

CONDITIONAL USE PERMIT APPLICATION

HIGH BRIDGE SOLAR, LLC
FARMVILLE, VIRGINIA

PROPERTY OWNER:

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3131 MAIDENS ROAD
POWHATAN, VA 23139

APPLICANT:

HIGH BRIDGE SOLAR, LLC
19890 STATE LINE ROAD
SOUTH BEND, IN 46637

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&

INOVATEUS SOLAR
19890 STATE LINE ROAD
SOUTH BEND, IN 46637

MAY 2024

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Attachments

Attachment A – Copy of the Conditional Use Permit Application Form

Attachment B – Town of Farmville, VA Parcel Details

Attachment C – Farmville Herald Ad Proof

Attachment D – Preliminary Site Plan

Attachment E – Property Impact Analysis

Attachment F – Fiscal & Economic Analysis

Attachment G – Glint & Glare Report

Attachment H – Threatened & Endangered Species Review

Attachment I – V-CRIS Cultural Resources Review

I. EXECUTIVE SUMMARY

High Bridge Solar, LLC (represented by “Inovateus Solar” or the “Applicant”) seeks the issuance of a Conditional Use Permit for a 12 megawatt (MW) solar energy facility (High Bridge Solar or “Project”).

The Project site is located within the Farmville, VA city limits. The eastern and northern-most boundary of the property is along the city line of Farmville and the northern property line is along the Appomattox River. The property is accessible using Cedar Avenue within Farmville, VA. The Project is to be located on a 131-acre tract of land comprised of one parcel, 0024000(OA)00-006, zoned R-3. The site is currently privately owned and mainly forested terrain. The current resident will remain. The parcel contains a powerline easement as well as an access road for this utility. The surrounding area contains wastewater treatment facilities, public services, apartment complexes, and single-family residential. Parcel details obtained from the Town of Farmville Interactive GIS Map are provided in Attachment B.

The total development area will be approximately 79 acres located within the 131-acre parent parcel. The remaining unused parcel area consists of existing transmission line easement, existing residence with access, floodplain, wetlands, streams, forested land, and setbacks. The Project will interconnect to the grid via overhead electric poles to the existing overhead lines located on the project parcel within the existing transmission easement running NW to SE. The Project will include approximately 27,600 panels and the ancillary project facilities will include electrical equipment pads, utility infrastructure and erosion control/stormwater management facilities. Native, pollinator-friendly vegetation will be maintained across the site to minimize erosion and promote a diverse ecological habitat. The project area shall be enclosed by agricultural square knot fencing comprised of metal with a height of at least 7ft. The height and/or location of the fence may be altered in the conditions for a particular permit. Fencing will be installed on the interior of the vegetative buffer so that it is screened from the ground level view of adjacent property owners. The fencing will be maintained at all times while the facility is in operation. The Project is expected to commence construction activities in 2025 and will take approximately 6-8 months after the start of construction for the commencement of operations at the site.

Inovateus Solar designed the Project and crafted this application to be consistent with the Zoning Ordinance of the Town of Farmville as well as the Special Use Permit Zoning Ordinance of Prince Edward County, Virginia Zoning Ordinance. The Project is compliant with the Applications and Procedures for Large and Utility Scale Energy Facilities as demonstrated by the Preliminary Site Plan and this application.

Solar energy is clean and efficient, and a properly sited solar facility such as this Project can be a safe, quiet, and unobtrusive neighbor. Solar development can bring significant benefits to Prince

Edward County and the Town of Farmville. This Project also directly supports both goals relating to Community Facilities and Environment as described in the Town of Farmville Comprehensive plan that was adopted 6-10-20. The Project can also complement the Town's existing industry, diversify incomes for landowners and revenues for the Town, and become an overall positive force in the community. The Project can also be the Town's contribution toward advancing the Commonwealth's Energy Policy Plan.

II. PROJECT DESCRIPTION

A. Proposed Use

This Application for a Conditional Use Permit is submitted to the Town of Farmville pursuant to the Town of Farmville's Comprehensive Plan and Article VII. – Alternative Energy Facilities of the Prince Edward County Code to construct and operate the 12 megawatts (MW) High Bridge Solar Project.

Attachment A is a copy of the completed Conditional Use Permit Application Form for the Project.

B. The Applicant

The Applicant, High Bridge Solar, LLC is leasing the property for the intended use of constructing and operating a distribution level solar generating facility from the current property owner for the life of the proposed project and decommissioning. The Project is being developed and will be constructed by Inovateus Solar.

