

AEUG Madison Solar, LLC
Kentucky State Board on Electric
Generation and Transmission Siting
Application

Application Documents
Site Assessment Report
Volume II
Case No. 2020-00219

December 2020





Madison Solar Project: Site Assessment Report

DECEMBER 2020

PREPARED FOR

AEUG Madison Solar, LLC

PREPARED BY

SWCA Environmental Consultants

MADISON SOLAR PROJECT: SITE ASSESSMENT REPORT

Prepared for

AEUG Madison Solar, LLC
55 E. Monroe Street, Suite 1925
Chicago, Illinois 60603
(312) 673-3000

Prepared by

SWCA Environmental Consultants
201 Chatham Street, Suite 3
Sanford, North Carolina 27330
(919) 292-2200
www.swca.com

SWCA Project No. 63270

December 2020

CONTENTS

1	Proposed Site Development Plan	1
2	Compatibility with Scenic Surroundings	2
3	Property Value Impacts	3
4	Anticipated Noise Levels at Property Boundary	3
5	Effect on Road, Railways, and Fugitive Dust.....	4
6	Mitigation Measures.....	5
7	References	7

Appendices

Appendix A.	Property Value Impact Report
Appendix B.	Legal Description of Site
Appendix C.	Noise and Traffic Study
Appendix D.	Environmental Site Assessment
Appendix E.	Preliminary Site Layout
Appendix F.	Visual Assessment

Tables

Table 1.	Land Use Adjoining the Madison Solar Project	1
----------	--	---

This page intentionally left blank.

1 PROPOSED SITE DEVELOPMENT PLAN

REQUIREMENT: *per KRS 278.708 (3)(a); A description of the proposed facility that shall include a proposed site development plan that describes:*

- 1 *Surrounding land uses for residential, commercial, agricultural, and recreational purposes;*
- 2 *The legal boundaries of the proposed site;*
- 3 *Proposed access control to the site;*
- 4 *The location of facility buildings, transmission lines, and other structures;*
- 5 *Location and use of access ways, internal roads, and railways;*
- 6 *Existing or proposed utilities to service the facility;*
- 7 *Compliance with applicable setback requirements as provided under KRS 278.704(2), (3), (4), or (5); and*
- 8 *Evaluation of the noise levels expected to be produced by the facility*

COMPLIANCE: Please see the application, Section 2 for a detailed description of the proposed Project and Project Area. The following items provide information specifically in response to requirements 1 through 8 listed above.

1. A detailed description of surrounding land uses is provided in Appendix A: Property Value Impact Report (Kirkland Appraisals, LLC 2020). A summary of land use on parcels adjoining the Project is taken from this report and provided in Table 1 below.

Table 1. Land Use Adjoining the Madison Solar Project

Land Use	Percent of Total Adjoining Acres	Percent of Total Adjoining Parcels
Residential	16.38	72.23
Agricultural	24.95	8.91
Agricultural/Residential	58.13	15.84
Religious	0.29	0.99
Substation	0.25	0.99
Cell Tower	0.01	0.99
Total	100.00	100.00

2. The Project survey boundary is depicted in Appendix A, and the legal descriptions of the participating properties are listed in Appendix B.
3. As described in the application, Section 2, “AEUG Madison Solar will secure the Project perimeter using 6-foot-high chain link fencing topped by barbed wire and meeting National Electrical Safety Code requirements. Project entrance gates are anticipated to be approximately 8 feet high and 12 feet wide to allow for emergency and maintenance access.”
4. The locations of proposed Project buildings, transmission lines, and other structures are depicted on the Preliminary Site Layout in Appendix E.
5. The locations of proposed access control points are depicted on the Preliminary Site Layout in Appendix E. No railways are present within the proposed Project site. A railway is located just

west of the Project site but will not be used for the construction or operation of the proposed Project.

6. The locations of existing and proposed utilities to service the Project are depicted on the Preliminary Site Layout in Appendix E.
7. Pursuant to KRS 278.704(3), the local setback requirements have primacy over the setback requirements identified elsewhere in KRS 278.704. Those local setback requirements are identified in application, Section 4. The Project will comply with the local setback requirements.
8. The noise and traffic study report provided in Appendix C identifies the noise levels expected to be produced by the facility. The findings of the report are as follows:

For noise generated by the operation of the Project, standard acoustical engineering methods were used and were based on vendor-supplied equipment noise levels; results are shown in Table 2.4-2 in Appendix C. These noise levels were based on inverters, trackers, and transformers. Predicted levels at the closest sensitive receptor were calculated based on geometric spreading attenuation using International Organization for Standardization (ISO) 9613-2, Acoustics – Sound Attenuation during Propagation Outdoors (ISO 1996). Additional attenuation factors, such as noise-reducing intervening terrain, structures, and barriers, cannot be considered with this methodology. Thus, this methodology is conservative. In addition, because solar panels produce power only when the sun is shining, the trackers will be silent at night. It was assumed that reactive power will be produced at night; therefore, inverters and transformers were assumed to emit noise at the same levels as during daytime hours. Central inverters are usually surrounded on all sides by the solar panel arrays whose electricity they manage, which further distances them from anyone who might happen to be nearby and would potentially act as a noise buffer.

2 COMPATIBILITY WITH SCENIC SURROUNDINGS

REQUIREMENT: *per KRS 278.708 (3)(b); An evaluation of the compatibility of the facility with scenic surroundings.*

COMPLIANCE: See Appendix F for a Visual Assessment report written by Tetra Tech studying potential visual impacts to the community surrounding the proposed facility. The conclusion of the report, on page 7, reads as follows:

The proposed Project would introduce low vertical, geometric elements that are gray in color into a relatively rolling terrain landscape dominated by green vegetation and patches of trees and shrubs. Visual impacts Visual Assessment Madison Solar Project Page 8 would vary depending on several factors, such as the distance of the viewer from the Project and whether views toward the Project are unobstructed or screened by vegetation, terrain, or development. The views can be vastly different from one location to another, even in proximity, because of the rolling terrain and vegetation. Viewers in proximity to the Project may have unobstructed or partially screened views and include adjacent rural residences and travelers along the local roads and highways. Existing vegetation between the solar arrays and the residences will be left in place, to the extent practicable, to help screen the Project and reduce visual impacts from the adjacent homes. It is anticipated that views of the Project from surrounding places (e.g., Richmond, Ford) would generally be screened by vegetation and structures associated with development. Roadways and rural residential development located outside of built communities would have elevated views towards the Project. Views would vary from completely screened to partially screened to unobstructed. Portions of the Project that would be visible would be seen in the context of existing development and would appear as a co-dominant feature in the landscape setting.

3 PROPERTY VALUE IMPACTS

REQUIREMENT: *per KRS 278.708 (3)(c); The potential changes in property values and land use resulting from the siting, construction, and operation of the proposed facility for property owners adjacent to the facility*

COMPLIANCE: Please refer to the Property Value Impact Report in Appendix A (Kirkland Appraisals LLC 2020). In his transmittal letter, Mr. Kirkland provides the following conclusions:

The matched pair analysis shows no impact in home values due to abutting or adjoining a solar farm as well as no 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 indicate 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 impact have been upheld by appellate courts. Similar solar farms have been approved adjoining agricultural uses, schools, churches, and residential developments. Industrial uses rarely absorb negative impacts from adjoining uses.

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 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.

4 ANTICIPATED NOISE LEVELS AT PROPERTY BOUNDARY

REQUIREMENT: *per KRS 278.708 (3)(d); Evaluation of anticipated peak and average noise levels associated with the facility's construction and operation at the property boundary*

COMPLIANCE: See Appendix C for a report studying the anticipated peak and average noise levels associated with the facility construction and operation at the property boundary. The excerpt below is a brief summary found on page 9 of Appendix C. For the construction phase of the proposed Project, predictive noise modeling has considered the range of potential impacts likely noting that noise generating activities will progressively move across the site over the duration of construction. As such, the highest noise levels would not be expected to be experienced at a single receptor for more than one day while construction equipment (e.g. piling drill rig) is at the closest point to the receptor. At the closest receptor, the calculated noise level during construction is a maximum of 83.6 dBA (Leq). The noise level at the nearest property boundary is estimated to be 87.3 dBA (Leq).

For noise generated by the operation of the Project, standard acoustical engineering methods were used and were based on vendor-supplied equipment noise levels, and results are shown in Table 2.4-2. These noise levels were based on inverters, trackers, and transformers. Predicted levels at the closest sensitive receptor were calculated based on geometric spreading attenuation using International Organization for Standardization (ISO) 9613-2, Acoustics – Sound

Attenuation during Propagation Outdoors (ISO, 1996). Additional attenuation factors, such as noise-reducing intervening terrain, structures, and barriers cannot be considered with this methodology. Thus, this methodology is conservative. In addition, because solar panels produce power only when the sun is shining, the trackers will be silent at night. It was assumed that reactive power will be produced at night; therefore, inverters, and transformers were assumed to emit noise at the same levels as during daytime hours. Central inverters are usually surrounded on all sides by the solar panel arrays whose electricity they manage, which further distances them from anyone who might happen to be nearby and would potentially act as a noise buffer.

The “as proposed” scenario L_{dn} at the nearest sensitive receptor, a residence on the west boundary of eastern portion of the Project 657 feet from the nearest inverter, is estimated to be 53.4 dBA L_{dn} , which is below the EPA’s recommended 24-hour average day and night value of 55 dBA L_{dn} (EPA 1974). The noise level at the property boundary under the “as proposed” scenario is estimated to be 49.3 dBA Leq. An isopleth of the “as-proposed” scenario noise anticipated for the Project is provided as Figure A-6.

It is important to note that two additional sensitive receptors that presented higher L_{dn} levels were not included in the evaluation as they are on leased land with signed Owner Waivers of impacts. However, these NSA were estimated to be less than 53.9 dBA L_{dn} , which is below the EPA’s recommended 24-hour average day and night value of 55 dBA L_{dn} . These additional receptors are labeled in Appendix B as NSA 13 and NSA 15.

The maximum worst-case scenario value estimated under the assumption all pieces of equipment are operating simultaneously and that all the inverters are located at a minimum distance of 985 feet (300 meters) from any sensitive receptor, is below the EPA’s recommended value, approximately 53.9 dBA L_{dn} . Therefore, the Project does comply with the EPA’s recommendation. An isopleth of the maximum worst-case scenario noise anticipated for the Project is provided as Figure A-7.

The average sound level (L_{Aeq}) would be 9.2 dBA higher than the current estimated ambient noise levels for the area, which would be perceived by humans as approximately a doubling of sound level (Bies and Hansen 1988).

5 EFFECT ON ROAD, RAILWAYS, AND FUGITIVE DUST

REQUIREMENT: *per KRS 278.708 (3)(e); The impact of the facility's operation on road and rail traffic to and within the facility, including anticipated levels of fugitive dust created by the traffic and any anticipated degradation of roads and lands in the vicinity of the facility*

COMPLIANCE:

The Noise and Traffic Study report provided in Appendix C discusses the Project’s impact on road and rail traffic and the anticipated levels of fugitive dust created by the traffic and degradation of roads as a result of the Project. The following is a brief summary of Sections 3.4 and 4 of the report.

During construction of this facility, traffic is anticipated to increase, with morning and evening peaks for daily workers and deliveries being made to the site periodically. All necessary safety precautions, including use signage and flagmen, will be taken to best ensure collisions are prevented on the surrounding roads. It is not anticipated that there will be any damages to the existing road infrastructure. Operation of the facility is not expected to cause a significant impact to local traffic as the anticipated traffic in the area will be similar to that of a typical single-family home.

The proposed facility will only have minimal fugitive dust during construction. The facility will be constructed within the existing contours and topography of the land. For those limited areas that are cleared and grubbed, water trucks are anticipated be employed to keep dust to a minimum, authorized by Section 1.2 of the Kentucky Pollutant Discharge Elimination System (KPDES) as a non-stormwater discharge (KPDES 2018).

The earth moving required for the site is anticipated to last from October of 2021 to April of 2022. The total acres to be disturbed is assumed to be approximately 275, which is estimated as 25% of the total facility acres. It is estimated that over the course of construction there will be 3.54 tons of particulate matter 10 microns or less in diameter (PM₁₀) released and 0.35 tons of particulate matter 2.5 microns or less in diameter (PM_{2.5}) released due to fugitive dust. Calculations for fugitive dust emissions were based on the emission factors provided in *WRAP Fugitive Dust Handbook* (Countess Environmental 2004). Calculations can be found in Appendix C.

To reduce wind erosion of recently disturbed areas, appropriate revegetation measures, application of water, or covering of spoil piles may occur. In addition, any open-bodied truck transporting dirt will be covered when the vehicle is in motion. The size of the Project site and the distance to nearby structures and roadways, combined with vegetated buffers along the property boundaries and fencerows will aid in managing off-site dust impacts. Internal roads will be compacted gravel, which may result in an increase in airborne dust particles during dry conditions and when internal road traffic is heavy. During construction activities, water may be applied to the internal road system to reduce dust generation.

Once the Project is operational, the only source of dust emissions would be due to occasional maintenance vehicle traffic on the access roads. Typical existing sources of dust in the Project Area include agricultural activities (e.g., from plowing, planting, and harvesting fields) and from travel along gravel and dirt roads.

6 MITIGATION MEASURES

REQUIREMENT: *per KRS 278.708(4); The site assessment report shall also suggest any mitigating measures to be implemented by the applicant to minimize or avoid adverse effects identified in the site assessment report; and per KRS 278.708(6); The applicant shall be given the opportunity to present evidence to the board regarding any mitigation measures. As a condition of approval for an application to obtain a construction certificate, the board may require the implementation of any mitigation measures that the board deems appropriate.*

COMPLIANCE: Specific mitigation measures are listed below.

Existing vegetation between the solar arrays and the residences will be left in place, to the extent practicable, to help screen the Project and reduce visual impacts to the adjacent homes. It is anticipated that views of the Project from surrounding places (e.g., Richmond, Ford) would generally be screened by vegetation and structures associated with development.

Other permit applications to the appropriate regulatory body will follow, as described below, as the Project enters the construction phase.

Stormwater Discharges Associated with Construction Activity

Regulatory Agency: Kentucky Energy & Environment Cabinet – Department for Environmental Protection – Division of Water (DOW)

The Project will obtain a Kentucky Department of Environmental Protection Stormwater Construction General Permit from the Kentucky Division of Water (DOW) for construction projects that disturb 1 or more acres of land in compliance with the National Pollutant Discharge Elimination System (NPDES) of the Clean Water Act (CWA). The Kentucky Pollution Discharge Elimination System (KPDES) permit (KPDES No. KYR100000) is a General Permit for Stormwater Discharges Associated with Construction Activity.

Wetlands and Waters of the United States

Federal Regulatory Agency: United States Army Corps of Engineers – Louisville District

AEUG Madison Solar has completed a Phase I Environmental Site Assessment (Appendix D) for the Project. In the assessment, National Wetlands Inventory wetlands categorized as riverine, freshwater pond, and freshwater emergent were identified on the Subject Property by the U.S. Fish and Wildlife Service wetland identification application. Therefore, an Approved Jurisdictional Determination (AJD) will be requested through the U.S. Army Corps of Engineers (USACE), Louisville District. The AJD process will include the USACE Louisville District in determining which aquatic features are considered federally jurisdictional under the CWA. If the Project design entails impacts to aquatic features, features that are deemed federally jurisdictional, a CWA Section 404 permit will be needed from the USACE.

The type of USACE permit required will depend on the amount of impact (e.g., acres or linear feet) to jurisdictional wetlands and/or waters of the U.S. If the proposed activity has minimal impacts, it may be authorized under a Nationwide Permit. If Project impacts exceed threshold requirements of the Nationwide Permit, an Individual Permit may be necessary.

Kentucky Regulatory Agency: Kentucky Energy & Environment Cabinet – Department for Environmental Protection – DOW

Depending on Project impacts and type of Section 404 permit necessary (discussed above), a Section 401 Water Quality Certification may be needed. An applicant seeking a Section 401 Water Quality Certification must submit an Application for Permit to Construct Across or Along a Stream and/or Water Quality Certification to the DOW. The DOW reviews projects jointly for potential impacts to water and floodplains.

Projects proposing to minimally affect waters of the state may be authorized under General Certifications of USACE Nationwide Permits. General Certifications may include impact thresholds and specific conditions for the proposed activity. If the proposed activity qualifies for coverage under the Nationwide Permit and the corresponding General Certification, an applicant does not need anything from the DOW. An applicant can request a letter from the DOW that the project meets the requirements of a Nationwide Permit. An Individual Water Quality Certification is required if the activity does not qualify for General Certification.

7 REFERENCES

- Bies, D.A., and C.H. Hansen. 1988. *Engineering Noise Control*. London: Unwin Hyman Ltd.
- Countess Engineering. 2006. *WRAP Fugitive Dust Handbook*. Available at: <https://www.wrapair.org/forums/dejf/fdh/content/final-handbook.pdf>. Accessed September 16, 2020.
- International Organization for Standardization (ISO). 1996. *Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation*. ISO 9613-2. Geneva, Switzerland: International Organization for Standardization.
- Kentucky Pollutant Discharge Elimination System (KPDES). 2018. *General Permit for Stormwater Discharges Associated With Industrial Activity From “Other Facilities.”* Available at: <https://eec.ky.gov/Environmental-Protection/Water/PermitCert/KPDES/Documents/FactSheetKYR00.pdf>. Accessed September 16, 2020.

This page intentionally left blank.

APPENDIX A

Property Value Impact Report



Kirkland Appraisals, LLC

Richard C. Kirkland, Jr., MAI
9408 Northfield Court
Raleigh, North Carolina 27603
Phone (919) 414-8142
rkirkland2@gmail.com
www.kirklandappraisals.com

December 7, 2020

Ms. April Montgomery
SWCA Environmental Consultants
201 Chatham Street, Suite 3
Sanford, NC 27330

RE: Madison 2 Solar Impact Study

Ms. Montgomery

At your request, I have considered the impact of a solar farm proposed to be constructed on a portion of an approximate 1,743.65-acre assemblage of tracts on Red House Road, Richmond, Kentucky. 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 and visited existing and proposed solar farms in Kentucky 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 letter is a limited report of a real property appraisal consulting assignment and subject to the limiting conditions attached to this letter. My client is SWCA Environmental Consultants, represented to me by Ms. April Montgomery. My findings support the Kentucky Siting Board Application. The effective date of this consultation is December 7, 2020.

While based in NC, I am also a Kentucky State Certified General Appraiser #5522.

Conclusion

The matched pair analysis shows no impact in home values due to abutting or adjoining a solar farm as well as no 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 indicate 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 impact have been upheld by appellate courts. Similar solar farms have been approved adjoining agricultural uses, schools, churches, and residential developments. Industrial uses rarely absorb negative impacts from adjoining uses.

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 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
Kentucky State Certified General Appraiser #5522

Standards and Methodology

I conducted this analysis using the standards and practices established by the 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 Kentucky 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 neighbor from fully using their homes or farms or businesses for the use intended.

Proposed Use Description

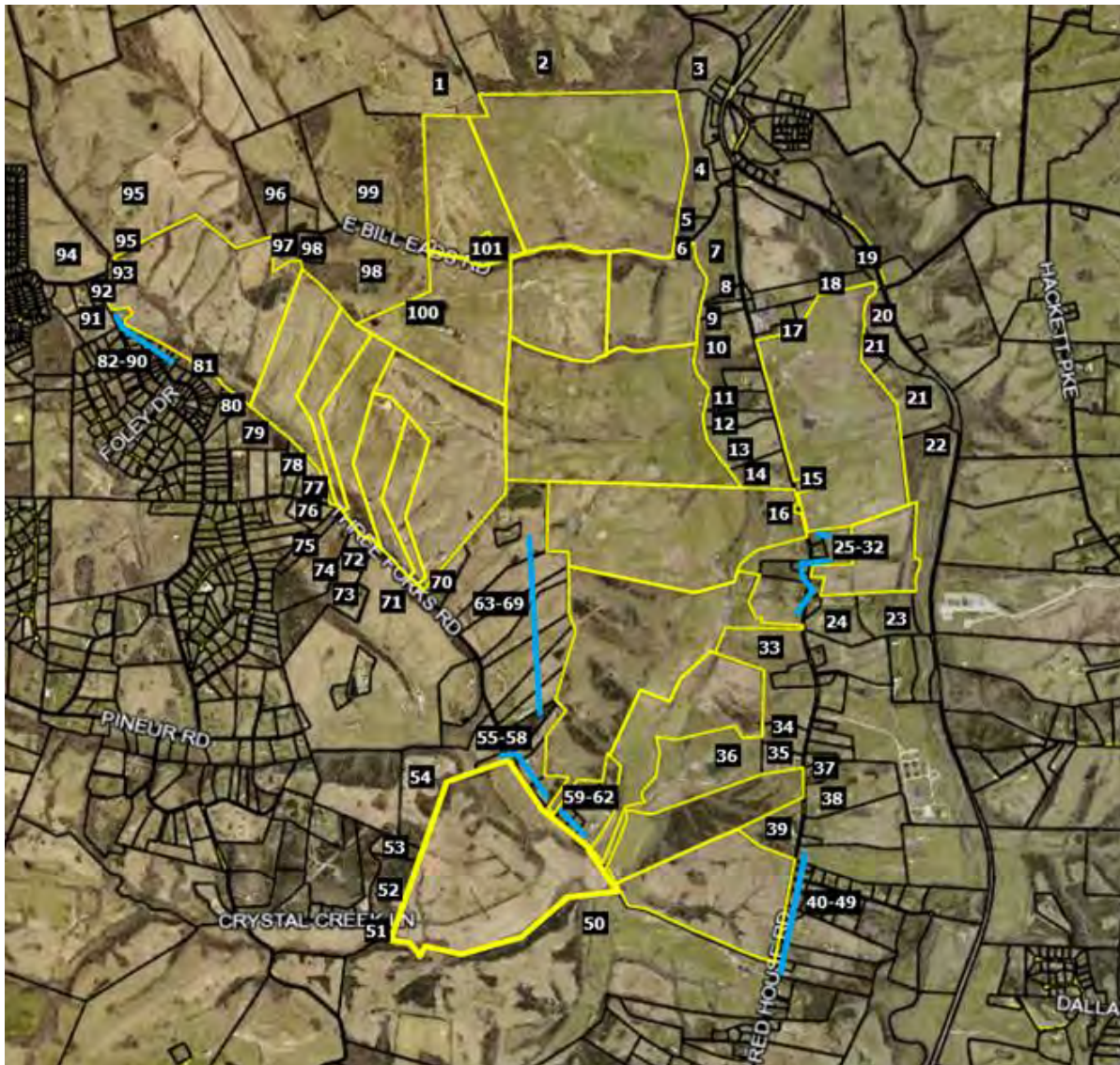
The proposed solar farm is proposed to be constructed on an approximate 1,743.65-acre assemblage of tracts on Red House Road, Richmond, Kentucky. Adjoining land is primarily a mix of residential and agricultural uses, which is very typical of solar farm sites. There is a nearby religious facility. Religious facilities such as churches as well as schools are commonly located adjoining solar farms and I note that I have matched pair data included in this report for a solar farm located on land not only adjoining a religious facility, but actually located on the land owned by the church and leased out for the solar farm use.

Adjoining Properties

I have considered adjoining uses and included a map to identify each parcel's location. The closest adjoining home will be 340 feet from the closest panel and the average distance to adjoining homes will be 873 feet. Matched pair data presented later in this report shows no impact on home values as close as 105 feet when reasonable visual buffers are provided.

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

	Acreage	Parcels
Residential	16.38%	72.28%
Agricultural	24.95%	8.91%
Agri/Res	58.13%	15.84%
Religious	0.29%	0.99%
Substation	0.25%	0.99%
Cell Tower	0.01%	0.99%
Total	100.00%	100.00%



Surrounding Uses

#	MAP ID	Owner	GIS Data		Adjoin		Distance (ft)
			Acres	Present Use	Acres	Parcels	Home/Panel
1	0052-0000-0022	Parke	177.00	Agri/Res	7.33%	0.99%	1,265
2	0065-0000-0041	Swinford	188.20	Agricultural	7.79%	0.99%	N/A
3	0065-0000-0033	Graham	17.07	Residential	0.71%	0.99%	1,450
4	0066-0000-0003	Madison	25.00	Agricultural	1.03%	0.99%	N/A
5	0066-0000-0002	BLM Investments I	4.78	Residential	0.20%	0.99%	695
6	0066-0000-0002	Portwood	1.00	Residential	0.04%	0.99%	615
7	0066-0000-0014	Harvey	19.54	Residential	0.81%	0.99%	980
8	0066-0000-0014	Bates	2.00	Residential	0.08%	0.99%	915
9	0066-0000-0014	Andrews	3.01	Residential	0.12%	0.99%	850
10	0066-0000-0014	Adams	22.50	Agri/Res	0.93%	0.99%	825
11	0066-0000-0014	Brumfield	8.02	Residential	0.33%	0.99%	495
12	0066-0000-0016	Roberts	6.85	Residential	0.28%	0.99%	505
13	0066-0000-0015	Cardinal Valley Fa	186.56	Agricultural	7.72%	0.99%	N/A
14	0066-0000-0016	Cross	9.73	Residential	0.40%	0.99%	435
15	0066-0000-0008	Bucher	1.64	Residential	0.07%	0.99%	400
16	0066-0000-0017	Day	0.27	Residential	0.01%	0.99%	575
17	0066-0000-0008	Red House Baptist	4.52	Residential	0.19%	0.99%	N/A
18	0066-0000-0009	Red House Baptist	11.03	Residential	0.46%	0.99%	N/A
19	0066-0000-00RR	Unknown	3.87	Residential	0.16%	0.99%	N/A
20	0066-0000-0007	Burke	74.00	Agri/Res	3.06%	0.99%	930
21	0066-0000-0019	Tevis	20.00	Agri/Res	0.83%	0.99%	760
22	0066-0000-0021	Parke	36.67	Agricultural	1.52%	0.99%	N/A
23	0066-0000-0018	Sears	14.66	Residential	0.61%	0.99%	710
24	0066-0000-0018	Northern Propertie	14.03	Residential	0.58%	0.99%	N/A
25	0066-0000-0018	Agee	1.00	Residential	0.04%	0.99%	545
26	0066-0000-0018	Boggs	6.63	Residential	0.27%	0.99%	715
27	066-0000-0017	JRice	7.88	Residential	0.33%	0.99%	805
28	0066-0000-0017	Overpeck	1.00	Residential	0.04%	0.99%	1,075
29	0066-0000-0017	Vogler	5.06	Residential	0.21%	0.99%	1,115
30	0066-0000-0018	Moberly	1.31	Residential	0.05%	0.99%	995
31	0066-0000-0018	Northern	1.32	Residential	0.05%	0.99%	1,130
32	0066-0000-0017	KBC LLC	13.73	Residential	0.57%	0.99%	1,405
33	0066-0000-0024	Oliver	35.20	Agricultural	1.46%	0.99%	N/A
34	0066-0000-0024	Oliver	6.45	Residential	0.27%	0.99%	910
35	0066-0000-0024	Kablen	5.03	Residential	0.21%	0.99%	1,210
36	0066-0000-0017	Wells	42.65	Agri/Res	1.77%	0.99%	590
37	0067-0000-0002	Lynn	1.98	Residential	0.08%	0.99%	1,560
38	0067-0000-0002	Masters	23.88	Agri/Res	0.99%	0.99%	1,545
39	0066-0000-0025	Hamilton	13.04	Residential	0.54%	0.99%	610
40	0067-0000-0002	Richardson	20.44	Agri/Res	0.85%	0.99%	575
41	0067-0000-0001	MckKinney	1.02	Residential	0.04%	0.99%	480
42	0067-0000-0001	Ginter	1.01	Residential	0.04%	0.99%	460

#	MAP ID	Owner	GIS Data		Adjoin	Adjoin	Distance (ft)
			Acres	Present Use	Acres	Parcels	Home/Panel
43	0067-0000-0001	Arms	1.12	Residential	0.05%	0.99%	375
44	0067-0000-0001	Lyons	2.19	Residential	0.09%	0.99%	400
45	0067-0000-0003	Campbell	1.01	Residential	0.04%	0.99%	395
46	0067-0000-0003	Day	20.00	Agri/Res	0.83%	0.99%	465
47	0067-0000-0003	Hall	10.00	Residential	0.41%	0.99%	410
48	0067-0000-0004	Bryant	0.77	Residential	0.03%	0.99%	470
49	0067-0000-0004	Correa	9.62	Residential	0.40%	0.99%	N/A
50	0054-0000-0005	Witt	315.00	Agri/Res	13.04%	0.99%	340
51	0053-0000-0038	Callebs	2.51	Residential	0.10%	0.99%	775
52	0053-0000-0038	Moberly	13.47	Residential	0.56%	0.99%	415
53	0053-0000-0038	Kelley	5.08	Residential	0.21%	0.99%	885
54	0053-0000-0048	Bucher	37.55	Agricultural	1.55%	0.99%	N/A
55	0053-0000-0048	Bucher	2.36	Residential	0.10%	0.99%	850
56	0066-0000-0031	Buck	5.00	Residential	0.21%	0.99%	1,095
57	0066-0000-0030	Wilson	5.00	Residential	0.21%	0.99%	1,005
58	0066-0000-0017	Hall	4.25	Residential	0.18%	0.99%	1,045
59	0066-0000-0017	Logan	4.66	Residential	0.19%	0.99%	835
60	0066-0000-0029	Harrison	1.43	Residential	0.06%	0.99%	860
61	0066-0000-0028	Thompson	1.30	Residential	0.05%	0.99%	920
62	0066-0000-0027	Mcintosh	12.54	Residential	0.52%	0.99%	1,150
63	0066-0000-0032	Caudill	4.90	Residential	0.20%	0.99%	1,130
64	0053-0000-0041	Christ	6.97	Religious	0.29%	0.99%	940
65	0053-0000-0041	Landon	11.65	Residential	0.48%	0.99%	1,000
66	0053-0000-0041	Brockman	32.11	Agri/Res	1.33%	0.99%	1,195
67	0053-0000-0041	Brockman	14.88	Residential	0.62%	0.99%	N/A
68	0053-0000-0041	McCarty	18.77	Residential	0.78%	0.99%	N/A
69	0053-0000-0041	McCarty	40.75	Agricultural	1.69%	0.99%	N/A
70	0053-0000-0041	Turner	6.77	Residential	0.28%	0.99%	1,410
71	0053-0000-0040	Indian LLC	140.00	Agri/Res	5.79%	0.99%	2,190
72	0053-0000-0039	Holbrook	3.06	Residential	0.13%	0.99%	765
73	0053-0000-0037	Unknown	21.12	Agricultural	0.87%	0.99%	N/A
74	0053-0000-0039	Gillum	21.82	Agri/Res	0.90%	0.99%	1,155
75	0053-0000-0039	Campbell	5.00	Residential	0.21%	0.99%	995
76	0053-0000-0018	East Inc	6.11	Substation	0.25%	0.99%	N/A
77	0053-0000-0071	Barber	5.96	Residential	0.25%	0.99%	805
78	0053-0000-0070	Jones	4.66	Residential	0.19%	0.99%	870
79	0053-0000-0072	Bragg	12.91	Residential	0.53%	0.99%	905
80	0053-0000-0058	Timberlake	5.12	Residential	0.21%	0.99%	775
81	053A-0001-0028	Young	3.84	Residential	0.16%	0.99%	N/A
82	053A-0001-0009	Renfro	0.91	Residential	0.04%	0.99%	1,110
83	053A-0001-0008	Holbrook	0.66	Residential	0.03%	0.99%	1,035
84	053A-0001-0006	Bailey	0.72	Residential	0.03%	0.99%	845
85	0053A-0001-000	Babcock	0.69	Residential	0.03%	0.99%	830

#	MAP ID	Owner	GIS Data		Adjoin	Adjoin	Distance (ft)
			Acres	Present Use	Acres	Parcels	Home/Panel
86	053A-0001-0029	Reynolds	1.17	Residential	0.05%	0.99%	965
87	0053-0001-0030	Reynolds	0.68	Residential	0.03%	0.99%	925
88	053A-0001-0032	Wilcox	0.37	Residential	0.02%	0.99%	870
89	053A-0001-0031	Wilcox	0.17	Residential	0.01%	0.99%	870
90	0053-0000-0013-	Bucher	1.09	Residential	0.05%	0.99%	715
91	0053-0000-0022-	Richardson	7.19	Residential	0.30%	0.99%	1,040
92	0053-0000-0022-	Mayo	4.82	Residential	0.20%	0.99%	1,225
93	0053-0000-0011	Phillips	1.25	Residential	0.05%	0.99%	765
94	0053-0000-0001	Sword LLC	111.28	Agri/Res	4.61%	0.99%	2,080
95	0053-0000-0010	Burgin	239.03	Agri/Res	9.89%	0.99%	495
96	0053-0000-0014	Hart	31.79	Agricultural	1.32%	0.99%	N/A
97	0053-0000-0013-	Floyd	5.01	Residential	0.21%	0.99%	705
98	0053-0000-0015	Hart	51.79	Agri/Res	2.14%	0.99%	795
99	0065-0000-0042	Hart	93.00	Agri/Res	3.85%	0.99%	1,000
100	0053-0000-0016-	Turner	0.14	Cell Tower	0.01%	0.99%	N/A
101	0065-0000-0043-	Coomer	2.67	Residential	0.11%	0.99%	350
Total			2416.272		100.00%	100.00%	873

I. Summary of Solar Projects in Kentucky

I have researched the solar projects in Kentucky. I identified the solar farms through the Solar Energy Industries Association (SEIA) Major Projects List and then excluded the roof mounted facilities. This leaves only six solar farms in Kentucky for analysis at this time.

One of these six solar farms has limited analysis potential: E.W. Brown near Harrodsburg in Mercer County. The E. W. Brown 10 MW solar farm was built in 2014 and adjoins three coal-fired units. Given that research studies that I have previously read regarding fossil fuel power plants including “The Effect of Power Plants on Local Housing Values and Rents” by Lucas W. Davis and published May 2010, it would not be appropriate to use any data from this solar farm due to the influence of the coal fired power plant that could have an impact on up to a one-mile radius. I note that the closest home to a solar panel at this site is 565 feet and the average distance is 1,026 feet. The homes are primarily clustered at the Herrington Lake frontage. Again, no usable data can be derived from this solar farm due to the adjoining coal fired plant.

Furthermore, the Cooperative solar farm in Shelby County is a 0.5 MW facility on 35 acres built in 2020 that is proposed to eventually be 4 MW. This project is too new and there have been no home sales adjoining this facility. I also cannot determine how close the nearby homes are to the adjoining solar panels as the aerial imagery does not yet show these panels.

I have provided a summary of projects below and additional detailed information on the projects on the following pages. I specifically note the similarity in most of the sites in Kentucky as compared to most of the states that I have searched before in terms of mix of adjoining uses, topography, and distances to adjoining homes.

The number of solar farms currently in Kentucky is low compared to a number of other states and NC in particular. I have looked at solar farms in Kentucky for sales activity, but the small number of sites coupled with the relatively short period of time these solar farms have been in place has not provided as many examples of sales adjoining a solar farm as I am able to pull from other places. I have therefore also considered sales in other states, but I have shown in the summary how the demographics around the solar farms in other locations relate to the demographics around the proposed solar farm to show that generally similar locations are being considered. The similarity of the sites in terms of adjoining uses and surrounding demographics makes it reasonable to compare the lack of significant impacts in other areas would translate into a similar lack of significant impact at the subject site.

Parcel #	State	County	City	Name	Output (MW)	Total Acres	Used Acres	Avg. Dist to home	Closest Home	Adjoining Use by Acre			
										Res	Agri	Agri/Res	Com
610	KY	Warren	Bowling Green	Bowling Green	2	17.36	17.36	720	720	1%	64%	0%	36%
611	KY	Clarky	Winchester	Cooperative Solar I	8.5	181.47	63	2,110	2,040	0%	96%	3%	0%
612	KY	Kenton	Walton	Walton 2	2	58.03	58.03	891	120	21%	0%	60%	19%
613	KY	Grant	Crittenden	Crittenden	2.7	181.7	34.1	1,035	345	22%	27%	51%	0%
659	KY	Shelby	Simpsonville	Cooperative Shelby	4	35	35			6%	11%	32%	52%
660	KY	Mercer	Harrodsburg	E.W. Brown	10	50	50	1,026	565	3%	44%	29%	25%
Total Number of Solar Farms					6								
Average					4.87	87.3	42.9	1156	758	9%	40%	29%	22%
Median					3.35	54.0	42.5	1026	565	4%	36%	30%	22%
High					10.00	181.7	63.0	2110	2040	22%	96%	60%	52%
Low					2.00	17.4	17.4	720	120	0%	0%	0%	0%

610: Bowling Green Solar, Bowling Green, KY



This project was built in 2011 and located on 17.36 acres for a 2 MW project on Scotty's Way with the adjoining uses being primarily industrial. The closest dwelling is 720 feet from the nearest panel.

Adjoining Use Breakdown

	Acreage	Parcels
Residential	0.58%	10.00%
Agricultural	63.89%	30.00%
Industrial	35.53%	60.00%
Total	100.00%	100.00%

611: Cooperative Solar I, Winchester, KY



This project was built in 2017 on 63 acres of a 181.47-acre parent tract for an 8.5 MW project with the closest home at 2,040 feet from the closest solar panel.

Adjoining Use Breakdown

	Acreage	Parcels
Residential	0.15%	11.11%
Agricultural	96.46%	77.78%
Agri/Res	3.38%	11.11%
Total	100.00%	100.00%

612: Walton 2 Solar, Walton, KY



This project was built in 2017 on 58.03 acres for a 2 MW project with the closest home 120 feet from the closest panel.

Adjoining Use Breakdown

	Acreage	Parcels
Residential	20.84%	47.06%
Agri/Res	59.92%	17.65%
Commercial	19.25%	35.29%
Total	100.00%	100.00%

613: Crittenden Solar, Crittenden, KY



This project was built in late 2017 on 34.10 acres out of a 181.70-acre tract for a 2.7 MW project where the closest home is 345 feet from the closest panel.

Adjoining Use Breakdown

	Acreage	Parcels
Residential	1.65%	32.08%
Agricultural	73.39%	39.62%
Agri/Res	23.05%	11.32%
Commercial	0.64%	9.43%
Industrial	0.19%	3.77%
Airport	0.93%	1.89%
Substation	0.15%	1.89%
Total	100.00%	100.00%

659: Cooperative Shelby Solar, Simpsonville, KY



This project was built in 2020 on 35 acres for a 0.5 MW project that is approved for expansion up to 4 MW.

Adjoining Use Breakdown

	Acreage	Parcels
Residential	6.04%	44.44%
Agricultural	10.64%	11.11%
Agri/Res	31.69%	33.33%
Institutional	51.62%	11.11%
Total	100.00%	100.00%

660: E.W. Brown Solar, Harrodsburg, KY



This project was built in 2016 on 50 acres for a 10 MW project. This solar facility adjoins three coal-fired units, which makes analysis of these nearby home sales problematic as it is impossible to extract the impact of the coal plant on the nearby homes especially given the lake frontage of the homes shown.

Adjoining Use Breakdown

	Acreage	Parcels
Residential	2.77%	77.27%
Agricultural	43.92%	9.09%
Agri/Res	28.56%	9.09%
Industrial	24.75%	4.55%
Total	100.00%	100.00%

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 Virginia, South Carolina, Tennessee, Texas, Oregon, Mississippi, Maryland, New York, California, Missouri, Florida, Montana, Georgia, Kentucky, and New Jersey.

Wherever I have looked at solar farms, I have derived a breakdown of the adjoining uses to show what adjoining uses are typical for solar farms and what uses would likely be considered consistent with a solar farm use similar to the breakdown that I've shown for the subject property on the previous page. 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 650 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 strikingly 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.

I have previously been asked by the Kentucky Siting Board about how the 37 solar farms and the 81 matched pair sets were chosen. This is the total of all the usable home and land sales adjoining the 650+ solar farms that I have looked at over the last 9 years. Most of the solar farms that I have looked at are only a few years old and have not been in place long enough for home or land sales to occur next to them for me to analyze. There is nothing unusual about this given the relatively rural locations of most of the solar farms where home and land sales occur much less frequently and the number of adjoining homes is relatively small.

Essentially, I go back through the solar farms that I have looked at roughly once a year to see if there are any new sales. If there is a sale I have to be sure it is not an inhouse sale or to a related family member. A great many of the rural sales that I find are from one family member to another, which makes analysis impossible given that these are not “arm’s length” transactions. There are also numerous examples of sales that are “arm’s length” but are still not usable due to other factors such as adjoining significant negative factors such as a coal fired plant or at a landfill or prison. I have looked at homes that require a driveway crossing a railroad spur, homes in close proximity to large industrial uses, as well as homes adjoining large state parks, or homes that are over 100 years old with multiple renovations. Such sales are not usable as they have multiple factors impacting the value that are tangled together. You can’t isolate the impact of the coal fired plant, the industrial building, or the railroad unless you are comparing that sale to a similar property with similar impacts. Matched pair analysis requires that you isolate properties that only have one differential to test for, which is why the type of sales noted above is not appropriate for analysis.

So once I go through all of the sales and eliminate the family transactions and those sales with multiple differentials, I am left with 81 matched pairs to analyze. The only other sales that I have eliminated from the analysis are home sales under \$100,000, which there haven’t been many such examples, but at that price range it is difficult to identify any impacts through matched pair analysis. As can be seen from a later question, I have not cherry picked the data to include just the sales that support one direction in value, but I have included all of them both positive and negative with a preponderance of the evidence supporting no impact to mild positive impacts.

A. *Kentucky Data*

1. 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	

Adjustments

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
Adjoins	250 Claiborne								\$120,000			373
Not	1250 Cason	\$2,081		\$2,850	\$26,144			-\$5,000	-\$5,000	\$116,075	3%	
Not	410 Reeves	\$249		\$0	\$24,615				\$104,865	13%		
Not	315 N Fork	-\$1,091		\$4,280	\$10,700				\$120,889	-1%		
											5%	

I also looked at three other home sales on this street as shown below. These are stick-built homes and show a higher price range.

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	\$212,720	2003	1,568	\$135.66	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

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
Adjoins	300 Claiborne								\$213,000			488
Not	460 Claiborne	-\$2,026		-\$4,580	\$15,457	\$5,000			\$242,850	-14%		
Not	2160 Sherman	-\$5,672		-\$2,650	-\$20,406				\$236,272	-11%		
Not	215 Lexington	\$1,072		\$3,468	-\$2,559	-\$5,000			\$228,180	-7%		
											-11%	

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

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
Adjoins	350 Claiborne								\$245,000			720
Not	460 Claiborne	-\$3,223		-\$5,725	\$30,660	\$5,000			\$255,712	-4%		
Not	2160 Sherman	-\$7,057		-\$3,975	-\$5,743				\$248,225	-1%		
Not	215 Lexington	-\$136		\$2,312	\$11,400	-\$5,000			\$239,776	2%		
											-1%	

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 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										Avg		
Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	% Diff	Distance
Adjoins	370 Claiborne								\$273,000			930
Not	2160 Sherman	\$1,831		\$0	-\$20,161				\$246,670	10%		
Not	2290 Dry	\$2,260		\$20,349	\$23,256	\$2,500			\$287,765	-5%		
Not	125 Lexington	\$9,951		\$4,800					\$254,751	7%		
											4%	

This set of matched pairs shows a general positive 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 variation in 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 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.

Furthermore, the comments of the local broker strongly support the data that shows no negative impact on value due to the proximity to the solar farm. This is further supported by the national data that is shown on the following pages.

B. National Data

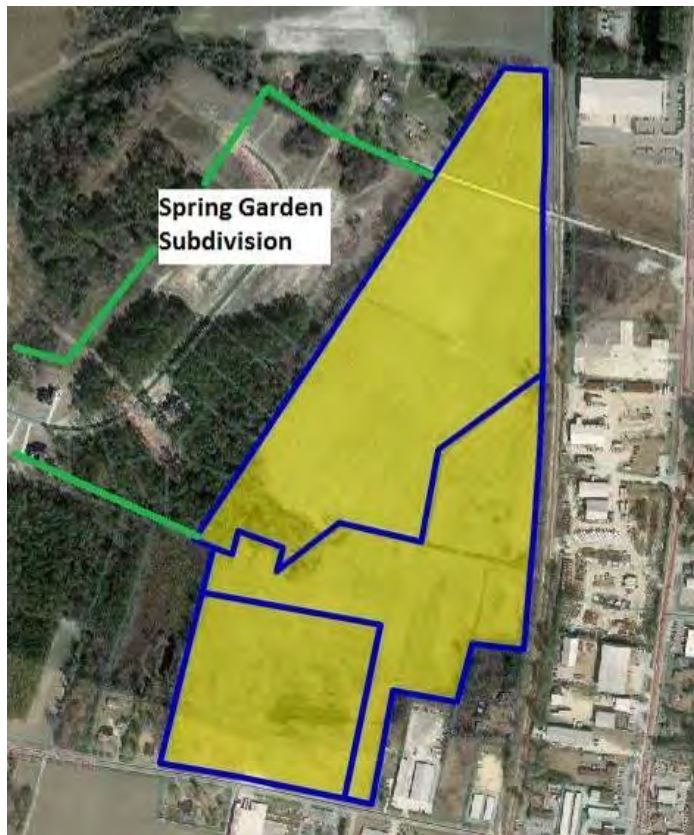
1. Matched Pair – AM Best Solar Farm, Goldsboro, NC

This solar farm adjoins Spring Garden Subdivision which had new homes and lots available for new construction during the approval and construction of the solar farm. The recent home sales have ranged from \$200,000 to \$250,000. This subdivision sold out the last homes in late 2014. The solar farm is clearly visible particularly along the north end of this street where there is only a thin line of trees separating the solar farm from the single-family homes.






Homes backing up to the solar farm are selling at the same price for the same floor plan as the homes that do not back up to the solar farm in this subdivision. According to the builder, the solar farm has been a complete non-factor. Not only do the sales show no difference in the price paid for the various homes adjoining the solar farm versus not adjoining the solar farm, but there are actually more recent sales along the solar farm than not. There is no impact on the sellout rate, or time to sell for the homes adjoining the solar farm.

I spoke with a number of owners who adjoin the solar farm and none of them expressed any concern over the solar farm impacting their property value.

The data presented on the following page shows multiple homes that have sold in 2013 and 2014 adjoining the solar farm at prices similar to those not along the solar farm. These series of sales indicate that the solar farm has no impact on the adjoining residential use.



The homes that were marketed at Spring Garden are shown below.

	<p>Americana SqFt: 3,194 Bed / Bath: 3 / 3.5</p>	<p>Price: \$237,900 View Now »</p>		<p>Washington SqFt: 3,292 Bed / Bath: 4 / 3.5</p>	<p>Price: \$244,900 View Now »</p>
	<p>Presidential SqFt: 3,400 Bed / Bath: 5 / 3.5</p>	<p>Price: \$247,900 View Now »</p>		<p>Kennedy SqFt: 3,494 Bed / Bath: 5 / 3</p>	<p>Price: \$249,900 View Now »</p>
	<p>Virginia SqFt: 3,449 Bed / Bath: 5 / 3</p>	<p>Price: \$259,900 View Now »</p>			

Matched Pairs

As of Date: 9/3/2014

Adjoining Sales After Solar Farm Completed

TAX ID	Owner	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	Style
3600195570	Helm	0.76	Sep-13	\$250,000	2013	3,292	\$75.94	2 Story
3600195361	Leak	1.49	Sep-13	\$260,000	2013	3,652	\$71.19	2 Story
3600199891	McBrayer	2.24	Jul-14	\$250,000	2014	3,292	\$75.94	2 Story
3600198632	Foresman	1.13	Aug-14	\$253,000	2014	3,400	\$74.41	2 Story
3600196656	Hinson	0.75	Dec-13	\$255,000	2013	3,453	\$73.85	2 Story
	Average	1.27		\$253,600	2013.4	3,418	\$74.27	
	Median	1.13		\$253,000	2013	3,400	\$74.41	

Adjoining Sales After Solar Farm Announced

TAX ID	Owner	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	Style
0	Feddersen	1.56	Feb-13	\$247,000	2012	3,427	\$72.07	Ranch
0	Gentry	1.42	Apr-13	\$245,000	2013	3,400	\$72.06	2 Story
	Average	1.49		\$246,000	2012.5	3,414	\$72.07	
	Median	1.49		\$246,000	2012.5	3,414	\$72.07	

Adjoining Sales Before Solar Farm Announced

TAX ID	Owner	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	Style
3600183905	Carter	1.57	Dec-12	\$240,000	2012	3,347	\$71.71	1.5 Story
3600193097	Kelly	1.61	Sep-12	\$198,000	2012	2,532	\$78.20	2 Story
3600194189	Hadwan	1.55	Nov-12	\$240,000	2012	3,433	\$69.91	1.5 Story
	Average	1.59		\$219,000	2012	2,940	\$74.95	
	Median	1.59		\$219,000	2012	2,940	\$74.95	

Nearby Sales After Solar Farm Completed

TAX ID	Owner	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	Style
3600193710	Barnes	1.12	Oct-13	\$248,000	2013	3,400	\$72.94	2 Story
3601105180	Nackley	0.95	Dec-13	\$253,000	2013	3,400	\$74.41	2 Story
3600192528	Mattheis	1.12	Oct-13	\$238,000	2013	3,194	\$74.51	2 Story
3600198928	Beckman	0.93	Mar-14	\$250,000	2014	3,292	\$75.94	2 Story
3600196965	Hough	0.81	Jun-14	\$224,000	2014	2,434	\$92.03	2 Story
3600193914	Preskitt	0.67	Jun-14	\$242,000	2014	2,825	\$85.66	2 Story
3600194813	Bordner	0.91	Apr-14	\$258,000	2014	3,511	\$73.48	2 Story
3601104147	Shaffer	0.73	Apr-14	\$255,000	2014	3,453	\$73.85	2 Story
	Average	0.91		\$246,000	2013.625	3,189	\$77.85	
	Median	0.92		\$249,000	2014	3,346	\$74.46	

Nearby Sales Before Solar Farm Announced

TAX ID	Owner	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	Style
3600191437	Thomas	1.12	Sep-12	\$225,000	2012	3,276	\$68.68	2 Story
3600087968	Lilley	1.15	Jan-13	\$238,000	2012	3,421	\$69.57	1.5 Story
3600087654	Burke	1.26	Sep-12	\$240,000	2012	3,543	\$67.74	2 Story
3600088796	Hobbs	0.73	Sep-12	\$228,000	2012	3,254	\$70.07	2 Story
	Average	1.07		\$232,750	2012	3,374	\$69.01	
	Median	1.14		\$233,000	2012	3,349	\$69.13	

Matched Pair Summary

	Adjoins Solar Farm		Nearby Solar Farm	
	Average	Median	Average	Median
Sales Price	\$253,600	\$253,000	\$246,000	\$249,000
Year Built	2013	2013	2014	2014
Size	3,418	3,400	3,189	3,346
Price/SF	\$74.27	\$74.41	\$77.85	\$74.46

Percentage Differences

Median Price	-2%
Median Size	-2%
Median Price/SF	0%

I note that 2308 Granville Drive sold again in November 2015 for \$267,500, or \$7,500 more than when it was purchased new from the builder two years earlier (Tax ID 3600195361, Owner: Leak). The neighborhood is clearly showing appreciation for homes adjoining the solar farm.

The Median Price is the best indicator to follow in any analysis as it avoids outlying samples that would otherwise skew the results. The median sizes and median prices are all consistent throughout the sales both before and after the solar farm whether you look at sites adjoining or nearby to the solar farm. The average for the homes nearby the solar farm shows a smaller building size and a higher price per square foot. This reflects a common occurrence in real estate where the price per square foot goes up as the size goes down. This is similar to the discount you see in any market where there is a discount for buying larger volumes. So when you buy a 2 liter coke you pay less per ounce than if you buy a 16 oz. coke. So even comparing averages the indication is for no impact, but I rely on the median rates as the most reliable indication for any such analysis.

I have also considered four more recent resales of homes in this community as shown on the following page. These comparable sales adjoin the solar farm at distances ranging from 315 to 400 feet. The matched pairs show a range from -9% to +6%. The range of the average difference is -2% to +1% with an average of 0% and a median of +0.5%. These comparable sales support a finding of no 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
	Adjoins	103 Granville Pl	1.42	7/27/2018	\$265,000	2013	3,292	\$80.50	4/3.5	2-Car	2-Story		385
	Not	2219 Granville	1.15	1/8/2018	\$260,000	2012	3,292	\$78.98	4/3.5	2-Car	2-Story		
	Not	634 Friendly	0.96	7/31/2019	\$267,000	2018	3,053	\$87.45	4/4.5	2-Car	2-Story		
	Not	2403 Granville	0.69	4/23/2019	\$265,000	2014	2,816	\$94.11	5/3.5	2-Car	2-Story		
												Avg	
	Adjoins	103 Granville Pl										Total	% Diff
	Not	2219 Granville	\$4,382		\$1,300	\$0						\$265,000	-2%
	Not	634 Friendly	-\$8,303		-\$6,675	\$16,721	-\$10,000					\$258,744	2%
	Not	2403 Granville	-\$6,029		-\$1,325	\$31,356						\$289,001	-9%

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
	Adjoins	104 Erin	2.24	6/19/2017	\$280,000	2014	3,549	\$78.90	5/3.5	2-Car	2-Story		315
	Not	2219 Granville	1.15	1/8/2018	\$260,000	2012	3,292	\$78.98	4/3.5	2-Car	2-Story		
	Not	634 Friendly	0.96	7/31/2019	\$267,000	2018	3,053	\$87.45	4/4.5	2-Car	2-Story		
	Not	2403 Granville	0.69	4/23/2019	\$265,000	2014	2,816	\$94.11	5/3.5	2-Car	2-Story		
												Avg	
	Adjoins	104 Erin										Total	% Diff
	Not	2219 Granville	-\$4,448		\$2,600	\$16,238						\$280,000	0%
	Not	634 Friendly	-\$17,370		-\$5,340	\$34,702	-\$10,000					\$274,390	2%
	Not	2403 Granville	-\$15,029		\$0	\$48,285						\$268,992	4%
												\$298,256	-7%

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
	Adjoins	2312 Granville	0.75	5/1/2018	\$284,900	2013	3,453	\$82.51	5/3.5	2-Car	2-Story		400
	Not	2219 Granville	1.15	1/8/2018	\$260,000	2012	3,292	\$78.98	4/3.5	2-Car	2-Story		
	Not	634 Friendly	0.96	7/31/2019	\$267,000	2018	3,053	\$87.45	4/4.5	2-Car	2-Story		
	Not	2403 Granville	0.69	4/23/2019	\$265,000	2014	2,816	\$94.11	5/3.5	2-Car	2-Story		
												Avg	
	Adjoins	2312 Granville										Total	% Diff
	Not	2219 Granville	\$2,476		\$1,300	\$10,173						\$284,900	1%
	Not	634 Friendly	-\$10,260		-\$6,675	\$27,986	-\$10,000					\$273,948	4%
	Not	2403 Granville	-\$7,972		-\$1,325	\$47,956						\$268,051	6%
												\$303,659	-7%

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Distance
	Adjoins	2310 Granville	0.76	5/14/2019	\$280,000	2013	3,292	\$85.05	5/3.5	2-Car	2-Story		400
	Not	2219 Granville	1.15	1/8/2018	\$260,000	2012	3,292	\$78.98	4/3.5	2-Car	2-Story		
	Not	634 Friendly	0.96	7/31/2019	\$267,000	2018	3,053	\$87.45	4/4.5	2-Car	2-Story		
	Not	2403 Granville	0.69	4/23/2019	\$265,000	2014	2,816	\$94.11	5/3.5	2-Car	2-Story		
												Avg	
	Adjoins	2310 Granville										Total	% Diff
	Not	2219 Granville	\$10,758		\$1,300	\$0						\$280,000	1%
	Not	634 Friendly	-\$1,755		-\$6,675	\$16,721	-\$10,000					\$272,058	3%
	Not	2403 Granville	\$469		-\$1,325	\$31,356						\$265,291	5%
												\$295,500	-6%

I have also considered the original sales prices in this subdivision relative to the recent resale values as shown in the chart below. This rate of appreciation is right at 2.5% over the last 6 years. Zillow indicates that the average home value within the 27530 zip code as of January 2014 was \$101,300 and as of January 2020 that average is \$118,100. This indicates an average increase in the market of 2.37%. I conclude that the appreciation of the homes adjoining the solar farm are not impacted by the presence of the solar farm based on this data.

Address	Initial Sale		Second Sale		Year Diff	Apprec. Apprec.	% Apprec.	Apprec. %/Year
	Date	Price	Date	Price				
1 103 Granville Pl	4/1/2013	\$245,000	7/27/2018	\$265,000	5.32	\$20,000	8.16%	1.53%
2 105 Erin	7/1/2014	\$250,000	6/19/2017	\$280,000	2.97	\$30,000	12.00%	4.04%
3 2312 Granville	12/1/2013	\$255,000	5/1/2015	\$262,000	1.41	\$7,000	2.75%	1.94%
4 2312 Granville	5/1/2015	\$262,000	5/1/2018	\$284,900	3.00	\$22,900	8.74%	2.91%
5 2310 Granville	8/1/2013	\$250,000	5/14/2019	\$280,000	5.79	\$30,000	12.00%	2.07%
6 2308 Granville	9/1/2013	\$260,000	11/12/2015	\$267,500	2.20	\$7,500	2.88%	1.31%
7 2304 Granville	9/1/2012	\$198,000	6/1/2017	\$225,000	4.75	\$27,000	13.64%	2.87%
8 102 Erin	8/1/2014	\$253,000	11/1/2016	\$270,000	2.25	\$17,000	6.72%	2.98%
							Average	2.46%
							Median	2.47%

2. Matched Pair – White Cross Solar Farm, Chapel Hill, NC



A new solar farm was built at 2159 White Cross Road in Chapel Hill, Orange County in 2013. After construction, the owner of the underlying land sold the balance of the tract not encumbered by the solar farm in July 2013 for \$265,000 for 47.20 acres, or \$5,606 per acre. This land adjoins the solar farm to the south and was clear cut of timber around 10 years ago. I compared this purchase to a nearby transfer of 59.09 acres of timber land just south along White Cross Road that sold in November 2010 for \$361,000, or \$6,109 per acre. After purchase, this land was divided into three mini farm tracts of 12 to 20 acres each. These rates are very similar and the difference in price per acre is attributed to the timber value and not any impact of the solar farm.

Type	TAX ID	Owner	Acres	Date	Price	\$/Acre	Notes	Conf By
Adjoins Solar	9748336770	Haggerty	47.20	Jul-13	\$265,000	\$5,614	Clear cut	Betty Cross, broker
Not Near Solar	9747184527	Purcell	59.09	Nov-10	\$361,000	\$6,109	Wooded	Dickie Andrews, broker

The difference in price is attributed to the trees on the older sale.

No impact noted for the adjacency to a solar farm according to the broker.

I looked at a number of other nearby land sales without proximity to a solar farm for this matched pair, but this land sale required the least allowance for differences in size, utility and location.

Matched Pair Summary

	Adjoins Solar Farm		Nearby Solar Farm	
	Average	Median	Average	Median
Sales Price	\$5,614	\$5,614	\$6,109	\$6,109
Adjustment for Timber	\$500	\$500		
Adjusted	\$6,114	\$6,114	\$6,109	\$6,109
Tract Size	47.20	47.20	59.09	59.09

Percentage Differences

Median Price Per Acre 0%

This matched pair again supports the conclusion that adjacency to a solar farm has no impact on adjoining residential/agricultural land.

3. Matched Pair – Wagstaff Farm, Roxboro, NC



This solar farm is located at the northeast corner of a 594-acre farm with approximately 30 acres of solar farm area. This solar farm was approved and constructed in 2013.

After approval, 18.82 acres were sold out of the parent tract to an adjoining owner to the south. This sale was at a similar price to nearby land to the east that sold in the same time from for the same price per acre as shown below.

Type	TAX ID	Owner	Acres	Present Use	Date Sold	Price	\$/AC
Adjoins Solar	0918-17-11-7960	Piedmont	18.82	Agricultural	8/19/2013	\$164,000	\$8,714
Not Near Solar	0918-00-75-9812 et al	Blackwell	14.88	Agricultural	12/27/2013	\$130,000	\$8,739

Matched Pair Summary

	Adjoins Solar Farm		Nearby Solar Farm	
	Average	Median	Average	Median
Sales Price	\$8,714	\$8,714	\$8,739	\$8,739
Tract Size	18.82	18.82	14.88	14.88

Percentage Differences

Median Price Per Acre 0%

This matched pair again supports the conclusion that adjacency to a solar farm has no impact on adjoining residential/agricultural land.

4. Matched Pair – Mulberry, Selmer, TN



This solar farm was built in 2014 on 208.89 acres with the closest home being 480 feet away.

This solar farm adjoins two subdivisions with Central Hills having a mix of existing and new construction homes. Lots in this development have been marketed for \$15,000 each with discounts offered for multiple lots being used for a single home site. I spoke with the agent with Rhonda Wheeler and Becky Hearnberger with United County Farm & Home Realty who noted that they have seen no impact on lot or home sales due to the solar farm in this community.

I have included a map below as well as data on recent sales activity on lots that adjoin the solar farm or are near the solar farm in this subdivision both before and after the announced plan for this solar farm facility. I note that using the same method I used to breakdown the adjoining uses at the subject property I show that the predominant adjoining uses are residential and agricultural, which is consistent with the location of most solar farms.

