



COUNTY OF PRINCE WILLIAM

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PLANNING
OFFICE

Rebecca Horner, AICP, CZA
Director of Planning

July 2, 2018

TO: Planning Commission

FROM: Connie M. Dalton, AICP
Planning Office

RE: Special Use Permit #SUP2018-00049
Nokesville Solar Facility
Brentsville Magisterial District

I. Background:

- A. Request – This is a request by Nokesville Solar LLC for a Special Use Permit (SUP) for a solar facility. The facility will use panel systems to collect solar energy and direct it to the power grid through transformer stations on site.

Uses / Features	Permitted / Required	Proposed
Structure Height	Maximum height for all structures in agricultural districts shall be 35 feet unless otherwise provided	Shall not exceed 25 feet in height measured from grade at base. <u>Solar panels</u> shall be a maximum of 13' in height above the highest grade around the structure. <u>Mechanical equipment</u> inverter, transformers, and electrical cabinets range in height from 7'6" to 8'9".
Access	Primary access to site is off of Warrenton Road	All access to the Project will be from Warrenton Road. The interior project roads shall be 20' wide.

<p>Buffer/Peripheral Landscape Area</p>	<p>50' buffer on all property lines where the public facility abuts residential uses (ZO 32-201.18.1, DCSM 802.10-12 and Table 8-1)</p> <p>Type C buffer</p>	<p>Applicant has committed to providing a minimum 50' setback and buffer from solar equipment to the property line and all public rights of way around the perimeter of the Project.</p> <p>Type C buffer will be required at site plan. A modification request may be needed at the time of final site plan.</p>
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- B. Location/Acreage – The proposed solar facility is located on the north side of Warrenton Road, ± 2,000 feet west of the intersection with Carriage Ford Road. The site is identified on County Mapper GPIN 7493-31-5998 and is addressed as 13204 Warrenton Road. The proposed solar facility is to be constructed on approximately ±225 acres of this ±331-acre parcel. (See Attachment A)
- C. Comprehensive Plan – The subject property is designated AE, Agricultural or Estate, and ER, Environmental Resource, in the Comprehensive Plan. This parcel is located in the Rural Area of the County, and is located in an Agricultural and Forestal District (AFD), specifically AFD91-1. However, the owner of this property has requested to be removed from the AFD as part of the review process initiated by the Board of County Supervisors in 2017 for all of the County AFDs. Pursuant to the Code of Virginia, property owners of the AFD have the right to remove their property from an AFD during a Board-initiated review of the AFDs.
- D. Zoning – The subject property is zoned A-1, Agricultural. Subject to SUP approval, a solar facility may be located on an A-1 zoned parcel. The property is located in the Domestic Fowl Overlay District.
- E. Surrounding Land Uses – Northeast and contiguous to the property is the Nokesville Community Park, northwest and contiguous to the property is both a vacant parcel and Madera Farm. West of the property is vacant land. One of the parcels to the west is zoned M-1, Heavy Industrial and is located in the Data Center Opportunity Overlay District. South of the property is a group of smaller parcels with residential homes. Warrenton Road abuts the southern boundary of the property. Across Warrenton Road is the Prince William County Public Safety Training Center. East of the property are agricultural and residential parcels. Carriage Ford Road abuts the property at the southeast corner. (See Attachment A).

- F. Background and Context – At the time that the original application was filed Solar Facilities were deemed a public facility and, as such, a Public Facility Review (PFR) application was submitted and processed. This PFR public hearing was originally scheduled to be heard at the June 20, 2018 Planning Commission meeting. The application was withdrawn from this agenda.

On April 10, 2018 the Board of County Supervisors approved Ord No.18-15 which determined that commercial solar facilities in A-1, Agricultural districts, would require Special Use Permit (SUP) approval. As a result of this change to the Zoning Ordinance, the applicant filed an SUP request.

The Applicant has also included a concurrent transportation waiver for the requirement to pave Warrenton Road.

The review and analysis of this subject SUP request satisfies the intent of a public facility review (PFR), pursuant to Section 15.2-2232 of the Code of Virginia. In conjunction with reviewing for consistency with the Comprehensive Plan through location, character, and extent, this SUP will also impose conditions to help offset or mitigate the impacts.

II. Current Situation:

- A. Planning Office Recommendation – Staff recommends approval of #SUP2018-00049, Nokesville Solar, subject to special use permit conditions dated July 2, 2018. This recommendation of approval would satisfy the intent of a Public Facility Review (PFR) to find this application consistent with the Comprehensive Plan pursuant to Section 15.2-2232 of the Code of Virginia. The following reasons support this recommendation:
- A solar energy facility is considered part of the utility system and as such public facilities are permitted in the A-1 zoning district with SUP approval
 - Approval of this solar facility will result in providing an alternative energy source, will improve overall grid reliability, will provide economic benefits to the County, will not impact the level of service needs for the County, will serve to hold the 331 acre parcel intact for the life of the facility, and the applicant has committed to providing buffers and preservation areas that will aid in protecting environmentally sensitive areas of this property.
 - This solar facility, once developed, is silent and passive and will generate only one vehicle trip per month resulting in a land use that is compatible in nature to the Agricultural and Estate designation of the Comprehensive Plan. The proposed facility in terms of the impact on surrounding land uses and County services is consistent with the Comprehensive Plan.

See Attachment B for the Staff Analysis and Attachment C for the proposed SUP conditions.

- B. Planning Commission Public Hearing – A Planning Commission public hearing has been advertised for July 11, 2018.

III. Issues:

- A. Comprehensive Plan – Is the proposed use consistent with the applicable comprehensive plan policies? Does the proposed use impact the existing levels of service?
- B. Community Input – Have members of the community raised any issues?
- C. Other Jurisdictional Input – Have other jurisdictions raised any issues?
- D. Legal Uses of the Property – What uses are allowed on the property? How are legal issues resulting from Planning Commission action to be addressed?
- E. Timing – When must the Planning Commission take action on this application?

IV. Alternatives beginning with the staff recommendation are as follows:

- A. Recommend approval of #SUP2018-00049, Nokesville Solar Facility, and find this application consistent with the Comprehensive Plan subject to conditions dated July 2, 2018, found in Attachment C.

1. Comprehensive Plan Consistency Analysis

Utilities, whether publicly or privately used, are typically evaluated in terms of location, character and extent of the facility to determine consistency with the Comprehensive Plan. Following is an analysis to determine these elements:

- a) Location – The proposed use is defined by the Zoning Ordinance as a solar energy facility. County Code Sec 32.301.04 states that a solar energy facility may be permitted in an A-1, Agricultural district with a Special Use Permit. This zoning district, in which the public facility is proposed is consistent with the Long-Range Land Use Plan Map designation of AE, Agricultural or Estate. (LU3.8).

The site is located near both an existing transmission line and a substation with adequate capacity, an existing electric distribution line lies west of the site and traverses the southwest corner of the site. The adjacent property, contiguous to the west, is zoned M-1, Heavy Industrial and is located in the Data Center Opportunity Zone Overlay

District. Because the use has very low impacts, staff believes the use is compatible with the surrounding area.

- b) Character – With respect to character, the site has been planned, sited, and buffered to provide compatibility with the surrounding existing and planned land uses.

The Applicant proposes to construct a 20MW (megawatts) solar facility to be constructed in a single-phase. The facility would consist of one integrated power generation facility and be limited to no more than ±225 acres of disturbed area on the ±331-acre parcel.

Preliminary design includes eight solar inverters, a primary access point and an alternative access point, a seven-foot-high security fence and locked security gate. The project will produce a low-voltage direct current (DC) electrical power which is collected and delivered to the inverter and transformer stations located throughout the site where it is converted into medium voltage alternating current (AC). The power from the inverter and transformers stations will be collected from across the site to the point of interconnections where it will interconnect with a Dominion Energy Virginia distribution line through a pole mounted device. By interconnecting with the distribution lines, the Project will help meet local electrical needs first, with the excess then flowing to the overall grid, improving reliability of public electricity infrastructure.

The Applicant has committed to providing a 50-foot setback and buffer from the solar equipment to the property line and any public rights of way around the perimeter of the Property which will provide a screen from the 13' high solar panels. The Applicant has committed to provide 32% of the site as open space. Preservation efforts have been made for both forested areas and for any identified archaeological sites. The Applicant has indicated that consideration will be given to providing a trail and/or other park amenities where the subject property abuts Nokesville Community Park to expand the services for this Community Park. Upon completion, the facility will be silent and passive and will generate only one vehicle trip per month.

The proposed solar facility will have a limited impact on surrounding uses both visually and in terms of activity generated. This use aligns with the AE, Agricultural and Estate Comprehensive Plan designation.

- c) Extent – The Applicant proposes to preserve 106 acres of the 331 acre site. The applicant also proposes to grade and develop no more than 225 acres shown on the maximum extents drawing. Thirty-two acres

of forested hardwood trees are being preserved in the northern portion of the site.

The proposed solar facility does not impact the level of service in terms of traffic, road infrastructure, schools, parks and minimal impact on police and fire.

2. Community Input – Notice of the application has been transmitted to adjacent property owners within 500 feet of the proposed site for the Nokesville Solar Facility in accordance with the recently adopted Zoning Ordinance. The Applicant reported that they held a community meeting on July 11, 2017 at the Nokesville Volunteer Fire Department. Notices were sent to all adjacent property owners within 200 feet for this meeting. Additionally, the Applicant spoke at the Nokesville Ruritans (July 13, 2017) and the Nokesville Business Association (July 19, 2017).

The Applicant indicated that they would do additional community outreach due to the new 500' notification requirement. A community meeting was held on Wednesday, June 20, 2018 at the Public Safety Training Center in Nokesville. Approximately 30 citizens were in attendance.

The Planning Office received one email from the current land owner supporting the application and one email from a resident with a list of questions and concerns. In part, questions were raised regarding metal content of the panels, environmental concerns, and the usability of the site upon completion. A letter was received on June 27, 2018 discussing concerns regarding erosion and sediment control and stormwater management issues.

3. Other Jurisdiction Comments – The site is outside the required notification area of nearby jurisdictions. However, Fauquier County was notified of this application.
4. Legal Uses of the Property – Those uses proposed by the subject application, and those allowed by-right in the A-1, Agricultural, zoning district would be permitted, as conditioned. Legal issues resulting from Planning Commission's action are appropriately addressed by the County Attorney's Office.
5. Timing – The Planning Commission has until October 9, 2018, 90 days from the first public hearing date, to take action on this proposal. Approval of the special use permit would meet the 90-day requirement.

- B. Recommend Denial of #SUP2018-00049, Nokesville Solar Facility.

1. Comprehensive Plan – If the application is denied, the property will remain A-1, Agricultural, and could be developed with by right uses. Denial would not have any impact on the level of service.
2. Community Input – Notice of the application has been transmitted to adjacent property owners within 500 feet of the proposed site for the Nokesville Solar Facility. The Applicant held a community meeting on July 11, 2017 at the Nokesville Volunteer Fire Department. Notices were sent to all adjacent property owners within 200 feet for this meeting. Additionally, the Applicant spoke at the Nokesville Ruritans (July 13, 2017) and the Nokesville Business Association (July 19, 2017).

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5. Timing – The Planning Commission has until October 9, 2018, 90 days from the first public hearing date, to take action on this proposal. Denial of the special use permit would meet the 90-day requirement.

