

**Exhibit P**  
**Property Value Study**

**Kirkland Appraisals, LLC**

**January 28, 2021**



# Kirkland Appraisals, LLC

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January 28, 2021

Mr. Ryan Van Portfliet  
Pleasant Prairie Solar Energy, LLC  
One South Wacker Drive, Suite 1800  
Chicago, IL 60606

**RE: Pleasant Prairie Solar Project – Property Value Impact Study**

Mr. Van Portfliet

At your request, I have considered the impact of a solar farm proposed to be constructed on approximately 1,728.7 acres of land located off West Broad Street, Galloway, Ohio. Specifically, I have been asked to give my professional opinion on whether the proposed solar farm will have any impact on adjoining property value and whether “the location and character of the use, if developed according to the plan as submitted and approved, will be in harmony with the area in which it is to be located.”

To form an opinion on these issues, I have researched existing solar farms in Ohio as well as other states, researched articles through the Appraisal Institute and other studies, and discussed the likely impact with other real estate professionals. I have not been asked to assign any value to any specific property.

This is a real property appraisal consulting assignment. My client is Pleasant Prairie Solar Energy, LLC, represented to me by Mr. Ryan Van Portfliet. The effective date of this consultation is January 28, 2021.

## **Conclusion**

The matched pair analysis shows no negative impact in home values due to abutting or adjoining a solar farm as well as no negative impact to abutting or adjacent vacant residential or agricultural land. The criteria that typically correlates with downward adjustments on property values such as noise, odor, and traffic all confirm that a solar farm is a compatible use for rural/residential transition areas and that it would function in a harmonious manner with this area.

Very similar solar farms in very similar areas have been found by hundreds of towns and counties not to have a substantial injury to abutting or adjoining properties, and many of those findings of no negative impact have been upheld by appellate courts. Similar solar farms have been approved adjoining agricultural uses, schools, churches, and residential developments.

I have found no difference in the mix of adjoining uses or proximity to adjoining homes based on the size of a solar farm and I have found no significant difference in the matched pair data adjoining larger solar farms versus smaller solar farms. The data in the Midwest is consistent with the larger set of data that I have nationally, as is the more specific data located in and around Ohio.

Based on the data and analysis in this report, it is my professional opinion that the solar farm proposed at the subject property will have no negative impact on the value of adjoining or abutting property and that the proposed use is in harmony with the area in which it is located. I note that some of the positive implications of a solar farm that have been expressed by people living next to solar farms include protection from future development of residential developments or other more

intrusive uses, reduced dust, odor and chemicals from former farming operations, protection from light pollution at night, it's quiet, and there is minimal traffic.

If you have any further questions please call me any time.

Sincerely,



Richard C. Kirkland, Jr., MAI  
NC Certified General Appraiser #A4359  
OH Temporary Appraiser License 2020009173

## **Standards and Methodology**

I conducted this analysis using the standards and practices established by the Appraisal Institute and that conform to the Uniform Standards of Professional Appraisal Practice. The analyses and methodologies contained in this report are accepted by all major lending institutions, and they are used in Ohio and across the country as the industry standard by certified appraisers conducting appraisals, market analyses, or impact studies and are considered adequate to form an opinion of the impact of a land use on neighboring properties. These standards and practices have also been accepted by the courts at the trial and appellate levels and by federal courts throughout the country as adequate to reach conclusions about the likely impact a use will have on adjoining or abutting properties.

The aforementioned standards compare property uses in the same market and generally within the same calendar year so that fluctuating markets do not alter study results. Although these standards do not require a linear study that examines adjoining property values before and after a new use (e.g. a solar farm) is developed, some of these studies do in fact employ this type of analysis. Comparative studies, as used in this report, are considered an industry standard.

## **Determining what is an External Obsolescence**

An external obsolescence is a use of property that, because of its characteristics, might have a negative impact on the value of adjacent or nearby properties because of identifiable impacts. Determining whether a use would be considered an external obsolescence requires a study that isolates that use, eliminates any other causing factors, and then studies the sales of nearby versus distant comparable properties. The presence of one or a combination of key factors does not mean the use will be an external obsolescence, but a combination of these factors tend to be present when market data reflects that a use is an external obsolescence.

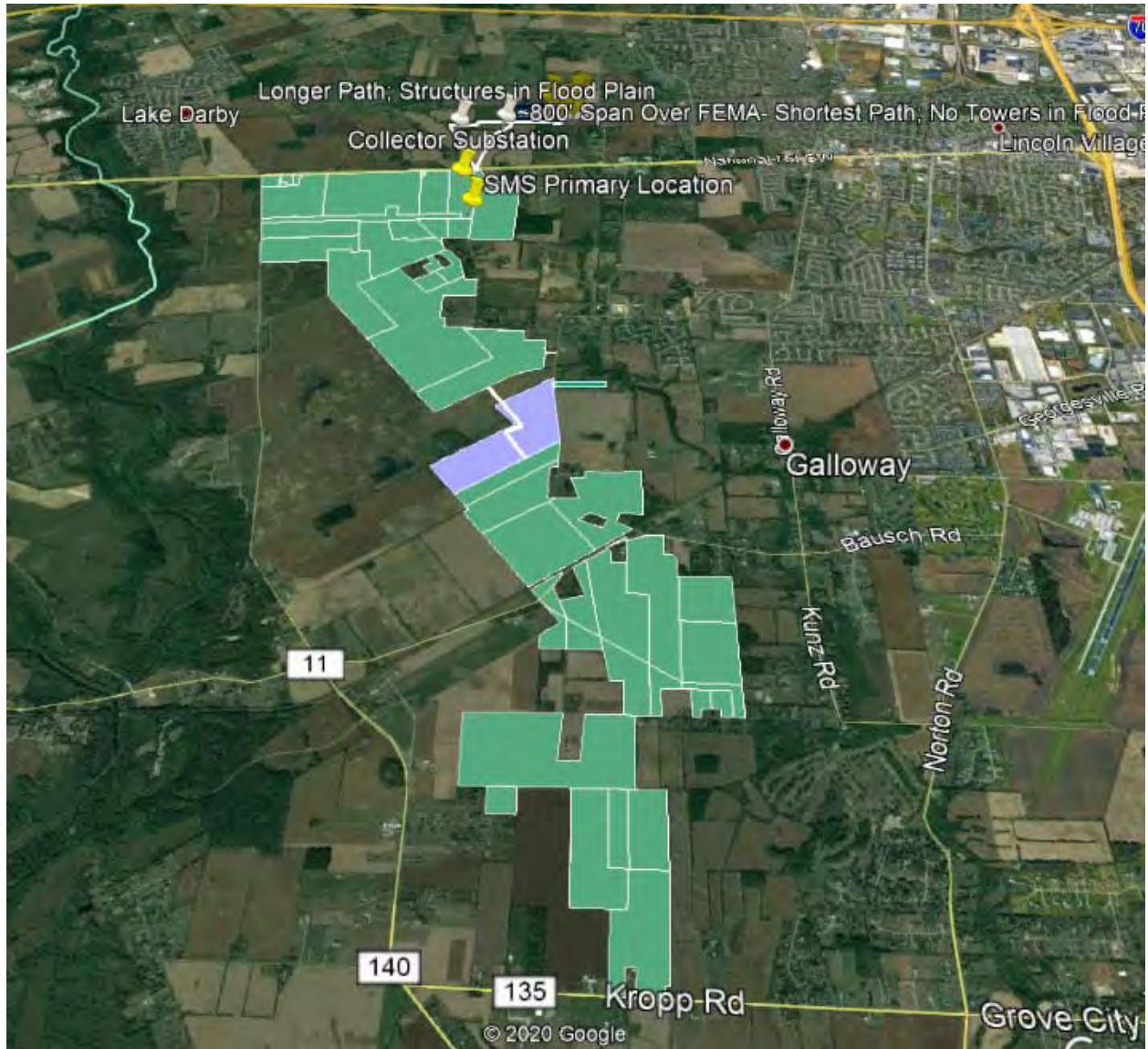
External obsolescence is evaluated by appraisers based on several factors. These factors include but are not limited to:

- 1) Traffic. Solar Farms are not traffic generators.
- 2) Odor. Solar farms do not produce odor.
- 3) Noise. Solar farms generate no noise concerns and are silent at night.
- 4) Environmental. Solar farms do not produce toxic or hazardous waste. Grass is maintained underneath the panels so there is minimal impervious surface area.
- 5) Other factors. I have observed and studied many solar farms and have never observed any characteristic about such facilities that prevents or impedes neighbors from fully using their homes or farms or businesses for the use intended.

### Proposed Use Description

The proposed solar farm is proposed to be constructed on approximately 1,728.7 acres of land located off West Broad Street, Galloway, Ohio.

I have been asked to consider the project with property boundaries shown below.



### **Adjoining Properties**

Adjoining land is a mix of residential and agricultural uses, which is very typical of solar farm sites. There is an adjoining church and I have researched numerous examples of solar farms and religious uses on adjoining tracts including a solar farm on land leased from a church adjoining the church's own sanctuary.

I have considered adjoining uses and included a map to identify each parcel's location.

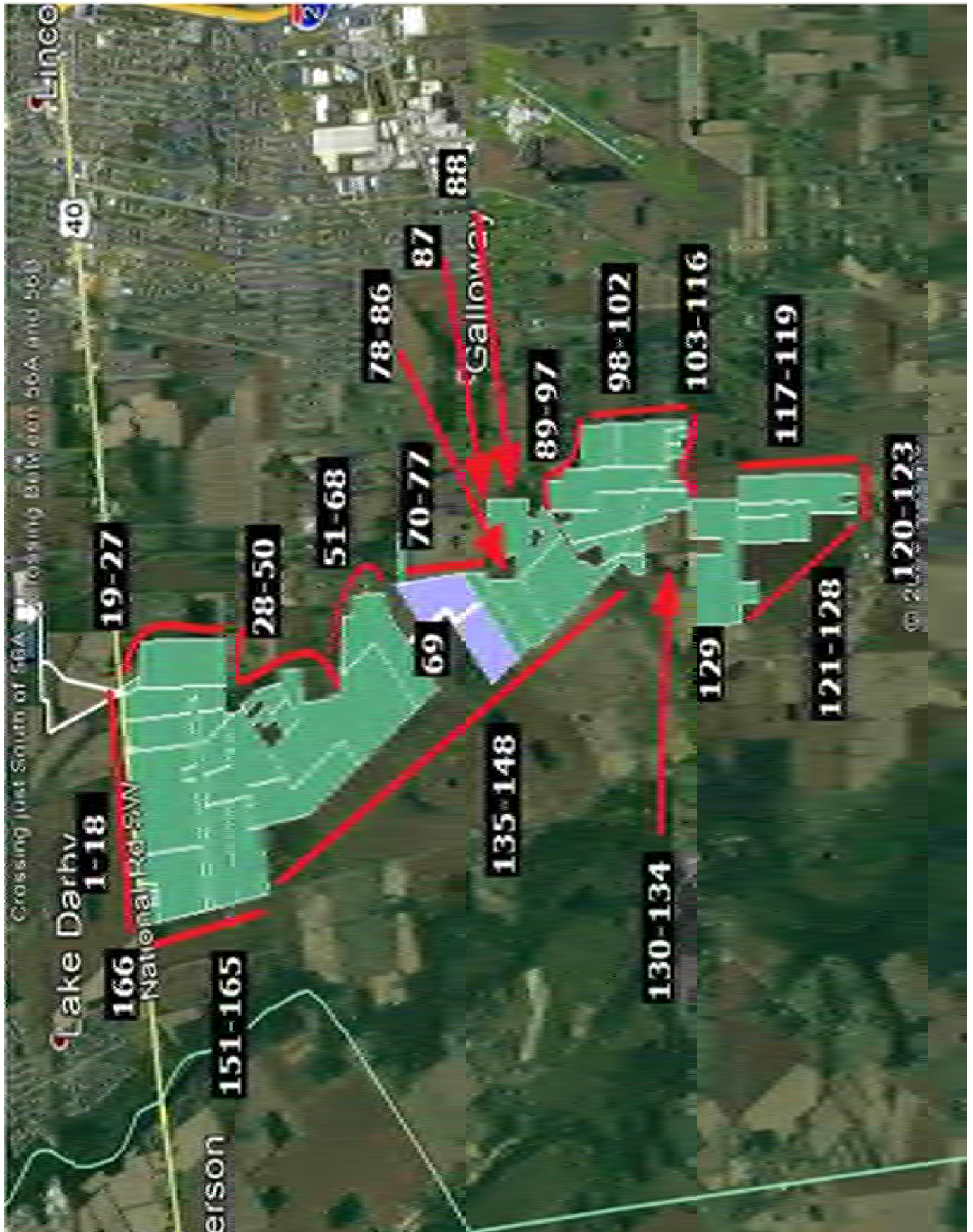
The developer has indicated that they will maintain at least 300 feet of separation between any adjoining home and the closest solar panel and at least 100 feet off of any adjoining property line or right of way. Matched pair data shows no negative impact at distances as close as 105 feet, which makes the 300 feet of separation a significant increase over that threshold. Furthermore, the average distance between the proposed solar panels and adjacent dwellings was measured at 618 feet.

The breakdown of those uses by number of parcels is summarized below.

#### **Adjoining Use Breakdown**

	<b>Acreage</b>	<b>Parcels</b>
Residential	15.01%	77.11%
Agricultural	37.84%	10.24%
Religious	0.32%	1.81%
Agri/Res	20.36%	6.63%
Park	26.48%	4.22%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>





**Surrounding Uses**

#	MAP ID	Owner	GIS Data		Adjoin	Adjoin	Distance (ft)
			Acres	Present Use	Acres	Parcels	Home/Panel
1	240-000070-00	Yutzy	1.93	Residential	0.06%	0.60%	N / A
2	240-006859-00	Yutzy	33.55	Agricultural	1.03%	0.60%	N / A
3	240-006861-00	Yutzy	3.46	Residential	0.11%	0.60%	N / A
4	240-000089-00	Yutzy	7.02	Residential	0.21%	0.60%	N / A
5	240-006864-00	Gingerick	3.39	Residential	0.10%	0.60%	N / A
6	240-006862-00	Gingerick	44.31	Agricultural	1.36%	0.60%	N / A
7	240-000018-00	Moraitis Co	180.27	Agricultural	5.51%	0.60%	N / A
8	240-000024-00	Keller	1.67	Residential	0.05%	0.60%	300
9	240-000244-00	Briggs	86.75	Agricultural	2.65%	0.60%	N / A
10	240-004986-00	Lawson	3.44	Religious	0.11%	0.60%	485
11	240-000241-00	Broad Church	3.86	Residential	0.12%	0.60%	N / A
12	240-000230-00	Broad Church	3.86	Religious	0.12%	0.60%	615
13	240-000231-00	Freedom Band	3.89	Residential	0.12%	0.60%	690
14	240-003070-00	Cummins	55.61	Agricultural	1.70%	0.60%	N / A
15	240-001669-00	Reynolds	1.29	Residential	0.04%	0.60%	700
16	240-001670-00	Barnard	0.52	Residential	0.02%	0.60%	810
17	240-001936-00	Maschak	0.83	Residential	0.03%	0.60%	855
18	240-000064-00	Resource	155.76	Agricultural	4.76%	0.60%	N / A
19	240-003087-00	Mcdowell	6.41	Residential	0.20%	0.60%	N / A
20	240-003119-00	Kennedy	1.96	Residential	0.06%	0.60%	355
21	240-001887-00	Opatsky	2.02	Residential	0.06%	0.60%	680
22	240-000063-00	Willis	6.06	Residential	0.19%	0.60%	N / A
23	240-000159-00	Beine	3.03	Residential	0.09%	0.60%	650
24	240-000170-00	Ledezma	1.78	Residential	0.05%	0.60%	N / A
25	240-003116-00	Ledezma	2.08	Residential	0.06%	0.60%	815
26	240-000182-00	Sunset Hills	10.18	Residential	0.31%	0.60%	N / A
27	240-001792-00	Sunset Hills	112.79	Agri/Res	3.45%	0.60%	835
28	240-004881-00	Timperley	54.41	Agri/Res	1.66%	0.60%	1,145
29	240-006490-00	Baker	6.02	Residential	0.18%	0.60%	930
30	240-000280-00	Hughes	3.49	Residential	0.11%	0.60%	445
31	240-000259-00	Buckner	0.98	Residential	0.03%	0.60%	315
32	240-005017-00	Mcmanaway	1.88	Residential	0.06%	0.60%	300
33	240-001980-00	Ternavskyy	1.09	Residential	0.03%	0.60%	330
34	240-004926-00	Matlack	1.25	Residential	0.04%	0.60%	345
35	240-004926-00	Dreussi	1.45	Residential	0.04%	0.60%	390
36	240-002320-00	Hemphill	1.26	Residential	0.04%	0.60%	N / A
37	240-005152-00	Hemphill	1.10	Residential	0.03%	0.60%	300
38	240-000207-00	Slye	1.23	Residential	0.04%	0.60%	570
39	240-002092-00	Johnson	2.52	Residential	0.08%	0.60%	845
40	240-002329-00	Conner	2.33	Residential	0.07%	0.60%	700
41	240-002009-00	Krist	2.17	Residential	0.07%	0.60%	495
42	240-004006-00	Ober	2.12	Residential	0.06%	0.60%	555
43	240-002037-00	Zabenco	1.07	Residential	0.03%	0.60%	445



#	MAP ID	Owner	GIS Data		Adjoin	Adjoin	Distance (ft)
			Acres	Present Use	Acres	Parcels	Home/Panel
44	240-004005-00	Nye	1.05	Residential	0.03%	0.60%	400
45	240-000225-00	Brigham	0.93	Residential	0.03%	0.60%	400
46	240-002007-00	Meas	1.23	Residential	0.04%	0.60%	300
47	240-000017-00	Lemaster	0.75	Residential	0.02%	0.60%	360
48	240-000102-00	Franklin Soil	50.66	Agri/Res	1.55%	0.60%	N/A
49	240-006592-00	Pritchard	21.91	Agri/Res	0.67%	0.60%	300
50	240-006872-00	Wilson	7.77	Residential	0.24%	0.60%	N/A
51	240-003096-00	Harvey	1.24	Residential	0.04%	0.60%	300
52	240-004316-00	Lynd	1.73	Residential	0.05%	0.60%	360
53	240-004312-00	Kern	1.50	Residential	0.05%	0.60%	345
54	240-005154-00	Stueber	2.51	Residential	0.08%	0.60%	385
55	240-000640-00	Stueber	2.50	Residential	0.08%	0.60%	300
56	240-003115-00	Hannum	0.73	Residential	0.02%	0.60%	310
57	240-006559-00	Hannum	4.11	Residential	0.13%	0.60%	N/A
58	240-001273-00	Sokol	3.01	Residential	0.09%	0.60%	300
59	240-002139-00	Kahn	3.01	Residential	0.09%	0.60%	300
60	240-003102-00	Brown	0.99	Residential	0.03%	0.60%	300
61	240-000553-00	Cox	1.99	Residential	0.06%	0.60%	300
62	240-005085-00	Curtiss	1.70	Residential	0.05%	0.60%	300
63	240-005079-00	Dayspring	1.76	Residential	0.05%	0.60%	N/A
64	240-000077-00	Dayspring	3.01	Religious	0.09%	0.60%	300
65	240-000263-00	Miller	1.00	Residential	0.03%	0.60%	300
66	240-006870-00	Alton Farm	9.09	Residential	0.28%	0.60%	N/A
67	240-006584-00	Oharra	1.30	Residential	0.04%	0.60%	300
68	240-002393-00	Hennosy	2.84	Residential	0.09%	0.60%	300
69	240-000042-00	BD of PK	87.53	Agricultural	2.68%	0.60%	N/A
70	240-006501-00	Sheets	5.21	Residential	0.16%	0.60%	1,390
71	240-006510-00	Hanby	6.30	Residential	0.19%	0.60%	1,920
72	240-002090-00	Harker	8.56	Residential	0.26%	0.60%	2,205
73	240-001928-00	Ennch	6.36	Residential	0.19%	0.60%	1,380
74	240-006622-00	Zubkevych	6.33	Residential	0.19%	0.60%	1,325
75	240-000055-00	Case	48.11	Agricultural	1.47%	0.60%	N/A
76	240-000176-00	Case	9.96	Residential	0.30%	0.60%	N/A
77	240-003069-00	Case	36.12	Agricultural	1.10%	0.60%	N/A
78	240-003129-00	Dellinger	1.49	Residential	0.05%	0.60%	515
79	240-001998-00	Alkaire RD LLC	0.50	Residential	0.02%	0.60%	395
80	240000113-00	Dellinger	5.01	Residential	0.15%	0.60%	360
81	240-000013-00	Dellinger	5.41	Residential	0.17%	0.60%	N/A
82	240-000187-00	Finley	0.55	Residential	0.02%	0.60%	300
83	240-000186-00	Davis	0.58	Residential	0.02%	0.60%	315
84	240-000140-00	Thomas	0.58	Residential	0.02%	0.60%	320
85	240-000056-00	Bedeshko	0.58	Residential	0.02%	0.60%	330
86	240-000011-00	Bruce	3.60	Residential	0.11%	0.60%	300
87	240-000288-00	Griffith	119.30	Agricultural	3.65%	0.60%	N/A

