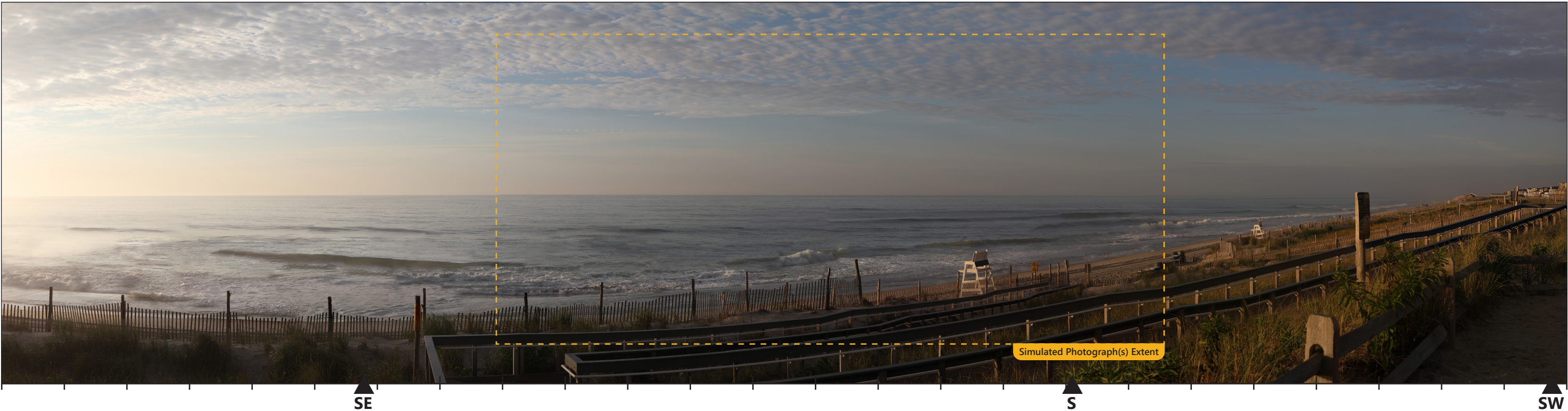


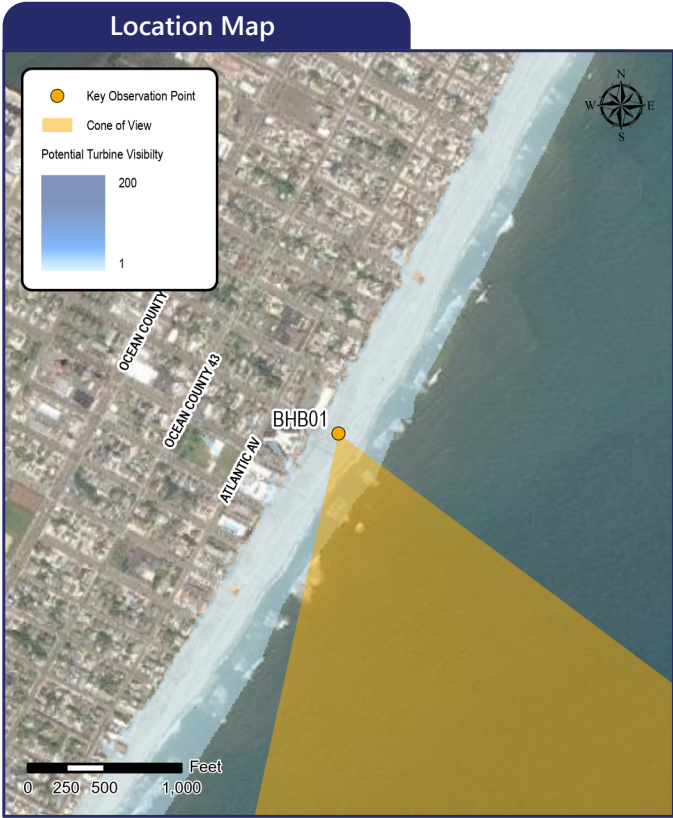
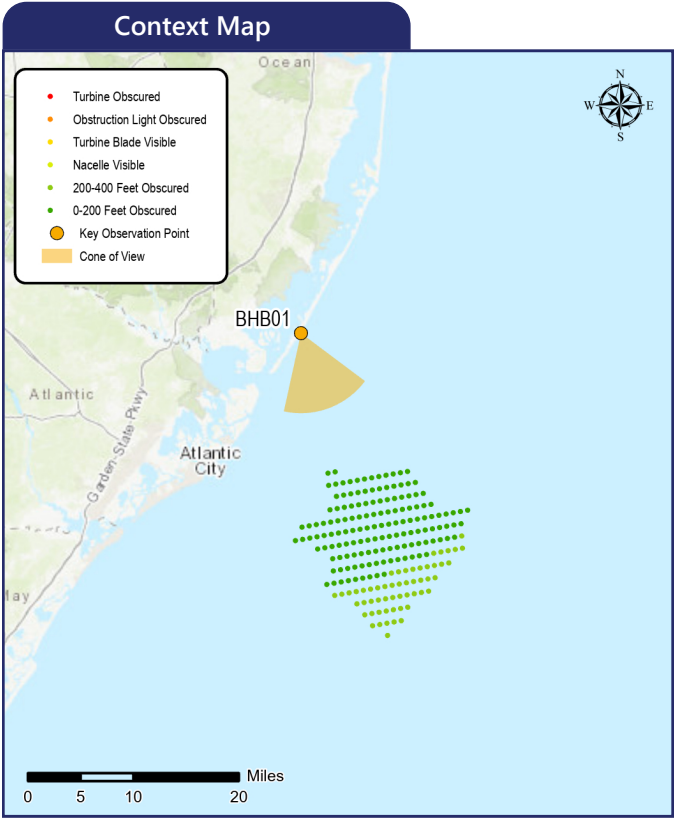
BHB01 Beach Haven Historic District

