VIA EMAIL
October 12, 2021

Town of Alfred
Attention: Janice Burdick
Town Clerk
Box 230
6340 Shaw Road
Alfred Station, NY 14803
town.alfred@gmail.com

Re: Request for Additional Information – Special Use Permit and Site Plan Review Application
Proposed 5568 Jericho Hill Road Solar Farm Project
Town of Alfred, Allegany County, New York

Dear Ms. Burdick:

At the Town of Alfred Town Board meeting on Thursday September 9, 2021, and through correspondence received prior to the meeting, your reviewing engineer, Labella, requested additional information on the proposed Jericho Hill Road Solar Project to the Town Board. Comments received from Labella in their correspondence dated September 2, 2021, and September 27, 2021 are included below, along with our responses:

Memorandum dated September 2, 2021:

1. **Site Plans and General Comments:** "***There are no demolition or landscape plans included with the submission.***"

Response: A landscape plan has been added to the site plan set. All existing structures/materials proposed to be removed will be called out on the site plan, please see sheet C004 for detail.

As mentioned previously, we have prepared an extensive landscape screening plan, see sheet C009, as part of this submission package that now includes the installation of rows of evergreen trees behind the dense deciduous forest along Jericho Hill Road, eliminating any additional perceived views into the project site. Additionally, we have proposed evergreen tree plantings along the northern property boundary to provide additional screening to the Pine Hills neighborhood to the north. For the reasons detailed in this letter, the proposed project is not anticipated to have a significant adverse impact to the environment.

A detailed decommissioning plan has been provided to the Town that specifically lays out how the project will be decommissioned ("demolished") at the end of its useful life. A demolition plan as a sheet in the site plan set would be redundant and is not required under the Town of Alfred Zoning Code.

2. **C001 General Notes:** ***"The type of wetland and jurisdiction should be included on the wetland impacts table."***

Response: The wetland impacts table in the site plan set has been revised to reflect the type of wetland and their jurisdiction.

3. **C004 Site Plan:**
   - **a.)** ***"Show the total area leased by the developer in the site plan data table."***
   - **b.)** ***"Add the number of panels/modules or racks to the site plan data table."***
   - **c.)** ***"Add area(s) of brush/tree removal to the plan and site plan data table."***
   - **d.)** ***"Add the limit of disturbance line to the site plan, and add the limit of disturbance area to the site plan data table."***
   - **e.)** ***"Change the proposed height of the panel height in the site plan data table to <15'."***
   - **f.)** ***"Proposed fence height allowed by solar law is seven feet, not eight feet as shown. If an eight foot fence is proposed, a variance will be required.***
   - **g.)** ***"Is the existing asphalt driveway being removed and being replaced with a gravel drive?"***
   - **h.)** ***"It is difficult to see proposed utility poles near the interconnection."***
   - **i.)** ***"Are field posts to remain? Two of them are within the proposed fence line."***
   - **j.)** ***"Label the temporary staging and parking areas on the plan."***
   - **k.)** ***"Add the hatch pattern of the staging area to the legend."***
   - **l.)** ***"Show typical dimensions between panels/modules."***
   - **m.)** ***"Show distance between panels/modules and fence."***
   - **n.)** ***"Show gate width."***

Response:

a.) The total lease area for the proposed solar farm has yet to be finalized through negotiations with the landowner and is subject to private agreement with said landowner. The area under lease by the project sponsor is not required to be provided under the Town of Alfred Zoning Code.

b.) Please see the array information table for number of modules, system size, and module type.

c.) Areas of brush/tree removal have been called out on the site plan. In addition, the total acreage for brush/tree removal and cutting have been added to the site plan data table.

d.) The limit of disturbance line has been added to the site plan and the total acreage for the limit of disturbance has been added to the site plan data table.

e.) The maximum height of the proposed solar panels will be fifteen (15) feet. The site plan data table and relevant details have been updated to reflect this.

f.) The proposed fence has been reduced to have a maximum height of seven (7) feet.

g.) A portion of the existing asphalt driveway in direct conjunction with the existing building will remain. The remaining section of the existing asphalt driveway will be removed and replaced with the limited use pervious gravel as shown in the site plan.

h.) The scaling for the proposed utility poles has been increased.

i.) The existing field posts will be removed/relocated per coordination with the landowner.

j.) The temporary staging area and parking areas have been called out on the site plan.

k.) The hatch pattern for the staging area has been added to the legend.

l.) Dimensions between the solar panels have been added to the site plan.

m.) Dimensions between the solar panels and fence have been added to the site plan.

n.) The gate width has been added to the site plan.

