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March 9, 2023

Melanie A. Bachman, Esq.  
Executive Director  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051

Re: Petition No. 1558 - Community Power Group LLC petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a 4-megawatt AC solar photovoltaic electric generating facility located at 24 Middle Road, Ellington, Connecticut, and associated electrical interconnection.

Dear Ms. Bachman:

Community Power Group LLC (“CPG” or the “Company”) hereby submits to the Connecticut Siting Council (the “Council”) the enclosed information documenting the Company’s community outreach efforts, including the list of comments received from the public in connection with the above-captioned petition. See Attachment A.

As discussed in CPG’s petition, the Company has undertaken community outreach efforts to keep town officials and abutting property owners apprised of the project, even during its conceptual stage. These efforts included meeting with the Town of Ellington (the “Town”) officials on February 3, 2021 to discuss the project, as well as hosting a virtual public meeting on February 16, 2023 to inform abutting property owners about various aspects of the project and to provide an opportunity for them to ask questions and/or raise their concerns with the project. Abutting property owners were notified about this public meeting in a letter dated January 27, 2023, which also informed them about the filing of Petition No. 1558 with the Council. The Company also transmitted via email details about the public meeting to Town officials for further dissemination. Fourteen (14) individuals, including Lisa Houlihan, the Town Planner, participated in the virtual public meeting. A copy of the meeting’s presentation is enclosed. See Attachment B.

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Following the submission of Petition No. 1558, various abutting property owners and Town officers contacted CPG via email with questions about the petition. The Company has responded to all the questions submitted and to the extent feasible has provided the requested information, including visual renderings. See Attachment A for additional information. CPG wishes to present this information to the Council as it is relevant to its decision regarding the necessity of a public hearing regarding this petition, as a significant amount of public outreach and discussion has already occurred.

An original and fifteen (15) copies of this filing will be hand delivered to the Council.

Should you have any questions regarding this filing, please do not hesitate to contact me.

Very truly yours,



Bruce L. McDermott

Enclosures

**Attachment A**  
**Comments Received Relating to Petition No. 1558**

<b>Topic</b>	<b>Question/Comment</b>	<b>Community Power Group (“CPG” or the “Company”) Response</b>
<b>Construction</b>	<ol style="list-style-type: none"> <li>1. What is the nearest distance of the proposed fenced solar facility area from the center of the rear property line of 32 Middle Road?</li> <li>2. Will any green shrubs be planted along the fence on the side abutting Middle Road— if so, what and where?</li> <li>3. Will the existing trees between the properties on Middle Road and the proposed fenced solar facility area be removed? If so, what specifically will be removed, including in what areas?</li> <li>4. Will any access to the facility be made via the right of way that exists between 32 and 36 Middle Road?</li> <li>5. Plan sheet DN 1 in the petition lists the material of the fence posts at “southern yellow treated pine posts”. Can you provide a photo of what the perimeter fencing, wire mesh and post, will look like when it’s constructed?</li> <li>6. What is the size of the garden/planting area?</li> <li>7. Why is the access road from Middle Road as opposed to Pinney Street, which is a collector road?</li> </ol>	<ol style="list-style-type: none"> <li>1. The distance is 238 feet from the center of the rear property line to the fence around the solar facility, and 258 feet to the nearest solar panel.</li> <li>2. Yes, CPG plans to install evergreen trees along the north fence line of the solar facility. Its landscape plan is currently in development and CPG will share it with the commenter once the engineer has completed it.</li> <li>3. No, the solar developer will not be removing any existing trees between the properties and the solar fencing. Trees will be added by the project along the fence line to increase the screening for neighbors.</li> <li>4. No, CPG will not be utilizing this path for this solar project. All access to the solar facility will be done by the existing drive between 28 Middle and 22 Middle Road.</li> <li>5. Please see he attached (Attachment A1). For its projects, CPG specifies agricultural fencing or “Game fencing” whenever it can because the Company feels that it makes a significant difference in the visual impact of the project.</li> <li>6. The garden area has been designed to be 10,000 square feet.</li> <li>7. CPG evaluated the existing Eversource distribution lines on both Pinney Street and Middle Road and Middle Road was the only option that was not cost prohibitive. With the interconnection happening off of Middle Road, the access road has to be near the point of interconnection for Eversource to access the</li> </ol>

		<p>equipment. In addition, the Company wanted to preserve the existing wooded area on the eastern boundary of the property to avoid any tree cutting for the project.</p>
<p><b>General Project Questions</b></p>	<ol style="list-style-type: none"> <li>1. What local entities will be working on the maintenance of the facility? What is the term of the contract?</li> <li>2. Who will manage the community garden? is it a commercial venture? Is it intended to be accessed by members of the public? And if so, what are the hours during which it will be accessed?</li> <li>3. How long will your organization be operating this solar project?</li> <li>4. Can you provide or instruct where I can find in the Council’s website details about the specifications for the equipment shelters?</li> <li>5. Will the garden/planting area be available to the general public?</li> <li>6. With regards to the garden/planting area, the Town has heard concerns with an increase in traffic and access safety if the garden is open to more than one user. The Ellington Planning and Zoning Commission will officially discuss the proposal at their February 27, 2023 meeting. The Town Planner anticipates the commission will be concerned with the loss of actively farmed farmland and direct the Town Planner to write a letter to the Council and the Department of Agriculture expressing their concerns.</li> <li>7. Impact on property values.</li> </ol>	<ol style="list-style-type: none"> <li>1. Local firms will be hired for the maintenance of the facility. CPG typically does not execute any maintenance contracts for its facilities until all building permits are granted. The Company would bid the project to several local providers to select the best firm for a long-term contract. It is in CPG’s best interest to maintain the solar facility to its best performance so that the Company maximizes its investment. Maintenance is typically performed through one to three visits annually to the site.</li> <li>2. The community garden will be managed by a local partner. The Company has identified a local individual gardener who would like to establish a vegetable crop so its expectation is that this individual will access the site during normal daylight hours. It is not a commercial venture.</li> <li>3. Community Power Group develops the project and once it is ready for construction it partners with a general contractor to build it and then a management company/long-term financier to monitor the day to day operations.</li> <li>4. CPG will not have any equipment shelters for this project. The solar inverters which are smaller pieces of equipment will be attached to the end of the rows of panels. The two transformers will be mounted on two concrete pads inside the fence at the access road. This is shown on Page 15 of Exhibit A.</li> <li>5. CPG has identified a local individual who has expressed interest in utilizing the entire space for vegetable harvesting so the Company’s preference would be to work with a specific entity who would have access to the space. However, if that project</li> </ol>



		<p>does not come to fruition once the garden area is established, CPG will consider opening the space up to the public. The Company has kept track of questions and concerns during the February 2023 public meeting and privately from neighbors regarding a public space on the site. Is this what you have heard as well? CPG is open to the Town's opinion on this, as the Company could discuss with the Department of Agriculture an option of returning the space to the tenant farmer as opposed to establishing a new garden.</p> <p>6. CPG thanked the Town for the information and indicated that it was looking forward to any comments or questions from the discussion at the PNZ Commission meeting. The Company also noted that CPG received confirmation from the Department of Agriculture that the project does not represent a material impact to prime farmland.</p> <p>7. CPG has done quite a bit of research in the effect of solar on property values, and has seen a number of studies conducted by appraisers and universities that show various impact to properties not accounting for distance to solar, size of project, screening implemented, etc. The Company has also completed its own studies for one of its projects in Maryland that show a slight increase to property values (Attachment A2), and CPG encourages the commenter to do their own research using property websites like Redfin and Zillow to make sure the study is taking into account properties like theirs and solar facilities like CPGs that are approximately 20 acres in size.</p>
<p><b>Environmental Including Visual Aesthetics</b></p>	<p>1. The petition includes a rendering of visual impact from several properties. Please show us a rendering of the visual impact from 32 Middle Road.</p>	<p>1. The Company made the renderings attached to the petition from Middle Road and Pinney St because it did not have access to any of the private properties. If the commenter sends CPG a picture of the view</p>

	<ol style="list-style-type: none"> <li>2. What are the key research questions that the CT state beekeeper will be considering? How long will that research be conducted on the property in question?</li> <li>3. Solar trackers are visible from Middle Road, but the visual impact analysis does not show the perimeter fence and gates. Is there another visual impact analysis that shows what the fence, gate, etc., look like to abutting property owners?</li> <li>4. Visual impact to the 204 Pinney Street property.</li> <li>5. Use of herbicides.</li> <li>6. Following up on no. 4, the abutting property owner requested that CPG plant either Canadian Hemlocks or Eastern White Pines rather than the typical arborvitae which do not spread and form a screen. The abutting property owner also indicated that due to the topography of the land, the only way to provide proper screening is if they maintain the trees on their own property. And for this reason, they asked to be compensated for the number of trees that they would plant on their property to be maintained by them.</li> </ol>	<p>from their back door towards the plowed field, CPG would be happy to prepare the requested rendering.</p> <ol style="list-style-type: none"> <li>2. The State Beekeeper and the CT Agricultural Experiment Station are responsible for research regarding the health of pollinators in the state as well as the role of honeybees as an agricultural crop producer (honey) and supporter (pollination). The State Beekeeper intends to use this project as a research project on pollinator genetic diversity, through the analysis of honey production at the site. In addition, the Beekeeper intends to study the types of infrastructure and housing that is most supportive to pollinator health including testing standard bee apiaries, pollinator hotels, and existing natural resources such as fallen logs. This research will be conducted as long as the State Beekeeper is able to collect data.</li> <li>3. CGP did not include that view in its petition, but it can work on something to share with the commenter and the abutting property owners showing the fence, provided the commenter provides a picture from their backyard in order to create the visual. CPG cannot create any visuals from neighboring properties without a picture from their backyard of the current view or without access to the property.</li> <li>4. The 204 Pinney Street property will be approximately 600 feet from the nearest panel, but CPG agrees that the existing vegetation behind the property is different from the properties to the north along Middle Road. With that in mind, the Company will be installing screening trees next to the project, see attached image (Attachment A3) for the green dots showing the trees, in order to greatly reduce the viewshed from the home. These will be evergreen trees 4-6' in height at installation that will grow to approximately 20 feet, and CPG is open to different</li> </ol>
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		<p>species if the abutting property owner has a preference. In addition, CPG prepared a visual rendering of what these proposed trees would look like in front of the solar for the 204 Pinney Street utilizing a photo view from the back of the property towards the field provided by the property owner (Attachment A4).</p> <ol style="list-style-type: none"> <li>5. CPG will not be using any herbicides on its project. Additionally, converting the field from a planted crop field to a wildflower/grassy field underneath the solar will actually eliminate the herbicides and pesticides that may currently be used with the corn crop. The Company will mow the field occasionally during the summer months, but no herbicides will be used.</li> <li>6. The Company stated that at first glance the two proposed species grow quite high (50'-80' at mature height) which would be too high to locate next to the project. However, CPG will do some research on whether the species can be clipped to reduce their height while maintaining the width for screening. Regarding planting trees on the abutting property, CPG stated that it was open to that alternative and hearing what the property owner thought was reasonable.</li> </ol>
<p><b>Review Process Including Information About the Public Meeting</b></p>	<ol style="list-style-type: none"> <li>1. A group of neighbors have reached out to the Town expressing concerns about a large solar array on the Middle Road property and in their backyards. Will CPG be conducting any public outreach before filing a petition with the Council? And will the neighbors' dissent have any impact on whether a utility scale project gets built there?</li> </ol>	<ol style="list-style-type: none"> <li>1. CPG thanked the Town for letting them know about the neighbors' concerns and asked for the names and/or contact information of those neighbors so that the Company can reach out to them and let them know about the upcoming public meeting. CPG noted that it plans to do outreach to the neighbors of the site and told the Town that they should feel free to pass the Company's contact information on to anyone who has questions about the project.</li> </ol>