Beach Haven Borough, Ocean County, New Jersey

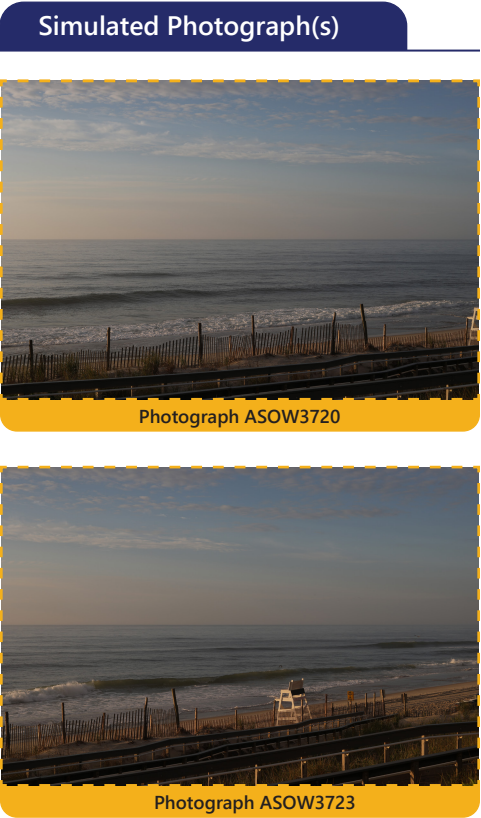


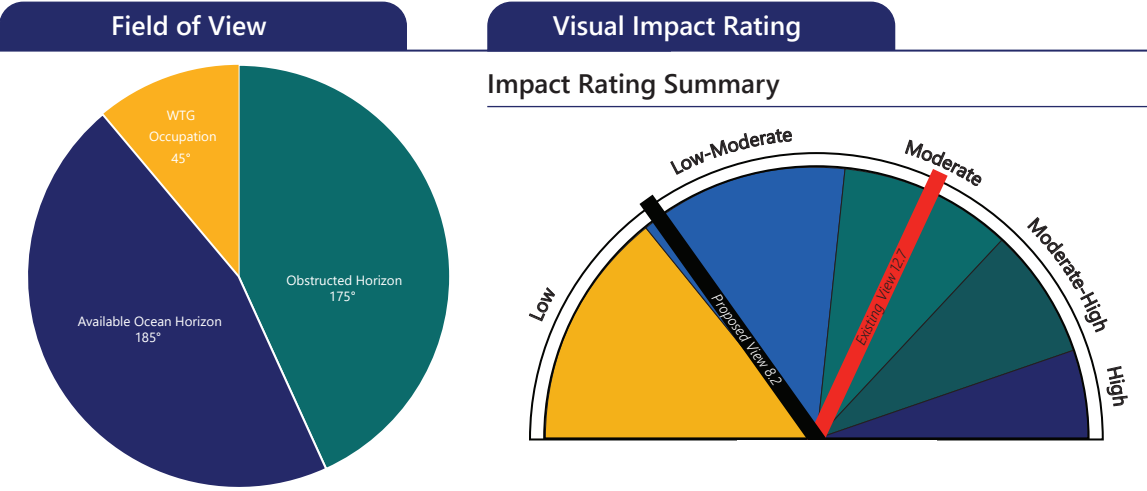
The image above is a +/- 124° panorama photograph from the Beach Haven Historic District, panning clockwise from east-southeast (left) to southwest (right). The yellow rectangle within the photo represents the extent of the photosimulation photo(s).