1. High Bridge Supporting Parties

a. Inovateus Solar – Developer & EPC - Since its founding in 2008, Inovateus Solar has been guided by a commitment to invest in the energy future of its customers by providing affordable, reliable and sustainable energy solutions. Headquartered in South Bend, Indiana, with offices across the United States including Virginia, Inovateus has established itself as the top Midwest Solar EPC and Developer through the execution of commercial and utility scale PV projects for a diverse portfolio of clients, including utilities, electric cooperatives, municipalities, schools, Fortune 500 firms, and industrial entities. Through origination, development, engineering, design build, and finance capabilities, Inovateus seeks to serve the growing demands of the solar energy marketplace and the communities that it serves. Inovateus has completed over 700 MW of solar installations throughout the USA and the Caribbean and has delivered services in over 15 countries.

Inovateus Solar has made a commitment to actively reduce its customers' carbon footprint and landfilled waste. Their Environmental Management System (EMS) provides a mechanism for

environmental management throughout all areas and departments designed to cover environmental aspects that the company can control and directly manage, as well as those it does not control or directly manage but can be expected to have an influence on. Inovateus Solar is committed to protecting the local and global environment of the earth with the primary goals of advancing sustainability and positive community stewardship. To minimize environmental impacts concerning all activities, products and services, we shall:

- Comply with all applicable environmental legislation and sustainability commitments;
- Include the consideration of environmental issues in all business strategies and initiatives;
- Prevent pollution and reduce consumption of resources through waste management strategies that promote waste minimization reuse, recovery and recycling as appropriate;
- Adopt a procurement program that takes into account the environmental impact of products and services, and supports the purchase of energy-efficient products;
- Encourage environmental protection among suppliers and subcontractors;
- Pursue a program of continuous improvement (PDCA – Plan, Do, Check, Act) by reviewing our EMS and related objectives and targets, policies and practices;
- Develop and maintain environmental management programs with objectives and targets to minimize adverse environmental or community impacts;
- Provide all team members with the knowledge and tools needed to meet the goals of this policy and to actively participate in efforts to prevent negative environmental or community impacts;
- Develop environmental goals and targets relevant to project fulfillment, and taking actions to achieve those goals and targets;
- Continually improve the effectiveness and efficiency of environmental management through assessments, performance and cost metrics;
- Advance environmental justice efforts in communities we work in;
- Utilize seeding that promotes pollinator habitats on our sites; and
- Specific to this project, we shall conserve the existing forested areas outside of our project limits.

C. Community Outreach

The Applicant held a Community Meeting on March 6, 2024 at the Prince Edward – Farmville Community Library. Eleven adjacent and nearby landowners were invited by mail to attend the meeting and a Public Notice was posted in The Farmville Herald on February 28, 2024. A copy of the public notice is provided in Attachment C.

D. Project Location and Site Description

The Project site is located in north-eastern Farmville, VA in the northern section of Prince Edward County. The east and north edges of the parcel line up with the border of the Town of Farmville and the north side is aligned with the Appomattox River. At its closest border, the parcel is over half a mile away from S Main Street/State Route 45.

The site is comprised of one approximately 131-acre parcel, 0024000(OA)00-006. Only the approximate 79 acres of solar development, as well as our planned conservations areas, will be leased for the life of the Project by High Bridge Solar, LLC, while the remaining acreage will be owned and maintained by the property owner. The parcel is zoned High Density Residential (R-3) and currently undeveloped except for the existing residence and access drive at the entrance of the parcel. The solar development area will be in the centralized areas of the parcel and on either side of the existing transmission easement running approximately NW to SE down the center of the parcel. Adjacent parcels are zoned Agricultural Residential District (A-2), Low Density Residential (R-1), and High Density Residential (R-3). There is a 100-year FEMA Floodplain present on the northern extents of the parcel. Wetlands and streams are also present throughout the parcel.

E. Project Components

The Project will include the following key components:

- Rows of photovoltaic (PV) panels mounted on steel posts principally driven into the ground. Panels will not exceed 15' in height. Rows of panels are typically spaced 15-25 feet apart.
- The steel posts are placed individually in an effort to minimize the amount of on-site grading and are engineered to be driven to a depth in the ground that does not require concrete reinforcement.
- Solar PV panels will be mounted on fixed tilt racks running east/west with a south-facing orientation to maximize exposure to sunlight.
- Like most technology, equipment improves continuously, and markets fluctuate, so the specific manufacturer and models of equipment will not be known until late in the engineering design process
- Inverters and transformers will be located within pad-mounted modular metal cabinets. This equipment converts electricity from direct current (DC) to alternating current (AC) and increases its voltage to deliver the energy to the existing utility's distribution grid.
- Electrical collection and communications lines either mounted on the racking, buried in conduits, or located on overhead utility poles.
- Gravel onsite access roads, grass cover driving aisles, and gravel entrances from public roads.

