

The following modifications and additions will be made to the Yavapai County Planning and Zoning Ordinance.

Modification to SECTION 410 R1L DISTRICT

(additions in **bold type/underlining** and deletions shown with a ~~single strike through~~):

- 410.G.10. Solar installations and wind turbines for on-site use only (including NET METERING as adopted by the Arizona Corporation Commission) except that wind turbines ~~and ground mount solar panels~~ must meet district building height limitations above natural grade and principal setback requirements. **Small-Scale Solar Use requirements are set forth in Section 501.E Accessory Uses and Structures.**

Addition:

SECTION 501 ACCESSORY USES AND STRUCTURES

- E. SMALL-SCALE SOLAR USE of solar energy electricity generating equipment, as defined in Section 608, will be permitted provided that the following performance standards are met:
1. Roof-mounted Photovoltaic (PV) panels shall not extend more than twenty-four (24") inches above the surface of the roof as measured perpendicularly to the roof at the point where it is mounted, and PV panels must meet district building height limitations above natural grade.
 2. Ground-mounted PV panels shall not exceed fifteen (15') feet in total height and must follow principal setbacks of the district.
 3. Support structures such as canopies and carports that incorporate PV panels will be subject to building permits and zoning requirements for the structure type.
 4. All utility service lines serving ground-mounted PV panels must be located underground.
 5. All components servicing ground-mounted and roof-mounted PV panels must be concealed or screened to blend in with the surroundings, including mechanical piping, electrical conduits, and the like.
 6. Battery energy storage associated with Small-Scale Solar Use for one-family and two-family dwelling units shall be limited to eighty (80 kWh) kilowatt-

- hours aggregate and must comply with the County's most current adopted building code and the requirements of the fire jurisdiction having authority.
7. Battery energy storage exceeding eighty (80 kWh) kilowatt-hours aggregate for Small-Scale Solar Use shall be subject to Section 1206 of the 2018 International Fire Code and its subsequent editions.

Addition:

SECTION 608 SOLAR FACILITIES

- A. **PURPOSE:** This Section establishes processes, requirements and performance standards for the placing, design, construction, operation, monitoring, modification, and removal of Utility-Scale Solar Facilities. This Section:
 1. gives County residents, leaders, staff, and developers clear direction on the appropriate siting of Solar Facilities while considering unique permitting conditions for each site;
 2. provides standards for the placement, design, construction, monitoring, modification, and removal of Utility-Scale Solar Facilities;
 3. protects and promotes public safety and welfare, and provides for the diversification of energy types in order to maintain energy security;
 4. encourages the efficient use of energy and promotes clean, renewable energy production by providing clear standards to encourage Utility-Scale Solar Facilities that:
 - a. minimize and mitigate impacts on natural, cultural, and Recreational Resources;
 - b. maintain and protect wildlife populations and corridors, viewsheds, vegetative communities, dark skies, air quality, and natural quiet;
 - c. protect property values;
 - d. offer private landholders options for economic diversity and stability; and
 - e. provide adequate financial assurance for decommissioning of facilities; and
 5. supports projects that provide clear benefits to the County, such as revenue generation, job creation, and economic and environmental benefits.

Small-Scale Solar Use standards are addressed in Section 410.G.10 and Section 501.E and are excluded from this Section.

- B. **DEFINITIONS:** Throughout this Ordinance, the following terms, phrases, words, and their derivations shall have the meaning given on the following pages. When not inconsistent with the context, words used in the present tense include the plural number. The word "shall" is always mandatory and not merely directory. The word "person" includes individuals, partnerships, corporations, clubs, and associations. The following words or terms when

applied to this Ordinance shall carry full force when used interchangeably: lot, plot, parcel, or premises; used, arranged, occupied, or maintained; sold, or dispensed; construct, reconstruct, erect, place, or alter (structurally or otherwise).

Agrivoltaics: Agricultural production, such as crop or livestock production or pollinator habitats, underneath or adjacent to PV panels (also known as agrisolar or dual-use solar). This practice may help to prevent water evaporation and produce a localized cooling effect.

Battery Energy Storage System (BESS): A physical container providing secondary containment to battery cells that is equipped with cooling, ventilation, fire suppression, and a Battery Management System (BMS).

Battery Energy Storage System (BESS) Facility: A commercial facility containing a group of batteries used to store and dispatch electric energy along with its component parts including associated containers, ventilation, fire safety equipment, associated fencing, landscaping, parking lots, and support structures and buildings. A BESS Facility may also include electrical substations, transformers, transmission lines, inverters, metering, communications equipment, and transmission poles. BESS Facilities may be part of a Solar Facility Use Permit where permitted by these regulations.

Battery Management System (BMS): An electronic regulator that manages a Battery Energy Storage System (BESS) by monitoring individual battery module voltages and temperatures, container temperature and humidity, off-gassing of combustible gas, fire, ground fault and direct current (DC) surge, and door access, and is also capable of shutting down the system before operating outside of safe parameters.

Brownfield: A former industrial or commercial site for which the expansion, redevelopment, or reuse of the site may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

Concentrating Solar Thermal Devices/Towers (CSV): A device using mirrors to reflect and concentrate sunlight onto a receiver. The use of such devices will not be permitted.

Critical Habitat: As defined in the Endangered Species Act, specific geographic areas that contain features essential to the conservation of an endangered or threatened species and that may require special management and protection. These areas are delineated by the U.S. Fish and Wildlife Service.

Decommissioning Plan, Solar Facility: A plan to disconnect, remove, and properly dispose of equipment, facilities, or devices associated with a Solar Facility and to return the site to its original state.

Desktop Study: A preliminary review of available information about a project site to help determine existing characteristics and conditions of the Project Area and vicinity, and

whether additional data may be needed. These studies shall include a literature review of current scientific research related to wildlife, vegetation, water resources, and cultural, archaeological, and historic features that may be present. Desktop Studies will be used to make early decisions regarding appropriate site locations, buffering requirements, design, and construction alternatives, which will help to improve time and cost estimates for the applicant by avoiding unforeseen obstacles.

Development Area: The portion of the Project Area where ground disturbance occurs and project infrastructure is installed, including features beyond the project security fence such as transmission or collector lines and driveways. The Development Area does not include buffers, wildlife corridors, or other areas which remain unfenced and undisturbed.

Hillside: The slope of a landform that rises above or descends below the surrounding terrain and has a distinct summit. For the purposes of this Section, the term Hillside may be applied to the rising or descending side of land features in the terrain that may be referred to as a hill, hillock, knoll, bluff, dune, talus, eminence, mound, prominence, promontory, cliff, valley flank, declination, dip, drop, pitch, ditch, depression, crater, etc.

Important Bird Area: Areas identified, monitored, and protected by the Audubon Society as being vital to the continued existence of a large variety of bird species.

Integrated Photovoltaic (Integrated PV): Photovoltaics incorporated into building materials, such as shingles.

Photovoltaic (PV): A material or device, such as a Photovoltaic panel, that absorbs sunlight and converts it directly into electricity.

Photovoltaic Array Block (PV Array Block): A grouping of Photovoltaic panels.

Project Area, Solar Facility (Project Area): The total area of land (calculated in acres) encompassed by a Solar Facility including buffers, wildlife corridors, or other areas which remain unfenced and undisturbed.

Project Boundary, Solar Facility (Project Boundary): The Project Boundary shall include all the collected Project Areas and shall also run along streets abutting the Project Area.

Rated Capacity: The maximum capacity of a Solar Facility based on the sum of each Photovoltaic system's nameplate capacity reported as Watts Direct Current (Wdc) or Watts Alternating Current (Wac).

Recreational Resources: Public and private lands and facilities intended for active recreational uses such as trails, athletic fields or courts, tracks, swimming pools, parks and ramadas, playgrounds, golf courses, outdoor riding arenas, group camps, and other designated recreational facilities.

Small-Scale Solar Use: The use of solar energy electricity generation equipment intended for onsite usage only. Small-Scale Solar Use standards are addressed in Section 410.G.10 and Section 501.E and are excluded from this Section.

Solar Facility: A commercial facility that converts sunlight into electricity using Photovoltaics or other conversion technology, along with all necessary equipment for generating electricity, which may include charge regulators, inverters, associated fencing, landscaping, parking lots, and PV support structures and buildings. A Solar Facility may also include electrical substations or transformers, transmission lines, and Battery Energy Storage Systems (BESS) where permitted by these regulations.

Solar Photovoltaics Panel Coverage: The total acres covered by groupings of Photovoltaic panels (PV Array Blocks) including spaces between panels but excluding driveways, wildlife corridors, required setbacks, wetlands, and the like.

Special Status Species: Federally threatened or endangered species, other federally protected species, Arizona Species of Greatest Conservation Need 1A and 1B, and U.S. Forest Service or Bureau of Land Management (BLM) sensitive species, as appropriate.

Visual Resource: A physical feature that defines the visual and aesthetic character of an area, and can include natural features, scenic vistas and viewsheds, or human-made structures on or in a landscape. Resource designations such as a Scenic Byway, Scenic Corridor, Scenic Road, Historic Road, National All-American Road, gateway community, National Scenic, or National Historic Trails, or other well-established trails, National or County Parks and Monuments, ridgelines, and the Granite Dells are examples of Visual Resources, or as determined through the Preliminary Site Investigation described in subsection D.1.c(2).

