Attachment J – Cultural Resources: Impacts Assessment and Correspondence

- Virginia Department of Historic Resources letter dated October 31, 2022
- Impacts Assessment and Avoidance of NRHP-Eligible Resources

COMMONWEALTH of VIRGINIA

Department of Historic Resources
2801 Kensington Avenue, Richmond, Virginia 23221

Travis A. Voyles
Acting Secretary of Natural and Historic Resources

Julie V. Langan
Director
Tel: (804) 367-2323
Fax: (804) 367-2391
www.dhr.virginia.gov

October 31, 2022

Robert Taylor
Dutton + Associates, LLC
1115 Crowder Dr.
Midlothian, VA 23113

RE: Waller Solar Project
Lancaster County, Virginia
DHR File No. 2021-0216

Dear Mr. Taylor:

We have received for review the document, *Updated Avoidance Plan and Assessment of Visual Impacts for NRHP-Eligible Resources,* prepared by Dutton + Associated (D+A) on behalf of Waller Solar I, LLC. We provide the following comments in support of an application to the Department of Environmental Quality (DEQ) for a Permit-by-Rule to construct and operate a small solar project Lancaster County, Virginia.

Archaeology

Sites **44LA0184** and **44LA0185** were both recommended as *potentially eligible* for listing in the National Register of Historic Places (NRHP). D+A recommended that both sites be avoided or conduct additional investigations if impacts could not be avoided. In a letter dated July 22, 2022, DHR concurred with D+A's recommendations. D+A conducted Phase II investigations at 44LA0184 and recommended the site as eligible for listing in the NRHP. DHR required additional info to evaluate the horizontal boundaries of 44LA0184. As such the site is considered *potentially eligible* (correspondence dated Oct. 6, 2022). Both sites (44LA0184 and 44LA0185) will be avoided with a 25-foot buffer. As a result, the project will not adversely impact any NRHP-eligible archaeological sites. DHR concurs with the proposed avoidance buffer of 25 feet. Please be sure to provide a detailed description of the avoidance measures in the mitigation plan for the PBR application.

Architecture

Thank you for providing additional information on impacts to historic architectural resources. Dutton + Associated (D+A) initially recommended a minimal impact for three (3) resources: Edgely (DHR ID #051-0041), Lebanon Baptist Church (DHR ID #051-0059) and Lively School (DHR ID #051-0096); and DHR concurred that there will be a minimal impact to DHR ID #s 051-0041, 051-0059, and 051-0096 with the condition that planting plans be submitted to DHR for review and comment with renderings showing mature

growth superimposed into the viewsheds that currently have no buffer. The requested information was submitted and we acknowledge the submission. DHR *concurs* that there will be a minimal impact to DHR ID #s 051-0041, 051-0059, and 051-0096. Provide DHR photos of the planting buffer once installed.

D+A recommended a moderate impact to the Virginia Landmarks Register (VLR) and National Register of Historic Places (NRHP) eligible Epping Forest (DHR ID #051-0008) and DHR concurred. As a result, Waller Solar I, LLC has undertaken measures to minimize the visual impact to Epping Forest through modifications to the conceptual site plan, providing a detailed planting plan and producing renderings for the property. With the revised array layout and landscape plan, D+A recommends that the project will pose no more than a minimal impact to Epping Forest and DHR *concurs* with the condition that the planting plan is planted as shown in current plans or DHR coordination is reopened, that photos are provided of the planting buffer once installed, and any plants that do not take in the first year be replaced in kind and installed by the project proponent

If you have any questions regarding these comments, please contact me at 804-482-8091 or via email, jennifer.bellville-marrion@dhr.virginia.gov.

Sincerely,

Jenny Bellville-Marrion, Project Review Archaeologist
Review and Compliance Division

c. Chris Egghart, DEQ

Dutton + Associates
CULTURAL RESOURCE SURVEY, PLANNING, AND MANAGEMENT

September 19, 2022

Jenny Bellville-Marrion
Project Review Archaeologist, Review and Compliance
Virginia Department of Historic Resources
2801 Kensington Avenue
Richmond, VA 23221

RE: *Phase I Cultural Resources Survey of the Waller Solar Project in Lancaster County, Virginia*
Impacts Assessment and Avoidance of NRHP-Eligible Resources
DHR File No. 2021-0216

Dear Ms. Bellville-Marrion:

On behalf of Waller Solar I, LLC, Dutton + Associates, LLC (D+A) is pleased to provide you with additional information regarding avoidance and impacts to NRHP-eligible resources identified as part of the *Phase I Cultural Resources Survey of the Waller Solar Project in Lancaster County, Virginia.* This information is provided to address comments received from your office on the Phase I report by a letter dated July 22, 2022 and includes details on the avoidance of two potentially NRHP-eligible archaeological sites, as well as additional analysis and detail regarding proposed landscape screening and visual impacts to several potentially NRHP-eligible architectural resources.

Archaeological Site Avoidance

As part of the Phase I survey, a total of five archaeological sites were identified, two of which (44LA0184 and 44LA0185) were found to be potentially eligible for listing in the NRHP and VDHR recommended avoidance or further Phase II investigation. Subsequently, D+A conducted Phase II investigation of Site 44LA0184 which resulted in refined boundaries of the NRHP-eligible portion of the site (D+A *Phase II Archaeological Evaluation of Site 44LA0184* September 2022). As a result, Waller Solar I, LLC has employed measures to ensure avoidance of both NRHP-eligible sites, and has revised the conceptual site plan to incorporate an avoidance area around each with a 25-foot buffer in accordance with the recommendation from VDHR. Figures 1 and 2 provide detail of the avoidance area around each site, and a full-resolution conceptual site plan may be found as Attachment A.

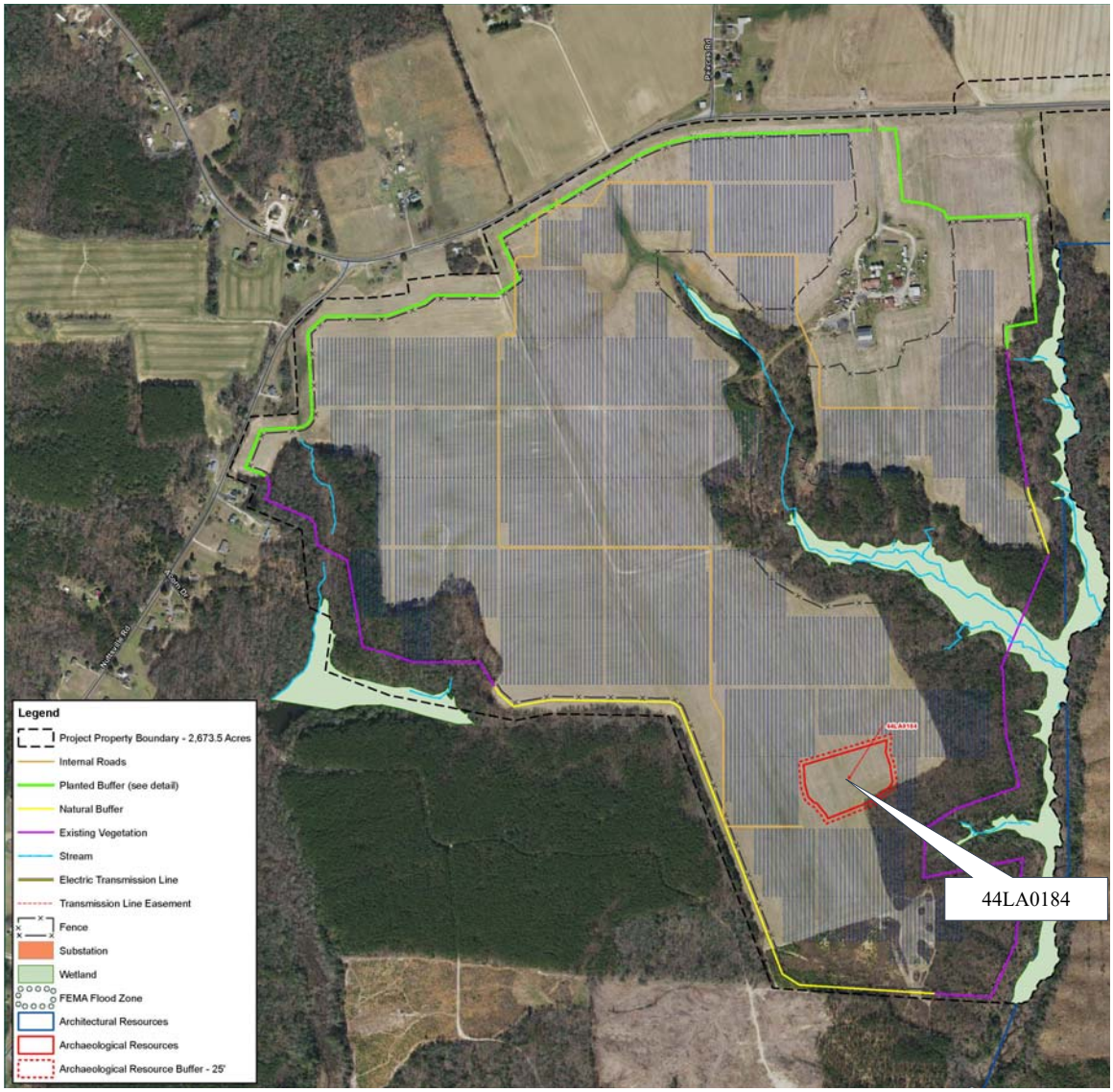


Figure 1: Waller Solar Project conceptual site plan, showing planned avoidance of Site 44LA0184.