Adjoining Use Breakdown

	Acreage	Parcels
Commercial	3.40%	0.034
Residential	12.84%	79.31%
Agri/Res	10.39%	3.45%
Agricultural	73.37%	13.79%
Total	100.00%	100.00%

From the above map, I identified four recent sales of homes that occurred adjoining the solar farm both before and after the announcement of the solar farm. I have adjusted each of these for differences in size and age in order to compare these sales among themselves. As shown below after adjustment, the median value is \$130,776 and the sales prices are consistent with one outlier which is also the least comparable home considered. The close grouping and the similar price per point overall as well as the similar price per square foot both before and after the solar farm.

Matched Pairs

#	TAX ID	Owner	Date Sold	Sales Price	Acres	Built	GBA	\$/GBA	Style	Parking
6&7	0900 A 011.00	Henson	Jul-14	\$130,000	2.65	2007	1,511	\$86.04	1 Story	2 Garage
12	0900 A 003.00	Amerson	Aug-12	\$130,000	1.20	2011	1,586	\$81.97	1 Story	2 Garage
15	099C A 003.00	Smallwood	May-12	\$149,900	1.00	2002	1,596	\$93.92	1 Story	4 Garage
16	099C A 002.00	Hessing	Jun-15	\$130,000	1.00	1999	1,782	\$72.95	1 Story	2 Garage
		Average		\$134,975	1.46	2005	1,619	\$83.72		
		Median		\$130,000	1.10	2005	1,591	\$84.00		

#	TAX ID	Owner	Date Sold	Sales Price	Adjustments*					
					Acres	Built	GBA	Style	Parking	Total
6&7	0900 A 011.00	Henson	Jul-14	\$130,000	-\$7,500	\$2,600	\$6,453	\$0	\$0	\$131,553
12	0900 A 003.00	Amerson	Aug-12	\$130,000	\$0	\$0	\$0	\$0	\$0	\$130,000
15	099C A 003.00	Smallwood	May-12	\$149,900	\$0	\$6,746	-\$939	\$0	-\$15,000	\$140,706
16	099C A 002.00	Hessing	Jun-15	\$130,000	\$0	\$7,800	-\$14,299	\$0	\$0	\$123,501
		Average		\$134,975	-\$1,875	\$4,286	-\$2,196	\$0	-\$3,750	\$131,440
		Median		\$130,000	\$0	\$4,673	-\$470	\$0	\$0	\$130,776

* I adjusted all of the comparables to a base line 2011 Year Built and 1,586 s.f. based on Lot 12

I also considered a number of similar home sales nearby that were both before and after the solar farm was announced as shown below. These homes are generally newer in construction and include a number of larger homes but show a very similar price point per square foot.

Nearby Sales Before Solar Farm Announced

TAX ID	Owner	Date Sold	Sales Price	Acres	Built	GBA	\$/GBA	Style	Parking
099B A 019	Durrance	Sep-12	\$165,000	1.00	2012	2,079	\$79.37	1 Story	2 Garage
099B A 021	Berryman	Apr-12	\$212,000	2.73	2007	2,045	\$103.67	1 Story	2 Garage
0900 A 060	Nichols	Feb-13	\$165,000	1.03	2012	1,966	\$83.93	1 Story	2 Garage
	Average		\$180,667	1.59	2010	2,030	\$88.99		
	Median		\$165,000	1.03	2012	2,045	\$83.93		

Nearby Sales After Solar Farm Announced

TAX ID	Owner	Date Sold	Sales Price	Acres	Built	GBA	\$/GBA	Style	Parking
090N A 040	Carrithers	Mar-15	\$120,000	1.00	2010	1,626	\$73.80	1 Story	2 Garage
099C A 043	Cherry	Feb-15	\$148,900	2.34	2008	1,585	\$93.94	1 Story	2 Garage
	Average		\$134,450	1.67	2009	1,606	\$83.87		
	Median		\$134,450	1.67	2009	1,606	\$83.87		

I then adjusted these nearby sales using the same criteria as the adjoining sales to derive the following breakdown of adjusted values based on a 2011 year built 1,586 square foot home. The adjusted values are consistent with a median rate of \$128,665, which is actually lower than the values for the homes that back up to the solar farm.

Nearby Sales Adjusted				Adjustments*					
TAX ID	Owner	Date Sold	Sales Price	Acres	Built	GBA	Style	Parking	Total
099B A 019	Durrance	Sep-12	\$165,000	\$0	-\$825	-\$39,127	\$0	\$0	\$125,048
099B A 021	Berryman	Apr-12	\$212,000	-\$7,500	\$4,240	-\$47,583	\$0	\$0	\$161,157
090O A 060	Nichols	Feb-13	\$165,000	\$0	-\$825	-\$31,892	\$0	\$0	\$132,283
090N A 040	Carrithers	Mar-15	\$120,000	\$0	\$600	-\$2,952	\$0	\$0	\$117,648
099C A 043	Cherry	Feb-15	\$148,900	-\$7,500	\$2,234	\$94	\$0	\$0	\$143,727
	Average		\$165,500	-\$1,875	\$798	-\$30,389	\$0	\$0	\$134,034
	Median		\$165,000	\$0	-\$113	-\$35,510	\$0	\$0	\$128,665

* I adjusted all of the comparables to a base line 2011 Year Built and 1,586 s.f. based on Lot 12

If you consider just the 2015 nearby sales, the range is \$117,648 to \$143,727 with a median of \$130,688. If you consider the recent adjoining sales the range is \$123,501 to \$131,553 with a median of \$127,527.

This difference is less than 3% in the median and well below the standard deviation in the sales. The entire range of the adjoining sales prices is overlapped by the range from the nearby sales. These are consistent data sets and summarized below.

Matched Pair Summary

	Adjoins Solar Farm		Nearby After Solar Farm	
	Average	Median	Average	Median
Sales Price	\$134,975	\$130,000	\$134,450	\$134,450
Year Built	2005	2005	2009	2009
Size	1,619	1,591	1,606	1,606
Price/SF	\$83.72	\$84.00	\$83.87	\$83.87

Based on the data presented above, I find that the price per square foot for finished homes is not being impacted negatively by the announcement of the solar farm. The difference in pricing in homes in the neighborhood is accounted for by differences in size, building age, and lot size. The median price for a home after those factors are adjusted for are consistent throughout this subdivision and show no impact due to the proximity of the solar farm. This is consistent with the comments from the broker I spoke with for this subdivision as well.

I have also run a number of direct matched comparisons on the sales adjoining this solar farm as shown below. These direct matched pairs include some of those shown above as well as additional more recent sales in this community. In each of these I have compared the one sale adjoining the solar farm to multiple similar homes nearby that do not adjoin a solar farm to look for any potential impact from the solar farm.

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
3	Adjoins	491 Dusty	6.86	10/28/2016	\$176,000	2009	1,801	\$97.72	3/2	2-Gar	Ranch	
	Not	820 Lake Trail	1.00	6/8/2018	\$168,000	2013	1,869	\$89.89	4/2	2-Gar	Ranch	
	Not	262 Country	1.00	1/17/2018	\$145,000	2000	1,860	\$77.96	3/2	2-Gar	Ranch	
	Not	35 April	1.15	8/16/2016	\$185,000	2016	1,980	\$93.43	3/2	2-Gar	Ranch	

Adjoining Sales Adjusted												
Parcel	Solar	Address	Acres	Time	Site	YB	GLA	Park	Other	Total	% Diff	Distance
3	Adjoins	491 Dusty								\$176,000		480
	Not	820 Lake Trail		-\$8,324	\$12,000	-\$3,360	-\$4,890			\$163,426	7%	
	Not	262 Country		-\$5,450	\$12,000	\$6,525	-\$3,680			\$154,396	12%	
	Not	35 April		\$1,138	\$12,000	-\$6,475	-\$13,380			\$178,283	-1%	
										Average	6%	

The best matched pair is 35 April Loop, which required the least adjustment and indicates a -1% increase in value due to the solar farm adjacency.

Adjoining Residential Sales After Solar Farm Built

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
12	Adjoins	57 Cooper	1.20	2/26/2019	\$163,000	2011	1,586	\$102.77	3/2	2-Gar	1.5 Story	Pool
	Not	191 Amelia	1.00	8/3/2018	\$132,000	2005	1,534	\$86.05	3/2	Drive	Ranch	
	Not	75 April	0.85	3/17/2017	\$134,000	2012	1,588	\$84.38	3/2	2-Crprt	Ranch	
	Not	345 Woodland	1.15	12/29/2016	\$131,000	2002	1,410	\$92.91	3/2	1-Gar	Ranch	

Adjoining Sales Adjusted												
Parcel	Solar	Address	Sales Price	Time	Site	YB	GLA	Park	Other	Total	% Diff	Distance
12	Adjoins	57 Cooper	\$163,000							\$163,000		685
	Not	191 Amelia	\$132,000	\$2,303		\$3,960	\$2,685	\$10,000	\$5,000	\$155,947	4%	
	Not	75 April	\$134,000	\$8,029	\$4,000	-\$670	-\$135	\$5,000	\$5,000	\$155,224	5%	
	Not	345 Woodland	\$131,000	\$8,710		\$5,895	\$9,811		\$5,000	\$160,416	2%	
										Average	4%	

The best matched pair is 191 Amelia, which was most similar in time frame of sale and indicates a +4% increase in value due to the solar farm adjacency.

Adjoining Residential Sales After Solar Farm Built

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
15	Adjoins	297 Country	1.00	9/30/2016	\$150,000	2002	1,596	\$93.98	3/2	4-Gar	Ranch	
	Not	185 Dusty	1.85	8/17/2015	\$126,040	2009	1,463	\$86.15	3/2	2-Gar	Ranch	
	Not	53 Glen	1.13	3/9/2017	\$126,000	1999	1,475	\$85.42	3/2	2-Gar	Ranch	Brick

Adjoining Sales Adjusted												
Parcel	Solar	Address	Sales Price	Time	Site	YB	GLA	Park	Other	Total	% Diff	Distance
15	Adjoins	297 Country	\$150,000							\$150,000		650
	Not	185 Dusty	\$126,040	\$4,355		-\$4,411	\$9,167	\$10,000		\$145,150	3%	
	Not	53 Glen	\$126,000	-\$1,699		\$1,890	\$8,269	\$10,000		\$144,460	4%	
										Average	3%	

The best matched pair is 53 Glen, which was most similar in time frame of sale and required less adjustment. It indicates a +4% increase in value due to the solar farm adjacency.

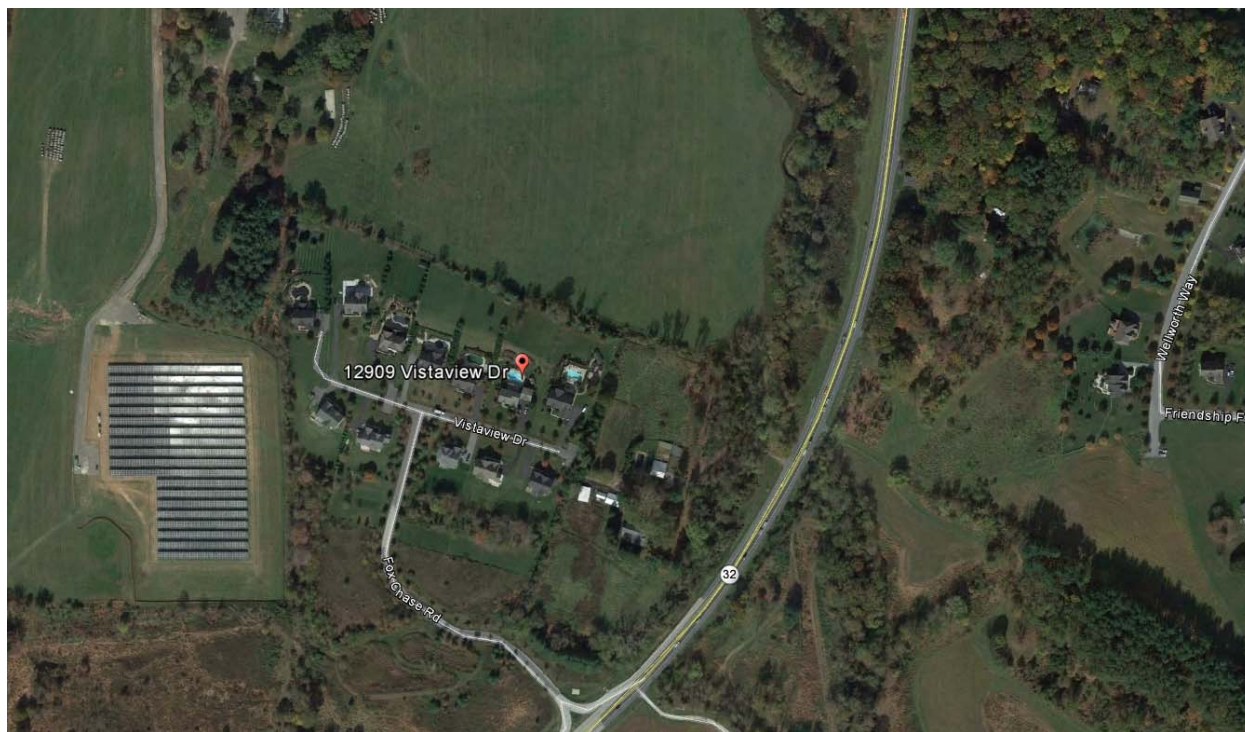
The average indicated impact from these three sets of matched pairs is +4%, which suggests a mild positive relationship due to adjacency to the solar farm.

I have also looked at several lot sales in this subdivision as shown below.

These are all lots within the same community and the highest prices paid are for lots one parcel off from the existing solar farm. These prices are fairly inconsistent, though they do suggest about a \$3,000 loss in the lots adjoining the solar farm. This is an atypical finding and additional details suggest there is more going on in these sales than the data crunching shows. First of all Parcel 4 was purchased by the owner of the adjoining home and therefore an atypical buyer seeking to expand a lot and the site is not being purchased for home development. Moreover, using the SiteToDoBusiness demographic tools, I found that the 1-mile radius around this development is expecting a total population increase over the next 5 years of 3 people. This lack of growing demand for lots is largely explained in that context. Furthermore, the fact that finished home sales as shown above are showing no sign of a negative impact on property value makes this data unreliable and inconsistent with the data shown in sales to an end user. I therefore place little weight on this outlier data.

Parcel	Solar	Address	Acres	Date Sold	Sales Price	4/18/2019	\$/AC	4/18/2019
						Adj for Time		Adj for Time
4	Adjoins	Shelter	2.05	10/25/2017	\$16,000	\$16,728	\$7,805	\$8,160
10	Adjoins	Carter	1.70	8/2/2018	\$14,000	\$14,306	\$8,235	\$8,415
11	Adjoins	Cooper	1.28	9/17/2018	\$12,000	\$12,215	\$9,375	\$9,543
	Not	75 Dusty	1.67	4/18/2019	\$20,000	\$20,000	\$11,976	\$11,976
	Not	Lake Trl	1.47	11/7/2018	\$13,000	\$13,177	\$8,844	\$8,964
	Not	Lake Trl	1.67	4/18/2019	\$20,000	\$20,000	\$11,976	\$11,976
		Adjoins	Per Acre	Not Adjoins	Per Acre	% DIF/Lot	% DIF/AC	
	Average	\$14,416	\$8,706	\$17,726	\$10,972	19%	21%	
	Median	\$14,306	\$8,415	\$20,000	\$11,976	28%	30%	
	High	\$16,728	\$9,543	\$20,000	\$11,976	16%	20%	
	Low	\$12,215	\$8,160	\$13,177	\$8,964	7%	9%	

5. Matched Pair – Nixon’s Solar Farm, West Friendship, MD



This smaller 2 MW solar farm being developed in phases mostly adjoins agricultural and residential uses as shown above. This is part of what will eventually be a 10 MW facility.

I compared a recent sale of 12909 Vistaview Drive to 2713 Friendship Farm Court. While this does not look at an adjacent home sale, it is close proximity and based on the matched pair data in the report it shows a \$16,640 positive impact on value due to proximity to the solar farm, or 2.16%. This is within typical market friction and supports an indication of no impact on property value.

I have shown this data below.

Nixon’s Farm Solar Farm, West Friendship, MD

Nearby Residential Sale After Solar Farm Construction

Address	Solar Farm	Acres	Date Sold	Sales Price*	Built	GBA	\$/GBA	Style	BR/BA	Park
12909 Vistaview	Nearby	0.92	9/12/2014	\$771,640	2003	2,692	\$286.64	Colonial	4/3.5	2 Car Det
2713 Friendship Farm	Not	0.98	6/20/2014	\$690,000	2000	2,792	\$247.13	Colonial	4/2.5	2 Car Att

*\$3,360 concession deducted from sale price for Vistaview

Adjoining Sales Adjusted

Address	Date Sold	Sales Price	Time	Adjustments			BR/BA	Other	Total
				Acres	YB				
12909 Vistaview	9/12/2014	\$771,640						\$771,640	
2713 Friendship Farm	6/20/2014	\$690,000		\$0	\$0	\$0	\$10,000	\$55,000	\$755,000

Difference Attributable to Location \$16,640
2.16%

6. Matched Pair – Leonard Road Solar Farm, Hughesville, MD



This solar farm mostly adjoins agricultural and residential uses to the west, south and east as shown above. The property also adjoins retail uses and a church. I looked at a 2016 sale of an adjoining home with a positive impact on value adjoining the solar farm of 2.90%. This is within typical market friction and supports an indication of no impact on property value.

I have shown this data below.

Leonardtown Road Solar Farm, Hughesville, MD

Nearby Residential Sale After Solar Farm Construction

Address	Solar Farm Acres	Date Sold	Sales Price*	Built	GBA	\$/GBA	Style	BR/BA	Bsmt	Park	Upgrades	Other
14595 Box Elder Ct	Adjoins	2/12/2016	\$291,000	1991	2,174	\$133.85	Colonial	5/2.5	No	2 Car Att	N/A	Deck
15313 Bassford Rd	Not	7/20/2016	\$329,800	1990	2,520	\$130.87	Colonial	3/2.5	Finished	2 Car Att	Custom	Scr Por/Patio

*\$9,000 concession deducted from sale price for Box Elder and \$10,200 deducted from Bassford

Adjoining Sales Adjusted

Address	Date Sold	Sales Price	Time	Adjustments				Total
				GLA	Bsmt	Upgrades	Other	
14595 Box Elder Ct	2/12/2016	\$291,000						\$291,000
15313 Bassford Rd	7/20/2016	\$329,800	-\$3,400	-\$13,840	-\$10,000	-\$15,000	-\$5,000	\$282,560

Difference Attributable to Location \$8,440
2.90%

This is within typical market friction and supports an indication of no impact on property value.

7. Matched Pair – Talbot County Community Center Solar Farm, Easton, MD



This solar farm mostly adjoins agricultural and residential uses but also the Community center and located across the street from a golf course which can be seen just to the east. I looked at a 2012 sale of a home 1,000 feet to the west of the solar farm with a slight positive impact on value nearby the solar farm.

I have shown this data below.

Talbot County Community Center, Easton, MD

Nearby Residential Sale After Solar Farm Construction

Address	Solar Farm	Acres	Date Sold	Sales Price*	Built	GBA	\$/GBA	Style	BR/BA	Park	Upgrades
10193 Hiners	Nearby	1.06	10/31/2012	\$136,092	1947	776	\$175.38	Bungalow	2/1	3 Car Det	N/A
10711 Hiners	Not	0.60	12/15/2012	\$135,000	1957	832	\$162.26	Bungalow	2/1	1 Car Det	Upd. Bath

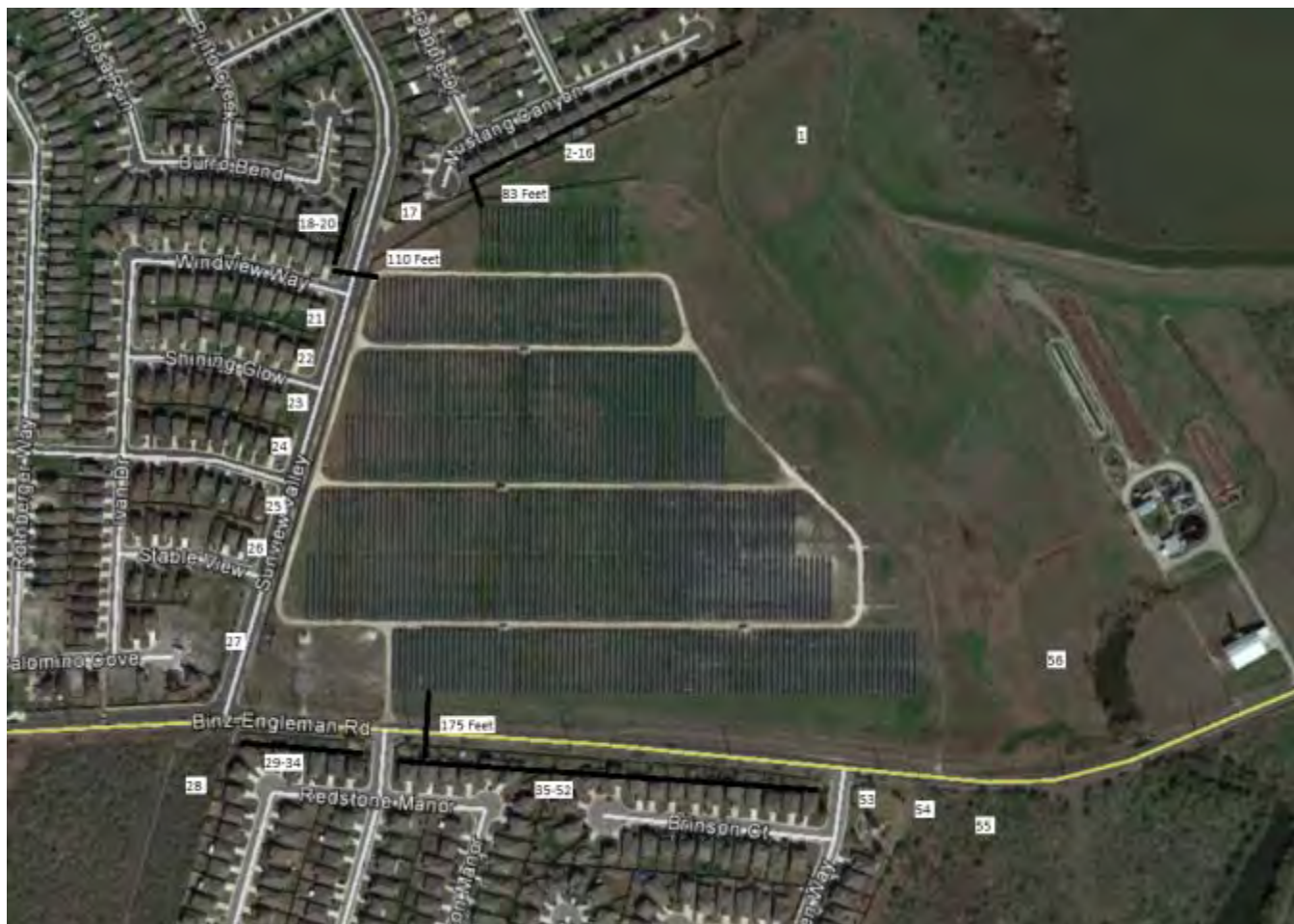
*\$5,908 concessions deducted from 10193 Hiners sales price

Adjoining Sales Adjusted

Address	Date Sold	Sales Price	Age	Adjustments				Total	
				Acres	Park	Upgrades	Other		
10193 Hiners	10/31/2012	\$136,092						\$136,092	
10711 Hiners	12/15/2012	\$135,000		-\$6,750	\$4,000	\$6,000	-\$3,000	\$0	\$135,250

Difference Attributable to Location \$842

8. Matched Pair – Alamo II, San Antonio, Texas



This project is located at 8203 Binz-Engleman Road, Converse, Texas, on 98.37 acres with a 4.4 MW output. This project is located with small lot residential development on to the north west and south. There appears to be minimal landscaping along this project. The closest home to the north is 83 feet from the solar panels, while the homes to the west are 110 feet and the homes to the south are 175 feet away from the solar panels.

This solar farm strongly shows an acceptance of nearby residential development in close proximity to solar farms as this solar farm has minimal landscaping, close proximity, small adjoining lot sizes, and the development of homes on three sides of the solar farm.

Adjoining Use Breakdown

Acreeage	Parcels
Residential	94.64%
Agricultural	5.36%
Total	100.00%

I have considered home sales in the three adjoining subdivisions to look at matched pair data. There are sales and resales of homes in Glenloch and Mustang Valley subdivisions to the south and west of this solar farm.

I have considered multiple matched pairs from these subdivisions to show typical appreciation and no impact on property value both before and after the solar farm was constructed in 2013. I have

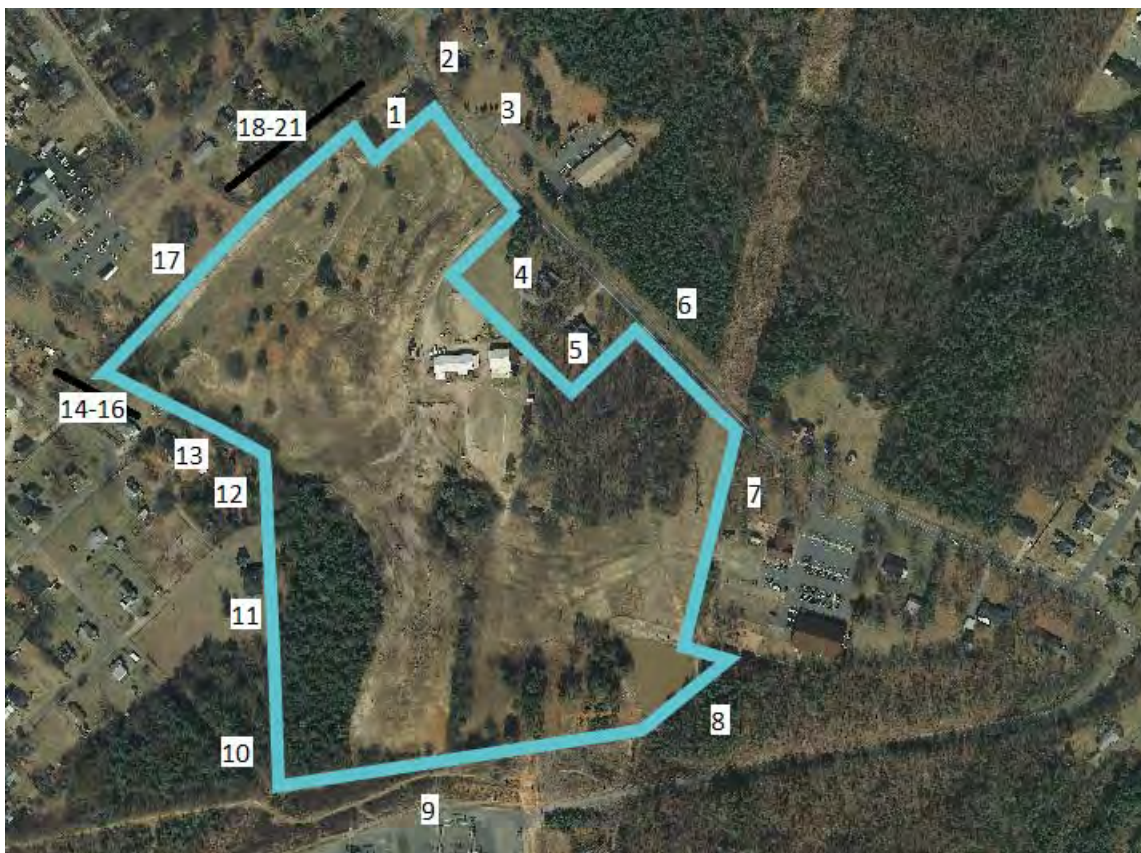
looked at a number of home sales and resales in the larger subdivisions, but I have focused on those directly adjoining/facing the solar farm in the examples shown below. These are sales and resales of the homes adjoining the solar farm both before and after the solar farm project in 2013.

The comparables shown below are compared to an earlier sale prior to the solar farm announcement or construction followed by a second sale after the solar farm. The first two have solar farms in the Backyard (B), while the other has the solar farm in the Side yard (S). All of these sales show appreciation that falls within the typical annual appreciation for homes in this area over this time period.

7703 Redstone Mnr (B)			7807 Redstone Mnr (B)			7734 Sundew Mist (S)		
	<u>Date</u>	<u>Price</u>		<u>Date</u>	<u>Price</u>		<u>Date</u>	<u>Price</u>
Sale	10/3/2012	\$149,980	Sale	5/11/2012	\$136,266	Sale	5/23/2012	\$117,140
Sale	3/24/2016	\$166,000	Sale	8/11/2014	\$147,000	Sale	11/18/2014	\$134,000
	<u>Time - YRS</u>	<u>% Incr.</u>		<u>Time - YRS</u>	<u>% Incr.</u>		<u>Time - YRS</u>	<u>% Incr.</u>
	3.47	10.7%		2.25	7.9%		2.49	14.4%
	<u>Per Year</u>	<u>3.1%</u>		<u>Per Year</u>	<u>3.5%</u>		<u>Per Year</u>	<u>5.8%</u>
Years	3.5	<u>10.8%</u>	Years	2.5	<u>8.7%</u>	Years	2	<u>11.6%</u>

I therefore conclude that this set of matched pairs shows no impact on property value and that homes in the area are showing typical appreciation consistent with other homes not in the vicinity of solar farms.

9. Matched Pair – Neal Hawkins Solar, Gastonia, NC



This project is located on the south side of Neal Hawkins Road just outside of Gastonia. The property identified above as Parcel 4 was listed for sale while this solar farm project was going through the approval process. The property was put under contract during the permitting process with the permit being approved while the due diligence period was still ongoing. After the permit was approved the property closed with no concerns from the buyer. I spoke with Jennifer Bouvier, the broker listing the property and she indicated that the solar farm had no impact at all on the sales price. She considered some nearby sales to set the price and the closing price was very similar to the asking price within the typical range for the market. The buyer was aware that the solar farm was coming and they had no concerns.

This two-story brick dwelling was sold on March 20, 2017 for \$270,000 for a 3,437 square foot dwelling built in 1934 in average condition on 1.42 acres. The property has four bedrooms and two bathrooms.

A more recent aerial photo is shown on the following page to illustrate the proximity of panels to homes.



10. 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 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	
	Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	
	Adjoins	358 Oxford								\$478,000		5%	
	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	

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff
Adjoins	343 Oxford								\$490,000		3%
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%	



11. Matched Pair – White Cross II, Chapel Hill, NC



This project is located in rural Orange County on White Cross Road with a 2.8 MW facility. This project is a few parcels south of White Cross Solar Farm that was developed by a different company. An adjoining home sold after construction as presented below.

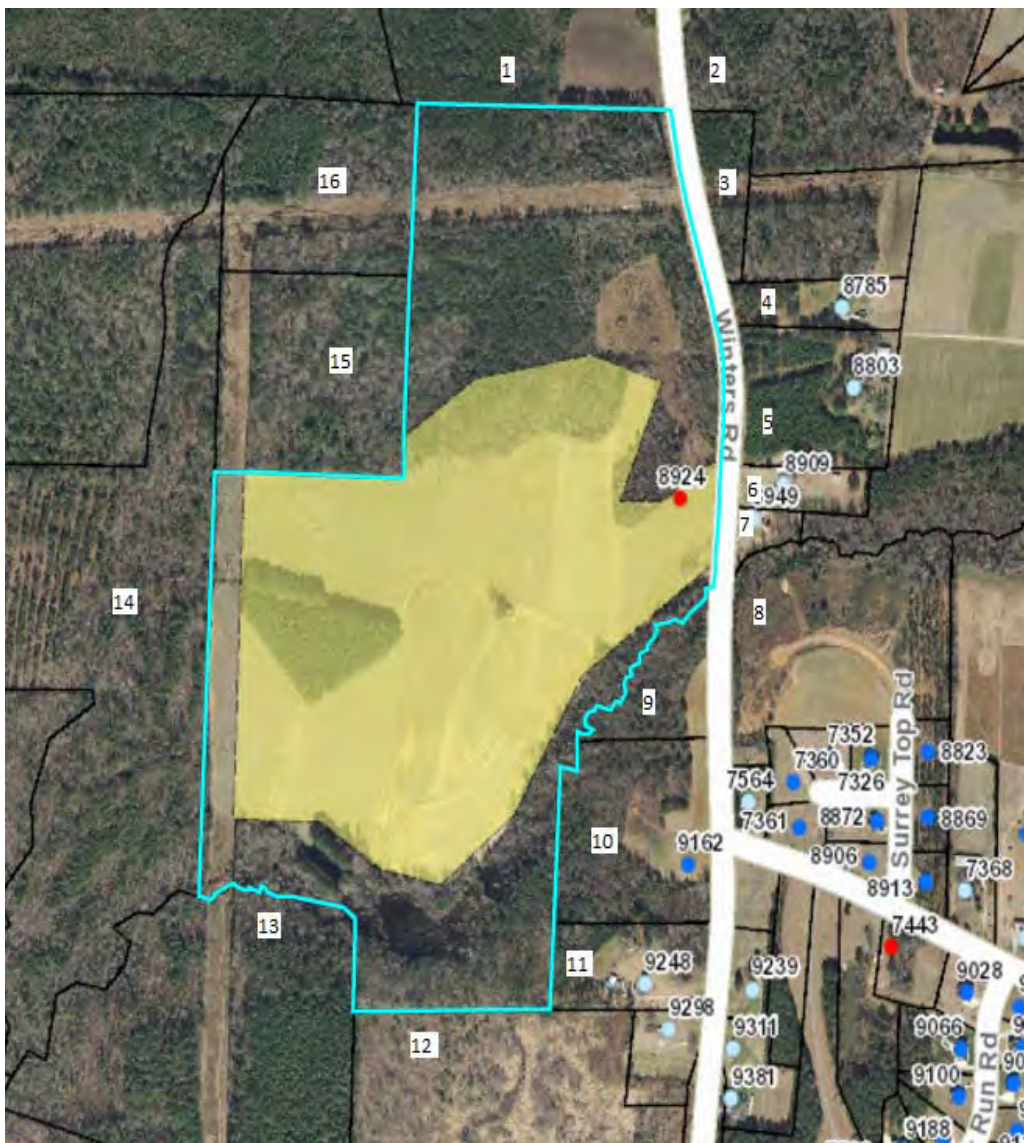
Adjoining Residential Sales After Solar Farm Completed

Solar	TAX ID/Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style
Adjoins	97482114578	11.78	2/29/2016	\$340,000	1994	1,601	\$212.37	3/3	Garage	Ranch
Not	4200B Old Greensbor	12.64	12/28/2015	\$380,000	2000	2,075	\$183.13	3/2.5	Garage	Ranch

Adjoining Residential Sales After Solar Farm Adjoining Sales Adjusted

Solar	TAX ID/Address	Sales Price	Time	Acres	YB	GLA	BR/BA	Park	Total	% Diff
Adjoins	97482114578	\$340,000							\$340,000	
Not	4200B Old Greensbor	\$380,000	\$3,800	\$0	-\$15,960	-\$43,402	\$5,000	\$0	\$329,438	3%

12. Matched Pair – Tracy Solar, Bailey, NC



This project is located in rural Nash County on Winters Road with a 5 MW facility that was built in 2016. A local builder acquired parcels 9 and 10 following construction as shown below at rates comparable to other tracts in the area. They then built a custom home for an owner and sold that at a price similar to other nearby homes as shown in the matched pair data below.

Adjoining Land Sales After Solar Farm Completed

#	Solar Farm	TAX ID	Grantor	Grantee	Address	Acres	Date Sold	Sales Price	\$/AC	Other
9 & 10	Adjoins	316003 & 316004	Cozart	Kingsmill	9162 Winters	13.22	7/21/2016	\$70,000	\$5,295	
	Not	6056	Billingsly		427 Young	41	10/21/2016	\$164,000	\$4,000	
	Not	33211	Fulcher	Weikel	10533 Cone	23.46	7/18/2017	\$137,000	\$5,840	Doublewide, structures
	Not	106807	Perry	Gardner	Claude Lewis	11.22	8/10/2017	\$79,000	\$7,041	Gravel drive for sub, cleared
	Not	3437	Vaughan	N/A	11354 Old Lewis Sch	18.73	Listing	\$79,900	\$4,266	Small cemetery, wooded

Adjoining Sales Adjusted

Time	Acres	Location	Other	Adj \$/Ac	% Diff
				\$5,295	
\$0	\$400	\$0	\$0	\$4,400	17%
-\$292	\$292	\$0	-\$500	\$5,340	-1%
-\$352	\$0	\$0	-\$1,000	\$5,689	-7%
-\$213	\$0	\$0	\$213	\$4,266	19%
Average					7%

Adjoining Residential Sales After Solar Farm Completed

#	Solar Farm	n	Address	Acres	Date Sold	Sales Price	Built	GLA	\$/GLA	BR/BA	Style	Other
9 & 10	Adjoins	9	9162 Winters	13.22	1/5/2017	\$255,000	2016	1,616	\$157.80	3/2	Ranch	1296 sf wrkshp
	Not	1	7352 Red Fox	0.93	6/30/2016	\$176,000	2010	1,529	\$115.11	3/2	2-story	

Adjoining Sales Adjusted

Time	Acres	YB	GLA	Style	Other	Total	% Diff
						\$255,000	
\$0	\$44,000	\$7,392	\$5,007	\$5,000	\$15,000	\$252,399	1%

The comparables for the land show either a significant positive relationship or a mild negative relationship to having and adjoining solar farm, but when averaged together they show no negative impact. The wild divergence is due to the difficulty in comping out this tract of land and the wide variety of comparables used. The two comparables that show mild negative influences include a property that was partly developed as a residential subdivision and the other included a doublewide with some value and accessory agricultural structures. The tax assessed value on the improvements were valued at \$60,000. So both of those comparables have some limitations for comparison. The two that show significant enhancement due to adjacency includes a property with a cemetery located in the middle and the other is a tract almost twice as large. Still that larger tract after adjustment provides the best matched pair as it required the least adjustment. I therefore conclude that there is no negative impact due to adjacency to the solar farm shown by this matched pair.

The dwelling that was built on the site was a build-to-suit and was compared to a nearby homesale of a property on a smaller parcel of land. I adjusted for that differenced based on a \$25,000 value for a 1-acre home site versus the \$70,000 purchase price of the larger subject tract. The other adjustments are typical and show no impact due to the adjacency to the solar farm.

The closest solar panel to the home is 780 feet away.

I note that the representative for Kingsmill Homes indicated that the solar farm was never a concern in purchasing the land or selling the home. He also indicated that they had built a number of nearby homes across the street and it had never come up as an issue.



13. 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 homesales as part of this matched pair analysis as shown below.

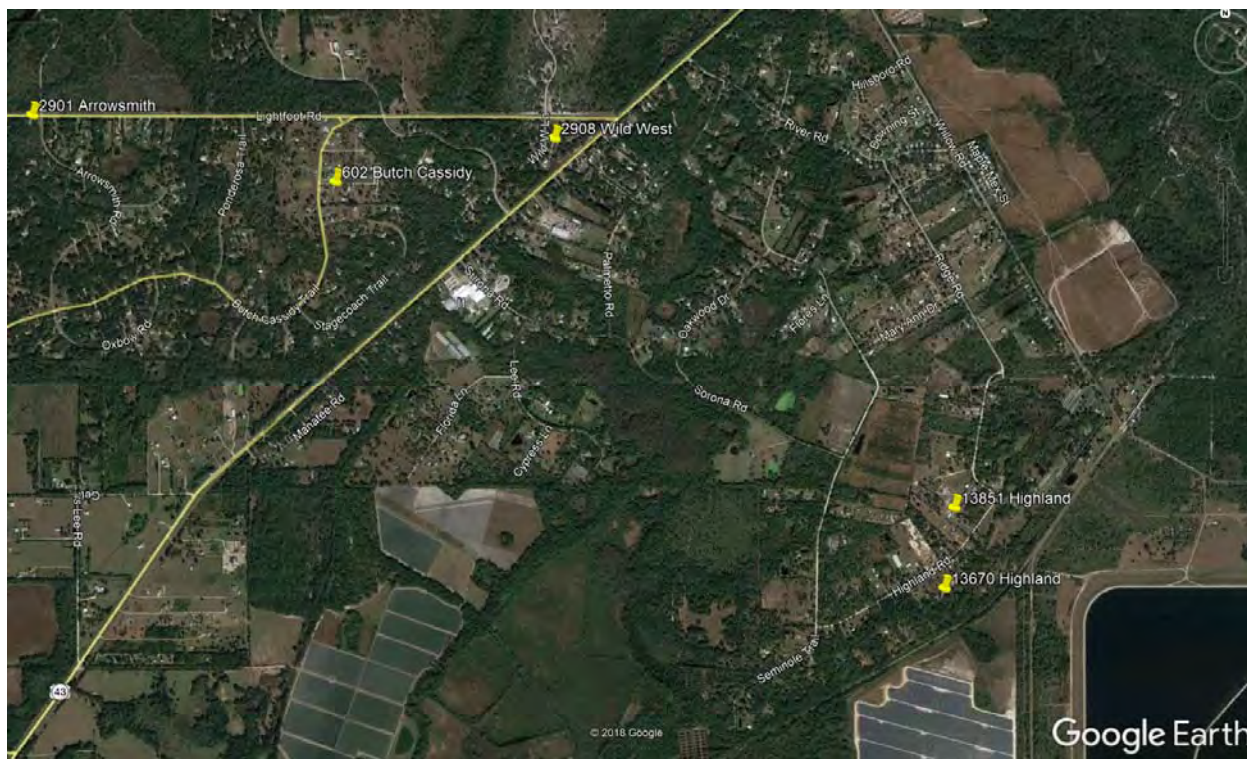
Solar	TAX ID/Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Note
Adjoins	13670 Highland	5.00	8/21/2017	\$255,000	1997	1,512	\$168.65	3/3	Carport/Wrkshp	Ranch	Renov.
Not	2901 Arrowsmith	1.91	1/31/2018	\$225,000	1979	1,636	\$137.53	3/2	2 Garage/Wrkshp	Ranch	
Not	602 Butch Cassidy	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						Note	Total	% Diff
		Time	Acres	YB	GLA	BR/BA	Park			
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%
Average										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 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.



14. 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	Outldg
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%
								Average	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 impact on value.

15. Matched Pair – Yamhill II, Amity, OR



This solar farm has a 1.2 MW output and is located on a 186.60 acre tract using less than 10 of those acres. The project was built in 2011.

I have considered the recent sale of Parcel 11 shown above, which sold on July 22, 2015 after the solar farm was built. The property sold for \$326,456 for a 2.12 acre site with a home built in 1912 with 2,154 s.f. and 4 BR and 2 BA. It was noted as a recently remodeled residence with outbuildings that sold for \$151.56 per square foot. I compared this to a number of similar older residences on similar acreage as shown below.

Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Adjust for		
									Time	Adjusted Sales	Adjusted \$/SF
Adjoins	12001 SW Bellevue, Amity	2.12	7/22/2015	\$326,456	1912	2,154	\$151.56	4/2			
Not	19915 SW Muddy, McMinnville	1.82	2/28/2011	\$213,400	1910	1,798	\$118.69	3/2	27%	\$271,018	\$150.73
Not	22600 Hopewell, Salem	1.00	10/15/2014	\$256,000	1910	1,966	\$130.21	3/2	5%	\$268,800	\$136.72
Not	22355 Hopewell, Salem	1.00	11/13/2015	\$320,000	1930	2,592	\$123.46	3/2	-2%	\$313,600	\$120.99
Not	9955 Bethel, Amity	2.86	2/17/2016	\$289,900	1936	2,028	\$142.95	3/2	-4%	\$278,304	\$137.23
Not	3361 Lone Oak, McMinnville	2.91	3/1/2016	\$465,000	1937	2,950	\$157.63	3/2	-7%	\$432,450	\$146.59
										Average	\$138.45
										Median	\$137.23

The sales prices of the comparables were only adjusted for time and provide a range of adjusted values of \$120.99 per square foot to \$150.73 per square foot. The subject property sold for above the high end of this range despite being on the older end of the range of comparables. Considering 9955 Bethel as the most similar in acreage, age and size and the price per square foot which adjusted to the median rate at \$137.23 per square foot. Applying that rate to the subject property square footage, the indicated value is \$295,593 for that matched pair, suggesting a 9% enhancement due to the adjacency to the solar farm.

This set of matched pair data falls in line with the data seen in other states. The home is 700 feet from the closest solar panel.

16. Matched Pair – Marion Solar, Aurora, OR



This solar farm has a 0.3 MW output and is located on a 2-acre portion of a 31.76-acre tract. The project was built in 2014.

I have considered the recent sale of Parcels 5 and 6 shown above, which sold on August 6, 2014 after the solar farm was built for \$259,000, or \$16,444 per acre for a combined 15.75 acres. This was sold as vacant agricultural land with a permitted home site.

I compared this to a number of similar land sales as shown below.

Adjoining Residential Land Sales After Solar Farm Approved								Adj for	Adjusted	Adjusted
Solar	Address	Acres	Date Sold	Sales Price	\$/Ac	Soils	Homesite	Time	Sales	\$/SF
Adjoins	18916 Butteville, Aurora	15.75	8/6/2014	\$259,000	\$16,444	2&3	Est.			
Not	15961 Wilsonville, Wilsonville	50.50	5/20/2014	\$950,000	\$18,812	2&3	Est.	1.5%	\$964,250	\$19,094
Not	11471 Wilco, Mt. Angel	13.31	11/10/2014	\$159,500	\$11,983	2&4	N/A	-1.5%	\$157,108	\$11,804
Not	Waconda, Salem	11.86	9/9/2015	\$215,000	\$18,128	2	N/A	-6.5%	\$201,025	\$16,950
									Average	\$15,949
									Median	\$16,950

The sales price for the subject property is in line and between the average and median rates from the comparables. The sale at 11471 Wilco is the most similar in terms of acreage, time, and location. The sale on Waconda is similar in size, but newer and required more adjustment. I therefore conclude that no impact due to the proximity of the solar farm.

17. Matched Pair – Clackamas II, Aurora, OR



This solar farm has a 0.22 MW output and is located on a 1-acre portion of a 156.32-acre tract. The project was built in 2014.

I have considered the homesales along SW Fairway Drive both before and after the solar farm was announced to see if there was any impact on total sales price or price per square foot. As can be seen in the chart below, the sales prices continued to trend upward after the announcement and the price per square foot continued to trend upward. These homes are all approximately 125 feet from the closest solar panel.

I adjusted these based on 0.75% per month difference in date of sale to January 1, 2014. The indicated average and median rate are right in line with the sales before and after the solar farm was built. These comparables strongly indicate no impact in sales price.

Adjoining Residential Sales Before and After Solar Farm Announced								Adjust	Adjusted	Adjusted
Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	Time	Sales	\$/SF
Prior	7500 SW Fairway	0.20	12/9/2011	\$365,000	1992	2,435	\$149.90	18.8%	\$433,620	\$178.08
Prior	7580 SW Fairway	0.30	11/21/2012	\$335,000	1990	2,256	\$148.49	11%	\$370,175	\$164.08
Prior	7480 SW Fairway	0.19	6/27/2013	\$365,000	1992	2,244	\$162.66	5%	\$384,345	\$171.28
							\$153.68	Average		\$171.15
							\$149.90	Median		\$171.28
After	7620 SW Fairway	0.27	7/1/2013	\$365,000	1992	2,212	\$165.01	3.8%	\$378,870	\$171.28
After	7700 SW Fairway	0.18	6/11/2014	\$377,100	1991	2,328	\$161.98	-2%	\$371,444	\$159.55
After	7380 SW Fairway	0.19	7/18/2014	\$415,000	1989	2,115	\$196.22	-6%	\$390,100	\$184.44
							\$174.40	Average		\$171.76
							\$165.01	Median		\$171.28

18. 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	Time	Adjustments	
			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
Sales Price/SF	\$79.90	\$79.90	\$75.57	\$74.14
GBA	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.

19. 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		\$/Sf
		Time	Total	
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
Sales Price/SF	\$89.41	\$89.41	\$90.91	\$91.99
GBA	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 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

TAX ID	Date Sold	Adjustments		\$/Acre
		Time	Total	
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

	Adjoins Solar Farm		Not Adjoin Solar Farm	
	Average	Median	Average	Median
Sales Price/Ac	\$8,480	\$8,480	\$7,329	\$7,329
Acres	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.

20. 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

Adjustments

TAX ID	Date Sold	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 impact due to the adjacency to the solar farm and includes a large selection of homes both adjoining and not adjoining in the analysis.

21. Matched Pair – Beetle-Shelby Solar, Cleveland County, NC



This project is located on Bachelor Road at Timber Drive, Mooresboro, NC. This is a 4 MW facility on a parent tract of 24 acres.

I have considered a custom home on a nearby property adjoining this solar farm. This home is located on 10.08 acres, was built in 2013, and has a gross living area of 3,196 s.f. This property sold on October 1, 2018 \$416,000. I compared this to several nearby homes of similar size on large lots as shown below.

Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	1715 Timber	10.08	10/1/2018	\$416,000	2013	3,196	\$130.16	4/3.5	2xGar	1.5 story	Pool, Scrn Prch
Not	1021 Posting	2.45	2/15/2019	\$414,000	2000	4,937	\$83.86	4/4.5	2xGar	1.5 story	Scrn Prch
Not	2521 Wood	3.25	7/30/2017	\$350,000	2003	3,607	\$97.03	4/4	4xGar	1.5 story	Pool, sunroom
Not	356 Whitaker	7.28	1/9/2017	\$340,000	1997	3,216	\$105.72	4/4	2xGar	Ranch	Pole barn

Adjoining Sales Adjusted

Time	Acres	YB	GLA	BR/BA	Park	Other	Total	% Diff
							\$416,000	
	\$15,000	\$37,674	-\$58,398	-\$10,000			\$398,276	4%
\$10,500	\$12,000	\$24,500	-\$15,952	-\$5,000	-\$5,000		\$371,048	11%
\$15,300	\$5,000	\$38,080	-\$846	-\$5,000			\$392,534	6%
							Average	7%

The data on these sales all show that the subject property adjoining the solar farm sold for more than these other comparable sales. These sales suggest a mild increase in value due to proximity to the solar farm; however, the subject property is a custom home with upgrades that would balance out that difference. I therefore conclude that these matched pairs support an indication of no impact on property value.

22. Matched Pair – Courthouse Solar, Gaston County, NC



This project is a 5 MW facility located on 161.92 acres on Tryon Courthouse Road near Bessemer City that was approved in late 2016 but has not yet been constructed due to delays in the power purchase agreement process with Duke Progress Energy.

I have considered a recent sale of a home (Parcel 13) located across from this approved solar farm project as well as an adjoining lot sale (Parcel 25) to the west of this approved project.

I compared the home sale to similar sized homes with similar exposure to county roads as shown below. I considered three similar sales that once adjusted for differences show a positive relationship due to proximity to the solar farm. The positive impact is less than 5% which is a standard deviation for real estate transaction and indicates no 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
Adjoins	2134 Tryon Court.	0.85	3/15/2017	\$111,000	2001	1,272	\$87.26	3/2	Drive	Ranch
Not	214 Kiser	1.14	1/5/2017	\$94,000	1987	1,344	\$69.94	3/2	Drive	Ranch
Not	101 Windward	0.30	3/30/2017	\$104,000	1995	1,139	\$91.31	3/2	Drive	Ranch
Not	5550 Lennox	1.44	10/12/2018	\$115,000	2002	1,224	\$93.95	3/2	Drive	Ranch

Adjoining Residential Sales After Solar Farm Approved

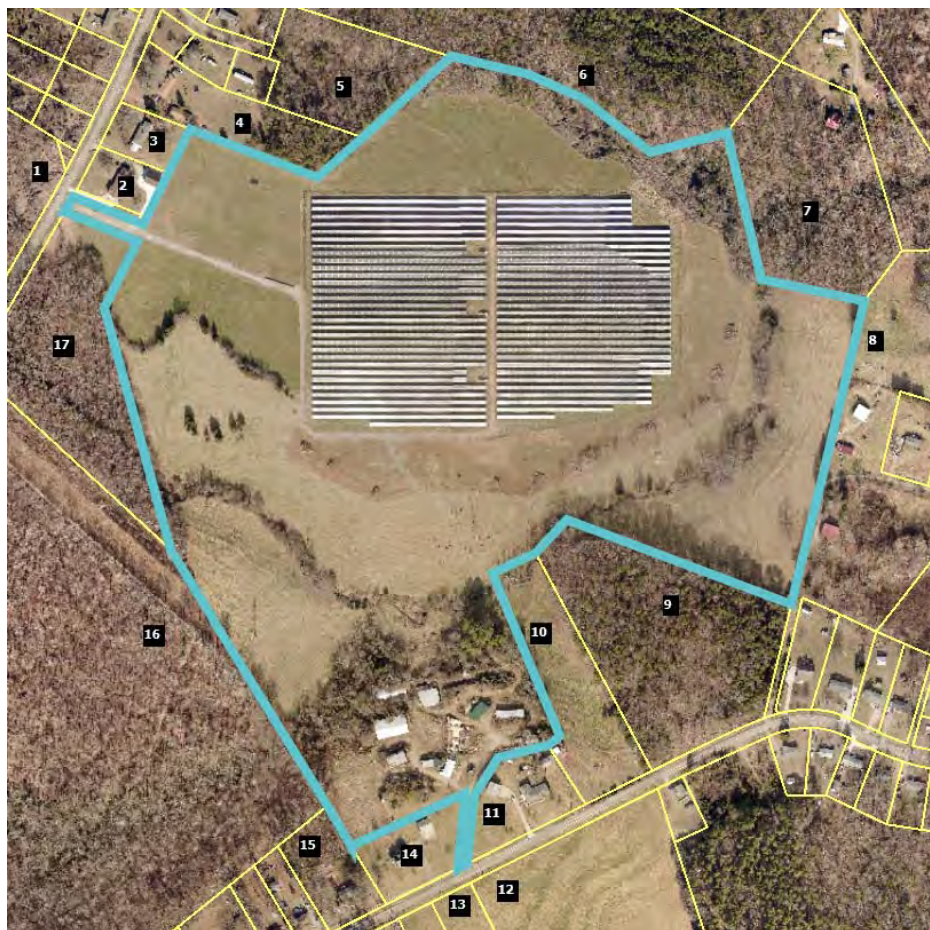
Solar	Address	Acres	Date Sold	Sales Price	Time	Acres	YB	GLA	Total	% Diff
Adjoins	2134 Tryon Court.	0.85	3/15/2017	\$111,000					\$111,000	
Not	214 Kiser	1.14	1/5/2017	\$94,000	\$533		\$9,212	-\$1,511	\$102,234	8%
Not	101 Windward	0.30	3/30/2017	\$104,000	-\$128		\$4,368	\$5,615	\$113,855	-3%
Not	5550 Lennox	1.44	10/12/2018	\$115,000	-\$5,444		-\$805	-\$2,396	\$106,355	4%
									Average	3%

Similarly, I compared the lot sale to four nearby land sales. Parcel 25 could not be subdivided and was a single estate lot. There were a number of nearby lot sales along Weaver Dairy that sold for \$43,000 to \$30,000 per lot for 4-acre home lots. Estate lots typically sell at a base homesite rate

that would be represented by those prices plus a diminishing additional value per additional acre. The consideration of the larger tract more accurately illustrates the value per acre for larger tracts. After adjustments, the land sales show a mild positive impact on land value with an average increase of 9%, which supports a positive impact.

Adjoining Residential Land Sales After Solar Farm Approved						Adjoining Sales Adjusted				
Solar	Address	Acres	Date Sold	Sales Price	\$/Ac	Time	Acres	Total	% Diff	Note
Adjoins	5021 Buckland	9.66	3/21/2018	\$58,500	\$6,056			\$58,500		1 homesite only
Not	Campbell	6.75	10/31/2018	\$42,000	\$6,222	-\$773	\$18,107	\$59,333	-1%	
Not	Kiser	17.65	11/27/2017	\$69,000	\$3,909	\$647	-\$19,508	\$50,139	14%	6 acres less usable due to shape (50%)
Not	522 Weaver Dairy	3.93	2/26/2018	\$30,000	\$7,634	\$57	\$25,000	\$55,057	6%	
Not	779 Sunnyside	6.99	3/6/2017	\$34,000	\$4,864	\$1,062	\$12,987	\$48,049	18%	
Average									9%	

23. Matched Pair – Mariposa Solar, Gaston County, NC



This project is a 5 MW facility located on 35.80 acres out of a parent tract of 87.61 acres at 517 Blacksnsake Road, Stanley that was built in 2016.

I have considered a number of recent sales around this facility as shown below.

The first is identified in the map above as Parcel 1, which is 215 Mariposa Road. This is an older dwelling on large acreage with only one bathroom. I've compared it to similar nearby homes as shown below.

Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style
Adjoins	215 Mariposa	17.74	12/12/2017	\$249,000	1958	1,551	\$160.54	3/1	Garage	Br/Rnch
Not	249 Mariposa	0.48	3/1/2019	\$153,000	1974	1,792	\$85.38	4/2	Garage	Br/Rnch
Not	110 Airport	0.83	5/10/2016	\$166,000	1962	2,165	\$76.67	3/2	Crprt	Br/Rnch
Not	1249 Blacksnsake	5.01	9/20/2018	\$242,500	1980	2,156	\$112.48	3/2	Drive	1.5
Not	1201 Abernathy	27.00	5/3/2018	\$390,000	1970	2,190	\$178.08	3/2	Crprt	Br/Rnch

Adjoining Residential Sales After Solar Farm Approved					Adjoining Sales Adjusted								
Solar	Address	Acres	Date Sold	Sales Price	Time	YB	Acres	GLA	BR/BA	Park	Other	Total	% Diff
Adjoins	215 Mariposa	17.74	12/12/2017	\$249,000								\$249,000	
Not	249 Mariposa	0.48	3/1/2019	\$153,000	-\$5,583	-\$17,136	\$129,450	-\$20,576	-\$10,000			\$229,154	8%
Not	110 Airport	0.83	5/10/2016	\$166,000	\$7,927	-\$4,648	\$126,825	-\$47,078	-\$10,000			\$239,026	4%
Not	1249 Blacksnake	5.01	9/20/2018	\$242,500	-\$5,621	-\$37,345	\$95,475	-\$68,048	-\$10,000	\$5,000		\$221,961	11%
Not	1201 Abernathy	27.00	5/3/2018	\$390,000	-\$4,552	-\$32,760	-\$69,450	-\$60,705	-\$10,000			\$212,533	15%
												Average	9%

The average difference after adjusting for all factors is +9% on average, which suggests an enhancement due to the solar farm across the street. Given the large adjustments for acreage and size, I will focus on the low end of the adjusted range at 4%, which is within the typical deviation and therefore suggests no impact on value.

I have also considered Parcel 4 that sold after the solar farm was approved but before it had been constructed in 2016.

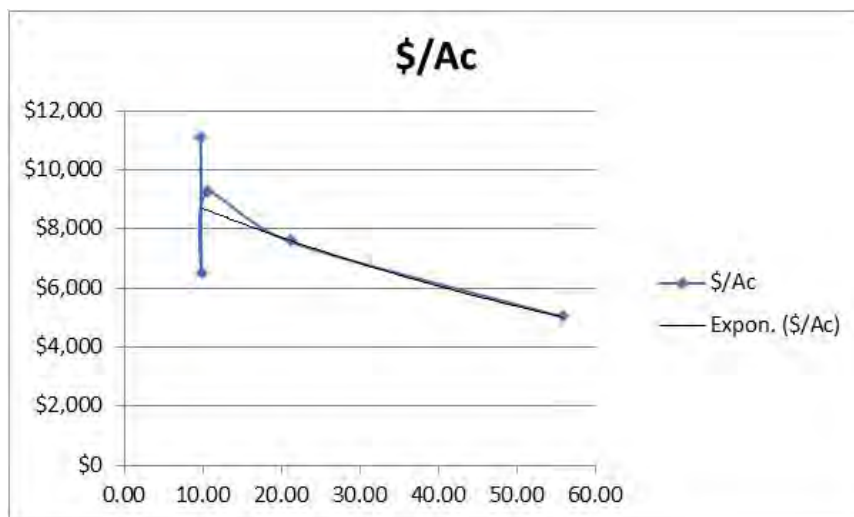
Adjoining Residential Sales After Solar Farm Approved												
Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	
Adjoins	242 Mariposa	2.91	9/21/2015	\$180,000	1962	1,880	\$95.74	3/2	Carport	Br/Rnch	Det Wrkshop	
Not	249 Mariposa	0.48	3/1/2019	\$153,000	1974	1,792	\$85.38	4/2	Garage	Br/Rnch		
Not	110 Airport	0.83	5/10/2016	\$166,000	1962	2,165	\$76.67	3/2	Crprt	Br/Rnch		
Not	1249 Blacksnake	5.01	9/20/2018	\$242,500	1980	2,156	\$112.48	3/2	Drive	1.5		

Adjoining Residential Sales After Solar Farm Approved					Adjoining Sales Adjusted								
Solar	Address	Acres	Date Sold	Sales Price	Time	YB	Acres	GLA	BR/BA	Park	Other	Total	% Diff
Adjoins	242 Mariposa	2.91	9/21/2015	\$180,000								\$180,000	
Not	249 Mariposa	0.48	3/1/2019	\$153,000	-\$15,807	-\$12,852	\$18,468	\$7,513		-\$3,000	\$25,000	\$172,322	4%
Not	110 Airport	0.83	5/10/2016	\$166,000	-\$3,165	\$0	\$15,808	-\$28,600			\$25,000	\$175,043	3%
Not	1249 Blacksnake	5.01	9/20/2018	\$242,500	-\$21,825	-\$30,555	-\$15,960	-\$40,942		\$2,000	\$25,000	\$160,218	11%
												Average	6%

The average difference after adjusting for all factors is +6%, which is again suggests a mild increase in value due to the adjoining solar farm use. The median is a 4% adjustment, which is within a standard deviation and suggests no impact on property value.

