

Figure 5-280: C&O Railroad in relation to the project alignment with locations and directions of representative photographs shown in yellow and simulations in green.

RESULTS OF FIELD RECONNAISSANCE



Figure 5-281: Photo location 1- View from C&O Railroad corridor west of Providence Forge, facing southeast.



Figure 5-282: Photo location 2 – View from C&O Railroad crossing of Courthouse Road in Providence Forge, facing south.



Figure 5-283: Photo location 3 – View from Boulevard Road east of Providence Forge, facing south.



Figure 5-284: Photo location 4 – View from Route 60 at crossing of project ROW and C&O Railroad corridor, facing southeast.



Figure 5-285: Photo location 5 – View from Route 60 at GW King Boulevard, facing west.

RESULTS OF FIELD RECONNAISSANCE

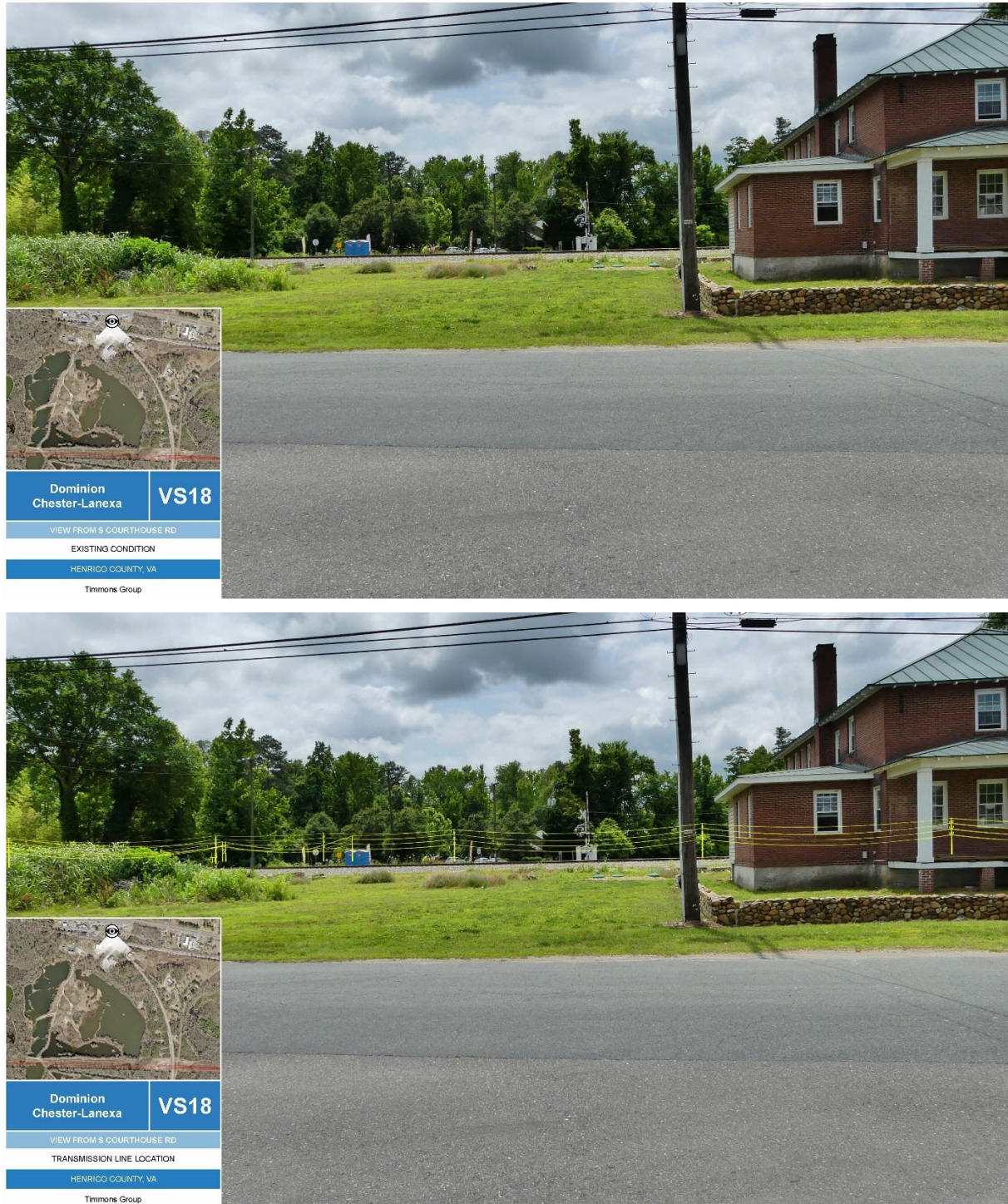


Figure 5-286: Photo Simulation 1 – Existing (above) and proposed (below) view from near C&O Railroad in Providence Forge, facing south. All structures shown in yellow to remain screened behind vegetation.

RESULTS OF FIELD RECONNAISSANCE



Figure 5-287: Photo Simulation 2 – Existing (above) and proposed (below) view from Route 60 at GW King Boulevard near C&O Railroad , facing northwest. All structures shown in yellow to remain screened behind vegetation.

6. ARCHAEOLOGICAL ASSESSMENT

A review of the VDHR VCRIS records reveals there are 16 previously recorded archaeological sites located within or crossed by the project area. Formal archaeological fieldwork and investigations were not conducted as part of this effort, so the existing conditions of the sites are unknown. Project engineering is also still preliminary so the final project alignment, structure locations, and extent of grading and limits of disturbance are uncertain, however, the table below provides a list of the previously recorded sites and proximity to the project based upon previous site data and preliminary project information available at time of this analysis.

