

June 5, 2025

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Mr. Bernard Logan, Clerk  
c/o Document Control Center  
State Corporation Commission  
1300 East Main Street  
Tyler Building – 1st Floor  
Richmond, Virginia 23219

*Application of Virginia Electric and Power Company for approval and certification  
of electric transmission facilities: 500 kV Septa-Yadkin Line #579 Rebuild and  
230 kV Suffolk-Thrasher Line #2110 Partial Rebuild*  
**Case No. PUR-2025-00104**

Dear Mr. Logan:

Please find enclosed for electronic filing in the above-captioned proceeding the application for approval of electric transmission facilities on behalf of Virginia Electric and Power Company (the “Company”). This filing contains the Application, Appendix, Direct Testimony, and DEQ Supplement, including attachments.

As indicated in Section II.A.12.b of the Appendix, an electronic copy of the map of the Virginia Department of Transportation “General Highway Map” for Isle of Wight County and Southeastern Metropolitan Area (which includes the City of Chesapeake and the City of Suffolk), as well as the digital geographic information system map required by § 56-46.1 of the Code of Virginia, which is Attachment II.A.2 to the Appendix, were provided via an e-room to the Commission’s Division of Public Utility Regulation on June 4, 2025.

Please do not hesitate to call if you have any questions regarding the enclosed.

Highest regards,



Vishwa B. Link

Enclosures

cc: William H. Chambliss, Esq.

Mr. Bernard Logan, Clerk

June 4, 2025

Page 2

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**Dominion  
Energy<sup>®</sup>**

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

**Before the State Corporation  
Commission of Virginia**

**500 kV Septa-Yadkin Line #579  
Rebuild and 230 kV Suffolk-  
Thrasher Line #2110 Partial  
Rebuild**

**Application No. 353**

**Case No. PUR-2025-00104**

**Filed: June 5, 2025**

**Volume 1 of 2**

COMMONWEALTH OF VIRGINIA  
BEFORE THE  
STATE CORPORATION COMMISSION

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

500 kV Septa-Yadkin Line #579 Rebuild and 230 kV Suffolk-  
Thrasher Line #2110 Partial Rebuild

Application No. 353

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COMMONWEALTH OF VIRGINIA

STATE CORPORATION COMMISSION

APPLICATION OF	)	
	)	
VIRGINIA ELECTRIC AND POWER COMPANY	)	Case No. PUR-2025-00104
	)	
For approval and certification of electric	)	
transmission facilities: 500 kV Septa-Yadkin	)	
Line #579 Rebuild and 230 kV Suffolk-Thrasher	)	
Line #2110 Partial Rebuild	)	

**APPLICATION OF VIRGINIA ELECTRIC AND POWER COMPANY FOR  
APPROVAL AND CERTIFICATION OF ELECTRIC TRANSMISSION  
FACILITIES: 500 KV SEPTA-YADKIN LINE #579 REBUILD AND  
230 KV SUFFOLK-THRASHER LINE #2110 PARTIAL REBUILD**

Pursuant to § 56-46.1 of the Code of Virginia (“Va. Code”) and the Utility Facilities Act, Va. Code § 56-265.1 *et seq.*, Virginia Electric and Power Company (“Dominion Energy Virginia” or the “Company”), by counsel, files with the State Corporation Commission of Virginia (the “Commission”) this application for approval and certification of electric transmission facilities (the “Application”). In support of its Application, Dominion Energy Virginia respectfully shows as follows:

1. Dominion Energy Virginia is a public service corporation organized under the laws of the Commonwealth of Virginia furnishing electric service to the public within its Virginia service territory. The Company also furnishes electric service to the public in portions of North Carolina. Dominion Energy Virginia’s electric system—consisting of facilities for the generation, transmission, and distribution of electric energy—is interconnected with the electric systems of neighboring utilities and is a part of the interconnected network of electric systems serving the continental United States. By reason of its operation in two states and its interconnections with other utilities, the Company is engaged in interstate commerce.

2. In order to perform its legal duty to furnish adequate and reliable electric service, Dominion Energy Virginia must, from time to time, replace existing transmission facilities or construct new transmission facilities in its system.

3. In this Application, in order to maintain the structural integrity and reliability of its transmission system in compliance with the Company's mandatory electric transmission planning criteria ("Planning Criteria"),<sup>1</sup> Dominion Energy Virginia proposes the following rebuild project located within existing right-of-way or within the Company's existing property rights in the Cities of Chesapeake and Suffolk and in Isle of Wight County, Virginia:

- Rebuild the Company's existing approximately 33.1-mile overhead 500 kilovolt ("kV") Septa-Yadkin Line #579 to address the condition of Line #579, which is approaching its end of service life. Beginning at the existing Septa Switching Station, approximately 24.6 miles of Line #579 currently is supported by single circuit 500 kV COR-TEN<sup>®2</sup> lattice structures, which will be replaced primarily with single circuit 500 kV dulled galvanized steel lattice structures (the "Line #579 Single Circuit Segment" or the "Single Circuit Segment"). The remaining approximately 8.5 miles of Line #579 to the existing Yadkin Substation currently is supported primarily by double circuit 500 kV / 230 kV ("5/2") COR-TEN<sup>®</sup> lattice structures shared with the overhead single circuit 230 kV Suffolk-Thrasher Line #2110, which will be replaced primarily with double circuit 5/2 dulled galvanized steel H-frame structures<sup>3</sup> (the "Line #579/#2110 Double Circuit

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<sup>1</sup> The Company's mandatory Planning Criteria can be found in Attachment 1 of the Company's FIR document (effective April 1, 2025), pursuant to Facility Connection ("FAC") Standard FAC-001 (R1, R3), which is available online at <https://cdn-dominionenergy-prd-001.azureedge.net/-/media/pdfs/virginia/parallel-generation/facility-connection-requirements.pdf?la=en&rev=f280781e90cf47f69ea526c944c9c347&hash=82DD2567D0B033C47536134B8C4D5C5E>.

<sup>2</sup> Registered trademark of the United States Steel Corporation.

<sup>3</sup> For approximately 0.8-mile of the 8.5-mile Double Circuit Segment (as defined herein), Line #579 and Line #2110 currently are supported by shorter, side-by-side, single circuit 500 kV steel H-frame and 230 kV monopole structures, which were engineered at the time of construction so as not to conflict with civil airport imaginary surfaces (the "Airport Section" of the Double Circuit Segment). Within the 0.8-mile Airport Section, the single circuit 500 kV steel H-frame structures supporting Line #579 will be replaced with single circuit 500 kV steel H-frame structures; however, the Line #2110 existing structures will not be replaced. *See infra*, n. 9. For the 5.1-mile section from the end of the Airport Section through the end of the Double Circuit Segment at the Yadkin Substation (the "Airport-Yadkin Section" of the Double Circuit Segment), Lines #579 and #2110 resume the existing 5/2 configuration on double circuit COR-TEN<sup>®</sup> lattice structures, which will be replaced primarily with double circuit dulled galvanized steel H-frame structures, consistent with the remainder of the Double Circuit Segment. *See Attachment I.A.1* of the Appendix.

Segment” or the “Double Circuit Segment”).<sup>4</sup> Additionally, the Company proposes to replace the existing three-phase twin-bundled 2500 Aluminum Conductor Alloy Reinforced (“ACAR”) conductor with three-phase triple-bundled 1351.5 Aluminum Conductor Steel Reinforced (“ACSR”) conductor<sup>5</sup> with a summer transfer capability of 4,357 MVA<sup>6</sup> for the entire 33.1 miles. The entirety of the approximately 33.1-mile Line #579 will be rebuilt within the Company’s existing right-of-way, which varies in width between 130 and 350 feet,<sup>7</sup> or within the Company’s existing property rights. Collectively, this work is referred to as the “Line #579 Rebuild.”

- Within the 8.5-mile Double Circuit Segment, rebuild approximately 7.7 miles of overhead single circuit 230 kV Suffolk-Thrasher Line #2110<sup>8</sup> from Structure #579/132 / #2110/36 through Structure #579/147 / #2110/51 and from Structure #579/154 / #2110/67 through Structure #579/183 / #2110/96.<sup>9</sup> Additionally, the Company proposes to replace the existing three-phase twin-bundled 768.2 Aluminum Conductor Steel Supported/Trapezoidal Wire/High Strength 285 (“ACSS/TW/HS285”) type conductor with three-phase twin-bundled 768.2 ACSS/TW/HS type conductor with a summer transfer capability of 1,573 MVA for the same 7.7-mile segment.<sup>10</sup> The rebuild of the 7.7-mile segment of Line #2110 will be within the Company’s existing right-of-way, which varies in width between 130 and 265 feet,<sup>11</sup> or within the Company’s existing property rights. Collectively, this work is referred to as the “Line #2110 Partial Rebuild.”
- Perform station-related work at the Company’s existing Septa Switching Station and Yadkin Substation.

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<sup>4</sup> All of the structures being replaced as part of the Rebuild Project will be replaced on a structure-for-structure basis.

<sup>5</sup> Note that the Company currently is evaluating its standard conductor for new 500 kV construction.

<sup>6</sup> Apparent power, measured in megavolt amperes (“MVA”), is made up of real power (MW) and reactive power (megavolt ampere reactive or “MVAR”).

<sup>7</sup> See Attachment I.A.1 of the Appendix for map showing the location and widths of the varying right-of-way.

<sup>8</sup> Existing Line #2110 extends for a total of approximately 21.8 miles between the Company’s existing Suffolk and Thrasher Substations. Within the 8.5-mile Double Circuit Segment, Line #2110 is collocated within the same right-of-way as Line #579. The existing 8.5 miles of 230 kV conductor on Line #2110 in the Double Circuit Segment was installed in 2014.

<sup>9</sup> While the Double Circuit Segment is 8.5 miles long, only 7.7 miles of the existing Line #2110 structures are being rebuilt. In the 0.8-mile Airport Section—where Line #579 and Line #2110 currently are supported by shorter, side-by-side, single circuit steel H-frame and steel monopole structures, respectively—the Line #2110 structures were rebuilt by the Company in 2011. Accordingly, those recently rebuilt 230 kV structures will not be replaced. See *supra*, n. 3.

<sup>10</sup> While the existing Line #2110 conductor was replaced during the reconductor of the line in 2014 (see *supra*, n. 8), the Company assumes that it will not be able to re-use the existing 230 kV conductor.

<sup>11</sup> See Attachment I.A.1 of the Appendix for map showing the location and widths of the varying right-of-way.

The Line #579 Rebuild, the Line #2110 Partial Rebuild, and the station-related work at the Septa Switching Station and Yadkin Substation are collectively referred to as the “Rebuild Project.”

4. The Company has developed a proactive plan to rebuild transmission lines that are comprised of weathering steel (COR-TEN®) towers and approaching the end of service life. The proposed Rebuild Project is necessary to address the condition of Line #579 by rebuilding the entire 33.1 miles of existing infrastructure, which includes the partial rebuild of Line #2110 where the two lines are collocated on double circuit structures for approximately 7.7 miles. Accordingly, the Rebuild Project is necessary to address aging infrastructure that is nearing the end of its service life in compliance with the Company’s mandatory Planning Criteria, thereby enabling the Company to maintain the overall long-term reliability of its transmission system.

5. Specifically, the approximately 33.1-mile Line #579—which includes 7.7 miles of Line #2110 where collocated on double circuit structures with Line #579—has been identified for rebuild. Line #579 was constructed in 1985—meaning its structures are currently 40 years old and approaching their expected life span—on COR-TEN® lattice towers. These COR-TEN® towers have been identified for rebuild based on the Company’s assessment in accordance with the Company’s mandatory Planning Criteria, thereby enabling the Company to maintain the overall long-term reliability of its transmission system.

6. At Septa Switching Station, the Company will replace the Line #579 terminal equipment to support the new line rating. One circuit breaker, four disconnect switches, the rigid bus, and the line risers will be replaced with 5,000 Amp rated equipment. The Line #579 wave trap will be retired, and the line protection will be upgraded to an optical fiber scheme. At Yadkin Substation, the Company will replace the Line #579 terminal riser to support the new line rating.

The Line #579 wave trap will be retired, and the line protection will be upgraded to an optical fiber scheme.

7. The total length of the existing right-of-way, which varies in width between 130 and 350 feet, and Company property rights to be used for the Rebuild Project, as proposed, is approximately 33.1 miles. Because the existing right-of-way and Company property rights are adequate for the proposed Rebuild Project, no new right-of-way is required. Given the availability of existing right-of-way and the statutory preference given to the use of existing right-of-way, and because additional costs and environmental impacts would be associated with the acquisition of and construction on new right-of-way, the Company did not consider any alternate routes requiring new right-of-way for the Rebuild Project.

8. The estimated conceptual cost of the proposed Rebuild Project is approximately \$248.9 million, which includes approximately \$244.6 million for transmission-related work and approximately \$4.3 million for substation-related work (2025 dollars). The description of the proposed Rebuild Project is described in detail in Sections I and II of the Appendix attached to this Application.

9. The desired in-service target date for the proposed Rebuild Project is June 1, 2029. The Company estimates it will take approximately 39 months for detailed engineering, materials procurement, permitting, real estate, and construction after a final order from the Commission. Accordingly, to support this estimated construction timeline and construction plan, the Company respectfully requests a final order February 28, 2026. Should the Commission issue a final order by February 28, 2026, to accommodate long-lead materials procurement, the Company estimates that construction should begin around June 1, 2026, and be completed by June 1, 2029. This schedule is contingent upon obtaining the necessary permits and outages, the latter of which may

be particularly challenging due to the amount of new load growth, rebuilds, and new builds scheduled to occur in this load area. Dates may need to be adjusted based on permitting delays or design modifications to comply with additional agency requirements identified during the permitting application process, as well as the ability to schedule outages, and unpredictable delays due to labor shortages or materials/supply issues.

10. In addition, the Company is monitoring actively regulatory changes and requirements associated with the Northern long-eared bat and how they could potentially impact construction timing associated with time of year restrictions. The U.S. Fish and Wildlife Service (“USFWS”) issued the final guidance, replacing the interim guidance, on October 23, 2024 and the final guidance was fully implemented November 30, 2024. The Company is reviewing the final guidance to the extent it applies to the Company’s projects and will coordinate with USFWS during the permitting stage.

11. The Company is also monitoring potential regulatory changes associated with the potential up-listing of the Tricolored bat (“TCB”). On September 14, 2022, the USFWS published the proposed rule to the Federal Register to list the TCB as endangered under the Endangered Species Act. USFWS extended its Final Rule issuance target from September 2023 to September 2024, but as of the date of this filing, the TCB listing decision has not been issued. The Company is tracking actively this ruling and evaluating the effects of potential outcomes on Company projects’ permitting, construction, and in-service dates, including electric transmission projects.

12. Any adjustments to this Rebuild Project schedule resulting from these or similar challenges could necessitate a minimum of a six- to twelve-month delay in the targeted in-service date. Accordingly, for purposes of judicial economy, the Company requests that the Commission



issue a final order approving both a desired in-service target date (*i.e.*, June 1, 2029) and an authorization sunset date (*i.e.*, June 1, 2030) for energization of the Rebuild Project.<sup>12</sup>

13. Based on consultations with the Virginia Department of Environmental Quality (“DEQ”), the Company has developed a supplement (“DEQ Supplement”) containing information designed to facilitate review and analysis of the proposed facilities by the DEQ and other relevant agencies. The DEQ Supplement is attached to this Application.

14. Based on the Company’s experience, the advice of consultants, and a review of published studies by experts in the field, the Company believes that there is no causal link to harmful health or safety effects from electric and magnetic fields generated by the Company’s existing or proposed facilities. Section IV of the Appendix provides further details on Dominion Energy Virginia’s consideration of the health aspects of electric and magnetic fields.

15. Section V of the Appendix provides a proposed route description for public notice purposes and a list of federal, state, and local agencies and officials that the Company has or will notify about the Application.

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<sup>12</sup> The Company notes that this request is consistent with the Commission’s findings in other recent proceedings. *See Application of Virginia Electric and Power Company for approval of electric transmission facilities: 230 kV Rebuild, Reconductoring, and New Line Projects to Network Takeoff Substation*, Case No. PUR-2024-00131, Final Order (Mar. 19, 2025), approving an in-service date of August 1, 2027, and an authorization sunset date of August 1, 2028, for energization of that project in Ordering Paragraph (8); *Application of Virginia Electric and Power Company for approval of electric transmission facilities: Fentress-Yadkin 500 kV Line #588 Rebuild and New 500 kV Fentress-Yadkin Line #5005*, Case No. PUR-2024-00105, Final Order (Feb. 28, 2025), approving an in-service date of January 1, 2027, and an authorization sunset date of January 1, 2028, for energization of that project in Ordering Paragraph (8); *Application of Virginia Electric and Power Company for approval of electric transmission facilities: 500-230 kV Aspen Substation, 500 kV Aspen-Goose Creek Line #5002, 500 kV and 230 kV Aspen-Golden Lines #5001 and #2333, 500-230 kV Golden Substation, and Lines #2081/#2150 Loop*, Case No. PUR-2024-00032, Final Order (Feb. 6, 2025), approving an in-service date of June 1, 2028, and an authorization sunset date of June 1, 2029, for energization of that project in Ordering Paragraph (8); and *Application of Virginia Electric and Power Company for approval of electric transmission facilities: 230 kV Apollo-Twin Creeks Lines, and Twin Creeks, Sycolin Creek, Starlight, Lunar, and Apollo Substations*, Case No. PUR-2024-00044, Final Order (Feb. 5, 2025), approving an in service date of September 30, 2028, and an authorization sunset date of September 30, 2029, for energization of that project in Ordering Paragraph (8).

16. In addition to the information provided in the Appendix and the DEQ Supplement, this Application is supported by the pre-filed direct testimony of Company Witnesses Samuel L. Carter, Reed R. Jennings, Mohammad M. Othman, and Nancy R. Reid filed with this Application.

17. As this Application seeks approval to rebuild an existing line, the Company respectfully requests, in the interest of judicial economy, that the Commission issue an Order for Notice and Comment setting forth a procedural schedule in this proceeding without an evidentiary hearing, but with an opportunity for interested persons to request an evidentiary hearing if the issues raised cannot be addressed adequately without a hearing. An Order for Notice and Comment will still allow the Company, Commission Staff, and any interested parties that join the proceeding to develop a complete record without prejudice, as Staff or any party may file with the Commission a request for hearing. The Company has previously requested and the Commission has issued Orders for Notice and Comments in rebuild cases.<sup>13</sup>

WHEREFORE, Dominion Energy Virginia respectfully requests that the Commission:

- (a) direct that notice of this Application be given as required by § 56-46.1 of the Code of Virginia;
- (b) approve pursuant to § 56-46.1 of the Code of Virginia the construction of the Partial Rebuild Project; and,
- (c) grant a certificate of public convenience and necessity for the Partial Rebuild Project under the Utility Facilities Act, § 56-265.1 *et seq.* of the Code of Virginia.

**VIRGINIA ELECTRIC AND POWER COMPANY**

By: /s/ Vishwa B. Link  
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*Counsel for Applicant Virginia Electric and Power Company*

June 5, 2025

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<sup>13</sup> See, e.g., *Application of Virginia Electric and Power Company For approval and certification of electric transmission facilities: Line #2011 230 kV Partial Rebuild Project*, Case No. PUR-2023-00049, Order for Notice and Comment (Apr. 25, 2023); *Application of Virginia Electric and Power Company For approval and certification of electric transmission facilities: Lines #2019 and #2007 Rebuild Project*, Case No. PUR-2023-00023, Order for Notice and Comment (March 23, 2023).

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500 kV Septa-Yadkin Line #579 Rebuild and  
230 kV Suffolk-Thrasher Line #2110 Partial Rebuild

Application No. 353

Appendix

Containing Information in Response to  
“Guidelines for Transmission Line Applications Filed Under Title 56 of the Code of Virginia”

Case No. PUR-2025-00104

Filed: June 5, 2025

## TABLE OF CONTENTS

Executive Summary .....	i
I.    Necessity for the Proposed Project .....	1
II.   Description of the Proposed Project .....	179
III.  Impact of Line on Scenic, Environmental and Historic Features .....	339
IV.   Health Aspects of EMF.....	414
V.    Notice.....	444

## EXECUTIVE SUMMARY

In order to maintain the structural integrity and reliability of its transmission system in compliance with the Company's mandatory electric transmission planning criteria ("Planning Criteria"),<sup>1</sup> Virginia Electric and Power Company ("Dominion Energy Virginia" or the "Company") proposes the following rebuild project located within existing right-of-way or within the Company's existing property rights in the Cities of Chesapeake and Suffolk and in Isle of Wight County, Virginia:

- (1) Rebuild the Company's existing approximately 33.1-mile overhead 500 kilovolt ("kV") Septa-Yadkin Line #579 to address the condition of Line #579, which is approaching its end of service life. Beginning at the existing Septa Switching Station, approximately 24.6 miles of Line #579 currently is supported by single circuit 500 kV COR-TEN<sup>®2</sup> lattice structures, which will be replaced primarily with single circuit 500 kV dulled galvanized steel lattice structures (the "Line #579 Single Circuit Segment" or the "Single Circuit Segment"). The remaining approximately 8.5 miles of Line #579 to the existing Yadkin Substation currently is supported primarily by double circuit 500 kV / 230 kV ("5/2") COR-TEN<sup>®</sup> lattice structures shared with the overhead single circuit 230 kV Suffolk-Thrasher Line #2110, which will be replaced primarily with double circuit 5/2 dulled galvanized steel H-frame structures<sup>3</sup> (the "Line #579/#2110 Double Circuit Segment" or the "Double Circuit Segment").<sup>4</sup> Additionally, the Company proposes to replace the existing three-phase twin-bundled 2500 Aluminum Conductor Alloy Reinforced ("ACAR") conductor with three-phase triple-bundled 1351.5 Aluminum Conductor Steel Reinforced ("ACSR") conductor<sup>5</sup> with a summer transfer capability of 4,357 MVA<sup>6</sup> for the entire 33.1 miles. The entirety of the approximately 33.1-mile Line #579 will be rebuilt within the Company's existing right-

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<sup>1</sup> The Company's mandatory Planning Criteria can be found in Attachment 1 of the Company's Facility Interconnections Requirement ("FIR") document (effective April 1, 2025), pursuant to Facility Connection ("FAC") Standard FAC-001 (R1, R3), which is available online at <https://cdn-dominionenergy-prd-001.azureedge.net/-/media/pdfs/virginia/parallel-generation/facility-connection-requirements.pdf?la=en&rev=f280781e90cf47f69ea526c944c9c347&hash=82DD2567D0B033C47536134B8C4D5C5E>.

<sup>2</sup> Registered trademark of the United States Steel Corporation.

<sup>3</sup> For approximately 0.8-mile of the 8.5-mile Double Circuit Segment (as defined herein), Line #579 and Line #2110 currently are supported by shorter, side-by-side, single circuit 500 kV steel H-frame and 230 kV monopole structures, which were engineered at the time of construction so as not to conflict with civil airport imaginary surfaces (the "Airport Section" of the Double Circuit Segment). Within the 0.8-mile Airport Section, the single circuit 500 kV steel H-frame structures supporting Line #579 will be replaced with single circuit 500 kV steel H-frame structures; however, the Line #2110 existing structures will not be replaced. *See infra*, n. 9. For the 5.1-mile section from the end of the Airport Section through the end of the Double Circuit Segment at the Yadkin Substation (the "Airport-Yadkin Section" of the Double Circuit Segment), Lines #579 and #2110 resume the existing 5/2 configuration on double circuit COR-TEN<sup>®</sup> lattice structures, which will be replaced primarily with double circuit dulled galvanized steel H-frame structures, consistent with the remainder of the Double Circuit Segment. *See Attachment I.A.1.*

<sup>4</sup> All of the structures being replaced as part of the Rebuild Project will be replaced on a structure-for-structure basis.

<sup>5</sup> Note that the Company currently is evaluating its standard conductor for new 500 kV construction.

<sup>6</sup> Apparent power, measured in megavolt amperes ("MVA"), is made up of real power (MW) and reactive power (megavolt ampere reactive or "MVAR").

of-way, which varies in width between 130 and 350 feet,<sup>7</sup> or within the Company's existing property rights. Collectively, this work is referred to as the "Line #579 Rebuild."

- (2) Within the 8.5-mile Double Circuit Segment, rebuild approximately 7.7 miles of overhead single circuit 230 kV Suffolk-Thrasher Line #2110<sup>8</sup> from Structure #579/132 / #2110/36 through Structure #579/147 / #2110/51 and from Structure #579/154 / #2110/67 through Structure #579/183 / #2110/96.<sup>9</sup> Additionally, the Company proposes to replace the existing three-phase twin-bundled 768.2 Aluminum Conductor Steel Supported/Trapezoidal Wire/High Strength 285 ("ACSS/TW/HS285") type conductor with three-phase twin-bundled 768.2 ACSS/TW/HS type conductor with a summer transfer capability of 1,573 MVA for the same 7.7-mile segment.<sup>10</sup> The rebuild of the 7.7-mile segment of Line #2110 will be within the Company's existing right-of-way, which varies in width between 130 and 265 feet,<sup>11</sup> or within the Company's existing property rights. Collectively, this work is referred to as the "Line #2110 Partial Rebuild."
- (3) Perform station-related work at the Company's existing Septa Switching Station and Yadkin Substation.

The Line #579 Rebuild, the Line #2110 Partial Rebuild, and the station-related work at the Septa Switching Station and Yadkin Substation are collectively referred to as the "Rebuild Project."

The Company has developed a proactive plan to rebuild transmission lines that are comprised of weathering steel (COR-TEN®) towers and approaching the end of service life. The proposed Rebuild Project is necessary to address the condition of Line #579 by rebuilding the entire 33.1 miles of existing infrastructure, which includes the partial rebuild of Line #2110 where the two lines are collocated on double circuit structures for approximately 7.7 miles. Accordingly, the Rebuild Project is necessary to address aging infrastructure that is nearing the end of its service life in compliance with the Company's mandatory Planning Criteria, thereby enabling the Company to maintain the overall long-term reliability of its transmission system.

Specifically, the approximately 33.1-mile Line #579—which includes 7.7 miles of Line #2110 where collocated on double circuit structures with Line #579—has been identified for rebuild.

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<sup>7</sup> See Attachment I.A.1 for map showing the location and widths of the varying right-of-way.

<sup>8</sup> Existing Line #2110 extends for a total of approximately 21.8 miles between the Company's existing Suffolk and Thrasher Substations. Within the 8.5-mile Double Circuit Segment, Line #2110 is collocated within the same right-of-way as Line #579. The existing 8.5 miles of 230 kV conductor on Line #2110 in the Double Circuit Segment was installed in 2014.

<sup>9</sup> While the Double Circuit Segment is 8.5 miles long, only 7.7 miles of the existing Line #2110 structures are being rebuilt. In the 0.8-mile Airport Section—where Line #579 and Line #2110 currently are supported by shorter, side-by-side, single circuit steel H-frame and steel monopole structures, respectively—the Line #2110 structures were rebuilt by the Company in 2011. Accordingly, those recently rebuilt 230 kV structures will not be replaced. See *supra*, n. 3.

<sup>10</sup> While the existing Line #2110 conductor was replaced during the reconductor of the line in 2014 (*see supra*, n. 8), the Company assumes that it will not be able to re-use the existing 230 kV conductor.

<sup>11</sup> See Attachment I.A.1 for map showing the location and widths of the varying right-of-way.

Line #579 was constructed in 1985—meaning its structures are currently 40 years old and approaching their expected life span—on COR-TEN® lattice towers. These COR-TEN® towers have been identified for rebuild based on the Company’s assessment in accordance with the Company’s mandatory Planning Criteria, thereby enabling the Company to maintain the overall long-term reliability of its transmission system.

At Septa Switching Station, the Company will replace the Line #579 terminal equipment to support the new line rating. One circuit breaker, four disconnect switches, the rigid bus, and the line risers will be replaced with 5,000 Amp (“A”) rated equipment. The Line #579 wave trap will be retired, and the line protection will be upgraded to an optical fiber scheme.

At Yadkin Substation, the Company will replace the Line #579 terminal riser to support the new line rating. The Line #579 wave trap will be retired, and the line protection will be upgraded to an optical fiber scheme.

The total length of the existing right-of-way, which varies in width between 130 and 350 feet, and Company property rights to be used for the Rebuild Project, as proposed, is approximately 33.1 miles. Because the existing right-of-way and Company property rights are adequate for the proposed Rebuild Project, no new right-of-way is required. Given the availability of existing right-of-way and the statutory preference given to the use of existing right-of-way, and because additional costs and environmental impacts would be associated with the acquisition of and construction on new right-of-way, the Company did not consider any alternate routes requiring new right-of-way for the Rebuild Project.

The total estimated conceptual cost of the Rebuild Project is approximately \$248.9 million, which includes approximately \$244.6 million for transmission-related work and approximately \$4.3 million for station-related work (2025 dollars).

The desired in-service target date for the proposed Rebuild Project is June 1, 2029. The Company estimates it will take approximately 39 months for detailed engineering, materials procurement, permitting, real estate, and construction after a final order from the Commission. Accordingly, to support this estimated construction timeline and construction plan, the Company respectfully requests a final order February 28, 2026. Should the Commission issue a final order by February 28, 2026, to accommodate long-lead materials procurement, the Company estimates that construction should begin around June 1, 2026, and be completed by June 1, 2029. This schedule is contingent upon obtaining the necessary permits and outages, the latter of which may be particularly challenging due to the amount of new load growth, rebuilds, and new builds scheduled to occur in this load area. Dates may need to be adjusted based on permitting delays or design modifications to comply with additional agency requirements identified during the permitting application process, as well as the ability to schedule outages, and unpredictable delays due to labor shortages or materials/supply issues.

In addition, the Company is monitoring actively regulatory changes and requirements associated with the Northern long-eared bat (“NLEB”) and how they could potentially impact construction timing associated with time of year restrictions (“TOYRs”). The U.S. Fish and Wildlife Service (“USFWS”) issued the final guidance, replacing the interim guidance, on October 23, 2024, and the final guidance was fully implemented November 30, 2024. The Company is reviewing the final guidance to the extent it applies to the Company’s projects and will coordinate with USFWS



during the permitting stage.

The Company is also monitoring potential regulatory changes associated with the potential up-listing of the Tricolored bat (“TCB”). On September 14, 2022, the USFWS published the proposed rule to the Federal Register to list the TCB as endangered under the Endangered Species Act. USFWS extended its Final Rule issuance target from September 2023 to September 2024, but as of the date of this filing, the TCB listing decision has not been issued. The Company is tracking actively this ruling and evaluating the effects of potential outcomes on Company projects’ permitting, construction, and in-service dates, including electric transmission projects.

Any adjustments to this Rebuild Project schedule resulting from these or similar challenges could necessitate a minimum of a six- to twelve-month delay in the targeted in-service date. Accordingly, for purposes of judicial economy, the Company requests that the Commission issue a final order approving both a desired in-service target date (*i.e.*, June 1, 2029) and an authorization sunset date (*i.e.*, June 1, 2030) for energization of the Rebuild Project.<sup>12</sup>

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<sup>12</sup> The Company notes that this request is consistent with the Commission’s findings in other recent proceedings. *See Application of Virginia Electric and Power Company for approval of electric transmission facilities: 230 kV Rebuild, Reconductoring, and New Line Projects to Network Takeoff Substation*, Case No. PUR-2024-00131, Final Order (Mar. 19, 2025), approving an in-service date of August 1, 2027, and an authorization sunset date of August 1, 2028, for energization of that project in Ordering Paragraph (8); *Application of Virginia Electric and Power Company for approval of electric transmission facilities: Fentress-Yadkin 500 kV Line #588 Rebuild and New 500 kV Fentress-Yadkin Line #5005*, Case No. PUR-2024-00105, Final Order (Feb. 28, 2025), approving an in-service date of January 1, 2027, and an authorization sunset date of January 1, 2028, for energization of that project in Ordering Paragraph (8); *Application of Virginia Electric and Power Company for approval of electric transmission facilities: 500-230 kV Aspen Substation, 500 kV Aspen-Goose Creek Line #5002, 500 kV and 230 kV Aspen-Golden Lines #5001 and #2333, 500-230 kV Golden Substation, and Lines #2081/#2150 Loop*, Case No. PUR-2024-00032, Final Order (Feb. 6, 2025), approving an in-service date of June 1, 2028, and an authorization sunset date of June 1, 2029, for energization of that project in Ordering Paragraph (8); and *Application of Virginia Electric and Power Company for approval of electric transmission facilities: 230 kV Apollo-Twin Creeks Lines, and Twin Creeks, Sycolin Creek, Starlight, Lunar, and Apollo Substations*, Case No. PUR-2024-00044, Final Order (Feb. 5, 2025), approving an in service date of September 30, 2028, and an authorization sunset date of September 30, 2029, for energization of that project in Ordering Paragraph (8).

## **I. NECESSITY FOR THE PROPOSED PROJECT**

- A. State the primary justification for the proposed project (for example, the most critical contingency violation including the first year and season in which the violation occurs). In addition, identify each transmission planning standard(s) (of the Applicant, regional transmission organization (“RTO”), or North American Electric Reliability Corporation) projected to be violated absent construction of the facility.**

Response: The Rebuild Project is necessary to address the condition of Line #579, which is approaching its end of life, to partially rebuild Line #2110 where collocated on double circuit structures with Line #579, and to maintain the structural integrity and reliability of the transmission system. See Attachment I.A.1 for an overview map of the overall Rebuild Project area.

Dominion Energy Virginia’s transmission system is responsible for providing transmission service (i) for redelivery to the Company’s retail customers; (ii) to Appalachian Power Company, Old Dominion Electric Cooperative, Northern Virginia Electric Cooperative, Central Virginia Electric Cooperative, and Virginia Municipal Electric Association for redelivery to their retail customers in Virginia; and, (iii) to North Carolina Electric Membership Corporation and North Carolina Eastern Municipal Power Agency for redelivery to their customers in North Carolina (collectively, the “DOM Zone”). The Company needs to be able to maintain the overall, long-term reliability of its transmission system to meet its customers’ evolving power needs in the future.

Dominion Energy Virginia is part of the PJM Interconnection, LLC (“PJM”) regional transmission organization (“RTO”), which provides service to a large portion of the eastern United States. PJM is currently responsible for ensuring the reliability and coordinating the movement of electricity through all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and the District of Columbia. This service area has a population of approximately 65 million and, on August 2, 2006, set a record high of 165,563 MW for summer peak demand, of which Dominion Energy Virginia’s load portion was approximately 19,256 MW. On July 16, 2024, the DOM Zone set a record high of 23,127 MW for summer peak demand. On January 23, 2025, the DOM Zone set a winter and all-time record demand of 24,678 MW. Based on the 2025 PJM Load Forecast, the DOM Zone is expected to grow with average growth rates of 6.3% summer and 6.0% winter over the next 10 years compared to the PJM average of 3.1% and 3.8% over the same period for the summer and winter, respectively.<sup>13</sup>

Dominion Energy Virginia is also part of the Eastern Interconnection transmission

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<sup>13</sup> A copy of the 2025 PJM Load Forecast Report is available at the following: <https://www.pjm.com/-/media/DotCom/library/reports-notice/load-forecast/2025-load-report.pdf>. See, in particular, page 9 (PJM) and page 34 (DOM Zone).

grid, meaning its transmission system is interconnected, directly or indirectly, with all of the other transmission systems in the United States and Canada between the Rocky Mountains and the Atlantic coast, except for Quebec and most of Texas. All of the transmission systems in the Eastern Interconnection are dependent on each other for moving bulk power through the transmission system and for reliability support. Dominion Energy Virginia's service to its customers is extremely reliant on a robust and reliable regional transmission system.

North American Electric Reliability Corporation ("NERC") has been designated by the Federal Energy Regulatory Commission ("FERC") as the electric reliability organization for the United States. Accordingly, NERC requires that the planning authority and transmission planner develop planning criteria to ensure compliance with NERC Reliability Standards. Mandatory NERC Reliability Standards require that a transmission owner ("TO") develop facility interconnection requirements that identify load and generation interconnection minimum requirements for a TO's transmission system, as well as the TO's reliability criteria.<sup>14</sup>

Federally mandated NERC Reliability Standards constitute minimum criteria with which all public utilities must comply as components of the interstate electric transmission system. Moreover, the Energy Policy Act of 2005 mandates that electric utilities must follow these NERC Reliability Standards and imposes fines on utilities found to be in noncompliance up to \$1.3 million a day per violation.

PJM's Regional Transmission Expansion Plan ("RTEP") is the culmination of a FERC-approved annual transmission planning process that includes extensive analysis of the electric transmission system to determine any needed improvements.<sup>15</sup> PJM's annual RTEP is based on the effective criteria in place at the time of the analyses, including applicable standards and criteria of NERC, PJM, and local reliability planning criteria, among others.<sup>16</sup> Projects identified through the RTEP process are developed by the TO in coordination with PJM, and are presented at the Transmission Expansion Advisory Committee ("TEAC") meetings prior to inclusion in the RTEP, which is then presented for approval to the PJM Board of Managers (the "PJM Board").

Outcomes of the RTEP process include three types of transmission system upgrades or projects: (i) baseline upgrades are those that resolve a system reliability criteria violation, which can include planning criteria from NERC, ReliabilityFirst, SERC Reliability Corporation, PJM, and TOs; (ii) network upgrades are new or upgraded facilities required primarily to eliminate reliability criteria violations caused by proposed generation, merchant transmission, or long-term firm transmission

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<sup>14</sup> See Facility Connection ("FAC") Standard FAC-001-4 (effective January 1, 2024), which can be found at <https://www.nerc.com/pa/Stand/Reliability%20Standards/FAC-001-4.pdf>.

<sup>15</sup> PJM Manual 14B (effective June 27, 2024) focuses on the RTEP process and can be found at <https://www.pjm.com/-/media/documents/manuals/m14b.ashx>.

<sup>16</sup> See PJM Manual 14B, Attachment D: PJM Reliability Planning Criteria. See *supra*, n. 15 for a link to the PJM Manual 14B.

service requests; and (iii) supplemental projects are projects initiated by the TO in order to interconnect new customer load, address degraded equipment performance, improve operational flexibility and efficiency, and increase infrastructure resilience. While supplemental projects are included in the RTEP, and the PJM Board administers stakeholder review of supplemental projects as part of the RTEP process, the PJM Board does not actually approve such projects.

This end-of-life Rebuild Project is classified as a PJM baseline project. See Section I.J. A discussion of the need driving the Line #579 Rebuild and the Line #2110 Partial Rebuild is as follows.

### **NEED FOR THE REBUILD PROJECT**

The Company has developed a proactive plan to rebuild transmission lines that are comprised of weathering steel (COR-TEN<sup>®</sup>) towers and approaching the end of service life. The proposed Rebuild Project is necessary to address the condition of Line #579 by rebuilding the entire 33.1 miles of existing infrastructure, which includes the partial rebuild of Line #2110 where the two lines are collocated on double circuit structures for approximately 7.7 miles. Accordingly, the Rebuild Project is necessary to address aging infrastructure that is nearing the end of its service life in compliance with the Company's mandatory Planning Criteria, thereby enabling the Company to maintain the overall long-term reliability of its transmission system.

Specifically, the approximately 33.1-mile Line #579—which includes 7.7 miles of Line #2110 where collocated on double circuit structures with Line #579—has been identified for rebuild. Line #579 was constructed in 1985—meaning its structures are currently 40 years old and approaching their expected life span—on COR-TEN<sup>®</sup> lattice towers. These COR-TEN<sup>®</sup> towers have been identified for rebuild based on the Company's assessment in accordance with the Company's mandatory Planning Criteria, thereby enabling the Company to maintain the overall long-term reliability of its transmission system. The Company hired a third-party company, Quanta Technology, LLC (“Quanta”), to evaluate the condition of its COR-TEN<sup>®</sup> towers, including those supporting Line #579 in the Single Circuit Segment and Lines #579 and #2110 in the Double Circuit Segment. In its November 1, 2016 report entitled “230kV & 500kV COR-TEN Lines Review” (the “2016 Quanta Report”), Quanta confirmed the need to rebuild the Line #579 and Lines #579/#2110 COR-TEN<sup>®</sup> towers.

Section C.2.9 of the Planning Criteria addresses electric transmission infrastructure approaching its end of life:<sup>17</sup>

Electric transmission infrastructure reaches its end of life as a result of many factors. Some factors such as extreme weather and environmental conditions can *shorten* infrastructure life, while others such as maintenance activities can *lengthen* its life. Once end of life is

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<sup>17</sup> See *supra*, n. 1.

recognized, in order to ensure continued reliability of the transmission grid, a decision must be made regarding the best way to address this end-of-life asset.

For this criterion, “end of life” is defined as the point at which infrastructure is at risk of failure, and continued maintenance and/or refurbishment of the infrastructure is no longer a valid option to extend the life of the facilities consistent with Good Utility Practice and Dominion Energy [Virginia] Transmission Planning Criteria. The infrastructure to be evaluated under this end-of-life criteria are all regional transmission lines operated at 500 kV and above.

The decision point of this criterion is based on satisfying two metrics:

- 1) Facility is nearing, or has already passed, its end of life, and*
- 2) Continued operation risks negatively impacting reliability of the transmission system.*

For facilities that satisfy both of these metrics, this criterion mandates either replacing these facilities with in-kind infrastructure that meets current Dominion Energy [Virginia] standards or employing an alternative solution to ensure the Dominion Energy [Virginia] transmission system satisfies all applicable reliability criteria.

Dominion Energy [Virginia] will determine whether the two metrics are satisfied based on the following assessment:

- 1. End of Life*

Factors that support a determination that a facility has reached its end of life include, but are not limited to,

- Condition of the facility, taking into consideration:
  - Industry recommendations on service life for the particular type of facility
  - The facility’s performance history
    - Documented evidence indicating that the facility has reached the end of its useful service life
  - The facility’s maintenance and expense history
- Third-party assessment – While not required, Dominion Energy [Virginia] has the option of seeking a third-party assessment of a facility to determine if industry specialists agree the facility has reached the end of its useful service life

- 2. Reliability and System Impact*

The reliability impact of continued operation of a facility will be determined based on a planning assessment and operational

performance considerations. The end-of-life determination for a facility to be tested for reliability impact will be assessed by evaluating the impact on short and long term reliability with and without the facility in service. The existing system with the facility removed will become the base case system for which all reliability tests will be performed.

The primary four (4) reliability tests to be considered are:

1. NERC Reliability Standards
2. PJM Planning Criteria – As documented in PJM Manual 14B – PJM Region Transmission Planning Process
3. Dominion Energy Transmission Planning Criteria contained in this document
4. Operational Performance – This test will be based on input from PJM and/or Dominion Energy System Operations as to the impact on reliably operating the system without the facility

Additional factors to be evaluated under system impact may include but not be limited to:

1. Market efficiency
2. Stage 1A ARR sufficiency
3. Public policy
4. SERC reliability criteria

Failure of any of these reliability tests, along with the end-of-life assessment discussed herein, will indicate a violation of the End-of-Life Criteria and necessitate replacement as mandated earlier in this document.

After the end of service life and reliability impact of a facility are evaluated and it has been determined that the facility violates the End-of-Life Criteria, a determination will be made as to whether replacement of the facility is the most effective solution for an identified reliability need, or whether an alternative solution should be employed. One or more of the following factors may be considered in determining whether to proceed with facility replacement or with an alternative solution:

- Planning analysis which may include power flow studies
- Operational performance
- System Reliability
- Effectiveness of the alternative as compared to the replacement facility
- Future load growth in the study area
- Future transmission projects or interconnects that impact the study area

- Constructability comparison
- Cost comparison

*1) Facility is nearing, or has already passed, its end of life*

In regard to the first metric of the Company's Planning Criteria addressing end of life, the structures supporting Line #579 and Line #2110 where collocated on double circuit structures are primarily COR-TEN® lattice towers that were erected in 1985, as noted above. COR-TEN® steel is now known to be problematic when used for lattice-type structures. Utility companies have been monitoring the material since the 1970s, and the problems are well documented. As noted in the 2016 Quanta Report, the weathering steel lattice towers supporting Line #579 have design features that enable significant deterioration in the connections of these towers. Industry guidelines indicate equipment life for wood structures is 35-55 years, COR-TEN® steel structures is 40-60 years, conductor and connectors are 40-60 years, and porcelain insulators is 50 years. The structures supporting Line #579 and Lines #579/#2110 are approaching their end of life, driving the Company's need for the proposed Rebuild Project.

*2) Continued operation risks negatively impacting reliability of the transmission system*

PJM presented at its December 3, 2024 TEAC Meeting (First Read) based on Metric #1 (Facility is already nearing, or has already passed, its useful life) that, if Line #579 were removed from service and not replaced with a rebuilt 500 kV line, it would negatively impact the operation of the transmission system since a third-party assessment had determined the towers were at the end of their useful life and therefore subject to failure. Accordingly, PJM accepted the Company's representation of the need for the baseline project and did not require any additional reliability studies in support of the need for the proposed Line #579 Rebuild. This included the Line #2110 Partial Rebuild to the extent that the line is collocated on 5/2 configured double circuit structures with Line #579. See Attachment I.J.1. The Second Read was presented at the January 7, 2025 TEAC Meeting. See Attachment I.J.2.

In addition, the Company studied the result of removing from service Line #579 and Line #2110 where collocated with Line #579 and not replacing those removed lines, which would effectively remove Lines #579 and #2110 from service. Based on the Summer 2029 RTEP case, the study results showed that removing Line #579 and Line #2110 would result in multiple thermal violations under the Generation Deliverability study. The results of these studies are included in Attachment I.D.1.

## **Area Transmission System**

Attachment I.A.2 provides a one-line diagram of the transmission system upon completion of the proposed Rebuild Project.

## DESCRIPTION OF THE REBUILD PROJECT

### Line #579 Rebuild

As part of the Rebuild Project, Dominion Energy Virginia proposes to rebuild the Company's existing approximately 33.1-mile overhead 500 kV Septa-Yadkin Line #579 to address the condition of Line #579, which is approaching its end of service life. Beginning at the existing Septa Switching Station, approximately 24.6 miles of Line #579 currently is supported by single circuit 500 kV COR-TEN® structures, which will be replaced primarily with single circuit 500 kV dulled galvanized steel lattice structures (*i.e.*, the Single Circuit Segment). The remaining 8.5 miles of Line #579 to the existing Yadkin Substation currently is supported primarily by double circuit 5/2 COR-TEN® lattice structures shared with the overhead single circuit 230 kV Suffolk-Thrasher Line #2110, which will be replaced primarily with double circuit 5/2 dulled galvanized steel H-frame structures (*i.e.*, the Double Circuit Segment).

For approximately 0.8-mile of the 8.5-mile Double Circuit Segment, Line #579 and Line #2110 currently are supported by shorter, side-by-side, single circuit 500 kV steel H-frame and 230 kV monopole structures, which were engineered at the time of construction so as not to conflict with civil airport imaginary surfaces (*i.e.*, the Airport Section). Within the 0.8-mile Airport Section, the single circuit 500 kV steel H-frame structures supporting Line #579 will be replaced with single circuit 500 kV steel H-frame structures; however, the Line #2110 existing structures will not be replaced.<sup>18</sup> For the 5.1-mile section from the end of the Airport Section through the end of the Double Circuit Segment at the Yadkin Substation (*i.e.*, the Airport-Yadkin Section), Lines #579 and #2110 resume the existing 5/2 configuration on double circuit COR-TEN® lattice structures, which will be replaced primarily with double circuit dulled galvanized steel H-frame structures, consistent with the remainder of the Double Circuit Segment. See Attachment I.A.1. All of the structures being replaced as part of the Rebuild Project will be replaced on a structure-for-structure basis.

Additionally, the Company proposes to replace the existing three-phase twin-bundled 2500 ACAR conductor with three-phase triple-bundled 1351.5 ACSR conductor with a summer transfer capability of 4,357 MVA for the entire approximately 33.1 miles. The entirety of the approximately 33.1-mile Line #579 will be rebuilt within the Company's existing right-of-way, which varies in width between 130 and 350 feet, or within the Company's existing property rights. See Attachment I.A.1.

The Company plans to complete the Rebuild Project in three phases. The first phase will include rebuild of approximately 12.1 miles of Line #579 from Septa Switching Station to Chuckatuck Substation, and is anticipated to begin in June 2026 and be completed in December 2026. The second phase will include rebuild of approximately 12.5 miles of Line #579 from Chuckatuck Substation through the

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<sup>18</sup> See *supra*, n. 9.



end of the Single Circuit Segment, and is anticipated to begin in March 2027 and be completed in December 2027. The third phase will include rebuild of approximately 8.5 miles of Line #579 and approximately 7.7 miles of Line #2110 within the Double Circuit Segment, and is anticipated to begin in March 2028 and be completed in December 2028.

The total length of the existing right-of-way, which varies in width between 130 and 350 feet, and property rights to be used for the Rebuild Project, as proposed, is approximately 33.1 miles. Because the existing right-of-way is adequate for the proposed Line #579 Rebuild, no new right-of-way is required. Given the availability of existing right-of-way and the statutory preference given to the use of existing right-of-way, and because additional costs and environmental impacts would be associated with the acquisition of and construction on new right-of-way, the Company did not consider any alternate routes requiring new right-of-way for the Rebuild Project.

### **Line #2110 Partial Rebuild**

Within the 8.5-mile Double Circuit Segment, the Company proposes to rebuild approximately 7.7 miles of overhead single circuit 230 kV Suffolk-Thrasher Line #2110 from Structure #579/132 / #2110/36 through Structure #579/147 / #2110/51 and from Structure #579/154 / #2110/67 through Structure #579/183 / #2110/96 as part of the Rebuild Project.

Existing Line #2110 extends for a total of approximately 21.8 miles between the Company's existing Suffolk and Thrasher Substations. Within the 8.5-mile Double Circuit Segment, Line #2110 is collocated within the same right-of-way with Line #579. The existing 8.5 miles of 230 kV conductor on Line #2110 in the Double Circuit Segment was installed in 2014.

While the Double Circuit Segment is 8.5 miles long, only 7.7 miles of the existing Line #2110 structures are being rebuilt. In the 0.8-mile Airport Section—where Line #579 and Line #2110 currently are supported by shorter, side-by-side, single circuit steel H-frame and steel monopole structures, respectively—the Line #2110 structures were rebuilt by the Company in 2011. Accordingly, those recently rebuilt 230 kV structures will not be replaced.

Additionally, the Company proposes to replace the existing three-phase twin-bundled 768.2 ACSS/TW/HS285 type conductor with three-phase twin-bundled 768.2 ACSS/TW/HS type conductor with a summer transfer capability of 1,573 MVA for the same 7.7-mile segment. While the existing Line #2110 conductor was replaced during the reconductor of the line in 2014, the Company assumes that it will not be able to re-use the existing 230 kV conductor. The rebuild of the 7.7-mile segment of Line #2110 will be within the Company's existing right-of-way, which varies in width between 130 and 265 feet, or within the Company's existing property rights. See [Attachment I.A.1.](#)

The Company plans to complete construction of the Line #2110 Partial Rebuild as

described above.

### **Station-Related Work**

The Company will perform station-related work at the Company's existing Septa Switching Station and Yadkin Substation, as described in Section II.C.

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In summary, the proposed Rebuild Project will address the condition of Line #579 and Line #2110 (where collocated), which are approaching the end of service life, by rebuilding existing infrastructure in accordance with mandatory Planning Criteria, thereby allowing the Company to maintain the overall long-term reliability of the transmission system for its customers.



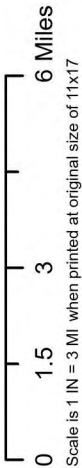
ATTACHMENT I.A.1  
PROJECT OVERVIEW MAP

Septa - Yadkin 500 kV Line #579 Rebuild and  
Suffolk - Thrasher 230 kV Line #2110 Partial Rebuild

City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

Client:  
Dominion Energy Virginia

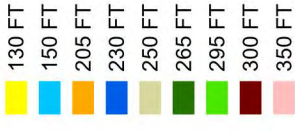
C2 Env Project: 0265  
Prepared By: KAS  
Date: 5/6/2025



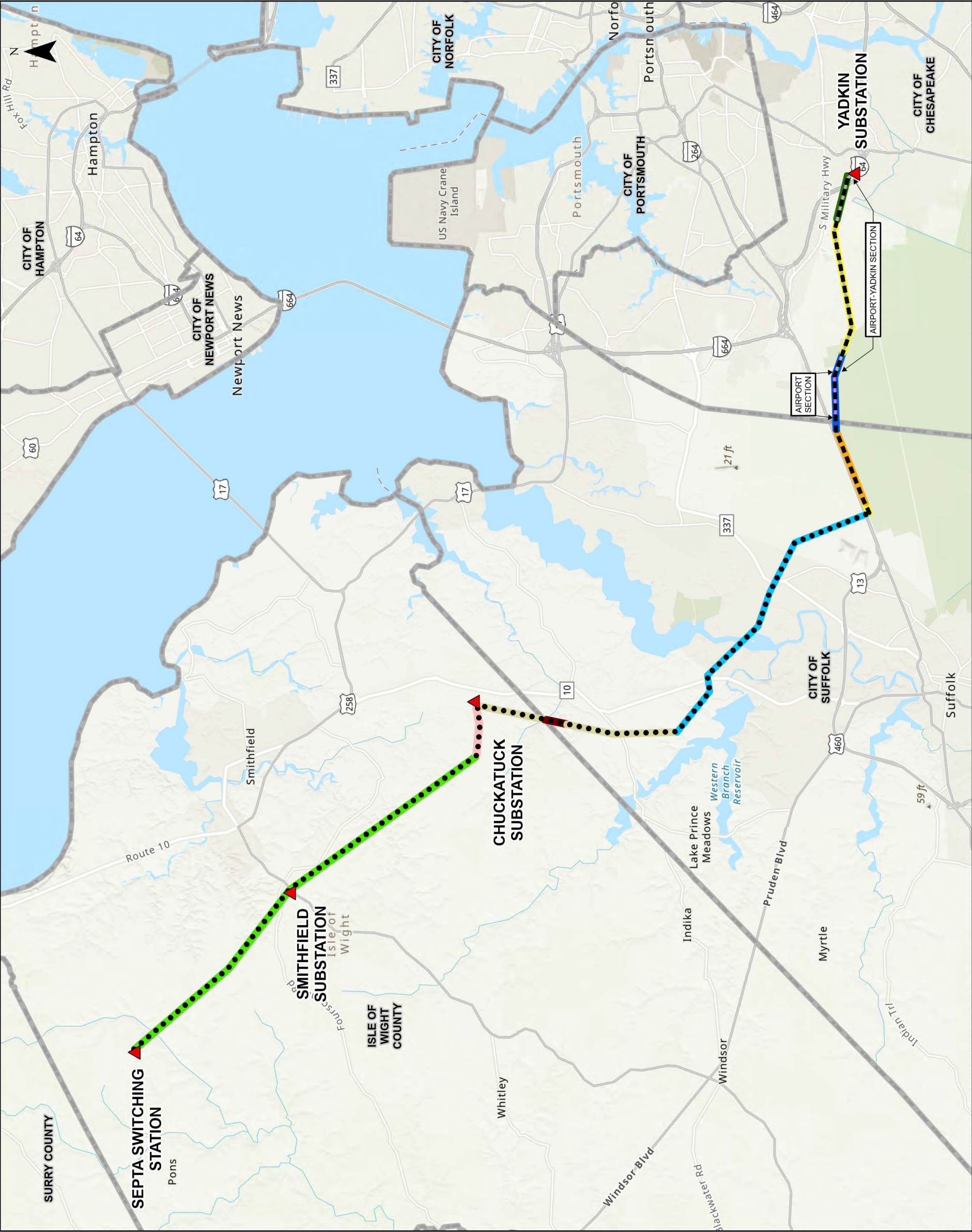
SITE DATA

- Line #579 Single Circuit Segment
- Lines #579/2110 Double Circuit Segment
- Airport Section
- Airport-Yadkin Section
- ▲ Existing Substation/Switching Station

Existing Right-of-Way Width

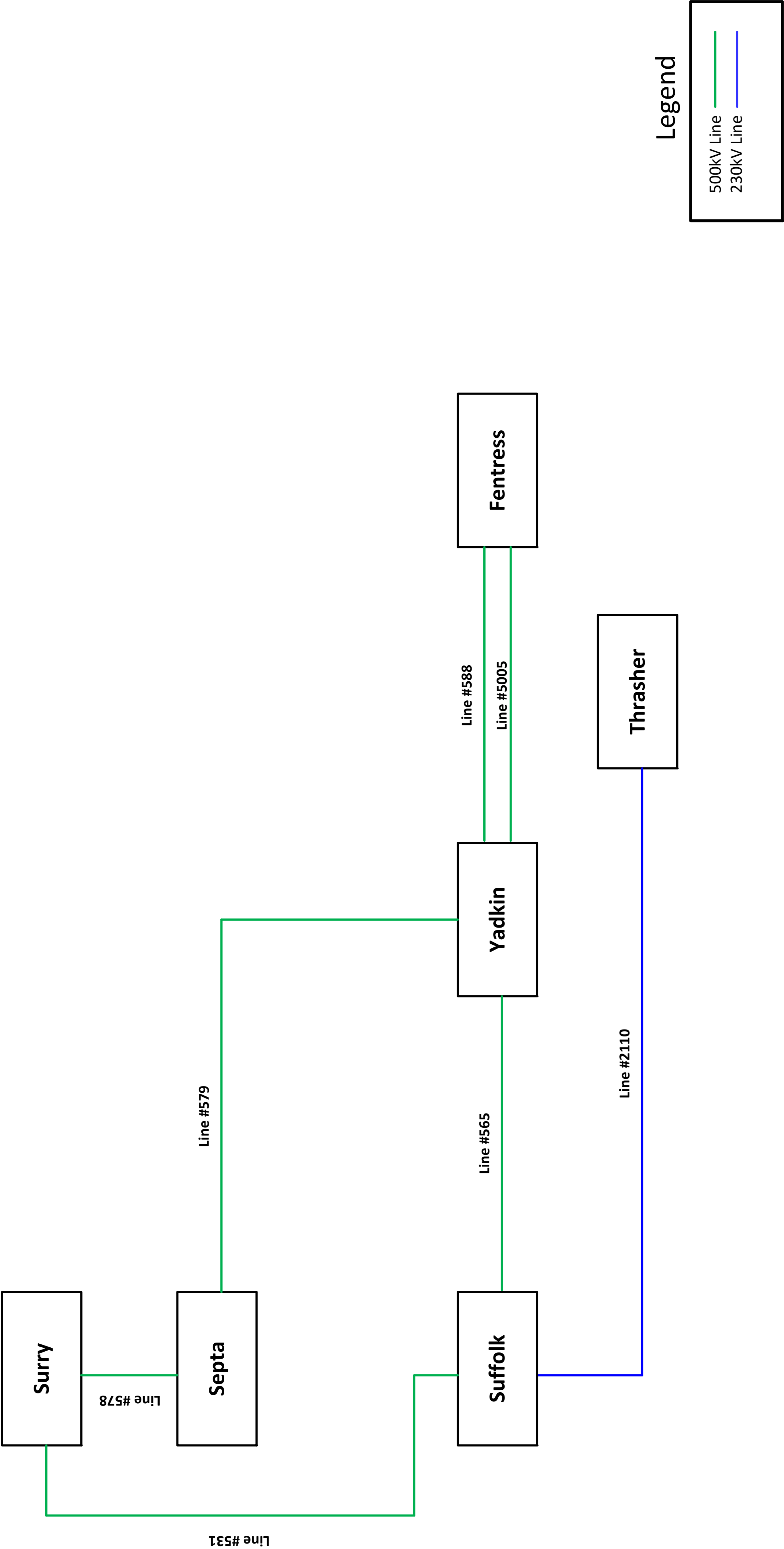


Notes:  
1. Basemap from ESRI World Topographic Map  
2. Project right-of-way provided by Dominion Energy Virginia





Proposed System as of  
June 2029



## **I. NECESSITY FOR THE PROPOSED PROJECT**

- B. Detail the engineering justifications for the proposed project (for example, provide narrative to support whether the proposed project is necessary to upgrade or replace an existing facility, to significantly increase system reliability, to connect a new generating station to the Applicant's system, etc.). Describe any known future project(s), including but not limited to generation, transmission, delivery point or retail customer projects, that require the proposed project to be constructed. Verify that the planning studies used to justify the need for the proposed project considered all other generation and transmission facilities impacting the affected load area, including generation and transmission facilities that have not yet been placed into service. Provide a list of those facilities that are not yet in service.**

Response: **Engineering Justification for Project**

*Detail the engineering justifications for the proposed project (for example, provide narrative to support whether the proposed project is necessary to upgrade or replace an existing facility, to significantly increase system reliability, to connect a new generating station to the Applicant's system, etc.).*

See Section I.A of the Appendix.

### **Known Future Projects**

*Describe any known future project(s), including but not limited to generation, transmission, delivery point or retail customer projects, that require the proposed project to be constructed.*

The proposed Rebuild Project is necessary to address the condition of Line #579 and Line #2110 (where collocated) by rebuilding the existing infrastructure, which are approaching the end of service life, consistent with the Company's mandatory Planning Criteria, as discussed in Section I.A. There are no known future projects that require the Rebuild Project to be constructed.

### **Planning Studies**

*Verify that the planning studies used to justify the need for the proposed project considered all other generation and transmission facilities impacting the affected load area, including generation and transmission facilities that have not yet been placed into service.*

The power flow model used for the end-of-life study was the 2029 RTEP Case. The PJM RTEP model accounts for all other generation and transmission facilities impacting the affected load area, including approved generation and transmission facilities that have not been placed into service. The model also considered generation deactivations and projects that have been driven by the generation deactivations.

As part of any RTEP cycle, PJM along with the member TOs run baseline reliability analysis to identify if any potential violations exist based on projected network topology and loading. A portion of Manual 14B Section 1.4.1.1 describes the process from a high level:

PJM Manual 14B – 1.4.1.1 Baseline reliability analyses

The PJM Transmission System (“PJM System”) provides the means for delivering the output of interconnected generators to the load centers in the PJM energy and capacity markets. Baseline reliability analyses ensure the security and adequacy of the Transmission System to serve all existing and projected long term firm transmission use including existing and projected native load growth as well as long term firm transmission service. RTEP baseline analyses include system voltage and thermal analysis, and stability, load deliverability, and generator deliverability testing. These tests variously entail single and multiple contingency testing for violations of established NERC reliability criteria regarding stability, thermal line loadings and voltage limits.<sup>19</sup>

Any thermal, voltage, or generation deliverability violations will require a baseline network upgrade. Typically, during the RTEP cycle, PJM is focused on a case that is five years out in time. The open window for this Project, which was based on the 2024 RTEP Open Window #1 (01-07-2025) and subsequently tested on the 2024 RTEP 2029 Summer Case, demonstrated that Line #579 is needed to maintain reliable service to the Company’s customers.

**Facilities List**

*Provide a list of those facilities that are not yet in service.*

Not applicable.

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<sup>19</sup> See *supra*, n. 15.

## **I. NECESSITY FOR THE PROPOSED PROJECT**

- C. Describe the present system and detail how the proposed project will effectively satisfy present and projected future electrical load demand requirements. Provide pertinent load growth data (at least five years of historical summer and winter peak demands and ten years of projected summer and winter peak loads where applicable). Provide all assumptions inherent within the projected data and describe why the existing system cannot adequately serve the needs of the Applicant (if that is the case). Indicate the date by which the existing system is projected to be inadequate.**

Response: Attachment I.G.1 shows the portion of the transmission system in the area of the proposed Rebuild Project. The existing Line #579 is part of the Company's 500 kV system, which supports the transfer of bulk power from generating resources to major load centers. Line #579 begins at the 500 kV Septa Switching Station in Isle of Wight County, Virginia, which consists of four, 500 kV breakers in a ring bus arrangement that provide terminations for four 500 kV lines: Carson-Septa Line #562, Septa-Surry Line #578, Septa-Yadkin Line #579, and Cavalier Collector Station-Septa Line #586.

Line #579 leaves the Septa Switching Station in an approximately southeast direction on single circuit 500 kV COR-TEN® structures, sharing a 295-foot-wide right-of-way with four 230 kV lines on double circuit COR-TEN® lattice towers: Surry-Winchester Line #214, Churchland-Surry Line #226, Chuckatuck-Surry Line #290, and Surry-Yadkin Line #223. Line #579 occupies the northernmost position in the right-of-way, followed by Line #214, Line #226, Line #290, and Line #223 in the southernmost position of the right-of-way.

Approximately 5.3 miles from the Septa Switching Station, Line #579 passes by the Company's 230 kV Smithfield Substation and continues for another approximately 5.6 miles before crossing over the four 230 kV lines described above to occupy the southernmost position in the right-of-way as the corridor turns east and expands to 350 feet wide.

Approximately 1.2 miles after crossing to the southernmost position in the right-of-way, Line #579 turns south at Dominion Energy Virginia's 230 kV Chuckatuck Substation where it shares a 250-foot-wide right-of-way corridor with Chuckatuck-Suffolk Line #289. In this roughly north-south corridor, Line #579 continues on single circuit COR-TEN® structures on the east side of the right-of-way and Line #289 is on the west side of the right-of-way on double circuit COR-TEN® lattice towers in the westernmost circuit position of the tower while the easternmost 230 kV circuit position is vacant. After approximately 1.6 miles, the corridor leaves Isle of Wight County and enters the City of Suffolk, Virginia, where it continues for approximately 3.3 miles in a corridor ranging between 250 and 300 feet in width before splitting, with Line #289 continuing south and Line #579 turning southeast on a 150-foot-wide right-of-way.

After the split with Line #289, Line #579 continues roughly southeast for

approximately 7.5 miles where it crosses Portsmouth Boulevard and the CSX Railroad before turning roughly east and merging into a corridor with Line #2110 ranging between 130 and 230 feet in width. After the merge, Line #579 and Line #2110 continue in the Double Circuit Segment predominantly on 5/2 structures for approximately 2.4 miles before crossing from the City of Suffolk into the City of Chesapeake, Virginia.

Once in the City of Chesapeake, the corridor continues roughly east for approximately 5.0 miles before it is joined by a corridor from the north containing 115 kV Chesapeake-Churchland Line #87, 230 kV Surry-Yadkin Line #223, and 230 kV Churchland-Yadkin Line #267. At the point where the corridor containing Lines #87, #223, and #267 enter from the north, the corridor expands to 265-feet wide and continues east for approximately 1.0 mile where it crosses Interstate 64 with Lines #579 and #2110 on the 5/2 configured towers in the southernmost position of the right-of-way, 115 kV Line #87 just to the north (in the middle) on a combination of single-circuit H-frame and monopole structures, and Lines #223 and #267 on double circuit COR-TEN® lattice towers occupying the northernmost position in the right-of-way. After crossing Interstate 64, the corridor immediately crosses Norfolk Southern Railroad before arriving at Yadkin Substation, which is in the southeast quadrant of the intersection between Interstate 64 and the Norfolk Southern Railroad.

The Yadkin Substation is in the City of Chesapeake and contains six 500 kV breakers in a ring bus arrangement, which provide terminations for three 500 kV lines: Suffolk-Yadkin Line #565, Septa-Yadkin Line #579, and Fentress-Yadkin Line #588, along with three 500-230 kV, 840 MVA transformer (“TX”) banks, TX#1, TX#2, and TX#5. Additionally, there is a 230 kV network that consists of eleven 230 kV breakers in roughly a breaker-and-a-half arrangement that provide terminations for the aforementioned TX#1, TX#2, and TX#5, in addition to five 230 kV lines: Surry-Yadkin Line #223, Churchland-Yadkin Line #267, Elizabeth River Non-Utility Generator (“NUG”)-Yadkin Line #2070, Thrasher-Yadkin Line #2105, and Chesapeake Energy Center-Yadkin Line #2158. Also tied into the 230 kV network are a 178 MVAR capacitor bank and a 50-100 MVAR variable shunt reactor. Finally, there are two 230-115 kV, 224 MVA TX banks (TX#3 and TX#6) that are networked on the low-side with 115 kV Line #46 Chesapeake Energy Center-Yadkin and a 230-34.5 kV, 75 MVA distribution TX#4 that feeds three 34.5 kV distribution circuits.

The existing Line #2110 is part of the Company’s 230 kV network, which supports the delivery of generation to retail and wholesale customers. Line #2110 begins at the Company’s Suffolk Substation in the City of Suffolk, Virginia and travels approximately 5.5 miles before merging with Line #579 in the approximately 8.5-mile Double Circuit Segment, as previously described. Line #579 and Line #2110 are then supported primarily by 5/2 COR-TEN® lattice structures, with the exception of the 0.8-mile Airport Section. Line #579 then terminates in the Yadkin Substation, and Line #2110 continues for another approximately 7.7 miles to the Company’s Thrasher Substation.



The tables in Attachment I.C.1 provide the historic summer and winter loads from 2020-2024 and the projected summer and winter peak loads from 2025-2034 for the DOM Zone.

The existing Line #579 and Line #2110 (where collocated on 5/2 structures) cannot continue to adequately serve the needs of the Company and its customers due to the condition of its aging infrastructure, as discussed in Section I.A. The Company has created a proactive plan to rebuild transmission lines that are comprised of COR-TEN<sup>®</sup> towers, setting target completion dates for end-of-life projects based on the condition of the facilities, the Company's resources, and the need to schedule outages. Replacing Line #579 and Line #2110 (where collocated) is needed to prevent identified thermal violations, as described in Section I.A. The in-service date for the proposed Rebuild Project (June 1, 2029) also supports the conclusions reflected in the 2016 Quanta Report balanced against the timeline for permitting, construction, and obtaining necessary outages.

Completing the proposed Rebuild Project, including the Line #2110 Partial Rebuild which is necessary where the two lines are collocated on double circuit structures, will support Dominion Energy Virginia's ability to continue to provide reliable electric service to retail and wholesale customers and will support the future overall growth and system generation capability in the area. See Section I.A.

[illegible]

Forecasted loads are based on the 2024 PJM Load Forecast

## **I. NECESSITY FOR THE PROPOSED PROJECT**

- D. If power flow modeling indicates that the existing system is, or will at some future time be, inadequate under certain contingency situations, provide a list of all these contingencies and the associated violations. Describe the critical contingencies including the affected elements and the year and season when the violation(s) is first noted in the planning studies. Provide the applicable computer screenshots of single-line diagrams from power flow simulations depicting the circuits and substations experiencing thermal overloads and voltage violations during the critical contingencies described above.**

Response: As discussed in Section I.C, Line #579 and Line #2110 (where collocated) cannot adequately serve the current and projected needs of the Company and its customers because of aging infrastructure. The Company has developed a plan to address its end-of-life facilities, setting completion target dates for end-of-life projects based on the conditions of the facilities, the Company's resources, and the need to schedule outages. The Company has set June 1, 2029, as the target in-service date for the proposed Rebuild Project.

As discussed in Section I.A, the Company performed an end-of-life study with Line #579 and Line #2110 modeled out-of-service to assess the reliability impact of these lines. The power flow model used was PJM's 2029 RTEP case. The study identified several thermal overloads, which are shown in Attachment I.D.1.

2029 Generation Deliverability Thermal Results							
Monitored Facility	kVs	Cont Name	ContType	Max of Final AC % LD		2029SUM_Base	2029SUM_579_2110_OOS
314475 6HARBORV 230 314514 6YADKIN 230 1	230	DVP_P1-2: LN 565_SRT-A	Single	< 90			112.2
314484 6HARBORV226 230 314453 6CHRLND 230 1	230	DVP_P1-2: LN 565_SRT-A	Single	< 90			115.8
314523 6CRITTDN 230 314484 6HARBORV226 230 1	230	DVP_P1-2: LN 565_SRT-A	Single	< 90			118.8
314533 6SMITFLD 230 314475 6HARBORV 230 1	230	DVP_P1-2: LN 565_SRT-A	Single	< 90			116.1
314538 6SURREY 230 314533 6SMITFLD 230 1	230	DVP_P1-2: LN 565_SRT-A	Single	< 90			117.8
314538 6SURREY 230 314523 6CRITTDN 230 1	230	DVP_P1-2: LN 565_SRT-A	Single	< 90			122.6
314538 6SURREY 230 314523 6CRITTDN 230 1	230	DVP_P4-2: H7T565_SRT-S	Breaker	< 90			100.3

## **I. NECESSITY FOR THE PROPOSED PROJECT**

### **E. Describe the feasible project alternatives, if any, considered for meeting the identified need including any associated studies conducted by the Applicant or analysis provided to the RTO. Explain why each alternative was rejected.**

Response: No feasible electrical alternatives have been submitted to PJM since the driver of the Rebuild Project is the need to replace aging infrastructure approaching the end of its service life in compliance with the Company's mandatory Planning Criteria. See Section I.A. Alternatives that would require acquisition of new right-of-way were not given serious consideration because the existing corridor is adequate to construct the proposed Line #579 Rebuild. PJM did not require the Company to consider alternatives that would require new right-of-way to be built.

#### **Analysis of Demand-Side Resources:**

Pursuant to the Commission's November 26, 2013, Order entered in Case No. PUE-2012-00029,<sup>20</sup> and its November 1, 2018, Final Order entered in Case No. PUR-2018-00075,<sup>21</sup> the Company is required to provide analysis of demand-side resources ("DSM") incorporated into the Company's planning studies. DSM is the broad term that includes both energy efficiency ("EE") and demand response ("DR"). In this case, the Company has identified a need for the Rebuild Project in order to comply with mandatory Planning Criteria, thereby enabling the Company to maintain the overall long-term reliability of its transmission system.<sup>22</sup> Notwithstanding, when performing an analysis based on PJM's 50/50 load forecast, there is no adjustment in load for DR programs because PJM only dispatches DR when the system is under stress (*i.e.*, a system emergency). Accordingly, while existing DSM is considered to the extent the load forecast accounts for it, DR that has been bid previously into PJM's capacity market is not a factor for this Rebuild Project because of the identified need. Based on these considerations, the evaluation of the Rebuild Project demonstrated that despite accounting for DSM consistent with PJM's methods, the Rebuild Project is necessary.

Incremental DSM also will not eliminate the need for the Rebuild Project. As reflected in Attachment I.C.1, the peak load area for this Rebuild Project (historic and projected) ranges from 17,100 to 39,817 MW (summer and winter). By way

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<sup>20</sup> *Application of Virginia Electric and Power Company d/b/a Dominion Virginia Power for approval and certification of electric facilities: Surry-Skiffes Creek 500 kV Transmission Line, Skiffes Creek-Wheaton 230 kV Transmission Line, and Skiffes Creek 500 kV-230 kV-115 kV Switching Station*, Case No. PUE-2012-00029, Final Order (Nov. 26, 2023).

<sup>21</sup> *Application of Virginia Electric and Power Company for approval and certification of electric transmission facilities under Va. Code § 56-46.1 and the Utility Facilities Act, Va. Code § 56-265.1 et seq.*, Case No. PUR-2018-00075, Final Order (Nov. 1, 2018).

<sup>22</sup> While the PJM load forecast does not directly incorporate DR, its load forecast incorporates variables derived from Itron that reflect EE by modeling the stock of end-use equipment and its usages. Further, because PJM's load forecast considers the historical non-coincident peak ("NCP") for each load serving entity ("LSE") within PJM, it reflects the actual load reductions achieved by DSM programs to the extent an LSE has used DSM to reduce its NCPs.

of comparison, statewide, the Company achieved demand savings of 276.5 MW (net) / 350.0 MW (gross) from its DSM programs in 2023.

## **I. NECESSITY FOR THE PROPOSED PROJECT**

### **F. Describe any lines or facilities that will be removed, replaced, or taken out of service upon completion of the proposed project, including the number of circuits and normal and emergency ratings of the facilities.**

Response: Line #579 Rebuild

For construction of the Line #579 Rebuild, the Company plans to remove all the existing 500 kV structures supporting Line #579 from Structure #579/1 through Structure #579/183 (approximately 33.1 miles), which are primarily COR-TEN® lattice structures. For the approximately 24.6-mile Single Circuit Segment of Line #579, the Company proposes to replace the existing primarily single circuit lattice structures with primarily single circuit 500 kV dulled galvanized steel monopole structures. For the approximately 8.5-mile Double Circuit Segment, the Company proposes to replace the existing primarily double circuit lattice structures with primarily double circuit H-frame structures. Line #579 will be rebuilt entirely within the existing right-of-way, which varies in width between 130 and 350 feet in the Single Circuit Segment and 130 and 265 feet in the Double Circuit Segment, or within the Company's existing property rights. See Attachment I.A.1.

The Line #579 Rebuild also includes replacing approximately 33.1 miles of the existing three-phase twin-bundled 2500 ACAR conductor, which has a normal/emergency transfer rating of 3,425 MVA.

#### Line #2110 Partial Rebuild

For construction of the Line #2110 Partial Rebuild along approximately 7.7 miles of the 8.5-mile Double Circuit Segment from Structure #579/132 / #2110/36 through Structure #579/147 / #2110/51 and from Structure #579/154 / #2110/67 through Structure #579/183 / #2110/96,<sup>23</sup> the Company proposes to replace the existing primarily double circuit lattice structures with primarily double circuit H-frame structures, entirely within the existing right-of-way, which varies in width between 130 and 265 feet, or within the Company's existing property rights. See Attachment I.A.1.

The Line #2110 Partial Rebuild also includes replacing approximately 7.7 miles of the existing three-phase twin-bundled 768.2 ACSS/TW/HS285 type conductor, which has a normal/emergency transfer rating of 1,386 MVA.<sup>24</sup>

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<sup>23</sup> See *supra* n 3.

<sup>24</sup> See *supra*, n. 8 and n. 10.

**I. NECESSITY FOR THE PROPOSED PROJECT**

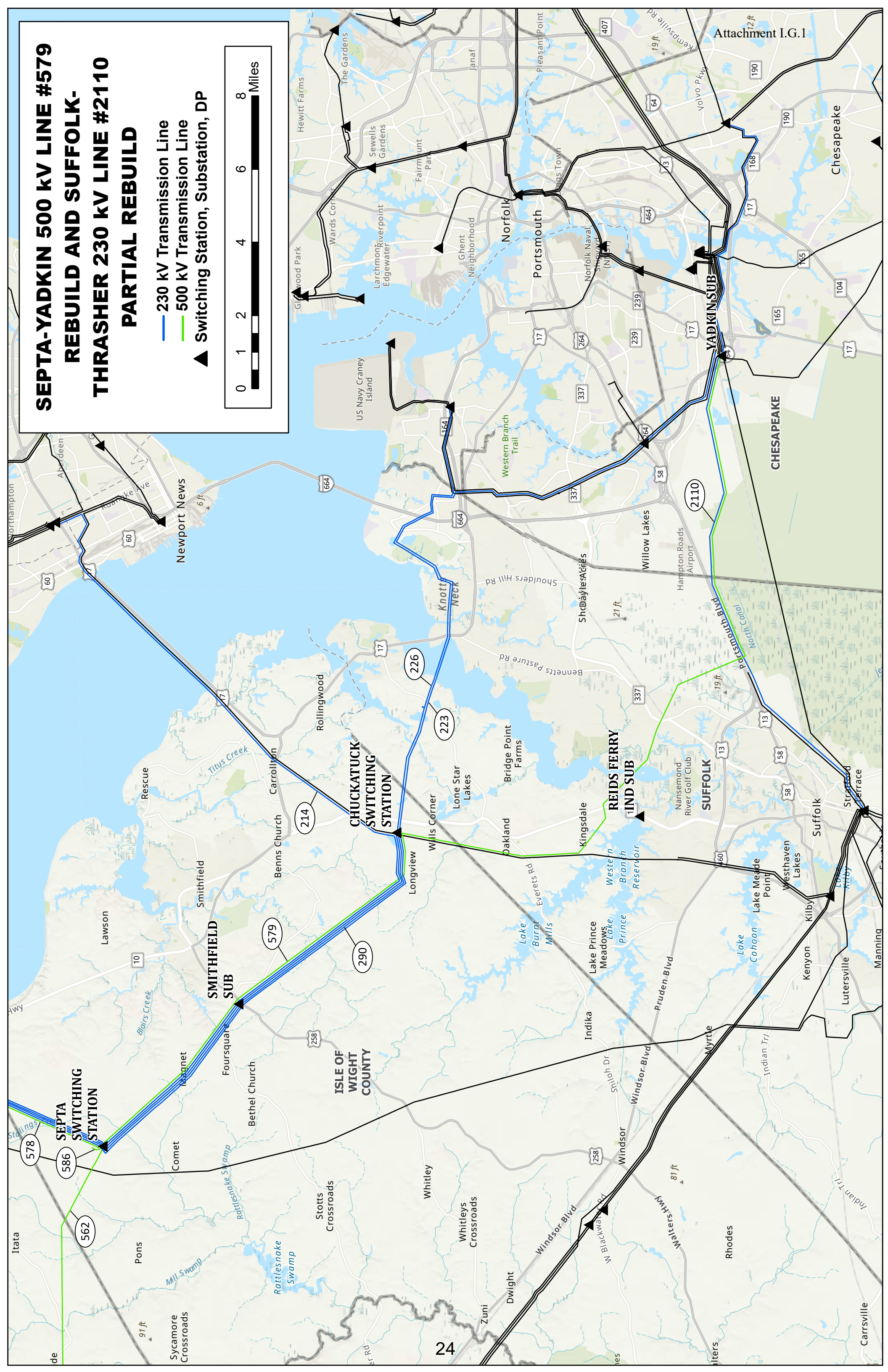
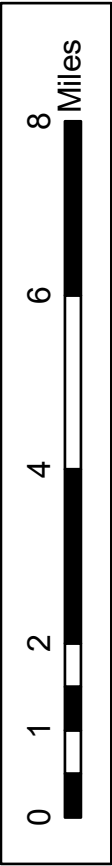
- G. Provide a system map, in color and of suitable scale, showing the location and voltage of the Applicant's transmission lines, substations, generating facilities, etc., that would affect or be affected by the new transmission line and are relevant to the necessity for the proposed line. Clearly label on this map all points referenced in the necessity statement.**

Response: See Attachment I.G.1.