Notes
Printed at 100%, the photosimulations are 15 inches wide by 10 inches high. At this size, the photosimulation(s) should be viewed from a distance of 21 inches. Night time photosimulations are digitally adjusted from daytime photographs.



Simulation Information	
Coordinates:	39.56188°N, 74.23545°W
Character Area:	Oceanfront Residential, Seascape (SCA)
User Group:	Residents/Tourists, Fishermen
Direction of View:	South-southeast
Distance to Nearest Visible Turbine:	13.5 miles
Visually Sensitive Resource:	Beach Haven Borough Public Beach, Beach Haven Historic District
Environmental Information	
Date Taken:	08/19/2020
Time:	6:53 AM
Temperature:	73°F
Humidity:	87%
Visibility:	10 miles
Wind Direction:	Calm
Wind Speed:	0 mph
Conditions Observed:	Cloudy
Photograph Information	
Camera:	Canon EOS 5D Mark IV
Resolution:	30.4 Megapixels
Focal Length:	50mm
Camera Height:	17.72 feet AMSL
Meteorological Visibility Model (2019)	
Visibility Conditions Represented in Photosimulation: 30 Miles	
Frequency of Visibility Condition in August, 2020: 6.3%	
Alternative Condition/Frequency #1: 18 miles/(19.4%)	
Alternative Condition/Frequency #2: 20 miles/(15.2%)	





Visual Threshold Level (VTL)

5

An object/phenomenon that is not large but contrasts with the surrounding landscape elements so strongly that it is a major focus of visual attention, drawing viewer attention immediately and tending to hold that attention. In addition to strong contrasts in form, line, color, and texture, bright light sources such as lighting and reflections and moving objects associated with the study subject may contribute substantially to drawing viewer attention. The visual prominence of the study subject interferes noticeably with views of nearby landscape/seascape elements (Sullivan et al., 2013).

Principles of Composition and Factors Affecting Visual Impact Summary	
Design Elements	Description
Focal Point	The tall beach lookout chair anchors this view and provides a focal point due to its contrasting color. Secondary focal points include the beach fencing, pink-tinged horizon line and cotton-candy clouds.
Order	The horizontal landscape is punctuated by the repeating vertical fence elements and railings, which are a visual barrier, and the broken clouds in the sky that compress the view to the center of the image.
Visual Clutter	There is “clutter” in this view (boardwalk railing, dilapidated shoreline fence, signage, and lifeguard chair) but it is not significant enough to disrupt any kind of natural order.
Movement	Waves, boats on the water, people on the beach, and wildlife.
Duration & Frequency of View	Moderate to long duration and high frequency view experienced by residents and beach-goers.
Atmospheric Conditions	The early morning view has a dark sky, a clear or bright sky would increase WTG definition.; Drier conditions might increase visibility
Lighting Direction	
Scenic or Recreational Value	NRHP Historic District and this location is a popular beach destination. The ocean is the major contribution to the scenic value of this resource.

