



## JEFFERSON COUNTY, WEST VIRGINIA

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### MEMO

**TO: County Commission**

**FROM: Alexandra Beaulieu, Zoning Administrator**

**DATE: July 9, 2020**

**RE: ZTA19-03, Solar Energy Facilities – July 16, 2020 Meeting**

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Below is a summary of the timeline for the proposed text amendment:

- 12-10-19 – Petition presented by Sam Gulland, Torch Green Energy to the Planning Commission for a request to consider an amendment to create provisions for Solar Energy Facilities. The PC voted to accept into their work plan to consider developing provisions to allow solar energy facilities.
- 02-11-20 – the Planning Commission appointed a subcommittee comprised of Mike Shepp, Wade Louthan, and Ron Thomas. The Planning Commission directed the subcommittee to work with consultants Sam Gulland from Torch Clean Energy, and Paul Raco, local land use consultant, and Staff. The Planning Commission specifically directed the committee to develop requirements to allow the land use to process as a Principal Permitted Use (by right) and to include site development standards to address fencing, screening, and decommissioning of solar energy facilities.
- 05-05-20 - Staff provided an overview of the proposed amendment drafted by the subcommittee as well as an overview of research from the Engineering Department regarding Stormwater Management and bonding requirements. The PC scheduled a Public Hearing for 06-02-20.
- 06-02-20 - the Planning Commission held a public hearing and voted to keep the public comment period open for ten business days.
- 06-23-20 – The Planning Commission made revisions to the draft based on public input and voted to revise the provisions for a decommission plan to include surety requirements; to change Appendix C to reflect solar facilities are Permitted in the Residential Growth (RG) zoning district (in addition to the zoning districts already listed as permitted); and to send the draft as amended to the County Commission, with the recommendation that the proposed text is consistent with the adopted Comprehensive Plan.

The attached draft Zoning Ordinance Text Amendment proposes revisions to Article 2, Section 2.2, Terms Defined; Article 8, Supplement Use Regulations, [creation of new Section 8.20, Solar Energy Facilities]; and Appendix C, Principal Permitted and Conditional Uses Table.

**Attachments:**

- Excerpts from Envision Jefferson 2035 Comprehensive Plan RE: Alternative / Renewable Energy
- ZTA19-03, Solar Energy Facilities DRAFT reflecting revisions made by PC on 06-23-20
- Engineering Department's recommended revisions to Stormwater Management Ordinance in response to the proposed Zoning Ordinance Text Amendment.

<b>Urban Level Development Recommendations (Goal 1)</b>	
<b>1.</b>	Recognize the existing vested rights, development entitlements, and permitted density levels on properties in Jefferson County.
	<b>a.</b> No property’s zoning status will be changed as part of this Plan.
<b>2.</b>	Recognize that the County Commission has the authority to make land use decisions including Zoning Map Amendments based upon the finding of consistency with the Future Land Use Guide and the recommendations of this Plan; the County Commission may determine that petitions or decisions for zoning map amendments are consistent with the Comprehensive Plan if any of the following conditions are met after the entire Plan is taken into consideration:
	<b>a.</b> Economic Well-Being of the County; or
	<b>b.</b> Error or Under Scrutinized Property on the Future Land Use Guide; or
	<b>c.</b> Change in Neighborhood; or
	<b>d.</b> Any Other Circumstance that the Governing Body determines should have been considered when drafting the Future Land Use Guide; and/or
	<b>e.</b> Environmental impacts are considered.
<b>3.</b>	Identify opportunities for small area plans and involve key stakeholders.
<b>4.</b>	In coordination with the Jefferson County Development Authority, utility providers, and other agencies, extend natural gas services and alternative energy sources into Jefferson County and encourage the extension of these services into new subdivisions to provide access to alternatives for heating and cooking uses.
<b>5.</b>	Create urban level land uses within the municipalities, UGBs, PGAs, or Villages through rezoning that is consistent with the Plan recommendations.
	<b>a.</b> Direct new urban level residential developments to locate in preferred areas within the municipalities, UGBs, PGAs, or Villages where water and sewer services are available.
	<b>b.</b> Reduce application fees for urban level development located within the areas desired for urban future growth.
	<b>c.</b> Establish a greater variety of zoning district options (in commercial, residential, and mixed-use zoning categories) that adhere to predictability of land use options and outcomes based on the Plan recommendations.
	<b>d.</b> Consider the utilization of alternatives to use-separated (Euclidean) zoning within the UGB and PGA, such as the SmartCode adopted by the City of Ranson or performance based zoning to achieve the desired land used goals.
	<b>e.</b> Update the County’s zoning regulations in a way that balances flexibility of use for property owners and developers while preserving the quality of life for residents.

## 2.D. Infrastructure

Having adequate and quality infrastructure in Jefferson County is beneficial to residents, businesses, and the County’s economy. Planning for the types of infrastructure needed and its location requires coordination with different entities that provide these services. The planning and coordination of where services are to be located maximizes efficiencies of these systems.

This Plan encourages infrastructure to be located in municipalities, Urban Growth Boundaries, Preferred Growth Areas, and Villages in a cost effective manner. In many places in rural areas, on-site private well and septic systems will be used.

