

Franklin County Planning Commission
Agenda
November 9, 2021

- I. Call to Order
- II. Roll Call
- III. Consent Agenda
 - A) Approval of Minutes from the October 12, 2021 meeting
- IV. New Business
 - A). Boxwood Green Homeowners Association – Presentation for Rezone
- V. Old Business:
 - A). Solar Ordinance - Ordinance Revisions
 - Presentation - Beth Simms, Economic Development Director
 - B.) Union Hall Survey Results - Update
- VI. Adjourn

*** The Planning Commission's next site visits are tentatively scheduled for December 8, 2021.

Department of Planning & Community Development



A meeting of the Franklin County Planning Commission was held on October 12, 2021, in the Board of Supervisors meeting room located in the Franklin County Government Center.

THOSE PRESENT:

Sherrie Mitchell- Snow Creek District
Debbie Crawford- Union Hall District
David Clements- Rocky Mount District
C.W. Doss, Jr.- Blue Ridge District
James Colby- Gills Creek District
David Pendleton – Blackwater District

THOSE ABSENT:

Angie McGhee – Boone District

OTHERS PRESENT:

Chris Dadak, County Attorney
Matthew Schmidt – Assistant to Mr. Dadak
Carrie Spencer, Director of Development and Planning
Timothy Mack – Senior Planner
Lisa Cooper – Principal Planner
Mindy Goldsmith – Clerk

The meeting was called to order by Chairwoman Mitchell at 6:00 p.m. The first order of business was approval of the September 14, 2021 minutes. Ms. Mitchell asked if there were any changes, edits or deletions. Hearing none, the minutes will stand as written. The minutes from September 14, 2021 were approved.

Chairwoman Mitchell introduced the next item on the agenda.

OLD BUSINESS:

UNION HALL VILLAGE PLAN UPDATE: Ms. Spencer introduced Lisa Cooper, who updated the commissioners. The project will last for twelve months. If the Board of Supervisors approves the village plan, it will be adopted as another community growth area. Lisa presented the project timeline. Lisa hopes to present some draft documents by the end of 2021 or early 2022. In the early spring, we may have draft zoning recommendations. We are also meeting with the consultants once a month. Lisa reported that 111 people attended the community meeting. We held an open house with exhibits. The Western Virginia Water Authority was present as well. Lisa thanked staff and Ms. Crawford, who helped get the word out. Lisa presented some of the exhibits that were at the community meeting. 55 citizens completed the survey while in attendance at the community meeting. The survey is available online, along with the meeting exhibits. The survey is open online until October 31st. Lisa plans to send a mass email about the survey to a list of citizens she has gathered from the 2013-2014 community meeting and plan, and emails gathered October 5th. Citizens presented several issues during the community meeting, such as broadband, daily retail needs, and maintaining the charm of the village. Citizens requested a pedestrian friendly village as well. Lisa presented some survey question results. Over 50% have lived there longer than ten years. The majority travel through the main intersection at Kemp Ford Road. The most frequently requested needs were grocery and retail facilities. 32.7% expressed concern over loss of scenic beauty. 52% requested small and large farms not visible from the road. 63% said Union Hall would not feel the same if not surrounded by farmland. Parks, trails and recreation areas were requested at a rate of 51%. A need for community facilities rated 91% - library, school, trash collection. Ms. Crawford

thanked the staff for their work and suggested we may need to move to a larger facility the next time we hold a community meeting. She also stated that many citizens from Penhook and Glade Hill attended as well. Ms. Crawford asked when census data would be available. Ms. Cooper reported the county population dropped by 1600 in population. Ms. Crawford has received a request for another meeting for HOA presidents. Ms. Spencer reported that the more detailed census data is what is needed, and we are unsure when we'll receive the information. Ms. Mitchell asked how long the survey is available online and if we are capturing demographics in the survey. We are not capturing demographics and the survey is available until October 31st. Ms. Crawford reported that the post office routes have grown to 1.5 rural routes versus 1 rural route in 2014. Lisa reiterated that many citizens talked about the need for broadband. Ms. Crawford stated it would be nice to learn the number of children now living in the Union Hall district.