4. **C005 Grading Plan:** ***"The proposed LOD, OGE, OHE, & SWL lines are difficult to read at 1" = 100'"***

Response: The scaling for the proposed LOD, OGE, OHE, and SWL lines has been increased.

5. **C008 Grading Plan Details:** ***"Detail for access road is shown for 0-10% slopes. There are portions of the proposed gravel road that exceed 10% (+/- 3+00, & +/- 10+50)."***

Response: The contractor will utilize the limited use pervious gravel with the Geoweb system from station 2+60 to 3+35 and 10+12 to 11+22 where slopes exceed 10%. Please see sheet C011 for detail.

6. **C012 Details IV:**
   a.) ***"Change fence height to 7' above ground."***
   b.) ***"The fence details appear to show significant concrete embedment (hatch) along the entire length of the fence. The applicant should review the fence details.***

Response:
   a.) The proposed fence has been revised to have a maximum height of 7' above ground.
   b.) Concrete will not be used during any portion of the fence installation. The fence detail has been updated to show existing soil beneath the fence posts.

7. **Landscape Plan (Suggested- Not in Plan Set):** ***"Add buffer plantings in areas indicated. These will increase screening where it appears that it might need some additional plant material."***

Response: A landscape plan was submitted to the Town Board during the September 9, 2021, meeting. Buffering plants have been incorporated into the proposed landscaping plan in areas that were indicated to further address any visual concerns. The landscaping plan was further amended to add additional plantings at the request of the Town Board and the public at the September 9, 2021 meeting. Please see the enclosed updated landscaping plan for details.

8. **Photo Simulations.**

"The Photo Simulation locations submitted do not adequately demonstrate the visual impact of the proposed project. We suggest two additional locations to supplement the current photo simulations.

- ***Provide a photo simulation that includes both leaf on and leaf off for an area north of the site near 77 Pine Hill Drive.***
- ***Provide a photo simulation that includes both leaf on and leaf off at the existing driveway to the site.***
- ***Provide leaf off conditions for the existing photo simulations at existing locations 1 & 2."***

Response: During the September 9, 2021, meeting we discussed our visual simulations and there was a concern voiced that the simulations only represented the summer and spring months since the trees have all of their leaves on. During the changing seasons it is expected that some of these trees will lose their leaves and that the simulations that were completed wouldn't be representative of this condition. We have performed an additional photo simulation from each of the initial viewpoints requested by the Town Board showing the array during a "leaf off" condition which would be present during the fall and winter months. The "leaf off" window of the simulation encompasses the full extent of the disturbed site. Extending the leaf off view would not change the simulation as

this portion of the view is not changing from its current state. In addition, we have also put together a landscaping plan to further address any visual concerns. The proposed revised landscaping plan has been incorporated into the revised photosimulations as well. As illustrated by the proposed photosimulations, the project continues to not be visible along Jericho Hill Road. Additionally, there is no significant increase in visibility between leaf-on and leaf-off conditions to the limited number of homes on Snyder Drive, located one-half mile west of the proposed project.

9. **Decommissioning Plan:** ***"The applicant has submitted the Decommissioning Plan (Appendix 4) that has been provided by the Town of Alfred. We recommend that as part of a conditional approval, that the applicant provide:***
   - ***Acknowledgement of the Town of Alfred Solar Energy Systems and Facilities Local Law, specifically Section 8 (h)3b, and 8(h)3c***
   - ***Provide photographs to document the predevelopment condition of the property."***

Response: We acknowledge the Town of Alfred Solar Energy Systems and Facilities Local Law, specifically Section 8 (h)3b, and 8(h)3c. We have also added photos of the site, predevelopment, to our package. Please refer to Exhibit B of the Decommissioning Plan.

10. **Operations and Maintenance Plan:** ***"The operations and Maintenance Plan addresses all the items listed in I.7."***

Response: Noted.

11. **Stormwater Pollution Prevention Plan (SWPPP):**
    - ***a.) "The SWPPP/NOI indicates a total disturbance of 14.5 acres, and the plans indicate a limit of disturbance of 30.9 acres. Section IV of Appendix A and the plans also indicate that no more than five acres will be disturbed at any one time. The applicant is requested to provide a potential phasing approach (written or visual) to accomplish this activity. The Construction Sequence should also be modified to reflect the limitation of five-acres disturbed at any one time."***
    - ***b.) "The NOI indicates 14.5 acres of disturbance and Sheet C006 indicates 30.9 acres of disturbance. Resolve."***
    - ***c.) "It is noted that the project follows NYSDEC's guidance for solar facilities regarding the use of a pervious gravel access driveway."***
    - ***d.) "Section D of Appendix A of the SWPPP indicates "the project does not propose any impervious areas on-site." However, we note that there is an approximately 800 SF concrete pad for an inverter. Water quality treatment must be provided for this area (potentially a filter strip may be used to address this). We note the Stormwater Management Report Section III(A) refers to the equipment pads as negligible, however, the NYSDEC Solar Panel Construction Stormwater Permitting/SWPPP Guidance memo clearly indicates these impervious areas must be treated."***
    - ***e.) "The Contractor and Subcontractor certification should be revised to match the language in GP-0-20-001 Part III.A.6."***

