

**17.168.050 Solar Facilities.**

- A. Purpose and Intent. The purpose of these application requirements and performance standards regarding Solar Facilities is to establish requirements for construction and operation of solar facilities (excluding small-scale solar facilities) and to provide standards for the placement, design, construction, monitoring, modification, and removal of such facilities; to address public safety, minimize impacts on scenic, natural, and historic resources; and to provide adequate financial assurance for decommissioning. These regulations are intended to provide a consolidated list of requirements for the proper consideration of project applications.
- B. Applicability. In addition to other requirements of the Pueblo County Code and Division II, Areas and Activities of State and Local Interest, applications for medium-scale and utility-scale solar projects shall be subject to the provisions contained herein. If regulations in other sections are inconsistent with those set forth herein, then the more restrictive requirement shall prevail. To the extent possible, all other zoning and land development requirements are consistent with those presented in this section.
- C. Zoning districts.
  - 1. Solar facilities shall be subject to a 1041 Permit as a primary use in zoning districts A-1 and P-1.
  - 2. Solar facilities shall be permitted as accessory uses to existing power plants, public facilities, and other existing uses as determined by the Zoning Administrator regardless of zoning district. Such uses are subject to the provisions herein as determined by the Zoning Administrator on a case-by-case basis.
  - 3. Battery facilities shall be subject to a 1041 Permit. They shall be permitted as
    - a. An ancillary use to solar facilities in A-1 and P-1 zoning districts.
    - b. A primary use adjacent to other energy generation facilities and substations.
- D. General Provisions.
  - 1. Project Area. The area included in the Development Plan should include the project boundary, solar facility, PV pods, and buffer zones. The Project Area may include multiple parcels and portions of parcels, which may be leased parcels or leased areas of parcels, and, for purposes of this section, the sum of this area shall be the Project Area and the boundaries of this area shall be the Project Boundary. The purpose of the Project Area is to accommodate a single Solar Facility. Furthermore,
  - 2. Pre-application meeting. Schedule a pre-application meeting with the Zoning Administrator to discuss the location, scale, and nature of the proposed use and what will be expected during that process.
- E. Application Requirements. A complete 1041 Permit application shall include:
  - 1. Owner Authorization and Information. Documentation of land ownership and/or legal authority to construct all properties within the Project Area.

2. Solar Facility Narrative. A narrative giving a general overview of the Solar Facility, which includes:
  - a. The owner and the operator of the proposed Solar Facility and the applicant,
  - b. The intended utility company to interconnect to the Solar Facility,
  - c. The current uses and physical characteristics of the Project Area and the surrounding area,
  - d. Approximate Rated Capacity of the solar facility project,
  - e. Type and location of interconnection to electrical grid as proposed with the appurtenant Public Utility Commission (PUC),
  - f. Approximate number of panels and representative types,
  - g. The Project Area and Solar Photovoltaic Panel Coverage expressed in acres.
  - h. An inventory with description of all proposed structures and uses including Battery Energy Storage Facilities, inverters, substations, and all structures over 60 ft. in height.
3. Concept Plan. A Concept Plan consisting of aerial imagery of the Project Area superimposed with the Project Boundary and the general location and arrangement of screening, buffer zones, fencing, structures, the proposed PV panels, driveways and entrances, wildlife corridors, floodplain, electric lines and overhead utility lines, and connections to the electrical grid, and, in addition, labeled with the distances of structures to the property lines. Typical elevations of structures shall be included with the Concept Plan. The intent of the Concept Plan is to be a visual summary of the project and may serve as the cover page of the Development Plan.
4. Development Plan (requirements may be modified by the Zoning Administrator for projects in the P-1 District). The Development Plan, certified by a licensed design professional registered in the State of Colorado (an architect, engineer, or similar professional), shall include the following:
  - a. A legal description of the subject parcels.
  - b. The Project Area and Solar Photovoltaic Panel Coverage expressed in acres.
  - c. The Project Boundary, property lines, lease lines, Official Street Line, and easements within the Project Area.
  - d. Setback lines.
  - e. General location of driveways, parking and entrances onto streets and accompanying site distance reports for such entrances.
  - f. Locations and dimensions of all existing and proposed buildings and structures, including solar panels, charge regulators, inverters, substations, Battery Energy Storage Facilities, structures over 60 feet in height, connections to the grid, fencing, and dwellings and associated accessory structures,
  - g. Preliminary sketches of structure elevations depicting the general style, size,

and exterior construction materials in sufficient detail to exhibit the relative compatibility of the proposed development with the character of the neighborhood.