SOLAR ORDINANCE: Ms. Spencer presented recent revisions made to the draft ordinance. Comments from the Board of Supervisors and Solsmart were gathered. She stated the Board of Supervisors was very pleased by the amount of information Solsmart was able to provide. Ms. Spencer has also received additional comments from planning commissioners. We have added acreage caps. Solar Farms allowed in any district would be 60 acres, and 1500 acres in total across the county. A more robust decommissioning language was added. Ms. Spencer reported she received a comment today about mitigating impact and her suggestion is to add language to the ordinance which asks the applicant to describe how they will mitigate the impact. Ms. Mitchell reported she saw a lawsuit in Charlotte County about a 2100-acre site., an 800-megawatt project with a footprint of 32 square miles. Ms. Spencer reported that a siting agreement addresses how the facility will be taxed and how the facility/developer will help to mitigate other community impacts such as broadband. A siting agreement could require a developer to provide a community development "pack", such as funds. Siting agreements will be negotiated on a case-by-case basis. Ms. Spencer reviewed the changes to the ordinance since the previous meeting. The options this evening is to approve the ordinance via email, after changes, for a public hearing in November, to meet again to discuss before holding a public hearing, or accept the agreement "as is" and recommend a hearing. If, at a public hearing, a citizen expresses a concern not addressed in the ordinance, the public hearing can be continued to the next meeting to allow the planning commission to address the concern and make any revisions to the ordinance. Ms. Spencer stated the final document will have page numbers. Ms. Spencer explained that depending on the area, the setback distance could be longer than 150 feet on a case-by-case basis. Ms. Mitchell pointed out that we have the language in the ordinance to allow for larger setbacks. Mr. Pendleton reported that he felt we were setting a "minimum standard" in the ordinance that states the minimum setback must be 150 feet, and this may be an issue in the future if we do not change the language. Ms. Crawford stated with a setback of 300 feet, there is an opportunity to see the structure past the setback because of the long distance of the setback. The buffer and the setback would be considered as part of the entire project area. Ms. Spencer suggested changing the vegetative buffer to thirty feet instead of fifteen. Ms. Spencer also stated we would require a landscaping plan which we would review and either approve or request additional vegetation or setback. The discussion is whether to require a 300-foot setback and 30-foot vegetation. Ms. Crawford feels 300 feet is too deep. Ms. Spencer suggested that we add a sentence that exceptions could be made to the setback and vegetative buffer. Mr. Colby requested that the trees in the vegetative buffer should be at least six feet tall instead of three feet. There was also a request to add language regarding the vegetative buffer surrounding the entire structure. Ms. Spencer reiterated that when the site plan is submitted, that is the time to consider the type and height of vegetation. Language can be added to allow the evaluation of the landscaping in the vegetative buffer during the permit process. The commissioners agreed.

Ms. Spencer reviewed further updates to the solar ordinance including assured maintenance of the facility and erosion control practices. There is a request to further define "experienced solar energy consultant". Ms. Spencer explained that the staff would hire the expert, not the developer. Mr. Colby reported that he likes the idea of adding an experienced solar energy consultant to the design review team for solar projects. Ms. Spencer suggested "third party consultants" as the language. The purpose of the wording is that we will have a third-party consultant or "consultants"

or “experts” that are under the umbrella of “expert”. Mr. Dadak stated that the further we narrow the definitions, the more issues we may have due to wording, and we may accidentally eliminate some of our options. He suggested keeping the language broad so that we don’t accidentally rule out items by being too specific. The better language may be “at the county’s sole discretion” instead of being too specific. He stated this gives the county more leeway. Mr. Dadak stated that we should not add assurity on top of what the state statute already requires, as this could be argued that we’re trying to get around the state statute. He stated that typically assurities are very inclusive. He stated he would need to see the language before he could advise whether to add language or not. Mr. Colby feels the assurity section needs further work. This section of the ordinance requires further staff and legal review. Ms. Mitchell asked about wording for when to add the buffer. She stated that she has learned that a lot of the complaints are coming from the construction phase. She asked if there was any method of mitigating the impact of construction. Mr. Dadak expressed concern about creating language in the ordinance. The construction issue may be a case-by-case concern. Mr. Dadak suggested we consult Solsmart. The county economic developer has reported that a lot of firms ask about solar before making the decision to locate in a county and may not locate in counties that are not solar friendly.

Mr. Colby asked about defining areas of impact and feels it is very important. He envisions a vicinity map showing an impact area. He listed items such as visual impact, water impact, environmental. Ms. Spencer asked if this was akin to an environmental impact analysis and would this type of analysis cover Mr. Colby’s concerns. Ms. Spencer reported that the ordinance has already addressed environmental impact. These issues are very broad and there is state language written that addresses how the project will impact the comprehensive plan. Mr. Colby offered to draft language and it will be submitted for staff and legal review.

Decommissioning: Ms. Spencer added language that needs legal review and feels the language is more robust. Mr. Colby asked about language regarding contiguous farms. This language needs to be added. Mr. Colby requested that we add language that prohibits solar applications in designated growth areas. Ms. Spencer reported that planning staff is mapping out where possible solar farms would be located and their vicinity to large electrical transmission lines. Mr. Colby stated he would not vote for the ordinance if we didn’t prohibit solar farms in designated growth areas. The concern is that farmers who wish to sell their land to a solar farm developer would not be allowed to do so in a designated growth area. Ms. Crawford expressed concern about telling individuals what they can and cannot do with their land.