Wildlife Linkage: An area of land used by wildlife to move between or within habitat blocks to complete activities necessary for survival, reproduction, and population persistence. Such areas are identified by the Arizona Game and Fish Department (AZGFD) and consist of interconnecting wildlife corridors and undisturbed lands that provide contiguous connection between habitat blocks.

C. GENERAL PROVISIONS:

1. The operation of a Solar Facility shall require a Solar Facility Use Permit approved by the Board of Supervisors. The Solar Facility Use Permit will be applied for in the same manner as a rezoning (zoning district change) as described in Section 208 of this Ordinance, with the application requirements described for a Solar Facility Use Permit in subsection D and the development and performance standards described in Subsection F of this Section.
2. The Project Area designated within the Solar Facility Use Permit application may include multiple parcels and portions of parcels, which may be wholly owned or leased areas of parcels.

- a. All land within the Project Area may or may not form one solid area (e.g., when separated by roads) and may form a collection of non-contiguous areas.
 - b. The entire Project Area covered by a Solar Facility Use Permit will be considered a single Solar Facility. However, no portion of the Project Area may be separated by a distance greater than one-half (1/2) mile from the next closest portion of the Project Area. Any such portion separated by more than one-half (1/2) mile will require a separate Solar Facility Use Permit application.
 3. The Project Boundary shall include all the collected Project Areas and shall also run along streets abutting the Project Area.
 4. A buffer zone within the Project Area shall be established and mapped in the Development Plan for the purpose of mitigating the effects of the Solar Facility upon surrounding properties, wildlife, and resources located both within and outside of the Project Area and the community at large.
 - a. The buffer zone shall be an area reserved for open space, wildlife corridors, natural vegetation, and landscaping.
 - b. The buffer zone shall begin at the Project Boundary and may encompass required setbacks, as defined in subsection F.2, and wildlife corridors that shall be defined in consultation with the Arizona Game and Fish Department.
- D. SOLAR FACILITY USE PERMITS: A Solar Facility Use Permit may be approved for a period of thirty (30) years. The project operator may apply for a single ten (10) year extension so long as the project remains in compliance with all terms of the original Solar Facility Use Permit, including the approved site plan. The Solar Facility must meet current operational standards and must address public safety and welfare, habitat, and wildlife impact considerations that are acceptable to the Board of Supervisors at the time of the renewal application.
 1. Pre-Application Requirements:
 - a. In accordance with the requirements of Section 582 Use Permits, a Preliminary Planning Meeting with Development Services must occur prior to submission of the Solar Facility Use Permit application.
 - b. Following the Preliminary Planning Meeting, the applicant must engage in the Citizen Participation process pursuant to Section 209 of this Ordinance prior to submission of the Solar Facility Use Permit application. The notification range for Citizen Participation shall be a minimum of two thousand six hundred forty (2,640') feet (i.e., half mile) from the Project Boundary. The notification range shall be extended to five (5) miles from the Project Boundary for city and town councils, homeowner associations, resident organizations, and other stakeholders identified during the Preliminary Planning Meeting. Development Services staff will also determine the appropriate number of community meetings the applicant will be required to hold.
 - c. Concept Plan and Preliminary Site Investigations: A review of the Concept Plan and Preliminary Site Investigations must be completed prior to submission of the Solar Facility Use Permit application. This review may take

place as part of the Preliminary Planning Meeting or as a separate meeting following initial discussion during the Preliminary Planning Meeting.

- (1) The Concept Plan of the Project Area shall provide a visual summary of the project and shall consist of:
 - (a) aerial imagery of the Project Area superimposed with the Project Boundary;
 - (b) general location and arrangement of buffer zones, tree preservation, sensitive habitats, wildlife corridors, floodplain, fencing, screening, structures (with elevations), PV array blocks, driveways, and entrances;
 - (c) locations of any proposed BESS Facility and/or substations; and
 - (d) locations of electric lines and overhead utility lines, including the proposed route of private electric power transmission lines from the Solar Facility to the points of connection to the grid.
- (2) Preliminary Site Investigations: Preliminary site investigations, inventories and mapping of the following resources shall be of appropriate scope to effectively evaluate and mitigate potential adverse issues. The applicant must also furnish the County with copies of any National Environmental Policy Act (NEPA) reports if they are required by other entities. This information will be used to guide the project applicant and the County in determining the appropriate siting and design of an installation. The applicant shall complete the following Desktop Studies of the Project Area and the surrounding area within at least five (5) miles of the Project Boundary for review, and all studies shall be conducted by qualified professionals.
 - (a) Preliminary habitat and wildlife study which identifies potential wildlife issues by determining whether Special Status Species or their habitats may be present. All state and federal wildlife management agencies with jurisdiction over the Project Area must be consulted for this study. However, the applicant will only be required to submit responses received within a four (4) month period following the initial outreach. This study shall also address any site-specific wildlife concerns about existing and suitable habitat, Important Bird Areas, and wildlife corridors to be established and protected from disturbance within the Project Area. Wildlife corridors shall be determined in consultation with the Arizona Game and Fish Department using the best available information at the time of this study. Any issues raised by state and federal wildlife management agencies must be addressed in the Wildlife Protection Plan

- (subsection D.2.c) for consideration by the Board of Supervisors.
- (b) Preliminary study of Recreational Resources and public lands, which shall include identification of these resources as well as an evaluation of any potential negative impacts to them.
 - (c) Preliminary study (Class I and Class II cultural resource surveys) of archaeological, cultural, and historic sites, which shall include identification of these resources as well as an evaluation of any potential negative impacts to them. This study must be conducted by a qualified professional and include an on-site survey of the site. In addition, a summary of communication and collaboration efforts, such as a pre-cultural on-site survey with any potentially affected Native American tribes to evaluate cultural and historic resources or sites, heritage areas, or cultural landscapes must be submitted with the application. If any areas or objects of archeological, paleontological, or historic significance are discovered on the site during the course of the Class I and Class II surveys, or during the construction of an approved Solar Facility, the applicant shall be required to have a qualified professional conduct a Class III survey encompassing the discovery area, and any other locations within the Project Area as recommended by the survey professionals, the State Historic Preservation Office (SHPO), or by any qualified third party professionals retained by the County.
 - (d) Preliminary study of known water resources and watercourses, streams, creeks, washes, etc., both onsite and adjacent to the site, which shall include identification of these resources as well as an evaluation of any potential impacts to them. A statement as to potential negative impacts or use of those resources for the project must also be provided.
 - (e) Preliminary study of Visual Resources (viewshed analysis) and residentially zoned property located within five (5) miles from the Project Boundary, or a distance determined by the Development Services Director, must be identified on a map showing the resource's distance from and relationship to the facility. This preliminary information will be used by the County and the applicant to select suitable site locations and the number of viewpoints from which the Visual Impact Analysis will be prepared.

2. Application Requirements: Each application for a Solar Facility Use Permit must be in compliance with this Section including all required site investigations, reports, and plans, and with Section 582 (Use Permits) of this Ordinance. The following information must be included with the application.
- a. Solar Facility Report: A report providing a detailed description of the project and containing a narrative overview of the Solar Facility, including:
 - (1) applicant, owner, and the operator of the proposed Solar Facility;
 - (2) current uses and physical characteristics of the Project Area and the surrounding area;
 - (3) intended energy provider to interconnect to the Solar Facility and location of proposed interconnection;
 - (4) approximate Rated Capacity of the Solar Facility project;
 - (5) type and location of interconnection to electrical grid and details of coordination with the local energy provider;
 - (6) approximate number of panels and representative types;
 - (7) the Project Area and Solar Photovoltaic Panel Coverage expressed in acres;
 - (8) an inventory with description of all proposed structures and uses including BESS Facilities, inverters, and substations;
 - (9) an inventory of all Solar Facilities within two (2) miles of the Project Boundary;
 - (10) an explanation of why the proposed site has been chosen based on the preferred sites/restricted locations criteria (subsection F.1.d and e);
 - (11) an explanation of how the facility provides clear economic and environmental benefits to the County;
 - (12) an explanation of how the facility's design and operational procedures apply current best practices and technologies;
 - (13) a detailed description of how the project meets each of the required Performance Standards in subsection F; and
 - (14) results of the Preliminary Site Investigations required in subsection D.1.c(2). The narrative will document how the site was evaluated and inspected, include the name and details of the professional(s) conducting each study, and any additional information requested at the Pre-Application review.
 - b. Development Plan: In addition to the requirements in subsection D.2.a, the Development Plan must also include:
 - (1) the Project Area and Solar Photovoltaic Panel Coverage expressed in acres;
 - (2) the Project Boundary, property lines, leased area lines, official street line, and all easements within the Project Area, including but not limited to right-of-way and utility easements;
 - (3) approximate location of driveways, parking, and entrances onto streets;

