

Application, Appendix, DEQ Supplement, Direct Testimony and Exhibits of Virginia Electric and Power Company

Before the State Corporation Commission of Virginia

Possum Point 2nd Transformer and New 230 kV Tie Line #2216

Application No. 322

Case No. PUR-2023-00029

Filed: March 9, 2023

Volume 2 of 2

BEFORE THE STATE CORPORATION COMMISSION OF VIRGINIA

APPLICATION OF VIRGINIA ELECTRIC AND POWER COMPANY FOR APPROVAL OF ELECTRIC TRANSMISSION FACILITIES

Possum Point 2nd Transformer and

New 230 kV Tie Line #2216

Application No. 322

DEQ Supplement

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Based upon consultations with the Virginia Department of Environmental Quality ("DEQ"), Virginia Electric and Power Company ("Dominion Energy Virginia" or the "Company") has developed this DEQ Supplement to facilitate review and analysis of the proposed Possum Point 2nd Transformer and New 230 kV Tie Line #2216 ("Project") by DEQ and other relevant agencies.

1. Project Description

In order to maintain the reliability of its transmission system in compliance with mandatory North American Electric Reliability Corporation ("NERC") Reliability Standards, Virginia Electric and Power Company ("Dominion Energy Virginia" or the "Company") proposes to:

- Install a second 500-230 kV transformer bank at the Possum Point 500 kV Substation and perform associated bus work;
- ii. Rebuild approximately 0.8 miles of existing 230 kV transmission Line #2078 between the Company's existing Possum Point 500 kV and 230 kV Substations in Prince William County, which is located within an existing corridor on Company-owned property, in order to utilize the existing corridor to accommodate a second circuit following the addition of a 500-230 kV transformer bank at the Possum Point 500 kV Substation;
- iii. Install 0.95 miles of a new 230 kV transmission line, Line #2216, between the Company's existing Possum Point 500 kV and 230 kV Substations along the majority of the Line #2078 corridor and primarily collocated with the Line #2078 structures, with three new structures on Company property in a new approximately 0.29-mile corridor adjacent to the existing Possum Point 500 kV Substation;
- iv. Install a circuit breaker and line terminal equipment at the Possum Point 230 kV Substation; and
- v. Install two new structures to raise Lines #215/#2001 and Lines #237/#2022 to provide clearance for Line #2078 and Line #2216.²

¹ The Project, which is located within Company-owned property, includes multiple crossings of the Richmond, Fredericksburg and Potomac ("RF&P") railroad, which traverses the Company's property. Existing Line #2078, Lines #215/#2001, and Lines #237/#2022 already cross the RF&P railroad at three locations, which are allowed pursuant to an existing master license agreement. The Company will pursue an amendment to the existing master license agreement for the crossing of Line #2216. See Sections II.A.6, II.A.8 and III.D of the Appendix.

#237/#2022 as described herein, the Company requests that the Commission grant such CPCNs as part of its final order in this proceeding.

² The Company considers the work associated with Lines #215/#2001 and Lines #237/#2022, which includes the installation of two new structures, to qualify as "ordinary extensions or improvements in the usual course of business" pursuant to § 56-265.2 A 1 of the Code of Virginia ("Va. Code") and, therefore, does not require approval pursuant to Va. Code § 56-46.1 B or a certificate of public convenience and necessity ("CPCN") from the State Corporation Commission of Virginia ("Commission"). Because the Company considers this work to be ordinary course, detailed supporting documentation has not been provided in the Appendix. Should the Commission determine that a CPCN is required for the work associated with Lines #215/#2001 and Lines

This Project is collectively known as the Possum Point 2nd Transformer and New 230 kV Tie Line #2216 ("Project"). This Project is necessary to maintain reliable service for the Company's customers, specifically those located in the Project area, and to comply with mandatory NERC Reliability Standards. The entire Project will be located on Company-owned property and no new property or right-of-way will be required.

2. Environmental Analysis

The Company originally solicited comments from all relevant state and local agencies on July 24 and August 16, 2020, prior to Project cancellation. The Project was re-initiated in late 2022 and the Company provided an updated correspondence to the agencies on February 3, 2023. Copies of these letters are included as Attachment 2.1. The DEQ provided a Scoping Response Letter dated February 6, 2023 (see Attachment 2.2).

As part of Dominion Energy Virginia's environmental compliance program, the Company has a comprehensive Environmental Management System Manual in place that ensures it is committed to complying with environmental laws and regulations, reducing risk, minimizing adverse environmental impacts, setting environmental goals, and achieving improvements in its environmental performance, consistent with the Company's core values.

A. Air Quality

For the Project, the Company will control fugitive dust during construction in accordance with DEQ regulations. During construction, if the weather is dry for an extended period of time, there will be airborne particles from the use of vehicles and equipment within the transmission line corridor. However, minimal earth disturbance will take place and vehicle speed, which is often a factor in airborne pollution, will be kept to a minimum. Erosion and sediment control is addressed in Section 2.H, below. Equipment and vehicles that are powered by gasoline or diesel motors will also be used during the construction of the line so there will be exhaust from those motors.

The entire width of the existing transmission corridor is currently maintained for transmission line operations, however, the Project may require some trimming of tree limbs along the existing transmission line corridor edges to support construction activities. Additionally, approximately 0.29 miles of new corridor will need to be cleared to extend new Line #2216 to interconnect with Possum Point 500 kV Substation. Because the Company-owned property is adequate to construct the proposed Project, including the new corridor, no additional property or right-of-way is necessary. The Company does not expect to burn cleared material but, if necessary, the Company will coordinate with the responsible locality to ensure all local ordinances are met. The Company's tree clearing methods are described in Section 2.L.

B. Water Source (No water source is required for transmission lines so this discussion will focus on potential waterbodies to be crossed by the proposed transmission line rebuild.)

The Project is located within the Lower Potomac River (Hydrologic Unit Code 02070011) watershed. The U.S. Geological Survey ("USGS") topographic quadrangle for Quantico (1994) depicts the majority of the study area as existing, cleared transmission line traversing through gently to steeply sloping terrain.

Any clearing required in the vicinity of streams will be performed by hand within 100 feet of both sides, and vegetation less than three inches in diameter will be left undisturbed.

The Company solicited comments from the Virginia Marine Resources Commission ("VMRC") regarding the proposed Project in February 2023. Comments, if received prior to filing, will be included in <u>Attachment 2.B.1</u>. The VMRC's comments typically note that a subaqueous encroachment permit would be required for any stream crossings with a drainage area of five square miles or greater at the crossing location. Based on the Company's review of the Project, there are no features under the jurisdiction of VMRC within the Project area.

Based on the Company's review, waters regulated by the U.S. Army Corps of Engineers ("Corps") and DEQ are present within the Project area. If aerial crossings or impacts to waters are proposed, a Joint Permit Application ("JPA") will be submitted for review by the VMRC, DEQ, and Corps for authorization under Sections 404/401 of the Clean Water Act. Discussion of this coordination is included in the non-tidal wetlands section (Section D) below.

C. Discharge of Cooling Waters

No discharge of cooling waters is associated with the Project.

D. Tidal and Non-tidal Wetlands

No tidal wetlands were identified within the proposed Project area.

Non-Tidal Wetlands Impact Consultation

Within the Project Corridor, the Company delineated wetlands and other waters of the United States using the *Routine Determination Method* as outlined in the 1987 Corps of Engineers Wetland Delineation Manual and methods described in the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0). The Company submitted the results of this delineation to the Corps on July 31, 2020, for confirmation. A preliminary jurisdictional determination from the Corps was received on September 1, 2020 (NAO-2020-01315-RDB), Attachment 2.D.1. Total jurisdictional resources within the proposed Project Corridor are provided in Table 1 and detailed in Attachment 2.D.1.

Table 1. Jurisdictional Resources within Project Corridor

Resource	Acreage (±)	
Palustrine Emergent Wetland	1.51	
Palustrine Scrub-shrub Wetland	0.07	
Palustrine Forested Wetland	0.44	
Open water	0.67	
Ephemeral Streams	0.07 (625 linear feet)	
Upper Perennial	0.03	
Streams	(501 linear feet)	
Intermittent Streams	0.03 (496 linear feet)	

As with waters, if impacts to wetlands are proposed, a JPA will be submitted for review by the VMRC, DEQ, and Corps for authorization under Sections 404/401 of the Clean Water Act.

The Company solicited comments from the DEQ Office of Wetlands and Stream Protection and the Corps in February 2023. On February 15, 2023, DEQ responded via email stating the comments provided on August 25, 2020, were still valid. DEQ recommendations include that structures be sited to avoid wetlands and stream channels and that timber debris should not be placed in wetlands or streams. DEQ also recommends spanning wetlands and streams, maintaining 100-foot buffers along stream banks, placing support structure foundations in uplands, and using matting in wetland areas. DEQ's response is included in Attachment 2.D.2. The Corps issued a project number (NAO-2010-00012-tca) which needs to be referenced in all future communication regarding the Project. This correspondence is included in Attachment 2.D.3.

E. Floodplains

As depicted on the Federal Emergency Management Agency's ("FEMA") online Flood Insurance Rate Maps #51153C0317E (effective date 8/3/2015), the Project area lies within Zone X, which is an area of minimal flood hazard, outside of the 100-year floodplain. The Company will coordinate with the local floodplain coordinators as required.

F. Solid and Hazardous Waste

On behalf of the Company, Stantec Consulting Services Inc. ("Stantec") conducted database searches for solid and hazardous wastes and petroleum release sites within a 0.5-mile radius (the "search radius") of the proposed Project to identify sites that may impact the proposed Project. This report is included as Attachment 2.F.1.

Publicly available data from the U.S. Environmental Protection Agency's ("EPA") Facility Registry System was obtained, which provides information about facilities, sites, or places subject to environmental regulation or of environmental interest. Although this data set contains all sites subject to environmental regulation by the EPA or other regulatory authorities, including sites that fall under air emissions or wastewater programs, the results reported here only include those sites which fall under the EPA's hazardous waste, solid waste, remediation, and underground storage tank programs (i.e., Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), Resource Conservation and Recovery Act ("RCRA"), or brownfield sites).

DEQ records show a closed construction demolition debris ("CDD") landfill within the ROW near the Possum Point Power Station. This location is also in the vicinity of five surface impoundments that the Company used to store coal combustion residuals ("CCR") from the Possum Point Power Station. Ash has been removed from four of the five ponds (SWP617) in accordance with 40 CFR Part 257 Subpart D. Plans for ash removal from the remaining pond are under development. This Project is not within the footprint and is separated from the ponds by Cockpit Point Road and Possum Point Road.

In summary, a total of two RCRA sites, two air pollution facilities, and six petroleum release sites are located within a 0.5-mile radius of the Project site; however, none of the sites are located within the Project transmission corridor. No EPA registered Brownfield sites or CERCLA/Superfund sites are located within 0.5 mile of the Project area.

G. Natural Heritage, Threatened and Endangered Species

On behalf of the Company, Stantec conducted online database searches for threatened and endangered species in the vicinity of the Project, including the U.S. Fish and Wildlife Service's ("USFWS") Information, Planning, and Conservation ("IPaC") system, the Virginia Department of Wildlife Resources' ("DWR") Virginia Fish and Wildlife Information Service ("VAFWIS"), the DWR Northern Long-eared Bat (NLEB) Winter Habitat and Roost Trees Map, the Virginia Department of Conservation and Recreation's ("DCR") Natural Heritage Data Explorer ("NHDE"), the National Oceanographic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) Endangered Species Act (ESA) Critical Habitat Mapper, and the Center for Conservation

Biology's ("CCB") Bald Eagle Nest Locator. The results are detailed in a report, included as Attachment 2.G.1, and are summarized in the table below.

Table 2. Threatened and endangered species within the Project vicinity

Species	Status	Database	Results
Northern long-eared bat (Myotis septentrionalis)	FE ST	USFWS, DWR	No hibernacula or maternal roost trees identified in the vicinity of the Project.
Sensitive joint-vetch (Aeschynomene virginica)	FT ST	DCR	May be present within the subwatershed in the intertidal zone of coastal marshes.
Small whorled pogonia (Isotria medeoloides)	FT SE	DCR	May be present within the subwatershed in acidic mixed damp woods.
Peregrine falcon (Falco peregrinus)	ST	DWR	There is a nest present at the Possum Point Power Station.
Virginia Piedmont water boatman (Sigara depressa)	SE	DCR	May be present within the subwatershed in still or slow-moving waters.
Critical Habitats	FE SE	NOAA- NMFS	The Potomac River is critical habitat for the Atlantic sturgeon.
Bald eagle (Haliaeetus leucocephalus)	Protected	USFWS CCB	Three nests were identified within the vicinity of the Project.

FT: federally threatened, FE: federally endangered, ST: state threatened, SE: state endangered

Bats

The majority of the work will take place within existing cleared and maintained transmission line ROW where tree limbing and removal would be limited to danger trees. However, tree clearing will be required along approximately 0.29 miles of new proposed corridor to extend new Line #2216 to interconnect with Possum Point 500 kV Substation. The Company notes that on November 30, 2022, the USFWS "uplisted" the Northern Long Eared Bat ("NLEB") from threatened to endangered status. The uplisting becomes effective on March 31, 2023. Once effective, the 4(d) rule associated with the NLEB's threatened status which currently exempts certain activities from the prohibition on take (*e.g.*, tree clearing) will no longer be applicable. If tree clearing becomes necessary after March 31, 2023, the Company will follow all applicable requirements of the uplisting rule.

Aquatic Species

Construction access will avoid stream crossings where practical or use crane mats to span stream crossings with no in-stream work required. Erosion and sediment controls would be used as appropriate throughout the Project. No anadromous fish streams will be crossed by construction access. Under these conditions, impacts to listed aquatic species or anadromous fish using streams would not be expected. Therefore, there should be no effect to Virginia Piedmont water boatman or Atlantic sturgeon critical habitat.

Plants

Two listed plant species have been observed in the subwatershed. Sensitive joint-vetch is generally found in the outer fringe of slightly brackish to freshwater

marshes. Suitable habitat for this species is not within the Project area; therefore, no effects are anticipated. Small whorled pogonia inhabits upland mixedwood and hardwood stands where there are long-persistent breaks in canopy cover. Based on habitat review during desktop and field reconnaissance, it does not appear suitable habitat is present for small whorled pogonia.

Peregrine Falcon

A peregrine falcon nest is confirmed on an emissions stack at the Possum Point Power Station. The nest is located within 600 feet of five existing and two proposed structures within the Project area (Table 2). This nest has been moved to an adjacent location by the Center for Conservation Biology at the College of William and Mary and it is undetermined at this time if the nest is still active. DWR standard recommendations are to maintain a 600-foot buffer around active peregrine falcon nests during February 15 – July 15. Due to the presence of the nest within the Project area, the Company should coordinate with DWR if construction will be required within 600 feet of the nest during this period.

Bald Eagle

Three active bald eagle nests are located adjacent to the transmission line with protective buffers extending into the Project area. To avoid the need for an eagle incidental take permit, work on eight existing and three proposed structures should not occur between December 15-July 15 within 660 feet of each nest. If construction must occur in these areas during the noted months, the Company should coordinate with USFWS to determine whether a Permit under the Bald and Golden Eagle Protection Act may be required. The Company previously held eagle permits, but they have since expired under the direction of USFWS since the eagles were not bothered by similar construction activities within the vicinity.

Existing structures #2078/4, #2022/3 and #237/3, and #2001/3 and #215/3, as well as proposed structure #2078/4 and #2216/6, are located within the Bald Eagle Concentration Area. Since the concentrating eagles are not disturbed by similar construction activities in the vicinity of the Project and based on the USFWS's direction to let the eagle permits expire, the Company does not anticipate impacts to the eagles in the Concentration Area.

The Company submitted a Project Review request to DCR on January 4, 2023. On January 4, 2023, the Company received confirmation from DCR that no natural heritage resources or impacts to state listed species are anticipated. Comments are included in Attachment 2.G.2. Additionally, the Company requested comments from the USFWS, DWR, and DCR regarding the proposed Project in February 2023. Agency comments, if received prior to filing, will be included as Attachment 2.G.2.

Because the Company will obtain all necessary permits prior to construction, such as authorization from the Corps, coordination with the USFWS, DWR, and DCR will take place through the respective permit processes to avoid and minimize impacts to listed species.

New and updated information is continually added to VDCR's Biotics database. The Company shall re-submit the Project information and a map for an update on this natural heritage information if the scope of the Project changes and/or six months have passed before this information is utilized.³

H. Erosion and Sediment Control

The DEQ approved the Company's Annual Standards & Specification for Erosion & Sediment Control and Stormwater Management for Construction of Linear Electric Transmission Facilities (TE VEP 8000) in August 2019. These specifications are given to the Company's contractors and require erosion and sediment control measures to be in place before construction of the proposed Project begins and specify the requirements for rehabilitation of the transmission corridor. A copy of the current DEQ approval letter dated August 13, 2019, is provided as Attachment 2.H.1. According to the approval letter, coverage was effective through August 12, 2020. The Company submitted the renewal application on August 3, 2020, and is awaiting approval.

I. Archaeological, Historic, Scenic, Cultural or Architectural Resources

The Company solicited comments from the Virginia Department of Historic Resources ("VDHR)" in February 2023. Comments from the VDHR were received on February 17, 2023 and March 1, 2023 and are included in Attachment 2.I.1. VDHR recommended the Company follow the *Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia* to minimize impacts to historic resources. Stantec was retained by the Company to conduct a Stage I Pre-Application Analysis, which is included as Attachment 2.I.2. VDHR's response, if received prior to filing, will be included as Attachment 2.I.3. As detailed by VDHR guidance, consideration was given to: National Historic Landmark ("NHL") properties located within a 1.5-mile radius of the Project centerline; National Register of Historic Places ("NRHP") listed properties, battlefields, and historic landscapes located within a 1.0-mile radius of the Project centerline; NRHP-eligible sites located within a 0.5-mile radius of the Project centerline; and archaeological sites located within the Project Corridor.

Archaeological Resources

No archaeological resources were identified within the transmission corridor.

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³ The Company updated this commitment consistent with discussions held between Company and VDCR representatives on August 23, 2022.

Architectural Resources

Quantico Marine Corps Base Historic District (VDHR# 287-0010) is listed on the NRHP and is located 4,640 feet south of the proposed corridor. VDHR has determined one architectural resource to be potentially eligible (VDHR# 076-0301) and one architectural resource to be eligible (VDHR# 500-001) for listing on the NRHP within or adjacent to the existing corridor. There is one architectural resource that the American Battlefield Protection Program determined potentially eligible for listing on the NRHP within or adjacent to the existing corridor (VDHR# 076-5842). The Stage I report recommends there will be minimal visual impacts from the proposed Project; the Stage I report will be sent to VDHR for concurrence. These resources are provided in Table 3 below.

Table 3. Architectural Resources Considered in the Stage I

VDHR#	Resource Name	VDHR/NRHP Status	Distance to Centerline (Feet)
076-0301	Richmond, Fredericksburg & Potomac Railroad	Determined Eligible by VDHR in 2010; Determined Potentially Eligible by VDHR in 2016	0
076-5842	Cock Point Battlefield	Potentially Eligible (ABPP)	0
287-0010	Quantico Marine Corps Base Historic District	NRHP-Listed 2001	4,640
500-0001	Richmond, Fredericksburg & Potomac Railroad Historic District	NRHP-Eligible 2018	0

J. Chesapeake Bay Preservation Areas

The proposed Project is located in Prince William County and is subject to the Chesapeake Bay Preservation Act. However, construction, installation, operation, and maintenance of electric transmission lines are conditionally exempt from the Chesapeake Bay Preservation Act as stated in the exemption for public utilities, railroads, public roads, and facilities in 9 VAC 25-830-150. See Attachment 2.J.1. for a DEQ memorandum dated February 7, 2023, indicating that as long as the Company adheres to certain requirements, the proposed Project activity would be consistent with the Chesapeake Bay Preservation Act. The Company will meet those requirements and conditions as applicable and in accordance with the Dominion Energy Virginia Standards & Specifications for Erosion & Sediment Control and Stormwater Management for Construction and Maintenance of Linear Electric Transmission Facilities as approved by DEQ.

K. Wildlife Resources

Relevant agency databases were reviewed and requests for comments from the USWFS, DWR, DCR, and VDACS were submitted to determine if the proposed

Project has the potential to affect any threatened or endangered species, as described in Section 2.G and included as <u>Attachment 2.G.2</u>. As discussed in Section 2.G and identified in <u>Attachment 2.G.1</u>, certain Federal and state listed species were identified as potentially occurring in the Project area. The majority of the Project will be located within existing, maintained transmission line corridor; however, limited removal of danger trees may be necessary for work within exiting transmission ROW. Approximately 0.29 miles of new corridor will need to be cleared to extend new Line #2216 to interconnect with Possum Point 500kV Substation.

Consistent with existing regulations, Dominion Energy Virginia would further minimize potential effects by avoiding (1) trees favorable for bat maternity roosting locations and (2) avoiding cutting trees and vegetation during the time-of-year restriction from March 15-August 15, to avoid nesting birds and bat maternity roosting locations, to the extent practicable.

The Company will follow all applicable requirements associated with the uplisting rule for the NLEB, which becomes effective on March 31, 2023.

L. Recreation, Agricultural and Forest Resources

The Project is not expected to impact recreational or agricultural resources due to the location of the Project within Company-owned property in an area characterized by industrial land uses.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. There are 0.45 acres of land designated as prime farmland within the Project Corridor. No portion of the Project area is currently in agricultural use and is not available for agricultural use due to the presence of the existing power station. Land that does not meet the criteria for prime farmland can be considered to be "farmland of statewide importance." The criteria for defining and delineating farmland of statewide importance are determined by the Virginia Department of Agriculture and Consumer Services. Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. There are 14.40 acres designated as farmland of statewide importance within the Project area. Other areas that are not identified as having national or statewide importance can be considered to be "farmland of local importance." This farmland is identified by the appropriate local agencies. Farmland of local importance may include tracts of land that have been designated for agriculture by local ordinance. No portion of the Project area is currently in agricultural use. Prince William County does not have designated farmlands of local importance. Therefore, the Project is not expected to affect agricultural land.

Under the Virginia Open-Space Land Act, any public body can acquire title or rights to real property to provide means of preservation of open-space land. Such conservation easements must be held for no less than five years in duration, and can be held in perpetuity. There are no conservation easements within the Project area.

The Virginia Scenic Rivers Act seeks to identify, designate, and protect rivers and streams that possess outstanding scenic, recreational, historic, and natural characteristics of statewide significance for future generations. The Project area contains no such identified rivers and streams nor do any exist within one mile of the Project area.

There are no scenic byways within the Project vicinity. Cockpit Point Public Park is located approximately 0.5 miles north of the Project, however, no impacts will occur to the property.

The majority of the existing transmission corridor is currently cleared and maintained for 230 kV transmission line operations. An additional 0.29 miles of transmission line will be installed, which will require approximately 2.88 acres of clearing. Clearing will be limited to Company-owned property, and will be converted to successional, scrub-shrub resources.

In February 2023, the Company solicited Virginia Outdoors Foundation ("VOF") and the Virginia Department of Forestry ("VDOF") for comments on the proposed Project. VOF responded that as of February 3, 2023, and February 7, 2023, there are not any existing nor proposed VOF open-space easements immediately adjacent to the Project. Comments are included in <u>Attachment 2.L.1.</u> Comments from VDOF, if received prior to filing, will be included in Attachment 2.L.2.

M. Use of Pesticides and Herbicides

Of the techniques available, selective foliar is the preferred method of herbicide application. The Company typically maintains transmission line rights-of-way and spaces for transmission line operation on Company property by means of selective, low volume applications of EPA approved, non-restricted use herbicides. The goal of this method is to exclude tall growing brush species from the right-of-way by establishing early successional plant communities of native grasses, forbs, and low growing woody vegetation. "Selective" application means the Company sprays only the undesirable plant species (as opposed to broadcast applications). "Low volume" application means the Company uses only the volume of herbicide necessary to remove the selected plant species. The mixture of herbicides used varies from one cycle to the next to avoid the development of resistance by the targeted plants. There are four means of dispersal available to the Company, including by-hand application, backpack, fixed nozzle-radiarc, and aerial. However, very little right-of-way maintenance incorporates aerial equipment. The Company uses licensed contractors to perform this work that are

either certified applicators or registered technicians in the Commonwealth of Virginia.

DEQ has previously requested that only herbicides approved for aquatic use by the EPA or the USFWS be used in or around any surface water; the Company intends to comply with this request.

Additionally, based on a discussion between Company and DCR DNH representatives in August 2022 and again in February 2023, the Company is continuing to review its Integrated Vegetation Management Plan ("IVMP") for application to both woody and herbaceous species, based on the species list available on the DCR website. The Company continues to work toward a resolution with DCR on this issue. The Company will submit the results of the resolution in a future certificate of public convenience and necessity case.⁴

N. Geology and Mineral Resources

According to the Division of Geology and Mineral Resources Interactive Geologic Map, the Project is underlain by unconsolidated sediments of the Atlantic Coastal Plain. The Project sits atop the Charles City, Potomac, and Tabb Formations which consists of sands and gravels with clays, mud, and silt.

According to the USGS topographic maps and aerial imagery, there are no active mines or stone quarries within the proposed Project area. A search of the Virginia Department of Mines, Minerals, and Energy online map confirms there are no active or abandoned mines within the transmission line corridor or within 0.5-mile of the corridor. Therefore, it is not anticipated that the Project will result in negative impacts on the geology or mineral resources.

O. Transportation Infrastructure

The existing corridor for Lines 2001 and 2022 crosses Cockpit Point Road, a VDOT maintained, low traffic volume roadway in Prince William County. The proposed Line 2216 does not cross any roadways. The Company plans to apply for land use permits from the Virginia Department of Transportation ("VDOT")

⁴ See, Application of Virginia Electric and Power Company, For approval and certification of electric transmission facilities: 230 kV Line #293 and 115 kV Line #83 Rebuild Project, Case No. PUR-2021-00272, Final Order at 9-11 (Aug. 31, 2022) (Commission agreed with the Chief Hearing Examiner and declined to adopt DCR DNH's recommendation regarding an invasive species management plan ("ISMP"), but directed the Company to meet with DCR DNH and to report on the status of the meetings in the Company's next transmission certificate of public convenience and necessity ("CPCN") filing); see also Report of Alexander F. Skirpan, Jr., Chief Hearing Examiner (June 22, 2022) at 22 (agreeing with the Company that, with its IVMP, the Company should not be required to undergo the additional cost of DCR DNH's ISMP; however, recommending that the Company meet with DCR DNH regarding its IVMP and report the results of the meeting in the next transmission CPCN filing).

for any aerial crossings of VDOT maintained roads and any construction entrances from the VDOT right-of-way. All permits will be obtained prior to construction. In February 2023, the Company solicited comments from VDOT regarding the proposed Project. Comments were received on February 3, 2023, and stating that since there is a crossing of Route 783, Cockpit Point Road, a permit will be required. The Company received additional comments on March 2, 2023. This correspondence is included in Attachment 2.O.1.

The Quantico Marine Corps Airfield / Turner Field is located approximately 2.5-miles from the Project and the Stafford Regional Airport is approximately 13 miles from the Project. The design of the proposed Project must not prevent interference with pilots' safe ingress and egress at the airport. Such hazard or impediments include interference with navigation and communication equipment and glare from materials and external lights. The Company solicited comments from the Virginia Department of Aviation ("DOA") regarding the proposed Project. Comments, if received prior to filing, will be included in Attachment 2.O.2. Due to the proximity of the Project to the Quantico airfield and information contained within the FAA Notice Criteria Tool, all structures will require FAA filing.

The crossings of the RF&P railroad by the Project are through listed encroachments in the master license agreement executed between the Company and CSX. Existing Lines #2078, #215 and #2001, and #237 and #2022 already cross the RF&P railroad at three locations, totaling five separate encroachments (one per line). The crossing of Line #2078 is near the Possum Point 230kV Substation and will be collocated with Line #2216. The Company will need a new encroachment listed within the master license agreement for the aerial crossing of Line #2216. The Company will coordinate with the railroad to obtain these agreements; however, it is not anticipated that the proposed Project will affect railroad facilities or conflict with their operation.

The Company will secure all necessary permits from VDOT, DOA, FAA, and CSX prior to construction in the respective rights-of-way.

P. Drinking Water Wells

As a general matter, water wells within 1,000 feet of any of the Proposed or Alternative Routes may be outside of the right-of-way and located on private property. The Company does not have the ability or right to field mark the wells on private property. In August 2021, the Company contacted the Virginia Department of Health's ("VDH") Office of Drinking Water ("ODW") to propose a method of well protection, including plotting and calling out the wells on the Project's Erosion and Sediment Control Plan, to which VDH-ODW indicated that the Company's proposed method is reasonable. A copy of that correspondence is included as <u>Attachment 2.P.1</u>. The Company intends to follow this same approach in this proceeding, as it has in other cases, and will coordinate with VDH-ODW, as needed.

In February 2023, the Company solicited comments on the proposed Project from various DEQ entities. DEQ forwarded the Company's request to VDH–ODW, which responded on February 16, 2023, regarding the proximity to of the Project to public drinking water sources (groundwater wells, springs and surface water intakes). VDH-ODW stated that there are no public groundwater wells within a one-mile radius of the Project site, no surface water intakes located within a five-mile radius of the Project site, the Project is not within the watershed of any public surface water intakes, and there are no apparent impacts to public drinking water sources due to this Project. A copy of that correspondence is included as Attachment 2.P.2.

Attachments

Dominion Energy Services, Inc. 120 Tredegar Street Richmond, Virginia 23219 DominionEnergy.com



February 3, 2023

BY EMAIL

RE: Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230 kV Tie Line #2216– Prince William County, Virginia

To Whom it May Concern,

Dominion Energy Virginia (the "Company") is proposing substation and related electric transmission line work at the Possum Point Power Station in Prince William County, Virginia, which will be performed entirely on Company-owned property or existing right-of-way crossing a railroad owned by CSX Transportation, Inc. (the "Project"). The Project is necessary to maintain the reliability of the Company's electric transmission system in compliance with mandatory North American Electric Reliability Corporation ("NERC") Reliability Standards.

Specifically, the Project will involve the following components: (i) install a second 500-230 kV transformer bank at the Possum Point 500 kV Substation and perform associated bus work; (ii) rebuild approximately 0.8 miles of existing 230 kV transmission Line #2078 within the existing transmission corridor between the Company's existing Possum Point 500 kV and 230 kV Substations on Company-owned property; (iii) install approximately 0.95 miles of a new 230 kV transmission line, Line #2216, between the Company's existing Possum Point 500 kV and 230 kV Substations along the majority of the Line #2078 corridor and primarily collocated with the Line #2078 structures, with three new structures on Company-owned property in a new approximately 0.29-mile corridor adjacent to the existing Possum Point 500 kV Substation; (iv) install a circuit breaker and line terminal equipment at the Possum Point 230 kV Substation; and (v) install two new structures to raise Lines #215/#2001 and Lines #237/#2022 to provide clearance for Line #2078 and Line #2216.

The Company is in the process of preparing an application for a certificate of public convenience and necessity ("CPCN") from the State Corporation Commission of Virginia (the "Commission"). In advance of filing an application for a CPCN from the Commission, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Project within 30 days of the date of this letter. If you would like to receive a GIS shapefile of the transmission line routes to assist in the project review or if there are any questions, please do not hesitate to contact Stacey Ellis at (434) 532-9034 or Stacey.T.Ellis@DominionEnergy.com.

We appreciate your assistance with this project review and look forward to any additional information you may have to offer.

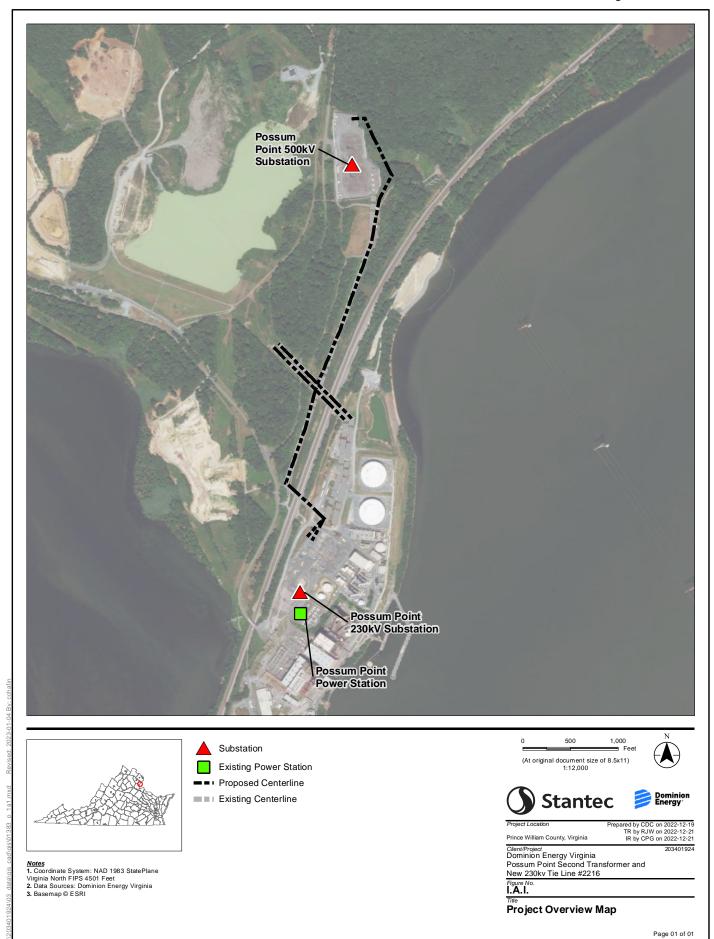
Regards,

Elizabeth L. Hester

Authorized Representative

Manager, Environmental Services

Attachments: Project Overview Map



Dominion Energy Services, Inc. 120 Tredegar Street Richmond, VA 23219 DominionEnergy.com



February 3, 2023

BY EMAIL

Ms. Michelle Henicheck Virginia Department of Environmental Quality Office of Wetlands and Stream Protection P.O. Box 1105 Richmond, VA 23218

RE: Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230 kV Tie Line #2216 – Prince William County, Virginia

Dear Ms. Henicheck,

Dominion Energy Virginia (the "Company") is proposing substation and related electric transmission line work at the Possum Point Power Station in Prince William County, Virginia, which will be performed entirely on Company-owned property or existing right-of-way crossing a railroad owned by CSX Transportation, Inc. (the "Project"). The Project is necessary to maintain the reliability of the Company's electric transmission system in compliance with mandatory North American Electric Reliability Corporation ("NERC") Reliability Standards.

Specifically, the project will involve the following components: (i) install a second 500-230 kV transformer bank at the Possum Point 500 kV Substation and perform associated bus work; (ii) rebuild approximately 0.8 miles of existing 230 kV transmission Line #2078 within existing transmission corridor between the Company's existing Possum Point 500 kV and 230 kV Substations on Company-owned property; (iii) install approximately 0.95 miles of a new 230 kV transmission line, Line #2216, between the Company's existing Possum Point 500 kV and 230 kV Substations along the majority of the Line #2078 corridor and primarily collocated with the Line #2078 structures, with three new structures on Company-owned property in a new approximately 0.29-mile corridor adjacent to the existing Possum Point 500 kV Substation; (iv) install a circuit breaker and line terminal equipment at the Possum Point 230 kV Substation; and (v) install two new structures to raise Lines #215/#2001 and Lines #237/#2022 to provide clearance for Line #2078 and Line #2216.

The Company is in the process of preparing an application for a certificate of public convenience and necessity ("CPCN") from the State Corporation Commission of Virginia (the "Commission"). Pursuant to the July 2003 Memorandum of Agreement between the Commission and the Department of Environmental Quality (the "DEQ") regarding Wetlands Impact Consultation, Dominion Energy Virginia is sending this letter to initiate consultation with the DEQ prior to filing an application for a CPCN from the Commission.

Within the Project corridor, the Company delineated wetlands and other waters of the United States using the *Routine Determination Method* as outlined in the *1987 Corps of Engineers Wetland Delineation Manual* and methods described in the *2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region* (Version 2.0). The Company submitted the results of this delineation to the Corps on July 31, 2020 for confirmation. A preliminary jurisdictional determination from the Corps was received on September 1, 2020 (NAO-2020-01315-RDB). Total jurisdictional resources within the proposed Project corridor are provided in Table 1.

Possum Point 2nd Transformer and New 230 kV Tie Line #2216 2/3/2023 Page 2 of 2

Table 1. Jurisdictional Resources within Project Corridor

Resource	Area/Length (±)	
Palustrine Emergent Wetland	1.51 acres	
Palustrine Scrub-shrub Wetland	0.07 acre	
Palustrine Forested Wetland	0.44 acre	
Open Water	0.67 acre	
Ephemeral Streams	0.07 acre/625 linear feet	
Upper Perennial Streams	0.03 acre/501 linear feet	
Intermittent Streams	0.03 acre/496 linear feet	

At this time, in advance of filing an application with the Commission, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Project within 30 days of the date of this letter. If you would like to receive a GIS shapefile of the transmission line routes to assist in the project review or if there are any questions, please do not hesitate to contact Stacey Ellis at (434) 532-9034 or Stacey.T.Ellis@DominionEnergy.com.

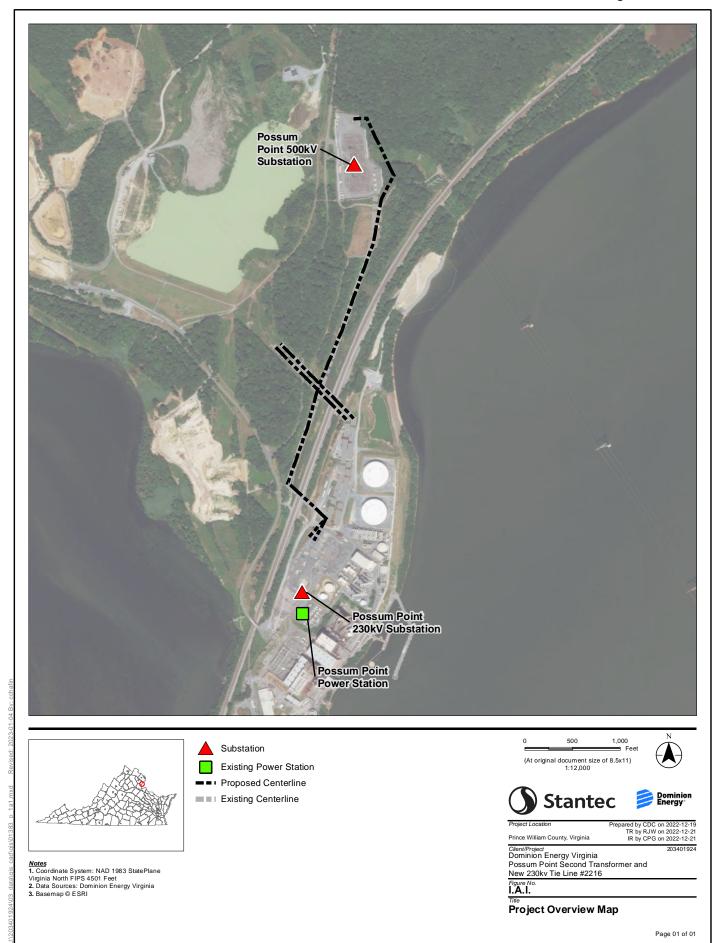
We appreciate your assistance with this project review and look forward to any additional information you may have to offer.

Sincerely,

Elizabeth L. Hester Authorized Representative Manager, Environmental Services

Enclosure: 1. Project Overview Map

2. Wetland Delineation



Dominion Energy Services, Inc. 120 Tredegar Street Richmond, VA 23219 DominionEnergy.com



BY EMAIL

July 30, 2020

Attention: Ms. Regena Bronson
US Army Corps of Engineers
1329 Alum Spring Road, Suite 102
Fredericksburg, Virginia 22401
Via email: regena.d.bronson@usace.army.mil

Reference: Possum Point 2nd Transformer and New 230 kV Tie Line #2216

Prince William County, Virginia

Latitude: 38.547603° Longitude: -77.278318°

Dear Ms. Bronson,

Dominion Energy Virginia (Dominion Energy) is pleased to submit the enclosed Preliminary Jurisdictional Determination (PJD) for the Possum Point 2nd Transformer and New 230 kV Tie Line #2216, located in Prince William County, Virginia. Should you have any questions regarding this submittal, please contact Rachel Studebaker (Dominion Energy) via email at Rachel.M.Studebaker@dominionenergy.com or by phone at 804-217-1847.

Regards,

Dominion Energy

Richard B. Gangle Director, Environmental Services

Attachment: PJD Application Package



Stantec Consulting Services Inc.