SQC & Magnitude of Impact					
Beach Haven Historic District					
	KAC	KAV	JMG	SMB	Average
Existing	11.7	12.3	13.7	13.0	12.7
Proposed	10.7	10.0	7.3	4.7	8.2
Change	1.0	2.3	6.3	8.3	4.5

Compatibility and Contrast Rating Average			
Beach Haven Historic District			
Resource	Compatibility	Scale	Spatial Dominance
Water Resources	2.8	2.8	2.5
Landform	1.5	1.5	2.0
Vegetation	1.3	1.3	2.0
Land Use	2.5	2.3	2.3
User Activity	2.5	2.3	2.3
<div><div><div>1 – Compatible</div><div>2 – Somewhat Compatible</div><div>3 – Not Compatible</div></div><div><div>1 – Minimal</div><div>2 – Moderate</div><div>3 – Severe</div></div><div><div>1 – Subordinate</div><div>2 – Co-Dominant</div><div>3 – Dominant</div></div></div>			

Existing Conditions

Scenic Quality Classification: Moderate

Rating Panel Score Average: 12.7

Rating Panel Score Range: 11.7 - 13.7

This view is from the edge of the Beach Haven Historic District in the Borough of Beach Haven, New Jersey. The District was added to the National Register of Historic Places on July 14, 1983 for its significance in architecture and history as a beachfront resort during the 19th century. The District’s boundary was increased on November 19, 2014 to cover 30 square blocks, with its boundary running from 5th Street to Chatsworth Avenue and from Bay Avenue to Atlantic Avenue. It now includes 149 contributing buildings. The adjacent Beach Haven Borough Public Beach is a popular swimming and sunbathing destination on Long Beach Island. In-season access requires a beach badge, and lifeguard and beach patrol services are provided.

The existing view to the south-southeast from this location looks across a fenced dune restoration area directly out to the ocean. The early morning light is illuminating the fence posts and lifeguard chairs, as well as the surface of the sand and foam along the beach. Continuing away from the gentle surf, the ocean’s surface is a silver blue to deep green color, reflecting the rising sun. Swells near the shoreline give way to a relatively smooth water surface that extends to the horizon line. In the distance, the blue water meets low, illuminated clouds on the horizon, which then transitions to a blue sky streaked with clouds overhead. Adjacent residential development is not visible (behind the viewer), but the abundant fencing, lifeguard chairs, and signage demonstrate a strong level of human use/management along the beach. The view is peaceful and the lighting is attractive, and the overall scenic quality of this view is average to distinct.

Rating panel members indicated that the view of the early morning light across the open water with the warm tones of the sand and the deep green of the ocean is visually appealing. The dapple clouded, light blue sky is accentuated by the pink tinge along the horizon. In contrast to the natural beauty of the seascape, the foreground view contains a high level of man-made visual clutter, however, the horizontal lines of the elements, that include the beach fencing, ramp rails, and signposts, are installed parallel to the shoreline and complement the rolling wave action, thereby not entirely detracting from the view. It was also noted by a rating panel member that while the view appears to be undeveloped, the viewer merely needs to turn 180-degrees to observe the heavily built residential Historic District behind them. Rating panel scores for the existing conditions photographs ranged from 11.7 to 13.7 (average SQC score = 12.7). The SQC Score indicates that this KOP has attributes consistent with moderate scenic quality.