#	MAP ID	Owner	GIS Data		Adjoin	Adjoin	Distance (ft)
			Acres	Present Use	Acres	Parcels	Home/Panel
88	240-006591-00	Alton RD LLC	5.59	Residential	0.17%	0.60%	540
89	240-006853-00	Knight	1.66	Residential	0.05%	0.60%	685
90	240-002553-00	Sullivan	4.09	Residential	0.13%	0.60%	875
91	240-006455-00	Mcduke	1.49	Residential	0.05%	0.60%	875
92	240-002259-00	Township	2.56	Residential	0.08%	0.60%	475
93	240-000050-00	Schellhaas	9.48	Residential	0.29%	0.60%	700
94	240-001668-00	Hammonds	10.96	Residential	0.34%	0.60%	755
95	240-006445-00	Sharrock	0.83	Residential	0.03%	0.60%	400
96	240-006446-00	Faust	0.56	Residential	0.02%	0.60%	370
97	240-006447-00	Merrill	0.78	Residential	0.02%	0.60%	370
98	240-003086-00	Moore	5.03	Residential	0.15%	0.60%	910
99	240-000165-00	Quezada	51.33	Agri/Res	1.57%	0.60%	1,640
100	240-000051-00	Wenzinger	13.31	Residential	0.41%	0.60%	555
101	240-006505-00	Bauman	8.21	Residential	0.25%	0.60%	300
102	240-002230-00	Miller	0.75	Residential	0.02%	0.60%	370
103	230-006654-00	Dever	1.66	Residential	0.05%	0.60%	530
104	230-000653-00	Pettis	0.82	Residential	0.03%	0.60%	540
105	230-000652-00	Yontz	0.78	Residential	0.02%	0.60%	530
106	230-000651-00	Oharra	0.80	Residential	0.02%	0.60%	540
107	230-000650-00	Stubbs	0.79	Residential	0.02%	0.60%	500
108	230-000482-00	Foley	0.94	Residential	0.03%	0.60%	300
109	230-001903-00	Brokaw	0.97	Residential	0.03%	0.60%	300
110	230-000645-00	Rummel	0.79	Residential	0.02%	0.60%	490
111	230-000644-00	Wimer	0.84	Residential	0.03%	0.60%	510
112	230-001900-00	Thomas	0.99	Residential	0.03%	0.60%	305
113	230-001635-00	Thomas	2.38	Residential	0.07%	0.60%	N/A
114	230-001638-00	Thomas	6.64	Residential	0.20%	0.60%	N/A
115	230-001670-00	Smith	20.01	Agri/Res	0.61%	0.60%	420
116	230-001647-00	Mccall	19.98	Residential	0.61%	0.60%	300
117	230-001646-00	Haun	16.24	Residential	0.50%	0.60%	N/A
118	230-001461-00	Haun	50.74	Agri/Res	1.55%	0.60%	665
119	230-000891-00	Starkey	0.52	Residential	0.02%	0.60%	655
120	230-002953-00	Krebbs	17.39	Residential	0.53%	0.60%	N/A
121	230-003370-00	Adkins	2.58	Residential	0.08%	0.60%	615
122	230-001533-00	Ruoff	15.20	Residential	0.46%	0.60%	N/A
123	230-001532-00	Ruoff	36.23	Agricultural	1.11%	0.60%	N/A
124	230-001462-00	Hayes	56.25	Agri/Res	1.72%	0.60%	975
125	230-001535-00	Hayes	64.85	Agricultural	1.98%	0.60%	N/A
126	230-001489-00	Mounts	7.79	Residential	0.24%	0.60%	850
127	230-002966-00	Cerni	9.00	Residential	0.28%	0.60%	345
128	230-003017-00	Matyuk	6.81	Residential	0.21%	0.60%	370
129	230-001161-00	Bausch	110.81	Agri/Res	3.39%	0.60%	940
130	230-003164-00	Wade Farms	22.87	Agricultural	0.70%	0.60%	N/A
131	230-003257-00	Phillipi	12.00	Residential	0.37%	0.60%	315

#	MAP ID	Owner	GIS Data		Adjoin	Adjoin	Distance (ft)
			Acres	Present Use	Acres	Parcels	Home/Panel
132	230-001649-00	Wade Farms	10.62	Residential	0.32%	0.60%	N/A
133	230-001650-00	Wade Farms	12.25	Residential	0.37%	0.60%	N/A
134	230-003165-00	Wade Farms	15.99	Residential	0.49%	0.60%	N/A
135	230-000597-00	Moore	8.68	Residential	0.27%	0.60%	875
136	230-001359-00	Guess	1.44	Residential	0.04%	0.60%	810
137	230-006457-00	Moore	48.94	Agricultural	1.50%	0.60%	N/A
138	230-001171-00	Emmelhainz	108.92	Agri/Res	3.33%	0.60%	4,955
139	240-000233-00	Murnane	99.90	Agricultural	3.05%	0.60%	N/A
140	240-000128-00	Griffith	10.50	Residential	0.32%	0.60%	1,360
141	240-000199-00	Ruzicka	5.25	Residential	0.16%	0.60%	1,340
142	240-002263-00	King	5.24	Residential	0.16%	0.60%	1,365
143	240-000096-00	Pomeroy	6.95	Residential	0.21%	0.60%	1,340
144	240-000115-00	Schlosser	28.00	Agri/Res	0.86%	0.60%	1,655
145	240-000001-00	BD of PK	470.49	Park	14.39%	0.60%	N/A
146	240-000087-00	BD of PK	28.15	Park	0.86%	0.60%	N/A
147	240-000163-00	BD of PK	28.14	Park	0.86%	0.60%	N/A
148	240-006630-00	BD of PK	103.62	Park	3.17%	0.60%	N/A
149	240-006632-00	BD of PK	135.84	Park	4.15%	0.60%	N/A
150	240-001130-00	BD of PK	89.37	Park	2.73%	0.60%	N/A
151	240-002103-00	BD of PK	10.36	Park	0.32%	0.60%	N/A
152	240-002034-00	Harding	0.28	Residential	0.01%	0.60%	300
153	240-000035-00	Tonti	52.15	Agricultural	1.59%	0.60%	N/A
154	240-002035-00	Meeks	0.27	Residential	0.01%	0.60%	300
155	240-002033-00	Humbarger	0.27	Residential	0.01%	0.60%	300
156	240-002027-00	Clark	0.27	Residential	0.01%	0.60%	300
157	240-002025-00	Agneshi	0.27	Residential	0.01%	0.60%	305
158	240-002023-00	Westfall	0.28	Residential	0.01%	0.60%	300
159	240-002021-00	Mosley	0.28	Residential	0.01%	0.60%	305
160	240-002031-00	Clark	0.27	Residential	0.01%	0.60%	300
161	240-002032-00	Hazelett	0.28	Residential	0.01%	0.60%	300
162	240-001690-00	Briggs Rd	14.08	Residential	0.43%	0.60%	N/A
163	240-002039-00	Martin	0.28	Residential	0.01%	0.60%	305
164	240-002043-00	Beachler	0.31	Residential	0.01%	0.60%	325
165	240-002045-00	Mccathrin	0.33	Residential	0.01%	0.60%	430
166	240-000141-00	Ingalls	65.04	Agricultural	1.99%	0.60%	N/A
<b>Total</b>			<b>3270.100</b>		<b>100.00%</b>	<b>100.00%</b>	618

## **I. Summary of Solar Projects In and Around Ohio**

I have researched the solar projects in Ohio. I identified the solar farms through the Solar Energy Industries Association (SEIA) Major Projects List and then excluded the roof mounted facilities. I focused on larger solar farms over 5 MW.

I was able to identify four solar farms in Ohio that met those criteria though there are a number of projects that are under development that are significantly larger such as Hardin at 150 MW, Hillcrest at 200 MW and Hecate at 300 MW. As those projects have not been built it would not be possible to find usable matched pairs around them so I have not written up those solar farms, though I note that they do have similar locations with primarily agricultural and residential adjoining uses.

## 731 – DG Amp Piqua, Miami County, OH



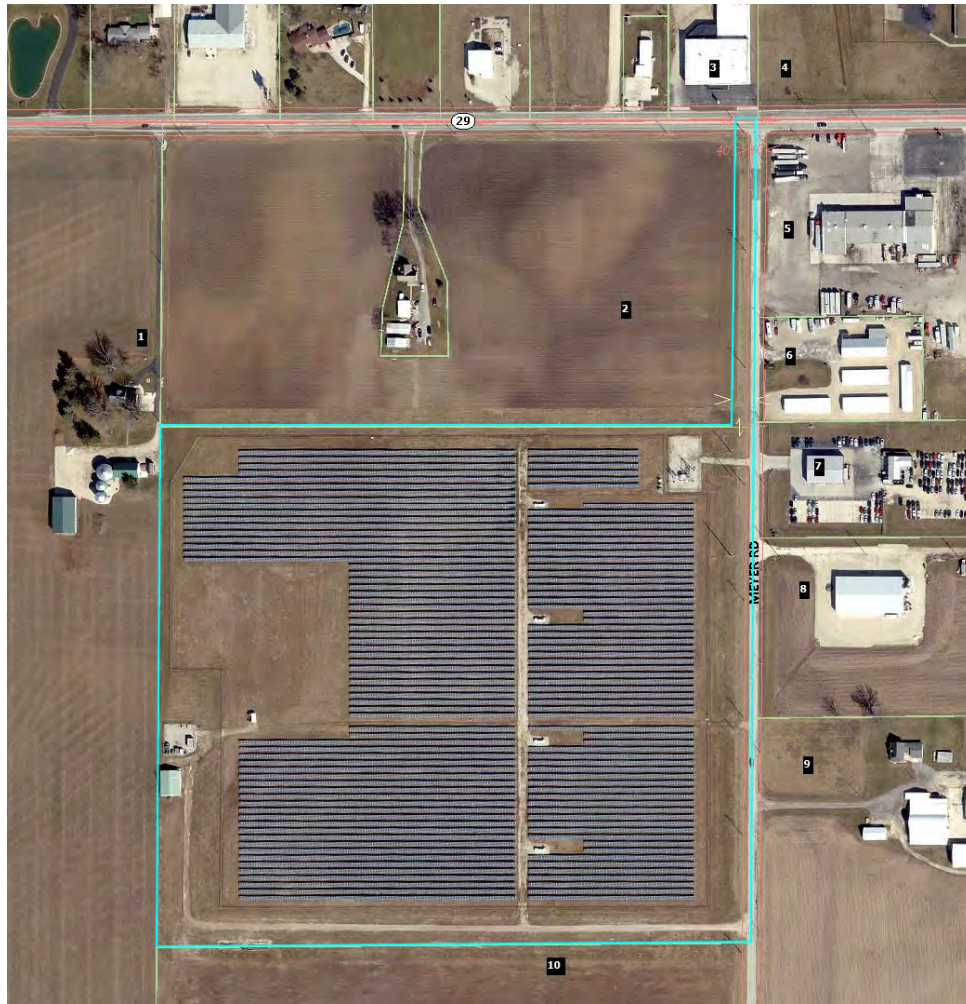
This project was built in 2019 and adjoins a mix of residential and agricultural properties. This is the most common breakdown of adjoining uses that I have found nationally and regionally.

### Adjoining Use Breakdown

	<b>Acreage</b>	<b>Parcels</b>
Residential	8.28%	83.78%
Agricultural	16.04%	2.70%
Agri/Res	58.03%	8.11%
Park	17.66%	5.41%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>



## 732 – Celina Solar, Celina, Mercer County, OH



This project was built in 2012 and adjoins a mix of industrial and agricultural properties.

### Adjoining Use Breakdown

	<b>Acreage</b>	<b>Parcels</b>
Agricultural	19.43%	20.00%
Agri/Res	58.51%	20.00%
School	8.99%	10.00%
Commercial	6.93%	30.00%
Industrial	6.14%	20.00%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>

### 733 – Campbell Soup, Napoleon, Henry County, OH



This project was built in 2011 around an industrial plant. The closest adjoining residential use is 160 feet from the closest panel. The solar panels are essentially forming a buffer between the industrial use and the adjoining residential uses to the south.

#### Adjoining Use Breakdown

	Acreage	Parcels
Residential	3.82%	41.18%
Agricultural	53.12%	17.65%
Commercial	3.36%	11.76%
Industrial	39.69%	29.41%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>

## 734 – DG Amp Bowling Green, Bowling Green, Wood County, OH



This project was built in 2017 and adjoins mostly agricultural properties.

### Adjoining Use Breakdown

	Acreage	Parcels
Residential	0.55%	15.38%
Agricultural	99.45%	84.62%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>



## **II. Market Analysis of the Impact on Value from Solar Farms**

I have researched hundreds of solar farms in numerous states to determine the impact of these facilities on the value of adjoining property. This research has primarily been in North Carolina, but I have also conducted market impact analyses in Ohio, Illinois, Indiana, Kentucky, Virginia, South Carolina, Tennessee, Texas, Oregon, Mississippi, Maryland, New York, California, Missouri, Florida, Montana, Georgia, and New Jersey.

have derived a breakdown of the adjoining uses to show what is typically found around solar farms and what uses would likely be considered consistent with a solar farm use. A summary showing the results of compiling that data over hundreds of solar farms is shown later in the Scope of Research section of this report.

I also consider whether the properties adjoining a solar farm in one location have characteristics similar to the properties abutting or adjoining the proposed site so that I can make an assessment of market impact on each proposed site. Notably, in most cases solar farms are placed in areas very similar to the site in question, which is surrounded by low density residential and agricultural uses. In my over 700 studies, I have found a striking repetition of that same typical adjoining use mix in over 90% of the solar farms I have looked at. Matched pair results in multiple states are very similar, and all indicate that solar farms – which generate very little traffic, and do not generate noise, dust or have other harmful effects – do not negatively impact the value of adjoining or abutting properties.

On the following pages I have considered matched pair data specific to the area around Ohio. I searched home sales in Kentucky, Indiana and Michigan as well as Ohio.

In the next section I have considered matched pair data throughout the Midwest Region of the United States as being the most similar states that would most readily compare to Ohio. This includes data from Illinois as well as Indiana, Ohio, and Michigan. Finally, I have included a brief summary of data pulled nationally as additional support for these findings.

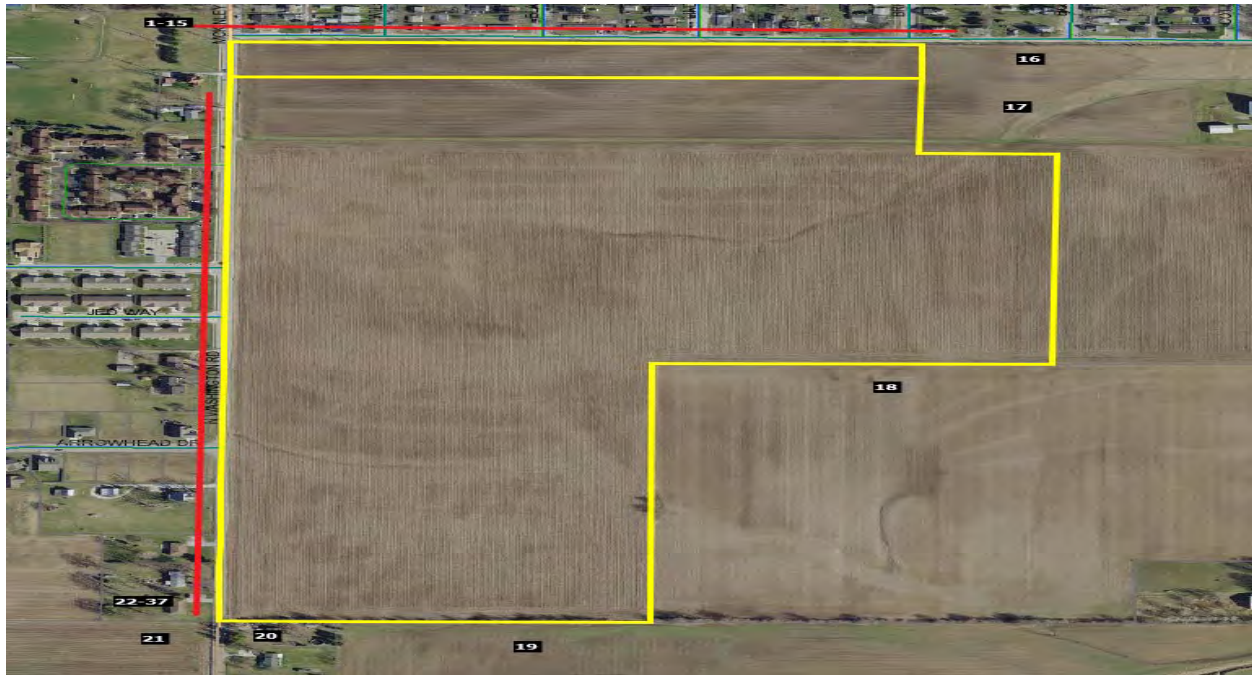
**A. *Ohio and Adjoining State Data***

I have focused first on Ohio and then on adjoining states. Of the solar farms in Ohio that I considered I only identified matched pairs adjoining the DG Amp Piqua Solar Farm. Additional data from adjoining states is included for additional support.

I have included two solar farms from Indiana, one from Kentucky, and two from Michigan where I was able to locate a number of additional matched pairs as outlined on the following pages.



# **1. Matched Pair – DG Amp Piqua**



This project is located on the southeast corner of Manier Street and N Washington Road, Piqua, OH. There are a number of nearby homes to the north, south and west of this solar farm.

I considered one adjoining sale and one nearby sale (one parcel off) that happened since the project was built in 2019. I did not consider the sale of a home located at Parcel 20 that happened in that time period as that property was marketed with damaged floors in the kitchen and bathroom, rusted baseboard heaters and generally was sold in an As-Is condition that makes it difficult to compare to move-in ready homes. I also did not consider some sales to the north that sold for prices significantly under \$100,000. The homes in that community includes a wide range of smaller, older homes that have been selling for prices ranging from \$25,000 to \$80,000. I have not been tracking home sales under \$100,000 as homes in that price range are less susceptible to external factors.

The adjoining sale at 6060 N Washington is a brick range fronting on a main road. I did not adjust the comparables for that factor despite the subdivision exposure on those comparables was superior. I considered the difference in lot size to be balancing factors. If I adjusted further for that main road frontage, then it would actually show a positive impact for adjoining the solar farm.

## **Adjoining Residential Sales After Solar Farm Approved**

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
22	Adjoins	6060 N Washington	0.80	10/30/2019	\$119,500	1961	1,404	\$85.11	3/1	2 Gar	Br Rnch	Updates
	Not	1523 Amesbury	0.25	5/7/2020	\$119,900	1973	1,316	\$91.11	3/2	Gar	Br Rnch	Updates
	Not	1609 Haverhill	0.17	10/17/2019	\$114,900	1974	1,531	\$75.05	3/1	Gar	Br Rnch	Updates
	Not	1511 Sweetbriar	0.17	8/6/2020	\$123,000	1972	1,373	\$89.58	4/2	Gar	Br Rnch	Updates

## **Adjoining Sales Adjusted**

Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
							\$119,500			155
-\$1,920		-\$7,194	\$6,414	-\$5,000	\$7,500	\$0	\$119,700	0%		
\$126		-\$7,469	-\$7,625		\$7,500	\$0	\$107,432	10%		
-\$2,913		-\$6,765	\$2,222	-\$5,000	\$7,500	\$0	\$118,044	1%		

4%

I also considered a home fronting on Plymouth Avenue which is one lot to the west of the solar farm with a rear view towards the solar farm. After adjustments this set of matched pairs shows no negative impact on the value of the property due to proximity to the solar farm.

**Adjoining Residential Sales After Solar Farm Approved**

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
	Nearby	1011 Plymouth	0.21	2/24/2020	\$113,000	1973	1,373	\$82.30	4/2	Gar	1.5 Stry	Fnce/Shd
	Not	1630 Haverhill	0.32	8/18/2019	\$94,900	1973	1,373	\$69.12	4/2	Gar	1.5 Stry	N/A
	Not	1720 Williams	0.17	12/4/2019	\$119,900	1968	1,682	\$71.28	4/1	2Gar	1.5 Br	Fnce/Shd
	Not	1710 Cambridge	0.17	1/22/2018	\$116,000	1968	1,648	\$70.39	4/2	Det 2	1.5 Br	Fnce/Shd

**Adjoining Sales Adjusted**

Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg	
							\$113,000		% Diff	Distance
\$1,519		\$0	\$0			\$10,000	\$106,419	6%		585
\$829		\$2,998	-\$17,621	\$5,000			\$111,105	2%		
\$7,459		\$2,900	-\$15,485				\$110,873	2%		
									3%	

Based on these two matched pairs, the data at this solar farm supports a finding of no negative impact on property value due to the proximity of the solar farm for homes as close as 155 feet.

## 2. Matched Pair – Portage Solar, Portage, IN



This solar farm has a 2 MW output and is located on a portion of a 56-acre tract. The project was built in 2012.

I have considered the recent sale of Parcels 5 and 12. Parcel 5 is an undeveloped tract, while Parcel 12 is a residential home. I have compared each to a set of comparable sales to determine if there was any impact due to the adjoining solar farm. This home is 1,320 feet from the closest solar panel.

**Adjoining Residential Sales After Solar Farm Completed**

#	TAX ID	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA
12	64-06-19-326-007.000-015	1.00	Sep-13	\$149,800	1964	1,776	\$84.35

**Nearby Residential Sales After Solar Farm Completed**

#	TAX ID	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA
2501 Architect Dr	64-04-32-202-004.000-021	1.31	Nov-15	\$191,500	1959	2,064	\$92.78
336 E 1050 N	64-07-09-326-003.000-005	1.07	Jan-13	\$155,000	1980	1,908	\$81.24
2572 Pryor Rd	64-05-14-204-006.000-016	1.00	Jan-16	\$216,000	1960	2,348	\$91.99

**Adjoining Land Sales After Solar Farm Completed**

#	TAX ID	Acres	Date Sold	Sales Price	\$/AC
5	64-06-19-200-003.000-015	18.70	Feb-14	\$149,600	\$8,000

**Nearby Land Sales After Solar Farm Completed**

#	TAX ID	Acres	Date Sold	Sales Price	\$/AC
	64-07-22-401-001.000-005	74.35	Jun-17	\$520,450	\$7,000
	64-15-08-200-010.000-001	15.02	Jan-17	\$115,000	\$7,658

**Residential Sale Adjustment Chart**

TAX ID	Date Sold	Adjustments		Total	\$/Sf
		Time			
64-06-19-326-007.000-015	Sep-13	\$8,988		\$158,788	\$89.41
64-04-32-202-004.000-021	Nov-15	\$3,830		\$195,330	\$94.64
64-07-09-326-003.000-005	Jan-13	\$9,300		\$164,300	\$86.11
64-05-14-204-006.000-016	Jan-16			\$216,000	\$91.99

2% adjustment/year  
Adjusted to 2017

	Adjoins Solar Farm		Not Adjoin Solar Farm	
	Average	Median	Average	Median
<b>Sales Price/SF</b>	\$89.41	\$89.41	\$90.91	\$91.99
<b>GBA</b>	1,776	1,776	2,107	2,064

After adjusting the price per square foot is 2.88% less for the home adjoining the solar farm versus those not adjoining the solar farm. This is within the typical range of variation to be anticipated in any real estate transaction and indicates no negative impact on property value.