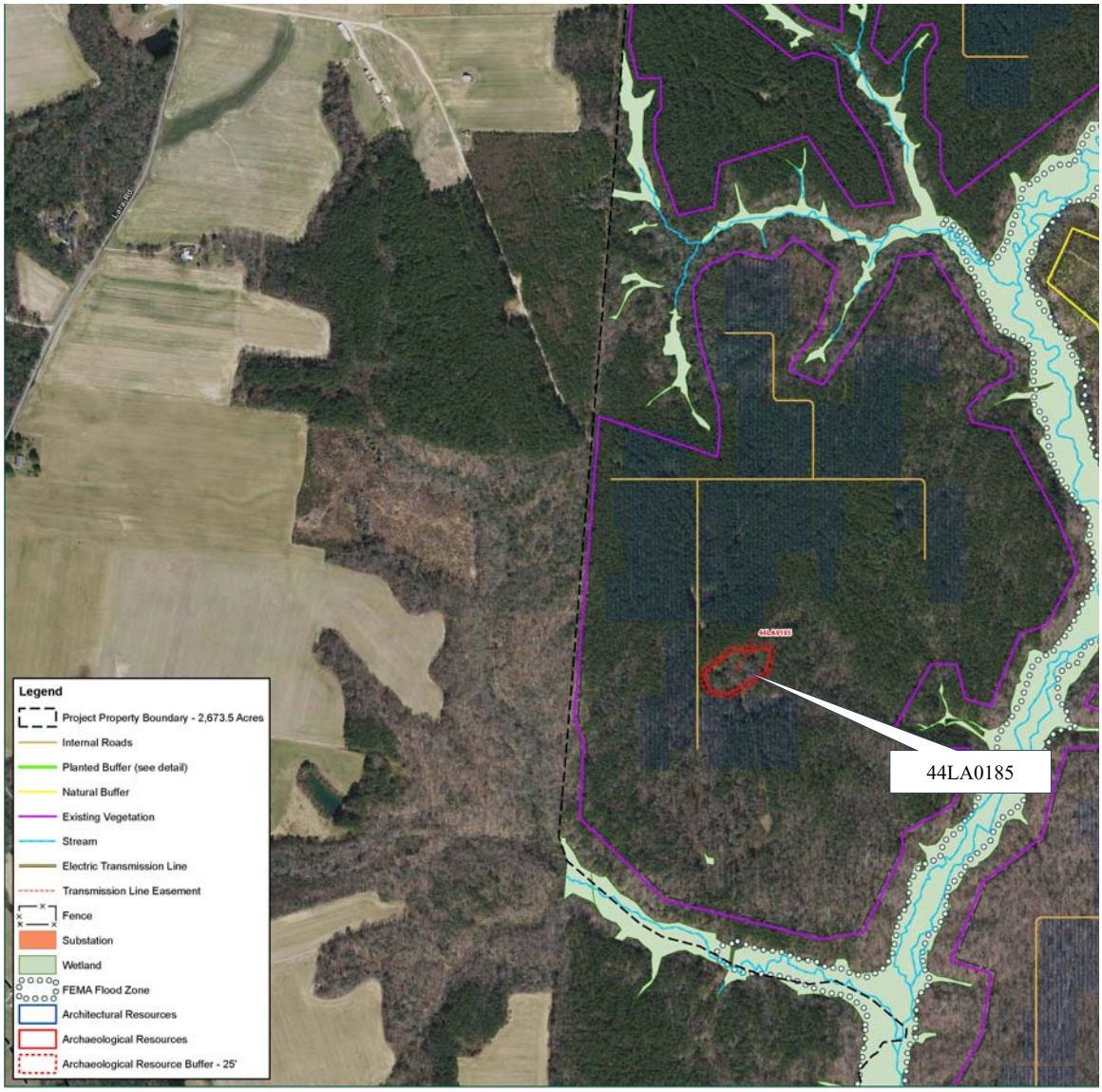


Figure 2: Waller Solar Project conceptual site plan, showing planned avoidance of Site 44LA0185.

Impacts to Architectural Resources

As part of the Phase I survey, D+A identified seven (7) architectural resources considered potentially eligible for listing in the NRHP and conducted preliminary viewshed analysis. As a result, one (1) resource, Epping Forest (VDHR# 051-0008) was determined by the VDHR to be moderately impacted by the project and three (3) additional resources, including Edgely (VDHR #051-0041), Lebanon Baptist Church (VDHR #051-0059) and Lively School (VDHR #051-0096), were found to be minimally impacted on the condition that detailed planting plans and photo renderings depicting mature buffer growth superimposed into the viewsheds that currently have no buffer be provided for review to confirm the level of impact.

As a result, Waller Solar I, LLC has undertaken measures to minimize the visual impact to Epping Forest (VDHR# 051-008) through modifications to the conceptual site plan. Detailed planting plans and renderings have also been prepared for the property as well as the others where there is currently no buffer to confirm project impacts.

Included in the sections below are a discussion of minimization measures for Epping Forest, the requested detailed planting plan for each of the NRHP-eligible resources, and the prepared photo renderings from representative vantage points within or near each property.

VDHR# 051-0008
Epping Forest, 677 Morattico Road

As part of the Phase I survey and initial viewshed analysis, VDHR determined that the project would have a *moderate impact* on the resource. At that time, project improvements were proposed within a field to the west of the Epping Forest property, immediately adjacent to a parcel bordering it, roughly 0.21 mile. To minimize visibility of the project and overall impact, Waller Solar I, LLC has reengineered the project in this vicinity to avoid the utilization of the field nearest to Epping Forest, and has set all improvements back an additional roughly 1,000 feet. As such, the nearest potentially visible improvements will be setback on the far side of a farm lane, roughly 0.37 mile from the Epping Forest House. The proposed landscaping plan was also revised accordingly to shift the supplemental plantings with the array setback. As a result, not only will the project improvements be further away from Epping Forest, but the planting buffer will be more effective due to the topography of the project area. Where initially proposed the buffer extended along the base of a shallow depression on the edge of the project area parcel and therefore would have been below the siteline from Epping Forest above, whereas in the new arrangement the planted buffer will extend along the high point of the landscape and therefore more effectively and quickly screen improvements as the plantings mature. The rest of the project improvements and solar arrays will continue to be screened by robust existing vegetation bordering the property.

With the revised array layout and landscape plan, it is recommended that the project will pose no more than a ***minimal impact*** to Epping Forest. In support of this recommendation and to provide the requested additional data, Figure 3 provides a comparison of the preliminary and revised conceptual site layout with landscape plan. Figure 4 provided a detailed conceptual site plan for the vicinity of the property. Figure 5

provides a detailed planting plan for the proposed landscape buffer. Figures 6 through 13 provides rendering series including a map of the location of rendering position, a photograph of existing conditions, project improvements with supplemental landscaping at the time of planting, and improvements with landscaping at maturity.

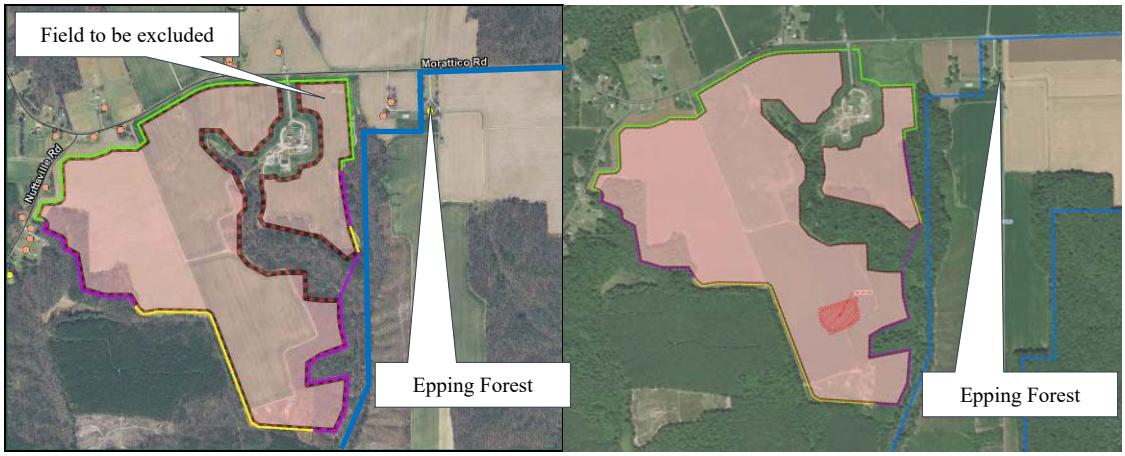


Figure 3: Waller Solar Conceptual Project Site Plan (preliminary – left and revised – right) in relation to Epping Forest depicting the extent of project improvements and landscape buffer. Epping Forest resource boundary depicted in blue with location of primary dwelling flagged with callout. Source: Timmons Group

