

Environmental Assessment

**Amelia Solar I Energy Project
Amelia Court House, Amelia County Virginia**



**U.S. Department of Agriculture
Rural Utilities Service (RUS)**

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LIST OF ACRONYMS

ACHP	Advisory Council on Historic Preservation
ACS	American Community Survey
ACOE	Army Corps. Of Engineers
AMSL	Above mean sea level
ASTM	American Society for Testing and Materials
BGEPA	Bald and Golden Eagle Protection Act
BMP	Best Management Practice
CAA	Clean Air Act
CBRA	Coastal Barrier Resources Act
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
DCR	Department of Conservation and Recreation
DEQ	Department of Environmental Quality
DGIF	Department of Game and Inland Fisheries
DNH	Division of Natural Heritage
EA	Environmental Assessment
EJSCREEN	Environmental Justice Screening and Mapping Tool
EMF	Electromagnetic Fields
EMI	Electromagnetic Interference
E.O.	Executive Order
EPC	Engineering, procurement and construction
ePIX	Electronic Project Information Exchange
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FPPA	Farmland Protection Policy Act
HUD	Housing & Urban Development
IA	Interconnection Agreement
IPaC	Information, Planning and Conservation
LESA	Land Evaluation Site Assessment
MTBA	Migratory Bird Treaty Act
MW ac	Megawatts alternating current
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historical Preservation Act
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resource Conservation Service

LIST OF ACRONYMS (CONTINUED)

NRI	National Rivers Inventory
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
O&M	Operations and Management
OSHA	Occupational Safety and Health Administration
PBR	Permit by Rule
PJD	Preliminary Jurisdictional Determination
PPA	Power purchase agreement
RD	Rural Development
REC	Recognized environmental conditions
RUS	Rural Utilities Service
SEC	Southside Electric Cooperative
SFHA	Special Flood Hazard Area
SPCC	Spill Control and Countermeasures Plan
SSA	Sole source aquifer
SWPPP	Stormwater Pollution Prevention Plan
THPO	Tribal Historic Preservation Officer
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
USFWS	United States Fish and Wildlife Service
VaFWIS	Virginia Fish and Wildlife Information Service
VCRIS	Virginia Cultural Resource Information Services
VDHR	Virginia Department of Historic Resources
VDOT	Virginia Department of Transportation
WOUS	Waters of the United States

1.0 PROJECT DESCRIPTION

The Amelia Solar I project is small-scale utility solar project which will be located southeast of the intersection of Genito Road and Grub Hill Church Road in the town of Amelia Court House, Virginia. The Proposed Project will disturb approximately 41.5 acres of a larger, 98.9-acre parent parcel identified as 12 2N by the Amelia County assessor (Proposed Project Area). The Proposed Project Area is currently agricultural land with a small portion of forested land intersected by a transmission line, and land use in the vicinity includes agricultural lands, forestland, and scattered residences.

The Proposed Project will generate a total of 5 megawatts alternating current (MW ac) of clean, reliable solar energy when complete. The Proposed Project would utilize solar modules, mounted on a steel racking system which will be anchored into the ground using driven steel piers, to convert the sun's energy to usable power. The estimated duration of construction is 4 months and it is anticipated that the Proposed Project will operate for a minimum of 35 years. The Proposed Project Area can be returned to its pre-construction state once the Proposed Project has reached the end of its useful life.

The Proposed Project would be accessed from Genito Road. An interior road would be constructed inside the perimeter and is anticipated to be flat and will match existing grades to minimize earth work. The Proposed Project Area will be secured by a security fence with standard gates for emergency and maintenance vehicles.

The Proposed Project will interconnect to Southside Electric Cooperative (SEC) electrical distribution system located offsite. SEC has existing three-phase infrastructure running on the north side of Genito road. The Proposed Project will utilize the existing three-phase lines that leave the eastern side of the Amelia substation. Approximately 1,850 feet east of the substation, the utility will be installing new a conductor and three new poles which will run directly south across Genito road spanning 250 feet in order to reach the Proposed Project. SEC would construct all necessary distribution system upgrades to interconnect the facility to their electrical system at a delivery point on the Proposed Project Area.

HCE Amelia Solar I (Applicant) will contract with an engineering, procurement, and construction (EPC) contractor to build the facility, which would include erecting the security fence, foundations, and racking system before installing the solar modules and inverters. An electrical contractor would wire the installed electrical components and work with SEC to complete the final facility commissioning. An operations and maintenance (O&M) contractor would maintain the facility.

1.1 Purpose and Need

United States Department of Agriculture (USDA) Rural Development (RD) is a mission area that includes three federal agencies – Rural Business-Cooperative Service, Rural Housing Service and Rural Utilities Service. The agencies have in excess of 50 programs that provide financial assistance and a variety of technical and educational assistance to eligible rural and

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tribal populations, eligible communities, individuals, cooperatives, and other entities with a goal of improving the quality of life, sustainability, infrastructure, economic opportunity, development, and security in rural America. Financial assistance can include direct loans, guaranteed loans, and grants in order to accomplish program objectives. The Applicant is seeking financial assistance from the Rural Utilities Service (RUS). RUS programs are administered based on regulations within RD 4280 Subpart A.

The Applicant proposes to construct a 5-MW solar facility approximately eight miles north of the town of Amelia Court House, Virginia. The purpose of the Proposed Project is to provide a source of long-term renewable energy for rural Virginia residents.

The Applicant and their lender are jointly seeking financial assistance via the RUS to enable credit to be extended to the Proposed Project. Utilizing the loan guarantee process will allow the lender to extend credit to the Proposed Project and in turn, the borrower will be able to build a renewable energy system. The Proposed Project will provide positive economic impacts by increasing the tax base for the County. The Proposed Project will also provide long-term, emission free electricity to the local utility.

SEC is charged to provide reliable and affordable power to homes and businesses in Virginia. HCE Amelia Solar I can provide reliable power to customers in Amelia County at competitive rates. Additionally, Virginia residents have expressed interest in procuring clean power from a solar farm; however, rooftop solar is cost prohibitive for most families due to the high upfront cost. HCE Amelia Solar I solve this dilemma by providing solar power from a solar farm located within Virginia. The Applicant is responding to a regional need for an affordable, reliable, and consistent supply of electric power at competitive rates to Virginia residents.

Pursuant to the National Environmental Policy Act of 1969, National Historic Preservation Act of 1966 as amended and 7 CFR 1970 Rural Development Policy and Procedures, an Environmental Assessment (EA) has been prepared to evaluate the environmental impacts of the construction and operation of a solar farm for the review of USDA Rural Development Rural Utility Service.

2.0 ALTERNATIVES EVALUATED INCLUDING THE PROPOSED ACTION AND NO ACTION

2.1 Introduction

The National Environmental Policy Act (NEPA) requires that Federal agencies describe alternatives, including the “No Action” and “Proposed Action” alternatives, in their environmental documents (see Sections 102(2)(C)(iii) and 102(2)(E) of NEPA and 40 CFR § 1502.14). In accordance with 7 CFR § 1970.13(a), the Proposed Project only needs to be evaluated with a “No Action” alternative since the Applicant is proposing to only complete a project at one specific site and no adverse environmental impacts are anticipated. The Applicant has an interconnection agreement (IA) at this specific location and a power purchase agreement (PPA) to only sell power from this specific location/facility; therefore, the Proposed Project should be evaluated on the basis that No Action should occur if the Proposed Project poses adverse environmental impacts that cannot be mitigated. Both the IA and PPA shall be provided to USDA Rural Development as part of the credit evaluation for the project.

2.2 Proposed Action Alternative

Under the Proposed Action Alternative, USDA would consider providing financial assistance to the Applicant to construct the Proposed Project as described in the Project Description section of this document. The Proposed Project will have a positive economic impact on the area by expanding the tax base in the County and would assist the Applicant and SEC in meeting the demands of its customers. The Proposed Project will also help meet national and state goals to expand the use of renewable energy.

Selection of a viable solar energy generation project site is based on several factors including:

- Quality of terrain including existing topography;
- Local transmission capacity;
- Potential conservation and environmental impacts;
- Opportunities and limitations presented by local zoning and land use ordinances and the existing land uses at and proximate to a potential site; and
- The availability of land of sufficient area for a solar facility.

The Proposed Project Area was selected based on proximity to an existing substation with capacity to receive power generated by the Project; suitable topography resulting in minimal grading to construct the Proposed Project; minimal tree clearing required; no wetland and stream impacts; appropriate local zoning district; and local support.

2.3 No Action Alternative

Under the No Action Alternative, USDA would not provide financial assistance to the Applicant, and the Proposed Project may not be constructed. The No Action Alternative is not responsive

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to the needs of the Applicant and SEC in fulfilling the demands of its customers for affordable and reliable solar energy. Furthermore, the opportunity to reduce consumer consumption of non-renewable energy will be forgone and the environmental benefit of this shift in energy supply unrealized. Other traditional generation technologies utilize large amounts of water and typically have high levels of greenhouse gas emissions (coal-fired and combined cycle natural gas facilities). In this analysis, the No Action Alternative serves as the baseline environmental condition to evaluate the impacts of the Proposed Project.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

The affected environment and environmental consequences of the Proposed Project and alternatives are discussed in this section. Also outlined in this section are mitigation measures necessary to compensate for unavoidable adverse impacts to specific environmental resources.

3.1 Land Ownership and Land Use

This section describes an overview of the existing land use at and surrounding the Proposed Project Area and the potential impacts to those resources associated with the Proposed Project.

3.1.1 Affected Environment

Land use is defined as the way people use and develop land, including agricultural, residential and industrial development. Many municipalities develop zoning ordinances and planning documents to control the direction of development and to keep similar land uses together.

General Land Ownership and Use

According to the Amelia County Assessor, the Proposed Project Area is privately owned and will be leased by HCE Amelia Solar I for the operational life of the facility. This Proposed Project Area is situated in a mix-use area north of the town of Amelia Court House, consisting of agricultural lands, undeveloped wooded areas, and scattered residences. The Proposed Project Area is currently agricultural land with a small portion of forested land; conditions that date back to at least 1963. The Proposed Project Area is bound by Genito Road to the north, residences, agricultural fields, and privately owned forested areas to the east, privately owned forested areas, agricultural fields, and a private residence to the south, and Grub Hill Church Road to the west. A transmission lines run north to south through the western portion of the Proposed Project Area.

The Proposed Project is below the threshold requiring a Virginia Department of Environmental Quality (DEQ) Solar Permit by Rule (PBR) authorization. According to 9VAC15-60-130, projects with a rated capacity of 5 megawatts or less require notification to DEQ and submission of a certification by the governing body of the locality that the project complies with all applicable land use ordinances (reference Appendix IV).

Formally Classified Lands

Formally classified lands are properties administered either by federal, state or local agencies or have been given special protection through formal legislative designation, including but not limited to: National parks, monuments, historic landmarks, battlefield and military parks, historic sites and parks, natural landmarks, wildlife refuges, seashores, lake shores and trails, wilderness areas, wild, scenic and recreational rivers, state parks, fish and wildlife

management areas, public lands and Native American owned lands, see Table 1.

Table 1. Formally Classified Lands

Formally Classified Land	Source	Determination of Effect
Coastal Barriers/National Seashores	https://koordinates.com/layer/20522-us-coastal-zone-management-act-boundary/	No Effect
	https://www.fws.gov/CBRA/Maps/Mapper.html	
National Forests	https://www.fs.fed.us/	No Effect
National Parks	https://www.nps.gov/state/va/index.htm	No Effect
National Trails	https://www.nps.gov/subjects/nationaltrailssystem/national-scenic-trails.htm	No Effect
	https://www.nps.gov/subjects/nationaltrailssystem/national-historic-trails.htm	
Wild & Scenic Rivers	https://www.rivers.gov/virginia.php https://www.epa.gov/nepa/nepassist	No Effect
National Rivers Inventory	https://www.nps.gov/subjects/rivers/nationwide-rivers-inventory.htm	No Effect
National Wildlife & Refuges	https://www.fws.gov/refuges/friends/friendsLocatorMaps/Virginia.html	No Effect
National Wilderness	https://www.wilderness.net/NWPS/maps	No Effect
Federal Lands	https://www.epa.gov/nepa/nepassist	No Effect
Protected Lands & State Parks	http://www.protectedlands.net/map/ https://www.dcr.virginia.gov/state-parks/find-a-park	No Effect

A review of mapping systems from various state and federal agencies: U.S. Fish and Wildlife Service (USFWS), USDA Natural Resources Conservation Service (NRCS) Soil Mapper, the Coastal Barriers/National Seashores, the National Parks Service (NPS) in identification of National Forests, Landmarks, Parks, and Trails, Wild & Scenic Rivers and Nationwide Rivers Inventory, National Wildlife & Refuges, National Wilderness, Federal Lands and State Parks did not identify any formally classified lands in or adjacent to the Proposed Project Area.

3.1.2 Environmental Consequences

Under the Proposed Action, effects on land use and formally classified lands would be negligible. Construction and operation of the Proposed Project would not affect formally classified lands as they are absent from the Proposed Project Area and nearby surroundings. There also are no potential impacts associated with the interconnection.

3.1.3 Mitigation

No mitigation measures are proposed as there are no anticipated impacts to formally classified lands.

3.2 Geology, Soils and Prime Farmland

This section describes an overview of the existing geological resources at the Proposed Project Area and the potential impacts to those resources associated with the Proposed Project. Components of geological resources that are analyzed include geology, soils, and prime farmlands.

3.2.1 Affected Environment

Geology

The Proposed Project Area is located in the Piedmont Physiographic Province and is underlain by crystalline bedrock formations that exhibit a high degree of geologic complexity. The region is also characterized by the bedrock being overlain by a mantle of residual soil and saprolite. Saprolite forms from in-situ chemical weathering of the crystalline bedrock that often retains the fabric, texture, and structure of the parent rock. The elevation within the Proposed Project Area ranges between ±360 feet above mean sea level (AMSL) in the northwestern portion to ±310 feet AMSL in the southeastern portion.

Soils

According to the NRCS Web Soil Survey, the Proposed Project Area consists of one unique soil unit (as illustrated in Table 2). The Cecil series consists of well drained, moderately permeable soils that have been formed in residuum weathered from felsic, igneous, and high-grade metamorphic rocks of the Piedmont uplands. The soils are very deep and exist on ridges and side slopes of the Piedmont uplands.

Prime Farmland

The Farmland Protection Policy Act of 1981 (FPPA) was established in order to minimize the extent of unnecessary and irreversible conversion of farmland to nonagricultural uses contributed by Federal programs. The regulation's ultimate goal was to reduce the rate and amount of adaptation of the nation's farmlands, forest lands and range lands which impairs the ability to produce sufficient domestic needs and export markets.

Upon review of the Proposed Project Area's Farmland Classification obtained through the Web Soil Survey, it was determined that approximately 72.7%, or 29.5 acres, of the Proposed Project Area are identified as prime farmland soils for Amelia County while 27.3%, or 11.1 acres, of the Proposed Project Area is classified as farmland of statewide importance (Table 2; Appendix IV).

Table 2. Soil Types

Map Unit Name	Map Unit Symbol	Acres	Percent	Farmland Classification
Cecil fine sandy loam 2 to 7 percent slopes	3B	29.5	72.7%	Prime Farmland
Cecil fine sandy loam 7 to 15 percent slopes	3C	11.1	27.3%	Farmland of Statewide Importance

The NRCS defines prime farmland soils in the FPPA as soils with an adequate and dependable source for water, favorable temperatures and growing season, acceptable acidity/alkalinity level, few or no rocks, sufficient permeability for water and air, and slopes averaging zero to six percent.

Form AD-1006, Farmland Conversion Impact Rating, is used to determine whether a site is farmland subject to the FPPA. This impact is based on soil characteristics, as well as site assessment criteria, such as agriculture and urban infrastructure, support services, farm size, compatibility factors, on-farm investments and potential farm production loss to the local community and county.

Consultation with the NRCS was initiated on June 18, 2020. Louise Jacques, Area Resource Soil Scientist, assisted in the completion Parts II through V of the Form AD-1006 on June 19, 2020. The USDA-RD, as the lead federal agency, is responsible for completing Parts VI and VII of the form. The total points on the form equaled 118. A score below 160 indicates the Proposed Project would not convert important farmland (reference Appendix IV).

3.2.2 Environmental Consequences

Under the Proposed Action, potential impacts include soil erosion, loss of soil productivity and the establishment of noxious weeds on the soil surface. Construction activities such as vegetation clearing, grading, and trenching may also increase erosion potential by destabilizing the soil surface; additionally, soil compaction can result from the movement of heavy equipment. These impacts would be minimized using best management practices (BMPs) and short-term in nature. The Proposed Project will be constructed and operated in accordance with the approved erosion and sedimentation control plan and National Pollutant Discharge Elimination System (NPDES) Permit. A full decommissioning plan has also been submitted and approved by the County and will be done at the Proposed Project’s expense. The interconnection includes the installation of three new power poles which only contribute a minimal amount of disturbance and would not be considered a conversion of prime or important farmland.

3.2.3 Mitigation

Best management practices (BMPs) for soil erosion and sediment control measures, such

as sediment basins, temporary diversion ditches, and silt fencing around soil stockpiles, will be used to minimize the potential for increased erosion and runoff. Post-construction, the disturbed soils will be stabilized and re-vegetated in order to reduce the potential for erosion impacts during facility operations.

3.3 Floodplains

This section describes an overview of the existing floodplain resources at the Proposed Project Area and the potential impacts to those resources that would be associated with the Proposed Project.

A floodplain is any land area susceptible to being inundated by floodwaters from any source. Floodplains are essential to clean water, recharge of water supplies, reduction of flood risks and protection of property, human safety, health and welfare and fish and wildlife habitat. Proper floodplain management will reduce flood losses and ensure the protection of the natural resources and functions of floodplains. The relevant floodplain area to be evaluated is an area that has either a one-percent probability of flood occurrence in a given year (100-year flood) or a 0.2-percent probability of flooding in a given year (500-year flood).

Executive Order (E.O.) 11988, *Floodplain Management*, requires federal agencies to avoid actions, to the extent possible, where there are long and short-term adverse impacts associated with the occupancy or modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practical alternative. Facilities located in a floodplain may be damaged or destroyed by a flood or may change the flood-handling capability of the natural floodplain or the pattern or magnitude of flood flows.

3.3.1 Affected Environment

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Number 51007C0075C (effective 4/16/2009), the entire Proposed Project Area (to be disturbed/constructed) is located outside the Special Flood Hazard Area (SFHA) and 100-year and 500-year floodplain zones (reference Appendix V).

3.3.2 Environmental Consequences

Under the Proposed Action, there would be no impacts to floodplains as they are absent from the Proposed Project Area and the Proposed Project will not be located in a SFHA. Additionally, the Proposed Project will not result in any impacts that would result in any increases to the 100-year or 500-year flood elevation or present barriers to floodway passage within the vicinity of the Proposed Project Area. There also are no potential impacts associated with the interconnection.

3.3.3 Mitigation

No mitigation measures are proposed as there are no anticipated impacts to the resource.

3.4 Wetlands

Federal Agencies are required to avoid, wherever possible, adverse impacts to wetlands, minimize wetlands destruction and preserve the values of wetlands, and to avoid, to the extent possible, the long- and short-term adverse impacts associated with destruction or modification of wetlands, and avoid direct and indirect support of new construction in wetlands wherever there is a practicable alternative under Executive Order 11990 Protection of Wetlands 1977. Under USDA's Land Use Policy, Department Regulation 9500-3, the Agency is responsible for assuring that Agency programs discourage the unwarranted alteration of wetlands or the unwarranted expansion of the peripheral boundaries of existing settlements. Section 363 of the Consolidated Farm and Rural Development Act (7 U.S.C. 2006e) 1990, known as the CON Act, prohibits the use of loan funds for certain purposes. Under the CON Act the Secretary of Agriculture shall not approve any loan under this title to drain, dredge, fill, or level or otherwise manipulate a wetland, or to engage in any activity that results in impairing or reducing the flow, circulation, or reach of water, except in the case of activity related to the maintenance of previously converted wetlands, or in the case of such activity that is already commenced prior to the enactment of this section. This project is not subject to the provisions of the Con Act. The Agency shall not assist in actions that would convert these lands to other uses unless there is a demonstrated, significant need for the project or there are no practicable alternative actions or sites that would avoid conversion, or if conversion is unavoidable, reduce the number of acres to be converted or encroached upon directly or indirectly.

Regulatory oversight of wetlands falls under Section 404 of the Clean Water Act (CWA) and permits are administered by the U.S. Army Corps of Engineers (ACOE) with oversight by the U.S. Environmental Protection Agency (USEPA). Section 404 established a Federal permitting program that requires anyone who is proposing to place dredged or fill material into "waters of the United States" (WOUS), which includes wetlands, to obtain a permit from the ACOE.

3.4.1 Affected Environment

Soils data, United States Geological Survey (USGS) topographic maps, aerial imagery, and the National Wetland Inventory (NWI) map were reviewed. A small area of hydric soils is depicted within the Proposed Project Area; however, the ratings for Cecil soils with slopes of 7 to 15 percent are low – suggesting only 3% of the map unit meets the criteria for hydric soils. The NWI map does not depict any wetlands on the Proposed Project Area (reference Appendix VI).

Timmons Group (Timmons) prepared a Jurisdictional Waters of the U.S. delineation package in August of 2019 in order to identify WOUS, including stream and wetland boundaries in accordance with the 1987 ACOE Wetland Delineation Manual, the Regional Supplement to the ACOE Wetland Delineation Manual, and the Eastern Mountains and Piedmont Region (Version 2.0). Timmons requested a Preliminary Jurisdictional Determination (PJD) from the

ACOE in August of 2019. The ACOE responded in a letter dated December 16, 2019 confirming the delineations outlined in Timmons' Wetland Delineation report. This determination concluded that there are 0.16 acres of non-tidal wetlands within the parent parcel (reference Appendix VI).

3.4.2 Environmental Consequences

Under the Proposed Action, impacts to wetland are not anticipated. While there are delineated, jurisdictional features located within the Proposed Project Area, the Proposed Project has been designed to avoid these features. Short-term and minor adverse water quality impacts may occur during the construction of the Proposed Project. These impacts would be associated with soils from disturbed areas being washed by storm water into adjacent waters during rainstorm events; however, these impacts would be avoided with the establishment of site-specific BMPs and would not significantly alter water quality conditions. The Proposed Project's interconnection includes the installation of three new power poles which will only contribute a minimal amount of disturbance and will not be located within or near to delineated wetlands.

3.4.3 Mitigation

BMPs and Stormwater Pollution Prevention Plan (SWPPP) will be developed and utilized during the construction phase to protect the soils and eliminate or minimize any potential erosion into any jurisdictional waters, including wetlands. When disposing of excess, spoil or other construction materials on public or private property, wetlands will not be filled in or otherwise converted. Compost filter socks, conveyance channels, sediment basins, emergency basin spillways, silt fence, silt fence rock outlets and silt fencing around stockpiles will be used as temporary measures during construction to control the flow of water. Additionally, ground vegetation will be maintained throughout the operational life of the facility to reduce erosion.

3.5 Water Resources

This section provides an overview of water resources at the Proposed Project Area and addresses water quantity and quality issues related to discharges to or appropriations from surface or ground water, ground water protection programs (e.g., sole source aquifers and recharge areas) and water quality degradation from temporary construction activities. Water quality and quantity changes can impact other environmental resources including but not limited to groundwater and drinking water supplies, threatened and endangered species, other fish and wildlife species and wetlands. Impacts to surface and/or ground water will be the Applicant's responsibility and permitting requirements, typically through state agencies, must be adhered to.

3.5.1 Affected Environment

The USEPA defines a sole source aquifer (SSA) as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. These areas may have no alternative drinking water source(s) that could physically, legally, and economically supply all those who depend on the aquifer for drinking water. All applicant proposals that have the potential to contaminate a designated SSA or adversely affect an SSA recharge area are subject to USEPA review. Pursuant to Section 1424(e) of the Safe Drinking Water Act (Pub. L. 93-523), no commitment for federal financial assistance may be entered into for any project which USEPA determines may contaminate the SSA so as to create a significant hazard to public health. The USEPA's sole source aquifer (SSA) map does not depict the Proposed Project Area within or near an SSA (reference Appendix VII).

The Proposed Project will be located within the Appomattox watershed (Hydrological Unit Code: 02080207). The nearest waterbody to the Proposed Project Area is an unnamed freshwater pond, located approximately 800 feet south of the Proposed Project Area. The Proposed Project Area drains south to unnamed tributaries of Myrtle Branch, which flows south into Flat Creek, and ultimately into the Appomattox River. The Appomattox River bounds Amelia County to the north and most of the eastern and western borders of the County.

3.5.2 Environmental Consequences

Under the Proposed Action, impacts to water resources would be minimal. There are no anticipated impacts to groundwater aquifers associated with the Proposed Project. Wastewater will not be generated, and process water will not be required for construction or operation of the Proposed Project. The Proposed Project will only add minor amounts of impervious surfaces to the Proposed Project Area and vegetation will be maintained wherever possible throughout the operational life of the facility.

Additionally, the Proposed Project does not include any work related to water distribution and does not include the construction or removal of any water intake facilities, therefore, impacts to water quantity are not anticipated. There also are no potential impacts associated with the interconnection.

3.5.3 Mitigation

Depending on local requirements, a Stormwater Management (SWM) plan may be required. SWM requirements should be requested from the appropriate County/Town office. [References: Virginia Stormwater Management Act, Virginia Code 62.1.44.15 et seq.; Virginia Stormwater Management Program (VSMP) Permit Regulations, 9 VAC 25-870-54 et seq.] Additional guidance may be obtained from DEQ's Office of Stormwater Management.

For any land disturbing activities equal to or exceeding one acre, or equal to or exceeding

2,500 square feet in all areas of the jurisdictions designated as subject to the Chesapeake Bay Preservation Area Designation and management Regulations adopted pursuant to the Chesapeake Bay Preservation Act, the operator or owner of a construction project is required to register for coverage under the General Permit for Discharges of Stormwater from Construction Activities (VAR10) and develop a project-specific SWPPP. The SWPPP must be prepared prior to submission of the registration statement for coverage under the general permit and it must address water quality and quantity in accordance with the VSMP Permit Regulations. General information and registration forms for the General Permit are available from DEQ at <http://www.deq.virginia.gov/Programs/Water/StormwaterManagement/VSMPPPermits/ConstructionGeneralPermit.aspx>. [References: Virginia Stormwater Management Act, Virginia Code sections 62.1.44.15 et seq.; VSMP Permit Regulations, 9 VAC 25-870-10 et seq.].

3.6 Biological Resources

This section describes an overview of the existing biological resources at the Proposed Project Area and the potential impacts to those resources that would be associated with the Proposed Project.

Biological resources refer to the flora (plants) and fauna (invertebrates, fish, birds, amphibians, reptiles, birds, and mammals) that may be found or have historically been found at the Proposed Project Area. Biological resources can also include rivers, lakes, wetlands, upland communities, and other habitat types necessary to support local flora and fauna. Vegetation is a key habitat component and acts to stabilize soils and prevent erosion; additionally, information on vegetation can be used in evaluating potential impacts to species and habitats. Potential impacts to biological resources can be direct (project-related mortality) or indirect (displacement, degradation, or loss of habitat). Effects of the proposed action on Federal and State-listed species, as well as other species of concern, and critical habitat must be addressed.

3.6.1 Affected Environment

General Fish, Wildlife and Vegetation

The Proposed Project Area lies within Virginia's Piedmont Level III Ecoregion and Northern Outer Piedmont Level IV sub-ecoregion. The potential natural vegetation consists of Oak-Hickory-Pine Forests where the dominant species include hickory (*Carya* spp.), shortleaf pine (*Pinus echinata*), loblolly pine (*Pinus taeda*), white oak (*Quercus alba*) and post oak (*Quercus stellata*). Today however, shortleaf, loblolly, and Virginia pine woodlands are common. The Proposed Project Area itself is primarily open field, with wooded areas in the western and southeastern portion of the Proposed Project Area. A transmission line runs north to south through the Proposed Project Area.

Wildlife around the Proposed Project Area includes species that adapt well to disturbance,

the presence of humans, and that are typically found in rural, agricultural areas in Virginia. Examples of typical mammals found in rural, Virginia include white-tailed deer (*Odocoileus virginianus*), meadow vole (*Microtus pennsylvanicus pennsylvanicus*), northern raccoon (*Procyon lotor lotor*), Virginia opossum (*Didelphis virginiana virginiana*), coyote (*Canis latrans*), red fox (*Vulpes vulpes*), marsh rabbit (*Sylvilagus palustris*), striped skunk (*Mephitis mephitis mephitis*), eastern chipmunk (*Tamias striatus*), eastern fox squirrel (*Sciurus niger vulpinus*), black rat (*Rattus rattus*) and big brown bat (*Eptesicus fuscus fuscus*).

Listed Threatened and Endangered Species

The Endangered Species Act (ESA) is enforced by the USFWS and provides the protection and recovery of species threatened with extinction and ensures federal agencies use their authorities to further the purpose of the ESA to protect and conserve endangered and threatened species. The ESA defines a federally endangered species as any species which is in danger of extinction throughout all or a significant portion of its range. The ESA also identifies habitats critical to listed species and potential mitigation strategies within these habitats. Section 7 of the ESA requires that all federal agencies consult with the USFWS regarding potential impacts that their federal actions could have to listed species.

True North conducted a review of the USFWS Information, Planning and Conservation (IPaC) database to evaluate which species have the potential to inhabit the Proposed Project Area. The IPaC database identified one federally listed threatened species (Table 3) in Amelia County having the potential to occur (reference Appendix XIII).

Table 3. Federally Listed Species with Potential to Occur

Species	Federal Status	ESA Determination
Northern Long-eared bat <i>Myotis septentrionalis</i>	Threatened	Reliance on Final 4(d) Rule

Northern Long-eared Bat (*Myotis septentrionalis*)

The Northern long-eared Bat is found across much of the eastern and northern central United States. During the summer, the species roost singly or in colonies underneath bark, in cavities, or in crevices of both live and dead trees. Males and non-reproductive females may also roost in cooler places, like caves and mines. The bat spends the winter hibernating in caves and minds, called hibernacula. The species will typically use large caves or mines with large passages and entrances; constant temperatures; and high humidity with no air currents. According to Virginia’s Department of Game and Inland Fisheries’ (DGIF) Northern Long-eared Bat Winter Habitat and Roost Trees Application, the Proposed Project Area is located over eighty miles from a known hibernaculum.

The Virginia Fish and Wildlife Information Service (VaFWIS) database identified thirteen state listed species that are known or likely to occur within a 2-mile radius of the Proposed Project Area (Table 4).

Table 4. State Listed Threatened and Endangered Species

Species	State Status	Preferred Habitat	Confirmed Observations within 2 miles
Dwarf Wedgemussel <i>Alasmidonta heterodon</i>	Endangered	Shallow to deep quick running water on cobble, fine gravel, or on firm silt or sandy bottoms	No
Brook Floater <i>Alasmidonta varicosa</i>	Endangered	High relief streams among boulders in sand	No
Henslow's Sparrow <i>Centronyx henslowii</i>	Threatened	Old pastures, weedy fields and occasionally in hayfields. Breeds in fields and meadows, often in low-lying or damp areas with tall grass, standing dead weeds and scattered shrubs	No
Rafinesque's Eastern Big-eared Bat <i>Corynorhinus rafinesquii macrotis</i>	Endangered	Roosts in forested areas, caves, rock shelters in sandstone formations	No
Yellow Lance <i>Elliptio lanceolata</i>	Threatened	Main channels of drainages down to streams as small as 1 meter across. Prefers clean, coarse to medium-sized sand and gravel substrates	No
Atlantic Pigtoe <i>Fusconaia masoni</i>	Threatened	Fast waters with high quality riverine/large creek habitat in headwaters or rural watersheds. Prefers coarse sand and gravel at the downstream edges or riffles	No
Loggerhead Shrike <i>Lanius ludovicianus</i>	Threatened	Semi-open country with lookout posts; wires, trees, scrub	Yes
Migrant Loggerhead Shrike <i>Lanius ludovicianus migrans</i>	Threatened	Open countryside, short-grass pastures, weedy fields, grasslands, agricultural areas, swampy thickets, orchards	No
Green Floater <i>Lasmigona subviridis</i>	Threatened	Smaller streams, quiet pools and eddies with gravelly and sandy bottoms	No
Little Brown Bat <i>Myotis lucifugus</i>	Endangered	Roosts in buildings, caves, trees, rocks, and wood piles	No
Northern Long-eared Bat <i>Myotis septentrionalis</i>	Threatened	Roosts underneath bark, in cavities or in crevices of both live trees and snags (dead trees), caves, and mines	No

Species	State Status	Preferred Habitat	Confirmed Observations within 2 miles
James Spiny mussel <i>Parvaspina collina</i>	Endangered	Large rivers to shallow streams with slow to moderate current and relatively hard water on sand and mixed sand and gravel substrates	No
Tri-colored Bat <i>Perimyotis subflavus</i>	Endangered	Forested landscapes, often in open woods	No

Loggerhead Shrike (*Lanius ludovicianus*)

According to data provided by the VaFWIS, the Loggerhead Shrike (*Lanius ludovicianus*) was observed over 500 feet from the Proposed Project Area (reference Appendix XIII). The species typically leaves their breeding grounds between September and November and return between early March and late April. Egg-laying occurs between mid-March and mid-June and nests are usually found in isolated trees rather than an area with a continuous line of trees. Habitat for this species includes open pasture, grassy fields, and agricultural fields with sparsely growing small trees and shrubs.

Migratory Birds

The Migratory Bird Treaty Act (MBTA) is enforced by the USFWS and makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter any migratory bird or the parts, nests, eggs of such bird except under the terms of a valid permit issued.

The USFWS IPaC Report lists one migratory bird species (Table 5) that may be potentially affected by activities within the Proposed Project Area (reference Appendix XIII).

Table 5: Migratory Birds

Species	Breeding Season	Preferred Habitat	Critical Habitat
Eastern Whip-poor-will <i>Antrostomus vociferus</i>	May 1 to August 20	Leafy moist woodlands, deciduous or mixed variety	No

Bald and Golden Eagles

The Bald and Golden Eagle Protection Act (BGEPA) is enforced by the USFWS and makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter any bald or golden eagle or the parts, nests, eggs of such bird except under the terms of a valid permit issued. The BGEPA also prohibits any activity that could cause injury to the species, nest abandonment or a decrease in productivity.

The Center for Conservation Biology’s Mapping Portal depicts no eagle nests or roosts

within 11 miles of the Proposed Project Area (reference Appendix XIII).

Invasive Species

E.O. 13112, *Invasive Species*, directs federal agencies to not authorize, fund or carry out actions believed to cause or promote the introduction or spread of invasive species unless the Agency determines that the benefits of such actions outweigh the potential harm caused by invasive species.

The Proposed Project will be located within Virginia's Piedmont Plateau province. True North utilized the Virginia DCR's DNH to identify invasive plant species with the potential to occur within the Proposed Project Area. According to the Invasive Plant Species search, eighty-three species have the potential to occur within the Piedmont region in areas most commonly characterized as having exposure to full sun and mixed moisture levels (reference Appendix XIII).

3.6.2 Environmental Consequences

Under the Proposed Action, impacts to biological communities are expected to be negligible. It is unlikely any threatened or endangered species will be affected by the Proposed Project based on the lack of suitable habitat and protected species' requirements. No designated critical habitat for federally listed species occurs within the Proposed Project Area nor will any be affected by the Proposed Project. In accordance with the ESA, the USFWS is not required to provide comments for projects that list the NLEB as the only species and if a review of IPaC's assisted determination key indicates that a project may rely on the Service's January 14, 2016 Final 4(d) Rule. The Proposed Project meets the criteria for reliance upon the Final 4(d) Rule and a Self-Certification letter was obtained through the USFWS Virginia Field Office Online Project Review. This letter represents the USFWS's concurrence of a "no effect" determination for the NLEB in regard to the Proposed Project (reference Appendix XIII).

The state threatened Loggerhead Shrike (*Lanius ludovicianus*) was observed within two miles of the Proposed Project Area; however, impacts to the species would be unlikely as most trees located within the Proposed Project Area appear to form a continuous line and sparsely growing smaller trees do not appear to be common. The Department of Conservation and Recreation's (DCR) Division of Natural Heritage (DNH) has also confirmed that no natural heritage resources have been documented within the Proposed Project Area and no state listed plants or insects will be affected by the Proposed Project (reference Appendix XIII).