Applying the price per square foot for the 336 E 1050 N sale, which is the most similar to the Parcel 12 sale, the adjusted price at \$81.24 per square foot applied to the Parcel 12 square footage yields a value of \$144,282.

**Land Sale Adjustment Chart**

<b>TAX ID</b>	<b>Date Sold</b>	<b>Adjustments</b>	<b>Total</b>	<b>\$/Acre</b>
		<b>Time</b>		
64-06-19-200-003.000-015	Feb-14	\$8,976	\$158,576	\$8,480
64-07-22-401-001.000-005	Jun-17		\$520,450	\$7,000
64-15-08-200-010.000-001	Jan-17		\$115,000	\$7,658

2% adjustment/year  
Adjusted to 2017

	<b>Adjoins Solar Farm</b>		<b>Not Adjoin Solar Farm</b>	
	<b>Average</b>	<b>Median</b>	<b>Average</b>	<b>Median</b>
<b>Sales Price/Ac</b>	\$8,480	\$8,480	\$7,329	\$7,329
<b>Acres</b>	18.70	18.70	44.68	44.68

After adjusting the price per acre is higher for the property adjoining the solar farm, but the average and median size considered is higher which suggests a slight discount. This set of matched pair supports no indication of negative impact due to the adjoining solar farm.

Alternatively, adjusting the 2017 sales back to 2014 I derive an indicated price per acre for the comparables at \$6,580 per acre to \$7,198 per acre, which I compare to the unadjusted subject property sale at \$8,000 per acre.



### **3. Matched Pair – Dominion Indy III, Indianapolis, IN**



This solar farm has an 8.6 MW output and is located on a portion of a 134-acre tract. The project was built in 2013.

There are a number of homes on small lots located along the northern boundary and I have considered several sales of these homes. I have compared those homes to a set of nearby not adjoining home sales as shown below. The adjoining homes that sold range from 380 to 420 feet from the nearest solar panel, with an average of 400 feet.

**Adjoining Residential Sales After Solar Farm Completed**

#	TAX ID	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA
2	2013249	0.38	12/9/2015	\$140,000	2006	2,412	\$58.04
4	2013251	0.23	9/6/2017	\$160,000	2006	2,412	\$66.33
5	2013252	0.23	5/10/2017	\$147,000	2009	2,028	\$72.49
11	2013258	0.23	12/9/2015	\$131,750	2011	2,190	\$60.16
13	2013260	0.23	3/4/2015	\$127,000	2005	2,080	\$61.06
14	2013261	0.23	2/3/2014	\$120,000	2010	2,136	\$56.18

**Nearby Not Adjoining Residential Sales After Solar Farm Completed**

#	TAX ID	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA
5836 Sable Dr	2013277	0.14	Jun-16	\$141,000	2005	2,280	\$61.84
5928 Mosaic Pl	2013845	0.17	Sep-15	\$145,000	2007	2,280	\$63.60
5904 Minden Dr	2012912	0.16	May-16	\$130,000	2004	2,252	\$57.73
5910 Mosaic Pl	2000178	0.15	Aug-16	\$146,000	2009	2,360	\$61.86
5723 Minden Dr	2012866	0.26	Nov-16	\$139,900	2005	2,492	\$56.14

TAX ID	Date Sold	Adjustments		
		Time	Total	\$/Sf
2013249	12/9/2015	\$5,600	\$145,600	\$60.36
2013251	9/6/2017		\$160,000	\$66.33
2013252	5/10/2017		\$147,000	\$72.49
2013258	12/9/2015	\$5,270	\$137,020	\$62.57
2013260	3/4/2015	\$5,080	\$132,080	\$63.50
2013261	2/3/2014	\$7,200	\$127,200	\$59.55
2013277	6/1/2016	\$2,820	\$143,820	\$63.08
2013845	9/1/2015	\$5,800	\$150,800	\$66.14
2012912	5/1/2016	\$2,600	\$132,600	\$58.88
2000178	8/1/2016	\$2,920	\$148,920	\$63.10
2012866	11/1/2016	\$2,798	\$142,698	\$57.26

2% adjustment/year  
Adjusted to 2017

	Adjoins Solar Farm		Not Adjoin Solar Farm	
	Average	Median	Average	Median
Sales Price/SF	\$64.13	\$63.03	\$61.69	\$63.08
GBA	2,210	2,163	2,333	2,280

This set of homes provides very strong indication of no negative impact due to the adjacency to the solar farm and includes a large selection of homes both adjoining and not adjoining in the analysis.

#### 4. Matched Pair – Crittenden Solar, Crittenden, KY



This solar farm was built in December 2017 on a 181.70-acre tract but utilizing only 34.10 acres. This is a 2.7 MW facility with residential subdivisions to the north and south.

I have identified four home sales to the north of this solar farm on Claiborne Drive and one home sale to the south on Eagle Ridge Drive since the completion of this solar farm. The home sale on Eagle Drive is for a \$75,000 home and all of the homes along that street are similar in size and price range. According to local broker Steve Glacken with Cutler Real Estate these are the lowest price range/style home in the market. I have not analyzed that sale as it would unlikely provide significant data to other homes in the area.

Mr. Glacken is currently selling lots at the west end of Claiborne for new home construction. He indicated that the solar farm near the entrance of the development has been a complete non-factor and none of the home sales are showing any concern over the solar farm. Most of the homes are in the \$250,000 to \$280,000 price range on lots being marketed for \$28,000 to \$29,000.

The first home considered is a bit of an anomaly for this subdivision in that it is the only manufactured home that was allowed in the community. It sold on January 3, 2019. I compared that sale to three other manufactured home sales in the area making minor adjustments as shown on the next page to account for the differences. After all other factors are considered the adjustments show a -1% to +13% impact due to the adjacency of the solar farm. The best indicator is 1250 Cason, which shows a 3% impact. A 3% impact is within the normal static of real estate transactions and therefore not considered indicative of a positive impact on the property, but it strongly supports an indication of no negative impact.

##### **Adjoining Residential Sales After Solar Farm Approved**

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
	Adjoins	250 Claiborne	0.96	1/3/2019	\$120,000	2000	2,016	\$59.52	3/2	Drive	Manuf	
	Not	1250 Cason	1.40	4/18/2018	\$95,000	1994	1,500	\$63.33	3/2	2-Det	Manuf	Carport
	Not	410 Reeves	1.02	11/27/2018	\$80,000	2000	1,456	\$54.95	3/2	Drive	Manuf	
	Not	315 N Fork	1.09	5/4/2019	\$107,000	1992	1,792	\$59.71	3/2	Drive	Manuf	



[illegible]

### Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
	Adjoins	300 Claiborne	1.08	9/20/2018	\$213,000	2003	1,568	\$135.84	3/3	2-Car	Ranch	Brick
	Not	460 Claiborne	0.31	1/3/2019	\$229,000	2007	1,446	\$158.37	3/2	2-Car	Ranch	Brick
	Not	2160 Sherman	1.46	6/1/2019	\$265,000	2005	1,735	\$152.74	3/3	2-Car	Ranch	Brick
	Not	215 Lexington	1.00	7/27/2018	\$231,200	2000	1,590	\$145.41	5/4	2-Car	Ranch	Brick

## Adjustments

[illegible]

This set of matched pairs shows a minor negative impact for this property. I was unable to confirm the sales price or conditions of this sale. The best indication of value is based on 215 Lexington, which required the least adjusting and supports a -7% impact.

### Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
	Adjoins	350 Claiborne	1.00	7/20/2018	\$245,000	2002	1,688	\$145.14	3/3	2-Car	Ranch	Brick
	Not	460 Claiborne	0.31	1/3/2019	\$229,000	2007	1,446	\$158.37	3/2	2-Car	Ranch	Brick
	Not	2160 Sherman	1.46	6/1/2019	\$265,000	2005	1,735	\$152.74	3/3	2-Car	R/FBsmt	Brick
	Not	215 Lexington	1.00	7/27/2018	\$231,200	2000	1,590	\$145.41	5/4	2-Car	Ranch	Brick

## Adjustments

[illegible]

This set of matched pairs shows a no negative impact for this property. The range of adjusted impacts is -4% to +2%. The best indication is -1%, which as described above is within the typical market static and supports no negative impact on adjoining property value.

### Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
	Adjoins	370 Claiborne	1.06	8/22/2019	\$273,000	2005	1,570	\$173.89	4/3	2-Car	2-Story	Brick
	Not	2160 Sherman	1.46	6/1/2019	\$265,000	2005	1,735	\$152.74	3/3	2-Car	R/FBsmt	Brick
	Not	2290 Dry	1.53	5/2/2019	\$239,400	1988	1,400	\$171.00	3/2.5	2-Car	R/FBsmt	Brick
	Not	125 Lexington	1.20	4/17/2018	\$240,000	2001	1,569	\$152.96	3/3	2-Car	Split	Brick

## Adjustments

[illegible]

This set of matched pairs shows a positive negative impact for this property. The range of adjusted impacts is -5% to +10%. The best indication is +7%. I typically consider measurements of +/-5% to be within the typical static of real estate transactions. This indication is higher than that and suggests a positive relationship.

The four matched pairs considered in this analysis includes two that show no negative impact on value, one that shows a negative impact on value, and one that shows a positive impact. The negative indication supported by one matched pair is -7% and the positive impact of another is +7%. The two neutral indications show impacts of -1% and +3%. The average indicated impact is +1% when all four of these indicators are blended.



## 5. Matched Pair – Demille Solar, Demille Road, Lapeer, MI



This solar farm is located on 160 acres of a parent tract assemblage of 311.40 acres with a 28.4 MW output. This was built in 2017.

I have identified several home sales adjoining this solar farm at the southeast corner where the red line shows adjoining Parcels 5 through 17 on the map above.

The first is Parcel 8 in the map above, 1120 Don Wayne Drive that sold in August 2019. I have compared this to multiple home sales as shown below. I consider 1231 Turrill to be the best comparable of this set as it required the least adjustment and was the most similar in size, age, and date of sale.

### Adjoining Residential Sales After Solar Farm Built

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Dist.
Adjoins	1120 Don Wayne	0.47	8/28/2019	\$194,000	1976	1,700	\$114.12	3/3.5	2-Car	Ranch	Brick/FinBsm	310
Not	1127 Don Wayne	0.51	9/23/2019	\$176,900	1974	1,452	\$121.83	3/2	2-Car	Ranch	Brick/Ufin Bsm	
Not	1231 Turrill	1.21	4/25/2019	\$182,000	1971	1,560	\$116.67	3/2	2-Car	Ranch	Brick/Wrkshp	
Not	1000 Baldwin	3.11	8/1/2017	\$205,000	1993	1,821	\$112.58	3/2.5	2-Car	Ranch	Vinyl	

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff
Adjoins	1120 Don Wayne								\$194,000		-1%
Not	1127 Don Wayne	-\$258		\$1,769	\$24,171	\$10,000			\$212,582	-10%	
Not	1231 Turrill	\$1,278	-\$10,000	\$4,550	\$13,067	\$10,000			\$200,895	-4%	
Not	1000 Baldwin	\$8,718	-\$20,000	-\$17,425	-\$10,897	\$10,000			\$175,396	10%	

Next I considered Parcel 9, 1126 Don Wayne Drive, which I have compared to two similar home sales nearby that are not adjoining a solar farm as shown below. This home sold in May 2018 after the solar farm was built.

**Adjoining Residential Sales After Solar Farm Built**

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Dist.
Adjoins	1126 Don Wayne	0.47	5/16/2018	\$160,000	1971	1,900	\$84.21	3/2.5	2-Car	Ranch	Brick,FinBsmnt	310
Not	70 Sterling Dr	0.32	8/2/2018	\$137,500	1960	1,800	\$76.39	3/1.5	1-Car	Ranch	Brick	
Not	3565 Garden Dr	0.34	5/15/2019	\$165,000	1960	2,102	\$78.50	3/1.5	2-Car	Ranch	Brick	

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff
Adjoins	1126 Don Wayne								\$160,000		-3%
Not	70 Sterling Dr	-\$603		\$7,563	\$6,111	\$10,000	\$5,000		\$165,571	-3%	
Not	3565 Garden Dr	-\$3,374		\$9,075	-\$12,685	\$5,000			\$163,016	-2%	

Next I looked at Parcel 11, 1138 Don Wayne Drive that sold in August 2019. I have compared this to three similar sales as shown below. I attributed no value to the pool at 1138 Don Wayne Drive.

**Adjoining Residential Sales After Solar Farm Built**

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Dist.
Adjoins	1138 Don Wayne	0.47	8/28/2019	\$191,000	1975	2,128	\$89.76	4/1.5	2-Car	2-Story	Brick	380
Not	1331 W Genessee	0.45	10/25/2019	\$160,707	1940	1,955	\$82.20	4/1.5	Drive	1.5 Story	Vinyl/UnBsmnt	
Not	1128 Gwen Dr	0.47	8/24/2018	\$187,500	1973	2,040	\$91.91	3/2.5	2-Car	2 Story	Brick/UnBsmnt	
Not	1227 Oakridge	1.05	6/11/2017	\$235,000	1980	2,500	\$94.00	4/2.5	2-Car	2 Story	Brk/PFinBsmnt	

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff
Adjoins	1138 Don Wayne								\$191,000		-1%
Not	1331 W Genessee	-\$524		\$16,874	\$11,377		\$10,000		\$198,434	-4%	
Not	1128 Gwen Dr	\$3,887		\$1,875	\$6,471	-\$10,000			\$189,733	1%	
Not	1227 Oakridge	\$10,667	-\$10,000	-\$5,875	-\$27,974	-\$10,000			\$191,818	0%	

Parcel 13, 1168 Alice Drive, sold in October 2019. I spoke with Tanya Biernat the buyer's agent who handled that sale and she indicated that the property was placed on the market below market for a fast sale by the sellers. The buyers expressed no concern regarding the adjacent solar farm and it had no negative impact on marketing or selling the property, though it did sell for a low price. I also spoke with Chantel Fink's office, the selling agent. They confirmed that the solar farm was not an issue in the sales price or marketing of the property. Given that this sale was noted as below market for a fast sale, I have not attempted to set it up as a matched pair.

Parcel 14, 1174 Alice Drive, sold in January 2019. I have compared that sale to three similar properties as shown below. I included 1135 Gwen Drive as a nearby comparable, but it is not a good comparable. According to the broker, Paul Coulter, that home had many recent and significant upgrades that made it superior to similar housing in the neighborhood. It is notably the highest sales price in the neighborhood. I have shown that one but I made no adjustment for those upgrades, but I won't rely on that sale for the matched pairs. I consider the 1127 Don Wayne Drive comparable to be a more reasonable comparison. I spoke with Chris Fergusson the broker for that sale who confirmed that it was arm's length and that while across Don Wayne Drive from the homes that adjoin the solar farm, this home had no view of the solar farm and was not an issue in marketing this home.

**Adjoining Residential Sales After Solar Farm Built**

<b>Solar</b>	<b>Address</b>	<b>Acres</b>	<b>Date Sold</b>	<b>Sales Price</b>	<b>Built</b>	<b>GBA</b>	<b>\$/GBA</b>	<b>BR/BA</b>	<b>Park</b>	<b>Style</b>	<b>Other</b>	<b>Dist.</b>
Adjoins	1174 Alice Dr	0.54	1/14/2019	\$165,000	1973	1,400	\$117.86	3/1.5	2-Car	Ranch	Brick/Fin Bsmt	280
Not	1127 Don Wayne	0.51	9/23/2019	\$176,900	1974	1,452	\$121.83	3/2	2-Car	Ranch	Brick/Ufin Bsmt	
Not	1135 Gwen Dr	0.43	7/26/2019	\$205,000	1967	1,671	\$122.68	3/2	2-Car	Ranch	Brick/Ufin Bsmt	
Not	1160 Beth Dr	0.46	6/20/2019	\$147,500	1970	1,482	\$99.53	4/1.5	2-Car	Ranch	Brick/Fin Bsmt	

<b>Solar</b>	<b>Address</b>	<b>Time</b>	<b>Site</b>	<b>YB</b>	<b>GLA</b>	<b>BR/BA</b>	<b>Park</b>	<b>Other</b>	<b>Total</b>	<b>% Diff</b>	<b>Avg % Diff</b>
Adjoins	1174 Alice Dr								\$165,000		2%
Not	1127 Don Wayne	-\$2,504		-\$885	-\$5,068	-\$5,000			\$163,443	1%	
Not	1135 Gwen Dr	-\$2,223		\$6,150	-\$26,597	-\$5,000			\$177,330	-7%	
Not	1160 Beth Dr	-\$1,301		\$2,213	-\$6,529				\$141,883	14%	

The four matched pairs identified show a range of -3% to +2% based on the average difference for each set of matched pairs. This is a very similar range I have found in most sales adjoining solar farms and strongly supports the assertion that the solar farm is not having a negative impact on adjoining property values.

Furthermore, two brokers active in the sale of a home adjoining the solar farm both confirmed that Parcel 13 was not impacted by the presence of the solar farm on the adjacent tract.

## 6. Matched Pair – Turrill Solar, Turrill Road, Lapeer, MI



This solar farm is located on approximately 230 acres with a 19.6 MW output. This was built in 2017.

I have identified several home sales adjoining this solar farm on the west side of this solar farm on Cliff Drive.

The first is 1060 Cliff Drive that sold in September 2018. I compared this to multiple nearby home sales as shown below.

### Adjoining Residential Sales After Solar Farm Built

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
Adjoins	1060 Cliff Dr	1.03	9/14/2018	\$200,500	1970	2,114	\$94.84	4/2.5	2-Car	2 Story	Brick	290
Not	1331 W Genessee	0.45	10/25/2019	\$160,707	1940	1,955	\$82.20	4/1.5	Drive	1.5 Story	Vinyl/Unfin Bsmt	
Not	1128 Gwen Dr	0.47	8/24/2018	\$187,500	1973	2,040	\$91.91	3/2.5	2-Car	2 Story	Brk/Unfin Bsmt	
Not	1227 Oakridge	1.05	6/11/2017	\$235,000	1980	2,500	\$94.00	4/2.5	2-Car	2 Story	Brk/Prt Fin Bsmt	

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff
Adjoins	1060 Cliff Dr								\$200,500		-2%
Not	1331 W Genessee	-\$3,666	\$10,000	\$14,464	\$10,456	\$10,000	\$10,000		\$211,961	-6%	
Not	1128 Gwen Dr	\$221	\$10,000	-\$2,813	\$5,441				\$200,350	0%	
Not	1227 Oakridge	\$6,073		-\$11,750	-\$29,027				\$200,296	0%	

Next I considered 1040 Cliff Drive as shown below. Comparing to the 1127 Don Wayne Drive, I show no negative impact. I included 1135 Gwen Drive as a nearby comparable, but it is not a good comparable. According to the broker, Paul Coulter, that home had many recent and significant upgrades that made it superior to similar housing in the neighborhood. It is notably the highest sales price in the neighborhood. I have shown that one but I made no adjustment for those upgrades, but I won't rely on that sale for the matched pairs. This leaves 1127 Don Wayne Drive which shows no negative impact and 1160 Beth Drive, which had the fewest adjustments shows a 12% premium or enhancement for adjoining the solar farm. I consider the Don Wayne Drive match up to be the better of these two comparables even with a higher number of adjustments.

**Adjoining Residential Sales After Solar Farm Built**

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
Adjoins	1040 Cliff Dr	1.03	6/29/2017	\$145,600	1960	1,348	\$108.01	3/1.5	3-Car	Ranch	Brick/Wrkshp	255
Not	1127 Don Wayne	0.51	9/23/2019	\$176,900	1974	1,452	\$121.83	3/2	2-Car	Ranch	Brick/Ufin Bsmt	
Not	1135 Gwen Dr	0.43	7/26/2019	\$205,000	1967	1,671	\$122.68	3/2	2-Car	Ranch	Brick/Ufin Bsmt	
Not	1160 Beth Dr	0.46	6/20/2019	\$147,500	1970	1,482	\$99.53	4/1.5	2-Car	Ranch	Brick/Fin Bsmt	

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff
Adjoins	1040 Cliff Dr								\$145,600		1%
Not	1127 Don Wayne	-\$8,110		-\$12,383	-\$10,136	-\$5,000	\$5,000		\$146,271	0%	
Not	1135 Gwen Dr	-\$8,718		-\$7,175	-\$31,701	-\$5,000	\$5,000		\$157,406	-8%	
Not	1160 Beth Dr	-\$5,975		-\$7,375	-\$10,669		\$5,000		\$128,481	12%	

The two matched pairs identified show a range of -2% to +1% based on the average difference for each set of matched pairs. This is a very similar range I have found in most sales adjoining solar farms and strongly supports the assertion that the solar farm is not having a negative impact on adjoining property values.