- Agricultural square knot fencing comprised of metal with a height of at least 7ft.
- Stormwater and erosion and sedimentation control features designed to meet town and state requirements.
- A storage container placed on a gravel pad for spare parts and maintenance materials, if necessary

A Preliminary Site Plan showing the proposed Project layout is provided as Attachment D. The developed Project footprint is approximately 79 acres of the total 131-acre site. All disturbed and developed areas will be planted and maintained with grass to stabilize the site and prevent erosion. The remaining site area includes stormwater control features, erosion buffer areas, and property setbacks with an existing vegetative buffer.

F. Setbacks and Screening

1. Setbacks

The proposed Preliminary Site Plan incorporates proposed setbacks from the Project's property line or road reservation line. Per Location, Appearance, and Operational Requirements of Alternative Energy Facilities Requirements (Section 7-110) in the Prince Edward County Ordinance all solar equipment will be set back 75' from the property boundary and 75' from any existing residences. Given the agricultural and low-density residential developments on neighboring properties, the proposed setbacks are considered adequate for the project.

Note that no solar facilities will be located within these setback areas. Some stormwater and erosion and sediment control facilities may be located within certain setback areas to connect them hydrologically to existing downstream systems, per state requirements.

2. Buffering

The solar development area is in the center of the project parcel, which is surrounded by the following adjacent developments: a wastewater treatment facility, public services, apartment complexes, and some single-family residences. The solar area is set back from the public right of way and not located near residential houses. The nearest residence is over 125 feet from the Project's solar arrays, the nearest state highway is about 1.50 miles from the Project's solar arrays, and the nearest county road is over 0.25 miles from the Project's solar arrays. Existing mature trees are present along the northern, southern, and western property lines providing screening to the site.

Furthermore, a 200' buffer will be maintained from the stream on the southern border of

the parcel, a 300' buffer will be maintained from the Appomattox River on the northern border of the parcel, and a 100' buffer will be maintained around the wetlands and intermittent streams.

G. Supplemental Studies

1. Property Impact Analysis

The Applicant contracted Kirkland Appraisals, LLC to evaluate the Project's impact on abutting or adjacent properties. The report concluded that the Project has no impact to these properties due to the lack of noise, odor, and traffic generated by a solar facility. See **Attachment E** for the full report.

2. Economic and Fiscal Contribution

The Applicant contracted Magnum Economics to assess the economic and fiscal contribution that the Project is forecasted to make to the Town of Farmville. Overall, the report concluded the Project will have favorable economic and fiscal contributions to the Town, such as creating jobs and generating tax revenue. See **Attachment F** for the full report.

3. Glint & Glare Report

Though the panels for this facility contain an anti-reflective coating designed to eliminate glint and glare effects, a study was performed to analyze any glare generated by the facility. The study considered any possible views from, but not limited to, Dosewell Street, East 2nd Street, East 3rd Street, Hylawn Avenue, and Sunchase Boulevard. No potential glare was found during the analysis. The full Glint and Glare Study performed by ForgeSolar can be found in **Attachment G**.

4. Threatened & Endangered Species Review

On August 7, 2023, Colliers Engineering & Design, Inc. (Colliers) completed a Threatened & Endangered Species Habitat Assessment for the High Bridge Solar Project. The sources used for this assessment included, but were not limited to, the United States Geological Survey (USGS) maps, the U.S. Department of Agriculture Natural Resource Conservation Service (NRCS) soils database, National Hydrography Dataset (NHD), Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM), the U.S. Fish & Wildlife Service (USFWS) National Wetlands Inventory (NWI) database, the USFWS Information, Planning, and Conservation System (IPaC), Virginia Department of Game and Inland Fisheries (VDGIF) Virginia Fish and Wildlife Information Service web-based application, Virginia Department of Conservation and Recreation – Natural Heritage Program (NHP) database, Virginia

Coastal Management Program (VCMF) Coastal GEMS mapping tool, Center for Conservation Biology (CCB) mapping tool, and the Virginia Wildlife Environmental Review Map Service (WERMS) mapping tool. Based on the results, the primary federal species to be of regulatory concern include the Northern Long-Eared Bat and the Tricolored Bat. Species that are listed at a state level of concern include the Atlantic Pigtoe and the Green Floater.