I have also considered the recent sale of Parcel 13 that is located on Blacksnake Road south of the project. I was unable to find good land sales in the same 20 acre range, so I have considered sales of larger and smaller acreage. I adjusted each of those land sales for time. I then applied the price per acre to a trendline to show where the expected price per acre would be for 20 acres. As can be seen in the chart below, this lines up exactly with the purchase of the subject property. I therefore conclude that there is no impact on Parcel 13 due to proximity to the solar farm.

Adjoining Residential Land Sales After Solar Farm Approved						Adjoining Sales Adjusted	
Solar	Tax/Street	Acres	Date Sold	Sales Price	\$/Ac	Time	\$/Ac
Adjoins	174339/Blacksnake	21.15	6/29/2018	\$160,000	\$7,565		\$7,565
Not	227852/Abernathy	10.57	5/9/2018	\$97,000	\$9,177	\$38	\$9,215
Not	17443/Legion	9.87	9/7/2018	\$64,000	\$6,484	-\$37	\$6,447
Not	164243/Alexis	9.75	2/1/2019	\$110,000	\$11,282	-\$201	\$11,081
Not	176884/Bowden	55.77	6/13/2018	\$280,000	\$5,021	\$7	\$5,027

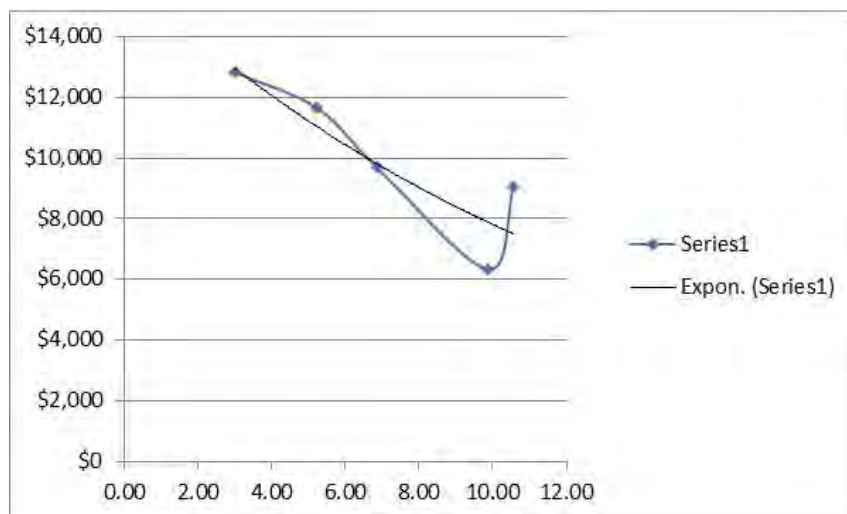


Finally, I have considered the recent sale of Parcel 17 that sold as vacant land. I was unable to find good land sales in the same 7 acre range, so I have considered sales of larger and smaller acreage. I adjusted each of those land sales for time. I then applied the price per acre to a trendline to show where the expected price per acre would be for 7 acres. As can be seen in the chart below, this lines up with the trendline running right through the purchase price for the subject property. I therefore conclude that there is no impact on Parcel 13 due to proximity to the solar farm. I note that this property was improved with a 3,196 square foot ranch built in 2018 following the land purchase, which shows that development near the solar farm was unimpeded.

Adjoining Residential Land Sales After Solar Farm Approved

Adjoining Sales Adjusted

Solar	Tax/Street	Acres	Date Sold	Sales Price	\$/Ac	Time	Location	\$/Ac
Adjoins	227039/Mariposa	6.86	12/6/2017	\$66,500	\$9,694			\$9,694
Not	227852/Abernathy	10.57	5/9/2018	\$97,000	\$9,177	-\$116		\$9,061
Not	17443/Legion	9.87	9/7/2018	\$64,000	\$6,484	-\$147		\$6,338
Not	177322/Robinson	5.23	5/12/2017	\$66,500	\$12,715	\$217	-\$1,272	\$11,661
Not	203386/Carousel	2.99	7/13/2018	\$43,500	\$14,548	-\$262	-\$1,455	\$12,832



24. 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 a recent sale 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.

I've compared this home sale to a number of similar rural homes on similar parcels as shown below. I have used multiple sales that bracket the subject property in terms of sale date, year built, gross living area, bedrooms and bathrooms. Bracketing the parameters insures that all factors are well balanced out in the adjustments. The trend for these sales shows a positive value for the adjacency to the solar farm.

Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	833 Nations Spr	5.13	1/9/2017	\$295,000	1979	1,392	\$211.93	3/2	Det Gar	Ranch	Unfin bsmt
Not	85 Ashby	5.09	9/11/2017	\$315,000	1982	2,333	\$135.02	3/2	2 Gar	Ranch	
Not	541 Old Kitchen	5.07	9/9/2018	\$370,000	1986	3,157	\$117.20	4/4	2 Gar	2 story	
Not	4174 Rockland	5.06	1/2/2017	\$300,000	1990	1,688	\$177.73	3/2	3 Gar	2 story	
Not	400 Sugar Hill	1.00	6/7/2018	\$180,000	1975	1,008	\$178.57	3/1	Drive	Ranch	

Adjoining Residential Sales After Solar Farm Approved

Adjoining Residential Sales After Solar Farm Approved					Adjoining Sales Adjusted									
Solar	Address	Acres	Date Sold	Sales Price	Time	Acres	YB	GLA	BR/BA	Park	Other	Total	% Diff	
Adjoins	833 Nations Spr	5.13	1/9/2017	\$295,000								\$295,000		
Not	85 Ashby	5.09	9/11/2017	\$315,000	-\$6,300			-\$6,615	-\$38,116		-\$7,000	\$15,000	\$271,969	8%
Not	541 Old Kitchen	5.07	9/9/2018	\$370,000	-\$18,500			-\$18,130	-\$62,057		-\$7,000	\$15,000	\$279,313	5%
Not	4174 Rockland	5.06	1/2/2017	\$300,000				-\$23,100	-\$15,782		-\$12,000	\$15,000	\$264,118	10%
Not	400 Sugar Hill	1.00	6/7/2018	\$180,000	-\$9,000	\$43,000	\$5,040	\$20,571	\$10,000	\$3,000	\$15,000	\$267,611	9%	
												Average	8%	

25. Matched Pair – Flemington Solar, Flemington, NJ



This solar farm is located off Kuhl Road and is south of Hart Boulevard. I spoke with Gerry Giles a local realtor who is familiar with the adjoining neighborhood as she has lived in that neighborhood. She indicated that in her opinion the adjoining solar farm is a quiet neighbor and would not have a negative impact on property value.

Furthermore, I spoke with her specifically about the recent sale of 10 Coventry, which I have included in the matched pairs. She noted that the seller was a divorced bachelor who had set the place up like a dorm and that it showed terribly. She believes proper staging of the interior would have significantly improved the sales price on this home. I adjusted for that factor in the comparables in that analysis based on that information.

I have identified four recent sales of homes adjoining this subdivision along Hart Boulevard and the side streets off of Hart Boulevard.

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
8	Adjoins	10 Coventry	0.36	3/19/2018	\$370,000	1986	1,829	\$202.30	3/2.5	2-Gar	2-Story	Staging
	Not	58 Wellington	0.45	6/8/2018	\$334,500	1984	1,757	\$190.38	3/2.5	2-Gar	2-Story	
	Not	28 Bristol	0.35	1/17/2018	\$398,000	1985	1,757	\$226.52	3/2.5	2-Gar	2-Story	
	Not	1 Sheffield	0.35	12/15/2017	\$399,900	1984	1,870	\$213.85	4/2.5	2-Gar	2-Story	

Adjoining Sales Adjusted

Time	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
						\$370,000			295
-\$2,283	\$3,345	\$8,224			-\$10,035	\$333,751	10%		
\$2,046	\$1,990	\$9,786			-\$11,940	\$399,882	-8%		
\$3,168	\$3,999	-\$5,261			-\$11,997	\$389,809	-5%	-1%	

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
14	Adjoins	54 Hart	0.36	7/25/2016	\$420,000	1986	2,680	\$156.72	4/2.5	2-Gar	2-Story	
	Not	43 Aberdeen	0.36	11/21/2016	\$417,000	1987	2,524	\$165.21	4/2.5	2-Gar	2-Story	
	Not	42 Aberdeen	0.34	2/7/2017	\$454,900	1988	2,734	\$166.39	5/3	2-Gar	2-Story	
	Not	18 Aberdeen	0.34	11/6/2017	\$437,500	1988	2,687	\$162.82	4/2.5	2-Gar	2-Story	

Adjoining Sales Adjusted

Time	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
						\$420,000			375
-\$4,182	-\$2,085	\$15,464				\$426,197	-1%		
-\$7,552	-\$4,549	-\$5,391	-\$5,000			\$432,408	-3%		
-\$17,291	-\$4,375	-\$684				\$415,150	1%	-1%	

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
16	Adjoins	6 Portsmouth	0.36	6/19/2015	\$410,000	1991	2,687	\$152.59	4/2.5	2-Gar	2-Story	
	Not	43 Aberdeen	0.36	11/21/2016	\$417,000	1987	2,524	\$165.21	4/2.5	2-Gar	2-Story	
	Not	42 Aberdeen	0.34	2/7/2017	\$454,900	1988	2,734	\$166.39	5/3	2-Gar	2-Story	
	Not	18 Aberdeen	0.34	11/6/2017	\$437,500	1988	2,687	\$162.82	4/2.5	2-Gar	2-Story	

Adjoining Sales Adjusted

Time	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
						\$410,000			425
-\$18,308	\$8,340	\$16,158				\$423,190	-3%		
-\$22,962	\$6,824	-\$4,692	-\$5,000			\$429,069	-5%		
-\$32,112	\$6,563	\$0				\$411,950	0%	-3%	

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
19	Adjoins	12 Stratford	0.55	11/30/2017	\$414,900	1991	1,828	\$226.97	3/2.5	2-Gar	2-Story	
	Not	58 Wellington	0.45	6/8/2018	\$334,500	1984	1,757	\$190.38	3/2.5	2-Gar	2-Story	
	Not	28 Bristol	0.35	1/17/2018	\$398,000	1985	1,757	\$226.52	3/2.5	2-Gar	2-Story	
	Not	1 Sheffield	0.35	12/15/2017	\$399,900	1984	1,870	\$213.85	4/2	Gar	2-Story	

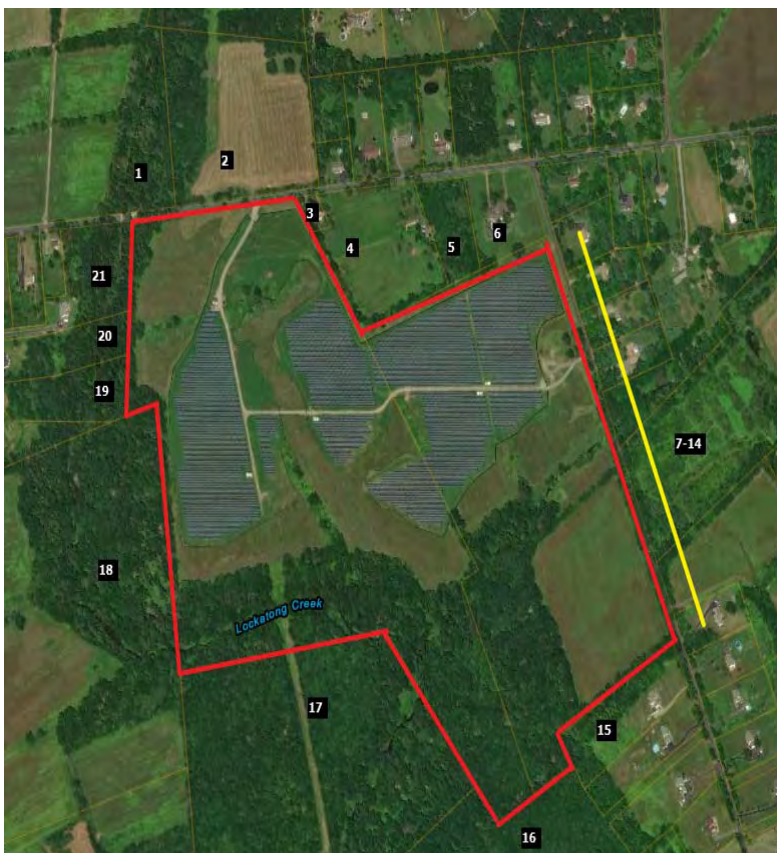
Adjoining Sales Adjusted

Time	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
						\$414,900			345
-\$5,356	\$11,708	\$8,110				\$348,962	16%		
-\$1,610	\$11,940	\$9,650				\$417,980	-1%		
-\$505	\$13,997	-\$5,389	\$5,000	\$7,000		\$420,002	-1%	5%	

The range of impact identified by these matched pairs ranges are therefore -3% to +5% for distances ranging from 295 feet to 425 feet with an average difference from these four indicators of 0%. As noted earlier this range is within the typical plus or minus for any real estate transaction and indicates no impact on property value.

The broker Gerry Giles indicated that she has not seen the solar farm having any impact on adjoining property value. She noted that the solar farm is visible from Hart Boulevard and from a number of these backyards, but is still heavily screened.

26. Matched Pair – Frenchtown Solar, Frenchtown, NJ



This solar farm is located off Muddy Run Road. I spoke with Gerry Giles a local realtor who helped a buyer purchase 5 Muddy Town Road. She indicated that his home adjoining the solar farm had multiple offers and that most of those offers were higher than the offer she presented, but her buyer provided an all cash offer. This was important as the property was being purchased while the septic system required repairs and updates that the seller paid for but completed the work during/after the purchase. The solar farm was not considered a negative by her buyer.

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
7	Adjoins	5 Muddy Run	2.14	6/23/2017	\$385,000	1985	2,044	\$188.36	4/2.5	2-Gar	2-Story	Updated
	Not	319 Barbertown	2.00	5/21/2019	\$358,000	1988	2,240	\$159.82	4/3	Gar	2-Story	
	Not	132 Kingwood	3.17	10/31/2016	\$380,000	1996	2,392	\$158.86	3/2.5	Det 2	2-Story	
	Not	26 Barbertown	2.03	5/21/2019	\$360,000	1998	2,125	\$169.41	4/3	2-Gar	2-Story	

Adjoining Sales Adjusted

Time	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
						\$385,000			250
-\$13,673	-\$5,370	-\$18,795	-\$5,000	\$10,000	\$20,000	\$345,162	10%		
\$4,893	-\$20,900	-\$33,171		\$5,000	\$20,000	\$355,823	8%		
-\$13,749	-\$23,400	-\$8,233	-\$5,000		\$20,000	\$329,618	14%		
								11%	

After typical adjustments including a \$20,000 increase in the comparable sales for updates, the subject property is showing a significant premium that may be attributable to the adjoining solar farm.

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style
	Adjoins	149 Wyndmoor	N/A	5/24/2017	\$206,000	1987	1,236	\$166.67	2/1.5	Gar	2-Story
	Not	97 Wyndmoor	N/A	4/17/2017	\$210,000	1987	1,236	\$169.90	2/1.5	Gar	2-Story
	Not	24 Monroe	N/A	12/23/2016	\$217,979	1987	1,560	\$139.73	3/2.5	Gar	2-Story
	Not	81 Wyndmoor	N/A	1/31/2018	\$204,000	1987	1,254	\$162.68	2/2.5	Gar	2-Story

Adjoining Sales Adjusted

Time	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
						\$206,000			175
\$639	\$0	\$0				\$210,639	-2%		
\$2,723	\$0	-\$27,164				\$193,539	6%		
-\$4,225	\$0	-\$1,757				\$198,018	4%	3%	

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style
	Adjoins	26 Wilmor	0.46	3/19/2019	\$286,000	1961	1,092	\$261.90	3/1.5	Gar	Ranch
	Not	25 Pinehurst	0.48	5/17/2019	\$315,000	1967	1,314	\$239.73	3/1&2	Gar	Ranch
	Not	15 Maple Stream	0.40	6/6/2017	\$285,000	1964	1,202	\$237.10	3/1.5	Gar	Ranch
	Not	3 Amy	0.29	10/11/2018	\$286,000	1969	1,229	\$232.71	3/1.5	Gar	Ranch

Adjoining Sales Adjusted

Time	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
						\$286,000			400
-\$1,566	-\$9,450	-\$31,932	-\$5,000			\$267,052	7%		
\$15,635	-\$4,275	-\$15,649				\$280,711	2%		
\$3,832	-\$11,440	-\$19,129				\$259,263	9%	6%	
						Average		-2%	250

The range of impact identified by these matched pairs ranges are therefore -14% to +6% for distances ranging from 175 feet to 400 feet with an average difference from these three indicators of -2%. As noted earlier this range is within the typical plus or minus for any real estate transaction and indicates no impact on property value.

This set of matched pairs is interesting and there appears to be more going on when you compare the two townhome properties. One shows a significant discount and the other shows no impact. When I compare the two townhomes that both back up to the same solar farm, the townhome that includes 1,532 s.f. sold for only \$9,000 more than the townhome that has 1,236 s.f. I attempted to speak with the broker involved with these but was unable to get a reply. The difference there strongly indicates that something else is going on with the larger townhome. I will not rely heavily on that matched pair, but I have included it to be complete.

28. Matched Pair – Tinton Falls Solar, Tinton Falls, NJ



This solar farm is located off W. Park Avenue. The tract with the solar farm also has a condo/townhome project from which I have considered recent sales activity. I note that the developer of the solar farm and the townhome community clearly did not see any negative impact from the combined use. These units are still being constructed with new sales expected in the near future.

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
	Adjoins	111 Kyle	N/A	8/8/2018	\$402,000	2015	2,200	\$182.73	3/2.5	Gar	3-Story	End
	Not	80 Kyle	N/A	9/18/2017	\$410,000	2015	2,226	\$184.19	2/2.5	Gar	3-Story	End/Park
	Not	15 Michael	N/A	9/19/2018	\$412,000	2016	2,157	\$191.01	3/2.5	Gar	3-Story	End
	Not	31 Michael	N/A	4/1/2019	\$390,000	2016	2,200	\$177.27	3/2.5	Gar	3-Story	End
	Not	15 Michael	N/A	9/9/2018	\$412,000	2016	2,157	\$191.01	3/2.5	Gar	3-Story	End

Adjoining Sales Adjusted

Time	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
						\$402,000			185
\$11,194	\$0	-\$2,873			-\$20,500	\$397,821	1%		
-\$1,458	-\$2,060	\$4,928				\$413,410	-3%		
-\$7,756	-\$1,950	\$0				\$380,294	5%		
-\$1,111	-\$2,060	\$4,928				\$413,757	-4%		

1%

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
	Adjoins	47 Kyle	N/A	8/31/2018	\$260,000	2016	1,140	\$228.07	2/2	Gar	3-Story	End
	Not	26 Jake	N/A	10/31/2017	\$268,000	2014	1,140	\$235.09	2/2	Gar	3-Story	End
	Not	4 Michael	N/A	11/8/2018	\$260,000	2015	1,140	\$228.07	2/2	Gar	3-Story	End
	Not	36 Kyle	N/A	1/10/2019	\$260,000	2015	1,140	\$228.07	2/2	Gar	3-Story	

Adjoining Sales Adjusted

Time	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
						\$260,000			155
\$6,866	\$2,680	\$0				\$277,546	-7%		
-\$1,512	\$1,300	\$0				\$259,788	0%		
-\$2,892	\$1,300	\$0			\$7,800	\$266,208	-2%	-3%	

Adjoining Residential Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
	Adjoins	7 Kyle	N/A	6/15/2017	\$262,195	2017	1,140	\$230.00	2/2	Gar	3-Story	End
	Not	26 Jake	N/A	10/31/2017	\$268,000	2014	1,140	\$235.09	2/2	Gar	3-Story	End
	Not	4 Michael	N/A	11/8/2018	\$260,000	2015	1,140	\$228.07	2/2	Gar	3-Story	End
	Not	36 Kyle	N/A	1/10/2019	\$260,000	2015	1,140	\$228.07	2/2	Gar	3-Story	

Adjoining Sales Adjusted

Time	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
						\$262,195			150
-\$3,117	\$4,020	\$0				\$268,903	-3%		
-\$11,196	\$2,600	\$0	-\$5,000			\$246,404	6%		
-\$12,576	\$2,600	\$0			\$7,800	\$257,824	2%	2%	

Adjoining Residential Sales After Solar Farm Approved

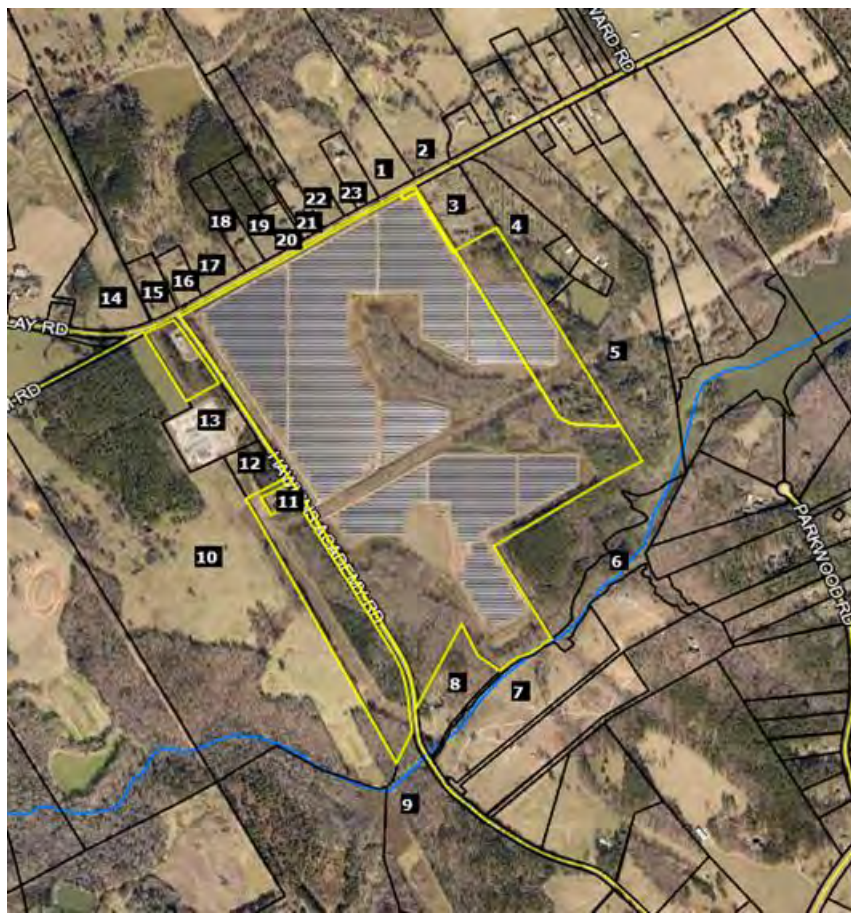
Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
	Adjoins	1 Samantha	N/A	9/1/2017	\$258,205	2017	1,140	\$226.50	2/2	Gar	3-Story	End
	Not	26 Jake	N/A	10/31/2017	\$268,000	2014	1,140	\$235.09	2/2	Gar	3-Story	End
	Not	4 Michael	N/A	11/8/2018	\$260,000	2015	1,140	\$228.07	2/2	Gar	3-Story	End
	Not	36 Kyle	N/A	1/10/2019	\$260,000	2015	1,140	\$228.07	2/2	Gar	3-Story	

Adjoining Sales Adjusted

Time	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
						\$258,205			155
-\$1,355	\$4,020	\$0	-\$5,000			\$265,665	-3%		
-\$9,487	\$2,600	\$0				\$253,113	2%		
-\$10,867	\$2,600	\$0			\$7,800	\$259,533	-1%	0%	

The range of impact identified by these matched pairs ranges are therefore -3% to +2% for distances ranging from 150 feet to 185 feet with an average difference from these four indicators of 0%. As noted earlier this range is within the typical plus or minus for any real estate transaction and indicates no impact on property value.

29. Matched Pair – Simon Solar, Social Circle, GA



This solar farm is located off Hawkins Academy Road and Social Circle Fairplay Road. I identified three adjoining sales to this tract after development of the solar farm. However, one of those is shown as Parcel 12 in the map above and includes a powerline easement encumbering over a third of the 5 acres and adjoins a large substation as well. It would be difficult to isolate those impacts from any potential solar farm impact and therefore I have excluded that sale. I also excluded the recent sale of Parcel 17, which is a farm with conservation restrictions on it that similarly would require a detailed examination of those conservation restrictions in order to see if there was any impact related to the solar farm. I therefore focused on the recent sale of Parcel 7 and the adjoining parcel to the south of that. They are technically not adjoining due to the access road for the flag-shaped lot to the east. Furthermore, there is an apparent access easement serving the two rear lots that encumber these two parcels which is a further limitation on these sales. This analysis assumes that the access easement does not negatively impact the subject property, though it may.

Adjoining Land Sales After Solar Farm Approved

Parcel	Solar	Address	Acres	Date Sold	Sales Price	\$/AC	Type	Other
7+	Adjoins	4514 Hawkins	36.86	3/31/2016	\$180,000	\$4,883	Pasture	Esmts
	Not	HD Atha	69.95	12/20/2016	\$357,500	\$5,111	Wooded	N/A
	Not	Pannell	66.94	11/8/2016	\$322,851	\$4,823	Mixed	*
	Not	1402 Roy	123.36	9/29/2016	\$479,302	\$3,885	Mixed	**

* Adjoining 1 acre purchased by same buyer in same deed. Allocation assigned on the County Tax Record.

** Dwelling built in 1996 with a 2016 tax assessed value of \$75,800 deducted from sales price to reflect land value

Adjoining Sales Adjusted						Avg
Time	Size	Type	Other	Total/Ac	% Diff	% Diff
				\$4,883		
\$89	\$256			\$5,455	-12%	
-\$90	\$241			\$4,974	-2%	
-\$60	\$389			\$4,214	14%	
						0%

The range of impact identified by these matched pairs ranges are therefore -12% to +14% for with an average of 0%. The best matched pair with the least adjustment supports a -2% impact due to the solar farm. I note again that this analysis considers no impact for the existing access easements that meander through this property and it may be having an impact. Still at -2% impact as the best indication for the solar farm, I consider that to be no impact given that market fluctuations support +/- 5%.

30. Matched Pair – Candace Solar, Princeton, NC



This solar farm is located at 4839 US 70 Highway just east of Herring Road. This solar farm was completed on October 25, 2016.

I identified three adjoining sales to this tract after development of the solar farm with frontage on US 70. I did not attempt to analyze those sales as they have exposure to an adjacent highway and railroad track. Those homes are therefore problematic for a matched pair analysis unless I have similar homes fronting on a similar corridor.

I did consider a land sale and a home sale on adjoining parcels without those complications.

The lot at 499 Herring Road sold to Paradise Homes of Johnston County of NC, Inc. for \$30,000 in May 2017 and a modular home was placed there and sold to Karen and Jason Toole on September 29, 2017. I considered the lot sale first as shown below and then the home sale that followed.

Adjoining Land Sales After Solar Farm Approved						Adjoining Sales Adjusted					
Parcel	Solar	Address	Acres	Date Sold	Sales Price	Other	Time	Site	Other	Total	% Diff
16	Adjoins	499 Herring	2.03	5/1/2017	\$30,000					\$30,000	
	Not	37 Becky	0.87	7/23/2019	\$24,500	Sub/Pwr	-\$1,679	\$4,900		\$27,721	8%
	Not	5858 Bizzell	0.88	8/17/2016	\$18,000		\$390	\$3,600		\$21,990	27%
	Not	488 Herring	2.13	12/20/2016	\$35,000		\$389			\$35,389	-18%
Average											5%

Following the land purchase, the modular home was placed on the site and sold. I have compared this modular home to the following sales to determine if the solar farm had any impact on the purchase price.

Adjoining Residential Sales After Solar Farm Approved												
Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
16	Adjoins	499 Herring	2.03	9/27/2017	\$215,000	2017	2,356	\$91.26	4/3	Drive	Modular	
	Not	678 WC	6.32	3/8/2019	\$226,000	1995	1,848	\$122.29	3/2.5	Det Gar	Mobile	Ag bldgs
	Not	1810 Bay V	8.70	3/26/2018	\$170,000	2003	2,356	\$72.16	3/2	Drive	Mobile	Ag bldgs
	Not	1795 Bay V	1.78	12/1/2017	\$194,000	2017	1,982	\$97.88	4/3	Drive	Modular	

Adjoining Residential Sales Af Adjoining Sales Adjusted													
Parcel	Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
16	Adjoins	499 Herring								\$215,000			488
	Not	678 WC	-\$10,037	-\$25,000	\$24,860	\$37,275	-\$5,000	-\$7,500	-\$20,000	\$220,599	-3%		
	Not	1810 Bay V	-\$2,579	-\$20,000	\$11,900	\$0				\$159,321	26%		
	Not	1795 Bay V	-\$1,063		\$0	\$21,964				\$214,902	0%		
Average												8%	

The best comparable is 1795 Bay Valley as it required the least adjustment and was therefore most similar, which shows a 0% impact. This signifies no impact related to the solar farm.

The range of impact identified by these matched pairs ranges are therefore -3% to +26% with an average of +8% for the home and an average of +4% for the lot, though the best indicator for the lot shows a \$5,000 difference in the lot value due to the proximity to the solar farm or a -12% impact.

31. 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 five 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	

Adjustments											Avg	
Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	% Diff	Distance
Adjoins	250 Claiborne								\$120,000			373
Not	1250 Cason	\$2,081		\$2,850	\$26,144		-\$5,000	-\$5,000	\$116,075	3%		
Not	410 Reeves	\$249		\$0	\$24,615				\$104,865	13%		
Not	315 N Fork	-\$1,091		\$4,280	\$10,700				\$120,889	-1%		
											5%	

I also looked at three other home sales on this street as shown below. These are stick-built homes and show a higher price range.

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	\$212,720	2003	1,568	\$135.66	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											Avg	
Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	% Diff	Distance
Adjoins	300 Claiborne								\$213,000			488
Not	460 Claiborne	-\$2,026		-\$4,580	\$15,457	\$5,000			\$242,850	-14%		
Not	2160 Sherman	-\$5,672		-\$2,650	-\$20,406				\$236,272	-11%		
Not	215 Lexington	\$1,072		\$3,468	-\$2,559	-\$5,000			\$228,180	-7%		
											-11%	

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											Avg	
Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	% Diff	Distance
Adjoins	350 Claiborne								\$245,000			720
Not	460 Claiborne	-\$3,223		-\$5,725	\$30,660	\$5,000			\$255,712	-4%		
Not	2160 Sherman	-\$7,057		-\$3,975	-\$5,743				\$248,225	-1%		
Not	215 Lexington	-\$136		\$2,312	\$11,400	-\$5,000			\$239,776	2%		
											-1%	

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 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											Avg	
Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	% Diff	Distance
Adjoins	370 Claiborne								\$273,000			930
Not	2160 Sherman	\$1,831		\$0	-\$20,161				\$246,670	10%		
Not	2290 Dry	\$2,260		\$20,349	\$23,256	\$2,500			\$287,765	-5%		
Not	125 Lexington	\$9,951		\$4,800					\$254,751	7%		
											4%	

This set of matched pairs shows a general positive 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 variation in real estate transactions. This indication is higher than that and suggests a positive relationship.

Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	330 Claiborne	1.00	12/10/2019	\$282,500	2003	1,768	\$159.79	3/3	2-Car	Ranch	Brick/pool
Not	895 Osborne	1.70	9/16/2019	\$249,900	2002	1,705	\$146.57	3/2	2-Car	Ranch	Brick/pool
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

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
Adjoins	330 Claiborne								\$282,500			665
Not	895 Osborne	\$1,790		\$1,250	\$7,387	\$5,000		\$0	\$265,327	6%		
Not	2160 Sherman	\$4,288		-\$2,650	\$4,032			\$20,000	\$290,670	-3%		
Not	215 Lexington	\$9,761		\$3,468	\$20,706	-\$5,000		\$20,000	\$280,135	1%		

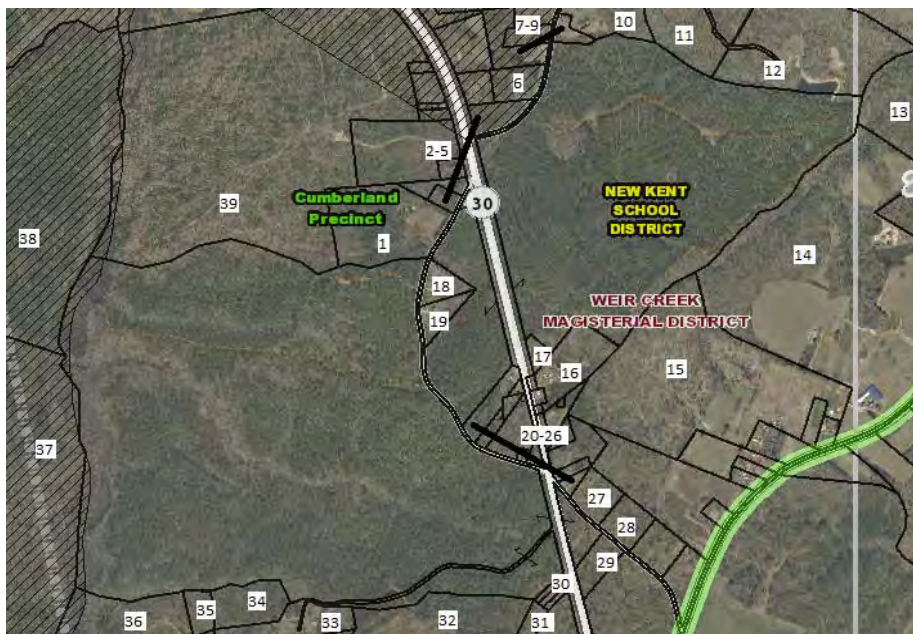
1%

This set of matched pairs shows a general positive impact for this property. The range of adjusted impacts is -3% to +6%. The best indication is +6%. I typically consider measurements of +/-5% to be within the typical variation in real estate transactions. This indication is higher than that and suggests a positive relationship.

The five matched pairs considered in this analysis includes two that show no impact on value, one that shows a negative impact on value, and two that show a positive impact. The negative indication supported by one matched pair is -7% and the positive impacts are +6% and +7%. The two neutral indications show impacts of -1% and +3%. The average indicated impact is +0% when all five of these indicators are blended.

Furthermore, the comments of the local broker strongly support the data that shows no negative impact on value due to the proximity to the solar farm. This is further supported by the national data that is shown on the following pages.

32. 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 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 impact on value. The home in this case was 510 feet from the closest panel.

33. 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 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%	

34. 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 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 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.



35. 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/FinBsmt	310
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	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,FinBsmt	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/UnBsmt	
Not	1128 Gwen Dr	0.47	8/24/2018	\$187,500	1973	2,040	\$91.91	3/2.5	2-Car	2 Story	Brick/UnBsmt	
Not	1227 Oakridge	1.05	6/11/2017	\$235,000	1980	2,500	\$94.00	4/2.5	2-Car	2 Story	Brk/PFinBsmt	

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 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 Ferguson 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

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other	Dist.
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	

Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff
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.

36. 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	Brick/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 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 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.

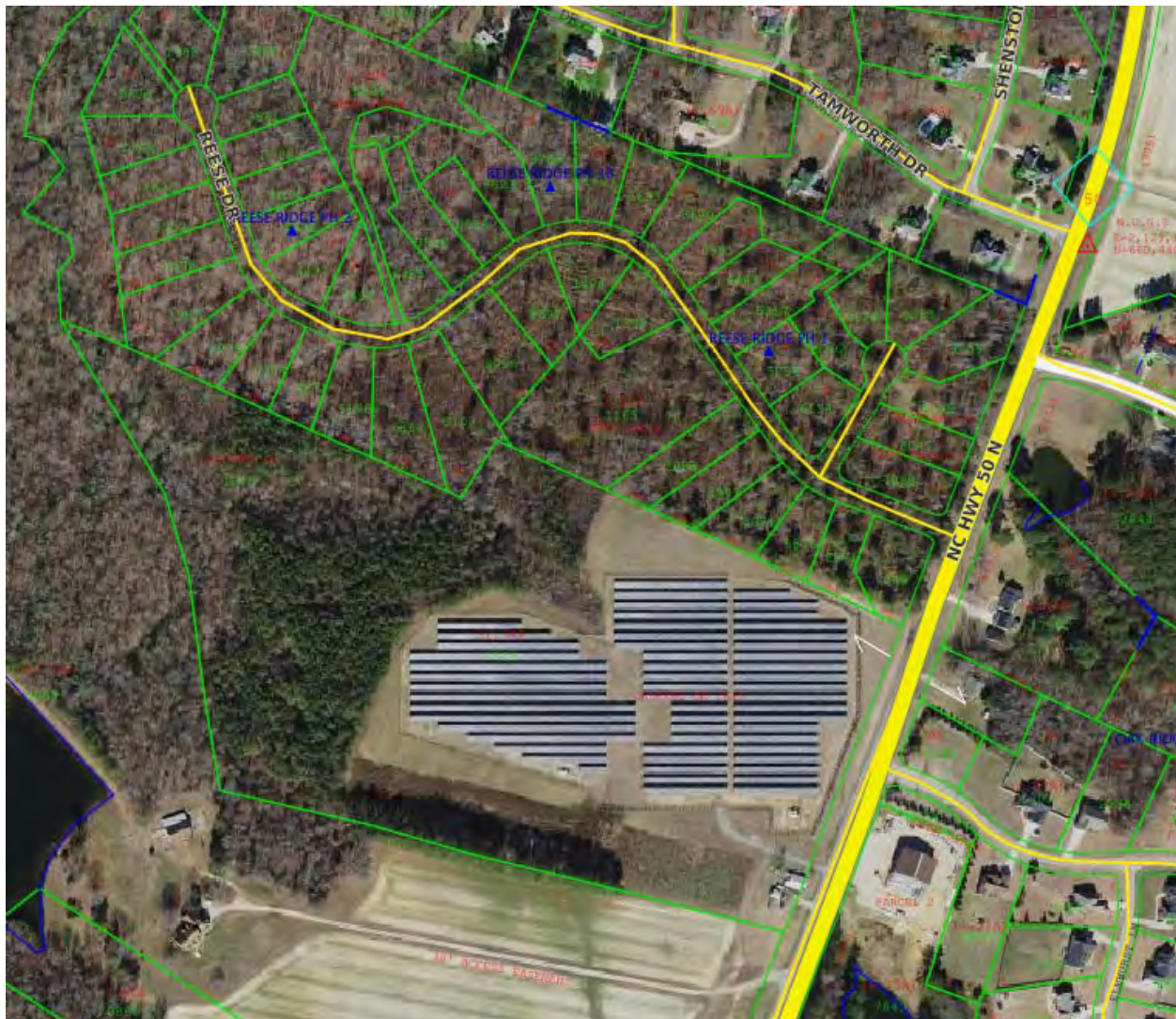
Adjoining Residential Sales After Solar Farm Built

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.

38. Matched Pair – HCE Johnston I, LLC, Benson, NC



This 2.6 MW project was built in 2015 and located on 30.55 acres.

There is a new subdivision that was developed in 2019 just north of this solar farm called Reese's Ridge. This location is near the McGees Crossroads near Mount Pleasant Road. As can be seen in the map below, the adjoining land to the north of this solar farm was purchased in 2017 and subdivided as Reese Ridge with 0.49 to 0.53 acre lots. Most of the trees on this site were cleared as part of the development with a single row of pine trees retained as a buffer along the solar farm. The first six lots on the south side of Reese Drive are around 115 feet from the center point in the lot to the nearest solar farm panel. This tract of land was purchased on September 7, 2017 for \$925,000 for 42.388 acres, or \$21,822 per acre.

The proposed homes will be custom homes starting at \$330,000. County water is available and the homes will use individual septic tanks. I spoke with Amanda with The Rodney Carroll Team who is marketing the homes and she indicated that 7 custom home builders had a lottery to purchase all of the lots.

Three different builders have purchased lots adjoining the solar farm for \$60,000 each. Similar lots across Reese Drive and further from the solar farm are selling at the same \$60,000 each. At

\$60,000 this indicates a lot-to-home ratio of 18%, which is typical for new home construction in the county where there is no amenity package.



Since then a home was built and then sold at 63 Reese Drive, which is two lots off of NC 50 and backs up to the solar farm. Similarly, 107 Reese Drive which is six lots off of NC 50 and backs up to the solar farm. I have considered both of these for matched pairs as shown below.

Adjoining Residential Sales After Solar Farm Built

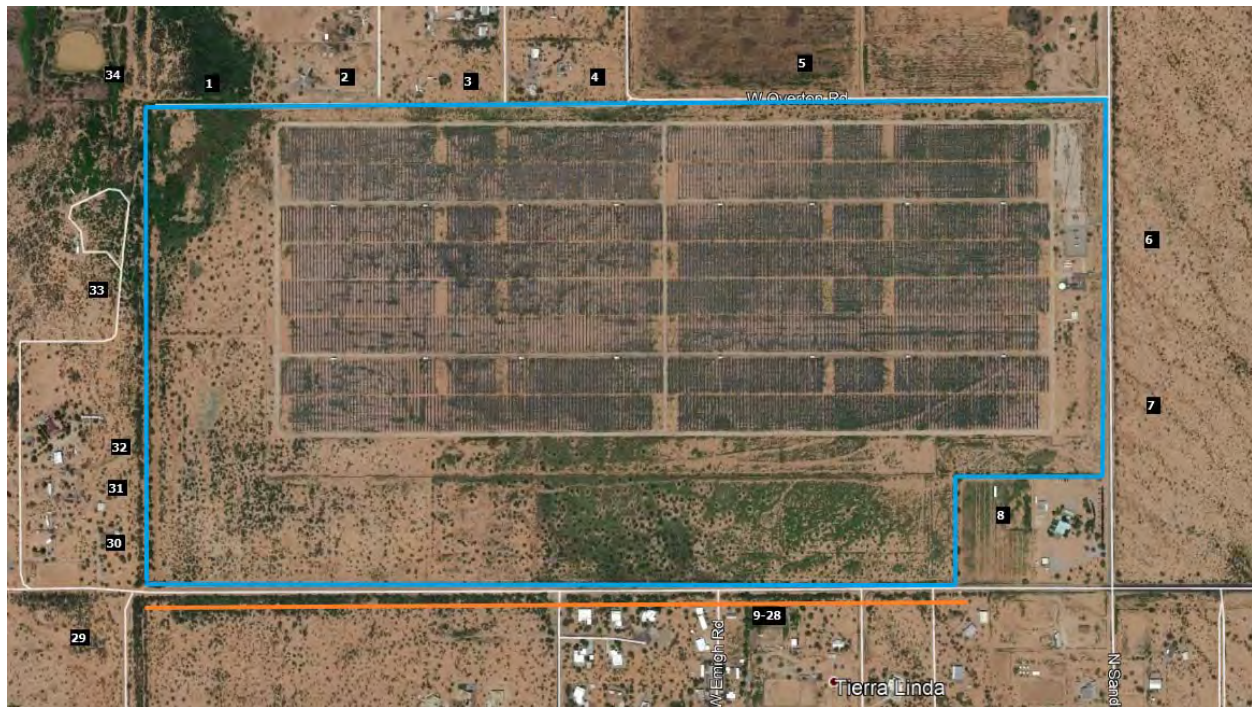
Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins		107 Reese Drive	0.69	11/27/2019	\$393,000	2019	2,960	\$132.77	3/3	2-Car	1.5 Vinyl	
Not		200 Reese Drive	0.44	2/19/2020	\$400,000	2019	3,209	\$124.65	3/2.5	2-Car	1.5 Batten/Stone	
Not		35 Pawnee Pl	0.65	5/30/2018	\$325,000	2017	2,609	\$124.57	4/3	2-Car	1.5 Vinyl/Stone	
Not		278 Timber Wolf	0.88	1/24/2020	\$367,443	2019	2,983	\$123.18	3/3	2-Car	1.5 Vinyl/Stone	
	Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff
Adjoins		107 Reese Drive								\$393,000		5%
Not		200 Reese Drive	-\$2,831		\$0	-\$24,830	\$5,000			\$377,338	4%	
Not		35 Pawnee Pl	\$14,954		\$3,250	\$34,979				\$378,183	4%	
Not		278 Timber Wolf	-\$1,796		\$0	-\$2,266				\$363,381	8%	

Adjoining Residential Sales After Solar Farm Built

Parcel	Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins		63 Reese Drive	0.45	3/24/2020	\$410,000	2019	3,240	\$126.54	4/3	2-Car	Ranch/Wd	
Not		200 Reese Drive	0.44	2/19/2020	\$400,000	2019	3,209	\$124.65	3/2.5	2-Car	1.5 Batten/Stone	
Not		320 Wolf Den	0.97	9/27/2019	\$377,780	2019	3,122	\$121.01	4/3	2-Car	1.5 Vinyl/Stone	
Not		37 Makers Way	0.59	5/29/2019	\$373,508	2019	3,122	\$119.64	4/3	3-Car	1.5 Vinyl/Stone	
	Solar	Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff
Adjoins		63 Reese Drive								\$410,000		3%
Not		200 Reese Drive	\$1,146		\$0	\$2,705	\$5,000			\$408,851	0%	
Not		320 Wolf Den	\$5,699		\$0	\$9,995				\$393,474	4%	
Not		37 Makers Way	\$9,443		\$0	\$9,882		-\$5,000		\$387,833	5%	

After adjustments, the two sales support a conclusion of no impact on property value due to the solar farm. I spoke with Rodney Carroll the broker marketing the homes and he indicated that the solar farm had zero impact on the sales price and they were marketing it as the best neighbor you could have.

39. 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 impact.

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 impact.

Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GLA	BR/BA	Park	Style	Other
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

Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	% Diff	Distance
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 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.

44. Matched Pair – Champion Solar, Lexington County, SC



This project is a 10 MW facility located on a 366.04-acre tract that was built in 2017.

I have considered the 2020 sale of an adjoining home located off 517 Old Charleston Road.

Adjoining Residential Sales After Solar Farm Approved

Solar	Address	Acres	Date Sold	Sales Price	Built	GBA	\$/GBA	BR/BA	Park	Style	Other
Adjoins	517 Old Charleston	11.05	8/25/2020	\$110,000	1962	925	\$118.92	3/1	Crport	Br Rnch	
Not	133 Buena Vista	2.65	6/21/2020	\$115,000	1979	1,104	\$104.17	2/2	Crport	Br Rnch	
Not	214 Crystal Spr	2.13	6/10/2019	\$102,500	1970	1,025	\$100.00	3/2	Crport	Rnch	
Not	1429 Laurel	2.10	2/21/2019	\$126,000	1960	1,250	\$100.80	2/1.5	Open	Br Rnch	3 Gar/Brn

Adjoining Sales Adjusted

Address	Time	Site	YB	GLA	BR/BA	Park	Other	Total	% Diff	Avg % Diff	Distance
517 Old Charleston								\$110,000			505
133 Buena Vista	\$410	\$17,000	-\$9,775	-\$14,917	-\$10,000			\$97,718	11%		
214 Crystal Spr	\$2,482	\$18,000	-\$4,100	-\$8,000	-\$10,000		\$10,000	\$110,882	-1%		
1429 Laurel	\$3,804	\$18,000	\$1,260	-\$26,208	-\$5,000	\$5,000	-\$15,000	\$107,856	2%	4%	

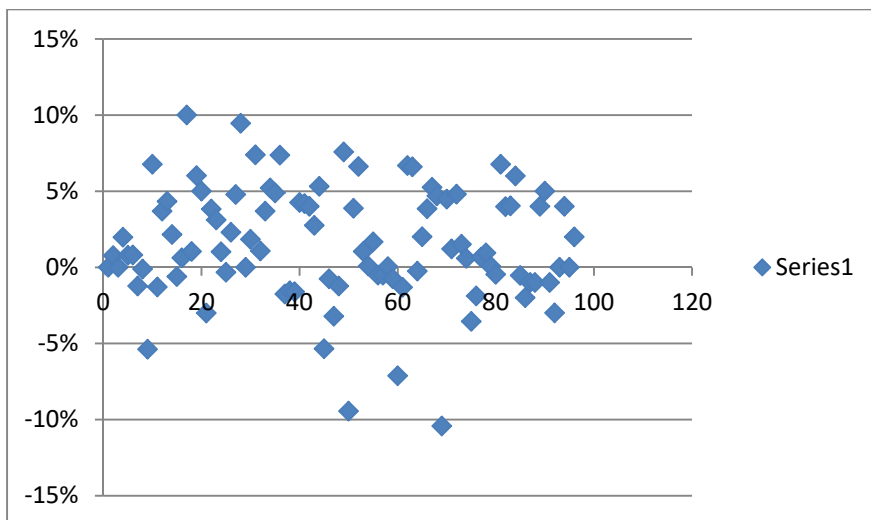
Conclusion

The solar farm matched pairs shown above have similar characteristics to each other in terms of population, but with several outliers showing solar farms in farm more urban areas. The median income for the population within 1 mile of a solar farm is \$63,665 with a median housing unit value of \$251,570. Most of the comparables are under \$400,000 in the home price, with \$770,000 being the high end of the set of matched pairs. The adjoining uses show that residential and agricultural uses are the predominant adjoining uses. These figures are in line with the larger set of solar farms that I have looked at with the predominant adjoining uses being residential and agricultural and similar to the solar farm breakdown shown for South Carolina and the proposed subject property.

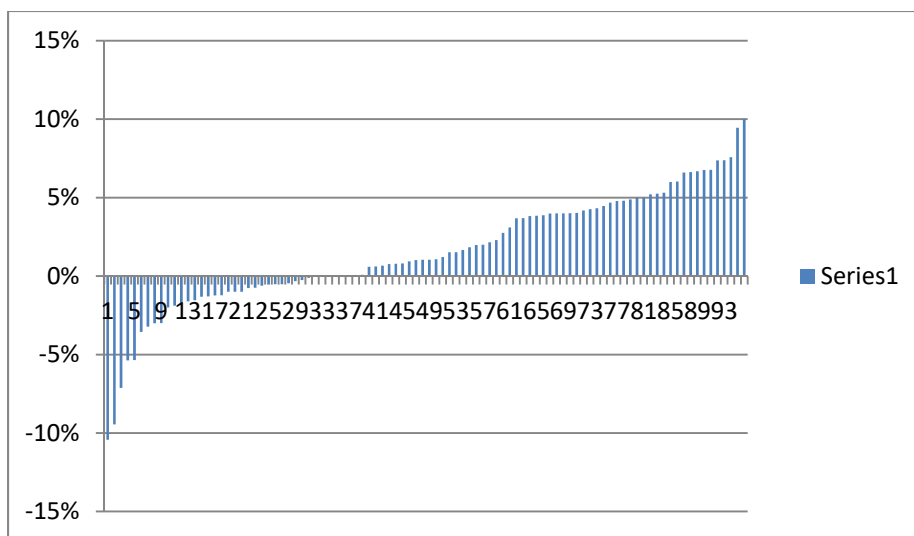
Matched Pair Summary					Adj. Uses By Acreage						1 mile Radius (2010-2020 Data)		
Name	City	State	Acres	MW	Topo Shift	Res	Ag/Res	Ag	Com/Ind	Population	Med. Income	Avg. Housing Unit	
1	AM Best	Goldsboro	NC	38	5.00	2	38%	23%	0%	39%	1,523	\$37,358	\$148,375
2	White Cross	Chapel Hill	NC	45	5.00	50	5%	51%	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	\$258,617
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	Courthouse	Bessemer	NC	52	5.00	150	48%	52%	0%	0%	551	\$45,968	\$139,404
23	Mariposa	Stanley	NC	36	5.00	96	48%	52%	0%	0%	1,716	\$36,439	\$137,884
24	Clarke Cnty	White Post	VA	234	20.00	70	14%	46%	39%	1%	578	\$81,022	\$374,453
25	Flemington	Flemington	NJ	120	9.36	N/A	13%	28%	50%	8%	3,477	\$105,714	\$444,696
26	Frenchtown	Frenchtown	NJ	139	7.90	N/A	37%	29%	35%	0%	457	\$111,562	\$515,399
27	McGraw	East Windsor	NJ	95	14.00	N/A	27%	0%	44%	29%	7,684	\$78,417	\$362,428
28	Tinton Falls	Tinton Falls	NJ	100	16.00	N/A	98%	0%	0%	2%	4,667	\$92,346	\$343,492
29	Simon	Social Circle	GA	237	30.00	71	1%	36%	63%	0%	203	\$76,155	\$269,922
30	Candace	Princeton	NC	54	5.00	22	76%	0%	24%	0%	448	\$51,002	\$107,171
31	Crittenden	Crittenden	KY	34	2.70	40	22%	27%	51%	0%	1,419	\$60,198	\$178,643
32	Walker	Barhamville	VA	485	20.00	N/A	12%	20%	68%	0%	203	\$80,773	\$320,076
33	Innov 46	Hope Mills	NC	532	78.50	0	17%	0%	83%	0%	2,247	\$58,688	\$183,435
34	Innov 42	Fayetteville	NC	414	71.00	0	41%	0%	59%	0%	568	\$60,037	\$276,347
35	Demille	Lapeer	MI	160	28.40	10	10%	0%	68%	22%	2,010	\$47,208	\$187,214
36	Turrill	Lapeer	MI	230	19.60	10	75%	0%	59%	25%	2,390	\$46,839	\$110,361
37	Sunfish	Willow Spring	NC	50	6.40	30	35%	30%	35%	0%	1,515	\$63,652	\$253,138
38	HCE Johnston	Benson	NC	30	2.60	0	55%	45%	0%	0%	1,169	\$65,482	\$252,544
39	Picture Rocks	Tucson	AZ	182	20.00	N/A	6%	6%	88%	0%	102	\$81,081	\$280,172
40	Avra Valley	Tucson	AZ	246	25.00	N/A	3%	3%	94%	0%	85	\$80,997	\$292,308
41	Sappony	Stony Crk	VA	322	20.00	N/A	2%	0%	98%	0%	74	\$51,410	\$155,208
42	Camden Dam	Camden	NC	50	5.00	0	17%	11%	72%	0%	403	\$84,426	\$230,288
43	Grandy	Grandy	NC	121	20.00	10	55%	0%	24%	21%	949	\$50,355	\$231,408
44	Champion	Pelion	SC	100	10.00	N/A	4%	8%	70%	18%	1,336	\$46,867	\$171,939
Average				211	17.10	32	28%	22%	46%	5%	1,551	\$66,956	\$260,573
Median				100	5.70	20	18%	9%	51%	0%	544	\$63,665	\$251,570
High				2,034	80.00	150	98%	94%	98%	44%	9,257	\$166,958	\$770,433
Low				24	0.22	0	1%	0%	0%	0%	48	\$35,057	\$99,219
1 Mile Radius	Madison 2		2,350	100		17%	32%	51%	0%		170	\$68,284	\$188,525
3 Mile Radius	Madison 2		2,350	100		17%	32%	51%	0%	3,678	\$75,700	\$189,902	

I have pulled 96 matched pairs from the above referenced solar farms to provide the following summary of home sale matched pairs and land sales next to solar farms. The summary shows that the range of differences is from -10% to +10% with an average of +1% and median of +1%. This means that the average and median impact is for a slight positive impact due to adjacency to a solar farm. However, this 1% rate is within the typical variability I would expect from real estate. I therefore conclude that this data shows no negative or positive impact due to adjacency to a solar farm.

While the range is seemingly wide, the graph below clearly shows that the vast majority of the data falls between -5% and +5% and most of those are clearly in the 0 to +5% range.



Arranging the data points in order of impact, I get the following chart that shows only 3 matched pairs out of 96 identifying impacts greater than -5% and only 22 more out of 96 between -5% and -1%. This leaves 71 out of 96 matched pairs showing positive impacts from 0 to +10%, or 74% of the total matched pairs. However, given that +/- 5% is considered no impact, that would include 82 of the 96 matched pairs, or 85% of the findings supporting a finding of no impact. The other readings are considered outliers with only 3 suggesting a negative impact and 11 suggesting a positive impact.



The breakdown for the 96 residential matched pairs is summarized below and the breakdown shown on the following pages.

