

## ATTACHMENT D

Visual Simulations and Contrast Rating



Attachment D. Visual Simulations

Viewpoint Information

**Viewpoint ID:** 5  
**County:** Chautauqua  
**Town:** Ripley  
**Location:** Intersection of County Route 6 and Miller Road  
**Latitude, Longitude:** 42.19465°N, 79.74688°W  
**Direction of View:** Southeast  
**Distance to Nearest PV Panel in View:** 167 feet  
**Distance Zone:** Near-foreground

Visual Resources

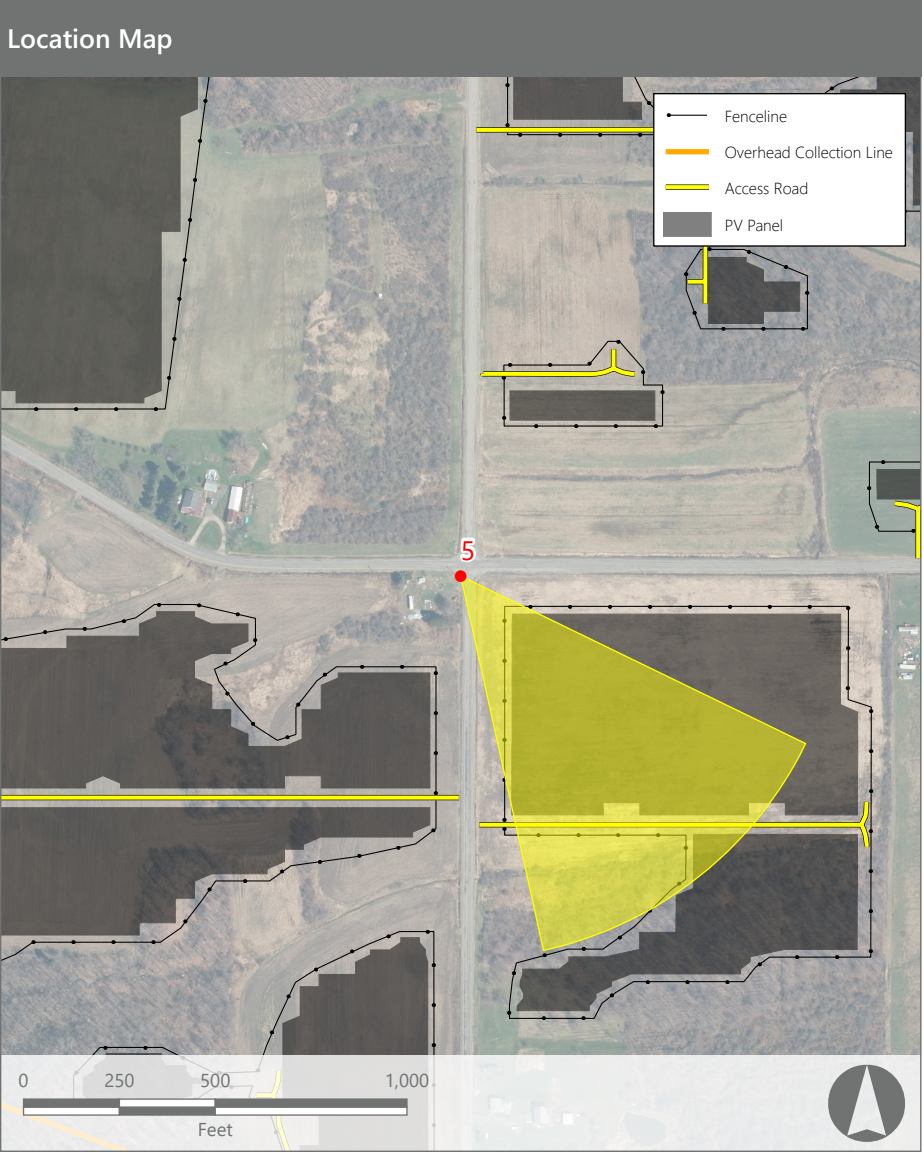
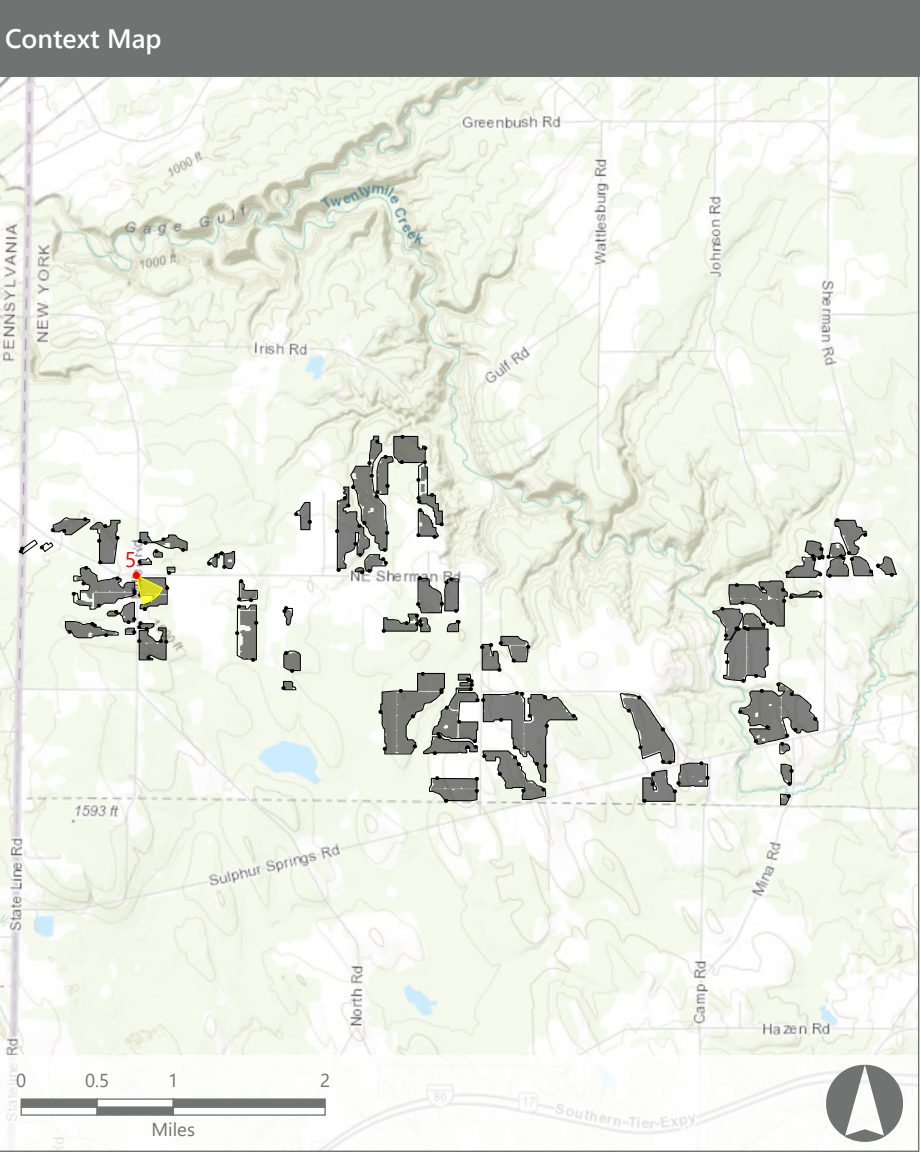
**Landscape Type:** Rural Residential/  
Agricultural  
**User Group:** Local Residents, Through-  
Travelers  
**VSR:** Concord Grape Belt State Heritage  
Area

Photograph Information

**Date Taken:** August 06, 2020  
**Time:** 11:46 AM  
**Camera:** Nikon D7100  
**Resolution:** 24.1 Megapixels  
**Lens Focal Length:** 24 mm  
**Camera Elevation:** 1,481 feet  
**Field of View:** 52°

