

**BEFORE THE OHIO POWER SITING BOARD**

<b>In the Matter of the Application of</b>	)	
<b>Nestlewood Solar I LLC</b>	)	
<b>for a Certificate of Environmental</b>	)	<b>Case No. 18-1546-EL-BGN</b>
<b>Compatibility and Public Need</b>	)	

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**SUPPLEMENTAL DIRECT TESTIMONY OF JOSEPH JORDAN**

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**Q.1. Please state your name, title, and business address.**

**A.1.** My name is Joe Jordan. I was the Development Director for the Nestlewood Solar Project (“Project”) through 2019. I am currently a Managing Director with Alto Power LLC, 3131 McKinney Avenue, Ste 502 #75624, Dallas, Texas 75204. I continue to assist in the development of the Project in my current role.

**Q.2. On whose behalf are you offering testimony?**

**A.2.** I am testifying on behalf of Nestlewood Solar I LLC (the “Applicant”).

**Q.3. Did you previously testify on behalf of the Applicant?**

**A.3.** Yes, I testified at the June 13, 2019 hearing in this matter.

**Q.4. Why is the Applicant providing additional testimony in this proceeding?**

**A.4.** We are testifying in support of the amendment to the Joint Stipulation filed on February 4, 2020 and in response to concerns raised by the Chairman at the October 17, 2019 meeting of the Ohio Power Siting Board regarding information that he felt was absent from the Application and the record in this case. In addition to my testimony, Nestlewood is providing testimony from Lynn Gresock of Haley & Aldrich, Tricia Pellerin of Tetra Tech, Andy English of PLANIT Studios and Mark Bonifas and Matt Marquis of Hull & Associates to identify, clarify, and, in certain cases, expand upon information that has been provided to the Board

1 through the application process to allow for a thorough consideration of the potential impact of  
2 the Project by the Board.

3 **Q.5. Have you reviewed the Joint Stipulation filed on June 12, 2019?**

4 **A.5.** Yes.

5 **Q.6. What is the purpose of your testimony?**

6 **A.6.** To provide additional explanation and detail regarding certain aspects of the  
7 Project, including: (1) the process for resolution of any complaints regarding the Project; (2) the  
8 Project's vegetation management plan; (3) outreach and interactions with the public and local  
9 regulators that have occurred regarding the Project, and (4) a discussion of the current status of  
10 the engineering and design of the Project. I will also support and briefly summarize the  
11 amendment to the Joint Stipulation entered into by the Parties and filed February 4, 2020.

12 **Q.7. Does the Project have a complaint resolution program in place?**

13 **A.7.** Yes. A complaint resolution program that will be in effect during construction of  
14 the Project was included in the Application as Appendix D. It lays out a thorough complaint  
15 resolution procedure which includes the following steps:

- 16 • Commitment to provide Project complaint contact information to local officials and via  
17 the Project's website;
- 18 • Commitment to maintain a logbook of all complaints, including information about the  
19 complainant and the complaint, Nestlewood's recommended resolution, the date  
20 agreement was reached on a resolution, and the date that resolution was implemented;
- 21 • A commitment to contact a complainant within two business days of a complaint being  
22 made;
- 23 • A commitment to initiate reasonable action to resolve a legitimate interference or

1 disturbance that is a direct result of the Project; and

- 2 • A commitment to submit a quarterly complaint summary report to OPSB Staff. This  
3 commitment also complies with Joint Stipulation Condition 17.

4 Appendix D to the Application included the complaint resolution plan for the Project (and only  
5 required minor edits to make it applicable for operation). Attached to my testimony as Company  
6 Exhibit 12 is an updated copy of the complaint resolution plan that will be used for construction  
7 and operation. The complaint resolution plan, with the then-current contact information, will be  
8 provided to Staff in advance of construction and updated as needed for commencement of  
9 commercial operation, in compliance with Joint Stipulation Condition 14.

10 **Q.8. Has Nestlewood addressed the impact on, and Nestlewood's plan for management**  
11 **of, vegetation in its Application?**

12 **A.8** Yes. The Application, along with Nestlewood's responses to Staff's data  
13 requests, presents information on how much tree-clearing on the leased property is required to  
14 construct the Project and confirms avoidance of clearing in wooded wetland areas. The  
15 Application also notes that tree clearing will be limited to areas along the various woodland  
16 edges to create a broader layout and minimize panel shading. Further, disturbance to plants,  
17 vegetation, wetlands or streams is not anticipated in association with the Project's operation and  
18 maintenance other than minor impacts associated with routine maintenance and occasional repair  
19 activities.

20 Nestlewood committed, in the Application, to implement vegetation management procedures.  
21 Nestlewood also noted in the Application that it sited project components in areas that allow  
22 wetlands and surface waters to be avoided and that minimize the need for tree clearing.  
23 Additionally, the Application notes that vegetation within the Project Area will be enhanced with

1 a robust, low growing seed mix consisting primarily of native grasses and other low-maintenance  
2 species, and that pollinator species will be included in the seed mix where practical. As Mr.  
3 Marquis testifies to in more detail and as noted in the Application, maintaining this ground cover  
4 will absorb precipitation, provide species habitat, reduce the need for herbicides, and filter  
5 stormwater flows to reduce the potential for erosion and sedimentation. Finally, the Application  
6 states that portions of the Project Area temporarily impacted by construction activities will be  
7 revegetated as soon as possible following completion of construction to stabilize exposed areas  
8 of soil. Species proposed for the seeding will be selected to ensure compatibility and suitability  
9 with surrounding agricultural areas. Outside of agricultural areas, temporarily-impacted areas  
10 will be revegetated with native plant species to prevent the spread of invasive species.

11 In addition to the information in the Application, Joint Stipulation Condition 28 requires  
12 Nestlewood to submit a “vegetation management plan” to Staff prior to construction to ensure  
13 that Nestlewood’s design plan for vegetation complies with its commitments.