- h. Location of exterior lights indicating area of illumination and foot-candles.
5. Environment Impact Assessment (may be waived by the Zoning Administrator for the P-1 District or for Medium-scale solar facilities).
    - a. Environmental inventory and impact statement regarding any site and viewshed impacts, including direct and indirect impacts to national or state forests and grasslands, national or state parks, County parks, wildlife management areas, conservation easements, recreational areas, or any known historic or cultural resources within three (3) miles of the Project Boundary.
    - b. Wetlands, rivers and streams, and floodplains shall be inventoried, delineated, and mapped in order to provide baseline data for the evaluation of the current proposal.
  6. Covenants/Easements/Restrictions. A copy of any subdivision covenants, utility easements and restrictions associated with the site.
  7. A draft Traffic Study (may be waived by the Zoning Administrator for the P-1 District or for Medium-scale solar facilities).
    - a. Information about the proposed project's traffic impacts, modeling both the construction and decommissioning processes, to include:
      - i. The time of day that transport will occur;
      - ii. A map showing the desired primary and secondary routes on the Pueblo Network;
      - iii. Characteristics of the loaded vehicles, including:
        - 1) Length, height, width, curb weight;
        - 2) Maximum load capacity;
      - iv. The number of vehicles transporting goods;
      - v. The frequency of vehicle arrival at the site; and
    - b. The haul route(s) must be provided and approved for construction impacts.
    - c. After review of the application's traffic impact information, the County may require a full traffic study to be accepted by an engineer approved by the County.
  8. Construction Schedule. An estimated construction schedule.
  9. A draft Grading Plan that limits grading to the greatest extent practicable by avoiding steep slopes and laying out arrays parallel to landforms. The Plan shall include:
    - a. Existing and proposed contours;
    - b. Locations and amount of topsoil to be stripped and stockpiled onsite (if any);
    - c. Percent of the site to be graded;

- d. An earthwork balance achieved on-site with no import or export of soil; and
  - e. Indicate natural flow patterns in drainage design and amount of impervious surface.
10. A preliminary drainage report prepared by an engineer licensed in the State of Colorado.
11. A draft Screening and Vegetation Plan to include:
- a. Ground cover species.
  - b. All screening and buffering materials, type of landscaping, and elevations.
  - c. Locations of wildlife corridors.
  - d. Maintenance requirements for screening and ground cover.
12. A Decommissioning and Reclamation Plan to include:
- a. Signatures by the applicant, landowner and any other person or entity with an interest or property right within the project area affirming the following:
    - i. Decommissioning/reclamation shall commence within six (6) months after power production has permanently ceased and be completed within twelve (12) months from the start date of the decommissioning/reclamation work, or per the schedule as approved within the Decommissioning Plan. Except if the project is being repowered or a force majeure event has or is occurring requiring longer repairs; however, the County may require evidentiary support that a longer repair period is necessary.
    - ii. The applicant shall notify the Zoning Administrator in writing of the proposed date of discontinued operations and plans for removal prior to commencement of decommissioning.
    - iii. Decommissioning shall be conducted in compliance with the approved decommissioning plan. Any amendments to the decommissioning plan must be approved by the Pueblo County Board of County Commissioners.
    - iv. All non-utility owned equipment, conduits, structures, fencing and foundations above and below grade shall be removed.
    - v. All fences, graveled areas and access roads shall be removed unless a landowner agreement to retain and presented, in writing, in which the landowner agrees for such specific improvements to remain.
    - vi. The applicant is responsible for decommissioning.
    - vii. Hazardous materials shall be removed and disposed of in accordance with Federal, State and Local law.
    - viii. At a frequency of every five (5) years from the initial commercial operating date, the applicant shall provide updated decommissioning/reclamation cost estimates, prepared by a qualified Engineer selected by the applicant, and approved by the landowner. These

updated estimates shall include all costs associated with the dismantlement, recycling, and safe disposal of facility components and site reclamation activities, including the following elements:

1. All labor, equipment, transportation and disposal costs associated with the removal of all facility components from the permit area.
  2. All costs associated with full reclamation of the permit area including the removal of non-native soils, fences and constructed access roads.
  3. All costs associated with reclamation of any primary agricultural soils at the facility site to ensure each are of direct impact shall be the same or better than pre-construction conditions.
  4. All decommissioning/reclamation activity management, site supervision and site safety costs.
  5. All other costs, including administrative costs, associated with the decommissioning and reclamation of the permit area.
- ix. Prior to issuance of any building permit the applicant must provide a full cost estimate for decommissioning and reclamation to the Zoning Administrator.
- i. No later than fifteen (15) years from the date of permit approval, an irrevocable standby letter of credit, bond, or alternate form of financial security in an amount sufficient to fund the estimated decommissioning/reclamation costs required by this Code shall be submitted to County with a copy sent to Landowner. The amount of security shall be 115% of the cost of decommissioning minus salvage value.
  - ii. In the event that the applicant fails to remove the installation in accordance with the requirements of this permit or within the proposed date of decommissioning, the County may collect the financial security and the County or hired third party may enter the property to physically remove the installation. If the cost to remove the facilities and complete the decommissioning minus the salvage value received exceeds the amount of the security, then the developer shall be required to reimburse the additional cost to the County or landowner who took the responsibility for the removal. If the reimbursement is not paid within 60 days after receipt of the invoice from the County (or landowner), then interest shall accrue on the unpaid balance at the then lawful rate of interest until paid in full.
13. Additional information may be required as determined by the Zoning Administrator, such as a scaled elevation view of the property and other supporting drawings, photographs of the proposed site, photo or other realistic simulations or modeling of the proposed project from potentially sensitive locations.