Major Elements within Section 2.D. Infrastructure
Water and sewer
Stormwater
Alternative energy
Natural gas services
High-speed internet and advanced technology communications services

### Water and Sewer Systems

Urban level development, which requires the provision of water and sewer systems, is defined as where more intense levels of residential, commercial, and industrial development activity occur. In West Virginia, by law, water and sewer providers are required to provide water and/or sewer service anywhere in a community so long as a developer pays to provide the initial infrastructure that would support the service(s). As a result, land use planning in West Virginia has to take a pro-active role in defining where urban level amenities and development will occur.

In order to take a pro-active role, it is the recommendation of this Plan to encourage the provision of infrastructure that allows for a higher level of development inside of the following areas: municipalities, Urban Growth Boundaries, Preferred Growth Areas, and Villages. In the rural area, it is anticipated that on-site private well and septic systems are to be utilized. In order for Jefferson County to retain its rural character and agricultural base, the expansion of water and sewer service into rural areas not designated as growth areas should not occur.

In the County’s village areas, development and revitalization is limited by a lack of existing water and sewer infrastructure that would support village-level development. In these areas, minimum lot size requirements tied to well and septic spacing have played a factor in limiting redevelopment or reuse of existing buildings within village centers. If Jefferson County is to reinvigorate its villages, infrastructure improvements would need to be in place to serve the village areas. A specific component of this would be the provision of village scaled water and sewer facilities that would alleviate the need for individual property owners to locate a well and septic tank on small village

development efforts have benefited from a number of public and quasi-public projects and efforts, including, but not limited to:

- Infrastructure improvements that have taken place in recent years (particularly the construction of WV 9 as a four-lane roadway through Jefferson County);
- An increased federal presence within Jefferson County;
- The continued expansion of Shepherd University in Shepherdstown and the relocation of the American Public University System’s headquarters in the Charles Town/Ranson area;
- The increased utilization of telecommuting as a viable employee option by national and regional businesses and federal government offices; and
- The expansion of a business park that has the necessary infrastructure in place for each lot which results in ready-to-build parcels.

Despite those gains, the lack of high paying jobs for Jefferson County’s skilled workforce requires approximately 36% of all employed individuals to commute to employment centers with higher wages located closer to Washington, D.C. or Baltimore, MD.

At the same time and paralleling a national trend, Jefferson County has lost some manufacturing and warehousing facilities. The loss of these employers has resulted in several vacant or underutilized structures, as well as unemployed workers. A number of these vacant facilities are within the Charles Town/Ranson urbanized area, and provide opportunities for redevelopment. Some of these facilities have been reused for other purposes, particularly by American Public University System (APUS) and the City of Ranson. APUS’s efforts have enhanced the economic revitalization process by purchasing and renovating 12 structures in Charles Town and Ranson as well as constructing a multi-story administrative building and related parking with a large array of solar panels. As part of this renovation and redevelopment activity, APUS has utilized several brownfield sites on the Charles Town/Ranson border.

With Jefferson County’s proximity to Washington, D.C. and Baltimore, MD and with the existing economic cluster of federal agencies, the County has the opportunity to attract additional federal facilities.

To support the success of future economic growth, there are a number of proposed improvements to the County’s public infrastructure that are expected to take place in the coming years. These include:

<b>Major Public Infrastructure Projects that are Proposed</b>
The widening and realignment of US 340 from Charles Town to the Virginia line near Berryville
The potential for improving natural gas and alternative energy facilities in the Eastern Panhandle and extending natural gas services into Jefferson County
Improvements to the County’s telecommunications network, particularly wireless technology and any advanced technologies

may not meet current standards, to be upgraded or maintained. Recently, the County adopted a new stand-alone Stormwater Management Ordinance that includes additional standards related to water quality and includes provisions for low impact design stormwater provisions such as rain gardens, bio-swales, permeable pavers, and permeable asphalt. These new standards help to minimize the impact of sediment and certain identified nutrients as required by the Chesapeake Bay Program.

In addition to land development activities, the following point and non-point source activities impact the water quality in waterways due to stormwater run-off:

<b>Point and non-point source pollution</b>
Over-fertilization and the use of chemicals to maintain lawns by homeowners
Use of salt and chemicals on roads in winter weather by the State Division of Highways
The fertilizers used to grow crops
Industrial emissions
Waste products (rubber, gasoline, and various other fluids) associated with auto use
Animal husbandry activities

The effect of stormwater run-off on the local waterways, particularly the Shenandoah and Potomac Rivers, has a significant impact on our local and regional recreational and heritage tourism, as well as drinking water quality. There are a number of watershed protection groups in the County that are actively seeking to improve the quality of the surface and groundwater within particular watersheds. These groups have made efforts to clean-up the waters and restore aquatic life to Jefferson County waterways. Such efforts have included, river clean ups, water monitoring, septic tank pumping and repair reimbursement programs, fencing of livestock to keep them out of streams, tree plantings, and outreach to residents and businesses to educate them about how to combat pollution. These efforts will ensure that high quality of water in Jefferson County continues.