Of the 16 previously recorded sites within the project area, three (3) have been determined eligible or potentially eligible for listing in the NRHP, one (1) has been determined not eligible for listing, and the others have not been formally evaluated (Table 6-1).

Table 6-1: Previously recorded archaeological resource adjacent to the Project ROW

VDHR #	Site Type	Temporal Association	NRHP Status	Proximity to Project
44CC0301	Dwelling, single	19th Century: 1st half (1800 - 1849)	Not Evaluated	~225 Feet from nearest proposed structure
44CC0319	Camp	Woodland (1200 B.C. - 1606 A.D.)	Not Evaluated	~110 Feet from nearest proposed structure
44HE0399	No Data	No Data	Not Evaluated	~280 Feet from nearest proposed structure
44HE0560	Other	Prehistoric/Unknown (15000 B.C. - 1606 A.D.), 19th Century: 2nd half (1850 - 1899)	Not Evaluated	~50 Feet from nearest proposed structure
44HE0730	Other	Early Woodland (1200 B.C.E - 299 C.E), Middle Woodland (300 - 999 C.E), Late Woodland (1000 - 1606), Contact Period (1607 - 1750), Early National Period (1790 - 1829), Antebellum Period (1830 - 1860), Civil War (1861 - 1865), Reconstruction and Growth (1866 - 1916), World War I to World War II (1917 - 1945), The New Dominion (1946 - 1991), Post Cold War (1992 - Present)	DHR Staff: Eligible	Three existing and proposed structures within site limits
44HE0732	Artifact scatter	Pre-Contact	Not Evaluated	Two existing and proposed structures within site limits
44HE0733	Camp, temporary, Trash scatter	Early National Period (1790 - 1829), Antebellum Period (1830 - 1860), Civil War (1861 - 1865), Reconstruction and Growth (1866 - 1916)	Not Evaluated	One existing and three proposed structures within site limits
44HE0734	Artifact scatter	Pre-Contact	Not Evaluated	~145 Feet from nearest proposed structure
44HE1008	Lithic scatter	Pre-Contact	DHR Staff: Not Eligible	~370 Feet from nearest proposed structure