Ms. Mitchell stated she feels we need to know where the transmission lines are located. She feels companies are likely to look at locations that are close to transmission lines, and it is possible these lines are within or near designated growth areas. This needs to be examined to determine whether this will be a large issue, or not. Ms. Cooper stated we also need to look at potential designated growth areas as this may impact where solar facilities are located. Ms. Mitchell also asked that the map of transmission lines also show the areas of the county that are zoned and not zoned.

Ms. Mitchell asked if we can further revise the ordinance and bring it to the next meeting. She also asked if the map would be possible. Ms. Spencer will inquire if the requested maps will be possible by November. Ms. Crawford moved that we continue the process to the November meeting. Second by Mr. Colby.

SHORT-TERM RENTALS: Ms. Spencer reported she had nothing new to share regarding short-term rentals and suggested we continue the discussion at the next meeting. There are no applications for the November meeting, therefore we will continue the discussion of the solar ordinance at the November meeting and defer a discussion about short-term rentals until after the solar ordinance is complete.

Ms. Spencer has been reviewing the by-laws and the requirements of the by-laws. She suggested that we update the by-laws in the future. She requested that the planning commissioners advise the staff to update the by-laws since the previous update of 2016. The commissioners agreed. Mindy will email the most recent version of the by-laws and will email them to the county attorney as well. Ms. Spencer asked if the commissioners would like her to be ready to make some suggestions when a discussion of the by-laws begins. There was a short discussion about absences. Absences are in the state statute and Mr. Colby will send this to Ms. Spencer.

Ms. Mitchell asked if there was any new business on the agenda. Hearing none, the meeting was adjourned at 8:28 PM.

Mindy S. Goldsmith, Clerk
Franklin County Planning Commission

October 12, 2021
Date

FRANKLIN COUNTY, VIRGINIA SOLAR ORDINANCE_DRAFT SEPTEMBER 28, 2021

DIVISION 3. – DEFINITIONS

Sec. 25-40. – Principal definitions of the Zoning Ordinance

Cap, Aggregate: *The total allowable acreage, set by the Board of Supervisors, to be used for utility-scale solar generation facilities. Until amended by the Board of Supervisors, no more than 1,500 acres, in aggregate, may be approved for utility-scale solar generation facilities.*

Cap, Per Site: *The per site limit, set by the Board of Supervisors, is the allowable maximum acreage to be used per utility-scale solar generation facility. No more than 60 acres may be approved, with issuance of a special use permit, for an individual utility-scale solar generation facility on land zoned A-1, Agriculture.*

Decommissioning: *The removal and proper disposal of solar energy equipment, facilities, or devices related to a Solar Facility, Utility-Scale. The term also includes the reasonable restoration of the real property to its original state, including (1) soil stabilization and regeneration, (2) revegetation of the ground cover of the real property disturbed by the installation of such equipment, facilities, or devices, and (3) the removal of all infrastructure, equipment, facilities, or devices associated with the facility. Solar energy infrastructure, equipment, facilities, or devices means any property designed and used primarily for the purpose of collecting, generating, or transferring electric energy from sunlight.*

Solar Generation Facility, Small: *A ground or roof-mounted solar power or thermal energy generation facility that serves the electricity or thermal needs of the property upon which such facilities are located, and/or adjacent parcels under common use, ownership, and control.*

Solar Generation Facility, Utility-Scale: *A renewable energy project that generates electricity from sunlight, consisting of one or more photovoltaic systems and other appurtenant structures and facilities within the boundaries of the site, and is designed to interconnect with the electrical grid and/or to serve facilities that are not adjacent or under common use, ownership, or control.*

ARTICLE II. BASIC REGULATIONS

DIVISION 4. – SUPPLEMENTARY REGULATIONS

Sec. 25-147. – Solar Generation Facility, Utility-Scale

(a) Commencing on [adopted date], and continuing until amended by the Board of Supervisors, no more than 1,500 acres, in aggregate, may be approved for utility-scale solar generation facilities by special use permit or rezoning. No more than 60 acres may be approved for an individual utility-scale solar generation facility permitted by special use permit on land zoned A-1. Utility-scale solar generation facilities greater than 60 acres are permitted by issuance of a special use permit on land zoned M-1, M-2, PCD, and REP.