Impacts to migratory birds and/or birds of interest are expected to be negligible based on the lack of suitable nesting and foraging habitat. Also, ground mounted solar arrays pose little to no risk to migratory birds. Additionally, the solar panels proposed for use at this facility are

designed to absorb the sunlight (photovoltaic panels) versus reflect the light; therefore, a reflective glare and the "lake effect" phenomenon is not a concern for this facility.

While Bald and Golden Eagles may be visitors to the area surrounding the Proposed Project Area, suitable nesting habitat, which includes tall, large diameter trees and preferred foraging areas including large, open expanses of water, are not present within the Proposed Project Area.

The potential increase of invasive species is not anticipated with the Proposed Project. Vegetation must be maintained under the panel surface in order to prevent shading which will be the responsibility of the facility owner and will be performed on a monthly or bi-monthly basis. Given that only minor earthwork is required for the construction of the Proposed Project and no fill material is being imported, the establishment of invasive species would be insignificant.

3.6.3 Mitigation

The contractor shall comply with the Endangered Species Act, which provides for the protection of endangered and/or threatened species and critical habitat. Should any evidence of the presence of endangered and/or threatened species or their critical habitat be brought to the attention of the contractor, the contractor will immediately report this evidence to the Owner and a representative of the Agency. Construction shall be temporarily halted pending the notification process and further directions issued by the Agency after consultation with the USFWS.

A time of year restriction will be implemented to prohibit any required tree removal during the Northern Long Eared Bat pup season (June 1-July 31) and the active season (April 15-September 15). All construction activities requiring vegetation removal or disturbance will either be avoided from March 15-June 15 or if they cannot be avoided during this timeframe, nest-surveys for the Loggerhead Shrike will be conducted prior to vegetation removal or disturbance activities are undertaken.

The following measures will be implemented where appropriate and feasible:

- Use of appropriate seed mix/plants and seasonal mowing developed in consultation with the DCR;
- Development of a monitoring and control plan for invasive species;
- Planting of native pollinator plants in the buffer areas of the planned facility, and;
- Minimizing habitat fragmentation by leaving round versus long, skinny natural cover and forest land fragments; retaining connective corridors that allow significant wildlife migrations between fragments and designing the intervening landscape to benefit habitat; and natural cover as opposed to turf grass and mowed lawn.

3.7 Cultural Resources and Historic Properties

This section describes an overview of the existing cultural and historic resources at the Proposed Project Area and the potential impacts to those resources that would be associated with the Proposed Project.

The National Historic Preservation Act (NHPA) is intended to protect and preserve historical and archeological sites within the United States; Section 106 of the NHPA requires all Federal agencies to consider the effects of the actions and the actions they fund, permit and/or license on historic properties. The NHPA defines historic properties as any prehistoric or historic district, site, building, structure, or object included in, or eligible for listing in, the NRHP.

The NHPA also allows the Applicant to notify, engage, involve, and work with Native American tribes as they proceed through the steps of Section 106 review. During the review process, consultation with any Native American tribe that attaches religious and cultural significance to historic properties that may be affected by the agency's undertakings is conducted and a reasonable opportunity to comment on such undertakings is granted.

3.7.1 Affected Environment

The Virginia Cultural Resource Information Services (VCRIS) database did not identify any resources within the Proposed Project Area but did list two architectural resources adjacent to the Proposed Project Area. Pursuant Section 106 of the NHPA, the Proposed Project was submitted to the VDHR's Electronic Project Information Exchange (ePIX) system on June 14, 2020. In a response dated July 13, 2020, the VDHR concluded that it is their opinion that no historic properties will be affected by the Proposed Project. A copy of all VDHR correspondence is presented in Appendix IX.

Tribal Consultation

Upon review of U.S. Department of Housing and Urban Development's (HUD) Tribal Directory Assessment Tool, it was determined that the Delaware Nation and Nansemond Indian Nation were listed as the tribes with interest in the area.

True North Consultants (True North) sent a letter to each Tribal Historic Preservation Office (THPO) on June 12, 2020 providing notification of intent to initiate the Section 106 review process. A response from the Nansemond Indian Nation was received on June 17, 2020 which stated that they have no objections or pending issues regarding this matter. The Delaware Nation provided acceptance of our invitation for consultation on June 29, 2020 and in a response dated July 9, 2020, they concluded that the location of the Proposed Project does not endanger cultural, or religious sites of interest. The Delaware Nation instructed the Proposed Project to continue as planned but asked that if any archaeological site or artifacts inadvertently be uncovered, all construction and ground disturbing activities be immediately halted until they, and the appropriate state agencies, are notified.

A copy of all THPO correspondence is presented in Appendix IX.

3.7.2 Environmental Consequences

Under the Proposed Action, no known historic properties and/or archaeological sites will be affected, as concluded by consultation with the VDHR and THPOs. There also are no potential impacts associated with the interconnection.

3.7.3 Mitigation

In the event of inadvertent discovery, a stop work order shall be issued immediately; the project engineer and RD will be notified. The Agency will issue further directions after coordination with VDHR, interested Tribes and the Advisory Council on Historic Preservation (ACHP).

3.8 Air Quality

This section describes an overview of the existing air quality at the Proposed Project Area and the potential impacts that would be associated with the Proposed Project.

Air quality management and protection responsibilities exist at the federal, state and local levels; however, the primary statutes that establish ambient air quality standards and establish regulatory authorities to enforce regulations designed to attain those standards are codified by the federal Clean Air Act (CAA).

The CAA and its amendments mandate requirements for managing air quality across the nation by establishing primary and secondary air quality standards. Primary air quality standards protect the public health, including the health of sensitive populations including people with asthma, children, and older adults. Secondary air quality standards protect public welfare by promoting ecosystem health, damage to crops and buildings and preventing decreased visibility. Potential air quality effects can be short-term (construction-related) or long-term (facility emissions and increased traffic).

3.8.1 Affected Environment

Under the CAA, the USEPA has established and continues to update the National Ambient Air Quality Standards (NAAQS) for “criteria” pollutants including ozone (O₃), particulate matter (PM_{2.5} and PM₁₀), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂) and lead (Pb). The NAAQS for these pollutants are listed in Table 6 and represent the levels of air quality deemed necessary by the USEPA to protect the public health and welfare with an adequate margin of safety.

Table 6. National Ambient Air Quality Standards

Pollutant		Averaging Time	Level	Form
Carbon Monoxide (CO)		8 hours	9 ppm	Not to be exceeded more than once per year
		1 hour	35 ppm	
Lead (Pb)		Rolling 3-month average	0.15 µg/m ³	Not to be exceeded
Nitrogen Dioxide (NO ₂)		1 hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		1 year	53 ppb	Annual Mean
Ozone (O ₃)		8 hours	0.070 ppm	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
Particle Pollution (PM)	PM _{2.5}	1 year	12.0 µg/m ³	annual mean, averaged over 3 years
		1 year	15.0 µg/m ³	annual mean, averaged over 3 years
		24 hours	35 µg/m ³	98th percentile, averaged over 3 years
	PM ₁₀	24 hours	150 µg/m ³	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide (SO ₂)		1 hour	75 ppb	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		3 hours	0.5 ppm	Not to be exceeded more than once per year

The USEPA Green Book provides detailed information about area NAAQS designations, classifications, and nonattainment status. Established under the CAA, the General Conformity Rule plays an important role in helping states improve air quality in those areas that do not meet the NAAQS. These regulations require that projects in federal nonattainment areas that could be built with funding from a federal agency such as the RBS must demonstrate conformity with the applicable state or local attainment plan. The Proposed Project Area is not located in any Nonattainment or Maintenance Areas for the six criteria pollutants including: carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter and sulfur dioxide (reference Appendix X); therefore, the Proposed Project Area is in conformance with the State Implementation Plan for air quality.

3.8.2 Environmental Consequences

Under the Proposed Action, impacts to air quality are expected to be minor and short-term in nature. During the construction phase, air quality impacts may result from dust generated during movement of soils and an increase in emissions from equipment and vehicles. It is estimated that during the peak construction period, there could be approximately 10-15 semi-trucks visiting the Proposed Project Area per day but on average, there will only be 6-7 trucks. Earth work will be completed using six skid steers and one mini excavator. A telehandler will also be utilized. Given the nature of operations of a solar facility, the Proposed Project would not contribute to air pollution nor result in a conflict or obstruction to an air quality plan. The

Proposed Project would produce electricity with no direct air emissions of greenhouse gases or other air pollutants, and very low life-cycle emissions relative to traditional fossil fuels. In the long-term, there will ultimately be a small reduction in harmful emissions by reducing the energy demand from traditional fossil fuel sources in the area which would improve air quality in the region. The Proposed Project's interconnection plan includes the installation of three new power poles which will assist in the transmission of electricity. The interconnection will not create air emissions, therefore, no potential impacts to air quality are expected.

3.8.3 Mitigation

Fugitive dust caused by the movement of construction materials and construction equipment will be controlled by adherence to the Virginia DEQ regulations and 9 VAC 5-50-60 et. seq., which governs the abatement of visible emissions and fugitive dust emissions. Measures include, but are not limited to, the following: use, where possible, of water or chemicals for dust control, installation and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials, covering of open equipment for conveying materials, and prompt removal of spilled or tracked dirt or other materials from paved streets and removal of dried sediments resulting from soil erosion. Land clearing wastes (vegetative debris) generated during construction should be properly managed in accordance with applicable regulations and local ordinances. Shredding/chipping of vegetative debris and reuse on-site is recommended over open burning. If project activities include open burning or the use of special incineration devices, this activity must meet the requirements under 9 VAC 5-130-10 through 9 VAC 130-60 and 9 VAC 5-130-100 of the *Regulations* for open burning. In addition, the *Regulations* provide for, but do not require, the local adoption of a model ordinance concerning open burning.

3.9 Socioeconomics and Environmental Justice

E.O. 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, require that federal agencies, whenever feasible, maintain information of populations by race, national origin or income and will use this information to determine whether their actions have disproportionately high and adverse human health or environmental effects on minority or low-income populations.

Additionally, the socioeconomic conditions of the Proposed Project Area are analyzed for any potential impacts associated with the construction and operation of the Proposed Project. Factors considered in this analysis include population, employment, and income.

3.9.1 Affected Environment

The USEPA's Environmental Justice Screening and Mapping Tool (EJSCREEN) and data from the US Census Bureau were utilized to determine the possible socio-economic impacts and environmental justice impacts of minority and low-income populations for the Proposed Project Area and surroundings (reference Appendix XI).

According to the EJSCREEN American Community Survey (ACS) Summary Report, the total population of the Proposed Project Area and 10-mile radius is 27,783. The area's race makeup consists of White (approximately 87%) and Black (approximately 9%). The area's population is distributed with 6% under the age of 4, 18% from 4 to 17, 61% from 18 to 64 and 15% over the age of 65.

According to the US Census Bureau, the median household income for Amelia County is \$58,526 with 9.9% of individuals below poverty level.

3.9.2 Environmental Consequences

Under the Proposed Action, impacts related to socioeconomic and environmental justice are not anticipated. As the Proposed Project does not include the addition of new homes or businesses, implementation of the Proposed Project would not directly stimulate unplanned population growth in the Proposed Project Area. Local residents would not notice a change in business or economic activity, shifts in population movement and growth, or impact on public service demands. The Proposed Project will not adversely or significantly affect low income or minority populations but will provide positive economic impacts by expanding the tax base in the County. There also are no potential impacts associated with the interconnection.

3.9.3 Mitigation

No mitigation measures are proposed as there are no anticipated impacts to the resource.

3.10 Coastal Zone and Coastal Barrier Resources

This section describes an overview of the existing coastal resources at the Proposed Project Area and the potential impacts that would be associated with the Proposed Project.

Coastal areas and barrier systems provide diverse and unique habitats as well as protect inland areas from hurricanes, other storms, and storm surges. Heavy pressure from residential, recreational, and industrial development urged Congress to enact two major laws for their protection: The Coastal Zone Management Act (CZMA) of 1972 and the Coastal Barrier Resources Act (CBRA) of 1982. The CZMA requires federal actions that are reasonably likely to affect any land or water use or natural resource in a coastal zone be consistent with the enforceable policies while the CBRA prohibits federal activities in CBRA units (undeveloped coastal barrier lands along the Atlantic, Gulf and Great Lakes coasts).

“Coastal State” means a State of the United States in, or bordering on, the Atlantic, Pacific, or Arctic Ocean, the Gulf of Mexico, Long Island Sound, or one or more of the Great Lakes. According to the National Oceanic and Atmospheric Administration (NOAA), Virginia's coastal zone includes the 29 counties, 17 cities and 42 incorporated towns of Tidewater Virginia,

including the Atlantic Coast watershed and portions of the Chesapeake Bay and Albemarle-Pamlico Sound watersheds.

3.10.1 Affected Environment

The Proposed Project Area is located over 80 miles from the coast and according to the USFWS's Coastal Barrier Resource System mapper and the DEQ's Coastal Zone Management Area map, the Proposed Project Area is not located within a protected coastal zone (reference Appendix XII).

3.10.2 Environmental Consequences

Under the Proposed Action, there would be no impacts to coastal resources as they are absent from the Proposed Project Area and surrounding area. There also are no potential impacts associated with the interconnection.

3.10.3 Mitigation

No mitigation measures are proposed as there are no anticipated impacts to the resource.

3.11 Noise

This section describes an overview of the existing ambient sound environment at the Proposed Project Area and the potential impacts that would be associated with the Proposed Project.

The construction and operation of the Proposed Project could create noise impacts. Certain activities inherently produce sound levels or characteristics that have the potential to create noise. There are two main categories of noise – community noise and job-related noise. Job-related noise is regulated by the Occupational Safety and Health Administration (OSHA). The other category, community noise, refers to the combination of multiple sources of noise which may result in an overall unacceptable level for those living, working or recreating in the area especially in noise-sensitive areas including residences, schools, hospitals, churches, parks, wildlife refuges, etc.

3.11.1 Affected Environment

The Proposed Project Area is located in Amelia County, eight miles north of Amelia Court House's city center. Ambient noise at the Proposed Project Area consists predominantly of rural or natural sounds, as well as manmade noise from agricultural practices and vehicle traffic traveling on local roads and highways. The Proposed Project Area is located in a rural area with only a few residences in the vicinity. Noise-sensitive areas are not located within the Proposed Project Area or nearby surroundings.

3.11.2 Environmental Consequences

Under the Proposed Action, there will be a direct, short-term increase in noise related to construction activities. This singular impact will be temporary, occurring only during daytime hours within the 4-month period. Land clearing activities will include skid steers and one mini excavator and during the first two weeks of construction, pile driving machines will be utilized. Noise related to traffic increase will also be encountered. It is estimated that during the peak of construction, approximately 10-15 semi-trucks will visit the Proposed Project Area per day but on average, there will only be 6-7. Post-construction, the ambient sound environment would be expected to return to existing levels. Noise from equipment (i.e., the inverter) will only be audible during the daylight hours when the panels are producing power and will likely only be heard by individuals within the perimeter fence. An annual site inspection will occur throughout the operational life of the Proposed Project along with monthly mowing activities. Consequently, the Proposed Project, and associated interconnection, would only cause temporary noise impacts and will not result in a long-term increase to the ambient noise levels of the area.

3.11.3 Mitigation

No mitigation measures are proposed as there are no anticipated impacts to the resource.

3.12 Traffic and Transportation

This section provides an overview of the existing traffic and transportation resources at the Proposed Project Area and describes the potential impacts the Proposed Project could have on these resources.

Transportation impacts include increases and decreases in traffic and transportation that might be caused or exacerbated by development of the Proposed Project. Other impacts considered are the transportation of materials to or from the facility either during construction or during operation. Any possible changes in transportation patterns or intensity are also evaluated.

3.12.1 Affected Environment

The Proposed Project will be located near the intersection of Genito Road (State Road 616) and Grub Hill Church Road (State Road 609). Genito Road is a two-lane highway that connects to State Road 604 in Masons Corner to the east and State Road 307 to the southwest. Virginia's Department of Transportation (VDOT) average daily traffic counts for Genito Road near Grub Hill Church in 2019 is 2,000 vehicles. The nearest railroad line is located approximately 8 miles south of the Proposed Project Area and the nearest airport is the Farmville Regional Airport. This general aviation airport is located approximately twenty-six miles southwest of the Proposed Project Area.

3.12.2 Environmental Consequences

Under the Proposed Action, significant impacts to transportation would not result due to the Proposed Project, given the short, 4-month duration of the construction phase and the limited number of workers and equipment required for operation and maintenance. The majority of the traffic burden as a result of the Proposed Project will occur during the construction phases – both build-out and end-of-life tear down. During these short duration phases, it is anticipated that traffic will increase slightly to account for construction personnel and equipment. It is estimated that during the peak construction period, there could be approximately 10-15 semi-trucks visiting the Proposed Project Area per day but on average, there will only be 6-7 trucks. During operation of the Proposed Project, there will be monthly mowing activities and an annual site inspection – a significant increase in traffic for any maintenance or inspection activities is not anticipated. The Proposed Project's interconnection would also not contribute to any long-term impacts to transportation and/traffic.

3.12.3 Mitigation

No mitigation measures are proposed as there are no anticipated impacts to the resource.

3.13 Visual Resources

This section describes an overview of the existing visual resources at the Proposed Project Area and the potential impacts to those resources associated with the Proposed Project. Visual resources are the visual character of a place, both manmade and natural, that give a particular landscape its character and aesthetic quality.

As development in rural areas increases in scope and complexity, aesthetics or visual impacts may be a concern. The visual quality of an area may be affected by the introduction of new buildings or structures. Where visual impacts are identified, and avoidance of the impacted area is not feasible, efforts should be made to design, construct and operate in such a way that would minimize aesthetic impacts.

3.13.1 Affected Environment

The Proposed Project will be located in Amelia County approximately eight miles north of the town of Amelia Court House. The Proposed Project Area is currently agricultural land, mimicking the surrounding properties.

3.13.2 Environmental Consequences

Under the Proposed Action, visual impacts would occur during both the construction and operation phase of the Proposed Project. During the construction stage, machinery would be present, and the Proposed Project Area would be cleared and graded – these impacts would be considered minor since construction would be temporary. Once the facility becomes

operational, visual impacts would include the addition of solar modules mounted on a steel racking system, surrounded by a chain-link security fence. Impacts to the visual quality of the Proposed Project Area and surroundings would be insignificant as the Proposed Project will be set back from the road and surrounded by a vegetative visual screen. There also are no potential impacts associated with the interconnection.

3.13.3 Mitigation

A 25-foot vegetative buffer will be planted around the north, east and west boundaries of the Proposed Project Area which would serve as a natural barrier, screening the Proposed Project from both Grub Hill Church Road and Genito Road. This buffer, and the use of the Emerald Green Arborvitae, has been approved by the County.

3.14 Human Health and Safety

This section describes public health and safety associated with the construction and operation of the Proposed Project and the potential impacts. There is an importance in evaluating the Proposed Project's impact on public health and safety per 40 CFR Part 1508.27. The Proposed Project would require all personnel and visitors to follow the OSHA guidelines during construction and operation.

Electromagnetic Fields and Interference

Electromagnetic Fields (EMF) are associated with any electric device. Power-frequency EMFs are associated with the generation, transmission and use of electric power. Electromagnetic Interference (EMI) is the disruption to the standard operation of an electronic device created by electromagnetic fields in its vicinity. This interference can be continuous or intermittent and can vary based on the distance and field levels that are produced by the source. Effects from high-voltage electric transmission lines and substations may include interference to radio and television reception in the immediate vicinity. Linkages between EMFs and human health have been made; however, are generally considered weak.

Environmental Risk Management

Environmental risk management informs Agency staff on the proper procedures for environmental due diligence relating to hazardous substances, hazardous wastes, and petroleum waste products. If properly conducted, environmental risk management proactively recognizes potential hazards and legal and financial vulnerabilities associated with the major hazardous materials, federal and state laws, as well as possible hazards to the human environment in compliance with NEPA.

Reflectivity, Glare or Dazzle

Reflectivity refers to light that is reflected off surfaces. The potential impacts of reflectivity are glint, glare or dazzle which can cause a brief loss of vision. According to the Federal Aviation Authority (FAA), solar energy projects introduce new visual surfaces to the airport setting, where reflectivity could result in glare that cause flash blindness episodes for pilots and air

traffic controllers.

3.14.1 Affected Environment

Environmental due diligence is the process of inquiring into the environmental condition of real property to determine the potential for contamination and was conducted by the completion of a Phase I Environmental Site Assessment by Timmons in May of 2020. The report was performed in accordance with the procedures included in American Society for Testing and Materials (ASTM) E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. Timmons' assessment revealed no evidence of recognized environmental conditions (RECs) inside or immediately surrounding the Proposed Project Area and concluded that no further investigation is required.

3.14.2 Environmental Consequences

Under the Proposed Action, significant impacts to human health and safety are not anticipated. There are no foreseeable health and safety risks from induced currents, electric shock, effects on cardiac pacemakers and nuisance factors, such as audible noise, potential interference with radio and television broadcast reception and electronic equipment. During the construction phase, hazardous materials such as diesel, maintenance fluids and paints would be stored and used onsite; however, the operation of the solar facility would not the use, release, or generate hazardous materials. A fuel tank will be kept within the Proposed Project Area and will sit on an overflow containment trap. The Proposed Project's will also include the installation of three new power poles which will assist in the transmission of electricity. The power poles will be erected within the SEC utility easement and there are no potential impacts associated with the interconnection.

PV systems do not emit any material during their operation; however, they do generate EMF, sometimes referred to as radiation. The EMF produced by electricity is non-ionizing radiation, meaning the radiation has enough energy to move atoms in a molecule around (experienced as heat), but not enough energy to remove electrons from an atom or molecule (ionize) or to damage DNA. At present, humans are all exposed to EMF throughout our daily lives without negative health impact. An individual outside of the fenced perimeter of a solar facility is not exposed to significant EMF; therefore, there is no negative health impact from the EMF produced in a solar farm.

The amount of reflectivity varies among solar technologies. The Proposed Project will reduce reflectivity by utilizing photovoltaic panels which are primarily absorptive compared to concentrated solar power technologies. Lastly, the Proposed Project does not include lighting; therefore, the Proposed Project would not result in light exposure or result in light pollution or glare.

3.14.3 Mitigation

Waste generation will be managed in accordance with Federal, State and local regulations. Site safety will be managed by strict adherence to OSHA requirements. Procedures included in an emergency response plan will include management efforts, a Hazardous Operations Manual, and Spill Control and Countermeasures (SPCC) plans designed to protect workers and the public from further exposure to hazards.

4.0 SUMMARY OF MITIGATION

Mitigation and monitoring actions will be performed to reduce any impacts to the environmental resources associated with the Proposed Project. These actions are as follows:

- The Applicant shall obtain and comply with all required County, State and Federal permits.
- BMPs will be implemented, including those required by the NPDES permitting and SWPPP.
- When disposing of excess, spoil or other construction materials on public or private property, wetlands will not be filled in or otherwise converted.
- Ground vegetation will be maintained throughout the operational life of the facility.
- Depending on local requirements, a Stormwater Management (SWM) plan may be required. SWM requirements should be requested from the appropriate County/Town office. [References: Virginia Stormwater Management Act, Virginia Code 62.1.44.15 et seq.; Virginia Stormwater Management Program (VSMP) Permit Regulations, 9 VAC 25-870-54 et seq.] Additional guidance may be obtained from DEQ's Office of Stormwater Management.
- For any land disturbing activities equal to or exceeding one acre, or equal to or exceeding 2,500 square feet in all areas of the jurisdictions designated as subject to the Chesapeake Bay Preservation Area Designation and management Regulations adopted pursuant to the Chesapeake Bay Preservation Act, the operator or owner of a construction project is required to register for coverage under the General Permit for Discharges of Stormwater from Construction Activities (VAR10) and develop a SWPPP. The SWPPP must be prepared prior to submission of the registration statement for coverage under the general permit and it must address water quality and quantity in accordance with the VSMP Permit Regulations. General information and registration forms for the General Permit are available from DEQ at <http://www.deq.virginia.gov/Programs/Water/StormwaterManagement/VSMPPermits/ConstructionGeneralPermit.aspx>. [References: Virginia Stormwater Management Act, Virginia Code sections 62.1.44.15 et seq.; VSMP Permit Regulations, 9 VAC 25-870-10 et seq.].
- The contractor shall comply with the Endangered Species Act, which provides for the protection of endangered and/or threatened species and critical habitat. Should any evidence of the presence of endangered and/or threatened species or their critical habitat be brought to the attention of the contractor, the contractor will immediately report this evidence to Owner and a representative of Agency. Construction shall be temporarily halted pending the notification process and further directions issued by Agency after consultation with the USFWS.
- Removal of all trees shall be in accordance with the requirements of the DGIF and the USFWS to protect indigenous bat species as set forth in the DGIF guidelines. It is also recommended that construction activities requiring vegetation removal or disturbance, should be avoided during mid-March to mid-June. Should vegetation removal be required during this time, nest-surveys for the Loggerhead Shrike are recommended prior to conducting work.
- The following will be implemented where appropriate and feasible:
 - Use of appropriate seed mix/plants and seasonal mowing developed in consultation with the DCR;

- Development of a monitoring and control plan for invasive species;
- Planting of native pollinator plants in the buffer areas of the planned facility, and;
- Minimizing habitat fragmentation by leaving round versus long, skinny natural cover and forest land fragments; retaining connective corridors that allow significant wildlife migrations between fragments and designing the intervening landscape to benefit habitat; and natural cover as opposed to turf grass and mowed lawn.
- In the event of inadvertent discovery, a stop work order shall be issued immediately; the project engineer and RD will be notified. The Agency will issue further directions after coordination with VDHR, interested Tribes and the ACHP.
- Fugitive dust caused by the movement of construction materials and construction equipment will be controlled by adherence to the Virginia DEQ regulations and 9 VAC 5-50-60 et. seq., which governs the abatement of visible emissions and fugitive dust emissions. Measures include, but are not limited to, the following: use, where possible, of water or chemicals for dust control, installation and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials, covering of open equipment for conveying materials, and prompt removal of spilled or tracked dirt or other materials from paved streets and removal of dried sediments resulting from soil erosion. Land clearing wastes (vegetative debris) generated during construction should be properly managed in accordance with applicable regulations and local ordinances. Shredding/chipping of vegetative debris and reuse on-site is recommended over open burning. If project activities include open burning or the use of special incineration devices, this activity must meet the requirements under 9 VAC 5-130-10 through 9 VAC 130-60 and 9 VAC 5-130-100 of the Regulations for open burning. In addition, the Regulations provide for, but do not require, the local adoption of a model ordinance concerning open burning. Waste generation will be managed in accordance with Federal, State and local regulations.
- A 25-foot vegetative buffer will be planted around the north, east and west boundaries of the Proposed Project Area which would serve as a natural barrier, screening the Proposed Project from both Grub Hill Church Road and Genito Road.
- Waste generation will be managed in accordance with Federal, State and local regulations.
- Site safety will be managed by strict adherence to OSHA requirements. Procedures included in an emergency response plan will include management efforts, a Hazardous Operations Manual, and SPCC plans designed to protect workers and the public from further exposure to hazards.

5.0 SUMMARY OF IMPACTS

Under the Proposed Action Alternative, USDA would consider providing financial assistance to the Applicant to construct a renewable energy system. The Proposed Project will have a positive economic impact on the area and would assist the Applicant and SEC in meeting the demands of its customers. The Proposed Project will provide positive economic impacts by increasing the tax base for the county. The Proposed Project will also provide long-term, emission free electricity to the local utility. The Proposed Project will also help meet national and state goals to expand the use of renewable energy.

Under the Proposed Action, the Proposed Project would have both short-term (temporary) and long-term direct effects – these effects are expected to be minor, insignificant, and unlikely to cause significant cumulative effects.

The mitigation measures discussed in Section 4.0 of this EA would avoid or minimize the Proposed Project's cumulative effects to the environment. This evaluation has revealed that the Proposed Project would not have significant adverse impacts and further impact analysis is not warranted.

Table 7. Summary of Impacts

Resource	Past Actions	Present Actions	Proposed Actions	Future Actions	Cumulative Effect
Land Use	Forestland and open green space	Agricultural land (partially wooded)	Construction and operation of a solar facility	None anticipated	None anticipated
Geology, Soils and Prime Farmland	Forestland and open green space	Agricultural land (partially wooded)	Conversion of Prime Farmland and Farmland of Statewide Importance to non-agricultural use	None anticipated	None anticipated
Floodplains	Forestland and open green space	Panels depict the Proposed Project Area as Zone X – an area outside of SFHAs	None anticipated	None anticipated	None anticipated
Wetlands	No wetlands within the Proposed Project Area	Wetland identified in southern portion of the Proposed Project Area	Direct impacts to wetlands are not anticipated as the Proposed Project has been designed to avoid those resources	None anticipated	None anticipated
Water Resources	No water resources or sole source aquifers within the Proposed Project Area	No water resources or sole source aquifers within the Proposed Project Area	Impacts to water resources such as water distribution, water quantity, or groundwater aquifers are not anticipated	None anticipated	None anticipated
Biological Resources	Forestland and open green space	Agricultural land (partially wooded)	Impacts to threatened and endangered species are not anticipated. Appropriate measures will be implemented to minimize habitat fragmentation	None anticipated	None anticipated
Cultural Resources and Historic Properties	Forestland and open green space	Agricultural land (partially wooded)	Construction and operation of a solar facility	None anticipated	None anticipated
Air Quality	Forestland and open green space	Agricultural land (partially wooded)	Temporary impacts during construction; no long-term impacts	None anticipated	None anticipated
Socioeconomic and Environmental Justice	Forestland and open green space	Agricultural land (partially wooded)	Positive economic benefit with temporary jobs during	None anticipated	None anticipated

Environmental Assessment

Resource	Past Actions	Present Actions	Proposed Actions	Future Actions	Cumulative Effect
			construction and increased tax base for the County		
Coastal Resources	Forestland and open green space	Over 80 miles from the coast and located within a protected coastal area	None anticipated	None anticipated	None anticipated
Noise	Forestland and open green space	Agricultural land (partially wooded)	Temporary increase during 4-month installation; no long-term impacts	None anticipated	None anticipated
Traffic and Transportation	Forestland and open green space	Agricultural land (partially wooded)	Temporary increase during construction; no long-term impacts	None anticipated	None anticipated
Visual Resources	Forestland and open green space	Agricultural land (partially wooded)	A 25-foot vegetative buffer will be planted around the north, east and west boundaries of the Proposed Project Area, reducing or eliminating visibility of the Proposed Project from adjacent properties	None anticipated	None anticipated
Human Health and Safety	Forestland and open green space	Agricultural land (partially wooded)	Limited and temporary impacts during construction which will be carefully managed through training and regulations	None anticipated	None anticipated

6.0 COORDINATION, CONSULTATION AND CORRESPONDENCE

Agency correspondence regarding this project includes:

- DEQ correspondence and PBR certification, dated May 8, 2020 and June 17, 2020.
- DEQ Local Governing Body Certification, dated May 7, 2020.
- NRCS correspondence and AD-1006, regarding prime farmlands, dated June 19, 2020.
- ACOE correspondence regarding wetlands and WOUS, dated December 16, 2019.
- VDHR correspondences, regarding historic properties, dated June 14, 2020 and July 13, 2020.
- Consultation was initiated with the following THPOs:
 - Nansemond Indian Nation
1001 Pembroke Lane
Suffolk, Virginia 23434
 - Erin Paden
Historic Preservation Director
Delaware Nation of Oklahoma
P.O. Box 825
Anadarko, Oklahoma 73005

Copies of all communications are included in this EA.

7.0 LIST OF PREPARERS

Holocene Clean Energy:

- Davis Plunkett, Development Manager

True North Consultants, Inc.:

- Brian Mihelich, Executive Vice President
- Leslie Schroeder, Staff Consultant
- Marina Jawad, Staff Consultant

USDA RUS Personnel:

- Suzanne Kopich, Environmental Protection Specialist
- James Warner, State Environmental / Civil Rights Coordinator

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APPENDIX I

Figures

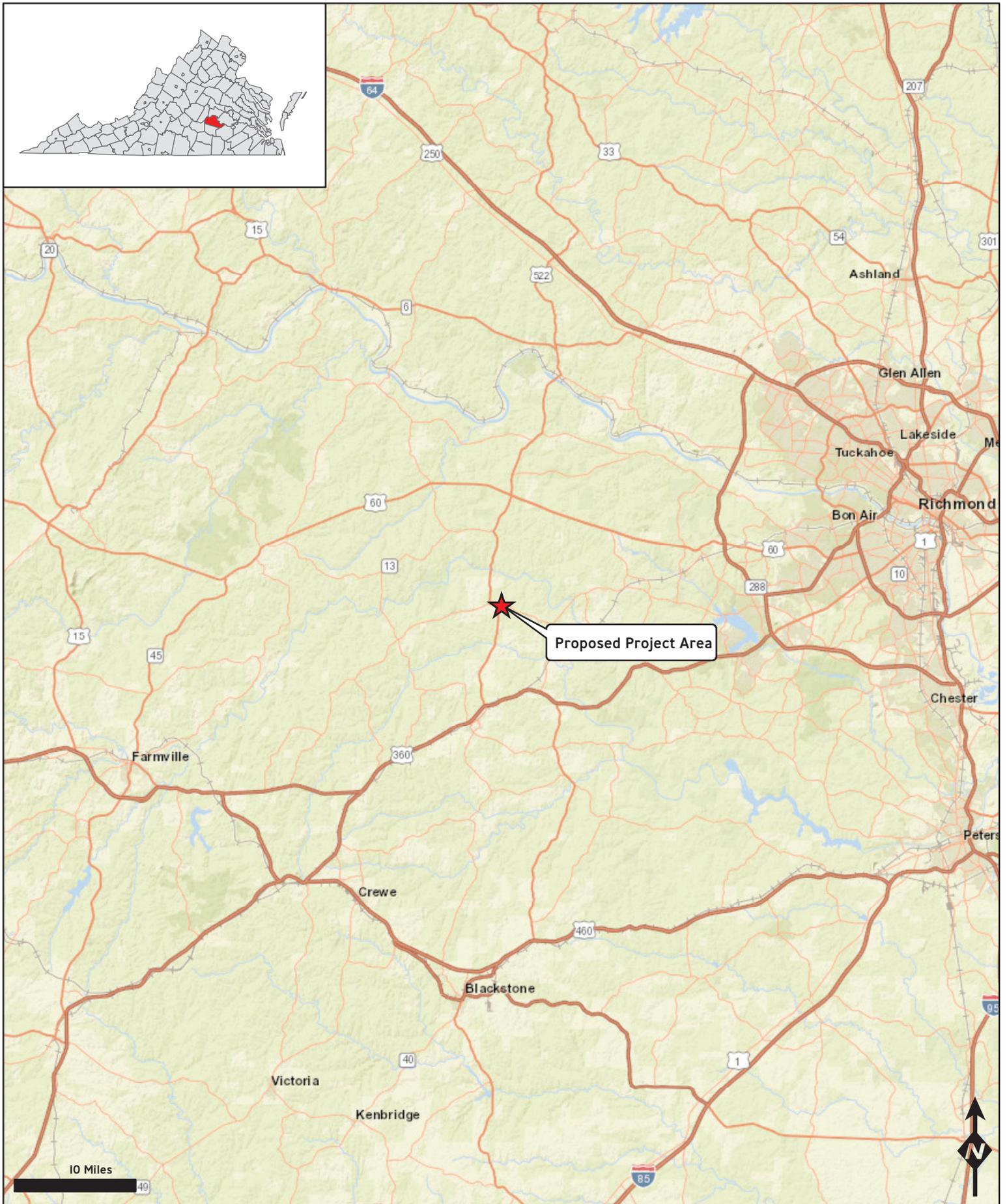


FIGURE I
Regional Map

*Proposed Amelia Solar I
Amelia Court House, Amelia County, Virginia*

Legend

 Proposed Project Parcel

 Proposed Project Area

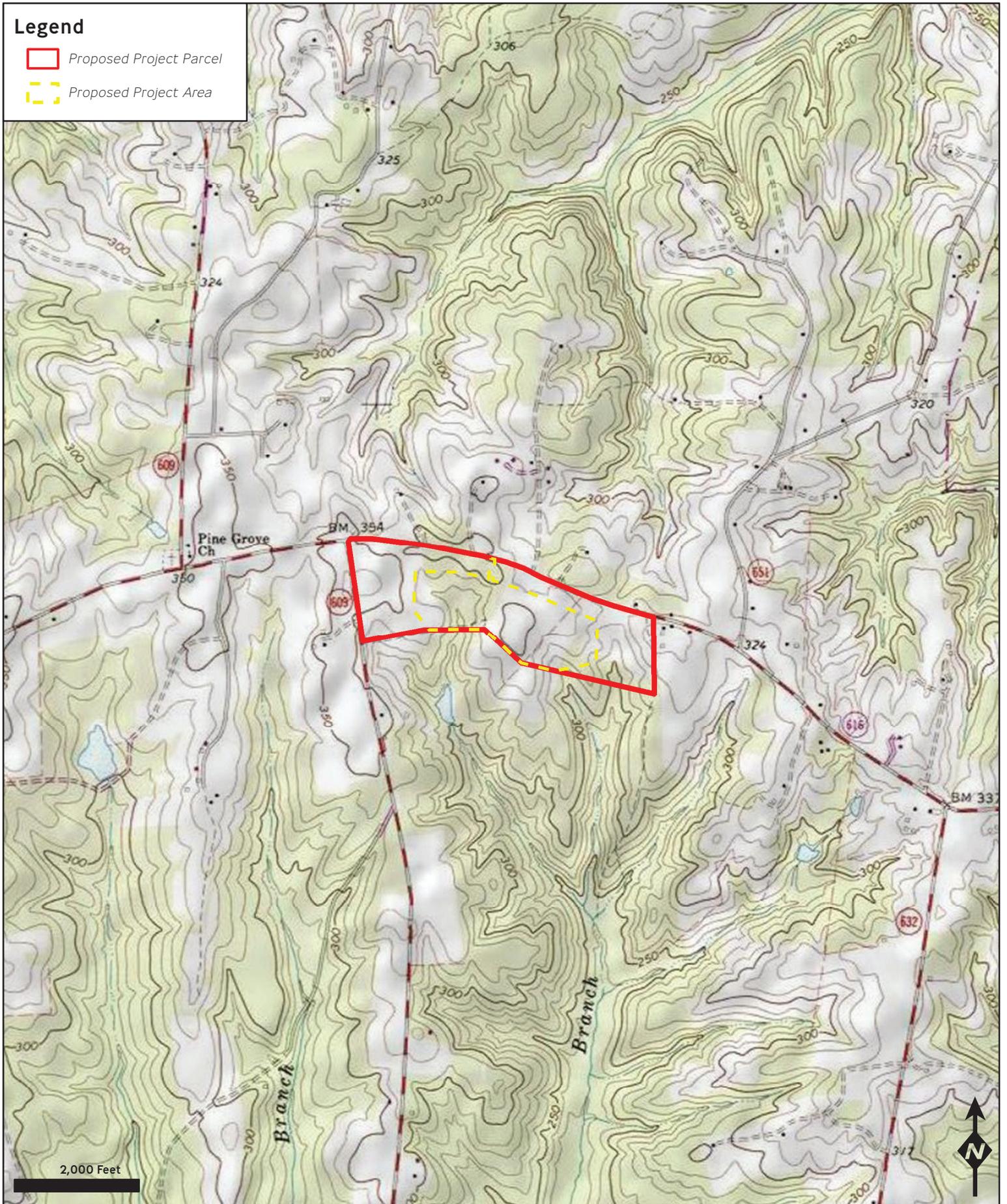


FIGURE 2

Topographic Map

Proposed Amelia Solar 1

Amelia Court House, Amelia County, Virginia

Legend

 Proposed Project Parcel

 Proposed Project Area



FIGURE 3
Area Map

*Proposed Amelia Solar I
Amelia Court House, Amelia County, Virginia*

APPENDIX II

Drawings

APPENDIX III

Site Photographs





APPENDIX IV

Land Use



RECEIVED
JUN 22 2020

BY:

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 1111 East Main Street, Suite 1400, Richmond, VA 23219

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

www.deq.virginia.gov

Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

June 17, 2020

Mr. Davis Plunkett
Development Project Manager
Holocene Clean Energy
4325 Lake Boone Trail, Suite 220
Raleigh, NC 27607

**RE: HCE Amelia Solar I, LLC
PBR 9VAC15-60-130 Authorization**

Dear Mr. Plunkett:

Thank you for notifying the Department of Environmental Quality (DEQ) about the 5 MWac proposed project, HCE Amelia Solar I, LLC, (Amelia Solar I) located in Amelia Court House, Virginia. As described in the documents you provided (attached), the project will consist of 16,300 modules.