SEPTA-YADKIN 500 kV LINE #579  
REBUILD AND SUFFOLK-  
THRASHER 230 kV LINE #2110  
PARTIAL REBUILD

- 230 kV Transmission Line
- 500 kV Transmission Line
- Switching Station, Substation, DP



## **I. NECESSITY FOR THE PROPOSED PROJECT**

### **H. Provide the desired in-service date of the proposed project and the estimated construction time.**

Response: The desired in-service target date for the proposed Rebuild Project is June 1, 2029.

The Company estimates it will take approximately 39 months for detailed engineering, materials procurement, permitting, real estate, and construction after a final order from the Commission. Accordingly, to support this estimated construction timeline and construction plan, the Company respectfully requests a final order by February 28, 2026. Should the Commission issue a final order by February 28, 2026, the Company estimates that construction should begin around June 1, 2026, and be completed by June 1, 2029. This schedule is contingent upon obtaining the necessary permits and outages, the latter of which may be particularly challenging due to the amount of new load growth, rebuilds, and new builds scheduled to occur in this load area. Dates may need to be adjusted based on permitting delays or design modifications to comply with additional agency requirements identified during the permitting application process, as well as the ability to schedule outages, and unpredictable delays due to labor shortages or materials/supply issues.

In addition, the Company is monitoring actively regulatory changes and requirements associated with the NLEB and how they could potentially impact construction timing associated with TOYRs. The USFWS issued the final guidance, replacing the interim guidance, on October 23, 2024, and the final guidance was fully implemented November 30, 2024. The Company is reviewing the final guidance to the extent it applies to the Company's projects and will coordinate with USFWS during the permitting stage.

The Company is also monitoring potential regulatory changes associated with the potential up-listing of the TCB. On September 14, 2022, the USFWS published the proposed rule to the Federal Register to list the TCB as endangered under the Endangered Species Act. USFWS extended its Final Rule issuance target from September 2023 to September 2024, but as of the date of this filing, the TCB listing decision has not been issued. The Company is tracking actively this ruling and evaluating the effects of potential outcomes on Company projects' permitting, construction, and in-service dates, including electric transmission projects.

Any adjustments to this Rebuild Project schedule resulting from these or similar challenges could necessitate a minimum of a six- to twelve-month delay in the targeted in-service date. Accordingly, for purposes of judicial economy, the Company requests that the Commission issue a final order approving both a desired in-service target date (*i.e.*, June 1, 2029) and an authorization sunset date (*i.e.*, June 1, 2030) for energization of the Rebuild Project.<sup>25</sup>

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<sup>25</sup> See *supra*, n. 12.

**I. NECESSITY FOR THE PROPOSED PROJECT**

- I. Provide the estimated total cost of the project as well as total transmission-related costs and total substation-related costs. Provide the total estimated cost for each feasible alternative considered. Identify and describe the cost classification (e.g. “conceptual cost,” “detailed cost,” etc.) for each cost provided.**

Response: The total estimated conceptual cost of the Rebuild Project is approximately \$248.9 million, which includes approximately \$244.6 million for transmission-related work and approximately \$4.3 million for station-related work (2025 dollars).

The approximate station-related costs are broken out in the table below (2025 dollars).

**Station-Related Costs by Substation / Switching Station  
(Millions (approximate))**

Station	Estimated Conceptual Costs (\$M)
Septa Switching Station	\$3.9
Yadkin Substation	\$0.4

**I. NECESSITY FOR THE PROPOSED PROJECT**

- J. If the proposed project has been approved by the RTO, provide the line number, regional transmission expansion plan number, cost responsibility assignments, and cost allocation methodology. State whether the proposed project is considered to be a baseline or supplemental project.**

Response: The components of the proposed Rebuild Project were first presented to the PJM stakeholders at the TEAC meeting as part of the 2024 Window #1 on December 3, 2024, and again on January 7, 2025, as an end-of-life rebuild project. The Rebuild Project subsequently was assigned baseline upgrade identification number b3929.1-4. See Attachments I.J.1 and I.J.2 for the relevant slides presented in the PJM TEAC meetings on December 3, 2024 and January 7, 2025.

The cost allocation for the Rebuild Project is shown in the following PJM tables.



Upgrade ID	Description	Cost Estimate (\$M)	TO	Cost Responsibility	Required IS Date
b3929.1	Rebuild approximately 33.09 miles of 500 kV line No. 579 from structure 579/1 inside Septa substation to structure 579/193 inside Yadkin substation.	\$191.25	VEPCO	Load-Ratio Share Allocation: AEC (1.58%)/AEP (13.71%)/APS (5.49%)/ATSI (7.69%)/BGE (4.16%)/ComEd (13.25%)/Dayton (2.07%)/DEOK (3.18%)/Dominion (14.20%)/DPL (2.57%)/DL (1.65%)/EKPC (2.30%)/JCPL (3.80%)/ME (1.88%)/OVEC (0.06%)/PECO (5.32%)/PENELEC (1.81%)/PEPCO (3.79%)/PPL (4.58%)/PSEG (6.24%)/RE (0.25%)/Neptune (0.42%)  DFAX Allocation: Dominion (100.00%)	6/1/2029
b3929.2	At Septa substation, upgrade CB (579T586), breaker switches (56288, 57985, 58688 and 57988) and line leads to 5000A rating to support line No. 519 rebuild.	\$3.84	VEPCO	Load-Ratio Share Allocation: AEC (1.58%)/AEP (13.71%)/APS (5.49%)/ATSI (7.69%)/BGE (4.16%)/ComEd (13.25%)/Dayton (2.07%)/DEOK (3.18%)/Dominion (14.20%)/DPL (2.57%)/DL (1.65%)/EKPC (2.30%)/JCPL (3.80%)/ME (1.88%)/OVEC (0.06%)/PECO (5.32%)/PENELEC (1.81%)/PEPCO (3.79%)/PPL (4.58%)/PSEG (6.24%)/RE (0.25%)/Neptune (0.42%)  DFAX Allocation: Dominion (100.00%)	6/1/2029
b3929.3	At Yadkin substation, upgrade line leads to 5000A rating to support line No. 579 rebuild.	\$0.44	VEPCO	Load-Ratio Share Allocation: AEC (1.58%)/AEP (13.71%)/APS (5.49%)/ATSI (7.69%)/BGE (4.16%)/ComEd (13.25%)/Dayton (2.07%)/DEOK (3.18%)/Dominion (14.20%)/DPL (2.57%)/DL (1.65%)/EKPC (2.30%)/JCPL (3.80%)/ME (1.88%)/OVEC (0.06%)/PECO (5.32%)/PENELEC (1.81%)/PEPCO (3.79%)/PPL (4.58%)/PSEG (6.24%)/RE (0.25%)/Neptune (0.42%)  DFAX Allocation: Dominion (100.00%)	6/1/2029
b3929.4	Rebuild approximately 7.7 miles of 230 kV line No. 2110 Suffolk-Thrasher that share the double circuit towers under Line No. 579.	\$21.25	VEPCO	Dominion (100.00%)	6/1/2029

# Reliability Analysis Update

Sami Abdulsalam, Director  
PJM Transmission Planning

Transmission Expansion Advisory  
Committee  
December 3, 2024

Attachment I.J.1

# Recommended Solutions

# Dominion Transmission Zone: Baseline 500kV Line #579 Rebuild (End of Life Criteria)

## Process Stage: First Review

**Criteria:** Dominion's FERC 715 Planning Criteria (C.2.9 – End of Life Criteria)

**Assumption Reference:** FERC 715 Planning Criteria

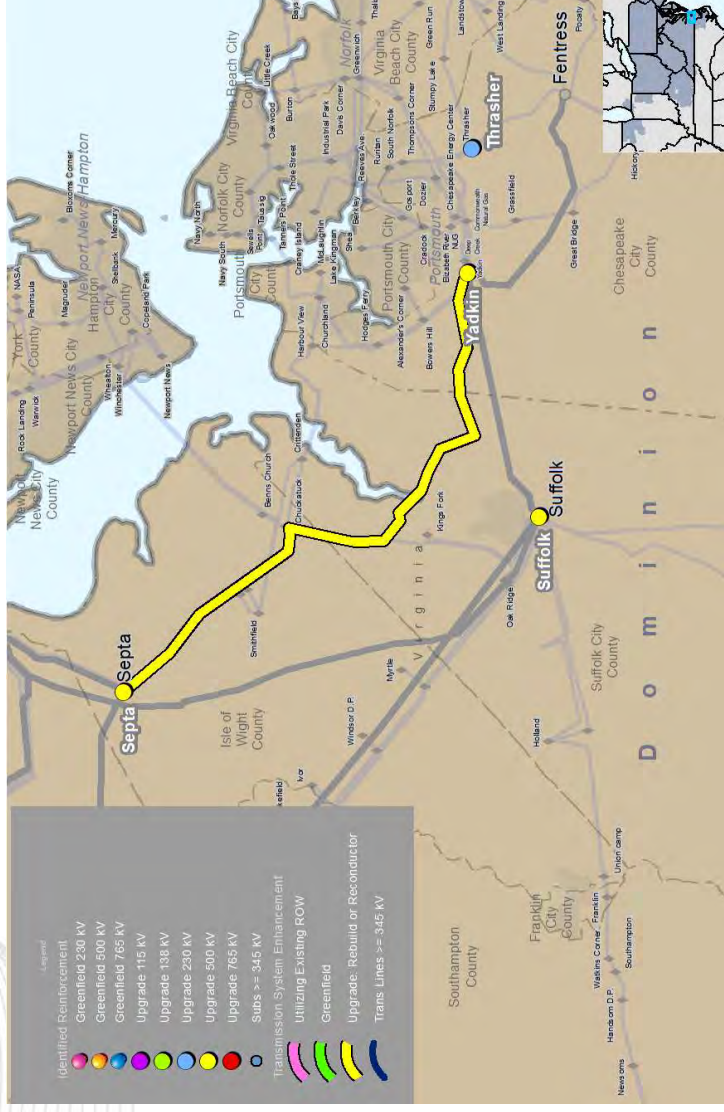
**Model Used for Analysis:** 2024 Series 2029 RTEP cases

## Problem Statement:

- Line #579 is approximately 33.1 miles of 500kV transmission line from Septa to Yadkin. Most of the line is Corten 5 Series, but approximately 8.4 miles of the line has 230 kV Line #2110 line underbuilt on 5-2 Corten towers. These structures were installed in 1985 and are approaching the end of service life. Corten Series 5 towers have been problematic for many years and fallen into a pattern where Dominion can expect to return for future maintenance if the line is not rebuilt by the requested target date.

- Third party assessment has determined that the towers have corroded to a point where they exhibit pre-mature thinning of structure members and pack-out at joints. If left unaddressed these issues could result in failure of structures and potentially the collapse for the line. (DOM-O1)

Continued on next slide....







# Dominion Transmission Zone: Baseline 500kV Line #579 Rebuild (End of Life Criteria)

## Existing Facility Rating:

Branch	SN/SE/WN/WE (MVA)
230kV Line #2110 Thrasher – Suffolk	940/940/1193/1193
500kV Line #579 Septa – Yadkin	3426/3426/3984/4018

## Preliminary Facility Rating:

Branch	SN/SE/WN/WE (MVA)
230kV Line #2110 Thrasher – Suffolk	940/940/1193/1193
500kV Line #579 Septa – Yadkin	4357/4357/5155/5155

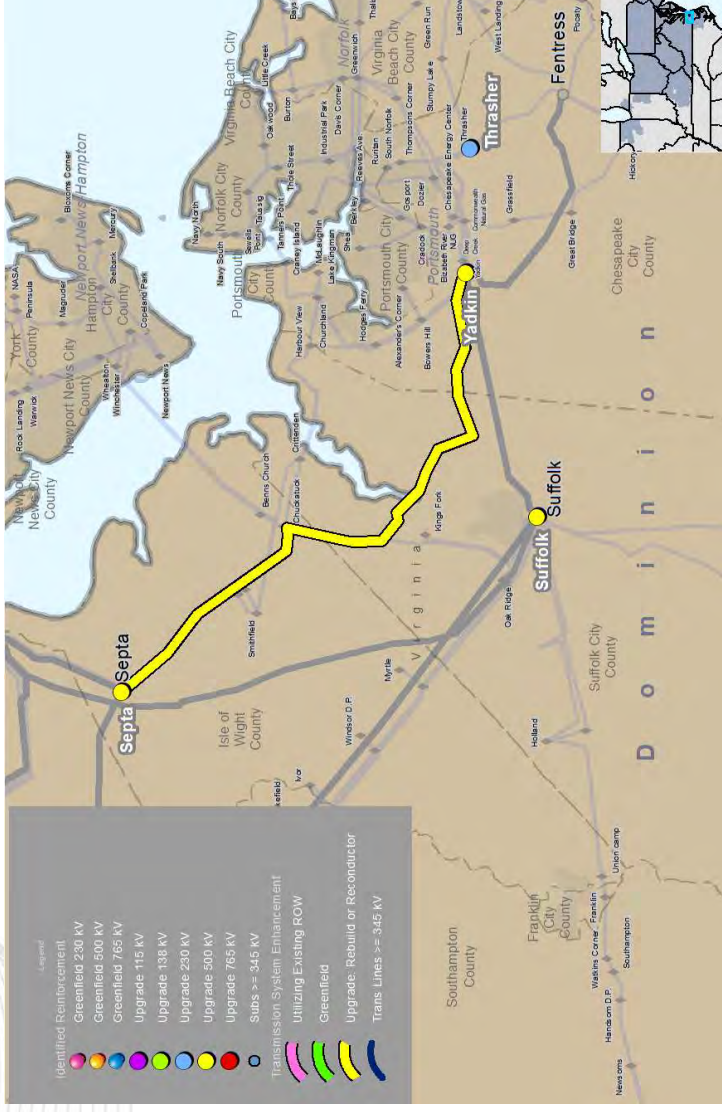
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## Proposed Solution: Proposal 2024-W1-980:

- Rebuild approximately 33.09 miles of 500 kV line #579 from structure 579/1 inside Septa substation to structure 579/193 inside Yadkin substation.
- Rebuild approximately 7.7 miles of 230kV Line #2110 Suffolk – Thrasher that share the double circuit towers under Line #579.
- At Septa substation, upgrade CB (579T586), breaker switches (56288, 57985, 58688 & 57988), and line leads to 5000A rating to support Line #579 rebuild.
- At Yadkin substation, upgrade line leads to 5000A rating to support Line #579 rebuild.

**Estimated Cost: \$216.78 M**

**Required In-Service: 6/1/2029**





# Reliability Analysis Update

Sami Abdulsalam, Director  
PJM Transmission Planning

Transmission Expansion Advisory  
Committee  
January 7, 2025

Attachment I.J.2

# Recommended Solutions 2<sup>nd</sup> Read for Local Solutions



# Dominion Transmission Zone: Baseline 500kV Line #579 Rebuild (End of Life Criteria)

**Process Stage:** Second Review

**Criteria:** Dominion's FERC 715 Planning Criteria (C.2.9 – End of Life Criteria)

**Assumption Reference:** FERC 715 Planning Criteria

**Model Used for Analysis:** 2024 Series 2029 RTEP cases

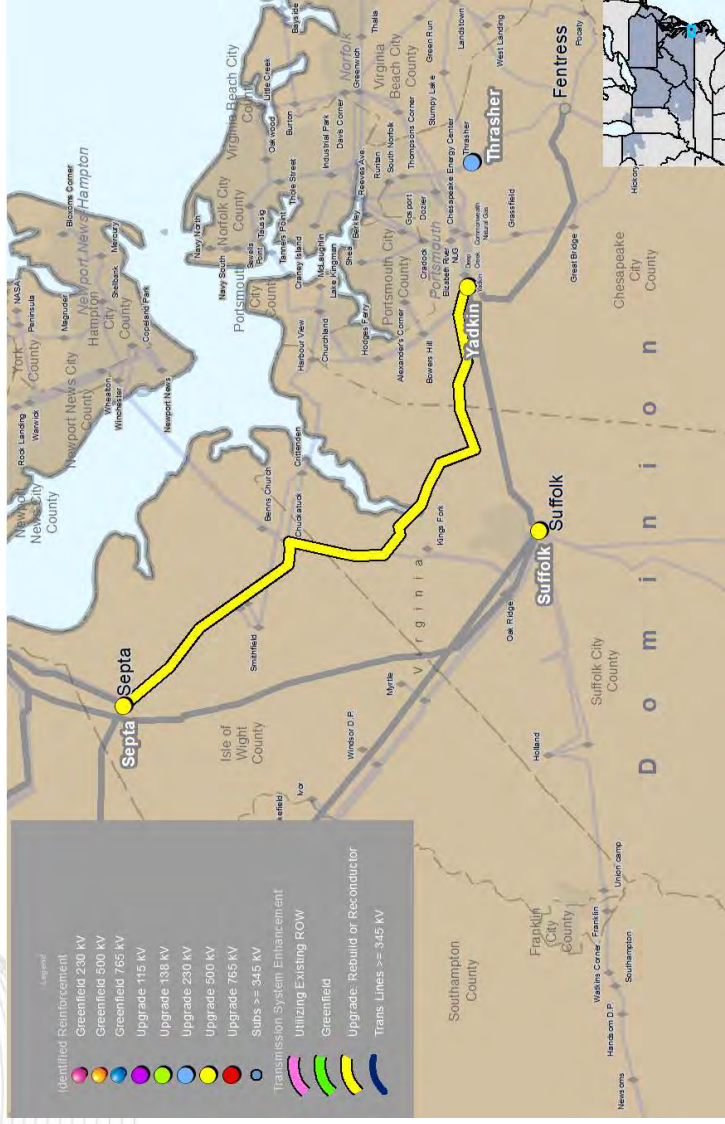
**Problem Statement:**

- Line #579 is approximately 33.1 miles of 500kV transmission line from Septa to Yadkin. Most of the line is Corten 5 Series, but approximately 8.4 miles of the line has 230 kV Line #2110 line underbuilt on 5-2 Corten towers. These structures were installed in 1985 and are approaching the end of service life.
- Corten Series 5 towers have been problematic for many years and fallen into a pattern where Dominion can expect to return for future maintenance if the line is not rebuilt by the requested target date.
- Third party assessment has determined that the towers have corroded to a point where they exhibit pre-mature thinning of structure members and pack-out at joints. If left unaddressed these issues could result in failure of structures and potentially the collapse for the line. (DOM-01)

**Existing Facility Rating:**

Branch	SN/SE/WN/WE (MVA)
230kV Line #2110 Thrasher – Suffolk	940/940/1193/1193
500kV Line #579 Septa – Yadkin	3426/3426/3984/4018

Continued on next slide....





# Dominion Transmission Zone: Baseline 500kV Line #579 Rebuild (End of Life Criteria)

## Preliminary Facility Rating:

Branch	SN/SE/WN/WE (MVA)
230kV Line #2110 Thrasher – Suffolk	940/940/1193/1193
500kV Line #579 Septa – Yadkin	4357/4357/5155/5155

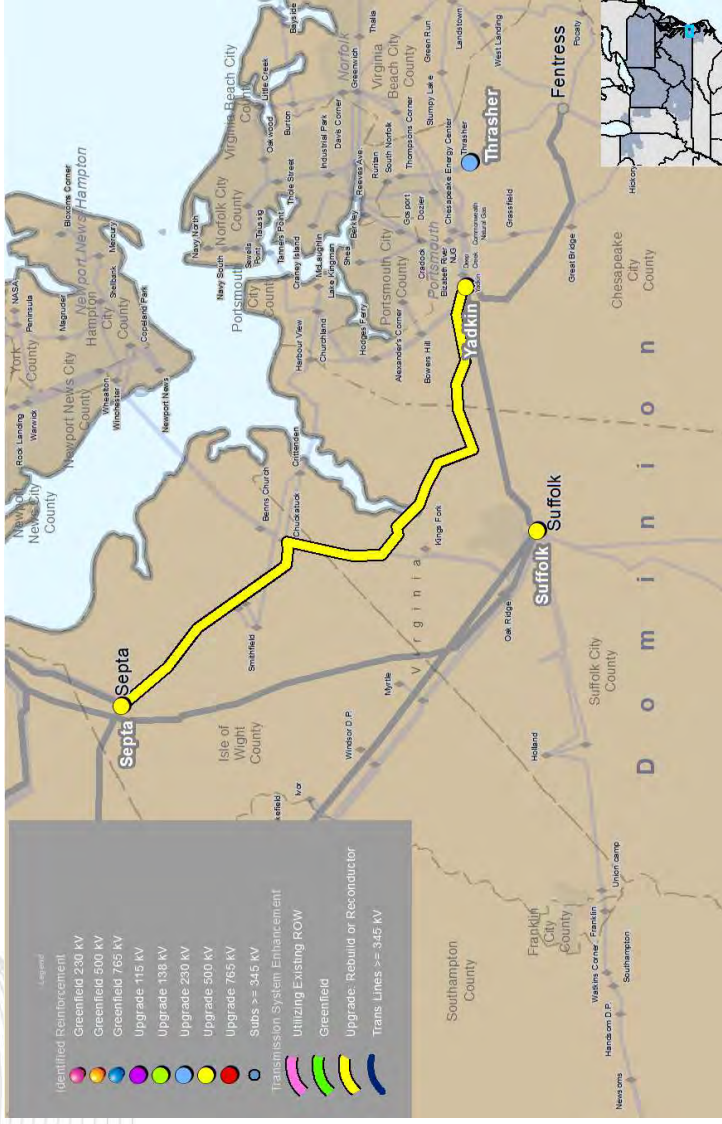
## Recommended Solution: Proposal 2024-W1-980:

- Rebuild approximately 33.09 miles of 500 kV line #579 from structure 579/1 inside Septa substation to structure 579/193 inside Yadkin substation.  
**Estimated Cost: \$191.25M (b3929.1)**
- Rebuild approximately 7.7 miles of 230kV Line #2110 Suffolk – Thrasher that share the double circuit towers under Line #579. **Estimated Cost: \$21.25M (b3929.4)**
- At Septa substation, upgrade CB (579T586), breaker switches (56288, 57985, 58688 & 57988), and line leads to 5000A rating to support Line #579 rebuild. **Estimated Cost: \$3.84M (b3929.2)**
- At Yadkin substation, upgrade line leads to 5000A rating to support Line #579 rebuild. **Estimated Cost: \$0.44M (b3929.3)**

**Estimated Cost: \$216.78 M**

**Required In-Service: 6/1/2029**

**Projected In-Service: 6/1/2029**



**I. NECESSITY FOR THE PROPOSED PROJECT**

- K. If the need for the proposed project is due in part to reliability issues and the proposed project is a rebuild of an existing transmission line(s), provide five years of outage history for the line(s), including for each outage the cause, duration and number of customers affected. Include a summary of the average annual number and duration of outages. Provide the average annual number and duration of outages on all Applicant circuits of the same voltage, as well as the total number of such circuits. In addition to outage history, provide five years of maintenance history on the line(s) to be rebuilt including a description of the work performed as well as the cost to complete the maintenance. Describe any system work already undertaken to address this outage history.**

Response: Not applicable. See Section I.A.

## **I. NECESSITY FOR THE PROPOSED PROJECT**

- L. If the need for the proposed project is due in part to deterioration of structures and associated equipment, provide representative photographs and inspection records detailing their condition.**

Response: The proposed Rebuild Project will replace aging infrastructure that is approaching the end of its service life. See Attachment I.L.1 for an overview of the rebuild, representative pictures of the deterioration of structures supporting Line #579, and non-structural related outstanding notifications. See also Attachment I.L.2 for the Transmission Specification Book containing the COR-TEN® Tower Monitoring Program for Septa-Yadkin Line #579 and Attachment I.L.3 for Weathering Steel Tower Inspection/Rehabilitation Data Sheets.

### Septa-Yadkin Line #579

#### TL579 Summary:

Located between Septa and Yadkin Substations, Line #579 is at its end of service life. Originally constructed in 1985, TL579 was installed on weathering (corten) steel lattice towers. Industry guidelines indicate TL579 towers are at their end of serviceable life. Rebuild project 992993 has been initiated to assure Dominion Energy can maintain and improve reliable electric service to customers served by TL579. The proposed Rebuild Project will remove aging infrastructure, which the Company has determined is no longer cost-effective to continue to repair and replace on an individual basis and replace it with current 500 kV construction standards.

#### EOL Project:

Currently, rebuild project 993107 has been established and has a target completion date of 6/1/2029.

#### Right-of-ways:

The majority of Line #579 passes through rural areas with two significant road crossings. The crossings include US Route 58 (Portsmouth Blvd) and Interstate 64 (Hampton Roads Beltway). ROW width varies from 130 feet to 350 feet in various locations.

#### TL579

~295' ROW between Strs. 1-60  
 ~350' ROW between Strs. 60-66  
 ~250' ROW between Strs. 66-76  
 ~300' ROW between Strs. 76-79  
 ~250' ROW between Strs. 79-94  
 ~150' ROW between Strs. 94-132  
 ~130' ROW between Strs. 132-134  
 ~205' ROW between Strs. 134-144  
 ~230' ROW between Strs. 144-158  
 ~130' ROW between Strs. 158-177  
 ~265' ROW between Strs. 177-184

#### TL588 Maintenance Activity:

Extensive rehab was conducted in 2022 under project 58408V70. Rehabbing corten lines on a 12 year cycle. Currently there are a total of thirteen (13) structure-related open notifications (approximately %7 of structures).



**Severe Packout & Steel Damage**



### Severe Packout & Steel Damage (Cont.)





## Foundation Damage



## Non-Structural Related Outstanding Notifications

OUTSTANDING NOTIFICATIONS - LINE 579							
LINE/STR	CAUSE GROUP	CAUSE CODE	CAUSE TEXT	NOTIF. DATE	REPORTED BY	NOTIFICATION	
2110/41, 579/137	Insulator Conductor	Broken- L=Leave, R=Replace	Insulator Conductor-Broken- L=Leave, R=R	8/12/2019	ADAM063	12068433	
2110/41, 579/137	Insulator Conductor	Wire Position L,M,R,T,B	L	8/12/2019	ADAM063	12068433	
2110/41, 579/137	Insulator Conductor	(H) Hot End / (C) Cold End	H	8/12/2019	ADAM063	12068433	
2110/86, 579/173	Insulator Conductor	Wire Position L,M,R,T,B	R - Right insulator	1/28/2017	HAVERFIELD	11618731	
2110/86, 579/173	Insulator Conductor	Broken- L=Leave, R=Replace		1/28/2017	HAVERFIELD	11618731	
579/103	Insulator Conductor	Wire Position L,M,R,T,B	R	5/24/2017	HAZON	11715401	
579/103	Insulator Conductor	Contaminated		5/24/2017	HAZON	11715401	
579/105	Insulator Conductor	Wire Position L,M,R,T,B	R - Right insulator	1/28/2017	HAVERFIELD	11618729	
579/105	Insulator Conductor	Broken- L=Leave, R=Replace		1/28/2017	HAVERFIELD	11618729	
579/105	Insulator Static	Broken- L=Leave, R=Replace	Broken insulator	8/21/2020	HELOAIR	12327273	
579/105	Insulator Static	Wire Position L,M,R,T,B	left phase Descending	8/21/2020	HELOAIR	12327273	
579/22	Insulator Conductor	Broken- L=Leave, R=Replace	1 glass insulator	5/28/2015	HELOAIR	11468075	
579/22	Insulator Conductor	Wire Position L,M,R,T,B	M	5/28/2015	HELOAIR	11468075	
579/22	Conductor	Wire Position L,M,R,T,B	M	1/28/2017	HAVERFIELD	11618725	
579/22	Conductor	Damper(s)-L=Loose, M=Missing	Moved/Slid	1/28/2017	HAVERFIELD	11618725	
579/34	Conductor	Wire Position L,M,R,T,B	L	1/28/2017	HAVERFIELD	11618726	
579/34	Conductor	Damper(s)-L=Loose, M=Missing	Moved/Slid	1/28/2017	HAVERFIELD	11618726	
579/53	Insulator Conductor	Wire Position L,M,R,T,B	M	2/11/2020	DAVI120	12195825	
579/53	Insulator Conductor	Broken- L=Leave, R=Replace	Chipped	2/11/2020	DAVI120	12195825	
579/53	Insulator Conductor	Wire Position L,M,R,T,B	R	2/11/2020	DAVI120	12195827	
579/53	Insulator Conductor	Broken- L=Leave, R=Replace	Chipped insulator	2/11/2020	DAVI120	12195827	
579/72	Insulator Conductor	Wire Position L,M,R,T,B	L	10/12/2017	HAZON	11715400	
579/72	Insulator Conductor	Contaminated		10/12/2017	HAZON	11715400	
579/79	Insulator Conductor	Wire Position L,M,R,T,B	R	2/13/2020	DAVI120	12196652	
579/79	Insulator Conductor	Broken- L=Leave, R=Replace	Chipped bell	2/13/2020	DAVI120	12196652	
579/89	Insulator Static	Broken- L=Leave, R=Replace	Broken insulators	8/21/2020	HELOAIR	12327570	
579/89	Insulator Static	Wire Position L,M,R,T,B	right phase Descending	8/21/2020	HELOAIR	12327570	



*Transmission Construction  
Specification Book*

**TRANSMISSION PROJECTS**

10900 Nuckols Rd, Ste. 400 Glen Allen, VA 23060

**CORTEN TOWER REHABILITATION**

**LINE 579**

**STRS. 7 – 131**

**SEPTA – YADKIN**

**NW58408V70**

**BM# –**

**APPROVED FOR CONSTRUCTION**

\_\_\_\_\_  
**DATE** \_\_\_\_\_



**Dominion  
Energy®**

***Transmission Construction  
Specification Book***

**TRANSMISSION PROJECTS**

**10900 Nuckols Rd, Ste. 400 Glen Allen, VA 23060**

**CORTEN TOWER REHABILITATION**

**LINE 579**

**STRS 7 – 131**

**SEPTA – YADKIN**

**NW58408V70**

**BM# –**

**PROJECT ENGINEER:**

**MARK WILSON**

**(804) 771-4408**

**(804) 370-4678 (CELL)**

**ALTERNATE CONTACT:**

**CHRIS HOULIHAN**

**(804) 771-6742**

**DESIGN VERIFICATION**

*Mark Wilson*

**(STRUCTURAL ENGINEER)**

**DATE**

**7/6/20**

# *Table of Contents*

# CORTEN TOWER REHABILITATION

Line 579

## TABLE OF CONTENTS

WORK SUMMARY

ROUTE MAP

PROJECT SPEC. FOR TOWER INSPECTION AND REHABILITATION

CONCRETE FOUNDATION REPAIR & RESTORATION

STRUCTURE LOCATION SHEETS

GROUNDING REQUIREMENTS

FALL PROTECTION CLIP INSTALLATION INSTRUCTIONS

### CONSTRUCTION DRAWINGS:

Numbering of Steel Tower – Lower (Single Circuit Installed)

Numbering of Steel Tower – Aerial



# *Work Summary*

Work Summary  
Weathering Steel Rehabilitation  
Lines 579

The purpose of this project is to inspect and rehabilitate the self supporting towers of Transmission Line 579 between Septa Sub and Yadkin Sub. Sixty eight (68) structures to be inspected are from 579/7 to 579/131 in Isle of Wright County, Virginia. Maps are included here to indicate the specific location of the weathering steel towers. See “Inspection” section below for requirements for foundation inspection, as well as climbing inspection, of these towers.

The specification for this project will be the *Project Specifications for Weathering Steel Transmission Tower Inspection and Rehabilitation*. The contractor performing the work for this project shall be thoroughly familiar with the above specification.

**Note: Some of these towers may not be accessible due to time of year (very soft wet soils, farming, etc.) or due to landowners making changes on land (i.e. fences). Please note, if tower was not accessed.**

**Inspection**

The contractor shall inspect every tower on this project. The inspection shall be in accordance with the specification and include a ground-line inspection, foundation assessment and a full tower climbing inspection. All deficiencies or damage found on the tower during the tower climbing inspection will be repaired as a part of this project unless noted otherwise in this specification.

**Grounding**

Grounding for every tower needs to be inspected and rehabilitated per the attached *Corten Refurbishment Project Structure Grounding Procedures*. Note that temporary grounding is required on every structure, regardless of the condition of any existing grounding, before any other work is performed. If the tower does not have a visible ground in good condition; the grounding system shall be repaired and/or replaced in accordance with the attached grounding detail (Drawing 60.920).

**Site Access**

Site access is available via select road crossings and navigable right of way paths. Some right of way access points may require coordination with land owners via the Dominion construction representative. Select road crossings have been noted on the structure location sheets. The noted road crossings are only intended to be a preliminary guide for site access points; additional access points may be available based on coordination with landowners.

**Safety Clips**

Fall protection safety clips will be installed on step bolts for all structures. Please see the manufacturer installations included in this specification.

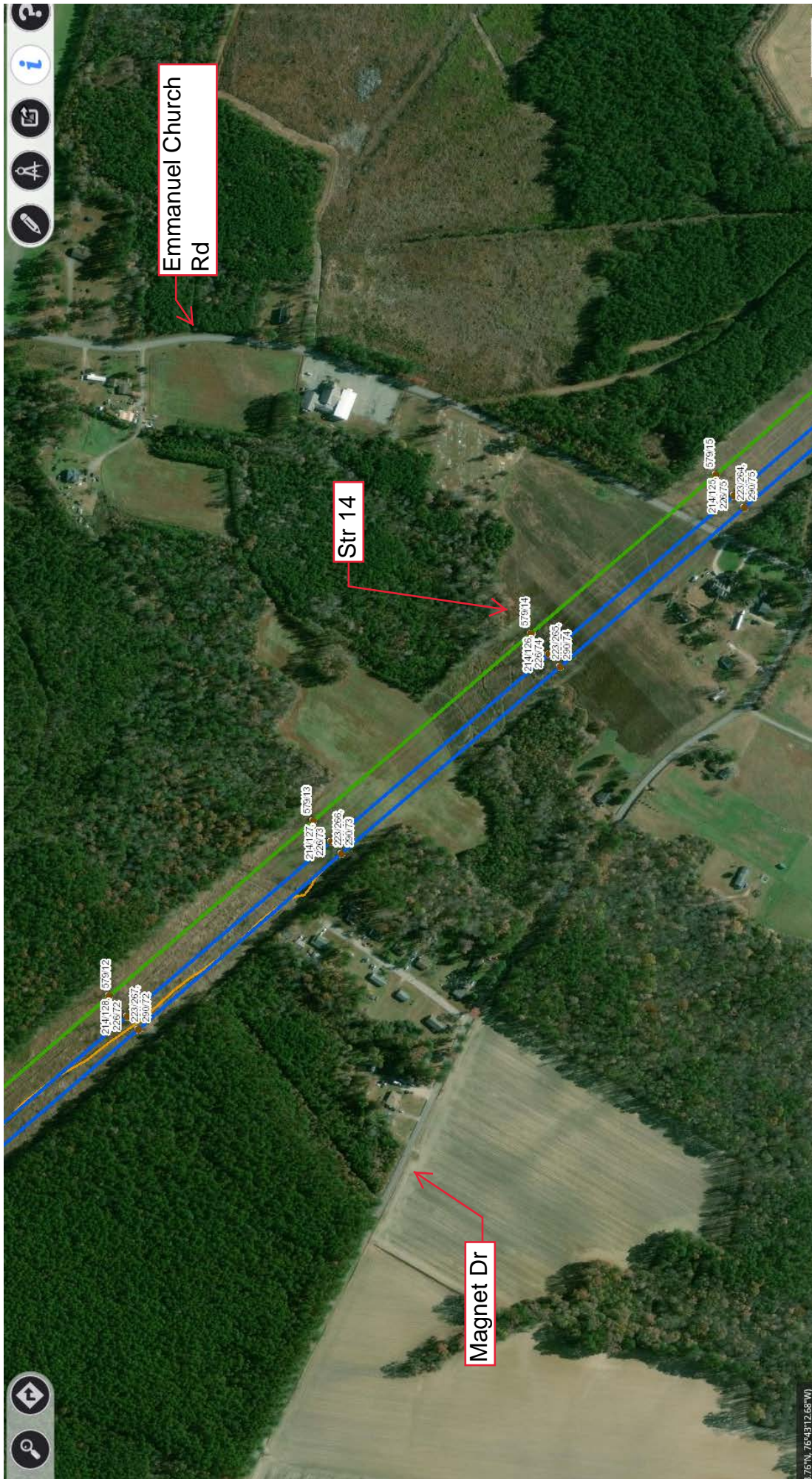
# *Route Map*



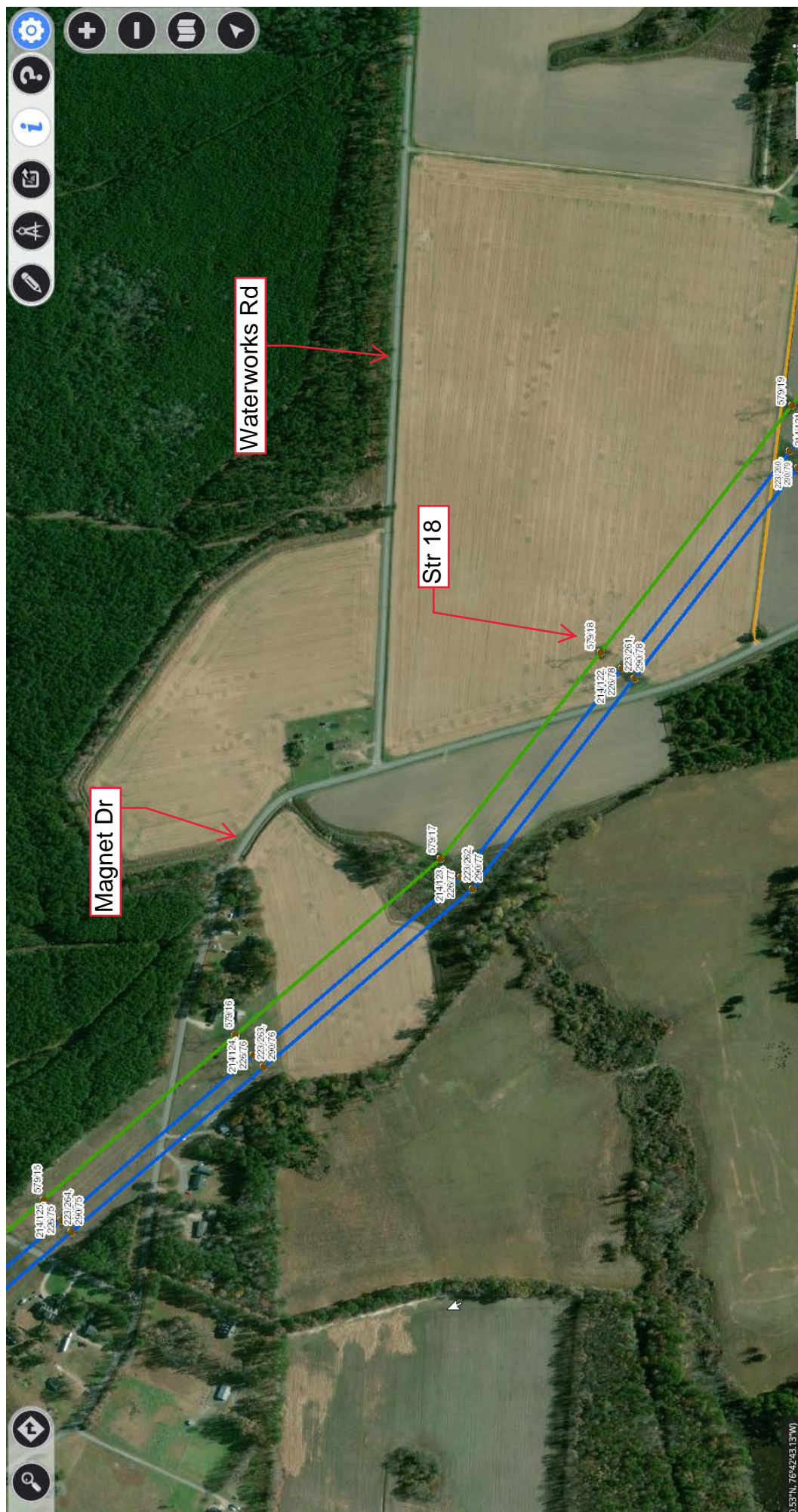




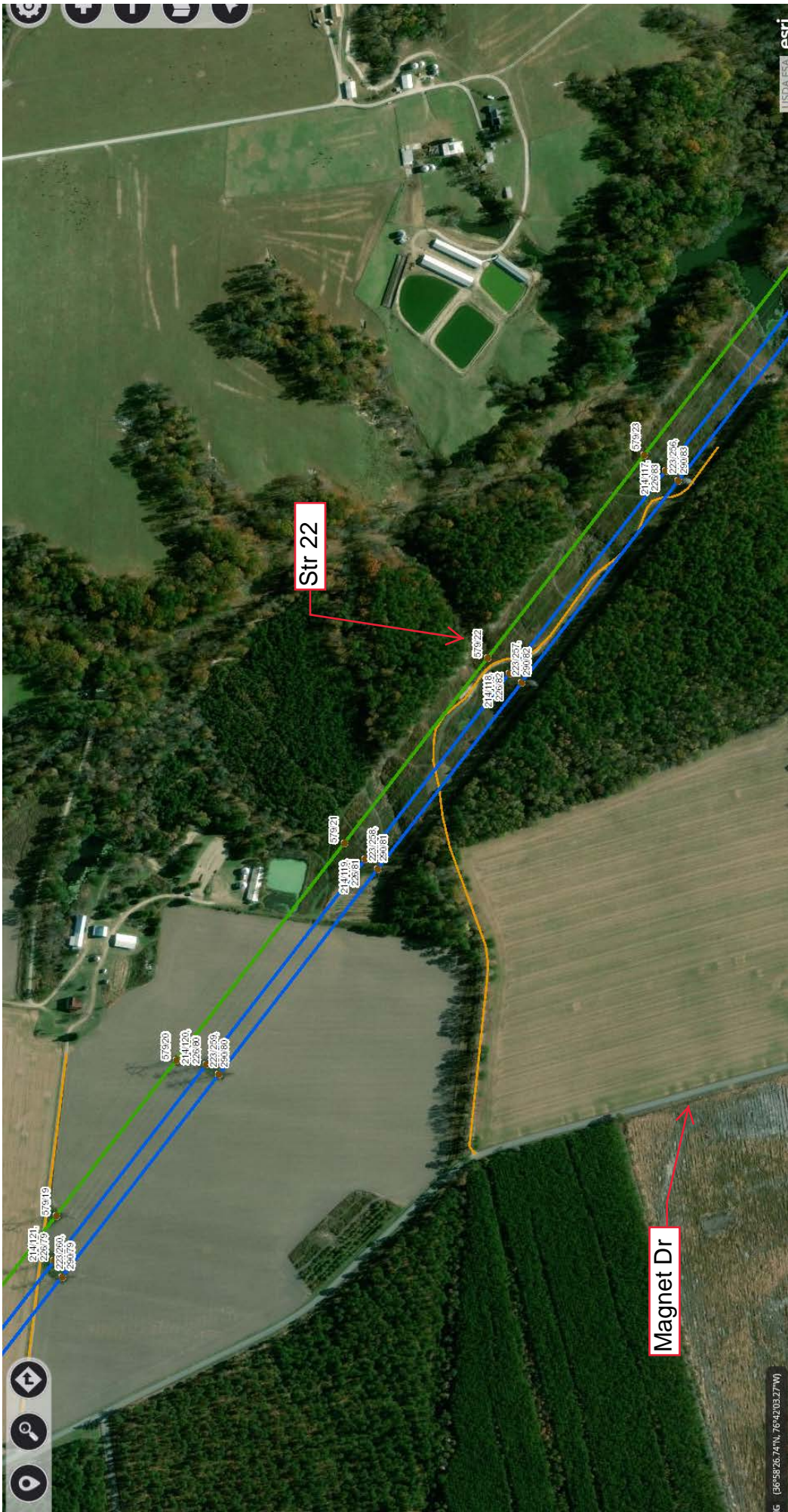








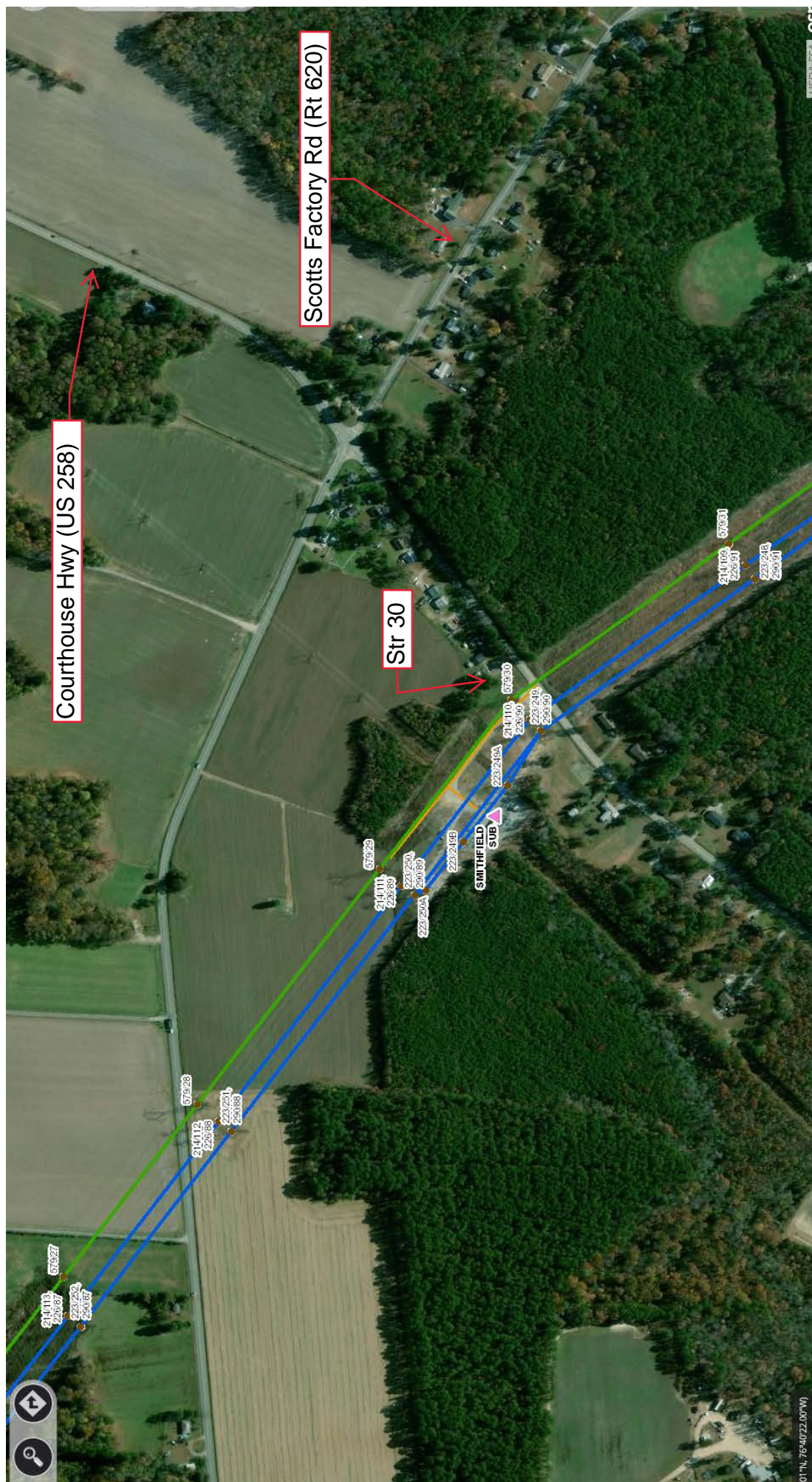




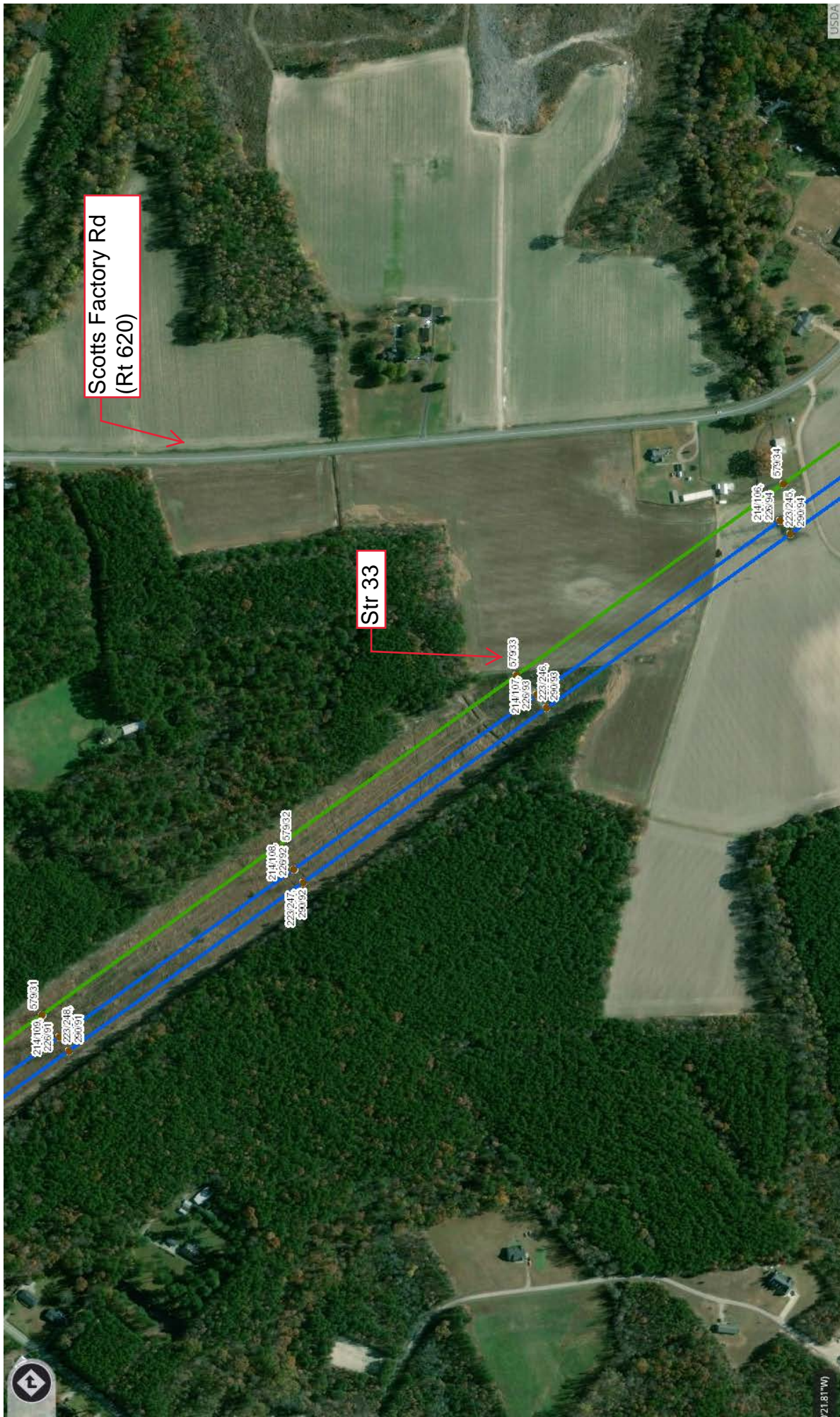




















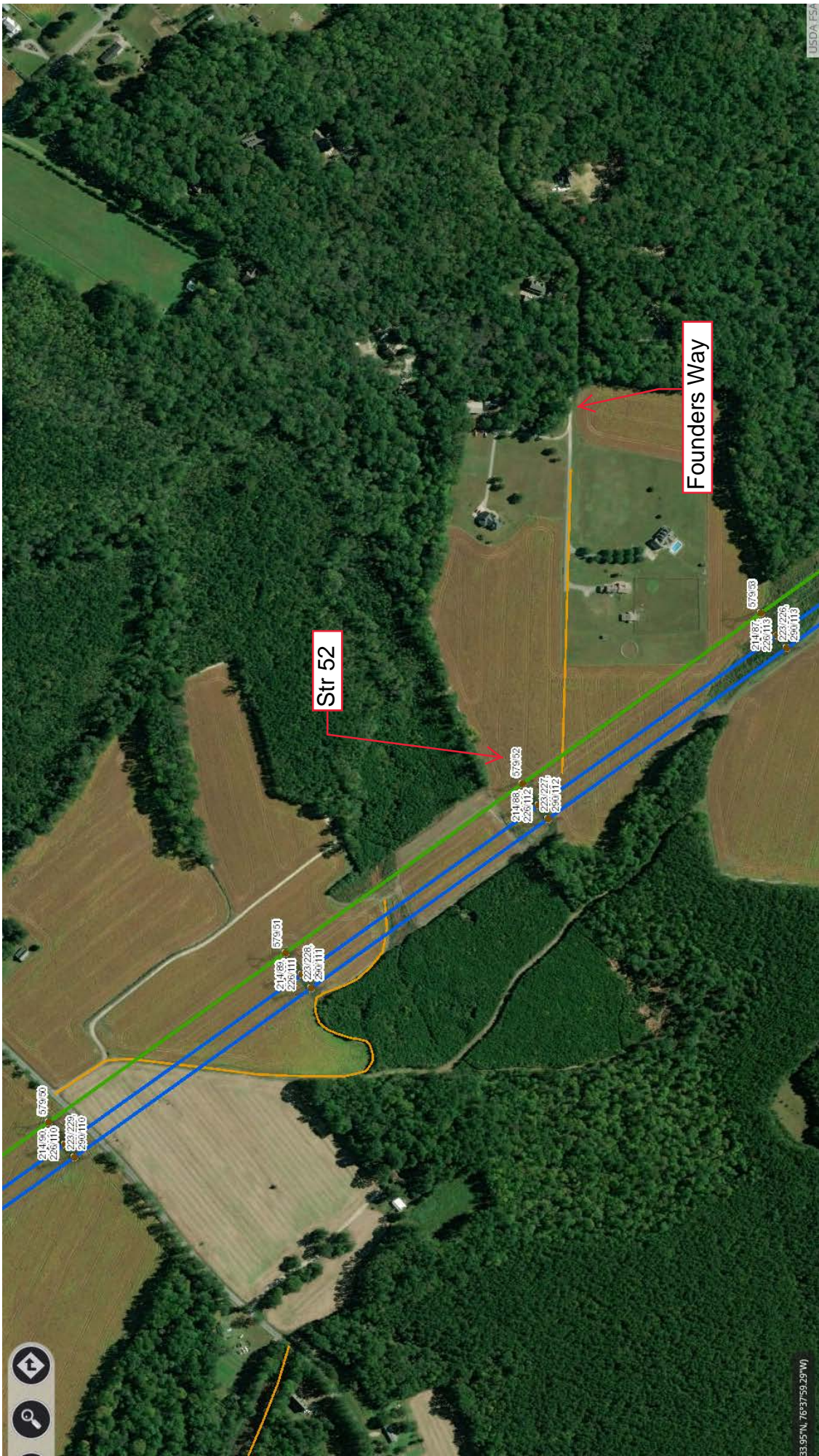








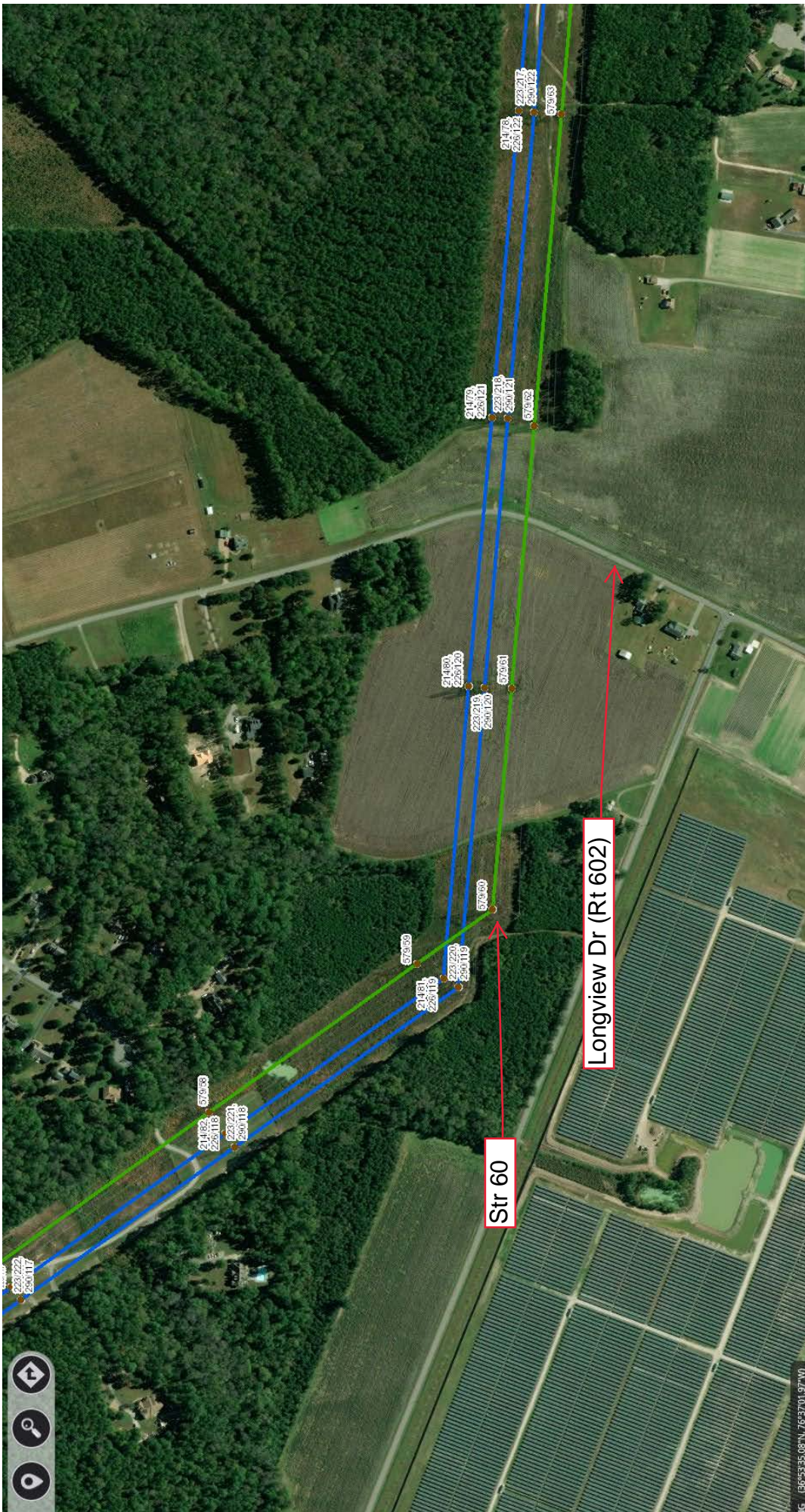








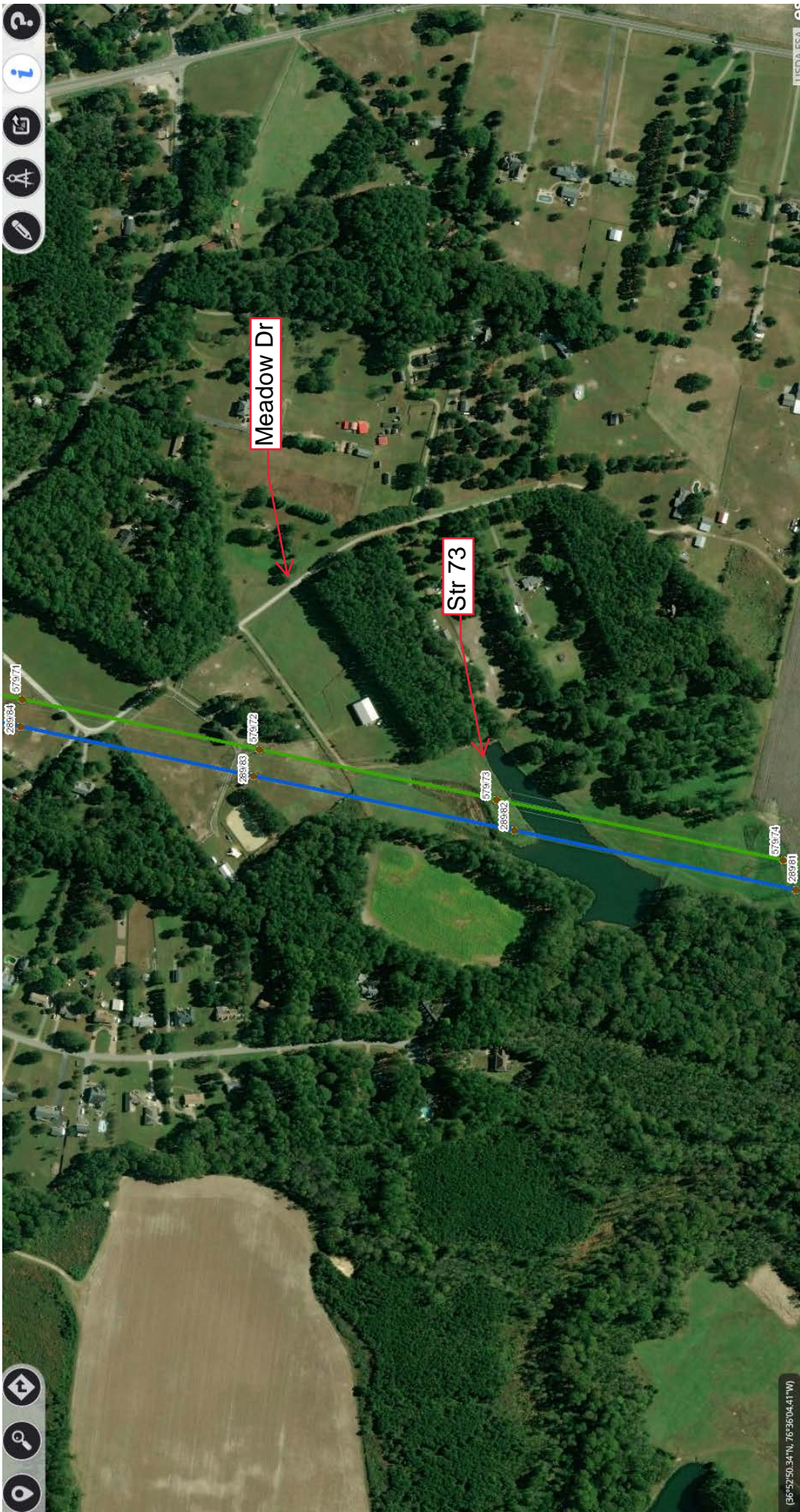












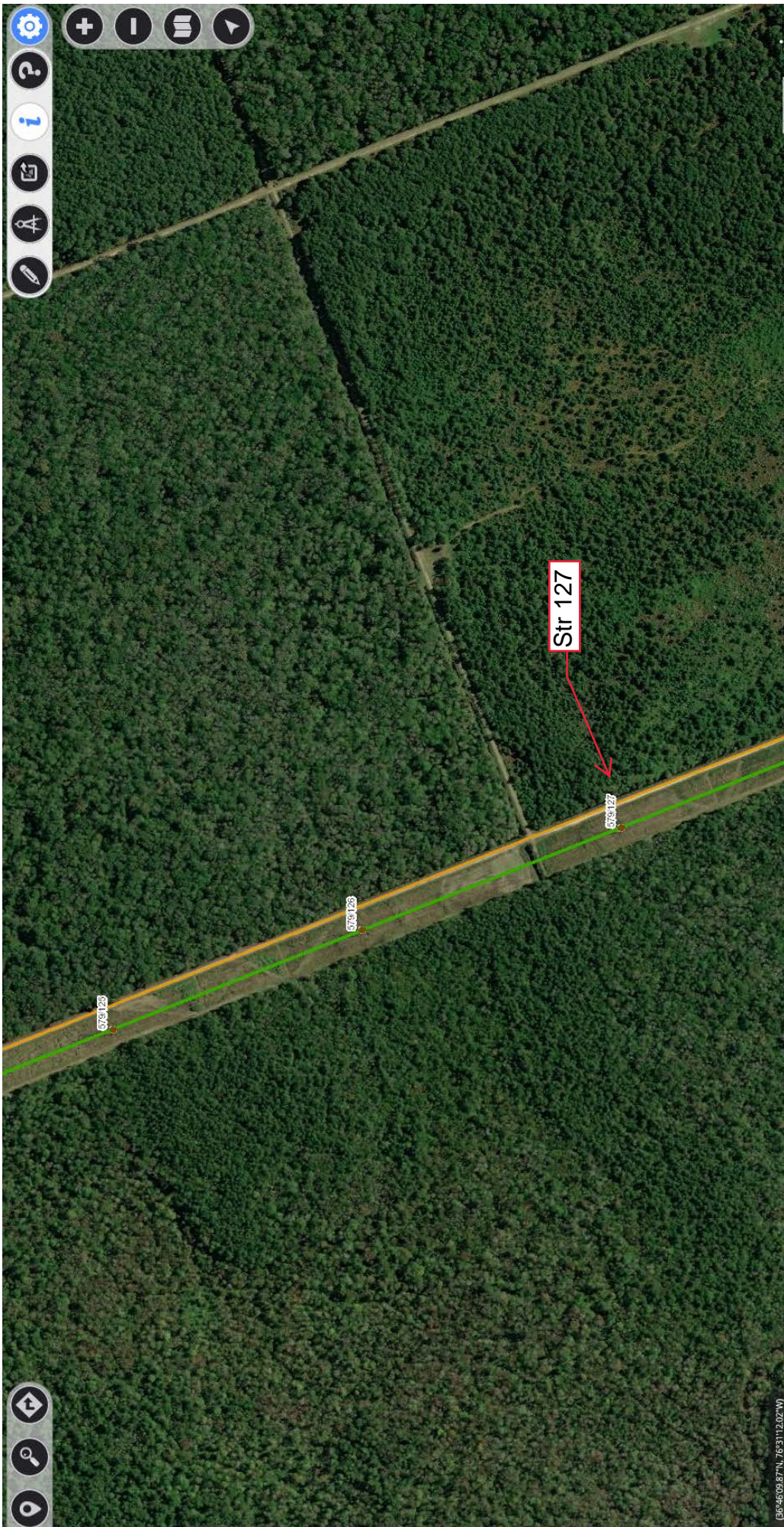




















# *Standard Specifications*

**PROJECT SPECIFICATIONS**  
**FOR**  
**WEATHERING STEEL TRANSMISSION**  
**TOWER INSPECTION & REHABILITATION**

1. Scope of Work

This specification includes the general technical specifications for the inspection, repair and rehabilitation of weathering steel transmission towers.

It is the intent of this specification and all specifications referenced herein to cover the work related to the inspection, reporting, and repair of the weathering steel tower foundations and tower components.

2. Concrete Foundation Inspection and Repair

The contractor will assess the condition of the supporting tower foundations and report the condition of each foundation on the attached inspection form. The foundation assessment and subsequent foundation repairs will be in accordance with the attached "Concrete Foundation Repair & Restoration Specification".

3. Groundline Corrosion Protection

Special attention shall be given to the tower baseshoes or stub angles of the self-supporting towers. When corrosion of the baseshoes is visible; the corrosion shall be removed by mechanical means and thickness reading taken and recorded. The readings shall be taken on the leg of the baseshoe just above the weld connecting the leg to the baseplate. Two reading for each baseshoe are required; one on each leg of the angle about half way in towards the heel of the angle. The actual steel thickness readings shall be compared with the following minimum steel thickness permitted. If the actual steel thickness readings are less than the minimum steel thickness readings permitted; the baseshoe (including gusset plates) shall be replaced and documented.

<u>Tower Type</u>	<u>Min. Thickness (in)</u>
5LT	0.2500
5MT	0.3335
5HT	0.3335
5LA	0.3335
5MA	0.5000
5HA	0.5836
5DE	0.6670



Some baseshoe designs make the ability to obtain the thickness reading very difficult. At this point, the inspection will include a visually estimated thickness at the prescribed areas of the baseshoes.

#### 4. Tower Inspection and Repair

All towers on the lines associated with this project shall undergo a complete climbing inspection by an experienced lineman. This inspection shall identify and record the following:

- Missing Bolts / Bolts with Heads Popped Off
- Bent Members
- Cracked Members
- Thinning Steel (knife edge)
- Worn Hardware
- Damaged Insulators
- Damaged Conductor / Shield Wire
- Excessive Pack-out

The inspector shall pay particular attention to all tower joints. He should be looking for missing bolts, cracked or thinning steel, and excessive packout.

A bent member shall be defined as an angle that is physically bent in such a manner as to cause at least one leg of the angle to be buckled. The bending of a small angle that is obviously related to pack-out and occurs adjacent to a joint shall not be considered for repair unless directed by the Company.

All members that are cracked, bent, or have excessive thinning; shall be replaced and their member number recorded on the inspection form. When the damaged member is smaller than the stock steel furnished by the company; a new member shall be fabricated out of the next larger size stock steel. Field fabricate a new member using stock steel to replace the existing member. When the damaged member cannot be fabricated in the field, notify the Engineer immediately for instructions on how to proceed.

All members to be replaced may require temporary bracing or removal of load before the work can be completed. The contractor is responsible for assuring these measures are implemented.

The field fabrication and installation of new members shall adhere to the following:

- All holes shall be punched or drilled.

- No steel shall be cut with a torch.
- The interfacing surfaces of the joints where members are to be replaced shall be coated with "TR2100 by Termarust".
- All new bolts shall be tightened to the following torque values.
  - i. 5/8" bolts = 70 ft-lbs.
  - ii. 3/4" bolts = 125 ft-lbs.
- The contractor is responsible for any temporary bracing or support where necessary to safely remove the member for replacement.

All missing and/or broken bolts shall be reported and replaced.

The company will furnish copies of the tower erection drawings for reference and component identification. All members repaired or replaced shall be documented on the inspection form.

#### 4. Line Hardware Inspection

All static wire and conductor shall be observed for damage, wear, etc. including spacers, dampers, sleeves, and armor rods.

All hardware shall be inspected for wear, damage, corrosion, corona, etc. This included all insulators and connecting hardware, cotter pins, connectors, etc.

All line components that are damaged or worn shall be noted on the inspection form and reported to the engineer.

Weathering Steel Tower Inspection & Rehabilitation Bath Co Lines.doc

12/13/17

C. Houlihan

**PROJECT SPECIFICATION**  
**FOR**  
**CONCRETE FOUNDATION**  
**REPAIR & RESTORATION**  
**DOMINION ENERGY VIRGINIA**  
**TRANSMISSION LINE REHABILITATION**

**1.0    SCOPE OF WORK**

- 1.1    THIS SPECIFICATION INCLUDES THE GENERAL TECHNICAL SPECIFICATIONS FOR THE CONCRETE FOUNDATION REPAIR AND RESTORATION FOR **DOMINION ENERGY VIRGINIA TRANSMISSION LINE REHABILITATION**.
- 1.2    IT IS THE INTENT OF THIS SPECIFICATION AND ALL SPECIFICATIONS REFERENCED HEREIN TO COVER ALL WORK RELATED TO THE COMPLETION OF THE CONCRETE FOUNDATION REPAIR AND RESTORATION OF THE TRANSMISSION LINE STRUCTURES WHICH MAY INCLUDE THE FOLLOWING: TEMPORARY SUPPORT OF THE TRANSMISSION STRUCTURE, ABRASIVE BLASTING, CRACK REPAIR, CONCRETE COATING, DETERIORATED CONCRETE REMOVAL AND THE PLACEMENT OF HIGH QUALITY CONCRETE, ETC.
- 1.3    AN ASSESSMENT WILL BE MADE ON EACH OF THE EXISTING CONCRETE FOUNDATIONS ON THESE TRANSMISSION LINES TO DETERMINE THE EXTENT OF REPAIR REQUIRED. THE EXTENT OF REPAIR WILL BE CODED AS **FR-0, FR-1, FR-2, FR-3, FR-4 & FR-5**. EACH OF THESE CONDITION ASSESSMENTS IS OUTLINED IN THE FOLLOWING SPECIFICATIONS ALONG WITH THE REQUIRED REPAIR PROCEDURES. **FR-0** ASSESSMENT REFERS THAT THE FOUNDATION IS GENERALLY IN GOOD CONDITION AND NO ADDITIONAL WORK IS REQUIRED. DOMINION'S DESIGNATED FIELD CONSTRUCTION REPRESENTATIVE WILL BE RESPONSIBLE FOR MAKING THE FOUNDATION ASSESSMENTS.
- 1.4    THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TRANSPORTATION, TOOLS, UTILITIES, EQUIPMENT AND APPURTENANCES UNLESS SPECIFICALLY EXCEPTED HEREINAFTER, WHICH IS REQUIRED FOR AND INCIDENTAL TO THE COMPLETE REPAIR AND RESTORATION OF THESE SWITCHYARD STRUCTURE FOUNDATIONS. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER, CONSISTENT



WITH THE BEST PRACTICES OF THE TRADES INVOLVED, AND IN ACCORDANCE WITH THE APPROPRIATE FEDERAL, STATE AND LOCAL REGULATIONS GOVERNING OCCUPATIONAL SAFETY AND HEALTH.

1.5 THE CONTRACTOR SHALL PROVIDE ADEQUATE SUPPORT FOR THE TOWER LEG (WHERE NECESSARY) WHEN MAKING MAJOR FOUNDATION REPAIRS. DOMINION'S TRANSMISSION ENGINEER WILL BE AVAILABLE TO PROVIDE THE CONTRACTOR THE ESTIMATED FOUNDATION LOADS REALIZED DURING THIS RESTORATION WORK.

1.6 THE COMPANY SHALL FURNISH THE FOLLOWING:

1.6.1 SPECIFICATIONS, PROCEDURES AND CONSTRUCTION DRAWINGS REQUIRED FOR THE COMPLETION OF THE WORK.

## 2.0 **MATERIALS (CONCRETE FOUNDATION REPAIR)**

### 2.1 FORMS

2.1.1 FORMS FOR THE CONCRETE FOUNDATION REPAIR AND RESTORATION SHALL BE WOOD, STEEL, FIBER OR OTHER MATERIALS SUITABLE TO REFORM THE FOUNDATION TO ITS ORIGINAL DIMENSIONS AND GRADE.

### 2.2 EPOXY BONDING AGENT

2.2.1 THE EPOXY BONDING AGENT TO BE USED TO COAT THE INTERFACING SURFACES BETWEEN THE EXISTING CONCRETE AND THE FRESHLY PLACED CONCRETE SHALL BE **WELD-CRETE, MANUFACTURED BY LARSON PRODUCTS.**

2.2.2 THE EPOXY BONDING AGENT SHALL BE STORED, MIXED AND APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.

### 2.3 EPOXY PASTE

2.3.1 THE EPOXY PASTE USED TO FILL THE CRACKS ON THE SURFACES OF THE CONCRETE FOUNDATION PEDESTALS

SHALL BE **E-BOND 560, LOW MOD GEL,**  
**MANUFACTURED BY E-BOND EPOXIES, INC.**

- 2.3.2 THE EPOXY PASTE SHALL BE STORED, MIXED, AND APPLIED IN ACCORANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.

## 2.4 FIELD MIXED CONCRETE

- 2.4.1 CONCRETE THAT MUST BE MIXED AT THE JOBSITE DUE TO INACCESSIBILITY WITH A READY MIX TRUCK OR OTHER REASONS SHALL BE A CONCRETE MIX UTILIZING **EMACO S66-CI, STRUCTRAL CONCRETE, MANUFACTURED BY MASTER BUILDERS, INC.**
- 2.4.2 A CONCRETE DRUM MIXER SHALL BE USED TO MIX THE JOB SITE CONCRETE. THIS MIXER SHALL BE LARGE ENOUGH TO MIX AND PLACE THE CONCRETE TO ASSURE A MONOLITHIC PLACEMENT.
- 2.4.3 THE CONCRETE MIX SHALL BE STORED, MIXED, AND PLACED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.

## 2.5 STRUCTURAL REPAIR MORTAR

- 2.5.1 THE STRUCTURAL REPAIR MORTAR USED TO MAKE REPAIRS SUCH AS SPALLS, SURFACE DEFECTS, ETC. SHALL BE **EMACO S88-CI, STRUCTURAL MORTAR, MANUFACTURED BY MASTER BUILDERS, INC.**
- 2.5.2 THE STRUCTURAL REPAIR MORTAR SHALL BE MIXED TO A TROWEL CONSISTENCY FOR THIS REPAIR APPLICATION.
- 2.5.3 THE STRUCTURAL REPAIR MORTAR SHALL BE STORED, MIXED, AND APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.

## 2.6 POLYMER CEMENTITIOUS COATING

- 2.6.1 THE POLYMER CEMENTITIOUS COATING TO SEAL AND PROTECT THE FOUNDATIONS NOT REQUIRING

EXTENSIVE RESTORATION SHALL BE **CEM-KOTE FLEX ST, MANUFACTURED BY W.R. MEADOWS.**

2.6.2 THE POLYMER CEMENTITIOUS COATING SHALL BE STORED, MIXED, AND APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.

2.7 CONCRETE CURING COMPOUND

2.7.1 THE CONCRETE CURING COMPOUND FOR THIS PROJECT SHALL BE **AN APPROVED COMPOUND EITHER CLEAR OR PIGMENTED MEETING ASTM C309.**

2.7.2 THE CURING COMPOUND SHALL BE STORED, MIXED AND APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.

2.8 STEEL REINFORCEMENT

2.8.1 ALL REINFORCEMENT (**WHEN SPECIFIED OR INDICATED**) SHALL BE NEW BILLET STOCK CONFORMING TO ASTM A-615, GRADE 60.

2.8.2 ALL REINFORCEMENT AND METAL SUPPORTS SHALL BE CLEANED AND MAINTAINED FREE FROM MUD, OIL, ICE, EXCESSIVE RUST, TAGS OR OTHER SUBSTANCES THAT COULD ADVERSELY AFFECT THE BOND BETWEEN THE STEEL BARS AND THE CONCRETE.

3.0 **CONCRETE FOUNDATION REPAIR "FR-1"**

3.1 GENERAL

3.1.1 THE FOLLOWING PROCEDURES ARE FOR THE REPAIR AND RESTORATION OF THE CONCRETE FOUNDATIONS CLASSIFIED AS **"FR-1"**. THIS CLASSIFICATION CODE IS DEFINED AS FOLLOWS:

- 1.) CONCRETE IS GENERALLY IN GOOD SOUND CONDITION.
- 2.) THE CONCRETE SURFACE MAY HAVE A FEW HAIRLINE CRACKS LESS THAN 1/32" WIDE.