(b) Application – An application for a utility-scale solar generation facility shall contain:

- (1) Project narrative. A narrative identifying the applicant, facility owner, site owner, proposed operator, and describing the proposed utility scale solar generation including an overview of the project and its location; the size of the site and the project area; the

current use of the site; the estimated time for construction and proposed date for commencement of operations; the planned maximum generated capacity of the facility identified as AC and/or DC; the approximate number, representative types and expected footprint of solar equipment to be constructed, including, without limitation, photovoltaic panels; ancillary facilities, if applicable; and how and where the electricity generated at the facility will be transmitted, including the location of the proposed electric grid interconnection; and a statement that addresses how the facility will be in compliance with the Comprehensive Plan. The statement should address why the applicant believes the following:

- a. Why the applicant believes the proposal will not be of substantial detriment to adjacent properties
- b. Why the applicant believes that the character of the zoning district will not be changed by the proposed action; and
- c. How the proposal will be in harmony with the purpose and intent of Chapter 25 of the Franklin County Code, with the uses permitted by-right in the corresponding zoning district, with additional regulations provided in sections 25-111 through 25-137, supplementary regulations, and amendments of this chapter, and with the public health, safety and general welfare.

(2) Concept plan - The concept plan shall include the following information:

- a. Property lines, minimum required buffer areas, and any proposed buffer areas and setback lines that exceed the minimum requirements.
- b. An area map showing the proposed site within a five-mile radius, together with prominent landmarks, physical features, and transmission lines.
- c. Existing and proposed buildings structures and other improvements, including preliminary location(s) of the proposed solar equipment.
- d. Existing and proposed access roads, permanent entrances, temporary construction entrances, drives, and other areas requiring access to parking, including written confirmation from the Virginia Department of Transportation (VDOT) that all entrances satisfy applicable VDOT requirements
- e. Proposed locations and maximum heights of substations, electrical cabling from the solar systems to the substations, panels, ancillary equipment and facilities, buildings, and structures (including those within any applicable buffers or setbacks).
- f. Areas where vegetative buffering will be installed and maintained and areas where pollinator-friendly and wildlife-friendly native plants, shrubs, trees, grasses, forbs, and wildflowers will be installed and maintained following Virginia Pollinator-Smart Program best practices.

- g. Existing wetlands, woodlands and areas containing substantial woods or vegetation.
- h. Identification of actively cultivated lands, and predominant soil types of those lands including the identification of soils suited to farming.
- i. Identification of any parcels located in or immediately adjacent to a Designated Growth Area as shown in the most recently adopted Comprehensive Plan.
- j. Identification, zoning, and use of all adjacent parcels.
- k. Additional information may be required, as determined by the zoning administrator, such as a scaled elevation view and other supporting drawings, photographs of the proposed site, photo or other realistic simulations or modeling of the proposed solar energy project from potentially sensitive locations as deemed necessary by the zoning administrator to assess the visual impact of the project, aerial image or map of the site, and additional information that may be necessary for a technical review of the proposal. The planning commission or board of supervisors may also require other relevant information deemed to be necessary to evaluate the application.

(3) Generalized Landscaping and screening plan.

The applicant must submit a landscaping and screening plan with the location, size, and type of planting yards including the use of existing and newly installed vegetation to screen the facility.

A detailed landscaping and screening plan with plant species, size, number, spacing, and height will be required at the time of Site Plan review

(4) Identification of environmental and cultural resources - The applicant must submit the following:

- a. The location of all historical, architectural, archeological, or other cultural resources on or near the proposed facility as documented by the Virginia Cultural Resource Information System and the Department of Historic Resources for the Department of Environmental Quality
- b. The location of all wildlife and wildlife habitats documented by the Department of Wildlife Resources.
- c. The location of airports within a mile of the proposed development.

Detailed reports of environmental and cultural resources will be required as part of the Site Plan review.

(5) Performance Standards - The application shall comply with the following criteria:

- a. Visual impacts. The applicant shall demonstrate through project siting and proposed mitigation, if necessary, that the solar project minimizes impacts on

view sheds, including from residential areas and areas of scenic, historical, cultural, archeological, and recreational significance. The facility shall utilize only panels that employ anti-glare technology, antireflective coatings, and other available mitigation techniques, all that meet or exceed industry standards, to reduce glint and glare. Include visual impact during construction??