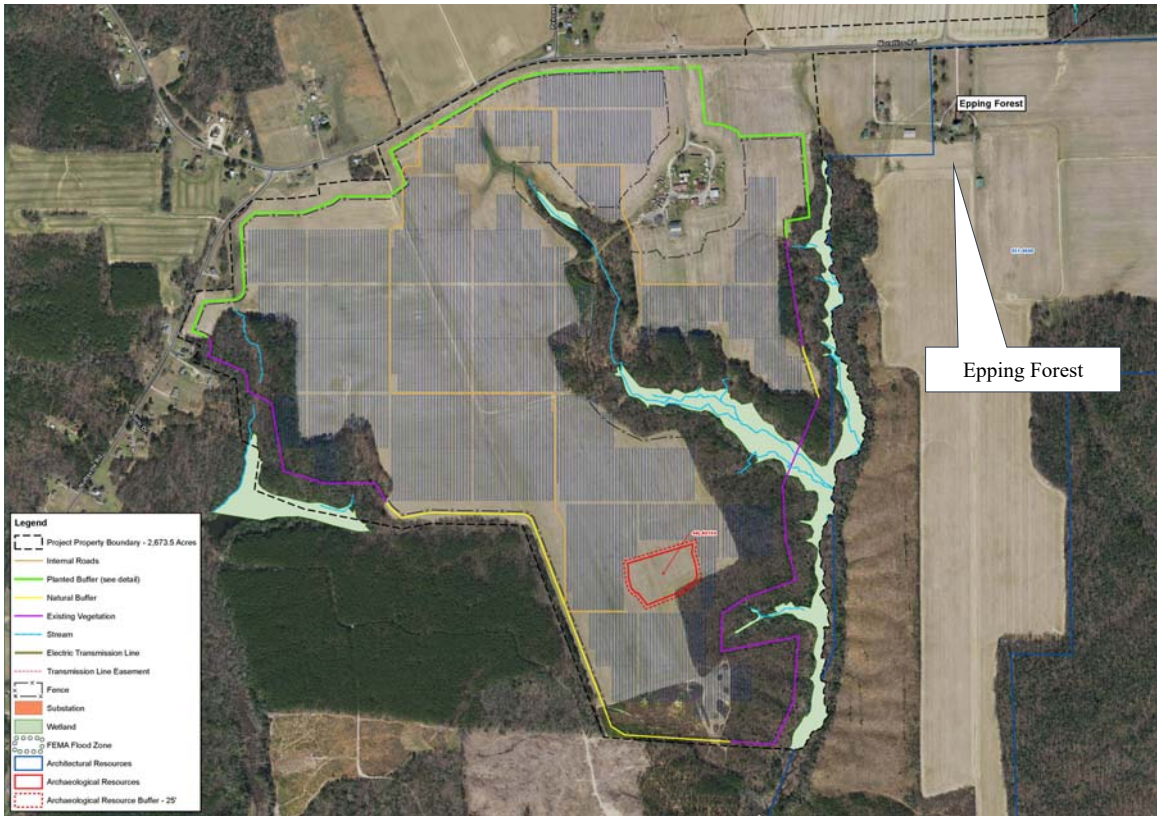
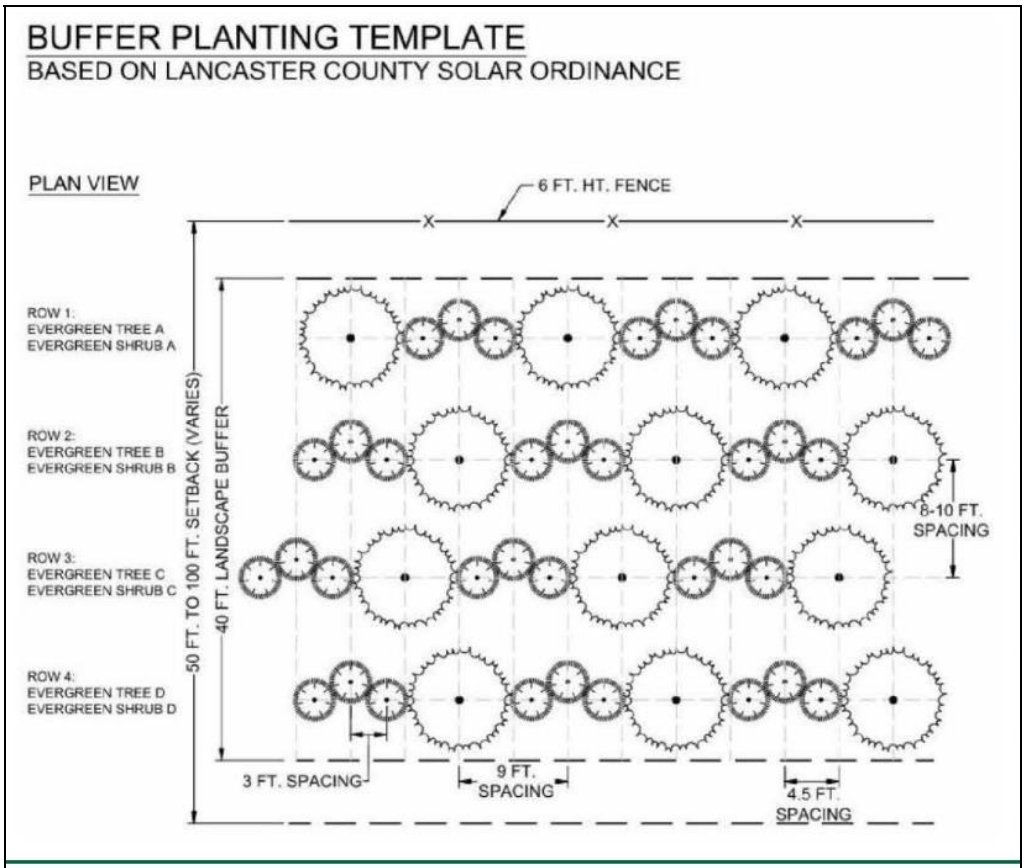
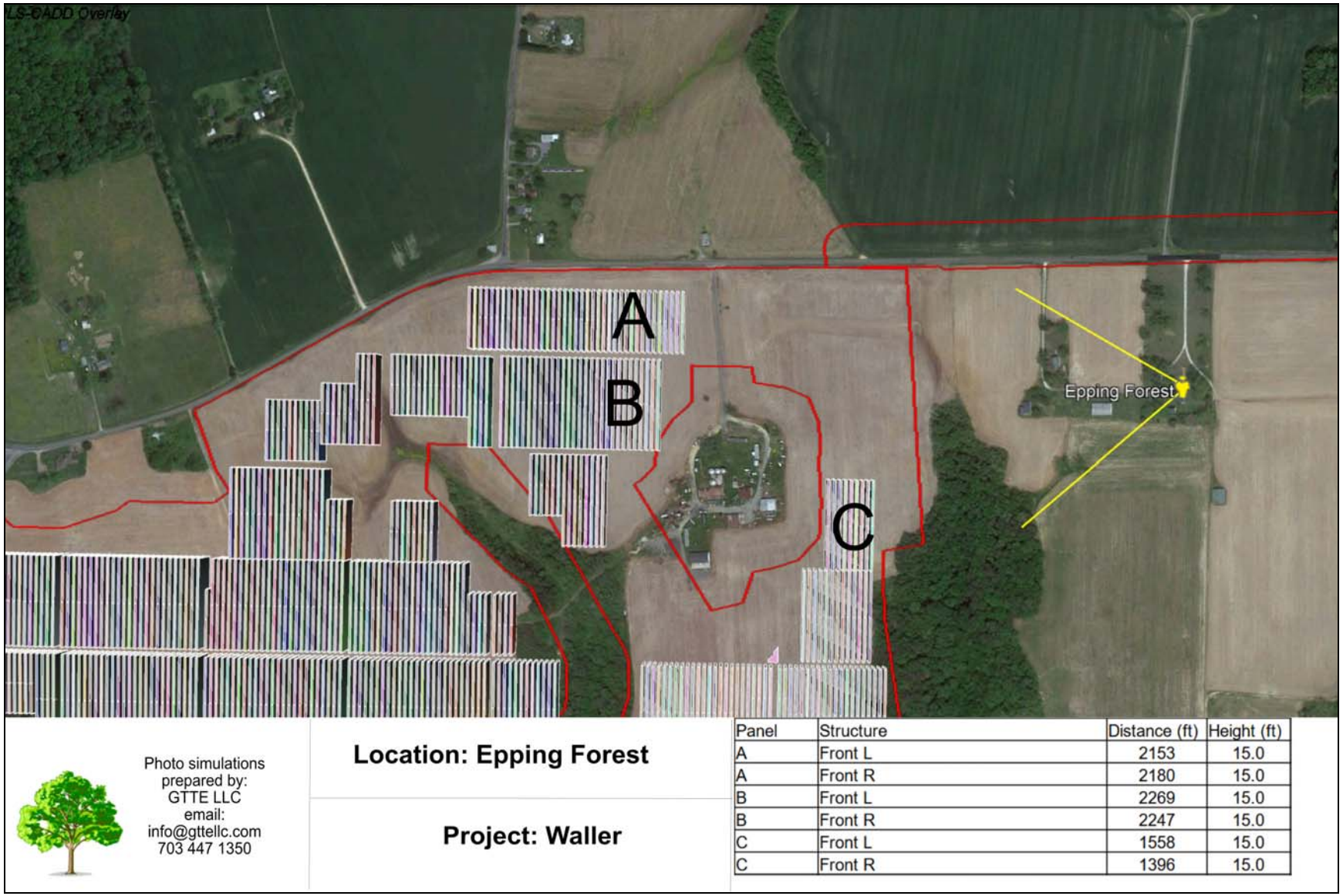


Figure 4: Detailed Waller Solar Conceptual Project Site Plan in relation to Epping Forest. Epping Forest resource boundary depicted in blue with location of primary dwelling flagged with callout. Source: Timmons Group



28-5-2(D). Vegetated buffer. A vegetated buffer of 40' in width is required within the setback area and out of and behind any VDOT or private road right of way. The buffer shall be around the entire project area, not necessarily the internal parcel boundaries, if the project involves more than one parcel or owner. This buffer shall consist of native plants to the maximum extent practical and feature specimens not listed on the Department of Conservation and Recreation Invasive Plant List. The planting schedule shall include at least four rows of medium to large evergreen shrubs (ex: myrica cerifera (morella cerifera)) spaced no further than three feet apart in the row. The rows should be no more than 10' apart and no closer than 8 feet. Evergreen trees (ex: juniperus virginiana) shall be included in this planting area and spaced 10' apart within each planting row. The specimens spaced within the planting rows or line shall be staggered from the adjacent rows in order to enhance the visual screening effect. The trees must be a minimum of 4 feet tall at planting and reach a height of 10 feet within 2 years. Shrubs shall be at least 12" tall at planting. Existing vegetation, or forest area, which meets or exceeds the buffer requirements, may be accepted in lieu of planting upon the written consent of the Zoning Administrator and shall be part of the Special Exception application for Board of Supervisors approval or modification.