## Conclusion – Ohio and Adjoining States

### Matched Pair Summary

	Name	City	State	Acres	MW	Adj. Uses By Acreage					1 mile Radius (2010-2020 Data)		
						Topo Shift	Res	Ag/Res	Ag	Com/Ind	Population	Med. Income	Avg. Housing Unit
1	DG Amp	Piqua	OH	86	12.60	2	26%	58%	16%	0%	6,735	\$38,919	\$96,555
2	Portage	Portage	IN	56	2.00	0	19%	0%	81%	0%	6,642	\$65,695	\$186,463
3	Dominion	Indianapolis	IN	134	8.60	20	3%	0%	97%	0%	3,774	\$61,115	\$167,515
4	Crittenden	Crittenden	KY	34	2.70	40	22%	27%	51%	0%	1,419	\$60,198	\$178,643
5	Demille	Lapeer	MI	160	28.40	10	10%	0%	68%	22%	2,010	\$47,208	\$187,214
6	Turrill	Lapeer	MI	230	19.60	10	75%	0%	59%	25%	2,390	\$46,839	\$110,361
<b>Average</b>				117	12.32	14	26%	14%	62%	8%	3,828	\$53,329	\$154,459
<b>Median</b>				110	10.60	10	21%	0%	64%	0%	3082	\$53,703	\$173,079
<b>High</b>				230	28.40	40	75%	58%	97%	25%	6,735	\$65,695	\$187,214
<b>Low</b>				34	2.00	0	3%	0%	16%	0%	1,419	\$38,919	\$96,555

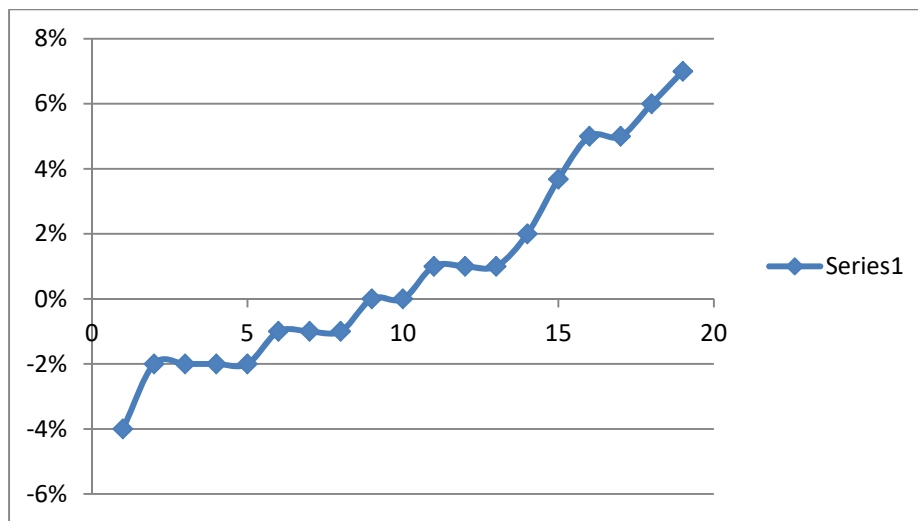
The median income for the population within 1 mile of a solar farm is \$53,703 with a median housing unit value of \$173,079. All of these comparable solar farms have homes within a 1-mile radius under \$200,000 on average, though I have matched pairs in other states over \$1,000,000 in price adjoining large solar farms. The adjoining uses show that residential and agricultural uses are the predominant adjoining uses.

I considered the demographics around the subject property and found 150 people within 1-mile of the middle of the project with a median income of \$76,415 and an average home value of \$220,918. I also considered a 3-mile radius and found 10,168 people with a median income of \$75,405 and an average home price of \$202,562.

Based on the similarity of adjoining uses and demographic data between these sites and the subject property, I consider it reasonable to compare these sites to the subject property. While none of these solar farms are of the same scale, these are located in Ohio or adjoining states. I will address larger solar farms in a later section of this report.

Each of these solar farms has adjoining home sales that support a conclusion of no negative impact on adjoining property values.

The following pages show greater detail on these solar farms and how the 19 matched pairs from these 6 solar farms were established. Below I have shown those findings charted from smallest to largest to show that most of the findings are between +/-5% within typical market variation.





## Residential Dwelling Matched Pairs Adjoining Solar Farms

Pair	Solar Farm	City	State	Area	MW	Approx Distance	Tax ID/Address	Sale Date	Sale Price	Adj. Sale Price	% Diff
1	Portage	Portage	IN	Rural	2	1320	836 N 450 W 336 E 1050 N	Sep-13 Jan-13	\$149,800 \$155,000		
2	Dominion	Indianapolis	IN	Rural	8.6	400	2013249 (Tax ID) 5723 Minden	Dec-15 Nov-16	\$140,000 \$139,900	\$144,282 \$132,700	4% 5%
3	Dominion	Indianapolis	IN	Rural	8.6	400	2013251 (Tax ID) 5910 Mosaic	Sep-17 Aug-16	\$160,000 \$146,000		
4	Dominion	Indianapolis	IN	Rural	8.6	400	2013252 (Tax ID) 5836 Sable	May-17 Jun-16	\$147,000 \$141,000		
5	Dominion	Indianapolis	IN	Rural	8.6	400	2013258 (Tax ID) 5904 Minden	Dec-15 May-16	\$131,750 \$130,000		
6	Dominion	Indianapolis	IN	Rural	8.6	400	2013260 (Tax ID) 5904 Minden	Mar-15 May-16	\$127,000 \$130,000	\$134,068 \$128,957	-2% -2%
7	Dominion	Indianapolis	IN	Rural	8.6	400	2013261 (Tax ID) 5904 Minden	Feb-14 May-16	\$120,000 \$130,000	\$121,930	-2%
8	Crittenden	Crittenden	KY	Suburban	2.7	373	250 Claiborne 315 N Fork	Jan-19 May-19	\$120,000 \$107,000		
9	Crittenden	Crittenden	KY	Suburban	2.7	488	300 Claiborne 1795 Bay Valley	Sep-18 Dec-17	\$213,000 \$231,200	\$120,889 \$228,180	-1% -7%
10	Crittenden	Crittenden	KY	Suburban	2.7	720	350 Claiborne 2160 Sherman	Jul-18 Jun-19	\$245,000 \$265,000		
11	Crittenden	Crittenden	KY	Suburban	2.7	930	370 Claiborne 125 Lexington	Aug-19 Apr-18	\$273,000 \$240,000	\$248,225 \$254,751	-1% 7%
12	Demille	Lapeer	MI	Suburban	28	310	1120 Don Wayne 1231 Turrill	Aug-19 Apr-19	\$194,000 \$182,000	\$200,895	-4%
13	Demille	Lapeer	MI	Suburban	28	310	1126 Don Wayne 3565 Garden	May-18 May-19	\$160,000 \$165,000		
14	Demille	Lapeer	MI	Suburban	28	380	1138 Don Wayne 1128 Gwen	Aug-19 Aug-18	\$191,000 \$187,500	\$163,016 \$189,733	-2% 1%
15	Demille	Lapeer	MI	Suburban	28	280	1174 Alice 1127 Don Wayne	Jan-19 Sep-19	\$165,000 \$176,900		
16	Turrill	Lapeer	MI	Suburban	20	290	1060 Cliff 1128 Gwen	Sep-18 Aug-18	\$200,500 \$187,500	\$163,443 \$200,350	1% 0%
17	Turrill	Lapeer	MI	Suburban	20	255	1040 Cliff 1127 Don Wayne	Jun-17 Sep-19	\$145,600 \$176,900		
18	DG Amp	Piqua	OH	Suburban	12.6	155	6060 N Washington 1511 Sweetbriar	Oct-19 Aug-20	\$119,500 \$123,000	\$146,271 \$118,044	0% 1%
19	DG Amp	Piqua	OH	Suburban	12.6	585	1011 Plymouth 1720 Williams	Feb-20 Dec-19	\$113,000 \$119,900		

	Avg. MW	Avg. Distance	% Dif
<b>Average</b>	12.72	463	1%
<b>Median</b>	8.60	400	0%
<b>High</b>	28.00	1,320	7%
<b>Low</b>	2.00	155	-7%

## ***B. Midwest USA Data – Over 5 MW***

I have not reshown the data for Ohio, Indiana, and Michigan, but I will include them in the summary for the Midwest data.

### **7. Matched Pair – Grand Ridge Solar, Streator, IL**



This solar farm has a 20 MW output and is located on a 160-acre tract. The project was built in 2012.

I have considered the recent sale of Parcel 13 shown above, which sold in October 2016 after the solar farm was built. I have compared that sale to a number of nearby residential sales not in proximity to the solar farm as shown below. Parcel 13 is 480 feet from the closest solar panel.

**Adjoining Residential Sales After Solar Farm Completed**

#	TAX ID	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA
13	34-21-237-000	2	Oct-16	\$186,000	1997	2,328	\$79.90

**Not Adjoining Residential Sales After Solar Farm Completed**

#	TAX ID	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA
712 Columbus Rd	32-39-134-005	1.26	Jun-16	\$166,000	1950	2,100	\$79.05
504 N 2782 Rd	18-13-115-000	2.68	Oct-12	\$154,000	1980	2,800	\$55.00
7720 S Dwight Rd	11-09-300-004	1.14	Nov-16	\$191,000	1919	2,772	\$68.90
701 N 2050th Rd	26-20-105-000	1.97	Aug-13	\$200,000	2000	2,200	\$90.91
9955 E 1600th St	04-13-200-007	1.98	May-13	\$181,858	1991	2,600	\$69.95

TAX ID	Date Sold	Adjustments		
		Time	Total	\$/Sf
34-21-237-000	Oct-16		\$186,000	\$79.90
32-39-134-005	Jun-16		\$166,000	\$79.05
18-13-115-000	Oct-12	\$12,320	\$166,320	\$59.40
11-09-300-004	Nov-16		\$191,000	\$68.90
26-20-105-000	Aug-13	\$12,000	\$212,000	\$96.36
04-13-200-007	May-13	\$10,911	\$192,769	\$74.14

	Adjoins Solar Farm		Not Adjoin Solar Farm	
	Average	Median	Average	Median
<b>Sales Price/SF</b>	\$79.90	\$79.90	\$75.57	\$74.14
<b>GBA</b>	2,328	2,328	2,494	2,600

Based on the matched pairs I find no indication of negative impact due to proximity to the solar farm.

The most similar comparable is the home on Columbus that sold for \$79.05 per square foot. This is higher than the median rate for all of the comparables. Applying that price per square foot to the subject property square footage indicates a value of \$184,000.

### Conclusion - Midwest

This is a similar set to the Ohio and adjoining states, but excludes data from Kentucky and includes data from Illinois.

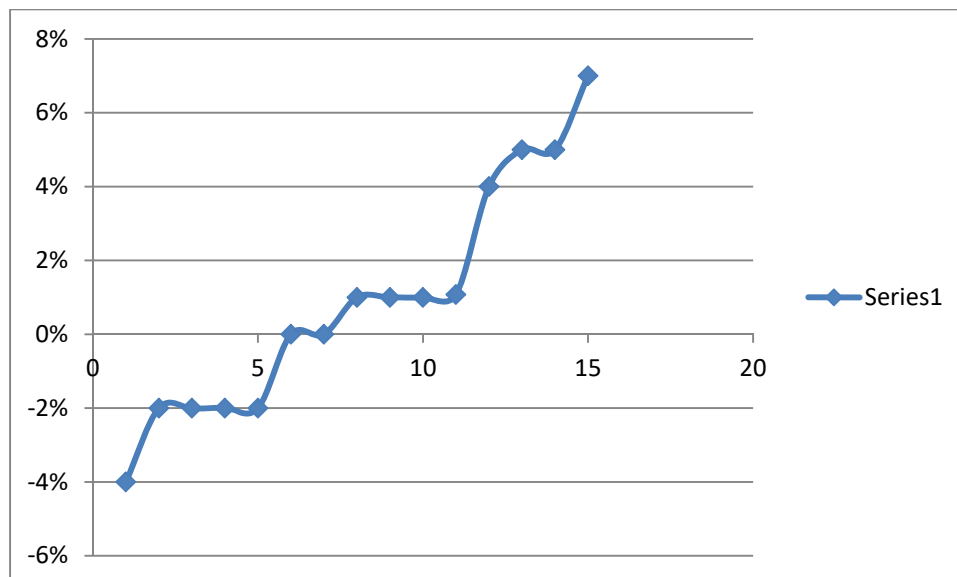
Matched Pair Summary						Adj. Uses By Acreage					1 mile Radius (2010-2020 Data)		
Name	City	State	Acres	MW	Topo Shift	Res	Ag/Res	Ag	Com/Ind		Population	Med. Income	Avg. Housing Unit
1	DG Amp Piqua	Piqua	OH	86	12.60	2	26%	58%	16%	0%	6,735	\$38,919	\$96,555
2	Portage	Portage	IN	56	2.00	0	19%	0%	81%	0%	6,642	\$65,695	\$186,463
3	Dominion	Indianapolis	IN	134	8.60	20	3%	0%	97%	0%	3,774	\$61,115	\$167,515
5	Demille	Lapeer	MI	160	28.40	10	10%	0%	68%	22%	2,010	\$47,208	\$187,214
6	Turrill	Lapeer	MI	230	19.60	10	75%	0%	59%	25%	2,390	\$46,839	\$110,361
7	Grand Ridge	Streator	IL	160	20.00	1	8%	5%	87%	0%	96	\$70,158	\$187,037
<b>Average</b>			138	15.20	7	23%	11%	68%	8%		3,608	\$54,989	\$155,858
<b>Median</b>			147	16.10	6	15%	0%	75%	0%		3082	\$54,162	\$176,989
<b>High</b>			230	28.40	20	75%	58%	97%	25%		6,735	\$70,158	\$187,214
<b>Low</b>			56	2.00	0	3%	0%	16%	0%		96	\$38,919	\$96,555

The median income for the population within 1 mile of a solar farm is \$54,162 with a median housing unit value of \$176,989. All of these comparable solar farms have homes within a 1-mile radius under \$200,000 on average, though I have matched pairs in other states over \$1,000,000 in price adjoining large solar farms. The adjoining uses show that residential and agricultural uses are the predominant adjoining uses.

Based on the similarity of adjoining uses and demographic data between these sites and the subject property, I consider it reasonable to compare these sites to the subject property. While none of these solar farms are of the same scale, these are located in the same region. I will address larger solar farms in a later section of this report.

Each of these solar farms has adjoining home sales that support a conclusion of no negative impact on adjoining property values.

The following pages show greater detail on these solar farms and how the 16 matched pairs from these 6 solar farms were established. In each case I started with three matched pairs to establish a range of potential adjustments as shown on the earlier pages and in the chart I concluded on the matched pair that required the least adjustment. Below I have shown those findings charted from smallest to largest to show that most of the findings are between +/-5% within typical market variation.



## Residential Dwelling Matched Pairs Adjoining Solar Farms

Pair	Solar Farm	City	State	Area	MW	Approx Distance	Tax ID/Address	Sale Date	Sale Price	Adj. Sale Price	% Diff
1	Grand Ridge	Streator	IL	Rural	20	480	1497 E 21st	Oct-16	\$186,000		
							712 Columbus	Jun-16	\$166,000	\$184,000	1%
2	Portage	Portage	IN	Rural	2	1320	836 N 450 W	Sep-13	\$149,800		
							336 E 1050 N	Jan-13	\$155,000	\$144,282	4%
3	Dominion	Indianapolis	IN	Rural	8.6	400	2013249 (Tax ID)	Dec-15	\$140,000		
							5723 Minden	Nov-16	\$139,900	\$132,700	5%
4	Dominion	Indianapolis	IN	Rural	8.6	400	2013251 (Tax ID)	Sep-17	\$160,000		
							5910 Mosaic	Aug-16	\$146,000	\$152,190	5%
5	Dominion	Indianapolis	IN	Rural	8.6	400	2013252 (Tax ID)	May-17	\$147,000		
							5836 Sable	Jun-16	\$141,000	\$136,165	7%
6	Dominion	Indianapolis	IN	Rural	8.6	400	2013258 (Tax ID)	Dec-15	\$131,750		
							5904 Minden	May-16	\$130,000	\$134,068	-2%
7	Dominion	Indianapolis	IN	Rural	8.6	400	2013260 (Tax ID)	Mar-15	\$127,000		
							5904 Minden	May-16	\$130,000	\$128,957	-2%
8	Dominion	Indianapolis	IN	Rural	8.6	400	2013261 (Tax ID)	Feb-14	\$120,000		
							5904 Minden	May-16	\$130,000	\$121,930	-2%
9	Demille	Lapeer	MI	Suburban	28	310	1120 Don Wayne	Aug-19	\$194,000		
							1231 Turrill	Apr-19	\$182,000	\$200,895	-4%
10	Demille	Lapeer	MI	Suburban	28	310	1126 Don Wayne	May-18	\$160,000		
							3565 Garden	May-19	\$165,000	\$163,016	-2%
11	Demille	Lapeer	MI	Suburban	28	380	1138 Don Wayne	Aug-19	\$191,000		
							1128 Gwen	Aug-18	\$187,500	\$189,733	1%
12	Demille	Lapeer	MI	Suburban	28	280	1174 Alice	Jan-19	\$165,000		
							1127 Don Wayne	Sep-19	\$176,900	\$163,443	1%
13	Turrill	Lapeer	MI	Suburban	20	290	1060 Cliff	Sep-18	\$200,500		
							1128 Gwen	Aug-18	\$187,500	\$200,350	0%
14	Turrill	Lapeer	MI	Suburban	20	255	1040 Cliff	Jun-17	\$145,600		
							1127 Don Wayne	Sep-19	\$176,900	\$146,271	0%
15	DG Amp	Piqua	OH	Suburban	12.6	155	6060 N Washington	Oct-19	\$119,500		
							1511 Sweetbriar	Aug-20	\$123,000	\$118,044	1%
16	DG Amp	Piqua	OH	Suburban	12.6	585	1011 Plymouth	Feb-20	\$113,000		

		Avg. MW	Avg. Distance		% Dif
<b>Average</b>		15.68	423	<b>Average</b>	1%
<b>Median</b>		12.60	400	<b>Median</b>	1%
<b>High</b>		28.00	1,320	<b>High</b>	7%
<b>Low</b>		2.00	155	<b>Low</b>	-4%

### C. Summary of National Data on Solar Farms

I have worked in 19 states related to solar farms and I have been tracking matched pairs in most of those states. On the following pages I provide a brief summary of those findings showing 46 solar farms studied with each one providing matched pair data supporting the findings of this report.

The solar farms summary is shown below with a summary of the matched pair data shown on the following page.

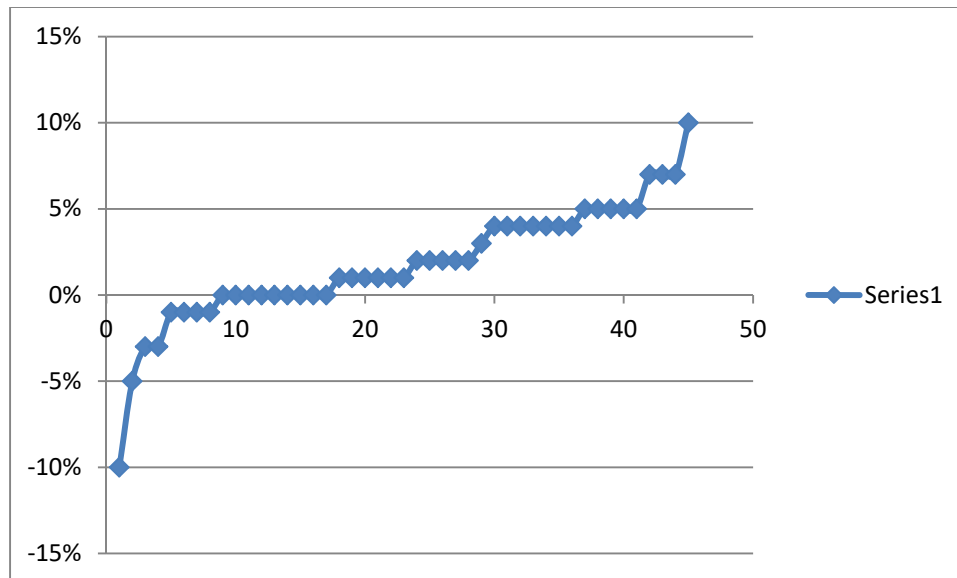
Matched Pair Summary						Adj. Uses By Acreage					1 mile Radius (2010-2020 Data)		
	Name	City	State	Acres	MW	Topo Shift	Res	Ag/Res	Ag	Com/Ind	Population	Med. Income	Avg. Housing Unit
1	AM Best	Goldsboro	NC	38	5.00	2	38%	23%	0%	39%	1,523	\$37,358	\$148,375
2	White Cross	Chapel Hill	NC	45	5.00	50	5%	51%	44%	0%	213	\$67,471	\$319,929
3	Wagstaff	Roxboro	NC	30	5.00	46	7%	89%	4%	0%	336	\$41,368	\$210,723
4	Mulberry	Selmer	TN	160	5.00	60	13%	10%	73%	3%	467	\$40,936	\$171,746
5	Nixon's	W. Friendship	MD	97	2.00	40	79%	4%	17%	0%	939	\$166,958	\$770,433
6	Leonard	Hughesville	MD	47	5.00	20	18%	0%	75%	6%	525	\$106,550	\$350,000
7	Talbot	Easton	MD	50	0.55	0	81%	0%	19%	0%	536	\$47,136	\$250,595
8	Alamo II	Converse	TX	98	4.40	30	95%	0%	5%	0%	9,257	\$62,363	\$138,617
9	Gastonia SC	Gastonia	NC	35	5.00	48	33%	23%	0%	44%	4,689	\$35,057	\$126,562
10	Summit	Moyock	NC	2,034	80.00	4	4%	94%	0%	2%	382	\$79,114	\$281,731
11	White Cross II	Chapel Hill	NC	34	2.80	35	25%	75%	0%	0%	213	\$67,471	\$319,929
12	Tracy	Bailey	NC	50	5.00	10	29%	71%	0%	0%	312	\$43,940	\$99,219
13	Manatee	Parrish	FL	1,180	75.00	20	2%	1%	97%	0%	48	\$75,000	\$291,667
14	McBride	Midland	NC	627	75.00	140	12%	78%	10%	0%	398	\$63,678	\$256,306
15	Yamhill II	Amity	OR	186	1.20	20	2%	0%	97%	1%	97	\$58,248	\$342,391
16	Marion	Aurora	OR	32	0.30	0	2%	37%	61%	0%	267	\$75,355	\$370,833
17	Clackamas II	Aurora	OR	156	0.22	0	7%	25%	68%	0%	3,062	\$70,911	\$464,501
18	Grand Ridge	Streator	IL	160	20.00	1	8%	5%	87%	0%	96	\$70,158	\$187,037
19	Portage	Portage	IN	56	2.00	0	19%	0%	81%	0%	6,642	\$65,695	\$186,463
20	Dominion	Indianapolis	IN	134	8.60	20	3%	0%	97%	0%	3,774	\$61,115	\$167,515
21	Beetle-Shelby	Shelby	NC	24	4.00	52	22%	0%	77%	1%	218	\$53,541	\$192,692
22	Mariposa	Stanley	NC	36	5.00	96	48%	52%	0%	0%	1,716	\$36,439	\$137,884
23	Clarke Cnty	White Post	VA	234	20.00	70	14%	46%	39%	1%	578	\$81,022	\$374,453
24	Flemington	Flemington	NJ	120	9.36	N/A	13%	28%	50%	8%	3,477	\$105,714	\$444,696
25	Frenchtown	Frenchtown	NJ	139	7.90	N/A	37%	29%	35%	0%	457	\$111,562	\$515,399
26	McGraw	East Windsor	NJ	95	14.00	N/A	27%	0%	44%	29%	7,684	\$78,417	\$362,428
27	Tinton Falls	Tinton Falls	NJ	100	16.00	N/A	98%	0%	0%	2%	4,667	\$92,346	\$343,492
28	Simon	Social Circle	GA	237	30.00	71	1%	36%	63%	0%	203	\$76,155	\$269,922
29	Candace	Princeton	NC	54	5.00	22	76%	0%	24%	0%	448	\$51,002	\$107,171
30	Crittenden	Crittenden	KY	34	2.70	40	22%	27%	51%	0%	1,419	\$60,198	\$178,643
31	Walker	Barhamsville	VA	485	20.00	N/A	12%	20%	68%	0%	203	\$80,773	\$320,076
32	Innov 46	Hope Mills	NC	532	78.50	0	17%	0%	83%	0%	2,247	\$58,688	\$183,435
33	Innov 42	Fayetteville	NC	414	71.00	0	41%	0%	59%	0%	568	\$60,037	\$276,347
34	Demille	Lapeer	MI	160	28.40	10	10%	0%	68%	22%	2,010	\$47,208	\$187,214
35	Turrill	Lapeer	MI	230	19.60	10	75%	0%	59%	25%	2,390	\$46,839	\$110,361
36	Sunfish	Willow Spring	NC	50	6.40	30	35%	30%	35%	0%	1,515	\$63,652	\$253,138
37	HCE Johnston	Benson	NC	30	2.60	0	55%	45%	0%	0%	1,169	\$65,482	\$252,544
38	Picture Rocks	Tucson	AZ	182	20.00	N/A	6%	6%	88%	0%	102	\$81,081	\$280,172
39	Avra Valley	Tucson	AZ	246	25.00	N/A	3%	3%	94%	0%	85	\$80,997	\$292,308
40	Sappony	Stony Crk	VA	322	20.00	N/A	2%	0%	98%	0%	74	\$51,410	\$155,208
41	Camden Dam	Camden	NC	50	5.00	0	17%	11%	72%	0%	403	\$84,426	\$230,288
42	Grandy	Grandy	NC	121	20.00	10	55%	0%	24%	21%	949	\$50,355	\$231,408
43	Champion	Pelion	SC	100	10.00	N/A	4%	8%	70%	18%	1,336	\$46,867	\$171,939
44	Eddy II	Eddy	TX	93	10.00	N/A	15%	58%	25%	2%	551	\$59,627	\$139,088
45	Somerset	Somerset	TX	128	10.60	N/A	5%	0%	95%	0%	1,293	\$41,574	\$135,490
46	DG Amp Piqua	Piqua	OH	86	12.60	2	26%	58%	16%	0%	6,735	\$38,919	\$96,555
	Average			208	16.97	27	26%	23%	47%	5%	1,658	\$66,092	\$254,281
	Median			100	8.25	20	17%	9%	51%	0%	560	\$63,008	\$241,002
	High			2,034	80.00	140	98%	94%	98%	44%	9,257	\$166,958	\$770,433
	Low			24	0.22	0	1%	0%	0%	0%	48	\$35,057	\$96,555



