



**Dominion
Energy®**

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

**Before the State Corporation
Commission of Virginia**

**Lanexa-Northern Neck Line
#224 230 kV Transmission
Line Partial Rebuild Projects**

Application No. 287

Case No. PUR-2018-00090

Filed: June 18, 2018

Volume 2 of 2

BEFORE THE
STATE CORPORATION COMMISSION
OF VIRGINIA

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

Lanexa-Northern Neck Line #224 230 kV Transmission Line
Partial Rebuild Projects

Application No. 287

DEQ Supplement

Case No. PUR-2018-00090

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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 Line #224 Partial Rebuild Projects by DEQ and other relevant agencies.

1. Project Description

In order to maintain the structural integrity and reliability of its transmission system and perform needed maintenance on its existing facilities, Dominion Energy Virginia proposes to rebuild, entirely within existing right-of-way, four separate segments of its existing Lanexa-Northern Neck Line #224 230 kilovolt (“kV”) transmission line in King and Queen, King William, and New Kent Counties based on the condition of the foundations and structures themselves. In the four separate segments, the Company proposes to: (i) remove and replace nine structures and foundations spanning the Pamunkey River and crossing adjacent tidal marshlands (the “Pamunkey River Rebuild”); (ii) remove and replace seven structures and foundations spanning the Mattaponi River and crossing adjacent tidal marshlands (the “Mattaponi River Rebuild”); (iii) remove and replace two double circuit COR-TEN^{®1} lattice structures and two adjacent wood H-frame structures, which are currently supporting a single transmission circuit, and foundations on the existing 230 kV Line #224 crossing Interstate 64 in New Kent County west of the intersection of I-64 and Route 3 (the “I-64 Rebuild”); and (iv) remove and replace one double circuit COR-TEN[®] lattice structure, which is currently supporting one transmission circuit for Line #224 and another for Line #2016, and foundation, with two DDE 2-pole structures and foundations (the “Diascund Rebuild”) (collectively, the Pamunkey River Rebuild, Mattaponi River Rebuild, I-64 Rebuild, and Diascund Rebuild are referred to as the “Line #224 Partial Rebuild Projects” or the “Rebuild Projects”).

Pamunkey River Rebuild (Structures #224/226 - #224/234)²

The Pamunkey River Rebuild stretches approximately 1.7 miles through King William County and New Kent County on the existing 230 kV Line #224 that crosses the Pamunkey River approximately 6.5 miles west, northwest of West Point, Virginia.

The purpose of the Pamunkey River Rebuild is to remove and replace six double circuit COR-TEN[®] lattice structures (Structures #224/228 through #224/233), one tubular 3-pole steel structure (Structure #224/227), and two wood H-frame structures (Structures #224/226 and #224/234), which are currently supporting a single transmission circuit, and foundations spanning the Pamunkey River and crossing adjacent tidal marshlands due to the deteriorating condition of the COR-TEN[®] lattice structures’ foundations. Severe concrete and steel deterioration has reduced the structural capacity of these foundations, jeopardizing the reliability of Line #224.

¹ Registered trademark of the United States Steel Corporation.

² The Rebuild Projects include four separate segments on Line #224. Therefore, for clarity, the Company is referencing the structures that are to be replaced by their structure numbers. The format for the structure number is the first number is the transmission line number (i.e., Line #224) and the second number after the slash is the structure number.

The Pamunkey River Rebuild will meet an immediate operational need by replacing aging transmission facilities. Specifically, the Pamunkey River Rebuild provides the benefit of removing or replacing aging transmission facilities spanning the Pamunkey River and crossing adjacent tidal marshlands that are reaching the end of their service lives.³ The foundations of the one structure in the river (Structure #224/228) and the four structures in the surrounding marshland (Structures #224/229 through #224/232) have critical structural deficiencies that are impractical to repair due to safety concerns. A secondary driver for the replacement of these five structures is that they consist of COR-TEN® steel that are also approaching the end of their service lives. The Company employed a third party company, Quanta Technology, to evaluate the condition of its COR-TEN® structures. Quanta provided a report (the “2016 Quanta Report”) indicating the need to rebuild the COR-TEN® structures on Line #224.

The remaining four structures, two towers and two deadend poles, are being replaced to facilitate the new conductor installation for the Pamunkey River Rebuild and to maintain the integrity of the remaining line which consists of wood poles.

The Company will also replace the single 1109 ACAR conductor with bundled 768 ACSS conductor and plans to install an idle 230 kV circuit for future use. It is prudent to install a future 230 kV circuit at the time of installation based on the location being a river crossing.

Most of the easements for this right-of-way were acquired in 1967 and the entire 120-foot width of the existing transmission line right-of-way has been cleared and maintained for operation of the existing transmission facilities since that time. The Pamunkey River Rebuild is in an area that is largely characterized by rural to low density residential development with scattered agricultural land use.

Mattaponi River Rebuild (Structures #224/180 - #224/186)

The Mattaponi River Rebuild stretches approximately 1.3 miles through King County and King and Queen County on the existing 230 kV Line #224 that crosses the Mattaponi River approximately 9.6 miles northwest of West Point, Virginia.

The purpose of the Mattaponi River Rebuild is to remove and replace three double circuit COR-TEN® lattice structures (Structures #224/182 - #224/184), two tubular 3-pole steel structures (Structures #224/181 and #224/185), and two wood H-frame structures (Structures #224/180 and #224/186), which are currently supporting a single transmission circuit and a single distribution circuit, and

³ All of the Line #224 Partial Rebuild Projects are based on facilities reaching the end of their service lives but are not based on the Company’s assessment in accordance Section C.2.9 of the Company’s Planning Criteria for electric transmission infrastructure approaching its end of life. Facilities that reach their end of life pursuant to Section C.2.9 of the Company’s Planning Criteria undergo an analysis with the regional transmission operator, PJM Interconnection LLC (“PJM”). Because the Rebuild Projects are viewed as needed maintenance, PJM was not required to approve the Rebuild Projects.

foundations spanning the Mattaponi River and crossing adjacent tidal marshlands due to the deteriorating condition of the COR-TEN® lattice structures' foundations. Severe concrete deterioration has reduced the structural capacity of these foundations, jeopardizing the reliability of the Line #224.

The Mattaponi River Rebuild will meet an immediate operational need by replacing aging transmission facilities. Specifically, the Mattaponi River Rebuild provides the benefit of removing or replacing aging transmission facilities spanning the Mattaponi River and crossing adjacent tidal marshlands that are reaching the end of their service lives. The foundations of the three structures in the surrounding marshland (Structures #224/182 through #224/184) have critical structural deficiencies that are impractical to repair due to safety concerns. A secondary driver for the replacement of these three structures is that they consist of COR-TEN® steel that are also approaching the end of their service lives. The Company employed Quanta Technology to evaluate the condition of its COR-TEN® structures, and the 2016 Quanta Report indicates the need to rebuild the COR-TEN® structures on Line #224.

The remaining four structures, two towers and two deadend poles, are being replaced to facilitate the new conductor installation for the Mattaponi River Rebuild and to maintain the integrity of the remaining line which consists of wood poles.

The Company will also replace the single 1109 ACAR conductor with bundled 768 ACSS conductor. The Company will also replace the 34.5 kV distribution circuit.

During the Mattaponi River Rebuild, the 34.5 kV river crossing will be unavailable for approximately six months. The Company plans to utilize a 230 kV/34.5 kV temporary mobile substation to provide service to the customers on the north side of the Mattaponi River. The temporary mobile substation will be located on a Company-owned site within the 230 kV right-of-way.

Most of the easements for this right-of-way were acquired in 1967 and the entire 120-foot width of the existing transmission line right-of-way has been cleared and maintained for operation of the existing transmission facilities since that time. The Mattaponi River Rebuild is in an area that is largely characterized by rural to low density residential development with scattered agricultural land use.

I-64 Rebuild (Structures #224/268 - #224/271)

Pursuant to § 56-265.2 of the Code of Virginia, the Company is required to obtain a CPCN from the Commission to construct facilities unless the project qualifies as an ordinary extension or improvement in the usual course of business. To the extent that the Commission finds that the I-64 Rebuild requires a CPCN, the Company is including the I-64 Rebuild as part of its Application and in this Appendix.

The I-64 Rebuild stretches for approximately 0.5 mile in New Kent County on the existing 230 kV Line #224.

The purpose of the I-64 Rebuild is to replace two double circuit COR-TEN[®] lattice structures (Structures #224/269 and #224/270), which are currently supporting a single transmission circuit, and foundations crossing I-64 in New Kent County west of the intersection of I-64 and Route 33 because of the corrosion of the COR-TEN[®] material, which results in loss of base steel from the structural members. This type of tower has inherent problems stemming from the effects of “pack-out.”⁴ These structures have experienced inherent corrosion and deterioration, requiring repairs, including replacement of tower members. In addition, the I-64 Rebuild will replace two wood H-frame structures (Structures #224/268 and #224/271) that are adjacent to the two COR-TEN[®] lattice structures carrying the conductor and shield wire across Interstate I-64 that would experience a change in load as a result of replacing the two COR-TEN[®] lattice structures. As a result of the change in load, the two existing wood H-frames were determined to no longer be adequate and are being proposed for replacement as a part of the I-64 Rebuild.

The primary driver of the I-64 Rebuild is the deterioration of the COR-TEN[®] structures that are approaching the end of their service lives. The Company employed Quanta Technology to evaluate the condition of its COR-TEN[®] structures, and the 2016 Quanta Report indicates the need to rebuild the COR-TEN[®] structures on Line #224.

Most of the easements for this right-of-way were acquired in 1967 and the entire 120-foot width of the existing transmission line right-of-way has been cleared and maintained for operation of the existing transmission facilities since that time. The I-64 Rebuild is in an area that is largely characterized by rural to low density residential land use.

Diascund Rebuild (Structure # 224/297, 2016/6)

To the extent that the Commission finds that the Diascund Rebuild requires a CPCN, the Company is including the Diascund Rebuild as part of its Application and in this Appendix.

The Diascund Rebuild is located in New Kent County on the existing 230 kV Line #224.

The purpose of the Diascund Rebuild is to replace one double circuit COR-TEN[®] lattice structure, which is currently supporting one transmission circuit for Line

⁴ The term “pack-out” describes deformation of tower joints caused by the in-place corrosion of the steel. This pack-out is known to cause member cracking and fastener failure due to the deformation resulting from the phenomenon.

#224 and another for Line #2016, and foundation because of the corrosion of the COR-TEN® material, which results in loss of base steel from the structural members. This type of tower has inherent problems stemming from the effects of “pack-out.” The structure has experienced inherent corrosion and deterioration, requiring repairs, including replacement of tower members. The Company plans to replace one structure with two structures to minimize the overall scope of the work as conductor work would be required if the Diascund Rebuild proceeded as a one-for-one structure replacement. Therefore, no conductor work is anticipated by replacing the existing structure with two structures.

The primary driver of the Diascund Rebuild is the deterioration of the COR-TEN® structure that is approaching the end of its service life. The Company employed Quanta Technology to evaluate the condition of its COR-TEN® structures, and the 2016 Quanta Report indicates the need to rebuild the COR-TEN® structures on Line #224.

Most of the easements for this right-of-way were acquired in 1967 and the entire 120-foot width of the existing transmission line right-of-way has been cleared and maintained for operation of the existing transmission facilities since that time. The Diascund Rebuild is in an area that is largely characterized by rural to low density residential development with scattered agricultural land use.

2. Environmental Analysis

A. Air Quality

For the Line #224 Partial Rebuild Projects, the Company will control fugitive dust during construction in accordance with DEQ regulations. If the weather is dry for an extended period of time during construction, there will be airborne particles from the use of vehicles and equipment within the right-of-way. However, minimal earth disturbance will take place and vehicle speed, which is often a factor in airborne particulate, will be kept to a minimum. Erosion and sediment control is addressed in Section 2.G, 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 facility operations. However, the Rebuild Projects may require some trimming of tree limbs along the right-of-way edges to support construction activities. 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.K.

Concurrent with the filing of this application, the Company submitted a letter to DEQ to solicit comments on the proposed Rebuild Projects. Any comments

received because of this correspondence will be provided to the State Corporation Commission of Virginia.

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 Company solicited comments from the Virginia Marine Resources Commission ("VMRC"), the U.S. Army Corps of Engineers ("Corps"), and Local Wetlands Boards regarding the proposed Line #224 Partial Rebuild Projects. Copies of these requests for comments are included as Attachment 2.B.1. Comments from the New Kent County Local Wetlands Board were received and are included as Attachment 2.B.2. A Joint Permit Application will be submitted for the Rebuild Projects for review by the VMRC, DEQ, the Corps, and Local Wetlands Boards, as appropriate, to authorize jurisdictional crossings, work in tidal waters, and for any impacts to jurisdictional features as necessary.

Pamunkey River Rebuild

The Pamunkey River Rebuild is located within the Pamunkey watershed, Hydrologic Unit Code 02080106. According to the U.S. Geological Survey ("USGS") topographic quadrangle New Kent (1985 revision), the existing transmission line crosses one tidal waterbody, the Pamunkey River. A wetland delineation conducted by Stantec Consulting Services Inc. ("Stantec") documented 4.2 acres (6,987 linear feet) of tidal channel and 0.01 acre (164 linear feet) of upper perennial stream channel within the right-of-way of the Pamunkey River Rebuild. One existing structure is located within the Pamunkey River and is proposed to be relocated north, on the river bank. 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.

Mattaponi River Rebuild

The Mattaponi River Rebuild is located within the Mattaponi watershed, Hydrologic Unit Code 02080105. According to the USGS topographic quadrangle King and Queen Courthouse (1985 revision), the existing transmission line crosses one tidal waterbody, the Mattaponi River. A wetland delineation conducted by Stantec documented 4.5 acres (2,363 linear feet) of tidal channel and 0.03 acre (409 linear feet) of upper perennial stream channel within the right-of-way of the Mattaponi River Rebuild. One existing structure is located on the bank of the Mattaponi River and is proposed to be relocated further landward. 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.

I-64 Rebuild

The I-64 Rebuild is located within the lower James watershed, Hydrologic Unit Code 02080206. According to the USGS Topographic Quadrangle Map for Walkers (1985 revision), the existing transmission line does not cross any waterbody and no jurisdictional streams were identified during the field delineation.

Diascund Rebuild

The Diascund Rebuild is located within the lower James watershed, Hydrologic Unit Code 02080206. According to the USGS topographic quadrangle Walkers (1985 revision), the existing transmission line does not cross any waterbody and no jurisdictional streams were identified during the field delineation. The Diascund Creek Reservoir is managed jointly by the City of Newport News and the Department of Game and Inland Fisheries ("DGIF"). The Company solicited comments from the City of Newport News since the Diascund Rebuild is located within the Diascund Creek Reservoir watershed. A copy of the Company's request for comments is included as Attachment 2.B.1.

C. Discharge of Cooling Waters

No discharge of cooling waters is associated with the Line #224 Partial Rebuild Projects.

D. Tidal and Non-Tidal Wetlands

Pamunkey River Rebuild

A detailed investigation of waters of the U.S., including wetlands, was conducted by Stantec for the Pamunkey River Rebuild. Prior to conducting fieldwork, Stantec consulted the USGS 7.5 minute Topographical Quadrangle Map for New Kent (1985 revision), the National Wetlands Inventory Interactive Mapper ("NWI"), administered by the U.S. Fish and Wildlife Service ("USFWS") and the Web Soil Survey, administered by the Natural Resources Conservation Service ("NRCS"). The USGS topographic map indicates the Pamunkey River Rebuild project area has gently sloping to moderately sloping terrain and crosses the Pamunkey River. The NWI map depicted estuarine and marine wetlands and estuarine and marine deepwater within the Pamunkey River Rebuild project limits.

Wetlands and other waters of the U.S. were delineated using the *Routine Determination Method* as outlined in the *1987 Corps Wetlands Delineation Manual*, and methods described in the *2010 Regional Supplement to the Corps Wetland Delineation Manual: Atlantic and Gulf Coastal Plain* (Version 2.0). In total, 13.4 acres of wetlands were identified, including 12.5 acres of estuarine emergent wetlands (E2EM), 0.1 acre of palustrine forested wetlands ("PFO"), 0.5 acre of palustrine scrub-shrub wetlands ("PSS"), and 0.4 acre of palustrine

emergent wetlands ("PEM"). The Company submitted this information along with a request for Pre-Jurisdictional Determination to the Corps. A copy of the delineation map is included as Attachment 2.D.1.

