



Figure 5-78: Photo location 3- View from entrance to Battery Dantzler preservation area towards the project area (not visible), facing northwest.



Figure 5-79: Photo location 4- View from Battery Dantzler parking lot towards the project area (no project structures visible, but a length of conductor may be seen suspended over the road), facing west.

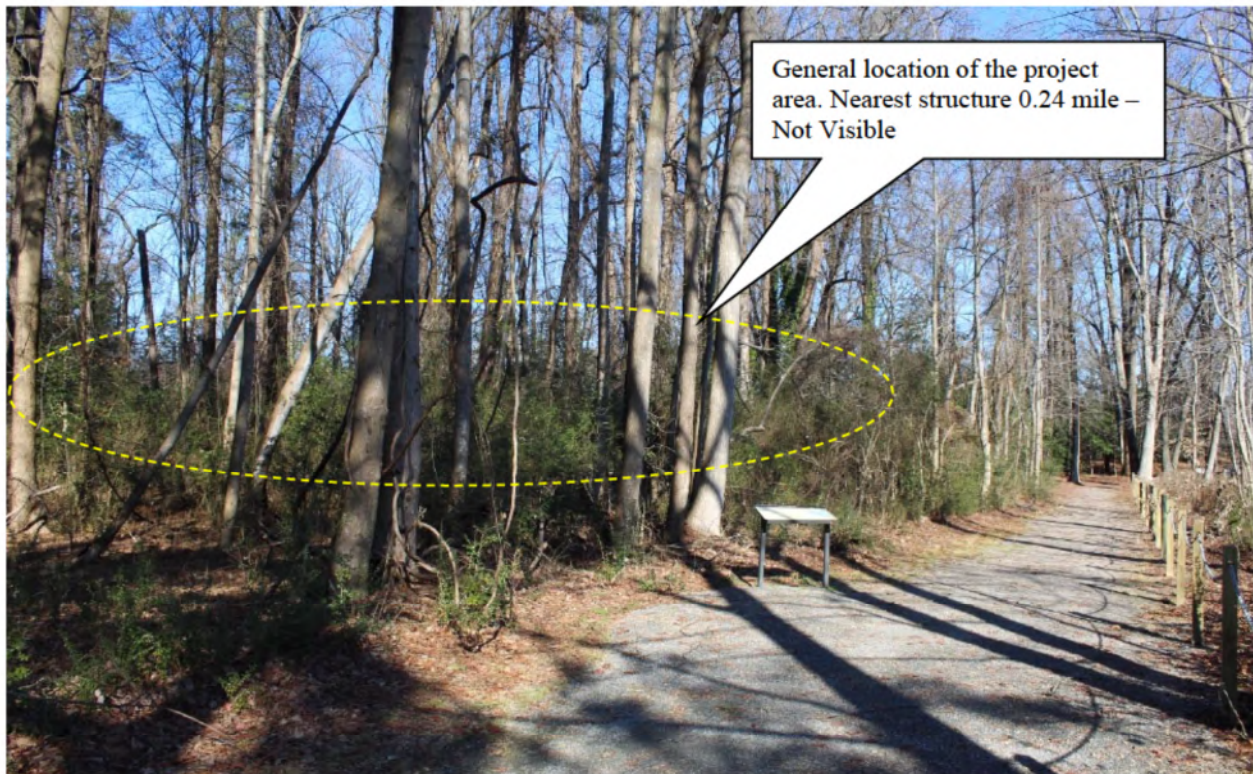


Figure 5-80: Photo location 5- View from Battery Dantzler preservation area trail towards the project area (not visible – screened by vegetation), facing northwest.



Figure 5-81: Photo location 6- View from Battery Dantzler preservation area towards the project area (not visible – screened by vegetation), facing west.

Proctor's Creek Battlefield (VDHR# 020-5320)

The Battle of Proctor's Creek was the fourth encounter of the Bermuda Hundred Campaign of the Civil War. Between May 12 and 16, 1864, Union forces, led by Major General Benjamin F. Butler, attempted to move north from Bermuda Hundred to take Drewry's Bluff and eventually Richmond, but were repulsed by Confederate troops, led by General P.G.T. Beauregard. A majority of the battlefield is situated in the eastern part of Chesterfield County with the core of the battlefield located near the intersection of US Route 1 and Willis Road. The battlefield contains monuments, interpretive markers, a cemetery, historic road beds, period structures, trenches, and field fortifications. Its current uses are agricultural, residential, industrial, and commercial in nature. Much of the battlefield has been subject to heavy modern development that has compromised its historic character but some areas remain relatively undeveloped and intact.

Proctor's Creek Battlefield is significant for its associations with notable events of the Civil War, and maintains a relatively high level of integrity, despite large areas of its historic landscape having been compromised by modern development. As such, it is considered potentially eligible for listing in the NRHP.

Because portions of the Proctor's Creek Battlefield are located within one mile of the project alignment, it was subject to assessment for potential impacts in accordance with VDHR guidance. In order to assess the potential impact of the proposed project, visual inspection was conducted of the setting around and within the battlefield and photographs were taken to document viewshed with emphasis on views from the battlefield towards the project alignment. As much of the battlefield landscape is comprised of private property, field inspection was conducted from public ROW or property where access was granted.

The Proctor's Creek Battlefield occupies a large landscape in eastern Chesterfield County focused around the crossing of Proctor's Creek by the Richmond-Petersburg Turnpike (Route 1). Although much of the battlefield, including the core area, is situated to the north and west of the project, a short length of the southern end of the project alignment extends directly through a portion of the battlefield. A total of seven (7) existing transmission structures spread across a roughly 1-mile length of ROW associated with this project are located directly within the delineated boundaries of the battlefield. This includes the southern end of the project, however, additional portions of the battlefield are located within one-half mile of the northern length of the project alignment.

A site visit to the battlefield found that much of the landscape within the vicinity of the project alignment is heavily fractured and has been subject to modern development that has compromised the historic setting. Although several discrete battlefield features have been preserved as public parks or conservation areas, much of the landscape is characterized by commercial and light-industrial development, and is crossed by modern infrastructure in form of roads, railroads, and other utilities.

As part of the project, several of the existing structures located directly in the battlefield will be replaced while one will remain in place. The structures to be replaced will be done so on a one-to-one basis near the location of the existing structures and will not require any additional ROW or clearing within the property. The existing structures to be replaced within the battlefield currently

range from 115- to 151-feet in height. As part of the project, the 151-foot tall structure is proposed to be decreased in height to 142-feet, three structures that are currently 132-feet tall will remain the same height, and two structures will be increased in height, including a 117- foot tall structure and a 132-foot tall structure that will both be increased to 137-feet tall. As a result of the structure replacement, the project will have a direct impact on the battlefield, however, because the project will replace structures that already exist within a shared ROW occupied by numerous other transmission line infrastructure, it will not introduce any substantially new or different components into the landscape. Nor will it result in clearing or demolition of any associated battlefield features, and therefore the direct impact is anticipated to be minimal.

Inspection from representative vantage point throughout the battlefield found that visibility of the existing structure varies from completely screened by intervening vegetation and development to wide and unobstructed views of long lengths of the line. Where the project structures are visible is generally limited to vantage points in close proximity and views are in conjunction with and set amongst extensive modern development, as well as multiple other transmission lines, including two within the same shared ROW as the project alignment. More distant views are limited to vantage points along open road corridors that cross the project alignment such as West Hundred Road. Inspection from Civil War-era battlefield features reveal that the project area and some existing structures are visible from public ROW in the vicinity, however, they are screened from vantages within the interpretation/preservation areas by vegetation.

Due to the change in structure heights as well as configuration, the project is anticipated to result in a slight change in the overall appearance of the line from vantage points where it is already visible, however, due to the minimal increase in height for those structures that will be taller, new or expanded visibility from other locations is not expected. Because the project alignment is within a shared ROW and located between two other existing transmission lines of similar height, the change is not anticipated to be particularly noticeable. One of these lines was also recently rebuilt with replacement structures averaging 124-feet in height, and as part of the project review, it was determined that the project would have a minimal impact on the battlefield. As the overall change in structure height as part of this project will be only minimally increased, the project improvements are not anticipated to introduce a substantial cumulative change in setting or viewshed from the property which is already compromised by modern development and includes views of other transmission lines, and it is therefore D+A's opinion that the Lines# 211/228 partial Rebuild Project will pose no more than a *minimal impact* to Proctor's Creek Battlefield per VDHR's impact characterization scale.

Figure 5-82 depicts the boundaries of the Proctor's Creek Battlefield in relation to the project area and viewshed buffers, with the location and direction of all representative photographs. Figures 5-83 through 5-94 are representative photographs of the battlefield, as well as those taken from locations within the battlefield towards the project area.

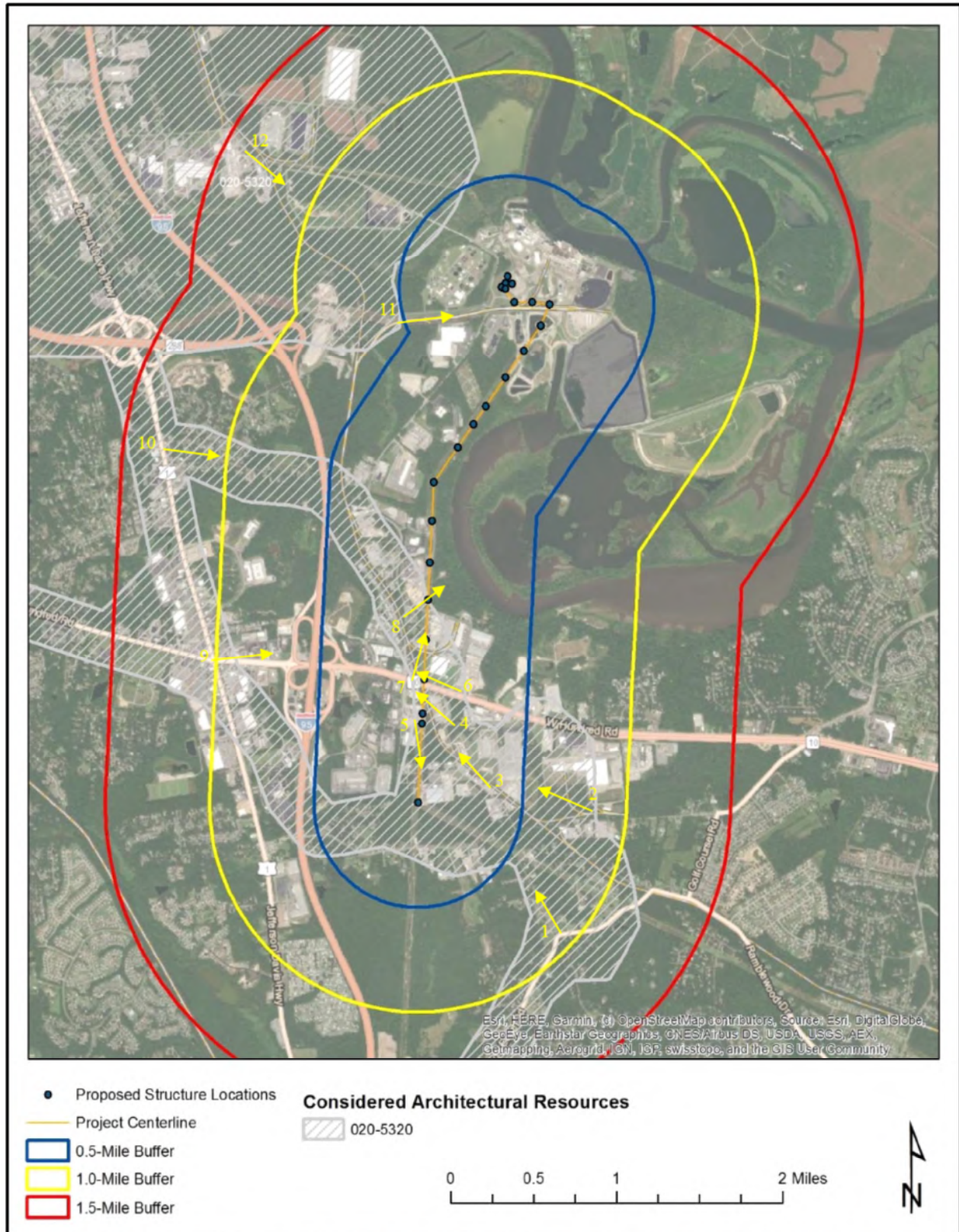


Figure 5-82: Location of Proctor's Creek Battlefield in relation to the project alignment (Representative photographs and views towards the project area depicted in yellow).



Figure 5-83: Photo location 1- View from Ware Bottom Church Battlefield Park along Old Bermuda Hundred Road (No project structures visible – Visible structures are another line not included in this project), facing northeast.



Figure 5-84: Photo location 2- View from Old Bermuda Hundred Road (No project structures visible), facing northwest.



Figure 5-85: Photo location 3- View from Ramblewood Drive (One project structure visible above treeline), facing northwest.



Figure 5-86: Photo location 4- View from Ware Bottom Spring Road at Ramblewood Drive (Three project structures visible through vegetation and above development), facing north.



Figure 5-87: Photo location 5- View from entrance to Parkers Battery (Two project structures visible down open ROW), facing south.



Figure 5-88: Photo location 6- View from West Hundred Road at Bermuda Triangle Road (One project structure visible), facing west.



Figure 5-89: Photo location 7- View from Old Stage Road at W Hundred Road (Three project structures visible), facing northeast.



Figure 5-90: Photo location 8- View from Old Stage Road at Battery Dantzler Court (One project structure visible through vegetation), facing northeast.



Figure 5-91: Photo location 9- View from W Hundred Road at US-1 (One project structure visible), facing east.



Figure 5-92: Photo location 10- View from US-1 at Osborne Road (not visible – screened by vegetation and development), facing east.



Figure 5-93: Photo location 11- View from Coxendale Road (no project structures visible but multiple unrelated structures visible in foreground), facing east.