Residential Dwelling Matched Pairs Adjoining Solar Farms

Pair	Solar Farm	City	State	Area	MW	Approx		Sale Date	Sale Price	Adj. Sale Price	% Diff
						Distance	Tax ID/Address				
1	AM Best	Goldsboro	NC	Suburban	5	280	3600195570	Sep-13	\$250,000		
							3600198928	Mar-14	\$250,000	\$250,000	0%
2	AM Best	Goldsboro	NC	Suburban	5	280	3600195361	Sep-13	\$260,000		
							3600194813	Apr-14	\$258,000	\$258,000	1%
3	AM Best	Goldsboro	NC	Suburban	5	280	3600199891	Jul-14	\$250,000		
							3600198928	Mar-14	\$250,000	\$250,000	0%
4	AM Best	Goldsboro	NC	Suburban	5	280	3600198632	Aug-14	\$253,000		
							3600193710	Oct-13	\$248,000	\$248,000	2%
5	AM Best	Goldsboro	NC	Suburban	5	280	3600196656	Dec-13	\$255,000		
							3601105180	Dec-13	\$253,000	\$253,000	1%
6	AM Best	Goldsboro	NC	Suburban	5	280	3600182511	Feb-13	\$247,000		
							3600183905	Dec-12	\$240,000	\$245,000	1%
7	AM Best	Goldsboro	NC	Suburban	5	280	3600182784	Apr-13	\$245,000		
							3600193710	Oct-13	\$248,000	\$248,000	-1%
8	AM Best	Goldsboro	NC	Suburban	5	280	3600195361	Nov-15	\$267,500		
							3600195361	Sep-13	\$260,000	\$267,800	0%
9	Mulberry	Selmer	TN	Rural	5	400	0900A011	Jul-14	\$130,000		
							099CA043	Feb-15	\$148,900	\$136,988	-5%
10	Mulberry	Selmer	TN	Rural	5	400	099CA002	Jul-15	\$130,000		
							0990NA040	Mar-15	\$120,000	\$121,200	7%
11	Mulberry	Selmer	TN	Rural	5	480	491 Dusty	Oct-16	\$176,000		
							35 April	Aug-16	\$185,000	\$178,283	-1%
12	Mulberry	Selmer	TN	Rural	5	650	297 Country	Sep-16	\$150,000		
							53 Glen	Mar-17	\$126,000	\$144,460	4%
13	Mulberry	Selmer	TN	Rural	5	685	57 Cooper	Feb-19	\$163,000		
							191 Amelia	Aug-18	\$132,000	\$155,947	4%
14	Nixon's	W. Friendship	MD	Rural	2	660	12909 Vistaview	Sep-14	\$775,000	\$771,640	
							2712 Friendship Farm	Jun-14	\$690,000	\$755,000	2%
15	Leonard Rd	Hughesville	MD	Rural	5.5	230	14595 Box Elder	Feb-16	\$291,000		
							15313 Bassford Rd	Jul-16	\$329,800	\$292,760	-1%
16	Talbot Cnty	Easton	MD	Rural	0.55	1000	10193 Hiners	Oct-12	\$136,092		
							10711 Hiners	Dec-12	\$135,000	\$135,250	1%
17	Alamo II	San Antonio	TX	Suburban	4.4	360	7703 Redstone Mnr	Mar-16	\$166,000		
							7703 Redstone Mnr	Oct-12	\$149,980	\$165,728	0%
18	Alamo II	San Antonio	TX	Suburban	4.4	170	7807 Redstone Mnr	Aug-14	\$147,000		
							7807 Redstone Mnr	May-12	\$136,266	\$145,464	1%
19	Alamo II	San Antonio	TX	Suburban	4.4	150	7734 Sundew Mist	Nov-14	\$134,000		
							7734 Sundew Mist	May-12	\$117,140	\$125,928	6%
20	Neal Hawkins	Gastonia	NC	Suburban	5	225	609 Neal Hawkins	Mar-17	\$270,000		
							1418 N Modena	Apr-18	\$225,000	\$257,290	5%
21	Summit	Moyock	NC	Suburban	80	1,060	129 Pinto	Apr-16	\$170,000		
							102 Timber	Apr-16	\$175,500	\$175,101	-3%
22	Summit	Moyock	NC	Suburban	80	2,020	105 Pinto	Dec-16	\$206,000		
							127 Ranchland	Jun-15	\$219,900	\$198,120	4%
23	White Cross II	Chapel Hill	NC	Rural	2.8	1,479	2018 Elkins	Feb-16	\$340,000		
							4200B Old Greensbor	Dec-15	\$380,000	\$329,438	3%
24	Tracy	Bailey	NC	Rural	5	780	9162 Winters	Jan-17	\$255,000		
							7352 Red Fox	Jun-16	\$176,000	\$252,399	1%
25	Manatee	Parrish	FL	Rural	75	1180	13670 Highland	Aug-18	\$255,000		
							13851 Highland	Sep-18	\$240,000	\$255,825	0%
26	McBride Place	Midland	NC	Rural	75	275	4380 Joyner	Nov-17	\$325,000		
							3870 Elkwood	Aug-16	\$250,000	\$317,523	2%
27	McBride Place	Midland	NC	Rural	75	505	5811 Kristi	Mar-20	\$530,000		
							3915 Tania	Dec-19	\$495,000	\$504,657	5%
28	Yamhill II	Amity	OR	Rural	1.2	700	12001 SW Bellerus	Jul-15	\$326,456		
							9955 Bethel	Feb-16	\$289,900	\$295,593	9%
29	Clackamas II	Aurora	OR	Suburban	0.22	125	7620 SW Fairway	Jul-13	\$365,000		
							7480 SW Fairway	Jun-13	\$365,000	\$365,000	0%
30	Clackamas II	Aurora	OR	Suburban	0.22	125	7700 SW Fairway	Jun-14	\$377,100		
							7500 SW Fairway	Dec-11	\$365,000	\$370,175	2%

Pair	Solar Farm	City	State	Area	MW	Approx		Sale Date	Sale Price	Adj. Sale Price	% Diff
						Distance	Tax ID/Address				
31	Clackamas II	Aurora	OR	Suburban	0.22	125	7380 SW Fairway 7480 SW Fairway	Jul-14 Jun-13	\$415,000 \$365,000		
32	Grand Ridge	Streator	IL	Rural	20	480	1497 E 21st 712 Columbus	Oct-16 Jun-16	\$186,000 \$166,000	\$384,345 \$184,000	7% 1%
33	Portage	Portage	IN	Rural	2	1320	836 N 450 W 336 E 1050 N	Sep-13 Jan-13	\$149,800 \$155,000		4%
34	Dominion	Indianapolis	IN	Rural	8.6	400	2013249 (Tax ID) 5723 Minden	Dec-15 Nov-16	\$140,000 \$139,900		5%
35	Dominion	Indianapolis	IN	Rural	8.6	400	2013251 (Tax ID) 5910 Mosaic	Sep-17 Aug-16	\$160,000 \$146,000		5%
36	Dominion	Indianapolis	IN	Rural	8.6	400	2013252 (Tax ID) 5836 Sable	May-17 Jun-16	\$147,000 \$141,000		7%
37	Dominion	Indianapolis	IN	Rural	8.6	400	2013258 (Tax ID) 5904 Minden	Dec-15 May-16	\$131,750 \$130,000		
38	Dominion	Indianapolis	IN	Rural	8.6	400	2013260 (Tax ID) 5904 Minden	Mar-15 May-16	\$127,000 \$130,000		
39	Dominion	Indianapolis	IN	Rural	8.6	400	2013261 (Tax ID) 5904 Minden	Feb-14 May-16	\$120,000 \$130,000		
40	Beetle-Shelby	Mooresboro	NC	Rural	4	945	1715 Timber 1021 Posting	Oct-18 Feb-19	\$416,000 \$414,000		4%
41	Courthouse	Bessemer	NC	Rural	5	375	2134 Tryon Court. 5550 Lennox	Mar-17 Oct-18	\$111,000 \$115,000		4%
42	Mariposa	Stanley	NC	Suburban	5	1155	215 Mariposa 110 Airport	Dec-17 May-16	\$249,000 \$166,000		4%
43	Mariposa	Stanley	NC	Suburban	5	570	242 Mariposa 110 Airport	Sep-15 Apr-16	\$180,000 \$166,000		3%
44	Clarke Cnty	White Post	VA	Rural	20	1230	833 Nations Spr 541 Old Kitchen	Jan-17 Sep-18	\$295,000 \$370,000		5%
45	Flemington	Flemington	NJ	Suburban	9.36	295	10 Coventry 1 Sheffield	Mar-18 Dec-17	\$370,000 \$399,900		-5%
46	Flemington	Flemington	NJ	Suburban	9.36	375	54 Hart 43 Aberdeen	Jul-16 Nov-16	\$420,000 \$417,000		-1%
47	Flemington	Flemington	NJ	Suburban	9.36	425	6 Portsmith 43 Aberdeen	Jun-15 Nov-16	\$410,000 \$417,000		-3%
48	Flemington	Flemington	NJ	Suburban	9.36	345	12 Stratford 28 Bristol	Nov-17 Dec-18	\$414,900 \$398,000		-1%
49	Frenchtown	Frenchtown	NJ	Rural	7.9	250	5 Muddy Run 132 Kingswood	Jun-17 Oct-16	\$385,000 \$380,000		8%
50	McGraw	East Windsor	NJ	Suburban	14	175	153 Wyndmoor 20 Spyglass	Apr-17 Dec-17	\$215,000 \$240,000		-9%
51	McGraw	East Windsor	NJ	Suburban	14	175	149 Wyndmoor 81 Wyndmoor	May-17 Jan-18	\$206,000 \$204,000		4%
52	McGraw	East Windsor	NJ	Suburban	14	400	26 Wilmor 25 Pinehurst	Mar-19 May-19	\$286,000 \$315,000		7%
53	Tinton Falls	Tinton Falls	NJ	Suburban	16	185	111 Kyle 80 Kyle	Aug-18 Sep-17	\$402,000 \$410,000		1%
54	Tinton Falls	Tinton Falls	NJ	Suburban	16	155	47 Kyle 4 Michael	Aug-18 Nov-18	\$260,000 \$260,000		0%
55	Tinton Falls	Tinton Falls	NJ	Suburban	16	150	7 Kyle 36 Kyle	Jun-17 Jan-19	\$262,195 \$260,000		2%
56	Tinton Falls	Tinton Falls	NJ	Suburban	16	155	1 Samantha 36 Kyle	Sep-17 Jan-19	\$258,205 \$260,000		-1%
57	Tinton Falls	Tinton Falls	NJ	Suburban	16	155	1 Samantha 36 Kyle	Sep-17 Jan-19	\$258,205 \$260,000		-1%
58	Candace	Princeton	NC	Suburban	5	488	499 Herring 1795 Bay Valley	Sep-17 Dec-17	\$215,000 \$194,000		0%
59	Crittenden	Crittenden	KY	Suburban	2.7	373	250 Claiborne 315 N Fork	Jan-19 May-19	\$120,000 \$107,000		-1%

Pair	Solar Farm	City	State	Area	MW	Distance	Tax ID/Address	Sale Date	Sale Price	Adj. Sale Price	% Diff
60	Crittenden	Crittenden	KY	Suburban	2.7	488	300 Claiborne	Sep-18	\$213,000		
							1795 Bay Valley	Dec-17	\$231,200	\$228,180	-7%
61	Crittenden	Crittenden	KY	Suburban	2.7	720	350 Claiborne	Jul-18	\$245,000		
							2160 Sherman	Jun-19	\$265,000	\$248,225	-1%
62	Crittenden	Crittenden	KY	Suburban	2.7	930	370 Claiborne	Aug-19	\$273,000		
							125 Lexington	Apr-18	\$240,000	\$254,751	7%
63	Walker	Barhamsville	VA	Rural	20	250	5241 Barham	Oct-18	\$264,000		
							9252 Ordinary	Jun-19	\$277,000	\$246,581	7%
64	AM Best	Goldsboro	NC	Suburban	5	385	103 Granville Pl	Jul-18	\$265,000		
							2219 Granville	Jan-18	\$260,000	\$265,682	0%
65	AM Best	Goldsboro	NC	Suburban	5	315	104 Erin	Jun-17	\$280,000		
							2219 Granville	Jan-18	\$265,000	\$274,390	2%
66	AM Best	Goldsboro	NC	Suburban	5	400	2312 Granville	May-18	\$284,900		
							2219 Granville	Jan-18	\$265,000	\$273,948	4%
67	AM Best	Goldsboro	NC	Suburban	5	400	2310 Granville	May-19	\$280,000		
							634 Friendly	Jul-19	\$267,000	\$265,291	5%
68	Summit	Moyock	NC	Suburban	80	570	318 Green View	Sep-19	\$357,000		
							336 Green View	Jan-19	\$365,000	\$340,286	5%
69	Summit	Moyock	NC	Suburban	80	440	164 Ranchland	Apr-19	\$169,000		
							105 Longhorn	Oct-17	\$184,500	\$186,616	-10%
70	Summit	Moyock	NC	Suburban	80	635	358 Oxford	Sep-19	\$478,000		
							176 Providence	Sep-19	\$425,000	\$456,623	4%
71	Summit	Moyock	NC	Suburban	80	970	343 Oxford	Mar-17	\$490,000		
							218 Oxford	Apr-17	\$525,000	\$484,064	1%
72	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%
73	Innov 42	Fayetteville	NC	Suburban	71	340	2923 County Line	Feb-19	\$385,000		
							2109 John McMillan	Apr-18	\$320,000	\$379,156	2%
74	Innov 42	Fayetteville	NC	Suburban	71	330	2935 County Line	Jun-19	\$266,000		
							7031 Glynn Mill	May-18	\$255,000	\$264,422	1%
75	Demille	Lapeer	MI	Suburban	28	310	1120 Don Wayne	Aug-19	\$194,000		
							1231 Turrill	Apr-19	\$182,000	\$200,895	-4%
76	Demille	Lapeer	MI	Suburban	28	310	1126 Don Wayne	May-18	\$160,000		
							3565 Garden	May-19	\$165,000	\$163,016	-2%
77	Demille	Lapeer	MI	Suburban	28	380	1138 Don Wayne	Aug-19	\$191,000		
							1128 Gwen	Aug-18	\$187,500	\$189,733	1%
78	Demille	Lapeer	MI	Suburban	28	280	1174 Alice	Jan-19	\$165,000		
							1127 Don Wayne	Sep-19	\$176,900	\$163,443	1%
79	Turrill	Lapeer	MI	Suburban	20	290	1060 Cliff	Sep-18	\$200,500		
							1128 Gwen	Aug-18	\$187,500	\$200,350	0%
80	Turrill	Lapeer	MI	Suburban	20	255	1040 Cliff	Jun-17	\$145,600		
							1127 Don Wayne	Sep-19	\$176,900	\$146,271	0%
81	Sunfish	Willow Sprng	NC	Suburban	6.4	205	7513 Glen Willow	Sep-17	\$185,000		
							205 Pine Burr	Dec-17	\$191,000	\$172,487	7%
82	HCE Johnston	Benson	NC	Suburban	2.6	290	107 Reese	Nov-19	\$393,000		
							200 Reese	Feb-20	\$400,000	\$377,338	4%
83	HCE Johnston	Benson	NC	Suburban	2.6	105	63 Reese	Mar-20	\$410,000		
							320 Wolf Den	Sep-19	\$377,780	\$393,474	4%
84	Crittenden	Crittenden	KY	Suburban	2.7	655	330 Claiborne	Dec-19	\$282,500		
							895 Osborne	Sep-19	\$249,900	\$265,327	6%
85	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%
86	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%
87	Picture Rocks	Tucson	AZ	Rural	20	990	12705 W Emigh	Jan-19	\$255,000		
							12020 W Camper	Sep-19	\$200,000	\$257,440	-1%
88	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%
89	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%
90	Neal Hawkins	Gastonia	NC	Suburban	5	145	611 Neal Hawkins	Jun-17	\$288,000		
							1211 Still Forrest	Jul-18	\$280,000	\$284,838	1%
91	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%
92	Sappony	Stony Creek	VA	Rural	20	1425	12511 Palestine	Jul-18	\$128,400		
							6494 Rocky Branch	Nov-18	\$100,000	\$131,842	-3%

Pair	Solar Farm	City	State	Area	MW	Approx		Sale Date	Sale Price	Adj. Sale Price	% Diff
						Tax ID/Address	Distance				
93	Camden Dam	Camden	NC	Rural	5	122 N Mill Dam	342	Nov-18	\$350,000		
						548 Trotman		May-18	\$309,000	\$351,027	0%
94	Grandy	Grandy	NC	Suburban	20	120 Par Four	405	Aug-19	\$315,000		
95	Grandy	Grandy	NC	Suburban	20	116 Barefoot	477	Sep-20	\$290,000	\$302,587	4%
						269 Grandy		May-19	\$275,000		
96	Champion	Pelion	SC	Suburban	10	103 Spring Leaf	505	Aug-18	\$270,000	\$274,094	0%
						517 Old Charleston		Aug-20	\$110,000		
						1429 Laurel		Feb-19	\$126,000	\$107,856	2%
Avg.											
					MW	Distance				Average	% Dif
					Average	18.11	521				1%
					Median	8.60	400			Median	1%
					High	80.00	2,020			High	10%
					Low	0.22	105			Low	-10%

Similarly, the 10 land sales shows a median impact of 0% due to adjacency to a solar farm. The range of these adjustments range from -12% to +17%. Land prices tend to vary more widely than residential homes, which is part of that greater range. I consider this data to support no negative or positive impact due to adjacency to a solar farm.

Land Sale Matched Pairs Adjoining Solar Farms

Pair	Solar Farm	City	State	Area	MW	Tax ID/Address	Sale Date	Sale Price	Acres	\$/AC	Adj.		% Diff
											\$/AC	% Diff	
1	White Cross	Chapel Hill	NC	Rural	5	9748336770	Jul-13	\$265,000	47.20	\$5,614			
						9747184527	Nov-10	\$361,000	59.09	\$6,109	\$5,278	6%	
2	Wagstaff	Roxboro	NC	Rural	5	91817117960	Aug-13	\$164,000	18.82	\$8,714			
						91800759812	Dec-13	\$130,000	14.88	\$8,737	\$8,737	0%	
3	Tracy	Bailey	NC	Rural	5	316003	Jul-16	\$70,000	13.22	\$5,295			
						6056	Oct-16	\$164,000	41.00	\$4,000	\$4,400	17%	
4	Marion	Aurora	OR	Rural	0.3	18916 Butteville	Aug-14	\$259,000	15.75	\$16,444			
						Waconda	Sep-15	\$215,000	11.86	\$18,128	\$16,950	-3%	
5	Portage	Portage	IN	Sub	2	64-06-19-200-003	Feb-14	\$149,600	18.70	\$8,000			
						64-15-08-200-010	Jan-17	\$115,000	15.02	\$7,656	\$7,198	10%	
6	Courthouse	Bessemer	NC	Rural	5	5021 Buckland	Mar-18	\$58,500	9.66	\$6,056			
						Kiser	Nov-17	\$69,000	17.65	\$3,909	\$5,190	14%	
7	Mariposa	Stanley	NC	Sub	5	174339	Jun-18	\$160,000	21.15	\$7,565			
						227852	May-18	\$97,000	10.57	\$9,177	\$7,565	0%	
8	Mariposa	Stanley	NC	Sub	5	227039	Dec-17	\$66,500	6.86	\$9,694			
						177322	May-17	\$66,500	5.23	\$12,715	\$9,694	0%	
9	Simon	Social Circle	GA	Rural	30	4514 Hawkins	Mar-16	\$180,000	36.86	\$4,883			
						Pannell	Nov-16	\$322,851	66.94	\$4,823	\$4,974	-2%	
10	Candace	Princeton	NC	Sub	5	499 Herring	May-17	\$30,000	2.03	\$14,778			
						488 Herring	Dec-16	\$35,000	2.17	\$16,129	\$16,615	-12%	
Average													
					Average	6.73				Average	% Diff		
					Median	5.00				Median	0%		
					High	30.00				High	17%		
					Low	0.30				Low	-12%		

Larger Solar Farm Data

I have summarized the solar farm data for projects at 20 MW and larger as shown below. These are the same solar farms noted above but focused on larger projects.

Matched Pair Summary						Adj. Uses By Acreage					1 mile Radius (2010-2020 Data)		
Name	City	State	Acres	MW	Topo	Res	Ag/Res	Ag	Com/Ind	Population	Med. Income	Avg. Housing Unit	
10	Summit	Moyock	NC	2,034	80.00	4	4%	94%	0%	2%	382	\$79,114	\$281,731
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
18	Grand Ridge	Streator	IL	160	20.00	1	8%	5%	87%	0%	96	\$70,158	\$187,037
24	Clarke Cnty	White Post	VA	234	20.00	70	14%	46%	39%	1%	578	\$81,022	\$374,453
26	Simon	Social Circle	GA	237	30.00	71	1%	36%	63%	0%	203	\$76,155	\$269,922
32	Walker	Barhamsville	VA	485	20.00	N/A	12%	20%	68%	0%	203	\$80,773	\$320,076
33	Innov 46	Hope Mills	NC	532	78.50	0	17%	0%	83%	0%	2,247	\$58,688	\$183,435
34	Innov 42	Fayetteville	NC	414	71.00	0	41%	0%	59%	0%	568	\$60,037	\$276,347
35	Demille	Lapeer	MI	160	28.40	10	10%	0%	68%	22%	2,010	\$47,208	\$187,214
36	Turrill	Lapeer	MI	230	19.60	10	75%	0%	59%	25%	2,390	\$46,839	\$110,361
39	Picture Rocks	Tucson	AZ	182	20.00	N/A	6%	6%	88%	0%	102	\$81,081	\$280,172
40	Avra Valley	Tucson	AZ	246	25.00	N/A	3%	3%	94%	0%	85	\$80,997	\$292,308
41	Sappony	Stony Crk	VA	322	20.00	N/A	2%	0%	98%	0%	74	\$51,410	\$155,208
43	Grandy	Grandy	NC	121	20.00	10	55%	0%	24%	21%	949	\$50,355	\$231,408
Average				478	40	31	17%	19%	62%	5%	689	\$66,834	\$246,510
Median				246	25	10	10%	3%	68%	0%	382	\$70,158	\$269,922
High				2,034	80	140	75%	94%	98%	25%	2,390	\$81,081	\$374,453
Low				121	20	0	1%	0%	0%	0%	48	\$46,839	\$110,361

The breakdown of adjoining uses, population density, median income and housing prices for these projects are very similar to those of the larger set.

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 Acres	Used Acres	Avg. Dist to home	Closest Home	Adjoining Use by Acre			
										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 & Pt	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 Que	Shackelfords	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	Rocky	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	Payette	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. Distance Between Homes and Solar Panels

I have measured distances at matched pairs as close as 105 feet between panel and home to show no impact on value. This measurement goes from the closest point on the home to the closest solar panel. This is a strong indication that at this distance there is no impact on adjoining homes.

However, in tracking other approved solar farms across Kentucky, North Carolina and other states, I have found that it is common for there to be homes within 100 to 150 feet of solar panels. Given the visual barriers whether in privacy fencing or landscaping involved in these there is no sign of negative impact.

I have also tracked a number of locations where solar panels are between 50 and 100 feet of single family homes. In these cases the landscaping is typically a double row of more mature evergreens at time of planting. There are many examples of solar farms with one or two homes closer than 100-feet, but most of the adjoining homes are further than that distance.

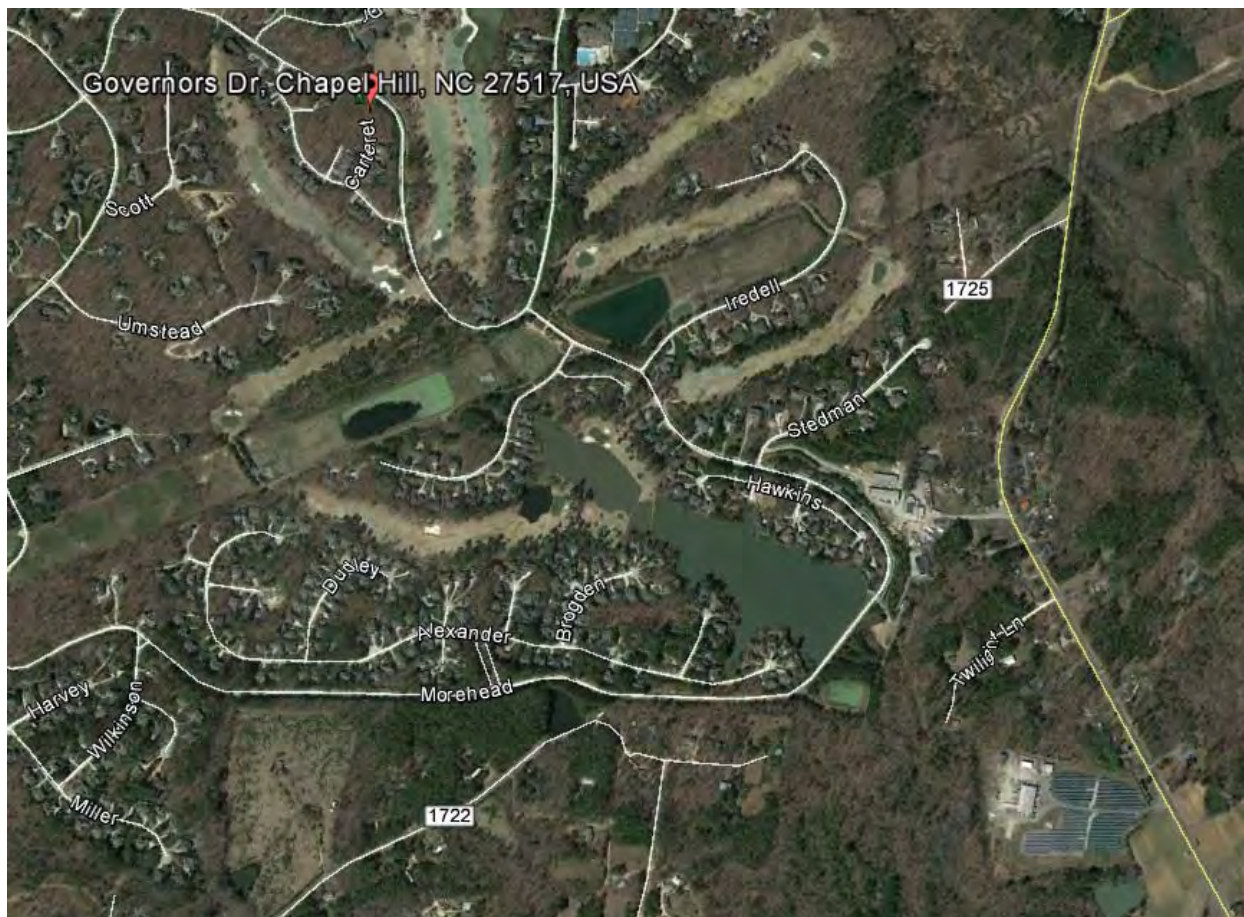
IV. Potential Impacts During Construction

I have previously been asked by the Kentucky Siting Board about potential impacts during construction. This is not a typical question I get as any development of a site will have a certain amount of construction, whether it is for a commercial agricultural use such as large scale poultry operations or a new residential subdivision. I defer to the traffic study on traffic impacts. Construction will be temporary and consistent with other development uses of the land and in fact dust from the construction will likely be less than most other construction projects given the minimal grading. I would not anticipate any impacts on property value due to construction on the site.

I note that in the matched pairs that I have included there have been a number of home sales that happened after a solar farm was approved but before the solar farm was built showing no impact on property value. Therefore the anticipated construction had no impact as shown by that data.

V. Scope of Research

I have researched over 700 solar farms and sites on which solar farms are existing and proposed in North Carolina, Kentucky, 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 assertion 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.

VI. 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 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.

VII. Conclusion

The matched pair analysis shows no impact in home values due to abutting or adjoining a solar farm as well as no 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 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 impact have been upheld by appellate courts. Similar solar farms have been approved adjoining agricultural uses, schools, churches, and residential developments.

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 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.



Kirkland Appraisals, LLC

Richard C. Kirkland, Jr., MAI
9408 Northfield Court
Raleigh, North Carolina 27603
Mobile (919) 414-8142
rkirkland2@gmail.com
www.kirklandappraisals.com

Professional Experience

Kirkland Appraisals, LLC , Raleigh, N.C. Commercial appraiser	2003 – Present
Hester & Company , Raleigh, N.C. Commercial appraiser	1996 – 2003

Professional Affiliations

MAI (Member, Appraisal Institute) designation #11796	2001
NC State Certified General Appraiser # A4359	1999
VA State Certified General Appraiser # 4001017291	
SC State Certified General Appraiser # 6209	
FL State Certified General Appraiser # RZ3950	
IL State Certified General Appraiser # 553.002633	
OR State Certified General Appraiser # C001204	
KY State Certified General Appraiser # 5522	

Education

Bachelor of Arts in English , University of North Carolina, Chapel Hill	1993
--	------

Continuing Education

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

This page intentionally left blank.

APPENDIX B

Legal Description of Site

TRACT 1:

File No. 305183NCT-5

Hank Ballinger and Nancy Jane Ballinger, husband and wife, jointly and equally, remainder to the survivor of them

Subject Property consists of the surface only of all that certain tract or parcel of land, situate in Madison County, Kentucky, more particularly bounded and described as follows:

Being Tract 1 (100.00 acres) of the Final Plat of Springview Farm, of record in Plat Cabinet 27, Page 198, in the Madison County Court Clerk's Office, and known as 510 Three Forks Road, Richmond, Kentucky 40475.

Being the same property conveyed by deed dated November 30, 2016, and recorded in Deed Book 738, Page 583, from LP Farms, LLC, a Kentucky limited liability company, to Hank Ballinger and Nancy Jane Ballinger, husband and wife, jointly and equally, for and during their natural lives, and with the remainder in fee simple to the survivor of them, his or her heirs and assigns.

Parcel No.: 0053-0000-0017

TRACT 2:

File No. 305183NCT-24

Big Wind, LLC, a Kentucky Limited Liability Company

Tract 1:

PARCEL 1: 390 Three Fork Road Richmond, Ky 40475

Being all of that property described as Tract 3 on that certain plat of record in Plat Cabinet 26, Page 336 in the Office of the Madison County Clerk, reference to which is hereby made for a more particular description.

SAVE AND EXCEPT that tract of parcel of land in Deed dated May 21, 1981, recorded May 22, 1981 in Book 336, Page 387, Official Public Records, Madison County, Kentucky; as corrected by Deed of Correction dated March 3, 1983, recorded March 4, 1982 in Book 341, Page 504 and being more particularly described as follows:

A certain tract of land located on the east side of Three Forks Road approximately 5 miles north of Richmond in Madison County, Kentucky and being bounded by survey made April 21, 1981, by R. E. Cartier, Jr., a licensed land surveyor (L.S. 1863) and further described as follows:

Beginning at a concrete nail in the centerline of Three Forks Road and common corner to John Denton; thence Leaving the line of Denton with the centerline of said road, 1 call, N35°01'05"W 20.00 feet to a concrete nail; thence leaving the centerline of Three Forks Road with the line of Three Forks, Inc., 2 calls N37°23'45"E 716.90 feet to a steel pin; thence S79°15'09"E 412.68 feet to a steel pin in the line of Roscoe McIntosh; thence leaving the line of McIntosh with the line of Don Jaynes S49°35' 21"W 661.50 feet to a steel pin and common corner to John Denton; thence leaving the line of Jaynes with the line of Denton, 2 calls, N40°23'39"W 150.00 feet to a steel pin; thence S49°36'21"W 300.00 feet to the point of beginning and containing 3.88 acres.

AND EXCEPT that tract of parcel of land in Deed dated January 24, 1978, recorded January 30, 1978 in Book 308, Page 201, Official Public Records, Madison County, Kentucky, and being more particularly described as follows:

One (1) certain lot or parcel of land located in Millstone Estates, Richmond, Madison County, Kentucky, and being known and designated as Lot No. 4 in said subdivision, and being recorded in Plat Book 5, Page 345, of the Madison County Court Clerk's Office, to which reference is hereby made.

AND EXCEPT that tract of parcel of land in Deed dated January 12, 1978, recorded January 12, 1978 in Book 308, Page 7, Official Public Records, Madison County, Kentucky, and being more particularly described as follows:

One (1) certain lot or parcel of land located in Millstone Estates, Richmond, Madison County, Kentucky, and being known and designated as Lot No. 1 in said subdivision, and being recorded in Plat Book 5, Page 345, of the Madison County Court Clerk's Office, to which reference is hereby made.

AND EXCEPT that tract of parcel of land in Deed dated January 9, 1976, recorded January 13, 1976 in Book 289, Page 290, Official Public Records, Madison County, Kentucky, and being more particularly described as follows:

A certain tract of land located on the east side of Three Forks Road approximately 1 ½ miles north of Redhouse Road (Ky. 388) in Madison County, Kentucky and being bounded by survey made November 26, 1975 by Charles E. Black, a licensed land surveyor (L.S. 670) and further described as follows:

Beginning at a concrete nail in the centerline of Three Forks Road and common (new) corner to Rufus West; thence with said centerline, 3 calls, N32°36'26"W 73.85 feet to a concrete nail; thence N26°54'06"W 169.49 feet to a concrete nail; thence N18°30'26"W 189.18 feet to a railroad spike and common corner to Albert Wilson; thence leaving the centerline of said road with the line of Wilson, 2 calls, N63°58'20"E 300.00 feet to a steel pin; thence N44°09'22"E 401.50 feet to a steel pin and common (new) corner to Rufus West; thence leaving the line of Wilson with new lines dividing the lands of West, 2 calls, S07°41'02"W 680.31 feet to a steel pin; thence S63°51'54"W 313.86 feet -to a concrete nail in the centerline of Three Forks Road . and point of beginning and containing 5.00 acres.

AND EXCEPT that tract of parcel of land in Deed dated January 6, 1976, recorded January 6, 1976 in Book 289, Page 185, Official Public Records, Madison County, Kentucky, and being more particularly described as follows:

[Please note legal description illegible]

AND EXCEPT that tract of parcel of land in Deed dated December 19, 1975, recorded January 2, 1976 in Book 289, Page 100, Official Public Records, Madison County, Kentucky, and being more particularly described as follows:

A certain tract of land situated west of Kentucky Highway #388 in Madison County, Kentucky, bounded and described by survey of B. H. Luxon III, Civil Engineers Reg. No. 62, as follows:

BEGINNING at a corner post, said post being N86°-32' 1181.10 feet from the west right-of-way line of Kentucky Highway #338 along the property line of Cora Eades Heirs and H. N. Eades Heirs, thence with the line of Cora Eades Heirs S08°-42'H 432.96 feet, S84°-55'W 37.69 feet to a point and corner to W. N. Eades Heirs, thence with the line of W. N. Eades Heirs N13°-55'E 442.00 feet to the beginning, containing 0.13 acres.

And being a part of the same property conveyed to S. D. Eades and Cora L. Eades by deed recorded in Deed Book 114, Page 23, Madison County Court Clerk's Office; and S. D. Eades by his will recorded in Will Book 15, Page 366 devised his interest to Cora L. Eades. Cora L. Eades is now deceased and by her Will recorded in Will Book 17, Page 634, Madison County Court Clerk's Office, she directed that John L. Cummins be appointed Executor of her estate and that he proceed to sell same.

AND EXCEPT that tract of parcel of land in Deed dated August 27, 1974, recorded August 6, 1974 in Book 279, Page 421, Official Public Records, Madison County, Kentucky, and being more particularly described as follows:

A certain tract of land located on the north side of Three Forks Road about one and one half miles west of Red House Road north of Richmond in Madison County, Kentucky and being bounded by survey made July 23, 1974 by Charles E. Black, a licensed land surveyor (L.S. 670) and further described as follows:

Beginning at a steel pin in the north line of Lot 2 of a plat of lots entitled Lot Survey for Rufus West, (a plat which is on file in Plat Book 3 at page 104) said pin being located 60.00 feet west of the northeast corner of Lot 2; thence leaving the north line of Lot 2 on a new line dividing the lands of Rufus west N 46° 26' 00" E 532.00 feet to a steel pin in the line fence between west and Roscoe McIntosh; thence with the line of McIntosh two calls, S 11° 52' 19" W

143.41 feet to a steel pin; thence $34^{\circ} 20' 18''$ W 423.29 feet to a post at the northeast corner of Lot 1; thence with the north line of Lot 1 and Lot 2, passing in line the northeast corner of Lot 2 at $N 43^{\circ} 34' 00''$ W 110.05 feet, in all 170.05 feet to the point of beginning and containing 1.31 acres.

AND EXCEPT that tract of parcel of land in Deed dated July 16, 1974, recorded July 17, 1974 in Book 279, Page 279, Official Public Records, Madison County, Kentucky, and being more particularly described as follows:

A certain tract of land located on the north side of Three Forks Road approximately 4000 feet west of Kentucky 388 (Red House Road) and being bounded by survey and described as follows:

Beginning at a concrete nail in the center of Three Forks Road, a corner to Lot No. 1; thence with the centerline of said road $S 43^{\circ} 34'$ W 150 feet to a concrete nail, a corner to Lot No. 3; thence leaving the center line of Three Forks Road with the line of West, a new line, $N 46^{\circ} 26'$ E 300 feet to an iron pin, a corner to Rufus West, thence with the line West $S 43^{\circ} 34'$ E 150 feet to an iron pin, a corner to Lot No. 1, thence with the line of Lot No. 1, $S 46^{\circ} 26'$ W 300 feet to a concrete nail in the center of Three Forks Road, a corner to Lot No. 1, and point of beginning. And being Lot No. 2, in the Pioneer Estate, a plat of which is recorded in Plat Book 3 page 104 Madison County Clerk's office to which reference is hereby made. As per survey made by Charles E. Black, consulting Engineers dated August 4, 1970.

AND EXCEPT that tract of parcel of land in Deed dated June 26, 1971, recorded June 28, 1971 in Book 257, Page 185, Official Public Records, Madison County, Kentucky, and being more particularly described as follows:

A certain tract of land located about one and one half miles west of Boonesboro Road on the north side of the Three Forks Road and being in Madison County, Kentucky, and being bounded and described as follows:

Beginning at a concrete nail in the center of Three Forks Road, a corner to James Spurlin; thence leaving said pike with the line of Spurlin $N 64^{\circ}-17' 40''$ E 300.00 feet to an iron pine; thence leaving the Spurlin line $S 19^{\circ}-05' 20''$ E 150.00 feet, a new line with West, to an iron pin; thence $S 63^{\circ}-58' 20''$ W 300.00 feet, a new line with West, to a concrete nail in the center line of said road $N 19^{\circ}-00' 00''$ W 150.00 feet to a concrete nail and point of beginning and containing 1.0 acres. As per survey made by Charles E. Black, consulting engineers, on June 22, 1971.

AND EXCEPT that tract of parcel of land in Deed dated August 22, 1970, recorded August 29, 1970 in Book 251, Page 564, Official Public Records, Madison County, Kentucky, and being more particularly described as follows:

A certain tract of land located in Madison County, Kentucky, on the north side of Three Forks Road approximately 4000 feet west of Kentucky 399 (Red House Road) and being bounded by survey and described as follows: Beginning at a concrete nail in the center of Three Forks Road, a corner to Lot No. 2, thence with the centerline of said road $N 43-34'$ W 150.00 feet to a concrete nail, a corner to Rufus West, thence leaving the centerline of Three Forks Road with the line of West, a new line, $N 46-26'$ E 300.00 feet to an iron pin, a corner to Rufus West, thence with the line of East $S 43-34'$ E 150.00 feet to an iron pin, a corner to Lot No. 2; thence with the line of Lot No. 2, $S 46-26'$ W 300.00 feet to a concrete nail, in the center of Three Forks Road, a corner to Lot No. 2 and point of beginning. And being Lot No. 3, in the Pioneer Estate, a plat of which is recorded in Plat Book 3, Page 104 Madison County Clerk's Office, to which reference is hereby made. As per survey made by Charles E. Black, Consulting Engineers dated August 4, 1970.

AND EXCEPT that tract of parcel of land in Deed dated August 15, 1970, recorded August 156, 1970 in Book 251, Page 378, Official Public Records, Madison County, Kentucky, and being more particularly described as follows:

A certain tract of land located in Madison County, Kentucky, on the north side of Three Forks Road approximately 4000 feet west of Kentucky 300 (Red House Road) and being bounded by survey and described as follows: Beginning at a concrete nail in the center of Three Forks Road, a corner to Amos N. Speakman; thence with the centerline of said road $N 43-34'$ W 150.00 feet to a concrete nail, a corner to lot 2; thence leaving said road, a new line, $N 46-26'$ E 300.00 feet to an iron pin, a corner to Rufus West; thence with the line of West, a new line $S 43-34'$ E 110.05 feet to an iron pin in the line of Amos Speakman, a new corner; thence with the line of Speakman $S 34-43'$ 62.81 feet to a steel post; thence $S 40-00'$ W 240.09 feet to a concrete nail in the center of Three Forks Road, a corner to Amos N.

Speakman, and point of beginning. And being Lot No. 1, in the Pioneer Estate, a plat of which is recorded in Plat book 3, Page 104 Madison County Clerk's Office, to which reference is hereby made. As per survey made by Charles E. Black, Consulting Engineers, dated August 4, 1970.

AND EXCEPT that tract of parcel of land in Deed dated April 3, 1968, recorded April 26, 1968 in Book 234, Page 360, Official Public Records, Madison County, Kentucky, and being more particularly described as follows:

Beginning at a Locust post in the north right-of-way of Three Forks Road, and a corner to Rufus W. West, thence with West 40°00' E 226.0 feet to a point, N 34°43' E 485.2 feet to a point, N 11°53' E 783 feet to a point in the line of S.D. Eades, said point being 207 feet west of Eades and West corner, thence with Eades line N 43°07' W 330 feet to a point, in Eades line and a corner to West, thence with S 11° 35' W 792 feet to a point S 34°43' W 485.2 feet to a point, S 40°00' W 226.0 feet to a point in the right-of-way of Three Forks Road and a corner to West thence with right-of-way S 44°25' 325.0 feet to the point of beginning.

Parcel No.: 066-0000-0017-B

Tract 2:

PARCEL 2: 2056 Red House Road Richmond, Ky 40475

Being all of that property shown as Tract 2B on that certain plat of the Stephen and Susan Wells property located on Three Forks Road, which is of record in Plat Cabinet 27, Page 73 in the Office of the Madison County Clerk, reference to which is hereby made for a more particular description.

SAVE AND EXCEPT that tract of parcel of land in Deed dated May 21, 1981, recorded May 22, 1981 in Book 336, Page 387, Official Public Records, Madison County, Kentucky; as corrected by Deed of Correction dated March 3, 1983, recorded March 4, 1982 in Book 341, Page 504 and being more particularly described as follows:

A certain tract of land located on the east side of Three Forks Road approximately 5 miles north of Richmond in Madison County, Kentucky and being bounded by survey made April 21, 1981, by R. E. Cartier, Jr., a licensed land surveyor (L.S. 1863) and further described as follows:

Beginning at a concrete nail in the centerline of Three Forks Road and common corner to John Denton; thence Leaving the line of Denton with the centerline of said road, 1 call, N35°01'05"W 20.00 feet to a concrete nail; thence leaving the centerline of Three Forks Road with the line of Three Forks, Inc., 2 calls N37°23'45"E 716.90 feet to a steel pin; thence S79°15'09"E 412.68 feet to a steel pin in the line of Roscoe McIntosh; thence leaving the line of McIntosh with the line of Don Jaynes S49°35' 21"W 661.50 feet to a steel pin and common corner to John Denton; thence leaving the line of Jaynes with the line of Denton, 2 calls, N40°23'39"W 150.00 feet to a steel pin; thence S49°36'21"W 300.00 feet to the point of beginning and containing 3.88 acres.

AND EXCEPT that tract of parcel of land in Deed dated January 9, 1976, recorded January 13, 1976 in Book 289, Page 290, Official Public Records, Madison County, Kentucky, and being more particularly described as follows:

A certain tract of land located on the east side of Three Forks Road approximately 1 ½ miles north of Redhouse Road (Ky. 388) in Madison County, Kentucky and being bounded by survey made November 26, 1975 by Charles E. Black, a licensed land surveyor (L.S. 670) and further described as follows:

Beginning at a concrete nail in the centerline of Three Forks Road and common (new) corner to Rufus West; thence with said centerline, 3 calls, N32°36'26"W 73.85 feet to a concrete nail; thence N26°54'06"W 169.49 feet to a concrete nail; thence N18°30'26"W 189.18 feet to a railroad spike and common corner to Albert Wilson; thence leaving the centerline of said road with the line of Wilson, 2 calls, N63°58'20"E 300.00 feet to a steel pin; thence N44°09'22"E 401.50 feet to a steel pin and common (new) corner to Rufus West; thence leaving the line of Wilson with new lines dividing the lands of West, 2 calls, S07°41'02"W 680.31 feet to a steel pin; thence S63°51'54"W 313.86 feet -to a concrete nail in the centerline of Three Forks Road . and point of beginning and containing 5.00 acres.

AND EXCEPT that tract of parcel of land in Deed dated January 6, 1976, recorded January 6, 1976 in Book 289, Page 185, Official Public Records, Madison County, Kentucky, and being more particularly described as follows:

[Please note legal description illegible]

AND EXCEPT that tract of parcel of land in Deed dated February 21, 1975, recorded February 22, 1975 in Book 283, Page 121, Official Public Records, Madison County, Kentucky, and being more particularly described as follows:

A certain tract of land located on the east side of Three Forks Road approximately 1 ½ miles north of Redhouse Road (Ky. 388) and being bounded by survey made January 15, 1975 by Charles E. Black, a licensed land surveyor (L.S.670) and further described as follows, and being on Three Forks Road in Madison county, Kentucky.

TRACT 2:

Beginning at a railroad spike in the center line of Three Forks Road and common corner to Tract 1; thence leaving the center line of said road with the line of Tract 1, 2 calls, N 63° 58' 20" E 300 feet to a steel pin, thence N 44° 11' 12" E 850.01 feet to a steel pin in the line of Cora L. and S. D. Eades, thence leaving the line of Tract 1 with the line of Eades S 38° 14' 15" E 180.50 feet to a steel pin and common corner to Rufus West; thence leaving the line of Eades with the line of West, 2 calls, S 44° 09' 22" W 914.61 feet to a steel pin; thence S 63° 58' 20" W 300 feet to a railroad spike in the center line of Three Forks Road, thence leaving the line of West with the centerline of said Road N 19° 35' 06" W 200 feet to a railroad spike and point of beginning and containing 5.00 acres.

AND EXCEPT that tract of parcel of land in Deed dated December 19, 1975, recorded January 2, 1976 in Book 289, Page 100, Official Public Records, Madison County, Kentucky, and being more particularly described as follows:

A certain tract of land situated west of Kentucky Highway #388 in Madison County, Kentucky, bounded and described by survey of B. H. Luxon III, Civil Engineers Reg. No. 62, as follows:

BEGINNING at a corner post, said post being N86°-32' 1181.10 feet from the west right-of-way line of Kentucky Highway #338 along the property line of Cora Eades Heirs and H. N. Eades Heirs, thence with the line of Cora Eades Heirs S08°-42'H 432.96 feet, S84°-55'W 37.69 feet to a point and corner to W. N. Eades Heirs, thence with the line of W. N. Eades Heirs N13°-55'E 442.00 feet to the beginning, containing 0.13 acres.

And being a part of the same property conveyed to S. D. Eades and Cora L. Eades by deed recorded in Deed Book 114, Page 23, Madison County Court Clerk's Office; and S. D. Eades by his will recorded in Will Book 15, Page 366 devised his interest to Cora L. Eades. Cora L. Eades is now deceased and by her Will recorded in Will Book 17, Page 634, Madison County Court Clerk's Office, she directed that John L. Cummins be appointed Executor of her estate and that he proceed to sell same.

AND EXCEPT that tract of parcel of land in Deed dated February 21, 1975, recorded February 28, 1975 in Book 283, Page 118, Official Public Records, Madison County, Kentucky, and being more particularly described as follows:

A certain tract of land located on the east side of Three Forks Road approximately 1½ miles north of Redhouse Road (ky.388) and being bounded by survey made January 15, 1975 by Charles E. Black, a licensed land surveyor (L.S.670) and further described as follows, and being on Three Forks Road in Madison county, Kentucky:

TRACT 1:

Beginning at a railroad spike in the center line of Three Forks Road and common corner to David Bertram thence leaving said center line with the line of Bertram, 2 calls, N 63 58' 20" E 300 feet to a steel pin: thence N 19° 05' 20 W 150 feet to a steel pin in the line of James Spurlin; thence leaving the line of Bertram with the line of Spurlin N 63° 37' 51" E 739.36 feet to a steel pin and common corner to Cora L. and s. D. Eades; thence leaving the line of Spurlin with the line of Eades S 38° 55' 35" E 65.29 feet to a steel pin and common corner to Tract 2, thence leaving the line of Eades with the lines of Tract 2, 2 calls, S 44° 11' 12" W 850 feet to a steel pin; thence S 63° 58' 20" W 300 feet to a railroad spike in the center line of Three Forks Road: thence leaving the lines of Tract 2 with the center line of said road N 18° 02' 30" W 200 feet to a railroad spike and point of beginning and containing 4.93 acres.

AND EXCEPT that tract of parcel of land in Deed dated August 27, 1974, recorded August 6, 1974 in Book 279, Page 421, Official Public Records, Madison County, Kentucky, and being more particularly described as follows:

A certain tract of land located on the north side of Three Forks Road about one and one half miles west of Red House Road north of Richmond in Madison County, Kentucky and being bounded by survey made July 23, 1974 by Charles E. Black, a licensed land surveyor (L.S. 670) and further described as follows:

Beginning at a steel pin in the north line of Lot 2 of a plat of lots entitled Lot Survey for Rufus West, (a plat which is on file in Plat Book 3 at page 104) said pin being located 60.00 feet west of the northeast corner of Lot 2; thence leaving the north line of Lot 2 on a new line dividing the lands of Rufus west N 46° 26' 00" E 532.00 feet to a steel pin in the line fence between west and Roscoe McIntosh; thence with the line of McIntosh two calls, S 11° 52' 19" W 143.41 feet to a steel pin; thence 34° 20' 18" W 423.29 feet to a post at the northeast corner of Lot 1; thence with the north line of Lot 1 and Lot 2, passing in line the northeast corner of Lot 2 at N 43° 34' 00" W 110.05 feet, in all 170.05 feet to the point of beginning and containing 1.31 acres.

AND EXCEPT that tract of parcel of land in Deed dated June 26, 1971, recorded June 28, 1971 in Book 257, Page 185, Official Public Records, Madison County, Kentucky, and being more particularly described as follows:

A certain tract of land located about one and one half miles west of Boonesboro Road on the north side of the Three Forks Road and being in Madison County, Kentucky, and being bounded and described as follows:

Beginning at a concrete nail in the center of Three Forks Road, a corner to James Spurlin; thence leaving said pike with the line of Spurlin N 64°-17' 40" E 300.00 feet to an iron pine; thence leaving the Spurlin line S 19°-05' 20" E 150.00 feet, a new line with West, to an iron pin; thence S 63°-58' 20" W 300.00 feet, a new line with West, to a concrete nail in the center line of said road N 19°-00' 00" W 150.00 feet to a concrete nail and point of beginning and containing 1.0 acres. As per survey made by Charles E. Black, consulting engineers, on June 22, 1971.

AND EXCEPT that tract of parcel of land in Deed dated August 15, 1970, recorded August 156, 1970 in Book 251, Page 378, Official Public Records, Madison County, Kentucky, and being more particularly described as follows:

A certain tract of land located in Madison County, Kentucky, on the north side of Three Forks Road approximately 4000 feet west of Kentucky 300 (Red House Road) and being bounded by survey and described as follows: Beginning at a concrete nail in the center of Three Forks Road, a corner to Amos N. Speakman; thence with the centerline of said road N 43-34' W 150.00 feet to a concrete nail, a corner to lot 2; thence leaving said road, a new line, N 46-26' E 300.00 feet to an iron pin, a corner to Rufus West; thence with the line of West, a new line S 43-34' E 110.05 feet to an iron pin in the line of Amos Speakman, a new corner; thence with the line of Speakman S 34-43' 62.81 feet to a steel post; thence S 40-00' W 240.09 feet to a concrete nail in the center of Three Forks Road, a corner to Amos N. Speakman, and point of beginning. And being Lot No. 1, in the Pioneer Estate, a plat of which is recorded in Plat book 3, Page 104 Madison County Clerk's Office, to which reference is hereby made. As per survey made by Charles E. Black, Consulting Engineers, dated August 4, 1970.

AND EXCEPT that tract of parcel of land in Deed dated April 3, 1968, recorded April 26, 1968 in Book 234, Page 360, Official Public Records, Madison County, Kentucky, and being more particularly described as follows:

Beginning at a Locust post in the north right-of-way of Three Forks Road, and a corner to Rufus W. West, thence with West 40°00' E 226.0 feet to a point, N 34°43' E 485.2 feet to a point, N 11°53' E 783 feet to a point in the line of S.D. Eades, said point being 207 feet west of Eades and West corner, thence with Eades line N 43°07' W 330 feet to a point, in Eades line and a corner to West, thence with S 11° 35' W 792 feet to a point S 34°43' W 485.2 feet to a point, S 40°00' W 226.0 feet to a point in the right-of-way of Three Forks Road and a corner to West thence with right-of-way S 44°25' 325.0 feet to the point of beginning.

Parcel No.: 066-0000-0017-IB

TRACT 3:

File No. 305183NCT-26

Harold Bucher and Jean C. Bucher, husband and wife, as tenants by the entireties for and during their joint lives and at the death of one unto the survivor of them

Harold Franklin Bucher and Jean Carol Bucher, husband and wife, as tenants by the entireties and not as tenants in common, for and during their natural lives with the fee in the survivor of them

Harold Bucher and Jean Bucher, husband and wife, as tenants by the entireties, the survivor of them to take the whole of said property in fee simple

The surface only of all those certain tracts or parcels of land in Madison County, Kentucky, said parcels of land being more particularly bounded and described as follows:

Tract One:

A certain tract or parcel of land lying and being in Madison County, Kentucky and on Otter Creek, containing twenty acres and bounded as follows:

BEGINNING at a stone near a walnut stump and corner to Clifton Portwood, thence west with his line 36 poles to a stake East of new pike a white oak pointer,

THENCE South 12 W 35 2/5 poles to a stake in the pike and corner to Richard Taylor, thence with the dividing line N 85 E 104.9 poles to a stake in the bed of the creek N 8 W 7 2/5 poles N 19 E 12 poles N 35 1/2 E 11 poles to a stake in said creek, corner to A. Stagner,

THENCE with his line N 87 3/4 W 91 1/2 poles to a stone in Clifton Portwood's line, corner to Stagner's

THENCE S 2 1/2 E 9 poles to the beginning.

Tract Two:

A certain tract or parcel of land in Madison County, Kentucky, and on Otter Creek and bounded and described as follows, to-wit:

BEGINNING at a stone in line to Bettie Parks and corner to Ross Dozier,

THENCE S 84 E 61 1/2 poles to a stake in the county road, better known as Hackett Lane,

THENCE with the wire fence on the east side of said road N 3 3/4 E 58 poles to a stake corner to the part sold to Shirley Parks,

THENCE S 72 W passing H. B. Hanger's corner 9 poles in all 60 poles to a stake in a drain, corner to Bettie Parks, THENCE her line S 3/4 W 31.6 poles to the beginning, containing 17 3/4 acres and 10 poles.

THERE IS EXCLUDED AND NOT CONVEYED HEREIN that property conveyed to Sondra L. Van Winkle and Ormand Van Winkle, wife and husband, from Orville G. Moberly and Willie Miles Moberly, by Deed dated April 18, 1983, and recorded in Deed Book 352, Page 485, containing 1.31 acres more or less, and more particularly described as follows:

A certain tract of Land located on the East side of Red House Road approximately 4 miles North of Richmond in Madison County, Kentucky, and being bounded by survey made March 24, 1983, by Charles E. Black, a licensed Land surveyor (L.S. 670) and further described as follows:

BEGINNING at a steel pin in the East right of way line of Red House Road and common corner to Shirly Scriber;

THENCE with said right of way line N14°14'40"E 270.00 feet to a steel pin and new corner to Orville G. Moberly; THENCE leaving said right of way line with new lines dividing the lands of Moberly, 2 calls, S87°08'00"E 215.00 feet to a steel pin;

THENCE S14°14'40"W 270.00 feet to a steel pin in the line of Shirley Scriber;

THENCE leaving the new lines of Moberly with the line of Scriber N87°08'00"W 215.00 feet to the Point of Beginning and containing 1.31 acres.

Being the same property conveyed by Deed dated October 18, 2006, and recorded in Deed Book 613, Page 738, from Jeff Cruse and Trina Cruse, husband and wife, to Harold Bucher and Jean C. Bucher, husband and wife, as tenants by the entireties, for and during their joint lives and at the death of one unto the survivor of them, his or her heirs and assigns forever in fee simple.

Parcel No.: 0066-0000-0018-DA

Tract Three:

All that certain tract or parcel of land, lying on the waters of Otter Creek in Madison County, Kentucky, containing one hundred and fifty five (155) acres, said parcel of land being more particularly bounded and described as follows:

BEGINNING at a stone near a branch corner to Susan Parrish;

THENCE N 40 3/4 W 40 2/10 poles to a stone at the foot of a hill,

THENCE N 46 E 26 1/2 poles to a stake in the old bed of the creek a corner to said Susan Parrish on Wesley Parrish N 44 W 27 poles N 67 W 9 poles N 5 1/2 W 25 poles N 31 E 18 poles N 19 W 10 1/2 to a stake in the creek corner to James B. Butner,

THENCE with him S 76 W 103 poles to a stake in the old dirt road on east side of Richmond and Otter Creek Pike, THENCE with said Butner S 15 E 56 poles to a stake on the east side of pike,

THENCE S 2-1/2 W 14 poles to a stake S 14-1/2 W 2-1/2 poles to a stake in the center of the old road at the west edge of the road meets,

THENCE with the west edge of the road S 2-1/2 E 20 poles S 12 E 10 poles S 17 E 22 7/10 poles to a stake in the center of turnpike corner to said Butner and Edwards Cosby,

THENCE with the center of the road S 16 E 101-1/2 poles to a stake corner to Simeon Shearer,

THENCE with his lines N 78-1/2 E 26 poles N 82-1/2 E 19 poles to a stake in a branch corner to Shearer and O. W. Walker,

THENCE S 69 E 59 poles to an elm on the north side of a branch,

THENCE N 7 W 99-1/2 poles to the beginning.

HOWEVER, there is EXCLUDED from the above described tract of land the following:

1. A strip of land 400 ft. long by 15 feet wide conveyed to Red House Baptist Church by Deed of Conveyance dated June 26, 1969, of record in Deed Book 242, Page 559, in the Madison County Clerk's Office.
2. A tract of land containing one (1) acre conveyed to Red House Baptist by Deed of Conveyance dated July 13, 1971, of record in Deed Book 257, Page 379, in the Madison County Clerk's Office.
3. A tract of land containing three (3) acres conveyed to Red House Baptist Church by Deed of Conveyance dated February 28, 1991, of record in Deed Book 413 at Page 328, in the Madison County Clerk's Office.

Being the same property conveyed by Deed dated December 6, 1993, and recorded in Deed Book 440, Page 18, from Robert E. Spurlin, a single person, Seana Ray Spurlin, a single person, and Jeannene Smyth, a single person, to Harold Bucher and Jean C. Bucher, husband and wife, for and during their joint lives and at the death of one the fee to the survivor of them, his, her or their heirs and assigns forever.

Parcel No.: 0066-0000-0008

ALSO EXCEPTING THEREFROM a parcel or tract of Land conveyed to Red House Baptist Church, Inc., a Kentucky Corporation, by Deed dated June 22, 2007, recorded June 25, 2007 in Book 622, Page 797, Madison County, Kentucky, and more particularly described as follows:

Being a part of the same property conveyed to Harold Bucher and Jean Bucher, husband and wife, from Orval M. Reid and Nannie M. Reid, husband and wife, by Deed dated April 25, 1994 and recorded in Deed Book 444, Page 589,

Madison County Court Clerk's Office; and being a part of the same property conveyed to Harold Bucher and Jean C. Bucher, husband and wife, from Robert E. Spurlin, single, Seana Rey Spurlin, single, and Jeannene Smyth, single, by Deed dated December 6, 1993, and recorded in Book 440, Page 18, Madison County Court Clerk's Office.

AND EXCEPTING THEREFROM a parcel or tract of Land conveyed to Jeff Cruse and Trina Cruse, husband and wife, by Deed dated March 14, 1994, recorded March 22, 1994 in Book 442, Page 598, located on the East side of Red House Road approximately 3.2 miles North of the City of Richmond, Kentucky and being more particularly described as follows:

BEGINNING at a point in the center of Red House Road and a new corner in the Harold Bucher Farm,

THENCE with said road N08° 28' 13" W, 208.83 feet to a point,

THENCE leaving said road a new line in the said Bucher Farm a series of calls:

N79° 06' 56" E, 343.94 feet to a steel post, S08° 13' 14" E 208.91 feet to a steel post, S79° 04' 07" W, 343.08 feet to the Point of Beginning. This tract contains 1.64 acres.

Being a part of the same property conveyed to Harold Bucher and Jean C. Bucher, husband and wife, from Robert E. Spurlin, single and Seana Rey Spurlin, single, by Deed dated December 6, 1993 and recorded in Deed Book 440, Page 18 in the Madison County Court Clerk's Office.

Tract Four:

Two certain tracts or parcels of land located about seven miles north of Richmond, Kentucky, near the Red House Pike in Madison County, Kentucky, and bounded and described as follows:

Parcel I:

Beginning at a stone N 19 degrees E 1451 feet to D. T. Jones, N. 84 degrees 30 minutes E 595 feet to a stone, S 8 degrees 30 minutes E 117 feet corner to Barnes and Williams, his line S 19 degrees E 650 feet to a stone near a walnut;

THENCE S 51 degrees E 665 feet to passing the line of the 17 acre tract and on 235 feet making in all 900 feet; THENCE S 34 degrees 30 minutes E 375 feet to a sycamore;

THENCE up a creek S 62 degrees W 594 feet S 30 degrees 30 minutes W 462 feet to a sycamore pointer,

THENCE N 62 degrees 30 minutes W 905 feet to a corner of the 43 acre tract and THENCE 750 feet, in all 1655 feet, to the BEGINNING, containing 60 acres, more or less.

Parcel II:

Beginning at a hickory tree in the last fork of Otter Creek, corner to W. H. Harber,

THENCE S 55 degrees 30 minutes E 1112 feet,

THENCE S 62 degrees E 175 feet to a stone, corner to a tract sold to A. J. Asher and on line of Jones,

THENCE N 19 degrees 30 minutes E 1595 feet;

THENCE N. 88 degrees 15 minutes E 572 feet;

THENCE N 8 degrees 30 minutes W 780 feet to a stake;

THENCE N 88 degrees 30 minutes W 170 feet to a stake;

THENCE N 88 degrees 30 minutes W 870 feet;

THENCE N 2 degrees E 1350 feet to a stake, corner to Michael Shea,

THENCE with line of same N 66 degrees 30 minutes W 470 feet to an elm tree;

THENCE N 23 degrees E 28 feet to a stake,

THENCE N 67 degrees W 645 feet to a stake, corner to W. H. Harber,

THENCE S $\frac{1}{2}$ degrees W 3415 feet to the BEGINNING, containing 113 acres, more or less.

THERE IS RESERVED out of the above tract $\frac{1}{8}$ th of an acres for a graveyard together with the right of ingress and egress to and from said graveyard.

Being the same property conveyed by Deed dated January 10, 1976, and recorded in Deed Book 289, Page 241, from Wayne Platt and Linda Platt, husband and wife, to Harold Franklin Bucher and Jean Carol Bucher, his wife, as tenants by the entireties.

Tract Five:

A certain tract or parcel of land located in Madison County, Kentucky, and bounded and described as follows:

Beginning at a stake in the south right of way of U. S. No. 227 corner tract No. 2,

THENCE with No. 2, S $43\frac{1}{2}$ E 16.51 chains to a stake corner tract No. 2 in line of Taylor and Williams,

THENCE with Taylor and Williams as follows:

N $64\frac{1}{2}$ E 13.56 chains to a post near a shelving rock, and N $11\frac{1}{4}$ W 7.23 chains to a stone and W 7.24 chains to a post and N 66 W 28 chains to a post and N $49\frac{1}{4}$ W 1.79 chains to a post and N $20\frac{3}{4}$ W 4.25 chains to a stake in chains to a post at the N.W. corner of cemetery and N $54\frac{3}{4}$ W 3.29 chains to a stake and the S. E. right of way line of U. S. Highway No. 227,

THENCE with said line S 30.14 W 6.00 chains and S 37 W 3.14 chains to the beginning, containing 25.34 acres, more or less, **LESS** cemetery 60 by 85 feet. **ALSO** Tract No. 3: Beginning at a stake in the S. E. right of way of U.S. Highway No. 227 corner tract No. 1, S $54\frac{3}{4}$ E 3.29 chains to a post at the N.W. corner of cemetery and N 82 E 4.36 chains to a stake corner tract No. 1, in line of Taylor and Williams,

THENCE with Taylor and Williams N $20\frac{3}{4}$ E $5\frac{3}{8}$ chains to a post; and N 76 W 3.72 chains to a post in the S. E. right of way line of U. S. Highway No. 227;

THENCE with said line S $13\frac{3}{4}$ W 1.90 chains to a post, and S $20\frac{1}{2}$ W 3.00 chains to the beginning containing 3.00 acres, more or less.

THERE IS EXCLUDED from the above described property a certain tract or parcel of land located in Madison County, Kentucky, about seven miles Northeast of Richmond, Kentucky, and bounded and described as follows:

Being situated on the side of the road known as Highway 388, and beginning at a telephone pole in corner of road and the property of Walter Reams, Jr.,

THENCE East with the line of said Reams property a distance of 358 feet to a big tree, corner in property of Reams and Spurlin,

THENCE North with the line of Spurlin a distance of 165 feet to a point in corner with said Spurlin,

THENCE with the line of Spurlin West to a corner of the said Spurlin and said Highway a distance of 244 feet, THENCE with the said Highway 388 South a distance of 213 feet to the point of beginning.

ALSO the following described property is conveyed, to-wit:

A certain tract of land in Madison County, Kentucky, situated on the waters of Otter Creek, bounded and described as follows: Beginning at a stake in the S.E. right of way line of U. S. Highway # 227, corner Tract No. 1 (now Williams)

THENCE with said highway line S 37 W 7.16 chains to a post corner Taylor and Williams, thence with Taylor and Williams S 38 E 12.67 chains, to a stone and N $64\frac{1}{2}$ E 8.68 chains to a stake corner Tract No. 1 (now Williams), in Taylor and Williams line;

THENCE with Tract No. 1 (now Williams), N $43\frac{1}{2}$ E 16.51 chains to the beginning, containing 11.18 acres, more or less.