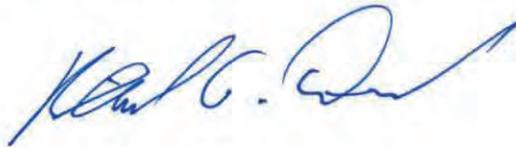
Pursuant to Part III of the DEQ's Small Renewable Energy Projects (Solar) Permit by Rule (PBR) Regulation, the owner or operator of a small solar energy project with rated capacity greater than 500 kilowatts and less than or equal to five megawatts shall notify the department and shall submit a certification by the governing body of the locality where the project will be located that the project complies with all applicable land use ordinances (9VAC15-60-130 B). Although projects with rated capacity of five megawatts and less do not have to fulfill the full requirements of the Solar PBR Regulation, DEQ deems such projects to be covered by the PBR.

HCE Amelia Solar I, LLC
Page 2
June 17, 2020

This authorization for construction and operation shall not relieve Amelia Solar I of the responsibility to comply with all other applicable local, state and federal statutes and regulations, including but not limited to strict adherence to applicable state and local erosion and sediment control/storm water management laws.

Should you need further information or have any questions please contact Mary E. Major at 804-698-4423.

Sincerely,

A handwritten signature in blue ink, appearing to read "Michael G. Dowd", with a long, sweeping flourish extending to the right.

Michael G. Dowd, Director
Air and Renewable Energy Division



Holocene
CLEAN ENERGY

(Notice of Intent for Solar Energy Project – “de minimis” Section 130 projects)

May 8, 2020

Ms. Mary E. Major
Department of Environmental Quality
P. O. Box 1105 Richmond, VA 23218
mary.major@deq.virginia.gov

Dear Ms. Major:

On behalf of HCE Amelia Solar I, LLC, I am providing notice to the Department of Environmental Quality of our intention to construct a small renewable energy project (solar) in Amelia Court House, Virginia, pursuant to Virginia Regulation 9VAC15-60-130.B. This project will be subject to provision 9VAC15-60-130.B because the rated capacity of the project will be 5 megawatts AC.

HCE Amelia Solar I is a 5 MWac solar photovoltaic facility located at the intersection of Genito and Grub Hill Church Road in Amelia Court House, VA. The electrical generation will come from approximately 16,300 solar photovoltaic modules. The project will cover approximately 32 acres of a 98 acre parcel and interconnect to Southside Electric Cooperative.

Attached to this letter, please find a certification by Amelia County that the project complies with all applicable land use ordinances.

If the Department has questions regarding this project, please contact Davis Plunkett at 919-999-2603 and davis.plunkett@holocene-energy.com

Sincerely yours,

Davis Plunkett
Development Project Manager

**Virginia Department of Environmental Quality
Small Renewable Energy Projects (Solar)
Local Governing Body Certification Form**

Facility Name and Location: HCE Amelia Solar I, located at the intersection of Genito and Grub Hill Church Rd, Amelia Court House. Lat: 37.451955°, Long: -77.952110°.

Applicant's Name: HCE Amelia Solar I

Applicant's Mailing Address:
4325 Lake Boone Trail, #220
Raleigh, NC 27607

Telephone Number and Email Address:
919-829-0037
info@holocene-energy.com

The applicant or his representative is submitting an application for a small renewable energy permit by rule from the Virginia Department of Environmental Quality. In accordance with § 10.1 - 1197.6 B 2 of the Code of Virginia, before such permit application can be considered complete, the applicant must obtain a certification from the governing body of the locality or localities in which the small renewable energy project will be located that the project complies with all applicable land use ordinances.

The undersigned requests that an authorized representative of the local governing body sign the certification statement below. In addition, by signing below, the applicant affirms that he has also submitted this form to other localities, if any, in which the proposed project will be located.

Applicant's signature:



Date:

5/5/2020

The undersigned local government representative certifies that the proposed small renewable energy project complies with all applicable land use ordinances, as follows:

(Check one block)



The proposed facility **complies with** all applicable land use ordinances.



The proposed facility **does not comply with** all applicable land use ordinances.

Signature of authorized local government representative:



Date:

5/7/2020

Type or print name:

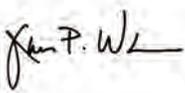
David R. Whitaker

Title:

Community Development Director

County, City or Town:

Amelia County

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request 6/18/2020			
Name of Project Amelia Solar I		Federal Agency Involved USDA-RUS			
Proposed Land Use Solar Farm		County and State Amelia, Virginia			
PART II (To be completed by NRCS)		Date Request Received By NRCS 6/19/2020		Person Completing Form: Louise Jacques	
PART III (To be completed by Federal Agency)		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly		41			
B. Total Acres To Be Converted Indirectly		-			
C. Total Acres In Site		41			
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)		61			
PART VI (To be completed by Federal Agency) Site Assessment Criteria (Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)		Maximum Points	Site A	Site B	Site C
1. Area In Non-urban Use		(15)	15		
2. Perimeter In Non-urban Use		(10)	10		
3. Percent Of Site Being Farmed		(20)	0		
4. Protection Provided By State and Local Government		(20)	0		
5. Distance From Urban Built-up Area		(15)	15		
6. Distance To Urban Support Services		(15)	15		
7. Size Of Present Farm Unit Compared To Average		(10)	0		
8. Creation Of Non-farmable Farmland		(10)	0		
9. Availability Of Farm Support Services		(5)	2		
10. On-Farm Investments		(20)	0		
11. Effects Of Conversion On Farm Support Services		(10)	0		
12. Compatibility With Existing Agricultural Use		(10)	0		
TOTAL SITE ASSESSMENT POINTS		160	57	0	0
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100	61	0	0
Total Site Assessment (From Part VI above or local site assessment)		160	57	0	0
TOTAL POINTS (Total of above 2 lines)		260	118	0	0
Site Selected: A		Date Of Selection 1-4-2021		Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>	
Reason For Selection:		 <small>Digitally signed by JAMES WARNER DN: c=US, o=U.S. Government, ou=Department of Agriculture, cn=JAMES WARNER, 0.9.2342.19200300.100.1.1=1200100 0125897 Date: 2021.01.04 17:01:01 -05'00'</small>			
Name of Federal agency representative completing this form: Jim Warner, State Enviro Coord.				Date: 1-4-2021	

(See Instructions on reverse side)

Form AD-1006 (03-02)

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

- Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, <http://fppa.nrcs.usda.gov/lesa/>.
- Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s) of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)
- Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.
- Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.
- Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.
- Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.
- Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.
2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.

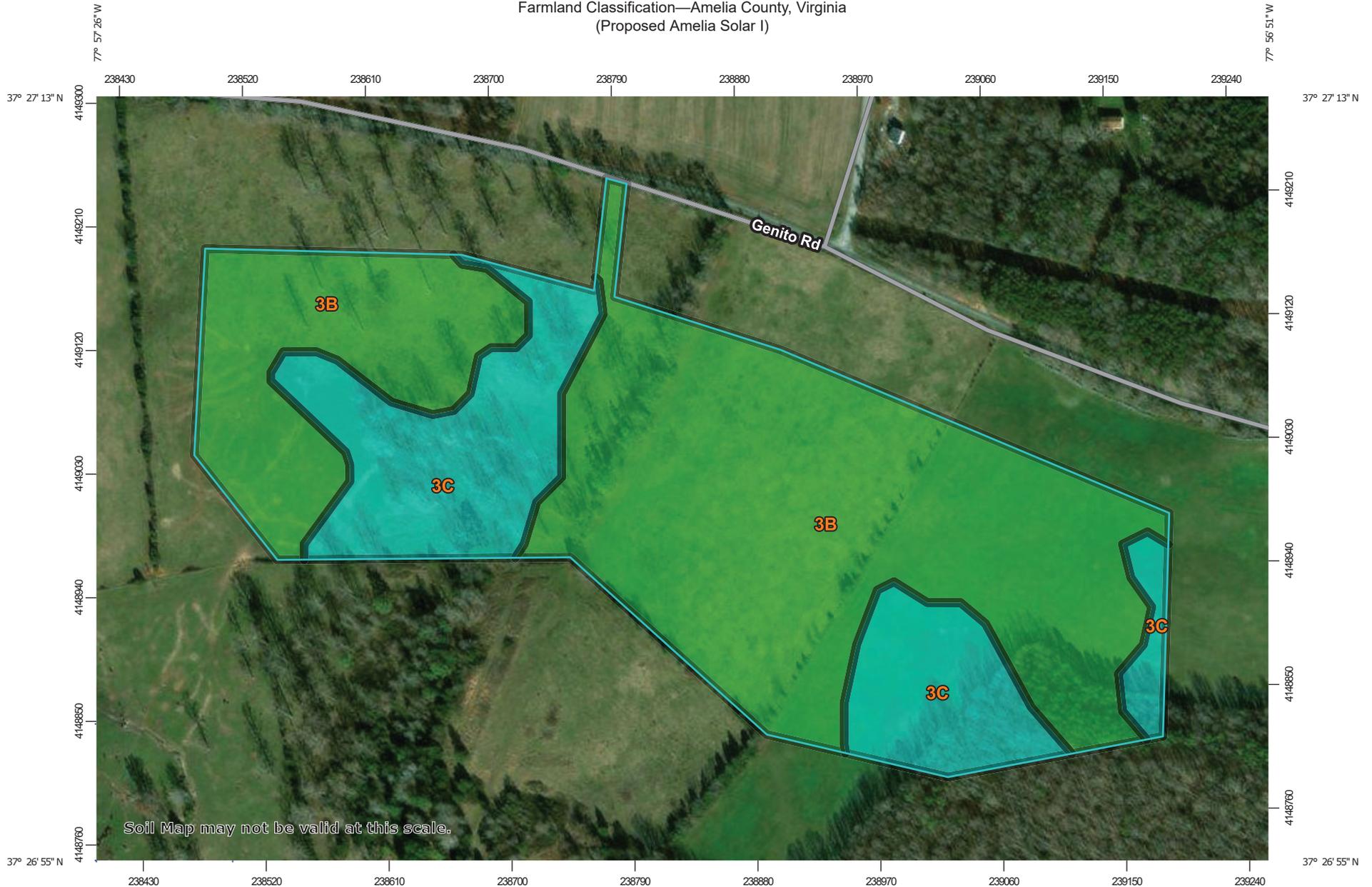
Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$$

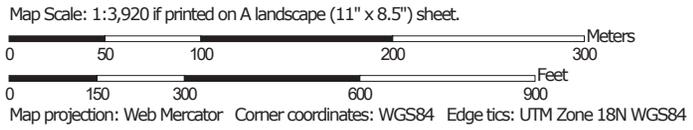
For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.

Farmland Classification—Amelia County, Virginia
(Proposed Amelia Solar I)



Soil Map may not be valid at this scale.



Farmland Classification—Amelia County, Virginia
Proposed Amelia Solar I)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of statewide importance, if drained
-  Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough
-  Farmland of statewide importance, if thawed
-  Farmland of local importance
-  Farmland of local importance, if irrigated

-  Farmland of unique importance
-  Not rated or not available

Soil Rating Lines

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

Farmland Classification—Amelia County, Virginia
Proposed Amelia Solar I)

	Prime farmland if subsoiled, completely removing the root inhibiting soil layer		Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium		Farmland of unique importance		Prime farmland if subsoiled, completely removing the root inhibiting soil layer
	Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60		Farmland of statewide importance, if irrigated and drained		Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season		Soil Rating Points Not prime farmland		Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
	Prime farmland if irrigated and reclaimed of excess salts and sodium		Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season		Prime farmland if drained		Prime farmland if irrigated and reclaimed of excess salts and sodium
	Farmland of statewide importance		Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer		Farmland of statewide importance, if warm enough		Prime farmland if protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance
	Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60		Farmland of statewide importance, if thawed		Prime farmland if irrigated		Farmland of statewide importance, if drained
	Farmland of statewide importance, if irrigated				Farmland of local importance		Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
					Farmland of local importance, if irrigated		Prime farmland if irrigated and drained		Farmland of statewide importance, if irrigated
							Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season		

Farmland Classification—Amelia County, Virginia
Proposed Amelia Solar I)

<ul style="list-style-type: none">  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season  Farmland of statewide importance, if irrigated and drained  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60 	<ul style="list-style-type: none">  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season  Farmland of statewide importance, if warm enough  Farmland of statewide importance, if thawed  Farmland of local importance  Farmland of local importance, if irrigated 	<ul style="list-style-type: none">  Farmland of unique importance  Not rated or not available <p>Water Features</p> <ul style="list-style-type: none">  Streams and Canals <p>Transportation</p> <ul style="list-style-type: none">  Rails  Interstate Highways  US Routes  Major Roads  Local Roads <p>Background</p> <ul style="list-style-type: none">  Aerial Photography 	<p>The soil surveys that comprise your AOI were mapped at 1:24,000.</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>Warning: Soil Map may not be valid at this scale.</p> <p>Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.</p> </div> <p>Please rely on the bar scale on each map sheet for map measurements.</p> <p>Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)</p> <p>Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.</p> <p>This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.</p> <p>Soil Survey Area: Amelia County, Virginia Survey Area Data: Version 16, Sep 16, 2019</p> <p>Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.</p> <p>Date(s) aerial images were photographed: Apr 11, 2015—Nov 22, 2016</p> <p>The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.</p>
--	--	--	--

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
3B	Cecil fine sandy loam, 2 to 7 percent slopes	All areas are prime farmland	29.5	72.7%
3C	Cecil fine sandy loam, 7 to 15 percent slopes	Farmland of statewide importance	11.1	27.3%
Totals for Area of Interest			40.6	100.0%

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower



NATIONAL WILD AND SCENIC RIVERS SYSTEM



- NATIONAL SYSTEM
- MANAGEMENT
- RESOURCES
- PUBLICATIONS
- CONTACT US
- 50 YEARS
- SITE INDEX

VIRGINIA

Virginia has approximately 49,350 miles of river, but no designated wild & scenic rivers.



[+ View larger map](#)

Virginia does not have any designated rivers.

EXPLORE DESIGNATED RIVERS



Choose A State

Choose A River

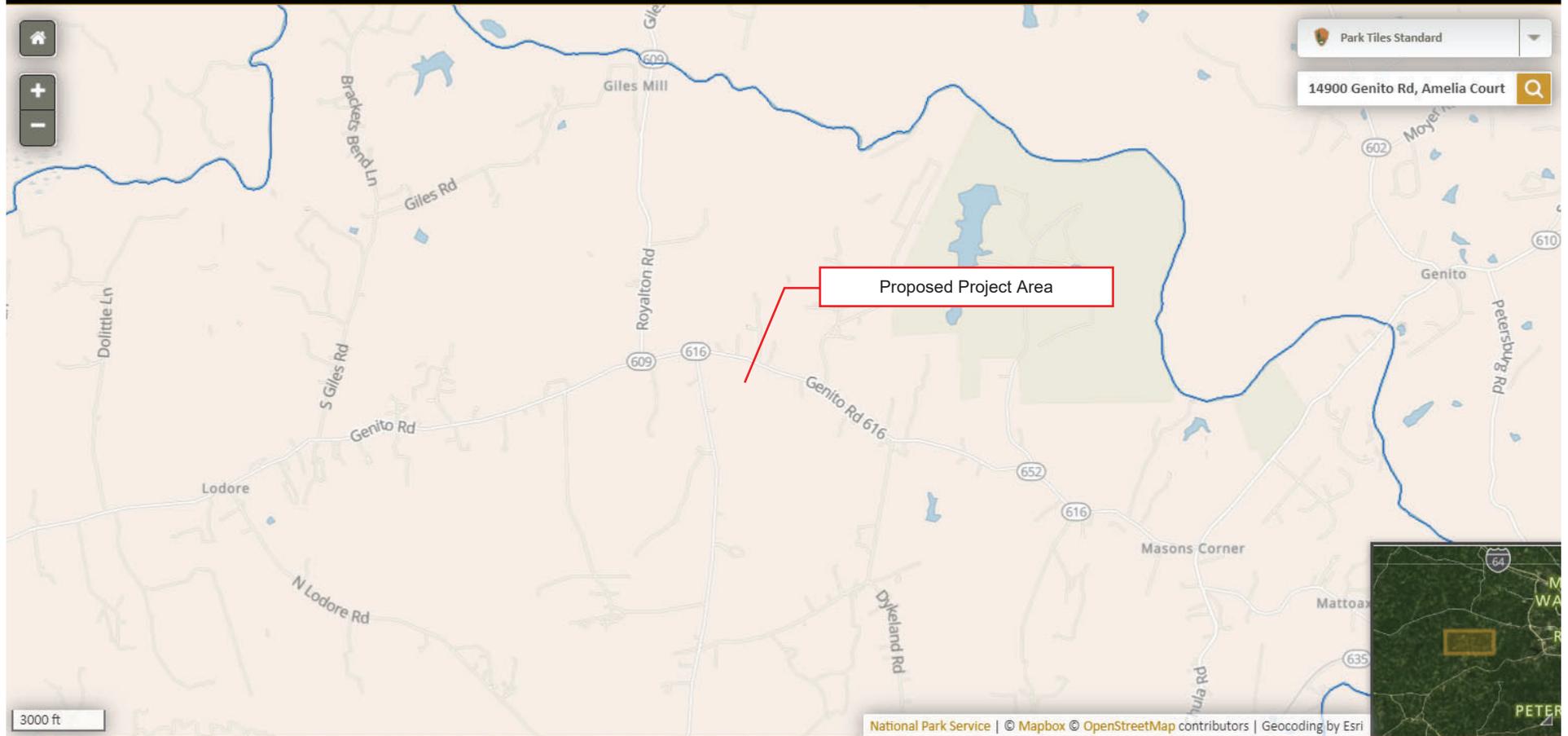
While progress should never come to a halt, there are many places it should never come to at all. — Paul Newman



Nationwide Rivers Inventory

This is a listing of more than 3,200 free-flowing river segments in the U.S. that are believed to possess one or more "outstandingly remarkable" values.

National Park Service
U.S. Department of the Interior



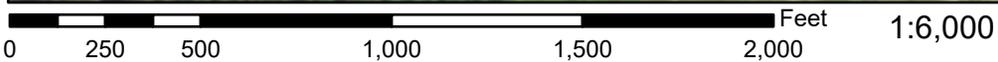
APPENDIX V

Floodplains

National Flood Hazard Layer FIRMMette



77°57'29"W 37°27'17"N



77°56'51"W 37°26'49"N

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) <i>Zone A, V, A99</i>
		With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i>
		Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>
		Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>
		Area with Flood Risk due to Levee <i>Zone D</i>
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>
		Effective LOMRs
		Area of Undetermined Flood Hazard <i>Zone D</i>
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Profile Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped
		The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **3/18/2021 at 2:14 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX VI

Wetlands



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NORFOLK DISTRICT
FORT NORFOLK
803 FRONT STREET
NORFOLK VA 23510-1011

December 16, 2019

PRELIMINARY JURISDICTIONAL DETERMINATION

Southern Virginia Regulatory Section
NAO-2019-1549 (Myrtle Branch)

Holocene Clean Energy
c/o Davis Plunkett
727 W. Hargett Street, Suite 201
Raleigh, NC 27603

Dear Mr. Plunkett:

This letter is in regard to your request for a preliminary jurisdictional determination verification for waters of the U.S. (including wetlands) on an approximately 89.6 acre study area located near 14902 Genito Road in Amelia Court House, Virginia.

The map, entitled "FIGURE 4: WETLANDS AND WATERS OF THE U.S. DELINEATION MAP" prepared by Timmons Group, and date stamped as received August 13, 2019 (*copy enclosed*), provides the approximate location(s) of waters and/or wetlands within the study area on the property listed above. Approximately 0.16 acres of non-tidal wetlands have been identified on the property. The basis for this delineation includes application of the Corps' *1987 Wetland Delineation Manual* and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region* as well as the presence of positive indicators of wetland hydrology, hydric soils, and hydrophytic vegetation. This letter is not confirming the Cowardin classifications of these aquatic resources.

The Norfolk District has relied on the information and data provided by the applicant or agent. If such information and data subsequently prove to be materially false or materially incomplete, this verification may be suspended or revoked, in whole or in part, and/or the Government may institute appropriate legal proceedings.

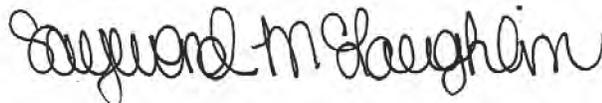
Discharges of dredged or fill material, including those associated with mechanized landclearing, into waters and/or wetlands on this site may require a Department of the Army permit and authorization by state and local authorities including a Virginia Water Protection Permit from the Virginia Department of Environmental Quality (DEQ), a permit from the Virginia Marine Resources Commission (VMRC) and/or a permit from your local wetlands board. This letter is a confirmation of the Corps preliminary jurisdiction for the waters and/or wetlands on the subject property and does not authorize any work in these areas. Please obtain all required permits before starting work in the delineated waters/wetland areas.

This is a preliminary jurisdictional determination and is therefore not a legally binding determination regarding whether Corps jurisdiction applies to the waters or wetlands in question. Accordingly, you may either consent to jurisdiction as set out in this preliminary jurisdictional determination and the attachments hereto if you agree with the determination, or you may request and obtain an approved jurisdictional determination.

Enclosed is a copy of the "Preliminary Jurisdictional Determination Form". Please review the document, sign, and return one copy to Ms. Sayward McLaughlin, of my staff, either via email (Sayward.a.mclaughlin@usace.army.mil) or via standard mail to US Army Corps of Engineers, Regulatory Office, and ATTN: Sayward McLaughlin, 803 Front Street Norfolk, Virginia 23510 within 30 days of receipt and keep one for your records. This delineation of waters and/or wetlands can be relied upon for no more than five years from the date of this letter. New information may warrant revision.

If you have any questions, please contact Ms. Sayward McLaughlin, of my staff, either via telephone at (757) 201-7580 or via email at sayward.a.mclaughlin@usace.army.mil .

Sincerely,



Sayward McLaughlin
Project Manager, Southern Virginia
Regulatory Section

Enclosure(s):
Appeals Form
Delineation Map
Preliminary Jurisdictional Determination Form

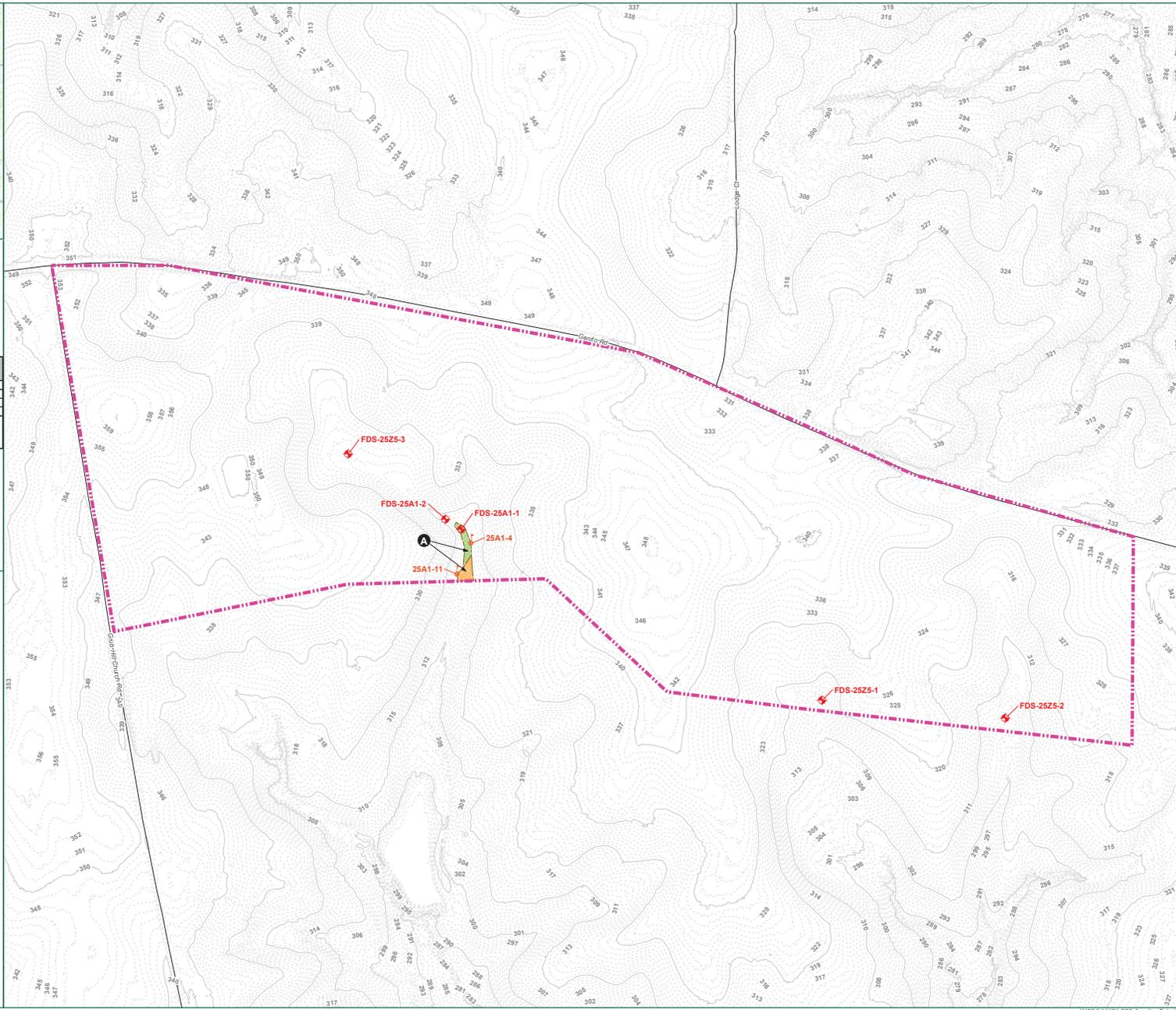
Cc: Virginia Department of Environmental Quality
Locality
FILE



Resource Identification	Confirmation							Resource Description Notes*
	PFO (sq ft)	PSS (sq ft)	PEM (sq ft)	POW (sq ft)	R3 (ft)	R4 (ft)	R6 (ft)	
A	3,250	3,642	0	0	0	0	0	NTV
Total	0	3,250	3,642	0	0	0	0	
Total Wetland Area =	6,892 sq ft							0.16 ac
Total Stream Length =	0 ft							

* 1=Total; N=Non-Vegetated; V=Vegetated; NV=Non-Vegetated; PFO=Palustrine Forested Wetland; PSS=Palustrine Scrub-Shrub Wetland; PEM=Palustrine Emergent Wetland; POW= Palustrine Open Water; EIW= Estuarine Intertidal Wetlands; R3= Upper Perennial Streams; R4=Intermittent Streams; R6= Epifaunal Streams

- Legend**
- Project Study Limits - 89.6 Acres
 - ⊗ Wetland Identifier
 - ⊕ Wetland Flag
 - ⊕ Field Data Station
 - Palustrine Emergent (PEM) Wetlands
 - Palustrine Scrub-Shrub (PSS) Wetlands
- Topographic Contours**
- Major - 10 Feet
 - Minor - 1 Foot



TIMMONS GROUP
YOUR VISION. ACHIEVED THROUGH OURS.
1101 West 10th Street, Suite 315
Richmond, VA 23228
www.timmons.com

PROJECT NAME & LOCATION

AMELIA SOLAR
AMELIA COUNTY,
VIRGINIA

DATE 07/30/2019
PROJECT NUMBER 44131.003
PROJECT NAME AMELIA SOLAR
DESIGNED BY GUYTON
DESIGNED BY A. MEHFOLD

1. Waters of the U.S. within the project study limits have been located using submeter, Bluetooth GPS antennas by Timmons Group.
2. Waters of the U.S. have not been confirmed by the U.S. Army Corps of Engineers until stamped.
3. Project limits are approximate.
4. Topography based on USGS LIDAR.
5. Cowardin Stream Classifications are based solely on field observations. No formal Stream assessment methodology was completed to determine these Cowardin Classifications.

These data and associated documents are the intellectual property of Timmons Group and may not be copied, in whole or in part, nor may they be used for any purpose whatsoever, including, but not limited to, construction, bidding, or other construction planning, without the express written consent of Timmons Group.

REVISIONS	
NO.	DESCRIPTION

FIGURE 4: WETLANDS AND WATERS OF THE U.S. DELINEATION MAP

SCALE (FEET)

0 175 350

H:1" = 175' 1

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: December 16, 2019

B. NAME AND ADDRESS OF PERSON REQUESTING PJD:

Holocene Clean Energy c/o Davis Plunkett 727 W. Hargett Street, Suite 201 Raleigh, NC 27603

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

NAO-2019-1549; Amelia Solar

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: Virginia County/parish/borough: Amelia Co City:

Center coordinates of site (lat/long in degree decimal format): 37.449717, -77950784

Lat.: xx.xxx° Long.: yy.yyy°

Universal Transverse Mercator:

Name of nearest waterbody: Myrtle Branch

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: November 25, 2019

Field Determination. Date(s):

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
			0.16 acres	non-tidal wetlands	404

- 1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
- 2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there "may be" waters of the U.S. and/or that there "may be" navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:

Map: FIGURE 4. WETLANDS AND WATERS OF THE _____.

Data sheets prepared/submitted by or on behalf of the PJD requestor.

Office concurs with data sheets/delineation report.

Office does not concur with data sheets/delineation report. Rationale: _____.

Data sheets prepared by the Corps: _____.

Corps navigable waters' study: _____.

U.S. Geological Survey Hydrologic Atlas: _____.

USGS NHD data.

USGS 8 and 12 digit HUC maps.

U.S. Geological Survey map(s). Cite scale & quad name: Chula _____.

Natural Resources Conservation Service Soil Survey. Citation: _____.

National wetlands inventory map(s). Cite name: CorpsMap

State/local wetland inventory map(s): _____.

FEMA/FIRM maps: _____.

100-year Floodplain Elevation is: _____. (National Geodetic Vertical Datum of 1929)

Photographs: Aerial (Name & Date): _____.

or Other (Name & Date): LiDAR

Previous determination(s). File no. and date of response letter: _____.

Other information (please specify): _____.

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.



Sayward A.
McLaughlin

Signature and date of
Regulatory staff member
completing PJD

Signature and date of
person requesting PJD
(REQUIRED, unless obtaining
the signature is impracticable)¹

¹ Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Holocene Clean Energy c/o Davis Plunkett		File Number: NAO-2019-1549	Date: 16DEC19
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A	
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B	
	PERMIT DENIAL	C	
	APPROVED JURISDICTIONAL DETERMINATION	D	
X	PRELIMINARY JURISDICTIONAL DETERMINATION	E	

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/appeals.aspx> or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Ms. Sayward McLaughlin
U.S. Army Corps of Engineers – Norfolk District
803 Front Street
Norfolk, VA 23510
(757) 201-7580
Sayward.a.mclaughlin@usace.army.mil

If you only have questions regarding the appeal process you may also contact:

Mr. James W. Haggerty
Regulatory Program Manager (CENAD-PD-OR)
U.S. Army Corps of Engineers
Fort Hamilton Military Community
301 General Lee Avenue
Brooklyn, New York 11252-6700
Telephone number: 347-370-4650

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.