14 **Q.9. What is a vegetation management plan?**

15 **A.9.** The Board has routinely approved conditions in certificates which require that  
16 certificate holders provide a vegetation management plan to Staff in advance of the  
17 commencement of construction of a new power generation project. The plan will in many  
18 instances repeat what is in the Application and also further refine that information. The  
19 vegetation management plan for Nestlewood will incorporate a clearing plan prior to  
20 commencement of construction that will identify all areas of vegetation clearing for the Project  
21 and specify the extent of the clearing. The vegetation management plan describes how the  
22 remaining trees and shrubs along access routes, at construction staging areas, during maintenance  
23 operations, and in proximity to any other Project facilities will be protected from damage. The



1 plan describes the implementation and maintenance of pollinator-friendly plantings. The plan  
2 also describes the steps to be taken to prevent establishment and/or further propagation of  
3 noxious weed identified in OAC 901:5-37 during implementation of pollinator-friendly  
4 plantings. All of these requirements of the plan are required by Condition 28 of the Joint  
5 Stipulation, and I expect the plan will continue to be refined in coordination with final Project  
6 engineering and design, and in consultation with the Project's builder (engineering, procurement  
7 and construction contractor). A vegetation management plan for the Project has been developed  
8 and is attached to my testimony as Company Exhibit 13. As I previously discussed, this plan  
9 will be refined in close coordination with the selected builder after engineering design is  
10 complete.

11 **Q.10. What is the specific language of Joint Stipulation Condition 28 that addresses the**  
12 **vegetation management plan?**

13 **A.10.** Condition 28 of the Joint Stipulation requires that:

14 the Applicant shall submit a vegetation management plan to Staff for review and  
15 confirmation that it complies with this condition. The plan would identify all  
16 areas of proposed vegetation clearing for the project, specifying the extent of the  
17 clearing, and describing how such clearing work would be done as to minimize  
18 removal of woody vegetation. The plan shall describe how trees and shrubs along  
19 access routes, at construction staging areas, during maintenance operations, and in  
20 proximity to any other project facilities would be protected from damage. The  
21 plan shall also describe the implementation and maintenance of pollinator-  
22 friendly plantings and describe any planned herbicide use. The plan shall also  
23 describe the steps to be taken to prevent establishment and/or further propagation  
24 of noxious weed identified in OAC 901:5-37 during implementation of pollinator-  
25 friendly plantings.

26  
27 Again, this is a standard condition that the Board has approved for other utility scale solar  
28 projects.

29 **Q.11. Does the construction and operation of the Project present any concerns with**  
30 **respect to glare from the solar panels?**

**A.11.** No. PV solar technology absorbs light from the sun rather than reflecting it, so glare off the PV solar panels is not anticipated to have a material impact on visibility. No significant reflectivity is expected to be visually noticeable. Solar panels are designed to maximize energy production by capturing as much light as possible, which means they inherently have low levels of glare from reflection of sunlight. Specifically, albedo is a measurement of the amount of solar radiation reflected from a surface. A black, perfectly absorbing surface that reflects away no sunlight has an albedo of 0. A white, perfectly reflecting surface that reflects away all sunlight has an albedo of 1. The albedo of freshly laid asphalt is .04, deciduous trees are .15 to .18, bare soil is .17, green grass is .25, uncultivated fields are .26, new concrete is .55, and fresh snow is .80 to .90. Typical albedos for solar panels range from .16 to .27, quite similar to that of the agricultural land that makes up the bulk of the Project Area. In addition, the wooded areas present within the Project Area, the majority of which will be retained, as well as the absence of major roads in the Project Area, will minimize any potential impact from glare. Finally, solar panels are common sights around the country, and, in fact, are also installed at airports, including a 33 panel array at the John Glenn Columbus International Airport, a 183-acre, 20-MW ground mounted array at the Indianapolis International Airport, and the Wyandot Solar Farm in Upper Sandusky, Ohio that straddles the runway of the Wyandot County Airport. Finally, as discussed in the Application, there is no need for an aeronautical study with respect to Nestlewood because the project is not located “in the vicinity” of a federally obligated airport. The FAA’s screening tool was used to confirm that no filing with the FAA is required.

**Q.12. Can you describe the public outreach that has been performed regarding the Project?**

1           **A.12.** Yes, as I testified at the June 13, 2019 hearing, Nestlewood has been engaged in  
2 speaking with members of the general public, neighbors to the Project Area, and local regulators  
3 regarding the development of the Project. At the public information meeting conducted as part  
4 of the Board's process, I spoke with a number of neighbors and other area residents to talk about  
5 questions or concerns they had regarding the Project, and made myself available to them for any  
6 follow-up questions they might have. Although I subsequently reached out to some of the  
7 interested neighbors, none responded to my additional outreach.

8 Following the public information meeting, I also attended the public hearing that was conducted  
9 by the Board. At that hearing, five people spoke, including John McManus, representing the  
10 Clermont Soil & Water Conservation District. The Clermont Soil & Water Conservation District  
11 had previously filed a public comment with the Board regarding the Project, and Mr. McManus  
12 and I had spoken prior to the public hearing.

13 Following the public hearing, I spoke to the four other people who spoke regarding their  
14 questions and concerns, and I have reached out to them subsequent to that hearing to maintain  
15 contact throughout the process. As we continue with design for our landscaping plan and  
16 stormwater calculations and continued development of the Project, we will keep all Project  
17 neighbors abreast of Project design.

18 Specifically with respect to Mr. McManus and the Clermont Soil & Water Conservation District,  
19 Nestlewood continued to work with his organization to ensure that, if necessary, appropriate  
20 post-construction storm water control measures are maintained for the Project. Mr. McManus  
21 provided input to the language of Condition 31 included in the amended Joint Stipulation. It is  
22 my understanding that Mr. McManus is satisfied with Condition 31 as written, based on a written  
23 communication received by Nestlewood from Mr. McManus. In addition, as discussed in Mr.

1 Marquis' testimony, at this time, we don't anticipate that the Project will result in any changes to  
2 stormwater flows following construction. That said, as committed in Condition 31 of the  
3 Amended Joint Stipulation and discussed in Mr. Marquis' testimony, Nestlewood will continue  
4 to evaluate what, if any, post-construction controls are required as final design progresses.