From these 46 solar farms, I have derived 108 matched pairs. The matched pairs show no negative impact at distances as close as 105 feet between a solar panel and the nearest point on a home. The range of impacts is -0% to +10% with an average and median of +1%.

	<b>MW</b>	<b>Avg. Distance</b>	<b>Indicated Impact</b>
<b>Average</b>	16.99	517	<b>Average</b> 1%
<b>Median</b>	8.60	400	<b>Median</b> 1%
<b>High</b>	80.00	2,020	<b>High</b> 10%
<b>Low</b>	0.22	105	<b>Low</b> -10%

While the range is broad, the chart below shows the data points in range from lowest to highest. There is only one data point out of 108 that shows a negative impact. The rest support either a finding of no negative impact or four of the data points suggest a positive impact due to adjacency to a solar farm. As discussed earlier in this report, I consider this data to strongly support a finding of no negative impact on value as most of the findings are within typical market variation and even within that, most are mildly positive findings.



***D. Larger Solar Farms***

I have also considered larger solar farms to address impacts related to larger projects. Projects have been increasing in size and most of the projects between 100 and 1000 MW are newer with little time for adjoining sales. I have included a breakdown of solar farms with 20 MW to 80 MW facilities adjoining and I will discuss applicability of these solar farms to larger scale projects in the conclusion.

I have not repeated the data from Illinois and Michigan adjoining larger solar farms, but I have included them in the summary charts for analysis.

**8. Matched Pair – Summit/Ranchlands Solar, Moyock, NC**



This project is located at 1374 Caritoke Highway, Moyock, NC. This is an 80 MW facility on a parent tract of 2,034 acres. Parcels Number 48 and 53 as shown in the map above were sold in 2016. The

project was under construction during the time period of the first of the matched pair sales and the permit was approved well prior to that in 2015.

I looked at multiple sales of adjoining and nearby homes and compared each to multiple comparables to show a range of impacts from -10% up to +11% with an average of +2% and a median of +3%. These ranges are well within typical real estate variation and supports an indication of no negative impact on property value.

Adjoining Residential Sales After Solar Farm Approved													
Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
48	Adjoins	129 Pinto	4.29	4/15/2016	\$170,000	1985	1,559	\$109.04	3/2	Drive	MFG		1,060
	Not	102 Timber	1.30	4/1/2016	\$175,500	2009	1,352	\$129.81	3/2	Drive	MFG		
	Not	120 Ranchland	0.99	10/1/2014	\$170,000	2002	1,501	\$113.26	3/2	Drive	MFG		
	Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	
	Adjoins	129 Pinto								\$170,000		-3%	
	Not	102 Timber	\$276	\$10,000	-\$29,484	\$18,809				\$175,101	-3%		
	Not	120 Ranchland	\$10,735	\$10,000	-\$20,230	\$4,598				\$175,103	-3%		

Adjoining Residential Sales After Solar Farm Approved													
Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
53	Adjoins	105 Pinto	4.99	12/16/2016	\$206,000	1978	1,484	\$138.81	3/2	Det Gar	Ranch		2,020
	Not	111 Spur	1.15	2/1/2016	\$193,000	1985	2,013	\$95.88	4/2	Gar	Ranch		
	Not	103 Marshall	1.07	3/29/2017	\$196,000	2003	1,620	\$120.99	3/2	Drive	Ranch		
	Not	127 Ranchland	0.99	6/9/2015	\$219,900	1988	1,910	\$115.13	3/2	Gar/3Gar	Ranch		
	Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	
	Adjoins	105 Pinto								\$206,000		11%	
	Not	111 Spur	\$6,918	\$10,000	-\$6,755	-\$25,359				\$177,803	14%		
	Not	103 Marshall	-\$2,268	\$10,000	-\$24,500	-\$8,227		\$5,000		\$176,005	15%		
	Not	127 Ranchland	\$13,738	\$10,000	-\$10,995	-\$24,523		-\$10,000		\$198,120	4%		

Adjoining Residential Sales After Solar Farm Built													
Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
15	Adjoins	318 Green View	0.44	9/15/2019	\$357,000	2005	3,460	\$103.18	4/4	2-Car	1.5 Brick		570
	Not	195 St Andrews	0.55	6/17/2018	\$314,000	2002	3,561	\$88.18	5/3	2-Car	2.0 Brick		
	Not	336 Green View	0.64	1/13/2019	\$365,000	2006	3,790	\$96.31	6/4	3-Car	2.0 Brick		
	Not	275 Green View	0.36	8/15/2019	\$312,000	2003	3,100	\$100.65	5/3	2-Car	2.0 Brick		
	Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	
	Adjoins	318 Green View								\$357,000		4%	
	Not	195 St Andrews	\$12,040		\$4,710	-\$7,125	\$10,000			\$333,625	7%		
	Not	336 Green View	\$7,536		-\$1,825	-\$25,425			-\$5,000	\$340,286	5%		
	Not	275 Green View	\$815		\$3,120	\$28,986	\$10,000			\$354,921	1%		

Adjoining Residential Sales After Solar Farm Built													
Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
29	Adjoins	164 Ranchland	1.01	4/30/2019	\$169,000	1999	2,052	\$82.36	4/2	Gar	MFG		440
	Not	150 Pinto	0.94	3/27/2018	\$168,000	2017	1,920	\$87.50	4/2	Drive	MFG		
	Not	105 Longhorn	1.90	10/10/2017	\$184,500	2002	1,944	\$94.91	3/2	Drive	MFG		
	Not	112 Pinto	1.00	7/27/2018	\$180,000	2002	1,836	\$98.04	3/2	Drive	MFG	Fenced	
	Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	
	Adjoins	164 Ranchland								\$169,000		-10%	
	Not	150 Pinto	\$5,649		-\$21,168	\$8,085			\$5,000	\$165,566	2%		
	Not	105 Longhorn	\$8,816	-\$10,000	-\$3,875	\$7,175			\$5,000	\$191,616	-13%		
	Not	112 Pinto	\$4,202		-\$3,780	\$14,824			\$5,000	\$200,245	-18%		

### Adjoining Residential Sales After Solar Farm Built

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
	Adjoins	358 Oxford	10.03	9/16/2019	\$478,000	2008	2,726	\$175.35	3/3	2 Gar	Ranch		635
	Not	276 Summit	10.01	12/20/2017	\$355,000	2006	1,985	\$178.84	3/2	2 Gar	Ranch		
	Not	176 Providence	6.19	5/6/2019	\$425,000	1990	2,549	\$166.73	3/3	4 Gar	Ranch	Brick	
	Not	1601 B Caratoke	12.20	9/26/2019	\$440,000	2016	3,100	\$141.94	4/3.5	5 Gar	Ranch	Pool	

										Avg
Solar Adjoints	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff
	358 Oxford								\$478,000	
Not	276 Summit	\$18,996		\$3,550	\$106,017	\$10,000			\$493,564	-3%
Not	176 Providence	\$4,763		\$38,250	\$23,609		-\$10,000	-\$25,000	\$456,623	4%
Not	1601 B Caratoke	-\$371	\$50,000	-\$17,600	-\$42,467	-\$5,000	-\$10,000		\$414,562	13%

### Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
	Nearby	343 Oxford	10.01	3/9/2017	\$490,000	2016	3,753	\$130.56	3/3	2 Gar	1.5 Story	Pool	970
	Not	287 Oxford	10.01	9/4/2017	\$600,000	2013	4,341	\$138.22	5/4.5	8-Gar	1.5 Story	Pool	
	Not	301 Oxford	10.00	4/23/2018	\$434,000	2013	3,393	\$127.91	5/3	2 Gar	1.5 Story		
	Not	218 Oxford	10.01	4/4/2017	\$525,000	2006	4,215	\$124.56	4/3	4 Gar	1.5 Story	VG Barn	

										Avg
Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff
Adjoins	343 Oxford								\$490,000	
Not	287 Oxford	-\$9,051		\$9,000	-\$65,017	-\$15,000	-\$25,000		\$494,932	-1%
Not	301 Oxford	-\$14,995	-\$10,000	\$6,510	\$36,838				\$452,353	8%
Not	218 Oxford	-\$1,150		\$26,250	-\$46,036		-\$10,000	-\$10,000	\$484,064	1%



**9. Matched Pair – Manatee Solar Farm, Parrish, FL**



This solar farm is located near Seminole Trail, Parrish, FL. The solar farm has a 74.50 MW output and is located on a 1,180.38 acre tract and was built in 2016. The tract is owned by Florida Power & Light Company.

I have considered the recent sale of 13670 Highland Road, Wimauma, Florida. This one-story, block home is located just north of the solar farm and separated from the solar farm by a railroad corridor. This home is a 3 BR, 3 BA 1,512 s.f. home with a carport and workshop. The property includes new custom cabinets, granite counter tops, brand new stainless steel appliances, updated bathrooms and new carpet in the bedrooms. The home is sitting on 5 acres. The home was built in 1997.

I have compared this sale to several nearby home sales as part of this matched pair analysis as shown below.

Solar	TAX ID/Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Note
Adjoins	13670 Highland	5.00	8/21/2017	\$255,000	1997	1,512	\$168.65	3/3	Carport/Wrkshp	Ranch	Renov.
Not	2901 Arrowsmith	1.91	1/31/2018	\$225,000	1979	1,636	\$137.53	3/2	2 Garage/Wrkshp	Ranch	
Not	602 Butch Cassidy	1.00	5/5/2017	\$220,000	2001	1,560	\$141.03	3/2	N/A	Ranch	Renov.
Not	2908 Wild West	1.23	7/12/2017	\$254,000	2003	1,554	\$163.45	3/2	2 Garage/Wrkshp	Ranch	Renov.
Not	13851 Highland	5.00	9/13/2017	\$240,000	1978	1,636	\$146.70	4/2	3 Garage	Ranch	Renov.

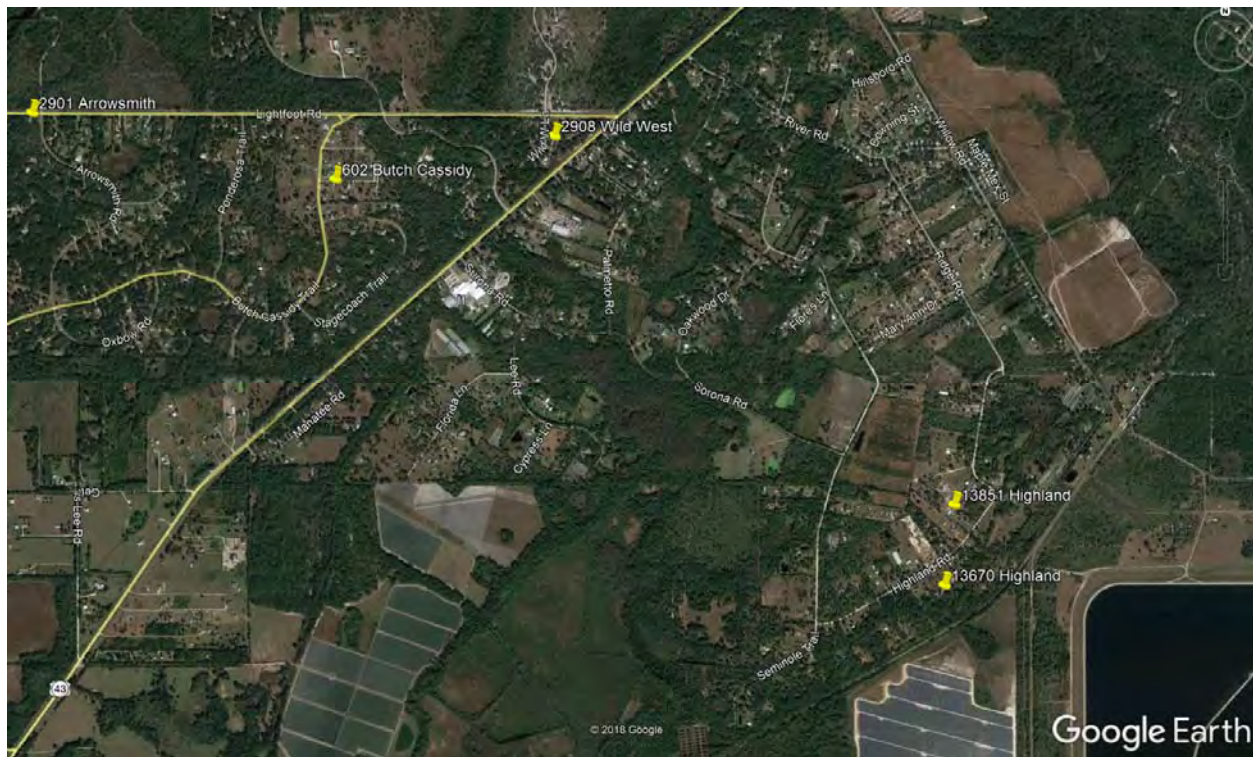


Solar	TAX ID/Address	Adjoining Sales Adjusted				GLA	BR/BA	Park	Note	Total	% Diff
		Time	Acres	YB							
Adjoins	13670 Highland									\$255,000	
Not	2901 Arrowsmith	\$2,250	\$10,000	\$28,350	-\$8,527	\$5,000	-\$10,000	\$10,000		\$262,073	-3%
Not	602 Butch Cassidy	-\$2,200	\$10,000	-\$6,160	-\$3,385	\$5,000	\$2,000			\$225,255	12%
Not	2908 Wild West	\$0	\$10,000	-\$10,668	-\$3,432	\$5,000	-\$10,000			\$244,900	4%
Not	13851 Highland	\$0	\$0	\$31,920	-\$9,095	\$3,000	-\$10,000			\$255,825	0%
<b>Average</b>											3%

The sales prices of the comparables before adjustments range from \$220,000 to \$254,000. After adjustments they range from \$225,255 to \$262,073. The comparables range from no negative impact to a strong positive impact. The comparables showing -3% and +4% impact on value are considered within a typical range of value and therefore not indicative of any impact on property value.

This set of matched pair data falls in line with the data seen in other states. The closest solar panel to the home at 13670 Highland is 1,180 feet. There is a wooded buffer between these two properties.

I have included a map showing the relative location of these properties below.



**10. Matched Pair – McBride Place Solar Farm, Midland, NC**



This project is located on Mount Pleasant Road, Midland, North Carolina. The property is on 627 acres on an assemblage of 974.59 acres. The solar farm was approved in early 2017 for a 74.9 MW facility.

I have considered the sale of 4380 Joyner Road which adjoins the proposed solar farm near the northwest section. This property was appraised in April of 2017 for a value of \$317,000 with no consideration of any impact due to the solar farm in that figure. The property sold in November 2018 for \$325,000 with the buyer fully aware of the proposed solar farm.

I have considered the following matched pairs to the subject property.

**Adjoining Residential Sales After Solar Farm Approved**

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	4380 Joyner	12.00	11/22/2017	\$325,000	1979	1,598	\$203.38	3/2	2xGar	Ranch	Outbldg
Not	3870 Elkwood	5.50	8/24/2016	\$250,000	1986	1,551	\$161.19	3/2.5	Det 2xGar	Craft	
Not	8121 Lower Rocky	18.00	2/8/2017	\$355,000	1977	1,274	\$278.65	2/2	2xCarppt	Ranch	Eq. Fac.
Not	13531 Cabarrus	7.89	5/20/2016	\$267,750	1981	2,300	\$116.41	3/2	2xGar	Ranch	

**Adjoining Sales Adjusted**

Time	Acres	YB	Condition	GLA	BR/BA	Park	Other	Total	% Diff
								\$325,000	
\$7,500	\$52,000	-\$12,250	\$10,000	\$2,273	-\$2,000	\$2,500	\$7,500	\$317,523	2%
\$7,100	-\$48,000	\$4,970		\$23,156	\$0	\$3,000	-\$15,000	\$330,226	-2%
\$8,033	\$33,000	-\$3,749	\$20,000	-\$35,832	\$0	\$0	\$7,500	\$296,702	9%
<b>Average</b>									3%

The home at 4380 Joyner Road is 275 feet from the closest solar panel.

I also considered the recent sale of a lot at 5800 Kristi Lane that is on the east side of the proposed solar farm. This 4.22-acre lot sold in December 2017 for \$94,000. A home was built on this lot in 2019 with the closest point from home to panel at 689 feet. The home site is heavily wooded and their remains a wooded buffer between the solar panels and the home. I spoke with the broker, Margaret Dabbs, who indicated that the solar farm was considered a positive by both buyer and seller as it insures no subdivision will be happening in that area. Buyers in this market are looking for privacy and seclusion.

The breakdown of recent lot sales on Kristi are shown below with the lowest price paid for the lot with no solar farm exposure, though that lot has exposure to Mt Pleasant Road South. Still the older lot sales have exposure to the solar farm and sold for higher prices than the front lot and adjusting for time would only increase that difference.

**Adjoining Lot Sales After Solar Farm Built**

Parcel	Solar	Address	Acres	Date Sold	Sales Price	\$/AC	\$/Lot
	Adjoins	5811 Kristi	3.74	5/1/2018	\$100,000	\$26,738	\$100,000
	Adjoins	5800 Kristi	4.22	12/1/2017	\$94,000	\$22,275	\$94,000
	Not	5822 Kristi	3.43	2/24/2020	\$90,000	\$26,239	\$90,000

The lot at 5811 Kristi Lane sold in May 2018 for \$100,000 for a 3.74-acre lot. The home that was built later in 2018 is 505 feet to the closest panel. This home then sold to a homeowner for \$530,000 in April 2020. I have compared this home sale to other properties in the area as shown below.

**Adjoining Residential Sales After Solar Farm Built**

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	5811 Kristi	3.74	3/31/2020	\$530,000	2018	3,858	\$137.38	5/3.5	2 Gar	2-story	Cement Ext
Not	3915 Tania	1.68	12/9/2019	\$495,000	2007	3,919	\$126.31	3/3.5	2 Gar	2-story	3Det Gar
Not	6782 Manatee	1.33	3/8/2020	\$460,000	1998	3,776	\$121.82	4/2/2h	2 Gar	2-story	Water
Not	314 Old Hickory	1.24	9/20/2019	\$492,500	2017	3,903	\$126.18	6/4.5	2 Gar	2-story	

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff
Adjoins	5811 Kristi								\$530,000		5%
Not	3915 Tania	\$6,285		\$27,225	-\$3,852		-\$20,000		\$504,657	5%	
Not	6782 Manatee	\$1,189		\$46,000	\$4,995	\$5,000			\$517,183	2%	
Not	314 Old Hickory	\$10,680		\$2,463	-\$2,839	-\$10,000			\$492,803	7%	

After adjusting the comparables, I found that the average adjusted value shows a slight increase in value for the subject property adjoining a solar farm. As in the other cases, this is a mild positive

and within the typical range of real estate transactions. I therefore conclude that these matched pairs show no negative impact on value.