THERE IS EXCLUDED from the above mentioned last tract of land the following described property, to-wit:

A certain tract or parcel of land situated in Madison County, Kentucky, on the waters of Otter Creek, bounded and described by survey made June 19, 1956 by H. deB. Forbes, a registered Civil Engineer:

BEGINNING at a stake in the east right of way line of the Richmond-Winchester Road, U. S. Highway #227 and corner to Sandlin's C. W. Cobb land,

THENCE said right of way line S 38°-10' W 208.7 feet to a stake, a new corner to C. E. Sandlin,

THENCE new line with Sandlin, S 41°-30' E 212.1 feet to a stake, N 38°-10' E 208.7 feet to a stake in fence, in line of Sandlin's C. W. Cobb tract,

THENCE with the line of Cobb tract, N 41°-30' W 212.1 feet to the beginning, containing one and no 100 (1.00) acre.

THERE IS ALSO EXCLUDED from the above tract of land and not conveyed herein 9 acres which is being retained by first parties herein, to-wit:

BEGINNING at a point at Adams/Reams and Bucher line Southeast to an existing fence located on back end of property of first part,

THENCE Southwest to corner of Reams and Spurlin thence West to Highway 388,

THENCE North to point of Reams and Adams, containing 9 acres, more or less.

Being the same property conveyed by Deed dated January 18, 1971, and recorded in Deed Book 254, Page 193, from Walter Reams, Jr., and his wife, Lucy Reams, to Harold Bucher and his wife, Jean Bucher, as tenants by the entireties.

Parcel No.: 0065-0000-002

TRACT 4:

File No. 305183NCT-12

Cardinal Valley Farm, LLC, a Kentucky Limited Liability Company

Subject Property consists of the surface only of all that certain tract or parcel of land, situate in Madison County, Kentucky, more particularly bounded and described as follows:

PARCEL D

Tract One:

The property is situated in Madison County, Kentucky, on the Waters of West Fork of Otter Creek near Red House, Kentucky. BEGINNING at a point in the West right of way line of the Richmond-Winchester Pike (US Highway No. 227) a corner to Cora Eades; thence leaving the Highway with Cora Eades line N 85 5/8 West passing the corner of Cora Eades and G. R. Spurlin at 61.13 chains and continuing with Spurlin, the same course, in all 71.73 chains to a stone corner to G. R. Spurlins York Land and in line of Spurlins Dozier land; thence with the line of the Spurlins Dozier land N 1 5/8 E 17.50 chains to a point in center of small branch, in line of Spurlin and corner to Mrs. R. A. Cosby; thence with her line and with fence S 73 1/2 E passing the corner of a fence at 7.67 chains, and old gate post at 15.47 chains and continuing the same course, in all 16.00 chains to a stake 6 feet from an elm pointer, S 56 1/2 East passing 2 feet north of a Chinkapin oak, marked two hacks, at 3.00 chains, in all 3.15 chains to a stake, S 79 3/4 E 8.32 chains to an elm on the North bank of the branch and 30 feet below a hickory pointer, S 84 1/2 E 8.59 chains to a stake on bank of branch, N 49 1/2 E 6.74 chains to a stake on bank of branch, N 68 1/8 E 6.39 chains to a stake on bank of branch at the end of a stone fence, N 87 5/8 E 4.57 chains, crossing the west fork of Otter Creek, to a double elm bush on the east bank and opposite the mouth of the branch above called for, a corner to Mrs. R. A. Cosby and Mrs. Morgan; thence with Mrs. Morgan's line S 85 1/2 E 16.23 chains to a point in the west right of way line of the Winchester-Richmond Pike, a corner to Mrs. Morgan; thence with said right of way line, S 12 3/4 E 20.32 chains to the BEGINNING, containing 110.44 acres.

THERE IS EXCLUDED FROM THE ABOVE and not conveyed herein, the following described tract conveyed to Clinton T. Allen by deed dated February 1, 1967, and recorded in Deed Book 226, Page 208, in the office aforesaid, to-wit:

Being on the Waters of West Fork of Otter Creek near Red House, in Madison County, Kentucky, and being 30 acres, more or less, and beginning on the West at the corner of the property of Cora Eades and U. S. Highway 338, thence with the line of Cora Eades across the West fork of Otter Creek to a fence, bounded by the lands of first parties, thence with the fence a Northerly direction to the line of Robert Turley and Robert Fritz and Jane Fritz, thence with the line of Turley in an Easterly direction to the right of way of U. S. Highway No. 338, thence in a Southerly direction with the right of way of U. S. Highway 338 to the point of beginning.

Tract Two: (Tract #2)

A certain tract of land situated on the west side of Ky. Hwy. #388, approximately 4 miles North of Richmond, Kentucky, in Madison County, Kentucky, bounded and described by survey as follows:

Beginning at an iron pin in the West line of Ky. Hwy. #388, a corner to Tract #1, thence leaving said highway with Tract #1 S72°-26'W 949.5 feet to an iron pin and corner to Robert Fritz, thence with Fritz line N32°-50'W 198.4 feet, N58°-31'W 39.8 feet, N20°-47'W 142.6 feet, N33°-57'W 287.8 feet, N9°-48'W 207.4 feet to an iron pin and corner to Tract #3, thence with Tract #3 S88°02'E 736.6 feet, N69°-23'E 260.3 feet, N86°06'E 102.4 feet, N87°06'E 99.7 feet to a post in the west line of Ky. Hwy. #388, a corner, thence with the West line of said highway S10°-29'E 559.7 feet to the beginning containing 16.12 acres;

Tract Three:

A certain tract of land located in Madison County, Ky., near the Village of Red House and on the waters of Otter Creek, and known as the Dower tract, and bounded as follows:

Beginning at a double elm bush on the east bank of the West Fork of Otter Creek and opposite the mount of a branch in line of J. E. Cosbys tract #1 and corner to Mrs. Morgan; thence with lines of tract No. 1, S 87 5/8 W crossing the west fork and up a branch 4.57 chains to a stake at end of stone wall on bank of branch S 68 1/8 W 6.39 chains to a stake on bank of branch, S 49 1/2 W 6.74 chains to a stake on bank of branch N 84 1/2 W 8.59 chains to an elm on North Bank of branch and 30 feet below a hickory pointer, N 79 3/4 W 8.32 chains to a stake, N 56 1/2 W passing two feet North of a oak, marked two hacks at 15 links, in all 3.15 chains to a stake 6 feet from an elm pointer, N 73 1/2 W passing an old gate post (cut off) at 53 links, the corner of a fence at 8.33 chains and continuing with the fence, the same course in all 16.00 chains to a point in the center of branch, corner tract No. 1 and in line of G. R Spurlin; thence Spurlins line crossing a ridge N 5 1/4 E 11.47 chains N 7 3/8 E 6.79 chains to a post in center of a drain, a corner to J. E. Cosbys Tract No. 2 and line of Spurlin; thence down the drain with line of tract No. 2 and with the trace of an old fence as indicated by occasional standing posts, S 67 3/4 E 6.94 chains to a post, S 65 3/4 E 4.67 chains to a post, S 80 1/2 E 2.28 chains to a point in the center of branch at a cross fence S 74 E 6.16 chains to the end of stone fence at branch, N 77 1/4 E 4.24 chains, to a post near the branch, a corner to tract No. 2 and Mrs. W. J. Lanter, thence continuing down the branch with Mrs. Lanter and the fence N 85 1/4 E 23.59 chains, crossing the west fork of Otter Creek to a stake on the East bank, 12 feet above a cedar, a corner to Mrs. Lanter and line of Mrs. Morgan; thence Mrs. Morgans line up the creek, S 16 W 4.68 chains to a point in the center of creek, S 30 1/2 E 6.41 chs., to a point in center of creek, S 3/4 W 6.01 chains to the beginning, containing 90.00 acres, Ninety and no/100 acres, by survey made by H de B Forbes, Civil Engineer.

Being a part of the same property conveyed by deed dated April 11, 2016, and recorded in Deed Book 730, Page 196, from Robert Vinson Vickers and Amy Vickers, his wife, and Ryan Clayton Vickers, and Heather Vickers, his wife, to Cardinal Valley Farms LLC, a Kentucky limited liability company.

Parcel No.: 0066-0000-0015

PARCEL B

Tract Four:

A certain parcel of land in the County of Madison, State of Kentucky, on the waters of the West fork of Otter Creek and bounded as follows:

BEGINNING at a point on the North side of the Sappington Branch 24 1/2 chains below where a sugar tree once stood and corner to James & Laura Taylor down the branch N 83 E 15 1/4 poles S 76 E 41 poles to a stone in said branch corner to the Harbor land crossing a ridge N 2 1/2 E 49 1/2 poles to a stake in another branch corner to the Durham land down the branch S 83 1/2 E 40 poles to a stake on the West fork of Otter Creek corner to E. Biggerstaff, up the creek S 32 E 48 poles S 6 E 12 poles S 30 E 26-3/10 poles S 19 1/2 W 12 poles, S 5 1/4 W 38 poles S 21 W 8 poles to a stake on the East side of the creek corner to the Walter Dozier land cross the creek up a branch S 37 1/4 W 34 poles S 70 1/4 W 20 poles S 31 1/4 W 38 poles, more or less to a stone on the South side of the branch, a corner of the 58 1/2 acres this day conveyed to Joel E. Cosby, thence a new line the dividing line between Joel E. Cosby and Elizabeth Cosby, N 7 1/2 E 12-80/100 chains to a stone near a pond N 2 E 14-13/100 chains to the BEGINNING, containing 62-3/4 acres.

There is a 60-foot roadway reserved to the County road along the West side of the creek for the benefit of any and all persons that now own or may hereafter own any of the lands that have come from the estate of J. E. Cosby or may hereafter come from Joel E. Cosby.

THERE IS EXCLUDED FROM the above and not conveyed herein, the following tract of land conveyed to Edythe E. Hall, mother of Gordon L. Hall and Gordon L. Hall, son of Edythe E. Hall, by deed dated February 12, 1975, and recorded in Deed Book 283, Page 16, and described as follows:

A certain parcel of land in the County of Madison, State of Kentucky, on the waters of the West Fork of Otter Creek and bounded as follows: Beginning at a point on the North side of Sappington Branch, a corner to Mrs. S. W. Barclay and Robert Fritz at a gate, thence with Mrs. S. W. Barclay N 2 1/2 E 49 1/2 poles, more or less, to a stake in another branch, corner to Karrol L. Switzer, thence with Switzer down the branch S 83 1/2 E 40 poles to a stake on the West Fork of Otter Creek, corner to Robert Turley, thence with Turley up the creek in a Southerly direction 360 feet, more or less, to a big Elm tree, corner to Robert Fritz, thence up a road with Fritz in a Southwesterly direction approximately 354 feet to a corner with Mrs. Barclay and the Point of Beginning, containing 6.7 acres, more or less.

Being a part of the same property conveyed by deed dated April 11, 2016, and recorded in Deed Book 730, Page 196, from Robert Vinson Vickers and Amy Vickers, his wife, and Ryan Clayton Vickers, and Heather Vickers, his wife, to Cardinal Farms LLC, a Kentucky limited liability company.

Parcel No.: 0066-0000-0002

TRACT 5:

File No. 305183NCT-4

Sondra Lee Coomer, a married person, Ruby Jo Ward, a single person, and Daniel Leon Turner, a married person, tenants without right of survivorship, as to an undivided one-third interest each

Two certain tracts or parcels of land located near Red House in Madison County, Kentucky, on the Waters of Otter Creek and bounded and described as follows, to wit:

Tract One:

Beginning at a small sugar tree standing on the North bank of Staplet on Branch of the east prong of Otter Creek, Corner to P.C. Taylor and Allen Deatherage; thence N 76 degrees E 17 1/10 poles to a stake in the branch a point on an agreed line; then N 21 1/2 W 149 3/10 to a stone on line of Tilford Jones, formerly C.M. Taylor's line; thence with

the said Jones line N 88 1/2 W 13 6/10 poles to a stake; thence on a new line, the division line between Annie C. Witmer and Callie D. Cunliffe S 4 1/2 E 142 8/10 to a stone on the north side of the branch and road and corner to P.W. Taylor; thence S 61 3/4 E 16 poles to a stone in road; thence N 74 1/2 E 28 poles to the beginning containing 32 3/4 acres more or less.

Tract Two:

Beginning at a stake on the North Side of a gate and road in the James Parks line a corner to P.C. Taylor; thence down the branch on the North side thereof S 78 1/4 E 39 1/2 poles to a stone corner to the said P.C. Taylor thence on a new line N 3 1/2 W 142 8/10 poles to a stake in the old C.M. Taylor line; thence with the Taylor line now Tilford Jones, N 88 1/2 W 30 6/10 poles to a stake corner to the James Parks land, thence with the said Parks line S 1 1/4 E 135 2/10 poles to the beginning, containing thirty (30) acres more or less.

EXCEPT THEREFROM a parcel or tract of real estate conveyed to Scott Allen Coomer and Shelly Lynn Coomer, husband and wife, recorded January 25, 2007 in Book 617, Page 394, Madison County, Kentucky, more particularly described as follow:

A certain tract or parcel of land located on Bill Eades Road, Richmond, Kentucky, described as Tract 1A consisting of 2.67 acres as described in the plat recorded in Plat Book 23, Page 329, in the Madison County Clerk's Office.

Being the same property conveyed to Sondra Lee Coomer, a single person, Ruby Jo Ward, a single person, and Daniel L. Turner, a single person, from Sondra Lee Coomer and Glenn Allen Coomer, spouse and spouse, Ruby Jo Ward, a single person, and Daniel Leon Turner and Teresa Dianne Turner, spouse and spouse, by Deed dated March 25, 2020, and recorded in Deed Book 786, Page 126.

Parcel No.: 0065-0000-0043

TRACT 6:

File No. 305183NCT-14

Delbert Day and Flora Day, husband and wife, as tenants by the entireties and not as tenants in common, for and during their natural lives with the fee in the survivor of them

Subject Property consists of the surface only of all that certain tract or parcel of land, situate in Madison County, Kentucky, more particularly bounded and described as follows:

Tract One:

A certain tract of land situated on the west side of Kentucky Highway 388 in Madison County, Kentucky and bounded and described by survey of B.H. Luxon, III, Civil Engineer Reg. No. 62, as follows:

BEGINNING at a corner post in the west right of way of Kentucky Highway #388, a corner to Kenneth Barger, thence with Barger's line N85⁰-43'W 324.68 feet, thence continuing with Barger's line and the line of Robert Fritz N84⁰-37'W 3327.08 feet, N86⁰-23'W 338.69 feet to a corner post and corner to Thomas and James Spurlin, thence with Spurlin's line SO4⁰-41'W 360.50 feet, S05⁰-03'W 769.21 feet, S85⁰-23'E 357.33 feet, S02⁰-32'W 286.77 feet to an iron pin and corner to Tract #1, thence with the line of Tract #1, S75⁰-32'E 2621.05 feet, N05⁰-24'E 166.39 feet, N84⁰-55'E 117.69 feet, N08⁰-42'E 432.96 feet, S86⁰-32'E 1181.10 feet to a corner post in the west right of way of Kentucky Highway #388 and corner, thence with said west right of way line N06⁰-59'E 156.95 feet, N06⁰-33'W 111.53 feet, N11⁰-46'W 951.84 feet to the beginning, containing 141.80 acres.

See also Deed Book 289, Page 100, Madison County Court Clerk's Office for a small tract of land included in this conveyance.

THERE IS EXCLUDED, the following tract of property, situated west of Kentucky Highway #388, in Madison County, Kentucky, conveyed to Rufus W. West and Frances Campbell West, husband and wife by Deed recorded in Deed Book 289, Page 187, Madison County, Kentucky, and more particularly bounded and described as follows:

Beginning at an iron pin at the Southernmost corner of Tract #1, a corner to Rufus West, thence with West's line S4⁰-11'W 94.3 feet, S84⁰-55'W 117.69 feet, S5⁰-24'W 166.39 feet, N75⁰-32'W 532.0 feet to a post and new corner to Evans Spurlin, thence a new line with Spurlin N78⁰-08'E 667.9 feet to the beginning containing 1.8 acres.

Tract Two:

A certain tract of land situated west of Kentucky Highway #388 in Madison County, Kentucky, bounded and described by survey of B. H. Luxon, III, Civil Engineer, Reg. No. 62, as follows:

BEGINNING at an iron pin, said iron pin being situated 762.1 feet west of the west right-of-way line of Kentucky Highway #388, in the south line of Evans Spurlin, a new corner to Rufus West, thence a new line with West S12⁰-19'W 225.7 feet, N77⁰-00'W 371.6 feet, S20⁰-38'W 190.5 feet to an iron pin and corner to Evans Spurlin, thence with Spurlin's line N09⁰-58'E 345.4 feet, S86⁰-32'E 419.0 feet to the beginning, containing 1.8 acres.

EXCEPTING from the foregoing property a certain tract of land, conveyed to Tommy W. Rice and Linda E. Rice, husband and wife, recorded in Deed Book 436, Page 719, Madison County, Kentucky, situated on the West side of Red House Road, Kentucky Highway #388, approximately 4 miles North of Richmond, Kentucky, bounded and described as follows:

Beginning at an iron pin in the West line of Red House Road, a corner to H. G. Pruitt, thence leaving said road with Pruitt's line, 3 calls, N86⁰-32'-00"W 768.95 feet, S12⁰-07'-19"W 233.41 feet, N77⁰-15'-24"W 370.94 feet to an iron pin and new corner with Delbert Day, thence a new line with Day, 6 calls, N19⁰-46'-32"E 69.06 feet, N34⁰-38'-16"E 73.28 feet, N54⁰-00'-20"E 110.33 feet, N50⁰-15'-05"E 135.73 feet, N60⁰-35'-18"E 103.80 feet, N77⁰-57'29"E 824.53 feet to an iron pin in the west line of Red House Road, a corner, thence with said west line, 3 calls, S10⁰-40'-21"E 151.22 feet, S09⁰-38'-45"E 85.42 feet, S06⁰-55'-46"W 178.29 feet to the beginning, containing 7.881 acres.

Parcel No.: 0066-0000-0017

TRACT 7:

File No. 305183NCT-13

Found Spoon Farm, LLC, a Kentucky limited liability company

Subject Property consists of the surface only of all that certain tract or parcel of land, situate in Madison County, Kentucky, more particularly bounded and described as follows:

The land situated on the Lost Fork Pike, on the waters of Otter Creek, in Madison County, Kentucky, particularly described as follows:

Tract 1:

Beginning at a stone on the East side of Lost Fork of Otter Creek, corner to A. T. Chenault; thence his line S 25 E 46 poles to a stone and notch in fence, corner to Nelson B. Gentry's 48 3/4 acres and 20 poles; thence his line N 60 1/4 E 112 poles to a stake in the center of the pike, corner to Pleasant Gentry's and Claiborne T. Gentry's 58 acres; thence with the center of the pike and with Gentry N 27 3/4 W 4.5 poles to a stake; thence N 32 1/2 W 47 poles to a stake; thence N 62 1/2 W 10 poles to a stake; thence N 83 1/2 W 18 poles to a stake; thence S 74 W 42 poles to a stake in the center of pike at mouth of a lane, corner to James W. Smith; thence along the lane and his line S 13 E 9 1/2 poles; thence S 28 1/2 W 49 poles to the beginning, containing 44 1/2 acres, and 20 poles, more or less.

Tract 2:

Beginning at a stake and notch in the fence, corner to Lucy A. Karr's 44 1/2 acres and 20 poles on A. T. Chenault's line; thence with his line S 25 E 46.8 poles to a stone; thence S 21 E 28.2 poles to a stake corner to Thomas P. Harber land, now owned by C. M. Taylor; thence his line N 52 E 120 poles to a stake in the center of the pike, a corner to Claibourne T. Gentry; thence with the center of the pike and his line N 27 3/4 W 61.6 poles to a stake in the center of the pike, a corner to Lucy A. Karr's 44 1/2 acres and 20 poles; thence her line S 60 1/4 W 112 poles to the beginning, containing 48 3/4 acres and 20 poles.

Tract 3:

Beginning at a stone on the south side of Lost Fork of Otter Creek at B. T. Gentry's corner; thence S 62 1/2 W 72 poles, crossing said fork and running on the north side of a pond near said creek to a stone on the north side of said creek; thence S 70 1/2 W 34 poles to a point in the center of said fork corner to C. M. Taylor; thence with Taylor's line S 20 1/2 E 26 poles to a stone, Taylor's corner; thence S 63 W 10 poles to a stone a sugar tree pointer; thence S 28 E 71 poles to a stone and locust tree; thence N 63 1/2 E 28 poles to a stone; thence 76 3/4 E 7 poles to a stone; thence N 19 E 1.8 poles to a stone; thence N 63 1/2 E 75 poles to a stone in old road corner to C. M. Taylor in B. T. Gentry's line; thence with his line N 24 1/2 W 95 poles to the beginning, containing 66 3/4 acres and 20 poles.

LESS AND EXCEPT from the foregoing is that certain tract of land located on the West Side of Lost Fork Road, and being bounded by survey made May 25, 1993 by Charles E. Black a licensed land surveyor (L.S. 670), and described as follows:

Beginning at a steel pin in the West right of the way line of Lost Fork Road and new corner to Ruth B. Hatton; thence leaving said right of way with new lines dividing the lands of Ruth B. Hatton, three (3) calls: N 60 17' 45" W 272.54 feet to a steel pin, thence; N 30 31' 42" E 249.84 feet to a steel pin, thence; S 66 27' 27" E 251.59 feet to a steel pin in the West right of the way line of the Lost Fork Road; thence leaving the line of Ruth B. Hatton with the said right of way S 25 48' 58" W 277.45 feet to a steel pin and point of beginning and containing 1.58 acres. A plat of said lot is attached to Deed dated June 3, 1993 of record in Deed Book 434, Page 525, in the Madison County Clerk's Office, being the same land conveyed by deed dated June 3, 1993, and recorded in Deed Book 434, Page 525, from Ruth Black Hatton to John Hatton Lange.

ALSO LESS AND EXCEPTED from the foregoing is that certain tract of land situated on the west side of Lost Fork Road, approximately one (1) mile northeast of the community of Red House, in Madison County, bounded and described by survey as follows:

Beginning at an iron pin in the center line of Lost Fork Road, said pin being 1449 feet south of the northeast corner of the J. B. Hatton property, a new corner to J. B. Hatton, thence leaving the road, a new line with J. B. Hatton S 60°-19'W 250.0 feet to an iron pin and new corner to J. B. Hatton, thence continuing a new line with Hatton S25°-06'E 132.9 feet to an iron pin and corner, N67°-57'E 130.0 feet, N53°-19'E 130.9 feet to a point in the center of Lost Fork Road, a corner, thence with the center line of Lost Fork Road N29°-01'W 133.6 feet to the beginning containing 0.83 acres, being the same land conveyed by deed dated June 13, 1976, and recorded in Deed Book 312, Page 49, from Jesse B. Hatton and Ruth Black Hatton, husband and wife, unto Arlene H. Lange, a single person.

ALSO LESS AND EXCEPTED from the foregoing is that certain one acre parcel of land located at 385 Lost Fork Road in Madison County, Kentucky, which is shown and described as Tract 2 on the Minor Plat for Ruth Hatton/Mary Lynne Lange, which Minor Plat is of record in the Office of the Madison County Court Clerk in Plat Cabinet 22, Page 87, being the same land conveyed by deed dated September 23, 2005, and recorded in Deed Book 596, Page 664, from Ruth Black Hatton, a/k/a Ruth Esther Hatton, a/k/a Ruth Hatton, single, by and through Mary Lynne Lange, her attorney in fact, unto Benny Lloyd Marshall and Cathy Diane Marshall, husband and wife, as joint tenants, with the remainder in fee simple to the survivor of them, his or her heirs and assigns forever.

Being the same property conveyed by deed dated February 17, 2020, and recorded in Deed Book 784, Page 746, from Mary Lynne Lange, a single person, and John Hatton Lange and Sara Michelle Lange, his spouse, unto Found Spoon Farm LLC.

Parcel No.: 0065-0000-0039

TRACT 8:

File No. 305183NCT-3

Four-Star Development Corporation, Inc., a Kentucky corporation, as to an undivided ½ interest

Frazier Realty Company, LLC, a Kentucky limited liability company, as to an undivided ¼ interest

Tudor Holdings, LLC, a Kentucky limited liability company, as to an undivided ¼ interest

Tract One:

A certain tract or parcel of land lying in Madison County, Kentucky on the Red House and Foxtown Road and bounded and described as follows:

BEGINNING in center of said road and running with same N 72-3/4 E 8.06 chains corner to Wilson Eades with same S 5-3/4 E 10.20 chains corner to Rufus Spurlin, with Spurlin and Cosby, S 72-1/2 W 15.65 chains corner to Cosby, thence N 6 W 10.82 chains a point on south side of said road, with road N 74 E 7.45 chains to the BEGINNING, containing 15.89 acres more or less.

SAVE AND EXCEPT that tract or parcel of land in Deed dated July 31, 1986, recorded August 7, 1986 in Book 378, Page 382, Official Public Records, Madison County, Kentucky, more fully described as follows:

A certain tract of land located on the south side of the Bill Eads East Road, about 8600 feet west of Red House, in Madison County, Kentucky and being bounded by survey made July 21, 1986 by Charles E. Black, a licensed land surveyor, (LS. 670) and further described as follows:

BEGINNING at a steel pin in the south line of the Bill Eads East Road, a common corner between Lloyd Bucher and Harris; thence leaving said road with the line of Harris S02° 58' 11" E 503.26 feet to a steel pin, a new corner to Lloyd Bucher; thence leaving Harris with new lines dividing the lands of Bucher two (2) calls; S72° 33' 20" W 488.67 feet to a steel line; N07° 51' 33" E 571.16 feet to a steel pin in the south line of the Bill Eads East Road; thence with said south line N77° 02' 40" E 371.48 feet to a steel pin and point of beginning and containing 5.01 acres.

Being a part of the same property conveyed to Lloyd Bucher and Annell Bucher, husband and wife, from Jim Ed Day, Jr., and Emma Jo Day, husband and wife, by deed dated the 23rd days of September, 1972 and recorded in Deed Book 266, Page 191 in the Madison County Court Clerk's Office.

Tract Two:

A certain tract or parcel of land situated in the County of Madison, State of Kentucky on the South fork of the waters of Otter Creek and bounded as follows:

Beginning at a white oak corner to Ben Bowling N 19 E 144 poles to a white oak corner to Dozier, Park and Burgin thence with Burgin's line S 68 3/4 W 62 poles to a black oak corner to Burgin N 9 W 42 poles to a black walnut Burgin's corner N 50 W 51 poles S 61 1/2 W 92 poles to a branch of Otter Creek S 30 E 17 1/2 poles S 65 W 19 poles to the road and with the road S 19 W 16 poles to a walnut stump S 29 E 16 poles S 47 E 20 poles to a white oak corner to Burgin S 40 1/2 E 62 poles to the beginning containing one hundred and fourteen and three fourth acres more or less.

SAVE AND EXCEPT that tract or parcel of land, containing approximately 1.14 acres, more or less, as shown on that certain Boundary Survey - Minor Plat for the Annell Bucher Estate, said plat being found of record in Plat Book 28, Page 296, Official Public records, Madison County, Kentucky.

Parcel Number: 0053-0000-0013

TRACT 9:

File No. 305183NCT-19

Charles A. Hamilton and Shawna Hamilton, husband and wife, jointly remainder to the survivor of them

Subject Property consists of the surface only of that certain tract of Land situate in Madison County, Kentucky, said parcel of Land being more particularly bounded and described as follows:

BEGINNING at a point in the center of the Richmond and Red House Pike, a corner to Charles Davis and Mrs. Parkes, thence new lines with the center of said pike and with Tract No. 1, N 12 E 13.20 chains N 1 3/4 W 7.82 chains N 1/4 W 2.07 chains to the point in the center of said pike, a corner to Robert Cosby and Parks; thence leaving the pike with the line to Parks S 86 1/4 W 14 links to an end post on the west edge of the pike, S 82 1/4 W 10.17 chains to a walnut snag, a corner to Wilson Eads; thence with lines to him S 71 3/4 W 29.89 chains to the west end of a stone buttress on the west side of the west prong of Otter Creek N 77 1/2 W 5.59 chains to a post in line of Jack Roswell, thence with lines to him S 6 1/4 W 2.23 chains to a sycamore in fence, S 24 3/4 W 13.88 chains to a point on the north bank of the creek formerly a box elder, a corner to May Collins, thence with the line to him S 38 3/4 F. 4.20 chains to a large walnut about 30 inches in diameter, standing on the north side of the road at the three forks of Otter Creek, a corner to the said Collins and Charlie Davis; thence with lines to Davis N 67 1/4 E 33.23 chains to a stake near fence corner, S 61 1/4 E 7.00 chains to a stake in fence 6 feet west of a small ash tree S 67 3/8 E 9.67 chains to the beginning containing sixty nine acres and eight tenths (69.8).

There is **EXCLUDED** from this conveyance about one tenth of an acre which lies on the West side of the road leading from the Red House Pike to Foxtown.

Being the same property conveyed to Charles A. Hamilton and Shawna Hamilton, husband and wife, from the Margaret S. Hale Revocable Trust Dated November 20, 2001, by and thru Wells Fargo Bank, NA, as Trustee, by Deed of Conveyance dated February 21, 2014, and recorded in Deed Book 700, Page 538.

Parcel No.: 0066-0000-0025-A

EXCEPT THEREFROM a tract or parcel or Land conveyed by Charles A. Hamilton and Shawna Hamilton, husband and wife to Charles A. Hamilton and Shawna Hamilton, husband and wife, in fee simple absolute, for and during their joint lives and at the death of one the fee to the survivor of them, located in Madison County, Kentucky and more particularly described as follows:

Being all of Tract "A" as shown on Minor Subdivision Plat for Charles A. Hamilton and Shawna Hamilton, found of record in Plat Book 26, Page 573, Madison County Clerk's Office.

Being a part of the same property conveyed to Charles A. Hamilton and Shawna Hamilton, husband and wife, from Margaret S. Hale Revocable Trust dated November 20, 2001, by and thru Wells Fargo Bank, NA as Trustee, by Deed dated February 21, 2014, of record in Deed Book 700, Page 538, Madison County Clerk's Office.

TRACT 10:

File No. 305183NCT-6

Hickory Haven, LLC, a Kentucky limited liability company

Tract One:

A certain tract of land in Madison County on the waters of otter creek including the old Thomas P. Harber brick house and bounded and described as follows:

Beginning at a sycamore tree on the south bank of a branch a corner to J.E. Cosby; thence N 4 1/2 E crossing the branch and up a hill 48 poles to a stake; thence N 13 E 50 poles to a stake; thence N 8 W 36 poles to a white oak a corner to Simeon Turpin remaining tract of 44.92 acres; thence with the division line West 207 2/10 poles to a stake and some ash bushes on the west line; thence with the old line S 22 1/2 E 130 poles to a stake in a big branch; thence with and down said branch N 82 E 40 poles; thence S 74 E 32 poles; thence N 85 E 34 poles; thence S 75 E 44 1/2 poles to the beginning containing 136.83 acres be the same more or less.

Tract Two:

Beginning at a white oak tree corner to 136.83 acres sold by said Turpin to said Davis and on Elihu Biggerstaff's line; thence with said line N 9 1/2 W 12 poles; thence N 11 W 29 poles to a hickory; thence N 5 E 1 2/10 (poles) to a stake corner to W. R and E. S. Taylor, thence with their line S 89 3/4 W 194 poles to a stake on Tilford Jones line; thence with same S 23 1/4 E 24 poles to a white oak corner to said Jones, still with line N 89 1/2 W 20 2/10 poles to a stone corner to Mrs. Callie Cundiff; thence with her line S 22 1/2 E 24 2/10 poles to an ash bush, corner to said tract sold by Simeon Turpin to Earnest Davis; thence with the division line of the said two tracts N 89 3/4 E 208 poles to the beginning containing 44.92 acres be the same more or less.

Parcel Number: 0065-0000-0044

TRACT 11:

File No.: 305183NCT-15

Larry Jones as to a Life Estate; Robert Jones and Erin Jones, jointly, remaindermen

Larry Pierce Jones

Subject Property consists of the surface only of all that certain tract or parcel of land, situate in Madison County, Kentucky, more particularly bounded and described as follows:

Tract One:

Beginning at a point in the center of Hammonds Fork of Otter Creek a corner to Boswell's Collins land, hereinafter described, and other lands of Boswell, thence leaving the Creek new line with Boswell N 67 1/2 E 7.34 chains to a stone on south side of County road #216; thence with the south line of said road 23 1/4 E. 4.19 chains S 31 1/2 E 3 chains S 39 5/8 E. 10.78 chains 44 3/4 E. 11.82 chains; thence leaving the road S. 1 W 1.91 chains to a point in the said Hammonds fork in line of the above Collins land; thence up the creek with lines of same N 83 3/4 W 1.7 chains N 63 3/4 W. 3.85 chains N 50 3/4 W. 4.69 chains N 67 W 1.4 chains N 74 W 2.73 chains S 81 W. 2.24 chains N 31 1/4 W. 1.71 chains N. 25 W 2.24 chains N 26 1/4 W. 1.55 chains N 66 W 1.44 chains to a walnut at the North edge of water gap; thence crossing Hammonds Fork S 54 1/2 W. 1.85 chains to a marked sugar tree N 59 1/2 W. 5.55 chains to a stake in stone fence N 26 1/4 W. 1.95 chains to a sugar tree N 5 1/4 E 7.43 chains to the beginning containing 22.27 acres.

Tract Two:

Beginning at a point in the center of the Richmond and Red House pike at the south east corner of the 30 foot roadway sold by George Phelps to Archie Dunn, thence leaving the pike with the south line of said road N 77 3/4 W 26.91 chains to a fence post N 69 1/2 W. 12.05 chains to a fence post a corner to the land bought by Archie Dunn from George Phelps thence with line of same S. 25 W .25 chains to a walnut tree., S 82 1/4 N 2.36 chains to a stone 5 1/2 feet from the north edge of a blazed walnut thence with new line with Phelps S 46 E 3.88 chains to a stake on top of a hill S 65 7/8 E 4.8 chains to a stake near a pond S 63 E 7.97 chains to a stake 32 feet from the north west corner of a tobacco barn S 67 5/8 E 2.3 chains to a stake 22 feet from the north west corner of said barn S 65 1/8 E 9.79 chains to a stake in the old rail fence S 66 3/4 E. 9.91 chains to a stake in field near a dead apple tree S 74 E 3.93 chains to a point in the center of the above mentioned pike, thence with the center of same N 13 1/2 E 9.07 chains to the beginning containing 22.6 acres.

Tract Three:

Beginning at a large walnut tree on the edge of the road a corner to Chas. Davis, thence crossing a creek N 40 1/2 W 4.89 chains to the snag of a box elder tree and of old stone fence on the North bank of Hammonds Fork of Otter Creek corner to the lands of Jack Boswell, thence lines to him as now fenced and up said fork N 39 E 2.80 chains N 6 W 1.35 chains N 56 W 1.99 chains N 83 3/4 W 1.70 chains N 63 3/4 W 3.58 chains N 52 3/4 W 4.69 chains N 67 W 1.40 chains N 74 W 2.73 chains S 81 W 2.24 chains N 31 3/4 W 1.71 chains N 25 W 2.24 chains N 26 1/4 W. 1.55 chains N 66 W 1.44 chains to a walnut tree at the north edge of a water gap thence crossing Hammonds Fork S 54 1/2 W 1.85 chains to a large marked sugar tree a corner to the said Boswell thence continuing up the fork with lines to said Boswell N 59 1/4 W 5.55 chains to a stake in a stone fence on the South side of the fork N 26 1/4 W. 1.95 chains to a sugar tree N 5 1/4 E 7.43 chains to a point in the center of said fork, thence leaving same with lines of Boswell S 73 W 8.06 chains to a stone fence thence leaving along the fence S 25 1/4 W. 18.19 chains to a stake at stone cross fence S 24 1/4 W. 23.85 chains to a large elm on the North side of Tribble's branch, thence with new lines with George W. Phelps N. 89 1/2 E 2.42 chains to a walnut tree on the North bank of the branch S 72 E 11.56 chains to a stake at fence corner, thence along an old rail fence S 72 1/2 E 3.23 chains N 79 1/4 E 6.64 chains N 67 3/4 E 3.45 chains N 68 3/4 E 5 chains N 64 1/2 E 2.90 chains N 50 E 6.16 chains to a walnut tree in the fence N 72 1/4 E 3.33 chains to the south side of a large oak tree at the east bank of the branch N 46 1/2 E 4.10 chains to a stake 8 1/2 feet northwardly from a walnut tree at gate N 54 E 1.91 chains to a stake N 77 1/4 E 1.13 chains to a stake S 71 3/4 E 2.62 chains to a walnut tree on the East bank of Gin Creek; N 81 7/8 E 10.74 chains to a walnut tree on hill side N 22 3/4 E .7 chains to a fence post in Chas. Davis line thence with his line N 69 W 4.03 chains to the beginning containing 132.38 acres.

Tract Four:

Also, a small strip of land adjoining the above mentioned tract bounded and described as follows: to-wit:

Beginning at a fence post in Chas Davis line and corner to above the above described tract, thence with line to same S 22 3/4 W 30 feet thence S 69 E 11.93 chains to a stake thence S 77 3/4 E 26.91 chains to a point in the center of the Richmond and Red House pike, thence with the center of same N 12.5 E 30 feet to a stake corner to Chas Davis, thence with line to him N 77 3/4 W 26.91 chains to a fence post N 69 W 11.93 chains to the beginning containing 1.99 acres.

Being the same property conveyed by Deed dated February 26, 1923, and recorded in Deed Book 97, Page 160, from S.R. Ballard and Elizabeth C. Ballard to Leonard H. Ballard. By Last Will and Testament dated February 18, 1986, and recorded in Will Book 29, Page 150, Leonard H. Ballard, who died prior to December 29, 1987, devised his farm of 179 acres, more or less, located on Three Forks Pike and Boonesboro Road in Madison County, Kentucky, acquired by him from A.J. Boswell about 1920, as follows: to Millard Jones for life; then to Larry Jones for life; then the remainder in fee simple to Robert Jones and Erin Jones, jointly.

Tract Five:

Situated in Madison County, Kentucky, on the waters of Tates Creek and bounded as follows:

Beginning at a stake a small drain, a new corner in line to Morgan Taylor, thence S 24 3/4 W 73 chains to a stone on a hillside S 49 1/2 W 13 chains to a rock in the branch, thence down same as it meanders with Morgan Taylor's line S 29 1/4 W 5 5/10 chains S 16 1/4 W 3 chains S 27 1/2 W 16 1/2 chains to where a sycamore stood on Mill Branch thence up same S 52 E 6 1/4 chains, N 89 E 4 1/4 chains N 68 1/2 E 19 1/2 chains N 34 1/2 E 10 1/2 chains to a stake in the Mill branch above a gate, thence S 46 1/2 W 2 chains to a stake near a beach tree by the stone fence, thence S 15 E 1 55/100 chains N 34 3/4 W 1 25/100 chains N 48 W 1 1/2 chains N 54 3/4 W 2 chains N 42 3/4 W 74/100 chains N 7 3/4 W 6 1/2 chains N 30 W 6 92/100 chains to the beginning containing sixty (60) acres more or less.

EXCEPTING FROM THE TRACT OF 60 ACRES THE FOLLOWING:

Being all of Tract 1-B (51.247 acres) as shown on Plat titled Minor Consolidation Plat and recorded in Plat Book 29, Page 59 (Plat), in the Madison County Clerk's office.

Said Tract 1-B being a portion of the same property conveyed to Fairy Ballard Jones in Deed Book 115, Page 458 in the Madison County Clerk's office. Fairy Ballard Jones conveyed her interest to Millard H. Jones, for life, with remainder interest to Larry Pierce Jones by deed dated December 23, 1976 and recorded in Deed Book 297, Page 446 in the Madison County Clerk's Office. Millard H. Jones died August 22, 1990 extinguishing his life estate in this property. Larry Pierce Jones is the sole owner.

Being the same property conveyed by Deed dated December 23, 1976, and recorded in Deed Book 297, Page 446, from Fairy Ballard Coy to Millard H. Jones (life estate) and Larry Pierce Jones (remainder interest). Thereafter, by Deed dated May 19, 2020, and recorded in Deed Book 788, Page 303, Larry Pierce Jones and Beth M. Jones, husband and wife, conveyed a tract of land containing 51.247 acres to Ching Kuang Chow and Shukwei Lily Cho, husband and wife, for and during their joint lives with the remainder in fee simple to the survivor of them, his or her heirs and assigns, forever.

ALSO EXCEPTING a strip of Land located on Three Forks Road in the Red House section of Madison County, Kentucky, by Deed dated July 29, 1949 in Book 148, Page 584, bounded and described as follows, to-wit:

A strip of Land thirty (30) feet wide, fifteen (15') feet each side of the center line, the location of said center line being as follows:

BEGINNING at a point in the center of the existing road, opposite, and 17 ¾ feet from the Southwest corner of Ballard's barn, thence N 36° 30' W 250 feet, crossing one fork of the creek N 4° 0' E 113 feet, crossing another fork of the creek, to a point in the center of the existing road.

Parcel No.: 0067-0000-0001

TRACT 12:

File No.: 305183NCT-2

KT&D, LLC, a Kentucky limited liability company

Tract One:

A certain tract or parcel of land, situate in Madison County, Kentucky, more particularly described as follows:

Being all of Tract 2 (consisting of 20.60 acres), of Three Forks Development, Madison County, Kentucky, as shown by Plat thereof of record in Plat Cabinet 27, Page 198, in the Madison County Clerk's Office.

Parcel No.: 0053-0000-0017-2

Tract Two:

A certain tract or parcel of land, situate in Madison County, Kentucky, more particularly described as follows:

Being all of Tract 3 (consisting of 30.10 acres) of Three Forks Development, Madison County, Kentucky, as shown on plat thereof of record in Plat Cabinet 27, Slide 198 in the Madison County Clerk's Office.

Parcel No.: 0053-0000-0017-3

Tract Three:

A certain tract or parcel of land, situate in Madison County, Kentucky, more particularly described as follows:

Being all of Tract 4 (consisting of 36.76 acres) of Three Forks Development, Madison County, Kentucky, as shown by plat thereof of record in Plat Cabinet 27, Slide 98, in the Madison County Clerk's Office.

Parcel No.: 0053-0000-0017-4

Tract Four:

A certain tract or parcel of land, situate in Madison County, Kentucky, more particularly described as follows:

Being all of Tract 5 (consisting of 26.98 acres) of Three Forks Development, Madison County, Kentucky, as shown on Plat thereof of record in Plat Cabinet 27, Slide 98, in the Madison County Clerk's Office.

Parcel No.: 0053-0000-0017-5

Tract Five:

A certain tract or parcel of land, situate in Madison County, Kentucky, more particularly described as follows:

Being all of Tract 6 (consisting of 48.17 acres) of Three Forks Development, Madison County, Kentucky as shown by Plat thereof of record in Plat Cabinet 27, Slide 98, in the Madison County Clerk's Office.

All being part of the same property conveyed by Deed dated April 21, 2017, and recorded in Deed Book 744, Page 1, from LP Farms, LLC, a Kentucky Limited Liability Company, to KT&D, LLC, a Kentucky Limited Liability Company.

Parcel No.: 0053-0000-0017-6

TRACT 13:

File No.: 305183NCT-11

Garnett B. Parke

Subject Property consists of the surface only of all that certain tract or parcel of land, situate in Madison County, Kentucky, more particularly bounded and described as follows:

A certain tract of land situated in Madison County, Ky. on the Lost Fork of Otter Creek, bounded and described as follows:

Beginning at a stone in J. Parke's line, corner to Calvin Burgin, thence N 66-1/4 E 105 poles to a stone, Parke's corner, S 17 E 26 poles to a stake, S 88-3/4 E 120 poles to a white oak, corner to Thos. P. Harber, thence his line N. 26 W 77-1/2 poles to a stone, N 23-1/4 W 52-1/2 poles to a stone corner to Harber, N 21 W 28-1/2 poles to a stone, corner to C. Chenault, thence with his line S 62-1/2 W 75 poles to a stone, S. 20 W 6 poles to a stone, N. 76-1/4 W 6.3 poles to a stone, S 62-1/2 W 28-1/2 poles to a locust, N. 29-1/4 W 69.7 poles to a stake in the old fence, a new corner to Ira T. Parke and the land sold by Jones to G.R. Spurlin, thence a new line between Parke and Spurlin S. 69-1/8 W 38.1 poles to a stake in a corn field, where a walnut and a sugar tree stood, thence with the line between the old Cassius M. Taylor place and the Burgin land, both property of Jones, and sold by him to Ira T. Parke and G.R. Spurlin respectively, S 66 W 66 poles to a stake where a hickory stood, a corner to Jones and Calvin Burgin, now Parke and Calvin Burgin, and in Spurlin's line, said stake being S 25-1/2 E 4 feet from the corner post of Calvin Burgin's fence, thence with Burgin's line S 28-1/4 E 146 poles to the beginning, containing One Hundred and Eighty Six hundredths acres (180.06), as per the old survey.

Being the same property as to which an 87.74 acre portion was conveyed by deed dated November 27, 1941, and recorded in Deed Book 137, Page 472, from Ira T. Parke to Amanda Parke, and the remaining portion of which was conveyed by deed dated January 26, 1959, and recorded in Deed Book 178, Page 501, from Gilbert Parke and Phelps Parke, Co-Executors of the Estate of Ira T. Parke, deceased, to Garnett B. Parke.

Parcel No.: 0052-0000-0022

TRACT 14:

File No.: 305183NCT-10

Daniel L. Turner

Daniel Leon Turner, a married person

Subject Property consists of the surface only of all that certain tract or parcel of land, situate in Madison County, Kentucky, more particularly bounded and described as follows:

Property No. 7C: Two certain tracts or parcels of land in Madison County, Kentucky and bounded and described as follows:

Tract 1:

A tract of land in Madison County, Kentucky, on the waters of Otter Creek bounded as follows:

Beginning at an elm tree corner to Mrs. E. Dozier, dower tract; thence S 68 1/2 E 47 1/2 poles to a hickory in S. B. Phelps line, thence North 144 poles to a sugar tree in the North Bank of a branch corner to Harber, thence S 65 W 165 poles to a hickory stump corner on the dower, thence S 61 1/2 E 119 poles to the beginning containing 68 1/2 acres.

Tract 2:

Beginning at a small sugar tree on the North Bank of Sappington Branch, corner to said Taylor and Allen Deatherage, thence with new and agreed lines S 73 1/4 W 28 poles to a stone in the road, thence N 62 3/4 W 16 poles to a stone on the North side of the branch, thence N 79 1/4 W 38 6/10 poles to a stake, on a line of James Parks, on North side of a gate and road, thence with Parks line S 2 1/4 E 39 3/10 poles to a hickory on a ridge, thence N 67 1/2 E 84 poles to the Beginning containing 7 1/2 acres.

Being the same property conveyed by quitclaim deed dated September 22, 1998, and acknowledged by Daniel L. Turner on September 22, 1998, and by Mary A. Turner on September 14, 1998, and recorded in Deed Book 493, Page 508, from Daniel L. Turner, a single person, and Mary A. Turner, a single person, to Daniel L. Turner; and being the same property conveyed by deed dated December 29, 1974, and recorded in Deed Book 281, Page 593, from Thomas J. Spurlin, a single man, unto Daniel L. Turner and Mary A. Turner, husband and wife, as tenants by the entireties and not as tenants in common, for and during their joint natural lives with the fee in the survivor of them, his, her or their heirs and assigns.

Parcel No.: 0053-0000-0016

Tract 3:

A tract or parcel of and located in Madison County, Kentucky, **BEGINNING** at a point in the center of the Red House and White Hall Road and on the south side of the branch, a corner to Mrs. W.J. Lanter and in line of Earnest Davis, thence with the center of said road, S 89 3/8 W 4.91 chains, N 73 W 6.01 chains, S 85 5/8 W 6.96 chains, S 78 1/4 W 7.64 chains crossing the branch to a point in center of said road, in line of Davis and corner to G.R Spurlin, thence leaving the road with Spurlin, S. 1 1/2 E 7.82 chains, S 2 1/4 W 12.00 chains to a post in center of drain, in line of Spurlin and corner to Mrs. R.A. Cosby, thence her line, down the drain, with trace of an old fence as indicted by occasional standing posts, S 67 3/4 E 6.94 chains to a post. S 65 3/4 E 4.67 chains to a post, S 80 1/2 E 2.28 chains to a point in center of branch at a cross fence, S 74 E 6.16 chains to the end of a stone fence at the branch, N 77 1/4 E 4.24 chains to a post near the branch, a corner to Mrs. Lanter N 8 1/2 E 11.68 chains to a post in angle of fence, on a ridge near a pond, N 3 3/8 E 14.22 chains to the beginning, containing sixty and 70/100 (60.70) acres.

Being the same property in which a 1/6 interest each (1/2 in aggregate) was conveyed to Sondra Lee Coomer, Ruby Jo Ward and Daniel Leon Turner from Virginia Turner, widow, by deed dated March 30, 2012 and of record in Deed Book 676, Page 624 in the Madison County Court Clerk's Office.

And being the same property in which a 1/2 interest was conveyed to Daniel Leon Turner from Leon Turner and Virginia Turner, husband and wife, by deed dated February 6, 1974 and of record in Deed Book 275, Page 513 in the Madison County Court Clerk's Office.

Being the same property conveyed by deed dated March 25, 2020, and recorded in Deed Book 786, Page 122, from Sondra Lee Coomer and Glenn Allen Coomer, spouse and spouse, Ruby Jo Ward, a single person, and Daniel Leon Turner and Teresa Dianne Turner, spouse and spouse, unto Daniel Leon Turner, a married person.

Parcel No.: 0066-0000-0001

APPENDIX C

Noise and Traffic Study



Madison County Solar Project: Noise and Traffic Study

DECEMBER 2020

PREPARED FOR

AEUG Madison Solar, LLC

PREPARED BY

SWCA Environmental Consultants

MADISON COUNTY SOLAR PROJECT: NOISE AND TRAFFIC STUDY

Prepared for

AEUG Madison Solar, LLC

50 E Monroe St
Chicago, IL 60603
Attn: Mark Randall

SWCA Environmental Consultants

201 Chatham Street, Suite 3
Sanford, North Carolina 27330
(919) 292-2200
www.swca.com

SWCA Project No. 63270

December 2020

CONTENTS

1	Introduction	1
1.1	Project Description	1
1.2	Existing Land Use and Site Conditions	1
2	Compatibility with Scenic Surroundings	1
2.1	Existing Noise Conditions	1
2.1.1	Nearest Receptor Sites	1
2.1.2	Existing Noise from Surrounding Areas	2
2.1.3	Existing On-Site Noise	3
2.2	Proposed Construction Noise Conditions	4
2.2.1	Equipment and Machinery	4
2.2.2	Roadway Noise During Construction	6
2.2.3	Assembly of solar array and construction facilities	6
2.3	Proposed Operation Noise Conditions	6
2.3.1	Solar Array and Tracking System	6
2.3.2	Inverters	7
2.3.3	Transformers	7
2.3.4	Site Operation and Maintenance	7
2.4	Noise Summary and Conclusions	8
3	Traffic Study	10
3.1	Existing Road Network and Traffic Conditions	10
3.2	Construction Traffic	10
3.2.1	Traffic Safety Precautions	11
3.2.2	Impact on Road Infrastructure	11
3.3	Operational and Maintenance Traffic	11
3.4	Traffic Summary and Conclusions	12
4	Fugitive Dust Impacts	12
5	Impacts to Rail	12
6	References	13

Appendices

- A. Figures
- B. Noise Impacts Calculations
- C. Fugitive Dust Calculations

Tables

Table 2.1-1. Nearest Sensitive Receptor to the Site.....	2
Table 2.1-2. Representative Existing Conditions Based on Land Use.....	3
Table 2.1-3. Typical Sound Levels Measured in the Environment and Industry.....	4
Table 2.2-1. Noise Levels for Common Construction Equipment.....	5
Table 2.3-1: Noise Levels Due to Inverter Operation.....	7
Table 2.4-1. Calculated Noise Levels Due to Construction.....	8
Table 2.4-2. Calculated Noise Levels at Property Boundary Due to Operation	9
Table 3.1-1: Access Road Information	10
Table 3.2-1. Summary of Anticipated Construction Vehicle Trips	11

1 INTRODUCTION

1.1 Project Description

The proposed Madison Solar Facility (Project) is a 100-megawatt photovoltaic (PV) facility in Madison County, Kentucky, located approximately 4 miles north of Richmond. It is planned to be built on either side of KY-388 sitting on 1,700 acres of land. The power generated by the proposed solar facility will be connected to the existing power grid using the transmission line currently traversing the tract. The generating facility will sell power on the wholesale market as a merchant power plant or independent power producer. A Project Location Map is shown in Figure A-1.

Construction of the facility is anticipated to last 10 months, commencing in September of 2021 and completing in June of 2022. Based on the preliminary design, the Project will include 36 inverters, 276,048 modules, and 2,556 trackers onsite. The Project will also include a substation to be located near the northwest corner of the project and a warehouse and O&M Building to be located just south of the substation.

The site would be secured using six-foot-high, perimeter, chain-link fencing topped by razor wire surrounding the PV system and switchyard. The entrance gates for the site are anticipated be about 8 feet high and 12 feet wide, to allow for fire department and maintenance access. All fencing would be placed at or above grade to ensure drainage flows are unobstructed. Naturally occurring vegetation around the boundary, most notably small groupings of trees along the north and south property boundaries, would remain in place. At the end of life of the project, the land will likely return to farmland.

1.2 Existing Land Use and Site Conditions

According to the National Land Cover Database (NLCD) for Madison County, the land upon which the facility will be built is largely farmland, consisting of land cover mostly characterized as hay/pasture as well as patches of cultivated crops and deciduous forest as shown in Figure A-2. Based on aerial imagery from Google Earth, there are approximately 17 ponds within the property boundary in the central portion and 6 ponds within the property boundary in the eastern portion. There are various buildings near KY-388, as shown in the aerial imagery (Figure A-3). There is a church on the east side of KY-388 in between the central and eastern sections of the facility and several residences near the west and southwest boundaries.

2 COMPATIBILITY WITH SCENIC SURROUNDINGS

2.1 Existing Noise Conditions

2.1.1 *Nearest Receptor Sites*

Noise-sensitive receptors generally are defined as locations where people reside or where the presence of unwanted sound may adversely affect the existing land use. Typically, noise-sensitive land uses include residences, hospitals, places of worship, libraries, performance spaces, offices, and schools, as well as nature and wildlife preserves, recreational areas, and parks.

Excluding the NSAs that are on leased land with Owner Waivers of impacts, the closest receptor to any structure is a residence along the northwest boundary of central portion and will be 320 feet from the nearest solar panel and 850 ft from the nearest inverter. The closest receptor to any inverter is a residence along the west boundary of eastern portion and will be 657 feet from the nearest inverter. A further list of the nearest sensitive receptors for the site is shown in Table 2.1-1. A Noise Receptor Map is shown in Figure A-4.

Table 2.1-1. Nearest Sensitive Receptor to the Site

Type	Direction from Project Site	Distance from Property Boundary	Distance from Nearest Solar Panel	Distance from Nearest Inverter or Transformer
Residence	Along west boundary of eastern portion	Within 77 ft	Within 450 ft	Within 657 ft
Residence	Along north boundary of central portion	Within 326 ft	Within 340 ft	Within 885 ft
Residence	Along northwest boundary of central portion	Within 252 ft	Within 320 ft	Within 850 ft
Residence	Between central and eastern portions	Within 138 ft	Within 520 ft	Within 895 ft

2.1.2 Existing Noise from Surrounding Areas

Community sound levels are generally presented in terms of A-weighted decibels (dBA). The A-weighting network measures sound in a similar fashion to how a person perceives or hears sound, thus achieving a strong correlation with how people perceive acceptable and unacceptable sound levels.

A-weighted sound levels are typically measured or presented as the equivalent sound pressure level (L_{eq}), which is defined as the average noise level on an equal-energy basis for a stated period of time and commonly is used to measure steady-state sound that is usually dominant. Another metric used in determining the impact of environmental noise is the differences in response that people have to daytime and nighttime noise levels. During the evening and at night, exterior background noises generally are lower than daytime levels. However, most household noise also decreases at night, and exterior noise becomes more noticeable. Furthermore, most people sleep at night and are sensitive to intrusive noises. The L_{dn} is a noise metric that accounts for the greater annoyance of noise during the nighttime hours (10:00 p.m. to 7:00 a.m.).

Local conditions such as traffic, topography, and winds characteristic of the region can alter background noise conditions. In general, the L_{dn} sound levels for outdoor quiet urban nighttime noise range from 40 to 50 A-weighted decibels (dBA) (EPA, 1974). The American National Standards Institute (ANSI, 2013) has published a standard with estimates of general ambient noise levels (L_{eq} and L_{dn}) based on detailed descriptions of land use categories. The ANSI document organizes the land use based on six categories. The descriptions and estimated daytime and nighttime L_{eq} ambient noise levels for each category are provided in Table 2.1-2.

Table 2.1-2. Representative Existing Conditions Based on Land Use

Land Use Category	Typical L_{dn} (dBA)	Day Level, L_d (dBA)	Night Level, L_n (dBA)
1. Very noisy urban residential	67	66	58
2. Noisy urban residential	62	61	54
3. Urban and noisy suburban residential	57	55	49
4. Quiet urban and normal suburban residential	52	50	44
5. Quiet suburban residential	47	45	39
6. Very quiet suburban and rural residential	42	40	34

Source: ANSI S12.9-2013/Part 3

The project area can be defined as a sparse suburban or rural area with very few (if any) near sources of sound; therefore, background sound levels are conservatively represented by those of *Category 6: Very quiet suburban and rural residential*. Thus, the majority of the analysis area would be expected to have background noise L_{dn} of about 40 dBA or less. This noise level would occasionally increase due to passing vehicular traffic from KY-388. There are also temporary increases in the existing noise level from farm equipment (e.g., tractors) used to grow and harvest crops and to raise cattle and other farm animals. No commercial or industrial sources were identified in the analysis area.

The Richmond, KY Noise Ordinance (Chapter 98, 2019) prohibits producing a noise disturbance that crosses a dwelling boundary due to operating construction equipment or loading and unloading boxes, building materials, and similar objects between 10:00 pm and 7:00 am. No relevant county or state noise ordinance was found.

In 1974 the U.S. EPA published “Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin on Safety”. In this publication, the U.S. EPA evaluated the effects of environmental noise with respect to health and safety and determined an L_{dn} of 55 dBA (equivalent to a continuous noise level of 48.6 dBA) to be the maximum sound level that will not adversely affect public health and welfare by interfering with speech or other activities in outdoor areas. Since no other local, county, or state thresholds were identified, an L_{dn} of 55 dBA has been used to determine if the Project would adversely affect public health and welfare.

2.1.3 Existing On-Site Noise

The existing on-site noise conditions are anticipated to be largely those due to farming and agricultural activities. These include trucks, tractors, and typical farming equipment. Other likely noises are those due to livestock and other wild animals in the area such as birds, frogs, and insects.

The general human response to changes in noise levels that are similar in frequency content (such as comparing increases in continuous $[L_{eq}]$ traffic noise levels) are summarized as follows:

- A 3-decibel (dB) change in sound level is considered to be a barely noticeable difference.
- A 5-dB change in sound level typically is noticeable.
- A 10-dB increase is considered to be a doubling in loudness.

Community sound levels are generally presented in terms of dBA. The A-weighting network measures sound in a similar fashion to how a person perceives or hears sound, thus achieving a strong correlation with how people perceive acceptable and unacceptable sound levels. Table 2.1-3 presents A-weighted

sound levels and the general subjective responses associated with common sources of noise in the physical environment.

Table 2.1-3. Typical Sound Levels Measured in the Environment and Industry

Noise Source at a Given Distance	Sound Level in A-weighted Decibels (dBA)	Qualitative Description
Carrier deck jet operation	140	
Civil defense siren (100 feet)	130	Pain threshold
Jet takeoff (200 feet)	120	Deafening
Auto horn (3 feet), Pile driver (50 feet), Rock music concert environment	110	Maximum vocal effort
Jet takeoff (100 feet), Shout (0.5 foot), Ambulance siren (100 feet), Newspaper press (5 feet), Power lawn mower (3 feet)	100	
Heavy truck (50 feet), Power mower, Motorcycle (25 feet), Propeller plane flyover (1,000 feet)	90	Annoying; Hearing damage (8-hour, continuous exposure)
Pneumatic drill (50 feet), Garbage disposal (3 feet), High urban environment	80	Very loud
Passenger car, 65 mph (25 feet), Living room stereo (15 feet), Vacuum cleaner (3 feet)	70	Loud/Intrusive (telephone use difficult)
Air conditioning unit (20 feet), Human voice (3 feet), Department store environment	60	
Light auto traffic (50 feet), Residential air conditioner (50 feet), Private business office environment	50	Moderate/Quiet
Living room/Bedroom, Bird calls (distant)	40	
Library Soft whisper (5 feet), Quiet bedroom environment	30	Very quiet
Broadcasting/Recording studio	20	Faint
	10	Just audible
	0	Threshold of human audibility

Source: Adapted from Table E, "Assessing and Mitigating Noise Impacts" (New York Department of Environmental Conservation 2001) and *Handbook of Environmental Acoustics* (Cowan 1993).

2.2 Proposed Construction Noise Conditions

2.2.1 Equipment and Machinery

Construction noise levels were estimated using the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM). The RCNM is FHWA's national model for the prediction of construction noise. This software is based on actual sound level measurements from various equipment types taken during the Central Artery/Tunnel Project conducted in Boston, Massachusetts, during the early 1990s (FHWA 2011).