Mattaponi River Rebuild

A detailed investigation of waters of the U.S., including wetlands, was conducted by Stantec for the Mattaponi River Rebuild. Prior to conducting fieldwork, Stantec consulted the USGS 7.5 minute Topographical Quadrangle Map for King and Queen Courthouse (1985 revision), NWI, USFWS, and the Web Soil Survey, administered by the NRCS. The USGS topographic map indicates the Mattaponi River Rebuild project area has gently sloping to moderately sloping terrain and crosses the Mattaponi River. The NWI map depicted freshwater emergent wetlands, freshwater forested/shrub wetlands and riverine within the Mattaponi River Rebuild project limits.

Wetlands and other waters of the US were delineated using the *Routine Determination Method* as outlined in the *1987 Corps Wetlands Delineation Manual*, and methods described in the *2010 Regional Supplement to the Corps Wetland Delineation Manual: Atlantic and Gulf Coastal Plain* (Version 2.0). In total, 11.1 acres of wetlands were identified, including 0.3 acre PFO, 1.6 acres PSS, and 9.3 acres PEM. An additional 0.2 acre of open water ("PUBH") was identified. The Company submitted this information along with a request for Pre-Jurisdictional Determination to the Corps. A copy of the delineation map is included as Attachment 2.D.2.

I-64 Rebuild

A detailed investigation of waters of the U.S., including wetlands, was conducted by Stantec for the I-64 Rebuild and neighboring area. Prior to conducting fieldwork, Stantec consulted the USGS 7.5 minute Topographical Quadrangle Map for Walkers (1985 revision), NWI, USFWS, and the Web Soil Survey, administered by the NRCS. The USGS topographic map indicates the I-64 Rebuild project area has gently sloping to moderately sloping terrain. The NWI map did not depicted any wetlands or waterways within the I-64 Rebuild project limits.

Within the I-64 Rebuild right-of-way and neighboring area, wetlands and other waters of the US were delineated using the *Routine Determination Method* as outlined in the *1987 Corps Wetlands Delineation Manual*, and methods described in the *2010 Regional Supplement to the Corps Wetland Delineation Manual: Atlantic and Gulf Coastal Plain* (Version 2.0). In total, 0.4 acre of PEM were identified. The Company submitted this information along with a request for Pre-Jurisdictional Determination to the Corps. A copy of the delineation map is included as Attachment 2.D.3.

Diascund Rebuild

A detailed investigation of waters of the U.S., including wetlands, was conducted by Stantec for the Diascund Rebuild and neighboring area. Prior to conducting fieldwork, Stantec consulted the USGS 7.5 minute Topographical Quadrangle Map for King and Queen Courthouse (1985 revision), NWI, USFWS, and the Web Soil Survey, administered by the NRCS. The NWI map did not depict any wetlands or waterways within the project limits.

Within the Diascund Rebuild right-of-way and neighboring area, wetlands and other waters of the U.S. were delineated using the *Routine Determination Method* as outlined in the *1987 Corps Wetlands Delineation Manual*, and methods described in the *2010 Regional Supplement to the Corps Wetland Delineation Manual: Atlantic and Gulf Coastal Plain* (Version 2.0). In total, 2.1 acres of wetlands were identified, including 0.1 acre PFO and 2.0 acres PSS. An additional 0.2 acre PUBH was also identified. The Company submitted this information along with a request for Pre-Jurisdictional Determination to the Corps. A copy of the delineation map is included as Attachment 2.D.4.

Wetlands Impact Consultation

The Company submitted the wetland delineation maps to DEQ to initiate the wetlands impacts consultation. These were the same maps submitted to the Corps in the request for Pre-Jurisdictional Determination. Any comments received as a result of this correspondence will be provided to the SCC. The Company will coordinate with the DEQ as appropriate and obtain any necessary permits prior to construction.

E. Solid and Hazardous Waste

On behalf of the Company, Stantec database searches for solid and hazardous wastes and petroleum release sites were conducted within a 0.5-mile radius (the "search radius") of the proposed Rebuild Projects to identify sites that may impact the proposed Line #224 Partial Rebuild Projects. This memorandum is included as Attachment 2.E.1. Publicly available data from the U.S. Environmental Protection Agency ("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, Resource Conservation and Recovery Act, or brownfield sites). According to this database, no such sites are present within the Rebuild Projects' radius.

DEQ records were also searched for the presence of solid waste management facilities, Voluntary Remediation Program sites and petroleum releases. DEQ records did not identify any petroleum release sites within the 0.5-mile search radius of the Pamunkey River Rebuild, the I-64 Rebuild or the Diascund Rebuild. Two sites were located within a 0.5-mile radius of the Mattaponi River Rebuild (DEQ ID: 19994274, and 19994012). The two cases have been closed. The Company has a procedure in place to handle petroleum contaminated soil, if encountered; however, no release sites were identified within the Line #224 Partial Rebuild Projects.

F. Natural Heritage, Threatened and Endangered Species

On behalf of the Company, Stantec conducted online database searches for Natural Heritage areas and listed species in the vicinity of the proposed Rebuild Projects. These databases included the USFWS Information, Planning, and Conservation system, DGIF, Virginia Fish and Wildlife Information Service ("VAFWIS"), Virginia Department of Conservation and Recreation ("DCR"), Natural Heritage Data Explorer, and the Center for Conservation Biology ("CCB") Bald Eagle Nest Locator. The results are summarized in a memorandum, included as Attachment 2.F.1, and are presented in the tables below. No Natural Heritage areas were identified in the vicinity of any of the Rebuilds.

The Company also requested comments from the USFWS, DGIF, and DCR regarding the proposed Rebuild Projects. See Attachment 2.F.2 for copies of the requests. The Company is awaiting a response from the USFWS and DGIF. Comments from DCR were received and are included as Attachment 2.F.3. The Company will obtain all necessary permits prior to construction for the proposed Rebuild Projects, such as authorization from the VMRC, DEQ, and the Corps, coordination with the DGIF, DCR, National Marine Fisheries Service ("NMFS"), and USFWS will take place through the respective permit processes to avoid and minimize impacts to listed species.

Database results revealed the potential presence of the federally and state threatened northern long-eared bat (*Myotis septentrionalis*) in the vicinity of the Rebuild Projects. However, DGIF records indicate that no known hibernacula or maternity roost trees occur within the vicinity. The proposed Rebuild Projects will occur within existing maintained right-of-way, and tree removal is expected to be limited to danger trees and limbing.

The bald eagle (*Haliaeetus leucocephalus*) was also identified as potentially being present in the vicinity of the Rebuild Projects. However, no nests were documented by CCB with management zones that overlap the proposed Rebuild Projects.

Additional species identified by the database searches specific to the Rebuild Projects are detailed below.

Pamunkey River Rebuild

Table 2. Threatened and endangered species in the vicinity of the Pamunkey River Rebuild

Species	Results
Northern long-eared bat (<i>Myotis septentrionalis</i>) Status: FT, ST Database: USFWS-IPaC, DGIF- NLEB Winter Habitat and Roost Tree Map	Identified as potentially occurring in the project vicinity. No known hibernacula or maternity roost trees in the vicinity of the Pamunkey River Rebuild.
Atlantic sturgeon (<i>Acipenser oxyrinchus</i>) Status: FE, SE Database: DGIF, NMFS	Identified as occurring in the Pamunkey River. Pamunkey River designated as critical habitat.
Sensitive joint-vetch (<i>Aeschynomene virginica</i>) Status: FT, ST Database: USFWS-IPAC, DCR- NHR	Identified as potentially occurring in the vicinity of the Pamunkey River Rebuild.
Henslow's sparrow (<i>Ammodramus henslowii</i>) Status: ST Database: DGIF-VAFWIS	The species was observed downstream from the Pamunkey River Rebuild project location, near the Sweet Hall Marsh of the Pamunkey River.
Bald eagle (<i>Haliaeetus leucocephalus</i>) Status: BGEPA Database: CCB, USFWS-Bald Eagle Concentration Area Map	No nests within 660 feet of the Pamunkey River Rebuild and no concentration area present.

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

The state threatened Henslow's sparrow (*Ammodramus henslowii*) has been identified as being observed downstream from the Pamunkey River Rebuild project area. This species prefers habitats of unmowed grassy or weedy hayfields, the right-of-way for the Pamunkey River Rebuild is existing and the vegetation is regularly maintained.

The federally and state endangered Atlantic sturgeon (*Acipenser oxyrinchus*) has been identified by USFWS and DGIF as occurring within the segment of the Pamunkey River crossed by the Pamunkey River Rebuild. The NMFS has designated this segment of the Pamunkey River as a critical habitat for the Atlantic sturgeon. The DGIF has also identified a time-of-year-restriction for instream work in anadromous fish use streams, such as the Pamunkey River, from February 15 – June 30.

USFWS and DCR have identified the federally and state threatened sensitive joint-vetch (*Aeschynomene virginica*) as potentially occurring within the project area. A field survey for this species was conducted by Rouse Environmental Services in September 2017 and is included as [Attachment 2.F.4](#). Because of the relatively fresh nature of the marshland, and the predominance of species often associated with sensitive joint-vetch, there is potentially suitable habitat; however, no individuals were identified at a time of year when the plant is generally observable.

Mattaponi River Rebuild

Table 3. Threatened and endangered species in the vicinity of the Mattaponi River Rebuild

Species	Results
Northern long-eared bat (<i>Myotis septentrionalis</i>) Status: FT, ST Database: USFWS-IPaC, DGIF- NLEB Winter Habitat and Roost Tree Map	Identified as potentially occurring in the project vicinity. No known hibernacula or maternity roost trees in the vicinity of the Mattaponi River Rebuild.
Atlantic sturgeon (<i>Acipenser oxyrinchus</i>) Status: FE, SE Database: DGIF, NMFS	Identified as occurring in the Mattaponi River. Mattaponi River designated as critical habitat.
Sensitive joint-vetch (<i>Aeschynomene virginica</i>) Status: FT, ST Database: USFWS-IPaC, DCR-NHR	Identified as potentially occurring in the vicinity of the Mattaponi River Rebuild.
Bald eagle (<i>Haliaeetus leucocephalus</i>) Status: BGEPA Database: CCB, USFWS-Bald Eagle Concentration Area Map	No nests within 660 feet of the Mattaponi River Rebuild and no concentration area present.

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

The federally and state endangered Atlantic sturgeon has been identified by USFWS and DGIF as occurring within the segment of the Mattaponi River crossed by the Mattaponi River Rebuild. NMFS has designated this segment of the Pamunkey River as a critical habitat for the Atlantic sturgeon. The DGIF has also identified a time-of-year-restriction for instream work in anadromous fish use streams, such as the Mattaponi River, from February 15 – June 30.

USFWS and DCR have identified the federally and state threatened sensitive joint-vetch as potentially occurring within the project area. A field survey for this species was conducted by Rouse Environmental Services in September 2017, Attachment 2.F.5. Because of the relatively fresh nature of the marshland, and the predominance of species often associated with sensitive joint-vetch, there is potentially suitable habitat; however, no individuals were identified at a time of year when the plant is generally observable.

I-64 Rebuild

Table 4. Threatened and endangered species in the vicinity of the I-64 Rebuild

Species	Results
Northern long-eared bat <i>(Myotis septentrionalis)</i> Status: FT, ST Database: USFWS-IPaC, DGIF- NLEB Winter Habitat and Roost Tree Map	Identified as potentially occurring in the project vicinity. No known hibernacula or maternity roost trees in the vicinity of the I-64 Rebuild.
Bald eagle <i>(Haliaeetus leucocephalus)</i> Status: BGEPA Database: CCB, USFWS-Bald Eagle Concentration Area Map	No nests within 660 feet of the I-64 Rebuild and no concentration area present.

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

Diascund Rebuild

Table 5. Threatened and endangered species in the vicinity of the Diascund Rebuild

Species	Results
Northern long-eared bat (<i>Myotis septentrionalis</i>) Status: FT, ST Database: USFWS-IPaC, DGIF- NLEB Winter Habitat and Roost Tree Map	Identified as potentially occurring in the project vicinity. No known hibernacula or maternity roost trees in the vicinity of the Diascund Rebuild.
Sensitive joint-vetch (<i>Aeschynomene virginica</i>) Status: FT, ST Database: USFWS-IPAC	Identified as potentially occurring in the vicinity of the Diascund Rebuild.
Bald eagle (<i>Haliaeetus leucocephalus</i>) Status: BGEPA Database: CCB, USFWS-Bald Eagle Concentration Area Map	No nests within 660 feet of the Diascund Rebuild and no concentration area present.

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

USFWS has identified the federally and state threatened sensitive joint-vetch as potentially occurring within the Diascund Rebuild project area. A field delineation revealed a lack of tidal wetlands within the limits of the Diascund Rebuild and as such, this species is not expected to be present.

G. Erosion and Sediment Control

The Company is required to submit annual Erosion and Sediment Control Specifications and an anticipated list of transmission line projects to DEQ for review and approval. The Company's submittal for 2018 will likewise follow DEQ guidelines and the Line #224 Partial Rebuild Projects will be included in the submittal. These specifications are given to the Company's contractors and require erosion and sediment control measures to be in place before construction of the line begins and specify the requirements for rehabilitation of the right-of-way.

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

Stantec was retained by the Company to conduct Stage I Pre-Application Analysis for the proposed Rebuild Projects. Preliminary background research 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 (DHR 2008) for proposed transmission line improvements. As detailed by DHR guidance, consideration was given to: National Historic Landmark (“NHL”) properties located within a 1.5-mile radius of the Rebuild Projects 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.

Pamunkey River Rebuild

One archaeological resource was identified immediately adjacent to the Pamunkey River Rebuild and may extend into the existing right-of-way. Site 44NK0248, a Woodland lithic scatter, was determined potentially eligible for listing on the NRHP in 2008.

No NHL-listed architectural resources were identified within 1.5 miles. Two NRHP-listed resources, Sweet Hall (DHR #050-0067), and Ruffin’s Ferry (DHR #050-0070), were identified within 1.0 mile. No NRHP-eligible resources were identified within 0.5 mile.

In addition to the resources identified within the DHR’s Virginia Cultural Resources Information System (“VCRIS”), research indicated that a portion of the Captain John Smith Chesapeake National Historic Water Trail is located within the Pamunkey River Rebuild project area. While not a traditionally documented historic resource, the trail has been identified recently as a potential historic resource and is therefore noted here and considered as part of this assessment. Because the proposed rebuild is consistent with the transmission line which is currently in place, Stantec recommended that the Pamunkey River Rebuild would have a minimal visual and minimal direct effect to the Captain John Smith Chesapeake National Historic Trail.

The Stage 1 Analysis is included as Attachment 2.H.1 and has been submitted to DHR. No response has been received from the DHR at the time of filing this application.

Mattaponi River Rebuild

No archaeological resources are within the right-of-way of the Mattaponi River Rebuild.

No NHL-listed architectural resources were identified within 1.5 miles. NRHP-listed King and Queen County Court House Green Historic District (DHR ID 049-5001) was identified within 1.0 mile. NRHP-Eligible King and Queen Court House (DHR ID 049-0036) and potentially eligible Mantapike Hill/Walkerton Battlefield (DHR ID 049-5007) were identified within 0.5 mile.

In addition to the resources identified by VCRIS, research indicated that a portion of the Captain John Smith Chesapeake National Historic Water Trail. While not a traditionally documented historic resource, the trail has been identified recently as a potential historic resource and is therefore noted here and considered as part of this assessment. Because the proposed Mattaponi River Rebuild is consistent with the transmission line which is currently in place, Stantec recommended that the Mattaponi River Rebuild would have a minimal visual and minimal direct effect to the Captain John Smith Chesapeake National Historic Trail.

The Stage 1 Analysis is included as Attachment 2.H.2 and has been submitted to DHR. No response has been received from the DHR at the time of filing this Application.

I-64 Rebuild

No cultural resources were identified for Stage 1 Analysis using the DHR guidelines.

Diascund Rebuild

No cultural resources were identified for stage 1 Analysis using the DHR guidelines.

I. Chesapeake Bay Preservation Areas

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. The Company will meet those conditions.

