

**TE OF VERMONT
PUBLIC UTILITY COMMISSION**

Investigation pursuant to 30 V.S.A. §§ 30 and 209	)	Case No. 20-1611-INV
into whether the petitioner initiated site	)	
preparation at Apple Hill in Bennington, Vermont,	)	
for electric generation in violation of 30 V.S.A. §	)	
248(a)(2)	)	

SUPPLEMENTAL AFFIDAVIT OF ROBERT POPP
(ANR EXHIBIT 10)

I, Robert Popp, hereby state that the following is true and accurate to the best of my knowledge, information and belief.

1. My name is Robert Popp. I am the Botanist for the Vermont Fish and Wildlife Department (“Department”), Agency of Natural Resources (“Agency”). I am stationed in Barre and am part of the Department’s Natural Diversity Program.
2. I have been employed as the Department Botanist for 30 years. I am responsible for determining the status and distribution of Vermont’s rare flora and assessing impacts due to proposed activities such as Act 250 and Section 248 projects.
3. I am familiar with the Apple Hill and Willow Road (formerly Chelsea) solar electric generation projects (collectively “Solar Projects”) which are proposed to be constructed at the 27-acre parcel located at the end of Willow Road (the “Apple Hill site”), in Bennington, Vermont. I am also familiar with the investigation which the Public Utility Commission (“Commission”) is presently conducting in this matter (Case No. 20-1611-INV) concerning

whether the developers (“Developer”) of the Solar Projects initiated site preparation without a certificate of public good (“CPG”).

4. On June 24, 2020, I filed an affidavit and three exhibits with the Commission in this matter. I also testified at the hearing which the Commission held on June 26, 2020.
5. I am now filing this supplemental affidavit (**ANR Exhibit 10**) to provide additional clarity concerning the locations of rare plants and plant conservation areas, the age of the location information, how those locations relate to the Developer’s proposed site clearing activities, and to address the Commission’s requests contained in its order dated November 13, 2020.
6. I have reviewed and am familiar with the transcript of the June 26, 2020 hearing as well as the Temporary Restraining Order (“TRO”) which the Commission issued on that same date to stop the site clearing which was underway at that time.
7. I am also familiar with, and have reviewed, the affidavit and the four photo exhibits filed on June 24, 2020 by Patrick Lowkes, an Agency Environmental Enforcement Officer.
8. My understanding is that the June 24, 2020 affidavits and exhibits were admitted into the record as evidence in this case at the June 26 hearing.
9. The photos taken by Mr. Lowkes were identified as ANR Exhibits 2, 3, 4, and 5. The exhibits included with my June 24, 2020 affidavit were identified as **ANR Exhibit 7** (Sheep Farm Plan), **ANR Exhibit 8** (Conservation Area Plan), and **ANR Exhibit 9** (2018 Apple Hill Plant Report).

10. In my June 24, 2020 affidavit, I refer to the 27-acre Apple Hill site as the Willow Road Parcel. I am now referring to it as the “Apple Hill site” to avoid confusion because this is how the Commission referred to it in the TRO.
- When I discuss the Apple Hill site, I am referring to the 27-acre parcel upon which the Developer intends to construct two solar arrays and associated infrastructure. The Agency’s concerns in this matter are limited to the 27-acre Apple Hill site because that is where the forest clearing for, and construction of, the Solar Projects is proposed. I am aware that there is a separate parcel, an old apple orchard, which is contiguous to the Apple Hill site (located generally north of the Apple Hill Solar array area) and upon which the Developer has indicated it intends to grow hemp. The Agency is not seeking any relief or remedy related to the Developer’s proposed activities on the old apple orchard parcel.
11. In order to provide additional background, and clarity, concerning the Arrow-Leaved American Aster (*Symphyotrichum urophyllum*), an S1-ranked very rare species, and Nimblewill Muhly (*Muhlenbergia schreberi*), an S2-ranked rare species, which exist at the Apple Hill site, I am including five additional exhibits with this supplemental affidavit. These are: **ANR Exhibit 11** (2017 Apple Hill Plant Report); **ANR Exhibit 12** (2017 Chelsea Plant Report); **ANR Exhibit 13** (2018 Chelsea Plant Report); **ANR Exhibit 14** (2019 Apple Hill Plant Report); and **ANR Exhibit 15** (2019 Chelsea Plant Report).¹ These

¹ The report dates refer to the growing season for which the data in each report was collected, and not when the report may have been written or received by the Agency.

reports, as well as the 2018 Apple Hill Plant Report (**ANR Exhibit 9**), were prepared by Arrowwood Environmental as part of their work for the Developer in connection with the Solar Projects, and were provided to the Agency as part of the Section 248 process and pursuant to agreements reached between the Agency and the Developer with regard to the Projects and their potential to impact very rare and rare plants at the Apple Hill site. Such reports are typically produced and submitted to the Agency in connection with Section 248 projects when rare plants have been identified as part of that process. I am the Agency employee who typically receives, reviews, and maintains such reports, as is the case with the reports I have included as exhibits with my two affidavits in this matter.