3.2 SURFACE PREPARATION **"FR-1"**

3.2.1 THE ENTIRE EXPOSED CONCRETE FOUNDATION PEDESTAL AND EXTENDING 6" BELOW GRADE SHALL BE ABRASIVE BLASTED TO REMOVE ALL CONCRETE LAITANCE, OIL, DIRT, AND OTHER BOND-INHIBITING MATERIALS. **PLEASE NOTE THAT THIS IS A LIGHT SANDBLASTING. DO NOT REMOVE MORE THAN ABOUT 12 MILS.**

3.3 CONCRETE PEDESTAL COATING

3.3.1 THE ENTIRE EXPOSED CONCRETE FOUNDATION PEDESTAL AND PREPARED BELOW GRADE PORTION SHALL BE GIVEN **TWO** COATS AT APPROXIMATELY 31-32 MILS EACH OF THE **CEM-KOTE FLEX ST.**

4.0 **CONCRETE FOUNDATION REPAIR "FR-2"**

4.1 GENERAL

4.1.1 THE FOLLOWING PROCEDURES ARE FOR THE REPAIR AND RESTORATION OF THE CONCRETE FOUNDATIONS CLASSIFIED AS **"FR-2"**. THIS CLASSIFICATION CODE IS DEFINED AS FOLLOWS:

- 1.) CONCRETE IS GENERALLY IN GOOD SOUND CONDITION.
- 2.) THE CONCRETE SURFACE HAS CRACKS RANGING FROM 1/32" UP TO 3/16" IN WIDTH.

4.2 SURFACE PREPARATION **"FR-2"**

4.2.1 THE ENTIRE EXPOSED CONCRETE FOUNDATION PEDESTAL AND EXTENDING 6" BELOW GRADE SHALL BE ABRASIVE BLASTED TO REMOVE ALL CONCRETE LAITANCE, OIL, DIRT, AND OTHER BOND-INHIBITING MATERIALS. **PLEASE NOTE THAT THIS IS A LIGHT SANDBLASTING. DO NOT REMOVE MORE THAN ABOUT 12 MILS.**

4.3 CRACK REPAIR **"FR-2"**

4.3.1 ALL CONCRETE SURFACE CRACKS FROM 1/32" UP TO 3/16" IN WIDTH SHALL BE FILLED WITH THE **EPOXY PASTE (E-BOND 560)**. A PUTTY KNIFE OR POINTED

TROWEL SHALL BE USED TO FORCE AS MUCH EPOXY INTO THE CRACKS AS POSSIBLE. THE SURFACE SHALL BE FLUSH WITH THE EXISTING CONCRETE.

4.3.2 THE **EPOXY PASTE (E-BOND 560)** SHALL BE CURED FOR A MINIMUM OF **2 HOURS** BEFORE THE PEDESTAL COATING CAN BE APPLIED.

#### 4.4 CONCRETE PEDESTAL COATING

4.4.1 THE ENTIRE EXPOSED CONCRETE FOUNDATION PEDESTAL AND PREPARED BELOW GRADE PORTION SHALL BE GIVEN **TWO** COATS AT APPROXIMATELY **31-32 MILS** EACH OF THE **CEM-KOTE FLEX ST.**

### 5.0 CONCRETE FOUNDATION REPAIR “FR-3”

#### 5.1 GENERAL

5.1.1 THE FOLLOWING PROCEDURES ARE FOR THE REPAIR AND RESTORATION OF THE CONCRETE FOUNDATIONS CLASSIFIED AS “**FR-3**”. THIS CLASSIFICATION CODE IS DEFINED AS FOLLOWS:

- 1.) THE CONCRETE IS GENERALLY IN FAIR CONDITION.
- 2.) THE TOP SURFACE AND EDGES MAY HAVE SEVERAL AREAS THAT ARE SPALLING.
- 3.) THERE MAY BE ONE OR MORE CRACKS THAT ARE 1/32” UP TO 3/16” IN WIDTH.

#### 5.2 SURFACE PREPARATION “**FR-3**”

5.2.1 THE ENTIRE EXPOSED CONCRETE FOUNDATION PEDESTAL AND EXTENDING 6” BELOW GRADE SHALL BE ABRASIVE BLASTED TO REMOVE ALL CONCRETE LAITANCE, OIL, DIRT, AND OTHER BOND-INHIBITING MATERIALS. **PLEASE NOTE THAT THIS IS A LIGHT SANDBLASTING. DO NOT REMOVE MORE THAN ABOUT 12 MILS.**

5.2.2 ALL DETERIORATED CONCRETE SHALL BE REMOVED BY MEANS OF A 20 LB. OR SMALL AIR HAMMER WITH BULL POINTS.

### 5.3 CRACK REPAIR “FR-3”

5.3.1 ALL CONCRETE SURFACE CRACKS FROM 1/32” UP TO 3/16” IN WIDTH SHALL BE FILL WITH THE **EPOXY PASTE (E-BOND 560)**. A PUTTY KNIFE OR POINTED TROWEL SHALL BE USED TO FORCE AS MUCH EPOXY INTO THE CRACKS AS POSSIBLE. THE SURFACE SHALL BE FLUSH WITH THE EXISTING CONCRETE.

5.3.3 THE EPOXY PASTE SHALL BE CURED FOR A MINIMUM OF **2 HOURS** BEFORE THE PEDESTAL COATING CAN BE APPLIED.

### 5.4 CONCRETE SURFACE REPAIR “FR-3”

5.4.3 THE CONCRETE SURFACE REPAIR INVOLVES THE RESTORATION OF MINOR SPALLS , EDGE DETERIORATION AND OTHER SURFACE DEFECTS.

5.4.4 THE **STRUCTURAL REPAIR MORTAR (S88-CI)** SHALL BE MIXED TO A TROWEL CONSISTENCY AND APPLIED TO RESTORE THE FOUNDATION PEDESTAL TO ITS ORIGINAL SHAPE AND DIMENSIONS. THE REPAIR SHALL CURE FOR AT LEAST **1 HOUR** PRIOR TO APPLYING THE CONCRETE COATING (SEE SECT. 5.5 BELOW). LONGER TIMES (GREATER THAN 1 HOUR) WILL REQUIRE THAT POLYETHELENE BE USED TO CURE THE REPAIRS UNTIL THE COATING CAN BE APPLIED.

### 5.5 CONCRETE PEDESTAL COATING

5.5.1 THE ENTIRE EXPOSED CONCRETE FOUNDATION PEDESTAL AND PREPARED BELOW GRADE PORTION SHALL BE GIVEN **TWO** COATS AT APPROXIMATELY 31-32 MILS EACH OF THE **CEM-KOTE FLEX ST**.

## 6.0 CONCRETE FOUNDATION REPAIR “FR-4” & “FR-5”

### 6.1 GENERAL



6.1.1 THE FOLLOWING PROCEDURES ARE FOR THE REPAIR AND RESTORATION OF THE CONCRETE FOUNDATIONS CLASSIFIED AS “FR-4” & “FR-5”. THESE CLASSIFICATION CODES ARE DEFINED AS FOLLOWS:

**“FR-4”**

- 1.) THE MAJORITY OF THE OUTSIDE CONCRETE SURFACE IS ASSESSED AS POOR.
- 2.) THE CONCRETE CORE OF THE FOUNDATION PEDESTAL IS BELIEVED TO BE OF REASONABLY SOUND CONDITION.
- 3.) THE TOP SURFACE, EDGES, AND A GOOD PORTION OF THE VERTICAL SURFACES ARE DETERIORATED OR IN POOR CONDITION.

**“FR-5”**

- 1.) THE MAJORITY OF THE OUTSIDE CONCRETE SURFACE IS ASSESSED AS POOR.
- 2.) THE CONDITION OF THE CONCRETE CORE IS QUESTIONABLE DUE TO THE ADVANCED DETERIORATION.
- 3.) THE TOP SURFACE, EDGES, AND A MAJORITY OF THE REMAINING PEDESTAL HAVE ADVANCED DETERIORATION IN THE FORM OF SPALLING, LIFTING OR SEPARATION OF THE FOUNDATION, EFFLORESCENCE, LARGE CRACKS, ETC.

6.1.2 REFER TO THE ATTACHED DRAWINGS DEPICTING THE GENERAL INFORMATION PERTAINING TO THE REPAIR WORK INVOLVED.

6.1.3 THE REPAIR WORK SHALL BE COORDINATED SO THAT THE CONCRETE IS PLACED AS SOON AS POSSIBLE; NOT TO EXCEED 12 HOURS AFTER THE CHIPPING OF DETERIORATED CONCRETE REMOVAL IS COMPLETED.

6.2 TEMPORARY STRUCTURE SUPPORT

6.2.1 THE CONTRACTOR SHALL BE EQUIPPED TO SUPPORT THE TOWER LEG WHERE REQUIRED TO PERFORM THE

NECESSARY REPAIR AND RESTORATION WORK. THE TRANSMISSION SHALL DETERMINE IF TEMPORARY STRUCTURE SUPPORT IS REQUIRED. **STRUCTURE SUPPORT IS GENERALLY MANDATORY FOR “FR-5”.**

6.2.2 THE TRANSMISSION TOWER STRUCTURE SHALL BE ADEQUATELY SUPPORTED OR SECURED PRIOR TO ANY REMOVAL OF DETERIORATED CONCRETE WHEN REQUIRED. ONLY ONE FOUNDATION ON A TOWER MAY BE REPAIRED AT ANY ONE TIME UNLESS OTHERWISE AUTHORIZED BY THE TRANSMISSION ENGINEER. CONTACT THE ENGINEER FOR OPTIONS.

6.3 SURFACE PREPARATION **“FR-4” & “FR-5”**

6.3.1 (**“FR-4”**)ALL DETERIORATED CONCRETE, DIRT, OILS, FORM COATINGS, CURING AGENTS AND OTHER BOND-INHIBITING MATERIALS SHALL BE REMOVED FROM THE EXISTING CONCRETE FOUNDATION. ALL EXPOSED REINFORCING STEEL SHALL BE CLEANED OF ALL RUST AND LOOSELY ADHERED CONCRETE LAITANCE.

6.3.2 ALL CHIPPING OF DETERIORATED CONCRETE SHALL BE DONE WITH A 20 LB. OR SMALLER AIR HAMMER USING BULL POINTS.

6.3.3 (**“FR-5”**)THE ENTIRE EXISTING CONCRETE FOUNDATION PEDESTAL SHALL BE CHIPPED DOWN TO A MINIMUM DEPTH OF 6" BELOW GRADE AS INDICATED ON THE ATTACHED DRAWINGS (**UNLESS OTHERWISE DIRECTED BY VIRGINIA POWER’S DESIGNATED CONSTRUCTION REPRESENTATIVE**). IF THE EXISTING CONCRETE REMAINS UNSOUND AT THIS DEPTH, THE STRUCTURAL ENGINEER SHALL BE CONTACTED.

6.4 STEEL REINFORCEMENT INSTALLATION (**WHEN APPLICABLE OR REQUESTED**)

6.4.1 THE STEEL REINFORCEMENT FOR THE FOUNDATION REPAIR SHALL BE INSTALLED AS SHOWN ON THE ATTACHED DRAWINGS OR AS NEEDED TO REPLACE DAMAGED REBAR.

6.4.2 THE STEEL REINFORCEMENT SHALL BE POSITIONED AND SECURED PRIOR TO CONCRETE PLACEMENT WITH

THE CLEAR DISTANCES FROM THE REINFORCEMENT, FORMS, EXISTING CONCRETE TO BE STRICTLY MAINTAINED.

- 6.4.3 THE REINFORCEMENT SHALL BE FREE FROM DIRT, OIL, OR ANY DELETERIOUS MATERIALS WHICH MAY AFFECT THE BOND BETWEEN THE STEEL AND THE CONCRETE.

#### 6.5 CONCRETE FORMWORK

- 6.5.1 THE CONCRETE FORMS SHALL BE INSTALLED AT THE LOCATION AND DEPTHS INDICATED ON THE ATTACHED DRAWINGS.
- 6.5.2 THE FORMS SHALL BE THE SAME SIZE AND/OR DIAMETER AS THE ORIGINAL FOUNDATION PEDESTAL.
- 6.5.3 THE INSIDE SURFACE OF THE FORMS SHALL BE SMOOTH AND CLEAN WITH A LIGHT COAT OF FORM OIL APPLIED TO AID IN FORM REMOVAL.
- 6.5.4 THE COMPLETELY INSTALLED FORMWORK WHEN READY FOR CONCRETE PLACEMENT SHALL BE BRACED AND SECURED TO MAINTAIN ITS SHAPE AND DIMENSIONS AGAINST INTERNAL OR EXTERNAL PRESSURES REALIZED DURING CONSTRUCTION.

#### 6.6 REPLACEMENT CONCRETE MIX “FR-4” & “FR-5”

- 6.6.1 THE REPLACEMENT CONCRETE MIX FOR THE FOUNDATION REPAIRS CLASSIFIED AS “FR-4” OR “FR-5” SHALL BE THE **FIELD MIXED CONCRETE**.

#### 6.7 CONCRETE PLACEMENT

- 6.7.1 PRIOR TO CONCRETE PLACEMENT, THE **WELD-CRETE** SHALL BE APPLIED TO THE EXISTING CONCRETE THAT WILL RECEIVE THE REPAIR CONCRETE MATERIAL.
- 6.7.2 PLACEMENT OF CONCRETE SHALL CONFORM TO ACI 304, CHAPTER 6, AND THE PORTLAND CEMENT ASSOCIATION ADESIGN AND CONTROL OF CONCRETE MIXTURES; EXCEPT AS AMENDED HEREIN. NO



CONCRETE SHALL BE PLACED WITHOUT AN APPROVED DESIGN MIX OR APPROVAL OF PLACEMENT.

6.7.3 CONCRETE PLACEMENT SHALL NOT BE PERMITTED WHEN, IN THE OPINION OF DOMINION'S CONSTRUCTION REPRESENTATIVE, WEATHER CONDITIONS OR OTHER PERTINENT FACTORS PREVENT PROPER PLACEMENT AND CONSOLIDATION.

6.7.4 CONCRETE SHALL BE CONSOLIDATED IN ACCORDANCE WITH ACI 309 AND THE PORTLAND CEMENT ASSOCIATION'S "DESIGN AND CONTROL OF CONCRETE MIXTURES".

6.7.5 VIBRATION OF CONCRETE SHALL BE BY ELECTRIC OR PNEUMATIC, IMMERSION-TYPE VIBRATORS OPERATING AT A MINIMUM FREQUENCY OF 7,000 RPM WHEN IMMersed IN CONCRETE.

6.7.6 CONCRETE SHALL BE CONSOLIDATED TO THE MAXIMUM PRACTICAL DENSITY WITHOUT SEGREGATION SUCH THAT THE CONCRETE IS THOROUGHLY WORKED AROUND THE REINFORCEMENT, AROUND EMBEDDED ITEMS, AND INTO CORNERS OF FORMS, ELIMINATING ALL AIR OR STONE POCKETS WHICH MAY CAUSE HONEYCOMBING, JETTING, OR PLANES OF WEAKNESS.

#### 6.8 CONCRETE FINISHING

6.8.1 THE CONCRETE TOP SURFACE SHALL BE SLIGHTLY SLOPED AWAY FROM THE ATTACHED STEEL EQUIPMENT (WHERE DIRECTED) AS TO PROVIDE POSITIVE DRAINAGE OF WATER ALLOWING NO CREVICES OR AREAS TO TRAP WATER. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" CHAMFER.

6.8.2 CARE MUST BE MADE TO PREVENT DRAWING EXCESS MOISTURE TO THE CONCRETE SURFACE DURING FINISHING. A WOOD OR MAGNESIUM FLOAT SHOULD BE ADEQUATE. **DO NOT USE STEEL TROWELS.**

#### 6.9 CONCRETE CURING

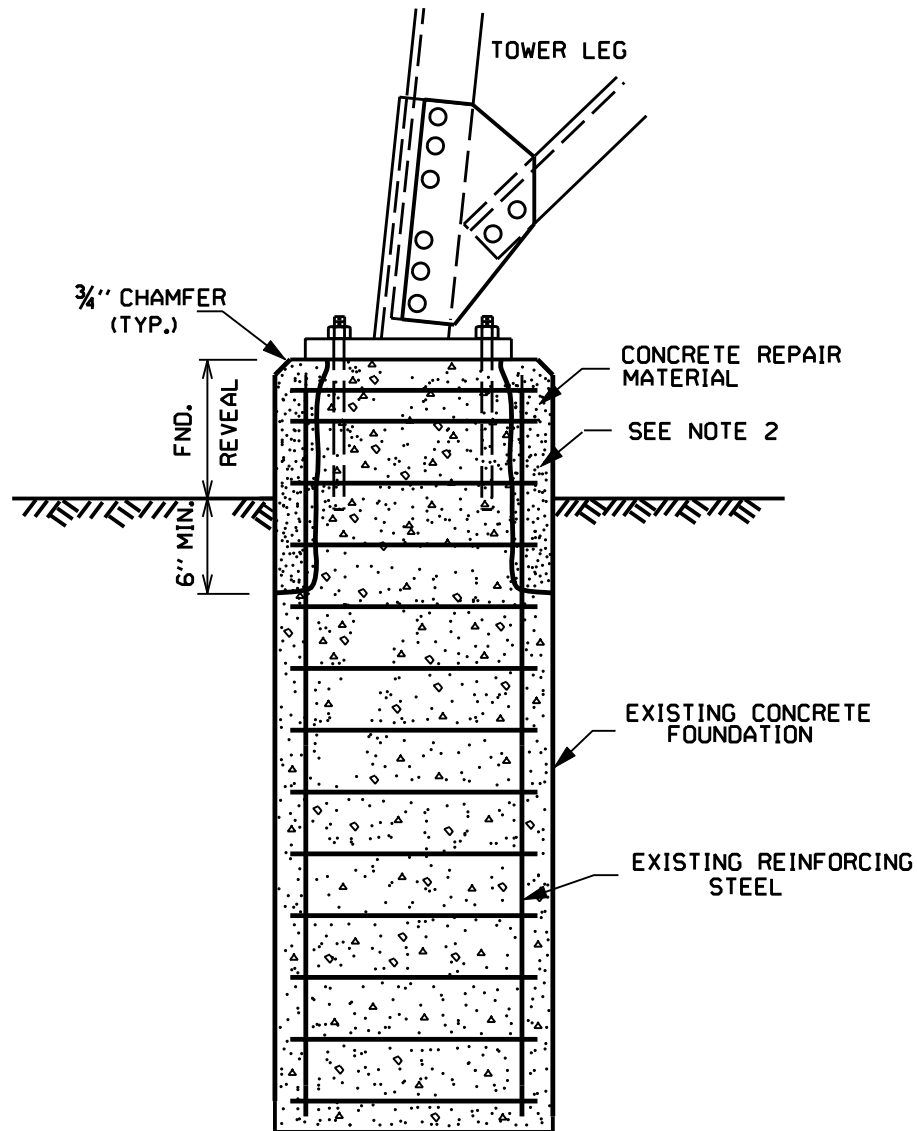
6.9.1 THE CURING OF CONCRETE SHALL CONFORM TO ACI

308, EXCEPT AS AMENDED HEREIN. CURING SHALL BE ACCOMPLISHED BY APPLYING THE LIQUID MEMBRANE FORMING **CONCRETE CURING COMPOUND** IN ACCORDANCE WITH ASTM C309. THE CURING COMPOUND SHALL BE APPLIED AS SOON AS POSSIBLE AFTER THE FINISHING OF THE CONCRETE IS COMPLETE AND WHERE THERE IS NO PRESENCE OF BLEED WATER.

6.9.3 CONCRETE PLACED AT AMBIENT TEMPERATURES LESS THAN 40 F SHALL BE CURED IN ACCORDANCE WITH ACI 306 AND ACI 308 EXCEPT AS AMENDED HEREIN.

6.9.4 THE CONTRACTOR SHALL MAINTAIN THE TEMPERATURE OF THE CONCRETE AT OR ABOVE 50 F DURING THE 7 DAY CURING PROCESS.

FND-REP-2019.DOC



**NOTES:**

- 1.) THE FOUNDATION REPAIR AND RESTORATION SHALL BE IN ACCORDANCE WITH THE ATTACHED WRITTEN SPECIFICATIONS.
- 2.) THE CONCRETE SHALL BE REMOVED TO A DEPTH OF 1" - 2" BEYOND THE EXISTING REINFORCED STEEL.
- 3.) ONLY ONE FOUNDATION ON THE STRUCTURE SHALL BE REPAIRED AT ANY ONE TIME UNLESS OTHERWISE STATED.
- 4.) ALL FOUNDATION REPAIR WORK ON ANY ANGLE OR DOUBLE DEADEND STRUCTURE SHOULD BE CLOSELY COORDINATED THROUGH THE STRUCTURAL ENGINEER.

**Transmission Construction**

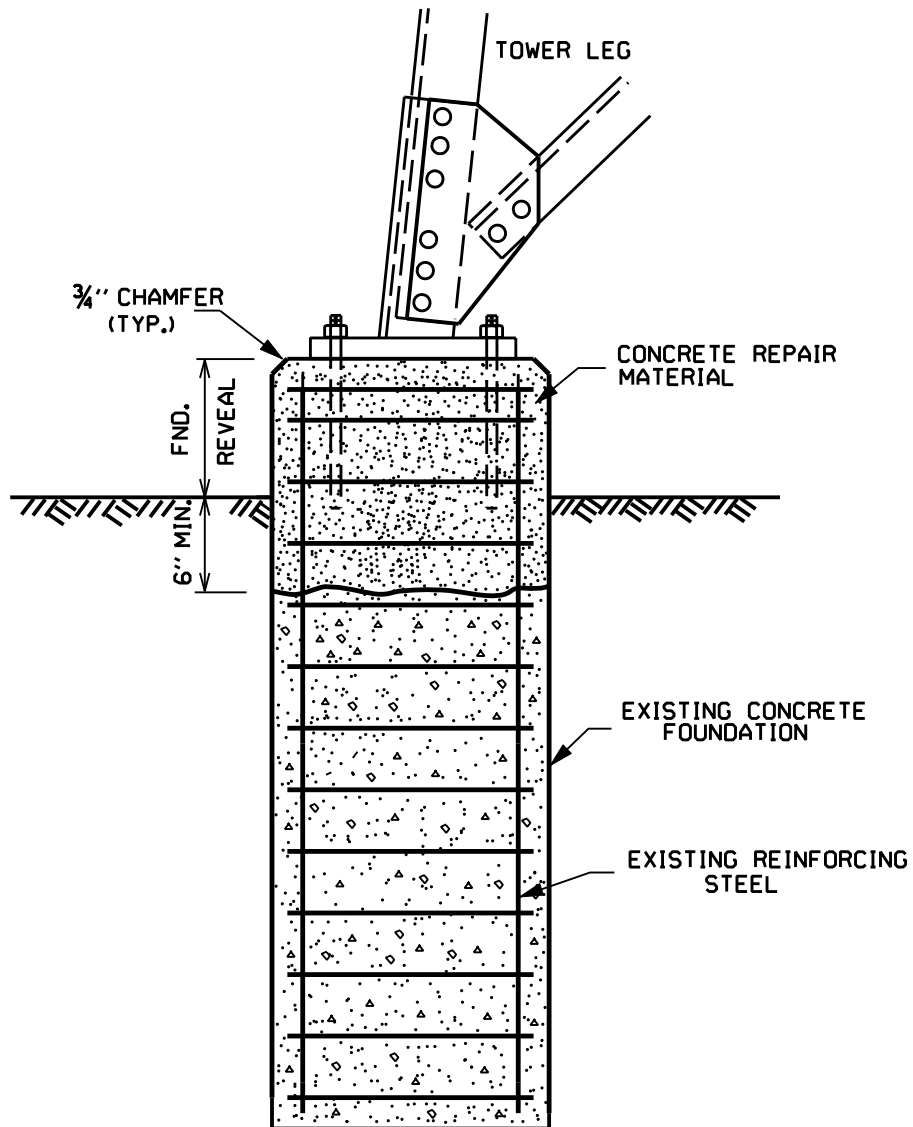


**Dominion**  
701 E. Cary Street  
Richmond, VA 23219

**FOUNDATION REPAIR & RESTORATION  
REPAIR "FR-4"**

	DRAWN	CHECKED	APPROVED	DATE	DRAWING NO.
ORIGINAL	DLC			11/08/99	<b>500LOOP FR4</b>
REVISION	CVB		DLC	4/17/07	CAD NO. 500LOOP FR4





**NOTES:**

- 1.) THE FOUNDATION REPAIR AND RESTORATION SHALL BE IN ACCORDANCE WITH THE ATTACHED WRITTEN SPECIFICATIONS.
- 2.) THE ALLOWABLE DEPTH OF THE REPAIR BELOW GROUND IS CLOSELY DEPENDENT ON THE HEIGHT OF THE FOUNDATION REVEAL. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF THE HEIGHT OF THE FOUNDATION REVEAL PRIOR TO ANY REPAIR WORK.
- 3.) ONLY ONE FOUNDATION ON THE STRUCTURE SHALL BE REPAIRED AT ANY ONE TIME UNLESS OTHERWISE STATED.
- 4.) ALL FOUNDATION REPAIR WORK ON ANY ANGLE OR DOUBLE DEADEND STRUCTURE SHOULD BE CLOSELY COORDINATED THROUGH THE STRUCTURAL ENGINEER.
- 5.) THE TOWER LEG SHALL BE SUPPORTED PRIOR TO REMOVING DETERIORATED CONCRETE.

**Transmission Construction**

**FOUNDATION REPAIR & RESTORATION  
REPAIR "FR-5"**



**Dominion**  
701 E. Cary Street  
Richmond, VA 23219

	DRAWN	CHECKED	APPROVED	DATE	DRAWING NO.
ORIGINAL	DLC			11/08/99	<b>500LOOP FR5</b>
REVISION	CVB		DLC	4/17/07	CAD NO. 500LOOP FR5

# ***Structure Location Sheets***

Structure Number	Tower Type	Notifications	Structure Height	Notes
<b>Septa Sub</b> TL 579 terminates at 5HA str 579/1 (inside Sub)				
Structures 579/1 to 579/6				
579/7	5LT+30			Access Stallings Creek Dr
579/8	5LT+30			
579/9	5LT+25			
579/10	5LT+25			Wet/soggy soil
579/11				Not accessible
579/12	5LT+25			Wet/soggy soil
579/13	5LT+20			Wet/soggy soil
579/14	5LT+30			
579/15	5LT+20			Access Emmanuel Church Rd
579/16	5LT+35			Access Magnet Drive
579/17	5LA+20			Access Magnet Drive
579/18	5LT+35			Access Magnet Drive
579/19	5LT+40			Access non-paved driveway
579/20				In farm field/not accessible
579/21	5LT+25			Access off non-paved driveway
579/22	5LT+30+35			
579/23	5LT+20			
579/24	5LT+20			
579/25	5LT+25			
579/26	5LT+20BE+25LE			
579/27	5LT+40			
579/28	5LT+35			Access Foursquare Rd (Rt 620)
579/29	5LT+30			Smithfield Sub/Foursquare Rd
579/30	5MA+15			Smithfield Sub
579/31	5LT+35			
579/32	5LT+25			
579/33	5LT+40			
579/34	5LT+40			Access off Scotts Factory Rd (Rt 620)
579/35	5LT+40			
579/36	5LT+20			Access Carroll Bridge Rd

Structure Number	Tower Type	Notifications	Structure Height	Notes
579/37	5LT+25			
579/38	5LT+15			
579/39	5LT+15			In a farm field
579/40	5LT+40			
579/41	5LT+30			
579/42	5LT+30			
579/43	5LT+5			
579/44	5LT+20BE+20+25			
579/45	5LT+40			
579/46	5LT+15			
579/47	5LT+35			
579/48	5LT+30			
579/49	5LT+30			Access off Bowling Green Rd (Rt 644)
579/50				In farm field/not accessible
579/51	5LT+35			In farm field
579/52	5LT+30			In farm field
579/53	5LT+40			In farm field
579/54				Next to farm field/not accessible
579/55	5LT+15			Access Rd off Woodland Dr (Rt 600)
579/56	5LT+10			Access Rd off Arabian Trail
579/57	5LT+10			
579/58	5LT+35			
579/59	5LT+40BE+40			
579/60	5HA+40BE+40			Access from Woodland Dr (Rt 600)
Structures 579/61 to 579/68				
579/69	5LT+35			In a farm field
579/70	5LT+30			Access Oliver Dr (Rt 600)
579/71	5LT+30			Inside horse fence area
579/72	5LT+30			Inside farm fence area
579/73	5LT+35			
Structures 579/74 to 579/101				
579/102	5HA+35			Structures not to be inspected and rehab Access Godwin Blvd (Rt 32)



Structure Number	Tower Type	Notifications	Structure Height	Notes
579/103	5LT+30			In a farm field area ?
Structures 579/104 to 579/120				
579/121	5LT+40			Access off ROW
579/122	5HA+10			
579/123	5LT+20			
579/124	5LT+20			
579/125	5LT+30			
579/126	5LT+25			
579/127	5LT+30			
579/128	5LT+30			
579/129	5LT+30			
579/130	5LT+35			
579/131	5LT+35			Access off Portsmouth Blvd (Rt 13)
Structures 579/132 to 579/183				
Yadkin Sub	TL 579 terminates at backbone str 579/184			
Structures not to be inspected and rehab				

# ***Grounding Requirements***

## CORTEN TOWER REFURBISHMENT PROJECT

### STRUCTURE GROUNDING PROCEDURES

Grounding of every tower which will need to be climbed, inspected, and rehabilitated in accordance with the project specification is mandatory for the safety of the construction personnel. Every tower shall be grounded with a temporary ground whether a ground connection is visible or not on the tower before any other work is performed. Below is the step-by-step procedure to follow when installing the temporary ground for the tower:

The set of grounds shall be comprised of the following components or approved equivalent:

Minimum of 2/0 stranded copper insulated grounding cables. Hubbell C-Type Clamp C6002275, Tower Face Clamp C6002232, and Temporary Ground Rod G3370.

#### **Procedures:**

- \*Install the Temporary Ground Rod in the ground adjacent to the tower leg.
- \*The area of the Ground Rod where the clamp is to be attached shall be thoroughly cleaned with a wire brush or fine grit emery cloth. Attach one end of the ground set (C-Type Clamp) securely on the cleaned ground rod.
- \*Using a hot line stick (shotgun stick 6 foot); attach the other end of the ground set (Tower Face Clamp) firmly to the tower leg. Tighten set screw on clamp with hot-stick to get good contact with the steel surface.
- \*You may proceed with the work activities on the tower.
- \*If the tower does **not** have a visible ground in good condition; the grounding system shall be repaired or the tower must be grounded in accordance with the attached grounding detail (60.920).
- \*The temporary ground shall be removed in the reverse order as it was installed. This means the ground clamp to the tower leg shall be removed with the hot stick just like the first step.

DLC 8/31/15

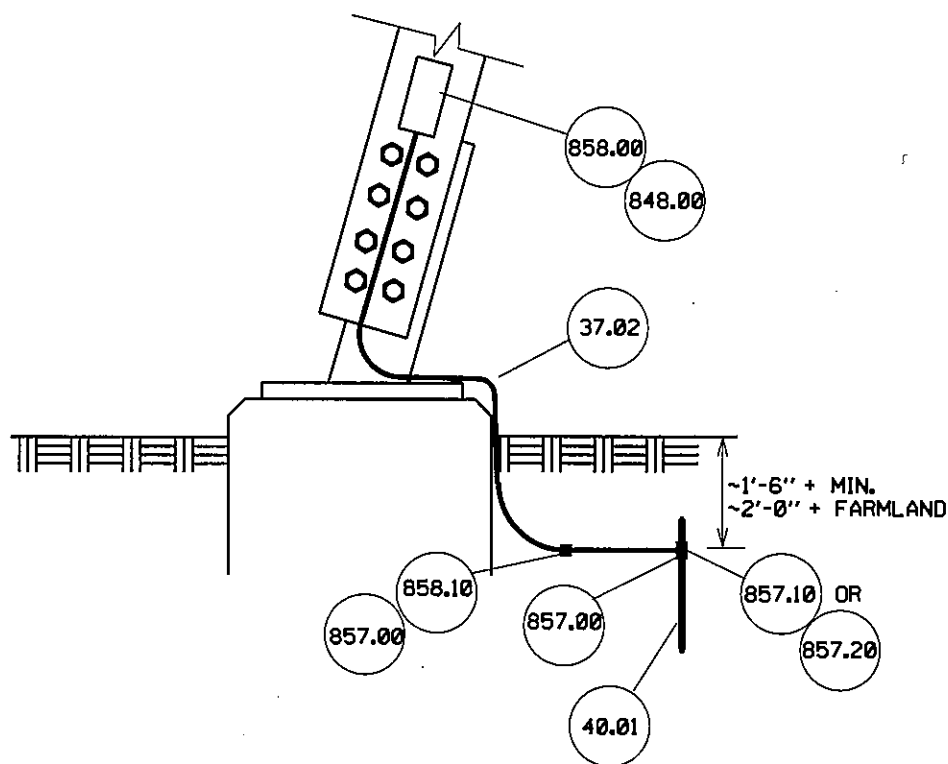
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## B/M REQ'D FOR ONE ASSEMBLY

PAGE  
NO.

QTY	ITEM NO.	STOCK NO.	DESCRIPTION	ULT. STR.
*	37.02	42177693	WIRE, CCS #4 SOLID	
*	40.01	57.8785	GROUND ROD, CU, 5/8" X 6'	
*	848.00	71.5995	#65 WELD METAL	
*	857.00	42134611	#25 WELD METAL	
*	857.10	42126879	CADWELD, #4 CU TO 5/8" ROD	
*	857.20	42126880	CADWELD, #4 CU TO 5/8" ROD	
*	858.00	42204510	#4 TO TOWER LEG CONN.	
*	858.10	42204511	#4/#4 MOLD CONN.	

\*AS REQUIRED

REPAIR GROUNDING AT ALL TOWER LEGS

## NOTE:

EACH TOWER LEG TO BE CHECKED FOR COMPETENCY OF GROUNDING CONNECTION. IF EXISTING GROUNDING IS DAMAGED OR MISSING, NEW MATERIALS SHALL BE USED AS SHOWN TO RESTORE THE CONNECTION. A CADWELD CONNECTION SHALL BE USED WHERE A NEW GROUNDING TO TOWER LEG CONNECTION IS REQUIRED. THE AREA WHERE A CADWELD CONNECTION IS TO BE MADE SHALL BE GROUND TO BRIGHT METAL. NEW GROUND RODS ARE REQUIRED IF EXISTING GROUND WIRE IS BROKEN BELOW GRADE OR FLUSH TO CONCRETE SURFACE.

\* - CADWELD COME IN KITS OF 60 WELDS PER KIT. SEE SAP LONG DESCRIPTION FOR STARTER KIT (ITEM 857.10) AND REPLACEMENT KIT (857.20) DETAILS.

ITEM 848.00 IS ONE WELD METAL AND GOES WITH ITEM 858.00 WHICH IS ONE CONNECTION.

ITEM 857.00 (PART OF STARTER KIT) IS ONE WELD THAT GOES WITH 858.10 WHICH IS ONE CONNECTION.

**Standard  
Transmission Construction**

**CORTEN REHAB. - STEEL TOWER  
GROUNDWIRE INSTALLATION / REPAIR**



Dominion  
701 E. Cary Street  
Richmond, VA 23219

	DRAWN	CHECKED	APPROVED	DATE	DRAWING NO.
STANDARD	CNH			8/19/15	60.920
LINE DWG					CAD NO. TES60920

TES60920 \$DGN\$SPEC\$





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### Temporary Ground Rod

The Chance Screw Ground Rod provides a temporary ground where a system ground is not available. When installed, the 6' spiraled ground rod develops less resistance than straight ground rods. However, actual effectiveness depends upon soil properties. The reusable Ground Rod is copper clad. The helix (spiral) and handle are bronze. For truck-grounding applications, see kit below.

Catalog No.	Description	Weight
G3370	Screw Ground Rod	7-3/4 lb./3.5 kg.



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Home > Products > Lineman Grade Tools > Grounding Equipment > Clamps > Tower & Flat Face > C6002232

### Tower & Flat-Face :: C6002232

**C6002232**  
 Bronze body  
 Serrated jaws  
 Smooth jaws,  
 Bronze eyescrew with Acme threads,  
 Drilled for 5/8-11 UNC threaded ferrule



ELECTRICAL RATINGS	
Continuous Current (AMPS)	400
Fault Current 15 Cycles (AMPS)	43,000
Fault Current 30 Cycles (AMPS)	30,000
Recommended Torque (in.-lb.)	250
Main Line Range - Max.	1 1/2" Angles 1 1/2" Flat
Main Line Range - Min.	1/8"
Jumper Range - Max.	4/0 Grd. Cable w/Threaded Stud
Jumper Range - Min.	#2 Grd. Cable w/Threaded Stud
Weight Each	2 lb./0.9 kg.
ASTM Designation	Type I Class B Grade 5



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### C-Type :: C6002275

**C6002275**  
 Aluminum body,  
 Smooth jaws,  
 Bronze eyescrew with Acme threads,  
 Bronze pressure-type terminals



ELECTRICAL RATINGS	
<b>Continuous Current (AMPS)</b>	400
<b>Fault Current 15 Cycles (AMPS)</b>	43,000
<b>Fault Current 30 Cycles (AMPS)</b>	30,000
MECHANICAL RATINGS	
<b>Recommended Torque (in.-lb.)</b>	250
<b>Main Line Range - Max.</b>	1033 kcmil ACSR (1.25")
<b>Main Line Range - Min.</b>	#8 Sol. Cu. (0.128")
<b>Jumper Range - Max.</b>	4/0 Grd. Cable w/Plain Plug
<b>Jumper Range - Min.</b>	#2 Grd. Cable w/Plain Plug
<b>Weight Each</b>	1 1/4 lb./0.6kg.
<b>ASTM Designation</b>	Type I Class A Grade 5



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# ***Fall Protection***



## S-K2™ Step Bolt Adaptor

### INSTALLATION INSTRUCTIONS

The Rapid Rail International **S-K2™** product is designed for use on structures equipped with step-bolts. Step bolts are not supplied but must be capable of supporting a correctly installed SK-2 product when it is subjected to a force of 5000lbf vertically downwards. Three models are available:

SK2-16 Part No. 101053 for attachment to 5/8" bolts

SK2-19 Part No. 101054 for attachment to 3/4" bolts

SK2-22 Part No. 101055 for attachment to 7/8" bolts

**WARNING:** All persons using or installing this equipment must understand all instructions. Failure to do so may result in serious injury or death. Users should be familiar with pertinent regulations governing this equipment. All individuals who use this product must be properly instructed on how to use this device.



### Installation

- Before starting installation, establish that the structure and step bolts are capable of supporting the expected fall arrest forces and are in good condition. I.e. free of corrosion, distortion (bending) and securely fixed.
- Removal of the step-bolt is not required if it is in good condition, otherwise it should be replaced.
- Inspect the **S-K2™** for damage, cracks or corrosion before attachment to the step-bolt.

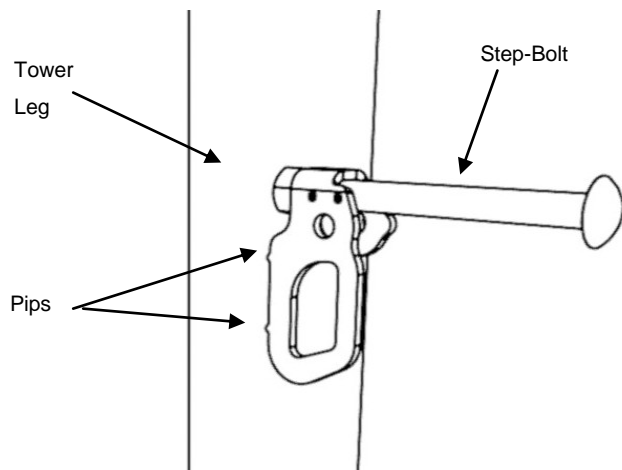


Fig 1

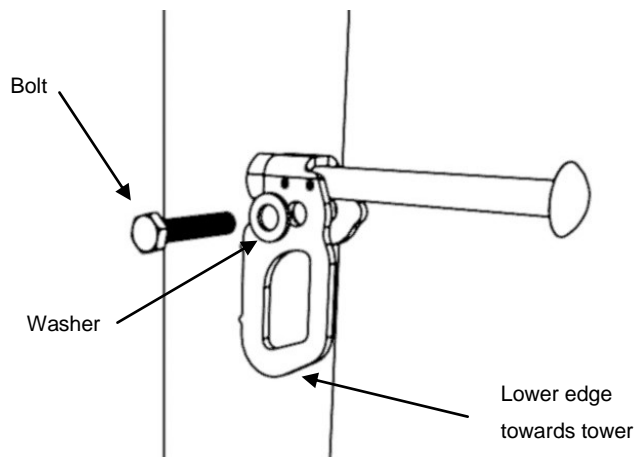


Fig 2

- Place the **S-K2™** over the step-bolt in the correct vertical orientation with the lower edge angled down towards the tower body and the pips against the tower leg as shown on Fig1. The **S-K2™** must be vertical as shown.
- Insert the supplied bolt and washer through the fixing hole in the **S-K2™** until it engages with the fixed nut and hand tighten. Use the supplied bolt and washer only, do not use any other bolts or washers. Fig 2.
- Ensure that the **S-K2™** is vertical and the pips are against the tower before using a suitable wrench to tighten the bolt sufficiently to prevent it rotating on the step bolt when hand pressure is applied. Torque to approximately 26 lbf ft (35 Nm)
- Ensure that the **S-K2™** will not rotate or slide along the step bolt when hand pressure is applied.

Doc: D15002	Issue: 4	Issue Date: 12/2015
Page 1 of 2	Approved: A Warren	

## Pre-Use Inspection

- Before use as a fall arrest anchor, visually inspect the **S-K2™** and step-bolt for corrosion or damage and that the **S-K2™** will not slide along or rotate on the step-bolt.
- Ensure the correct orientation of the **S-K2™** i.e. the snap-hook attachment point is vertically below the step-bolt.

**Do not use any product that fails these inspections.**

## Warnings

- This product is intended for use by trained professional climbers only.
- A copy of these instructions should be provided to all users. Please contact Rapid Rail International Limited for additional copies.
- All instructions for this and any associated products must be read and understood before use.

**Failure to comply with these instructions and warnings could result in serious injury or death.**

- This product is for use as a fall arrest anchor only. It must not be used for any other purpose such as hoisting. Please consult Rapid Rail International Limited before use if you propose to use this product for any other purpose.
- If this product had been subjected to any impact forces, such as arresting a fall, it must be immediately removed from service.
- The **S-K2™** can be used to protect one person only. Multiple connections to a single **S-K2™** is not allowed.
- The **S-K2™** will support a force of 5000lbf (22,2kN) but OSHA requires that fall arrest forces are limited to 1800lbf (8kN). The user should ensure that the PFAS system used includes a force limiting feature e.g. tear webbing. Maximum free fall distance is 6'.
- Do not modify, change or repair this product in any way.
- This product should be used only with compatible snap-hooks or carabineers. They should meet applicable OSHA standards. Be aware of roll out issues with some snap-hooks and carabineers.
- Check that the snap-hook or carabineer is correctly attached to the **S-K2™** and that the gate is closed and engaged. Check visually.

## Product Warranty, Limited Remedy and Limitation of Liability

**Warranty:** The following is made in lieu of all warranties or conditions, express or implied, including the implied warranties and conditions or merchantability or fitness for a particular purpose. The SK2 range of products offered by Rapid Rail International Limited is warranted against factory defects in workmanship and materials for a period of two years from the date of purchase or first use by the original owner.

**Limited Remedy:** Upon notice in writing, Rapid Rail International Limited will repair or replace all defective items at Rapid Rail International's sole discretion. Rapid Rail International Limited reserves the right to require that the defective item be returned to its plant for inspection before determining the appropriate course of action. Warranty does not cover equipment damage resulting from wear, abuse, damage in transit, or any damage beyond the control of Rapid Rail International Limited. Rapid Rail International Limited is the sole judge of product condition and warranty options. This warranty applies only to the original purchaser and is the only warranty applicable to the product. Please contact Rapid Rail International for assistance.

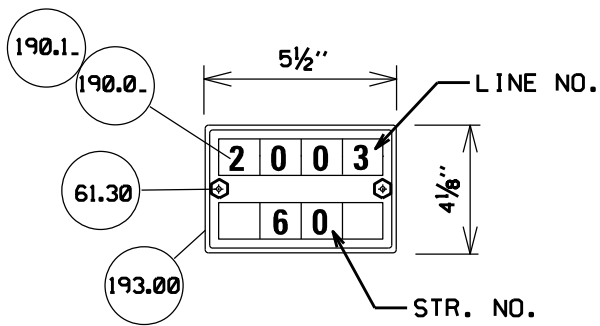
**Limitation of liability:** In no event will Rapid Rail International Limited be liable for any indirect, incidental, special or consequential damages including, but not limited to loss of profits, in any way related to these products regardless of the legal theory asserted.

Rapid Rail International Limited, Cwmbran, NP44 8SN, UK

Tel: 00144 1633 870676 [www.RRiSafety.com](http://www.RRiSafety.com)

Doc: D15002	Issue: 4	Issue Date: 12/2015
Page 2 of 2	Approved: A Warren	

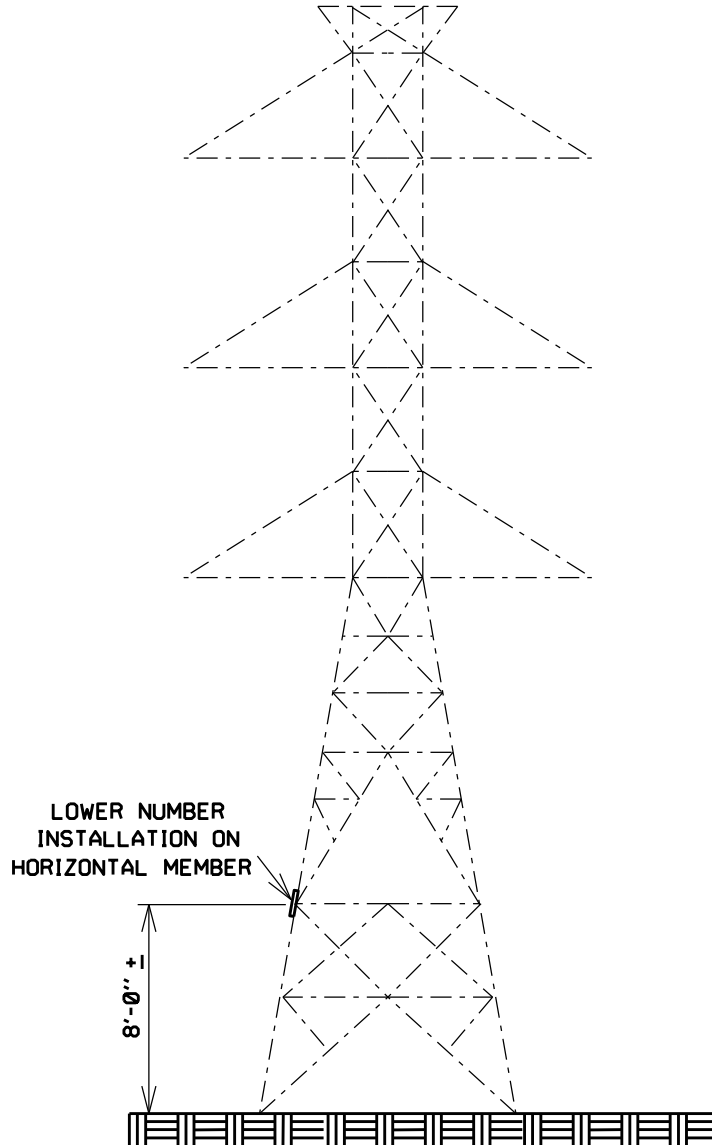
# *Construction Drawings*



LOWER NUMBERING PLATE

B/M REQ'D FOR ONE ASSEMBLY				PAGE NO.
QTY	ITEM NO.	STOCK NO.	DESCRIPTION	ULT. STR.
2	61.30	42019091	BOLT, SS 5/16"x1-1/4" w NUT	
*	190.0.	51.7325	1" ALUMINUM NUMBERS	
*	190.1.	51.7020	1" ALUMINUM LETTERS	
1	193.00	51.7040	NUMBER PLATE, 4 1/8"x5 1/2"	

\* AS REQUIRED



**NOTE:**

1. SEE DWG. 80.010, INSTRUCTIONS FOR STRUCTURE NUMBERING.
2. ITEM 61.30 IS SUPPLIED WITH A FLAT WASHER, LOCK WASHER, AND NUT, TO BE USED TO ATTACH THE LOWER NUMBER PLATE.

**Standard  
Transmission Construction**

**NUMBERING OF STEEL TOWER - LOWER  
SINGLE CIRCUIT INSTALLED**



Dominion  
701 E. Cary Street  
Richmond, VA 23219

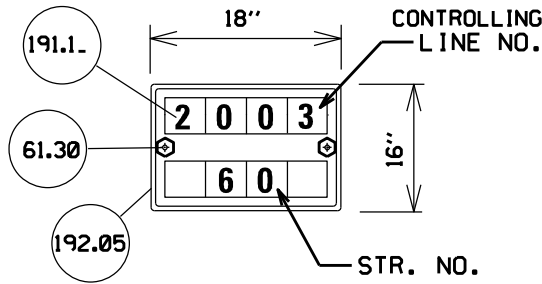
	DRAWN	CHECKED	APPROVED	DATE	DRAWING NO.
STANDARD	CVB	AKK	MSA	9/28/07	80.160
LINE DWG					CAD NO. XXXXXXXX



\$SYTIME\$

\$DGN\$SPEC\$

TESBORDI



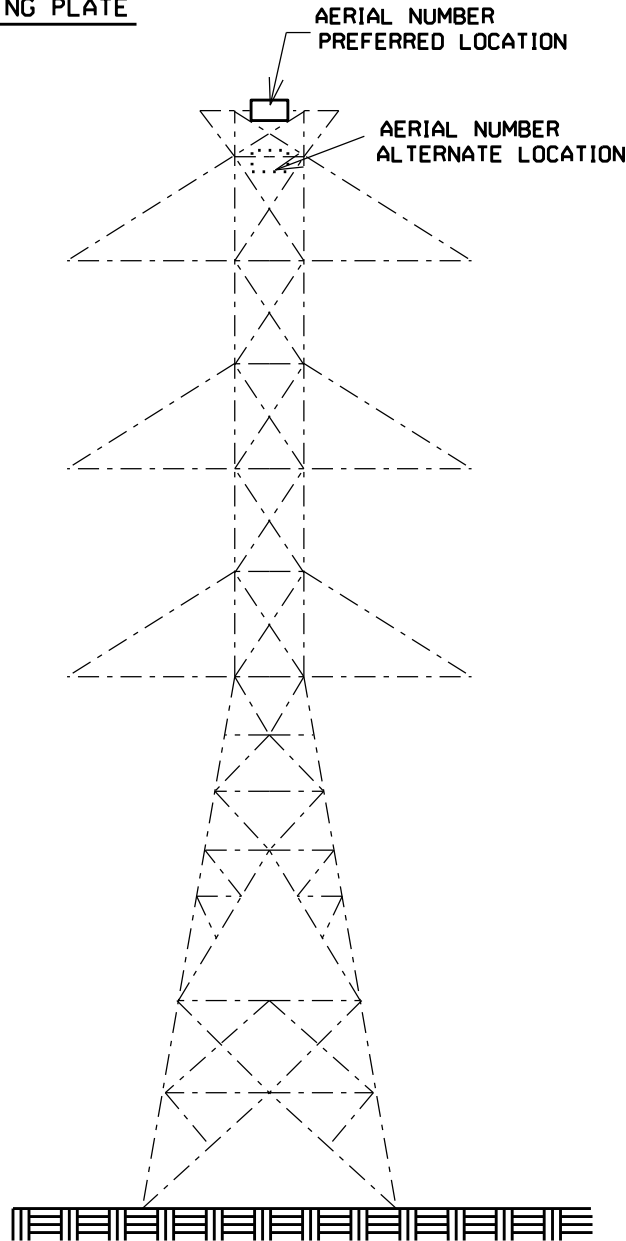
AERIAL NUMBERING PLATE

**B/M REQ'D FOR ONE ASSEMBLY**

PAGE  
NO.

QTY	ITEM NO.	STOCK NO.	DESCRIPTION	ULT. STR.
4	61.30	42019091	BOLT, SS 5/16"x1-1/4" w NUT	
*	191.1.	42026...	NUMERALS, 6" STICK ON	
2	192.05	42026164	BLANK, AERIAL, 18"x16"	

\* AS REQUIRED



**NOTE:**

1. WHEN MORE THAN ONE CIRCUIT IS INSTALLED, THE CONTROLLING LINE NUMBER WILL BE DETERMINED BY THE TRANSMISSION LINES DEPARTMENT.
2. SEE DWG. 80.010, INSTRUCTIONS FOR STRUCTURE NUMBERING.
3. ITEM 61.30 IS SUPPLIED WITH A FLAT WASHER, LOCK WASHER, AND NUT, TO BE USED TO ATTACH THE AERIAL NUMBER PLATE.

**Standard  
Transmission Construction**

**NUMBERING OF STEEL TOWER - AERIAL**

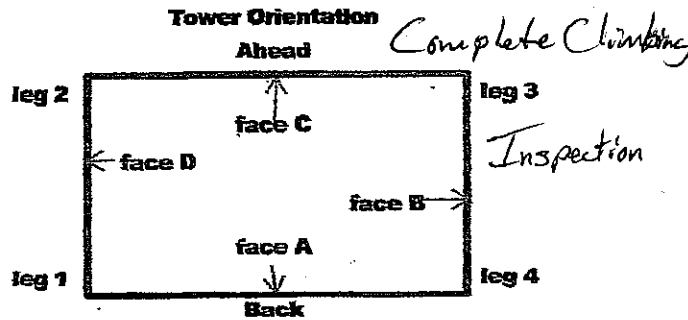


Dominion  
701 E. Cary Street  
Richmond, VA 23219

	DRAWN	CHECKED	APPROVED	DATE	DRAWING NO.
STANDARD	CVB	EHS	SAC	7/22/02	80.162
LINE DWG					CAD NO. XXXXXXXX

80.162

## Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Line Number: 579Structure No: 7Structure Type: SLT+30'LEBack Substation: SeptaAhead Substation: YAKin

Groundline Inspection						Date: _____		
Severe Corrosion		Steel Measurements			Foreman: _____			
	Yes	No	Reading 1	Reading 2	Action Code	See spec book for explanation of foundation codes	Fnd Code	Action Code
Leg 1	—	✓	VG	VG	P			
Leg 2	—	✓	VG	VG	P			
Leg 3	—	✓	VG	VG	P			
Leg 4	—	✓	VG	VG	P			

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found  
In Lieu of Measurements - VG: Visually Inspected - Good

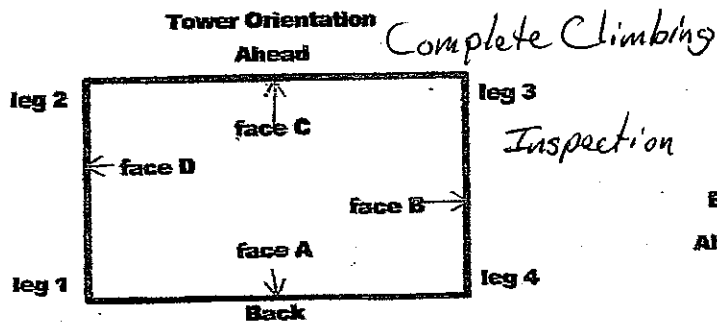
FR: Foundation Repaired

## Tower Inspection

Step Bolt Clips Added:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Quantity: <u>40</u>	
	Damage	Face	Member	Corrective Action	Remark
1	P	BD	10x2	BP-NB-GW	
2	P	BD	11x2	BP-NB-GW	
3	C	D	115Lx1	LF	Ladder
4	C	D	115Rx1	LF	Ladder
5	P	AC	213x2	BP-NB-GW	
6	P	BD	674x4	BP-NB-GW	
7	P	AC	673x4	BP-NB-GW	
8	O	AB	Leg 2	G	Grounded Rod wire Cadweld
9	O	CD	Leg 4	G	Grounded Rod wire Cadweld
10					
11					
12					
13					
14					
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	
B: Bent		RP: Replaced		RS: Removed Lower Step Bolts	
C: Cracked		LF: Left as Found		BP: Beat Packout	
TM: Thin Member				NS: New Danger/Aerial/Number Signs	
O: Other				IP: Installed Package Per Specs	
				FP: Flipped /Straightened Plates	

Date: 1-26-2022 Foreman: Michael DavisCompany: LEMYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet



Line Number: 579

Structure No: 8

Structure Type: 5LT+30'LE

Back Substation: SEPTA

Ahead Substation: VAKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	VG	VG
Leg 2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	VG	VG
Leg 3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	VG	VG
Leg 4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	VG	VG

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Fnd Code	Action Code
		LF
		LF
		LF
		LF

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found  
In Lieu of Measurements - VG: Visually Inspected - Good

FR: Foundation Repaired

## Tower Inspection

Step Bolt Clips Added:		Yes	No	Quantity: 48	
	Damage	Face	Member	Corrective Action	Remark
1	P	BD	10x2	BP-NB-GW	
2	P	BD	11x2	BP-NB-GW	
3	C	D	115Lx1	LF	Ladder
4	C	D	115Rx2	LF	Ladder
5	P	AC	213x2	BP-NB-GW	
6	P	AC	673x4	BP-NB-GW	
7	P	BD	674x4	BP-NB-GW	
8	O	AB	Leg 1	G	Ground rod wire each weld
9	O	CD	Leg 3	G	Ground rod wire each weld
10					
11					
12					
13					
14					
15					
16					
17					

Damage Code		Corrective Action Code		Remark Code:	
NB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

Date: 1-25-2022

Foreman: Michael Davis

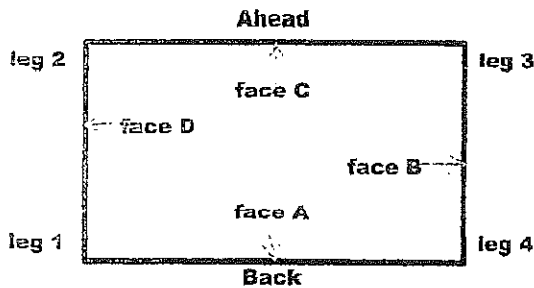
Company: L.E. MYERS

## Ahead



# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579

Structure No: 10

Structure Type: SLT+25' LE

Back Substation: SEPTA

Ahead Substation: YAKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1		✓	↓	↓
Leg 2		✓	↓	↓
Leg 3		✓	↓	↓
Leg 4		✓	Good	VG
		Action Code		
		P		

Foundation Inspection		
Date: _____		
Foreman: _____		
See spec book for explanation of foundation codes	Fnd Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

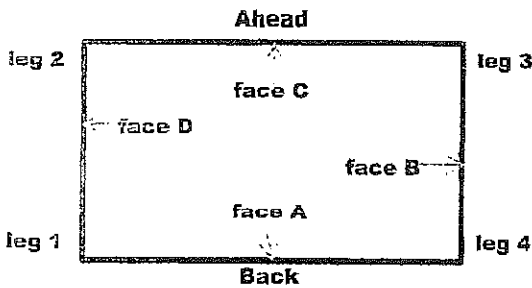
Step Bolt Clips Added:		<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No		Quantity: <u>38</u>	
	Damage	Face	Member	Corrective Action	Remark		
1	P	Bd	10x2	R	BP - NB - GW		
2	P	Bd	11x2	R			
3	P	AC	219x4	R			
4							
5							
6							
7							
8							
9					Install Grounds		
10					Leg 1-3		
11							
12							
13							
14							
15							
16					Climbing Inspection		
17					Complete		
Damage Code		Corrective Action Code		Remark Code:			
MB: Missing Bolt		R: Repaired		G: Grounded Str		RS: Removed Lower Step Bolts	
B: Bent		RP: Replaced		BP: Beat Packout		NS: New Danger/Aerial/Number Signs	
C: Cracked		LF: Left as Found		GW: Applied Greywax		IP: Installed Package Per Specs	
TM: Thin Member				NB: New Bolts		FP: Flipped /Straightened Plates	
O: Other							

Date: 1/25/22 Foreman: GREG V/A

LEMYRES

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579

Structure No: 12

Structure Type: SLT+25'LE

Back Substation: SEPTA

Ahead Substation: YADKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1		✓		
Leg 2		✓		
Leg 3		✓		
Leg 4		✓	Good	VG
				Action Code
				P
				P
				P
				P

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	End Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired  
in Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

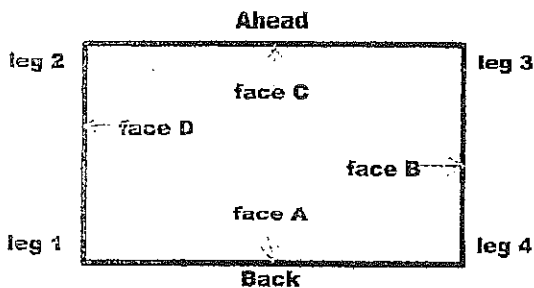
Step Bolt Clips Added:		✓ Yes		No		Quantity:	38
	Damage	Face	Member	Corrective Action		Remark	
1	P	Bd	10x2	R		BP - Gw - NB	
2	P	Bd	11x2	R			
3	P	A	219x2	R			
4	TM	ABcd	220x8	RP			
5							
6						Installed Grounds	
7						Leg 3-4	
8							
9							
10							
11							
12							
13							
14						Climbing Inspection	
15						Complete	
16							
17							
Damage Code		Corrective Action Code		Remark Code:			
MB: Missing Bolt		R: Repaired		G: Grounded Str		RS: Removed Lower Step Bolts	
B: Bent		RP: Replaced		BP: Beat Packout		NS: New Danger/Aerial/Number Signs	
C: Cracked		LF: Left as Found		GW: Applied Greywax		IP: Installed Package Per Specs	
TM: Thin Member				NB: New Bolts		FP: Flipped /Straightened Plates	
O: Other							

Date: 1/31/22 Foreman: GREG VIA

LEMYRES

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Numbers: 579

Structure No: 13

Structure Type: 5LT + 20' LE

Back Substation: \_\_\_\_\_

Ahead Substation: \_\_\_\_\_

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1		✓	↓	↓
Leg 2		✓	↓	↓
Leg 3		✓	↓	↓
Leg 4		✓	Good	VG
				Action Code
				P
				P
				P
				P

Foundation Inspection		
Date: _____		
Foreman: _____		
See spec book for explanation of foundation codes	Fnd Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added:		Yes		No		Quantity: 35	
	Damage	Face	Member	Corrective Action		Remark	
1	P	Bd	10x2	R		BP - Gw - NB	
2	P	Bd	11x2	R			
3	P	AC	219x4	R			
4							
5							
6							
7							
8							
9						Installed Grounds	
10						Leg 2-4	
11							
12							
13							
14							
15							
16							
17						Climbing Inspection Complete	
Damage Code		Corrective Action Code		Remark Code:			
MB: Missing Bolt		R: Repaired		G: Grounded Str		RS: Removed Lower Step Bolts	
B: Bent		RP: Replaced		BP: Beat Packout		NS: New Danger/Aerial/Number Signs	
C: Cracked		LF: Left as Found		GW: Applied Greywax		IP: Installed Package Per Specs	
TM: Thin Member				NB: New Bolts		FP: Flipped /Straightened Plates	
O: Other							

Date: 4/30/22 Foreman: Greg V. A

LEMYRES

## Tower Orientation Ahead

# Complete Climbing

**Line Number:**

529

**Structure No:**

14

**Structure Type:**

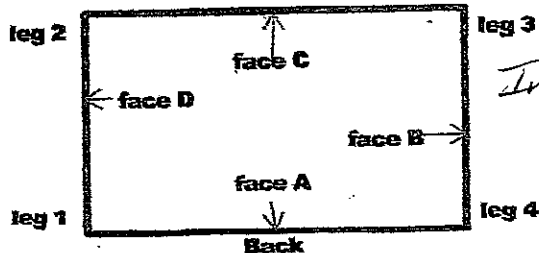
527+30'LE

## Back Substations

SEPTA

### Ahead Substation:

YADKIN



### Groundline Inspection

Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1	—	✓	VG	VG	P
Leg 2	—	✓	VG	VG	P
Leg 3	—	✓	VG	VG	P
Leg 4	—	✓	VG	VG	P

## Foundation Inspection

**Dates:****Foreman:**

**See spec  
book for  
explanation  
of  
foundation  
codes**

**End Code****Action Code**

15

LF

LF

4

FR

Action Codes: P: Applied Leg Coating - B: Baseshoe Replaced - LF: Left as Found  
In Lieu of Measurements - VG: Visually Inspected - Good

## FR: Foundation Repaired

## Tower Inspection

Step Bolt Clips Added:		Yes	No	Quantity: 43	
	Damage	Face	Member	Corrective Action	Remark
1	P	BD	10x2	BP-NB-GW	
2	P	BD	11x2	BP-NB-GW	
3	MB	C	42x1	R-NB-GW	
4	P	AC	213x2	BP-NB-GW	
5	C	BD	115Lx2	LF	
6	C	BD	115RX2	LF	
7	P	C	673x1	BP-NB-GW	
8	P	B	674x1	BP-NB-GW	
9	TM-B	ABCD	220x8	RP-BP-NB-GW	
10	O	AD	Leg 1	G	Rod - wire - Cadweld
11	O	CB	Leg 3	G	Rod - wire - Cadweld
12					
13					
14					
15					
16					
17					

Damage Code	Corrective Action Code	Remark Code:
MB: Missing Bolt	R: Repaired	G: Grounded Str
B: Bent	RP: Replaced	BP: Beat Packout
C: Cracked	LF: Left as Found	GW: Applied Greywax
TM: Thin Member		NB: New Bolts
O: Other		

RS: Removed Lower Step Bolts	NS: New Danger/Aerial/Number Signs	IP: Installed Package Per Specs	FP: Flipped /Straightened Plates

**Date:** 1-31-2022

**Foreman:**

Michael Davis

Company: LEMYERS



# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation  
Ahead

Complete Climbing

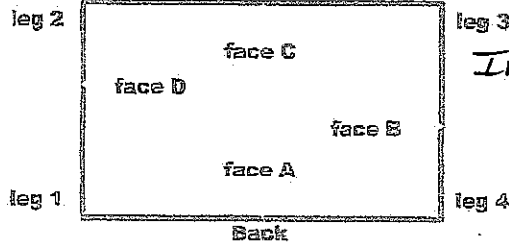
Line Number: 579

Structure No: 15

Structure Type: SLT+20'LE

Back Substation: SEPTA

Ahead Substation: YADKIN



Inspection

Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1		✓	VG	VG	P
Leg 2		✓	VG	VG	P
Leg 3		✓	VG	VG	P
Leg 4		✓	VG	VG	P

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired  
In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added: ✓ Yes		No		Quantity: 35	
Damage	Face	Member	Corrective Action	Remark	
P	BD	10x2	BP-NB-GW		
P	BD	11x2	BP-NB-GW		
C	BD	115LX1	LF		
C	BD	115RX1	LF		
P	AC	213X2	BP-NB-GW		
P	A	594X1	BP-NB-GW		
O	AD	Leg 1	G	Rod - WIRE - Cackwield	
O	CB	Leg 3	G	Rod - WIRE - Cackwield	
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

Date: 1-27-2022 Foreman: Michael Davis

Company: L.E. MYERS

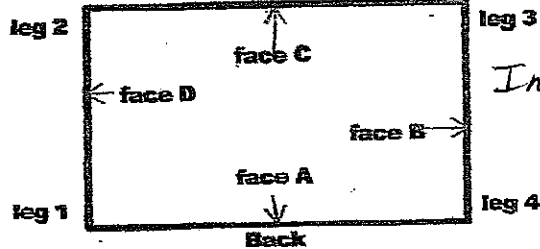
# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation  
Ahead

Complete Climbing

Line Number: 579

Structure No: 16



Inspection

Structure Type: 5LT+35'LE

Back Substation: SEPTA

Ahead Substation: YADKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1		✓	VG	VG
Leg 2		✓	VG	VG
Leg 3		✓	VG	VG
Leg 4		✓	VG	VG

Foundation Inspection		
Date:		
Foreman:		
See spec	Find Code	Action Code
book for		LF
explanation		LF
of		LF
foundation		LF
codes		LF

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found  
In Lieu of Measurements - VG: Visually Inspected - Good

FR: Foundation Repaired

## Tower Inspection

Step Bolt Clips Added: ✓ Yes		No		Quantity: 48	
	Damage	Face	Member	Corrective Action	Remark
1	P	BD	10x2	BP-NB-GW	
2	P	BD	11x2	BP-NB-GW	
3	C	BD	115Lx2	LF	Ladder
4	C	BD	115Rx2	LF	Ladder
5	P	AC	213x2	BP-NB-GW	
6	TM-B	ABCD	220X9	RP-BP-NB-GW	
7	P	A	8151X1	BP-NB-GW	
8	P	B	8291X1	BP-NB-GW	
9	P	A	704X1	BP-NB-GW	
10	P	BD	707X4	BP-NB-GW	
11	O	AB	Leg 2	G	ground rod - wire - Cadweld
12	O	CD	Leg 4	G	ground rod - wire - Cadweld
13	O	ABCD	High Voltage Signs	X4 NS	
14	C	A	805X1	RP-BP-NB-GW	
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

Date: 2-7-2022 Foreman: Michael Davis

Company: L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation

Ahead

Complete Climbing

Line Number:

579

Structure No:

17

Structure Type:

5LA+20'LE

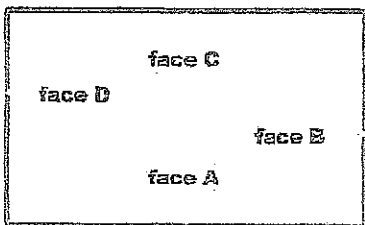
Back Substation:

CHICKAHOMINY

Ahead Substation:

ELMONT

leg 2



leg 3

Inspection

leg 1

leg 4

Back

## Foundation Inspection

Date:

Foreman:

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1	—	✓	VG	VG
Leg 2	—	✓	VG	VG
Leg 3	—	✓	VG	VG
Leg 4	—	✓	VG	VG

See spec  
book for  
explanation  
of  
foundation  
codes

Fnd Code

Action Code

LF

LF

LF

LF

Action Code: F: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added:		✓ Yes	— No	Quantity: 34	
	Damage	Face	Member	Corrective Action	Remark
1	C	BD	231/2x2	LF	Ladders
2	C	BD	231R/2x2	LF	Ladders
3	P	D	64X1	BP-NB-GW	
4	P	D	65X1	BP-NB-GW	
5	P	D	229X1	BP-NB-GW	
6	P	D	230X1	BP-NB-GW	
7	P	BD	311X2	BP-NB-GW	
8	P	BD	312X2	BP-NB-GW	
9	P	D	313X1	BP-NB-GW	
10	C	B	313X2	RP-BP-NB-GW	
11	MB	D	333X1	R-NB	
12	P	B	337X1	BP-NB-GW	
13	C	BD	339X2	RP-BP-NB-GW	
14	P	AC	332X2	BP-NB-GW	
15	P	BD	691X4	BP-NB-GW	
16	P	AC	683X4	BP-NB-GW	
17	P	D	54X1	BP-NB-GW	
Damage Code		Corrective Action Code		Remark Codes	
MB: Missing Bolt		R: Repaired		G: Grounded Str	
B: Bent		RP: Replaced		BP: Beat Packout	
C: Cracked		LF: Left as Found		NS: New Danger/Aerial/Number Signs	
TM: Thin Member				IP: Installed Package Per Specs	
O: Other				FP: Flipped /Straightened Plates	

Date: 2-1-2022

Foreman: Michael Davis

Company: L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Line Number: 579

Structure No: 17

Page 2 of 2

## Tower Inspection

	Damage	Face	Member	Corrective Action	Remark
1	P	D	55X1	BP-NB-GW	
2	P	D	225X1	BP-NB-GW	
3	P	D	224X1	BP-NB-GW	
4	D	B	21X1	BP-NB-GW	
5	P	B	22X1	BP-NB-GW	
6	O	AD	Leg1	G	Rod-wire-Cadweld
7	O	CB	Leg3	G	Rod-wire-Cadweld
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

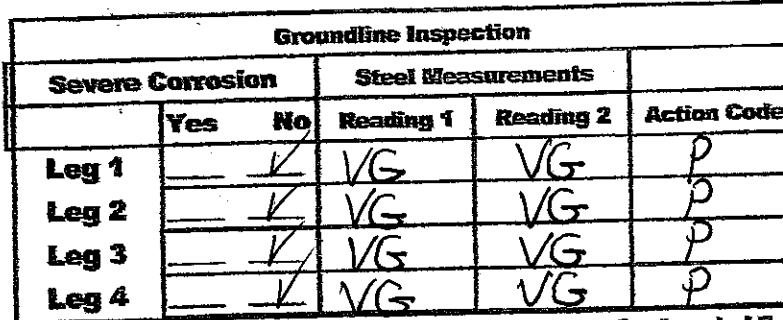


## Complete Climbing

Structure No: 18

Back Substation: SEPTA

Ahead Substation: YADKIN



Foundation Inspection		
Date: _____		
Foreman: _____		
See spec. book for explanation of foundation codes	Fnd Code	Action Code
		LF
		LF
		LF
		LF

## FR: Foundation Repaired

### Tower Inspection

Step Bolt Clips Added:		✓ Yes		No	Quantity: 49
	Damage	Face	Member	Corrective Action	Remark
1	P	BD	10X2	BP-NB-GW	
2	P	BD	11X2	BP-NB-GW	
3	C	BD	115LX1	LF	Ladder
4	C	BD	115RX1	LF	Ladder
5	P	AC	213X2	BP-NB-GW	
6	P	BD	207X4	BP-NB-GW	
7	P	D	706X2	BP-NB-GW	
8	P	A	219X1	BP-NB-GW	
9	TM-B	ABCD	220X13	BP-BP-NB-GW	
10	O	B	Dampner	LF	Outer Phase Loose Vibrated
11	O	AD	Leg 1	G	Down the Line ground Rod wire cadweld
12	O	BC	Leg 2	G	ground Rod wire cadweld
13					
14					
15					
16					
17					

Damage Code	Corrective Action Code	Remark Code:
MB: Missing Bolt	R: Repaired	G: Grounded Str
B: Bent	RP: Replaced	RS: Removed Lower Step Bolts
C: Cracked	LF: Left as Found	NS: New Danger/Aerial/Number Signs
TM: Thin Member		IP: Installed Package Per Specs
O: Other		FP: Flipped /Straightened Plates

Company: L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation

Ahead

Complete Climbing

Line Number:

579

Structure No:

19

Structure Type:

5L+40'LE

Back Substation:

SEPTA

Ahead Substation:

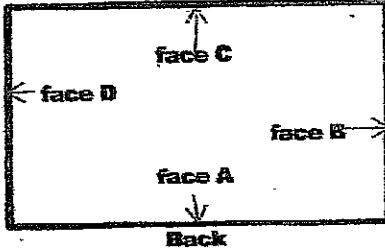
VADKIN

leg 2

leg 3

leg 1

leg 4



## Groundline Inspection

Severe Corrosion		Steel Measurements		Action Code
Yes	No	Reading 1	Reading 2	
Leg 1	<input checked="" type="checkbox"/>	VG	VG	P
Leg 2	<input checked="" type="checkbox"/>	VG	VG	P
Leg 3	<input checked="" type="checkbox"/>	VG	VG	P
Leg 4	<input checked="" type="checkbox"/>	VG	VG	P

## Foundation Inspection

Date:

Foreman:

See spec  
book for  
explanation  
of  
foundation  
codes

Fnd Code

Action Code

LF

LF

LF

LF

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found  
In Lieu of Measurements - VG: Visually Inspected - Good

FR: Foundation Repaired

## Tower Inspection

Step Bolt Clips Added:		✓ Yes		No	Quantity:	48
	Damage	Face	Member	Corrective Action	Remark	
1	P	BD	10X2	BP-NB-GW		
2	P	BD	11X2	BP-NB-GW		
3	P	AC	213X2	BP-NB-GW		
4	P	AC	754X4	BP-NB-GW		
5	P	BD	757X4	BP-NB-GW		
6	TM-B	ABCD	220X16	RP-BP-NB-GW		
7	P	BD	756X2	BP-NB-GW		
8	P	A	753X1	BP-NB-GW		
9	O	AD	Leg 1	G	grounded Rock wire Cadweld	
10	O	BC	Leg 3	G	ground Rock wire Cadweld	
11						
12						
13						
14						
15						
16						
17						
Damage Code		Corrective Action Code		Remark Code:		
NB: Missing Bolt		R: Repaired		G: Grounded Str		RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout		NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax		IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts		FP: Flipped /Straightened Plates
O: Other						

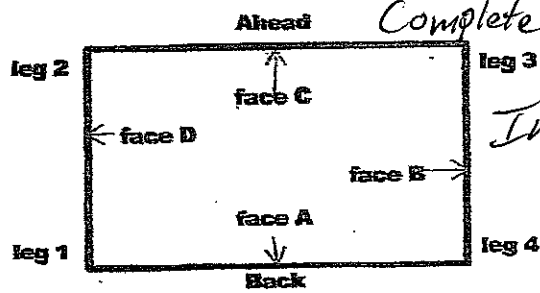
Date: 2-15-2022

Foreman: Michael Davis

Company: L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579  
 Structure No: 21  
 Structure Type: SLT+25'LE  
 Back Substation: SEPTA  
 Ahead Substation: YADKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		Action Code
Yes	No	Reading 1	Reading 2	
Leg 1	<input checked="" type="checkbox"/>	VG	VG	P
Leg 2	<input checked="" type="checkbox"/>	VG	VG	P
Leg 3	<input checked="" type="checkbox"/>	VG	VG	P
Leg 4	<input checked="" type="checkbox"/>	VG	VG	P

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found  
 In Lieu of Measurements - VG: Visually Inspected - Good

FR: Foundation Repaired

## Tower Inspection

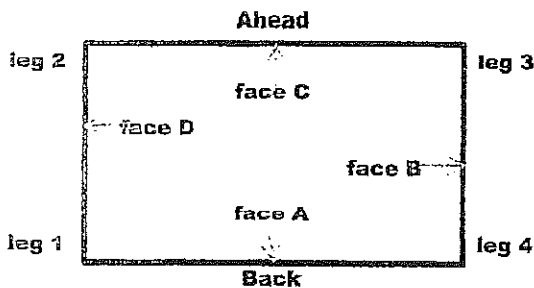
Step Bolt Clips Added:		Yes	No	Quantity: <u>38</u>	
Damage	Face	Member	Corrective Action	Remark	
1	P	BD	10X2	BP-NB-GW	
2	P	BD	11X2	BP-NB-GW	
3	C	BD	115LX2	LF	Ladders
4	C	BD	115RX2	LF	Ladders
5	P	AC	213X2	BP-NB-GW	
6	P	A	219X2	BP-NB-GW	
7	TM-B	ABCD	220X8	RP-BP-NB-GW	
8	P	AC	601X4	BP-NB-GW	
9	P	BD	602X4	BP-NB-GW	
10	P	BD	624X4	BP-NB-GW	
11	P	AC	623X4	BP-NB-GW	
12	O	AD	Leg 1	G	ground rod wire Cadweld
13	O	BC	Leg 3	G	ground rod wire Cadweld
14					
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

Date: 2-15-2022 Foreman: Michael Davis

Company: L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579

Structure No: 22

Structure Type: 5LT+30'+35'LF

Back Substation: SEPTA

Ahead Substation: YAKdion

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1		✓		
Leg 2		✓		
Leg 3		✓		
Leg 4		✓	Good	VG

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
	3	<del>FR</del> FR
		LF
	<del>3</del>	<del>FR</del> LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added: <u>✓</u> Yes <u>      </u> No		Quantity: <u>46</u>			
	Damage	Face	Member	Corrective Action	Remark
1	P	Bd	10x2	R	BP - NB - GW
2	P	Bd	11x2	R	
3	P	AC	213x2	R	
4	Tm	ABcd	220x12	RP	
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