J. Wildlife Resources

Agency databases were reviewed and agency consultations initiated with the USFWS, DGIF, and DCR to determine if the proposed Line #224 Partial Rebuild Projects have the potential to impact any threatened or endangered species. As discussed in Section 2.F, certain federal and state listed species were identified as potentially occurring in the Rebuild Projects area. The Company will coordinate with the USFWS, NMFS, DGIF, and DCR as appropriate to determine whether additional surveys are necessary and to minimize impacts on wildlife resources. Since the proposed Line #224 Partial Rebuild Projects are four rebuilds of a transmission line within existing right-of-way, no loss of wildlife habitat is anticipated.

K. Recreation, Agricultural and Forest Resources

The Line #224 Partial Rebuild Projects are expected to have minimal permanent impacts on recreational, agricultural, and forest resources since no additional right-of-way is required. The general character of the Line #224 Partial Rebuild Projects areas is predominantly rural with low density residential and scattered agricultural land uses. The portion of the Pamunkey River and Mattaponi River where the proposed projects are located may be used for recreational activities, such as watersports, fishing, and bird watching. The Captain John Smith Chesapeake National Historic Water Trail follows the Pamunkey River and Mattaponi River and runs through the center of the Pamunkey River Rebuild and Mattaponi River Rebuild project areas. The Line #224 Rebuild Projects are not expected to have an impact on recreation since the existing transmission line was constructed prior to the designation of the Captain John Smith Trail and will not alter the river such as to restrict recreational activities.

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 Pamunkey and Mattaponi Rivers have been identified as worthy and Potential Rivers for inclusion within the state Scenic River program but have not been designated as Scenic Rivers. Based on comments received from DCR and included as Attachment 2.F.4, additional impacts to these resources are not anticipated since the Rebuild Projects take place within existing right-of-way.

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. 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. 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 such designation has been made in the municipalities where the proposed Rebuild Projects are located. A total of 8.3 acres of prime farmland are located within the Rebuild Projects right-of-way, according to NRCS data.

The majority of the right-of-way for the proposed Rebuild Projects is not currently in agricultural use. Where agricultural uses are present, these activities have been occurring within the right-of-way while the existing transmission line has been in operation. The Rebuild Projects may result in temporary impacts to farmland during construction but would otherwise not be expected to impact farmlands.

These temporary impacts are further discussed in Section III.F of this Application's Appendix.

The entire width of the existing transmission right-of-way is currently cleared and maintained for 230 kV transmission facility operations. However, the Rebuild Projects may require some trimming of tree limbs along the right-of-way edges to support construction activities. Trees and brush located within 100 feet of streams will be cleared by hand in accordance with the Company approved Erosion and Sediment Control specifications.

Any tree along the right-of-way that is tall enough to endanger the conductors if it were to break at the stump or uproot and fall directly towards the conductors and exhibits signs or symptoms of disease or structural defect that make it an elevated risk for falling will be designated as a "danger tree" and may be removed. The Company's arborist will contact the property owner if possible before any danger trees are cut, except in emergency situations. The Company's Forestry Coordinator will field inspect the right-of-way and designate any danger trees present. Qualified contractors working in accordance with the Company's Electric Transmission specifications will perform all danger tree cutting. The Rebuild Projects are expected to have minimal, if any, impact on agricultural or forest resources as the proposed involves rebuilding a portion of an existing line which is already cleared and maintained for existing facility operation and no additional right-of-way is required.

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.

The initial construction of Line #224 and acquisition of Company easements in for the right-of-way in 1967 preceded the designation of any conservation easements. The proposed Rebuild Projects consist of rebuilding an existing transmission line and no additional right-of-way is required.

Pamunkey River Rebuild

Sweet Hall Marsh is a conservation easement on privately owned land, located on the east side of the right-of-way along the Pamunkey River. The site is part of the Chesapeake Bay National Estuarine Research Reserve system, administered by the Virginia Institute of Marine Science, the College of William and Mary, and the National Oceanic and Atmospheric Administration. The site represents extensive tidal fresh water marsh ecosystem and supports two exemplary natural communities, sensitive joint-vetch and rare skipper (*Problema australis*). A DHR easement appears to abut the west side of the right-of-way along the Pamunkey River. The easement is associated with Ruffin's Ferry (DHR ID 050-0070) and appears to abut the transmission line right-of-way.

Mattaponi River Rebuild

One conservation easement is located within the Mattaponi River Rebuild right-of-way in King William County. This Department of Forestry conservation easement is located on privately owned land.

I-64 Rebuild and Diascund Rebuild

No conservation easements occur within the right-of-way of these Rebuilds.

L. Use of Pesticides and Herbicides

Of the techniques available, selective foliar is the preferred method of herbicide application. The Company typically maintains transmission line right-of-way 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.

M. Geology and Mineral Resources

According to the USGS topographic maps and aerial imagery, there are no active mines or stone quarries within the proposed Rebuild Projects. A search of the Virginia Department of Mines, Minerals, and Energy online map confirms there are no active or abandoned mines within the right-of-way for any of the Line #224 Partial Rebuild Projects. The Company does not anticipate that the proposed Rebuild Projects will result in negative impacts on the geology or mineral resources. A summary of the specific geology and mineral resources underlying each Rebuild is provided below.

Pamunkey River Rebuild

According to the Division of Geology and Mineral Resources Interactive Geologic Map, the Pamunkey River Rebuild area is underlain by unconsolidated sediments of the Atlantic Coastal Plain. The Pamunkey River Rebuild project area sits atop the Sedgefield Member of the Tabb Formation, which consists of pebbly to boulder, clayey sand and fine to medium, shelly sand grading upward to sand and clayey silt; the Lynnhaven and Poquoson Members of the Tabb Formation, which consists of Pebbly and cobbly, fine to coarse gray sand grading upward into clayey and silty fine sand and sandy silt; and the Chesapeake Group, which consists of fine-to coarse-grained, quartzose sand, silt, and clay.

Mattaponi River Rebuild

According to the Division of Geology and Mineral Resources Interactive Geologic Map, the Mattaponi River Rebuild area is underlain by unconsolidated sediments of the Atlantic Coastal Plain. The Mattaponi River Rebuild project area sits atop the Sedgefield Member of the Tabb Formation, which consists of pebbly to boulder, clayey sand and fine to medium, shelly sand grading upward to sand and clayey silt.

I-64 Rebuild

According to the Division of Geology and Mineral Resources Interactive Geologic Map, the I-64 Rebuild area is underlain by unconsolidated sediments of the Atlantic Coastal Plain. The I-64 Rebuild project area sits atop the Bacon's Castle Formation, which consists of gray, yellowish-orange, and reddish-brown sand, gravel, silt, and clay.

Diascund Rebuild

According to the Division of Geology and Mineral Resources Interactive Geologic Map, the Diascund Rebuild project area is underlain by unconsolidated sediments of the Atlantic Coastal Plain. The project area sits atop the Chesapeake Group, which is primarily sand with secondary silt.

N. Transportation Infrastructure

The proposed Rebuild Projects cross multiple roads in New Kent, King William, and King and Queen Counties that are maintained by the Virginia Department of Transportation ("VDOT"), including I-64. The Company will maintain appropriate minimum vertical clearances above the road surface and comply with all VDOT requirements.

The Company solicited VDOT for comments on the proposed Rebuild Projects. See Attachment 2.N.1 for a copy of the solicitation letter. A response has not yet been received.

The Company will also maintain the appropriate vertical clearances above the Pamunkey and Mattaponi Rivers and will coordinate with the Corps and the United States Coast Guard ("USCG") as necessary to ensure the Pamunkey River Rebuild and the Mattaponi River Rebuild do not impact marine navigation.

The Company solicited comments from the Virginia Department of Aviation ("DOA") regarding the proposed Rebuild Projects. See Attachment 2.N.2 for a copy of the solicitation letter. Comments were received and are included as Attachment 2.N.3. No public use airports were found to be located within 20,000 linear feet of any portion of the proposed Rebuild Projects and as such, no comments were given based on the information provided. The comments advised that any transmission line support structures or construction cranes 200' above ground level or greater will require notification to the FAA.

The Company reviewed the Federal Aviation Administration ("FAA") website (<https://oeaaa.faa.gov/oeaaa/external/portal.jsp>) to identify airports within 10 nautical miles of the Rebuild Projects; the Middle Peninsula Regional airport was identified. The FAA's online Notice Criteria Tool was used in order to evaluate whether the proposed Rebuild Projects would require notification to the FAA. Based on preliminary engineering information, the Pamunkey River Rebuild, I-64 Rebuild, and Diascund Rebuild exceed Notice Criteria. As a result, notification to the FAA is required due to the proximity to a navigation facility and may impact the assurance of navigation signal reception. Form 7460-1 was filed with the FAA in May 2018 for the appropriate proposed structures. A determination for the Pamunkey River Rebuild and I-64 Rebuild had not yet been received at the time of this filing. A no hazard determination was found for the Diascund Rebuild, and a copy of that determination is included as Attachment 2.N.4.

The Company will coordinate with VDOT, DOA, USCG, and the FAA as necessary to provide appropriate notifications and seek appropriate approvals.

Attachments



Stantec Consulting Services Inc.
5209 Center Street, Williamsburg, Virginia 23188

April 4, 2018
File: 203400940

Attention: Mr. David McIntire
King & Queen County Local Wetlands Board
242 Allens Circle, Suite L
P.O. Box 177
King & Queen C.H., Virginia 23085

Reference: 230 kV Transmission Line #224 Partial Rebuild Projects
King William County, King and Queen County, New Kent County, Virginia
Application: Virginia Electric and Power Company (Dominion Energy Virginia)

Dear Mr. McIntire,

Dominion Energy Virginia (the "Company") is proposing to wreck and rebuild portions of its 230 kV transmission line, Line #224, which is located in King and Queen County, King William County and New Kent County, Virginia. Select structures have been identified as requiring replacement due to the deterioration of the foundations and/or structures that are nearing the end of their service life. A total of 21 structures in four different locations, inclusive of two river crossings, are scheduled for replacement. The project is entirely within cleared and maintained transmission line right-of-way ("ROW") and no additional ROW is anticipated. The proposed project is part of an ongoing effort to provide reliable electric service consistent with North American Electric Reliability Corporation Reliability Standards. The structures have been in operation for over five decades and need to be replaced to maintain reliability for the Company's customers.

Since the project involves proposed work to an existing 230 kV transmission line, the Company is preparing an application for a certificate of public convenience and necessity from the State Corporation Commission ("SCC"). It is likely that the Department of Environmental Quality, on behalf of the SCC, will coordinate agency comments and include you in the review of the proposed project. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information you feel would have bearing on the proposed project within 30 days of the date of this letter. Stantec is supporting the Company with the solicitation of this information. If you would like to receive a GIS shapefile of the transmission line route to assist in your project review or if you have any questions, please do not hesitate to contact me using the contact information provided below. We appreciate your assistance with this project review and look forward to any additional information you may have to offer.

Regards,

STANTEC CONSULTING SERVICES

A handwritten signature in black ink, appearing to read "Jennifer Johnson".

Jennifer Johnson
Project Manager
Phone: (757) 220-6869
jennifer.johnson@stantec.com

CC: John Mulligan, Dominion

Design with community in mind



Stantec Consulting Services Inc.
5209 Center Street, Williamsburg, Virginia 23188

April 4, 2018
File: 203400940

Attention: Ms. Lynette Rhodes
US Army Corps of Engineers
Norfolk District, Southern Section
803 Front Street
Norfolk, Virginia 23510

Reference: **230 kV Transmission Line #224 Partial Rebuild Projects**
King William County, King and Queen County, New Kent County, Virginia
Application: Virginia Electric and Power Company (Dominion Energy Virginia)

Dear Ms. Rhodes,

Dominion Energy Virginia (the "Company") is proposing to wreck and rebuild portions of its 230 kV transmission line, Line #224, which is located in King and Queen County, King William County and New Kent County, Virginia. Select structures have been identified as requiring replacement due to the deterioration of the foundations and/or structures that are nearing the end of their service life. A total of 21 structures in four different locations, inclusive of two river crossings, are scheduled for replacement. The project is entirely within cleared and maintained transmission line right-of-way ("ROW") and no additional ROW is anticipated. The proposed project is part of an ongoing effort to provide reliable electric service consistent with North American Electric Reliability Corporation Reliability Standards. The structures have been in operation for over five decades and need to be replaced to maintain reliability for the Company's customers.

Since the project involves proposed work to an existing 230 kV transmission line, the Company is preparing an application for a certificate of public convenience and necessity from the State Corporation Commission ("SCC"). It is likely that the Department of Environmental Quality, on behalf of the SCC, will coordinate agency comments and include you in the review of the proposed project. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information you feel would have bearing on the proposed project within 30 days of the date of this letter. Stantec is supporting the Company with the solicitation of this information. If you would like to receive a GIS shapefile of the transmission line route to assist in your project review or if you have any questions, please do not hesitate to contact me using the contact information provided below. We appreciate your assistance with this project review and look forward to any additional information you may have to offer.

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Project Manager
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Stantec Consulting Services Inc.
5209 Center Street, Williamsburg, Virginia 23188

April 4, 2018
File: 203400940

Attention: Mr. Charles M. Shaver
King William Local Wetlands Board
180 Horse Landing Road, #4
King William, Virginia 23086

Reference: 230 kV Transmission Line #224 Partial Rebuild Projects
King William County, King and Queen County, New Kent County, Virginia
Application: Virginia Electric and Power Company (Dominion Energy Virginia)

Dear Mr. Shaver,

Dominion Energy Virginia (the "Company") is proposing to wreck and rebuild portions of its 230 kV transmission line, Line #224, which is located in King and Queen County, King William County and New Kent County, Virginia. Select structures have been identified as requiring replacement due to the deterioration of the foundations and/or structures that are nearing the end of their service life. A total of 21 structures in four different locations, inclusive of two river crossings, are scheduled for replacement. The project is entirely within cleared and maintained transmission line right-of-way ("ROW") and no additional ROW is anticipated. The proposed project is part of an ongoing effort to provide reliable electric service consistent with North American Electric Reliability Corporation Reliability Standards. The structures have been in operation for over five decades and need to be replaced to maintain reliability for the Company's customers.

Since the project involves proposed work to an existing 230 kV transmission line, the Company is preparing an application for a certificate of public convenience and necessity from the State Corporation Commission ("SCC"). It is likely that the Department of Environmental Quality, on behalf of the SCC, will coordinate agency comments and include you in the review of the proposed project. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information you feel would have bearing on the proposed project within 30 days of the date of this letter. Stantec is supporting the Company with the solicitation of this information. If you would like to receive a GIS shapefile of the transmission line route to assist in your project review or if you have any questions, please do not hesitate to contact me using the contact information provided below. We appreciate your assistance with this project review and look forward to any additional information you may have to offer.

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CC: John Mulligan, Dominion

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Stantec Consulting Services Inc.
5209 Center Street, Williamsburg, Virginia 23188

April 4, 2018
File: 203400940

Attention: Mr. Justin Stauder
New Kent Local Wetlands Board
12007 Courthouse Circle
PO Box 150
New Kent, Virginia 23124

Reference: 230 kV Transmission Line #224 Partial Rebuild Projects
King William County, King and Queen County, New Kent County, Virginia
Application: Virginia Electric and Power Company (Dominion Energy Virginia)

Dear Mr. Stauder,

Dominion Energy Virginia (the "Company") is proposing to wreck and rebuild portions of its 230 kV transmission line, Line #224, which is located in King and Queen County, King William County and New Kent County, Virginia. Select structures have been identified as requiring replacement due to the deterioration of the foundations and/or structures that are nearing the end of their service life. A total of 21 structures in four different locations, inclusive of two river crossings, are scheduled for replacement. The project is entirely within cleared and maintained transmission line right-of-way ("ROW") and no additional ROW is anticipated. The proposed project is part of an ongoing effort to provide reliable electric service consistent with North American Electric Reliability Corporation Reliability Standards. The structures have been in operation for over five decades and need to be replaced to maintain reliability for the Company's customers.

Since the project involves proposed work to an existing 230 kV transmission line, the Company is preparing an application for a certificate of public convenience and necessity from the State Corporation Commission ("SCC"). It is likely that the Department of Environmental Quality, on behalf of the SCC, will coordinate agency comments and include you in the review of the proposed project. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information you feel would have bearing on the proposed project within 30 days of the date of this letter. Stantec is supporting the Company with the solicitation of this information. If you would like to receive a GIS shapefile of the transmission line route to assist in your project review or if you have any questions, please do not hesitate to contact me using the contact information provided below. We appreciate your assistance with this project review and look forward to any additional information you may have to offer.