Figure 5: Detailed Planting Plan. Source: Timmons Group



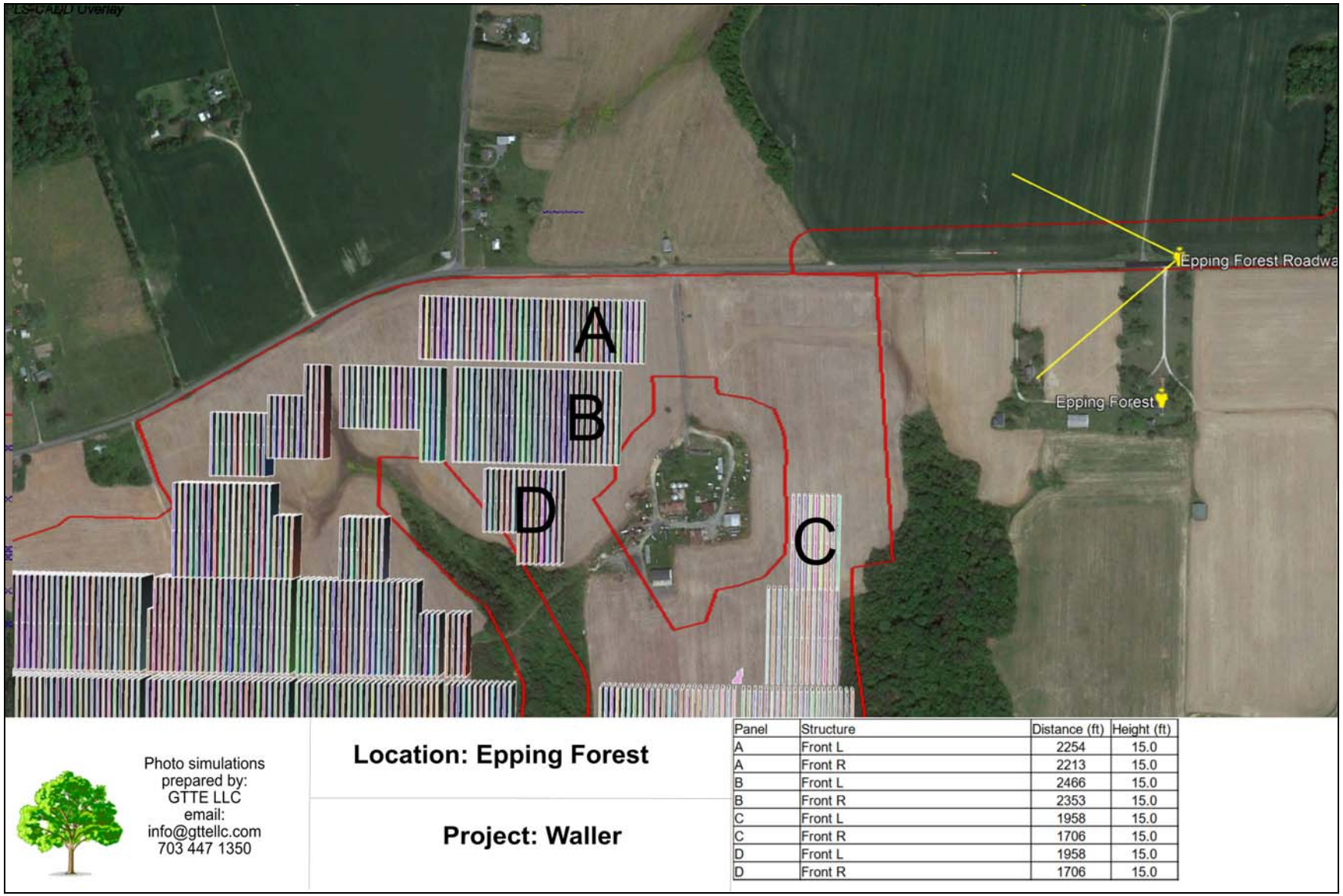
Panel	Structure	Distance (ft)	Height (ft)
A	Front L	2153	15.0
A	Front R	2180	15.0
B	Front L	2269	15.0
B	Front R	2247	15.0
C	Front L	1558	15.0
C	Front R	1396	15.0

Figure 6: Map depicting the location of Photo Rendering from Epping Forest house. Source: GTTE, LLC

Figure 7: Existing view from Epping Forest house. Source: GTTE, LLC

Figure 8: Proposed view from Epping Forest house at the time of landscape planting (Visible array fields shown as they would appear through breaks in vegetation. Array fields completely screened by existing vegetation shown in yellow for reference). Source: GTTE, LLC

Figure 9: Proposed view from Epping Forest house at the time of landscape maturity. (Visible array fields shown as they would appear behind vegetative screening. Array fields completely screened by existing vegetation shown in yellow for reference) Source: GTTE, LLC



Panel	Structure	Distance (ft)	Height (ft)
A	Front L	2254	15.0
A	Front R	2213	15.0
B	Front L	2466	15.0
B	Front R	2353	15.0
C	Front L	1958	15.0
C	Front R	1706	15.0
D	Front L	1958	15.0
D	Front R	1706	15.0

Figure 10: Map depicting the location of Photo Rendering from road in front of Epping Forest. Source: GTTE, LLC

Figure 11: Existing view from road in front of Epping Forest. Source: GTTE, LLC

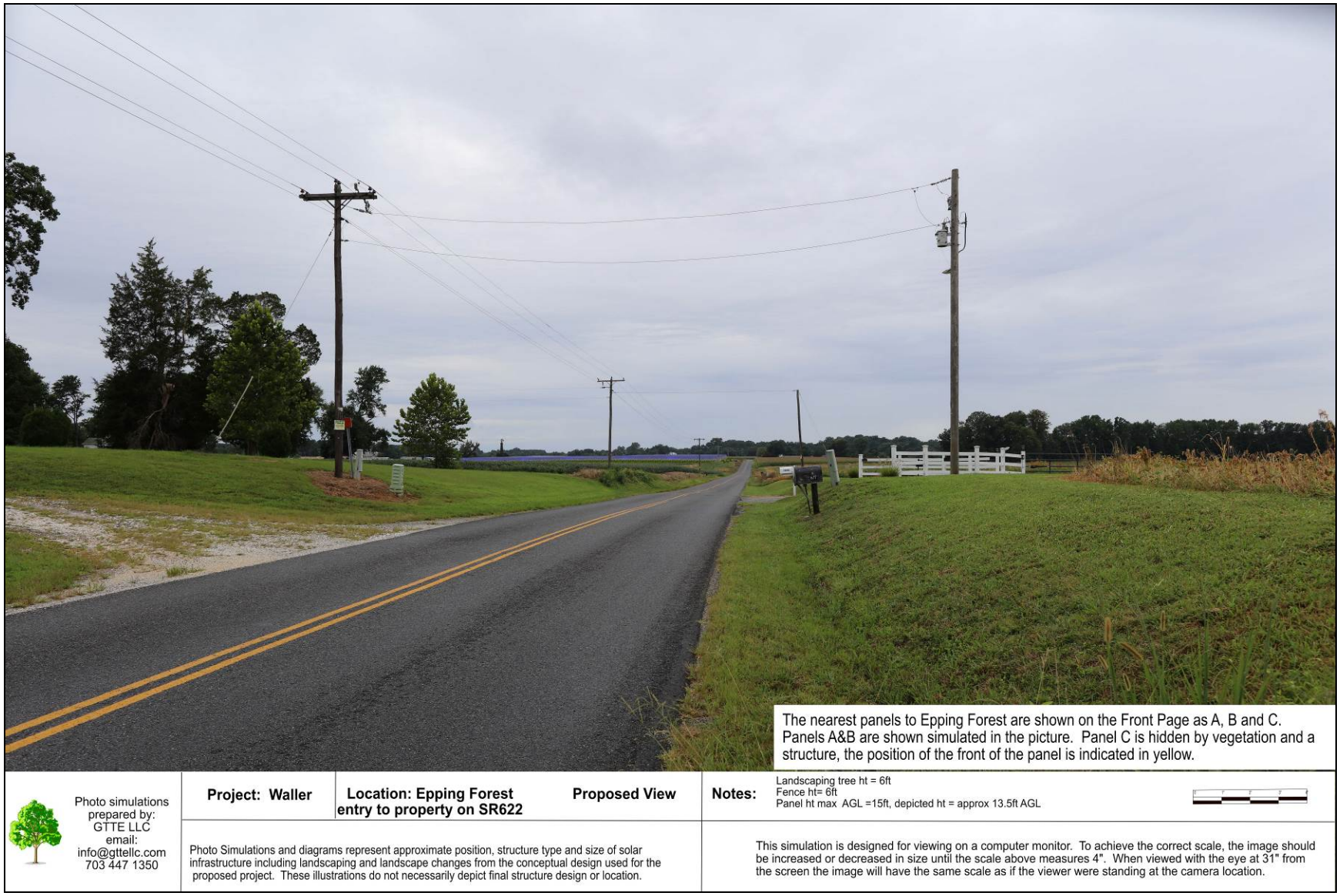


Figure 12: Proposed view from road in front of Epping Forest at the time of landscape planting. Source: GTTE, LLC