5 With regard to screening, conceptual plans have been prepared. Visual simulations showing  
6 conceptual views of the Project with different types of screening are attached to my testimony as  
7 Company Exhibit 14. Company Exhibit 15 is a map showing in what areas the different  
8 screening options are planned to be implemented. As noted in the Application, it is not  
9 anticipated the Project will be visible from many locations, and a key design goal of the Project  
10 is to maintain the existing vegetation surrounding the Project Area to the greatest extent possible  
11 in order to take advantage of pre-existing screening. As further discussed by Mr. English in his  
12 testimony, landscaping can be adjusted based on specific location. Three conceptual planting  
13 schemes have been developed that can be adjusted, as necessary, to reflect the most appropriate  
14 installation for specific circumstances. In addition, any landscaping, especially landscaping near  
15 the substation, will be developed and maintained in compliance with rules and regulations of the  
16 interconnecting utility, the Federal Energy Regulatory Commission (FERC), and the North  
17 American Electric Reliability Corporation (NERC).

18 I have also been in contact with the local tax authorities, including the counties, townships, and  
19 school districts within which the Project will be located. Overall, local tax jurisdictions will  
20 receive annual revenue totaling \$720,000 from the Project assuming that a \$9,000/MW PILOT is  
21 in place. Nestlewood estimates that the Bethel-Tate Local School District and the Western  
22 Brown Local School District will receive, in aggregate, approximately 35 to 40% of the annual  
23 tax revenue from the Project. The local counties, townships, vocational schools, and library will

1 also receive tax revenue from the Project. The exact amount of annual tax revenue for each local  
2 entity will be dependent on the final location of installed capacity.

3 **Q.13. Can you describe the current status of the design of the Project?**

4 **A.13.** Yes. Detailed engineering design of the Project is not complete, though the  
5 Application identifies the maximum extent of impact so that the impact of the Project can be  
6 conservatively evaluated by the Board. The Project's maximum boundaries have been  
7 determined and used to evaluate the maximum possible impact that the Project will have on  
8 species, waterbodies, woodlands, and other resources in the Project Area. In addition, the  
9 Application includes a conceptual layout for the Project (See Appendix F, Figure 2). This layout  
10 illustrates the maximum potential impact to sensitive resources from the Project.

11 As noted above, concerns regarding visual impact have been addressed by determining specific  
12 locations of concern and applying an appropriate landscaping scenario. Given the existing  
13 vegetation and low density of residences in the area surrounding the Project, visual impact is  
14 expected to be limited and will be mitigated by landscaping.

15 The noise impacts of the Project, as further discussed by Ms. Pellerin, were specifically modeled  
16 in the Application. As discussed in Ms. Pellerin's testimony, with respect to the Project's  
17 inverters, Nestlewood has the flexibility to design the Project to avoid adverse impacts to non-  
18 participating residences.

19 **Q.14. Why wasn't the engineering design of the Project complete at the time the**  
20 **Application was submitted?**

21 **A.14.** Producing the final engineering design for a Project is a complex and expensive  
22 undertaking for any utility scale power generation project (wind, solar, gas, coal or nuclear) and  
23 in my experience the investment required for final engineering design occurs only once certain

1 key authorizations for a project have already been obtained, which in Ohio would be the  
2 certificate issued by the Board. Specific to solar generation projects, the panel selected for a  
3 project will drive the final layout of a project including the racking used, the type of inverter  
4 preferred for use with that panel, row width, panel orientation, post design, access road design  
5 and inverter location. Panel technology (along with pricing) is evolving with new models being  
6 issued or improved upon every four to six months. Given the Board's lengthy application  
7 process and the need to identify specific panel technology closer to construction, it is not  
8 practical to absorb the significant cost and time for final engineering and detailed construction  
9 drawings prior to or during the Board's review process for a proposed project. If this were the  
10 case, by the time approval occurred the design of the project would be obsolete creating a never-  
11 ending cycle of spend, design, review and approval of projects that would never be built. In my  
12 experience the costs for final design, and the associated deposits to lock in associated major  
13 equipment, can exceed one million dollars for a project such as Nestlewood. This investment  
14 would be wasted if major design changes were required as a result of the Board's review or if  
15 there were changes in panel technology that made selected panels commercially obsolete. This  
16 sends a clear message to the power generation investment community to invest in other PJM  
17 states. Similar to other power projects sited in the state of Ohio, the Board has been provided  
18 sufficient information for this project through its current application rules to be able to discharge  
19 its duties under R.C. 4906.10, even without the final design because, as explained previously, the  
20 maximum impacts of the project are clearly defined and the projects cannot exceed those well-  
21 defined parameters. We note that the Board has approved thousands of megawatts of power  
22 generation projects that represent billions of dollars of capital investment without requiring that  
23 final engineering or construction drawings be complete prior to the issuance of a certificate. In

1 fact, the sequenced approach to permitting, design, and investment has been a major cornerstone  
2 for the successful deployment of billions of dollars in capital investment in the power sector that  
3 has occurred in the state of Ohio over the last 10 years. I am not aware of any certificated  
4 project for which the Board required that final engineering and construction drawings be  
5 submitted prior to certificate issuance. Also, there is no Board rule requiring that final design of  
6 a Project be complete before a certificate is issued. In fact, for the reasons I laid out, the Board's  
7 rules specifically contemplate a later submission of a final design, after an application is filed.  
8 (OAC 4906-4-03(C)(1)(g) requires an application include in a proposed project schedule  
9 "preparation of the final design.").

10 I believe that if the Board were to require that the engineering design of the Project were  
11 complete before a certificate is issued, it would drive investment for any type of power  
12 generation plants away from the State because of the delay and cost that a final  
13 engineering/construction design requirement would impose on any project. And if that were to  
14 happen, Ohio would not benefit from the massive investment, tax revenue and job creation that  
15 the power industry has created for this State.

16 **Q.15. Is there any additional information on final design that Nestlewood can provide the**  
17 **Board to assist with its consideration of the Application?**

18 **A.15.** I believe the Application contains more than sufficient information about the  
19 design of the Project to allow the Board to meet its statutory obligations prior to issuing a  
20 certificate. With that said, as I indicated previously, design of the Project continues to progress,  
21 and Nestlewood is presenting the Board with additional visual simulations, as well as a screening  
22 plan and a vegetation management plan.