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CC: John Mulligan, Dominion

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Stantec Consulting Services Inc.
5209 Center Street, Williamsburg, Virginia 23188

April 4, 2018
File: 203400940

Attention: Mr. Tony Watkinson
Virginia Marine Resources Commission
Habitat Management Division
2600 Washington Ave, 3rd Floor
Newport News, Virginia 23607

Reference: 230 kV Transmission Line #224 Partial Rebuild Projects
King William County, King and Queen County, New Kent County, Virginia
Application: Virginia Electric and Power Company (Dominion Energy Virginia)

Dear Mr. Watkinson,

Dominion Energy Virginia (the "Company") is proposing to wreck and rebuild portions of its 230 kV transmission line, Line #224, which is located in King and Queen County, King William County and New Kent County, Virginia. Select structures have been identified as requiring replacement due to the deterioration of the foundations and/or structures that are nearing the end of their service life. A total of 21 structures in four different locations, inclusive of two river crossings, are scheduled for replacement. The project is entirely within cleared and maintained transmission line right-of-way ("ROW") and no additional ROW is anticipated. The proposed project is part of an ongoing effort to provide reliable electric service consistent with North American Electric Reliability Corporation Reliability Standards. The structures have been in operation for over five decades and need to be replaced to maintain reliability for the Company's customers.

Since the project involves proposed work to an existing 230 kV transmission line, the Company is preparing an application for a certificate of public convenience and necessity from the State Corporation Commission ("SCC"). It is likely that the Department of Environmental Quality, on behalf of the SCC, will coordinate agency comments and include you in the review of the proposed project. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information you feel would have bearing on the proposed project within 30 days of the date of this letter. Stantec is supporting the Company with the solicitation of this information. If you would like to receive a GIS shapefile of the transmission line route to assist in your project review or if you have any questions, please do not hesitate to contact me using the contact information provided below. We appreciate your assistance with this project review and look forward to any additional information you may have to offer.

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Project Manager
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CC: John Mulligan, Dominion

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Stantec Consulting Services Inc.
5209 Center Street, Williamsburg, Virginia 23188

April 4, 2018
File: 203400940

Attention: Mr. Jeff Steers
Department of Environmental Quality
Piedmont Regional Office
4949-A Cox Road
Glen Allen, Virginia 23060

Reference: 230 kV Transmission Line #224 Partial Rebuild Projects
King William County, King and Queen County, New Kent County, Virginia
Application: Virginia Electric and Power Company (Dominion Energy Virginia)

Dear Mr. Steers,

Dominion Energy Virginia (the "Company") is proposing to wreck and rebuild portions of its 230 kV transmission line, Line #224, which is located in King and Queen County, King William County and New Kent County, Virginia. Select structures have been identified as requiring replacement due to the deterioration of the foundations and/or structures that are nearing the end of their service life. A total of 21 structures in four different locations, inclusive of two river crossings, are scheduled for replacement. The project is entirely within cleared and maintained transmission line right-of-way ("ROW") and no additional ROW is anticipated. The proposed project is part of an ongoing effort to provide reliable electric service consistent with North American Electric Reliability Corporation Reliability Standards. The structures have been in operation for over five decades and need to be replaced to maintain reliability for the Company's customers.

Stantec Consulting Services, Inc., delineated wetlands and other waters of the United States using the Route 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). In total, 27.83 acres of wetlands and 9,923 LF of stream channel were identified within the proposed Rebuild Projects. The limits of these features are illustrated on the attached Delineation Maps and a breakdown of features by each project Section is provided below. The limits of wetlands and other waters of the United States will be submitted to the U.S. Army Corps of Engineers for confirmation.

Table 1. Jurisdictional Features Identified within the Rebuild Projects

Section	E2EM (acres)	PFO (acres)	PSS (acres)	PEM (acres)	Tidal Stream Channel (linear feet)	Upper Perennial Stream Channel (linear feet)	PUBH (acres)
Pamunkey	12.49	0.08	0.45	0.40	6,987	164	0.01
Mattaponi	0	0.25	1.60	9.26	2,363	409	0.17
I-64	0	0	0	0.39	0	0	0
Diascund	0	0.10	2.0	0.81	0	0	0.22
Total	12.49	0.43	4.05	10.86	9,350	573	0.40

Since the project involves proposed work to an existing 230 kV transmission line, the Company is preparing an application for a certificate of public convenience and necessity from the State Corporation Commission ("SCC"). It is likely that the Department of Environmental Quality, on behalf of the SCC, will coordinate agency comments and include you in the review of the proposed project. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information you feel would have bearing on the proposed project within 30 days of the date of this letter. Stantec is supporting the Company with the solicitation of this information. If you would like to receive a GIS shapefile

Design with community in mind



of the transmission line route to assist in your project review of if you have any questions, please do not hesitate to contact me using the contact information provided below. We appreciate your assistance with this project review and look forward to any additional information you may have to offer.

Regards,

STANTEC CONSULTING SERVICES

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Jennifer Johnson
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CC: John Mulligan, Dominion



Stantec Consulting Services Inc.
5209 Center Street, Williamsburg, Virginia 23188

April 11, 2018
File: 203400940

Attention: Mr. Louis Martinez
City of Newport News
Director of Waterworks
700 Town Center Drive
Newport News, Virginia 23606

Reference: 230 kV Transmission Line #224 Partial Rebuild Projects
King William County, King and Queen County, New Kent County, Virginia
Application: Virginia Electric and Power Company (Dominion Energy Virginia)

Dear Mr. Martinez,

Dominion Energy Virginia (the "Company") is proposing to wreck and rebuild portions of its 230 kV transmission line, Line #224, which is located in King and Queen County, King William County and New Kent County, Virginia. Select structures have been identified as requiring replacement due to the deterioration of the foundations and/or structures that are nearing the end of their service life. A total of 21 structures in four different locations, inclusive of two river crossings and work within the Diascund Creek Reservoir watershed, are scheduled for replacement. The project is entirely within cleared and maintained transmission line right-of-way ("ROW") and no additional ROW is anticipated. The proposed project is part of an ongoing effort to provide reliable electric service consistent with North American Electric Reliability Corporation Reliability Standards. The structures have been in operation for over five decades and need to be replaced to maintain reliability for the Company's customers.

Since the project involves proposed work to an existing 230 kV transmission line, the Company is preparing an application for a certificate of public convenience and necessity from the State Corporation Commission ("SCC"). It is likely that the Department of Environmental Quality, on behalf of the SCC, will coordinate agency comments and include you in the review of the proposed project. At this time, in advance of the SCC filing, the Company respectfully requests that you submit any comments or additional information you feel would have bearing on the proposed project within 30 days of the date of this letter. Stantec is supporting the Company with the solicitation of this information. If you would like to receive a GIS shapefile of the transmission line route to assist in your project review or if you have any questions, please do not hesitate to contact me using the contact information provided below. We appreciate your assistance with this project review and look forward to any additional information you may have to offer.

Regards,

STANTEC CONSULTING SERVICES

A handwritten signature in black ink, appearing to read "Jennifer Johnson".

Jennifer Johnson
Project Manager
Phone: (757) 220-6869
jennifer.johnson@stantec.com

CC: John Mulligan, Dominion

Design with community in mind

From: Justin M. Stauder
To: [Johnson, Jennifer](#)
Subject: 230 kV Transmission Line #224 Partial Rebuild Projects
Date: Thursday, April 19, 2018 3:22:38 PM
Attachments: [image001.png](#)

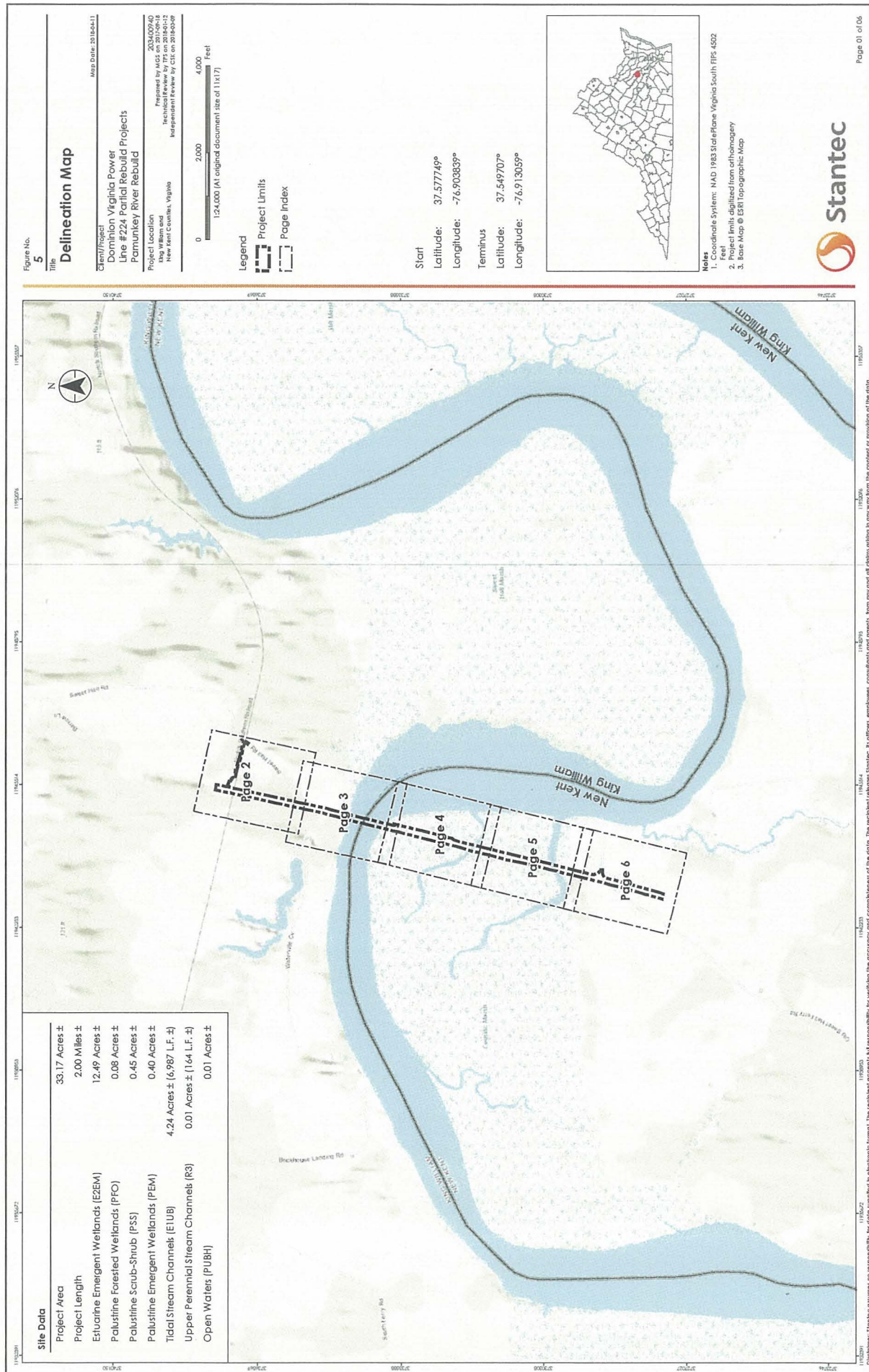
Jennifer,

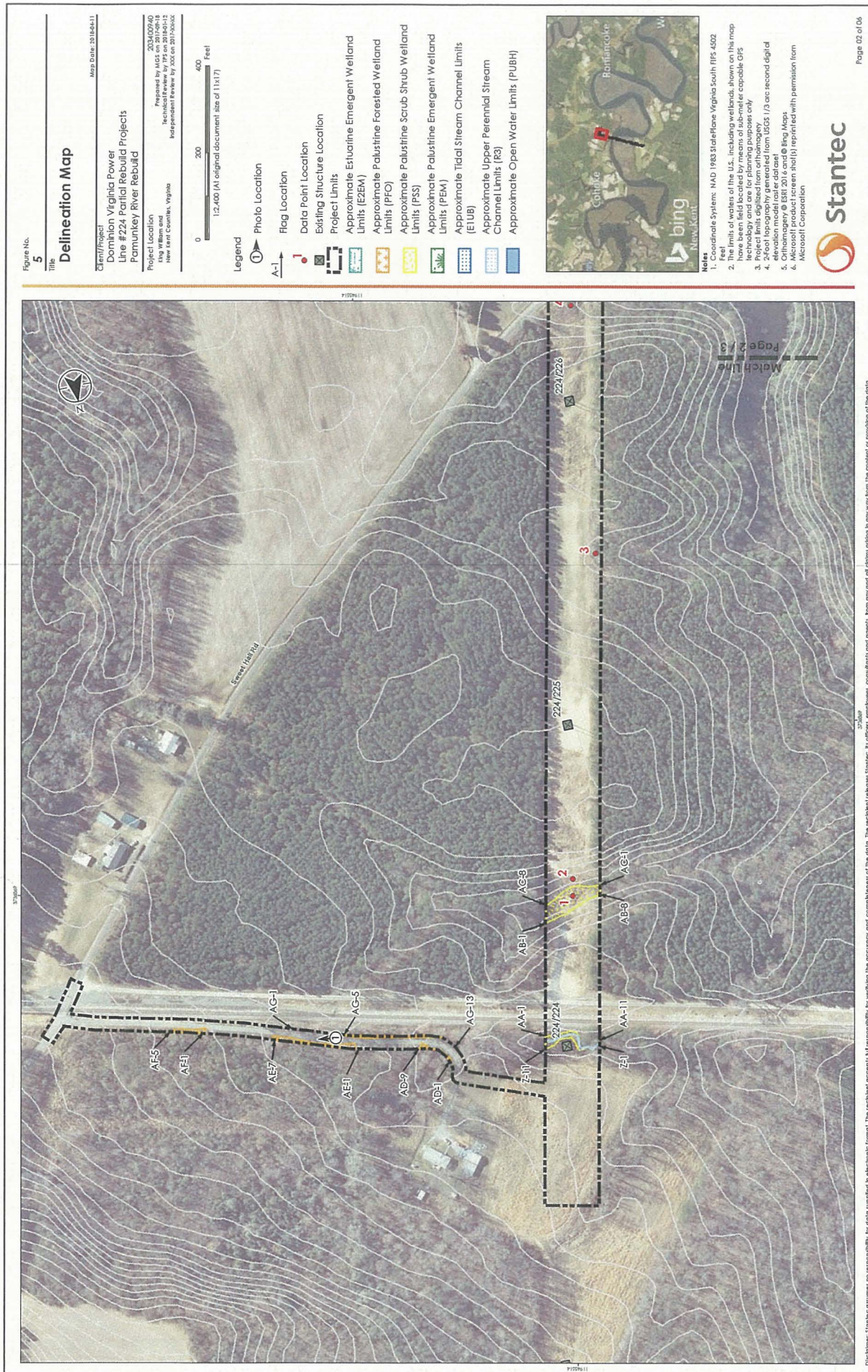
The proposed project would need to be routed through the proper County channels for approvals and permitting of the proposed development, such as Erosion and Sediment Control, Stormwater Management, Chesapeake Bay Preservation Board, and the Wetlands Board where applicable. At this time I do not have any direct comments for the project. I look forward to working on this project with Stantec and Dominion, and am available for any questions you may have.