150 Riverside Parkway Suite 301, Fredericksburg VA 22406-1094

July 30, 2020 File: 203401383

Attention: Ms. Regena Bronson

U.S. Army Corps of Engineers 1329 Alum Spring Road, Suite 102 Fredericksburg, Virginia 22401

Via Email: regena.d.bronson@usace.army.mil

Reference: Request for Preliminary Jurisdictional Determination

Possum Point 2nd Transformer and New 230 kV Tie Line #2216, Prince William County, Virginia

NAO 2020-01315

Latitude: 38.547603° Longitude: -77.278318°

Applicant: Mr. Mark Allen

Dominion Energy Virginia 10900 Nuckols Road, 4th Floor Glen Allen, Virginia 23060

Dear Ms. Bronson:

Stantec Consulting Services Inc. (Stantec) has been retained by Dominion Energy Virginia to conduct a detailed investigation of waters of the U.S., including wetlands, on the above-referenced project. The 0.81-mile project corridor encompasses approximately 58.02 acres and is located within the Potomac River drainage basin in Prince William County, Virginia. The site is situated northeast of Possum Point Road, south and east of Cockpit Point Road, west of the Potomac River, and can be accessed via Possum Point Road (Figures 1 & 2). A copy of the Pre-Application and/or Jurisdictional Waters Determination Request Form is provided in Appendix A.

Off-site Evaluation

Prior to conducting fieldwork, Stantec consulted the U.S. Geological Survey (USGS) 7.5-minute Topographical Quadrangle Map for Quantico, Virginia (1994 revision), the National Wetlands Inventory Interactive Mapper (NWI), administered by the U.S. Fish and Wildlife Service (USFWS), the Web Soil Survey, administered by the Natural Resources Conservation Service (NRCS), and flood plain maps available at the Flood Map Service Center, administered by the Federal Emergency Management Agency (FEMA). The USGS quad map depicts a project area comprised of forested and cleared land situated on moderately sloping terrain. The NWI map (Figure 3) depicts two freshwater ponds within the project boundaries. The soil survey (Figure 4) indicates that the site is underlain primarily by Urban land-Udorthents complex, Dumfries sandy loam, Lunt loam, Marr very fine sandy loam, Neabsco-Quantico complex, and Delanco fine sandy loam. None of these soils are listed as hydric in Prince William County, Virginia, however, Delanco fine sandy loam may contain hydric inclusions. Additionally, the flood plain map (Figure 5) shows the subject property lies outside of the 100-year floodplain (Zone X – Area of Minimal Flood Hazard).

On-site Evaluation

Fieldwork was conducted during April 2020 using the Routine Determination Method as outlined in the 1987 Corps of Engineers Wetland Delineation Manual and methods described in the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version

Design with community in mind



July 30, 2020 Ms. Regena Bronson Page 2 of 3

Reference: Possum Point 2nd Transformer and New 230 kV Tie Line #2216, Prince William County, Virginia

2.0). Wetland flags were placed in the field by Stantec and sequentially numbered to provide an on-site record of the delineation. The data sheets (Appendix B) used in this investigation are attached along with the Delineation Map (Figure 6) showing the GPS located limits of wetlands and other water features, as well as data point locations. Representative site photos are included in Appendix C.

Site Description

Jurisdictional features identified by Stantec within the project limits may be classified as palustrine forested, scrub-shrub, and emergent wetlands with associated freshwater ponds and stream channels. Wetland vegetation is typified by red maple (*Acer rubrum*), black elderberry (*Sambucus nigra*), soft rush (*Juncus effusus*), common reed (*Phragmites australis*), shallow sedge (*Carex lurida*) and, Japanese stiltgrass (*Microstegium vimineum*). The transition from wetland to upland is generally identified by a shift in the vegetative community and a shift from hydric to non-hydric soils. Table 1 shows the dimensions of the identified jurisdictional resources within the project area.

Table 1. Wetlands and WOUS Calculations

PFO (Acres)	PSS (Acres)	PEM (Acres)	Open Waters (Acres)	Stream Channels (R3) Acres (LF)	Stream Channels (R4) Acres (LF)	Stream Channels (R6) Acres (LF)
0.44	0.07	1.51	0.67	0.03 (501)	0.03 (496)	0.07 (625)

On behalf of our client, Stantec respectfully requests that the Corps confirm our delineation. We would appreciate the opportunity to meet with you on site to present our fieldwork. Please call to set up a meeting date or to discuss any questions regarding our investigation.

Thank you for your cooperation in this matter.

Regards,

Stantec Consulting Services Inc.

Brendan Young

Ecologist

Phone: 540 785 5544 Fax: 540 785 1742

brendan.young@stantec.com

Attachment: Appendices A-C & Figures 1-6

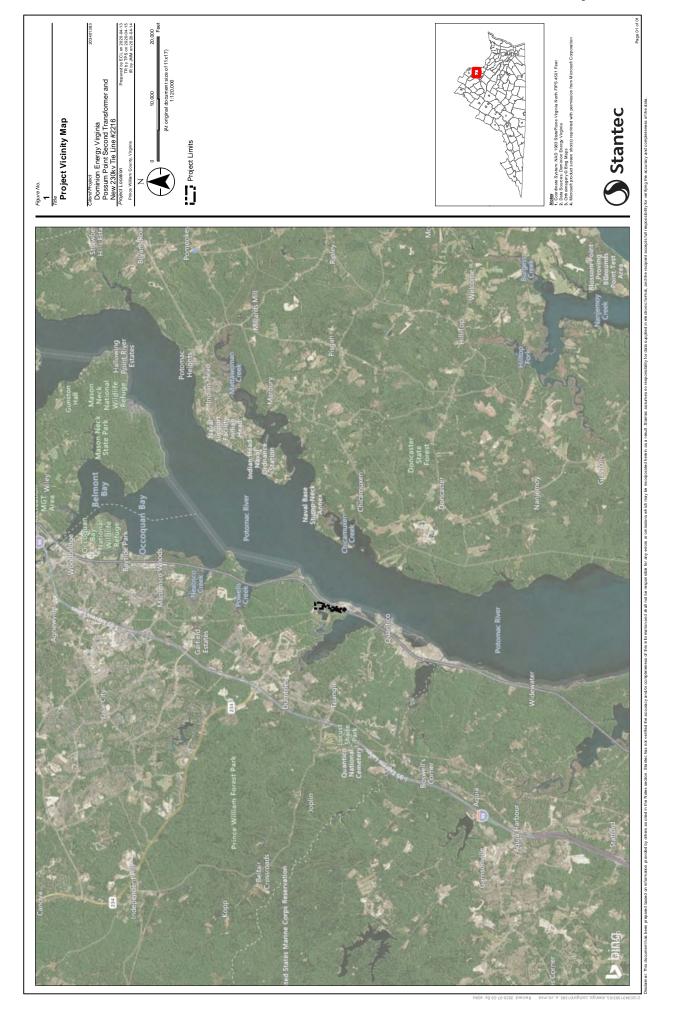
Design with community in mind

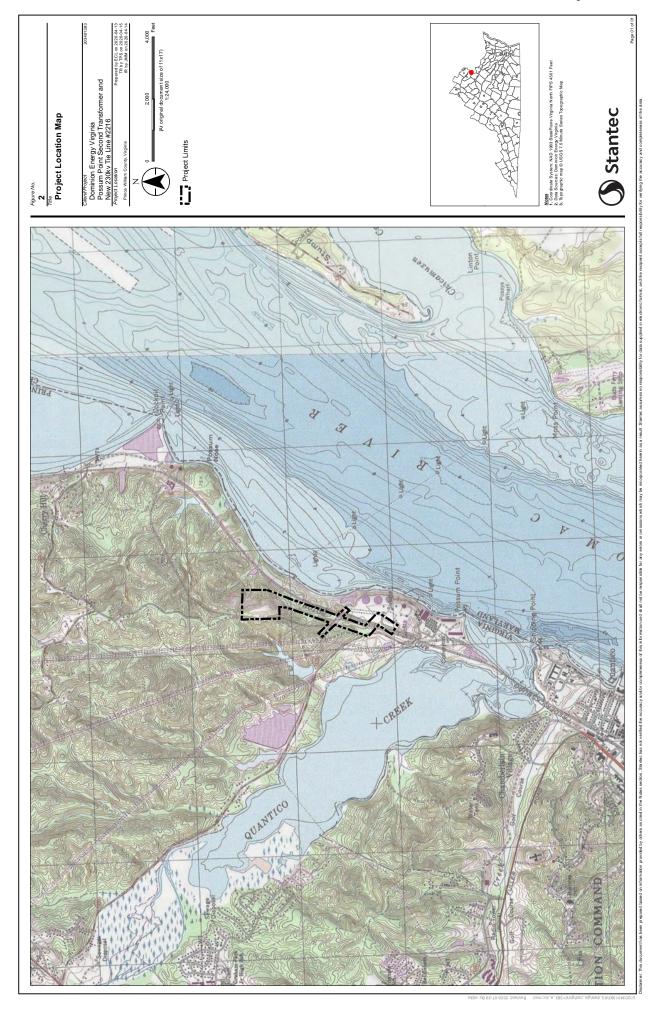


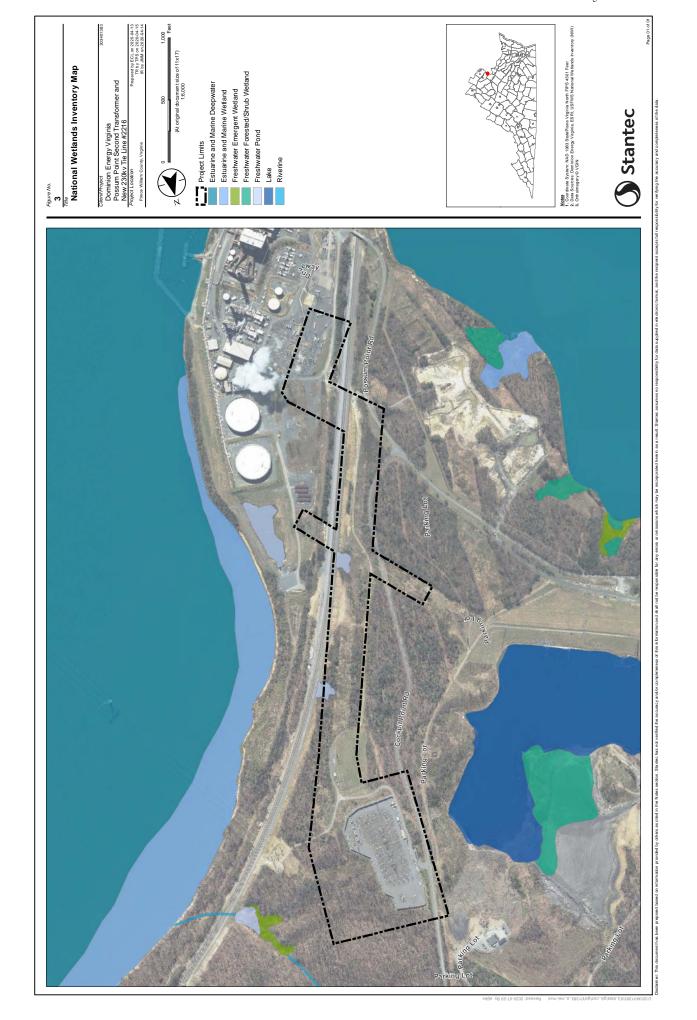
July 30, 2020 Ms. Regena Bronson Page 3 of 3

Reference: Possum Point 2nd Transformer and New 230 kV Tie Line #2216, Prince William County, Virginia

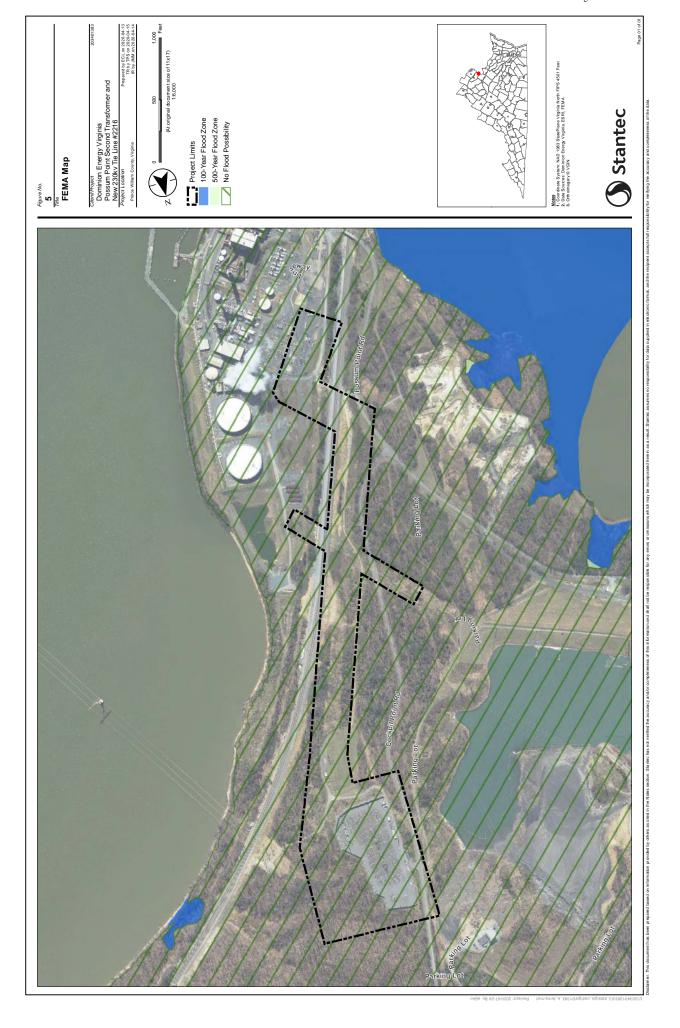
c. Chuck Weil, P.E. – Dominion Energy Virginia Rachel Roberts, PMP – Stantec

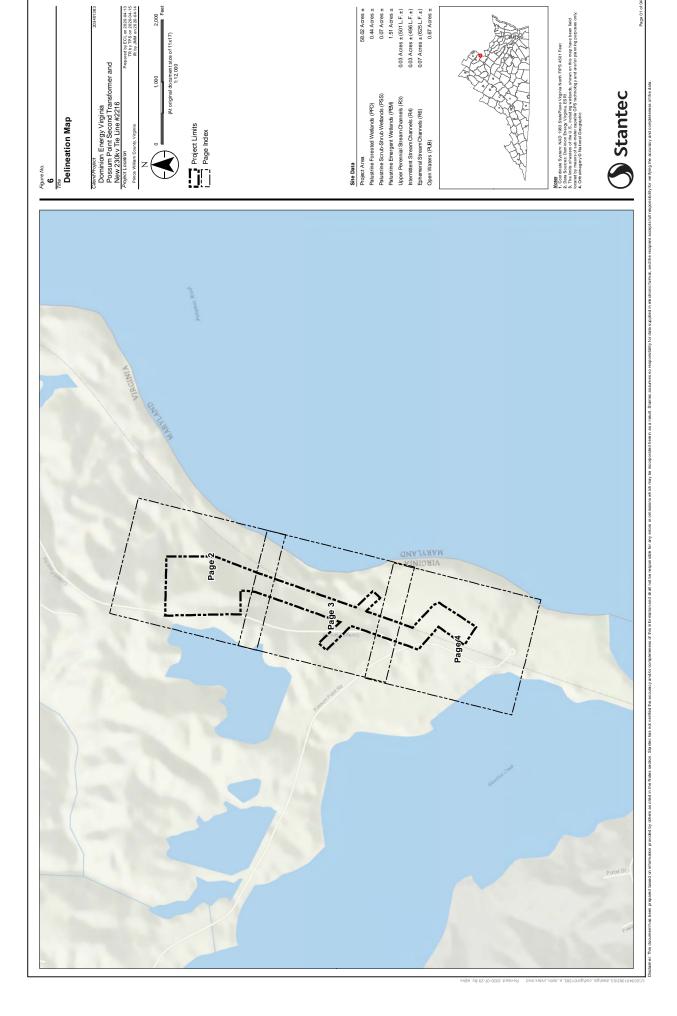






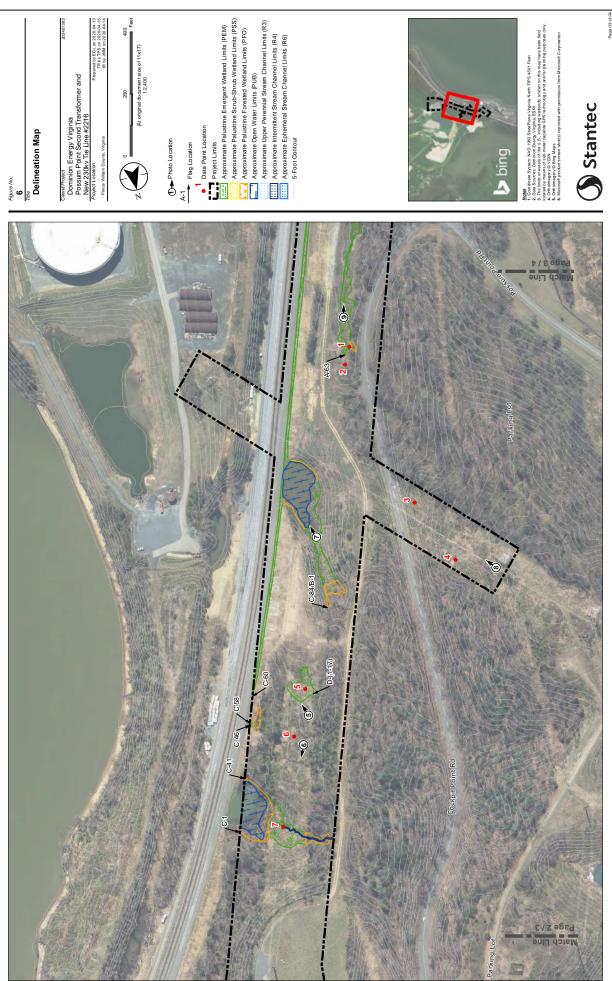








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APPENDIX A PRE-APPLICATION AND JURISDICTIONAL DETERMINATION REQUEST FORM



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 emailed 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 Office 803 Front Street Norfolk, Virginia 23510-1096

Or faxed to (757) 201-7678

Or sent via e-mail to: <u>CENAO.REG_ROD@usace.army.mil</u>

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.

<u>Location and Information about Property to be subject to a Jurisdictional Determination:</u>

- 1. Date of Request: July 30, 2020
- 2. Project Name: Possum Point 2nd Transformer and New 230 kV Tie Line #2216
- 3. City or County where property located: Prince William County, Virginia
- 4. Address of property and directions (attach a map of the property location and a copy of the property plat): The approximate 58.02-acre site is located within the Potomac River drainage basin in Prince William County, Virginia. The site is situated northeast of Possum Point Road, south and east of Cockpit Point Road, west of the Potomac River, and can be accessed via Possum Point Road.
- 5. Coordinates of property (if known): Latitude: 38.547603° Longitude: -77.278318°
- 6. Size of property in acres: 58.02
- 7. Tax Parcel Number / GPIN (if available):
- 8. Name of Nearest Waterway: Potomac River
- 9. Brief Description of Proposed Activity, Reason for Preapplication Request, and/or Reason for Jurisdictional Waters Determination Request: **Environmental constraints analysis.**

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: Dominion Energy c/o Mark Allen

Mailing Address: 10900 Nuckols Road City: State: Zip: Glen Allen, Virginia 23060

Daytime Telephone: (804) 257-4711

E-mail Address: Mark.Allen@dominionenergy.com

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

Requestor Name: Rachel Studebaker- Dominion Energy Environmental Services

Mailing Address: 120 Tredegar Street City: State: Zip: Richmond, Virginia 23219

Daytime Telephone: (804) 217-1847

E-mail Address: Rachel.M.Studebaker@dominionenergy.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:

Jul 30, 2020 Property Odate's Signaturally

APPENDIX B WETLAND DETERMINATION DATA FORMS

0	Chambaa
	Stantec

S t	antec City	Applicant: //County: State: iigator(s):	SUM POINT SUBSTATION - 230KV SWITCH YARD LI DOMINION ENERGY VIRGINIA PRINCE WILLIAM COUNTY VIRGINIA B. YOUNG & M. MCGRAW				8 REBUILD	Section/Township/Range: Subregion (LRR or MLRA): Site Latitude: Site Longitude:			N/A LRR P 38.547603° -77.278318°		
		Date:		3/31/2	2020			Soil N	Map Unit Name:	MARR VI	ERY FINE S	SANDY I	LOAM
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Hydric Se	oil Indicators:												
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Sandy Redox (S5) Stratified Layers (A5) Organic Bodies (A6) 5cm Mucky Mineral (A7) Muck Presence (A8) 1 cm Muck (A9) Depleted Below Dark Surface (A1 Thick Dark Surface (A12) Coast Prairie Redox (A16) Sandy Mucky Mineral (S1) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Polyvalue Below Surface (S8) Thin Dark Surface (S9) Loamy Mucky Mineral (F1) Depleted Matrix (F2)				Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Marl (F10) Depleted Ochric (F11) Iron-Manganese Masses (F12) Umbric Surface (F13) Delta Ochric (F17) Reduced Vertic (F18) Piedmont Floodplain Correction Red Parent Material (Very Shallow Dark SPiedmont Floodplain Soils (F19) Anomalous Bright Loamy Soils (F20)					(A9) (A10) Tertic (F18) Floodplain S Bright Loa Material (T	oils (F19 my Soils F2)) (F20)		
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0-	Project: POSSUM PO		ION - 230KV NION ENE			8 REBUILD	BUILD Section/Township/Range: N/A					
() Stantec	City/County:		NCE WILLI					LRR or MLRA):		LRR F	,	
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In	vestigator(s):	В. У	OUNG & 1		AW			Site Longitude:		-77.2783		
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				1								
Hydric Soil Indicators:		1				1						
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Black Histic (A3)		Gleyed Matrix (54)	_	Redox Depre	essions (F8)			1cm Muck			
Hydrogen Sulfide (A Stratified Layers (A5		Redox (S5) I Matrix (S6)		_	Marl (F10) Depleted Oc	hric (F11)			2cm Muck Reduced V			
Organic Bodies (A6)		rface (S7)			Iron-Mangar		(F12)		Piedmont F		Soils (F19)	
5cm Mucky Mineral		ue Below Surfa	ce (S8)	_	Umbric Surf		•			-	my Soils (F2	20)
Muck Presence (A8)		ark Surface (S9		_	Delta Ochric					Material (7		
1 cm Muck (A9)		Mucky Mineral		_	Reduced Ve					ow Dark Su	rface (TF12))
Depleted Below Dar		Gleyed Matrix	(F2)	_	Piedmont Flo				Other			
Thick Dark Surface	(A12) Deplete	d Matrix (F3)			_Anomalous	origiit Loamy	y 30118 (F2U)					
Restrictive Layer (If	Observed)			Remarks:	SOIL PARA	AMETER N	OT MET.					
T	ype:											
Depth (inch	nes):			1								

			SWITCH YAI		LD					
Ctantac	Applicant:	DOMINION ENE	ERGY VIRG	INIA	Section/Township/Range: N/A					
Stantec Cit	y/County:	PRINCE WILL	IAM COUN	TY	Subregion (LRR			RR P		
A 24 A 18 A 18 A	State:	VIRG	inia		<u>-</u>	te Latitude:		547603°		
Inves	tigator(s):	B. YOUNG &	M. MCGRA	W	-	Longitude:		.278318°		
	Date:	3/31/	2020		Soil Map	Unit Name:	MARR VERY F	INE SANDY LOAM		
Summary of Findings:			LIDI AND	IN SWALE WEST OF (COCKPIT POINT ROAD;					
	c Vegetation is Present:		UI LAND	Normal Circumstances:		I Classification:		N/A		
	lydric Soils are Present:		Disturbed F	Parameters (see Remarks):		Local Relief:		NCAVE	-	
	d Hydrology is Present:			Parameters (see Remarks):		Landform:		NAGEWAY	-	
	a is within a Wetland:			Hydrology (see Remarks):		Slope %:		2-4	-	
Hydrology Parameter:	a is main a mount	, P	rear Cirriance,	Tydrology (see Remains).		Biope 70.				
Trydrology Farameter:	Primary	Indicators:			1	Secono	dary Indicators:			
						Surface Soil Crac	•			
Surface Water (A1)	Wat	er Stained Leaves (B9))			Sparsely Vegetat		ace (B8)		
High Water Table (A2)	Aqu	atic Fauna (B13)				Drainage Pattern	s (B10)			
Saturation (A3)	Mar	l Deposits (B15)				Moss Trim Lines	(B16)			
Water Marks (B1)	Hyd	rogen Sulfide Odor (C	C1)			Dry-Season Water	er Table (C2)			
Sediment Deposits (B2)	Oxi	dized Rhizospheres on	Living Roots	s (C3)		Crayfish Burrow	s (C8)			
Drift Deposits (B3)		ence of Reduced Iron				Saturation Visibl	_	ery (C9)		
Algal Mat or Crust (B4)		ent Iron Reduction in	Tilled Soils (C6)		Stunted or Stress				
Iron Deposits (B5)		n Muck Surface (C7)			<u>X</u>	Geomorphic Posi				
Inundation Visible on A	erial Imagery (B7)Oth	er				Shallow Aquitard				
1					_	FAC-Neutral Tes Sphagnum Moss				
Water Depths (inches):			Remarks:	HYDROLOGY PARA	L METER NOT MET		(20)			
Surface Water			Acmarks.	III DROLOGI I AKA	IER HOLIMEI	•				
Water Table			1							
Saturated soil			1							
Vegetation Parameter:										
Dominan		Stratum IND	%		minant Species		ratum IN			
Elaeagnus Microstegiu		Shrub UPL erbaceous FAC	5 25		oma hederacea laria media		baceous FAC			
Rubus		erbaceous FAC	15		ria petiolata		baceous FAC			
Solidago		erbaceous FACU	10							
Chasmanthii Schedonorus		erbaceous FAC FAC	10 10							
Cirsium		erbaceous FACU	10							
Lonicera		Vine FACU	5							
% Dominant	species EAC or watter	5004			Provol	anca Inday:	2.5			
	species FAC or wetter:	50%	DI ANT I IST			ence Index:	3.5			
NOTE: SPECIES INDICA	TOR STATUS ACCORDING TO 20			VECETATION PARA	Calculated using	all species present.	3.5	<u> </u>		
NOTE: SPECIES INDICA Rapid Test for Hydrophy	tor status according to 20		PLANT LIST Remarks:	VEGETATION PARA	Calculated using	all species present.	3.5			
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan	tic Vegetation:ce Test >50%:			VEGETATION PARA	Calculated using	all species present.	3.5			
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence	TOR STATUS ACCORDING TO 20 cic Vegetation: ce Test >50%: Index is ≤ 3.0 :			VEGETATION PARA	Calculated using	all species present.	3.5			
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan	TOR STATUS ACCORDING TO 20 cic Vegetation: ce Test >50%: Index is ≤ 3.0 :			VEGETATION PARA	Calculated using	all species present.	3.5			
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence	TOR STATUS ACCORDING TO 20 cic Vegetation: ce Test >50%: Index is ≤ 3.0 :			VEGETATION PARA	Calculated using	all species present.	3.5			
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy	TOR STATUS ACCORDING TO 20 cic Vegetation: ce Test >50%: Index is ≤ 3.0 :	16 NATIONAL WETLAND		VEGETATION PARA Redox Fe	Calculated using METER NOT MET	all species present.	3.5			
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy	TOR STATUS ACCORDING TO 20 ic Vegetation: ce Test >50%: Index is \le 3.0: ic Vegetation:	16 NATIONAL WETLAND	Remarks:		Calculated using METER NOT MET	all species present.		exture		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-1	TOR STATUS ACCORDING TO 20 ic Vegetation: ce Test >50%: Index is ≤ 3.0: ic Vegetation: Matr	16 NATIONAL WETLAND	Remarks:	Redox Fe	Calculated using METER NOT MET	all species present.	Tr L	OAM		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches)	TOR STATUS ACCORDING TO 20 cic Vegetation: ce Test >50%: Index is ≤ 3.0: cic Vegetation: Matr Color (Moist)	is %	Remarks:	Redox Fe	Calculated using METER NOT MET	all species present.	Tr L			
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-1	ror status according to 20 tic Vegetation: ce Test >50%: Index is ≤ 3.0: cic Vegetation: Matr Color (Moist) 7.5YR 4/4	ix	Remarks:	Redox Fe	Calculated using METER NOT MET	all species present.	Tr L	OAM		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-1	ror status according to 20 tic Vegetation: ce Test >50%: Index is ≤ 3.0: cic Vegetation: Matr Color (Moist) 7.5YR 4/4	ix	Remarks:	Redox Fe	Calculated using METER NOT MET	all species present.	Tr L	OAM		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-1 1-20	ror status according to 20 tic Vegetation: ce Test >50%: Index is ≤ 3.0: cic Vegetation: Matr Color (Moist) 7.5YR 4/4	ix	Remarks:	Redox Fe	Calculated using METER NOT MET	all species present.	Tr L	OAM		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-1 1-20 Hydric Soil Indicators:	TOR STATUS ACCORDING TO 20 ic Vegetation: ce Test >50%: Index is ≤ 3.0: ic Vegetation: Matr Color (Moist) 7.5YR 4/4 5YR 4/6	ix	Remarks:	Redox Fee (Moist) %	Calculated using METER NOT MET attures Type	all species present.	Te L CLA	OAM Y LOAM		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-1 1-20 Hydric Soil Indicators: Histosol (A1)	TOR STATUS ACCORDING TO 20 tic Vegetation: te Test >50%: Index is ≤ 3.0: tic Vegetation: Matr Color (Moist) 7.5YR 4/4 5YR 4/6	ix	Remarks:	Redox Fee (Moist) % Redox Dark Surface (F6	Calculated using METER NOT MET stures Type	all species present.	Tr L	OAM Y LOAM		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-1 1-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2)	Coast Prairie Coast Market Coast Prairie Sandy Mucky Coast Mu	ix	Remarks:	Redox Fea (Moist) % Redox Dark Surface (F6 Depleted Dark Surface (Calculated using METER NOT MET stures Type	Loc Indicat	To L CLA	OAM Y LOAM		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-1 1-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3)	Coast Prairie Sandy Gleyes Sa	ix	Remarks:	Redox Fea (Moist) % Redox Dark Surface (F6 Depleted Dark Surface (Redox Depressions (F8)	Calculated using METER NOT MET stures Type	Loc	TCLA' CLA' ors for Problema	OAM Y LOAM attic Hydric Soils		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-1 1-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4)	TOR STATUS ACCORDING TO 20 ic Vegetation: ce Test >50%: Index is ≤ 3.0: ic Vegetation: Matr Color (Moist) 7.5YR 4/4 5YR 4/6 ——————————————————————————————————	ix	Remarks:	Redox Fer (Moist) % Redox Dark Surface (F6 Depleted Dark Surface (Redox Depressions (F8) Marl (F10)	Calculated using METER NOT MET stures Type	Loc Indicat	TCLA' CLA' ors for Problema cm Muck (A9) cm Muck (A10)	OAM Y LOAM attic Hydric Soils		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-1 1-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5)	TOR STATUS ACCORDING TO 20 ic Vegetation: ce Test >50%: Index is ≤ 3.0: ic Vegetation: Matr Color (Moist) 7.5YR 4/4 5YR 4/6 Coast Prairie Sandy Mucky Sandy Gleyee Sandy Gleyee Sandy Redox Stripped Mat	ix	Remarks:	Redox Fer (Moist) % Redox Dark Surface (F6 Depleted Dark Surface (Redox Depressions (F8) Marl (F10) Depleted Ochric (F11)	Calculated using METER NOT MET attures Type F7)	Loc Indicat	To L CLA Ors for Problema Icm Muck (A9) Cm Muck (A10) Reduced Vertic (I	OAM Y LOAM atic Hydric Soils		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-1 1-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6)	TOR STATUS ACCORDING TO 20 ic Vegetation: ce Test >50%: Index is ≤ 3.0: ic Vegetation: Matr Color (Moist) 7.5YR 4/4 5YR 4/6	ix	Remarks:	Redox Fee (Moist) % Redox Dark Surface (F6 Depleted Dark Surface (Redox Depressions (F8) Marl (F10) Depleted Ochric (F11) Iron-Manganese Masses	Calculated using METER NOT MET attures Type F7)	Loc Indicat	To L CLA ors for Problema cm Muck (A9) 2cm Muck (A10) Reduced Vertic (1) Piedmont Floodpi	OAM Y LOAM atic Hydric Soils F18) lain Soils (F19)		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-1 1-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) 5cm Mucky Mineral (A	TOR STATUS ACCORDING TO 20 ic Vegetation: ce Test >50%: Index is ≤ 3.0: ic Vegetation: Matr Color (Moist) 7.5YR 4/4 5YR 4/6 Coast Prairie Sandy Muck; Sandy Gleye: Sandy Redox Stripped Mat Dark Surface 7) Polyvalue Be	ix	Remarks:	Redox Fee (Moist) % Redox Dark Surface (F6 Depleted Dark Surface (Redox Depressions (F8) Marl (F10) Depleted Ochric (F11) Iron-Manganese Masses Umbric Surface (F13)	Calculated using METER NOT MET attures Type F7)	Loc Indicate	Tell L CLA ors for Problema cem Muck (A9) Pem Muck (A10) Reduced Vertic (I Piedmont Floodpi Anomalous Brigh	OAM Y LOAM atic Hydric Soils F18) lain Soils (F19) at Loamy Soils (F20)		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-1 1-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) 5cm Mucky Mineral (A Muck Presence (A8)	TOR STATUS ACCORDING TO 20 ic Vegetation: ce Test >50%: Index is ≤ 3.0: ic Vegetation: Matr Color (Moist) 7.5YR 4/4 5YR 4/6 Coast Prairie Sandy Muck; Sandy Gleyer Sandy Redox Stripped Matr Dark Surface Polyvalue Be Thin Dark St	ix	Remarks:	Redox Fer (Moist) % Redox Dark Surface (F6 Depleted Dark Surface (Redox Depressions (F8) Marl (F10) Depleted Ochric (F11) Iron-Manganese Masses Umbric Surface (F13) Delta Ochric (F17)	Calculated using METER NOT MET attures Type F7)	Loc Indicat	To L CLA ors for Problema cm Muck (A9) cm Muck (A10) Reduced Vertic (I) eicdmont Floodpl Anomalous Brigh Red Parent Mater	OAM Y LOAM atic Hydric Soils F18) lain Soils (F19) at Loamy Soils (F20) rial (TF2)		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-1 1-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) 5cm Mucky Mineral (A Muck Presence (A8) 1 cm Muck (A9)	TOR STATUS ACCORDING TO 20 ic Vegetation: ce Test >50%; Index is ≤ 3.0: ic Vegetation: Matr Color (Moist) 7.5YR 4/4 5YR 4/6 Coast Prairie Sandy Mucky Sandy Gleye Sandy Redox Stripped Mat Dark Surface 7) Polyvalue Be Thin Dark St Loamy Mucky Loamy Mucky	ix % 100 100	Remarks:	Redox Fea (Moist) % Redox Dark Surface (F6 Depleted Dark Surface (Redox Depressions (F8) Marl (F10) Depleted Ochric (F11) Iron-Manganese Masses Umbric Surface (F13) Delta Ochric (F17) Reduced Vertic (F18)	Attures Type Type (F12)	Loc Indicat	Tr. L CLA' ors for Problema cm Muck (A9) 2cm Muck (A10) Reducck Overtic (1 ridedmott Floodpi Anomalous Brigh Red Parent Mater Very Shallow Da	OAM Y LOAM atic Hydric Soils F18) lain Soils (F19) at Loamy Soils (F20)		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-1 1-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) 5cm Mucky Mineral (A Muck Presence (A8) 1 cm Muck (A9) Depleted Below Dark S	TOR STATUS ACCORDING TO 20 ic Vegetation: ce Test >50%: Index is ≤ 3.0: ic Vegetation: Matr Color (Moist) 7.5YR 4/4 5YR 4/6 Coast Prairie Sandy Muck; Sandy Gleye Sandy Redox Stripped Mat Dark Surface Thin Dark St Loamy Muck Loamy Muck	Redox (A16) / Mineral (S1) d Matrix (S4) (S5) rix (S6) (S7) low Surface (S8) urface (S9) y Mineral (F1) d Matrix (F2)	Remarks:	Redox Fer (Moist) % Redox Dark Surface (F6 Depleted Dark Surface (Redox Depressions (F8) Marl (F10) Depleted Ochric (F11) Iron-Manganese Masses Umbric Surface (F13) Delta Ochric (F17) Reduced Vertic (F18) Piedmont Floodplain So	Calculated using METER NOT MET stures Type F7) (F12)	Loc Indicat	To L CLA ors for Problema cm Muck (A9) cm Muck (A10) Reduced Vertic (I) eicdmont Floodpl Anomalous Brigh Red Parent Mater	OAM Y LOAM atic Hydric Soils F18) lain Soils (F19) at Loamy Soils (F20) rial (TF2)		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-1 1-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) 5cm Mucky Mineral (A Muck Presence (A8) 1 cm Muck (A9)	TOR STATUS ACCORDING TO 20 ic Vegetation: ce Test >50%: Index is ≤ 3.0: ic Vegetation: Matr Color (Moist) 7.5YR 4/4 5YR 4/6 Coast Prairie Sandy Muck; Sandy Gleye Sandy Redox Stripped Mat Dark Surface Thin Dark St Loamy Muck Loamy Muck	Redox (A16) / Mineral (S1) d Matrix (S4) (S5) rix (S6) (S7) low Surface (S8) urface (S9) y Mineral (F1) d Matrix (F2)	Remarks:	Redox Fea (Moist) % Redox Dark Surface (F6 Depleted Dark Surface (Redox Depressions (F8) Marl (F10) Depleted Ochric (F11) Iron-Manganese Masses Umbric Surface (F13) Delta Ochric (F17) Reduced Vertic (F18)	Calculated using METER NOT MET stures Type F7) (F12)	Loc Indicat	Tr. L CLA' ors for Problema cm Muck (A9) 2cm Muck (A10) Reduccd Vertic (1 ridedmott Floodpi Anomalous Brigh Red Parent Mater Very Shallow Da	OAM Y LOAM atic Hydric Soils F18) lain Soils (F19) at Loamy Soils (F20) rial (TF2)		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-1 1-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) 5cm Mucky Mineral (A Muck Presence (A8) 1 cm Muck (A9) Depleted Below Dark S Thick Dark Surface (A1	TOR STATUS ACCORDING TO 20 ic Vegetation: ce Test >50%: Index is ≤ 3.0: ic Vegetation: Matr Color (Moist) 7.5YR 4/4 5YR 4/6 Coast Prairie Sandy Muck; Sandy Gleyee Sandy Gleyee Sandy Gleyee Sandy Redox Stripped Mat Dark Surface Thin Dark Surface Thin Dark Surface Loamy Muck Loamy Muck Loamy Muck Loamy Muck Dark Surface Thin Dark Surface Loamy Muck Loamy Muck Loamy Muck Loamy Muck Loamy Muck Dark Surface Thin Dark Surface	Redox (A16) / Mineral (S1) d Matrix (S4) (S5) rix (S6) (S7) low Surface (S8) urface (S9) y Mineral (F1) d Matrix (F2)	Color	Redox Fee (Moist) % Redox Dark Surface (F6 Depleted Dark Surface (Redox Depressions (F8) Marl (F10) Depleted Ochric (F11) Iron-Manganese Masses Umbric Surface (F13) Delta Ochric (F17) Reduced Vertic (F18) Piedmont Floodplain So Anomalous Bright Loam	Calculated using METER NOT MET Itures Type F7) (F12) ils (F19) y Soils (F20)	Loc Indicat	Tr. L CLA' ors for Problema cm Muck (A9) 2cm Muck (A10) Reduccd Vertic (1 ridedmott Floodpi Anomalous Brigh Red Parent Mater Very Shallow Da	OAM Y LOAM atic Hydric Soils F18) lain Soils (F19) at Loamy Soils (F20) rial (TF2)		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-1 1-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) 5cm Mucky Mineral (A Muck Presence (A8) 1 cm Muck (A9) Depleted Below Dark S	TOR STATUS ACCORDING TO 20 ic Vegetation: ce Test >50%: Index is ≤ 3.0: ic Vegetation: Matr Color (Moist) 7.5YR 4/4 5YR 4/6 Coast Prairie Sandy Muck; Sandy Gleyee Sandy Redox Stripped Mat Dark Surface Thin Dark Su Loamy Muck Loamy Muck Loamy Muck Loamy Muck Loamy Muck Dark Surface All Loamy Gleye Depleted Ma Served)	Redox (A16) / Mineral (S1) d Matrix (S4) (S5) rix (S6) (S7) low Surface (S8) urface (S9) y Mineral (F1) d Matrix (F2)	Remarks:	Redox Fer (Moist) % Redox Dark Surface (F6 Depleted Dark Surface (Redox Depressions (F8) Marl (F10) Depleted Ochric (F11) Iron-Manganese Masses Umbric Surface (F13) Delta Ochric (F17) Reduced Vertic (F18) Piedmont Floodplain So	Calculated using METER NOT MET Itures Type F7) (F12) ils (F19) y Soils (F20)	Loc Indicat	Tr. L CLA' ors for Problema cm Muck (A9) 2cm Muck (A10) Reduccd Vertic (1 ridedmott Floodpi Anomalous Brigh Red Parent Mater Very Shallow Da	OAM Y LOAM atic Hydric Soils F18) lain Soils (F19) at Loamy Soils (F20) rial (TF2)		