- b. National standards. Projects shall comply with generally accepted national environmental protection and product safety standards for the use of solar panels and battery technologies for solar photovoltaic (electric energy) projects, such as those developed for existing product certifications and standards including the National Sanitation Foundation/American National Standards Institute No. 457, International Electro technical Commission No. 61215-2, Institute of Electrical and Electronics Engineers Standard 1547, and Underwriters Laboratories No. 61730-2. A site development plan shall refer to the specific safety and environmental standards being met.
- c. Setbacks. The project area shall be set back a distance of at least ~~300~~ 300 feet from all public rights-of-way and main buildings on adjoining parcels, and from adjacent property lines. Exceptions to this distance may be made for adjoining parcels owned by the applicant. Increased setbacks over 300 feet and additional buffering may be included in the conditions for a particular permit as required to . Access, erosion and stormwater structures, and interconnection to the electrical grid may be made through setback areas provided that such are generally perpendicular to the property line or underground
- d. Fencing. The project area shall be enclosed by security fencing not less than eight feet in height and equipped with appropriate anticlimbing device such as strands of barbed wire on top of the fence. The height and/or location of the fence may be altered in the conditions for a particular permit. Fencing must be installed on the interior of the vegetative buffer required so that it is screened from the ground level view of adjacent property owners. The fencing shall be maintained at all times while the facility is in operation. and posted with appropriate safety messaging. Fencing height and design shall be coordinated with the Department of Wildlife Resources regarding wildlife fencing that would allow ingress and egress.
- e. Vegetative buffer. A vegetative buffer sufficient to mitigate the visual impact of the facility as approved by the Zoning Administrator is required. The buffer shall consist of a landscaping strip at least 30 feet wide, shall be located within the setbacks required under subsection (3) above, and shall run around the entirety of the area proposed for development. . The buffer shall consist of existing vegetation and, if deemed necessary for the issuance of a special use permit, an installed landscaped strip consisting of multiple rows of staggered trees and other vegetation. This buffer should be made up of plant materials reasonably expected to grow to a minimum height of full maturity within three years. The Planning Commission or Board of Supervisors may require increased setbacks and additional or taller vegetative buffering in situations where the height of structures or topography affects the visual impact of the facility. Non-invasive

plant species and pollinator-friendly and wildlife-friendly native plants, shrubs, trees, grasses, forbs and wildflowers must be used in the vegetative buffer following Virginia Pollinator-Smart Program best practices. Fencing must be installed on the interior of the buffer. A recommendation that the screening and/or buffer creation requirements be waived or altered may be made by the Planning Commission when the applicant proposes to use alternative designs such as landscaped berms, existing wetlands or woodlands, as long as the berms, wetlands or woodlands are permanently protected for use as a buffer. Existing trees and vegetation may be maintained within such buffer areas except where dead, diseased or as necessary for development or to promote healthy growth, and such trees and vegetation may supplement or satisfy landscaping requirements as applicable and approved by the Zoning Administrator. If existing trees and vegetation are disturbed, new plantings shall be provided for the buffer at least 6 feet tall at planting. The buffer shall be maintained for the life of the facility.

- f. Pollinator habitats. The project area shall be seeded promptly with pollinator-friendly vegetation following completion of construction in such a manner as to reduce invasive weed growth and trap sediment within the project area. At the beginning of the next planting season the project area, setbacks and buffers will be overseeded with appropriate pollinator-friendly native plants, shrubs, trees, grasses, forbs and wildflowers following Virginia Pollinator-Smart Program best practices. Once these pollinator habits are established, maintenance of the site shall follow Virginia Pollinator-Smart Program best practices unless Agrivoltaics (APV) are employed.
- g. Height. Ground-mounted solar energy generation facilities shall not exceed a height of 15 feet, which shall be measured from the highest natural grade below each solar panel. This limit shall not apply to utility poles and the interconnection to the overhead electric utility grid that meet State Corporation Commission requirements.
- h. Lighting. Lighting shall be limited to the minimum reasonably necessary for security purposes and shall be designed to minimize off-site effects. Lighting on the site shall be dark sky compliant.
- i. Density; location. Solar Facilities shall not be located within one mile of an airport unless the applicant submits, as part of its application, written certification from the Federal Aviation Administration that the location of the facility poses no hazard for, and will not interfere with, airport operations.
- j.

(b) Processing and approval standards

- (1) Community meeting. A public meeting shall be held prior to the public hearing with the planning commission to give the community an opportunity to hear from the applicant and ask questions regarding the proposed facility.

The meeting shall be held under the following guidelines:

- a. The applicant shall inform the zoning administrator and adjacent property owners in writing of the date, time and location of the meeting, at least seven but no more than 14 days in advance of the meeting.
 - b. The date, time and location of the meeting shall be advertised in a newspaper of record in the county by the applicant, at least seven but no more than 14 days, in advance of the meeting date.
 - c. The meeting shall be held within the county, at a location open to the public with adequate parking and seating facilities that will accommodate persons with disabilities.
 - d. The meeting shall give members of the public the opportunity to review application materials, ask questions of the applicant and provide feedback.
 - e. The applicant shall provide to the zoning administrator a summary of any input received from members of the public at the meeting.
 - f. The applicant shall make available to the public information about materials and components used for the construction, maintenance, and decommissioning of solar panels.
- (2) Review of application and site plan - Applications for Large Scale Solar Facilities will be reviewed by the County's Development Review Team as well as 3rd party consultants with expertise and experience in solar energy development and storm water management. Consulting firms will be chosen at the sole discretion of the county. The cost of consultant review will be estimated upon receipt of the application and charged to the applicant.
- (3) Considerations. Utility-Scale Solar Generation Facilities shall be prohibited within Designated Growth Areas **with exceptions??** Compare DGA locations to transmission locations.
- (4) Conditions - The Board of Supervisors may impose conditions reasonably designed to mitigate the impacts of the facility. Such conditions may include requirements for (1) dedication of real property of substantial value to the county or one of its instrumentalities, or (2) substantial cash payments for or construction of substantial public improvements, the need for which is not generated solely by the granting of the conditional use permit, so long as such conditions are reasonably related to the project.
- (5) Plans and Studies – Staff approval of the following plans and studies is required prior to any grading, permitting or construction:
- a. Site Development Plan - The approval of an administrative, minor, or major site development plan (site plan) and Erosion and Sedimentation Control plans as defined by the Zoning Code shall be required prior to any construction. All Solar Generation Facilities shall require a site development plan and all other documentation and approvals required by law, including those provided for any