Date:

Telephone number:



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NORFOLK DISTRICT
FORT NORFOLK
803 FRONT STREET
NORFOLK VA 23510-1011

December 16, 2019

Supplemental Preapplication Information

Project Number: NAO-2019-1549

1. A search of the Virginia Department of Historic Resources data revealed the following:

- No known historic properties are located on the property.
- Tribal consultation may be required.
- The following known architectural resources are located on the property:
- The following known archaeological resources are located on the property:
- The following known historic resources are located in the vicinity of the property (potential for effects to these resources from future development):

NOTE:

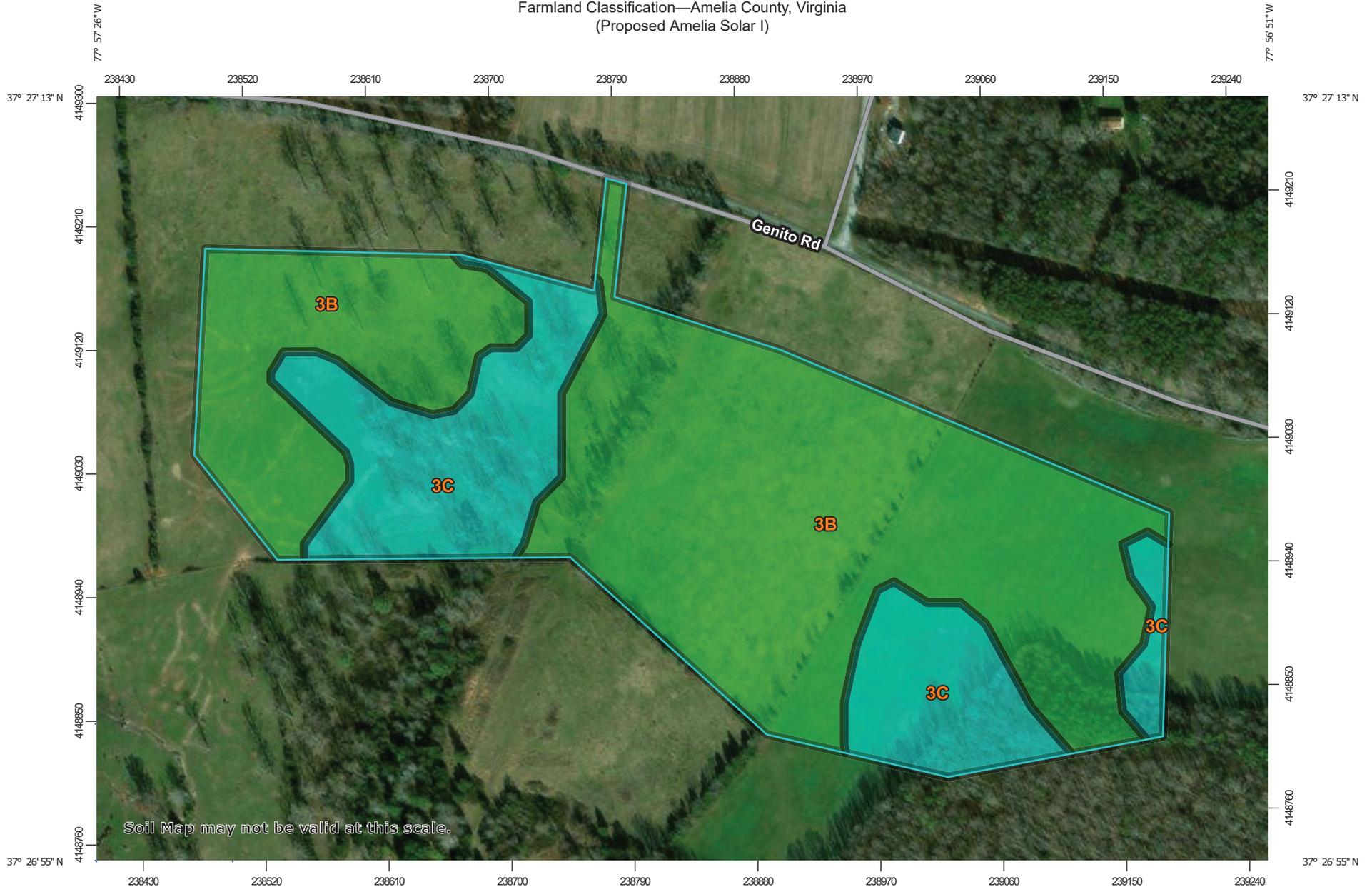
- 1) *The information above is for planning purposes only. In most cases, the property has not been surveyed for historic resources. Undiscovered historic resources may be located on the subject property or adjacent properties and this supplemental information is not intended to satisfy the Corps' requirements under Section 106 of the National Historic Preservation Act (NHPA).*
- 2) *Prospective permittees should be aware that Section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant.*

2. A search of the data supplied by the U.S. Fish & Wildlife Service, the Virginia Department of Conservation and Recreation and the Virginia Department of Game and Inland Fisheries revealed the following:

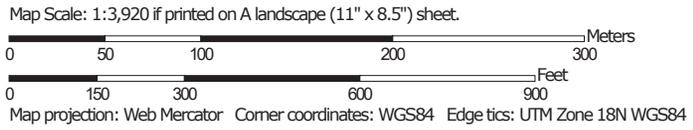
- No known populations of threatened or endangered species are located on or within the vicinity of the subject property.
- The following federally-listed species may occur within the vicinity of the subject property: Northern Long-eared Bat (*Myotis septentrionalis*)
- The following state-listed (or other) species may occur within the vicinity of the subject property:

Please note this information is being provided to you based on the preliminary data you submitted to the Corps relative to project boundaries and project plans. Consequently, these findings and recommendations are subject to change if the project scope changes or new information becomes available and the accuracy of the data.

Farmland Classification—Amelia County, Virginia
(Proposed Amelia Solar I)



Soil Map may not be valid at this scale.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Soil Rating Lines

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Soil Rating Points

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Amelia County, Virginia
Survey Area Data: Version 17, Jun 3, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 11, 2015—Nov 22, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
3B	Cecil fine sandy loam, 2 to 7 percent slopes	0	29.5	72.7%
3C	Cecil fine sandy loam, 7 to 15 percent slopes	3	11.1	27.3%
Totals for Area of Interest			40.6	100.0%

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower



Amelia Solar I

 Proposed Project Area



March 18, 2021

Wetlands

- | | | | | | |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland |  | Lake |
|  | Estuarine and Marine Wetland |  | Freshwater Forested/Shrub Wetland |  | Other |
|  | Freshwater Pond |  | Riverine |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



1001 Boulders Parkway
Suite 300
Richmond, VA 23225

P 804.200.6500
F 804.560.1016
www.timmons.com

August 13, 2019

Mr. Randy Steffey
U.S. Army Corps of Engineers- Norfolk District
Richmond Field Office
9100 Arboretum Parkway Suite 235
Richmond, Virginia 23236

**Re: Jurisdictional Waters of
the U.S. Delineation Package
Amelia Solar I
(Approx. 89.6 acres)
Amelia County, Virginia**

Applicant: Holocene Clean Energy
c/o Davis Plunkett
727 W. Hargett Street, Suite 201
Raleigh, NC 27603

Dear Mr. Steffey,

On behalf of Holocene Clean Energy, Timmons Group is seeking confirmation of a wetland delineation conducted on July 29, 2019 to identify Waters of the U.S., including stream and wetland boundaries, at the Amelia Solar I site (Site). The Site encompasses approximately 89.6 acres and is located in Amelia County in Virginia's Piedmont Physiographic Province see [Figure 1: Vicinity Map](#)). It is bound by Genito Road to the north, Grub Hill Church Road to the west, and agricultural/pastoral lands to the south and east. The majority of the Site consists of fallow agricultural fields. Onsite surface and stormwater generally drain south to unnamed tributaries of Myrtle Branch which flows south to Flat Creek and ultimately the Appomattox River. The Site is located within the Appomattox watershed (HUC 02080207) [Figure 2: Hydrologic Unit Code Map](#) .

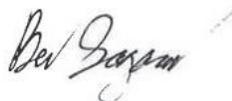
The Site was delineated based upon the methodology outlined in the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual; the Regional Supplement to the USACE Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0); and subsequently issued USACE regulatory guidance regarding the identification of jurisdictional stream channels through the recognition of field indicators of an ordinary high water mark within drainage features. The wetland boundary was flagged with consecutively numbered pink and black ribbon at approximately 50-foot intervals. Field data stations were established within close proximity to the flagged wetland boundary in order to document upland and wetland conditions existing along the jurisdictional boundary. Field data stations were labeled and marked with blue flagging in the field. Features identified in the field were GPS located for the study area. Field data sheets are included in [Appendix A](#).

Using these methodologies, delineation mapping was produced showing the location and size of jurisdictional areas delineated onsite and is included as Figure 4: Wetlands and Waters of the U.S. Delineation Map. During our delineation, approximately 0.08 acres of palustrine scrub-shrub (PSS) wetlands and 0.08 acres of palustrine emergent (PEM) wetlands were identified onsite.

The primary and secondary hydrology indicators present within wetland areas included: oxidized rhizospheres on living roots (C3), sparsely vegetated concave surface (B8), drainage patterns (B10), and FAC-Neutral Test (D5). Wetland vegetation was dominated by rough cocklebur *Xanthium strumarium* and white cutgrass *Leersia virginica* in the herb stratum. No vegetation within the tree, sapling nor shrub stratum were found in wetland areas as the Site appears to be actively maintained, at least every few years. The hydric soils observed within jurisdictional areas exhibited low chroma matrix colors and redox concentrations that are characteristic of reducing anaerobic conditions associated with the formation of hydric soils. The soils identified within the wetland areas met the F3 Depleted Matrix hydric soil indicator. Soils in the top 10 inches ranged from dark brown (10YR 3/3) to greyish brown (2.5Y 5/2) with concentrations of redox and were generally underlain by the same greyish brown matrix, mixed with concentrations and depletions. Soil textures identified within the wetlands were mostly silty clay loam, sandy clay, and clay. Upland areas located within the subject property are characterized by fallow agricultural fields and retired silvicultural areas see Figure 3: Environmental Inventory Map. Upland soils were typically dark brown (10YR 3/4) to brown (10YR 4/6). Upland soil textures include sandy clay, sandy clay loam, and clay. Some indicators of wetland hydrology were observed within the upland areas, including geomorphic position (D2) and drainage patterns (B10).

Timmons Group would appreciate your review of the enclosed maps and attachments, and confirmation of the jurisdictional Waters of the U.S. delineation performed at this Site. Please feel free to contact me at (804)-200-6567, or ben.sagara@timmons.com if you have any questions or would like to schedule a site visit to confirm the jurisdictional boundaries.

Sincerely,
Timmons Group



Ben Sagara
Environmental Scientist



Sarah Kammer
Environmental Technician

Enclosure
CC: Rick Thomas, Timmons Group

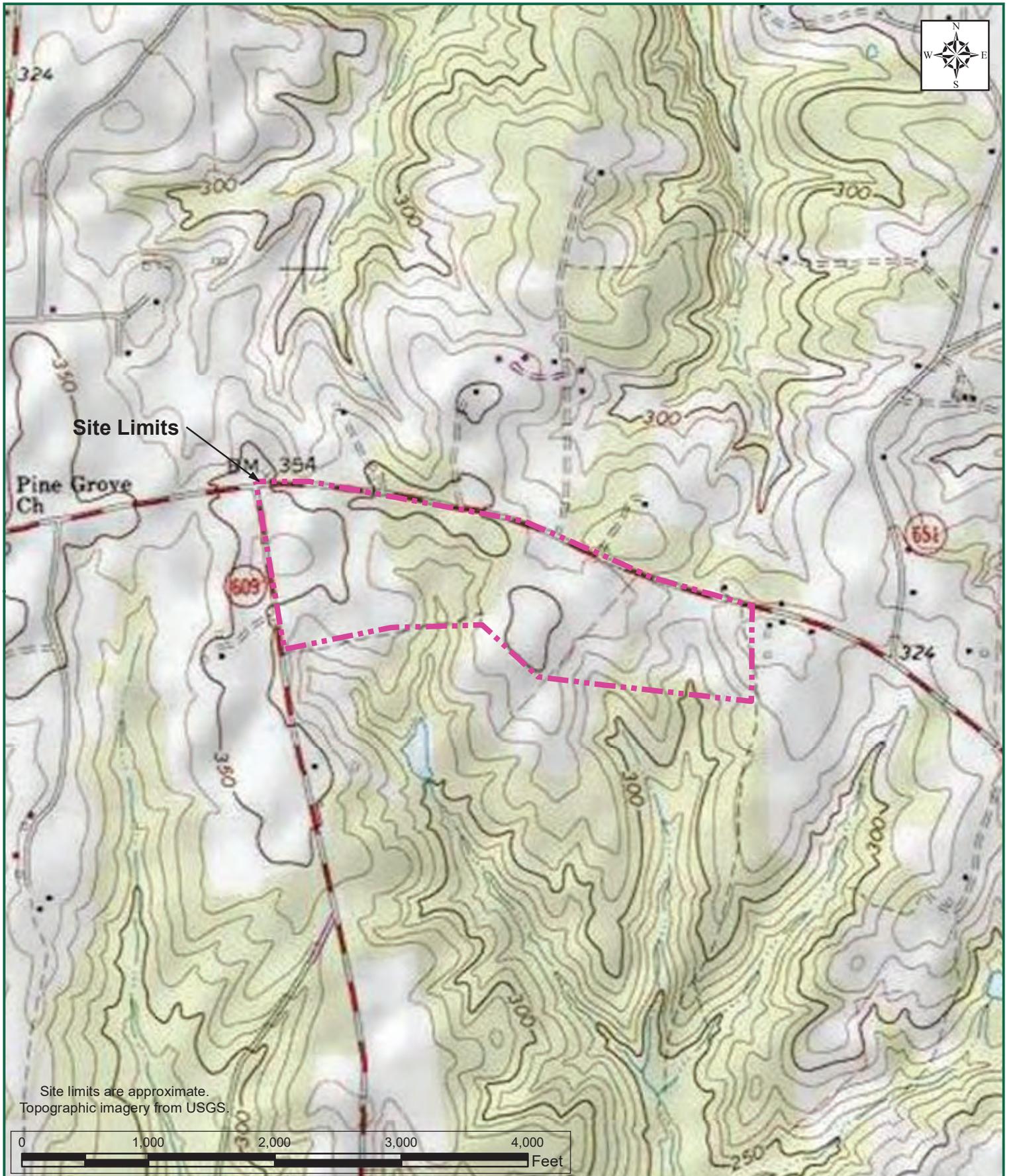
MAPS

- Figure 1 Vicinity Map
- Figure 2 Hydrologic Unit Code Map
- Figure 3 Environmental Inventory Map
- Figure 4 Wetlands and Waters of the U.S. Delineation Map

APPENDICES

- Appendix A Field Data Sheets
- Appendix B USACE JD Request Form

MAPS

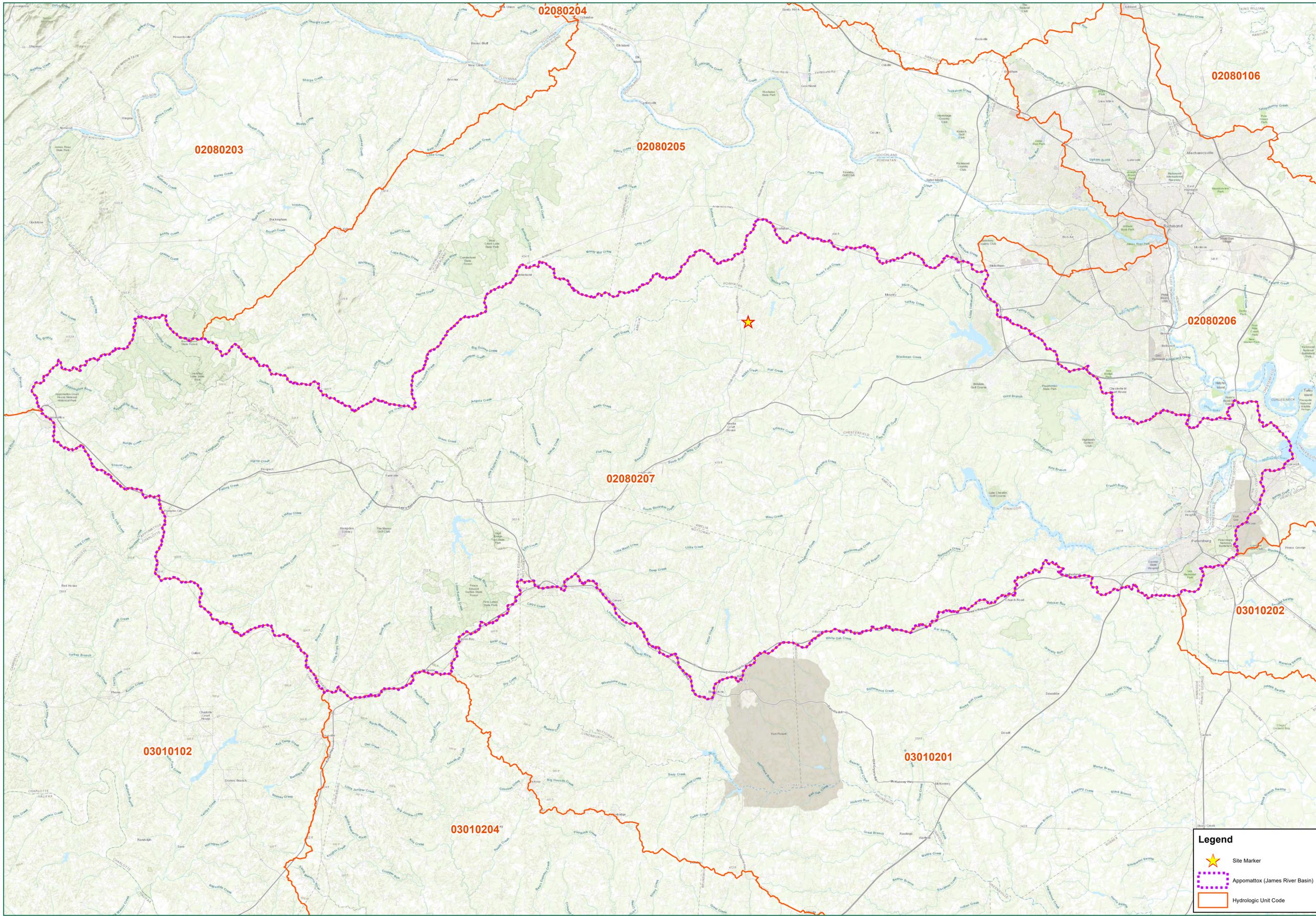


AMELIA SOLAR
AMELIA COUNTY, VIRGINIA
FIGURE 1: VICINITY MAP

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

TIMMONS GROUP JOB NUMBER: 44131.003
PROJECT STUDY LIMITS: 89.6 ACRES
LATITUDE: 37.449717
LONGITUDE: -77.950784

U.S.G.S. QUADRANGLE S : CHULA
DATE S : 2016
WATERSHED(S) : APPOMATTOX (JAMES RIVER BASIN)
HYDROLOGIC UNIT CODE S : 02080207



TIMMONS GROUP
 YOUR VISION ACHIEVED THROUGH OURS.
 1001 Builders Parkway, Suite 300
 Richmond, VA 23225
 TEL: 804-200-6500
 www.timmons.com

PROJECT NAME & LOCATION
AMELIA SOLAR
 AMELIA COUNTY,
 VIRGINIA

DATE 07/22/2019
PROJECT NUMBER 44131.003
PROJECT NAME AMELIA SOLAR
DESIGNED BY / DRAWN BY A. MEHFOUD

NOTES:
 Site marker is approximate.
 HUC from USGS.
 Topographic basemap from Esri Online.

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REVISIONS

#	DATE	DESCRIPTION

DRAWING DESCRIPTION
FIGURE 2:
 HYDROLOGIC
 UNIT CODE MAP

Legend

-  Site Marker
-  Appomattox (James River Basin)
-  Hydrologic Unit Code


 Miles

0 3 6
 PLANS PRINTED AS 11X17 ARE HALF SCALE
 SCALE SHEET NUMBER
 H: 1
 1" = 3 Miles

Amelia County Soils	
Mapunit Symbol	Mapunit Name
16A	Partlow fine sandy loam, 0 to 2 percent slopes, rarely flooded
1B	Appling fine sandy loam, 2 to 7 percent slopes
1C	Appling fine sandy loam, 7 to 15 percent slopes
3B	Cecil fine sandy loam, 2 to 7 percent slopes
3C	Cecil fine sandy loam, 7 to 15 percent slopes
W	Water



Legend

- Project Study Limits - 89.6 Acres
- National Hydrography Dataset
- National Wetlands Inventory

Hydric Soil Classification

- Hydric
- Partially Hydric; Non Hydric

TIMMONS GROUP
 YOUR VISION ACHIEVED THROUGH OURS.
 1001 Builders Parkway, Suite 300
 Richmond, VA 23226
 TEL: 804-200-6500
 www.timmons.com

PROJECT NAME & LOCATION

AMELIA SOLAR
 AMELIA COUNTY,
 VIRGINIA

DATE	07/22/2019
PROJECT NUMBER	44131.003
PROJECT NAME	AMELIA SOLAR
DESIGNED BY / DRAWN BY	A. MEHFOUD

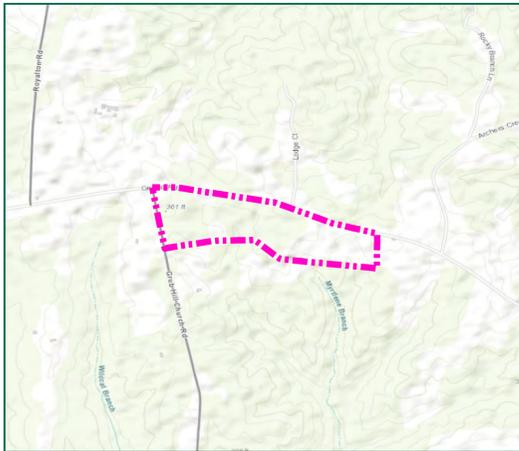
NOTES:
 Project Limits are approximate.
 NWI from US Fish and Wildlife Service.
 Soils data from SSURGO.
 National Hydrography Dataset from USGS.
 Aerial imagery from VGIN.

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#	DATE	DESCRIPTION

DRAWING DESCRIPTION
 FIGURE 3:
 ENVIRONMENTAL
 INVENTORY MAP

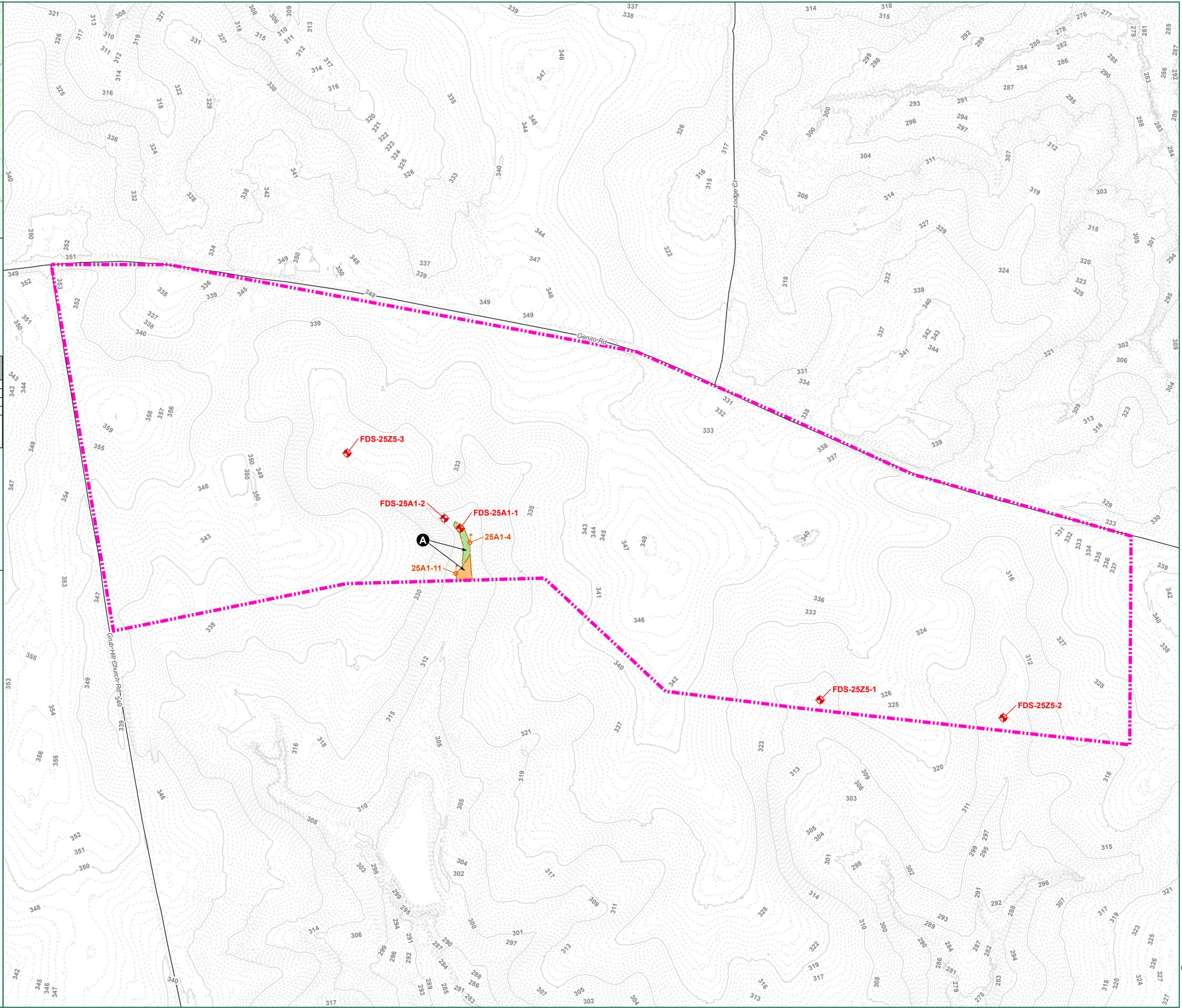
SCALE (FEET)
 0 150 300
 PLANS PRINTED AS 1/4" = 150' SCALE
 SHEET NUMBER 1



Resource Identification	Confirmation								Resource Description Notes*
	PFO (sq ft)	PSS (sq ft)	PEM (sq ft)	POW (sq ft)	R3 (lf)	R4 (lf)	R6 (lf)	Ditch (lf)	
A	0	3,250	3,642	0	0	0	0	0	NT/V
Total	0	3,250	3,642	0	0	0	0	0	
Total Wetland Area =			6,892 sq ft		0.16 ac				
Total Stream Length =			0 lf						

* T=Tidal; NT=Non-tidal; V=Vegetated; NV=Non-Vegetated; PFO=Palustrine Forested Wetland; PSS=Palustrine Scrub-Shrub Wetland; PEM=Palustrine Emergent Wetland; POW= Palustrine Open Water; EIW= Estuarine Intertidal Wetlands; R3= Upper Perennial Streams; R4=Intermittent Streams; R6 = Ephemeral Streams

- ### Legend
- Project Study Limits - 89.6 Acres
 - Wetland Identifier
 - Wetland Flag
 - Field Data Station
 - Palustrine Emergent (PEM) Wetlands
 - Palustrine Scrub-Shrub (PSS) Wetlands
- ### Topographic Contours
- Major - 10 Feet
 - Minor - 1 Foot



TIMMONS GROUP
 YOUR VISION ACHIEVED THROUGH OURS.
 1001 Boulders Parkway, Suite 300
 Richmond, VA 23225
 TEL 804.200.6500
 www.timmons.com

PROJECT NAME & LOCATION
AMELIA SOLAR
 AMELIA COUNTY,
 VIRGINIA

DATE: 07/30/2019
 PROJECT NUMBER: 44131.003
 PROJECT NAME: AMELIA SOLAR
 DESIGNED BY / DRAWN BY: A. MEHFUOD

1. Waters of the U.S. within the project study limits have been located using submeter, Bluetooth GPS antennas by Timmons Group.
2. Waters of the U.S. have not been confirmed by the U.S. Army Corps of Engineers until stamped.
3. Project limits are approximate.
4. Topography based on USGS LIDAR.
5. Cowardin Stream Classifications are based solely on field observations. No formal Stream assessment methodology was completed to determine these Cowardin Classifications.

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REVISIONS	
#	DESCRIPTION

DRAWING DESCRIPTION
FIGURE 4:
 WETLANDS AND
 WATERS OF THE
 U.S. DELINEATION
 MAP

SCALE (FEET)
 0 175 350
 PLANS PRINTED AS 11X17 ARE HALF SCALE
 SCALE SHEET NUMBER
 H:1" = 175' 1

**APPENDIX A
FIELD DATA STATIONS**

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Amelia Solar I City/County: Amelia County Sampling Date: 07/29/2019
 Applicant/Owner: Holocene Clean Energy State: VA Sampling Point: FDS-25A1-2
 Investigator(s): B. Sagara, S. Kammer Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Drainage Swale Local relief (concave, convex, none): Concave Slope (%): 1%
 Subregion (LRR or MLRA): MLRA136 Lat: 37.451295° Long: -77.954535° Datum: _____
 Soil Map Unit Name: Cecil fine sandy loam NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks:					

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor C1 <input type="checkbox"/> Saturation A3 <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils C6 <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table C2 <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test D5
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth inches: <u>N/A</u> Water Table Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth inches: <u>>15in.</u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth inches: <u>>15in.</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: FDS-25A1-2

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30ft.</u>)				
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
	<u>0</u>	Total Cover		
	50% of total cover: <u>0</u>		20% of total cover: <u>0</u>	
Sapling Stratum (Plot size: <u>30ft.</u>)				
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
	<u>0</u>	Total Cover		
	50% of total cover: <u>0</u>		20% of total cover: <u>0</u>	
Shrub Stratum (Plot size: <u>30ft.</u>)				
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
	<u>0</u>	Total Cover		
	50% of total cover: <u>0</u>		20% of total cover: <u>0</u>	
Herb Stratum (Plot size: <u>30ft.</u>)				
1. <u>Schedonorus arundinaceus</u>	<u>50</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Xanthium strumarium</u>	<u>15</u>	<u>N</u>	<u>FAC</u>	
3. <u>Persicaria virginiana</u>	<u>10</u>	<u>N</u>	<u>OBL</u>	
4. <u>Phytolacca americana</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	
5. <u>Rumex crispus</u>	<u>5</u>	<u>N</u>	<u>FAC</u>	
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
	<u>90</u>	Total Cover		
	50% of total cover: <u>45</u>		20% of total cover: <u>18</u>	
Woody Vine Stratum (Plot size: <u>N/A</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
	<u>0</u>	Total Cover		
	50% of total cover: <u>0</u>		20% of total cover: <u>0</u>	
Dominance Test worksheet:				
Number of Dominant Species That Are OBL, FACW, or FAC:				<u>0</u> A)
Total Number of Dominant Species Across All Strata:				<u>1</u> B)
Percent of Dominant Species That Are OBL, FACW, or FAC:				<u>0%</u> A/B)
Prevalence Index worksheet:				
Total % Cover of:		Multiply by:		
OBL species	<u>10</u>	x 1 =	<u>10</u>	
FACW species	<u>0</u>	x 2 =	<u>0</u>	
FAC species	<u>20</u>	x 3 =	<u>60</u>	
FACU species	<u>60</u>	x 4 =	<u>240</u>	
UPL species	<u>0</u>	x 5 =	<u>0</u>	
Column Totals:	<u>90</u>	(A	<u>310</u>	B)
Prevalence Index		B/A = <u>3.4</u>		
Hydrophytic Vegetation Indicators:				
<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation				
<input type="checkbox"/> 2 - Dominance Test is >50%				
<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹				
<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)				
<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)				
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
Definitions of Five Vegetation Strata:				
Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).				
Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.				
Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.				
Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.				
Woody vine – All woody vines, regardless of height.				
Hydrophytic Vegetation Present?				
Yes		<input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Remarks: Include photo numbers here or on a separate sheet.				

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Amelia Solar I City/County: Amelia County Sampling Date: 07/29/2019
 Applicant/Owner: Holocene Clean Energy State: VA Sampling Point: FDS-25Z5-1
 Investigator(s): B. Sagara, S. Kammer Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Sideslope Local relief (concave, convex, none): Concave Slope (%): 2%
 Subregion (LRR or MLRA): MLRA136 Lat: 37.449466° Long: -77.949844° Datum: NAD83
 Soil Map Unit Name: Cecil fine sandy loam NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation Soil or Hydrology significantly disturbed? N Are "Normal Circumstances" present? Yes No
 Are Vegetation Soil or Hydrology naturally problematic? N (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:	

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <table style="width:100%;"> <tr> <td><input type="checkbox"/> Surface Water (A1)</td> <td><input type="checkbox"/> True Aquatic Plants (B14)</td> </tr> <tr> <td><input type="checkbox"/> High Water Table (A2)</td> <td><input type="checkbox"/> Hydrogen Sulfide Odor C1)</td> </tr> <tr> <td><input type="checkbox"/> Saturation A3)</td> <td><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</td> </tr> <tr> <td><input type="checkbox"/> Water Marks (B1)</td> <td><input type="checkbox"/> Presence of Reduced Iron (C4)</td> </tr> <tr> <td><input type="checkbox"/> Sediment Deposits (B2)</td> <td><input type="checkbox"/> Recent Iron Reduction in Tilled Soils C6)</td> </tr> <tr> <td><input type="checkbox"/> Drift Deposits (B3)</td> <td><input type="checkbox"/> Thin Muck Surface (C7)</td> </tr> <tr> <td><input type="checkbox"/> Algal Mat or Crust (B4)</td> <td><input type="checkbox"/> Other (Explain in Remarks)</td> </tr> <tr> <td><input type="checkbox"/> Iron Deposits (B5)</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Water-Stained Leaves (B9)</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Aquatic Fauna (B13)</td> <td></td> </tr> </table>	<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Hydrogen Sulfide Odor C1)	<input type="checkbox"/> Saturation A3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils C6)	<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Iron Deposits (B5)		<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Aquatic Fauna (B13)		<p><u>Secondary Indicators (minimum of two required)</u></p> <table style="width:100%;"> <tr><td><input type="checkbox"/> Surface Soil Cracks (B6)</td></tr> <tr><td><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</td></tr> <tr><td><input type="checkbox"/> Drainage Patterns (B10)</td></tr> <tr><td><input type="checkbox"/> Moss Trim Lines (B16)</td></tr> <tr><td><input type="checkbox"/> Dry-Season Water Table C2)</td></tr> <tr><td><input type="checkbox"/> Crayfish Burrows (C8)</td></tr> <tr><td><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</td></tr> <tr><td><input type="checkbox"/> Stunted or Stressed Plants (D1)</td></tr> <tr><td><input type="checkbox"/> Geomorphic Position (D2)</td></tr> <tr><td><input type="checkbox"/> Shallow Aquitard (D3)</td></tr> <tr><td><input type="checkbox"/> Microtopographic Relief (D4)</td></tr> <tr><td><input type="checkbox"/> FAC-Neutral Test D5</td></tr> </table>	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Moss Trim Lines (B16)	<input type="checkbox"/> Dry-Season Water Table C2)	<input type="checkbox"/> Crayfish Burrows (C8)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	<input type="checkbox"/> Geomorphic Position (D2)	<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> Microtopographic Relief (D4)	<input type="checkbox"/> FAC-Neutral Test D5
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> True Aquatic Plants (B14)																																		
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<input type="checkbox"/> FAC-Neutral Test D5																																			
<p>Field Observations:</p> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth inches: <u>N/A</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth inches: <u>>15in.</u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth inches: <u>>15in.</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																																		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:																																			
Remarks:																																			

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: FDS-25Z5-1

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30ft.</u>)				
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
	<u>0</u>	Total Cover		
	50% of total cover: <u>0</u>		20% of total cover: <u>0</u>	
Sapling Stratum Plot size: <u>30ft.</u>				
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
	<u>0</u>	Total Cover		
	50% of total cover: <u>0</u>		20% of total cover: <u>0</u>	
Shrub Stratum Plot size: <u>30ft.</u>				
1. <u>Diospyros virginiana</u>	<u>3</u>	<u>Y</u>	<u>FAC</u>	
2. <u>Liriodendron tulipifera</u>	<u>2</u>	<u>Y</u>	<u>FACU</u>	
3. <u>Liquidambar styraciflua</u>	<u>1</u>	<u>N</u>	<u>FAC</u>	
4. <u>Ligustrum sinense</u>	<u>1</u>	<u>N</u>	<u>FACU</u>	
5. _____				
6. _____				
	<u>7</u>	Total Cover		
	50% of total cover: <u>3.5</u>		20% of total cover: <u>1.4</u>	
Herb Stratum (Plot size: <u>30ft.</u>)				
1. <u>Schedonorus arundinaceus</u>	<u>70</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Sorghum halepense</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	
3. <u>Rumex crispus</u>	<u>5</u>	<u>N</u>	<u>FAC</u>	
4. <u>Phytolacca americana</u>	<u>4</u>	<u>N</u>	<u>FACU</u>	
5. <u>Rubus pensilvanicus</u>	<u>3</u>	<u>N</u>	<u>FAC</u>	
6. <u>Lonicera japonica</u>	<u>3</u>	<u>N</u>	<u>FACU</u>	
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
	<u>90</u>	Total Cover		
	50% of total cover: <u>45</u>		20% of total cover: <u>18</u>	
Woody Vine Stratum Plot size: <u>N/A</u>				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
	<u>0</u>	Total Cover		
	50% of total cover: <u>0</u>		20% of total cover: <u>0</u>	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 A)

Total Number of Dominant Species Across All Strata: 3 B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33% A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>12</u>	x 3 = <u>36</u>
FACU species <u>85</u>	x 4 = <u>340</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>97</u> (A)	<u>376</u> B

Prevalence Index B/A = 3.88

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes No

Remarks: Include photo numbers here or on a separate sheet.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Amelia Solar I City/County: Amelia County Sampling Date: 07/29/2019
 Applicant/Owner: Holocene Clean Energy State: VA Sampling Point: FDS-25Z5-2
 Investigator(s): B. Sagara, S. Kammer Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Drainage Swale Local relief (concave, convex, none): Concave Slope (%): 2%
 Subregion (LRR or MLRA): MLRA136 Lat: 37.449280° Long: -77.947553° Datum: NAD83
 Soil Map Unit Name: Cecil fine sandy loam NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation Soil or Hydrology significantly disturbed? N Are "Normal Circumstances" present? Yes No
 Are Vegetation Soil or Hydrology naturally problematic? N (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor C1 <input type="checkbox"/> Saturation A3 <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils C6 <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table C2 <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test D5
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth inches: <u>N/A</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth inches: <u>>15in.</u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth inches: <u>>15in.</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: FDS-25Z5-2

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30ft.</u>)				
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
	<u>0</u>	Total Cover		
	50% of total cover: <u>0</u>		20% of total cover: <u>0</u>	
Sapling Stratum Plot size: <u>30ft.</u>				
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
	<u>0</u>	Total Cover		
	50% of total cover: <u>0</u>		20% of total cover: <u>0</u>	
Shrub Stratum Plot size: <u>30ft.</u>				
1. <u>Sambucus nigra</u>	<u>3</u>	<u>Y</u>	<u>FAC</u>	
2. <u>Liriodendron tulipifera</u>	<u>2</u>	<u>Y</u>	<u>FACU</u>	
3. <u>Ligustrum sinense</u>	<u>1</u>	<u>N</u>	<u>FACU</u>	
4. <u>Salix nigra</u>	<u>1</u>	<u>N</u>	<u>OBL</u>	
5. <u>Elaeagnus angustifolia</u>	<u>1</u>	<u>N</u>	<u>FACU</u>	
6. _____				
	<u>8</u>	Total Cover		
	50% of total cover: <u>4</u>		20% of total cover: <u>1.6</u>	
Herb Stratum (Plot size: <u>30ft.</u>)				
1. <u>Erechtites hieraciifolius</u>	<u>15</u>	<u>Y</u>	<u>UPL</u>	
2. <u>Lonicera japonica</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>	
3. <u>Erigeron canadensis</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	
4. <u>Phytolacca americana</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	
5. <u>Dichanthelium clandestinum</u>	<u>10</u>	<u>N</u>	<u>FAC</u>	
6. <u>Ambrosia artemisiifolia</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	
7. <u>Toxicodendron radicans</u>	<u>5</u>	<u>N</u>	<u>FAC</u>	
8. _____				
9. _____				
10. _____				
11. _____				
	<u>75</u>	Total Cover		
	50% of total cover: <u>37.5</u>		20% of total cover: <u>15</u>	
Woody Vine Stratum Plot size: <u>N/A</u>				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
	<u>0</u>	Total Cover		
	50% of total cover: <u>0</u>		20% of total cover: <u>0</u>	
Remarks: Include photo numbers here or on a separate sheet.				