	<ol style="list-style-type: none"> <li>2. How many residents signed up to attend the information session for residents (February 2023 public meeting)?</li> <li>3. Is there a recording available for distribution of the February 2023 public meeting?</li> <li>4. Can you share the 'Commonly Asked Questions' referenced in the petition?</li> <li>5. Will the Council hold a hearing on the petition? If so, do you know the date, time, and location of it?</li> </ol>	<ol style="list-style-type: none"> <li>2. At the time a response was provided (February 7, 2023), ten neighbors had registered for the public meeting.</li> <li>3. The meeting was not recorded, but a copy of the presentation slides was provided (Attachment B).</li> <li>4. See Attachment A5 for a FAQ of CPG's projects.</li> <li>5. A hearing has not been scheduled for this petition. It is at the Council's discretion whether there is a hearing scheduled for a petition.</li> </ol>
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Study of Solar Farm Impact on Property Values

Prepared by Community Power Group

Dated 07/01/2021

I. Purpose

The purpose of this study is to evaluate if the Roxbury Road Solar project (“Roxbury Solar”) would impact adjacent residential property values.

II. Methodology

In this study our intent was to identify a solar farm similar to the proposed Roxbury Solar Farm in terms of size and proximity to neighbors with similarly valued homes. To do this we reviewed numerous solar facilities throughout Maryland to find a similar sized solar farm and then utilized Zillow to identify adjacent property values. To determine home prices before and after the solar facility was installed, we reviewed tax records and publicly available home sale records (via Zillow) before and after construction of the solar facility. Of the numerous solar farms in Maryland, the Nixon Farms site was chosen for this comparison study based on the geographic locations (Howard County, Maryland) and comparable property values<sup>1</sup>. These two factors are the baseline of the “apples to apples” comparison and therefore this study assumes that impacts to the Nixon Farms property values may be experienced at the Roxbury Road Solar project. Community Power Group acknowledges that property values can fluctuate for a variety of reasons and thus this study is limited to the information presented herein. Other characteristics including turnover rate, size of project, minimum distance to residential lots, fencing, and landscaping were also considered in this study.

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<sup>1</sup> Zillow.com

### III. Summary of Site Comparison

As noted in Table 1 (below), the sites are located in the same County and same zone with a similar number of residential properties abutting the solar farm locations. The most notable difference is that the Nixon Farms project is almost 9 times the size of the proposed Roxbury Road Solar project. Additionally, the Roxbury Road Solar project is proposing game fencing and enhanced landscape screening to improve the solar facility’s surrounding environment. It is of Community Power Group’s professional opinion that a smaller facility with less obtrusive fencing and enhanced landscaping would have a favorable impact on the aesthetic of the solar facility when compared to the larger and more industrial layout of Nixon Farms.

The below chart provides a side-by-side comparison between the two sites:

*Table 1: Project Parameter Comparison*

	Nixon Farms	Roxbury Road	Notes
Location / Zone	West Friendship, Howard County, MD / RC-DEO	Glenelg, Howard County, MD / RC-DEO	Solar allowed with approval of a Conditional Use Permit.
Number of Adjacent Residential Properties	8	7	Similar.
Average Price of Adjacent Residential Properties	\$1.03 Million	\$920K	The average price of Nixon Farms homes is 12% higher than Roxbury Road homes.
Number of Properties Sold in last 8 years (Turnover Rate) <sup>2</sup>	3	2	The rates of turnover since 2013 are similar.
Size/Power	67 Acres / 10 MWatts	7.5 Acres / 1.99 MWatts	The smaller facility would have less of a potential impact.
Minimum Distance to Residential Lot (Panel to Property Line)	Greater than 50 LF	Greater than 50 LF	The County code requires a 50-foot setback; both projects exceed the minimum requirement.
Fencing	Chain Link	Game Fencing	It is of Community Power Group’s opinion that game fencing is more aesthetically pleasing while also providing benefits to the natural habitat by allowing wildlife to traverse its boundaries freely.
Landscaping along Abutting Residential Properties	Existing trees along property lines remain, minimal additional screening	Existing tree lines to remain. New screening to be provided along all residential abutting property lines per new County requirements.	The current County requirements will be followed at the Roxbury Road site. These robust screening requirements create a natural buffer.

<sup>2</sup> Nixon Farms was built in 2013. This study is focused on the 8 years since 2013 to focus on the impacts of the solar farm.



## Nixon Farms Analysis

### Pre-Development



Figure 1: Google Earth, Imagery Date 8/29/2010

### Post-Development

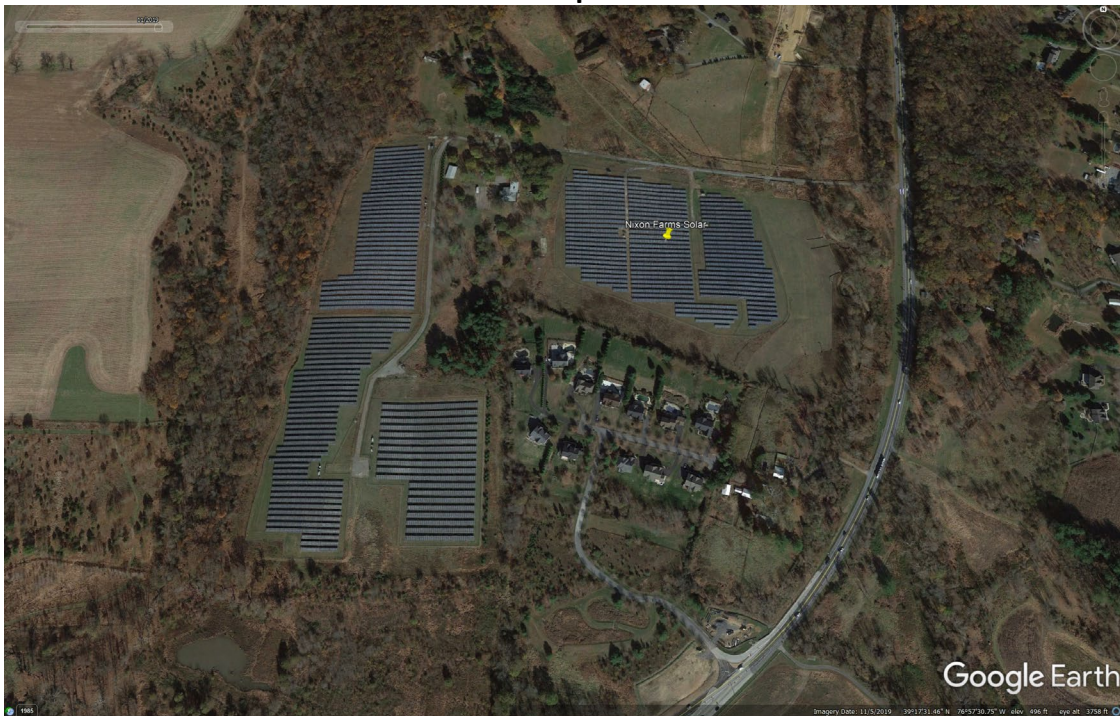


Figure 2: Google Earth, Imagery Date 11/5/2019



### Current Nixon Property Values

Table 2: Nixon Farms Property Values

Map Key	Adjacent to Solar	Address	Current Zestimate	Lot Size	Price / Acre
A	Y	13012 Cedarview Ct	\$ 1,010,000.00	1.19	\$ 848,739.50
B	Y	13008 Cedarview Ct	\$ 1,030,000.00	0.99	\$ 1,040,404.04
C	Y	13004 Cedarview Ct	\$ 984,000.00	0.92	\$ 1,069,565.22
D	Y	13000 Cedarview Ct	\$ 1,170,000.00	0.92	\$ 1,271,739.13
E	Y	12905 Vistaview Dr	\$ 1,040,000.00	0.92	\$ 1,130,434.78
F	Y	12909 Vistaview Dr	\$ 936,000.00	0.92	\$ 1,017,391.30
G	Y	12913 Vistaview Dr	\$ 1,170,000.00	0.99	\$ 1,181,818.18
H	Y	13011 Cedarview Ct	\$ 945,000.00	1.16	\$ 814,655.17

