Sec. 8-2.1104 Solar energy systems

(a) Purpose

The purposes of this Section are as follows:

(1) To provide for the placement of solar energy systems to enable generation of electricity from the sun, for on- and/or off-site uses, thereby increasing local production and use of renewable energy and reducing peak demand on the power grid.

(2) To minimize potential adverse impacts associated with solar energy systems on area residents, historic sites, and agricultural and biological resources through careful siting, design and operation, consistent with State law.

(3) To avoid or minimize public health and safety risks associated with solar energy systems by providing standards for the placement, design, construction, modification and removal of such systems, consistent with Federal, State and local regulations.

(4) To streamline the solar permitting process that complies with the Solar Rights Act and AB 2188 (Chapter 21, Statutes 2014) to achieve timely and cost-effective installations of small accessory use solar energy systems, as defined below.

(b) Definitions

Solar energy system
"Solar energy system" shall mean a device, array of devices, or structural design feature which is used to provide for generation and/or storage of electricity from sunlight, or the collection, storage, and distribution of solar energy for space heating or cooling, daylight for interior lighting, or water heating

Accessory solar energy system
"Accessory solar energy system" shall mean an onsite solar energy system where the energy generated contributes to the supply of power to and/or offsets energy demands on the property, or on adjacent or contiguous properties. An accessory solar energy system shall be limited to ground-mounted systems, roof-mounted systems, floating systems, and systems affixed to shade structures located over required parking areas. Accessory solar energy systems do not include small accessory use roof-mounted and ground-mounted solar energy systems as defined in this Section. Accessory solar energy systems shall not occupy more than 10 acres of land. A solar energy system that produces power that is sold directly to the electrical grid with a generation capacity of more than one megawatt shall be considered a utility solar energy system, as defined below.

Adjacent
A property shall be "adjacent" to the property with the accessory solar energy system if the property lines are separated by less than 100 feet at their nearest point.

Small accessory use ground-mounted solar energy system
"Small accessory use ground-mounted solar energy system" shall mean a system that:

(i) is no larger than 10 kilowatts alternating current nameplate rating or 30 kilowatts thermal; and

(ii) is structurally mounted to the ground.

Small accessory use roof-mounted solar energy system
"Small accessory use roof-mounted solar energy system" shall mean a system that:

(i) is mounted to the roof of a house, building, or other structure;

(ii) is no larger than 10 kilowatts alternating current nameplate rating or 30 kilowatts thermal;
and

(iii) has a solar panel of module array that does not exceed five feet above rooftop for photovoltaic or seven feet above rooftop for thermal solar systems.

Medium-sized solar energy system
"Medium-sized solar energy system" shall mean a private on-site or utility solar energy conversion system consisting of many ground–mounted solar arrays, a solar photovoltaic system mounted on a rack or pole that is ballasted on or attached to the ground, or roof-panels, and associated control or conversion electronics, occupying more than 10 acres and no more than 30 acres of land, and that will be used to produce utility power to on-site uses and/or off-site customers.

Large-scale solar energy system
"Large-scale solar energy system" shall mean a utility solar energy conversion system consisting of many ground–mounted solar arrays, or a solar photovoltaic system mounted on a rack or pole that is ballasted on or attached to the ground, and associated control or conversion electronics, occupying more than 30 acres of land, and that will be used to produce utility power to off-site customers.

Utility solar energy system
"Utility solar energy system" shall mean a solar facility featuring panels designed to generate solar power that is fed directly into the electrical grid, supplying a utility company with energy which is distributed to offsite end users. For the purposes of this Section, a utility solar energy system has a total generation capacity of more than one megawatt. A solar energy system that feeds directly to the power grid but generates one megawatt or less shall be considered a medium-sized solar energy system as defined above.

Specific, Adverse Impact

"Specific, Adverse Impact" means a significant, quantifiable, direct, and unavoidable impact, based on objective, identified, and written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete.

(c) Applicability

The provisions of this Section apply to onsite accessory and small accessory use solar energy systems, medium-sized solar energy systems, and large-scale solar energy systems, as defined in subsection (b). These solar energy systems require the issuance of a Building Permit, a Site Plan Review, or a Use Permit, as set forth below. Any solar systems installed prior to the effective date of this Section shall be considered legal, conforming uses so long as a County permit or approval was issued in connection with their installation.

(d) Administration and required approvals

The following types of approvals are required in addition to any other permits that may be required by State, federal, and regional agencies and by any other sections of this Code:

(1) All solar energy systems shall meet applicable health and safety standards and requirements imposed by the state and the County Building and local fire department or districts.

(2) Solar energy systems for heating water in single-family residences and for heating water in commercial or swimming pool applications shall be certified by an accredited listing agency as defined by the California Plumbing and Mechanical Code.

(3) Solar energy systems for producing electricity shall meet all applicable safety and performance standards established by the California Electrical Code, the Institute of Electrical and Electronics Engineers, and accredited testing laboratories such as Underwriters Laboratories and, where applicable, rules of the Public Utilities Commission regarding safety and reliability.