Estimates of noise from the construction of the access roads and improvements to the access roads are based on a roster of the maximum amount of construction equipment used at the facility on a given day. Table 2.2-1 shows a list of typical construction equipment and the noise level at 50 feet. The RCNM has noise levels for various types of equipment pre-programmed into the software; therefore, the noise level associated with the equipment is typical for the equipment type and not based on any specific make or model.

The RCNM assumes that the maximum sound level for the project (L_{max}) is the maximum sound level for the loudest piece of equipment. The approximate noise generated by the construction equipment used at the proposed Madison Solar Project site has been conservatively calculated based on the maximum amount of construction equipment that will be used at the project site at one time, and not considering further attenuation due to atmospheric interference or intervening structures. Results of the RCNM construction noise estimates are provided in Section 2.4, with calculations shown in Appendix B.

Construction of the facility is expected to commence in September of 2021 and be completed June of 2022. The noisiest phase of construction is anticipated to be the foundations phase due to piledriver use and would last from December of 2021 to May of 2022 with planned pauses the week of December 27, 2021, and January 3, 2022. It should also be noted that there will be a 4-week period from March to April of 2022 when all six major construction phases will be in progress concurrently. Foundations would be the loudest activity during this time. While other construction activities may be occurring during this period, construction work is expected to progress across the site such that equipment and activities would only be in a single area for a short period of time. Given this, the potential for adverse impacts at any one receptor is expected to only occur for a short period of time.

Table 2.2-1. Noise Levels for Common Construction Equipment

Equipment Type	Typical Maximum Noise Levels at 50 Feet (dBA)
Air Compressor	81
Backhoe	80
Ballast Equalizer	82
Ballast Tamper	83
Chainsaw	85
Compactor	82
Crane Derrick	88
Crane Mobile	83
Dozer	85
Generator	81
Grader	85
Impact Wrench	85
Jack Hammer	88
Loader	85
Pickup Truck	55
Pile Driver (Impact)	101
Pile Driver (Sonic)	96
Pneumatic Tool	85
Pump	76
Rail Saw	90
Rock Drill	98
Roller	74
Saw	76
Scarifier	83

Equipment Type	Typical Maximum Noise Levels at 50 Feet (dBA)
Scraper	89
Shovel	82
Spike Driver	77
Tie Cutter	84
Tie Handler	80
Tie Inserter	85
Tractor	84
Truck	88
Welder/Torch	73

Source: Federal Highway Administration (FHWA). 2011. Roadway Construction Noise Model (RCNM). Software Version 1.1. Table based on EPA Report and measured data. Exact noise levels may vary depending on manufacturer and model.

2.2.2 Roadway Noise During Construction

Construction of the facility is expected to increase traffic. This is discussed with greater detail in Section 3. Construction and deliveries will be limited to hours between 7:00 am and 10:00 pm pursuant to the requirements in the Richmond Noise Ordinance (Chapter 98, 2019). In addition, the loading and unloading of equipment is not anticipated to occur between 10 pm and 7 am and would occur several hundred feet inside the property boundary.

2.2.3 Assembly of solar array and construction facilities

Construction may require small gas-powered generators to power hand tools and gas-powered welders to assemble the steel portions of the tracking system and for general assembly of the electrical equipment associated with the solar facility and substation. This will occur during normal business hours approximately 35 feet within the project boundary at the closest distance. Any noise that would be created by the assembly activities is anticipated to be temporary (short in duration) and transient in nature (moving across the site as construction progresses).

2.3 Proposed Operation Noise Conditions

2.3.1 Solar Array and Tracking System

The solar array associated with this project includes single-axis tracking panels distributed evenly across the site. Tracking systems involve the panels being driven by small, 24-volt brushless DC motors to track the arc of the sun to maximize each panel's potential for solar absorption. Panels would turn no more than five (5) degrees every 15 minutes and would operate no more than one (1) minute out of every 15-minute period. These tracking motors are a potential source of mechanical noise and are included in this assessment. The sound power typically produced by panel tracking motors (NexTracker or equivalent) is approximately 78 dBA. For reference, that equates to a sound pressure level of 47 dBA at 10 meters distance.

2.3.2 Inverters

This facility is will consist of approximately 36 inverters, which are expected to be the loudest noise-generating operational equipment. The facility is divided into A, B, and C blocks, with A blocks planned to hold two (2) inverters each and B and C planned to hold one (1) each. This is subject to change. The site layout currently has plans for sixteen (16) A block, three (3) B blocks, and one (1) C block. Inverters are assumed to be either Ingecon Sun 1600TL or Sun Grow SG3150U-MV models. Table 2.3-1 below is a summary of the inverters to be onsite and their respective noise levels. It is assumed that all inverters will operate with approximately the same noise levels. Figure A-3 displays the locations of each inverter.

Table 2.3-1: Noise Levels Due to Inverter Operation

Inverter Type	Typical Maximum Noise Levels at 10 Meters (dBA)
Ingecon Sun 1600TL	<66
Sun Grow SG3150U-MV	<66

Source: Ingeteam Power Technology, S.A. 2020.

According to the manufacturer’s specifications, the noise emission produced by the inverter is rated at 66.0 dBA at a distance of 10 meters. This noise produced by the inverter can be described as a hum and has roughly the same noise output of a household air conditioning unit.

2.3.3 Transformers

The transformer to be used is a 240 MVA ONAF2 with 650 kV BIL. It is located within the planned substation, which is anticipated to cover approximately 1.4 acres on the northwest side of the facility. The transformer is anticipated to be the loudest noise-generating operational equipment with noise emissions rated at 85 dBA sound power (National Electrical Manufacturers Association, 2019). The nearest sensitive receptor to the transformer is a residential community approximately 1,000 feet west.

2.3.4 Site Operation and Maintenance

2.3.4.1 VEHICULAR TRAFFIC

The operation of the Madison County Solar Facility is expected to have a maximum of eight (8) people on staff, normally working Monday through Friday, 7:00AM – 3:30PM, but will change shifts as needed to perform some planned maintenance at night. There will also be an On-Call schedule to respond to any corrective maintenance that is impacting production.

Maintenance activities may also be conducted at night up to 30 days a year. While dispatches are not anticipated on weekends, they remain a possibility in the event of a component outage that would require timely repair in order to limit production impact from the site. Maintenance employees will be in mid- or full-sized trucks and will contribute less to traffic noise than a typical single-family home. With the exception of the scenarios mentioned above, vehicular traffic on the project site will be limited to typical weekday work hours.

2.3.4.2 MAINTENANCE ACTIVITIES

Photovoltaic facilities contain very few moving parts and have limited ongoing maintenance requirements. Maintenance activities would consist of checking electrical performance parameters via remote monitoring, performing periodic inspections and maintenance of transformers and inverters, responding to any problems detected by remote monitoring, conducting weed abatement, mowing grass cover, performing dust control activities, cleaning PV panels, and maintaining all-weather access roads. Water would be used for cleaning PV panels and controlling dust as well as to establish landscaping (both for the trees and shrubs, forming a visual buffer along the boundaries of the site, and the native grass cover) during the first 3 years, but no water would be used by the facility for the production of electricity. No major equipment is anticipated to be required for maintenance of the facility except as necessary for maintenance of all-weather access roads.

2.4 Noise Summary and Conclusions

The construction of the facility will likely cause an increase in noise during daylight hours due to the use of heavy equipment, power tools, and vehicular traffic entering and leaving the site.

The RCNM was used to estimate the maximum sound level for the loudest pieces of equipment during the pole setting activities. The approximate noise generated by the construction equipment used at the site has been conservatively calculated based on the maximum amount of construction equipment that will be used at the project site at one time, and not considering further attenuation due to atmospheric interference or intervening structures. The equipment used for the calculations included cranes, vibratory pile drivers, pickup trucks, front end loaders, and trenchers. Results of the RCNM construction noise calculations are given for the facility in Table 2.4-1.

Table 2.4-1. Calculated Noise Levels Due to Construction

	Calculated L_{max} (dBA)	Calculated L_{eq} Total (dBA)
Noise Level at Nearest Receptor	89.7	83.6
Noise Level at Nearest Property Boundary	94.0	87.3

All construction will occur between 7:00 am and 10:00 pm, pursuant to the Richmond, KY Noise Ordinance (Chapter 98, 2019). No other ordinance, local, county, or otherwise, that limits the noise levels for the Project were identified. Construction activities at the Project site would move around the site and are not anticipated to be performed proximate to a sensitive receptor more than a few days or weeks. The calculated L_{max} is a conservative estimate based on the instantaneous worst-case noise level. Construction will be short term and any noises due to construction will be transient.

The pole installation is anticipated to be the loudest activity and will be based on three pole setting crews working simultaneously within a single block. It is assumed that the construction equipment for one crew will be operating at the block boundary closest to the considered receptor. The other two crews are assumed to be operating at the location of the proposed inverter for that block. The nearest sensitive receptor is located 157 feet from the nearest block boundary. The closest block boundary is located 115 feet from the nearest plant boundary.

For the construction phase of the proposed project, predictive noise modeling has considered the range of potential impacts likely noting that noise generating activities will progressively move across the site over

the duration of construction. As such, the highest noise levels would not be expected to be experienced at a single receptor for more than one day while construction equipment (e.g., piling drill rig) is at the closest point to the receptor. At the closest receptor, the calculated noise level during construction is 83.6 dBA (L_{eq}). The noise level at the nearest property boundary is estimated to be 87.3 dBA (L_{eq}). An isopleth of the construction noise anticipated for the Project is provided as Figure A-5.

For noise generated by the operation of the Project, standard acoustical engineering methods were used and were based on vendor-supplied equipment noise levels, and results are shown in Table 2.4-2. These noise levels were based on inverters, trackers, and transformers. Predicted levels at the closest sensitive receptor were calculated based on geometric spreading attenuation using International Organization for Standardization (ISO) 9613-2, Acoustics – Sound Attenuation during Propagation Outdoors (ISO, 1996). Additional attenuation factors, such as noise-reducing intervening terrain, structures, and barriers cannot be considered with this methodology. Thus, this methodology is conservative. In addition, because solar panels produce power only when the sun is shining, the trackers will be silent at night. It was assumed that reactive power will be produced at night; therefore, inverters, and transformers were assumed to emit noise at the same levels as during daytime hours. Central inverters are usually surrounded on all sides by the solar panel arrays whose electricity they manage, which further distances them from anyone who might happen to be nearby and would potentially act as a noise buffer.

Table 2.4-2. Calculated Noise Levels at Property Boundary Due to Operation

	Calculated L_{eq} Total (dBA)	Community Noise Level (dBA)		
		L_{day}	L_{night}	L_{dn}
Estimated Ambient Noise Level *	--	40.0	34.0	42.0
Noise Level at Property Boundary – As proposed **	49.3	49.5	49.0	55.5
Noise Level at Nearest NSA – As proposed **	47.3	47.6	46.9	53.4
Nearest NSA – Worst case condition ***	47.2	47.4	46.7	53.2

* ANSI S12.9-2013/Part 3

** Noise levels were estimated assuming the equipment locations as proposed in the Project layout. Presented values correspond to the maximum cumulative noise levels for all the evaluated NSAs. The nearest residential sensitive receptor is located approximately 77 feet from the property boundary and approximately 657 feet from the nearest inverter.

*** Noise levels were estimated assuming the inverters were located at a minimum distance of 985 feet (300 meters) from the block boundary closest to the considered receptor. Presented values correspond to the maximum cumulative noise levels for all the evaluated NSAs. The maximum noise level corresponds to a residential receptor located approximately 71 feet east of the property boundary and 985 feet from the nearest inverter.

The “as proposed” scenario L_{dn} at the nearest sensitive receptor, a residence on the west boundary of eastern portion of the Project 657 feet from the nearest inverter, is estimated to be 53.4 dBA L_{dn} , which is below the EPA’s recommended 24-hour average day and night value of 55 dBA L_{dn} (EPA 1974). The noise level at the property boundary under the “as proposed” scenario is estimated to be 49.3 dBA L_{eq} . An isopleth of the “as-proposed” scenario noise anticipated for the Project is provided as Figure A-6.

It is important to note that two additional sensitive receptors that presented higher L_{dn} levels were not included in the evaluation as they are on leased land with signed Owner Waivers of impacts. However, these NSA were estimated to be less than 53.9 dBA L_{dn} , which is below the EPA’s recommended 24-hour average day and night value of 55 dBA L_{dn} . These additional receptors are labeled in Appendix B as NSA 13 and NSA 15.

The maximum worst-case scenario value estimated under the assumption all pieces of equipment are operating simultaneously and that all the inverters are located at a minimum distance of 985 feet (300 meters) from any sensitive receptor, is below the EPA’s recommended value, approximately 53.9 dBA L_{dn} . Therefore, the Project does comply with the EPA’s recommendation. An isopleth of the maximum worst-case scenario noise anticipated for the Project is provided as Figure A-7.

The average sound level (L_{Aeq}) would be 9.2 dBA higher than the current estimated ambient noise levels for the area, which would be perceived by humans as approximately a doubling of sound level (Bies and Hansen 1988).

The loudest noise-generating operational equipment will consist of inverters, trackers, and transformers. No operational components of the project include significant ground borne noise or vibration sources, and no significant vibrations sources currently exist, or are planned, in the area. Thus, no significant ground borne vibration impacts would occur with operation of the project. In addition, blasting would not be required as part of the project.

3 TRAFFIC STUDY

3.1 Existing Road Network and Traffic Conditions

The anticipated routes for construction equipment, materials deliveries, and construction and operation crews to access the project site consist of the existing roads that are adjacent to the sites and the existing roads that would be used to access Richmond, Lexington, and Winchester (see Figure A-1). The major roads to be used to access the facility are anticipated to be KY-388, I-75, and KY-627. KY-388 would be the main route to access the facility from Richmond, which is south of the facility, and runs north and south on the east side of the facility, and partially through the facility. I-75 is a divided highway that will provide access from Lexington, which is northwest of the facility. I-75 runs generally north and south along the west side of the site. KY-627 will be the main route from Winchester in the northeast, eventually connecting with KY-388 to reach the facility and runs northeast and southwest. Table 3.1-1 below provides further details on each road that would be used to access the site.

Table 3.1-1: Access Road Information

Access Road	Number of Through-lanes	Closest Milepoint to Property Line	Distance (ft) and Direction to Property Line from Closest Milepoint	Average Daily Traffic*	Lane Width (ft)	Shoulder Width (ft)
KY-388	2	Milepoint 5.4	40 feet West	5,318 (2019 estimate)	10	3
I-75	6	Milepoint 93.8	1.65 miles West	56,860 (2018 estimate) - 72,050 (2019 estimate)	12	12
KY-627	2	Milepoint 1.8	2.0 miles Northwest	7,650 (2017 estimate)	12	12

*Kentucky Transportation Cabinet 2020

3.2 Construction Traffic

Any entrances to the facility would likely be on KY-388. There are multiple dirt roads leading to the site in either direction that may lead to a site entrance, depending on construction of the facility. These potential access points are identified on the General Layout provided in Appendix E of the Site Assessment Report. Traffic is expected to increase during construction, with a morning and afternoon peak due to workers entering and leaving the site as well as deliveries occurring throughout the day.

The construction of the proposed solar facility is expected to take approximately ten months for completion. During construction, a temporary increase in traffic volume associated with travel of construction laborers, delivery of construction equipment and material, delivery of solar panel components and equipment is anticipated. Laborer commutes with passenger vehicles and trucks will occur daily with two traffic peaks (i.e., morning peak and afternoon peak), whereas deliveries of equipment will occur on trailers, flatbeds, or other large vehicles periodically throughout the construction process at various times of day. A summary of the anticipated construction vehicle trips per day are included in Table 3.2-1.

Table 3.2-1. Summary of Anticipated Construction Vehicle Trips

Construction Vehicle Type	Vehicle Trips Per Day (avg.)	Vehicle Trips Per Day (Max.)
Employee Passenger Vehicles	40	90
Heavy-Duty Delivery Trucks	8	16
Light-Duty Delivery Trucks	2	5
Water Trucks	1	5

3.2.1 Traffic Safety Precautions

Permanent road or lane closures are not anticipated for the construction of the solar facility. Construction of the facility is not expected to impact roads, but safety precautions including signage, signaling, flagmen, and temporary lane closures may be utilized as needed. For example, during a delivery, flagmen may be used to temporarily stop traffic to allow the delivery driver to turn into the facility safely, with signage used to warn oncoming traffic of the lane closure.

3.2.2 Impact on Road Infrastructure

Construction of the facility is not expected to have any significant impact on road infrastructure other than increased wear due to increased traffic at the possible entrances on KY-388. Any impact to the road due to construction of the facility will be repaired.

Access drives and internal roads will be constructed or improved as needed to accommodate appropriate vehicles and equipment to construct the proposed solar facility. Internal roads will be compacted gravel, which may result in an increase in airborne dust particles. During construction, water may be applied to internal road system to reduce dust generation.

3.3 Operational and Maintenance Traffic

The facility will be manned during normal business operation with eight (8) people on staff, normally working Monday through Friday, 7:00AM – 3:30PM, but will change shifts as needed to perform some planned maintenance at night. There will also be an On-Call schedule to respond to any corrective maintenance that is impacting production. It is anticipated that workers making site visits will be in mid- to full-size trucks, accounting for less vehicle traffic than an average single-family home. During operation, workers are not anticipated to create a significant impact on local traffic and will generally be entering and leaving on normal weekdays during daylight hours.

3.4 Traffic Summary and Conclusions

During construction of this facility, traffic is anticipated to increase, with morning and evening peaks for daily workers and deliveries being made to the site periodically. All necessary safety precautions, including use signage and flagmen, will be taken to best ensure collisions are prevented on the surrounding roads. It is not anticipated that there will be any damages to the existing road infrastructure. Operation of the facility is not expected to cause a significant impact to local traffic as the expected traffic to be contributed to the area will be similar to that of a typical single-family home.

4 FUGITIVE DUST IMPACTS

The proposed facility will only have minimal fugitive dust during construction. The facility will be constructed within the existing contours and topography of the land. For those limited areas that are cleared and grubbed, water trucks are anticipated be employed to keep dust to a minimum, authorized by Section 1.2 of the Kentucky Pollutant Discharge Elimination System (KPDES) as a non-stormwater discharge (KPDES, 2018).

The earth moving required for the site is anticipated to last from October of 2021 to April of 2022. The total acres to be disturbed is assumed to be approximately 275, which is estimated as 25% of the total facility acres. It is estimated that over the course of construction there will be 3.54 tons of PM₁₀ (particulate matter 10 microns or less in diameter) released and 0.35 tons of PM_{2.5} (particulate matter 2.5 microns or less in diameter) released due to fugitive dust. Calculations for fugitive dust emissions were based on the emission factors provided in the WRAP Fugitive Dust Handbook (Countess Environmental, 2004). Calculations can be found in Appendix C.

To reduce wind erosion of recently disturbed areas, appropriate revegetation measures, application of water, or covering of spoil piles may occur. In addition, any open-bodied truck transporting dirt will be covered when the vehicle is in motion. The size of the project site, distance to nearby structures and roadways, combined with vegetated buffers along the property boundaries and fencerows will aid in managing off-site dust impacts. Internal roads will be compacted gravel, which may result in an increase in airborne dust particles during dry conditioned and internal road traffic is heavy. During construction activities water may be applied to internal road system to reduce dust generation.

Once operational, the only source of dust emissions would be due to occasional maintenance vehicle traffic on the access roads. Typical existing sources of dust in the project area include agricultural activities (e.g., from plowing, planting, and harvesting fields) and from travel along gravel and dirt roads.

5 IMPACTS TO RAIL

An existing railway is located on the eastern side of the Project that runs through Ford, Kentucky. However, the Project will not use railways for any construction or operational activities. Therefore, the proposed solar facility will have no impacts on rail facilities as a result of Project construction or operation.

6 REFERENCES

- American National Standards Institute, Inc (ANSI). 2013. Quantities and Procedures for Description and Measurements with an Observer Present – Part 3: Short-term Measurements with an Observer Present, ANSI/ASA S12.9-2013/Part 3.² ANSI S12.9-2013/Part 3, 2013.
- Bies, D.A. and C.H. Hansen. 1988. Engineering Noise Control. London: Unwin Hyman Ltd.
- Countess Engineering. 2006. WRAP Fugitive Dust Handbook. Available at: <https://www.wrapair.org//forums/dejf/fdh/content/final-handbook.pdf>. Accessed September 16, 2020.
- Cowan, J.P. 1993. Handbook of Environmental Acoustics. John Wiley & Sons, Inc. December
- Federal Highway Administration (FHWA). 2011. Roadway Construction Noise Model (RCNM). Software Version 1.1.
- Ingeteam Power Technology, S.A. 2020. Ingecon Sun 3600TL C-Series.
- International Organization for Standardization (ISO). 1996. ISO 9613-2: Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation. December 2006.
- Kentucky Pollutant Discharge Elimination System (KPDES). General Permit for Stormwater Discharges Associated With Industrial Activity From “Other Facilities”. 2018. Available at <https://eec.ky.gov/Environmental-Protection/Water/PermitCert/KPDES/Documents/FactSheetKYR00.pdf>. Accessed September 16, 2020.
- Kentucky Transportation Cabinet (KYTC). 2020. Traffic Counts. Available at: <https://maps.kytc.ky.gov/trafficcounts/>. Access September 16, 2020.
- National Electrical Manufacturers Association. 2019.
- New York Department of Environmental Conservation. 2001. Assessing and Mitigating Noise Impacts. February 2001. Available at: https://www.dec.ny.gov/docs/permits_ej_operations_pdf/noise2000.pdf. Accessed May 6, 2020.
- Richmond, KY Code of Ordinances. 2019. Chapter 98: Noise. Available at: [http://library.amlegal.com/nxt/gateway.dll/Kentucky/richmond_ky/titleixgeneralregulations/chapter98noise?f=templates\\$fn=altmain-nf.htm\\$q=%5bfield%20folio-destination-name:%27Chapter%2098%27%5d\\$x=Advanced#JD_Chapter98](http://library.amlegal.com/nxt/gateway.dll/Kentucky/richmond_ky/titleixgeneralregulations/chapter98noise?f=templates$fn=altmain-nf.htm$q=%5bfield%20folio-destination-name:%27Chapter%2098%27%5d$x=Advanced#JD_Chapter98). Accessed September 16, 2020.
- U.S. Environmental Protection Agency (EPA). 1974. Information on levels of environmental noise requisite to protect public health and welfare with an adequate margin of safety. Available at: <http://www.nonoise.org/library/levels/levels.htm#levelsof>. Accessed August 4, 2017.¹ Environmental Protection Agency [EPA], 1974.

This page intentionally left blank

APPENDIX A

Figures

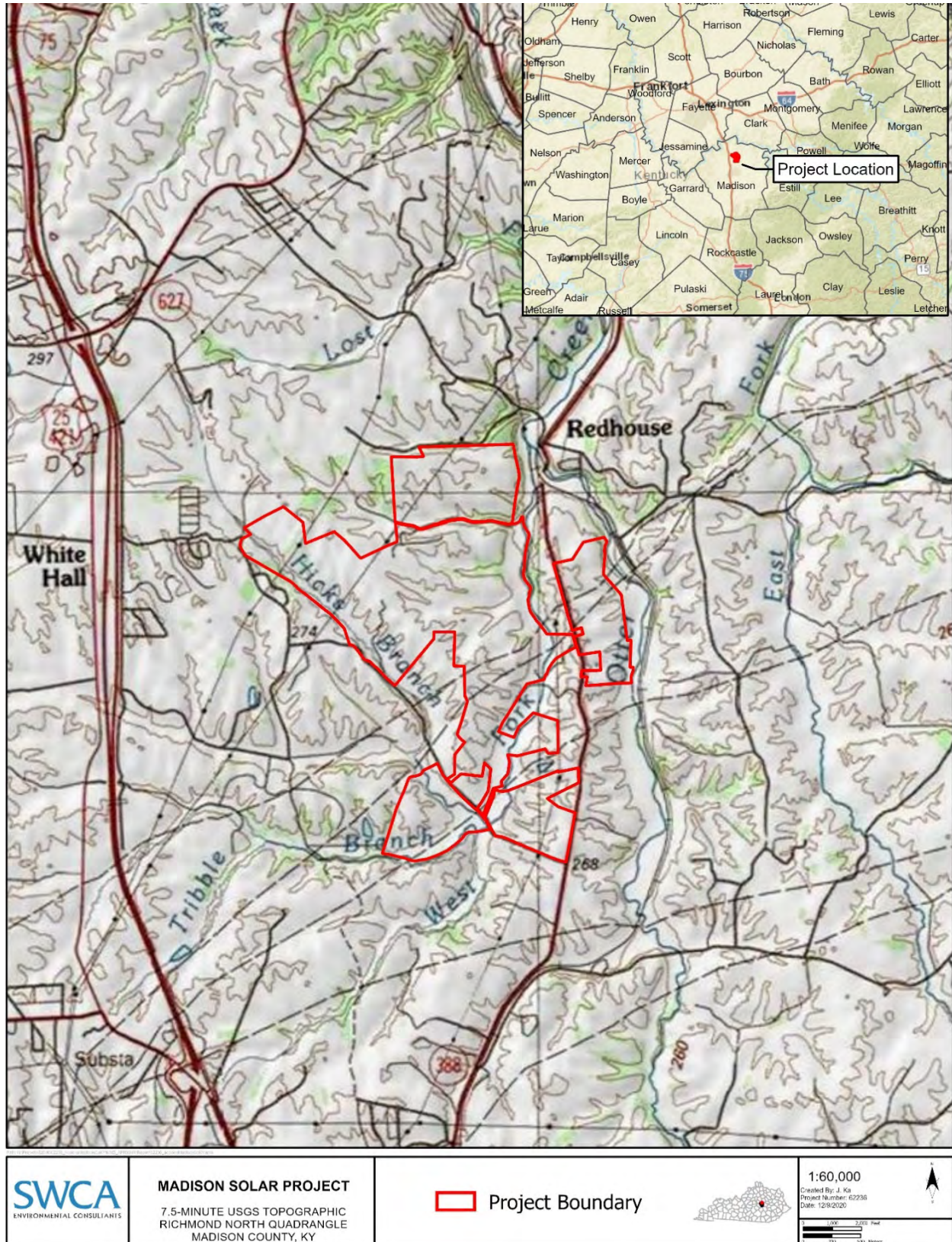


Figure A-1: Project Location Map

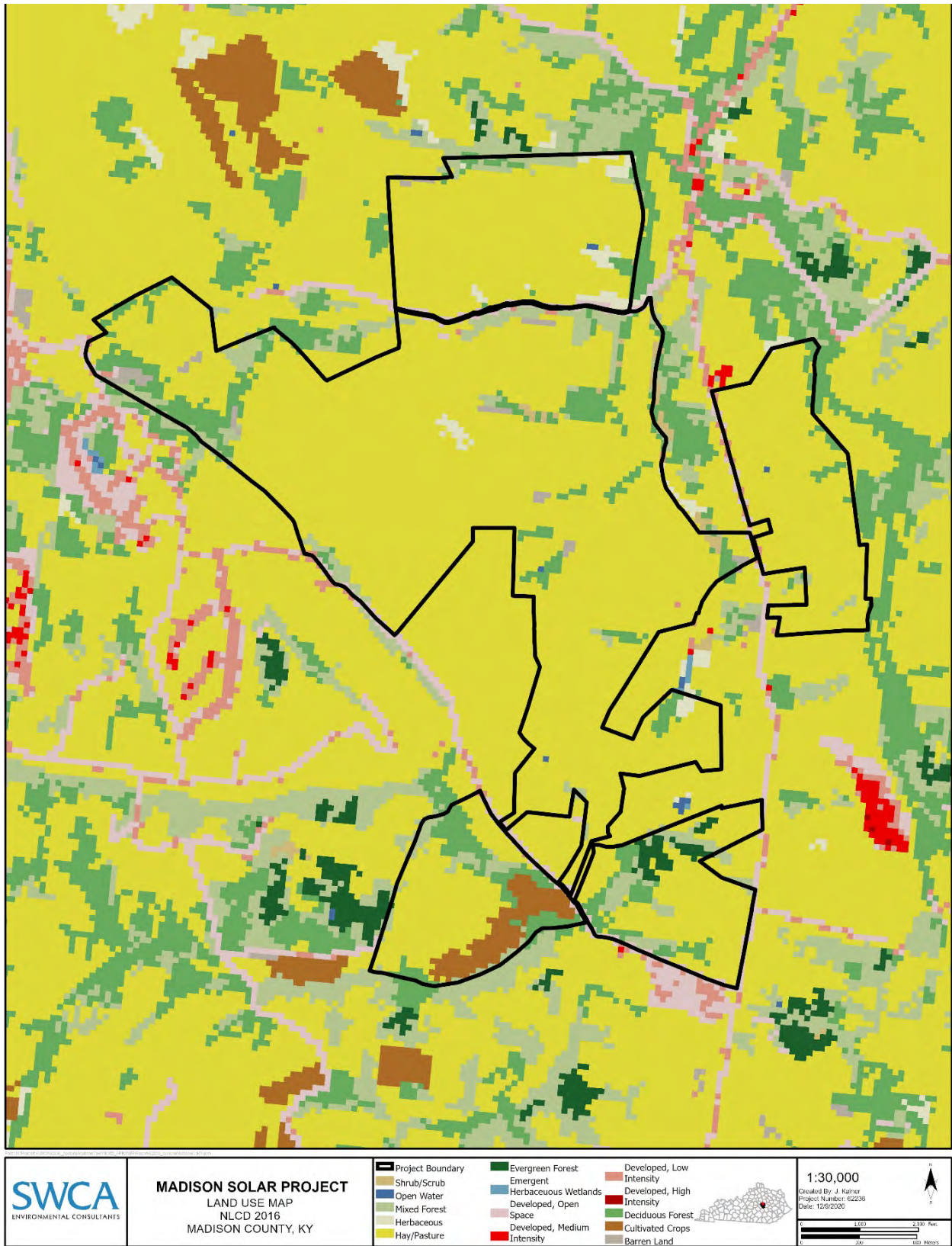


Figure A-2: Land Use Map

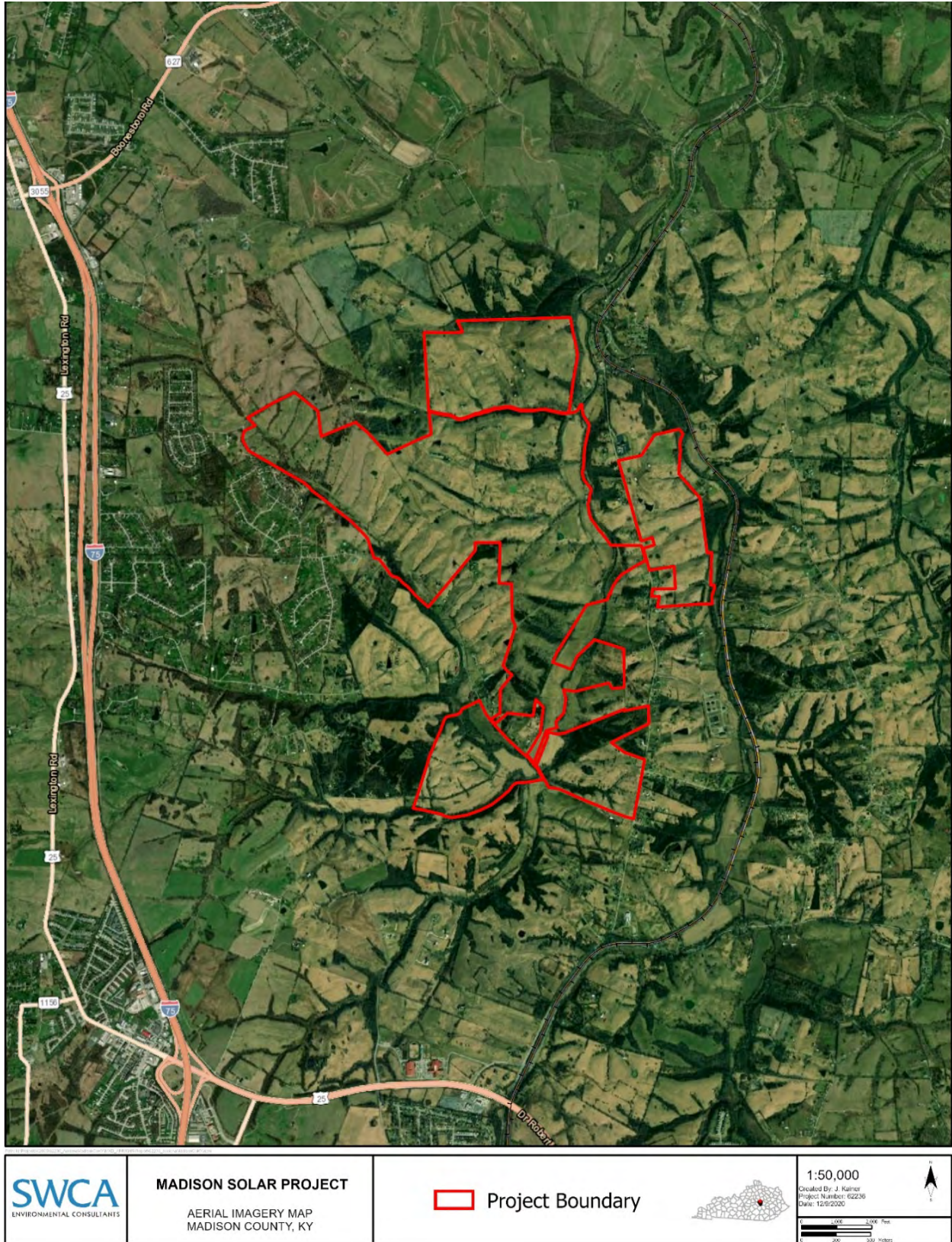


Figure A-3: Aerial Imagery Map

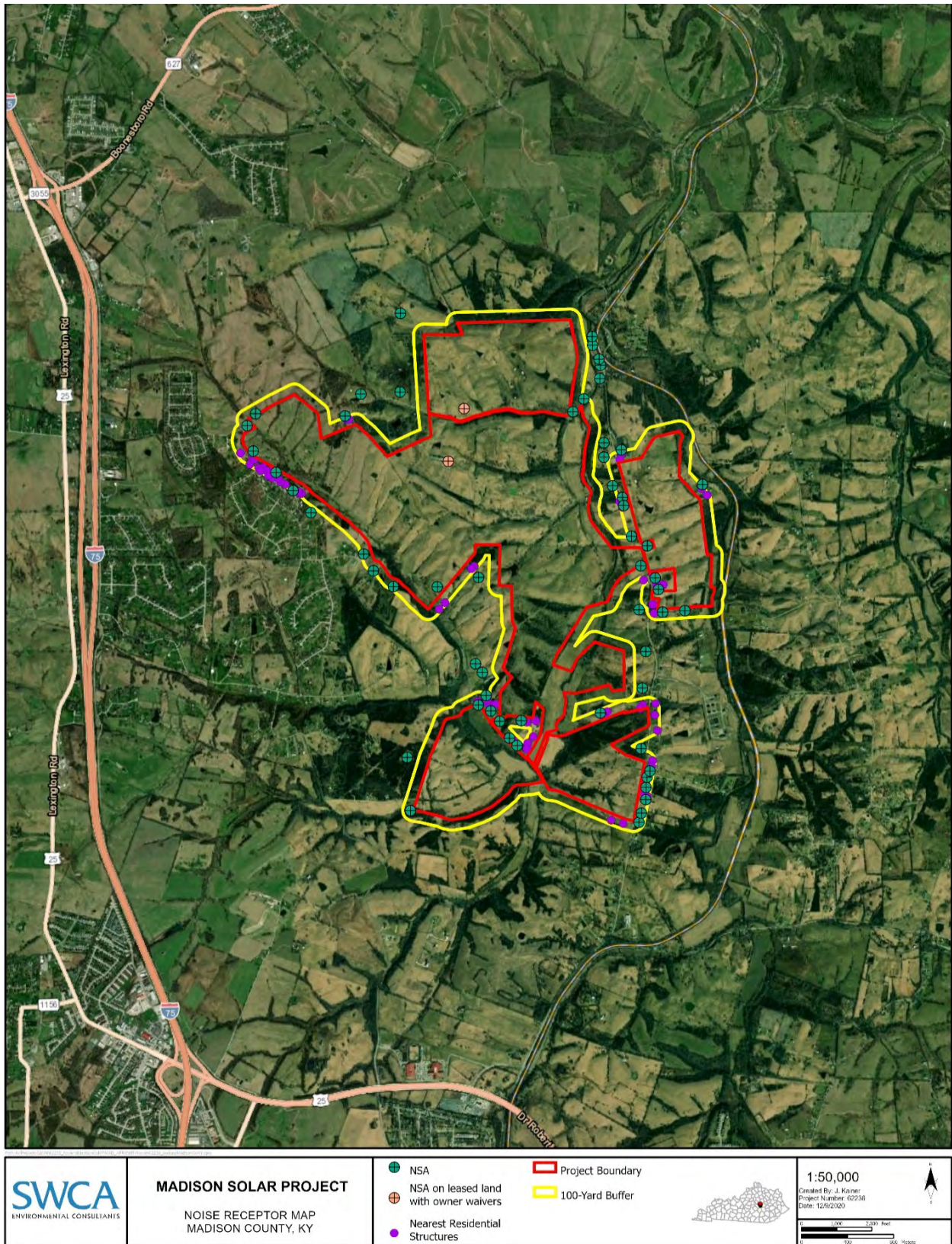


Figure A-4: Noise Receptor Map

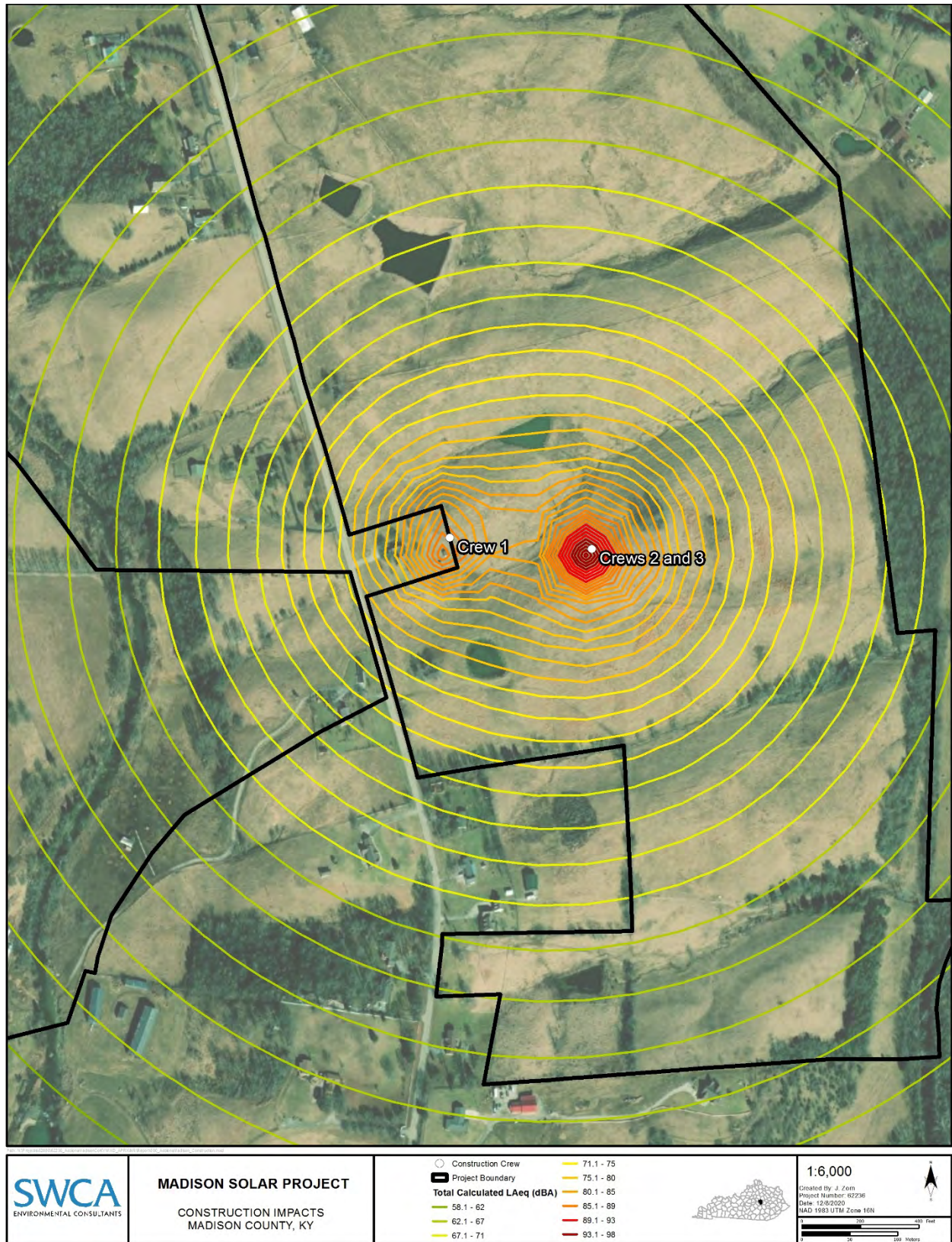


Figure A-5: Construction Noise Isopleth

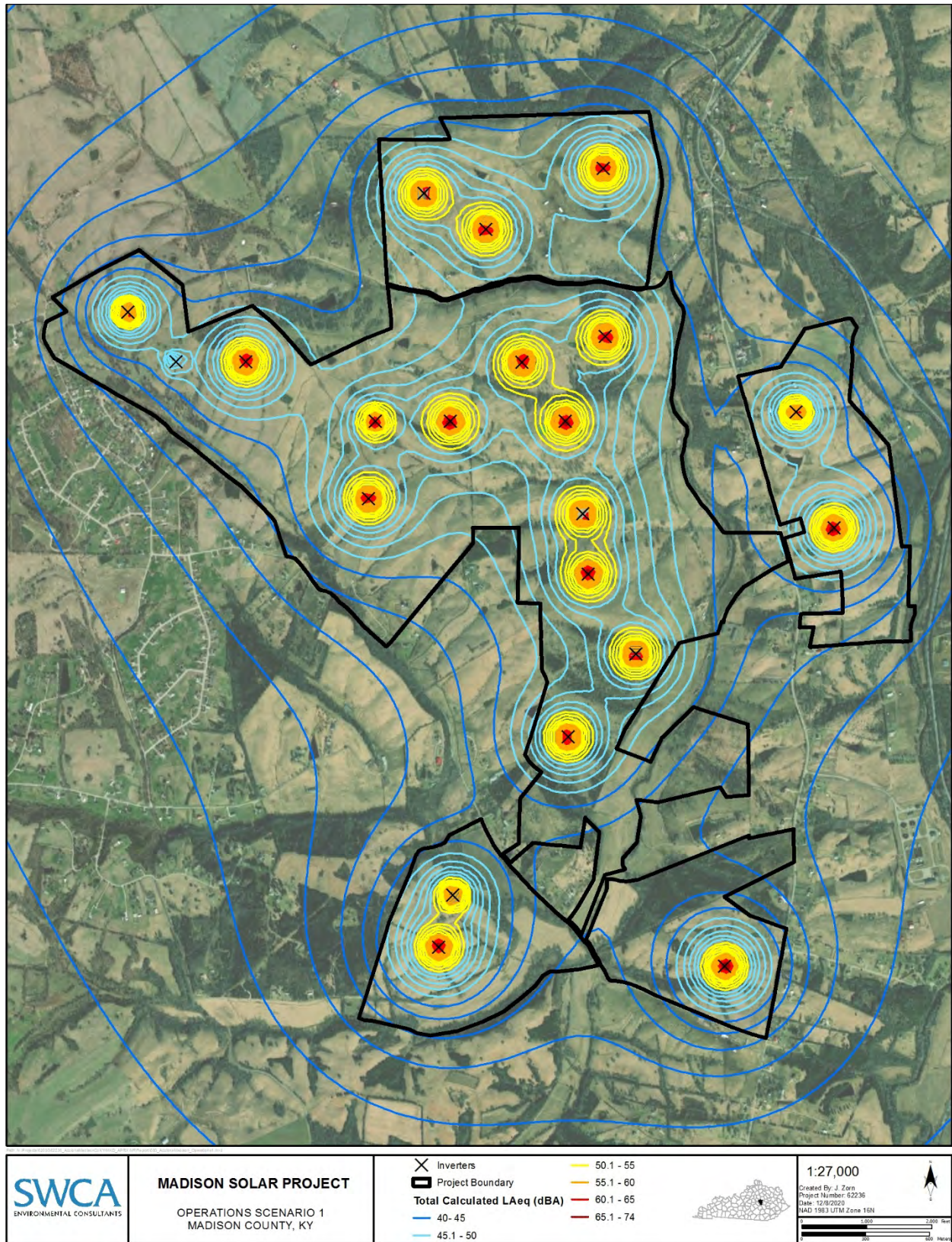


Figure A-6: Operational Noise (Scenario 1) Isopleth

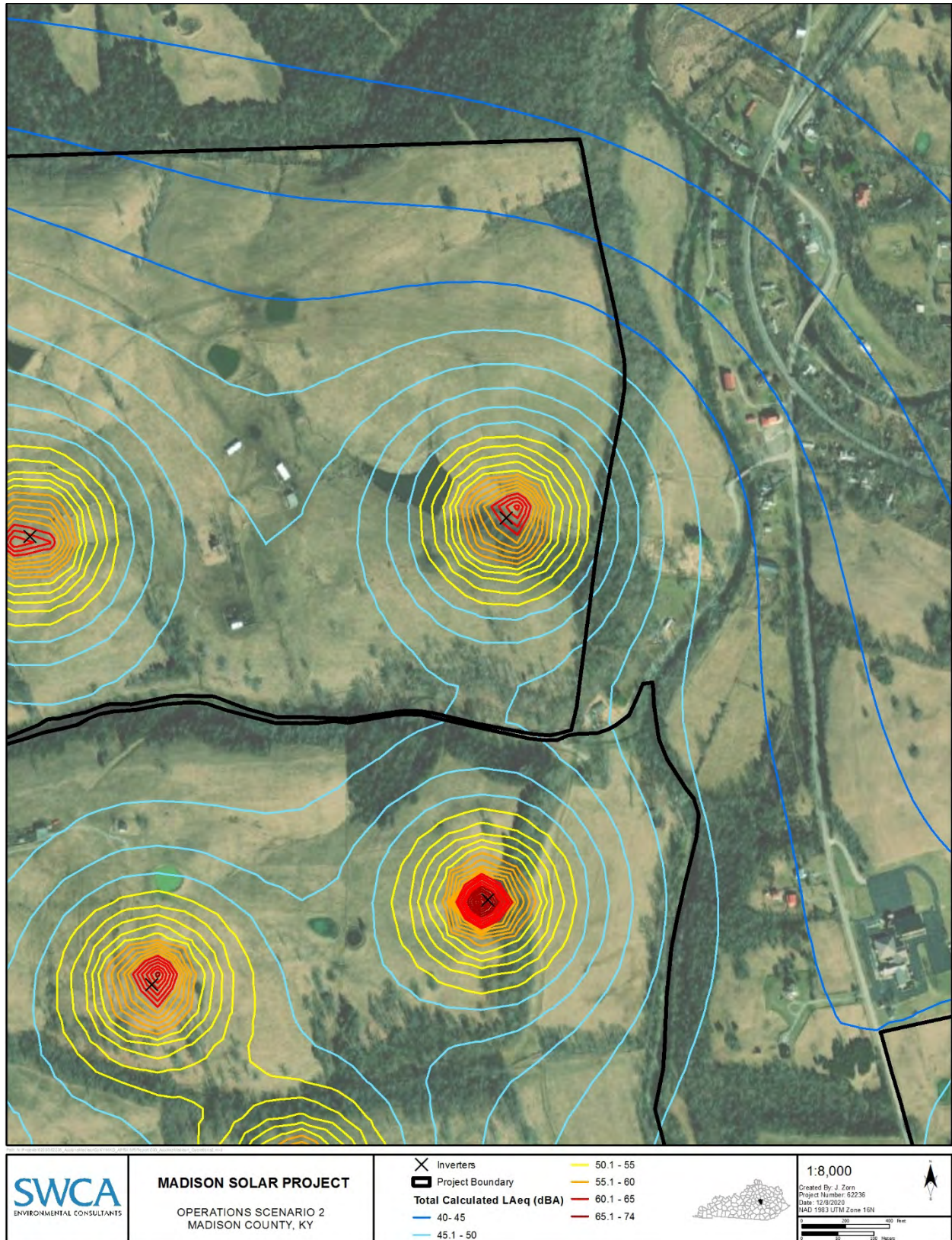


Figure A-7: Operational Noise (Scenario 2) Isopleth

This page intentionally left blank.

APPENDIX B

Noise Impact Calculations

Madison County Solar Project
Construction
Noise Impact Assessment

Receiver	Construction Leq	Construction Lmax ¹	Combined Ambient & Calculated Noise Level, LAeq	Daytime Noise Level, Lday	Nighttime Noise Level, Lnight ²	Combined Ambient & Calculated Noise Level, Ldn	Potential Noise Increase, Ldn
	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)
NSA 1	72.3	75.9	69.3	71.6	34.0	69.3	27.3
NSA 2	71.1	75.3	68.1	70.5	34.0	68.1	26.1
NSA 3	68.7	70.7	65.7	68.0	34.0	65.7	23.7
NSA 4	74.7	79.7	71.7	74.1	34.0	71.7	29.7
NSA 5	70.4	74.5	67.4	69.7	34.0	67.4	25.4
NSA 6	70.6	75.3	67.6	69.9	34.0	67.6	25.6
NSA 7	71.2	75.9	68.2	70.5	34.0	68.2	26.2
NSA 8	71.6	76.4	68.6	71.0	34.0	68.6	26.6
NSA 9	72.9	77.7	69.9	72.2	34.0	69.9	27.9
NSA 10	71.8	76.0	68.8	71.1	34.0	68.8	26.8
NSA 11	68.8	73.0	65.8	68.1	34.0	65.8	23.8
NSA 12	70.6	74.9	67.6	70.0	34.0	67.6	25.6
NSA 13	78.9	84.6	75.8	78.2	34.0	75.8	33.8
NSA 15	79.5	85.3	76.5	78.8	34.0	76.5	34.5
NSA 16	70.0	74.1	67.0	69.3	34.0	67.0	25.0
NSA 17	70.3	73.5	67.3	69.7	34.0	67.3	25.3
NSA 18	71.2	74.6	68.3	70.7	34.0	68.3	26.3
NSA 19	70.4	73.9	67.4	69.7	34.0	67.4	25.4
NSA 20	71.5	76.7	68.5	70.8	34.0	68.5	26.5
NSA 21	72.7	76.4	69.7	72.1	34.0	69.7	27.7
NSA 22	72.0	75.2	69.0	71.4	34.0	69.0	27.0
NSA 23	71.3	75.2	68.3	70.7	34.0	68.3	26.3
NSA 24	71.0	73.7	68.0	70.4	34.0	68.0	26.0
NSA 25	69.9	72.8	66.9	69.2	34.0	66.9	24.9
NSA 26	71.5	76.7	68.5	70.9	34.0	68.5	26.5
NSA 27	71.7	76.1	68.7	71.0	34.0	68.7	26.7
NSA 28	67.9	71.7	64.9	67.3	34.0	64.9	23.0
NSA 29	73.5	77.1	70.5	72.8	34.0	70.5	28.5
NSA 30	74.0	76.2	71.0	73.4	34.0	71.0	29.0
NSA 31	75.6	80.5	72.6	75.0	34.0	72.6	30.6
NSA 32	76.3	80.9	73.3	75.6	34.0	73.3	31.3
NSA 33	83.6	89.7	80.5	82.9	34.0	80.5	38.5
NSA 34	74.4	78.6	71.4	73.7	34.0	71.4	29.4
NSA 35	71.9	77.5	68.9	71.2	34.0	68.9	26.9
NSA 36	70.2	75.1	67.1	69.5	34.0	67.1	25.2
NSA 37	73.1	77.9	70.1	72.4	34.0	70.1	28.1
NSA 38	73.6	77.0	70.5	72.9	34.0	70.5	28.6
NSA 39	75.7	80.7	72.7	75.0	34.0	72.7	30.7
NSA 40	71.4	73.4	68.3	70.7	34.0	68.3	26.4
NSA 41	72.2	76.3	69.2	71.6	34.0	69.2	27.2
NSA 42	70.5	75.3	67.5	69.8	34.0	67.5	25.5
NSA 43	68.1	70.1	65.1	67.4	34.0	65.1	23.1
NSA 44	73.6	77.8	70.6	72.9	34.0	70.6	28.6
NSA 45	73.2	77.4	70.2	72.5	34.0	70.2	28.2
NSA 46	71.4	77.0	68.4	70.7	34.0	68.4	26.4
NSA 47	72.9	78.6	69.9	72.3	34.0	69.9	27.9
NSA 48	71.3	76.4	68.3	70.6	34.0	68.3	26.3
NSA 49	71.8	77.2	68.8	71.1	34.0	68.8	26.8
NSA 50	71.3	76.3	68.3	70.6	34.0	68.3	26.3
NSA 51	75.6	81.5	72.6	74.9	34.0	72.6	30.6
NSA 52	77.1	83.1	74.1	76.4	34.0	74.1	32.1
NSA 53	76.5	82.1	73.5	75.8	34.0	73.5	31.5
NSA 54	77.7	83.4	74.7	77.0	34.0	74.7	32.7
NSA 55	78.0	83.8	75.0	77.3	34.0	75.0	33.0
NSA 56	76.2	81.8	73.2	75.6	34.0	73.2	31.2
NSA 57	74.2	79.4	71.2	73.5	34.0	71.2	29.2
NSA 58	73.5	79.5	70.5	72.8	34.0	70.5	28.5
NSA 59	65.7	70.0	62.7	65.1	34.0	62.7	20.7
NSA 60	64.7	66.7	61.7	64.0	34.0	61.7	19.7
NSA 61	73.0	78.2	70.0	72.3	34.0	70.0	28.0

¹ Calculated to be the lowest individual value.
² Assumes daytime construction only.

NSA 33
Madison County Solar Project
Construction
Noise Impact Assessment

Project Fund No: 1034700

Receivers:

Receiver	Land Use	OTN Coordinates		Receiver Location (to nearest 0.1) (Use Coordinates)			
		Latitude	Longitude	Long	Alt	Dist	Dir
NSA 33	Power Plant	36° 45' 00" N	87° 15' 00" W	36.75	87.25	423	SW

¹ Source: AASHTO (1985) Part 3 - Highway Noise (Planning, Construction, Roadside Prediction, and Control) Systems Handbook for Roadway Noise.

Construction Activities:

Activity	OTN Coordinates	
	Latitude	Longitude
Crane	36° 45' 00" N	87° 15' 00" W
Site Work	36° 45' 00" N	87° 15' 00" W
Power Plant	36° 45' 00" N	87° 15' 00" W
Front End Loader	36° 45' 00" N	87° 15' 00" W
Tractor	36° 45' 00" N	87° 15' 00" W
Generator	36° 45' 00" N	87° 15' 00" W
Motor Vehicle	36° 45' 00" N	87° 15' 00" W
Power Plant	36° 45' 00" N	87° 15' 00" W
Front End Loader	36° 45' 00" N	87° 15' 00" W
Generator	36° 45' 00" N	87° 15' 00" W

¹ Data 1: Coordinates of receiver and activity. ² Latitude of the construction activity and the combined receiver. ³ (Data 1) and 1 - Latitude of the donor grouped receiver location.

Targets:

Receiver	Intensity	Equivalent Noise (dBA)		Other (to be listed as Distance ² / Area)	Sound Pressure Level (reference distance) (dBA)
		1/1hr	24hr		
Crane	3	18	5.0	0.2	83
Site Work	3	20	5.0	0.2	81
Power Plant	3	40	5.0	0.2	79
Front End Loader	3	40	5.0	0.2	79
Tractor	3	50	5.0	0.2	69
Generator	3	50	5.0	0.2	69
Motor Vehicle	3	30	5.0	0.2	83
Power Plant	3	40	5.0	0.2	79
Front End Loader	3	40	5.0	0.2	79
Generator	3	50	5.0	0.2	69

¹ dBA: Construction noise level. Data 1: 1/1hr Equivalent Noise Prediction Level and Average Factor.

Results:

Receiver	Leq - 10/1hr/24hr	
	Leq (dBA)	L _{max} (dBA)
Crane	81.5	87.7
Site Work	83.7	89.7
Power Plant	79.7	82.7
Front End Loader	82.7	87.7
Tractor	80.7	86.7
Generator	82.7	87.7
Motor Vehicle	84.7	89.7
Power Plant	81.7	86.7
Front End Loader	82.7	87.7
Generator	82.7	87.7
Total	81.5	87.7

¹ See also the Appendix A for detailed noise assessment.

Receiver	Construction Noise		Combined Assessment - Overall Noise Level		Distance (to be listed, if any)		Alternative noise level (if any)		Combined Assessment - Total (noise level)		Receptor (noise decrease)	
	dBA	dBA	dBA	dBA	dBA	dBA	dBA	dBA	dBA	dBA	dBA	
NSA 33	81.5	87.7	81.5	87.7	423	34.0	80.2	80.2	80.2	80.2	80.2	

¹ Construction Noise - NSA Subject individual values.

² Receptor (noise decrease) (dB).

**Operational Noise
As Proposed Layout
Madison County Solar Project
Sources**

Block	Inverter ID	Inverter UTM Coordinates	
		Easting (m)	Northing (m)
A1	A1	737,844.19	4,189,536.53
A2	A2	738,421.71	4,188,892.74
A3	A3	738,805.83	4,189,256.70
A4	A4	739,344.49	4,189,257.14
A5	A5	739,141.63	4,189,534.64
A6	A6	739,531.29	4,189,654.57
A7	A7	738,972.00	4,190,158.00
A8	A8	739,522.59	4,190,443.88
A9	A9	738,681.00	4,190,327.00
A10	A10	739,428.01	4,188,822.98
A11	A11	739,453.11	4,188,540.11
A12	A12	739,675.27	4,188,164.43
A13	A13	739,357.79	4,187,775.03
A14	A14	738,751.01	4,186,788.73
A15	A15	740,093.29	4,186,698.94
A16	A16	740,606.24	4,188,756.88
B1	B1	737,291.55	4,189,770.05
B2	B2	738,453.32	4,189,256.78
B3	B3	740,428.57	4,189,299.21
C1	C1	738,817.65	4,187,032.35
Transformer	Trans	737,517.00	4,189,536.00

**Operational Noise
As Proposed Layout
Madison County Solar Project
Receptors**

NSA ID	NSA UTM Coordinates		Type	Closest Noise Sources			
	Easting (m)	Northing (m)		Source ID	Distance (m)	Source ID	Distance (m)
NSA1	740180.12	4189580.59	church	B3	375.37	A6	653.03
NSA2	740029.42	4189516.6	Residence	B3	454.51	A6	516.88
NSA3	740029.61	4189642.5	Residence	A6	498.47	B3	526.32
NSA4	739760.97	4189911.38	Residence	A6	344.53	A8	583.42
NSA5	739854.87	4190022.97	Residence	A6	490.33	A8	536.26
NSA6	739993.35	4190199.57	Residence	A8	530.38	A6	714.51
NSA7	739999.82	4190314.13	Residence	A8	494.55	A6	809.04
NSA8	739987.13	4190368.61	Residence	A8	470.60	A6	847.14
NSA9	739931.13	4190487.73	Residence	A8	410.89	A6	924.14
NSA10	739927.66	4190563.49	Residence	A8	422.36	A6	991.59
NSA11	738264.29	4190765.57	Residence	A9	604.97	A7	932.74
NSA12	738260.33	4190082.23	Residence	A9	486.70	A1	686.27
NSA13	738816.21	4189938.09	Residence	A7	269.50	A9	411.74
NSA14	739099.76	4189747.96	Residence	A5	217.39	A7	429.48
NSA15	738679.15	4189481.19	Residence	A3	257.77	B2	318.37
NSA16	738941.26	4188473.37	Residence	A11	516.18	A10	599.29
NSA17	738914.77	4187726.65	Residence	A13	445.65	C1	701.06
NSA18	738975.25	4187650.13	Residence	A13	402.41	C1	637.57
NSA19	739007.49	4187450.35	Residence	C1	459.09	A13	477.63
NSA20	739312.65	4187232.24	Residence	C1	533.84	A13	544.66
NSA21	738939	4187368	Residence	C1	356.91	A13	584.00
NSA22	739047.51	4187316.33	Residence	C1	365.35	A13	553.79
NSA23	739125.28	4187227.74	Residence	C1	364.44	A14	576.89
NSA24	739210.12	4187081.75	Residence	C1	395.57	A14	544.65
NSA25	739277.1	4187016.69	Residence	C1	459.72	A14	573.36
NSA26	738350.1	4186451.86	Residence	A14	523.65	C1	745.37
NSA27	738323.35	4186913.89	Residence	A14	445.60	C1	508.30
NSA28	740334.35	4188194.4	Residence	A16	624.75	A12	659.76
NSA29	740104.27	4189269.7	Residence	B3	325.64	A6	690.24
NSA30	740190.42	4189168.15	Residence	B3	271.83	A16	584.85
NSA31	740200	4189098	Residence	B3	304.52	A16	530.47
NSA32	740268.74	4188831.25	Residence	A16	345.60	B3	494.50
NSA33	740406.04	4188748.31	Residence	A16	200.38	B3	551.36
NSA34	740349.93	4188575.08	Residence	A16	314.24	B3	728.39
NSA35	740731.92	4188185.7	Residence	A16	584.84	A12	1,056.86
NSA36	740538.96	4188172.88	Residence	A16	587.86	A12	863.73
NSA37	740503.37	4188369.32	Residence	A16	400.98	A12	853.07
NSA38	740474.13	4188469.96	Residence	A16	315.87	B3	830.50
NSA39	737006.79	4189894.02	Residence	B1	310.57	TRANS	623.29
NSA40	736985	4189569	Residence	B1	366.60	TRANS	533.02
NSA41	737183.58	4189384.88	Residence	TRANS	366.07	B1	400.02
NSA42	737332.43	4189227.38	Residence	TRANS	359.60	B1	544.21
NSA43	737920.02	4190063.9	Residence	A1	532.79	TRANS	664.16
NSA44	737782.25	4189874.81	Residence	A1	343.90	TRANS	430.29
NSA45	736932.9	4189789.95	Residence	B1	359.20	TRANS	636.92
NSA46	737486.11	4189036.07	Residence	TRANS	500.88	A1	615.37
NSA47	737943.85	4188677.41	Residence	A2	524.13	B2	771.51
NSA48	738026.8	4188531.71	Residence	A2	533.59	B2	840.20
NSA49	738201.92	4188394.91	Residence	A2	544.19	B2	897.79
NSA50	738583.39	4188392.27	Residence	A2	525.94	B2	874.24
NSA51	740333.74	4186350.26	Residence	A15	423.55	A14	1,642.34
NSA52	740354.72	4186431.3	Residence	A15	374.13	A14	1,643.06

**Operational Noise
 As Proposed Layout
 Madison County Solar Project
 Receptors**

NSA ID	NSA UTM Coordinates		Type	Closest Noise Sources			
	Easting (m)	Northing (m)		Source ID	Distance (m)	Source ID	Distance (m)
NSA53	740392.3	4186547.22	Residence	A15	335.30	A13	1,605.53
NSA54	740394.49	4186654.22	Residence	A15	304.50	A13	1,526.75
NSA55	740403.6	4186742.58	Residence	A15	313.36	A13	1,469.58
NSA56	740428.49	4186795.02	Residence	A15	348.70	A13	1,451.49
NSA57	740353.18	4186989.25	Residence	A15	389.64	A13	1,268.17
NSA58	739998.49	4187298.49	Residence	A15	607.00	A13	798.49
NSA59	740363.31	4187514.88	Residence	A15	859.46	A12	946.21
NSA60	740393.1	4187832.77	Residence	A12	790.75	A16	948.37
NSA61	740885.17	4189280.96	Residence	B3	456.96	A16	593.68

Madison County Solar Project
Noise and Traffic Study

Construction Noise
As Proposed in the
Madison County Solar Project
2008-11

NOISE	NOISE	NOISE	NOISE
-------	-------	-------	-------

NOISE	NOISE	NOISE	NOISE	NOISE	NOISE	NOISE	NOISE
-------	-------	-------	-------	-------	-------	-------	-------

NOISE	NOISE	NOISE	NOISE
-------	-------	-------	-------

NOISE	NOISE	NOISE	NOISE
-------	-------	-------	-------

Notes: All values are in dB(A) unless otherwise specified.