	Project: POSSUM PO					8 REBUILD	. Section/T	Correshin/Donoo		NI/A		
	//County:		NION ENEI ICE WILLI				•	ownship/Range: LRR or MLRA):		N/A LRR P	,	
9	State:		VIRGI					Site Latitude:		38.54760		
Invest	igator(s):	B. Y	OUNG & N	M. MCGRA	W		•	Site Longitude:		-77.27831	18°	
	Date:		3/31/2	020			Soil !	Map Unit Name:	MARR VI	ERY FINE S	SANDY L	OAM
C				TIDE AND	The Carlot E. S.	THESE OF S	OCEPHE POR	NT DO AD				
Summary of Findings:	Vegetation is Present:			UPLAND		cumstances:	COCKPIT POI	NWI Classificat	tion:	N/A		
, , ,	ydric Soils are Present:			Disturbed	Parameters (se			Local Re		CONCA	VE	
	l Hydrology is Present:		F		Parameters (se			Landfo	-	DRAINAGE		
	a is within a Wetland:				Hydrology (se			Slope		4-6		
Hydrology Parameter:												
	Prii	mary Indicator	s:						Secondary Indic	ators:		
									il Cracks (B6)			
Surface Water (A1)		Water Stained							egetated Concav	e Surface (E	38)	
High Water Table (A2)		Aquatic Fauna	. ,						atterns (B10)			
Saturation (A3) Water Marks (B1)		Marl Deposits Hydrogen Sul		1)					Lines (B16)	72)		
Sediment Deposits (B2)		Oxidized Rhiz			s (C3)			<u> </u>	urrows (C8)	-2)		
Drift Deposits (B3)		Presence of R	-	-	.5 (05)				Visible on Aeria	l Imagery (C	C9)	
Algal Mat or Crust (B4)		Recent Iron R			(C6)				Stressed Plants (,	
Iron Deposits (B5)	<u> </u>	Thin Muck Su	rface (C7)					X Geomorphi	c Position (D2)			
Inundation Visible on A	erial Imagery (B7)	Other							quitard (D3)			
									al Test (D5)			
W . D . J . C . J .)				ln ı	INDROLO	CV DADA	WEED NOT	Sphagnum	Moss (D8)			
Water Depths (inches):				Remarks:	HYDROLO	GY PARA	METER NOT I	MET.				
Surface Water: Water Table:				I								
Saturated soil:												
Vegetation Parameter:												
Dominan		Stratum	IND	%			minant Species		Stratum	IND	%	
Prunus s Cercis cas		Sapling Shrub	FACU UPL	5 15			ous argutus ago altissima		Herbaceous Herbaceous	FAC FACU	15 10	
Rosa mu		Shrub	FACU	5			ogon virginicus		Herbaceous	FAC	5	
Stellaria		Herbaceous	FACU	65		Alli	um vineale		Herbaceous	FACU	5	
Lonicera	iaponica	Vine	FACU	10								
				ļI						!!		
% Dominant	species FAC or wetter:	О					P	revalence Index:	4.0			
NOTE: SPECIES INDICATE	OR STATUS ACCORDING	TO 2016 NATIONA	L WETLAND P	LANT LIST			Calculated	using all species pre	sent.	1		
Rapid Test for Hydrophyt	ic Vegetation:	-		Remarks:	VEGETAT	ION PARA	METER NOT	МЕТ.				
	ce Test >50%:	_										
	ndex is ≤ 3.0:	-										
Problematic Hydrophyt	ic Vegetation:	_										
Soil Parameter:												
Son rarameter:		Matrix		ı		Redox Fea	tures	1				
Depth (inches)	Color (Mois		%	Colo	r (Moist)	%	Туре	Loc		Texture	e	<u> </u>
0-16	7.5YR 3/2	.,	100	2010	(1/10150)	,,,	2,700	200		LOAM		
16-20	10YR 4/4		100							SANDY LO		
		İ										
Hydric Soil Indicators:												
Histosol (A1)		airie Redox (A	,	_	Redox Dark			I	ndicators for Pr	oblematic H	ydric Soil	S
Histic Epipedon (A2)		lucky Mineral			Depleted Da		F7)					
Black Histic (A3)		leyed Matrix (54)		Redox Depre	essions (F8)			1cm Muck			
Hydrogen Sulfide (A4)		edox (S5)		_	Marl (F10)	heio (E11)			2cm Muck			
Stratified Layers (A5) Organic Bodies (A6)		Matrix (S6) face (S7)		_	Depleted Oc Iron-Mangar		(F12)		Reduced V	ertic (F18) Floodplain S	oile (F10)	1
5cm Mucky Mineral (A7	_	Umbric Surf		(114)			Bright Loa					
Muck Presence (A8)		Delta Ochric					: Material (T	-	. 20)			
1 cm Muck (A9)		rk Surface (S9) Mucky Mineral		_	Reduced Ve					ow Dark Sur		12)
Depleted Below Dark Su		Gleyed Matrix (Piedmont Fle		ls (F19)		Other	541		,
Thick Dark Surface (A1)	· -	Matrix (F3)		_	_		y Soils (F20)					
							· · · · · ·					
Restrictive Layer (If Obs	erved)			Remarks:	SOIL PARA	AMETER N	OT MET.					
Туре:												
Denth (inches):												

(Stant	toc A	Project: POSSUM pplicant:	DOMI	NION FNE	RGY VIRC	INIA	8 REBUILD	Section/Township/Range: N/A					
Stani	Lec City.	/County:	PRIN	NCE WILLI	AM COUN	ITY		Subregion	(LRR or MLRA):		LRR F		
(24 H H	Invocati	State: igator(s):	D V	VIRG	INIA M. MCCD/	W			Site Latitude: Site Longitude:		38.54760 -77.2783		
	Hivesu	Date:	В. 1	4/1/2	020	1 11		Soil	Map Unit Name:		ERY FINE		LOAM
		<u> </u>											-
Summary of Find							ND NEAR F	·					
		Vegetation is Prese			B		rcumstances:	X	NWI Classificat		N/A		
		ydric Soils are Prese		,		Parameters (se	-	_	Local Re		CONCA		
		Hydrology is Prese is within a Wetlar				Parameters (se Hydrology (se	-	_	Landfo Slope		SLOPI 2-4	3	
Hydrology Param	_	i is within a vvetian	iu. A	Ацур	icai Ciinate	Trydrology (sc	c Kemarks).		Бюре	. /o.	2-4		
ny droiogy i drain			Primary Indicator	rs:					S	econdary Indic	ators:		
										l Cracks (B6)			
Surface Wa	ater (A1)	_	Water Stained	Leaves (B9)				Sparsely V	egetated Concav	e Surface (l	B8)	
	r Table (A2)	_	Aquatic Faun	. ,						atterns (B10)			
X Saturation (Water Mark		_	Marl Deposits		41)					Lines (B16)	72)		
	Deposits (B2)	-	Hydrogen Sul X Oxidized Rhiz			s (C3)			Crayfish B	Water Table (Carrows (C8)	-4)		
Drift Depos	-	_	Presence of R			3 (C3)				Visible on Aeria	l Imagery (C9)	
	or Crust (B4)	_	Recent Iron R			(C6)				Stressed Plants (
Iron Depos		=	Thin Muck Su	urface (C7)						c Position (D2)			
Inundation	Visible on Ae	erial Imagery (B7)	Other						Shallow Ac				
									X FAC-Neutr Sphagnum				
Water Depths (i	inches):				Remarks:	HYDROLO	GV PARAN	ETER MET		WOSS (D8)			
	urface Water:					DROLL	. J. I MAN		-				
	Water Table:												
S	Saturated soil:	1											
Vegetation Paran	neter:												
	Dominant	Species	Stratum	IND	%		Non-Dor	ninant Specie	s	Stratum	IND	%	
	Poa triv		Herbaceous		30			ites australis	5	Herbaceous	FACW	15	
	Juncus e	ffusus	Herbaceous	OBL	20			gium vimineun	n	Herbaceous	FAC	10	
							Scirpi	is cyperinus		Herbaceous	OBL	5	
			•		-								
	% Dominant s	species FAC or wett	er: 100%	_				1	Prevalence Index:	1.8			
		OR STATUS ACCORDE		AL WETLAND					d using all species pre	sent.			
Rapid Test fo	or Hydrophyti				Remarks:	VEGETAT	ION PARAN	METER MET	·-				
		e Test >50%: X											
Problemat	ic Hydrophyti	ndex is ≤ 3.0 : X											
rioneman	ic rryuropiiyti	c regetation.	_										
Soil Parameter:					ı								
			Matrix				Redox Feat	tures					
Depth (inc	hes)	Color (M		%		r (Moist)	%	Type	Loc		Textur		
0-20		N 3/0)	80		YR 3/6	15	C	M	SA	NDY CLAY	Y LOAM	
					10	YR 3/6	5	С	PL				
					<u> </u>				1				
									_				
Hydric Soil Indi	icators												
Histosol (A		Coast	Prairie Redox (A	16)		Redov Dark	Surface (F6)		I.	dicators for Pr	oblematic H	lvdric So	ile
Histic Epip	,		Mucky Mineral		_	_	ark Surface (F	7)	17	idicators for 17	obiemane 11	yarıc 50	113
Black Histi			Gleyed Matrix (_	Redox Depr		.,		1cm Muck	(A9)		
	Sulfide (A4)		Redox (S5)		_	Marl (F10)	, ,			2cm Muck			
Stratified L			ed Matrix (S6)		_	Depleted Oc	chric (F11)			Reduced V	ertic (F18)		
Organic Bo			Surface (S7)			_ ~	nese Masses (F12)			Floodplain S		
	y Mineral (A7		alue Below Surfa			Umbric Surf					Bright Loa	•	(F20)
Muck Prese			Dark Surface (S9)			Delta Ochrid					Material (7		310)
1 cm Muck			y Mucky Mineral		_	Reduced Ve		e (E10)		Very Shall Other	ow Dark Su	пасе (Т	12)
	elow Dark Su Surface (A12	· —	y Gleyed Matrix eted Matrix (F3)	(1'2)	_	_	oodplain Soil Bright Loamy			Otner			
IIICK Dalk	Surace (A12	., <u>A</u> Deple	111BI11 (1'J)		_	_ inomatous	angin Doailly	50113 (1/20)					
Restrictive	Layer (If Obs	erved)			Remarks:	SOIL PAR	AMETER M	ET.					
	Type:												
De	epth (inches):				1								

Other

Stantec City		PRINCE WILLI	RGY VIRGINIA		•	ownship/Range: .RR or MLRA):			
	County.								
Invest	State:	VIRG			. Duologion (L	Site Latitude:			
HIVEST	igator(s):	B. YOUNG & I	M. MCGRAW			Site Longitude:	-77.278318°		
	Date:	4/1/2	020		Soil N	Iap Unit Name:	MARR VERY FINE SANDY LOA!		
umous of Findings.			LIDE AND	NODTHO	EELACD 2.				
nmary of Findings:	Vegetation is Present:			cumstances:	F FLAG D-3;	NWI Classifica	ation: N/A		
	ydric Soils are Present: X	1	Disturbed Parameters (se			Local R			
	d Hydrology is Present: X	1	Problematic Parameters (se			Landf			
Sampled Are	a is within a Wetland:	Atypi	cal Climate/Hydrology (se	e Remarks):		Slop	pe %: 2-4		
drology Parameter:									
	Primary Indi	cators:					Secondary Indicators: pil Cracks (B6)		
Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	Aquatic I Marl Dep Hydroger Oxidized	rained Leaves (B9) Fauna (B13) Posits (B15) In Sulfide Odor (C Rhizospheres on Of Reduced Iron	1) Living Roots (C3)			Drainage I Moss Trin Dry-Seaso Crayfish B	/egetated Concave Surface (B8) Patterns (B10) n Lines (B16) n Water Table (C2) Burrows (C8) Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent In	on Reduction in T	Filled Soils (C6)			Stunted or	Stressed Plants (D1)		
Iron Deposits (B5)	Thin Mu	ck Surface (C7)				X Geomorph	ic Position (D2)		
Inundation Visible on A	erial Imagery (B7)Other						quitard (D3)		
							ral Test (D5) Moss (D8)		
Water Depths (inches):			Remarks: HYDROLO	GY PARA!	METER MET.	Spriagnulli	(2000)		
Surface Water:									
Water Table:									
Saturated soil:	2		l						
getation Parameter:									
Dominant	t Species Strat	ım IND	%	Non-Do	minant Species		Stratum IND %		
Stellaria Lonicera j			15 10		um vineale ria petiolata		Herbaceous FACU 5 Herbaceous FACU 5		
% Dominant	species FAC or wetter: 509	ó			Pr	evalence Index:	: 3.5		
NOTE: SPECIES INDICAT	FOR STATUS ACCORDING TO 2016 NA	FIONAL WETLAND I	PLANT LIST		Calculated i	ısing all species pr	esent.		
Rapid Test for Hydrophyt			Remarks: VEGETAT	ION PARA	METER NOT N	ÆT.			
	te Test >50%:								
Problematic Hydrophyt	index is ≤ 3.0:								
Parameter:									
Denti (* 1	Matrix	A /	Cal arts	Redox Fea			70. 4		
Depth (inches) 0-5	Color (Moist) 10YR 4/3	% 80	Color (Moist) 10YR 4/6	% 20	Type C	Loc M	Texture SANDY CLAY LOAM		
5-20	10 TR 4/3 10 YR 5/1	90	101 R 4/6	10	C	M	SANDY CLAY LOAM SANDY CLAY LOAM		
Thirdian Court 12			<u>l</u>						
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4)	Coast Prairie Redo Sandy Mucky Mir Sandy Gleyed Ma Sandy Redox (S5)	eral (S1) rix (S4)	Redox Dark Depleted Da Redox Depr Marl (F10)	ırk Surface (l		1	Indicators for Problematic Hydric Soils lcm Muck (A9)2cm Muck (A10)		

Piedmont Floodplain Soils (F19) Anomalous Bright Loamy Soils (F20)

Remarks: SOIL PARAMETER MET.

Depleted Below Dark Surface (Al Loamy Gleyed Matrix (F2)

Thick Dark Surface (Al2)

X Depleted Matrix (F3)

Restrictive Layer (If Observed) Type: Depth (inches):

Sampling Point Number:	7	7
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	Project: POSSUM POINT S	UBSTATION - 230KV	SWITCH YARD LINE #207	8 REBUILD				
	pplicant:	DOMINION ENERGY VIRGINIA					<u> </u>	N/A
Stattlet City	/County: State:	PRINCE WILLI VIRG			_			LRR P 38.547603°
Invest	igator(s):	B. YOUNG &				Site Longitude		-77.278318°
	Date:	4/1/2			Soil M	Iap Unit Name	: MARR VI	ERY FINE SANDY LOAM
Summary of Findings:			WETLA	ND NEAR FL	AG C-30;			
	Vegetation is Present:			rcumstances:	X	NWI Classifica		N/A
	ydric Soils are Present: 2 Hydrology is Present: 2		Disturbed Parameters (se	_	_	Local R		CONCAVE DRAINAGEWAY
	Hydrology is Present: 2 a is within a Wetland: 2		Problematic Parameters (se sical Climate/Hydrology (se	_	_	Land: Slor	ne %:	1-2
Hydrology Parameter:		71	, , , , , , , , , , , , , , , , , , ,					
	Primary I	Indicators:					Secondary Indic	ators:
Surface Water (A1)	Wate	r Stained Leaves (B9)		,		oil Cracks (B6) Vegetated Concay	e Surface (B8)
X High Water Table (A2)		tic Fauna (B13)	,		•		Patterns (B10)	
Saturation (A3)	Marl	Deposits (B15)			•	Moss Trin	n Lines (B16)	
Water Marks (B1)	Hydro	ogen Sulfide Odor (C	21)			Dry-Seaso	on Water Table (C	22)
Sediment Deposits (B2)		zed Rhizospheres on	-		,		Burrows (C8)	
Drift Deposits (B3)		nce of Reduced Iron			,		Visible on Aeria	
Algal Mat or Crust (B4)		nt Iron Reduction in	Tilled Soils (C6)		,		Stressed Plants	(D1)
Iron Deposits (B5)		Muck Surface (C7)					aic Position (D2) equitard (D3)	
Inundation Visible on A	other				•	X FAC-Neut		
							Moss (D8)	
Water Depths (inches):			Remarks: HYDROLO	GY PARAMI	ETER MET.			
Surface Water:								
Water Table:	4							
Saturated soil:								
Vegetation Parameter:								
Dominant	Species St	ratum IND	%	Non-Dom	inant Species		Stratum	IND %
Phragmites	australis Her	baceous FACW	85		s effusus trivialis		Herbaceous Herbaceous	OBL 10 FACW 10
NOTE: SPECIES INDICAT Rapid Test for Hydrophyti Dominanc	c Vegetation: X e Test >50%: X	100% NATIONAL WETLAND		ION PARAM	Calculated ı	evalence Index all species pr		
Prevalence I Problematic Hydrophyti	ndex is < 3.0: X c Vegetation:							
Soil Parameter:			I	D 1 =				
Depth (inches)	Matrix Color (Moist)	%	Color (Moist)	Redox Featu		Loc		Texture
0-5	10YR 5/8	100	Color (Moist)	70	Type	Loc		LOAMY SAND
5-20	10YR 5/1	100						LTY CLAY LOAM
				+ +			1	
Hydric Soil Indicators:			1					
Histosol (A1)	Coast Prairie F	Redox (A16)	Redox Dark	Surface (F6)			Indicators for Pr	oblematic Hydric Soils
Histic Epipedon (A2)	Sandy Mucky			ark Surface (F7)			y
Black Histic (A3)	Sandy Gleyed		Redox Depr				1cm Muck	(A9)
Hydrogen Sulfide (A4)	Sandy Redox (Marl (F10)				2cm Muck	(A10)
Stratified Layers (A5)	Stripped Matri	x (S6)	Depleted Oc	chric (F11)			Reduced V	ertic (F18)
Organic Bodies (A6)	Dark Surface (S7)	Iron-Mangar	nese Masses (F	712)		Piedmont I	Floodplain Soils (F19)
5cm Mucky Mineral (A7	Polyvalue Belo	ow Surface (S8)	Umbric Surf	face (F13)			Anomalous	s Bright Loamy Soils (F20)
Muck Presence (A8)	Thin Dark Sur	face (S9)	Delta Ochric	c (F17)			Red Parent	Material (TF2)
1 cm Muck (A9)	Loamy Mucky		Reduced Ve					ow Dark Surface (TF12)
Depleted Below Dark Su				oodplain Soils			Other	
Thick Dark Surface (A12	 X Depleted Matr 	(Al_Loamy Gleyed Matrix (F2) Piedmont Floodplain Soil: X Depleted Matrix (F3) Anomalous Bright Loamy						

Remarks: SOIL PARAMETER MET.

Restrictive Layer (If Observed)

Type: Depth (inches):

PRINCE WILLIAM COUNTY VIRGINIA B. YOUNG & M. MCGRAW 4/1/2020 WETLAND NEAR FI							
VIRGINIA B. YOUNG & M. MCGRAW							
VIRGINIA B. YOUNG & M. MCGRAW							
PRINCE WILLIAM COUNTY							
DOMINION ENERGY VIRGINIA							
POINT SUBSTATION - 230KV SWITCH YARD LINE #2078 REBUILD							

Section/Township/Range:	N/A
Subregion (LRR or MLRA):	LRR P
Site Latitude:	38.547603°
Site Longitude:	-77.278318°
Soil Map Unit Name:	DUMFRIES SANDY LOAM

	Stalltet City/County:	PRI	NCE WILLI	AM COUNTY	5	Subregion (LRR or MLRA): LRR P				
9	State:		VIRG	INIA		Site Latitude:		38.54760)3°	
	Investigator(s):	В. У	YOUNG &	M. MCGRAW		Site Longitude:		-77.2783	18°	
	Date:		4/1/2	020		Soil Map Unit Name:	DUM	FRIES SAN	DY LOAM	
Summa	ry of Findings:			WETLAND I	NEAR FLA	G F-34;				
	Hydrophytic Vegetation is Pr	esent: X		Normal Circums	stances: X	NWI Classificati	on:	N/A		
	Hydric Soils are Pr	esent: X		Disturbed Parameters (see Re	emarks):	Local Rel	ief:	CONCA	VE	
	Wetland Hydrology is Pr	esent: X	Ī	Problematic Parameters (see Re	emarks):	Landfo	rm:	SLOPE	3	
	Sampled Area is within a Wet	land: X	Atyp	ical Climate/Hydrology (see Re	emarks):	Slope	%:	1-2		
Hydrolo	ogy Parameter:									
		Primary Indicato	rs:			Se	econdary Indic	ators:		
						Surface Soil	Cracks (B6)			
	Surface Water (A1)	Water Stained	l Leaves (B9)		Sparsely Vegetated Concave Surface (B8)				
	High Water Table (A2)	Aquatic Faun				Drainage Patterns (B10)				
	Saturation (A3)	Marl Deposits				Moss Trim Lines (B16)				
	Water Marks (B1)	Hydrogen Su				Dry-Season Water Table (C2)				
	Sediment Deposits (B2)			Living Roots (C3)		Crayfish Burrows (C8)				
	Drift Deposits (B3)	Presence of R		1 /		Saturation Visible on Aerial Imagery (C9)				
	Algal Mat or Crust (B4)			Filled Soils (C6)		Stunted or Stressed Plants (D1)				
	Iron Deposits (B5)	Thin Muck S	urface (C7)			X Geomorphic Position (D2)				
	Inundation Visible on Aerial Imagery (B7	Other				Shallow Aqu				
						X FAC-Neutra				
						Sphagnum N	Moss (D8)			
Wate	er Depths (inches):			Remarks: HYDROLOGY	PARAMET	TER MET.				
	Surface Water:									
	Water Table: 1									
	Saturated soil:									
Vegetat	tion Parameter:									
	Dominant Species	Stratum	IND	1 %	Non-Domin	ant Species	Stratum	IND	%	
	Phragmites australis	Herbaceous		35	Impatiens		Herbaceous	FACW	15	
				1 1 1						

Dominant Species	Stratum	IND	%	Non-Dominant Species	Stratum	IND	%
Phragmites australis	Herbaceous	FACW	35	Impatiens capensis	Herbaceous	FACW	15
Microstegium vimineum	Herbaceous	FAC	20	Athyrium filix-femina	Herbaceous	FAC	5
Lonicera japonica	Vine	FACU	3	Juncus effusus	Herbaceous	OBL	3
							•
% Dominant species FAC or wetter:	67%	•		Prevalence Index:	2.3		
NOTE: SPECIES INDICATOR STATUS ACCORDING TO	2016 NATIONAL	WETLAND P	LANT LIST	Calculated using all species prese	nt.		
Rapid Test for Hydrophytic Vegetation:	-		Remarks:	VEGETATION PARAMETER MET.			
Dominance Test >50%: X							

NOTE: SPECIES INDICATOR STATUS ACC	ORDING TO 2016 NATIONAL WETLAND PLANT LI	ST Calculated using all species present.
Rapid Test for Hydrophytic Vegetation:	Remar	ks: VEGETATION PARAMETER MET.
Dominance Test >50%:	X	
Prevalence Index is ≤ 3.0 :	X	
Problematic Hydrophytic Vegetation:		
·		

Soil Parameter:

Type: Depth (inches):

	Matrix			Redox Fea					
Depth (inches)	Color (Moist)	%	Color (Moist)	%	Type	Loc	Texture		
0-4	10YR 4/4	100					SILT LOAM		
4-20	4-20 10YR 5/1 80		10YR 5/8	20	C	M	SANDY LOAM		
Hydric Soil Indicators:		1							
Histosol (A1)	Coast Prairie Redo	x (A16)	Redox Dark	Surface (F6)			Indicators for Problematic Hydric Soils		
Histic Epipedon (A2)	Sandy Mucky Min	eral (S1)	Depleted Da	rk Surface (F					
Black Histic (A3)	Sandy Gleyed Mat	rix (S4)	Redox Depr	essions (F8)			1cm Muck (A9)		
Hydrogen Sulfide (A4)	Sandy Redox (S5)		Marl (F10)				2cm Muck (A10)		
Stratified Layers (A5)	Stripped Matrix (S	6)	Depleted Oc	hric (F11)			Reduced Vertic (F18)		
Organic Bodies (A6)	Dark Surface (S7)		Iron-Manga	nese Masses	(F12)		Piedmont Floodplain Soils (F19)		
5cm Mucky Mineral (A7)	Polyvalue Below S	urface (S8)	Umbric Sur	ace (F13)			Anomalous Bright Loamy Soils (F20)		
Muck Presence (A8)	Thin Dark Surface	(S9)	Delta Ochri	(F17)			Red Parent Material (TF2)		
1 cm Muck (A9)	Loamy Mucky Mir	neral (F1)	Reduced Ve	rtic (F18)			Very Shallow Dark Surface (TF12)		
Depleted Below Dark Surface	Depleted Below Dark Surface (A1 Loamy Gleyed Matrix (F2)		Piedmont F	oodplain Soi		Other			
Thick Dark Surface (A12)	X Depleted Matrix (F		Anomalous	Bright Loam	y Soils (F20)				
				- '					
Restrictive Layer (If Observed	1)		Remarks: SOIL PAR	AMETER M	IET.		_		

Č	
Sampling Point Number:	9

			V SWITCH YA		<u></u>			
O Chamber	Applicant:	DOMINION EN	ERGY VIRO	JINIA	Section/Town	ship/Range:	N/A	
Stantec Cit	y/County:	PRINCE WILL	JAM COUN	TY	Subregion (LRR	or MLRA):	LRR P	
_	State:	VIRO	GINIA		_ S	ite Latitude:	and the second s	
Inves	tigator(s):	B. YOUNG &	M. MCGRA	<u>W</u>	_	Longitude:	-77.278318°	
	Date:	4/1/	2020		Soil Map	Unit Name: DI	JMFRIES SANDY LOAM	
Commons of Findings				UDI AND IN CULAT E N	EAD EL AC E 02.			
Summary of Findings:	c Vegetation is Present:			UPLAND IN SWALE N	•	I Classification:	N/A	
	Iydric Soils are Present:	 	Dieturhod	Normal Circumstances Parameters (see Remarks		Local Relief:	CONCAVE	
	d Hydrology is Present:	X		Parameters (see Remarks		Landform:	DRAINAGEWAY	_
	ea is within a Wetland:			Hydrology (see Remarks)		Slope %:	2-4	
Hydrology Parameter:	a is within a vectaria.	ruy	picar Cimiate	rrydrology (see Remarks)	<i>)</i> .	Бюре ж.	2 7	
liyarology rarameter:	Prima	ary Indicators:				Secondary In	dicators:	
	270000	19 11410410151				Surface Soil Cracks (B6		
Surface Water (A1)	Surface Water (A1) Water Stained Leaves (B9					Sparsely Vegetated Cor		
High Water Table (A2)						Drainage Patterns (B10)	
X Saturation (A3)	N	Iarl Deposits (B15)				Moss Trim Lines (B16)		
Water Marks (B1)		ydrogen Sulfide Odor (Dry-Season Water Tabl	e (C2)	
Sediment Deposits (B2)	0	xidized Rhizospheres o	n Living Root	s (C3)		Crayfish Burrows (C8)		
Drift Deposits (B3)		resence of Reduced Iror				Saturation Visible on A		
Algal Mat or Crust (B4)		ecent Iron Reduction in	Tilled Soils	(C6)		Stunted or Stressed Plan		
Iron Deposits (B5)		hin Muck Surface (C7)			<u>X</u>	Geomorphic Position (I	02)	
Inundation Visible on A	erial Imagery (B/)O	ther			-	Shallow Aquitard (D3)		
					<u> </u>	FAC-Neutral Test (D5) Sphagnum Moss (D8)		
Water Depths (inches):			Remarks:	HYDROLOGY PARA	METER MET	Spilagilulii Woss (D6)		
Surface Water	:		ixciiiai KS.	III DROLOGI I ARA	WIELL			
Water Table								
Saturated soil								
Vegetation Parameter:								
							_	
Dominan		Stratum IND	%		ominant Species	Stratum		
Liriodendro Nyssa s		Tree FACU Tree FAC	60 25	Pri	unus serotina	Tree	FACU 5	
Ilex o		Sapling FAC	20					
Liriodendro		Sapling FACU						
Vaccinium o		Shrub FACW Shrub FAC	25 15					
Ilex o		Shrub FAC Shrub UPL	15					
Cardamir		Herbaceous FACU	10					
Stellario	ı media	Herbaceous FACU	15					
Vitis roti	ındifolia	Vine FAC	10					
1								
% Dominant	species FAC or wetter	50%			Preva	ence Index: 3.5		
	species FAC or wetter:	50%) PLANT LIST			ence Index: 3.5	_	
NOTE: SPECIES INDICA	TOR STATUS ACCORDING TO			VEGETATION PARA	Calculated using	all species present.	<u> </u>	
NOTE: SPECIES INDICA Rapid Test for Hydrophy	tor status according to		PLANT LIST Remarks:	VEGETATION PARA	Calculated using	all species present.	_	
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan	tic Vegetation:ce Test >50%:			VEGETATION PARA	Calculated using	all species present.	_	
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence	TOR STATUS ACCORDING TO tic Vegetation: ce Test >50%: Index is ≤ 3.0 :			VEGETATION PARA	Calculated using	all species present.	_	
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan	TOR STATUS ACCORDING TO tic Vegetation: ce Test >50%: Index is ≤ 3.0 :			VEGETATION PARA	Calculated using	all species present.	_	
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence	TOR STATUS ACCORDING TO tic Vegetation: ce Test >50%: Index is ≤ 3.0 :			VEGETATION PARA	Calculated using	all species present.	_	
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy	TOR STATUS ACCORDING TO the Vegetation: ce Test >50%: Index is ≤ 3.0: the Vegetation:			VEGETATION PARA	Calculated using	all species present.		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches)	TOR STATUS ACCORDING TO the Vegetation: ce Test >50%: Index is \(\leq \) 3.0: the Vegetation: Ma Color (Moist)	2016 NATIONAL WETLAND trix %	Remarks:		Calculated using	all species present.	Texture	
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter:	TOR STATUS ACCORDING TO the Vegetation: ce Test >50%: Index is \(\le \) 3.0: the Vegetation:	2016 NATIONAL WETLAND	Remarks:	Redox Fe	Calculated using	all species present.	Texture LOAMY SAND	
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches)	TOR STATUS ACCORDING TO the Vegetation: ce Test >50%: Index is \(\leq \) 3.0: the Vegetation: Ma Color (Moist)	2016 NATIONAL WETLAND trix %	Remarks:	Redox Fe	Calculated using	all species present.		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches)	TOR STATUS ACCORDING TO the Vegetation: ce Test >50%: Index is \(\leq \) 3.0: the Vegetation: Ma Color (Moist)	2016 NATIONAL WETLAND trix %	Remarks:	Redox Fe	Calculated using	all species present.		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches)	TOR STATUS ACCORDING TO the Vegetation: ce Test >50%: Index is \(\leq \) 3.0: the Vegetation: Ma Color (Moist)	2016 NATIONAL WETLAND trix %	Remarks:	Redox Fe	Calculated using	all species present.		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-20	TOR STATUS ACCORDING TO the Vegetation: ce Test >50%: Index is \(\leq \) 3.0: the Vegetation: Ma Color (Moist)	2016 NATIONAL WETLAND trix %	Remarks:	Redox Fe	Calculated using	all species present.		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-20 Hydric Soil Indicators:	TOR STATUS ACCORDING TO the Vegetation: ce Test >50%: Index is \le 3.0: the Vegetation: Ma Color (Moist) 10YR 4/6	trix % 100	Remarks:	Redox F (Moist) %	Calculated using	Loc	LOAMY SAND	
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-20 Hydric Soil Indicators: Histosol (A1)	TOR STATUS ACCORDING TO the Vegetation: ce Test >50%: Index is \le 3.0: the Vegetation: Ma Color (Moist) 10YR 4/6 Coast Prain	trix % 100 100 ie Redox (A16)	Remarks:	Redox For (Moist) % Redox Dark Surface (F	Calculated using AMETER NOT MET attures Type 6)	Loc		
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2)	TOR STATUS ACCORDING TO the Vegetation: ce Test >50%: Index is < 3.0: the Vegetation: Ma Color (Moist) 10YR 4/6 Coast Prain Sandy Muc	trix % 100 ite Redox (A16) eky Mineral (S1)	Remarks:	Redox For (Moist) % Redox Dark Surface (For Depleted Dark Surface (For Dep	Calculated using AMETER NOT MET catures Type 60 (F7)	Loc Indicators for	LOAMY SAND Problematic Hydric Soils	
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3)	TOR STATUS ACCORDING TO the Vegetation: ce Test >50%: Index is \le 3.0: the Vegetation: Ma Color (Moist) 10YR 4/6	trix % 100 ie Redox (A16) ky Mineral (S1) yed Matrix (S4)	Remarks:	Redox For (Moist) % Redox Dark Surface (F Depleted Dark Surface Redox Depressions (F8	Calculated using AMETER NOT MET catures Type 60 (F7)	Loc Indicators for lcm M	LOAMY SAND Problematic Hydric Soils uck (A9)	
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4)	TOR STATUS ACCORDING TO tic Vegetation: ce Test >50%: Index is \le 3.0: tic Vegetation: Ma Color (Moist) 10YR 4/6	trix % 100 ie Redox (A16) :ky Mineral (S1) yed Matrix (S4) ox (S5)	Remarks:	Redox Fer (Moist) % Redox Dark Surface (F Depleted Dark Surface Redox Depressions (F8 Marl (F10)	Calculated using AMETER NOT MET catures Type 60 (F7)	Loc Indicators for lcm M2cm M	LOAMY SAND Problematic Hydric Soils ack (A9) ack (A10)	
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5)	TOR STATUS ACCORDING TO tic Vegetation: ce Test >50%: Index is \le 3.0: tic Vegetation: Ma Color (Moist) 10YR 4/6 Coast Prair Sandy Muc Sandy Gle Sandy Red Stripped M	trix % 100 ie Redox (A16) eky Mineral (S1) yed Matrix (S4) ox (S5) latrix (S6)	Remarks:	Redox Fr (Moist) % Redox Dark Surface (F Depleted Dark Surface Redox Depressions (F8 Marl (F10) Depleted Ochric (F11)	Calculated using AMETER NOT METAMETER NOT ME	Loc Indicators for lcm M 2cm M Reduce	Problematic Hydric Soils uck (A9) uck (A10) d Vertic (F18)	
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6)	TOR STATUS ACCORDING TO tic Vegetation: ce Test >50%: Index is \le 3.0: tic Vegetation: Ma Color (Moist) 10YR 4/6 Coast Prair Sandy Mu Sandy Gle Sandy Red Stripped M Dark Surfa	trix % 100 ie Redox (A16) cky Mineral (S1) yed Matrix (S4) ox (S5) latrix (S6) ce (S7)	Remarks:	Redox Fr (Moist) % Redox Dark Surface (F Depleted Dark Surface Redox Depressions (F8 Marl (F10) Depleted Ochric (F11) Iron-Manganese Masse	Calculated using AMETER NOT METAMETER NOT ME	Loc Indicators for lcm M 2cm M Reduce Piedmo	LOAMY SAND Problematic Hydric Soils ack (A9) ack (A10) d Vertic (F18) nt Floodplain Soils (F19)	200
Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) 5cm Mucky Mineral (A	TOR STATUS ACCORDING TO tic Vegetation: ce Test >50%: Index is \le 3.0: tic Vegetation: Ma Color (Moist) 10YR 4/6 Coast Prain Sandy Mue Sandy Glee Stripped M Dark Surfa Polyvalue 7) Polyvalue	trix % 100 ie Redox (A16) sky Mineral (S1) yed Matrix (S4) ox (S5) latrix (S6) ce (S7) Below Surface (S8)	Remarks:	Redox Fr (Moist) % Redox Dark Surface (F Depleted Dark Surface (Factor Depleted Ochric (F11) Iron-Manganese Masse Umbric Surface (F13)	Calculated using AMETER NOT METAMETER NOT ME	Loc	Problematic Hydric Soils uck (A9) uck (A10) d Vertic (F18) nt Floodplain Soils (F19) lous Bright Loamy Soils (F2)	20)
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) 5cm Mucky Mineral (A Muck Presence (A8)	TOR STATUS ACCORDING TO tic Vegetation: ce Test >50%: Index is \le 3.0: tic Vegetation: Ma Color (Moist) 10YR 4/6 Coast Prair Sandy Mu Sandy Gle Sandy Red Stripped M Dark Surfa Polyvalue Thin Dark	trix % 100 ie Redox (A16) :ky Mineral (S1) yed Matrix (S4) ox (S5) latarix (S6) ce (S7) Below Surface (S8) Surface (S9)	Remarks:	Redox For (Moist) % Redox Dark Surface (F Depleted Dark Surface Redox Depressions (F8 Marl (F10) Depleted Ochric (F11) Iron-Manganese Masse Umbric Surface (F13) Delta Ochric (F17)	Calculated using AMETER NOT METAMETER NOT ME	Loc Indicators for lcm M 2cm M Peduce Anoma Red Pa	Problematic Hydric Soils ack (A9) ack (A10) d Vertic (F18) nt Floodplain Soils (F19) tous Bright Loamy Soils (F2 rent Material (TF2)	
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) 5cm Mucky Mineral (A Muck Presence (A8) 1 cm Muck (A9)	TOR STATUS ACCORDING TO the Vegetation: ce Test >50%: Index is \(\leq \) 3.0: the Vegetation: Ma	trix % 100 ie Redox (A16) sky Mineral (S1) yed Matrix (S4) ox (S5) latrix (S6) ce (S7) Surface (S8) Surface (S9) cky Mineral (F1)	Remarks:	Redox For (Moist) % Redox Dark Surface (F Depleted Dark Surface Redox Depressions (F8 Marl (F10) Depleted Ochric (F11) Iron-Manganese Masse Umbric Surface (F13) Delta Ochric (F17) Reduced Vertic (F18)	Calculated using AMETER NOT METER NO	Loc Indicators for lcm M 2cm M Peduce Anoma Red Pa	Problematic Hydric Soils uck (A9) uck (A10) d Vertic (F18) nt Floodplain Soils (F19) lous Bright Loamy Soils (F2)	
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) 5cm Mucky Mineral (A Muck Presence (A8)	TOR STATUS ACCORDING TO the Vegetation: ce Test >50%: Index is \leq 3.0: the Vegetation: Ma Color (Moist) 10YR 4/6 Coast Prair Sandy Muc Sandy Gle Sandy Gle Sandy Red Stripped M Dark Surfa Polyvalue Thin Dark Loamy Mu urface (Al Loamy Gle	trix % 100 ie Redox (A16) :ky Mineral (S1) yed Matrix (S4) ox (S5) latrix (S6) ce (S7) Below Surface (S8) Surface (S9) cky Mineral (F1) tyed Matrix (F2)	Remarks:	Redox For (Moist) % Redox Dark Surface (F Depleted Dark Surface Redox Depressions (F8 Marl (F10) Depleted Ochric (F11) Iron-Manganese Masse Umbric Surface (F13) Delta Ochric (F17)	Calculated using AMETER NOT MET Patures Type (F7) (F7) (S) S (F12) Dills (F19)	Loc Indicators for 2cm M 2cm M Reduce Piedmo Anoma Red Pa Very Sl	Problematic Hydric Soils ack (A9) ack (A10) d Vertic (F18) nt Floodplain Soils (F19) tous Bright Loamy Soils (F2 rent Material (TF2)	
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) 5cm Mucky Mineral (A Muck Presence (A8) 1 cm Muck (A9) Depleted Below Dark S	TOR STATUS ACCORDING TO the Vegetation: ce Test >50%: Index is \leq 3.0: the Vegetation: Ma Color (Moist) 10YR 4/6 Coast Prair Sandy Muc Sandy Gle Sandy Gle Sandy Red Stripped M Dark Surfa Polyvalue Thin Dark Loamy Mu urface (Al Loamy Gle	trix % 100 ie Redox (A16) :ky Mineral (S1) yed Matrix (S4) ox (S5) latrix (S6) ce (S7) Below Surface (S8) Surface (S9) cky Mineral (F1) tyed Matrix (F2)	Remarks:	Redox For (Moist) % Redox Dark Surface (F Depleted Dark Surface Redox Depressions (F8 Marl (F10) Depleted Ochric (F11) Iron-Manganese Masse Umbric Surface (F13) Delta Ochric (F17) Reduced Vertic (F18) Piedmont Floodplain Sc	Calculated using AMETER NOT MET Patures Type (F7) (F7) (S) S (F12) Dills (F19)	Loc Indicators for 2cm M 2cm M Reduce Piedmo Anoma Red Pa Very Sl	Problematic Hydric Soils ack (A9) ack (A10) d Vertic (F18) nt Floodplain Soils (F19) tous Bright Loamy Soils (F2 rent Material (TF2)	
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) 5cm Mucky Mineral (A Muck Presence (A8) 1 cm Muck (A9) Depleted Below Dark S	TOR STATUS ACCORDING TO tic Vegetation: ce Test >50%: Index is \leq 3.0: tic Vegetation: Ma Color (Moist) 10YR 4/6 Coast Prain Sandy Mu Sandy Glet Sandy Red Stripped M Dark Surfa Thin Dark Loamy Mu urface (A1 Loamy Glet 2) Depleted M	trix % 100 ie Redox (A16) :ky Mineral (S1) yed Matrix (S4) ox (S5) latrix (S6) ce (S7) Below Surface (S8) Surface (S9) cky Mineral (F1) tyed Matrix (F2)	Remarks:	Redox For (Moist) % Redox Dark Surface (F Depleted Dark Surface Redox Depressions (F8 Marl (F10) Depleted Ochric (F11) Iron-Manganese Masse Umbric Surface (F13) Delta Ochric (F17) Reduced Vertic (F18) Piedmont Floodplain Sc	Calculated using AMETER NOT METAMETER NOT ME	Loc Indicators for 2cm M 2cm M Reduce Piedmo Anoma Red Pa Very Sl	Problematic Hydric Soils ack (A9) ack (A10) d Vertic (F18) nt Floodplain Soils (F19) tous Bright Loamy Soils (F2 rent Material (TF2)	
NOTE: SPECIES INDICA Rapid Test for Hydrophy Dominan Prevalence Problematic Hydrophy Soil Parameter: Depth (inches) 0-20 Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) 5cm Mucky Mineral (A Muck Presence (A8) 1 cm Muck (A9) Depleted Below Dark S Thick Dark Surface (A1	TOR STATUS ACCORDING TO tic Vegetation: ce Test >50%: Index is \leq 3.0: tic Vegetation: Ma Color (Moist) 10YR 4/6 Coast Prain Sandy Mue Sandy Gle Sandy Red Stripped M Dark Surfa Thin Dark Loamy Mu urface (Al Loamy Gle Served)	trix % 100 ie Redox (A16) :ky Mineral (S1) yed Matrix (S4) ox (S5) latrix (S6) ce (S7) Below Surface (S8) Surface (S9) cky Mineral (F1) tyed Matrix (F2)	Color	Redox Fer (Moist) % Redox Dark Surface (F Depleted Dark Surface Redox Depressions (F8 Marl (F10) Depleted Ochric (F11) Iron-Manganese Masse Umbric Surface (F13) Delta Ochric (F17) Reduced Vertic (F18) Piedmont Floodplain Sc Anomalous Bright Loan	Calculated using AMETER NOT METAMETER NOT ME	Loc Indicators for 2cm M 2cm M Reduce Piedmo Anoma Red Pa Very Sl	Problematic Hydric Soils ack (A9) ack (A10) d Vertic (F18) nt Floodplain Soils (F19) tous Bright Loamy Soils (F2 rent Material (TF2)	