(4) Small accessory use roof-mounted and ground-mounted solar energy systems may be approved through the issuance of a Building Permit and a Zoning Clearance, provided the application meets setback and other standards, as provided in this Section. However, consistent with Section 65850.5 of the California Government Code, if the Chief Building Official has a good faith belief that the solar energy system could have a specific, adverse impact upon the public health and safety, the Official may require the applicant to apply for a Use Permit. Such a Use Permit shall be considered by the Zoning Administrator according to the requirements of Section 65850.5

(5) Accessory solar energy systems, excluding ground-mounted systems located in the POS and P-R zones, may be approved through the issuance of a Building Permit and Site Plan Review, provided the application meets the Development

Standards set forth in Section 8-2.1104(g), below. The Site Plan Review approval is ministerial (not discretionary) and does not require a public hearing. If the application fails to meet any of the standards, the application shall instead be evaluated as an application for a Minor Use Permit by the Zoning Administrator.

(6) Accessory or medium-sized ground-mounted solar energy systems proposed to locate in the POS and P-R zones may be approved through the issuance of a Minor Use Permit as set forth in Section 8-2.1104(e)(4), below.

(7) Solar energy systems proposed on a property or structure that is a designated Historic Landmark or is located within a designated Historic District may be permitted provided that the design of the facilities is consistent with the purposes of the Landmark or District designation.

(8) Medium-sized solar energy systems may be approved through Site Plan Review if the facility is located on non-prime farmland that is not under a Williamson Act contract and shall comply with all relevant avoidance and minimization measures set forth in the Yolo Habitat Conservation Plan/Natural Communities Conservation Plan (HCP/NCCP). Any medium-sized solar energy system that is located on prime farmland or on land that is enrolled in the Williamson Act shall require the issuance of a Minor Use Permit provided the application is consistent with the conditions and standards set forth in subsections (h) and (i), below.

(9) Large-scale solar energy systems occupying no more than 120 acres of land may be approved through the issuance of a Major Use Permit by the Planning Commission, provided the application is consistent with conditions and standards set forth in subsections (h) and (i). A large-scale solar energy system greater than 120 acres requires approval from the Board of Supervisors, following a recommendation from the Planning Commission, provided the application is consistent with conditions and standards set forth in subsections (h) and (i), below.

(10) If a utility solar energy system is proposed to locate on lands under a Williamson Act contract, the use must be found to be compatible in accordance with Section 106 of the Yolo County Williamson Act Guidelines, including compliance with the Williamson Act statutes governing the principles of compatibility required under Section 51238.1 of the California Government Code.

(e) Permitted locations

(1) Solar energy systems may be installed and operated in the following zones, provided the systems meet setback and other standards, as provided in this Section and shown in Table 8-2.1104:

Table 8-2.1104
Allowed Accessory Solar Uses and Permit Requirements

A = Allowed use, subject to zoning clearance SP = Site Plan Review UP (m) = Minor Use Permit UP (M) = Major Use Permit N = Use Not Allowed	Land Use Permit Required by Zone							
	A-N, A-X, A-I	A-C, A-R	RR-5, RR-2, R-L, R-M, R-H	C-L, DMX, C-G, C-H	I-L, I-H, OPRD	PQP	POS, P-R	Specific Use Requirements or Performance Standards
Solar Energy System								
Small accessory use roof-mounted solar energy system (up to 10Kw)	A	A	A	A	A	A	A	Sec. 8-2.1104(f)
Small accessory use ground-mounted solar energy system (up to 10Kw)	A	A	A	A	A	A	SP	
Accessory solar energy system (up to 10 acres)	SP	SP	SP	SP	SP	SP	SP/UP(m)	Sec. 8-2.1104(g)
Medium-sized solar energy system (10 to 30 acres)	SP/UP(m)	N	N	SP/UP(m)	SP/UP(m)	SP/UP(m)	N	Sec. 8-2.1104(h)(i)
Large-scale solar energy system (> 30 acres)	UP(M)	N	N	N	UP(M)	UP(M)	N	

(2) Installation of roof-mounted solar arrays is encouraged in all public facilities in all zones so long as associated controls or conversion electronics do not impact other facilities.

(3) Accessory and medium-sized solar energy systems in the Public and Open Space (POS) and Park and Recreation (P-R) zones are limited to roof-mounted panels and associated controller and conversion electronics.

(4) Under circumstances where roof -mounted solar arrays alone cannot provide sufficient power for onsite uses in the POS or P-R zones, supplemental ground-mounted solar arrays may be permitted only to the extent necessary to provide sufficient power for onsite uses only through the issuance of a Minor Use Permit**.**

(5) Large-scale solar energy systems are prohibited in the Public Open Space (POS) and Parks and Recreation (P-R) zones.

(f) Development standards for small accessory use solar energy systems

Applications for small accessory use roof-mounted and ground-mounted solar energy systems shall meet all of the following standards and any permit issued for such a system shall be conditioned to meet the standards:

(1) Photovoltaic solar energy systems may extend up to five (5) feet above the roof surface even if this exceeds the maximum height limit for the principal structure for the zone in which it is located, or if this exceeds the height limit of an accessory structure (15 feet).