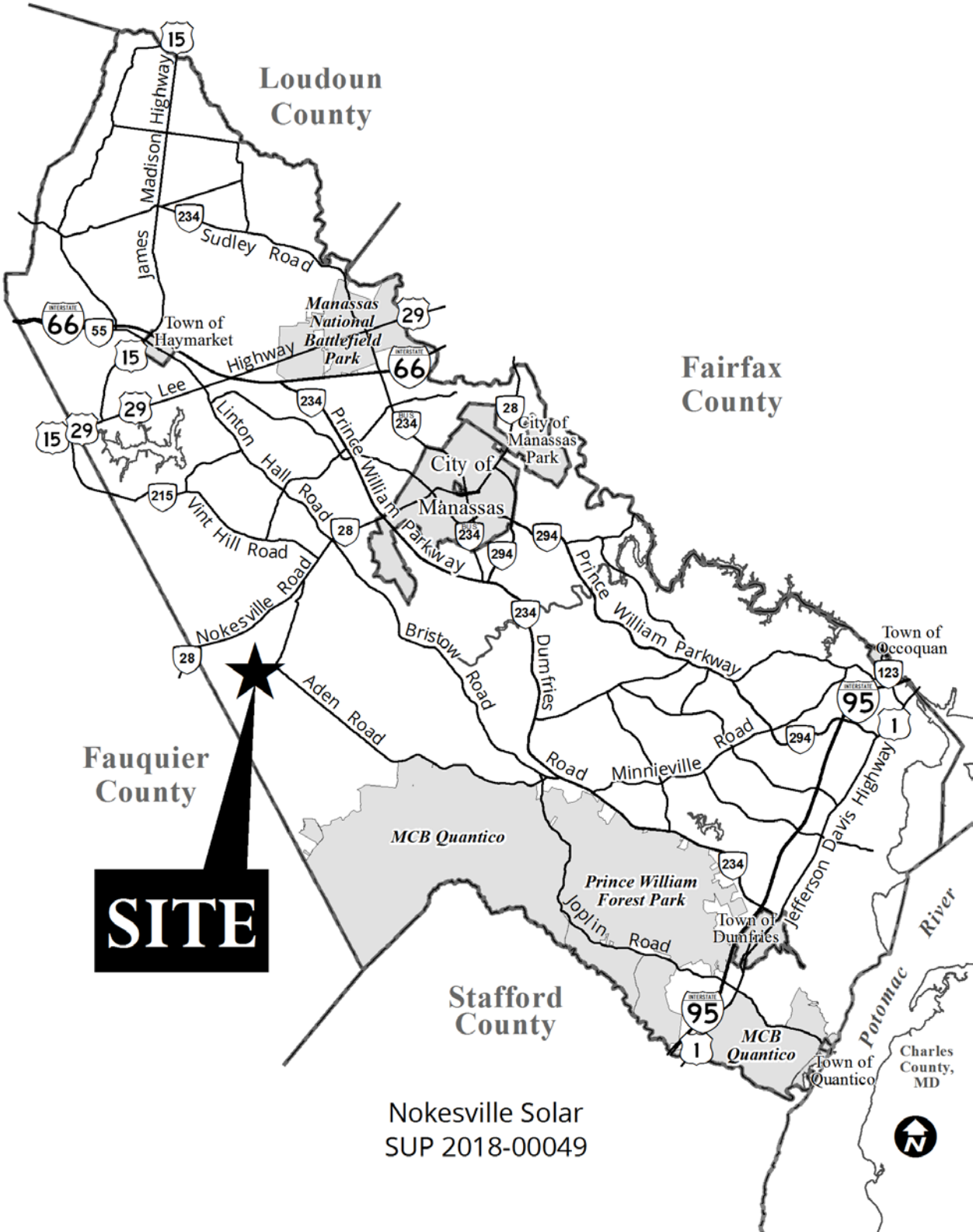
V. Recommendation is that the Planning Commission accept Alternative A and recommend approval of Special Use Permit #SUP2018-00049, Nokesville Solar Facility, subject to conditions dated July 2, 2018. This recommendation of approval would satisfy the intent of a Public Facility Review (PFR) to find this application consistent with the Comprehensive Plan pursuant to Section 15.2-2232 of the Code of Virginia.

Staff: Connie Dalton, AICP x6934

Attachments:

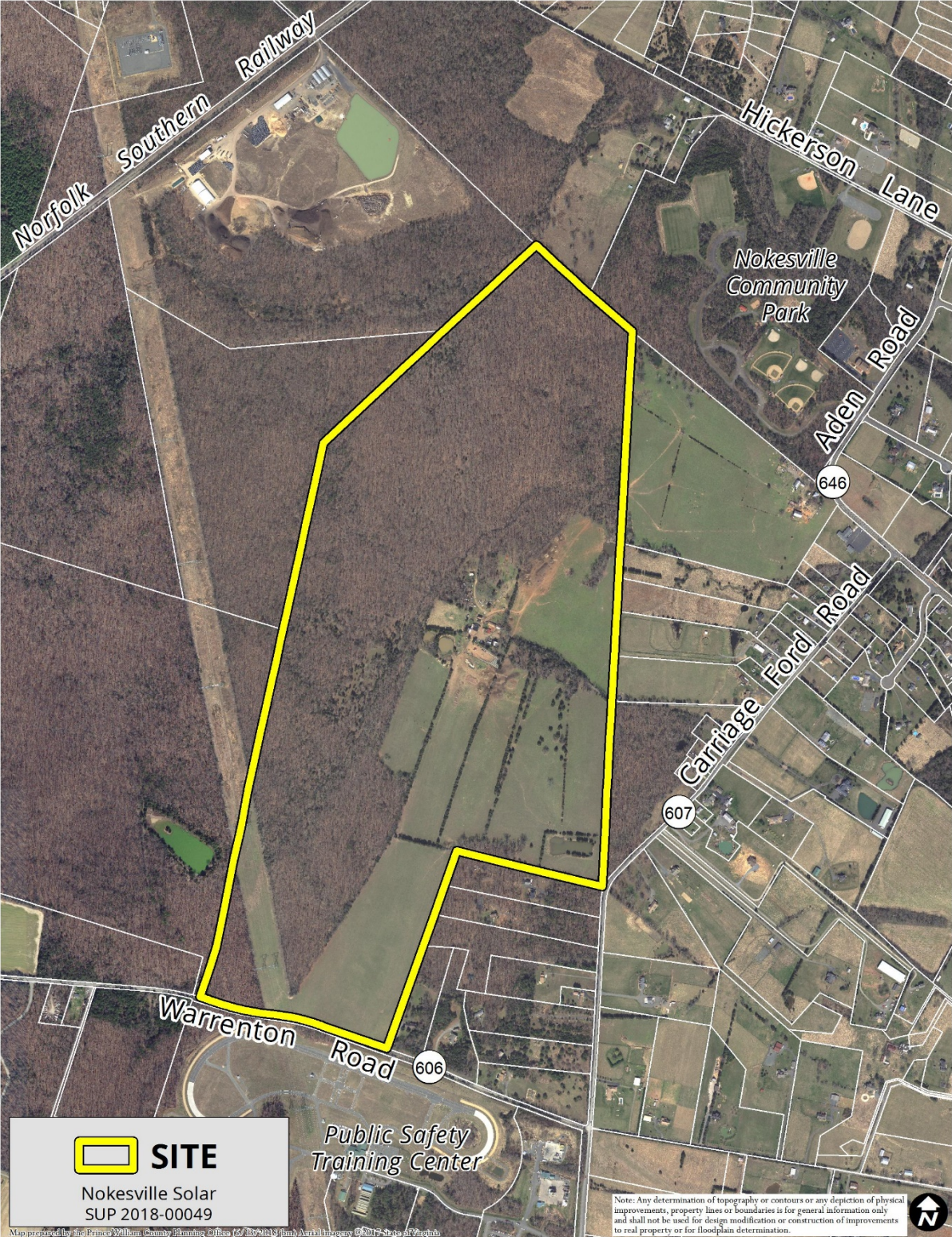
- A. Area Maps
- B. Staff Analysis
- C. Proposed SUP Conditions
- D. SUP Plan
- E. Historical Commission Resolution