- (4) approximate locations and dimensions of all existing and proposed structures, including PV panels, charge regulators, inverters, substations, BESS Facilities, connections to the grid, fencing within the Project Area, including the location of all dwellings and associated structures within two thousand six hundred forty (2,640') feet (i.e., half mile) of the Project Boundary;
 - (5) example elevations and graphic imagery of structures depicting the typical style, size, and exterior construction materials in sufficient detail to exhibit the relative compatibility of the proposed development with the character of the neighborhood; and
 - (6) a conceptual grading plan indicating existing and proposed contours at no greater than two (2')-foot contours.
- c. Wildlife Protection Plan: This plan shall be based on the results of the Preliminary Site Investigations. The Wildlife Protection Plan must detail the following information:
- (1) an inventory of all Special Status Species that may be present on or utilize the site;
 - (2) identification of existing and proposed wildlife Critical Habitat and Important Bird Areas;
 - (3) location and dimensions of wildlife corridors and design details regarding fencing, if any, including a description of potential impacts to wildlife and wildlife movement;
 - (4) direct and cumulative impacts to wildlife and Wildlife Linkages and explanation of how these impacts will be avoided through project design, habitat enhancement, stewardship activities, evaluation, continued monitoring, or other mitigation strategies; and
 - (5) notations summarizing conditional requirements related to wildlife, such as timing restrictions to reduce or prohibit activities in specified areas during sensitive life cycle events (e.g., active nesting periods and migration movements) and wildlife survey requirements.
 - (6) Post-construction Wildlife Corridor Monitoring: The owner or operator and their successors shall work with the Arizona Game and Fish Department and the County to determine an appropriate post-construction monitoring plan to validate the effectiveness of implemented wildlife corridors in maintaining habitat connectivity. This may include telemetry and camera studies or other effective options at the time of completion.
- d. Cultural Resources Management Plan: This plan shall be based on the preliminary study of archaeological, cultural, and historic resources and must be prepared by a qualified professional to protect and mitigate impacts to any known or discovered archaeological, cultural, or historic sites or artifacts found in the Project Area. Instructions notifying operators how to proceed in the event such cultural resources are encountered during construction or grading must be included on construction documents.

- e. Stormwater Management Plan: The proposed Stormwater Management Plan must be in accordance with all applicable County standards/regulations and in conformance with the Flood Control District Stormwater Management Requirements in effect at the time of application and must be approved by the Flood Control District prior to issuance of construction permits. The stormwater management plan shall include, but not be limited to, the following sections:
 - (1) preliminary and post-development hydrologic analysis of water quantity and proposed usage;
 - (2) proposed stream buffer/setback analyses;
 - (3) erosion and sediment control regulations for land disturbing activities;
 - (4) Post-Construction Stormwater Quality Treatment Regulation requirements; and
 - (5) County and the Federal Emergency Management Agency (FEMA) floodplain regulations/requirements.
- f. Visual Impact Analysis: A visual impact analysis demonstrating project siting and, if necessary, proposed mitigation and screening to reduce impacts on the visual character of the surrounding area.
 - (1) The applicant shall provide accurate, to scale, photographic simulations showing the relationship of the Solar Facility to its surroundings.
 - (2) Photographic simulations must show views of Solar Facility structures and uses from prominent locations, adjacent roads, nearby highways, existing dwellings (from closest adjacent property line), and other residential, scenic, cultural, and Recreational Resources in order to assess the visual impact of the Solar Facility.
 - (3) The total number of simulations and the perspectives from which they are prepared shall be established by the Development Services Director after the pre-application meeting and will be chosen with the intent of establishing the visual impacts upon sensitive areas potentially receiving the greatest impacts from such a proposal.
- g. Landscaping Plan: The Landscaping Plan must have sufficient detail to demonstrate compliance with ground cover and vegetation preservation requirements and screening requirements of this Section (subsections F.5 and F.6). The Landscaping Plan shall include:
 - (1) specifications of proposed ground cover (including seed mixes), screening materials (including identification of appropriate plant species and spacing), and proposed herbicides used if any;
 - (2) design and specifications of proposed additional vegetative screening as needed for certain dwellings and other improvements, in compliance with subsections F.6 of this Section;

- (3) installation and maintenance practices to include the establishment of ground cover and woody plant materials, and the application of herbicides if any;
 - (4) locations and descriptions of plant communities and densities in areas that have not been previously plowed or graded;
 - (5) proposed clearing or grading of natural vegetation or woody plants including stands of trees, shrubs, and woodlands, which may be a separate plan;
 - (6) description of invasive weed populations and densities currently existing on the site and provisions for controlling and preventing the spread of noxious weeds during construction, throughout project operation, and post operation restoration; and
 - (7) proposed restoration procedures for roadway shoulders and other areas disturbed by construction.
- h. Public Safety, Fire Protection, and Emergency Management Plan: The proposed Public Safety, Fire Protection and Emergency Management Plan for construction and post construction operation of the facility, including plans for ongoing management of forest and fire fuels shall be submitted by the applicant. Additional mitigation may be required if requested by the local or nearest fire district to support response capabilities. This plan must be finalized and approved by the Development Services Director prior to issuance of construction permits.
 - i. Traffic Plan: The applicant shall submit a preliminary traffic plan describing estimated travel routes and trip volumes during the construction and decommissioning processes. Public road improvement, repair and maintenance is further addressed within subsection H of this Section. This plan must be finalized and approved by the Development Services Director and Yavapai County Public Works prior to issuance of construction permits.
 - j. Airport Studies: For the purpose of determining impacts on area airports, a Glare Impact Study and/or an Airspace Study in accordance with, and if required by, Federal Aviation Administration (FAA) requirements shall be submitted by the applicant.
 - k. Land Use Impacts and Mitigation: In addition to typical Citizen Participation notification requirements (see Section 209), the applicant must contact all relevant land use entities in the vicinity of the proposed Solar Facility (i.e., U.S. Forest Service, Bureau of Land Management, etc.) to discuss, and memorialize in written form, the potential impacts of the project and the recommended mitigation strategies and measures. Such dialogue will be submitted to the Development Services Director for review and reference.
 - l. Decommissioning Plan: The applicant shall submit a Preliminary Decommissioning Plan to be approved by the Board of Supervisors as part of the application. This Plan shall specify the procedure by which the owner or operator, or their successors, will remove the improvements associated with the Solar Facility and any BESS Facility after the end of their usefulness and

to reclaim the property for immediate non-solar related uses, including restoring the Project Area to natural conditions where reasonably achievable. Prior to issuance of construction permits, the applicant shall submit a Detailed Decommissioning Plan, which must demonstrate substantial conformance with the Preliminary Decommissioning Plan, to be approved by the Development Services Director. The Development Services Director may choose to defer approval of this plan as a separate hearing item through the Board of Supervisors if substantial changes have been made. The Detailed Decommissioning Plan must be prepared by a professional engineer licensed in the state of Arizona who has expertise in the removal of Solar Facilities through educational knowledge or practical experience. The Plan shall be prepared in sufficient detail to determine compliance with subsection M, and shall include the following:

- (1) anticipated life span of the project;
 - (2) implementation and manner in which the project will be decommissioned and reclaimed, including:
 - (a) plans for stabilizing the soils;
 - (b) ripping the soil to loosen the compaction areas prior to native reseeding, and replanting; and
 - (c) disposal and recycling of Solar Facility materials including but not limit to PV panels, inverters, and batteries; and
 - (3) decommissioning and reclamation cost estimate prepared by an independent third-party Arizona licensed professional engineer mutually agreed upon by the Applicant and the Development Services Director.
 - (a) The estimate shall quantify the gross estimated cost for decommissioning and reclamation of the Solar Facility and any BESS Facility in accordance with the Decommissioning Plan and these conditions.
 - (b) The estimate shall explicitly detail the cost and manner in which the estimate was determined.
 - (c) The estimate shall establish the full amount of the decommissioning and reclamation cost without regard to the possibility of salvage value unless the Board of Supervisors accepts the value of the salvage as part of a third-party engineer's analysis, as updated every five (5) years with the rest of the cost estimate to ensure reasonable and accurate estimates.
 - (d) The estimate shall reflect the costs of decommissioning and restoration of the Project Area in accordance with subsection M of this Section.
3. Site Plan Approval: The applicant must submit and receive Board of Supervisor approval of the Site Plan for the entire project prior to obtaining any construction or other permits related to the Solar Facility.