(2) Solar water or swimming pool heating systems may extend up to seven (7) feet above the roof surface even if this exceeds the maximum height limit for the principal structure for the zone in which it is located, or if this exceeds the height limit of an accessory structure (15 feet).

(3) Excluding solar collection panels, solar energy system equipment may be installed within the required side and rear yards, but shall not be closer than ten (10) feet from any property line in agricultural, commercial, industrial, and public and open space zones and five (5) feet from any property line in residential zones.

(4) Pole mounted solar collection panels located in the residential zones shall comply with existing regulations for accessory structures (Section 8-2.506(a) and Table 8-2.506 of this Chapter), i.e., the panels may not exceed ten (10) feet in height in residential zones and must meet a rear yard setback of five (5) feet.

(5) The solar panels of a small accessory use ground-mounted solar energy system shall not be included in any calculation of impervious surface for purposes of calculating lot coverage.

(g) Development standards for accessory solar energy systems

Applications for accessory solar energy systems shall meet all of the following standards. If the application does not meet one or more of the standards, a Minor Use Permit shall be required and shall be conditioned to meet the standards, unless findings of fact to justify a waiver of any of the standards are adopted by the Zoning Administrator. A waiver may be granted only if the Zoning Administrator concludes that the waiver is consistent with the purposes of this Section and that, due to unusual circumstances or other considerations, it is not reasonable to require compliance with one or more of the standards.

(1) Photovoltaic solar energy systems may extend up to five feet above the roof surface even if this exceeds the maximum height limit for the principal structure for the zone in which it is located, or if this exceeds the height limit of an accessory structure (15 feet).

(2) Solar water or swimming pool heating systems may extend up to seven (7) feet above the roof surface even if this exceeds the maximum height limit for the principal structure for the zone in which it is located, or if this exceeds the height limit of an accessory structure (15 feet).

(3) Accessory solar energy systems occupying more than 2.5 acres of land that are proposed in agricultural zones and the PQP zone are encouraged to locate on predominantly (more than 60 percent) non-prime farmland and/or previously disturbed areas to the extent feasible.

(4) Ground-mounted solar facilities shall meet the front, rear, and side yard setback requirements of the zone in which they are located, with the following exceptions: Accessory solar energy systems in agricultural zones occupying no more than 2.5 acres shall not be required to meet the front yard setback. To address Fire Code requirements for weed control, a 10-foot perimeter is required from property lines in all agricultural, commercial, industrial, and public and open space zones and a 5-foot perimeter is required in all residential zones.

(5) Ground-mounted solar facilities shall meet the height limit requirements of the zone in which they are located, except that auxiliary equipment may exceed this limit.

(6) Ground-mounted solar arrays that occupy more than 2.5 acres of Swainson's hawk foraging habitat shall include a vegetative substrate, such as grassland or pollinator habitat, that is planted and maintained between and beneath the rows of panels.

(8) Accessory solar energy systems shall occupy no more than 10 acres of land or 20 percent of the area of the parcel, whichever is smaller.

(9) The solar panels of an accessory solar energy system shall not be included in any calculation of impervious surface for purposes of calculating lot coverage.

(h) Development standards for medium-sized and large-scale solar energy systems

(1) Medium-sized and large-scale solar energy systems are encouraged to locate on predominantly non-prime farmland and non-Williamson Act contracted land, as feasible.

(2) Medium-sized solar energy systems shall meet the front, rear, and side yard setback requirements of the zone in which they are located, with the following exception: in agricultural zones, the setbacks shall be at least 50 feet from all property lines. A 10-foot perimeter shall be required in all other zones to address Fire Code requirements for weed control.

(3) Large-scale solar energy systems must be setback at least 50 feet from any property line.

(4) Utility solar energy systems shall be located no closer than 100 feet from any residential dwelling on an adjacent property.

(5) To the extent reasonably practicable, a utility solar energy system shall have a visual buffer of natural vegetation that provides a visual screen to reduce the view of the solar energy system from residences on adjacent lots, including those lots located across a public right-of-way. Solar energy systems proposed to locate in a designated scenic corridor shall require visual screening.

(6) Solar panels shall not be included in any calculation of impervious surface or impervious cover.

(i) Mitigation required

(1) All utility solar energy systems shall mitigate for the permanent loss of agricultural land, in accordance with Section 8-2.404 (the Agricultural Conservation and Mitigation Program). Medium-sized solar energy systems approved by Site Plan Review are exempt from this requirement.

(2) If a proposed utility solar energy system will remove Swainson's hawk foraging habitat, mitigation for the loss of foraging habitat shall be required to comply with applicable Yolo HCP/NCCP Avoidance and Minimization Measures and requirements in accordance with the California Department of Fish and Wildlife.

(j) Decommissioning

Unless otherwise approved by the County, decommissioning shall begin no later than 12 months after a medium-sized or large-scale solar energy system has ceased to generate electricity. Within six months of the beginning of decommissioning, the solar energy system and all structures associated with it shall be removed, all materials shall be recycled or otherwise reused to the extent reasonably practicable, and the property shall be returned to its condition prior to the installation of the solar energy system or to some other condition reasonably appropriate for the designated land use.