

KOP: Umpqua Lighthouse | Season: Spring | Time of Day: Morning

Base Photographic Documentation

Date (MM/DD/YYYY):	3/29/2023
Time (24hr):	9:13
GPS Longitude:	-124.1988873
GPS Latitude:	43.66301076
Viewpoint Elevation (ft):	113.9009
Camera Height (ft):	5.41
Camera Heading:	WNW

Turbine Information

Distance to Nearest Turbine (Miles):	32.79
Number of Turbines:	262
Hub Height (ft):	725
Support Structure Height (ft):	106
Rotor Diameter (ft):	935
Total Height to Tip of Blade (ft):	1,171

Image Preview



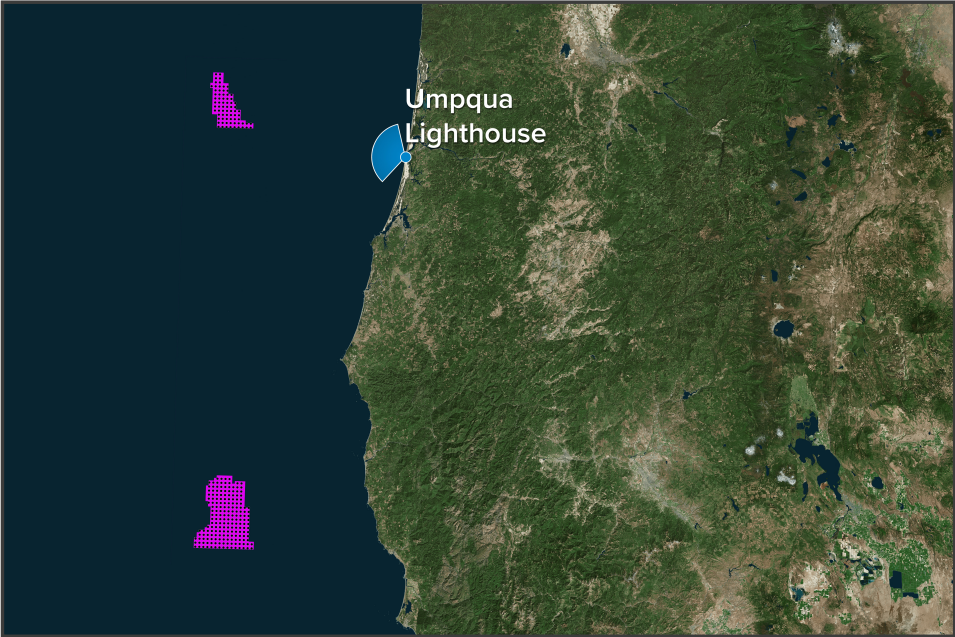
Camera Information

Camera Make & Model:	Canon EOS 5DS R
Camera Sensor Size:	36mm x 24mm
Lens Make & Model:	Sigma F1.4 DG HSM A031
Lens Focal Length:	20mm
Field of View:	65.47ø (H) / 46.397ø (V)

Sun, Sky, and Weather Information

Sun Azimuth:	115.76
Sun Elevation:	42.01
Lighting Angle (On Turbines):	Left Lit
Weather Conditions:	Partly Cloudy
Predicted Visibility (Miles):	11.93
Temperature (°F):	43
Temperature (°C):	6
Humidity (%):	86
SQM Reading:	N/A

Context Map



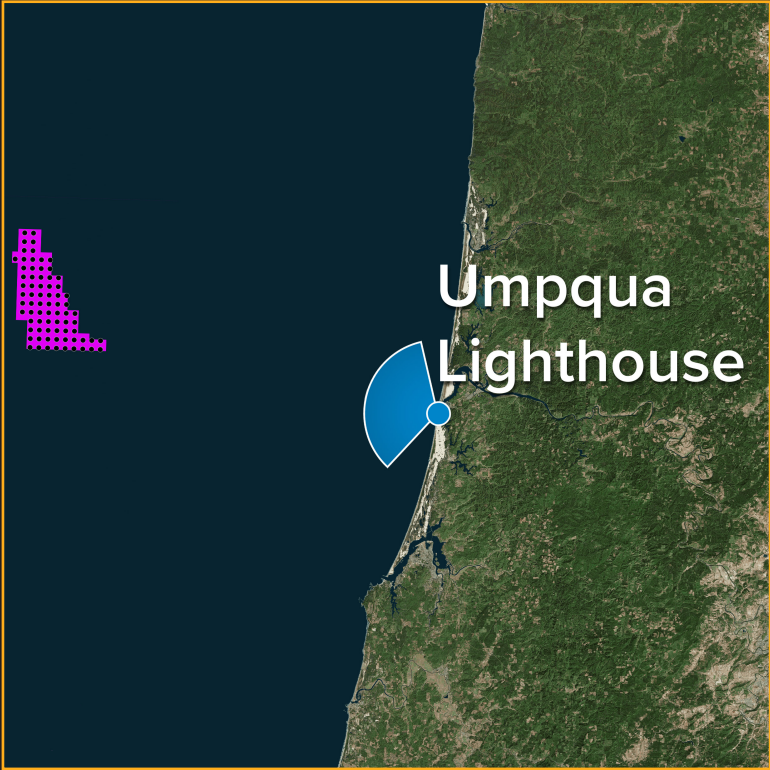
Viewing Instructions

For 11 x 17 inch Printed Display:	Viewing distance is 19.7 inches (500 mm)
For On-Screen Display:	Viewing distance is 19.7 inches (500 mm)