23 **Q.16. Why haven't final versions of certain plans been provided with the Application?**

1           **A.16.** Certain plans related to the Project and required by the Joint Stipulation, including  
2 the vegetation management plan, landscape and lighting plan, Phase I cultural resources survey  
3 plan, final construction drawings, and final transportation management plan, are dependent on  
4 final engineering design for the Project being complete. The plans and surveys are also not  
5 required to be submitted under the Board's rules and have been allowed as post-certificate  
6 submittals for numerous Board-approved projects. With that said, a vegetation management plan  
7 is attached to my testimony as Company Exhibit 13; however, the plan will continue to be  
8 refined upon selection of a builder and development of the final design. With respect to impact  
9 on cultural resources, conducting archaeological evaluation of the entire parcel, rather than  
10 focusing on where impact will actually occur, would be a considerably greater level of effort and  
11 expense, particularly given the landowners' desire to avoid unnecessary disturbance of the  
12 parcels (for example, the need to plow or dig test pits in no till areas to prepare for a cultural  
13 resources pedestrian survey). Once the Project's major approvals are granted, cultural resources  
14 field work can be focused on the specific limits of disturbance and the landowner will better  
15 understand timing for execution of the lease and may allow appropriate areas of the property to  
16 be plowed. Finally, the final construction drawings and final transportation management plan  
17 are both dependent upon the selection of a builder, the detailed design of the Project, and  
18 equipment selection.

19 **Q.17. Has the Project obtained all permits that will be required for the Project at this**  
20 **time?**

21           **A.17.** No.

22 **Q.18. Why hasn't the Project obtained every permit that it will be required to obtain to**  
23 **construct the Project?**



1           **A.18.** The Joint Stipulation Condition 8, in part, obligates Nestlewood to:

2           Prior to the commencement of construction activities in areas that require permits  
3           or authorizations by federal or state laws and regulations, the Applicant shall  
4           obtain and comply with such permits or authorizations.

5  
6           This is an appropriate condition for the Project, and is a condition that the Board routinely  
7           includes in certificates. I am also not aware of any utility-scale generation project where this  
8           condition has not been used in some form. Similar to my reasoning why all plans cannot be  
9           prepared before final engineering is complete, without a final design, all permits cannot be  
10          obtained before final design is complete. For example, the Project will likely be obtaining a  
11          permit or authorization from the relevant county or township for a driveway for access to the  
12          Project Area from a county or township road. This authorization requires identification of the  
13          location of the driveway, which will not be determined until final design of the Project is  
14          complete. In addition, as further discussed in Mr. Marquis' testimony, obtaining coverage under  
15          the Ohio EPA general construction stormwater permit requires a stormwater pollution prevention  
16          plan be in place, the content of which is informed by the design of the Project. Joint Stipulation  
17          Condition 8 is a typical condition that ensures that Staff is made aware of permits as they are  
18          issued by other authorities.

19          **Q.19. To what extent will the Project impact agricultural district land within the Project**  
20          **Area?**

21          **A.19.** It's important to note that, although the vast majority of the land in the Project  
22          Area is being used for agriculture, very little is actually agricultural district land. Specifically,  
23          there are only 2.25 acres of agricultural district land within the Project Area and approximately  
24          470 acres of agricultural land that will be used for the Project. In addition, farming can continue  
25          outside the fenced Project and, unlike many other forms of development that result in permanent

1 change, the land within the Project fence can be returned to agricultural use after Project  
2 decommissioning. In fact, the Project may be beneficial to agricultural land, including  
3 agricultural district land, in the long run. The presence of a solar project can provide land with  
4 an opportunity to recover, when paired with planting of native grasses and pollinator-friendly  
5 species and be used for agricultural purposes in the future. Given the lack of extensive  
6 foundation work required for a solar farm, as compared to a strip mall or housing subdivision,  
7 returning the land to agricultural use is a much easier proposition.

8 Finally, the Project will take only a very small amount of acreage out of agricultural production.  
9 Based on information from the 2017 USDA Census of Agriculture, if we conservatively assume  
10 that the entirety of the 610-acre Project Area were to be taken out of production, and that 40% of  
11 the Project were located in Clermont County and 60% in Brown County, then this Project would  
12 occupy only 0.3% of Clermont County cropland, and slightly over 0.2% of Brown County  
13 cropland.

14 **Q.20. Will the Project adversely impact drain tile in the Project Area?**

15 **A.20.** No. Many megawatts of solar energy facilities have been designed and  
16 constructed on agricultural land similar to the Project throughout the Midwest where drain tile is  
17 commonly used. Nestlewood is committed to determine the location of any subsurface drainage  
18 tiles through consultation with the landowner and/or review of public records, and, if any drain  
19 tile is damaged, they will be identified, documented, and repaired. Joint Stipulation Condition  
20 18 also provides that Nestlewood must:

21 “... avoid, where possible, or minimize to the extent practicable, any damage to  
22 functioning field tile drainage systems and soils resulting from the construction,  
23 operation, and/or maintenance of the facility in agricultural areas. Unless  
24 otherwise agreed to by the landowner, damaged field tile systems shall be  
25 promptly repaired to at least original conditions or modern equivalent at the  
26 Applicant’s expense. If the affected landowner agrees not to have the field tile

1 system repaired, they may do so only if the field tile systems of adjacent  
2 landowners would be unaffected by the non-repair of the landowner's field tile  
3 system."

4  
5 Finally, Nestlewood's lease agreements with landowners in the Project Area also require that any  
6 tile damaged as a result of project activities be repaired to original condition.

7 **Q.21. Has the Joint Stipulation been changed since it was initially filed?**

8 **A.21.** Yes. The Joint Stipulation was amended by all parties to include an additional  
9 condition related to post-construction stormwater management (Condition 31). The supplement  
10 to the Joint Stipulation is attached to my testimony as Joint Exhibit 2. Condition 31 reads:

11 If one acre or more of ground is disturbed, the Applicant shall obtain from Ohio  
12 EPA a "General Permit Authorization for Storm Water Discharges Construction  
13 Associated with Construction Activities" (also known as a Construction General  
14 Permit). Following the completion of final project engineering design, the  
15 Applicant shall perform pre- and post-construction stormwater calculations to  
16 determine if post-construction best management practices are required, based on  
17 requirements contained in Ohio EPA's Construction General Permit. The  
18 calculations along with a copy of any stormwater submittals made to the Ohio  
19 EPA shall be submitted to the Clermont County Building Inspection Department  
20 and Brown County Soil & Water Conservation District. The Applicant will also  
21 provide confirmation that it incorporated guidance from the Ohio EPA's  
22 document "Guidance on Post-Construction Storm Water Controls for Solar Panel  
23 Arrays" dated October 2019 to the Clermont County Building Inspection  
24 Department and Brown County Soil & Water Conservation District. If post  
25 construction storm water best management practices are required, the Applicant  
26 will submit construction drawings detailing any stormwater control measures to  
27 the Clermont County Building Inspection Department and the Brown County Soil  
28 & Water Conservation District, as applicable, no less than seven days prior to the  
29 applicable construction activities.  
30

31 **Q.22. Is the amendment to the Joint Stipulation a product of serious bargaining among**  
32 **capable and knowledgeable parties?**

33 **A.22.** Yes. I was personally involved in the negotiation of the amendment to the Joint  
34 Stipulation. The Parties were all represented by counsel and all parties to this proceeding  
35 participated in settlement discussions. Additionally, as noted previously, Nestlewood

1 communicated repeatedly with John McManus of the Clermont Soil & Water Conservation  
2 District to get his input on Condition 31. During negotiations, Condition 31 was revised multiple  
3 times before being finalized.