14. Two sets (11"× 17" or larger), one reduced copy (8½"× 11") and one electronic copy of the concept plan (in .pdf format), including elevations and landscape plans as required.
- F. Minimum Development and Performance Standards. A facility shall be constructed and maintained in substantial compliance with the approved Development Plan to mitigate negative impacts to residences; historic, cultural, recreational, or environmentally sensitive areas; and scenic viewsheds.
1. Setbacks.
    - a. Project Boundary Setbacks. To minimize adverse impacts upon surrounding properties and the community at large, the minimum setback of structures and uses associated with the Solar Facility to exterior parcel. Such structures and uses include but are not limited to fencing, PV panels, parking areas, and outdoor storage.
      - i. 50 feet from any structures and uses associated with the Solar Facility to the boundary of any commercial and industrial zoned parcels, or
      - ii. 750 feet from any structures and uses associated with the Solar Facility to the boundary of all other parcels (unless located within the P-1 District).
    - b. The setback requirement may be administratively reduced by the Zoning Administrator if appropriate screening through landscape or fencing approved by the Zoning Administrator is installed. An adjoining property owner may submit to Pueblo County a signed waiver or informed consent agreeing to a lesser setback.
  2. Ground Cover. Ground cover on the site shall be native vegetation, and incorporation of native plant species that require no pesticides, herbicides, and fertilizers.
  3. Exterior/Outdoor Lighting. Outdoor lighting shall be limited to levels required for safety and security. Facilities need to comply with section 17.120.180. All lights shall be shielded.
  4. Ingress/Egress. Permanent access roads and parking areas will be stabilized with gravel, asphalt, or concrete to minimize dust and impacts to adjacent properties.
  5. Coordination of local emergency services. Applicants for new solar facilities shall coordinate with the County's emergency services staff to provide materials, education and/or training to the departments serving the property with emergency services in how to safely respond to on-site emergencies.
  6. At all times, the Solar Facility shall comply with any other condition added or required by the Board of County Commissioners as part of a 1041 Permit approval.
  7. Compliance with other local, state, and federal regulations. During the term of this permit, operation shall fully comply with all applicable local regulations, as well as all applicable state and federal regulations.
  8. If the Solar Facility does not receive a building permit within 24 months of approval of the 1041 Permit, the Permit may be terminated.

9. Construction timeline. Unless allowed by a phasing plan approved by the Board, the Solar Facility shall be installed in accordance with the Development Plan within three (3) years of approval of the permit. Extensions may be granted by the Zoning Administrator on a case-by-case basis as deemed necessary or appropriate.
  10. Traffic. The applicant shall comply with all Colorado Department of Transportation (CDOT) and/or Pueblo County Department of Engineering and Public Works requirements for traffic management during construction and decommissioning of the Solar Facility.
  11. Maintenance. The Solar Facility shall be continually maintained and kept in good repair. The Solar Facility operator or owner shall be responsible for the cost of repairing damage to public and private roads occurring because of construction and operation. Failure to maintain the Solar Facility may result in a show cause hearing. The County reserves the right to require soil and water testing.
  12. Inspections. The Applicant will allow designated County representatives or employees access to the facility for inspection purposes. The Applicant shall reimburse the County its costs in obtaining an independent third-party to conduct inspections required by local and state laws and regulations.
  13. The owner and operator shall conform with Chapter 17.148 Administrative Regulations, Article 4. Permits, Section 17.148.330 Transfer of Permits.
- G. Special provisions for battery facilities. In addition to the above provisions, , the following additional requirements shall be met for the approval of a Battery Energy Storage Facility:
1. Battery Energy Storage Facilities shall be constructed, maintained, and operated in accordance with national industry standards and regulations including the most current adopted edition of the National Electrical Code, International Fire Code of the International Code Council, and the National Fire Protection Association Fire Code. The batteries will be NFPA (National Fire Protection Agency) compliant. In the event of a conflict between the national industry standards and these Conditions, the national industry standards shall control so that as technology advances, updated technology may be used.
  2. Battery cells shall be placed in a Battery Energy Storage System (“BESS”) with a Battery Management System (“BMS”). The BESS shall provide a secondary layer of physical containment to the batteries and be equipped with cooling, ventilation, and fire suppression systems. Each individual battery shall have 24/7 automated fire detection technology built in. The BMS shall monitor individual battery module voltages and temperatures, container temperature and humidity, off-gassing of combustible gas, fire, ground fault and DC surge, and door access and be able to shut down the system before Thermal Runaway takes place.
  3. The Battery Energy Storage System will be placed on an appropriate foundation.
  4. Access to all batteries and electrical switchgear shall be from the exterior for normal operation and maintenance. Access to the container interior shall not be permitted while the system is in operation except for safety personnel and first responders.