Response:

a.) The construction sequence within the plans and SWPPP has been updated to indicate that no more than five (5) acres will be disturbed at any one time. A formal phasing plan will be provided to elaborate on how the proposed construction activities will be accomplished.

b.) Although the limit of disturbance is stated to be 30.9 acres (i.e. the project area), physical ground disturbance will only involve 14.5 acres as indicated on the SWPPP/NOI. The 14.5 acres of physical ground disturbance will include construction of the driveway, equipment pad, fence, panel post, land grading, underground electrical trenching, and the area of tree/brush removal. The perimeter fence encompasses an area of 25.2 acres, however a majority of the existing ground will not be impacted. In addition, the proposed area of tree/brush cutting that is incorporated within the LOD line will also not involve physical ground disturbance. During construction, the cumulative physical ground disturbance will not exceed 14.5 acres. The limit of disturbance, as stated to be 30.9 acres, is a representation of the total project area and does not represent the acreage of physical ground disturbance. Additional language has also been added to the site plan set to clarify the acreage of disturbance for the project.

c.) Noted.

d.) A grass filter strip and level spreader has been included in the revised site plan set to address concerns for water quality treatment caused by the concrete equipment pad.

e.) The Contractor and Subcontractor certification has been revised to include the conditions stated in GP-0-20-001 Part III.A.6.

12. <u>Miscellaneous Comments:</u>

- ***"Article 8(g) Tree cutting. The removal of existing trees larger than 6" should be minimized to the extent practicable. Has the applicant investigated the existing wooded area and assessed the number of trees with diameters greater than 6"?***

Response: As mentioned previously, we have completed a tree survey of the area where tree clearing is proposed. The Town of Alfred solar Code places greater emphasis on the protection of farmland of statewide importance (i.e. "Tier 3 Solar Energy located on areas that consist of prime farmland or farmland of statewide importance ***shall not*** exceed 50% of the entire lot"), which we comply with, than the suggested recommendation that "Removal of existing trees larger than 6 inches in diameter ***should*** be minimized to the extent possible. For these reasons, in combination with the requirements of the landowner to provide the aforementioned land for his continued grazing, the layout is proposed as presented. We have attached the report as well as a memo explaining the results; please reference the attached information for details.

- ***Article 8(i) 4. Preliminary equipment specification sheets. Although there are summaries of some of the equipment listed in the project summary, the applicant has not included specification sheets in this submission***

Response: A specification sheet for the proposed inverters has been added to the submission. This was provided previously as a response to the 09-02-2021 Memorandum. Given the global constraints on solar panel availability, the specifications for what is available today may be entirely different than what is available at the time of equipment procurement. As such, we would request that the provision of submitting the specification sheets for the actual panels available to the Town of Alfred for review be added a condition of potential Special Use Permit approval.

- ***Provide answers to specific electrical-related questions regarding stray voltage and dirty electricity from Fred Sinclair – Planning Board."***

Response: All metal components of the system are grounded, as required by the National Electrical Code. This eliminates the potential for stray voltage. This is shown on our three-line which was included in the initial submittal package. As for the concern about dirty electricity, please refer to response #3 of the 09-02-2021 Memorandum which was previously provided.

Memorandum dated September 27, 2021 – outstanding information:

1. ***Formal response to comments in LaBella's 9/2/2021 Memo.***

Response: Please see above responses.

2. ***Alternative Site Plan as requested by Town Supervisor and Town Board at 9/9/21 meeting, regarding relocating the solar array further down the slope, as an alternative to reduce total tree clearing.***

Response: As previously discussed, this location was chosen based on feedback from the landowner. In the current location, the landowner is able to maintain his rotational grazing pattern for his cattle, enabling continued agricultural use of the property once construction is completed. As the conversation continued the main question centered around whether the location took into consideration Article 8(G) of the Town of Alfred Solar Code, where "Removal of trees larger than 6 inches in diameter should be minimized to the extent possible". As of this time, an alternative site plan is not possible and the landowner will not support an alternative site plan.