### **Alternative Energy**

It is widely recognized that many of the resources that we rely on to heat, cool, and light homes, power electronics, provide transportation fuel, and other daily needs are finite. Consequently, there has been an increasing need to assess the viability of alternative and renewable energy sources that may assist in maintaining the quality of life of Jefferson County's residents and businesses. In 2009, West Virginia adopted an Alternative and Renewable Energy Portfolio Standard that requires investor-owned electric utilities (such as Potomac Edison) with more than 30,000 residential customers to supply 25% of retail sales from eligible alternative and renewable energy resources by 2025.

Alternative and renewable energy sources are available, ranging from hydro (water), solar, and wind power to the use of various biofuels (algae, biomass, wood pulp, and other waste products), and plant crops (corn and switchgrass) that might be used to

complement or replace existing power sources. Another alternative energy source that may be applicable for the heating and cooling of buildings is the use of geothermal systems (drawing up groundwater and circulating it through pipes embedded in a building's walls).

There are efforts underway at the local and state level to encourage the conservation of energy and the utilization of alternative energy sources. The most notable of these are the projects that have been incorporated into the expansion of the American Public University System (APUS) in Charles Town and Ranson. These projects include the use of solar collectors that also serve as cover for parked cars, the installation of several electric car charging stations, and the utilization of building improvements and materials that limit the use of energy needed for heating, cooling, and lighting. The improvements undertaken by APUS can serve as a role model to new development in Jefferson County and to the redevelopment of existing structures and sites.

Several large-scale alternative and renewable energy projects have taken place in the County. Concern has been expressed that legislation prohibiting Cooperatives or Communities to create a solar panel system that would feed multiple houses is impacting the expansion and viability of implementing other solar projects in the County. As the cost of improvements decreases and the efficiency of various renewable energy materials improves, the reliance on current energy sources will be reduced as more families and businesses adopt these improvements.

### **Natural Gas Services**

Jefferson County regional economic development officials and businesses identified the need for natural gas services to homes and businesses. At present the only area of the County served by natural gas lines is the former Kodak/3M plant in Middleway; however, the potential exists for the expansion of service capacity in the Eastern Panhandle and the extension of natural gas lines from the Berkeley/Jefferson County line along WV Route 9 to various parts of the County. The extension of natural gas into Jefferson County would aid County economic development efforts while providing an alternative to electricity for residential and commercial purposes.

One of the reasons this improvement is needed is because an increasing number of businesses are using natural gas in their manufacturing process, due to the lower costs and the cleaner emissions that result from its use. Natural gas, in a compressed or liquefied form, can also be used to fuel cars and buses. While natural gas has been primarily used as a fuel source for local and regional bus services in the US, it can also serve as a fuel source for both privately owned and County owned vehicles.

### **High-Speed Internet and Advanced Technology Communication Services**

Over the last two decades, people have increasingly taken for granted the ability to be connected to the world via the internet. Internet uses include a variety of communication and media modes, conducting business, shopping for goods, staying abreast of local, national and world events, and have a plethora of entertainment

	<p>c. Collaborate with local public utility providers to identify and provide incentives that would encourage property owners to transition from well and septic to a centralized system where and when needed to address public health issues.</p>
	<p>d. Find funding mechanisms to defray the costs of providing public utilities in areas where the provision of these utilities is necessary based on declining public health or environmental concerns.</p>
6.	<p>Coordinate with Region 9 and the County’s public service providers to identify and seek additional funding sources that would aid in the construction of needed capital facilities and for the upgrading of existing facilities to meet newer federal standards.</p>
	<p>a. Continue to monitor and participate in planning efforts related to the implementation of the Chesapeake Bay Watershed Improvement Plan.</p>
	<p>b. Assess and evaluate the County’s stormwater planning documents as best management practices in the field evolve.</p>
7.	<p>Identify ways that utility services can be regularly upgraded to meet the highest level of service and technology through coordination with local water, sewer, electric, gas, and telecommunications utility and service providers.</p>
	<p>a. Require all local electric, cable, and other utility providers to bury existing and new lines (serving new development) as a part of the regular maintenance and upgrading of their facilities.</p>
8.	<p>Encourage public entities to utilize alternative and renewable energy sources for a variety of energy needs.</p>
	<p>a. Enable the construction of renewable energy generation facilities by residents and businesses.</p>
	<p>b. Encourage County businesses and service stations to provide electric vehicle recharging stations within Jefferson County as soon as possible and use distinctive signage to guide residents and visitors to the charging stations.</p>
	<p>c. Develop regulations to enable cooperatives or communities to create a solar panel system that would feed multiple houses in the County.</p>
9.	<p>Collaborate with local economic development agencies and Information Technology (IT) providers to ensure that the current and future needs of small businesses within Jefferson County are met.</p>
	<p>a. Ensure that all areas of Jefferson County are served by high speed wireline and/or wireless services and other advanced technologies.</p>
	<p>b. Encourage private sector investment to improve wireless internet service availability in Jefferson County and the Eastern Panhandle.</p>
	<p>c. Ensure that, as next-generation wireless and cellular services are implemented, Jefferson County collaborates with providers, including any necessary regulatory changes, to ensure that providers are able to provide these services at the same time as other communities in the Washington, D.C. and Baltimore, MD Metropolitan Areas.</p>

13.	Explore options to develop and implement a tax credit for those improving and investing in designated historic structures while maintaining the historic character of the structures.
14.	Consider implementation of alternative energy systems as they become more efficient and cost effective in facilities owned and maintained by the County or other public entities.
15.	Create and provide a series of tax credits based on state and federal government programs for homeowners and businesses that implement sustainable improvements for their homes and/or businesses that would result in long-term energy and cost savings.