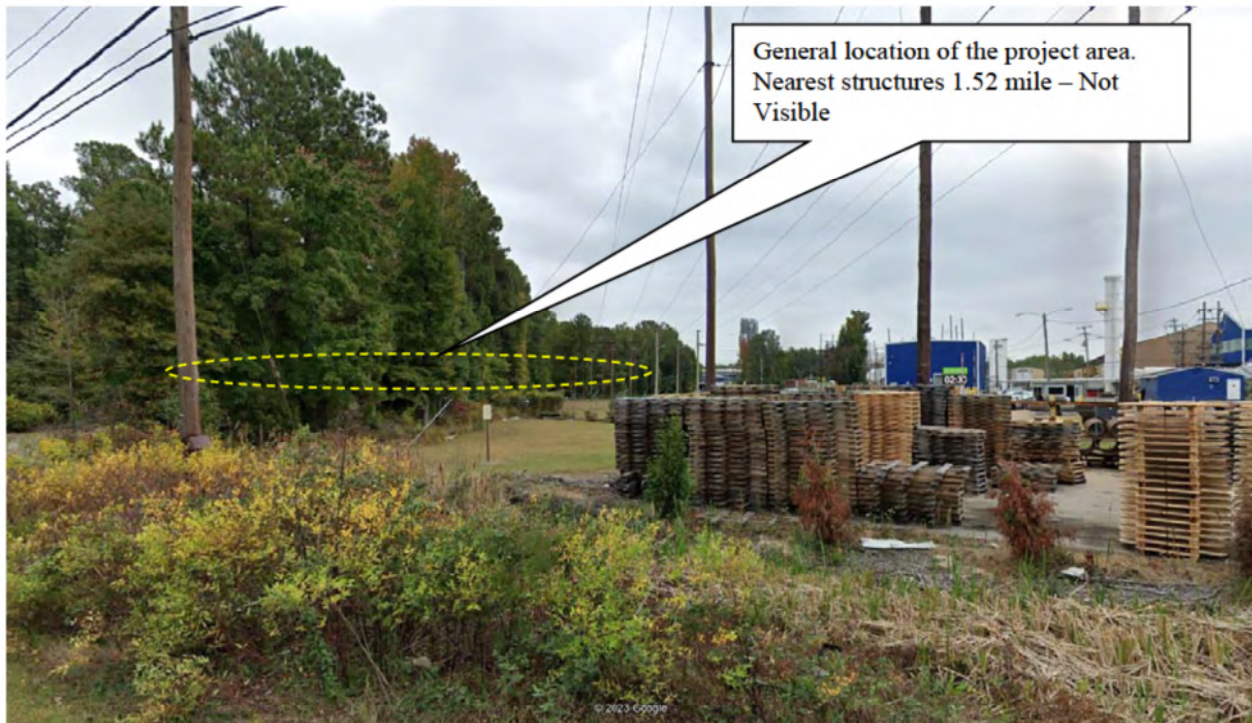


Figure 5-94: Photo location 12- View from Reymet Road (not visible – screened by vegetation and development), facing east.

Richmond National Battlefield Park (VDHR# 043-0033)

Initially conceived as a state park, Richmond National Battlefield Park was established in 1936 by an act of Congress, accepted by the Department of the Interior in 1944, and listed in the NRHP in 1966. The district encompasses a collection of discontinuous sites related to major events of the Civil War and a total of approximately 2,789 acres located in and around the eastern side of Richmond and parts of Hanover, Henrico, and Chesterfield counties. It is associated with the various Union attempts to take the Confederate capital city of Richmond during the Peninsula Campaign in 1862, the Overland and Bermuda Hundred Campaigns in 1864, and the Richmond-Petersburg Campaign in 1864-1865. Today most of the area is heavily developed with suburban housing, light industrial sites, and major transportation corridors, including US Interstates 95 and 295. Many earthworks related to Civil War events and remnants of the permanent fortifications defending Richmond from Union attack remain intact and unaltered, although deteriorated. Historically open views and vistas across battle lines, however, have been largely obscured by successional tree growth and encroaching modern development. Other significant contributing resources include the Watt House, Garthright House, and Shelton House, which were used as military headquarters and/or field hospitals during the Civil War, as well as a series of commemorative markers known as Freeman markers placed around Richmond circa 1925.

One unit of the Richmond National Battlefield Park is located within one-mile of the project alignment. This is the Parker's Battery Earthworks that were constructed as part of the defense system of Parker's Battery during the Bermuda Campaign of the Civil War. The earthworks remain relatively well-preserved and retain their association with major events of the Civil War. As such, the resource is considered contributing the Richmond National Battlefield Park and continues to be owned by the National Park Service and preserved as a public park.

Because the Parker's Battery unit of the Richmond National Battlefield Park is NRHP-listed and located within one mile of the project alignment, it was subject to assessment for potential impacts.

In order to assess the potential impact of the proposed project, visual inspection was conducted of the setting around Parker's Battery and photographs were taken to document viewshed with emphasis on views from the resource towards the project alignment. Parker's Battery is located within a light-industrial area directly adjacent to the east edge of the project alignment. Access to the site is by a driveway and parking lot directly under the project alignment.

A site visit to the property found that the overall historic setting has been compromised by nonhistoric development including commercial and industrial development as well as an extensive infrastructure network. The property is bordered by a high-voltage transmission line corridor to one side, a railroad corridor to the other, and industrial properties beyond in all directions. The immediate setting of the property is generally intact, although now wooded, and has been preserved as a public park.

Inspection was conducted from throughout the property as well as public ROW in the vicinity. This effort revealed that the project area and existing transmission line is highly visible from many vantage points in the vicinity, particularly from the driveway to the property off of Ware Bottom Spring Road. The driveway and public parking lot are both within the project ROW and the existing line is suspended directly overhead. The project alignment and multiple existing structures are also visible from the trailhead into the preservation area, however, upon entering this area, visibility of the project area quickly becomes screened by thick vegetation within the wooded area. This vegetation consists of mature forest with a mix of deciduous and evergreen trees that permit only minimal views of existing structures, and is anticipated to provide increased screening at other times of the year as this assessment was conducted in January under winter conditions. Views remain nearly completely screened from throughout the trail system and in the immediate vicinity of the Parker's Battery earthworks. The project area and multiple structures become visible again as the trail emerges from the site into the ROW where it extends along the treeline back to the parking area.

Existing structures within one-half mile of the property currently range from 117-feet to 151 feet in height. As part of the project, the 151-foot tall structure is proposed to be decreased in height to 142-feet, two structures that are currently 132-feet tall will remain the same height while one 132-foot structure will be increased to 135-feet, and the 117-foot tall structure is proposed to be increased to 137-feet tall. As such, visibility of the replacement structures is expected to be similar to current conditions, although the structures will have a smaller profile as a result of the shift from lattice structures to monopoles. The one structure that will be increased in height more substantially than the others (117-feet to 137-feet) is located within the portion of ROW immediately adjacent to the property, and therefore visibility of this structure will likely increase, however, it will only be minimally taller than the majority of other existing structure heights, and continue to be shorter than the next adjacent structure down the alignment that is currently 151-feet and will be replaced with a 142-foot structure.

Due to the change in structure heights as well as configuration, the project is anticipated to result in a slight change in the overall appearance of the line from the Parker's Battery site, however, the project alignment is within a shared ROW, and located between two other existing transmission lines of similar height. One of these lines was also recently rebuilt with replacement structures

ranging from 100- to 140-feet within one-half mile, and as part of the project review, it was determined that the project would have a minimal impact on the resource.

Because of the increase in height of the structure located immediately adjacent to the site, a photo simulation was conducted to model the appearance of the proposed structure. This simulation was conducted from the trailhead to the preservation area and reveals that at 117-feet the existing structure is shorter than the structure on the adjacent Lines #100/2049, however, once the structure is replaced and increased in height to 137-feet, it will appear only minimally taller than that structure that is 130-feet in height.

As the overall change in structure height as part of this project will be only minimally increased, the project improvements are not anticipated to introduce a substantial cumulative change in setting or viewshed from the property which is already compromised by modern development and includes views of other transmission lines, and it is therefore D+A's opinion that the Lines# 211/228 partial Rebuild Project will pose no more than a *minimal impact* to Richmond National Battlefield Park per VDHR's impact characterization scale.

Figure 5-95 depicts the location of Richmond National Battlefield Park – Parkers Battery in relation to the project area and viewshed buffers, with the location and direction of all representative photographs. Figures 5-96 through 5-103 are representative photographs of the property, as well as those taken from locations within and near the property towards the project area. Figure 5-104 provides simulation of the existing and proposed views towards the adjacent project structure.

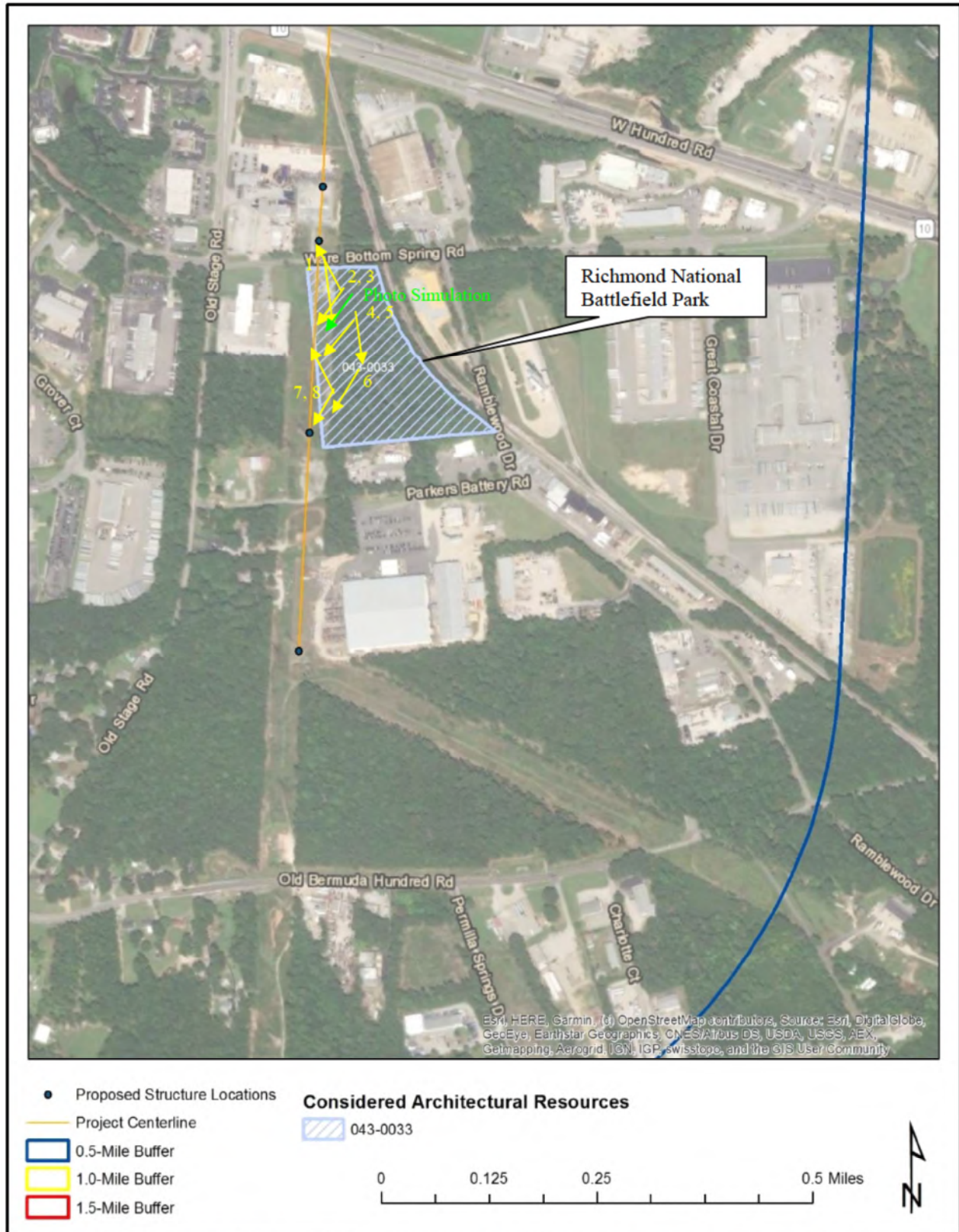


Figure 5-95: Location of Richmond National Battlefield Park in relation to the project area (Representative photographs and views towards the project area depicted in yellow).



Figure 5-96: Photo location 1- View of Richmond National Battlefield Park - Parker's Battery unit of setting, facing southeast.

