

May 12, 2022

SCE No.14393.94

ReJean DeVaux
Project Engineer
Borrego Solar Systems, Inc.
30 Century Hill Drive, Suite 30
Latham NY, 12110
rdevaux@borregosolar.com

**Re: Small Whorled Pogonia Presence/Absence Survey
111 Owens Road Solar Site
Goshen, Orange County, NY**

Dear Mr. DeVaux:

In accordance with our Scope of Services, Shumaker Consulting Engineering & Land Surveying, D.P.C. (SCE) performed a presence/absence survey for the small whorled pogonia (*Isotria medeoloides*) at 111 Owens Rd in the Town of Goshen, Orange County, NY. This investigation was completed on behalf of Borrego Solar Systems on May 10-11, 2022. The small whorled pogonia is state endangered, and a federally threatened orchid. The small whorled pogonia has a smooth and hollow stem that grows 14" in height. The leaves are arranged in a whorl consisting of five or six leaves. The leaves are a grayish-green, and the flowers are a yellowish green with a white lip. The small whorled pogonia occurs in a variety of upland, mid-successional wooded habitats. Maple, beech, oak, birch, and white pine are suitable habitat. The species prefers acidic soils with a thick leaf layer, and location in proximity to streams and slopes. The small whorled pogonia prefers areas of broken canopy cover with greater access to sunlight. The intent of this survey was to identify if the small whorled pogonia is present on the subject property.

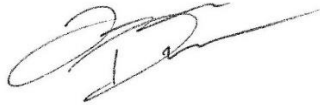
The surveyed area consisted of approximately 132 acres northwest of Owens Rd and east of the Wallkill River and is herein referred to as the Site. The Site is accessed from the east side of the property, where two different access roads are located. The site does not include any developments, but does consist of hardwood forests, wetlands, and open fields. The site has a mix of early and mid-successional forest stands. The southwest portion and the center of the property mainly consist of early successional forest with species such as red oak (*Quercus rubra*), black cherry (*Prunus serotina*), and various shrubs. A mid successional forest stands at the north end of the property, also consisting of red oak, American beech (*Fagus sylvatica*), and green ash (*Fraxinus pennsylvanica*). The Wallkill River, which is a class B stream, runs along the west border of the property boundary. The survey area is adjoined by Owens Rd to the south, forests and a golf course to the north, the Wallkill River to the west, and forests and residential property to the east.

Prior to the field survey effort, the New York State Department of Environmental Conservation (NYSDEC) Environmental Resource Mapper (ERM) aerial photography, and prior site habitat studies were reviewed.

The field survey, conducted over the course of two days, indicates the small whorled pogonia is not present in this location. Similarly, the large whorled pogonia was not found onsite.

If you have any questions or require additional information, please do not hesitate to contact Markku McGlynn in our Albany Office or at mmcglynn@shumakerengineering.com.

Very truly yours,
**SHUMAKER CONSULTING ENGINEERING
& LAND SURVEYING, D.P.C.**



Jessica Dubman
Environmental Scientist I