## TIM **MILLER** ASSOCIATES, INC.

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December 10, 2021

Mayor Brian Pugh and the Board of Trustees Village of Croton-on-Hudson Stanley Kellerhouse Municipal Building One Van Wyck Street Croton-on-Hudson NY 10520

Re: Hudson National Golf Club/Matrix Development LLC Solar Project

Prickly Pear Drive

Village of Croton on Hudson Westchester County, NY

Dear Mr. Pugh and Members of the Board:

Following a review of the Chazen memo dated December 1, 2021, we offer the following responses to comments related to trees, wildlife and ecology:

3a. Attached please find a 2016 aerial photo from the Westchester County GIS that has been colored to show existing and proposed vegetative cover types. The vegetation in the area of the proposed solar arrays will be the equivalent of open meadow/old field. This change will affect two adjacent areas totaling approximately 6.75 acres.

The golf course and power line easement are the only locations in the region that provide this type of habitat, and the new arrays will be connected directly to those through the existing disturbance of the clubhouse/parking lot area. While a large part of the course is maintained turf, large expanses are maintained as rough and taller grass similar to what the array meadows will look like. The two patches of meadow we are creating are small in the big picture but will be beneficial in providing this habitat type.

A significant portion of the project site will remain as undisturbed woodland. It is also important to note that much of the surrounding wooded area (which includes hundreds of acres) is not entirely "undisturbed woodland", but rather wooded areas within the context of a low density residential community. The attached aerial does differentiate between the two, but regardless, the area of woods to be lost to the solar arrays is a small fraction of that available regionally.

Regarding fragmentation, the opening of the canopy for these two arrays is not significantly different than the loss of some large trees in a closed forest or the disturbance caused by intense storms (think of the clearing of the Saw Mill River Parkway by a tornado/microburst a few years back). Fragmentation is usually discussed in blocks of a minimum of ten acres, and we do not approach that here.

- 3b. I have personally observed kestrels and bluebirds on the site during several summers. The report of bobolinks as an infrequent but positively identified visitor to the course is anecdotal from a party that has spent a number of years observing birds at the golf club.
- 4. Perhaps a better term to describe the presence of open meadow in the county is "uncommon" rather than "rare". Historically, a large majority of Westchester County was cleared for pasture and other agricultural activities. In the last 50 100 years much of this woodland has regrown as agricultural activities were phased out. Some pockets of agricultural land, some of it fallow and succeeding to open field/scrub-shrub, do remain in the county. Other large areas are made up of contiguous grass areas maintained as lawn, with little value to sensitive wildlife species.
- 7c. Please see the response to Comment 3a. Generally, patches of three to four acres with in a larger contiguous woodland are not considered large enough to cause fragmentation of a forest habitat. Woodland birds and other vertebrate species that are particularly sensitive to openings in the woodland would avoid these areas if adjacent woodled habitat is still available. The distances necessary to cross in this scenario, assuming that there is not a great deal of human activity within the opening, would not be a hindrance to most species. No highly sensitive deep woods species have been observed during the number of years we have been working at the Hudson National site.

I hope this clarifies the issues related to habitat, ecology and potential wildlife impacts. We are available to answer any further questions on request.

Sincerely,

Steve Marino, PWS

Principal/Senior Wetland Scientist

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Tim Miller Associates,, Inc.