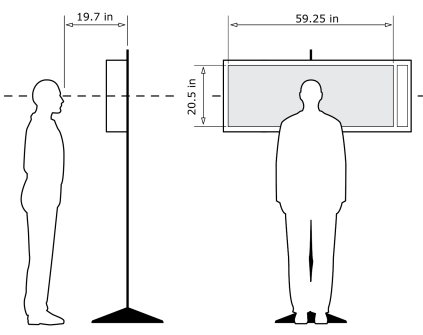
Umpqua Lighthouse, Morning, Heading WNW - Existing View

For on-screen display:
Scale bar to be 4 inches wide
Viewing distance 19.7 inches



Latitude: 43.6631076
Longitude: -124.1988873
Elevation of Viewpoint Position: 113.9009
Height of Camera Above Ground: 5.41 ft
Date of Photography: 3/29/2023 at 9:13
Horizontal Field of View: 124°
Vertical Field of View: 55°

CORRECT VIEWING OF TRUEVIEW™ PHOTO SIMULATIONS



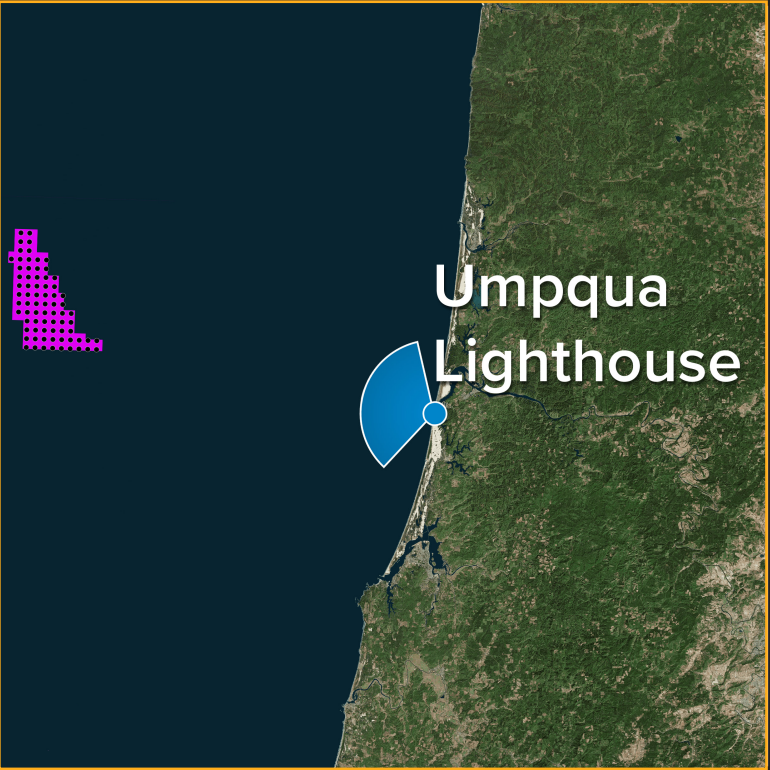
NOTES:
Viewpoint locations have been precision surveyed by
Surveyor:
Westland Resources
Engineering & Environmental Services Inc.
Portland, OR
(971) 256-0046
Heights are above mean sea level.
Structure design and placement are subject to final engineering.
No part of this photo simulation shall be altered in any way.

Photo Simulation Created Using
TrueView™ Technology
(Patent No.: US 8,184,906 B2)
Provided by



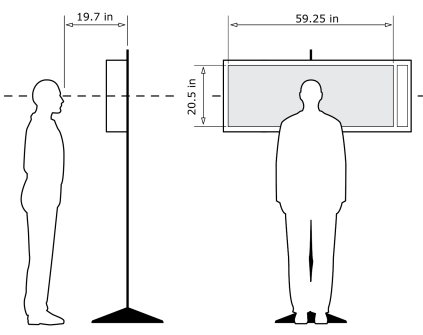
Umpqua Lighthouse, Morning, Heading WNW - Proposed View - Predicted Visibility

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Umpqua Lighthouse, Morning, Heading WNW - **Proposed View - Maximum Visibility**

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Viewing distance 19.7 inches