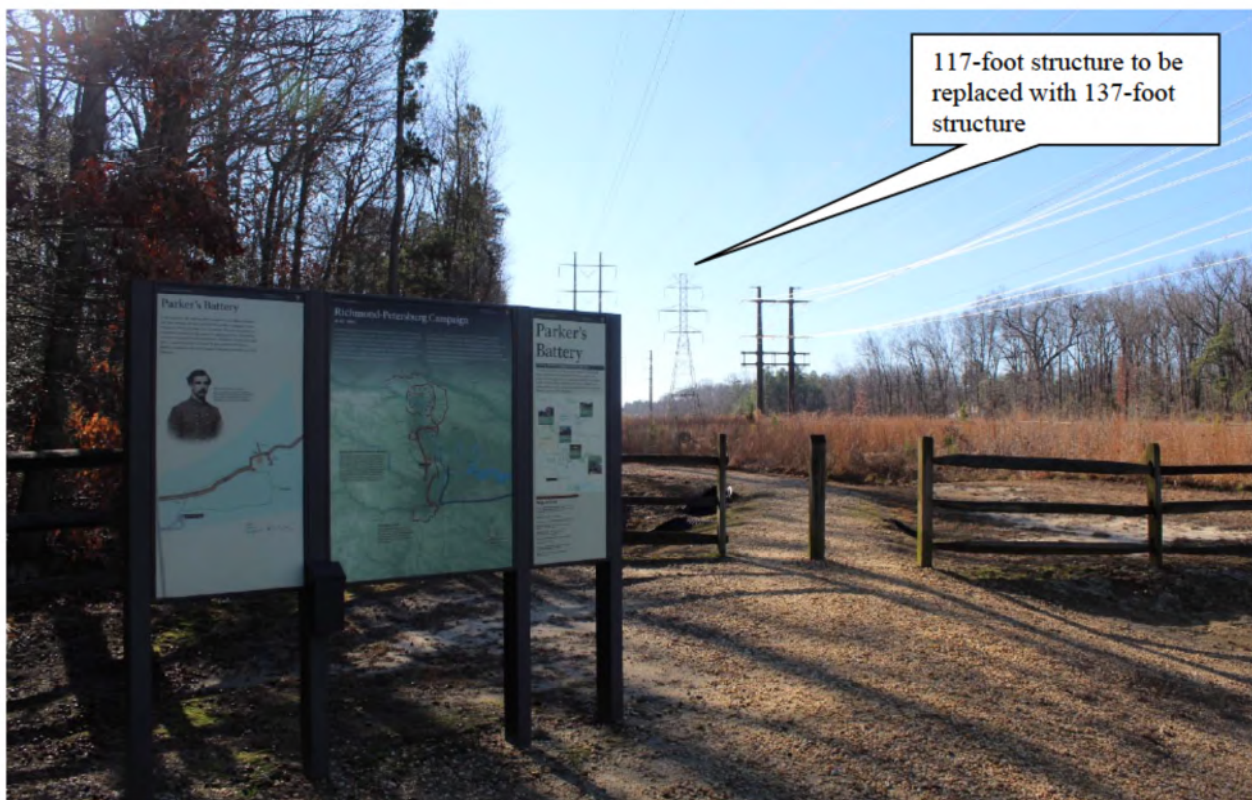


Figure 5-97: Photo location 2- View from trailhead to Richmond National Battlefield Park - Parker's Battery preservation area towards the project area (visible), facing south.



Figure 5-98: Photo location 3- View from trailhead to Parker's Battery preservation area towards the project area (visible amongst extensive other infrastructure not included in this project), facing north.



Figure 5-99: Photo location 4- View from Parker's Battery preservation area towards the project area (not visible – screened by vegetation), facing south.



Figure 5-100: Photo location 5- View from Parker's Battery preservation area towards the project area (not visible – screened by vegetation), facing southwest.



Figure 5-101: Photo location 6- View from Parker's Battery preservation area towards the project area (One structure seasonally visible through vegetation), facing west.



Figure 5-102: Photo location 7- View from trail at exit from Parker's Battery preservation area towards the project area (visible), facing west.



Figure 5-103: Photo location 8- View from trail at exit from Parker's Battery preservation area towards the project area (visible), facing west.

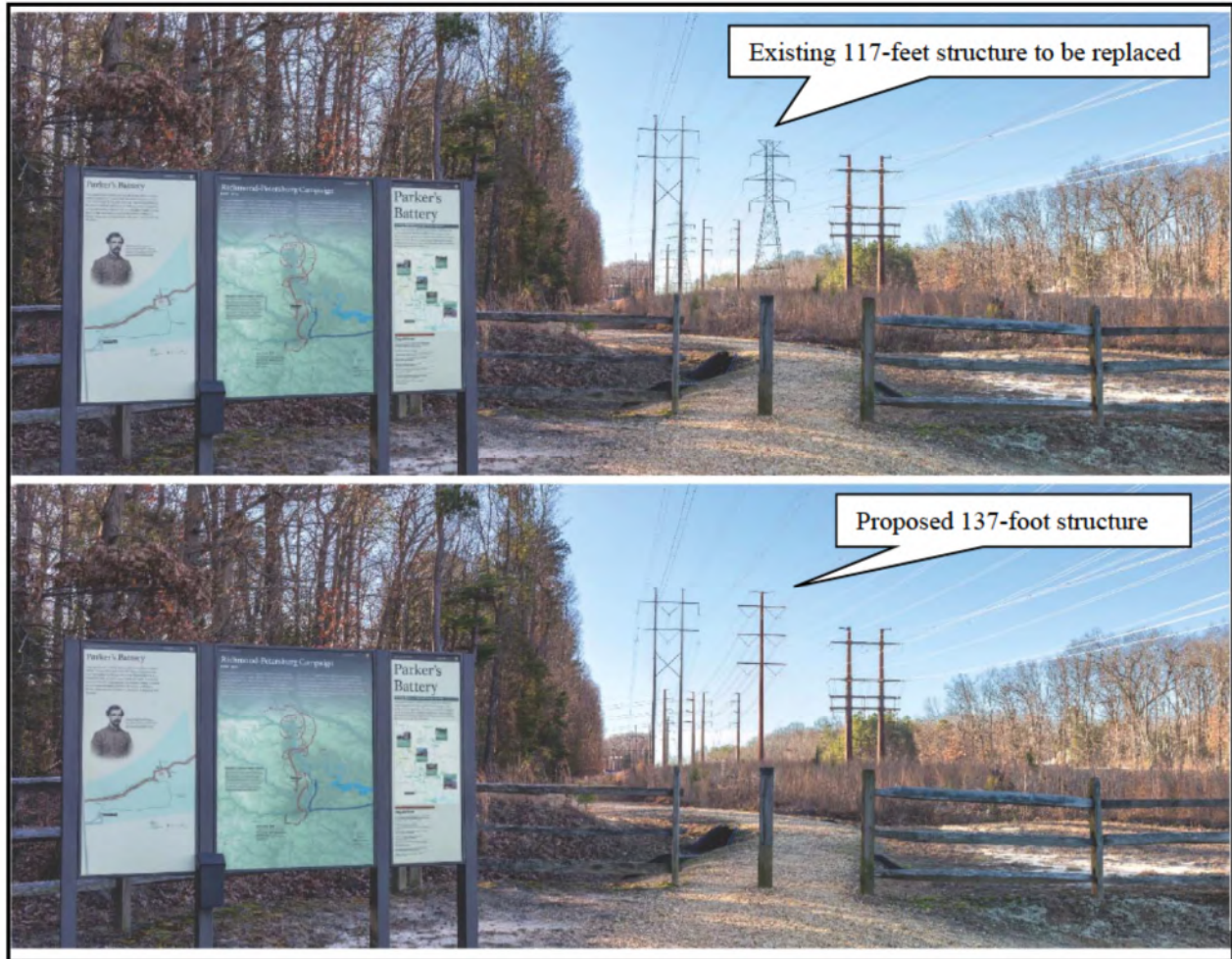


Figure 5-104: Photo simulation from Parker's Battery illustrating existing conditions (top) and proposed view following the project (below). Source: Dominion Energy.

New Market Heights Battlefield (VDHR# 043-0307)

The Battle of Chaffin's Farm and New Market Heights took place from September 29-30, 1864 as part of the Richmond-Petersburg Campaign. Union forces succeeded in taking New Market Heights and Fort Harrison after a fight around Chaffin's Farm but were halted from further advance by Confederate counterattacks. The two armies were pushed into trench warfare that lasted the remainder of the war. The New Market Heights Battlefield extends across Henrico and Chesterfield counties and the City of Richmond in Virginia. It is located in the Atlantic Coastal Plain and is characterized by fairly level topography with a high knoll in the center of the battlefield. It contains archaeological sites, trenches, historic road beds, monuments, interpretive markers, and a cemetery. The landscape is characterized by a mix of rural and residential areas. Scattered residential development and transportation routes have negatively impacted much of the historic landscape and viewsheds, although some areas of its historic landscape remain relatively undeveloped and intact.

New Market Heights Battlefield is significant on a national level under Criterion A for the role played by Black soldiers in the fight and the subsequent recognition of their gallantry with the award of 14 Medals of Honor. It is also significant under Criterion B for its association with Major General Butler along with a few other northern military leaders. As such, the battlefield is considered potentially eligible for listing in the NRHP.

Because portions of the New Market Heights Battlefield are located within one mile of the project alignment, it was subject to assessment for potential impacts in accordance with VDHR guidance. In order to assess the potential impact of the proposed project, visual inspection was conducted of the setting around and within the battlefield and photographs were taken to document viewshed with emphasis on views from the battlefield towards the project alignment. As much of the battlefield landscape is comprised of private property, field inspection was conducted from public ROW or property where access was granted.

The New Markets Height Battlefield occupies a large landscape in eastern Henrico County focused on the intersection of New Market Road and Varina Road. Although much of the battlefield, including the core area, is situated well to the northeast and across the James River from the project, a small portion of the southern limits of the battlefield boundaries are situated within one mile of the northern terminus of the project alignment. The nearest structure to be replaced as part of the project is roughly 0.82 mile away and just one additional structure is located within one-mile of the battlefield.

Much of the landscape within the vicinity of the project alignment retains a rural, sparsely-developed setting. The portion of the battlefield within one-mile of the project consists of undeveloped shoreline bordering James River, while development in the area just beyond is characterized by single-family homes set on small to large rural lots.

Inspection was not possible for portions of the battlefield within one-mile due to all of the landscape being on private property, however, a site visit to representative vantage points throughout accessible portions of the battlefield nearby found that none of the existing structures to be replaced as part of the project are visible due to intervening vegetation and development.

Inspection from the Osborne Park and Boat Landing that is roughly 1.39 mile from the nearest portion of the project revealed that the smokestacks of the plant are visible just above the treeline, as is a transmission line backbone structure within the plant, however, none of the existing transmission line structures included in this project are visible. Inspection from Kingsland Road at its nearest point to the project (roughly 1.35 mile away) revealed similar visibility of just a smokestack and taller backbone structure, whereas all of the existing transmission line structures are screened by other improvements within the plant, as well as the thick vegetation in the area.

The project structures nearest the property that are located within the power plant complex are proposed for reconductoring only and not replacement. The nearest structure to be replaced is currently 115 feet and will be replaced by a structure 108-feet in height. The second nearest structure is currently 97-feet and will be replaced with a 102-feet tall structure. As such, the nearest structure is being decreased in height, and although the next nearest structure is being increased in height, it will still be 13 feet lower than the nearest existing structure that is not currently visible. Therefore, it is expected that the intervening vegetation will continue to provide complete screening of views in the direction of the project area and associated improvements.

As such, it is anticipated that project improvements will not be visible from publicly-accessible land-based vantage points in the vicinity, and will therefore not introduce any change in setting or viewshed from the property which already includes views of the Chesterfield Power Plant from many locations. While it is expected that the potential for some visibility from vantage points within the river exist, any visibility of project structures would be seen in conjunction with and behind extensive other infrastructure and transmission lines within the power plant complex. It is D+A's opinion that the Lines# 211/228 partial Rebuild Project will pose no more than a *minimal impact* to the New Market Heights Battlefield per VDHR's impact characterization scale.

Figure 5-105 depicts the boundaries of the New Market Heights Battlefield in relation to the project area and viewshed buffers, with the location and direction of all representative photographs. Figures 5-106 through 5-108 are representative photographs of the battlefield, as well as those taken from locations within the battlefield towards the project area.

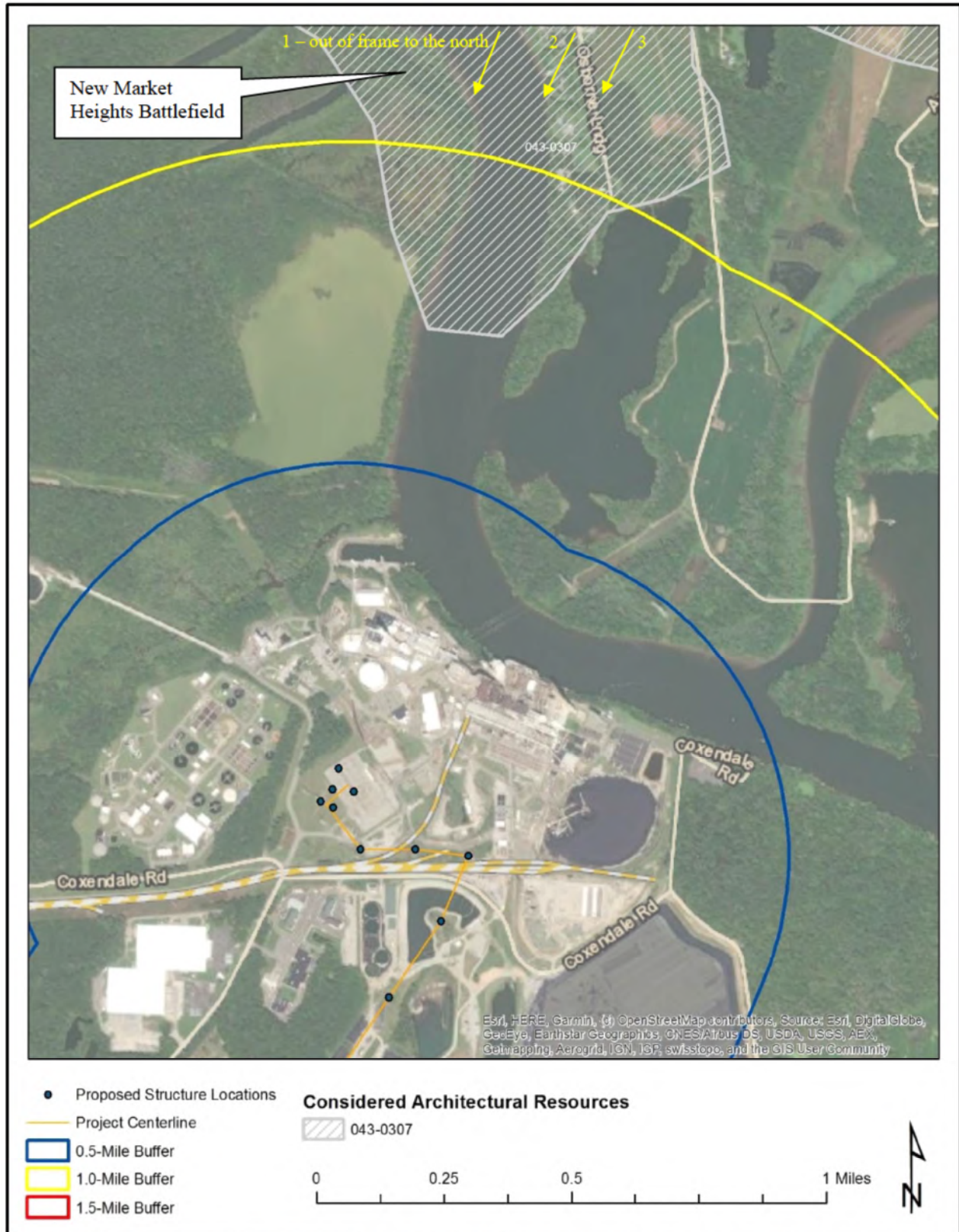


Figure 5-105: Location of New Market Heights Battlefield in relation to the project area (Representative photographs and views towards the project area depicted in yellow).