4. Waiver Request: In certain instances where the applicant desires a deviation from the requirements of this Section, the waiver request to deviate from a specified requirement may be considered for approval if:
 - a. compliance with the specified requirement would be impractical;
 - b. the deviation would not result in adverse impacts compared to what would otherwise be permitted under this Ordinance; and
 - c. the deviation would not conflict with planned uses and resources in the area.
 - d. For otherwise suitable projects where adverse impacts on natural resources may be unavoidable, as identified in the Preliminary Site Investigations described in subsection D.1.c(2), offsite mitigation may be proposed that is commensurate with the degree and nature of the impact as determined acceptable by the Board of Supervisors. At a minimum, such mitigation shall provide an acreage ratio offset of three-to-one (3:1) acres for every affected acre. Examples of acceptable mitigation measures shall include any combination of the following:
 - (1) the dedication of conservation easements on lands of equivalent value habitat or resources;
 - (2) long-term restoration of equivalent habitat or resources;
 - (3) stewardship of equivalent affected species or resources; and
 - (4) long-term wildlife studies.
 - e. The applicant must submit written information with the application indicating the circumstances which are believed to necessitate the need for a deviation from the specific requirement, as well as any proposed alternatives.
 - f. The written information shall clearly outline the positive and negative impacts of the proposed changes and what protective measures will be taken by the applicant to adequately reduce, avoid, and mitigate such impacts, along with explanation of how the proposed changes will not adversely affect public safety and welfare, or wildlife and wildlife movement.
 - g. If the proposal is deemed reasonable by the Development Services Director after all internal and external agency reviews are completed, the waiver request will be submitted for consideration as part of the final application to the Board of Supervisors.
5. Application Review Time: Application review time for Solar Facility Use Permits will be one hundred eighty (180) days. The application review time may be increased with a determination made by the Development Services Director in writing based upon the size and complexity of the application as determined by factors including but not limited to the number of third-party reviews to be coordinated and completed and the Project Area of the Solar Facility.
6. A minimum of one (1) year prior to the end of the Solar Facility Use Permit term, the Solar Facility owner or operator must notify the Development Services Director in writing of future plans for the Solar Facility, which may include decommissioning and reclamation or a request for Solar Facility Use Permit renewal.
7. Although the Solar Facility allowed by this Section may potentially be located upon multiple parcels of land, the underlying Solar Facility Use Permit comprises and

approves only one (1) unified Solar Facility Use Permit. The use of any parcel, or portion thereof, that results in a conflict with the associated Development Plan (subsection D.2.b) or failure to properly maintain the Project Area according to the Site Maintenance Agreement (subsection G) may cause the Solar Facility Use Permit to terminate. The Development Agreement (subsection E) may also contain provisions that may result in termination of the Solar Facility Use Permit.

8. Prior to terminating a Solar Facility Use Permit pursuant to subsection D.7 or subsection E, and prior to initiating a partial or complete decommissioning and reclamation of any project, the Board of Supervisors must provide the owner and operator, or their successors, with official notice of the County's intent to terminate and/or decommission via certified mail. The notice will identify each specific reason for the commencement of the termination or decommissioning and reclamation process and will provide thirty (30) calendar days to remedy the issue identified in the notice. If the remedy requires more than thirty (30) calendar days to complete, the owner or operator or their successors must respond in writing within the thirty (30) calendar day period and inform the County. The request for a reasonable and specific timeframe to remedy the identified issue(s) will be considered by the Development Services Director. In the event that thirty (30) calendar days pass and the issues have not been completely resolved nor has the County received any written correspondence from the owner or operator or their successors, the Development Services Director may place the item on the Board of Supervisor's Agenda to allow public comment and input from the owner or operator or their successors prior to considering a termination of the Solar Facility Use Permit, commencing decommissioning of the Solar Facility, or providing additional time to remedy the issue(s), which will be determined by the Board of Supervisors.
 9. The Solar Facility Use Permit conditions of approval and Section 608 requirements shall be binding on the applicant, owners, and operators, or their successors, assignees and transferees, and any affiliates, agents, or lessees of the applicant who have a contractual relationship with the applicant concerning the construction, operation, maintenance, or reclamation of the project. The applicant shall provide to the County a list of any agreement(s) or lease(s) pertaining to the project which note that the contracting parties and/or lessees will be responsible for compliance with the conditions and requirements set forth in the Solar Facility Use Permit approval and Section 608. The applicant shall also provide an affidavit acknowledging that the applicant's responsibilities with respect to compliance with such conditions and requirements shall not cease or be abated by reason of the fact that the applicant is not in control of or responsible for operation and maintenance of the project facilities.
- E. **DEVELOPMENT AGREEMENT:** A Development Agreement between the Solar Facility owner or operator and the County, which is satisfactory to and approved by the County, shall be required to provide that the Solar Facility is developed, maintained, decommissioned, and reclaimed in accordance with the requirements of these regulations and does not create an undue burden on County services. The Development Agreement must be approved by the

Board of Supervisors and all associated financial assurances must be posted prior to issuance of construction permits.

1. The Development Agreement shall include the following items, subject to any approved waivers:
 - a. annual compliance monitoring report prepared by the project operator and submitted to the Development Services Director;
 - b. posting of financial assurances for installation and maintenance of the Solar Facility as described in subsections G, H, I, J, and K (failure to develop or maintain the Solar Facility in the manner required may result in loss of the associated financial assurance funds, termination of the Solar Facility Use Permit, and decommissioning of the Solar Facility);
 - c. provision by the project operator of specialized fire safety equipment or other protections deemed necessary by County emergency services staff as described in subsection L; and
 - d. decommissioning of the Solar Facility and reclamation of the Project Area (subsection M), including:
 - (1) posting and collection of associated financial assurance funds;
 - (2) review and recalculation of decommissioning and reclamation costs;
 - (3) the various required deadlines associated with decommissioning and reclamation; and
 - (4) adherence to the finalized Detailed Decommissioning Plan.
2. The Development Agreement includes financial assurance, as described in subsection M.1.g, which must be received prior to the approval of any construction permits and must remain in full force for the duration of the life span of the Solar Facility and until all decommissioning and reclamation is completed to the satisfaction of the County. If the County receives notice or reasonably believes that any form of assurance has been revoked, or the County receives notice that any assurance may be revoked, the County may, after providing notice and a reasonable opportunity to post a replacement security, terminate the Solar Facility Use Permit and shall be entitled to take all actions necessary to obtain the rights to the securitized funds.
3. Liability Insurance: The owner or operator of the Solar Facility shall maintain a current general liability insurance policy with minimum limits of \$1 million per occurrence with a \$2 million aggregate to include the County as an additional insured, with the designation of primary and noncontributory. The County may require higher limits. The owner or operator must immediately provide the County, in writing, with notice of cancellation or other changes to this liability insurance policy.
4. Compliance with Other Agencies:
 - a. The owner or operator of the Solar Facility must comply with the Arizona Game and Fish Department (AZGFD) guidelines for handling Special Status Species, should any be encountered during construction and operation of the project, and must consult with AZGFD or the U.S. Fish and Wildlife Service, as appropriate, on all other issues concerning wildlife.

- b. The owner or operator of the Solar Facility must consult the State Historic Preservation Office (SHPO) with respect to cultural resources. If objects of cultural significance or any archeological, paleontological, or historic sites are discovered during the construction or operation of the project, the owner or operator shall promptly report the discovery to the Director of the Arizona State Museum (ASM) and, in consultation with the Director, shall immediately take all responsible steps to secure and maintain the preservation of the discovery as required by ARS §41-844. If human remains and/or funerary objects are encountered during the course of any ground-disturbing activities related to the construction or maintenance of the project, the owner or operator shall cease work on the affected area of the project and notify the Director of the ASM as required by ARS §41-865 for private land, or as required by ARS §41-844 for state, county, or municipal lands.
 - 5. Use of Third Parties: The County may obtain reviews, inspections or other work completed by a third party for the purpose of review or monitoring of the Solar Facility, the costs of which shall be required to be reimbursed by the Solar Facility owner or operator. Examples of such work include but are not limited to reviews and associated inspections of the Wildlife Protection Plan, stormwater quantity and quality plans, the Decommissioning Plan, and compliance reports.
 - 6. Change of Owner or Operator: The Solar Facility owner or operator must give the County ninety (90) days written notice prior to any proposed change of the Solar Facility operator or ownership, with the additional requirement that the new owner or operator must enter into all required written agreements and provide the required financial assurances prior to the release of the then current owner or operator.
- F. DEVELOPMENT AND PERFORMANCE STANDARDS: The following standards are intended to mitigate and avoid adverse impacts on adjacent property owners, the surrounding area, viewshed, and natural, cultural, archaeological, and Recreational Resources, as well as future development within the County.
- 1. Location and Dimensions: Solar Facilities are required to be located in the RCU (Residential; Rural) zoning district. The County will utilize the following criteria to identify appropriate locations within this required zoning district. A waiver request, as described in subsection D.5 of this Section, shall be required for consideration to locate a Solar Facility in any other zoning district. The Board of Supervisors may also utilize and require these criteria for the siting of Solar Facilities in other zoning districts when considering whether to approve the waiver request.
 - a. The maximum Development Area shall not exceed three thousand (3,000) acres per project.
 - b. The cumulative acreage maximum for all Solar Facility projects located within Yavapai County is ten thousand (10,000) acres.
 - c. Solar Facilities must be located greater than one half (1/2) mile from any incorporated municipal limits, or no more than one quarter (1/4) mile where

the Board of Supervisors receives the consent of the affected municipality by way of a resolution of approval submitted by the governing body. This requirement shall not apply to non-contiguous areas of a town or city (“islands”) that are less than twenty-five (25) acres in size.

d. Preferred Sites: The following site characteristics are considered preferred. No combination of preferred characteristics will create an entitlement to a Solar Facility Use Permit, but the Board of Supervisors will consider those characteristics to determine whether a location is appropriate. The determination of whether a proposed Solar Facility’s location is appropriate is a legislative decision by the Board of Supervisors. Preferred sites will be located on:

- (1) a previously utilized site exhibiting challenging characteristics for reuse (e.g., existing Brownfield, aggregate extraction, or mining site);
- (2) project sites exhibiting highly disturbed and degraded ecological features;
- (3) project sites having low environmental, recreational, and cultural or archaeological resource values as identified in the required preliminary site investigations;
- (4) project sites that may retain traditional uses and allow for multiple uses such as Agrivoltaics;
- (5) project sites that have minimal negative visual impact on significant landforms and scenic viewsheds of widely recognized aesthetic or recreational value, or which are more than five (5) miles from Visual Resources such as natural landforms, vegetation, water features, and human modifications that give the landscape its visual aesthetic quality;
- (6) project sites located near major highway interchanges, existing or planned industrial areas, or other Solar Facilities; and
- (7) project sites that use or are near an existing or planned substation, or transmission line or other satisfactory inter-tie location.

e. Restricted Locations: The following locations within the Project Area must remain in an undisturbed condition unless a waiver is granted as described in subsection D.4.