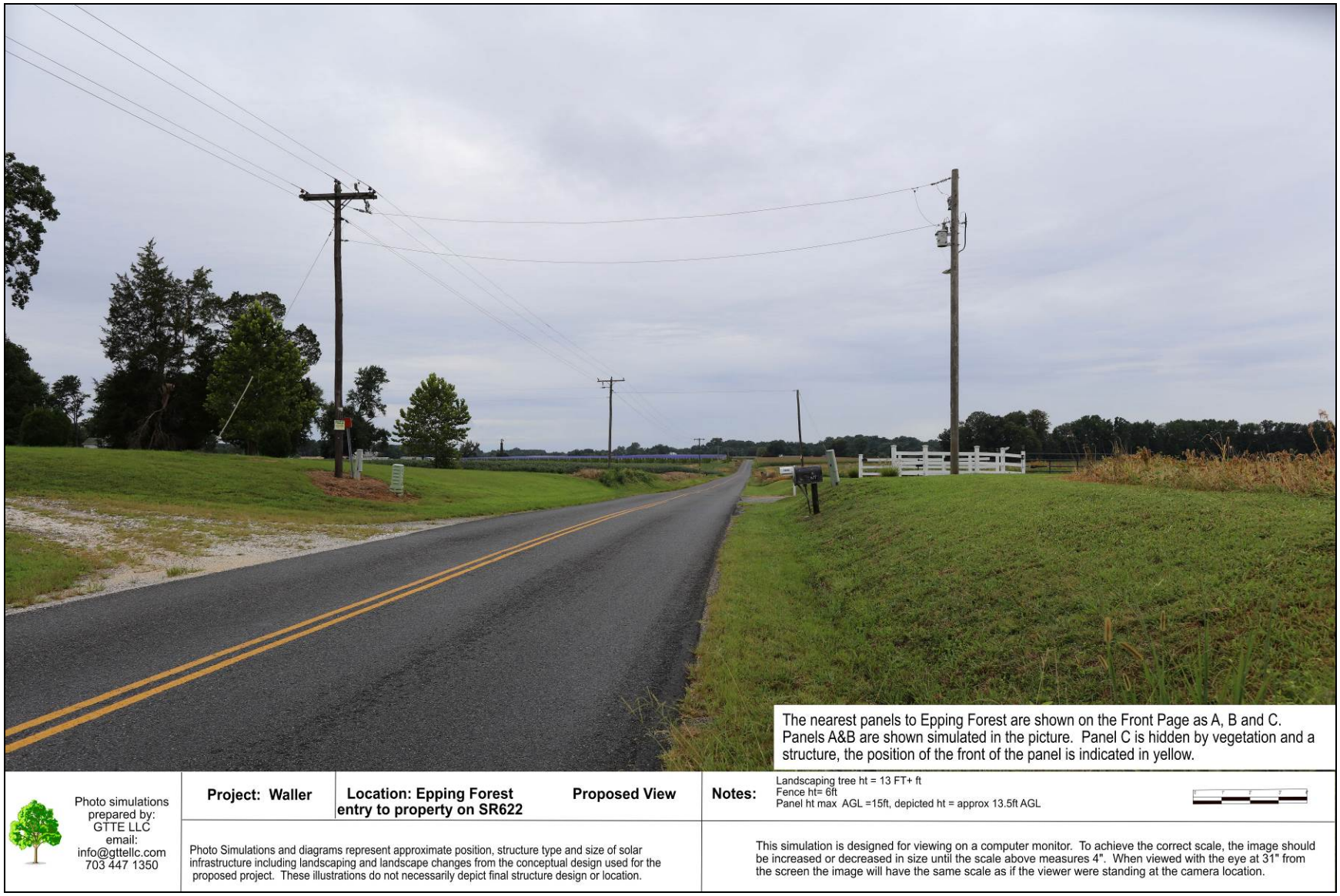


Figure 13: Proposed view from road in front of Epping Forest at the time of landscape maturity. Source: GTTE, LLC

VDHR# 051-0041
Edgely, 9279 Courthouse Road

As part of the Phase I survey and initial viewshed analysis, VDHR conditionally concurred that the project would have a *minimal impact* on the resource but requested detailed planting plans and photo renderings depicting mature buffer growth superimposed into the viewsheds that currently have no buffer be provided for review to confirm the level of impact. At that time, the nearest improvements related to the Waller Solar project were proposed to take place within a field immediately across the road to the west of the Edgely property. Because the Edgely house is setback from the road, the nearest portion of the project area is roughly 675 feet from the house at the nearest point. To further minimize the potential for visibility of the project from the home, Waller Solar I, LLC has updated the conceptual site plan to set proposed solar arrays back from the nearest corner of the project area while maintaining a line of proposed landscape buffer around the perimeter of the project area. As such, there will be limited visibility of the solar arrays from the road in front of Edgely, however, supplemental landscape buffer will provide substantial screening at the time of planting and complete screening by the time of maturity. The robust line of vegetation bordering the homesite and driveway will continue to provide complete screening of all project improvements.

With this array layout and landscape plan, it is reaffirmed that the project will pose no more than a ***minimal impact*** to Edgely. In support of this finding and to provide the requested additional data, Figure 14 provides a conceptual site layout with landscape plan. Figure 15 provides a detailed conceptual site plan for the vicinity of the property. Figure 16 provides a detailed planting plan for the proposed landscape buffer. Figures 17 through 20 provides rendering series including a map of the location of rendering position, a photograph of existing conditions, project improvements with supplemental landscaping at the time of planting, and improvements with landscaping at maturity.

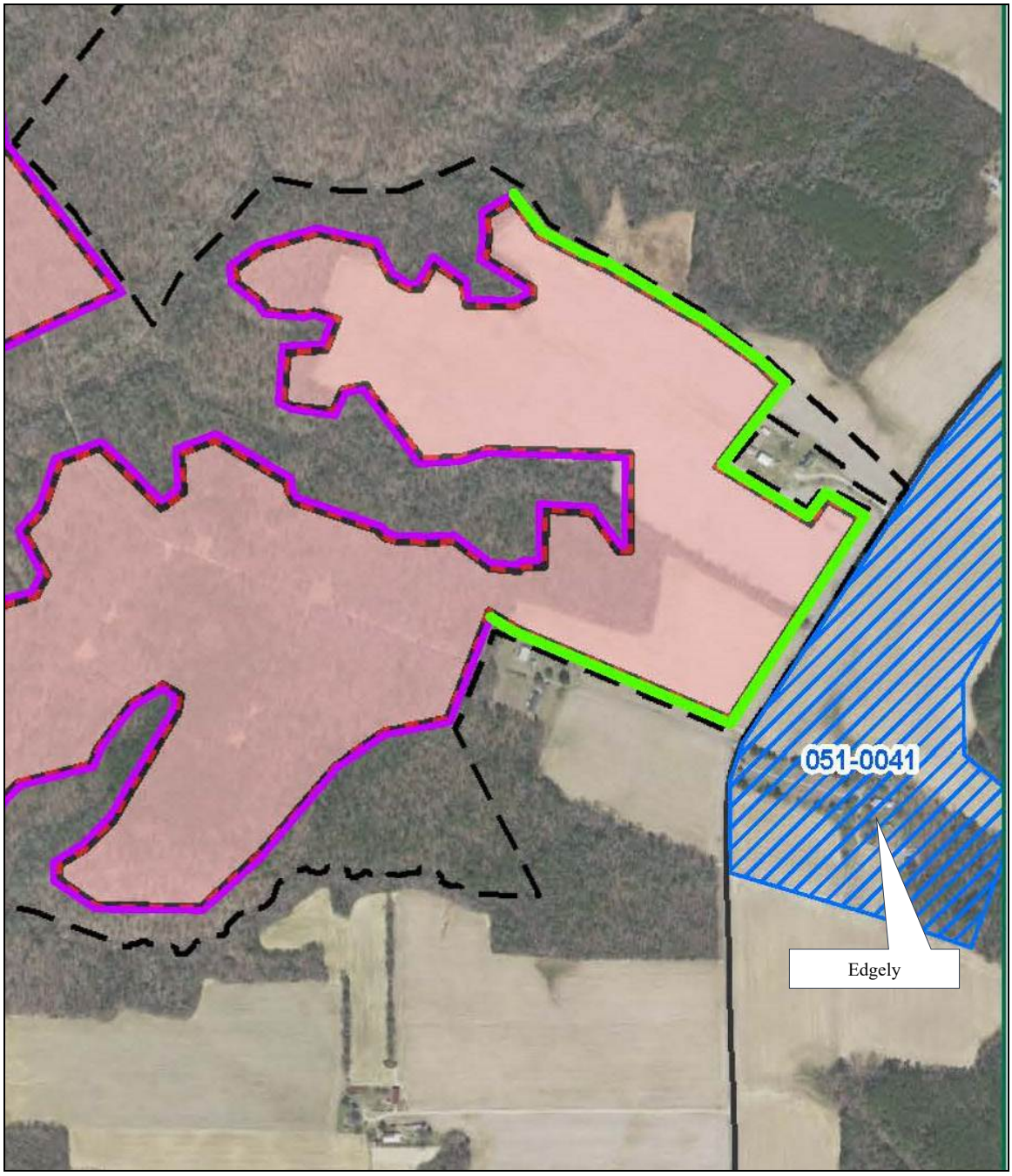


Figure 14: Waller Solar Conceptual Project Site Plan in relation to Edgely depicting the extent of project improvements and landscape buffer. Edgely resource boundary depicted in blue with location of primary dwelling flagged with callout. Source: Timmons Group