Proposed Conditions

Scenic Quality Classification: Low-Moderate

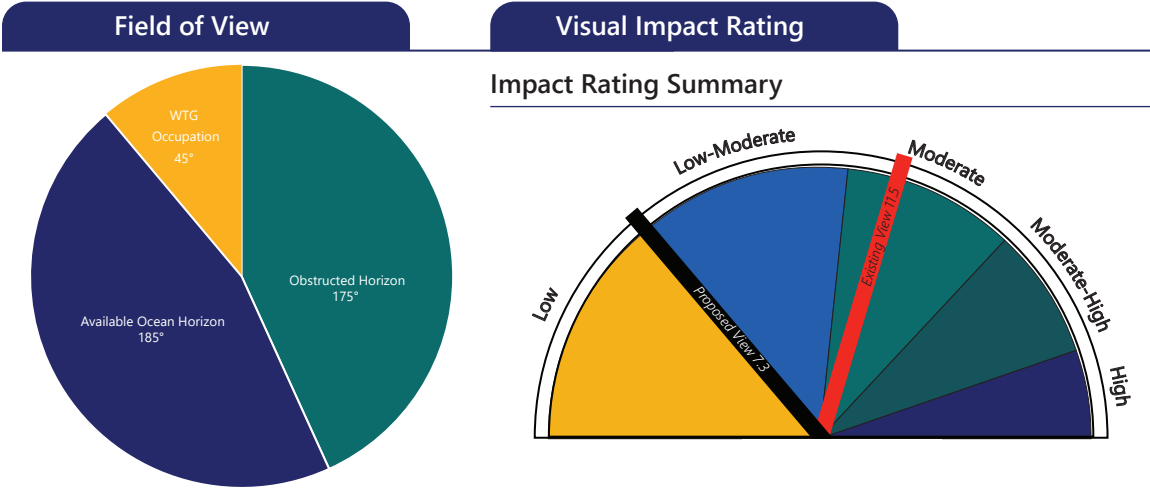
Rating Panel Score Average: 8.2

Rating Panel Score Range: 4.7 - 10.7

Impact Magnitude: 4.5

With the proposed Project in place, the view is dominated by a large array of WTGs that span across an extensive portion of the ocean view to the south-southwest from this location. The Project is in varying states of visibility due to the side-lit conditions of the morning sky. Of the 185-degrees of relatively unobstructed ocean horizon, the Project occupies approximately 45-degrees or approximately 24 percent of the view. Project visibility is enhanced by the relative proximity of the WTGs and the rising sun side-lighting condition, which makes the WTGs appear light colored and a ghostly blue-gray color against the pink horizon. Rating panel members had a somewhat variable range of reactions to the impact resulting from the Project WTGs, with the VIA scores ranging from 4.7 to 10.7 (average score = 8.2). These scores indicate an average reduction of 4.5 points in comparison to the existing view, which suggests high magnitude impacts would result from the Project during clear conditions. Individual rating panel members indicated score reductions that ranged from 1.0 to 8.3. One panel member suggested that the WTGs are a dominant built feature in a once nearly pristine seascape. Despite the light color and slender silhouette of the WTGs against the sky, the stacking of the WTGs (in the left of the view) splays into a perceived arrangement of disorganized and random elements as the viewer moves to the right, thereby creating an increased sense of visual clutter. The movement of the overlapping rotor blades will also attract viewer attention and make the WTGs the focus of this ocean view. However, the clear conditions presented in this photosimulation are not typical or frequent viewing conditions. Based on the 2019 meteorological data, the atmospheric conditions represented in this photosimulation (visibility extending to 32 miles) only occurs during approximately 7% of the daylight hours in August. Two additional photosimulations were created to illustrate atmospheric conditions that occur during 15% and 20% of the daylight hours in August to show more typical visibility conditions. During 15% of daylight hours visibility extends to a distance of 20 miles and during 20% of daylight hours visibility extends to 18 miles. As illustrated in the 15% scenario, only the first few rows of WTGs are faintly visible on the horizon and their prominence is significantly reduced due to a reduction in color contrast and less visible stacking or layering of multiple rows of WTGs. During the 20% scenario, even the nearest WTGs become difficult to see though the atmospheric haze. It is important to note that during these atmospheric condition scenarios, weather conditions on the shore are still perceived as clear and viewers would likely characterize the day as “very clear”.

Panel members assigned the Project visibility an average VTL of 5 from this KOP. The WTGs were considered not compatible, resulted in severe scale contrast, and are the dominant feature when considered in the context of the Ocean (water resources). The rating panel also indicated significant scale, compatibility, and spatial dominance contrast with land use and user activity. These scores are consistent with a VTL of 5.



Visual Threshold Level (VTL)

5

An object/phenomenon that is not large but contrasts with the surrounding landscape elements so strongly that it is a major focus of visual attention, drawing viewer attention immediately and tending to hold that attention. In addition to strong contrasts in form, line, color, and texture, bright light sources such as lighting and reflections and moving objects associated with the study subject may contribute substantially to drawing viewer attention. The visual prominence of the study subject interferes noticeably with views of nearby landscape/seascape elements (Sullivan et al., 2013).