Attachment A – Maps
LOCATOR MAP

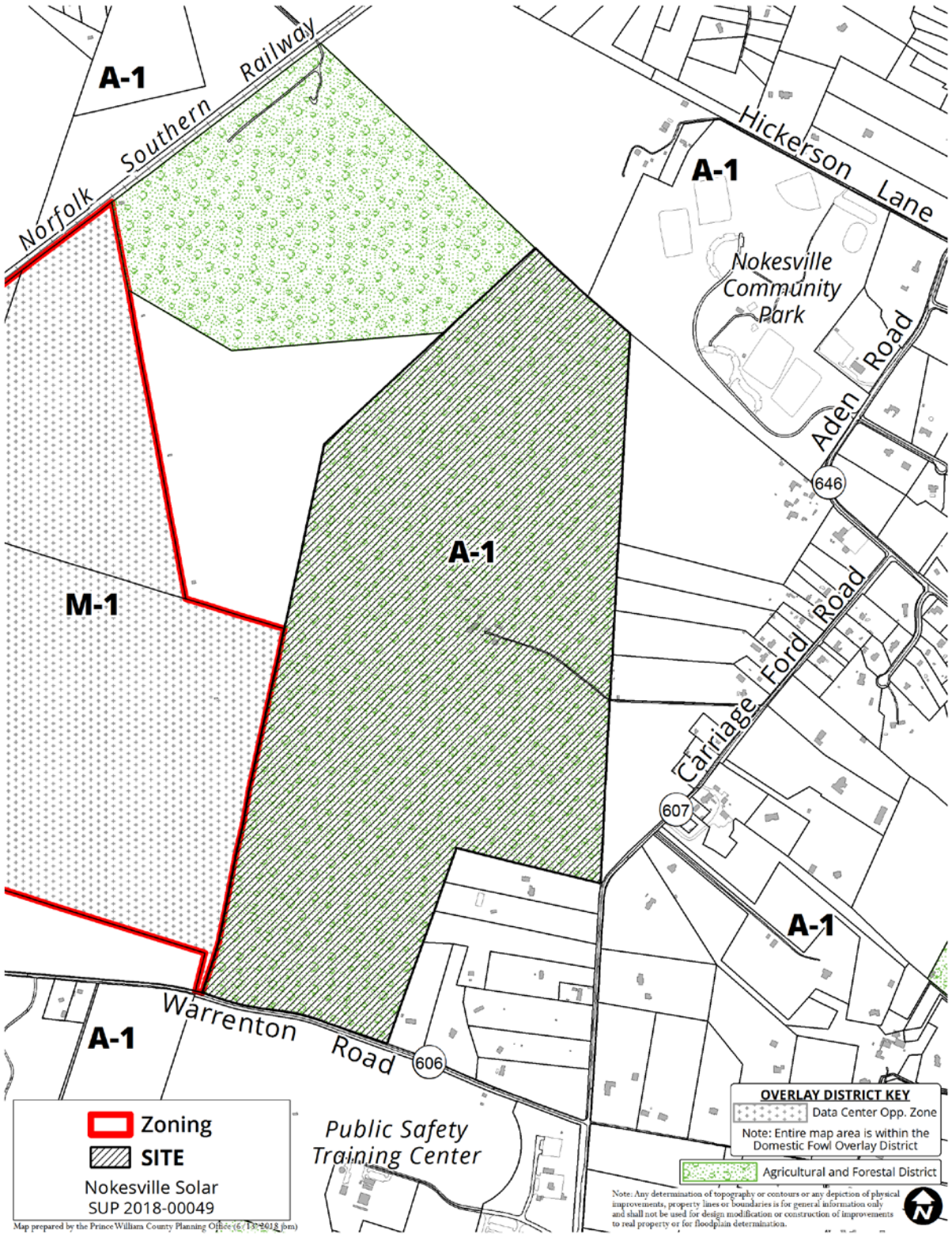


Nokesville Solar
SUP 2018-00049

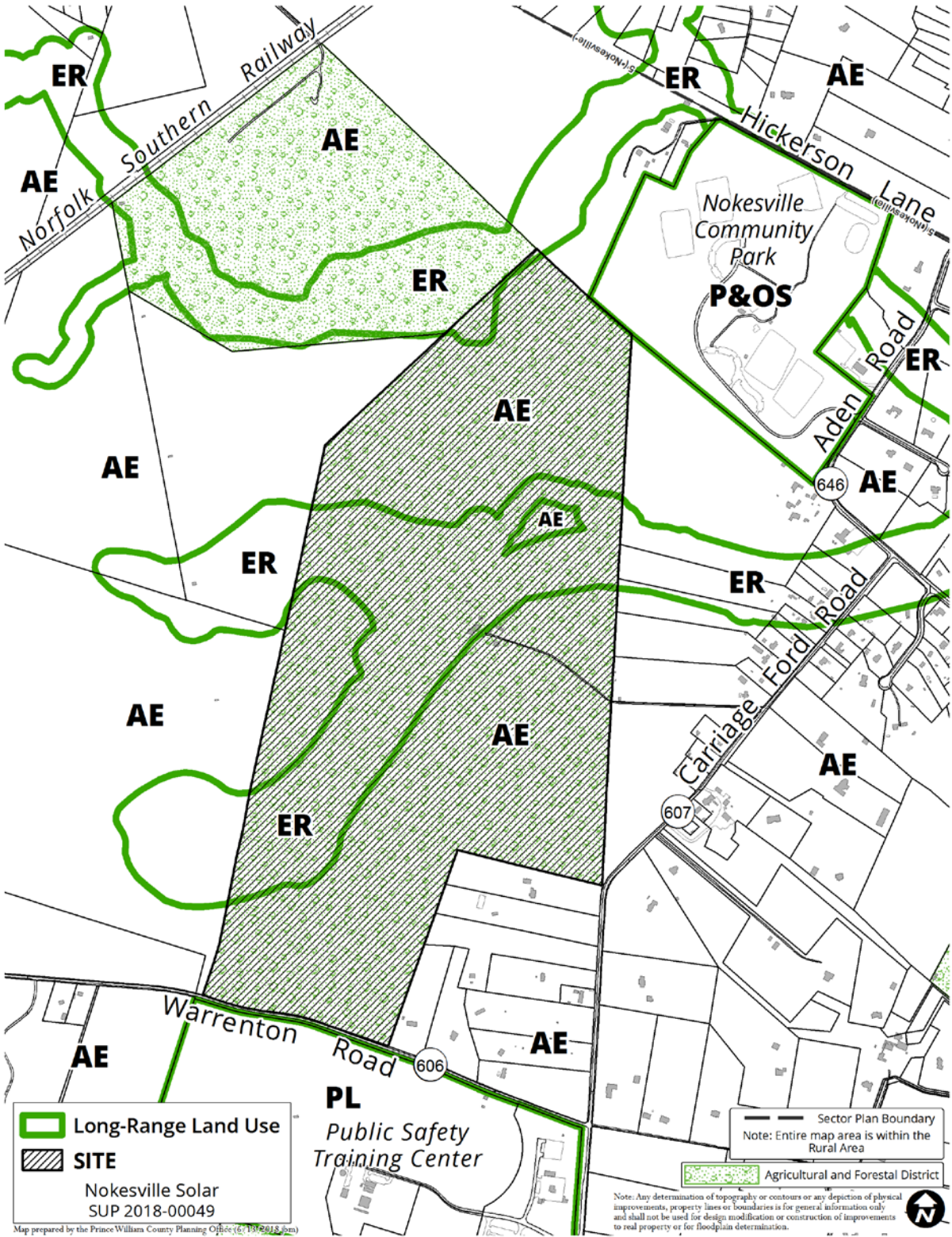
Attachment A – Maps
AERIAL MAP



**Attachment A – Maps
ZONING MAP**



Attachment A – Maps
LONG-RANGE LAND USE MAP



Part I. Summary of Comprehensive Plan Consistency

Staff Recommendation: Approval

This analysis is based on the relevant Comprehensive Plan action strategies, goals, and policies. A complete analysis is provided in Part II of this report.

Comprehensive Plan Sections	Plan Consistency
Long-Range Land Use	Yes
Community Design	Yes
Cultural Resources	Yes
Economic Development	Yes
Environment	Yes
Fire & Rescue	Yes
Parks, Open Space & Trails	Yes
Police	Yes
Transportation	Yes

Part II. Comprehensive Plan Consistency Analysis

The following table summarizes the area characteristics (see maps in Attachment A):

Direction	Land Use	Long Range Future Land Use Map Designation	Zoning
North	Agricultural Nokesville Community Park	AE, Agricultural or Estate ER, Environmental Resource P&OS, Parks and Open Space	A-1, Agricultural
South	Warrenton Road PWC Public Safety Training Center	AE, Agricultural or Estate ER, Environmental Resource PL, Public Land	A-1, Agricultural
East	Agricultural Detached Single Family Residential	AE, Agricultural or Estate ER, Environmental Resource	A-1, Agricultural
West	Existing 225' VEPCO Easement/ Agricultural	AE, Agricultural or Estate ER, Environmental Resource	A-1, Agricultural M-1, Heavy Industrial Data Center Opportunity Zone Overlay

Long-Range Land Use Plan Analysis

Through wise land use planning, the County ensures that landowners are provided a reasonable use of their land while the County is able to judiciously use its resources to provide the services for residents and employers’ needs. The Long Range Land Use Plan sets out policies and action strategies that further the County’s goal of concentrating population, jobs, and infrastructure within vibrant, walkable, mixed-use centers serviced by transit. In addition to delineating land uses on the Long Range Land Use Map, the Plan includes smart growth principles that promote a countywide pattern of land use that encourages fiscally sound development and achieves a high-quality living environment; promotes distinct centers of commerce and centers of community; complements and respects our cultural and natural resources, and preserves historic landscapes and site-specific cultural resources; provides adequate recreational, park, open space and trail amenities that contribute to a high quality of life for county residents; and revitalizes, protects, and preserves existing neighborhoods.

This site is located in the Rural Area of the County and is designated as AE, Agricultural or Estate, and ER, Environmental Resource on the Long Range Land Use Map. The following table summarizes the uses and densities intended within the AE and ER designations:

Long-Range Land Use Plan Classification	Land Uses Intended
<p style="text-align: center;">AE Agricultural or Estate</p>	<p>Agricultural or Estate (AE). The purpose of the Agricultural or Estate classification is to protect existing agricultural lands, cultural resources, and open space, as well as other important rural environmental resources, and to provide areas within the County where large lot residential development is appropriate. The maximum density is one dwelling per 10 gross acres.</p>
<p style="text-align: center;">ER Environmental Resource</p>	<p>Environmental Resource (ER). This classification is explained in detail within the Environment Plan. Therein are located goals, policies, action strategies, and other Plan components designed to protect the sensitive nature of the identified resources. Environmental Resources include all 100-year floodplains as determined by the Federal Emergency Management Agency (FEMA), Flood Hazard Use Maps or natural 100-year floodplains as defined in the DCSM, and Resource Protection Areas (RPAs) as defined by the Chesapeake Bay Preservation Act. In addition, areas shown in an environmental constraints analysis submitted with a rezoning or special use permit application with wetlands; 25 percent or greater slopes; areas with 15 percent or greater slopes in conjunction with soils that have severe limitations; soils with a predominance of marine clays; public water supply sources; and critically erodible shorelines and stream banks are considered part of the Environmental Resource Designation.</p>

Attachment B – Staff Analysis

This is a request for a special use permit (SUP) to allow for the construction of a solar facility on ±225 acres of a ±331 acre parcel and an associated transportation waiver to the requirement to pave Warrenton Road.

Public facilities, and in this case the proposed solar facility, are consistent with the Comprehensive Plan and are permissible in the County, subject to approval of a Special Use permit (SUP). In the Comprehensive Plan Land Use Policies 2.6 and 12.3 state, “Ensure that the primary function of the Rural Area as reflected by the Long-Range Land Use Plan Map is to maintain open space, protect native habitats, allow for large-lot residential development, allow for agricultural activities, and provide potential sites for community facilities.” The Plan, LU-Policy 3 further states to plan and design all public facilities in a manner that generally conforms to the Comprehensive Plan, the Zoning Ordinance, the Design and Construction Standards Manual (DCSM), the Capital Improvements Plan (CIP), and the Strategic Plan and are integral to the developments inducing their needs.

Proposal’s Strengths

- **Comprehensive Plan Consistency** – A commercial solar facility, is permitted as a public facility. Public facilities are allowed in all zoning districts, except solar facilities and electrical substations require an approved Special Use Permit (SUP).
- **Consistency with the Zoning Ordinance** – The solar facility is allowed, subject to an approved Special Use Permit (SUP), in the A-1, Agricultural district.
- **Rural Area** – The operation of the solar facility, once constructed, is passive in terms of noise, traffic, and impact on the level of service requirements.

Proposal’s Weaknesses

- None identified.

On balance, this application is found to be consistent with the relevant components of the Long-Range Land Use Plan.

Community Design Plan Analysis

An attractive, well-designed County will attract quality development, instill civic pride, improve the visual character of the community and create a strong, positive image of Prince William County. The Community Design Plan sets out policies and action strategies that further the County’s goals of providing quality development and a quality living environment for residents, businesses and visitors, and creating livable and attractive communities. The Plan includes recommendations relating to building design, site layout, circulation, signage, access to transit, landscaping and streetscaping, community open spaces, natural and cultural amenities, stormwater management, and the preservation of environmental features.

The Applicant has proposed to plan, site, and buffer the proposed solar facility to provide compatibility with the surrounding existing and planned land uses. (Preserve and enhance the unique architectural and landscape qualities of the County’s rural area. DES-POLICY 9, Comprehensive Plan). Development proposed under such public facility determination shall adhere to the policies and action strategies of the Community Design Plan.

Proposal’s Strengths

- **Buffer/Peripheral Landscape Area** – The Applicant is conditioned to provide a 50-foot wide peripheral landscaped buffer, as shown on the SUP Plan. The Applicant has also been conditioned to provide a 150’ setback from all solar panels to any residential structures.
- **Security Lighting** – The Applicant is conditioned to provide that all safety and security lighting will be motion-activated, limited to 15’ in height, and shall be downward facing.
- **Height** – No aspect of the project shall exceed 25’ in height. The solar panels shall not exceed 13’ in height.
- **Anti-Reflective Coating** – All solar panels shall use anti-reflective coatings as conditioned.

Proposal’s Weaknesses

- None identified.

On balance, this application is found to be consistent with the relevant components of the Community Design Plan.

Cultural Resources Plan Analysis

Residents and visitors to Prince William County are aware of the important links of the County today with the rich heritage of the past because of the preservation and enhancement of our cultural resources. The Cultural Resources Plan sets out policies and action strategies that further the County’s goal of identifying and protecting our historical, archaeological, architectural and cultural resources, including those significant to our minority community, for the benefit of citizens and visitors. The Plan includes recommendations relating to the identification of assets, preservation through the use of federal, state, local and private initiatives, mitigation of negative impacts, and public education/awareness programs. Land use applications should include appropriate records review for prehistoric and historic resources, as well as Phase I, II, and III level archaeological studies, as appropriate.

The Applicant submitted two cultural resource studies for the project area: “Phase I Architectural Survey of the Nokesville Solar Site, Prince William County, Virginia” and “Phase I Archaeological Survey of the Nokesville Solar Site, Prince William County, Virginia (June 2017).” The Historical Commission and the County Archaeologist recommended revisions to

Attachment B – Staff Analysis

both reports and additional archaeological and architectural study to and around architectural resource 076-5852, an historic farmstead located on the project area. The Applicant committed to these requests and these commitments are reflected in the SUP conditions. See Attachment C for the SUP conditions and see Attachment E for the Historical Commission’s resolutions.

The Prince William Historical Commission reviewed the final submission during its regularly scheduled meeting on June 12, 2018 and recommended no further work (i.e. no further requests for additional studies).

Proposal’s Strengths

- SUP Conditions – Staff supports the application based on the conditions and that the Applicant recognized the requirement for additional studies and for the preservation and protection of identified sites.

Proposal’s Weaknesses

- None identified.

On balance, this application is found to be consistent with the relevant components of the Cultural Resources Plan.

Economic Development

An enhanced, diverse nonresidential tax base creates quality jobs, allowing people to live, work and recreate in Prince William County. The Economic Development Plan sets out policies and action strategies that further the County’s goal of attracting and fostering the growth of environmentally sound industries to create quality jobs and diversify the nonresidential tax base, creating a climate where citizens can live and work in Prince William County. The Plan includes recommendations relating to business attraction, retention and expansion, the provision of adequate infrastructure, redevelopment of less competitive areas, telecommuting and other information-age opportunities, and recognition of tourism as an industry.