4 **Q.23. Does the Joint Stipulation as amended violate any important regulatory principle or**  
5 **practice?**

6 **A.23.** No.

7 **Q.24. Is the Joint Stipulation as amended in the public interest?**

8 **A.24.** Yes, for all of the reasons listed in my previous testimony. In addition, the  
9 amendment to the Joint Stipulation clarifies that Nestlewood will obtain all appropriate  
10 stormwater permitting and will, if necessary, implement appropriate post-construction  
11 stormwater best management practices. This addition to the Joint Stipulation further benefits the  
12 public by ensuring that post-construction stormwater flows at the Project will be appropriately  
13 managed.

14 **Q.25. Does this conclude your supplemental direct testimony?**

15 **A.25.** Yes, and I hope this additional testimony is helpful to the Board in its  
16 consideration of Nestlewood's Application and the amended Joint Stipulation.

### **CERTIFICATE OF SERVICE**

The Public Utilities Commission of Ohio's e-filing system will electronically serve notice of the filing of this document on the parties referenced on the service list of the docket card who have electronically subscribed to the case. In addition, the undersigned certifies that a courtesy copy of the foregoing document is also being sent via electronic mail on February 10, 2020 to:

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/s/ MacDonald W. Taylor  
MacDonald W. Taylor

## **Nestlewood Solar Complaint Resolution Program**

### **1. INTRODUCTION**

Nestlewood Solar I LLC (Nestlewood Solar) has developed a complaint resolution program for implementation during the construction and operation of the Project to provide an effective process for identification and resolution of concerns voiced by members of the community.

Nestlewood Solar is committed to complying with requirements established through the Ohio Power Siting Board and other regulatory processes, and to establishing an accessible process for community members to voice concerns and for those concerns to be addressed as quickly and effectively as possible. Maintaining detailed records of all complaints and resulting actions is an important aspect of the complaint resolution program.

Nestlewood Solar's policy is to take all reasonable necessary actions to rectify legitimate interference or disturbances that are a direct result of the Project.

### **2. COMPLAINT RESOLUTION PROCEDURE**

#### **2.1 Nestlewood Solar Contacts**

Nestlewood Solar will establish a toll-free telephone number and will provide that number to the county commissioners, township trustees, emergency responders, schools, and public libraries within the Project Area; that number will also be posted on the Project website. To register a complaint, individuals may either call the telephone number and leave a message or go to the project's local office during regular business hours. Messages will be checked daily, Monday thru Friday and initial follow up will occur within two business days. Any emergency situations should be addressed with the appropriate local authorities or by calling 911.

#### **2.2 Notification**

In addition to providing the contact information and procedure to the officials and public locations noted above, Nestlewood Solar will maintain a Project contact list for area residents and will provide notification to residences located within 1 mile of the perimeter of the project site that construction or another major site activity is about to commence.

#### **2.3 Complaint Documentation and Follow-Up**

Nestlewood Solar will keep a logbook to register every complaint received. The logbook will include pertinent information about the person making the complaint, the issues surrounding the complaint, and the date the complaint was received; the complaint resolution form is attached.

The logbook will also document Nestlewood Solar's recommended resolution, the date agreement was reached on a proposed resolution, and the date when the proposed resolution was implemented. Nestlewood Solar personnel will generate a quarterly report based on the information recorded in the log book about the nature and resolution of all complaints received in that quarter, and file the report with the OPSB on January 31, April 30, July 31, and October 31 of each calendar year or portion thereof during construction.

Individuals who register a complaint with Nestlewood Solar will receive correspondence from Nestlewood Solar no later than 2 business days after registering the complaint. The intent of the initial correspondence is to gather more information to better understand the complaint. Within 30 days of the complaint being logged, Nestlewood Solar will initiate reasonable action to resolve any legitimate interference or disturbance that is a direct result of the Project.

If Nestlewood Solar and the complaining individual cannot agree to a resolution, Nestlewood Solar will provide a summary of the complaint and proposed resolution to the complaining individual so the complaint can be brought to the OPSB.

### Nestlewood Solar Complaint Resolution Form

Complaint Log Number: _____	
Complainant's name and address:	
Phone number/email:	
Date complaint received: _____	
Time complaint received: _____	
Date complainant first contacted: _____	
Nature of complaint:	
Definition of problem after investigation:	
Description of corrective measures taken:	
Complainant's signature: _____	Date: _____
This information is certified to be correct:	
Nestlewood Solar Project Manager Signature: _____	Date: _____

(Attach additional pages and supporting documentation, as required.)

# Nestlewood Solar I LLC

## Vegetation Management Plan

February - 2020





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## **Summary**

Nestlewood Solar is an 80 megawatt solar-powered electrical generation facility with related electrical interconnection facilities located in Brown and Clermont Counties, Ohio. This plan provides the approach to be taken to identify all areas of proposed vegetation clearing for the project, specify the extent of the clearing, and describe how much clearing work will be done to minimize removal of woody vegetation. In addition, this plan provides the approach for how trees and shrubs along access routes, at construction staging areas, during maintenance operations, and in proximity to any other project facilities will be protected from damage. Finally, this plan provides the approach for implementing and maintaining pollinator-friendly plantings, use of herbicides, and steps to be taken to prevent the establishment and/or further propagation of noxious weeds during implementation of pollinator-friendly plantings.