**Goal #10: Maintain and Enhance Community Services and Infrastructure Capacity for Water, Sanitary Sewer, Storm Sewer, and Other Utilities; and Enable the Provision of Orderly and Efficient Services and Advanced Technologies.**

- Objective #1:** In coordination with public and private service providers serving Jefferson County, create a public service plan for the County that identifies specific standards (based on state and nationally accepted standards for communities), the applicability of enhancements to existing facilities, and potential locations of future infrastructure improvements.
- Objective #2:** Continue to coordinate between county and regional/state agencies in relation to information and activities related to meeting Chesapeake Bay Watershed Implementation Plan (WIP) goals.
- Objective #3:** Create and implement a means to require shared infrastructure between existing and proposed development.
- Objective #4:** Require that new utility facilities and/or extensions are located within Urban Growth Boundaries (UGBs), Preferred Growth Areas (PGAs), or Villages.
- Objective #5:** Identify and implement ways to provide utility services within and immediately adjoining Village areas.
- Objective #6:** Provide mechanisms to ensure that existing utility systems are upgraded to meet the needs of the residents and businesses throughout the County.
- Objective #7:** Private water and wastewater plants shall meet material and design standards set by local publicly owned service providers.
- Objective #8:** Work with appropriate local agencies and regional providers to extend natural gas services into Jefferson County.
- Objective #9:** Encourage the creation of and use of a variety of energy sources (including renewable energy) within Jefferson County in ways that respect the character of the County.
- Objective #10:** Adhere to the regulations included as part of the Jefferson County Stormwater Ordinance.
- Objective #11:** For water and sewer utilities to serve new developments and in areas currently not served by water and sewer where services have been deemed necessary by local or state health officials, allocate costs equitably so that new development or the development being served is responsible for the infrastructure cost, rather than existing ratepayers.

pressing, and tailoring; massage therapy provided by licensed massage practitioner; photographic studios; psychic readers; real estate; self-service laundromat; shoe repair; spas; tanning salons; travel agencies; video rental stores and other similar establishments.

Photovoltaic Technology Materials and devices that absorb sunlight and convert it directly into electricity.

Plat<sup>23</sup> A scaled, graphic drawing of a land subdivision project prepared according to the provisions of the Subdivision and Land Development Regulations and this Ordinance. A plat depicts the design and layout of a project as well as the location of existing and proposed property boundaries and easements. A plat also includes all terms, conditions and performance requirements established prior to the approval of a subdivision.

Preliminary Plat<sup>23</sup> A professionally prepared drawing of a proposed subdivision which is not a record plat but which contains detailed information concerning the proposed development, and is prepared according to the provisions of the Subdivision and Land Development Regulations and this Ordinance.

Preschool<sup>23</sup> Use of a site for the provision of pre-elementary educational services on a scheduled basis to children through kindergarten. If the West Virginia Department of Education establishes requirements for a preschool, the land use shall meet these requirements.

Preservation of a Historic Site<sup>35</sup> The act or process of applying measures necessary to sustain the existing form, integrity, and materials of a historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction.

Primary Public Safety Provider<sup>22</sup> An FCC licensed governmental user that uses wireless telecommunication facilities to provide primary communications for law enforcement, fire, ambulance or related emergency services. Primary Public Service Provider does not include Commercial Wireless Service Providers, or Competitive Local Exchange Carriers (CLEC), who provide telecommunication services on a commercial basis to Primary Public Service Providers, or who deliver emergency calls or messages from its customers to a Public Safety Answering Point (PSAP).

Principal Permitted Use<sup>23, 31, 32</sup> Any use included on the Principal Permitted and Conditional Uses Table (Appendix C) which is or may be lawfully established in a particular district, approved by the Office of Planning and Zoning without requirement of approval by a board or commission, provided the use conforms with all applicable requirements of this Ordinance. Such use does not include Conditional Uses as defined in this Ordinance.

Principal Use<sup>23</sup> The primary or predominant use of any site.