Proposal’s Strengths

- Non-Residential Development – The application proposes a nonresidential use that will enhance the County’s nonresidential tax base.
- Employment – The Applicant has indicated that the facility, in addition to construction workers, will create 13 direct jobs, 1 indirect job, and 1 induced job with a \$1.3 million economic impact.

- Alternative Energy Source – While alternative energy source is not a targeted industry, the proposal adds to the economic diversity opportunities of the County. This type of renewable energy is preferred by some businesses/industries because of consistent rates and green goals.

Proposal’s Weaknesses

- None identified.

On balance, this application is found to be consistent with the relevant components of the Economic Development Plan.

Environment Plan Analysis

Prince William County has a diverse natural environment, extending from sea level to mountain crest. Sound environmental protection strategies will allow that natural environment to co-exist with a vibrant, growing economy. The Environment Plan sets out policies and action strategies that further the County’s goal of preserving, protecting and enhancing significant environmental resources and features. The Plan includes recommendations relating to the incorporation of environmentally sensitive development techniques, improvement of air quality, identification of problematic soil issues, preservation of native vegetation, enhancement of surface and groundwater quality, limitations on impervious surfaces, and the protection of significant view sheds.

This site is approximately half-open field and half hardwood forests. Bisecting the property roughly from east to west are higher order intermittent streams and associated headwater wetlands, a Chesapeake Bay RPA, a 100 year flood plain, and numerous specimen trees of which 27 will be impacted by the proposed solar facility. The project contains 33 specimen trees.

A Perennial Flow determination (PFD) report was completed and signed off by Prince William County on May 25, 2017. The Waters of US Delineation and Resource Protection Area Evaluation has been approved by the Army Corps of Engineers on May 16, 2017. There are Jurisdictional wetlands and other waters of the US are present within the site, as well as RPA areas. The Applicant has stated that no grading, grubbing, or timbering will occur within the RPA areas, 100 year floodplain, historical area, and the 50’ perimeter buffer. The Applicant has agreed to no grading or grubbing within 50’ from any significant Non-RPA stream, other streams, wetlands, and ponds as identified by the Army Corps of Engineers, located throughout the property, unless permitted by respective permitting agencies, as stated in the SUP conditions. The Applicant has, in the SUP conditions, identified the efforts proposed to be made to be environmentally sensitive.

The SUP conditions that, “A 150-foot setback shall be maintained from solar equipment to any adjacent residential dwelling that exists at the time of approval by the Board of County Supervisors.” Additionally, the Applicant has committed to “A minimum 50’ setback and buffer from solar equipment to the property line and any public rights of way shall be provided around the perimeter of the Project.” “No trees within this buffer may be cut unless needed for road access to the site.”

Attachment B – Staff Analysis

County Staff will hold a pre-submission meeting to discuss erosion and sediment control and stormwater management requirements, as they apply to this project, with the Applicant prior to submitting final site plan.

The Applicant has also committed to a decommissioning plan at the end of the project's 35-year life expectancy. The term "deconstructed and removed", as specified in the SUP conditions, shall mean the removal from the surface of all structures, permanent foundations, structural supports, fences, and gravel, the filling in and compacting of all trenches or other borings, the removal of all debris from the surface, and the restoration of the land to a condition reasonably similar to the condition prior to any development, including replacing topsoil. Areas originally timbered will be replanted as specified in the SUP conditions. Applicant has stated that all structural supports will be removed completely.

This application will support and provide renewable energy to facilities and residences in Prince William County (EN-Policy 15, Comprehensive Plan).

Proposal's Strengths

- **SUP Conditions** – The Comprehensive Plan LU Policy 12 encourages a land use pattern that respects environmental features in accordance with the goals and objectives of the Environment Plan. The Applicant has, in the application and SUP conditions, identified proposed efforts to be environmentally sensitive.
- **Buffer/Peripheral Area** – The Applicant has conditioned to a 50-foot wide peripheral buffer area and that no trees within this area may be cut unless needed for road access to the site.
 - The buffer area between the solar facility and the parkland to the north is proposed to be at a minimum 50' wide as reflected on the SUP plan.
 - The SUP conditions state that a "Minimum of 150' setback shall be maintained from solar equipment to any residential dwellings that exist at the time of the approval by the Board of County Supervisors. The security fence and internal project roads may be located within the setbacks. During construction, the setback may be used for the staging of materials and parking."
- **Stormwater Management** – Stormwater Management (SWM) and Best Management Practices (BMP) will be accommodated on-site in accordance with current County regulations.
- **Water Quality Monitoring** – The Applicant has conditioned to make a monetary contribution to the Prince William Board of County Supervisors in the amount of \$75.00 per disturbed acre for water quality monitoring and/or drainage improvements and/or stream restoration projects prior to approval of the site plan.
- **Wells and Drainfields** – The SUP conditions state that any wells or drain fields which are removed from service shall be done in a manner consistent with the Department of

Attachment B – Staff Analysis

Health's recommendations. The removal from service shall occur prior to the completion of construction.

- Decommissioning – The Applicant conditioned, at the time of decommissioning the project, areas that were originally timbered will be replanted, at a minimum planting density of 600 trees per acre for bare root or 450 trees per acre if container seedlings, with native species appropriate to the site. Additional details regarding the decommissioning process may be found in the SUP Conditions. (See Attachment C)
- Native Warm Season Grasses – Staff requested that the wooded areas which will be disturbed to be seeded with native warm season grasses. The Applicant agreed to use native warm season grasses, as stated in the SUP conditions in these areas. The environmental benefits of the site will be further enhanced by planting native grasses and pollinators. The benefits derived over the 35-year life of the facility would be significant.
- Specimen Trees – The Applicant has located and identified 33 specimen trees as shown on sheet 4 of 5, entitled Specimen Tree and Forest Classification Plan. In the SUP conditions, the Applicant has conditioned to protect specimen trees #2-7. This represents six of the 33 identified trees. The Applicant has indicated that commercially reasonable efforts will be made to be preserve additional specimen trees based on final site plan design. (See Attachment C)
- RPA Areas – No grading, grubbing, or timbering shall occur within the RPA areas, 100-year flood plain, historical area, and the 50' perimeter buffer.
- Timbering in the Non-RPA Buffer – The Applicant plans to timber, when needed, within the first 40' of the 50' wide non-RPA buffer proposed around the significant non-RPA streams to provide the necessary sunlight to the solar panels. The Applicant shall not grade or grub within 50' from any significant non-RPA stream, other streams, wetlands, and ponds, as specified in the SUP conditions. Root systems will be left intact for the purpose of allowing growth up to a height of ten feet. The area to be graded and grubbed will be minimized to the extent practical. Staff suggested that the Applicant condition to preserving a substantial area in the northern portion of the site to remain undisturbed hardwood forest in an effort to offset this timbering. The Applicant has conditioned to preserving a minimum of 32 acres of undisturbed hardwood forest in the area outside of and generally between the two Resource Protection Areas onsite. This will be reflected on the final site plan.
- Proposed Buffer – In the 50' peripheral buffer, the Applicant has committed to preserving existing vegetation, to the extent possible, and provide supplemental plantings as needed to meet the Type C buffer standard of the DCSM 800. Applicant may, at the time of final site plan, request a modification to the DCSM to exceed the maximum 30% large evergreen tree limitation.

Proposal's Weaknesses

Attachment B – Staff Analysis

- SUP Plan – The Applicant, as part of the SUP application provided a preliminary design and layout. The final design and layout will be completed with the final site plan. Lacking a final layout, questions and concerns of staff could not be fully addressed. Staff expressed concerns about the details regarding the extent of the “Maximum Extents Map”.

On balance, this application is found to be consistent with the relevant components of the Environment Plan.

Fire and Rescue Plan Analysis

Quality fire and rescue services provide a measure of security and safety that both residents and businesses have come to expect from the County. The Fire and Rescue Plan sets out policies and action strategies that further the County’s goal of protecting lives, property, and the environment through timely, professional, humanitarian services essential to the health, safety, and well-being of the community. The plan includes recommendations relating to siting criteria, appropriate levels of service, and land use compatibility for fire and rescue facilities. The plan also includes recommendations to supplement response time and reduce risk of injury or death to County residents, establishment of educational programs, such as cardio-pulmonary resuscitation (CPR) training, automatic external defibrillators (AED), and encourage installation of additional fire protection systems such as sprinklers, smoke detectors, and other architectural modifications.

The nearest responding fire station would be Fire & Rescue Station #5 (Nokesville) located at 12826 Marsteller Drive, Nokesville. The site does not fall within the 4.0-minute response time for fire suppression and basic life support or within 8.0-minute response time for advanced life support services. According to the FY 2017 figures, Fire/Rescue Station #5 responded to 840 incidents. The workload for this station is a maximum 2,200 incidents per year.

Proposal’s Strengths

- Emergency Access Roads – The Applicant committed to provide emergency access roads. The Applicant has committed that emergency access roads shall be 20’ wide and will have a load bearing capacity sufficient to meet the 80,000 lbs. for a three axle emergency vehicle. The emergency access roads shall be provided from the primary and secondary access points into the site to the locations of the inverters. If these roads have a dead end length exceeding 150 foot length an approved turn-a-round (per the DCSM) that will accommodate a 3 axle, 45 foot long truck shall be provided. The precise layout of the roads will be demonstrated on the final site plan.
- Fire Access Roads – A 10-15 foot access road (no weight or paving requirement) will be provided at approximately 300 foot intervals between the solar panels. The location and arrangement of these roads will be determined during the site plan process and demonstrated on the final site plan.
- Emergency Access Plan – The Applicant will develop an Emergency Access Plan to provide to the Fire Marshal’s Office. This plan will provide specific details of how to

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respond to emergency situations including contact information and details regarding access to the locked facility. Specific signage will be required at all entrances to the site which provides an emergency contact number.

- Transformer Oil Leak Mitigation Plan – The Applicant has committed to providing a Transformer Oil Leak Mitigation Plan to the Fire Marshal’s Office at the time of site plan.
- Batteries – No batteries, for long-term storage of electricity, shall be located on the site.
- Education/Training – The Applicant will provide training and information to the Fire Marshal’s Staff on how to safely respond to on-site emergencies at this solar facility prior to commencement of the use.
- Access to Existing Structure – The existing structures, to the extent they remain in existence, will continue to utilize the existing access easement and will not enter into the fenced line of the solar facility.

Proposal’s Weaknesses

- None identified.

On balance, this application is found to be consistent with the relevant components of the Fire and Rescue Plan.

Parks, Open Space and Trails Plan Analysis

The quality of life for residents of Prince William County is linked closely to the development and management of a well-maintained system of parks, trails, and open space. Prince William County contains a diversity of park, open space, and trail resources. These parklands, open spaces, and recreational facilities play a key role in shaping both the landscape and the quality of life of Prince William County residents through the conservation of natural and cultural resources, protection of environmental quality, and provision of recreational facilities. The Parks, Open Space and Trails Plan sets out policies and action strategies that further the County’s goal of providing park lands and recreational facilities of a quantity, variety, and quality appropriate to meet the needs of the current and future residents of Prince William County. The plans include recommendations to preserve existing protected open space, maintain high quality open space, expand the amount of protected open space within the County and to plan, and implement a comprehensive countywide network of trails.

The Existing and Projected Parks map (Figure 1) in the Comprehensive Plan, indicates a need for additional parks and recreation facilities in this area. While the proposed solar facility will not generate an increase in population, the proposed project is contiguous to the Nokesville Community Park. The Applicant proposes to commit to protecting 32% of the project area as open space and further commits to exploring additional recreational facilities and trail options on

the northern portion of the property to enhance and expand the facilities at the Nokesville Community Park.