Figure 5-106: Photo location 1- View from Osborne Park and Boat Landing towards the project area (not visible – screened by vegetation), facing southwest.



Figure 5-107: Photo location 2- View from Kingsland Road towards the project area (not visible – screened by vegetation), facing southwest.



Figure 5-108: Photo location 3- View from Kingsland Road at Osborne Landing towards the project area (not visible – screened by vegetation), facing southwest.

Petersburg Battlefield II; Assault on Petersburg (VDHR# 123-5025)

The Second Battle of Petersburg took place between June 15 and 18, 1864 as part of the Richmond-Petersburg Campaign of the Civil War. After an unsuccessful attempt to capture Richmond, General Ulysses S. Grant turned his attention to Petersburg. Union forces crossed the Appomattox River at Windmill Point and attacked the Petersburg defenses on June 15, 1864, although they withdrew on June 18 after sustaining heavy casualties. The core of the battlefield is located mainly to the east of Petersburg and what is now I-95, although avenues of approach extend through Chesterfield, Charles City, and Prince George Counties, as well as Colonial Heights and Hopewell. Portions of the battlefield, particularly in the northern and western parts of the battlefield and along I-295, have been subject to heavy modern development that has obscured its historic character. Some areas, however, remain relatively undeveloped and intact.

Petersburg Battlefield II is significant for its association with major events of the Civil War, specifically the Richmond-Petersburg Campaign and the sequence of events that led to the end of the Civil War. It is also associated with significant figures of the Civil War includes Ulysses S. Grant and Robert E. Lee. As such, this resource is considered potentially eligible for listing in the NRHP under Criteria A and B.

Because portions of the Second Petersburg Battlefield are located within one mile of the project alignment, it was subject to assessment for potential impacts in accordance with VDHR guidance. In order to assess the potential impact of the proposed project, visual inspection was conducted of the setting around and within the battlefield and photographs were taken to document viewshed with emphasis on views from the battlefield towards the project alignment. As much of the battlefield landscape is comprised of private property, field inspection was conducted from public ROW or property where access was granted.

The Second Petersburg Battlefield occupies a large landscape in eastern Dinwiddie County focused around the City of Petersburg. Although much of the battlefield, including the core area, is situated well to the south of the project, a small portion of one length of the battlefield avenue of approach crosses within one-mile of the project alignment. The nearest structure to be replaced as part of the project is roughly 0.76 mile away and a total of five additional structures are located within one-mile of the battlefield.

A site visit to the portion of the battlefield within one mile found that much of the landscape within the vicinity of the project alignment is heavily fractured and has been subject to modern development that has compromised the historic setting. This portion of the battlefield consists solely of the Richmond-Petersburg Turnpike (US-1) and the immediately adjacent properties which are presently characterized by a mix of suburban and urban development crossed by modern infrastructure in form of roads, railroads, and other utilities.

Inspection from representative vantage points throughout the battlefield found that just one (1) of the existing structures to be replaced as part of the project is visible when viewed down the open ROW of W Hundred Road. All other existing structures are screened from all vantages by intervening vegetation and development. As part of the project, five existing structures located within one-mile of the battlefield will be replaced and one will remain in place. The structures to

be replaced will be done so on a one-to-one basis near the location of the existing structures and will not require any additional ROW or clearing. The nearest structure to be replaced is currently 151-feet in height and will be reduced in height to 142-feet. The next adjacent structure is 117-feet in height and will be increased to 142-feet. The three other structures to be replaced are all currently 132-feet in height, two of which will remain 132-feet and one will be increased to 137-feet. As such, it is expected that the intervening vegetation will continue to provide complete screening of views in the direction of the project area and associated improvements.

Because the project improvements are anticipated to generally be screened, and will therefore not introduce any change in setting or viewshed from the battlefield which is already compromised by modern development and considered not eligible for listing in the NRHP, it is D+A's opinion that the Lines# 211/228 partial Rebuild Project will pose ***no impact*** to the Second Petersburg Battlefield per VDHR's impact characterization scale.

Figure 5-109 depicts the boundaries of the Second Petersburg Battlefield in relation to the project area and viewshed buffers, with the location and direction of all representative photographs. Figures 5-110 through 5-112 are representative photographs of the battlefield, as well as those taken from locations within the battlefield towards the project area.

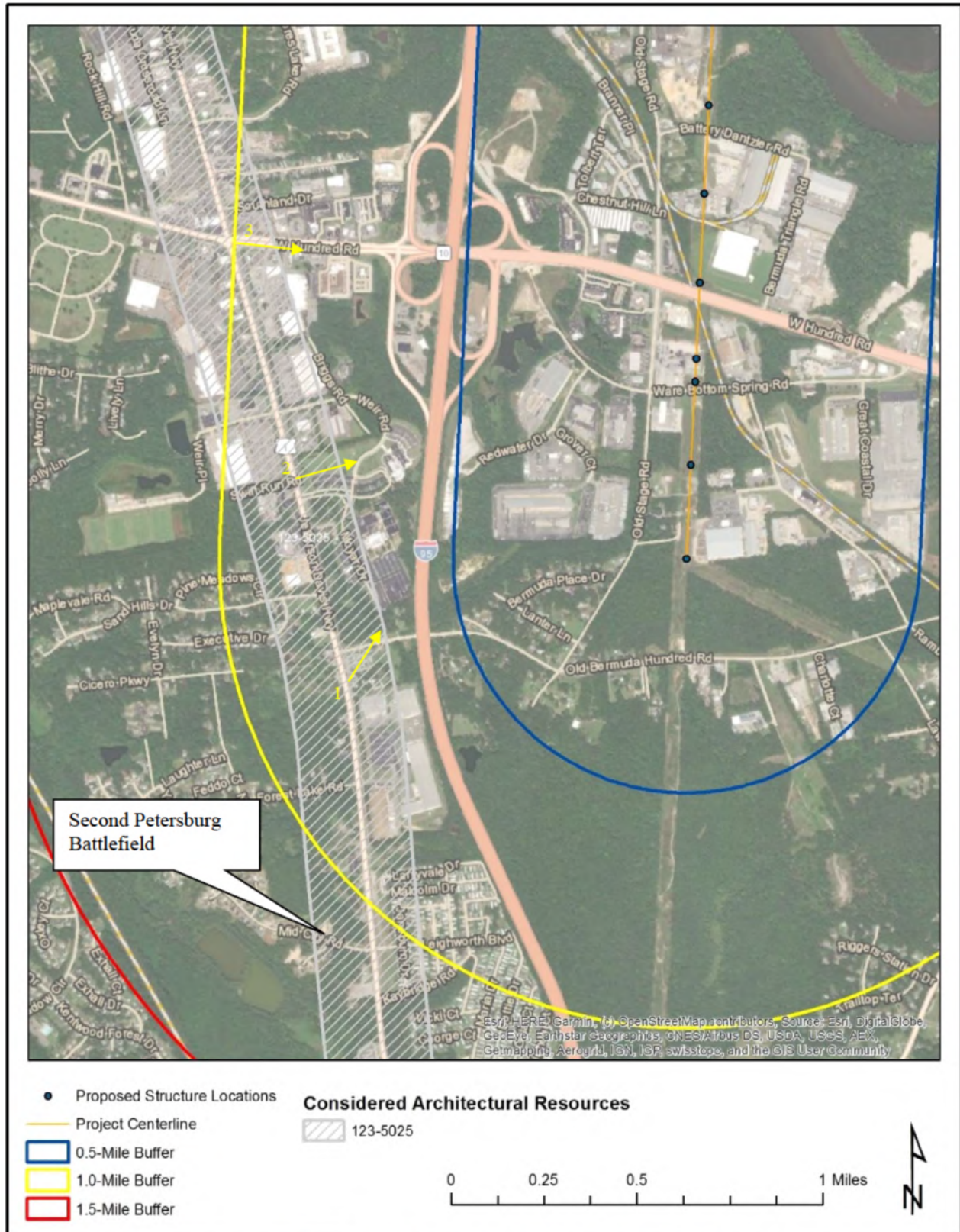


Figure 5-109: Location of Second Petersburg Battlefield in relation to the project area (Representative photographs and views towards the project area depicted in yellow).



Figure 5-110: Photo location 1- View from US-1 at Old Bermuda Hundred Road (No project structures visible), facing northeast.



Figure 5-111: Photo location 2- View from US-1 at John Tyler Drive (No project structures visible), facing east.



Figure 5-112: Photo location 3- View from W Hundred Road at US-1 (One project structure visible), facing east.

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6. SUMMARY OF POTENTIAL IMPACTS

As part of this pre-application analysis of cultural resources for the Lines# 211/228 Partial Rebuild Project, potential impacts to previously recorded architectural properties designated an NHL, NRHP-listed, or considered eligible for listing in the NRHP within the VDHR-defined buffered tiers were assessed in accordance with the VDHR guidelines. Archaeological resources were not subject to field investigation as part of this effort. 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, 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 a total of twelve (12) historic properties located within the defined study tiers that warrant consideration of impacts. This includes no (0) NHLs located within 1.5 mile of the proposed project or closer, one (1) property listed in the NRHP located within 1.0 mile or closer of the project, seven (7) battlefields located within 1.0 mile or closer of the project, and three (3) properties that have been determined eligible or potentially eligible for listing in the NRHP within 0.5 mile or closer of the project. One (1) additional property is considered contributing to the NRHP-listed resource and is also held under a historic preservation easement by the VDHR. Of these, one (1) property listed in the NRHP and four (4) battlefields or associated components are located directly within or crossed by the project ROW.

Inspection from these resources found that they are all located within a densely developed suburban setting with extensive nonhistoric and ongoing development. The project area roughly parallels the Interstate-95 corridor which is flanked by dense residential, commercial and industrial areas. The majority of the landscape directly crossed by the project alignment is characterized by light-industry and associated development. Due to the dense development patterns in the area, coupled with pockets and lines of vegetation scattered throughout the area, the existing transmission line is generally visible only from vantages in close proximity or along road corridors where the ROW allows more distant views. Because many of the historic properties are crossed

by the alignment or in close proximity, the existing transmission line is visible, however, views are generally limited to one or two structures visible above rooftops or treelines. Wide and/or uninterrupted views are limited to vantages where public ROW crosses or intersects the project ROW.

As part of the project, most of the existing structures along the alignment will be replaced while some will remain. Some of the structures to be replaced will be increased in height, some will be replaced with structures of the same height as the existing, and some will be decreased in height. Of the structures being increased in height, most will be only slightly taller while just one structure is being increased more substantially. As a result of the project, the overall average structure height will increase only minimally, from 121-feet to 125-feet or an approximately 3.3% increase.

*Therefore, it is anticipated that visibility of the project and associated structures will remain nearly identical to current views, with visibility of proposed structures from where the existing structures can currently be seen and no visibility where the existing structures are currently screened. Further, the alignment is within a shared ROW and flanked by other transmission lines of similar height to both sides. As such, the project improvements are not anticipated to introduce a substantial cumulative change in setting or viewshed from any of the properties, many of which already include modern development and views of other transmission lines. **It is therefore D+A's opinion that the Lines# 211/228 Partial Rebuild Project will pose no more than a minimal impact on any architectural resources that are designated an NHL, listed in the NRHP, or determined eligible or potentially eligible for listing per VDHR's impact characterization scale. (Table 6-1).***

Table 6-1: Potential impacts summary for architectural resources.

VDHR #	Resource Name, Address	NRHP-Status	Distance from Project	Recommended Impact
020-0015	Clay House, 2341 Old Bermuda Hundred Road	NRHP-Eligible	~0.36 Mile	No Impact
020-0121	Osborne's Naval Battle	NRHP-Eligible	~0.30 Mile	Minimal Impact
020-0232	Howlett Line, Parker's Battery, Parker's Battery Earthworks	NRHP-Eligible	Directly Crossed	Minimal Impact
020-5316	Chester Station Battlefield	Not Eligible	Directly Crossed	Minimal Impact
020-5317	Port Walthall Junction Battlefield, Indian Hills Road	NRHP-Eligible	~0.81 Mile	No Impact
020-5318	Arrowfield Church, Fort Clifton, Swift Creek Battlefield	Potentially NRHP-Eligible	~0.77 Mile	No Impact
020-5319	Ware Bottom Church Battlefield	Potentially NRHP-Eligible	Directly Crossed	Minimal Impact
020-5319	Battery Dantzler	VDHR Easement	Immediately Adjacent	Minimal Impact
020-5320	Drewry's Bluff (2nd) Battlefield, Fort Darling, Fort Drewry, Proctor's Creek Battlefield	Potentially NRHP-Eligible	Directly Crossed	Minimal Impact
043-0033	Richmond National Battlefield Park	NRHP-Listed	Directly Crossed	Minimal Impact
043-0307	Battle of Chaffin's Farm, New Market Road, New Market Heights Battlefield	Potentially NRHP-Eligible	~0.72 Mile	Minimal Impact
123-5025	Assault on Petersburg, Petersburg Battlefield II	Potentially NRHP-Eligible	~0.66 Mile	No Impact

With regards to archaeology, a review of VCRIS reveals that much of the project ROW has been subject to previous Phase I cultural resource survey. The most recent Phase I survey was conducted in 2020 and titled the *Phase I Cultural Resources Survey of Approximately 3 Miles Associated with the Proposed Chesterfield to Tyler 230 kV Partial Rebuild Project* (Stantec 2020). That survey that was conducted in relation to the rebuild of a parallel transmission line within the same ROW as the project. As a result, roughly the western half of the 235-foot ROW was subject to survey as part of that effort. The Lines# 211/228 alignment, subject to this project, is set centrally within the ROW, and therefore the portion of the ROW west of the project centerline was subject to survey but the portion to the east was not included in the that survey.