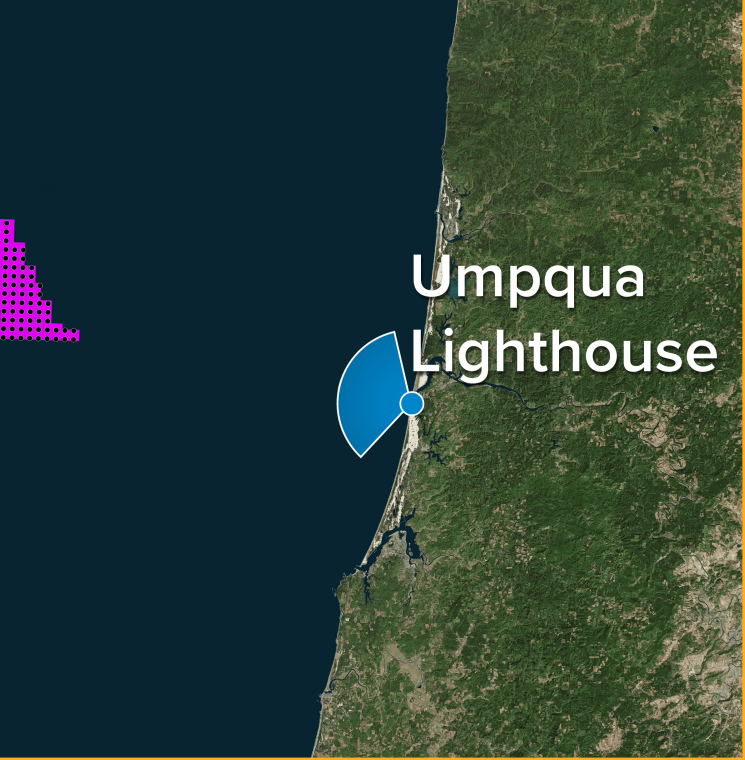
BUREAU OF OCEAN ENERGY MANAGEMENT

KW Oregon Offshore Wind

Umpqua Lighthouse
Spring / Morning
Heading WNW

● Viewpoint Location

● Project Area



Umpqua Lighthouse

Latitude:

43.66301076

Longitude:

-124.1988873

Elevation of Viewpoint Position:

113.9009

Height of Camera Above Ground:

5.41 ft

Date of Photography:

3/29/2023 at 9:13

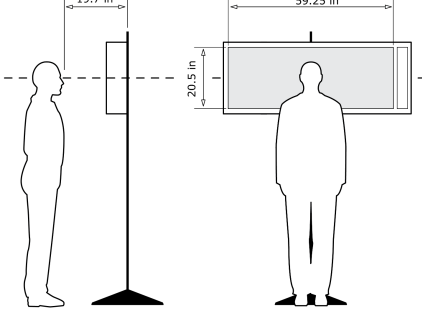
Horizontal Field of View:

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Vertical Field of View:

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Provided by

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truescape.com

3/29/2023 at 9:13 -XOP-5



For on-screen display:
Scale bar to be 4 inches wide
Viewing distance 19.7 inches

KOP: Umpqua Lighthouse | Season: Spring | Time of Day: Noon

Base Photographic Documentation

Date (MM/DD/YYYY):	3/29/2023
Time (24hr):	12:18
GPS Longitude:	-124.1988873
GPS Latitude:	43.66301076
Viewpoint Elevation (ft):	113.9009
Camera Height (ft):	5.41
Camera Heading:	WNW

Turbine Information

Distance to Nearest Turbine (Miles):	32.79
Number of Turbines:	262
Hub Height (ft):	725
Support Structure Height (ft):	106
Rotor Diameter (ft):	935
Total Height to Tip of Blade (ft):	1,171

Image Preview



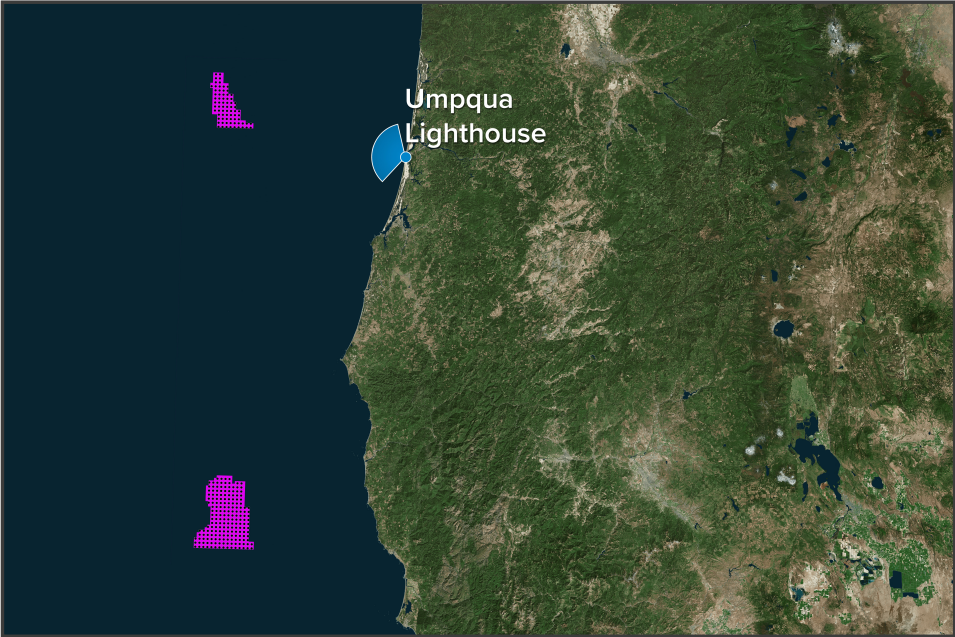
Camera Information

Camera Make & Model:	Canon EOS 5DS R
Camera Sensor Size:	36mm x 24mm
Lens Make & Model:	Sigma F1.4 DG HSM A032
Lens Focal Length:	20mm
Field of View:	65.47ø (H) / 46.397ø (V)

Sun, Sky, and Weather Information

Sun Azimuth:	184.72
Sun Elevation:	58.99
Lighting Angle (On Turbines):	Top-Left Lit
Weather Conditions:	Sunny
Predicted Visibility (Miles):	26.71
Temperature (°F):	55
Temperature (°C):	13
Humidity (%):	53
SQM Reading:	N/A