Proposal's Strengths

- Additional Recreation Facilities – The Applicant is willing, during the site plan process, to explore options to add public trails and interpretive structures or elements, such as kiosks, benches, and small picnic and play areas to educate the community about solar energy and how it is generated. This effort aligns with EN-Policy 16, which encourages education in the areas of energy efficiency, demand response and renewable energy applications.
- Trail – The Applicant has also conditioned to work with Parks and Recreation at the site plan stage to provide a trail easement through the remaining acres outside of the solar facility fence line, of which there are at least 106 acres.
- Trail Construction – The Applicant in the SUP conditions states that the trails developed shall be consistent with the PWC Trail standard available as of May 18, 2018. The trails shall be of the type Class 3 or Class 4 to most closely match the existing trail at Nokesville Community Park, to which they will connect.
- Development/Maintenance Options – The SUP conditions provide two alternatives for the development and maintenance of the above items.
- Open Space – The Applicant committed to protecting 32% (106 undisturbed acres of the 331-acre parcel) of the project area as open space as shown on the SUP Plan. EN-Policy 3 of the Comprehensive Plan is to support a minimum of 39% of the total area in the county as protected open space.
- **Proposal's Weaknesses**
 - None identified.

On balance, this application is found to be consistent with the relevant components of the Parks, Open Space, and Trail Plans.

Police Plan Analysis

Residents and businesses expect a high level of police service for their community. This service increases the sense of safety and protects community investments. The Police Plan is designed to promote Prince William County's public safety strategic goal to continue to be a safe community, reduce criminal activity, and prevent personal injury and loss of life and property, as well as to ensure effective and timely responses throughout the County. In order to maintain low response times and minimize the amount of crime, this chapter encourages funding and locating future police facilities to maximize public accessibility and police visibility as well as to permit effective, timely response to citizen needs and concerns. The Plan recommends educational initiatives, such as Neighborhood and Business Watch, and Crime Prevention through

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Environmental Design (CPTED), which encourages new development to be designed in a way that enhances crime prevention and effective. The Plan also encourages reliable public safety communications linking emergency responders in the field with the Public Safety Communications Center and ultimately to the public.

The nearest police station is the Western District Police Station located at 8900 Freedom Center Blvd., Manassas, VA 20110. The Police Department reviewed the application and the Applicant, in the SUP conditions, has addressed the requests made with respect to security fencing, signage, lighting, and the marking of access roads into the solar facility.

Proposal's Strengths

- Security Fencing – The Applicant has conditioned to enclose the proposed solar facility with a 7-foot high security fence with a locked security gate.
- Signage – Approximately every 100' along the fence, safety and security signage will be posted. The signs shall state “No Trespassing / No Loitering, Violators Will Be Prosecuted” as requested by the police department.
- Lighting – The only lighting proposed is motion activated safety and security lighting, which shall be downward facing; the Project shall not be lit. Lighting shall not exceed 15' in height.
- Access Roads – All access roads entering the facility are to be marked by the Applicant with identifying signage and emergency contact information.

Proposal's Weaknesses

- None identified.

On balance, this application is found to be consistent with the relevant components of the Police Plan.

Transportation Plan Analysis

By providing a multi-modal approach to traffic circulation, Prince William County promotes the safe and efficient movement of goods and people throughout the County and surrounding jurisdictions. The Transportation Plan sets out policies and action strategies that further the County's goal of creating and sustaining an environmentally friendly, multi-modal transportation system that meets the demands for intra- and inter-county trips, is integrated with existing and planned development, and provides a network of safe, efficient, and accessible modes of travel. The Plan includes recommendations addressing safety, minimizing conflicts with environmental and cultural resources, maximizing cost effectiveness, increasing accessibility of all travel

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modes, minimizing projected trip demand, and providing sufficient network capacity. Projects should include strategies that result in a Level of Service (LOS) of “D” or better on all roadway corridors and intersections, reduce traffic demand through transportation demand management strategies, dedicate planned rights-of-way, provide and/or fund transit infrastructure, pedestrian and bicycle pathways, and improved and coordinated access to transit facilities.

A Traffic Impact Analysis was not required. The traffic generated by the proposed solar facility does not exceed the thresholds established in Section 602.01 of the DCSM.

Transportation Department requests that the Applicant pave Warrenton Road from the proposed site entrance west to the existing paved section at the Fauquier County/Prince William County line for safety and maintenance repairs due to anticipated construction traffic.

The applicant has filed a transportation waiver (WA2018-00134) request regarding the requirement to pave Warrenton Road concurrent with this SUP application. The Transportation Department does not support this waiver request. Planning Staff, however, does not believe the paving of Warrenton Road is consistent with the goals and objectives of the Rural Area and therefore supports this waiver request.

Staff understands some residents are concerned about existing traffic from the adjacent Public Safety Training Facility. Some residents are also concerned about the conditions of Warrenton Road. The County is currently looking into how to best address these concerns, which are appropriately separate from this case/application.

Proposal’s Strengths

- Level of Activity – The Applicant has identified the parameters of the proposed usage of Warrenton Road as follows: “The solar project intends to have only 180 semi-trailers of legal size and weight deliver materials to the site. This will occur over roughly a 2 month period meaning 2-3 truck deliveries a day. After construction no semi-trailers are expected and only one vehicle per month.” The proposed level of activity generated by this facility is consistent and would not burden the transportation network in the Rural Area.
- Access to Residential Area – The existing structures, to the extent they remain in existence, will continue to utilize existing access easement, off Carriage Ford Road, and will not enter into the fenced line of the solar facility.
- Repair of Warrenton Road –The Applicant agrees to controlling dust and restoring Warrenton Road equal to a pre-construction condition and such requirement shall be demonstrated prior to final inspection and approval.

Proposal’s Weaknesses

- None identified.

On balance, this application is found to be consistent with the relevant components of the Transportation Plan.

Materially Relevant Issues

This section of the report is intended to identify issues raised during the review of the proposal, which are not directly related to the policies, goals, or action strategies of the Comprehensive Plan, but which are materially relevant to the County’s responsibilities in considering land use issues. The materially relevant issues in this case are as follows:

- **Decommissioning** – The SUP conditions outline the Applicant’s decommissioning plan for the site. The solar facility has an estimated life of approximately 35 years. Nokesville Solar LLC shall remove the facilities (“decommissioning”) within 12 months of receipt of notice from the County as outlined in the terms of the proposed SUP Conditions dated July 2, 2018.
- **Soil and Water Sample Reports** – Nokesville Solar LLC shall provide soil and water sample reports ensuring that soil and water on the location is free of toxic, heavy metals and contaminants, and ensure that the subject site is suitable for agricultural production both prior to the site plan approval (for the solar facility) and after decommissioning, is complete.
- **State Permitting** – All applicable state permits are required to be obtained prior to receiving final site plan approval.

Minimum Design Criteria

Staff and other agencies that have reviewed the proposal and noted the following minimum design criteria. The development proposal will be reviewed, for compliance with all minimum standards, at the time that the Applicant submits detailed site development information, prior to the issuance of construction permits. The listing of these issues is provided to ensure that these concerns are a part of the review record. Such issues are more appropriately addressed during site plan review.

- DCSM and Zoning Ordinance requirements will pertain and must be satisfied.
- **Transportation Waiver** – The applicant has filed a transportation waiver request (WA2018-00134) regarding the requirement to pave Warrenton Road concurrent with this SUP application. Planning Office Staff supports this request and recommends approval.

Agency Comments

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The following agencies have reviewed the proposal and their comments have been summarized in relevant Comprehensive Plan chapters of this report. Individual comments are in the case file in the Planning Office:

County Archaeologist
Crime Prevention Police
Economic Development
Fire and Rescue
Health Department
Historical Commission
Land Development
Public Works – Watershed/Environmental Services
Planning Office, Long Range Planning and Case Manager
PWC Department of Parks and Recreation
PWC Transportation
VDOT Fairfax
Zoning Administrator

**SPECIAL USE PERMIT CONDITIONS
Special Use Permit #SUP2018-00049
Applicant/Owner: Nokesville Solar, LLC (“Applicant”)
Zoning: A-1, Agricultural
Special Use Permit Area: ±331acres
Prince William County GPIN: 7493-31-5998 (Property”)
Brentsville Magisterial District**

July 2, 2018

The following conditions are intended to offset the impacts of the proposal and to render the application consistent with the applicable chapters of the Comprehensive Plan and the surrounding areas. If the conditions of this special use permit or the special use permit plan are in conflict with the Zoning Ordinance, and/or the Design and Construction Standards Manual (DCSM), the more restrictive standards shall apply, except as specifically allowed by this special use permit. The term “Applicant” as referenced herein shall include within its meaning the Applicant, the current owner and all future owners and successors. The term “Facility” as referenced herein shall include within its meaning the subject solar facility. This special use permit for the subject solar facility satisfies the intent of a public facility review, pursuant to Section 15.2-2232 of the Code of Virginia.

If the Applicant intends to utilize the solar facility, the special use permit (SUP) use must be implemented by the filing of a site plan within three (3) years of approval of this SUP by the Board of County Supervisors, and the Applicant shall have up to five (5) years from the date of site plan approval to commence the proposed use. Final site plan inspection is required prior to the commencement of the SUP use.

1. Site Development – The SUP uses on the Property shall be in substantial conformance with these SUP conditions and in general conformance with the plans entitled “Special Use Permit Plan #SUP2018-00049 – Nokesville Solar Facility”, prepared by Timmons Group, dated June 12, 2018 sheets 1-5 (hereinafter, the “SUP Plan”). Minor modifications shall be permitted at the time of final site plan approval based on final engineering and design requirements that align with the following conditions.
2. State Permitting – The development of this Facility is contingent upon receipt of the applicable State permit(s) prior to final site plan approval. A copy of such permit(s) shall be provided to the Planning Office prior to final site plan approval.
3. Site Plan – Prior to the commencement of the SUP use, the Applicant shall obtain final site plan approval from the Land Development Division of the Department of Development Services in accordance with paragraph two above. No site plan shall be required for by-right agricultural uses on the Property.

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4. Inspection – Upon completion of the site inspection that demonstrates that all applicable SUP conditions and the required site plan improvements have been completed, commencement of the SUP for a solar energy facility shall be permitted.

5. Community Design
 - a. The Facility shall consist of one integrated power generation facility and shall be limited to no more than 225 acres of disturbed area within the 257 acres shown as part of the max extents on the 331 acre property identified as “Nokesville – Virginia Solar” on the Maximum Extents Plan prepared by Timmons Group revision, dated 8/15/17, revised 6/12/18, excepting the access roads.
 - b. This facility shall be at maximum a 20MW (megawatts) AC solar photovoltaic (PV) facility to be constructed in a single phase.
 - c. A minimum one hundred and fifty foot (150’) setback shall be maintained from all solar equipment to any adjacent residential dwellings that exist at the time of the approval by the Board of County Supervisors. The security fence and internal project roads may be located within the setbacks. During construction, the setback may be used for the staging of materials and parking.
 - d. A minimum 50’ setback and buffer from all solar equipment to the property line and any public rights of way shall be provided around the perimeter of the Facility. If there are no existing trees in the setback and buffer area in a given location it may be used for the security fence and project roads. If there are no existing trees in the setback and buffer area in a given location it may be used during construction for the staging of materials and parking. No trees within this setback and buffer area may be cut unless needed for road access to the Facility. After construction is complete, in the buffer area where trees do not already exist, the buffer area shall be planted to meet the Type C buffer standard of the DCSM 800. Applicant may, at the time of the final site plan review, request a modification to the DCSM requirement to exceed the maximum 30% large evergreen tree limitation.
 - e. All solar panels shall use anti-reflective coatings.
 - f. No aspect of the “Facility” shall exceed 25 feet in height, as measured from grade at the base of the structure to its highest point. Solar panels shall be a maximum of 13 feet in height above grade, from the highest grade around the structure. Such height restriction shall not apply to electrical distribution lines.
 - g. Electrical distribution lines between the inverters and the point of interconnection shall be underground except where crossing creeks, flood plains, wetlands, and at the point of interconnection. The DC collection system shall be below the level of the solar panels to minimize visibility.