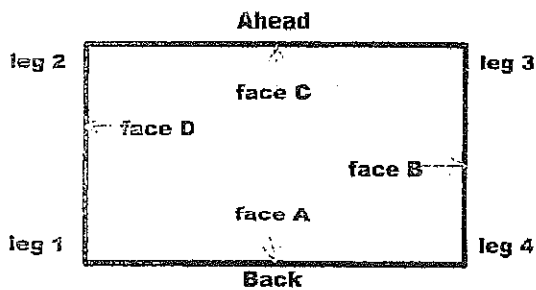
Date: 2/1/22 Foreman: GREG V/A

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# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579

Structure No: 23

Structure Type: SLT+20'LE

Back Substation: SEPTA

Ahead Substation: YADKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1	—	✓	↓	↓
Leg 2	—	✓	↓	↓
Leg 3	—	✓	↓	↓
Leg 4	—	✓	Good	VG
Action Code:		P: Applied A-120	B: Baseshoe Replaced	LF: Left as Found

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Fnd Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

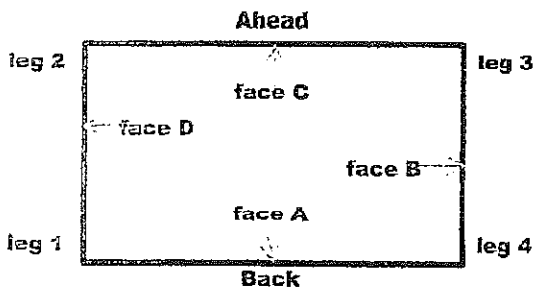
Step Bolt Clips Added:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Quantity:	33	
	Damage	Face	Member	Corrective Action	Remark
1	P	Bd	10x2	R	BP - NB - GW
2	P	Bd	11x2	R	
3	TM	ABcd	220x8	RP	
4	P	AC	213x2	R	
5					
6					Installed Grounds
7					LEG 1-3
8					
9					
10					
11					
12					
13					
14					
15					
16					climbing inspection
17					complete
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

Date: 2/1/22 Foreman: GREG V/A

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# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579

Structure No: 24

Structure Type: SLT+ 20' LE

Back Substation: SEPTA

Ahead Substation: YACKIN

Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1	<input type="checkbox"/>	<input checked="" type="checkbox"/>			LF
Leg 2	<input type="checkbox"/>	<input checked="" type="checkbox"/>			LF
Leg 3	<input type="checkbox"/>	<input checked="" type="checkbox"/>			LF
Leg 4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Good	VG	LF

Foundation Inspection		
Date: _____		
Foreman: _____		
See spec book for explanation of foundation codes	Fnd Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired  
In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

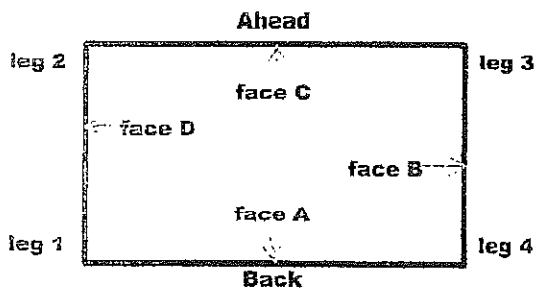
Step Bolt Clips Added: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Quantity: <u>40</u>			
	Damage	Face	Member	Corrective Action	Remark
1	P	Bd	10x2	R	BP - NB - GW
2	P	Bd	11x2	R	
3	Tm	ABcd	220x8	RP	
4	P	AC	213x2	R	
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					climbing inspection complete
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

Date: 2/8/22 Foreman: GREG V.A

Company: LEMYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579

Structure No: 25

Structure Type: SLT+ 25 LE

Back Substation: SEPTA

Ahead Substation: YACKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1		✓		
Leg 2		✓		
Leg 3		✓		
Leg 4		✓	Good	VG
				Action Code
				P
				P
				P
				P

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired  
In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

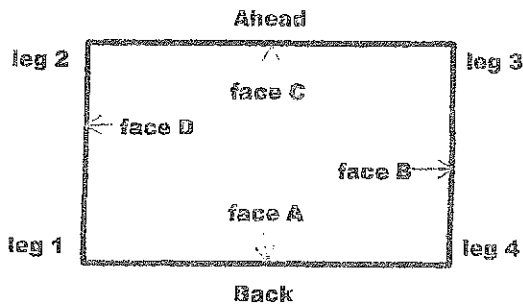
Step Bolt Clips Added:		✓ Yes	No	Quantity: <u>36</u>	
Damage	Face	Member	Corrective Action	Remark	
1	P	Bd	10x2	R	BP - NB - GW
2	P	Bd	11x2	R	
3	P	AC	213x2	R	
4	TM	ABCD	220x8	RP	
5					
6					Installed Grounds
7					Leg 1-3
8					
9					
10					
11					
12					
13					
14					
15					
16					Climbing Inspection
17					Complete
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

Date: 2/2/22 Foreman: GREG VIA

Commander: LEMYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579

Structure No: 26

Structure Type: SLT+20'BE+25'LE

Groundline Inspection					Foundation Inspection		
Severe Corrosion		Steel Measurements			Foreman: _____	Date: _____	
	Yes	No	Reading 1	Reading 2	Action Code	See spec book for explanation of foundation codes	Action Code
Leg 1	—	✓	↓	↓	P		LF
Leg 2	—	✓	↓	↓	P		LF
Leg 3	—	✓	↓	↓	P		LF
Leg 4	—	✓	Good	VG	P		LF

Action Code: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found

FR: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added: <u>✓</u> Yes <u>—</u> No		Quantity: <u>51</u>			
	Damage	Face	Member	Corrective Action	Remark
1	P	Bd	10x2	R	BP - GW - NB
2	P	Bd	11x2	R	
3	P	AC	256 <sup>L</sup> x2	R	
4	P	AC	256 <sup>R</sup> x2	R	
5	P	AC	255x2	R	
6	P	AC	213x2	R	
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					climbing inspection complete

Damage Code	Corrective Action Code	Remark Code:	
MB: Missing Bolt	R: Repaired	G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent	RP: Replaced	BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked	LF: Left as Found	GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member		NB: New Bolts	FP: Flipped /Straightened Plates
P: Packout O: Other			

2/2/22

GREG V/A

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# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation

Ahead

Complete Climbing

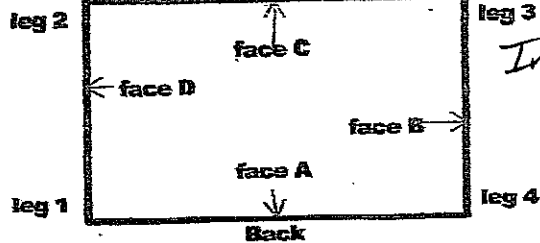
Line Number: 579

Structure No: 27

Structure Type: SLT+40'LE

Back Substation: SEPTA

Ahead Substation: YADKIN



## Groundline Inspection

	Severe Corrosion		Steel Measurements		Action Code
	Yes	No	Reading 1	Reading 2	
Leg 1		✓	VG	VG	P
Leg 2		✓	VG	VG	P
Leg 3		✓	VG	VG	P
Leg 4		✓	VG	VG	P

## Foundation Inspection

Date:

Foreman:

See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found  
In Lieu of Measurements - VG: Visually Inspected - Good

FR: Foundation Repaired

## Tower Inspection

Step Bolt Clips Added:		Yes	No	Quantity: 49	
	Damage	Face	Member	Corrective Action	Remark
1	P	BD	10X2	BP-NB-GW	
2	P	BD	11X2	BP-NB-GW	
3	C	B	115LX1	LF	
4	C	B	115RX1	LF	
5	P	AC	213X2	BP-NB-GW	
6	TM-B	ABCD	220X15	RP-BP-NB-GW	
7	P	BD	757X4	BP-NB-GW	
8	P	AC	754X4	BP-NB-GW	
9	P	D	784X1	BP-NB-GW	
10	P	A	753X1	BP-NB-GW	
11	O	AD	Leg 1	G	ground rod wire cadweld
12	O	BC	Leg 3	G	ground rod wire cadweld
13					
14					
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
MB:	Missing Bolt	R:	Repaired	G:	Grounded Str
B:	Bent	RP:	Replaced	RS:	Removed Lower Step Bolts
C:	Cracked	LF:	Left as Found	BP:	Beat Packout
TM:	Thin Member			NS:	New Danger/Aerial/Number Signs
O:	Other			GW:	Applied Greywax
				NB:	New Bolts
				IP:	Installed Package Per Specs
				FP:	Flipped /Straightened Plates

Date: 2-9-2022

Foreman: Michael Davis

Company: L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation

Ahead

Complete Climbing

Line Number

579

Structure No:

28

Structure Type:

5LT+35'LE

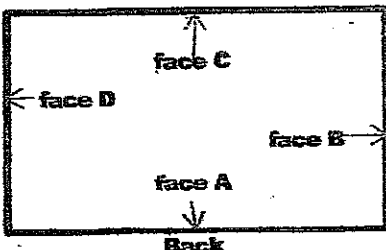
Back Substation:

SEPTA

Ahead Substation:

VADKIN

leg 2



leg 3

leg 4

Back

## Groundline Inspection

	Severe Corrosion		Steel Measurements		Action Code
	Yes	No	Reading 1	Reading 2	
Leg 1		<input checked="" type="checkbox"/>	VG	VG	P
Leg 2		<input checked="" type="checkbox"/>	VG	VG	P
Leg 3		<input checked="" type="checkbox"/>	VG	VG	P
Leg 4		<input checked="" type="checkbox"/>	VG	VG	P

## Foundation Inspection

Date:

Foreman:

See spec  
book for  
explanation  
of  
foundation  
codes

Fnd Code

Action Code

LF

LF

LF

LF

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found

FR: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Quantity: 47	
	Damage	Face	Member	Corrective Action	Remark
1	P	BD	10x2	BP-NB-GW	
2	P	BD	11x2	BP-NB-GW	
3	C	BD	115Lx2	LF	Ladder
4	C	BD	115Rx2	LF	Ladder
5	P	AC	213x2	BP-NB-GW	
6	P	A	219x1	BP-NB-GW	
7	P	BD	707x4	BP-NB-GW	
8	TM-B	ABCD	220x16	RP-BP-NB-GW	
9	P	BD	706x3	BP-NB-GW	
10	O	AD	Leg 1	G	groundrod wire Cadweld
11	O	BC	Leg 3	G	groundrod wire Cadweld
12					
13					
14					
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	
B: Bent		RP: Replaced		RS: Removed Lower Step Bolts	
C: Cracked		LF: Left as Found		BP: Beat Packout	
TM: Thin Member				NS: New Danger/Aerial/Number Signs	
O: Other				IP: Installed Package Per Specs	
				NB: New Bolts	
				FP: Flipped /Straightened Plates	

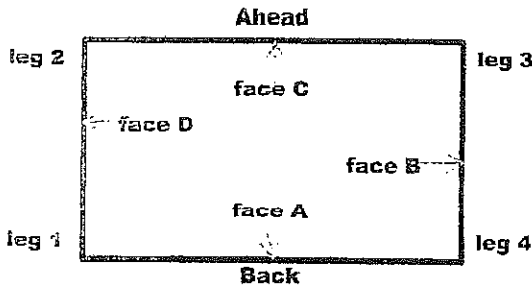
Date: 2-8-2022

Foreman: Michael Davis

Company: L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

## Tower Orientation



Line Number: 579  
Structure No: 29

Structure Type: 5LT+30'LE  
Back Substation: SEPTA  
Ahead Substation: YADKIN

Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1	—	✓	↓	↓	P
Leg 2	—	✓	↓	↓	P
Leg 3	—	✓	↓	↓	P
Leg 4	—	✓	Good	VG	P

Foundation Inspection		
Date: _____		
Foreman: _____		
See spec book for explanation of foundation codes	Fnd Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired  
In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Quantity: <u>40</u>	
	Damage	Face	Member	Corrective Action	Remark
1	P	Bd	10x2	R	BP - NB - GW
2	P	Bd	11x2	R	
3	P	AC	213x2	R	
4	TM	ABcd	220x8	RP	
5					
6					Grounds Installed LEg 1234
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					Climbing Inspection Complete
17					

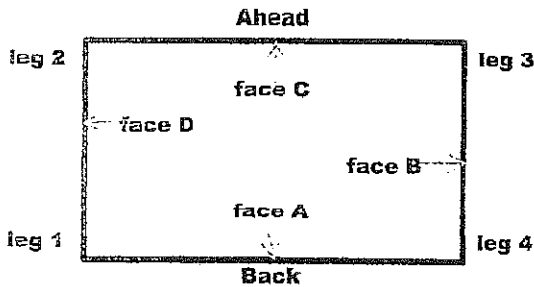
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

Date: 2/2/22 Foreman: GREG V/A

LEMYRES

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579

Structure No: 30

Structure Type: SMAT 15' LE

Back Substation: SEPTA

Ahead Substation: YACKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Leg 2	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Leg 3	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Leg 4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Good	VG
		Action Code		
		P		

Foundation Inspection		
Date: _____		
Foreman: _____		
See spec book for explanation of foundation codes	Fnd Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired  
In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Quantity: <u>30</u>			
	Damage	Face	Member	Corrective Action	Remark
1	P	AC	332X2	R	BP - NB - GW
2	P	Bd	339X2	R	
3	P	d	1312X1	R	
4	P	AC	1651X2	R	
5					
6					
7					
8					Installed Grounds
9					Leg 1-3
10					
11					
12					
13					
14					
15					
16					
17					Climbing Inspection Complete
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	
B: Bent		RP: Replaced		BP: Beat Packout	
C: Cracked		LF: Left as Found		NS: New Danger/Aerial/Number Signs	
TM: Thin Member				IP: Installed Package Per Specs	
O: Other				NB: New Bolts	
				FP: Flipped /Straightened Plates	

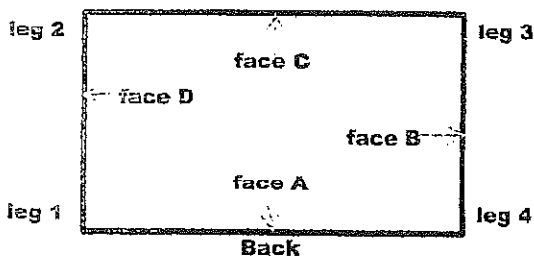
Date: 2/8/22 Foreman: GREG VIA

Comment: LEMYRES



### Tower Orientation

## Ahead



Line Number: 579

Structure No: 31

Structure Type: SLT 35 LR

Back Substation: SEOTA

Ahead Substation: Yadkin

Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1	___	✓	↓	↓	P
Leg 2	___	✓	↓	↓	P
Leg 3	___	✓	↓	↓	P
Leg 4	___	✓	Good	VG	P

Foundation Inspection		
Date: _____		
Foreman: _____		
See spec book for explanation of foundation codes	Fnd Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired

**In Lieu of Measurements - VG: Visually Inspected - Good**

## Tower Inspection

Step Bolt Clips Added:		Yes	No	Quantity: 42	
	Damage	Face	Member	Corrective Action	Remark
1	P	Bd	10x2	R	BP - NB - GW
2	P	Bd	11x2	R	
3	P	AC	213x2	R	
4	Tm	ABcd	220x8	RP	
5					
6					
7					
8					Installed Grounds
9					Leg 1-3
10					
11					
12					
13					
14					
15					
16					
17					Climbing Inspection Complete

Damage Code	Corrective Action Code	Remark Code:
MB: Missing Bolt	R: Repaired	G: Grounded Str
B: Bent	RP: Replaced	BP: Beat Packout
C: Cracked	LF: Left as Found	GW: Applied Greywax
TM: Thin Member		NB: New Bolts
O: Other		

RS: Removed Lower Step Bolts
NS: New Danger/Aerial/Number Signs
IP: Installed Package Per Specs
FP: Flipped /Straightened Plates

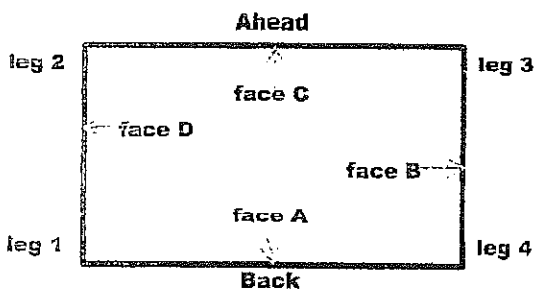
Date: 2/14/22

Foreman: GREG VA

~~POISSON~~ LÉMYRÉS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579

Structure No: 32

Structure Type: SLT+25'LE

Back Substation: SEPTA

Ahead Substation: YADKIN

Groundline Inspection					
Severe Corrosion			Steel Measurements		
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1	___	✓	↓	↓	P
Leg 2	___	✓	↓	↓	P
Leg 3	___	✓	↓	↓	P
Leg 4	___	✓	Good	VG	P

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired  
In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

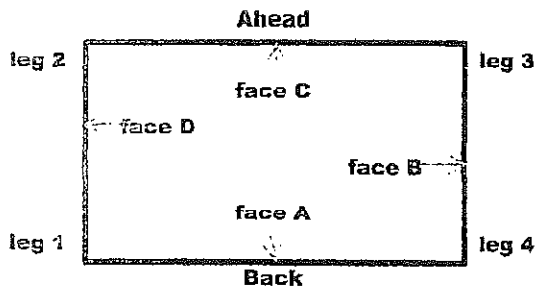
Step Bolt Clips Added: <u>✓</u> Yes <u>      </u> No		Quantity: <u>37</u>			
	Damage	Face	Member	Corrective Action	Remark
1	P	Bd	10x2	R	BP - NB - GW
2	P	Bd	11x2	R	
3	P	AC	213x2	R	
4	TM	ABcd	220x8	RP	
5					
6					
7					Installed Grounds
8					LEG 1-3
9					
10					
11					
12					
13					
14					
15					
16					
17					climbing inspection complete
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

Date: 2/9/22

Foreman:

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579

Structure No: 33

Structure Type: 5LT+40'LE

Back Substation: SEPTA

Ahead Substation: YACKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1		✓		
Leg 2		✓		
Leg 3		✓		
Leg 4		✓	Good	VG

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired  
In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added:		Yes	No	Quantity: <u>54</u>	
Damage	Face	Member	Corrective Action	Remark	
1	P	Bd	10x2	R	BP - NB - GW
2	P	Bd	11x2	R	
3	P	AC	213x2	R	
4	Tm	ABcd	220x16	RP	
5					Installed Grounds Leg 1 - 3 REATTACHED Ground on Leg 4
6					
7					
8					
9					Climbing Inspection Complete
10					
11					
12					
13					
14					
15					
16					
17					

Damage Code	Corrective Action Code	Remark Code:	
MB: Missing Bolt	R: Repaired	G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent	RP: Replaced	BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked	LF: Left as Found	GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member		NB: New Bolts	FP: Flipped /Straightened Plates
O: Other			

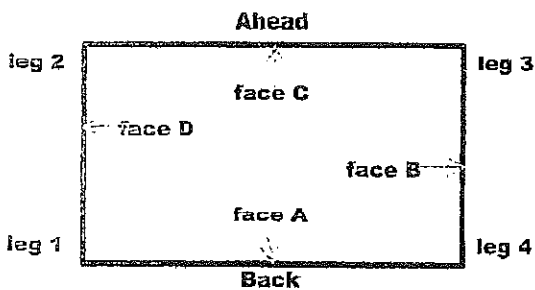
Date: 2/9/22

Foreman: GREG V/A

LEMYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579

Structure No: 34

Structure Type: SLT+ 40' LE

Back Substation: SEPTA

Ahead Substation: YADKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1		✓		
Leg 2		✓		
Leg 3		✓		
Leg 4		✓	Good	VG

Foundation Inspection		
Date: _____		
Foreman: _____		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired  
In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added:		✓	Yes	No	Quantity:	49
	Damage	Face	Member	Corrective Action	Remark	
1	P	Bd	10x2	R	BP - NB - GW	
2	P	Bd	11x2	R		
3	Tm	ABcd	220x16	RP		
4	P	AC	213x2	R		
5	P	Bd	757x8	R		
6	P	AC	754x8	R		
7						
8					Installed Grounds LEg 1-3	
9						
10						
11						
12						
13						
14						
15						
16					climbing Inspection Complete	
17						
Damage Code		Corrective Action Code		Remark Code:		
MB:	Missing Bolt	R:	Repaired	G:	Grounded Str	RS: Removed Lower Step Bolts
B:	Bent	RP:	Replaced	BP:	Beat Packout	NS: New Danger/Aerial/Number Signs
C:	Cracked	LF:	Left as Found	GW:	Applied Greywax	IP: Installed Package Per Specs
TM:	Thin Member			NB:	New Bolts	FP: Flipped /Straightened Plates
O:	Other					

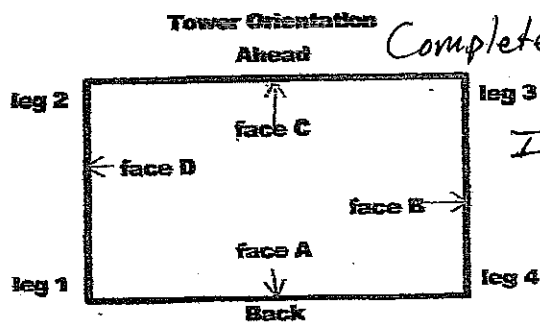
Date: 2/14/22

Foreman: GREG V.A

Company: LEMYER'S



# Weathering Steel Tower Inspection/Rehabilitation Data Sheet



Line Number: 579  
 Structure No: 35  
 Structure Type: SLT+40'LE  
 Back Substation: SEPTA  
 Ahead Substation: YADKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1		✓	VG	VG
Leg 2		✓	VG	VG
Leg 3		✓	VG	VG
Leg 4		✓	VG	VG

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found  
 In Lieu of Measurements - VG: Visually Inspected - Good

FR: Foundation Repaired

## Tower Inspection

Step Bolt Clips Added:		✓ Yes	No	Quantity: 48	
	Damage	Face	Member	Corrective Action	Remark
1	P	BD	10x2	BP-NB-GW	
2	P	BD	11x2	BP-NB-GW	
3	P	AC	213x2	BP-NB-GW	
4	P	AC	754x4	BP-NB-GW	
5	P	BD	752x4	BP-NB-GW	
6	TM-B	ABCD	220x16	RP-BP-NB-GW	
7	P	BD	788x4	BP-NB-GW	
8	P	BD	756x4	BP-NB-GW	
9	P	AC	787x4	BP-NB-GW	
10	P	AC	753x4	BP-NB-GW	
11	O	AD	Leg1	G	ground rod-wire-Cadweld
12	O	BC	Leg3	G	ground rod-wire-Cadweld
13	Broke	DC	Leg2	G	Cadweld
14	Broke	AB	Leg4	G	Cadweld
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

Date: 2-16-2022 Foreman: Michael Davis Company: L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation  
Ahead

Complete Climbing

Line Number:

579

Structure No:

36

Structure Type:

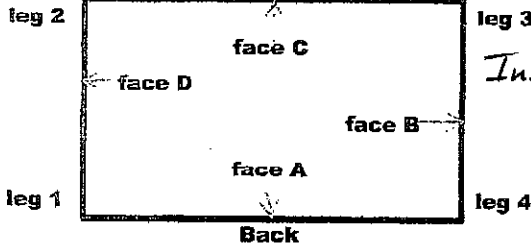
SLT+20'LE

Back Substation:

SEPTA

Ahead Substation:

WADKIN



Inspection

## Groundline Inspection

Severe Corrosion		Steel Measurements		Action Code
Yes	No	Reading 1	Reading 2	
Leg 1	<input checked="" type="checkbox"/>	VG	VG	P
Leg 2	<input checked="" type="checkbox"/>	VG	VG	P
Leg 3	<input checked="" type="checkbox"/>	VG	VG	P
Leg 4	<input checked="" type="checkbox"/>	VG	VG	P

## Foundation Inspection

Date:

Foreman:

See spec  
book for  
explanation  
of  
foundation  
codes

Fnd Code

Action Code

LF

LF

LF

LF

Action Code: P: Applied A-120

B: Baseshoe Replaced

LF: Left as Found

FP: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added:

☒ Yes

No

Quantity:

39

	Damage	Face	Member	Corrective Action	Remark
1	P	BD	10X2	BP-NB-GW	
2	P	BD	11X2	BP-NB-GW	
3	C	BD	115LX1	LF	Ladders
4	C	BD	115RX1	LF	Ladders
5	P	AC	213X2	BP-NB-GW	
6	TM-B	ABCD	220X8	RP-BP-NB	
7	P	BD	595X4	BP-NB-GW	
8	P	AC	594X4	BP-NB-GW	
9	O	AD	Leg 1	G	ground rod wire Cadweld
10	O	CB	Leg 2	G	ground rod wire Cadweld
11					
12					
13					
14					
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

Date: 2-14-2022

Foreman: Michael Davis

Company: L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation

Ahead

Complete Climbing

Line Number:

579

Structure No:

37

Structure Type:

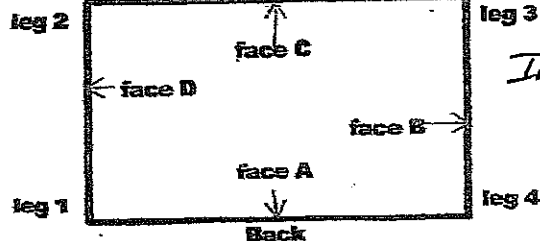
SLT+25'LE

Back Substation:

SEPTA

Ahead Substation:

YADKIN



Inspection

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1	✓	—	0.23400	0.24150
Leg 2	—	✓	VG	VG
Leg 3	✓	—	0.19670	0.24615
Leg 4	—	✓	VG	VG

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found  
In Lieu of Measurements - VG: Visually Inspected - Good

FR: Foundation Repaired

## Tower Inspection

Step Bolt Clips Added:		✓ Yes	No	Quantity: 38	
	Damage	Face	Member	Corrective Action	Remark
1	P	BD	10X2	BP-NB-GW	
2	P	BD	11X2	BP-NB-GW	
3	P	AC	219X4	BP-NB-GW	
4	C	BD	115LX2	LF	Ladders
5	C	BD	115RX2	LF	Ladders
6	P	BD	624X4	BP-NB-GW	
7	P	AC	623X4	BP-NB-GW	
8	TM-B	ABCD	220X8	RP-BP-NB-GW	
9	O	AD	Leg 1	G	Ground rod wire Cadweld
10	O	BC	Leg 3	G	Ground rod wire Cadweld
11					
12					
13					
14					
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

Date: 2-28-2022

Foreman:

Michael Davis

Company:

L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation

Ahead

Complete Climbing

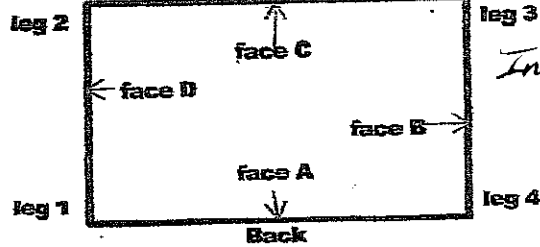
Line Number: 579

Structure No: 38

Structure Type: 5LT+15'LE

Back Substation: SEPTA

Ahead Substation: YADKIN



Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1	—	✓	VG	VG
Leg 2	—	✓	VG	VG
Leg 3	—	✓	VG	VG
Leg 4	—	✓	VG	VG
				Action Code
				P
				P
				P
				P

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found  
In Lieu of Measurements - VG: Visually Inspected - Good

FR: Foundation Repaired

## Tower Inspection

Step Bolt Clips Added:		Yes	No	Quantity: 30	
Damage	Face	Member	Corrective Action	Remark	
1	P	BD	10X2	BP-NB-GW	
2	P	BD	11X2	BP-NB-GW	
3	C	BD	115LX2	LF	Ladders
4	C	BD	115RX2	LF	Ladders
5	P	AC	213X2	BP-NB-GW	
6	P	AC	565X4	BP-NB-GW	
7	P	D	552X2	BP-NB-GW	
8	P	AC	219X4	BP-NB-GW	
9	O	AD	Leg 1	G	Cadweld ground rod - wire
10	O	BC	Leg 3	G	Cadweld ground rod - wire
11					
12					
13					
14					
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Boat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

Date: 2-23-2022

Foreman: Michael Davis

Company: LEMMYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation

Ahead

Complete Climbing

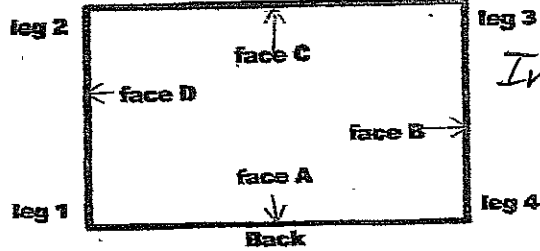
Line Number: 579

Structure No: 39

Structure Type: 5LT+15'LE

Back Substation: SePTA

Ahead Substation: YADKIN



Inspection

Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1		✓	VG	VG	P
Leg 2		✓	VG	VG	P
Leg 3		✓	VG	VG	P
Leg 4		✓	VG	VG	P

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found  
In Lieu of Measurements - VG: Visually Inspected - Good

FR: Foundation Repaired

Tower Inspection

Step Bolt Clips Added:		Yes	No	Quantity: 31	
	Damage	Face	Member	Corrective Action	Remark
1	P	BD	566X4	BP-NB-GW	
2	P	AC	565X4	BP-NB-GW	
3	P	BD	10X2	BP-NB-GW	
4	P	BD	11X2	BP-NB-GW	
5	P	AC	213X2	BP-NB-GW	
6	P	C	219X1	BP-NB-GW	
7	C	BD	115LX2	LF	Ladder
8	C	BD	115RX2	LF	Ladder
9	TM-B	ABCD	220X8	RP-BP-NB-GW	
10	P	D	552X1	BP-NB-GW	
11	O	AD	Leg1	G	rod wire Cadweild
12	O	BC	Leg3	G	rod wire Cadweild
13	O	AB	Leg4	G	Cadweild
14					
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

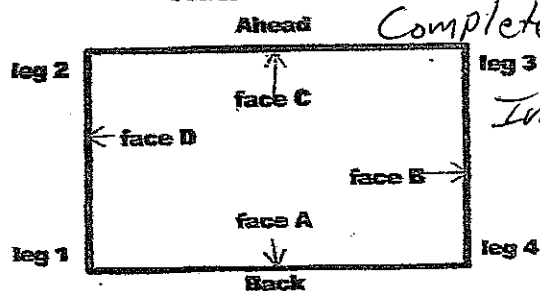
Date: 2-22-2022 Foreman: Michael Davis

Company: L.E.MYERS



# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579  
 Structure No: 40  
 Structure Type: SLT+40'LE  
 Back Substation: SEPTA  
 Ahead Substation: YADKIN

Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1	—	✓	VG	VG	P
Leg 2	—	✓	VG	VG	P
Leg 3	—	✓	VG	VG	P
Leg 4	—	✓	VG	VG	P

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Fnd Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found  
 In Lieu of Measurements - VG: Visually Inspected - Good

FR: Foundation Repaired

## Tower Inspection

Step Bolt Clips Added:		Yes	No	Quantity: 42	
	Damage	Face	Member	Corrective Action	Remark
1	P	BD	10x2	BP-NB-GW	
2	P	BD	11x2	BP-NB-GW	
3	C	BD	115Lx2	LF	Ladders
4	C	BD	115RX2	LF	Ladders
5	C	C	96insider	RP-BP-NB-GW	
6	P	AC	213x2	BP-NB-GW	
7	TM-B	ABCD	220x8	RP-BP-NB-GW	
8	P	BD	288x4	BP-NB-GW	
9	P	AC	787x4	BP-NB-GW	
10	O	AD	Leg 1	G	ground rod wire Cadwell
11	O	BC	Leg 3	G	ground rod wire Cadwell
12					
13					
14					
15					
16					
17					

Damage Code	Corrective Action Code	Remark Code:	
MB: Missing Bolt	R: Repaired	G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent	RP: Replaced	BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked	LF: Left as Found	GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member		NB: New Bolts	FP: Flipped /Straightened Plates
O: Other			

Date: 2-22-2022 Foreman: Michael Davis

Company: L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation

Ahead

Complete Climbing

Line Number:

579

Structure No:

41

Structure Type:

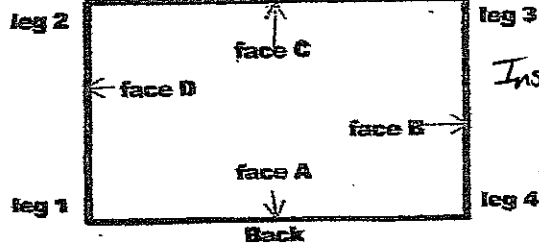
SLT+30'LE

Back Substation:

SEPTA

Ahead Substation:

YADKIN



Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1		✓	VG	VG
Leg 2		✓	VG	VG
Leg 3		✓	VG	VG
Leg 4		✓	VG	VG

Foundation Inspection		
Date: _____		
Foreman: _____		
See spec	Find Code	Action Code
book for		LF
explanation		LF
of		LF
foundation		LF
codes		LF

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found  
In Lieu of Measurements - VG: Visually Inspected - Good

FR: Foundation Required

## Tower Inspection

Step Bolt Clips Added: ✓ Yes		No		Quantity: 43	
Damage	Face	Member	Corrective Action	Remark	
1	P	BD	10x2	BP-NB-GW	
2	P	BD	11x2	BP-NB-GW	
3	C	D	222x1	RP-BP-NB-GW	
4	C	BD	115Lx2	LF	
5	C	BD	115Rx2	LF	
6	P	A	43LNEARX1	BP-NB-GW	
7	P	AC	219x4	BP-NB-GW	
8	TM-B	ABCD	220x8	RP-BP-NB-GW	
9	P	BD	674x4	BP-NB-GW	
10	P	AC	673x4	BP-NB-GW	
11	O	AD	Leg 1	G	ground rod wire Cadweld
12	O	BC	Leg 3	G	ground rod wire Cadweld
13					
14					
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied GreYWax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

Date: 3-1-2022

Foreman: Michael Davis

Company: L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation

Ahead

Complete Climbing

Line Number:

579

Structure No:

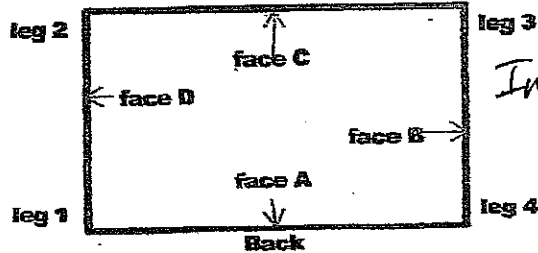
42

Structure Type:

Back Substation:

Ahead Substation:

SEPTA  
YAKIN



Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1		✓	VG	VG	P
Leg 2		✓	VG	VG	P
Leg 3		✓	VG	VG	P
Leg 4		✓	VG	VG	P

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found  
In Lieu of Measurements - VG: Visually Inspected - Good

FR: Foundation Repaired

## Tower Inspection

Step Bolt Clips Added:		✓ Yes	No	Quantity: 42	
	Damage	Face	Member	Corrective Action	Remark
1	P	BD	10X2	BP-NB-GW	
2	P	BD	11X2	BP-NB-GW	
3	C	BD	115LX2	LF	Ladder
4	C	BD	115RX2	LF	Ladder
5	P	AC	213X2	BP-NB-GW	
6	TMB	ABCD	220X8	RP-BP-NB-GW	
7	O	AD	Leg 1	G	ground/rod-wire-Cadweld
8	O	DC	Leg 2	G	Broke ground Cadweld
9	O	CB	Leg 3	G	ground/rod-wire-Cadweld
10	O	BA	Leg 4	G	Broke ground Cadweld
11					
12					
13					
14					
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

Date: 2-16-2022

Foreman: Michael Davis

Company: L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation

Ahead

Complete Climbing

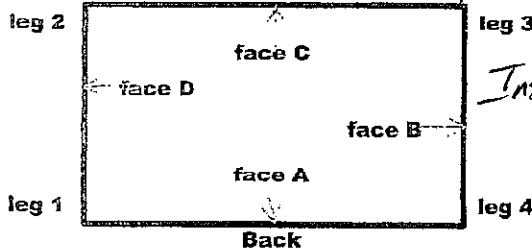
Line Number: 529

Structure No: 43

Structure Type: 5LT+5'LE

Back Substation: SEPTA

Ahead Substation: YADKIN



## Groundline Inspection

	Severe Corrosion		Steel Measurements		Action Code
	Yes	No	Reading 1	Reading 2	
Leg 1		✓	VG	VG	P
Leg 2		✓	VG	VG	P
Leg 3		✓	VG	VG	P
Leg 4		✓	VG	VG	P

## Foundation Inspection

Date:

Foreman:

See spec book for explanation of foundation codes	Fnd Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added: ☒ Yes ☐ No Quantity: 25

	Damage	Face	Member	Corrective Action	Remark
1	P	BD	10X2	BP-NB-GW	
2	P	BD	11X2	BP-NB-GW	
3	C	BD	115LX2	LF	Ladder
4	C	BD	115RX2	LF	Ladder
5	P	AC	213X1	BP-NB-GW	
6	TM-B	ABCD	220X8	RP-BP-NB-GW	
7	P	A	43LNEARX1	BP-NB-GW	
8	P	C	43LFARX1	BP-NB-GW	
9	O	AD	Leg 1	G	ground rod - wire - Cadweld
10	O	CB	Leg 3	G	ground rod - wire - Cadweld
11	C	B	16LX1	LF	Static Ladder
12	C	B	16RX1	LF	Static Ladder
13	MB	B	117X1	R-NB	
14					
15					
16					
17					

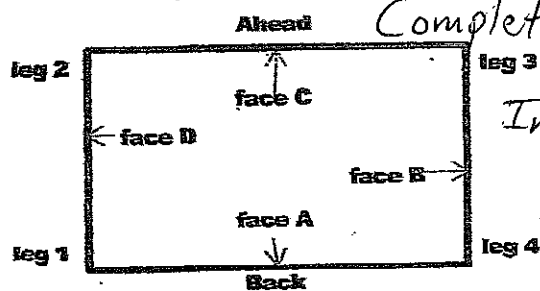
Damage Code	Corrective Action Code	Remark Code:
MB: Missing Bolt	R: Repaired	G: Grounded Str
B: Bent	RP: Replaced	BP: Beat Packout
C: Cracked	LF: Left as Found	GW: Applied Greywax
TM: Thin Member		NB: New Bolts
O: Other		FP: Flipped /Straightened Plates
		RS: Removed Lower Step Bolts
		NS: New Danger/Aerial/Number Signs
		IP: Installed Package Per Specs

Date: 2-14-2022 Foreman: Michael Davis

Company: L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579

Structure No: 44

Structure Type: 5LT+20'BE+20'LE+25'NE

Back Substation: SEPTA

Ahead Substation: YADKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		Action Code
Yes	No	Reading 1	Reading 2	
—	✓	VG	VG	P
—	✓	VG	VG	P
—	✓	VG	VG	P
✓	—	0.21475	0.20130	P

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found  
In Lieu of Measurements - VG: Visually Inspected - Good

FR: Foundation Repaired

## Tower Inspection

Step Bolt Clips Added:		Yes	No	Quantity:	51
	Damage	Face	Member	Corrective Action	Remark
1	P	C	43LFARX1	BP-NB-GW	
2	P	A	43LNEARX1	BP-NB-GW	
3	C	BD	16Lx2	LF	Ladders
4	C	BD	16Rx2	LF	Ladders
5	C	BD	115Lx2	LF	Ladders
6	C	BD	115Rx2	LF	Ladders
7	P	BD	10x2	BP-NB-GW	
8	P	BD	11x2	BP-NB-GW	
9	P	AC	213x2	BP-NB-GW	
10	TM-B	ABCD	220x16	RP-BP-NB-GW	
11	P	AC	256Lx2	BP-NB-GW	
12	P	AC	256Rx2	BP-NB-GW	
13	P	AC	255x2	BP-NB-GW	
14	P	A	275x1	BP-NB-GW	
15	P	B	275Ax1	BP-NB-GW	
16	O	AD	Leg 1	G	ground rod wire Cadweld
17	O	BC	Leg 3	G	ground rod wire Cadweld
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	
B: Bent		RP: Replaced		RS: Removed Lower Step Bolts	
C: Cracked		LF: Left as Found		NS: New Danger/Aerial/Number Signs	
TM: Thin Member				IP: Installed Package Per Specs	
O: Other				FP: Flipped /Straightened Plates	
				NB: New Bolts	

Date: 2/21/2022

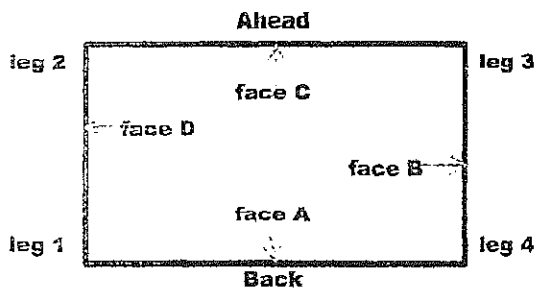
Foreman: Michael Davis

Company: L.E. MYERS



# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

## Tower Orientation



Line Number: 579

Structure No: 45

Structure Type: SLT+40'LE

Back Substation: SEPTA

Ahead Substation: YACKIN

Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1		✓			P
Leg 2		✓			P
Leg 3		✓			P
Leg 4		✓	Good	VG	P

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Fnd Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added: <u>✓</u> Yes <u>      </u> No		Quantity: <u>48</u>			
	Damage	Face	Member	Corrective Action	Remark
1	P		10x2	R	BP - GW - NB
2	P		11x2	R	
3	P		213x2	R	
4	TM	ABed	220x16	RP	
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	
B: Bent		RP: Replaced		BP: Beat Packout	
C: Cracked		LF: Left as Found		GW: Applied Greywax	
TM: Thin Member				NB: New Bolts	
O: Other				RS: Removed Lower Step Bolts	
				NS: New Danger/Aerial/Number Signs	
				IP: Installed Package Per Specs	
				FP: Flipped /Straightened Plates	

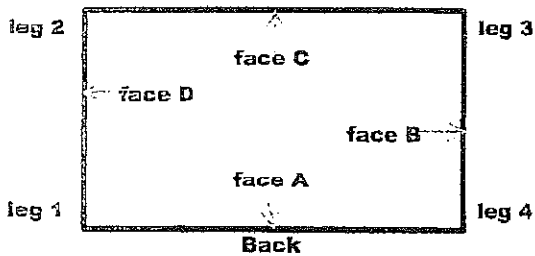
Date: 2/21/22

Inspector: GREG VIA

Signature: EMYRE'S

### Tower Orientation

## Ahead



Line Number: 579

Structure No: 46

Structure Type: 5LT + 15 LE

Back Substation: SEPTA

Ahead Substation: Yadkin

## Foundation Inspection

**Date:** \_\_\_\_\_

**Foreman:** \_\_\_\_\_

See spec book for explanation of foundation codes	End Code	Action Code
		LF
		LF
		LF
		LF

### Groundline Inspection

Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1	_____	✓	↓	↓	P
Leg 2	_____	✓	↓	↓	P
Leg 3	_____	✓	↓	↓	P
Leg 4	_____	✓	Good	VG	P

**Action Code:** P: Applied A-120    B: Baseshoe Replaced    LF: Left as Found    FP: Foundation Repaired

**In Lieu of Measurements - VG: Visually Inspected - Good**

## Tower Inspection

Step Bolt Clips Added: ✓ Yes        No Quantity: 25

	Damage	Face	Member	Corrective Action	Remark
1	P	Bd	10x2	R	BP - NB - GW
2	P	Bd	11x2	R	
3	P	AC	213x2	R	
4	Tm	ABcd	220x2	RP	
5					
6					
7					Installed Grounds
8					LEG 1-3
9					
10					
11					
12					
13					
14					
15					
16					Climbing Inspection
17					Complete

Damage Code	Corrective Action Code	Remark Code:	
MB: Missing Bolt	R: Repaired	G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent	RP: Replaced	BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked	LF: Left as Found	GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member		NB: New Bolts	FP: Flipped /Straightened Plates
O: Other			

Date: 2/16/22 Foreman: GREG V.A

~~Common~~ Lemyre's

### Tower Orientation

A diagram of a rectangular cell. The four legs are labeled: 'leg 1' at the bottom-left, 'leg 2' at the top-left, 'leg 3' at the top-right, and 'leg 4' at the bottom-right. The four faces are labeled: 'face A' at the bottom, 'face B' at the right, 'face C' at the top, and 'face D' at the left. Arrows point from each label to its corresponding leg or face on the rectangle.

Structure No: 47

**Back Substation:** 507A

Ahead Substation: Yadkin

Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1	___	___✓	↓	↓	P
Leg 2	___	___✓			P
Leg 3	___	___✓	↓	↓	P
Leg 4	___	___✓	Good	VG	P

## Date: \_\_\_\_\_

**Foreman:**

See spec book for explanation of foundation codes	Fnd Code	Action Code
		LF
		LF
		LF
		LF

Action Code: F: Applied A-120    B: Baseshoe Replaced    LF: Left as Found    FP: Foundation Repaired  
In Lieu of Measurements - VG: Visually Inspected - Good

Step Bolt Clips Added:		Yes	No	Quantity: <u>47</u>	
	Damage	Face	Member	Corrective Action	Remark
1	P	Bd	10x2	R	BP - NB - GW
2	P	Bd	11x2	R	
3	P	AC	213x2	R	
4	Tm	ABCD	220x16	RP	
5					
6					
7					
8					Installed Grounds
9					LE9 1-3
10					
11					
12					
13					
14					
15					
16					
17					Climbing Inspection Complete

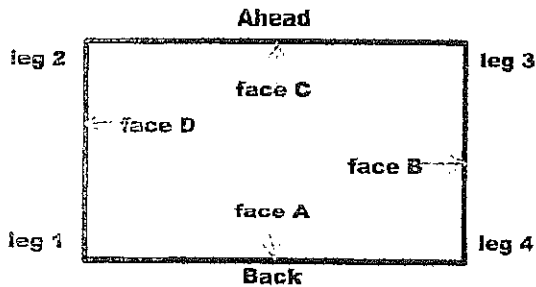
Damage Code	Corrective Action Code	Remark Code:
NB: Missing Bolt	R: Repaired	G: Grounded Str
B: Bent	RP: Replaced	BP: Beat Packout
C: Cracked	LF: Left as Found	GW: Applied Greywax
TM: Thin Member		NB: New Bolts
O: Other		RS: Removed Lower Step Bolts
		NS: New Danger/Aerial/Number Signs
		IP: Installed Package Per Specs
		FP: Flipped /Straightened Plates

Date: 2/16/22 Foreman: GREG VIA

~~XXXXXXXXXX~~ LEMYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579

Structure No: 48

Structure Type: SLT+ 30' LE

Back Substation: SEPTA

Ahead Substation: YADKIN

Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1		✓	↓	↓	P
Leg 2		✓	↓	↓	P
Leg 3		✓	↓	↓	P
Leg 4		✓	Good	VG	P

Foundation Inspection		
Date:	<u>03-24-22</u>	
Foreman:	<u>Alley Rundgren</u>	
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
	3	FR

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired  
In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

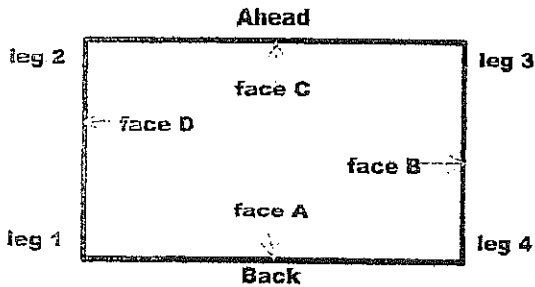
Step Bolt Clips Added:		✓	Yes	No	Quantity: 41
	Damage	Face	Member	Corrective Action	Remark
1	P	Bd	10x2	R	BP - NB - GW
2	P	Bd	11x2	R	
3	P	AC	213x2	R	
4	TM	ABcd	220x8	RP	
5					
6					
7					Installed Grounds LEg 1-3
8					
9					
10					
11					
12					
13					
14					
15					
16					Climbing Inspection Complete
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

Date: 2/15/22 Foreman: GREG V. A

Company: LEMYRES

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579

Structure No: 49

Structure Type: SLT+ 30' LE

Back Substation: SEPTA

Ahead Substation: YADKIN

Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1		✓			P
Leg 2		✓			P
Leg 3		✓			P
Leg 4		✓	Good	VG	P

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Fnd Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired  
In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added:		<u>✓</u> Yes	<u>      </u> No	Quantity: <u>41</u>	
	Damage	Face	Member	Corrective Action	Remark
1	P	Bd	10x2	R	BP - NB - GW
2	P	Bd	11x2	R	
3	P	Ac	213x2	R	
4	TM	ABcd	220x8	RP	
5					Installed Grounds leg 1-3
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					Climbing Inspection Complete
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

Date: 2/15/22 Foreman: GREG V/A

Company: LEMYERS



### Tower Orientation

A diagram of a rectangular arena. The four sides are labeled: 'leg 1' on the left, 'leg 2' on the top, 'leg 3' on the right, and 'leg 4' on the bottom. The four corners are labeled: 'face A' at the bottom-left, 'face B' at the bottom-right, 'face C' at the top-right, and 'face D' at the top-left. Arrows point from each face label to its corresponding corner. The word 'Back' is written below the arena.

Structure No: 51

Back Substation: 5707A

Ahead Substation: Yack K'in

Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1	___	✓	↓	↓	P
Leg 2	___	✓	↓	↓	P
Leg 3	___	✓	↓	↓	P
Leg 4	___	✓	Good	VG	P

Foundation Inspection		
Date: _____		
Foreman: _____		
See spec book for explanation of foundation codes	Fnd Code	Action Code
		LF
		LF
		LF
		LF

## Tower Inspection

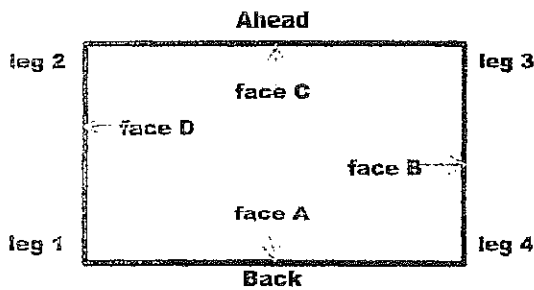
Step Bolt Clips Added: ✓ Yes        No Quantity: 4/3

Damage Code	Corrective Action Code	Remark Code:	
<b>NB:</b> Missing Bolt	<b>R:</b> Repaired	<b>G:</b> Grounded Str	<b>RS:</b> Removed Lower Step Bolts
<b>B:</b> Bent	<b>RP:</b> Replaced	<b>BP:</b> Beat Packout	<b>NS:</b> New Danger/Aerial/Number Signs
<b>C:</b> Cracked	<b>LF:</b> Left as Found	<b>GW:</b> Applied Greywax	<b>IP:</b> Installed Package Per Specs
<b>TM:</b> Thin Member		<b>NB:</b> New Bolts	<b>FP:</b> Flipped /Straightened Plates
<b>O:</b> Other			

--- Lemyres

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

## Tower Orientation



Line Number: 579

Structure No: 52

Structure Type: 56T + 30' LE

Back Substation: SEPTA

Ahead Substation: YADKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		Action Code
	Yes No	Reading 1	Reading 2	
Leg 1	<input checked="" type="checkbox"/>			P
Leg 2	<input checked="" type="checkbox"/>			P
Leg 3	<input checked="" type="checkbox"/>			P
Leg 4	<input checked="" type="checkbox"/>	Good	VG	P

Foundation Inspection		
Date: _____		
Foreman: _____		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

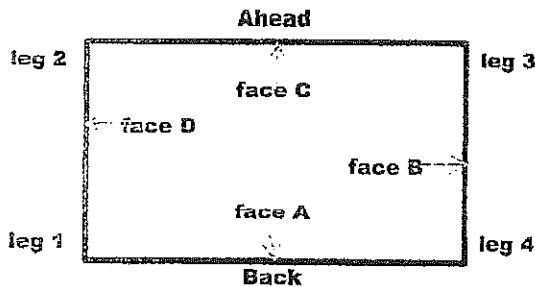
Step Bolt Clips Added:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Quantity: 41	
	Damage	Face	Member	Corrective Action	Remark
1	P	Bd	10x2	P	BP - NA - GW
2	P	Bd	11x2	P	
3	P	AC	213x2	P	
4	Tm	ABcd	220x8	RP	
5					
6					INSTALLED GROUNDS
7					LEG 1-3 REATTACHED
8					GROUND LEG 4
9					
10					
11					
12					
13					
14					
15					
16					CLIMBING INSPECTION
17					COMPLETE
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

Date: 2/21/22 Foreman: GREG V/A

LEMYRES

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

## Tower Orientation



Line Number: 579

Structure No: 53

Structure Type: SLT + 40' LE

Back Substation: SEPTA

Ahead Substation: YADKIN

Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1		✓			P
Leg 2		✓			P
Leg 3		✓			P
Leg 4		✓	Good	VG	P

Foundation Inspection		
Date: _____		
Foreman: _____		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired  
In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Quantity: <u>47</u>	
	Damage	Face	Member	Corrective Action	Remark
1	P	Bd	10x2	R	BP - NB - GW
2	P	Bd	11x2	R	
3	TM	ABcd	220x16	RP	
4	P	AC	213x2	R	
5	P	AC	754x2	R	
6	P	Bd	757x3	R	
7					
8					INSULATOR BROKE B FACE INSIDE STRING
9					
10					
11					
12					Grounds Installed leg 1-3
13					
14					Climbing Inspection complete
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

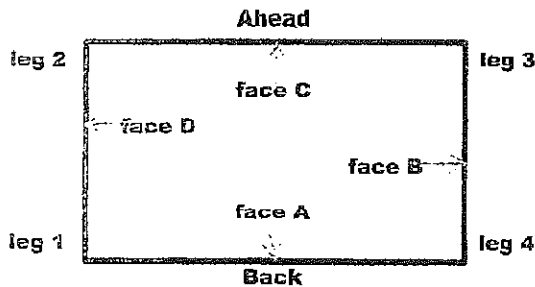
Date: 2/21/22

Inspector: GREG V/A

Inspector: LEMYRE

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

## Tower Orientation



Line Number: 579

Structure No: 55

Structure Type: SLT+ 15' LE

Back Substation: SEPTA

Ahead Substation: YADKIN

Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1	<input type="checkbox"/>	<input checked="" type="checkbox"/>			P
Leg 2	<input type="checkbox"/>	<input checked="" type="checkbox"/>			P
Leg 3	<input type="checkbox"/>	<input checked="" type="checkbox"/>			P
Leg 4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Good	VG	P

Foundation Inspection		
Date: _____		
Foreman: _____		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired  
In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added:		✓ Yes		No		Quantity: 32	
	Damage	Face	Member	Corrective Action		Remark	
1	P	Bd	10x2	R		BP - NB - GW	
2	P	Bd	11x2	R			
3	P	AC	213x2	R			
4	Tm	ABcd	220x8	RP			
5							
6						Installed Grounds	
7						1Eg 1-3	
8							
9							
10							
11							
12							
13							
14							
15						Climbing Inspection	
16						Complete	
17							
Damage Code		Corrective Action Code		Remark Code:			
MB: Missing Bolt		R: Repaired		G: Grounded Str		RS: Removed Lower Step Bolts	
B: Bent		RP: Replaced		BP: Beat Packout		NS: New Danger/Aerial/Number Signs	
C: Cracked		LF: Left as Found		GW: Applied Greywax		IP: Installed Package Per Specs	
TM: Thin Member				NB: New Bolts		FP: Flipped /Straightened Plates	
O: Other							

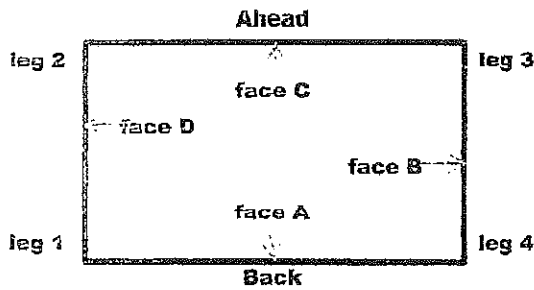
Date: 2/28/22

Inspector: GRFG V/A

Inspector: LEMYRE'S

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

## Tower Orientation



Line Number: 579

Structure No: 56

Structure Type: SLT+ 10 LE

Back Substation: SEPTA

Ahead Substation: YADKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		Action Code
	Yes No	Reading 1	Reading 2	
Leg 1	<input checked="" type="checkbox"/>			P
Leg 2	<input checked="" type="checkbox"/>			P
Leg 3	<input checked="" type="checkbox"/>			P
Leg 4	<input checked="" type="checkbox"/>	Good	VG	P

Foundation Inspection		
Date: _____		
Foreman: _____		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired  
In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added:		<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No		Quantity: _____
	Damage	Face	Member	Corrective Action	Remark	
1	P	Bd	10x2	R	BP - NB - GW	
2	P	Bd	11x2	R		
3	P	AC	213x2	R		
4	TM	ABcd	220x8	RP		
5						
6						
7					Installed Grounds LEg 1-3	
8						
9						
10						
11						
12						
13						
14						
15						
16					Climbing Inspection Complete	
17						
Damage Code		Corrective Action Code		Remark Code:		
MB: Missing Bolt		R: Repaired		G: Grounded Str		RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout		NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax		IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts		FP: Flipped /Straightened Plates
O: Other						

Date: 2/28/22

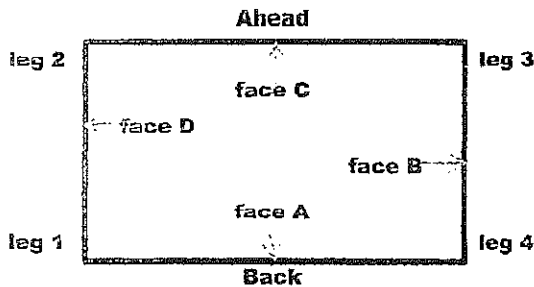
Foreman: GREG V. A

LEMYRES



# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

## Tower Orientation



Line Number: 579

Structure No: 57

Structure Type: SLT + 10' LE

Back Substation: SEPTA

Ahead Substation: YAD KIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1		✓		
Leg 2		✓		
Leg 3		✓		
Leg 4		✓	Good	VG

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Code: F: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added:		✓ Yes		No		Quantity: 28
	Damage	Face	Member	Corrective Action	Remark	
1	P	Bd	10x2	R	BP - NB - GW	
2	P	Bd	11x2	R		
3	P	AC	213x2	R		
4	MB	C	220x1	RP		
5	Tm	ABcd	220x8	RP		
6	B	A	526x1	RP		
7						
8					Installed Grounds LEG 1-3	
9						
10						
11						
12						
13						
14						
15						
16					Climbing Inspection Complete	
17						
Damage Code		Corrective Action Code		Remark Code:		
NB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts	
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs	
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs	
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates	
O: Other						

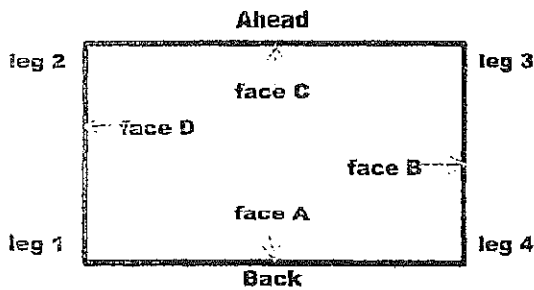
Date: 2/22/22

Inspector: GREG VIA

LEMYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

## Tower Orientation



Line Number: 579

Structure No: 58

Structure Type: 52T+35'LE

Back Substation: SEPTA

Ahead Substation: YACKLIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1		✓		
Leg 2		✓		
Leg 3		✓		
Leg 4		✓	Good	VG

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added: <u>✓</u> Yes <u>      </u> No		Quantity: <u>47</u>			
	Damage	Face	Member	Corrective Action	Remark
1	P	Bd	10x2	R	BP - GW - NB
2	P	Bd	11x2	R	
3	P	AC	213x2	R	
4	TM	ABcd	220x16	RP	
5					
6					
7					Installed Grounds
8					Leg 1-3
9					
10					
11					
12					
13					
14					
15					
16					
17					Climbing Inspection
					Complete
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

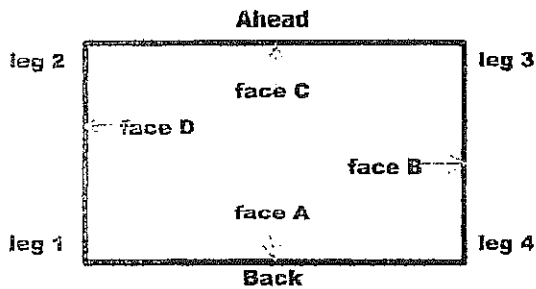
Date: 2/24/22

Foreman: GREG V/A

LEMYER'S

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

## Tower Orientation



Line Number: 579

Structure No: 59

Structure Type: 5LT+40'BE+40'LE

Back Substation: SEPTA

Ahead Substation: YACKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1		✓		
Leg 2		✓		
Leg 3		✓		
Leg 4		✓	Good	VG

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added:		<u>✓</u> Yes	<u>      </u> No	Quantity: <u>76</u>	
	Damage	Face	Member	Corrective Action	Remark
1	P	Bd	757X4	R	BP - NB - GW
2	P	AC	754X4	R	
3	C	C	312 <sup>L</sup> X1	RP	
4	P	C	312 <sup>R</sup> X1	R	
5	P	A	318X1	R	
6	P	Bd	333X4	R	
7	P	AC	311X2	R	
8	P	Bd	340X2	R	
9	MB	C	319X1	RP	
10	P	AC	213X2 <sup>2</sup>	R	
11	P	Bd	10X2	R	
12	P	Bd	11X2	R	
13	Tm	ABCD	220X32	RP	
14					climbing inspection complete
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
WB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

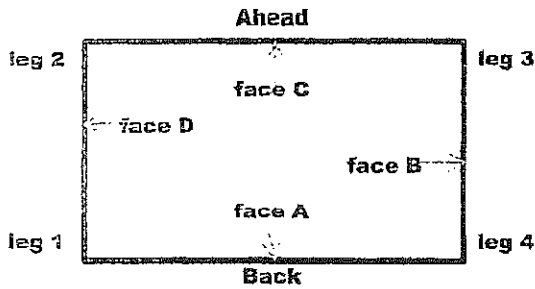
Date: 3/1/22

Foreman: GREG VIA

-LEMYRES

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

## Tower Orientation



Line Number: 579

Structure No: 60

Structure Type: 5HA+40'BE+40'LE

Back Substation: SEPTA

Ahead Substation: YACKLAW

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1		✓		
Leg 2		✓		
Leg 3		✓		
Leg 4		✓	Good	VG

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Code: F: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added: <u>✓</u> Yes <u>      </u> No		Quantity: <u>53</u>			
	Damage	Face	Member	Corrective Action	Remark
1	MB	C	686X1	RP	BP - NB - GW
2	P	Bd	692X2	R	
3	P	ABcd	678X8	R	
4	C	ABcd	685X4	RP	
5	C	ABd	687X3	RP	
6	C	ABd	686X3	RP	
7	P	B	283 <sup>R</sup> X1	R	
8	C	C	290X1	RP	
9	C	C	287X1	RP	
10	C	AC	308X2	RP	
11	P	C	308X1	R	
12	P	d	305X2	R	
13	P	d	307X1	R	
14	P	d	310 <sup>R</sup> X1	P	
15	P	B	313X1	P	
16	C	AC	130X2	RP	
17	C	AC	126X2	RP	
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Graywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

Date:

Foreman:

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Line Number: 579

Structure No: 60

Page 2 of 2

## Tower Inspection

	Damage	Face	Member	Corrective Action	Remark
1	MB		86X1	RP	Top Bridge
2	MB	C	69 <sup>2</sup> X1	RP	
3	MB	A	1 <sup>R</sup> X1	RP	
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					Climbing Inspection
30					Complete
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: This Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					



### Tower Orientation

**Already**

## Complete Climbing

**Line Number**

579

Structure No:

69

**Structure Type:**

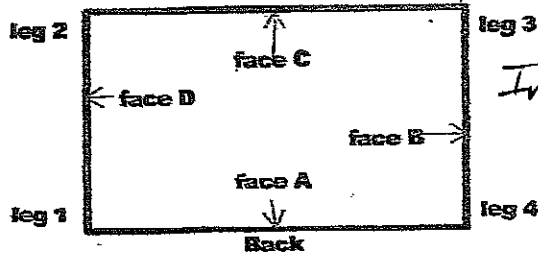
5LT+35'LE

## Back Substations

SEPTA

### Ahead Substations

YADKIN



<div style="display: flex; justify-content: space-between;"> <span>Leg 1</span> <span>Back</span> <span>Leg 4</span> </div>						<b>Foundation Inspection</b>		
<b>Groundline Inspection</b>						<b>Date:</b> _____		
<b>Severe Corrosion</b>		<b>Steel Measurements</b>				<b>Foreman:</b> _____		
	Yes	No	Reading 1	Reading 2	Action Code	See spec book for explanation of foundation codes	Fnd Code	Action Code
Leg 1	—	✓	VG	VG	P			LF
Leg 2	—	✓	VG	VG	P			LF
Leg 3	—	✓	VG	VG	P			EF
Leg 4	—	✓	VG	VG	P			LF

## FR: Foundation Repaired

**In Lieu of Measurements - VG: Visually Inspected - Good**

## Tower Inspection

Step Bolt Clips Added:		Yes	No	Quantity: 48	
	Damage	Face	Member	Corrective Action	Remark
1	P	BD	10x2	BP-NB-GW	
2	P	BD	11x2	BP-NB-GW	
3	P	AC	219x3	BP-NB-GW	
4	P	AC	213x2	BP-NB-GW	
5	TM-B	ABCD	220x16	RP-BP-NB-GW	
6	P	BD	707x4	BP-NB-GW	
7	C	BD	115Lx2	LF	Ladders
8	C	BD	115Rx2	LF	Ladders
9					
10					
11					
12					
13					
14					
15					
16					
17					

Damage Code	Corrective Action Code	Remark Code:	
MB: Missing Bolt	R: Repaired	G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent	RP: Replaced	BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked	LF: Left as Found	GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member		NB: New Bolts	FP: Flipped /Straightened Plates
O: Other			

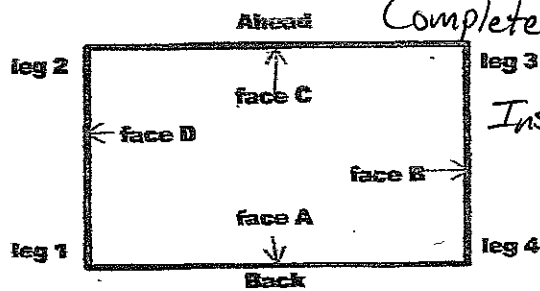
Date: 3-2-2022

Foreman: Michael Davis

Company: L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Complete Climbing

Line Number

579

Structure No:

71

Structure Type:

SLT+30'LE

Back Substation:

SEPTA

Ahead Substation:

YADKIN

Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1		✓	VG	VG	P
Leg 2		✓	VG	VG	P
Leg 3		✓	VG	VG	P
Leg 4		✓	VG	VG	P

Foundation Inspection		
Date:		
Foreman:		
See spec	Find Code	Action Code
look for		LF
explanation		LF
of		LF
foundation		LF
codes		LF

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found  
In Lieu of Measurements - VG: Visually Inspected - Good

FR: Foundation Repaired

## Tower Inspection

Step Bolt Clips Added:		✓	Yes	No	Quantity:	43
	Damage	Face	Member	Corrective Action	Remark	
1	P	BD	10x2	BP-NB-GW		
2	P	BD	11x2	BP-NB-GW		
3	C	BD	115Lx2	LF	Ladders	
4	C	BD	115Rx2	LF	Ladders	
5	P	AC	219x4	BP-NB-GW		
6	TM-B	ABCD	220x8	RP-BP-NB-GW		
7	P	BD	674x4	BP-NB-GW		
8	P	AC	673x4	BP-NB-GW		
9	O	AD	Leg 1	G	ground rod wire Cadweld	
10	O	CB	Leg 3	G	ground rod wire Cadweld	
11						
12						
13						
14						
15						
16						
17						
Damage Code		Corrective Action Code		Remark Code:		
MB: Missing Bolt		R: Repaired		G: Grounded Str		RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout		NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax		IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts		FP: Flipped /Straightened Plates
O: Other						

Date: 3-2-2022 Foreman: Michael Davis

Company: L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation

Ahead

Complete Climbing

Line Number:

579

Structure No:

22

Structure Type:

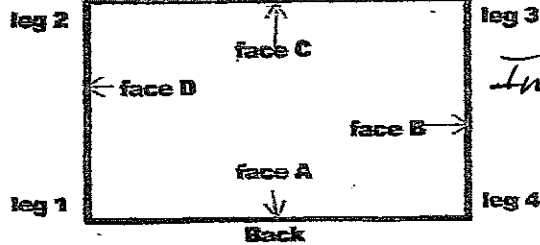
5LT+30'LE

Back Substation:

SEPTA

Ahead Substation:

YADKIN



Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1		✓	VG	VG	P
Leg 2		✓	VG	VG	P
Leg 3		✓	VG	VG	P
Leg 4		✓	VG	VG	P

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found  
In Lieu of Measurements - VG: Visually Inspected - Good

FR: Foundation Repaired

## Tower Inspection

Step Bolt Clips Added:		Yes	No	Quantity:	
		✓		45	
	Damage	Face	Member	Corrective Action	Remark
1	P	BD	10X2	BP-NB-GW	
2	P	BD	11X2	BP-NB-GW	
3	C	BD	16LX2	LF	Ladders
4	C	BD	16RX2	LF	Ladders
5	C	BD	115LX2	LF	Ladders
6	C	BD	115RX2	LF	Ladders
7	P	AC	219X4	BP-NB-GW	
8	P	AC	213X2	BP-NB-GW	
9	P	B	228X1	BP-NB-GW	
10	P	B	226X1	BP-NB-GW	
11	Tm-B	ABCD	220X8	RP-BP-NB-GW	
12	O	AD	Leg 1	G	groundrod wire Cadweld
13	O	BC	Leg 3	G	groundrod wire Cadweld
14	O	A	structure sign	N/S	
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	
B: Bent		RP: Replaced		RS: Removed Lower Step Bolts	
C: Cracked		LF: Left as Found		NS: New Danger/Aerial/Number Signs	
TM: Thin Member				IP: Installed Package Per Specs	
O: Other				NB: New Bolts	
				FP: Flipped /Straightened Plates	

Date: 3-15-2022

Foreman:

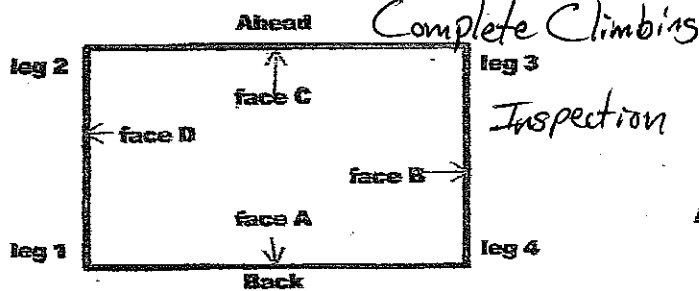
Michael Davis

Company:

L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579

Structure No: 73

Structure Type: 5LT+35'

Back Substation: SEPTA

Ahead Substation: YADKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1	—	✓	VG	VG
Leg 2	—	✓	VG	VG
Leg 3	—	✓	VG	VG
Leg 4	—	✓	VG	VG

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		LF
		LF
		LF
		LF

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found  
In Lieu of Measurements - VG: Visually Inspected - Good

FR: Foundation Repaired

## Tower Inspection

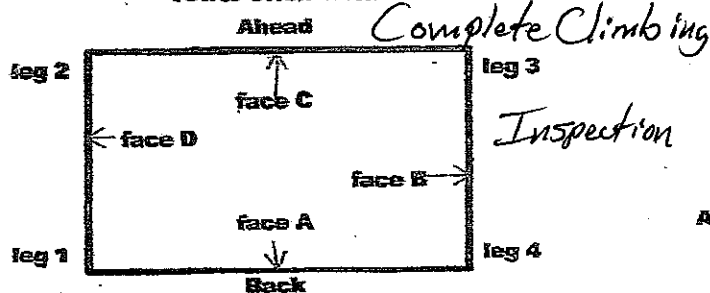
Step Bolt Clips Added:		✓ Yes	No	Quantity: 48	
	Damage	Face	Member	Corrective Action	Remark
1	P	BD	10x2	BP-NB-GW	
2	P	BD	11x2	BP-NB-GW	
3	C	BD	115Lx2	LF	
4	C	BD	115Rx2	LF	
5	B	B	2234x1	RP-BP-NB-GW	
6	P	BD	707x4	BP-NB-GW	
7	P	AC	219x3	BP-NB-GW	
8	P	C	213x1	BP-NB-GW	
9	P	A	43LNEARX1	BP-NB-GW	
10	O	AD	Leg 1	G	ground/rod wire Cadweld
11	O	BC	Leg 3	G	ground rod wire. Cadweld
12	TM-B	ABCD	220X16	RP-BP-NB-GW	
13					
14					
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

Date: 3-7-2022 Foreman: Michael Davis

Company: L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579  
 Structure No: 102  
 Structure Type: SHA+35' LE  
 Back Substation: SEPTA  
 Ahead Substation: NADKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		Action Code
Yes	No	Reading 1	Reading 2	
Leg 1	<input checked="" type="checkbox"/>	VG	VG	P
Leg 2	<input checked="" type="checkbox"/>	VG	VG	P
Leg 3	<input checked="" type="checkbox"/>	VG	VG	P
Leg 4	<input checked="" type="checkbox"/>	VG	VG	P

Foundation Inspection		
Date:		
Foreman:		
See spec.	Find Code	Action Code
book for explanation of foundation codes		LE
		LF
		LE
		LE

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found  
 In Lieu of Measurements - VG: Visually Inspected - Good

FR: Foundation Repaired

## Tower Inspection

Step Bolt Clips Added:		Yes	No	Quantity:	
		<input checked="" type="checkbox"/>		29	
Step	Damage	Face	Member	Corrective Action	Remark
1	MB	A	652X1	R-NB	
2	MB	A	653X1	R-NB	
3	MB	AB	669X1	R-NB	
4	MB	AB	6694X1	R-NB	
5	MB	AB	668X1	B-NB	
6	P	B	665X1	BP-NB-GW	
7	C	D	664X1	RP-BP-NB-GW	
8	C	AC	660X3	RP-BP-NB-GW	
9	C	A	659X1	RP-BP-NB-GW	
10	C	B	657X2	RP-BP-NB-GW	
11	C	D	658X1	RP-BP-NB-GW	
12	P	BC	654X2	-BP-NB-GW	
13	C	D	208RX1	RP-BP-NB-GW	
14	C	AC	207X3	RP-BP-NB-GW	
15	C	C	128X1	RP-BP-NB-GW	
16	P	A	128X1	BP-NB-GW	
17	C	C	126X1	RP-BP-NB-GW	
Damage Code		Corrective Action Code		Remark Codes:	
MB:	Missing Bolt	R:	Repaired	G:	Grounded Str
B:	Bent	RP:	Replaced	BP:	Beat Packout
C:	Cracked	LF:	Left as Found	GW:	Applied Greywax
TM:	Thin Member			NB:	New Bolts
O:	Other				
				RS:	Removed Lower Step Bolts
				NS:	New Danger/Aerial/Number Signs
				IP:	Installed Package Per Specs
				FP:	Flipped /Straightened Plates

Date: 3-9-2022

Foreman: Michael Davis

Company: L.E. MYERS



# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Line Number: 579

Structure No: 102

Page 2 of 2

## Tower Inspection

	Damage	Face	Member	Corrective Action	Remark
1	P	A	126x1	BP-NB-GW	
2	C	C	127x1	RP-BP-NB-GW	
3	P	A	127x1	BP-NB-GW	
4	P	A	130x1	BP-NB-GW	
5	C	BD	142x3	RP-BP-NB-GW	
6	P	B	111x1	BP-NB-GW	
7	MB	B	176x1	RP-BP-NB-GW	
8	P	B	88x1	BP-NB-GW	
9	P	D	139x1	BP-NB-GW	
10	O	AD	L451	G	Ground Rod Wire Cadweld
11	O	BC	L453	G	Ground Rod Wire Cadweld
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation

Ahead

*Complete Climbing*

Line Number:

579

Structure No:

103

Structure Type:

SLT+30'

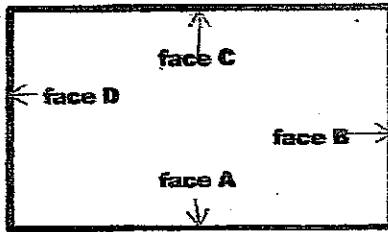
Back Substation:

SEPTA

Ahead Substation:

YADKIN

leg 2



leg 3

*Inspection*

leg 1

Back

leg 4

## Groundline Inspection

	Severe Corrosion		Steel Measurements		Action Code
	Yes	No	Reading 1	Reading 2	
Leg 1	—	<input checked="" type="checkbox"/>	VG	VG	P
Leg 2	—	<input checked="" type="checkbox"/>	VG	VG	P
Leg 3	—	<input checked="" type="checkbox"/>	VG	VG	P
Leg 4	—	<input checked="" type="checkbox"/>	VG	VG	P

## Foundation Inspection

Date:

Foreman:

See spec  
book for  
explanation  
of  
foundation  
codes

Fnd Code

Action Code

LF

LF

LF

LF

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found

FR: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Quantity: 48	
	Damage	Face	Member	Corrective Action	Remark
1	P	BD	10x2	BP-NB-GW	
2	P	BD	11x2	BP-NB-GW	
3	C	BD	115LX1	LF	Ladders
4	C	BD	115RX1	LF	Ladders
5	P	AC	219X3	BP-NB-GW	
6	TM-B	ABCD	220x8	RP-BP-NB-GW	
7	P	BD	674X4	BP-NB-GW	
8	P	AC	673X4	BP-NB-GW	
9	C	ABCD	Leg 1-2-3-4	G	ground/Rock Wire Cadweld
10	P	D	671X1	BP-NB-GW	
11					
12					
13					
14					
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	
B: Bent		RP: Replaced		BP: Beat Packout	
C: Cracked		LF: Left as Found		GW: Applied Greywax	
TM: Thin Member				NB: New Bolts	
O: Other				FR: Flipped /Straightened Plates	

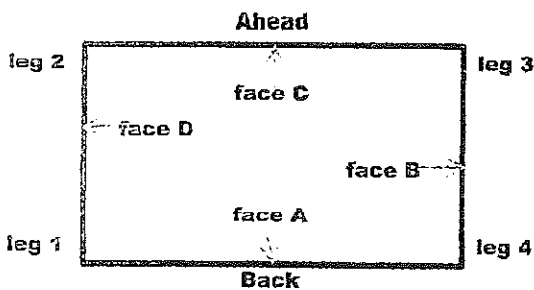
Date: 3-8-2022

Foreman: Michael Davis

Company: L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579

Structure No: 121

Structure Type: SLT+ 40' LE

Back Substation: SEPTA

Ahead Substation: YADKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Leg 2	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Leg 3	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Leg 4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Good	VG
				Action Code
				LF
				LF
				LF
				LF

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		Pilings

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Quantity: <u>55</u>	
	Damage	Face	Member	Corrective Action	Remark
1	P	Bd	10x2	R	BP - NB - GW
2	P	Bd	11x2	R	
3	Tm	ABcd	230x16	RP	
4	P	Ac	213x2	R	
5	MB	A	213x1	R	
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					Climbing Inspection Complete
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	
B: Bent		RP: Replaced		BP: Beat Packout	
C: Cracked		LF: Left as Found		GW: Applied Greywax	
TM: Thin Member				NB: New Bolts	
O: Other				FP: Flipped /Straightened Plates	