ARCHAEOLOGICAL ASSESSMENT

VDHR #	Site Type	Temporal Association	NRHP Status	Proximity to Project
44HE1083	Trash scatter	Historic/Unknown, Paleo-Indian (15000 - 8501 B.C.E), Early Archaic Period (8500 - 6501 B.C.E), Middle Archaic Period (6500 - 3001 B.C.E), Late Archaic Period (3000 - 1201 B.C.E), Early Woodland (1200 B.C.E - 299 C.E), Middle Woodland (300 - 999 C.E), Late Woodland (1000 - 1606)	Not Evaluated	One existing and proposed structure within site limits
44HE1100	Earthworks	Antebellum Period (1830 - 1860), Civil War (1861 - 1865), Reconstruction and Growth (1866 - 1916)	DHR Staff: Eligible	~215 Feet from nearest proposed structure
44HE1178	Dwelling, single	World War I to World War II (1917 - 1945), The New Dominion (1946 - 1988), Post Cold War (1989 - Present)	Not Evaluated	~305 Feet from nearest proposed structure
44HE1272	Earthworks	Civil War (1861 - 1865)	Not Evaluated	~160 Feet from nearest proposed structure
44NK0171	Dwelling, single	Historic/Unknown	Not Evaluated	~60 Feet from nearest proposed structure
44NK0172	Camp	Prehistoric/Unknown (15000 B.C. - 1606 A.D.)	Not Evaluated	One existing structure within site limits. ~350 Feet from nearest proposed structure
44NK0173	Camp	No Data	DHR Staff: Eligible	One existing structure within site limits. ~100 Feet from nearest proposed structure

7. SUMMARY OF POTENTIAL IMPACTS

As part of this pre-application analysis of cultural resources for the Chesterfield-Lanexa Rebuild Project, potential impacts to previously recorded historic properties that qualify for consideration under VDHR-defined buffered tiers were assessed in accordance with the VDHR guidance. For the purposes of this analysis, an impact is one that alters, either directly or indirectly, those qualities or characteristics that qualify a particular property for listing in the NRHP and does so in a manner that diminishes the integrity of a property's materials, workmanship, design, location, setting, feeling, and/or association. With respect to transmission lines and associated projects, direct impacts typically are associated with ground disturbance resulting from ROW clearing and structure construction. Indirect impacts typically are associated with the introduction of new visual elements or changes to the physical features of a property's setting or viewshed. According to VDHR guidance, project impacts are characterized as such:

- **None** – Project is not visible from the property.
- **Minimal** – Occur within viewsheds that have existing transmission lines, locations where there will only be a minor change in tower height, and/or views that have been partially obstructed by intervening topography and vegetation.
- **Moderate** – Include viewsheds with expansive views of the transmission line, more dramatic changes in the line and tower height, and/or an overall increase in the visibility of the route from the historic properties.
- **Severe** – Occur within viewsheds that do not have existing transmission lines and where the views are primarily unobstructed, locations where there will be a dramatic increase in tower visibility due to the close proximity of the route to historic properties, and viewsheds where the visual introduction of the transmission line is a significant change in the setting of the historic properties.

With regards to architectural resources, there are no (0) NHLs located within 1.5 mile of the proposed project or closer, five (5) NRHP-listed properties and 13 battlefields located within 1.0 mile or closer of the project, and five (5) properties that have been determined eligible or potentially eligible for listing in the NRHP by the VDHR within 0.5 mile or closer of the project. One (1) of the NRHP-listed resources, eight (8) of the battlefields, and two (2) of the NRHP-eligible resources are directly crossed by the project alignment.

Assessment of impacts to architectural resources and battlefield found that in general, the existing transmission line and structures to be rebuilt as part of this project is not visible from most vantage points within and near the historic properties due to the rolling topography and widespread tree cover in the area. Where it is visible, views are limited to portions of one or two structures above treelines with the exception of where road crossings allow more open views of structures up and down the ROW.