Principles of Composition and Factors Affecting Visual Impact Summary	
Design Elements	Description
Focal Point	The lifeguard chair becomes a focal point only because it is white in an otherwise dark landscape.
Order	The layering of shoreline, open water and horizon create a natural order.
Visual Clutter	There is hardly any ambient light to illuminate the context. The fence line and chair in the foreground attract one’s attention.
Movement	Waves and buoy lights likely to be the only features in motion.
Duration & Frequency of View	Short Duration and Occasional
Atmospheric Conditions	Clear
Lighting Direction	NA
Scenic or Recreational Value	Beach Haven Historic District; This area will be used by nearby homeowners and visitors for recreation and views of the nighttime sky.

SQC & Magnitude of Impact					
Beach Haven Historic District - Night					
	KAC	KAV	JMG	SMB	Average
Existing	9.8	12.3	11.8	12.0	11.5
Proposed	9.5	9.7	5.2	4.7	7.3
Change	0.3	2.7	6.7	7.3	4.3

Compatibility and Contrast Rating Average			
Beach Haven Historic District - Night			
Resource	Compatibility	Scale	Spatial Dominance
Water Resources	2.3	2.3	2.3
Landform	1.5	1.8	2.3
Vegetation	1.0	1.0	1.5
Land Use	2.6	2.6	2.8
User Activity	2.5	2.8	2.8
<div><div><div>1 – Compatible</div><div>2 – Somewhat Compatible</div><div>3 – Not Compatible</div></div><div><div>1 – Minimal</div><div>2 – Moderate</div><div>3 – Severe</div></div><div><div>1 – Subordinate</div><div>2 – Co-Dominant</div><div>3 – Dominant</div></div></div>			

Existing Conditions

Scenic Quality Classification: Moderate
Rating Panel Score Average: 11.5
Rating Panel Score Range: 9.8 - 12.3

This nighttime view is from the edge of the Beach Haven Historic District in the Borough of Beach Haven, New Jersey. The existing view from this KOP is extremely dark, presenting few features that allow the eye to focus, except for a fence in the foreground and low surf at the shoreline. Although the open ocean is directly in front of the viewer, the horizon is barely visible in the distance below a subtle veil of low clouds. In this setting, user experience at the KOP is more likely to be defined by the extreme darkness, and the sound and smell of the adjacent ocean, rather than any visual components of the landscape.

Rating panel scores for the existing conditions photograph ranged from 9.8 to 12.3 (average SQC score = 11.5). The SQC Score for this KOP indicates that the nighttime view from this KOP has moderate scenic quality.

Proposed Conditions

Scenic Quality Classification: Low-Moderate
Rating Panel Score Average: 7.3
Rating Panel Score Range: 4.7 - 9.7
Impact Magnitude: 4.3

With the proposed Project in place, the WTG’s flashing red lights extend across a substantial portion of the horizon. The visual effect of the lights is accentuated by their number, expanse, and the stacking of rows of WTGs, which increases the intensity of the lights and creates visual hot spots in the view. Due to the lack of other visible features, the WTG lights are the only real focus of the view. All other landscape elements blend together in the dark in comparison to the lights. Due to viewer perspective of the WTG array’s grid layout the WTGs appear as a splay of red lights in the middle of the view that appears somewhat odd. Variation in perceived WTG height (due to varying distance from the viewer) in combination with the flash pattern and rotor movement will make the lights the dominant feature of the view.

Rating panel members had variable reactions to the nighttime impact resulting from the Project WTGs, with the VIA scores ranging from 4.7 to 9.7 (average score = 7.3). These scores indicate an average reduction of 4.3 points in comparison to the existing view suggesting high magnitude impacts. Individual rating panel members indicated reductions that ranged from 0.3 to 7.3. With the Project in place, the AWOLs result in a reduction of low to moderate scenic quality of the view.

The rating panel scores indicated an average VTL score of 5. Considering the compatibility, scale contrast, and spatial dominance factors that influenced the VTL at this KOP, impacts to user activity and land use were the greatest. The rating panel felt the AWOLs are not compatible, present severe scale contrast, and dominate the nighttime view. The AWOLs present moderate scale contrast with the ocean (water resources), as well as co-dominance and