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 A)

Total Number of Dominant Species Across All Strata: 4 B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25% A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>1</u>	x 1 = <u>1</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>18</u>	x 3 = <u>54</u>
FACU species <u>49</u>	x 4 = <u>196</u>
UPL species <u>15</u>	x 5 = <u>75</u>
Column Totals: <u>83</u> (A)	<u>326</u> B

Prevalence Index B/A = 3.92

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes No

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Amelia Solar I City/County: Amelia County Sampling Date: 07/29/2019
 Applicant/Owner: Holocene Clean Energy State: VA Sampling Point: FDS-25Z5-3
 Investigator(s): B. Sagara, S. Kammer Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 2%
 Subregion (LRR or MLRA): MLRA136 Lat: 37.451950° Long: -77.955748° Datum: NAD83
 Soil Map Unit Name: Cecil fine sandy loam NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation Soil or Hydrology significantly disturbed? N Are "Normal Circumstances" present? Yes No
 Are Vegetation Soil or Hydrology naturally problematic? N (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <table style="width:100%; border: none;"> <tr> <td style="width:50%; border: none;"><input type="checkbox"/> Surface Water (A1)</td> <td style="width:50%; border: none;"><input type="checkbox"/> True Aquatic Plants (B14)</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> High Water Table (A2)</td> <td style="border: none;"><input type="checkbox"/> Hydrogen Sulfide Odor C1)</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Saturation A3)</td> <td style="border: none;"><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Water Marks (B1)</td> <td style="border: none;"><input type="checkbox"/> Presence of Reduced Iron (C4)</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Sediment Deposits (B2)</td> <td style="border: none;"><input type="checkbox"/> Recent Iron Reduction in Tilled Soils C6)</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Drift Deposits (B3)</td> <td style="border: none;"><input type="checkbox"/> Thin Muck Surface (C7)</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Algal Mat or Crust (B4)</td> <td style="border: none;"><input type="checkbox"/> Other (Explain in Remarks)</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Iron Deposits (B5)</td> <td></td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</td> <td></td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Water-Stained Leaves (B9)</td> <td></td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Aquatic Fauna (B13)</td> <td></td> </tr> </table>	<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Hydrogen Sulfide Odor C1)	<input type="checkbox"/> Saturation A3)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils C6)	<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Iron Deposits (B5)		<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Aquatic Fauna (B13)		Secondary Indicators (minimum of two required) <table style="width:100%; border: none;"> <tr><td style="border: none;"><input type="checkbox"/> Surface Soil Cracks (B6)</td></tr> <tr><td style="border: none;"><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</td></tr> <tr><td style="border: none;"><input type="checkbox"/> Drainage Patterns (B10)</td></tr> <tr><td style="border: none;"><input type="checkbox"/> Moss Trim Lines (B16)</td></tr> <tr><td style="border: none;"><input type="checkbox"/> Dry-Season Water Table C2)</td></tr> <tr><td style="border: none;"><input type="checkbox"/> Crayfish Burrows (C8)</td></tr> <tr><td style="border: none;"><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</td></tr> <tr><td style="border: none;"><input type="checkbox"/> Stunted or Stressed Plants (D1)</td></tr> <tr><td style="border: none;"><input checked="" type="checkbox"/> Geomorphic Position (D2)</td></tr> <tr><td style="border: none;"><input type="checkbox"/> Shallow Aquitard (D3)</td></tr> <tr><td style="border: none;"><input type="checkbox"/> Microtopographic Relief (D4)</td></tr> <tr><td style="border: none;"><input type="checkbox"/> FAC-Neutral Test D5</td></tr> </table>	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Moss Trim Lines (B16)	<input type="checkbox"/> Dry-Season Water Table C2)	<input type="checkbox"/> Crayfish Burrows (C8)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> Microtopographic Relief (D4)	<input type="checkbox"/> FAC-Neutral Test D5
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Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth inches: <u>N/A</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth inches: <u>>15in.</u> Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth inches: <u>>15in.</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: FDS-25Z5-3

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30ft.</u>)				
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
	<u>0</u>	Total Cover		
	50% of total cover: <u>0</u>		20% of total cover: <u>0</u>	
Sapling Stratum Plot size: <u>30ft.</u>				
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
	<u>0</u>	Total Cover		
	50% of total cover: <u>0</u>		20% of total cover: <u>0</u>	
Shrub Stratum Plot size: <u>30ft.</u>				
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
	<u>0</u>	Total Cover		
	50% of total cover: <u>0</u>		20% of total cover: <u>0</u>	
Herb Stratum (Plot size: <u>30ft.</u>)				
1. <u>Persicaria virginiana</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>	
2. <u>Schedonorus arundinaceus</u>	<u>25</u>	<u>Y</u>	<u>FACU</u>	
3. <u>Juncus effusus</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>	
4. <u>Cyperus esculentus</u>	<u>10</u>	<u>N</u>	<u>FACW</u>	
5. <u>Carex lurida</u>	<u>10</u>	<u>N</u>	<u>OBL</u>	
6. <u>Rumex crispus</u>	<u>5</u>	<u>N</u>	<u>FAC</u>	
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
	<u>100</u>	Total Cover		
	50% of total cover: <u>50</u>		20% of total cover: <u>20</u>	
Woody Vine Stratum Plot size: <u>N/A</u>				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
	<u>0</u>	Total Cover		
	50% of total cover: <u>0</u>		20% of total cover: <u>0</u>	
Dominance Test worksheet:				
Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> A)				
Total Number of Dominant Species Across All Strata: <u>3</u> B)				
Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7%</u> A/B)				
Prevalence Index worksheet:				
Total % Cover of:		Multiply by:		
OBL species	_____	x 1 =	_____	
FACW species	_____	x 2 =	_____	
FAC species	_____	x 3 =	_____	
FACU species	_____	x 4 =	_____	
UPL species	_____	x 5 =	_____	
Column Totals:	_____	(A	_____	B)
Prevalence Index		B/A = _____		
Hydrophytic Vegetation Indicators:				
<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation				
<input checked="" type="checkbox"/> 2 - Dominance Test is >50%				
<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹				
<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)				
<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)				
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
Definitions of Five Vegetation Strata:				
Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).				
Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.				
Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.				
Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.				
Woody vine – All woody vines, regardless of height.				
Hydrophytic Vegetation Present?				
Yes		<input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Remarks: Include photo numbers here or on a separate sheet.				

SOIL

Sampling Point: FDS-25Z5-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 3/4	100					SCL	
3-8	10YR 4/4	95	5YR 5/6	5	C	M	CL	
8-18	2.5Y 5/6	90	2.5Y 6/3	10	D	M	C	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic A3
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10) (LRR N)
- Depleted Below Dark Surface A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1 (LRR N, MLRA 147, 148)
- Sandy Gleyed Matrix S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)

- Dark Surface (S7)
- Polyvalue Below Surface (S8 (MLRA 147, 148)
- Thin Dark Surface (S9) (MLRA 147, 148)
- Loamy Gleyed Matrix F2
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Iron-Manganese Masses (F12 (LRR N, MLRA 136)
- Umbric Surface (F13 (MLRA 136, 122)
- Piedmont Floodplain Soils (F19) (MLRA 148)
- Red Parent Material (F21 (MLRA 127, 147)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10) (MLRA 147)
- Coast Prairie Redox (A16 (MLRA 147, 148)
- Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- Very Shallow Dark Surface (TF12)
- Other Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
 Depth (inches : _____

Hydric Soil Present? Yes No

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Amelia Solar I City/County: Amelia County Sampling Date: 07/29/2019
 Applicant/Owner: Holocene Clean Energy State: VA Sampling Point: FDS-25A1-1
 Investigator(s): B. Sagara, S. Kammer Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Drainage Swale Local relief (concave, convex, none): Concave Slope (%): 1%
 Subregion (LRR or MLRA): MLRA136 Lat: 37.451196° Long: -77.954338° Datum: NAD83
 Soil Map Unit Name: Cecil fine sandy loam NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation Soil or Hydrology significantly disturbed? N Are "Normal Circumstances" present? Yes No
 Are Vegetation Soil or Hydrology naturally problematic? N (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <table style="width:100%;"> <tr> <td><input type="checkbox"/> Surface Water (A1)</td> <td><input type="checkbox"/> True Aquatic Plants (B14)</td> </tr> <tr> <td><input type="checkbox"/> High Water Table (A2)</td> <td><input type="checkbox"/> Hydrogen Sulfide Odor C1</td> </tr> <tr> <td><input type="checkbox"/> Saturation A3</td> <td><input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</td> </tr> <tr> <td><input type="checkbox"/> Water Marks (B1)</td> <td><input type="checkbox"/> Presence of Reduced Iron (C4)</td> </tr> <tr> <td><input type="checkbox"/> Sediment Deposits (B2)</td> <td><input type="checkbox"/> Recent Iron Reduction in Tilled Soils C6</td> </tr> <tr> <td><input type="checkbox"/> Drift Deposits (B3)</td> <td><input type="checkbox"/> Thin Muck Surface (C7)</td> </tr> <tr> <td><input type="checkbox"/> Algal Mat or Crust (B4)</td> <td><input type="checkbox"/> Other (Explain in Remarks)</td> </tr> <tr> <td><input type="checkbox"/> Iron Deposits (B5)</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Water-Stained Leaves (B9)</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Aquatic Fauna (B13)</td> <td></td> </tr> </table>	<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Hydrogen Sulfide Odor C1	<input type="checkbox"/> Saturation A3	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils C6	<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Iron Deposits (B5)		<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Aquatic Fauna (B13)		<p><u>Secondary Indicators (minimum of two required)</u></p> <table style="width:100%;"> <tr> <td><input type="checkbox"/> Surface Soil Cracks (B6)</td> </tr> <tr> <td><input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</td> </tr> <tr> <td><input checked="" type="checkbox"/> Drainage Patterns (B10)</td> </tr> <tr> <td><input type="checkbox"/> Moss Trim Lines (B16)</td> </tr> <tr> <td><input type="checkbox"/> Dry-Season Water Table C2</td> </tr> <tr> <td><input type="checkbox"/> Crayfish Burrows (C8)</td> </tr> <tr> <td><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</td> </tr> <tr> <td><input type="checkbox"/> Stunted or Stressed Plants (D1)</td> </tr> <tr> <td><input type="checkbox"/> Geomorphic Position (D2)</td> </tr> <tr> <td><input type="checkbox"/> Shallow Aquitard (D3)</td> </tr> <tr> <td><input type="checkbox"/> Microtopographic Relief (D4)</td> </tr> <tr> <td><input checked="" type="checkbox"/> FAC-Neutral Test D5</td> </tr> </table>	<input type="checkbox"/> Surface Soil Cracks (B6)	<input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input checked="" type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Moss Trim Lines (B16)	<input type="checkbox"/> Dry-Season Water Table C2	<input type="checkbox"/> Crayfish Burrows (C8)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	<input type="checkbox"/> Geomorphic Position (D2)	<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> Microtopographic Relief (D4)	<input checked="" type="checkbox"/> FAC-Neutral Test D5
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> True Aquatic Plants (B14)																																		
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Hydrogen Sulfide Odor C1																																		
<input type="checkbox"/> Saturation A3	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)																																		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Presence of Reduced Iron (C4)																																		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils C6																																		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Thin Muck Surface (C7)																																		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Other (Explain in Remarks)																																		
<input type="checkbox"/> Iron Deposits (B5)																																			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)																																			
<input type="checkbox"/> Water-Stained Leaves (B9)																																			
<input type="checkbox"/> Aquatic Fauna (B13)																																			
<input type="checkbox"/> Surface Soil Cracks (B6)																																			
<input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)																																			
<input checked="" type="checkbox"/> Drainage Patterns (B10)																																			
<input type="checkbox"/> Moss Trim Lines (B16)																																			
<input type="checkbox"/> Dry-Season Water Table C2																																			
<input type="checkbox"/> Crayfish Burrows (C8)																																			
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)																																			
<input type="checkbox"/> Stunted or Stressed Plants (D1)																																			
<input type="checkbox"/> Geomorphic Position (D2)																																			
<input type="checkbox"/> Shallow Aquitard (D3)																																			
<input type="checkbox"/> Microtopographic Relief (D4)																																			
<input checked="" type="checkbox"/> FAC-Neutral Test D5																																			
<p>Field Observations:</p> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth inches: <u>N/A</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth inches: <u>>15in.</u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth inches: <u>>15in.</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																																		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:																																			
Remarks:																																			

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: FDS-25A1-1

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30ft.</u>)				
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
	<u>0</u>	Total Cover		
	50% of total cover: <u>0</u>		20% of total cover: <u>0</u>	
Sapling Stratum Plot size: <u>30ft.</u>				
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
	<u>0</u>	Total Cover		
	50% of total cover: <u>0</u>		20% of total cover: <u>0</u>	
Shrub Stratum Plot size: <u>30ft.</u>				
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
	<u>0</u>	Total Cover		
	50% of total cover: <u>0</u>		20% of total cover: <u>0</u>	
Herb Stratum (Plot size: <u>30ft.</u>)				
1. <u>Xanthium strumarium</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>	
2. <u>Leersia virginica</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	
3. <u>Persicaria virginiana</u>	<u>15</u>	<u>N</u>	<u>FAC</u>	
4. <u>Erigeron canadensis</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	
5. <u>Rumex crispus</u>	<u>5</u>	<u>N</u>	<u>FAC</u>	
6. <u>Cyperus esculentus</u>	<u>3</u>	<u>N</u>	<u>FACW</u>	
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
	<u>88</u>	Total Cover		
	50% of total cover: <u>44</u>		20% of total cover: <u>17.6</u>	
Woody Vine Stratum Plot size: <u>N/A</u>				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
	<u>0</u>	Total Cover		
	50% of total cover: <u>0</u>		20% of total cover: <u>0</u>	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 A)

Total Number of Dominant Species Across All Strata: 2 B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% A/B)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A _____ B _____)

Prevalence Index B/A = _____

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes No

Remarks: Include photo numbers here or on a separate sheet.
 Fallow field lacking woody vegetation. Likely maintained every few years.

SOIL

Sampling Point: FDS-25A1-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 3/3	100					SiCL	
3-10	2.5Y 5/2	55	10YR 4/3	40	D	M	SC	
			10YR 5/8	5	C	PL		
10-18	2.5Y 5/2	60	2.5Y 3/1	10	D	M	C	
			7.5YR 5/6	30	C	M		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic A3
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10) (LRR N)
- Depleted Below Dark Surface A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)
- Sandy Gleyed Matrix S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)

- Dark Surface (S7)
- Polyvalue Below Surface (S8 (MLRA 147, 148)
- Thin Dark Surface (S9) (MLRA 147, 148)
- Loamy Gleyed Matrix F2
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- Umbric Surface (F13 (MLRA 136, 122)
- Piedmont Floodplain Soils (F19) (MLRA 148)
- Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10) (MLRA 147)
- Coast Prairie Redox (A16 (MLRA 147, 148)
- Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- Very Shallow Dark Surface (TF12)
- Other Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
 Depth (inches : _____

Hydric Soil Present? Yes No

Remarks:

**APPENDIX B
COE REQUEST FORM**



NORFOLK DISTRICT REGULATORY OFFICE PRE-APPLICATION AND/OR JURISDICTIONAL WATERS DETERMINATION REQUEST FORM

This form is used when you want to determine if areas on your property fall under regulatory requirements of the U.S. Army Corps of Engineers (USACE). Please supply the following information and supporting documents described below. This form can be filled out online and/or printed and then mailed, faxed, or e-mailed to the Norfolk District. Submitting this request authorizes the US Army Corps of Engineers to field inspect the property site, if necessary, to help in the determination process. **THIS FORM MUST BE SIGNED BY THE PROPERTY OWNER TO BE CONSIDERED A FORMAL REQUEST.**

The printed form and supporting documents should be mailed to:

U.S. Army Corps of Engineers, Norfolk District
Regulatory Branch
803 Front Street
Norfolk, Virginia 23510-1096

Or faxed to (757) 201-7678

Or sent via e-mail to: CENAO.REG_ROD@usace.army.mil

Additional information on the Regulatory Program is available on our website at:
<http://www.nao.usace.army.mil/>

Please contact us at 757-201-7652 if you need any assistance with filling out this form.

Location and Information about Property to be subject to a Jurisdictional Determination:

1. Date of Request: August 13, 2019
2. Project Name: Amelia Solar I
3. City or County where property located: Amelia County
4. Address of property and directions (attach a map of the property location and a copy of the property plat): Approximately 14902 Genito Road, Amelia Court House, Virginia 23002
5. Coordinates of property (if known): 37.449717, -77950784
6. Size of property in acres: 89.6
7. Tax Parcel Number / GPIN (if available): N/A
8. Name of Nearest Waterway: Myrtle Branch

9. Brief Description of Proposed Activity, Reason for Preapplication Request, and/or Reason for Jurisdictional Waters Determination Request:
Preliminary site investigation.

10. Has a wetland delineation/determination been completed by a consultant or the Corps on the property previously? YES NO UNKNOWN

If yes, please provide the name of the consultant and/or Corps staff and Corps permit number, if available:

Property Owner Contact Information:

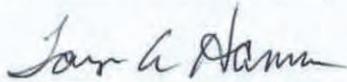
Property Owner Name: Faye Hamner
Mailing Address: PO Box 206
City: State: Zip: Blackstone, VA 32824
Daytime Telephone: (434) 292-5781
E-mail Address:

If the person requesting the Jurisdictional Determination is **NOT** the Property Owner, please also supply the Requestor's contact information here:

Requestor Name: Ben Sagara
Mailing Address: 1001 Boulders Parkway, Suite 300
City: State: Zip: Richmond, VA 23225
Daytime Telephone: 804-200-6567
E-mail Address: ben.sagara@timmons.com

Additionally, if you have any of the following information, please include it with your request: wetland delineation map, other relevant maps, drain tile survey, topographic survey, and/or site photographs.

CERTIFICATION: I am hereby requesting a preapplication consultation or jurisdictional waters and/or wetlands determination from the U.S. Army Corps of Engineers, for the property(ies) I have described herein. I agree to allow the duly authorized representatives of the Norfolk District Corps of Engineers and other regulatory or advisory agencies to enter upon the premises of the project site at reasonable times to evaluate inspect and photograph site conditions. This consent to enter the property is superior to, takes precedence over, and waives any communication to the contrary. For example, if the property is posted as "no trespassing" this consent specifically supercedes and waives that prohibition and grants permission to enter the property despite such posting. I hereby certify that the information contained in the Request for a Jurisdictional Determination is accurate and complete:



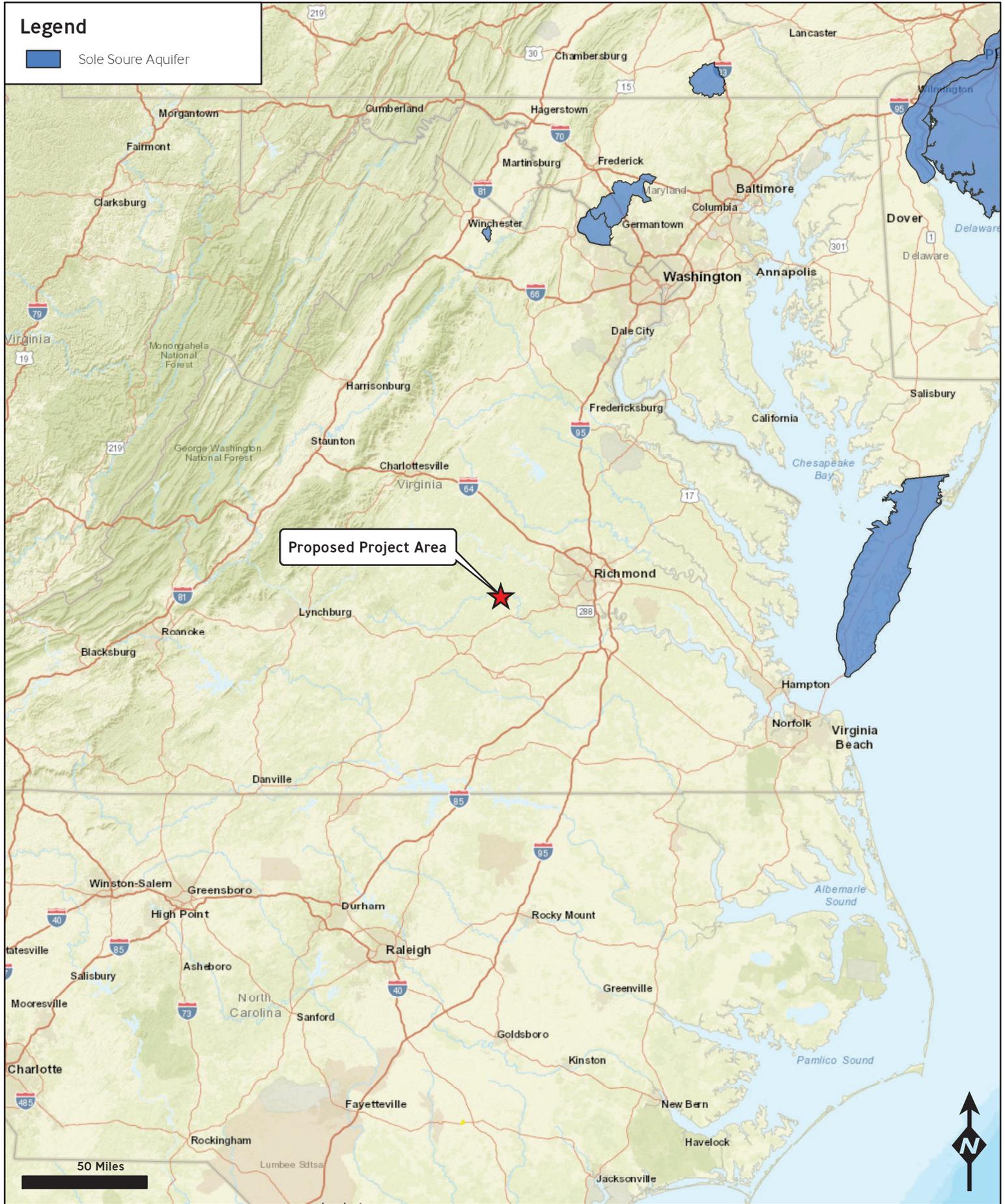
Property Owner's Signature

7-31-19

Date

APPENDIX VII

Water Resources



Legend

Sole Source Aquifer

Proposed Project Area

SOLE SOURCE AQUIFER MAP

Proposed Amelia Solar I
Amelia Court House, Amelia County, Virginia

APPENDIX VIII

Biological Resources



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Virginia Field Office
6669 Short Lane
Gloucester, VA 23061

Date: 1/22/21

Self-Certification Letter

Project Name: Proposed Amelia I Solar

Dear Applicant:

Thank you for using the U.S. Fish and Wildlife Service (Service) Virginia Ecological Services online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the project named above in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA). This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.

The species conclusions table in the enclosed project review package summarizes your ESA conclusions. These conclusions resulted in:

- “no effect” determinations for proposed/listed species and/or proposed/designated critical habitat; and/or
- Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR § 17.40(o) [as determined through the Information, Planning, and Consultation System (IPaC) northern long-eared bat assisted determination key]; and/or
- “may affect, not likely to adversely affect” determinations for proposed/listed species and/or proposed/designated critical habitat.

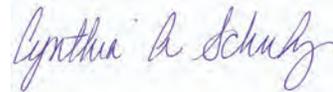
We certify that use of the online project review process in strict accordance with the instructions provided as documented in the enclosed project review package results in reaching the appropriate determinations. Therefore, we concur with the determinations described above for proposed and listed species and proposed and designated critical habitat. Additional coordination with this office is not needed.

Candidate species are not legally protected pursuant to the ESA. However, the Service encourages consideration of these species by avoiding adverse impacts to them. Please contact this office for additional coordination if your project action area contains candidate species.

Should project plans change or if additional information on the distribution of proposed or listed species, proposed or designated critical habitat becomes available, this determination may be reconsidered. This certification letter is valid for 1 year.

Information about the online project review process including instructions and use, species information, and other information regarding project reviews within Virginia is available at our website http://www.fws.gov/northeast/virginiafield/endspecies/project_reviews.html. If you have any questions, please contact Troy Andersen of this office at (804) 824-2428.

Sincerely,

A handwritten signature in blue ink that reads "Cynthia A. Schulz". The signature is written in a cursive style and is positioned above the printed name.

Cindy Schulz
Field Supervisor
Virginia Ecological Services

Enclosures - project review package



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
Phone: (804) 693-6694 Fax: (804) 693-9032
<http://www.fws.gov/northeast/virginiafield/>

In Reply Refer To:

July 01, 2020

Consultation Code: 05E2VA00-2020-TA-4351

Event Code: 05E2VA00-2020-E-13013

Project Name: Proposed Amelia Solar I

Subject: Verification letter for the 'Proposed Amelia Solar I' project under the January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.

Dear Marina Jawad:

The U.S. Fish and Wildlife Service (Service) received on July 01, 2020 your effects determination for the 'Proposed Amelia Solar I' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. This IPaC key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take"^[1] prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under ESA Section 7(a)(2) with respect to the northern long-eared bat.

Please report to our office any changes to the information about the Action that you submitted in IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation. If the Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between you and this Service office is required. If the Action may disturb bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act is recommended.

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

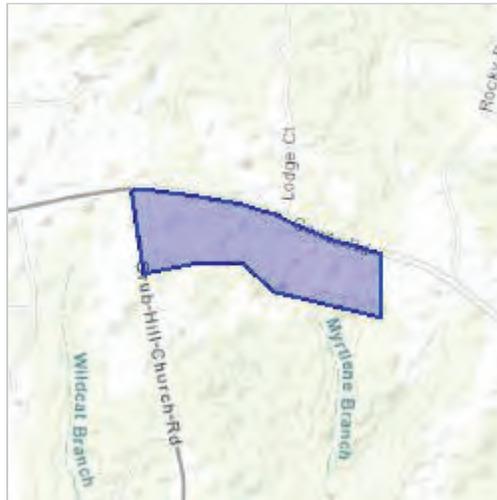
Proposed Amelia Solar I

2. Description

The following description was provided for the project 'Proposed Amelia Solar I':

VA

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/37.451076591800515N77.95246190857067W>



Determination Key Result

This Federal Action may affect the northern long-eared bat in a manner consistent with the description of activities addressed by the Service's PBO dated January 5, 2016. Any taking that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o). Therefore, the PBO satisfies your responsibilities for this Action under ESA Section 7(a)(2) relative to the northern long-eared bat.

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on May 15, 2017. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for Federal actions is to assist determinations as to whether proposed actions are consistent with those analyzed in the Service's PBO dated January 5, 2016.

Federal actions that may cause prohibited take of northern long-eared bats, affect ESA-listed species other than the northern long-eared bat, or affect any designated critical habitat, require ESA Section 7(a)(2) consultation in addition to the use of this key. Federal actions that may affect species proposed for listing or critical habitat proposed for designation may require a conference under ESA Section 7(a)(4).

Determination Key Result

This project may affect the threatened Northern long-eared bat; therefore, consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.) is required. However, based on the information you provided, this project may rely on the Service's January 5, 2016, *Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions* to fulfill its Section 7(a)(2) consultation obligation.

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?
Yes
2. Have you determined that the proposed action will have "no effect" on the northern long-eared bat? (If you are unsure select "No")
No
3. Will your activity purposefully **Take** northern long-eared bats?
No
4. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?
Automatically answered
No
5. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/midwest/angered/mammals/nleb/nhisites.html.

Yes

6. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

No

7. Will the action involve Tree Removal?

Yes

8. Will the action only remove hazardous trees for the protection of human life or property?

No

9. Will the action remove trees within 0.25 miles of a known northern long-eared bat hibernaculum at any time of year?

No

10. Will the action remove a known occupied northern long-eared bat maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31?

No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

0.5

2. If known, estimated acres of forest conversion from April 1 to October 31

0.5

3. If known, estimated acres of forest conversion from June 1 to July 31

0

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?
0

Species Summary Table

Project name used in IPaC: PROPOSED AMELIA SOLAR I

Date: 3/19/2021

Your name: MARINA JAWAD

Step 2 Listed or candidate species that are likely present according to the Official Species List from IPaC? “No Species” or IPaC species list Bald eagle nests from Step 4.	Step 2 Is your action area in critical habitat (only for Canada lynx or Atlantic salmon)? Yes or No	Step 3A Is suitable habitat for listed or candidate species present in your action area? “suitable habitat present” “suitable habitat not present” “Don’t know”	Step 3B Does the species occur in your action area? “Species present” “Species not present” “Don’t know”	Step 4 Is your project likely to take or disturb eagles and require an Eagle Act permit? “Will not disturb” “May disturb” “Don’t know”	Step 5 Determinations for the Endangered Species Act – only Federal agencies complete this column “No effect” “May effect”	Notes and Documentation (provide additional information if needed)
Northern Long-eared Bat	No	Suitable Habitat Not Present	Species Not Present	Choose an item.	Choose an item.	Received verification letter from IPaC’s programmatic biological opinion on Final 4(d) Rule for NLEB and Self-Certification letter through the USFWS’ Virginia Field Office Online Project Review.

Notes:



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
Phone: (804) 693-6694 Fax: (804) 693-9032
<http://www.fws.gov/northeast/virginiafield/>

In Reply Refer To:

March 18, 2021

Consultation Code: 05E2VA00-2021-SLI-2686

Event Code: 05E2VA00-2021-E-07789

Project Name: Amelia Solar I Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered

species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
 - USFWS National Wildlife Refuges and Fish Hatcheries
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

Project Summary

Consultation Code: 05E2VA00-2021-SLI-2686

Event Code: 05E2VA00-2021-E-07789

Project Name: Amelia Solar I Project

Project Type: POWER GENERATION

Project Description: The construction of a 5-MW solar facility located near the town of Amelia Court House, Virginia.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@37.4511303,-77.9527123323288,14z>



Counties: Amelia County, Virginia

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.



Site Location

37,27,13.7 -77,57,33.9 is the Search Point

[back](#)
[Refresh Browser Page](#)

 Map Click [Pan](#) [Zoom In](#) [Zoom Out](#)
 Map Scale [Small](#) [Size](#) [Big](#) [Help](#)

Show Position Rings

Yes No
1/2 mile and 1/8 mile at the Search Point

Show Search Area

Yes No
2 Search distance miles buffer

Display at center	Search Point is not at map center
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Base Map Choices

BW Aerial Photography ▾

Map Overlay Choices

Current List: Anadromous, TEWaters, BAEANests, BECAR, Trout, TierI, Habitat, Search, SppObs

Map Overlay Legend

T & E Waters

- Federal
- State

Predicted Habitat WAP Tier I & II

- Aquatic
- Terrestrial

Trout Waters

- Class I - IV
- Class V - VI

Anadromous Fish Reach

- Confirmed
- Potential

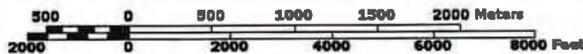
Impediment

2 mile radius Search Area

Bald Eagle Concentration Areas and Roosts

Bald Eagle nests 660 and 330 foot management zones

Data Observation Site



Point of Search 37,27,13.7 -77,57,33.9

Map Location 37,27,05.1 -77,57,09.6

Select Coordinate System: Degrees,Minutes,Seconds Latitude - Longitude

Decimal Degrees Latitude - Longitude

Meters UTM NAD83 East North Zone

Meters UTM NAD27 East North Zone

Base Map source: Black & White USGS Aerial Photography (see [Microsoft terraserver-usa.com](https://microsoft.terraserver-usa.com) for details)

Map projection is UTM Zone 18 NAD 1983 with left 234814 and top 4153047. Pixel size is 8 meters . Coordinates displayed are Degrees, Minutes, Seconds North and West. Map is currently displayed as 1000 columns by 1000 rows for a total of 1000000 pixels. The map display represents 8000 meters east to west by 8000 meters north to south for a total of 64.0 square kilometers. The map display represents 26251 feet east to west by 26251 feet north to south for a total of 24.7 square miles.

Topographic maps and Black and white aerial photography for year 1990+- are from the United States Department of the Interior, United States Geological Survey. Color aerial photography aquired 2002 is from Virginia Basic Mapping Program, Virginia Geographic Information Network.

