Upgrade ID	Description	Cost Estimate ($M)	Required In-Service Date
n6634.7	Install new Spickard 138 kV three-breaker ring bus station along the Hillsboro-Clinton County 138 kV line, installation of associated protection and control equipment, line risers, switches, jumpers and supervisory control and data acquisition (SCADA) equipment.	$4.92	2/16/2017
n6634.8	Modify Hillsboro-Clinton County 138 kV T-Line and Fiber Cut In for AC2- 061 interconnection.	$0.96	2/16/2017
n6634.9	Upgrade line protection and fiber connectivity at Hillsboro 138 kV station for AC2-061 interconnection.	$0.28	2/16/2017
n6648	Build a three breaker 115 kV substation at the AC1-143 facility.	$5.30	6/30/2018
n6649	Build new structures to cut and loop the transmission line into AC1-143 115 kV substation.	$1.80	6/30/2018
n6650	Modify protection and communication work to support interconnection of new AC1-143 generator.	$0.15	6/30/2018
n6688	Attachment Facilities: Construct 69 kV Tap line, MOLBAB Switch, Poles, structure and foundations for AE1-226 interconnection.	$0.84	9/30/2020
n6689	Modifications to the Face Rock-Kinzer 69 kV line to tie in the AE1-226 Attachment Facilities.	$0.09	9/30/2020
n6690	Relay Modification Scope of Work at Face Rock substation.	$0.20	9/30/2020
n6759.1	Perform a sag study on the Deaborn-Pierce 345 kV line	$0.13	12/31/2021
n6764	Build a three breaker 115 kV substation at the AE1-084 facility.	$5.60	11/30/2020
n6765	Build new structures to cut and loop the transmission line into AE1-084 115 kV substation.	$0.80	11/30/2020
n6766	Modify protection and communication work to support interconnection of new AE1-084 generator.	$0.27	11/30/2020
n6770	Build a three breaker 230 kV substation at the AC2-165 facility.	$6.30	10/1/2019
n6771	Build new structures to cut and loop the transmission line into the Powhatan 230 kV substation.	$1.00	10/1/2019
n6772	Modify protection and communication work to support interconnection of new Powhatan generator.	$0.19	10/1/2019
n6929	Construct new substation for AF2-349 interconnection.	$15.00	12/26/2022
n6930	Cut circuit and loop into new AF2-349 substation.	$3.70	12/26/2022
n6931	Install communications equipment at new AF2-349 substation.	$2.90	12/26/2022
n6932	Update relays at Cherry Valley TSS 156 for AF2-349 interconnection.	$0.19	12/26/2022
n6933	Update relays at Silver Lake TSS 138 for AF2-349 interconnection.	$0.19	12/26/2022
n7267	Extend the Burlington 26 kV P-120 circuit to the Point of Interconnection (POI) and install revenue grade metering.	$0.34	12/28/2022
n7279	Old Chapel 138 kV substation – Modify substation nameplates and high-voltage circuit diagram.	$0.06	9/1/2020
n7280	Exit Span and 1st Structure to Gen Lead Line at Adam 138 kV.	$0.59	4/16/2016
n7281	Extend fiber-optic cables from the point of transition into the Adams 138 kV control house.	$0.12	4/16/2016

Upgrade ID	Description	Cost Estimate ($M)	Required In-Service Date
n7289	Expand the Lockwood Road 138 kV substation: Install two additional 138 kV circuit breakers. Installation of associated protection and control equipment, 138 kV line risers and SCADA.	$1.60	9/28/2017
n7297	Install one New 138 kV Circuit Breaker, Associated Equipment, Update Protective Relay Settings at the Kirk 138 kV station.	$1.00	2/28/2020
n7298	Install three Dead End Structures, three Spans of Conductor, OPGW and Alumoweld Shield Wires from the Kirk 138 kV station to the Point of Interconnection.	$1.65	2/28/2020
n7299	Install Revenue Metering at Kirk 138 substation.	$0.31	2/28/2020
n7300	Install two Fiber-Optic Cable Paths from the Kirk 138 kV station to the Fiber-Optic Cable Points of Interconnection.	$0.27	2/28/2020
n7349	Engineering and construction oversight for a new three-breaker ring bus on the Greene-Clark 138 kV line for the AD1-140 interconnection. Includes review of drawings, nameplates and relay settings for FirstEnergy standards. Includes Project Management, Environmental and Right of Way.	$0.72	5/29/2020
n7350	AD1-140 Supervisory Control and Data Acquisition (SCADA): Design, install and test/commission Multiprotocol Label Switching (MPLS) equipment for SCADA transport.	$0.20	5/29/2020
n7351	Fiber Communication: ADSS fiber run from AD1-140 Interconnection Switchyard control house to Greene-East Springfield line fiber and to developer built fiber run to support communications and control to the generator site.	$0.08	5/29/2020
n7352	AD1-140 Clark-Green 138 kV Line Loop: Loop the Clark-Greene 138 kV circuit into the new AD1-140 Interconnection Switchyard. The proposed location of the new ring bus is near structure No. 5604. Includes project management, environmental, forestry, real estate and right-of-way.	$0.41	5/29/2020
n7353	Clark 138 kV substation: Install two 138 kV wave traps and tuners. Update Relay Settings.	$0.13	5/29/2020
n7384	Install 345 kV metering at the Marysville 345 kV station. Construct line from the Marysville 345 kV station to the Point of Interconnection. Install dual fiber telecommunications from the Marysville 345 kV station to the Customer Facility collector station.	$1.46	3/20/2018
n7385	Modify and expand the existing Marysville 345 kV station including one 345 kV circuit breaker installation.	$1.27	3/20/2018
n7422	Construct line No. 2 between Morrisville substation and AE1-044 Transition station.	$1.71	11/2/2020
n7433	Construct a new three circuit breaker 345 kV station, Chenoweth, physically configured and operated as a ring bus	$10.47	6/1/2022
n7434	Install 345 kV Revenue Meter, Generator lead first span exiting the POI station, including the first structure outside the fence at the new AE2-148 switching station	$1.60	6/1/2022
n7435	Install a cut in at Beatty Road-Greene 345 kV.	$1.43	6/1/2022
n7436	Upgrade line protection and controls at the Beatty Road 345 kV station.	$0.60	6/1/2022
n7449	Install new 345 kV three-breaker ring bus station along the Olive-Reynolds 345 kV line.	$0.35	5/31/2021

Upgrade ID	Description	Cost Estimate ($M)	Required In-Service Date
n7450	Install three Structures, two Spans of Conductor, Connect Ora Ora 345 kV station to Existing Transmission Circuit	$1.19	5/31/2021
n7451	Replace Protective Relays at Olive 345 kV station.	$0.61	5/31/2021
n7469	Install 345 kV metering at the Gunn Road 345 kV station. Construct line from the Gunn Road 345 kV station to the Point of Interconnection. Install dual fiber telecommunications from the Gunn Road 345 kV station to the Customer Facility collector station.	$1.44	9/30/2019
n7475	Install a new 138 kV circuit breaker, physical structures, protection and control equipment, communications equipment and associated facilities at the Eldean 138 kV substation.	$0.85	12/31/2021
n7492	Install 138 kV metering at the Inez 138 kV station. Construct generator lead transmission line from the Inez 138 kV station to the Point of Interconnection. Install dual fiber telecommunications from the Inez 138 kV station to the Customer Facility collector station.	$0.88	9/18/2019
n7493	Expand Inez 138 kV station, including the addition of a new string and two 138 kV circuit breakers, installation of associated protection and control equipment, 138 kV line risers, switches, jumpers and supervisory control and data acquisition (SCADA) equipment.	$1.53	9/18/2019
n7751	Replace 1600A Switches at Sorenson 345 kV.	$0.10	12/31/2021
n7753	Upgrade circuit breaker and associated Current Transformers and Switches from 2000A to 3000A at Mt. Pleasant substation	$0.40	12/31/2021
n7754.1	Replace 5 substation conductor 2000 AAC 91 Str. at Danville2 138 kV station.	$0.00	11/30/2022
n7754.2	Replace 3 Sub conductor 2000 AAC 91 Str. at East Danville 138 kV station.	$0.00	11/30/2022
n7847	EKPC to install necessary equipment (a 69 kV isolation switch structure and associated switch, plus interconnection metering, fiber-optic connection and telecommunications equipment, circuit breaker and associated switches, and relay panel) at the new Eighty Eight 69 kV Switching station to accept the IC generator lead line/bus.	$1.03	2/14/2019
n7848	Construct a new 69 kV switching station built to 161 kV standards (Eighty Eight Switching) to facilitate connection of the Glover Creek Solar generation project	$3.74	12/31/2022
n7849	Construct facilities (~175 feet) to loop the existing Patton Road Junction-Summer Shade 69 kV line section into the new Eighty Eight Switching substation.	$0.56	12/31/2022
n7850	Modify relay settings at Fox Hollow substation for existing line to Eighty Eight Switching station.	$0.05	12/31/2022
n7851	Modify relay settings at Summer Shade substation for existing line to Eighty Eight Switching substation	$0.05	12/31/2022
n7852	install OPGW in the Summer Shade-Eighty Eight 69 kV line section (1.7 miles).	$0.50	12/31/2022
n7853.1	Re-arrange line No. 1012 to loop into and out of the new three breaker AD2- 063 115 kV switching station. A new three-breaker ring bus substation will be installed between structures 2068/446 and 2068/447.	$1.20	12/31/2024

Upgrade ID	Description	Cost Estimate ($M)	Required In-Service Date
n7853.2	Build a three breaker AD1-152 230 kV switching station.	$7.60	12/31/2024
n7853.3	Remote protection and communications work at Clover 230 kV substation.	$0.06	12/31/2024
n7853.4	Remote drawing work at Sedge Hill 230 kV substation.	$0.02	12/31/2024
n7965	Millville-Old Chapel 138 kV Line: Loop the Millville-Old Chapel 138 kV line into new AE2-226 interconnection substation.	$1.02	12/1/2022
n7966	Double Toll Gate 138 kV: Adjust relay settings and update drawings and nameplates.	$0.05	12/1/2022
n7967	Old Chapel 138 kV: Modify SCADA RTU and update drawings and nameplates.	$0.05	12/1/2022
n7968	Wheatland 138 kV (AD2-158 Interconnect): Upgrade relaying as needed to accommodate the new AE2-226 generation queue project interconnection of 99 MW MFO.	$0.36	12/1/2022
n7969	AE2-226 Interconnect: Construct new Kabletown 138 kV substation as a 3- breaker ring bus looping in and out the Old Chapel-Millville 138 kV line.	$6.88	12/1/2022
n7970	Kabletown 138 kV substation Fiber Installation: Install fiber from Kabletown substation to AD2-158 Interconnection for communication transport.	$0.16	12/1/2022
n7971	SCADA/Fiber Communication: Design, install and test/commission MPLS Equipment at Kabletown 138 kV for SCADA transport.	$0.25	12/1/2022
n7991	Install 69 kV Revenue Meter, generator lead transmission line span from the new 69 kV station to the Point of Interconnection, including the first structure outside the new 69 kV station, and extend fiber-optic from the Point of Interconnection to the new 69 kV station control house.	$0.69	10/31/2016
n7992	Expand the Platter Creek 69 kV station, including the addition of one 69 kV circuit breaker, installation of associated protection and control equipment, 69 kV line risers, and supervisory control and data acquisition (SCADA) equipment.	$0.68	10/31/2016
n8004	Install new 138 kV three-breaker ring bus station along the Grandview- Clifftop 138 kV line, installation of associated protection and control equipment, 138 kV line risers, and supervisory control and data acquisition (SCADA) equipment.	$3.88	9/25/2018
n8005	Modify Grandview-Clifftop 138 kV T-Line Cut In.	$1.22	9/25/2018
n8006	Upgrade line protection and controls at the Grandview 138 kV station	$0.30	9/25/2018
n8018	AE2-256 substation 230 kV: Design, install and test/commission MPLS Equipment for SCADA transport.	$0.29	6/30/2022
n8019	North Lebanon substation 230 kV: Replace CVT & line/carrier Relaying	$0.67	6/30/2022
n8020	Copperstone-North Lebanon 230 kV: Loop the 1094-1(Copperstone- North Lebanon) 230 kV line into a new substation, approximately 7.5 miles from the North Lebanon substation.	$2.33	6/30/2022
n8021	North Hershey-North Temple 230 kV: Install one steel pole strain structure on the existing North Hershey-North Temple 230 kV line to avoid clearance violations to new loop structures on the 1094-1 (Copperstone-North Lebanon) 230 kV line.	$1.04	6/30/2022
n8022	Copperstone substation (PPL 230 kV): Replace CVT & line/carrier Relaying.	$0.52	6/30/2022

Upgrade ID	Description	Cost Estimate ($M)	Required In-Service Date
n8029.1	Attachment facility line and Revenue Metering Installation at the new AF1- 202 345 kV switching station.	$1.08	12/31/2022
n8029.2	Construct a new three breaker 345 kV Switching station for AF1-202 interconnection.	$17.44	12/31/2022
n8029.3	Construct a new loop-in tap line at the Keyston-Desoto 345 kV line for AF1-202 interconnection.	$1.21	12/31/2022
n8029.4	Modify relay settings at Desoto 345 kV substation	$0.05	12/31/2021
n8031.1	New 138 kV switching station (Wapahani switching station) to interconnect AD1-128 customer facility.	$5.37	10/31/2021
n8031.2	Loop-in tap line to new AD1-128 switching station from College Corner-Desota 138 kV line.	$0.93	10/31/2021
n8035.1	Install 69 kV Revenue Meter, generator lead transmission line spans from the Buckskin 69 kV station to the Point of Interconnection, including the first two structures outside the Buckskin 69 kV station, and extend dual fiber-optic from the Point of Interconnection to the Buckskin 69 kV station control house.	$1.02	2/16/2017
n8035.2	Expand the Buckskin 69 kV station, including the addition of one 69 kV circuit breaker, installation of associated protection and control equipment, 69 kV line risers, and supervisory control and data acquisition (SCADA) equipment.	$0.71	2/16/2017
n8035.3	Buckskin-Highland 69 kV T-Line Re-termination. External station associated work, including two structures, including one double circuit structure.	$0.82	2/16/2017
n8059.1	Construct one 69 kV generator lead transmission line from the Steubenville 69 kV station to the Point of Interconnection, install 69 kV revenue meter, extend dual fiber-optic cable from the Point of Interconnection to the Steubenville 69 kV station control house. Expand the Steubenville 69 kV station, including the addition of one 69 kV circuit breaker, installation of associated protection and control equipment, line risers, switches, jumpers and SCADA.	$1.57	11/7/2017
n8059.2	Install one additional 69 kV circuit breaker on the 69 kV side of the Steubenville 138/69/12 kV autotransformer.	$0.37	11/7/2017
n8072.1	Design, install and test/commission MPLS Equipment for SCADA transport at the new AE2-345 substation.	$0.26	4/9/2019
n8072.2	SCADA/Fiber Communication: Install fiber from AE2-345 Interconnection to Hunterstown for relaying communication and MPLS transport.	$1.07	4/9/2019
n8072.3	Gardners-Hunterstown 115 kV Line Loop: Loop existing L991 Gardners-Hunterstown 115 kV line into the new three-breaker Ring Bus approximately 4.2 miles from the Hunterstown substation.	$0.77	4/9/2019
n8072.4	Gardeners 115 kV: Modify drawings, relay settings and nameplates for line name change.	$0.10	4/9/2019
n8072.5	Hunterstown 115 kV: Modify drawings, relay settings and nameplates for line name change.	$0.10	4/9/2019
n8072.6	AE2-345 option to build: FirstEnergy Work at new station built by developer (Security & Network).	$1.57	4/9/2019

Upgrade ID	Description	Cost Estimate ($M)	Required In-Service Date
n8075.1	Construct a new switching station (North Taylor County switching station) to interconnect AF1-083 customer facility.	$3.95	12/31/2022
n8075.2	Loop-in tap line to new AF1-083 switching station from Green County-Marion County 161 kV line.	$0.34	12/31/2022
n8075.3	Modify relay settings at Green County 161 kV substation.	$0.01	12/31/2022
n8075.4	Modify relay settings at Marion County 161 kV substation.	$0.01	12/31/2022
n8075.5	Install OPGW at Green County-North Taylor Switching station.	$0.90	12/31/2022
n8083.1	Construct a new Switching station for AF2-205 interconnection	$5.41	12/31/2022
n8083.2	Transmission line cut-in of Swingle 345 kV switching station & update remote end protection settings.	$0.71	12/31/2022
n8083.3	Install two fiber-optic connections at Swingle-Tatertown 345 kV transmission line.	$0.56	12/31/2022
n8097.1	AE2-001: Tap the existing Nittany-Zion 46 kV line and install 2 main line switches and 1 tap switch to interconnect queue project AE2-001. Tap and CTs/PTs mounted in the customer's station.	$0.16	6/30/2025
n8097.2	Nittany 46 kV: Replace Stone Junction 46 kV line relaying at Nittany for AE2-001 interconnection.	$0.26	6/30/2025
n8097.3	Pleasant Gap 46 kV: Replace Stone Junction 46 kV line relaying at Pleasant Gap for AE2-001 interconnection	$0.26	6/30/2025
n8097.4	Milesburg 46 kV: Replace Stone Junction 46 kV line relaying at Milesburg for AE2-001 interconnection.	$0.26	6/30/2025
n8098.1	East Fayette 138 kV: To connect the AE2-282 solar project with the Toledo Edison transmission system, a new line position will be established within the East Fayette 138 kV substation by adding a new 138 kV circuit breaker and related equipment. A circuit breaker, 3 CCVTs, 1 138 kV Tubular Steel H- frame Dead End, and a relaying panel will be installed to accommodate the new line terminal.	$1.03	9/15/2021
n8098.2	East Fayette 138 kV: Estimated SCADA work at East Fayette substation to support breaker installation, relay installation and updated relay setting. Estimated in-sub fiber run from East Fayette control house to developer ran fiber build for communications to AE2-282 Generator.	$0.06	9/15/2021
n8113	The Contingency driving this upgrade/overload is DVP_P7-1: LN 25-2034-A which is the tower failure of the Dominion 115 kV line No. 25 Trowbridge-Everett and 230 kV line No. 2034 who share a common tower. Dominion new proposal is to resolve the overload by splitting line No. 25 off of line No. 2034, which eliminate the tower contingency.	$4.74	12/31/2022
n8118	AE2-256 substation: Construct a new three-breaker ring bus on the 230 kV (1094) line between Copperstone and North Lebanon. Includes Project Management, Environmental, Forestry, Real Estate and Right of Way.	$6.14	6/30/2022
n8119	AE2-256 substation: Estimated in-sub fiber run to customer built fiber run outside AE2-256 substation. Estimated SCADA work at North Lebanon substation to support relay installation and updated relay settings.	$0.05	6/30/2022
n8151.1	The Hackettstown to Pohatcong 34.5 kV line will be tapped to accommodate the AF1-328 interconnect project. This tap will take place at	$0.44	8/31/2021

Upgrade ID	Description	Cost Estimate ($M)	Required In-Service Date
	a location that is approximately 1.25 miles from the Pohatcong substation and 1.50 miles from the Hackettstown substation.		
n8151.2	Relay settings will be revised for tap at Pohatcong 34.5 kV.	$0.04	8/31/2021
n8151.3	Adjust relay settings at AF1-328 substation.	$0.07	8/31/2021
n8157	Update 138 kV line relaying at the Bremo 138 kV station.	$0.18	9/12/2018
n8159.1	AF1-290 Mechanicstown Interconnection Sub: Design, install and test/commission MPLS Equipment for SCADA transport.	$0.25	11/15/2023
n8159.2	Fiber from AF1-290 Mechanicstown to Feagans Mill-Millville: Install fiber from Mechanicstown to backbone for communication transport.	$0.27	11/15/2023
n8159.3	Feagans Mill-Millville 138 kV Line Loop: Loop the Feagans Mill-Millville 138 kV into the new Mechanicstown substation.	$1.91	11/15/2023
n8159.4	Stonewall substation: Line Terminal Upgrade.	$0.66	11/15/2023
n8159.5	Feagans Mill substation: Modify drawings and nameplates for line name change.	$0.03	11/15/2023
n8159.6	Millville substation: Line Terminal Upgrade.	$0.62	11/15/2023
n8160.1	Tap the Y701 Cozy Lake (Franklin) 34.5 kV line to interconnect to the new AF1-325 customer substation.	$1.50	1/1/2026
n8160.2	Revise relay settings at Franklin 34.5 kV.	$0.05	1/1/2026
n8166.1	115 kV line to provide for the AF1-320 interconnection at the new Merrill Creek 115 kV substation.	$6.36	12/1/2022
n8166.2	Modify drawings, relay settings and nameplates for line name change at Flanders 115 kV.	$0.13	12/1/2022
n8166.3	Modify drawings, relay settings and nameplates for line name change at Drakestown 115 kV.	$0.13	12/1/2022
n8166.4	Replace one 115 kV wave trap, line tuner and coax for Gilbert line exit at Morris Park 115 kV.	$0.82	12/1/2022
n8166.5	Relay setting changes at Pequest River 115 kV.	$0.21	12/1/2022
n8166.6	Review drawings, nameplates and relay settings Gilbert 115 kV.	$0.15	12/1/2022
n8166.7	Merrill Creek substation: Install new three-breaker ring bus at Merrill Creek substation 115 kV.	$13.74	12/1/2022
n8166.8	SCADA/Fiber Communication: Install fiber from Merrill Creek to backbone for communication transport. Fiber backbone location is subject to change at Merrill Creek to Fiber Backbone. Design, install and test/commission MPLS Equipment for SCADA transport at Merrill Creek 115 kV.	$1.39	12/1/2022
n8166.9	SCADA/Fiber Communication: Design, install and test/commission MPLS Equipment for SCADA transport at Merrill Creek 115 kV.	$0.39	12/1/2022
n8187.1	Farmers Valley-Ridgway 115 kV Line Loop: Construct a loop from the Farmers Valley-Ridgway 115 kV line to the new substation, approximately 14.4 miles from Farmers Valley substation.	$1.69	12/31/2020
n8187.2	Ridgway substation 115 kV: Line terminal upgrade.	$0.19	12/31/2020
n8187.3	Farmers substation 115 kV: Line terminal upgrade.	$0.30	12/31/2020
n8187.4	Pierce Brook substation 115 kV: Line terminal upgrade.	$0.06	12/31/2020

Upgrade ID	Description	Cost Estimate ($M)	Required In-Service Date
n8188.1	Brookville-Squab Hollow 138 kV Line: Loop the Brookville-Squab Hollow 138 kV line into the new AE2-316 interconnection sub.	$1.58	12/31/2020
n8188.2	Brookville 138 kV: Install new relays and modify relay settings.	$0.24	12/31/2020
n8188.3	Armstrong 138 kV: Install anti-islanding transmitter.	$0.19	12/31/2020
n8188.4	Squab Hollow 138 kV: Install anti-islanding transmitter.	$0.21	12/31/2020
n8188.5	Install fiber from AE2-316 to Backbone for communication transport at AE2- 316 Direct Connect – Squab Solar.	$1.11	12/31/2020
n8188.6	SCADA/Fiber Communication: Design, install and test/commission MPLS Equipment for SCADA transport at AE2-316 interconnection substation.	$0.29	12/31/2020
n8193.1	Install fiber from AE2-344 interconnection substation to Edinboro South for communication transport.	$0.40	3/31/2026
n8193.10	Morgan Street substation 115 kV: Line Terminal Upgrade.	$0.59	3/31/2026
n8193.2	Design, install and test/commission MPLS Equipment for SCADA transport at AE2-344 interconnection substation.	$0.19	3/31/2026
n8193.3	Edinboro South-Morgan Street-Springboro 115 kV Line Loop: Loop from the MF1/MFS (Edinboro South-Morgan Street-Springboro) 115 kV line to the new AE2-344 interconnection substation.	$0.97	3/31/2026
n8193.4	Edinboro South 115 kV: Line Terminal Upgrade.	$0.55	3/31/2026
n8193.5	Wayne substation 115 kV: Line Terminal Upgrade.	$0.03	3/31/2026
n8193.6	Geneva substation 115 kV: Line Terminal Upgrade.	$0.53	3/31/2026
n8193.7	Erie West substation 115 kV: Line Terminal Upgrade.	$0.21	3/31/2026
n8193.8	Erie South substation 115 kV: Line Terminal Upgrade.	$0.21	3/31/2026
n8193.9	Springboro substation 115 kV: Line Terminal Upgrade.	$0.52	3/31/2026
n8198.1	Install (3) 34.5 kV load-break air switches with SCADA control on the Cookstown-New Lisbon (W75) 34.5 kV line approximately 0.3 miles from the Fort Dix W75 Tap and 3.1 miles from the Hanover Solar Tap (at structures 116 & 117).	$0.36	12/31/2020
n8198.2	Review Cookstown line relay settings as required for AF2-254 tap at New Lisbon 34.5 kV.	$0.04	12/31/2020
n8198.3	Review New Lisbon line relay settings as required for AF2-254 tap at Cookstown 34.5 kV.	$0.04	12/31/2020
n8206	Snyder: Extend the Snyder 69 kV bus. Install one 69 kV circuit breaker.	$0.87	10/31/2021
n8207.1	New SCADA switch at AF2-130 POI: Add new SCADA switch at the proposed tap point near pole No. 0C-37451 on the 34.5 kV Tionesta Jct./Crown distribution ckt No. 00519-51	$0.10	6/30/2023
n8207.2	AF2-130 Generation substation: Integrate customer protection and controls to the FE transmission system.	$0.08	6/30/2023
n8207.3	Crown substation: Installing 34.5 kV PT as well as SEL-351S.	$0.63	6/30/2023
n8207.4	Tionesta substation 34.5 kV: Revise relay settings.	$0.11	6/30/2023
n8210.1	Branchville to Holiday Lakes 34.5 kV line: The Branchville to Holiday Lakes 34.5 kV line will be tapped to accommodate the Customer Facility. This tap will take place at a location that is approximately 1.50 miles from the Holiday Lakes substation and 10 miles from the Branchville substation	$1.42	3/1/2021

Upgrade ID	Description	Cost Estimate ($M)	Required In-Service Date
n8210.2	Branchville substation 34.5 kV: Revise relay settings.	$0.05	3/1/2021
n8211.1	Albright-Cross School 138 kV Line: Loop in and out the Albright-Cross School AFA 138 kV line to new three-breaker ring bus at Swanton 138 kV substation.	$1.36	8/31/2025
n8211.2	Cross School 138 kV substation: Replace one 138 kV, 2000A, wave trap, line tuner and coax on Albright line exit with one 138 kV, 2000A wideband wave trap, line tuner and coax. Replace line relaying panel for the Swanton line terminal.	$1.38	8/31/2025
n8211.3	Albright 138kV substation: Replace one 138 kV, 2000A, wave trap, line tuner and coax on Cross School line exit with one 138 kV, 2000A wideband wave trap, line tuner and coax. Replace line relaying panel for the Swanton line terminal.	$1.81	8/31/2025
n8211.4	Dan's Rock substation 138 kV: Design, install and test/commission new licensed microwave link at Dan's Rock MW.	$0.19	8/31/2025
n8211.5	Design, install and test/commission MPLS Equipment for SCADA transport at Swanton 138 kV substation.	$0.66	8/31/2025
n8211.6	AF2-356 Interconnection substation (OTB): Install physical security camera system.	$1.80	8/31/2025
n8217.1	Groton substation 138 kV: Expand existing Groton ring bus to a four- breaker ring bus.	$1.64	12/31/2021
n8217.2	Hayes substation 138 kV: Modify relay setting.	$0.13	12/31/2021
n8217.3	West Fremont substation 138 kV: Revise relay settings.	$0.13	12/31/2021
n8221.1	Construct a new 69 kV three-breaker ring bus on the Cardington-Tangy 69 kV line.	$5.78	11/30/2022
n8221.2	Design, install and test/commission MPLS Equipment for SCADA transport on the Cardington-Tangy 69 kV line.	$0.26	11/30/2022
n8221.3	Loop the Cardington-Tangy 69 kV line to create the interconnection for the new AF1-122 three-breaker ring bus, approximately 1.1 miles from the Cardington substation. Install fiber from the new AF1-122 three-breaker ring bus to the Cardington substation.	$1.14	11/30/2022
n8221.4	Relay Settings Changes, Drawing Updates and Nameplates at Tangy 69 kV substation.	$0.06	11/30/2022
n8221.5	Upgrade line relaying at Cardington 69 kV substation.	$0.56	11/30/2022
n8312.1	Corry East-Four Mile 115 kV Line Loop: Loop the Corry East-Four Mile Junction 115 kV line into the new substation, approximately 7.7 miles from Four Mile Junction substation.	$0.96	8/30/2019
n8312.2	Warren substation 115 kV: Provide interconnection facilities for PJM AF1- 098.	$0.59	8/30/2019
n8312.3	Corry East substation 115 kV: Provide interconnection facilities for PJM AF1-098. Replace carrier equipment and relaying at Corry East.	$0.89	8/30/2019
n8312.4	Four Mile substation 115 kV: Provide interconnection facilities for PJM AF1- 098. Replace carrier equipment and relaying at Four Mile Junction.	$0.77	8/30/2019
n8312.5	Construct a new interconnection substation with 3-115 kV breakers in a ring bus configuration at Four Mile 115 kV substation.	$7.90	8/30/2019

Upgrade ID	Description	Cost Estimate ($M)	Required In-Service Date
n8312.6	Install fiber from AF1-098 to Four Mile Junction for communication transport at AF1-098.	$4.70	8/30/2019
n8312.7	Design, install and test/commission MPLS Equipment for SCADA transport at AF1-098	$0.29	8/30/2019
n8313.1	Install Tap Pole at Emlenton 34.5 kV.	$0.02	3/17/2020
n8313.2	Haynie 34.5 kV: Revise Relay Settings.	$0.27	3/17/2020
n8313.3	Emlenton 34.5 kV: Revise Relay Settings.	$0.27	3/17/2020
n8314.1	SCADA/Fiber Communication: Design, install and test/commission MPLS Equipment for SCADA transport at the new AF1-086 interconnection substation.	$0.21	9/20/2019
n8314.2	Install fiber from AF1-086 interconnection substation to ADSS Backbone for communication transport.	$1.26	9/20/2019
n8314.3	Garman-Shawville 115 kV Line Loop: Loop existing Garman Shawville 115 kV line into the new CPV Rogue's Wind interconnection substation.	$1.21	9/20/2019
n8314.4	Madera 115 kV: Modify drawings and nameplates for line name change.	$0.03	9/20/2019
n8314.5	Westover 115 kV: Modify drawings and nameplates for line name change.	$0.03	9/20/2019
n8314.6	Glory 115 kV: Line Terminal upgrade.	$0.39	9/20/2019
n8314.7	Shawville 115 kV: Line Terminal upgrade.	$0.57	9/20/2019
n8314.8	Garman 115 kV: Line Terminal upgrade.	$0.81	9/20/2019
n8319	Relocate the East Bend 345 kV line from the T bay to the R bay at the Tanners Creek 345 kV substation. This addresses the breaker failure contingency AEP_P4_No. 14920_05TANNER 345_T_SRT-A for the Tanners tie breaker failure.	$3.10	12/31/2021
n8327	Replace existing 23 kV Bedford relaying with one SEL-351S and install one SATEC meter.	$0.77	9/15/2022
n8337.1	Construct a new line exit out of the Galion substation by adding a new 138 kV breaker.	$2.14	12/31/2023
n8337.2	Modify Relay Settings Roberts 138 kV.	$0.10	12/31/2023
n8337.3	Modify Relay Settings at Cardington 138 kV.	$0.10	12/31/2023
n8337.4	Modify Relay Settings at Leaside 138 kV.	$0.10	12/31/2023
n8337.5	Modify Relay Settings at Ontario 138 kV.	$0.10	12/31/2023
n8359.1	Upgrade existing Sullivan 138 kV (previously named Napoleon Muni Northside) substation to a five-breaker ring bus substation.	$2.94	11/1/2022
n8359.2	Re-terminate the Midway-Sullivan 138 kV line into the expanded substation to support new generation interconnection.	$0.71	11/1/2022
n8359.3	Revise relay settings at Striker 138 kV substation.	$0.08	11/1/2022
n8359.4	Perform end to end testing and revising relay settings at Midway 138 kV substation.	$0.08	11/1/2022
n8359.5	Integrate upgrades to the Sullivan 138 kV substation to the FirstEnergy transmission system.	$0.08	11/1/2022
n8370.1	Tap Cambridge Springs-Corry Central 34.5kV line and convert approximately three-quarters of a mile of 12 kV to 35 kV.	$0.42	1/1/2023

Upgrade ID	Description	Cost Estimate ($M)	Required In-Service Date
n8370.2	Update relay settings on 34.5 kV Cambridge Springs line.	$0.05	1/1/2023
n8370.3	Installation of one 700 MHz radio system to support SCADA Switch at AF1- 094 tap location.	$0.06	1/1/2023
n8374.1	Warfordsburg substation: Replace existing McConnellsburg line relaying with one standard line relaying panel with two SEL-421 and one SEL-501 BFT.	$0.19	3/28/2019
n8374.2	Warfordsburg-Purcell Jct 34.5 kV Line: Install two main line switches on the existing Warfordsburg-Purcell Jct 34.5 kV line.	$0.12	3/28/2019
n8374.3	Mercersburg-AD1-061 34.5 kV Tap: Reconductor approximately 1.6 mi from Mercersburg-AD1-061 (Elk Hill 1) Tap 34.5 kV line from Mercersburg substation to Pole PA406-WP47 with 795 ACSR conductor.	$1.32	3/28/2019
n8374.4	Mercersburg substation 34.5 kV: Replace limiting conductors and revise relay settings.	$0.23	3/28/2019
n8374.5	McConnellsburg substation 34.5 kV: Revise relay settings.	$0.13	3/28/2019
n8438.1	Construct three Breaker 138 kV station in a Breaker and a Half Configuration for AE2-323 interconnection.	$6.36	4/4/2019
n8438.2	Install two Dead End Structures, two Spans of Conductor, two Spans of OPGW Shield wire, Connect New 138 kV station to Existing Twin Branch-Guardian Transmission Circuit and upgrade remote end relays.	$0.69	4/4/2019
n8443.1	Build a new 69 kV IC substation with a three-breaker ring bus. Two of the positions on the ring bus will be transmission line terminals for the tie-in of the Kellam-Cheriton 69 kV line (Line 6750) to the substation. The other position will be a terminal configured for AF2-055 with a disconnect switch.	$5.00	6/1/2027
n8443.2	Rebuild about 20 miles of Cheriton/Bayview-Kellam 69 kV. Install reverse power relay at Cheriton station to trip the generator tie if power flow is greater that 0.15 MW toward AF2-055.	$20.00	6/1/2027
n8443.3	Install dynamic VAR compensation at Kellam-Chriton 69 kV substation.	$5.00	6/1/2027
n8443.4	Communication network upgrades for Island detection at Oakhall 69 kV substation.	$0.50	6/1/2027
n8443.5	Communication network upgrades for Island detection at Oakhall 69 kV substation.	$0.50	6/1/2027
n8445	Update Protective Relay Settings at the Proposed AF1-215 345 kV station.	$0.05	3/16/2020
n8449.1	Install one 230 kV breaker and a new 230 kV line terminal position to create a five-breaker ring bus at Erie East substation.	$2.91	6/1/2026
n8449.2	Install anti-islanding (transfer trip) equipment at Four Mile Junction substation.	$0.63	6/1/2026
n8449.3	Fiber connection and associated conduit to customer substation at Erie East substation.	$0.18	6/1/2026
n8450.1	Bruceton Mills Interconnection Sub 138 kV: Construct three-breaker ring-bus substation for new generation interconnection.	$8.38	9/30/2021
n8450.2	AE1-106 Sub: Design, install and test/commission multi-protocol label switching (MPLS) equipment for SCADA transport.	$0.74	9/30/2021

Upgrade ID	Description	Cost Estimate ($M)	Required In-Service Date
n8450.3	Design, install and test/commission microwave equipment for Supervisory Control and Data Acquisition (SCADA) transport between AE1-106 Customer Facility and Bruceton Mills 138 kV substation.	$0.23	9/30/2021
n8450.4	Brandonville Junction (Albright-Hazelton-Lake Lynn) 138 kV: Loop the existing Brandonville Junction (Albright-Hazelton-Lake Lynn) 138 kV line into the new Bruceton Mills substation.	$1.67	9/30/2021
n8450.5	Lake Lynn substation 138 kV: Replace Panel No. 4 existing line relaying with new breaker control panel with one SEL451 and one SATEC meter.	$0.33	9/30/2021
n8450.6	Hazelton substation 138 kV: Provide remote end equipment required for AE1-106.	$0.93	9/30/2021
n8450.7	Albright substation 138 kV: Provide remote end equipment required for AE1-106.	$1.72	9/30/2021
n8451.1	Construct a new 138 kV three-breaker ring bus looping in the South Akron- Toronto 138 kV line to provide interconnection facilities for AE2-194.	$6.38	5/1/2022
n8451.10	Relay settings for the Gilchrist- Lakemore 138 kV line will be adjusted.	$0.09	5/1/2022
n8451.12	Relay settings for the Lakemore- South Akron 138 kV line will be adjusted.	$0.19	5/1/2022
n8451.13	Relay settings for the Boardman-Toronto 138 kV line will be adjusted.	$0.09	5/1/2022
n8451.14	Relay settings for the Lowellville- Dobbins 138 kV line will be adjusted.	$0.09	5/1/2022
n8451.15	Relay settings for the Urban-Firestone 138 kV line will be adjusted.	$0.19	5/1/2022
n8451.16	Relay settings for the Tusc-Urban 138 kV line will be adjusted.	$0.09	5/1/2022
n8451.2	The South Akron to Toronto 138 kV line will be cut and looped into the new 138 kV interconnection substation. This cut will take place at a location that is approximately 21 miles from the Toronto substation. It is assumed that the interconnection substation will be located within one span (approximately 0.1 mile) from the existing line.	$3.06	5/1/2022
n8451.5	138 kV line relay setting for AE2-194 Interconnection (South Akron) will be changed.	$0.50	5/1/2022
n8451.6	One 138 kV 2000A dual-frequency wave traps, line tuners and coax will be installed.	$0.17	5/1/2022
n8451.7	Relay settings for the Dobbins-Toronoto 138 kV line will be adjusted.	$0.19	5/1/2022
n8451.8	Relay settings for the Dale- South Akron 138 kV line will be adjusted.	$0.09	5/1/2022
n8451.9	Relay settings for the Sammis-Toronoto 138 kV line will be adjusted.	$0.09	5/1/2022
n8455.1	Sandridge substation: Establish new 69 kV line position for AF1-064.	$1.56	3/31/2022
n8455.2	Midway substation 69 kV: Install Carrier equipment for anti-islanding.	$0.50	3/31/2022
n8455.3	Bowling Green No.2 69 kV: Install Carrier equipment for anti-islanding.	$0.47	3/31/2022
n8457.1	AE2-262/AE2-263 Interconnection Sub: Construct a new 230 kV three-breaker ring bus looping in the Moshannon-Milesburg 230 kV line to provide interconnection facilities for AE2-262/AE2-263.	$11.43	6/30/2022
n8457.2	AE2-262/AE2-263 Interconnection Sub: Design, install and test/commission MPLS Equipment for SCADA transport at new Interconnection Sub.	$0.24	6/30/2022
n8457.3	AE2-262/AE2-263 Interconnection Sub: Install fiber from AE2-262/AE2-263 New Interconnection substation to fiber backbone for communication transport.	$0.15	6/30/2022

Upgrade ID	Description	Cost Estimate ($M)	Required In-Service Date
n8457.4	Moshannon-Milesburg 230 kV Line: The Moshannon-Milesburg 230 kV line will be cut and looped into the new 230 kV interconnect substation. This cut will take place at a location that is approximately 16.3 miles from the Moshannon substation.	$1.72	6/30/2022
n8457.5	Moshannon 230 kV: Anti-islanding and carrier equipment will be installed in existing relay panels. Existing Milesburg line relaying will be replaced.	$0.69	6/30/2022
n8457.6	Milesburg 230 kV: One existing 230 kV CVT, wave trap, line tuner and circuit breaker will be replaced. Anti-islanding will be installed. Existing Moshannon line relaying panel will be replaced.	$1.82	6/30/2022
n8457.7	Dale Summit 230 kV: A new carrier relaying panel with anti-islanding will be installed for the Milesburg and Shingletown exits.	$0.57	6/30/2022
n8457.8	Shingletown 230 kV: A new carrier relaying panel with anti-islanding will be installed for the Dale Summit exit.	$0.61	6/30/2022
n8458	Install one 23 kV line potential transformer and associated structure on Bedford North line Replace 23 kV Bedford North line relays with one line relaying panel with one SEL351S and one SATEC Meter.	$0.69	12/15/2022

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. The need for the Rebuild Project is not driven by outage history, but rather by the need to address the overloading issue. See Sections I.A and I.C.

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: Not applicable. See Section I.A.

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 Rebuild Project transmission corridor is approximately 22.3 miles between the Company's existing Charlottesville and Dooms Substations. The right-of-way is in the Commonwealth of Virginia within the City of Charlottesville and Albemarle and Augusta Counties.

No alternative routes are proposed for the Rebuild Project. See Section II.A.9 of the Appendix for an explanation of the Company's route selection process.

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, which includes existing linear utilities paralleled by the existing transmission line corridor. The Rebuild Project is located entirely within the existing cleared transmission line right-of-way or on Company-owned property, which parallels 115 kV Line #39 and 500 kV Line #534 from existing Structures #233/122, #291/122 to the Dooms Substation for approximately 4.0 miles. No portion of the right-of-way is proposed to be quitclaimed or relinquished.

The Company will make the digital Geographic Information Systems ("GIS") shapefile available to interested persons upon request to the Company's legal counsel as listed in the Rebuild Project Application.

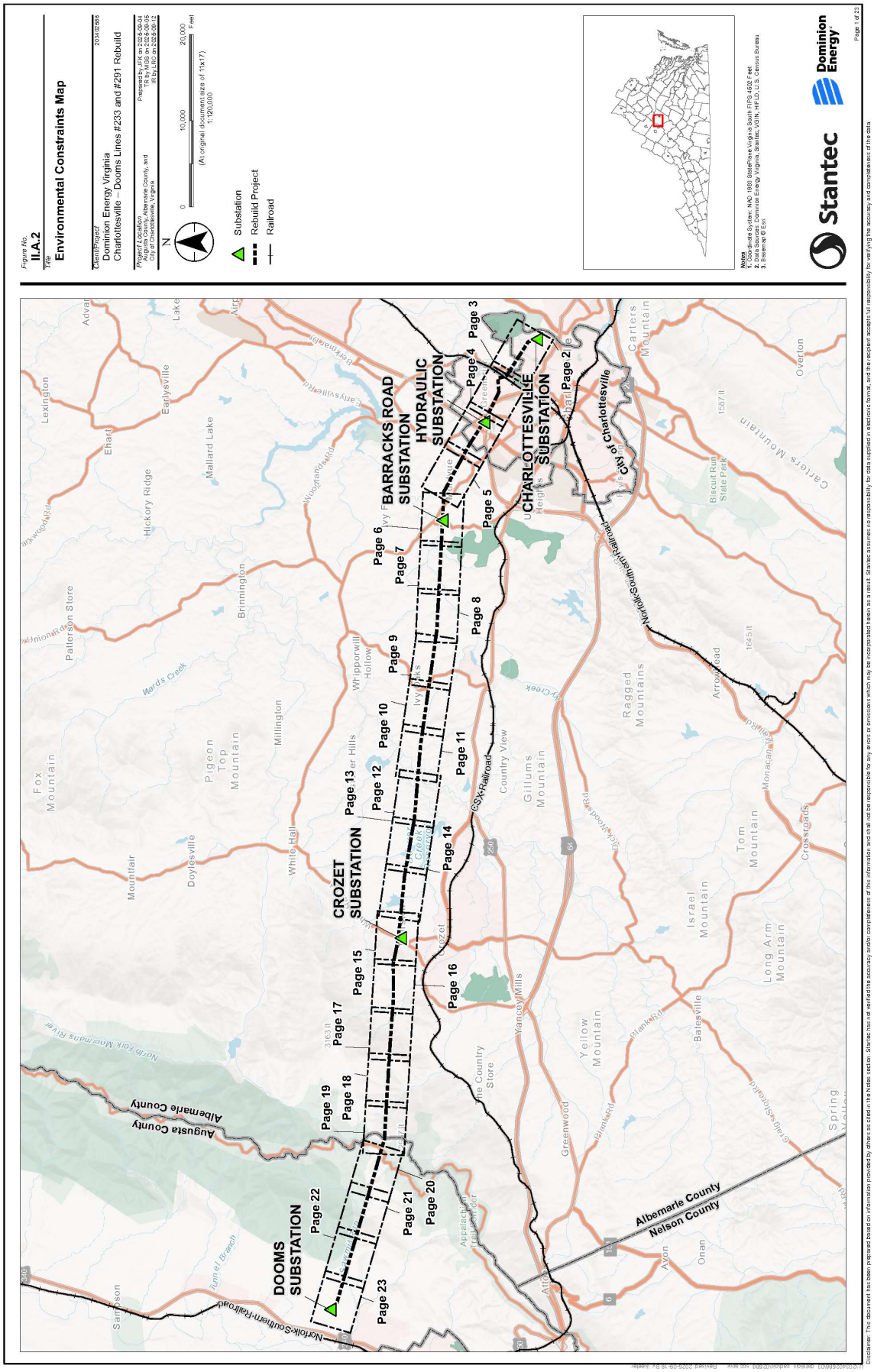
Figure No.
II.A.2
Title
Environmental Constraints Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Prepared by JFK on 2025-08-04
TR by MGB on 2025-08-05
IR by LAG on 2025-08-12
N
0
10,000
20,000
Feet
(At original document size of 11x17)
1:120,000
Substation
Rebuild Project
Railroad
Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Dominion Energy, Virginia, Stantec, VGIN, HIFLD, U.S. Census Bureau
3. Basemap © Esri
Stantec
Dominion Energy
Page 1 of 23
DOOMS SUBSTATION
CROZET SUBSTATION
BARRACKS ROAD HYDRAULIC SUBSTATION
CHARLOTTESVILLE SUBSTATION
Norfolk-Southern Railroad
CSX Railroad
Albemarle County
Augusta County
Nelson County
City of Charlottesville
Page 2
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Page 10
Page 11
Page 12
Page 13
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Page 15
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Page 19
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Page 21
Page 22
Page 23

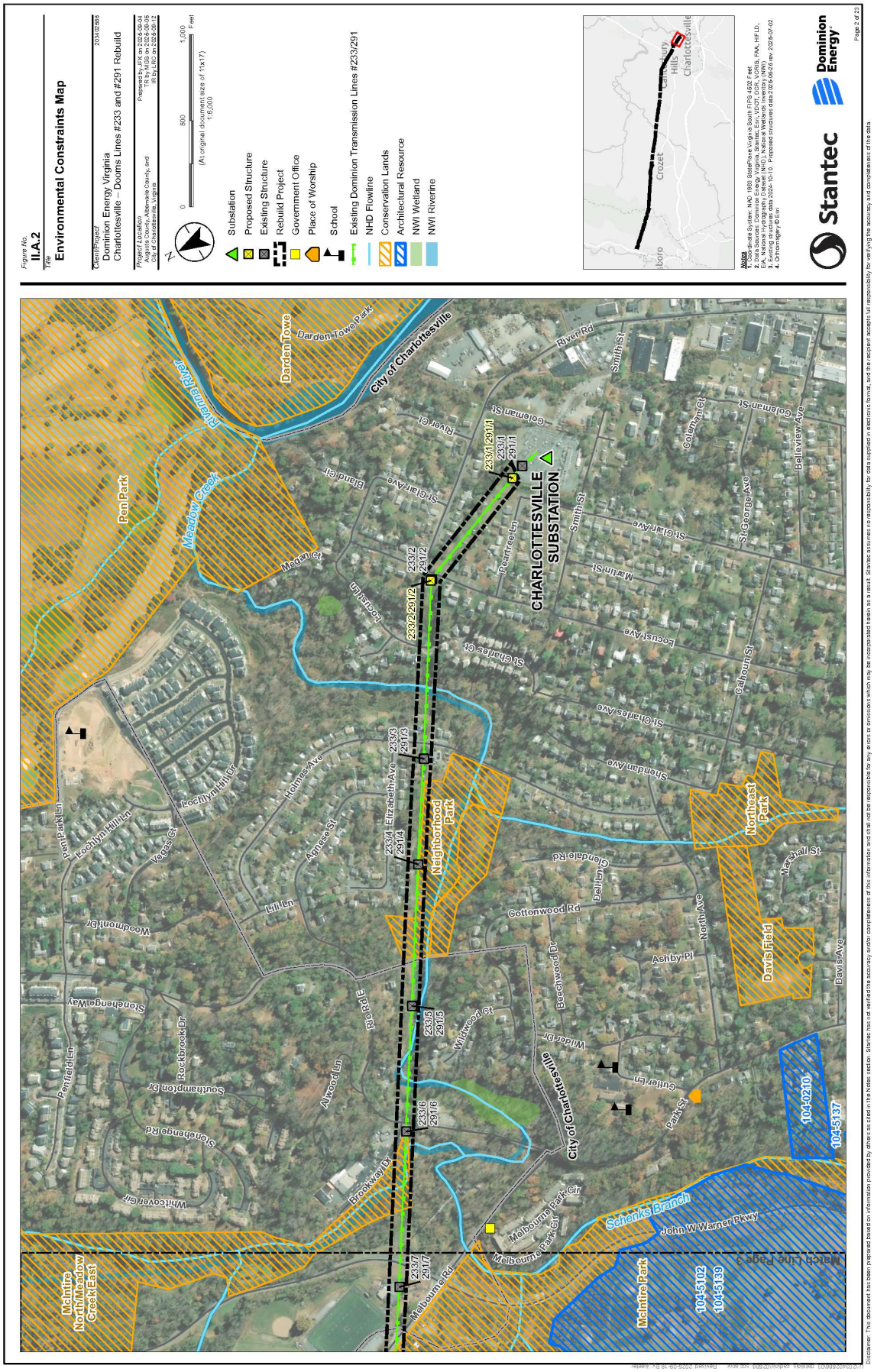
Figure No.
II.A.2
Title
Environmental Constraints Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
205402566
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Prepared by JFK on 2025-08-04
TR by MGB on 2025-08-06
IR by LAG on 2025-08-12
0
500
1,000
Feet
1:6,000
(At original document size of 11x17)
Substation
Proposed Structure
Existing Structure
Rebuild Project
Government Office
Place of Worship
School
Existing Dominion Transmission Lines #233/291
NHD Flowline
Conservation Lands
Architectural Resource
NWI Wetland
NWI Riverine
CHARLOTTESVILLE SUBSTATION
City of Charlottesville
Darden Towe Park
Pen Park
Meadow Creek
Rivanna River
Northeast Neighborhood Park
Davis Field
Schenks Branch
John W Warner Pkwy
McIntire Park
McIntire North/Meadow Creek East
Dominion Energy
Stantec
Page 2 of 23

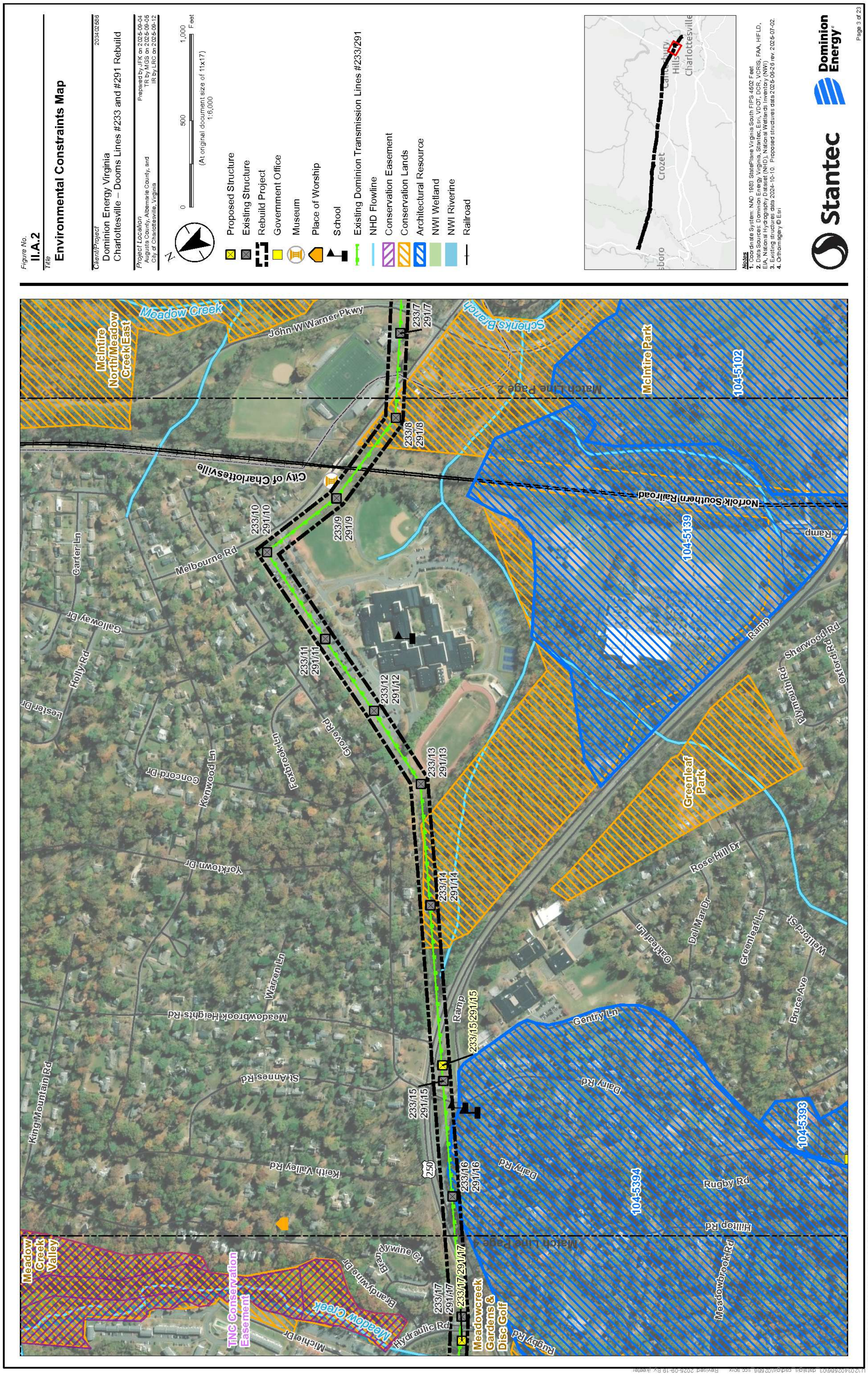

Figure No.
II.A.2
Title
Environmental Constraints Map
Client/Project
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Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
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500
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Feet
(At original document size of 11x17)
1:6,000
Proposed Structure
Existing Structure
Rebuild Project
Government Office
Museum
Place of Worship
School
Existing Dominion Transmission Lines #233/291
NHD Flowline
Conservation Easement
Conservation Lands
Architectural Resource
NWI Wetland
NWI Riverine
Railroad
Crozet
Charlottesville
Stantec
Dominion Energy
Meadow Creek
McIntire North/Meadow Creek East
John W Warner Pkwy
Schenks Branch
Match Line Page 2
McIntire Park
104-5102
City of Charlottesville
Norfolk Southern Railroad
104-5139
Melbourne Rd
Carter Ln
Galloway Dr
Holly Rd
Lester Dr
Concord Dr
Kenwood Ln
Foxbrook Ln
Grove Rd
Greenleaf Park
Rose Hill Dr
Yorktown Dr
Warren Ln
Meadowbrook Heights Rd
St Annes Rd
Keith Valley Rd
King Mountain Rd
Gentry Ln
Dairy Rd
Rugby Rd
Hilltop Rd
Meadowbrook Rd
104-5394
104-5393
Sherwood Rd
Oxford Rd
Plymouth Rd
Bruce Ave
Del Mar Dr
Greenleaf Ln
Oakhurst Ln
Ramp
250
Match Line Page 4
Meadow Creek Valley
TNC Conservation Easement
Brandywine Dr
Brandywine Ct
Hydraulic Rd
Michie Dr
Meadowcreek Gardens & Disc Golf
233/7 291/7
233/8 291/8
233/9 291/9
233/10 291/10
233/11 291/11
233/12 291/12
233/13 291/13
233/14 291/14
233/15 291/15
233/16 291/16
233/17 291/17
Page 3 of 23

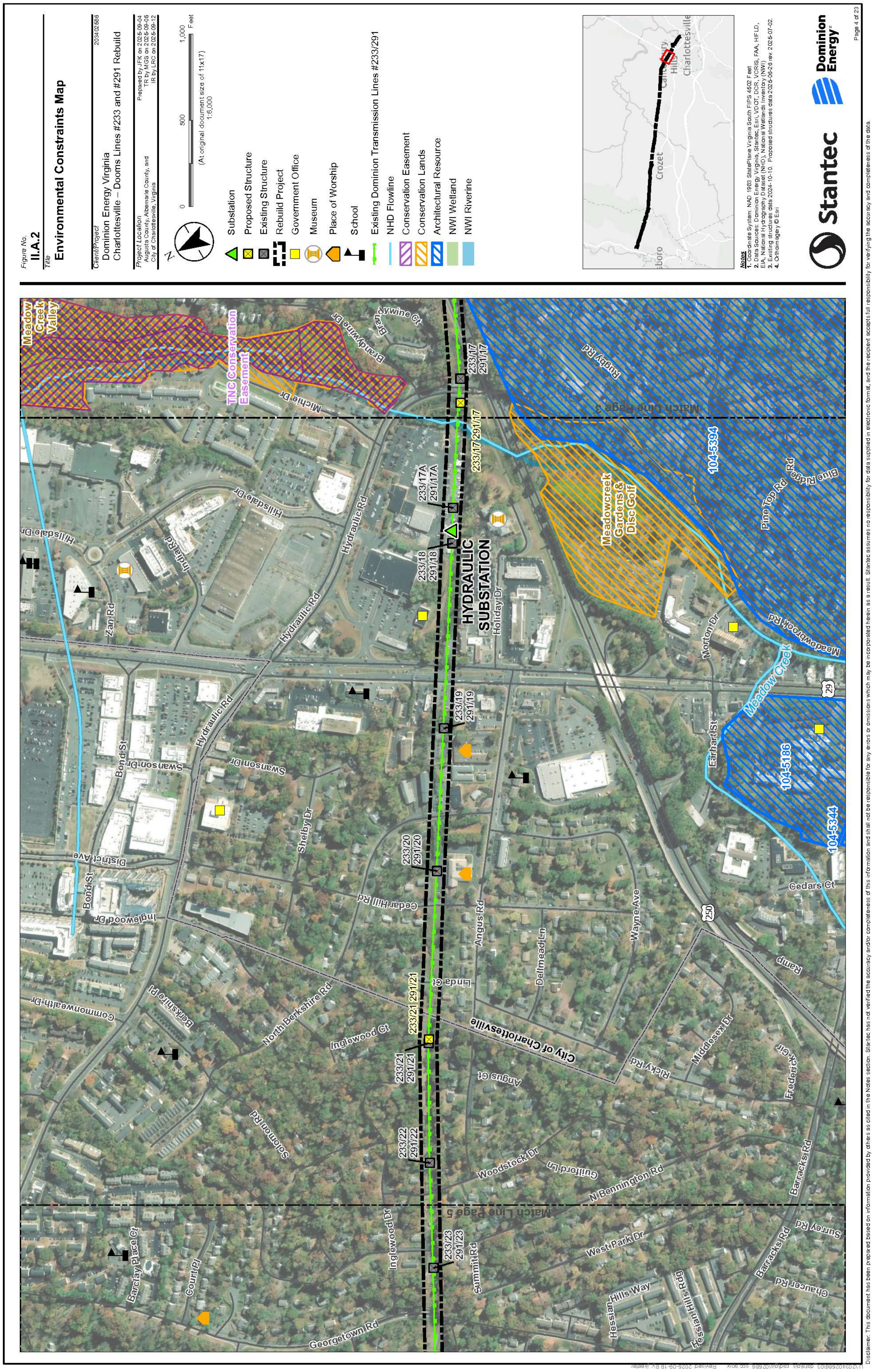

Figure No.
II.A.2
Title
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Client/Project
203402586
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Prepared by JFK on 2026-09-04
TR by MGS on 2026-09-05
IR by LRC on 2026-09-12
(At original document size of 11x17)
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500
1,000
Feet
Substation
Proposed Structure
Existing Structure
Rebuild Project
Government Office
Museum
Place of Worship
School
Existing Dominion Transmission Lines #233/291
NHD Flowline
Conservation Easement
Conservation Lands
Architectural Resource
NWI Wetland
NWI Riverine
Notes
Stantec
Dominion Energy
Page 4 of 23
HYDRAULIC SUBSTATION
Meadow Creek Valley
TNC Conservation Easement
Meadowcreek Gardens & Disc Golf
City of Charlottesville
Match Line Page 3
Match Line Page 5
104-5394
104-5186
104-5344
Meadow Creek
233/17
291/17
233/17A
291/17A
233/18
291/18
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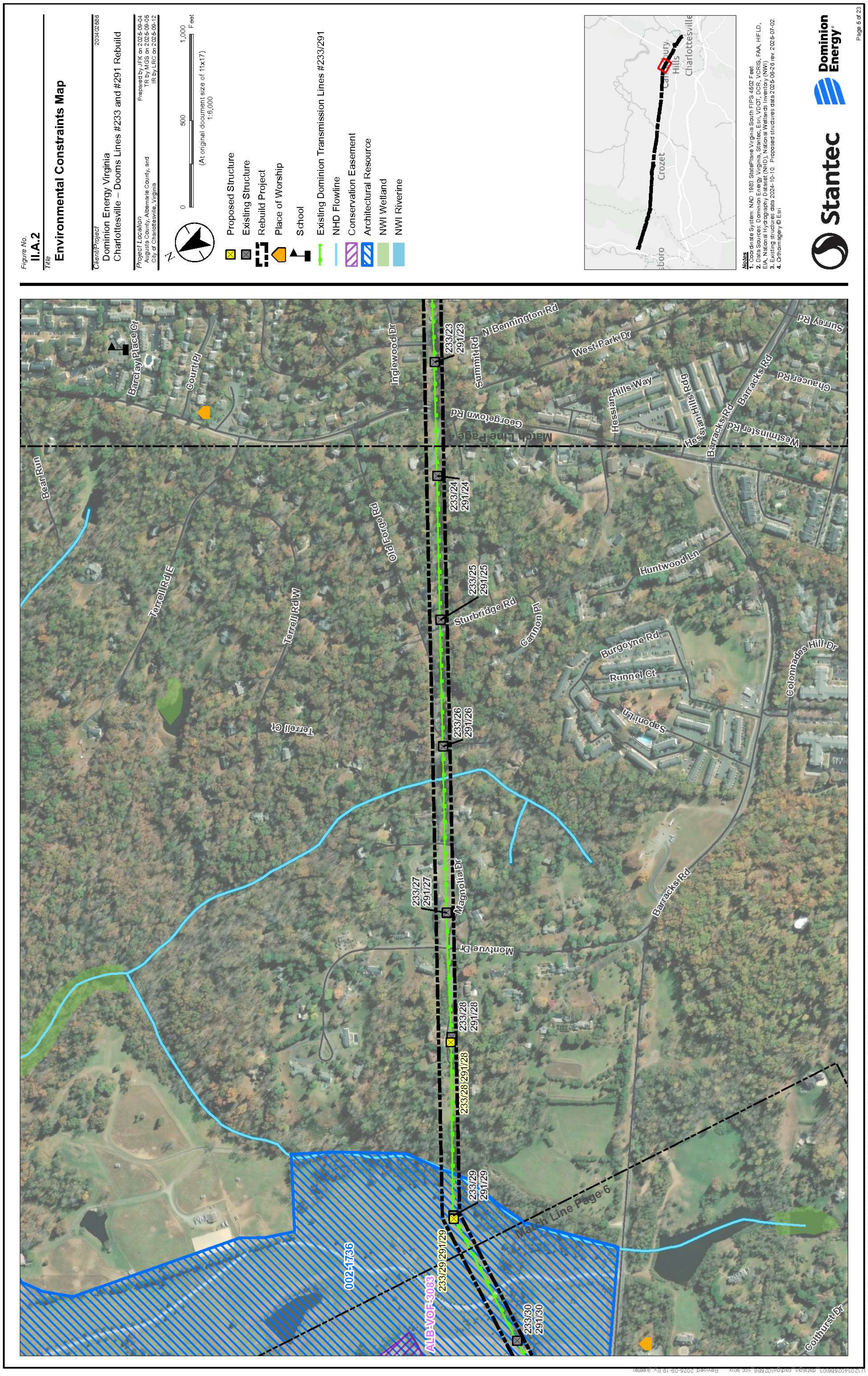
291/22
233/23
291/23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Environmental Constraints Map
Client/Project
203402586
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Prepared by JFK on 2025-09-04
TR by MGS on 2025-09-05
IR by LRC on 2025-09-12
0
500
1,000
Feet
(At original document size of 11x17)
1:6,000
Proposed Structure
Existing Structure
Rebuild Project
Place of Worship
School
Existing Dominion Transmission Lines #233/291
NHD Flowline
Conservation Easement
Architectural Resource
NWI Wetland
NWI Riverine
Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Dominion Energy Virginia, Stantec, Esri, VDOT, DCR, VCRIS, FAA, HIFLD, EIA, National Hydrography Dataset (NHD), National Wetlands Inventory (NWI)
3. Existing structures data 2024-10-10. Proposed structures data 2025-06-26 rev. 2025-07-02.
4. Orthoimagery © Esri
Stantec
Dominion Energy
Page 6 of 23
Crozet
Charlottesville
002-1736
ALB-VOF-3083
233/29 291/29
233/28 291/28
233/30
291/30
233/29
291/29
233/28
291/28
233/27
291/27
233/26
291/26
233/25
291/25
233/24
291/24
233/23
291/23
Match Line Page 6
Match Line Page
Bear Run
Barclay Place Ct
Terrell Rd E
Court Pl
Terrell Ct
Terrell Rd W
Old Forge Rd
Inglewood Dr
Magnolia Dr
Montvue Dr
Sturbridge Rd
Georgetown Rd
Summit Rd
N Bennington Rd
Cannon Pl
West Park Dr
Hessian Hills Way
Hessian Hills Rdg
Saponi Ln
Runnel Ct
Burgoyne Rd
Huntwood Ln
Barracks Rd
Westminster Rd
Chaucer Rd
Surrey Rd
Colonnades Hill Dr
Colthurst Dr
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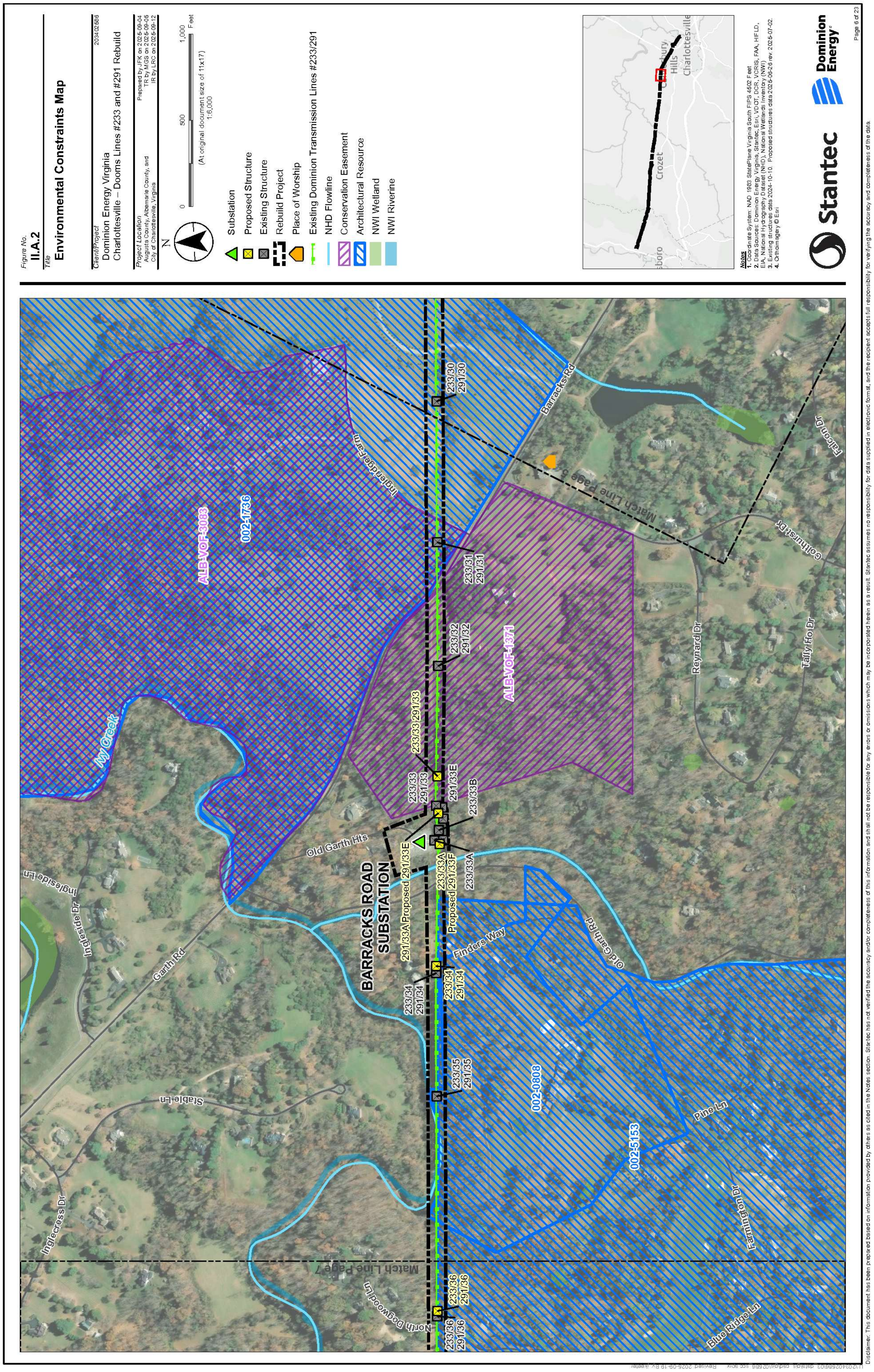
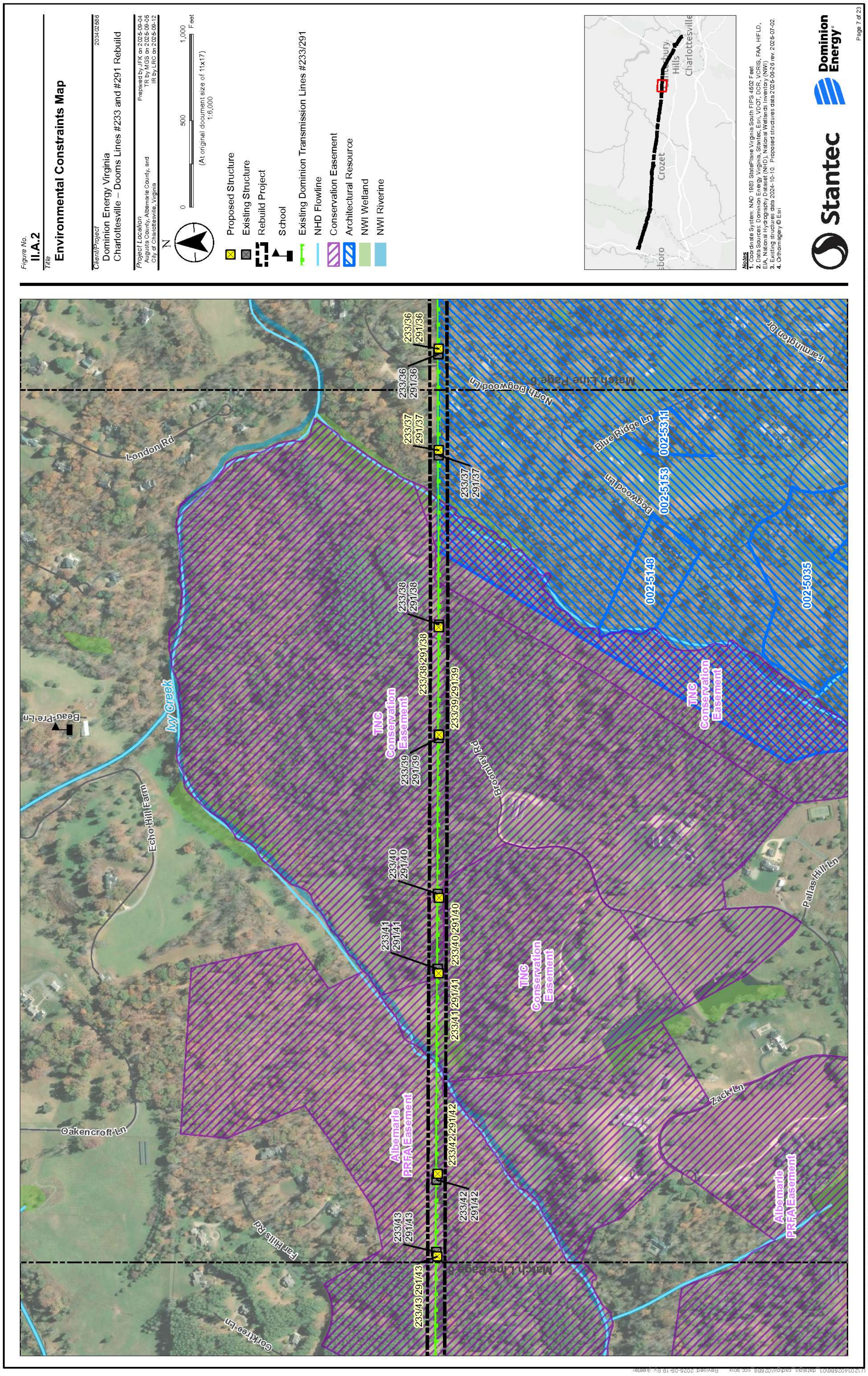


Figure No.
II.A.2
Title
Environmental Constraints Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
(At original document size of 11x17)
1:6,000
Substation
Proposed Structure
Existing Structure
Rebuild Project
Place of Worship
Existing Dominion Transmission Lines #233/291
NHD Flowline
Conservation Easement
Architectural Resource
NWI Wetland
NWI Riverine
BARRACKS ROAD SUBSTATION
Match Line Page 5
Match Line Page 7
ALB-VOF-3063
ALB-VOF-1371
002-1736
002-0808
002-5153
Ivy Creek
Barracks Rd
Garth Rd
Old Garth Rd
Old Garth Hls
Finders Way
Reynard Dr
Tally Ho Dr
Pine Ln
Farmington Dr
Blue Ridge Ln
North Dogwood Ln
Stable Ln
Inglecress Dr
Ingleside Dr
Ingleside Ln
Falcon Ln
Colthurst Dr
Stantec
Dominion Energy
Page 6 of 23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II.A.2
Title
Environmental Constraints Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
(At original document size of 11x17)
1:6,000
0 500 1,000 Feet
Proposed Structure
Existing Structure
Rebuild Project
School
Existing Dominion Transmission Lines #233/291
NHD Flowline
Conservation Easement
Architectural Resource
NWI Wetland
NWI Riverine
Crozet
Charlottesville
Ivy Creek
London Rd
Echo Hill Farm
Beau-Pre Ln
Oakencroft Ln
Far Hills Rd
North Dogwood Ln
Blue Ridge Ln
Dogwood Ln
Farmington Dr
Broomley Rd
Pallas Hill Ln
Zack Ln
TNC Conservation Easement
Albemarle PRFA Easement
002-5148
002-5153
002-5311
002-5035
Match Line Page 6
Match Line Page 8
233/36 291/36
233/37 291/37
233/38 291/38
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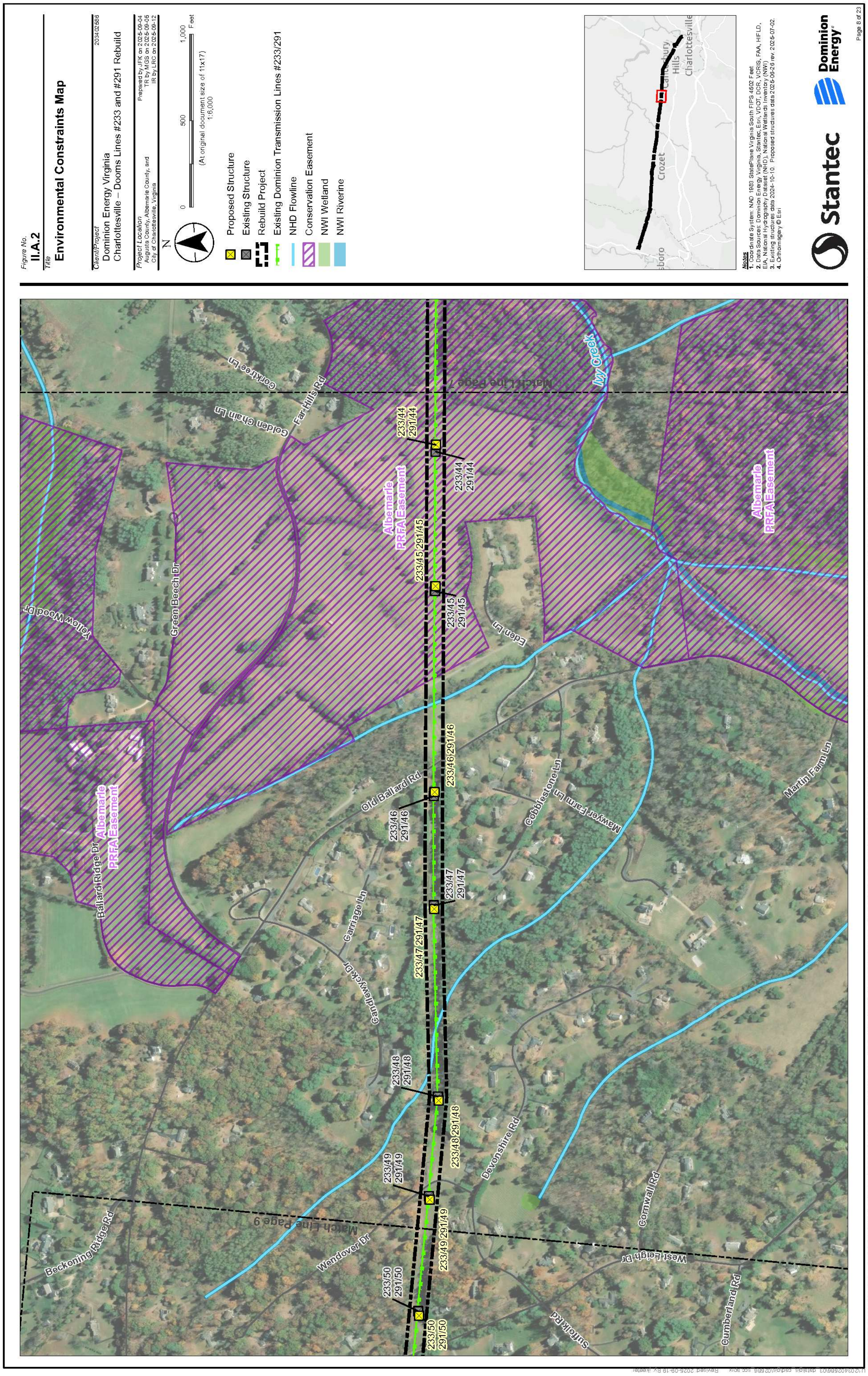
233/40 291/40
233/41 291/41
233/42 291/42
233/43 291/43
Stantec
Dominion Energy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II.A.2
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Environmental Constraints Map
Client/Project
203402586
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Prepared by JFK on 2025-09-04
TR by MGS on 2025-09-05
IR by LRC on 2025-09-12
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(At original document size of 11x17)
1:6,000
Proposed Structure
Existing Structure
Rebuild Project
Existing Dominion Transmission Lines #233/291
NHD Flowline
Conservation Easement
NWI Wetland
NWI Riverine
Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Dominion Energy Virginia, Stantec, Esri, VDOT, DCR, VCRIS, FAA, HIFLD, EIA, National Hydrography Dataset (NHD), National Wetlands Inventory (NWI)
3. Existing structures data 2024-10-10. Proposed structures data 2025-06-26 rev. 2025-07-02.
4. Orthoimagery © Esri
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Dominion Energy
Page 8 of 23
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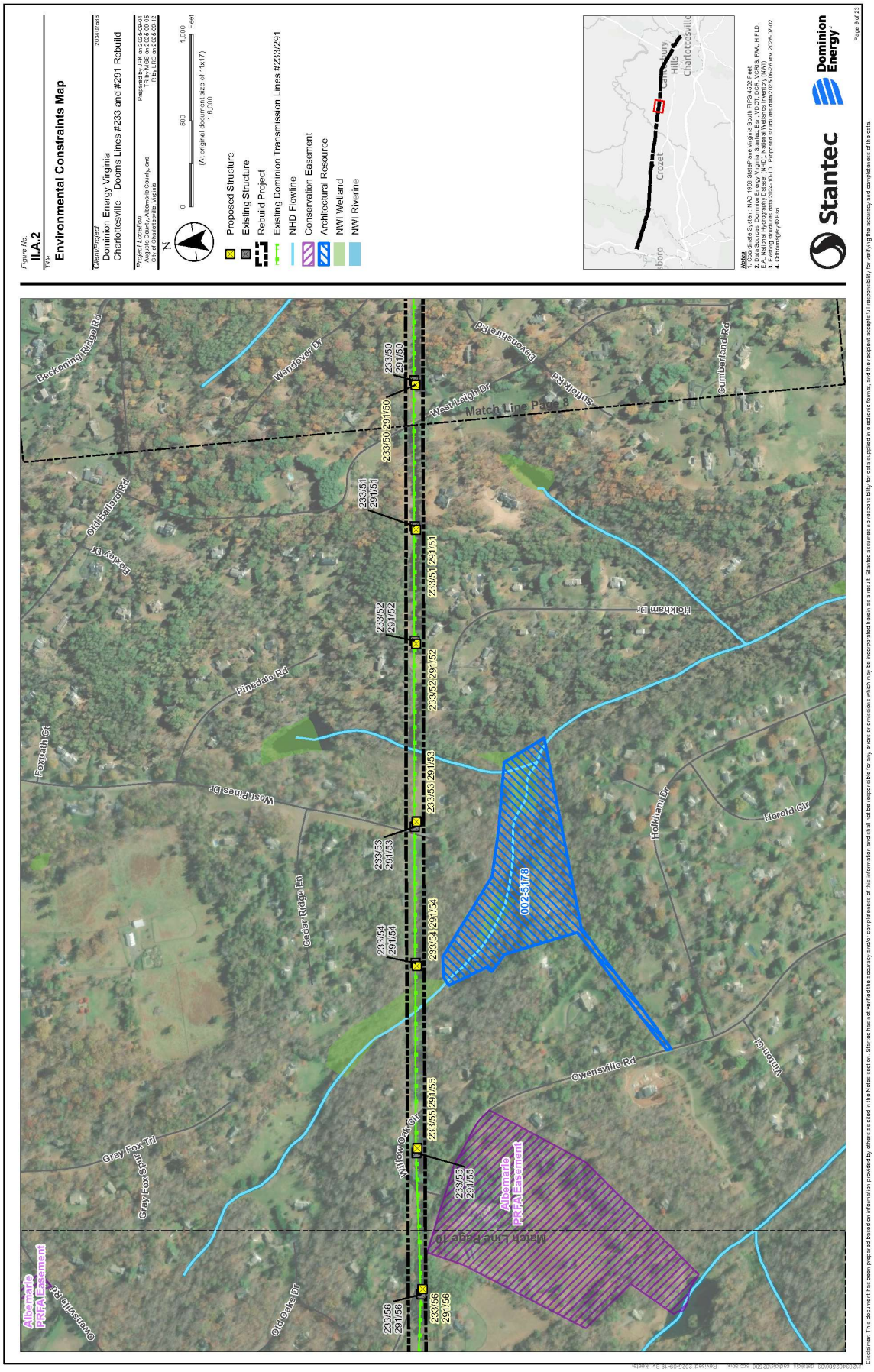
Albemarle PRFA Easement
Ballard Ridge Dr
Yellow Wood Dr
Green Beech Dr
Golden Chain Ln
Corktree Ln
Far Hills Rd
Beckoning Ridge Rd
Wendover Dr
Match Line Page 9
Match Line Page 7
Candlewyck Dr
Carriage Ln
Old Ballard Rd
Eden Ln
Devonshire Rd
Cobblestone Ln
Mawyer Farm Ln
Suffolk Rd
West Leigh Dr
Cornwall Rd
Cumberland Rd
Martin Farm Ln
Ivy Creek
233/44 291/44
233/45 291/45
233/46 291/46
233/47 291/47
233/48 291/48
233/49 291/49
233/50 291/50
Crozet
Canterbury Hills
Charlottesville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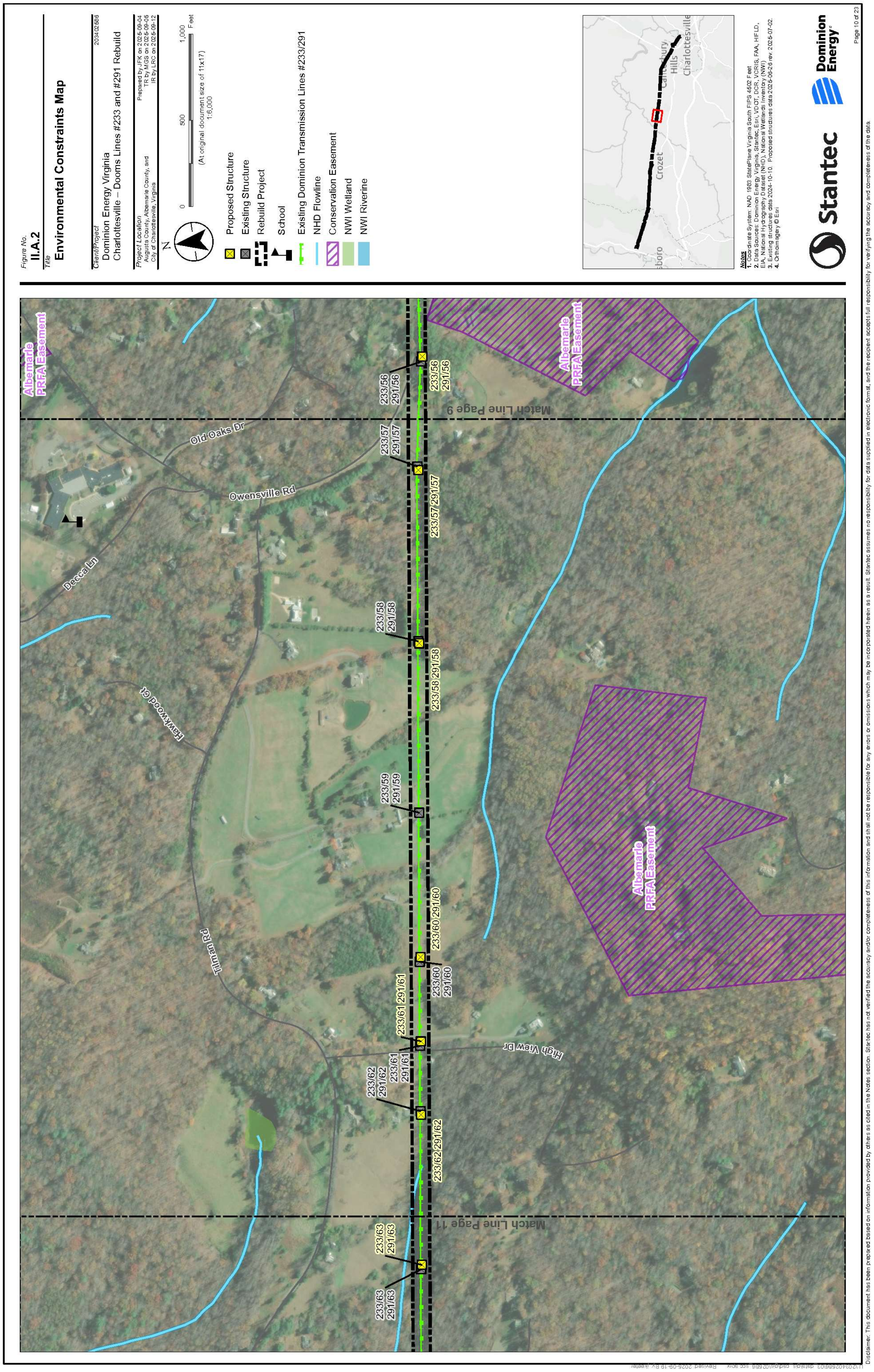
Title
Environmental Constraints Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Proposed Structure
Existing Structure
Rebuild Project
Existing Dominion Transmission Lines #233/291
NHD Flowline
Conservation Easement
Architectural Resource
NWI Wetland
NWI Riverine
Match Line Page 8
Match Line Page 10
002-5178
Albemarle PRIFA Easement
Albemarle PRIFA Easement
Stantec
Dominion Energy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Environmental Constraints Map
Client/Project
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Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Prepared by JFK on 2025-09-04
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IR by LRC on 2025-09-12
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Feet
(At original document size of 11x17)
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Proposed Structure
Existing Structure
Rebuild Project
School
Existing Dominion Transmission Lines #233/291
NHD Flowline
Conservation Easement
NWI Wetland
NWI Riverine
Crozet
Canterbury Hills
Charlottesville
Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Dominion Energy Virginia, Stantec, Esri, VDOT, DCR, VCRIS, FAA, HIFLD, EIA, National Hydrography Dataset (NHD), National Wetlands Inventory (NWI)
3. Existing structures data 2024-10-10. Proposed structures data 2025-06-26 rev. 2025-07-02.
4. Orthoimagery © Esri
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Dominion Energy
Page 10 of 23
Albemarle PRFA Easement
Old Oaks Dr
Owensville Rd
Decca Ln
Hawkwood Ct
Tilman Rd
High View Dr
Match Line Page 9
Match Line Page 11
233/56 291/56
233/57 291/57
233/58 291/58
233/59 291/59
233/60 291/60
233/61 291/61
233/62 291/62
233/63 291/63

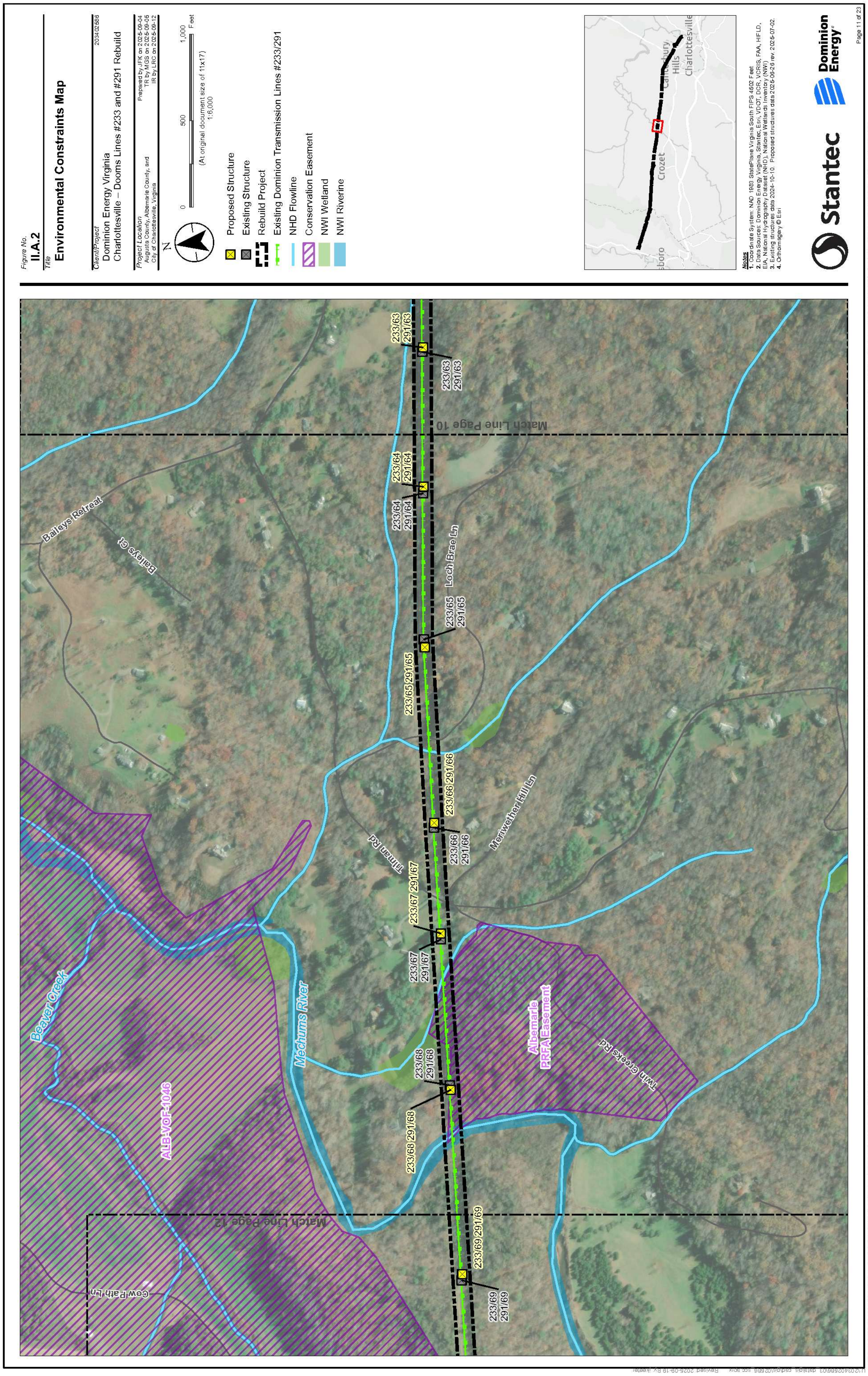
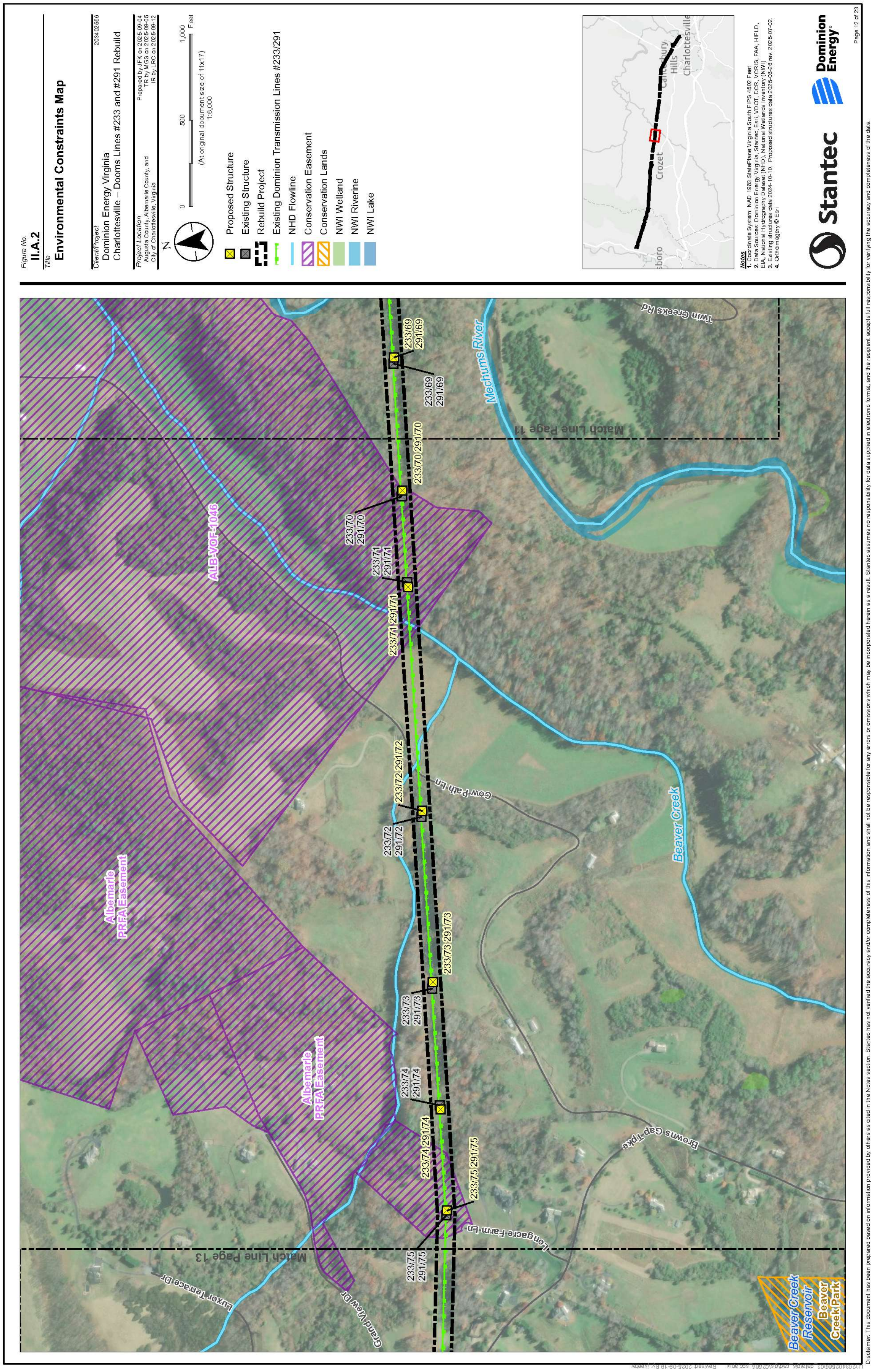


Figure No.
II.A.2
Title
Environmental Constraints Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Proposed Structure
Existing Structure
Rebuild Project
Existing Dominion Transmission Lines #233/291
NHD Flowline
Conservation Easement
NWI Wetland
NWI Riverine
Match Line Page 10
Match Line Page 12
Baileys Retreat
Baileys Ct
Loch Brae Ln
Tilman Rd
Meriwether Hill Ln
Mechums River
Beaver Creek
Twin Creeks Rd
Cow Path Ln
Albemarle PRFA Easement
ALB-VOF-1046
Crozet
Stantec
Dominion Energy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Title
Environmental Constraints Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
(At original document size of 11x17)
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Proposed Structure
Existing Structure
Rebuild Project
Existing Dominion Transmission Lines #233/291
NHD Flowline
Conservation Easement
Conservation Lands
NWI Wetland
NWI Riverine
NWI Lake
Match Line Page 11
Match Line Page 13
ALB-VOF-1046
Albemarle PRFA Easement
Albemarle PRFA Easement
Mechums River
Beaver Creek
Cow Path Ln
Browns Gap Tpke
Twin Creeks Rd
Longacre Farm Ln
Luxor Terrace Dr
Grand View Dr
Beaver Creek Reservoir
Beaver Creek Park
233/69 291/69
233/70 291/70
233/71 291/71
233/72 291/72
233/73 291/73
233/74 291/74
233/75 291/75
Crozet
Charlottesville
Stantec
Dominion Energy

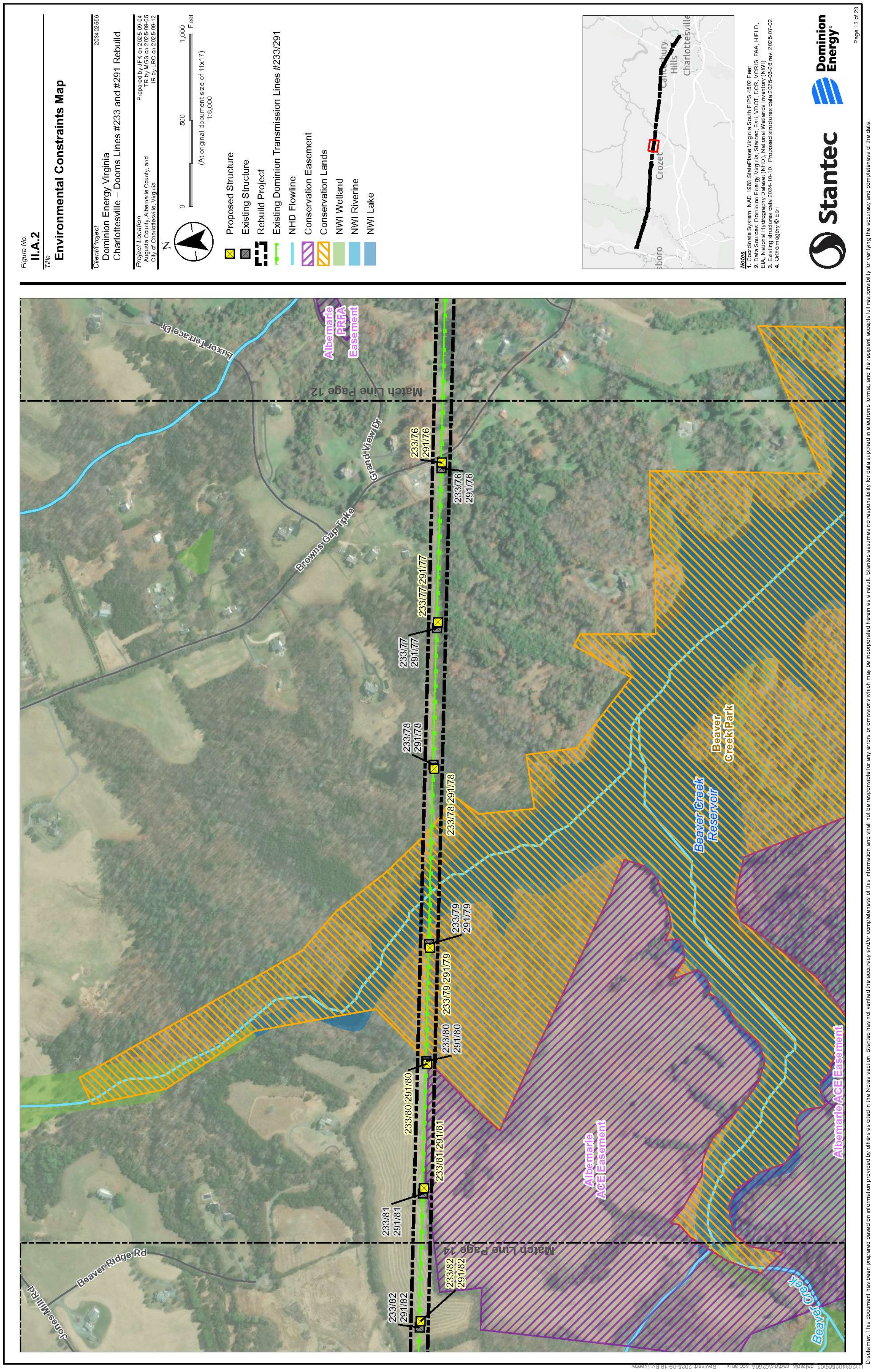

Figure No.
II.A.2
Title
Environmental Constraints Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
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Feet
(At original document size of 11x17)
1:6,000
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Proposed Structure
Existing Structure
Rebuild Project
Existing Dominion Transmission Lines #233/291
NHD Flowline
Conservation Easement
Conservation Lands
NWI Wetland
NWI Riverine
NWI Lake
Crozet
Charlottesville
Stantec
Dominion Energy
Albemarle PRFA Easement
Luxor Terrace Dr
Match Line Page 12
Grand View Dr
Browns Gap Tpke
233/76
291/76
233/77 291/77
233/78
291/78
233/78 291/78
233/79
291/79
233/79 291/79
233/80
291/80
233/80 291/80
233/81 291/81
233/81
291/81
233/82
291/82
Beaver Creek Reservoir
Beaver Creek Park
Albemarle ACE Easement
Match Line Page 14
Beaver Ridge Rd
Jones Mill Rd
Beaver Creek

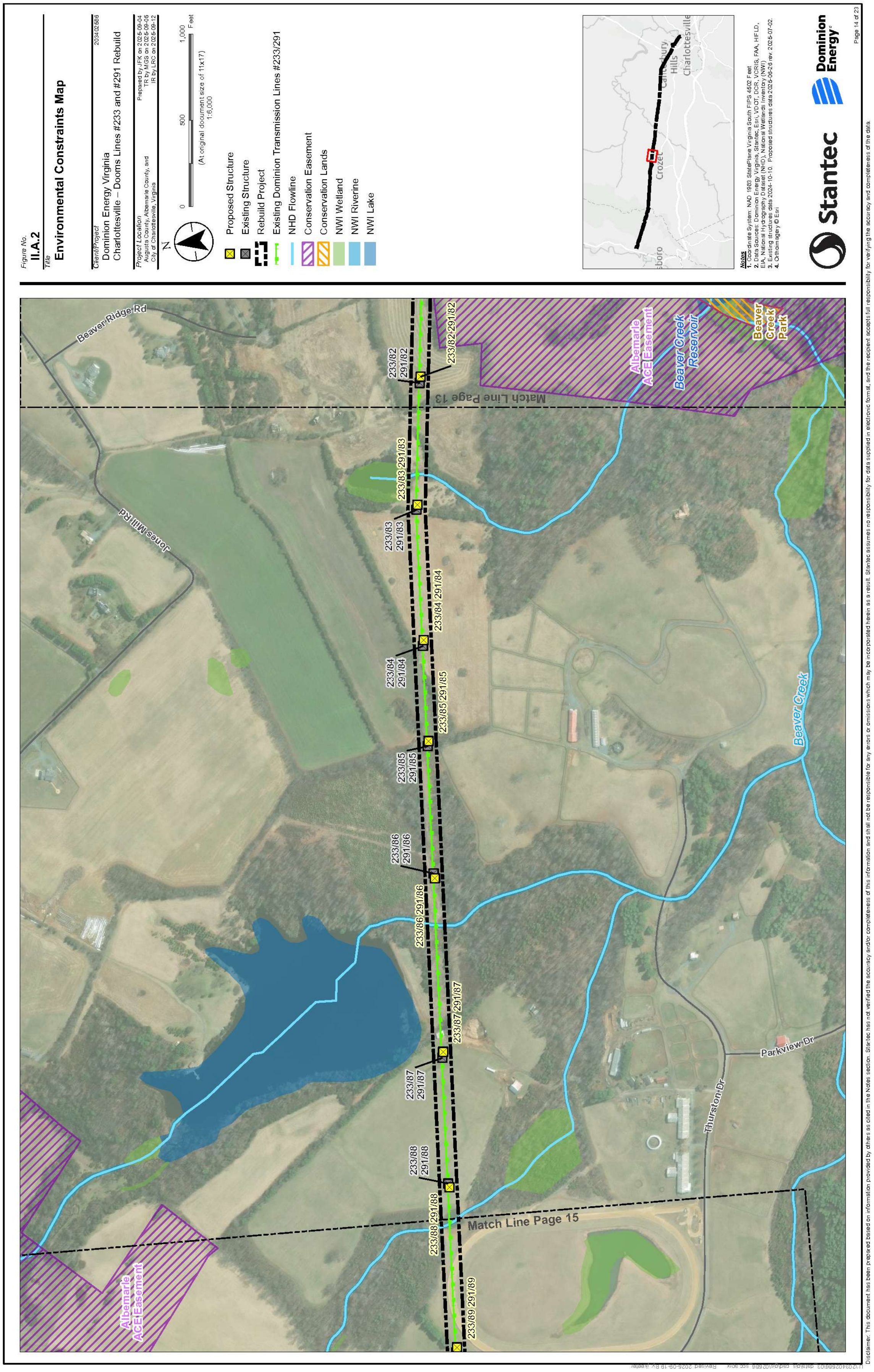
Figure No.
II.A.2
Title
Environmental Constraints Map
Client/Project
203402586
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Prepared by JFK on 2025-09-04
TR by MGS on 2025-09-05
IR by LRC on 2025-09-12
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Feet
(At original document size of 11x17)
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Proposed Structure
Existing Structure
Rebuild Project
Existing Dominion Transmission Lines #233/291
NHD Flowline
Conservation Easement
Conservation Lands
NWI Wetland
NWI Riverine
NWI Lake
Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Dominion Energy Virginia, Stantec, Esri, VDOT, DCR, VCRIS, FAA, HIFLD, EIA, National Hydrography Dataset (NHD), National Wetlands Inventory (NWI)
3. Existing structures data 2024-10-10. Proposed structures data 2025-06-26 rev. 2025-07-02.
4. Orthoimagery © Esri
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Dominion Energy
Page 14 of 23
Crozet
Charlottesville
Albemarle ACE Easement
Albemarle ACE Easement
Beaver Creek Reservoir
Beaver Creek Park
Beaver Creek
Beaver Ridge Rd
Jones Mill Rd
Thurston Dr
Parkview Dr
Match Line Page 13
Match Line Page 15
233/82 291/82
233/83 291/83
233/84 291/84
233/85 291/85
233/86 291/86
233/87 291/87
233/88 291/88
233/89 291/89
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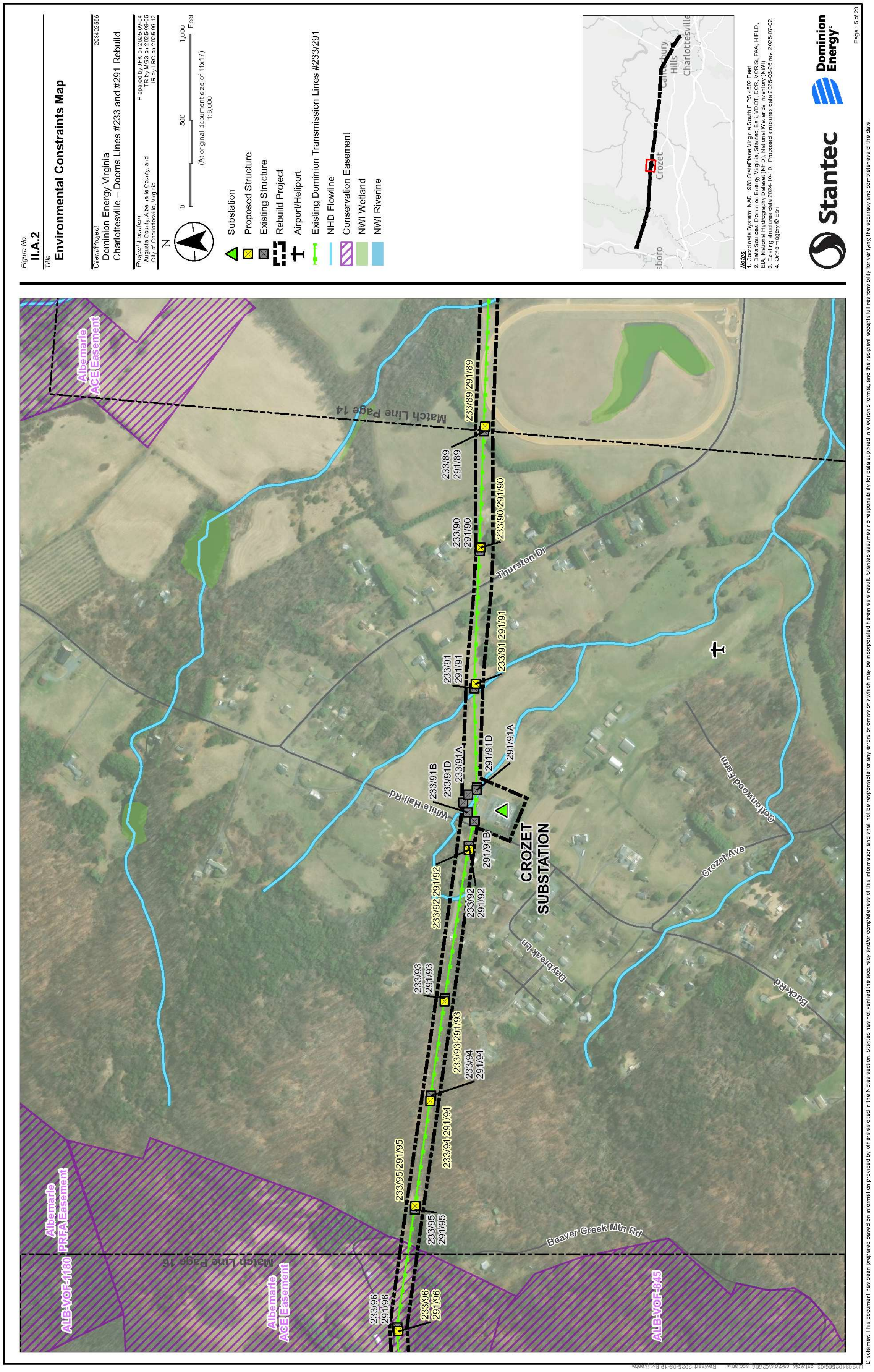
Figure No.
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Title
Environmental Constraints Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
(At original document size of 11x17)
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Substation
Proposed Structure
Existing Structure
Rebuild Project
Airport/Heliport
Existing Dominion Transmission Lines #233/291
NHD Flowline
Conservation Easement
NWI Wetland
NWI Riverine
Match Line Page 14
Match Line Page 16
CROZET SUBSTATION
Thurston Dr
White Hall Rd
Cottonwood Farm
Crozet Ave
Daybreak Ln
Buck Rd
Beaver Creek Mtn Rd
Albemarle ACE Easement
Albemarle PRFA Easement
ALB-VOF-1180
ALB-VOF-845
Stantec
Dominion Energy
Page 16 of 23

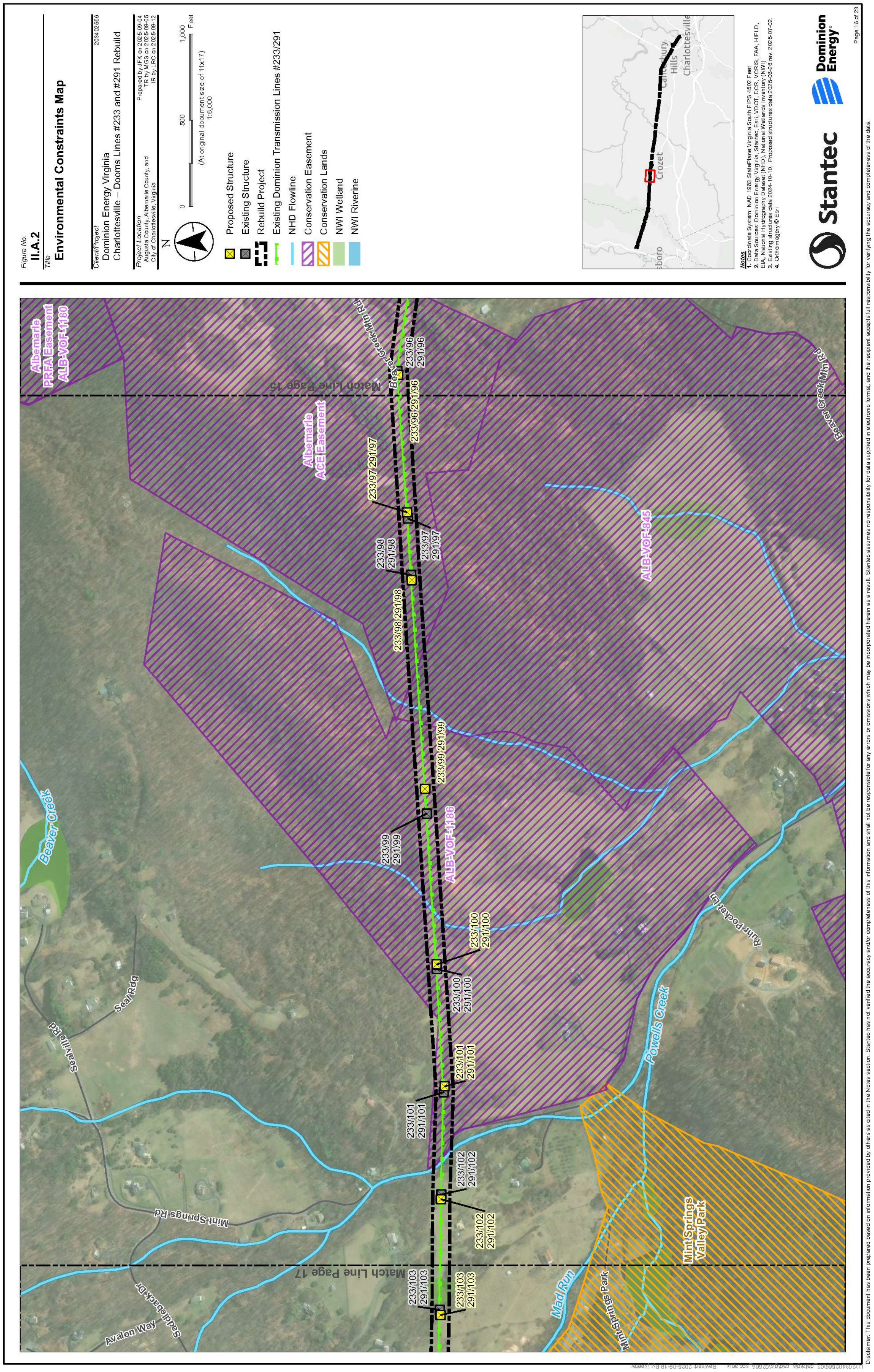
Figure No.
II.A.2
Title
Environmental Constraints Map
Client/Project
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Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Prepared by JFK on 2026-09-04
TR by MGS on 2026-09-05
IR by LRC on 2026-09-12
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Feet
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Proposed Structure
Existing Structure
Rebuild Project
Existing Dominion Transmission Lines #233/291
NHD Flowline
Conservation Easement
Conservation Lands
NWI Wetland
NWI Riverine
Page 16 of 23
Albemarle PRFA Easement ALB-VOF-1180
Albemarle ACE Easement
ALB-VOF-845
ALB-VOF-1186
Match Line Page 15
Match Line Page 17
Mint Springs Valley Park
Beaver Creek
Powells Creek
Mad Run
Beaver Creek Mtn Rd
Mint Springs Rd
Seal Rdg
Sealsville Rd
Saddleback Dr
Avalon Way
Mint Springs Park
Ruhr Pocket Ln
233/96 291/96
233/97 291/97
233/98 291/98
233/99 291/99
233/100 291/100
233/101 291/101
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233/103 291/103
Stantec
Dominion Energy

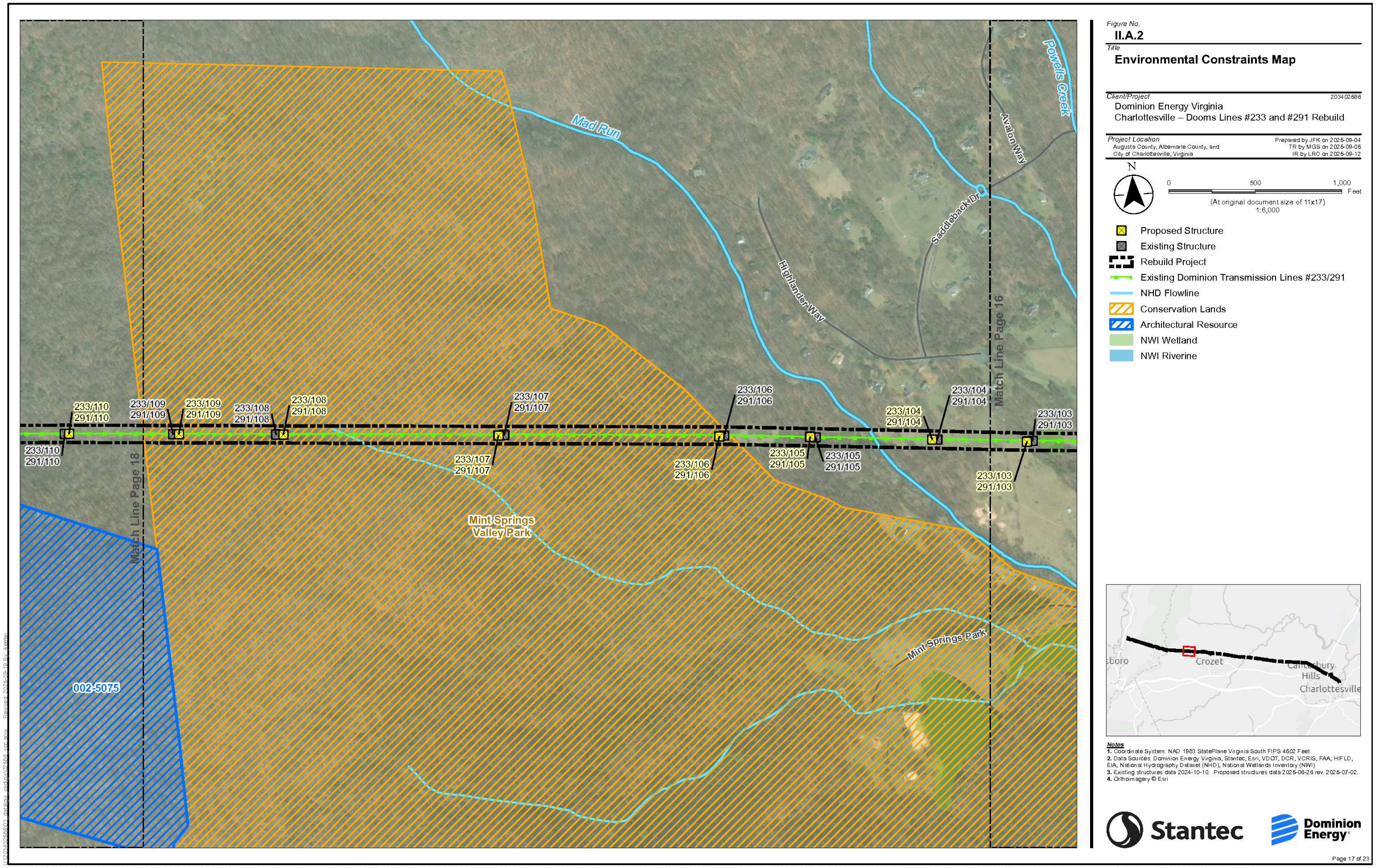
Figure No.
II.A.2
Title
Environmental Constraints Map
Client/Project
203402586
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and
City of Charlottesville, Virginia
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TR by MGS on 2025-09-05
IR by LRC on 2025-09-12
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Feet
(At original document size of 11x17)
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Proposed Structure
Existing Structure
Rebuild Project
Existing Dominion Transmission Lines #233/291
NHD Flowline
Conservation Lands
Architectural Resource
NWI Wetland
NWI Riverine
Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Dominion Energy Virginia, Stantec, Esri, VDOT, DCR, VCRIS, FAA, HIFLD, EIA, National Hydrography Dataset (NHD), National Wetlands Inventory (NWI)
3. Existing structures data 2024-10-10. Proposed structures data 2025-06-26 rev. 2025-07-02.
4. Orthoimagery © Esri
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Dominion Energy
Page 17 of 23
Powells Creek
Avalon Way
Saddleback Dr
Highlander Way
Mad Run
Match Line Page 16
Match Line Page 18
Mint Springs Valley Park
Mint Springs Park
002-5075
233/103
291/103
233/104
291/104
233/105
291/105
233/106
291/106
233/107
291/107
233/108
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233/109
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233/110
291/110
Crozet
Canterbury Hills
Charlottesville
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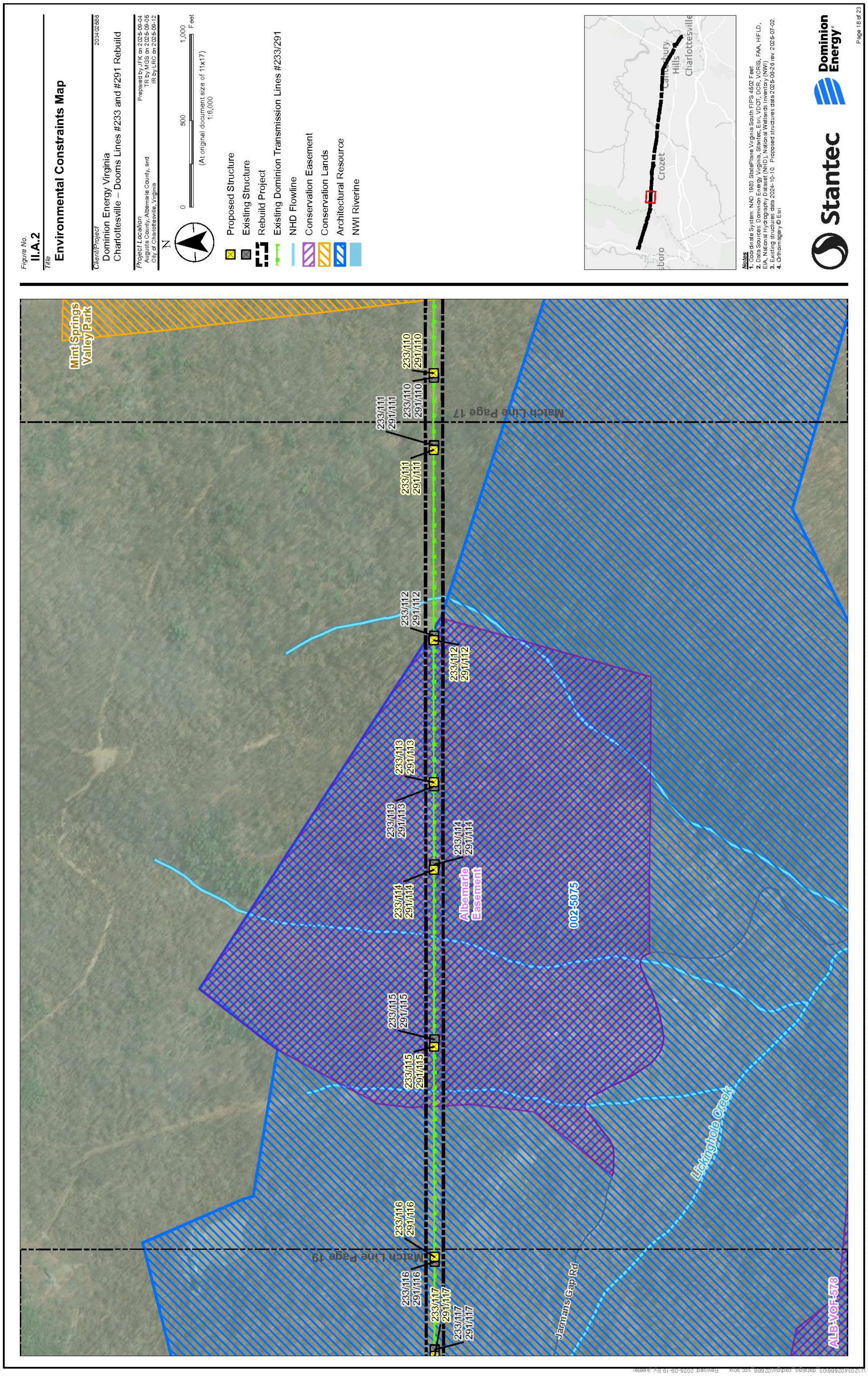
Figure No.
II.A.2
Title
Environmental Constraints Map
Client/Project
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Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
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Proposed Structure
Existing Structure
Rebuild Project
Existing Dominion Transmission Lines #233/291
NHD Flowline
Conservation Easement
Conservation Lands
Architectural Resource
NWI Riverine
Crozet
Charlottesville
Notes
Stantec
Dominion Energy
Mint Springs Valley Park
Match Line Page 17
Match Line Page 19
233/110
291/110
233/111
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233/112
291/112
233/113
291/113
233/114
291/114
233/115
291/115
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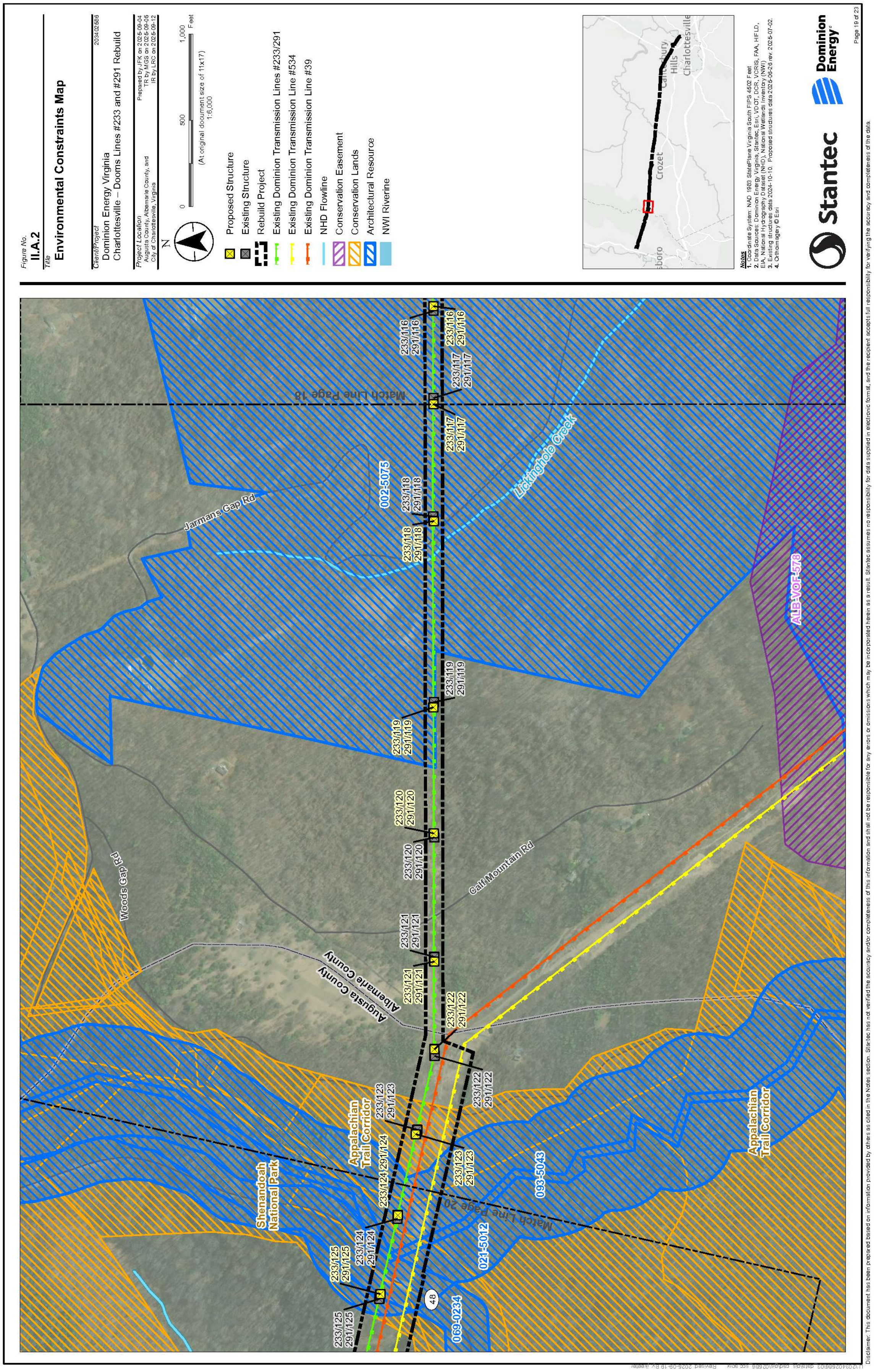
233/117
291/117
Albemarle Easement
002-5075
Lickinghole Creek
Jarmans Gap Rd
ALB-VOF-578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Environmental Constraints Map
Client/Project
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Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Prepared by JFK on 2025-09-04
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Rebuild Project
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Existing Dominion Transmission Line #534
Existing Dominion Transmission Line #39
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Conservation Easement
Conservation Lands
Architectural Resource
NWI Riverine
Crozet
Canterbury Hills
Charlottesville
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1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Dominion Energy Virginia, Stantec, Esri, VDOT, DCR, VCRIS, FAA, HIFLD, EIA, National Hydrography Dataset (NHD), National Wetlands Inventory (NWI)
3. Existing structures data 2024-10-10. Proposed structures data 2025-06-26 rev. 2025-07-02.
4. Orthoimagery © Esri
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Page 19 of 23
Shenandoah National Park
Appalachian Trail Corridor
Woods Gap Rd
Jarmans Gap Rd
Calf Mountain Rd
Augusta County
Albemarle County
Lickinghole Creek
Match Line Page 18
Match Line Page 20
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069-0234
021-5012
093-5043
ALB-VOF-578
48
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233/124 291/124
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233/116 291/116
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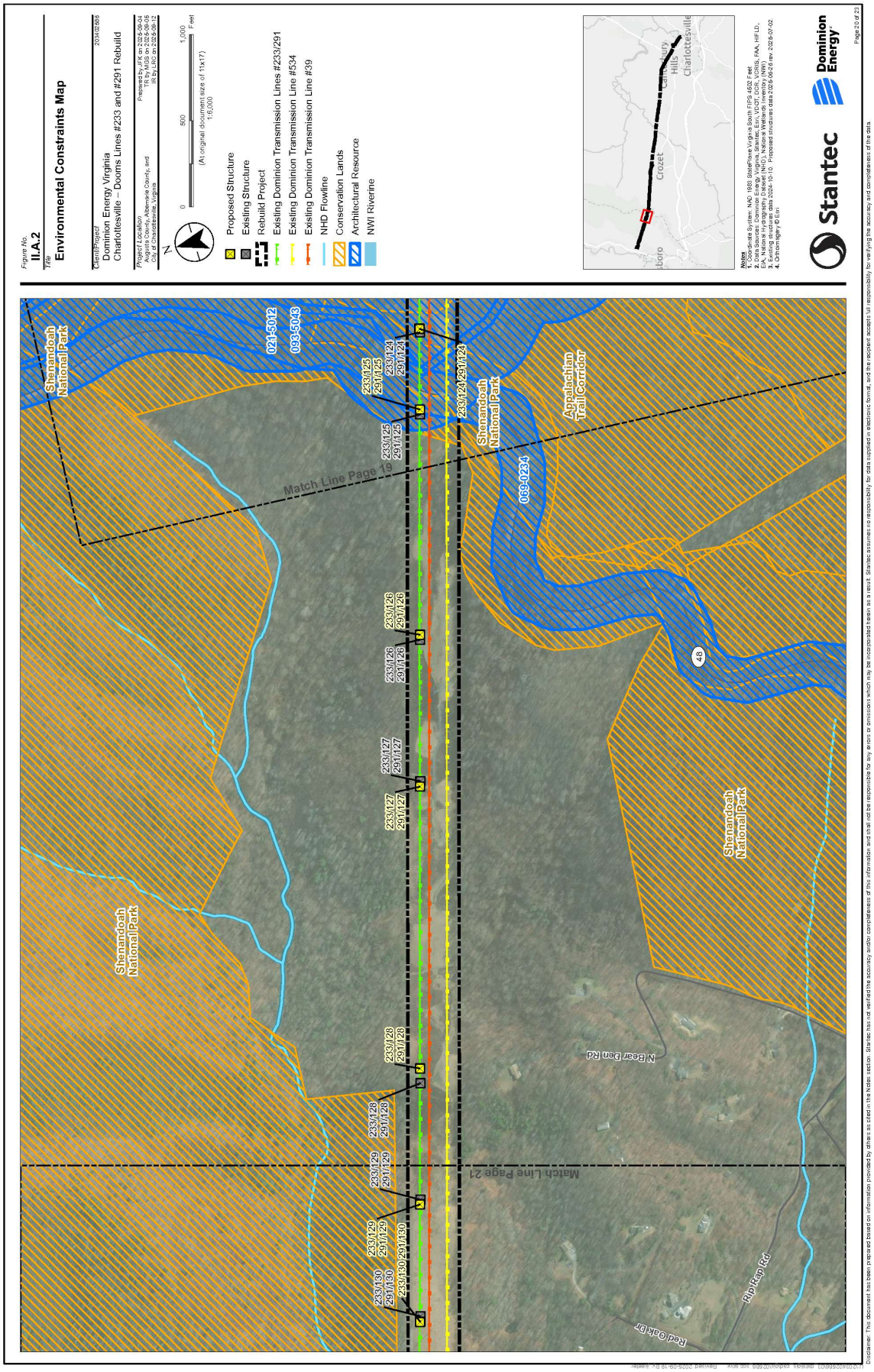
Figure No.
II.A.2
Title
Environmental Constraints Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Proposed Structure
Existing Structure
Rebuild Project
Existing Dominion Transmission Lines #233/291
Existing Dominion Transmission Line #534
Existing Dominion Transmission Line #39
NHD Flowline
Conservation Lands
Architectural Resource
NWI Riverine
Shenandoah National Park
Appalachian Trail Corridor
Match Line Page 15
Match Line Page 21
N Bear Den Rd
Rip Rap Rd
Red Oak Dr
021-5012
009-5043
069-0234
233/124 291/124
233/125 291/125
233/126 291/126
233/127 291/127
233/128 291/128
233/129 291/129
233/130 291/130
Stantec
Dominion Energy
Page 20 of 23

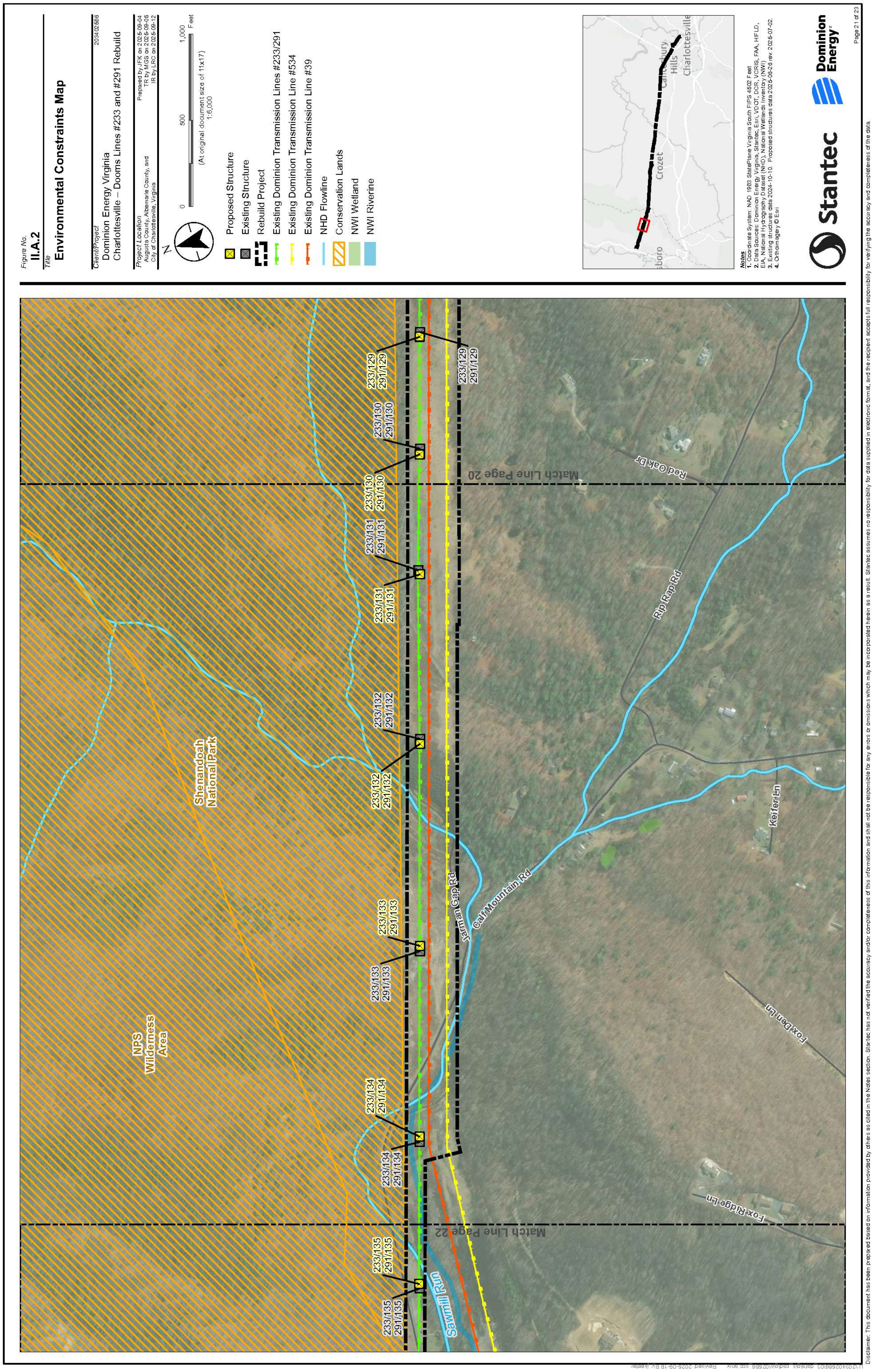
Figure No.
II.A.2
Title
Environmental Constraints Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
203402586
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Feet
(At original document size of 11x17)
1:6,000
Proposed Structure
Existing Structure
Rebuild Project
Existing Dominion Transmission Lines #233/291
Existing Dominion Transmission Line #534
Existing Dominion Transmission Line #39
NHD Flowline
Conservation Lands
NWI Wetland
NWI Riverine
Crozet
Charlottesville
Stantec
Dominion Energy
Match Line Page 20
Match Line Page 22
Shenandoah National Park
NPS Wilderness Area
Red Oak Dr
Rip Rap Rd
Keifer Ln
Calf Mountain Rd
Jarman Gap Rd
Fox Den Ln
Fox Ridge Ln
Sawmill Run
233/129 291/129
233/130 291/130
233/131 291/131
233/132 291/132
233/133 291/133
233/134 291/134
233/135 291/135
Page 21 of 23

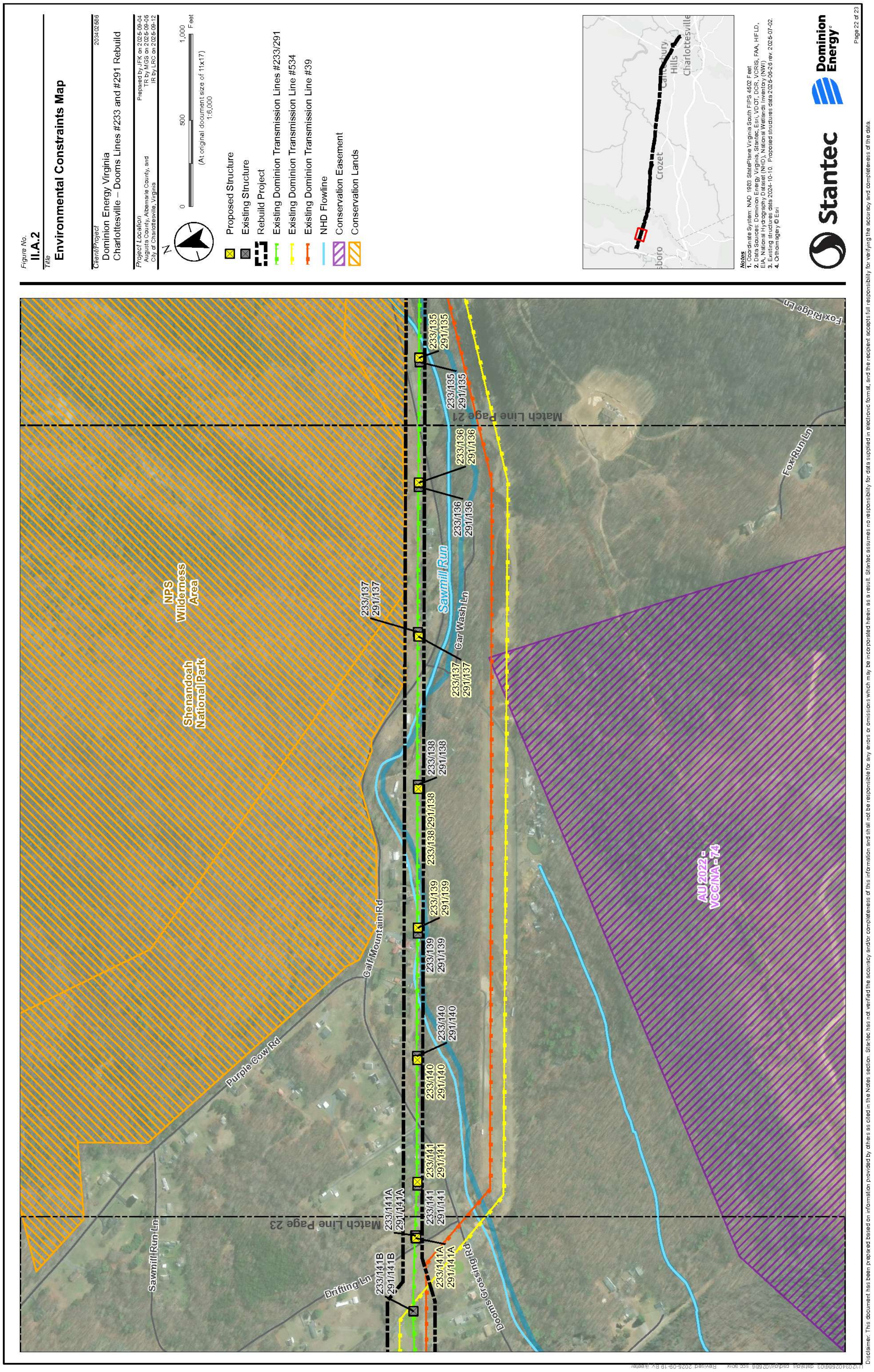
Figure No.
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Title
Environmental Constraints Map
Client/Project
203402686
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Prepared by JFK on 2026-09-04
TR by MGS on 2026-09-05
IR by LRC on 2026-09-12
0
500
1,000
Feet
(At original document size of 11x17)
1:6,000
Proposed Structure
Existing Structure
Rebuild Project
Existing Dominion Transmission Lines #233/291
Existing Dominion Transmission Line #534
Existing Dominion Transmission Line #39
NHD Flowline
Conservation Easement
Conservation Lands
Crozet
Charlottesville
Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Dominion Energy Virginia, Stantec, Esri, VDOT, DCR, VCRIS, FAA, HIFLD, EIA, National Hydrography Dataset (NHD), National Wetlands Inventory (NWI)
3. Existing structures data 2024-10-10. Proposed structures data 2026-06-26 rev 2026-07-02.
4. Orthoimagery © Esri
Stantec
Dominion Energy
Page 22 of 23
Shenandoah National Park
NPS Wilderness Area
AU 2022 - VCC/NA - 74
Sawmill Run
Car Wash Ln
Calf Mountain Rd
Purple Cow Rd
Sawmill Run Ln
Drifting Ln
Dooms Crossing Rd
Fox Run Ln
Fox Ridge Ln
Match Line Page 21
Match Line Page 23
233/135
291/135
233/136
291/136
233/137
291/137
233/138
291/138
233/139
291/139
233/140
291/140
233/141
291/141
233/141A
291/141A
233/141B
291/141B

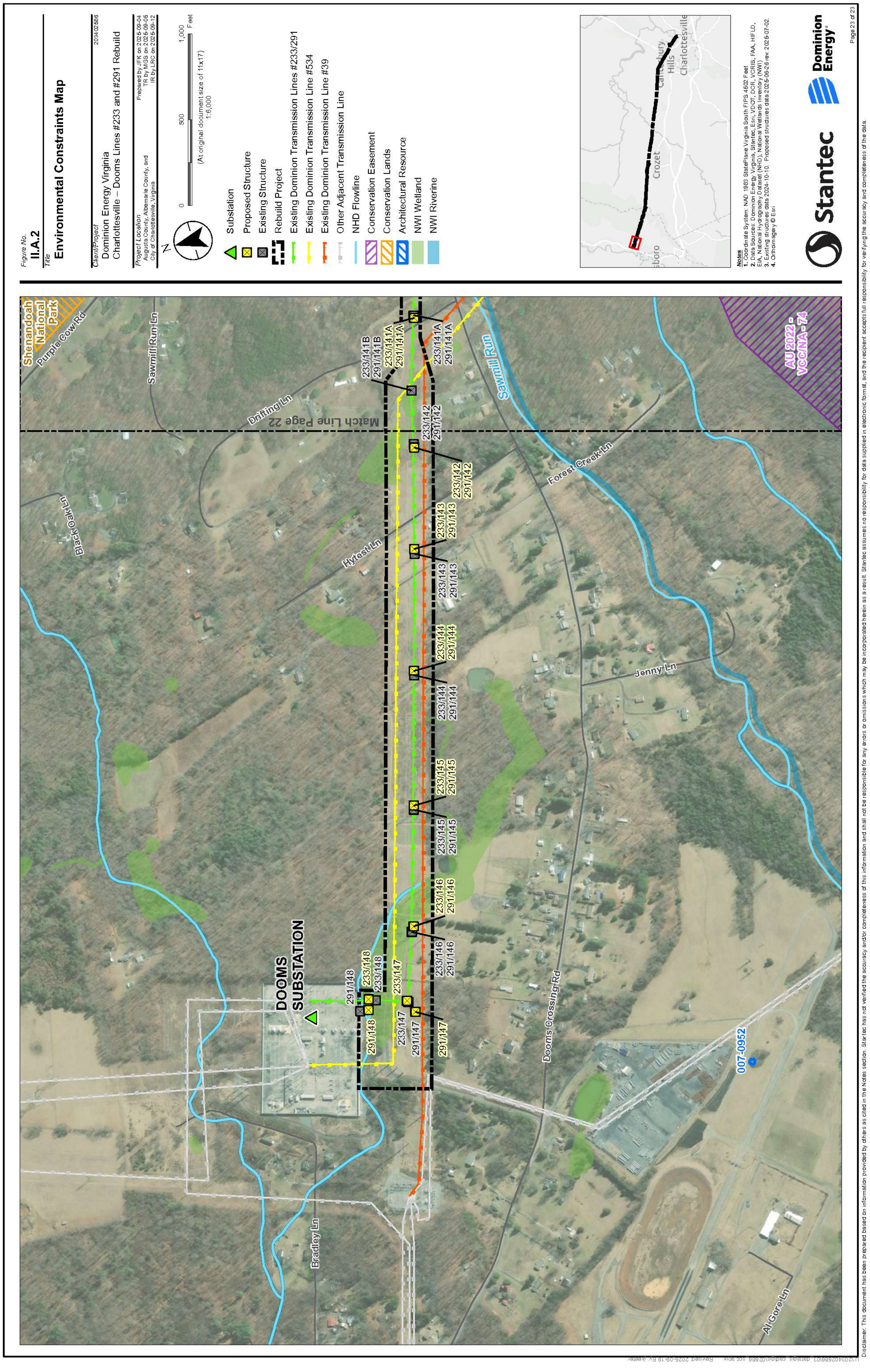


Figure No.
II.A.2
Title
Environmental Constraints Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
203402586
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Prepared by JFK on 2025-09-04
TR by MGS on 2025-09-05
IR by LRC on 2025-09-12
0
500
1,000
Feet
(At original document size of 11x17)
1:6,000
N
Substation
Proposed Structure
Existing Structure
Rebuild Project
Existing Dominion Transmission Lines #233/291
Existing Dominion Transmission Line #534
Existing Dominion Transmission Line #39
Other Adjacent Transmission Line
NHD Flowline
Conservation Easement
Conservation Lands
Architectural Resource
NWI Wetland
NWI Riverine
Crozet
Charlottesville
Notes
1. Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
2. Data Sources: Dominion Energy Virginia, Stantec, Esri, VDOT, DCR, VCRIS, FAA, HIFLD, EIA, National Hydrography Dataset (NHD), National Wetlands Inventory (NWI)
3. Existing structures data 2024-10-10. Proposed structures data 2025-06-26 rev. 2025-07-02.
4. Orthoimagery © Esri
Stantec
Dominion Energy
Page 23 of 23
Shenandoah National Park
Purple Cow Rd
Sawmill Run Ln
Drifting Ln
Match Line Page 22
Sawmill Run
Black Oak Ln
Hytest Ln
Forest Creek Ln
Jenny Ln
AU 2022 - VCC/NA-74
DOOMS SUBSTATION
Dooms Crossing Rd
Bradley Ln
Al Gore Ln
007-0952
233/141B
291/141B
233/141A
291/141A
233/142
291/142
233/143
291/143
233/144
291/144
233/145
291/145
233/146
291/146
233/147
291/147
233/148
291/148

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. The Rebuild Project is proposed to be located entirely within the existing cleared right-of-way, which varies in width from approximately 100 to 300 feet, or on Company-owned property. Where the Company does not own property in the transmission corridor, the Company has acquired blanket easements for the majority of the right-of-way. A blanket easement allows the Company to construct and maintain transmission lines, but it does not define the exact right-of-way boundaries or width. Such blanket easements have allowed the original construction of what are now Lines #233 and #291 in the Rebuild Project area. The Company plans to construct the Rebuild Project within this already established, cleared right-of-way.

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;

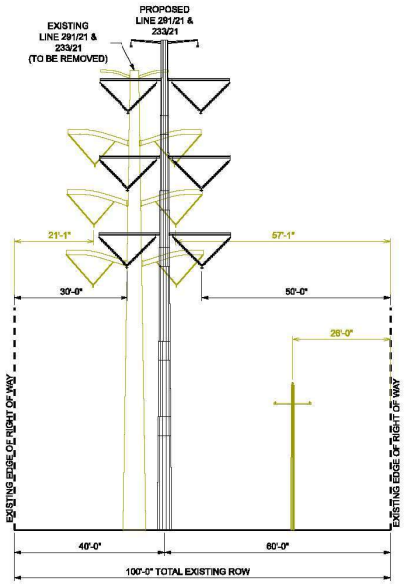
c. Existing utility facilities on the ROW; and

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 Attachments II.A.5.a through II.A.5.e.

CLEARANCE VALUES USED (FT)	
FORESTRY: 500 - ROW	35
FORESTRY: 230 - ROW	25
CIRCUIT: 500 - 500	65
CIRCUIT: 500 - 230	50
CIRCUIT: 230 - 230	35

230KV D.C. MONOPOLE 100' ROW CONFIGURATION



LOOKING WEST TOWARDS BARRACKS RD SUB

LEGEND:
- PROPOSED
- EXISTING
- FUTURE PROPOSED PROJECT

Ø 15 30
SCALE OF FEET

PROPOSED ROW CONFIGURATION
MINIMUM 100' ROW
230KV D.C. MONOPOLE

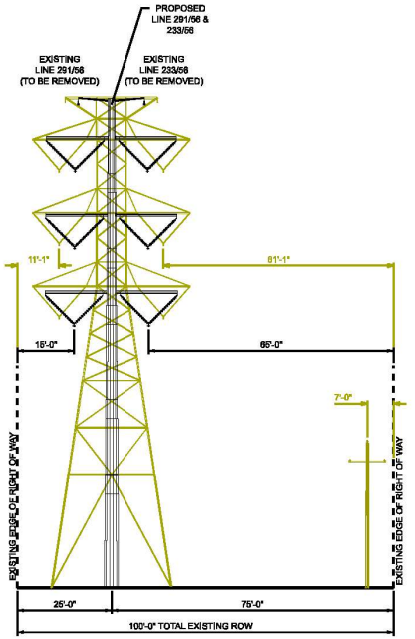
Dominion Energy®

Dominion Energy
5000 Dominion Blvd.
Glen Allen, VA 23060

	ORIGINAL	REVISION	DRAWING NO.
DRAWN	RAW		II.A.5.a
CHECKED			
APPROVED			
DATE	10/16/2025		

230KV D.C. MONOPOLES 100' ROW CONFIGURATION

CLEARANCE VALUES USED (FT)	
FORESTRY: 500 - ROW	35
FORESTRY: 230 - ROW	25
CIRCUIT: 500 - 500	65
CIRCUIT: 500 - 230	50
CIRCUIT: 230 - 230	35



LOOKING WEST TOWARDS DOOMS
AT OWENVILLES RD

LEGEND:
- PROPOSED
- EXISTING
- FUTURE PROPOSED PROJECT

0 15 30
SCALE OF FEET

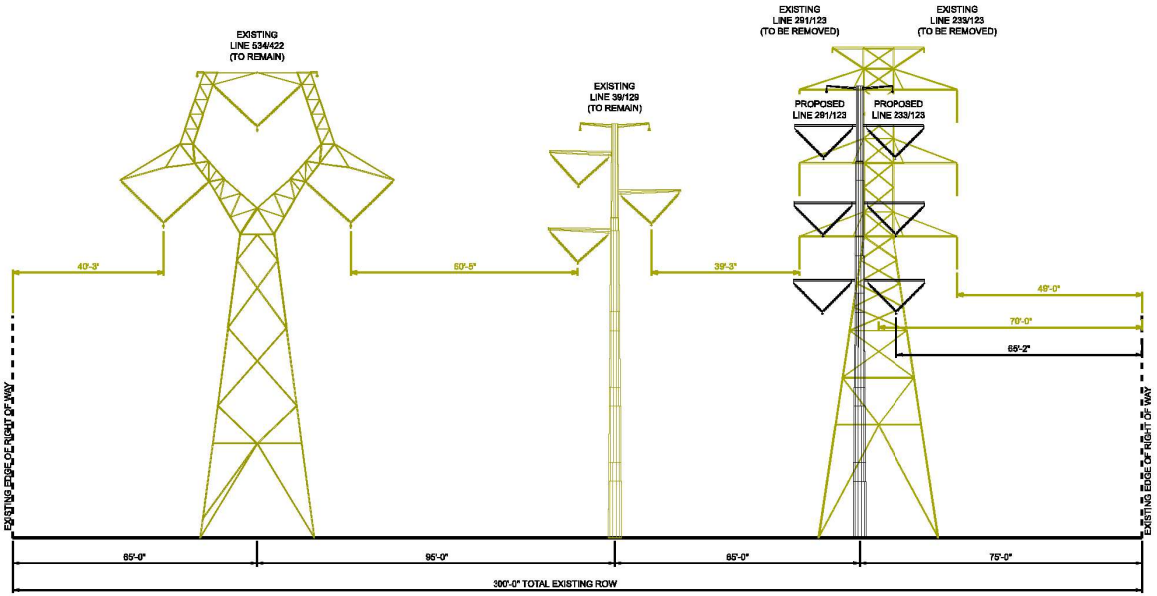
PROPOSED ROW CONFIGURATION
MINIMUM 100' ROW
230KV D.C. MONOPOLES

Dominion Energy
Dominion Energy
5000 Dominion Blvd.
Glen Allen, VA 23060

	ORIGINAL	REVISION	DRAWING NO.
DRAWN	RAW		II.A.5.b
CHECKED			
APPROVED			
DATE	09/29/2025		

230KV D.C. MONOPOLE 300' ROW CONFIGURATION

CLEARANCE VALUES USED (FT)	
FORESTRY: 500 - ROW	35
FORESTRY: 230 - ROW	25
CIRCUIT: 500 - 500	65
CIRCUIT: 500 - 230	50
CIRCUIT: 230 - 230	35



LOOKING WEST TOWARDS DOOMS

LEGEND:
- PROPOSED
- EXISTING
- FUTURE PROPOSED PROJECT

0 15 30
SCALE OF FEET

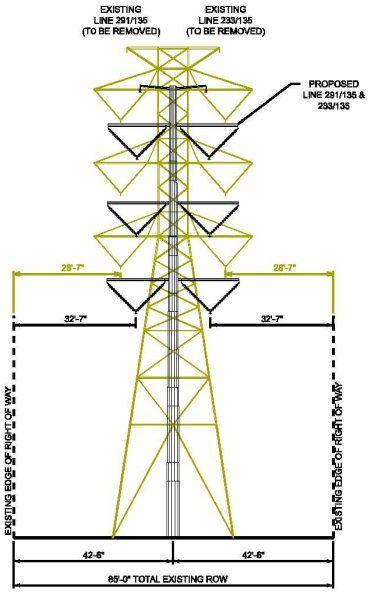
PROPOSED ROW CONFIGURATION
MINIMUM 300' ROW
230KV D.C. MONOPOLES

Dominion Energy
Dominion Energy
5000 Dominion Blvd.
Glen Allen, VA 23060

	ORIGINAL	REVISION	DRAWING NO.
DRAWN	RAW		II.A.5.c
CHECKED			
APPROVED			
DATE	09/29/2025		

230KV D.C. MONOPOLE 85' ROW CONFIGURATION

CLEARANCE VALUES USED (FT)	
FORESTRY: 500 - ROW	35
FORESTRY: 230 - ROW	25
CIRCUIT: 500 - 500	65
CIRCUIT: 500 - 230	50
CIRCUIT: 230 - 230	35



LOOKING WEST TOWARDS DOOMS

LEGEND:
- PROPOSED
- EXISTING
- FUTURE PROPOSED PROJECT

0 15 30
SCALE OF FEET

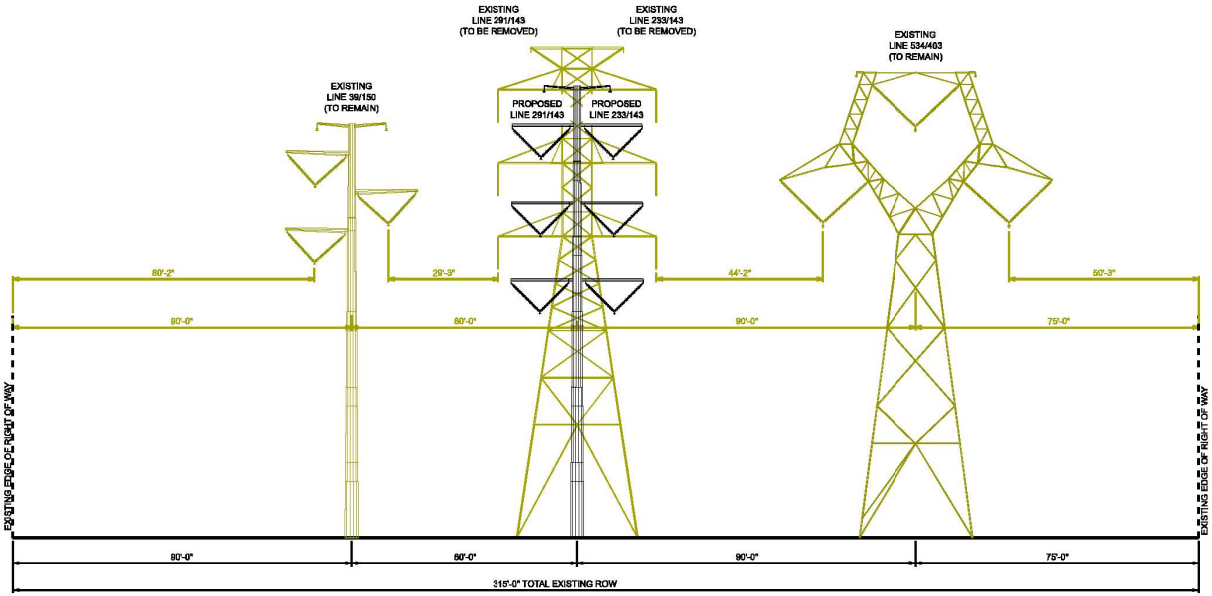
PROPOSED ROW CONFIGURATION
MINIMUM 85' ROW
230KV D.C. MONOPOLE

Dominion Energy
Dominion Energy
5000 Dominion Blvd.
Glen Allen, VA 23060

	ORIGINAL	REVISION	DRAWING NO.
DRAWN	RAW		II.A.5.d
CHECKED			
APPROVED			
DATE	09/29/2025		

230KV D.C. MONOPOLE 315' ROW CONFIGURATION

CLEARANCE VALUES USED (FT)	
FORESTRY: 500 - ROW	35
FORESTRY: 230 - ROW	25
CIRCUIT: 500 - 500	65
CIRCUIT: 500 - 230	50
CIRCUIT: 230 - 230	35



LOOKING WEST TOWARDS DOOMS

LEGEND:
- PROPOSED
- EXISTING
- FUTURE PROPOSED PROJECT

0 15 30
SCALE OF FEET

PROPOSED ROW CONFIGURATION
MINIMUM 315' ROW
230KV D.C. MONOPOLE

Dominion Energy
Dominion Energy
5000 Dominion Blvd.
Glen Allen, VA 23060

	ORIGINAL	REVISION	DRAWING NO.
DRAWN	RAW		II.A.5.e
CHECKED			
APPROVED			
DATE	09/29/2025		

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: Easements for the existing cleared right-of-way in the Rebuild Project corridor were established in around 1924. The corridor has been in continuous use since 1924. Fifteen (15) existing conservation easements are crossed by the Rebuild Project as listed below. All conservation easements were established after the Company's initial establishment of the transmission corridor in 1924.

Easement Holder	Location	Establishment Date
Virginia Outdoor Foundation ("VOF") ALB-VOF-3083	Existing Structure #233/31, #291/31	12/2009
VOF ALB-VOF-1371	Existing Structure #233/32, #291/32	12/2003
The Nature Conservancy ("TNC")	Between existing Structures #233/37, #291/37 and #233/38, #291/38	The exact date of establishment is unknown; however, TNC was founded in 1954, after the establishment of the Company easement.
TNC	Existing Structures #233/38, #291/38 through #233/41, #291/41	12/2004
TNC	Between existing Structures #233/41, #291/41 and #233/42, #291/42	The exact date of establishment is unknown; however, TNC was founded in 1954, after the establishment of the Company easement.
Albermarle Conservation Easement Authority ("ACEA") Public Recreational Facility Authority ("PRFA")	Between existing Structures #233/41, #291/41 and #233/42, #291/42	12/2018
ACEA PRFA	Existing Structures #233/42, #291/42 through #233/45, #291/45	12/1993
ACEA PRFA	Existing Structure #233/68, #291/68	12/2007

Easement Holder	Location	Establishment Date
VOF ALB-VOF-1046	Existing Structures #233/70, #291/70 and #233/71, #291/71	12/2001
ACEA PRFA	Existing Structure #233/75, #291/75	12/2017
ACEA	Between existing Structures #233/80, #291/80 and #233/81, # 291/81	05/2008
ACEA	Existing Structures #233/96, #291/96 through #233/98, #291/98	08/2012
VOF ALB-VOF-845	Between Structures 233/98, #291/98 and #233/99, #291/99	12/2000
VOF ALB-VOF-1186	Between existing Structures #233/98, #291/98 and #233/99, #291/99	12/2002
ACEA	Existing Structures #233/112, #291/112 through #233/115, #291/115	The exact date of establishment is unknown; however, the ACEA program began in 2000, after the establishment of the Company easement.

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.

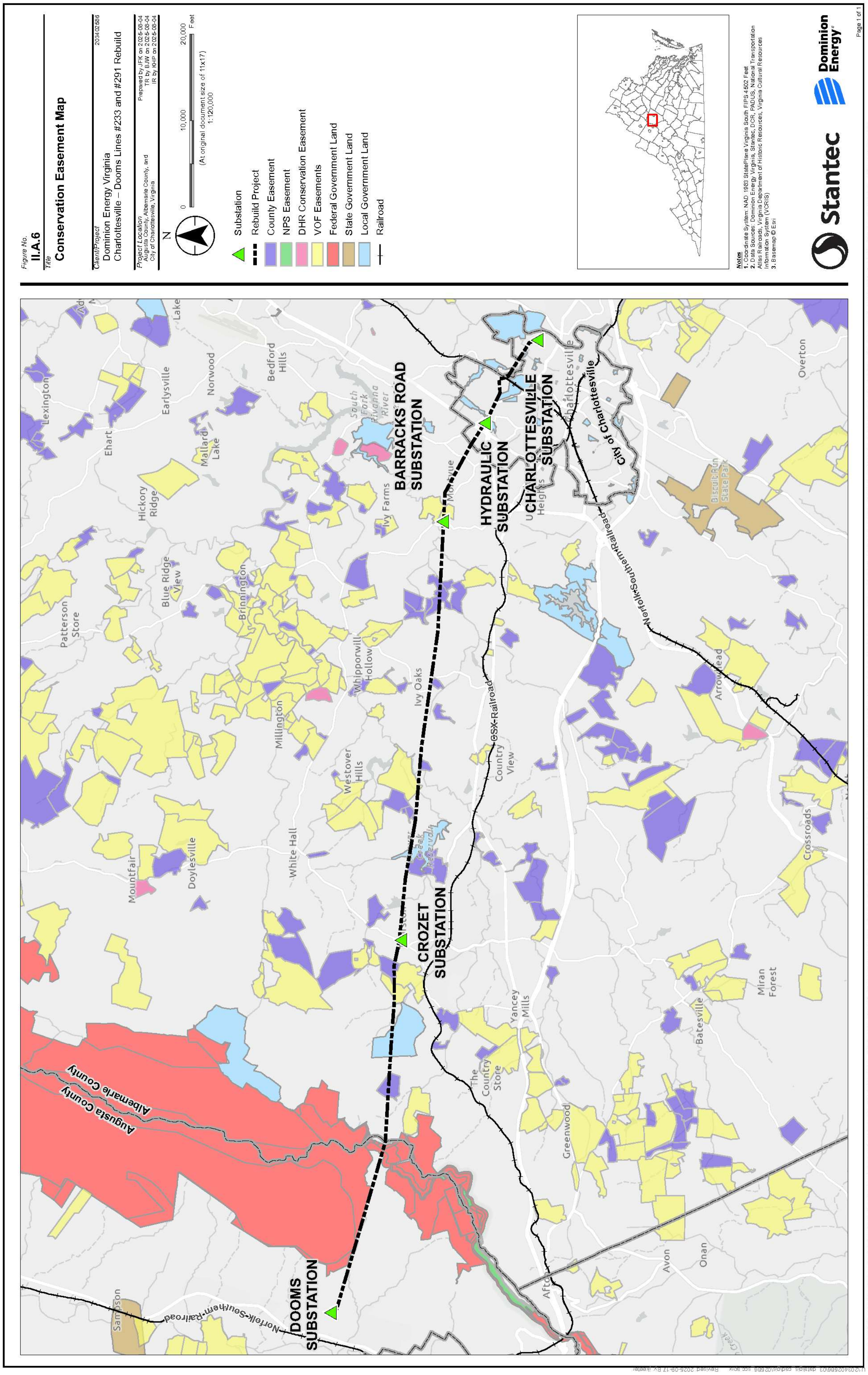


Figure No.
II.A.6
Title
Conservation Easement Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
203402586
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Prepared by JFK on 2025-08-04
TR by BJW on 2025-08-04
IR by KHP on 2025-08-04
N
0
10,000
20,000
Feet
(At original document size of 11x17)
1:120,000
Substation
Rebuild Project
County Easement
NPS Easement
DHR Conservation Easement
VOF Easements
Federal Government Land
State Government Land
Local Government Land
Railroad
DOOMS SUBSTATION
CROZET SUBSTATION
BARRACKS ROAD SUBSTATION
HYDRAULIC SUBSTATION
CHARLOTTESVILLE SUBSTATION
Augusta County
Albemarle County
City of Charlottesville
Norfolk-Southern-Railroad
CSX-Railroad
Stantec
Dominion Energy

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 utilize existing cleared right-of-way, which varies in width from approximately 100 to 300 feet wide. As such, additional clearing within the existing rights-of-way is not necessary, but the existing rights-of-way currently is and will continue to be maintained for the operation of the existing transmission facilities.

Trimming of tree limbs along the edge of the right-of-way 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 also 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 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 *Dominion Energy Virginia Electric Transmission 2025 Standards and Specifications for Erosion & Sediment Control and Stormwater Management* that was approved by the Virginia Department of Environmental Quality ("DEQ"). Time of year and weather conditions may affect when permanent stabilization takes place.

The 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; and,
- 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 the existing right-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 cleared transmission corridor right-of-way that currently contains Lines #233 and #291 is adequate.

Because the existing cleared rights-of-way and Company-owned property are adequate to construct the Rebuild Project, no new right-of-way is necessary. Given no need for new right of way, the availability of existing right-of-way and the statutory preference given to the use of existing rights-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 this Rebuild Project.

See Attachment II.A.6 for conservation easements crossed by the Rebuild Project. As noted previously, these conservation easements were created after the establishment of the existing 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 durations on Lines #233 and #291 and prevents simultaneous outages on both lines. Assuming the Commission issues a final order by July 2026, and construction commences around January 2027, the Company estimates outages on Lines #233 and 291 will start in Spring 2027 and progress through Fall 2029, so that the Rebuild Project can be completed by November 2029.

The Company intends to complete the relevant work during requested outage windows. However, as with all outage scheduling, these outages may change depending on whether PJM approves the outages and whether 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 of the 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 almost entirely within 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 to the extent possible, 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 Stantec on behalf of the Company was submitted to the VDHR on October 22, 2025, and is included with the DEQ Supplement as Attachment 2.I.1.

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 Charlottesville, Augusta and Albemarle Counties, as well as the National Park Service regarding the Rebuild Project. See Sections III and V of this Appendix.

The Company follows recommended construction methods in the Guidelines 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

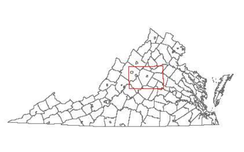
b. Provide three (3) color copies of the Virginia Department of Transportation "General Highway Map" for each county and city through which the line will pass. On the maps show the proposed line and all previously approved and certificated facilities of the Applicant. Also, where the line will be located 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 traverses the City of Charlottesville total of approximately 2.4 miles, Albemarle County for a total of approximately 15.9 miles, and Augusta County for a total of approximately 4.0 miles. Approximately 20.3 miles of the Rebuild Project are located within Dominion Energy Virginia's service territory. Approximately 0.1 mile of the Rebuild Project are located within Central Virginia Electric Cooperative's ("CVEC") service territory, and approximately 1.8 miles are located within Shenandoah Valley Electric Cooperative's ("SVEC") service territory.[13] The Company has confirmed that neither CVEC nor SVEC object to the construction of the Rebuild Project. See Attachments II.A.12.b.i-ii with signatures of CVEC's and SVEC's representatives.

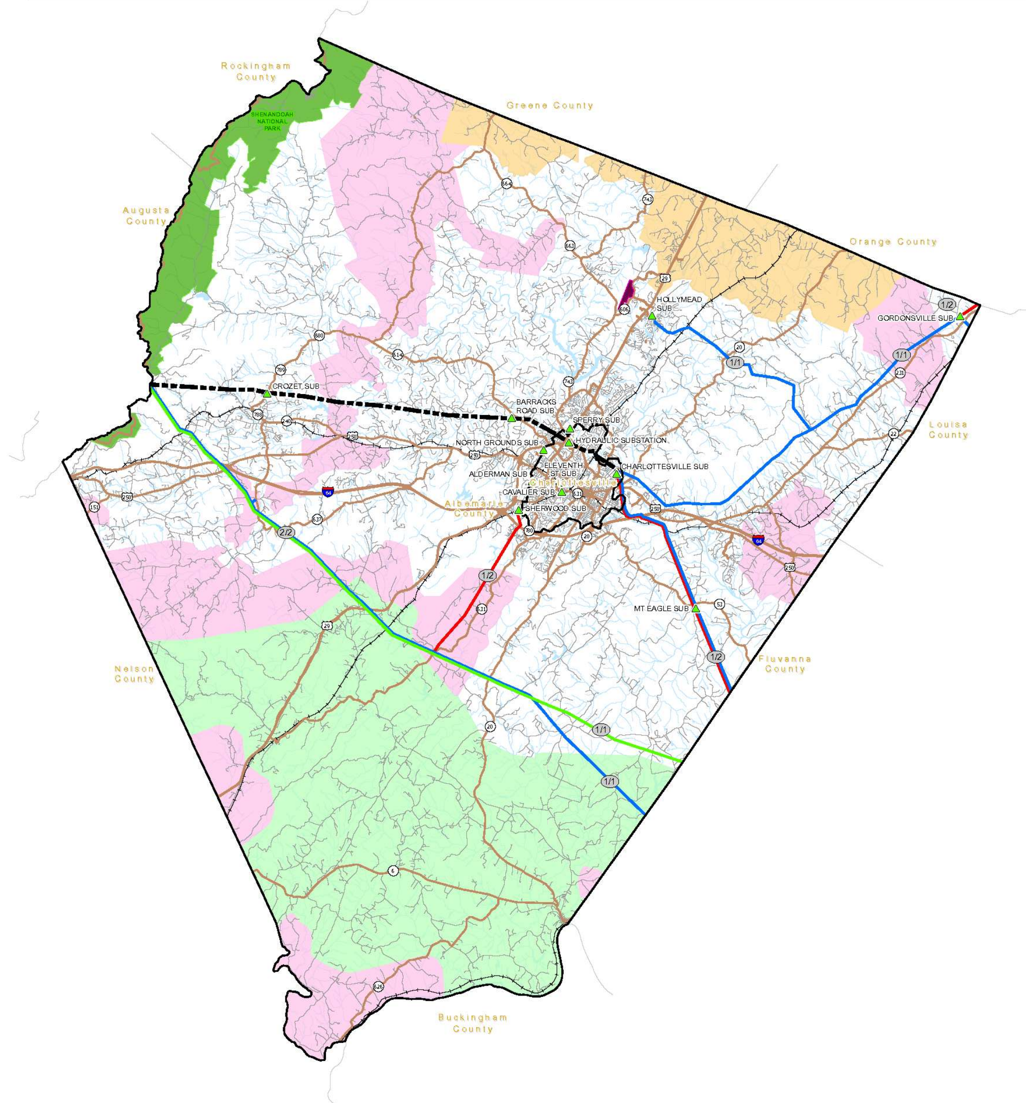
b. Copies of the Virginia Department of Transportation ("VDOT") "General Highway Map" for City of Charlottesville, Albemarle County, and Augusta County are marked as required and filed with the Application. A reduced copy of each map is provided as Attachment II.A.12.b.i (Albemarle County and City of Charlottesville) and Attachment II.A.12.b.ii (Augusta County).

[13] *See* https://www.scc.virginia.gov/consumers/public-utility/electricity-faqs/regulated-companies-service-map/.

Albemarle County and City of Charlottesville Road Map



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 ______________. Other Company facilities previously authorized by the SCC may be depicted on prior SCC approved county maps.



VIRGINIA ELECTRIC AND POWER COMPANY PLANS TO BUILD TRANSMISSION LINES AND SUBSTATIONS AS SHOWN IN BLACK DASHES ON THIS MAP.

CENTRAL VIRGINIA ELECTRIC COOPERATIVE IS NOT OPPOSED TO SUCH CONSTRUCTION IN ITS SERVICE TERRITORY.

SIGNATURE [signature]

DATE 09/24/2025 TITLE Executive VP & COO

Legend

- Substation
- Number of Lines of Structures/Number of Circuits
- Proposed Lines #233 and 291 Rebuild
- 115 kV Transmission Line
- 230 kV Transmission Line
- 500 kV Transmission Line
- Shenandoah National Park
- Charlottesville Albemarle Airport

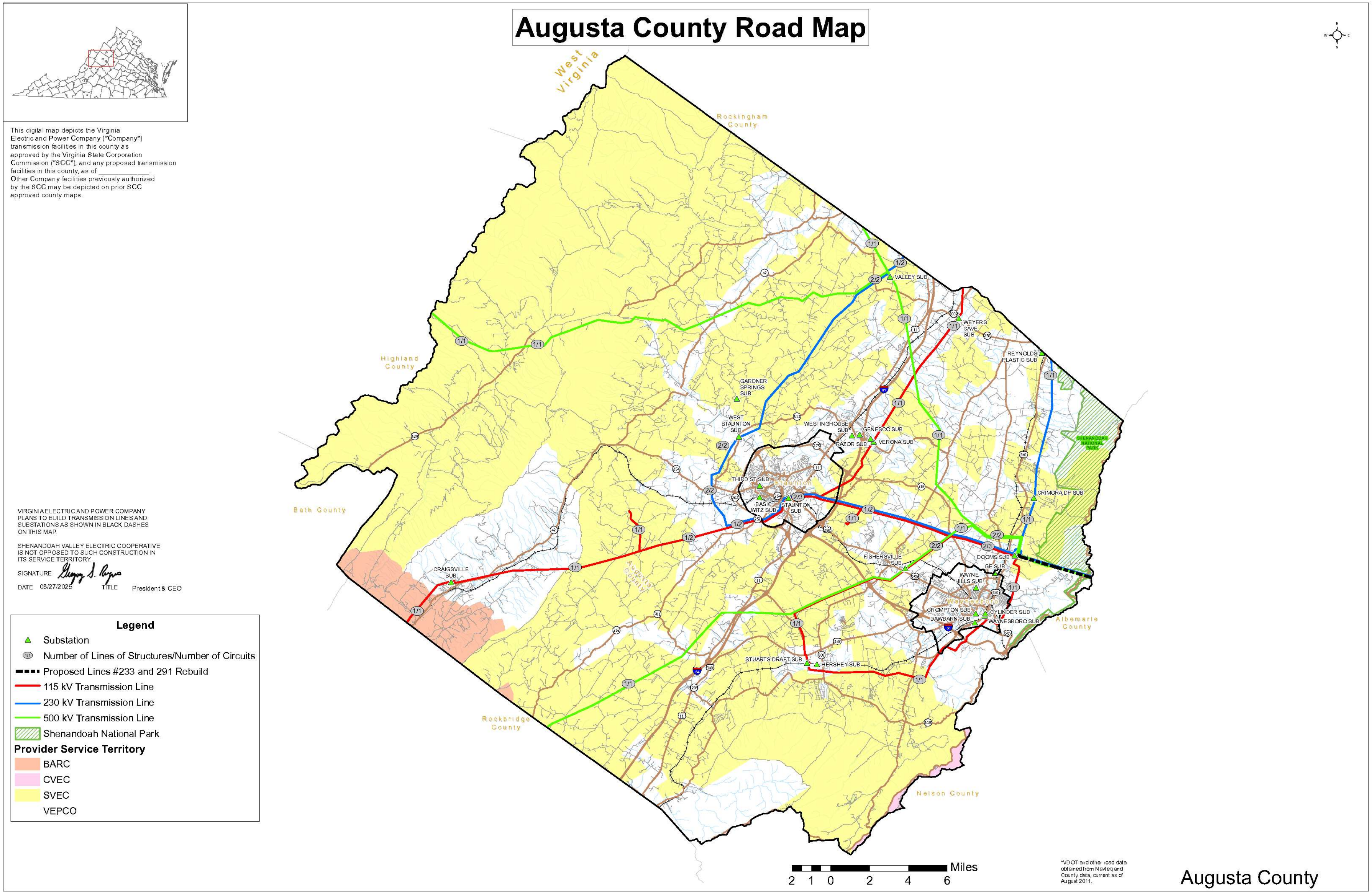
Provider Service Territory

- CVEC
- APC
- REC
- VEPCO
- Substation

Miles: 2 1 0 2 4 6

*VDOT and other road data obtained from Navteq and County data, current as of August 2011.

Albemarle County and City of Charlottesville


Augusta County Road Map
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 ______________.
Other Company facilities previously authorized by the SCC may be depicted on prior SCC approved county maps.
VIRGINIA ELECTRIC AND POWER COMPANY PLANS TO BUILD TRANSMISSION LINES AND SUBSTATIONS AS SHOWN IN BLACK DASHES ON THIS MAP.
SHENANDOAH VALLEY ELECTRIC COOPERATIVE IS NOT OPPOSED TO SUCH CONSTRUCTION IN ITS SERVICE TERRITORY.
SIGNATURE
DATE 08/27/2025
TITLE President & CEO
Legend
Substation
Number of Lines of Structures/Number of Circuits
Proposed Lines #233 and 291 Rebuild
115 kV Transmission Line
230 kV Transmission Line
500 kV Transmission Line
Shenandoah National Park
Provider Service Territory
BARC
CVEC
SVEC
VEPCO
West Virginia
Rockingham County
Highland County
Bath County
Rockbridge County
Nelson County
Albemarle County
Augusta County
VALLEY SUB
WEYERS CAVE SUB
REYNOLDS PLASTIC SUB
GARDNER SPRINGS SUB
WEST STAUNTON SUB
WESTINGHOUSE SUB
GENESCO SUB
RAZOR SUB
VERONA SUB
THIRD ST SUB
BASIC WITZ SUB
STAUNTON SUB
CRIMORA DP SUB
CRAIGSVILLE SUB
FISHERSVILLE SUB
DOOMS SUB
GE SUB
WAYNE HILLS SUB
CROMPTON SUB
DAWBARN SUB
CYLINDER SUB
WAYNESBORO SUB
STUARTS DRAFT SUB
HERSHEY SUB
SHENANDOAH NATIONAL PARK
Miles
2 1 0 2 4 6
*VDOT and other road data obtained from Navteq and County data, current as of August 2011.
Augusta County

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: Lines #233 and #291 will be designed and operated at 230 kV and will have a summer/winter transfer capability of 1573 MVA. No voltage upgrades are anticipated.

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: Lines #233 and #291 will utilize two bundled 768.2 ACSS/TW/HS conductors per phase. The twin-bundled 768.2 ACSS/TW/HS conductors are the Company's 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;

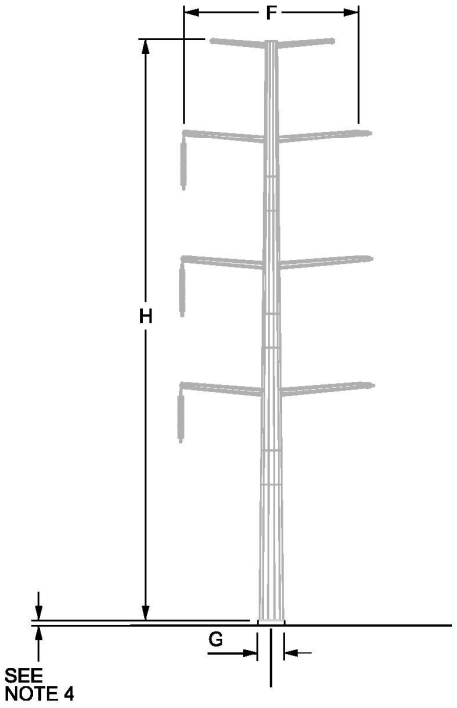
h. the maximum, minimum and average structure heights;

i. the average span length; and

j. the minimum conductor-to-ground clearances under maximum operating conditions.

Response: See Attachment II.B.5 in response to item a. See Attachment II.B.3.a-f in response to items b-j.

STRUCTURES: 291,233/1; 291,233/2; 291,233/15; 291,233/17; 291,233/29; 291,233/33; 291,233/34; 291,233/43; 291,233/48; 291,233/60; 291,233/75; 291,233/83; 291,233/90 - 291,233/93; 291,233/95; 291,233/96; 291,233/101; 291,233/107; 291,233/110; 291, 233/113; 291,233/118; 291,233/122; 291,233/125; 291,233/131; 291,233/141; 291,233/146



230KV DOUBLE CIRCUIT DDE POLES

B. RATIONALE FOR STRUCTURE TYPE:	230KV VERTICALLY ARRANGED TO REDUCE ROW REQUIREMENTS
C. LENGTH OF R/W (STRUCTURE QUANTITY):	22.3 MILES (28 STRUCTURES)
D. STRUCTURE MATERIAL:	GALVANIZED AND WEATHERED STEEL
RATIONALE FOR STRUCTURE MATERIAL:	WEATHERED STEEL TO MINIMIZE VISUAL IMPACT BY REDUCING THE GLARE ON THE NEW STRUCTURES. GALVANIZED STEEL USED TO MIMIC VISUALS OF EXISTING PAINTED STRUCTURES.
E. FOUNDATION MATERIAL: AVERAGE FOUNDATION REVEAL:	CONCRETE SEE NOTE 4
F. AVERAGE WIDTH AT CROSSARM:	25.5'
G. AVERAGE WIDTH AT BASE:	3.5' (SEE NOTE 2)
H. MINIMUM STRUCTURE HEIGHT: MAXIMUM STRUCTURE HEIGHT: AVERAGE STRUCTURE HEIGHT:	105' 140' 118'
I. AVERAGE SPAN LENGTH:	749' (214'-1301')
J. MINIMUM CONDUCTOR-TO-GROUND AT MAXIMUM OPERATING TEMPERATURE:	22.5' (230 KV) PER THE NATIONAL ELECTRICAL SAFETY CODE

NOTES
1. INFORMATION ON DRAWING IS PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL ENGINEERING
2. FINAL FOUNDATION DIAMETER SHALL BE BASED UPON FINAL ENGINEERING
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

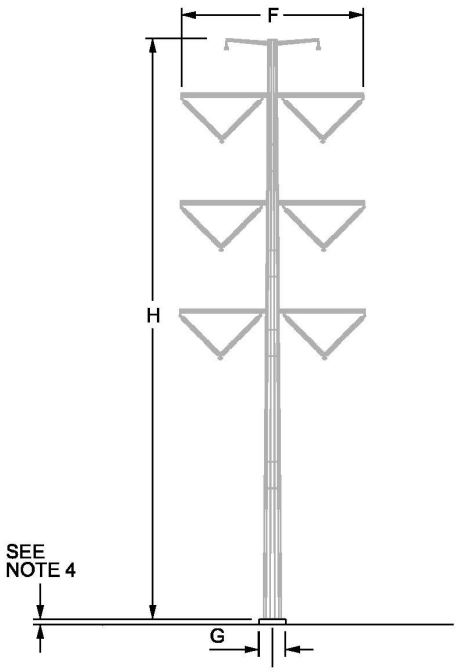
Dominion Energy
Dominion Energy
5000 Dominion Blvd
Glen Allen, VA 23060

STRUCTURES: 291,233/1; 291,233/2; 291,233/15; 291,233/17; 291,233/29; 291,233/33; 291,233/34; 291,233/43; 291,233/48; 291,233/60; 291,233/75; 291,233/83; 291,233/90 - 291,233/93; 291,233/95; 291,233/96; 291,233/101; 291,233/107; 291,233/110; 291, 233/113; 291,233/118; 291,233/122; 291,233/125; 291,233/131; 291,233/141; 291,233/146

DRAWING NO.
ATTACHMENT II.B.3.a

DRAWN: RAW

STRUCTURES: 291,233/21; 291,233/28; 291,233/36 - 291,233/42; 291,233/44 - 291,233/47; 291,233/49 - 291,233/58; 291,233/61 - 291,233/74; 291,233/76 - 291,233/82; 291,233/84 - 291,233/89; 291,233/94; 291,233/97 - 291,233/100; 291,233/102 - 291,233/106; 291,233/108; 291,233/109; 291,233/111; 291,233/112; 291,233/114 - 291,233/117; 291,233/119 - 291,233/121; 291,233/123; 291,233/124; 291,233/126 - 291,233/130; 291,233/132 - 291,233/140; 291,233/143 - 291,233/145



230KV DOUBLE CIRCUIT TANGENT V-STRING SUS STRUCTURE POLES

B. RATIONALE FOR STRUCTURE TYPE:	230KV VERTICALLY ARRANGED TO REDUCE ROW REQUIREMENTS
C. LENGTH OF R/W (STRUCTURE QUANTITY):	22.3 MILES (90 STRUCTURES)
D. STRUCTURE MATERIAL:	GALVANIZED AND WEATHERED STEEL
RATIONALE FOR STRUCTURE MATERIAL:	WEATHERED STEEL TO MINIMIZE VISUAL IMPACT BY REDUCING THE GLARE ON THE NEW STRUCTURES. GALVANIZED STEEL USED TO MIMIC VISUALS OF EXISTING PAINTED STRUCTURES.
E. FOUNDATION MATERIAL: AVERAGE FOUNDATION REVEAL:	CONCRETE SEE NOTE 4
F. AVERAGE WIDTH AT CROSSARM:	35'
G. AVERAGE WIDTH AT BASE:	3' (SEE NOTE 2)
H. MINIMUM STRUCTURE HEIGHT: MAXIMUM STRUCTURE HEIGHT: AVERAGE STRUCTURE HEIGHT:	95' 140' 124'
I. AVERAGE SPAN LENGTH:	816' (398'-1634')
J. MINIMUM CONDUCTOR-TO-GROUND AT MAXIMUM OPERATING TEMPERATURE:	22.5' (230 KV) PER THE NATIONAL ELECTRICAL SAFETY CODE

NOTES
1. INFORMATION ON DRAWING IS PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL ENGINEERING
2. FINAL FOUNDATION DIAMETER SHALL BE BASED UPON FINAL ENGINEERING
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

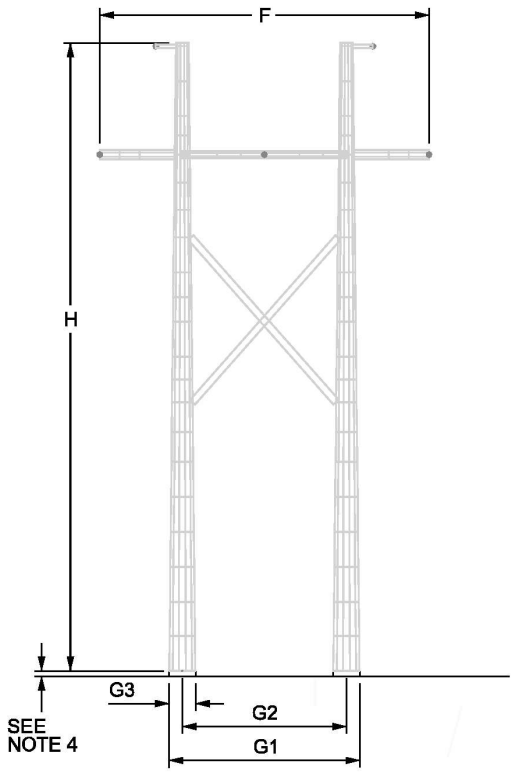
Dominion Energy
5000 Dominion Blvd
Glen Allen, VA 23060

STRUCTURES: 291,233/21; 291,233/28; 291,233/36 - 291,233/42; 291,233/44 - 291,233/47; 291,233/49 - 291,233/58; 291,233/61 - 291,233/74; 291,233/76 - 291,233/82; 291,233/84 - 291,233/89; 291,233/94; 291,233/97 - 291,233/100; 291,233/102 - 291,233/106; 291,233/108; 291,233/109;291,233/111; 291,233/112; 291,233/114 - 291,233/117; 291,233/119 - 291,233/121; 291,233/123; 291,233/124; 291,233/126 - 291,233/130; 291,233/132 - 291,233/140; 291,233/143 - 291,233/145

DRAWING NO.
ATTACHMENT II.B.3.b

DRAWN: RAW

STRUCTURES: 291/148, 233/148



230KV SC STEEL H-FRAME - SMALL ANGLE (0-15 DEG) - CROSSING

B. RATIONALE FOR STRUCTURE TYPE:	230KV VERTICALLY ARRANGED TO REDUCE ROWREQUIREMENTS
C. LENGTH OF R/W (STRUCTURE QUANTITY):	22.3 MILES (2 STRUCTURES)
D. STRUCTURE MATERIAL:	GALVANIZED AND WEATHERED STEEL
RATIONALE FOR STRUCTURE MATERIAL:	WEATHERED STEEL TO MINIMIZE VISUAL IMPACT BY REDUCING THE GLARE ON THE NEW STRUCTURES. GALVANIZED STEEL USED TO MIMIC VISUALS OF EXISTING PAINTED STRUCTURES.
E. FOUNDATION MATERIAL: AVERAGE FOUNDATION REVEAL:	CONCRETE SEE NOTE 4
F. AVERAGE WIDTH AT CROSSARM:	47.2'
G1: AVERAGE WIDTH AT BASE\G2: POLE SPACING G3: BASE WIDTH:	G1: 27.2'\G2: 23.5'\G3: 3.7' (SEE NOTE 2)
H. MINIMUM STRUCTURE HEIGHT: MAXIMUM STRUCTURE HEIGHT: AVERAGE STRUCTURE HEIGHT:	60' 60' 60'
I. AVERAGE SPAN LENGTH:	336' (335'-336')
J. MINIMUM CONDUCTOR-TO-GROUND AT MAXIMUM OPERATING TEMPERATURE:	22.5' (230 KV) PER THE NATIONAL ELECTRICAL SAFETY CODE

NOTES
1. INFORMATION ON DRAWING IS PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL ENGINEERING
2. FINAL FOUNDATION DIAMETER SHALL BE BASED UPON FINAL ENGINEERING
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

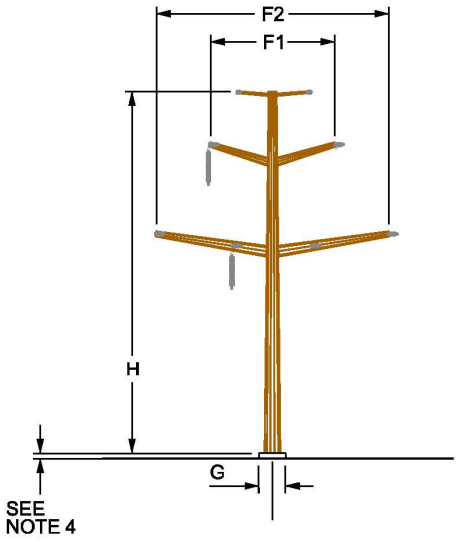
Dominion Energy
5000 Dominion Blvd
Glen Allen, VA 23060

STRUCTURES: 291/148, 233/148

DRAWING NO.
ATTACHMENT II.B.3.c

DRAWN: RAW

STRUCTURES: 291,233/142; 291,233/141A



230KV DC DDE CROSSING SRUCTURE

B. RATIONALE FOR STRUCTURE TYPE:	230KV VERTICALLY ARRANGED TO REDUCE ROW REQUIREMENTS
C. LENGTH OF R/W (STRUCTURE QUANTITY):	22.3 MILES (2 STRUCTURES)
D. STRUCTURE MATERIAL:	GALVANIZED AND WEATHERED STEEL
RATIONALE FOR STRUCTURE MATERIAL:	WEATHERED STEEL TO MINIMIZE VISUAL IMPACT BY REDUCING THE GLARE ON THE NEW STRUCTURES. GALVANIZED STEEL USED TO MIMIC VISUALS OF EXISTING PAINTED STRUCTURES.
E. FOUNDATION MATERIAL: AVERAGE FOUNDATION REVEAL:	CONCRETE SEE NOTE 4
F. AVERAGE WIDTH AT CROSSARM:	F1: 25.7'\F2: 48.2'
G. AVERAGE WIDTH AT BASE:	3.2' (SEE NOTE 2)
H. MINIMUM STRUCTURE HEIGHT: MAXIMUM STRUCTURE HEIGHT: AVERAGE STRUCTURE HEIGHT:	75' 80' 78'
I. AVERAGE SPAN LENGTH:	506' (422'-591')
J. MINIMUM CONDUCTOR-TO-GROUND AT MAXIMUM OPERATING TEMPERATURE:	22.5' (230 KV) PER THE NATIONAL ELECTRICAL SAFETY CODE

NOTES
1. INFORMATION ON DRAWING IS PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL ENGINEERING
2. FINAL FOUNDATION DIAMETER SHALL BE BASED UPON FINAL ENGINEERING
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

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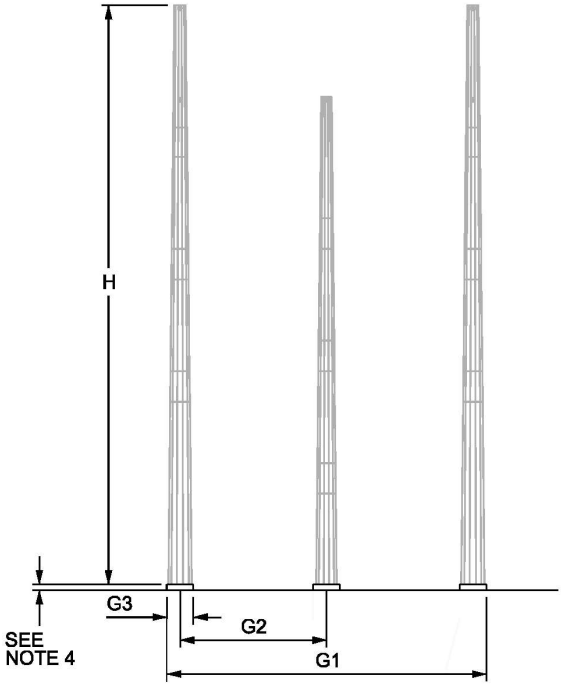
Dominion Energy
5000 Dominion Blvd
Glen Allen, VA 23060

STRUCTURES: 291,233/142; 291,233/141A

DRAWING NO.
ATTACHMENT II.B.3.d

DRAWN: RAW

STRUCTURES: 291/147, 233/147



230KV S.C. 3 POLE HEAVY ANGLE DDE - CROSSING STRUCTURE

B. RATIONALE FOR STRUCTURE TYPE:	230KV VERTICALLY ARRANGED TO REDUCE ROW REQUIREMENTS
C. LENGTH OF R/W (STRUCTURE QUANTITY):	22.3 MILES (2 STRUCTURES)
D. STRUCTURE MATERIAL:	GALVANIZED AND WEATHERED STEEL
RATIONALE FOR STRUCTURE MATERIAL:	WEATHERED STEEL TO MINIMIZE VISUAL IMPACT BY REDUCING THE GLARE ON THE NEW STRUCTURES. GALVANIZED STEEL USED TO MIMIC VISUALS OF EXISTING PAINTED STRUCTURES.
E. FOUNDATION MATERIAL: AVERAGE FOUNDATION REVEAL:	CONCRETE SEE NOTE 4
F. AVERAGE WIDTH AT CROSSARM:	N/A
G1: AVERAGE WIDTH AT BASE\G2: POLE SPACING G3: BASE WIDTH:	G1: 52'\G2: 24'\G3: 4' (SEE NOTE 2)
H. MINIMUM STRUCTURE HEIGHT: MAXIMUM STRUCTURE HEIGHT: AVERAGE STRUCTURE HEIGHT:	50' 50' 50'
I. AVERAGE SPAN LENGTH:	1330' (1330'-1330')
J. MINIMUM CONDUCTOR-TO-GROUND AT MAXIMUM OPERATING TEMPERATURE:	22.5' (230 KV) PER THE NATIONAL ELECTRICAL SAFETY CODE

NOTES
1. INFORMATION ON DRAWING IS PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL ENGINEERING
2. FINAL FOUNDATION DIAMETER SHALL BE BASED UPON FINAL ENGINEERING
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

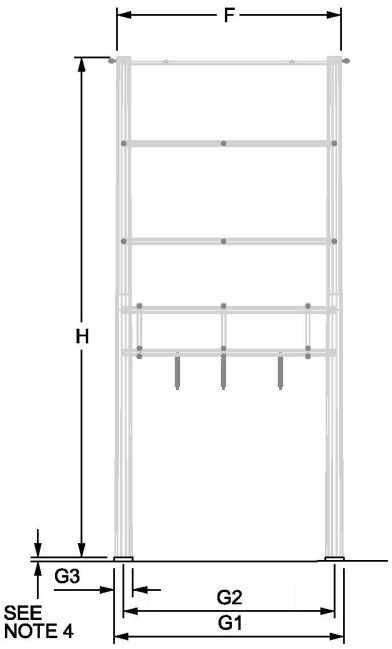
Dominion Energy®
Dominion Energy
5000 Dominion Blvd
Glen Allen, VA 23060

STRUCTURES: 291/147, 233/147

DRAWING NO.
ATTACHMENT II.B.3.e

DRAWN: RAW

STRUCTURES: P291/33E, P291/33F



D.C. STEEL BACKBONE

B. RATIONALE FOR STRUCTURE TYPE:	230KV VERTICALLY ARRANGED TO REDUCE ROW REQUIREMENTS
C. LENGTH OF R/W (STRUCTURE QUANTITY):	22.3 MILES (2 STRUCTURES)
D. STRUCTURE MATERIAL:	GALVANIZED AND WEATHERED STEEL
RATIONALE FOR STRUCTURE MATERIAL:	WEATHERED STEEL TO MINIMIZE VISUAL IMPACT BY REDUCING THE GLARE ON THE NEW STRUCTURES. GALVANIZED STEEL USED TO MIMIC VISUALS OF EXISTING PAINTED STRUCTURES.
E. FOUNDATION MATERIAL:	CONCRETE
AVERAGE FOUNDATION REVEAL:	SEE NOTE 4
F. AVERAGE WIDTH AT CROSSARM:	42.5'
G1: AVERAGE WIDTH AT BASE\G2: POLE SPACING G3: BASE WIDTH:	G1: 44'\G2: 40'\G3: 4' (SEE NOTE 2)
H. MINIMUM STRUCTURE HEIGHT:	95'
MAXIMUM STRUCTURE HEIGHT:	95'
AVERAGE STRUCTURE HEIGHT:	95'
I. AVERAGE SPAN LENGTH:	443' (178'-708')
J. MINIMUM CONDUCTOR-TO-GROUND AT MAXIMUM OPERATING TEMPERATURE:	22.5' (230 KV) PER THE NATIONAL ELECTRICAL SAFETY CODE

NOTES
1. INFORMATION ON DRAWING IS PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL ENGINEERING
2. FINAL FOUNDATION DIAMETER SHALL BE BASED UPON FINAL ENGINEERING
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

Dominion Energy
Dominion Energy
5000 Dominion Blvd
Glen Allen, VA 23060

STRUCTURES: P291/33E, P291/33F

DRAWING NO.
ATTACHMENT II.B.3.f

DRAWN: RAW

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

4. With regard to the proposed supporting structures for all feasible alternate routes, provide the maximum, minimum and average structure heights with respect to the whole route.

Response: Not applicable.

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

5. For lines being rebuilt, provide mapping showing existing and proposed structure heights for each individual structure within the ROW, as proposed in the application.

Response: See Attachment II.B.5 for existing and proposed structure locations.

The proposed approximate structure heights are from the conceptual design created to estimate the cost of the proposed Rebuild Project and are subject to change based on final engineering design. The approximate structure heights include estimated foundation reveal.

Line Number		Structure Number	Existing Structure Height (ft)	Proposed Structure Height (ft)	Attachment II.B.3 Structure Type
	233	1A	65	-	-
291		1A	65	-	-
291	233	1	130	135	II.B.3.a
291	233	2	120	125	II.B.3.a
291	233	3	120	-	-
291	233	4	145	-	-
291	233	5	115	-	-
291	233	6	125	-	-
291	233	7	130	-	-
291	233	8	95	-	-
291	233	9	95	-	-
291	233	10	115	-	-
291	233	11	110	-	-
291	233	12	115	-	-
291	233	13	135	-	-
291	233	14	125	-	-
291	233	15	135	140	II.B.3.a
291	233	16	135	-	-
291	233	17	130	140	II.B.3.a
291	233	17A	95	-	-
291	233	18	145	-	-
291	233	19	135	-	-

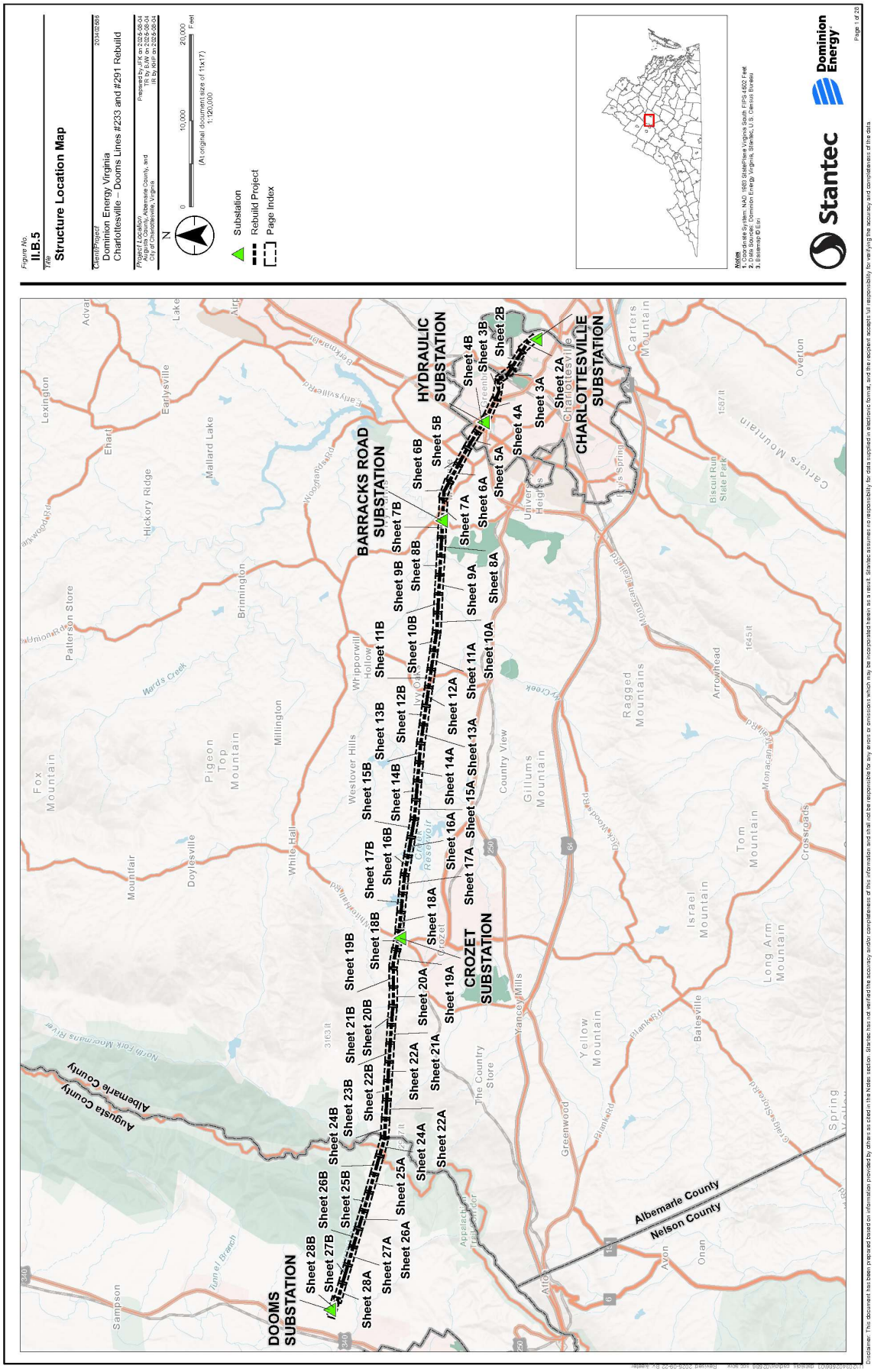
Line Number		Structure Number	Existing Structure Height (ft)	Proposed Structure Height (ft)	Attachment II.B.3 Structure Type
291	233	20	115	-	-
291	233	21	130	130	II.B.3.b
291	233	22	110	-	-
291	233	23	110	-	-
291	233	24	115	-	-
291	233	25	120	-	-
291	233	26	135	-	-
291	233	27	115	-	-
291	233	28	125	130	II.B.3.b
291	233	29	110	120	II.B.3.a
291	233	30	120	-	-
291	233	31	115	-	-
291	233	32	115	-	-
291	233	33	110	110	II.B.3.a
291	233	33E	65	95	II.B.3.f
291	233	33F	-	95	II.B.3.f
291		33A	65		--
	233	33A	65		--
291		33B	40	-	-
	233	33B	40	-	-
291		33C	35	-	-
	233	33C	55	-	-
291		33D	55	-	-
	233	33D	55	-	-
291	233	34	110	110	II.B.3.a
291	233	35	115	-	-
291	233	36	121	120	II.B.3.b
291	233	37	120	120	II.B.3.b
291	233	38	120	120	II.B.3.b
291	233	39	105	120	II.B.3.b
291	233	40	110	120	II.B.3.b
291	233	41	140	140	II.B.3.b
291	233	42	140	140	II.B.3.b
291	233	43	125	120	II.B.3.a

Line Number		Structure Number	Existing Structure Height (ft)	Proposed Structure Height (ft)	Attachment II.B.3 Structure Type
291	233	44	130	130	II.B.3.b
291	233	45	130	130	II.B.3.b
291	233	46	110	120	II.B.3.b
291	233	47	120	120	II.B.3.b
291	233	48	110	110	II.B.3.a
291	233	49	105	110	II.B.3.b
291	233	50	140	140	II.B.3.b
291	233	51	110	120	II.B.3.b
291	233	52	115	120	II.B.3.b
291	233	53	115	120	II.B.3.b
291	233	54	110	120	II.B.3.b
291	233	55	130	140	II.B.3.b
291	233	56	140	130	II.B.3.b
291	233	57	130	130	II.B.3.b
291	233	58	120	130	II.B.3.b
291	233	59	120	-	-
291	233	60	115	120	II.B.3.a
291	233	61	105	110	II.B.3.b
291	233	62	110	110	II.B.3.b
291	233	63	115	120	II.B.3.b
291	233	64	140	140	II.B.3.b
291	233	65	140	140	II.B.3.b
291	233	66	130	130	II.B.3.b
291	233	67	125	130	II.B.3.b
291	233	68	105	120	II.B.3.b
291	233	69	145	140	II.B.3.b
291	233	70	115	120	II.B.3.b
291	233	71	115	120	II.B.3.b
291	233	72	110	120	II.B.3.b
291	233	73	125	120	II.B.3.b
291	233	74	105	110	II.B.3.b
291	233	75	115	120	II.B.3.a
291	233	76	140	130	II.B.3.b
291	233	77	115	120	II.B.3.b

Line Number		Structure Number	Existing Structure Height (ft)	Proposed Structure Height (ft)	Attachment II.B.3 Structure Type
291	233	78	120	120	II.B.3.b
291	233	79	140	140	II.B.3.b
291	233	80	125	130	II.B.3.b
291	233	81	110	120	II.B.3.b
291	233	82	140	140	II.B.3.b
291	233	83	110	110	II.B.3.a
291	233	84	130	130	II.B.3.b
291	233	85	125	120	II.B.3.b
291	233	86	135	130	II.B.3.b
291	233	87	130	130	II.B.3.b
291	233	88	125	130	II.B.3.b
291	233	89	130	140	II.B.3.b
291	233	90	120	110	II.B.3.a
291	233	91	120	120	II.B.3.a
291		91A	95	-	-
	233	91A	75	-	-
291		91B	95	-	-
	233	91B	75	-	-
291		91C	37	-	-
	233	91C	37	-	-
291		91D	85	-	-
	233	91D	35	-	-
291	233	92	110	110	II.B.3.a
291	233	93	115	120	II.B.3.a
291	233	94	120	120	II.B.3.b
291	233	95	110	120	II.B.3.a
291	233	96	110	120	II.B.3.a
291	233	97	125	130	II.B.3.b
291	233	98	110	120	II.B.3.b
291	233	99	115	140	II.B.3.b
291	233	100	110	120	II.B.3.b
291	233	101	105	110	II.B.3.a
291	233	102	105	110	II.B.3.b
291	233	103	105	110	II.B.3.b

Line Number		Structure Number	Existing Structure Height (ft)	Proposed Structure Height (ft)	Attachment II.B.3 Structure Type
291	233	104	110	120	II.B.3.b
291	233	105	120	120	II.B.3.b
291	233	106	105	120	II.B.3.b
291	233	107	125	120	II.B.3.a
291	233	108	120	130	II.B.3.b
291	233	109	120	120	II.B.3.b
291	233	110	107	130	II.B.3.a
291	233	111	105	120	II.B.3.b
291	233	112	110	110	II.B.3.b
291	233	113	110	110	II.B.3.a
291	233	114	110	110	II.B.3.b
291	233	115	110	120	II.B.3.b
291	233	116	110	120	II.B.3.b
291	233	117	125	135	II.B.3.b
291	233	118	110	120	II.B.3.a
291	233	119	120	130	II.B.3.b
291	233	120	115	120	II.B.3.b
291	233	121	110	120	II.B.3.b
291	233	122	135	120	II.B.3.a
291	233	123	110	120	II.B.3.b
291	233	124	110	120	II.B.3.b
291	233	125	110	110	II.B.3.a
291	233	126	110	120	II.B.3.b
291	233	127	110	120	II.B.3.b
291	233	128	110	110	II.B.3.b
291	233	129	120	120	II.B.3.b
291	233	130	135	120	II.B.3.b
291	233	131	110	110	II.B.3.a
291	233	132	120	120	II.B.3.b
291	233	133	115	120	II.B.3.b
291	233	134	115	130	II.B.3.b
291	233	135	115	120	II.B.3.b
291	233	136	110	120	II.B.3.b
291	233	137	110	120	II.B.3.b

Line Number		Structure Number	Existing Structure Height (ft)	Proposed Structure Height (ft)	Attachment II.B.3 Structure Type
291	233	138	115	130	II.B.3.b
291	233	139	130	120	II.B.3.b
291	233	140	125	130	II.B.3.b
291	233	141	110	105	II.B.3.a
291	233	141A	78	80	II.B.3.d
291	233	141B	45	-	-
291	233	142	78	75	II.B.3.d
291	233	143	110	120	II.B.3.b
291	233	144	115	120	II.B.3.b
291	233	145	110	120	II.B.3.b
291	233	146	110	110	II.B.3.a
291		147	40	50	II.B.3.e
	233	147	55	50	II.B.3.e
291		148	60	60	II.B.3.c
	233	148	60	60	II.B.3.c
		148A	60	-	-
291		149	70	-	-
	233	149	70	-	-
Minimum			35	35	
Maximum			145	145	
Average			109	113	



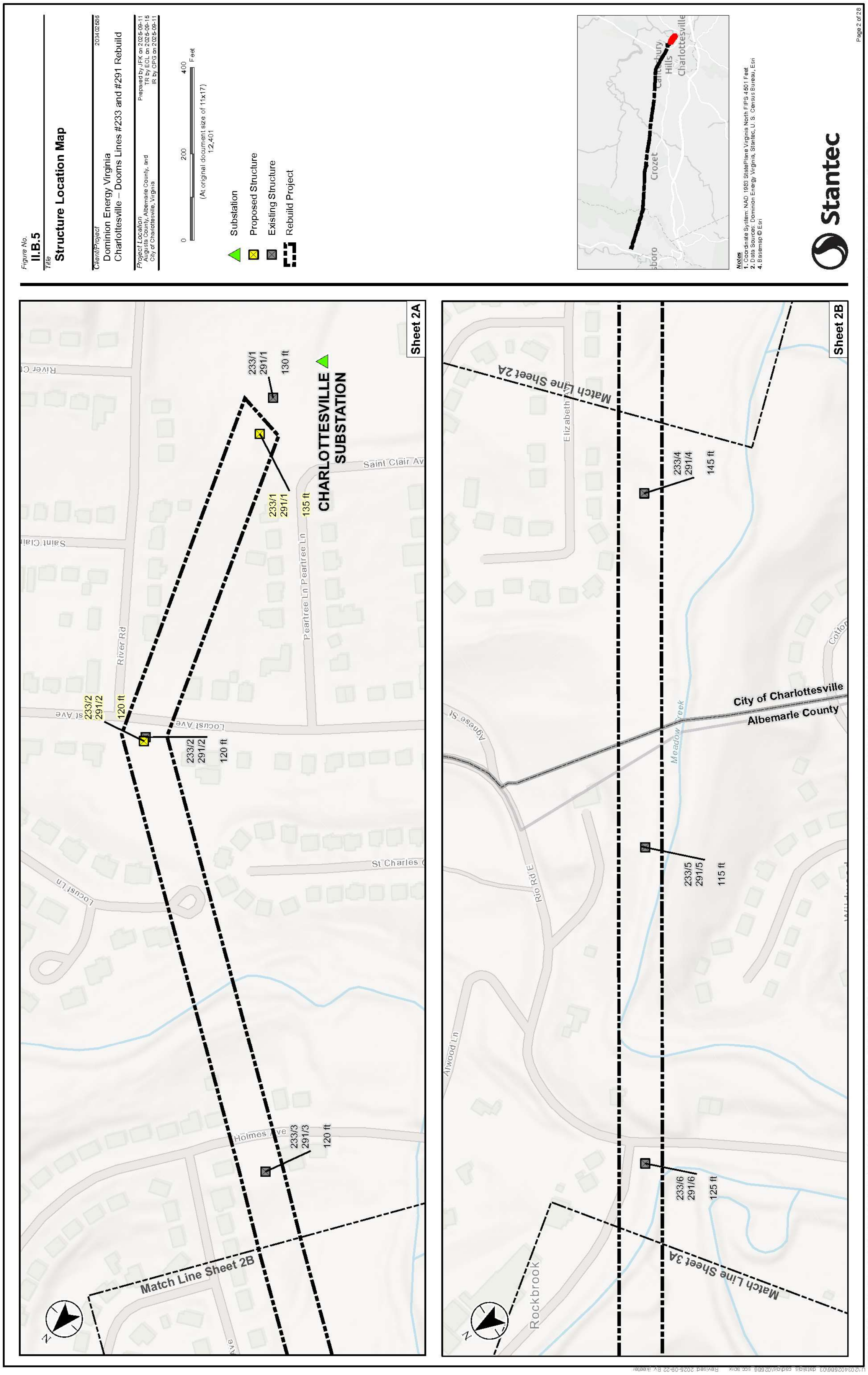


Figure No.
II.B.5
Title
Structure Location Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Substation
Proposed Structure
Existing Structure
Rebuild Project
Sheet 2A
Sheet 2B
CHARLOTTESVILLE SUBSTATION
233/1
291/1
130 ft
135 ft
233/2
291/2
120 ft
233/3
291/3
233/4
291/4
145 ft
233/5
291/5
115 ft
233/6
291/6
125 ft
Match Line Sheet 2B
Match Line Sheet 2A
Match Line Sheet 3A
City of Charlottesville
Albemarle County
Stantec


Figure No.
II.B.5
Title
Structure Location Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
(At original document size of 11x17)
1:2,401
Feet
Substation
Proposed Structure
Existing Structure
Rebuild Project
Stantec
Crozet
Charlottesville
Sheet 3A
Sheet 3B
Match Line Sheet 2B
Match Line Sheet 3B
Match Line Sheet 3A
Match Line Sheet 4A
Albemarle County
City of Charlottesville
Rockbrook
Willow Heights
Melbourne Rd
Grove Rd
250 Byp
233/7
291/7
130 ft
233/8
291/8
105 ft
233/9
291/9
95 ft
233/10
291/10
115 ft
233/11
291/11
110 ft
233/12
291/12
115 ft
233/13
291/13
135 ft
233/14
291/14
125 ft
Page 3 of 28

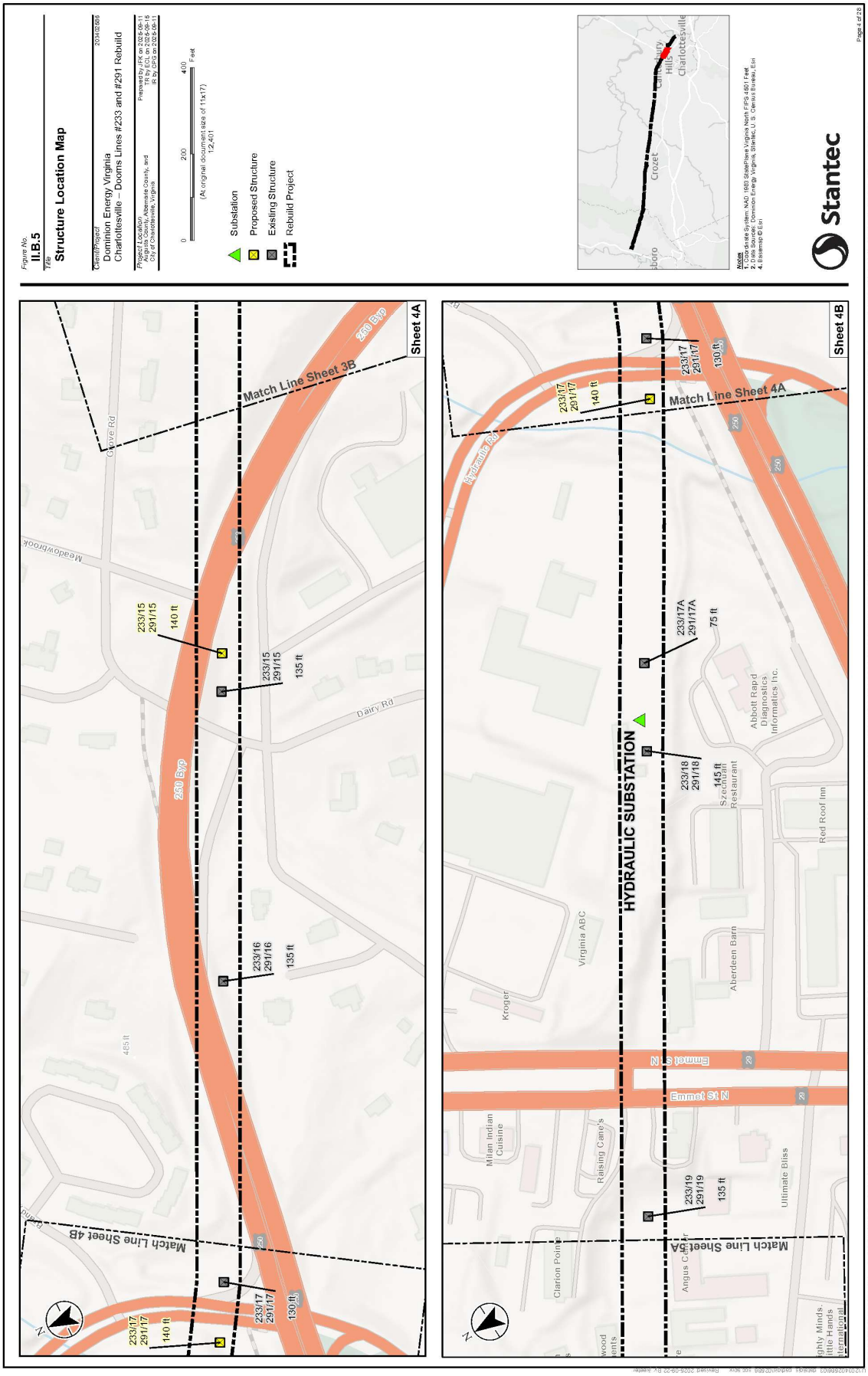


Figure No.
II.B.5
Title
Structure Location Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
20243265
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Prepared by JFK on 2025-08-11
TR by ECL on 2025-08-15
IR by CPR on 2025-08-15
0
200
400
Feet
(At original document size of 11x17)
1:2,401
Substation
Proposed Structure
Existing Structure
Rebuild Project
Charlottesville
Crozet
Notes
1. Coordinate System: NAD 1983 StatePlane Virginia North FIPS 4501 Feet
2. Data Sources: Dominion Energy Virginia, Stantec, VA Parcels, Esri
4. Basemap © Esri
Stantec
Page 4 of 28
Sheet 4A
Match Line Sheet 3B
Match Line Sheet 4B
250 Byp
Dairy Rd
Grove Rd
Meadowbrook
233/15
291/15
140 ft
233/15
291/15
135 ft
233/16
291/16
135 ft
233/17
291/17
140 ft
233/17
291/17
130 ft
Sheet 4B
Match Line Sheet 4A
Match Line Sheet 5A
Hydraulic Rd
HYDRAULIC SUBSTATION
Emmet St N
233/17
291/17
140 ft
233/17
291/17
130 ft
233/17A
291/17A
75 ft
233/18
291/18
145 ft
233/19
291/19
135 ft
Kroger
Virginia ABC
Milan Indian Cuisine
Raising Cane's
Clarion Pointe
Aberdeen Barn
Szechuan Restaurant
Abbott Rapid Diagnostics Informatics Inc.
Red Roof Inn
Ultimate Bliss
Angus Center
Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

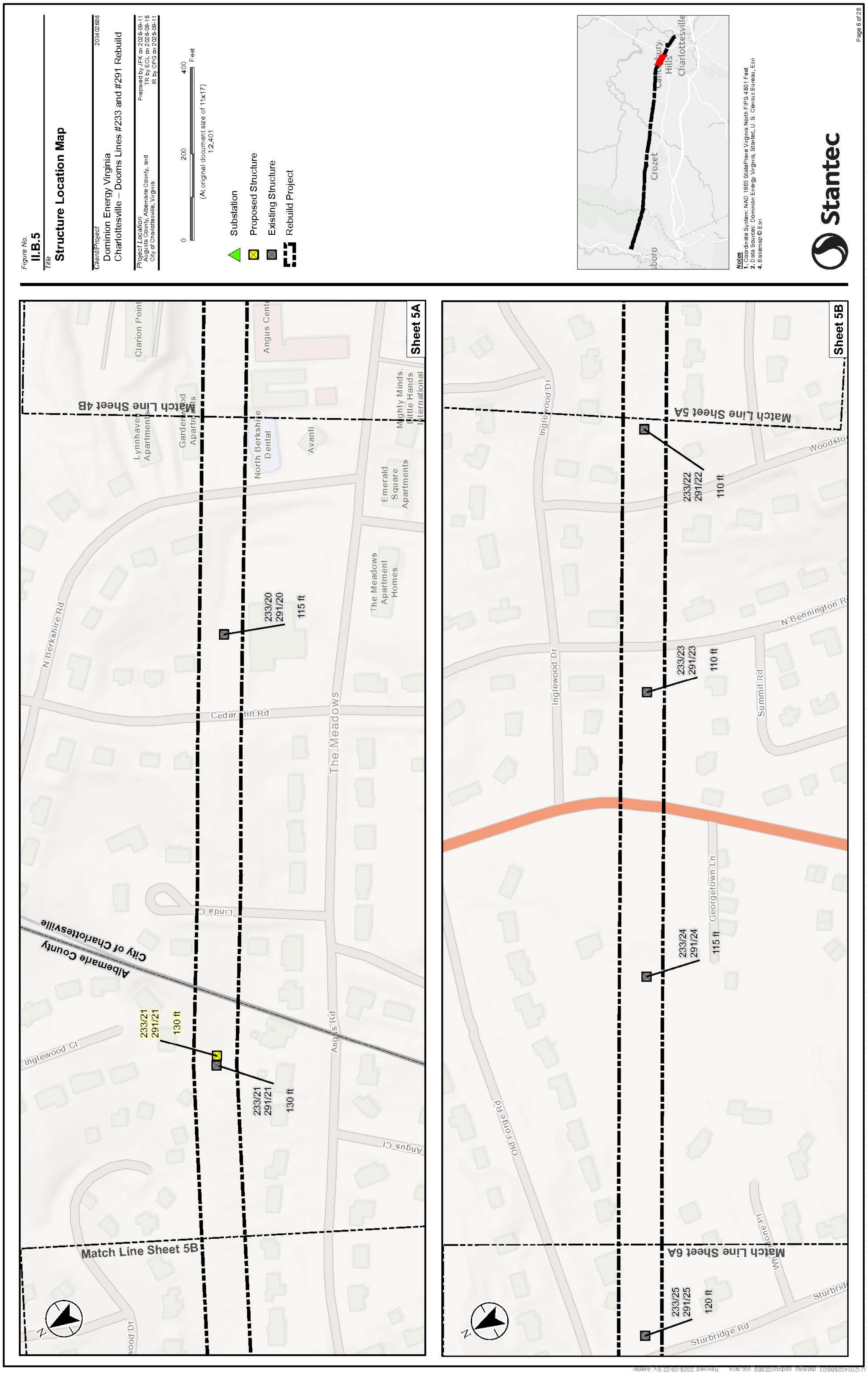


Figure No.
II.B.5
Title
Structure Location Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
0
200
400
Feet
(At original document size of 11x17)
1:2,401
Substation
Proposed Structure
Existing Structure
Rebuild Project
Crozet
Charlottesville
Notes
Stantec
Sheet 5A
Match Line Sheet 4B
Match Line Sheet 5B
233/20
291/20
115 ft
233/21
291/21
130 ft
233/21
291/21
130 ft
City of Charlottesville
Albemarle County
N Berkshire Rd
Cedar Hill Rd
The Meadows
Angus Rd
Linda Ct
Angus Ct
Inglewood Ct
The Meadows Apartment Homes
Emerald Square Apartments
North Berkshire Dental
Avanti
Clarion Point
Sheet 5B
Match Line Sheet 5A
Match Line Sheet 6A
233/22
291/22
110 ft
233/23
291/23
110 ft
233/24
291/24
115 ft
233/25
291/25
120 ft
Inglewood Dr
N Bennington Rd
Summit Rd
Georgetown Ln
Old Forge Rd
Sturbridge Rd

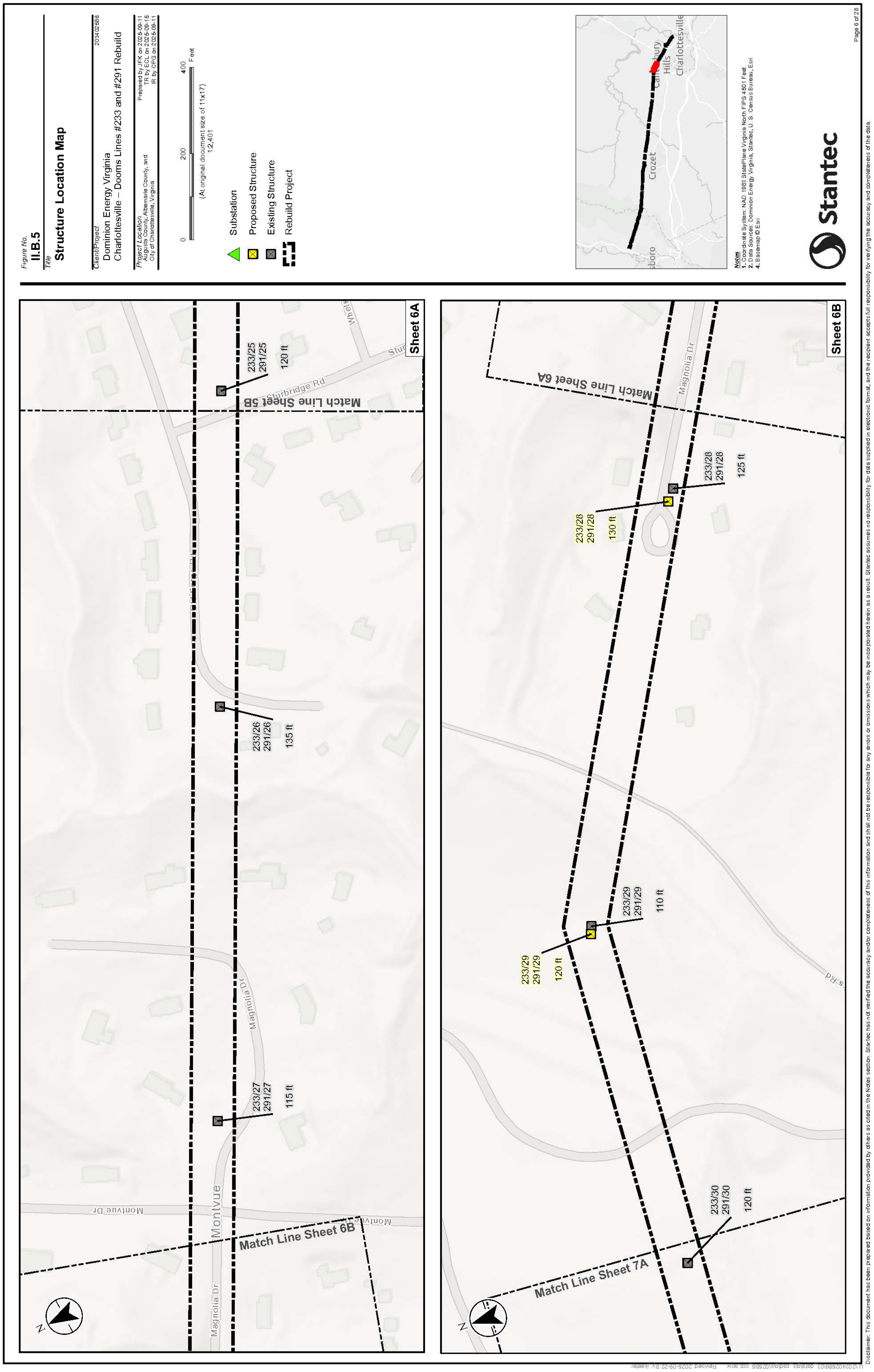


Figure No.
II.B.5
Title
Structure Location Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
0
200
400
Feet
(At original document size of 11x17)
1:2,401
Substation
Proposed Structure
Existing Structure
Rebuild Project
Crozet
Charlottesville
Stantec
Sheet 6A
Sheet 6B
Match Line Sheet 5B
Match Line Sheet 6B
Match Line Sheet 6A
Match Line Sheet 7A
233/25
291/25
120 ft
233/26
291/26
135 ft
233/27
291/27
115 ft
233/28
291/28
125 ft
233/28
291/28
130 ft
233/29
291/29
110 ft
233/29
291/29
120 ft
233/30
291/30
120 ft
Magnolia Dr
Montvue Dr
Montvue
Sturbridge Rd

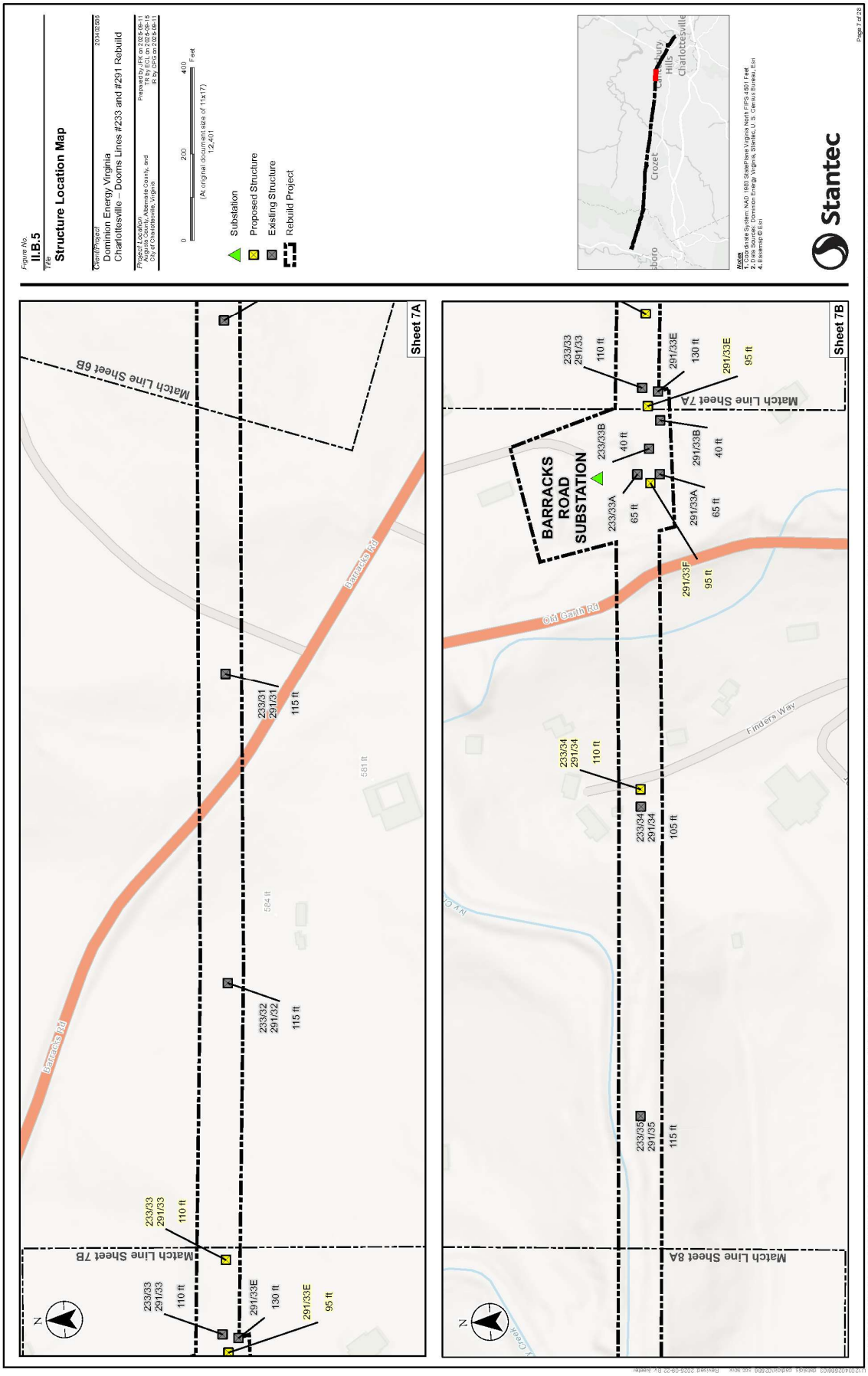


Figure No.
II.B.5
Title
Structure Location Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Substation
Proposed Structure
Existing Structure
Rebuild Project
Sheet 7A
Sheet 7B
Match Line Sheet 6B
Match Line Sheet 7B
Match Line Sheet 7A
Match Line Sheet 8A
Barracks Rd
Old Garth Rd
Finders Way
BARRACKS ROAD SUBSTATION
233/33 291/33 110 ft
233/33A 65 ft
233/33B 40 ft
233/31 291/31 115 ft
233/32 291/32 115 ft
233/34 291/34 110 ft
233/34 291/34 105 ft
233/35 291/35 115 ft
291/33A 65 ft
291/33B 40 ft
291/33E 130 ft
291/33E 95 ft
291/33F 95 ft
581 ft
584 ft
Stantec

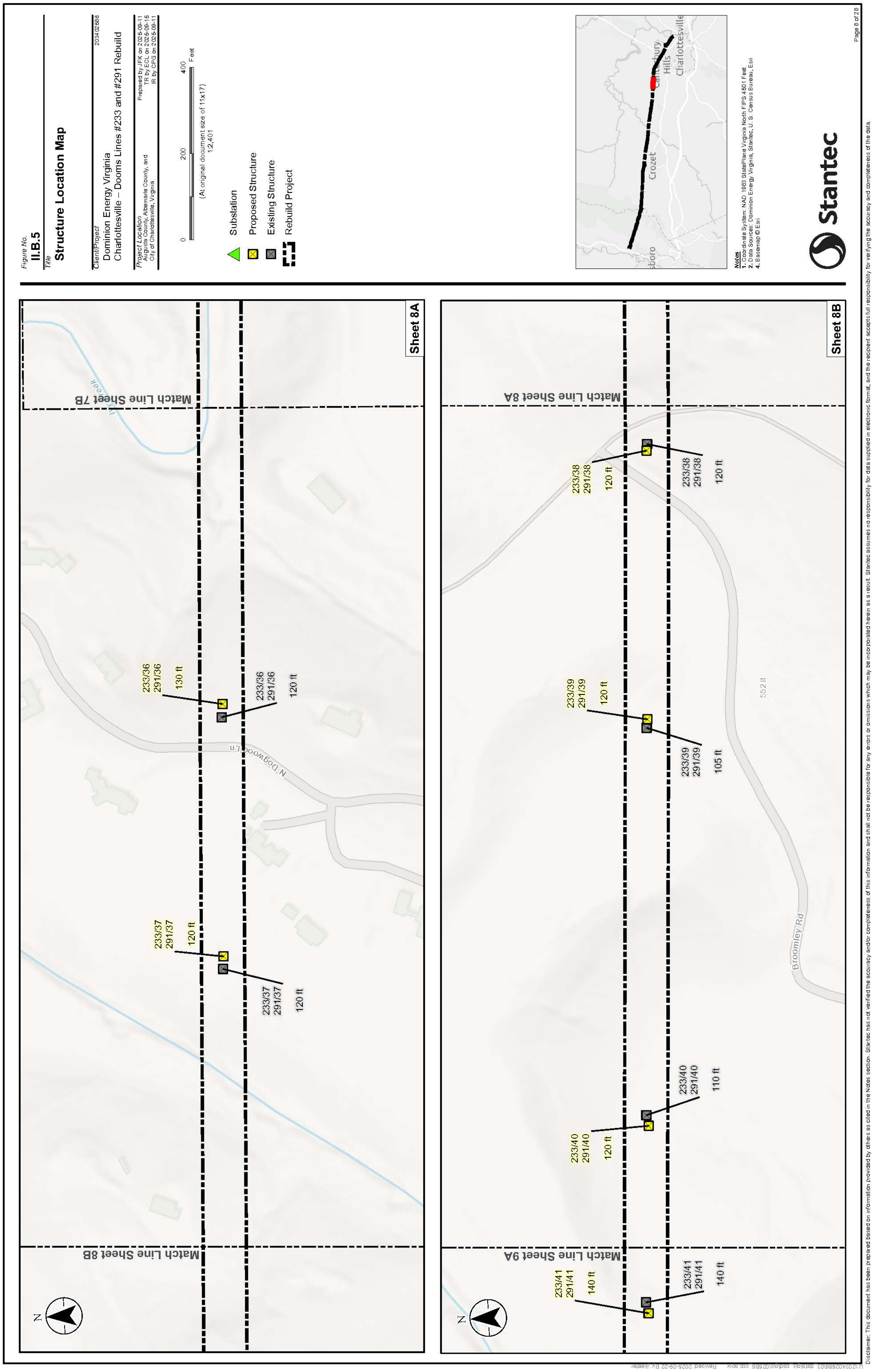


Figure No.
II.B.5
Title
Structure Location Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
203402686
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
0
200
400
Feet
(At original document size of 11x17)
1:2,401
Substation
Proposed Structure
Existing Structure
Rebuild Project
Crozet
Charlottesville
Notes
Stantec
Sheet 8A
Match Line Sheet 7B
Match Line Sheet 8B
N Dogwood Ln
233/36
291/36
130 ft
233/36
291/36
120 ft
233/37
291/37
120 ft
233/37
291/37
120 ft
Sheet 8B
Match Line Sheet 8A
Match Line Sheet 9A
233/38
291/38
120 ft
233/38
291/38
120 ft
233/39
291/39
120 ft
233/39
291/39
105 ft
233/40
291/40
120 ft
233/40
291/40
110 ft
233/41
291/41
140 ft
233/41
291/41
140 ft
Broomley Rd
Page 8 of 28

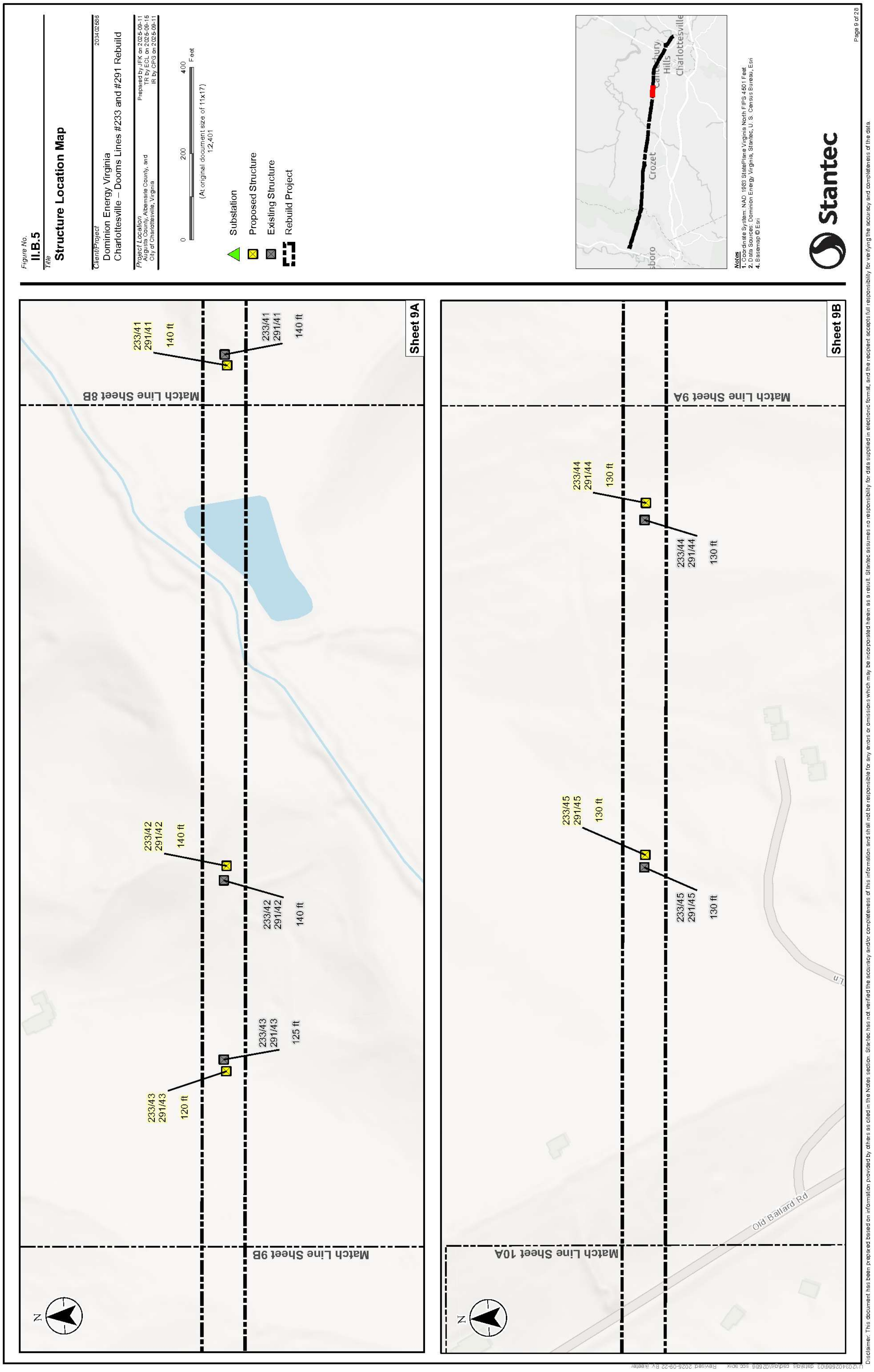


Figure No.
II.B.5
Title
Structure Location Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
0
200
400
Feet
(At original document size of 11x17)
1:2,401
Substation
Proposed Structure
Existing Structure
Rebuild Project
Sheet 9A
Match Line Sheet 8B
Match Line Sheet 9B
233/41
291/41
140 ft
233/42
291/42
140 ft
233/43
291/43
120 ft
125 ft
Sheet 9B
Match Line Sheet 9A
Match Line Sheet 10A
233/44
291/44
130 ft
233/45
291/45
Old Ballard Rd
Crozet
Charlottesville
Stantec


Figure No.
II.B.5
Title
Structure Location Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Prepared by JFK on 2025-08-11
TR by ECL on 2025-08-15
IR by CPS on 2025-08-15
0
200
400 Feet
(At original document size of 11x17)
1:2,401
Substation
Proposed Structure
Existing Structure
Rebuild Project
Crozet
Charlottesville
Notes
1. Coordinate System: NAD 1983 StatePlane Virginia North FIPS 4501 Feet
2. Data Source(s): Dominion Energy Virginia, Stantec, VA Parcels, Esri
4. Basemap © Esri
Stantec
Sheet 10A
Match Line Sheet 9B
Match Line Sheet 10B
Candlewyck Dr
233/46
291/46
120 ft
233/46
291/46
110 ft
233/47
291/47
120 ft
233/47
291/47
120 ft
233/48
291/48
110 ft
233/48
291/48
110 ft
Sheet 10B
Match Line Sheet 10A
Match Line Sheet 11A
Devonshire Rd
Wendover Dr
W Leigh Dr
233/49
291/49
110 ft
233/49
291/49
105 ft
233/50
291/50
140 ft
233/50
291/50
140 ft
233/51
291/51
110 ft
233/51
291/51
120 ft
621 ft
627 ft
Page 10 of 28


Figure No.
II.B.5
Title
Structure Location Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Prepared by JFK on 2025-08-11
TR by ECG on 2025-08-15
IR by DPS on 2025-08-15
0
200
400 Feet
(At original document size of 11x17)
1:2,401
Substation
Proposed Structure
Existing Structure
Rebuild Project
Crozet
Charlottesville
Notes
1. Coordinate System: NAD 1983 StatePlane Virginia North FIPS 4501 Feet
2. Data Source(s): Dominion Energy Virginia, Stantec, VA Parcels, Esri
4. Basemap © Esri
Stantec
Sheet 11A
Match Line Sheet 10B
Match Line Sheet 11B
233/52
291/52
120 ft
233/52
291/52
115 ft
233/53
291/53
120 ft
233/53
291/53
115 ft
233/54
291/54
120 ft
233/54
291/54
110 ft
Sheet 11B
Match Line Sheet 11A
Match Line Sheet 12A
233/54
291/54
120 ft
233/54
291/54
110 ft
233/55
291/55
140 ft
233/55
291/55
130 ft
233/56
291/56
130 ft
233/56
291/56
140 ft
665 ft
Willow Oak Cir
Owensville Rd
Page 11 of 28

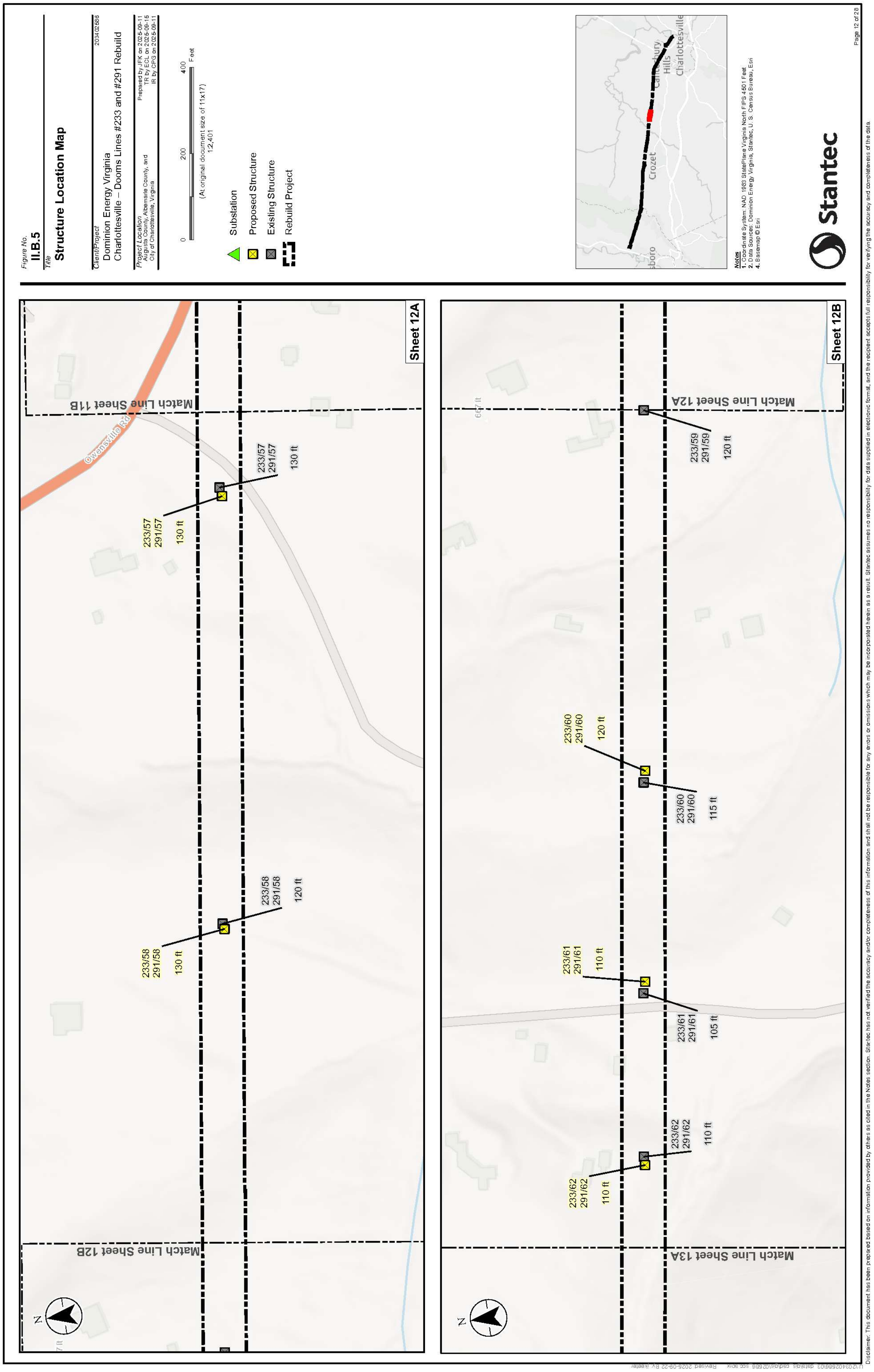


Figure No.
II.B.5
Title
Structure Location Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Substation
Proposed Structure
Existing Structure
Rebuild Project
Sheet 12A
Sheet 12B
Match Line Sheet 11B
Match Line Sheet 12B
Match Line Sheet 12A
Match Line Sheet 13A
Owensville Rd
233/57
291/57
130 ft
233/58
291/58
120 ft
233/59
291/59
120 ft
233/60
291/60
115 ft
233/61
291/61
110 ft
105 ft
233/62
291/62
110 ft
Crozet
Stantec
Page 12 of 28

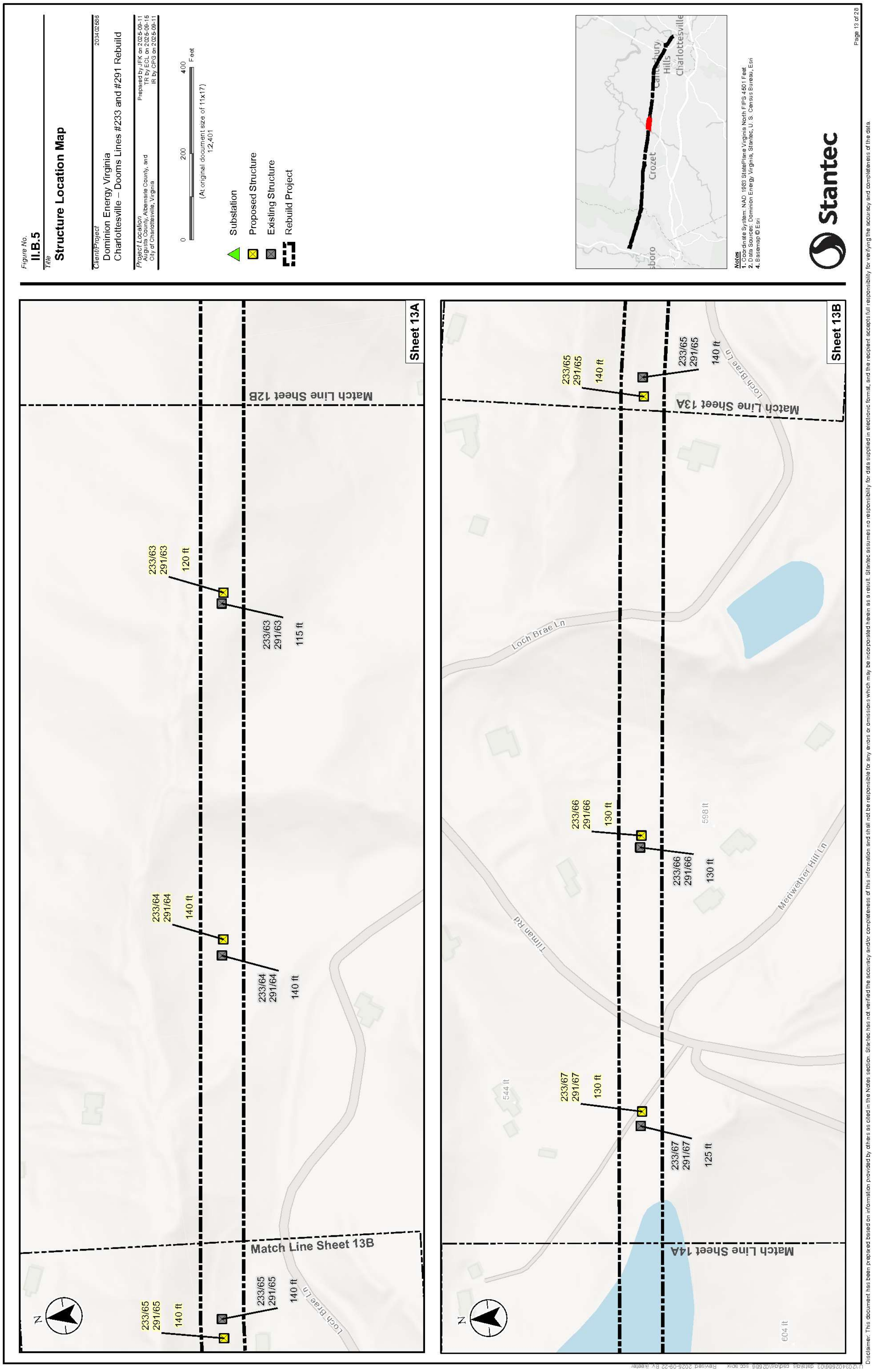


Figure No.
II.B.5
Title
Structure Location Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Substation
Proposed Structure
Existing Structure
Rebuild Project
Stantec
Sheet 13A
Sheet 13B
Match Line Sheet 12B
Match Line Sheet 13B
Match Line Sheet 13A
Match Line Sheet 14A
233/63
291/63
120 ft
115 ft
233/64
291/64
140 ft
233/65
291/65
140 ft
233/66
291/66
130 ft
233/67
291/67
130 ft
125 ft
Loch Brae Ln
Tilman Rd
Meriwether Hill Ln
Crozet
Charlottesville
N

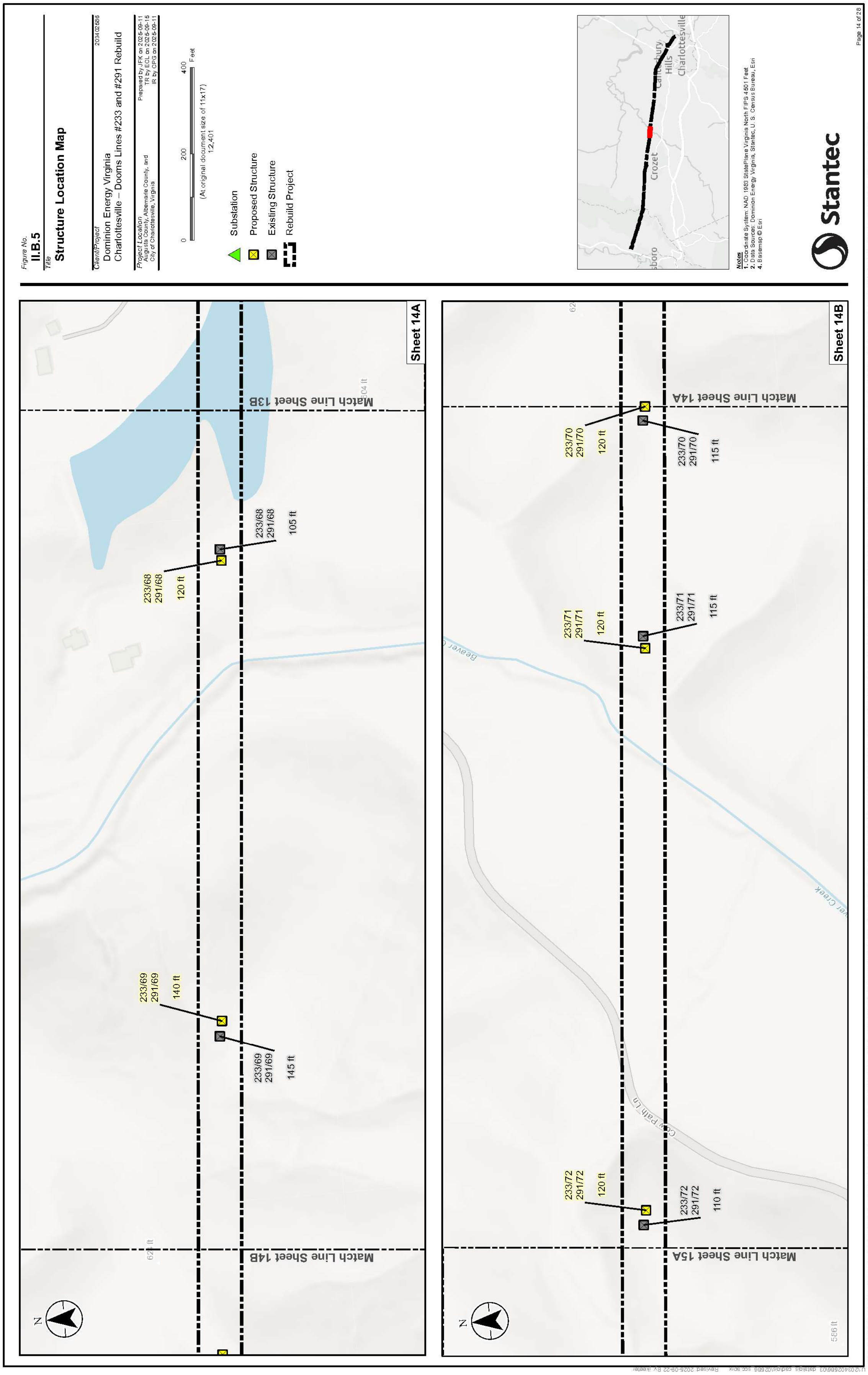


Figure No.
II.B.5
Title
Structure Location Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Substation
Proposed Structure
Existing Structure
Rebuild Project
Sheet 14A
Sheet 14B
Match Line Sheet 13B
Match Line Sheet 14B
Match Line Sheet 14A
Match Line Sheet 15A
233/68
291/68
120 ft
105 ft
233/69
291/69
140 ft
145 ft
233/70
291/70
115 ft
233/71
291/71
233/72
291/72
110 ft
Crozet
Charlottesville
Stantec

Figure No.
II.B.5

Title
Structure Location Map

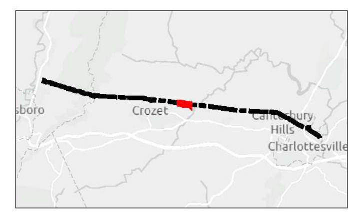
Client/Project 203402586
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild

Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia

Prepared by JFK on 2025-09-11
TR by ECL on 2025-09-15
IR by CPG on 2025-09-11

0 200 400 Feet
(At original document size of 11x17)
1:2,401

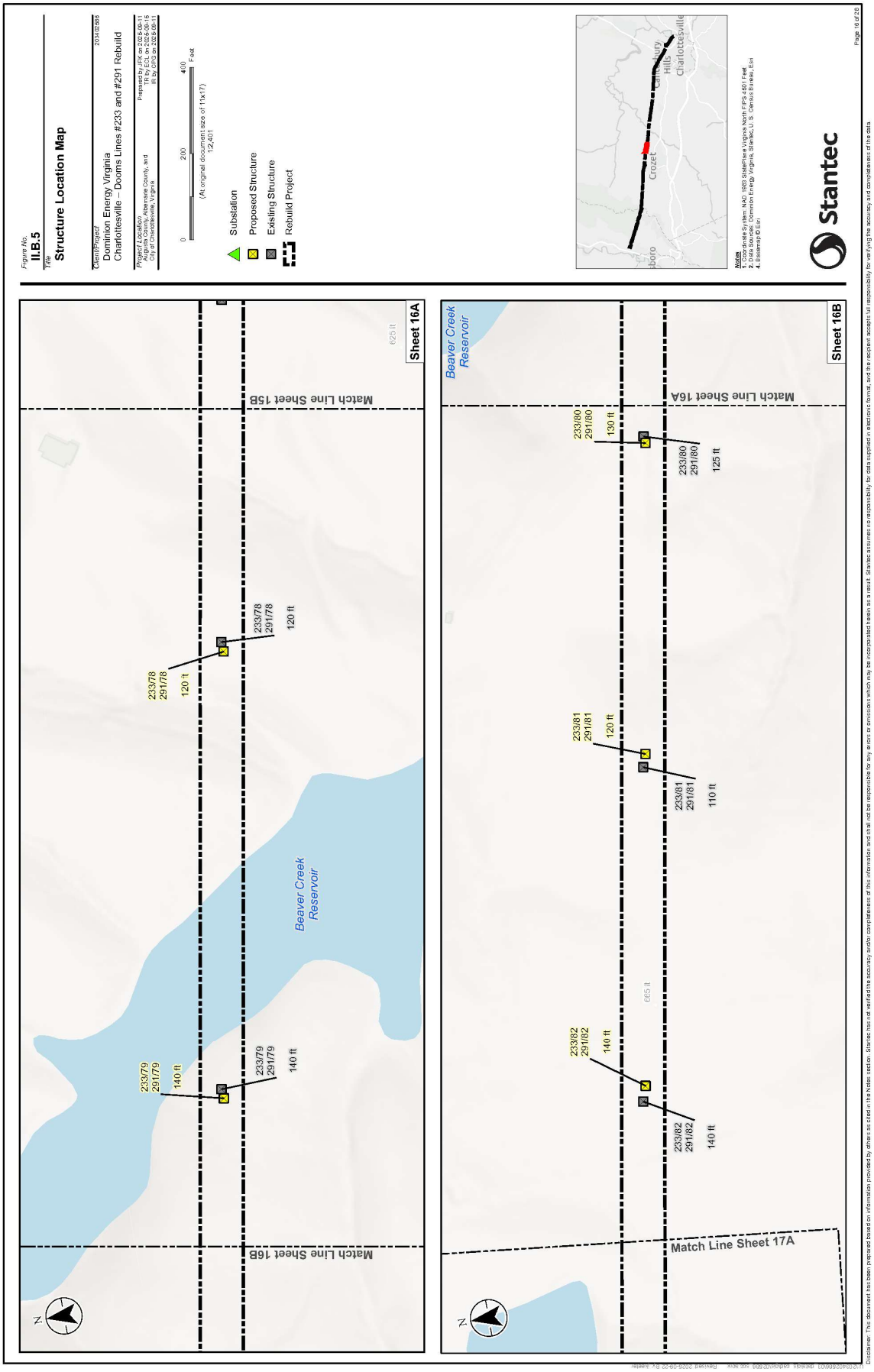
- Substation
- Proposed Structure
- Existing Structure
- Rebuild Project



Notes
1. Coordinate System: NAD 1983 StatePlane Virginia North FIPS 4501 Feet
2. Data Sources: Dominion Energy Virginia, Stantec, U. S. Census Bureau, Esri
4. Basemap © Esri

Stantec

Page 16 of 28



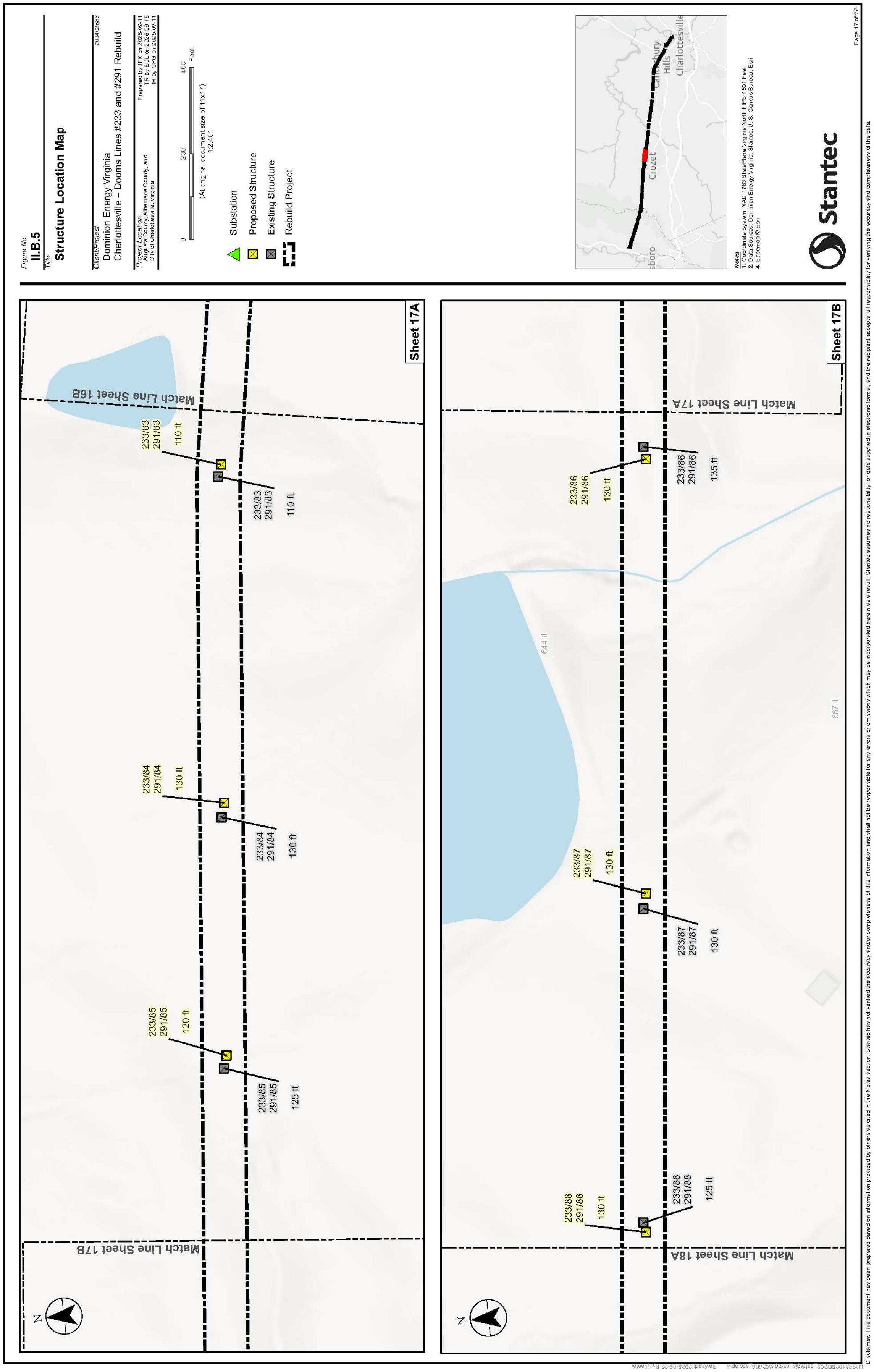


Figure No.
II.B.5
Title
Structure Location Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
Substation
Proposed Structure
Existing Structure
Rebuild Project
Sheet 17A
Sheet 17B
Match Line Sheet 16B
Match Line Sheet 17B
Match Line Sheet 17A
Match Line Sheet 18A
233/83
291/83
110 ft
233/84
291/84
130 ft
233/85
291/85
120 ft
125 ft
233/86
291/86
135 ft
233/87
291/87
233/88
291/88
Crozet
Stantec

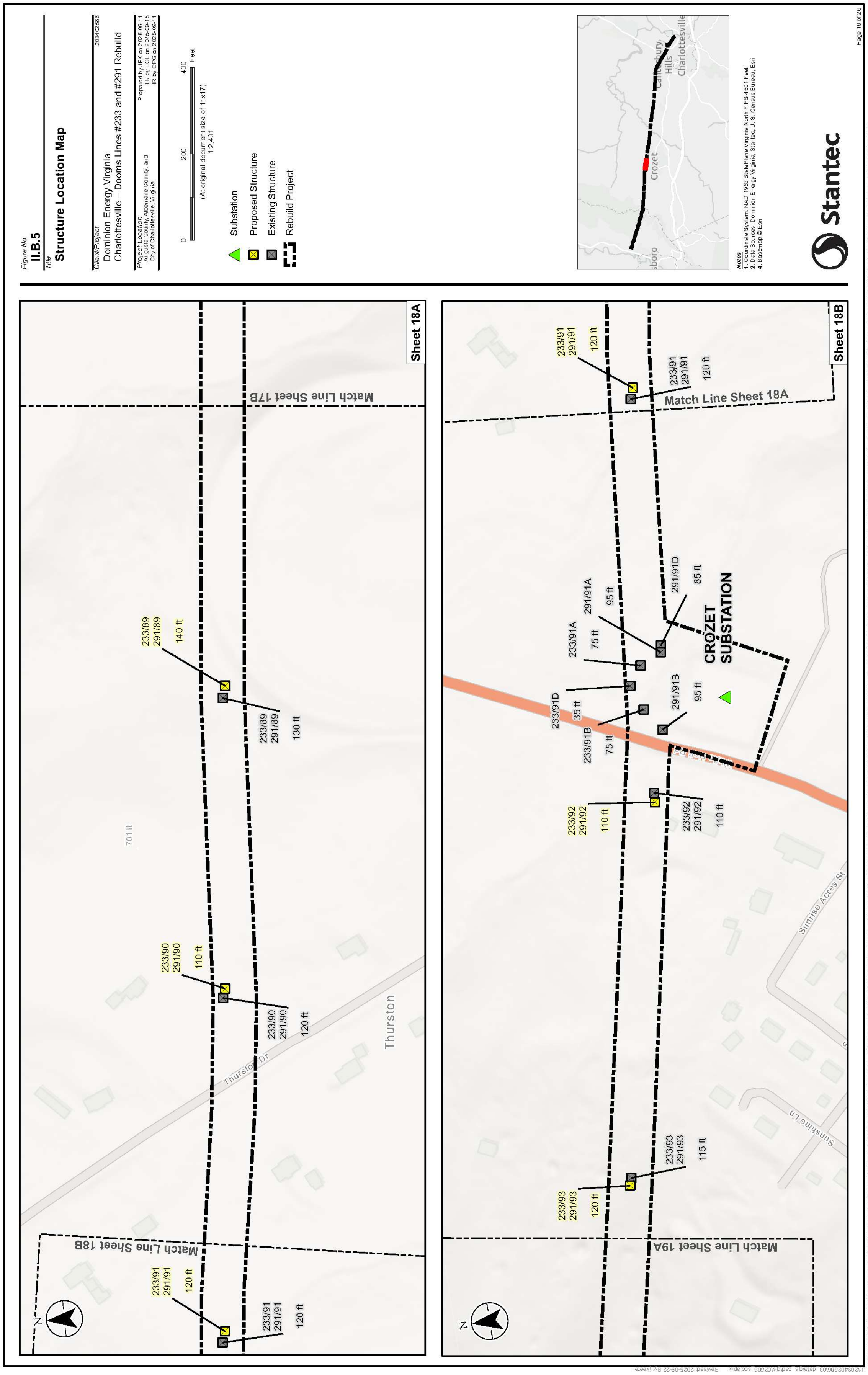


Figure No.
II.B.5
Title
Structure Location Map
Client/Project
Dominion Energy Virginia
Charlottesville – Dooms Lines #233 and #291 Rebuild
Project Location
Augusta County, Albemarle County, and City of Charlottesville, Virginia
(At original document size of 11x17)
1:2,401
Substation
Proposed Structure
Existing Structure
Rebuild Project
Stantec
Sheet 18A
Sheet 18B
Match Line Sheet 17B
Match Line Sheet 18B
Match Line Sheet 18A
Match Line Sheet 19A
CROZET SUBSTATION
233/89
291/89
140 ft
130 ft
233/90
291/90
110 ft
120 ft
233/91
291/91
120 ft
233/91A
75 ft
291/91A
95 ft
233/91B
75 ft
291/91B
95 ft
233/91D
35 ft
291/91D
85 ft
233/92
291/92
110 ft
233/93
291/93
120 ft
115 ft
Thurston Dr
Thurston
Sunrise Acres St
Sunshine Ln
Crozet
Charlottesville