Existing Conditions



Photosimulation



Photosimulation - 18-mile Visibility



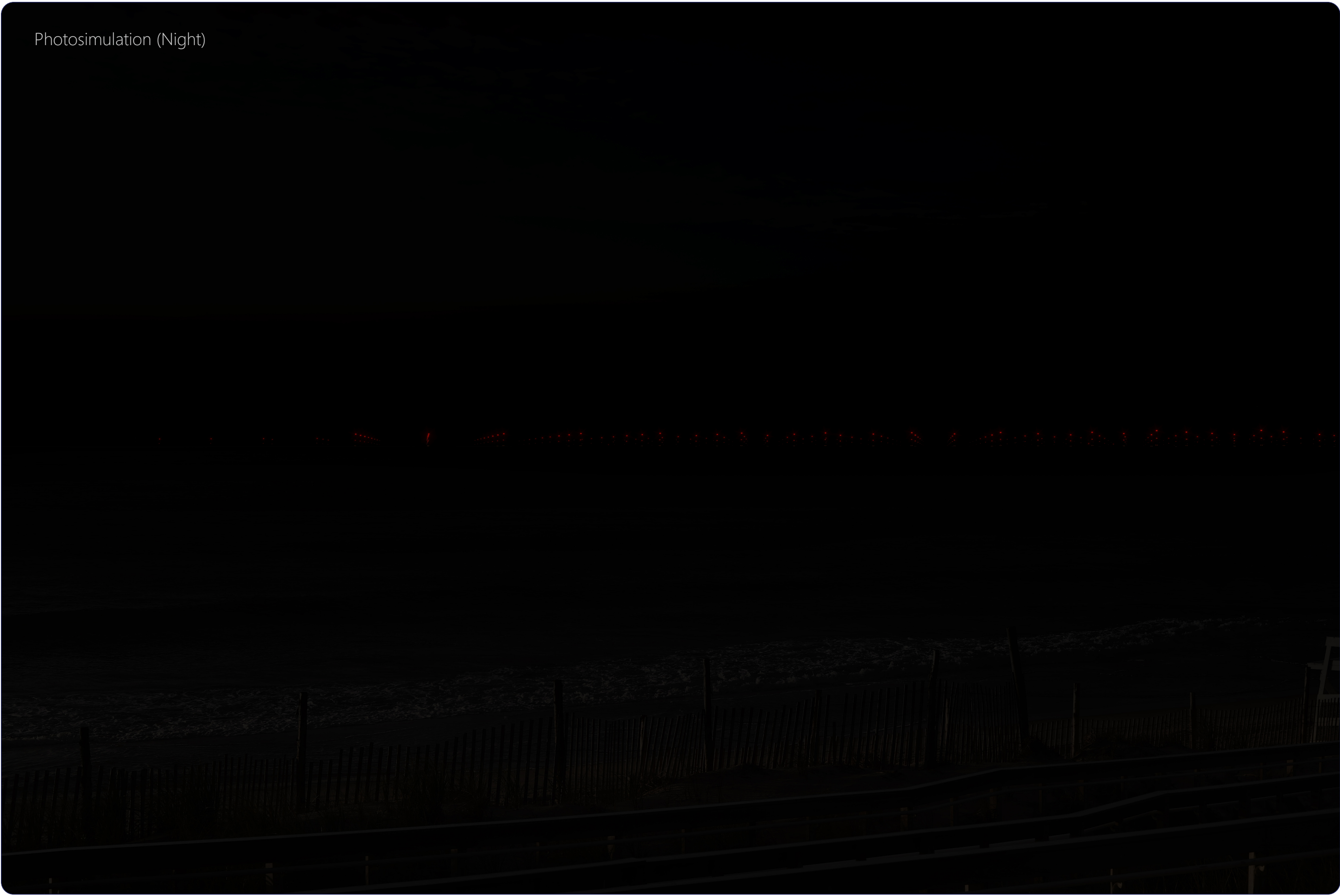
Photosimulation - 20-mile Visibility



Existing Conditions (Night)



Photosimulation (Night)



Existing Conditions



This scale is designed to insure the photosimulation images are printed at the intended size.

Photosimulation



Printed at 100% the resulting photosimulation size is 15 inches wide by 10 inches high. At this size and focal length, the photosimulation should be viewed from a distance of 21 inches.



This scale is designed to insure the photosimulation images are printed at the intended size.

Photosimulation - 18-mile Visibility



Photosimulation - 20-mile Visibility



Existing Conditions (Night)



Photosimulation (Night)