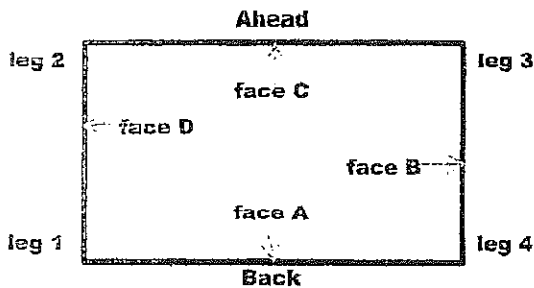
Date: 3/14/22

Foreman: GREG V. A

LEMYRE'S

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579

Structure No: 122

Structure Type: 5HA + 10 LE

Back Substation: SEPTA

Ahead Substation: YACKIN

Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1		✓			LF
Leg 2		✓			LF
Leg 3		✓			LF
Leg 4		✓	Good	VG	LF

Foundation Inspection		
Date: _____		
Foreman: _____		
See spec book for explanation of foundation codes	Fnd Code	Action Code
		Pilings

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired  
In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added:		✓ Yes		No	Quantity: 9
	Damage	Face	Member	Corrective Action	Remark
1	P	ABC	528X3	R	BP - GW - NB
2	P	d	207X1	R	
3	P	C	130X1	R	
4	C	AC	130X2	RP	
5	C	AC	128X3	RP	
6	P	C	128X1	R	
7	P	B	153 <sup>A</sup> X1	R	
8	C	Bd	142X2	RP	
9	C	BRIDGE	80 <sup>R</sup> X1	RP	
10	C	B	113X1	RP	
11	P	B	41X1	R	
12					103 bosom plates
13					welded Lfg 1-4
14					
15					climbing inspection
16					complete
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

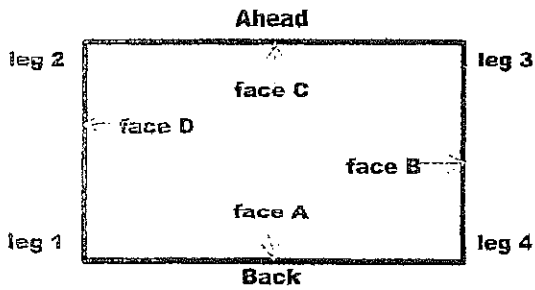
Date: 3/15/22

Foreman: GREG VIA

LEMYRES

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Line Number: 579

Structure No: 123

Structure Type: SLT+20'LE

Back Substation: SEPTA

Ahead Substation: YADKIN

Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	↓	↓	LF
Leg 2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	↓	↓	LF
Leg 3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	↓	↓	LF
Leg 4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Good	VG	LF

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Fnd Code	Action Code
		Pilings
		1

Action Code: F: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired  
In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Quantity: <u>40</u>			
	Damage	Face	Member	Corrective Action	Remark
1	P	Bd	10x2	R	BP - GW - NB
2	P	Bd	11x2	R	
3	P	AC	213x2	R	
4	Tm	ABCD	220x8	RP	
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					Climbing Inspection Complete
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	
B: Bent		RP: Replaced		RS: Removed Lower Step Bolts	
C: Cracked		LF: Left as Found		BP: Beat Packout	
TM: Thin Member				NS: New Danger/Aerial/Number Signs	
O: Other				IP: Installed Package Per Specs	
				NB: New Bolts	
				FP: Flipped /Straightened Plates	

Date: 3/15/22

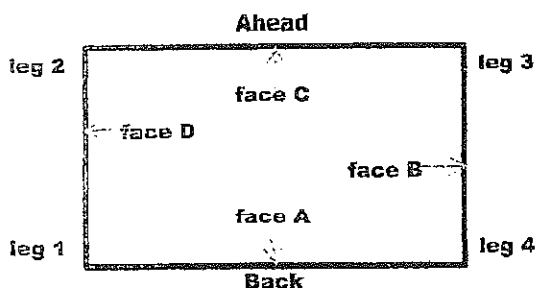
Foreman: GREG VIA

Company: LEMYRES



# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

## Tower Orientation



Line Number: 579

Structure No: 124

Structure Type: SLT+20'LE

Back Substation: SEPTA

Ahead Substation: YADKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1		✓		
Leg 2		✓		
Leg 3		✓		
Leg 4		✓	Good	VG

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		Pilings

Action Code: F: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired  
In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added:		<u>✓</u> Yes	<u>    </u> No	Quantity: <u>36</u>	
	Damage	Face	Member	Corrective Action	Remark
1			10x2	R	BP - GW - NB
2			11x2	R	
3			213x2	R	
4			220x8	RP	
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
WB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					
Climbing Inspection Complete					

Date: 3/16

Foreman: GREG VIA

LEMYRES

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation

Ahead

Complete Climbing

Line Number

579

Structure No:

125

Structure Type:

SLT+30'LE

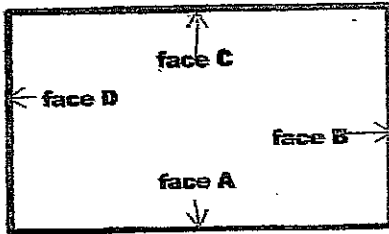
Back Substation:

SEPTA

Ahead Substation:

YADKIN

leg 2



leg 3

Inspection

leg 4

Back

## Groundline Inspection

Severe Corrosion		Steel Measurements		Action Code
Yes	No	Reading 1	Reading 2	
Leg 1	<input checked="" type="checkbox"/>	VG	VG	LF
Leg 2	<input checked="" type="checkbox"/>	VG	VG	LF
Leg 3	<input checked="" type="checkbox"/>	VG	VG	LF
Leg 4	<input checked="" type="checkbox"/>	VG	VG	LF

## Foundation Inspection

Date:

Foreman:

See spec  
book for  
explanation  
of  
foundation  
codes

Find Code

Action Code

Pilings

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found

FR: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

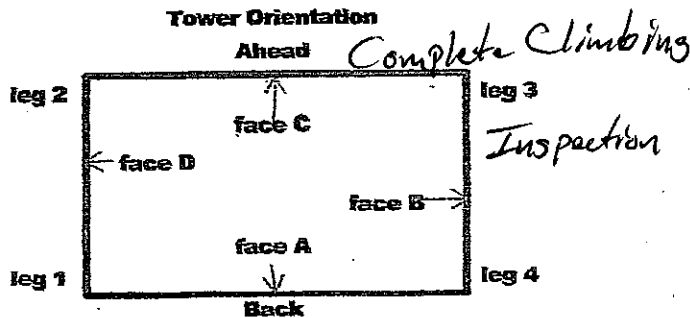
## Tower Inspection

Step Bolt Clips Added:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Quantity: 48	
	Damage	Face	Member	Corrective Action	Remark
1	P	BD	10X2	BP-NB-GW	
2	P	BD	11X2	BP-NB-GW	
3	C	BD	115RX2	LF	Ladders
4	C	BD	115LX2	LF	Ladders
5	C	B	222X1	RP-BP-NB-GW	
6	P	AC	219X4	BP-NB-GW	
7	MB	B	667X1	R-NB-GW	
8	P	BD	671X3	BP-NB-GW	
9	P	AC	213X2	BP-NB-GW	
10	TM-B	ABCD	220X8	RP-BP-NB-GW	
11					
12					
13					
14					
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
MB: Missing Bolt		R: Repaired		G: Grounded Str	
B: Bent		RP: Replaced		RS: Removed Lower Step Bolts	
C: Cracked		LF: Left as Found		BP: Beat Packout	
TM: Thin Member				GW: Applied Greywax	
O: Other				NB: New Bolts	
				NS: New Danger/Aerial/Number Signs	
				IP: Installed Package Per Specs	
				FP: Flipped /Straightened Plates	

Date: 3-14-2022 Foreman: Michael Davis

Company: L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet



Line Number: 579

Structure No: 126

Structure Type: 5LT+25'LE

Back Substation: SEPTA

Ahead Substation: VADKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1	—	✓	VG	VG
Leg 2	—	✓	VG	VG
Leg 3	—	✓	VG	VG
Leg 4	—	✓	VG	VG
				Action Code
				LF

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		Pilings

Action Codes: P: Applied Leg Coating · B: Baseshoe Replaced · LF: Left as Found  
In Lieu of Measurements - VG: Visually Inspected - Good

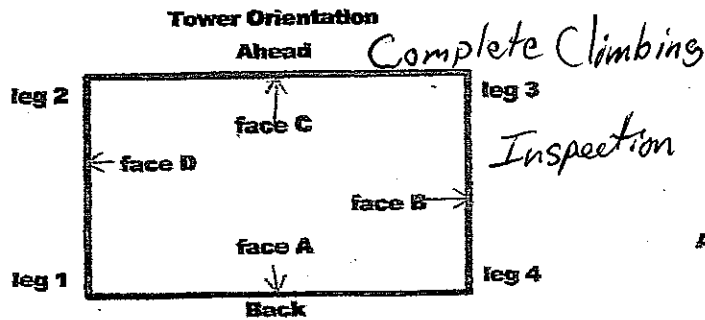
FR: Foundation Repaired

## Tower Inspection

Step Bolt Clips Added:		Yes		No		Quantity: 43	
	Damage	Face	Member	Corrective Action		Remark	
1	P	BD	10X2	BP-NB-GW			
2	P	BD	11X2	BP-NB-GW			
3	C	BD	115LX2	LF		Ladders	
4	C	BD	115RX2	LF		Ladders	
5	P	AC	213X2	BP-NB-GW			
6	TM-B	ABCD	220X8	RP-BP-NB-GW			
7	P	A	215X2	BP-NB-GW			
8	C	BD	16LX2	LF		Ladders	
9	C	BD	16RX2	LF		Ladders	
10							
11							
12							
13							
14							
15							
16							
17							
Damage Code		Corrective Action Code		Remark Code:			
MB: Missing Bolt		R: Repaired		G: Grounded Str		RS: Removed Lower Step Bolts	
B: Bent		RP: Replaced		BP: Beat Packout		NS: New Danger/Aerial/Number Signs	
C: Cracked		LF: Left as Found		GW: Applied Greywax		IP: Installed Package Per Specs	
TM: Thin Member				NB: New Bolts		FP: Flipped /Straightened Plates	
O: Other							

Date: 3-14-2022 Foreman: Michael Davis Company: LEMYER

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet



Line Number: 579

Structure No: 127

Structure Type: SLT+30'LE

Back Substation: SEPTA

Ahead Substation: YADKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1		<input checked="" type="checkbox"/>	VG	VG
Leg 2		<input checked="" type="checkbox"/>	VG	VG
Leg 3		<input checked="" type="checkbox"/>	VG	VG
Leg 4		<input checked="" type="checkbox"/>	VG	VG

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		<i>Piling</i>

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found  
In Lieu of Measurements - VG: Visually Inspected - Good

FR: Foundation Repaired

## Tower Inspection

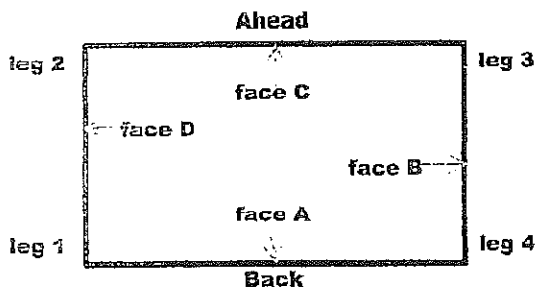
Step Bolt Clips Added:		✓ Yes		No	Quantity:	48
	Damage	Face	Member	Corrective Action	Remark	
1	P	BD	10x2	BP-NB-GW		
2	P	BD	11x2	BP-NB-GW		
3	C	B	115Lx1	LF		
4	C	B	115Rx1	LF		
5	P	AC	213x2	BP-NB-GW		
6	P	A	219x2	BP-NB-GW		
7	TM-B	ABCD	220x8	RP-BP-NB-GW		
8	P	B-D	671x3	BP-NB-GW		
9						
10						
11						
12						
13						
14						
15						
16						
17						
Damage Code		Corrective Action Code		Remark Code:		
MB: Missing Bolt		R: Repaired		G: Grounded Str		RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout		NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax		IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts		FP: Flipped /Straightened Plates
O: Other						

Date: 3-14-2022 Foreman: Michael Davis

Company: L.E. MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

## Tower Orientation



Line Number: 579

Structure No: 128

Structure Type: SLT 30' LE

Back Substation: SEPTA

Ahead Substation: YADKIN

Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1		✓			LF
Leg 2		✓			LF
Leg 3		✓			LF
Leg 4		✓	Good	VG	LF

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		Pilings

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added:		Yes		No		Quantity:	
	Damage	Face	Member	Corrective Action		Remark	
1	P	Bd	10X2	R		BP - NB - GW	
2	P	Bd	11X2	R			
3	P	AC	213X2	R			
4	Tm	ABcd	220X8	RP			
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16						climbing inspection	
17						complete	
Damage Code		Corrective Action Code		Remark Code:			
MB: Missing Bolt		R: Repaired		G: Grounded Str		RS: Removed Lower Step Bolts	
B: Bent		RP: Replaced		BP: Beat Packout		NS: New Danger/Aerial/Number Signs	
C: Cracked		LF: Left as Found		GW: Applied Greywax		IP: Installed Package Per Specs	
TM: Thin Member				NB: New Bolts		FP: Flipped /Straightened Plates	
O: Other							

Date: 3/9/22

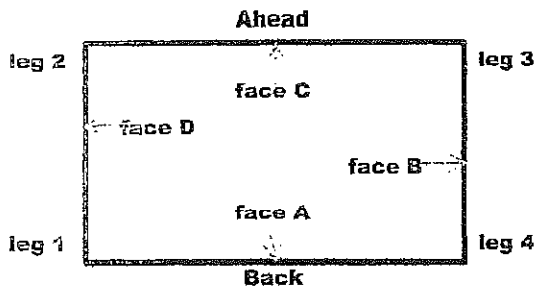
Foreman: GREG V.A

LEMYRE'S



# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

## Tower Orientation



Line Number: 579

Structure No: 129

Structure Type: SLT+ 30 LE

Back Substation: SEPTA

Ahead Substation: YACKIN

Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1	<input type="checkbox"/>	<input checked="" type="checkbox"/>			LF
Leg 2	<input type="checkbox"/>	<input checked="" type="checkbox"/>			LF
Leg 3	<input type="checkbox"/>	<input checked="" type="checkbox"/>			LF
Leg 4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Good	VG	LE

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Fnd Code	Action Code
		Pilings
		/

Action Code: P: Applied A-120 B: Baseshoe Replaced LF: Left as Found FP: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Quantity: <u>47</u>	
	Damage	Face	Member	Corrective Action	Remark
1	P	Bd	10x2	R	BP - NB - GW
2	P	Bd	11x2	R	
3	Tm	ABcd	220x8	RP	
4	P	AC	213x2	R	
5	P	Bd	671x2	R	
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					Climbing Inspection Complete
17					
Damage Code		Corrective Action Code		Remark Code:	
WB: Missing Bolt		R: Repaired		G: Grounded Str	RS: Removed Lower Step Bolts
B: Bent		RP: Replaced		BP: Beat Packout	NS: New Danger/Aerial/Number Signs
C: Cracked		LF: Left as Found		GW: Applied Greywax	IP: Installed Package Per Specs
TM: Thin Member				NB: New Bolts	FP: Flipped /Straightened Plates
O: Other					

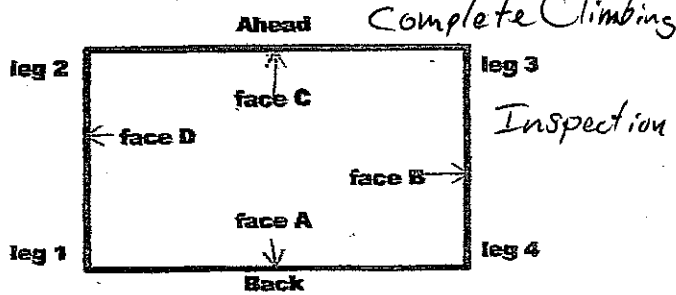
Date: 3/8/22

Foreman: GREG V.A

- LEMYRES

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

## Tower Orientation



Line Number: 579

Structure No: 130

Structure Type: SLT+35'LE

Back Substation: SePTA

Ahead Substation: YADKIN

Groundline Inspection					
Severe Corrosion		Steel Measurements			
	Yes	No	Reading 1	Reading 2	Action Code
Leg 1		<input checked="" type="checkbox"/>	VG	VG	LF
Leg 2		<input checked="" type="checkbox"/>	VG	VG	LF
Leg 3		<input checked="" type="checkbox"/>	VG	VG	LF
Leg 4		<input checked="" type="checkbox"/>	VG	VG	LF

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Fnd Code	Action Code
		<u>Pilings</u>

Action Codes: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found  
In Lieu of Measurements - VG: Visually Inspected - Good

FR: Foundation Repaired

## Tower Inspection

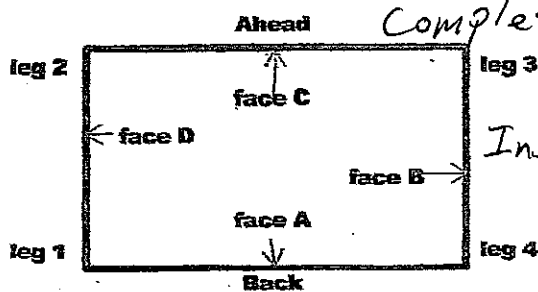
Step Bolt Clips Added:		<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No		Quantity:	51
	Damage	Face	Member	Corrective Action	Remark		
1	P	C	43RFARX1	BP-NB-GW			
2	P	BD	10X2	BP-NB-GW			
3	P	BD	11X2	BP-NB-GW			
4	C	BD	115LX2	LF	Ladders		
5	C	BD	115RX2	LF	Ladders		
6	P	AC	219X4	BP-NB-GW			
7	P	AC	213X2	BP-NB-GW			
8	TM-B	ABCD	220X16	RP-BP-NB-GW			
9	P	BD	707X4	BP-NB-GW			
10	P	B	730X1	BP-NB-GW			
11	C	D	730X1	RP-BP-NB-GW			
12							
13							
14							
15							
16							
17							
Damage Code		Corrective Action Code		Remark Code:			
MB: Missing Bolt		R: Repaired		G: Grounded Str		RS: Removed Lower Step Bolts	
B: Bent		RP: Replaced		BP: Boat Packout		NS: New Danger/Aerial/Number Signs	
C: Cracked		LF: Left as Found		GW: Applied Greywax		IP: Installed Package Per Specs	
TM: Thin Member				NB: New Bolts		FP: Flipped /Straightened Plates	
O: Other							

Date: 3-15-2022 Foreman: Michael Davis

Company: L.E MYERS

# Weathering Steel Tower Inspection/Rehabilitation Data Sheet

Tower Orientation



Complete Climbing

Line Number: 579

Structure No: 131

Structure Type: 5LT+35'LE

Back Substation: SEPTA

Ahead Substation: YADKIN

Groundline Inspection				
Severe Corrosion		Steel Measurements		
	Yes	No	Reading 1	Reading 2
Leg 1	—	✓	VG	VG
Leg 2	—	✓	VG	VG
Leg 3	—	✓	VG	VG
Leg 4	—	✓	VG	VG

Foundation Inspection		
Date:		
Foreman:		
See spec book for explanation of foundation codes	Find Code	Action Code
		Pilings

Action Code: P: Applied Leg Coating B: Baseshoe Replaced LF: Left as Found

FR: Foundation Repaired

In Lieu of Measurements - VG: Visually Inspected - Good

## Tower Inspection

Step Bolt Clips Added: ✓ Yes		No		Quantity: 51	
	Damage	Face	Member	Corrective Action	Remark
1	P	BD	10X2	BP-NB-GW	
2	P	BD	11X2	BP-NB-GW	
3	C	BD	115LX2	LF	Ladders
4	C	BD	115RX2	LF	Ladders
5	P	D	222X1	BP-NB-GW	
6	P	AC	213X2	BP-NB-GW	
7	TM-B	ABCD	220X16	RP-BP-NB-GW	
8	P	BD	707X4	BP-NB-GW	
9	P	A	36NEARX1	BP-NB-GW	
10	P	C	36FARX1	BP-NB-GW	
11					
12					
13					
14					
15					
16					
17					
Damage Code		Corrective Action Code		Remark Code:	
NB: Missing Bolt		R: Repaired		G: Grounded Str	
B: Bent		RP: Replaced		BP: Beat Packout	
C: Cracked		LF: Left as Found		GW: Applied Greywax	
TM: Thin Member				NB: New Bolts	
O: Other				FR: Flipped /Straightened Plates	

Date: 3-16-2022 Foreman: Michael Davis

Company: L.E. MYERS

**I. NECESSITY FOR THE PROPOSED PROJECT**

**M. In addition to the other information required by these guidelines, applications for approval to construct facilities and transmission lines interconnecting a Non-Utility Generator (“NUG”) and a utility shall include the following information:**

- 1. The full name of the NUG as it appears in its contract with the utility and the dates of initial contract and any amendments;**
- 2. A description of the arrangements for financing the facilities, including information on the allocation of costs between the utility and the NUG;**
- 3. a. For Qualifying Facilities (“QFs”) certificated by Federal Energy Regulatory Commission (“FERC”) order, provide the QF or docket number, the dates of all certification or recertification orders, and the citation to FERC Reports, if available;**  
**b. For self-certificated QFs, provide a copy of the notice filed with FERC;**
- 4. Provide the project number and project name used by FERC in licensing hydroelectric projects; also provide the dates of all orders and citations to FERC Reports, if available; and**
- 5. If the name provided in 1 above differs from the name provided in 3 above, give a full explanation.**

Response: Not applicable.

**I. NECESSITY FOR THE PROPOSED PROJECT**

- N. Describe the proposed and existing generating sources, distribution circuits or load centers planned to be served by all new substations, switching stations and other ground facilities associated with the proposed project.**

Response: Not applicable.



## **II. DESCRIPTION OF THE PROPOSED PROJECT**

### **A. Right-of-way (“ROW”)**

#### **1. Provide the length of the proposed corridor and viable alternatives.**

Response: The total length of the existing transmission corridor containing the Rebuild Project is approximately 33.1 miles with the right-of-way corridor varying from 130 to 350 feet in width. No alternative routes are proposed for the Rebuild Project. See Section II.A.9.

## **II. DESCRIPTION OF THE PROPOSED PROJECT**

### **A. Right-of-way (“ROW”)**

- 2. Provide color maps of suitable scale (including both general location mapping and more detailed GIS-based constraints mapping) showing the route of the proposed line and its relation to: the facilities of other public utilities that could influence the route selection, highways, streets, parks and recreational areas, scenic and historic areas, open space and conservation easements, schools, convalescent centers, churches, hospitals, burial grounds/cemeteries, airports and other notable structures close to the proposed project. Indicate the existing linear utility facilities that the line is proposed to parallel, such as electric transmission lines, natural gas transmission lines, pipelines, highways, and railroads. Indicate any existing transmission ROW sections that are to be quitclaimed or otherwise relinquished. Additionally, identify the manner in which the Applicant will make available to interested persons, including state and local governmental entities, the digital GIS shape file for the route of the proposed line.**

Response: See Attachment II.A.2. The Rebuild Project is located entirely within existing right-of-way or within the Company’s existing property rights, and no portion of the right-of-way is proposed to be quitclaimed or relinquished.

Dominion Energy Virginia will make the digital Geographic Information Systems shape file available to interested persons upon request to the Company’s legal counsel as listed in the Rebuild Project Application.

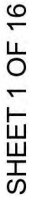


Septa - Yadkin 500 kV Line #579 Rebuild and  
Suffolk - Thrasher 230 kV Line #2110 Partial Rebuild

Client:	Dominion Energy Virginia		
C2 Env Project:	0265	Prepared By:	KAS
		Date:	5/6/2025



- Notes:
1. Basemap from ESRI World Topographic Map
  2. Project right-of-way provided by Dominion Energy Virginia
  3. Conservation lands, easements and local lands from Virginia Department of Conservation and Recreation, U.S. Geological Survey Protected Areas Database of the U.S. and Department of Historic Resources Virginia Cultural Resources Information System
  4. Railroads from Virginia Geographic Information Network
  5. Stream centerlines from U.S. Geological Survey National Hydrography Dataset







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

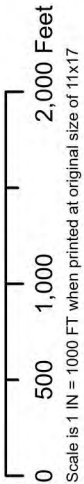
ATTACHMENT II.A.2  
ENVIRONMENTAL CONSTRAINTS MAP

Septa - Yadkin 500 kV Line #579 Rebuild and  
Suffolk - Thrasher 230 kV Line #2110 Partial Rebuild

City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

Client:  
Dominion Energy Virginia

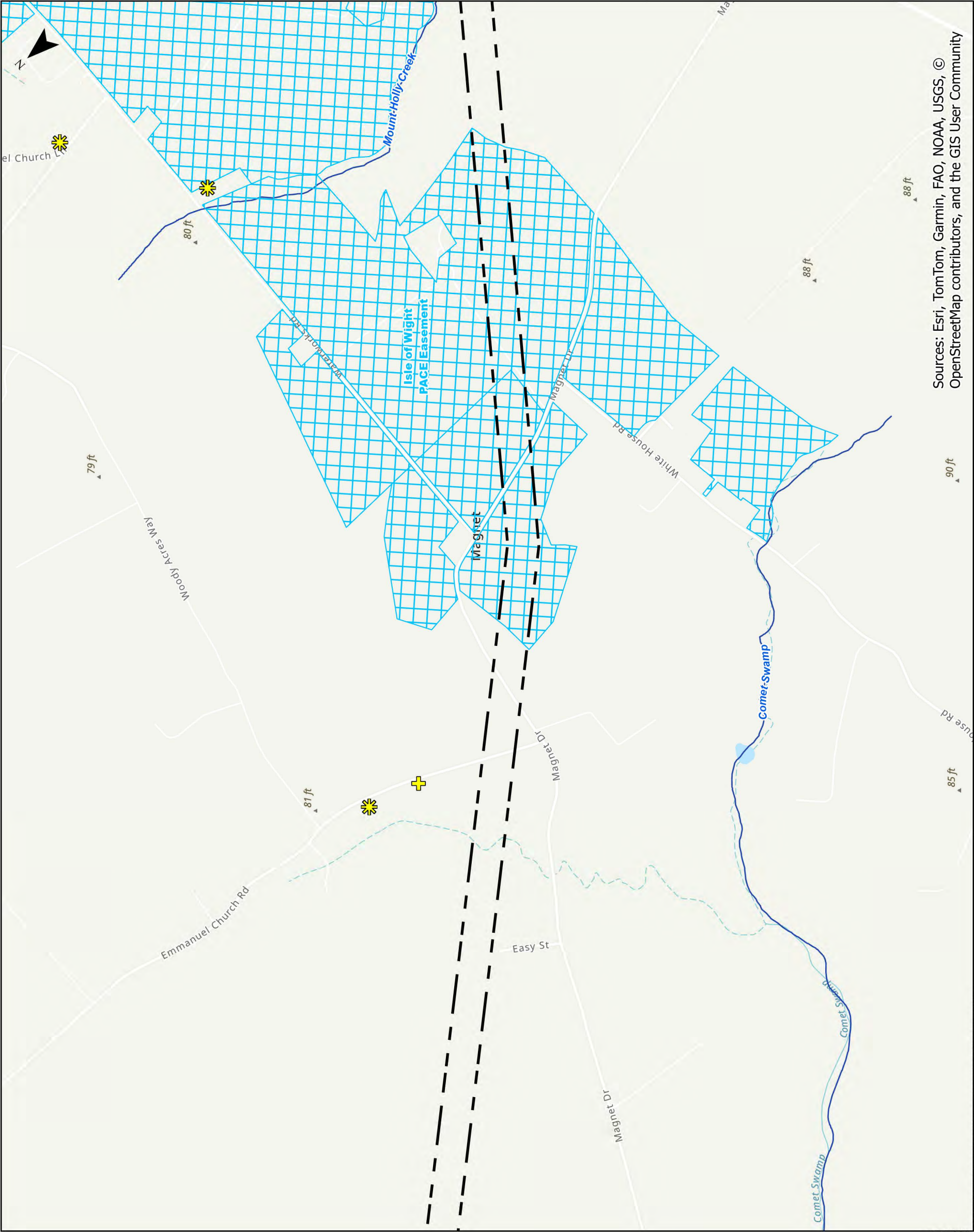
C2 Env Project: 0265  
Prepared By: KAS  
Date: 5/6/2025



- Existing Right-of-Way
- Existing Substation/Switching Station
- Dominion Station Parcel
- Local Park
- Isle of Wight PACE Easement
- National Wildlife Refuge
- Virginia Department of Forestry Easement
- Chesapeake Wetland Mitigation Bank Easement
- Listed, Eligible or Potentially Eligible VCRIS
- Architecture Resource
- School
- Cemetery
- Place of Worship
- Recreational Facility
- Captain John Smith Chesapeake National Historic Trail
- East Coast Greenway
- Railroad
- USGS National Hydrography Stream Centerline







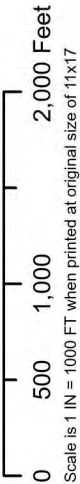
ATTACHMENT II.A.2  
ENVIRONMENTAL CONSTRAINTS MAP

Septa - Yadkin 500 kV Line #579 Rebuild and  
Suffolk - Thrasher 230 kV Line #2110 Partial Rebuild

City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

Client:  
Dominion Energy Virginia

C2 Env Project: 0265  
Prepared By: KAS  
Date: 5/6/2025

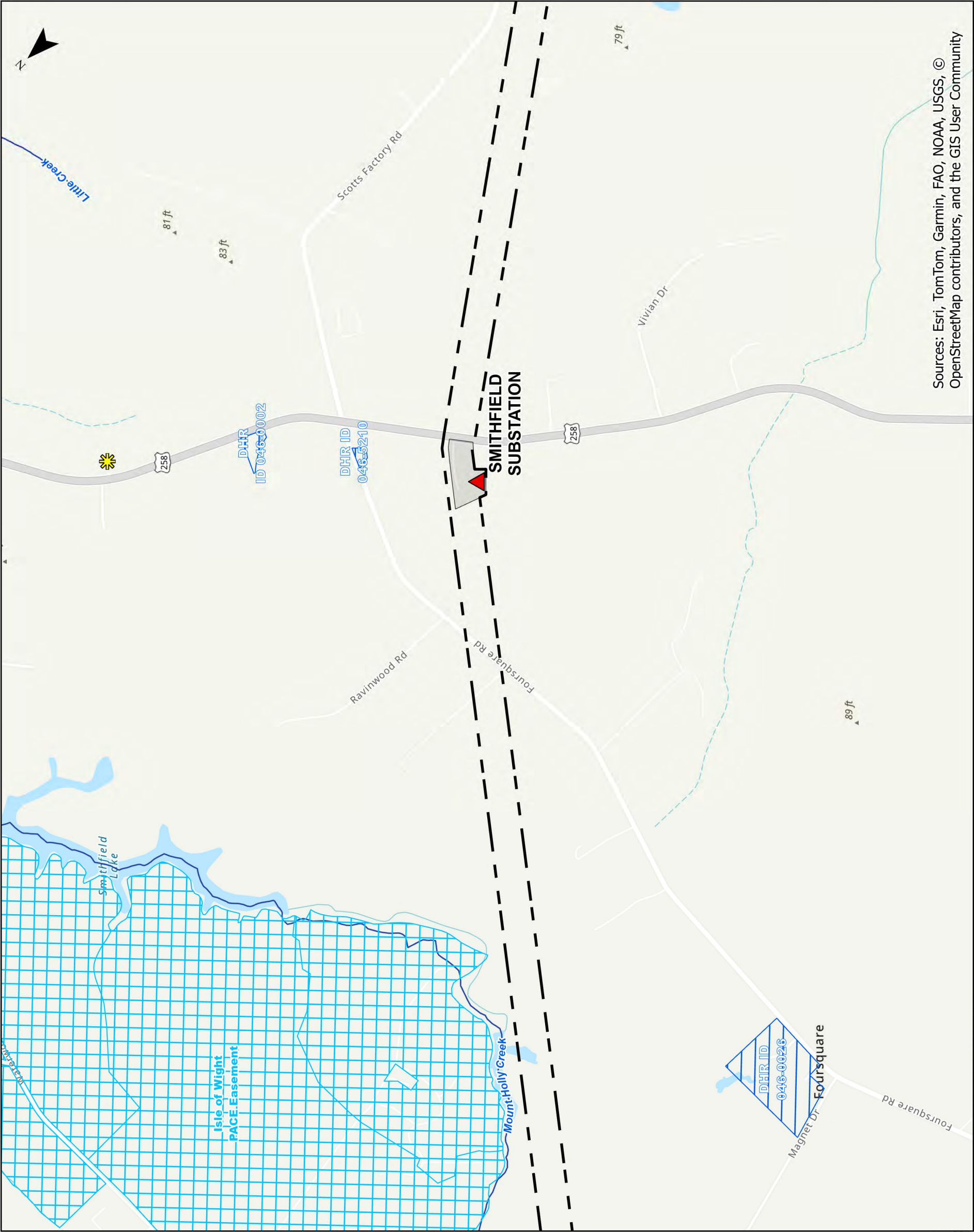


- Existing Right-of-Way
- Existing Substation/Switching Station
- Dominion Station Parcel
- Local Park
- Isle of Wight PACE Easement
- National Wildlife Refuge
- Virginia Department of Forestry Easement
- Chesapeake Wetland Mitigation Bank Easement
- Listed, Eligible or Potentially Eligible VCRIS
- Architecture Resource
- School
- Cemetery
- Place of Worship
- Recreational Facility
- Captain John Smith Chesapeake National Historic Trail
- East Coast Greenway
- Railroad
- USGS National Hydrography Stream Centerline



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





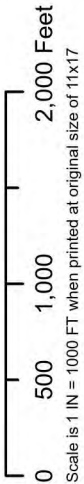
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, ©  
OpenStreetMap contributors, and the GIS User Community

ATTACHMENT II.A.2  
ENVIRONMENTAL CONSTRAINTS MAP

Septa - Yadkin 500 kV Line #579 Rebuild and  
Suffolk - Thrasher 230 kV Line #2110 Partial Rebuild

City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

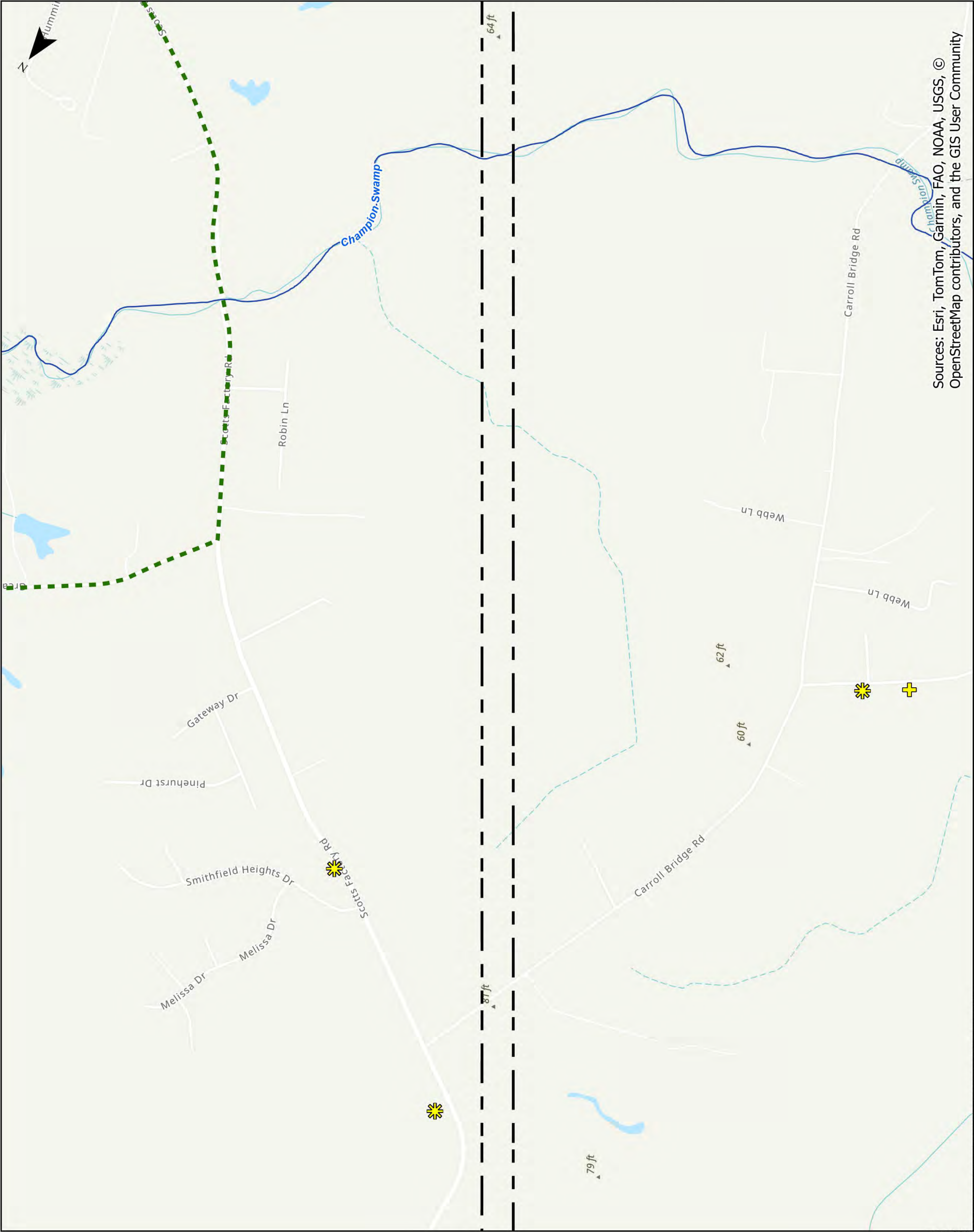
Client:	
Dominion Energy Virginia	
C2 Env Project:	Prepared By:
0265	KAS
Date:	
5/6/2025	



- Existing Right-of-Way
- Existing Substation/Switching Station
- Dominion Station Parcel
- Local Park
- Isle of Wight PACE Easement
- National Wildlife Refuge
- Virginia Department of Forestry Easement
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- East Coast Greenway
- Railroad
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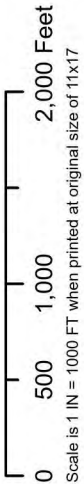
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, ©  
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## ATTACHMENT II.A.2 ENVIRONMENTAL CONSTRAINTS MAP

Septa - Yadkin 500 kV Line #579 Rebuild and  
Suffolk - Thrasher 230 kV Line #2110 Partial Rebuild

City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

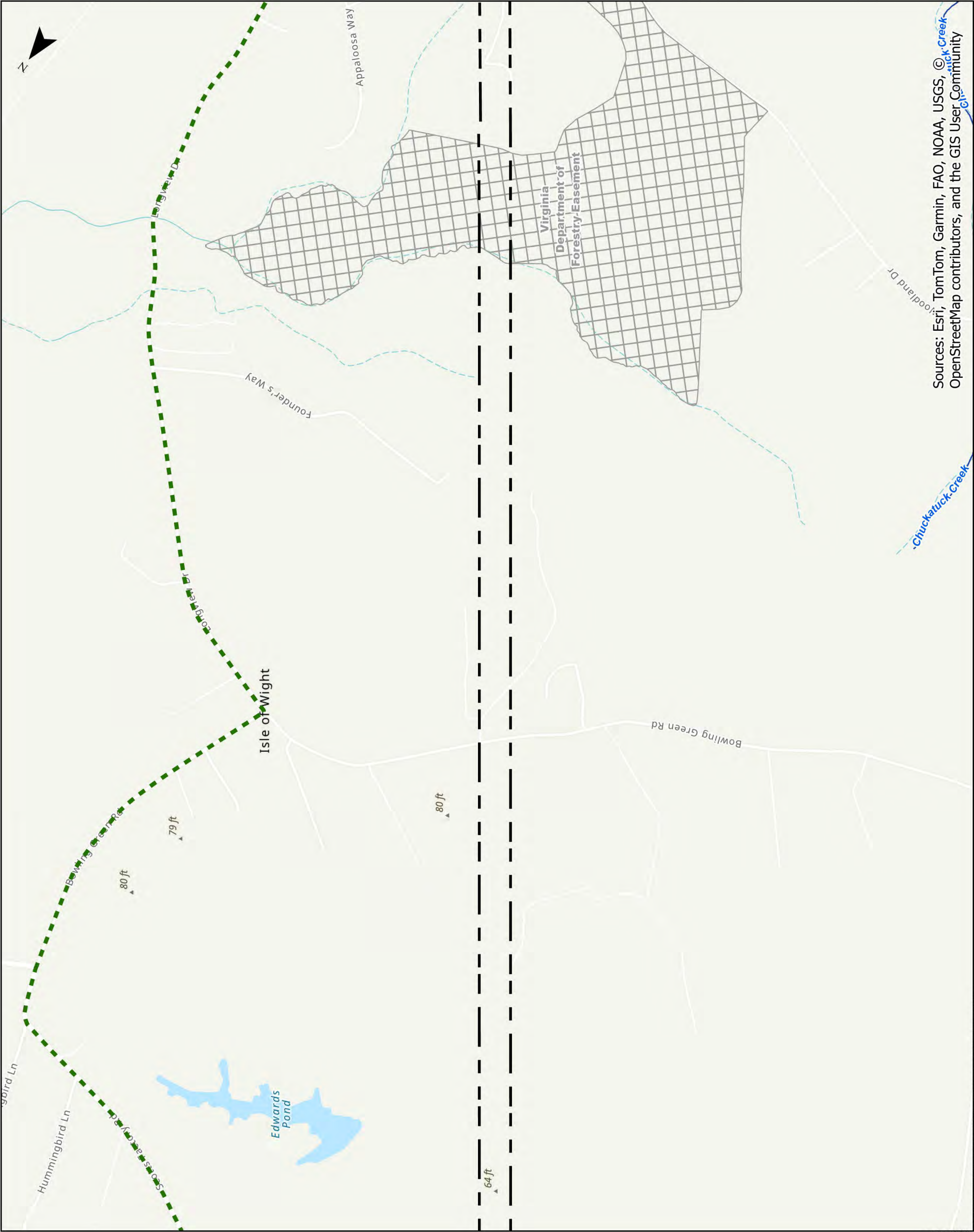
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Dominion Energy Virginia	
C2 Env Project:	Prepared By:
0265	KAS
Date:	
5/6/2025	



- Existing Right-of-Way
- Existing Substation/Switching Station
- Dominion Station Parcel
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- Chesapeake Wetland Mitigation Bank Easement
- Listed, Eligible or Potentially Eligible VCRIS
- Architecture Resource
- School
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- Place of Worship
- Recreational Facility
- Captain John Smith Chesapeake National Historic Trail
- East Coast Greenway
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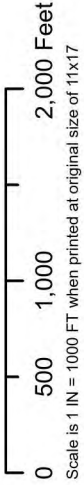
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © [Chuck Creek](#), © [Mick](#), © [OpenStreetMap contributors](#), and the [GIS User Community](#)

ATTACHMENT II.A.2  
ENVIRONMENTAL CONSTRAINTS MAP

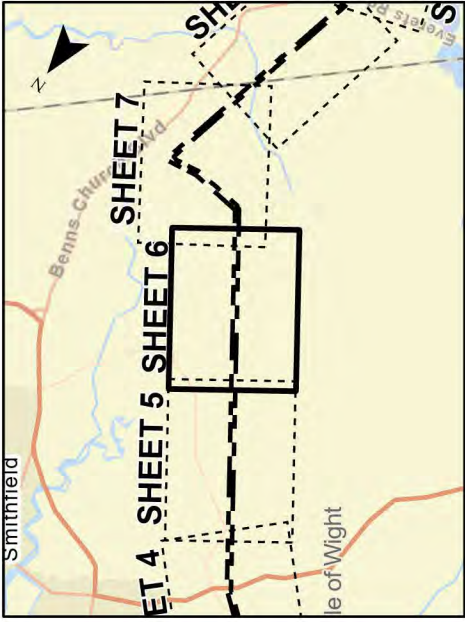
Septa - Yadkin 500 kV Line #579 Rebuild and  
Suffolk - Thrasher 230 kV Line #2110 Partial Rebuild

City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

Client:		
Dominion Energy Virginia		
C2 Env Project:	Prepared By:	Date:
0265	KAS	5/6/2025



- Existing Right-of-Way
- Existing Substation/Switching Station
- Dominion Station Parcel
- Local Park
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- Chesapeake Wetland Mitigation Bank Easement
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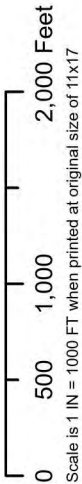


ATTACHMENT II.A.2  
ENVIRONMENTAL CONSTRAINTS MAP

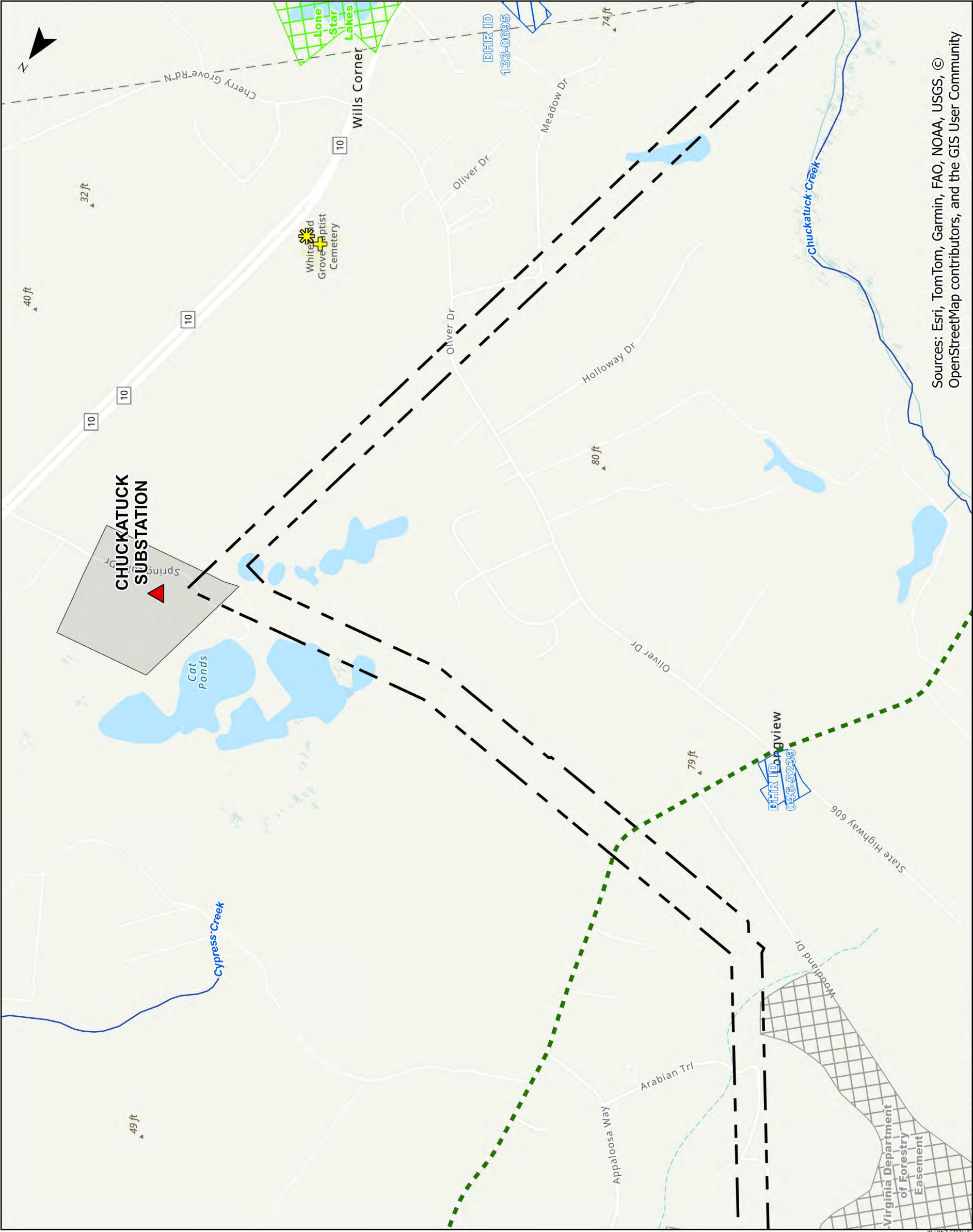
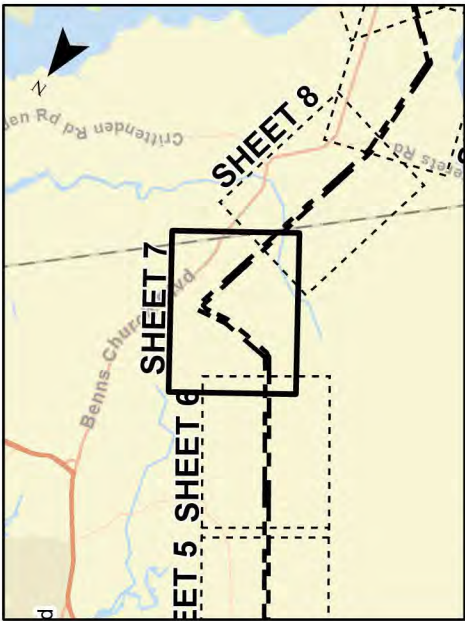
Septa - Yadkin 500 kV Line #579 Rebuild and  
Suffolk - Thrasher 230 kV Line #2110 Partial Rebuild

City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

Client:	
Dominion Energy Virginia	
C2 Env Project:	Prepared By:
0265	KAS
Date:	
5/6/2025	

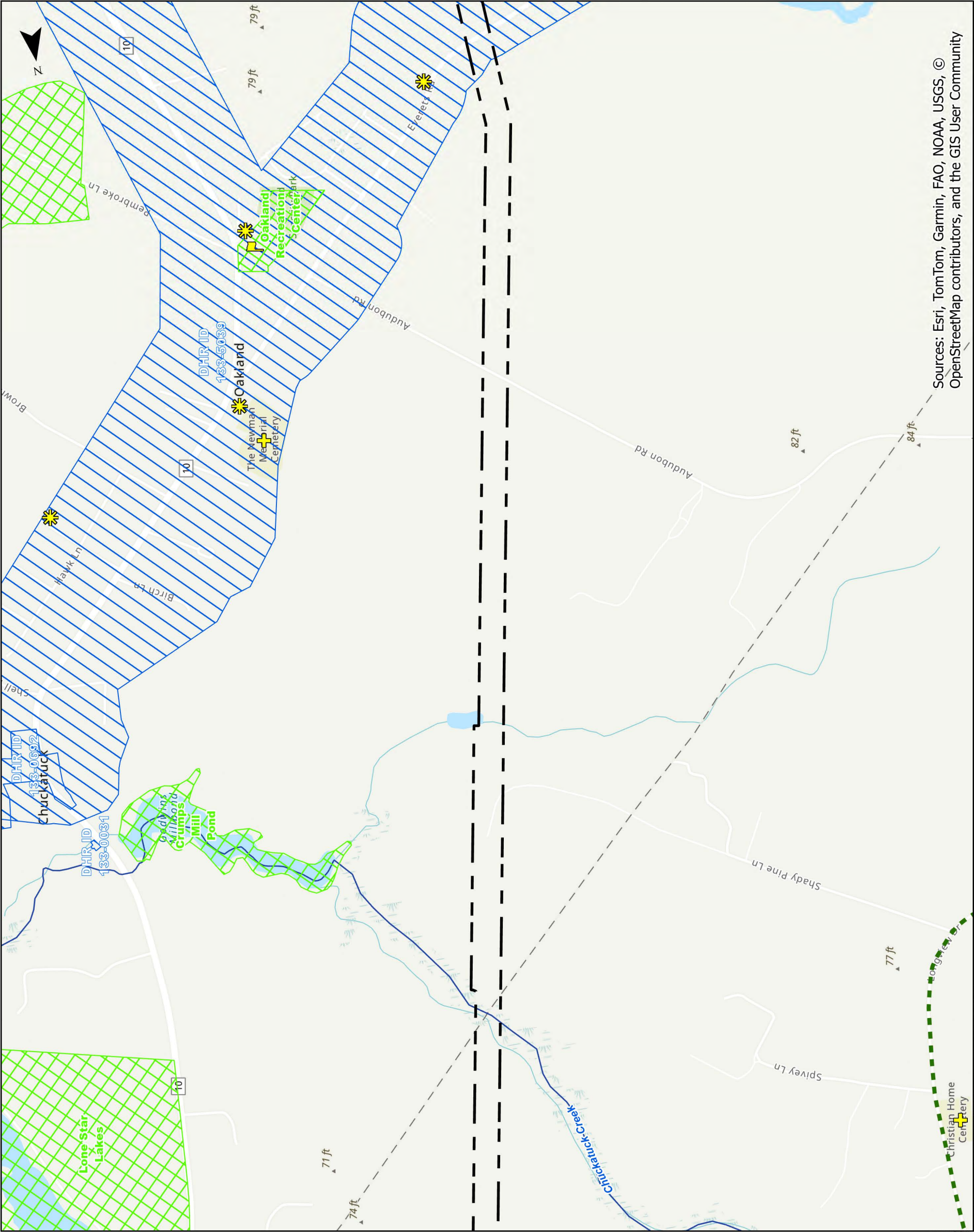


- Existing Right-of-Way
- Existing Substation/Switching Station
- Dominion Station Parcel
- Local Park
- Isle of Wight PACE Easement
- National Wildlife Refuge
- Virginia Department of Forestry Easement
- Chesapeake Wetland Mitigation Bank Easement
- Listed, Eligible or Potentially Eligible VCRIS
- Architecture Resource
- School
- Cemetery
- Place of Worship
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- Railroad
- USGS National Hydrography Stream Centerline



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, ©  
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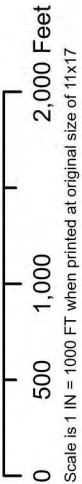


ATTACHMENT II.A.2  
ENVIRONMENTAL CONSTRAINTS MAP

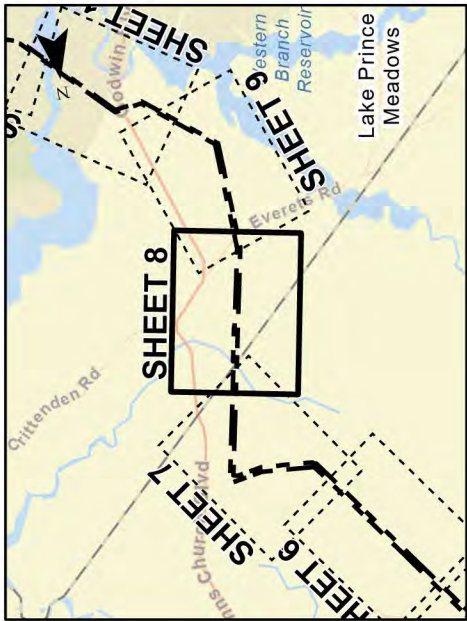
Septa - Yadkin 500 kV Line #579 Rebuild and  
Suffolk - Thrasher 230 kV Line #2110 Partial Rebuild

City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

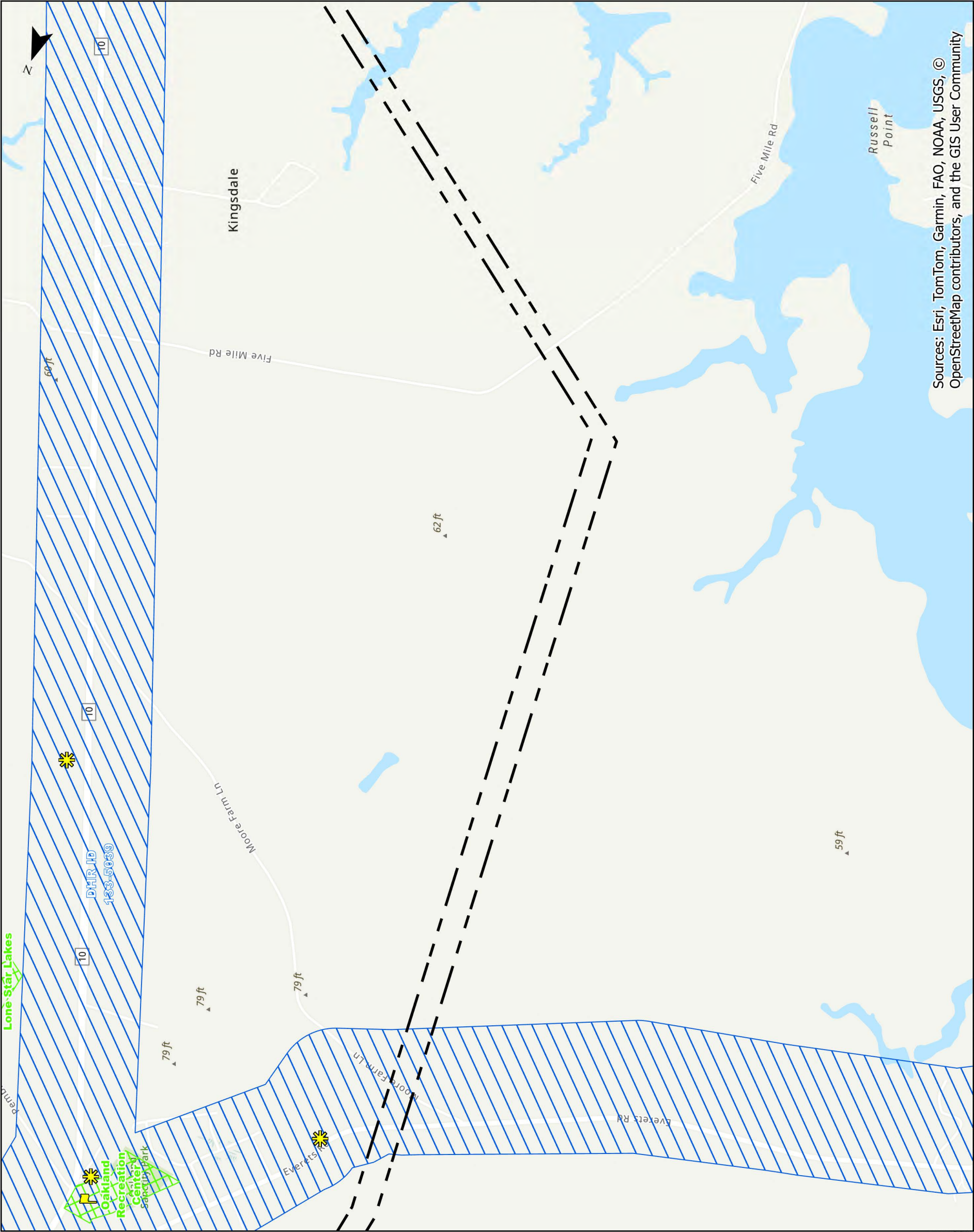
Client:	Dominion Energy Virginia
C2 Env Project:	0265
Prepared By:	KAS
Date:	5/6/2025



- Existing Right-of-Way
- Existing Substation/Switching Station
- Dominion Station Parcel
- Local Park
- Isle of Wight PACE Easement
- National Wildlife Refuge
- Virginia Department of Forestry Easement
- Chesapeake Wetland Mitigation Bank Easement
- Listed, Eligible or Potentially Eligible VCRIS
- Architecture Resource
- School
- Cemetery
- Place of Worship
- Recreational Facility
- Captain John Smith Chesapeake National Historic Trail
- East Coast Greenway
- Railroad
- USGS National Hydrography Stream Centerline







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

## ATTACHMENT II.A.2 ENVIRONMENTAL CONSTRAINTS MAP

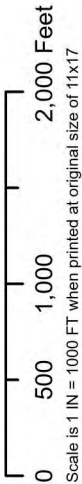
Septa - Yadkin 500 kV Line #579 Rebuild and  
Suffolk - Thrasher 230 kV Line #2110 Partial Rebuild

City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

Client:

Dominion Energy Virginia

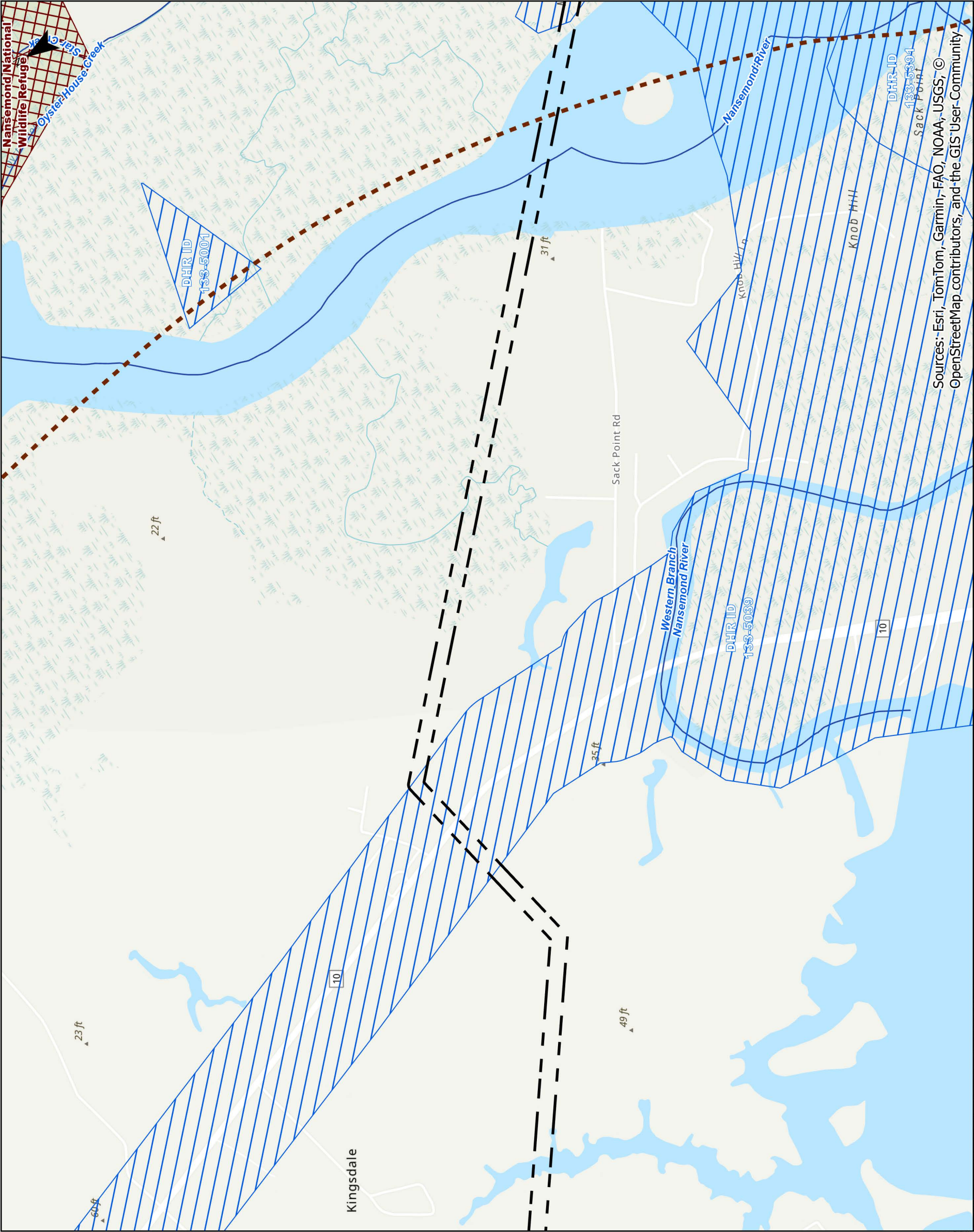
C2 Env Project: 0265  
Prepared By: KAS  
Date: 5/6/2025



- Existing Right-of-Way
- Existing Substation/Switching Station
- Dominion Station Parcel
- Local Park
- Isle of Wight PACE Easement
- National Wildlife Refuge
- Virginia Department of Forestry Easement
- Chesapeake Wetland Mitigation Bank Easement
- Listed, Eligible or Potentially Eligible VCRIS
- Architecture Resource
- Cemetery
- Place of Worship
- Recreational Facility
- Captain John Smith Chesapeake National Historic Trail
- East Coast Greenway
- Railroad
- USGS National Hydrography Stream Centerline







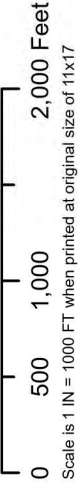
ATTACHMENT II.A.2  
ENVIRONMENTAL CONSTRAINTS MAP

Septa - Yadkin 500 kV Line #579 Rebuild and  
Suffolk - Thrasher 230 kV Line #2110 Partial Rebuild

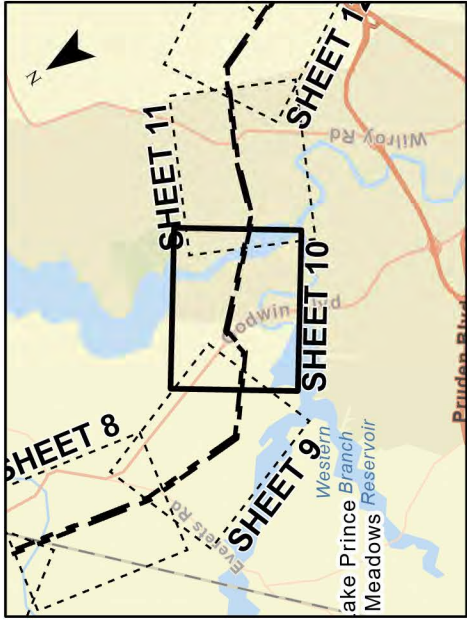
City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

Client:  
Dominion Energy Virginia

C2 Env Project: 0265  
Prepared By: KAS  
Date: 5/6/2025

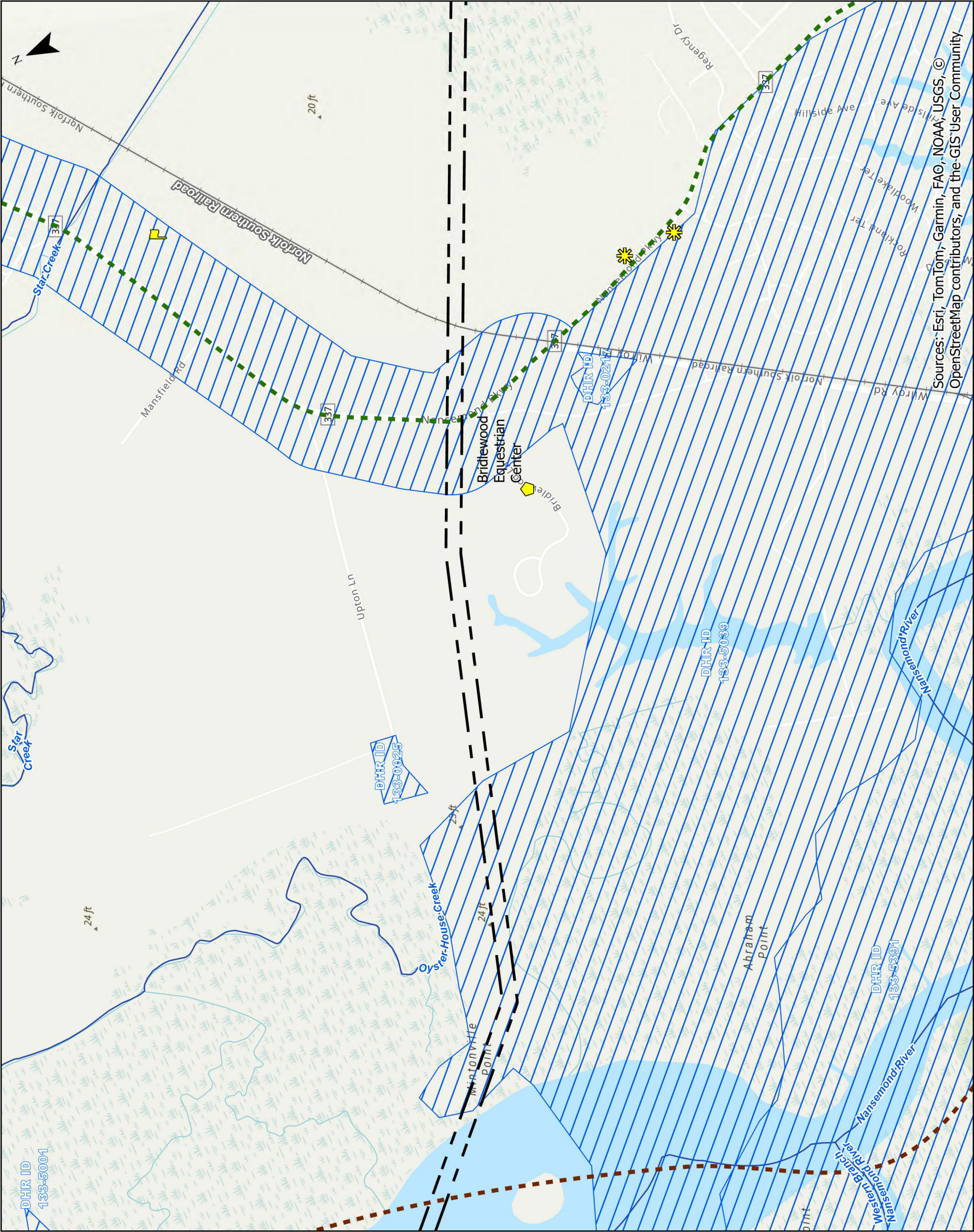


- Existing Right-of-Way
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- Chesapeake Wetland Mitigation Bank Easement
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Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, ©  
OpenStreetMap contributors, and the GIS User Community



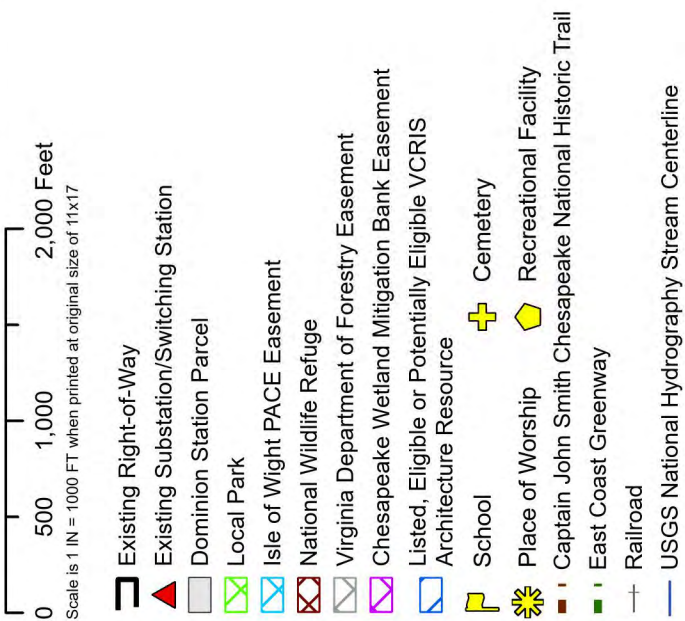


ATTACHMENT II.A.2  
**ENVIRONMENTAL CONSTRAINTS MAP**  
Septa - Yadkin 500 kV Line #579 Rebuild and  
Suffolk - Thrasher 230 kV Line #2110 Partial Rebuild

City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

Client:  
Dominion Energy Virginia

C2 Env Project: 0265      Prepared By: KAS      Date: 5/6/2025

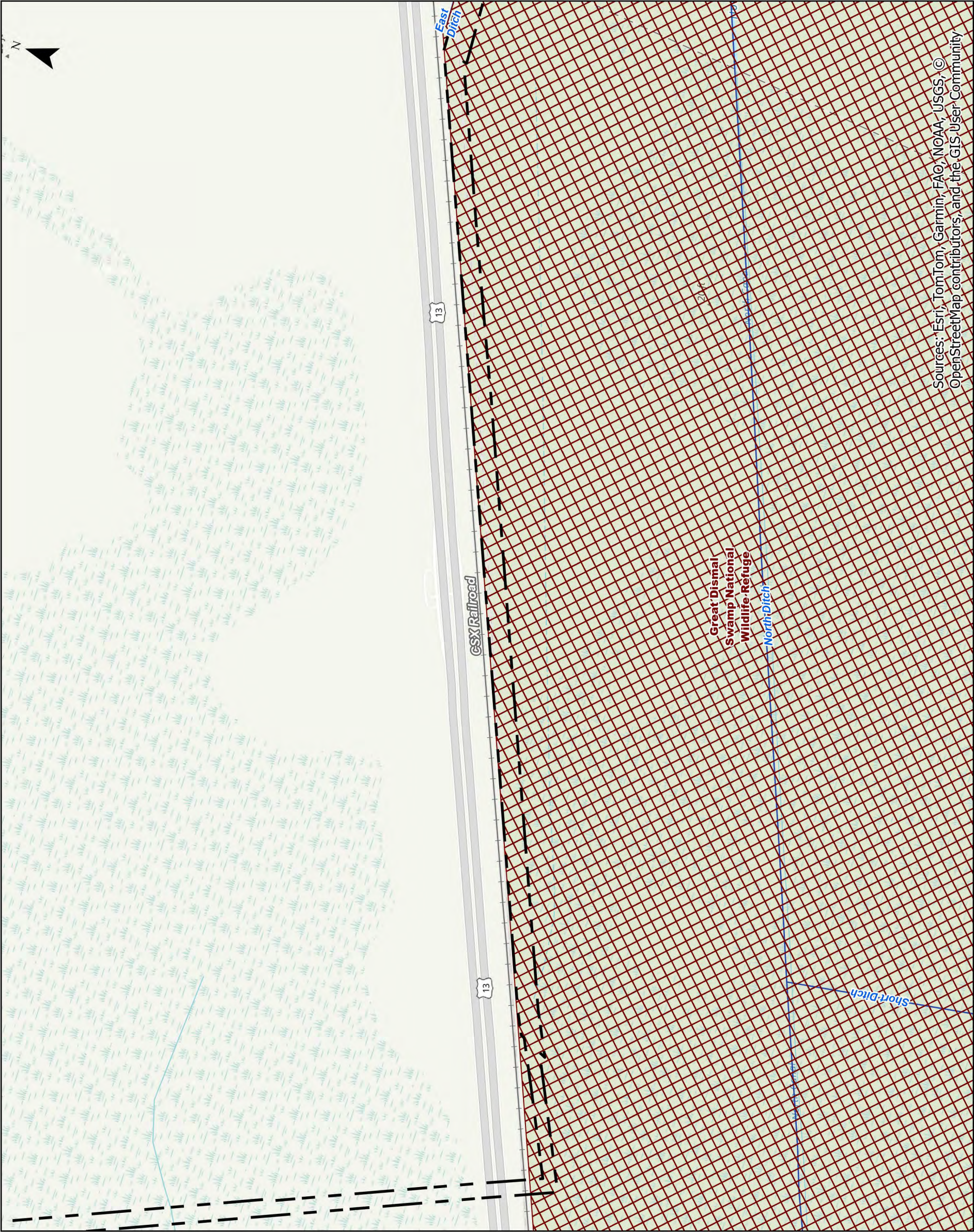


Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, ©  
OpenStreetMap contributors, and the GIS User Community









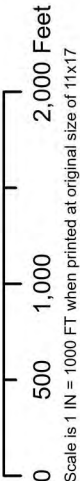
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, ©  
OpenStreetMap contributors, and the GIS User Community

ATTACHMENT II.A.2  
ENVIRONMENTAL CONSTRAINTS MAP

Septa - Yadkin 500 kV Line #579 Rebuild and  
Suffolk - Thrasher 230 kV Line #2110 Partial Rebuild

City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

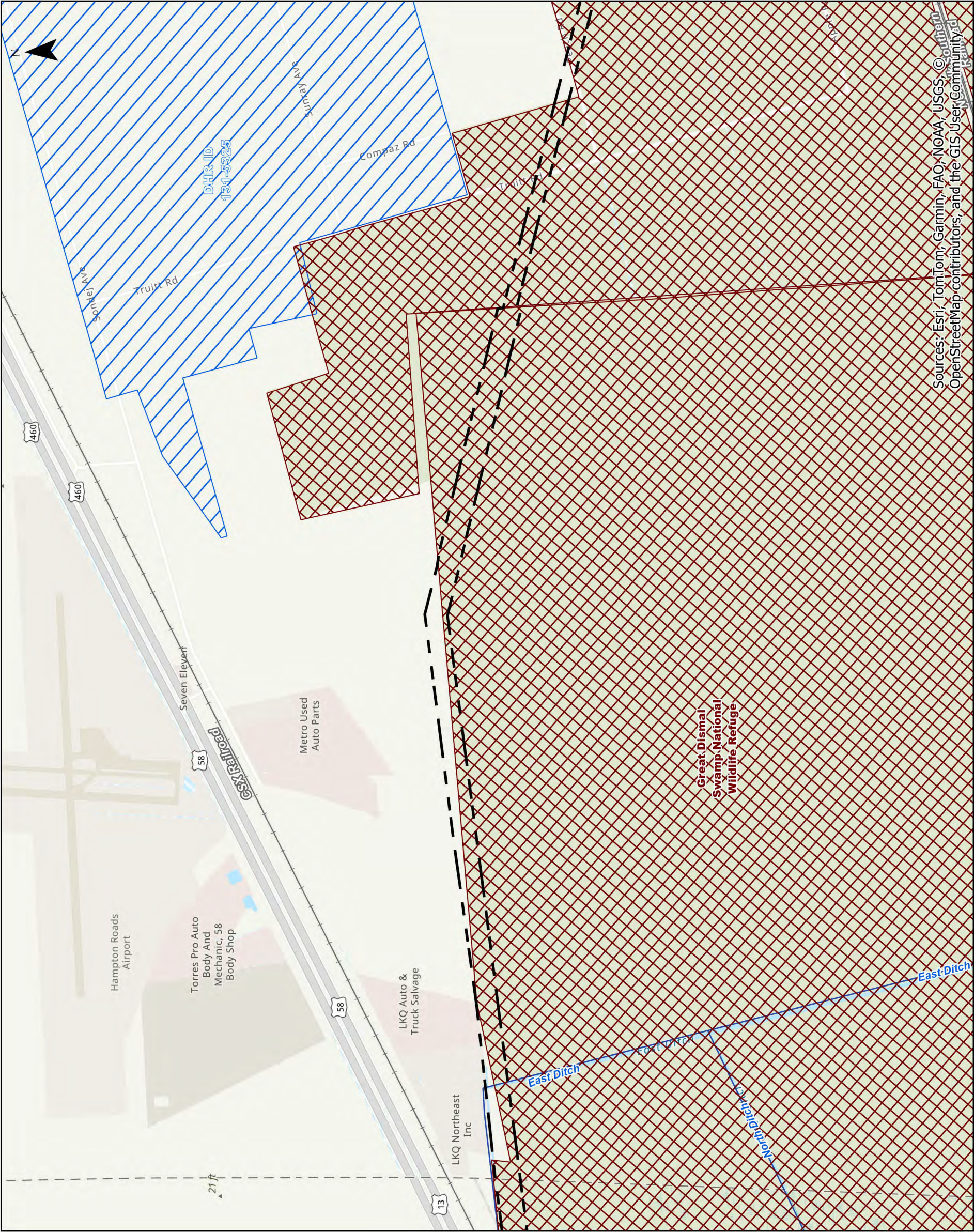
Client:		Dominion Energy Virginia	
C2 Env Project:		Prepared By:	
0265		KAS	
		Date:	
		5/6/2025	



- Existing Right-of-Way
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- East Coast Greenway
- Railroad
- USGS National Hydrography Stream Centerline







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

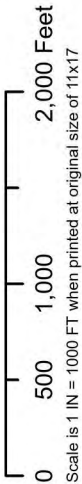
ATTACHMENT II.A.2  
ENVIRONMENTAL CONSTRAINTS MAP

Septa - Yadkin 500 kV Line #579 Rebuild and  
Suffolk - Thrasher 230 kV Line #2110 Partial Rebuild

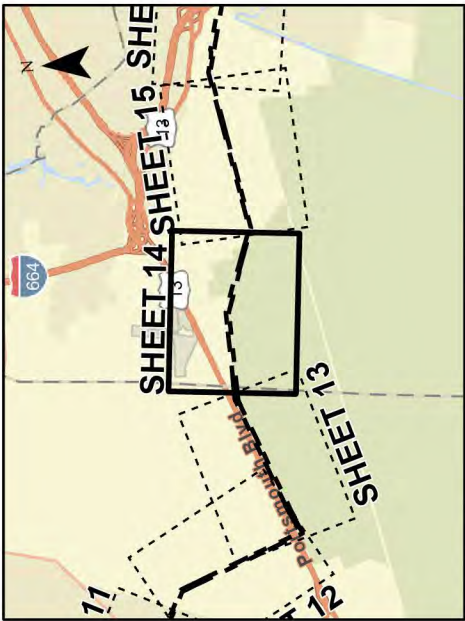
City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

Client:  
Dominion Energy Virginia

C2 Env Project: 0265  
Prepared By: KAS  
Date: 5/6/2025



- Existing Right-of-Way
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- East Coast Greenway
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- USGS National Hydrography Stream Centerline





**ATTACHMENT II.A.2  
ENVIRONMENTAL CONSTRAINTS MAP**

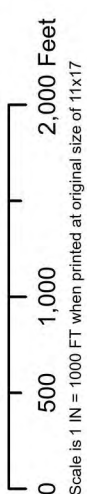
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Suffolk - Thrasher 230 kV Line #2110 Partial Rebuild

















City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

Client:

Dominion Energy Virginia

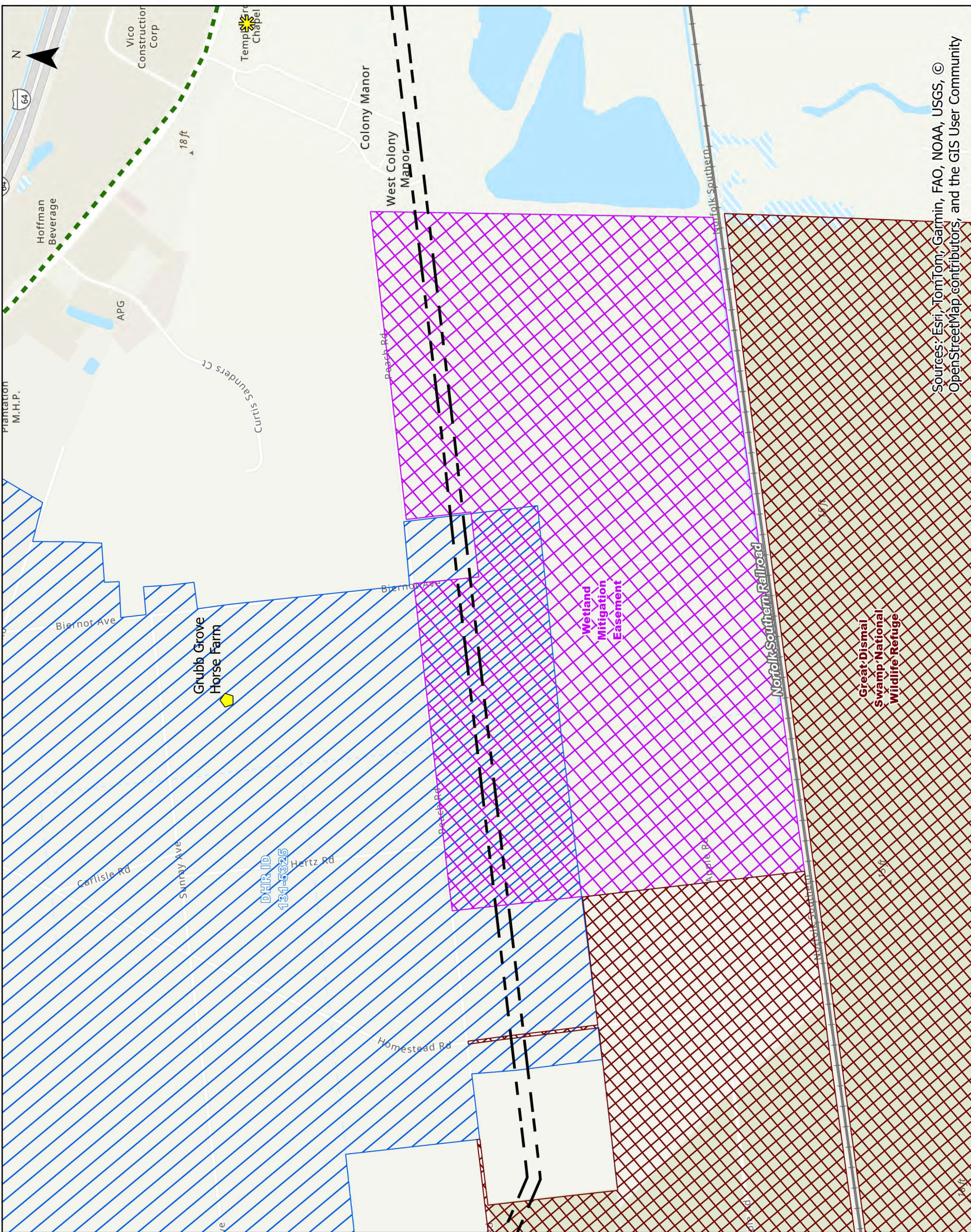
C2 Env Project:	Prepared By:	Date:
0265	KAS	5/6/2025



-  Existing Right-of-Way  
 Existing Substation/Switching Station  
 Dominion Station Parcel  
 Local Park  
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 National Wildlife Refuge  
 Virginia Department of Forestry Easement  
 Chesapeake Wetland Mitigation Bank Easement  
 Listed, Eligible or Potentially Eligible VCRIS Architecture Resource  
 School  
 Cemetery  
 Place of Worship  
 Captain John Smith Chesapeake National Historic Trail  
 East Coast Greenway  
 Railroad  
 USGS National Hydrography Stream Centerline



SHEET 15 OF 16



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





## **II. DESCRIPTION OF THE PROPOSED PROJECT**

### **A. Right-of-way (“ROW”)**

- 3. Provide a separate color map of a suitable scale showing all the Applicant’s transmission line ROWs, either existing or proposed, in the vicinity of the proposed project.**

Response: See Attachment I.G.1.