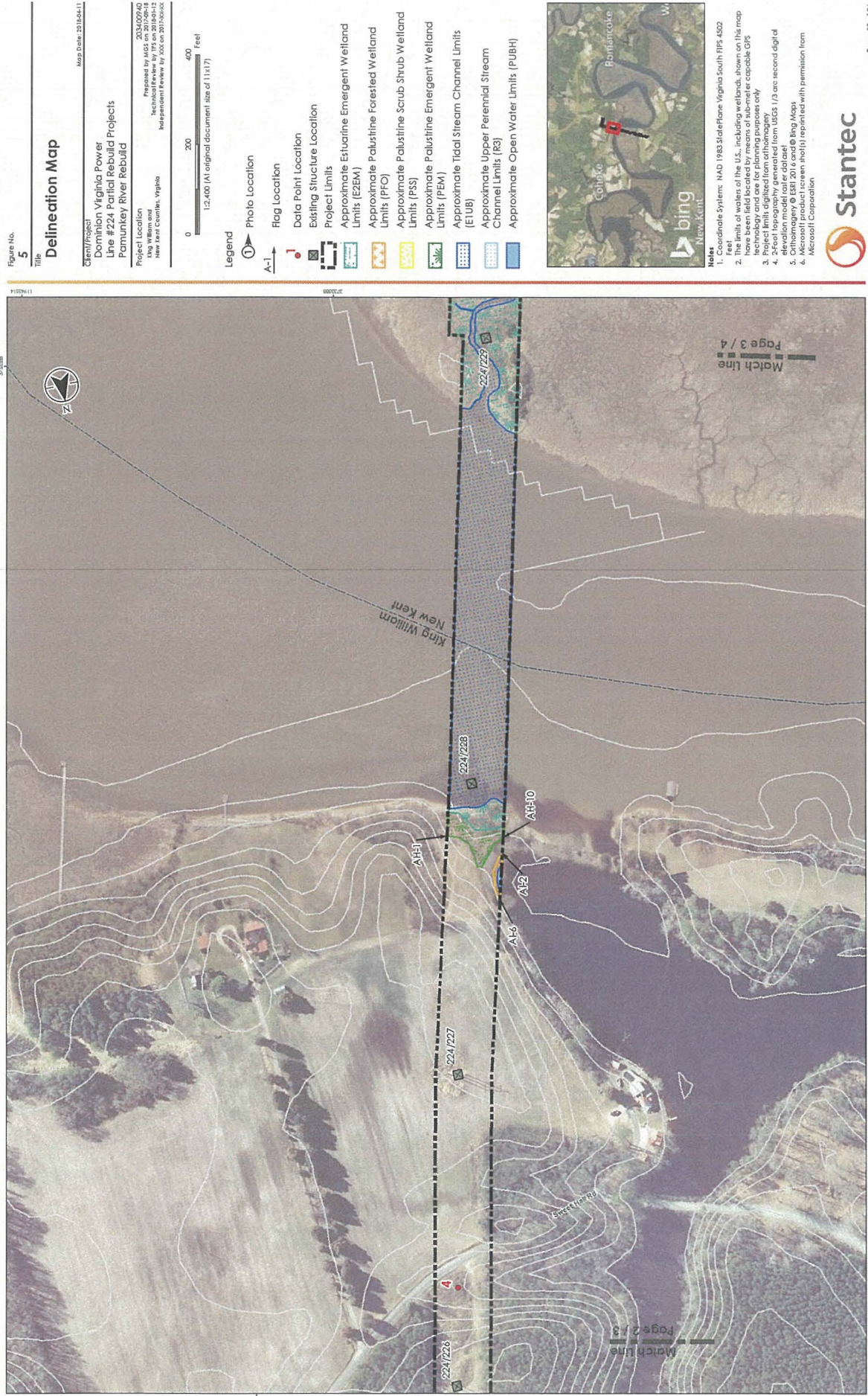
Thanks,

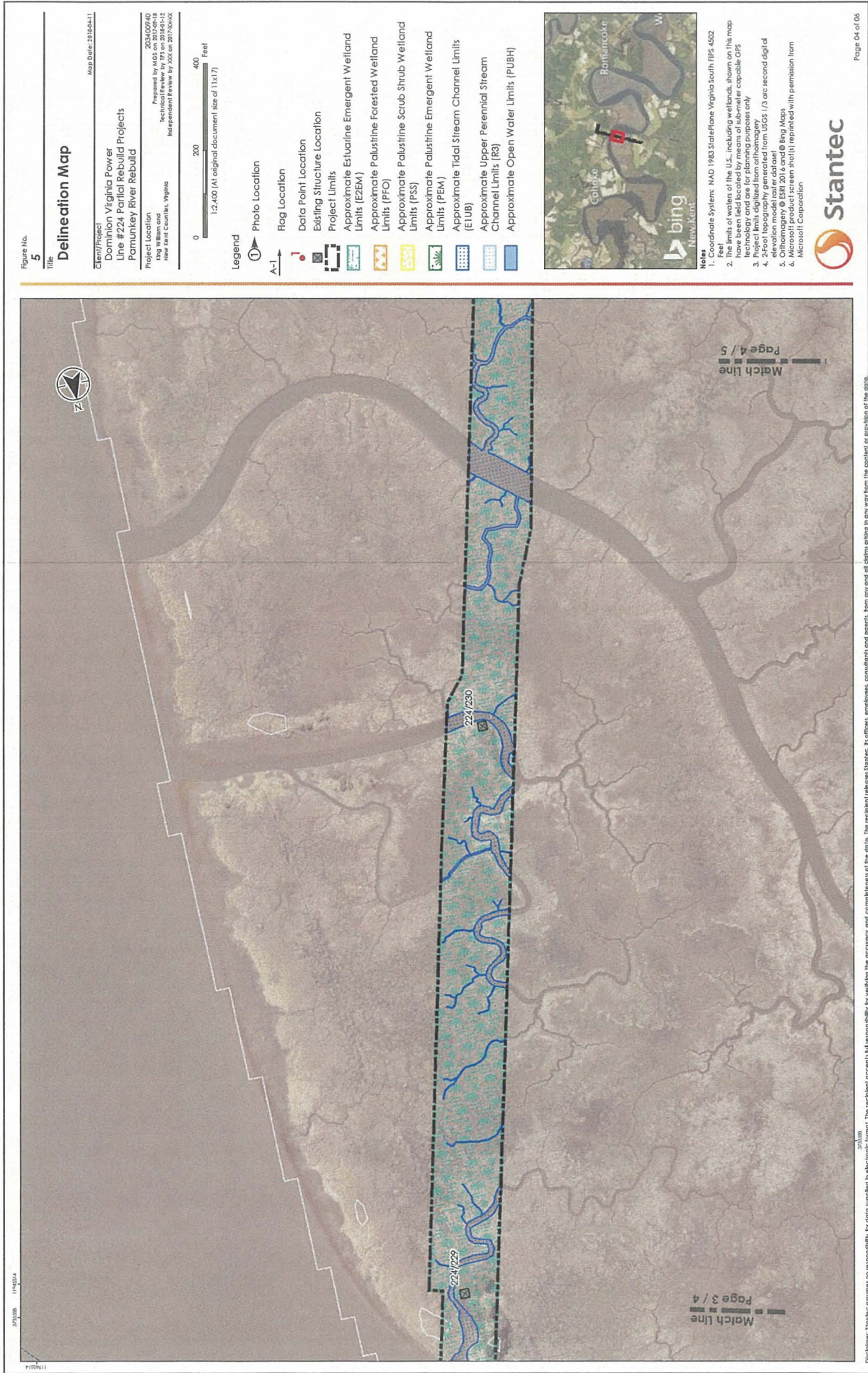
Justin Stauder
Environmental Director
12007 Courthouse Circle
PO Box 150
New Kent, Virginia 23124-0150
(804) 966-9686
jmstauder@newkent-va.us

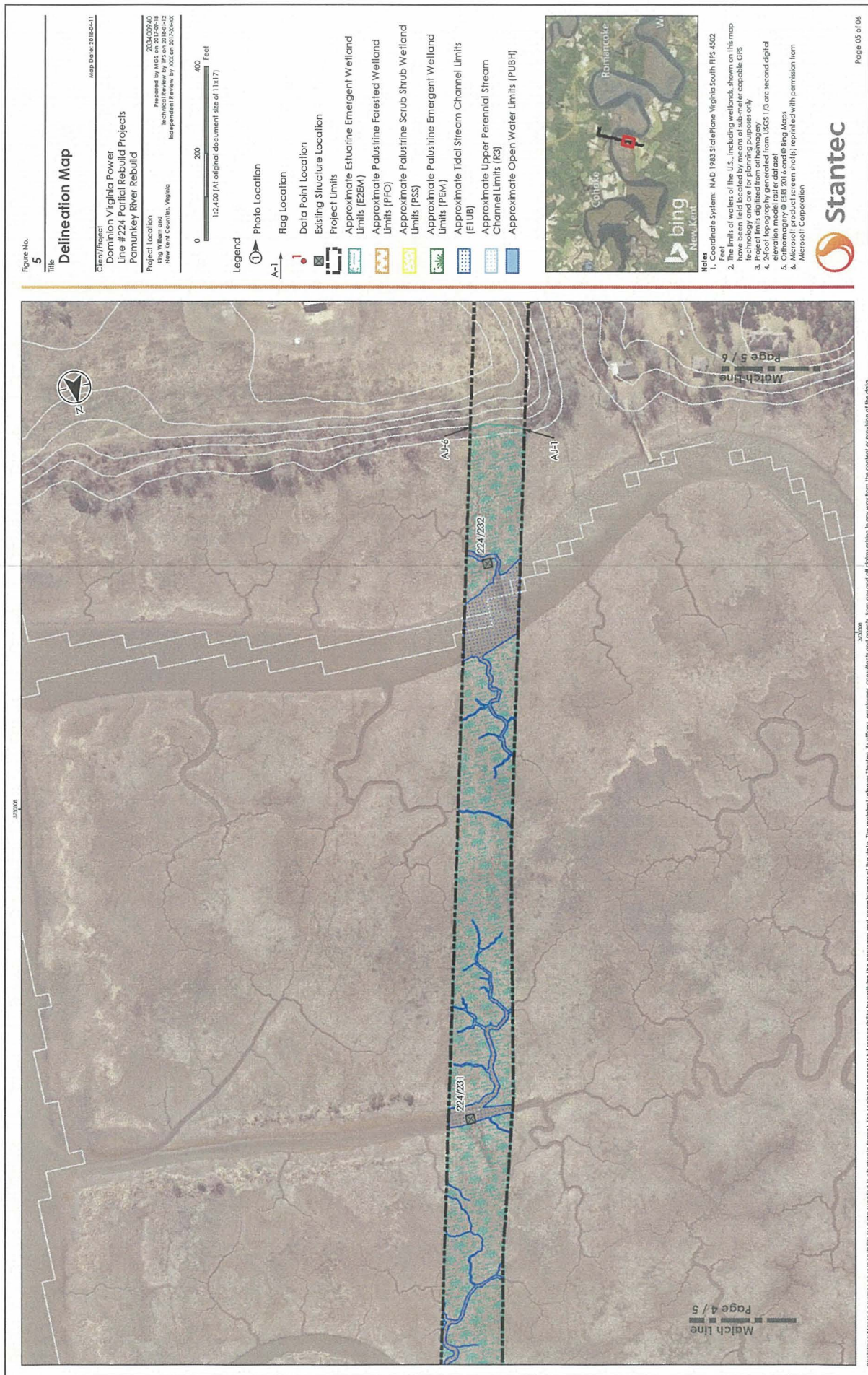


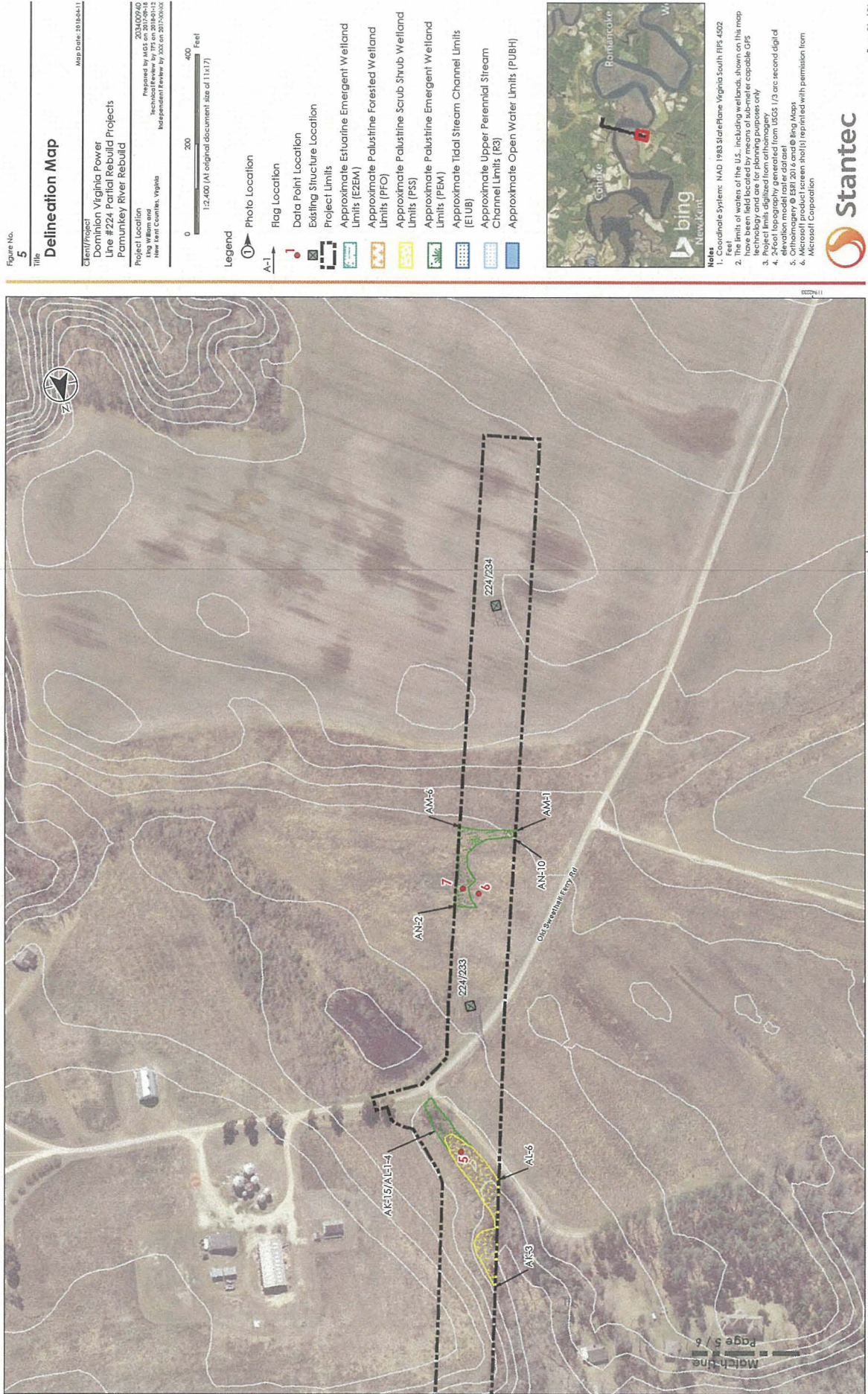












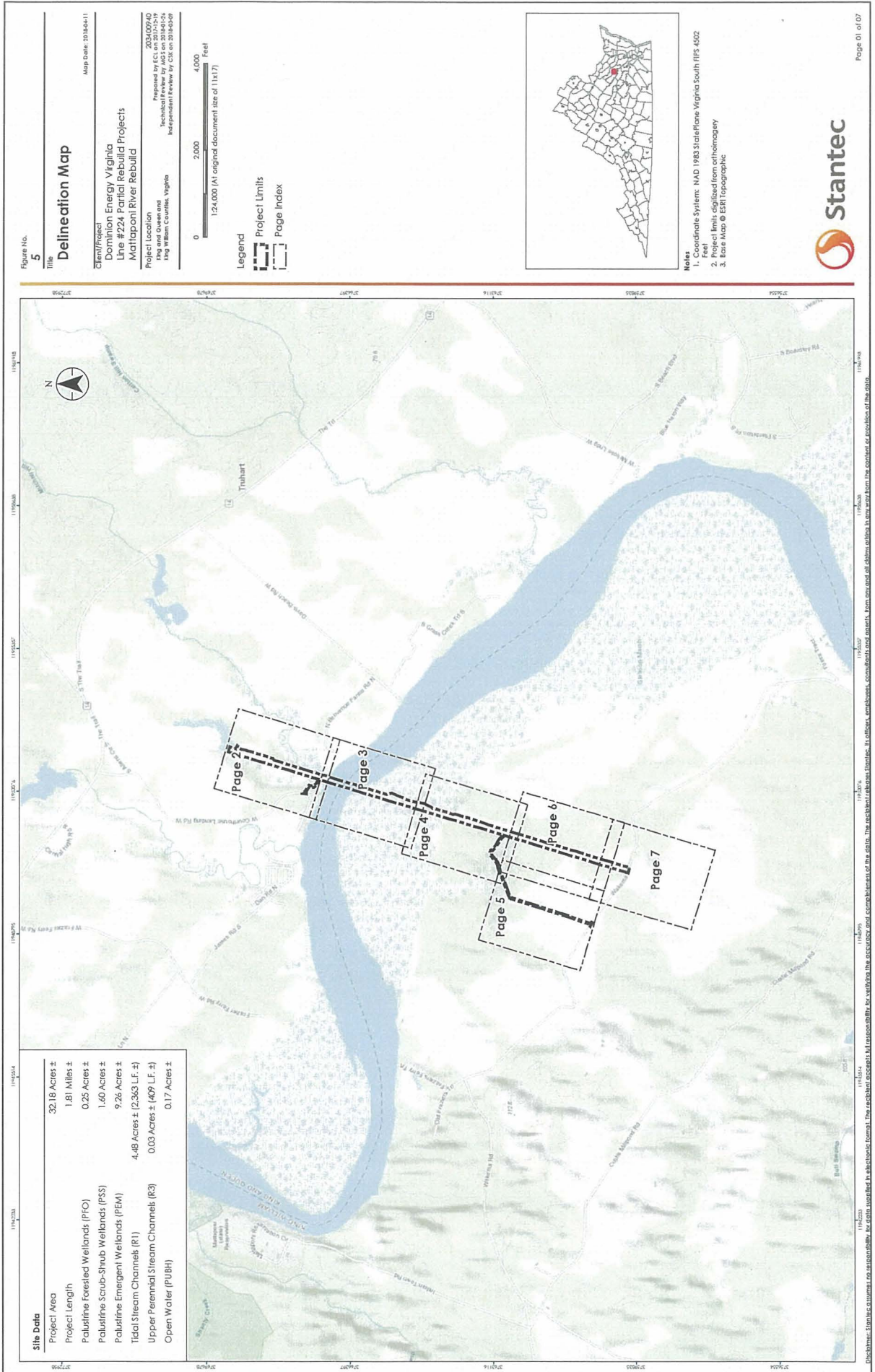


Figure No.
5

Delineation Map

Map Date: 2016-04-11

Client/Project
Dominion Energy Virginia
Line #224 Partial Rebuild Projects
Mattaponi River Rebuild