Context Map



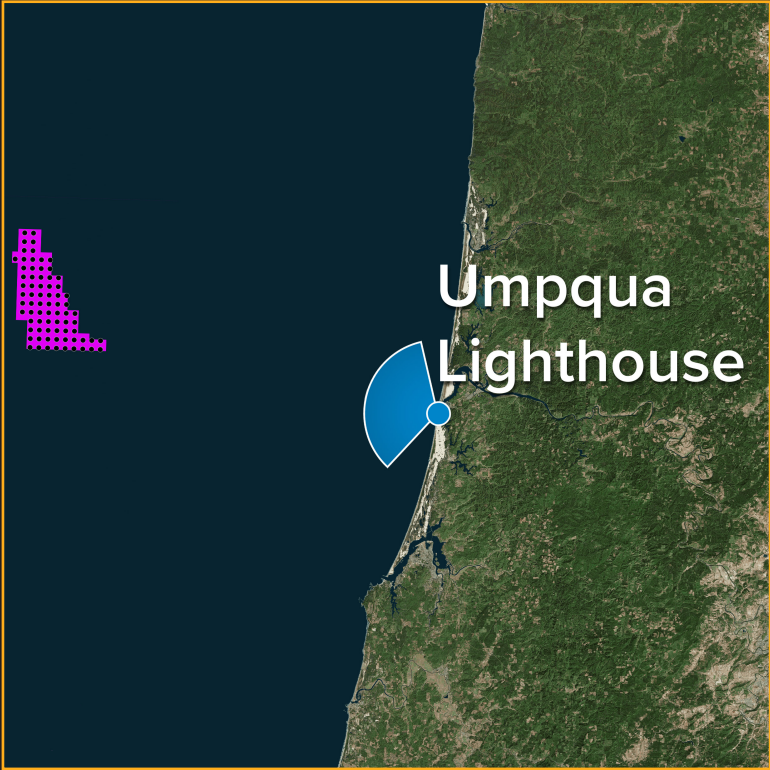
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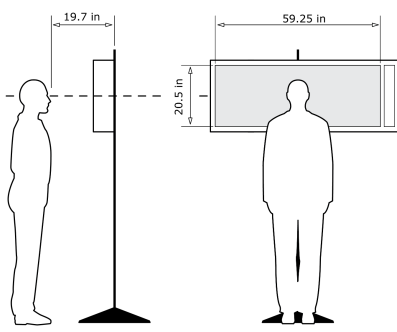
Umpqua Lighthouse, Noon, Heading WNW - Existing View

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Scale bar to be 4 inches wide
Viewing distance 19.7 inches



Latitude: 43.66301076
Longitude: -124.1988873
Elevation of Viewpoint Position: 113.9009
Height of Camera Above Ground: 5.41 ft
Date of Photography: 3/29/2023 at 12:18
Horizontal Field of View: 124°
Vertical Field of View: 55°

CORRECT VIEWING OF TRUEVIEW™ PHOTO SIMULATIONS



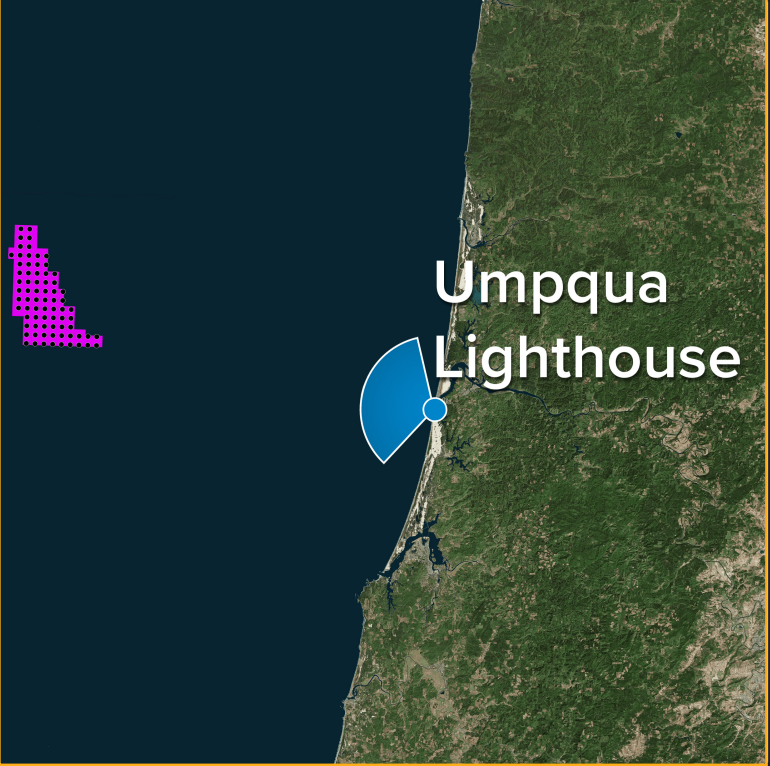
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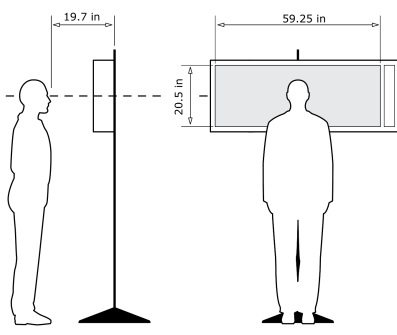
Umpqua Lighthouse, Noon, Heading WNW - **Proposed View - Predicted Visibility**