- (1) Locations that would fragment, degrade, or irreparably harm important resources of local, County, state, or federal significance, as determined through the Preliminary Site Investigations described in subsection D.1.c(2).
- (2) Locations that conflict with or have potential significant negative impacts on Special Status Species and their habitats, other special wildlife designations such as Critical Habitat and Important Bird Areas, identified wildlife corridors (e.g., pronghorn antelope, predators, and other wide-ranging wildlife), and significant stands of unique vegetative communities (e.g., saguaro cactus), as determined

through the Preliminary Site Investigations described in subsection D.1.c(2).

- (3) Scenic sites, areas, and viewsheds of recognized aesthetic or recreational value, as determined through the Preliminary Site Investigations described in subsection D.1.c(2).
 - (4) Unique topographic features such as ridges.
 - (5) Steep Hillside slopes averaging greater than eight percent (8%) over three hundred (300') feet or more of horizontal run. Development of slopes that average up to ten percent (10%) over three hundred (300') feet may be permitted, provided that the affected area comprises less than ten percent (10%) of the Development Area.
 - (6) Sites or locations that conflict with or have potential negative impacts on archaeological, cultural, and historic resources or sites, heritage areas, or cultural landscapes as formally identified by a designated tribal entity or government), and as determined through the Preliminary Site Investigations described in subsection D.1.c(2).
 - (7) Locations that require significant ground disturbance and grading due to their unique topographical features or environmental constraints.
 - (8) Forested or heavily vegetated sites or locations comprising thirty percent (30%) canopy density of woody species (i.e., trees, shrubs) or saguaro cactus species as averaged across the vegetated area.
 - (9) Floodplains, riparian areas, wetlands, or seeps as may be determined by the Federal Emergency Management Agency (FEMA), Yavapai County Flood Control District, or other federal, state, and local public entities charged with environmental water quality and protection.
2. Setbacks: The following standards shall apply to the Development Area of the Solar Facility, unless otherwise expressly stated in this Section, including fencing and PV panels, but not including landscaping, unless a waiver is granted as described in subsection D.4.
- a. Five hundred (500') feet from any dwellings (existing or under permit) or any parcels zoned R1L, RMM, R1, RCU, R2, RS, C1, C2, C3, PAD, RCD, or OS.
 - b. Five hundred (500') feet from any parcel zoned PM, M1, or M2.
 - c. Five hundred (500') feet from any lake, creek, perennial or intermittent stream, river, major tributaries, riparian areas, wetlands, or seeps, as measured from the top edge of the bank, or from the outer edge of any delineated Federal Emergency Management Agency (FEMA) Floodplains. Minor tributaries may warrant a reduced buffer setback to be no less than one hundred fifty (150') feet as determined by the Board of Supervisors.
 - d. One thousand (1,000') feet from federally protected lands (e.g., National Park, National Monument, Conservation Lands), and five hundred (500') feet from other federally managed lands, unless such adjacent lands have leased or planned uses deemed compatible by the Board of Supervisors.

- e. One thousand (1,000') feet from County open space, parks, and other Recreational Resources.
 - f. Five hundred (500') feet from forested or heavily vegetated areas comprising forty-five (45%) percent or greater canopy density of woody or cactus species (i.e., trees, shrubs, succulents) as averaged across the vegetated area, or from transitional habitat areas.
 - g. Five hundred (500') feet from ravines, canyons, or other significant and well-defined drainage features, as measured from the peak of the outer edges of these features.
 - h. One hundred fifty (150') feet from any Hillsides with slopes of ten percent (10%) or greater or with a total elevation gain of fifty (50') feet or more. The setback will be measured from the high and low points where the average slope percentage calculation begins and ends.
 - i. Five hundred (500') feet from significant archeological, paleontological, or historic sites as identified in the Cultural Resources Management Plan, or sites already formally recognized by the State Historic Preservation Office (SHPO). Identified cultural ruins of documented significance may require an additional setback up to one thousand (1,000') feet as determined by the Board of Supervisors.
 - j. Six hundred fifty (650') feet from each parcel corner on land parcels with checkerboard ownership arrangements (i.e., public land/private land) to allow connectivity to be maintained for wildlife corridors identified in the Wildlife Protection Plan (subsection D.2.c). Parcels with adjacent corners that also provide an equivalent buffer would be able to complete a combined wildlife corridor of one thousand three hundred (1,300') feet.
 - k. Three hundred (300') feet from the official street Right-of-Way line of any State or Interstate highway.
 - l. In all other cases where the above setbacks do not apply, the front, rear, interior side, and exterior side setbacks shall be a minimum of one hundred (100') feet.
3. Height:
- a. The maximum height of the highest edge of PV panels when fully tilted shall be twenty (20') feet, as measured from the average finished grade of the row.
 - b. The maximum height of all other structures associated with the Solar Facility shall be thirty-five (35') feet as measured from the finished grade at the base of the structure to its highest point, including appurtenances. This does not apply to poles and other equipment associated with onsite substation uses.
4. Wildlife Corridors: The applicant for a proposed Solar Facility is required to conduct a preliminary habitat and wildlife study as part of the required preliminary site investigations. The study shall identify existing corridors, potential impacts, and proposed mitigation measures to avoid or substantially reduce potential impacts to wide-ranging wildlife that may be present on or utilize the Project Area (e.g., deer, pronghorn antelope, elk, bears, mountain lions, etc.). Existing wildlife corridors and those identified in the Wildlife Protection Plan (subsection D.2.c) shall be provided a

minimum width of one thousand three hundred (1,300') feet through the entire length of the course where daily or seasonal migrations of pronghorn antelope, elk, and mule deer are known to occur. If the length of the corridor through the Project Area exceeds two (2) miles, a minimum width up to two thousand (2,000') feet may be required as determined by the Board of Supervisors and consultation with the Arizona Game and Fish Department (AZGFD). If a proposed Solar Facility is located where such migrations do not occur, a smaller buffer may be implemented as identified in the Preliminary Site Investigation described in subsection D.1c.(2)(a) in consultation with the AZGFD. The applicant must consult with the AZGFD in identifying wildlife corridors to provide adequate access for wildlife to safely navigate through and around the Project Area. Wildlife Linkages and access strategies must be shown in the Concept Plan and Development Plan submitted to the County. The use of wildlife permeable fencing with holes large enough to allow for small and medium-sized animals (e.g., racoons, rabbits, squirrels, etc.) to fit through is required. All fencing must be permeable to small animals by leaving a six (6") inch gap between the bottom of the fence and the ground, exclusive of substation and BESS Facilities. These accommodations will be provided to support habitat connectivity and facilitate the safe movement of mobile wildlife species.

5. Ground Cover and Vegetation Preservation: Preliminary erosion control, site maintenance, noxious weed control and management, and native plant preservations and revegetation plans shall be submitted as part of the Landscaping Plan. The project must be planned and developed in a way that maintains the local ecosystem by minimizing grading and site disturbance and to maximize retention of native vegetation, topsoil, and landforms. Areas cleared during construction that are not needed for site operations must be revegetated with native vegetative cover.
 - a. For the purpose of preventing erosion and managing runoff, any disturbed land, including land under and around the PV panels following construction or decommissioning, must be seeded with a certified weed free native revegetation seed mix based on plants predominantly native to the site and Yavapai County, as approved by the Development Services Director. Such ground cover shall be continually maintained on the site for the duration of the Solar Facility Use Permit.
 - b. Solar Facilities shall be designed and developed to minimize grading and to protect and preserve prominent landscape features (i.e., rock outcroppings, large boulders, etc.), unique plant communities, riparian zones, steep slopes, and other natural features, prime grassland, woodland, and Sonoran Desert habitat. No more than a ten percent (10%) average change from natural grade will be allowed except for roads, equipment pads, substation, BESS, and other structures that require a leveled surface to meet engineering or safety codes.
6. Screening: The required Project Boundary setbacks and buffer zone must provide adequate screening to reduce visual impacts associated with the Solar Facility. Screening should be placed strategically with consideration of wildlife benefit and must not impede identified wildlife corridors. In areas where it is determined that

setbacks and buffer zones do not appropriately screen the project from sensitive locations (e.g., dwellings, designated viewsheds, scenic highways, etc.), the following screening measures shall apply.

a. The applicant may use any combination of methods listed in this subsection, or other comparable methods deemed equivalent by the Board of Supervisors, to satisfy the screening requirements. The methods proposed by the applicant must provide adequate relief from ground level views and activity. While full view obstruction is not required, the intent is to minimize and soften views from being dominated by the project by providing strategic natural landscaping. Such screening shall be located within the buffer zone and outside of security fencing. Screening may also be required in other locations for specific uses or structures, such as substations and BESS Facilities. The Board of Supervisors may approve a plan to allow phased screening based on special or unique conditions of the use or site. The screening required by this section must be shown on the required Development Plan.