Printing and Publishing<sup>27</sup> A printing operation of an industrial scale, involving a process that is considered printing, imprinting, reproducing, or duplicating images and using printing methods including but not limited to offset printing,

Soil Value	A relative numeric value assigned to soil groups based on the group's potential for agricultural production.
<u>Solar Decommissioning Plan</u>	<u>A plan certified by a West Virginia Licensed Professional Engineer that outlines the removal and proper disposal of the components of the Solar Energy Facilities and property restoration; including, the timeline for the removal at the end of the lease and/or when production of electricity ceases, the estimated cost of the removal, the estimated salvage value of the material, equipment, devices, etc., and the reasonable restoration of the real property upon which such Solar Energy Facilities are located, including soil stabilization an re-vegetation of the ground cover of the property which may be disturbed due to the location, installation, or removal of such facilities. The Plan may also include a list of specific items that are requested to remain on site for the benefit of the property owner.</u>
<u>Solar Energy Facility</u>	<u>A facility that generates electricity from sunlight by utilization of photovoltaic (PV) technology and distributes the generated electrical power. On-site components of the facility may include solar panels and other accessory components including, without limitation, Essential Utility Equipment, transformers, inverters, cabling, electrical lines, substations, and other improvements necessary to support generation, collection, storage, and transmission of electrical power.</u>
Special Event <sup>39</sup>	A gathering of individuals for the common purpose of attending a celebration, ceremony, reception, or similar activity for the benefit of someone other than the property owner. Private parties, gatherings, and similar activities that are not subject to a use agreement between a private individual or group and the property owner are not defined as a special event.
Special Event Facility <sup>39</sup>	A facility where special events are permitted to occur. Special event facilities are subject to a use agreement between a private group or individual and the facility owner. The facility owner may or may not charge a rental fee for the use of the facility. Facilities may operate entirely within a structure, entirely outside of a structure, or both inside and outside a structure.
Special Event Facility, Agricultural <sup>39</sup>	A Special Event Facility located on a parcel which the Assessor's Office has classified as "farm use".
Species, Rare or Endangered	Any species listed with the West Virginia Department of Natural Resources Heritage Program Species List or by the U.S. Department of the Interior, Department of Fish and Wildlife Management.

B. Setback Standards to operate a Nature Center and Preserve:

Enclosed structures over 250 square feet that are solely for the purpose of housing animals shall be setback 50 feet.

All structures and motorized trails shall meet commercial setbacks of 25 feet with the exception that accessory structures under 250 square feet that are associated with the maintenance of the land use shall be setback ten feet.

All non-motorized trails and non-amplified outdoor activity areas shall meet a minimum ten foot setback. Motorized vehicles associated with the maintenance of the land use are permitted within the non-motorized trails.

C. Landscaping Standards to operate a Nature Center and Preserve:

In lieu of this Ordinance's landscaping standards, a ten foot woodland preservation buffer shall be required along the perimeter of the land use. This ten foot buffer is not required along the interior property lines of the land use. There shall be no clearing or cutting within the buffer with the exception of removing dead, dying, and/or diseased trees. The woodland preservation buffer may be used for passive recreation such as pedestrian, bike, or equestrian trails provided that:

1. No trees, shrubs, hedges, or walls are removed.
2. Not more than 20% of the width of the buffer is impervious surface.
3. The total width of the buffer area is maintained.

D. Noise Standards to operate a Nature Center and Preserve:

This land use is restricted to the noise standards of Section 8.9A.1 of this Ordinance. The Residential Growth District measurement shall apply when the use is adjacent to a lot that contains a residence, or is zoned Rural or Residential Growth.

**Section 8.19 Crematorium<sup>37</sup>**

A. Crematorium, Livestock

A Livestock Crematorium shall process as a Conditional Use Permit in all zoning districts other than Rural, unless such use is determined by the Zoning Administrator to be accessory to an active agricultural use.

B. Crematorium, Pet

A Pet Crematorium shall process as a Principal Permitted or Conditional Use in zones as designated in Appendix C. In the Rural Zoning District, a Pet Crematorium may process utilizing the Site Plan Exemption for the Rural District.

**Section 8.20 Solar Energy Facilities**

Solar Energy Facilities are permitted as indicated in Appendix C.

A. Application

1. A Pre-Proposal Conference is recommended, pursuant to the Jefferson County Subdivision and Land Development Regulations.

2. A Concept Plan, pursuant to the Minor Site Development Concept Plan standards established in the Jefferson County Subdivision and Land Development Regulations is required; except that after the Planning Commission direction is given, the next steps are Application for a Zoning Certificate and Building Permits, including submission of final Decommissioning Plan. In addition to the Concept Plan requirements outlined in the Subdivision Regulations, the Concept Plan shall also include the following standards:

- (a) Property or Properties Location
- (b) Access Points;
- (c) Anticipated location of all proposed components of the Solar Energy Facility; and
- (d) Landscaping, Buffering, Ground Cover Plan, and Fencing.

Each proposed solar panel is not required to be located on the Plan, if compliance with setbacks can be established by what is depicted on the Plan.

If the project is to be completed in phases, the Concept Plan shall reflect phasing of the project.

3. A Zoning Certificate based on an approved Concept Plan is required prior to initiating any use regarding Solar Energy Facilities.

- (a) In addition to the standards found in Section 8.20, any Zoning Certificate regarding Solar Energy Facilities shall be issued conditioned on all other State Regulations and approvals being granted, including, but not limited to, the WV Public Service Commission, WVDEP applicable NPDES Permits, Fire Marshal Approval, Building Permits through the Department of Engineering, Planning, and Zoning, and approval of the Stormwater Management Report pursuant to the Jefferson County Stormwater Management Ordinance.