For on-screen display:
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Height of Camera Above Ground: 5.41 ft
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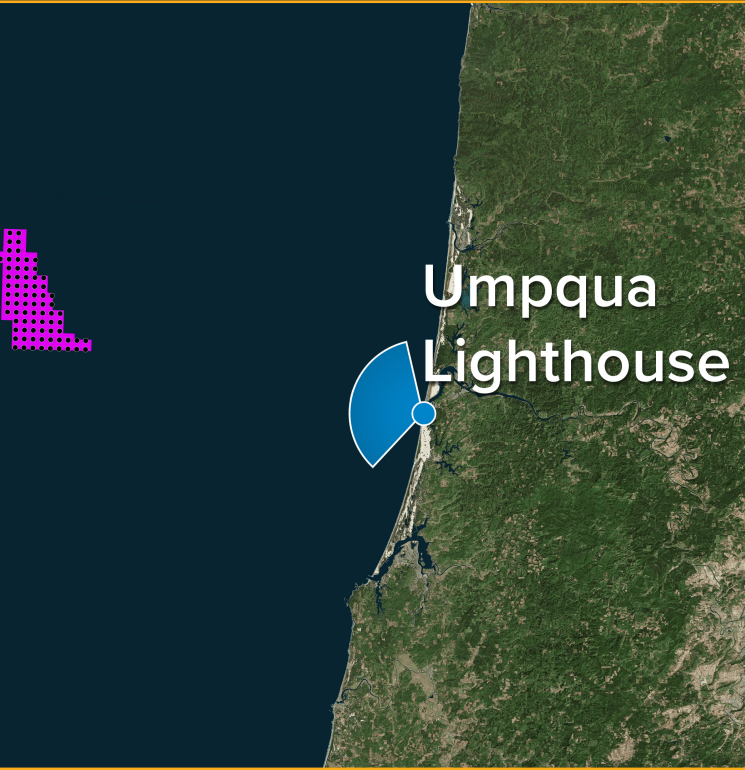


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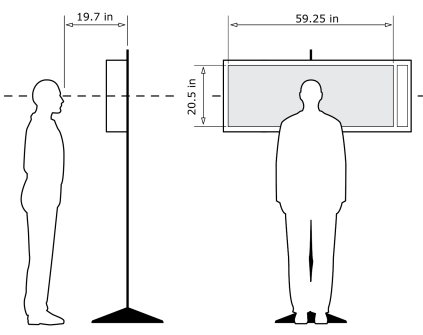
Umpqua Lighthouse, Noon, Heading WNW - **Proposed View - Maximum Visibility**

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For on-screen display:
Scale bar to be 4 inches wide
Viewing distance 19.7 inches

KOP: Umpqua Lighthouse | Season: Spring | Time of Day: Afternoon

Base Photographic Documentation

Date (MM/DD/YYYY):	3/29/2023
Time (24hr):	15:13
GPS Longitude:	-124.1988873
GPS Latitude:	43.66301076
Viewpoint Elevation (ft):	113.9009
Camera Height (ft):	5.41
Camera Heading:	WNW

Turbine Information

Distance to Nearest Turbine (Miles):	32.79
Number of Turbines:	262
Hub Height (ft):	725
Support Structure Height (ft):	106
Rotor Diameter (ft):	935
Total Height to Tip of Blade (ft):	1,171

Image Preview



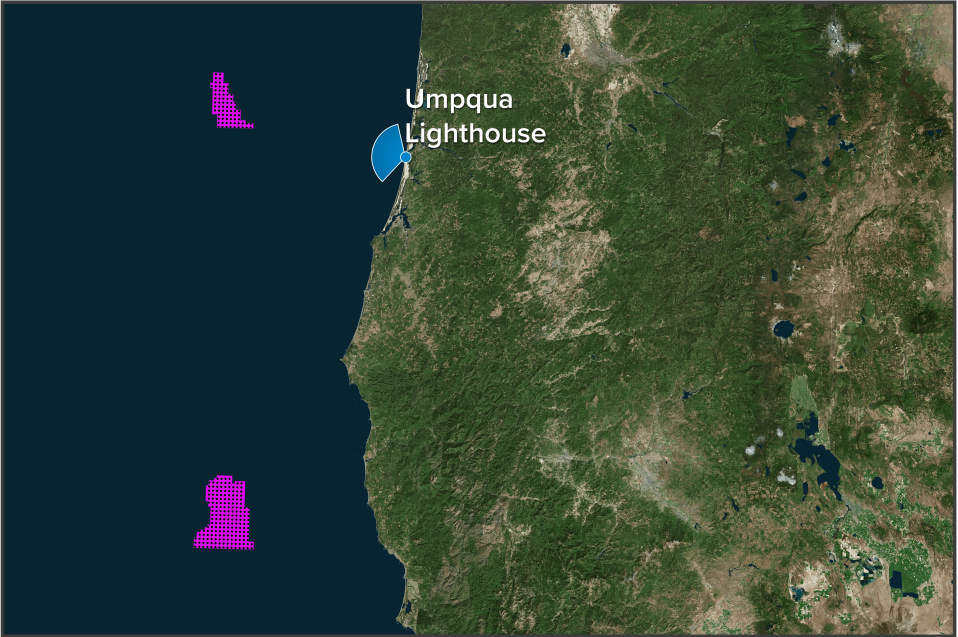
Camera Information

Camera Make & Model:	Canon EOS 5DS R
Camera Sensor Size:	36mm x 24mm
Lens Make & Model:	Sigma F1.4 DG HSM A033
Lens Focal Length:	20mm
Field of View:	65.47ø (H) / 46.397ø (V)