12. Robert Kobelia, the logger hired by the Developer to clear the Apple Hill site, testified at the June 26 TRO hearing that he would be clearing the entire Apple Hill site with the exception of three RTE plant conservation areas (June 26, 2020 hearing transcript pages 112-115).
13. The RTE plant conservation area which Mr. Kobelia identified as RTE 1 is in the southwest portion of the Apple Hill site. This area appears to be shown on the Sheep Farm Plan (**ANR Exhibit 7**) as a fenced area, albeit not labelled as such. It is depicted on the Conservation Area Plan (**ANR Exhibit 8**) and also shown on the Arrowwood Environmental 2017, 2018, and 2019 Plant Reports for the Chelsea Solar Project (**ANR Exhibits 12, 13, and 15**), more recently known as the Willow Road Solar Project.

14. The area referred to as RTE 1 contains Arrow-leaved aster plants that were transplanted there in 2014 and 2017 from what was then called Chelsea Solar Project. The conservation area already contained approximately 30 Arrow-leaved aster plants which were identified by Arrowwood Environmental in 2014. As reflected in the Tables in the Chelsea Plant Reports, 89 presumed Arrow-leaved asters were transplanted into RTE 1 in 2014. Nine additional Arrow-leaved aster plants were transplanted by Arrowwood Environmental to RTE 1 in 2017, raising the total number of transplants to 98 plants.
15. The RTE plant conservation area which Mr. Kobelia identified as RTE 2 is in the southeast portion of the Apple Hill site. This area is not depicted as being avoided or protected from clearing on the Sheep Farm Plan (**ANR Exhibit 7**). That was why the Agency raised clearing in this area as a concern when the Developer filed the Sheep Farm Plan as an amendment to the Apple Hill Solar Project in March 2020. RTE 2 is depicted on the Conservation Area Plan (**ANR Exhibit 8**) and is also shown on the Arrowwood Environmental 2017, 2018, and 2019 Plant Reports for the Apple Hill Solar Project (**ANR Exhibits 9, 11, and 14**).
16. The area referred to as RTE 2 contains Arrow-leaved aster plants which were transplanted there in 2017 and 2018 and Nimblewill muhly which was transplanted in 2014. In 2017, 130 Arrow-leaved asters were transplanted to RTE 2 followed by an additional 72 plants in 2018. Since the Nimblewill plants are difficult to count, no actual number of transplants was reported by Arrowwood Environmental. The Nimblewill plants were found at four

locations on the Apple Hill site shown in Figure 1 in the three Plant Reports for the Apple Hill Project as Sites A, B, C, and D. Some plants were moved from Sites A and B, both of which contained many hundreds of plants. The 29 stems from Site C were all moved, but none of the plants at Site D were moved and they remain in that location.

17. Mr. Kobelia described RTE 3 as being in the northeast corner of the Apple Hill site. While this area is not mapped as a Plant Conservation Area in any of the Arrowwood Environmental Plant Reports, it is called out in the 2018 and 2019 Plan Reports for the Apple Hill Project as an area to be avoided during construction. This area contains two clumps of Nimblewill consisting of approximately 30 stems and was staked out with high visibility flagging as indicated in the 2019 Plant Report.
18. The Plant Reports prepared by Arrowwood Environmental also depict a significant number of very rare and rare plants which exist on the Apple Hill site outside of the three conservation areas discussed at the June 26 TRO hearing. Many of these plants are in areas that Mr. Kobelia testified will be cleared. For example, as depicted on Figure 1 of the 2019 Apple Hill Plant Report, Arrow-leaved aster plants were left in place outside of the proposed solar array but within the area to now be cleared. Some of these plants also appear to be within an area to be cleared for the access road to the Chelsea (now Willow Road) Solar Project. Figure 1 on page 3 of the 2017 Apple Hill Plant Report depicts 12 polygons in this area that contain a total of 110 Arrow-leaved aster plants. At least ten of these polygons consisting of 80

plants appear to be within the area which Mr. Kobelia testified would be

cleared, consistent with the clearing area depicted on the Sheep Farm Plan.

There are also two polygons of Arrow-leaved aster depicted on Figure 1 in the 2018 and 2019 Apple Hill Plant Reports that are unlabeled as to number of plants. These are both within the proposed limits of clearing as depicted on the Sheep Farm Plan. All three Apple Hill Plant Reports also depict two polygons containing 30 Arrow-leaved asters near the terminus of Willow Road. These are shown outside the proposed Solar Project clearing area, but it is unclear as to whether these plants have been impacted or destroyed by the clearing which was performed at the end of Willow Road in June.