## B. Standards

1. Multiple adjacent properties under the same ownership or lease by the same company shall be considered one property for the purpose of these regulations. Internal boundary lines on adjacent properties under the same ownership or lease by the same company are not subject to the setbacks or buffer requirements provided below.

### 2. Setbacks

#### a. Solar Panels

- i. Front, Side, and Rear Setbacks shall be 100 feet from all external/perimeter property lines and from the edge of the State ROW or Easement of any State Road.
- ii. Solar panels and accessory components may be located on a common side or rear lot line of contiguous property owned by the same entity.

#### b. Accessory components, excluding solar panels.

- i. Front, side, and rear setbacks shall be 25' from all external/perimeter property lines and from the edge of the State ROW or Easement of any State Road.

### 3. Buffering, Landscaping, Security, and Access

- a. Solar Panels that are located within 200 feet of any residence, Category 1 Historic Resource, Institution for Human Care, Church, or similar use or structure as determined by the Zoning Administrator, shall provide a 20 foot wide buffer along common property lines. The buffer shall be provided anywhere within the 200 foot radius from

the structures/uses herein and is not required to be provided along the entire length of the common property line.

- b. The buffer screen may be either vegetative or opaque fencing and may be placed anywhere within the buffer area. No structures, materials, or vehicular parking shall be permitted within the side and rear yard buffers. Existing, natural vegetation may be used in lieu of a planted buffer if documentation is submitted to the Zoning Administrator verifying how the existing natural vegetation complies with the required buffer standard.
- c. Accessory Components (excluding solar panels) that are located within 200 feet of any residence, Category 1 Historic Resource, Institution for Human Care, Church, or similar use as determined by the Zoning Administrator, shall comply with the commercial provisions of Section 4.11, with the exception that the Zoning Administrator can allow the use of existing, natural vegetation as appropriate to achieve the intent of the required buffering.
- d. A security fence with secured gates shall be erected around the operating areas of the Solar Energy Facility with a minimum height of 6 feet and a maximum height of 10 feet.
  - i. Arrangements shall be made with the appropriate Fire Department for Access. A letter documenting approval of access from the Fire Department shall be provided with the Zoning Certificate application. The Fire Department shall respond within 15 days of the date of the letter. If no response is provided, the Fire Department shall be deemed by this Ordinance to have approved the access.
  - ii. Upon three business days notice by the Department of Engineering, Planning, and Zoning, access shall be provided to Staff.

#### 4. Stormwater Management

Stormwater Management shall be required in accordance with the Jefferson County Stormwater Management Ordinance. Solar Energy Facilities may be exempt from providing stormwater management if the conditions for granting exemption under Article I.D.2.h of the Stormwater Management Ordinance are satisfied.

#### 5. Decommissioning Plan

- a. W.Va. Code §7-1-3kk provides that the County Commission may enact ordinances, issue orders, and take other appropriate and necessary actions for the elimination of hazards to public health and safety and to abate or cause to be abated anything which the commission determines to be a public nuisance.
  - i. The County Commission hereby finds and declares that a solar facility that has ceased producing electricity for a period of 12 months is a public nuisance and/or hazard pursuant to West Virginia Code §7-1-3kk and other applicable authority.
  - ii. The County Commission therefore finds that an unused solar facility must be decommissioned and removed from the property on which it is located. This means that all of the solar facility's structures and other associated property must be removed from the premises and the land must be restored to a condition reasonably similar to its original condition prior to the installation of the solar facility.
  - iii. A general outline of the decommissioning of the Solar Energy Facility shall be included with the Concept Plan. This outline shall include a general discussion on

the timeline of the lease or operating plan and a general plan for removal of the Solar Energy Facility. A full Solar Decommissioning Plan is not required until submission of the Zoning Certificate application for the Facility.

- b. The County Commission finds that, as a condition of approval, a Solar Energy Facility must:
  - i. Develop a decommissioning plan acceptable to the County Engineering Staff in accord with County Solar Decommissioning Guidelines that will provide that all parts of the solar facility be removed from the premises and the land must be restored to a condition reasonably similar to its original condition prior to the installation of the solar facility; and
  - ii. Post surety in an amount that would enable the decommissioning and removal of the solar facility in accord with the County Solar Decommissioning Guidelines in the event that the solar facility has ceased to produce electricity as defined.
- c. The approved Solar Decommissioning Plan shall be submitted as part of the Zoning Certificate Application. Either the Zoning Administrator or the Applicant may request that the Planning Commission approve or disapprove any component of the Solar Decommissioning Plan.
- d. Staff shall be notified by certified mail at least 60 days in advance of the intended decommissioning of the Solar Energy Facility. Staff will place the notice on the next regularly scheduled Planning Commission meeting under “non-actionable correspondence”.
- e. Failure of the Lessee or Property Owner to meet and/or comply with the Solar Decommissioning Plan may result in the County pursuing legal action pursuant to Section 3 of this Ordinance, including legal action to have the Solar Energy Facility, or portions thereof as applicable, removed at the Property Owner’s expense. The County may seek to recover its costs, legal fees, and legal expenses incurred to have the facility decommissioned in compliance with the Solar Decommissioning Plan.