Project Location
King William County, Virginia
Prepared by: C1
Technical Review by: MGS on 2016-04-14
Independent Review by: C1C on 2016-05-09

1:2,400 (A1 original document size of 11x17)
0 200 400 Feet

Legend

Photo Location
A-1

Flag Location
A-1

Data Point Location

Existing Structure Location

Project Limits

Approximate Palustrine Forested Wetland Limits (PFO)

Approximate Palustrine Scrub-Shrub Wetland Limits (PSS)

Approximate Palustrine Emergent Wetland Limits (PEW)

Approximate Tidal Stream Channel Limits (R1)

Approximate Upper Perennial Stream Channel Limits (R3)

Approximate Open Water Limits (PUWH)

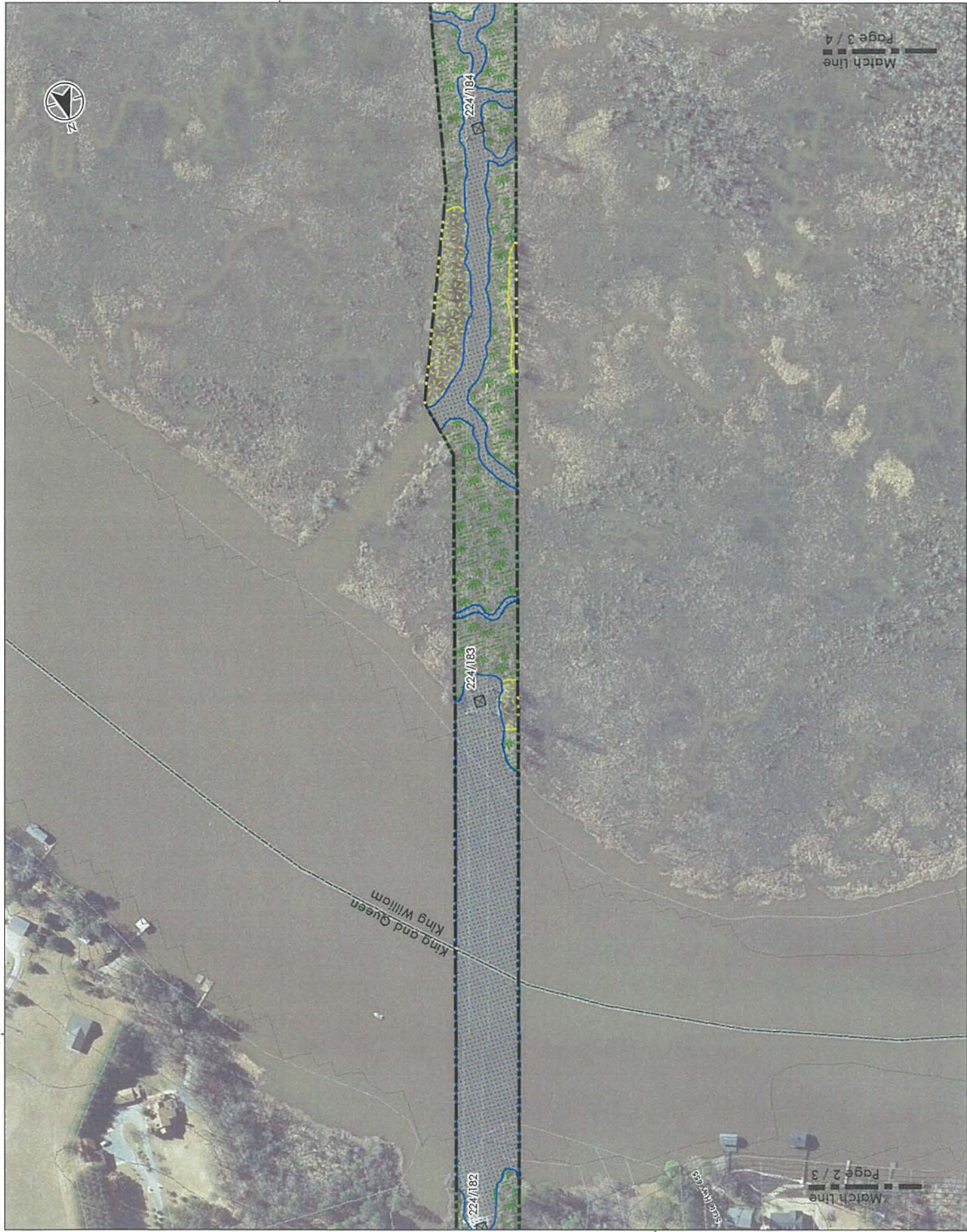
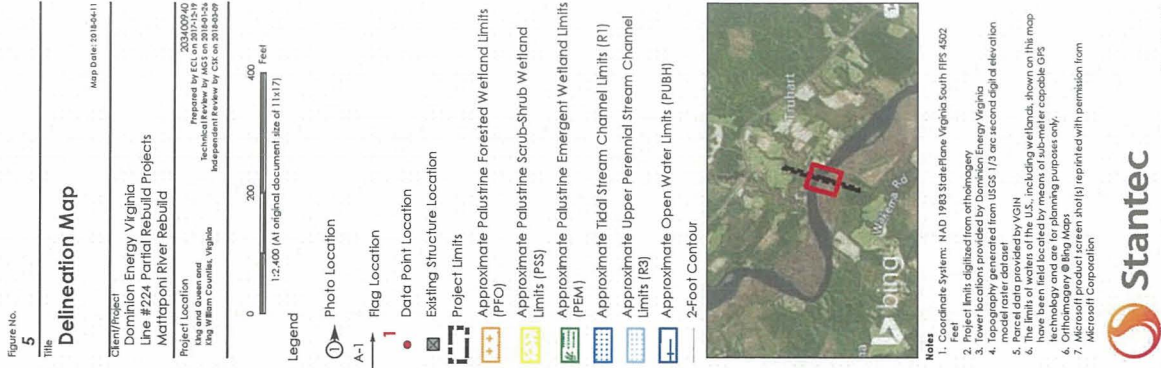
2-Foot Contour



- Notes:**
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502
 2. Project limits digitized from orthomosaic
 3. Lower locations provided by Dominion Energy Virginia
 4. Elevation data derived from USGS 1/3 arc second digital elevation model raster dataset
 5. Parcel data provided by VGIN
 6. The limits of waters of the U.S., including wetlands, shown on this map are for informational purposes only and do not constitute a legal determination of jurisdiction or water capable OFS technology and are for planning purposes only.
 7. Orthomosaic © Bing Maps
 8. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation



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Delineation Map

Map Date: 2018-04-11

Client/Project
Dominion Energy Virginia
Line #224 Partial Rebuild Projects
Mattaponi River Rebuild

Project Location
King and Queen and
King William Counties, Virginia



legend



1.

↑
Flag Location

- Data Point Location

☒ Existing Structure Location

Project Limits

Approximate Palustrine Forested Wetland Limits (PFO)

Approximate Palustrine Scrub-Shrub Wetland Limits (PSS)

Approximate Palustrine Emergent Wetland Limits (PEM)

Approximate Tidal Stream Channel Limits (R1)

Approximate

Limits (R3)

Approximate Open Water Limits (PUBH)

2-Foot Contour



otes

1. Coordinate System: NAD 1983 StatePlane, Virginia South (FIPS 4502 Feet)
2. Project limits: digitized from orthophotography
3. Lower locations: provided by Dominion Energy
4. Topography generated from USGS 1/3 arc second digital elevation model raster dataset
5. Parcel data provided by VGN
6. Utility data: provided by VGN, including wetlands, shown on this map have been field checked by means of sub-meter capable GPS technology and are for planning purposes only.
7. Orthophotography © Bing Maps
8. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation



Figure No. 5

Title: **Delineation Map**

Client/Project: Dominion Energy Virginia
Line #224 Partial Rebuild Projects
Mattaponi River Rebuild

Project Location: Mattaponi River, Virginia
Prepared by: ECI on 2018-01-19
Technical Review by: MGS on 2018-01-24
Independent Review by: CS on 2018-02-08

Map Scale: 2018-01-11

1:2,400 (At original document size of 11x17)

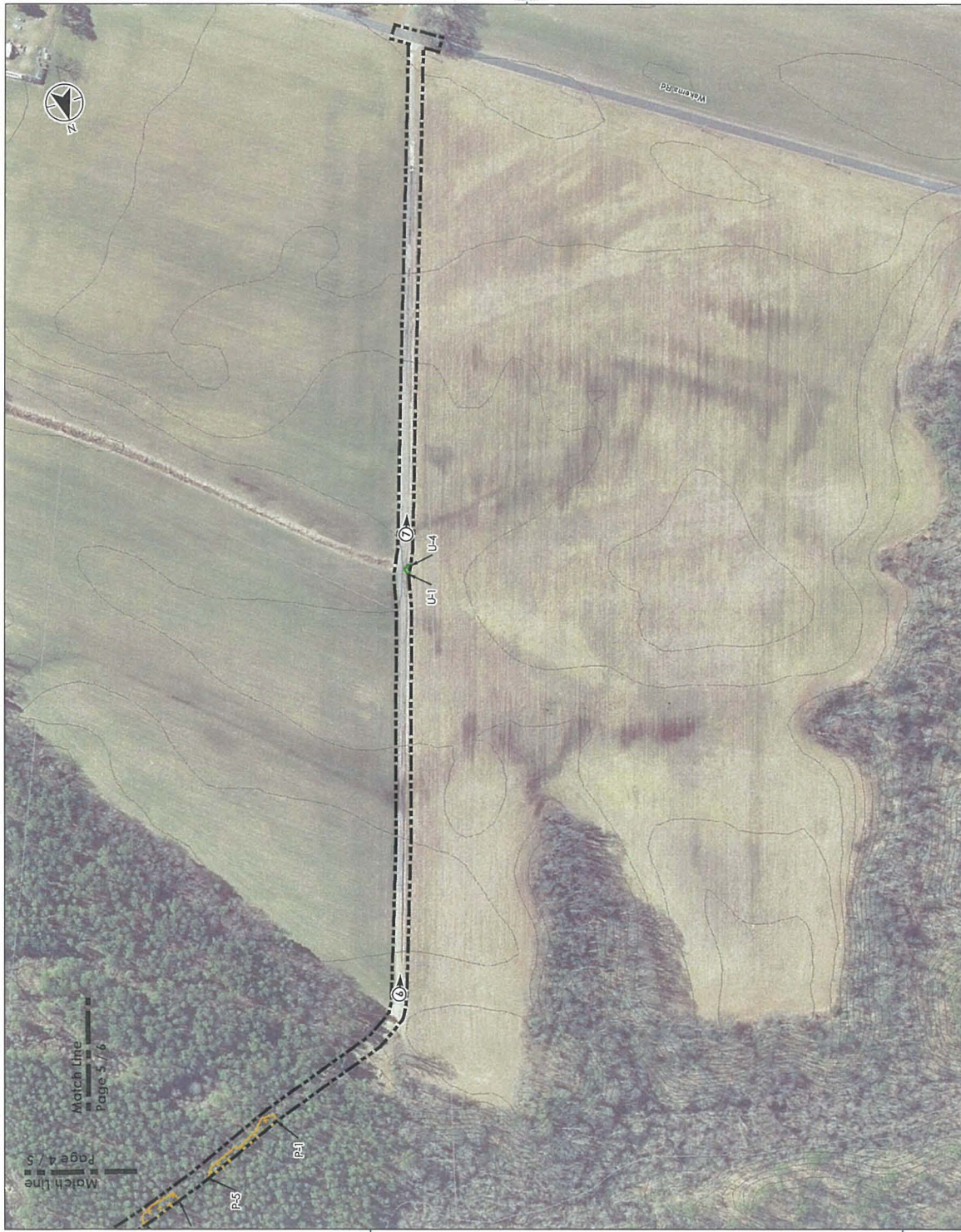
0 200 400 Feet

Legend

- Photo Location
- Flag Location
- Data Point Location
- Existing Structure Location
- Project Limits
- Approximate Palustrine Forested Wetland Limits (PFO)
- Approximate Palustrine Scrub-Shrub Wetland Limits (PSS)
- Approximate Palustrine Emergent Wetland Limits (PEM)
- Approximate Tidal Stream Channel Limits (R1)
- Approximate Upper Perennial Stream Channel Limits (R3)
- Approximate Open Water Limits (PUH)
- 2-Foot Contour

Notes

- Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502
- Project limits digitized from orthomosaic
- Topography generated from USGS 1/3 arc second digital elevation model raster dataset
- Parcel data provided by VGIN
- Orthomosaic imagery was generated using aerial photography captured by drone and processed using photogrammetry software
- Orthomosaic imagery was generated using aerial photography captured by drone and processed using photogrammetry software
- Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation



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Figure No.
5

Title
Delineation Map

Client/Project
Dominion Energy Virginia
Line #224 Partial Rebuild Projects
Mattaponi River Rebuild

Project Location
Mattaponi River, Virginia

Prepared by CCI
2023/02/20
Technical Review by MGS on 2018/01/04
Independent Review by CTC on 2018/05/08

Map Date: 2018/05/11

1:2,400 (At original document size of 11x17)
0 200 400 Feet

Legend

Photo Location

Flag Location

Data Point Location

Existing Structure Location

Project Limits

Approximate Palustrine Forested Wetland Limits (PFC)

Approximate Palustrine Scrub-Shrub Wetland Limits (PSS)

Approximate Palustrine Emergent Wetland Limits (PEM)

Approximate Tidal Stream Channel Limits (R1)

Approximate Upper Perennial Stream Channel Limits (R3)

Approximate Open Water Limits (PUWH)

2-Foot Contour



Notes

1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502
2. Project limits digitized from orthomosaic
3. Lower locations provided by Dominion Energy Virginia
4. Wetland limits digitized from USGS 1/5 arc second digital elevation model raster data set
5. Parcel data provided by VGIN
6. The limits of waters of the U.S., including wetlands, shown on this map are based on the best available information and are not for planning purposes only.
7. Orthomosaic © Bing Maps
8. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation



Match Line
Page 4 / 6

Match Line
Page 5 / 6

Match Line
Page 6 / 7

Figure No.
5

Title
Delineation Map

Client/Project
Dominion Energy Virginia
Line #224 Partial Rebuild Projects
Mattaponi River Rebuild