Sun, Sky, and Weather Information

Sun Azimuth:	246.74
Sun Elevation:	40.46
Lighting Angle (On Turbines):	Right Lit
Weather Conditions:	Sunny
Predicted Visibility (Miles):	19.70
Temperature (°F):	51
Temperature (°C):	11
Humidity (%):	71
SQM Reading:	N/A

Context Map



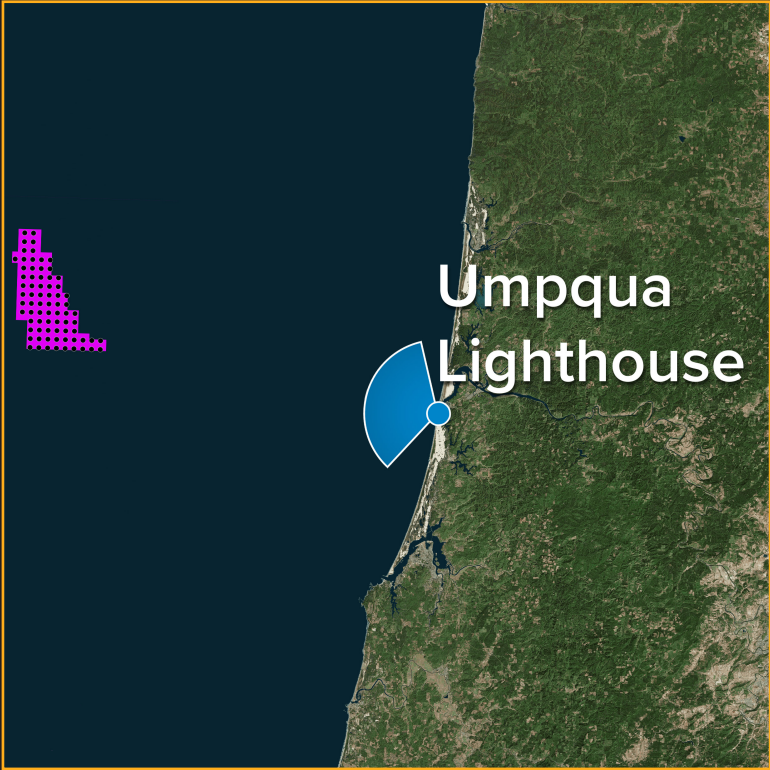
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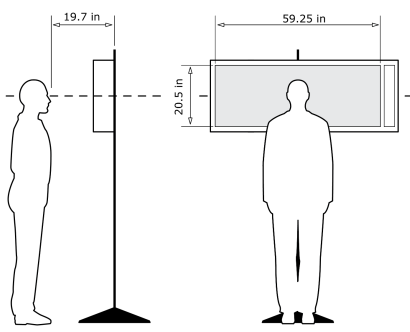
Umpqua Lighthouse, Afternoon, Heading WNW - Existing View

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Height of Camera Above Ground: 5.41 ft
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Vertical Field of View: 55°

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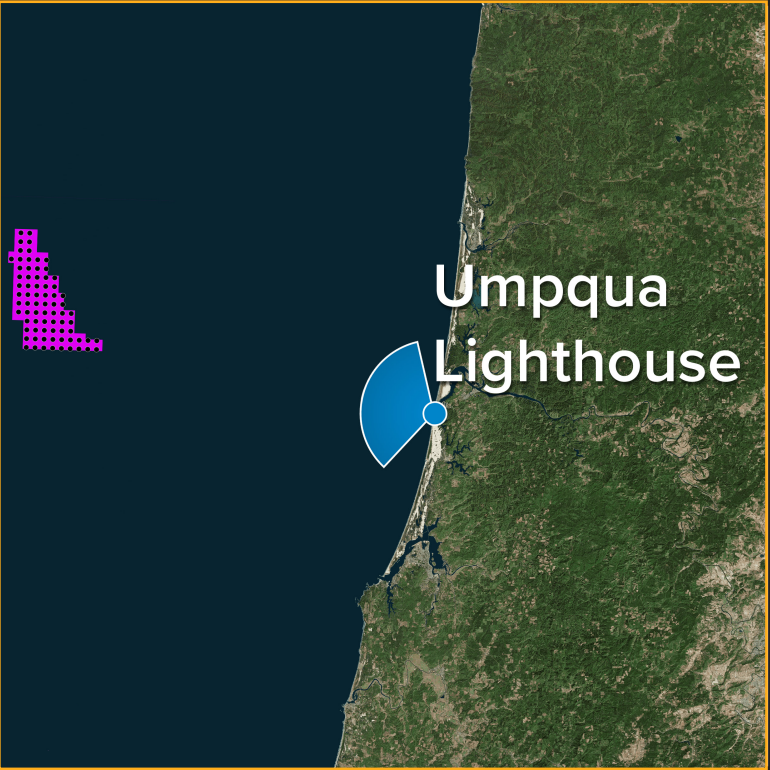
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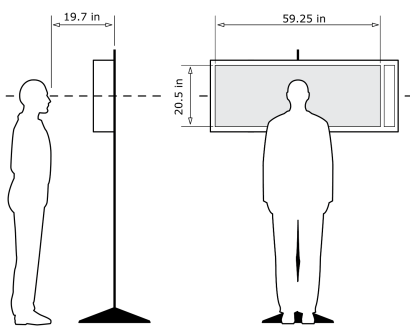
Umpqua Lighthouse, Afternoon, Heading WNW - **Proposed View - Predicted Visibility**