special use permit. The Site Development plan shall include a Decommissioning Plan as well as other requirements stated throughout this ordinance.

- b. A detailed landscaping and screening plan with plant species, size, number, spacing, and height shall be required prior to the approval of zoning or building permits. The plan must also include and identify pollinator-friendly and wildlife-friendly native plants, shrubs, trees, grasses, forbs, and wildflowers in the project area and in the setbacks and vegetative buffering-following Virginia Pollinator-Smart Program best practices.
- c. A Lighting Plan per the County Zoning Code.
- d. Provisions for the overall maintenance and operational integrity of the site including interim on-site evaluations of the facility, mowing appropriate areas five times per year, maintenance of pollinator habitats following Virginia Pollinator-Smart Program best practices, or best practices for Agrivoltaic (APV) facilities. Consider requiring a surety to guarantee the maintenance and upkeep of the developed site??
(fencing, vegetation, elements of the project that mitigate visual, etc impacts) / all elements of an approved site plan.
- e. A post-construction safety plan to be reviewed by public safety agencies, to include a site-specific Emergency Response Plan as well as training on the equipment to be located on the site.
- f. Environmental and Cultural Resources Reports
 - 1. A copy of the cultural resources review conducted in conjunction with the state Department of Historic Resources for the Department of Environmental Quality permit by rule process This report shall be in addition to the report required in subsection (1) above and shall further identify historical, architectural, archeological, or other cultural resources on or abutting the proposed site.
 - 2. A report on potential impacts on pollinators and pollinator habitats at the site, including but not necessarily limited to the submission of a completed solar site pollinator habitat assessment as required by the zoning administrator.
 - 3. An Environmental Impact Analysis detailing the potential impact of the development on wetlands, woodlands and areas containing substantial woods or vegetation, Placeholder for Jim's concern about area impacts he will draft language
 - 4. For facilities within a one-mile radius of a Federally Obligated airport: A glint and glare study that demonstrates that the panels will be sited, designed, and installed to eliminate glint and glare effects on roadway

users, nearby residences, commercial areas, and other sensitive viewing locations. The study will assess and quantify potential glint and glare effects and address the potential health, safety, and visual impacts associated with glint and glare. Any such assessment must be conducted by qualified individuals using appropriate and commonly accepted software and procedures.

(d) Decommissioning.

(1) The Site Development plan for a Solar Generation Facility, Utility-Scale shall include a detailed decommissioning plan that provides the following:

- a. Procedures and requirements for removal of all parts of the solar energy generation facility and its various structures and foundations at the end of the useful life of the facility or if it is deemed abandoned.
- b. Provisions for the restoration and regeneration of soil and vegetation with a description of pre-construction and desired post- construction conditions including productivity goals for agricultural viability. (Description is provided at the time of the Concept Plan. What do we require as part of the description – soil type, hydrology, etc
- c. The anticipated life of the facility
- d. The estimated overall cost of decommissioning the facility in current dollars and the methodology for determining such estimate, and;
- e. The manner in which the project will be decommissioned including a plan for the disposal of each component material type above and below ground.
- f. The decommissioning plan and the estimated decommissioning cost will be updated upon the request of the zoning administrator or as provided in the agreement.

The BOS requested regular updates of the estimate. This requirement can be included in Development Agreements on a case by case basis to consider current and relevant factors.

(2) Surety. Unless the Large Solar Energy Facility project is owned by a public utility within the Commonwealth of Virginia, the gross costs of decommissioning shall be secured by an adequate surety in a form agreed to by the County Attorney, including but not limited to cash, or a letter of credit, bond or other guarantee issued by an entity whose debt is rated as investment grade by either Standard and Poor's or by Moody's, and posted prior to the project receiving its certificate of completion, or equivalent, from Rockingham County to operate the use. If an adequate surety is required, the cost estimates of the decommissioning shall be updated at least every five (5) years by the applicant, owner, or operator, and provided to the County. "Gross costs" shall not

include a deduction for salvage value. The estimate shall equal 100% of the total projected cost of decommissioning, which shall include a reasonable allowance for estimated administrative costs related to a default of the owner, lessee, or developer, and an annual inflation factor.