U	
Sampling Point Number:	10

•	Project: POSSUM PO		ATION - 230KV MINION ENE			8 REBUILD	Section/T	'ownship/Range:		N/A		
	y/County:		INCE WILLI					LRR or MLRA):		LRR P	1	
•	State:		VIRG					Site Latitude:		38.54760	13°	
Inves	tigator(s):	В	YOUNG & I		RAW			Site Longitude:		-77.27831		
	Date:		4/1/2	020			Soil I	Map Unit Name:	DUM	FRIES SAN	DY LOA	M
Summary of Findings:				U	PLAND IN SWA							
	c Vegetation is Present:			Disturb		cumstances:		NWI Classificatio		N/A	VE	
	Iydric Soils are Present: d Hydrology is Present:		1		ed Parameters (se tic Parameters (se			Local Reli Landfor		CONCAV DRAINAGE		
	ea is within a Wetland:				ate/Hydrology (se			Slope		2-4	*****	
Hydrology Parameter:					7 - 27 (-							
•	Pri	mary Indica	tors:					Se	condary Indica	ators:		
								Surface Soil				
Surface Water (A1)		-	ed Leaves (B9))				_ · · ·	getated Concav	e Surface (E	38)	
High Water Table (A2) Saturation (A3)		Aquatic Fat Marl Depos						Drainage Pat Moss Trim L				
Water Marks (B1)		-	Sulfide Odor (C	3)					Water Table (C	72)		
Sediment Deposits (B2)			hizospheres on		oots (C3)			Crayfish Bur		/		
Drift Deposits (B3)		Presence of	Reduced Iron	(C4)				Saturation V	isible on Aeria	ıl Imagery (C	29)	
Algal Mat or Crust (B4)		-	Reduction in T	Filled Soi	ls (C6)				ressed Plants (
Iron Deposits (B5)	<u> </u>	-	Surface (C7)					X Geomorphic				
Inundation Visible on A	erial Imagery (B7)	Other						Shallow Aqu				
								FAC-Neutral Sphagnum M				
Water Depths (inches):				Remarks	: HYDROLO	GY PARAN	METER NOT I					
Surface Water	·			1								
Water Table				1								
Saturated soil	:											
Vegetation Parameter:												
Dominan	t Species	Stratun	ı IND	%		Non-Do	minant Species		Stratum	IND	%	
Liriodendro		Tree	FACU	15		Polystichu	m acrostichoide	?s	Herbaceous	FACU	5	
Cercis ca Carpinus c		Sapling Sapling		15 10							ı	
Lindera		Shrub	FACW	40							ı	
Stellaria		Herbaceo		20							ı	
Cardamin Wisteria f		Herbaceo Vine	us FACU UPL	15 10							ı	
Toxicodendr		Vine	FAC	5							ı	
Vitis roti	ındifolia	Vine	FAC	5							ı	
											ı	
											ı	
											ı	
											ı	
											ı	
											ı	
											ı	
											ı	
			•					•		•		
	species FAC or wetter:	44%					Pi	revalence Index:	3.5	-		
	TOR STATUS ACCORDING	TO 2016 NATIO	ONAL WETLAND I					using all species prese	nt.			
Rapid Test for Hydrophy	tic Vegetation: ce Test >50%:	-		Remarks	s: VEGETAT	ION PARA	METER NOT !	мет.				
	Index is < 3.0:	-										
Problematic Hydrophy		•										
		•										
Soil Parameter:												
		Aatrix	Ξ,			Redox Fea		_				
Depth (inches)	Color (Mois	t)	<u>%</u>	Co	olor (Moist)	%	Type	Loc		Texture		
0-20	10YR 3/2		100	-				-		SANDY LC	JAM	
				+		+ -		+ +				
				1		1		 				
				1				†				
Hydric Soil Indicators:	•											
Histosol (A1)	Coast Pr	airie Redox	(A16)		Redox Dark	Surface (F6))	Ina	licators for Pro	oblematic H	ydric Soil	ls
Histic Epipedon (A2)		lucky Miner			Depleted Da		F7)					
Black Histic (A3) Sandy Gleyed Matrix (S4)				Redox Depre	essions (F8)		_	1cm Muck				
Hydrogen Sulfide (A4)		edox (S5)			Marl (F10)	L.: - (E11)		-	2cm Muck			
Stratified Layers (A5)		Matrix (S6)			Depleted Oc		(E13)		Reduced V		-:1- (E10)	
Organic Bodies (A6) 5cm Mucky Mineral (A		face (S7) e Below Sur	face (SS)	•	Iron-Mangar Umbric Surf		(1.17)	-		Floodplain Se s Bright Loai		
Muck Presence (A8)		rk Surface (S		•	Delta Ochric			_		s Bright Loai t Material (T	-	(1.70)
1 cm Muck (A9)		Aucky Mine		•	Reduced Ve			-	_	ow Dark Sur		12)
Depleted Below Dark S		Gleyed Matri			Piedmont Fl		ls (F19)	_	Other		(,
Thick Dark Surface (A1		Matrix (F3			Anomalous	-		-				
Partiristina I (ICO)	comed)			D1	. COII BAR	METER	ОТ МЕТ					
Restrictive Layer (If Ob Type				Remarks	S: SOIL PARA	ANIETEK N	OI MET.					
Depth (inches)												

	Project: POSSUM PO					8 REBUILD				27/4	
	Applicant:			RGY VIRO AM COUN				ownship/Range: LRR or MLRA):		N/A LRR P	
G Starritor Ch	State:	Trance	VIRGI				. Buolegion (Site Latitude:		38.547603°	
Inves	tigator(s):	B. YO		M. MCGRA	ΑW		•	Site Longitude:		-77.278318°	
	Date:		4/1/20	020			Soil l	Map Unit Name:	DUM	IFRIES SANDY	LOAM
Summary of Findings:					UDI AND IN C	NATE AND	ADELAC II 1	0-			
	c Vegetation is Present:	X			Normal Circ		AR FLAG H-1 X	NWI Classificat	ion:	N/A	
, , ,	Iydric Soils are Present:			Disturbed 1	Parameters (se			Local Re		CONCAVE	
Wetlan	d Hydrology is Present:	X	F	Problematic	Parameters (se	e Remarks):		Landfo	orm:	DRAINAGEWA	ΑY
	ea is within a Wetland:		Atypi	cal Climate/	Hydrology (see	e Remarks):		Slope	%:	1-2	
Hydrology Parameter:											
	Pru	mary Indicators:							econdary India l Cracks (B6)	cators:	
Surface Water (A1)		Water Stained Le	aves (B9)							ve Surface (B8)	
High Water Table (A2)	<u> </u>	Aquatic Fauna (E							atterns (B10)		
X Saturation (A3)	_	Marl Deposits (B							Lines (B16)		
Water Marks (B1)		Hydrogen Sulfide			(02)				Water Table (C2)	
Sediment Deposits (B2) Drift Deposits (B3)		Oxidized Rhizosp Presence of Redu		-	is (C3)			Crayfish Bu		al Imagery (C9)	
Algal Mat or Crust (B4)		Recent Iron Redu			(C6)				Stressed Plants		
Iron Deposits (B5)		Thin Muck Surfa			()			X Geomorphi			
Inundation Visible on A	erial Imagery (B7)	Other						Shallow Aq	uitard (D3)		
								FAC-Neutra			
Water Depths (inches):				Remarks:	HVDDOLO	CVDADA	METER MET.	Sphagnum 1	Moss (D8)		
Surface Water				Kemarks.	IIIDKOLO	GIIAKA	VIETEK MET.				
Water Table											
Saturated soil	: 5										
Vegetation Parameter:											
Dominar	t Species	Stratum	IND	%		Non-Do	minant Species	. 1	Stratum	IND 9	%
Acer r	ubrum	Tree	FAC	25		Prur	us serotina		Tree	FACU	5
Acer r Ouercus		Sapling Shrub	FAC UPL	10 5		Pyru	s calleryana		Shrub	UPL	3
Acer r		Shrub	FAC	5							
Aralia		Herbaceous	FAC	10							
Potentille Panicum dicl		Herbaceous Herbaceous	FACU FACW	5 5							
Lonicera		Vine	FACU	5							
		ļļ.		——				ļ			
% Dominant	species FAC or wetter:	63%					P	revalence Index:	3.3		
NOTE: SPECIES INDICA	TOR STATUS ACCORDING	TO 2016 NATIONAL V	VETLAND P	LANT LIST			Calculated	using all species pre	sent.	-	
Rapid Test for Hydrophy		_		Remarks:	VEGETATI	ION PARA	METER MET.				
	ce Test >50%: X	_									
	Index is ≤ 3.0:	-									
Problematic Hydrophy	tic Vegetation:	-									
Soil Parameter:											
	N	Matrix				Redox Fea	tures				
Depth (inches)	Color (Mois	it)	%	Color	r (Moist)	%	Type	Loc		Texture	
0-20	10YR 4/6		100			1				LOAMY SANI	ס
Hydric Soil Indicators:	•	•					•				
Histosol (A1)	Coast Pr	airie Redox (A16))		Redox Dark	Surface (F6))	In	dicators for P	roblematic Hydri	ic Soils
Histic Epipedon (A2)		Iucky Mineral (S1			Depleted Da		F7)				
Black Histic (A3)		leyed Matrix (S4)			Redox Depre	essions (F8)		-	1cm Mucl		
Hydrogen Sulfide (A4)		edox (S5)			Marl (F10) Depleted Oct	hric (E11)		-	2cm Mucl	(A10) Vertic (F18)	
Stratified Layers (A5) Stripped Matrix (S6) Organic Bodies (A6) Dark Surface (S7)					Iron-Mangan		(F12)	-		Floodplain Soils	(F19)
5cm Mucky Mineral (A		e Below Surface	(S8)	_	Umbric Surfa		,	-		is Bright Loamy	
Muck Presence (A8)	Thin Da	rk Surface (S9)		_	Delta Ochric	(F17)			Red Paren	nt Material (TF2))
1 cm Muck (A9)		Mucky Mineral (F		_	Reduced Ver					low Dark Surfac	e (TF12)
Depleted Below Dark S	· — ·	Gleyed Matrix (F2)	_	Piedmont Flo			-	Other		
Thick Dark Surface (A1	2) Depleted	l Matrix (F3)			Anomalous I	Bright Loam	y Soils (F20)				
Restrictive Layer (If Ob	served)			Remarks:	SOIL PARA	AMETER N	OT MET.				
Type				- comunes.	SOLLIAMA						
Depth (inches)				I							

APPENDIX C REPRESENTATIVE PHOTOS



Photograph 1: Upland swale in northern portion of project area.



Photograph 2: Upland swale in northern portion of project area, looking downstream towards ephemeral stream channel.





Photograph 3: Intermittent stream channel in northern portion of project area, looking downstream.



Photograph 4: Ephemeral stream channel in northern portion of site, looking upstream.





Photograph 5: PEM wetland within central portion of project area.



Photograph 6: Uplands within central portion of project area.





Photograph 7: Open water feature and adjacent wetlands in central portion of project area.



Photograph 8: Uplands within overhead transmission line right-of-way in central portion of project area.





Photograph 9: PEM wetlands in southern portion of project area.



Photograph 10: Open water feature and adjacent wetlands in southern portion of project area.



Photos taken by: B. Young Stantec Consulting Services Inc. April 1, 2020 Project #203401383

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: 01-SEP-2020

B. NAME AND ADDRESS OF PERSON REQUESTING PJD:

Allen, Mark Dominion Energy Virginia 10900 Nuckols Road, 4th Floor Glen Allen, VA 23060

Young, Brendan Stantec 150 Riverside Parkway, Suite 301 Fredericksburg, VA 22406

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

NAO, Dominion Energy Possum Point, NAO-2020-01315-RDB

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:
(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: VA County/parish/borough: Prince William County City:

Center coordinates of site (lat/long in degree decimal format):

Lat.: 38.547524° Long.: -77.278585° Universal Transverse Mercator: 18
Name of nearest waterbody: Quantico Creek

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

\times	Office	(Desk)	Determination.	Date:	9/1/2020

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)
streams	38.547524	-77.278585	1622 feet	Non-wetland waters	Section 404
wetlands	38.547524	-77.278585	2.69 acres	Wetland	Section 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

¹ Districts may establish timeframes for requester to return signed PJD forms. If the requester 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.

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

- 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:

X_	Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
	Map: _Dominion Energy Virginia, Possum Point Second Transformer and New 230kv Tie
	Line #2216
	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:
_X	U.S. Geological Survey Hydrologic Atlas: _2070011
	USGS NHD data.
	USGS 8 and 12 digit HUC maps.

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Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

XU.S. Geological Survey map(s). Cite scale & quad name:Quantico			
GENA _03608 Signature	SON.RE Digitally signed by BRONSON.REGENA.D.10 .D.10940 94003608 Date: 2020.09.01 15:19:14-04'00' e and date of Regulatory staff completing PJD	Signature and date of person rec PJD (REQUIRED, unless obtain signature is impracticable) ¹	

¹ Districts may establish timeframes for requester to return signed PJD forms. If the requester 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.



February 3, 2023

Christopher Shorter County Executive Prince William County 1 County Complex Court Prince William, VA 22192

RE: Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230 kV Tie Line #2216– Prince William County, Virginia
Notice Pursuant to Va. Code § 15.2-2202E

Dear Mr. Shorter,

Dominion Energy Virginia (the "Company") is proposing substation and related electric transmission line work at the Possum Point Power Station in Prince William County, Virginia, which will be performed entirely on Companyowned property or existing right-of-way crossing a railroad owned by CSX Transportation, Inc. (the "Project"). The Project is necessary to maintain the reliability of the Company's electric transmission system in compliance with mandatory North American Electric Reliability Corporation ("NERC") Reliability Standards.

Specifically, the Project will involve the following components: (i) install a second 500-230 kV transformer bank at the Possum Point 500 kV Substation and perform associated bus work; (ii) rebuild approximately 0.8 miles of existing 230 kV transmission Line #2078 within the existing transmission corridor between the Company's existing Possum Point 500 kV and 230 kV Substations on Company-owned property; (iii) install approximately 0.95 miles of a new 230 kV transmission line, Line #2216, between the Company's existing Possum Point 500 kV and 230 kV Substations along the majority of the Line #2078 corridor and primarily collocated with the Line #2078 structures, with three new structures on Company-owned property in a new approximately 0.29-mile corridor adjacent to the existing Possum Point 500 kV Substation; (iv) install a circuit breaker and line terminal equipment at the Possum Point 230 kV Substation; and (v) install two new structures to raise Lines #215/#2001 and Lines #237/#2022 to provide clearance for Line #2078 and Line #2216.

The Company is in the process of preparing an application for a certificate of public convenience and necessity ("CPCN") from the State Corporation Commission of Virginia (the "Commission"). Pursuant to Va. Code § 15.2-2202, the Company is writing to notify you of the specific plans for the proposed Project in advance of the Commission filing. In advance of filing an application for a CPCN from the Commission, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Project within 30 days of the date of this letter. If you would like to receive a GIS shapefile of the transmission line routes to assist in the project review or if there are any questions, please do not hesitate to contact me at (804) 239-6450 or charles.h.weil@dominionenergy.com.

We appreciate your assistance with this project review and look forward to any additional information you may have to offer.

Regards,

Dominion Energy Virginia

Charles H. Weil, PE

Engineer III, Siting and Permitting

Enc: Project Overview Map



February 3, 2023

Ms. Patrice Sadler Historic Virginia Land Conservancy 5000 New Point Road Suite 2202 Williamsburg, Virginia 23188

BY EMAIL

RE: Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230 kV Tie Line #2216– Prince William County, Virginia

Dear Ms.Sadler,

Dominion Energy Virginia (the "Company") is proposing substation and related electric transmission line work at the Possum Point Power Station in Prince William County, Virginia, which will be performed entirely on Company-owned property or existing right-of-way crossing a railroad owned by CSX Transportation, Inc. (the "Project"). The Project is necessary to maintain the reliability of the Company's electric transmission system in compliance with mandatory North American Electric Reliability Corporation ("NERC") Reliability Standards.

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Dominion Energy Line 574 Elmont – Ladysmith 500 kV Transmission Line Rebuild January 23, 2023

We appreciate your assistance with this project review and look forward to any additional information you may have to offer.

Regards,

Dominion Energy Virginia

Charles H. Weil, PE

Engineer III

Siting and Permitting Group

Attachments: Project Overview Map



February 3, 2023

Roger Kirchen Virginia Department of Historic Resources Review and Compliance Division 2801 Kensington Ave. Richmond, VA 23221

BY EMAIL

RE: Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230 kV Tie Line #2216– Prince William County, Virginia

Dear Mr. Kirchen,

Dominion Energy Virginia (the "Company") is proposing substation and related electric transmission line work at the Possum Point Power Station in Prince William County, Virginia, which will be performed entirely on Company-owned property or existing right-of-way crossing a railroad owned by CSX Transportation, Inc. (the "Project"). The Project is necessary to maintain the reliability of the Company's electric transmission system in compliance with mandatory North American Electric Reliability Corporation ("NERC") Reliability Standards.

Specifically, the Project will involve the following components: (i) install a second 500-230 kV transformer bank at the Possum Point 500 kV Substation and perform associated bus work; (ii) rebuild approximately 0.8 miles of existing 230 kV transmission Line #2078 within the existing transmission corridor between the Company's existing Possum Point 500 kV and 230 kV Substations on Company-owned property; (iii) install approximately 0.95 miles of a new 230 kV transmission line, Line #2216, between the Company's existing Possum Point 500 kV and 230 kV Substations along the majority of the Line #2078 corridor and primarily collocated with the Line #2078 structures, with three new structures on Company-owned property in a new approximately 0.29-mile corridor adjacent to the existing Possum Point 500 kV Substation; (iv) install a circuit breaker and line terminal equipment at the Possum Point 230 kV Substation; and (v) install two new structures to raise Lines #215/#2001 and Lines #237/#2022 to provide clearance for Line #2078 and Line #2216.

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Dominion Energy Line 574 Elmont – Ladysmith 500 kV Transmission Line Rebuild January 23, 2023

We appreciate your assistance with this project review and look forward to any additional information you may have to offer.

Regards,

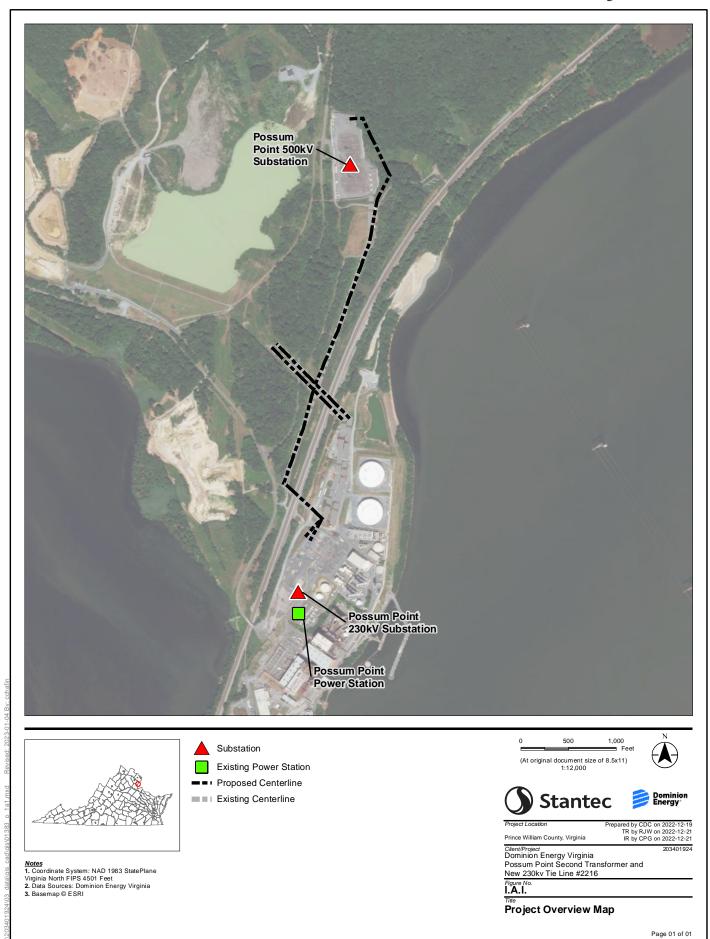
Dominion Energy Virginia

Charles H. Weil, PE

Engineer III

Siting and Permitting Group

Attachments: Project Overview Map





February 3, 2023

Scott Denny Virginia Department of Aviation Airport Services Division 5702 Gulfstream Road Richmond, VA 23250

BY EMAIL

RE: Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230 kV Tie Line #2216– Prince William County, Virginia

Dear Mr. Denny,

Dominion Energy Virginia (the "Company") is proposing substation and related electric transmission line work at the Possum Point Power Station in Prince William County, Virginia, which will be performed entirely on Company-owned property or existing right-of-way crossing a railroad owned by CSX Transportation, Inc. (the "Project"). The Project is necessary to maintain the reliability of the Company's electric transmission system in compliance with mandatory North American Electric Reliability Corporation ("NERC") Reliability Standards.

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Dominion Energy Line 574 Elmont – Ladysmith 500 kV Transmission Line Rebuild January 23, 2023

We appreciate your assistance with this project review and look forward to any additional information you may have to offer.

Regards,

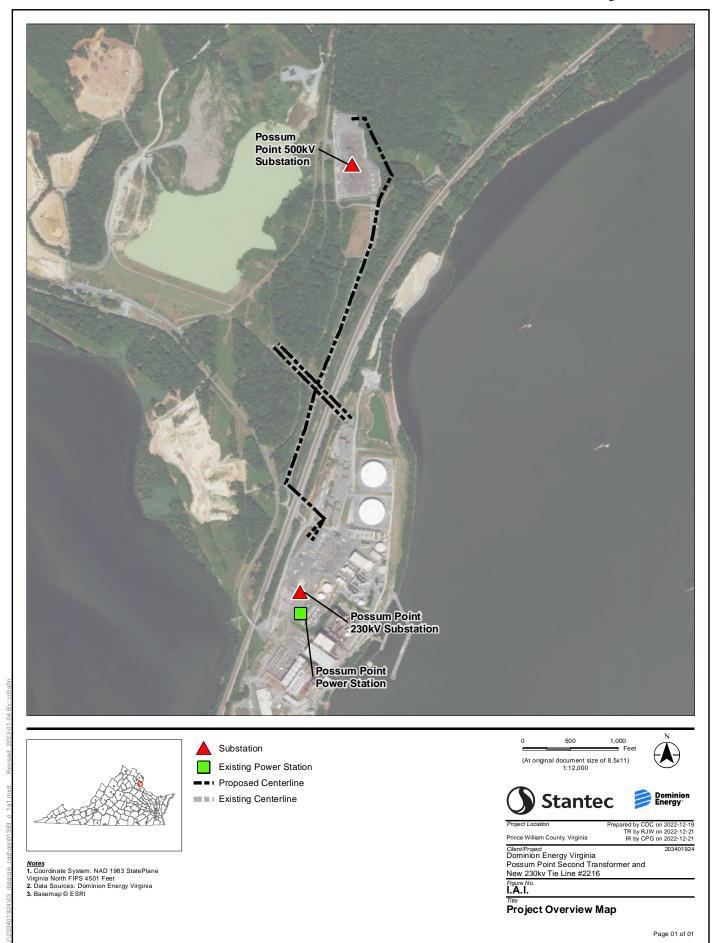
Dominion Energy Virginia

Charles H. Weil, PE

Engineer III

Siting and Permitting Group

Attachments: Project Overview Map





February 3, 2023

Mr. John Lynch, PE District Engineer Virginia Department of Transportation Northern Virginia Residency 4975 Alliance Drive Fairfax, VA 22030

BY EMAIL

RE: Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230 kV Tie Line #2216– Prince William County, Virginia

Dear Mr. Lynch,

Dominion Energy Virginia (the "Company") is proposing substation and related electric transmission line work at the Possum Point Power Station in Prince William County, Virginia, which will be performed entirely on Company-owned property or existing right-of-way crossing a railroad owned by CSX Transportation, Inc. (the "Project"). The Project is necessary to maintain the reliability of the Company's electric transmission system in compliance with mandatory North American Electric Reliability Corporation ("NERC") Reliability Standards.

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Dominion Energy Line 574 Elmont – Ladysmith 500 kV Transmission Line Rebuild January 23, 2023

We appreciate your assistance with this project review and look forward to any additional information you may have to offer.

Regards,

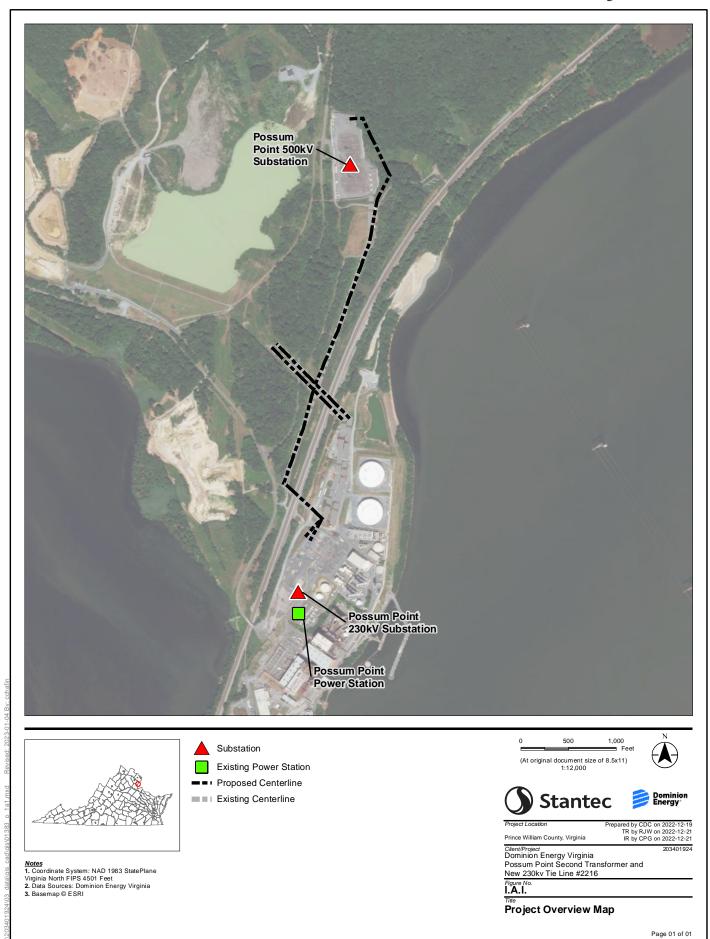
Dominion Energy Virginia

Charles H. Weil, PE

Engineer III

Siting and Permitting Group

Attachments: Project Overview Map



Dominion Energy Services, Inc. 120 Tredegar Street Richmond, Virginia 231219 DominionEnergy.com



February 3, 2023

Ms. Martha Little Virginia Outdoors Foundation 600 East Main Street Suite 402 Richmond, VA 23219

BY EMAIL

RE: Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230 kV Tie Line #2216– Prince William County, Virginia

Dear Ms. Little,

Dominion Energy Virginia (the "Company") is proposing substation and related electric transmission line work at the Possum Point Power Station in Prince William County, Virginia, which will be performed entirely on Company-owned property or existing right-of-way crossing a railroad owned by CSX Transportation, Inc. (the "Project"). The Project is necessary to maintain the reliability of the Company's electric transmission system in compliance with mandatory North American Electric Reliability Corporation ("NERC") Reliability Standards.

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Dominion Energy Line 574 Elmont – Ladysmith 500 kV Transmission Line Rebuild January 23, 2023

We appreciate your assistance with this project review and look forward to any additional information you may have to offer.

Regards,

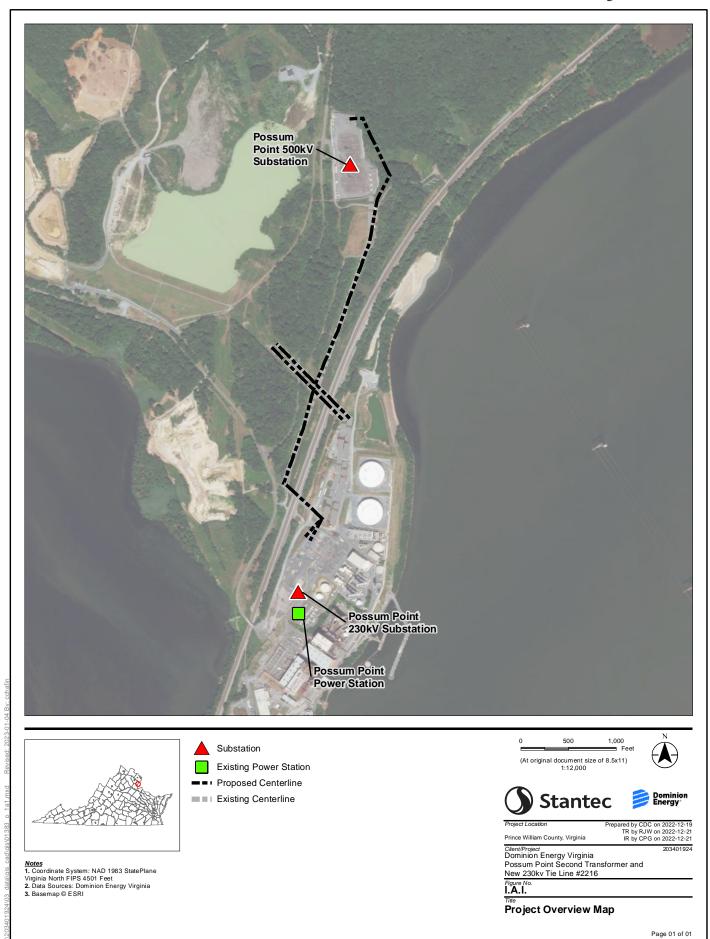
Dominion Energy Virginia

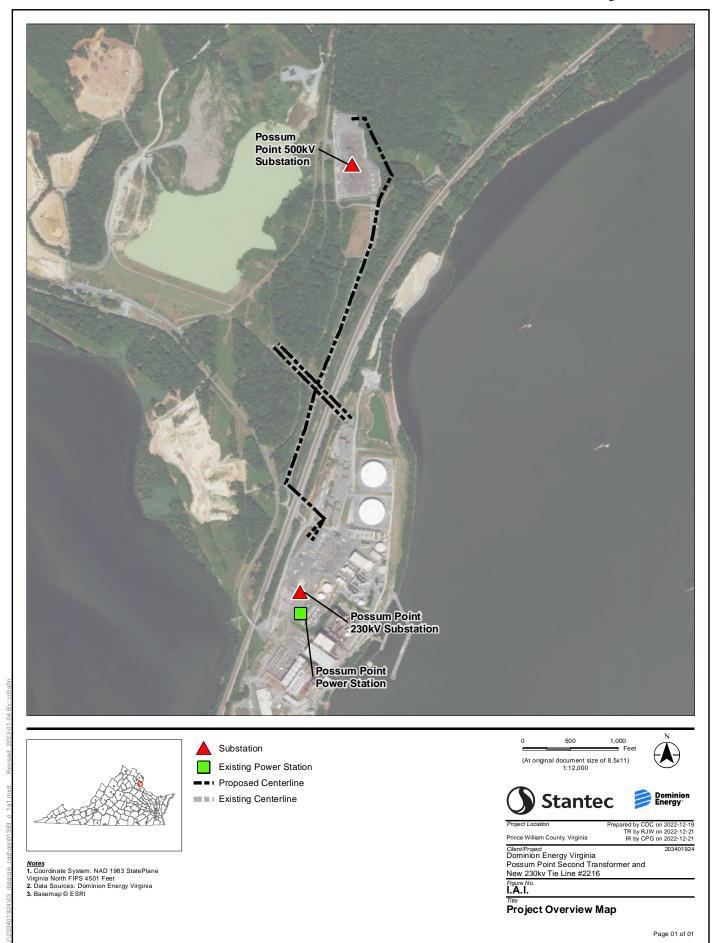
Charles H. Weil, PE

Engineer III

Siting and Permitting Group

Attachments: Project Overview Map





From: Fulcher, Valerie (DEQ)

dgif-ESS Projects (DWR); Tignor, Keith (VDACS); rr DCR-PRR Environmental Review To:

(envreview@dcr.virginia.gov); odwreview (VDH); Gavan, Larry (DEQ); Martinez, Carlos (DEQ); Ballou, Thomas (DEQ); Mackey, Heather (DEQ); Miller, Mark (DEQ); Kirchen, Roger (DHR); MRC - Scoping (MRC); Didier, Karl (Virginia); Folks, Clint (DOF); rr EIR Coordination (eir.coordination@vdot.virginia.gov); ImpactReview

(impactreview@vof.org); Lazaro, Robert (VDOT); jspatton@pwcgov.org (jspatton@pwcgov.org)

Cc: Stacey T Ellis (Services - 6)

Subject: [EXTERNAL] NEW SCOPING Proposed Possum Point 2nd Transformer

Date: Monday, February 6, 2023 1:21:05 PM

Attachments: possom point 2nd transformer scoping comments.pdf

Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230 kV Tie Line #2216 - Prince

William County VA.pdf

CAUTION! This message was NOT SENT from DOMINION ENERGY

Are you expecting this message to your DE email? Suspicious? Use PhishAlarm to report the message. Open a browser and type in the name of the trusted website instead of clicking on links. DO NOT click links or open attachments until you verify with the sender using a known-good phone number. Never provide your DE password.

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

Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230 kV Tie Line #2216- Prince William County, Virginia

If you choose to make comments, please send them directly to the project sponsor (Stacey.T.Ellis@DominionEnergy.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

NEW PHONE NUMBER: 804-659-1550 Email: Valerie.Fulcher@deq.virginia.gov

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

For program updates and public notices please subscribe to Constant

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



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

1111 E. Main Street, Suite 1400, Richmond, Virginia 23219 P.O. Box 1105, Richmond, Virginia 23218 (800) 592-5482 FAX (804) 698-4178 www.deq.virginia.gov

Travis A. Voyles Acting Secretary of Natural and Historic Resources Michael S. Rolband, PE, PWD, PWS Emeritus Director (804) 698-4020

February 6, 2023

Stacey Ellis Dominion Energy

Via email: <u>Stacey.T.Ellis@DominionEnergy.com</u>

RE: Possum Point 2nd Transformer and New 230 kV Tie Line #2216—Prince William County,

Virginia

Dear Ms. Ellis:

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

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 environmental impacts for electric power generating projects and power line projects in conjunction with the licensing process of the State Corporation Commission.

DOCUMENT SUBMISSIONS

In order to ensure an effective coordinated review of the environmental impact analysis may be sent directly to OEIR. We request that you submit one electronic to <a href="eigen-ei

ENVIRONMENTAL REVIEW UNDER VIRGINIA CODE 56-46.1

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 environmental impact analysis document. Accordingly, we have coordinated your request with the following state agencies and those localities and Planning District Commissions, including but not limited to:

Department of Environmental Quality:

- o DEO Regional Office
- Air Division

- o Office of Wetlands and Stream Protection
- o 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:

- o 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:

- o 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.

 $\frac{\text{http://portal.midatlanticocean.org/visualize/\#x=-}}{73.24\&y=38.93\&z=7\&logo=true\&controls=true\&basemap=Ocean\&tab=data\&legends=false\&layers=true}$

• DHR Data Sharing System.

Survey records in the DHR inventory:

o 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:

- o www.dcr.virginia.gov/natural_heritage/dbsearchtool.shtml
- Wetland Condition Assessment Tool (WetCAT)
 - o https://www.deq.virginia.gov/water/wetlands-streams/wetcat
- DWR Fish and Wildlife Information Service

Information about Virginia's Wildlife resources:

- o http://vafwis.org/fwis/
- Total Maximum Daily Loads Approved Reports
 - https://www.deq.virginia.gov/programs/water/waterqualityinformationtmdls/tmdl/tmdldevelopment/approvedtmdlreports.aspx
- Virginia Outdoors Foundation: Identify VOF-protected land
 - o http://vof.maps.arcgis.com/home/index.html
- 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:

- o www.epa.gov/superfund/sites/cursites/index.htm
- EPA RCRAInfo Search

Information on hazardous waste facilities:

- o www.epa.gov/enviro/facts/rcrainfo/search.html
- Total Maximum Daily Loads Approved Reports
 - https://www.deq.virginia.gov/programs/water/waterqualityinformationtmdls/tmdl/tmdlde velopment/approvedtmdlreports.aspx
- EPA Envirofacts Database

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

- o <u>www.epa.gov/enviro/index.html</u>
- EPA NEPAssist 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) 659-1915 or e-mail bettina.rayfield@deq.virginia.gov).

I hope this information is helpful to you.

Sincerely,

Bettina Rayfield, Program Manager Environmental Impact Review and

Long-Range Priorities

Dominion Energy Services, Inc. 120 Tredegar Street Richmond, Virginia 23219 DominionEnergy.com



February 3, 2023

BY EMAIL

RE: Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230 kV Tie Line #2216— Prince William County, Virginia

To Whom it May Concern,

Dominion Energy Virginia (the "Company") is proposing substation and related electric transmission line work at the Possum Point Power Station in Prince William County, Virginia, which will be performed entirely on Company-owned property or existing right-of-way crossing a railroad owned by CSX Transportation, Inc. (the "Project"). The Project is necessary to maintain the reliability of the Company's electric transmission system in compliance with mandatory North American Electric Reliability Corporation ("NERC") Reliability Standards.