- (1) Existing vegetation, topography, buildings, open space, or other elements located on or adjacent to the site may be considered as part of the required screening if deemed adequate by the Board of Supervisors.
- (2) Vegetative landscaping intended for screening may include a combination of evergreen and deciduous trees, shrubs, and/or cacti or succulents where appropriate, that are native to Yavapai County and four (4') to six (6') feet in height (excluding cacti and succulents) at time of planting. The combination of plant species to be installed and spacing shall be detailed in the Landscaping Plan (subsection D.2.g).
- (3) Berms must generally be constructed with a three-to-one (3:1) horizontal-to-vertical ratio, four (4') feet to six (6') feet above the adjacent grade, with a top that is three (3') feet in width (the wide top is necessary to have a flat area for plantings). The outside edges of the berm must be sculpted such that there are vertical and horizontal undulations to give variations in appearance. When completed, the berm must have a naturalistic appearance and may not be uniform like a dike. All land berms shall be seeded with a certified weed free revegetation seed mix based on shrubs, cacti and succulents, grasses and herbaceous forbs, and wildflowers native to Yavapai County as approved by the Development Services Director.
- (4) Fencing: Proposed fencing shall be designed to minimize visual impacts and be complementary with scenic corridors and adjacent properties. Fencing shall also be designed to minimize impacts to wildlife and must not impede identified wildlife corridors.

- (a) Exclusionary fencing shall be aligned to avoid dead-ends where wildlife could become trapped. If fencing

is required within a wildlife corridor due to industry regulatory standards, it must consist of a wildlife friendly design provided by the Arizona Game and Fish Department (e.g., fencing with a maximum height of forty-two (42") inches and a smooth bottom wire that is eighteen to twenty (18-20") inches above the ground to allow pronghorn and deer fawns to pass under).

- (b) Fencing intended for screening must be at least seventy-five (75%) percent visually solid as viewed on any line perpendicular to the fence from adjacent property or a public street.
 - (c) Fencing may be used in combination with other screening methods but shall not be the primary method. For the purposes of this subsection, fencing shall not be used to screen more than thirty (30%) percent of the views required to be screened.
 - (d) Depending on the location, such as where fencing abuts residential uses, ornamental features may be required on the fence.
 - (e) Fencing material used for screening shall not include chain link fencing with slats.
 - (f) When feasible, fencing shall be designed around groups or clusters of equipment, as opposed to fencing the entire site.
 - (g) New fencing must not impede existing easements to private or public lands.
- (5) The perimeter of BESS Facilities, substations, and other structures must be enclosed with security or game fencing prior to the commencement of operations of the Solar Facility as required by local, state, and federal regulations and national safety codes. Perimeter fencing around PV arrays must be composed of low-visibility game or similar fencing. Arizona Game and Fish and other applicable agencies shall be consulted on the design of perimeter fencing and associated wildlife openings. Fencing shall be maintained in an upright and functional condition pursuant to the executed Site Maintenance Agreement.
- (6) Dwellings located one thousand (1,000') feet or less from the Project Boundary which are existing or under permit at the time of Board of Supervisors approval of the Solar Facility may require additional vegetative screening from views of the Solar Facility structures as determined appropriate by the Development Services Director. Such vegetative screening shall be located within the buffer zone in an

area extending at least seventy-five (75') feet from either side of the dwelling.

- (7) Additional screening where appropriate may be required as determined by the Development Services Director.
7. Outdoor Storage: Material storage areas shall be located in low-visibility areas of the project site whenever possible. The locations of any storage areas and an inventory of anticipated materials to be stored must be included in the Development Plan. Screening requirements for outside storage areas will be determined by the Development Services Director upon review.
8. Outdoor Lighting: Any outdoor exterior lighting associated with the Solar facility or BESS Facility shall be limited to levels required for safety and security and avoid crossing into identified wildlife corridors. All outdoor lighting must comply with Section 603 Light Pollution Control, and lamps must not exceed a correlated color temperature (CCT) in excess of three thousand (3,000K) kelvins. Light poles associated with the Solar Facility shall not exceed a height of eighteen (18') feet. Preliminary lighting information must be shown on the Development Plan (see Section 603.D.2). Additional lighting after approval of the Solar Facility Use Permit may require an amendment to the Solar Facility Use Permit as determined by the Development Services Director.
9. Glare Impact: All structures and PV panels associated with the Solar Facility shall be arranged to direct reflected sunlight and artificial light away from adjacent parcels, identified wildlife corridors, and public streets, and shall be installed in such a manner as to prevent glare that could interfere with any road or air traffic. As indicated in subsection D.2.j of this Section, the Federal Aviation Administration (FAA) may require a glare impact study and/or an airspace study to determine impacts on area airports.
10. Noise: Operational noise impacts at the Project Boundary shall not exceed fifty (50 dBA) decibels where abutting residential or Planned Area Development use districts, identified wildlife corridors, or where abutting parcels with dwellings existing at the time of Board of Supervisors approval of the Solar Facility. This must be demonstrated by a noise analysis prepared by a qualified expert or by submission of manufacturer documentation showing noise level compliance with the fifty (50 dBA) decibels standard, as determined satisfactory by the Development Services Director.
11. Signs: Any signs associated with the Solar Facility shall be designed to comply with Section 601 Sign Code and a sign permit must be obtained for all proposed signs. Only signs related to Solar Facility use and safety will be permitted, including directional signs for emergency purposes proposed in consultation with the Fire District, Sheriff's Office, and Emergency Management staff.
12. General Compliance: The Solar Facility or BESS Facility shall be designed, constructed, tested, and operated to fully comply with all applicable County, state, and federal laws, regulations, codes, and requirements. The Solar Facility shall also comply with the most current standards set forth by industry regulating bodies, including the Western Electricity Coordinating Council (WECC) and North American

Electric Reliability Corporation (NERC) planning standards, as approved by the Federal Energy Regulatory Commission (FERC), the National Electric Safety Code (NES) standards, and Federal Aviation Administration (FAA) regulations.

- G. INSTALLATION AND MAINTENANCE: The Solar Facility must be developed in accordance with the approved Development Plan and shall be continually maintained and kept in good repair including, but not limited to, fencing, ground cover, screening, lighting, driveways, entrances, PV panels, and structures.
1. A Site Maintenance Agreement shall be mutually executed between the owner or operator and Yavapai County (as a condition of approval).
 2. The Solar Facility operator shall be responsible for the cost of developing and maintaining the Solar Facility.
 3. The Solar Facility operator shall be responsible for arranging the training of all project field personnel regarding proper ingress/egress routes and on-site protocols for working in environmentally, culturally, or archeologically sensitive areas. Contractors employing such field personnel must maintain records documenting that the personnel have received this training.
 4. A Construction Management Plan that includes an estimated construction schedule and hours of operation must be provided to the County prior to the start of construction.
 5. Unless allowed by a phasing plan approved by the Board of Supervisors, all grading, groundcover, berms, fencing, trees, and other forms of landscaping shall be installed in accordance with the Development Plan within one (1) year of the commencement of construction.
 6. Berms and fencing shall be continuously maintained and repaired or replaced if damaged.
 7. Solar panels must be repaired or replaced or removed when they are either nonfunctional or in visible disrepair.
 8. All undeveloped portions of the subject property shall be maintained in a natural, undisturbed, and debris-free condition. The project operator shall monitor noxious weed density and provide mitigation to eradicate or prevent the spread of such weeds based on the Landscaping Plan (subsection D.2.g).
 9. After the construction of the solar arrays, native low-growing vegetation shall be used to stabilize and restore disturbed areas of the site for the duration of the facility's use.
 10. Weed and vegetation control or mowing shall be performed routinely and a performance bond reflecting the costs of such maintenance for a period of six (6) months must be posted and maintained by the owner or operator.
 11. Groundcover and landscaping shall be continuously maintained and replaced if dead.
 12. While the use of herbicides is not encouraged, any herbicides must be applied in a manner that does not cause "drift", which occurs when applied pesticides move through the air to abutting properties or aquatic habitat. Only Environmental Protection Agency (EPA) designated minimum risk herbicides may be used for

vegetative and weed control. Herbicide applicators must possess an Arizona Certified Pesticide Applicator license.

13. The Solar Facility operator shall be responsible for noxious weed management in accordance with state laws within the Project Area.
14. Failure to maintain the site or its improvements over a continuous period of twelve (12) months, as determined by the Development Services Director based upon receipt of a valid Land Use complaint, an unsatisfactory Annual Report as described in subsection E.1.a, unsatisfactory annual life and fire safety inspections and/or unsatisfactory semi-annual self-inspection of battery units described in subsection L.4, or a failure to provide any of these reports, may result in termination of the Solar Facility Use Permit and initiate the facility's decommissioning by the Board of Supervisors (subsection D.7 and D.8). However, following the first six (6) months of such failure to maintain the site, the County will have the option to hire appropriate professionals to perform needed maintenance using the surety funds designated by the Development Agreement (subsection E.1.b).

H. PUBLIC ROAD IMPROVEMENT, REPAIR, MAINTENANCE, AND DEDICATION (including bridges, drainage structures, guard rails and all other roadway related infrastructure): The Solar Facility owner or operator shall be responsible for any damage to public roads caused by the installation or decommissioning of a Solar Facility. In addition to the Traffic Plan (subsection D.2.i) which provides general travel routes and trip volumes to assist in the general review of the Solar Facility Use Permit, a public road mitigation plan may be required by Yavapai County Public Works to address the following.