**11. Matched Pair – Clarke County Solar, Clarke County, VA**



This project is a 20 MW facility located on a 234-acre tract that was built in 2017.

I have considered two recent sales of Parcel 3. The home on this parcel is 1,230 feet from the closest panel as measured in the second map from Google Earth, which shows the solar farm under construction. This home sold in January 2017 for \$295,000 and again in August 2019 for \$385,000. I show each sale below and compare those to similar home sales in each time frame. The significant increase in price between 2017 and 2019 is due to a significant kitchen remodel, new roof, and related upgrades as well as improvement in the market in general. The sale and later resale of the home with updates and improvements speaks to pride of ownership and increasing overall value as properties perceived as diminished are less likely to be renovated and sold for profit.

I note that 102 Tilthammer includes a number of barns that I did not attribute any value in the analysis. The market would typically give some value for those barns but even without that adjustment there is an indication of a positive impact on value due to the solar farm.

### Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
3	Adjoins	833 Nations Spr	5.13	8/18/2019	\$385,000	1979	1,392	\$276.58	3/2	Det Gar	Ranch	UnBsmt
	Not	167 Leslie	5.00	8/19/2020	\$429,000	1980	1,665	\$257.66	3/2	Det2Gar	Ranch	
	Not	2393 Old Chapel	2.47	8/10/2020	\$330,000	1974	1,500	\$220.00	3/1.5	Det Gar	Ranch	
	Not	102 Tilthammer	6.70	5/7/2019	\$372,000	1970	1,548	\$240.31	3/1.5	Det Gar	Ranch	UnBsmt

### Adjoining Sales Adjusted

[illegible]

### Adjoining Residential Sales After Solar Farm Approved

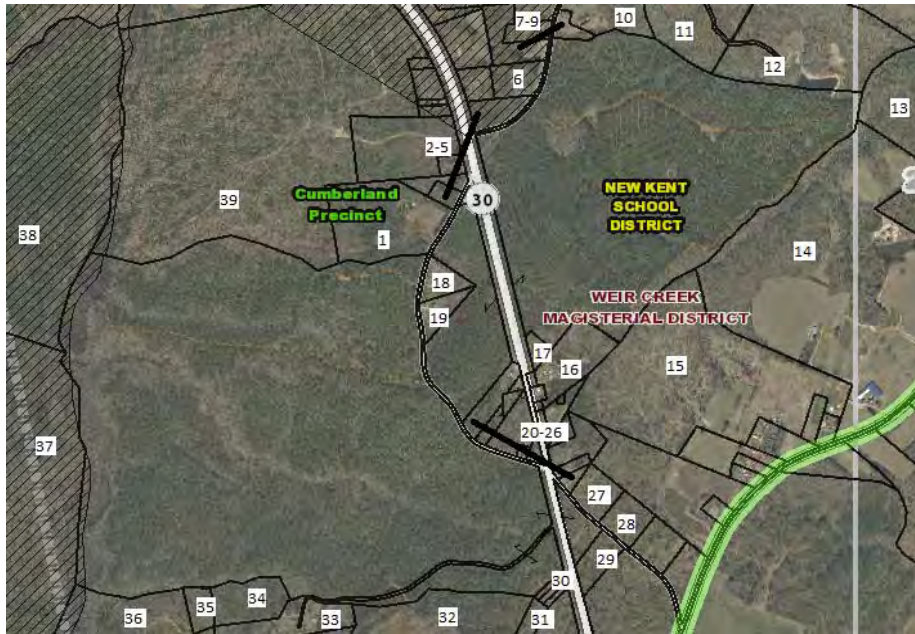
Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
3	Adjoins	833 Nations Spr	5.13	1/9/2017	\$295,000	1979	1,392	\$211.93	3/2	Det Gar	Ranch	UnBsmt
	Not	6801 Middle	2.00	12/12/2017	\$249,999	1981	1,584	\$157.83	3/2	Open	Ranch	
	Not	4174 Rockland	5.06	1/2/2017	\$300,000	1990	1,688	\$177.73	3/2	2 Gar	2-story	
	Not	400 Sugar Hill	1.00	6/7/2018	\$180,000	1975	1,008	\$178.57	3/1	Open	Ranch	

### Adjoining Sales Adjusted

[illegible]



## 12. Matched Pair – Walker-Correctional Solar, Barham Road, Barhamsville, VA



This project was built in 2017 and located on 484.65 acres for a 20 MW with the closest home at 110 feet from the closest solar panel with an average distance of 500 feet.

I considered the recent sale identified on the map above as Parcel 19, which is directly across the street and based on the map shown on the following page is 250 feet from the closest panel. A limited buffering remains along the road with natural growth being encouraged, but currently the panels are visible from the road. Alex Uminski, SRA with MGMiller Valuations in Richmond VA confirmed this sale with the buying and selling broker. The selling broker indicated that the solar farm was not a negative influence on this sale and in fact the buyer noticed the solar farm and then discovered the listing. The privacy being afforded by the solar farm was considered a benefit by the buyer. I used a matched pair analysis with a similar sale nearby as shown below and found no negative impact on the sales price. Property actually closed for more than the asking price.

### Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	5241 Barham	2.65	10/18/2018	\$264,000	2007	1,660	\$159.04	3/2	Drive	Ranch	Modular
Not	17950 New Kent	5.00	9/5/2018	\$290,000	1987	1,756	\$165.15	3/2.5	3 Gar	Ranch	
Not	9252 Ordinary	4.00	6/13/2019	\$277,000	2001	1,610	\$172.05	3/2	1.5-Gar	Ranch	
Not	2416 W Miller	1.04	9/24/2018	\$299,000	1999	1,864	\$160.41	3/2.5	Gar	Ranch	

### Adjoining Sales Adjusted

Solar	Address	Time	Ac/Loc	YB	GLA	BR/BA	Park	Other	Total	% Diff	Dist
Adjoins	5241 Barham								\$264,000		250
Not	17950 New Kent		-\$8,000	\$29,000	-\$4,756	-\$5,000	-\$20,000	-\$15,000	\$266,244	-1%	
Not	9252 Ordinary	-\$8,310	-\$8,000	\$8,310	\$2,581		-\$10,000	-\$15,000	\$246,581	7%	
Not	2416 W Miller		\$8,000	\$11,960	-\$9,817	-\$5,000	-\$10,000	-\$15,000	\$279,143	-6%	

**Average Diff** 0%



I also spoke with Patrick W. McCrerey of Virginia Estates who was marketing a property that sold at 5300 Barham Road adjoining the Walker-Correctional Solar Farm. He indicated that this property was unique with a home built in 1882 and heavily renovated and updated on 16.02 acres. The solar farm was through the woods and couldn't be seen by this property and it had no negative impact on marketing this property. This home sold on April 26, 2017 for \$358,000. I did not set up any matched pairs for this property as it was such a unique property that any such comparison would be difficult to rely on. The broker's comments do support the assertion that the adjoining solar farm had no negative impact on value. The home in this case was 510 feet from the closest panel.



### 13. Matched Pair – Innovative Solar 46, Roslin Farm Rd, Hope Mills, NC



This project was built in 2016 and located on 532 acres for a 78.5 MW solar farm with the closest home at 125 feet from the closest solar panel with an average distance of 423 feet.

I considered the recent sale of a home on Roslin Farm Road just north of Running Fox Road as shown below. This sale supports an indication of no negative impact on property value.

#### Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
Adjoins	6849 Roslin Farm	1.00	2/18/2019	\$155,000	1967	1,610	\$96.27	3/3	Drive	Ranch	Brick	435
Not	6592 Sim Canady	2.43	9/5/2017	\$185,000	1974	2,195	\$84.28	3/2	Gar	Ranch	Brick	
Not	1614 Joe Hall	1.63	9/3/2019	\$145,000	1974	1,674	\$86.62	3/2	Det Gar	Ranch	Brick	
Not	109 Bledsoe	0.68	1/17/2019	\$150,000	1973	1,663	\$90.20	3/2	Gar	Ranch	Brick	

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff
Adjoins	6849 Roslin Farm								\$155,000		5%
Not	6592 Sim Canady	\$8,278		-\$6,475	-\$39,444	\$10,000	-\$5,000		\$152,359	2%	
Not	1614 Joe Hall	-\$2,407		-\$5,075	-\$3,881	\$10,000	-\$2,500		\$141,137	9%	
Not	109 Bledsoe	\$404	\$10,000	-\$4,500	-\$3,346		-\$5,000		\$147,558	5%	



**14. Matched Pair – Innovative Solar 42, County Line Rd, Fayetteville, NC**



This project was built in 2017 and located on 413.99 acres for a 71 MW with the closest home at 135 feet from the closest solar panel with an average distance of 375 feet.

I considered the recent sales identified on the map above as Parcels 2 and 3, which is directly across the street these homes are 330 and 340 feet away. Parcel 2 includes an older home built in 1976, while Parcel 3 is a new home built in 2019. So the presence of the solar farm had no negative impact on new construction in the area.

The matched pairs for each of these are shown below followed by a more recent map showing the panels at this site.

**Adjoining Residential Sales After Solar Farm Approved**

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
Adjoins	2923 County Ln	8.98	2/28/2019	\$385,000	1976	2,905	\$132.53	3/3	2-Car	Ranch	Brick/Pond	340
Not	1928 Shaw Mill	17.00	7/3/2019	\$290,000	1977	3,001	\$96.63	4/4	2-Car	Ranch	Brick/Pond/Rental	
Not	2109 John McM.	7.78	4/25/2018	\$320,000	1978	2,474	\$129.35	3/2	Det Gar	Ranch	Vinyl/Pool,Stable	

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff
Adjoins	2923 County Ln								\$385,000		3%
Not	1928 Shaw Mill	-\$3,055	\$100,000	-\$1,450	-\$7,422	-\$10,000			\$368,074	4%	
Not	2109 John McM.	\$8,333		-\$3,200	\$39,023	\$10,000		\$5,000	\$379,156	2%	

**Adjoining Residential Sales After Solar Farm Approved**

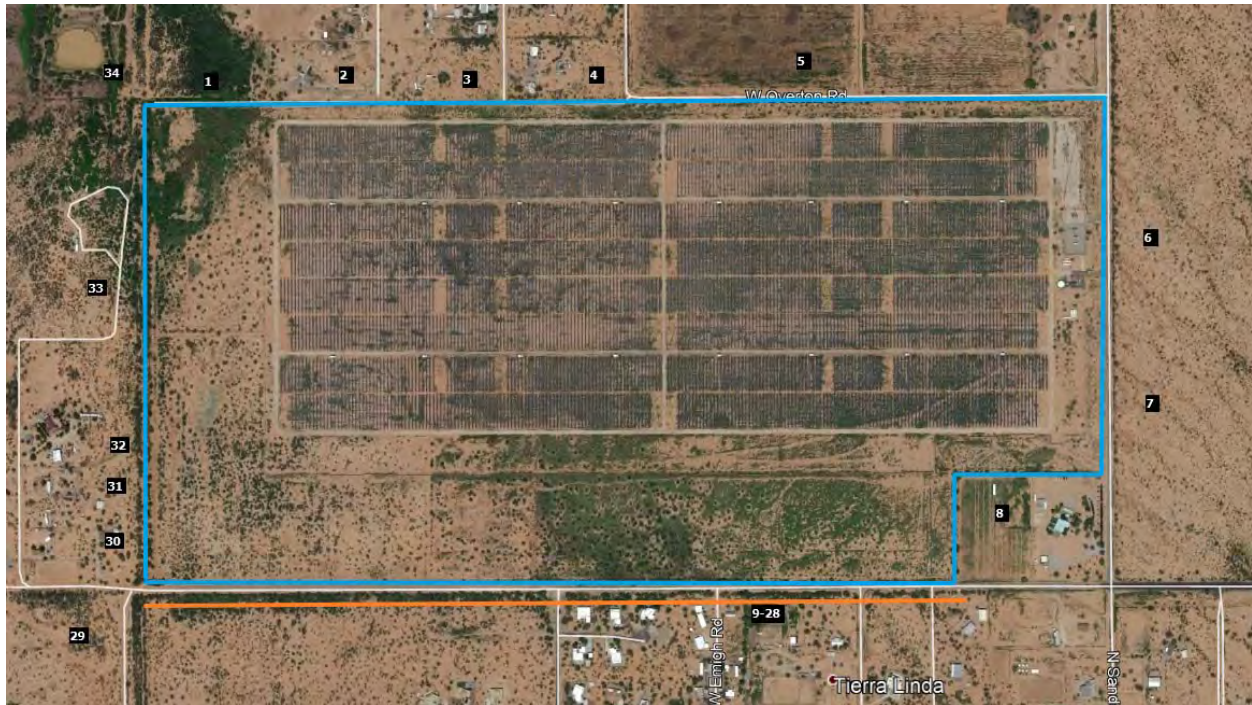
Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
Adjoins	2935 County Ln	1.19	6/18/2019	\$266,000	2019	2,401	\$110.79	4/3	Gar	2-Story		330
Not	3005 Hemingway	1.17	5/16/2019	\$269,000	2018	2,601	\$103.42	4/3	Gar	2-Story		
Not	7031 Glynn Mill	0.60	5/8/2018	\$255,000	2017	2,423	\$105.24	4/3	Gar	2-Story		
Not	5213 Bree Brdg	0.92	5/7/2019	\$260,000	2018	2,400	\$108.33	4/3	3-Gar	2-Story		

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff
Adjoins	2935 County Ln								\$266,000		3%
Not	3005 Hemingway	\$748		\$1,345	-\$16,547				\$254,546	4%	
Not	7031 Glynn Mill	\$8,724		\$2,550	-\$1,852				\$264,422	1%	
Not	5213 Bree Brdg	\$920		\$1,300	\$76			-\$10,000	\$252,296	5%	

Both of these matched pairs adjust to an average of +3% on impact for the adjoining solar farm, meaning there is a slight positive impact due to proximity to the solar farm. This is within the standard +/- of typical real estate transactions, which strongly suggests no negative impact on property value. I noted specifically that for 2923 County Line Road, the best comparable is 2109 John McMillan as it does not have the additional rental unit on it. I made no adjustment to the other sale for the value of that rental unit, which would have pushed the impact on that comparable downward – meaning there would have been a more significant positive impact.



# **15. Picture Rocks, Tucson, Pima County, AZ**



This solar farm was built in 2012 on a 302.80-acre tract but utilizing only 182 acres. This is a 20 MW facility with residential subdivision to the south and larger lot homes to the north, south and west.

I have identified two adjoining homes in the Tierra Linda subdivision that have sold recently in close proximity to the solar farm. They are written up as matched pairs below.

## **Adjoining Residential Sales After Solar Farm Approved**

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
14	Adjoins	12980 W Moss V	0.97	6/4/2020	\$393,900	2020	2,241	\$175.77	4/3	3-Gar	Adobe	Crtyrd
	Not	13071 W Smr Ppy	0.85	2/26/2020	\$389,409	2019	2,231	\$174.54	4/3	3-Gar	Adobe	Crtyrd
	Not	13352 W Tgr Aloe	1.07	3/31/2020	\$389,300	2015	2,555	\$152.37	4/3	3-Gar	Adobe	Crtyrd
	Not		0.97	8/2/2020	\$410,000	2018	2,688	\$152.53	4/2	3-Gar	Adobe	Crtyrd

## **Adjoining Sales Adjusted**

Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
							\$393,900			1100
\$3,249		\$1,947	\$1,396				\$396,001	-1%		
\$2,132		\$9,733	-\$38,275				\$362,890	8%		
-\$2,038		\$4,100	-\$54,545	\$10,000			\$367,517	7%		
									5%	

## **Adjoining Residential Sales After Solar Farm Approved**

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
15	Adjoins	12986 W Moss V	1.00	6/27/2019	\$350,000	2006	2,660	\$131.58	4/3.5	3-Gar	Adobe	Crtyrd
	Not	12994 W Btr Bsh	0.92	5/24/2018	\$302,000	2007	2,410	\$125.31	4/3	3-Gar	Adobe	Crtyrd
	Not	12884W Zbra Aloe	0.83	1/29/2020	\$336,500	2007	2,452	\$137.23	4/3	3-Gar	Adobe	Crtyrd
	Not	12829W Smr Ppy	0.88	6/2/2020	\$317,500	2006	2,452	\$129.49	4/3	3-Gar	Adobe	Crtyrd



Adjoining Sales Adjusted									Avg	
Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	% Diff	Distance
							\$350,000			970
\$10,154		-\$1,510	\$25,062	\$5,000			\$340,707	3%		
-\$6,125		-\$1,683	\$22,836	\$5,000			\$356,528	-2%		
-\$9,124		\$0	\$21,546	\$5,000			\$334,923	4%		
									2%	

I have also looked at a recent sale of a manufactured home in close proximity to this solar farm for an additional matched pairs. This home included a 2,200 s.f. detached metal building used as a garage/workshop that I adjusted based on Marshall Swift Cost Estimating Service values for a depreciated metal building.

#### Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
9	Adjoins	12705 W Emigh	2.26	1/27/2019	\$255,000	1994	2,640	\$96.59	3/2	Det 4Car	Ranch	Horse
	Not	12715 W Emigh	2.50	5/30/2019	\$210,000	2005	2,485	\$84.51	4/2	Crprt	Ranch	Horse
	Not	12020 W Camper	1.81	9/15/2019	\$200,000	2006	2,304	\$86.81	4/2	Open	Ranch	Horse
	Not	12445 W Emigh	5.00	10/2/2018	\$210,000	1999	2,400	\$87.50	4/2	Open	Ranch	Horse

Adjoining Sales Adjusted									Avg	
Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	% Diff	Distance
							\$255,000			990
-\$2,177		-\$11,550	\$10,479		\$46,000	\$0	\$252,752	1%		
-\$3,893		-\$12,000	\$23,333		\$50,000	\$0	\$257,440	-1%		
\$2,071	-\$25,000	-\$5,250	\$16,800		\$50,000	\$0	\$248,621	3%		
									1%	

These matched pairs range from 970 to 1,100 feet from the closest solar panel and shows no negative impact due to proximity to the solar farm. The average measured impacts range from +1% to +5%, which is within a typical variation for real estate and supports a conclusion of no negative impact.

**16. Avra Valley, Tucson, Pima County, AZ**



This solar farm was built in 2013 on a 319.86-acre tract but utilizing only 246 acres. This is a 25 MW facility with residential uses to the west.

I have identified two sales of manufactured homes that are in close proximity to this solar farm and I have analyzed them as shown below.

### Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style
	Adjoins	9415 N Ghst Rnch	4.40	10/30/2018	\$131,000	2004	1,508	\$86.87	3/1.5	Det Gar	Manuf
	Not	8240 N Msq Oasis	20.01	2/16/2018	\$145,000	2008	1,232	\$117.69	3/1.5	Open	Manuf
	Not	7175 N Nlsn Quinh.	5.00	3/26/2019	\$136,000	2000	1,568	\$86.73	3/2	Open	Manuf
	Not	5536 N Squeak	1.12	7/26/2018	\$114,100	2003	1,512	\$75.46	4/1.5	Open	Manuf

### Adjoining Sales Adjusted

[illegible]

**Adjoining Residential Sales After Solar Farm Approved**

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style
	Adjoins	14441 W Stallion	4.40	12/21/2017	\$150,000	2002	2,280	\$65.79	3/3.5	Open	Manuf
	Not	9620 N Rng Bck	4.14	3/24/2019	\$139,000	2003	2,026	\$68.61	4/3	Open	Manuf
	Not	5537 N Whitetail	1.38	9/26/2018	\$148,000	2006	2,037	\$72.66	4/3	Open	Manuf
	Not	5494 N Puma	1.38	12/6/2017	\$138,900	2000	2,044	\$67.95	4/3	Open	Manuf

**Adjoining Sales Adjusted**

Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
							\$150,000			1467
-\$5,365		-\$695	\$10,456				\$143,396	4%		
-\$3,480	\$5,000	-\$2,960	\$10,593				\$157,154	-5%		
\$176	\$5,000	\$1,389	\$9,622				\$155,087	-3%		
									-1%	

These matched pairs range from 1,467 to 1,697 feet from the closest solar panel and shows no negative impact due to proximity to the solar farm. The average measured impacts range from -1% to 0%, which is within a typical variation for real estate and supports a conclusion of no negative impact.

**17. Matched Pair – Sappony Solar, Sussex County, VA**



This project is a 30 MW facility located on a 322.68-acre tract that was built in the fourth quarter of 2017.

I have considered the 2018 sale of Parcel 17 as shown below.

### Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
	Adjoins	12511 Palestine	6.00	7/31/2018	\$128,400	2013	1,900	\$67.58	4/2.5	Open	Manuf	
	Not	15698 Concord	3.92	7/31/2018	\$150,000	2010	2,310	\$64.94	4/2	Open	Manuf	Fence
	Not	23209 Sussex	1.03	7/7/2020	\$95,000	2005	1,675	\$56.72	3/2	Det Crpt	Manuf	
	Not	6494 Rocky Br	4.07	11/8/2018	\$100,000	2004	1,405	\$71.17	3/2	Open	Manuf	

### Adjoining Sales Adjusted

[illegible]



# **18. Matched Pair – Grandy Solar, Grandy, NC**



This 20 MW project was built in 2019 and located on a portion of 121 acres.

Parcels 40 and 50 have sold since construction began on this solar farm. I have considered both in matched pair analysis below. I note that the marketing for Parcel 40 (120 Par Four) identified the lack of homes behind the house as a feature in the listing. The marketing for Parcel 50 (269 Grandy) identified the property as “very private.”