Specifically, the Project will involve the following components: (i) install a second 500-230 kV transformer bank at the Possum Point 500 kV Substation and perform associated bus work; (ii) rebuild approximately 0.8 miles of existing 230 kV transmission Line #2078 within the existing transmission corridor between the Company's existing Possum Point 500 kV and 230 kV Substations on Company-owned property; (iii) install approximately 0.95 miles of a new 230 kV transmission line, Line #2216, between the Company's existing Possum Point 500 kV and 230 kV Substations along the majority of the Line #2078 corridor and primarily collocated with the Line #2078 structures, with three new structures on Company-owned property in a new approximately 0.29-mile corridor adjacent to the existing Possum Point 500 kV Substation; (iv) install a circuit breaker and line terminal equipment at the Possum Point 230 kV Substation; and (v) install two new structures to raise Lines #215/#2001 and Lines #237/#2022 to provide clearance for Line #2078 and Line #2216.

The Company is in the process of preparing an application for a certificate of public convenience and necessity ("CPCN") from the State Corporation Commission of Virginia (the "Commission"). In advance of filing an application for a CPCN from the Commission, the Company respectfully requests that you submit any comments or additional information that would have bearing on the proposed Project within 30 days of the date of this letter. If you would like to receive a GIS shapefile of the transmission line routes to assist in the project review or if there are any questions, please do not hesitate to contact Stacey Ellis at (434) 532-9034 or Stacey.T.Ellis@DominionEnergy.com.

We appreciate your assistance with this project review and look forward to any additional information you may have to offer.

Regards,

Elizabeth L. Hester

Authorized Representative

Manager, Environmental Services

Attachments: Project Overview Map

Page 01 of 01

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: 01-SEP-2020

B. NAME AND ADDRESS OF PERSON REQUESTING PJD:

Allen, Mark Dominion Energy Virginia 10900 Nuckols Road, 4th Floor Glen Allen, VA 23060

Young, Brendan Stantec 150 Riverside Parkway, Suite 301 Fredericksburg, VA 22406

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

NAO, Dominion Energy Possum Point, NAO-2020-01315-RDB

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION: (USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: VA County/parish/borough: Prince William County City:

Center coordinates of site (lat/long in degree decimal format):

Lat.: 38.547524° Long.: -77.278585° Universal Transverse Mercator: 18
Name of nearest waterbody: Quantico Creek

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

\times	Office	(Desk)	Deterr	minati	on.	Date:	9/1/20	20

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)
streams	38.547524	-77.278585	1622 feet	Non-wetland waters	Section 404
wetlands	38.547524	-77.278585	2.69 acres	Wetland	Section 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

¹ Districts may establish timeframes for requester to return signed PJD forms. If the requester 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.

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

- 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:

X_	Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
	Map: _Dominion Energy Virginia, Possum Point Second Transformer and New 230kv Tie
	Line #2216
	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:
_X	U.S. Geological Survey Hydrologic Atlas: _2070011
	USGS NHD data.
	USGS 8 and 12 digit HUC maps.

¹ Districts may establish timeframes for requester to return signed PJD forms. If the requester 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.

PJD (REQUIRED, unless obtaining the

signature is impracticable)¹

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

X_ National wetlands inventory map(s). Cite State/local wetland inventory map(s):	e Soil Survey. Citation: _Figure 4 in report e name:Figure3 in report
X_ FEMA/FIRM maps: _Figure 5 in report	
100-year Floodplain Elevation is: Photographs: Aerial (Name	. (National Geodetic Vertical Datum of 1929 e & Date):
or Other (Name	e & Date):
Previous determination(s). File no. and d	date of response letter:
Other information (please specify):	
IMPORTANT NOTE: The information recorded of the Corps and should not be relied upon for late	on this form has not necessarily been verified by er jurisdictional determinations.
BRONSON.RE Digitally signed by BRONSON.REGENA.D.10 GENA.D.10940 94003608 Date: 2020.09.01	Marl & Oller 09/03/2020
O3608 15:19:14-04'00' Signature and date of Regulatory staff	Signature and date of person requesting

member completing PJD

¹ Districts may establish timeframes for requester to return signed PJD forms. If the requester 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.

From: <u>Stacey.T.Ellis@dominionenergy.com</u>

To: Wilk, Becky

Cc: Charles.H.Weil@dominionenergy.com

Subject: Fwd: Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230 kV Tie Line - Project

Notification

Date: Wednesday, February 15, 2023 7:55:29 PM

Attachments: Possum Point WIC 082520.pdf

Thanks,

Stacey Ellis Environmental Specialist III Dominion Energy Environmental Services 434-532-9034

Sent from iPhone

From: Henicheck, Michelle (DEQ) < Michelle. Henicheck@deq.virginia.gov>

Sent: Wednesday, February 15, 2023 4:15:43 PM

To: Stacey T Ellis (Services - 6) <Stacey.T.Ellis@dominionenergy.com>

Subject: [EXTERNAL] Re: Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and

New 230 kV Tie Line - Project Notification

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Hi Stacey,

I realized I have already reviewed this project back in 2020. Attached is my comment letter which remains valid. Should the scope of the project change, then please resubmit for additional review.

Thanks,

Michelle

From: Stacey.T.Ellis@dominionenergy.com <Stacey.T.Ellis@dominionenergy.com>

Sent: Friday, February 3, 2023 9:03 AM

To: Henicheck, Michelle (DEQ) < Michelle. Henicheck@deq.virginia.gov>

Cc: Stacey.T.Ellis@dominionenergy.com <Stacey.T.Ellis@dominionenergy.com>

Subject: Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230 kV Tie

Line - Project Notification

Good Morning, Michelle –

Please see the attached project notification and associated project location map for the Dominion Energy Virginia Proposed Possum Point 2nd Transformer and New 230 kV Tie Line in Prince William County, Virginia. If you have any questions, please feel free to contact me directly.

Thank you,

Stacey T. Ellis

Environmental Specialist III Dominion Energy Environmental Services 120 Tredegar Street, Richmond, VA 23219 Cell: (434) 532-9034



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COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 1111 E. Main Street, Suite 1400, Richmond, Virginia 23219

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

www.deq.virginia.gov

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

David K. Paylor

Director

August 25, 2020

Matthew J. Strickler

Secretary of Natural Resources

Ms. Rachel Studebaker Dominion Energy Services 120 Tredegar Street, Richmond, VA 23219

RE: Wetland Impact Consultation; Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230 kV Tie Line #2216 Project – Prince William County, Virginia

Dear Ms. Studebaker:

In accordance with the Department of Environmental Quality-State Corporation Commission *Memorandum of Agreement Regarding Wetland Impact Consultation* (July 2003), we have reviewed the information submitted by Dominion Energy (here after, Dominion) regarding potential wetland impacts on the above referenced project. Dominion is proposing the Possum Point 2nd Transformer and New 230 kV Tie Line #2216 project located in Prince William County, Virginia entirely on company-owned land. The project would rebuild approximately 0.8 mile of existing 230 kV transmission line located within cleared and maintained transmission line right-of-way, install 0.95 mile of a new 230 kV transmission line between the existing Possum Point 500 kV and 230 kV Substations within a majority of existing cleared and maintained transmission line right-of-way, and install related project infrastructure at both the 230 kV and 500 kV substations. Approximately 0.12 mile of additional corridor will be required on company-owned land.

Summary of Findings

Stantec Consulting Services, Inc. delineated wetlands and other waters of the United States using the Routine Determination Method as outlined in the 1987 Corps of Engineers Wetland Delineation Manual and methods described in the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0). The wetland types and stream amounts are provided below in Table 1. The limits of wetlands of other waters of the United States will be submitted to the U.S. Army Corps of Engineers for confirmation.

Table 1.

PFO (Acres)	PSS (Acres)	PEM (Acres)	Open Waters (Acres)	Stream Channels (R3) Acres (LF)	Stream Channels (R4) Acres (LF)	Stream Channels (R6) Acres (LF)
0.44	0.07	1.51	0.67	0.03 (501)	0.03 (496)	0.07 (625)

According to Dominion, alternatives were not considered due to the fact that the project will take place within Dominion's existing right of way. New alternatives would have also required significant tree clearing. Dominion anticipates minimum permanent impacts to State waters associated with this project.

DEQ recommends structures should be sited to avoid wetlands to the extent practicable and should be sited outside of stream channels. Timbering debris should not be placed in wetlands or streams. DEQ further recommends wetland and stream avoidance and minimization efforts, where practical, during project construction by: (1) spanning wetlands and streams, (2) maintaining 100-foot buffers along either side of streams, (3) placing support structure foundations outside of wetlands and streambeds, and (4) using removable mats in wetland areas to reduce compaction and rutting.

The DEQ Northern Virginia Regional Office (NVRO) will make the final permitting decisions.

Recommendations and Potential Permits

DEQ offers the following recommendations:

- 1. Prior to commencing project work, all surface waters on the project site should be delineated by a qualified professional and verified by the U.S. Army Corps of Engineers (the Corps) for federal jurisdictional waters and by DEQ for state jurisdictional waters.
- 2. Wetland and stream impacts should be avoided and minimized to the maximum extent practicable.
- 3. If the scope of the project changes, additional review will be necessary by one or more offices in the Commonwealth's Secretariat of Natural Resources and/or the Corps.
- 4. At a minimum, any required compensation for impacts to State Waters, including the compensation for permanent conversion of forested wetlands to emergent wetlands, should be in accordance with all applicable state regulations and laws. Consider mitigating impacts to forested or converted wetlands by establishing new forested wetlands within the impacted watershed.
- 5. Any temporary impacts to surface waters associated with this project should be restored to preexisting conditions.
- 6. No activity may substantially disrupt the movement of aquatic life indigenous to the water body, including those species, which normally migrate through the area, unless the primary purpose of the activity is to impound water. Culverts placed in streams must be installed to maintain low flow conditions. No activity may cause more than minimal adverse effect on navigation. Furthermore the activity must not impede the passage of normal or expected high flows and the structure or discharge must withstand expected high flows.
- 7. Erosion and sedimentation controls should be designed in accordance with the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992. These controls should be placed prior to clearing

and grading and maintained in good working order to minimize impacts to state waters. These controls should remain in place until the area is stabilized and should then be removed. Any exposed slopes and streambanks should be stabilized immediately upon completion of work in each permitted area. All denuded areas should be properly stabilized in accordance with the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992.

- 8. No machinery may enter surface waters, unless authorized by a Virginia Water Protection (VWP) individual permit, general permit, or general permit coverage.
- 9. Heavy equipment in temporarily impacted surface waters should be placed on mats, geotextile fabric, or other suitable material, to minimize soil disturbance to the maximum extent practicable. Equipment and materials should be removed immediately upon completion of work.
- 10. Activities should be conducted in accordance with any Time-of-Year restriction(s) as recommended by the Department of Game and Inland Fisheries, the Department of Conservation and Recreation, or the Virginia Marine Resources Commission. The permittee should retain a copy of the agency correspondence concerning the Time-of-Year restriction(s), or the lack thereof, for the duration of the construction phase of the project.
- 11. All construction, construction access, and demolition activities associated with this project should be accomplished in a manner that minimizes construction materials or waste materials from entering surface waters, unless authorized by a Virginia Water Protection (VWP) individual permit, general permit, or general permit coverage. Wet, excess, or waste concrete should be prohibited from entering surface waters.
- 12. Herbicides used in or around any surface water should be approved for aquatic use by the United States Environmental Protection Agency (EPA) or the U.S. Fish & Wildlife Service. These herbicides should be applied according to label directions by a licensed herbicide applicator. A non-petroleum based surfactant should be used in or around any surface waters.

Permits:

Based on DEQ's review of the Possum Point information dated July 24th with additional information provided August 16th, the proposed project <u>may</u> require a Virginia Water Protection (VWP) individual permit or general permit coverage. The applicant may submit a Joint Permit Application (JPA) in accordance with form instructions for further evaluation and final permit need determination by DEQ.

Should you have any questions, please don't hesitate to contact me at 804-698-4007 or at michelle.henicheck@deq.virginia.gov.

Sincerely,

Midulle Henricuck

Michelle Henicheck, PWS Senior Wetland Ecologist Office of Wetlands & Stream Protection

Cc: Trisha Beasley, DEQ - NVRO
Bettina Sullivan, DEQ - Office of Environmental Review

Stacey T Ellis (Services - 6)

From: Elizabeth L Hester (Services - 6) **Sent:** Tuesday, February 7, 2023 8:14 AM

To: Stacey T Ellis (Services - 6)

Subject: Fwd: NAO-2010-00012-tca (Possum Point 500kV)

Tibby Hester Environmental Services

From: CENAO-REG_ROD < CENAO-.REG_ROD@usace.army.mil>

Sent: Monday, February 6, 2023 7:47:49 AM

To: Elizabeth L Hester (Services - 6) < Elizabeth.L.Hester@dominionenergy.com>

Subject: [EXTERNAL] NAO-2010-00012-tca (Possum Point 500kV)

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Dear Applicant,

We have received your request and it has been assigned NAO project number referenced in the subject line above. Please reference this project number in all future communications. Your request has been assigned to the County POC based on project location listed here: https://www.nao.usace.army.mil/Missions/Regulatory/Contacts.aspx. Your project manager will reach out to you within 15 days confirming assignment of your request. If you do not hear from your PM within 15 days, reach out to the County POC.

NOTE: If you have submitted an RP-17 checklist, we will only contact you if we have concerns.

Thank you!

- Regulatory Branch, Norfolk District, US Army Corps of Engineers



Memo

To: Stacey Ellis From: Becky Wilk

Dominion Energy Environmental Services 120 Tredegar Street Richmond, VA 23219 Stantec Consulting Services, Inc. 5209 Center Street

Williamsburg, VA 23188

File: 203401924 Date: February 8, 2023

Reference: Possum Point 2nd Transformer and New 230 kV Tie Line # 2216, Prince William County, Virginia: Solid & Hazardous Waste Search

Stantec conducted database searches for solid and hazardous wastes and petroleum release sites within a 0.5-mile radius of the proposed Possum Point 2nd Transformer and New 230 kV Tie Line #2216 Project. The project is in Prince William County, Virginia and will take place within the existing transmission line right-of-way (ROW) with the exception of 0.29 miles of new ROW corridor that will be required to extend new Line #2216 to interconnect with Possum Point 500 kV Substation. The project consists of a partial rebuild of approximately 0.93 mile of 230 kV transmission line.

Publicly available data from the Environmental Protection Agency (EPA) Facility Registry System (FRS) were obtained, which provide information about facilities, sites, or places subject to environmental regulation or of environmental interest. Although this data set includes all sites subject to environmental regulation by the EPA or other state authority, such as sites that fall under air emissions or wastewater programs, the results reported here only include those sites which fall under the EPA's hazardous waste, solid waste, remediation, and underground storage tank programs. These sites include *Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)/Superfund; Resource Conservation and Recovery Act* (RCRA); and brownfield sites. Per this database, there are two registered RCRA sites present within a 0.5-mile radius of the project (Table 1). A review of the FRS forms has determined that both RCRA sites are small quantity generators. None of these sites are expected to be a concern for the project due to the distance and nature of the sites.

The Virginia Department of Environmental Quality (DEQ) records were also searched for the presence of solid waste management facilities, Voluntary Remediation Program sites, and petroleum releases within 0.5 mile of the proposed project. A total of six petroleum release sites were identified within the search radius. All petroleum releases related are located on Possum Point Power Station, were addressed by Dominion Energy, and are now closed. None of the identified petroleum release sites identified within 0.5 mile of the proposed project are within the Project transmission corridor (Table 2). The closest site (PC Number: 19921506) is located approximately 1,014 linear feet from the project area. Additionally, A Pollution Response Program (PReP) report (#296597) dated September 3rd 2020 is still pending investigation. Dominion reported a potential seep that was observed along the Potomac River shoreline approximately 950 ft away from the project area. The seep is related to an area of concern along the Potomac River shoreline, east of the industrial portion of the Company's property and just north of the Fuel Unloading Docks. The Company inspects this area monthly and reports any noticeable changes to DEQ. DEQ has been out to look at it several times, but not since early 2022. Dominion has a procedure in place to handle petroleum contaminated soil, if encountered. However, as all the release sites are located outside of the Project transmission corridor, none of the petroleum release sites are expected to have an impact on the proposed Project.

DEQ records show a closed construction demolition debris (CDD) landfill within the ROW near the Possum Point Power Station. This location is also in the vicinity of five surface impoundments that Dominion used to

February 8, 2023

Stacey Ellis Page 2 of 3

Reference:

Possum Point 2nd Transformer and New 230 kV Tie Line # 2216, Prince William County, Virginia: Solid & Hazardous Waste Search

store coal combustion residuals (CCR) from the Possum Point Power Station. Ash has been removed from four of the five ponds (SWP617) in accordance with 40 CFR Part 257 Subpart D. Plans for ash removal from the remaining pond are under development. This Project is not within the footprint and is separated from the ponds by Cockpit Point Road and Possum Point Road.

In summary, a total of two RCRA sites, two air pollution facilities, and six petroleum release sites are located within a 0.5-mile radius of the project site; however, none of the sites are located within the Project transmission corridor. No EPA registered Brownfield sites or CERCLA/Superfund sites are located within 0.5 mile of the project area.

Should you have any questions with the information provided, please do not hesitate to contact me by phone at (757) 603-4528 or by email at Becky.Wilk@stantec.com.

Stantec Consulting Services Inc.

Becky Wilk

Senior Environmental Scientist

Phone: (757) 603-4528 Becky.Wilk@stantec.com

Becky Wick

c. Charles.H.Weil@dominionenergy.com



Table 1. Hazardous waste sites identified by the EPA as occurring within 0.5-mile of the Possum Point 2nd Transformer and New 230 kV Tie Line # 2216

Proximity to Centerline (feet)	1469	931
Longitude	-77.281848	-77.2786
Latitude	38.538241	38.5391
Interest Type	RCRA - Small Quantity Generator	RCRA - Small Quantity Generator
Site Name	A-Annandale Inc	Possum Point Power Station

Table 2. Petroleum releases identified by the DEQ as occurring within 0.5 mile of the Possum Point 2nd Transformer and New 230 kV Tie Line # 2216

Site Name	PC Number	Location	Latitude	Longitude	Status	Type of Release	Federally Registered Tank?	Proximity to Centerline (feet)
Virginia Electric Power - APAC Virginia	19860023	Prince William County	38.540390	38.540390 -77.283874	Closed	Confirmed	z	1575
Dominion Possum Point Power Station	20013228	Prince William County	38.538032	38.538032 -77.281222 Closed Confirmed	Closed	Confirmed	Z	1087
Virginia Power- Possum Point	19921506	Prince William County	38.538139	-77.280767	Closed	Confirmed	z	1014
Dominion Possum Point Power Station	20013150	Prince William County	38.537894	38.537894 -77.279831	Closed	Closed Confirmed	z	1065
VEPCO - Possum Point Power Station	20013045	Prince William County	38.535870	38.535870 -77.280912 Closed Confirmed	Closed	Confirmed	z	1831
Virginia Power- Possum Point	19983621	Prince William County	38.534683	38.534683 -77.281973	Closed	Closed Confirmed	\	2312



File:

Memo

Stacey Ellis Becky Wilk To: From:

Dominion Energy Environmental

Services

120 Tredegar Street Richmond, VA 23219

Stantec Consulting Services Inc.

5209 Center Street Williamsburg, VA 23188

203401924 Date: March 7, 2023

Reference: Possum Point 2nd Transformer and New 230 kV Tie Line #2216 Threatened and **Endangered Species Review**

Online database searches for federal and state threatened and endangered species were completed by Stantec for the Possum Point 2nd Transformer and New 230 kV Tie Line #2216. The Project consists of the wreck and rebuild of approximately 0.95 mile between the Possum Point substation and the 230kV Switch Yard following the replacement of a 500kV transformer at the Possum Point substation in Prince William County, Virginia. Approximately 0.29 mile of new corridor will be required to extend new Line #2216 to interconnect with Possum Point 500 kV Substation. The online database searches included the following:

- U.S. Fish & Wildlife (USFWS) Information, Planning, and Conservation (IPaC)
- USFWS Critical Habitat for Threatened and Endangered Species Mapper
- **USFWS Bald Eagle Concentration Area Map**
- Department Wildlife Resources (DWR) Virginia Fish and Wildlife Information Service (VAFWIS) & Wildlife Environmental Review Map Service (WERMS)
- DWR Northern Long-eared Bat (NLEB) Winter Habitat and Roost Trees Map
- Virginia Department of Conservation and Recreation (DCR) Natural Heritage Data Explorer (NHDE)
- Center for Conservation Biology (CCB) Bald Eagle Nest Locator for Virginia
- National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) Endangered Species Act (ESA) Critical Habitat Mapper
- Dominion Energy-provided Possum Point Power Station Eagle Nest Map

Results

Species with confirmed or potential presence within the Project vicinity have been identified by database searches and are provided below in Table 1.

Table 1. Database Results

Species	Status	Database	Results
Northern long-eared bat (Myotis septentrionalis)	FE, ST	USFWS- IPaC, DWR-NLEB Winter Habitat and Roost Tree Map	Roosting and foraging habitat includes underneath bark, in cavities, or in crevices of live trees and snags, or dead trees. No known hibernacula or maternity roost trees within the vicinity of the Project.
Sensitive joint-vetch (Aeschynomene virginica)	FT, ST	DCR NHDE	This species is generally found in the intertidal zone of coastal marshes in bare to sparsely vegetated substrates. It is typically found in the outer fringe of slightly brackish to freshwater marshes.

March 7, 2023 Stacey Ellis

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Reference: Threatened and Endangered Species Review

Species Status Database		Database	Results	
Small whorled pogonia (Isotria medeoloides)	FT, SE	DCR NHDE	Identified as potentially occurring in the Project watershed. Species requires mixed damp woods of acidic soils of dry to mesic second-growth, deciduous or deciduous-coniferous forests with an open herb layer, although occasionally dense ferns, moderate to light shrub layer, and a relatively open canopy.	
Peregrine falcon (Falco peregrinus)	ST	DWR VAFWIS	There is a nest present at the Possum Point Power Station. Species prefers undisturbed areas with a wide view, near water, and close to plentiful prey.	
Virginia Piedmont water boatman SE [DCR NHDE Identified as potentially occurring in the Proj watershed. Insect occupies a wide range of habitats, including pools, ponds, backwaters streams, and occasionally slow-flowing streams.		
Critical Habitats	FE, SE	NOAA-NMFS	No critical habitat is present within the Project area. However, the Potomac River is critical habitat for the Atlantic sturgeon.	
Bald Eagle (Haliaeetus leucocephalus)	BGEPA	CCB Eagle Nest Locator, USFWS Eagle Concentration Areas, Dominion Energy	Three bald eagle nests have buffers that intersect the Project area. Six proposed and six existing structures are located with 660 feet of either nest PW2018 or PW1501.	

FT: federally threatened, FE: federally endangered, ST: state threatened, SE: state endangered, BGEPA: Bald and Golden Eagle Protection Act

Conclusion

The following conclusions are based upon the proposed scope of work, as described by Dominion Energy. A map depicting the database results is included in the attachments. DWR standard time-of-year restrictions (TOYRs) specific to each structure are included in Table 2.

Bats

The majority of the work will take place within existing cleared and maintained transmission line ROW where tree limbing and removal would be limited to danger trees. However, tree clearing will be required along approximately 0.29 mile of new proposed corridor to extend new Line #2216 to interconnect with Possum Point 500 kV Substation. The Company notes that on November 30, 2022, the USFWS "uplisted" the Northern Long Eared Bat ("NLEB") from threatened to endangered status. The uplisting becomes effective on March 31, 2023. Once effective, the 4(d) rule associated with the NLEB's threatened status which currently exempts certain activities from the prohibition on take (e.g., tree clearing) will no longer be applicable. If tree clearing becomes necessary after March 31, 2023, the Company will follow all applicable requirements of the uplisting rule.

Aquatic Species

Construction access will avoid stream crossings where practical or use crane mats to span stream crossings with no in-stream work required. Erosion and sediment controls would be used as appropriate throughout the Project. No anadromous fish streams will be crossed by construction access. Under these conditions, impacts to listed aquatic species or anadromous fish using streams would not be expected. Therefore, there should be no effect to Virginia Piedmont water boatman or Atlantic sturgeon critical habitat.

March 7, 2023

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Reference: Threatened and Endangered Species Review

<u>Plants</u>

Two listed plant species have been observed in the subwatershed. Sensitive joint-vetch is generally found in the outer fringe of slightly brackish to freshwater marshes. Suitable habitat for this species is not within the Project area; therefore, no effects are anticipated. Small whorled pogonia inhabits upland mixedwood and hardwood stands where there are long-persistent breaks in canopy cover. Based on habitat review during desktop and field reconnaissance, it does not appear suitable habitat is present for small whorled pogonia.

Peregrine Falcon

A peregrine falcon nest is confirmed on an emissions stack at the Possum Point Power Station. The nest is located within 600 feet of five existing and two proposed structures within the Project area. This nest has been moved to an adjacent location by the Center for Conservation Biology at the College of William and Mary and it is undetermined at this time if the nest is still active. DWR standard recommendations are to maintain a 600-foot buffer around active peregrine falcon nests during February 15 – July 15. Due to the presence of the nest within the Project area, the Company should coordinate with DWR if construction will be required within 600 feet of the nest during this period.

Bald Eagle

Three active bald eagle nests are located adjacent to the transmission line with protective buffers extending into the Project area. To avoid the need for an eagle incidental take permit, work on eight existing and three proposed structures should not occur between December 15-July 15 within 660 feet of each nest. If construction must occur in these areas during the noted months, the Company should coordinate with USFWS to determine whether a Permit under the Bald and Golden Eagle Protection Act may be required. The Company previously held eagle permits, but they have since expired under the direction of USFWS since the eagles were not bothered by similar construction activities within the vicinity.

Existing structures # 2078/4, # 2022/3 & 237/3, and #2001/3 & 215/3, as well as proposed structure # 2078/4 & 2216/6 are located within the Bald Eagle Concentration Area. Since the concentrating eagles are not disturbed by similar construction activities in the vicinity of the Project and based on the USFWS's direction to let the eagle permits expire, the Company does not anticipate impacts to the eagles in the Concentration Area.

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Reference: Threatened and Endangered Species Review

Table 2. Structures with Potential TOYR

Affected Structure(s)	Structure Count	Structure Type	Species	TOYR
2216/2, 2216/3, 2216/4	3	Proposed	Northern long- eared bat	April 1 to Nov 14
2078/3, 2078/4, 2078/6, 2078/7, 2001/4 & 215/4, 2022/4 & 237/4	6	Existing	Bald eagle	Dec 15 to July 15
2078/3 & 2216/5, 2078/4 & 2216/6, 2078/5 & 2216/7, 2078/6 & 2216/8. 215/3A & 2001/3A, 237/3A & 2022/3A	6	Proposed	Bald eagle	Dec 15 to July 15
2022/3 & 237/3	1	Existing	Bald Eagle & Peregrine Falcon	Dec 15 to July 15 & February 15 to July 15
2022/1 & 237/1, 2022/2 & 237/2, 2001/2 & 215/2, 2001/3 & 215/3, 2078/8, 2078/9	6	Existing	Peregrine falcon	February 15 & July 15
2078/7 & 2216/9, 2078/8 & 2216/10	2	Proposed	Peregrine falcon	February 15 &July 15

Should you have any questions with the information provided, please do not hesitate to contact me by phone at (757) 603-4528 or by email at Becky.Wilk@stantec.com.

Stantec Consulting Services Inc.

Becky Wilk

Senior Environmental Scientist

Phone: (757) 603-4528 Becky.Wilk@stantec.com

Attachment: Figure 1. Protected Species Map

USFWS-IPaC Database Search Results

USFWS Critical Habitat for Threatened and Endangered Species Mapper Database Search Results

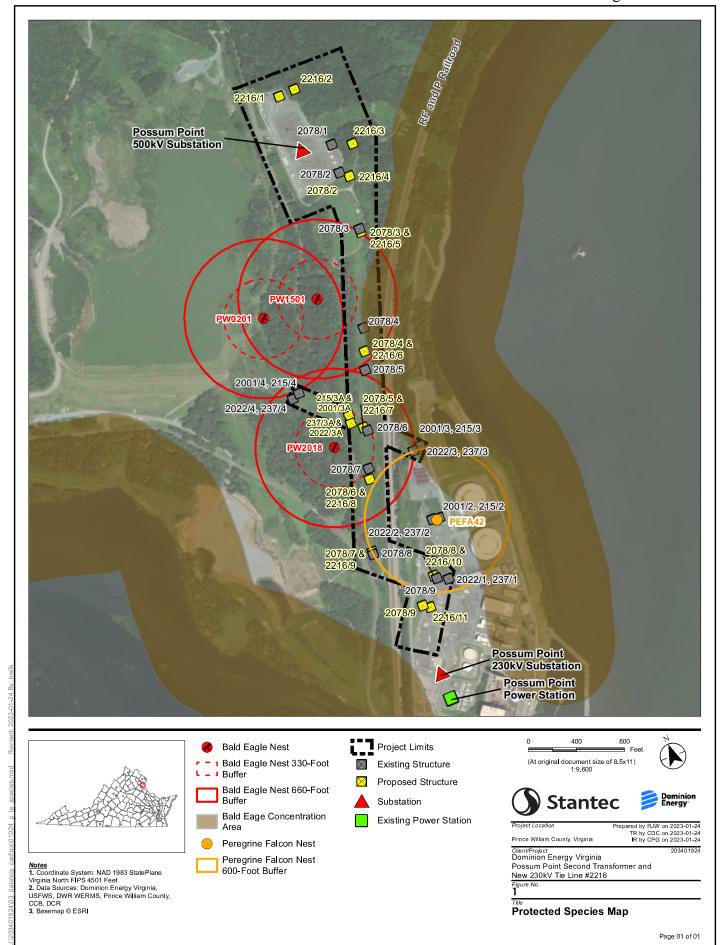
USFWS Bald Eagle Concentration Area Map Database Search Results

VAFWIS-DWR Database Search Results

DWR-NLEB Winter Habitat and Roost Tree Map Database Search Results

DCR Natural Heritage Data Explorer Database Search Results

ATTACHMENTS





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

In Reply Refer To: December 29, 2022

Project Code: 2023-0029308

Project Name: Possum Point 2nd Transformer and New 230 kV Tie Line #2216 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.

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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

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

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 Project Code in the header of this

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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
- Migratory Birds

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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 12/29/2022 Page 11 of 30

Project Summary

Project Code: 2023-0029308

Project Name: Possum Point 2nd Transformer and New 230 kV Tie Line #2216 Project

Project Type: Transmission Line - Maintenance/Modification - Above Ground

Project Description: The project consists of the wreck and rebuild of approximately 0.93 mile

between the Possum Point substation and the 230kV Switch Yard following the replacement of a 500kV transformer at the substation in

Prince William County, Virginia.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.546762799999996,-77.27886402439535,14z



Counties: Prince William County, Virginia

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Endangered Species Act Species

There is a total of 2 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. <u>NOAA Fisheries</u>, 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 Myotis septentrionalis

Endangered

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045

Insects

NAME STATUS

Monarch Butterfly Danaus plexippus

Candidate

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743

Critical habitats

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

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USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> 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.

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Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described <u>below</u>.

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The Bald and Golden Eagle Protection Act of 1940.
- 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Jul 31
Black-billed Cuckoo <i>Coccyzus erythropthalmus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10

NAME	BREEDING SEASON
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Eastern Whip-poor-will <i>Antrostomus vociferus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Aug 20
Kentucky Warbler <i>Oporornis formosus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 20
Prairie Warbler <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee

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was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
- 3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

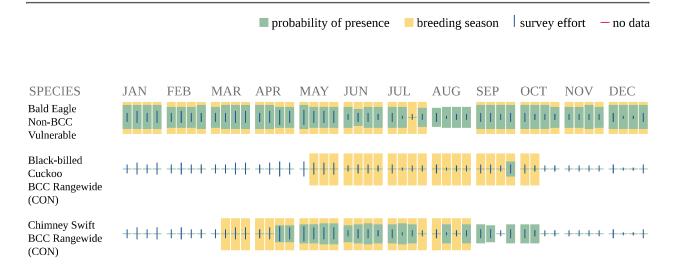
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

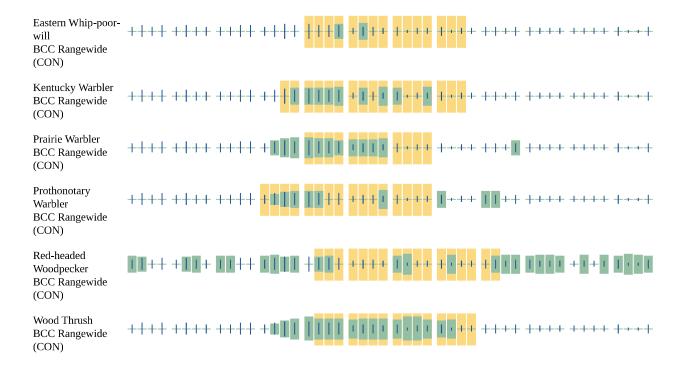
No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

<u>Nationwide Conservation Measures</u> describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. <u>Additional measures</u> or <u>permits</u> may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS <u>Birds of Conservation Concern</u> (BCC) and other species that may warrant special attention in your project location.

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The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (<u>Eagle Act</u> requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- 2. "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
- 3. "Non-BCC Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

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Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the <u>Diving Bird Study</u> and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

12/29/2022 Page 20 of 30

IPaC User Contact Information

Agency: Stantec

Name: Spencer Davis

Address: 150 Riverside Pkwy #301

City: Fredericksburg

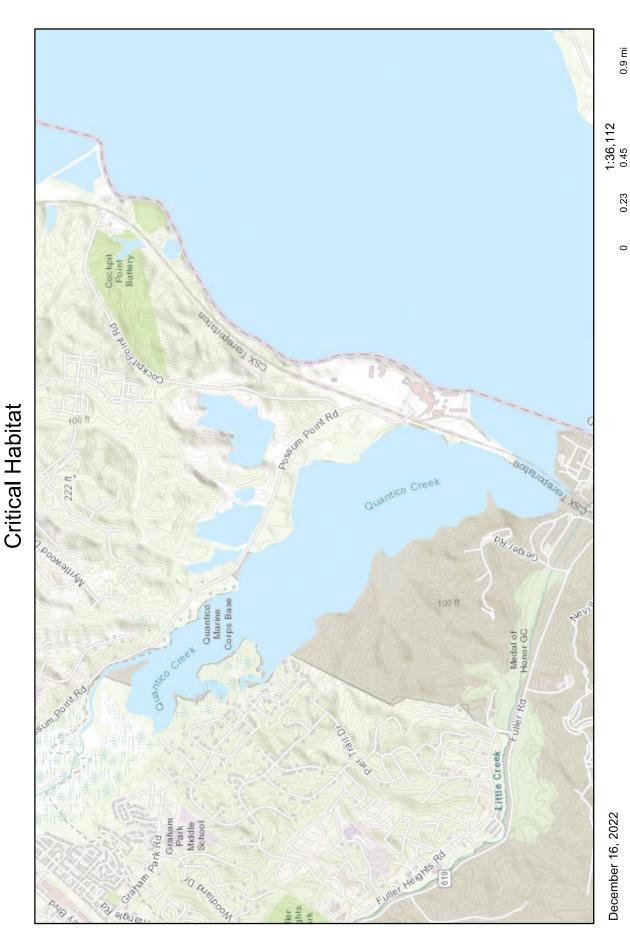
State: VA Zip: 22406

Email spencer.davis@stantec.com

Phone: 7572206869

0.9 mi

0.23



1.5 km County of Prince William, VITA, Esri, HERE, Garmin, INCREMENT P., USGS, METJINASA, EPA, USDA 0.75

December 16, 2022

2 mi

1:72,224

0.5

12/16/2022, 4:08:06 PM

3 km

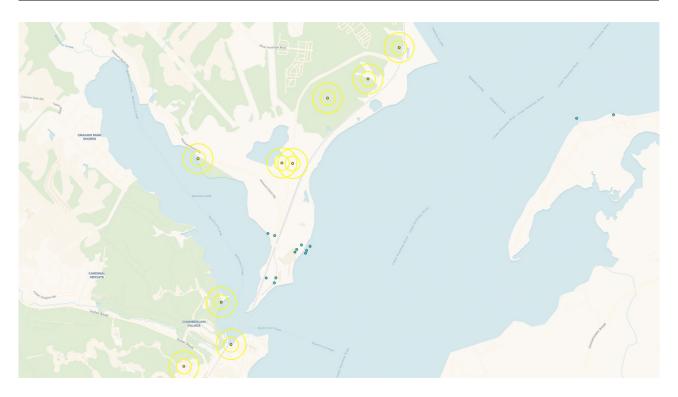
VA Dept. Game & Inland Fisheries County of Prince William, VITA, Esri, HERE, Garmin, INCREMENT P, USGS, METINASA, NGA, EPA, USDA |

County of Prince William, VITA, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, NGA, EPA, USDA

0.75



CCB Mapping Portal



Layers: VA Eagle Nest Locator, VA Eagle Nest Buffers, OspreyWatch Nests

Map Center [longitude, latitude]: [-77.27611541748047, 38.54373491401628]

Map Link:

 $\frac{\text{https://www.ccbbirds.org/maps/\#layer=VA+Eagle+Nest+Locator\&layer=VA+Eagle+Nest+Buffers\&layer=Osprey }{\text{Watch+Nests\&zoom=15\&lat=38.54373491401628\&lng=-77.27611541748047\&legend=legend_tab_41b097d8-e52c-11e4-b6e6-0e853d047bba\&base=Street+Map+%28OSM%2FCarto%29}$

Report Generated On: 12/16/2022

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 <u>Data Use Agreement</u> to ensure compliance with our data use policies. For additional data access questions, view our <u>Data Distribution Policy</u>, 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

Natural Heritage Resources

Your Criteria

Federal Legal Status: Select All

State Legal Status: Select All

Watershed (8 digit HUC): 02070011 - Lower Potomac River

Subwatershed (12 digit HUC): PL52 - Quantico Creek, PL54 - Potomac River-Tank Creek

Search Run: 12/16/2022 16:18:56 PM Result Summary

Total Species returned: 5

Total Communities returned: 0

Click scientific names below to go to NatureServe report.

Click column headings for an explanation of species and community ranks.

Common Name/Natural Community	Scientific Name	Scientific Name Linked	Global Conservation Status Rank	State Conservation Status Rank	Global Conservation State Conservation Federal Legal Status Status Rank Status Rank	e Legal Status	Statewide Occurrences	Virginia Coastal Zone
Lower Potomac	mac							
Potomac River-Tank Creek LEPIDOPTERA (BUTTERF	Potomac River-Tank Creek -EPIDOPTERA (BUTTERFLIES & MOTHS)							
Frosted Elfin VASCULAR PLANTS	Callophrys irus	Callophrys irus	6263	S1S2	SOC	Q	25	>-
Sensitive Joint-vetch Aeschynomene virginica	Aeschynomene virginica	<u>Aeschynomene</u> virginica	G2	S2	רז רי		22	>-
Quantico Creek HETEROPTERA (TRUE BUGS)	UE BUGS)							
Virginia Piedmont Water Boatman	Sigara depressa	Sigara depressa	G1G2	S1S2	SOC		4	>-
LEPIDOPTERA (BUT	LEPIDOPTERA (BUTTERFLIES & MOTHS)							
Frosted Elfin VASCULAR PLANTS	Callophrys irus	Callophrys irus	G2G3	S1S2	SOC None	e e	25	>
Small Whorled Pogonia	Isotria medeoloides <u>Isotria medeoloides</u>	Isotria medeoloides	6263	S2	LT LE		99	>

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Help

Known or likely to occur within a 2 mile buffer around line beginning 38,32,22.6 -77,16,42.3 in 153 Prince William County, VA

View Map of Site Location

564 Known or Likely Species ordered by Status Concern for Conservation (displaying first 24) (24 species with Status* or Tier II**)

BOVA Code Status* Tier**	Status*	Tier**	Common Name	Scientific Name	Confirmed	Database(s)
010032	FESE	lb	Sturgeon, Atlantic	Acipenser oxyrinchus		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
050027	FPSE	Ia	Bat, tri-colored	Perimyotis subflavus		BOVA
900090	SE	<u>a</u>	Floater, brook	Alasmidonta varicosa		BOVA
040096	ST	Ia	Falcon, peregrine	Falco peregrinus	Yes	BOVA,SppObs,HU6
040293	ST	Ia	Shrike, loggerhead	Lanius ludovicianus		BOVA
040379	ST	Ia	<u>Sparrow, Henslow's</u>	Centronyx henslowii		BOVA
040292	ST		<u>Shrike, migrant loggerhead</u>	Lanius ludovicianus migrans		BOVA
100079	FC	IIIa	Butterfly, monarch	Danaus plexippus		BOVA
030063	CC	IIIa	<u>Turtle, spotted</u>	Clemmys guttata		BOVA,HU6
030012	CC	IVa	Rattlesnake, timber	Crotalus horridus		BOVA,HU6
010077		Ia	Shiner, bridle	Notropis bifrenatus	Yes	BOVA, Habitat, SppObs
040306		Ia	Warbler, golden-winged	Vermivora chrysoptera		BOVA
100248		Ia	Fritillary, regal	Speyeria idalia idalia		BOVA,HU6
040213		Ic	Owl, northern saw-whet	Aegolius acadicus		BOVA,HU6
040052		IIa	Duck, American black	Anas rubripes	<u>Potential</u>	BOVA,BBA,HU6
040036		IIa	Night-heron, yellow-crowned	Nyctanassa violacea violacea		BOVA
040181		IIa	<u>Tern, common</u>	Sterna hirundo		BOVA,HU6
040320		IIa	Warbler, cerulean	Setophaga cerulea		BOVA,HU6
040140		IIa	Woodcock, American	Scolopax minor		BOVA,HU6
040203		qII	Cuckoo, black-billed	Coccyzus erythropthalmus		BOVA

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IIb Rail, king. Rallus elegans Potenti	otential BOVA, Habitat, HU6
--	-----------------------------

VAFWIS Seach Report

To view All 564 species View 564

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

**I=VA Wildlife Action Plan - Tier I - Critical Conservation Need; II=VA Wildlife Action Plan - Tier II - Very High Conservation Need; IV=VA Wildlife Action Plan - Tier IV - Moderate Conservation Need III=VA Wildlife Action Plan - Tier III - High Conservation Need;

Virginia Widlife 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.