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Latitude: 43.6631076
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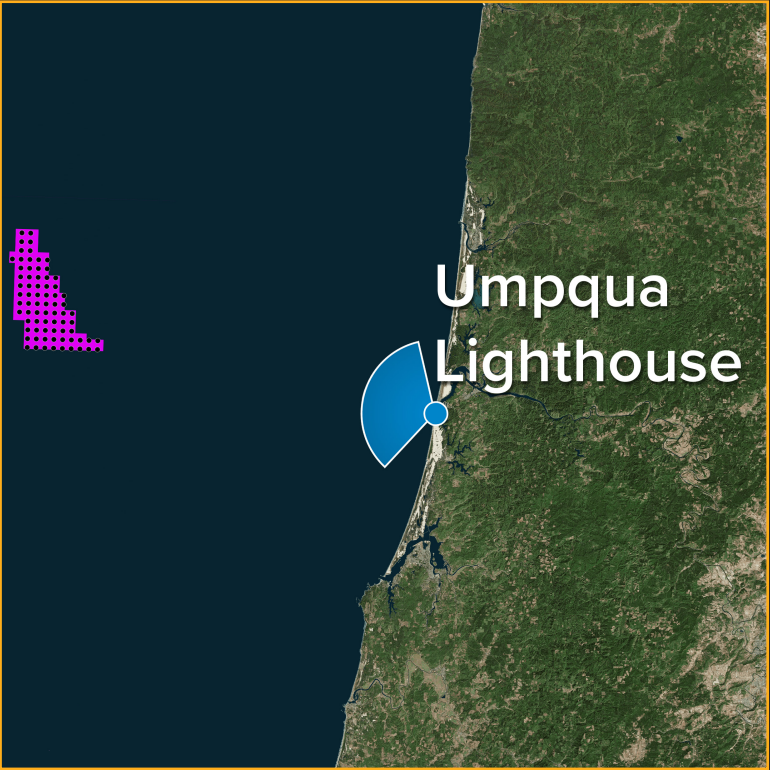


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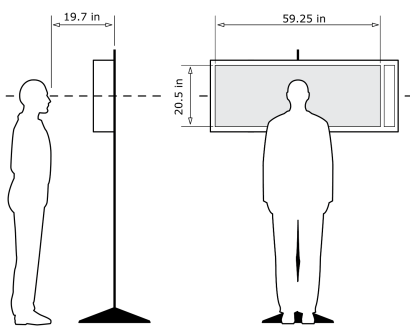
Umpqua Lighthouse, Afternoon, Heading WNW - **Proposed View - Maximum Visibility**

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KOP: Umpqua Lighthouse | Season: Spring | Time of Day: Night

Base Photographic Documentation

Date (MM/DD/YYYY):	3/29/2023
Time (24hr):	21:27
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Camera Heading:	WNW

Turbine Information

Distance to Nearest Turbine (Miles):	32.79
Number of Turbines:	262
Hub Height (ft):	725
Support Structure Height (ft):	106
Rotor Diameter (ft):	935
Total Height to Tip of Blade (ft):	1,171

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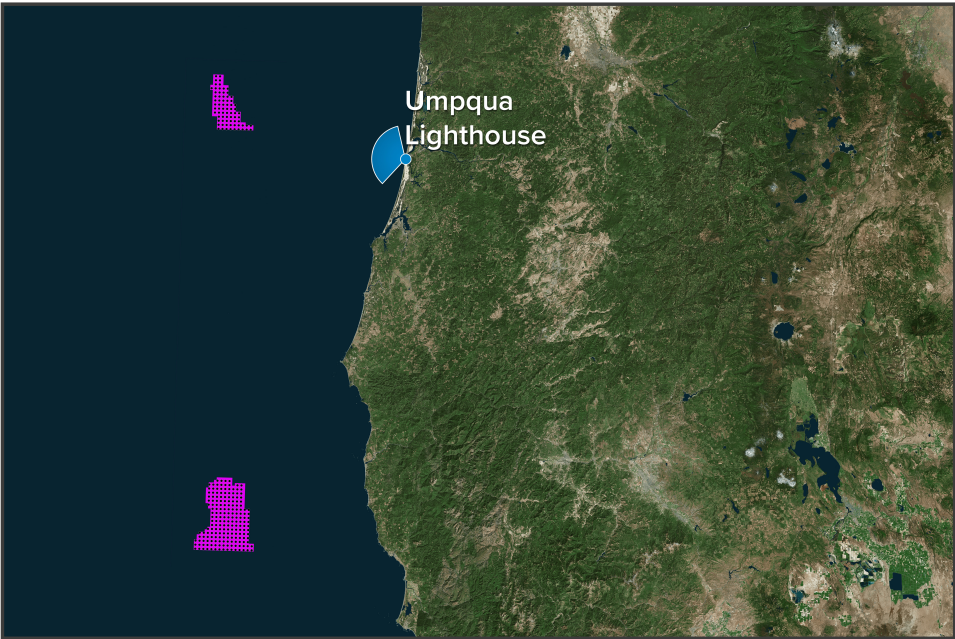
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Lens Make & Model:	Sigma F1.4 DG HSM A034
Lens Focal Length:	20mm
Field of View:	65.47ø (H) / 46.397ø (V)