1. Improvement, repair, and maintenance of public roads, including during installation and decommissioning of the Solar Facility.
 - a. Yavapai County Public Works may require more than one Mitigation Plan to document road conditions, first during installation, and again during decommissioning and reclamation.
 - b. The Mitigation Plan will identify all public roads within unincorporated Yavapai County proposed as haul routes to transport equipment, parts and material for construction, operation, maintenance, and decommissioning of any Solar Facility, including estimated daily vehicle counts as required by Yavapai County Public Works.
2. Yavapai County Public Works may request studies and reports prepared by qualified professionals to determine the likely and expected impact to the haul routes designated by the applicant.
 - a. All associated costs for baseline road condition studies of the haul routes shall be paid for by the applicant.
 - b. Yavapai County Public Works will inspect the haul routes periodically to determine the road conditions and any damages caused by the Solar Facility. The Solar Facility shall be responsible for the costs of such inspections, repairs, and restoration of the haul road, or any other road damaged by activities associated with the Solar Facility.

3. Existing roads shall be used to provide access to the site. If new roads are constructed, the amount of land disturbance must be minimized. Roads constructed to provide vehicle access for site shall be designed and constructed to standards approved by Yavapai County Public Works and the nearest Fire District, in coordination with any required public safety, fire protection, and emergency management plans.
 - a. Grading and road construction permits are required under certain circumstances as described in the current version of the Yavapai County Engineering Design and Construction Manual.
 - b. Measures to control and mitigate dust on roads shall be outlined in a dust control and mitigation plan.
 4. If prior to or during initial installation of the Solar Facility Yavapai County Public Works determines the haul routes designated by the applicant appear inadequate for use as haul routes because of the weight of the loads, the number of trips, drainage issues, or because of safety concerns, then the Solar Facility owner or operator may be required to improve and maintain the roads to accommodate the anticipated traffic load. The costs and details for required improvements shall be included in the project's Development Agreement and subsequent amendments as needed.
 5. Yavapai County Public Works may require financial assurance to address any reasonably foreseeable costs and expenses related to the repair and maintenance of the haul roads designated by the applicant. Such financial assurance requirement may be a separate agreement or may be included as part of the Solar Facility Development Agreement required by subsection E.2 of this Section.
 6. The property owner/developer must dedicate the full right-of-way for all minor and major arterial roads (see Yavapai County Interactive Map) or as identified by the Yavapai County Public Works Director prior to obtaining a building permit.
 7. The property owner/developer shall coordinate with the appropriate Fire Department or Fire District on the required roadway cross section to provide adequate weight capacity and internal circulation from the project vehicular access points to key internal project components (i.e., inverters, batteries, etc.) for fire and emergency response apparatus.
- I. **STORMWATER MANAGEMENT PERFORMANCE BOND:** The Solar Facility owner or operator shall be responsible for all stormwater facilities. The project must be planned with low impact development stormwater management techniques, as outlined in the current version of the Yavapai County Engineering Design and Construction Manual, to capture and infiltrate stormwater and rainwater. A performance bond or other surety acceptable to the Board of Supervisors may be required as deemed necessary to ensure compliance with the County's stormwater regulations and to correct nonfunctioning or inadequate stormwater controls or necessary maintenance and may be a separate agreement or may be included as part of the Solar Facility Development Agreement required by subsection E.2 of this Section. The bond or other surety, if any, may be required to remain in effect during the entire term of the Solar Facility Use Permit.

- J. BATTERY STORAGE: In addition to the general provisions, application requirements, and development and performance standards, the following additional requirements must be met for the approval of a Battery Energy Storage System (BESS) facility, for both stand-alone facilities and those approved in conjunction with a Solar Facility Use Permit.
1. Location: Due to their potentially combustible nature and possible large footprint, the siting of BESS Facilities must meet the following criteria.
 - a. BESS Facilities shall be located in nonresidential areas unless approved as part of the Solar Facility Use Permit or substation.
 - b. BESS Facilities may not be located in areas used by the public (Recreational Resources) or within identified wildlife corridors.
 - c. BESS Facilities may be co-located with the project substation as described in subsection K.
 - d. Take advantage of existing topography, structures, and vegetation to provide extra screening.
 - e. Design the BESS Facility so that it mitigates the potential detrimental impacts to the general health, safety, and welfare of the community, and to wildlife.
 - f. Design and configure the BESS Facility in a way that minimizes other adverse impacts on the community (e.g., views, noise, and vibration).
 2. Configuration:
 - a. All battery cells shall be contained within a BESS equipped with cooling, ventilation, built-in 24/7 automated fire detection and extinguishing technology (following all manufacturer recommendations), and a Battery Management System (BMS).
 - b. The BMS shall monitor individual battery module voltages and temperatures, container temperature and humidity, combustible off-gassing, fire, ground fault and direct current (DC) surge, and door access.
 - c. The BMS must be capable of shutting down the system before it begins to operate outside of safe parameters (before thermal runaway takes place).
 3. Construction, Maintenance and Operation: BESS Facilities shall be constructed, maintained, and operated in accordance with applicable codes and standards including, but not limited to:
 - a. all applicable fire, electrical and building codes adopted by the County;
 - b. National Fire Protection Association (NFPA) 855, Standard for the Installation of Stationary Energy Storage Systems, 2023 Edition and subsequent additions; and
 - c. Underwriters Laboratories (UL) 9540A, Standard for Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems and subsequent editions; and, unless otherwise required by such regulations and codes.
 - (1) Access to all batteries and electrical switchgear shall be from the exterior for normal operation and maintenance.
 - (2) Access will not be permitted to any containers that have an interior walkway while the system is in operation.
 - (3) Signage must include the following information:

- (a) type of technology associated with the BESS;
 - (b) any associated special hazards;
 - (c) type of suppression system installed in the area of the BESS;
and
 - (d) 24-hour emergency contact information, including reach-back phone number.
- (4) Disconnect and other emergency shutoff information must be clearly displayed on a light reflective surface.

K. **SUBSTATIONS:** In addition to the general provisions, application requirements, and development and performance standards, the following additional requirements must be met for the approval of a substation, for both stand-alone facilities and those approved in conjunction with a Solar Facility Use Permit.

1. **Location:**
 - a. Substations may not be located within five hundred (500') feet of adjacent residential districts, existing or approved residences, subdivisions, public lands and uses, or parkland. An exception to this requirement will be made when co-locating within one hundred (100') feet of an existing utility substation, however, a substation may not be located within an identified wildlife corridor.
 - b. Take advantage of existing topography, structures, and vegetation to provide extra screening.
 - c. Design the substation so that it mitigates the potential detrimental impacts to the general health, safety, and welfare of the community, and to wildlife.
 - d. Design and configure the substation in a way that minimizes other adverse impacts on the community (e.g., views, noise, and vibration).
2. **Term:** Substations approved as part of the Solar Facility Use Permit will have the same Use Permit term as the Solar Facility, however, substations and transmission lines may have a life expectancy longer than that of the remainder of the Solar Facility. Therefore, upon decommissioning of the Solar Facility, the private owner of a substation may apply for a new Use Permit or other zoning approval to allow the continued use of the substation. Public utility service providers are exempt from this requirement.

L. **EMERGENCY PREPAREDNESS/SAFETY INSPECTIONS:**

1. The Solar Facility owner or operator shall allow County employees and designated third-party inspectors access to the Solar Facility premises with forty-eight (48) hour notice for inspection purposes as set forth in their application.
2. The Solar Facility operator shall coordinate with County emergency services staff (e.g., Fire District, Sheriff's Office, and Emergency Management staff) to provide materials and continuing education to these departments serving the Project Area with emergency services.
 - a. These materials shall inform staff on how to safely respond to onsite emergencies, including emergencies associated with any BESS Facilities.

- b. The Solar Facility operator shall arrange a pre-operational training session with emergency services staff to familiarize personnel with issues unique to the Solar Facility prior to the initiation of solar operations.
 - 3. The Solar Facility owner or operator shall provide a fire safety plan, a fire evacuation plan, and all other submittals relating to emergency planning and preparedness as required by applicable fire, electrical and building codes adopted by the County or referenced in this Section, including directional signs for emergency purposes proposed in consultation with the Fire District, Sheriff's Office, and Emergency Management staff.
 - 4. In addition to the annual life and fire safety inspections required by the most current fire codes and performed by the fire jurisdiction having authority, the Solar Facility operator shall conduct semi-annual on-site self-inspections of the battery units and submit a written report to the Development Services Director on their condition.
 - 5. The Solar Facility Development Agreement, required by subsection E.1.d of this Section, must address provision of specialized BESS Facility fire safety equipment or other protections, if necessary for support of the BESS Facility use.
 - a. The cost of this specialized equipment, or a portion thereof, may be required to be reimbursed by the Solar Facility owner or operator.
- M. **DECOMMISSIONING AND RECLAMATION:** The Solar Facility Use Permit shall include the submission of a Detailed Decommissioning Plan as described in subsection D.I. Prior to the issuance of construction permits, the cost estimate for the complete removal of non-operational above and below ground improvements must be submitted and financial assurance must be posted.
 - 1. **Decommissioning Plan:** The Decommissioning Plan will address the following items.
 - a. All physical improvements, materials, and equipment related to solar energy generation, transmission, and storage must be removed from the surface and the subsurface to a minimum depth of forty-eight (48") inches. The pre-existing soil grade shall also be restored following disturbance caused in the removal process. These shall include, but are not limited to, structures, buildings, equipment, cabling and wiring, solar electric systems, electrical components, security barriers, foundations, pilings, berms, storm water improvements, and any other associated facilities.
 - b. All fencing shall be removed and recycled or reused unless the Development Services Director grants approval for any existing perimeter fencing to remain in place, in which case, the Arizona Game and Fish Department will be consulted to ensure that the remaining fence will not negatively impact wildlife.
 - c. All access roads located within the Project Area shall be removed unless the Development Services Director approves a written request from the current or purchasing landowner to allow a portion of the access roads and associated culverts or related materials to remain.