## **Adjoining Residential Sales After Solar Farm Approved**

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
Adjoins	120 Par Four	0.92	8/17/2019	\$315,000	2006	2,188	\$143.97	4/3	2-Gar	1.5 Story	Pool
Not	102 Teague	0.69	1/5/2020	\$300,000	2005	2,177	\$137.80	3/2	Det 3G	Ranch	
Not	112 Meadow Lk	0.92	2/28/2019	\$265,000	1992	2,301	\$115.17	3/2	Gar	1.5 Story	
Not	116 Barefoot	0.78	9/29/2020	\$290,000	2004	2,192	\$132.30	4/3	2-Gar	2 Story	

## **Adjoining Sales Adjusted**

Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	% Diff	Avg Distance
120 Par Four								\$315,000			405
102 Teague	-\$3,565		\$1,500	\$910	\$10,000		\$20,000	\$328,845	-4%		
112 Meadow Lk	\$3,796		\$18,550	-\$7,808	\$10,000	\$10,000	\$20,000	\$319,538	-1%		
116 Barefoot	-\$9,995		\$2,900	-\$318			\$20,000	\$302,587	4%		

-1%

**Adjoining Residential Sales After Solar Farm Approved**

<b>Solar</b>	<b>Address</b>	<b>Acres</b>	<b>Date Sold</b>	<b>Sales Price</b>	<b>Built</b>	<b>GBA</b>	<b>\$/GLA</b>	<b>BR/BA</b>	<b>Park</b>	<b>Style</b>	<b>Other</b>
Adjoins	269 Grandy	0.78	5/7/2019	\$275,000	2019	1,535	\$179.15	3/2.5	2-Gar	Ranch	
Not	307 Grandy	1.04	10/8/2018	\$240,000	2002	1,634	\$146.88	3/2	Gar	1.5 Story	
Not	103 Branch	0.95	4/22/2020	\$230,000	2000	1,532	\$150.13	4/2	2-Gar	1.5 Story	
Not	103 Spring Lf	1.07	8/14/2018	\$270,000	2002	1,635	\$165.14	3/2	2-Gar	Ranch	Pool

**Adjoining Sales Adjusted**

<b>Address</b>	<b>Time</b>	<b>Site</b>	<b>YB</b>	<b>GLA</b>	<b>BR/BA</b>	<b>Park</b>	<b>Other</b>	<b>Total</b>	<b>% Diff</b>	<b>Avg % Diff</b>	<b>Distance</b>
269 Grandy								\$275,000			477
307 Grandy	\$4,267		\$20,400	-\$8,725	\$5,000	\$10,000		\$270,943	1%		
103 Branch	-\$6,803		\$21,850	\$270				\$245,317	11%		
103 Spring Lf	\$6,052		\$22,950	-\$9,908	\$5,000		-\$20,000	\$274,094	0%		
										4%	

Both of these matched pairs support a finding of no negative impact on value. This is reinforced by the listings for both properties identifying the privacy due to no housing in the rear of the property as part of the marketing for these homes.



### **Conclusion – Larger Solar Farms**

This set of solar farms focuses on larger solar farms including those in Indiana and Michigan as well as other solar farm projects that I have previously researched. These solar farms show very similar adjoining use mixes to the solar farms identified in the Midwest and in the Ohio and adjacent state analyses. The demographics are showing higher median incomes and higher average housing units in proximity to the larger solar farms which speaks to these projects being around homes that would likely be more sensitive to external obsolescence (negative impacts from adjacent uses). The proximity to adjoining homes as shown on the next page is also very similar to the other sets. This shows that larger solar farms are being located in the same areas with same proximity to adjoining residential uses with a similar no negative impact on adjoining property value despite the potential for more sensitivity to such an impact.

By looking at the maps on the preceding pages, it is clear that most of the homes adjoining these larger solar farms have no ability to see any significant portion of that adjacent solar farm. In fact, the views are very similar in most cases from an adjacent property whether it adjoins a 5 MW facility or an 80 MW facility as the landscape screens do provide a good buffer and distant views of panels are not generally perceived as negatively as close up views. Based on the data presented below I conclude that the size of the adjoining project has no bearing on the impact to adjoining property value. I consider the matched pairs for these larger solar farms to be consistent with the data presented for the solar farms in the region and provides strong support for a conclusion of no negative impact on value for adjoining properties.

Matched Pair Summary						Adj. Uses By Acreage					1 mile Radius (2010-2020 Data)		
	Name	City	State	Acres	MW	Topo Shift	Res	Ag/Res	Ag	Com/Ind	Population	Med. Income	Avg. Housing Unit
5	Demille	Lapeer	MI	160	28.40	10	10%	0%	68%	22%	2,010	\$47,208	\$187,214
6	Turrill	Lapeer	MI	230	19.60	10	75%	0%	59%	25%	2,390	\$46,839	\$110,361
7	Grand Ridge	Streator	IL	160	20.00	1	8%	5%	87%	0%	96	\$70,158	\$187,037
8	Summit	Moyock	NC	2,034	80.00	4	4%	94%	0%	2%	382	\$79,114	\$281,731
9	Manatee	Parrish	FL	1,180	75.00	20	2%	1%	97%	0%	48	\$75,000	\$291,667
10	McBride	Midland	NC	627	75.00	140	12%	78%	10%	0%	398	\$63,678	\$256,306
11	Clarke Cnty	White Post	VA	234	20.00	70	14%	46%	39%	1%	578	\$81,022	\$374,453
12	Walker	Barhamsville	VA	485	20.00	N/A	12%	20%	68%	0%	203	\$80,773	\$320,076
13	Innov 46	Hope Mills	NC	532	78.50	0	17%	0%	83%	0%	2,247	\$58,688	\$183,435
14	Innov 42	Fayetteville	NC	414	71.00	0	41%	0%	59%	0%	568	\$60,037	\$276,347
15	Picure Rocks	Tucson	AZ	182	20.00	N/A	6%	6%	88%	0%	102	\$81,081	\$280,172
16	Avra Valley	Tucson	AZ	246	25.00	N/A	3%	3%	94%	0%	85	\$80,997	\$292,308
17	Sappony	Stony Crk	VA	322	20.00	N/A	2%	0%	98%	0%	74	\$51,410	\$155,208
18	Grandy	Grandy	NC	121	20.00	10	55%	0%	24%	21%	949	\$50,355	\$231,408
<b>Average</b>				495	41	27	19%	18%	62%	5%	724	\$66,169	\$244,837
<b>Median</b>				284	23	10	11%	2%	68%	0%	390	\$66,918	\$266,327
<b>High</b>				2,034	80	140	75%	94%	98%	25%	2,390	\$81,081	\$374,453
<b>Low</b>				121	20	0	2%	0%	0%	0%	48	\$46,839	\$110,361

The median income for the population within 1 mile of a solar farm is \$66,918 with a median housing unit value of \$266,327. All of these comparable solar farms have homes within a 1-mile radius under \$400,000 on average, though I have matched pairs in other states over \$1,000,000 in price adjoining large solar farms. The adjoining uses show that residential and agricultural uses are the predominant adjoining uses.

Based on the similarity of adjoining uses and demographic data between these sites and the subject property, I consider it reasonable to compare these sites to the subject property. While none of these solar farms are of the same scale, these are located in the same region. I will address larger solar farms in a later section of this report.

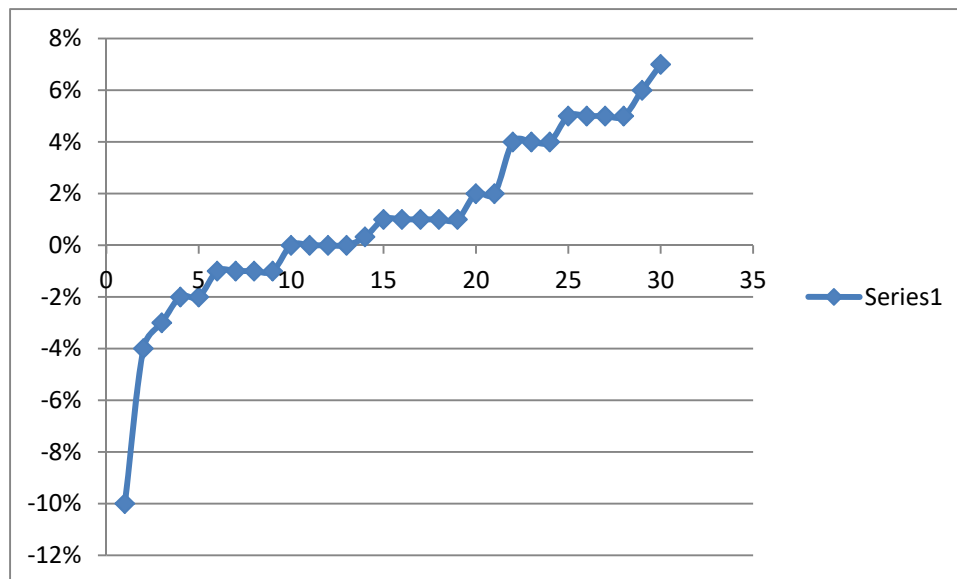
Each of these solar farms have adjoining home sales that support a conclusion of no negative impact on adjoining property values.

The breakdown of the 30 matched pairs is shown on the following page and summarized below.

	MW	Avg. Distance	Indicated Impact
<b>Average</b>	44.25	744	1%
<b>Median</b>	28.00	493	1%
<b>High</b>	80.00	2,020	7%
<b>Low</b>	20.00	250	-10%

While the spread is -10% impact to a +7% impact, the average and median is +1%.

Below I have shown those findings charted from smallest to largest to show that most of the findings are between +/-5% within typical market variation. Furthermore, it also shows more positive readings than negative readings by far. Still most of those positive readings are within the typical market variation and I consider this to be a strong support for a conclusion of no negative impact on value.



## Residential Dwelling Matched Pairs Adjoining Solar Farms

Pair	Solar Farm	City	State	Area	MW	Approx Distance	Tax ID/Address	Sale Date	Sale Price	Adj. Sale Price	% Diff
1	Summit	Moyock	NC	Suburban	80	1,060	129 Pinto	Apr-16	\$170,000		
							102 Timber	Apr-16	\$175,500	\$169,451	0%
2	Summit	Moyock	NC	Suburban	80	2,020	105 Pinto	Dec-16	\$206,000		
							127 Ranchland	Jun-15	\$219,900	\$194,278	6%
3	Manatee	Parrish	FL	Rural	75	1180	13670 Highland	Aug-18	\$255,000		
							13851 Highland	Sep-18	\$240,000	\$255,825	0%
4	McBride Place	Midland	NC	Rural	75	275	4380 Joyner	Nov-17	\$325,000		
							3870 Elkwood	Aug-16	\$250,000	\$317,523	2%
5	McBride Place	Midland	NC	Rural	75	505	5811 Kristi	Mar-20	\$530,000		
							3915 Tania	Dec-19	\$495,000	\$504,657	5%
6	Grand Ridge	Streator	IL	Rural	20	480	1497 E 21st	Oct-16	\$186,000		
							712 Columbus	Jun-16	\$166,000	\$184,000	1%
7	Clarke Cnty	White Post	VA	Rural	20	1230	833 Nations Spr	Jan-17	\$295,000		
							541 Old Kitchen	Sep-18	\$370,000	\$279,313	5%
8	Walker	Barhamsville	VA	Rural	20	250	5241 Barham	Oct-18	\$264,000		
							9252 Ordinary	Jun-19	\$277,000	\$246,581	7%
9	Summit	Moyock	NC	Suburban	80	570	318 Green View	Sep-19	\$357,000		
							336 Green View	Jan-19	\$365,000	\$340,286	5%
10	Summit	Moyock	NC	Suburban	80	440	164 Ranchland	Apr-19	\$169,000		
							105 Longhorn	Oct-17	\$184,500	\$186,616	-10%
11	Summit	Moyock	NC	Suburban	80	635	358 Oxford	Sep-19	\$478,000		
							176 Providence	Sep-19	\$425,000	\$456,623	4%
12	Summit	Moyock	NC	Suburban	80	970	343 Oxford	Mar-17	\$490,000		
							218 Oxford	Apr-17	\$525,000	\$484,064	1%
13	Innov 46	Hope Mills	NC	Suburban	78.5	435	6849 Roslin Farm	Feb-19	\$155,000		
							109 Bledsoe	Jan-19	\$150,000	\$147,558	5%
14	Innov 42	Fayetteville	NC	Suburban	71	340	2923 County Line	Feb-19	\$385,000		
							2109 John McMillan	Apr-18	\$320,000	\$379,156	2%
15	Innov 42	Fayetteville	NC	Suburban	71	330	2935 County Line	Jun-19	\$266,000		
							7031 Glynn Mill	May-18	\$255,000	\$264,422	1%
16	Demille	Lapeer	MI	Suburban	28	310	1120 Don Wayne	Aug-19	\$194,000		
							1231 Turrill	Apr-19	\$182,000	\$200,895	-4%
17	Demille	Lapeer	MI	Suburban	28	310	1126 Don Wayne	May-18	\$160,000		
							3565 Garden	May-19	\$165,000	\$163,016	-2%
18	Demille	Lapeer	MI	Suburban	28	380	1138 Don Wayne	Aug-19	\$191,000		
							1128 Gwen	Aug-18	\$187,500	\$189,733	1%
19	Demille	Lapeer	MI	Suburban	28	280	1174 Alice	Jan-19	\$165,000		
							1127 Don Wayne	Sep-19	\$176,900	\$163,443	1%
20	Turrill	Lapeer	MI	Suburban	20	290	1060 Cliff	Sep-18	\$200,500		
							1128 Gwen	Aug-18	\$187,500	\$200,350	0%
21	Turrill	Lapeer	MI	Suburban	20	255	1040 Cliff	Jun-17	\$145,600		
							1127 Don Wayne	Sep-19	\$176,900	\$146,271	0%
22	Picture Rocks	Tucson	AZ	Rural	20	1100	12980 W Moss V	Jun-20	\$393,900		
							13071 W Smr Poppy	Feb-20	\$389,409	\$396,001	-1%
23	Picture Rocks	Tucson	AZ	Rural	20	970	12986 W Moss V	Jun-19	\$350,000		
							12884 W Zebra Aloe	Jan-20	\$336,500	\$356,528	-2%
24	Picture Rocks	Tucson	AZ	Rural	20	990	12705 W Emigh	Jan-19	\$255,000		
							12020 W Camper	Sep-19	\$200,000	\$257,440	-1%
25	Avra Valley	Tucson	AZ	Rural	25	1697	9415 N Ghost Ranch	Oct-18	\$131,000		
							7175 N Nelson Quich.	Mar-19	\$136,000	\$131,913	-1%
26	Avra Valley	Tucson	AZ	Rural	25	1467	14441 W Stallion	Dec-17	\$150,000		
							9620 N Rng Bck	Mar-19	\$139,000	\$143,396	4%
27	Clarke Cnty	White Post	VA	Rural	20	1230	833 Nations Spr	Aug-19	\$385,000		
							2393 Old Chapel	Aug-20	\$330,000	\$389,286	-1%
28	Sappony	Stony Creek	VA	Rural	20	1425	12511 Palestine	Jul-18	\$128,400		
							6494 Rocky Branch	Nov-18	\$100,000	\$131,842	-3%
29	Grandy	Grandy	NC	Suburban	20	405	120 Par Four	Aug-19	\$315,000		
							116 Barefoot	Sep-20	\$290,000	\$302,587	4%
30	Grandy	Grandy	NC	Suburban	20	477	269 Grandy	May-19	\$275,000		
							103 Spring Leaf	Aug-18	\$270,000	\$274,094	0%

***E. Additional Larger Solar Farm Data***

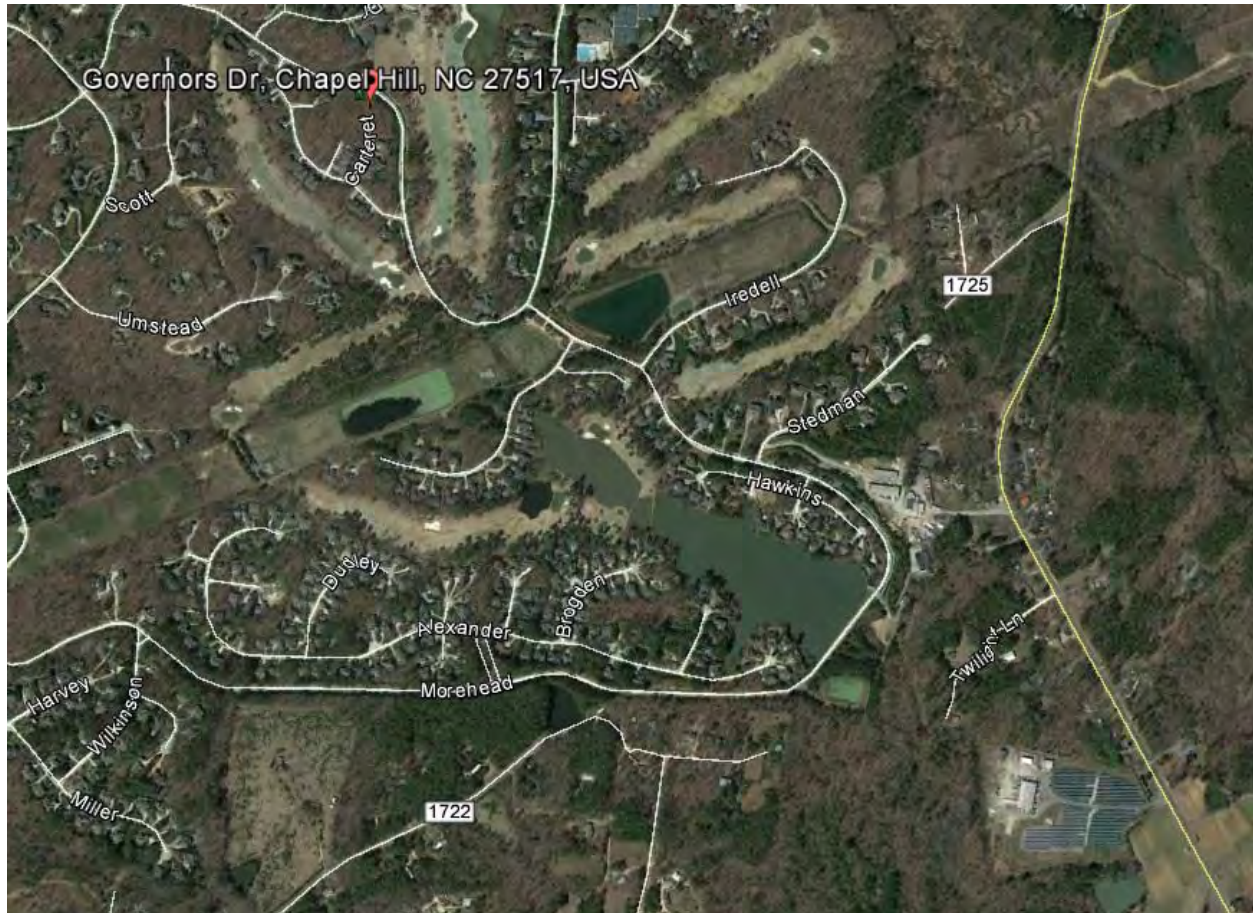
As stated earlier, the trend is for larger solar farms and there is typically a delay between construction of a new project and any adjoining sales being available for analysis. I have included additional data on a number of larger solar farms that I have researched but found no adjoining sales for analysis. I include this primarily to show the similarity in adjoining uses, proximity to adjoining homes for projects of this scale.

On the following page I show 63 projects ranging in size from 50 MW up to 1,000 MW with an average size of 118.48 MW and a median of 80 MW. The average closest distance for an adjoining home is 241 feet, while the median distance is 175 feet. The closest distance is 57 feet. The mix of adjoining uses is similar with most of the adjoining uses remaining residential or agricultural in nature.

