

## MEMORANDUM

To: Bryan Healy, Village of Croton-on-Hudson Village Manager  
CC: Linda Whitehead, Village Attorney  
From: Nick Vamvas  
Date: November 29, 2021  
Re: Hudson National Golf Club/Matrix Development, LLC – Solar Project – Public Comment Review  
Project #: 82050.00

This office is in receipt of comments by Susan Ealer of 5 Prickly Pear Hill Road, dated November 26, 2021. Ms. Ealer raised a question regarding our opinion of the potential for visual impacts by the proposed solar array. Our opinion is that parts of the site will be visible from public vantage points, but that visibility in and of itself doesn't mean there is a significant environmental impact. Below is an elaboration on this point to offer the Village Board a little more information on our thinking.

Our thought is that the tree removal likely will be noticeable from the areas identified by Ms. Ealer, but the solar array tables will not have a large enough visible profile to cause a significant impact on the view shed. The perspective height of an object is inversely related to the distance at which the object is viewed –  $h/l$  where 'h' is the object height and 'l' is the viewing length. The tables will stand no taller than 10 feet above the ground. At the distances shown in Ms. Ealer's study, the tables will appear maybe 1/20 of 1 inch tall: perspective height =  $10'/3000' = 0.003'$  or 0.04 inches. An argument could be made that with several tables lined up together to form the array as proposed, this approach is overly simplified. However, there will be vegetation remaining between the locations shown in the Ealer view study and the proposed array that should limit the visibility of parts of the array, and there will also be vegetation remaining behind the array at the top of the hill (southwest of the clubhouse). The panels are dark (mainly gray and black) and shouldn't stand out as a large contrast to the existing vegetation to remain. Even with several tables side-by-side running down the slope, the low profile and coloration of the panels should minimize the effect of their visibility.

From the photos Ms. Ealer provided, the HNGC clubhouse isn't plainly visible. Possibly it's off frame, but if it's hard to see the clubhouse from the Riverwalk, it would be similarly difficult to see the panels which sit much closer to the ground and below the ridgeline.

Finally, it doesn't appear from the applicant's plans that they intend to cut trees along the ridgeline. It appears the only vegetation removal would be on the slopes. Again, we do anticipate that the tree removal and parts of the array would be visible, but following the guidance from NYSDEC, we do not expect there to be a significant impact on the views. Impacts on the view are subjective of course, but the applicant has met the zoning requirement to conduct an assessment of the visual impacts of the system on public roadways.