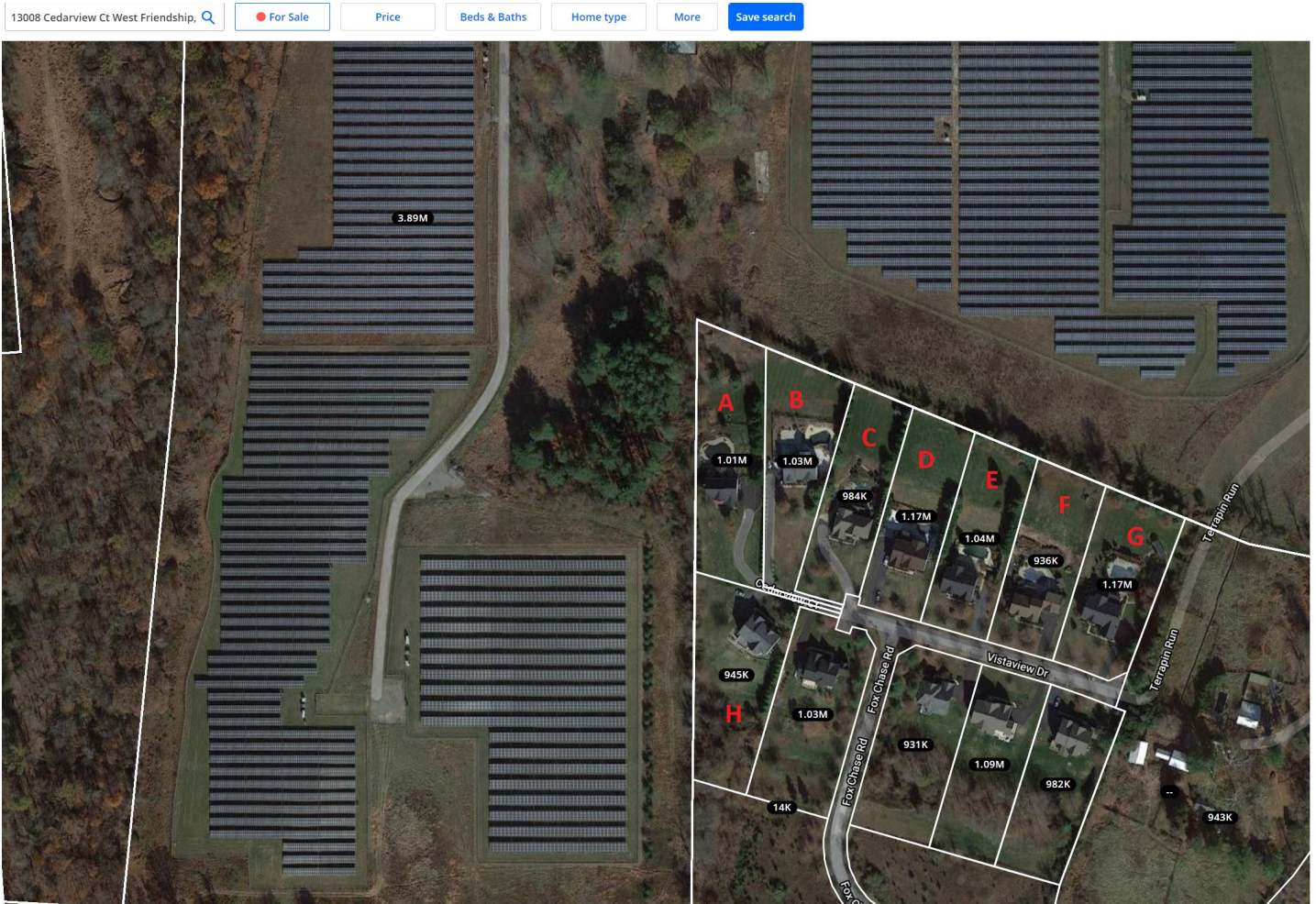


Figure 3: Nixon Farms site with listed rounded property values per Zillow.com. Note, the image depicts slightly different property value whereas Table 2 lists the current property estimate to the nearest dollar per Zillow.com

### Analysis of Recent Nixon Home Sales (Post-Development)

In the 8 years since the Nixon Farms Solar facility has been in operation, only 3 adjacent owners have sold their properties. Two of those sales took place 7 years and 4 years after the construction and both were sold for more than asking price.

*Table 3: Property Sales per Zillow.com and Realtor.com*

Key Map	Adjacent to Solar	Address	Latest Year Sold	Latest Posted Listing Price	Sale Price
A	Y	13012 Cedarview Ct	2020	\$865,000	\$870,000
F	Y	12909 Vistaview Dr	2017	\$800,000	\$804,000
G	Y	12913 Vistaview Dr	2014	\$974,000	\$971,000

Additionally, 2 of the homes (Key Map A and B in Figure 5) added pools which indicates favorable use of their backyard.



## Roxbury Road Analysis

### Pre-Development



Figure 4: Google Earth, Imagery Date 11/5/2019

### Post-Development

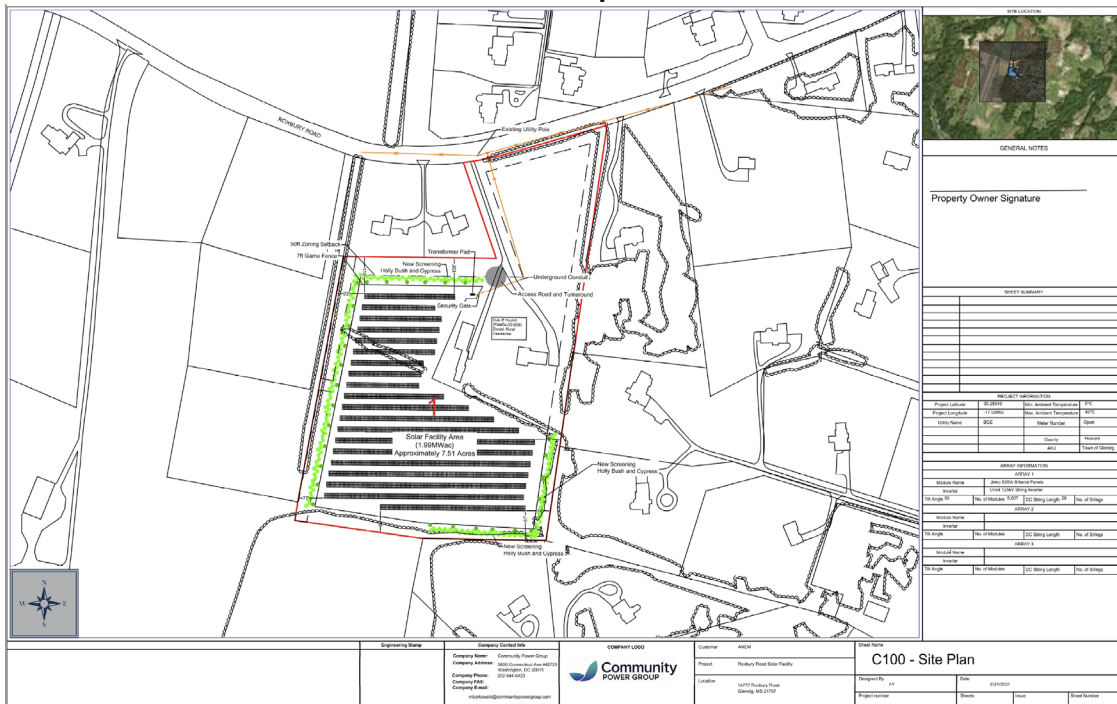


Figure 5: Site Plan prepared by Community Power Group

### Current Roxbury Property Values

Table 4: Roxbury Road Property Values

Map Key	Adjacent to Solar	Address	Current Zestimate	Lot Size (LandVision)	Price / Acre
A	Y	14831 Roxbury	\$ 907,000	1.36	\$ 666,911.76
B	Y	14821 Roxbury	\$ 970,000	1.05	\$ 923,809.52
C	Y	14725 Roxbury	\$ 1,230,000	5.00	\$ 246,000.00
D	Y	14650 Triadelphia	\$ 832,000	4.15	\$ 200,481.93
E	Y	14670 Triadelphia	\$ 868,000	3.44	\$ 252,325.58
F	Y	14818 Woodfield	\$ 835,000	3.21	\$ 260,124.61
G	Y	14824 Woodfield	\$ 801,000	3.39	\$ 236,283.19