5. Qualifications and experience from selected developers and integrators shall be provided including disclosure of fires or other hazards at facilities.
  6. Safety testing and failure modes analysis data from selected developers and manufacturers shall be provided.
  7. The latest applicable product certifications shall be provided.
  8. The Solar Facility operator or owner shall be responsible for any environmental remediation required by the county or the state and the costs of such remediation. All remediation shall be completed in a timely manner.
  9. Battery storage shall be developed in collaboration with technical experts and first responders to utilize technology-appropriate best practices for safe energy storage systems including.
  10. The Solar Facility operator or owner shall conduct regular on-site inspections of the battery units and submit an annual written report to the Zoning Administrator on their condition.
- H. Special provisions for project related substations. In addition to the above provisions, the following additional requirements shall be met for the approval of a project related substation. Utility owned substations are subject to a separate permitting process.
1. Siting. Substations located within the Solar Facility shall be located in accordance with the Development Plan.
  2. Term. Substations included as part of the Solar Facility may have a life longer than that of the remainder of the Solar Facility and may continue under the 1041 Permit as part of this application approval.
- I. General Conditions.
1. Site Plan Requirements. In addition to all Pueblo County site plan requirements, the Applicant shall provide the following plans for review and approval for the Solar Facility prior to the issuance of a building permit:
    - a. Construction Management Plan. The Applicant shall prepare a "Construction Management Plan" for each applicable site plan for the Solar Facility, and each plan shall address the following:
      - i. Traffic control methods as identified in the final Traffic Study along with:
        - 1) Lane closures,
        - 2) Signage, and
        - 3) Flagging procedures.
      - ii. Site access planning. Directing employee and delivery traffic to minimize conflicts with local traffic.
    - b. Construction Mitigation Plan. The Applicant shall prepare a "Construction Mitigation Plan" for each applicable site plan for the Solar Facility, and each plan shall identify and address the effective mitigation of adverse impacts to



the satisfaction of the Zoning Administrator. Damage to public roads related to construction activities shall be repaired in a timely manner and not postponed until construction completion. The Applicant shall provide written notice to both the Zoning Administrator and the Director of Engineering and Public Works of the plans for making such repairs, including time within which repairs will be commenced and completed, within thirty (30) days of any written notice received from the Zoning Administrator.

- i. Driving of posts shall be limited to 7:00 am to 6:00 pm, Monday through Saturday. Driving of posts shall be prohibited on state and federal holidays.
  - ii. Other construction activity on-site shall be permitted Monday through Saturday, and in accordance with the provisions of the County's Noise Ordinance.
  - iii. During construction, the setbacks may be used for staging of materials and parking. No material and equipment laydown area, construction staging area, or construction trailer shall be located within 200 feet of any property containing a residential dwelling.
  - iv. Construction lighting shall be minimized and shall be directed downward.
- c. Traffic Study. The Applicant will submit a final Traffic Study for review and approval if required by the Department of Engineering and Public Works prior to the approval of an access permit. The Traffic Study, if required, will be reviewed and approved by the Department of Engineering and Public Works and/or a third-party if deemed necessary.
  - d. Grading Plan. The Applicant will submit a final Grading Plan for review and approval by the Department of Engineering and Public Works prior to the commencement of any construction activities. The Project shall be constructed in compliance with the Grading Plan.
  - e. Erosion and Sediment Control Plan. The County will have a third-party review with corrections completed prior to County review and approval. The owner or operator shall construct, maintain, and operate the project in compliance with the approved plan.
  - f. Stormwater Management Plan. The County will have a third-party review with corrections completed prior to County review and approval. The owner or operator shall construct, maintain, and operate the project in compliance with the approved plan.
- g. Professional Services, Legal Services, and Associated Studies. The County reserves the authority to charge and collect reimbursement for third-party building plan, site, or other review of any application, including, but not limited to, civil engineer, traffic engineer, landscape architect, urban forester, arborist, attorney, or any other professional costs and associated expenses.