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- h. The Applicant shall not construct any new distribution lines off of the Property.
- i. Except for motion activated safety and security lighting, which shall be downward facing, the Facility shall not be lit. Lighting shall not exceed fifteen (15) feet in height.
- j. The buffer area between the Facility and Nokesville Community Park, to the north, is identified with a minimum width of 50' on the SUP Plan. This shall be demonstrated on the final site plan.

6. Cultural Resources

- a. Revisions requested by the County Archaeologist and the Historical Commission to reports titled “Phase I Architectural Survey of the Nokesville Solar Site, Prince William County, Virginia (June 2017),” including the update to architectural resource 076-5852, and Phase I Archaeological Survey of the Nokesville Solar Site, Prince William County, Virginia (June 2017)” shall be resubmitted to the County Archaeologist prior to or with first submission of the final site plan.
- b. Either in an addendum or addendums to the two reports referenced in Condition #6.a., the Applicant shall conduct a Phase I Archaeological Survey of the architectural resource 076-5852. This shall be submitted to the County Archaeologist prior to or with first submission of the final site plan.
- c. For archeology site 44PW2028, and other potentially eligible archeology sites, if found during additional Phase I testing, the potentially eligible archeological sites shall be avoided during design, construction, and operations of the Facility, and no further archeological evaluations shall be completed on the archeological site(s). Compliance shall be demonstrated on the final site plan.
- d. The archeological site(s) boundaries shall be marked on all of the construction drawings, and the boundaries shall be marked in the field with orange safety fencing prior to the commencement of construction on the site. Photos of the installed fencing shall be taken and submitted to the County Archeologist for their files when construction starts.
- e. For any archeological site(s) which are to be preserved and located within the Facility’s fenced area, during the life of the Facility, the archeological site(s) boundaries shall be fenced off to prevent damage by maintenance operations. Fencing can be chain link, split rail, or other types that create a physical barrier. Compliance shall be demonstrated on the final site plan.
- f. The Applicant shall permit the County Archaeologist or his designee, during the life of the Facility, to conduct archeological research on archeology site

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44PW2028, as long as the site remains outside the Facility’s fence line, in accordance with the following provisions. The County shall provide notice to the Applicant by requesting access to that portion of the Property at least two (2) weeks prior to such access. The notice shall provide the time, location and extent of the work and excavations. All archaeological activities by the County on the Property shall be approved in advance by the Applicant and shall not interfere with operations of the Applicant's use. Any findings shall be shared with the Applicant. All artifacts shall be curated with the County and shall be transferred to the County with a deed of gift, which is acceptable to the County.

7. Environment

- a. Undisturbed Area – At least 32 acres of the 257 acres shown as part of the maximum extents plan for the 331 acre property identified as “Nokesville – Virginia Solar” on the Maximum Extents Plan prepared by Timmons Group dated 8/15/17 and revised 6/12/18 shall remain undisturbed hardwood forest. These acres shall be located in the northern portion of the site, outside of and generally between the two Resource Protection Areas onsite. Compliance shall be demonstrated on the final site plan.
- b. Supplemental Plantings – The Applicant shall plant the wooded areas, which are timbered, with native warm season grasses.
- c. RPA Areas – No grading, grubbing, or timbering shall occur within the RPA areas, 100-year flood plain, historical area, and the 50’ perimeter buffer.
- d. Non-RPA Areas –The Applicant shall not grade or grub within 50’ from any significant non-RPA stream, other streams, wetlands, and ponds, as identified by the U.S. Army Corps of Engineers, unless permitted by the applicable permitting agency for the purpose of crossing the relevant stream or wetlands. Timbering may be permitted pursuant to the normal limits of the Virginia Department of Forestry, leaving the root system intact, for the purpose of allowing growth up to a height of ten feet. Compliance shall be demonstrated on the final site plan.
- e. Parameters for Cutting of Trees – Trees shall only be cut in areas required for the Facility and within 150’ to the south, east, and west of the solar panels to prevent shading on the solar panels. Compliance shall be demonstrated on the final site plan. This cutting does not include buffer areas specified in Condition 5.d. above.
- f. Siting of Facility –The Facility shall be designed using land from the south east to the north west with the goal of leaving as much of the northern tree covered portion of the site intact as possible. Compliance shall be demonstrated on the final site plan.

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- g. Specimen Trees – Specimen trees have been field located to identify the full extent of the trees with the SUP plan. The Applicant shall protect specimen trees #2-7. The Applicant shall make commercially reasonable efforts to preserve other specimen trees based on the final design. Compliance shall be demonstrated on the final site plan with a tree preservation plan, which show all trees that are to be preserved, in order to aid in preserving the trees in good health after construction, meeting the minimum elements of Tree Preservation Plan Requirements found in the Landscaping Plan Selection and Cover Guide.
 - h. Wells and Drain Fields – Any wells or drain fields which are removed from service shall be done in compliance with the Virginia Department of Health’s recommendations. The removal from service shall occur prior to the completion of construction and compliance demonstrated prior to final site plan inspection and commencement of use.
 - i. Monetary Contribution – The Applicant shall make a monetary contribution to the Prince William Board of County Supervisors in the amount of \$75.00 per disturbed acre for water quality monitoring and/or drainage improvements and/or stream restorations projects. The contribution shall be made prior to, and as a condition of, site plan approval for the solar facility.
8. Fire and Rescue
- a. Emergency Access Roads – The Applicant shall provide internal emergency access roads that shall be 20’ wide and shall have a load bearing capacity sufficient to meet the 80,000 lbs. for a three axle emergency vehicle. The emergency access roads shall be provided from the primary and secondary access points into the site to the locations of the inverters. If these roads have a dead end length exceeding 150 feet in length, an approved turn-a-round (per the DCSM) that shall accommodate a 3 axle, 45’ long truck shall be provided. The precise layout of the roads shall be determined during the site plan process and demonstrated on the final site plan.
 - b. Fire Access Roads – A 10’ - 15’ access road (no weight threshold or paving requirement) shall be provided at approximately 300’ intervals between the solar panels. The precise layout of the roads shall be determined during the site plan process and demonstrated on the final site plan.
 - c. Emergency Access Plan – The Applicant shall develop an Emergency Access Plan to provide to the Fire Marshal’s Office during the site plan process. This plan shall provide specific details of how to respond to emergency situations including contact information and details regarding access to the locked facility. Specific signage, which provides an emergency contact number, shall be required at all entrances to the Property. Such plan shall be submitted to the Fire Marshal’s Office for its approval prior to final site plan approval.

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- d. Transformer Oil Leak Mitigation Plan – The Applicant shall provide a Transformer Oil Leak Mitigation Plan to the Fire Marshal’s Office during the site plan process.
 - e. Batteries – No batteries, for long-term storage of electricity, shall be located on the Property.
 - f. Education/Training – The Applicant shall provide training and information to the Fire Marshal’s Staff on how to safely respond to on-site emergencies at this solar facility prior to final site plan approval.
 - g. Access to Existing Structure – The existing structures, to the extent they remain in existence, shall continue to utilize existing access easement and shall not enter into the fenced line of the solar facility. Compliance shall be demonstrated on the final site plan.
9. Construction Considerations for Neighbors
- a. Limited Hours During Construction – All pile driving activity shall be limited to the hours from 8:00 a.m. to 6:00 p.m., Monday through Saturday.
 - b. Best Management Practices (BMP) – The project shall strictly adhere to and follow best management practices for the storm water plan. Compliance shall be demonstrated on the final site plan.
10. Police
- a. Security Fencing – The Facility shall be enclosed by a security fence with a minimum height of seven (7) feet with locked security gate. Compliance shall be demonstrated on the final site plan.
 - b. Signage – Approximately every 100’ along the fence, safety and security signage shall be posted. The signs shall state “no trespassing / no loitering, violators will be prosecuted.” Compliance shall be demonstrated on the final site plan.
 - c. Entrance Signage – All access and roads entering the Facility shall be marked by the Applicant with identifying signage and emergency contact information. Compliance shall be demonstrated on the final site plan.
11. Maintenance of Property
- a. Vegetation Maintenance – The grass around the solar facility shall be maintained such that it shall not be greater than twelve (12)” inches in height.
12. Parks and Recreation

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- a. The Applicant shall explore options to add public trails and interpretive structures or elements, such as kiosks, benches, and small picnic and open play areas to educate the community about solar facilities and how solar energy is generated. Compliance shall be demonstrated on the final site plan.
 - b. The Applicant shall work with the County Department of Parks and Recreation (DPR) during site plan review to provide trail easement(s) through the remaining acreage outside of the Facility fence line, of which there are at least 106 acres. The trails developed shall be consistent with the Prince William County Trail Standard available as of May 18, 2018. The trails shall be of type Class 3 or Class 4 to most closely match the existing trail at Nokesville Community Park, to which they will connect.
 - c. For both items above if:
 - (i) DPR develops and maintains the items above, the trail easement shall be permanent and shall convey with the Property; or
 - (ii) The Applicant develops and maintains the trail system, and the trail easement shall have a life equal to that of the Facility.
 - (iii) Compliance shall be demonstrated on the final site plan.
13. Project Removal – This Facility has an estimated life of approximately 35 years. Therefore, it will likely need to be removed at some point in the future. The Applicant shall be solely responsible for all costs to remove and decommission the Facility, and restore the Property to its original condition.
- a. Decommissioning – The Facility shall be considered abandoned if the solar energy farm is inactive, and completely or substantially discontinuing the delivery of electricity to an electrical grid, for a continuous 24-month period, unless a longer period is approved by the Zoning Administrator in consultation with other County departments and agencies, as needed. The Applicant shall provide notice to County Staff immediately upon the site becoming inactive and/or shutting down operation.
 - b. Timing – The Applicant shall remove the Facility ("decommissioning") within twelve (12) months of receipt of notice from the County ("County Notice"). If the Facility is not removed within the specified time after the County Notice, the County may cause the removal of the Facility with costs being borne by the Applicant.
 - c. Surety – Unless the Facility is owned by a public service corporation in the Commonwealth of Virginia, the net costs of decommissioning shall be secured by an adequate surety in a form approved by the County Attorney's Office, including but not limited to a letter of credit, cash, or a guarantee by an investment grade entity licensed to do business in the Commonwealth of Virginia posted within 30 calendar days of the Facility receiving its occupancy

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permit or equivalent from the County. If the Facility is sold or transferred to any other entity or individual that is not a public service corporation in the Commonwealth of Virginia, the new owner shall not commence the SUP use until such time as the adequate surety is provided and approved by the County. The initial surety amount shall be determined by a third-party engineer and approved by the County prior to final site plan approval. If surety is required, the cost estimates of the decommissioning shall be updated every five (5) years and provided to the County's Bond Administrator. At its sole option, the County may require the surety amount be increased based on the net cost of decommissioning.

- d. Deconstructed and Removed – As used herein “deconstructed and removed” shall mean (i) the removal from the surface of the Property, any Facility structures and facilities installed or constructed thereupon, including permanent foundations, structural supports, fences, and gravel, (ii) the filling in and compacting of all trenches or other borings or excavations made in association with the Facility, (iii) the removal of all debris caused by the Facility from the surface of the Property and (iv) restoration of the land to a condition reasonably similar to the condition prior to any development, including replacing top soil (if any is removed or eroded). Areas which were originally timbered will be replanted in timber, at a minimum planting density of 600 trees per acre for bare root or 450 trees per acre if container seedlings, with native species appropriate to the site. Denuded areas shall be restored with native warm season grasses.
- e. Soil and Water Sample Reports – Applicant shall provide soil and water sample reports ensuring that soil and water on the Property is free of toxic, heavy metals and contaminants, and ensure that the Property is suitable for agricultural production both prior to final site plan approval and after decommissioning is complete.

13. Transportation

- a. Restore Warrenton Road – Applicant shall, after construction is complete, restore Warrenton Road equal to the pre-construction condition. Compliance shall be demonstrated prior to final inspection and approval by the Transportation Department.
- b. Dust and Maintenance – Applicant agrees to controlling dust and addressing any road maintenance issues during construction period that are related to the construction of the solar facility.