As part of the 2020 survey and other survey efforts that have included portions of the project ROW, a total of twelve (12) previously recorded sites have been identified. Of these, six (6) have been recommended potentially eligible or determined eligible for listing in the NRHP following phase II evaluations, four (4) have been determined not eligible, and two (2) have not been formally evaluated.

No archaeological fieldwork was conducted as part of this effort and previously recorded sites within or adjacent to the project were not visited or investigated for existing conditions or impacts at this time. However, *it is D+A's opinion that based upon review of background data, those portions of the project ROW that have not been previously surveyed be subject to Phase I survey, and previously identified sites be re-identified. D+A further recommends that those sites within the ROW that are considered eligible or potentially eligible for listing be avoided, and if avoidance is not feasible, they be subject to further consideration and treatment to assess and minimize impacts (Table 6-2).*

Table 6-2: Summary of potential impacts summary for archaeological resources located within the project area. Bold font indicates site is considered eligible or potentially eligible for listing in the NRHP.

VDHR#	Site Summary	NRHP Status	Impacts
44CF0102	Prehistoric/historic - Dwelling, multiple, Railroad bed, Village/Town, Wharf	DHR Staff: Eligible	TBD
44CF0124	Prehistoric/historic - Camp, temporary, Midden	DHR Staff: Potentially Eligible	TBD
44CF0127	Historic - Bridge, Road	Not Evaluated	TBD
44CF0128	Prehistoric/historic - Camp, temporary	DHR Staff: Not Eligible	TBD
44CF0129	Prehistoric - Camp, temporary, Quarry	Not Evaluated	TBD
44CF0130	Prehistoric/historic - Camp, temporary, Dwelling, single, Hospital, Lithic workshop	DHR Staff: Potentially Eligible	TBD
44CF0578	Historic - Earthworks, Fort	DHR Staff: Potentially Eligible	TBD
44CF0873	Historic - Artifact scatter	DHR Staff: Potentially Eligible	TBD

SUMMARY OF POTENTIAL IMPACTS

VDHR#	Site Summary	NRHP Status	Impacts
44CF0874	Prehistoric/historic - Artifact scatter	DHR Staff: Not Eligible	TBD
44CF0875	Prehistoric - Artifact scatter	DHR Staff: Not Eligible	TBD
44CF0876	Prehistoric/historic - Artifact scatter	DHR Staff: Potentially Eligible	TBD
44CF0877	Prehistoric/historic - Artifact scatter	DHR Staff: Not Eligible	TBD

7. 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

2016 Virginia Cultural Resource Information System (VCRIS) database and GIS server.

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APPENDIX A: RESUMES

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ROBERT J. TAYLOR, JR
Senior Architectural Historian



Dutton + Associates
CULTURAL RESOURCE SURVEY, PLANNING, AND MANAGEMENT



Education

Master of Arts, 2009
Historic Preservation
Savannah College of Art and
Design
Savannah, Georgia

Bachelor of Arts, 2005
Historic Preservation
University of Mary Washington
Fredericksburg, Virginia

Awards

Eagle Scout, 2001

Mr. Taylor holds a B.A. in Historic Preservation from University of Mary Washington and a M.A. in Historic Preservation from Savannah College of Art and Design. He has over 10 years of Cultural Resource Management Experience and has taken part in projects in Virginia, North Carolina, Maryland, Delaware, New Jersey, Rhode Island, Pennsylvania, Ohio, Florida, and California.

His experience in Cultural Resource Management includes working on both Architectural and Archaeological projects while participating in all phases of compliance from project initiation and development to completion. His work includes conducting field surveys, researching and documenting historic resources, completing site file forms, writing reports, preparing *NRHP* evaluations and documentation for individual resources and historic districts, compiling HABS/HAER documentation packages, preparing Cell Tower compliance packages, and conducting archaeological testing. He has a thorough understanding of the laws and regulations that govern cultural resources and has assisted with a number of Cultural Resource Management Plans, Programmatic Agreements, and Memorandum of Agreements. Outside of CRM, he has worked for the Thomas Jefferson's Monticello Foundation where he was a field archaeologist and assisted with the long-term, Plantation Survey Project on Monticello Mountain. Mr. Taylor's primary interests lie in Architectural Forensics and the study of building evolution.

As Senior Architectural Historian for Dutton + Associates, Mr. Taylor manages and conducts all aspects of historic and architectural resource projects and studies.



Dutton + Associates
CULTURAL RESOURCE SURVEY, TRAINING, AND MANAGEMENT

ROBERT J. TAYLOR, JR
Senior Architectural Historian

Professional Experience

Dutton + Associates, LLC, Architectural Historian, Richmond, Virginia, March 2009-present.

Manages architectural history studies, provides regulatory and compliance consultation, conducts Historic Resources Surveys, prepares NRHP nominations, HABS/HAER packages, site forms, and other documentation packages; performs research and context development, and authors project reports.

Thomas Jefferson Monticello Foundation, Field Archaeologist, Charlottesville, Virginia, Winter 2008- 2009. Conducted archaeological testing, assisted with site research, performed lab work

Janus Research, Inc., Architectural Historian, Tampa, Florida, August 2005- May 2008.

Conducted field surveys, Prepared NRHP and HABS/HAER documentation packages, authored Cultural Resource Assessment Survey Reports

Example Projects and Publications

Transmission Line Projects

Phase I Cultural Resources Survey of the Cunningham to Elmont 500 kV Transmission Line, Multiple Counties

Phase I Cultural Resources Survey of the TL47 230kV Transmission Line Rebuild, Multiple Counties
SCC Pre-Application Study for the Gainesville-Haymarket Substation and Transmission Line, Prince William Co

Cultural Resources Survey of the Bearwallow-Faraday Transmission Line Rebuild Project, Tazewell County
Phase I Cultural Resources Survey of the Dominion Line 567 Wilcox Wharf to Windmill Point Rebuild Project, Charles City and Prince George County
Phase I Survey of the Chase City-Kerr Dam, Line 137 and 138, Mecklenburg County
SCC Pre-Application Study of the Mount Storm-Valley Rebuild Project, Rockingham County
Phase I Survey of the Hayes-Yorktown 230kV Transmission Line, Gloucester County

Substation Projects

SCC Pre-Application Study of the Ellick Substation Expansion, Fairfax Co
SCC Pre-Application Study of the Roundtable Substation, Fairfax County
Phase I Survey of the Possum Point Project, Prince William County

Wind Power Projects

Phase I Cultural Resources Survey of the Rocky Forge Wind Project, Botetourt County

Solar Projects

Phase I Survey of the Briel Solar Farm, Henrico Co
Phase I Survey of the Puller Solar Project, Middlesex County
Phase I Survey of the Whitehouse Solar Project, Louisa County
Phase I Survey of the Hosier Road Solar Project, Suffolk County
Phase I Survey of the Twitty Creek Solar Project, Charlotte County

Other

Phase III Investigations of the Spring Hill Plantation Site for the Dominion Reymet Road Expansion Project, Chesterfield County
HALS Photography for the Skiffe's Creek 500kV Transmission Line Project, Charles City County



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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

P.O. Box 1105, Richmond, Virginia 23218

(800) 592-5482 FAX (804) 698-4178

www.deq.virginia.gov

Travis A. Voyles
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director
(804) 698-4020

MEMORANDUM

TO: Heather Kennedy, Dominion Energy, Heather.E.Kennedy@Dominionenergy.com

CC: DEQ Office of Environmental Impact Review, eir@deq.virginia.gov

FROM: Jake Kline, DEQ Environmental Specialist II

DATE: March 8, 2023

SUBJECT: SCOPING: Dominion Energy Virginia's Proposed Chesterfield-Hopewell 230 kV Transmission Lines 211 and 228 Partial Rebuild Project

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

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

The proposed project will rebuild approximately 2.9 miles of 230 kV Lines #211 and #228 on double-circuit weathering steel structures between Chesterfield Substation and Hopewell Substation in Chesterfield County. The proposed project is located entirely within existing transmission line rights-of-way or on Company-owned property.

Per a desktop analysis, using the County's online GIS mapping tool, the proposed project lies within the locally designated CBPA, spanning both the RPA and RMA. Per § 9VAC 25-830-150 (B) of the Regulations, the construction, installation, operation, and maintenance of public utilities (electric, natural gas, fiber-optic, and telephone transmission lines), railroads, and public roads and their appurtenant structures are conditionally exempt from the Regulations. Per §

9VAC 25-830-150 (B) (2) of the Regulations, the exemption of public utilities is contingent upon the following:

- 1) To the degree possible, the location of such utilities and facilities should be outside the RPA;
- 2) No more land shall be disturbed than is necessary to provide for the proposed utility installation;
- 3) All such construction, installation and maintenance of such utilities and facilities shall be in compliance with all applicable state and federal permits and designed and conducted in a manner that protects water quality; and
- 4) Any land disturbance exceeding an area of 2,500 square feet complies with all erosion and sediment control requirements.

In addition, all land disturbing activity exceeding 2,500 square feet must comply with the requirements of the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992. Finally, stormwater management criteria consistent with the water quality protection provisions of the Virginia Stormwater Management Regulations, § 9 VAC 25-870-51 and 9 VAC 25-870-103, shall be satisfied.

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

Alyssa Johnson

Subject: FW: Dominion Energy Request for Comments - Line 211/228 Partial Rebuild

From: ImpactReview <impactreview@vof.org>
Sent: Tuesday, March 7, 2023 9:05 AM
To: Blair Parks (Services - 6) <blair.parks@dominionenergy.com>
Subject: [EXTERNAL] RE: Dominion Energy Request for Comments - Line 211/228 Partial Rebuild

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Hi Blair,

Could you please send all shareable GIS shapefiles for this project?

Thanks,
Baron

Baron Lin (*he/they*)
GIS Specialist
[Virginia Outdoors Foundation](https://www.virginiaoutdoorsfoundation.org/)
cell: 540-935-3163
other work #: 844-863-9800, ext. 355
email: blin@vof.org

From: blair.parks@dominionenergy.com <blair.parks@dominionenergy.com>
Sent: Monday, March 6, 2023 6:51:52 PM
To: Martha Little <mlittle@vof.org>
Subject: Dominion Energy Request for Comments - Line 211/228 Partial Rebuild

Alert: This email originated from outside VOF
Ms. Little,

Please find the attached letter and overview map notifying you of the proposed partial transmission line rebuild project in Chesterfield County, Virginia.

Please contact me with any questions.

Respectfully,

Blair Parks
Siting and Permitting Specialist
Electric Transmission

10900 Nuckols Rd, 4th Floor
Glen Allen, VA 23060
Cell: 804-658-7316 | Office: 804-257-4706



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Alyssa Johnson

Subject: FW: LUP - Dominion Energy Request for Comments - Line 211/228 Partial Rebuild
Attachments: rpt_rt_10_mot_revised_20220429 (3).pdf

From: McGrath, Ryan <ryan.mcgrath@vdot.virginia.gov>
Sent: Thursday, March 9, 2023 3:21:46 PM
To: Blair Parks (Services - 6) <blair.parks@dominionenergy.com>; Meghann Samuelson <meghann.samuelson@vdot.virginia.gov>; Marco Verdone <marco.verdone@vdot.virginia.gov>
Subject: [EXTERNAL] LUP - Dominion Energy Request for Comments - Line 211/228 Partial Rebuild

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Blair,

The Chesterfield Residency permit office was forwarded your request for the above captioned rebuild project.

We will need the following information to proceed with permit approval.

1. A breakdown of all aerial crossings and the type of line to be pulled (power or fiber).
2. Plan and profile view of each crossing.
3. The below attached LUP-A or you can submit this request online via our permit portal. [Land Use Permits - Business | Virginia Department of Transportation \(virginiadot.org\)](#)
4. Once submitted, we will provide a link for your permit fee.
5. A MOT plan for each crossing. Additional comments may follow.

I have attached the MOT plan for your reference for the Rt. 10 crossing. This has been approved by Traffic Engineering.

If this is high voltage power and must be worked during the day. The following requirements must be followed.

Allowable Hours: 10am - 2pm - Tuesday through Thursday only. Please add this to the MOT narrative and on each sheet so this cannot be overlooked.

Also, the stoppage of traffic eastbound will need to occur at the traffic signal with Old Stage Rd. There is not sufficient room past the signal to store traffic before reaching the power lines. Please revise the MOT plan accordingly and submit back to me.

Please ensure the above notes are on the MOT plan when submitted.

Thanks

Ryan McGrath

*Land Use Specialist/Office of
Land Use*



Virginia Department of
Transportation
1401 East Broad Street
Richmond, VA 23219
804-640-3222
ryan.mcgrath@vdot.virginia.gov

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WEST HUNDRED ROAD (ROUTE 10) TEMPORARY TRAFFIC CONTROL PLAN



**West Hundred Road (Route 10)
Temporary Traffic Control Plan**

Chesterfield – Tyler 230 kV
Transmission Line #205 and Line #2003
Rebuild Project

March 31, 2022
Revised April 29, 2022

Prepared for:

Virginia Electric and Power Company
d/b/a Dominion Energy Virginia
10900 Nuckols Road, 4th Floor
Glen Allen, Virginia 23060

Prepared by:

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



WEST HUNDRED ROAD (ROUTE 10) TEMPORARY TRAFFIC CONTROL PLAN

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WEST HUNDRED ROAD (ROUTE 10) TEMPORARY TRAFFIC CONTROL PLAN**1.0 PROJECT LOCATION & BACKGROUND**

Virginia Electric and Power Company (Dominion Energy) is partially rebuilding the Chesterfield – Tyler 230 kV Transmission Lines #205 and #2003 in Chesterfield County, Virginia. The project crosses West Hundred Road (Route 10) in Chesterfield County. As part of the partial rebuild project, Dominion Energy will need to replace the overhead conductor and shield wires at this location. Stantec has been retained by Dominion Energy, to prepare a temporary Traffic Control Plan (TCP) as rebuilding the transmission line across West Hundred Road will require a temporary disruption to traffic, the temporary placement of equipment in the westbound far left turn lane and the westbound right lane for pulling out the old shield wires across the roadway resulting in temporary impacts to traffic. The purpose of this document is to describe the proposed temporary traffic control measures to maintain the flow of traffic while rebuilding the crossing, but more importantly to protect the workers who are working on the project and the motorists using the roadway.