(3) Applicant, Facility Owner and Property Owner Obligation. Within six (6) months after the cessation of use of the Large Solar Energy Facility for electrical power generation or transmission, the applicant or its successor, at its sole cost and expense, shall decommission the Large Solar Energy Facility in accordance with the decommissioning plan approved by the County. If the applicant or its successor fails to commence decommissioning in a timely manner so that decommissioning may be completed within six (6) months of the facility becoming an inactive Large Solar Energy Facility, the property owner shall conduct the decommissioning in accordance with the plan and may use bonded resources to do so, as approved and released by the County. Following completion of decommissioning of the entire Large Solar Energy Facility, the bond shall be released and, if the County has called upon the bond and taken control of bond resources, any remaining resources held by the County shall be distributed to the property owners in proportion to their ownership interests.

(4) Applicant, Owner Default; Decommissioning by the County.

- a. If the applicant, its successor, and the property owners fail to decommission the solar energy facility within six (6) months, the County shall have the right, but not the obligation, to commence decommissioning activities and shall have access to the property, access to the full amount of the decommissioning surety, and the rights to the solar energy equipment and materials on the property. The applicant, and property owners, or successors, shall be responsible for reimbursing the County for all costs and expenses of decommissioning in excess of the decommissioning surety, and all such excess amounts shall attach to the real estate as a tax lien until paid in full.
- b. Any excess decommissioning surety funds shall be released to the then owners of the property after completion of decommissioning.

c. Prior to the issuance of any permits, the applicant and the property owners shall deliver a legal instrument to the County granting the County the right to access the property and the solar energy facility equipment and materials so the County can complete the decommissioning, should it choose to do so, upon the applicant's and property owner's default. Such instrument shall bind the applicant and property owners and their successors, heirs, and assigns. Nothing herein shall limit other rights or remedies that may be available to the County to enforce the obligations of the applicant, operator, or property owner, including remedies under the County's zoning powers.

(5) Equipment, Structure and Building Removal. Unless otherwise approved by the County, all physical improvements, materials, and equipment related to solar energy generation, both surface and subsurface components, regardless of depth underground, shall be removed in the removal process to a site located outside the county and within 90 days of decommissioning.

(6) Infrastructure Removal. A Reclamation Plan will be required as a part of the site plan approval for all large solar facilities. This plan will be used to assist with the cost estimate for the decommissioning bond. The Reclamation Plan shall include, at a minimum:

- a. All above-ground and underground infrastructure shall be removed and recycled or reused, unless a written request is received from the then current property owner proposing the retention of any infrastructure, and the request is approved by the County.
- b. Final land surface conditions (grass, trees, cropland, pasture, etc), including the status of on-site gravel roads if to remain.
- c. Provisions for the restoration and regeneration of soil and vegetation with a description of pre-construction and desired post- construction conditions including productivity goals for agricultural viability.
- d. Final contours and grades; and
- e. A plan for the disposal of each component material type outside the county

The BOS requested regular updates of the estimate. This requirement can be included in Siting Agreements on a case by case basis to consider current and relevant factors.

(7) Partial Decommissioning. Any reference to decommissioning the Large Solar Energy Facility shall include the obligation to decommission all or a portion of the Solar Energy Facility, whichever is applicable with respect to a particular

situation. If decommissioning is triggered for a portion, but not the entire solar energy facility, then the partial decommissioning shall be completed in accordance with the decommissioning plan and this section for the applicable portion of the Large Solar Energy Facility.

Sec. 25-148 Solar Generation Facility, Small.

(a) Small Solar Generation Facilities are a permitted accessory use in all zoning districts where structures of any sort are allowed, subject to certain requirements as set forth below. Small Solar Generation Facilities that do not meet the following criteria will require a Special Use Permit.

(1) Height - Solar energy systems must meet the following height requirements:

- a. Building- or roof- mounted solar energy systems shall not exceed the maximum allowed height in any zoning district. For purposes for height measurement, solar energy systems other than building-integrated systems shall be given an equivalent exception to height standards as building-mounted mechanical devices or equipment.
- b. Ground- or pole-mounted solar energy systems shall not exceed 15 feet in height when oriented at maximum tilt.
- c. Solar carports in non-residential districts shall not exceed 20 feet in height.

(2) Set-back - Solar energy systems must meet the accessory structure setback for the zoning district and primary land use associated with the lot on which the system is located, except as allowed below.