## **II. DESCRIPTION OF THE PROPOSED PROJECT**

### **A. Right-of-way (“ROW”)**

- 4. To the extent the proposed route is not entirely within existing ROW, explain why existing ROW cannot adequately service the needs of the Applicant.**

Response: Not applicable.

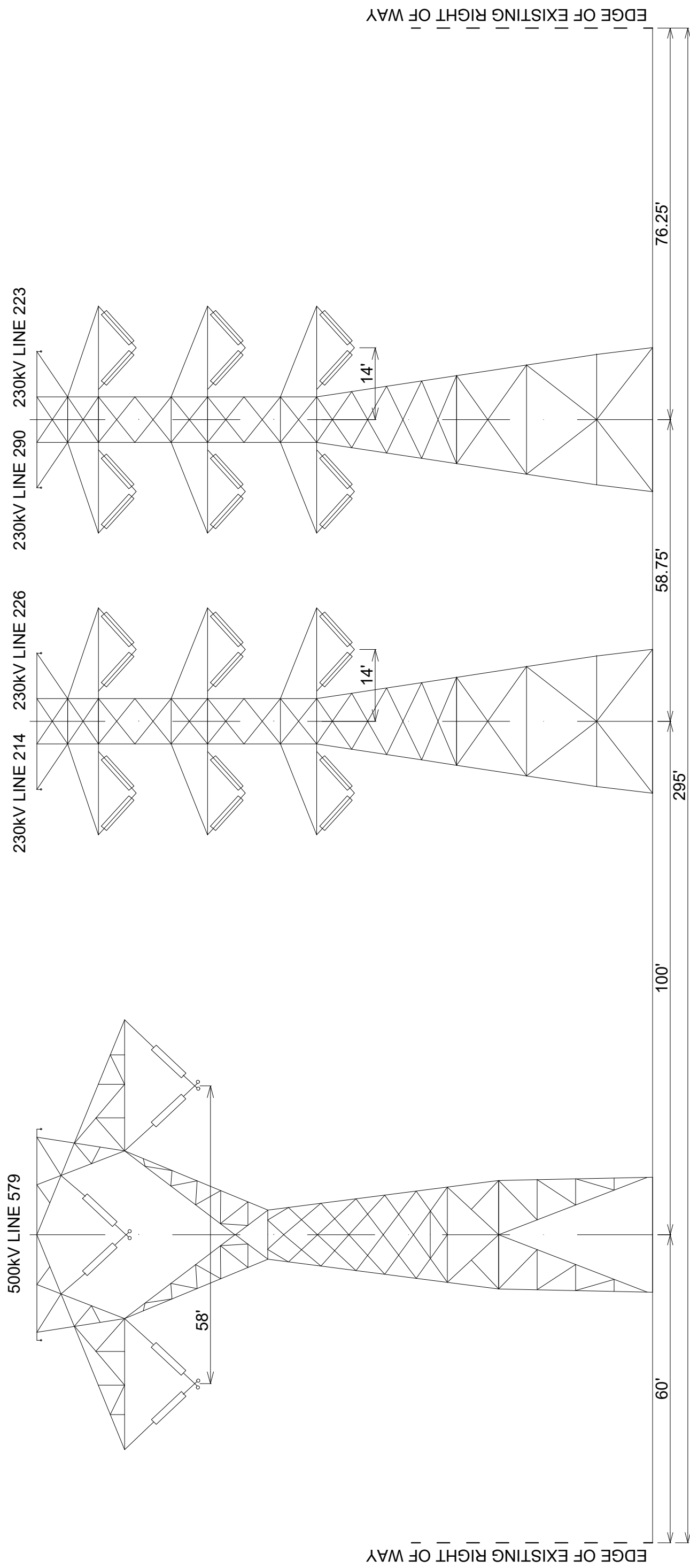
## **II. DESCRIPTION OF THE PROPOSED PROJECT**

### **A. Right-of-way (“ROW”)**

- 5. Provide drawings of the ROW cross section showing typical transmission line structure placements referenced to the edge of the ROW. These drawings should include:**
  - a. ROW width for each cross section drawing;**
  - b. Lateral distance between the conductors and edge of ROW;**
  - c. Existing utility facilities on the ROW; and**
  - d. For lines being rebuilt in existing ROW, provide all of the above (i) as it currently exists, and (ii) as it will exist at the conclusion of the proposed project.**

Response: See Attachment II.A.5.a.i-j.i (existing) and II.A.5.a.ii-j.ii (proposed).

For additional information on the structures, see Section II.B.3.



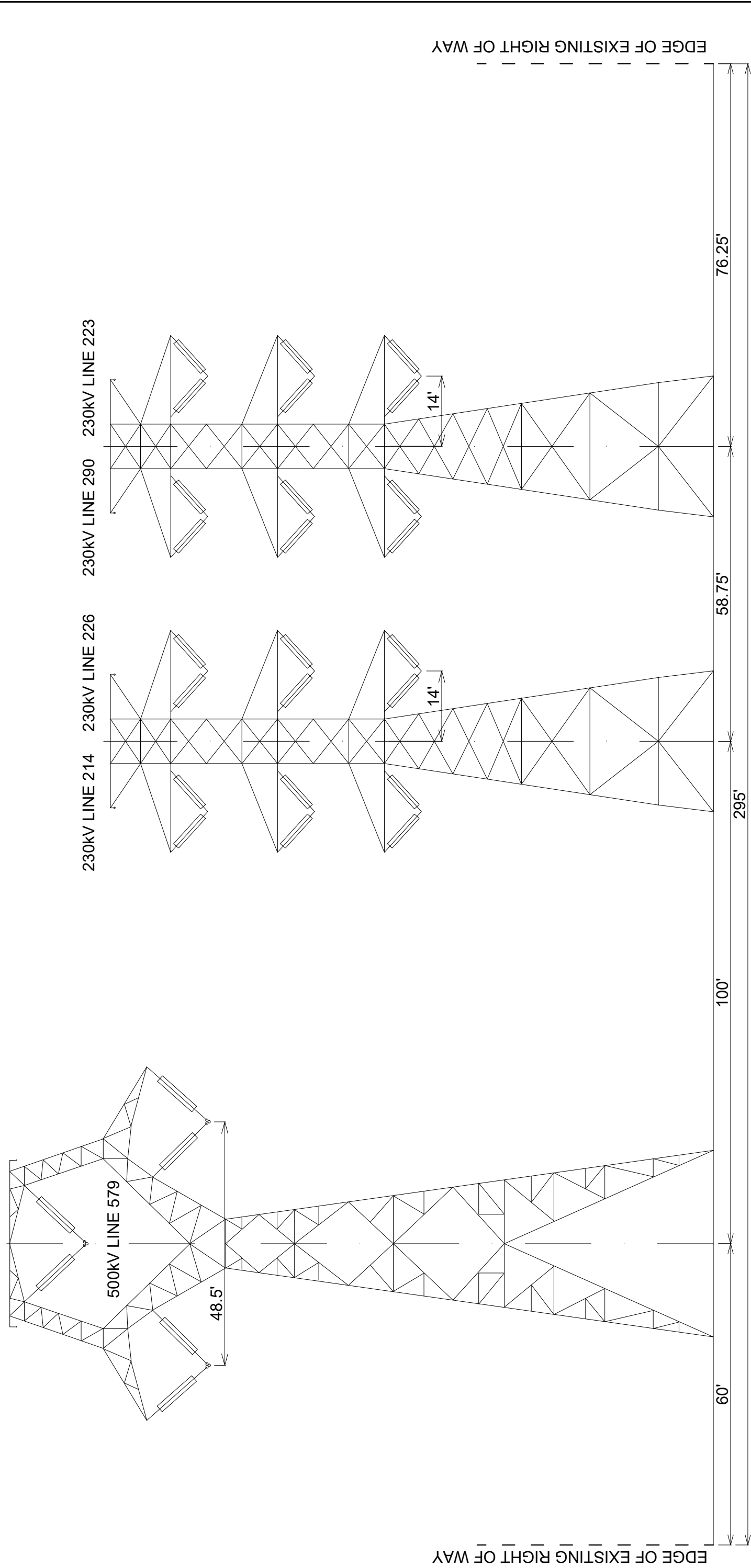
## TYPICAL EXISTING RIGHT OF WAY LOOKING TOWARDS YADKIN SUBSTATION




Dominion Energy  
5000 Dominion Blvd  
Glen Allen, VA 23060

		ORIGINAL	REVISION	DRAWING NO.
DRAWN	GKF			ATTACHMENT II.A.5.a.i
CHECKED	RAJ			
APPROVED	RAJ			
DATE	4/14/25			

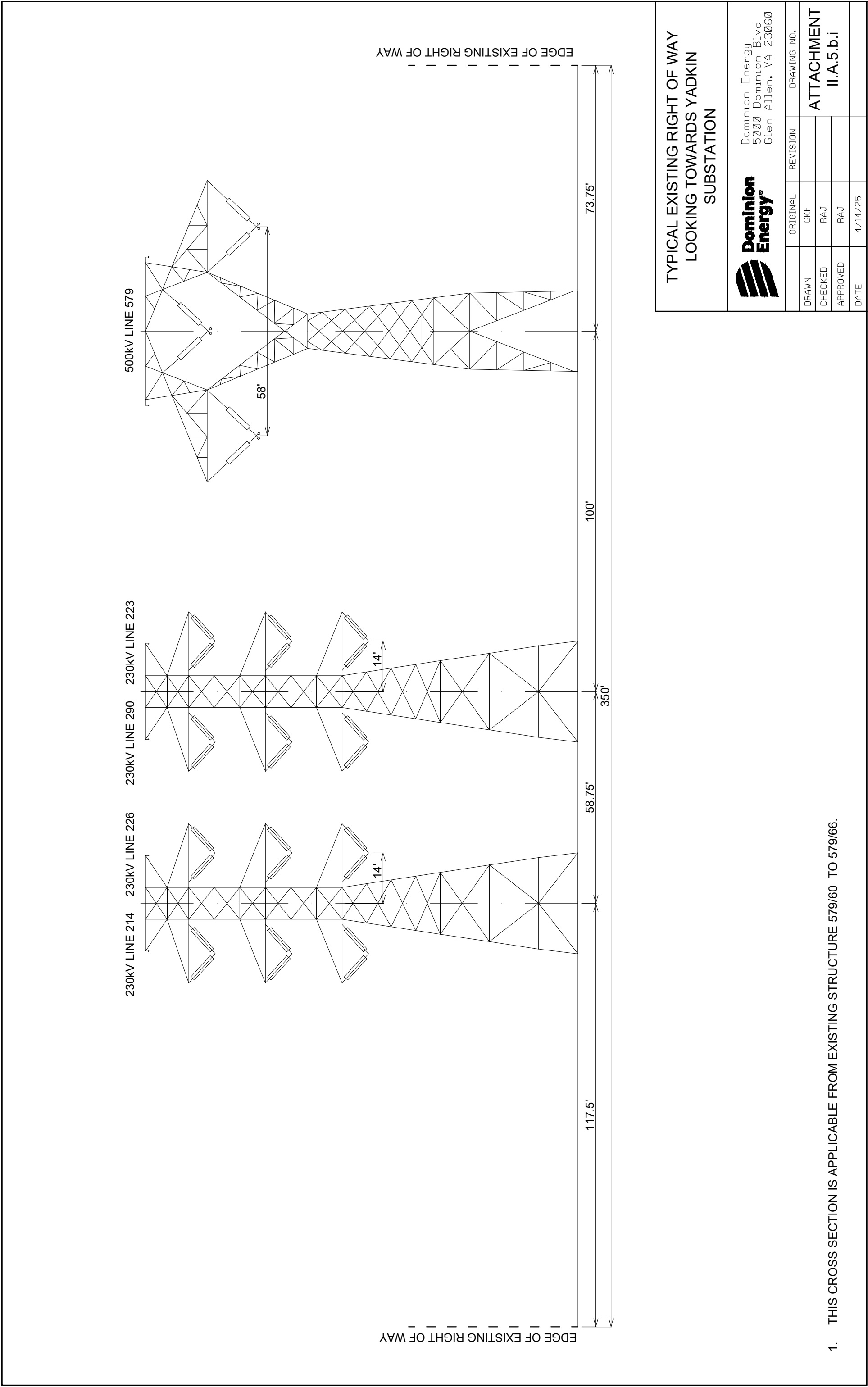
1. THIS CROSS SECTION IS APPLICABLE FROM EXISTING STRUCTURE 579/1 TO 579/60.




TYPICAL PROPOSED RIGHT OF WAY LOOKING TOWARDS YADKIN SUBSTATION			
		Dominion Energy 5000 Dominion Blvd Glen Allen, VA 23060	
ORIGINAL	REVISION	DRAWING NO.	
DRAWN	GKF	ATTACHMENT II.A.5.a.ii	
CHECKED	RAJ		
APPROVED	RAJ		
DATE	4/14/25		

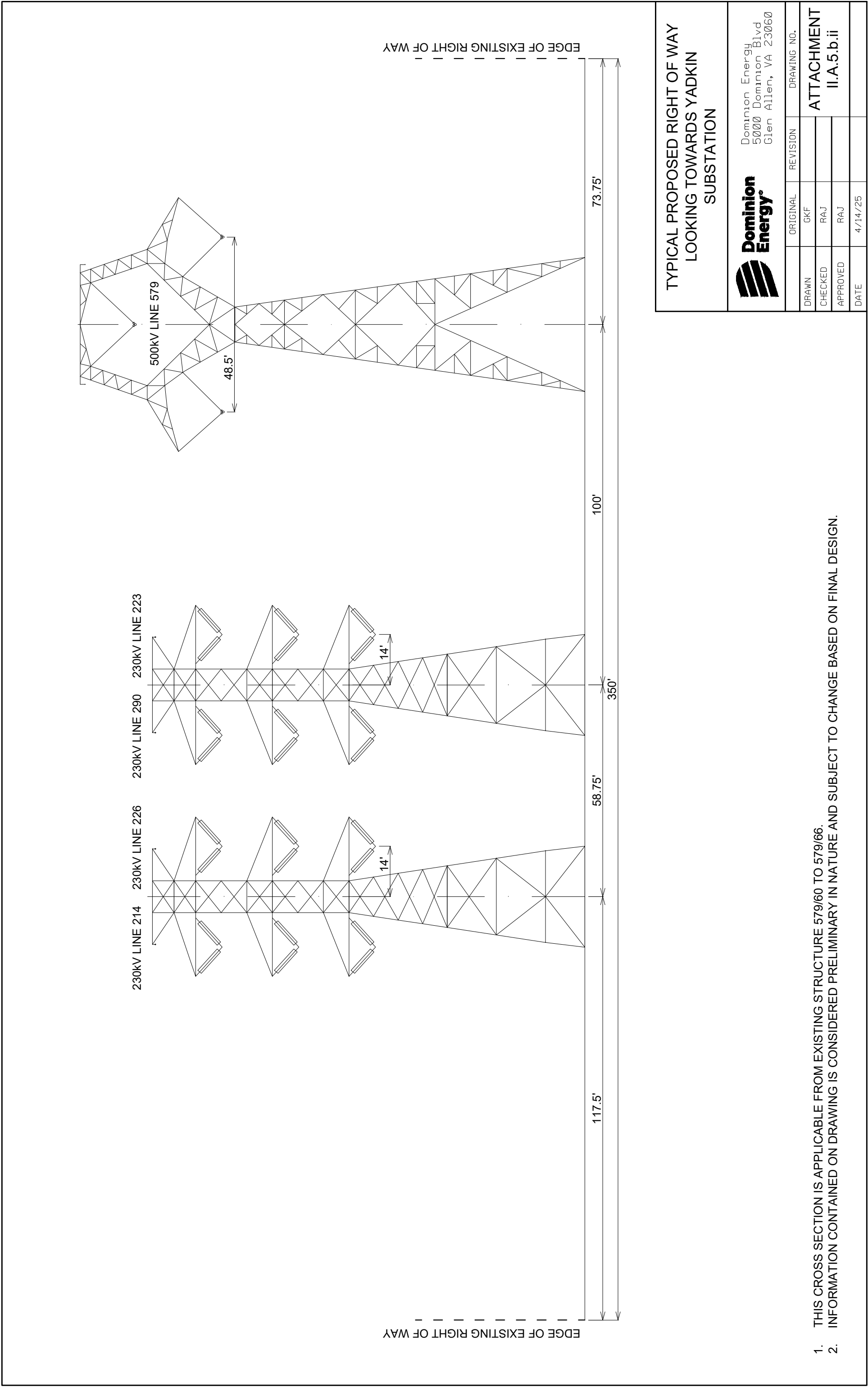
1. THIS CROSS SECTION IS APPLICABLE FROM EXISTING STRUCTURE 579/1 TO 579/60.
2. INFORMATION CONTAINED ON DRAWING IS CONSIDERED PRELIMINARY IN NATURE AND SUBJECT TO CHANGE BASED ON FINAL DESIGN.






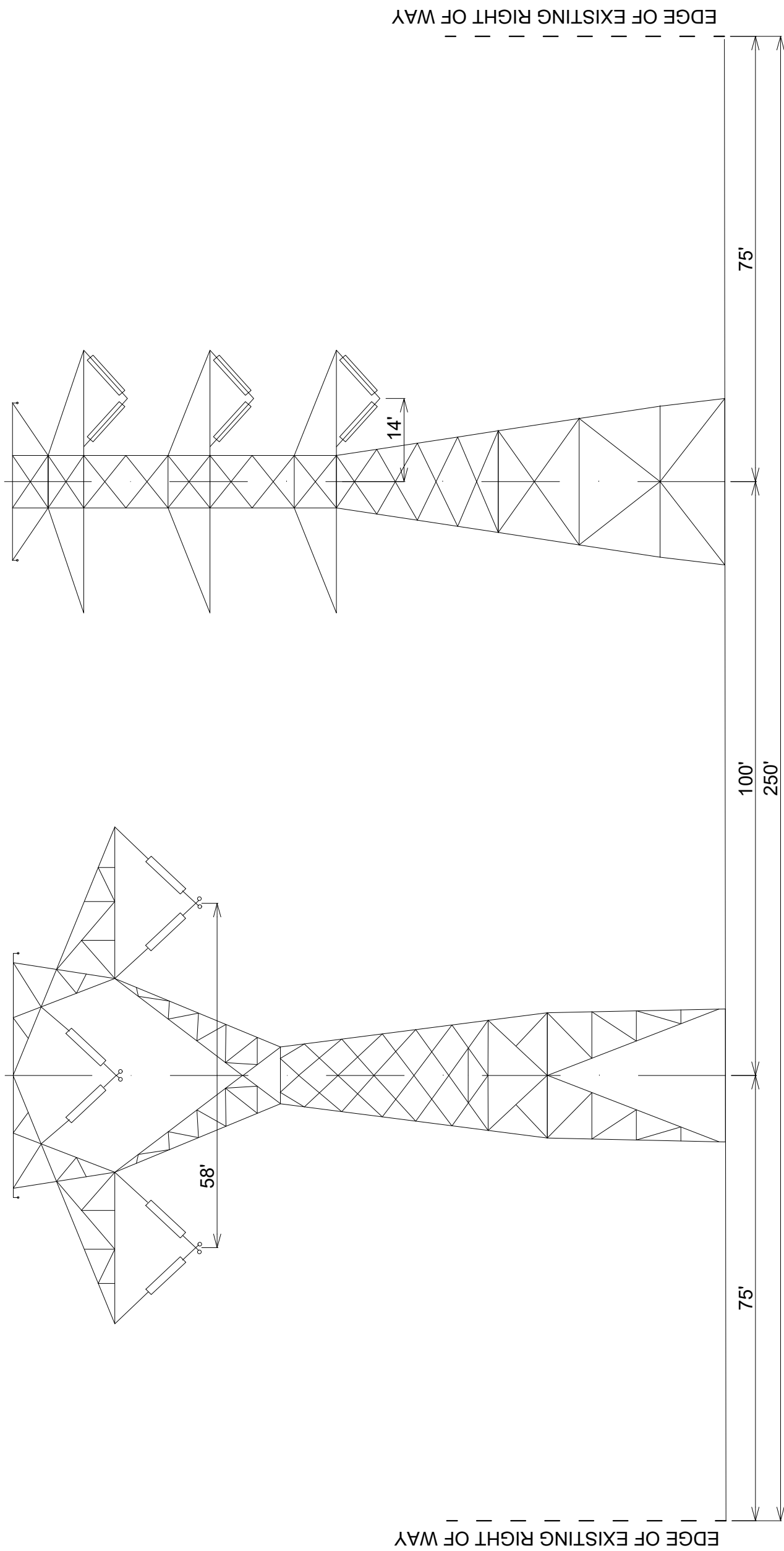
TYPICAL EXISTING RIGHT OF WAY LOOKING TOWARDS YADKIN SUBSTATION			
		Dominion Energy 5000 Dominion Blvd Glen Allen, VA 23060	
ORIGINAL	REVISION	DRAWING NO.	
DRAWN	GKF	ATTACHMENT	
CHECKED	RAJ	II.A.5.b.i	
APPROVED	RAJ		
DATE	4/14/25		

1. THIS CROSS SECTION IS APPLICABLE FROM EXISTING STRUCTURE 579/60 TO 579/66.



TYPICAL PROPOSED RIGHT OF WAY LOOKING TOWARDS YADKIN SUBSTATION			
		Dominion Energy 5000 Dominion Blvd Glen Allen, VA 23060	
	ORIGINAL	REVISION	DRAWING NO.
DRAWN	GKF		ATTACHMENT II.A.5.b.ii
CHECKED	RAJ		
APPROVED	RAJ		
DATE	4/14/25		

1. THIS CROSS SECTION IS APPLICABLE FROM EXISTING STRUCTURE 579/60 TO 579/66.
2. INFORMATION CONTAINED ON DRAWING IS CONSIDERED PRELIMINARY IN NATURE AND SUBJECT TO CHANGE BASED ON FINAL DESIGN.



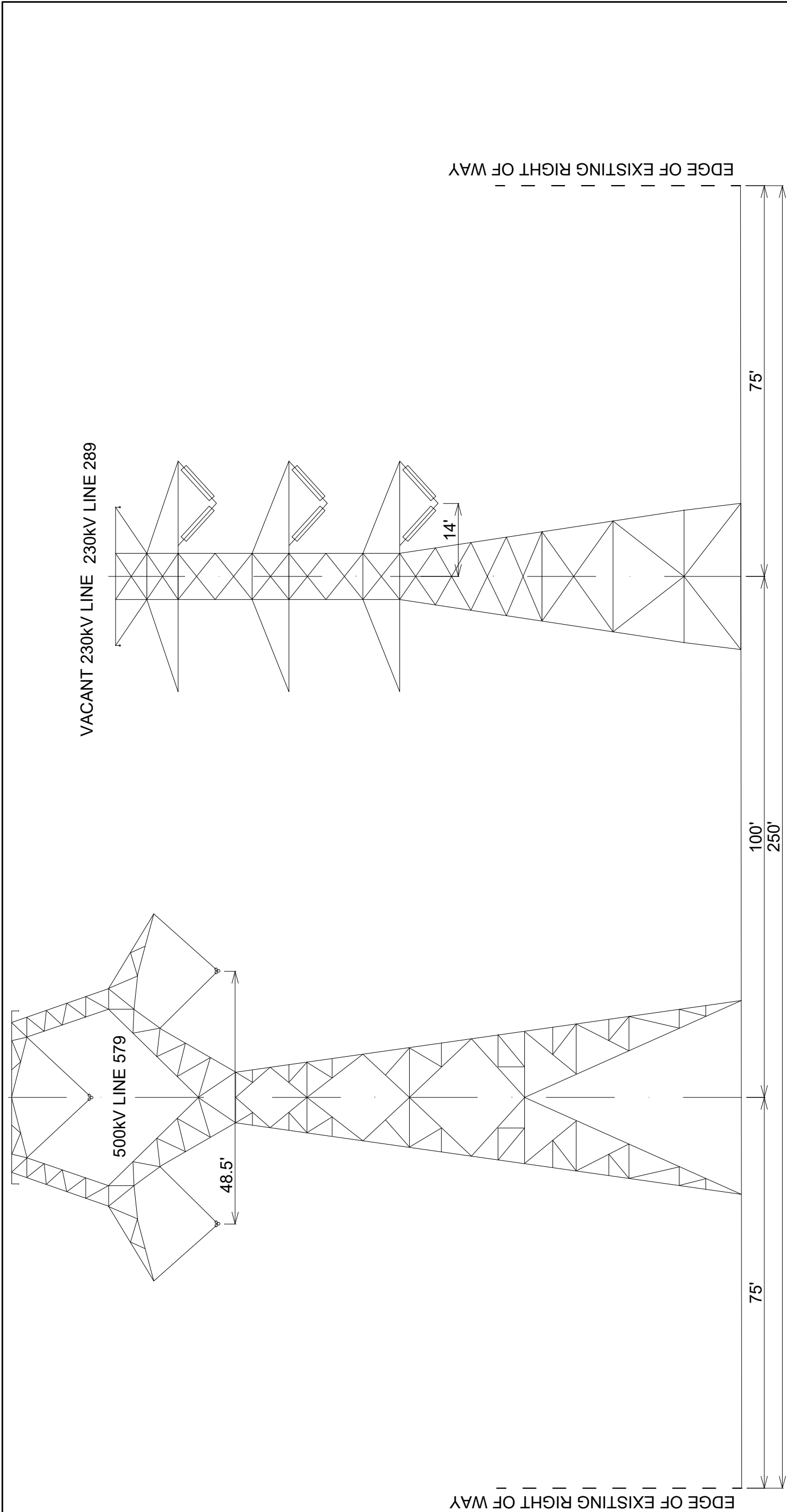
TYPICAL EXISTING RIGHT OF WAY  
LOOKING TOWARDS YADKIN  
SUBSTATION




Dominion Energy  
5000 Dominion Blvd  
Glen Allen, VA 23060

	ORIGINAL	REVISION	DRAWING NO.
DRAWN	GKF		<b>ATTACHMENT II.A.5.c.i</b>
CHECKED	RAJ		
APPROVED	RAJ		
DATE	4/7/25		

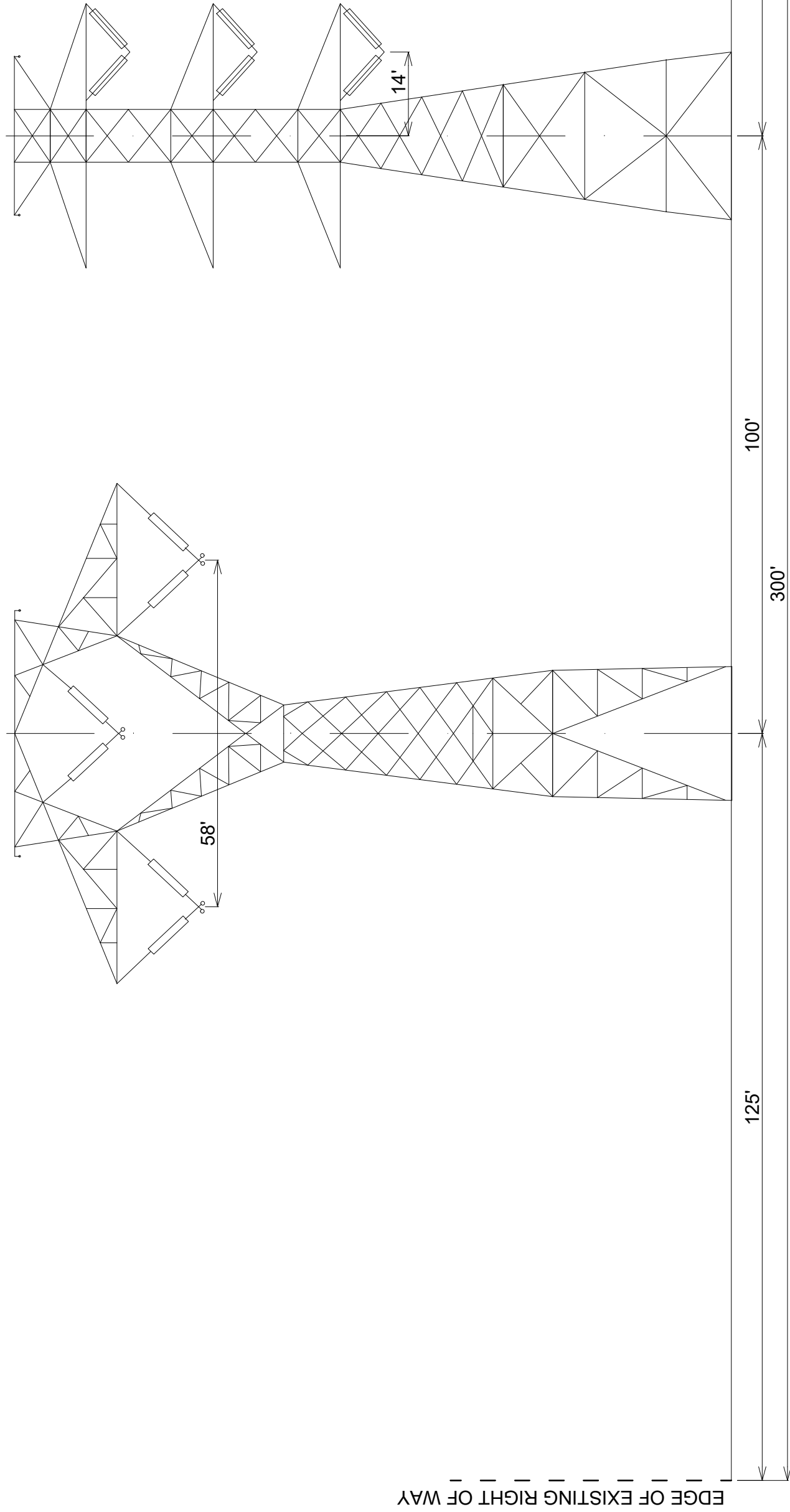
1. THIS CROSS SECTION IS APPLICABLE FROM EXISTING STRUCTURE 579/66 TO 579/76 AND FROM 579/79 TO 579/94.




TYPICAL PROPOSED RIGHT OF WAY LOOKING TOWARDS YADKIN SUBSTATION			
		Dominion Energy 5000 Dominion Blvd Glen Allen, VA 23060	
ORIGINAL	REVISION	DRAWING NO.	
DRAWN	GKF	ATTACHMENT II.A.5.c.ii	
CHECKED	RAJ		
APPROVED	RAJ		
DATE	4/14/25		

1. THIS CROSS SECTION IS APPLICABLE FROM EXISTING STRUCTURE 579/66 TO 579/76 AND FROM 579/79 TO 579/94.
2. INFORMATION CONTAINED ON DRAWING IS CONSIDERED PRELIMINARY IN NATURE AND SUBJECT TO CHANGE BASED ON FINAL DESIGN.

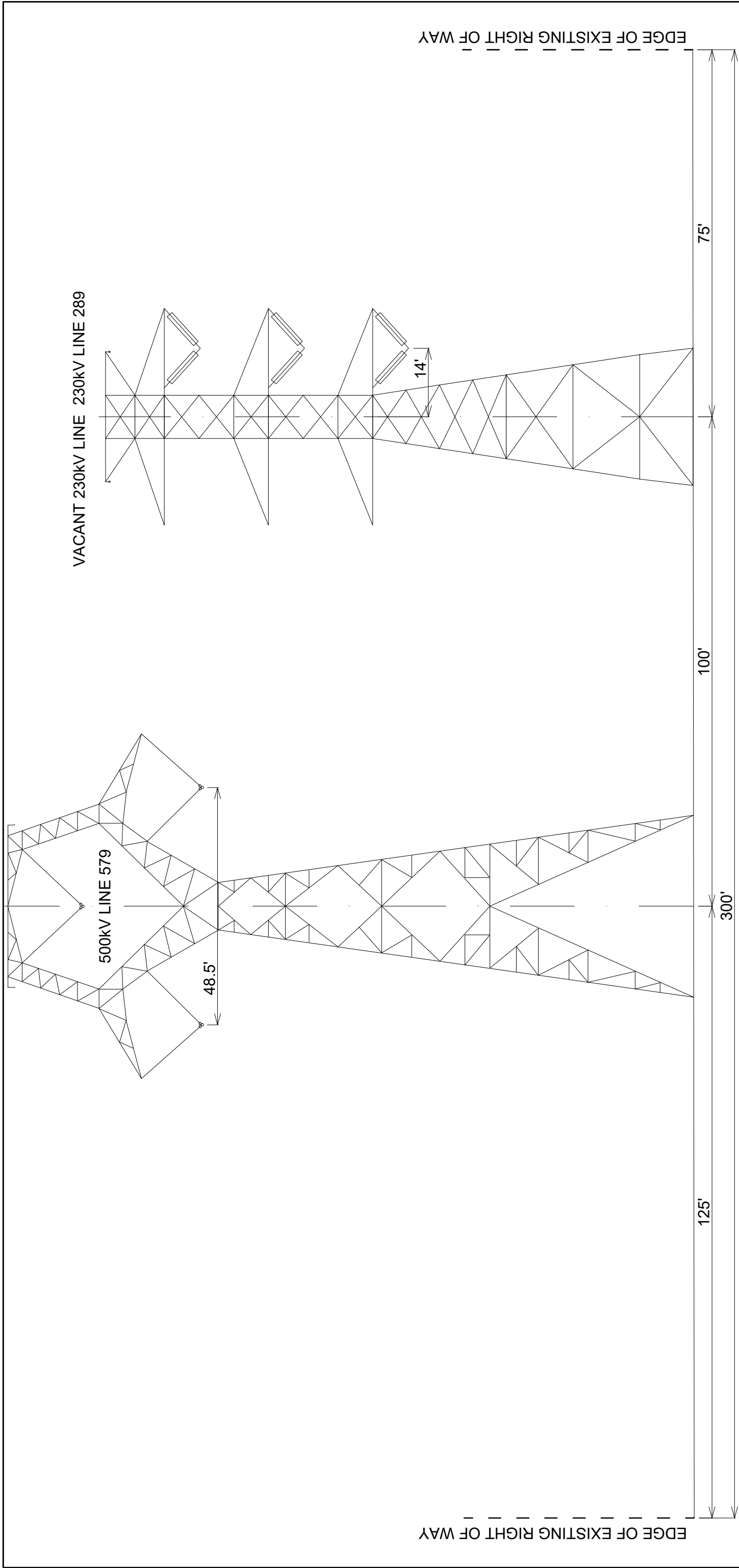





## TYPICAL EXISTING RIGHT OF WAY LOOKING TOWARDS YADKIN SUBSTATION

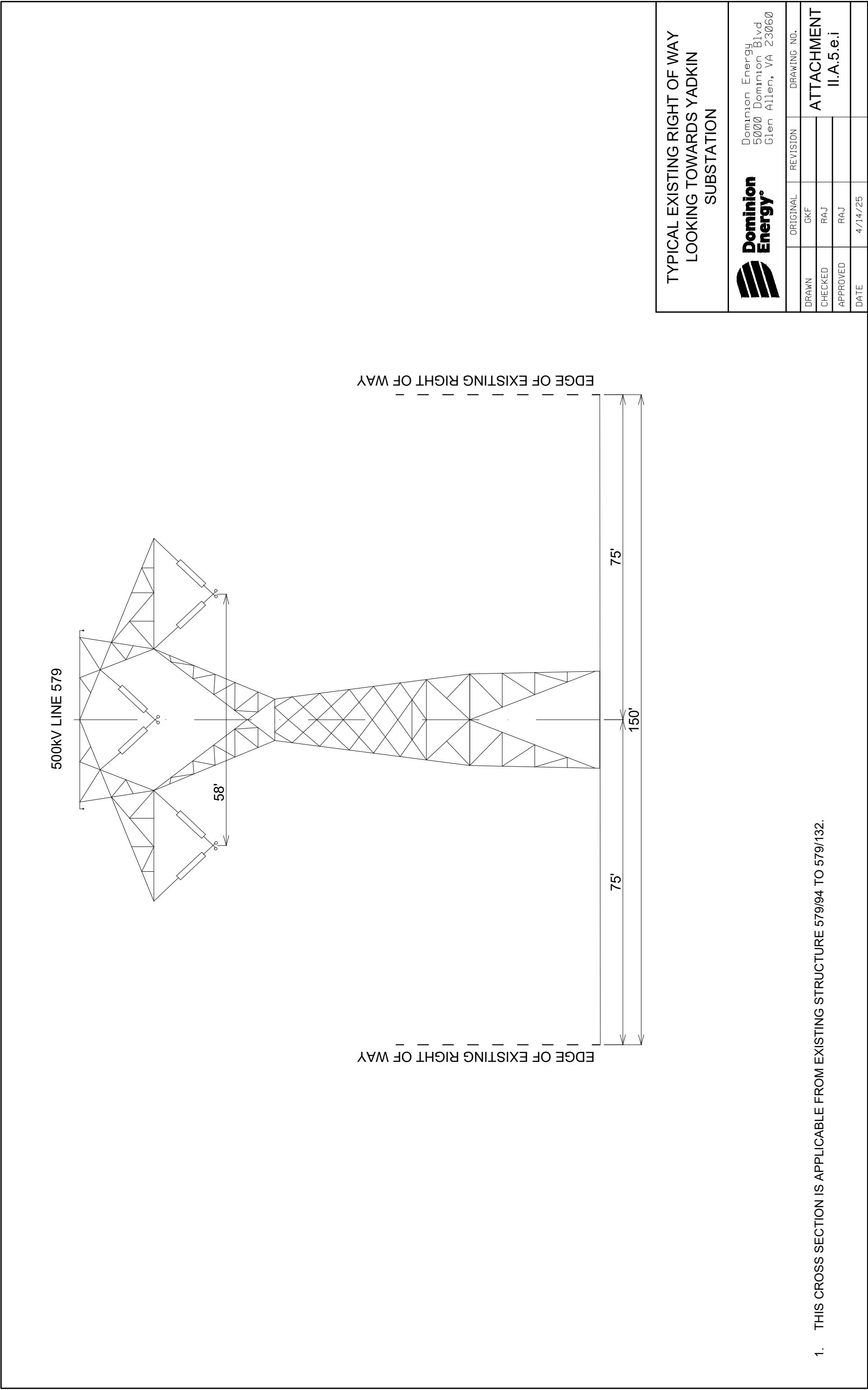
 <b>Dominion Energy®</b>	Dominion Energy 5000 Dominion Blvd Glen Allen, VA 23060			
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	CHECKED	RAJ		
APPROVED	RAJ			
DATE	4/14/25			

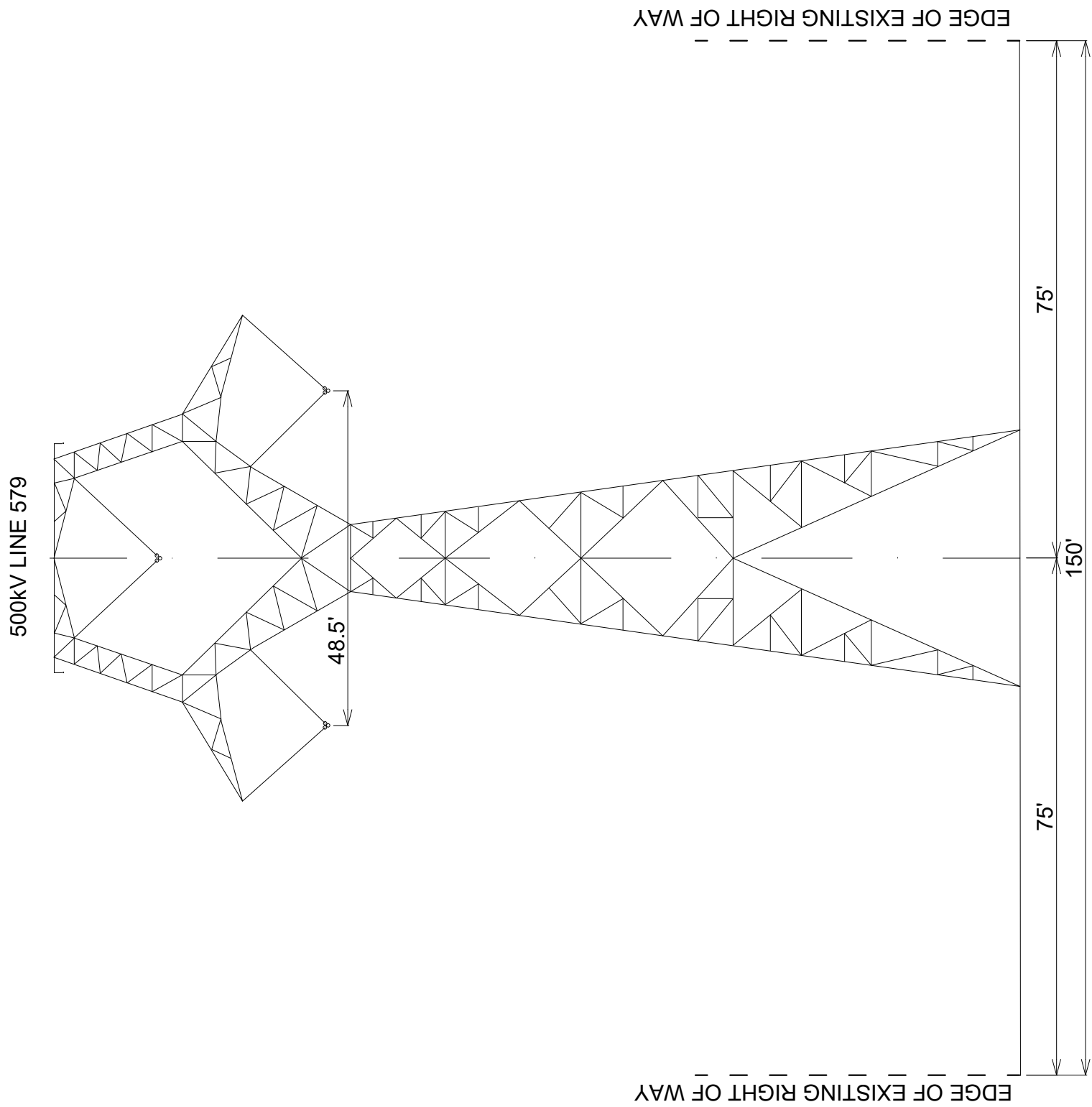
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TYPICAL PROPOSED RIGHT OF WAY LOOKING TOWARDS YADKIN SUBSTATION			
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	ORIGINAL	REVISION	DRAWING NO.
DRAWN	GKF		ATTACHMENT II.A.5.d.ii
CHECKED	RAJ		
APPROVED	RAJ		
DATE	4/14/25		

1. THIS CROSS SECTION IS APPLICABLE FROM EXISTING STRUCTURE 579/76 TO 579/79.
2. INFORMATION CONTAINED ON DRAWING IS CONSIDERED PRELIMINARY IN NATURE AND SUBJECT TO CHANGE BASED ON FINAL DESIGN.





1. THIS CROSS SECTION IS APPLICABLE FROM EXISTING STRUCTURE 579/94 TO 579/132.
2. INFORMATION CONTAINED ON DRAWING IS CONSIDERED PRELIMINARY IN NATURE AND SUBJECT TO CHANGE BASED ON FINAL DESIGN.

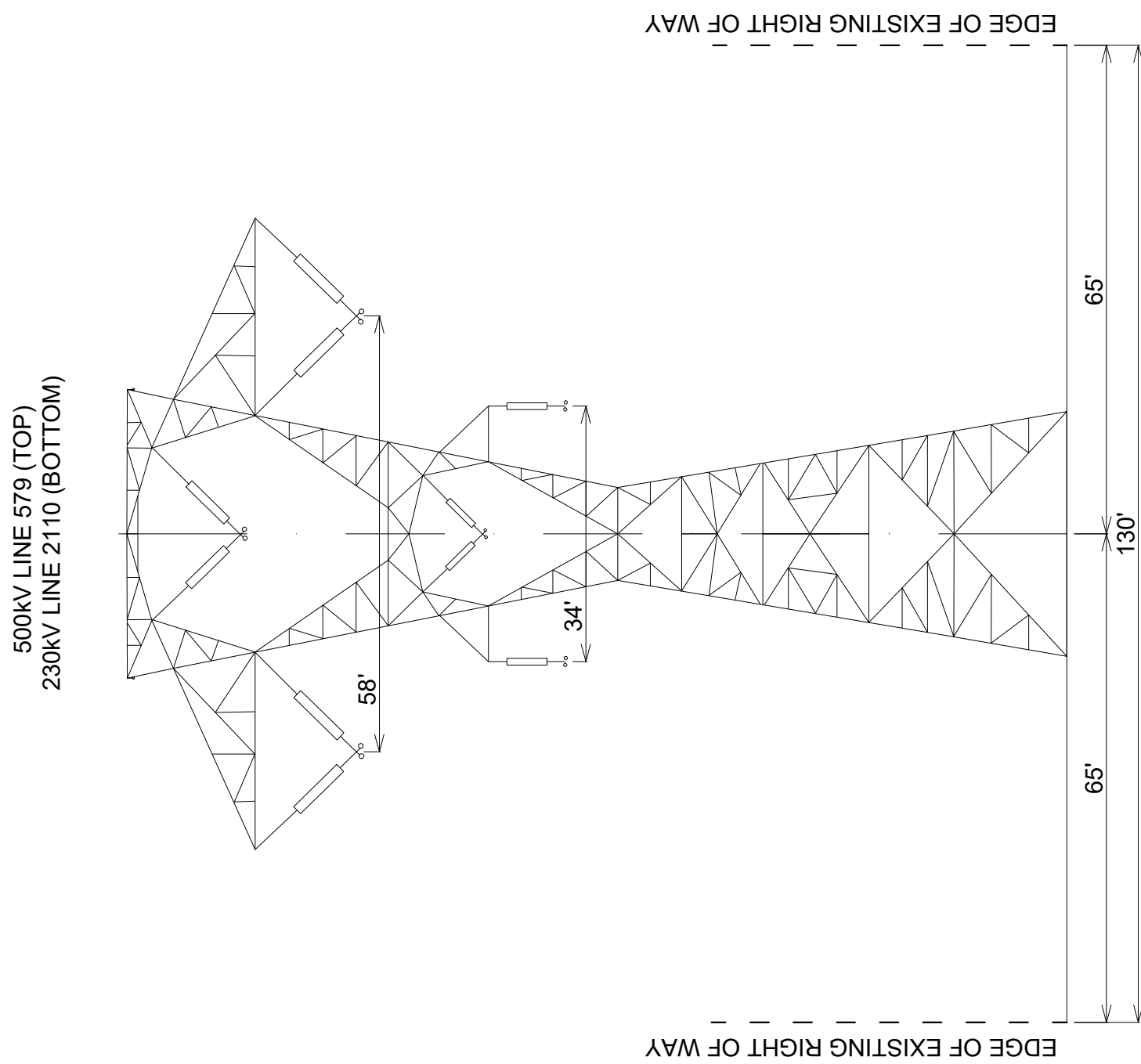
TYPICAL PROPOSED RIGHT OF WAY  
LOOKING TOWARDS YADKIN  
SUBSTATION




Dominion Energy  
5000 Dominion Blvd  
Glen Allen, VA 23060

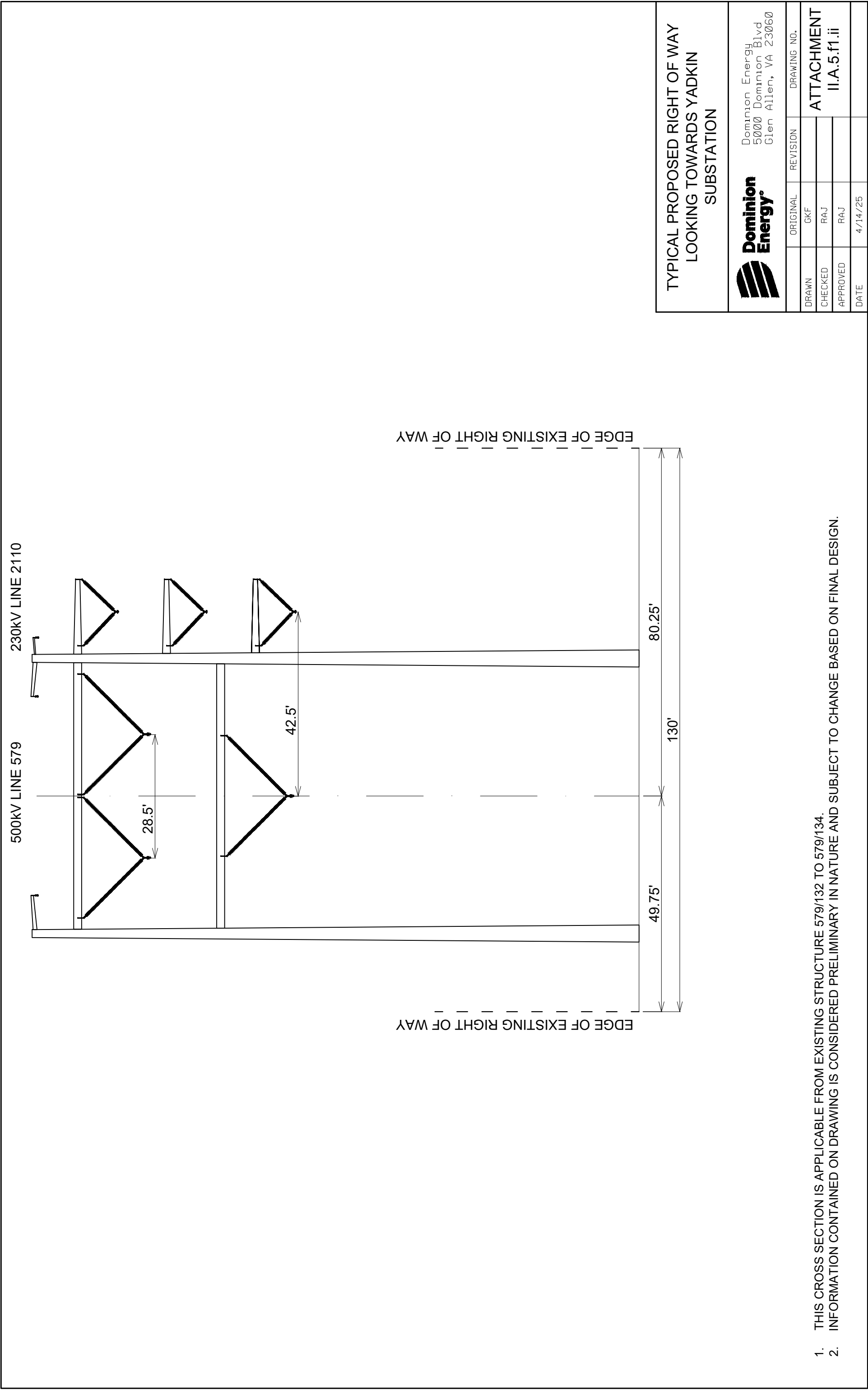
	ORIGINAL	REVISION	<b>ATTACHMENT</b> <b>II.A.5.e.ii</b>
DRAWN	GKF		
CHECKED	RAJ		
APPROVED	RAJ		
DATE	4/14/25		

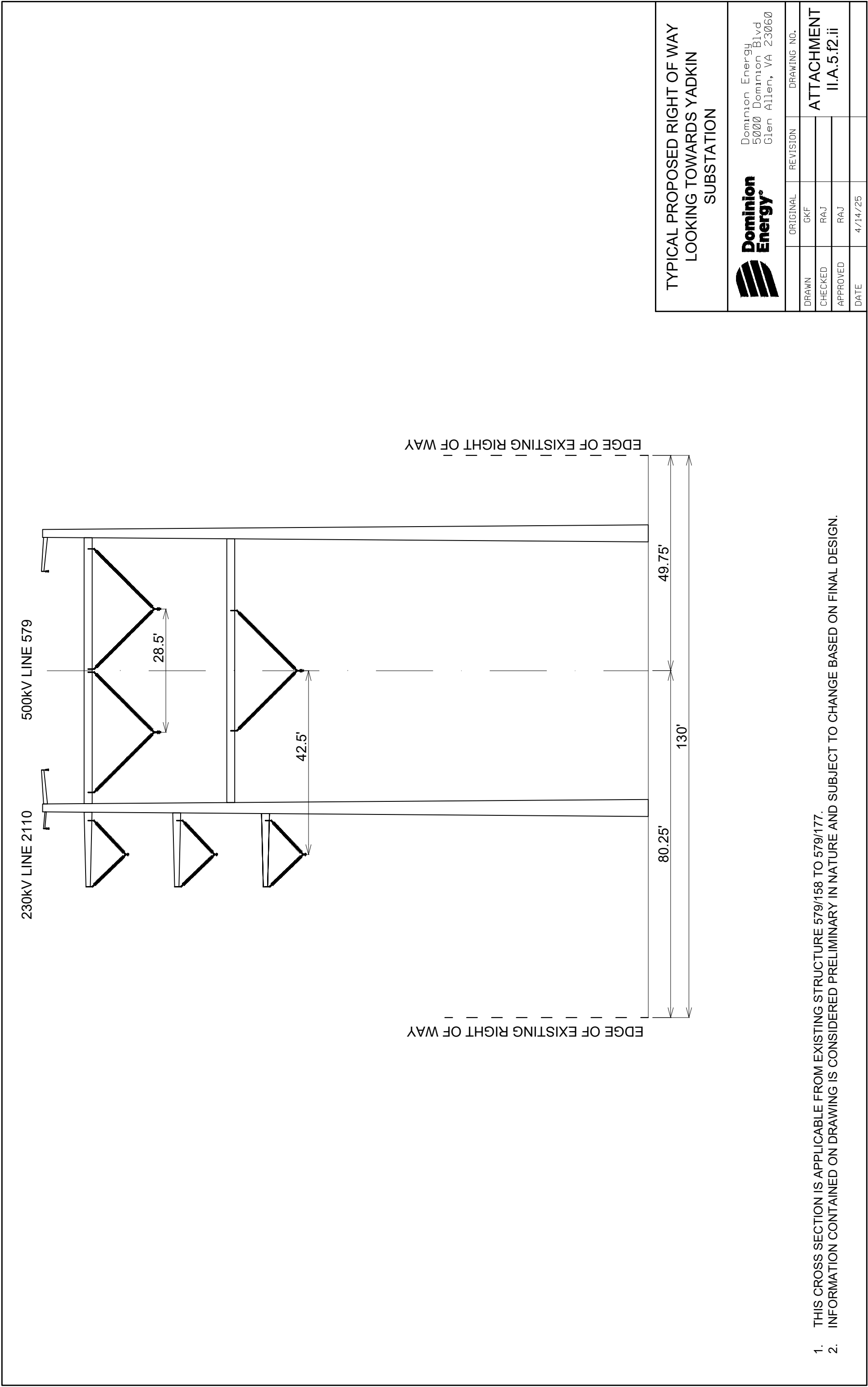


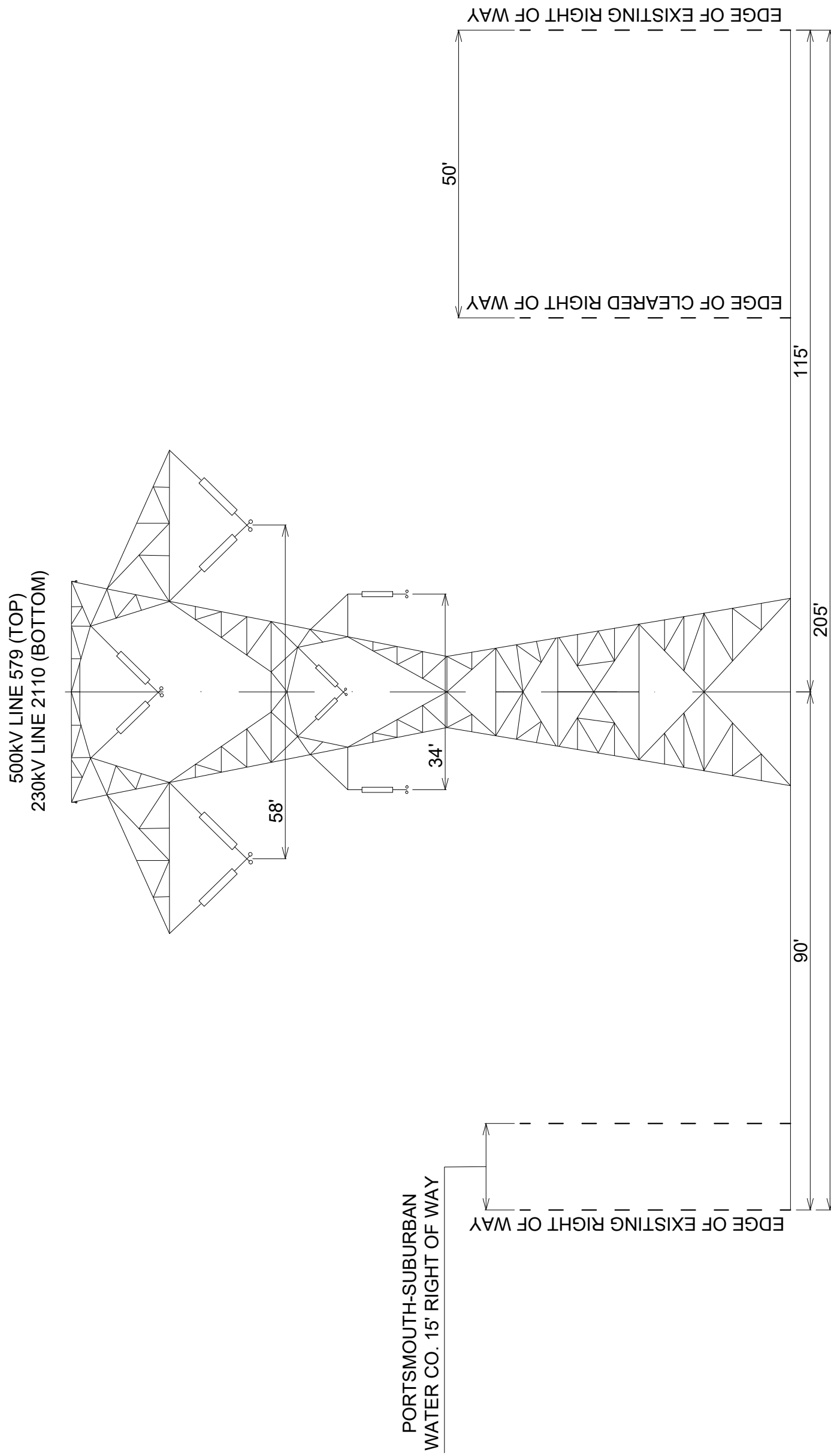


1. THIS CROSS SECTION IS APPLICABLE FROM EXISTING STRUCTURE 579/132 TO 579/134 AND FROM 579/158 TO 579/177.

TYPICAL EXISTING RIGHT OF WAY LOOKING TOWARDS YADKIN SUBSTATION		 Dominion Energy 5000 Dominion Blvd Glen Allen, VA 23060		DRAWING NO.
DRAWN	GKF	ORIGINAL	REVISION	ATTACHMENT II.A.5.f.i
CHECKED	RAJ			
APPROVED	RAJ			
DATE	4/7/25			







TYPICAL EXISTING RIGHT OF WAY  
LOOKING TOWARDS YADKIN  
SUBSTATION



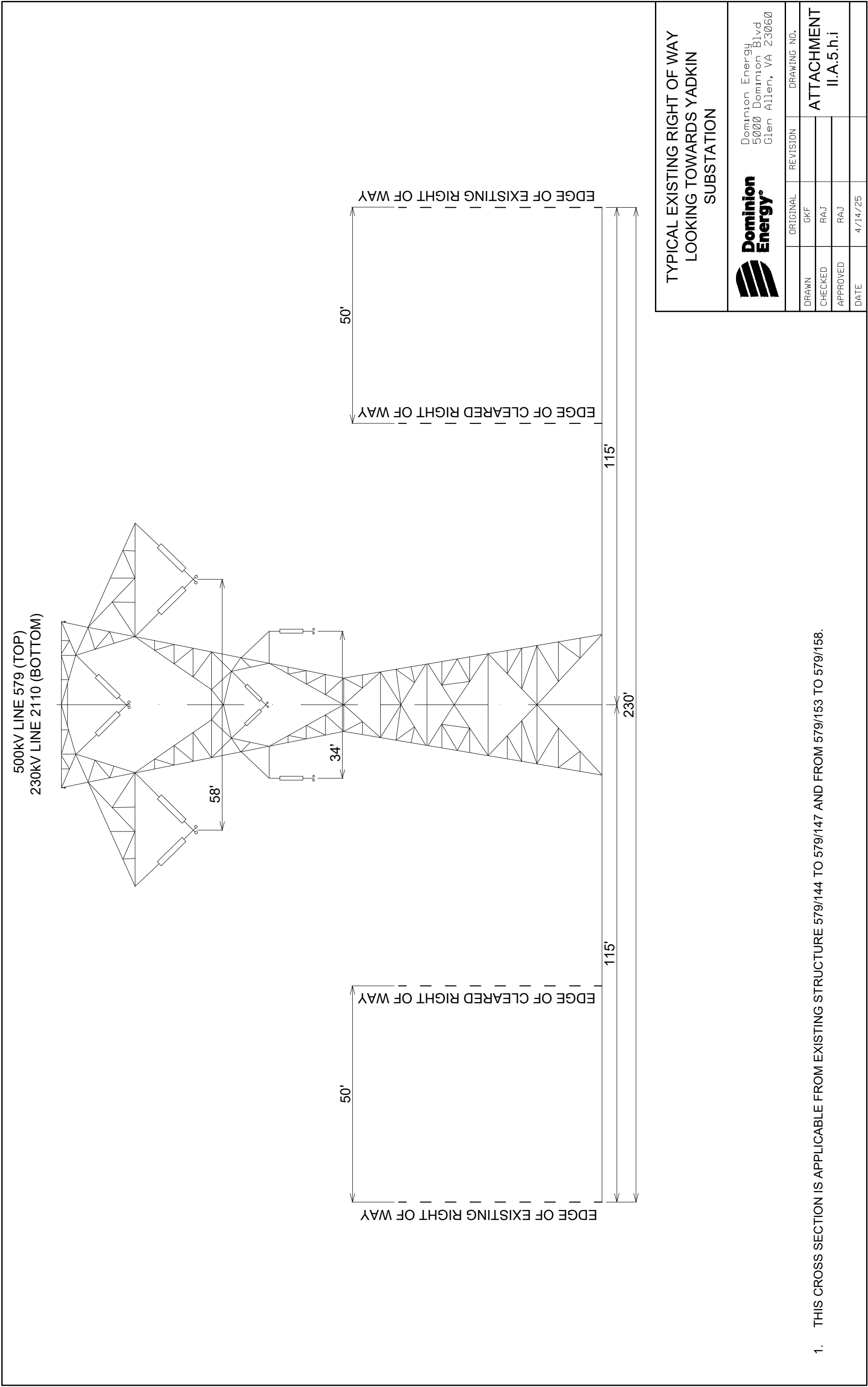
Dominion Energy  
 5000 Dominion Blvd  
 Glen Allen, VA 23060

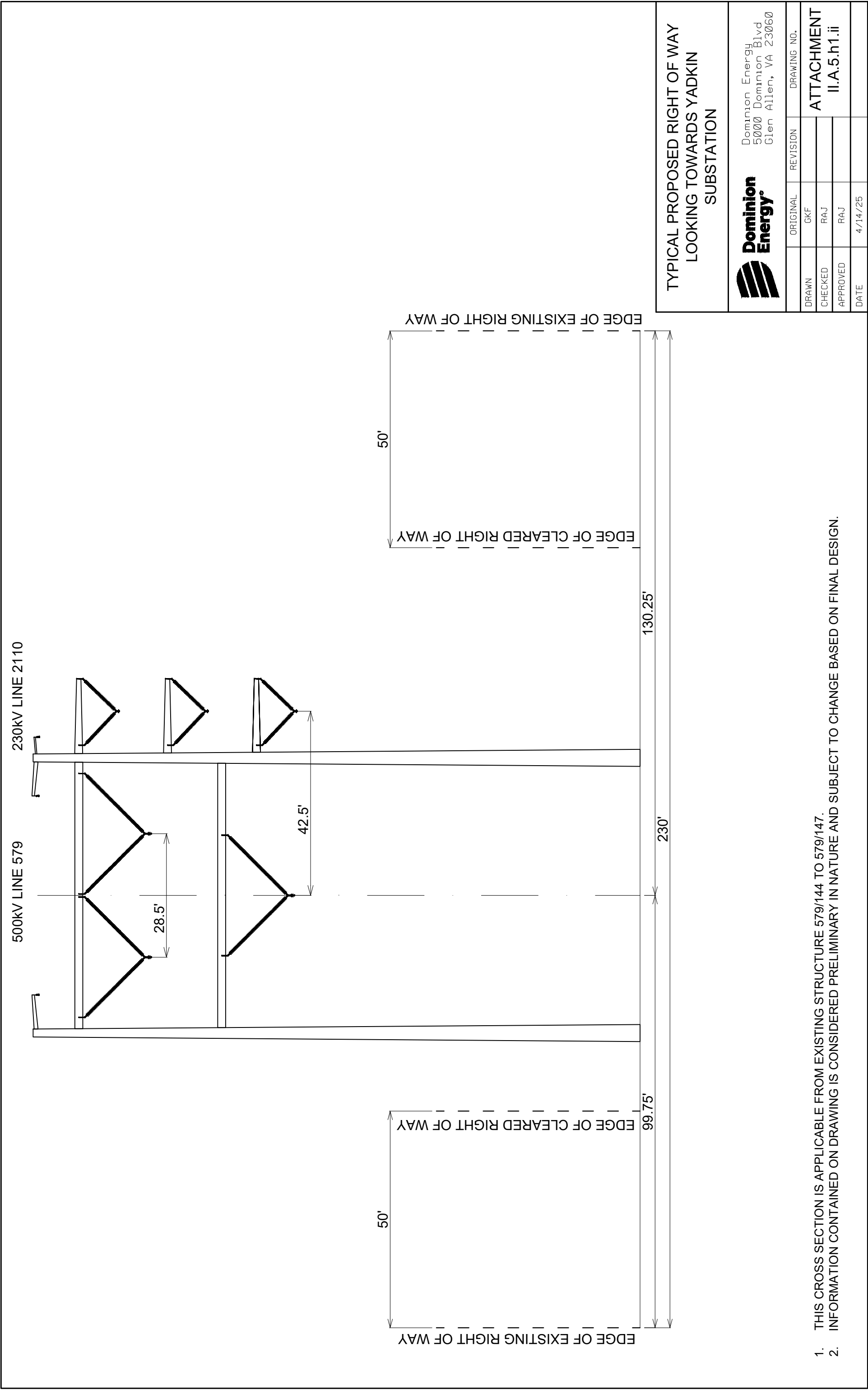
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DRAWN		GKF		ATTACHMENT II.A.5.g.i
CHECKED		RAJ		
APPROVED		RAJ		
DATE		4/14/25		

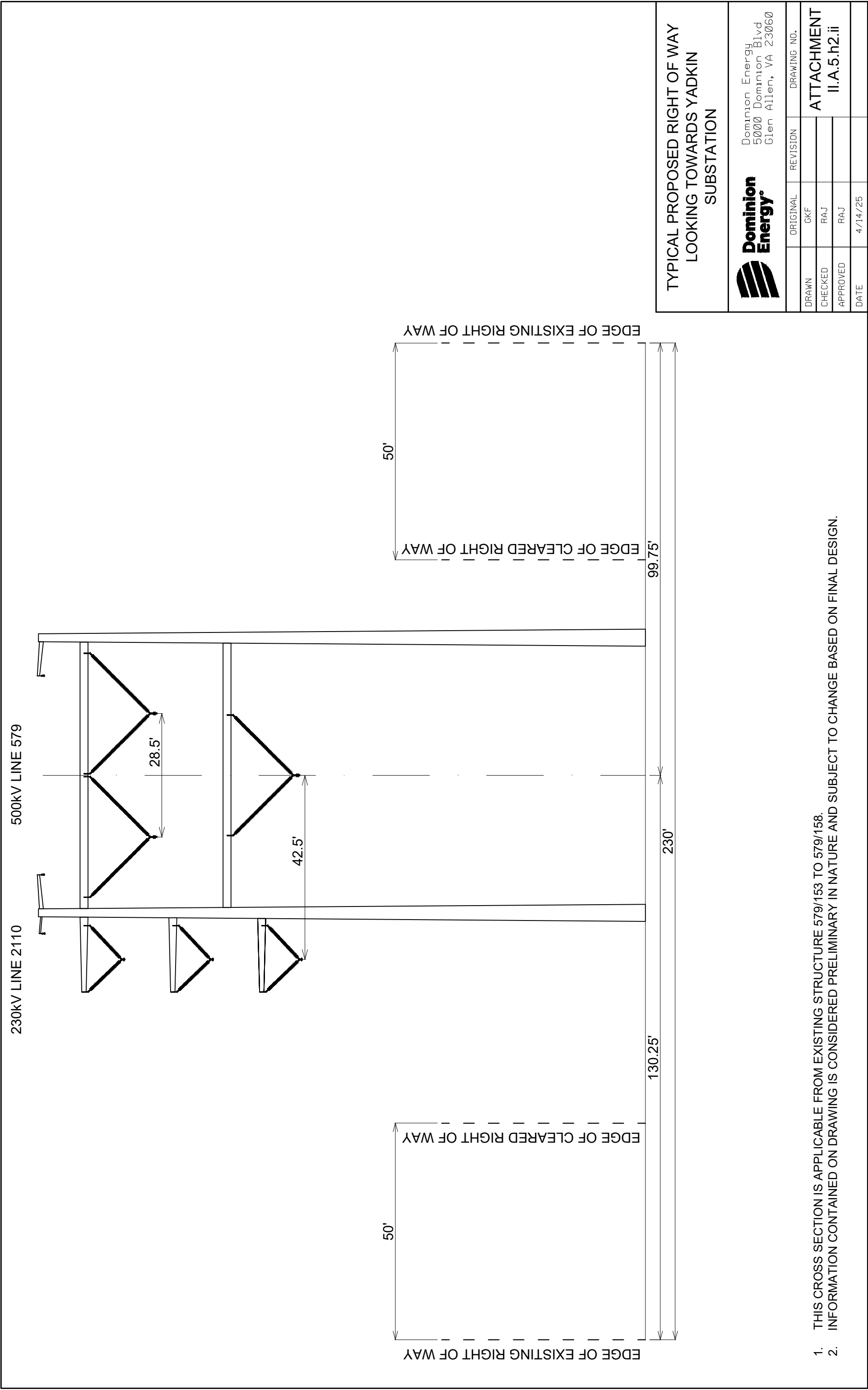
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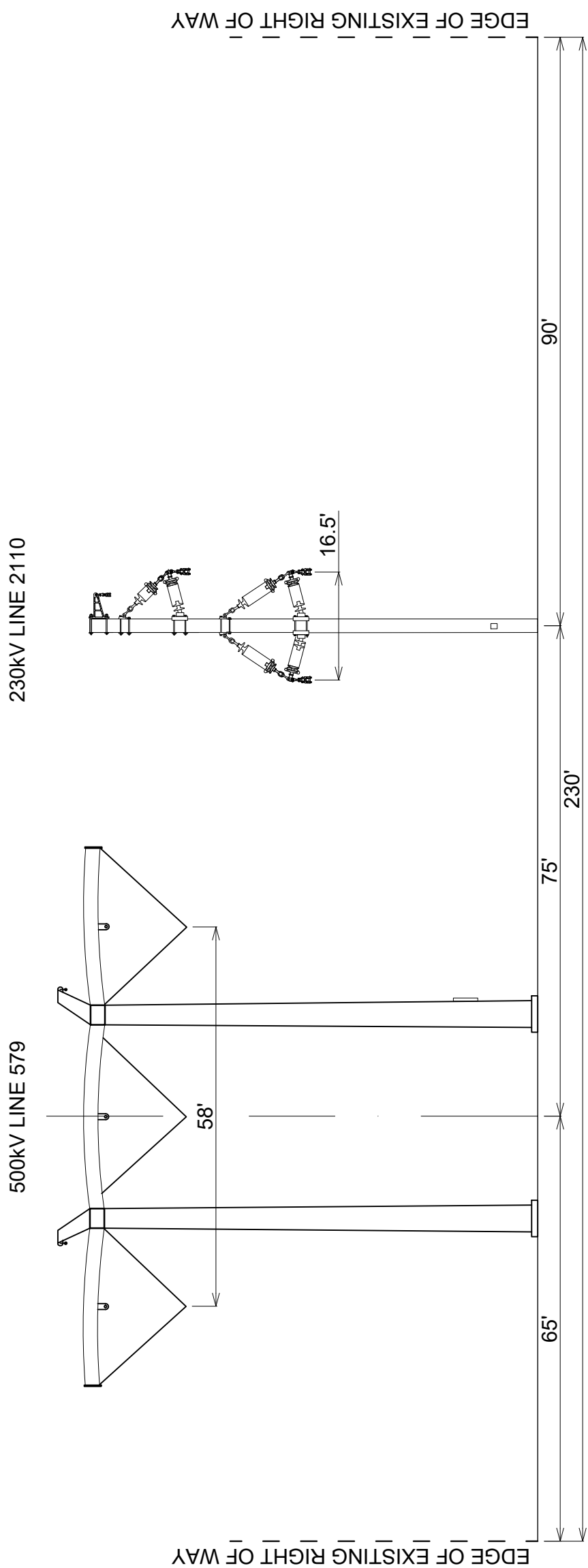












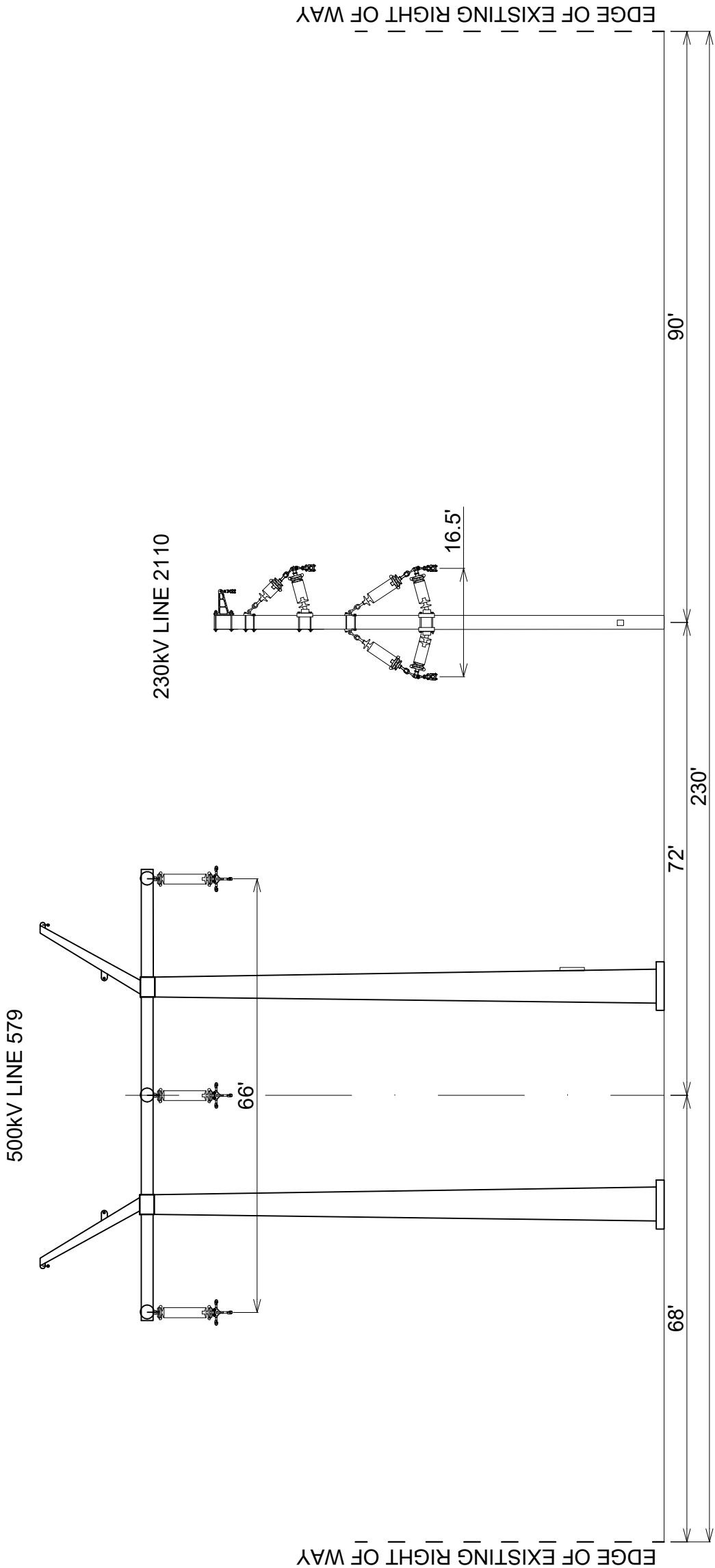
## TYPICAL EXISTING RIGHT OF WAY LOOKING TOWARDS YADKIN SUBSTATION




Dominion Energy  
5000 Dominion Blvd  
Glen Allen, VA 23060

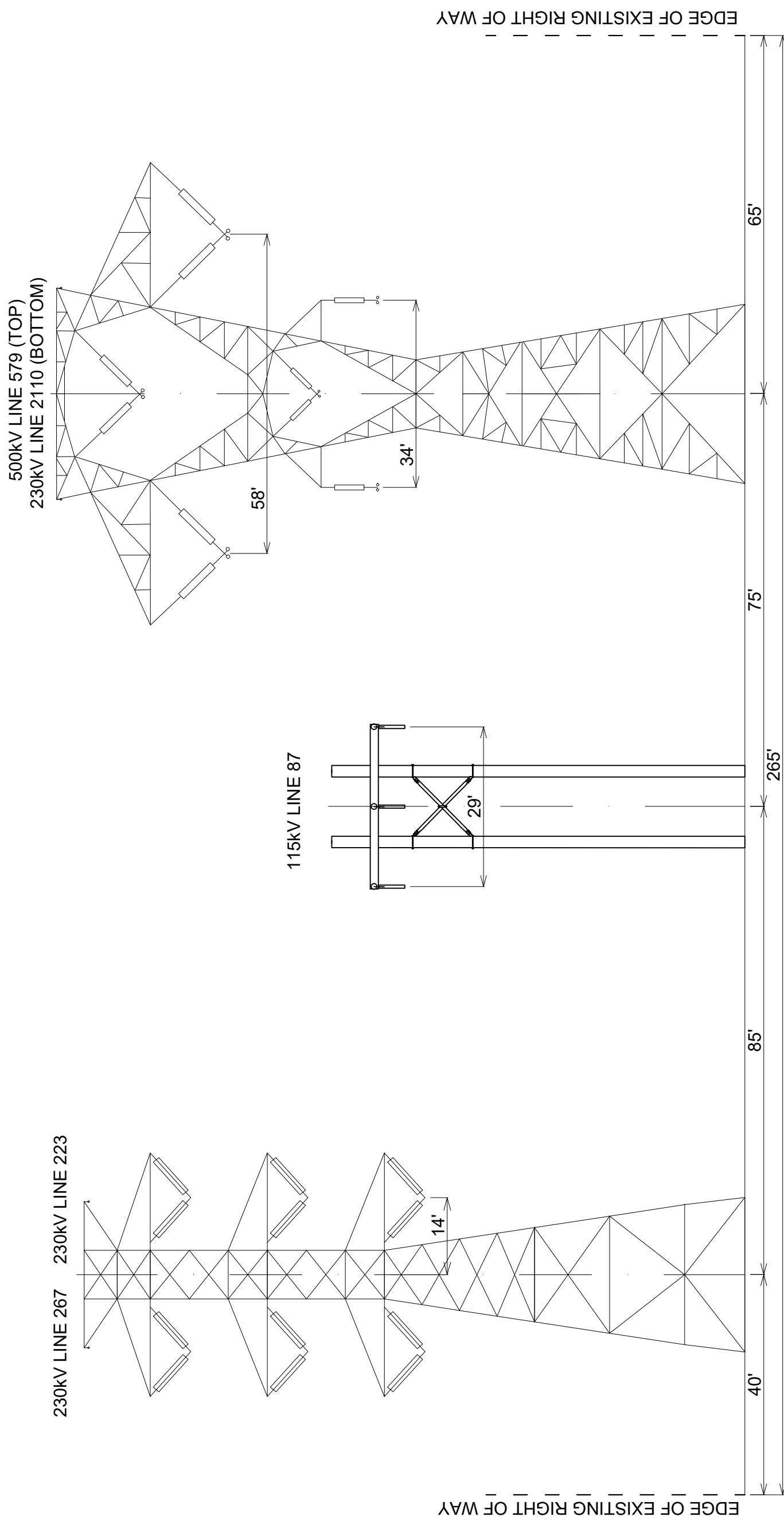
	ORIGINAL	REVISION	DRAWING NO.
DRAWN	GKF		ATTACHMENT II.A.5.i.i
CHECKED	RAJ		
APPROVED	RAJ		
DATE	4/14/25		

1. THIS CROSS SECTION IS APPLICABLE FROM EXISTING STRUCTURE 579/147 TO 579/153.



TYPICAL PROPOSED RIGHT OF WAY LOOKING TOWARDS YADKIN SUBSTATION			
 Dominion Energy 50000 Dominion Blvd Glen Allen, VA 23060		REVISION	DRAWING NO.
DRAWN	GKF		ATTACHMENT II.A.5.i.ii
CHECKED	RAJ		
APPROVED	RAJ		
DATE	4/14/25		

1. THIS CROSS SECTION IS APPLICABLE FROM EXISTING STRUCTURE 579/147 TO 579/153.
2. INFORMATION CONTAINED ON DRAWING IS CONSIDERED PRELIMINARY IN NATURE AND SUBJECT TO CHANGE BASED ON FINAL DESIGN.