Due to the numerous Civil War battlefields in the area that are crossed and in proximity to the project, including a number of areas that are maintained by the NPS as part of the Richmond National Battlefield Park, particular attention was given to the potential visibility from these areas. Coordination with NPS staff took place prior to conducting photo simulations in order to select the most representative and/or preferred vantage points. The effort found that the existing

SUMMARY OF POTENTIAL IMPACTS

transmission line is mostly to completely screened from most of the NPS tracts and land within one mile of the project with the exception of where the ROW directly crosses through them or over roads passing through the tracts. This includes a discrete length of Hoke Brady Road leading to Fort Brady, a short length of New Market Road and an access road leading into the New Market Heights Battlefield tract, and a length of Willis Church Road and the Nelson House site in the Glendale area. While the appearance of the transmission line from these areas will change, the views would be limited to the replacement of structures that are already visible. Because of the increase in height of the structures, many will be removed and not replaced resulting in fewer overall structures located within the park lands and in the viewshed from them. Of further note is that transmission structures visible from Willis Church Road would be seen on conjunction with another set of transmission structures in the shared ROW that will remain taller than the project structures. *As project engineering is still preliminary, including structure locations, these impact assessments are subject to change. However, based on project data current at the time of this analysis, it is D+A's opinion that there will be no more than a minimal impact to any historic properties or battlefields within the study tiers for the Chesterfield-Lanexa Rebuild Project (Table 7-1).*

Table 7-1: Potential impacts summary for architectural resources.

VDHR #	Resource Name, Address	NRHP-Status	Distance from Project	Recommended Impact
018-0015	Mount Stirling (NRHP Listing)	NRHP-Listed	~0.35 Mile	No Impact
018-5004	Nance's Shop (Historic), Saint Mary's Church Battlefield (Current Name), Samaria Church (Historic)	Battlefield/ NRHP-Eligible	Directly Crossed	Minimal Impact
020-0121	Osborne's Naval Battle (Site) (Historic)	Battlefield/ NRHP-Eligible	~0.12 Mile	Minimal Impact
020-5319	Ware Bottom Church Battlefield (Historic)	Battlefield/ NRHP-Eligible	~0.41 Mile	No Impact
020-5320	Drewry's Bluff (2nd) Battlefield (Historic), Fort Darling (Historic), Fort Drewry (Historic), Proctor's Creek Battlefield (Historic/Current)	Battlefield/ NRHP-Eligible	~0.74 Mile	No Impact
043-0033	Richmond National Battlefield Park (NRHP Listing)	NRHP-Listed	Directly Crossed	Minimal Impact
043-0041	Bullington Plantation (Estate) (Historic/Current), Coxley (Historic), Farmers Rest (NRHP Listing), Henry Cox Home, 9341 Varina Rd (Historic/Location), Stennett Farm (Historic)	NRHP-Listed	Directly Crossed	Minimal Impact
043-0074	Camp Hill Site (Current)	NRHP-Eligible	~0.35 Mile	No Impact
043-0307	Battle of Chaffin's Farm, New Market Road (Historic/Location), New Market Heights Battlefield (Historic/Current)	Battlefield/ NRHP-Eligible	Directly Crossed	Minimal Impact