Sun, Sky, and Weather Information

Sun Azimuth:	N/A
Sun Elevation:	N/A
Lighting Angle (On Turbines):	N/A
Weather Conditions:	Fair
Predicted Visibility (Miles):	N/A
Temperature (°F):	43
Temperature (°C):	6
Humidity (%):	97
SQM Reading:	20.17

Context Map



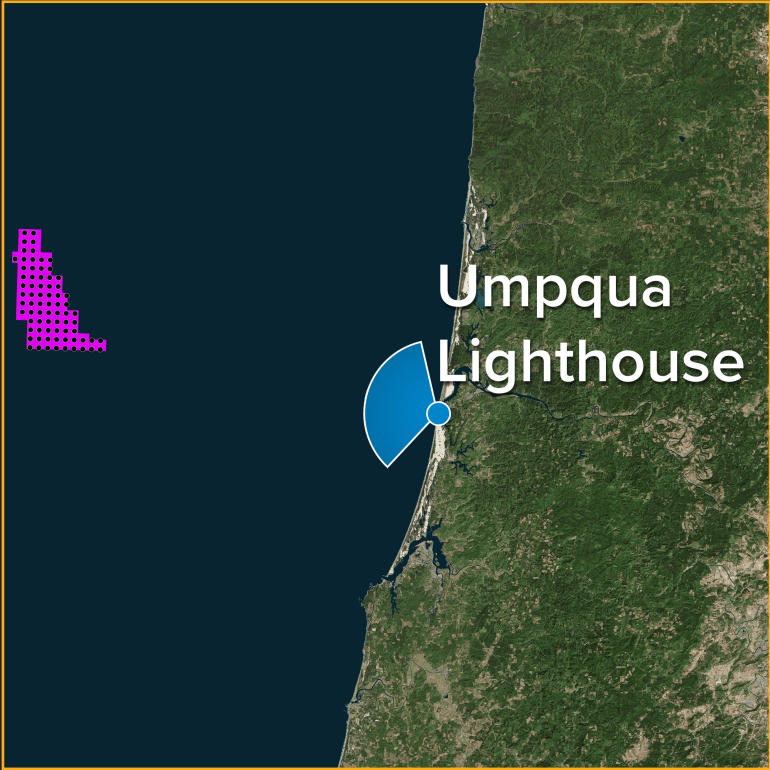
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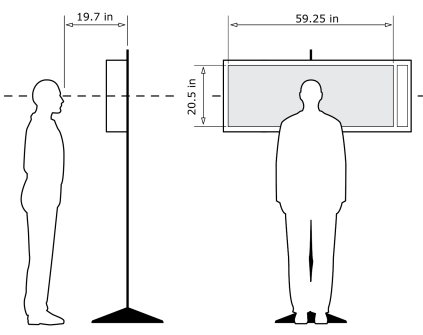
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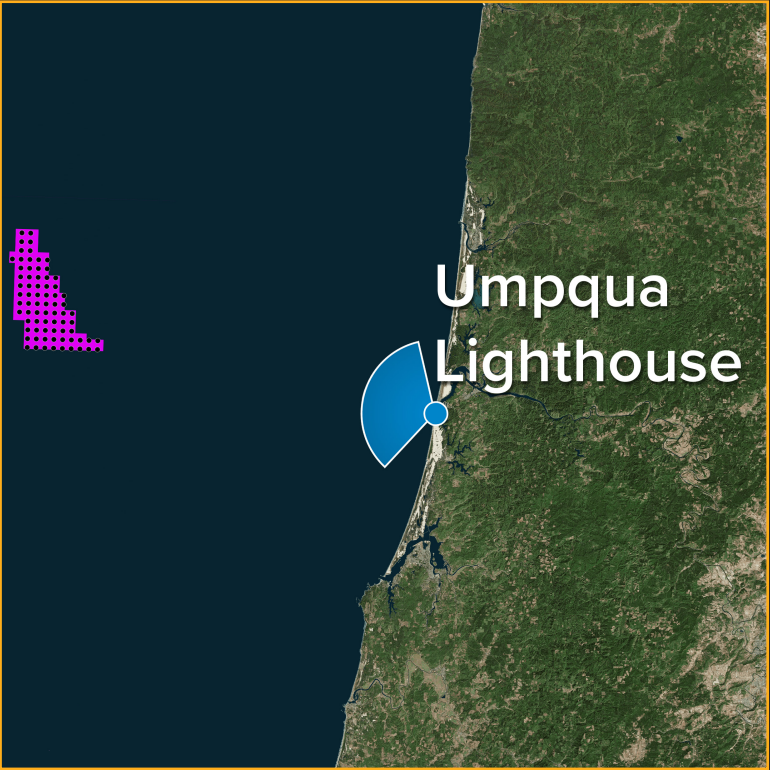
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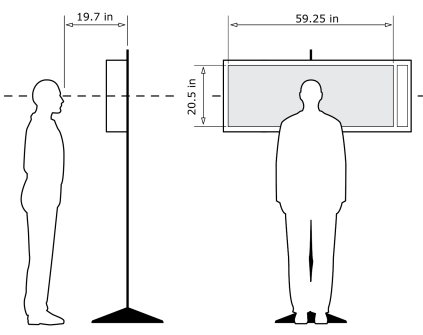
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