- d. For any part of the Solar Facility on leased property, the Decommissioning Plan may propose to incorporate agreements with landowners regarding the retainment of driveways, roads, landscaping, berms, fences, gates or repurposed buildings or other structures with approval by the Board of Supervisors. However, any proposed use of remaining buildings or other structures must be in conformance with the regulations for the zoning district in effect at the time of Board of Supervisors approval.
- e. Ground cover and screening established as part of the Solar Facility Development Plan and other existing vegetation may remain as part of the Decommissioning Plan. Land disturbed as part of the decommissioning process must be reseeded and re-vegetated with certified weed free native seed mixes (such as those described in subsection F.5) or other plant species suitable to the area. A list of such appropriate plant materials shall be provided by the Development Services Director. Such planting and associated grading or other land disturbance must be completed within one (1) year of removal of Solar Facility structures and equipment, in accordance with the Decommissioning Plan approved and adopted by the Board of Supervisors.
- f. Disposal and recycling of all Solar Facility materials and equipment, including but not limited to PV panels, inverters, and batteries must fully comply with all applicable County, state and federal laws, regulations, and code requirements, which includes a County-approved demolition permit for work to be performed by a licensed contractor and an approved location for disposal of such materials and equipment.
- g. Guaranteed Funds: Financial assurance for the estimated cost of decommissioning and reclamation, which may include the possibility of salvage value if allowed by the Board of Supervisors, prepared as required in subsection E.2, must be guaranteed by the owner or operator of the Solar Facility prior to issuance of construction permits to ensure that decommissioning and reclamation can successfully occur. Should another authority having jurisdiction (e.g., Arizona State Land Department, Bureau of Land Management, etc.) also require financial assurance for decommissioning and reclamation, the Board of Supervisors may consider accepting the same or portions of the same financial assurance to satisfy both requirements, so long as the assurance meets the specifications of both Yavapai County and the separate authority, as part of a waiver request pursuant to subsection D.5. Upon issuance of the financial assurance, the applicant shall name the County as a party to the financial assurance. The applicant may choose one of the following options (either the full cost option or the tiered securitization option) to provide financial assurance.
 - (1) Full Decommissioning Cost: The full cost of decommissioning and reclamation will be guaranteed by any combination of the following as determined acceptable by the Board of Supervisors.

- (a) Trust Fund: The owner or operator of the Solar Facility shall establish a trust fund into which money specifically earmarked for decommissioning and reclamation is deposited. The Solar Facility Development Agreement shall prohibit the release of these funds without the written consent of the County. The County shall consent to the release of the funds upon compliance with the Decommissioning Plan approved by the Board of Supervisors.
 - (b) Payment Surety Bond: The owner or operator of the Solar Facility shall obtain a surety bond satisfactory to and approved by the County in an amount equal to the estimated cost of decommissioning and reclamation. A standby trust fund must be established into which the surety company will make payments if the owner or operator fails to comply with their financial responsibilities. This money deposited into the standby trust fund shall be used to pay a third party to perform the work described in the Decommissioning Plan approved by the Board of Supervisors.
 - (c) Letter of Credit: A letter of credit issued by a financial institution that has a credit rating of at least BBB+ or higher by Standard and Poor's or Baa1 or higher by Moody's; and financial ratios and capitalization requirements that are acceptable to the County, in the full amount of the decommissioning and reclamation estimate.
 - (2) Tiered Securitization: An amount equal to, or more than, ten (10%) percent of the approved decommissioning and reclamation cost estimate shall be either: deposited into a cash escrow account at a financial institution acceptable to the County; or an amount equal to, or more than, ten (10%) percent of the decommissioning and reclamation cost estimate in the form of a payment surety bond or a letter of credit issued by a financial institution that has a credit rating of at least A- from Standard & Poor's or A3 from Moody's and assets (50%) and capital surplus (50%) totaling at least \$10,000,000,000, or an A.M. Best financial strength rating of at least A- (Excellent) or other credit rating and capitalization reasonably acceptable to the County shall be obtained. The amount deposited in the cash escrow account, or the amount of the surety bond or letter of credit, shall increase by an additional ten (10%) percent each year on the anniversary of the commencement of operation of the Solar Facility for nine (9) additional years until 100% of the full cost estimate of decommissioning and reclamation is achieved.
- h. Cost Estimate Update: The estimated decommissioning and reclamation costs must be recalculated at an interval no sooner than every year but not later

than every five years by an independent third-party Arizona licensed professional engineer, following the requirements for the original cost estimate as required in subsection M.1.g of this Section, and using the most current industry standards. The cost of preparing this update must be paid by the owner or operator.

- (1) If the recalculated estimated cost of decommissioning and reclamation exceeds the original estimated cost by two percent (2%) or greater, then the Solar Facility owner or operator shall deposit additional funds into the trust fund or cash escrow account or make an update to the payment surety bond or letter of credit to meet the new cost estimate.
 - (2) If the recalculated estimated cost of decommissioning and reclamation is less than ninety-eight percent (98%) of the original estimated cost, then the County may consider approval of a written request by the owner or operator to reduce the required deposits or, payment surety bond, or letter of credit to the recalculated estimate of decommissioning and reclamation cost.
 - (3) Any increase or decrease in the decommissioning and reclamation securitization shall be funded by the applicant or refunded to the applicant (if permissible by the form of security) within ninety (90) calendar days and shall be similarly readjusted for every subsequent five (5)-year decommissioning cost estimate update.
2. Amendment to Decommissioning Plan: Any amendment must be approved by the Board of Supervisors prior to beginning decommissioning and reclamation. Applications for an amendment shall require a public hearing under the same procedures as required for the Solar Facility Use Permit. Required timeframes for completion of decommissioning and reclamation shall not be extended due to the amendment application process.
3. Partial Decommissioning: If decommissioning is triggered for a portion, but not the entire Solar Facility, then the owner or operator shall complete decommissioning and reclamation in accordance with the Decommissioning Plan for the applicable portion of the Solar Facility. The remaining portion of the Solar Facility shall continue to be subject to the Decommissioning Plan.
4. Date of Decommissioning: If the Solar Facility is to be decommissioned and reclaimed, the Solar Facility owner or operator must notify the Development Services Director in writing of the proposed date of discontinued operations and plans for removal.
5. Abandonment of Solar Facility: Unless otherwise approved by the Development Services Director (e.g., to allow time to repair damage from severe weather or to update equipment), Solar Facilities that have not been in active and continuous service for a period of twelve (12) months, as determined by the Development Services Director based upon receipt of a valid Land Use complaint, an unsatisfactory Annual Report as described in subsection E.1.a, unsatisfactory annual life and fire safety inspections and/or unsatisfactory semi-annual self-inspection of battery units

described in subsection L.4, or a failure to provide any of these reports, shall be decommissioned and reclaimed at the Solar Facility owner or operator's expense. However, following the first six (6) months of failure to maintain the site, the County will have the option to hire appropriate professionals to perform needed maintenance using the surety funds designated by the Development Agreement (subsection E.1.b).

6. The owner or operator or their successors, within six (6) months after the complete cessation of use of the Solar Facility and at their sole expense, shall initiate and provide continuous decommissioning of the Solar Facility in accordance with the approved Decommissioning Plan.
 - a. Following the completion of decommissioning of the entire-Solar Facility and payment for any such costs arising out of a default by the owner or operator or their successors, any remaining securitized funds held by the County shall be distributed to the project owner(s) in the same percentage of the securitized funds matched with the percentage of the project owner's acreage ownership of the Solar Facility.
7. Default Decommissioning and Reclamation by the County: If the owner or operator, or their successors, fail to decommission the Solar Facility pursuant to the approved Decommissioning Plan, and the County has not approved a repowering of the Solar Facility, the County shall have the right, but not the obligation, to commence decommissioning and reclamation activities and shall have access to the property, and shall have the right to draw on securitized funds up to the amount of the actual decommissioning costs, and the rights to the solar generation equipment and BESS equipment and materials remaining on the property. If applicable, any excess decommissioning and reclamation securitized funds shall be returned to the current owner(s) of the property after the County has completed the decommissioning and reclamation activities and paid all outstanding invoices, divided according to the percentage of the property owner's acreage ownership of the Solar Facility. Nothing herein shall limit other rights or remedies that may be available to the County to enforce the obligations of the owner or operator or their successors, including under the County's zoning powers.