View Map of All Query Results from All Observation Tables

Bat Colonies or Hibernacula: Not Known

Anadromous Fish Use Streams View Map of All

(1 records)

Anadromous Fish Use Streams

View Map Highest Tier Anadromous Fish Species Different Species|Highest TE 9 Stream ID Stream Name Reach Status |Confirmed Potomac river C64

Fish Impediments View Map of All

(2 records)

Impediments to Fish Passage

	Name	River	View Map
1265	1265 POSSUM POINT ASH DAM #D OFF STREAM	OFF STREAM	Yes
1266	1266 <u>Possum point ash dam #E</u> Quantico creek	QUANTICO CREEK	Yes

Colonial Water Bird Survey

N/A

Threatened and Endangered Waters

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VAFWIS Seach Report

N/A

Managed Trout Streams

N/A

Bald Eagle Concentration Areas and Roosts

are present. View Map of Bald Eagle Concentration Areas and Roosts

(6 records)

BECAR ID	BECAR ID Observation Year Authority	Authority	Type	Comments	View Map
53	2006 - 2007	VDGIF, Center for Conservation Biology	for Conservation Biology Summer Concentration Area Eagle_use High	Eagle_use High	Yes
54	2006 - 2007	VDGIF, Center for Conservation Biology	for Conservation Biology Summer Concentration Area Eagle_use Low	Eagle_use Low	Yes
55	2006 - 2007	VDGIF, Center for Conservation Biology Summer Concentration Area Eagle_use Moderate	Summer Concentration Area	Eagle_use Moderate	Yes
56	2006 - 2007	VDGIF, Center for Conservation Biology Winter Concentration Area	Winter Concentration Area	Eagle_use High	Yes
57	2006 - 2007	VDGIF, Center for Conservation Biology	for Conservation Biology Winter Concentration Area	Eagle_use Low	Yes
58	2006 - 2007	VDGIF, Center for Conservation Biology	for Conservation Biology Winter Concentration Area	Eagle_use Moderate	Yes

Bald Eagle Nests (11 records)

View Map of All Query Results
Bald Eagle Nests

Nost	N O N		DGIF	Vious Mon
162K		Latest Date	Nest Status	view iviap
PW0201	11	Apr 24 2008	Unknown	Yes
PW0301		Apr 29 2007	HISTORIC	Yes
PW0302	6	Mar 22 2008	HISTORIC	Yes
PW0401	3	Jan 1 2005	HISTORIC	Yes
PW0603	7	Apr 24 2008	HISTORIC	Yes
PW0801	2	Apr 24 2008	Unknown	Yes

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Yes	Yes	Yes	Yes	Yes
UNKNOWN	HISTORIC	HISTORIC	HISTORIC	UNKNOWN
Apr 24 2008	Jan 1 1985	Apr 27 2000	Jan 1 2001	Mar 22 2008
2	1	11	8	15
PW0802	PW8501	PW9601	PW9802	PW9902

Displayed 11 Bald Eagle Nests

Species Observations

1.5 (190 records - displaying first 20, 2 Observations with Threatened or

View Map of All Query Results Species Observations

Map View Yes Highest Tier \equiv \coprod \equiv \coprod \equiv \equiv \equiv N Species Highest TE^* \mathbf{S} STDifferent Species 30 12 6 9 _ 4 9 _ Center for Conservation Biology, College of William and Dan; Zurlo| Jason; Rose| Cortney; Marquette| Cory; Fox| May 11 2017 Dan; Zurlo Jason; Rose Cortney; Marquette Cory; Fox Dan; Zurlo| Jason; Rose| Cortney; Marquette| Cory; Fox Greg; Barker| Dan; Zurlo| Jason; Rose| Cortney; Greg; Barker Dan; Zurlo Jason; Rose Cortney; Greg; Barker| Dan; Zurlo| Jason; Rose| Cortney; Greg; Barker Dan; Zurlo Jason; Rose Cortney VEPCO-B-VA. ELEC. & POWER Observer **USNM-SMITHSONIAN** Bryan; Watts Mary - VCU Marquett Marquett Marquett Endangered species) Marquett Jun 2 2010 Jun 18 2009 Jan 1 1912 Apr 11 2017 Apr 25 2016 Mar 21 2016 Mar 8 2016 Feb 23 2016 Jan 1 1971 Feb 13 2017 Observed Date 330016 SppObs SppObs SppObs SppObs 629403 SppObs SppObs SppObs SppObs SppObs SppObs SppObs class 628539 334008 628533 331093 |629394|529376 528540 608481 528554 obsID

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VAFWIS Seach Report

628471	SppObs	628471 SppObs Jul 28 2015	Greg; Barker Dan; Zurlo Jason; Rose Kaylie; Johnson	9		Yes
621750	621750 SppObs	Sep 4 2013	Sep 4 2013 Wayne; Starnes	19		Yes
611940	611940 SppObs	Jun 7 2011	Wayne; Starnes	17		Yes
312840	12840 SppObs	Aug 8 2005	Aug 8 2005 Robert Ballantine	8		Yes
305278	SppObs	Jun 22 1999	<u>305278</u> SppObs Jun 22 1999 Kelso, Donald P.	8		Yes
305280	305280 SppObs	May 19 1999	Kelso, Donald P.	22	I	Yes
305267	305267 SppObs		Jul 6 1998 Kelso, Donald P.	19		Yes
16414	SppObs	6414 SppObs Aug 16 1978 VIMS-B-172	VIMS-B-172	6	I	Yes
16413	SppObs	6413 SppObs Aug 16 1978 VIMS-B-171	VIMS-B-171	11	I	Yes
 - -	0					

Displayed 20 Species Observations

Selected 190 Observations View all 190 Species Observations

Habitat Predicted for Aquatic WAP Tier I & II Species (2 Reaches)

View Map Combined Reaches from Below of Habitat Predicted for WAP Tier I & II Aquatic Species

Stream Name Highest TE* BOVA Code, Status*, Tier**, Common & Scientific Name Quantico Creek (20700112)	st TE BOVA Code, Status, Tier		view Map
(112) 010077 I Ia			
	Ia	Shiner, bridle Notropis bifrenatus	Yes
tributary (20700112) 010077 Ia SH	Ia	Shiner, bridle Notropis bifrenatus	Yes

(3 Species) Habitat Predicted for Terrestrial WAP Tier I & II Species

View Map of Combined Terrestrial Habitat Predicted for 3 WAP Tier I & II Species Listed Below

ordered by Status Concern for Conservation

BOVA Code	Status*	Tier**	BOVA Code Status* Tier** Common Name	Scientific Name	View Map
040105		IIb	Rail, king.	Rallus elegans	<u>Yes</u>
040038			Bittern, American	Bittern, American Botaurus lentiginosus	Yes
040093			<u>Eagle, bald</u>	Haliaeetus leucocephalus Yes	Yes

Virginia Breeding Bird Atlas Blocks (4 records)

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View Map of All Query Results
Virginia Breeding Bird Atlas Blocks

			Breeding Bird Atlas Species		
BBA ID A	Atias Quadrangie Biock Name	Different Species Highest TE* Highest Tier	Highest TE*	Highest Tier	** View Map r
52174	Quantico, CE	28		III	Yes
52173	Quantico, CW	34		III	Yes
52176	Quantico, SE	99		III	Yes
52175	Quantico, SW	47		II	Yes

Public Holdings: (1 names)

Level	Federal
Agency	U.S. Dept. of Navy
Name	Quantico MCCDC - mainside

Summary of BOVA Species Associated with Cities and Counties of the Commonwealth of Virginia:

IPS Code	City and County Name	Different Species	Highest TE	Highest Tier
53	Prince William	483	FESE	I

USGS 7.5' Quadrangles:

Quantico

Indian Head

USGS NRCS Watersheds in Virginia:

N/A

USGS National 6th Order Watersheds Summary of Wildlife Action Plan Tier I, II, III, and IV Species:

HU6 Code	HU6 Code USGS 6th Order Hydrologic Unit	Unit Different Species	Highest TE	E Highest Tier
PL52	Quantico Creek	61	SS	I
PL54	Potomac River-Tank Creek	63	ST	I

Email: tracey.mcdonald@stantec.com

Zip: 23188

Web Project ID: WEB0000019226

Client Project Number: 203401924

PROJECT INFORMATION

TITLE: Possum Point Substation - 230 kV Switch Yard Transmission Line Routing

DESCRIPTION: The proposed project is an installation of a new 230kV transmission line between the Possum Point Substation and the 230kV Switch Yard following the replacement of a 500kV transformer at the substation. The new transmission line will be located entirely within existing Dominion Energy owned property.

EXISTING SITE CONDITIONS: The site is primarily an existing cleared and maintained transmission line corridor with a variable width

QUADRANGLES: Quantico

COUNTIES: Prince William

Latitude/Longitude (DMS): 38° 32′ 52.4857″ N / 77° 16′ 43.3331″ W

Acreage: 58 acres

Comments:

REQUESTOR INFORMATION

Tier Level: Tier II Priority: N

Tax ID:

Contact Name: Tracey McDonald

Company Name: Stantec Consulting Services Inc.

Address: 5209 Center Street

State: VA City: Williamsburg

Fax: **Phone:** 7572349329

Conservation Site			Site Type		Brank Acreage		Listed Species	sies	Essential Conservation	nservation
							Presence	a)	Site?	خ
Natural Heritage	Screening Feature	Natural Heritage Screening Features Intersecting Project Boundary	ct Boundary							
Site Name	Group Name	Common Name	Scientific Name	GRANK SRANK Fed Species State	Fed	Species	State	EO	EO Last Obs	Precision
					Status	Status of Status	Status	Rank Date	Date	
					0	Concern				
Natural Heritage	Resources Interse	Natural Heritage Resources Intersecting Project Boundary	larv							

Intersecting Predictive Models

Predictive Model Results

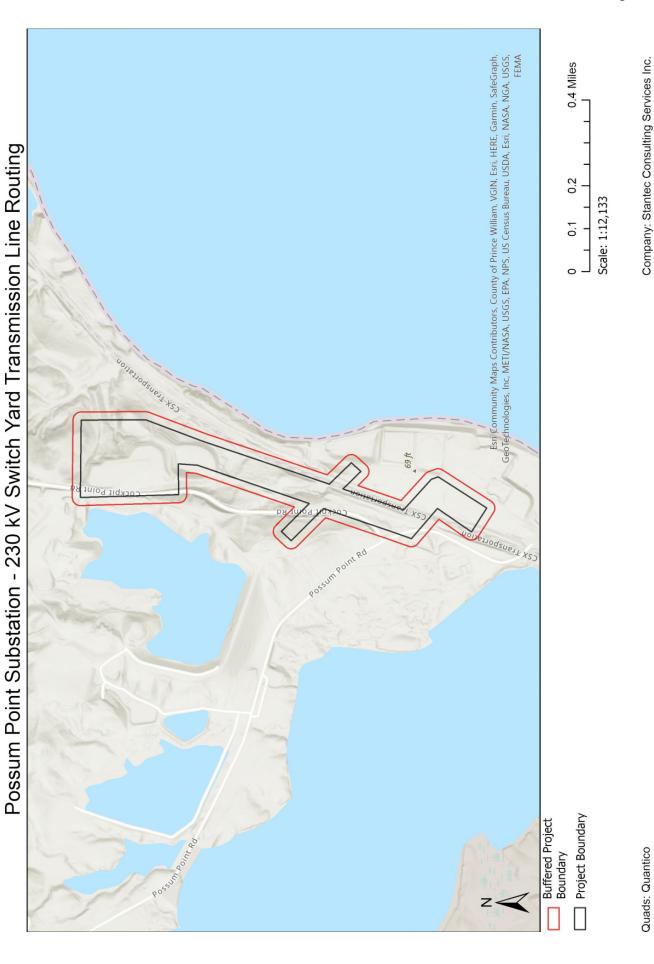
(https://www.dcr.virginia.gov/natural-heritage/vaconvisvnla). Mapped cores in the project area can be viewed via the Virginia Natural Heritage Data In addition, the proposed project will impact an Ecological Core(s) C5 as identified in the Virginia Natural Landscape Assessment Explorer, available here: http://vanhde.org/content/map.

sequestration of carbon, absorption of gaseous pollutants, and production of oxygen). Cores are ranked from C1 to C5 (C5 being the least significant) dependent forest species to habitat generalists, as well as species that utilize marsh, dune, and beach habitats. Interior core areas begin 100 meters Ecological Cores are areas of at least 100 acres of continuous interior, natural cover that provide habitat for a wide range of species, from interiorinside core edges and continue to the deepest parts of cores. Cores also provide the natural, economic, and quality of life benefits of open space, recreation, thermal moderation, water quality (including drinking water recharge and protection, and erosion prevention), and air quality (including using nine prioritization criteria, including the habitats of natural heritage resources they contain.

development causes reductions in ecosystem processes, native biodiversity, and habitat quality due to habitat loss; less viable plant and animal Impacts to cores occur when their natural cover is partially or completely converted permanently to developed land uses. Habitat conversion to populations; increased predation; and increased introduction and establishment of invasive species. DCR recommends avoidance of impacts to cores. When avoidance cannot be achieved, DCR recommends minimizing the area of impacts overall and concentrating the impacted area at the edges of cores, so that the most interior remains intact.

Lat/Long: 383252 / -771643

Counties: Prince William





COMMONWEALTH of VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION

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 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 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

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

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 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 of time passes (DCR recommends no more than six months) before it is utilized.

The Virginia Department of Wildlife Resources 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 https://services.dwr.virginia.gov/fwis/ or contact Amy Martin (804-367-2211 or amy.martin@dwr.virginia.gov)

preliminary screening results for this project, no further correspondence will be sent from this office. Should you have any questions or concerns about this report, the Thank you for submitting your project to the Virginia Department of Conservation and Recreation's Natural Heritage Data Explorer Web Service. <mark>Based on the</mark> Data Explorer, or other Virginia Natural Heritage Program services, please contact the Natural Heritage Project Review Unit at 804-371-2708.



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

1111 E. Main Street, Suite 1400, Richmond, Virginia 23219
P.O. Box 1105, Richmond, Virginia 23218
(800) 592-5482
www.deq.virginia.gov

Matthew J. Strickler Secretary of Natural Resources David K. Paylor Director (804) 698-4000

August 13, 2019

Mr. Jason E. Williams Director Environmental Services Dominion Energy 5000 Dominion Boulevard Glen Allen, VA 23060

Transmitted electronically: jason.e.william@dominionenergy.com

Subject: Dominion Energy (Electric Transmission) – Annual Standards and Specifications for Erosion & Sediment Control and Stormwater Management (AS&S for ESC and SWM)

Dear Mr. Williams:

The Virginia Department of Environmental Quality ("DEQ") hereby approves the Annual Standards and Specifications for Erosion & Sediment Control and Stormwater Management for Dominion Energy (Electric Transmission) dated "May 29, 2019". This coverage is effective from August 13, 2019 to August 12, 2020.

To ensure compliance with approved specifications, the Virginia Erosion and Sediment Control Law and the Virginia Stormwater Management Act, DEQ staff will conduct random site inspections, respond to complaints, and provide on-site technical assistance with specific erosion and sediment control and stormwater management measures and plan implementation.

Please note that your approved Annual Standards and Specifications include the following requirements:

- Variance, exception, and deviation requests must be submitted separately from this Annual Standards and Specifications submission to DEQ. DEQ may require project-specific plans associated with variance requests to be submitted for review and approval.
- 2. The following information must be submitted to DEQ for each project at least two weeks in advance of the commencement of regulated land-disturbing activities. Notifications shall be sent by email to: StandardsandSpecs@deq.virginia.gov
 - i: Project name or project number;
 - ii: Project location (including nearest intersection, latitude and longitude, access point);
 - iii: On-site project manager name and contact info;
 - iv: Responsible Land Disturber (RLD) name and contact info;
 - v: Project description;

Dominion Energy (Electric Transmission) – AS&S for ESC and SWM August 12, 2019
Page 2 of 2

- vi: Acreage of disturbance for project;
- vii: Project start and finish date; and
- viii: Any variances/exceptions/waivers associated with this project.
- 3. Project tracking of all regulated land disturbing activities (LDA) must be submitted to the DEQ on a bi-annual basis. Project tracking records shall contain the same information as required in the two week e-notifications for each regulated LDA.
- 4. Erosion & Sediment Control and Stormwater Management plan review and approval must be conducted by DEQ-Certified plan reviewers and documented in writing.

To ensure an efficient information exchange and response to inquiries, the DEQ Central Office is your primary point of contact. Central Office staff will coordinate with our Regional Office staff as appropriate.

Thank you very much for your submission and continued efforts to conserve and protect Virginia's precious natural resources.

Sincerely,

Jaime B. Robb, Manager
Office of Stormwater Management

Cc: Amelia Boschen, <u>Amelia.h.boschen@dominionenergy.com</u>
Elizabeth Hester, <u>Elizabeth.l.hester@dominionenergy.com</u>
Stacey Ellis, <u>Stacey.t.ellis@dominionenergy.com</u>

Case Decision Information:

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have thirty days from the date of service (the date you actually received this decision or the date it was mailed to you, whichever occurred first) within which to appeal this decision by filing a notice of appeal in accordance with the Rules of the Supreme Court of Virginia with the Director, Department of Environmental Quality. In the event that this decision is served on you by mail, three days are added to that period.



COMMONWEALTH of VIRGINIA

Travis A. Voyles Acting Secretary of Natural and Historic Resources

Department of Historic Resources

2801 Kensington Avenue, Richmond, Virginia 23221

Julie V. Langan Director Tel: (804) 367-2323 Fax: (804) 367-2391 www.dhr.yirginia.gov

February 17, 2023

Jenna Brown Dominion Energy Virginia Electric Transmission P.O. Box 26666 Richmond, VA 23261

Re: Possum Point Substations and 230 kV Transmission Line

Prince William County, Virginia

DHR File No. 2023-3100

Dear Ms. Brown,

We have received your request for comments on the project referenced above. The undertaking, as presented, involves the construction of a new transformer, improvements to the existing substation, and one mile of new transmission line. Our comments are provided as technical assistance to Dominion. We have not been notified by any state or federal agency of their involvement in this project; however, we reserve the right to provide additional comment pursuant to the National Historic Preservation Act, if applicable.

Based on the submission, Dominion plans to prepare an application for a certificate of public convenience and necessity (CPCN) from the State Corporation Commission (SCC). Typically, we recommend that Dominion follow the *Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia* developed by DHR to assist project proponents in developing transmission line projects that minimize impacts to historic resources.

Typically, we recommend that the project proponent establish a study area for any route alternative under consideration and gather information on known resources. A qualified cultural resources consultant in the appropriate discipline should perform an assessment of impact for each known historic resource present within the proposed study area.

Once the route alternatives and details have been finalized, DHR recommends that full archaeological and architectural surveys be performed to determine the effect of the project on all historic resources listed in or eligible for listing in the National Register. This process involves the identification and recordation of all archaeological sites and structures greater than 50 years of age, the evaluation of those resources for listing in the National Register, determining the degree of impact of the project on eligible resources, and developing a plan to avoid, minimize, or mitigate any negative impacts. Comments received from the public

or other stakeholder regarding impacts to specific historic resources should be addressed as part of this survey and assessment process.

Thank you for seeking our comments on this project. If you have any questions at this time, please do not hesitate to contact me at jennifer.bellville-marrion@dhr.virginia.gov.

Sincerely,

DHR File No. 2023-3100

Jenny Bellville-Marrion, Project Review Archaeologist

Review and Compliance Division

Page 2 of 4



COMMONWEALTH of VIRGINIA

Travis A. Voyles Acting Secretary of Natural and Historic Resources

Department of Historic Resources

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March 1, 2023

Charles Weil Dominion Energy Virginia Electric Transmission P.O. Box 26666 Richmond, VA 23261

Re: Possum Point Substations and 230 kV Transmission Line

Prince William County, Virginia

DHR File No. 2023-3100

Dear Mr. Weil,

We have received your request for comments on the project referenced above. The undertaking, as presented, involves the following components: (i) install a second 500-230 kV transformer bank; (ii) rebuild approximately 0.8 miles of existing 230 kV transmission Line #2078 within the existing transmission corridor; (iii) install approximately 0.95 miles of a new 230 kV transmission line; (iv) install a circuit breaker and line terminal equipment at the Possum Point 230 kV Substation; and (v) install two new structures to raise Lines #215/#2001 and Lines #237/#2022. Our comments are provided as technical assistance to Dominion. We have not been notified by any state or federal agency of their involvement in this project; however, we reserve the right to provide additional comment pursuant to the National Historic Preservation Act, if applicable.

Based on the submission, Dominion plans to prepare an application for a certificate of public convenience and necessity (CPCN) from the State Corporation Commission (SCC). Typically, we recommend that Dominion follow the *Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia* developed by DHR to assist project proponents in developing transmission line projects that minimize impacts to historic resources.

Typically, we recommend that the project proponent establish a study area for any route alternative under consideration and gather information on known resources. A qualified cultural resources consultant in the appropriate discipline should perform an assessment of impact for each known historic resource present within the proposed study area.

Once the route alternatives and details have been finalized, DHR recommends that full archaeological and architectural surveys be performed to determine the effect of the project on all historic resources listed in or eligible for listing in the National Register. This process involves the identification and recordation of

all archaeological sites and structures greater than 50 years of age, the evaluation of those resources for listing in the National Register, determining the degree of impact of the project on eligible resources, and developing a plan to avoid, minimize, or mitigate any negative impacts. Comments received from the public or other stakeholder regarding impacts to specific historic resources should be addressed as part of this survey and assessment process.

Thank you for seeking our comments on this project. If you have any questions at this time, please do not hesitate to contact me at jennifer.bellville-marrion@dhr.virginia.gov.

Sincerely,

Jenny Bellville-Marrion, Project Review Archaeologist

Review and Compliance Division



Stage I Pre-Application Analysis for the Proposed Dominion Energy Virginia Possum Point Second Transformer and New 230 kV Tie Line #2216, Prince William County, Virginia

August 4, 2020

Prepared for:

Dominion Energy Virginia Attention: Chuck Weil 5000 Dominion Boulevard Glen Allen, VA 23060

Prepared by:

Sandra DeChard Senior Architectural Historian

and

Ellen Brady Cultural Resources Practice Leader

Stantec Consulting Services Inc. 1011 Boulder Springs Drive, Suite 225 Richmond VA 23225-4951 (804) 267-3474



This document entitled Stage I Pre-Application Analysis for the Proposed Dominion Energy Virginia Possum Point Second Transformer and New 230 kV Tie Line #2216, Prince William County, Virginia was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of Dominion Energy Virginia (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

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Rachel Roberts, Senior Regulatory Specialist



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Executive Summary

Stantec Consulting Services Inc. (Stantec) was retained by Dominion Energy Virginia (Dominion Energy) to conduct a Stage I Pre-Application Analysis for the proposed Line #2078 project. The project, in order to maintain the reliability of its transmission system in compliance with mandatory North American Electric Reliability Corporation (NERC) Reliability Standards, Dominion Energy, pending final approval by the State Corporation Commission (SCC), proposes to:

- install a second 500-230 kV transformer bank at the Possum Point 500 kV Substation and perform associated bus work;
- rebuild approximately 0.8 mile of existing 230 kV transmission Line #2078 between the company's existing Possum Point 500 kV and 230 kV substations in Prince William County, which is located within an existing corridor on Dominion Energy-owned property. In order to utilize the existing corridor to accommodate a second circuit following the addition of a 500-230 kV transformer bank at the Possum Point 500 kV Substation:
- install 0.95 mile of a new 230 kV transmission line, Line #2216, between the Company's existing Possum Point 500 kV and 230 kV Substations along the majority of the Line #2078 corridor and primarily collocated with the Line #2078 structures, with three new structures on Company property in a new approximately 0.29-mile corridor adjacent to the existing Possum Point 500 kV Substation;
- install a circuit breaker and line terminal equipment at the Possum Point 230 kV Substation; and
- install two new structures to raise Lines #215 and #2001 and Lines #237 and #2022 to provide clearance for Line #2078 and Line #2216.

Background research for the Stage I Pre-Application Analysis was conducted in January 2020 by Stantec staff. The preliminary background research and a field study was conducted pursuant to the *Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia* (Virginia Department of Historic Resources [VDHR] 2008) for proposed transmission line improvements. As detailed by VDHR guidance, consideration was given to National Historic Landmark (NHL) properties located within a 1.5-mile radius of the project centerline; National Register of Historic Places (NRHP)-listed properties, Battlefields, and Historic Landscapes located within a 1.0-mile radius of the project centerline; NRHP-eligible sites located within a 0.5-mile radius of the project centerline; and archaeological sites located within the project right-of-way (ROW). Four previously identified architectural resources were identified for inclusion in the Stage I analysis. No previously recorded archaeological resources were identified within the ROW during this phase of the project.



Recommendations

Architectural Resources

One NRHP-listed resource, the Quantico Marine Corps Base Historic District (VDHR #287-0010), was located within 1.0-mile of the Project centerline and ROW. Two NRHP-eligible resources, the Richmond, Fredericksburg & Potomac Railroad (VDHR #076-0301) and the Richmond, Fredericksburg & Potomac Railroad Historic District (VDHR #500-0001) were located within 0.5-mile of the Project centerline and also cross the Project ROW. Additionally, one battlefield, Cockpit Point (VDHR #076-5842) was also identified within 0.5 mile of the Project centerline. Currently the battlefield has not been evaluated by VDHR; however, is recommended eligible by the American Battlefield Protection Program (ABPP). As the study was completed prior to filing a SCC application, all digital images were taken from public ROW and/or Dominion Energy property easements.

According to preliminary engineering for the Project, the proposed structures would increase in height approximately 16 to 40 (maximum) feet over the height of the existing structures with two new structures approximately 145 feet in height. Based on the review of the current and proposed structures, the results of the fieldwork, and computer visual effects modeling, it does not appear that the overall visual impact of the proposed structures will greatly change from the existing conditions in the vicinity of this resource. Therefore, it is recommended that the proposed Project would have a Minimal Impact to the Richmond, Fredericksburg & Potomac Railroad (VDHR #076-0301), the Richmond, Fredericksburg & Potomac Railroad Historic District (VDHR #500-0001), the Quantico Marine Corps Base Historic District (VDHR #287-0010) and the Cockpit Point Battlefield (VDHR #076-5842).

Previously Recorded Architectural Resources Considered within the Stage I Pre-Application Process

VDHR #	Resource Name	VDHR/NRHP Status	Distance to Centerline (Feet)	Impact
076-0301	Richmond, Fredericksburg & Potomac Railroad	Determined Eligible by VDHR in 2010; Determined Potentially Eligible by VDHR in 2016	0	Minimal
076-5842	Cockpit Point Battlefield	Potentially Eligible (ABPP)	0	Minimal
287-0010	Quantico Marine Corps Base Historic District	NRHP-Listed 2001	4,640	Minimal
500-0001	Richmond, Fredericksburg & Potomac Railroad Historic District	Determined Eligible for Listing on the NRHP by VDHR in 2018	0	Minimal

Archaeological Resources

No archaeological resources were located within the Project ROW.



Abbreviations

ABPP American Battlefield Protection Program

amsl Above Mean Sea Level
DEM Digital Elevation Model
DSM Digital Surface Model
Dominion Energy Dominion Energy Virginia

kV Kilovolt

NERC North American Electric Reliability Corporation

NHL National Historic Landmark

NHPA National Historic Preservation Act
NRHP National Register of Historic Places

ROW Right-of-Way

SCC State Corporation Commission
Stantec Stantec Consulting Services, Inc.

USDI United States Department of the Interior

V-CRIS Virginia Cultural Resources Information System

VLR Virginia Landmarks Register

VDHR Virginia Department of Historic Resources



1.0 INTRODUCTION

1.1 OVERVIEW

Stantec Consulting Services Inc. (Stantec) was retained by Dominion Energy Virginia (Dominion Energy) to conduct a Stage I Pre-Application Analysis for the proposed Line #2078 project. The project, in order to maintain the reliability of its transmission system in compliance with mandatory North American Electric Reliability Corporation (NERC) Reliability Standards, Dominion Energy, pending final approval by the State Corporation Commission (SCC), proposes to:

- install a second 500-230 kV transformer bank at the Possum Point 500 kV Substation and perform associated bus work;
- rebuild approximately 0.8 mile of existing 230 kV transmission Line #2078 between the company's existing Possum Point 500 kV and 230 kV substations in Prince William County, which is located within an existing corridor on Dominion Energy-owned property. In order to utilize the existing corridor to accommodate a second circuit following the addition of a 500-230 kV transformer bank at the Possum Point 500 kV Substation;
- install 0.95 mile of a new 230 kV transmission line, Line #2216, between the Company's existing Possum Point 500 kV and 230 kV Substations along the majority of the Line #2078 corridor and primarily collocated with the Line #2078 structures, with three new structures on Company property in a new approximately 0.29-mile corridor adjacent to the existing Possum Point 500 kV Substation;
- install a circuit breaker and line terminal equipment at the Possum Point 230 kV Substation; and
- install two new structures to raise Lines #215 and #2001 and Lines #237 and #2022 to provide clearance for Line #2078 and Line #2216.

Table 1 Summary of Structures for the Proposed Project

Structure No.	Height (FT) Existing	Proposed Structure No.	Height (FT) Proposed	Approximate Change in Height (FT)	Existing/Proposed Structure Type	
N/A	N/A	2216/1	75	N/A	Not Applicable/Backbone	
2078/1	80	N/A	N/A	N/A	Backbone/Not Applicable	
2078/2	102	2078/2	100	-2	Monopole/Monopole	
N/A	N/A	2216/2	90	N/A	Not Applicable/ 3-Pole	
N/A	N/A	2216/3	60	N/A	Not Applicable/ 3-Pole	
N/A	N/A	2216/4	85	N/A	Not Applicable/ Monopole	
2078/3	107	2078/3 & 2216/5	105	-2	Monopole/Monopole	



Structure No.	Height (FT) Existing	Proposed Structure No.	Height (FT) Proposed	Approximate Change in Height (FT)	Existing/Proposed Structure Type	
2078/4	80	2078/4 & 2216/6	110	30	H-Frame/Monopole	
2078/5	60	N/A	N/A	N/A	H-Frame/Not Applicable	
2078/6	39	2078/5 & 2216/7	55	16	3-Pole/H-Frame	
2078/7	65	2078/6 & 2216/8	100	35	H-Frame/Monopole	
2078/8	85	2078/7 & 2216/9	120	35	3-Pole/Monopole	
2078/9	80	2078/8 & 2216/10	120	40	3-Pole/Monopole	
N/A	N/A	2078/9	75	N/A	Not Applicable/Backbone	
N/A	N/A	2216/11	70.5	N/A	Not Applicable/Backbone	
N/A	N/A	215/3A & 2001/3A	145	N/A	Not Applicable/ DDE Double Circuit Steel	
N/A	N/A	237/3A & 2022/3A	145	N/A	Not Applicable/ DDE Double Circuit Steel	

Note: Existing and proposed structure heights do not include foundation reveal. This information is preliminary and subject to final engineering.

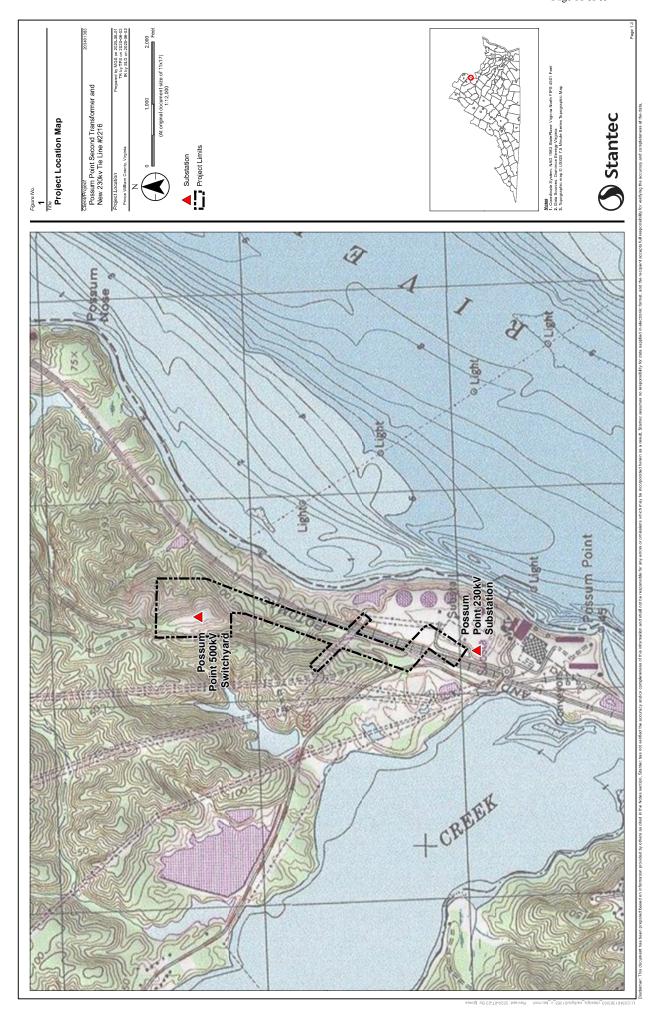
1.2 STAGE I PRE-APPLICATION ANALYSIS

The Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia (Virginia Department of Historic Resources [VDHR] 2008) were developed by the VDHR to assist the SCC and their applicants to address and minimize potential impacts to historic resources associated with the construction of large-scale transmission lines and associated facilities. In consideration to the general project design, as described above, and other elements associated with the proposed undertaking, including current ROW conditions within the proposed project area, Stantec designed the present study to identify all previously recorded architectural and archaeological resources requiring inclusion in a formal Stage I Pre-Application Analysis, as defined by the 2008 Guidelines.

As detailed by VDHR guidance, consideration was given to National Historic Landmark (NHL) properties located within a 1.5-mile radius of the project centerline; National Register of Historic Places (NRHP)-listed properties, battlefields, and historic landscapes located within a 1.0-mile radius of the project centerline; NRHP-eligible sites located within a 0.5-mile radius of the project centerline; and archaeological sites located within the project right-of-way (ROW). This document also includes a computer viewshed analysis to address potential views from the four resources identified pursuant to the guidance of the VDHR for the proposed Project.

This Stage I Pre-Application Analysis project was directed by Senior Regulatory Specialist Rachel Roberts and the report authored by Senior Architectural Historian Sandra DeChard. The visual effects evaluation fieldwork was conducted by Archaeological Technician Olivia McCarty under the supervision of Ms. DeChard. GIS Coordinators Perron Singleton and Melissa Sanderson prepared the report graphics and project maps.





2.0 BACKGROUND RESEARCH

As part of the Stage I Pre-Application Analysis effort, VDHR guidance recommends a four-tier study area strategy to be considered for each alternative alignment for the proposed undertaking (Table 2).

Table 2 Study Areas as Defined by VDHR Guidelines for Transmission Lines

Radial Buffer (in miles)	Considered Resources	
1.5	National Historic Landmarks	
1.0	Above resources and: National Register Properties (listed), Battlefields, Historic Landscapes (e.g. Rural HD)	
0.5	Above resources and: National Register-eligible (as determined by VDHR)	
0.0 (Within ROW)	Above resources and Archaeological Sites	

The background research included a review of the VDHR archives and of data collected from the VDHR's Virginia Cultural Resource Information System (V-CRIS) database using the most current data as provided by the VDHR. The VDHR files of archaeological sites and historic structures were examined and information was retrieved on all archaeological sites located up to a 0.5-mile radius of the project area and all previously recorded architectural resources up to a 1.5-mile radius of the Project centerline. ESRI ArcGIS Online aerial photography of current conditions was examined for the entire study area. Photographs of each of the architectural resources under consideration, if visible, as well as their viewsheds, were taken from the public ROW.

2.1 RESULTS OF THE BACKGROUND RESEARCH

2.1.1 Architectural Resources

One NRHP-listed resource, the Quantico Marine Corps Base Historic District (VDHR #287-0010), was located within 1.0-mile of the Project centerline and ROW. Two NRHP-eligible resources, the Richmond, Fredericksburg & Potomac Railroad (VDHR #076-0301) and the Richmond, Fredericksburg & Potomac Railroad Historic District (VDHR #500-0001) were located within 0.5-mile of the Project centerline and also cross the Project ROW. Additionally, one battlefield, Cockpit Point (VDHR #076-5842) was also identified within 0.5 mile of the Project centerline. Currently the battlefield has not been evaluated by VDHR; however, is recommended eligible by the American Battlefield Protection Program (ABPP). As the study was completed prior to filing an SCC application, all digital images were taken from public ROW and/or Dominion Energy property easements (Appendix B; Table 3).



Table 3 Previously Recorded Architectural Resources Considered for the Stage I Pre-Application Process

VDHR #	Resource Name	VDHR/NRHP Status	Distance to Centerline (Feet)	
076-0301	Richmond, Fredericksburg & Potomac Railroad	Determined Eligible by VDHR in 2010; Determined Potentially Eligible by VDHR in 2016	0	
076-5842	Cockpit Point Battlefield	Potentially Eligible (ABPP)	0	
287-0010	Quantico Marine Corps Base Historic NRHP-Listed 2001		4,640	
500-0001	Richmond, Fredericksburg & Potomac Railroad Historic District	Determined Eligible for Listing on the NRHP by VDHR in 2018	0	

2.1.2 Archaeological Resources

No previously recorded archaeological resources were located within Project ROW.



3.0 STAGE I PRE-APPLICATION ANALYSIS RESULTS

3.1 VISUAL EFFECTS METHODOLOGY

Fieldwork for the proposed transmission line project was conducted on April 8, 2020 by Olivia McCarty, Field Technician, under the supervision of Stantec's Senior Architectural Historian Sandra DeChard. The fieldwork for the assessment entailed photographing the resources requiring viewshed analysis according to the Stage I Pre-Application review process and examination of the potential views from the resources towards the proposed transmission line improvements. The existing transmission line in the ROW was utilized to assist with the assessment of potential visual effects. As the fieldwork was conducted prior to a formal SCC application submittal, all photographs were taken from public ROW locations with aerial photography utilized to supplement the analysis of project visibility and potential visual effects. As part of the project, if further evaluation of visual effects is necessary, Stantec will prepare photo simulations of the proposed structures for the resources under consideration to assess potential viewshed impacts. The current project is a wreck and rebuild of the existing transmission line within the project ROW with the proposed structures constructed in close proximity to the locations of the existing structures.