Shaded topographic maps are from TOPO! ©2006 National Geographic
<http://www.national.geographic.com/topo>

All other map products are from the Commonwealth of Virginia Department of Game and Inland Fisheries.

map assembled 2020-05-11 10:25:05 (qa/qc March 21, 2016 12:20 - tn=1030196.1 dist=3218

I)

\$poi=37.4538300 -77.9594299

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VaFWIS Initial Project Assessment Report Compiled on 5/11/2020,[Help](#)

10:22:33 AM

Known or likely to occur within a **2 mile buffer around polygon; center 37.4538300 -77.9594299**
 in **007 Amelia County, 145 Powhatan County, VA**

[View Map of
Site Location](#)

443 Known or Likely Species ordered by Status Concern for Conservation
 (displaying first 23) (23 species with Status* or Tier I** or Tier II**)

<u>BOVA Code</u>	<u>Status*</u>	<u>Tier**</u>	<u>Common Name</u>	<u>Scientific Name</u>	<u>Confirmed</u>	<u>Database(s)</u>
060017	FESE	Ia	Spinymussel, James	Parvaspina collina		BOVA
060003	FESE	Ia	Wedgemussel, dwarf	Alasmidonta heterodon		BOVA
050022	FTST	Ia	Bat, northern long-eared	Myotis septentrionalis		BOVA
060029	FTST	IIa	Lance, yellow	Elliptio lanceolata		BOVA
050020	SE	Ia	Bat, little brown	Myotis lucifugus		BOVA
050034	SE	Ia	Bat, Rafinesque's eastern big-eared	Corynorhinus rafinesquii macrotis		BOVA
050027	SE	Ia	Bat, tri-colored	Perimyotis subflavus		BOVA
060006	SE	Ib	Floater, brook	Alasmidonta varicosa		BOVA
040293	ST	Ia	Shrike, loggerhead	Lanius ludovicianus	Yes	BOVA,SppObs
040379	ST	Ia	Sparrow, Henslow's	Centronyx henslowii		BOVA
060173	FPST	Ia	Pigtoe, Atlantic	Fusconaia masoni		BOVA
060081	ST	IIa	Floater, green	Lasmigona subviridis		BOVA
040292	ST		Shrike, migrant loggerhead	Lanius ludovicianus migrans		BOVA
030063	CC	IIIa	Turtle, spotted	Clemmys guttata		BOVA
010077		Ia	Shiner, bridle	Notropis bifrenatus		BOVA
060084		Ib	Pigtoe, Virginia	Lexingtonia subplana		BOVA
040213		Ic	Owl, northern saw-whet	Aegolius acadicus		BOVA
040052		IIa	Duck, American black	Anas rubripes		BOVA
040029		IIa	Heron, little blue	Egretta caerulea caerulea		BOVA
040320		IIa	Warbler, cerulean	Setophaga cerulea		BOVA
040140		IIa	Woodcock, American	Scolopax minor	Yes	BOVA,SppObs
040203		IIb	Cuckoo, black-billed	Coccyzus erythrophthalmus		BOVA
040105		IIb	Rail, king	Rallus elegans		BOVA

To view **All 443 species** [View 443](#)

*FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed;
 FC=Federal Candidate; CC=Collection Concern

**I=VA Wildlife Action Plan - Tier I - Critical Conservation Need; II=VA Wildlife Action Plan - Tier II - Very High Conservation Need;
 III=VA Wildlife Action Plan - Tier III - High Conservation Need;
 IV=VA Wildlife Action Plan - Tier IV - Moderate Conservation Need
 Virginia Wildlife Action Plan Conservation Opportunity Ranking:
 a - On the ground management strategies/actions exist and can be feasibly implemented.;
 b - On the ground actions or research needs have been identified but cannot feasibly be implemented at this time.;
 c - No on the ground actions or research needs have been identified or all identified conservation opportunities have been exhausted.

Bat Colonies or Hibernacula: Not Known

Anadromous Fish Use Streams

N/A

Colonial Water Bird Survey

N/A

Threatened and Endangered Waters

N/A

Managed Trout Streams

N/A

Bald Eagle Concentration Areas and Roosts

N/A

Bald Eagle Nests

N/A

Habitat Predicted for Aquatic WAP Tier I & II Species

N/A

Habitat Predicted for Terrestrial WAP Tier I & II Species

N/A

Public Holdings: (1 names)

Name	Agency	Level
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Amelia Wildlife Management Area	Va DGIF	
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1 Species Observations where Shrike, loggerhead (040293) observed

37,27,13.7 -77,57,33.9 is the Search Point

[back](#)

Map Click



Map Scale

[Refresh Browser Page](#)

In Zoom Out

Screen Size

Small Size Big

[Help](#)

Show Position Rings

Yes No

1/2 mile and 1/8 mile at the Search Point

Show Search Area

Yes No

2 Search distance miles buffer

Display Search Point is at center not at map center

Base Map Choices

BW Aerial Photography

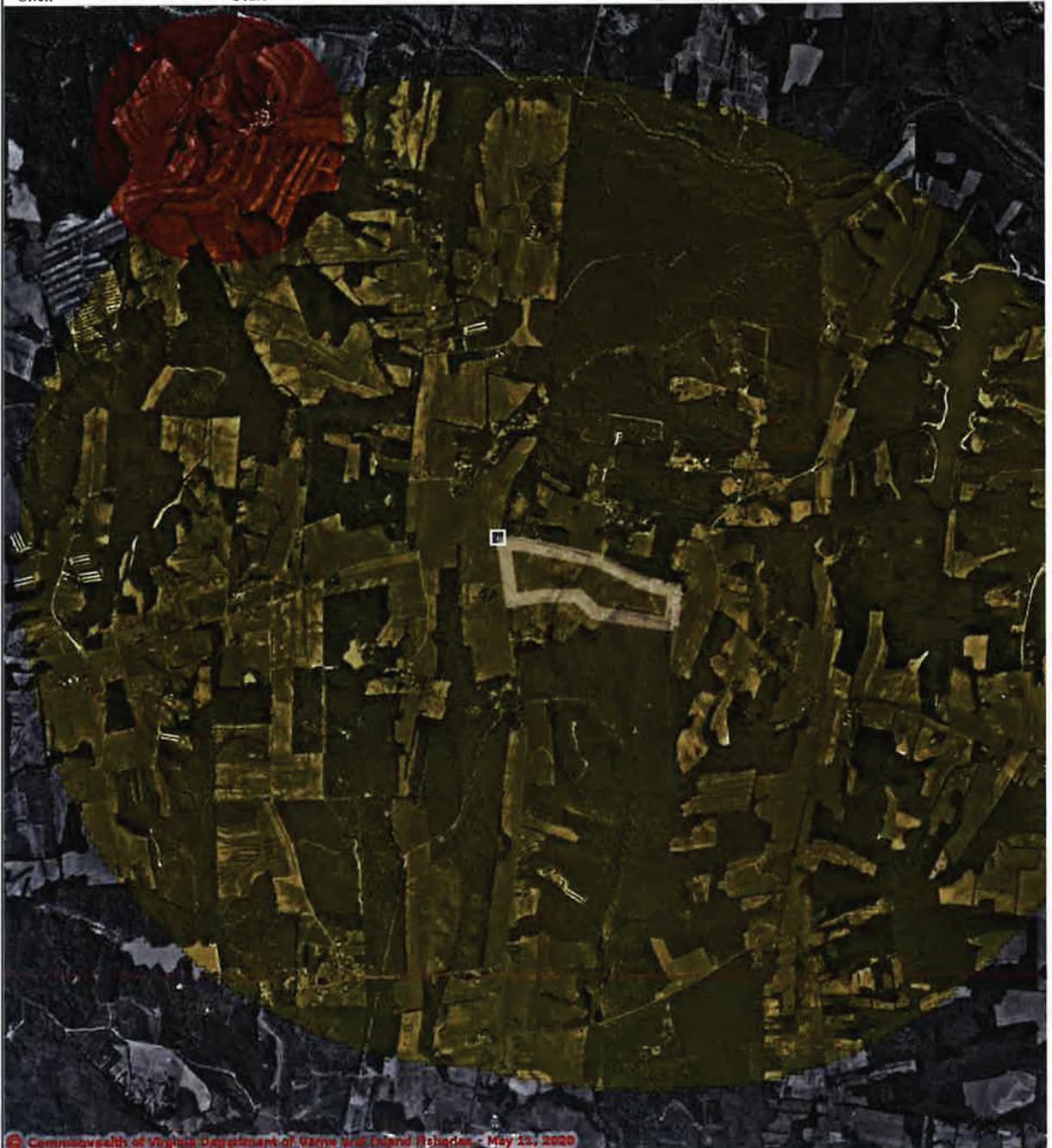
Map Overlay Choices

Current List: Search, SppObs

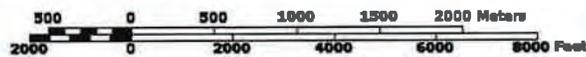
Map Overlay Legend

2 mile radius Search Area

Data Observation Site



Commonwealth of Virginia Department of Game and Inland Fisheries - May 11, 2020



Point of Search 37,27,13.7 -77,57,33.9

Map Location 37,27,05.1 -77,57,09.6

Select Coordinate System: Degrees,Minutes,Seconds Latitude - Longitude

Decimal Degrees Latitude - Longitude

Meters UTM NAD83 East North Zone

Meters UTM NAD27 East North Zone

Base Map source: Black & White USGS Aerial Photography (see microsoft.terraserver-usa.com for details)

Map projection is UTM Zone 18 NAD 1983 with left 234814 and top 4153047. Pixel size is 8 meters . Coordinates displayed are Degrees, Minutes, Seconds North and West. Map is currently displayed as 1000 columns by 1000 rows for a total of 1000000 pixels. The map display represents 8000 meters east to west by 8000 meters north to south for a total of 64.0 square kilometers. The map display represents 26251 feet east to west by 26251 feet north to south for a total of 24.7 square miles.

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map assembled 2020-05-11 10:29:01 (qa/qc March 21, 2016 12:20 - tn=1030196.1 dist=3218
1)
\$poi=37.4538300 -77.9594299

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Virginia Department of Game and Inland Fisheries

5/11/2020 10:24:04 AM

Fish and Wildlife Information Service

VaFWIS Search Report Compiled on 5/11/2020, 10:24:04 AM

[Help](#)

Known or likely to occur within a **2 mile buffer around polygon; center 37.4538300 -77.9594299**
 in **007 Amelia County, 145 Powhatan County, VA**
 where (040293) **Shrike, loggerhead** observed.

[View Map of Site Location](#)

Species Observations where Shrike, loggerhead (040293) observed

(1 records , 1 Observation with Threatened or Endangered species)

[View Map of All Query Results](#)

[Species Observations where Shrike, loggerhead \(040293\) observed](#)

obsID	class	Date Observed	Observer	N Species			View Map
				Different Species	Highest TE*	Highest Tier**	
5895	SppObs	May 25 1992	S. Capel, VDGIF	1	ST	I	Yes

Displayed 1 Species Observations where Shrike, loggerhead (040293) observed

*FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed; FC=Federal Candidate; CC=Collection Concern

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Compiled on 5/11/2020, 10:24:04 AM I1030196.1 report=BOVA searchType=P dist= 3218 poi= 37.4538300 -77.9594299

audit no. 1030196 5/11/2020 10:24:04 AM Virginia Fish and Wildlife Information Service
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Department of Conservation & Recreation

CONSERVING VIRGINIA'S NATURAL & RECREATIONAL RESOURCES

PROJECT INFORMATION

TITLE: Amelia Solar I

DESCRIPTION: Amelia Solar I is a proposed solar facility located in Amelia County on approximately 90 acres.

EXISTING SITE CONDITIONS: Agricultural

QUADRANGLES: Chula

COUNTIES: Amelia

Latitude/Longitude (DMS): 37° 27' 5.926" N / 77° 57' 10.6427" W

Acreage: 90 acres

Comments:

REQUESTOR INFORMATION

Priority: N

Tier Level: Tier I

Tax ID: 54-1301413

Contact Name: Julia Campus

Company Name: Timmons Group

Address: 1001 Boulders Pkwy Ste 300

City: Richmond

State: VA

Zip: 23225

Phone: 8042006577

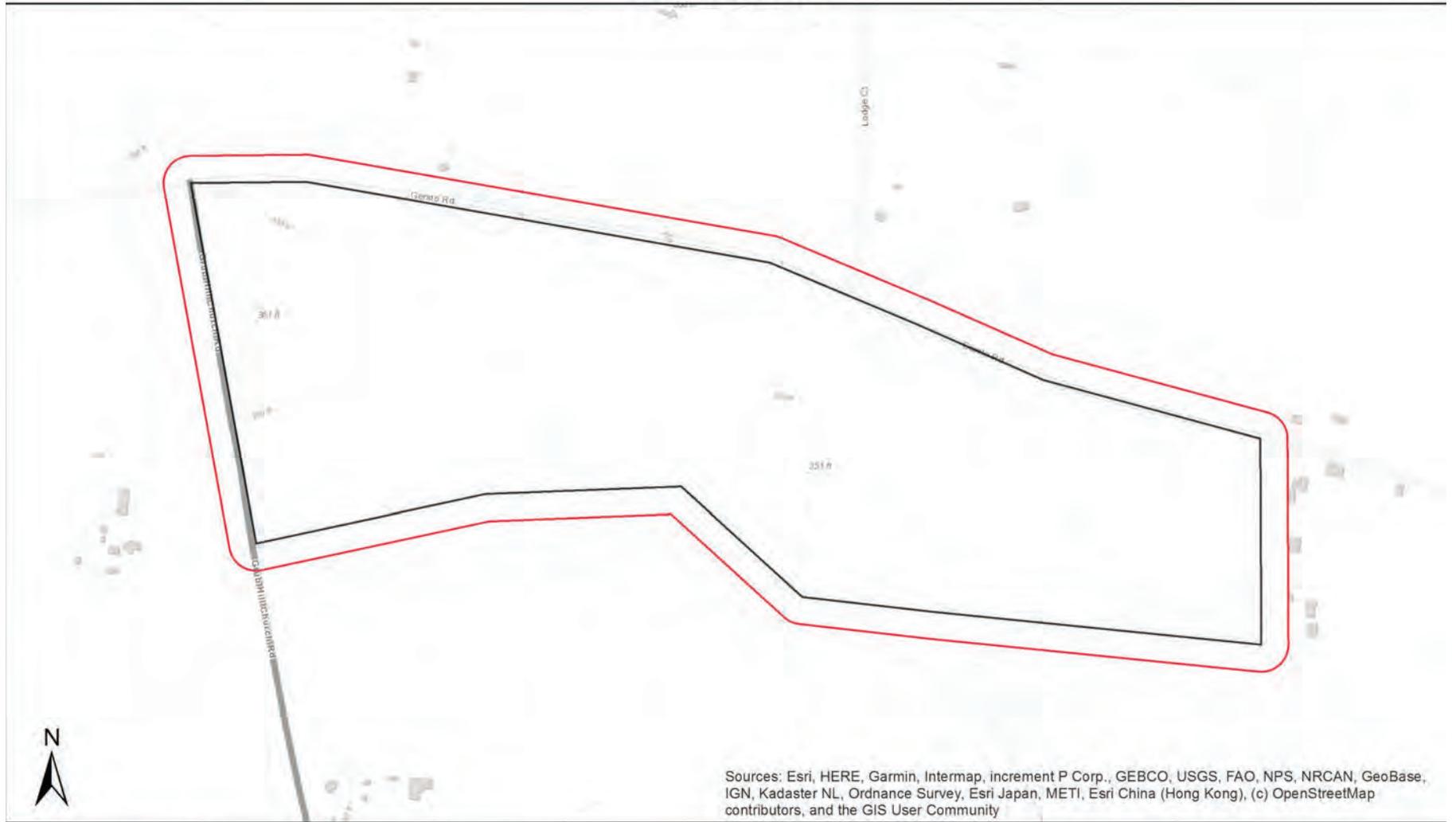
Fax:

Email: julia.campus@timmons.com

Conservation Site	Site Type	Brank	Acreage	Listed Species Presence
Natural Heritage Screening Features Intersecting Project Boundary				

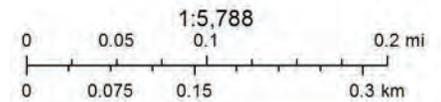
Intersecting Predictive Models
Predictive Model Results

Amelia Solar I



- Project Boundary
- Buffered Project Boundary

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



Quads: Chula
Counties: Amelia

Company: Timmons Group
Lat/Long: 372705 / -775710



COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

The project mapped as part of this report has been searched against the Department of Conservation and Recreation's Biotics Data System for occurrences of natural heritage resources in the vicinity of the area indicated for this project. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

According to the information currently in Biotics, natural heritage resources have not been documented within the submitted project boundary including a 100 foot buffer. In addition, the project area does not intersect any of the predictive models identifying potential habitat for natural heritage resources.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the Virginia Department of Conservation and Recreation (DCR), DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

Any absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks additional natural heritage resources. New and updated information is continually added to Biotics. Please revisit this website or contact DCR for an update on this natural heritage information if a significant amount of time passes (DCR recommends no more than six months) before it is utilized.

The Virginia Department of Game and Inland Fisheries maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters, that may contain information not documented in the Natural Heritage Data Explorer. Their database may be accessed from <http://vafwis.org/fwis/> or contact Ernie Aschenbach (804-367-2733 or Ernie.Aschenbach@dgif.virginia.gov).

Thank you for submitting your project to the Virginia Department of Conservation and Recreation's Natural Heritage Data Explorer Web Service. Should you have any questions or concerns about this report, the Data Explorer, or other Virginia Natural Heritage Program services, please contact the Natural Heritage Project Review Unit at 804-371-2708.



CCB Mapping Portal



Layers: VA Eagle Nest Locator, VA Eagle Nest Buffers, Eagle Roosts, Eagle Roost Polygons, Eagle Roost Buffers

Map Center [longitude, latitude]: [-77.89203643798828, 37.46559360090852]

Map Link:

https://www.ccbbirds.org/maps/#layer=VA+Eagle+Nest+Locator&layer=VA+Eagle+Nest+Buffers&layer=Eagle+Roosts&layer=Eagle+Roost+Polygons&layer=Eagle+Roost+Buffers&zoom=12&lat=37.46559360090852&lng=-77.89203643798828&legend=legend_tab_4ca7337c-c07d-11e5-93bc-0ecfd53eb7d3&base=Street+Map+%28OSM%2FCarto%29

Report Generated On: 05/06/2020

The Center for Conservation Biology (CCB) provides certain data online as a free service to the public and the regulatory sector. CCB encourages the use of its data sets in wildlife conservation and management applications. These data are protected by intellectual property laws. All users are reminded to view the [Data Use Agreement](#) to ensure compliance with our data use policies. For additional data access questions, view our [Data Distribution Policy](#), or contact our Data Manager, Marie Pitts, at mlpitts@wm.edu or 757-221-7503.

Report generated by [The Center for Conservation Biology Mapping Portal](#).

To learn more about CCB visit ccbbirds.org or contact us at info@ccbbirds.org

Virginia Invasive Plant Species List 2014			Region			Light Requirements			Soil Moisture Requirements		
Scientific Name	Common Name	VA Invasiveness Rank	Mountain	Piedmont	Coastal	Full	Partial	Shade	Hydric	Mesic	Xeric
<i>Ailanthus altissima</i>	Tree-of-heaven	High	•	•	•	•	•			•	
<i>Alliaria petiolata</i>	Garlic Mustard	High	•	•	•	•	•	•		•	
<i>Ampelopsis brevipedunculata</i>	Porcelain-berry	High		•	•	•	•	•		•	
<i>Celastrus orbiculatus</i>	Oriental Bittersweet	High	•	•	•	•	•	•		•	
<i>Centaurea stoebe ssp. micranthos</i>	Spotted Knapweed	High	•	•	•	•	•				•
<i>Cirsium arvense</i>	Canada Thistle	High	•	•	•	•				•	
<i>Dioscorea polystachya</i>	Cinnamon Vine	High	•	•	•		•	•		•	
<i>Elaeagnus umbellata</i>	Autumn Olive	High	•	•	•	•	•			•	
<i>Euonymus alatus</i>	Winged Euonymus	High	•	•			•	•		•	
<i>Ficaria verna</i>	Lesser Celandine	High		•	•		•	•		•	
<i>Hydrilla verticillata</i>	Hydrilla	High	•	•	•	•	•		•		
<i>Iris pseudacorus</i>	Yellow Flag	High	•	•	•	•	•		•		
<i>Lespedeza cuneata</i>	Sericea Lespedeza	High	•	•	•	•				•	
<i>Ligustrum sinense</i>	Chinese Privet	High	•	•	•		•	•	•	•	
<i>Lonicera japonica</i>	Japanese Honeysuckle	High	•	•	•	•	•	•		•	
<i>Lonicera maackii</i>	Amur Honeysuckle	High	•	•	•		•			•	
<i>Lonicera morrowii</i>	Morrow's Honeysuckle	High	•	•		•	•	•		•	
<i>Ludwigia grandiflora ssp. hexapetala*</i>	Large flower primrose willow	High	•	•	•	•			•		
<i>Lythrum salicaria</i>	Purple Loosestrife	High	•	•	•	•			•	•	
<i>Microstegium vimineum</i>	Japanese Stiltgrass	High	•	•	•	•	•	•	•	•	
<i>Murdannia keisak</i>	Marsh dewflower	High	•	•	•	•	•		•		
<i>Myriophyllum aquaticum</i>	Parrot Feather	High	•	•	•	•			•		
<i>Myriophyllum spicatum</i>	Eurasian Water-milfoil	High	•	•	•	•			•		
<i>Oplismenus hirtellus ssp. undulatifolius*</i>	Wavyleaf Grass	High	•	•				•		•	
<i>Persicaria perfoliata</i>	Mile-a-minute	High	•	•	•	•	•	•	•	•	
<i>Phragmites australis ssp. australis</i>	Common Reed	High	•	•	•	•	•		•	•	
<i>Pueraria montana var. lobata</i>	Kudzu	High	•	•	•	•	•	•		•	
<i>Reynoutria japonica</i>	Japanese knotweed	High	•	•	•	•	•			•	
<i>Rosa multiflora</i>	Multiflora Rose	High	•	•	•	•	•			•	
<i>Rubus phoenicolasius</i>	Wineberry	High	•	•	•		•	•		•	
<i>Sorghum halepense</i>	Johnson Grass	High	•	•	•	•	•			•	
<i>Urtica dioica</i>	European Stinging Nettle	High	•	•	•		•	•	•	•	
<i>Acer platanoides</i>	Norway Maple	Medium	•	•	•	•	•			•	

<i>Agrostis capillaris</i>	Colonial bent-grass	Medium	•	•	•	•	•			•	
<i>Akebia quinata</i>	Five-leaf Akebia	Medium		•	•	•	•	•		•	
<i>Albizia julibrissin</i>	Mimosa	Medium	•	•	•	•	•			•	
<i>Arthraxon hispidus</i> var. <i>hispidus</i>	Joint Head Grass	Medium	•	•	•	•	•		•	•	
<i>Berberis thunbergii</i>	Japanese Barberry	Medium	•	•	•	•	•	•		•	
<i>Cirsium vulgare</i>	Bull Thistle	Medium	•	•	•	•				•	
<i>Dipsacus fullonum</i>	Wild Teasel	Medium	•	•	•	•			•	•	
<i>Egeria densa</i>	Brazilian Waterweed	Medium	•	•	•	•	•		•		
<i>Euonymus fortunei</i>	Winter Creeper	Medium	•	•	•		•	•	•	•	
<i>Glechoma hederacea</i>	Gill-over-the-ground	Medium	•	•	•		•	•		•	
<i>Hedera helix</i>	English ivy	Medium		•	•	•	•	•		•	
<i>Heracleum mantegazzianum</i> *	Giant Hogweed	Medium	•	•		•	•		•	•	
<i>Holcus lanatus</i>	Common Velvet Grass	Medium	•	•	•	•	•		•	•	
<i>Humulus japonicus</i>	Japanese Hops	Medium	•	•	•	•	•	•	•	•	
<i>Ipomoea aquatica</i> *	Water spinach	Medium	•	•	•	•			•		
<i>Ligustrum obtusifolium</i> var. <i>obtusifolium</i>	Border privet	Medium	•	•	•			•		•	
<i>Lonicera tatarica</i>	Tartarian Honeysuckle	Medium	•	•		•	•			•	
<i>Lysimachia nummularia</i>	Moneywort	Medium	•	•	•	•	•	•	•	•	
<i>Miscanthus sinensis</i>	Chinese Silvergrass	Medium	•	•	•	•	•			•	
<i>Najas minor</i>	Brittle Naiad	Medium	•	•	•	•			•		
<i>Paulownia tomentosa</i>	Royal Paulowina	Medium	•	•	•	•	•			•	
<i>Persicaria longiseta</i>	Long-bristled Smartweed	Medium	•	•	•	•	•	•	•	•	
<i>Phyllostachys aurea</i>	Golden Bamboo	Medium	•	•	•	•	•			•	
<i>Poa compressa</i>	Flat-stemmed Bluegrass	Medium	•	•	•	•	•	•		•	
<i>Poa trivialis</i>	Rough Bluegrass	Medium	•	•	•	•	•	•	•	•	
<i>Pyrus calleryana</i>	Callery Pear	Medium	•	•	•	•	•			•	
<i>Rhodotypos scandens</i>	Jetbead	Medium	•	•	•	•	•	•	•	•	
<i>Rumex acetosella</i>	Sheep sorrel	Medium	•	•	•	•	•			•	
<i>Salvinia molesta</i> *	Giant Salvinia	Medium	•	•	•	•			•		
<i>Solanum viarum</i> *	Tropical Soda Apple	Medium		•	•	•	•		•	•	
<i>Spiraea japonica</i>	Japanese Spiraea	Medium	•	•			•	•	•	•	
<i>Stellaria media</i>	Common Chickweed	Medium	•	•	•	•	•	•		•	
<i>Veronica hederifolia</i>	Ivy-leaved Speedwell	Medium	•	•	•	•	•			•	
<i>Viburnum dilatatum</i>	Linden arrow-wood	Medium		•		•	•			•	
<i>Wisteria sinensis</i>	Chinese Wisteria	Medium	•	•	•		•	•		•	

<i>Commelina communis</i>	Asiatic Dayflower	Low	•	•	•	•	•			•	
<i>Elaeagnus pungens</i>	Thorny Olive	Low	•	•	•	•	•			•	
<i>Lespedeza bicolor</i>	Shrubby Bushclover	Low	•	•	•	•	•			•	
<i>Lonicera fragrantissima</i>	Winter Honeysuckle	Low	•	•	•	•	•			•	
<i>Melia azedarach</i>	Chinaberry	Low		•	•	•	•			•	
<i>Morus alba</i>	White Mulberry	Low	•	•	•	•	•			•	
<i>Perilla frutescens</i>	Beefsteak Plant	Low	•	•	•		•	•		•	
<i>Phleum pratense</i>	Timothy	Low	•	•	•	•	•			•	
<i>Populus alba</i>	Silver Poplar	Low	•	•	•	•	•			•	
<i>Rumex crispus ssp. crispus</i>	Curly dock	Low	•	•	•	•				•	•
<i>Securigera varia</i>	Crown-vetch	Low	•	•	•	•				•	•
<i>Ulmus pumila</i>	Siberian Elm	Low	•	•		•	•			•	
<i>Vinca major</i>	Greater Periwinkle	Low	•	•	•	•	•	•		•	
<i>Vinca minor</i>	Periwinkle	Low	•	•	•	•	•	•		•	
<i>Wisteria floribunda</i>	Japanese Wisteria	Low		•	•		•	•		•	

*Early detection species not yet established in Virginia.

Citation: Heffernan, K., E. Engle, C. Richardson. 2014. Virginia Invasive Plant Species List. Virginia Department of Conservation and Recreation, Division of Natural Heritage. Natural Heritage Technical Document 14-XX. Richmond.

APPENDIX IX

Historic and Cultural Resources

Leslie Schroeder

From: Jennifer Bellville-marrion <Jennifer.Bellville-Marrion@dhr.virginia.gov>
Sent: Monday, July 13, 2020 10:09 AM
To: Leslie Schroeder
Subject: Amelia Solar I (DHR File No. 2020-3861) | e-Mail #03918

Dear Ms. Schroeder,

Thank you for requesting comments from the Department of Historic Resources on the referenced project, Amelia Solar I (DHR File No. 2020-3861). Based upon the documentation provided, it is our opinion that no historic properties will be affected by the proposed undertaking.

Implementation of the undertaking in accordance with the finding of **No Historic Properties Affected** as documented fulfills the Federal agency's responsibilities under Section 106 of the National Historic Preservation Act. If for any reason the undertaking is not or cannot be conducted as proposed in the finding, consultation under Section 106 must be reopened.

If you have any questions or if we may provide any further assistance at this time, please do not hesitate to contact me.

Sincerely,

Jenny Bellville-Marrion, Archaeologist
Office of Review and Compliance
Division of Resource Services and Review
Phone: (804) 482-8091
Jennifer.Bellville-Marrion@dhr.virginia.gov



Legend

-  Project Study Limits - 89.5 Acres
-  Half Mile Project Buffer
-  Architecture Resources
-  Archaeological Resources

TIMMONS GROUP
 YOUR VISION ACHIEVED THROUGH OURS.
 1001 Boulders Parkway, Suite 300
 Richmond, VA 23226
 TEL: 804-200-6500
 www.timmons.com

PROJECT NAME & LOCATION
AMELIA SOLARI I
 AMELIA COUNTY,
 VIRGINIA

DATE	05/07/2020
PROJECT NUMBER	44131.003
PROJECT NAME	AMELIA SOLAR I
DESIGNED BY / DRAWN BY	L. WHEELER

NOTES:
 Project Limits are approximate.
 Cultural resource data from DHR.
 Aerial imagery from VGIN.

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REVISIONS	
#	DESCRIPTION

DRAWING DESCRIPTION
CULTURAL RESOURCE MAP


 SCALE (FEET)
 0 400 800
PLANS PRINTED AS 11X17 ARE HALF SCALE
 SCALE SHEET NUMBER
 H:1" = 400' 1

Property Information

Property Names

Name Explanation	Name
Historic	Lodge, The (Destroyed)
County/Independent City(s):	Amelia (County)
Incorporated Town(s):	No Data
Zip Code(s):	No Data
Magisterial District(s):	No Data
Tax Parcel(s):	No Data
USGS Quad(s):	No Data

Property Evaluation Status

Not Evaluated

Additional Property Information

Architecture Setting:	No Data
Acreage:	No Data
Site Description:	No Data
Surveyor Assessment:	No Data
Surveyor Recommendation:	No Data

Primary Resource Information

Resource Category:	Archaeology Site
Resource Type:	Archaeological Site
NR Resource Type:	Site
Historic District Status:	No Data
Date of Construction:	Ca 1800
Date Source:	Written Data
Historic Time Period:	Early National Period (1790 - 1829)
Historic Context(s):	Domestic
Other ID Number:	No Data
Architectural Style:	No Data
Form:	No Data
Number of Stories:	No Data
Condition:	No Data
Threats to Resource:	No Data
Architectural Description:	Architecture Summary: Destroyed house.

Secondary Resource Information

Historic District Information

Historic District Name:	No Data
--------------------------------	---------

Local Historic District Name: *No Data*
Historic District Significance: *No Data*

CRM Events

Event Type: Survey:HABS Inventory

Project Review File Number: *No Data*
Investigator: Fishburne, J.R.
Organization/Company: Unknown (DSS)
Photographic Media: *No Data*
Survey Date: 7/1/1967
Dhr Library Report Number: *No Data*
Project Staff/Notes:
No Data

Bibliographic Information

Bibliography:

No Data

Property Notes:

No Data

Property Information

Property Names

Name Explanation	Name
Historic/Current	Pine Grove Church Cemetery

Property Evaluation Status

Not Evaluated

Property Addresses

Current - Royalton Road (Route 609)

County/Independent City(s):	Amelia (County)
Incorporated Town(s):	No Data
Zip Code(s):	23002
Magisterial District(s):	No Data
Tax Parcel(s):	No Data
USGS Quad(s):	CHULA

Additional Property Information

Architecture Setting: Rural

Acreage: No Data

Site Description:

December 2010: The Pine Grove Church Cemetery is located just northwest of the intersection of Routes 609 and 616 in Amelia County, Virginia.

December 2010: The Pine Grove Church is located across Route 609 to the east from the Pine Grove Church Cemetery.

Surveyor Assessment:

December 2010: This survey was for a proposed fiber optic cable corridor. The field visit indicated that many of the grave markers within the cemetery were present along the fence which appeared to mark the cemetery boundaries. Although no visible evidence of burials was noted outside of the cemetery fence, because of the possibility that unmarked burials may extend into the road right-of-way, the proposed fiber optic line will be installed east of Route 609 and south of Route 616, on the opposite side of the road. The installation of the fiber optic line on the opposite side of the road will, in our opinion, have no effect on the cemetery.

Surveyor Recommendation: No Data

Ownership

Ownership Category	Ownership Entity
Private	No Data

Primary Resource Information

Resource Category:	Funerary
Resource Type:	Cemetery
NR Resource Type:	Site
Historic District Status:	No Data
Date of Construction:	Ca 1908
Date Source:	Plaque/Sign
Historic Time Period:	Reconstruction and Growth (1866 - 1916)
Historic Context(s):	Funerary, Religion
Other ID Number:	No Data
Architectural Style:	No Data
Form:	No Data
Number of Stories:	No Data
Condition:	Fair
Threats to Resource:	Deterioration, Neglect, Public Utility Expansion, Transportation Expansion
Architectural Description:	No Data

Cemetery Information

Current Use: Memorial Park
Historic Religious Affiliation: Unknown
Ethnic Affiliation: Unknown
Has Marked Graves: True
Has Unmarked Graves: False
Enclosure Type: Other
Number Of Gravestones: 101 - 999
Earliest Marked Death Year: *No Data*
Latest Marked Death Year: *No Data*

Secondary Resource Information

Historic District Information

Historic District Name: *No Data*
Local Historic District Name: *No Data*
Historic District Significance: *No Data*

CRM Events

Event Type: Survey:Phase I/Reconnaissance

Project Review File Number: *No Data*
Investigator: Carroll, David
Organization/Company: Unknown (DSS)
Photographic Media: *No Data*
Survey Date: 12/1/2010
Dhr Library Report Number: *No Data*

Project Staff/Notes:

TA-WSSI

Project Bibliographic Information:

Name: Snyder, Kim
Record Type: Report
Bibliographic Notes: "Cultural Resources Assessment of the Mid-Atlantic Broadband Middle Mile Expansion Project #972, AMELIA, APPOMATTOX, BEDFORD, BUCKINGHAM, CAMPBELL, CHARLOTTE, CUMBERLAND, DINWIDDIE, FRANKLIN, GREENSVILLE, HALIFAX, HENRY, MECKLENBURG, PITTSYLVANIA, POWHATAN, PRINCE EDWARD, PRINCE GEORGE AND SUSSEX COUNTIES AND THE CITIES OF BEDFORD, EMPORIA, LYNCHBURG AND PETERSBURG, Virginia" January 20011.

Bibliographic Information

Bibliography:

No Data

Property Notes:

No Data



The Delaware Nation
Historic Preservation /106 Department
31064 State Highway 281
Anadarko, OK 73005
Phone (405)247-2448

July 9, 2020

To Whom It May Concern:

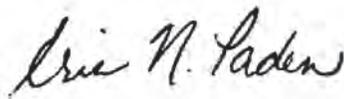
The Delaware Nation Historic Preservation Department received correspondence regarding the following referenced project(s).

**Project: Proposed Amelia Solar I Project
Amelia Court House, Amelia County, Virginia**

Our office is committed to protecting tribal heritage, culture and religion with particular concern for archaeological sites potentially containing burials and associated funerary objects.

The Lenape people occupied the area indicated in your letter during prior to European contact until their eventual removal to our present locations. According to our files, the location of the proposed project does not endanger cultural, or religious sites of interest to the Delaware Nation. **Please continue with the project as planned** keeping in mind during construction should an archaeological site or artifacts inadvertently be uncovered, all construction and ground disturbing activities should immediately be halted until the appropriate state agencies, as well as this office, are notified (within 24 hours), and a proper archaeological assessment can be made.

Please note the Delaware Nation, the Delaware Tribe of Indians, and the Stockbridge Munsee Band of Mohican Indians are the only Federally Recognized Delaware/Lenape entities in the United States and consultation must be made only with designated staff of these three tribes. We appreciate your cooperation in contacting the Delaware Nation Cultural Preservation Office to conduct proper Section 106 consultation. Should you have any questions, feel free to contact our offices at 405-247-2448.



Erin Paden
Director of Historic Preservation
Delaware Nation
31064 State Highway 281
Anadarko, OK 73005
Ph. 405-247-2448 ext. 1403
epaden@delawarenation-nsn.gov

TM



The Delaware Nation

Historic Preservation Department

31064 State Highway 281

Anadarko, OK 73005

Phone (405)247-2448

June 29, 2020

To Whom It May Concern:

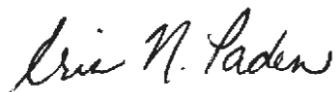
The Delaware Nation Historic Preservation Department received correspondence regarding the following referenced project(s).

**Project(s): Proposed Amelia Solar I Project
Amelia Court House, Amelia County, Virginia**

Our office is committed to protecting tribal heritage, culture and religion with particular concern for archaeological sites potentially containing burials and associated funerary objects.

The Lenape people occupied the area indicated in your letter during and prior to European contact until their eventual removal to our present locations. According to our files, the location of the proposed project does not endanger any known cultural, or religious sites of interest to the Delaware Nation. However, there is still the potential for the discovery of unknown resources. We would like to accept your invitation for consultation.

Please note the Delaware Nation, the Delaware Tribe of Indians, and the Stockbridge Munsee Band of Mohican Indians are the only Federally Recognized Delaware/Lenape entities in the United States and consultation must be made only with designated staff of these three tribes. We appreciate your cooperation in contacting the Delaware Nation Cultural Preservation Office to conduct proper Section 106 consultation. Should you have any questions, feel free to contact our offices at 405-247-2448 ext. 1403.