## **Clearing**

It is anticipated that approximately 46 acres of trees will be cleared as part of construction of the project. Appendix 1 of this plan contains Updated Figure 08-8. Updated Figure 08-8, which was submitted to OPSB Staff in April 2019, is an update of a figure that was included in Nestlewood's Application. Updated Figure 8-8 depicts the locations where clearing of woody vegetation is expected. After selecting a builder, the project will determine the specific clearing locations of woody vegetation based upon final engineering and design to create a Clearing Plan that will be provided in Appendix 2. Before any clearing activities begin on site, a surveyor will flag areas for clearing to detail and document in the Clearing Plan. All tree and shrub locations will be confirmed on site and an aerial image will be produced in concert with the surveyor to visually depict tree clearing areas in the Clearing Plan. All vegetation removal will be completed in accordance with Item 201, Clearing and Grubbing Specification, of the Ohio DOT Division of Construction Management.

Cleared vegetation and cut trees will be chipped/mulched and/or removed from the site. Industry standard equipment will be used for clearing activities including skidders, excavators, skid steers, feller bunchers, log processors, chippers, tub grinders and mulchers. Condition 28 within the project's Joint Stipulation will be adhered to with respect to prevention of establishment and/or further propagation of noxious weeds.



## **Vegetation Protection**

During the surveyor visit, wooded areas that are to remain will be clearly marked. These areas will be shown in an aerial image in the Clearing Plan. To ensure that protected areas are not damaged, the site will be cleared in phases to allow for proper supervision.

Protected areas are defined as:

- Sites with finds of cultural or archeological significance, or a site that is eligible for inclusion on the National Register of Historic Places.
- Areas with designated wetlands and/or streams or locations of threatened or endangered species or their identified habitat.
- Vegetation along access routes and at construction staging areas.

Visual inspections will be completed prior to any clearing and documented by photograph and video. The project environmental specialist will be included in the process for mark-out and on-site review prior to clearing activities commencing, consistent with Condition 26 in the Joint Stipulation for the project.

## **Seasonal Clearing**

Tree clearing activities will adhere to seasonal cutting dates contained in Condition 22 in the Joint Stipulation for the project, which is October 1 through March 31 for the removal of trees three inches or greater in diameter to avoid impacts to the Indian and Northern Long-Eared bats, unless coordination with ODNR and the USFWS allows for a different schedule. Further, construction in the norther harrier preferred nesting area shall be avoided from May 15 through August 1, unless coordination with ODNR allows a different course of action.

## **Seeding and Re-vegetation**

Before any grading occurs, topsoil will be stripped and stockpiled for future use. All stockpiled soil will be inspected for noxious weeds. Topsoil will be reestablished for areas where grading was necessary. Once construction activities are complete within a given area the site will be prepped for seeding by scarifying the surface. The seeding mix will be native to the area and designed to prevent establishment and/or further propagation of noxious weeds. Seeded areas will be uniform, free of ruts, erosion and/or bare and dead spots, free of weeds, and have a minimum 80% cover of germinated perennial seed. Final seed mix will be reviewed and approved prior to seeding by Nestlewood Solar.



## **Mowing and Maintenance**

Nestlewood's authorized subcontractors will perform routine mowing and maintenance activities to maintain site aesthetics, safety and efficient operation. Grassed areas between and under the rows of module racks will be mowed a minimum of twice per year, or more often if required. The height of the grass will be maintained at a level to avoid shading of the panels and reduce the risk of fire. The vegetated planting/screening areas around the project are intended to establish naturally and are not expected to require any regular maintenance. Any grassy areas outside the project fence will be mowed on the same schedule as the areas within the project fence. It is not anticipated that any herbicides will be used for regular maintenance. The site will be visited monthly for inspection. During site visits the site will be visually inspected, and any debris (such as fallen trees) within the project area will be removed and replacement will be scheduled as appropriate.

**Appendix 1**  
**Ecological Impact and Tree Clearing**  
**(Updated Figure 08-8)**

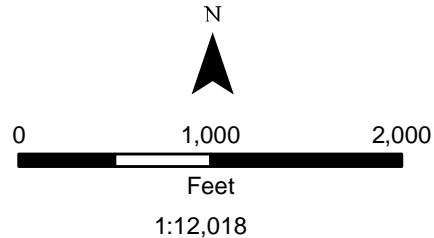


Updated Figure 08-8  
Ecological Impact

Nestlewood Solar  
Brown and Clermont Counties, Ohio

- Project Area
- Potential Solar Arrays
- Project Substation
- Utility-Owned Switchyard
- Potential Collection Line
- Potential Gravel Road
- Culverted Crossing\*
- Highway
- Tree Clearing
- Delineated Features
  - Stream
  - Wetland

\* This drawing is as of April 2019 and does not include the amended collection line easement area entered into the record in August of 2019. Trees planned for clearing in this area will be included in the clearing plan for staff review.



Source: NAIP (2017)





## Appendix 2

### Clearing Plan

(To be inserted after final engineering and design)