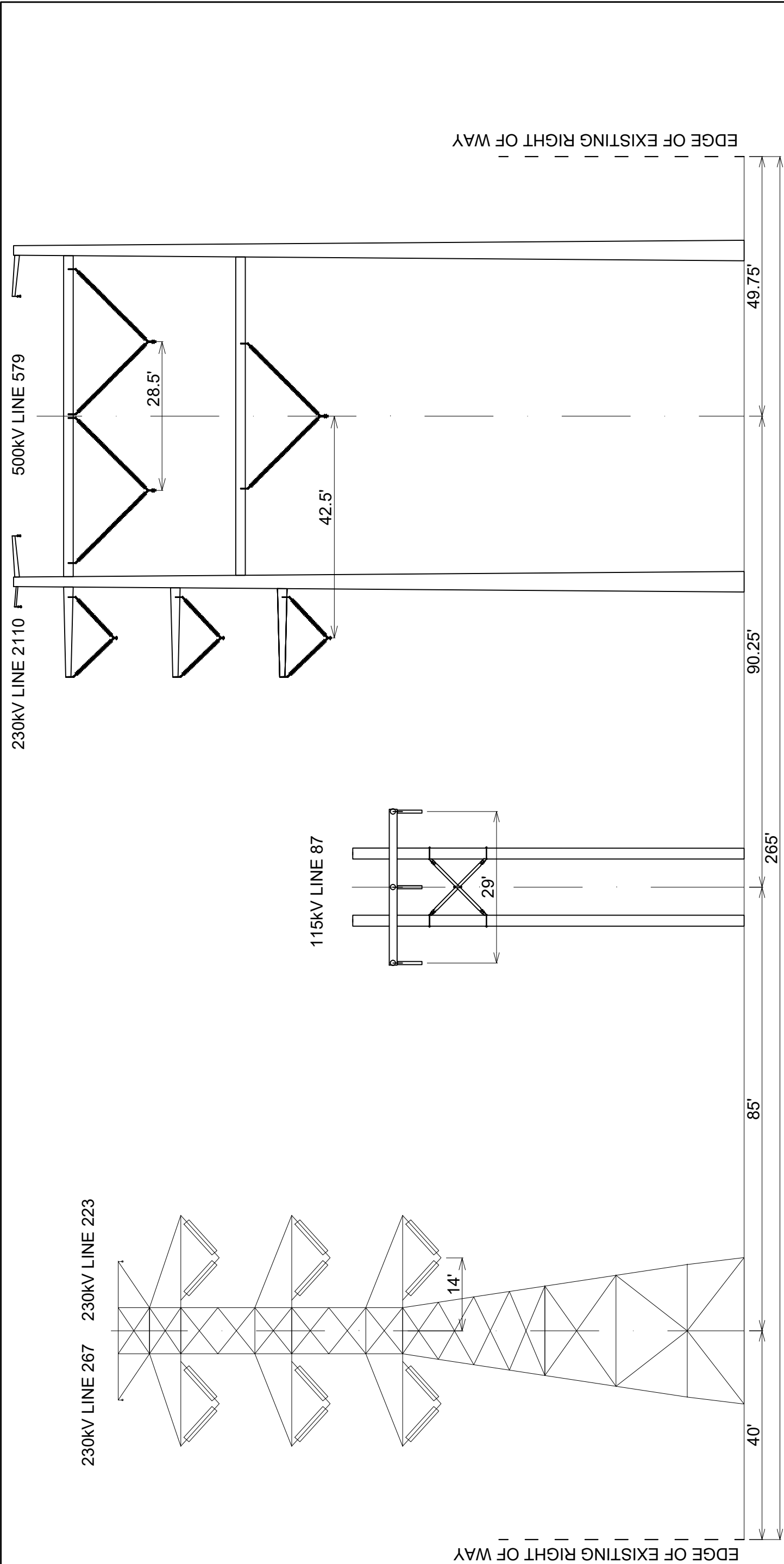
TYPICAL EXISTING RIGHT OF WAY  
LOOKING TOWARDS YADKIN  
SUBSTATION




Dominion Energy  
 5000 Dominion Blvd  
 Glen Allen, VA 23060

		ORIGINAL	REVISION	DRAWING NO.
DRAWN		GKF		ATTACHMENT II.A.5.j.i
CHECKED		RAJ		
APPROVED		RAJ		
DATE		4/14/25		

1. THIS CROSS SECTION IS APPLICABLE FROM EXISTING STRUCTURE 579/177 TO 579/184.



TYPICAL PROPOSED RIGHT OF WAY LOOKING TOWARDS YADKIN SUBSTATION			
		Dominion Energy 5000 Dominion Blvd Glen Allen, VA 23060	
ORIGINAL	REVISION	DRAWING NO.	
DRAWN	GKF	ATTACHMENT II.A.5.j.ii	
CHECKED	RAJ		
APPROVED	RAJ		
DATE	4/14/25		

1. THIS CROSS SECTION IS APPLICABLE FROM EXISTING STRUCTURE 579/177 TO 579/184.
2. INFORMATION CONTAINED ON DRAWING IS CONSIDERED PRELIMINARY IN NATURE AND SUBJECT TO CHANGE BASED ON FINAL DESIGN.



## **II. DESCRIPTION OF THE PROPOSED PROJECT**

### **A. Right-of-way (“ROW”)**

#### **6. Detail what portions of the ROW are subject to existing easements and over what portions new easements will be needed.**

Response: The approximately 33.1-mile Rebuild Project is located within an existing transmission line right-of-way corridor currently containing the Septa-Yadkin 500 kV Line #579, as well as other existing 230 kV (including Line #2110) and 115 kV lines along various segments of the corridor. See Attachment II.A.5.a through II.A.5.j.

Three existing conservation easements are crossed by the Rebuild Project: an Isle of Wight Purchase of Agricultural Conservation Easement (“PACE”) program easement, a Virginia Department of Forestry easement, and a private wetland mitigation bank easement. The Isle of Wight PACE program easement and the private wetland mitigation bank easement were both established in 2010 and the Virginia Department of Forestry Easement was established in 2011, all of which are after the Company’s initial establishment of the transmission corridor in 1985. The Company does not anticipate that new easements will be required for this Rebuild Project. See Attachment II.A.6 for a conservation easement map of the Rebuild Project.

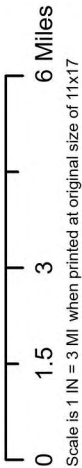


ATTACHMENT II.A.6  
CONSERVATION EASEMENTS MAP

Septa - Yadkin 500 kV Line #579 Rebuild and  
Suffolk - Thrasher 230 kV Line #2110 Partial Rebuild

City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

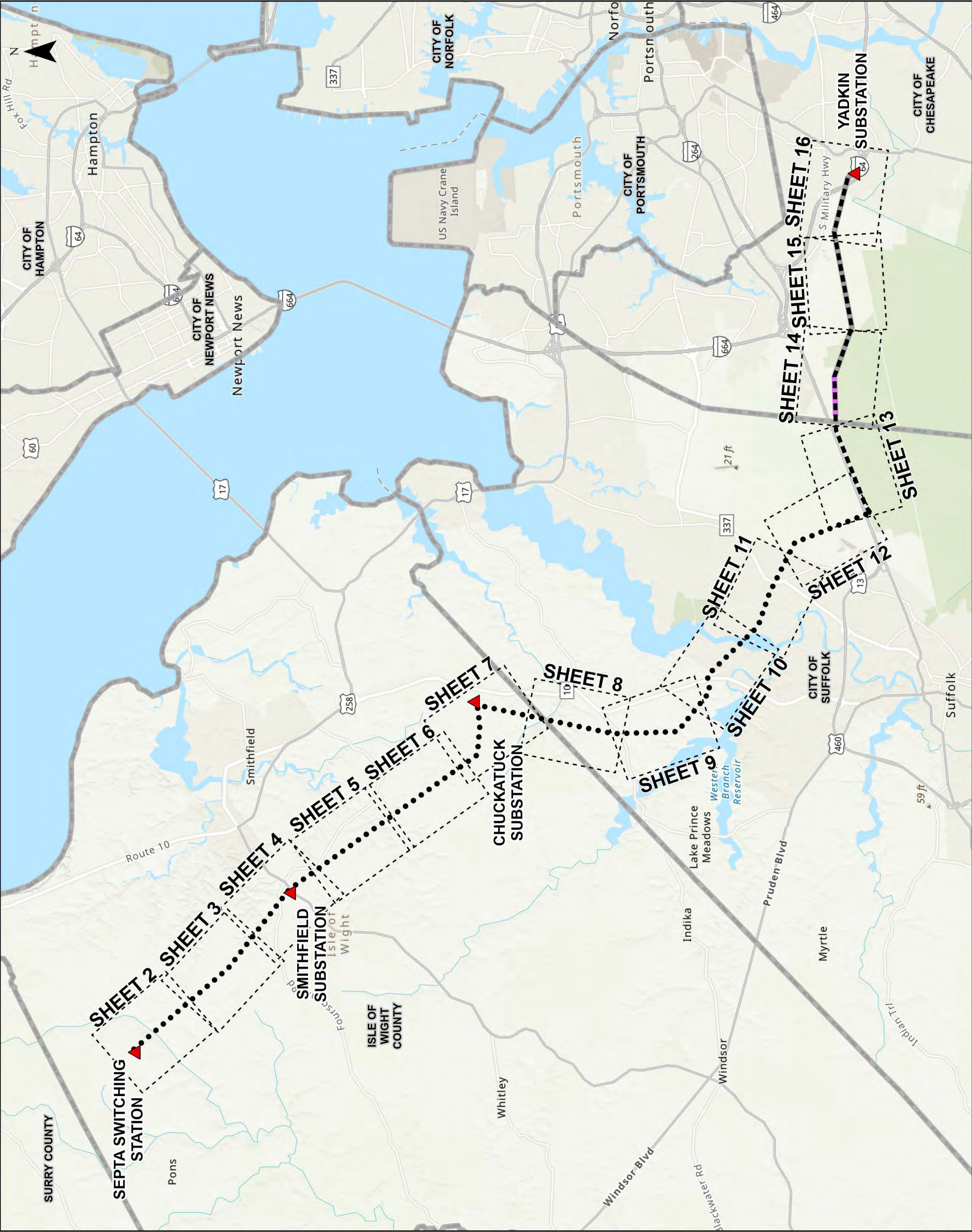
Client:	Dominion Energy Virginia		
C2 Env Project:	Prepared By:	Date:	
0265	KAS	5/6/2025	



SITE DATA

- Line #579 Single Circuit Segment
- Lines #579/2110 Double Circuit Segment
- Airport Section
- Airport-Yadkin Section
- ▲ Existing Substation/Switching Station
- Map Sheet

- Notes:
1. Basemap from ESRI World Topographic Map
  2. Project right-of-way provided by Dominion Energy Virginia
  3. Conservation lands, easements and local lands from Virginia Department of Conservation and Recreation, U.S. Geological Survey Protected Areas Database of the U.S. and Department of Historic Resources Virginia Cultural Resources Information System
  4. Railroads from Virginia Geographic Information Network
  5. Stream centerlines from U.S. Geological Survey National Hydrography Dataset







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ATTACHMENT II.A.6  
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City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

Client:  
Dominion Energy Virginia

C2 Env Project: 0265      Prepared By: KAS      Date: 5/6/2025

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Existing Right-of-Way

Existing Substation/Switching Station

Dominion Station Parcel

City of Suffolk Owned Land

City of Chesapeake Owned Land

Federally Owned Land

Isle of Wight PACE Easement

Chesapeake Wetland Mitigation Bank Easement

Virginia Outdoors Foundation Easement

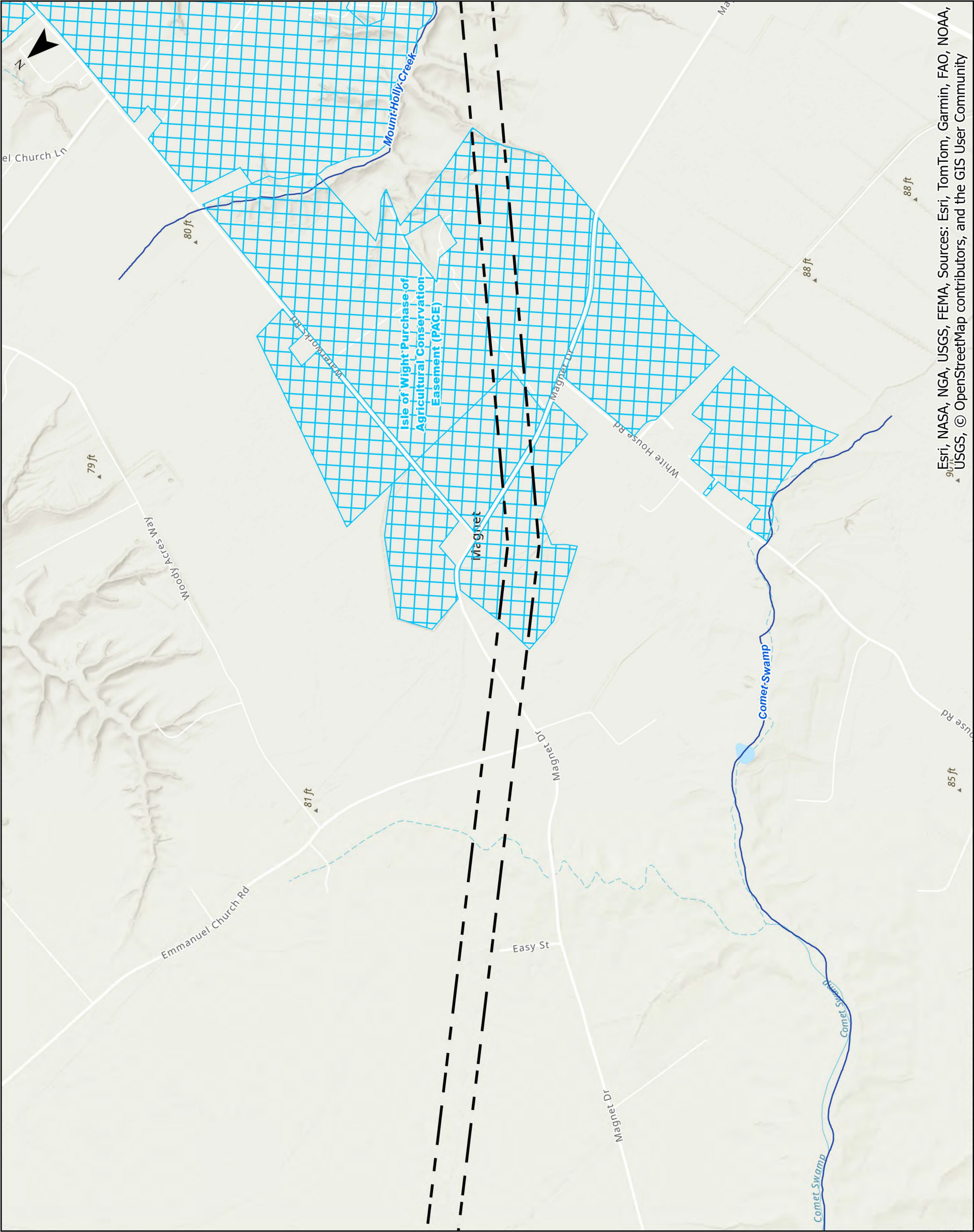
Virginia Department of Forestry Easement

USGS National Hydrography Stream Centerline

Railroad





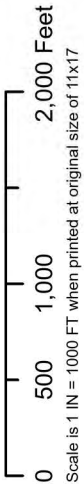


ATTACHMENT II.A.6  
**CONSERVATION EASEMENTS MAP**  
Septa - Yadkin 500 kV Line #579 Rebuild and  
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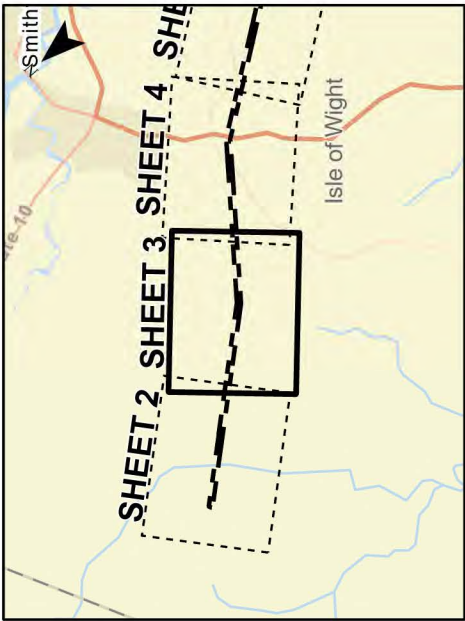
City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

Client:  
Dominion Energy Virginia

C2 Env Project: 0265      Prepared By: KAS      Date: 5/6/2025

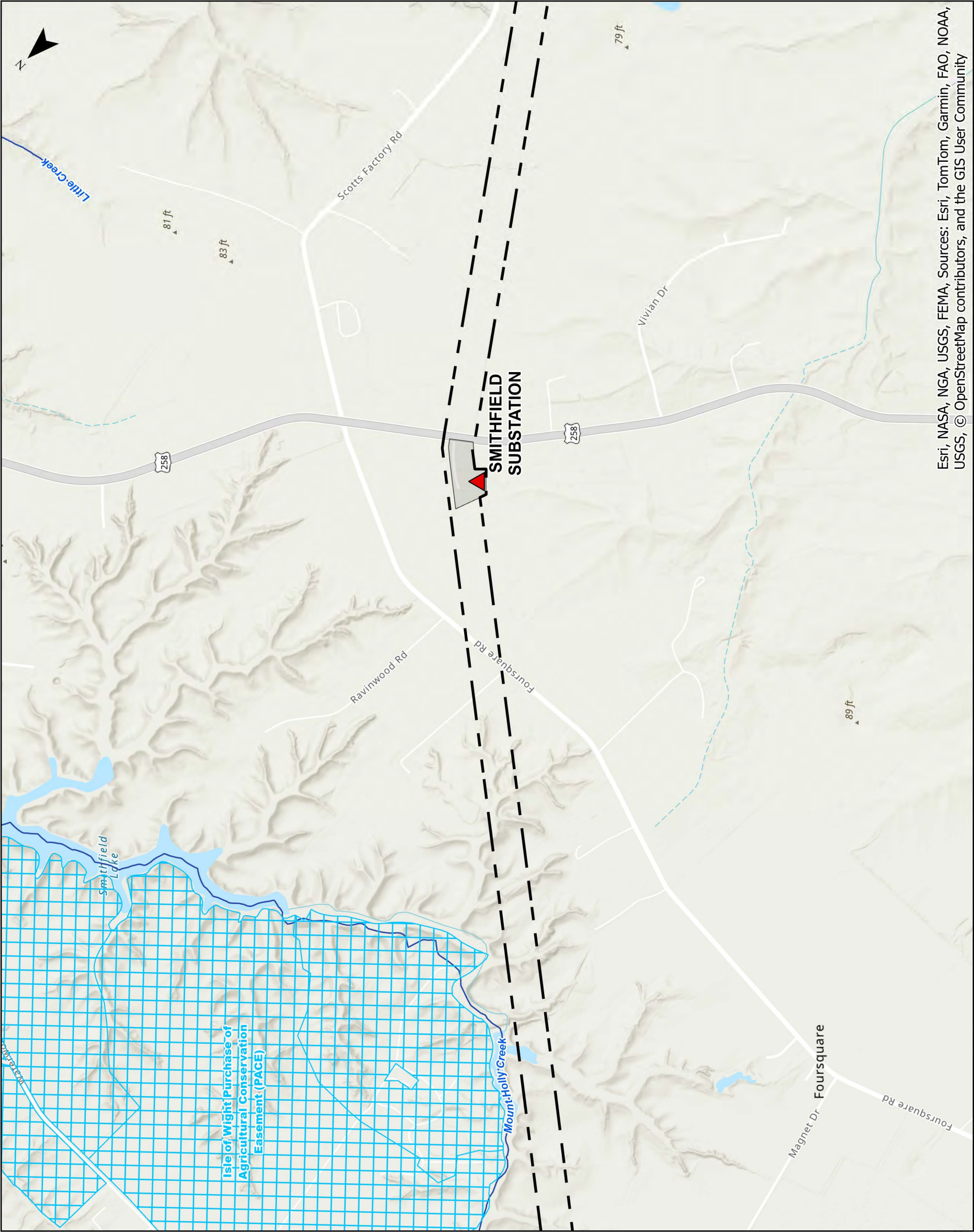


- Existing Right-of-Way
- Existing Substation/Switching Station
- Dominion Station Parcel
- City of Suffolk Owned Land
- City of Chesapeake Owned Land
- Federally Owned Land
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- USGS National Hydrography Stream Centerline
- Railroad



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USGS, © OpenStreetMap contributors, and the GIS User Community



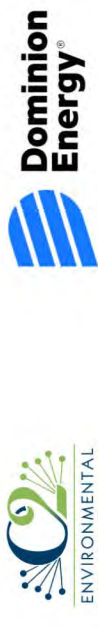


ATTACHMENT II.A.6  
**CONSERVATION EASEMENTS MAP**  
Septa - Yadkin 500 kV Line #579 Rebuild and  
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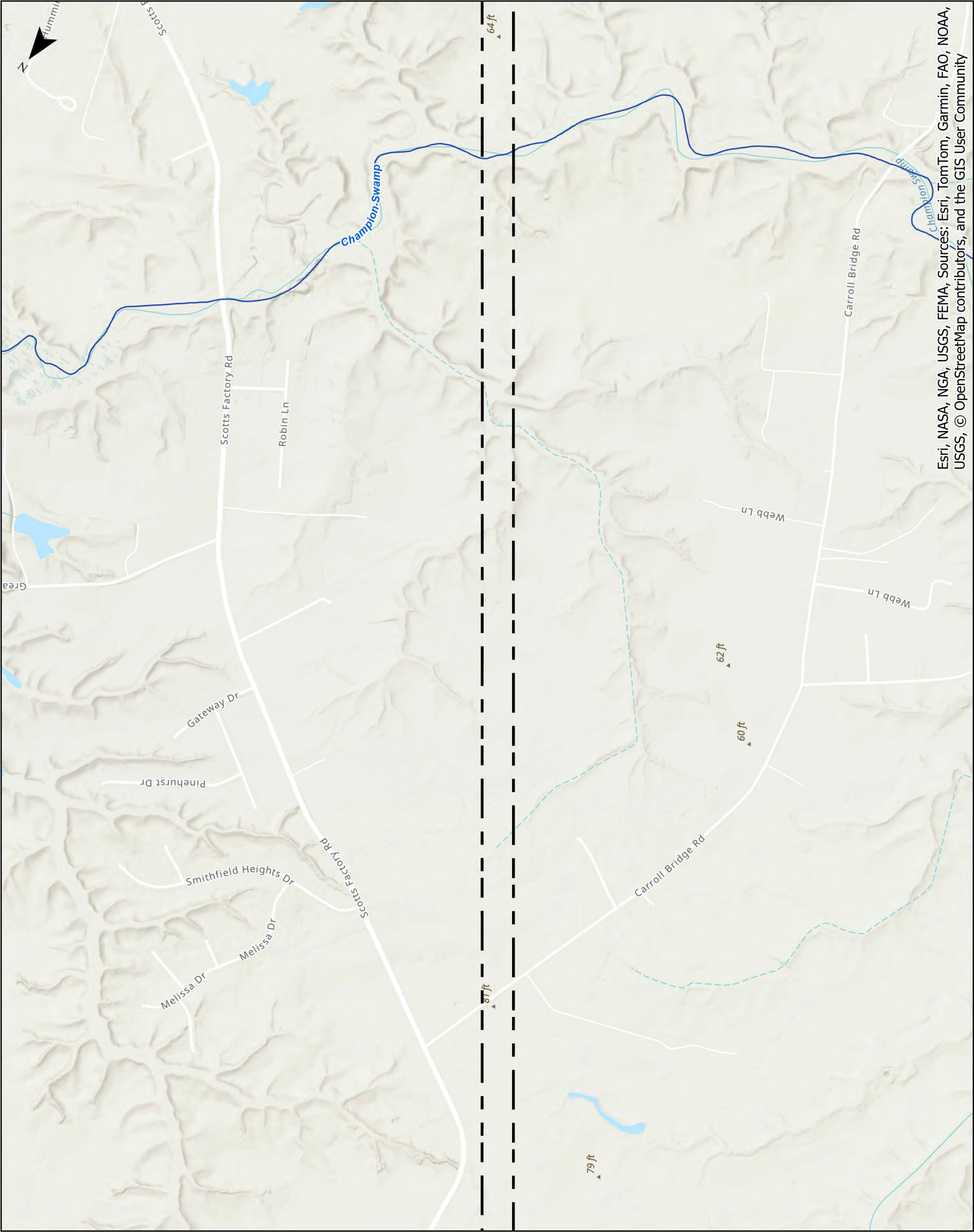
City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

Client:  
Dominion Energy Virginia

C2 Env Project: 0265    Prepared By: KAS    Date: 5/6/2025







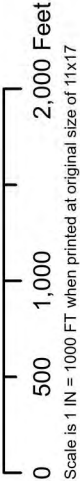
ATTACHMENT II.A.6  
CONSERVATION EASEMENTS MAP

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City of Chesapeake, Isle of Wight County and  
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Client:  
Dominion Energy Virginia

C2 Env Project: 0265      Prepared By: KAS      Date: 5/6/2025

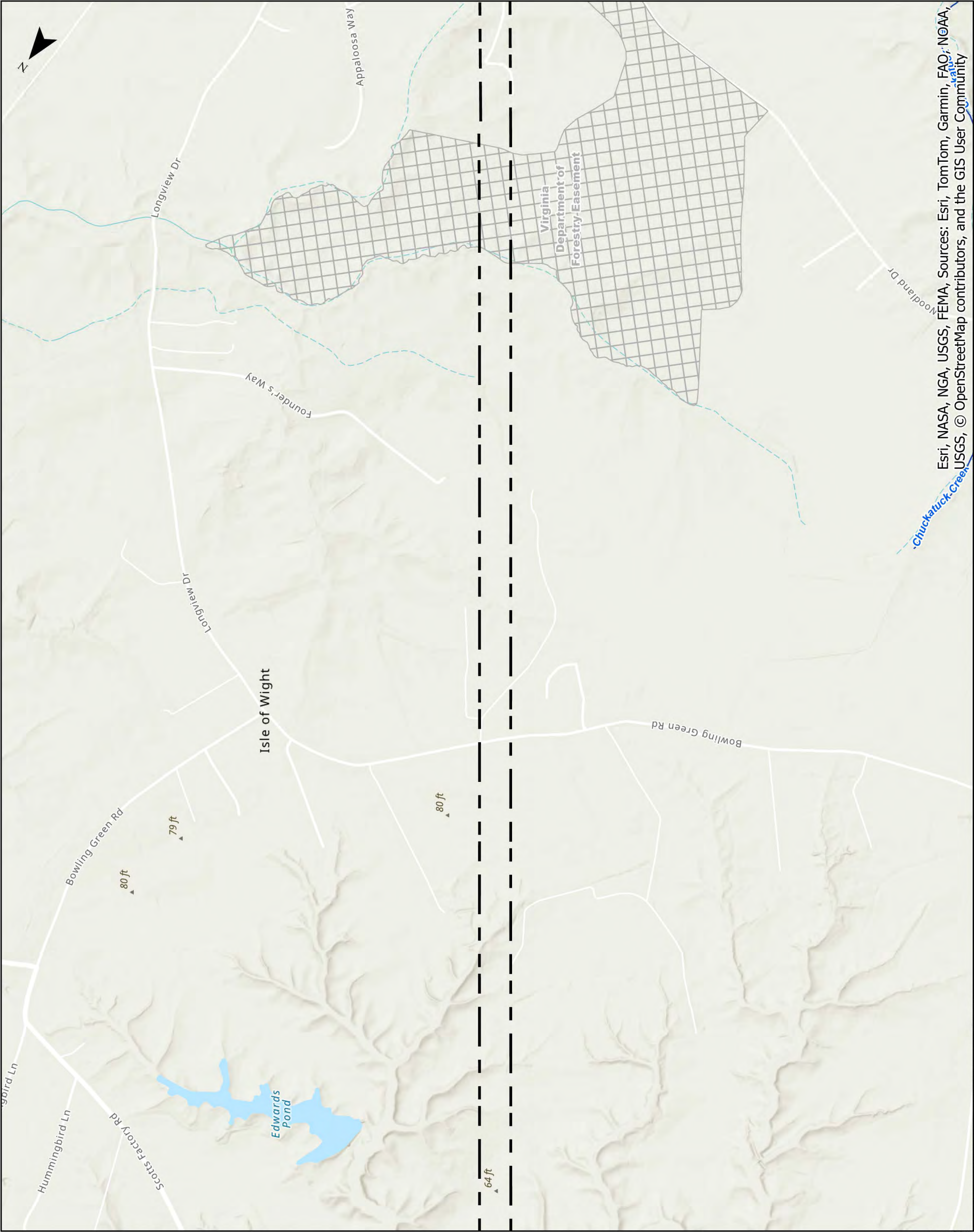


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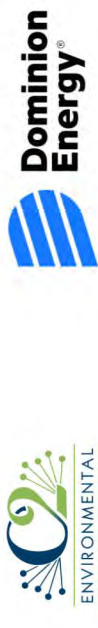
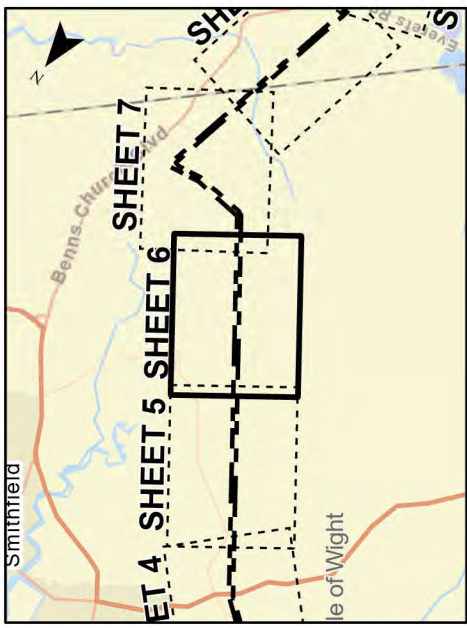
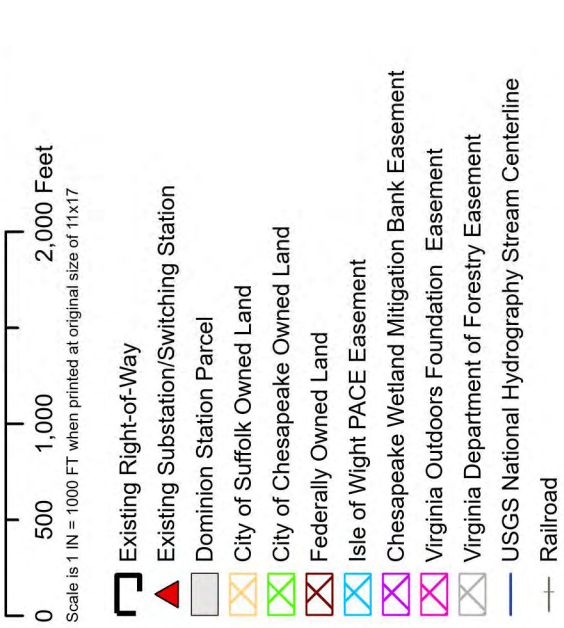
**ATTACHMENT II.A.6**  
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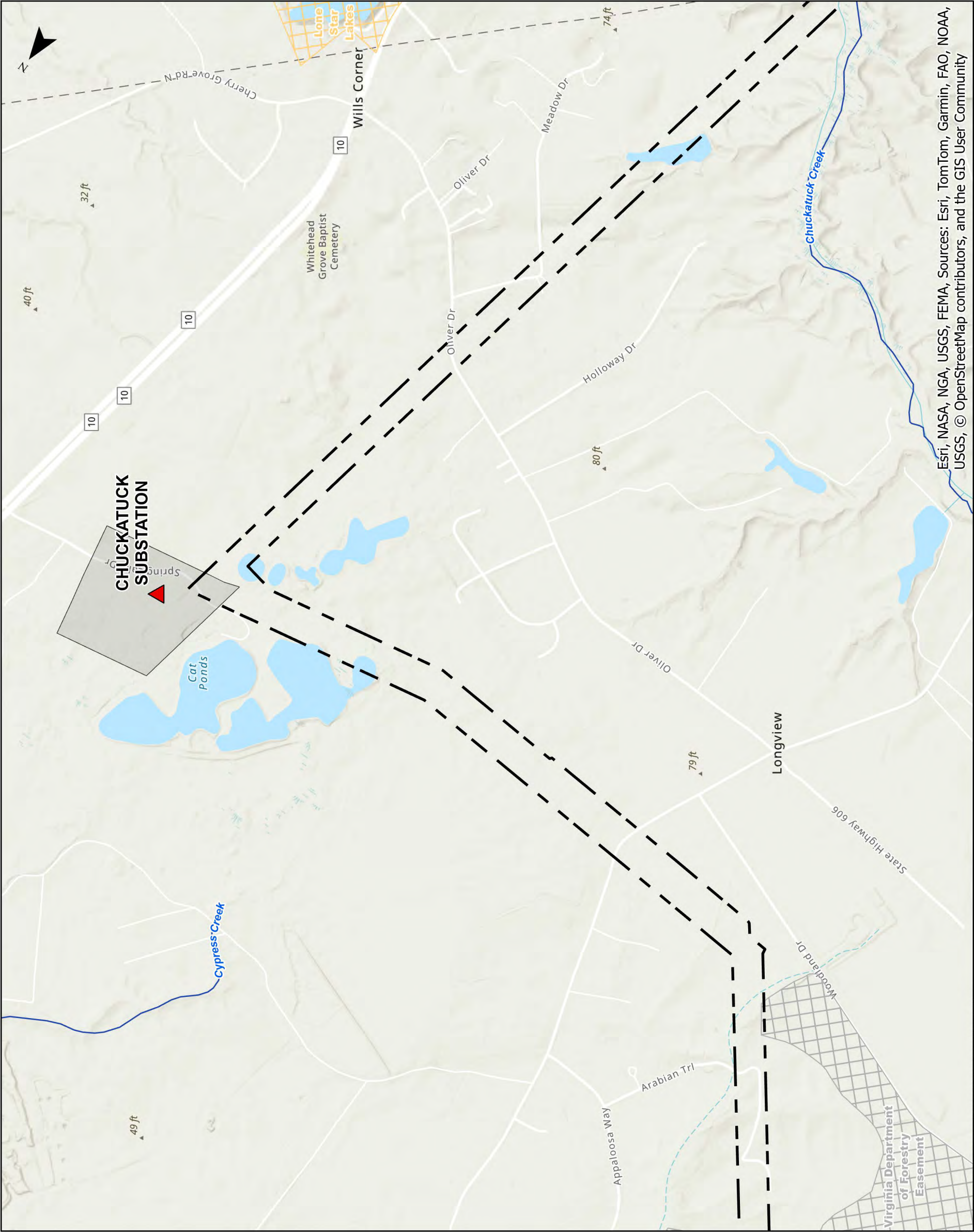
City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

Client:  
Dominion Energy Virginia

C2 Env Project: 0265 Prepared By: KAS Date: 5/6/2025





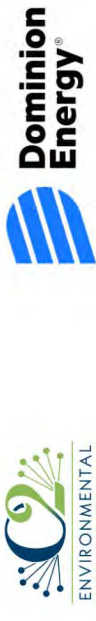
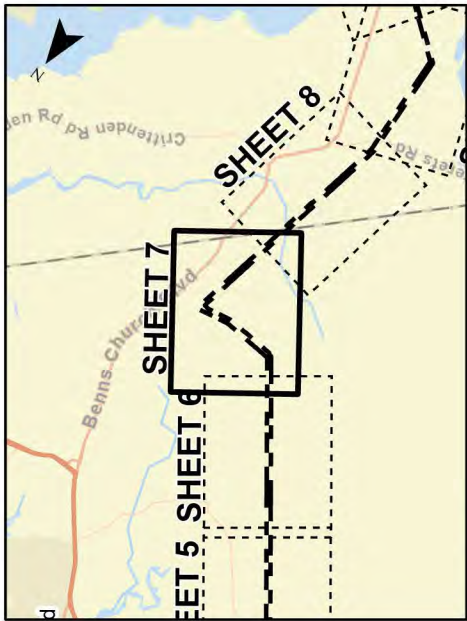
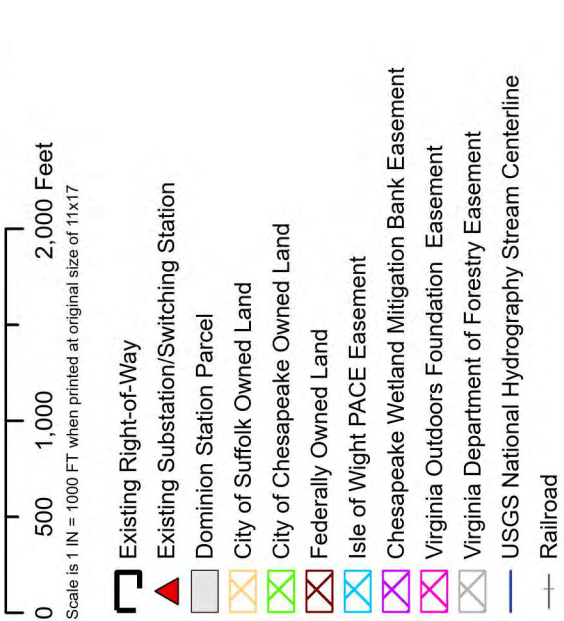


ATTACHMENT II.A.6  
**CONSERVATION EASEMENTS MAP**  
Septa - Yarkin 500 kV Line #579 Rebuild and  
Suffolk - Thrasher 230 kV Line #2110 Partial Rebuild

City of Chesapeake, Isle of Wight County and  
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Client:  
Dominion Energy Virginia

C2 Env Project: 0265 Prepared By: KAS Date: 5/6/2025







**ATTACHMENT II.A.6**  
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City of Chesapeake, Isle of Wight County and  
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Dominion Energy Virginia

C2 Env Project: 0265      Prepared By: KAS      Date: 5/6/2025

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Existing Right-of-Way

Existing Substation/Switching Station

Dominion Station Parcel

City of Suffolk Owned Land

City of Chesapeake Owned Land

Federally Owned Land

Isle of Wight PACE Easement

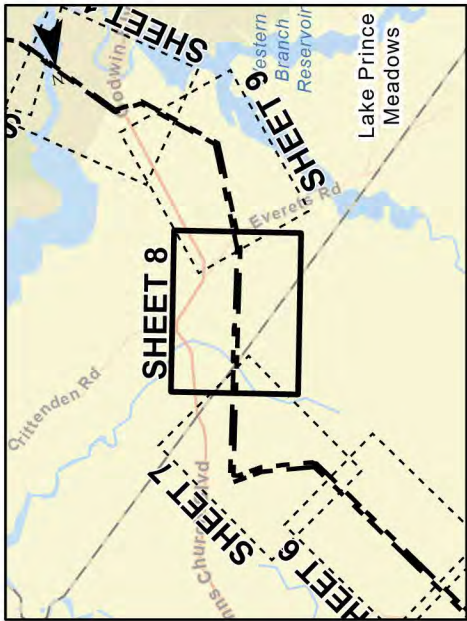
Chesapeake Wetland Mitigation Bank Easement

Virginia Outdoors Foundation Easement

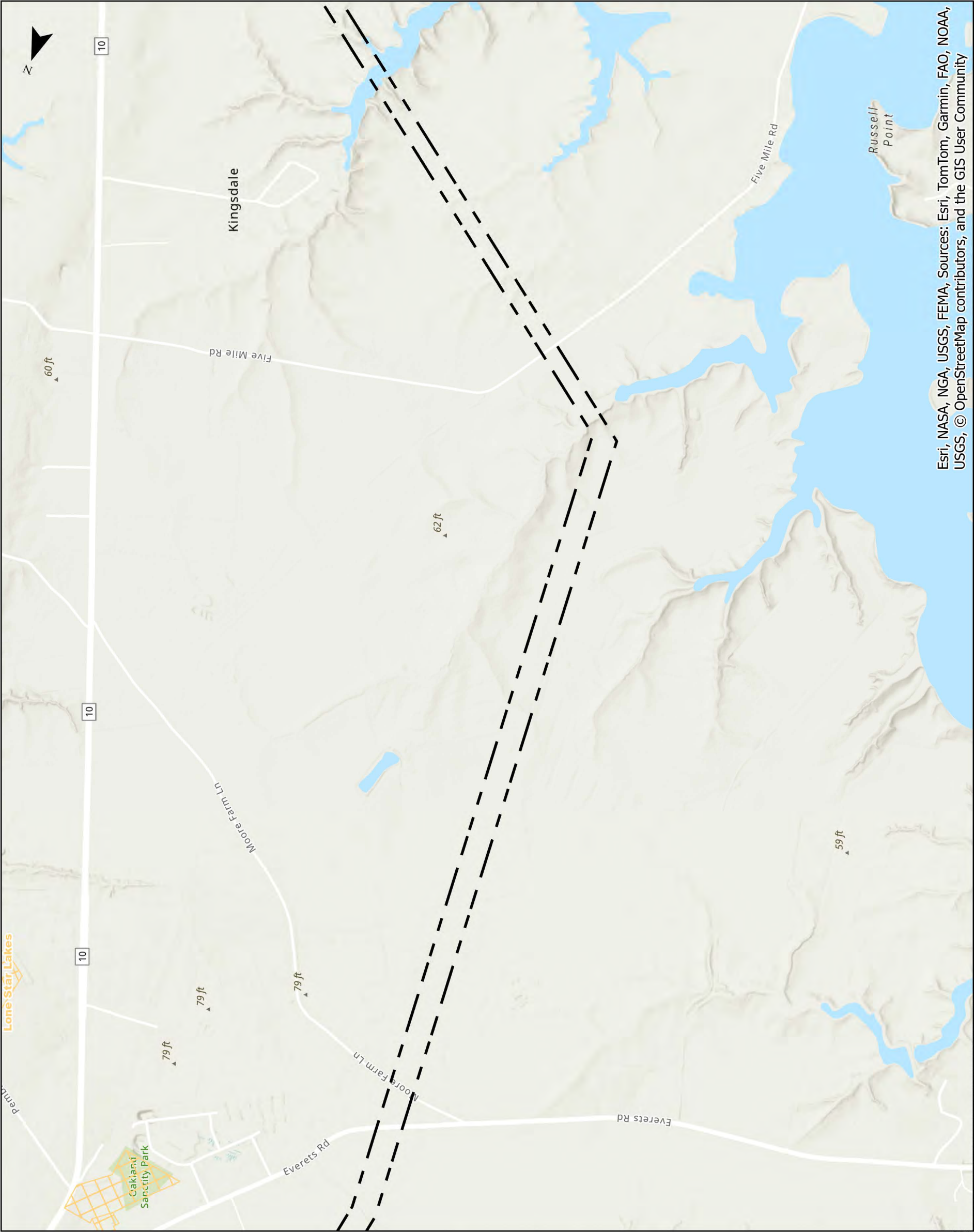
Virginia Department of Forestry Easement

USGS National Hydrography Stream Centerline

Railroad







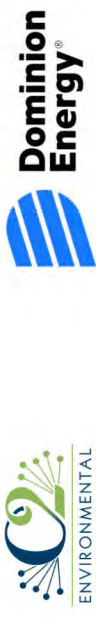
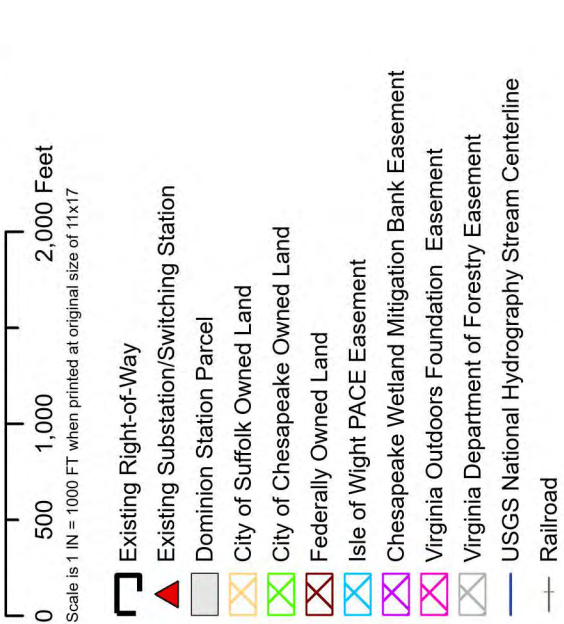
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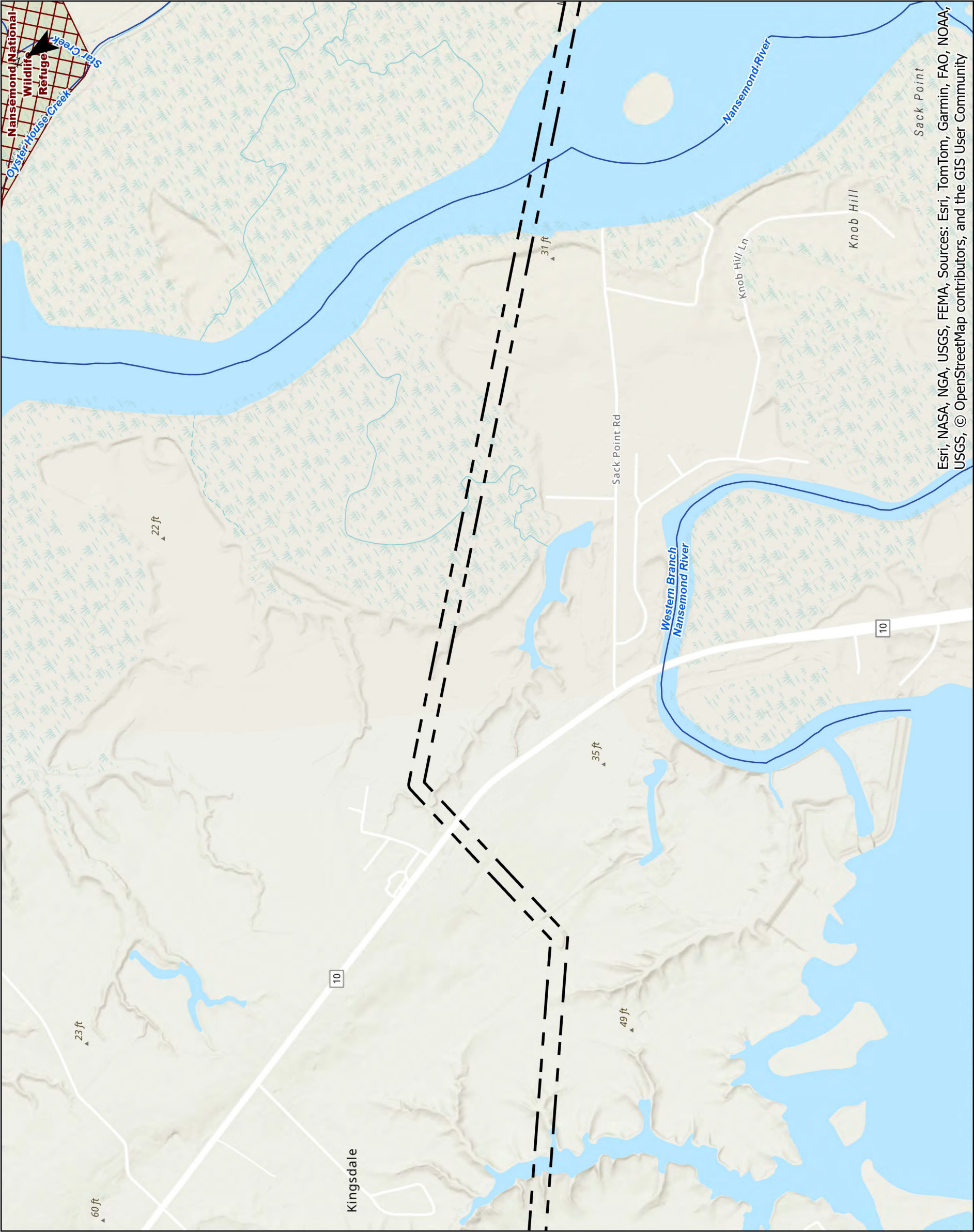
City of Chesapeake, Isle of Wight County and  
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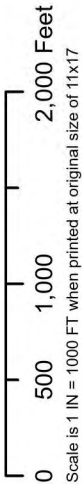
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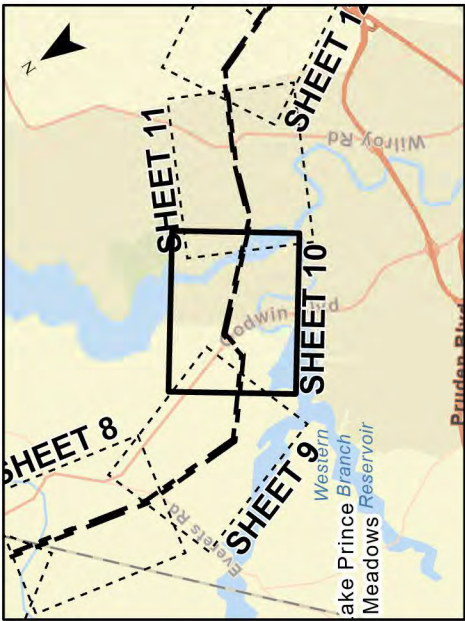
City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

Client:  
Dominion Energy Virginia

C2 Env Project: 0265      Prepared By: KAS      Date: 5/6/2025



- Existing Right-of-Way
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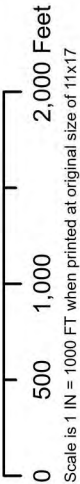
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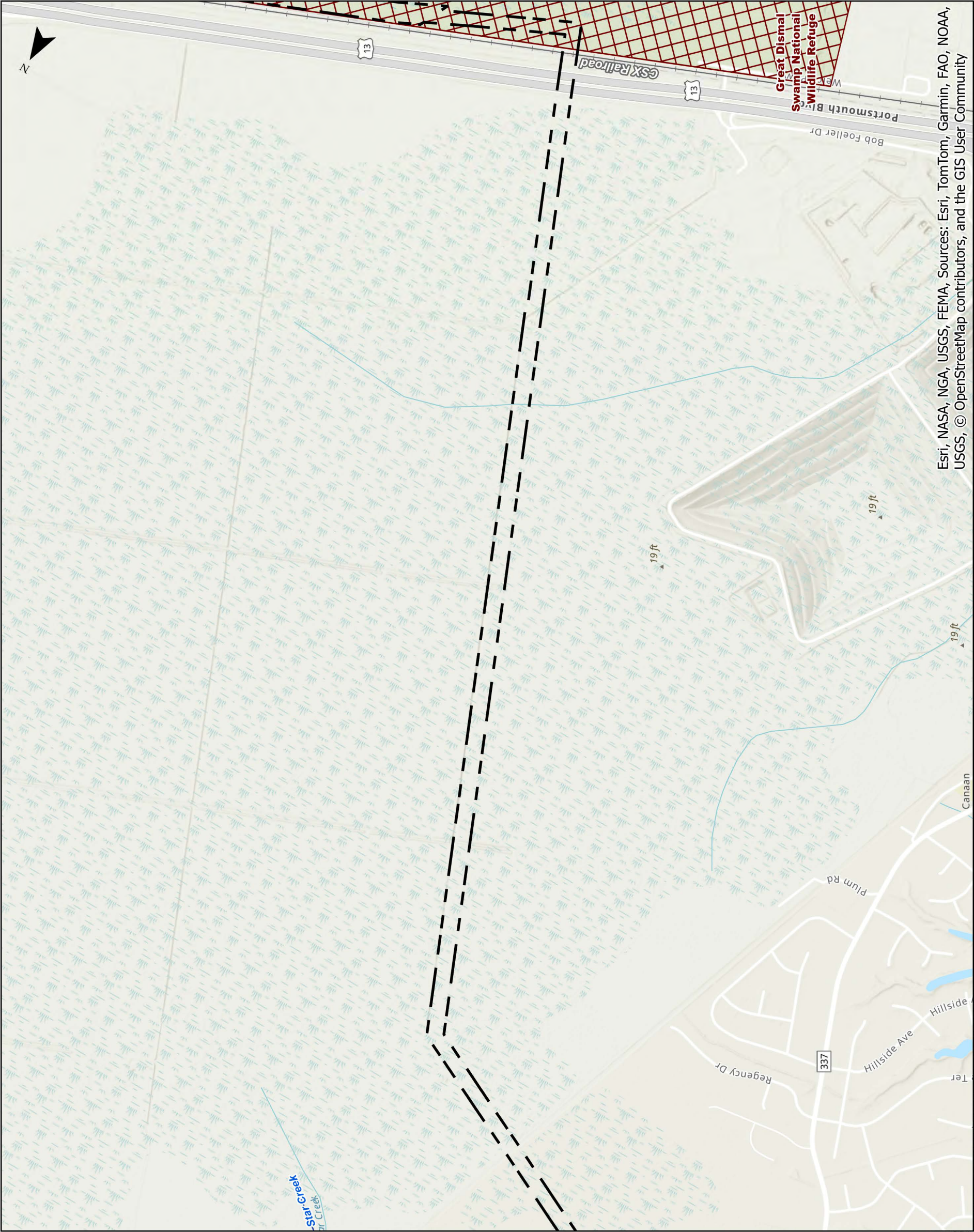
C2 Env Project: 0265  
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Date: 5/6/2025



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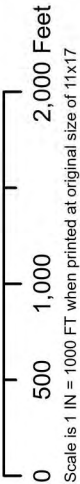
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City of Chesapeake, Isle of Wight County and  
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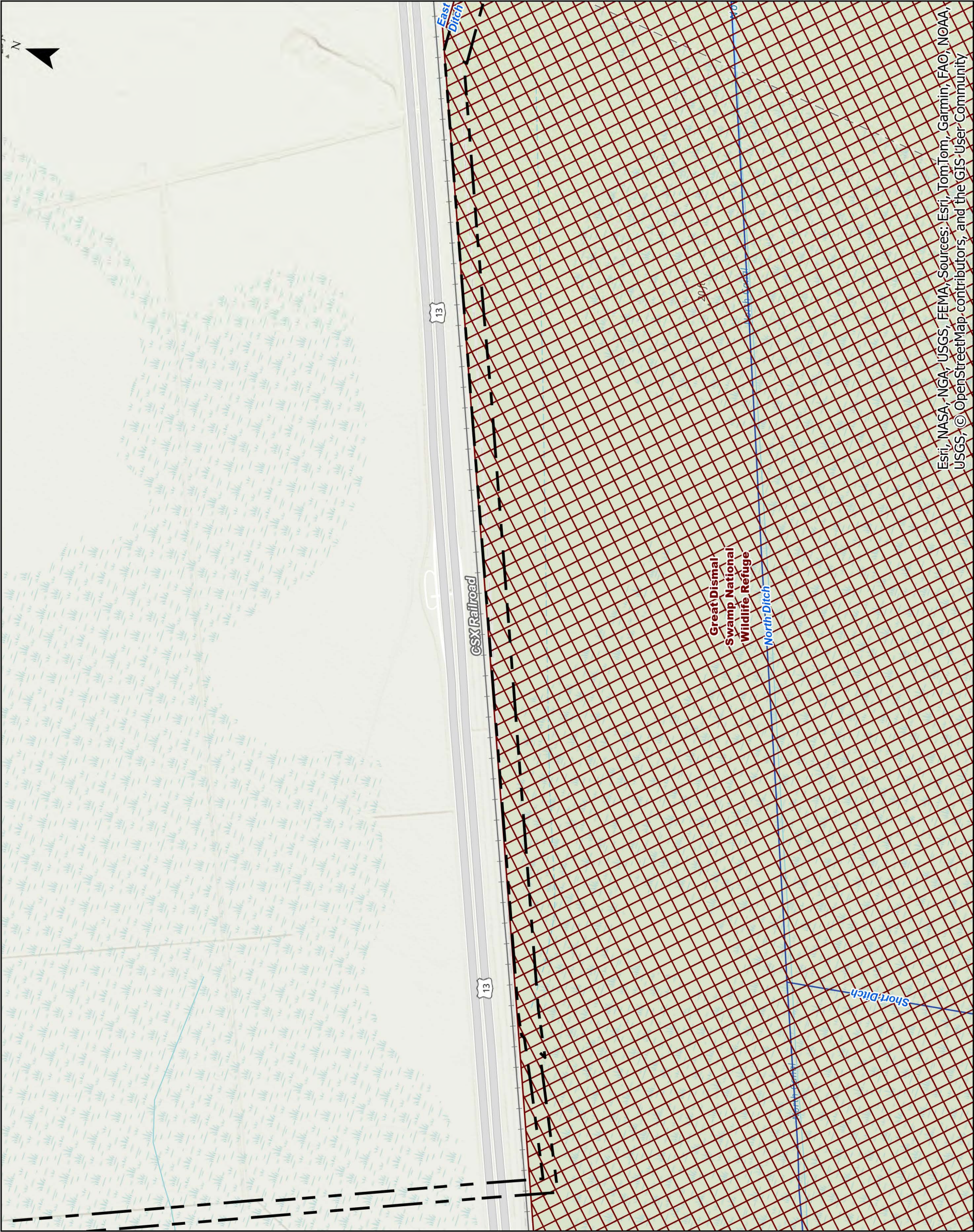
C2 Env Project: 0265  
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Date: 5/6/2025



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ATTACHMENT II.A.6  
CONSERVATION EASEMENTS MAP

Septa - Yadkin 500 kV Line #579 Rebuild and  
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City of Chesapeake, Isle of Wight County and  
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Client:  
Dominion Energy Virginia

C2 Env Project: 0265      Prepared By: KAS      Date: 5/6/2025

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Existing Right-of-Way

Existing Substation/Switching Station

Dominion Station Parcel

City of Suffolk Owned Land

City of Chesapeake Owned Land

Federally Owned Land

Isle of Wight PACE Easement

Chesapeake Wetland Mitigation Bank Easement

Virginia Outdoors Foundation Easement

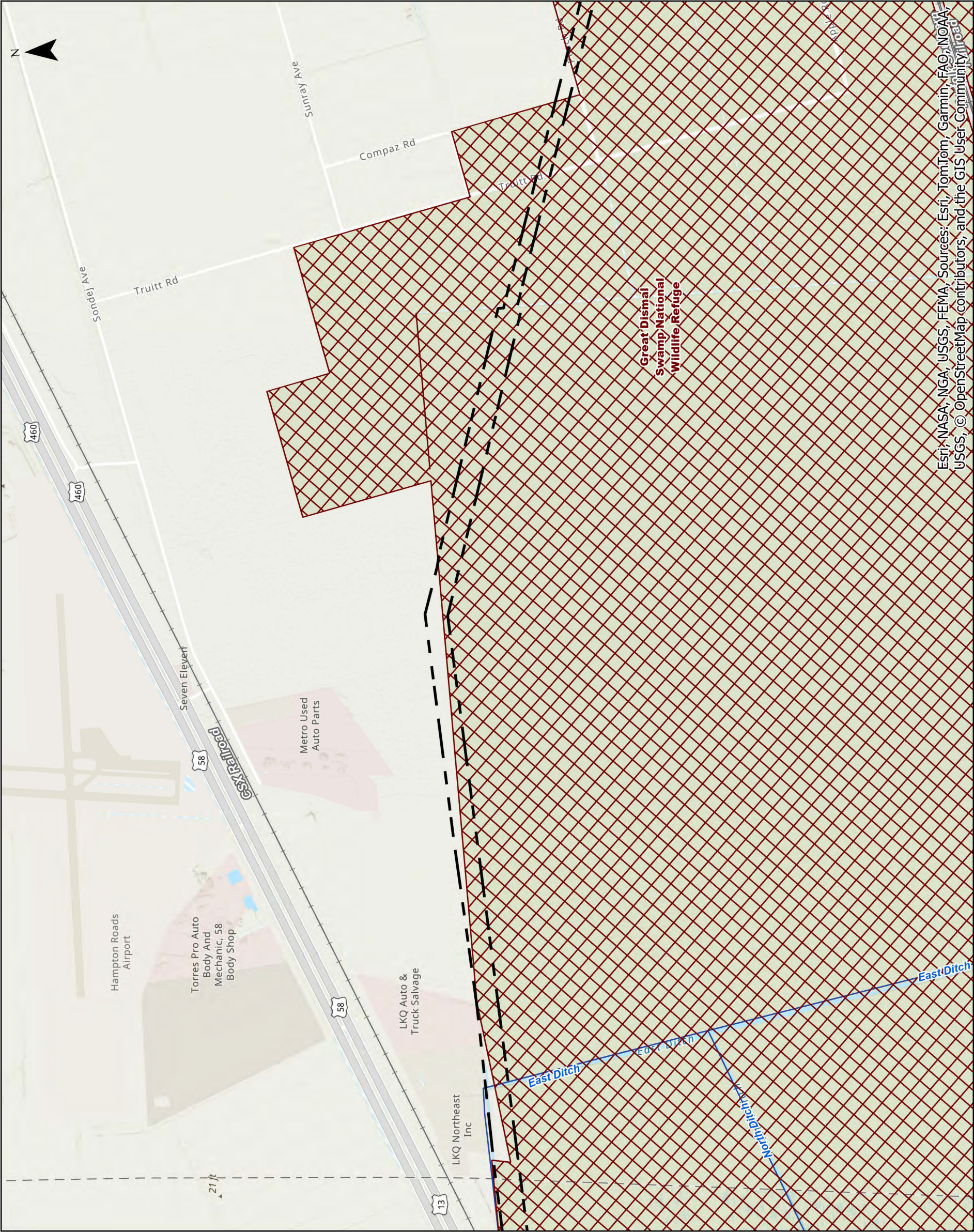
Virginia Department of Forestry Easement

USGS National Hydrography Stream Centerline

Railroad







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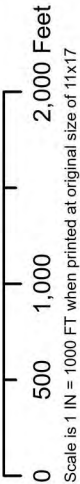
ATTACHMENT II.A.6  
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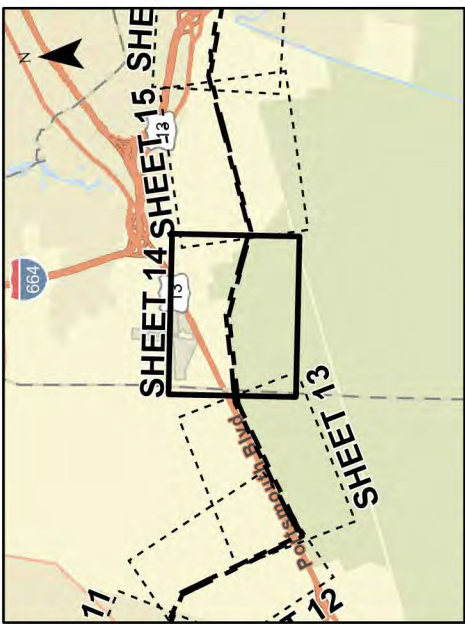
City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

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Dominion Energy Virginia

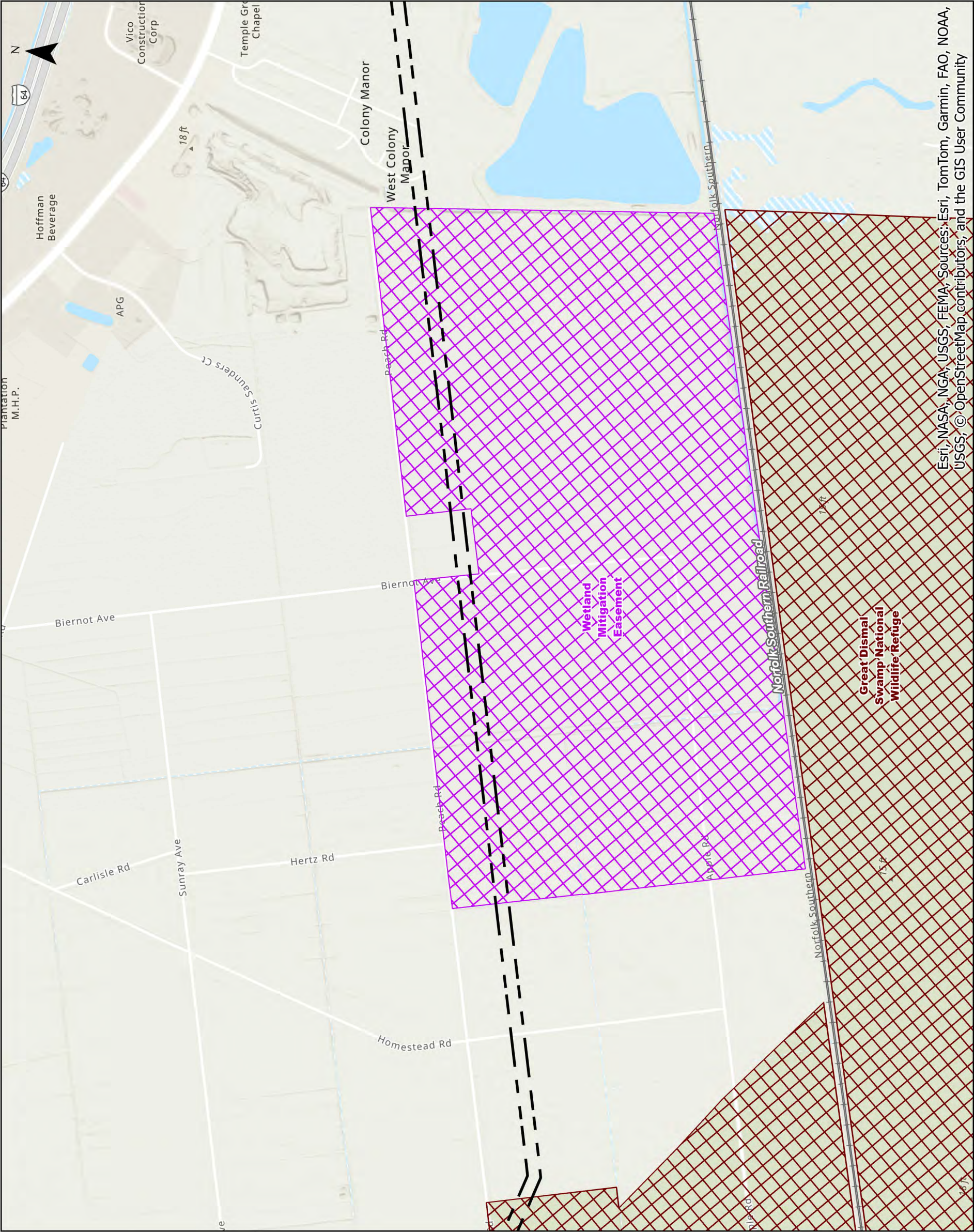
C2 Env Project: 0265  
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Date: 5/6/2025



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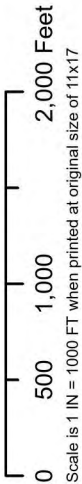
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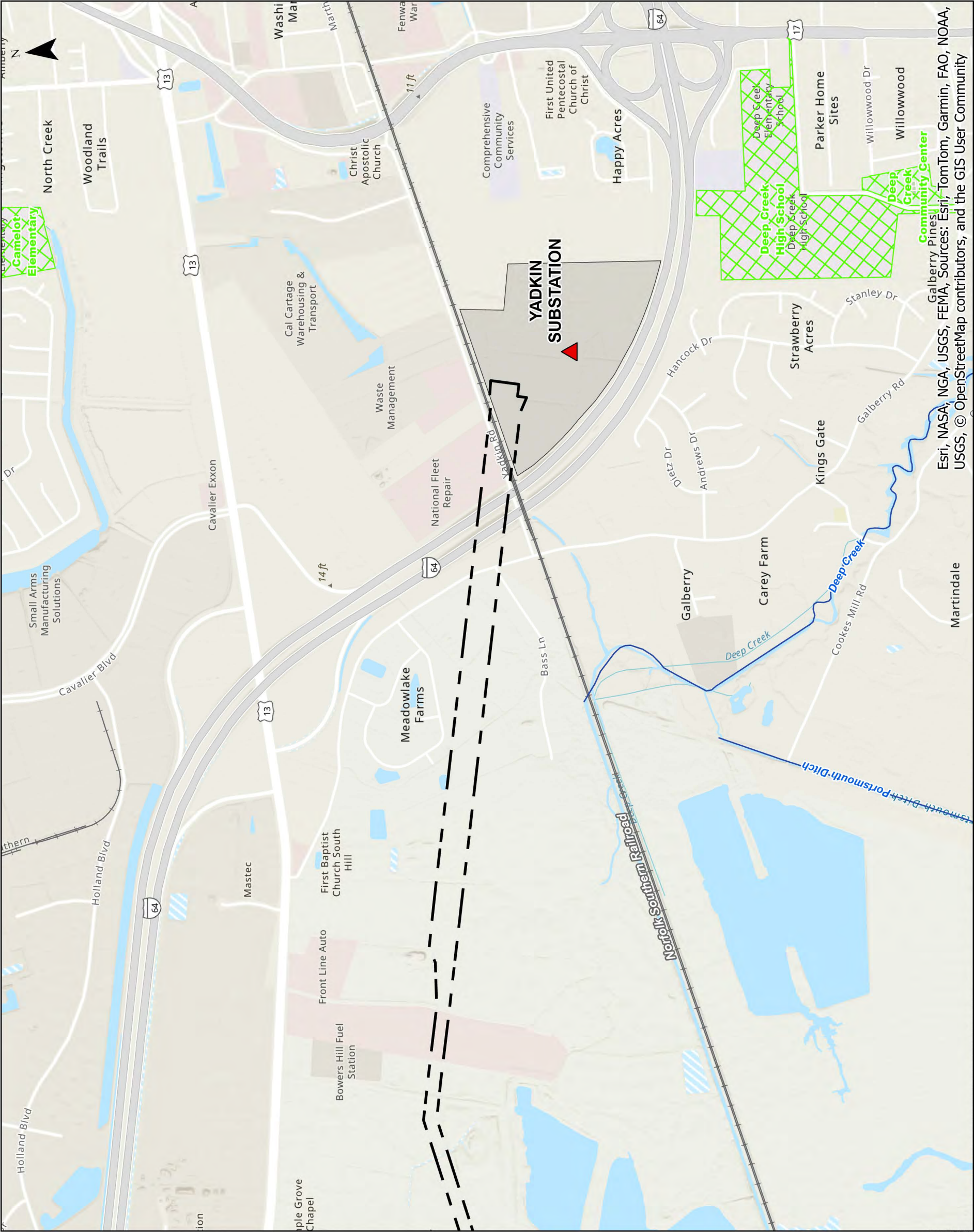


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ATTACHMENT II.A.6  
**CONSERVATION EASEMENTS MAP**  
Septa - Yadkin 500 kV Line #579 Rebuild and  
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City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

Client:  
Dominion Energy Virginia

C2 Env Project: 0265 Prepared By: KAS Date: 5/6/2025

0

500

1,000

2,000 Feet

Scale is 1 IN = 1000 FT when printed at original size of 11x17

Existing Right-of-Way

Existing Substation/Switching Station

Dominion Station Parcel

City of Suffolk Owned Land

City of Chesapeake Owned Land

Federally Owned Land

Isle of Wight PACE Easement

Chesapeake Wetland Mitigation Bank Easement

Virginia Outdoors Foundation Easement

Virginia Department of Forestry Easement

USGS National Hydrography Stream Centerline

Railroad





## II. DESCRIPTION OF THE PROPOSED PROJECT

### A. Right-of-way (“ROW”)

#### 7. **Detail the proposed ROW clearing methods to be used and the ROW restoration and maintenance practices planned for the proposed project.**

Response: The Rebuild Project will be constructed entirely within the existing right-of-way, which varies in width from 130 to 350 feet wide. As such, additional clearing is not necessary, but the existing right-of-way is currently and will continue to be maintained for the operation of the existing transmission facilities consistent with the Company’s approved maintenance practices.

Trimming of tree limbs along the edge of the right-of-way also may be conducted to support construction activities for the Rebuild Project. For any such minimal clearing within the right-of-way, trees will be cut to no more than three inches above ground level. Trees located outside of the right-of-way that are tall enough to potentially impact the transmission facilities, commonly referred to as “danger trees,” may also need to be cut. Danger trees will be cut to be no more than three inches above ground level, limbed, and will remain where felled. Debris that is adjacent to homes will be disposed of by chipping or removal. In other areas, debris may be mulched or chipped as practicable. Danger tree removal will avoid land disturbance in wetland areas and within 100 feet of streams, if applicable. Care will be taken not to leave debris in streams or wetland areas. Matting will be used for heavy equipment in these areas. Erosion control devices will be used where applicable on an ongoing basis during all clearing and construction activities accompanied by weekly Virginia Stormwater Management Program inspections.

Erosion control will be maintained and temporary stabilization for all soil disturbing activities will be used until the right-of-way has been restored. Upon completion of the Rebuild Project, the Company will restore the right-of-way utilizing site rehabilitation procedures outlined in the Company’s *Standards & Specifications for Erosion & Sediment Control and Stormwater Management for Construction and Maintenance of Linear Electric Transmission Facilities* that was approved by the Virginia Department of Environmental Quality (“DEQ”). Time of year and weather conditions may affect when permanent stabilization takes place.