19. Regarding the rare Nimblewill, the 2018 and 2019 Apple Hill Plant Reports confirm that the majority of the Nimblewill plants identified at the Apple Hill site are located outside of the plant conservation areas that Mr. Kobelia testified he was avoiding. These plants, of which there are hundreds, are located along what Arrowwood Environmental described as an “old logging road,” and what Mr. Kobelia described on June 26 as an “old farm road” or “trail.” The plant locations are depicted in Figure 1 of both the 2018 and 2019 Plant Reports as Sites A and B. Arrowwood Environmental reported transplanting only 10% of the Nimblewill from Site B. Mr. Kobelia testified that he will be clearing those areas without any measures to protect plants. He also testified that the caution ribbon that he had observed in those areas earlier this year was subsequently removed by Krebs and Lansing. (TRO June 26, 2020 hearing transcript pages 115-117.) In fact, Arrowwood Environmental

had installed this ribbon for the purpose of protecting these very same plants from destruction during construction as documented on page 2 of the 2019 Apple Hill Plant Report.

20. The Agency's primary concern remains the destruction of a significant number of very rare and rare plants which exist outside of the two plant conservation areas (RTE 1 and RTE 2) depicted on **ANR Exhibit 8** as well as the additional RTE 3 described by Mr. Kobelia as being approximately 50 feet by 50 feet and located in the northeast corner of the Apple Hill site. However, the Agency is also concerned about the significant decline of the Nimblewill that was transplanted to conservation area RTE 2 (in the southeast east corner of the Apple Hill site). In addition, the Arrow-leaved asters which had been transplanted to RTE 1 have declined from 144 plants in 2018 to 97 plants in 2019. Because of this, the Agency cannot presume that the plants which have been transplanted are going to persist. This results in some level of uncertainty concerning the viability of the plants in the conservation areas, and thus the viability of the population of each species for the entire Apple Hill site.

21. In addition to these known, previously observed locations for both the Arrow-leaved aster and the Nimblewill, there are likely to be other locations for both species. The Arrow-leaved aster is rhizomatous and therefore can spread vegetatively from any remaining roots while the Nimblewill can spread from seeds that are buried in the soil. The Agency typically considers plant inventories to be valid for three growing seasons, after which they should be

updated to reflect current population numbers and locations. Based on the information contained in the various Plant Reports, it appears that the last time the entire Apple Hill site was surveyed for rare plants was the fall of 2017. While normally, the Agency would be comfortable with site clearing being completed before the fourth growing season – in this case, May 1 of 2021 - this approach will not work here because the Nimblewill in Sites A and B needs to be flagged and this cannot be accurately done before the next growing season. Because of this, and the obvious fact that new plants were discovered in prior inventory updates, the Agency believes that it is necessary to update the inventory of the entire Apple Hill site before any further clearing is performed in order to avoid destruction of the plants which exists outside the conservation areas.

22. As I indicated above, the reason for the need to re-inventory Nimblewill plants is because as discussed by Mr. Kobelia in his testimony, personnel of Krebs and Lansing removed the flagging for the Nimblewill plants at Sites A and B. Flagging will then need to be installed after the inventory is completed and the plants are re-identified.
23. The clearing of the site and removal of stumps during the growing season would likely destroy any plants in the vicinity of these activities. Cutting and skidding trees will tear the aboveground portions of the Arrow-leaved aster and Nimblewill from their roots. In addition, the heavy equipment used to conduct the clearing would compact the soil and crush any plant over which it is driven. Both activities will jeopardize the continued existence of both

species. Further damage will occur during the stump removal, tearing up any plants in the vicinity.

24. It is possible to conduct tree clearing under frozen ground conditions during the season when the plants are dormant to limit the amount of destruction to the plants. Also, as discussed by Arrowwood Environmental in the Plant Reports, timber mats can be placed over all the rare plant areas during site clearing if this activity were to occur outside of the dormant season when the ground is frozen. However, the mats could not be left in place for more than five consecutive days during the growing season. Leaving mats in place longer than five consecutive days would likely result in damage to, or destruction of, the plants. Also, the use of mats or limiting tree clearing to the dormant season would not ameliorate the impact of the stump removal which is now proposed, but had not been part of the original solar clearing plan except for those limited areas where stumps would interfere with placement of posts.

25. As Mr. Melone testified at the June 26 TRO hearing, and which is an obvious fact from the time the Solar Projects were proposed for this site, the Solar Projects cannot be constructed without first clearing the trees. Stated another way, to prepare the Apple Hill site for solar arrays, the trees must be cleared. As such, I consider the tree clearing to be site preparation for the Solar Projects. Clearing the trees at this time, without measures to protect the plants which have already been documented to exist outside of the three RTE protection areas described at the June 26 TRO hearing, and without updating

the plant survey for the entire Apple Hill site, would result in the destruction of a significant number of Arrow-leaved aster and the Nimblewill. Because those plants will be destroyed, the harm will be irreparable.

Dated: November 25, 2020

Affiant: /s/ Robert Popp
Robert Popp

[Note: Pursuant to Public Utility Commission Case No. 20-0789-INV, Order dated 03/26/2020, this affidavit is not required to be notarized.]