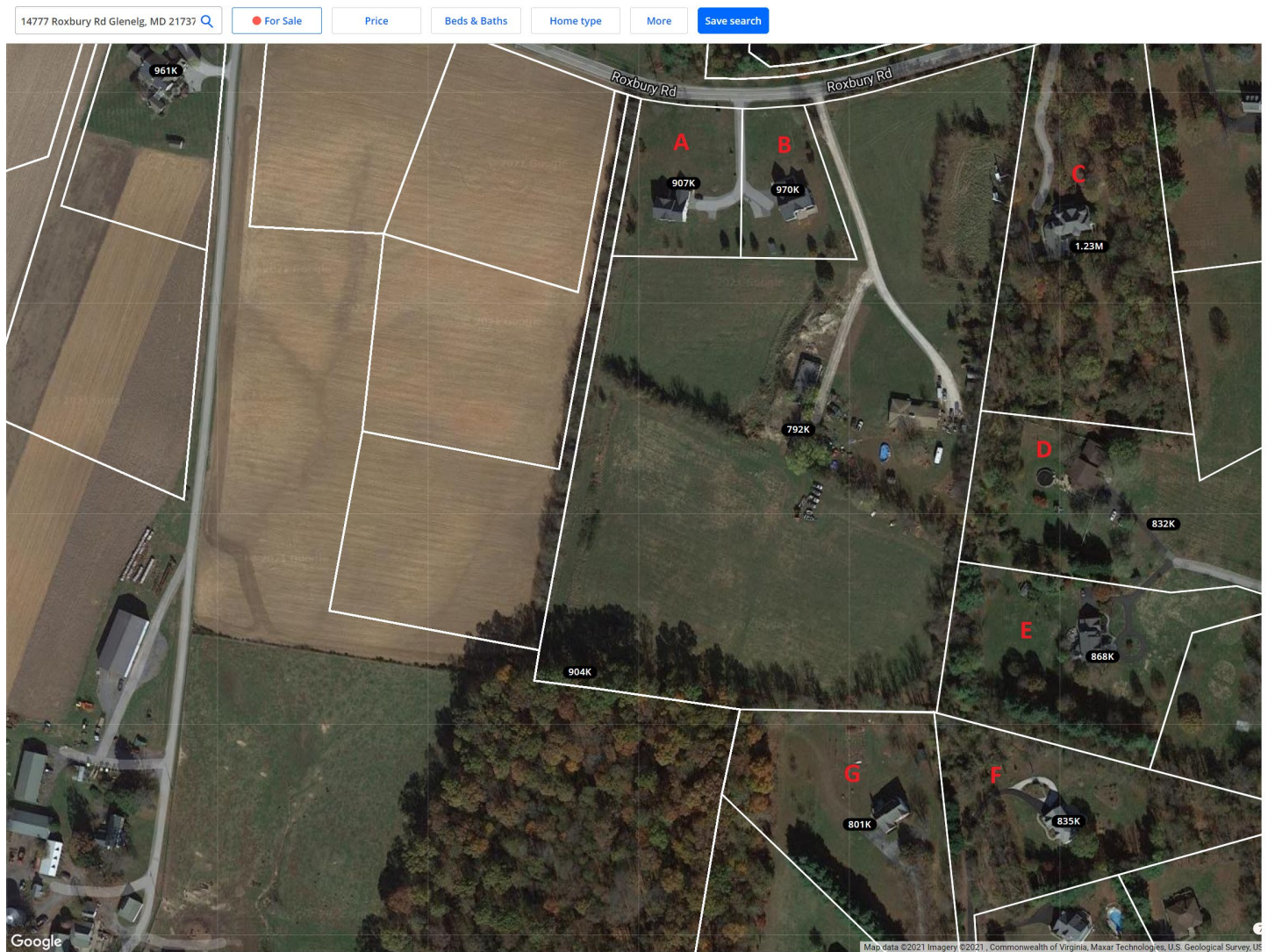


Figure 6: Roxbury Road site with listed rounded property values per Zillow.com. Note, the image depicts slightly different property value whereas Table 2 lists the current property estimate to the nearest dollar per Zillow.com



### Analysis of Recent Roxbury Home Sales

This study is focused on sales within the last 8 years since the Nixon Farms Solar facility has been in operation. The Roxbury Roads area of study has had 2 sales within that timeframe as indicated below, both of which were sold under the asking price.

*Table 5: Property Sales per Zillow.com*

Key Map	Address	Latest Year Sold	Latest Posted Listing Price	Sale Price
A	14831 Roxbury	2018	\$775,000	\$765,000
B	14821 Roxbury	2017	\$810,000	\$808,000

### Howard County Property Values

Both sites are in areas valued above the Howard County average. It is important to note that the current Zillow prices are higher than the previous sale prices which is likely due to the current high-demand in the housing market. This “surge” is graphically represented in the below steep increase in home values between 2020 and 2021.

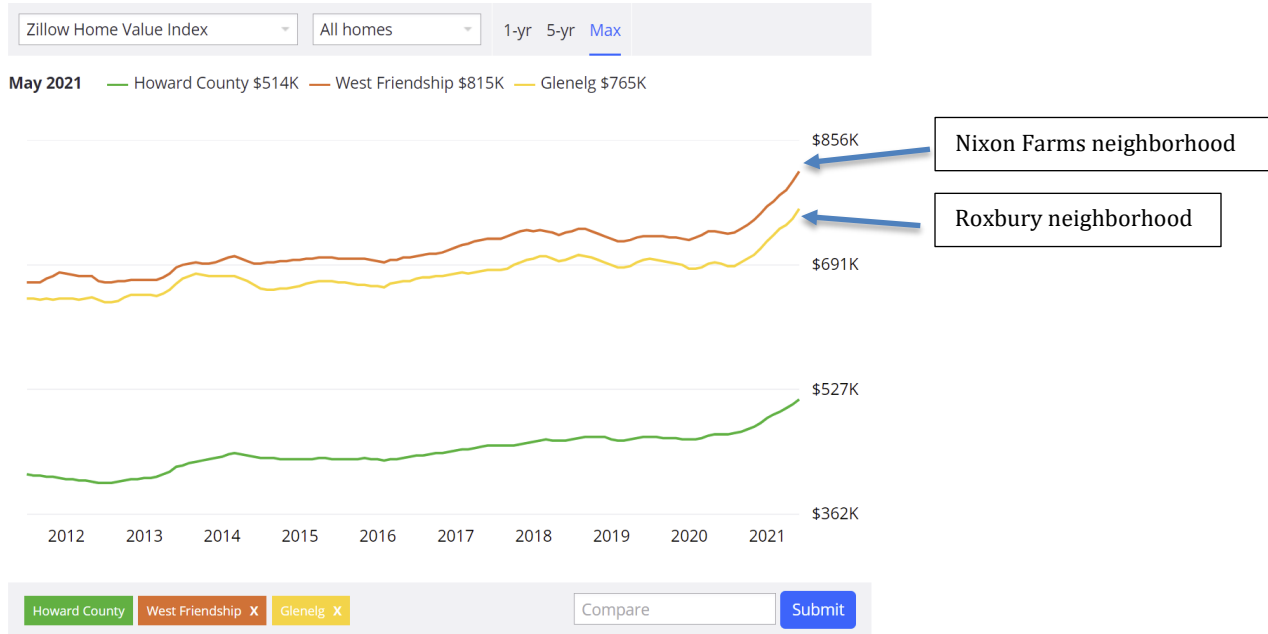


Figure 6 Zillow Home Value Index. Howard County average shown in green, location of Roxbury Road Solar (Glenelg) shown in yellow, location of Nixon Farms (West Friendship) shown in red.

#### IV. Conclusion

The property values of the Nixon Farms area are above the West Friendship average indicating that they are “high-end” and comparable to the Roxbury Road area. CPG found no evidence of an exodus of Nixon Farm Neighbors as a result of the solar farm being installed nor did there appear to be any impact on property values. In fact, homes were sold above asking price whereas the two homes sold in the Roxbury Road neighborhood in the same timeframe sold under asking. Additionally, it is noted that every home abutting the Nixon Farm had pools in their backyards, two of which were added after the solar farm was installed, indicating the neighbors of a solar farm enjoy their backyard and are even willing to make significant investments to spend more time in their backyards abutting the solar farm.

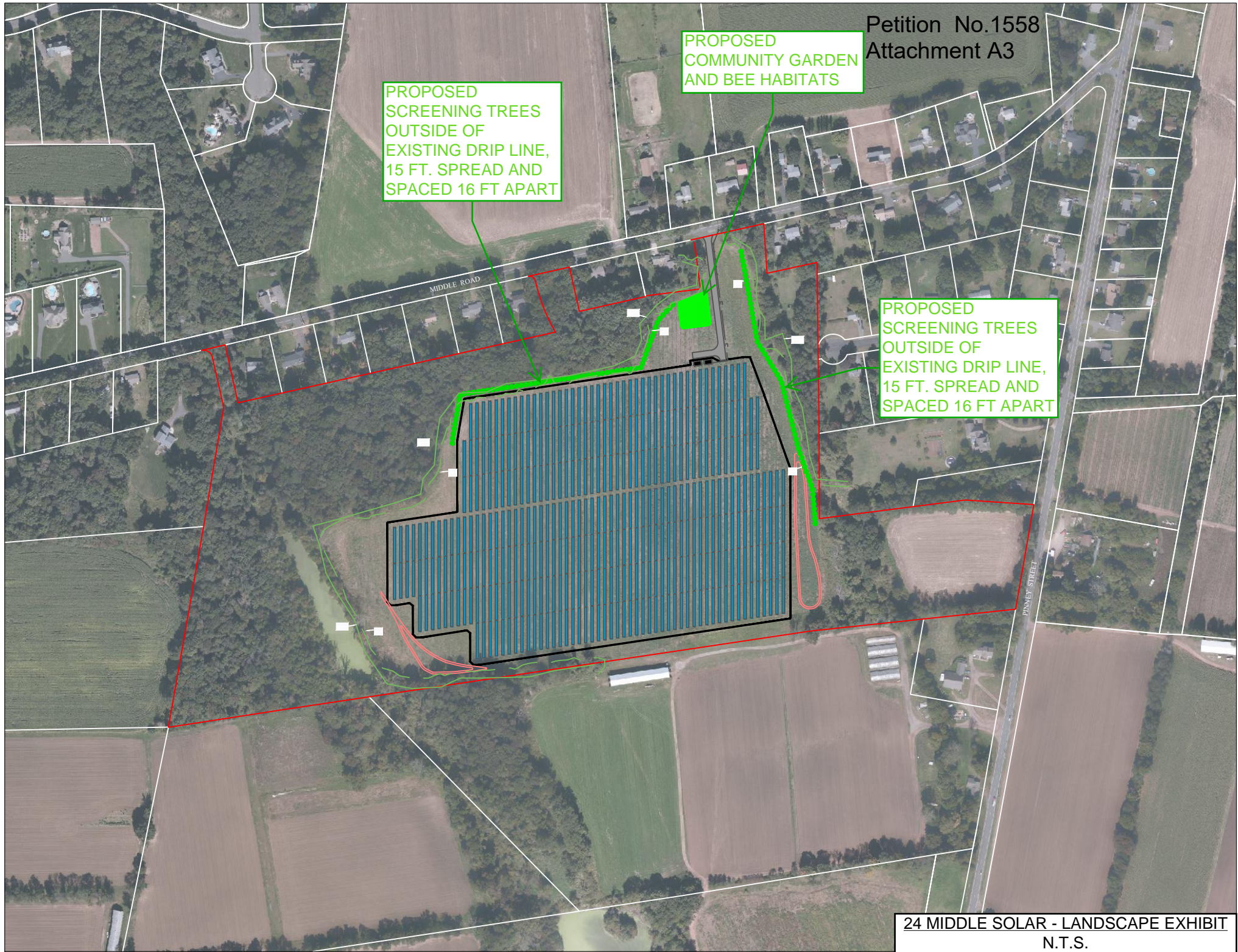
Based on this information, Community Power Group believes it is fair to conclude that the Nixon Farms project has not had an adverse impact on the adjacent residential property values and thus, by interpolation, does not anticipate an adverse impact on the Roxbury Road property values. In fact, the solar farm may have a positive impact on property values due to being a “quiet and private” neighbor that will not impede on privacy will at the same time providing safe habitat for wildlife.