NOISE	NOISE	NOISE	NOISE
-------	-------	-------	-------

NOISE	NOISE	NOISE	NOISE	NOISE	NOISE	NOISE	NOISE	NOISE	NOISE
-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

NOISE	NOISE	NOISE	NOISE	NOISE	NOISE	NOISE	NOISE	NOISE	NOISE
-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

143	44A E	470	3500	1.0	3.0	360	8.0	4.6
144	44B S	470	3500	1.0	3.0	360	8.0	4.6
145	44A S	470	3500	1.0	3.0	360	8.0	4.6
146	44F W	470	3500	1.0	3.0	360	8.0	4.6
147	44F W	470	3500	1.0	3.0	360	8.0	4.6
148	44G S	470	3500	1.0	3.0	360	8.0	4.6
149	44H S	470	3500	1.0	3.0	360	8.0	4.6
150	44I S	470	3500	1.0	3.0	360	8.0	4.6
151	44J S	470	3500	1.0	3.0	360	8.0	4.6
152	44K S	470	3500	1.0	3.0	360	8.0	4.6
153	44L S	470	3500	1.0	3.0	360	8.0	4.6
154	44M S	470	3500	1.0	3.0	360	8.0	4.6
155	44N S	470	3500	1.0	3.0	360	8.0	4.6
156	44O S	470	3500	1.0	3.0	360	8.0	4.6
157	44P S	470	3500	1.0	3.0	360	8.0	4.6
158	44Q S	470	3500	1.0	3.0	360	8.0	4.6
159	44R S	470	3500	1.0	3.0	360	8.0	4.6
160	44S S	470	3500	1.0	3.0	360	8.0	4.6
161	44T S	470	3500	1.0	3.0	360	8.0	4.6
162	44U S	470	3500	1.0	3.0	360	8.0	4.6
163	44V S	470	3500	1.0	3.0	360	8.0	4.6
164	44W S	470	3500	1.0	3.0	360	8.0	4.6
165	44X S	470	3500	1.0	3.0	360	8.0	4.6
166	44Y S	470	3500	1.0	3.0	360	8.0	4.6
167	44Z S	470	3500	1.0	3.0	360	8.0	4.6
168	44A S	470	3500	1.0	3.0	360	8.0	4.6
169	44B S	470	3500	1.0	3.0	360	8.0	4.6
170	44C S	470	3500	1.0	3.0	360	8.0	4.6
171	44D S	470	3500	1.0	3.0	360	8.0	4.6
172	44E S	470	3500	1.0	3.0	360	8.0	4.6
173	44F S	470	3500	1.0	3.0	360	8.0	4.6
174	44G S	470	3500	1.0	3.0	360	8.0	4.6
175	44H S	470	3500	1.0	3.0	360	8.0	4.6
176	44I S	470	3500	1.0	3.0	360	8.0	4.6
177	44J S	470	3500	1.0	3.0	360	8.0	4.6
178	44K S	470	3500	1.0	3.0	360	8.0	4.6
179	44L S	470	3500	1.0	3.0	360	8.0	4.6
180	44M S	470	3500	1.0	3.0	360	8.0	4.6
181	44N S	470	3500	1.0	3.0	360	8.0	4.6
182	44O S	470	3500	1.0	3.0	360	8.0	4.6
183	44P S	470	3500	1.0	3.0	360	8.0	4.6
184	44Q S	470	3500	1.0	3.0	360	8.0	4.6
185	44R S	470	3500	1.0	3.0	360	8.0	4.6
186	44S S	470	3500	1.0	3.0	360	8.0	4.6
187	44T S	470	3500	1.0	3.0	360	8.0	4.6
188	44U S	470	3500	1.0	3.0	360	8.0	4.6
189	44V S	470	3500	1.0	3.0	360	8.0	4.6
190	44W S	470	3500	1.0	3.0	360	8.0	4.6
191	44X S	470	3500	1.0	3.0	360	8.0	4.6
192	44Y S	470	3500	1.0	3.0	360	8.0	4.6
193	44Z S	470	3500	1.0	3.0	360	8.0	4.6
194	44A S	470	3500	1.0	3.0	360	8.0	4.6
195	44B S	470	3500	1.0	3.0	360	8.0	4.6
196	44C S	470	3500	1.0	3.0	360	8.0	4.6
197	44D S	470	3500	1.0	3.0	360	8.0	4.6
198	44E S	470	3500	1.0	3.0	360	8.0	4.6
199	44F S	470	3500	1.0	3.0	360	8.0	4.6
200	44G S	470	3500	1.0	3.0	360	8.0	4.6

Madison County Solar Project
Noise and Traffic Study

143	14A.1	47.0	3500	1.0	3.0	204	87	5.9
144	14B.1	47.0	3500	1.0	3.0	204	87	5.9
145	14C.1	47.0	3500	1.0	3.0	204	87	5.9
146	14D.1	47.0	3500	1.0	3.0	204	87	5.9
147	14E.1	47.0	3500	1.0	3.0	204	87	5.9
148	14F.1	47.0	3500	1.0	3.0	204	87	5.9
149	14G.1	47.0	3500	1.0	3.0	204	87	5.9
150	14H.1	47.0	3500	1.0	3.0	204	87	5.9
151	14I.1	47.0	3500	1.0	3.0	204	87	5.9
152	14J.1	47.0	3500	1.0	3.0	204	87	5.9
153	14K.1	47.0	3500	1.0	3.0	204	87	5.9
154	14L.1	47.0	3500	1.0	3.0	204	87	5.9
155	14M.1	47.0	3500	1.0	3.0	204	87	5.9
156	14N.1	47.0	3500	1.0	3.0	204	87	5.9
157	14O.1	47.0	3500	1.0	3.0	204	87	5.9
158	14P.1	47.0	3500	1.0	3.0	204	87	5.9
159	14Q.1	47.0	3500	1.0	3.0	204	87	5.9
160	14R.1	47.0	3500	1.0	3.0	204	87	5.9
161	14S.1	47.0	3500	1.0	3.0	204	87	5.9
162	14T.1	47.0	3500	1.0	3.0	204	87	5.9
163	14U.1	47.0	3500	1.0	3.0	204	87	5.9
164	14V.1	47.0	3500	1.0	3.0	204	87	5.9
165	14W.1	47.0	3500	1.0	3.0	204	87	5.9
166	14X.1	47.0	3500	1.0	3.0	204	87	5.9
167	14Y.1	47.0	3500	1.0	3.0	204	87	5.9
168	14Z.1	47.0	3500	1.0	3.0	204	87	5.9
169	14A.2	47.0	3500	1.0	3.0	204	87	5.9
170	14B.2	47.0	3500	1.0	3.0	204	87	5.9
171	14C.2	47.0	3500	1.0	3.0	204	87	5.9
172	14D.2	47.0	3500	1.0	3.0	204	87	5.9
173	14E.2	47.0	3500	1.0	3.0	204	87	5.9
174	14F.2	47.0	3500	1.0	3.0	204	87	5.9
175	14G.2	47.0	3500	1.0	3.0	204	87	5.9
176	14H.2	47.0	3500	1.0	3.0	204	87	5.9
177	14I.2	47.0	3500	1.0	3.0	204	87	5.9
178	14J.2	47.0	3500	1.0	3.0	204	87	5.9
179	14K.2	47.0	3500	1.0	3.0	204	87	5.9
180	14L.2	47.0	3500	1.0	3.0	204	87	5.9
181	14M.2	47.0	3500	1.0	3.0	204	87	5.9
182	14N.2	47.0	3500	1.0	3.0	204	87	5.9
183	14O.2	47.0	3500	1.0	3.0	204	87	5.9
184	14P.2	47.0	3500	1.0	3.0	204	87	5.9
185	14Q.2	47.0	3500	1.0	3.0	204	87	5.9
186	14R.2	47.0	3500	1.0	3.0	204	87	5.9
187	14S.2	47.0	3500	1.0	3.0	204	87	5.9
188	14T.2	47.0	3500	1.0	3.0	204	87	5.9
189	14U.2	47.0	3500	1.0	3.0	204	87	5.9
190	14V.2	47.0	3500	1.0	3.0	204	87	5.9
191	14W.2	47.0	3500	1.0	3.0	204	87	5.9
192	14X.2	47.0	3500	1.0	3.0	204	87	5.9
193	14Y.2	47.0	3500	1.0	3.0	204	87	5.9
194	14Z.2	47.0	3500	1.0	3.0	204	87	5.9
195	14A.3	47.0	3500	1.0	3.0	204	87	5.9
196	14B.3	47.0	3500	1.0	3.0	204	87	5.9
197	14C.3	47.0	3500	1.0	3.0	204	87	5.9
198	14D.3	47.0	3500	1.0	3.0	204	87	5.9
199	14E.3	47.0	3500	1.0	3.0	204	87	5.9
200	14F.3	47.0	3500	1.0	3.0	204	87	5.9
201	14G.3	47.0	3500	1.0	3.0	204	87	5.9
202	14H.3	47.0	3500	1.0	3.0	204	87	5.9
203	14I.3	47.0	3500	1.0	3.0	204	87	5.9
204	14J.3	47.0	3500	1.0	3.0	204	87	5.9
205	14K.3	47.0	3500	1.0	3.0	204	87	5.9
206	14L.3	47.0	3500	1.0	3.0	204	87	5.9
207	14M.3	47.0	3500	1.0	3.0	204	87	5.9
208	14N.3	47.0	3500	1.0	3.0	204	87	5.9
209	14O.3	47.0	3500	1.0	3.0	204	87	5.9
210	14P.3	47.0	3500	1.0	3.0	204	87	5.9
211	14Q.3	47.0	3500	1.0	3.0	204	87	5.9
212	14R.3	47.0	3500	1.0	3.0	204	87	5.9
213	14S.3	47.0	3500	1.0	3.0	204	87	5.9
214	14T.3	47.0	3500	1.0	3.0	204	87	5.9
215	14U.3	47.0	3500	1.0	3.0	204	87	5.9
216	14V.3	47.0	3500	1.0	3.0	204	87	5.9
217	14W.3	47.0	3500	1.0	3.0	204	87	5.9
218	14X.3	47.0	3500	1.0	3.0	204	87	5.9
219	14Y.3	47.0	3500	1.0	3.0	204	87	5.9
220	14Z.3	47.0	3500	1.0	3.0	204	87	5.9

This page intentionally left blank.

APPENDIX C

Fugitive Dust Impact Calculations

**Acciona Energy - Madison County Solar Project
 Air Quality
 Emission Calculations
 Construction Emissions: Earthmoving Activities**

Fugitive Dust From Construction Operations: General Construction and Cut/Fill

Parameter	Value	Source / Notes
Total Acres Affected During Construction	275.0	Assumption based on project description
Total Months of Construction	3	Project Description
General Construction PM ₁₀ Emission Factor, ton/acre-month	0.011	WRAP Fugitive Dust Handbook, Table 3-2, "Level 2"
Assumed Control Efficiency, %	61%	WRAP Fugitive Dust Handbook, Table 3-6, for applying water at various intervals (3.2hr watering interval).

Note: No off-site haulage indicated or assumed.

Source: Based on WRAP Fugitive Dust Handbook, Table 3-2, "Recommended PM₁₀ Emission Factors for Construction Operations," Level 2. [http://www.wrapair.org/forums/dej/fdhy/content/final handbook.pdf](http://www.wrapair.org/forums/dej/fdhy/content/final%20handbook.pdf)

Annual Fugitive Dust Emissions From Construction Operations, in Tons

Source	CO	NO _x	SO _x	PM ₁₀	PM _{2.5}	VOC	HAPs	CH ₄	CO ₂	CO _{2e}
General Construction	-	-	-	3.54	0.35	-	-	-	-	-
Total Fugitive Emissions, tons	-	-	-	3.54	0.35	-	-	-	-	-

Note: PM_{2.5}/PM₁₀ ratio of 0.10 used from the WRAP Fugitive Dust Handbook, Section 3.3.1. On-site cut-fill emissions do not assume controls

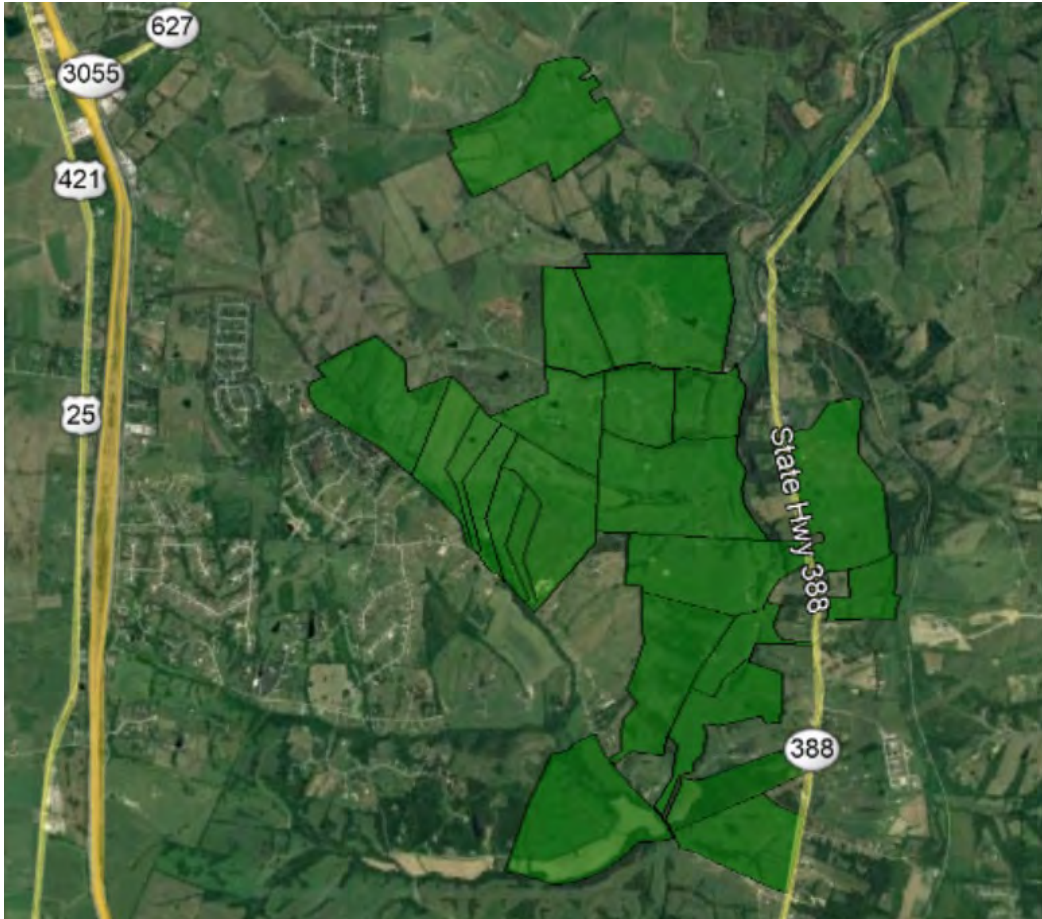
This page intentionally left blank.

APPENDIX D

Environmental Site Assessment – Phase 1

Phase I Environmental Site Assessment

**Madison Solar Project,
Madison County, Kentucky**



October 14, 2020

PRESENTED TO

AEUG Madison Solar, LLC
55 E Monroe Street, Suite 1925
Chicago, IL 60603

PRESENTED BY

Tetra Tech
222 S 15th Street, Suite 220
Omaha, NE 68102

EXECUTIVE SUMMARY

Tetra Tech, Inc. (“Tetra Tech”) performed a Phase I Environmental Site Assessment (“Phase I ESA”) of the Madison solar project in Madison County, Kentucky (hereafter, the “Subject Property”) for AEUG Madison Solar, LLC (“AMS”). The purpose of this Phase I ESA was to identify current and historic recognized environmental conditions (“RECs”) in connection with the Subject Property, based on commonly known and reasonably ascertainable information, pursuant to the process described in American Society for Testing and Materials (“ASTM”) Standard Practice E2247-16.

To assess environmental conditions at the Subject Property, Tetra Tech reviewed site land use history, geology, hydrogeology, and environmental records for the Subject Property and its general vicinity; conducted a visual site reconnaissance; mailed questionnaires to conduct landowner interviews; and completed telephone interviews to inquire about current environmental conditions.

The Subject Property is approximately 2,020.53 acres and is located north of Richmond in Madison County, Kentucky. The Subject Property is primarily used for agricultural purposes, including hay, corn, and soybean production and grazing land, with residential and farmstead structures present.

The findings and conclusions of this Phase I ESA are as follows:

Recognized Environmental Conditions

This assessment revealed no RECs associated with the Subject Property.

Historic Recognized Environmental Conditions

This assessment revealed no Historic RECs associated with the Subject Property

De minimis Conditions

This assessment revealed the following *de minimis* condition on the Subject Property:

- Solid waste disposal areas including areas where brush and trees are burned and deposition of metal and other wastes that cannot be burned were reported in returned Landowner Questionnaires. Also, the parcel owned by Big Wind, LLC (Assessor’s Parcel 0066-0000-0017-B) was observed during the site reconnaissance to have waste disposal areas on the ground, including an abandoned trailer, wooden “A-frame” construction materials, and other refuse materials. These solid waste disposal areas are considered a *de minimis* condition because there is no evidence that indicates a threat to human health or the environment.

TABLE OF CONTENTS

1.0 INTRODUCTION	1
1.1 Purpose	1
1.2 Scope of Services	1
1.3 Significant Assumptions	1
2.0 SITE DESCRIPTION AND PHYSICAL SETTING	2
2.1 Site Location and Legal Description	2
2.2 Site and Vicinity General Characteristics	3
2.3 Site Hydrogeology	3
2.4 Current and Past Uses of the Subject Property	3
2.5 Description of Structures, Roads, and Other Improvements	4
2.6 Current and Past Uses of Adjacent Properties	4
3.0 SITE DESCRIPTION AND PHYSICAL SETTING	5
3.1 User Questionnaire	5
3.2 Title Records	5
3.3 Environmental Liens or Activity and Use Limitations	5
3.4 Specialized Knowledge	5
3.5 Commonly Known or Reasonably Ascertainable Information	5
3.6 Valuation Reduction for Environmental Issues	5
3.7 Obvious Indicators of the Presence or Likely Presence of Contamination	5
3.8 Owner, Property Manager, and Occupant Information	5
3.9 Reason for Performing Phase I ESA	5
3.10 Other	5
4.0 RECORDS REVIEW	6
4.1 Physical Setting	6
4.2 Environmental Database information	6
4.3 Historical Use Information	15
4.3.1 Property Abstract	15
4.3.2 Aerial Photographs	15
4.3.3 Historic Topographic Maps	16
5.0 SITE RECONNAISSANCE	17
5.1 Methodology and Limiting Conditions	17
5.2 General Site Setting	17
5.3 Exterior Observations	18

5.3.1	Surface Staining and/or Stressed Vegetation	18
5.3.2	Drums, Aboveground Storage Tanks, and Containers	18
5.3.3	Evidence of Waste Disposal	18
5.3.4	Fill Material	18
5.3.5	Transformers	18
5.3.6	Vents, Air Stacks, and Odors	19
5.3.7	Underground Storage Tanks	19
5.3.8	Wells	19
5.3.9	Septic Systems	19
5.3.10	Alteration in Vegetation	19
5.4	Interior Observations	19
6.0	INTERVIEWS	19
6.1	Site Owners	19
6.2	Local Fire Department	20
6.3	Local Health Department	20
7.0	CONCLUSIONS	21
7.1	Recognized Environmental Conditions	21
7.2	Historic recognized Environmental Conditions	21
7.3	De Minimis Conditions	21
7.4	Data Gaps	21
8.0	DEVIATIONS	21
9.0	LIMITATIONS	22
9.1	Special Terms and Conditions	22
9.2	Limitations and Exceptions	22
9.3	User Reliance	22
10.0	REFERENCES CITED	23
11.0	QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL	24

LIST OF TABLES

TABLE 1	Subject Property Description
TABLE 2	Summary of Current and Past Uses of Adjacent Properties
TABLE 3	Physical Setting Information
TABLE 4	Databases Searched and Number of Facilities Identified
TABLE 5	Summary of Information from Aerial Photographs
TABLE 6	Summary of Information from Topographic Maps

FIGURES

FIGURE 1. PROJECT VICINITY

FIGURE 2. PROJECT MAP

APPENDICES

APPENDIX A.	PHOTOGRAPHIC DOCUMENTATION
APPENDIX B.	EDR AREA/CORRIDOR REPORT
APPENDIX C.	EDR AERIAL PHOTOGRAPHS
APPENDIX D.	EDR HISTORICAL TOPO MAP REPORT
APPENDIX E.	EDR DATAMAP™ WELL SEARCH REPORT
APPENDIX F.	LANDOWNER QUESTIONNAIRES

1.0 INTRODUCTION

1.1 PURPOSE

Tetra Tech, Inc. (“Tetra Tech”) performed a Phase I Environmental Site Assessment (“Phase I ESA”) of the Madison solar project in Madison County, Kentucky (hereafter, the “Subject Property”) for AEUG Madison Solar (“AMS”). The purpose of this Phase I ESA was to identify current and historic recognized environmental conditions (“RECs”) in connection with the Subject Property, based on commonly known and reasonably ascertainable information, pursuant to the process described in American Society for Testing and Materials (“ASTM”) Standard Practice E2247-16. This evaluation includes identifying RECs, historic RECs, and *de minimis* conditions associated with the Subject Property, as defined below:

REC: “...the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. *De minimis* conditions are not recognized environmental conditions.”

Historic REC: “A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).”

***De minimis* Condition:** “A condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.”

1.2 SCOPE OF SERVICES

The scope of services was defined in Tetra Tech's proposal dated June 18, 2020 and the project change order dated August 26, 2020. This Phase I ESA conforms to ASTM Standard Practice E2247-16, with the exception of any deviations described in Section 8.0 and is subject to the limitations described in Section 9.0 of this report.

1.3 SIGNIFICANT ASSUMPTIONS

Tetra Tech assumes that all information obtained from others for the Subject Property is correct and complete. No other significant assumptions associated with the Subject Property were made for this report.

2.0 SITE DESCRIPTION AND PHYSICAL SETTING

2.1 SITE LOCATION AND LEGAL DESCRIPTION

The Subject Property is approximately 2,020.53 acres and is located north of Richmond in Madison County, Kentucky. It is approximately bordered by Lost Fork Road to the north, State Highway 388 / Red House Road and a railroad to the east, Three Forks Road and Tribble Branch (tributary to West Fork Otter Creek) to the south, and Three Forks Road to the west. The Subject Property is defined as all of the land under lease or easement by AMS with the exception of structures that are real property (i.e., houses, barns, etc.) based on the assumption that no infrastructure will be constructed on these properties.

This part of Kentucky does not use the Public Land Survey System. Parcels that comprise the Subject Property are described by landowner and size in Table 1 below.

Table 1. Subject Property Description

Landowner	Assessor's Parcel Number	Parcel Size (Acres)
Harold and Jan Bucher	0066-0000-0008	140.97
	0066-0000-0018-DA	37.26
Found Spoon LLC	0065-0000-0039	159.99
Garnet B. Parke	0052-000-0022*	52.50
Hickory Haven LLC	0065-0000-0044	182.21
Sondra Lee Coomer, Ruby Jo Ward and Daniel Leon Turner	0065-0000-0043	62.38
Four-Star Development Corporation, Inc., Frazier Realty Company, LLC and Tudor Holdings, LLC	0053-0000-0013	118.89
KT & D LLC	0053-0000-0017-6	48.54
	0053-0000-0017-5	26.97
	0053-0000-0017-4	36.64
	0053-0000-0017-3	30.06
	0053-0000-0017-2	20.66
Hank Nancy Jane Ballinger	0053-0000-0017	99.23
Daniel Leon Turner	0053-0000-0016	80.52
	0066-0000-0001	61.47
Cardinal Valley Farms LLC	0066-0000-0002	53.86
	0066-0000-0015	165.47
Delbert and Flora Day	0066-0000-0017	125.41
Big Wind LLC	0066-0000-0017-1	39.70
	0066-0000-0017-B	110.97
	0066-0000-0017-1B	70.31
Larry Jones, Robert Jones, and Erin Jones	0067-0000-0001	239.32
Charles and Shawna Hamilton	0066-0000-0025-A	57.20

Maps of the Subject Property are presented in Figures 1 and 2.

2.2 SITE AND VICINITY GENERAL CHARACTERISTICS

The Subject Property and vicinity characteristics, as noted during the reconnaissance conducted July 7 and 8, 2020, by David Hermance of Tetra Tech and September 3, 2020 by Brandon Schack of Tetra Tech are described in this Section 2.0 and throughout the remainder of this report. The Subject Property consists of approximately 2,020.53 acres of land primarily used for agricultural purposes, including hay, corn, and soybean production and cattle grazing, with residential and farmstead structures.

The Subject Property is located approximately 1.25 miles north of Richmond in Madison County, Kentucky. The vicinity consists of rolling hills with agricultural properties primarily used for hay, corn, and soybean production and grazing lands, small streams, farm ponds, residential properties, two schools, a state park, public and private roads, a railroad right-of-way, and infrastructure associated with the City of Richmond. Photographs of the Subject Property are included in Appendix A, and photograph locations are shown in Figure 2.

2.3 SITE HYDROGEOLOGY

The Environmental Data Resources, Inc. (“EDR”) DataMap™ Well Search Report identified no natural gas wells or groundwater wells on the Subject Property (see Appendix G of this Phase I ESA). It is assumed that near-surface groundwater generally flows with the topographic gradient.

The Well Search Report did not identify public water supply (“PWS”) wells on the Subject Property or within a 1-mile radius of the Subject Property.

The Kentucky Water Health Portal provides a geographical compilation of surface water quality information. The data indicates that tributaries and creeks within the Subject Property have not been monitored for water quality by the Kentucky Division of Water; however, receiving waters for these tributaries and creeks indicate impairment due to *Escherichia coli*, Chlorophyll-a, and nutrient/eutrophication biological indicators likely from crop production and livestock grazing.

According to the EDR Area/Corridor Report and the Federal Emergency Management Agency (“FEMA”) “Stay Dry” Google Earth GIS flood zone mapping application, there are small areas of 100-year flood hazard area (Zone A) surrounding: (1) Hicks Branch and Tribble Branch (tributaries to West Fork Otter Creek) and along Three Forks Road and Crystal Creek Lane, respectively and (2) Otter Creek along State Highway 388. The remainder of the Subject Property is identified as Zone X, meaning that it is an area of minimal flood hazard.

National Wetland Inventory (“NWI”) wetlands categorized as riverine, freshwater pond, and freshwater emergent were identified on the Subject Property by the U.S. Fish and Wildlife Service wetland identification application.

2.4 CURRENT AND PAST USES OF THE SUBJECT PROPERTY

The Subject Property is used for residential and agricultural purposes. Based on landowner interviews, the Subject Property was used for residential and agricultural purposes since the area was settled in the late 18th century.

2.5 DESCRIPTION OF STRUCTURES, ROADS, AND OTHER IMPROVEMENTS

Structures and improvements on the Subject Property include:

- Residential and agricultural structures (i.e., various structures associated with agricultural operations including barns, grain storage, out buildings, aboveground storage tanks (“ASTs”), and stone walls);
- Public and private roads;
- Buried natural gas pipelines; and
- Electric power distribution infrastructure, including transmission poles, transmission lines, and pole-mounted transformers.

Photographs of onsite structures and other improvements on the Subject Property are included in Appendix A.

2.6 CURRENT AND PAST USES OF ADJACENT PROPERTIES

The vicinity of the Subject Property consists of residential and agricultural properties. The City of Richmond is south of the Subject Property. The following table describes the current and past uses of the properties adjacent to the Subject Property, determined through analysis of topographic maps, aerial photographs, interviews, and visual reconnaissance.

Table 2. Summary of Current and Past Uses of Adjacent Properties

Direction	Current Use	Past Use
North	1963 – Present: Residential, agricultural, Fort Boonesborough State Park, Boonesborough Road, State Highway 388.	1892 – 1963: Residential, agricultural, Boonesborough Road.
South	2006 – Present: Residential, agricultural, City of Richmond, Dr. Robert R. Martin Bypass, Glen Marshall Elementary School, B. Michael Caudill Middle School.	1892 – 2006: Residential, agricultural, City of Richmond, Kentucky.
East	2008 – Present: Residential, agricultural, State Highway 388, railroad line, community of Redhouse, Otter Creek Wastewater Treatment Plant.	1892 – 2008: Residential, agricultural, community of Redhouse, railroad line.
West	1965 – Present: Residential, agricultural, Colonel Road, Interstate 75, Lexington Road expanded portions of the City of Richmond, Kentucky.	1892 – 1965: Residential, agricultural, Lexington Road.

3.0 SITE DESCRIPTION AND PHYSICAL SETTING

3.1 USER QUESTIONNAIRE

The User Questionnaire presented in ASTM Standard E2247-16, Appendix X.3, was provided to Ms. Mary Connor, Senior Manager – Environmental, Social and Sustainability at AMS. The information provided in subsections 3.2 through 3.10 below was ascertained from her responses received July 13, 2020.

3.2 TITLE RECORDS

No title records for the Subject Property were provided by AMS.

3.3 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

According to AMS, no environmental liens or activity and use limitations for the Subject Property are in place or have been filed or recorded in a registry under federal, state, or local law.

3.4 SPECIALIZED KNOWLEDGE

AMS has no specialized knowledge or experience related to the Subject Property.

3.5 COMMONLY KNOWN OR REASONABLY ASCERTAINABLE INFORMATION

AMS is unaware of commonly known or reasonably ascertainable information about the Subject Property.

3.6 VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES

AMS stated that it is unknown if the purchase price for the Subject Property reasonably reflects its fair market value.

3.7 OBVIOUS INDICATORS OF THE PRESENCE OR LIKELY PRESENCE OF CONTAMINATION

AMS reported no obvious indicators that point to the presence or likely presence of contamination at the Subject Property based on their knowledge and experience related to the Subject Property.

3.8 OWNER, PROPERTY MANAGER, AND OCCUPANT INFORMATION

AMS provided the names and contact information of the owners and/or managers of the Subject Property.

3.9 REASON FOR PERFORMING PHASE I ESA

AMS is developing a solar electric generation facility. Therefore, this Phase I ESA is being conducted to determine if environmental concerns are present on the Subject Property prior to development.

3.10 OTHER

No other information was provided by AMS.

4.0 RECORDS REVIEW

4.1 PHYSICAL SETTING

Physical setting characteristics pertinent to the Subject Property are summarized in Table 3 below.

Table 3. Physical Setting Information

Conditions	Source	Description
TOPOGRAPHY		
Elevation (amsl)	EDR Historical Topo Map Report	919.35 feet amsl
Topographic Gradient	EDR Historical Topo Map Report	Localized ridges and valleys result in varied topography throughout the Subject Property, from approximately 700 to 950 feet amsl.
Coordinates	EDR Historical Topo Map Report	Latitude (North): 37° 47' 40" Longitude (West): 84° 19' 53"
HYDROLOGY		
Surface Water Runoff	EDR Historical Topo Map Report, 2013 Topographic Map; U.S Fish and Wildlife Service National Wetlands Inventory; Visual observation	Directed by localized variations in surface elevation. Surface water runoff generally flows into unnamed tributaries of the Hicks Branch and Tribble Branch (tributaries to West Fork Otter Creek) along Three Forks Road and Crystal Creek Lane, West Fork Otter Creek in the southern portions of the Subject Property, and Otter Creek along State Highway 388.
Flood Plain	FEMA Flood Map Numbers 21151C04145D, and 21151C0155D (December 21, 2017); EDR Report	Most of the Subject Property is an area of minimal flood hazard (Zone X). There is a 100-year flood hazard area (Zone A) surrounding Hicks Branch and Tribble Branch (tributaries to West Fork Otter Creek) along Three Forks Road and Crystal Creek Lane and Otter Creek along State Highway 388.
Wetlands	U.S Fish and Wildlife Service National Wetlands Inventory	Various riverine, freshwater pond, and freshwater emergent wetlands were identified throughout the Subject Property.
GEOLOGY		
Onsite wells	EDR DataMap™ Well Search Report	No groundwater wells are reported on the Subject Property. There are 31 domestic use, agricultural, monitoring or remediation wells within 1 mile of the Subject Property. The depths of these wells were not reported.
Nearest Oil and Gas Wells	EDR DataMap™ Well Search Report	No oil and gas wells were identified on or within 1.0 mile of the Subject Property.
Geologic Conditions	Kentucky Geological Survey, U.S. Department of Agriculture Natural Resources Conservation Service's Web Soil Survey	Bedrock in this portion of Madison County is largely limestone and shale that is Ordovician in age, part of the Drakes and Ashlock formations. The major shallow soil types within the Subject Property are a variety of silt loams, which are well-drained soil types with variable infiltration rates.

4.2 ENVIRONMENTAL DATABASE INFORMATION

Tetra Tech reviewed federal, state, and local environmental records pertaining to the Subject Property and vicinity. In performing this review, Tetra Tech used the services of EDR, a vendor specializing in the search and retrieval of government environmental databases. These federal, state, and local databases include information regarding reported hazardous materials use and storage; facilities that treat, store, dispose, or generate hazardous waste;

solid waste landfills, transfer stations, and incinerators; leaking underground storage tanks; discharges of petroleum and other hazardous substances; and reported incidents of contamination.

The EDR Area/Corridor Report is presented in Appendix B and includes: (1) a map showing the approximate locations of sites identified (if any) within a 1.0-mile radius of the Subject Property boundary; (2) a complete listing of findings; and (3) descriptions of the databases searched. “Approximate minimum search distances” are the distances beyond the Subject Property boundary required to be included in the search of the “Standard Environmental Record Sources” and are specified in subsection 8.2.1.1 of ASTM Standard Practice E2247-16. To ensure sufficient research up to and including the “approximate minimum search distances” beyond the Subject Property boundaries, a 2-mile radius search was conducted around the target coordinates central to the Subject Property.

Table 4. Databases Searched and Number of Facilities Identified

Database		Facilities
Federal Records from Standard Sources		
NPL	National Priority List	0
Proposed NPL	Proposed National Priority List Sites	0
NPL LIENS	Federal Superfund Liens	0
DELISTED NPL	National Priority List Deletions	0
FEDERAL FACILITY	Federal Facility Site Information listing	0
SEMS	Superfund Enterprise Management System	0
SEMS-ARCHIVE	Superfund Enterprise Management System Archive	0
CORRACTS	Corrective Action Report	0
RCRA-TSDF	RCRA - Treatment, Storage, and Disposal	0
RCRA-LQG	RCRA - Large Quantity Generators	0
RCRA-SQG	RCRA - Small Quantity Generators	0
RCRA-VSQG	RCRA – Very Small Quantity Generators	0
LUCIS	Land Use Control Information System	0
US ENG CONTROLS	Engineering Controls Sites List	0
US INST CONTROL	Sites with Institutional Controls	0
ERNS	Emergency Response Notification System	0
State and Tribal Records from Standard Sources		
SHWS	State Leads List	4
SWF/LF	Solid Waste Information System	0
PSTEAF	Underground Storage Tank Branch Facility Ranking List	0
INDIAN LUST	Leaking Underground Storage Tanks on Indian Land	0
SB 193	SB 193 Branch Site Inventory List for UST Permanent Closures	3
FEMA UST	FEMA Underground Storage Tank Listing	0

Database		Facilities
UST	Active UST Facilities	6
AST	Aboveground Petroleum Storage Tank Facilities	2
INDIAN UST	Underground Storage Tanks on Indian Land	0
ENG CONTROLS	Engineering Controls Site Listing	0
INST CONTROL	Institutional Controls Site Listing	1
INDIAN VCP	Voluntary Cleanup Priority Listing	0
VCP	Voluntary Cleanup Program Sites	0
BROWNFIELDS	Municipal Brownfields Redevelopment Grant Program Project Descriptions	0
Additional Environmental Federal, State, Tribal, and Local Records		
US BROWNFIELDS	A Listing of Brownfields Sites	0
SWRCY	Recycling Facilities	0
HIST LF	Historical Landfills	0
INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	0
DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	0
ODI	Open Dump Inventory	0
IHS OPEN DUMPS	Open Dumps on Indian Land	0
US HIST CDL	National Clandestine Laboratory Register	0
CDL	Meth Drug Lab Site Listing	0
US CDL	Clandestine Drug Labs	0
LIENS 2	CERCLA Lien Information	0
HMIRS	Hazardous Materials Information Reporting System	0
SPILLS	State Spills	5
Other Ascertainable Records		
RCRA NonGen/NLR	RCRA – Non Generators	2
FUDS	Formerly Used Defense Sites	0
DOD	Department of Defense Sites	0
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	0
US FIN ASSUR	Financial Assurance Information	0
EPA WATCH LIST	EPA WATCH LIST	0
2020 COR ACTION	2020 Corrective Action Program List	0
TSCA	Toxic Substance Control Act	0
TRIS	Toxic Chemical Release Inventory System	0
SSTS	Section 7 Tracking Systems	0
ROD	Records of Decision	0
RMP	Risk Management Plans	0
RAATS	RCRA Administrative Action Tracking System	0

Database		Facilities
PRP	Potentially Responsible Parties	0
PADS	PCB Activity Database System	0
ICIS	Integrated Compliance Information System	0
FTTS	FIFRA/ TSCA Tracking System	0
MLTS	Material Licensing Tracking System	0
COAL ASH DOE	Steam-Electric Plant Operation Data	0
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	0
PCB TRANSFORMER	PCB Transformer Registration Database	0
RADINFO	Radiation Information Database	0
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	0
DOT OPS	Department of Transportation, Office of Pipeline Safety Incident and Accident data	0
CONSENT	Superfund (CERCLA) Consent Decrees	0
INDIAN RESERV	Indian Reservations	0
FUSRAP	Formerly Utilized Sites Remedial Action Program	0
UMTRA	Uranium Mill Tailings Sites	0
LEAD SMELTERS	Lead Smelter Sites	0
US AIRS	Aerometric Information Retrieval System Facility Subsystem	0
US MINES	Mines Master Index File	3
ABANDONED MINES	Abandoned Mine Land Inventory	1
FINDS	Facility Index System/Facility Registry System	0
DOCKET HWC	Hazardous Waste Compliance Docket Listing	0
ECHO	Enforcement & Compliance History Information	0
UXO	Unexploded Ordnance Sites	0
FUELS PROGRAM	EPA Fuels Program Registered Listing	0
AIRS	Permit and Emissions Inventory Data	1
ASBESTOS	Asbestos	0
COAL ASH	Coal Ash Site Listing	0
DRYCLEANERS	Listing of drycleaner facility locations	0
FINANCIAL ASSURANCE	Financial Assurance Information Listing	0
LEAD	Environmental Lead Program Report Tracking Database	0
NPDES	NPDES Permits Listing	0
PIMW	Potentially Infection Medical Waste	0
UIC	UIC Wells Listing	0
MINES MRDS	Mineral Resources Data System	0
EDR Databases		
EDR MGP	EDR Proprietary Manufactured Gas Plants	0

Database		Facilities
EDR Hist Auto	EDR Exclusive Historic Gas Stations	1
EDR Hist Cleaner	EDR Exclusive Historic Dry Cleaners	0
RGA HWS	Recovered Government Archive State Hazardous Waste Facilities List	0
RGA LF	Recovered Government Archive Solid Waste Facilities List	0

EDR's database review identified the following facilities on the Subject Property:

AT&T Mobility, Verizon Wireless, and AT&T Mobility Bill Eads Cell Tower Engine – 297 E Bill Eads Rd., 285 E Bill Eads Rd., and Bill Eads Rd. This facility is located south of Bill Eads Road on Assessor's Parcel No. 0053-0000-0016 (landowner Daniel Turner) on the central portion of the Subject Property and was identified in the AST (2 occurrences) and AIRS databases due to registration of two ASTs with the Office of the State Fire Marshall and operation of a reciprocating internal combustion engine ("RICE") subject to 40 CFR 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants ("NESHAP") at the site to support powering of communications equipment. One of the AST registrations is reported as cancelled, and the other is reported as completed indicating presence of only one AST at the site. The AST likely contains fuel for the RICE. Photographs of the facility are shown in Photographs 64 and 65 in Appendix A. No spills, releases, or regulatory violations are reported in association with the AST or RICE. Operation of a registered AST and a permitted RICE are not considered a REC for the Subject Property.

RICHMOND, KY. The location, identified by the EDR database search to be near Assessor's Parcel No. 0066-0000-0008 (landowners Harold and Jean Bucher) on the eastern portion of the Subject Property, was identified in the SPILLS database due to report of a drinking water line break/leak affecting water supply at addresses 1923 – 2388 Red House Road on September 18, 2017. Release of drinking water is not considered a REC for the Subject Property.

RICHMOND, KY. The location, identified by the EDR database search to be on a nearby property located approximately 1 mile west of the Subject Property, was identified in the SPILLS database due to report of open burning of prohibited materials including treated wood fence posts and tires on June 20, 2012. Based on the distance from the Subject Property, the open burning of prohibited materials on the nearby property is not considered a REC for the Subject Property.

RICHMOND, KY. The location, identified by the EDR database search to be on a nearby property located approximately 1 mile west of the Subject Property, was identified in the SPILLS database (2 occurrences) in reference to an initial report submitted by Brent Harral with U.S. Fish and Wildlife Service on September 8, 2009 to report an unpermitted activity (bulldozing activity in a stream) on the Subject Property and a second, follow-up report on the same date was to report that Best Management Practices ("BMPs") were not being used to prevent stream degradation from earth-moving activities. Unpermitted dredge or fill

of a water of the U.S. and stream degradation due to earth-moving activities on a nearby property is not considered a REC for the Subject Property.

The following facilities were identified within ASTM Standard search distances of the Subject Property:

RED HOUSE COUNTRY STORE at 2550 Red House Road, Richmond, KY. The location, identified by the EDR database search to be on a property near Assessor's Parcel No. 0066-0000-0008 (landowners Harold and Jean Bucher), is actually located further north in the Red House community approximately 0.2 miles east of Assessor's Parcel 0065-0000-44 (landowner Hickory Haven, LLC) and approximately 0.7 miles north of Assessor's Parcel No. 0066-0000-0008 on the opposite side of Otter Creek and at a lower elevation. The EDR database search identified the location in the SB 193 and UST databases due to soil and groundwater contamination associated with release from a fuel storage tank. Reportedly, a double-walled 2,000-gallon AST used for gasoline storage was closed in place in 2010, a single-walled 500-gallon AST used for diesel fuel storage was removed in 1996, another AST used for gasoline storage was removed prior to 1988, and a single-walled 2,000-gallon AST used for gasoline storage was removed in 1996. Based on distance from the Subject Property and its location on the opposite side of Otter Creek, it is unlikely that contamination from the facility impacted the Subject Property, and therefore, it is not considered a REC for the Subject Property.

DGS COAL COMPANY INC., TENKILLER MINING SERVICES INC., NO. 2 TIPPLE, and JASPER & ASSOCIATES INC at Rockcastle (County), KY. The location, identified by the EDR database search to be immediately south of Assessor's Parcel No. 0065-0000-0024 (landowners Harold and Jean Bucher) was identified in the U.S. MINES database (3 occurrences) and ABANDONED MINES database due to surface mining activities occurring in 1980, 1981, and 1984. Further research and review of aerial photography indicate that the EDR database is in error, and surface mining activities did not occur at this location. As such, the database listing is not considered a REC for the Subject Property.

MADISON CO BOARD OF EDUCATION BUS GARAGE at 230 North Keeneland Drive, Richmond, KY. This facility is located on a nearby property approximately 1.75 miles southwest of the Subject Property and was identified in the SHWS database due to a report on March 26, 2008 of a leaking dispenser on an AST used to store petroleum. Based on the distance from the Subject Property, the leaking petroleum incident on the nearby property is not considered a REC for the Subject Property.

AAMCO OF RICHMOND at 240 North Keeneland Drive, Richmond, KY. This facility is located on a nearby property approximately 1.75 miles southwest of the Subject Property and was identified in the EDR Hist Auto database due to presence of an automotive transmission repair shop from 2008 to 2014. Former presence of this facility on a nearby property is not considered a REC for the Subject Property.

NTW LLC #519 at 123 North Keeneland Drive, Richmond, KY. This facility is located on a nearby property approximately 1.70 miles southwest of the Subject Property and was identified in the RCRA NonGen / NLR database due to change in generator category for generation of hazardous waste resulting from an onsite

compliance inspection in January 2012. Former generation of hazardous waste at the facility on this nearby property is not considered a REC for the Subject Property.

MOTEL 6 (FORMER DAYS INN) at I-75 & US 421. This facility is located on a nearby property approximately 2 miles southwest of the Subject Property and was identified in the UST database due to former presence of a 10,000-gallon UST used to store gasoline. The former presence of the UST on this nearby property is not considered a REC for the Subject Property.

TO GO VALERO at 112 N Keeneland Drive, Richmond, KY. This facility is located on a nearby property approximately 1.70 miles west of the Subject Property and was identified in the UST database due to use of two USTs (8,000- and 12,000-gallon capacity) used to store unleaded gasoline at the site. Use of USTs on this nearby property is not considered a REC for the Subject Property.

FRIENDLY MART EXXON NO 12 at 2121 Lexington Road, Richmond, KY. This facility is located on a nearby property approximately 1.85 miles southwest of the Subject Property and was identified in the UST database due to use of two USTs (15,000-gallon capacity each) used to store unleaded gasoline at the site. Use of USTs on this nearby property is not considered a REC for the Subject Property.

BMV ENTERPRISES /LEXINGTON ROAD SHELL at 2120 Lexington Road, Richmond, KY. This facility is located on a nearby property approximately 1.82 miles southwest of the Subject Property and was identified in the RCRA NonGen / NLR, SB 193, UST and Financial Assurance databases. The RCRA NonGen / NLR database listing is due to change in generator category for generation of hazardous waste in August 2009. The UST, SB 193, and Financial Assurance database listings are due to presence of active USTs, removals of former USTs, and remedial activities associated with the UST removals. Former generation of hazardous waste, presence of active USTs, former presence of USTs, and financial assurance registrations at this nearby property are not considered a REC for the Subject Property.

HARDEES at 107 S Keeneland Drive, Richmond, KY. This facility is located on a nearby property approximately 1.82 miles southwest of the Subject Property and was identified in the UST database due to presence of two USTs installed in January 1997. Presence of USTs on this nearby property is not considered a REC for the Subject Property.

KTC MADISON CO MAINT GARAGE at 2441 Lexington Road Richmond, KY. This facility is located on a nearby property approximately 1.92 miles west of the Subject Property and was identified in the SHWS, INST CONTROLS, and NPDES databases. The NPDES listing is due to authorization to discharge wastewater under NPDES Permit KYG00057 for a minor discharger in January of 2003. Permitted discharge of wastewater on this nearby property is not considered a REC for the Subject Property. The SHWS and INST CONTROLS listings are due to an incident involving the release of an undisclosed hazardous material to the environment that impacted groundwater. The status of the incident is listed as 'Managed' under Closure Option B: Contained/Managed as of October 12, 2010. Based on distance to the Subject Property, contamination on this nearby property is not considered a REC for the Subject Property.

NORTHGATE SHELL at 120 Northgate Drive, Richmond, KY. This facility is located on a nearby property approximately 2.05 miles south of the Subject Property and was identified in the UST and SB 193 databases due to presence of active USTs, removals of former USTs, and remedial activities associated with the UST removals. Based on distance to the Subject Property, presence of active USTs, removals of former USTs, and remedial activities associated with the UST removals on this nearby property are not considered a REC for the Subject Property.

KOKOKU RUBBER INC at 120 Hanger Circle, Richmond, KY. This facility is located on a nearby property approximately 2.50 miles southwest of the Subject Property and was identified in the SHWS and AIRS databases. The SHWS listing is due to release of an undisclosed hazardous material in February 1995. Based on distance from the Subject Property, the release of hazardous material on this nearby property is not considered a REC for the Subject Property. The AIRS database listing is due to registration of the facility as a source of air quality emissions under the Kentucky State Implementation Plan. Permitted air quality emissions from this facility are not considered a REC for the Subject Property.

JELEMLIA SANDERS RESIDENCE at 111 Belair Street, Richmond, KY. This facility is located on a nearby property approximately 2.50 miles southwest of the Subject Property and was identified in the SHWS due to release of heating oil from an AST in April 2008. Based on distance from the Subject Property, the release of heating oil on this nearby property, is not considered a REC for the Subject Property.

Orphan sites, according to EDR, are not considered in the foregoing analysis due to poor or inadequate address information. The following orphan sites were identified in the EDR database review:

KY TRANSPORTATION CABINET (KYTC) at Garrard/Madison County Line KY 52. The address is located approximately 12 miles southwest of the Subject Property, which is outside of ASTM Standard search distances. Thus, the facility is not considered in this assessment.

KY TRANSPORTATION CABINET (KYTC) at KY 67 over I-75 in Madison County. The address is located approximately 1.75 miles west of the Subject Property, which is outside of ASTM Standard search distances. Thus, the facility is not considered in this assessment.

BETWEEN FAYETTE AND MADISON COUNTIES. Details of this orphan listing describe a release of hydraulic fluid to the Kentucky River between Fayette and Madison Counties. The nearest location of the segment of the Kentucky River between Fayette and Madison Counties is approximately 4.1 miles northwest of the Subject Property, which is outside of ASTM Standard search distances. Thus, the location is not considered in this assessment.

MADISON COUNTY FIRE. Details of this orphan listing describe a release of 1 gallon of hydrochloric acid along US 421 (a.k.a., Lexington Road) from a transport vehicle operated by Old Dominion Trucklines. According to the database listing details, the material was released to the soil and was cleaned up. Because this incident did not occur on the Subject Property, it is not considered a REC for the Subject Property.

PATTIE A CLAY HOSPITAL at 801 Eastern Bypass, Richmond, KY. The facility is located approximately 3.25 miles south of the Subject Property, which is outside of ASTM Standard search distances. Thus, the facility is not considered in this assessment.

BOB DAUGHERTY LANDFILL at US 25 Lexington Road, Richmond, KY. Details of this orphan listing indicate that a Construction, Demolition, and Debris (“CDD”) landfill of less than 1 acre in size was permitted then terminated. The location is approximately 3.25 miles west of the Subject Property, which is outside of ASTM Standard search distances. Thus, the facility is not considered in this assessment.

MADISON COUNTY AIRPORT at 124 Madison Airport Road, Richmond, KY. The facility is located approximately 10 miles south of the Subject Property, which is outside of ASTM Standard search distances. Thus, the facility is not considered in this assessment.

MADISON COUNTY AREA VOCATIONAL CENTER at Red House Road, Richmond, KY. This facility located approximately 2.75 miles south of the Subject Property was identified in the RCRA NonGen / NLR database due to change in generator category for generation of hazardous waste resulting from an onsite compliance inspection in February 2015. Previous to the generator status change, the facility was a Conditionally Exempt Small Quantity Generator of ignitable hazardous waste. No regulatory violations, spills, or releases of hazardous waste are reported. Former generation of hazardous waste at the facility is not considered a REC for the Subject Property.

OTTER CREEK STP at Red House Road, Richmond, KY. This facility is located approximately 0.32 miles east of the Subject Property and was identified in the EPA WATCH LIST database in June, July, and August 2012 due to wastewater treatment activities at the facility. The EPA WATCH LIST is maintained by the U.S. Environmental Protection Agency (“EPA”) to facilitate communications between the EPA and state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the EPA WATCH LIST indicates that additional dialogue between EPA, state, and local agencies is needed primarily because of the length of time the alleged violation has gone unaddressed or unresolved. Based on absence of additional database listings and no evidence of environmental impact to the Subject Property in relation to this facility’s activities, the facility is not considered a REC for the Subject Property.

MADISON CENTRAL HIGH SCHOOL at 705 North 2nd Street, Richmond, KY. The facility is located approximately 2.65 miles southeast of the Subject Property, which is outside of ASTM Standard search distances. Thus, the facility is not considered in this assessment.

RED HOUSE GROCERY at Red House Road, Richmond, KY. Details of this orphan listing in the Financial Assurance database indicate it is associated with the UST and SB 193 listings for the RED HOUSE COUNTRY STORE discussed above. The Financial Assurance listing indicates that coverage for up to \$1 million was approved in 1997 for cleanup activities associated with UST closure. Based on distance from the Subject Property and its location on the opposite side of Otter Creek, it is unlikely that contamination

from the facility impacted the Subject Property, and therefore, it is not considered a REC for the Subject Property.

WATERFORD PLACE at Colonel Drive, Richmond, KY. Waterford Place is a subdivision of Richmond on nearby property west of the Subject Property with an entrance along Colonel Drive. The subdivision was issued an NPDES permit for discharges of storm water from construction activities to the Hicks Branch of Blue Water Stream in 2002, and the permit expired in 2007. Former permitted discharges of stormwater on this nearby property are not considered a REC for the Subject Property.

STARLIN HOWELL ETAL at Red House Road, Richmond, KY. Details of the orphan listing indicate the location on nearby property along Red House Road was issued an NPDES permit for discharges to Dreaming Creek in 2009, and the permit expired in 2014. Former permitted discharges of stormwater on nearby property are not considered a REC for the Subject Property.

GREENS CROSSING WASTEWATER COL NORTH MADISON COUNTY SANITATION at Richmond, KY. Details of the orphan listing indicate the location on nearby property was issued an NPDES permit for discharges to Otter Creek and Muddy Creek in 2002, and the permit expired in 2007. Former permitted discharges of stormwater on nearby property are not considered a REC for the Subject Property.

CZAR COAL CORP at 2398 Red House Road Richmond, KY. Details of this orphan listing identify the location on nearby property along Red House Road. The location was identified in the ECHO and FINDS databases due to surface mining activities. Research into the ECHO database indicates that the surface mining activities associated with this orphan listing are in Martin County, Kentucky more than 90 miles east of the Subject Property, which is outside of ASTM Standard search distances. Thus, the facility is not considered in this assessment.

4.3 HISTORICAL USE INFORMATION

Historical use information for the Subject Property was obtained through review of historic aerial photographs and topographic maps. Summaries of the historical use information are included in the following sections.

4.3.1 Property Abstract

An abstract of the Subject Property was not provided for review as part of this Phase I ESA.

4.3.2 Aerial Photographs

Tetra Tech obtained historic aerial photographs for the Subject Property from EDR and additional aerial photographs were viewed in Google™ Earth Pro. The following table provides a summary of the information gathered from each photograph. Aerial photographs are presented in Appendix C.

Table 5. Summary of Information from Aerial Photographs

Year	Source	Comments
1950	EDR	The Subject Property is dominated by evidence of agricultural activities with structures along public and private roads throughout the Subject Property. Adjacent properties in all directions include agricultural land and small roads with structures along the roads.
1959-1960	EDR	No discernible changes from the 1950 aerial photograph.
1965	EDR	No discernible changes from the 1959-1960 aerial photographs.
1975	EDR	Additional structures and driveways are shown on adjacent properties along Three Forks Road near the central portions of the Subject Property. Road onto the Subject Property is shown south off of Bill Eads Road. A road with several additional structures is shown just south of the central portion of the Subject Property.
1984	EDR	The road on the Subject Property intersecting and south of Bill Eads road has been expanded further south.
1993-1997	EDR	An additional structure and driveway are shown on adjacent property along Lost Fork Road.
2004	Google™ Earth Pro	Additional structures are shown on adjacent property along Lost Fork Road and west of Otter Creek along Red House Road. Many new roads with structures and driveways are shown on adjacent property southwest of central portions of the Subject Property.
2006	Google™ Earth Pro	An additional driveway leading to a structure south of Bill Eads road is shown. A large complex of structures is shown on nearby property south of the Subject Property.
2008	EDR	No discernible changes from the 2006 Google Earth Pro imagery.
2012	EDR	No discernible changes from the 2008 aerial photograph.
2016	EDR	No discernible changes from the 2012 aerial photograph.
2018	Google™ Earth Pro	No discernible changes from the 2016 aerial photograph.

4.3.3 Historic Topographic Maps

Tetra Tech obtained historic USGS topographic maps for the Subject Property through EDR. The following table provides a summary of the information gathered from each map. The historic topographic maps are presented in Appendix D.

Table 6. Summary of Information from Topographic Maps

Quad	Year	Scale	Comments
Richmond	1892	1:125,000	A railroad line is depicted east of the Subject Property through the community of Redhouse, which includes several structures. Roads are depicted throughout the area. Communities of Ford and Boonesboro are depicted north of the Subject Property and the community of White Hall is depicted west of the Subject Property. West Fork Otter Creek, Otter Creek, and several unnamed tributaries are depicted throughout the area.

Quad	Year	Scale	Comments
Richmond	1897	1:125,000	A railroad line in same location as depicted in the 1892 topographical map is identified as Kentucky Central. There are no other discernible changes from the 1892 topographic map.
Union City; Richmond North; Ford; Winchester	1952	1:24,000	A railroad line in same location as depicted in the 1892 and 1897 topographical maps is identified as Louisville and Nashville. Roads, streams, and topographic isolines are depicted in greater detail. Forested areas and surface water bodies (ponds and lakes) are depicted throughout the area. The communities of Redhouse and White Hall are depicted with greater detail and many more structures. Structures are depicted along roads throughout the area. Cemeteries are depicted on adjacent properties north of and between portions of the Subject Property. Pipelines are depicted crossing several portions of the Subject Property. An electric power transmission line is depicted on adjacent property in a north/south configuration leading to Redhouse.
Richmond North; Winchester; Ford	1965	1:24,000	A total of 5 additional electric power transmission lines crossing portions of the Subject Property are depicted. A multi-laned divided road ("I-75") is depicted west of the Subject Property.
Richmond North; Union City	1979	1:24,000	There are no discernible changes from the 1965 topographic maps.
Winchester; Ford; Richmond North	1993	1:24,000	New roads with structures are depicted on nearby property southwest of the Subject Property on the west side of I-75.
Richmond North; Union City; Winchester; Ford	2013	1:24,000	Structures are not depicted on these topographic maps. Many new roads are depicted on adjacent property south of central portions of the Subject Property.

5.0 SITE RECONNAISSANCE

5.1 METHODOLOGY AND LIMITING CONDITIONS

Reconnaissance of the Subject Property was performed by Tetra Tech staff David Hermance on July 7 and 8, 2020 and Brandon Schack on September 3, 2020. Access to interiors of residential and agricultural structures was not available during the site reconnaissance. This limiting condition is not considered to be a significant data gap. No other limiting conditions were experienced during the reconnaissance.

5.2 GENERAL SITE SETTING

The Subject Property is located north of Richmond in Madison County, Kentucky. The vicinity consists of rolling hills with agricultural properties primarily used for hay, corn, and soybean production and grazing lands, small streams, farm ponds, residential properties, public and private roads, a railroad, two schools, the community of Redhouse, and the City of Richmond. Photographs of the Subject Property are included in Appendix A, and photograph locations are shown in Figure 2.