### C. General Requirements

- 1. Design, construction, and installation of the Solar Energy Facility shall conform to applicable industry standards, including those of the American National Standards Institute (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM) or other similar certifying organizations and shall comply with the West Virginia Fire and Building Codes, including compliance with the Jefferson County Building Code.
- 2. Prior to commencing the transmission of electricity, the Solar Energy Facility shall provide documentation evidencing an interconnection agreement or similar agreement with the applicable public utility or approved entity in accordance with applicable law.
- 3. Generation of electrical power shall be limited to photovoltaic panels, provided that any on-site buildings may utilize integrated photovoltaic building materials.
- 4. Solvents necessary for the cleaning of the Solar Panels shall be biodegradable.
- 5. Internal wiring, excluding that which is on or between the Solar Arrays, connected to substations or between Solar Panels, shall be located underground, accept where necessary to mitigate impact to environmental and/or terrain features.
- 6. Onsite lighting shall be minimum necessary for security and onsite management and maintenance and shall comply with the standards outlined in the Subdivision Regulations.

7. Photovoltaic Panels shall use antireflective glass that is designed to absorb rather than reflect light.
8. Ground Cover comprised of natural vegetation is required. Ground cover that uses native or naturalized perennial vegetation and that provides foraging habitat that is beneficial for songbirds, gamebirds and pollinators is encouraged but not required.
9. Collocation of other agricultural activities such as small market hand-picked crops, grazing and apiary activities are permitted and encouraged.
10. No signage or advertising is permitted on the Solar Energy Facilities other than an identifying sign at the entrance of the Facility that shall be approved by the Zoning Administrator in accordance with Article 10. All other signage must be approved by Special Exception by the Board of Zoning Appeals.
11. Solar Energy Facilities shall comply with Article 8, Section 8.9 of this Ordinance.
12. The Solar Energy Facility Use is not considered abandoned until such time it is Decommissioned.
13. Damaged or unusable panels shall be removed within 60 days from discover of damage; provided, however, longer periods may be approved by the County Engineer due to extenuating circumstances.

Land Use	NC	GC	HC	LI	MI	PND <sup>1</sup>	OC	R	RG	RLIC	IC	V	Additional Standards
<b>Commercial Uses continued</b>													<b>Sec. 8.9</b>
Restaurant	P	P	P	P	CU	P	P	CU	CU	P	P	CU	
Retail Sales Limited	P	P	P	P	NP	P	P	CU	CU	P	P	CU	
Retail Sales and Services, General	NP	P	P	P	NP	P	NP	CU	CU	P	P	CU	
Retail Store, Large	NP	CU	P	CU	NP	CU	NP	CU	CU	CU	CU	CU	
Shipping and Mailing Services	P	P	P	P	CU	P	P	CU	CU	P	P	CU	
<u>Solar Energy Facility</u>	<u>NP</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>NP</u>	<u>NP</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>NP</u>	<u>Sec. 8.20</u>
Special Event Facility	P	P	P	P	NP	P	P	CU	CU	P	P	CU	Sec. 8.14
Storage, Commercial	NP	P	P	P	CU	P	NP	CU	CU	P	P	CU	
Veterinary Services	P	P	P	P	CU	P	P	P	CU	P	P	CU	
Wireless Telecommunications Facilities	P	P	P	P	P	P	P	P	P	P	P	P	Art. 4B
<b>Agricultural Uses*</b>													
Agricultural Uses, as defined in Article 2	P	P	P	P	P	P	P	P	P	P	P	P	
Agricultural Repair Center	NP	P	P	P	P	P	P	P	CU	P	P	NP	
Agricultural Tourism	P	P	P	P	P	P	P	P	P	P	P	P	
Crematorium, Livestock <sup>37</sup>	CU	CU	CU	CU	CU	CU	CU	P	CU	CU	CU	CU	Sec. 8.19
Farm Brewery	P	P	P	P	P	P	P	P	P	P	P	P	Sec. 8.5
Farm Winery or Distillery	P	P	P	P	P	P	P	P	P	P	P	P	Sec. 8.5
Farm Market	P	P	P	P	P	P	P	P	P	P	P	P	Sec. 8.6
Farm Vacation Enterprise	P	P	P	P	P	P	P	P	P	P	P	P	
Farmer's Market	P	P	P	NP	NP	P	NP	P	CU	P	NP	CU	Sec. 8.6
Feed and/or Farm Supply Center	CU	P	P	P	P	P	P	P	CU	P	P	NP	
Horticultural Nurseries and Commercial Greenhouses	P	P	P	P	P	P	P	P	CU	P	P	NP	
Landscaping Business	P	P	P	P	P	P	P	P	CU	P	P	NP	
Rental of Existing Farm Building for Commercial Storage Structure must have existed for 5 years	NP	P	P	P	P	P	P	P	CU	P	P	NP	
Special Event Facility, Agricultural	P	P	P	P	P	P	P	P	P	P	P	P	Sec. 8.14
<b>Accessory Uses</b>													
Accessory Uses	P	P	P	P	P	P	P	P	P	P	P	P	