PROPOSED  
COMMUNITY GARDEN  
AND BEE HABITATS

PROPOSED  
SCREENING TREES  
OUTSIDE OF  
EXISTING DRIP LINE,  
15 FT. SPREAD AND  
SPACED 16 FT APART

PROPOSED  
SCREENING TREES  
OUTSIDE OF  
EXISTING DRIP LINE,  
15 FT. SPREAD AND  
SPACED 16 FT APART









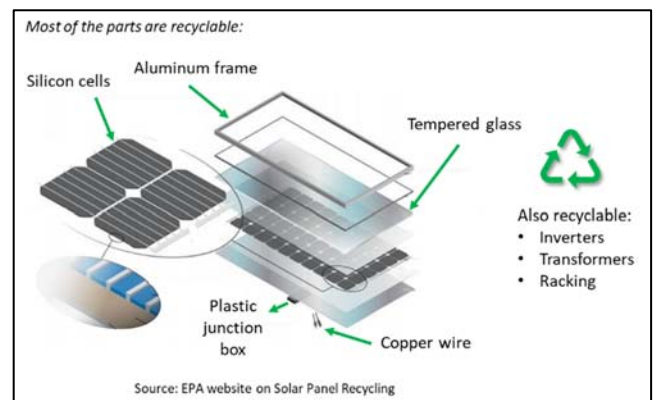
## Solar Development FAQ Connecticut

### Community Solar

- Community Solar is a mechanism for homeowners and small businesses to receive the benefit of solar power without needing to have a physical solar array on their roof of property. In Connecticut, these projects are developed under the “[Shared Clean Energy Facility Program](#)” mandated by state law.
- A community solar project will not cost anything to the Town or State. Rather, the project will pay tax revenue and permitting fees to the Town while not requiring any services (sewer, schools, etc).
- Community Solar developments are limited to 5MW in Connecticut, which is equivalent to approximately 20 – 25 acres. Additionally, the state laws specify that developers are limited to one project per parcel.
- There are 3 general characters that are needed to make a solar project location viable: (1) gentle slope, (2) positive environmental impact, and (3) proximity to utility infrastructure. The last characteristic limits all solar projects to only a few for each three-phase power line, each that often stretch for several miles. This means that there will only be 2-3 project maximum on any given circuit, which significantly limits the amount of solar energy in any given area.

### Decommissioning and Recycling

- The decommissioning (removal) of the solar array is required under the lease agreement with the landowner.
- The removal of the system is a fairly simple process; the only part of the solar array in the ground are the racking posts / h-beams which are approximately 18 inches in diameter.
- All components of a solar array can be recycled at the end of life.
- Solar panels are made from 99% recycled, common-household materials such as silicon and glass. The remaining 1% includes dry PV cells that are covered and protected within silicon inside a solar panel. Even if a panel is damaged, the dry PV cells do not leak (source- [US Department of Environmental Protection](#)).
- The demand for solar recycling has and is expected to continue growing exponentially. As this growth occurs, the cost to recycle panels will decrease while the competition will increase. This means we are confident that our solar panels will be in good hands upon decommissioning and recycling.



## Health Risk

- There is no extended record of these solar panels [providing long-term health risks](#) to anyone, regardless of current health status. The World Health Organization explains that “Electricity from solar panels and transmission to the power grid emits extremely weak electromagnetic fields. Exposure to low-level electromagnetic fields has been studied extensively, and there is no evidence that it is harmful to human health.”
- Our solar projects operate at a very low voltage (lower than your regular power lines carry, and significantly lower than transmission lines).
- Solar electricity is not a new technology. While the application of solar energy has increased greatly over the last decade, the first grid connected solar array was connected in 1993, and residential solar systems have been sold by Home Depot since 2001. People have had residential solar systems on their roofs for decades, and there has been no study linking having these solar panels right on their roof to any health concerns.
- The solar panels we are utilizing do not contain any heavy metals, such as cadmium. Some types of solar panels, specifically thin film, do contain small amounts of heavy metals. However, we design using panels that do not include any heavy metals.

## Environmental Benefits

- Solar energy replaces the need for other forms of energy generation which release harmful greenhouse gas and other pollutants into the air. This accelerates global warming on a national level, as well as creates decreased air quality locally, which is directly linked to health concerns.
- We plan to plant a robust pollinator habitat which will include a mix of native vegetation and wildflowers. This will create a unique ecosystem for pollinators to thrive and will support the declining bee population by providing a safe habitat for them.
- Local agriculture benefits greatly from the presence of pollinators. Over 75% of flowering plants need pollination. Crops such as soybeans and green beans will have a significantly higher yield when they are grown with the benefit of local pollinators.
- By planting native vegetation, the existing topsoil will be protected from wind, rain, and sun while replenishing nutrients through expansive root systems. Currently, soil erosion and degradation happen naturally due to repeatedly plowing fields, flooding, tilling, etc., and the installation of pollinator habitats will replenish some of the 24 billion tons of fertile soil that is lost to erosion annually.
- Local wildlife such as birds, squirrels, deer, etc. will not be impacted by development of this solar project. Solar developers are not allowed to cut down large swaths of trees or



forests to accommodate projects. Often, due to the native pollinator vegetative mix, local wildlife thrives in the field underneath a solar array.

### **Property Value**

- CPG encourages neighbors of solar projects to do their own research on property value websites such as Redfin or Zillow, there is available data on sale history next to solar projects.
- There has been an increase of property value research given the development of utility and other forms of solar over the last decade. Time and time again, we see that while some people believe property values are impacted much of the research has shown that have sold near a development have done so at or above market value and with no criticisms. We have included the studies below.
  - It is important to note that these homes that have sold for at or above market value have typically been near utility scale solar projects, of which are much larger than community solar sites.
- The solar array will be significantly screened, and that screening will grow and become more dense over time. By mitigating visual impact, it will diminish any impacts to property value changes.
- The solar array will not produce a noise impact outside of the property boundaries. The solar panels themselves generate no noise. The only equipment which generates noise are the inverters. These inverters, which are about the size of a desktop computer, produce noise at approximately 65 decibels, which is equivalent to a residential refrigerator. We design the array and place the inverters so the noise impact is totally mitigated by the property boundaries, with the expected noise impact of the inverters going below the typical rural ambient noise in any given area.
- Following construction, there will be no added traffic as a result of the solar array. The array will be monitored remotely.
- Land is precious all over the nation and being near open land without dense land usage or county service usage is an advantage to many homebuyers. The fear of living near dense housing developments, dust-generating facilities, areas of high traffic, or developments that generate noise are far less appealing developments in all areas.

# 24 Middle Solar Project

Prepared for Community Meeting  
February 16, 2023  
By Community Power Group



# Community Power Group - About us

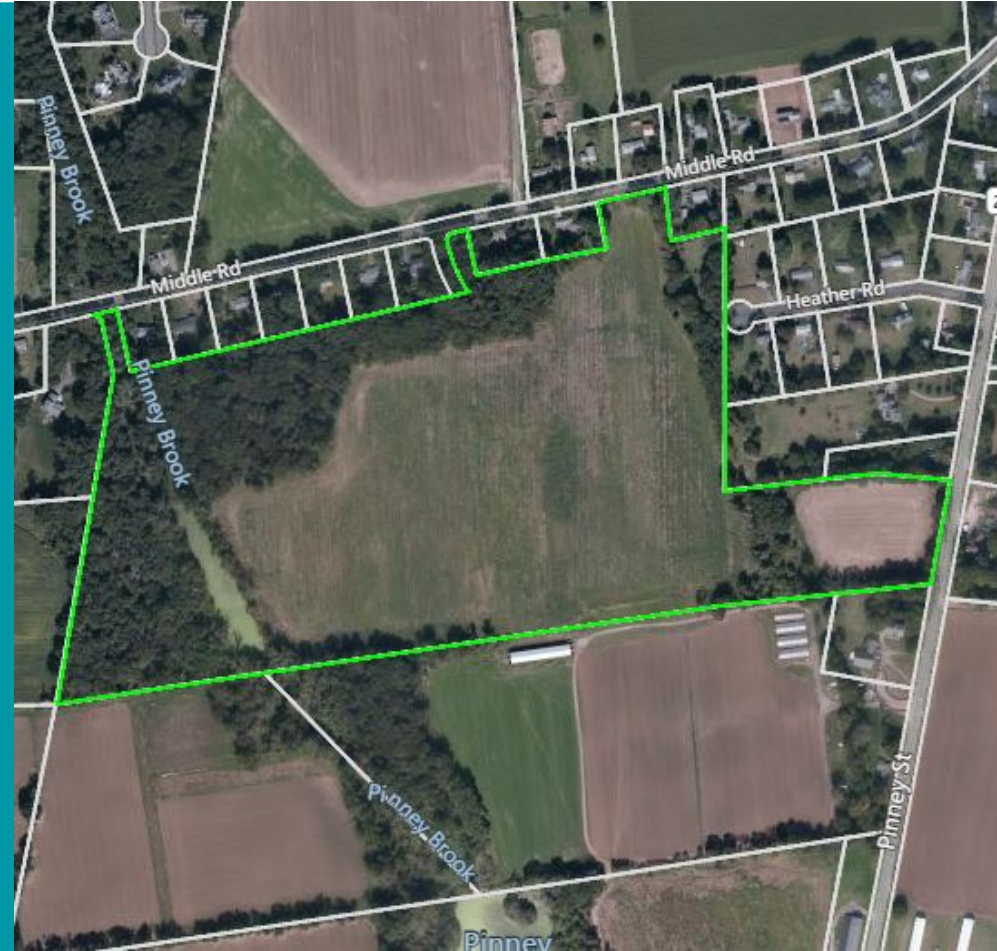
- Founded in 2010, CPG has been developing solar farms over the last 12 years
- We has more than 100 solar farms across the US with projects in VA, MD, DE, NY, IL, MA, CT, and CO
- CPG emphasizes using local labor on all projects
- CPG uses domestic equipment, pollinator friendly ground cover and game fences whenever possible