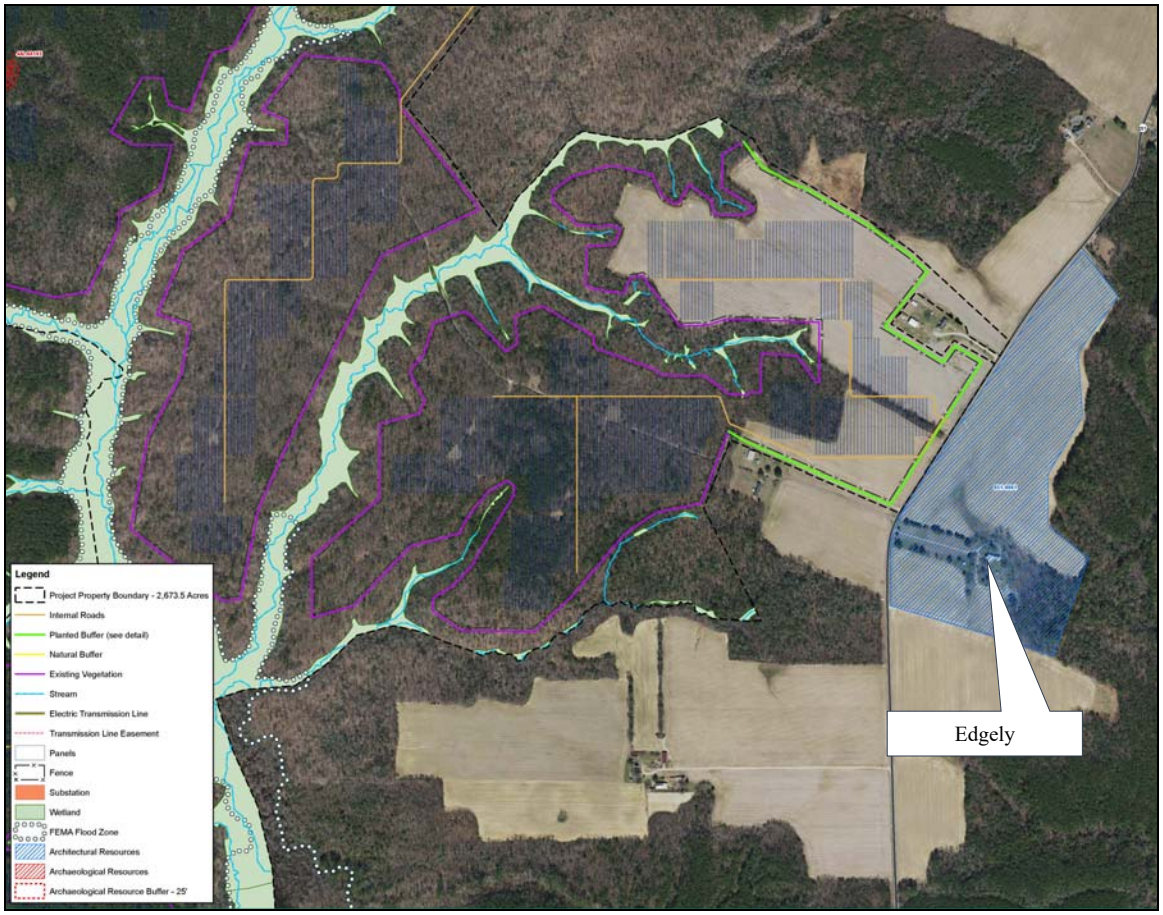
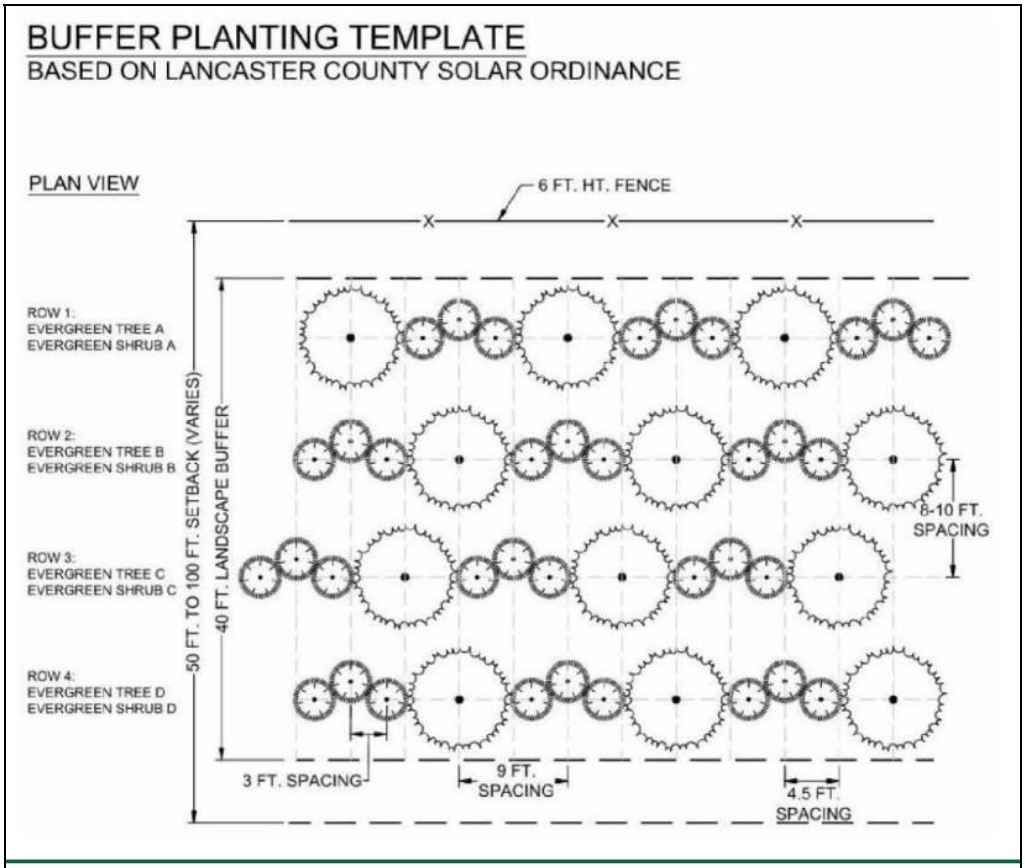


Figure 15: Detailed Waller Solar Conceptual Project Site Plan in relation to Edgely. Edgely resource boundary depicted in blue with location of primary dwelling flagged with callout. Source: Timmons Group



28-5-2(D). Vegetated buffer. A vegetated buffer of 40' in width is required within the setback area and out of and behind any VDOT or private road right of way. The buffer shall be around the entire project area, not necessarily the internal parcel boundaries, if the project involves more than one parcel or owner. This buffer shall consist of native plants to the maximum extent practical and feature specimens not listed on the Department of Conservation and Recreation Invasive Plant List. The planting schedule shall include at least four rows of medium to large evergreen shrubs (ex: myrica cerifera (morella cerifera)) spaced no further than three feet apart in the row. The rows should be no more than 10' apart and no closer than 8 feet. Evergreen trees (ex: juniperus virginiana) shall be included in this planting area and spaced 10' apart within each planting row. The specimens spaced within the planting rows or line shall be staggered from the adjacent rows in order to enhance the visual screening effect. The trees must be a minimum of 4 feet tall at planting and reach a height of 10 feet within 2 years. Shrubs shall be at least 12" tall at planting. Existing vegetation, or forest area, which meets or exceeds the buffer requirements, may be accepted in lieu of planting upon the written consent of the Zoning Administrator and shall be part of the Special Exception application for Board of Supervisors approval or modification.

Figure 16: Detailed Planting Plan. Source: Timmons Group

Photo simulations
prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Location: Edgely House

Project: Waller

Panels	Position	Distance (ft)	Comment
A	Front L	1106	
A	Front R	880	
B	Front L	792	
B	Front R	509	
C	Front L	638	Not visible
C	Front R	652	Not visible

Figure 17: Map depicting the location of Photo Rendering from road in front of Edgely. Source: GTTE, LLC

Figure 18: Existing view from road in front of Edgely. Source: GTTE, LLC

Figure 19: Proposed view from road in front of Edgely at the time of landscape planting. Source: GTTE, LLC

Figure 20: Proposed view from road in front of Edgely at the time of landscape maturity. Source: GTTE, LLC

VDHR# 051-0059
Lebanon Baptist Church, 20 Alfonso Road

As part of the Phase I survey and initial viewshed analysis, VDHR conditionally concurred that the project would have a *minimal impact* on the resource, but requested detailed planting plans and photo renderings depicting mature buffer growth superimposed into the viewsheds that currently have no buffer be provided for review to confirm the level of impact. At that time, the nearest improvements related to the Waller Solar project were a proposed interconnect corridor to the west of the property, roughly 315 feet away at its closest. The nearest solar array fields were roughly 1,050 feet down Alfonso Road to the south and 1,100 feet down Lara Road to the east at their nearest points. In an effort to further minimize visual impacts, Waller Solar I, LLC has revised the conceptual project site plan to avoid development of the nearest array field down Lara Road, while the nearest arrays down Alfonso Road will be set within a field that is currently bordered by existing vegetative buffer. The existing vegetation provides complete screening of the project area and will be retained as part of the project. The interconnect line in closer proximity to the property will be underground and therefore not introduce any visible features.

As such, it is reaffirmed that the project will pose no more than a ***minimal impact*** to the Lebanon Baptist Church and because all buffers are existing and no supplemental plantings are proposed in the vicinity, no photo renderings were prepared. In support of this finding and to provide the requested additional data, Figure 21 provides a conceptual site layout with landscape plan.

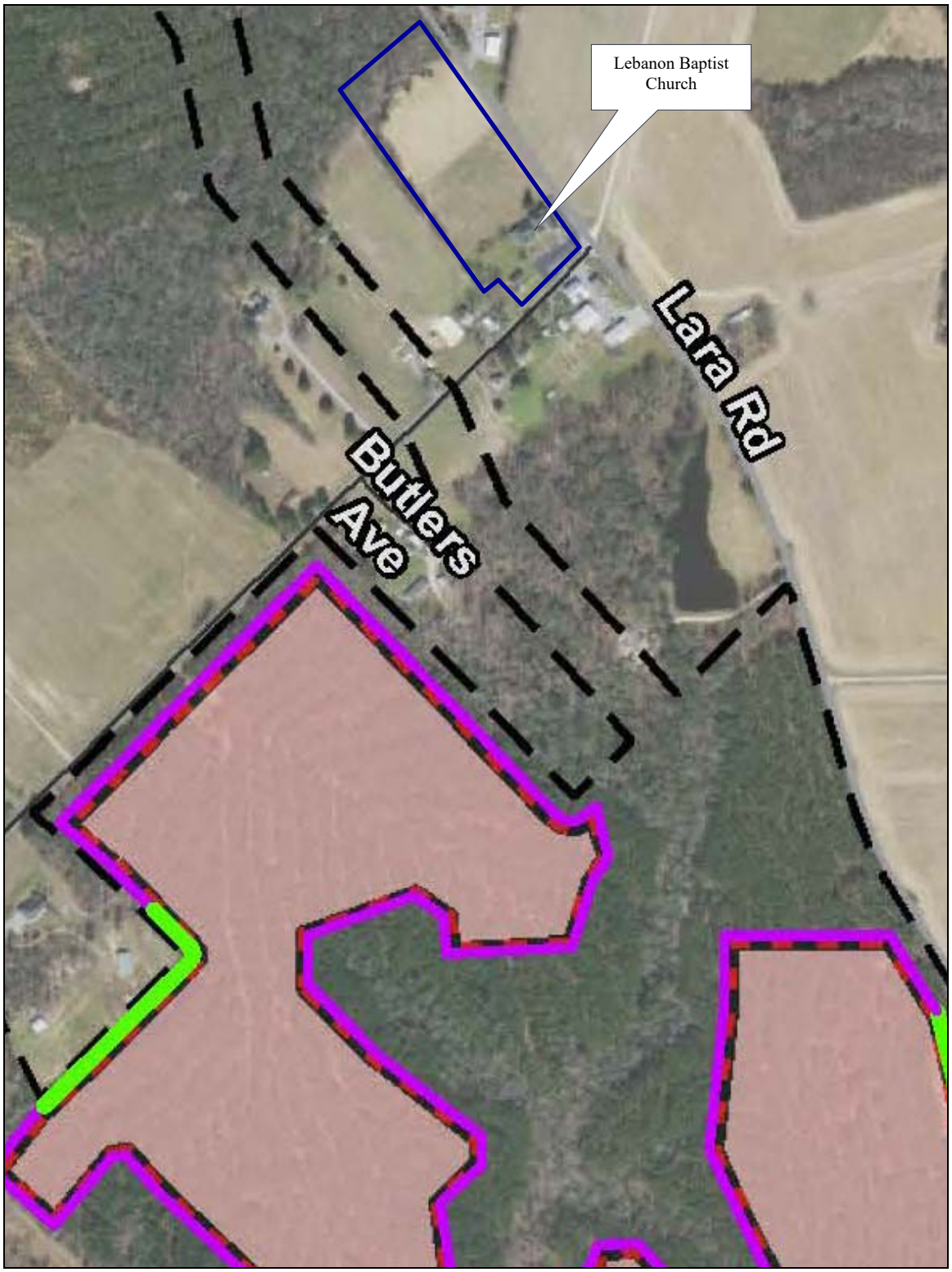


Figure 21: Waller Solar Conceptual Project Site Plan in relation to Lebanon Baptist Church depicting the extent of project improvements and landscape buffer. Lebanon Baptist Church resource boundary depicted in blue with building flagged with callout. Source: Timmons Group

VDHR# 051-0096
Lively School, Mary Ball Road

As part of the Phase I survey and initial viewshed analysis, VDHR conditionally concurred that the project would have a *minimal impact* on the resource but requested detailed planting plans and photo renderings depicting mature buffer growth superimposed into the viewsheds that currently have no buffer be provided for review to confirm the level of impact. At that time, the nearest improvements related to the Waller Solar project were proposed to take place within a field immediately across the road to the east of the Lively School property, roughly 330 feet away from the building at its nearest point. To further minimize the potential for visibility of the project from the home, Waller Solar I, LLC has updated the conceptual site plan to avoid placement of arrays in the field immediately across the road and instead set all arrays back in a field to the rear, roughly 0.66 mile away. The existing treelines and vegetation between the resource the development area will be maintained and continue to provide complete screening of all project improvements.