The rebuilt crossing over West Hundred Road will maintain the same general configuration, with a total of 3-phases of triple-bundled (nine total) conductors and two fiber/static wires, but will use upgraded conductor wire, consisting of 1351 ACSR aluminum/steel wire. The proposed minimum clearance over the roadway will remain at or above the current clearance above the road surface.

Dominion Energy has determined that 16 disruption operations are necessary to support the proposed line rebuilding activities. Dominion Energy is proposing to coordinate with the Virginia State Police (VSP) and Virginia Department of Transportation (VDOT) throughout the work. All temporary traffic controls have been designed and reviewed by Adam Valenti, P.E. (Certification #042018633), who successfully completed the Virginia Advanced Work Zone Traffic Control Training. All temporary traffic controls have been designed in accordance with the *Virginia Work Area Protection Manual* (VWAPM), Revision 2.1 edition. The TCP enclosed is being submitted to VDOT for agency review and approval.



WEST HUNDRED ROAD (ROUTE 10) TEMPORARY TRAFFIC CONTROL PLAN**2.0 APPROXIMATE DATE & TIME OF TRAFFIC FLOW INTERRUPTION**

For the disruption of traffic activities, traffic will be stopped for a time period not to exceed 15 minutes. The traffic control devices associated with this closure will be removed and reinstalled daily until wire pulling activities are completed. All advance signage will be installed during the overnight hours.

The proposed work is scheduled to occur in late August/early September of 2022. The traffic controls are proposed during VDOT's allowable working daylight hours of 9AM to 3:30PM and on specific dates yet to be determined. It is anticipated that Dominion Energy will need multiple days to complete the work; however, the schedule is dependent upon weather, outage schedule, and subcontractor availability. Dominion Energy will coordinate with VDOT in advance of the work as described in Section 4.0.

WEST HUNDRED ROAD (ROUTE 10) TEMPORARY TRAFFIC CONTROL PLAN**3.0 SCOPE OF WORK**

Dominion Energy will require the use of temporary traffic control measures to facilitate the replacement of the aerial transmission line crossing West Hundred Road. Dominion Energy is proposing two temporary traffic controls to be implemented simultaneously in order to safely conduct wire pulling activities over the aforementioned road. Dominion Energy will coordinate with VDOT to ensure the traffic controls included herein are those that best meet the needs of the agency. All temporary traffic controls have been designed in accordance with the latest edition of the VWAPM.

As stated in Section 2.0, the work will require 16 temporary disruptions to traffic traveling eastbound and westbound on West Hundred Road to protect motorists. Each disruption of traffic will not exceed 15 minutes and will follow a modified version of TTC 50.2 *Disruption Operation on a Multi-Lane Roadway*. In addition, the far left turn lane from West Hundred Road westbound will be closed in accordance with TTC 29.2 *Turn Lane Closure Operation*, to allow for placement of a mobile guard structure. An additional mobile guard structure will be placed in the right lane of West Hundred Road westbound, which will be closed in accordance with the modified version of TTC 50.2 *Disruption Operation on a Multi-Lane Roadway*.

WEST HUNDRED ROAD (ROUTE 10) TEMPORARY TRAFFIC CONTROL PLAN**3.1 DISRUPTION OPERATION ON A MULTI-LANE ROADWAY (TTC-50.2)**

Brief disruptions to West Hundred Road traffic near the work area are proposed to allow Dominion Energy to safely conduct line pulling activities over the roadway (TTC-50.2). For this disruption, the guidelines below will be followed:

- Law enforcement officers (LEO) will occupy all lanes of travel on West Hundred Road simultaneously to bring traffic to a complete stop prior to the work zone.
- Once all traffic has cleared the work zone the contractor may proceed with the overhead line pulling activity.
- Traffic shall not be stopped for longer than 15 minutes at a time and shall be allowed to return to free flow conditions for a minimum of 15 minutes prior to implementing additional disruptions.
- Shadow vehicles will be stationed 380 feet in advance of the LEOs in the westbound lanes and 250 feet in advance of the LEOs in the eastbound lanes.
- A Portable Changeable Message Sign (PCMS) will be placed on West Hundred Road in the eastbound and westbound directions informing motorists of the operation ahead and advising of the action required. These will be placed approximately 1 mile in advance of the warning signs westbound and 1.13 miles in advance of the warning signs eastbound. The eastbound location has been increased from the standard due to spacing constraints at the 1 mile location. The message shall read as follows:
 - The message up until the time the pre-activity meeting is concluded, and the crew is ready to begin staging for the disruption operation shall read as follows:

Message 1
UTILITY WORK AHEAD MM-DD-YY 9AM to 3:30PM

- Once all personnel are on-site for the disruption operation, the PCMS shall be changed to read as follows:

Message 1	Message 2
UTILITY WORK AHEAD	BE PREPARED TO STOP

WEST HUNDRED ROAD (ROUTE 10) TEMPORARY TRAFFIC CONTROL PLAN

- A PCMS will be placed on Interstate 95 in both north and southbound directions approximately 1-mile in advance of the exit ramps to West Hundred Road eastbound. The message shall read as follows:

Message 1	Message 2	Message 3
RTE 10 EAST	UTILITY WORK AHEAD	BE PREPARED TO STOP

- Minimum sign spacing on West Hundred Road is 350 to 500 feet, based on the posted speed limit of 45 miles per hour (MPH) at the crossing location.
- The safety buffer prior to the work area in the westbound lanes shall be 380 feet while the safety buffer in the eastbound lanes has been shortened to 290 feet to allow efficient staging of law enforcement officers.
- LEOs will be on hand to assist with traffic control at the intersections with Old Stage Road and Bermuda Triangle Road.
- Intersecting roadways and parking lots within the traffic control operation area will be temporarily affected during the disruption to traffic. Signage will be placed on Old Stage Road, Bermuda Triangle Road, Ware Bottom Spring Road, the exit ramps to West Hundred Road eastbound from I-95, and the Hardee's and Marriott parking lots (located just west of the Old Stage Road/West Hundred Road intersection), in advance of their respective intersections with West Hundred Road to notify motorists.

3.2 TURN LANE CLOSURE OPERATION (TTC-29.2)

The far left turn lane onto Old Stage Road from West Hundred Road westbound will be closed for the placement of a mobile guard structure. For this operation the guidelines below will be followed:

- Channelizing devices shall be spaced in a manner not to exceed 10 feet on center.
- Channelizing devices within the transition area shall be spaced at 40 feet, as West Hundred Road has a posted speed limit of 45 miles per hour (MPH) at the crossing location.
- Channelizing devices within the travelway area shall be spaced at 80 feet, as West Hundred Road has a posted speed limit of 45 miles per hour (MPH) at the crossing location.
- Based on the posted speed limit of 45 MPH the sign spacing shall be 350 to 500 feet.
- The shoulder taper shall be 180 feet.

WEST HUNDRED ROAD (ROUTE 10) TEMPORARY TRAFFIC CONTROL PLAN

- The lane taper shall be 380 feet (shortened from 540 feet due to length of lane).
- A shadow vehicle with a truck-mounted attenuator (TMA) shall be stationed in the turn lane approximately 120 feet in advance of the work zone.

WEST HUNDRED ROAD (ROUTE 10) TEMPORARY TRAFFIC CONTROL PLAN**4.0 DOMINION ENERGY'S WORK PLAN****4.1 PRIOR TO PROJECT WORK**

Dominion Energy will notify the Traffic Operations Center (TOC) and Lane Closure Advisory Management System (LCAMS) of the planned work at least 72 hours in advance of the proposed work and confirm approval from VDOT that the work may proceed. PCMSs shall be placed at the locations shown on the enclosed graphics (Appendix A). Each PCMS shall display the "Advance Message" for 48 hours in advance of the proposed line pulling activities, following Dominion Energy's notification of the VSP TOC, as shown in Table 1.

Table 1: PCMS Messages

Advance Message	Day of Message	
<i>Message 1</i>	<i>Message 1</i>	<i>Message 2</i>
UTILITY WORK AHEAD MM-DD-YY 9AM to 3:30PM	UTILITY WORK AHEAD	BE PREPARED TO STOP

4.2 NOTIFICATION PROTOCOL

Prior to beginning the line pulling activities, Dominion Energy will adhere to the following VDOT procedures:

- A pre-activity meeting is scheduled at a location to be coordinated between Dominion Energy and VDOT.
- The TOC must be called at least 72 hours in advance of the start of the work by the Dominion Energy Primary Supervisor. The Primary Supervisor must also call each day of activity at least one (1) hour prior to temporary traffic control set-up and must also call after all controls have been removed each day.
- The Primary Supervisor must enter the traffic control information in the VDOT 511 and LCAMS.
- The Primary Supervisor will contact the TOC each day at least one (1) hour prior to temporary traffic control set up and let the dispatcher know that the traffic control plan is being activated, provide his emergency contact information, and specify the time at which the operation will occur.

4.3 DAY OF PROJECT WORK

A meeting will be held onsite, an hour before commencement of the traffic control operations. Dominion Energy's Primary Supervisor will coordinate all movements of personnel to their various locations and

WEST HUNDRED ROAD (ROUTE 10) TEMPORARY TRAFFIC CONTROL PLAN

maintain constant communications with the Dominion Energy work crew. Dominion Energy's Traffic Control Technicians (VDOT Certified) will deploy the PCMS advance warning signs at the locations shown on the enclosed graphics and will change them to the "Day of Message," listed in Table 1. Signs will be set for all traffic controls simultaneously, and the Primary Supervisor will coordinate with law enforcement, so they are in position.

Once law enforcement has been positioned and all traffic controls have been implemented, the work crew can proceed with the proposed work. At the completion of the work over West Hundred Road, the work crew will communicate with the Primary Supervisor that they are all clear. The Primary Supervisor will then communicate with Dominion Energy's Traffic Control Technicians to begin to break down the disruptions to traffic. Once the work crew has completed the project work, the Primary Supervisor will ensure that all signage and PCMSs have been removed.

WEST HUNDRED ROAD (ROUTE 10) TEMPORARY TRAFFIC CONTROL PLAN

5.0 EMERGENCY CONTACTS

Virginia State Police
Area 6 Office for Chesterfield County
(804) 379-8645
#77 on Mobile Phone

Haz-Mat Center
911

VDOT Operations Center – Central Virginia Traffic Operations Center
(804) 796-4029

VDOT Field Representative – Ryan McGrath
(804) 674-2814, Marco Verdone (804) 840-6361, and Jason Nixon (804) 519-1981

District Traffic Engineering – Donnie Smith
(804) 720-6804

District Public Affairs – Kyle Gibson/Sara Owens
(804) 586-4455

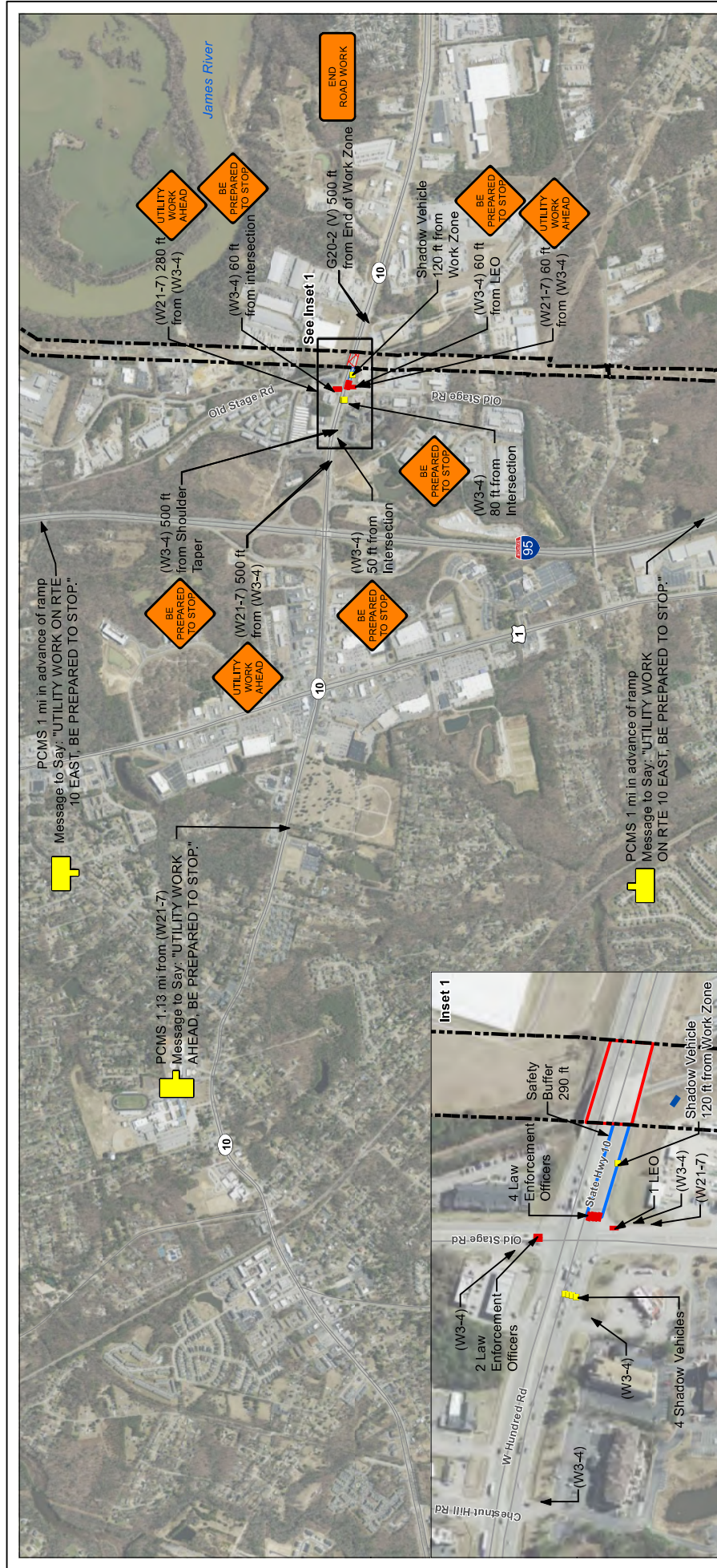
Construction Contact, LE Myers – Thomas Meadows
(336) 407-2006