A detailed viewshed was modeled for the existing and proposed structures. This analysis required the creation of two datasets: a digital elevation model (DEM) which provided base ground elevations and a digital surface model (DSM) which provided overall terrain elevations including tree canopy. The DEM utilized was a 1/3 arc second elevation model downloaded from the U. S. Geological Survey (USGS). To create the DSM, the Virginia Statewide Landcover Dataset, provided by the Virginia Geographic Information Network, was used to identify areas covered by tree canopy. Those areas were then given a constant value of 75 feet, which was added to the ground elevation to account for the typical mature forest heights found in the area. Using the existing structure heights and preliminary proposed structure heights provided by Dominion Energy, two viewshed analyses were run using these datasets to determine where the existing and proposed towers are or will be visible in the landscape surrounding the project ROW. The visibility is illustrated by three color shadings:

- orange where both existing and proposed structures are/will be visible,
- red where the existing structures are visible but the proposed structures will not be, and
- blue where the existing structures are not visible but the proposed structures will be.



3.2 ARCHITECTURAL RESOURCES CONSIDERED

3.2.1 Richmond, Fredericksburg & Potomac Railroad (VDHR #076-0301)/ Richmond, Fredericksburg & Potomac Railroad Historic District (VDHR #500-0001)

The Richmond, Fredericksburg & Potomac Railroad (VDHR #076-0301) and the Richmond, Fredericksburg & Potomac Railroad Historic District (VDHR #500-0001) share the same boundaries within the 0.5-mile radius from the transmission line centerline. Since the two resources are essentially the same in this area, the visual effects findings were also the same for each resource. As such, the two resources were evaluated together for the purposes of the visual effects assessment.

The Richmond, Fredericksburg & Potomac Railroad, completed in the late nineteenth century, extends 11 miles through Prince William and Stafford counties, from Cherry Hill on its northern end to Arkendale, at its southern-most point. The railroad parallels Route 1 and the Potomac River. The resource comprises two tracks (Figure 2) and a number of bridges, a majority of which has been replaced. The freight station and passenger station, constructed after World War II, located in Quantico, remain. The section of the railroad line located in Prince William and Stafford counties was determined eligible for listing on the NRHP in 2010 by VDHR, although the determination was changed to potentially eligible in 2016 (VDHR Site Files). The Richmond, Fredericksburg & Potomac Railroad Historic District (VDHR #500-0001), which incorporates the Richmond, Fredericksburg & Potomac Railroad within the project area (VDHR #076-0301), was determined eligible for listing on the NRHP in 2018 (VDHR Site Files).

3.2.1.1 Visual Effect Assessment

The Richmond, Fredericksburg & Potomac Railroad (VDHR #076-0301) runs parallel to the east side of the Project ROW for much of the project area. The resource diverges at the point where the tracks turn to the northeast in the vicinity of the Possum Point Switching Station (Appendix B). The resource currently views the Possum Point Generation Station, as well as existing transmission lines extending from the power station, and where the line crosses the resource at Possum Point Road. The line is also visible from two additional crossing further to the north and in areas where the existing transmission lines parallels the railroad tracks (Figures 2-10). The area on either side of the railroad tracks at the northeastern end of the project limits is tree lined with an area of woods approximately 480 feet between the tracks and the existing switch yard. Under current conditions, the existing transmission line structures, which range in height from approximately 39 to 107 feet in the vicinity of the resource, were visible mainly from Photo Location 2 (Figures 2-10), however, the existing power station and additional transmission lines were visible from Photo Location 1. Based upon Dominion Energy's preliminary design, the proposed structures in this section of the line will range in height from approximately 55 to 120 feet, an increase in height ranging from approximately 16 to 40 feet with two new structures reaching 145 feet in height.

The viewshed modeling conducted for the resource indicated that existing structures were visible from approximately 840 feet north of the Possum Point Road entrance into the Possum Point Generation



Station as well as from the power station entrance extending northeast approximately 2,218 feet along the railroad line. From the vicinity of existing Structure 2078/4 northward, the existing line, under current conditions was not visible as indicated by the computer modeling; however, the proposed structures will be visible where the Project enters the switch yard (Figure 11). The overall visual impact of the proposed structures; however, will not greatly change from the existing conditions in the vicinity of this resource. Based on the fieldwork, the preliminary heights of the proposed structures, and the viewshed modeling for the resource, *it is recommended that the proposed Project would have a Minimal Visual Impact to the Richmond, Fredericksburg & Potomac Railroad (VDHR #076-0301) and the Richmond, Fredericksburg & Potomac Railroad Historic District (VDHR #500-0001).*



Figure 2 View of Richmond, Fredericksburg & Potomac Railroad (VDHR #076-0301), Richmond, Fredericksburg & Potomac Railroad Historic District (VDHR #500-0001), and the Cockpit Point Battlefield (VDHR #076-5842; Location 1) Looking North/Northeast.





Figure 3 View from Richmond, Fredericksburg & Potomac Railroad (VDHR #076-0301), Richmond, Fredericksburg & Potomac Railroad Historic District (VDHR #500-0001), and the Cockpit Point Battlefield (VDHR #076-5842; Location 1) Looking Northeast towards Proposed Project Area.



Figure 4 View from Richmond, Fredericksburg & Potomac Railroad (VDHR #076-0301), Richmond, Fredericksburg & Potomac Railroad Historic District (VDHR #500-0001), and the Cockpit Point Battlefield (VDHR #076-5842; Location 1) Looking North towards Proposed Project Area. Transmission Lines Visible are not the Current Project Transmission Line.





Figure 5 View from Richmond, Fredericksburg & Potomac Railroad (VDHR #076-0301), Richmond, Fredericksburg & Potomac Railroad Historic District (VDHR #500-0001), and the Cockpit Point Battlefield (VDHR #076-5842; Location 1) Looking Southwest from Bridge over Tracks towards Proposed Project Area. Transmission Lines Visible are not the Current Project Transmission Line.



Figure 6 View from Richmond, Fredericksburg & Potomac Railroad (VDHR #076-0301), Richmond, Fredericksburg & Potomac Railroad Historic District (VDHR #500-0001), and the Cockpit Point Battlefield (VDHR #076-5842; Location 1) Looking Southeast from Bridge over Tracks towards Proposed Project Area. Transmission Lines Visible are not the Current Project Transmission Line.



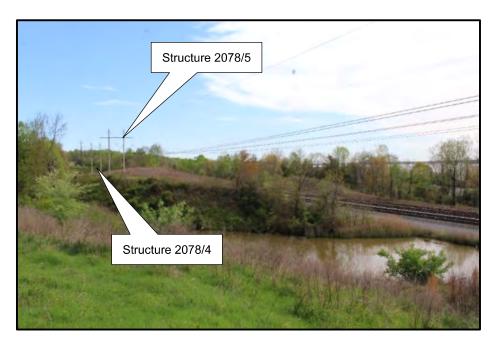


Figure 7 View from Richmond, Fredericksburg & Potomac Railroad (VDHR #076-0301), Richmond, Fredericksburg & Potomac Railroad Historic District (VDHR #500-0001), and the Cockpit Point Battlefield (VDHR #076-5842; Location 2) Looking Northeast towards Proposed Project Area.



Figure 8 View from Richmond, Fredericksburg & Potomac Railroad (VDHR #076-0301), Richmond, Fredericksburg & Potomac Railroad Historic District (VDHR #500-0001), and the Cockpit Point Battlefield (VDHR #076-5842; Location 2) Looking Northwest towards Proposed Project Area. Visible Structures will Remain Unchanged.





Figure 9 View from Richmond, Fredericksburg & Potomac Railroad (VDHR #076-0301), Richmond, Fredericksburg & Potomac Railroad Historic District (VDHR #500-0001), and the Cockpit Point Battlefield (VDHR #076-5842; Location 2) Looking Southeast towards Proposed Project Area.

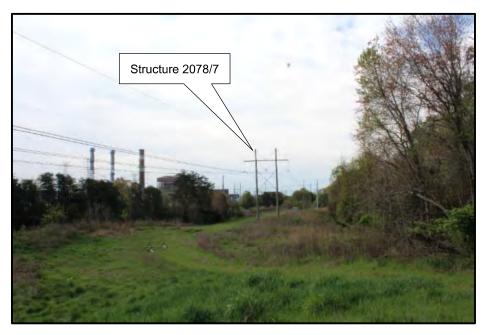
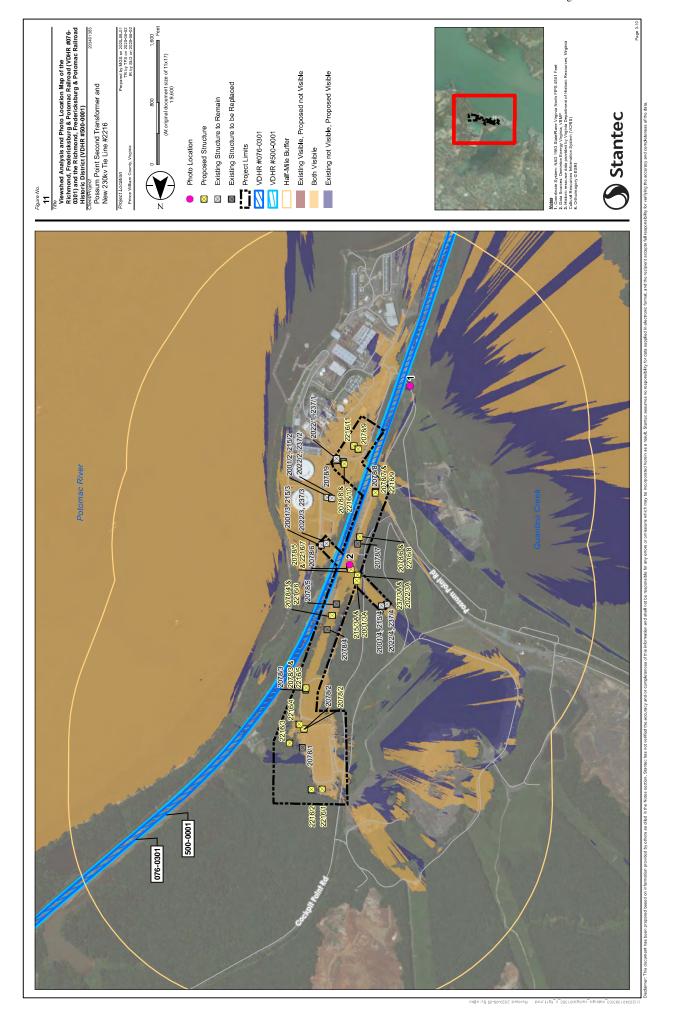


Figure 10 View from Richmond, Fredericksburg & Potomac Railroad (VDHR #076-0301), Richmond, Fredericksburg & Potomac Railroad Historic District (VDHR #500-0001), and the Cockpit Point Battlefield (VDHR #076-5842; Location 2) Looking Southwest towards Proposed Project Area.





3.2.2 Quantico Marine Corps Base Historic District (VDHR #287-0010)

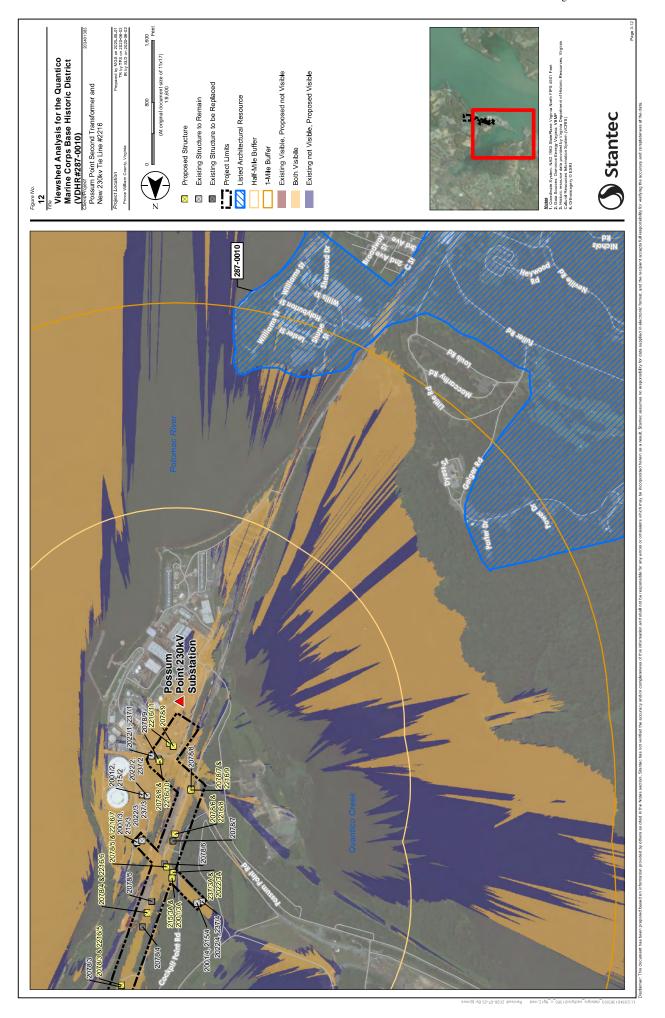
The Quantico Marine Corps Base Historic District, located in Prince William and Stafford counties, is located on the western shore of the Potomac River (Appendix B). The base, which includes both the Marine Corps Combat Development Command and the Naval Regional Medical Clinic, comprises approximately 1,025 acres. The district is characterized by the presence of dense wooded areas as well as open areas containing buildings associated with the Marine Corps facility. The district itself comprises 239 contributing and 188 non-contributing resources located on approximately 1,025 acres. Resources listed as contributing within the NRHP-listed district reflect significance in aviation, education, and industry as well as African American and military history with a period of significance from 1918 to 1949 (VDHR Site Files; Quantico Marine Corps Base Historic District Nomination Form).

3.2.2.1 Visual Effect Assessment

Access to the Quantico Marine Corps Base Historic District was not permitted during the Stage I field study. The majority of the historic district is situated beyond the 1.0-mile buffer (Appendix B). Since the resource is not an NHL, the section within the 1.5-mile buffer does not meet the criteria for consideration. Two small areas of the NRHP-listed property on the far northeastern end of the historic district are located within the 1.0-mile buffer of the existing/proposed transmission line and meet the criteria for consideration per VDHR guidelines. As access to the resources was not permitted, assessment of the potential visual effects on the historic district by the Project was conducted using computer modeling only (Figure 12).

The viewshed modeling for the resource indicated that under current conditions the existing structures were visible from points along the northern edge of the portion of the historic district located on the east side of the Richmond, Fredericksburg & Potomac Railroad. Computer modeling also indicated that the proposed structures will be visible from multiple points along the northern edge of the district (Figure 12). The overall visual impact of the proposed structures; however, will not greatly change from the existing conditions in the vicinity of this resource. Based on the fieldwork, the preliminary heights of the proposed structures, and the viewshed modeling for the resource, *it is recommended that the proposed Project would have a Minimal Visual Impact to the Quantico Marine Corps Base Historic District (VDHR #287-0010).*





3.3 BATTLEFIELD RESOURCES CONSIDERED

Battlefields and associated fortifications noted within the limits of the study area were further considered for visual effects for the proposed project. One battlefield was located within the project area, the Cockpit Point (VDHR #042-5842; ABPP VA100). The resource is further described below along with a discussion of potential effects as a result of the project. Recommendations on visual effects are provided. Potential direct effects to the battlefield resources will be assessed during future archaeological investigations.

3.3.1 Cockpit Point Battlefield (VDHR #042-5842; ABPP VA100)

The Battle of Cockpit Point took place on January 3, 1862 and was part of the Blockade of the Potomac River Campaign. Batteries has been previously set up on the Point as part of the defensive line, which also included Evansport, Freestone Point, and Shipping Point. The battle on January 3rd pitted Lieutenant R. H. Wyman, Commander of the Union forces, against Brigadier General S. G. French, Commander of the Confederate forces. The battle was inconclusive and limited damage was done to either the Union ships, the *Anacostia* and *Yankee*, engaged in the battle, or to the Cockpit Point battery (VDHR Site Files; Townsend 1988; ABPP 2016).

3.3.1.1 Visual Effect Assessment

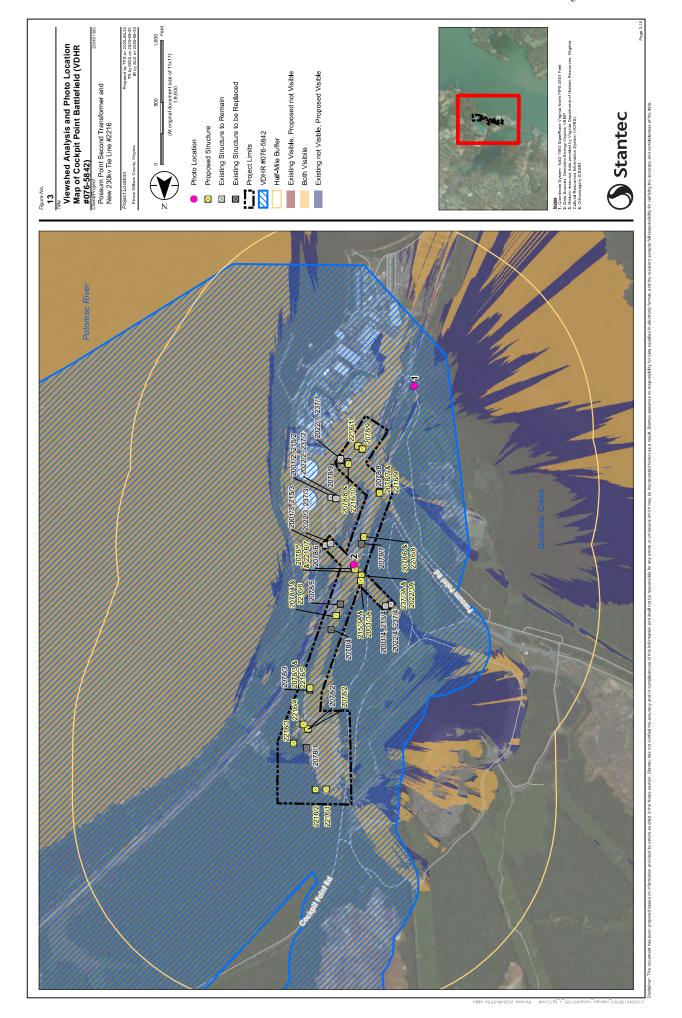
The resource currently views the Possum Point Generation Station, as well as existing transmission lines extending from the power station, and where the line crosses the resource at Possum Point Road (Figures 2-10). The resource also overlaps the Richmond, Fredericksburg & Potomac Railroad (VDHR #076-0301) and the Richmond, Fredericksburg & Potomac Railroad Historic District (VDHR #500-0001). The landscape of the resource consists of mainly dense areas of woods broken by several roads with areas of residential development located within the northwestern-most end of the Cockpit Point Battlefield ABPP Study Area. The wooded areas currently obscure most of the resource from the existing line with the exception of the area of the battlefield crossed by the existing transmission line. Under current conditions, the existing transmission line structures, which range in height from approximately 39 to 107 feet in the vicinity of the resource, were visible mainly from Photo Location 2, however, the existing power station and additional transmission lines were visible from Photo Location 1 (Figures 2-10). Based upon Dominion Energy's preliminary design, the proposed structures in this section of the line will range in height from approximately 55 to 120 feet, an increase in height ranging from approximately 16 to 40 feet with two new structures reaching 145 feet in height.

The viewshed modeling conducted for the resource indicated that existing structures were visible along the railroad tracks as well as areas to the south and southwest of the switch yard and Possum Point Road. Additionally, large sections of the Possum Point Generation Station, which is encompassed within the battlefield resource, also view the proposed line. The area of the battlefield within the Generation Station, however, has been compromised by the facility's construction. Under current conditions, as indicated by the computer modeling, the proposed structures will be visible in similarly areas within the resource as the existing line, with additional areas located to the southwest of the switch yard (Figure 13). The overall visual impact of the proposed structures; however, will not greatly change from the existing



conditions in the vicinity of this resource. Based on the fieldwork, the preliminary heights of the proposed structures, and the viewshed modeling for the resource, *it is recommended that the proposed Project would have a Minimal Visual Impact to the Cockpit Point Battlefield (VDHR #076-5842).*





4.0 CONCLUSIONS

4.1 OVERVIEW

Stantec was retained by Dominion Energy to conduct a Stage I Pre-Application Analysis for the proposed Line #2078 project. The project, in order to maintain the reliability of its transmission system in compliance with mandatory NERC Reliability Standards, Dominion Energy, pending final approval by the SCC, proposes to:

- install a second 500-230 kV transformer bank at the Possum Point 500 kV Substation and perform associated bus work;
- rebuild approximately 0.8 mile of existing 230 kV transmission Line #2078 between the company's existing Possum Point 500 kV and 230 kV substations in Prince William County, which is located within an existing corridor on Dominion Energy-owned property. In order to utilize the existing corridor to accommodate a second circuit following the addition of a 500-230 kV transformer bank at the Possum Point 500 kV Substation;
- install 0.95 mile of a new 230 kV transmission line, Line #2216, between the Company's existing Possum Point 500 kV and 230 kV Substations along the majority of the Line #2078 corridor and primarily collocated with the Line #2078 structures, with three new structures on Company property in a new approximately 0.29-mile corridor adjacent to the existing Possum Point 500 kV Substation;
- install a circuit breaker and line terminal equipment at the Possum Point 230 kV Substation; and
- install two new structures to raise Lines #215 and #2001 and Lines #237 and #2022 to provide clearance for Line #2078 and Line #2216.

4.1.1 Recommendations - Architectural Resources

One NRHP-listed resource, the Quantico Marine Corps Base Historic District (VDHR #287-0010), was located within 1.0-mile of the Project centerline and ROW. Two NRHP-eligible resources, the Richmond, Fredericksburg & Potomac Railroad (VDHR #076-0301) and the Richmond, Fredericksburg & Potomac Railroad Historic District (VDHR #500-0001) were located within 0.5-mile of the Project centerline and also cross the Project ROW. Additionally, one battlefield, Cockpit Point (VDHR #076-5842) was also identified within 0.5 mile of the Project centerline. Currently the battlefield has not been evaluated by VDHR; however, is recommended eligible by the ABPP. No previously recorded archaeological resources were located within the project limits. Table 4 details the recommendations for the project.

According to preliminary engineering for the Project, the proposed structures would increase in height approximately 16 to 40 (maximum) feet over the height of the existing structures with two new structures approximately 145 feet in height. Based on the review of the current and proposed



structures, the results of the fieldwork, and computer visual effects modeling, it does not appear that the overall visual impact of the proposed structures will greatly change from the existing conditions in the vicinity of this resource. Therefore, it is recommended that the proposed Project would have a Minimal Impact to the Richmond, Fredericksburg & Potomac Railroad (VDHR #076-0301), the Richmond, Fredericksburg & Potomac Railroad Historic District (VDHR #500-0001), the Quantico Marine Corps Base Historic District (VDHR #287-0010) and the Cockpit Point Battlefield (VDHR #076-5842).

Table 4 Previously Recorded Architectural Resources Considered for the Stage I Pre-Application Process

VDHR #	Resource Name	VDHR/NRHP Status	Distance to Centerline (Feet)	Impact
076-0301	Richmond, Fredericksburg & Potomac Railroad	Determined Eligible by VDHR in 2010; Determined Potentially Eligible by VDHR in 2016	0	Minimal
076-5842	Cockpit Point Battlefield	Recommended Potentially Eligible (ABPP)	0	Minimal
287-0010	Quantico Marine Corps Base Historic District	NRHP-Listed 2001	4,640	Minimal
500-0001	Richmond, Fredericksburg & Potomac Railroad Historic District	Determined Eligible for Listing on the NRHP by VDHR in 2018	0	Minimal



5.0 REFERENCES

Advisory Council for Historic Preservation (ACHP)

2000 36 CFR 800: Part 800- Protection of Historic and Cultural Properties. Federal Register, September 2, Washington, D.C.

United States Department of the Interior (Interagency Resources Division)

- 1981 Department of the Interior's Regulations, 36 CFR Part 60: National Register of Historic Places. Interagency Resources Division, National Park Service, U.S. Department of the Interior, Washington, D.C.
- 1983 Department of the Interior, Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines. Interagency Resources Division, National Park Service, U.S. Department of the Interior, Washington, D.C.
- 1991 How to Apply the National Register Criteria of Evaluation. National Register Bulletin 15. Interagency Resources Division, National Park Service, U.S. Department of the Interior, Washington, D.C.

Virginia Department of Historic Resources (VDHR)

- 2008 Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia. VDHR, Richmond.
- 2020 VDHR Archive Files.



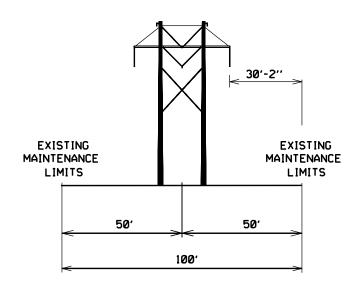
APPENDIX

Appendix A SCHEMATICS



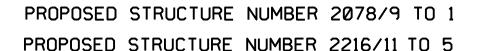
EXISTING STRUCTURE NUMBER 2078/10 TO 1

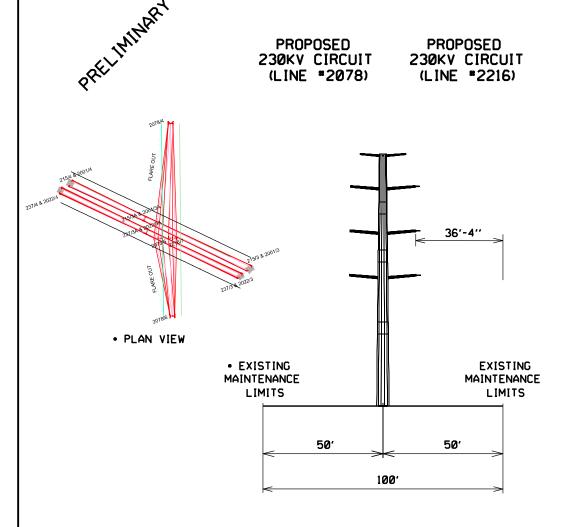
EXISTING 230KV CIRCUIT (LINE *2078)



EXISTING CONFIGURATION

TYPICAL CORRIDOR LOOKING TOWARD 500kV STATION





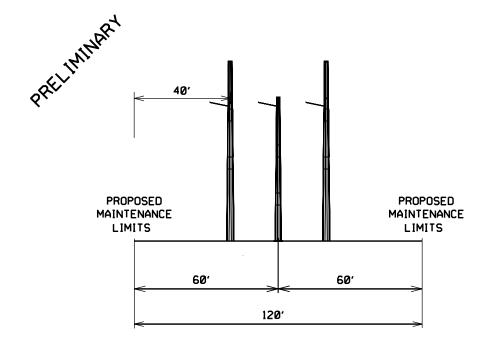
PROPOSED CONFIGURATION TYPICAL CORRIDOR LOOKING TOWARD 500kV STATION

*PROPOSED CORRIDOR FLARES OUT AN ADDITIONAL 85'AT STRUCTURE 2078/5. FLARE OUT STARTS AT PROPOSED STRUCTURE 2078/6 AND ENDS AT STRUCTURE 2078/4. THIS INCLUDES TWO SPANS FOR APPROXIMATELY 1000' WHICH INCLUDES AN APPROXIMATE 200' OVERLAP WITH THE EXISTING LINE 215, 237, 2001, & 2022 CORRIDOR.

NOTE: Information contained on drawing is to be considered preliminary in nature and subject to change based on final design.

PROPOSED STRUCTURE NUMBER 2216/4 TO 1

PROPOSED 230KV CIRCUIT (LINE *2216)



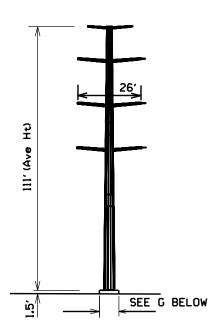
PROPOSED CONFIGURATION

TYPICAL CORRIDOR LOOKING TOWARD 500kV STATION

NOTE: Information contained on drawing is to be considered preliminary in nature and subject to change based on final design.

DOUBLE CIRCUIT DOUBLE DEADEND STEEL POLE

PRELIMINARY



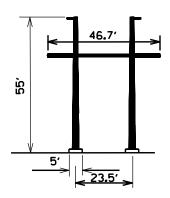
PROPOSED STRUCTURES

- MAPPING THAT IDENTIFIES EACH PORTION OF THE PREFERRED ROUTE: SEE ATTACHMENT II.B.5
- b. RATIONALE FOR THE SELECTION OF THE STRUCTURE TYPE: THE SINGLE SHAFT STEEL POLE ALLOWS THE INSTALLATION OF A SECOND 230kV CIRCUIT IN THE EXISTING CORRIDOR.
- c. NUMBER OF EACH TYPE OF STRUCTURE AND LENGTH OF EACH PORTION OF THE R/W: 5 AND 0.8 MILES LINE 2078 (0.95 MILES LINE 2216)
- d. STRUCTURE MATERIAL AND RATIONALE FOR THE SELECTION OF SUCH MATERIAL:
 GALVANIZED STEEL TO RESEMBLE EXISTING CONCRETE POLES
- e. FOUNDATION MATERIAL: CONCRETE (Str 2078/3, 4, & 6)
 H-PILE WITH CONCRETE CAP (Str 2078/7 & 8)
- f. AVERAGE WIDTH AT CROSSARM: 26'
- g. AVERAGE WIDTH AT BASE: 6.5' DIAMETER (RANGE OF 6'-7.5' FOR Str 2078/3, 4, & 6)

 11'*5' PEDESTAL (Str 2078/7 & 8)
- h. MAX, MIN, AND AVERAGE STRUCTURE HEIGHTS: 120 FEET, 100', AND 111'
 (DOES NOT INCLUDE FOUNDATION REVEAL)
- 1. AVERAGE SPAN LENGTH: 532 FEET (RANGE 238 990 FEET) (LINE 2078) 508 FEET (RANGE 139 - 990 FEET) (LINE 2216)
- j. MINIMUM CONDUCTOR-GROUND CLEARANCE UNDER MAXIMUM OPERATING CONDITIONS: 22.5'
 NOTE: Information contained on drawing is to be considered preliminary
 in nature and subject to change based on final design.

SINGLE CIRCUIT STEEL H-FRAME

PRELIMINARY



PROPOSED STRUCTURES

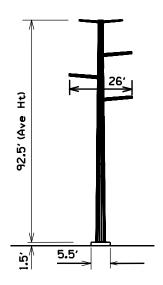
- a. MAPPING THAT IDENTIFIES EACH PORTION OF THE PREFERRED ROUTE: SEE ATTACHMENT II.B.5
- b. RATIONALE FOR THE SELECTION OF THE STRUCTURE TYPE: THE H-FRAME STRUCTURE PLACES THE CONDUCTORS IN THE HORIZONTAL POSITION TO CROSS UNDER THE FOUR EXISTING 230kV LINES.
- c. NUMBER OF EACH TYPE OF STRUCTURE AND LENGTH OF EACH PORTION OF THE R/W: 1 AND 0.8 MILES (LINE 2078) 1 AND 0.95 MILES (LINE 2216)
- d. STRUCTURE MATERIAL AND RATIONALE FOR THE SELECTION OF SUCH MATERIAL:
 GALVANIZED STEEL TO RESEMBLE EXISTING CONCRETE POLES
- e. FOUNDATION MATERIAL: CONCRETE
- f. AVERAGE WIDTH AT CROSSARM: 46.7
- g. AVERAGE WIDTH AT BASE: 28.5'
- h. MAX, MIN, AND AVERAGE STRUCTURE HEIGHTS: 55 FEET, 55', AND 55'

(DOES NOT INCLUDE FOUNDATION REVEAL)

- 1. AVERAGE SPAN LENGTH: 532 FEET (RANGE 238 990 FEET) (LINE 2078) 508 FEET (RANGE 139 - 990 FEET) (LINE 2216)
- j. MINIMUM CONDUCTOR-GROUND CLEARANCE UNDER MAXIMUM OPERATING CONDITIONS: 22.5'

NOTE: Information contained on drawing is to be considered preliminary in nature and subject to change based on final design.

SINGLE CIRCUIT STEEL POLE



PROPOSED STRUCTURES

- a. MAPPING THAT IDENTIFIES EACH PORTION OF THE PREFERRED ROUTE: SEE ATTACHMENT II.B.5
- b. RATIONALE FOR THE SELECTION OF THE STRUCTURE TYPE: THE SINGLE SHAFT STEEL POLE REDUCES THE FOOTPRINT OF THE STRUCTURE
- c. NUMBER OF EACH TYPE OF STRUCTURE AND LENGTH OF EACH PORTION OF THE R/W: 1 AND 0.8 MILES (LINE 2078)
- 1 AND 0.95 MILES (LINE 2216)
- d. STRUCTURE MATERIAL AND RATIONALE FOR THE SELECTION OF SUCH MATERIAL: GALVANIZED STEEL TO MATCH REBUILT LINE 2078
- e. FOUNDATION MATERIAL: CONCRETE
- f. AVERAGE WIDTH AT CROSSARM: 26'
- q. AVERAGE WIDTH AT BASE: 5.5'
- h. MAX, MIN, AND AVERAGE STRUCTURE HEIGHTS: 100 FEET, 85', AND 92.5'

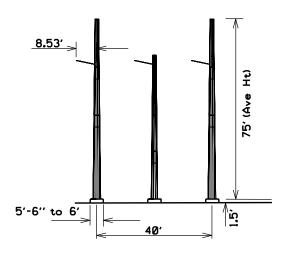
(DOES NOT INCLUDE FOUNDATION REVEAL)

- 1. AVERAGE SPAN LENGTH: 532 FEET (RANGE 238 990 FEET) (LINE 2078) 508 FEET (RANGE 139 - 990 FEET) (LINE 2216)
- j. MINIMUM CONDUCTOR-GROUND CLEARANCE UNDER MAXIMUM OPERATING CONDITIONS: 22.5'

NOTE: Information contained on drawing is to be considered preliminary in nature and subject to change based on final design.

SINGLE CIRCUIT STEEL 3-POLE

PRELIMINARY



PROPOSED STRUCTURES

- a. MAPPING THAT IDENTIFIES EACH PORTION OF THE PREFERRED ROUTE: SEE ATTACHMENT II.B.5
- b. RATIONALE FOR THE SELECTION OF THE STRUCTURE TYPE:

 THE 3-POLE STRUCTURE PLACES THE CONDUCTORS IN A HORIZONTAL ARRANGEMENT
 TO CROSS UNDER THE EXISTING 500kV LINE
- c. NUMBER OF EACH TYPE OF STRUCTURE AND LENGTH OF EACH PORTION OF THE R/W: 2 AND 0.95 MILES (LINE 2216)
- d. STRUCTURE MATERIAL AND RATIONALE FOR THE SELECTION OF SUCH MATERIAL:
 GALVANIZED STEEL TO MATCH REBUILT LINE 2078
- e. FOUNDATION MATERIAL: CONCRETE
- f. AVERAGE WIDTH AT CROSSARM: SEE ABOVE
- g. AVERAGE WIDTH AT BASE: SEE 45.75' (RANGE OF 45.5'-46')
- h. MAX, MIN, AND AVERAGE STRUCTURE HEIGHTS: 90 FEET, 60', AND 75'

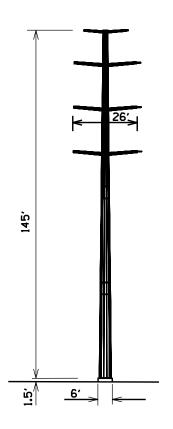
(DOES NOT INCLUDE FOUNDATION REVEAL)

- 1. AVERAGE SPAN LENGTH: 508 FEET (RANGE 139 990 FEET) (LINE 2216)
- j. MINIMUM CONDUCTOR-GROUND CLEARANCE UNDER MAXIMUM OPERATING CONDITIONS: 22.5'

NOTE: Information contained on drawing is to be considered preliminary in nature and subject to change based on final design.

DOUBLE CIRCUIT DOUBLE DEADEND STEEL POLE

PREIMINARY



PROPOSED STRUCTURES

- a. MAPPING THAT IDENTIFIES EACH PORTION OF THE PREFERRED ROUTE: SEE ATTACHMENT II.B.5
- b. RATIONALE FOR THE SELECTION OF THE STRUCTURE TYPE: MAINTAINS THE CONDUCTORS IN THE EXISTING VERTICAL ARRANGEMENT AND RAISES THE LINES FOR THE PROPOSED 230kV CROSSING
- c. NUMBER OF EACH TYPE OF STRUCTURE AND LENGTH OF EACH PORTION OF THE R/W: 2 AND 0 MILES (LINE 237/2022 & 215/2001)
- d. STRUCTURE MATERIAL AND RATIONALE FOR THE SELECTION OF SUCH MATERIAL:
 GALVANIZED STEEL TO MATCH REBUILT LINE 2078
- e. FOUNDATION MATERIAL: CONCRETE
- f. AVERAGE WIDTH AT CROSSARM: 26'
- g. AVERAGE WIDTH AT BASE: 6'
- h. MAX, MIN, AND AVERAGE STRUCTURE HEIGHTS: 145 FEET, 145', AND 145'

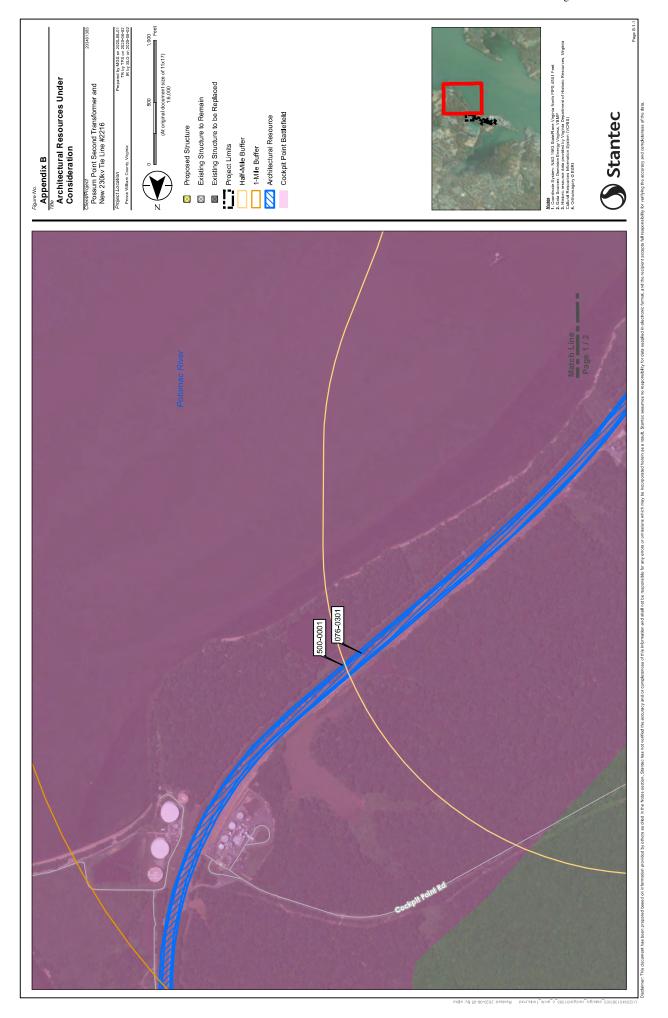
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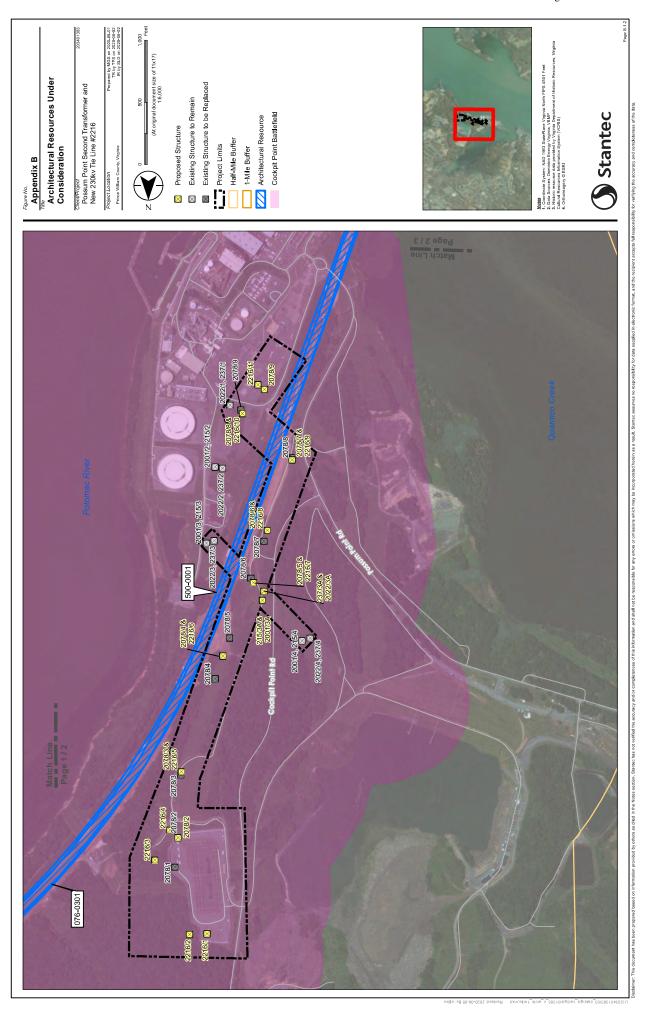
- 1. AVERAGE SPAN LENGTH: 553 FEET (RANGE 531 576 FEET FOR LINE 237)
 552 FEET (RANGE 455 648 FEET FOR LINE 215)
- j. MINIMUM CONDUCTOR-GROUND CLEARANCE UNDER MAXIMUM OPERATING CONDITIONS: 22.5'

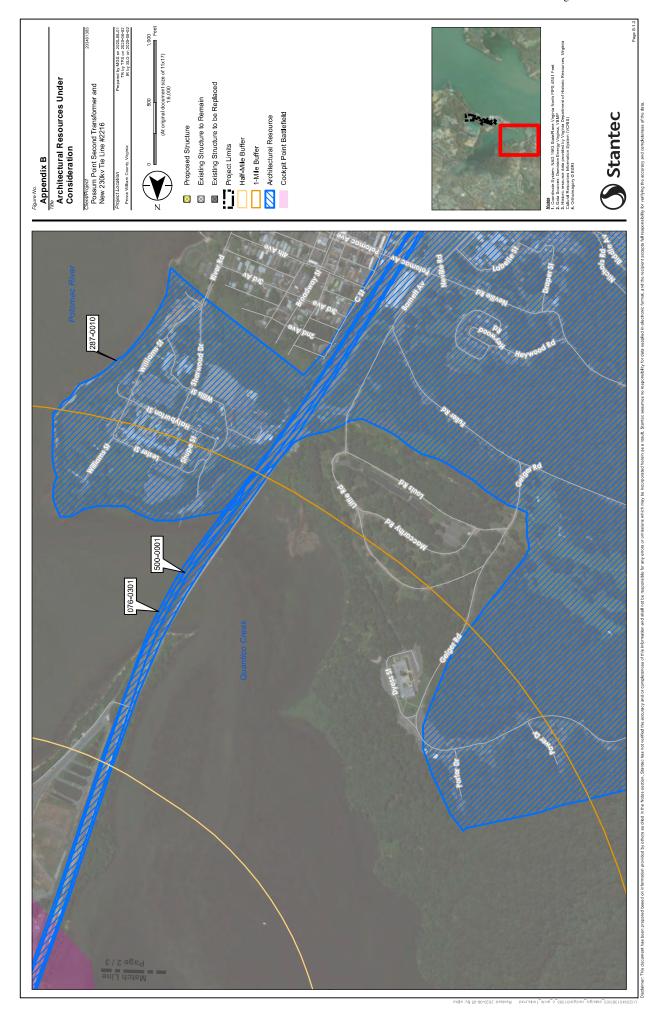
NOTE: Information contained on drawing is to be considered preliminary in nature and subject to change based on final design.