Project Location
Line #224 Partial Rebuild
King William Counties, Virginia

2014-2015
Prepared by ECI on 2/20/15
Technical Review by MGS on 2/24/15
Independent Review by CEA on 2/24/15

Map Scale: 2014-2015

0 200 400 Feet

1:2,400 (At original document size of 11x17)

Legend

- Photo Location
- Flag Location
- Data Point Location
- Existing Structure Location
- Project Limits
- Approximate Palustrine Forested Wetland Limits (PFO)
- Approximate Palustrine Scrub-Shrub Wetland Limits (PSS)
- Approximate Palustrine Emergent Wetland Limits (PEM)
- Approximate Tidal Stream Channel Limits (R1)
- Approximate Upper Perennial Stream Channel Limits (R3)
- Approximate Open Water Limits (PUH)
- 2-Foot Contour

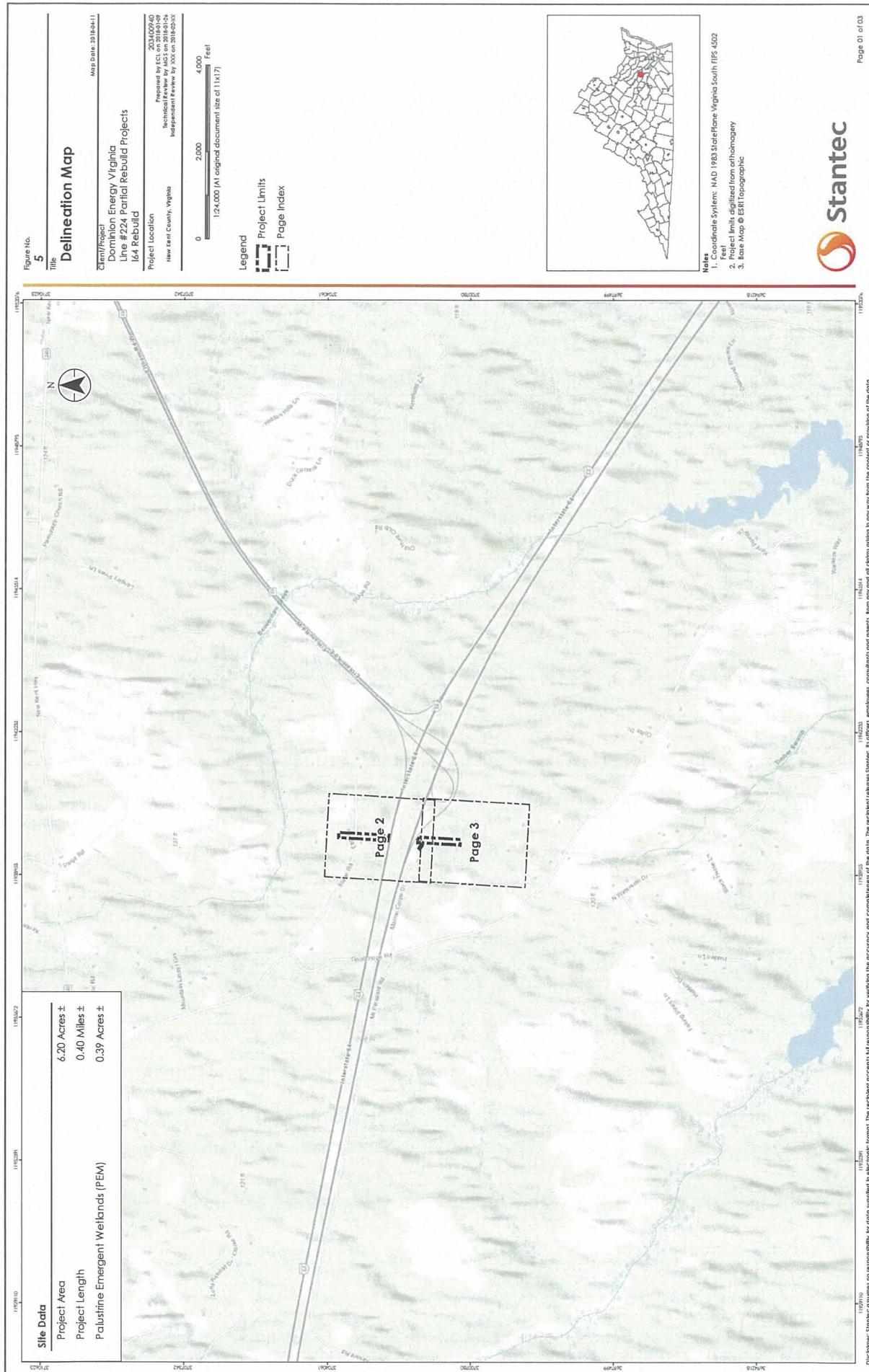
Notes

1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Project limits digitized from orthomosaic
3. Wetland limits digitized from aerial imagery
4. Topography generated from USGS 1/3 arc second digital elevation model raster dataset
5. Parcel data provided by VGIN
6. Wetland limits digitized from aerial imagery
7. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation

Page 07 of 07



Page 6 / 7







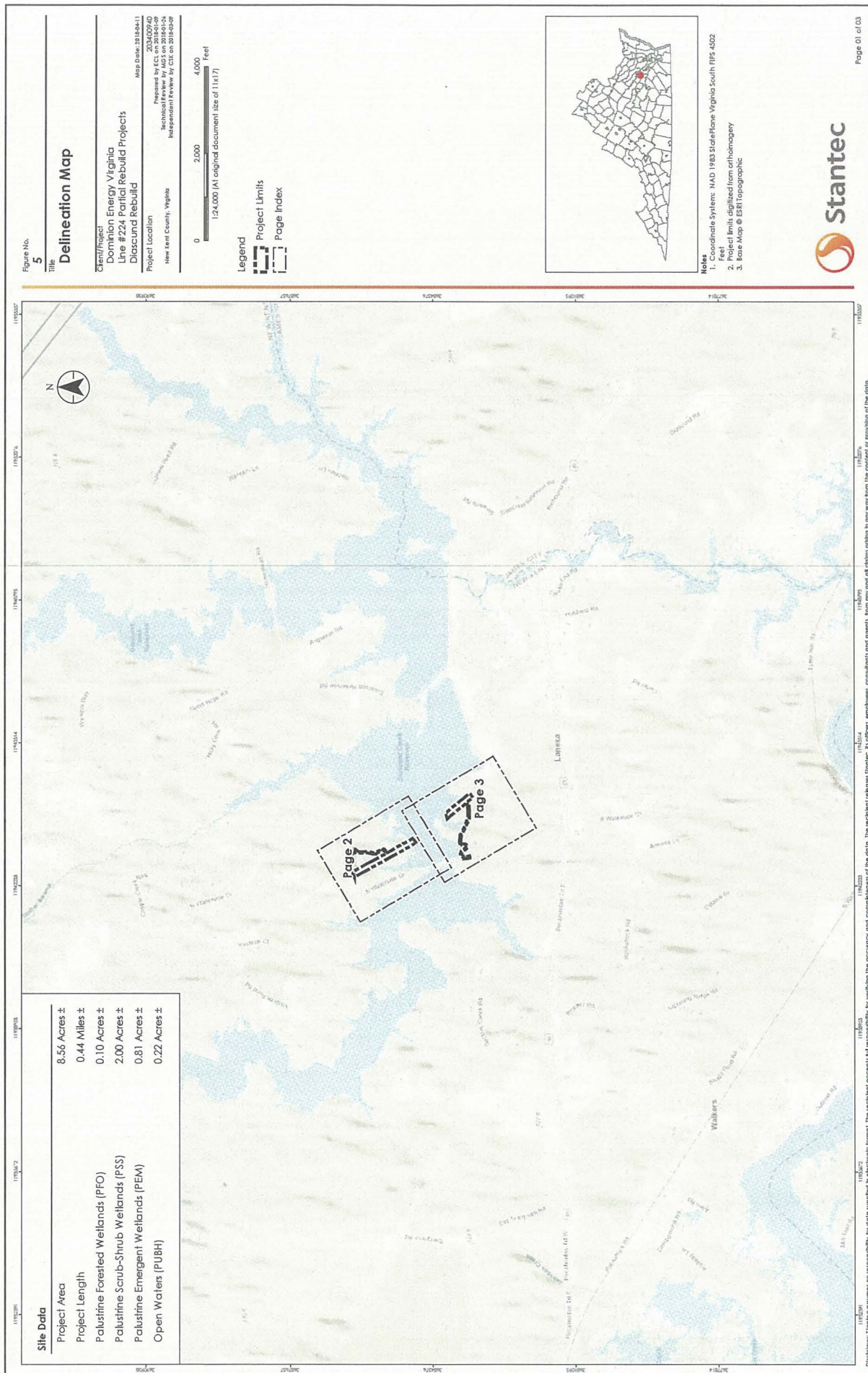




Figure No.
5

Delineation Map

Client/Project
Dominion Energy Virginia
Line #224 Partial Rebuild Projects
Discound Rebuild
Project Location
New Kent County, Virginia
Map Date 2016-04-11
Prepared by JCS on 2016-04-09
Technical Review by MGS on 2016-04-26
Independent Review by JCS on 2016-04-29



Legend

- ① Photo Location
- A-1 Flag Location
- 1 Data Point Location
- Existing Structure Location
- Project Limits
- Approximate Palustrine Forested Wetland Limits (PFO)
- Approximate Palustrine Scrub-Shrub Wetland Limits (PSS)
- Approximate Palustrine Emergent Wetland Limits (PEM)
- Approximate Open Water Limits (LUBH)
- 2-Foot Contour



- Notes**
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 5002 Feet
 2. Project limits digitized from orthomography
 3. Topography generated from USGS 1/3 arc second digital elevation model raster dataset
 4. Field survey located by means of sub-meter capable GPS technology and are for planning purposes only.
 5. Orthomography © Bing Maps
 6. Wetland boundaries are based on the National Wetland Inventory (NWI) and are for planning purposes only.



Page 03 of 03





Memo

To:	John Mulligan	From:	Jennifer B. Johnson
	701 East Cary Street, 12th Floor		5209 Center Street
	Richmond, Virginia 23219		Williamsburg, Virginia 23188
File:	203400940	Date:	March 8, 2018

Reference: Solid & Hazardous Waste Search for the Line #224 Partial Rebuild Project

Stantec conducted database searches for solid and hazardous wastes and petroleum release sites within a 0.5-mile radius of the proposed Line #224 Partial Rebuild Projects (Rebuild Projects). The Rebuild Projects consist of four components, listed below. Each Rebuild Project will take place within the existing, cleared transmission line right-of-way and no additional right-of-way is required.

- Pamunkey River Rebuild in New Kent and King William Counties
- Mattaponi River Rebuild in King William and King and Queen Counties
- I-64 Rebuild in New Kent County
- Diascund Rebuild in New Kent County

Publicly available data from the Environmental Protection Agency (EPA) Facility Registry System (FRS) were obtained. FRS provides 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/Superfund*; *Resource Conservation and Recovery Act*; and brownfield sites. Per this database, no such registered sites are present within a 0.5-mile radius of the Rebuild Projects.

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 Rebuild Projects. No petroleum release sites were identified within 0.5 mile of the Pamunkey River, I-64, and Diascund Rebuilds. Two petroleum releases were documented within 0.5 miles of the Mattaponi River Rebuild (DEQ ID: 19994274, and 19994012). All two cases have been closed and are illustrated on Figure 1, attached. Although not expected to impact the project, Dominion has a procedure in place to handle petroleum contaminated soils, if encountered.

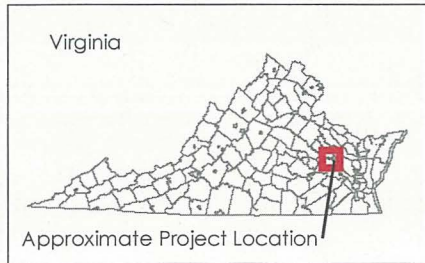
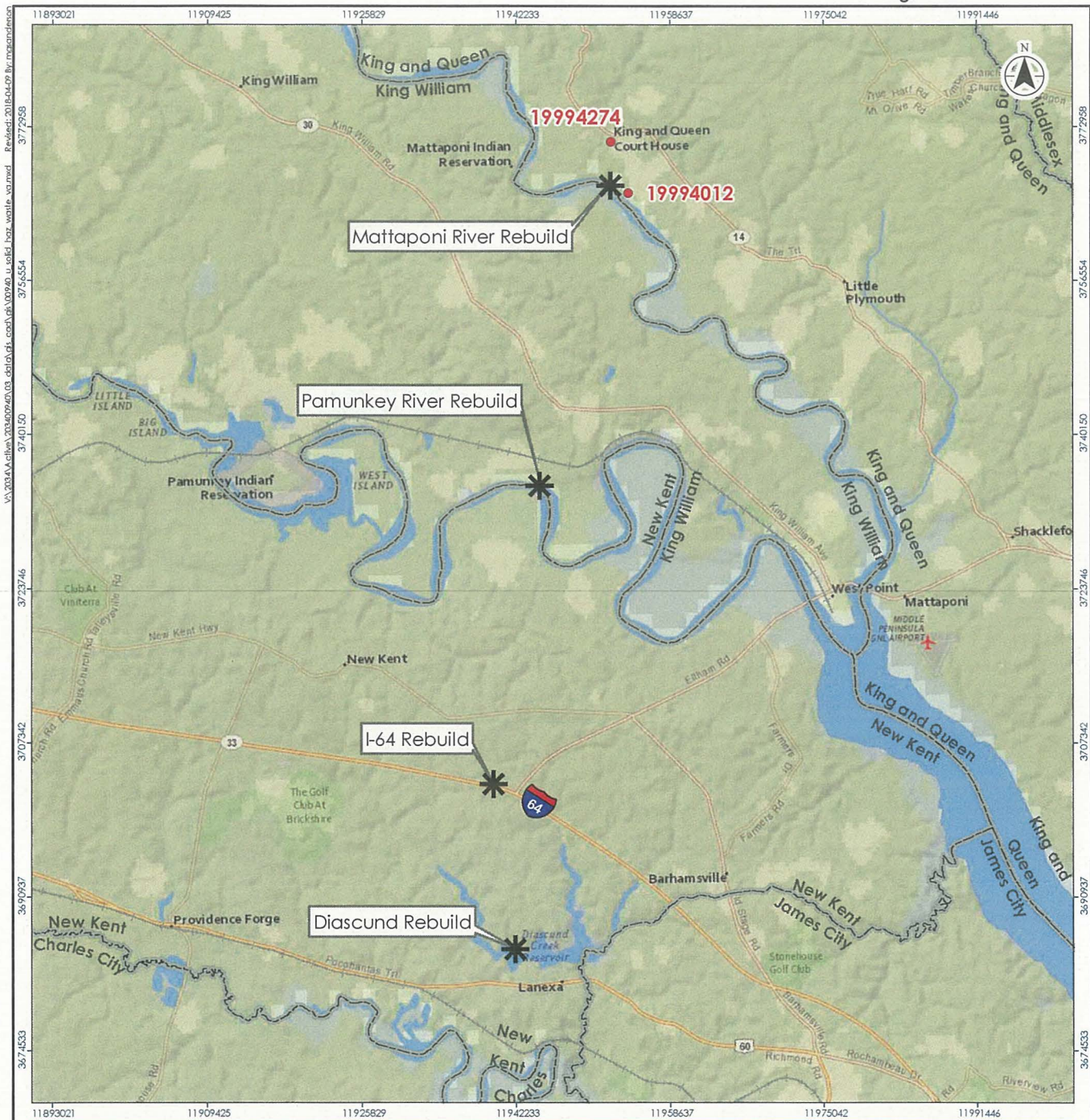
If you have any questions regarding the details presented in this report, please feel free to contact me at your convenience.

STANTEC CONSULTING SERVICES INC.

A handwritten signature in black ink, appearing to read 'Jennifer B. Johnson'.