Parcel #	State	County	City	Name	Output (MW)	Total	Used	Avg. Dist	Closest	Adjoining Use by Acre			
						Acres	Acres	to home	Home	Res	Agri	Agri/Res	Com
78	NC	Currituck	Moyock	Summit/Ranchland	80	2034		674	360	4%	94%	0%	2%
133	MS	Forrest	Hattiesburg	Hattiesburg	50	1129	479.6	650	315	35%	65%	0%	0%
179	SC	Jasper	Ridgeland	Jasper	140	1600	1000	461	108	2%	85%	13%	0%
211	NC	Halifax	Enfield	Chestnut	75	1428.1		1,429	210	4%	96%	0%	0%
222	VA	Mecklenburg	Chase City	Grasshopper	80	946.25				6%	87%	5%	1%
226	VA	Louisa	Louisa	Belcher	88	1238.1			150	19%	53%	28%	0%
305	FL	Pasco	Dade City	Mountain View	55	347.12		510	175	32%	39%	21%	8%
319	FL	Hamilton	Jasper	Hamilton	74.9	1268.9	537	3,596	240	5%	67%	28%	0%
336	FL	Manatee	Parrish	Manatee	74.5	1180.4		1,079	625	2%	50%	1%	47%
337	FL	DeSoto	Arcadia	Citrus	74.5	640				0%	0%	100%	0%
338	FL	Charlotte	Port Charlotte	Babcock	74.5	422.61				0%	0%	100%	0%
353	VA	Accomack	Oak Hall	Amazon East(ern shore)	80	1000		645	135	8%	75%	17%	0%
364	VA	Culpepper	Stevensburg	Greenwood	100	2266.6	1800	788	200	8%	62%	29%	0%
368	NC	Duplin	Warsaw	Warsaw	87.5	585.97	499	526	130	11%	66%	21%	3%
390	NC	Richmond	Ellerbe	Innovative Solar 34	50	385.24	226	N/A	N/A	1%	99%	0%	0%
399	NC	Cabarrus	Midland	McBride	74.9	974.59	627	1,425	140	12%	78%	9%	0%
400	FL	Polk	Mulberry	Alafia	51	420.35		490	105	7%	90%	3%	0%
406	VA	Halifax	Clover	Foxhound	91	1311.8		885	185	5%	61%	17%	18%
410	FL	Gilchrist	Trenton	Trenton	74.5	480		2,193	775	0%	26%	55%	19%
411	NC	Edgecombe	Battleboro	Fern	100	1235.4	960.71	1,494	220	5%	76%	19%	0%
412	MD	Caroline	Goldsboro	Cherrywood	202	1722.9	1073.7	429	200	10%	76%	13%	0%
434	NC	Edgecombe	Conetoe	Conetoe	80	1389.9	910.6	1,152	120	5%	78%	17%	0%
440	FL	Volusia	Debary	Debary	74.5	844.63		654	190	3%	27%	0%	70%
441	FL	Alachua & Putnam	Hawthorne	Horizon	74.5	684				3%	81%	16%	0%
484	VA	Southampton	Newsoms	Southampton	100	3243.9		-	-	3%	78%	17%	3%
486	VA	Augusta	Stuarts Draft	Augusta	125	3197.4	1147	588	165	16%	61%	16%	7%
491	NC	Stanly	Misenheimer	Misenheimer 2018	80	740.2	687.2	504	130	11%	40%	22%	27%
494	VA	King and Queen	Shacklefords	Walnut	110	1700	1173	641	165	14%	72%	13%	1%
496	VA	Halifax	Clover	Piney Creek	80	776.18	422	523	195	15%	62%	24%	0%
511	NC	Halifax	Scotland Neck	American Beech	160	3255.2	1807.8	1,262	205	2%	58%	38%	3%
514	NC	Rockingham	Reidsville	Williamsburg	80	802.6	507	734	200	25%	12%	63%	0%
517	VA	Page	Luray	Cape	100	566.53	461	519	110	42%	12%	46%	0%
518	VA	Greensville	Emporia	Fountain Creek	80	798.3	595	862	300	6%	23%	71%	0%
525	NC	Washington	Plymouth	Macadamia	484	5578.7	4813.5	1,513	275	1%	90%	9%	0%
526	NC	Cleveland	Mooreboro	Broad River	50	759.8	365	419	70	29%	55%	16%	0%
555	FL	Polk	Mulberry	Durrance	74.5	463.57	324.65	438	140	3%	97%	0%	0%
560	NC	Yadkin	Yadkinville	Sugar	60	477	357	382	65	19%	39%	20%	22%
561	NC	Halifax	Enfield	Halifax 80mw 2019	80	1007.6	1007.6	672	190	8%	73%	19%	0%
577	VA	Isle of Wight	Windsor	Windsor	85	564.1	564.1	572	160	9%	67%	24%	0%
579	VA	Spotsylvania	Paytes	Spotsylvania	500	6412	3500			9%	52%	11%	27%
582	NC	Rowan	Salisbury	China Grove	65	428.66	324.26	438	85	58%	4%	38%	0%
583	NC	Stokes	Walnut Cove	Lick Creek	50	1424	185.11	410	65	20%	64%	11%	5%
584	NC	Halifax	Enfield	Sweetleaf	94	1956.3	1250	968	160	5%	63%	32%	0%
586	VA	King William	Aylett	Sweet Sue	77	1262	576	1,617	680	7%	68%	25%	0%
593	NC	Bertie	Windsor	Sumac	120	3360.6	1257.9	876	160	4%	90%	6%	0%
599	TN	Fayette	Somerville	Yum Yum	147	4000	1500	1,862	330	3%	32%	64%	1%
602	GA	Burke	Waynesboro	White Oak	76.5	516.7	516.7	2,995	1,790	1%	34%	65%	0%
603	GA	Taylor	Butler	Butler GA	103	2395.1	2395.1	1,534	255	2%	73%	23%	2%
604	GA	Taylor	Butler	White Pine	101.2	505.94	505.94	1,044	100	1%	51%	48%	1%
605	GA	Candler	Metter	Live Oak	51	417.84	417.84	910	235	4%	72%	23%	0%
606	GA	Jeff Davis	Hazelhurst	Hazelhurst II	52.5	947.15	490.42	2,114	105	9%	64%	27%	0%
607	GA	Decatur	Bainbridge	Decatur Parkway	80	781.5	781.5	1,123	450	2%	27%	22%	49%
608	GA	Sumter	Leslie-DeSoto	Americus	1000	9661.2	4437	5,210	510	1%	63%	36%	0%
616	FL	Colombia	Fort White	Fort White	74.5	570.5	457.2	828	220	12%	71%	17%	0%
621	VA	Surry	Spring Grove	Loblolly	150	2181.9	1000	1,860	110	7%	62%	31%	0%
622	VA	Albemarle	Scottsville	Woodridge	138	2260.9	1000	1,094	170	9%	63%	28%	0%
625	NC	Nash	Middlesex	Phobos	80	754.52	734	356	57	14%	75%	10%	0%
628	MI	Lenawee	Deerfield	Carroll Road	200	1694.8	1694.8	343	190	12%	86%	0%	2%
633	VA	Greensville	Emporia	Brunswick	150.2	2076.4	1387.3	1,091	240	4%	85%	11%	0%
634	NC	Surry	Elkin	Partin	50	429.4	257.64	945	155	30%	25%	15%	30%
638	GA	Twiggs	Dry Branch	Twiggs	200	2132.7	2132.7	-	-	10%	55%	35%	0%
639	NC	Cumberland	Hope Mills	Innovative Solar 46	78.5	531.87	531.87	423	125	17%	83%	0%	0%
640	NC	Cumberland	Hope Mills	Innovative Solar 42	71	413.99	413.99	375	135	41%	59%	0%	0%
Total Number of Solar Farms					63								
Average					118.48	1533.1	1043.6	1058	241	11%	60%	24%	6%
Median					80.00	1000.0	657.1	808	175	7%	64%	19%	0%
High					1000.00	9661.2	4813.5	5210	1790	58%	99%	100%	70%
Low					50.00	347.1	185.1	343	57	0%	0%	0%	0%

### III. Scope of Research

I have researched over 700 solar farms and sites on which solar farms are existing and proposed in North Carolina, Ohio, Virginia as well as other states to determine what uses are typically found in proximity with a solar farm. The data I have collected and provide in this report strongly supports the conclusion that solar farms are having no negative consequences on adjoining agricultural and residential values. While I have focused on adjoining values, I note that there are many examples of solar farms being located within a quarter mile of residential developments, including such notable developments as Governor's Club in Chapel Hill, which has a solar farm within a quarter mile as shown on the following aerial map. Governor's Club is a gated golf community with homes selling for \$300,000 to over \$2 million.



The subdivisions included in the matched pair analysis also show an acceptance of residential uses adjoining solar farms with no negative impact on property value.

Beyond these references, I have quantified the adjoining uses for a number of solar farm comparables to derive a breakdown of the adjoining uses for each solar farm. The chart below shows the breakdown of adjoining or abutting uses by total acreage.



Percentage By Adjoining Acreage									
	Res	Ag	Res/AG	Comm	Ind	Avg Home	Closest Home	All Res Uses	All Comm Uses
Average	19%	53%	20%	2%	6%	887	344	91%	8%
Median	11%	56%	11%	0%	0%	708	218	100%	0%
High	100%	100%	100%	93%	98%	5,210	4,670	100%	98%
Low	0%	0%	0%	0%	0%	90	25	0%	0%
Res = Residential, Ag = Agriculture, Com = Commercial									
Total Solar Farms Considered: 705									

I have also included a breakdown of each solar farm by number of adjoining parcels rather than acreage. Using both factors provides a more complete picture of the neighboring properties.

Percentage By Number of Parcels Adjoining									
	Res	Ag	Res/AG	Comm	Ind	Avg Home	Closest Home	All Res Uses	All Comm Uses
Average	61%	24%	9%	2%	4%	887	344	93%	6%
Median	65%	19%	5%	0%	0%	708	218	100%	0%
High	100%	100%	100%	60%	78%	5,210	4,670	105%	78%
Low	0%	0%	0%	0%	0%	90	25	0%	0%
Res = Residential, Ag = Agriculture, Com = Commercial									
Total Solar Farms Considered: 705									

Both of the above charts show a marked residential and agricultural adjoining use for most solar farms. Every single solar farm considered included an adjoining residential or residential agricultural use.

## **IV. Specific Factors Related To Impacts on Value**

I have completed a number of Impact Studies related to a variety of uses and I have found that the most common areas for impact on adjoining values typically follow a hierarchy with descending levels of potential impact. I will discuss each of these categories and how they relate to a solar farm.

1. Hazardous material
2. Odor
3. Noise
4. Traffic
5. Stigma
6. Appearance

### **1. Hazardous material**

The solar farm presents no potential hazardous waste byproduct as part of normal operation. Any fertilizer, weed control, vehicular traffic, or construction will be significantly less than typically applied in a residential development and even most agricultural uses.

The various solar farms that I have inspected and identified in the addenda have no known environmental impacts associated with the development and operation.

### **2. Odor**

The various solar farms that I have inspected produced no odor.

### **3. Noise**

Whether discussing passive fixed solar panels, or single-axis trackers, there is no negative impact associated with noise from a solar farm. The transformer reportedly has a hum similar to an HVAC that can only be heard in close proximity to this transformer and the buffers on the property are sufficient to make emitted sounds inaudible from the adjoining properties. No sound is emitted from the facility at night.

The various solar farms that I have inspected were inaudible from the roadways.

### **4. Traffic**

The solar farm will have no onsite employee's or staff. The site requires only minimal maintenance. Relative to other potential uses of the site (such as a residential subdivision), the additional traffic generated by a solar farm use on this site is insignificant.

### **5. Stigma**

There is no stigma associated with solar farms and people generally respond favorably towards such a use. While an individual may express concerns about proximity to a solar farm, there is no specific stigma associated with a solar farm. Stigma generally refers to things such as adult establishments, prisons, rehabilitation facilities, and so forth.

Solar panels have no associated stigma and in smaller collections are found in yards and roofs in many residential communities. Solar farms are adjoining elementary, middle and high schools as well as churches and subdivisions. I note that Solar Farm Matched Pair Set 9 in this report not only adjoins a church, but is actually located on land owned by the church. Solar panels on a roof are often cited as an enhancement to the property in marketing brochures.

I see no basis for an impact from stigma due to a solar farm.

## 6. Appearance

I note that larger solar farms using fixed or tracking panels are a passive use of the land that is in keeping with a rural/residential area. As shown below, solar farms are comparable to larger greenhouses. This is not surprising given that a greenhouse is essentially another method for collecting passive solar energy. The greenhouse use is well received in residential/rural areas and has a similar visual impact as a solar farm.



The solar panels are all less than 15 feet high, which means that the visual impact of the solar panels will be similar in height to a typical greenhouse and lower than a single story residential dwelling. Were the subject property developed with single family housing, that development would have a much greater visual impact on the surrounding area given that a two-story home with attic could be three to four times as high as these proposed panels.

## 7. Conclusion

On the basis of the factors described above, it is my professional opinion that the proposed solar farm will not negatively impact adjoining property values. The only category of impact of note is appearance, which is addressed through setbacks and landscaping buffers. The matched pair data supports that conclusion.

## V. University Studies

I have also considered two studies completed by two different universities related to solar farms and impacts on property values.

### A. *University of Texas at Austin, May 2018*

#### **An Exploration of Property-Value Impacts Near Utility-Scale Solar Installations**

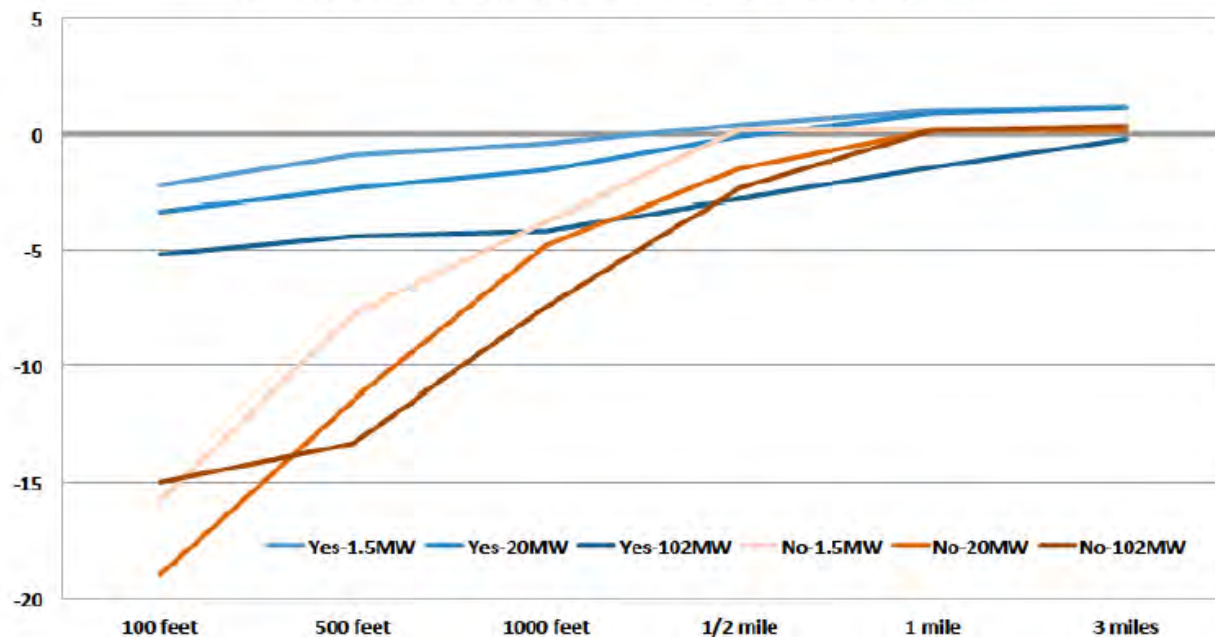
This study considers solar farms from two angles. First it looks at where solar farms are being located and concludes that they are being located primarily in low density residential areas where there are fewer homes than in urban or suburban areas.

The second part is more applicable in that they conducted a survey of appraisers/assessors on their opinions of the possible impacts of proximity to a solar farm. They consider the question in terms of size of the adjoining solar farm and how close the adjoining home is to the solar farm. I am very familiar with this part of the study as I was interviewed by the researchers multiple times as they were developing this. One very important question that they ask within the survey is very illustrative. They asked if the appraiser being surveyed had ever appraised a property next to a solar farm. There is a very noticeable divide in the answers provided by appraisers who have experience appraising property next to a solar farm versus appraisers who self-identify as having no experience or knowledge related to that use.

On Page 16 of that study they have a chart showing the responses from appraisers related to proximity to a facility and size of the facility, but they separate the answers as shown below with appraisers with experience in appraising properties next to a solar farm shown in blue and those inexperienced shown in brown. Even within 100 feet of a 102 MW facility the response from experienced appraisers were -5% at most on impact. While inexperienced appraisers came up with significantly higher impacts. This chart clearly shows that an uninformed response widely diverges from the sales data available on this subject.

**Chart B.2 - Estimates of Property Value Impacts (%) by Size of Facility,  
Distance, & Respondent Type**

Have you assessed a home near a utility-scale solar installation?



Furthermore, the question cited above does not consider any mitigating factors such as landscaping buffers or screens which would presumably reduce the minor impacts noted by experienced appraisers on this subject.

The conclusion of the researchers is shown on Page 23 indicated that “Results from our survey of residential home assessors show that the majority of respondents believe that proximity to a solar installation has either no negative impact or a positive impact on home values.”

This analysis supports the conclusion of this report that the data supports no negative impact on adjoining property values.

## ***B. University of Rhode Island, September 2020***

### **Property Value Impacts of Commercial-Scale Solar Energy in Massachusetts and Rhode Island**

The University of Rhode Island published a study entitled **Property Value Impacts of Commercial-Scale Solar Energy in Massachusetts and Rhode Island** on September 29, 2020 with lead researchers being Vasundhara Gaur and Corey Lang. I have read that study and interviewed Mr. Corey Lang related to that study. This study is often cited by opponents of solar farms but the findings of that study have some very specific caveats according to the report itself as well as Mr. Lang from the interview.

While that study does state in the Abstract that they found depreciation of homes within 1-mile of a solar farm, that impact is limited to non-rural locations. On Pages 16-18 of that study under Section 5.3 Heterogeneity in treatment effect they indicate that the impact that they found was limited to non-rural locations with the impact in rural locations effectively being zero. For the study they defined “rural” as a municipality/township with less than 850 population per square mile.

They further tested the robustness of that finding and even in areas up to 2,000 population per square mile they found no statistically significant data to suggest a negative impact. They have not specifically defined a point at which they found negative impacts to begin, as the sensitivity study stopped checking at the 2,000 population dataset.

Where they did find negative impacts was in high population density areas that was largely a factor of running the study in Massachusetts and Rhode Island which the study specifically cites as being the 2<sup>nd</sup> and 3<sup>rd</sup> most population dense states in the USA. Mr. Lang in conversation as well as in recorded presentations has indicated that the impact in these heavily populated areas may reflect a loss in value due to the scarce greenery in those areas and not specifically related to the solar farm itself. In other words, any development of that site might have a similar impact on property value.

So based on this study I have checked the population for the Prairie Township of Franklin County, which has a population of 140 population for 2020 based on SiteToDoBusiness by ESRI and a total area of 19.1 square miles. This indicates a population density of 7 people per square mile which puts this well below the threshold indicated by the Rhode Island Study.

I therefore conclude that the Rhode Island Study supports the indication of no negative impact on adjoining properties for the proposed solar farm project.



## **VI. Conclusion**

The matched pair analysis shows no negative impact in home values due to abutting or adjoining a solar farm as well as no negative impact to abutting or adjacent vacant residential or agricultural land. The criteria that typically correlates with downward adjustments on property values such as noise, odor, and traffic all support a finding of no negative impact on property value.

Very similar solar farms in very similar areas have been found by hundreds of towns and counties not to have a substantial injury to abutting or adjoining properties, and many of those findings of no negative impact have been upheld by appellate courts. Similar solar farms have been approved adjoining agricultural uses, schools, churches, and residential developments.

I have found no difference in the mix of adjoining uses or proximity to adjoining homes based on the size of a solar farm and I have found no significant difference in the matched pair data adjoining larger solar farms versus smaller solar farms. The data in the Midwest is consistent with the larger set of data that I have nationally, as is the more specific data located in and around Ohio.

Based on the data and analysis in this report, it is my professional opinion that the solar farm proposed at the subject property will have no negative impact on the value of adjoining or abutting property. I note that some of the positive implications of a solar farm that have been expressed by people living next to solar farms include protection from future development of residential developments or other more intrusive uses, reduced dust, odor and chemicals from former farming operations, protection from light pollution at night, it's quiet, and there is no traffic.



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Mobile (919) 414-8142  
[rkirkland2@gmail.com](mailto:rkirkland2@gmail.com)  
[www.kirklandappraisals.com](http://www.kirklandappraisals.com)

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## ***Professional Experience***

<b>Kirkland Appraisals, LLC</b> , Raleigh, N.C. Commercial appraiser	2003 – Present
<b>Hester &amp; Company</b> , Raleigh, N.C. Commercial appraiser	1996 – 2003

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## ***Professional Affiliations***

<b>MAI</b> (Member, Appraisal Institute) designation #11796	2001
<b>NC State Certified General Appraiser</b> # A4359	1999
<b>VA State Certified General Appraiser</b> # 4001017291	
<b>SC State Certified General Appraiser</b> # 6209	
<b>FL State Certified General Appraiser</b> # RZ3950	
<b>IL State Certified General Appraiser</b> # 553.002633	
<b>KY State Certified General Appraiser</b> # 5522	

## ***Education***

<b>Bachelor of Arts in English</b> , University of North Carolina, Chapel Hill	1993
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## ***Continuing Education***

Florida Appraisal Laws and Regulations	2020
Michigan Appraisal Law	2020
Uniform Standards of Professional Appraisal Practice Update	2020
Uniform Appraisal Standards for Federal Land Acquisitions (Yellow Book)	2019
The Cost Approach	2019
Income Approach Case Studies for Commercial Appraisers	2018
Introduction to Expert Witness Testimony for Appraisers	2018
Appraising Small Apartment Properties	2018
Florida Appraisal Laws and Regulations	2018
Uniform Standards of Professional Appraisal Practice Update	2018
Appraisal of REO and Foreclosure Properties	2017
Appraisal of Self Storage Facilities	2017
Land and Site Valuation	2017
NCDOT Appraisal Principles and Procedures	2017
Uniform Standards of Professional Appraisal Practice Update	2016
Forecasting Revenue	2015
Wind Turbine Effect on Value	2015
Supervisor/Trainee Class	2015
Business Practices and Ethics	2014
Subdivision Valuation	2014
Uniform Standards of Professional Appraisal Practice Update	2014
Introduction to Vineyard and Winery Valuation	2013
Appraising Rural Residential Properties	2012

Uniform Standards of Professional Appraisal Practice Update	2012
Supervisors/Trainees	2011
Rates and Ratios: Making sense of GIMs, OARs, and DCFs	2011
Advanced Internet Search Strategies	2011
Analyzing Distressed Real Estate	2011
Uniform Standards of Professional Appraisal Practice Update	2011
Business Practices and Ethics	2011
Appraisal Curriculum Overview (2 Days – General)	2009
Appraisal Review - General	2009
Uniform Standards of Professional Appraisal Practice Update	2008
Subdivision Valuation: A Comprehensive Guide	2008
Office Building Valuation: A Contemporary Perspective	2008
Valuation of Detrimental Conditions in Real Estate	2007
The Appraisal of Small Subdivisions	2007
Uniform Standards of Professional Appraisal Practice Update	2006
Evaluating Commercial Construction	2005
Conservation Easements	2005
Uniform Standards of Professional Appraisal Practice Update	2004
Condemnation Appraising	2004
Land Valuation Adjustment Procedures	2004
Supporting Capitalization Rates	2004
Uniform Standards of Professional Appraisal Practice, C	2002
Wells and Septic Systems and Wastewater Irrigation Systems	2002
Appraisals 2002	2002
Analyzing Commercial Lease Clauses	2002
Conservation Easements	2000
Preparation for Litigation	2000
Appraisal of Nonconforming Uses	2000
Advanced Applications	2000
Highest and Best Use and Market Analysis	1999
Advanced Sales Comparison and Cost Approaches	1999
Advanced Income Capitalization	1998
Valuation of Detrimental Conditions in Real Estate	1999
Report Writing and Valuation Analysis	1999
Property Tax Values and Appeals	1997
Uniform Standards of Professional Appraisal Practice, A & B	1997
Basic Income Capitalization	1996

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**Case No(s). 20-1679-EL-BGN**

Summary: Application - 20 of 25 (Exhibit P –Property Value Study) electronically filed by Christine M.T. Pirik on behalf of Pleasant Prairie Solar Energy LLC