Project Information

**Racking Type:** Fixed Tilt PV Array  
**Max Panel Height:** 13 feet AGL  
**Project Area:** 3,382 acres



Context Photo: View to the Northeast



Context Photo: View to the East



Simulation Photo: View to the Southeast



Context Photo: View to the South





Existing View



Existing Condition

Viewpoint 5 is located in the Town of Ripley at the intersection of County Route 6 and Miller Road, approximately 167 feet from the nearest proposed PV panel array. This viewpoint occurs in the western portion of the Facility Site and is representative of views available to residents traveling local roads. The existing view to the southeast includes the paved surface of Miller Road in the immediate foreground, backed by a recently harvested agricultural field. The field is separated from the road by a band of unmowed vegetation on the shoulder and is backed by a dense forested woodlot. A more distant wooded ridgeline is visible in the background on the left. The contrasting bands of color and texture in the vegetation, road and sky result in strong horizontal lines across the view. Aside from the road, man-made features are limited to a road sign on the far left, a small wind turbine behind the woodlot on the right, and a tractor in the field. The view has a strong working agricultural character and moderate scenic quality.

Proposed View



Proposed View

With the proposed Facility in place, the field beyond the roadside vegetation is now fully occupied by solar panels. The tops of some trees in the middle ground are visible above the panels, but some of this vegetation has obviously been cleared. The array is close enough to the viewer that details of the perimeter fencing and racking system are clearly visible. The dark color and hard line of the panels present strong contrast with the existing vegetation and sky. They also block views of more distant landscape features and serve to enclose the view. The panels also change the character of the landscape from agricultural to energy generation and become the new focus of the view.

View with Mitigation



Landscape Mitigation

With perimeter screen plantings in place, and following five to seven years of growth, several clumps of trees and shrubs now break up the repetition of the racking system and the linear appearance of the array. The plantings also help to soften the hard edge of the panels against the sky. The effectiveness of the plantings in screening the Facility will improve over time but will also further enclose the formerly open view. The presence of conifers amongst the plantings will assist with screening during the dormant season, but also appears somewhat inconsistent with the existing vegetation in the area.

Viewpoint Sensitivity<sup>1</sup>:

Scenic Quality:

☐ Low

☒ Moderate

☐ High

Viewer Exposure:

☐ Continuous

☒ Repeated/Regular

☒ Occasional/Brief

☐ Rare

<sup>1</sup> Viewpoint Sensitivity information is gathered from rating panel results. Scenic Quality is an average based on Low = 1, Moderate = 2, High = 3. Viewer Exposure reflects all those selected by the review panel.

Contrast Rating Scores<sup>2</sup>:

Component	Score		Contrast Rating 5-7 Years
	Install	5-7 Years	
Landform	2.8	2.0	Moderate
Vegetation	3.0	2.1	Moderate
Land Use	2.9	2.3	Moderate/Appreciable
Water	NA	NA	NA
Sky	2.5	1.6	Minimal/Moderate
Viewer Activity	2.9	2.3	Moderate/Appreciable
AVERAGE	2.8	2.1	Moderate

<sup>2</sup> Contrast Rating Scale: 0.0 - 0.2 (Insignificant), 0.3 – 0.7 (Insignificant/Minimal), 0.8 – 1.2 (Minimal), 1.3 – 1.7 (Minimal/Moderate), 1.8 - 2.2 (Moderate), 2.3 – 2.7 (Moderate/Appreciable), 2.8 – 3.2 (Appreciable) 3.3 – 3.7 Appreciable/Strong), 3.8 – 4.0 (Strong).

Contrast Rating - Lowest and Highest Scores:

Install			Mitigation		
Component	Score		Component	Score	
	Low	High		Low	High
Landform	1.5	4	Landform	1.5	3
Vegetation	2	4	Vegetation	1.5	3
Land Use	2	3.5	Land Use	1.5	3
Water	NA	NA	Water	NA	NA
Sky	1	4	Sky	0	3
Viewer Activity	2	4	Viewer Activity	1.5	3



Existing Conditions





Simulation



**South Ripley Solar Project**

Town of Ripley, Chautauqua County, New York

**Section 94-c Application. Matter No. 21-00750** | Viewpoint 5, County Route 6 and Miller Road in the Town of Ripley - Simulation