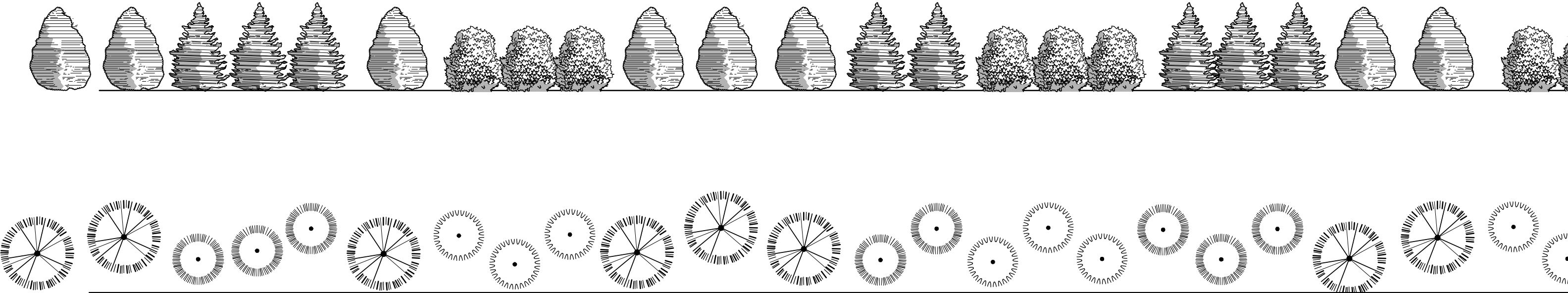


Light Screening Simulation

Tate & Clark Townships,  
Brown & Clermont County,  
Ohio

Nestlewood Solar





Hooks Juniper

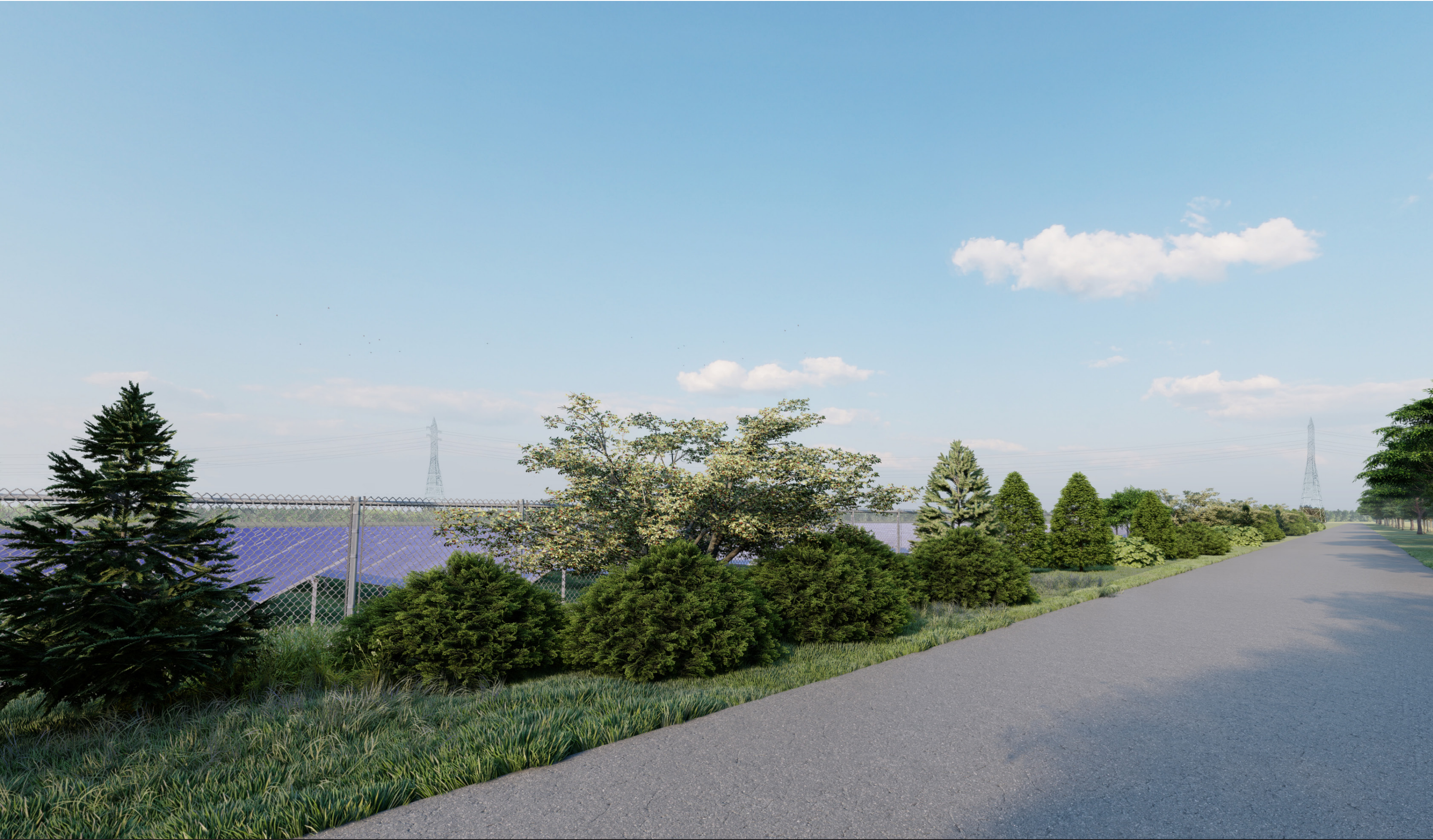


Techny Arborvitae



Hicksii Taxus



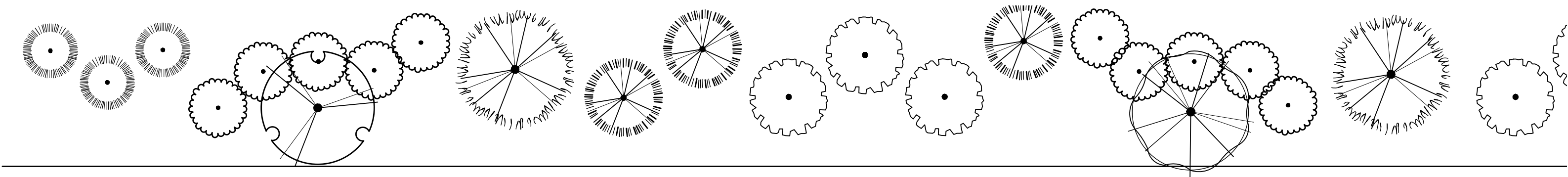
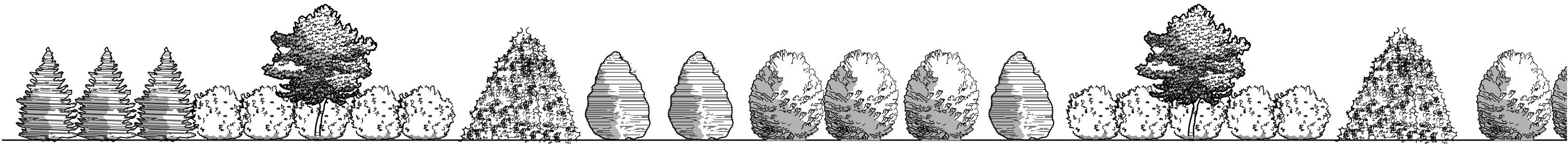