With this array layout and landscape plan, it is reaffirmed that the project will pose no more than a ***minimal impact*** to Lively School. In support of this finding and to provide the requested additional data, Figure 22 provides a conceptual site layout with landscape plan. Figure 23 provides a detailed conceptual site plan for the vicinity of the property. Figures 24 through 27 provides rendering series including a map of the location of rendering position, a photograph of existing conditions, project improvements with supplemental landscaping at the time of planting.

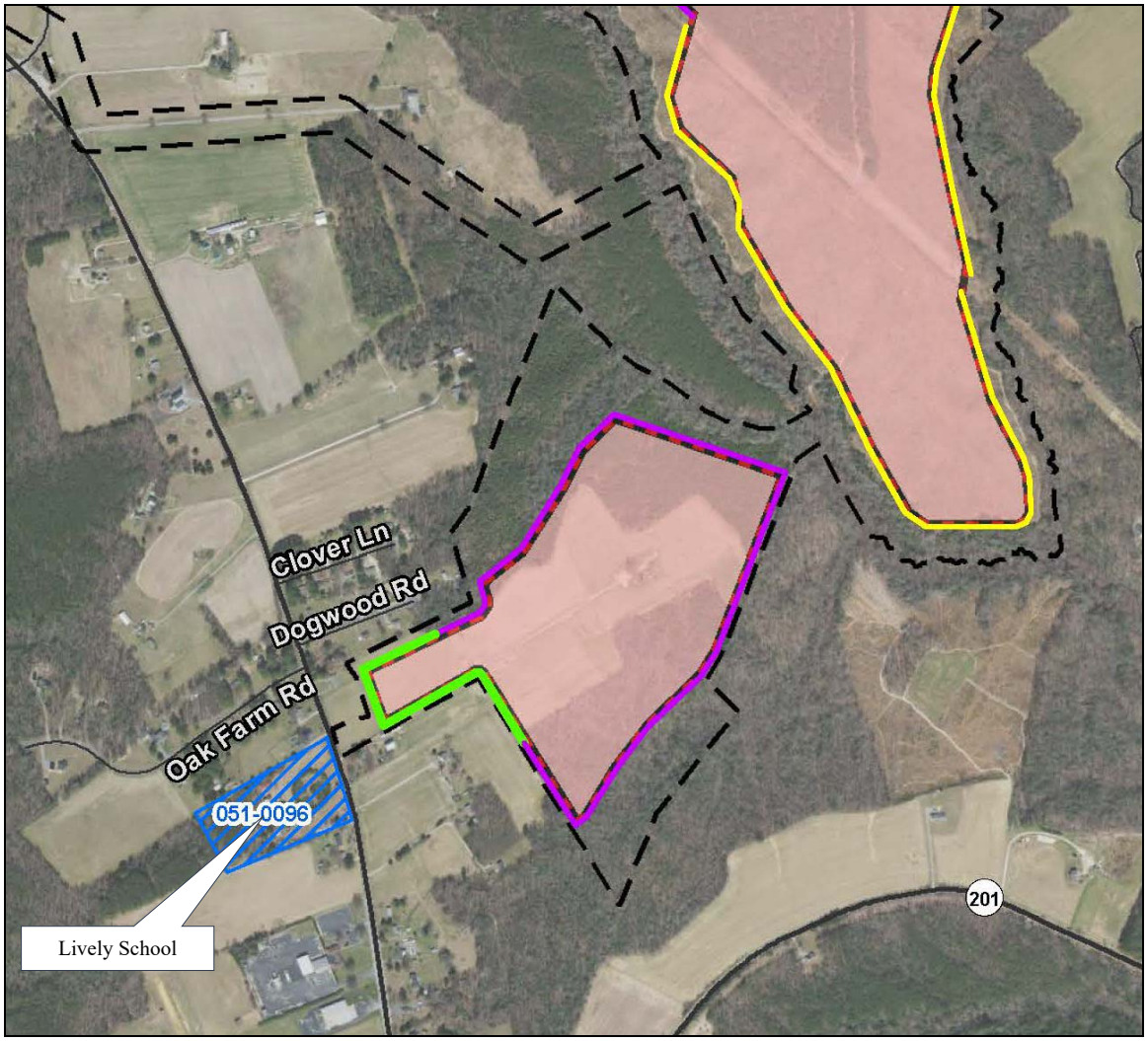


Figure 22: Waller Solar Conceptual Project Site Plan in relation to Lively School depicting the extent of project improvements and landscape buffer. Lively School resource boundary depicted in blue with location of primary building flagged with callout. Source: Timmons Group

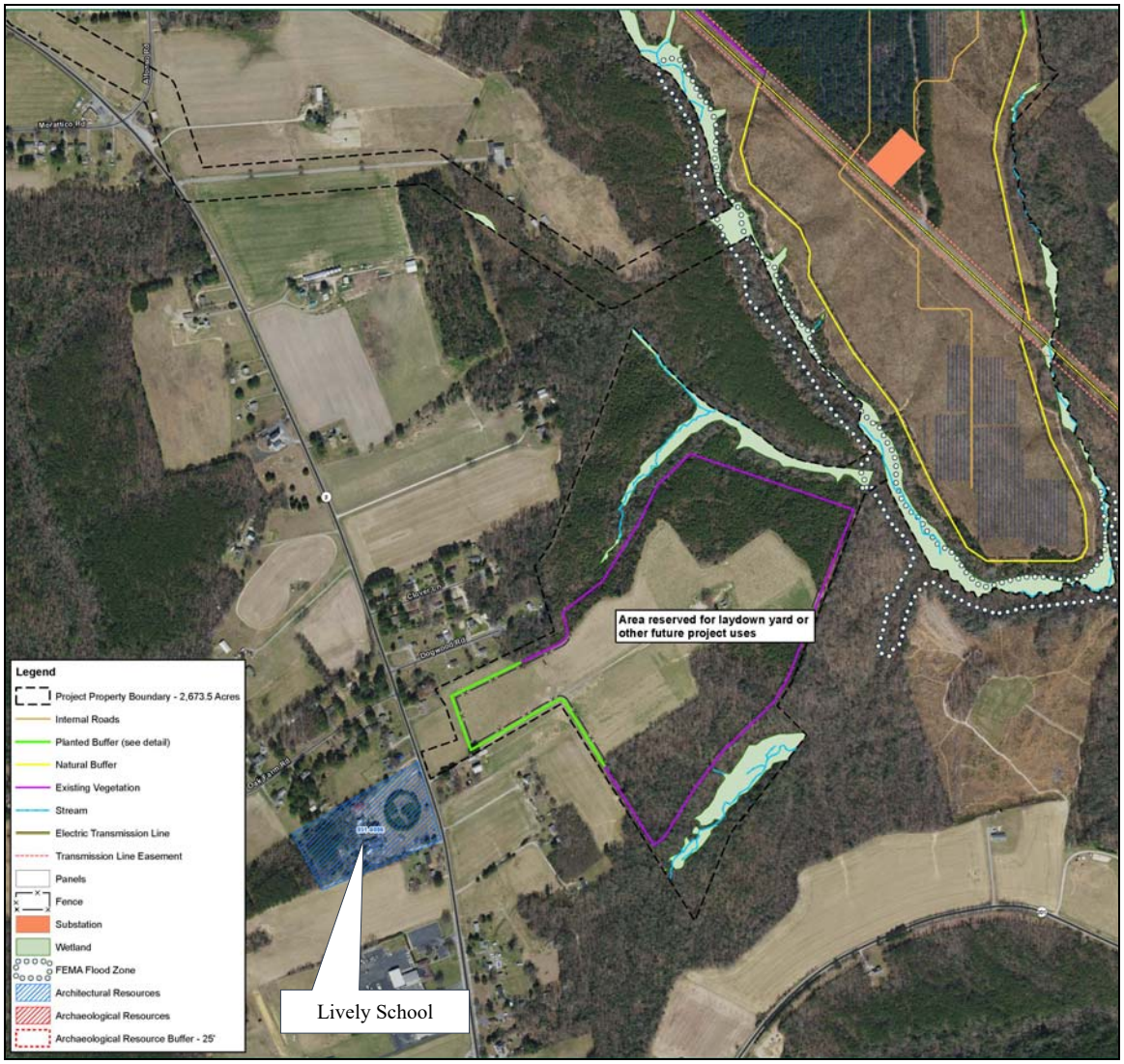
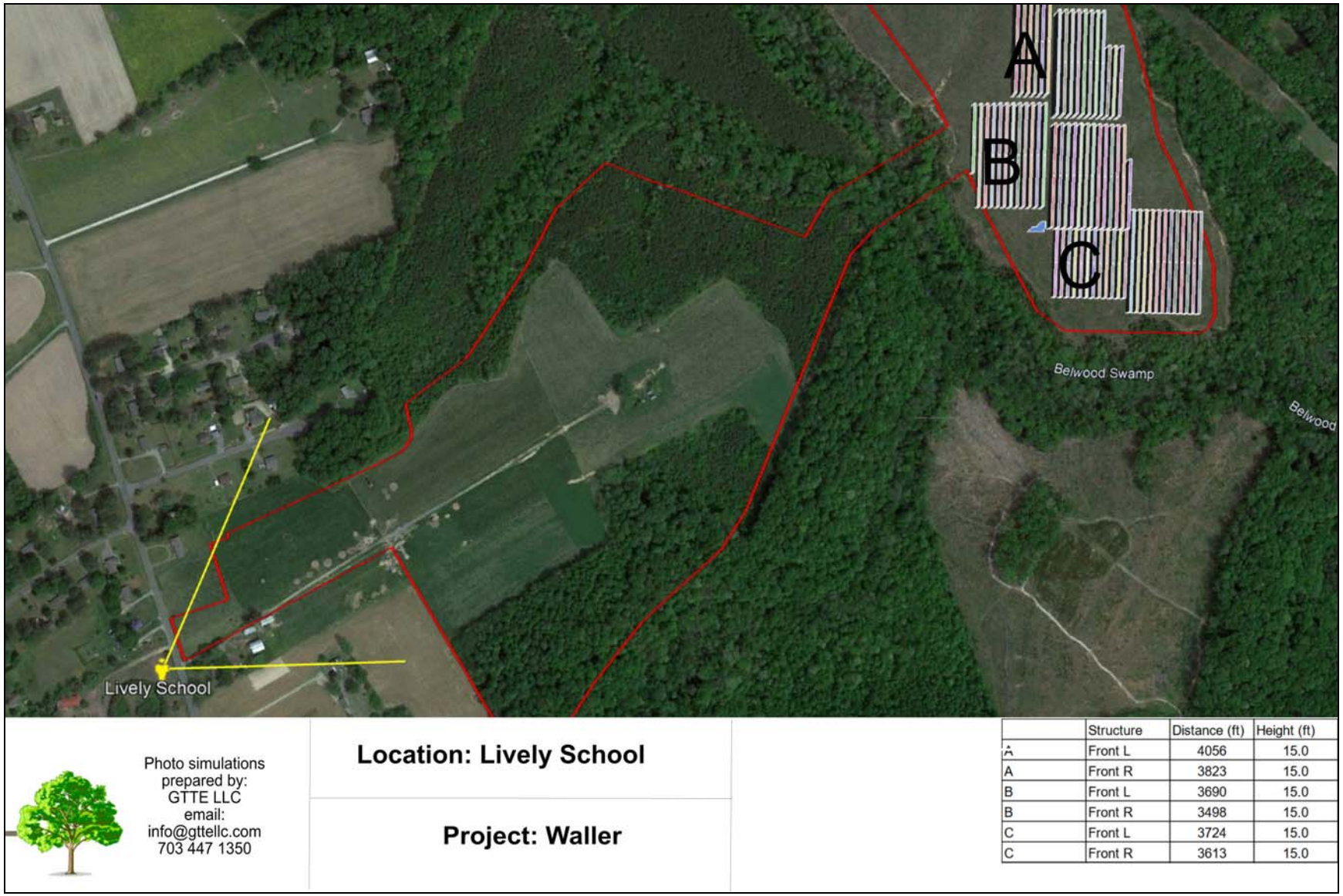