Simulation with Mitigation 5-7 Year Post Install





Simulation with Mitigation 5-7 Year Post Install (Leaf-off)





# Attachment D. Visual Simulations

## Viewpoint Information

**Viewpoint ID:** 15  
**County:** Chautauqua  
**Town:** Ripley  
**Location:** County Route 6  
**Latitude, Longitude:**  
42.19505°N, 79.70936°W  
**Direction of View:** West-Southwest  
**Distance to Nearest PV Panel in View:**  
170 feet  
**Distance Zone:** Near-foreground

## Visual Resources

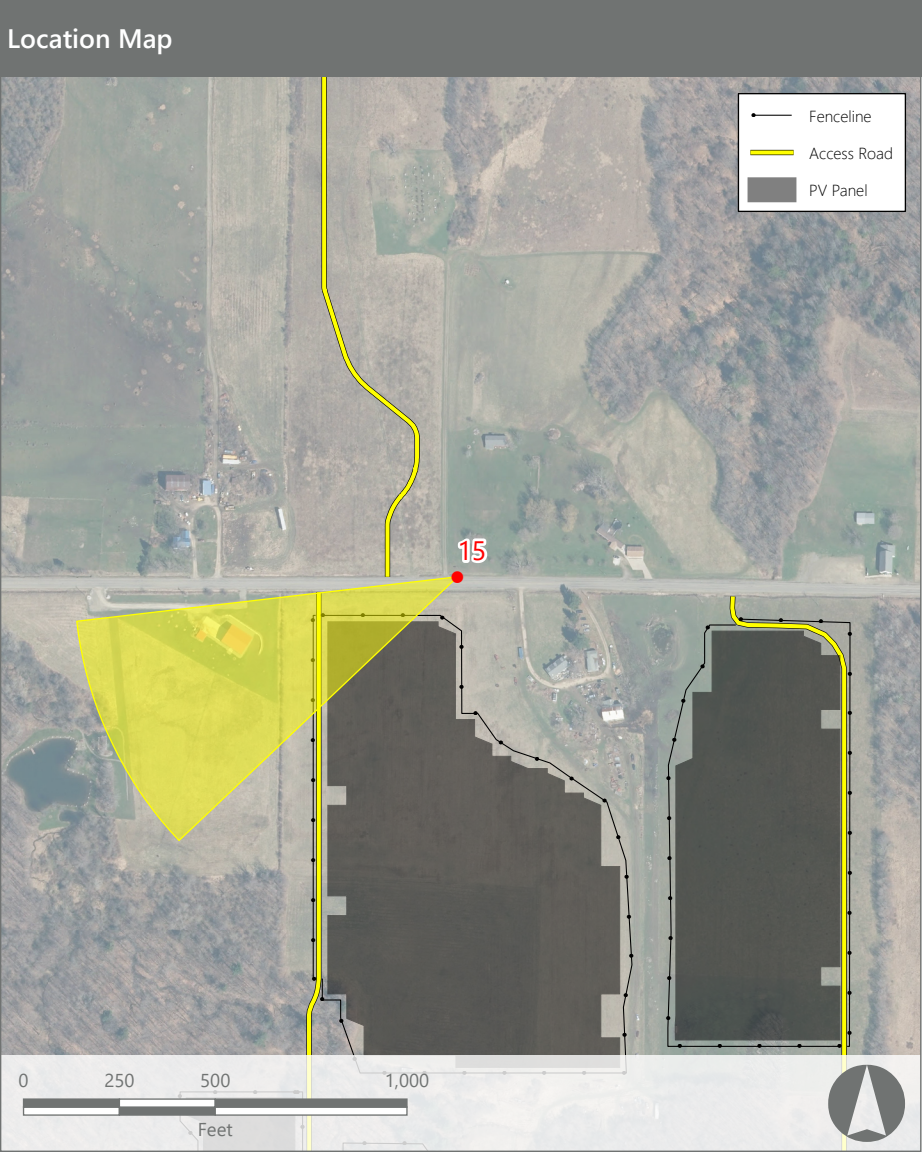