14. Monetary Escalator – In the event the monetary contributions set forth in the development conditions are paid to the Prince William County Board of County Supervisors within eighteen (18) months of the approval of this special use permit, as applied for by the Applicant, said contributions shall be in the amounts stated herein.

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Any monetary contributions set forth in the development conditions, which are paid after eighteen (18) months following the approval of this special use permit, shall be adjusted in accordance with the Urban Consumer Price Index (CPI-U) published by the United States Department of Labor, such that , at the time the contributions are paid, they shall be adjusted by the percentage change in the CPI-U from the date eighteen (18) months after the approval of this special use permit to the most recently available CPI-I to the date the contributions are paid, subject to a cap of six (6%) percent per year, non-compounded.

Legend

Project Boundary (331 AC)	VA Roadways
Setback (50')	Cultural Site Avoidance Area (0.6 AC)
Parcel	Wetland Buffer (50ft)
Existing Structures	100 Year Floodplain
Tracker Array	Topographic Contour
7' Fence (no barbed wire)	10'
Drivable Area (20')	2'
Solar Inverter	Slope
Transmission Line	0 - 15%
Distribution Line	15 - 25%
Easement Boundary	>25%
Gas Line (Approximate)	

Delineated by Timmons Group on 2/27/2017

Riparian Protection Area

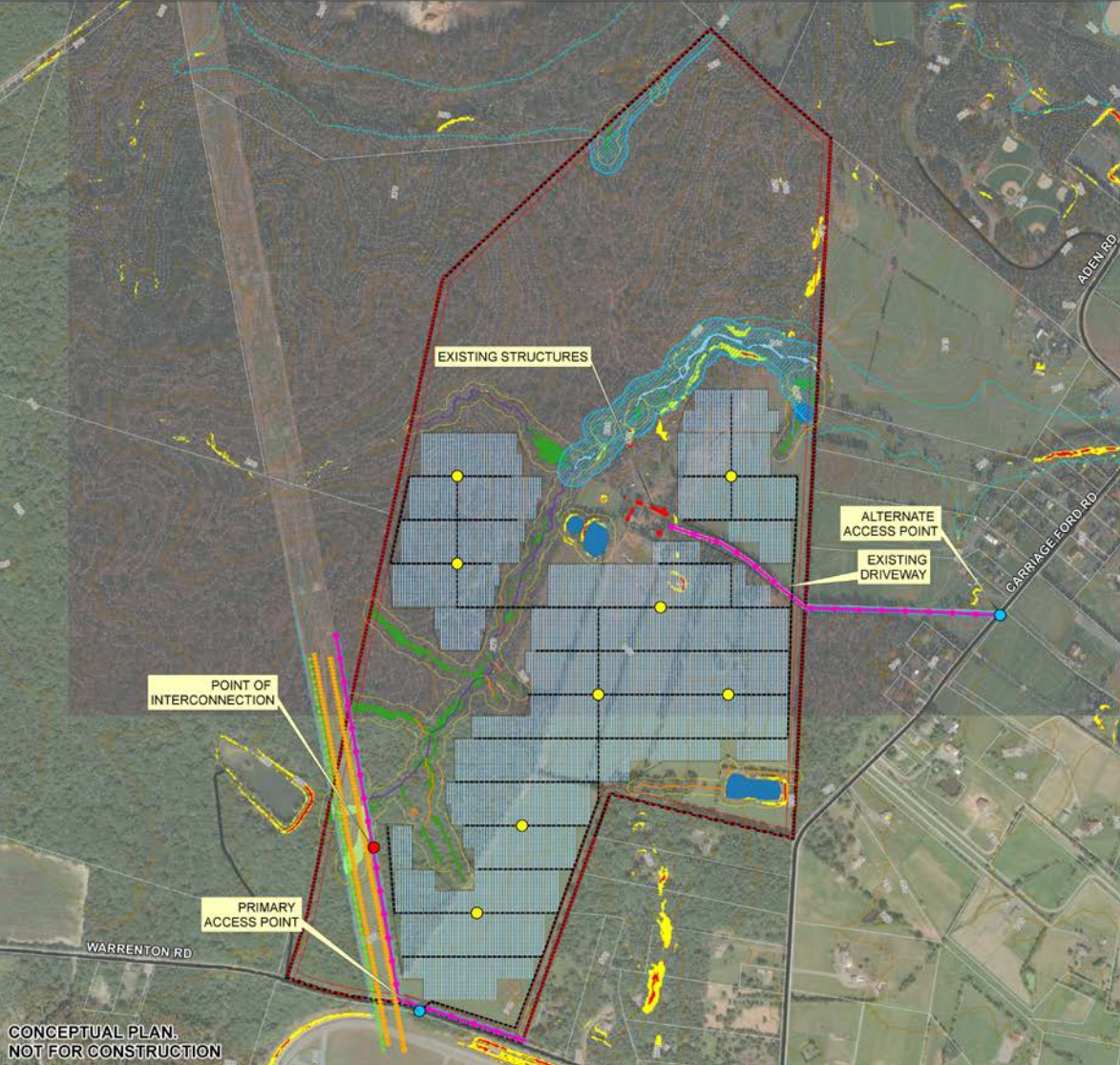
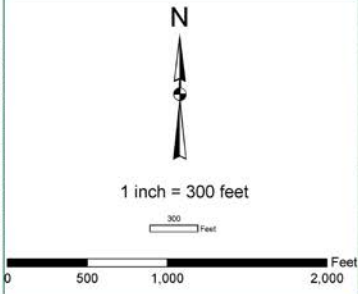
Stream

Perennial (R3)
Intermittent (R4)
Ephemeral (R6)

Wetland

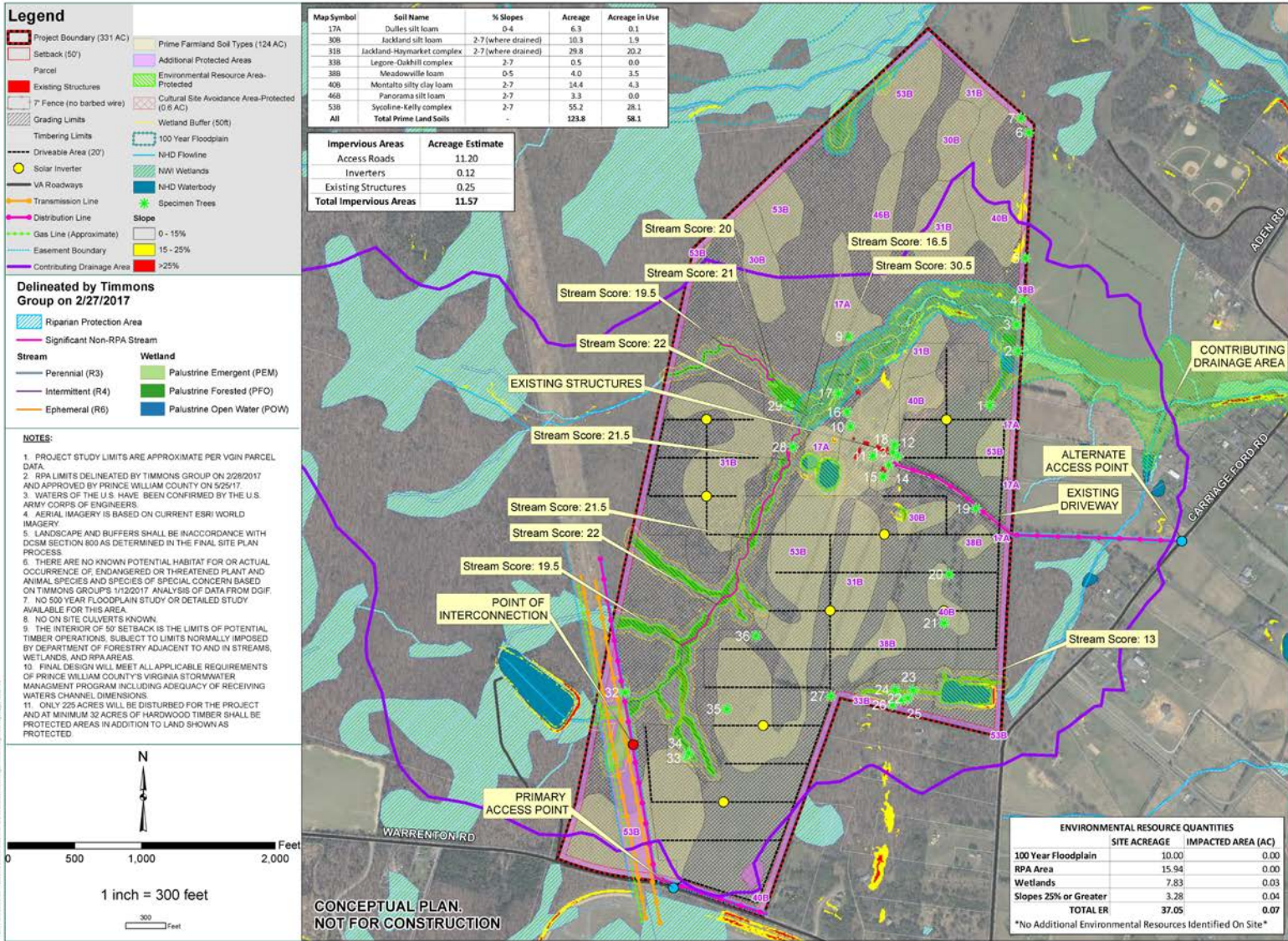
Palustrine Emergent (PEM)
Palustrine Forested (PFO)
Palustrine Open Water (POW)

- NOTES:**
1. PROJECT STUDY LIMITS ARE APPROXIMATE PER VGIN PARCEL DATA.
 2. RPA LIMITS DELINEATED BY TIMMONS GROUP ON 2/28/2017 AND APPROVED BY PRINCE WILLIAM COUNTY ON 5/25/17.
 3. WATERS OF THE U.S. HAVE BEEN CONFIRMED BY THE U.S. ARMY CORPS OF ENGINEERS.
 4. AERIAL IMAGERY IS BASED ON CURRENT ESRI WORLD IMAGERY.
 5. TOPOGRAPHIC CONTOURS ARE BASED ON USGS LIDAR DATA.
 6. THERE ARE NO KNOWN POTENTIAL HABITAT FOR OR ACTUAL OCCURRENCE OF ENDANGERED OR THREATENED PLANT AND ANIMAL SPECIES AND SPECIES OF SPECIAL CONCERN BASED ON TIMMONS GROUP'S 1/12/2017 ANALYSIS OF DATA FROM DGF.
 7. NO 500 YEAR FLOODPLAIN STUDY OR DETAILED STUDY AVAILABLE FOR THIS AREA.