On August 28, 2023, Colliers provided a letter to the USFWS requesting their review of the High Bridge Solar Threatened & Endangered Species Assessment. On January 3, 2024, the Virginia Field Office for the USFWS responded with the following:

“To minimize impacts to the tricolored bat should the species be listed while project activities are ongoing, our office recommends adhering to a time-of-year restriction for no tree clearing during the active season. That is, no clearing from 4/1-11/14. Can the project adhere to this?”

After confirming the Project could adhere to the time-of-year-restriction, the USFWS Virginia Field Office concluded that there were no further comments or concerns. On January 30, 2024, the USFWS Virginia Field Office confirmed the same restrictions originally identified in response to the Tricolored Bat are applicable to the Northern Long-Eared Bat.

Due to the possibility of presence of the Atlantic Pigtoe and the Green Floater, on January 16, 2024, Colliers reached out to Amy Martin, the Program Manager with the Wildlife Information & Environmental Services division at the Virginia Department of Wildlife Resources (VDWR) concerning the buffers associated with the streams and wetlands onsite for the High Bridge Solar Project. It was concluded that the current buffers as shown in our site plan fall in line with those of the recommendations from the VDWR.

The Threatened and Endangered Species Habitat Assessment and accompanying memorandums can be found in **Attachment H**.

5. Cultural and Historical Resources Review

On May 29, 2024, Colliers completed a review of the Virginia Cultural Resources Information System (V-CRIS) to identify any historical, architectural, archaeological, or other cultural resources on site. The results show that the Project area has not been previously surveyed for cultural resources, however there are two documented surveys within a 0.5 mile buffer of the Project area. There is one cultural resource located within the Project area which is labeled as The Hay Market and surveyed in 1967. It has not been evaluated for eligibility for inclusion in the National Register of Historic Places (NRHP). There were also two resources documented adjacent to the Project area. These resources are the Battle of High Bridge located north of the Appomattox River and The Upper Appomattox Canal. Both of these resources are listed as potentially eligible. A map and report depicting these resources are provided in **Attachment I**.

The Project is setback from the Appomattox River by at least 300ft. Considering the density of the existing vegetation on site, as well as the proposed setbacks, it is the Applicant’s opinion that the Project will be sufficiently screened from these resources and therefore have no negative impacts.

Further studies, coordination, and enforcement concerning cultural and historical resources will be completed at the state level throughout the ongoing permit-by-rule application, as is customary at this stage of development.

III. POTENTIAL IMPACTS AND MITIGATION

A. Construction

The project will be constructed in three phases; 1) site work, 2) structure installation, and 3) electrical installation. The first phase consists of installing initial erosion control features (i.e. perimeter silt fence, sediment ponds, etc.), the site access road, and the perimeter security fence. The second phase consists of driving the support piles into the ground, connecting the racking system to the piles, attaching the solar panels to the racking system, and installing the concrete pad for the transformer and electrical pad. The third phase consists of trenching for the underground electrical conduits, installing the electrical components, and directional boring or trenching the Medium Voltage Line (“MVL”) to the POI, erecting the tie-in poles, and connecting the system to the existing grid. Complete construction of the solar array will take approximately 6 to 8 months from breaking ground to commercial operation. Approximately 60 workers will be onsite during the peak of the construction phase.

1. Stormwater and Erosion and Sedimentation Control

The proposed project will comply with all requirements of the County and State stormwater management regulations and erosion & sediment control provisions, as well as NPDES permit requirements, as applicable. This site may require minimal grading the existing topography to allow for the solar infrastructure to properly function on the site.

Full stormwater management design will be a part of civil design plans and will include all necessary stormwater control structures to ensure no excess stormwater leaves the site during construction or post- development.

Land disturbing activities will be minimized as much as practical to reduce the potential for environmental and off-site impacts. Currently, the site consists of forested land. With the proposed site design, the entire site will be stabilized and maintained with vegetative cover; areas beneath the solar arrays will be planted with grass to stabilize the site. Disturbances within the site will be seeded with native grasses and pollinator-friendly seed mixes appropriate for the region. Seeded vegetation will establish a deep root system that will stabilize the soil and promote stormwater ground infiltration similar to the existing vegetation on site.