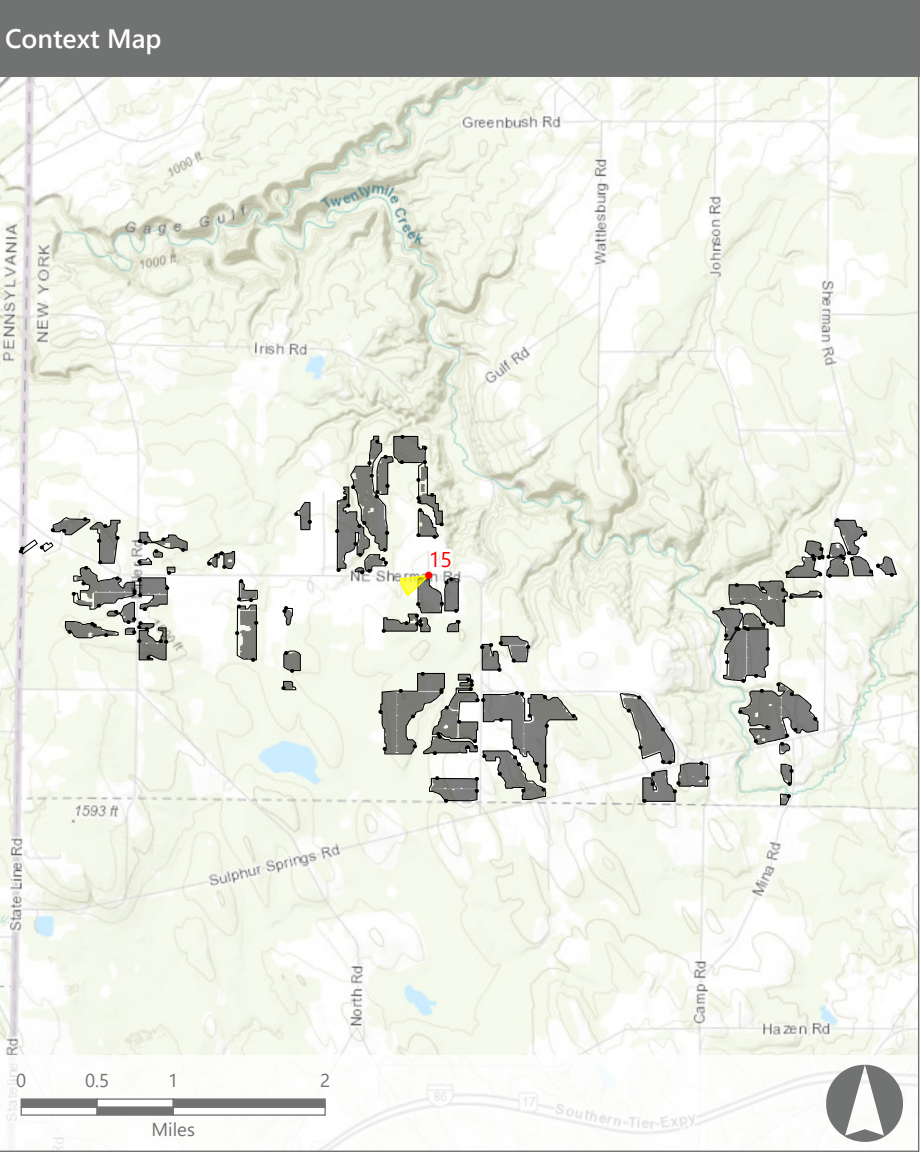
**Landscape Type:** Rural Residential/  
Agricultural  
**User Group:** Local Residents, Through-  
Travelers  
**VSR:** Concord Grape Belt State Heritage  
Area, South Ripley Cemetery, South  
Ripley Methodist Church

## Photograph Information

**Date Taken:** August 06, 2020  
**Time:** 12:36 PM  
**Camera:** Nikon D7100  
**Resolution:** 24.1 Megapixels  
**Lens Focal Length:** 24 mm  
**Camera Elevation:** 1,484 feet  
**Field of View:** 52°