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VDHR #	Resource Name, Address	NRHP-Status	Distance from Project	Recommended Impact
043-0308	Savage Station Battlefield (Historic/Current)	Battlefield/ NRHP-Eligible	Directly Crossed	Minimal Impact
043-0741	Gravel Hill Community Center (Current), Gravel Hill School (NRHP Listing), Rosenwald School, 5417 Longbridge Road (Function/Location)	NRHP-Eligible	~0.28 Mile	No Impact
043-0753	Glendale National Cemetery (NRHP Listing)	NRHP-Listed	~0.26 Mile	Minimal Impact
043-5071	Darbytown & New Market Roads Battlefield (Historic), Fourmile Creek (Historic)	Battlefield/ NRHP-Eligible	~0.42 Mile	No Impact
043-5072	Alms House (Historic), Darbytown Road Battlefield (Historic)	Battlefield/ NRHP-Eligible	~0.47 Mile	No Impact
043-5073	Fair Oaks & Darbytown Road Battlefield (Historic)	Battlefield/ NRHP-Eligible	Directly Crossed	Minimal Impact
043-5074	First Deep Bottom Battlefield (Historic), Strawberry Plains (Historic)	Battlefield/ NRHP-Eligible	Directly Crossed	Minimal Impact
043-5077	Frazier's Farm (Historic), Glendale Battlefield (Current Name), Glendale Battlefield (Historic), Nelson's Farm (Historic)	Battlefield/ NRHP-Eligible	Directly Crossed	Minimal Impact
043-5078	Malvern Hill Battlefield (Current Name), Poindexter's Farm (Historic)	Battlefield/ NRHP-Eligible	Directly Crossed	Minimal Impact
043-5080	Bailey's Creek (Historic), Fussell's Mill (Historic), Second Deep Bottom Battlefield (Historic)	Battlefield/ NRHP-Eligible	Directly Crossed	Minimal Impact
043-5256	Fussells Mill Miller's House (Historic/Current)	NRHP-Eligible	Directly Crossed	Minimal Impact
043-6124	House, 1573 Kingsland Road (Function/Location)	Treated as Potentially NRHP-Eligible for Compliance Purposes	~100 Feet	Minimal Impact
063-0080	Indian Fields (Historic), Spring Hill (NRHP Listing), Springhill (Alternate Spelling)	NRHP-Listed	~0.47 Mile	No Impact
121-5134	Chesapeake and Ohio Railroad (Historic), CSX Railroad (Current Name)	NRHP-Eligible	Directly Crossed	Minimal Impact

With regards to archaeology, portions of the project area have been subject to previous Phase I survey, however, these are primarily limited to linear corridors associated with utility or infrastructure projects crossing the project area. As a result of these prior surveys, discrete lengths of the overall project area have been subject to survey although much of the project area

SUMMARY OF POTENTIAL IMPACTS

remains unsurveyed. The surveys that have been conducted have resulted in the identification of 16 previously recorded archaeological sites within the project area. Of these, three (3) have been determined eligible or potentially eligible for listing in the NRHP, one (1) has been determined not eligible for listing, and the others have not been formally evaluated. Formal archaeological fieldwork and investigations were not conducted as part of this effort, so the existing conditions of the sites are unknown, and project engineering is also still preliminary so the final project alignment, structure locations, and extent of grading and limits of disturbance are subject to change. Further investigation and analysis will be needed to assess impacts to NRHP-eligible sites. *It is therefore D+A's recommendation that any portion of the project area that has not been subject to accepted cultural resource survey be investigated to identify unrecorded sites and previously recorded sites that are considered eligible or unevaluated be assessed for eligibility. Any sites found to be eligible for listing in the NRHP should be assessed for project impacts as additional project construction details become available (Table 7-2).*

Table 7-2: Summary of potential impacts summary for archaeological resources.

VDHR #	Site Type/ Temporal Context	NRHP Status	Proximity to Project	Impacts/ Recommendation
44CC0301	Dwelling, single/ 19th Century: 1st half (1800 - 1849)	Not Evaluated	~225 Feet from nearest proposed structure	Reidentify, evaluate, and assess impacts if necessary
44CC0319	Camp/ Woodland (1200 B.C. - 1606 A.D.)	Not Evaluated	~110 Feet from nearest proposed structure	Reidentify, evaluate, and assess impacts if necessary
44HE0399	No Data/ No Data	Not Evaluated	~280 Feet from nearest proposed structure	Reidentify, evaluate, and assess impacts if necessary
44HE0560	Other/ Prehistoric/Unknown (15000 B.C. - 1606 A.D.), 19th Century: 2nd half (1850 - 1899)	Not Evaluated	~50 Feet from nearest proposed structure	Reidentify, evaluate, and assess impacts if necessary
44HE0730	Early Woodland (1200 B.C.E - 299 C.E), Middle Woodland (300 - 999 C.E), Late Woodland (1000 - 1606), Contact Period (1607 - 1750), Early National Period (1790 - 1829), Antebellum Period (1830 - 1860), Civil War (1861 - 1865), Reconstruction and Growth (1866 - 1916), World War I to World War II (1917 - 1945), The New Dominion (1946 - 1991), Post Cold War (1992 - Present)	DHR Staff: Eligible	Three existing and proposed structures within site limits	Reidentify and assess impacts
44HE0732	Artifact scatter/ Pre-Contact	Not Evaluated	Two existing and proposed structures within site limits	Reidentify, evaluate, and assess impacts if necessary