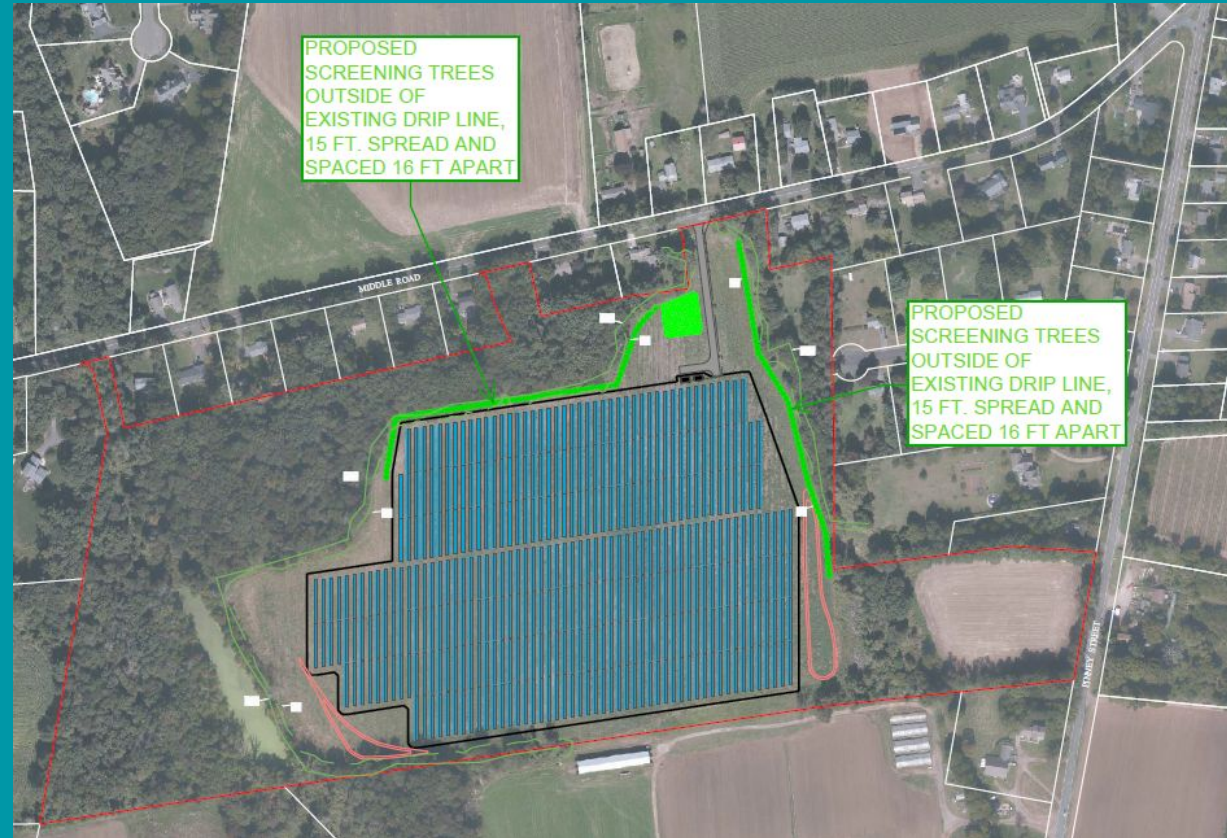
# Project Location

- 24 Middle Road, Ellington CT
- Total parcel(s) acreage: ~68 acres
- Property has been held by a local family for several generations, and owners desire to keep the parcel in the family

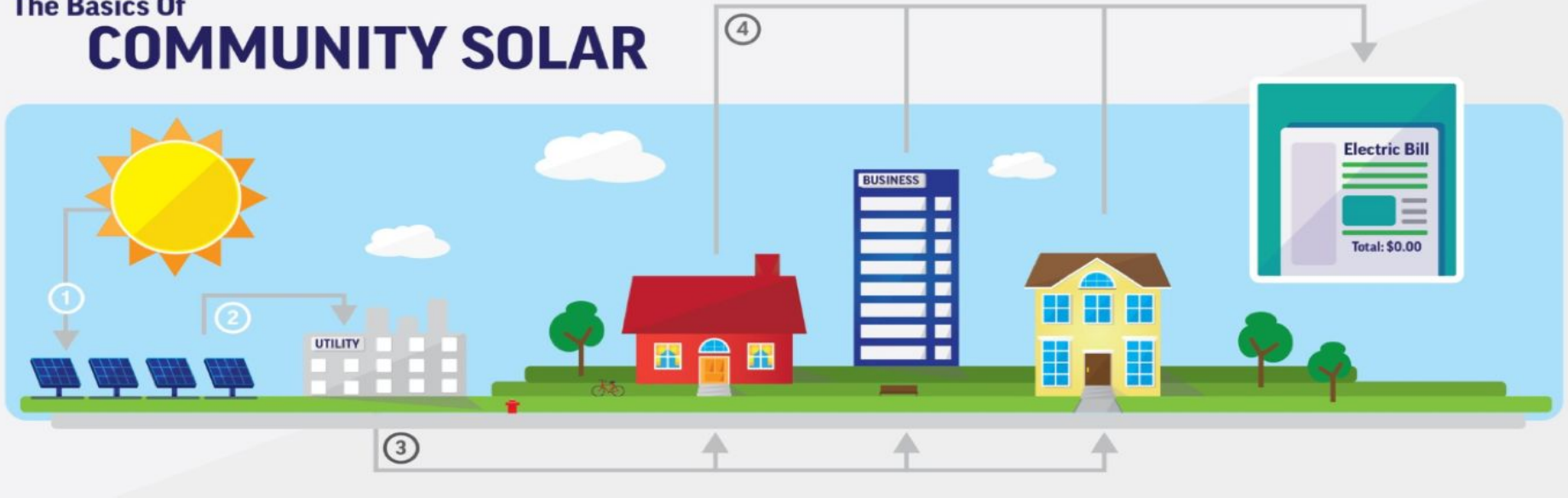


# Project

- The Solar Farm would be ~23 acres of the 68 acres
- Closest home to the fence line is ~272 feet (almost a football field away)
- The project will have multiple layers of screening (to be discussed), no tree clearing is needed for the solar
- Unique co-uses to be established



# The Basics Of COMMUNITY SOLAR



- The sunshines and the solar panels generate power that is sent to the grid
- The CSG receives a “credit” for the amount of energy it puts back to the grid
- Those “credits” are allocated to subscribers
- Credit shown as a separate line item on customers bill
- The end result is a lower electricity bill cost for subscribers



# Shared Clean Energy Facility Program

- SCEF program was created pursuant to Section 7(a)(1)(C) of Public Act 18-50, An Act Concerning Connecticut's Energy Future, codified as Section 16-244z(a)(1)(C) of the General Statutes of Connecticut
- Eversource and United Illumination both have created renewable energy programs
- Program benefits the following Eversource customers:
  - low-to-moderate income residential customers
  - Small businesses
  - Those who cannot host their own solar due to shared roof or shaded roof
- Check to see if you are eligible on Eversource's website (CT SCEF Program)

The logo for Eversource, featuring the word "EVERSOURCE" in a bold, black, sans-serif font. The letter "O" is replaced by a stylized globe icon with horizontal green and blue bands.

# View from Heather Road (without screening)





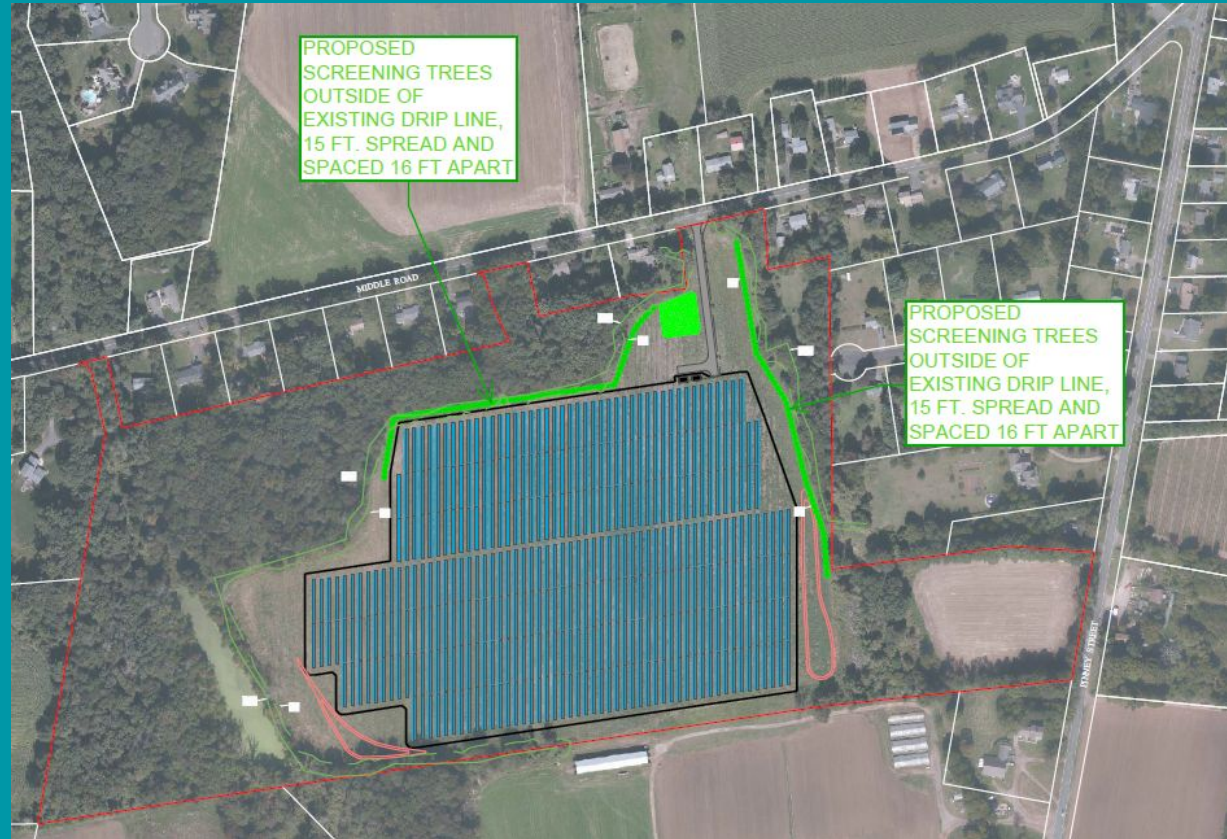
# View from Pinney Street (over 700ft away)