Appendix B ARCHITECTURAL RESOURCES UNDER CONSIDERATION









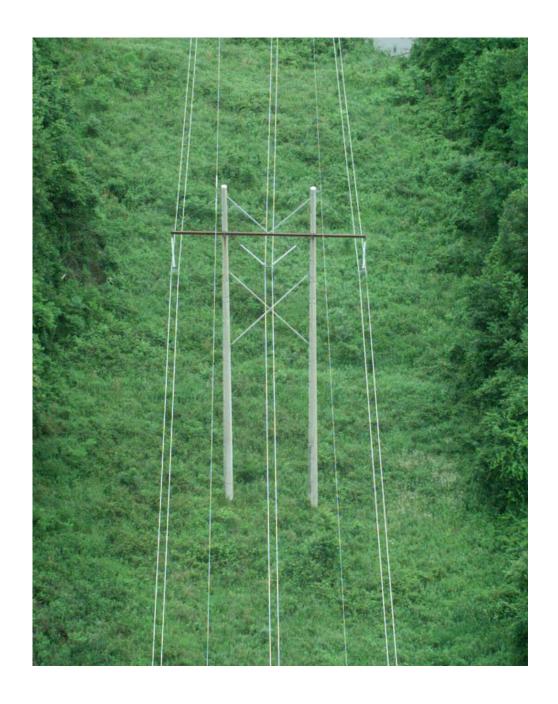
STAGE I PRE-APPLICATION ANALYSIS FOR THE PROPOSED DOMINION ENERGY VIRGINIA POSSUM POINT SECOND TRANSFORMER AND NEW 230 KV TIE LINE #2216, PRINCE WILLIAM COUNTY, VIRGINIA

Appendix C PHOTOSIMULATIONS









Photograph provided by Stantec





Photograph provided by Stantec



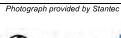














Proposed Double Circuit DDE Steel Pole

Stantec Pominion Stantec

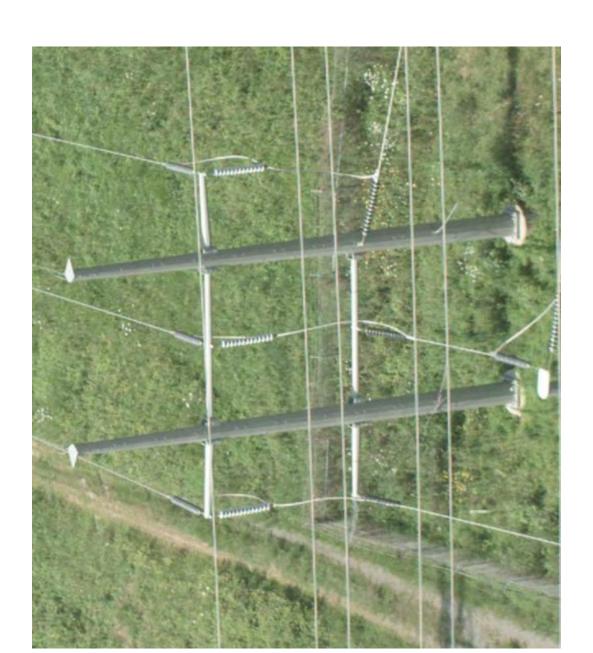


Photograph provided by Dominion Energy



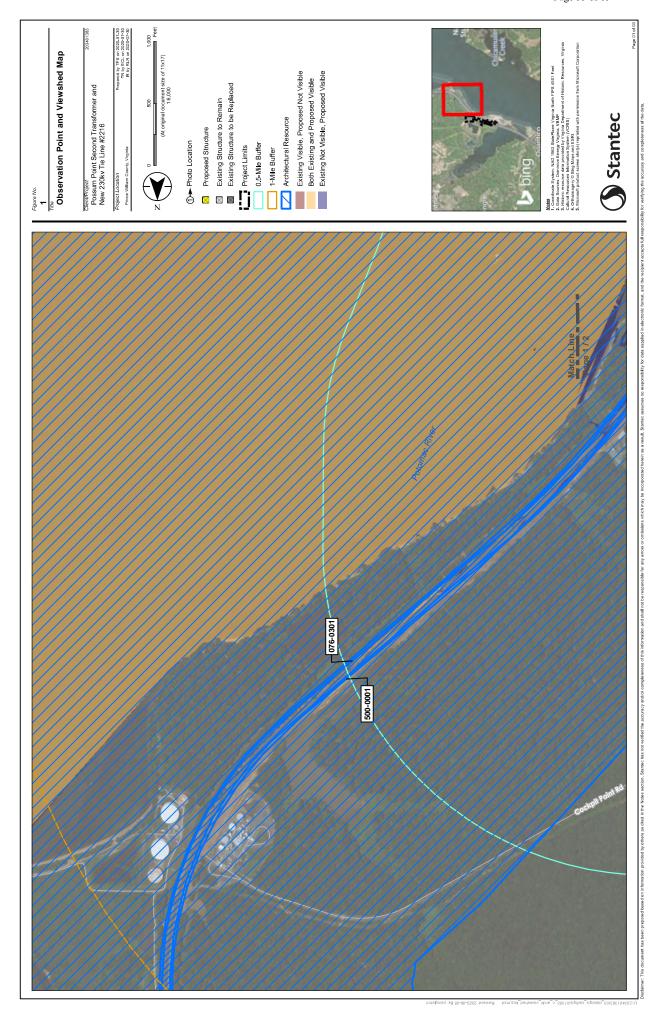


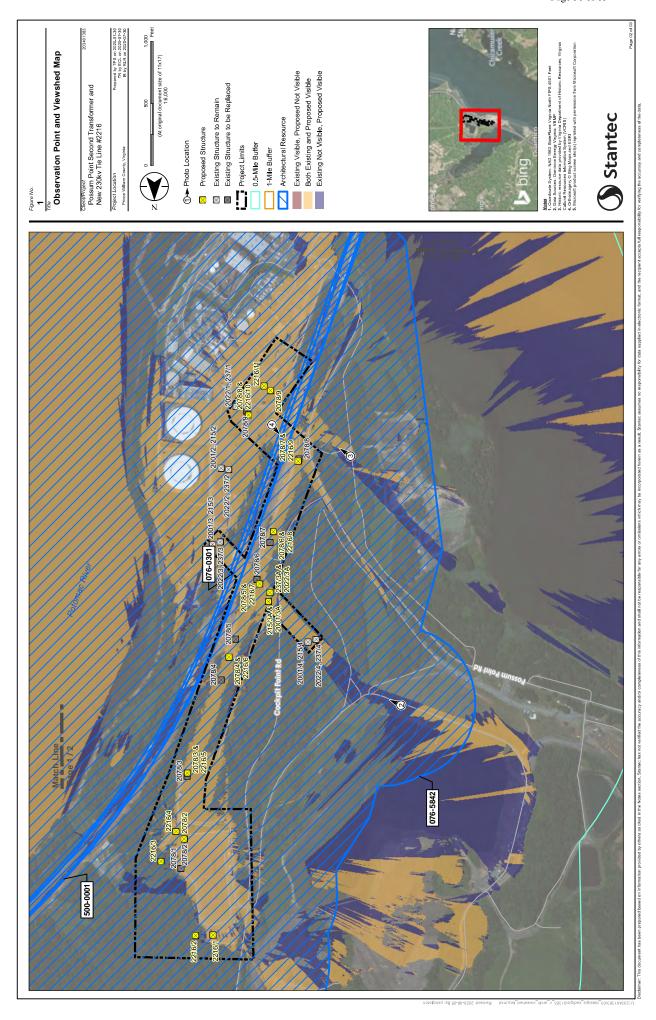
Photograph provided by Dominion Energy

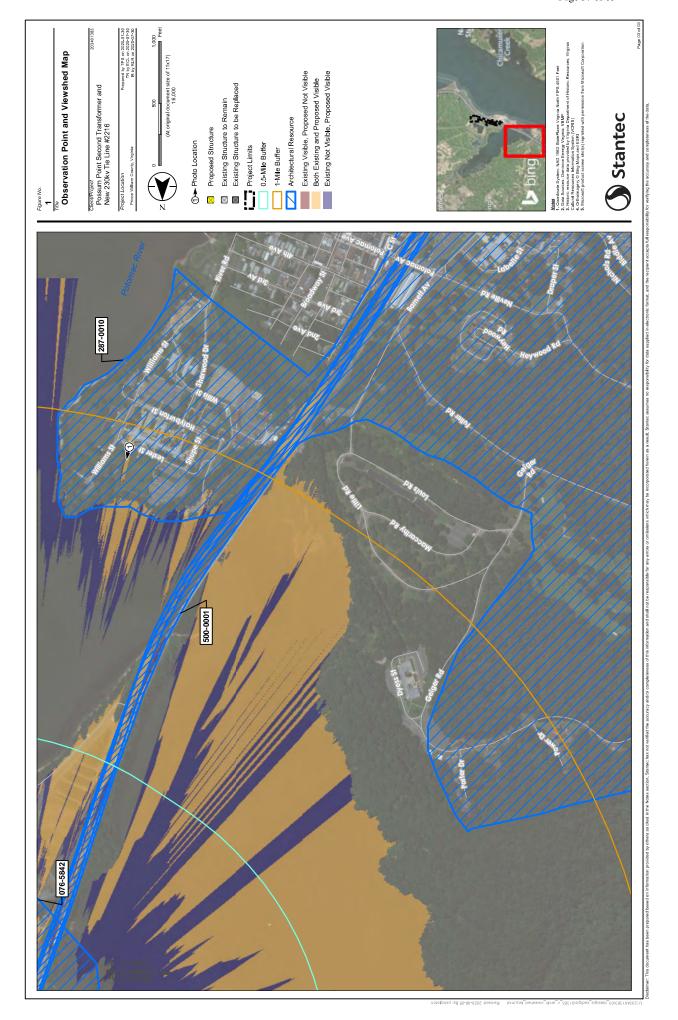


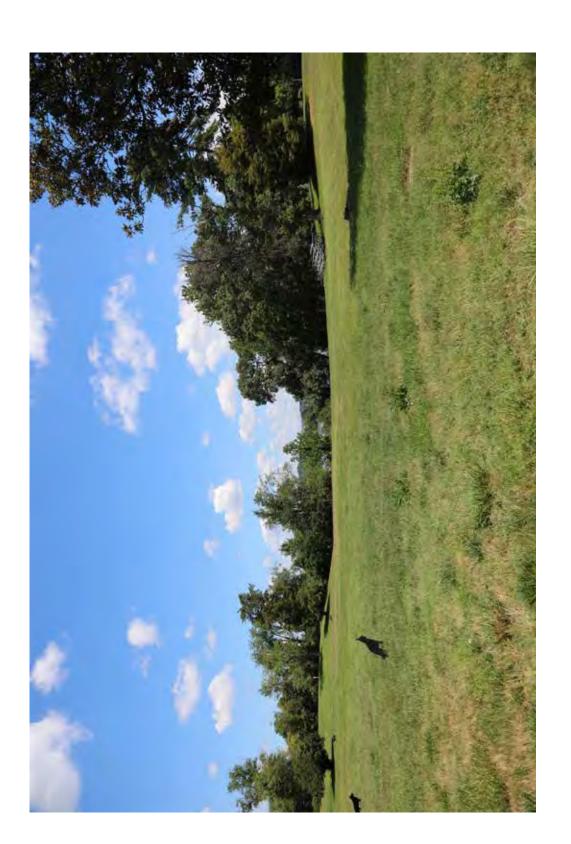
Photograph provided by Dominion Energy









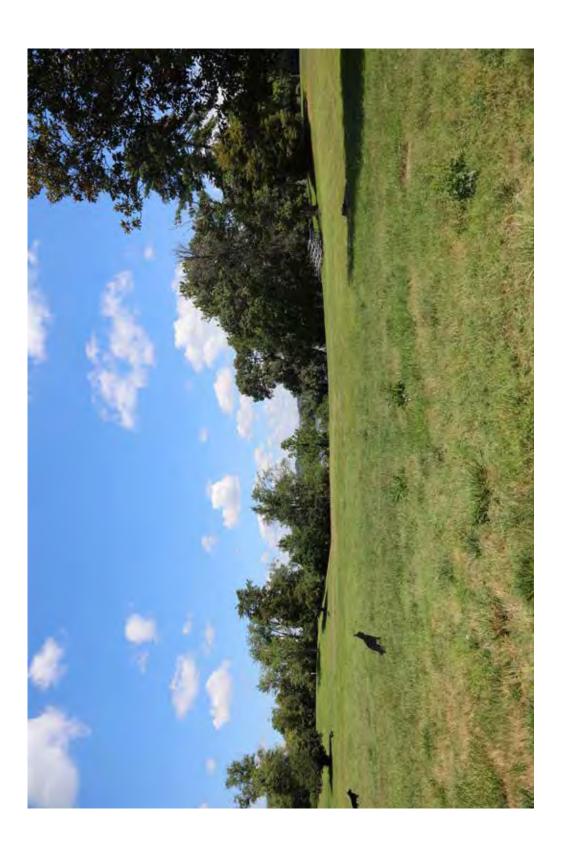


Observation Point 1: Existing Quantico Marine Corps Base Historic District (DHR #287-0010)

Stantec. Senergy

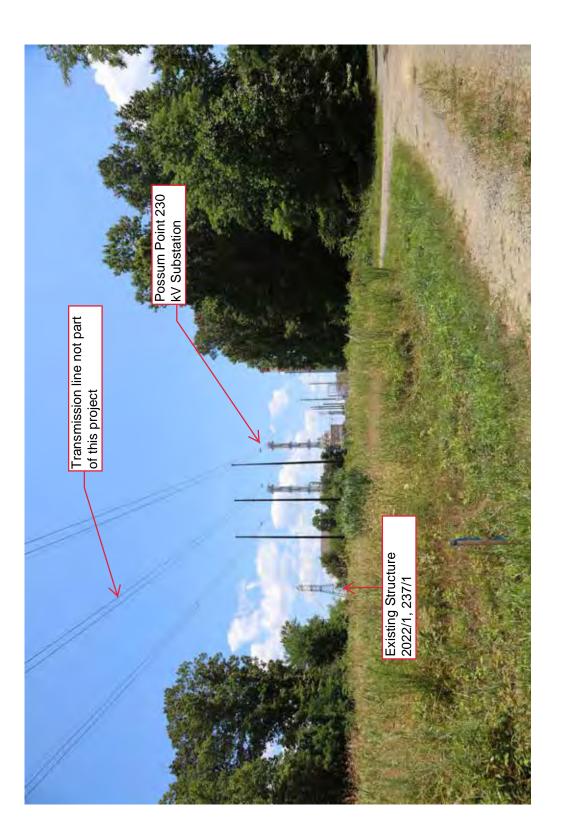


Observation Point 1: Proposed



Stantec Speninion Stantec

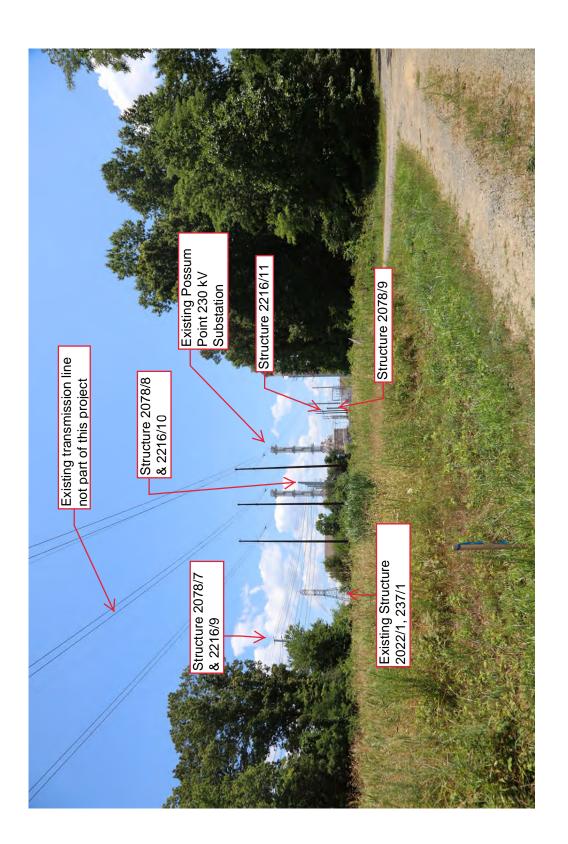




Observation Point 3: Existing Cockpit Point Battlefield (DHR #076-5842)

Representation Provided by Stantec *Subject to final engineering





Observation Point 3: Proposed Cockpit Point Battlefield (DHR #076-5842)



Representation Provided by Stantec *Subject to final engineering



Observation Point 4: Existing Richmond, Fredericksburg & Potomac Railroad Historic District (DHR #500-0001); Cockpit Point **Battlefield (DHR #076-5842)**







Observation Point 4: Proposed Richmond, Fredericksburg & Potomac Railroad Historic District (DHR #500-0001); Cockpit Point Battlefield (DHR #076-5842)

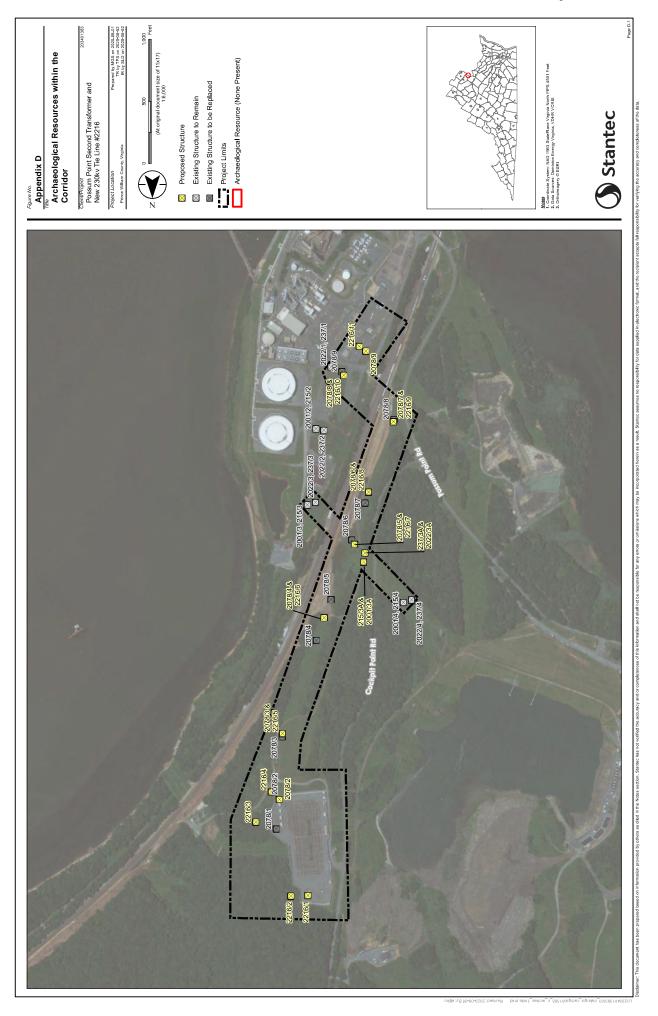




STAGE I PRE-APPLICATION ANALYSIS FOR THE PROPOSED DOMINION ENERGY VIRGINIA POSSUM POINT SECOND TRANSFORMER AND NEW 230 KV TIE LINE #2216, PRINCE WILLIAM COUNTY, VIRGINIA

Appendix D ARCHAEOLOGICAL RESOURCES WITHIN THE CORRIDOR





Stacey T Ellis (Services - 6)

From: Moore, Daniel (DEQ) <Daniel.Moore@deq.virginia.gov>

Sent: Monday, February 6, 2023 3:15 PM

To: Stacey T Ellis (Services - 6)
Cc: Fulcher, Valerie (DEQ)

Subject: [EXTERNAL] Line #2216 Possum Pt. Prince Wm. Countty

Attachments: SCOPING Dominion Energy Line #2216 Possum Point Prince Wm. Co.docx

CAUTION! This message was NOT SENT from DOMINION ENERGY

Are you expecting this message to your DE email? Suspicious? Use PhishAlarm to report the message. Open a browser and type in the name of the trusted website instead of clicking on links. DO NOT click links or open attachments until you verify with the sender using a known-good phone number. Never provide your DE password.

Ms. Ellis -

Please find attached the scoping letter response for the Possum Pt. Line #2216 project.

Daniel Moore

Principal Environmental Planner
Office of Watersheds and Local Government Assistance Programs
Department of Environmental Quality
1111 East Main Street
P.O. Box 1105
Richmond, VA 23219
(804) 774-9577
daniel.moore@deq.virginia.gov



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

1111 E. Main Street, Suite 1400, Richmond, Virginia 23219
P.O. Box 1105, Richmond, Virginia 23218
(800) 592-5482 FAX (804) 698-4178
www.deg.virginia.gov

Travis A. Voyles Secretary of Natural and Historic Resources Michael S. Rolband, PE, PWD, PWS Emeritus Director (804) 698-4020

MEMORANDUM

TO: Stacey T. Ellis, Dominion Energy

FROM: Daniel Moore, Principal Environmental Planner

DATE: February 7, 2023

SUBJECT: Dominion Energy Proposed Possum Point 2nd Transformer and New 230 kV Tie

Line #2216 Project – Prince William Counties

We have reviewed the EA for the proposed project and offer the following comments regarding consistency with the provisions of the *Chesapeake Bay Preservation Area Designation and Management Regulations* (Regulations):

In Prince William County, the areas protected by the Chesapeake Bay Preservation Act, as locally implemented, require conformance with performance criteria. These areas include Resource Protection Areas (RPAs) and Resource Management Areas (RMAs) as designated by the local government. RPAs include tidal wetlands, certain non-tidal wetlands and tidal shores. RPAs also include a 100-foot vegetated buffer area located adjacent to and landward of these features and along both sides of any water body with perennial flow. RMAs, which require less stringent performance criteria, include all areas of each county not included in the RPAs.

The proposed project will involve the following components: (i) install a second 500-230 kV transformer bank at the Possum Point 500 kV substation; (ii) rebuild approximately 0.8 miles of existing 230 kV transmission line #2078 within the existing transmission corridor between the existing Possum Point 500 kV and 230 kV substations; (iii) install approximately 0.95 miles of a new 230 kV transmission line #2216, between the existing Possum Point 500 kV and 230 kV substations along the majority of the line #2078 corridor and primarily collocated with line #2078 structures, with three new structures in a new approximately 0.29-mile corridor adjacent to the existing Possum Point 500 kV substation; (iv) install a circuit breaker and line terminal equipment at the Possum Point 230 kV substation; and (v) install two new structures to raise lines #215/#2001 and lines #237/#2022 to provide clearance for line #2078 and line #2216.

The proposed project is considered exempt from §9 VAC 25-830-150 B 2 of the Regulations provided the proposed electrical transmission lines in accord with the following conditions:

- (a) to the degree possible, the location of such utilities and facilities should be outside the RPA;
- (b) no more land shall be disturbed than is necessary to provide for the proposed utility installation;
- (c) all such construction, installation and maintenance of such utilities and facilities shall be in compliance with all applicable state and federal permits and designed and conducted in a manner that protects water quality; and
- (d) any land disturbance exceeding an area of 2,500 square feet complies with all erosion and sediment control regulations promulgated pursuant to the *Virginia Erosion and Sediment Control Law* and the *Virginia Stormwater Management Act*, (ii) an erosion and sediment control plan and a stormwater management plan approved by DEQ, or (iii) local water quality protection criteria at least as stringent as the above state requirements.

Provided adherence to the above requirements, the proposed activity would be consistent with the Regulations and the *Chesapeake Bay Preservation Act*.

From: <u>ImpactReview</u>

To: <u>Charles H Weil (Services - 6)</u>

Subject: [EXTERNAL] RE: Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230 kV Tie -

Project Notification

Date: Friday, February 3, 2023 10:26:55 AM

Attachments: <u>image001.png</u>

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Hi Charles,

The Virginia Outdoors Foundation has reviewed the project referenced below. As of February 3, 2023, there are not any existing nor proposed VOF open-space easements immediately adjacent to the project.

Please contact VOF again for further review if the project area changes or if this project does not begin within 24 months. Thank you for considering conservation easements.

Best, Baron

Baron Lin (he/they)

GIS Specialist

Virginia Outdoors Foundation

cell: 540-935-3163

other work #: 844-863-9800, ext. 355

email: blin@vof.org

From: Charles.H.Weil@dominionenergy.com < Charles.H.Weil@dominionenergy.com >

Sent: Friday, February 3, 2023 8:39 AM **To:** Martha Little < mlittle@vof.org>

Cc: Stacey.T.Ellis@dominionenergy.com; Becky.Wilk@stantec.com

Subject: Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230 kV Tie -

Project Notification

Alert: This email originated from outside VOF

Good morning Ms. Little,

Please see the attached project notification in support of our State Corporation Commission CPCN application. If you need additional information, please feel free to contact me.

Thank you,

Chuck Weil, PE

Engineer III Siting & Permitting, Electric Transmission 10900 Nuckols Rd, 4th Floor, Glen Allen, VA 23060 M: 804-239-6450



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From: <u>Stacey.T.Ellis@dominionenergy.com</u>

To: Wilk, Becky

Cc: Charles.H.Weil@dominionenergy.com

Subject: FW: NEW SCOPING Proposed Possum Point 2nd Transformer

Date: Tuesday, February 7, 2023 11:38:41 AM

From: ImpactReview <impactreview@vof.org>

Sent: Tuesday, February 7, 2023 8:55 AM

To: Stacey T Ellis (Services - 6) <Stacey.T.Ellis@DominionEnergy.com>; Fulcher, Valerie (DEQ)

<Valerie.Fulcher@deq.virginia.gov>

Subject: [EXTERNAL] RE: NEW SCOPING Proposed Possum Point 2nd Transformer

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Hi Stacey,

The Virginia Outdoors Foundation has reviewed the project referenced below. As of February 7, 2023, there are not any existing nor proposed VOF open-space easements immediately adjacent to the project.

Please contact VOF again for further review if the project area changes or if this project does not begin within 24 months. Thank you for considering conservation easements.

Best,

Baron

Baron Lin (he/they)

GIS Specialist

Virginia Outdoors Foundation

cell: 540-935-3163

other work #: 844-863-9800, ext. 355

email: blin@vof.org

From: Fulcher, Valerie (DEQ) < <u>Valerie.Fulcher@deq.virginia.gov</u>>

Sent: Monday, February 6, 2023 1:18 PM

To: dgif-ESS Projects (DWR) < ESSProjects@dwr.virginia.gov; Tignor, Keith (VDACS)

< keith.Tignor@vdacs.virginia.gov; rr DCR-PRR Environmental Review (keith.Tignor@vdacs.virginia.gov; rr DCR-PRR Environmental Review (keith.Tignor@vdacs.virginia.gov; rr DCR-PRR Environmental Review (keith.Tignor@vdacs.virginia.gov)

<envreview@dcr.virginia.gov>; odwreview (VDH) <odwreview@vdh.virginia.gov>; Gavan, Larry

(DEQ) <<u>Larry.Gavan@deq.virginia.gov</u>>; Martinez, Carlos (DEQ) <<u>Carlos.Martinez@deq.virginia.gov</u>>;

Ballou, Thomas (DEQ) < Thomas.Ballou@deq.virginia.gov >; Mackey, Heather (DEQ)

< Heather. Mackey@deq.virginia.gov >; Miller, Mark (DEQ) < Mark. Miller@deq.virginia.gov >; Kirchen,

 $Roger (DHR) < \underline{Roger.Kirchen@dhr.virginia.gov}; MRC - Scoping (MRC) < \underline{Scoping@mrc.virginia.gov};$

Didier, Karl (Virginia) < Karl.Didier@dof.virginia.gov; Folks, Clint (DOF)

< <u>Clint.Folks@dof.virginia.gov</u>>; rr EIR Coordination (<u>eir.coordination@vdot.virginia.gov</u>)

<eir.coordination@vdot.virginia.gov>; ImpactReview <impactreview@vof.org>; Lazaro, Robert

(VDOT) < rlazaro@novaregion.org >; ispatton@pwcgov.org (ispatton@pwcgov.org)

<ispatton@pwcgov.org>

Cc: stacey.t.ellis@dominionenergy.com (stacey.t.ellis@dominionenergy.com)

<stacey.t.ellis@dominionenergy.com>

Subject: NEW SCOPING Proposed Possum Point 2nd Transformer

Alert: This email originated from outside VOF

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

Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230 kV Tie Line #2216- Prince William County, Virginia

If you choose to make comments, please send them directly to the project sponsor (<u>Stacey.T.Ellis@DominionEnergy.com</u>) and copy the DEQ Office of Environmental Impact Review: <u>eir@deq.virginia.gov</u>. 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 <u>eir@deq.virginia.gov</u>.

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

NEW PHONE NUMBER: 804-659-1550

Email: <u>Valerie.Fulcher@deq.virginia.gov</u>

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

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From: Burke, Richard

To: Charles H Weil (Services - 6)
Cc: John Lynch; David A. Heironimus

Subject: [EXTERNAL] Fwd: Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230 kV Tie -

Project Notification

Date: Friday, February 3, 2023 1:08:56 PM

Attachments: <u>image001.png</u>

01924 p 1a1.pdf VDOT Notification Letter.pdf

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Mr. Weil --

Good afternoon, Mr. Lynch has asked I respond on his behalf. Our Permits team and I have reviewed the route and from the information provided it appears most of the impacts are outside VDOT right of way. There appears to be a crossing of Route 783, Cockpit Point Road. Therefore when you are ready for construction please contact Mr. David Heironimus, Prince William Permit Manager to obtain a permit. In the interim, if you have any questions or need further coordination please feel free to reach out to Dave or me.

Thanks,

Dic Burke

Transportation Director / NOVA District
Virginia Department of Transportation
703-366-1935

Richard.Burke@VDOT.Virginia.gov



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

From: <u>Charles.H.Weil@dominionenergy.com</u> < <u>Charles.H.Weil@dominionenergy.com</u> >

Date: Fri, Feb 3, 2023 at 8:47 AM

Subject: Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230

kV Tie - Project Notification

To: <u>iohn.lvnch@vdot.virginia.gov</u> < <u>iohn.lvnch@vdot.virginia.gov</u>>

Cc: <u>Stacey.T.Ellis@dominionenergy.com</u> < <u>Stacey.T.Ellis@dominionenergy.com</u>>,

Becky.Wilk@stantec.com < Becky.Wilk@stantec.com>

Please see the attached project notification in support of our State Corporation Commission CPCN application. If you need additional information, please feel free to contact me.

Thank you,

Chuck Weil, PE

Engineer III

Siting & Permitting, Electric Transmission

10900 Nuckols Rd, 4th Floor, Glen Allen, VA 23060

M: 804-239-6450



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Page 3 of 3

From: Dabestani, Cina <cina.dabestani@vdot.virginia.gov>

Sent: Thursday, March 2, 2023 8:58 AM

To: Stacey T Ellis (Services - 6) <Stacey.T.Ellis@dominionenergy.com>; rr EIR Coordination

<eir.coordination@vdot.virginia.gov>

Cc: Michael Trinh <michael.trinh@vdot.virginia.gov>; Trivedi, Rahul <rahul.trivedi@vdot.virginia.gov>; Amirhossein

Shahpar <amir.shahpar@vdot.virginia.gov>

Subject: [EXTERNAL] Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230 kV Tie Line

#2216- Prince William County, Virginia

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Ms. Ellis-

Thank you for providing the opportunity to review the subject project's proposal.

After careful review by VDOT-NoVa, there are no comments to be offered since this project is entirely within private right-of-way.

Should you have any questions or concerns, please do not hesitate to contact me.

Thank you, Cina S. Dabestani

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From: Warren, Arlene

To: Rachel M Studebaker (Services - 6)

Subject: [EXTERNAL] Re: FW: SCC Case No. PUR-2021-00010/DEQ21-013S

Date: Tuesday, June 22, 2021 7:54:22 AM

Attachments: <u>image001.png</u>

This is an EXTERNAL email that was NOT sent from Dominion Energy. Are you expecting this message? Are you expecting a link or attachment? DO NOT click links or open attachments until you verify them

The proposal from Dominion is reasonable and we consider it acceptable.

Best Regards,

Arlene Fields Warren

GIS Program Support Technician

Office of Drinking Water

Virginia Department of Health

109 Governor Street

Richmond, VA 23219

(804) 864-7781

On Thu, Jun 17, 2021 at 4:33 PM <u>Rachel.M.Studebaker@dominionenergy.com</u> < <u>Rachel.M.Studebaker@dominionenergy.com</u> > wrote:

Hello Ms. Warren,

I am reaching out in regard to the DEQ Report for SCC Case No. PUR-2021-00010/DEQ21-013S (230 kV lines #2113 and #2154 Transmission Line Rebuilds and Related Projects). As part of the VDH ODW review, it was recommended that all wells within a 1,000-foot radius of the project site be field marked and protected from accidental damage. It is our custom construction process to not conduct any work outside of the existing right-of-way (ROW), with the exception of entry using existing access roads, and use DEQ approved erosion and sediment controls. These well are located outside of the project area ROW on private land and Dominion Energy does not have permission to enter private property to field mark the wells.

Therefore, we are proposing to plot and call out the wells on the Erosion and Sediment control plans as a way of flagging them for the construction team for protection from accidental damage. Is this a sufficient approach to comply with the ODW recommendation?

Thank you,

Rachel Studebaker

Environmental Specialist II

Dominion Energy Services

120 Tredegar Street, Richmond, VA 23219

Office: (804) 273-4086

Cell: (804) 217-1847



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From: <u>Stacey.T.Ellis@dominionenergy.com</u>

To: Wilk, Becky

Cc: <u>Charles.H.Weil@dominionenergy.com</u>

Subject: FW: NEW SCOPING Proposed Possum Point 2nd Transformer

Date: Thursday, February 16, 2023 1:37:43 PM

From: Warren, Arlene (VDH) < Arlene. Warren@vdh.virginia.gov>

Sent: Thursday, February 16, 2023 11:28 AM

To: Stacey T Ellis (Services - 6) <Stacey.T.Ellis@DominionEnergy.com>

Cc: Environmental Impact Review (DEQ) <eir@deq.virginia.gov>

Subject: [EXTERNAL] RE: NEW SCOPING Proposed Possum Point 2nd Transformer

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Project Name: NEW SCOPING Proposed Possum Point 2nd Transformer

Project #: N/A UPC #: N/A

Location: Prince William County

VDH – Office of Drinking Water has reviewed the above project. Below are our comments as they relate to proximity to **public drinking water sources** (groundwater wells, springs and surface water intakes). Potential impacts to public water distribution systems or sanitary sewage collection systems **must be verified by the local utility.**

There are no public groundwater wells within a 1-mile radius of the project site.

There are no surface water intakes located within a 5-mile radius of the project site.

The project is not within the watershed of any public surface water intakes.

There are no apparent impacts to public drinking water sources due to this project.

The Virginia Department of Health – Office of Drinking Water appreciates the opportunity to provide comments. If you have any questions, please let me know.

Best Regards,

Arlene F. Warren

GIS Program Support Technician

Mobile 804-389-2167 (office/cell/text)

Email arlene.warren@vdh.virginia.gov

VDH, Office of Drinking Water 109 Governor Street, 6th Floor Richmond, VA 23219

From: Fulcher, Valerie (DEQ) < <u>Valerie.Fulcher@deq.virginia.gov</u>>

Sent: Monday, February 6, 2023 1:18 PM

To: dgif-ESS Projects (DWR) < ESSProjects@dwr.virginia.gov >; Tignor, Keith (VDACS)

< keith.Tignor@vdacs.virginia.gov>; rr DCR-PRR Environmental Review (keith.Tignor@vdacs.virginia.gov>; rr DCR-PRR Environmental Review (keith.Tignor@vdacs.virginia.gov>; rr DCR-PRR Environmental Review (keith.Tignor@vdacs.virginia.gov);

<envreview@dcr.virginia.gov>; odwreview (VDH) <odwreview@vdh.virginia.gov>; Gavan, Larry

(DEQ) < <u>Larry.Gavan@deq.virginia.gov</u>>; Martinez, Carlos (DEQ) < <u>Carlos.Martinez@deq.virginia.gov</u>>;

Ballou, Thomas (DEQ) < Thomas.Ballou@deq.virginia.gov>; Mackey, Heather (DEQ)

< Heather. Mackey@deq.virginia.gov >; Miller, Mark (DEQ) < Mark. Miller@deq.virginia.gov >; Kirchen,

Roger (DHR) < Roger (DHR) < Roger (DHR) < Roger.Kirchen@dhr.virginia.gov; MRC - Scoping (MRC) < Scoping@mrc.virginia.gov;

Didier, Karl (Virginia) < Karl.Didier@dof.virginia.gov; Folks, Clint (DOF)

< <u>Clint.Folks@dof.virginia.gov</u>>; rr EIR Coordination (<u>eir.coordination@vdot.virginia.gov</u>)

<<u>eir.coordination@vdot.virginia.gov</u>>; ImpactReview (<u>impactreview@vof.org</u>)

<impactreview@vof.org>; Lazaro, Robert (VDOT) <<u>rlazaro@novaregion.org</u>>; <u>jspatton@pwcgov.org</u>

(jspatton@pwcgov.org) <jspatton@pwcgov.org>

Cc: stacey.t.ellis@dominionenergy.com)

<stacey.t.ellis@dominionenergy.com>

Subject: NEW SCOPING Proposed Possum Point 2nd Transformer

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

Dominion Energy Virginia's Proposed Possum Point 2nd Transformer and New 230 kV Tie Line #2216— Prince William County, Virginia

If you choose to make comments, please send them directly to the project sponsor (<u>Stacey.T.Ellis@DominionEnergy.com</u>) and copy the DEQ Office of Environmental Impact Review: <u>eir@deq.virginia.gov</u>. 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

NEW PHONE NUMBER: 804-659-1550

Email: <u>Valerie.Fulcher@deq.virginia.gov</u>

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

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