Project Manager, Burns & McDonnell – Lawrence O'Donnell
(804) 516-2307

WEST HUNDRED ROAD (ROUTE 10) TEMPORARY TRAFFIC CONTROL PLAN

APPENDIX A

Project Graphics



Stantec

Project Location: Chesterfield County, Virginia
Client/Project: Dominion Energy Virginia
Chesterfield - Tyler 230 kV Transmission Line #205 and Line #203 Rebuild Project
Figure No. 1
Title: Route 10 East Disruption Operation on a Multi-Lane Roadway (TTC 50.2)

Prepared by MCS on 2022-04-19
Reviewed by TR on 2022-04-19
IR by ADV on 2022-04-19
202407247

0 1,000 2,000 Feet
(Original document size of 11x17)
1:19,200

N

COMMONWEALTH OF VIRGINIA
ADAM VALENTI
Lic. No. 57505
04/29/2022
PROFESSIONAL ENGINEER

Table 2
Sign Spacing

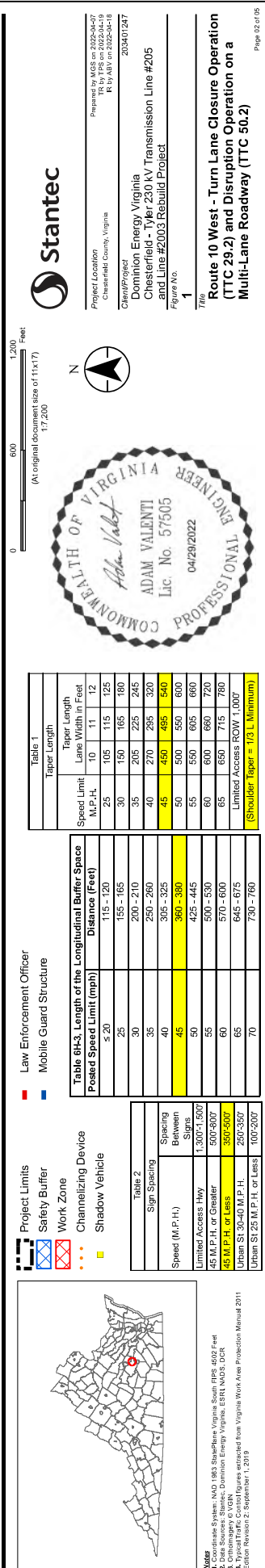
Speed (M.P.H.)	Spacing Between Signs
Limited Access Hwy	1,300'-1,500'
45 M.P.H. or Greater	900'-800'
45 M.P.H. or Less	350'-500'
Urban ST 30-40 M.P.H.	250'-350'
Urban ST 25 M.P.H. or Less	100'-200'

Project Limits

- Work Zone
- Safety Buffer
- Shadow Vehicle
- Law Enforcement Officer (LEO)
- Mobile Guard Structure

Notes

1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4602 Feet
2. Data Source: Dominion Energy Virginia, ENR, NCHS, DCN
3. Orthorectified Aerial Imagery
4. Typical Traffic Control Figures extracted from Virginia Work Area Production Manual 2011
5. Design Network: 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 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September 2019

Typical Traffic Control
Turn Lane Closure Operation
(Figure TTC-29.2)

NOTES

Guidance:
1. Sign spacing distances should be 350'-500' where the posted speed limit is 45 mph or less, 500'-800' where the posted speed limit is greater than 45 mph.

Standard:
2. On divided highways having a median wider than 8', right and left sign assemblies shall be required.
3. To prevent accidental intrusion into the work area, channelizing device spacing shall not exceed 10' on centers or as directed by the Engineer.²

Outside:
4. This layout may be used for either right or left turn lane closures.
5. For a high volume of turning movements, additional traffic control devices, such as slant signposts, NO LEFT TURN (R2-7) or LEFT LANE MUST TURN LEFT (R2-7L), channelizing devices and vehicle may be used.

Standard:

6. Taper length (L) shall be at the following:

Speed Limit (mph)	Lane Width (Feet)				Speed Limit (mph)	Remarks	Lane Width (Feet)				Remarks
	9	10	11	12			9	10	11	12	
15	105	115	125	135	15	L=3000	105	115	125	135	L=3000
20	135	145	155	165	20	L=3000	135	145	155	165	L=3000
25	165	175	185	195	25	L=3000	165	175	185	195	L=3000
30	195	205	215	225	30	L=3000	195	205	215	225	L=3000
35	225	235	245	255	35	L=3000	225	235	245	255	L=3000
40	255	265	275	285	40	L=3000	255	265	275	285	L=3000
45	285	295	305	315	45	L=3000	285	295	305	315	L=3000

Shoulder Taper = 1/2 L Minimum

7. Length of the Longitudinal Buffer spacing shall be at the following:

Posted Speed Limit (mph)		Distance (Feet)	
15 - 30	115 - 120	50	425 - 445
35	135 - 165	55	500 - 520
40	200 - 210	60	570 - 600
45	250 - 260	65	645 - 675
50	305 - 325	70	720 - 760
55	350 - 380		

Guidance:

8. If the work space extends across a crosswalk, the crosswalk should be closed using the information and devices shown in Figure TTC-16.

Support:

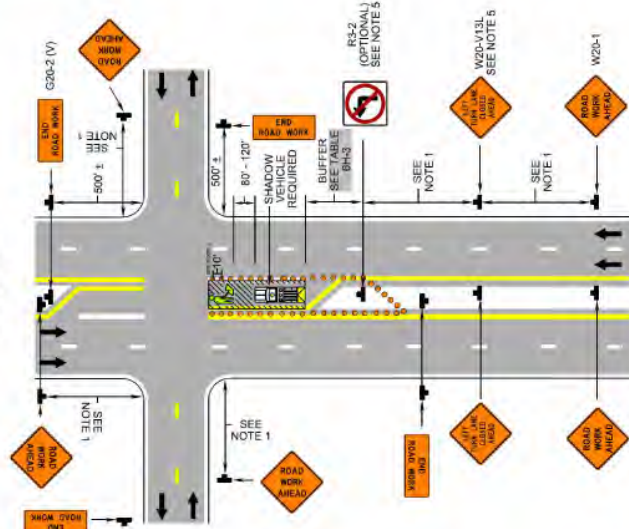
9. Turns can be prohibited as required by vehicular traffic conditions. Unless the streets are wide, it might be physically impossible to make certain turns, especially for large vehicles.

1: Revision 1 - 4/1/2019
2: Revision 2 - 8/1/2019

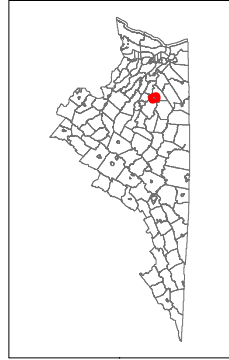
September 2019

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Turn Lane Closure Operation
(Figure TTC-29.2)



2: Revision 2 - 8/1/2019



Notes:
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4002 Feet
2. Typical Traffic Control figures extracted from Virginia Work Area Production Manual 2011
Edition Revision 2, September 1, 2019

Disclaimer: This Document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.



Project Location
Charlottesville County, Virginia
Client/Project
Dominion Energy Virginia
Chesterfield - Tyler 230 kV Transmission Line #205
and Line #2003 Rebuild Project
Figure No.
1
Title
Route 10
Turn Lane Closure Operation (TTC 29.2)

Page 03 of 05

Disruption Operation on a Multi-Lane Roadway
(Figure TTC-50.2)

1. Conditions represented are a planned closure not exceeding 15¹ minutes.

1. Conditions represented are a planned closure not exceeding 135 minutes.
2. On limited access highways, the sign spacing distance and flagger distance should be 300'–1500'. For all other roadways, the distance between the advance warning signs and between the flagger should be 500–2000' where the posted speed limit is 45 mph or less.

Guidance:

- On Limited Access highways, the sign spacing distance and flagger distance should be 1300' - 1500'. For all other roadways, the distance between the advance warning signs and between the flagger should be 500'-500' where the posted speed limit is 45 mph or less.
- Caution should be exercised when establishing the limits of the work zone to insure maximum possible sight distance in advance of the transition, based on the posted speed limit and at least equal to or greater than the values in Table 601-3. For Limited Access highways a minimum of 1000' is desired.
- The buffer space should be as shown in Table 601-3 on Page 601-3 for the posted speed limit.

Standard:

5. When work is on an undivided highway with a center turn lane the center turn lane shall be closed using channelizing devices spaced at 20 foot intervals.
6. On divided highways having a median wider than 8', right and left sign assemblies shall be used.
7. Flagging stations shall be located far enough in advance of the operation to permit approaching traffic to reduce speed and/or stop before passing into the operation.
8. All flaggers shall be state certified and have their certification card in their possession when performing flagging duties.
9. At night, flagging signs shall be illuminated. See Section 612.04 and 612.05.
10. A minimum of four advance advance warning signs shall be used on the boundaries, advance of the

PCMS in a taper for delineation (see Figure 6F-6).

11. *A Portable Changeable Message Sign (PCMS) should be used on Limited Access highways and placed a minimum of one mile in advance of the warning signs warning of the operation ahead (UTILITY WORK AHEAD) and advising of the action required (BE PREPARED TO STOP).*
12. *Disruptions in traffic should be coordinated with all entities involved in advance and performed during off-peak hours to minimize the impact on the traveling public. On Limited Access highways, State Police should assist with the movement of traffic.*

OPTION: $\text{max}_{\theta} \text{min}_{\phi} \mathbb{E}_{\mathbf{z} \sim p_{\theta}(\mathbf{z})} \mathbb{E}_{\mathbf{x} \sim p_{\phi}(\mathbf{x})} \log \frac{p_{\theta}(\mathbf{x})}{p_{\phi}(\mathbf{x})}$

13. A uniformed law enforcement officer may be used for this application in place of the flagger.
14. The ROAD WORK AHEAD (W20-1) sign may be replaced with other appropriate signs such as UTILITY WORK AHEAD (W21-7).

2: Revision 2 – 9/1/2019



TTC 50.2 has been modified.
The site specific plan shall govern
when there are differences between
the TTC and site specific plan.



Project Location Chesterfield County, Virginia	Client/Project Dominion Energy Virginia Chesterfield - Tyler 230 kV Transmission Line #205 and Line #2003 Rebuild Project	Prepared by LJJ on 2022-04-15 Checked by LJJ on 2022-04-18 R by ASB on 2022-04-18 203401247
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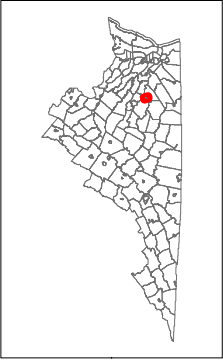
Notes
 1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
 2. Data Sources: Stantec, DCR
 3. Typical Traffic Control figures extracted from Virginia Work Area Protection Manual 2011
 Edition Revision 2: September 1, 2019

**Route 10
Disruption Operation on a Multi-Lane
Roadway (TTC 50.2)**

below. This document has been prepared based on information provided by others as cited in the Notes section. Statline has not verified the accuracy and/or completeness of this information and shall not be accountable for any errors or omissions which may be incorporated herein as a result. Statline assumes no responsibility for data inputted in electronic format and the associated accuracy of the accuracy and/or completeness of the data.

Traffic Control Notes

1. Warning signs in temporary traffic control (TTC) zones shall have a black legend and border on an orange background.
2. All signs used during day and night shall be retroreflective with a material that has a smooth, sealed, outer surface. Non-retroreflective signs, such as mesh signs, shall not be allowed. Reflective sheeting used on orange construction and maintenance activity signs shall be fluorescent prismatic lens type conforming to section 247 of the Virginia Road and Bridge Specifications.
3. Post mounted signs shall be made of rigid material. Sign substrates for signs mounted on plastic drums and portable sign stands shall be either a flexible retroreflective roll-up material, or a 0.4 inch thick corrugated polypropylene or polyethylene plastic material, or a 0.079 inch thick aluminum/plastic laminate material, and shall be the same material that was used when the device was tested and found in compliance with NCHRP-350, test level 3 requirements.
4. Sign supports shall be crashworthy. Signs mounted on barricades, or other portable supports, shall be no less than one foot above the traveled way from the bottom of the sign.
5. Ground mounted sign panels shall be securely fastened to posts or supports and erected plumb and maintained in plumb condition.
6. Distance between ground mounted signs and the top of the near edge of the travel way shall be at least 7 feet.
7. All cones or drums referenced herein shall comply with the standard for group 1 or group 2 channelized devices, respectively, in accordance with the latest Virginia Work Area Protection Manual (VWAPM). Final selection of type to be determined by contractor based on work zone conditions.
8. An Arrow Board shall be used when a lane is closed. When more than one lane is closed, a separate Arrow Board shall be used for each closed lane. Arrow Boards should be placed in accordance with the VWAPM. Type C Arrow Boards are intended for use on high-speed roadways (45 MPH or greater).
9. A shadow vehicle with either a Type B or C Arrow Board operating in the caution mode, or at least one high intensity amber rotating, oscillating, or amber strobe light shall be parked 120 feet in advance of the first work crew. When the posted speed limit is 45 MPH or greater, a truck-mounted attenuator shall be used.
10. TTC warning signs shall conform to the standards for warning signs presented in part 2 of the MUTCD and in the Federal Highway Administration "Standard Highway Signs" Book (see section 1A.II of the MUTCD). TTC warning signs shall be diamond-shaped with a black legend and border on a fluorescent orange prismatic lens sheeting background, except for signs that are permitted in parts 2 or 7 of the MUTCD to have fluorescent yellow green backgrounds. The district traffic engineer shall approve and document the use of reduced regulatory speed limits in TTC zones. Sign material shall conform to the latest Virginia Road and Bridge Specifications and all revisions to such.
11. Any existing permanent regulatory device different from the Temporary Traffic Control plan shall be removed or covered and superseded by the appropriate temporary regulatory signs. This change shall be made in conformance with applicable ordinances or statutes of the jurisdiction as well as comply with the sign design standards of the MUTCD.
12. If signage will be present for more than three work days, signage shall be post-mounted, not portable.
13. Tripod type portable signs shall not be used.
14. All traffic control devices shall conform to the applicable provisions of the VWAPM.
15. The contractor shall ensure all work whether consistent with that shown herein or based on field changes, complies with the VWAPM. If the contractor makes field changes, the revisions must be documented by the person adjusting the design on a plan set and coordinated for approval.



Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4602 Feet
2. Typical Traffic Control figures extracted from Virginia Work Area Protection Manual 2011
Edition Revision 2, September 1, 2019

Site Specific Traffic Control Notes

1. Pre-Activity meeting shall be held as directed by VDOT. The date is to be determined and shall be provided to VDOT.
2. Sixteen traffic disruptions are proposed to occur during late August/early September 2022 with specific dates to be determined.
3. The approved VDOT permit shall be kept on-site during work operations.
4. Coordination with Ryan McGrath regarding road construction east and west of the work zone will be required at least two weeks in advance of the work.
5. Contact information for the day of work pre-activity meeting is as follows:
Virginia State Police - Area 6 Office for Chesterfield County 804-379-8645 - #77 on Mobile Phone
Haz-Mat Center - 911
VDOT Operations Center - Central Virginia Traffic Operations Center 804-796-4029
VDOT Field Representative - Ryan McGrath 804-674-2814, Marco Verdine 804-840-6361,
Jason Nixon 804-519-1981
District Traffic Engineering - Donnie Smith 804-720-6804
District Public Affairs - Kyle Gibson/Sara Owens 804-586-4455
Construction Contact, LE Myers - Thomas Meadows 336-407-2006
Project Manager, Burns & McDonnell - Lawrence O'Donnell 804-516-2307
6. Should inclement weather be a factor, including up to 18 MPH winds, then the work will be rescheduled.
7. The PCMS's shown on pages 01 and 02 associated with the operation will read: "UTILITY WORK AHEAD MM-DD-YY, Route 10 EB (WB) FROM 9AM to 3:30PM" up until the time the pre-activity meeting is concluded and the crew is ready to begin staging for the operation. (Hours may be modified seasonally to align with sunrise and daylight savings. Variation in hours must be approved by VDOT prior to implementation.) Once all personnel is on-site for the operation, the PCMS's shall be changed to read two messages in the following sequence: "UTILITY WORK AHEAD" followed by "BE PREPARED TO STOP," or "UTILITY WORK ON Route 10 EAST (WEST) / BE PREPARED TO STOP."
8. All stationary equipment placed on the roadway and used to support the pull lines and wires must be stabilized with outriggers.
9. Law enforcement intended to provide control at intersections as shown on the plan. Final placement and number of law enforcement officers to be coordinated amongst Virginia State Police, local law enforcement, VDOT, and Dominion Energy.

Certification Information
The temporary traffic control plan and transportation management plan have been designed and reviewed by Adam Valenti (042018633), who successfully completed Advanced Work Zone Traffic Control Training and Flagger Certification on 4/20/2018. This training certification is valid through 4/30/2022.



Project Location Chesterfield County, Virginia	Prepared By: LUT on 2022-04-19 TR by TTS on 2022-04-19 R by AV on 2022-04-18
Client/Project Dominion Energy Virginia Chesterfield - Tyler 230 kV Transmission Line #205 and Line #2003 Rebuild Project	203401247
Figure No.	1
Title	Route 10 Traffic Control Notes

WEST HUNDRED ROAD (ROUTE 10) TEMPORARY TRAFFIC CONTROL PLAN

APPENDIX B
Land Use Permit Application

VDOT Virginia Department
of Transportation
Land Use Permit Application (LUP-A)

APPLICATION is hereby made for permit as shown on the accompanying plan or sketch and as described below. Said activity(s) will be done under and in accordance with the rules and regulations of the Commonwealth Transportation Board of Virginia, in so far as said rules are applicable thereto and any agreement between the parties herein before referred to. Where applicable agreements may be attached and made a part of the permit assembly including any cost responsibilities covering work under permit. Applicant agrees to maintain work in a manner as approved upon its completion. Applicant also hereby agrees and is bound and held responsible to the owner for any and all damages to any other installations already in place as a result of work covered by resulting permit. Applicants to whom permits are issued shall at all times indemnify and save harmless the Commonwealth Transportation Board members of the Board, the Commonwealth and all Commonwealth employees, agents, and offices, from responsibility, damage, or liability arising from the exercise of the privileges granted in such permit to the extent allowed by law. In consideration of the issuance of a permit the applicant agrees to waive for itself, successors in interest or assigns any entitlements it may otherwise have or have hereafter under the Uniform Relocation and Assistant Act of 1972 as amended in event the Department or its successor, chooses to exercise its acknowledged right to demand or cause the removal of any or all fixtures, personality of whatever kind or description that may hereafter be located, should this application be approved.

Applicant Information:

Driver's License or Tax ID No. 54-0418825
 Owner Name Virginia Electric and Power Company
 Address 10900 Nuckols Road, 4th Floor
 City Glen Allen State VA Zip Code 23060

Contact Name Lane Carr
 E-mail Address Lane.E.Carr@dominionenergy.com
 Telephone Number (804) 771-4061
 Emergency Telephone Number (804) 310-9658
 Fax Number _____

Agent Information:

Driver's License or Tax ID No. 11-2167170
 Owner Name Stantec Consulting Services Inc.
 Address 5209 Center Street
 City Williamsburg State VA Zip Code 23188

Contact Name Tracey McDonald
 E-mail Address Tracey.Mcdonald@stantec.com
 Telephone Number (757) 220-6869
 Emergency Telephone Number (757) 234-9329
 Fax Number _____

Permit Term Requested 1 year Fees Enclosed \$ 110 Check Number _____ Money Order _____

Estimated cost of work to be performed on VDOT Right of Way \$ _____

Surety Information:

Surety Posted by: ☒ Owner ☐ Agent ☐ County Resolution ☐ Waived

If cash/check surety is posted, please complete
Commonwealth of Virginia's Substitute Form W-9.

Bonding Company Name Corporate Surety Bond # VCVA00268

Irrevocable Letter of Credit - Bank Name _____ Irrevocable Letter of Credit # _____

Surety paid by Check - Check Number _____

Amount of Surety \$ 39,000,000 Obligation Amount \$ 35,000

Request permission to perform the following activity(s):

To rebuild the existing aerial crossing over West Hundred Road per the proposed temporary traffic control plan submitted with this application.

_____ as per attached plans.

Location: ☒ County ☐ Town ☐ City of Chesterfield Route No. 10 Street Name West Hundred Road

Between Route No. _____ Street Name _____ and Route No. _____ Street Name _____

Latitude 37.353298 Longitude -77.395117 Tax Map Number _____ Applicant Job No. 203401247

Applicant shall provide proof of registration as an operator with the appropriate notification center in accordance as defined in §2.2-1151.1 of the Code of Virginia & must provide a notarized affidavit, stating that the utility owner has notified the commercial and residential developer, owner of commercial or multifamily real estate, or local government entities with a property interest in any parcel of land located adjacent to the property over which the land use is being requested, that application for the permit has been made.

☒ IF APPLICABLE, I AGREE TO PAY THE FULL SALARY AND EXPENSES OF A STATE ASSIGNED INSPECTOR IN CONJUNCTION WITH ACTIVITIES AUTHORIZED UNDER THE AUSPICES OF A VDOT LAND USE PERMIT.

By signing below, I acknowledge that I am fully cognizant of all the LUP-SPG requirements associated with the issuance of a VDOT Land Use Permit.

Signature of Applicant: Lane Carr Title Siting and Permitting Specialist Date 4/4/2022
 Signature of Agent: Tracey McDonald Title Regulatory Specialist Date 4/4/2022

All applicable items on this form must be completed to avoid delay in processing the issuance of a VDOT Land Use Permit.
Prepayment required with remittance payable to Treasurer of Virginia.

VDOT USE ONLY

Receipt is hereby acknowledged for: CHECK No.: _____ MONEY ORDER No.: _____

In the Amount of \$ _____ for PERMIT FEE \$ _____ CASH SURETY \$ _____

Authorized VDOT Signature: _____ Date: _____

*Agent means: Applicant's contractor or a person or business authorized to act on another's behalf.

Alyssa Johnson

Subject: FW: Dominion Energy Request for Comments - Line 211/228 Partial Rebuild

From: Denny, S. Scott (DOAV) <Scott.Denny@doav.virginia.gov>**Sent:** Monday, March 6, 2023 2:41 PM**To:** Blair Parks (Services - 6) <blair.parks@dominionenergy.com>**Subject:** [EXTERNAL] Re: Dominion Energy Request for Comments - Line 211/228 Partial Rebuild**CAUTION! This message was NOT SENT from DOMINION ENERGY**

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Ms. Parks:

The Virginia Department of Aviation is in receipt of your March 6, 2023 email and information package pertaining to Dominion Lines # 211 and # 228. Following our review, it appears as though these lines are greater than 20,000 linear feet from any public use airport. Therefore, unless any structure supporting or erecting these replacement lines exceed 200' above ground level, no additional coordination with the Department is necessary. If the supporting structures, either temporary or permanent, reach a height of 200' above ground level, a 7460 form must be submitted to the Federal Aviation Administration. The submission of this form would initiate an airspace review to determine if the proposed improvements would constitute a hazard to air navigation.

Please feel free to contact me if you have any questions regarding this matter.

Sincerely,

S. Scott Denny
Senior Aviation Planner
Virginia Department of Aviation

From: blair.parks@dominionenergy.com <blair.parks@dominionenergy.com>**Sent:** Monday, March 6, 2023 12:51 PM**To:** Denny, S. Scott (DOAV) <Scott.Denny@doav.virginia.gov>**Subject:** Dominion Energy Request for Comments - Line 211/228 Partial Rebuild

Mr. Denny,

Please find the attached letter and overview map notifying you of the proposed partial transmission line rebuild project in Chesterfield County, Virginia.

Please contact me with any questions.

Respectfully,

Blair Parks

Siting and Permitting Specialist
Electric Transmission

10900 Nuckols Rd, 4th Floor
Glen Allen, VA 23060
Cell: 804-658-7316 | Office: 804-257-4706



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Alyssa Johnson

Subject: FW: Dominion Energy Virginia's Proposed Chesterfield-Hopewell 230 kV Transmission Lines 211 and 228 Partial Rebuild Project

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

Sent: Monday, March 27, 2023 10:39 AM

To: Heather E Kennedy (Services - 6) <Heather.E.Kennedy@dominionenergy.com>

Subject: [EXTERNAL] RE: Dominion Energy Virginia's Proposed Chesterfield-Hopewell 230 kV Transmission Lines 211 and 228 Partial Rebuild Project

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Project #: N/A

Project Name: Dominion Energy Virginia's Proposed Chesterfield-Hopewell 230 kV Transmission Lines 211 and 228 Partial Rebuild Project

UPC #: N/A

Location: Chesterfield County

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

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

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

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

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

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

From: Heather.E.Kennedy@dominionenergy.com <Heather.E.Kennedy@dominionenergy.com>

Sent: Monday, March 6, 2023 4:00 PM

To: Goodwin, Keith R CIV USARMY CENAO (USA) <Keith.R.Goodwin@usace.army.mil>; Rayfield, Bettina (DEQ) <Bettina.Rayfield@deq.virginia.gov>; Rhur, Robbie (DCR) <Robbie.Rhur@dcr.virginia.gov>; Hypes, Rene (DCR) <Rene.Hypes@dcr.virginia.gov>; McKelvey, Kristal (DCR) <Kristal.McKelvey@dcr.virginia.gov>; Didier, Karl (Virginia) <Karl.Didier@dof.virginia.gov>; DCR-PRR Environmental Review (DCR) <envreview@dcr.virginia.gov>; Kirchen, Roger (DHR) <Roger.Kirchen@dhr.virginia.gov>; Lasher, Terrance J. (DOF) <Terry.Lasher@dof.virginia.gov>; Martin, Amy (DWR) <Amy.Martin@dwr.virginia.gov>; Tignor, Keith (VDACS) <Keith.Tignor@vdacs.virginia.gov>; Chartrand, Lauren (MRC) <Lauren.Chartrand@mrc.virginia.gov>; MRC - Scoping (MRC) <Scoping@mrc.virginia.gov>; Troy Andersen <troy_andersen@fws.gov>; Warren, Arlene (VDH) <Arlene.Warren@vdh.virginia.gov>

Cc: andy.flavin@troutman.com; annie.c.larson@dominionenergy.com; Bonnie.Gill@troutman.com; trey.smith@troutman.com; ET.Environmental@dominionenergy.com; blair.parks@dominionenergy.com; Tim.McHugh@troutman.com; David.J.Depippo@dominionenergy.com

Subject: Dominion Energy Virginia's Proposed Chesterfield-Hopewell 230 kV Transmission Lines 211 and 228 Partial Rebuild Project

Hello,

Please see the attached project notification and associated project location map for the Dominion Energy Virginia's Proposed Chesterfield-Hopewell 230 kV Transmission Lines 211 and 228 Partial Rebuild Project in Chesterfield County, Virginia. If you have any questions, please feel free to contact me directly.

Thank you,

Heather E.B. Kennedy

Environmental Specialist II

Dominion Energy Services

120 Tredegar Street, Richmond, VA 23219

(804) 317-9930

Heather.E.Kennedy@Dominionenergy.com



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