Erin Paden
Director of Historic Preservation
Delaware Nation
31064 State Highway 281
Anadarko, OK 73005
Ph. 405-247-2448 ext. 1403
epaden@delawarenation-nsn.gov

TM

Leslie Schroeder

From: Megan Bass <administrator@nansemond.org>
Sent: Wednesday, June 17, 2020 8:56 PM
To: Leslie Schroeder
Cc: samflyingeagle48
Subject: Section 106 Initiation: Amelia Solar I

Good evening Leslie,

I hope you are doing well. My name is Megan Bass and I am the administrator for the Nansemond Indian Nation. On behalf of Chief Sam Bass, the Nansemond Indian Nation is satisfied with efforts conducted to be sure that no Nansemond historic properties or other cultural resources will likely be adversely affected. The Nansemond Indian Nation is not currently aware of any specific Nansemond cultural or historic sites in the project area referenced. We, therefore, offer no objections to the proposed project.

The Nansemond Indian Nation only wishes to be informed if ancestral or cultural artifacts are discovered. Thank you for your time and for including our Nation in the 106 process.

Sincerely,

--

Megan L. Bass, J.D.
Administrator
Nansemond Indian Nation
(757) 777-4647



1000 East Warrenville Road, Suite 140
Naperville, Illinois 60563

P : 630 717 2880
F : 630 689 5881

mail@consulttruenorth.com

June 12, 2020

Nansemond Indian Nation
1001 Pembroke Lane
Suffolk, Virginia 23434

**RE: United States Department of Agriculture (USDA) – Rural Development (RD)
Rural Utilities Service (RUS)
Applicant THPO Section 106 Initiation
Proposed Amelia Solar I Project
Amelia Court House, Amelia County, Virginia**

To Whom it May Concern:

HCE Amelia Solar I (Applicant) is seeking financial assistance from the United States Department of Agriculture's (USDA) Rural Development (RD), Rural Utilities Service (RUS) for the proposed Amelia Solar I Project, as shown on the enclosed maps.

The Proposed Project will consist of the installation of a 5-megawatt (MW) ground-mounted photovoltaic (PV) system on the southeast corner of the intersection of Genito Road and Grub Hill Church Road near the town of Amelia Court House. The PV system and associated components will be situated on approximately 41.5 acres of a larger, 98.9-acre parent parcel (Site) – this parcel is identified by Amelia County Assessor as: 12 2N. The Site is bound on the north by Genito Road with forested and agricultural land beyond, residences, agricultural fields, and forested areas to the east and south and Grub Hill Church Road, forested areas, agricultural fields, and residences to the west. Currently, the Site consists of fallow agricultural fields and an overhead, electric powerline extends across the central portion of the Site. The Site, and surrounding properties, have historically consisted of forested areas, agricultural fields, and residences.

The Proposed Project's infrastructure would include installing PV solar panels; inverters (to allow for the transmission to the utility grid); connections to the existing powerlines and necessary safety features including access roads, perimeter roads and fencing. The estimated duration of construction is approximately 4 months and is anticipated that the Proposed Project will operate for a minimum of 35 years. When the Proposed Project has reached its operation end, the Site can be returned to its pre-construction state.

Within the Site, there will be no demolition of existing structures. The two main sources of ground disturbance are the racking system installation and the measures for erosion control



and stormwater. Ditches will be located around the Site with an approximate total distance of 1500' with a depth of 2-4', to direct runoff into stormwater basins. The Site's basins consist of one large and one small. The large basin has a maximum depth of 8' and covers an area that is 130'x375'. The small basin has a maximum depth of 6' and covers an area that is 90'x200'. The dirt removed for the construction of the stormwater measures will be graded out across the Site and planted with a grass seed mix. Approximately 1050 steel piles will be driven into the ground with an approximate average depth of 8'. The access road to the project will be approximately 1000' and will consist of 6" of compacted gravel over 12" of compacted native soil.

Utilizing the RUS loan guarantee process will allow the lender to extend credit to the Proposed Project and in turn, the borrower will be able to build a renewable energy system. Traditional generation technologies utilize large amounts of water and typically have high levels of greenhouse gas emissions (coal-fired and combined cycle natural gas facilities). The Proposed Project will provide long-term, emission free electricity to the local utility and will also help meet national and state goals to expand the use of renewable energy. The Proposed Project will also provide positive economic impacts by increasing the tax base for the county.

If RUS elects to fund the Project, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800. Pursuant to 36 CFR § 800.2(c)(4), and 7 CFR § 1970.5(b)(2) of the regulations, "Environmental Policies and Procedures" (7 CFR Part 1970), RUS has issued a blanket delegation for its applicants to initiate and proceed through Section 106 review. In accordance with this blanket delegation, HCE Amelia Solar I is initiating Section 106 review on behalf of RUS. In delegating this authority, RUS is advocating for the direct interaction between its borrowers and the Tribal Historic Preservation Office (THPO) or other Tribal cultural representative. RUS believes this interaction, prior to direct agency involvement, will support and encourage the consideration of impacts to historic properties earlier in project planning.

HCE Amelia Solar I proposes that the area of potential effects (APE) for the referenced project are limited to the boundaries of the approximate 41.5-acre portion of the larger parent parcel as shown on the enclosed map. The APE does not include any tribal lands as defined pursuant to 36 CFR § 800.16(x). The geographic scope of the APE will not be final until a determination is made by RUS pursuant to 36 CFR § 800.4(a)(1).

HCE Amelia Solar I is notifying you about the referenced project because of the possible interest of the Nansemond Indian Nation in Amelia County, Virginia. Should the Nansemond Indian Nation elect to participate in Section 106 review for the referenced project, please notify me at the following address – Brian Mihelich, True North Consultants, 1000 East Warrenton Road, Suite 140, Naperville, Illinois 60563, or bmihelich@consultruenorth.com.

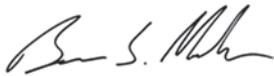
Please include with your affirmative response, a description of any specific historic properties or important tribal resources in the APE and your recommendations about the level of effort needed to identify additional historic properties which might be affected by the referenced project. HCE Amelia Solar I will respect the confidentiality of the information which you provide to the fullest extent possible.

If at any time you wish to share your interests, recommendations and concerns directly with the USDA-Rural Development as the agency responsible for conducting Section 106 review, or to request that USDA-Rural Development participate directly in Section 106 review, please notify me at once; however, you may also contact the Agency directly. If you wish to do so, please submit your request to Steven Polacek, USDA-Rural Development, 1400 Independence Avenue, SW, Washington DC 20250-1510, or steve.polacek@usda.gov.

Please submit your response **electronically** within thirty (30) days. The RUS will proceed to the next step in Section 106 review if you fail to provide a timely response. Should you have any questions or require additional information, you may contact me at 224-387-6125 or bmihelich@consulttruenorth.com.

Sincerely,

TRUE NORTH CONSULTANTS, INC.



Brian S. Mihelich
Executive Vice President



Leslie Schroeder
Staff Consultant

cc: Steven Polacek (via email)
Environmental Protection Specialist
United States Department of Agriculture
Environmental & Engineering Staff, Rural Development
steve.polacek@usda.gov

June 12, 2020

Erin Paden
Historic Preservation Director
Delaware Nation of Oklahoma
P.O. Box 825
Anadarko, Oklahoma 73005

**RE: United States Department of Agriculture (USDA) – Rural Development (RD)
Rural Utilities Service (RUS)
Applicant THPO Section 106 Initiation
Proposed Amelia Solar I Project
Amelia Court House, Amelia County, Virginia**

Dear Ms. Paden:

HCE Amelia Solar I (Applicant) is seeking financial assistance from the United States Department of Agriculture's (USDA) Rural Development (RD), Rural Utilities Service (RUS) for the proposed Amelia Solar I Project, as shown on the enclosed maps.

The Proposed Project will consist of the installation of a 5-megawatt (MW) ground-mounted photovoltaic (PV) system on the southeast corner of the intersection of Genito Road and Grub Hill Church Road near the town of Amelia Court House. The PV system and associated components will be situated on approximately 41.5 acres of a larger, 98.9-acre parent parcel (Site) – this parcel is identified by Amelia County Assessor as: 12 2N. The Site is bound on the north by Genito Road with forested and agricultural land beyond, residences, agricultural fields, and forested areas to the east and south and Grub Hill Church Road, forested areas, agricultural fields, and residences to the west. Currently, the Site consists of fallow agricultural fields and an overhead, electric powerline extends across the central portion of the Site. The Site, and surrounding properties, have historically consisted of forested areas, agricultural fields, and residences.

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Within the Site, there will be no demolition of existing structures. The two main sources of



ground disturbance are the racking system installation and the measures for erosion control and stormwater. Ditches will be located around the Site with an approximate total distance of 1500' with a depth of 2-4', to direct runoff into stormwater basins. The Site's basins consist of one large and one small. The large basin has a maximum depth of 8' and covers an area that is 130'x375'. The small basin has a maximum depth of 6' and covers an area that is 90'x200'. The dirt removed for the construction of the stormwater measures will be graded out across the Site and planted with a grass seed mix. Approximately 1050 steel piles will be driven into the ground with an approximate average depth of 8'. The access road to the project will be approximately 1000' and will consist of 6" of compacted gravel over 12" of compacted native soil.

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If RUS elects to fund the Project, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800. Pursuant to 36 CFR § 800.2(c)(4), and 7 CFR § 1970.5(b)(2) of the regulations, "Environmental Policies and Procedures" (7 CFR Part 1970), RUS has issued a blanket delegation for its applicants to initiate and proceed through Section 106 review. In accordance with this blanket delegation, HCE Amelia Solar I is initiating Section 106 review on behalf of RUS. In delegating this authority, RUS is advocating for the direct interaction between its borrowers and the Tribal Historic Preservation Office (THPO) or other Tribal cultural representative. RUS believes this interaction, prior to direct agency involvement, will support and encourage the consideration of impacts to historic properties earlier in project planning.

HCE Amelia Solar I proposes that the area of potential effects (APE) for the referenced project are limited to the boundaries of the approximate 41.5-acre portion of the larger parent parcel, as shown on the enclosed map. The APE does not include any tribal lands as defined pursuant to 36 CFR § 800.16(x). The geographic scope of the APE will not be final until a determination is made by RUS pursuant to 36 CFR § 800.4(a)(1).

HCE Amelia Solar I is notifying you about the referenced project because of the possible interest of the Delaware Nation of Oklahoma in Amelia County, Virginia. Should the Delaware Nation of Oklahoma elect to participate in Section 106 review for the referenced project, please notify me at the following address – Brian Mihelich, True North Consultants, 1000 East Warrenville Road, Suite 140, Naperville, Illinois 60563, or bmihelich@consulttruenorth.com.

Please include with your affirmative response, a description of any specific historic properties or important tribal resources in the APE and your recommendations about the level of effort needed to identify additional historic properties which might be affected by the referenced project. HCE Amelia Solar I will respect the confidentiality of the information which you provide to the fullest extent possible.



If at any time you wish to share your interests, recommendations and concerns directly with the USDA-Rural Development as the agency responsible for conducting Section 106 review, or to request that USDA-Rural Development participate directly in Section 106 review, please notify me at once; however, you may also contact the Agency directly. If you wish to do so, please submit your request to Steven Polacek, USDA-Rural Development, 1400 Independence Avenue, SW, Washington DC 20250-1510, or steve.polacek@usda.gov.

Please submit your response **electronically** within thirty (30) days. The RUS will proceed to the next step in Section 106 review if you fail to provide a timely response. Should you have any questions or require additional information, you may contact me at 224-387-6125 or bmihelich@consulttruenorth.com.

Sincerely,

TRUE NORTH CONSULTANTS, INC.

Brian S. Mihelich
Executive Vice President

Leslie Schroeder
Staff Consultant

cc: Steven Polacek (via email)
Environmental Protection Specialist
United States Department of Agriculture
Environmental & Engineering Staff, Rural Development
steve.polacek@usda.gov

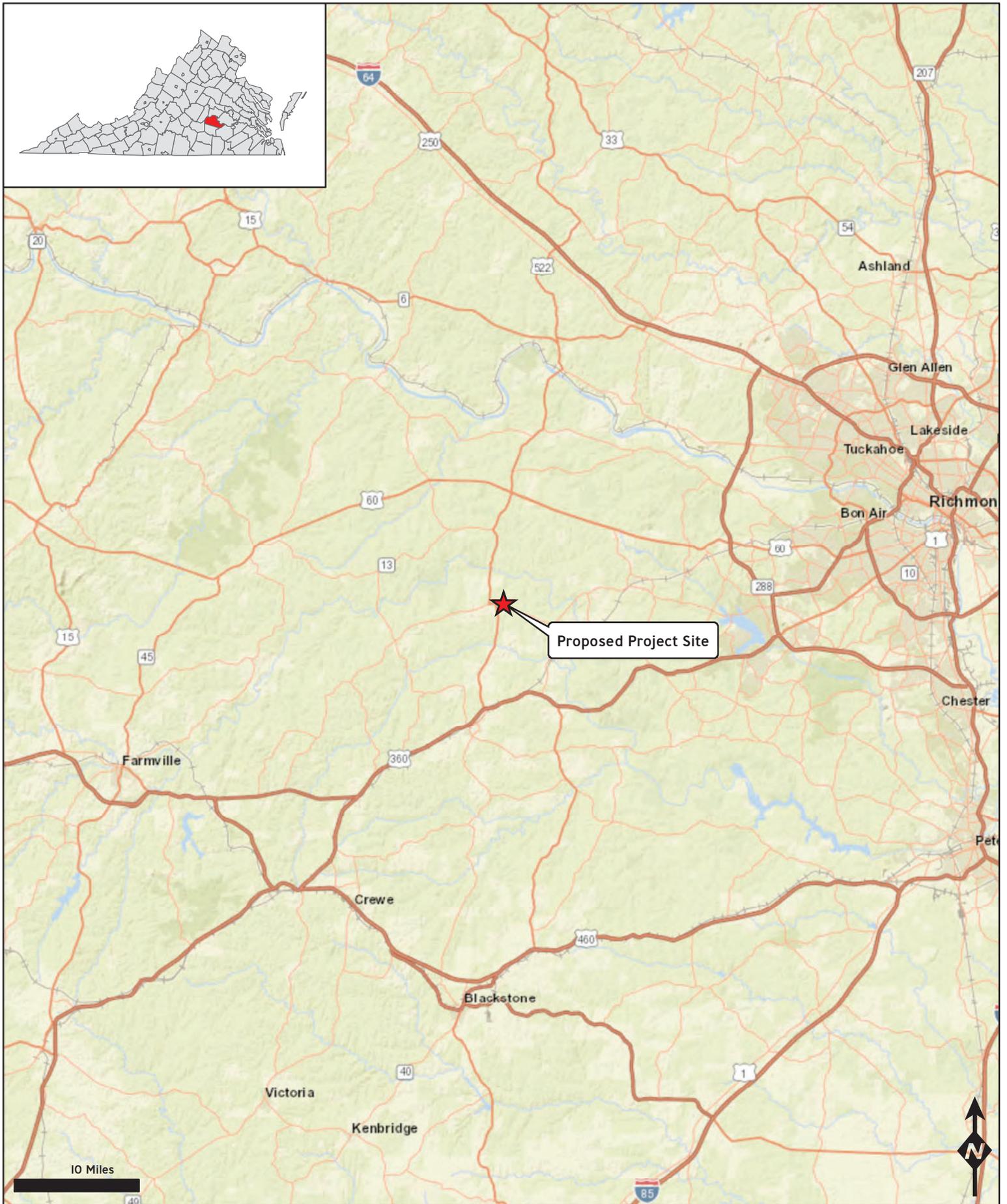


FIGURE I

Regional Map

Proposed Amelia Solar I

Amelia Court House, Amelia County, Virginia

Legend

 Proposed Project Parcel

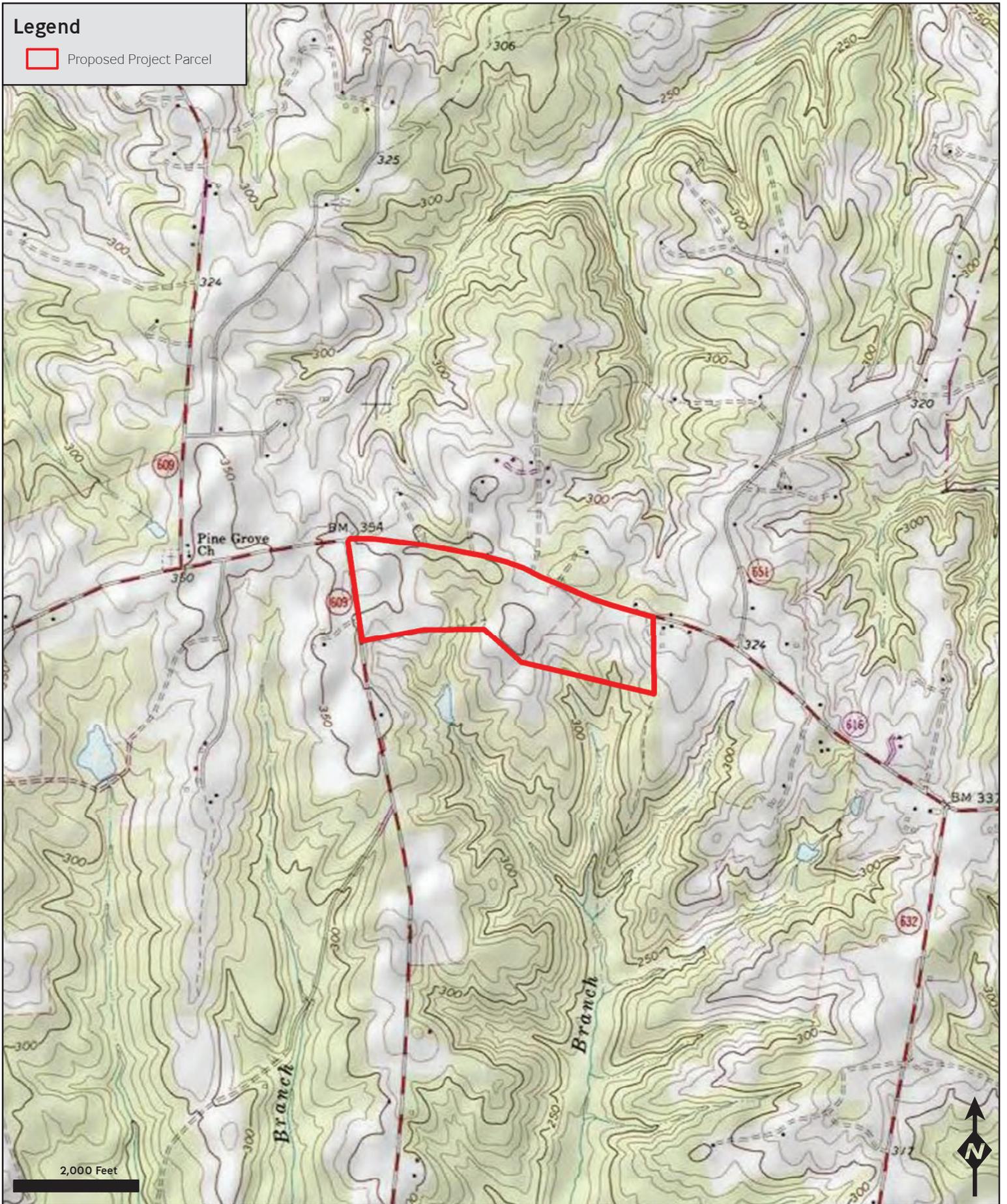


FIGURE 2

Topographic Map

Proposed Amelia Solar I

Amelia Court House, Amelia County, Virginia

Legend

-  Proposed Project Parcel
-  Proposed Project Area

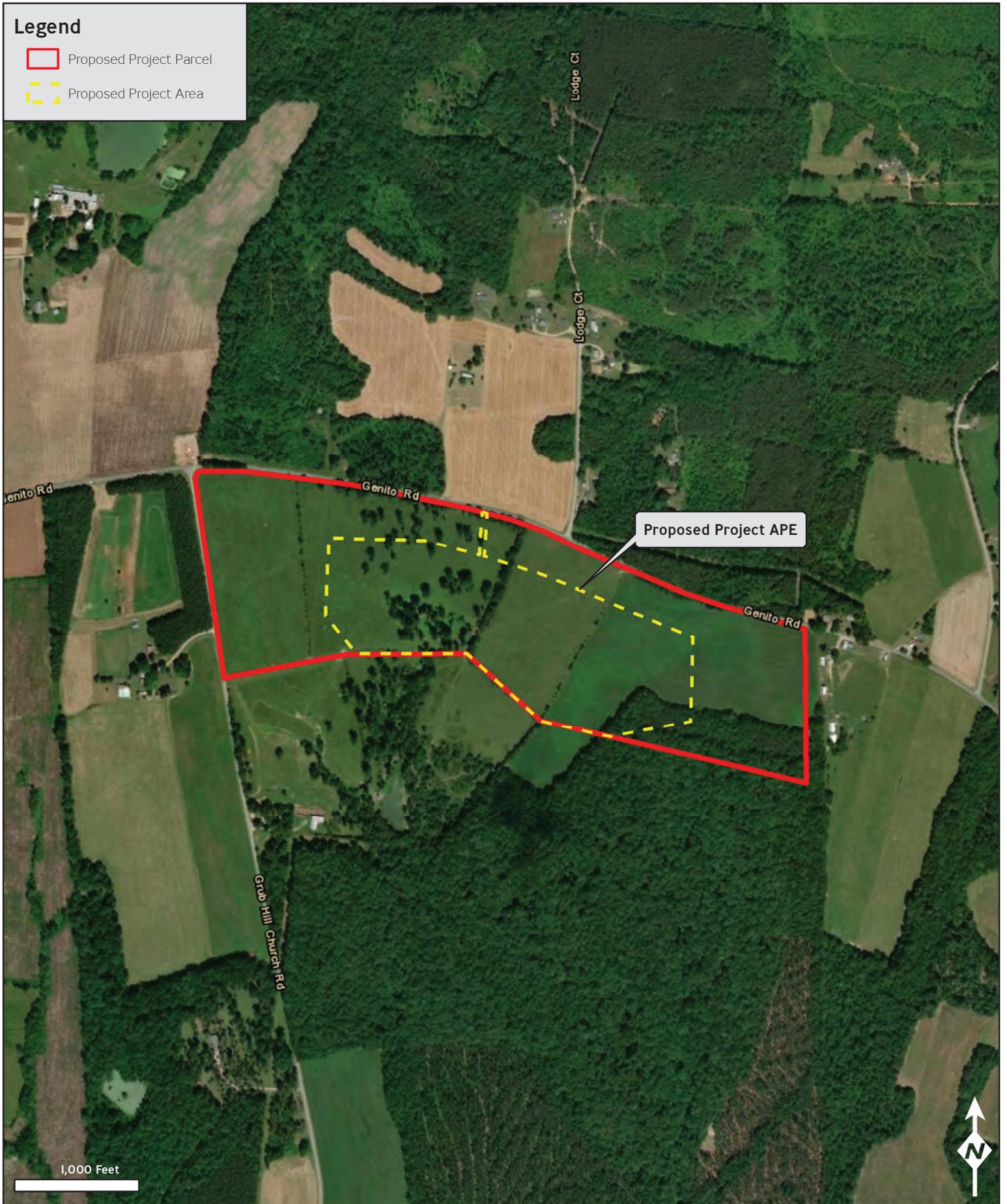


FIGURE 3
Area Map

*Proposed Amelia Solar I
Amelia Court House, Amelia County, Virginia*



Tribal Directory Assessment Information



Contact Information for Tribes with Interests in Amelia County, Virginia

	Tribal Name	County Name
+	Delaware Nation, Oklahoma	Amelia

1 - 1 of 1 results « < 1 > » 10 ▼

APPENDIX X

Air Quality



You are here: EPA Home > Green Book > >National Area and County-Level Multi-Pollutant Information >Virginia Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants

Virginia Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants

Data is current as of November 30, 2020

Listed by County, NAAQS, Area. The 8-hour Ozone (1997) standard was revoked on April 6, 2015 and the 1-hour Ozone (1979) standard was revoked on June 15, 2005.

* The 1997 Primary Annual PM-2.5 NAAQS (level of 15 µg/m³) is revoked in attainment and maintenance areas for that NAAQS. For additional information see the PM-2.5 NAAQS SIP Requirements Final Rule, effective October 24, 2016. (81 FR 58009)

Change the State:

Important Notes

[Download National Dataset: dbf](#) | [xls](#) | [Data dictionary \(PDF\)](#)

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Class
VIRGINIA					
Alexandria city	1-Hour Ozone (1979)-NAAQS revoked	Washington, DC-MD-VA	92939495969798990001020304	//	S
Alexandria city	8-Hour Ozone (1997)-NAAQS revoked	Washington, DC-MD-VA	0405060708091011121314	//	I
Alexandria city	8-Hour Ozone (2008)	Washington, DC-MD-VA	12131415161718	05/15/2019	I
Alexandria city	8-Hour Ozone (2015)	Washington, DC-MD-VA	181920	//	I
Alexandria city	Carbon Monoxide (1971)	Washington, DC-MD-VA	92939495	03/15/1996	M
Alexandria city	PM-2.5 (1997)-NAAQS revoked	Washington, DC-MD-VA	050607080910111213	11/05/2014 *	I
Arlington County	1-Hour Ozone (1979)-NAAQS revoked	Washington, DC-MD-VA	92939495969798990001020304	//	S
Arlington County	8-Hour Ozone (1997)-NAAQS revoked	Washington, DC-MD-VA	0405060708091011121314	//	I
Arlington County	8-Hour Ozone (2008)	Washington, DC-MD-VA	12131415161718	05/15/2019	I
Arlington County	8-Hour Ozone (2015)	Washington, DC-MD-VA	181920	//	I
Arlington County	Carbon Monoxide (1971)	Washington, DC-MD-VA	92939495	03/15/1996	M
Arlington County	PM-2.5 (1997)-NAAQS revoked	Washington, DC-MD-VA	050607080910111213	11/05/2014 *	I
Charles City County	1-Hour Ozone (1979)-NAAQS revoked	Richmond, VA	9293949596	12/17/1997	I
Charles City County	8-Hour Ozone (1997)-NAAQS revoked	Richmond-Petersburg, VA	040506	06/18/2007	I

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Class
Chesapeake city	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	9293949596	07/28/1997	1
Chesapeake city	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	04 05 06	06/01/2007	1
Chesterfield County	1-Hour Ozone (1979)-NAAQS revoked	Richmond, VA	9293949596	12/17/1997	1
Chesterfield County	8-Hour Ozone (1997)-NAAQS revoked	Richmond-Petersburg, VA	04 05 06	06/18/2007	1
Colonial Heights city	1-Hour Ozone (1979)-NAAQS revoked	Richmond, VA	9293949596	12/17/1997	1
Colonial Heights city	8-Hour Ozone (1997)-NAAQS revoked	Richmond-Petersburg, VA	04 05 06	06/18/2007	1
Fairfax County	1-Hour Ozone (1979)-NAAQS revoked	Washington, DC-MD-VA	92939495969798990001020304	//	S
Fairfax County	8-Hour Ozone (1997)-NAAQS revoked	Washington, DC-MD-VA	0405060708091011121314	//	1
Fairfax County	8-Hour Ozone (2008)	Washington, DC-MD-VA	12 13 14 15 16 17 18	05/15/2019	1
Fairfax County	8-Hour Ozone (2015)	Washington, DC-MD-VA	18 19 20	//	1
Fairfax County	PM-2.5 (1997)-NAAQS revoked	Washington, DC-MD-VA	05 06 07 08 09 10 11 12 13	11/05/2014 *	1
Fairfax city	1-Hour Ozone (1979)-NAAQS revoked	Washington, DC-MD-VA	92939495969798990001020304	//	S
Fairfax city	8-Hour Ozone (1997)-NAAQS revoked	Washington, DC-MD-VA	0405060708091011121314	//	1
Fairfax city	8-Hour Ozone (2008)	Washington, DC-MD-VA	12 13 14 15 16 17 18	05/15/2019	1
Fairfax city	8-Hour Ozone (2015)	Washington, DC-MD-VA	18 19 20	//	1
Fairfax city	PM-2.5 (1997)-NAAQS revoked	Washington, DC-MD-VA	05 06 07 08 09 10 11 12 13	11/05/2014 *	1
Falls Church city	1-Hour Ozone (1979)-NAAQS revoked	Washington, DC-MD-VA	92939495969798990001020304	//	S
Falls Church city	8-Hour Ozone (1997)-NAAQS revoked	Washington, DC-MD-VA	0405060708091011121314	//	1
Falls Church city	8-Hour Ozone (2008)	Washington, DC-MD-VA	12 13 14 15 16 17 18	05/15/2019	1

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Class
Falls Church city	8-Hour Ozone (2015)	Washington, DC-MD-VA	18 19 20	//	I
Falls Church city	PM-2.5 (1997)-NAAQS revoked	Washington, DC-MD-VA	05 06 07 08 09 10 11 12 13	11/05/2014 *	I
Fredericksburg city	8-Hour Ozone (1997)-NAAQS revoked	Fredericksburg, VA	04 05	01/23/2006	I
Gloucester County	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	04 05 06	06/01/2007	I
Hampton city	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	92 93 94 95 96	07/28/1997	I
Hampton city	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	04 05 06	06/01/2007	I
Hanover County	1-Hour Ozone (1979)-NAAQS revoked	Richmond, VA	92 93 94 95 96	12/17/1997	I
Hanover County	8-Hour Ozone (1997)-NAAQS revoked	Richmond-Petersburg, VA	04 05 06	06/18/2007	I
Henrico County	1-Hour Ozone (1979)-NAAQS revoked	Richmond, VA	92 93 94 95 96	12/17/1997	I
Henrico County	8-Hour Ozone (1997)-NAAQS revoked	Richmond-Petersburg, VA	04 05 06	06/18/2007	I
Hopewell city	1-Hour Ozone (1979)-NAAQS revoked	Richmond, VA	92 93 94 95 96	12/17/1997	I
Hopewell city	8-Hour Ozone (1997)-NAAQS revoked	Richmond-Petersburg, VA	04 05 06	06/18/2007	I
Isle of Wight County	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	04 05 06	06/01/2007	I
James City County	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	92 93 94 95 96	07/28/1997	I
James City County	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	04 05 06	06/01/2007	I
Loudoun County	1-Hour Ozone (1979)-NAAQS revoked	Washington, DC-MD-VA	92 93 94 95 96 97 98 99 00 01 02 03 04	//	S

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Class
Loudoun County	8-Hour Ozone (1997)-NAAQS revoked	Washington, DC-MD-VA	0405060708091011121314	//	1
Loudoun County	8-Hour Ozone (2008)	Washington, DC-MD-VA	12131415161718	05/15/2019	1
Loudoun County	8-Hour Ozone (2015)	Washington, DC-MD-VA	181920	//	1
Loudoun County	PM-2.5 (1997)-NAAQS revoked	Washington, DC-MD-VA	050607080910111213	11/05/2014 *	1
Madison County	8-Hour Ozone (1997)-NAAQS revoked	Madison and Page Cos (Shenandoah NP), VA	0405	02/02/2006	5
Manassas Park city	1-Hour Ozone (1979)-NAAQS revoked	Washington, DC-MD-VA	92939495969798990001020304	//	S
Manassas Park city	8-Hour Ozone (1997)-NAAQS revoked	Washington, DC-MD-VA	0405060708091011121314	//	1
Manassas Park city	8-Hour Ozone (2008)	Washington, DC-MD-VA	12131415161718	05/15/2019	1
Manassas Park city	8-Hour Ozone (2015)	Washington, DC-MD-VA	181920	//	1
Manassas Park city	PM-2.5 (1997)-NAAQS revoked	Washington, DC-MD-VA	050607080910111213	11/05/2014 *	1
Manassas city	1-Hour Ozone (1979)-NAAQS revoked	Washington, DC-MD-VA	92939495969798990001020304	//	S
Manassas city	8-Hour Ozone (1997)-NAAQS revoked	Washington, DC-MD-VA	0405060708091011121314	//	1
Manassas city	8-Hour Ozone (2008)	Washington, DC-MD-VA	12131415161718	05/15/2019	1
Manassas city	8-Hour Ozone (2015)	Washington, DC-MD-VA	181920	//	1
Manassas city	PM-2.5 (1997)-NAAQS revoked	Washington, DC-MD-VA	050607080910111213	11/05/2014 *	1
Newport News city	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	9293949596	07/28/1997	1
Newport News city	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	040506	06/01/2007	1
Norfolk city	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	9293949596	07/28/1997	1
Norfolk city	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	040506	06/01/2007	1

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Class
Page County	8-Hour Ozone (1997)-NAAQS revoked	Madison and Page Cos (Shenandoah NP), VA	04 05	02/02/2006	S
Petersburg city	8-Hour Ozone (1997)-NAAQS revoked	Richmond-Petersburg, VA	04 05 06	06/18/2007	I
Poquoson city	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	92 93 94 95 96	07/28/1997	I
Poquoson city	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	04 05 06	06/01/2007	I
Portsmouth city	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	92 93 94 95 96	07/28/1997	I
Portsmouth city	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	04 05 06	06/01/2007	I
Prince George County	8-Hour Ozone (1997)-NAAQS revoked	Richmond-Petersburg, VA	04 05 06	06/18/2007	I
Prince William County	1-Hour Ozone (1979)-NAAQS revoked	Washington, DC-MD-VA	92 93 94 95 96 97 98 99 00 01 02 03 04	//	S
Prince William County	8-Hour Ozone (1997)-NAAQS revoked	Washington, DC-MD-VA	04 05 06 07 08 09 10 11 12 13 14	//	M
Prince William County	8-Hour Ozone (2008)	Washington, DC-MD-VA	12 13 14 15 16 17 18	05/15/2019	I
Prince William County	8-Hour Ozone (2015)	Washington, DC-MD-VA	18 19 20	//	I
Prince William County	PM-2.5 (1997)-NAAQS revoked	Washington, DC-MD-VA	05 06 07 08 09 10 11 12 13	11/05/2014 *	M
Richmond city	1-Hour Ozone (1979)-NAAQS revoked	Richmond, VA	92 93 94 95 96	12/17/1997	M
Richmond city	8-Hour Ozone (1997)-NAAQS revoked	Richmond-Petersburg, VA	04 05 06	06/18/2007	I
Smyth County	1-Hour Ozone (1979)-NAAQS revoked	Smyth Co, VA (White Top Mtn)	92 93 94 95 96 97 98 99 00 01 02 03 04	//	M (I)
Spotsylvania County	8-Hour Ozone (1997)-NAAQS revoked	Fredericksburg, VA	04 05	01/23/2006	M
Stafford County	1-Hour Ozone (1979)-NAAQS revoked	Washington, DC-MD-VA	92 93 94 95 96 97 98 99 00 01 02 03 04	//	S

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Class
Stafford County	8-Hour Ozone (1997)-NAAQS revoked	Fredericksburg, VA	04 05	01/23/2006	1
Suffolk city	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	9293949596	07/28/1997	1
Suffolk city	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	04 05 06	06/01/2007	1
Virginia Beach city	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	9293949596	07/28/1997	1
Virginia Beach city	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	04 05 06	06/01/2007	1
Williamsburg city	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	9293949596	07/28/1997	1
Williamsburg city	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	04 05 06	06/01/2007	1
York County	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	9293949596	07/28/1997	1
York County	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	04 05 06	06/01/2007	1

Important Notes

Discover.
Connect.
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2020-11-30

APPENDIX XI

Socioeconomic and Environmental Justice



Location: User-specified point center at 37.451643, -77.951616
 Ring (buffer): 10-miles radius
 Description: Proposed Amelia I Solar Farm

Summary of ACS Estimates		2013 - 2017
Population		27,783
Population Density (per sq. mile)		91
Minority Population		4,090
% Minority		15%
Households		9,800
Housing Units		10,723
Housing Units Built Before 1950		611
Per Capita Income		34,900
Land Area (sq. miles) (Source: SF1)		304.30
% Land Area		99%
Water Area (sq. miles) (Source: SF1)		2.54
% Water Area		1%

	2013 - 2017 ACS Estimates	Percent	MOE (±)
Population by Race			
Total	27,783	100%	409
Population Reporting One Race	27,147	98%	951
White	24,173	87%	423
Black	2,618	9%	264
American Indian	56	0%	60
Asian	201	1%	114
Pacific Islander	20	0%	33
Some Other Race	79	0%	57
Population Reporting Two or More Races	636	2%	204
Total Hispanic Population	540	2%	207
Total Non-Hispanic Population	27,243		
White Alone	23,693	85%	416
Black Alone	2,607	9%	264
American Indian Alone	56	0%	60
Non-Hispanic Asian Alone	201	1%	114
Pacific Islander Alone	20	0%	33
Other Race Alone	30	0%	57
Two or More Races Alone	636	2%	204
Population by Sex			
Male	13,864	50%	287
Female	13,919	50%	330
Population by Age			
Age 0-4	1,678	6%	158
Age 0-17	6,726	24%	316
Age 18+	21,057	76%	537
Age 65+	4,143	15%	239

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.
 N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2013 - 2017



EJSCREEN ACS Summary Report



Location: User-specified point center at 37.451643, -77.951616
 Ring (buffer): 10-miles radius
 Description: Proposed Amelia I Solar Farm

	2013 - 2017 ACS Estimates	Percent	MOE (±)
Population 25+ by Educational Attainment			
Total	19,062	100%	305
Less than 9th Grade	765	4%	145
9th - 12th Grade, No Diploma	1,045	5%	176
High School Graduate	5,157	27%	295
Some College, No Degree	5,741	30%	310
Associate Degree	1,593	8%	167
Bachelor's Degree or more	6,355	33%	295
Population Age 5+ Years by Ability to Speak English			
Total	26,105	100%	381
Speak only English	25,221	97%	434
Non-English at Home ¹⁺²⁺³⁺⁴	884	3%	174
¹ Speak English "very well"	608	2%	150
² Speak English "well"	215	1%	86
³ Speak English "not well"	33	0%	36
⁴ Speak English "not at all"	27	0%	30
³⁺⁴ Speak English "less than well"	60	0%	43
²⁺³⁺⁴ Speak English "less than very well"	276	1%	88
Linguistically Isolated Households*			
Total	42	100%	40
Speak Spanish	6	14%	17
Speak Other Indo-European Languages	28	67%	31
Speak Asian-Pacific Island Languages	8	19%	17
Speak Other Languages	0	0%	17
Households by Household Income			
Household Income Base	9,800	100%	210
< \$15,000	509	5%	129
\$15,000 - \$25,000	488	5%	146
\$25,000 - \$50,000	1,575	16%	198
\$50,000 - \$75,000	1,789	18%	185
\$75,000 +	5,439	56%	288
Occupied Housing Units by Tenure			
Total	9,800	100%	210
Owner Occupied	8,817	90%	216
Renter Occupied	983	10%	191
Employed Population Age 16+ Years			
Total	21,864	100%	358
In Labor Force	14,235	65%	342
Civilian Unemployed in Labor Force	489	2%	116
Not In Labor Force	7,629	35%	310

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of anyrace.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS)

*Households in which no one 14 and over speaks English "very well" or speaks English only.