# Landscape Plan

- Plantings shown in green
- Evergreen trees to be installed along northern and western boundaries



# Selecting the Right Privacy Tree

## Comparison Chart & Checklist



Emerald Green  
Arborvitae



Excelsa  
Cedar



Green Giant  
Arborvitae



Leyland  
Cypress



Schipka Laurel



Gold Rider  
Cypress



English Laurel



H.M. Eddie  
Yew



Thin Man  
Arborvitae

<u>TREE LINKS:</u>	<u>Mature Height</u>	<u>Mature Width</u>	<u>Growth Rate</u>	<u>Sunlight Requirements</u>	<u>Soil Requirements</u>	<u>Can Be Pruned* ?</u>	<u>Need to be Watered**?</u>	<u>Comments</u>
Emerald Green Arborvitae	14-15'	3-4'	Slow	Full/Close to Full	Well-Drained	Not Necessary	YES	The most popular screening tree
Excelsa Cedar	30-35'	12-15'	Medium/Fast	Full/Partial	Wet-soil Tolerant	Yes	YES	The most popular larger screening tree
Green Giant	30-50'	Approx. 12'	Fast	Full/Partial	Widely Adaptable	Yes	YES	
"Emerald Tower" <sup>tm</sup>	25-30	Approx. 8'	Fast	Full/close to full	Well-Drained	No	YES	
Leyland Cypress	To 60'	To 25'	Fast	Full	Well-Drained	Yes	YES	The fastest-growing screening tree
"Thin Man" Arborvitae	22-25'	4'	Fast	Full	Well-Drained	Not Necessary	YES	A new Privacy Tree
"Gold Rider" Cypress	To 35'	To 15'	Medium Fast	Full	Well Drained	Yes	YES	Color
English Laurel	To 20'	To 20'	Fast	Shade Tolerant	Well-Drained	Yes	YES	
Schipka Laurel	12-15'	6-8'	Medium	Full/Partial	Well-Drained	Yes	YES	Popular size and easy to maintain
Portugal Laurel	15-18'	To 15'	Medium	Full/Partial	Well-Drained	Yes	YES	
"H.M. Eddie" Yew	To 20'	3-5'	Moderate	Shade Tolerant	Well-Drained	Yes	YES	The most shade-tolerant

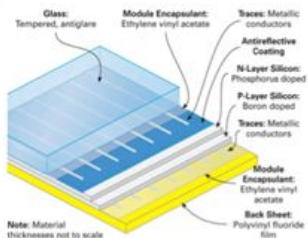
\* All of these trees can be left to grow naturally. Those with a "Yes" can also be pruned to maintain a certain size.

\*\* All newly-planted trees need to be watered. If you don't water them, they won't survive

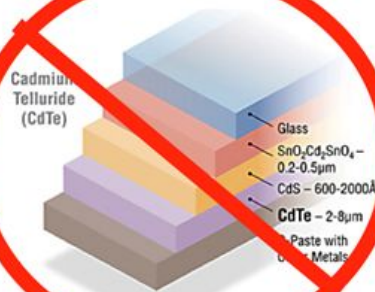


# Panel Type & Racking

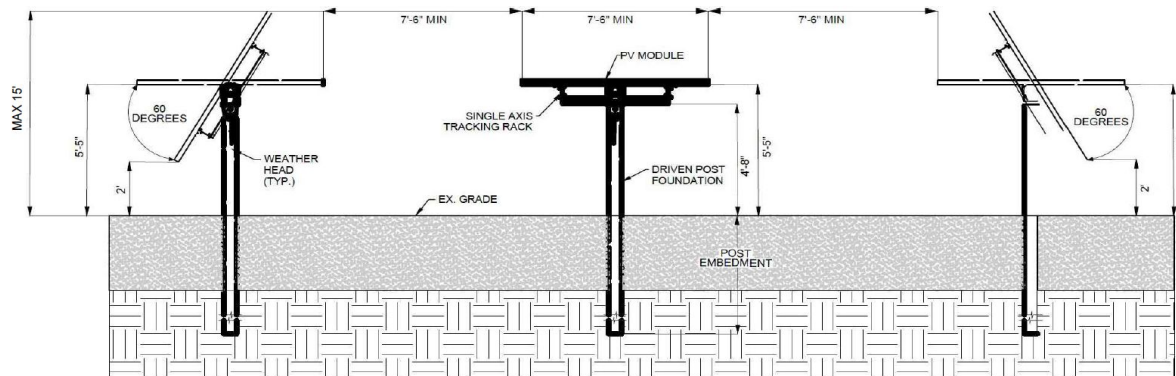
Anatomy of **Crystalline** Solar PV Panel



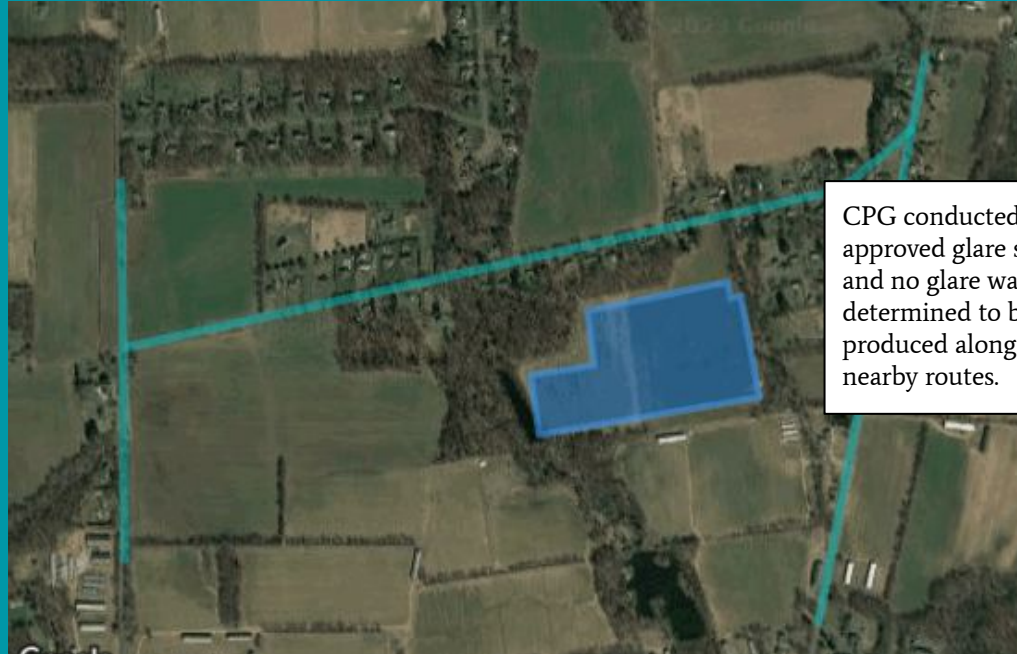
Anatomy of **Thin-Film** Solar PV Panel



- Neighbors will not be subject to chemicals. Crystalline Solar PV panels will be used, NOT Thin-Film.
- Single Axis Tracking (SAT) racking system shown below



# Glare & Noise



CPG conducted a FAA approved glare study, and no glare was determined to be produced along the nearby routes.

Inverter Noise over Distance - 65dB Estimate		
Distance from Inverter	dB	Equivalent Sound
1 ft	65	Normal Speech at 3ft
2 ft	59	
4 ft	53	Dishwasher next room over
8 ft	47	
16 ft	41	Empty theater or library
32 ft	35	
64 ft	29	Same as quiet rural area at night

Point at which ambient background noise would be louder than the solar farm

Note: These values assume an open, unobstructed field. Decibels would be lower due to obstructions like vegetation, fences, solar panels and topography.

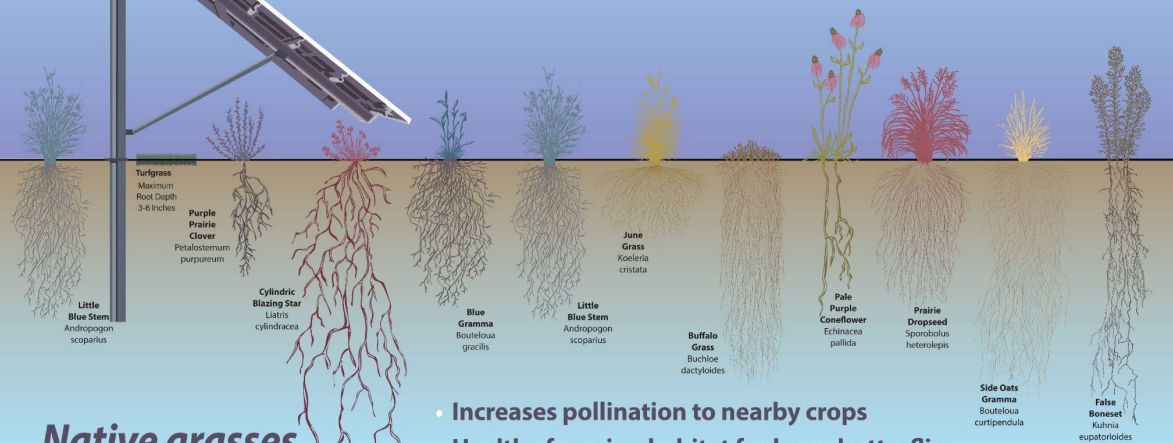
Source: Massachusetts Clean Energy Center "Study of Acoustic and EMF Levels from Solar Photovoltaic Projects"

