combination of Natural topography and vegetation can serve as a buffer, provided that the PSES will not be visible from public roads, public parks or existing residences on surrounding properties. Earthen berms may not be created to serve as a buffer.
 - (10) The buffering requirements of this section shall supersede the other sections of the Orwigsburg Borough Zoning Ordinance and Subdivision and Land Development Ordinance as they may pertain to PSESs.
- g. Ground-Mounted PSES shall not be placed within any legal easement or right-of-way or be placed within any stormwater conveyance system, or in any other manner that would alter or impede stormwater runoff from collecting in a constructed stormwater conveyance system, unless the Applicant can demonstrate, to the satisfaction of the municipality, that the PSES will not impede stormwater management, or in any manner alter or impede stormwater runoff from collecting in a constructed stormwater conveyance system.
- h. Security.
- (1) All ground mounted PSES shall be completely enclosed by fencing that consists of a minimum six (6) foot high fence and a self-locking gate, or as designated and approved by the Borough.

- (2) A clearly visible warning sign shall be placed at the base of all pad-mounted transformers and substations and on the fence surrounding the PSES informing individuals of potential voltage hazards.
 - i. Access.
 - (1) At a minimum, a 14' wide stabilized access road must be provided from a State, County, or Township roadway into the site that is maintained in a dust free condition. The PSES Developer shall obtain a permit from the appropriate jurisdiction from the construction of the access road.
 - (2) Adequate space shall be provided between the solar arrays to allow access for maintenance vehicles and emergency management vehicles including fire apparatus and emergency vehicles as determined and approved by the Borough.
 - (3) Access to the PSES shall comply with the municipal access requirements in the Subdivision and Land Development Ordinance (SALDO).
 - j. The ground mounted PSES shall not be artificially lighted except to the extent required for safety or applicable federal, state, or local authority.
 - k. If a ground mounted PSES is removed, any earth disturbance resulting from the removal must be graded and reseeded.
- 10. Roof Mounted Principal Solar Energy Systems:
 - a. For roof and wall-mounted systems, the applicant shall provide evidence that the plans comply with the Uniform Construction Code and adopted building code of the Township that the roof or wall is capable of holding the load imposed on the structure.
 - b. PSES mounted on the roof or wall of any building shall be subject to the maximum height regulations of the underlying zoning district.
- 11. Wall Mounted Principal Solar Energy Systems should not be incorporated into a PSES.
- 12. PSES installers must certify they are listed as a certified installer on the PA Department of Environmental Protection's (DEP) approved solar installer list or that they meet the criteria to be a DEP approved installer by meeting or exceeding one of the following requirements:

- a. Is certified by the North American Board of Certified Energy Practitioners (NABCEP).
 - b. Has completed an Interstate Renewable Energy Council (IREC) Institute for Sustainable Power Quality (IS PQ) accredited PV training program or a PV manufacturer's training program and successfully installed a minimum of three PV systems.
13. No portion of the PSES shall contain or be used to display advertising. The manufacturer's name and equipment information or indication of ownership shall be allowed on any equipment of the PSES provided they comply with the prevailing sign regulations
14. Permit Requirements.
 - a. PSES shall comply with the Borough's Subdivision and Land Development Ordinance requirements through submission of a land development plan. The installation of PSES shall be in compliance with all applicable permit requirements, codes, and regulations including highway occupancy, driveway permits, and road bonding requirements.
 - b. The PSES owner and/or operator shall repair, maintain and replace the PSES and related solar equipment during the term of the permit in a manner consistent with industry standards as needed to keep the PSES in good repair and operating condition.
15. Solar Easements.
 - a. Where a subdivision or land development proposes a PSES, solar easements may be provided. Said easements shall be in writing and shall be subject to the same conveyance and instrument recording requirements as other easements.
 - b. Any such easement shall be appurtenant; shall run with the land benefited and burdened; and shall be defined and limited by conditions stated in the instrument of conveyance. Instruments creating solar easement shall include, but not be limited to:
 - (1) A description of the dimensions of the easement including vertical and horizontal angles measured in the degrees or the hours of the day, on specified dates, during which direct sunlight to a specified surface or structural design feature may not be obstructed;
 - (2) Restrictions on the placement of vegetation, structures, and other objects which may impair or obstruct the passage of sunlight through the easement;

(3) Enumerate terms and conditions, if any, under which the easement may be revised or terminated;

(4) Explain the compensation for the owner of the real property subject to the solar easement for maintaining the easement and for the owner of the real property benefiting from the solar easement in the event of interference with the easement.

- c. If required, a PSES owner and/or operator must obtain any solar easements necessary to guarantee unobstructed solar access by separate civil agreement(s) with adjacent property owner(s).
- d. Prior to the issuance of a zoning permit, applicants must acknowledge in writing that the issuing of said permit for a solar energy system shall not and does not create in the property owner, its, his, her or their successors and assigns in title or, create in the property itself: (a) the right to remain free of shadows and/or obstructions to solar energy caused by development of adjoining or other property or the growth of any trees or vegetation on such property; or (b) the right to prohibit the development on or growth of any trees or vegetation on such property.

16. Decommissioning.

- a. The PSES owner is required to notify the Township immediately upon cessation or abandonment of the operation. The PSES shall be presumed to be discontinued or abandoned if no electricity is generated by such system for a period of twelve (12) continuous months.
- b. The PSES owner shall then have eighteen (18) months in which to dismantle and remove the PSES including all solar-related equipment or appurtenances related thereto, including, but not limited to, buildings, cabling, electrical components, roads, foundations and other associated facilities from the property. If the owner fails to dismantle and/or remove the PSES within the established timeframes, the municipality may complete the decommissioning at the owner's expense.
- c. To the extent possible the materials shall be re-sold or salvaged. Materials that cannot be re-sold or salvaged shall be disposed of at a facility authorized to dispose of such materials by federal or state law.
- d. Any soil exposed during the removal shall be stabilized in accordance with applicable erosion and sediment control standards.
- e. Any access drive paved aprons from public roads shall remain for future use unless directed otherwise by the land owner.