EJSCREEN ACS Summary Report



Location: User-specified point center at 37.451643, -77.951616

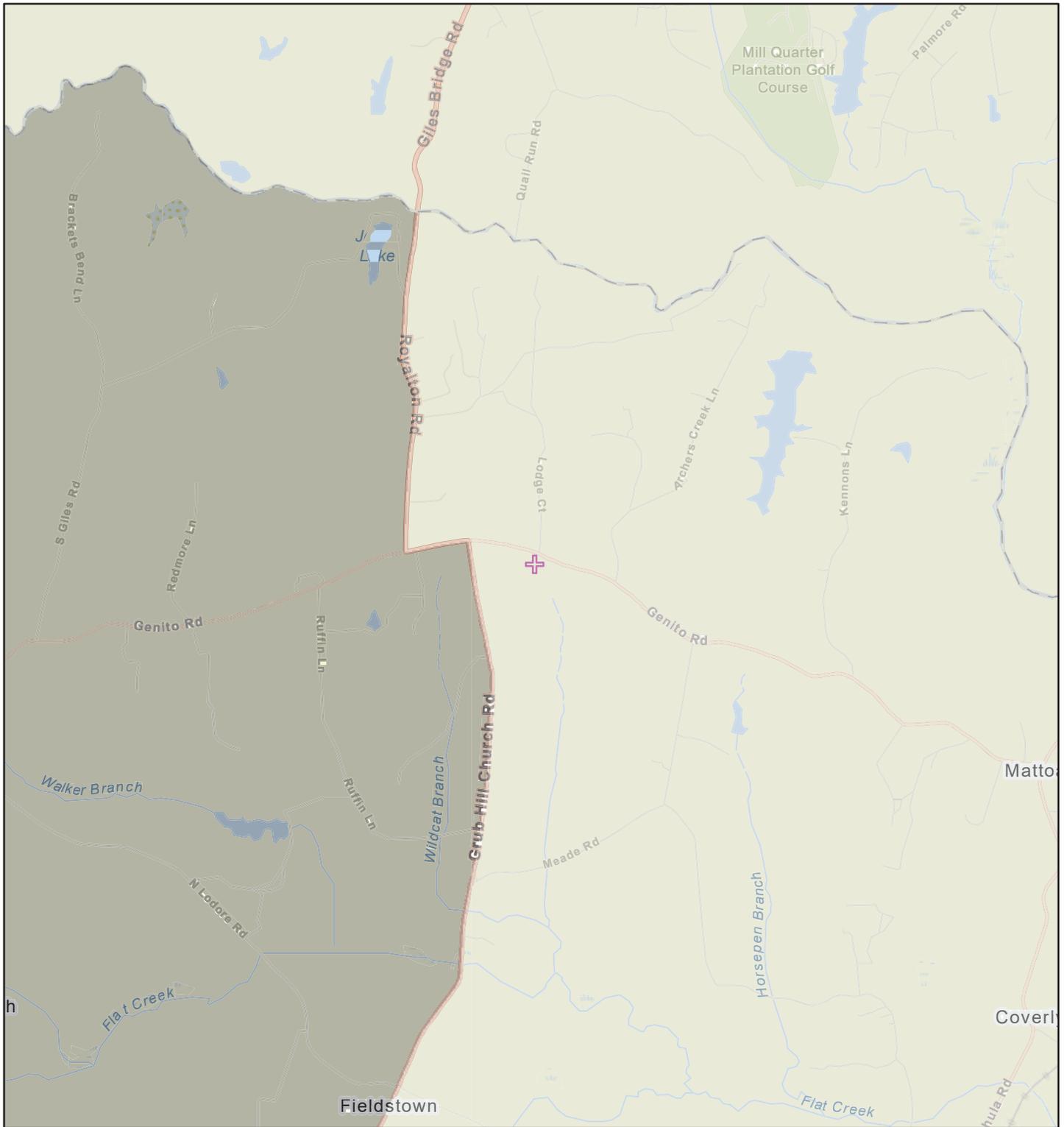
Ring (buffer): 10-miles radius

Description: Proposed Amelia I Solar Farm

	2013 - 2017 ACS Estimates	Percent	MOE (±)
Population by Language Spoken at Home*			
Total (persons age 5 and above)	26,105	100%	381
English	25,221	97%	400
Spanish	373	1%	181
French	49	0%	47
French Creole	N/A	N/A	N/A
Italian	N/A	N/A	N/A
Portuguese	N/A	N/A	N/A
German	119	0%	61
Yiddish	N/A	N/A	N/A
Other West Germanic	N/A	N/A	N/A
Scandinavian	N/A	N/A	N/A
Greek	N/A	N/A	N/A
Russian	N/A	N/A	N/A
Polish	N/A	N/A	N/A
Serbo-Croatian	N/A	N/A	N/A
Other Slavic	N/A	N/A	N/A
Armenian	N/A	N/A	N/A
Persian	N/A	N/A	N/A
Gujarathi	N/A	N/A	N/A
Hindi	N/A	N/A	N/A
Urdu	N/A	N/A	N/A
Other Indic	N/A	N/A	N/A
Other Indo-European	25	0%	47
Chinese	95	0%	63
Japanese	N/A	N/A	N/A
Korean	52	0%	84
Mon-Khmer, Cambodian	N/A	N/A	N/A
Hmong	N/A	N/A	N/A
Thai	N/A	N/A	N/A
Laotian	N/A	N/A	N/A
Vietnamese	0	0%	17
Other Asian	52	0%	38
Tagalog	9	0%	22
Other Pacific Island	N/A	N/A	N/A
Navajo	N/A	N/A	N/A
Other Native American	N/A	N/A	N/A
Hungarian	N/A	N/A	N/A
Arabic	9	0%	44
Hebrew	N/A	N/A	N/A
African	N/A	N/A	N/A
Other and non-specified	0	0%	17
Total Non-English	884	3%	552

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.
 N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2013 - 2017.
 *Population by Language Spoken at Home is available at the census tract summary level and up.

Proposed Amelia I Solar Farm: Low Income Populations Map



June 26, 2020

1:72,224

Low Income Population
(National Percentiles)

Data not available

Less than 50 percentile

50 -60 percentile

60 -70 percentile

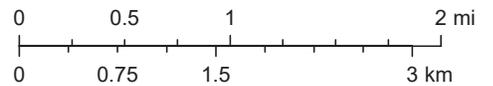
70 -80 percentile

80 - 90 percentile

90 - 95 percentile

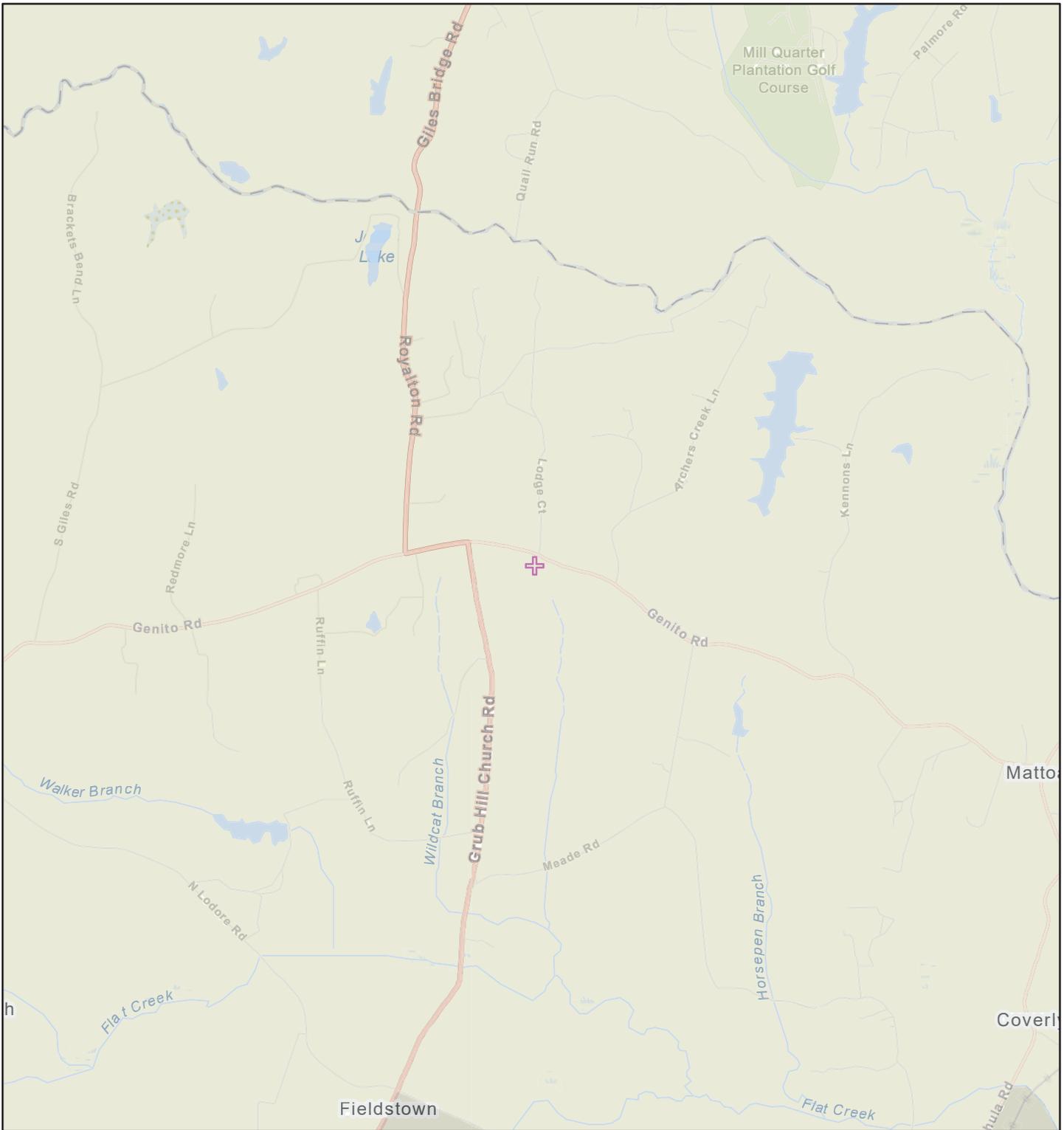
95 - 100 percentile

Search Result (point)



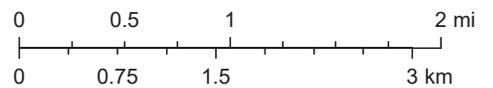
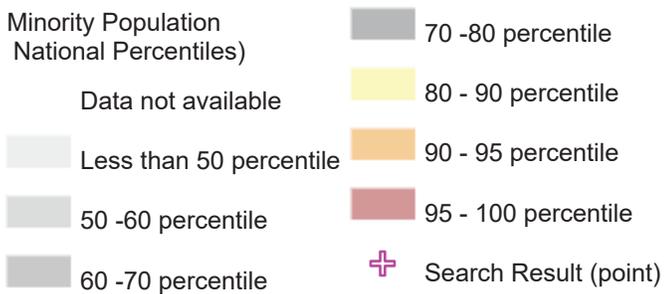
Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Proposed Amelia I Solar Farm: Minority Populations Map



June 26, 2020

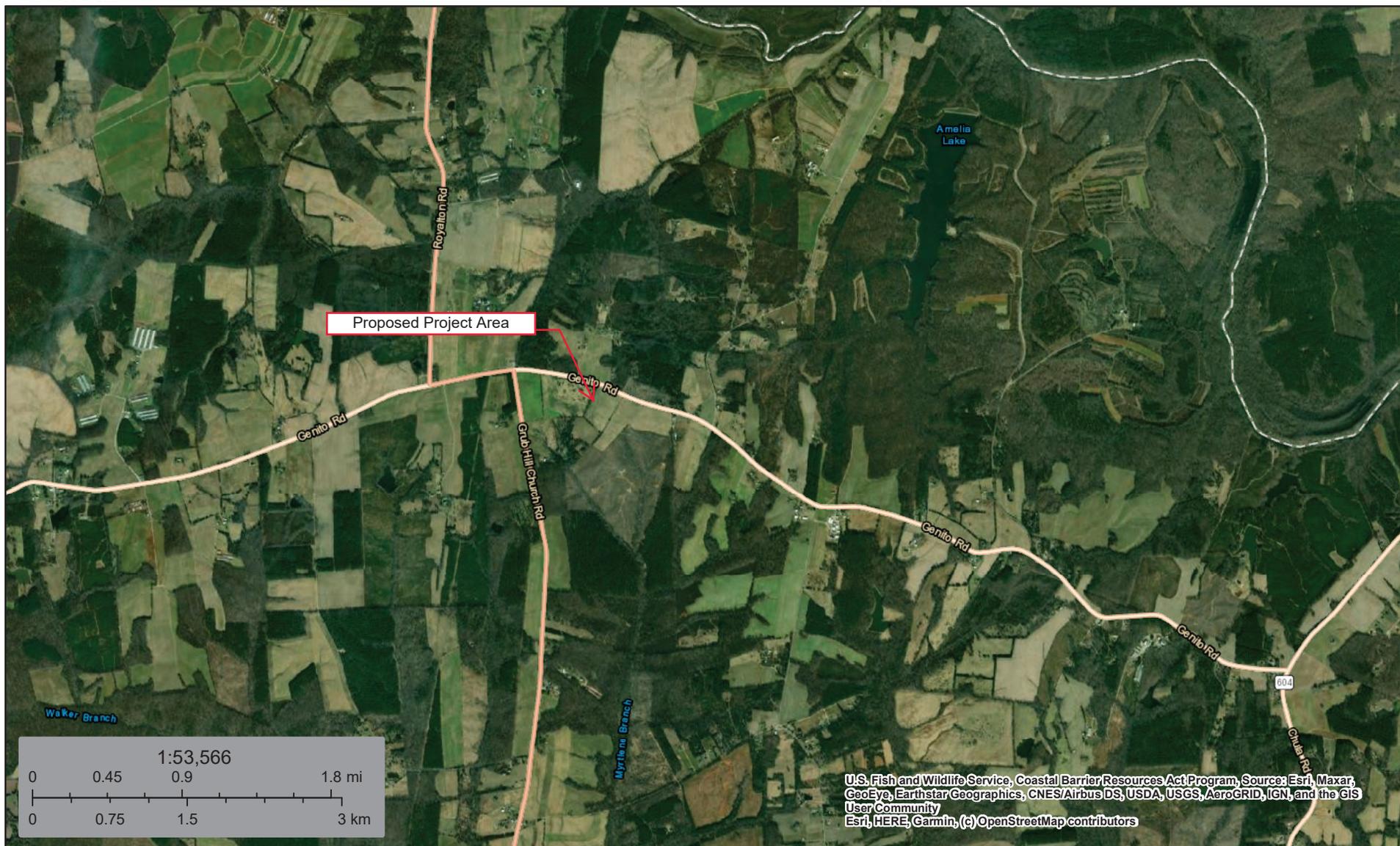
1:72,224



Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

APPENDIX XII

Coastal Resources



March 18, 2021

CBRS Buffer Zone System Unit

CBRS Units

Otherwise Protected Area

This map is for general reference only. The Coastal Barrier Resources System (CBRS) boundaries depicted on this map are representations of the controlling CBRS boundaries, which are shown on the official maps, accessible at <https://www.fws.gov/cbra/maps/index.html>. All CBRS related data should be used in accordance with the layer metadata found on the CBRS Mapper website.

The CBRS Buffer Zone represents the area immediately adjacent to the CBRS boundary where users are advised to contact the Service for an official determination (<http://www.fws.gov/cbra/Determinations.html>) as to whether the property or project site is located "in" or "out" of the CBRS.

CBRS Units normally extend seaward out to the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS mapper.



Virginia's Coastal Zone

APPENDIX XIII

DEQ Scoping Letters



Environmental Impact Review, rr <eir@deq.virginia.gov>

General Project Review Request: Amelia I Solar Project

1 message

Leslie Schroeder <lschroeder@consulttruenorth.com>
To: "EIR@DEQ.Virginia.gov" <EIR@deq.virginia.gov>
Cc: Marina Jawad <mjawad@consulttruenorth.com>

Tue, Jan 26, 2021 at 4:23 PM

Good Afternoon

On behalf of my client, Amelia I Solar, LLC, I am requesting a general project review for the proposed Amelia I Solar Project. Amelia I Solar, LLC will be requesting financial assistance from the USDA Rural Development and is therefore required to prepare a NEPA Environmental Assessment. We are specifically looking for comments from your office regarding erosion and sediment control, stormwater management, air quality, wetlands and stream impacts, hazardous and solid waste management, herbicide and pesticide management, and pollution control.

The Amelia Solar I project will be a small-scale utility solar project located southeast of the intersection of Genito Road and Grub Hill Church Road in the town of Amelia Court House, Virginia. The Proposed Project will disturb approximately 41.5 acres of a larger, 98.9-acre parent parcel identified as 12 2N by the Amelia County assessor (Proposed Project Area). The Proposed Project Area is currently agricultural land with a small portion of forested land adjacent to a transmission line, and land use in the vicinity includes agricultural lands, forestland, and scattered residences.

The Proposed Project will generate a total of 5 megawatts alternating current (MW ac) of clean, reliable solar energy when complete. The Proposed Project would utilize solar modules, mounted on a steel racking system which will be anchored into the ground using driven steel piers, to convert the sun's energy to usable power. The estimated duration of construction is 4 months, and it is anticipated that the Proposed Project will operate for a minimum of 35 years. The Proposed Project Area can be returned to its pre-construction state once the Proposed Project has reached the end of its useful life. The Proposed Project would be accessed from Genito Road. An interior road would be constructed inside the perimeter and is anticipated to be flat and will match existing grades to minimize earth work. The Proposed Project Area will be secured by a security fence with standard gates for emergency and maintenance vehicles.

 [Amelia I Solar_Plans.pdf](#)

 [Amelia I Solar_Maps.pdf](#)

Please review the above information and links to documents. Let me know if there if anything else you will need to complete your review. Thank you for your assistance.

Leslie Schroeder

Staff Consultant



1/29/2021

Commonwealth of Virginia Mail - General Project Review Request: Amelia I Solar Project

Trusted Partner. Leading Environmental Solutions.

1000 East Warrenville Road | Suite 140 | Naperville, IL 60563

o 630.717.2880 x109 | m 630.303.3006 | f 630.689.5881

COVID-19 Services

ConsultTrueNorth.com

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COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

www.deq.virginia.gov

Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

January 29, 2021

Leslie Schroeder
True North Consultants
1000 East Warrenton Road, Suite 140
Naperville, Illinois 60563

RE: Reams Solar I Project, Dinwiddie County
Powhatan Solar I Project, Powhatan County
Amelia I Solar Project, Amelia County
Amelia II Solar Project, Amelia County

Dear Ms. Schroeder:

This letter is in response to the scoping request for the above-referenced projects.

As you may know, the Department of Environmental Quality, through its Office of Environmental Impact Review (DEQ-OEIR), is responsible for coordinating Virginia's review of federal environmental documents prepared pursuant to the National Environmental Policy Act (NEPA) and responding to appropriate federal officials on behalf of the Commonwealth.

DOCUMENT SUBMISSIONS

In order to ensure an effective coordinated review of the NEPA document, notification of the NEPA document documentation should be sent directly to OEIR. We request that you submit one electronic to eir@deq.virginia.gov (25 MB maximum) or make the documents available for download at a website, file transfer protocol (ftp) site or the VITA LFT file share system (Requires an "invitation" for access. An invitation request should be sent to eir@deq.virginia.gov).

The NEPA document should include U.S. Geological Survey topographic. We strongly encourage you to issue shape files with the NEPA document. In addition, project details should be adequately described for the benefit of the reviewers.

ENVIRONMENTAL REVIEW UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT: PROJECT SCOPING AND AGENCY INVOLVEMENT

As you may know, NEPA (PL 91-190, 1969) and its implementing regulations (Title 40, *Code of Federal Regulations*, Parts 1500-1508) requires a draft and final Environmental Impact Statement (EIS) for federal activities or undertakings that are federally licensed or federally funded which will or may give rise to significant impacts upon the human environment. An EIS carries more stringent public

participation requirements than an Environmental Assessment (EA) and provides more time and detail for comments and public decision-making. The possibility that an EIS may be required for the proposed project should not be overlooked in your planning for this project. Accordingly, we refer to “NEPA document” in the remainder of this letter.

While this Office does not participate in scoping efforts beyond the advice given herein, other agencies are free to provide scoping comments concerning the preparation of the NEPA document. Accordingly, we are providing notice of your scoping request to several state agencies and those localities and Planning District Commissions, including but not limited to:

Department of Environmental Quality:

- DEQ Regional Office
- Air Division
- Office of Wetlands and Stream Protection
- Office of Local Government Programs
- Division of Land Protection and Revitalization
- Office of Stormwater Management

Department of Conservation and Recreation

Department of Health

Department of Agriculture and Consumer Services

Department of Wildlife Resources

Virginia Marine Resources Commission

Department of Historic Resources

Department of Mines, Minerals, and Energy

Department of Forestry

Department of Transportation

DATA BASE ASSISTANCE

Below is a list of databases that may assist you in the preparation of a NEPA document:

- DEQ Online Database: Virginia Environmental Geographic Information Systems

Information on Permitted Solid Waste Management Facilities, Impaired Waters, Petroleum Releases, Registered Petroleum Facilities, Permitted Discharge (Virginia Pollution Discharge Elimination System Permits) Facilities, Resource Conservation and Recovery Act (RCRA) Sites, Water Monitoring Stations, National Wetlands Inventory:

- www.deq.virginia.gov/ConnectWithDEQ/VEGIS.aspx

- DEQ Virginia Coastal Geospatial and Educational Mapping System (GEMS)

Virginia’s coastal resource data and maps; coastal laws and policies; facts on coastal resource values; and direct links to collaborating agencies responsible for current data:

- <http://128.172.160.131/gems2/>

- MARCO Mid-Atlantic Ocean Data Portal

The Mid-Atlantic Ocean Data Portal is a publicly available online toolkit and resource center that consolidates available data and enables users to visualize and analyze ocean resources and human

use information such as fishing grounds, recreational areas, shipping lanes, habitat areas, and energy sites, among others.

<http://portal.midatlanticocean.org/visualize/#x=-73.24&y=38.93&z=7&logo=true&controls=true&basemap=Ocean&tab=data&legends=false&layers=true>

- DHR Data Sharing System

Survey records in the DHR inventory:

- www.dhr.virginia.gov/archives/data_sharing_sys.htm

- DCR Natural Heritage Search

Produces lists of resources that occur in specific counties, watersheds or physiographic regions:

- www.dcr.virginia.gov/natural_heritage/dbsearchtool.shtml

- DWR Fish and Wildlife Information Service

Information about Virginia's Wildlife resources:

- <http://vafwis.org/fwis/>

- Total Maximum Daily Loads Approved Reports

- <https://www.deq.virginia.gov/programs/water/waterqualityinformationtmdls/tmdl/tmdldevelopment/approvedtmdlreports.aspx>

- Environmental Protection Agency (EPA) Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Database: Superfund Information Systems

Information on hazardous waste sites, potentially hazardous waste sites and remedial activities across the nation, including sites that are on the National Priorities List (NPL) or being considered for the NPL:

- www.epa.gov/superfund/sites/cursites/index.htm

- EPA RCRAInfo Search

Information on hazardous waste facilities:

- www.epa.gov/enviro/facts/rcrainfo/search.html

- EPA Envirofacts Database

EPA Environmental Information, including EPA-Regulated Facilities and Toxics Release Inventory Reports:

- www.epa.gov/enviro/index.html

- EPA NEPAassist Database

Facilitates the environmental review process and project planning:

<http://nepaassisttool.epa.gov/nepaassist/entry.aspx>

If you have questions about the environmental review process, please feel free to contact me (telephone (804) 698-4204 or e-mail bettina.rayfield@deq.virginia.gov).

I hope this information is helpful to you.

Sincerely,

A handwritten signature in black ink that reads "Bettina Rayfield". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Bettina Rayfield, Program Manager
Environmental Impact Review and
Long-Range Priorities

From: [ImpactReview](#)
To: [Fulcher, Valerie](#); [Leslie Schroeder](#)
Cc: eir@deq.virginia.gov
Subject: RE: NEW SCOPING 4 SOLAR PROJECTS
Date: Wednesday, February 3, 2021 2:04:00 PM

Ms. Schroeder,

The Virginia Outdoors Foundation has reviewed the project referenced above. As of 3 February 2021, there are not any existing nor proposed VOF open-space easements in the immediate vicinity of the four projects:

- Amelia I Solar
- Amelia II Solar
- Powhatan Solar I
- Reams Solar I

Please contact VOF again for further review if the project areas change or if a project does not begin within 24 months. Thank you for considering conservation easements.

Thanks,
Mike

Mike Hallock-Solomon, AICP
Virginia Outdoors Foundation

From: Fulcher, Valerie <valerie.fulcher@deq.virginia.gov>
Sent: Friday, January 29, 2021 2:14 PM
Cc: lschroeder@consulttruenorth.com
Subject: NEW SCOPING 4 SOLAR PROJECTS

Alert: This email originated from outside VOF

Good afternoon—attached is a request for scoping comments on the following:

Reams Solar I Project, Dinwiddie County
Powhatan Solar I Project, Powhatan County
Amelia I Solar Project, Amelia County
Amelia II Solar Project, Amelia County

If you choose to make comments, please send them directly to the project sponsor (lschroeder@consulttruenorth.com) and copy the DEQ Office of Environmental Impact Review: eir@deq.virginia.gov. We will coordinate a review when the environmental document is completed.

DEQ-OEIR's scoping response is also attached.

If you have any questions regarding this request, please email our office at eir@deq.virginia.gov.

Valerie

--

Valerie A. Fulcher, CAP, OM, Admin/Data Coordinator Senior

Department of Environmental Quality

Environmental Enhancement - Office of Environmental Impact Review

1111 East Main Street

Richmond, VA 23219

[804/698-4330](tel:8046984330)

Email: Valerie.Fulcher@deq.virginia.gov

<https://www.deq.virginia.gov/permits-regulations/environmental-impact-review>

OUR ENFORCEABLE POLICIES HAVE BEEN UPDATED FOR 2020: <https://www.deq.virginia.gov/permits-regulations/environmental-impact-review/federal-consistency>

For program updates and public notices please subscribe to Constant Contact: <https://lp.constantcontact.com/su/MVcCump/EIR>

From: [Smallwood, Desmond](#)
To: [Leslie Schroeder](#)
Cc: [McAdory, Liz](#); [rr Environmental Impact Review](#)
Subject: Re: NEW SCOPING 4 SOLAR PROJECTS
Date: Tuesday, February 23, 2021 2:11:15 PM

Good Afternoon,

After an extensive review in coordination with both the Chesterfield and Petersburg residencies, the Richmond district planning department does not have any impeding comments and approves the plans for each site. Please let me know if any additional information is required.

Best,
Desmond A. Smallwood



Desmond A. Smallwood
Richmond District Planning Specialist
Virginia Department of Transportation
804-774-1624
Desmond.Smallwood@VDOT.Virginia.gov

On Sun, Feb 14, 2021 at 9:40 AM Paul F Hinson, P.E. <paul.hinson@vdot.virginia.gov> wrote:

Reams road solar is in Prince George County and construction is complete and facility operational.

On Sun, Feb 14, 2021, 9:38 AM Paul F Hinson, P.E. <paul.hinson@vdot.virginia.gov> wrote:

Desmond,

As Adam said, Petersburg Residency was involved in zoning (special use) and provided comments to the county. We have been successful in the Petersburg Residency in getting localities to have applicants proffer a "construction traffic management plan". The plan requires pre-construction survey of all roads used to access site starting at a primary highway and applicant is responsible for maintenance of identified secondary roads during construction. Construction traffic is biggest issue with solar farms.

On Sat, Feb 13, 2021, 8:28 PM Smallwood, Desmond
<desmond.smallwood@vdot.virginia.gov> wrote:

Adam,

Received, thank you very much.

Best,
Desmond A. Smallwood



Desmond A. Smallwood
Richmond District Planning Specialist
Virginia Department of Transportation
804-774-1624

Desmond.Smallwood@VDOT.Virginia.gov

On Fri, Feb 12, 2021 at 1:57 PM Wilkerson, Adam
<adam.wilkerson@vdot.virginia.gov> wrote:

Desmond,

I have reviewed the information provided for Powhatan Solar I, Amelia Solar I, and Amelia Solar II. The Chesterfield Residency Land Use Office reviewed and commented on the zoning cases for all three sites and have provided comments to the respective counties regarding construction access and permanent access to these sites. Site plans for these three projects were routed to our office for review, and we recommended approval for each plan. We are satisfied with each site and have no further comments.

The fourth site named Reams Solar I, LLC appears to be located on Old Vaughan Road in Dinwiddie, VA. I checked Landtrack and it appears Paul Hison reviewed the site plan for this project. Please let me know if you need any further information regarding these projects.

Adam Wilkerson, P.E.

Area Land Use Engineer / Chesterfield Residency
Virginia Department of Transportation
804-674-2384
Adam.Wilkerson@VDOT.Virginia.gov

On Tue, Feb 9, 2021 at 8:49 AM Smallwood, Desmond
<desmond.smallwood@vdot.virginia.gov> wrote:

Ok, thanks.

Desmond A. Smallwood

Richmond District Planning Specialist
Virginia Department of Transportation
804-774-1624
Desmond.Smallwood@VDOT.Virginia.gov

On Mon, Feb 8, 2021 at 8:19 AM Cage, Todd <todd.cage@vdot.virginia.gov>
wrote:

Desmond,

All of these are in Adam's area.

C. Todd Cage

Land Development Engineer
Richmond District
South Hill & Petersburg Residencies
Virginia Department of Transportation
Cell 434-774-9053

South Hill Res. Office 434-774-2310
Petersburg Res. Office 804-863-4005
todd.cage@VDOT.Virginia.gov

On Fri, Feb 5, 2021 at 9:05 AM Smallwood, Desmond

<desmond.smallwood@vdot.virginia.gov> wrote:

Good Morning Gentlemen,

Please see the attached documents pertain to 4 new solar projects in Amelia, Powhatan, & Chesterfield County. Please review the attached project materials for impacts to existing and proposed transportation facilities and let me know if you have any comments or concerns.

Best,
Desmond A. Smallwood



Desmond A. Smallwood
Richmond District Planning Specialist
Virginia Department of Transportation
804-774-1624
Desmond.Smallwood@VDOT.Virginia.gov

On Fri, Jan 29, 2021 at 5:51 PM EIR Coordination, rr

<eir.coordination@vdot.virginia.gov> wrote:

DATE: January 29, 2021
TO: District Transportation Planning
PROJECT: Four Solar Projects
DEQ PROJECT: N/A
LOCATION: Dinwiddie County, Powhatan County, Amelia
County
SUBJECT: Scoping Comment Request

Please review the attached project materials for impacts to existing and proposed transportation facilities, and send any comments you might have to the project sponsor (Ischroeder@consulttruenorth.com) copying the DEQ Office of Environmental Impact Review (eir@deq.virginia.gov) and the VDOT EIR Coordination email (eir.coordination@vdot.virginia.gov).

Thank you,
Kirk Millikan

Kirk Millikan, P.E.
Environmental Division
VDOT Central Office

----- Forwarded message -----

From: **Fulcher, Valerie** <valerie.fulcher@deq.virginia.gov>
Date: Fri, Jan 29, 2021 at 2:14 PM
Subject: NEW SCOPING 4 SOLAR PROJECTS
To: rr dgif-ESS Projects <essprojects@dgif.virginia.gov>, Keith Tignor <keith.tignor@vdacs.virginia.gov>, Roberta Rhur <robbie.rhur@dcr.virginia.gov>, odwreview (VDH) <odwreview@vdh.virginia.gov>, Carlos Martinez <carlos.martinez@deq.virginia.gov>, Tom Ballou <thomas.ballou@deq.virginia.gov>, Lawrence Gavan <larry.gavan@deq.virginia.gov>, Holly Sepety <holly.sepety@deq.virginia.gov>, West, Kelley <kelley.west@deq.virginia.gov>, Roger Kirchen <roger.kirchen@dhr.virginia.gov>, Michelle Henicheck <michelle.henicheck@deq.virginia.gov>, Scott Kudlas <scott.kudlas@deq.virginia.gov>, <jruffa@craterpdc.org>, <mfooster@virginiashartland.org>, <sstewart@planrva.org>, Terrance Lasher <terry.lasher@dof.virginia.gov>, <taylor.harvie@ameliacova.com>, <kmassengill@dinwiddieva.us>, <administration@powhatanva.gov>, rr EIR Coordination <eir.coordination@vdot.virginia.gov>, ImpactReview <impactreview@vofonline.org>
Cc: <lschroeder@consulttruenorth.com>

Good afternoon—attached is a **request for scoping comments** on the following:

Reams Solar I Project, Dinwiddie County
Powhatan Solar I Project, Powhatan County
Amelia I Solar Project, Amelia County
Amelia II Solar Project, Amelia County

If you choose to make comments, please send them directly to the project sponsor (lschroeder@consulttruenorth.com) and copy the DEQ Office of Environmental Impact Review: eir@deq.virginia.gov. We will coordinate a review when the environmental document is completed.

DEQ-OEIR's scoping response is also attached.

If you have any questions regarding this request, please email our office at eir@deq.virginia.gov.

Valerie

--

Valerie A. Fulcher, CAP, OM, Admin/Data Coordinator Senior

Department of Environmental Quality

Environmental Enhancement - Office of Environmental Impact Review

1111 East Main Street

Richmond, VA 23219

[804/698-4330](tel:8046984330)

Email: Valerie.Fulcher@deq.virginia.gov

<https://www.deq.virginia.gov/permits-regulations/environmental-impact-review>

OUR ENFORCEABLE POLICIES HAVE BEEN UPDATED FOR

2020: <https://www.deq.virginia.gov/permits-regulations/environmental-impact-review/federal-consistency>

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Contact: <https://lp.constantcontact.com/su/MVcCump/EIR>