- a. Roof- or Building-mounted Solar Energy Systems – The collector surface and mounting devices for roof-mounted solar energy systems shall not extend beyond the exterior perimeter of the building on which the system is mounted or built, unless the collector and mounting system has been explicitly engineered to safely extend beyond the edge, and setback standards are not violated. Exterior piping for solar hot water systems shall be allowed to extend beyond the perimeter of the building on a side-yard exposure. Solar collectors mounted on the sides of buildings and serving as awnings are considered to be building-integrated systems and are regulated as awnings.
- b. Ground-mounted Solar Energy Systems - Ground-mounted solar energy systems may not extend into the side-yard or rear setback when oriented at minimum design tilt, except as otherwise allowed for building mechanical systems.

(3) Visibility - Solar energy systems in residential districts shall be designed to minimize visual impacts from the public right-of way to the extent that doing so does not affect the cost or efficacy of the system. Visibility standards do not apply to systems in non-

residential districts, except for historic building or district review as described in (e) below.

- a. **Building Integrated Photovoltaic Systems** - Building integrated photovoltaic solar energy systems shall be allowed regardless of whether the system is visible from the public right-of-way, provided the building component in which the system is integrated meets all required setback, land use, or performance standards for the district in which the building is located.
 - b. **Aesthetic restrictions** – Roof-mount or ground-mount solar energy systems shall not be restricted for aesthetic reasons if the system is not visible from the closest edge of any public right-of-way other than an alley, or if the system meets the following standards.
 1. Roof-mounted systems on pitched roofs that are visible from the nearest edge of the front right-of-way shall have the same finished pitch as the roof and be no more than ten inches above the roof.
 2. Roof-mount systems on flat roofs that are visible from the nearest edge of the front right-of-way shall not be more than five feet above the finished roof and are exempt from any rooftop equipment or mechanical system screening.
 - c. **Reflectors** - All solar energy systems using a reflector to enhance solar production shall minimize glare from the reflector affecting adjacent or nearby properties.
- (4) **Lot Coverage** - Ground-mount systems total collector area shall not exceed half the building footprint of the principal structure.
- a. Ground-mount systems shall be exempt from lot coverage or impervious surface standards if the soil under the collector is maintained in vegetation and not compacted.
 - b. Ground-mounted systems shall not count toward accessory structure limitations.
 - c. Solar carports in non-residential districts are exempt from lot coverage limitations.
- (5) **Historic Buildings** - Solar energy systems on buildings within designated historic districts or on locally designated historic buildings (exclusive of State or Federal historic designation) consistent with the standards for solar energy systems on historically designated buildings published by the U.S. Department of Interior.
- (6) **Plan Approval Required** - All solar energy systems requiring a building or zoning permit shall provide a site plan for review.

- a. Plan Applications - Plan applications for solar energy systems shall be accompanied by to-scale horizontal and vertical (elevation) drawings. The drawings must show the location of the system on the building or on the property for a ground-mount system, including the property lines.
 - b. Plan Approvals - Applications that meet the design requirements of this ordinance shall be granted administrative approval by the zoning official and shall not require Planning Commission review. Plan approval does not indicate compliance with Building Code or Electric Code.
- (7) Approved Solar Components - Electric solar energy system components must have a UL or equivalent listing and solar hot water systems must have an SRCC rating.
- (8) Compliance with Building Code - All solar energy systems shall meet approval of local building code officials, consistent with the State of Virginia Building Code, and solar thermal systems shall comply with HVAC-related requirements of the Energy Code. Facilities that are roof mounted shall be located on structures that comply with all provisions of the Uniform Statewide Building Code.
- (9) Compliance with State Electric Code - All photovoltaic systems shall comply with the Virginia State Electric Code.
- (10) Compliance with State Plumbing Code - Solar thermal systems shall comply with applicable Virginia State Plumbing Code requirements.
- (11) Utility Notification - All grid-intertie solar energy systems shall comply with the interconnection requirements of the electric utility. Off-grid systems are exempt from this requirement.
- (12) The provisions of this section may be varied or modified as part of a master plan or proffered condition
- (b) Roof and ground-mounted facilities shall comply with generally accepted national environmental protection and product safety standards for the use of solar panels and battery technologies for solar photovoltaic (electric energy) projects, such as those developed for existing product certifications and standards including the National Sanitation Foundation/American National Standards Institute No. 457, International Electrotechnical Commission No. 61215-2, Institute of Electrical and Electronics Engineers Standard 1547, and Underwriters Laboratories No. 61730-2. A site development plan or building permit application shall refer to the specific safety and environmental standards complied with.

The provisions of this section may be varied or modified as part of a master plan or proffered condition.

Permitted Uses:

	A-1	RE	R-1	R-2	RC-1	RMF	RPD	B-1	B-2	M-1	M-2	PCD	REP
Solar Generation Facility, Small	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR
Solar Generation Facility, Utility-Scale	SUP									SUP	SUP	SUP	SUP

SR: Allowed by right, Supplemental Regulations apply

SUP: Special Use Permit required

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