- f. The PSES site area shall be restored to its pre-existing condition, suitable for its prior use, except the landowner may authorize, in writing, any buffer landscaping or access roads installed to accommodate the PSES to remain.
- g. Any necessary permits, such as Erosion and Sedimentation and NDPES permits, shall be obtained prior to decommissioning activities.
- h. At the time of issuance of SALDO approval for the construction of the PSES, the owner shall provide financial security in the form and amount acceptable to the Borough and in favor of the Borough, to secure its obligations under this Section.
 - (1) The PSES Developer shall, at the time of the SALDO application, provide the Borough with an estimate of the cost of performing the decommissioning activities required herein. The Solar Project Owner shall provide financial security of 110% of the estimated cost of decommissioning. The estimate may include an estimated salvage and resale value, discounted by a factor of 10%. The decommissioning cost estimate formula shall be: Gross Cost of Decommissioning Activities minus 90% credit of Salvage and resale value equals the decommissioning cost estimate.
 - (2) On every 5th anniversary of the date of providing the decommissioning financial security the PSES Owner shall provide an updated decommission cost estimate, utilized the formula set forth above with adjustments for inflation and cost and value changes. If the decommissioning security amount increases, the SEF Owner shall remit the increased financial security to the Borough within 30 days of the approval of the updated decommissioning security estimate by the County. If the decommissioning security amount decreases by greater than 10%, the Borough Owner shall release from security any amounts held in excess of 110% of the updated decommission cost estimate.
 - (3) Decommissioning security estimates shall be subject to review and approval by the Borough and the PSES Developer/Owner shall be responsible for administrative, legal, and engineering costs incurred by the Borough for such review.
 - (4) The decommissioning security may be in the form of cash deposit, surety bond, irrevocable letter of credit, cashier's check, or escrow account from a federal or Commonwealth chartered lending institutions in the amount of 110% of the total proposed decommission cost estimate and in a form satisfactory to the Borough Solicitor.
 - (5) Prior to final approval of any SALDO plans for a PSES, the PSES Developer shall enter into a Decommissioning Agreement with the

Borough outlining the responsibility of the parties under this Agreement as to the Decommissioning of the PSES.

- i. Prior to the issuance of a zoning permit, PSES applicants must acknowledge in writing that the issuing of said permit shall not and does not create in the property owner, its, his, her or their successors and assigns in title or, create in the property itself: (a) the right to remain free of shadows and/or obstructions to solar energy caused by development of adjoining or other property or the growth of any trees or vegetation on such property; or (b) the right to prohibit the development on or growth of any trees or vegetation on such property.

D. Administration and Enforcement

1. Applications

- a. Permit applications shall document compliance with this Ordinance and shall be accompanied by drawings showing the location of the solar energy system on the building or property, including property lines. Permits must be kept on the premises where the solar energy system is located.
- b. The permit shall be revoked if the solar energy system, whether new or pre-existing is moved or otherwise altered, either intentionally or by natural forces, in a manner which causes the solar energy system not to be in conformity with this Ordinance.
- c. The solar energy system must be properly maintained and be kept free from all hazards including, but not limited to, faulty wiring, loose fastenings, being in an unsafe condition or detrimental to public health, safety or general welfare.
- d. An approved land development plan shall accompany all permit applications excluding those for ASES which are accessory to a single-family residential use.

2. Fees and Costs

- a. The Applicant shall pay all permit application fees and inspection fees when seeking approval of a solar energy system under this Ordinance, which fees shall be set by resolution.
- b. The Applicant shall pay the following fees when seeking approval of a solar energy system:
 - (1) Zoning Permit. In accordance with Zoning Fee Schedule.
 - (2) UCC Permit Application Fee: In accordance with UCC Permit Schedule.

(3) Inspection Fee: In accordance with UCC Permit Schedule.

(4) Subdivision and Land Development Fees. In accordance with current fee schedule.

3. Modifications

- a. The Municipality may grant modification of the requirements of one or more provisions of this Ordinance if the literal enforcement will exact undue hardship because of peculiar conditions pertaining to the property in question, provided that such modification will not be contrary to the public interest and that the purpose and intent of the Ordinance is observed.
- b. All requests for a modification shall be in writing and shall state in full the grounds and facts of unreasonableness or hardship on which the request is based, the provision or provisions of the Ordinance involved and the minimum modification necessary.

Section 18. All Ordinances or Resolutions, or parts of Ordinances or Resolutions, in so far as they are inconsistent herewith, shall be and the same are hereby repealed.

Section 19. If any section(s) or part of a section(s) of this Ordinance shall be declared invalid, such invalidity shall not affect the remaining parts or section of this Ordinance. It is hereby declared to be the legislative intent that this Ordinance would have been enacted as if such invalid section, or portion thereof, had not been included therein.

Section 20. This Ordinance shall become effective upon enactment.

DULY ENACTED AND ORDAINED this 10th day of May, 2023, by the Council of the Borough of Orwigsburg, Schuylkill County, Pennsylvania, in lawful session duly assembled.

BOROUGH OF ORWIGSBURG
Schuylkill County, Pennsylvania

ATTEST:


Sherry Edwards, Borough Secretary

By: 
Richard Bubeck, President of Council

EXAMINED and APPROVED this 10th day of May, 2023.


Barry J. Berger, Mayor, Borough of Orwigsburg