- NC Neighborhood Commercial
- GC General Commercial
- HC Highway Commercial
- LI Light Industrial
- MI Major Industrial
- PND Planned Neighborhood Development
- OC Office / Commercial Mixed-Use
- R Rural
- RG Residential Growth District
- RLIC Residential-Light Industrial-Commercial District
- IC Industrial-Commercial District
- V Village District

- P Permitted Uses
- NP Not Permitted Uses
- CU Conditional Uses (subject to requirements of district and/or other requirements of this Ordinance)
- \*\* Accessory Use to a planned residential community, if permitted pursuant to Section 5.4 and processed as a CU
- <sup>1</sup> The Planning Commission may amend the permitted uses for a development in the PND District per Article 5.
- <sup>2</sup> Approval process is per the Salvage Yard Ordinance.

# **Jefferson County, WV**

**Stormwater Management Ordinance  
Department of Engineering**

AUGUST, 2013

provide stormwater management controls under the regulations, conditions and terms in effect at the time of the original approval.

However, if, after the adoption of this ordinance, there is any physical expansion to said exclusion listed above, this ordinance shall apply to the expanded area only.

(06/16/2020 Revision – “Solar Energy Facility” name change)

(h) Solar Energy Facilities (commonly referred to as “Solar Farms”), provided all of the following conditions are met:

- Earth disturbance and grading activities shall be minimized and natural vegetative cover shall be preserved and/or restored.
- Vegetative cover shall have 90% or better uniform coverage and shall not be subject to chemical fertilization and herbicides/pesticides. A meadow condition is preferable, particularly for slopes between 5 and 10%. Mowed areas should be kept to a minimum of 4”.

Individual Photo Voltaic (PV) modules within an array shall be arranged in a fashion that allows the passage of runoff underneath each module. The PV modules shall be arranged to allow the growth of vegetation beneath the PV modules and between the rows of PV arrays.

If the width of the vegetative strip between rows of PV arrays is not a minimum of twelve feet (i.e. there is inadequate vegetated spacing between modules), then stormwater BMPs such as infiltration trenches (min. 12” wide by 12” deep) or infiltration berms shall be installed down gradient between each row.

- Ground-mounted solar PV modules shall be supported with structures/foundations occupying a maximum of 5% of the total project area. (not the parcel area, but that area within the boundary of the 100’ setback/buffer surrounding the solar energy facility equipment) This area shall be delineated, and dimensioned on the Concept Plan, along with a note of the total area and a calculation of the percent of impervious area occupied by the support structures/foundation.
- Solar PV modules shall be situated on mild slopes (10% max). If greater than 10% slopes are proposed, then stormwater BMPs such as infiltration trenches (min. 12” wide by 12” deep) or infiltration berms shall be installed down gradient between each row of PV arrays, in addition to providing the minimum 12-foot spacing between the rows of PV arrays.
- The lowest vertical clearance of the solar PV array shall be at an elevation of 10 feet or less from the ground, but is also at an adequate height to promote vegetative growth below the PV array.

- No erosion or transport of sediments shall be allowed. An Erosion and Sediment Control Plan shall be submitted as part of the Stormwater Report. Permanent Erosion and Sediment Control shall be provided to address the potential for erosion at the drip edge of solar panels. In addition, the West Virginia Department of Environmental Protection's temporary construction stormwater NPDES permit shall be submitted along with the Stormwater Report.

The developer shall submit documentation in the form of a Stormwater Report, which demonstrates all of the above conditions are satisfied, to the Jefferson County Engineer for review and approval. At the time of submission, the developer shall pay a non-refundable review fee in accordance with the established fee schedule. The Stormwater Report shall be prepared, signed, and sealed, by a professional engineer registered to practice in the State of West Virginia. The Stormwater Report shall be approved prior to the issuance of the building permit.

If all the above conditions cannot be met, then the project shall fall under the jurisdiction of this Ordinance and stormwater quantity and quality control shall be provided.

For the life of the project, the Jefferson County Engineering staff shall have the authority to visit the site, with 72-hours' notice, to determine if the above conditions are being maintained.

Failure to perpetually maintain and meet the conditions for this exemption shall be a violation of this Ordinance and enforceable under the law.

- (3) Compatibility with Other Permits and Ordinance Requirements
  - (a) Compliance with the requirements herein does not create exclusion to permitting requirements from the WVDEP, the U.S. Army Corps of Engineers, or any other agency or reviewing body that has jurisdiction over the proposed project area.
  - (b) Whenever this Ordinance imposes a conflicting restriction regarding stormwater regulation, the provisions of the more restrictive ordinance shall control.

#### **E. SEVERABILITY**

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If any section, clause, sentence, part, or provision hereof shall be held to be invalid, or unconstitutional, by any court of competent jurisdiction, such decision of the court shall not affect or impair the remaining sections, clauses, sentences, parts, or provisions of this Ordinance.

#### **F. INCORPORATION BY REFERENCE**

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- (1) For the purposes of this Ordinance, Jefferson County has adopted by reference the following published standards: