

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

- 2. Detail the number, size(s), type(s), coating and typical configurations of conductors. Provide the rationale for the type(s) of conductor(s) to be used.**

Response: The two proposed single circuit 230 kV lines Company will include 3-phase twin bundled 768.2 ACSS/HS/TW conductors arranged as shown in Attachments II.B.3.i-iii. The twin bundled 768.2 ACSS/HS/TW conductors are a Company standard for new 230 kV construction.

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

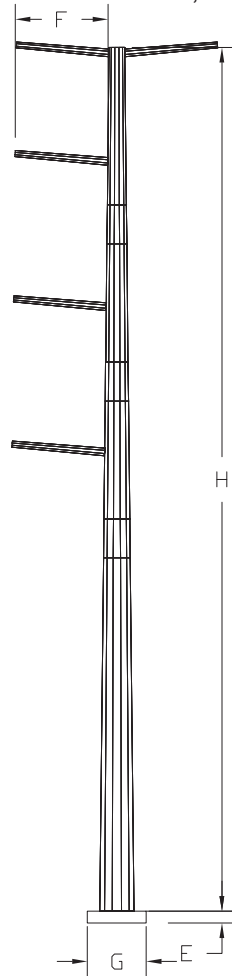
3. With regard to the proposed supporting structures over each portion of the ROW for the preferred route, provide diagrams (including foundation reveal) and descriptions of all the structure types, to include:
 - a. mapping that identifies each portion of the preferred route;
 - b. the rationale for the selection of the structure type;
 - c. the number of each type of structure and the length of each portion of the ROW;
 - d. the structure material and rationale for the selection of such material;
 - e. the foundation material;
 - f. the average width at cross arms;
 - g. the average width at the base;
 - h. the maximum, minimum and average structure heights;
 - i. the average span length; and
 - j. the minimum conductor-to-ground clearances under maximum operating conditions.

Response: See Attachments II.B.3.i-iii for subparts (b)-(j).³⁶ For subpart (a), see Attachment II.B.3.iv.

³⁶ See also, *supra*, n. 5 and n. 7.

TUNSTALL-UNITY, LINES #2259 & #2262
 RAINES-TUNSTALL, LINE #2275
 EVANS CREEK-TUNSTALL, LINE #2274
 EVANS CREEK-RAINES, LINE #2277

ATTACHMENT II.B.3.i



230kV SC ENGINEERED MONOPOLE SUSPENSION STRUCTURE

- | | |
|-----------------------------------|--|
| A. MAPPING OF THE ROUTE: | SEE ATTACHMENT II.B.3.iv |
| B. RATIONALE FOR STRUCTURE TYPE: | TO MINIMIZE RIGHT OF WAY |
| C. LENGTH OF R/W (STRUCTURE QTY): | 17.9 MILES (97 STRUCTURES) |
| D. STRUCTURE MATERIAL: | WEATHERING STEEL |
| RATIONALE FOR MATERIAL: | WEATHERING STEEL WAS SELECTED TO MATCH OTHER LINES IN THE AREA |
| E. FOUNDATION MATERIAL: | CONCRETE |
| AVERAGE FOUNDATION REVEAL: | SEE NOTE 2 |
| F. AVERAGE WIDTH AT CROSS ARM: | 12' |
| G. AVERAGE WIDTH AT BASE: | SEE NOTE 2 |
| H. MINIMUM STRUCTURE HEIGHT: | 105' |
| MAXIMUM STRUCTURE HEIGHT: | 130' |
| AVERAGE STRUCTURE HEIGHT: | 117' |
| I. AVERAGE SPAN LENGTH (RANGE): | 698' (375'-1110') (SEE NOTE 4) |
| J. MINIMUM CONDUCTOR-TO-GROUND: | 22.5' (AT MAXIMUM OPERATING TEMPERATURE) |

NOTES: 1. INFORMATION CONTAINED ON DRAWING IS PRELIMINARY IN NATURE AND SUBJECT TO CHANGE DURING FINAL DESIGN.

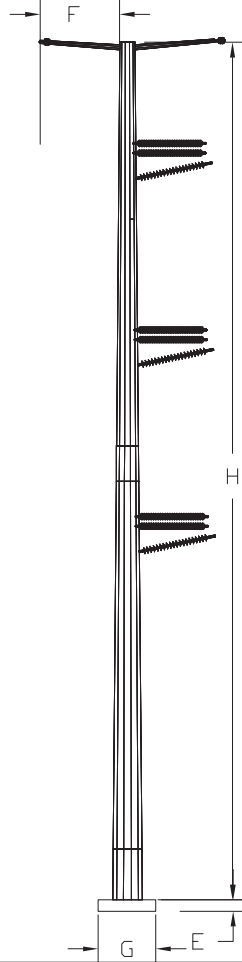
2. A MINIMUM FOUNDATION REVEAL SHALL BE 1.5 FEET. FOUNDATION DIAMETER SHALL BE BASED ON FINAL ENGINEERING.

3. STRUCTURE HEIGHTS ARE MEASURED FROM STRUCTURE CENTERLINE AND DO NOT INCLUDE FOUNDATION REVEAL.

4. THE SPAN ASSOCIATED WITH EACH STRUCTURE IS THE AHEAD SPAN.

TUNSTALL-UNITY, LINES #2259 & #2262
 RAINES-TUNSTALL, LINE #2275
 EVANS CREEK-TUNSTALL, LINE #2274
 EVANS CREEK-RAINES, LINE #2277

ATTACHMENT II.B.3.ii



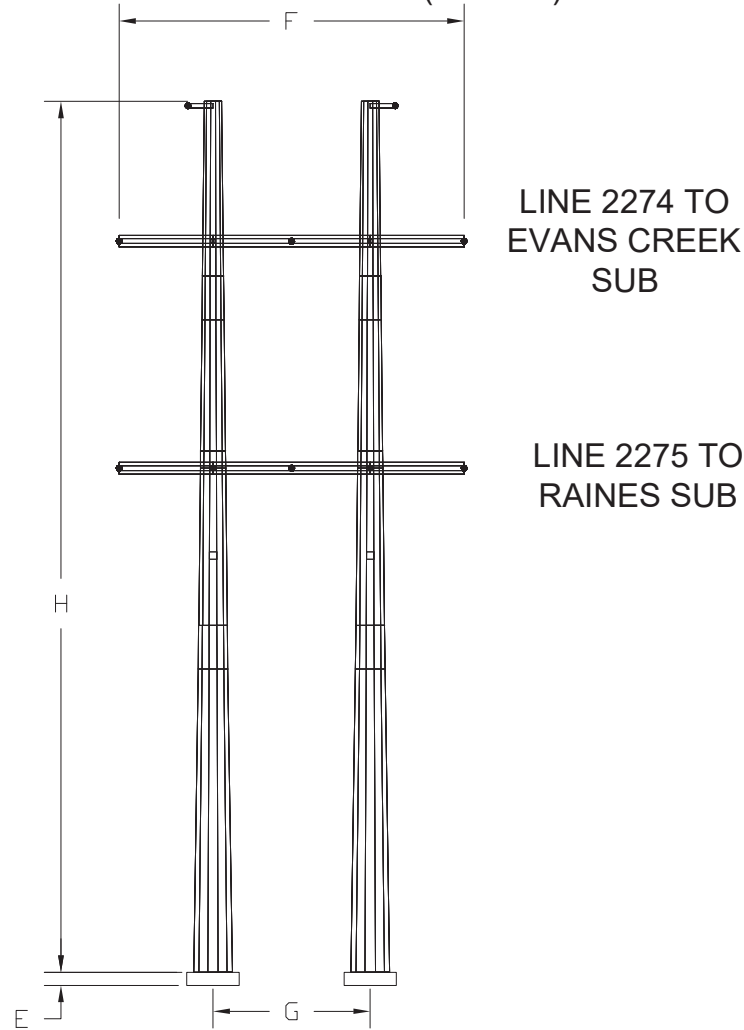
230kV SC ENGINEERED MONOPOLE DDE STRUCTURE

- | | |
|-----------------------------------|---|
| A. MAPPING OF THE ROUTE: | SEE ATTACHMENT II.B.3.iv |
| B. RATIONALE FOR STRUCTURE TYPE: | TO MINIMIZE RIGHT OF WAY |
| C. LENGTH OF R/W (STRUCTURE QTY): | 17.9 MILES (46 STRUCTURES) |
| D. STRUCTURE MATERIAL: | WEATHERING STEEL |
| RATIONALE FOR MATERIAL: | WEATHERING STEEL WAS SELECTED TO MATCH OTHER LINES IN THIS AREA |
| E. FOUNDATION MATERIAL: | CONCRETE |
| AVERAGE FOUNDATION REVEAL: | SEE NOTE 2 |
| F. AVERAGE WIDTH AT CROSS ARM: | 8' |
| G. AVERAGE WIDTH AT BASE: | SEE NOTE 2 |
| H. MINIMUM STRUCTURE HEIGHT: | 90' |
| MAXIMUM STRUCTURE HEIGHT: | 140' |
| AVERAGE STRUCTURE HEIGHT: | 111' |
| I. AVERAGE SPAN LENGTH (RANGE): | 615' (228-922') (SEE NOTE 4) |
| J. MINIMUM CONDUCTOR-TO-GROUND: | 22.5' (AT MAXIMUM OPERATING TEMPERATURE) |

- NOTES:1. INFORMATION CONTAINED ON DRAWING IS PRELIMINARY IN NATURE AND SUBJECT TO CHANGE DURING FINAL DESIGN.
2. A MINIMUM FOUNDATION REVEAL SHALL BE 1.5 FEET. FOUNDATION DIAMETER SHALL BE BASED ON FINAL ENGINEERING.
3. STRUCTURE HEIGHTS ARE MEASURED FROM STRUCTURE CENTERLINE AND DO NOT INCLUDE FOUNDATION REVEAL.
4. THE SPAN ASSOCIATED WITH EACH STRUCTURE IS THE AHEAD SPAN.

EVANS CREEK - TUNSTALL, LINE #2274 & #2275
STRUCTURE 2274/11 (2275/31)

ATTACHMENT II.B.3.iii



230kV DC ENGINEERED H-FRAME DDE STRUCTURE

- | | |
|-----------------------------------|--|
| A. MAPPING OF THE ROUTE: | SEE ATTACHMENT II.B.3.iv |
| B. RATIONALE FOR STRUCTURE TYPE: | TO FACILITATE TRANSMISSION CROSSING |
| C. LENGTH OF R/W (STRUCTURE QTY): | 0.1 (1 STRUCTURE) |
| D. STRUCTURE MATERIAL: | WEATHERING STEEL |
| RATIONALE FOR MATERIAL: | WEATHERING STEEL WAS SELECTED TO MATCH OTHER LINES IN THE AREA |
| E. FOUNDATION MATERIAL: | CONCRETE |
| AVERAGE FOUNDATION REVEAL: | SEE NOTE 2 |
| F. AVERAGE WIDTH AT CROSS ARM: | 50' |
| G. AVERAGE WIDTH AT BASE: | SEE NOTE 2 |
| H. MINIMUM STRUCTURE HEIGHT: | 140' |
| MAXIMUM STRUCTURE HEIGHT: | 140' |
| AVERAGE STRUCTURE HEIGHT: | 140' |
| I. AVERAGE SPAN LENGTH (RANGE): | 564' (564'-564') (SEE NOTE 4) |
| J. MINIMUM CONDUCTOR-TO-GROUND: | 22.5' (AT MAXIMUM OPERATING TEMPERATURE) |

NOTES: 1. INFORMATION CONTAINED ON DRAWING IS PRELIMINARY IN NATURE AND SUBJECT TO CHANGE DURING FINAL DESIGN.
 2. A MINIMUM FOUNDATION REVEAL SHALL BE 1.5 FEET. FOUNDATION DIAMETER SHALL BE BASED ON FINAL ENGINEERING.
 3. STRUCTURE HEIGHTS ARE MEASURED FROM STRUCTURE CENTERLINE AND DO NOT INCLUDE FOUNDATION REVEAL.
 4. THE SPAN ASSOCIATED WITH EACH STRUCTURE IS THE AHEAD SPAN.





Attachment II.B.3.iv Proposed Structure Locations South Hill 230 kV Transmission Line Project Dominion Energy Virginia Lunenburg, Mecklenburg, and Brunswick Counties, VA		Proposed Structure Location Existing Dominion Transmission Line Unity Proposed Route		Right-of-Way Type Proposed New Right-of-Way Aboveground Facility - Unity Switching Station		Scale: 1:10,800 0 0.1 0.2 Miles	
Dominion Energy		ERM		Drawn By: NAD		MPLS:\Clients\BID-POD\South_Hill\GIS\SSCC_Appendix_A\DWI_SCHL_SCC_Appendix.aprx\Attachment II.B.3.iv REVISED: 09/29/2022 SCALE: 1:10,800 when printed at 11x17	



Attachment II.B.3.iv
Proposed Structure Locations
South Hill 230 kV Transmission Line Project
 Dominion Energy Virginia
 Lunenburg, Mecklenburg, and Brunswick Counties, VA



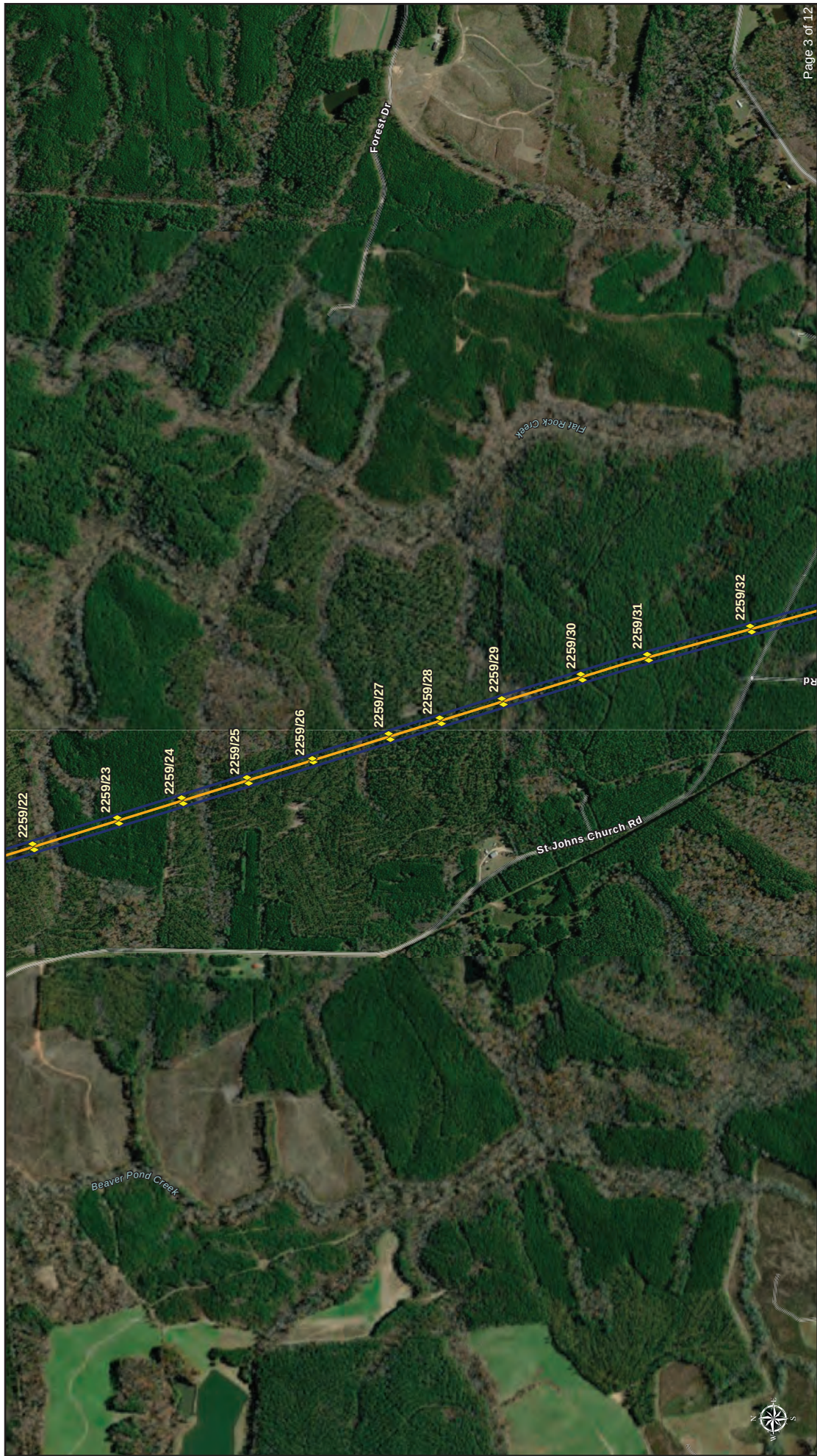

Drawn By: NAD

 Proposed Structure Location
 Unity Proposed Route
Right-of-Way Type
 Proposed New Right-of-Way



 1:10,800

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Proposed Structure Location

Right-of-Way Type

◆ Unity Proposed Route
 Proposed New Right-of-Way

Attachment II.B.3.iv
Proposed Structure Locations
South Hill 230 kV Transmission Line Project
 Dominion Energy Virginia
 Lunenburg, Mecklenburg, and Brunswick Counties, VA

ERM

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Proposed Structure Location

Right-of-Way Type

- ◆ Proposed Structure Location
- Unity Proposed Route
- Proposed New Right-of-Way

Attachment II.B.3.iv

Proposed Structure Locations

South Hill 230 kV Transmission Line Project

Dominion Energy Virginia

Lunenburg, Mecklenburg, and Brunswick Counties, VA

ERM

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Attachment II.B.3.iv
Proposed Structure Locations
South Hill 230 kV Transmission Line Project
 Dominion Energy Virginia
 Lunenburg, Mecklenburg, and Brunswick Counties, VA




 Proposed Structure Location
 Unity Proposed Route
Right-of-Way Type
 Proposed New Right-of-Way


 1:10,800




Proposed Structure Location

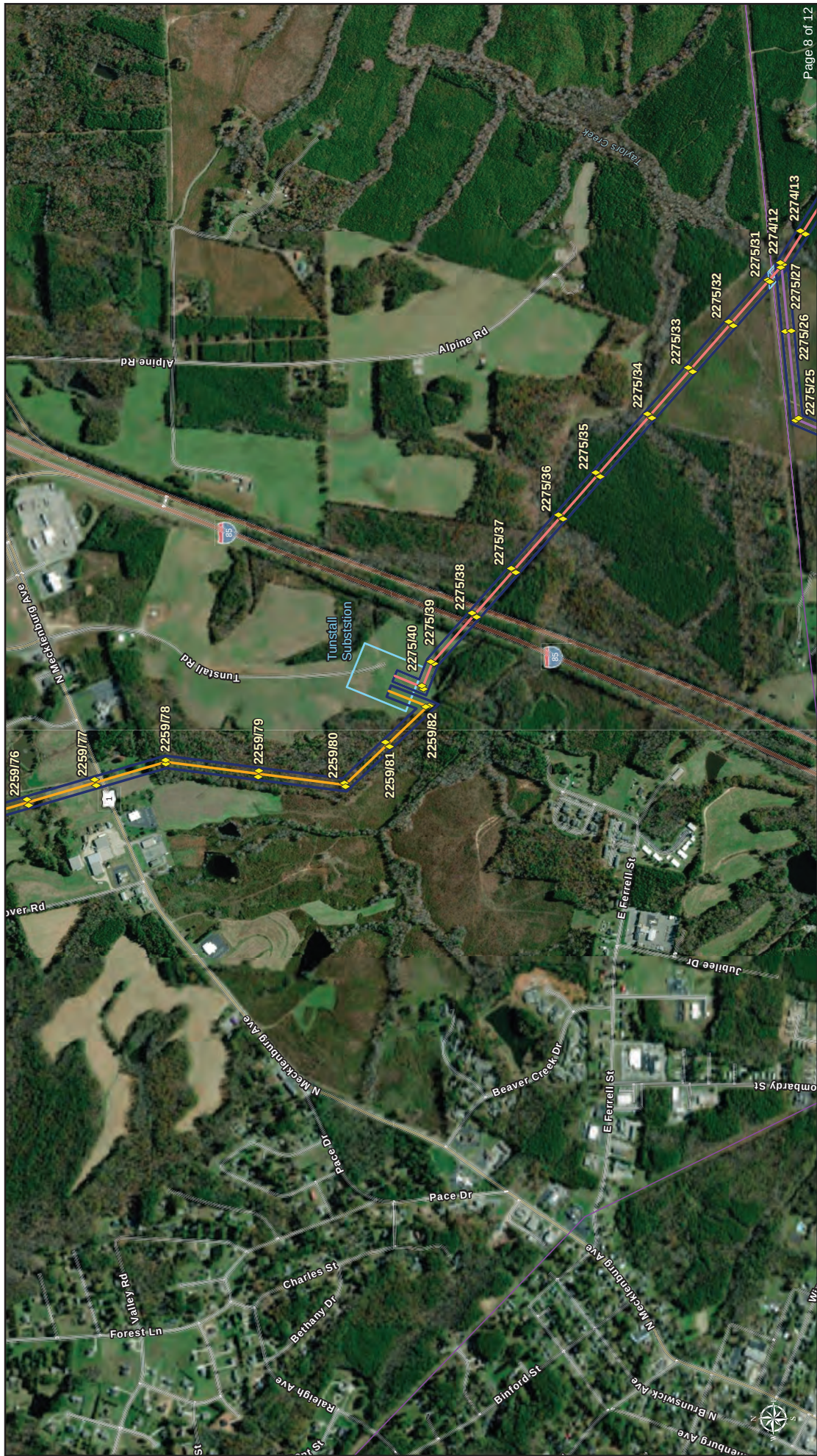
Right-of-Way Type

- ◆ Proposed Structure Location
- Unity Proposed Route
- Proposed New Right-of-Way

Attachment II.B.3.iv
Proposed Structure Locations
South Hill 230 kV Transmission Line Project
 Dominion Energy Virginia
 Lunenburg, Mecklenburg, and Brunswick Counties, VA

Drawn By: NAD

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Proposed Structure Location

- ◆ Proposed Structure Location
- Existing Dominion Transmission Line
- Corridor A Proposed Route
- Corridor D Proposed Route
- Unity Proposed Route

Right-of-Way Type

- Existing Overhead Right-of-Way
- Proposed New Right-of-Way
- Proposed Substation Boundary

Attachment II.B.3.iv
Proposed Structure Locations
South Hill 230 kV Transmission Line Project
 Dominion Energy Virginia
 Lunenburg, Mecklenburg, and Brunswick Counties, VA

ERM

Page 8 of 12

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DRAWN BY: NAD



Attachment II.B.3.iv
Proposed Structure Locations
South Hill 230 kV Transmission Line Project
 Dominion Energy Virginia
 Lunenburg, Mecklenburg, and Brunswick Counties, VA

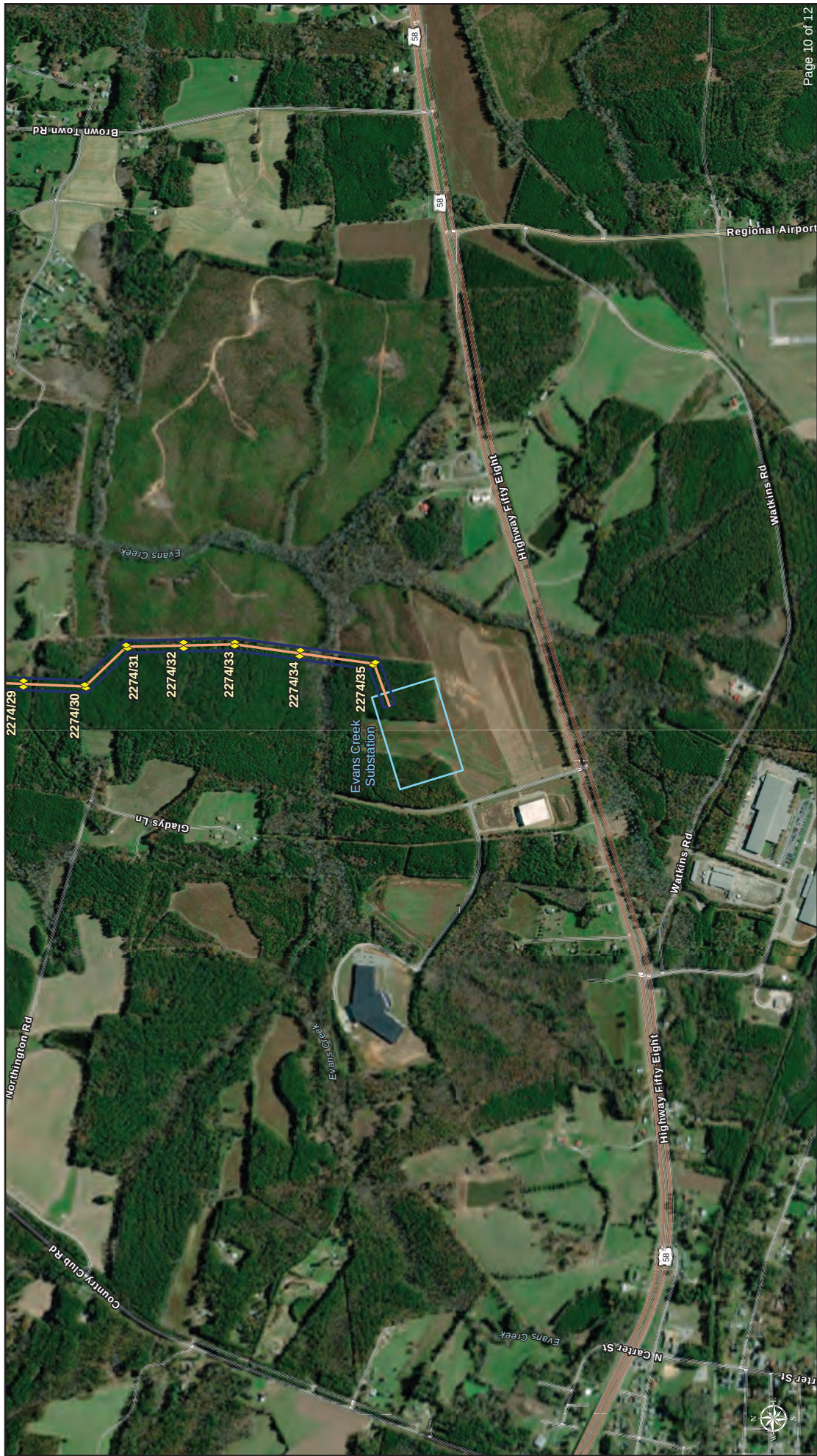



 Proposed Structure Location
 Existing Dominion Transmission Line
 Corridor A Proposed Route
 Corridor B Proposed Route

 Corridor D Proposed Route
Right-of-Way Type
 Existing Overhead Right-of-Way
 Proposed New Right-of-Way

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0 0.1 0.2
 Miles
 1:10,800



Attachment II.B.3.iv
Proposed Structure Locations
South Hill 230 kV Transmission Line Project
 Dominion Energy Virginia
 Lunenburg, Mecklenburg, and Brunswick Counties, VA

ERM

Dominion Energy

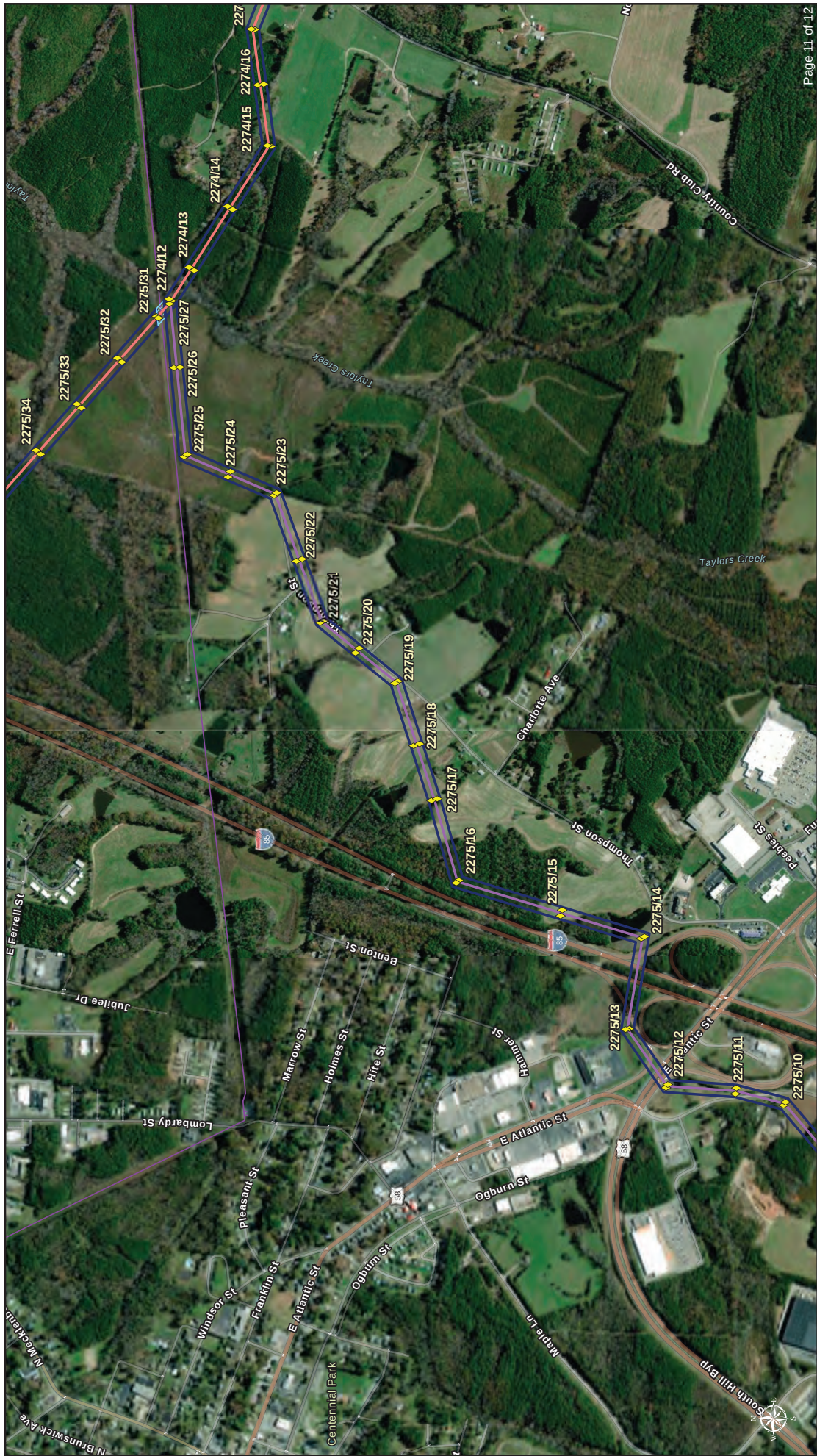
Right-of-Way Type

- Proposed New Right-of-Way
- Proposed Substation Boundary

Proposed Structure Location

- ◆ Corridor B Proposed Route

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Proposed Structure Location

- ◆ Proposed Structure Location
- Existing Dominion Transmission Line
- Corridor A Proposed Route
- Corridor D Proposed Route

Right-of-Way Type

- Existing Overhead Right-of-Way
- Proposed New Right-of-Way

Attachment II.B.3.iv
Proposed Structure Locations
 South Hill 230 kV Transmission Line Project
 Dominion Energy Virginia
 Lunenburg, Mecklenburg, and Brunswick Counties, VA

ERM

Drawn by: NAD



Attachment II.B.3.iv
Proposed Structure Locations
South Hill 230 kV Transmission Line Project
 Dominion Energy Virginia
 Lunenburg, Mecklenburg, and Brunswick Counties, VA

ERM

Dominion Energy

Proposed Structure Location

Corridor D Proposed Route

Right-of-Way Type

- Proposed New Right-of-Way
- Proposed Substation Boundary

0 0.1 0.2
 Miles
 1:10,800

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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: The approximate structure heights along the Proposed and Alternative Routes for the Project are provided in the tables below (Unity Option, Heritage Option, and Substation Interconnect). These heights are based on preliminary conceptual design, do not include foundation reveal, and are subject to change based on final engineering design.

UNITY OPTION ROUTES			
Route	Min (FT)	Max (FT)	Average (FT)
Unity Alternative Route 1	90	140	118
Unity Proposed Route 2	90	140	116

HERITAGE OPTION ROUTES			
Route	Min (FT)	Max (FT)	Average (FT)
Heritage Alternative Route 1	90	140	118
Heritage Route Variation 1	90	140	118
Heritage Alternative Route 2	90	140	118

SUBSTATION INTERCONNECT ROUTES			
Route	Min (FT)	Max (FT)	Average (FT)
Interconnect Proposed Route 1 (A-1, B-1, D-4)	100	140	113
Interconnect Alternative Route 2 (A-1, B-1, C-1)	100	140	114
Interconnect Alternative Route 3 (A-1, B-1, C-2)	100	140	114
Interconnect Alternative Route 4 (A-1, B-1, D-2)	100	140	114

A further breakdown of tower heights by Substation Interconnect Corridors is provided in the table below, based on preliminary conceptual design, do not include foundation reveal, and are subject to change based on final engineering design.

SUBSTATION INTERCONNECT CORRIDORS			
Route	Min (FT)	Max (FT)	Average (FT)
Corridor A Route 1 (Proposed Route)	100	140	114
Corridor B Route 1 (Proposed Route)	105	115	113
Corridor C Route 1	100	140	115
Corridor C Route 2	100	140	115
Corridor D Route 2	100	140	115
Corridor D Route 4 (Proposed Route)	100	140	114

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: Not applicable.

II. DESCRIPTION OF THE PROPOSED PROJECT

B. Line Design and Operational Features

6. **Provide photographs for [a] typical existing facilities to be removed, [b] comparable photographs or representations for proposed structures, and [c] visual simulations showing the appearance of all planned transmission structures at identified historic locations within one mile of the proposed centerline and in key locations identified by the Applicant.**

Response: [a] Not applicable.

[b] See Attachment II.B.6.b for representative photographs for proposed structures.

[c] Visual simulations showing the appearance of the proposed transmission structures at identified historic locations within 1.0 mile of the centerlines of the Proposed and Alternative Routes of the Project are provided as Attachment II.B.6.c. Specifically, Attachment II.B.6.c provides overview maps of the viewshed and simulation locations, as well as existing and simulated proposed views of the routes from the identified historic properties. These simulations were created using GIS modeling to depict whether the proposed structures will be visible from the identified historic properties. The historic properties evaluated are described below. See also the Stage I Pre-Application Analysis Report contained in Appendix F of the Environmental Routing Study.

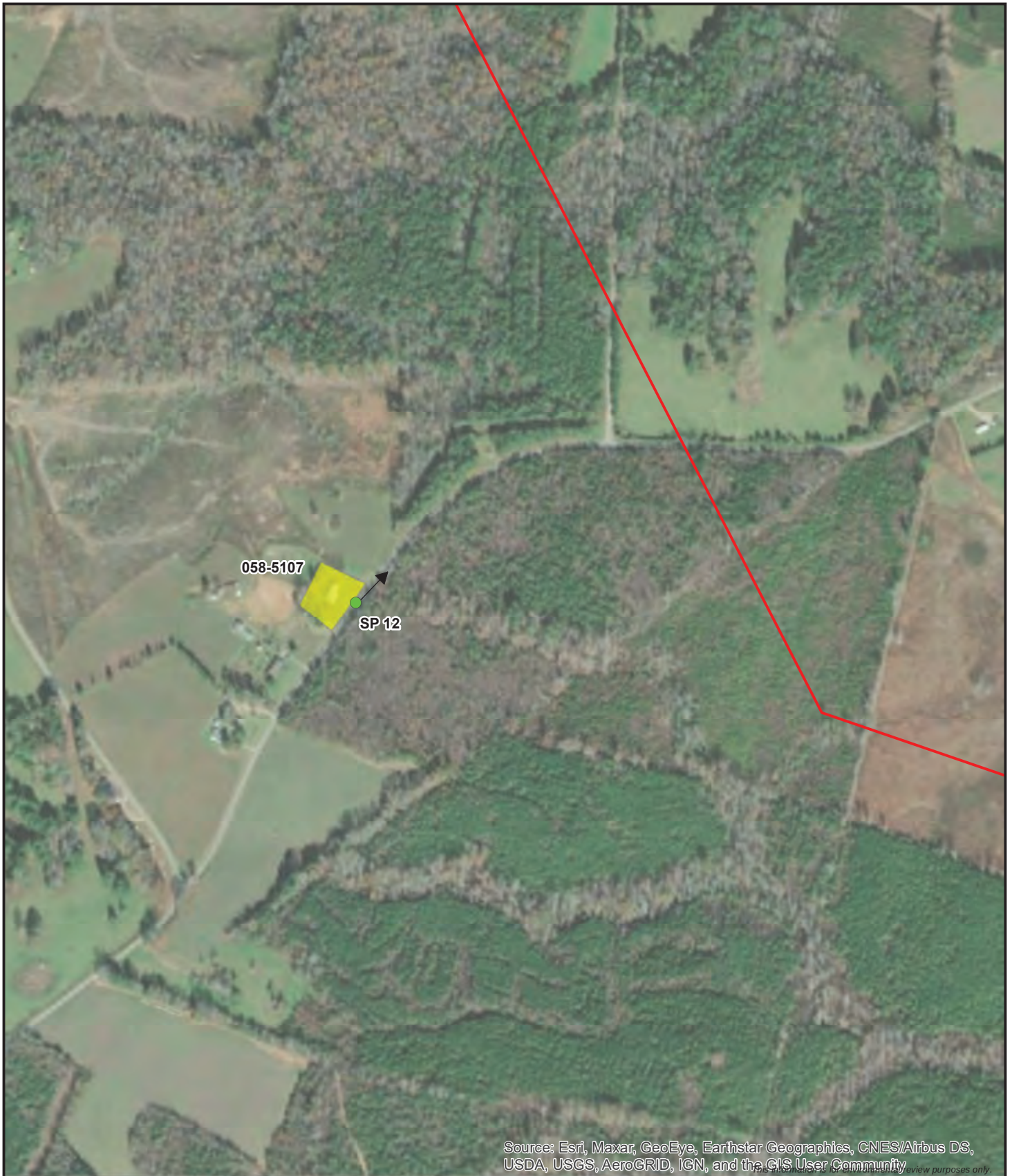
Historic Property	Viewpoint	Comments
Fort Christanna (VDHR ID# 012-0008)	1.2 and 3	Heritage Alternative Route 1 will have no impact on 012-0008.
	1.1 and 2	Heritage Alternative Route 2 will have no more than a minimal impact on 012-0008.
Gholson Bridge (VDHR ID# 012-0080)	29	Heritage Alternative Route 1 and Heritage Alternative Route 2 will have no impact on 012-0080.
Church Home for the Aged, Infirm, and Disabled Color People (VDHR ID# 012-0126)	7	Heritage Alternative Route 1 and Heritage Route Variation 1 will have no impact on 012-0126.
Brunswick Hall Plantation (VDHR ID# 012-5007)	6	Heritage Alternative Route 2 will have no more than a minimal impact on 012-5007.
Hawthorne's Store (VDHR ID# 055-0108)	14	The Unity Proposed Route 2 will have no impact on 055-0108.
Broad Branch Creek Rural Historic District (VDHR ID# 055-0183)	16 and 18	The Unity Proposed Route 2 will have no more than a minimal impact on 055-0183.

Historic Property	Viewpoint	Comments
Whittles Grove Rosenwald School (VDHR ID# 058-5107)	12	Unity Alternative Route 1 will have no impact on 058-5107.
Whittle's Mill (VDHR ID# 058-5199)	11	Unity Alternative Route 1 will have no more than a minimal impact on 058-5199.
Seaboard Air Line Railroad Corridor (VDHR ID# 127-6271)	8, 22, and 31	Heritage Alternative Route 1, Heritage Alternative Route 2, and Corridor A Route 1, Corridor B Route 1, Corridor C Route 1, and Corridor C Route 2 will have no more than a minimal impact on 127-6271.
La Crosse Commercial Historic District (VDHR ID# 250-5001)	22 and 26	Corridor C Route 1 and Corridor C Route 2 will have no more than a minimal impact on 250-5001.
La Crosse Hotel (VDHR ID# 250-5001-0003)	30	Corridor C Route 1 and Corridor C Route 2 will have no impact on 250-5001-0003.
South Hill Commercial Historic District (VDHR ID# 301-5062)	27	Corridor D Route 2, and Corridor D Route 4 will have no impact on 301-5062.

See [Attachment III.B.5](#) for visual simulations from key locations.







0 500 1,000 1,500 Feet

- Photo Point
- Unity Route 1
- Architecture Resource



Figure 1: Aerial photograph depicting land use and photo view for 058-5107.



Existing View



Proposed View



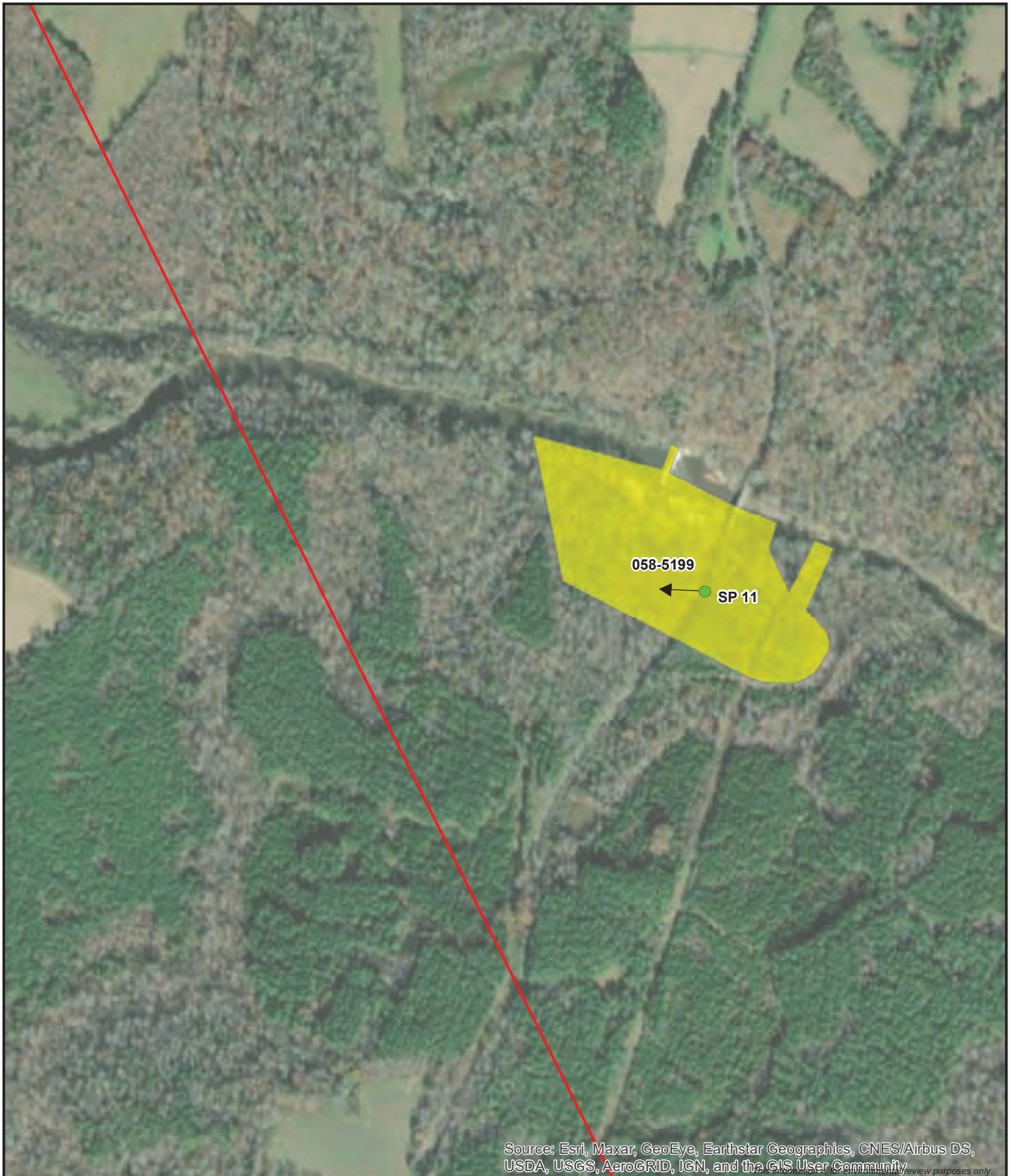
Viewpoint Location UTM Zone 17N: 752929E 4074145N
 View Direction: 42 degrees
 Viewpoint Elevation: 262 feet
 Distance to Development: 1404 feet
 Horizontal Field of View: 95 degrees

Date of Photography: 25th April 2022 16:22
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



Figure 2
Viewpoint SP 12 - Unity Route 1
 Whittles Mill Rd North of Bridge Rd
 058-5017

Pre-Application Analysis
South Hill



1:8,000

0 500 1,000 1,500 Feet

- Photo Point
- Unity Route 1
- Architecture Resource



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Figure 3: Aerial photograph depicting land use and photo view for 058-5199.



Existing View



Proposed View



Viewpoint Location UTM Zone 17N: 752637E 4076481N
 View Direction: 272 degrees
 Viewpoint Elevation: 167 feet
 Distance to Development: 1321 feet
 Horizontal Field of View: 95 degrees

Date of Photography: 22nd April 2022 16:12
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet

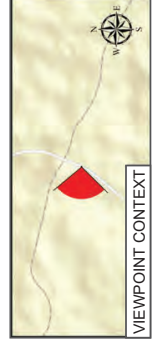


Figure 4
Viewpoint SP 11 - Unity Route 1
 Bridge Rd South of Meherrin River
 058-5199
Pre-Application Analysis
South Hill



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
This map is for review purposes only.



1:16,000

0 1,000 2,000 3,000 4,000 Feet

- Photo Point
- Unity Route 2
- Architecture Resource



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Figure 5: Aerial photograph depicting land use and photo view for 055-0108.



Existing View



Proposed View

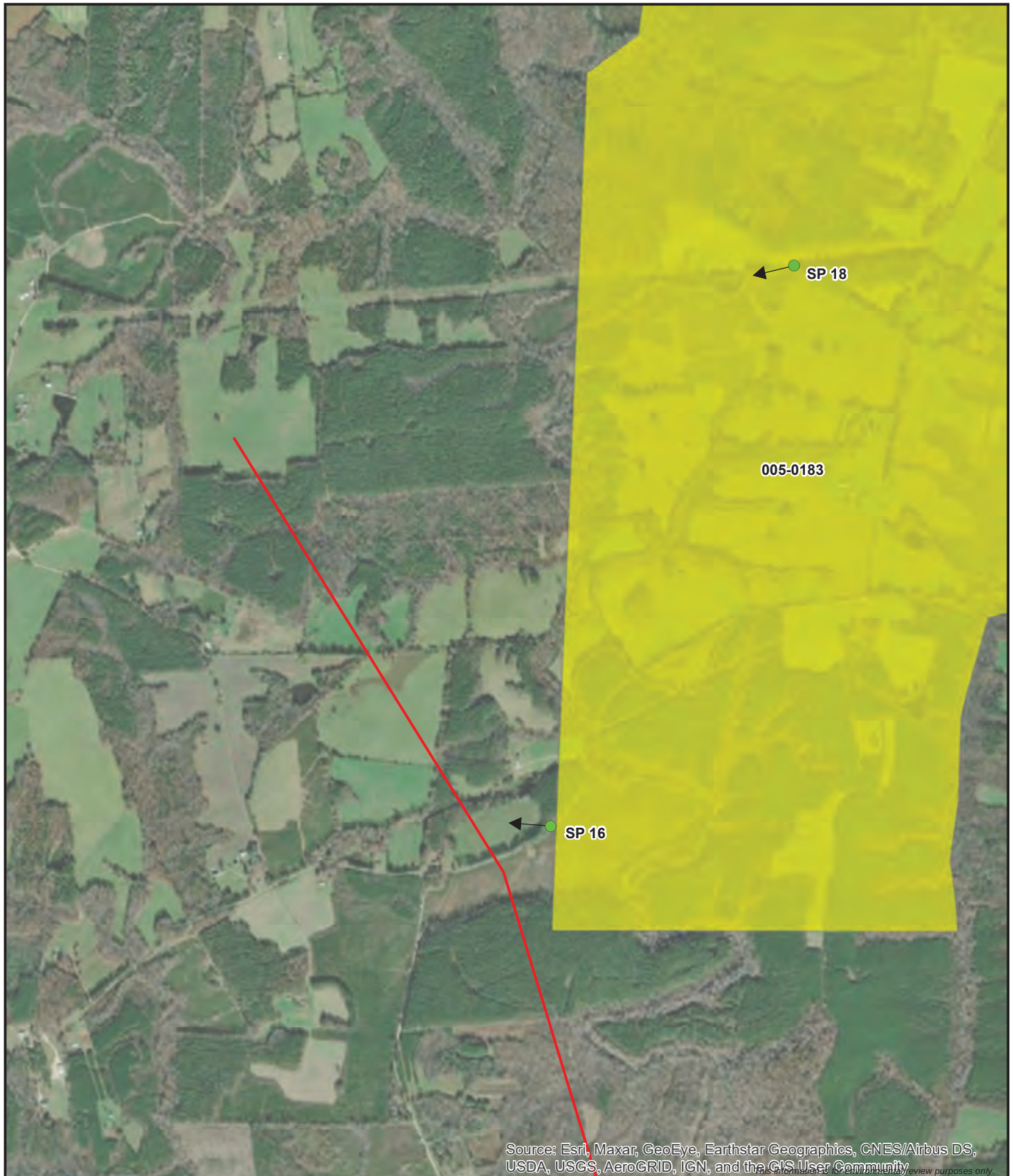


Viewpoint Location UTM Zone 17N: 756648E 407640N
 View Direction: 90 degrees
 Viewpoint Elevation: 207 feet
 Distance to Development: 331.5 feet
 Horizontal Field of View: 110 degrees

Date of Photography: 22nd April 2022 16:12
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



Figure 6
 Viewpoint SP 14 - Unity Route 2
 Craig Mill Rd South of Manson Rd
 055-0108
Pre-Application Analysis
South Hill



1:24,000

0 1,500 3,000 4,500 6,000 Feet

- Photo Point
- Unity Route 2
- Architecture Resource



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Figure 7: Aerial photograph depicting land use and photo view for 055-0183.



Existing View



Proposed View



Viewpoint Location UTM Zone 17N: 756792E 4086878N
 View Direction: 262 degrees
 Viewpoint Elevation: 301 feet
 Distance to Development: 6436 feet
 Horizontal Field of View: 60 degrees

Date of Photography: 23rd April 2022 10:49
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



Figure 8
Viewpoint SP 18 - Unity Route 2
 Sheads Store Rd West of Afton Grove Rd
 055-0183
Pre-Application Analysis
South Hill



Existing View



Proposed View



Viewpoint Location UTM Zone 17N: 755960E 4084801N
 View Direction: 274 degrees
 Viewpoint Elevation: 205 feet
 Distance to Development: 716 feet
 Horizontal Field of View: 130 degrees

Date of Photography: 25th April 2022 14:21
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet

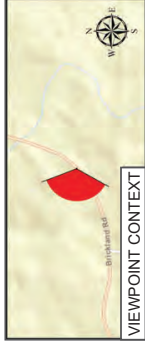
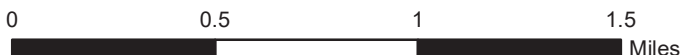


Figure 9
Viewpoint SP 16 - Unity Route 2
 Brickland Rd East of St. Johns Church Rd
 055-0183
Pre-Application Analysis
South Hill



1:30,000



- Photo Point
- Heritage Route 1
- Architecture Resource



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Figure 10: Aerial photograph depicting land use and photo view for 012-0008.



Existing View



Proposed View



Viewpoint Location UTM Zone 18N: 245020E 4067231N
 View Direction: 340 degrees
 Viewpoint Elevation: 72 feet
 Distance to Development: 4970 feet
 Horizontal Field of View: 115 degrees

Date of Photography: 22nd April 2022 11:34
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



Figure 11
Viewpoint SP 1.2 - Heritage Route 1
 Fort Hill Rd West of Christanna Hwy
 012-0008
Pre-Application Analysis
South Hill



Existing View



Proposed View



Viewpoint Location UTM Zone 17N: 726400E 4075492N
 View Direction: 0 degrees
 Viewpoint Elevation: 444 feet
 Distance to Development: 3878 feet
 Horizontal Field of View: 140 degrees

Date of Photography: 25th April 2022 14:09
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet

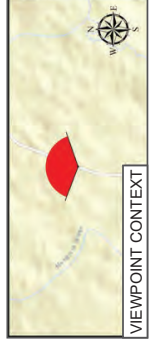


Figure 12
Viewpoint SP 3 - Heritage Route 1
 Meherin Beach Rd North of Fort Hill Rd
 012-0008
Pre-Application Analysis
South Hill



1:15,300



- Photo Point
- Heritage Route 1
- Architecture Resource



Figure 13: Aerial photograph depicting land use and photo view for 012-0080.



Existing View



Proposed View



Viewpoint Location UTM Zone 17N: 756643E 4068286N
 View Direction: 339 degrees
 Viewpoint Elevation: 157 feet
 Distance to Development: 4264 feet
 Horizontal Field of View: 110 degrees

Date of Photography: 19th July 2022 12:27
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



Figure 14
Viewpoint SP 29 - Heritage Route 1
 Iron Bridge Rd North of Meherrin River
 012-0080
Pre-Application Analysis
South Hill



1:16,000

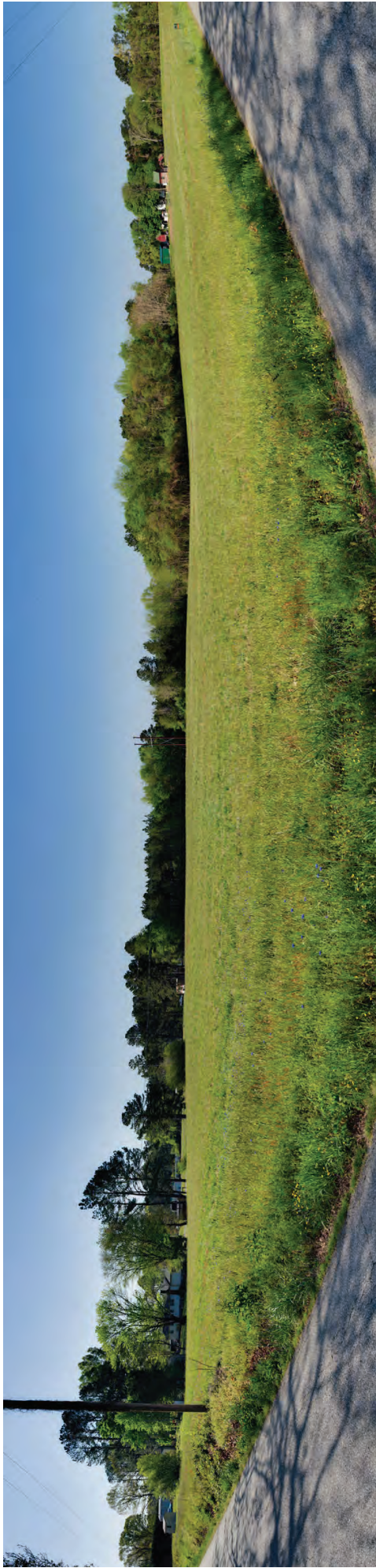
0 1,000 2,000 3,000 4,000 Feet

- Photo Point
- Heritage Route 1
- Architecture Resource

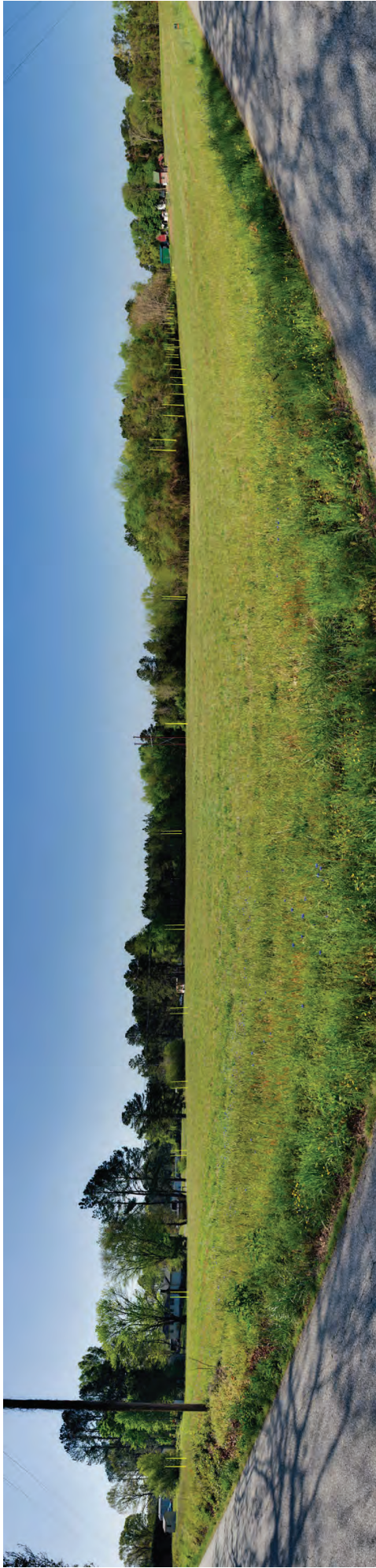


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Figure 15: Aerial photograph depicting land use and photo view for 012-0126.



Existing View



Proposed View



Viewpoint Location UTM Zone 18N: 242795E 4070552N
 View Direction: 208 degrees
 Viewpoint Elevation: 181 feet
 Distance to Development: 2023 feet
 Horizontal Field of View: 130 degrees

Date of Photography: 25th April 2022 16:15
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet

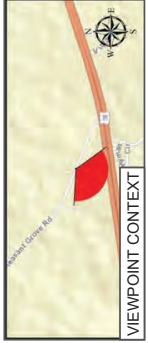


Figure 16
Viewpoint KOP 7 - Heritage Route 1
 Pleasant Grove Rd North of Gov Harrison Pkwy
 012-0126
Pre-Application Analysis
South Hill



1:30,000



- Photo Point
- Heritage Route 1
- Architecture Resource



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Figure 17: Aerial photograph depicting land use and photo view for 127-6271.



Existing View



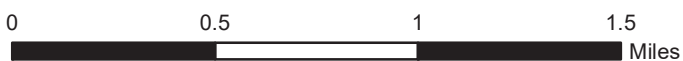
Date of Photography: 19th July 2022 10:56
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet

Viewpoint Location UTM Zone 17N: 761484E 4068760N
 View Direction: 100 degrees
 Viewpoint Elevation: 411 feet
 Distance to Development: 2498 feet
 Horizontal Field of View: 60 degrees

Figure 18
Viewpoint SP 31 - Heritage Route 1
 Wray Rd East of Country Club Rd
 127-6271
Pre-Application Analysis
South Hill



1:30,000

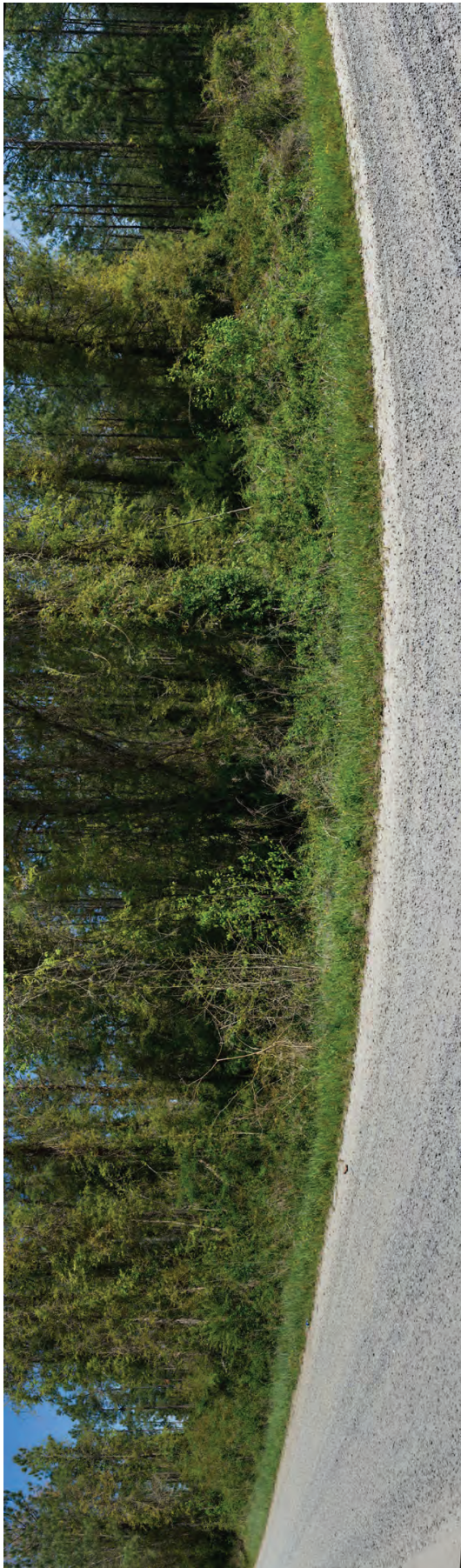


- Photo Point
- Heritage Route 2
- Architecture Resource



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Figure 19: Aerial photograph depicting land use and photo view for 012-0008.



Existing View



Proposed View



Viewpoint Location UTM Zone 18N: 245019E 4067235N
 View Direction: 209 degrees
 Viewpoint Elevation: 90 feet
 Distance to Development: 4589 feet
 Horizontal Field of View: 70 degrees

Date of Photography: 25th April 2022 14:31
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



Figure 20
Viewpoint SP 1.1 - Heritage Route 2
 Fort Hill Rd West of Christanna Hwy
 012-0008
Pre-Application Analysis
South Hill



Existing View



Proposed View



Viewpoint Location UTM Zone 18N: 243360E 4066435N
 View Direction: 167 degrees
 Viewpoint Elevation: 80 feet
 Distance to Development: 1199 feet
 Horizontal Field of View: 70 degrees

Date of Photography: 22nd April 2022 12:29
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



Figure 21
Viewpoint SP 2 - Heritage Route 2
 Fort Hill Rd South of Meherrin Beach Rd
 012-0008
Pre-Application Analysis
South Hill



1:15,300

0 0.25 0.5 0.75 Miles

- Photo Point
- Heritage Route 2
- Architecture Resource



Figure 22: Aerial photograph depicting land use and photo view for 055-0183.



Existing View



Proposed View

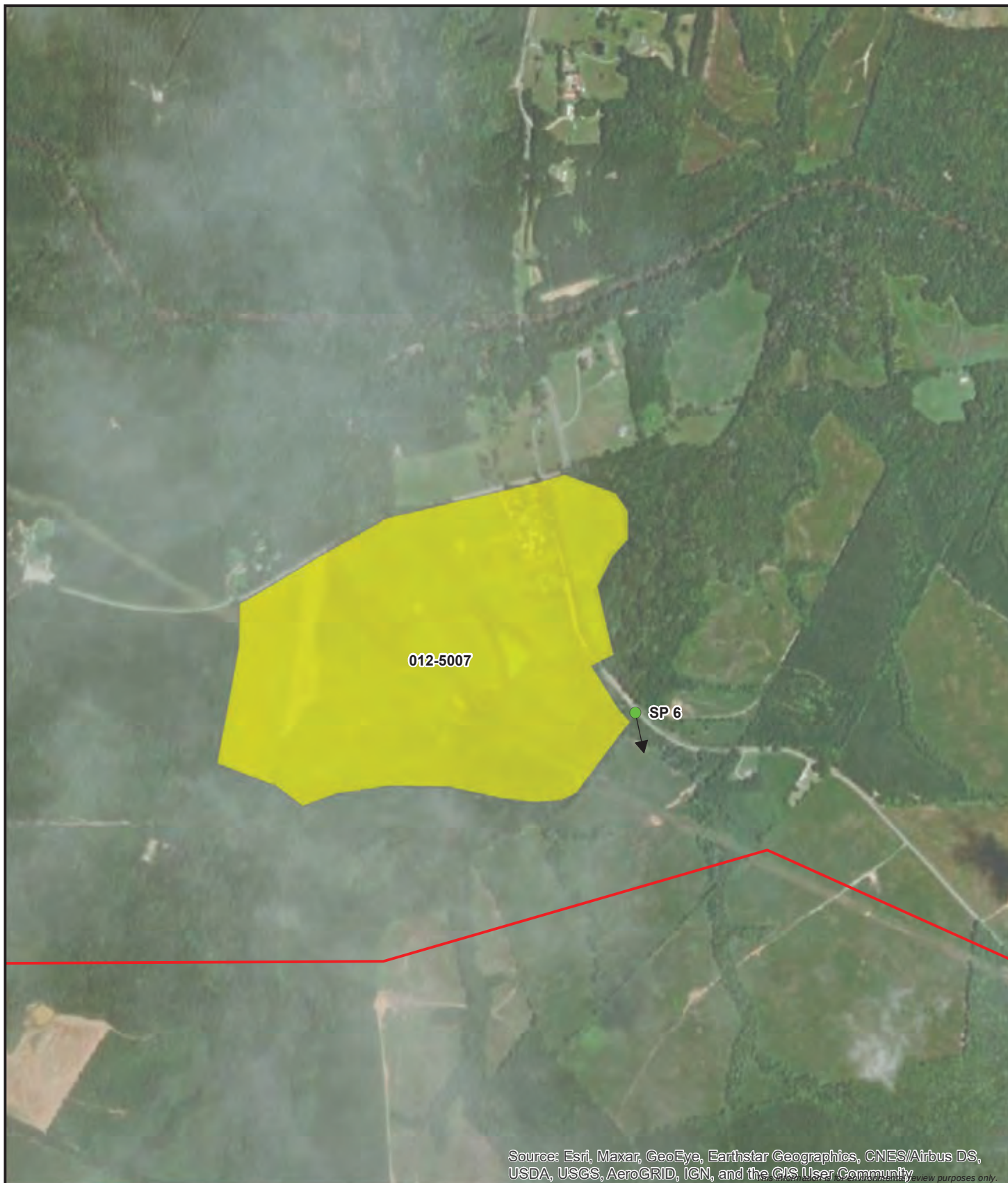


Viewpoint Location UTM Zone 18N: 247217E 4066976N
 View Direction: 164 degrees
 Viewpoint Elevation: 87 feet
 Distance to Development: 349.1 feet
 Horizontal Field of View: 100 degrees

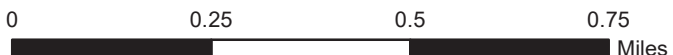
Date of Photography: 25th April 2022 16:21
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



Figure 23
Viewpoint SP 5.2 - Heritage Route 2
 Iron Bridge Rd South of Meherrin River
 012-0008
Pre-Application Analysis
South Hill



1:15,300

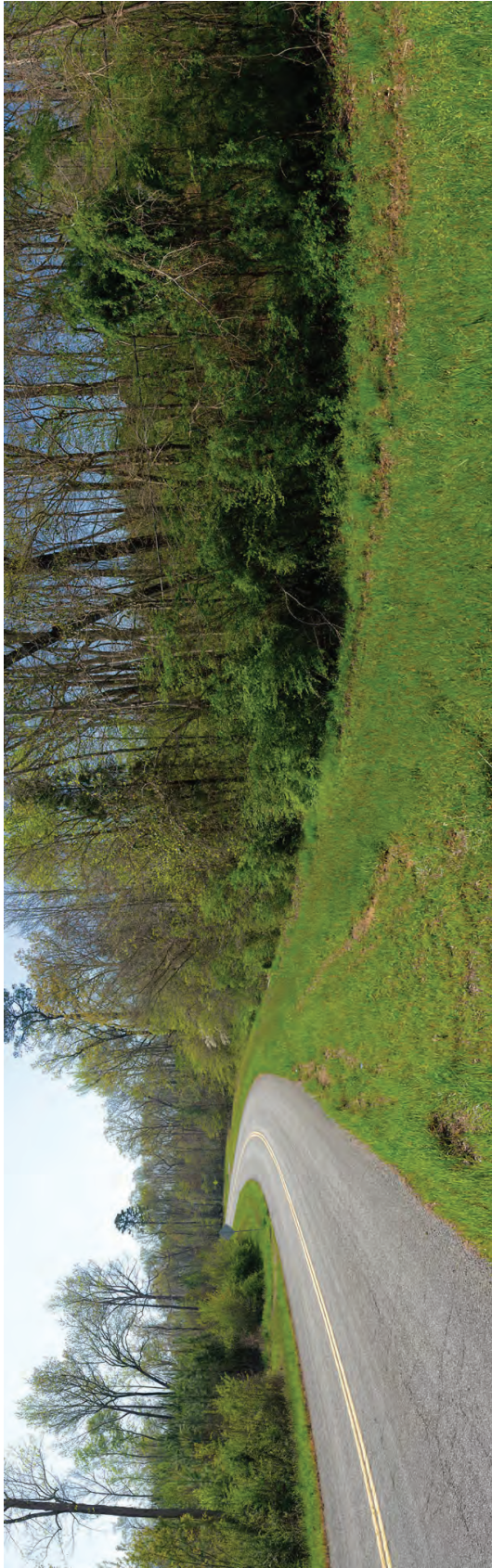


- Photo Point
- Heritage Route 2
- 012-5007



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Figure 24: Aerial photograph depicting land use and photo view for 012-5007.



Existing View



Proposed View



Viewpoint Location UTM Zone 18N: 247378E 4066304N
 View Direction: 164 degrees
 Viewpoint Elevation: 64 feet
 Distance to Development: 1226 feet
 Horizontal Field of View: 100 degrees

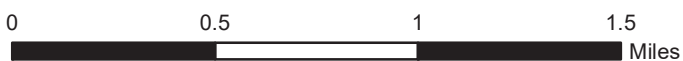
Date of Photography: 25th April 2022 16:17
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



Figure 25
Viewpoint SP 6 - Heritage Route 2
 Reavis Gin Rd South of Iron Bridge Rd
 012-5007
Pre-Application Analysis
South Hill



1:30,000



- Photo Point
- Heritage Route 2
- Architecture Resource



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Figure 26: Aerial photograph depicting land use and photo view for 127-6271.



Existing View



Date of Photography: 19th July 2022 10:56
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet

Viewpoint Location UTM Zone 17N: 761484E 4068760N
 View Direction: 100 degrees
 Viewpoint Elevation: 411 feet
 Distance to Development: 2498 feet
 Horizontal Field of View: 60 degrees

Figure 27
Viewpoint SP 31 - Heritage Route 2
 Wray Rd East of Country Club Rd
 127-6271
Pre-Application Analysis
South Hill



1:8,760

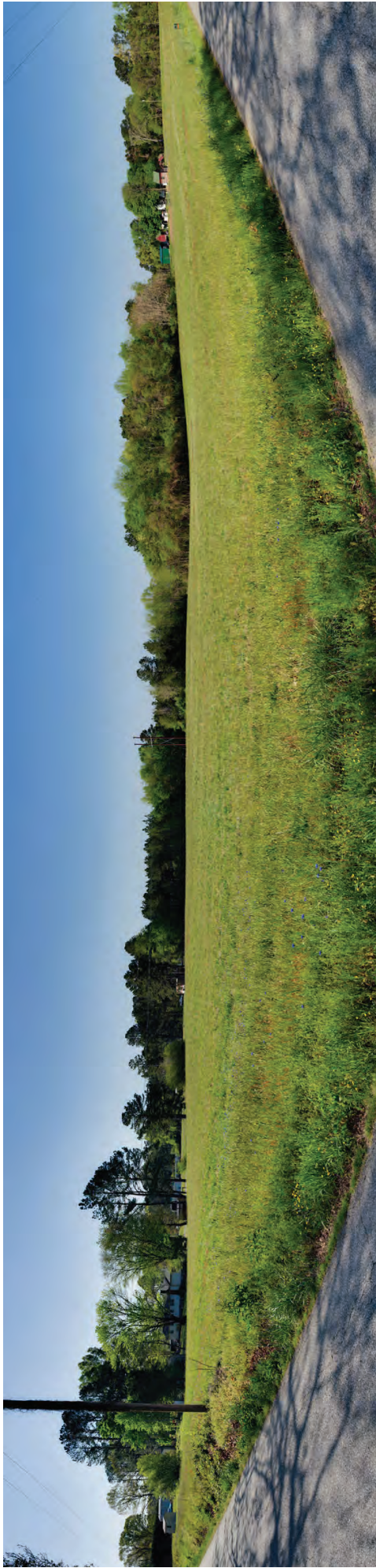


- Photo Point
- Heritage Route Variation 1
- Architecture Resource

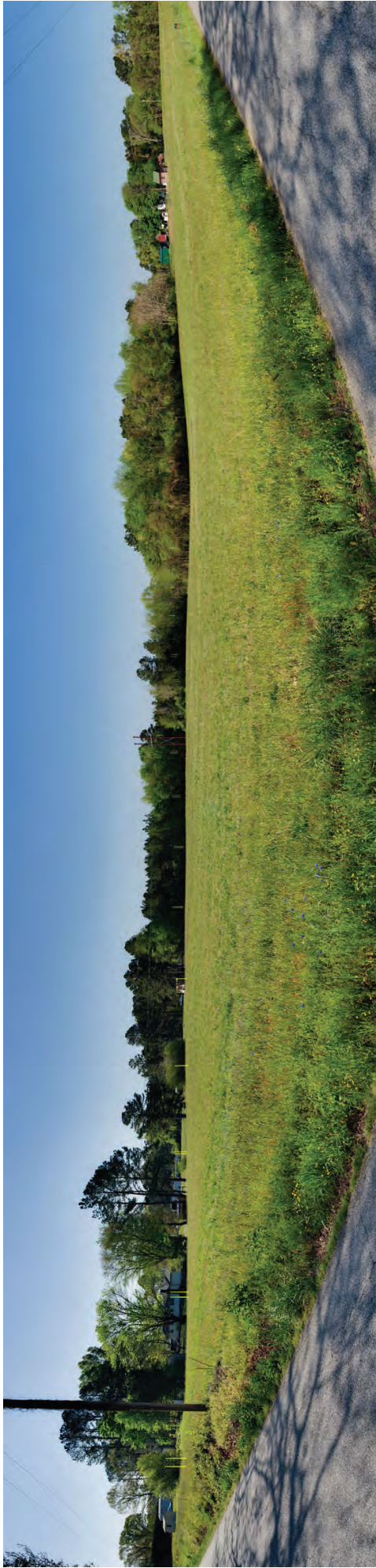


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Figure 28: Aerial photograph depicting land use and photo view for 012-0126.



Existing View



Proposed View



Viewpoint Location UTM Zone 18N: 242795E 4070552N
 View Direction: 208 degrees
 Viewpoint Elevation: 181 feet
 Distance to Development: 2023 feet
 Horizontal Field of View: 130 degrees

Date of Photography: 25th April 2022 16:15
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet

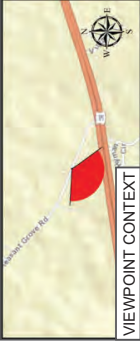


Figure 29
Viewpoint KOP 7 - Heritage Route 1
 Pleasant Grove Rd North of Gov Harrison Pkwy
 012-0126
Pre-Application Analysis
South Hill



1:4,000

0 250 500 750 Feet

● Photo Point

— Substation Interconnection Corridor A Route 1

■ Architecture Resource



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Figure 30: Aerial photograph depicting land use and photo view for 127-6271.



Existing View



Proposed View



Viewpoint Location UTM Zone 17N: 761011E 4068485N
 View Direction: 180 degrees
 Viewpoint Elevation: 307 feet
 Distance to Development: 364 feet
 Horizontal Field of View: 100 degrees

Date of Photography: 25th April 2022 16:18
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet

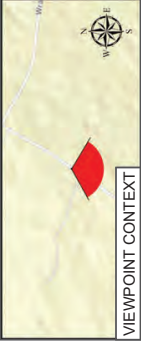
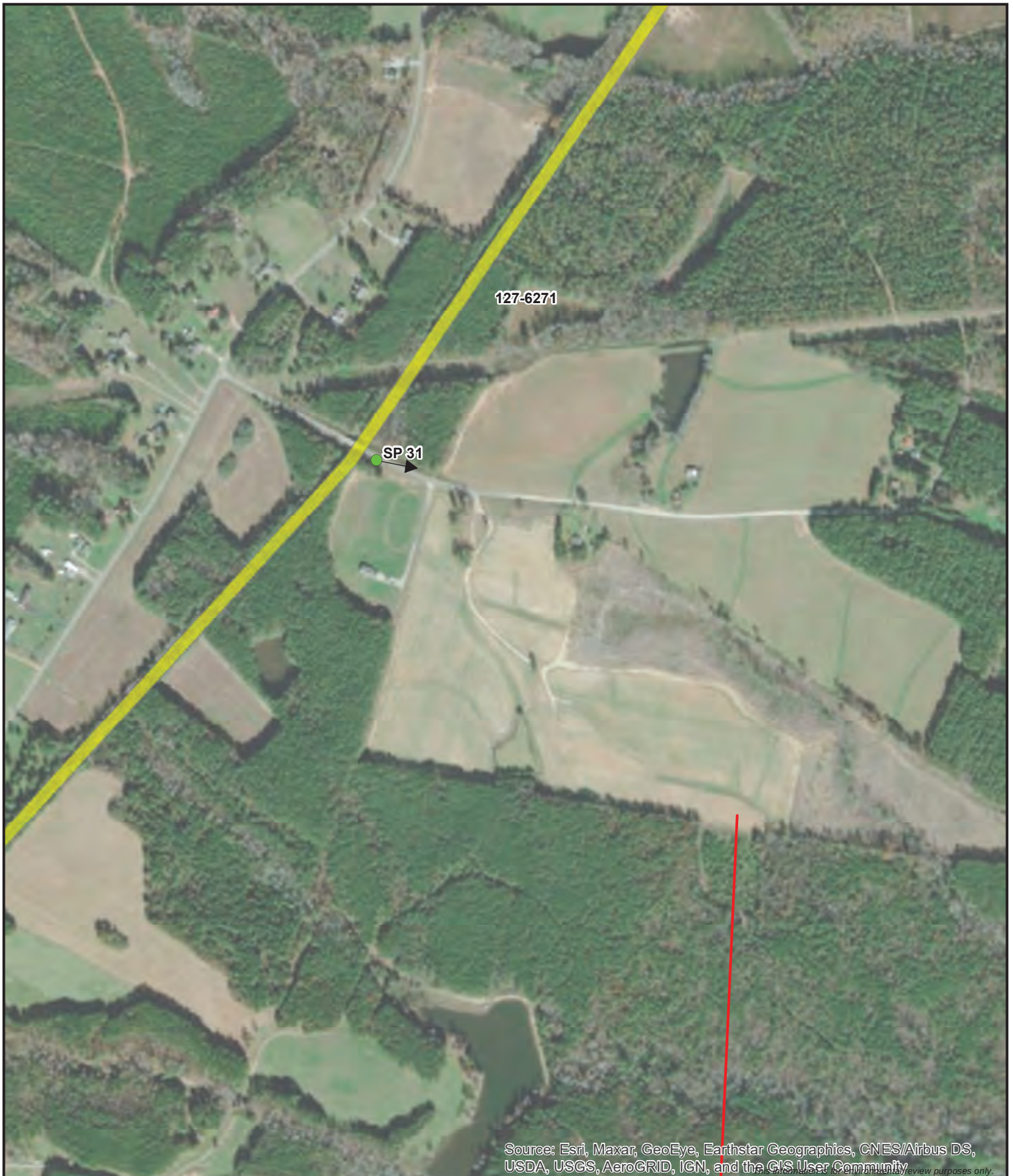


Figure 31
Viewpoint SP 8 - SI Corridor A Rte 1
 Country Club Rd South of Wray Rd
 127-6271
Pre-Application Analysis
South Hill



1:10,000

0 640 1,280 1,920 Feet

- Photo Point
- Substation Interconnection Corridor B Route 1
- Architecture Resource



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Figure 32: Aerial photograph depicting land use and photo view for 127-6271.



Existing View



Date of Photography: 19th July 2022 10:56
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet

Viewpoint Location UTM Zone 17N: 761484E 4068760N
 View Direction: 100 degrees
 Viewpoint Elevation: 411 feet
 Distance to Development: 2532 feet
 Horizontal Field of View: 60 degrees



Figure 33
Viewpoint SP 31 - SJ Corridor B Rte 1
 Wray Rd East of Country Club Rd
 127-6271
Pre-Application Analysis
South Hill



1:4,000

0 250 500 750 Feet

● Photo Point

— Substation Interconnection Corridor C Route 1

■ Architecture Resource



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Figure 34: Aerial photograph depicting land use and photo view for 127-6271.



Existing View



Proposed View

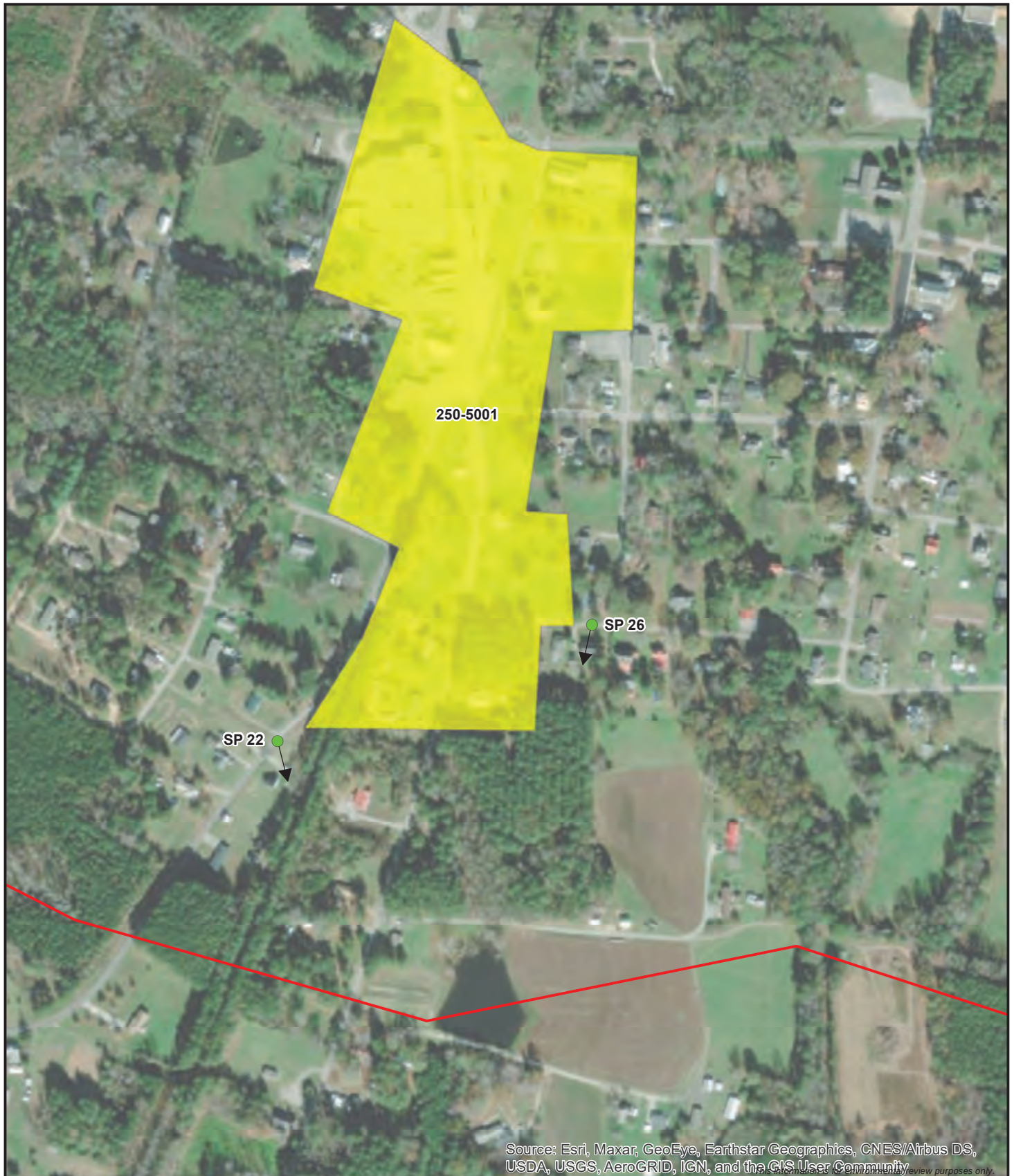


Viewpoint Location UTM Zone 17N: 759471E 4064623N
 View Direction: 164 degrees
 Viewpoint Elevation: 341 feet
 Distance to Development: 647 feet
 Horizontal Field of View: 125 degrees

Date of Photography: 25th April 2022 10:56
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



Figure 35
Viewpoint SP 22 - SJ Corridor C Rte 1
 Morris Town Cir South of Hillcrest Rd
 127-6271
Pre-Application Analysis
South Hill



1:6,000

0 400 800 1,200 Feet

● Photo Point

— Substation Interconnection Corridor C Route 1

■ Architecture Resource



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Figure 36: Aerial photograph depicting land use and photo view for 250-5001.