Medium Screening Simulation

Tate & Clark Townships,  
Brown & Clermont County,  
Ohio

**Nestlewood Solar**





Hooks Juniper



Sargent Crabapple



Fat Albert Spruce



Sea Green Juniper



Crusader Hawthorne



Techny Arborvitae



Arrowwood Viburnum

Medium Screening Simulation

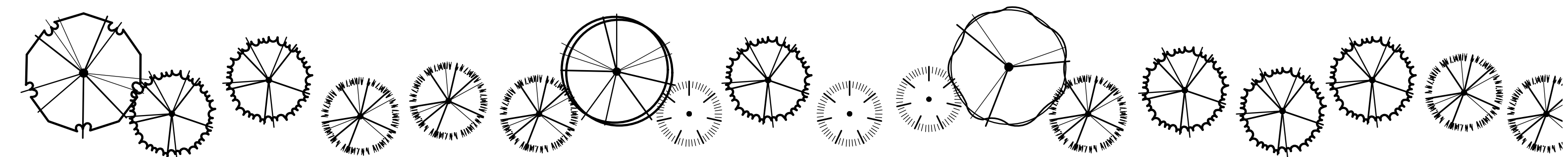
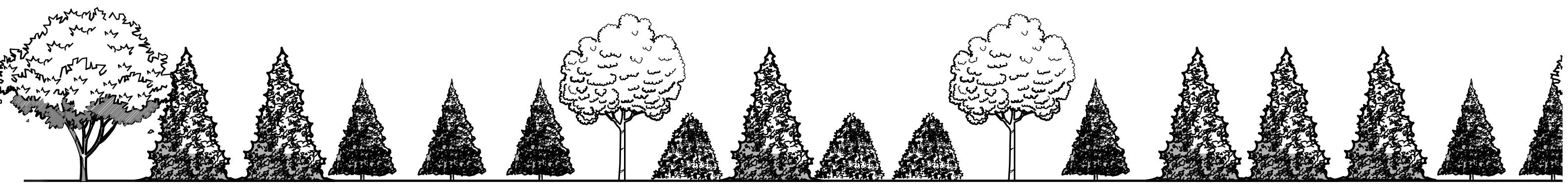
Tate & Clark Townships,  
Brown & Clermont County,  
Ohio

Nestlewood Solar









Oak



Norway Spruce



Austrian Pine

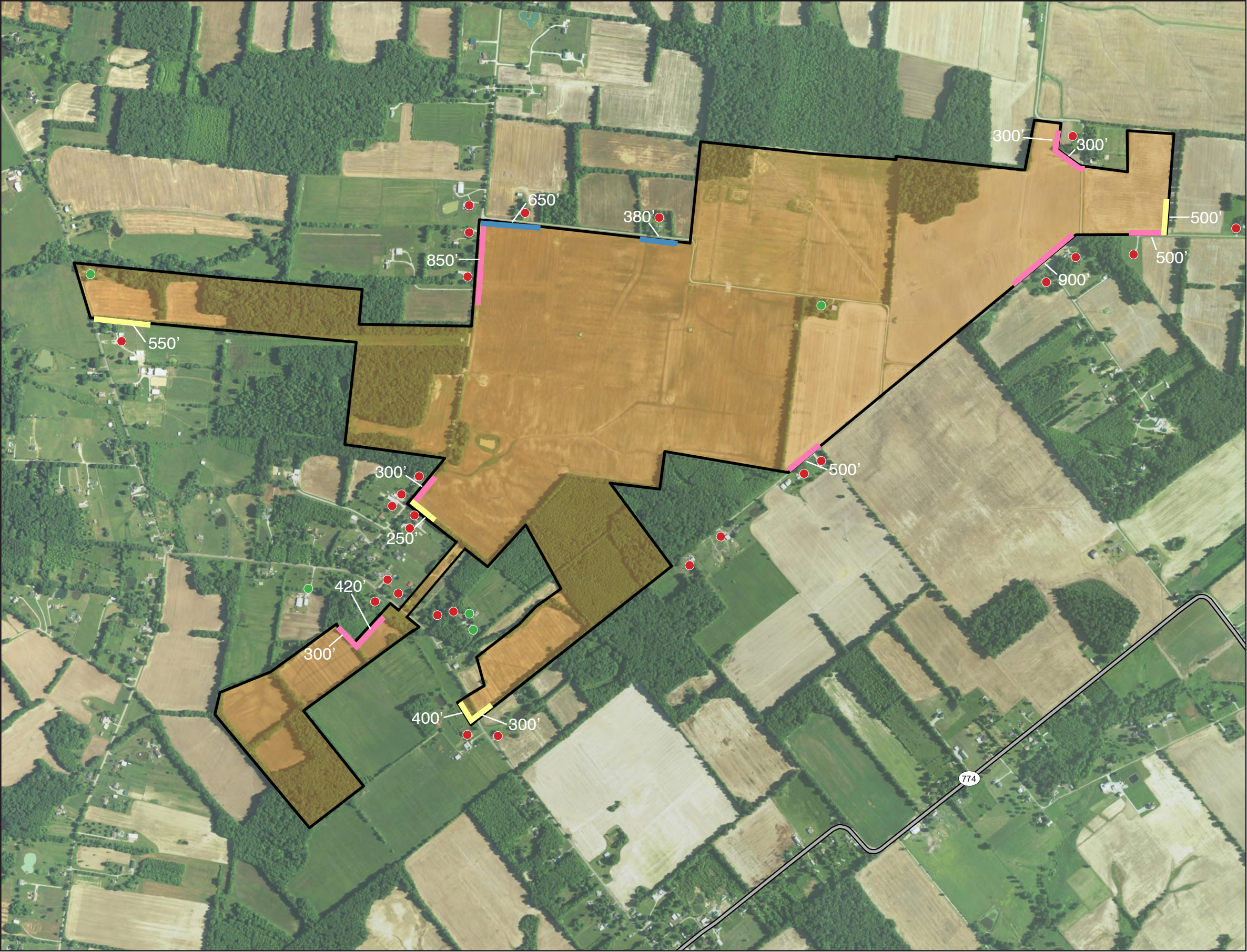


Elm



Maple





- Light Screening
- Medium Screening
- Tall Screening

Site Extents

House - Participating

House - Non-Participating

Screening Totals

2,000 ft.	Light Screening
4,370 ft.	Medium Screening
1,030 ft.	Tall Screening
7,400 ft.	Total



**This foregoing document was electronically filed with the Public Utilities**

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Summary: Testimony Supplemental Direct Testimony of Joseph Jordan electronically filed by Mr. MacDonald W Taylor on behalf of Nestlewood Solar I LLC