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Visualization Assessment

SED performed a visual assessment to determine how a Gamesa G90 wind turbine would appear from a representative location in Lewes. This location was chosen based on a number of factors, including cultural and historical significance, turbine visibility and traffic. After careful review, SED chose to perform a photomontage from a bridge on East Savannah Rd. near Front St, and from New Road. These are two of the few locations in Lewes that is heavily trafficked, familiar to most local residents and from which a Gamesa G90 wind turbine would be clearly visible.



Figure 1. Proposed turbine location with photomontage location shown.

In order to determine how a wind turbine would appear from these locations, SED considered the dimensions of the Gamesa G90 wind turbine, as well as the distance and elevation from the photomontage location to the proposed wind turbine location. A balloon was floated to hub height of 81 meters (266 feet) at the proposed turbine



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site on December 15, 2009. Conditions were favorable for the balloon float with light winds, partial cloud cover, and adequate visibility. SED used the balloon's position as a reference, as well as a model to determine the height of the turbine and length of the blades, using pixel ratios. The photograph used in this simulation was taken at a 35mm focal length equivalent of 55mm, which provides a perspective that is very similar to what would be perceived by the human eye.

The wind turbine is shown at its maximum visual impact, with the rotor facing the viewer. The bridge on East Savannah Rd. is approximately 2,500 meters (8,202 feet) from the proposed turbine location, and the photomontage location at New Road is approximately 1,080 meters (3,542 feet) from the proposed turbine location. The proposed turbine location and the sites chosen for the visual assessment are shown on a satellite image, below, and the visual simulations are included on pages 3-4 of this document.



Figure 2. Photomontage from Savannah Rd. Bridge.



Figure 3. Photomontage from New Road