PV Name	Tilt deg	Orientation deg	"Green" Glare min	"Yellow" Glare min	Energy Produced kWh
PV array 1	SA tracking	SA tracking	0	0	12,210,000.0

# Pollinator-Friendly Ground Cover

## Pollinator Habitat & Solar Arrays

*A winning combination*



**Native grasses and wildflowers provide many benefits:**

- Increases pollination to nearby crops
- Healthy foraging habitat for bees, butterflies
- Superior on-site water management
- Reduces soil erosion
- Less maintenance, less mowing
- Builds healthy topsoil for future land uses
- Greater resistance to weeds
- Increases soil organic matter



***Pollinator-friendly solar results in more groundwater recharge and a greater reduction in soil erosion than either conventional solar or farming. (Yale, 2019)***



# Co-Uses: Pollinators, Vegetables, & Sheep Grazing



# Decommissioning

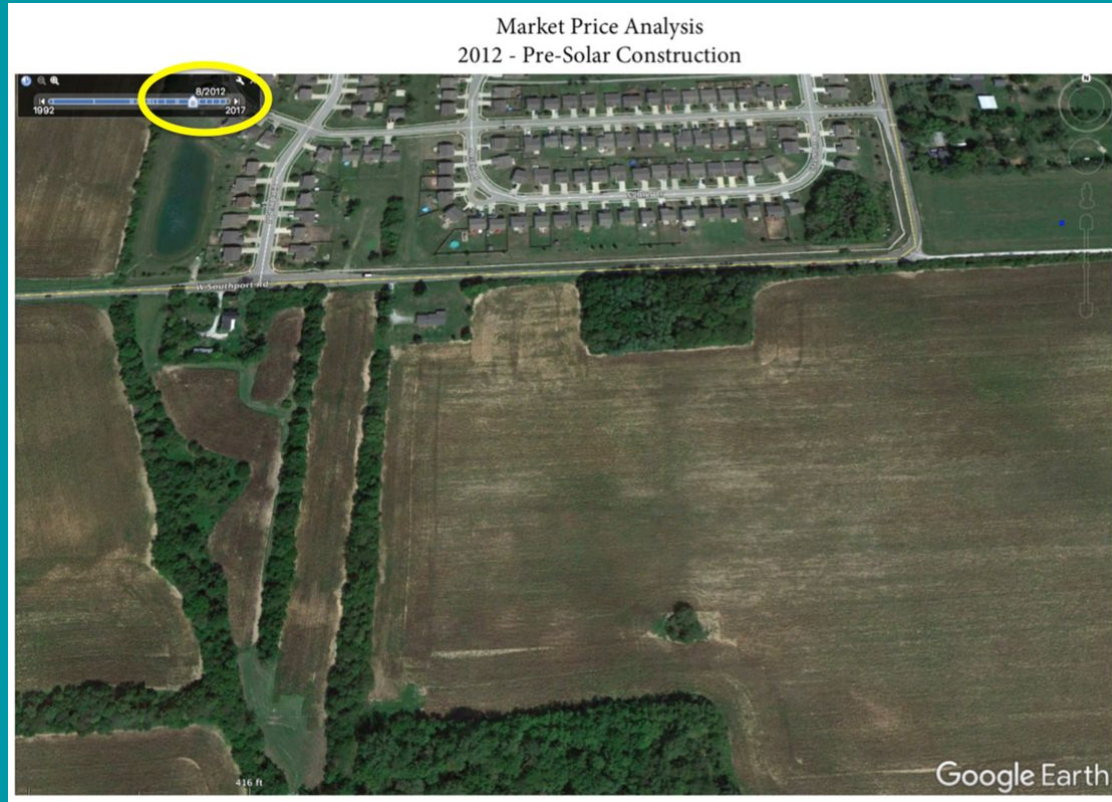
- We have prepared a decommissioning plan which requires there to be a financial security to ensure funds are available for decommissioning and removal of a solar farm in its entirety throughout the life of the project
- Additional surety comes from the fact that the salvage value of the equipment is beyond what it would cost to dismantle the solar farm and that the farm is insured for any natural disaster damage
- Even in the event of a company bankruptcy, the most valuable asset of the bankruptcy proceedings is the solar farm which only requires sun for it to operate and generate revenue





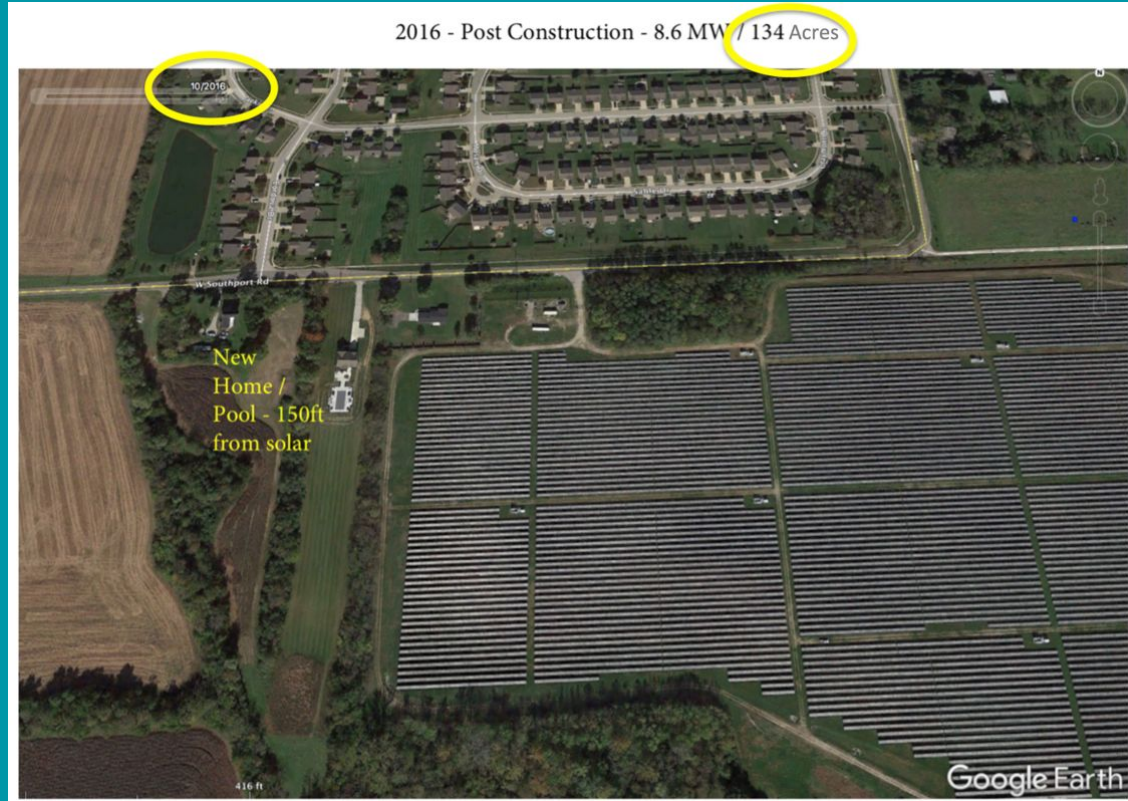
# Property Values

## Before Solar



# Property Values (continued)

## After Solar



# Property Values (continued)

## Dominion INDY III Solar Farm: Adjacent Property 9



Sept 2014



Oct 2016



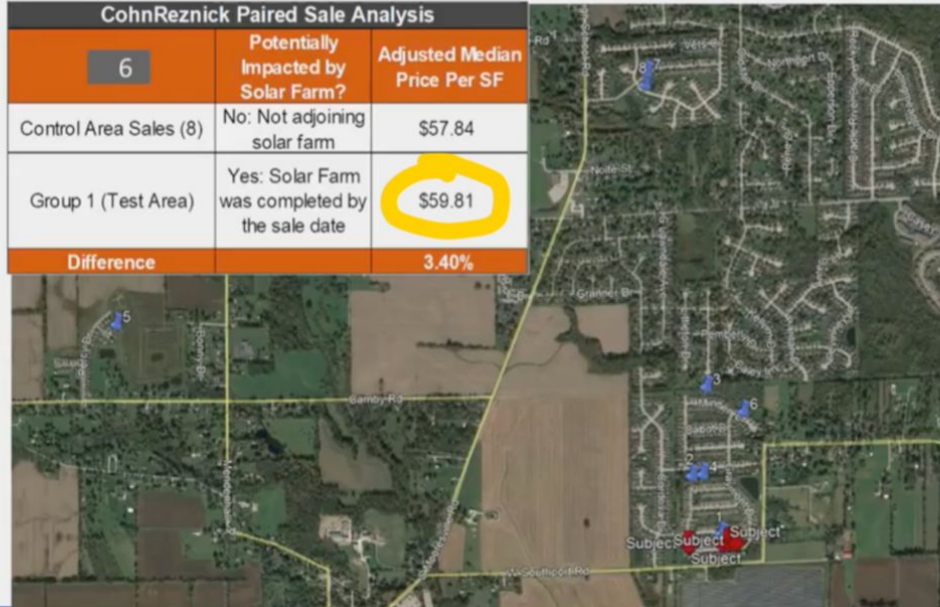
# Property Values (continued)

## Cohenreznick Results - Home Valuations

Solar Farm 4:  
Dominion Indy Solar III-Indianapolis, IN

### Group 1 Comparable Sales

CohnReznick Paired Sale Analysis		
6	Potentially Impacted by Solar Farm?	Adjusted Median Price Per SF
Control Area Sales (8)	No: Not adjoining solar farm	\$57.84
Group 1 (Test Area)	Yes: Solar Farm was completed by the sale date	\$59.81
<b>Difference</b>		<b>3.40%</b>





# Questions?

## Community Power Group

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- [mborkowski@communitypowergroup.com](mailto:mborkowski@communitypowergroup.com)