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VDHR #	Site Type/ Temporal Context	NRHP Status	Proximity to Project	Impacts/ Recommendation
44HE0733	Camp, temporary, Trash scatter/ Early National Period (1790 - 1829), Antebellum Period (1830 - 1860), Civil War (1861 - 1865), Reconstruction and Growth (1866 - 1916)	Not Evaluated	One existing and three proposed structures within site limits	Reidentify, evaluate, and assess impacts if necessary
44HE0734	Artifact scatter/ Pre-Contact	Not Evaluated	~145 Feet from nearest proposed structure	Reidentify, evaluate, and assess impacts if necessary
44HE1008	Lithic scatter/ Pre-Contact	DHR Staff: Not Eligible	~370 Feet from nearest proposed structure	No Further Consideration
44HE1083	Trash scatter/ Historic/Unknown, Paleo-Indian (15000 - 8501 B.C.E), Early Archaic Period (8500 - 6501 B.C.E), Middle Archaic Period (6500 - 3001 B.C.E), Late Archaic Period (3000 - 1201 B.C.E), Early Woodland (1200 B.C.E - 299 C.E), Middle Woodland (300 - 999 C.E), Late Woodland (1000 - 1606)	Not Evaluated	One existing and proposed structure within site limits	Reidentify, evaluate, and assess impacts if necessary
44HE1100	Earthworks/ Antebellum Period (1830 - 1860), Civil War (1861 - 1865), Reconstruction and Growth (1866 - 1916)	DHR Staff: Eligible	~215 Feet from nearest proposed structure	Reidentify and assess impacts
44HE1178	Dwelling, single/ World War I to World War II (1917 - 1945), The New Dominion (1946 - 1988), Post Cold War (1989 - Present)	Not Evaluated	~305 Feet from nearest proposed structure	Reidentify, evaluate, and assess impacts if necessary
44HE1272	Earthworks/ Civil War (1861 - 1865)	Not Evaluated	~160 Feet from nearest proposed structure	Reidentify, evaluate, and assess impacts if necessary
44NK0171	Dwelling, single/ Historic/Unknown	Not Evaluated	~60 Feet from nearest proposed structure	Reidentify, evaluate, and assess impacts if necessary
44NK0172	Camp/ Prehistoric/Unknown (15000 B.C. - 1606 A.D.)	Not Evaluated	One existing structure within site limits. ~350 Feet from nearest proposed structure	Reidentify, evaluate, and assess impacts if necessary
44NK0173	Camp/ No Data	DHR Staff: Eligible	One existing structure within site limits. ~100 Feet from nearest proposed structure	Reidentify and assess impacts

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8. REFERENCES

National Park Service

2009 “Civil War Sites Advisory Commission Report Update and Resurvey,” American Battlefield Protection Program

Virginia Department of Historic Resources

2008 *Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia*

Virginia Department of Historic Resources

2025 Virginia Cultural Resource Information System (VCRIS) database and GIS server.

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From: Warren, Arlene <arlene.warren@vdh.virginia.gov>
Sent: Tuesday, June 22, 2021 7:53 AM
To: Rachel.M.Studebaker@dominionenergy.com
Subject: [EXTERNAL] Re: FW: SCC Case No. PUR-2021-00010/DEQ21-013S

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

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

Best Regards,

Arlene Fields Warren

GIS Program Support Technician

Office of Drinking Water

Virginia Department of Health

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Richmond, VA 23219

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

Hello Ms. Warren,

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

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

Thank you,

Rachel Studebaker

Environmental Specialist II

Dominion Energy Services

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