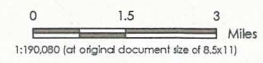
Jennifer B. Johnson
Project Manager
Phone: (757) 220-6869
Fax: (757) 229-4507
jennifer.johnson@stantec.com

Attachments: Figure 1. Solid and Hazardous Waste Sites within 0.5 mile



Legend

- Hazardous Waste Locations



Project Location: King William, King and Queen and New Kent Counties, VA
 Prepared by MGS on 2018-04-09
 Technical Review by ECL on 2018-04-09
 Independent Review by JBU on 2018-04-09

Client/Project: Dominion Energy Virginia
 Line #224 Partial Rebuild Projects

Attachment
1

**Solid and Hazardous Waste Sites
Within 0.5 Miles**

- Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South RPS 4502 Feet
 2. Base Map © National Geographic
 3. Tower Locations provided by Dominion Energy Virginia
 4. Hazardous waste reference locations provided by Virginia DEQ and US EPA

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Memo

To: John Mulligan
701 East Cary Street, 12th Floor
Richmond, Virginia 23219

From: Jennifer B. Johnson
5209 Center Street
Williamsburg, Virginia 23188

File: 203400940

Date: March 8, 2018

Reference: Threatened and Endangered Species Review for the Line #224 Partial Rebuild Projects

Stantec conducted database searches for potential federally and state listed threatened and endangered species in the vicinity of the proposed Line #224 Partial Rebuild Projects (Rebuild Projects). The Rebuild Projects consist of four components, listed below. Each Rebuild Project will take place within the existing, cleared transmission line right-of-way and no additional right-of-way is required.

- Pamunkey Rebuild in New Kent and King William Counties
- Mattaponi Rebuild in King William and King and Queen Counties
- I-64 Rebuild in New Kent County
- Diascund Rebuild in New Kent County

The online database searches included the U.S. Fish & Wildlife (USFWS) Information, Planning, and Conservation system, the Virginia Department of Game and Inland Fisheries (DGIF) Virginia Fish and Wildlife Information Service (VAFWIS), the Virginia Department of Conservation and Recreation (DCR) Natural Heritage Data Explorer (NHDE), and the Center for Conservation Biology (CCB) Bald Eagle Nest Locator for Virginia.

Results

Table 1. Database Search Results

Species	Status	Database	Results	Rebuild
Northern long-eared bat <i>Myotis septentrionalis</i>	FT ST	USFWS	No hibernacula or maternal roost trees were identified in the vicinity of the project.	All Rebuilds
Atlantic sturgeon <i>Acipenser oxyrinchus</i>	FE SE	DGIF NMFS	Pamunkey & Mattaponi Rivers are suitable habitat for this species and have been designated as critical habitat..	Pamunkey Mattaponi
Sensitive joint vetch <i>Aeschynomene virginica</i>	FT ST	USFWS DCR	Identified as potentially occurring in the vicinity of the project.	All Rebuilds Except I-64
Henslow's sparrow <i>Ammodramus henslowii</i>	ST	DGIF	Identified as potentially occurring in the vicinity of the project	Pamunkey
Bald eagle <i>Haliaeetus leucocephalus</i>	Protected	CCB	No nests were identified with management zones that overlap the project.	All Rebuilds

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

Conclusion

DGIF identified the Pamunkey and Mattaponi Rivers as potential anadromous fish use areas with a time-of-year restriction (TOYR) for instream work from February 15 – June 30. Additionally, the National Marine Fisheries Service has designated the main stem of both Rivers as critical habitat for the Atlantic sturgeon. There is only one existing structure located within either river, and that is structure 224/228 just off the northern bank of the Pamunkey River. Additional structures are located within tidal wetlands and lesser stream channels at both river crossings. Proposed structure 224/228 will be relocated inland on the northern bank. Scheduling deconstruction of this structure towards the end or outside the TOYR would help minimize potential impacts to the Atlantic sturgeon and other anadromous fish; however, all work within tidal areas may be subject to the TOYR. Potential impacts to critical habitat for the Atlantic sturgeon will need to be evaluated during the permit process and it can be expected that the project will be coordinated with the Virginia Institute for Marine

March 8, 2018
John Mulligan
Page 2 of 2

Reference: Threatened and Endangered Species Review

Science, National Marine Fisheries Service, and the US Fish and Wildlife Service to evaluate potential impacts to listed species and critical habitat.

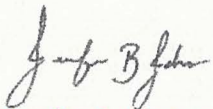
USFWS and DCR have identified the federally and state threatened sensitive joint-vetch (SJV) as potentially occurring within the project area. SJV prefers fresh to slightly brackish tidal marshes in the mid-Atlantic and as such, SJV surveys were conducted by Rouse Environmental Services for both the Pamunkey and Mattaponi Rebuilds. Because of the relatively fresh nature of the marshland, and the predominance of species often associated with SJV, there is potentially suitable habitat present; however, as no individuals were identified at a time of year when the plant is generally observable. The survey findings are attached.

The state threatened Henslow's sparrow has been observed downstream from the Pamunkey Rebuild in Sweet Hall Marsh. This species prefers habitats of unmowed grassy or weedy hayfields. Impacts to vegetation as a result of the project would be temporary and limited to construction access.

The federally and state threatened northern long-eared bat has been identified by USFWS as potentially occurring within the proposed Rebuild Projects. However, DGIF records indicate that no known hibernacula or maternity roost trees occur within the vicinity. There is a TOYR on tree clearing of April 15- September 15. The Rebuild Projects will occur within an existing maintained ROW and tree removal is expected to be limited to danger trees and limbing. If tree clearing is required and adherence to the TOYR is not possible, the project could likely rely on the findings of the 4 (d) rule and any limitations on clearing would likely be reduced to a TOYR of June 1- July 31 through coordination with the Corps and USFWS.

The complete results from the database searches are attached for your reference along with survey findings.

STANTEC CONSULTING SERVICES INC.



Jennifer B. Johnson

Project Manager
Phone: (757) 220-6869
Fax: (757) 229-4507
jennifer.johnson@stantec.com

Attachment: Database Search Results

US Fish and Wildlife Service
Information, Planning, and Conservation Tool



United States Department of the Interior

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



In Reply Refer To:
Consultation Code: 05E2VA00-2018-SLI-0466
Event Code: 05E2VA00-2018-E-01057
Project Name: Line 224 Rebuild: Pamunkey River Crossing

October 31, 2017

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

To Whom It May Concern:

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

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

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

utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

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

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

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

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

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

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

Attachment(s):

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

Official Species List

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

This species list is provided by:

Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
(804) 693-6694

Project Summary

Consultation Code: 05E2VA00-2018-SLI-0466

Event Code: 05E2VA00-2018-E-01057

Project Name: Line 224 Rebuild: Pamunkey River Crossing

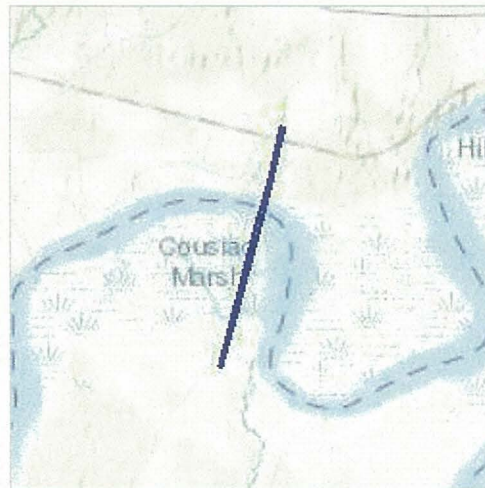
Project Type: TRANSMISSION LINE

Project Description: The Line 224 Rebuild project consists of multiple project elements that will take place along the same transmission line, within the same outage. These elements consist of the Mattaponi River Crossing, the Pamunkey River Crossing, the Interstate 64 Crossing Rebuild, and the Diascund Creek Reservoir Structure Work. The Pamunkey River Crossing involves rebuilding an existing 230 kV single circuit aerial transmission line crossing of the Pamunkey River approximately 6.5 miles west of West Point, Virginia. The rebuild length stretches approximately 1.6 miles, centered on the river crossing, rebuilding structures 224/226-224/234 for a total of nine structures. The structures will be replaced 1:1 and the crossing will be upgraded to a double circuit.

Project Location:

Approximate location of the project can be viewed in Google Maps:

<https://www.google.com/maps/place/37.5638964117803N76.90816910354718W>



Counties: King William, VA | New Kent, VA

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. 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.

Mammals

NAME

STATUS

Northern Long-eared Bat *Myotis septentrionalis*

Threatened

No critical habitat has been designated for this species.

Species profile: <https://ecos.fws.gov/ecp/species/9045>

Flowering Plants

NAME

STATUS

Sensitive Joint-vetch *Aeschynomene virginica*

Threatened

No critical habitat has been designated for this species.

Species profile: <https://ecos.fws.gov/ecp/species/855>

Critical habitats

There are no critical habitats within your project area under this office's jurisdiction.

USFWS National Wildlife Refuges And Fish Hatcheries

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.

There are no refuges or fish hatcheries within your project area.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Virginia Ecological Services Field Office

6669 Short Lane

Gloucester, VA 23061-4410

Phone: (804) 693-6694 Fax: (804) 693-9032

<http://www.fws.gov/northeast/virginiafield/>



In Reply Refer To:

October 31, 2017

Consultation Code: 05E2VA00-2018-SLI-0463

Event Code: 05E2VA00-2018-E-01050

Project Name: Line 224 Rebuild: Mattaponi River Crossing

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

To Whom It May Concern:

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

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

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

utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

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

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

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

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

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

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

Attachment(s):

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

Official Species List

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

This species list is provided by:

Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
(804) 693-6694

Project Summary

Consultation Code: 05E2VA00-2018-SLI-0463

Event Code: 05E2VA00-2018-E-01050

Project Name: Line 224 Rebuild: Mattaponi River Crossing

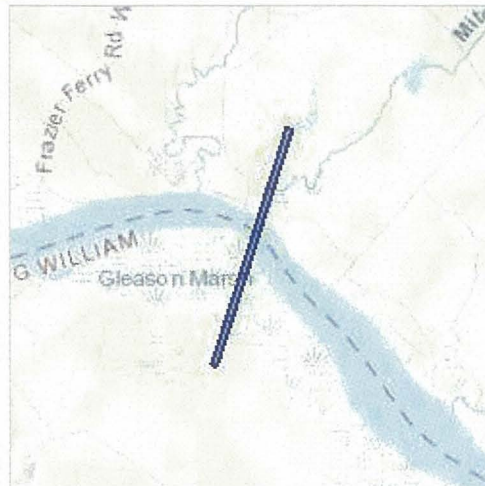
Project Type: TRANSMISSION LINE

Project Description: The Line 224 Rebuild project consists of multiple project elements that will take place along transmission line 224, within the same outage. These elements consist of the Mattaponi River Crossing, the Pamunkey River Crossing, the Interstate 64 Crossing Rebuild, and the Diascund Creek Reservoir Structure Work. The Mattaponi River Crossing involves rebuilding an existing 230 kV single circuit aerial transmission line crossing of the Mattaponi River approximately 9.6 miles northwest of West Point, Virginia. The rebuild length stretches approximately 1.3 miles, centered on the river crossing, rebuilding structures 224/180-224/186 for a total of seven structures. The structures will be replaced 1:1 and the crossing will be upgraded to a double circuit.

Project Location:

Approximate location of the project can be viewed in Google Maps:

<https://www.google.com/maps/place/37.65524295485492N76.87910679793688W>



Counties: King William, VA | King and Queen, VA

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. 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.

Mammals

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

Flowering Plants

NAME	STATUS
Sensitive Joint-vetch <i>Aeschynomene virginica</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/855	Threatened

Critical habitats

There are no critical habitats within your project area under this office's jurisdiction.

USFWS National Wildlife Refuges And Fish Hatcheries

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.

There are no refuges or fish hatcheries within your project area.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

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<http://www.fws.gov/northeast/virginiafield/>



In Reply Refer To:

October 31, 2017

Consultation Code: 05E2VA00-2018-SLI-0467

Event Code: 05E2VA00-2018-E-01059

Project Name: Line 224 Rebuild: Interstate 64 Crossing Rebuild

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

To Whom It May Concern:

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

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

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

utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

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

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

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

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

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

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

Attachment(s):

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

Official Species List

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

This species list is provided by:

Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
(804) 693-6694

Project Summary

Consultation Code: 05E2VA00-2018-SLI-0467

Event Code: 05E2VA00-2018-E-01059

Project Name: Line 224 Rebuild: Interstate 64 Crossing Rebuild

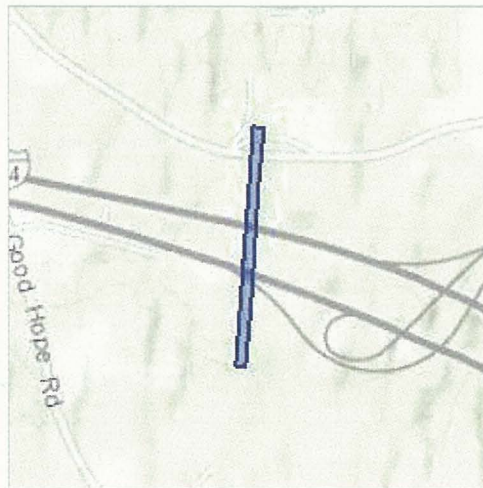
Project Type: TRANSMISSION LINE

Project Description: The Line 224 Rebuild project consists of multiple project elements that will take place along the same transmission line, within the same outage. These elements consist of the Mattaponi River Crossing, the Pamunkey River Crossing, the Interstate 64 Crossing Rebuild, and the Diascund Creek Reservoir Structure Work. The I-64 Crossing involves rebuilding an existing 230 kV single circuit aerial transmission line, just west of its intersection with Route 33. The rebuild work includes the replacement of structures 224/268-224/271 and the installation of new conductor wire.

Project Location:

Approximate location of the project can be viewed in Google Maps:

<https://www.google.com/maps/place/37.48070837818477N76.92542697535546W>



Counties: New Kent, VA

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. 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.

Mammals

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

Critical habitats

There are no critical habitats within your project area under this office's jurisdiction.

USFWS National Wildlife Refuges And Fish Hatcheries

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.

There are no refuges or fish hatcheries within your project area.



United States Department of the Interior

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



In Reply Refer To:

October 31, 2017

Consultation Code: 05E2VA00-2018-SLI-0468

Event Code: 05E2VA00-2018-E-01063

Project Name: Line 22 Rebuild: Diascund Creek Reservoir Structure Work

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

To Whom It May Concern:

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

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

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

utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

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

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

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

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

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

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

Attachment(s):

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

Official Species List

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

This species list is provided by:

Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
(804) 693-6694

Project Summary

Consultation Code: 05E2VA00-2018-SLI-0468

Event Code: 05E2VA00-2018-E-01063

Project Name: Line 22 Rebuild: Diascund Creek Reservoir Structure Work

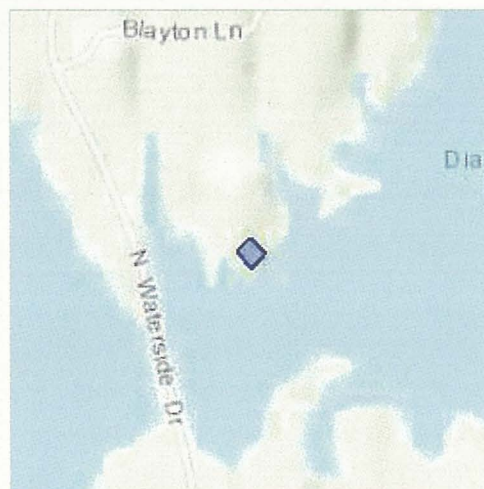
Project Type: TRANSMISSION LINE

Project Description: The Line 224 Rebuild project consists of multiple project elements that will take place along the same transmission line, within the same outage. These elements consist of the Mattaponi River Crossing, the Pamunkey River Crossing, the Interstate 64 Crossing Rebuild, and the Diascund Creek Reservoir Structure Work. The Diascund Creek Reservoir Structure Work will involve rebuilding structure 224/297 (2016/6), located on the bank of the Diascund Creek Reservoir. The structure currently supports conductor Lines 2016 and 224 and is proposed to be rebuilt into two separate structures.

Project Location:

Approximate location of the project can be viewed in Google Maps:

<https://www.google.com/maps/place/37.43257954545782N76.91464500958972W>



Counties: New Kent, VA

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. 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.

Mammals

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

Flowering Plants

NAME	STATUS
Sensitive Joint-vetch <i>Aeschynomene virginica</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/855	Threatened

Critical habitats

There are no critical habitats within your project area under this office's jurisdiction.

USFWS National Wildlife Refuges And Fish Hatcheries

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.

There are no refuges or fish hatcheries within your project area.

Virginia Department of Game and Inland Fisheries
Virginia Fish and Wildlife Information Services