The proposed site design will protect against soil erosion and sedimentation, as all such facilities must develop erosion and sediment control and stormwater management plans that satisfy applicable state and town or county requirements during the site plan process.

2. Traffic

Due to the passive nature of the proposed facility, traffic impacts will be minimal. Trip generation is one of the first steps in a traffic impact analysis for a proposed land use. For this project site, there are no on-site personnel required for day-to-day operations and the site will not be open to the public. Consequently, trip generations and impacts to the transportation network are negligible. Traffic impacts will be most noticeable during construction of the facility, which will last approximately 6 to 8 months. The types of vehicles expected to be accessing the site during construction include equipment hauling trucks, passenger vehicles, fuel delivery vehicles, and material delivery trucks. No oversize or overweight loads are anticipated.

3. Noise

The project is considered a “passive” power generation facility and noise levels will not exceed 60 decibels; this represents a level just above a conversational talking volume. The transformers and inverters are the loudest components of the system. Noise levels at the property line will be in accordance with Location, Appearance, and Operational Requirements of Alternative Energy Facilities (Section 7-110) and will not exceed 50 decibels.

B. Operations

1. Health and Safety

Solar facilities do not endanger public health or safety. The facility will be designed and built to all applicable electrical, construction, and environmental codes and regulations. Fencing will be provided around all equipment to prevent unauthorized entry.

All equipment must comply with FCC rules to limit any radio frequency power that is emitted by electronic devices.

Solar projects do not contain hazardous materials which are leachable and pose no threat of soil, groundwater, nor surface water contamination when properly maintained. The facility will not produce any air emissions.

The photovoltaic (PV) solar panels that will be installed with this project are coated with non-reflective materials designed to maximize light absorption and significantly minimize glare. PV solar panels are designed to absorb as much light as possible since any reflected light is energy lost from the system; therefore, glare or reflected sun light is not an issue with PV solar projects.

The solar facility will be remotely monitored and will not have on-site personnel for normal day-to-day operations. Standard operation and maintenance of the facility requires personnel to be on-site approximately 7-10 days during a calendar year.

2. Visual Impact

The Applicant is proposing to preserve the existing mature tree line within the 75' property line setback along the entire perimeter of the project in an effort to provide a robust visual screen of the Project. Therefore, in accordance with the Comprehensive Plan, the Project will encourage environmental conservation of the area and maintain the scenic qualities of the surrounding parcels. The solar development area is strategically placed away from public rights of way and residential houses. The nearest residence is over 125 feet from the project's solar arrays, the nearest state highway is over 1.50 miles from the project's solar arrays, and the nearest county road is over 0.25 miles from the project's solar arrays.

C. Decommissioning of the Project

The solar facility is anticipated to have a lifespan of at least 25 years with a goal of 40 years. The purpose of site decommissioning is to return the original property to pre-development conditions to the greatest extent possible after the project lifespan has elapsed.

Decommissioning of the solar facility will be in accordance with Prince Edward Zoning Ordinance Sec. 7-108 and include the disconnection of the solar facility from the electrical grid and the removal of all solar facility components, including solar collectors, cabling, electrical components, fencing and any other associated equipment, facilities, and structures to a depth of at least 36 inches and restoration of site vegetation and topography to pre-existing conditions. Permits for decommissioning will be obtained as required and notification will be given to stakeholders prior to decommissioning the project. The owner and operator of the solar facility shall completely decommission the facility within 12 months if the facility stops generating electricity for a period of 12 months. In the case of abandonment of the project during construction or before its maturity, the same decommissioning procedures will be undertaken.

A finalized decommissioning plan will be submitted with the Site Plan application. The plan will

include the anticipated life of the project, the estimated decommissioning cost, how the estimate was determined, and the manner in which the project will be decommissioned. The full estimate of decommissioning will be guaranteed by escrow at a federally insured financial institution, irrevocable letter of credit, or surety bond prior to a building permit being issued. The cost estimate will be updated every five years and the surety increased when the recalculation of the estimate exceeds the guarantee amount by 10% and provided to the town.

IV. Conclusion

The Applicant respectfully requests approval of a Conditional Use Permit for the proposed Project. The Project plan as described above, and the Preliminary Site Plan in Attachment C demonstrate a well-conceived Project that conforms to the Comprehensive Plan and latest Zoning Ordinance and provides substantial benefits to the Town of Farmville and Prince Edward County.