3. ***Leaf off photo simulations in more standard format (showing leaf off for entire view not only within super-imposed "window"), as requested by Town Supervisor and Town Board at 9/9/21 meeting.***

Response: Please refer to response #8 of the 09-02-2021 Memorandum.

4. ***Information to address concerns discussed at the 9/9/21 Town Board meeting regarding issues of encountering bedrock during post-driving, including noise as well as structural stability (mitigation for posts bent or damaged during driving).***

Response: Posts will be pile-driven to minimize ground disturbance. Any posts that are damaged during the installation process will be replaced and not utilized. The Allegany County Soil Survey and the NRCS Web Soil Mapper both list depth to bedrock for the project site at greater than 200 cm (6.56 feet). Based on the documented depth to bedrock and the typical depth at which solar footers are installed, conflicts with bedrock are not anticipated. In the unlikely event that bedrock is hit during the installation, a concrete collar can be poured around the post to meet the required structural capacity without going through the bedrock. Screw pile footers are also an option as they can provide some benefits on sites dealing with bedrock. If it is necessary to drive the post through the bedrock, there are techniques available to do so in order to reach the full embedment depth of the post. These techniques would be within the noise level of typical construction. Standard industry data for pile-driven solar racking posts indicates that the pile driver can produce a maximum instantaneous sound level of 84 dBA at 50 feet when the hammer is operating.
However, based on previous experience, a pile driver only operates at full power Based on the standard noise attenuation rate of -6 dBA per doubling of distance for point sources, maximum off-site instantaneous levels from the pile driver operating at full power would be approximately:

- 84 dBA at 50 feet away (equal to the sound of an alarm clock)
- 78 dBA at 100 feet away
- 72 dBA at 200 feet away (equal to the sound of a washing machine)
- 66 dBA at 400 feet away
- 60 dBA at 800 feet away (equal to the sound of an electric toothbrush)

Typical farm equipment utilized on agricultural properties on the subject parcel and other parcels in the vicinity of the project site, including tractors and combines, operate at a noise range of 90 dBA to 97 dBA at 50 feet, producing noise at a factor of 10 higher than the proposed racking installation by pile driver. As such, no significant adverse impact related to noise is anticipated as a result of the project.

5. ***Supplemental landscaping information regarding a greater diversity of species mix, in order to minimize risk of plant loss possible when single species (monoculture) is proposed. This issue was a subject of discussion at the 9/9/21 Town Board meeting.***

Response: Please refer to the updated landscaping plan. Additional plant species have been proposed to diversify the landscaping.

6. ***Supplemental information regarding the Tree Inventory Memo relative to the distribution and density of the trees > 6" dbh and an indication of the habitat value of this woodland (such information is necessary for the SEQR evaluation of potential impacts on vegetation, species, and habitat.) Communication of this information can be initiated by a phone call from LaBella to the author of the Tree Inventory, Rita Kozak.***

Response: Please refer to the Tree inventory Memo submitted on September 7, 2021, for additional information on the potential impacts on vegetation, species, and habitat.

Norman Grosse Letter to the Town Board dated September 23, 2021 (provided to Bergmann on 10/11/21)

1. ***"I attended the last town board meeting/hearing about the proposed solar farm on Jericho Hill Road. At that time there was discussion about lowering the project down the hillside to hide the panels from the view of the neighbors. My home (as well as rental properties that I own) are directly across the road from the proposed site and I look at the hilltop that would be covered with panes from my front porch. I would support the lowering of the project down off the top of the ridge if it would be possible to do so. If it wouldn't be possible could some evergreen trees be planted to help block the panels from view? I am in favor of the project going forward. Attention to these ideas would be appreciated."***

Response: Please see above responses with respect to why the project cannot be moved. As an alternative and as proposed by Mr. Grosse, additional rows of evergreen trees and shrubs have been added to the landscape plan to further shield the project from any potential views along Jericho Hill Road, further supplementing the already dense vegetation that exists along the roadway. The proposed additional landscaping addresses visibility concerns without creating potential shading issues that would impact the productivity of the panels to generate electricity.

Please feel free to contact me at 518-588-8270 or via email at dplante@bergmannpc.com in the event you have questions or need additional information with respect to this Project.

Sincerely,

David J. Plante, AICP CEP
Energy + Environment Practice Leader, BERGMANN

Cc: **Peter Dolgos, Alyssa Nielsen, Dan Compitello (DRS – New York, NY)**
Eric Redding, PE, Kathleen Connolly (Bergmann)
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Kathy Spencer (LaBella)