Figure 23: Detailed Waller Solar Conceptual Project Site Plan in relation to Lively School. Lively School resource boundary depicted in blue with location of primary building flagged with callout. Source: Timmons Group



	Structure	Distance (ft)	Height (ft)
A	Front L	4056	15.0
A	Front R	3823	15.0
B	Front L	3690	15.0
B	Front R	3498	15.0
C	Front L	3724	15.0
C	Front R	3613	15.0

Figure 24: Map depicting the location of Photo Rendering from road in front of Lively School. Source: GTTE, LLC

Figure 25: Existing view from road in front of Lively School. Source: GTTE, LLC

Figure 26: Proposed view from road in front of Edgely at the time of landscape planting. (Array fields completely screened by existing vegetation shown in red, orange, and yellow for reference) Source: GTTE, LLC

Summary and Conclusions

D+A has assembled a variety of additional information to address comments and requests made by the VDHR in response to review of the *Phase I Cultural Resources Survey of the Waller Solar Project in Lancaster County, Virginia.* This includes details on the planned avoidance of NRHP-eligible archaeological sites as well as additional information and analysis of impacts to NRHP-eligible architectural resources.

With regards to archaeological sites, sites 44LA0184 and 44LA0185 were both recommended for avoidance or further investigation by the VDHR. Subsequently, 44LA0184 was subject to Phase II evaluation which determined the site to be NRHP-eligible. Both sites will be avoided with a 25-foot buffer. ***As a result, the project will not adversely impact any NRHP-eligible archaeological sites.***

With regards to architectural resources, a total of seven were found to be eligible for listing in the NRHP. VDHR determined that one resource, Epping Forest (VDHR# 051-0008) would be moderately impacted by the project and three, Edgely (VDHR# 051-0041), Lebanon Baptist Church (VDHR# 051-0059), and Lively School (VDHR# 051-0096) would be minimally impacted with the condition that additional details on planting plans and photo renderings be provided for review. Subsequently, Waller Solar I, LLC revised the conceptual site plan to minimize impacts to Epping Forest while maintaining a minimal impact to the other three properties. ***As a result, the project will have no more than a minimal impact on any NRHP-eligible architectural resources.***

Please feel free to let me know if there is anything else needed to assist with your review of any of these materials. If you wish to discuss, please do not hesitate to contact me at (804) 897-1960 or rtaylor@dutton-associates.com.

Sincerely,

DUTTON + ASSOCIATES, LLC

Robert J. Taylor, Jr.
Principal Investigator/Senior Architectural Historian

cc: Rick Thomas – Timmons Group

Attachment A: Full-Resolution Photo Rendering Files for Epping Forest (VDHR# 051-0008), Edgely (VDHR# 051-0041), Lebanon Baptist Church (VDHR# 051-0059), and Lively School (VDHR# 051-0096)

ATTACHMENT A:

Full Resolution Photo Renderings

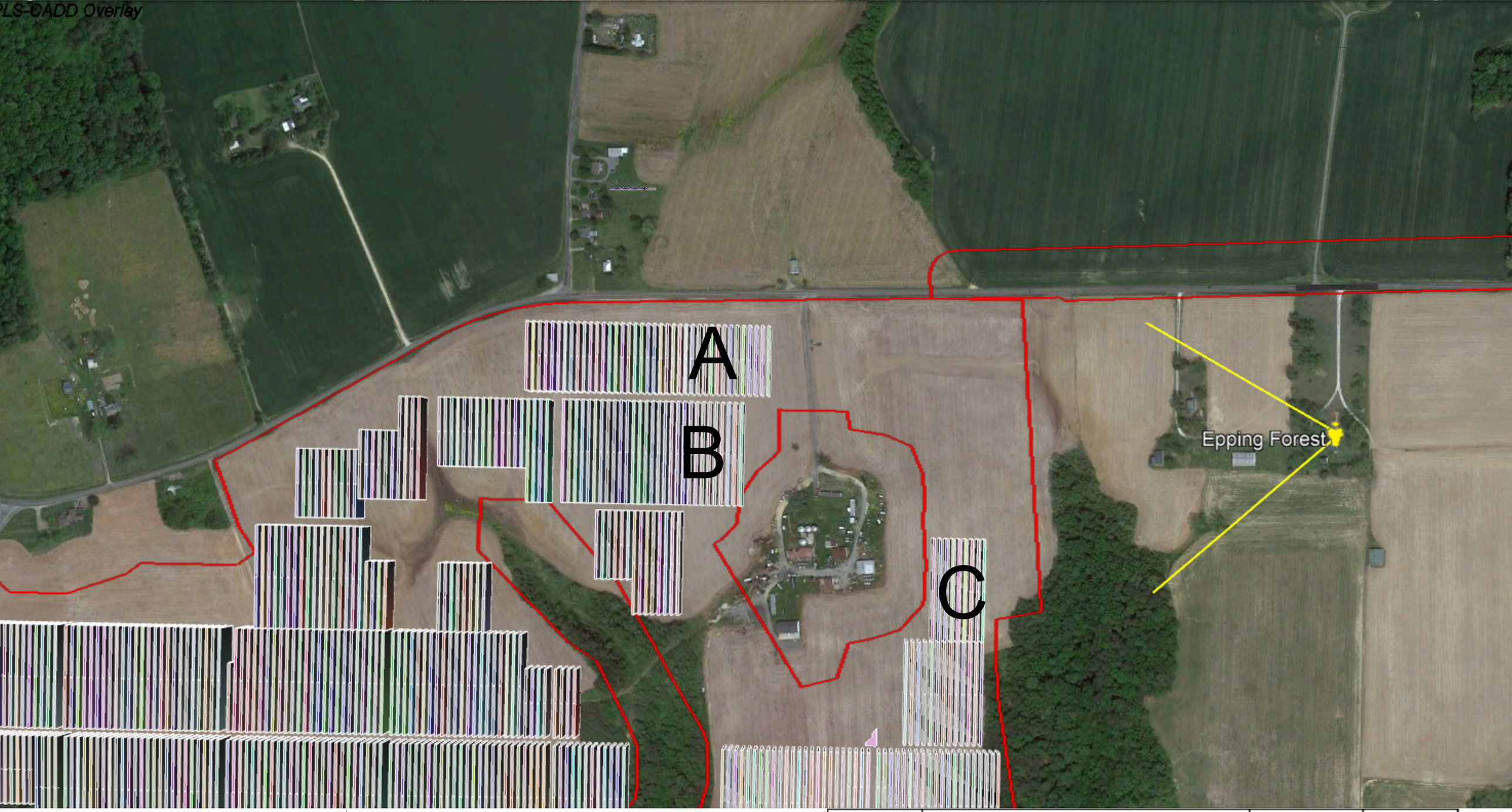


Photo simulations
prepared by:
GTTE LLC
email:
info@gttellc.com
703 447 1350

Location: Epping Forest

Project: Waller

Panel	Structure	Distance (ft)	Height (ft)
A	Front L	2153	15.0
A	Front R	2180	15.0
B	Front L	2269	15.0
B	Front R	2247	15.0
C	Front L	1558	15.0
C	Front R	1396	15.0