## Project Information

**Racking Type:** Fixed Tilt PV Array  
**Max Panel Height:** 13 feet AGL  
**Project Area:** 3,382 acres





Existing View



Proposed View



View with Mitigation



Existing Condition

Viewpoint 15 is located in the Town of Ripley on County Route 6, approximately 152 feet from the nearest proposed PV panel array. This viewpoint is in the central portion of the Facility Site, adjacent to the South Ripley Cemetery. The existing view to the southwest from this somewhat elevated viewpoint looks down County Route 6, which draws the viewer’s eye from the immediate foreground into the background on the right side of the view. The road is paralleled on the left by a low band of brushy vegetation and an overhead utility line. Although relatively low in height, the band of brushy roadside vegetation blocks views into an adjacent open field. The land drops gently away from the viewpoint into a wooded valley, before rising again over undulating terrain to a wooded tree line that defines the visible horizon in the background. Some open fields and portions of a few buildings are visible in the middle ground and background of this largely forested landscape. The sky overhead is an attractive mix of sun and clouds, and a dominant feature of the view. The view has a strong rural residential character and moderate scenic quality.

Proposed View

With the proposed Facility in place, a small portion of the panel array and perimeter fence can be seen in the foreground field on the left adjacent to the road. However, the existing band of roadside vegetation is effective in screening the majority of the array. The panels also blend with the rolling landform and due to the presence of wooded hills in the background, do not project above the tree line into the sky. They are noticeable, but do not dominate the view. Existing vegetative elements and perspective lines are maintained. In this view the Facility has minimal impact on scenic quality or landscape character.

Landscape Mitigation

Proposed perimeter plantings reinforce the existing roadside buffer, adding color and visual interest, along with enhanced screening. The plantings blend nicely with the existing vegetation in front of and behind the array, softening the exposed horizontal edge of the panel array.

Viewpoint Sensitivity<sup>1</sup>:

**Scenic Quality:**

☐ Low

☒ Moderate

☐ High

**Viewer Exposure:**

☐ Continuous

☒ Repeated/Regular

☒ Occasional/Brief

☐ Rare

<sup>1</sup> Viewpoint Sensitivity information is gathered from rating panel results. Scenic Quality is an average based on Low = 1, Moderate = 2, High = 3. Viewer Exposure reflects all those selected be the review panel.

Contrast Rating Scores<sup>2</sup>:

Component	Score		Contrast Rating 5-7 Years
	Install	5-7 Years	
Landform	0.6	0.4	Insignificant/Minimal
Vegetation	1.1	0.5	Insignificant/Minimal
Land Use	1.5	1.0	Minimal
Water	NA	NA	NA
Sky	0.5	0.5	Insignificant/Minimal
Viewer Activity	0.9	0.6	Insignificant/Minimal
AVERAGE	0.9	0.6	Insignificant/Minimal

<sup>2</sup> Contrast Rating Scale: 0.0 - 0.2 (Insignificant), 0.3 – 0.7 (Insignificant/Minimal), 0.8 – 1.2 (Minimal), 1.3 – 1.7 (Minimal/Moderate), 1.8 - 2.2 (Moderate), 2.3 – 2.7 (Moderate/Appreciable), 2.8 – 3.2 (Appreciable) 3.3 – 3.7 Appreciable/Strong), 3.8 – 4.0 (Strong).

Contrast Rating - Lowest and Highest Scores:

Install			Mitigation		
Component	Score		Component	Score	
	Low	High		Low	High
Landform	0	1	Landform	0	1
Vegetation	0.5	1.5	Vegetation	0	1
Land Use	1	2	Land Use	0.5	1.5
Water	NA	NA	Water	NA	NA
Sky	0	1.5	Sky	0	1
Viewer Activity	0.5	1	Viewer Activity	0.5	1



Existing Conditions





Simulation





Simulation with Mitigation 5-7 Year Post Install





Simulation with Mitigation 5-7 Year Post Install (Leaf-off)





# Attachment D. Visual Simulations

## Viewpoint Information

**Viewpoint ID:** 16  
**County:** Chautauqua  
**Town:** Ripley  
**Location:** County Route 6  
**Latitude, Longitude:**  
42.19504°N, 79.70556°W  
**Direction of View:** South-Southwest  
**Distance to Nearest PV Panel in View:**  
179 feet  
**Distance Zone:** Near-foreground