THIS DRAWING PREPARED AT THE
10377 Oakdale Parkway, Suite 201, Richmond, VA 23238
(804) 270-8000 FAX (804) 270-8000 www.timmons.com

Site Development	Residential	Infrastructure	Technology	Environmental
DATE 05/24/17	DESIGNED BY R. THOMAS	REVISION DESCRIPTION SECOND ROUND OF COMMENTS REVIEW	DATE 06/12/2018	DRAWN BY E. FORDNEY
05/24/17	CHECKED BY R. THOMAS	SCALE AS SHOWN	<p style="font-size: 2em; font-weight: bold; text-align: center;">TIMMONS GROUP</p> <p style="text-align: center; font-weight: bold;">NOKESVILLE SOLAR FACILITY PRINCE WILLIAM COUNTY, VIRGINIA</p> <p style="text-align: center; font-weight: bold;">PLAN CASE # SUP2018-00049</p>	
JOB NO. 36878-009		SHEET NO. J OF 5		



THE DRAWING PREPARED AT THE OFFICE OF THE ENGINEER, 10017 Ardenway Parkway, Suite 201 (Richmond, VA 23225) (703) 493-8000 (800) 742-1010 (Fax 703) 493-1010 www.timmons.com

YOUR SOURCE ACCREDITED THROUGH DQMS

DATE 06/12/2018

DESIGNED BY E. FORDNEY

CHECKED BY R. THOMAS

SCALE AS SHOWN

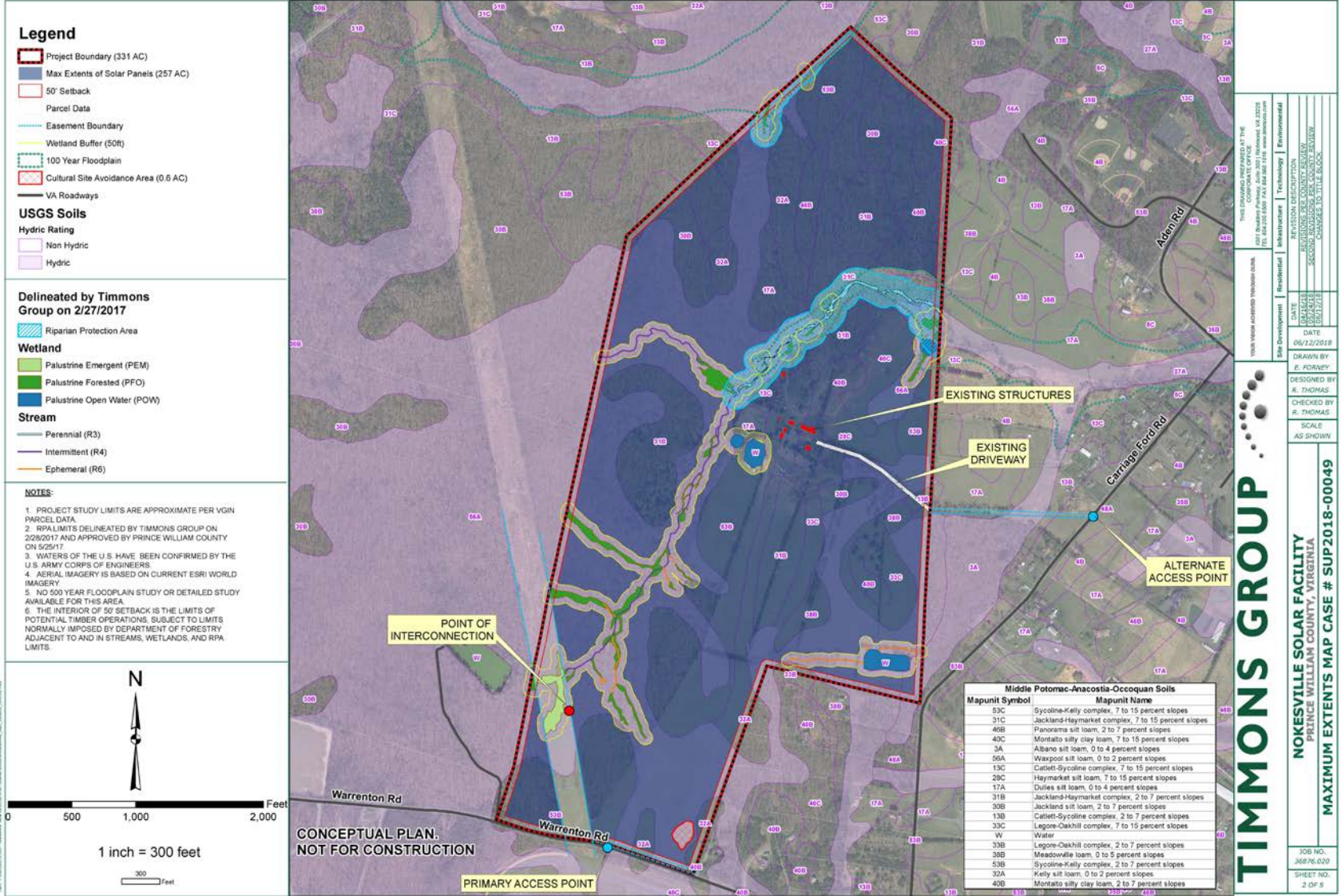
JOB NO. 1667676-039

SHEET NO. 3 OF 5

REVISION DESCRIPTION
 15054711 SECOND REVISION FOR LOCAL ROADWAY CHANGES TO TILE BLOCK

Site Development | **Residential** | **Infrastructure** | **Technology** | **Environmental**

TIMMONS GROUP
 NOKESVILLE SOLAR FACILITY
 PRINCE WILLIAM COUNTY, VIRGINIA
 ENVIRONMENTAL CONSTRAINTS ANALYSIS MAP CASE # SUP2018-00049



TIMMONS GROUP

**NOKESVILLE SOLAR FACILITY
PRINCE WILLIAM COUNTY, VIRGINIA**

MAXIMUM EXTENTS MAP CASE # SUP2018-00049

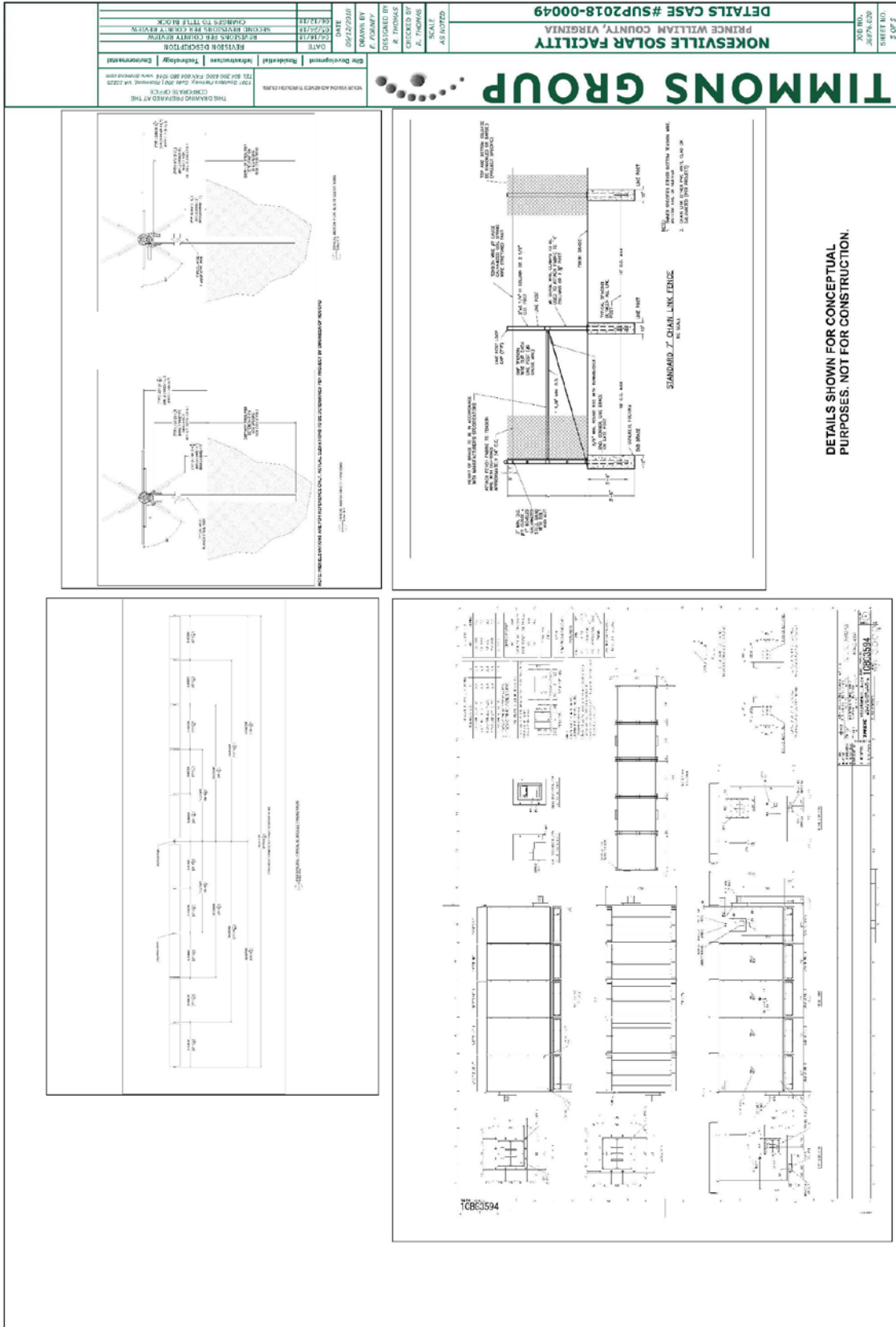
THE DRAWING PREPARED AT THE OFFICE OF THE ENGINEER, 10377 DUBLIN AVENUE, SUITE 201, FARMERSVILLE, VA 22029. TEL: 540-202-6000 FAX: 540-202-6110 WWW.TIMMONSGROUP.COM

YOUR DESIGNATED THROUGH DATA: Residential | Infrastructure | Technology | Environmental

DATE: 06/12/2018
DRAWN BY: E. FORNEY

DESIGNED BY: R. THOMAS
CHECKED BY: R. THOMAS
SCALE: AS SHOWN

JOB NO.: 30678-039
SHEET NO.: 2 OF 5



DETAILS SHOWN FOR CONCEPTUAL PURPOSES. NOT FOR CONSTRUCTION.

TGBC0594

Attachment E – Historical Commission Resolution

HISTORICAL COMMISSION RESOLUTION

MOTION: CUNARD

**May 8, 2018
Regular Meeting
Res. No. 18-021**

SECOND: JOHNS

RE: LAND DEVELOPMENT RECOMMENDATIONS

ACTION: APPROVED

WHEREAS, the Prince William County Historical Commission seeks to identify, preserve and protect historic sites and structures in Prince William County; and

WHEREAS, the Prince William County Historical Commission’s review of pending land development applications assists in determining the necessity for cultural resource surveys and other research and evaluations; and

WHEREAS, the Prince William County Historical Commission believes that the identification, preservation and protection of historic sites and structures throughout Prince William County is well served by this action;

NOW, THEREFORE, BE IT RESOLVED, that the Prince William County Historical Commission does hereby recommend to the Prince William County Planning Commission the action(s) noted for the following properties:

<u>Case Number</u>	<u>Name</u>	<u>Recommendation</u>
PLN2014-00145	SUP, Hendrick Honda 2 nd Submission	No further work
REZ2018-00020	Albrite Industrial Road	No further work
PFR2017-00015	Virginia Solar Facility 2 nd Submission	Concur with County Archaeologist’s recommendations regarding revisions to both the Phase I archaeology report and the Architectural report and including: Phase II archaeological evaluation on 44PW2028 and other sites as warranted; Mitigation Plan in the event the Phase II evaluations find an archaeology site significant and the site will be disturbed by construction, the Applicant will either initiate mitigation of the archaeology site through Section 106 of the National Historic Preservation Act (NHPA), with the County as a consulting party; or, if Section 106 review is not

Attachment E – Historical Commission Resolution

May 8, 2018
 Regular Meeting
 Res. No. 18-021
 Page 2

<u>Case Number</u>	<u>Name</u>	<u>Recommendation</u>
		required, the Applicant will prepare a mitigation plan for approval by the Planning Director or his designee. If a County mitigation plan is required, its stipulations shall be completed prior to final site plan approval. The mitigation plan shall meet the standards set forth in the current version of the Virginia Department of Historic Resources (VDHR) Guidelines for Conducting Cultural Resource Survey in Virginia and also the Advisory Council on Historic Preservation's (ACHP) Recommended Approach for Consultation on Recovery of Significant Information from Archeological Sites.
PFR2018-00014	Connect to Sewer - Mary J. Champ Way	Phase I study to include shovel test pits and, if warranted, Phase II evaluation and Phase III data recovery study. Artifacts to be donated to and curated with the County.
PFR2018-00018	12175 Vint Hill Road	Phase I study to include shovel test pits and, if warranted, Phase II evaluation and Phase III data recovery study. Artifacts to be donated to and curated with the County.
SUP2018-00029	Camp Snyder Outdoor Range SUP Amendment	No further work
SUP2018-00039	Koons Used Car Outlet SUP Amendment	No further work

Votes:

Ayes: by acclamation

Nays: none

Absent from Vote: none

Absent from Meeting: Duley, Smith

MOTION CARRIED

ATTEST: 
 Secretary to the Commission