Existing View



Proposed View



Viewpoint Location UTM Zone 17N: 759471E 4064623N
 View Direction: 164 degrees
 Viewpoint Elevation: 341 feet
 Distance to Development: 647 feet
 Horizontal Field of View: 125 degrees

Date of Photography: 25th April 2022 10:56
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



VIEWPOINT CONTEXT

Figure 37 Viewpoint SP 22 - SJ Corridor C Rte 1 Morris Town Cir South of Hillcrest Rd 250-5001	Pre-Application Analysis South Hill
--	---



Existing View



Proposed View



Viewpoint Location UTM Zone 17N: 759757E 4064738N
 View Direction: 191 degrees
 Viewpoint Elevation: 340 feet
 Distance to Development: 1001 feet
 Horizontal Field of View: 210 degrees

Date of Photography: 25th April 2022 14:16
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



Figure 38
Viewpoint SP 26 - SJ Corridor C Rte 1
 Hillcrest Rd West of Carolina St
 250-5001
Pre-Application Analysis
South Hill



1:4,644

0 250 500 750 1,000 Feet

● Photo Point

— Substation Interconnection Corridor C Route 1

■ Architecture Resource



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Figure 39: Aerial photograph depicting land use and photo view for 250-5001-0003.



Existing View



Proposed View



Viewpoint Location UTM Zone 17N: 759660E 4064984N
 View Direction: 175 degrees
 Viewpoint Elevation: 448 feet
 Distance to Development: 1865 feet
 Horizontal Field of View: 150 degrees

Date of Photography: 19th July 2022 10:22
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



Figure 40
Viewpoint SP 30 - SJ Corridor C Rte 1
 Central Ave North of S Main St
 250-5001-0003
Pre-Application Analysis
South Hill



1:4,000

0 250 500 750 Feet

● Photo Point

— Substation Interconnection Corridor C Route 2

■ Architecture Resource



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Figure 41: Aerial photograph depicting land use and photo view for 127-6271.



Existing View



Proposed View

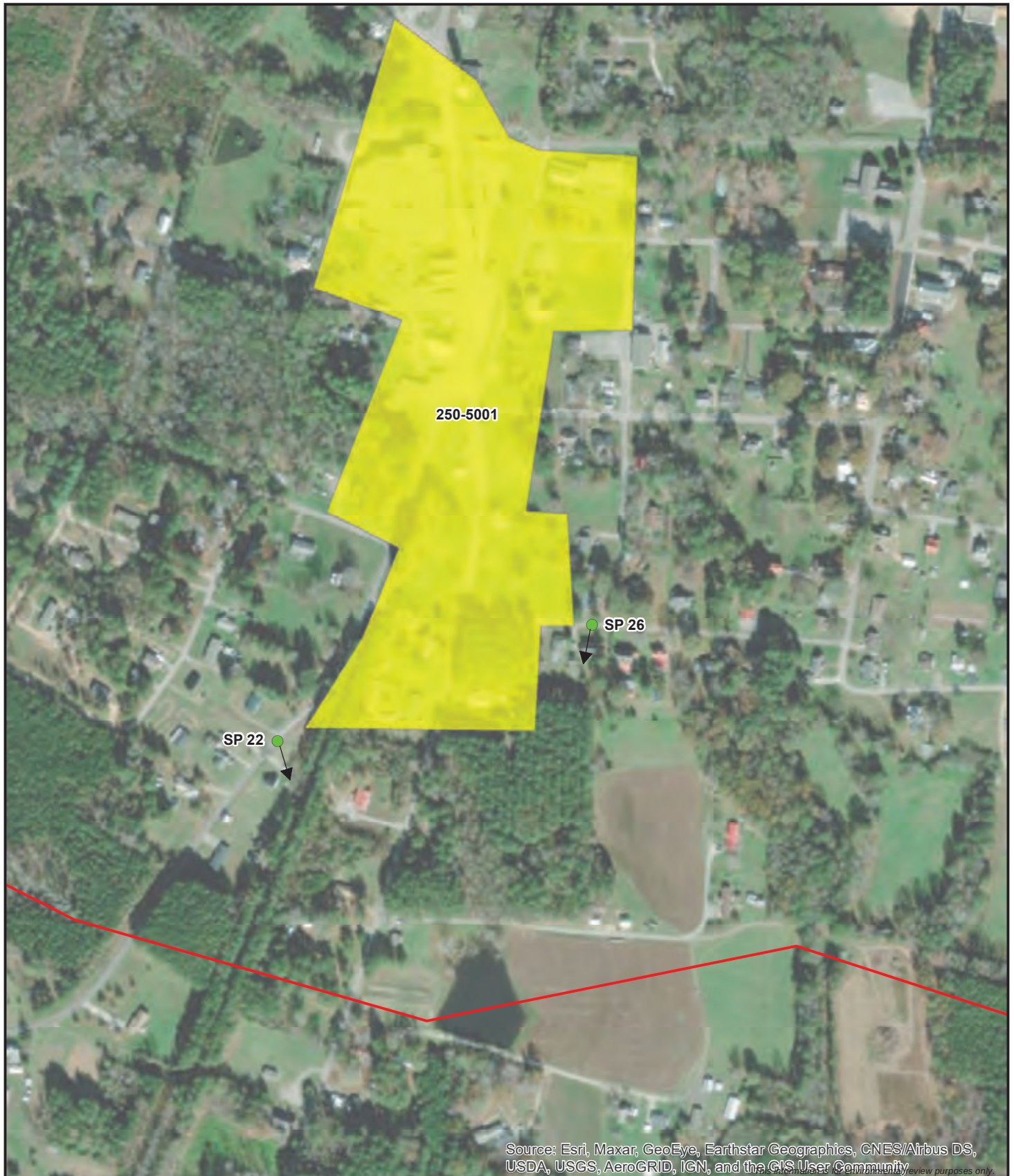


Viewpoint Location UTM Zone 17N: 759471E 4064623N
 View Direction: 164 degrees
 Viewpoint Elevation: 341 feet
 Distance to Development: 647 feet
 Horizontal Field of View: 125 degrees

Date of Photography: 25th April 2022 14:15
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



Figure 42
Viewpoint SP 22 - SJ Corridor C Rte 2
 Morris Town Cir South of Hillcrest Rd
 127-6271
Pre-Application Analysis
South Hill



1:6,000

0 400 800 1,200 Feet

● Photo Point

■ Architecture Resource

— Substation Interconnection Corridor C Route 2



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Figure 43: Aerial photograph depicting land use and photo view for 250-5001.



Existing View



Proposed View



Viewpoint Location UTM Zone 17N: 759471E 4064623N
 View Direction: 164 degrees
 Viewpoint Elevation: 341 feet
 Distance to Development: 647 feet
 Horizontal Field of View: 125 degrees

Date of Photography: 25th April 2022 10:56
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



VIEWPOINT CONTEXT

Figure 44 Viewpoint SP 22 - SJ Corridor C Rte 2 Morris Town Cir South of Hillcrest Rd 250-5001	Pre-Application Analysis South Hill
--	---



Existing View



Proposed View



Viewpoint Location UTM Zone 17N: 759757E 4064738N
 View Direction: 191 degrees
 Viewpoint Elevation: 340 feet
 Distance to Development: 1001 feet
 Horizontal Field of View: 210 degrees

Date of Photography: 25th April 2022 14:16
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



Figure 45
Viewpoint SP 26 - SJ Corridor C Rte 2
 Hillcrest Rd West of Carolina St
 250-5001
Pre-Application Analysis
South Hill



1:4,644

0 250 500 750 1,000 Feet

- Photo Point
- Substation Interconnection Corridor C Route 2
- Architecture Resource



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Figure 46: Aerial photograph depicting land use and photo view for 250-5001-0003.



Existing View



Proposed View



Viewpoint Location UTM Zone 17N: 759660E 4064984N
 View Direction: 175 degrees
 Viewpoint Elevation: 448 feet
 Distance to Development: 1865 feet
 Horizontal Field of View: 150 degrees

Date of Photography: 19th July 2022 10:22
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



Figure 47
Viewpoint SP 30 - SJ Corridor C Rte 2
 Central Ave North of S Main St
 250-5001-0003
Pre-Application Analysis
South Hill



1:20,000

0 1,000 2,000 3,000 4,000 Feet

● Photo Point

— Substation Interconnection Corridor D Route 1

■ Architecture Resource



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Figure 48: Aerial photograph depicting land use and photo view for 301-5062.



Existing View



Proposed View



Viewpoint Location UTM Zone 17N: 759660E 4064984N
 View Direction: 71 degrees
 Viewpoint Elevation: 299 feet
 Distance to Development: 360 feet
 Horizontal Field of View: 100 degrees

Date of Photography: 25th April 2022 13:33
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



Figure 49
 Viewpoint SP 27 - SJ Corridor D Rte 1
 Franklin St East of Park Ln
 301-5062
Pre-Application Analysis
 South Hill



1:20,000



- Photo Point
- Substation Interconnection Corridor D Route 1
- Architecture Resource



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Figure 50: Aerial photograph depicting land use and photo view for 301-5062.



Existing View



Proposed View



Viewpoint Location UTM Zone 17N: 759660E 4064984N
 View Direction: 71 degrees
 Viewpoint Elevation: 299 feet
 Distance to Development: 4464 feet
 Horizontal Field of View: 100 degrees

Date of Photography: 25th April 2022 13:33
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



Figure 51
Viewpoint SP 27 - SJ Corridor D Rte 2
 Franklin St East of Park Ln
 301-5062
Pre-Application Analysis
South Hill



1:20,000



● Photo Point

— Substation Interconnection Corridor D Route 1

■ Architecture Resource



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Figure 52: Aerial photograph depicting land use and photo view for 302-5062.



Existing View



Proposed View



Viewpoint Location UTM Zone 17N: 759660E 4064984N
 View Direction: 71 degrees
 Viewpoint Elevation: 299 feet
 Distance to Development: 360 feet
 Horizontal Field of View: 100 degrees

Date of Photography: 25th April 2022 13:33
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



Figure 53
Viewpoint SP 27 - SJ Corridor D Rte 3
 Franklin St East of Park Ln
 301-5062
Pre-Application Analysis
South Hill



1:20,000

0 1,000 2,000 3,000 4,000 Feet

● Photo Point

— Substation Interconnection Corridor D Route 1

■ Architecture Resource



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Figure 54: Aerial photograph depicting land use and photo view for 301-5062.



Existing View



Proposed View



Viewpoint Location UTM Zone 17N: 759660E 4064984N
 View Direction: 71 degrees
 Viewpoint Elevation: 299 feet
 Distance to Development: 4464 feet
 Horizontal Field of View: 100 degrees

Date of Photography: 25th April 2022 13:33
 Camera: Nikon D800
 Lens: Nikkor 50mm 1.4
 Camera Height: 5 feet



Figure 55
Viewpoint SP 27 - SJ Corridor D Rte 4
 Franklin St East of Park Ln
 301-5062
Pre-Application Analysis
South Hill