This right-of-way will continue to be maintained on a regular cycle to prevent interruptions to electric service and provide ready access to the right-of-way to patrol and make emergency repairs. Periodic maintenance to control woody growth will consist of hand cutting, machine mowing and/or herbicide application.

## **II. DESCRIPTION OF THE PROPOSED PROJECT**

### **A. Right-of-way (“ROW”)**

#### **8. Indicate the permitted uses of the proposed ROW by the easement landowner and the Applicant.**

Response: Any non-transmission use will be permitted that:

- Is in accordance with the terms of the easement agreement for the right-of-way;
- Is consistent with the safe maintenance and operation of the transmission lines;
- Will not restrict future line design flexibility; and
- Will not permanently interfere with future construction.

Subject to the terms of the easement, examples of typical permitted uses include but are not limited to:

- Agriculture
- Hiking Trails
- Fences
- Perpendicular Road Crossings
- Perpendicular Utility Crossings
- Residential Driveways
- Wildlife / Pollinator Habitat



## II. DESCRIPTION OF THE PROPOSED PROJECT

### A. Right-of-way (“ROW”)

9. **Describe the Applicant’s route selection procedures. Detail the feasible alternative routes considered. For each such route, provide the estimated cost and identify and describe the cost classification (e.g. “conceptual cost,” “detailed cost,” etc.). Describe the Applicant’s efforts in considering these feasible alternatives. Detail why the proposed route was selected and other feasible alternatives were rejected. In the event that the proposed route crosses, or one of the feasible routes was rejected in part due to the need to cross, land managed by federal, state, or local agencies or conservation easements or open space easements qualifying under §§ 10.1-1009 – 1016 or §§ 10.1-1700 – 1705 of the Code (or a comparable prior or subsequent provision of the Code), describe the Applicant’s efforts to secure the necessary ROW.**

Response: The Company’s route selection for transmission line rebuild projects begins with a review of existing rights-of-way. This approach generally minimizes impacts on the natural and human environments. This approach is also consistent with Attachment 1 of these Guidelines, which provides a tool routinely used by the Company in routing its transmission line projects. Specifically, this approach is consistent with Guideline #1, which states that existing rights-of-way should be given priority when adding new transmission facilities, and Va. Code §§ 56-46.1 and 56-259, which promote the use of existing rights-of-way for new transmission facilities. For the proposed Rebuild Project, the existing transmission corridor right-of-way that currently contains Line #579 and Line #2110 (as well as other 230 kV and 115 kV lines at various segments of the corridor) is adequate.

Because the existing right-of-way and Company property rights are adequate to construct the proposed Rebuild Project, no new right-of-way is necessary. Given the availability of existing right-of-way and the statutory preference given to the use of existing right-of-way, and because additional costs and environmental impacts would be associated with the acquisition of and construction on new right-of-way, the Company did not consider any alternate routes requiring new right-of-way for the Rebuild Project.

See Attachment II.A.6 for conservation easements crossed by the proposed Rebuild Project. As noted previously, these conservation easements were created after establishment of the existing transmission corridor.

## II. DESCRIPTION OF THE PROPOSED PROJECT

### A. Right-of-way (“ROW”)

10. **Describe the Applicant’s construction plans for the project, including how the Applicant will minimize service disruption to the affected load area. Include requested and approved line outage schedules for affected lines as appropriate.**

Response: The Company plans to construct the Rebuild Project in a manner that minimizes outage times on Line #579 and Line #2110. Assuming the Commission issues a final order by February 28, 2026, and construction commences around June 1, 2026, the Company estimates that construction of the Rebuild Project will require three outages of Line #579 in summer-winter 2026, spring-winter 2027, and spring-winter 2028, and two outages of Line #2110 in spring-winter 2027 and spring-winter 2028, in order for the Rebuild Project to be completed by June 1, 2029. The Company additionally anticipates short outages will be required on Lines #214, #226, #290, #223, and #289, which will be scheduled as timing allows.

The Company intends to complete this work during requested outage windows, as described above. However, as with all outage scheduling, these timeframes may change depending on whether PJM approves the outages and other relevant considerations allow for it. It is customary for PJM to hold requests for outages and approve only shortly before the outages are expected to occur and, therefore, the requested outages are subject to change. Therefore, the Company will not have clarity on whether this work will be done as requested until very close in time to the requested outages. If PJM approves different outage dates, the Company will continue to diligently pursue timely completion of this work.

## **II. DESCRIPTION OF THE PROPOSED PROJECT**

### **A. Right-of-way (“ROW”)**

#### **11. Indicate how the construction of this transmission line follows the provisions discussed in Attachment 1 of these Guidelines.**

Response: Attachment 1 to these Guidelines provides a tool routinely used by the Company in routing its transmission line projects.

The Company utilized Guideline #1 by siting the Rebuild Project entirely within an existing transmission line right-of-way corridor (to the extent permitted by the property interest involved, rights-of-way should be selected with the purpose of minimizing conflict between the rights-of-way and present and prospective uses of the land on which they are to be located. To this end, existing rights-of-way should be given the priority as the locations for additions to existing transmission facilities, and the joint use of existing rights-of-way by different kinds of utility services should be considered).

By utilizing the existing transmission corridor, the proposed Rebuild Project will minimize impact to any site listed on the National Register of Historic Places (“NRHP”). Thus, the Rebuild Project is consistent with Guideline #2 (where practical, rights-of-way should avoid sites listed on the NRHP). In any event, the Company will coordinate with the Virginia Department of Historic Resources (“VDHR”) regarding its plans prior to final engineering and construction of the Rebuild Project to avoid or minimize impacts. A Stage I Pre-Application Analysis prepared by Dutton + Associates on behalf of the Company was submitted to the VDHR on June 4, 2025.

The Company has communicated with a number of local, state, and federal agencies prior to filing this application consistent with Guideline #4 (where government land is involved the applicant should contact the agencies early in the planning process). In particular, the Company consulted with the City of Chesapeake, City of Suffolk, and Isle of Wight County regarding the Rebuild Project. See Sections III.B, III.J, and V.D of this Appendix.

The Company follows recommended construction methods on a site-specific basis for typical construction projects (Guidelines #8, #10, #11, #15, #16, #18, and #22).

The Company also utilizes recommended guidelines in the clearing of transmission line rights-of-way, constructing facilities, and maintaining rights-of-way after construction. Moreover, secondary uses of rights-of-way that are consistent with the safe maintenance and operation of facilities are permitted, as noted in Section II.A.8.



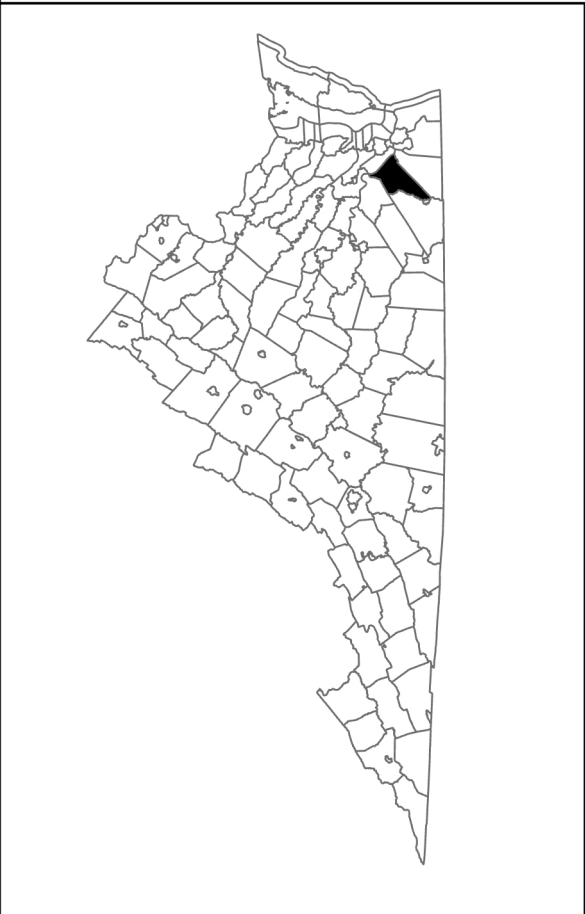
## II. DESCRIPTION OF THE PROPOSED PROJECT

### A. Right-of-way (“ROW”)

12. a. Detail counties and localities through which the line will pass. If any portion of the line will be located outside of the Applicant’s certificated service area: (1) identify each electric utility affected; (2) state whether any affected electric utility objects to such construction; and (3) identify the length of line(s) proposed to be located in the service area of an electric utility other than the Applicant; and
- b. Provide three (3) color copies of the Virginia Department of Transportation “General Highway Map” for each county and city through which the line will pass. On the maps show the proposed line and all previously approved and certificated facilities of the Applicant. Also, where the line will be located outside of the Applicant’s certificated service area, show the boundaries between the Applicant and each affected electric utility. On each map where the proposed line would be outside of the Applicant’s certificated service area, the map must include a signature of an appropriate representative of the affected electric utility indicating that the affected utility is not opposed to the proposed construction within its service area.

- Response:
- a. The proposed Rebuild Project crosses the City of Chesapeake (approximately 6.2 miles), the City of Suffolk (approximately 13.1 miles), and Isle of Wight County (approximately 13.8 miles) for a total of approximately 33.1 miles. Approximately 22.8 miles of the Rebuild Project are located within Dominion Energy Virginia’s service territory, and approximately 10.3 miles of the Rebuild Project are located within Community Electric Cooperative’s (“CEC”) service territory in Isle of Wight County. The Company has confirmed that CEC does not object to the Rebuild Project. See Attachment II.A.12.b.i.
- b. Electronic copies of the VDOT “General Highway Map” for Isle of Wight County and Southeastern Metropolitan Area (which includes the City of Chesapeake and the City of Suffolk) have been marked as required and submitted with the Application. A reduced copy of the Isle of Wight County map is provided as Attachment II.A.12.b.i., and a reduced copy of the Southeastern Metropolitan Area Road Map is provided as Attachment II.A.12.b.ii.

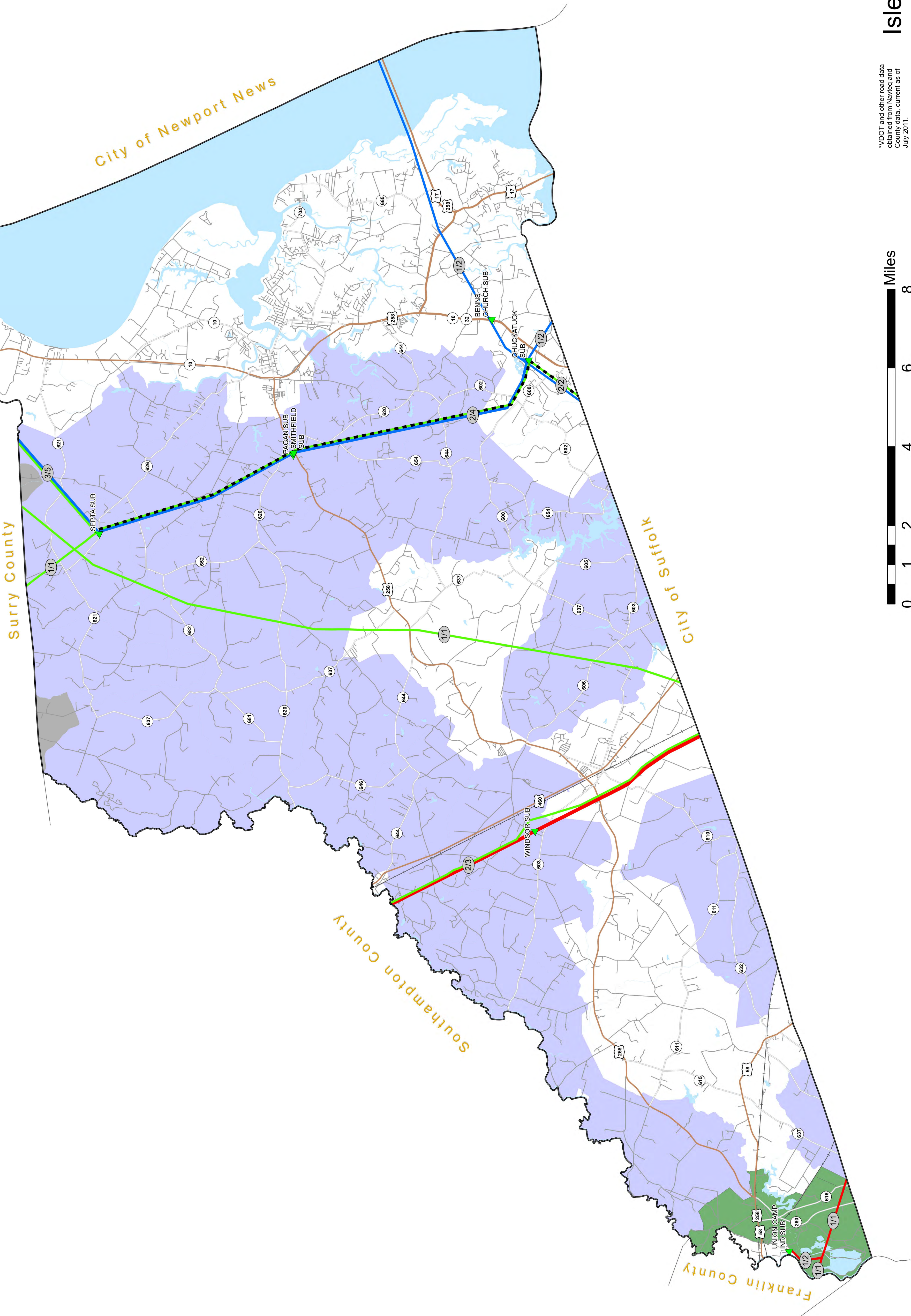
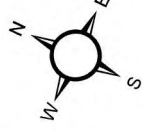




This digital map depicts the Virginia Electric and Power Company ("Company") transmission facilities in this county as approved by the Virginia State Corporation Commission ("SCC"), and any proposed transmission facilities in this county, as of 2/13/25. Other company facilities previously authorized by the SCC are shown in black on prior SCC approved county maps.

# Isle of Wight County Road Map

James City County



VIRGINIA ELECTRIC AND POWER COMPANY  
PLANS TO BUILD TRANSMISSION LINES AND  
SUBSTATIONS AS SHOWN IN BLACK DASHES  
ON THIS MAP.

Community Electric Cooperative  
IS NOT OPPOSED TO SUCH CONSTRUCTION IN  
ITS SERVICE TERRITORY.

SIGNATURE *Jonathan D. Thompson* Jonathan D Thompson

DATE 5/13/2025 TITLE Chief Operations Officer

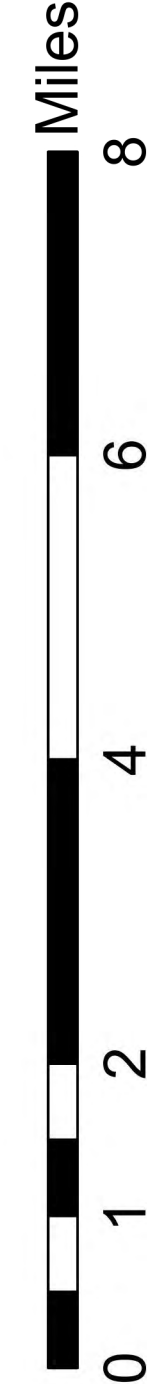
**Legend**

- Existing Substation
- Project Centerline
- 115 kV
- 230 kV
- 500 kV
- Railroad
- Number of Lines of Structures/  
Number of Circuits

**Provider Service Territory**

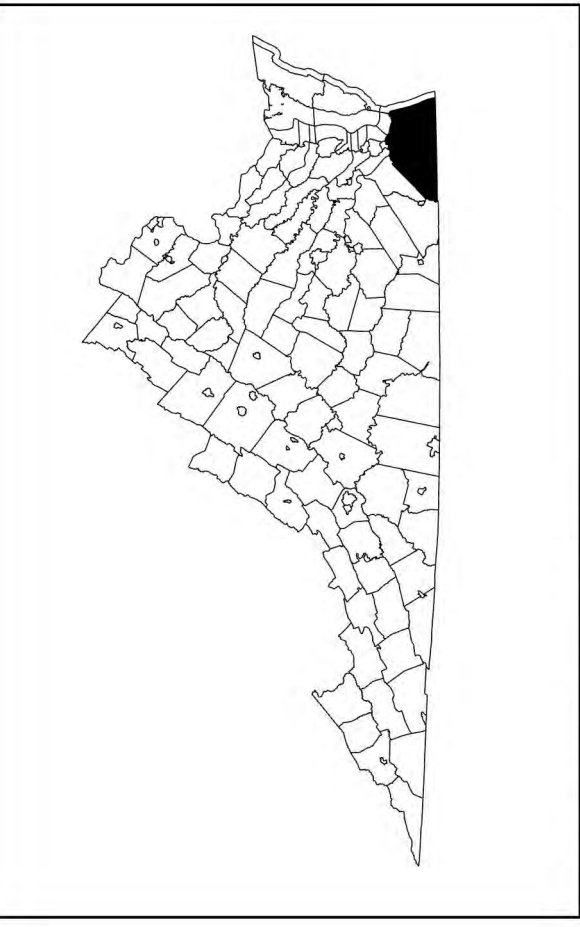
VEPCO
CEC
PG&E
Franklin

\*VDOT and other road data  
obtained from Virginia  
County data, current as of  
July 2011.

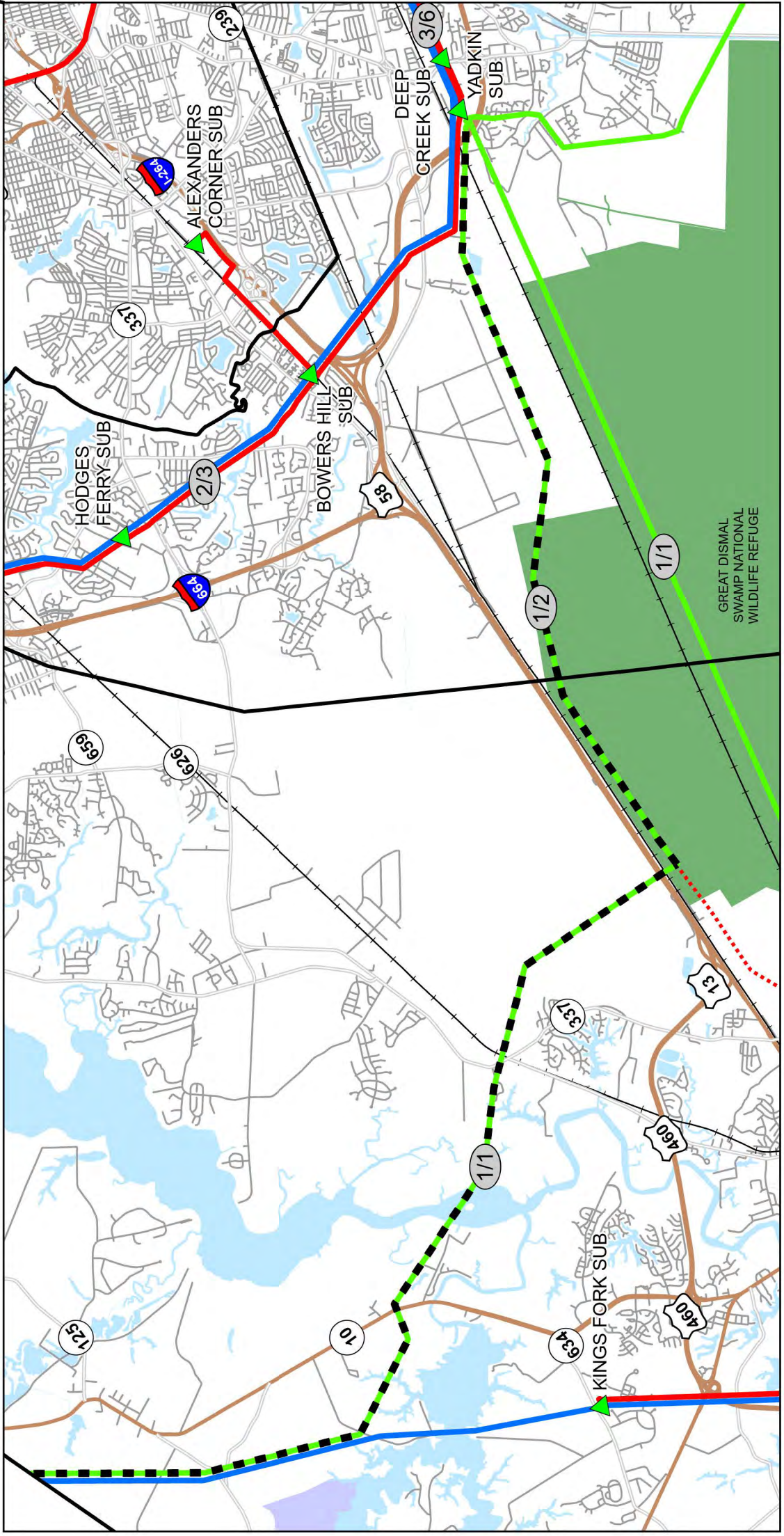
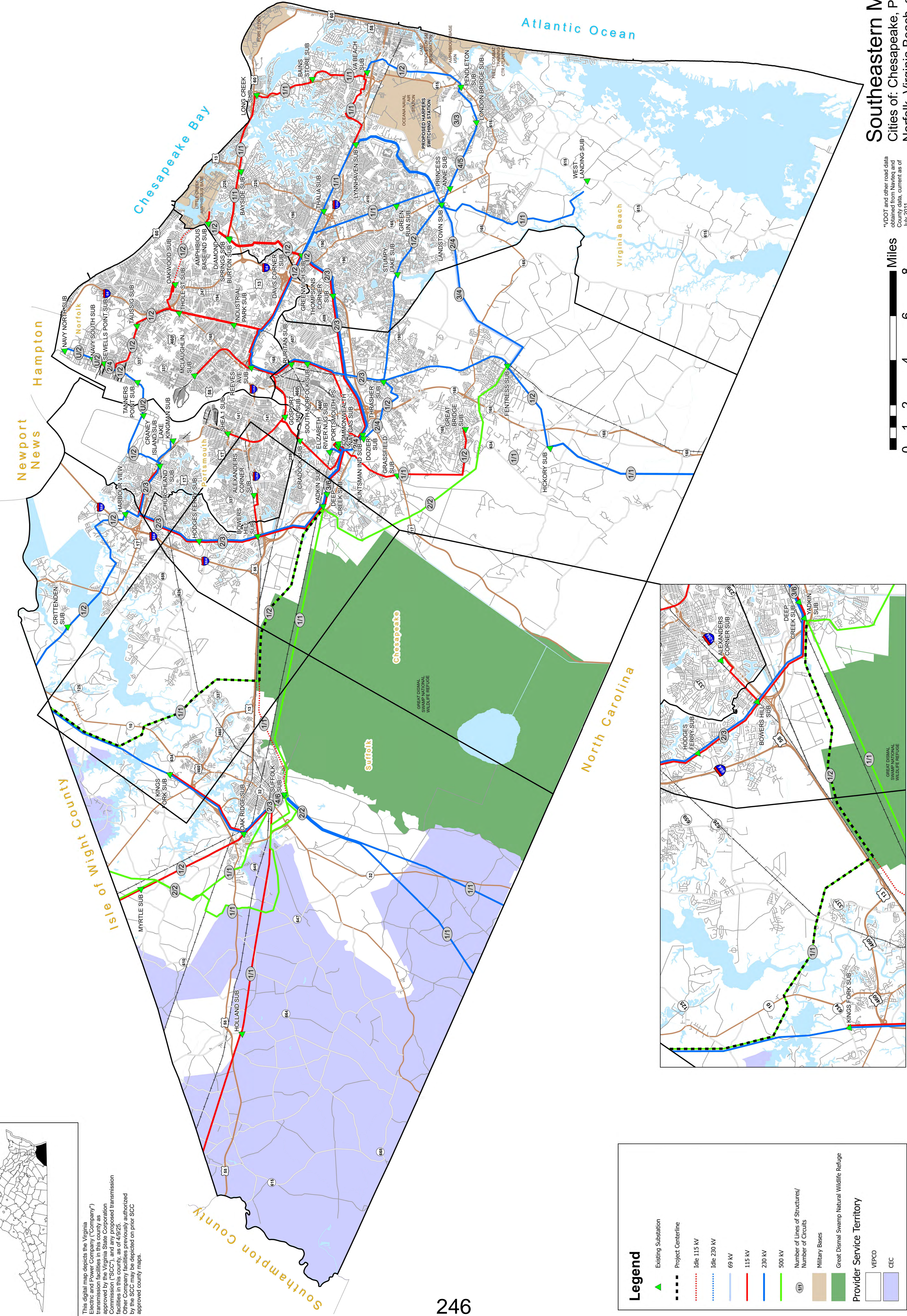




# Southeastern Metropolitan Area Road Map



This digital map depicts the Virginia Electric Power Company's ("VEPCO") transmission facilities in this county as approved by the Virginia State Corporation Commission ("SCC"), and any proposed transmission facilities in this county, as of 4/9/25. Other Company facilities previously authorized by the SCC may be depicted on prior SCC approved county maps.



Legend

Existing Substation

Project Centerline

Idle 115 kV

Idle 230 kV

69 kV

115 kV

230 kV

500 kV

Number of Lines of Structures/  
Number of Circuits

Military Bases

Great Dismal Swamp Natural Wildlife Refuge

Provider Service Territory

VEPCO

CEC

0 1 2 4 6 8 Miles

\*VDOT and other road data obtained from Navteq and Google Maps, current as of July 2011.

**Southeastern Metropolitan Area**  
Cities of: Chesapeake, Portsmouth  
Norfolk, Virginia Beach, and Suffolk



## **II. DESCRIPTION OF THE PROPOSED PROJECT**

### **B. Line Design and Operational Features**

- 1. Detail the number of circuits and their design voltage, initial operational voltage, any anticipated voltage upgrade, and transfer capabilities.**

Response: The approximately 33.1-mile Line #579 proposed for rebuild will be designed and operated at 500 kV with no anticipated voltage upgrade and will have a transfer capability of 4,357 MVA.

The 7.7-mile segment of Line #2110 proposed for partial rebuild will be designed and operated at 230 kV with no anticipated voltage upgrade and will have a summer transfer capability 1,573 MVA.

## **II. DESCRIPTION OF THE PROPOSED PROJECT**

### **B. Line Design and Operational Features**

- 2. Detail the number, size(s), type(s), coating and typical configurations of conductors. Provide the rationale for the type(s) of conductor(s) to be used.**

Response: The proposed conductor for the Line #579 Rebuild will include three-phase triple-bundled 1351.5 ACSR conductor arranged as shown in Attachments II.B.3.a-i. The three-phase triple-bundled 1351.5 ACSR conductors are a Company standard for new 500 kV construction.

The proposed conductor for the Line #2110 Partial Rebuild will be three-phase twin-bundled 768.2 ACSS/TW/HS type conductor arranged as shown in Attachments II.B.3.g-i. The twin-bundled 768.2 ACSS/TW/HS conductors are a Company standard for new 230 kV construction.

## **II. DESCRIPTION OF THE PROPOSED PROJECT**

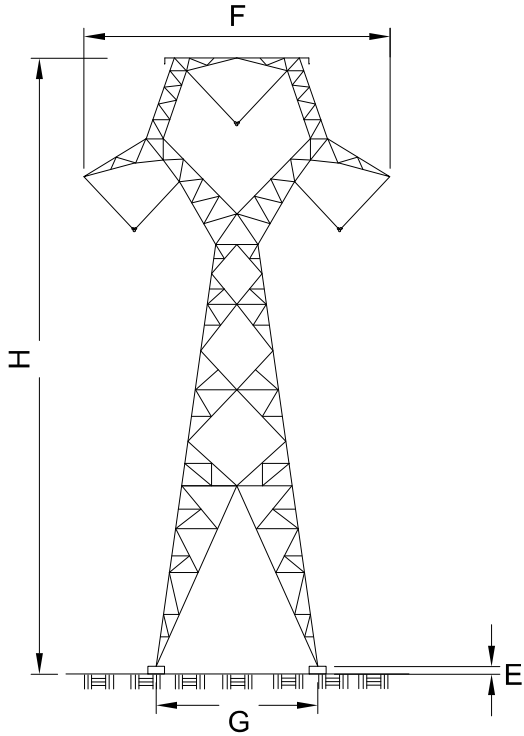
### **B. Line Design and Operational Features**

- 3. With regard to the proposed supporting structures over each portion of the ROW for the preferred route, provide diagrams (including foundation reveal) and descriptions of all the structure types, to include:**
  - a. mapping that identifies each portion of the preferred route;**
  - b. the rationale for the selection of the structure type;**
  - c. the number of each type of structure and the length of each portion of the ROW;**
  - d. the structure material and rationale for the selection of such material;**
  - e. the foundation material;**
  - f. the average width at cross arms;**
  - g. the average width at the base;**
  - h. the maximum, minimum and average structure heights;**
  - i. the average span length; and**
  - j. the minimum conductor-to-ground clearances under maximum operating conditions.**


Response: See Attachments II.B.3.a-i for subparts (b)-(j).

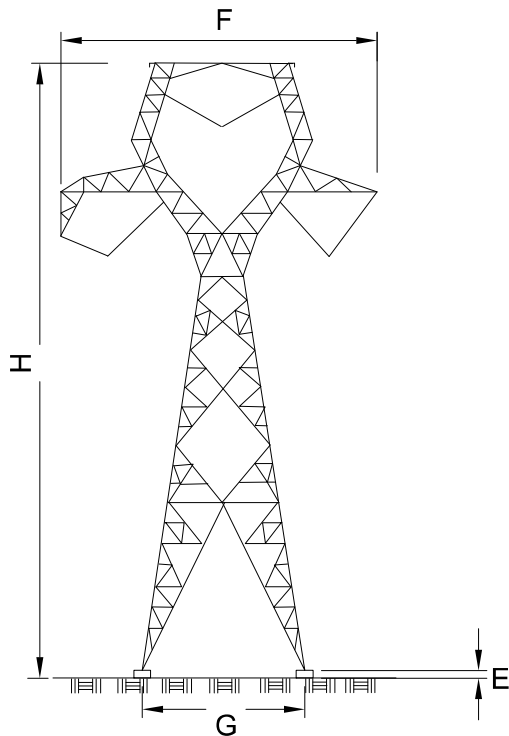
For subpart (a), see Attachment II.B.3.j for approximate mapping of the proposed structures for the Rebuild Project, which is subject to change during final engineering.





**SINGLE CIRCUIT SUSPENSION TOWER STRUCTURE**


B. RATIONALE FOR STRUCTURE TYPE:		TYPICAL 500KV SUSPENSION TOWER, TIGHTER WIRE SPACING THAN EXISTING
C. LENGTH OF R/W (STRUCTURE QUANTITY):		21.1 MILES (112 STRUCTURES)
D. STRUCTURE MATERIAL:		DULLED GALVANIZED STEEL
RATIONALE FOR STRUCTURE MATERIAL:		TYPICAL TOWER FINISH FOR PROPOSED STRUCTURES
E. FOUNDATION MATERIAL:		STEEL H-PILES
AVERAGE FOUNDATION REVEAL:		SEE NOTE 4
F. AVERAGE WIDTH AT CROSSARM:		72.6'
G. AVERAGE WIDTH AT BASE:		VARIES BASED ON TOWER HEIGHT - 35' ON AVERAGE
H. MINIMUM STRUCTURE HEIGHT:		115'
MAXIMUM STRUCTURE HEIGHT:		180'
AVERAGE STRUCTURE HEIGHT:		137'
I. AVERAGE SPAN LENGTH:		996'
J. MINIMUM CONDUCTOR-TO-GROUND:		30.9' (AT MAXIMUM OPERATING TEMPERATURE)
<b>NOTES</b> <div><div>1. INFORMATION ON DRAWING IS PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL ENGINEERING</div><div>2. INDIVIDUAL POLE HEIGHTS ABOVE GROUND MAY VARY SUBJECT TO FINAL LOCATION AND TERRAIN</div><div>3. STRUCTURE HEIGHTS ARE MEASURED FROM STRUCTURE CENTERLINE</div><div>4. MINIMUM FOUNDATION REVEAL SHALL BE 1.5', MAX REVEAL SUBJECT TO FINAL LOCATION AND TERRAIN</div></div>		
Electric Transmission		STRUCTURES 579/3-579/16, 579/18-579/29, 579/31-579/59, 579/61-579/63, 579/65, 579/68-579/84, 579/86-579/89, 579/91-579/93, 579/95-579/99, 579/101, 579/103-579/106, 579/111-579/114, 579/116-579/121, 579/123-579/131
<div><div> <b>Dominion Energy</b></div><div>Dominion Energy 5000 Dominion Blvd Glen Allen, VA 23060</div></div>		
		DRAWING NO. Attachment II.B.3.a
		DRAWN RAJ

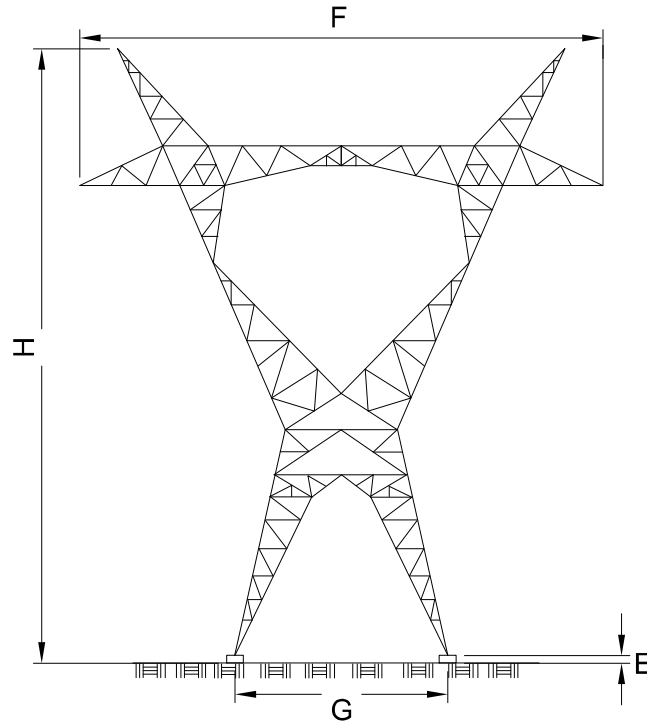


# SINGLE CIRCUIT RUNNING ANGLE TOWER STRUCTURE

B. RATIONALE FOR STRUCTURE TYPE:	TYPICAL 500KV SMALL ANGLE TOWER
C. LENGTH OF R/W (STRUCTURE QUANTITY):	1.5 MILES (9 STRUCTURES)
D. STRUCTURE MATERIAL:	DULLED GALVANIZED STEEL
RATIONALE FOR STRUCTURE MATERIAL:	TYPICAL TOWER FINISH FOR PROPOSED STRUCTURES
E. FOUNDATION MATERIAL:	STEEL H-PILES
AVERAGE FOUNDATION REVEAL:	SEE NOTE 4
F. AVERAGE WIDTH AT CROSSARM:	75'
G. AVERAGE WIDTH AT BASE:	VARIES BASED ON TOWER HEIGHT - 35' ON AVERAGE
H. MINIMUM STRUCTURE HEIGHT:	116'
MAXIMUM STRUCTURE HEIGHT:	176'
AVERAGE STRUCTURE HEIGHT:	136'
I. AVERAGE SPAN LENGTH:	904'
J. MINIMUM CONDUCTOR-TO-GROUND:	30.9' (AT MAXIMUM OPERATING TEMPERATURE)

<b>NOTES</b>	1. INFORMATION ON DRAWING IS PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL ENGINEERING
	2. INDIVIDUAL POLE HEIGHTS ABOVE GROUND MAY VARY SUBJECT TO FINAL LOCATION AND TERRAIN
	3. STRUCTURE HEIGHTS ARE MEASURED FROM STRUCTURE CENTERLINE
	4. MINIMUM FOUNDATION REVEAL SHALL BE 1.5', MAX REVEAL SUBJECT TO FINAL LOCATION AND TERRAIN

<div>Electric Transmission</div> <div>  <div>                     Dominion Energy                      5000 Dominion Blvd                      Glen Allen, VA 23060                 </div> </div>	<div>STRUCTURES</div> <div>579/2, 579/17, 579/30, 579/64, 579/66, 579/85, 579/90, 579/110, 579/115</div>	<div>DRAWING NO.</div> <div>Attachment II.B.3.b</div>
		<div>DRAWN</div> <div>RAJ</div>



### SINGLE CIRCUIT DEADEND TOWER STRUCTURE

B. RATIONALE FOR STRUCTURE TYPE:	USED FOR MODERATE ANGLES AND WIRE PULLING LOCATIONS
C. LENGTH OF R/W (STRUCTURE QUANTITY):	0.4 MILES (3 STRUCTURES)
D. STRUCTURE MATERIAL:	DULLED GALVANIZED STEEL
RATIONALE FOR STRUCTURE MATERIAL:	TYPICAL TOWER FINISH FOR PROPOSED STRUCTURES
E. FOUNDATION MATERIAL:	STEEL H-PILES
AVERAGE FOUNDATION REVEAL:	SEE NOTE 4
F. AVERAGE WIDTH AT CROSSARM:	91.75'
G. AVERAGE WIDTH AT BASE:	VARIES BASED ON TOWER HEIGHT - 48' ON AVERAGE
H. MINIMUM STRUCTURE HEIGHT:	112'
MAXIMUM STRUCTURE HEIGHT:	162'
AVERAGE STRUCTURE HEIGHT:	132'
I. AVERAGE SPAN LENGTH:	782'
J. MINIMUM CONDUCTOR-TO-GROUND:	30.9' (AT MAXIMUM OPERATING TEMPERATURE)

#### NOTES

1. INFORMATION ON DRAWING IS PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL ENGINEERING
2. INDIVIDUAL POLE HEIGHTS ABOVE GROUND MAY VARY SUBJECT TO FINAL LOCATION AND TERRAIN
3. STRUCTURE HEIGHTS ARE MEASURED FROM STRUCTURE CENTERLINE
4. MINIMUM FOUNDATION REVEAL SHALL BE 1.5', MAX REVEAL SUBJECT TO FINAL LOCATION AND TERRAIN

Electric Transmission

STRUCTURES  
579/60, 579/67, 579/94

DRAWING NO.

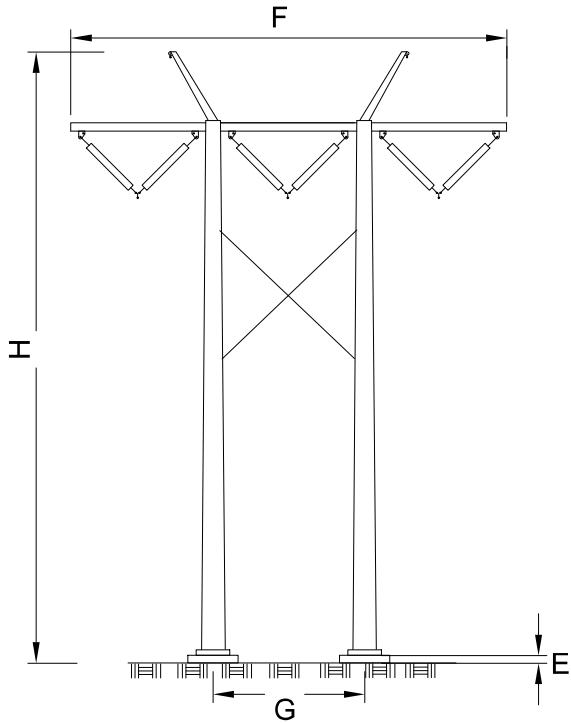
Attachment II.B.3.c



Dominion Energy  
5000 Dominion Blvd  
Glen Allen, VA 23060

DRAWN RAJ




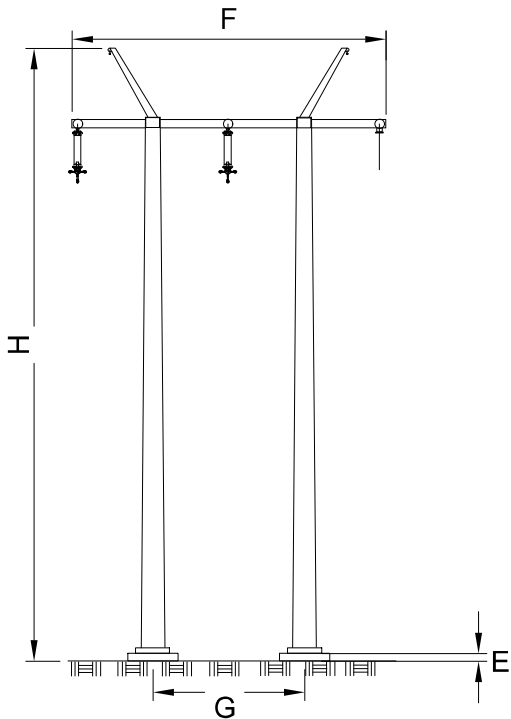


### SINGLE CIRCUIT SUSPENSION H-FRAME STRUCTURE

B. RATIONALE FOR STRUCTURE TYPE:	RIVER CROSSING & AIRPORT SECTION. USED FOR ADDITIONAL CAPACITY AND SHORTER HEIGHT
C. LENGTH OF R/W (STRUCTURE QUANTITY):	1 MILES (5 STRUCTURES)
D. STRUCTURE MATERIAL:	DULLED GALVANIZED STEEL
RATIONALE FOR STRUCTURE MATERIAL:	MATCHING ADJACENT LINES AND TOWER PORTION OF LINE
E. FOUNDATION MATERIAL:	STEEL PIPE PILES
AVERAGE FOUNDATION REVEAL:	SEE NOTE 4
F. AVERAGE WIDTH AT CROSSARM:	92.5'
G. AVERAGE WIDTH AT BASE:	34'-8"
H. MINIMUM STRUCTURE HEIGHT:	127'
MAXIMUM STRUCTURE HEIGHT:	162'
AVERAGE STRUCTURE HEIGHT:	140'
I. AVERAGE SPAN LENGTH:	1022'
J. MINIMUM CONDUCTOR-TO-GROUND:	30.9' (AT MAXIMUM OPERATING TEMPERATURE)

<b>NOTES</b>	1. INFORMATION ON DRAWING IS PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL ENGINEERING
	2. INDIVIDUAL POLE HEIGHTS ABOVE GROUND MAY VARY SUBJECT TO FINAL LOCATION AND TERRAIN
	3. STRUCTURE HEIGHTS ARE MEASURED FROM STRUCTURE CENTERLINE
	4. MINIMUM FOUNDATION REVEAL SHALL BE 1.5', MAX REVEAL SUBJECT TO FINAL LOCATION AND TERRAIN


Electric Transmission	STRUCTURES 579/107-579/109, 579/148, 579/153	DRAWING NO. Attachment II.B.3.d
 Dominion Energy 5000 Dominion Blvd Glen Allen, VA 23060		DRAWN RAJ

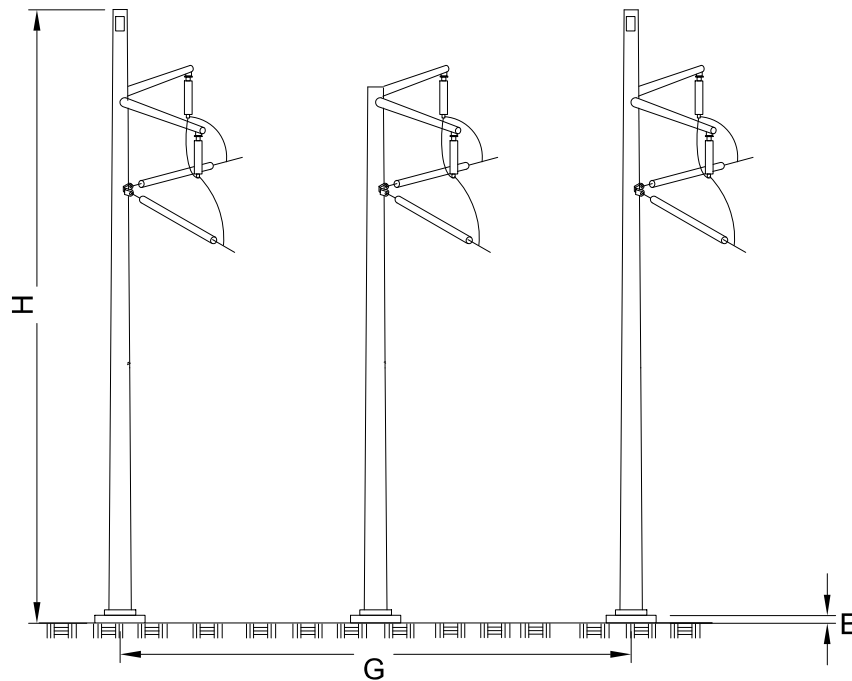


### SINGLE CIRCUIT DEADEND H-FRAME STRUCTURE

B. RATIONALE FOR STRUCTURE TYPE:	AIRPORT SECTION, SHORTEST POSSIBLE STRUCTURE HEIGHT
C. LENGTH OF R/W (STRUCTURE QUANTITY):	0.5 MILES (4 STRUCTURES)
D. STRUCTURE MATERIAL:	DULLED GALVANIZED STEEL
RATIONALE FOR STRUCTURE MATERIAL:	MATCHING ADJACENT LINES AND TOWER PORTION OF LINE
E. FOUNDATION MATERIAL:	STEEL PIPE PILES
AVERAGE FOUNDATION REVEAL:	SEE NOTE 4
F. AVERAGE WIDTH AT CROSSARM:	66.5'
G. AVERAGE WIDTH AT BASE:	33'
H. MINIMUM STRUCTURE HEIGHT:	91'
MAXIMUM STRUCTURE HEIGHT:	96'
AVERAGE STRUCTURE HEIGHT:	94'
I. AVERAGE SPAN LENGTH:	658'
J. MINIMUM CONDUCTOR-TO-GROUND:	30.9' (AT MAXIMUM OPERATING TEMPERATURE)

<b>NOTES</b>	1. INFORMATION ON DRAWING IS PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL ENGINEERING
	2. INDIVIDUAL POLE HEIGHTS ABOVE GROUND MAY VARY SUBJECT TO FINAL LOCATION AND TERRAIN
	3. STRUCTURE HEIGHTS ARE MEASURED FROM STRUCTURE CENTERLINE
	4. MINIMUM FOUNDATION REVEAL SHALL BE 1.5', MAX REVEAL SUBJECT TO FINAL LOCATION AND TERRAIN

Electric Transmission	STRUCTURES 579/149-579/152	DRAWING NO. Attachment II.B.3.e
 Dominion Energy 5000 Dominion Blvd Glen Allen, VA 23060		DRAWN RAJ



### SINGLE CIRCUIT DEADEND 3-POLE STRUCTURE

B. RATIONALE FOR STRUCTURE TYPE: HEAVY ANGLES

C. LENGTH OF R/W (STRUCTURE QUANTITY): 0.6 MILES (3 STRUCTURES)

D. STRUCTURE MATERIAL: DULLED GALVANIZED STEEL

RATIONALE FOR STRUCTURE MATERIAL: MATCHING ADJACENT LINES AND TOWER PORTION OF LINE

E. FOUNDATION MATERIAL: STEEL H-PILES  
AVERAGE FOUNDATION REVEAL: SEE NOTE 4

F. AVERAGE WIDTH AT CROSSARM: NA

G. AVERAGE WIDTH AT BASE: 78'

H. MINIMUM STRUCTURE HEIGHT: 117'  
MAXIMUM STRUCTURE HEIGHT: 132'  
AVERAGE STRUCTURE HEIGHT: 123'

I. AVERAGE SPAN LENGTH: 1017'

J. MINIMUM CONDUCTOR-TO-GROUND: 30.9' (AT MAXIMUM OPERATING TEMPERATURE)

#### NOTES

1. INFORMATION ON DRAWING IS PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL ENGINEERING
2. INDIVIDUAL POLE HEIGHTS ABOVE GROUND MAY VARY SUBJECT TO FINAL LOCATION AND TERRAIN
3. STRUCTURE HEIGHTS ARE MEASURED FROM STRUCTURE CENTERLINE
4. MINIMUM FOUNDATION REVEAL SHALL BE 1.5', MAX REVEAL SUBJECT TO FINAL LOCATION AND TERRAIN

Electric Transmission

STRUCTURES  
579/100, 579/102, 579/122

DRAWING NO.

Attachment II.B.3.f

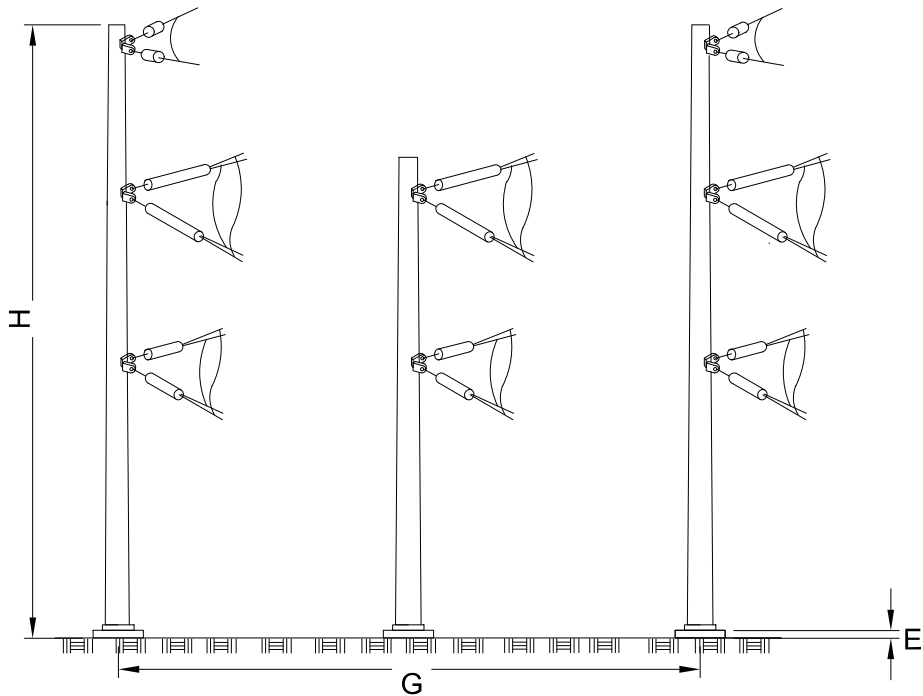


**Dominion  
Energy**

Dominion Energy  
5000 Dominion Blvd  
Glen Allen, VA 23060

DRAWN RAJ





**DOUBLE CIRCUIT DEADEND 3-POLE STRUCTURE**

B. RATIONALE FOR STRUCTURE TYPE: USED TO TRANSITION 230KV CIRCUIT ONTO STRUCTURES

C. LENGTH OF R/W (STRUCTURE QUANTITY): 0.3 MILES (2 STRUCTURES)

D. STRUCTURE MATERIAL: DULLED GALVANIZED STEEL

RATIONALE FOR STRUCTURE MATERIAL: MATCHING ADJACENT LINES AND TOWER PORTION OF LINE

E. FOUNDATION MATERIAL: STEEL H-PILES  
AVERAGE FOUNDATION REVEAL: SEE NOTE 4

F. AVERAGE WIDTH AT CROSSARM: NA

G. AVERAGE WIDTH AT BASE: 78'

H. MINIMUM STRUCTURE HEIGHT: 132'  
MAXIMUM STRUCTURE HEIGHT: 142'  
AVERAGE STRUCTURE HEIGHT: 137'

I. AVERAGE SPAN LENGTH: 829'


J. MINIMUM CONDUCTOR-TO-GROUND: 30.9' (500KV AT MAXIMUM OPERATING TEMPERATURE)  
25.5' (230KV AT MAXIMUM OPERATING TEMPERATURE)

- NOTES**
1. INFORMATION ON DRAWING IS PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL ENGINEERING
  2. INDIVIDUAL POLE HEIGHTS ABOVE GROUND MAY VARY SUBJECT TO FINAL LOCATION AND TERRAIN
  3. STRUCTURE HEIGHTS ARE MEASURED FROM STRUCTURE CENTERLINE
  4. MINIMUM FOUNDATION REVEAL SHALL BE 1.5', MAX REVEAL SUBJECT TO FINAL LOCATION AND TERRAIN

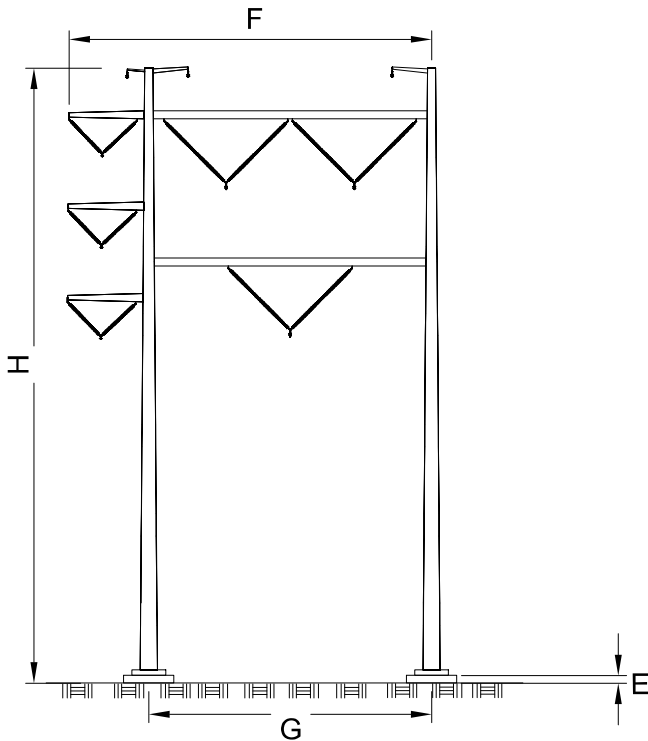
Electric Transmission

STRUCTURES  
579/132, 579/183

DRAWING NO.  
Attachment II.B.3.g

 **Dominion Energy**  
5000 Dominion Blvd  
Glen Allen, VA 23060


DRAWN RAJ

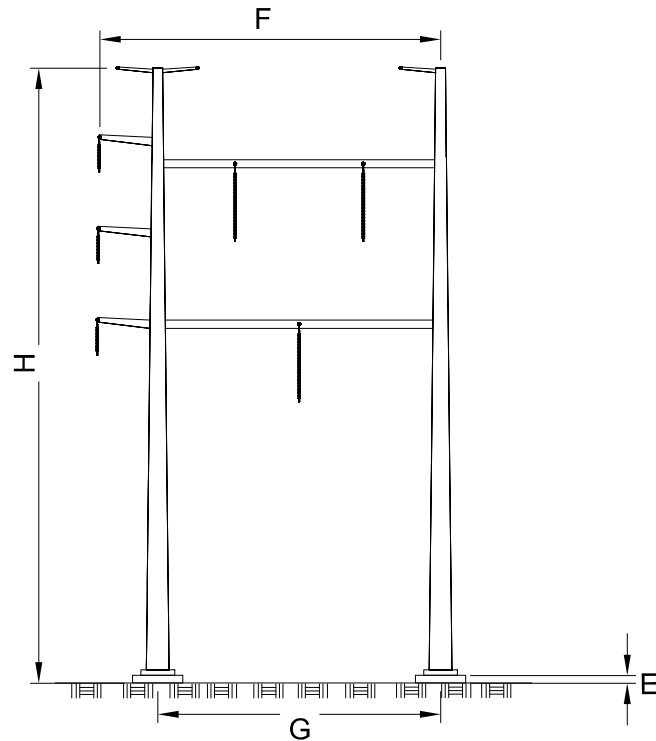


# **DOUBLE CIRCUIT SUSPENSION H-FRAME STRUCTURE**

B. RATIONALE FOR STRUCTURE TYPE:	DOUBLE CIRCUIT TANGENT SECTIONS, TIGHTER SPACING THAN TYPICAL TOWERS
C. LENGTH OF R/W (STRUCTURE QUANTITY):	6.9 MILES (40 STRUCTURES)
D. STRUCTURE MATERIAL:	DULLED GALVANIZED STEEL
RATIONALE FOR STRUCTURE MATERIAL:	MATCHING ADJACENT LINES AND TOWER PORTION OF LINE
E. FOUNDATION MATERIAL:	STEEL PIPE PILES
AVERAGE FOUNDATION REVEAL:	SEE NOTE 4
F. AVERAGE WIDTH AT CROSSARM:	81.5'
G. AVERAGE WIDTH AT BASE:	63.5'
H. MINIMUM STRUCTURE HEIGHT:	137'
MAXIMUM STRUCTURE HEIGHT:	162'
AVERAGE STRUCTURE HEIGHT:	144'
I. AVERAGE SPAN LENGTH:	910'
J. MINIMUM CONDUCTOR-TO-GROUND:	30.9' (500KV AT MAXIMUM OPERATING TEMPERATURE) 25.5' (230KV AT MAXIMUM OPERATING TEMPERATURE)

<b>NOTES</b>	1. INFORMATION ON DRAWING IS PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL ENGINEERING
	2. INDIVIDUAL POLE HEIGHTS ABOVE GROUND MAY VARY SUBJECT TO FINAL LOCATION AND TERRAIN
	3. STRUCTURE HEIGHTS ARE MEASURED FROM STRUCTURE CENTERLINE
	4. MINIMUM FOUNDATION REVEAL SHALL BE 1.5', MAX REVEAL SUBJECT TO FINAL LOCATION AND TERRAIN

<div>Electric Transmission</div> <div>  <div>                     Dominion Energy                      5000 Dominion Blvd                      Glen Allen, VA 23060                 </div> </div>	<div>STRUCTURES</div> <div>                     579/133-579/143, 579/145-579/147, 579/155-579/161,                      579/163-579/174, 579/176-579/182                 </div>	<div>DRAWING NO.</div> <div>Attachment II.B.3.h</div>
		<div>DRAWN</div> <div>RAJ</div>



## DOUBLE CIRCUIT DEADEND H-FRAME STRUCTURE

B. RATIONALE FOR STRUCTURE TYPE: DOUBLE CIRCUIT ANGLES, TIGHTER SPACING THAN TYPICAL TOWERS

C. LENGTH OF R/W (STRUCTURE QUANTITY): 0.6 MILES (4 STRUCTURES)

D. STRUCTURE MATERIAL: DULLED GALVANIZED STEEL

RATIONALE FOR STRUCTURE MATERIAL: MATCHING ADJACENT LINES AND TOWER PORTION OF LINE

E. FOUNDATION MATERIAL: STEEL H-PILES  
AVERAGE FOUNDATION REVEAL: SEE NOTE 4

F. AVERAGE WIDTH AT CROSSARM: 77'

G. AVERAGE WIDTH AT BASE: 63.5'

H. MINIMUM STRUCTURE HEIGHT: 137'  
MAXIMUM STRUCTURE HEIGHT: 142'  
AVERAGE STRUCTURE HEIGHT: 138'

I. AVERAGE SPAN LENGTH: 810'

J. MINIMUM CONDUCTOR-TO-GROUND: 30.9' (500KV AT MAXIMUM OPERATING TEMPERATURE)  
25.5' (230KV AT MAXIMUM OPERATING TEMPERATURE)

### NOTES

1. INFORMATION ON DRAWING IS PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL ENGINEERING
2. INDIVIDUAL POLE HEIGHTS ABOVE GROUND MAY VARY SUBJECT TO FINAL LOCATION AND TERRAIN
3. STRUCTURE HEIGHTS ARE MEASURED FROM STRUCTURE CENTERLINE
4. MINIMUM FOUNDATION REVEAL SHALL BE 1.5', MAX REVEAL SUBJECT TO FINAL LOCATION AND TERRAIN

Electric Transmission

STRUCTURES  
579/144, 579/154, 579/162, 579/175

DRAWING NO.

Attachment II.B.3.i



**Dominion Energy**  
Dominion Energy  
5000 Dominion Blvd  
Glen Allen, VA 23060

DRAWN RAJ

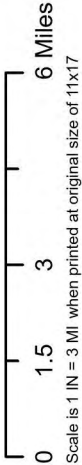


ATTACHMENT II.B.3.j  
STRUCTURE LOCATION MAP

Septa - Yadkin 500 kV Line #579 Rebuild and  
Suffolk - Thrasher 230 kV Line #2110 Partial Rebuild

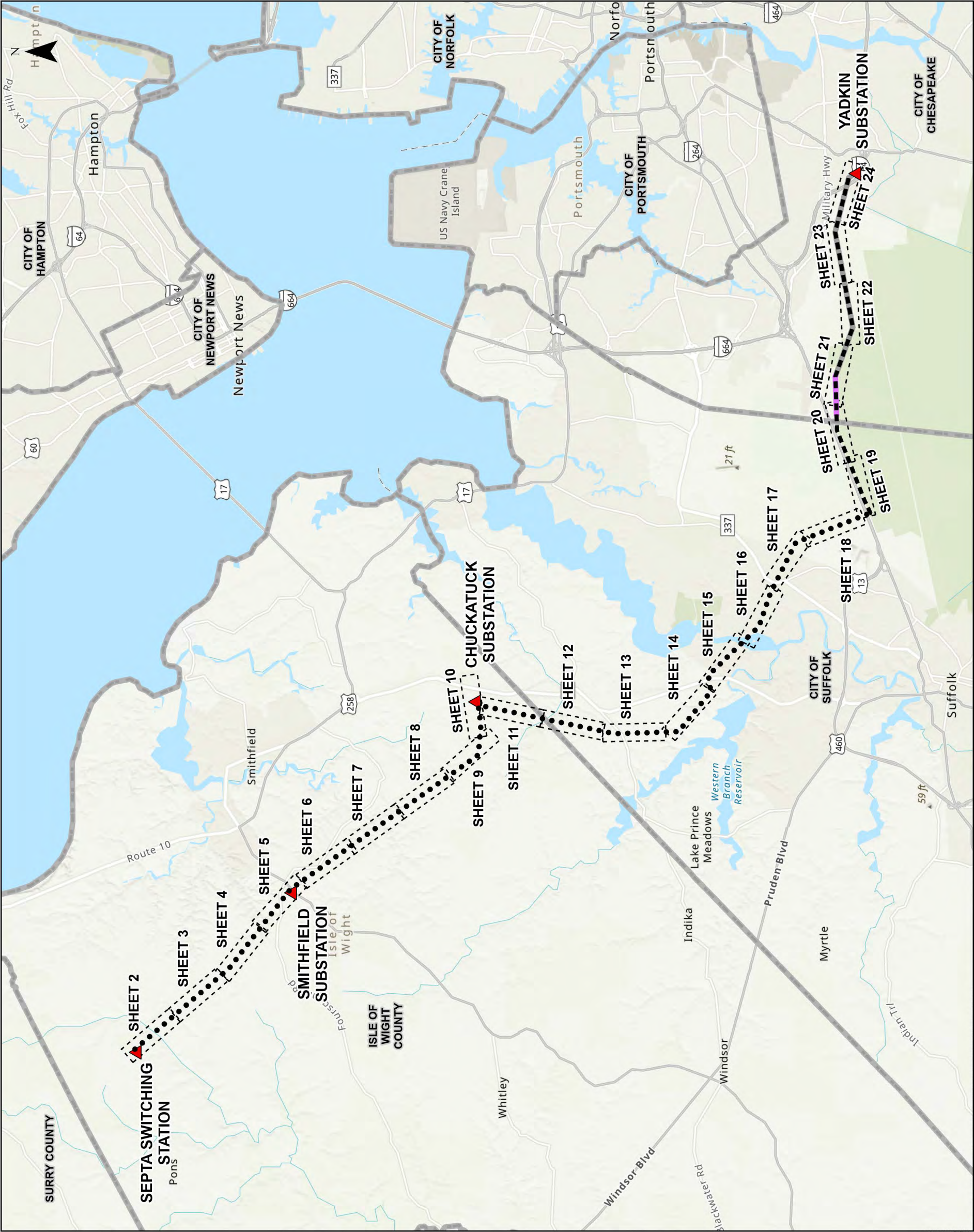
City of Chesapeake, Isle of Wight County and  
City of Suffolk, Virginia

Client:	Dominion Energy Virginia		
C2 Env Project:	Prepared By:	Date:	
0265	KAS	5/15/2025	

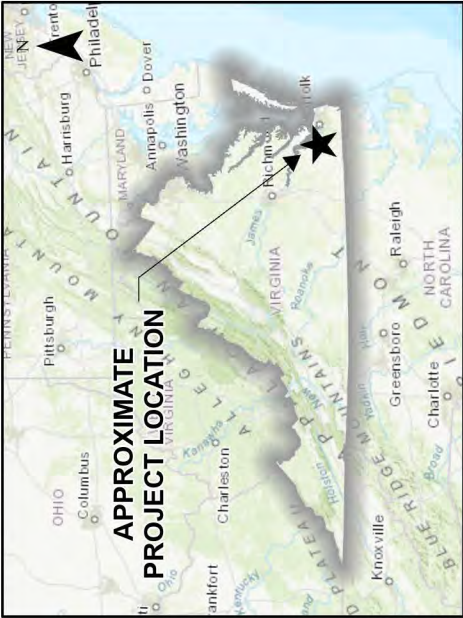


SITE DATA

- Line #579 Single Circuit Segment
- Lines #579/2110 Double Circuit Segment
- Airport Section
- Airport-Yadkin Section
- ▲ Existing Substation/Switching Station
- Map Sheet



Notes:  
1. Basemap from ESRI World Topographic Map  
2. Project right-of-way and Structure Locations provided by Dominion Energy Virginia





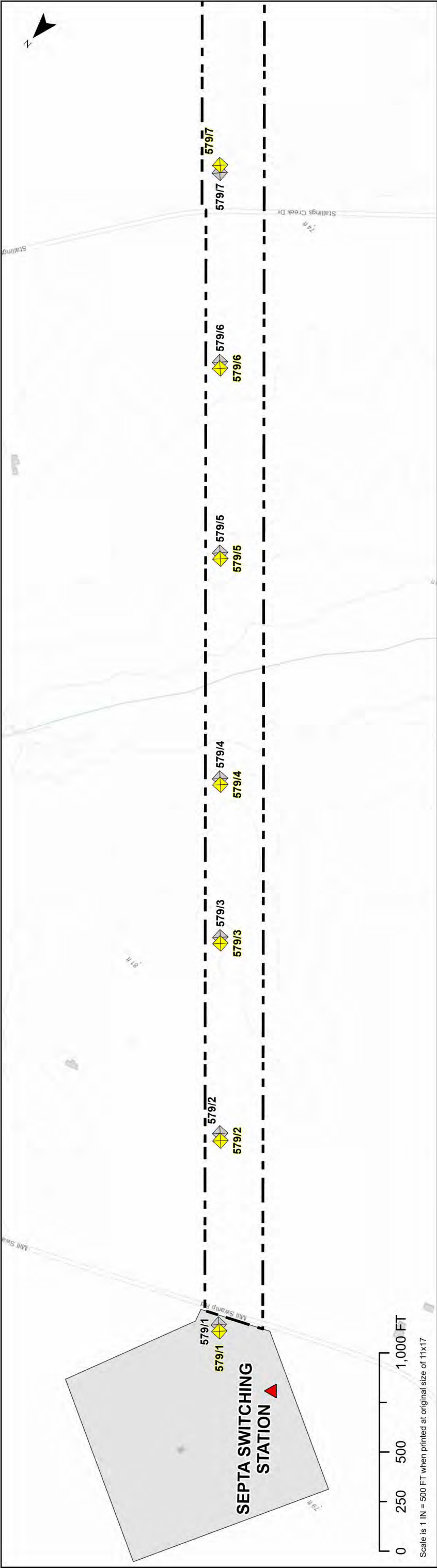
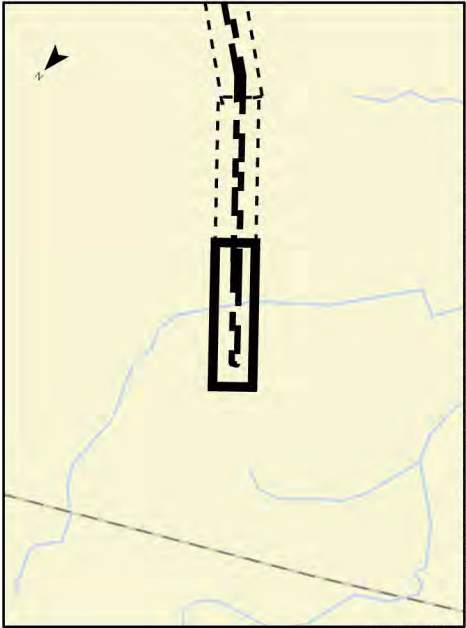


TABLE II.B.3

Proposed Line #579 Structure Number	579/1	579/2	579/3	579/4	579/5	579/6	579/7
Proposed Height (FT)	117	135	140	125	140	135	140
Existing Height (FT)	87	123	113	103	117	98	118

Notes:

1. The proposed structure heights are above ground level and include foundation reveal.
2. Structure locations and heights provided by Dominion Energy Virginia.
3. Project and structures are subject to change based on final engineering design.
4. Basemap from ESRI Topographic and World Street Map.
5. Between existing structures 579/132 and 579/147 and again between existing structures 579/154 and 579/184, Line #579 and Line #2110 are located on the same 500/230 kV double circuit structures and will be rebuilt on new 500/230 kV double circuit structures.
6. Between existing structures 579/148 and 579/153 Line #579 (Airport Section) is located on existing 500 kV single circuit structures and will be rebuilt on new 500 kV single circuit structures. Line #2110 existing structures will not be replaced along this Airport Section.



- Existing Right-of-Way
- Existing Substation/Switching Station
- Proposed Structures
- Existing Structures
- Dominion Station Parcel



ATTACHMENT II.B.3.j  
STRUCTURE LOCATION MAP

Septa - Yadkin 500 kV Line #579 Rebuild and  
Suffolk - Thrasher 230 kV Line #2110 Partial  
Rebuild

City of Chesapeake, Isle of Wight County and City of  
Suffolk, Virginia

Owner/ Applicant:  
Dominion Energy Virginia

C2 Env Project:	Prepared By:	Date:
0265	KAS	5/15/2025

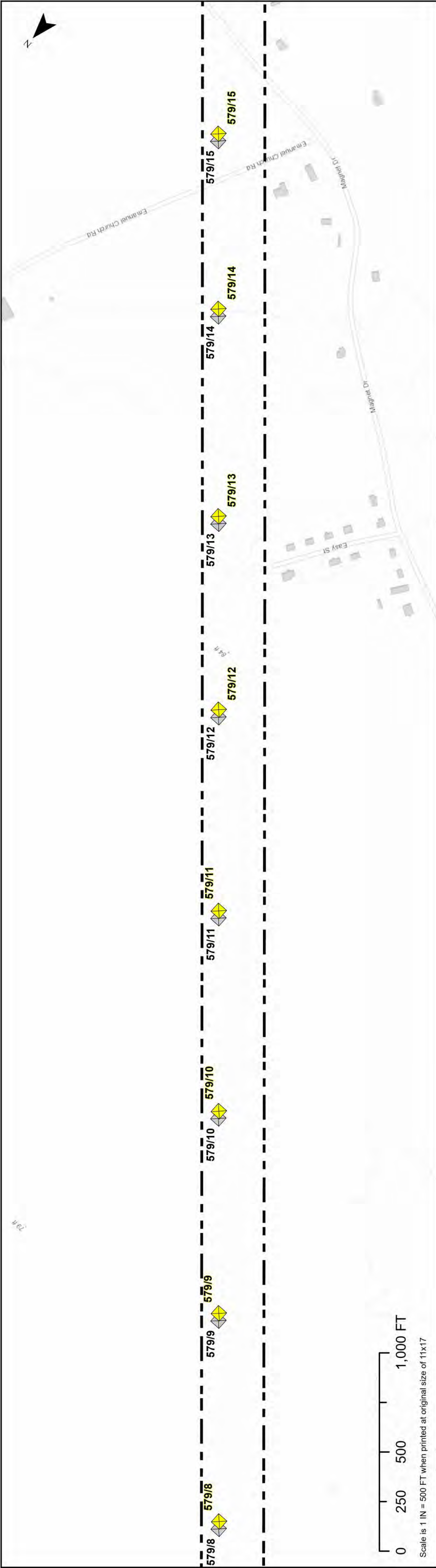


TABLE II.B.3

Proposed Line #579 Structure Number	579/8	579/9	579/10	579/10	579/11	579/11	579/12	579/13	579/14	579/15
Proposed Height (FT)				140	135	135	135	140	135	125
Existing Height (FT)				118	113	113	113	108	118	108

Notes:

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2. Structure locations and heights provided by Dominion Energy Virginia.
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4. Basemap from ESRI Topographic and World Street Map.
5. Between existing structures 579/132 and 579/147 and again between existing structures 579/154 and 579/184, Line #579 and Line #2110 are located on the same 500/230 kV double circuit structures and will be rebuilt on new 500/230 kV double circuit structures.
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- Existing Right-of-Way
- Existing Substation/Switching Station
- Proposed Structures
- Existing Structures
- Dominion Station Parcel



ATTACHMENT II.B.3.j  
STRUCTURE LOCATION MAP

Septa - Yadkin 500 kV Line #579 Rebuild and  
Suffolk - Thrasher 230 kV Line #2110 Partial  
Rebuild

City of Chesapeake, Isle of Wight County and City of  
Suffolk, Virginia

Owner/ Applicant:  
Dominion Energy Virginia

C2 Env Project:	Prepared By:	Date:
0265	KAS	5/15/2025



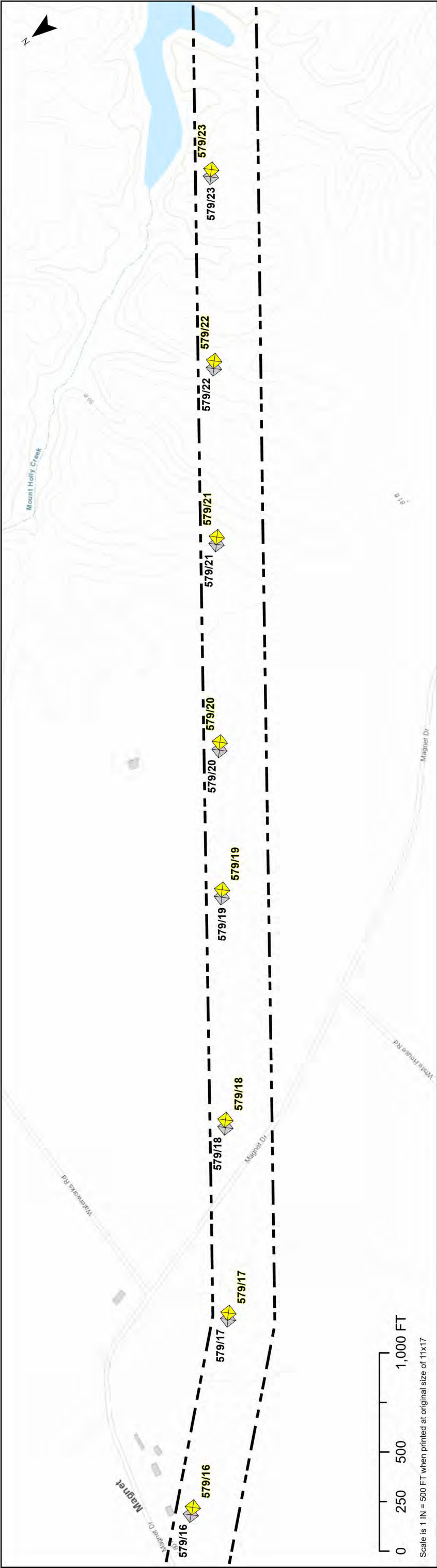


TABLE II.B.3

Proposed Line #579 Structure Number	579/16	579/17	579/18	579/19	579/20	579/21	579/22	579/23
Proposed Height (FT)	145	136	160	140	135	140	130	125
Existing Height (FT)	123	107	121	127	117	113	122	108

Notes:

1. The proposed structure heights are above ground level and include foundation reveal.
2. Structure locations and heights provided by Dominion Energy Virginia.
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4. Basemap from ESRI Topographic and World Street Map.
5. Between existing structures 579/132 and 579/147 and again between existing structures 579/154 and 579/184, Line #579 and Line #2110 are located on the same 500/230 kV double circuit structures and will be rebuilt on new 500/230 kV double circuit structures.
6. Between existing structures 579/148 and 579/153 Line #579 (Airport Section) is located on existing 500 kV single circuit structures and will be rebuilt on new 500 kV single circuit structures. Line #2110 existing structures will not be replaced along this Airport Section.



- Existing Right-of-Way
- Existing Substation/Switching Station
- Proposed Structures
- Existing Structures
- Dominion Station Parcel



ATTACHMENT II.B.3.j  
**STRUCTURE LOCATION MAP**

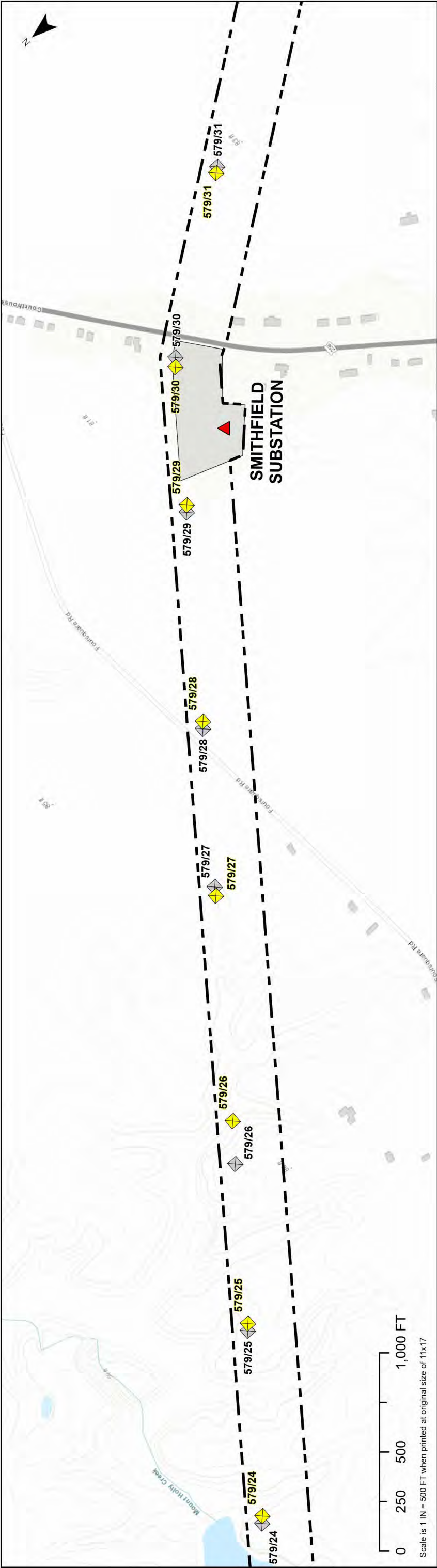
Septa - Yadkin 500 kV Line #579 Rebuild and  
Suffolk - Thrasher 230 kV Line #2110 Partial  
Rebuild

City of Chesapeake, Isle of Wight County and City of  
Suffolk, Virginia

Owner/ Applicant:  
Dominion Energy Virginia

C2 Env Project:	Prepared By:	Date:
0265	KAS	5/15/2025





Scale is 1 IN = 500 FT when printed at original size of 11x17

TABLE II.B.3

Proposed Line #579 Structure Number	579/24	579/25	579/26	579/27	579/28	579/29	579/30	579/31
Proposed Height (FT)	140	150	165	145	140	150	141	145
Existing Height (FT)	109	113	133	128	122	118	103	123

Notes:

- 1. The proposed structure heights are above ground level and include foundation reveal.
- 2. Structure locations and heights provided by Dominion Energy Virginia.
- 3. Project and structures are subject to change based on final engineering design.
- 4. Basemap from ESRI Topographic and World Street Map.
- 5. Between existing structures 579/132 and 579/147 and again between existing structures 579/154 and 579/184, Line #579 and Line #2110 are located on the same 500/230 kV double circuit structures and will be rebuilt on new 500/230 kV double circuit structures.
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ATTACHMENT II.B.3.j  
STRUCTURE LOCATION MAP

Septa - Yadkin 500 kV Line #579 Rebuild and  
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City of Chesapeake, Isle of Wight County and City of  
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Owner/ Applicant:  
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C2 Env Project: 0265  
Prepared By: KAS  
Date: 5/15/2025