## Visual Resources

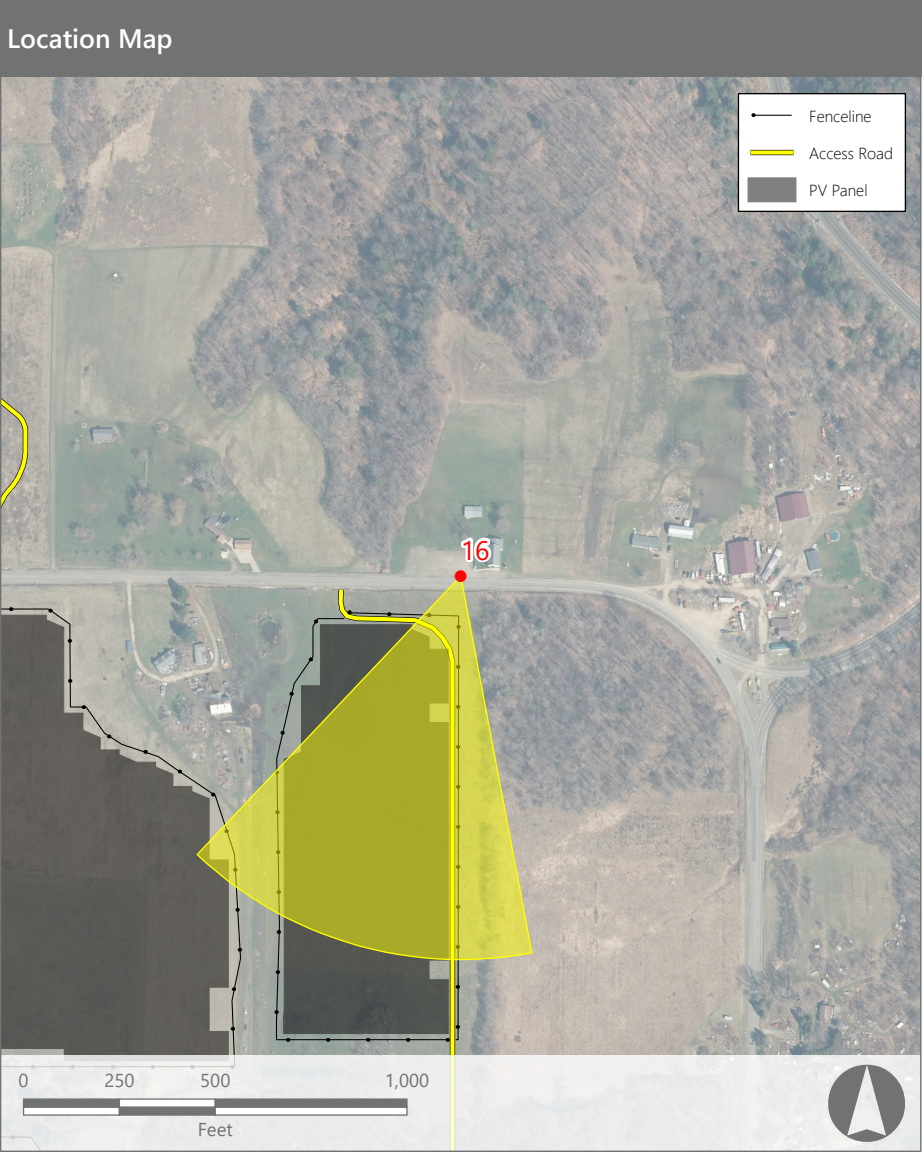
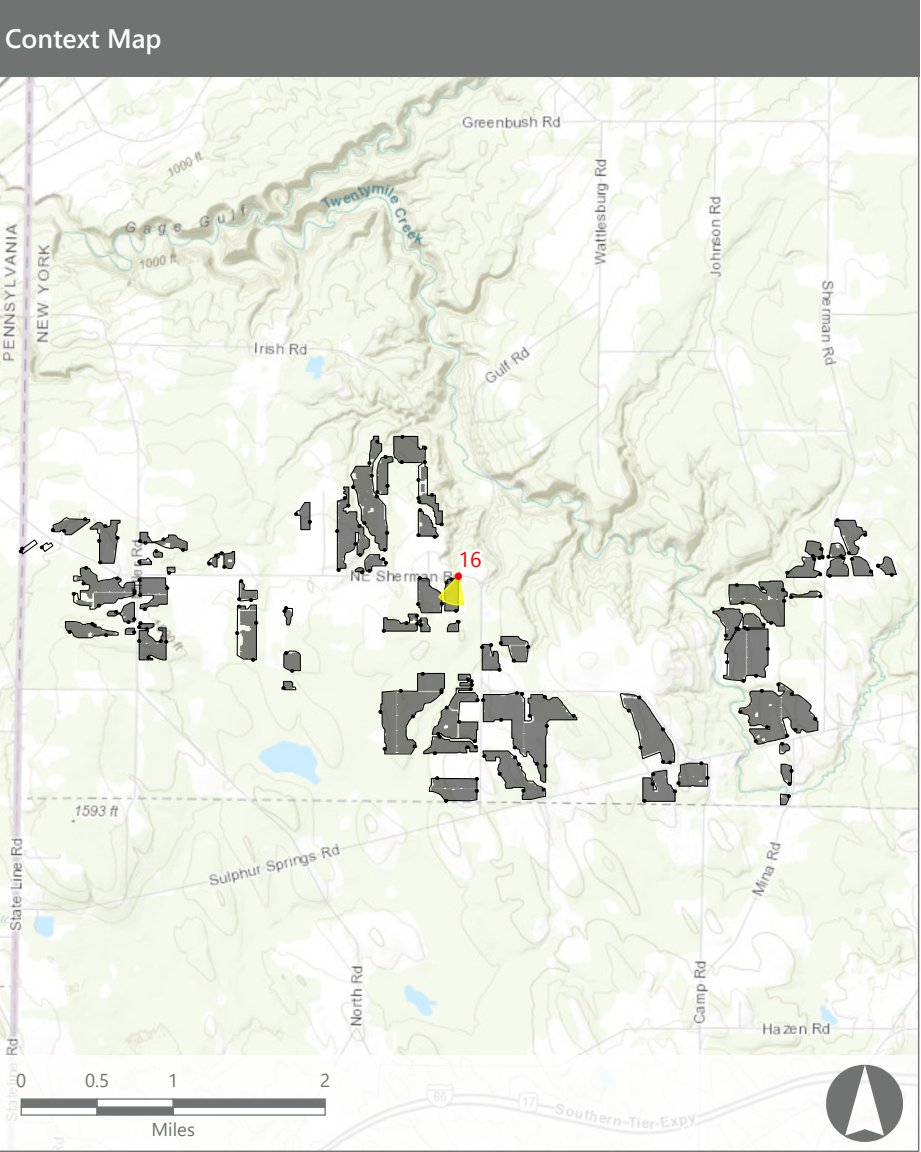
**Landscape Type:** Rural Residential/  
Agricultural  
**User Group:** Local Residents, Through-  
Travelers  
**VSR:** Concord Grape Belt State Heritage  
Area, South Ripley Methodist Church

## Photograph Information

**Date Taken:** August 06, 2020  
**Time:** 12:41 PM  
**Camera:** Nikon D7100  
**Resolution:** 24.1 Megapixels  
**Lens Focal Length:** 23 mm  
**Camera Elevation:** 1,470 feet  
**Field of View:** 54°

## Project Information

**Racking Type:** Fixed Tilt PV Array  
**Max Panel Height:** 13 feet AGL  
**Project Area:** 3,382 acres



Context Photo: View to the East-Southeast



Context Photo: View to the Southeast



Simulation Photo: View to the South-Southwest



Context Photo: View to the Southwest

## South Ripley Solar Project

Town of Ripley, Chautauqua County, New York

Section 94-c Application. Matter No. 21-00750