5.3 EXTERIOR OBSERVATIONS

The Subject Property consists of approximately 2,020.53 acres of land primarily used for agricultural purposes with residential and farmstead structures associated with agricultural activities that include hay production and grazing land for cattle.

5.3.1 Surface Staining and/or Stressed Vegetation

No evidence of surface staining or stressed vegetation was observed on the Subject Property during the reconnaissance.

5.3.2 Drums, Aboveground Storage Tanks, and Containers

ASTs with capacities estimated to be between 500 and 2,000 gallons were observed during the reconnaissance near residential and agricultural structures on the Subject Property and nearby properties. No staining or evidence of releases of the contents was observed in relation to the ASTs. Observed ASTs are shown in Photographs 52, 72, 75, and 97 in Appendix A.

5.3.3 Evidence of Waste Disposal

Waste management containers of the type for temporary storage prior to routine pick-up and off-site disposal were observed near residential and agricultural structures. An observed waste management container located on a nearby property is shown in Photograph 31 in Appendix A.

An area on Assessor's Parcel 0066-0000-0017-B (landowner Big Wind, LLC) was observed to have waste disposal areas on the ground, including an abandoned trailer, wooden "A-frame" construction material, and other refuse material. Additional evidence of waste disposal was observed on a nearby property including scrap metal, empty drums, appliances, and other materials. These waste materials are considered a *de minimis* condition because there is no evidence that indicates a threat to human health or the environment. These waste materials are shown in Photographs 26, 27, 125, 126, and 127 in Appendix A.

5.3.4 Fill Material

No fill material was observed during the reconnaissance.

5.3.5 Transformers

Pole-mounted transformers were observed along roads and near residential and agricultural structures on the Subject Property, adjacent properties, and nearby properties during the reconnaissance. No staining or evidence of releases of transformer fluid was observed. The pole-mounted transformers are shown in Photographs 1, 5, 20,

24, 44, 70, 72, and 115 in Appendix A. A substation transformer was observed on adjacent property at the Three Forks Substation. The Three Forks Substation is shown in Photograph 81 in Appendix A.

5.3.6 Vents, Air Stacks, and Odors

A small vent stack associated with communications tower equipment was observed on the Subject Property. The vent stack and communications tower equipment are shown in Photograph 65 in Appendix A.

No other air stacks, vents, or odors were observed or detected on the Subject Property.

5.3.7 Underground Storage Tanks

No USTs were observed or detected during the reconnaissance of the Subject Property.

5.3.8 Wells

Domestic water wells, public water systems, and oil and gas wells were not observed during the site reconnaissance.

5.3.9 Septic Systems

Septic systems were not observed during the site reconnaissance. Aboveground components of a subsurface utility vault were observed on a nearby property along Colonel Road. The components are shown in Photograph 3 in Appendix A.

5.3.10 Alteration in Vegetation

The Subject Property's primary land use is agriculture. Hay fields were observed to be cut with hay bales in storage areas. No other alterations in vegetation were observed on the Subject Property during the reconnaissance.

5.4 INTERIOR OBSERVATIONS

Access to interiors of residential and agricultural structures was not available during the site reconnaissance.

6.0 INTERVIEWS

6.1 SITE OWNERS

Questionnaires regarding Subject Property usage and environmental history were forwarded by Tetra Tech on behalf of AMS to landowners or representatives familiar with the Subject Property via mail, providing a self-addressed stamped envelope to facilitate return of the mailing. The list of landowners was provided by AMS due to its familiarity with both the owner (and/or associated representative) and the areas proposed for solar development. Landowner questionnaires were mailed on June 30, 2020 and September 8, 2020, and 62.5% of the

landowners responded. Interview participants were asked questions pertaining to their knowledge of current or historical conditions, events, or situations that could present a REC in the areas where the solar generation facility and associated facilities will be constructed.

According to the returned questionnaires, the primary land use within the Subject Property for at least the last 100 years is agricultural, including crop production of hay, soybeans, corn, tobacco, cattle grazing, and livestock production. The following information was provided by landowners pertaining to potential hazardous substances or petroleum on or adjacent to the Subject Property:

- On property owned by Sondra Lee Coomer and Ruby Jo Ward, two 800-gallon ASTs are used to store diesel fuel for dispensary to farm equipment. There is no indication that diesel fuel has been spilled or leaked to the environment from these ASTs.
- Solid waste disposal areas reported by the landowners include:
 - Burn areas used to burn brush and trees were reported on the parcels owned by Daniel Turner and Sandra Coomer.
 - Fence wire, metal roof materials, and other wastes that were not able to be burned were reported as deposited on parcels owned by Found Spoon LLC.

There is no indication that hazardous substances or petroleum was disposed at these solid waste disposal areas. Thus, these solid waste disposal areas are considered a *de minimis* condition because there is no evidence that indicates a threat to human health or the environment.

Copies of the completed questionnaires are provided in Appendix G. In the event that additional landowner questionnaires are received, Tetra Tech will review the responses and issue an addendum to this report if a response is indicative of a REC associated with the Subject Property.

6.2 LOCAL FIRE DEPARTMENT

Tetra Tech attempted to contact the Richmond Fire Department and the Madison County Fire Department on July 28, 2020, for information related to potential fires, releases of hazardous substances, and/or other emergency responses at or within the vicinity of the Subject Property. To date, neither organization has responded to messages requesting this information. In the event that one or both of these organizations responds with information indicative of a REC associated with the Subject Property, Tetra Tech will issue an addendum to this report.

6.3 LOCAL HEALTH DEPARTMENT

Tetra Tech attempted to contact the Madison County Health Department (“MCHD”) on July 28, 2020, for information related to releases of hazardous substances and/or other environmental issues in Madison County. To date, MCHD has not responded to a message requesting this information. In the event MCHD responds with information indicative of a REC associated with the Subject Property, Tetra Tech will issue an addendum to this report.

7.0 CONCLUSIONS

Tetra Tech performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 2247-16. Any exceptions to, or deviations from, this practice are described in Section 8.0 of this report.

7.1 RECOGNIZED ENVIRONMENTAL CONDITIONS

This assessment has revealed no evidence of RECs associated with the Subject Property.

7.2 HISTORIC RECOGNIZED ENVIRONMENTAL CONDITIONS

This assessment has revealed no Historic RECs associated with the Subject Property.

7.3 DE MINIMIS CONDITIONS

This assessment has revealed the following *de minimis* condition on the Subject Property:

- Solid waste disposal areas including areas where brush and trees are burned and deposition of metal and other wastes that cannot be burned were reported in returned Landowner Questionnaires. Also, the parcel owned by Big Wind, LLC (Assessor's Parcel 0066-0000-0017-B) was observed during the site reconnaissance to have waste disposal areas on the ground, including an abandoned trailer, wooden "A-frame" construction materials, and other refuse materials. These solid waste disposal areas are considered a *de minimis* condition because there is no evidence that indicates a threat to human health or the environment.

7.4 DATA GAPS

Data gaps encountered during the performance of the Phase I ESA included the following:

- The Richmond Fire Department, Madison County Fire Department, and MCHD did not respond to Tetra Tech's request for information regarding fires, emergency responses, hazardous substance releases, and environmental health issues.
- Access to interiors of residential and agricultural structures was not available during the site reconnaissance.

Absence of site listings for sites located on the Subject Property and within specified search distances from the Subject Property combined with site reconnaissance, historical records (aerial photographs and topographic maps) review, and landowner and occupant interviews render the data gaps experienced in conducting this Phase I ESA to be insignificant and did not hinder the ability of the environmental professional to identify RECs for the Subject Property.

8.0 DEVIATIONS

No deviations from ASTM E2247-16 were identified.

9.0 LIMITATIONS

9.1 SPECIAL TERMS AND CONDITIONS

This work was conducted in accordance with Tetra Tech's proposal, authorized June 18, 2020.

9.2 LIMITATIONS AND EXCEPTIONS

No Phase I ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with a site. Performance of ASTM Standard Practice E2247-16 is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs in connection with the Subject Property. The information presented in this report is based on professional opinions from our field reconnaissance and visual observations of the Subject Property and vicinity, and our interpretation of the available historical information and documents reviewed, as described in this report.

It should be recognized that this study was not intended to be a definitive investigation of potential environmental concerns at the Subject Property. The scope of services for this investigation was limited and should not be construed as a guarantee that no currently unrecognized environmental concerns exist at the Subject Property. However, this study was undertaken and completed in accordance with the professional standards and generally accepted practices of environmental consultants at the time of preparation. Business environmental risk may exist on the Subject Property that is beyond the scope of this investigation.

Opinions and recommendations presented apply to the Subject Property's conditions existing at the time of our investigation and those reasonably foreseeable. They do not necessarily apply to Subject Property changes of which Tetra Tech is not aware and has not had the opportunity to evaluate.

9.3 USER RELIANCE

This report is intended for the sole use of AMS unless otherwise authorized by Tetra Tech in writing. The scope of services performed in execution of this investigation may not be appropriate to satisfy the needs of other users, and any use or re-use of this document or the findings, conclusions, or recommendations presented is at the sole risk of said user.

10.0 REFERENCES CITED

- American Society of Testing and Materials (“ASTM”), 2016. E2247-16 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.
- Environmental Data Resources (“EDR”), June 30, 2020. EDR Area/Corridor Report, Inquiry Number 6106593.2s.
-- June 30, 2020. EDR Historical Topo Map Report, Inquiry Number 6106593.5.
-- June 30, 2020. The EDR Aerial Photo Decade Package, Inquiry Number 61065395.6.
-- June 30, 2020. EDR DataMap™ Well Search Report, Inquiry Number 61065395.2w.
- Federal Emergency Management Agency (“FEMA”). FEMA Flood Map Service Center, Flood Map Number 17177C0150C (March 3, 2011). <https://msc.fema.gov/portal/home>. Accessed July 20, 2020.
- Kentucky Department of Environmental Protection (“KDEP”). KDEP Agency Interest Search http://dep.gateway.ky.gov/eSearch/Search_AI.aspx. Accessed July 25, 2020.
- Kentucky Geological Survey. 2009. Geologic Map of Kentucky. https://kgs.uky.edu/kgsweb/olops/pub/kgs/GM19_12.pdf. Accessed July 21, 2020.
- Kentucky Division of Water, Water Quality Branch. “Kentucky Water Health Portal”. <https://watermaps.ky.gov/WaterHealthPortal/>. Accessed July 23, 2020.
- U.S. Department of Agriculture, Natural Resources Conservation Service. Web Soil Survey. <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed July 24, 2020.
- U.S. Environmental Protection Agency. Enforcement and Compliance History Online. <https://echo.epa.gov/detailed-facility-report?fid=110011213356>. Accessed July 27, 2020.
- U.S. Fish and Wildlife Service. National Wetlands Inventory, Wetlands Mapper. <https://www.fws.gov/wetlands/data/Mapper.html>. Accessed July 23, 2020.

11.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL

This report was prepared by Tetra Tech under the supervision of David Hermance, who also conducted the site reconnaissance. The findings, recommendations, specifications, and professional opinions presented in this report were prepared in accordance with generally accepted professional practice, and within the scope of the project. There is no other warranty, either express or implied.

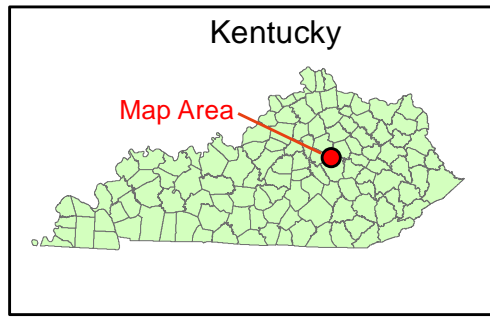
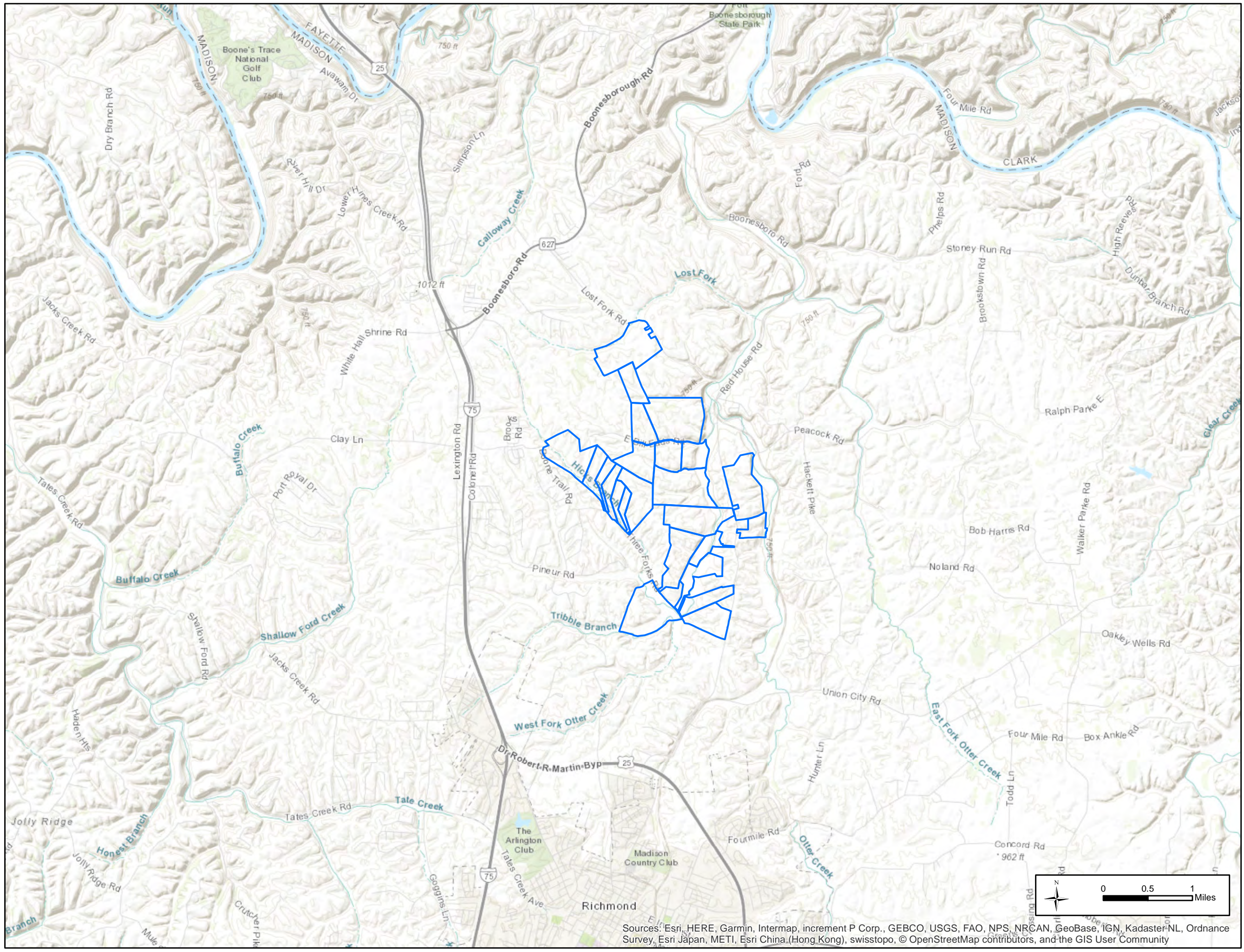
I, David Hermance, declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR 312.10. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. I have developed and performed the All Appropriate Inquiries in conformance with the standards and practices set forth in 40 CFR 312.

- Hold a current Professional Engineer's (P.E.) or Professional Geologist's (P.G.) license or registration from a state, tribe, or U.S. territory and have the equivalent of three (3) years of full-time relevant experience.
- Be a licensed or certified by the federal government, a state tribe, or U.S. territory to perform environmental inquiries as defined in §312.21 and have the equivalent of three (3) years of full-time relevant experience.
- Have a Baccalaureate or higher degree from an accredited institution of higher education in a relevant discipline of engineering, environmental science, or earth science and the equivalent of five (5) years of full-time relevant experience.
- As of the date of promulgation of the final rule, have a Baccalaureate or higher degree from an accredited institution of higher education and the equivalent of ten (10) years of full-time relevant experience.



David R. Hermance

FIGURES



Legend

Project Parcel Boundaries

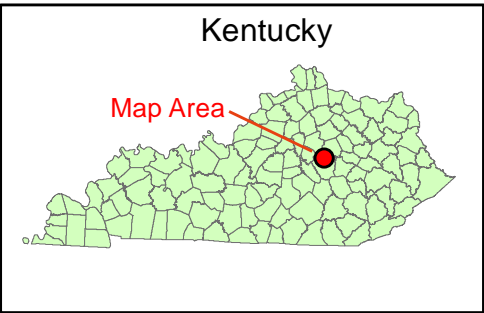
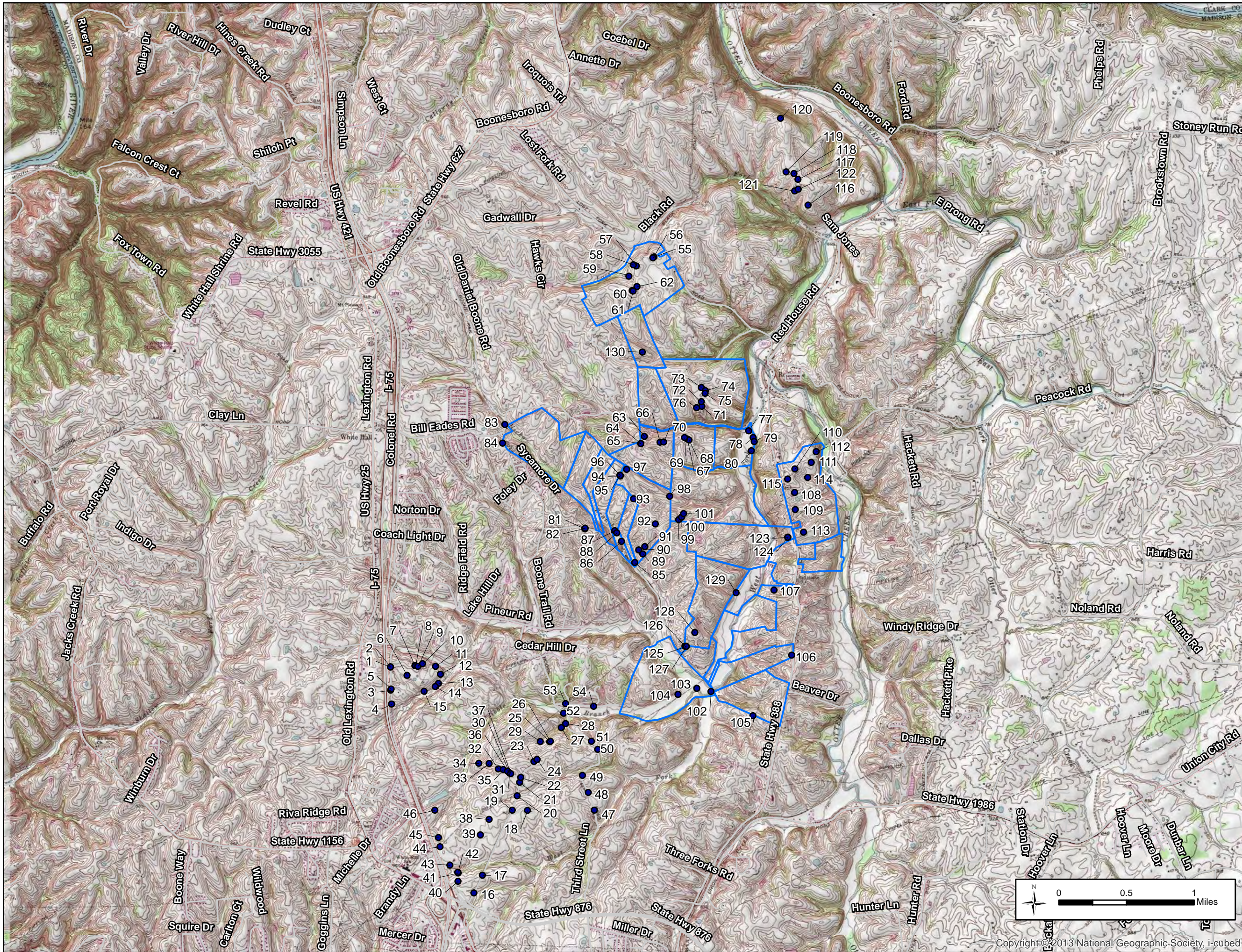


Project Vicinity

Madison Solar Project
Madison Co.
Kentucky

Figure 1
 Date: 9/11/2020

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster-NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community



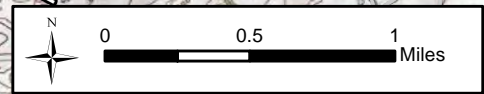
Legend

- Photo Locations
- Project Parcel Boundaries
- County Roads



Photo Log
Madison Solar Project
Madison Co.
Kentucky

Figure 2
 Date: 9/11/2020



Copyright © 2013 National Geographic Society, i-cubed

APPENDIX A. PHOTOGRAPHIC DOCUMENTATION

**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 1

Description:

View of agricultural property with pole-mounted transformer and farm pond on nearby property.

Orientation:

Facing E.



Photo: 2

Description:

View of agricultural land east of Interstate Highway 75 on nearby property.

Orientation:

Facing E.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 3

Description:

View of aboveground components of subsurface utility vault on nearby property.

Orientation:

Facing NW.



Photo: 4

Description:

View of agricultural property with electric power transmission lines on nearby property.

Orientation:

Facing SE.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 5

Description:

View of residential structure with pole-mounted transformer on nearby property.

Orientation:

Facing E.



Photo: 6

Description:

View of agricultural structure on nearby property.

Orientation:

Facing E.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 7

Description:
View of grazing lands on nearby property.

Orientation:
Facing NE.



Photo: 8

Photograph Unavailable

**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 9

Description:

View of grazing lands on nearby property.

Orientation:

Facing NE.



Photo: 10

Description:

View of farm pond with electric power transmission lines in background on nearby property.

Orientation:

Facing SE.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 11

Description:

View of grazing land in the foreground on nearby property, and residential structures on adjacent property in the background.

Orientation:

Facing NE.



Photo: 12

Description:

View of controlled burning of debris on nearby property.

Orientation:

Facing NE.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 13

Description:

View of controlled burning of debris on nearby property.

Orientation:

Facing N.



Photo: 14

Description:

View of grazing lands with stream on the nearby property

Orientation:

Facing S.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 15

Description:

View of post near stream on grazing land on nearby property.

Orientation:

Facing S.



Photo: 16

Description:

View of electric power transmission lines on nearby property.

Orientation:

Facing SW.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 17

Description:

View of corn fields on nearby property along McCord Lane.

Orientation:

Facing N.



Photo: 18

Description:

View of natural gas pipeline marker along McCord Lane on nearby property.

Orientation:

Facing NW.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 19

Description:
View of residential structure on the nearby property.

Orientation:
Facing W.



Photo: 20

Description:
View of residential structure with pole-mounted transformer on nearby property.

Orientation:
Facing W.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 21

Description:

View of agricultural structures on nearby property with natural gas pipeline marker in the foreground.

Orientation:

Facing NNE.



Photo: 22

Description:

View of farm pond on nearby property.

Orientation:

Facing E.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 23

Description:

View of agricultural structures and vehicles on nearby property.

Orientation:

Facing W.



Photo: 24

Description:

View of pole-mounted transformer on the nearby property.

Orientation:

Facing W.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 25

Description:

View of grazing land on nearby property.

Orientation:

Facing.



Photo: 26

Description:

View of debris including scrap metal, empty drums, appliances, and other materials on nearby property.

Orientation:

Facing N.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 27

Description:

View of empty metal drums in debris area on nearby property.

Orientation:

Facing W.



Photo: 28

Description:

View of electric power transmission lines on nearby property.

Orientation:

Facing W.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 29

Description:

View of nearby property with Old Wilderness Trail (public road) in background.

Orientation:

Facing NE.



Photo: 30

Description:

View of grazing land on nearby property with an agricultural structure on the Subject Property.

Orientation:

Facing SW.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 31

Description:

View of waste management container on nearby property.

Orientation:

Facing SW.



Photo: 32

Description:

View of aboveground storage tanks on nearby property.

Orientation:

Facing NW.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 33

Description:

View of grazing land on nearby property.

Orientation:

Facing W.



Photo: 34

Description:

View of grazing land on nearby property.

Orientation:

Facing S.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 35

Description:

View of grazing land on nearby property.

Orientation:

Facing W.



Photo: 36

Description:

View of managed scrap metal pile near agricultural structures on nearby property.

Orientation:

Facing S.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 37

Description:

View of interior of agricultural structure with 55-gallon drum on nearby property.

Orientation:

Facing S.



Photo: 38

Description:

View of agricultural structure on nearby property.

Orientation:

Facing S.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 39

Description:

View of grazing land on nearby property.

Orientation:

Facing S.



Photo: 40

Description:

View of grazing land and cornfield on nearby property.

Orientation:

Facing S.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 41

Description:
View of residential structure on nearby property.

Orientation:
Facing SE.



Photo: 42

Description:
View of natural gas pipeline marker near stream on nearby property.

Orientation:
Facing NE.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 43

Description:

View of forested area on nearby property.

Orientation:

Facing SW.



Photo: 44

Description:

View of agricultural structure with pole-mounted transformer on nearby property.

Orientation:

Facing NE.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 45

Description:

View of old grain storage bin (not in use) along private road on nearby property.

Orientation:

Facing NW.



Photo: 46

Description:

View of agricultural structure and cornfield on nearby property.

Orientation:

Facing NE.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 47

Description:

View of cornfield and grazing land on nearby property.

Orientation:

Facing NE.



Photo: 48

Description:

View of grazing land on nearby property.

Orientation:

Facing WNW.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 49

Description:

View of grazing land on nearby property.

Orientation:

Facing W.



Photo: 50

Description:

View of cut hay filed on nearby property.

Orientation:

Facing W.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 51

Description:

View of grazing land on nearby property with natural gas pipeline markers along Old Wilderness Trail.

Orientation:

Facing W.



Photo: 52

Description:

View of grazing land on nearby property.

Orientation:

Facing W.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 53

Description:

View of grazing land on nearby property.

Orientation:

Facing SE.



Photo: 54

Description:

View of cleared area on nearby property with a natural gas pipeline marker.

Orientation:

Facing NE.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 55

Description:

View of grazing land on the Subject Property with electric power transmission lines in the background.

Orientation:

Facing NW.



Photo: 56

Description:

View of abandoned residential structure on the Subject Property.

Orientation:

Facing N.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 57

Description:

View of grazing land on the Subject Property with a natural gas pipeline marker.

Orientation:

Facing S.



Photo: 58

Description:

View of grazing land on the Subject Property.

Orientation:

Facing NW.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 59

Description:

View of grazing land on the Subject Property.

Orientation:

Facing SE.



Photo: 60

Description:

View of grazing land on the Subject Property.

Orientation:

Facing S.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 61

Description:

View of grazing land on the Subject Property.

Orientation:

Facing W.



Photo: 62

Description:

View of electric power transmission lines crossing grazing land on the Subject Property.

Orientation:

Facing S.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 63

Description:

View of an agricultural structure on the Subject Property.

Orientation:

Facing SE.



Photo: 64

Description:

View of a communications tower on the Subject Property.

Orientation:

Facing SW.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 65

Description:

View of communications tower equipment with vent stack on side of structure on the Subject Property.

Orientation:

Facing SW.



Photo: 66

Description:

View of farm pond on the Subject Property.

Orientation:

Facing SE.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 67

Description:

View of residential structure on the Subject Property.

Orientation:

Facing N.



Photo: 68

Description:

View of residential structure on the Subject Property.

Orientation:

Facing NE.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 69

Description:

View of grazing land and farm pond on the Subject Property.

Orientation:

Facing SE.



Photo: 70

Description:

View of pole-mounted transformer on the Subject Property.

Orientation:

Facing SW.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 71

Description:

View of abandoned residential structure on the Subject Property.

Orientation:

Facing NW.



Photo: 72

Description:

View of an aboveground storage tank and pole-mounted transformer near an agricultural structure on the Subject Property.

Orientation:

Facing E.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 73

Description:

View of farm pond on grazing land on the Subject Property.

Orientation:

Facing NE.



Photo: 74

Description:

View of farm pond on grazing land on the Subject Property.

Orientation:

Facing SE.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 75

Description:

View of hay bale storage with chemical mixing tank on the Subject Property.

Orientation:

Facing SE.



Photo: 76

Description:

View of grazing land on the Subject Property.

Orientation:

Facing NW.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 77

Description:

View of rock wall on grazing land on the Subject Property.

Orientation:

Facing S.



Photo: 78

Description:

View of agricultural structure on the Subject Property.

Orientation:

Facing SW.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 79

Description:

View of West Fork Otter Creek along the Subject Property boundary.

Orientation:

Facing S.



Photo: 80

Description:

View of private road on the Subject Property.

Orientation:

Facing S.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 81

Description:

View of the Three Forks Substation with transformer on adjacent property.

Orientation:

Facing S.



Photo: 82

Description:

View of electric power transmission lines along Three Forks Road on adjacent property with the Subject Property in the Background.

Orientation:

Facing N.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 83

Description:

View of old vehicle among
vegetation n adjacent
property.

Orientation:

Facing N.



Photo: 84

Description:

View of recently cut hay
field on the Subject
Property.

Orientation:

Facing E.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 85

Description:

View of residential structure on the Subject Property.

Orientation:

Facing NE.



Photo: 86

Description:

View of grazing land on the Subject Property.

Orientation:

Facing N.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 87

Description:

View of agricultural structure on the Subject Property.

Orientation:

Facing N.



Photo: 88

Description:

View of grazing land on the Subject Property.

Orientation:

Facing N.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 89

Description:

View of portions of a residential structure with grazing land in the background on the Subject Property.

Orientation:

Facing NE.



Photo: 90

Description:

View of grazing land on the Subject Property.

Orientation:

Facing NW.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 91

Description:

View of recently cut hay field on the Subject Property.

Orientation:

Facing NW.



Photo: 92

Description:

View of recently cut hay field on the Subject Property.

Orientation:

Facing NW.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 93

Description:

View of recently cut hay field on the Subject Property.

Orientation:

Facing NW.



Photo: 94

Description:

View of grazing land on the Subject Property.

Orientation:

Facing SW.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 95

Description:

View of grazing land on the Subject Property.

Orientation:

Facing W.



Photo: 96

Description:

View of recently cut hay field on the Subject Property.

Orientation:

Facing NW.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 97

Description:

View of agricultural structures with aboveground storage tanks on the Subject Property.

Orientation:

Facing N.



Photo: 98

Description:

View of grazing land on the Subject Property.

Orientation:

Facing E.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 99

Description:

View of farm pond on grazing land on the Subject Property.

Orientation:

Facing E.



Photo: 100

Description:

View of grazing land on the Subject Property.

Orientation:

Facing NE.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 101

Description:

View of grazing land on the Subject Property.

Orientation:

Facing NE.



Photo: 102

Description:

View of soybean field on the Subject Property.

Orientation:

Facing W.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 103

Description:

View of soybean field on the Subject Property.

Orientation:

Facing SW.



Photo: 104

Description:

View of agricultural structure on the Subject Property.

Orientation:

Facing S.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 105

Description:

View of grazing land with electric power transmission lines on the Subject Property.

Orientation:

Facing N.



Photo: 106

Description:

View of grazing land with electric power transmission lines on the Subject Property.

Orientation:

Facing WSW.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 107

Description:

View of farm pond on adjacent property.

Orientation:

Facing W.



Photo: 108

Description:

View of farm pond near hay field and grazing land on the Subject Property.

Orientation:

Facing SE.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 109

Description:

View of grazing land on the Subject Property.

Orientation:

Facing SE.



Photo: 110

Description:

View of agricultural structure on the Subject Property.

Orientation:

Facing NE.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 111

Description:

View of grazing land on the Subject Property.

Orientation:

Facing E.



Photo: 112

Description:

View of recently cut hay field on the Subject Property.

Orientation:

Facing N.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 113

Description:

View of farm pond on the Subject Property.

Orientation:

Facing E.



Photo: 114

Description:

View of residential structure on adjacent property.

Orientation:

Facing S.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 115

Description:

View of agricultural structure with pole-mounted transformer on the Subject Property.

Orientation:

Facing NE.



Photo: 116

Description:

View of electric power transmission lines crossing grazing land on nearby property.

Orientation:

Facing NE.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 117

Description:
View of agricultural structure on nearby property.

Orientation:
Facing N.



Photo: 118

Description:
View of farm pond on nearby property.

Orientation:
Facing SW.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 119

Description:
View of rock pile on
grazing land on nearby
property.

Orientation:
Facing SSW.



Photo: 120

Description:
View of grazing land on
nearby property.

Orientation:
Facing S.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 121

Description:
View of filled cistern location on nearby property.

Orientation:
Facing E.



Photo: 122

Description:
View of electric power transmission lines crossing on nearby property.

Orientation:
Facing S.



**Photographic Documentation
Madison Solar Project
7, 8 July 2020**

Photo: 123

Description:

View of grazing land on the Subject Property.

Orientation:

Facing W.



Photo: 124

Description:

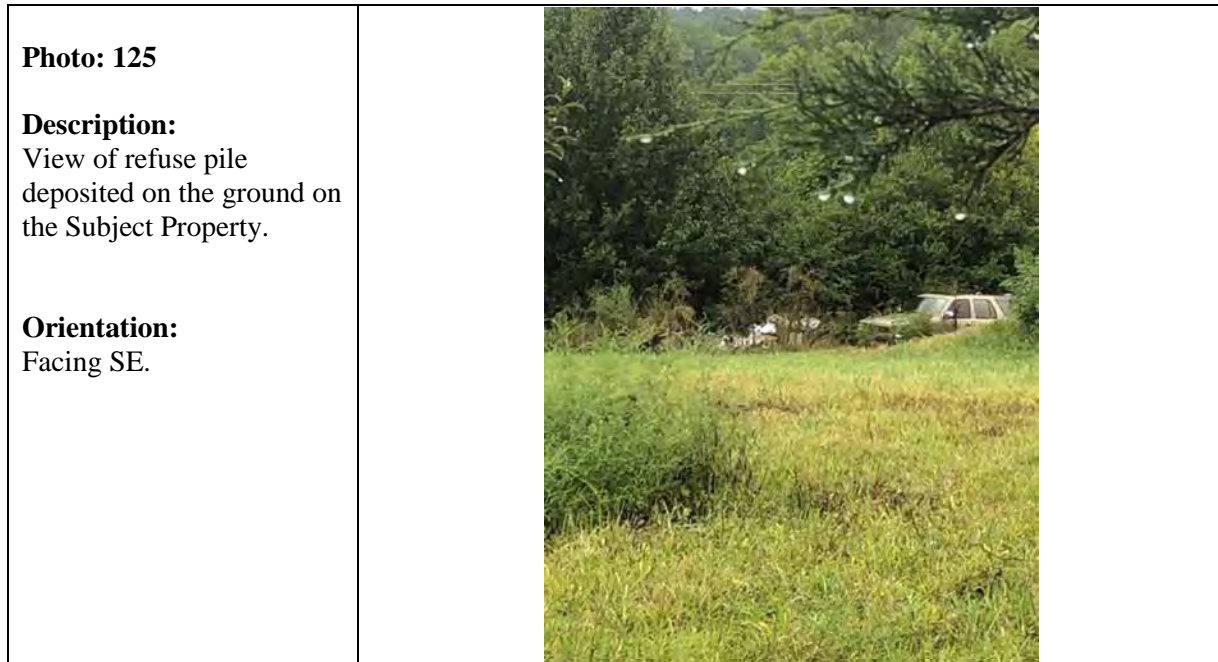
View of private road among grazing land and agricultural structures on the Subject Property.

Orientation:

Facing SW.



**Photographic Documentation
Madison Solar Project
3 September 2020**



**Photographic Documentation
Madison Solar Project
3 September 2020**



**Photographic Documentation
Madison Solar Project
3 September 2020**

Photo: 129

Description:

View of cattle feeding equipment on grazing land on the Subject Property.

Orientation:

Facing N.



Photo: 130

Description:

View of cemetery on the Subject Property.

Orientation:

Facing SE.



APPENDIX B. EDR RADIUS MAP™ REPORT WITH GEOCHECK®

Madison Solar

Madison Solar

Richmond, KY 40475

Inquiry Number: 6106593.2s

June 30, 2020

EDR Area / Corridor Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary	ES1
Mapped Sites Summary	2
Key Map	2
Map Findings Summary	3
Focus Maps	7
Map Findings	47
Orphan Summary	OR-1
Government Records Searched/Data Currency Tracking	GR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2020 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

SUBJECT PROPERTY INFORMATION

ADDRESS

MADISON SOLAR
RICHMOND, KY 40475

TARGET PROPERTY SEARCH RESULTS

The Target Property was identified in the following databases.

Page Numbers and Map Identifications refer to the EDR Area/Corridor Report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

STANDARD ENVIRONMENTAL RECORDS

State and tribal registered storage tank lists

AST: Above Ground Storage Tanks

A review of the AST list, as provided by EDR, and dated 02/19/2020 has revealed that there are 2 AST sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
AT&T MOBILITY	297 E BILL EADS RD	1 / 8	46
VERIZON WIRELESS	285 E BILL EADS RD	A2 / 8	46

ADDITIONAL ENVIRONMENTAL RECORDS

Records of Emergency Release Reports

SPILLS: State spills

A review of the SPILLS list, as provided by EDR, and dated 04/02/2020 has revealed that there are 5 SPILLS sites within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
Not reported Facility Status: Env. Closed		4 / 12	52

EXECUTIVE SUMMARY

Inc ID: 2430339		
Not reported	5 / 10	53
Facility Status: Env. Closed		
Inc ID: 2348197		
Not reported	B6 / 10	53
Facility Status: Env. Closed		
Inc ID: 2301007		
Not reported	B7 / 10	54
Facility Status: Env. Closed		
Inc ID: 2301009		
Not reported	B8 / 10	55
Facility Status: Env. Closed		
Inc ID: 2301261		

Other Ascertainable Records

AIRS: Permitted Airs Facility Listing

A review of the AIRS list, as provided by EDR, and dated 02/14/2020 has revealed that there is 1 AIRS site within the requested target property.

<u>Site</u>	<u>Address</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
AT&T MOBILITY - BILL Facility Id: 2115100086	BILL EADS RD	A3 / 8	46

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Page Numbers and Map Identifications refer to the EDR Area/Corridor Report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

SHWS: State Leads List

A review of the SHWS list, as provided by EDR, and dated 05/15/2020 has revealed that there are 4 SHWS sites within approximately 1 mile of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
MADISON CO BOARD OF	230 NORTH KEENELAND	WSW 0 - 1/8 (0.112 mi.)	D13 / 15	61

EXECUTIVE SUMMARY

Facility Id: 99640

Facility Status: Closed

KTC MADISON CO MAINT **2441 LEXINGTON RD** **W 1/4 - 1/2 (0.257 mi.)** **23 / 10** **81**

Facility Id: 2830

Facility Status: Managed

KOKOKU RUBBER INC **120 HANGER CIRCLE** **SW 1/2 - 1 (0.781 mi.)** **25 / 18** **87**

Facility Id: 2829

Facility Status: Closed

JELEMIA SANDERS RESI **111 BELAIR ST.** **SSE 1/2 - 1 (0.873 mi.)** **26 / 19** **96**

Facility Id: 98476

Facility Status: Closed

State and tribal leaking storage tank lists

SB193: SB193 Branch Site Inventory List

A review of the SB193 list, as provided by EDR, and dated 09/05/2006 has revealed that there are 3 SB193 sites within approximately 0.5 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
REDHOUSE COUNTRY STO Facility Id: 3363076	2550 RED HOUSE RD	WSW 0 - 1/8 (0.006 mi.)	9 / 8	56
LEXINGTON ROAD SHELL Facility Id: 0921076	2120 LEXINGTON RD	WSW 1/8 - 1/4 (0.217 mi.)	F21 / 15	72
NORTHGATE SHELL Facility Id: 8210076	120 NORTHGATE DR	S 1/4 - 1/2 (0.486 mi.)	24 / 19	82

State and tribal registered storage tank lists

UST: Underground Storage Tank Database

A review of the UST list, as provided by EDR, and dated 02/04/2020 has revealed that there are 6 UST sites within approximately 0.25 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
REDHOUSE COUNTRY STO Tank Status: TCP Tank Status: TRM Tank Status: TR8 Facility Id: 59593	2550 RED HOUSE RD	WSW 0 - 1/8 (0.006 mi.)	9 / 8	56
MOTEL 6 (FORMER DAYS) Tank Status: TRM Facility Id: 69463	I-75 & US 421	SW 1/8 - 1/4 (0.134 mi.)	17 / 15	64
TO GO VALERO Tank Status: TAC Facility Id: 57387	112 N KEENELAND DR	WSW 1/8 - 1/4 (0.154 mi.)	E18 / 15	66
FRIENDLY MART EXXON	2121 LEXINGTON RD	WSW 1/8 - 1/4 (0.206 mi.)	F19 / 15	68

EXECUTIVE SUMMARY

Tank Status: TAC
Facility Id: 59640

LEXINGTON ROAD SHELL **2120 LEXINGTON RD** **WSW 1/8 - 1/4 (0.217 mi.)** **F21 / 15** **72**

Tank Status: TAC
Tank Status: TRM
Facility Id: 59610
Closed In Place Date: 12/22/1998
Closed In Place Date: 03/16/1998

HARDEES **107 S KEENELAND DR** **WSW 1/8 - 1/4 (0.231 mi.)** **F22 / 15** **79**

Tank Status: TTC
Facility Id: 59645
Closed In Place Date: 01/01/2006

State and tribal institutional control / engineering control registries

INST CONTROL: State Superfund Database

A review of the INST CONTROL list, as provided by EDR, and dated 05/19/2020 has revealed that there is 1 INST CONTROL site within approximately 0.5 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
KTC MADISON CO MAINT Incident Id: 2830	2441 LEXINGTON RD	W 1/4 - 1/2 (0.257 mi.)	23 / 10	81

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/23/2020 has revealed that there are 2 RCRA NonGen / NLR sites within approximately 0.25 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
NTW LLC #519 EPA ID:: KYR000049742	123 N. KEENELAND DRI	WSW 1/8 - 1/4 (0.129 mi.)	E16 / 15	62
BMV ENTERPRISES/LEXI EPA ID:: KYR000050690	2120 LEXINGTON ROAD	WSW 1/8 - 1/4 (0.217 mi.)	F20 / 15	70

US MINES: Mines Master Index File

A review of the US MINES list, as provided by EDR, has revealed that there are 3 US MINES sites within approximately 0.25 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
D G S COAL COMPANY I Database: US MINES, Date of Government Version: 02/11/2020		SSW 0 - 1/8 (0.081 mi.)	C10 / 4	59

EXECUTIVE SUMMARY

Mine ID:: 1512873

TENKILLER MINING SER	SSW 0 - 1/8 (0.099 mi.)	C11 / 4	60
Database: US MINES, Date of Government Version: 02/11/2020			
Mine ID:: 1510123			

JASPER & ASSOCIATES	SSW 0 - 1/8 (0.118 mi.)	15 / 4	62
Database: US MINES, Date of Government Version: 02/11/2020			
Mine ID:: 1512440			

ABANDONED MINES: Abandoned Mines

A review of the ABANDONED MINES list, as provided by EDR, and dated 03/05/2020 has revealed that there is 1 ABANDONED MINES site within approximately 0.25 miles of the requested target property.

<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
NO 2 TIPPLE		SSW 0 - 1/8 (0.103 mi.)	C12 / 4	60

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR Exclusive Historical Auto Stations

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the requested target property.

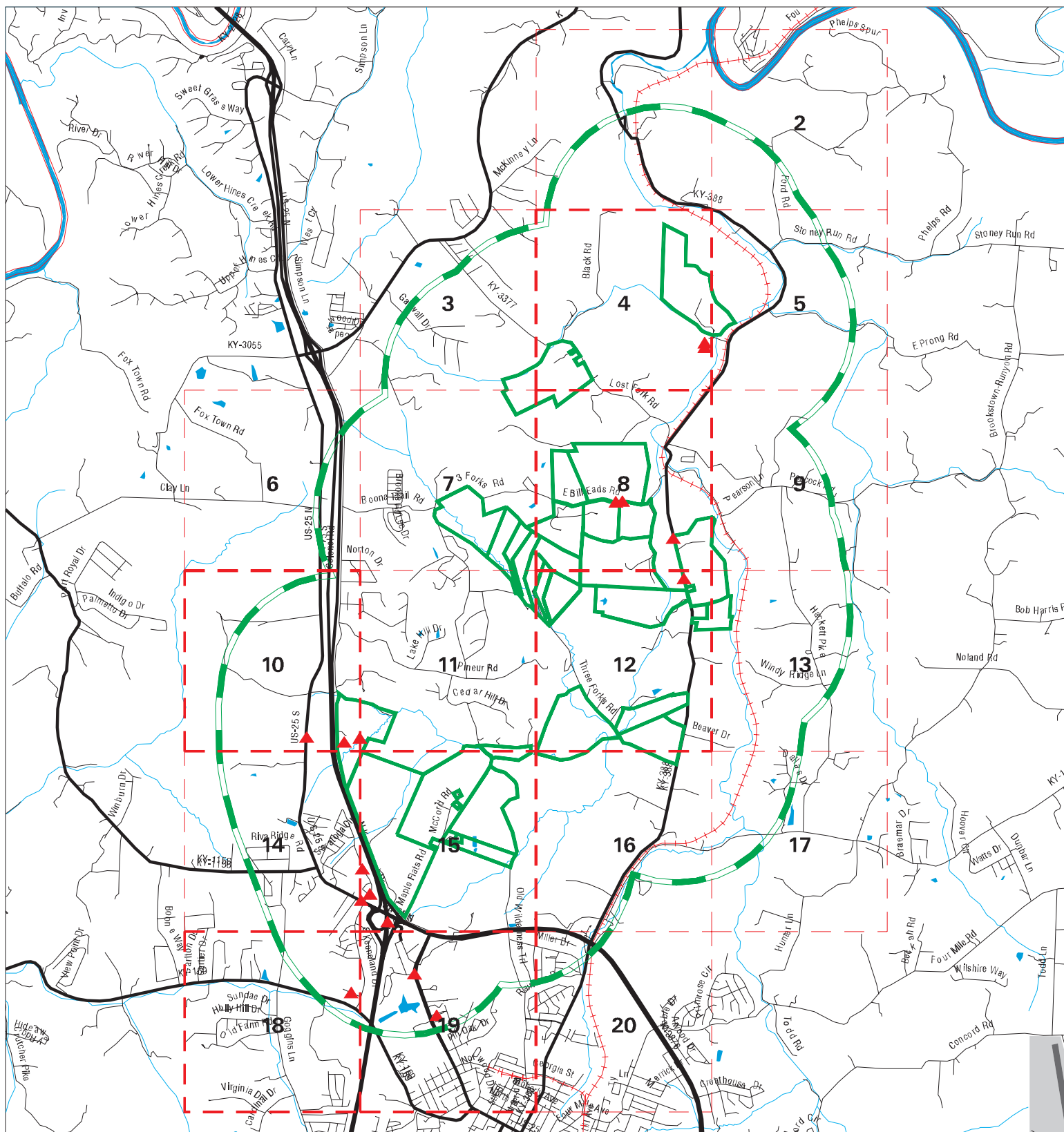
<u>Site</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID / Focus Map(s)</u>	<u>Page</u>
AAMCO OF RICHMOND	240 N KEENELAND DR S	WSW 0 - 1/8 (0.112 mi.)	D14 / 15	61

MAPPED SITES SUMMARY

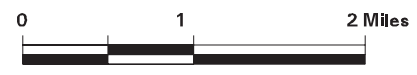
Target Property:
MADISON SOLAR
RICHMOND, KY 40475

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION		
1 / 8	AT&T MOBILITY	297 E BILL EADS RD	AST			TP
A2 / 8	VERIZON WIRELESS	285 E BILL EADS RD	AST			TP
A3 / 8	AT&T MOBILITY - BILL	BILL EADS RD	AIRS			TP
4 / 12			SPILLS			TP
5 / 10			SPILLS			TP
B6 / 10			SPILLS			TP
B7 / 10			SPILLS			TP
B8 / 10			SPILLS			TP
9 / 8	REDHOUSE COUNTRY STO	2550 RED HOUSE RD	SB193, UST	31	0.006	WSW
C10 / 4	D G S COAL COMPANY I		US MINES	429	0.081	SSW
C11 / 4	TENKILLER MINING SER		US MINES	525	0.099	SSW
C12 / 4	NO 2 TIPPLE		ABANDONED MINES	543	0.103	SSW
D13 / 15	MADISON CO BOARD OF	230 NORTH KEENELAND	SHWS	592	0.112	WSW
D14 / 15	AAMCO OF RICHMOND	240 N KEENELAND DR S	EDR Hist Auto	594	0.112	WSW
15 / 4	JASPER & ASSOCIATES		US MINES	621	0.118	SSW
E16 / 15	NTW LLC #519	123 N. KEENELAND DRI	RCRA NonGen / NLR	681	0.129	WSW
17 / 15	MOTEL 6 (FORMER DAYS	I-75 & US 421	UST	705	0.134	SW
E18 / 15	TO GO VALERO	112 N KEENELAND DR	UST	814	0.154	WSW
F19 / 15	FRIENDLY MART EXXON	2121 LEXINGTON RD	UST	1090	0.206	WSW
F20 / 15	BMV ENTERPRISES/LEXI	2120 LEXINGTON ROAD	RCRA NonGen / NLR	1145	0.217	WSW
F21 / 15	LEXINGTON ROAD SHELL	2120 LEXINGTON RD	SB193, UST, Financial Assurance	1145	0.217	WSW
F22 / 15	HARDEES	107 S KEENELAND DR	UST	1221	0.231	WSW
23 / 10	KTC MADISON CO MAINT	2441 LEXINGTON RD	SHWS, INST CONTROL, NPDES	1355	0.257	West
24 / 19	NORTHGATE SHELL	120 NORTHGATE DR	SB193, UST	2568	0.486	South
25 / 18	KOKOKU RUBBER INC	120 HANGER CIRCLE	SHWS, AIRS	4126	0.781	SW
26 / 19	JELEMIA SANDERS RESI	111 BELAIR ST.	SHWS	4612	0.873	SSE

Key Map - 6106593.2s



- ▲ Sites
- ▬ Target Property
- ▬ Search Buffer
- ▬ Focus Map - No Sites
- Focus Map - Sites
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA



SITE NAME: Madison Solar
ADDRESS: Madison Solar
CITY/STATE: Richmond KY
ZIP: 40475

CLIENT: Tetra Tech MM
CONTACT: David Hermance
INQUIRY #: 6106593.2s
DATE: 06/30/20

9:12 AM

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<u>STANDARD ENVIRONMENTAL RECORDS</u>								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site list</i>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	TP		NR	NR	NR	NR	NR	0
<i>State- and tribal - equivalent CERCLIS</i>								
SHWS	1.000		1	0	1	2	NR	4
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
PSTEAF	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
SB193	0.500		1	1	1	NR	NR	3
<i>State and tribal registered storage tank lists</i>								
FEMA UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UST	0.250		1	5	NR	NR	NR	6
AST	0.250	2	0	0	NR	NR	NR	2
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	1	NR	NR	1
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<u>ADDITIONAL ENVIRONMENTAL RECORDS</u>								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
SWRCY	0.500		0	0	0	NR	NR	0
HIST LF	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP	5	NR	NR	NR	NR	NR	5
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	2	NR	NR	NR	2
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		3	0	NR	NR	NR	3
ABANDONED MINES	0.250		1	0	NR	NR	NR	1
FINDS	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
AIRS	TP	1	NR	NR	NR	NR	NR	1
ASBESTOS	TP		NR	NR	NR	NR	NR	0
COAL ASH	0.500		0	0	0	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
LEAD	TP		NR	NR	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		1	NR	NR	NR	NR	1
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS	TP		NR	NR	NR	NR	NR	0
---------	----	--	----	----	----	----	----	---

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
RGA LF	TP		NR	NR	NR	NR	NR	0
- Totals --		8	8	8	3	2	0	29

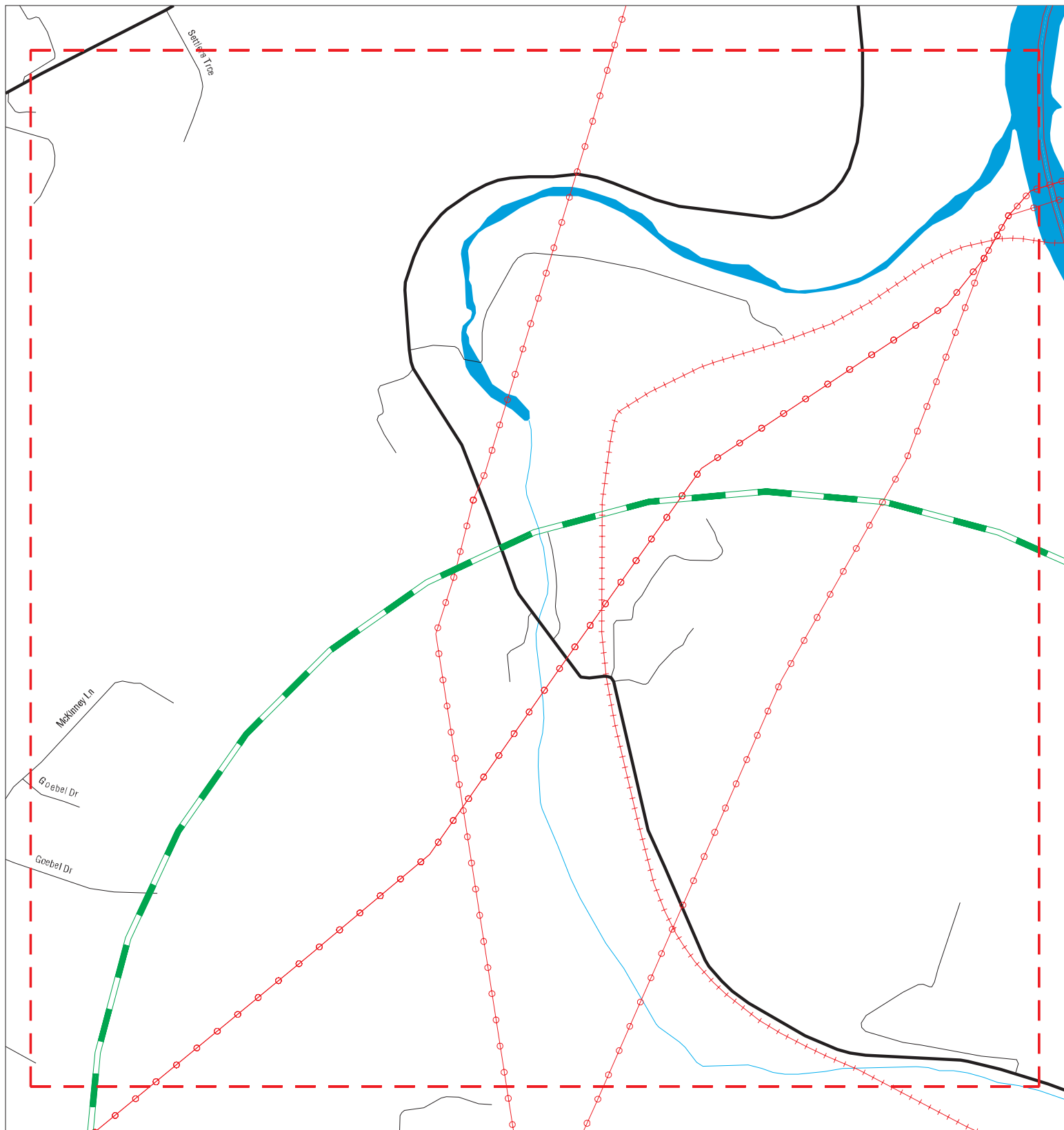
NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Focus Map - 1 - 6106593.2s



- | | | | |
|--|---|--|---|
|  Sites |  Focus Map - Sites |  Indian Reservations BIA |  |
|  Target Property |  Power Line |  National Priority List Sites | |
|  Search Buffer |  Dept. Defense Sites | | |
|  Focus Map - No Sites | | | |

SITE NAME: Madison Solar
ADDRESS: Madison Solar
CITY/STATE: Richmond KY
ZIP: 40475

CLIENT: Tetra Tech MM
CONTACT: David Hermance
INQUIRY #: 6106593.2s
DATE: 06/30/20

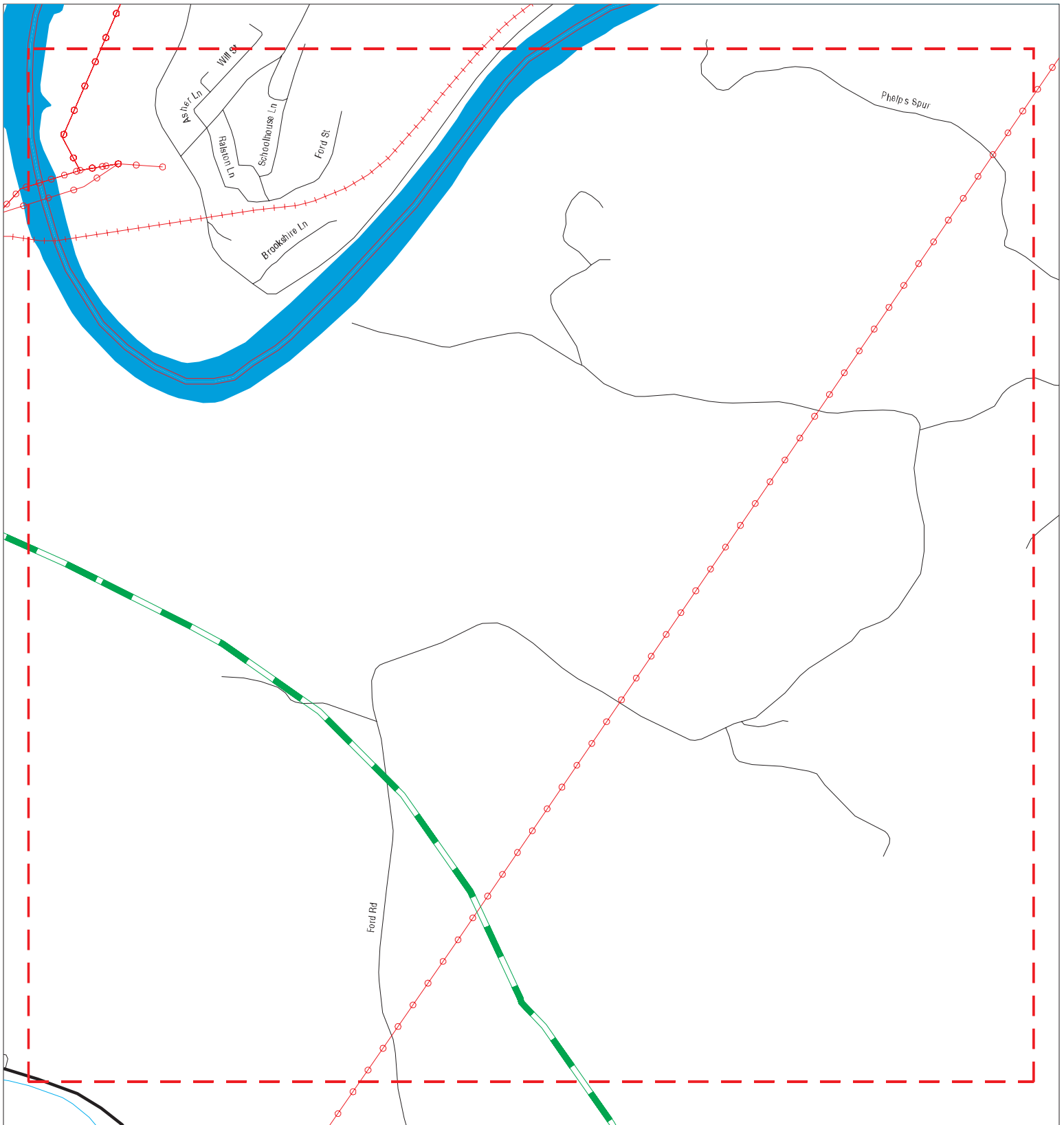
MAPPED SITES SUMMARY - FOCUS MAP 1










Target Property:
MADISON SOLAR
RICHMOND, KY 40475

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
-----------------------	-----------	---------	-------------------	-------------------------------

NO MAPPED SITES FOUND

Focus Map - 2 - 6106593.2s



-  Sites
-  Target Property
-  Search Buffer
-  Focus Map - No Sites
-  Focus Map - Sites
-  Power Line
-  National Priority List Sites
-  Dept. Defense Sites
-  Indian Reservations BIA



SITE NAME: Madison Solar
 ADDRESS: Madison Solar
 CITY/STATE: Richmond KY
 ZIP: 40475

CLIENT: Tetra Tech MM
 CONTACT: David Hermance
 INQUIRY #: 6106593.2s
 DATE: 06/30/20

MAPPED SITES SUMMARY - FOCUS MAP 2

Target Property:
MADISON SOLAR
RICHMOND, KY 40475

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
-----------------------	-----------	---------	-------------------	-------------------------------

NO MAPPED SITES FOUND

Focus Map - 3 - 6106593.2s



- ▲ Sites
- ▬ Focus Map - Sites
- ▨ Indian Reservations BIA
- ▬ Target Property
- Power Line
- ▨ National Priority List Sites
- ▬ Focus Map - No Sites
- ▨ Dept. Defense Sites



SITE NAME: Madison Solar
ADDRESS: Madison Solar
CITY/STATE: Richmond KY
ZIP: 40475

CLIENT: Tetra Tech MM
CONTACT: David Hermance
INQUIRY #: 6106593.2s
DATE: 06/30/20

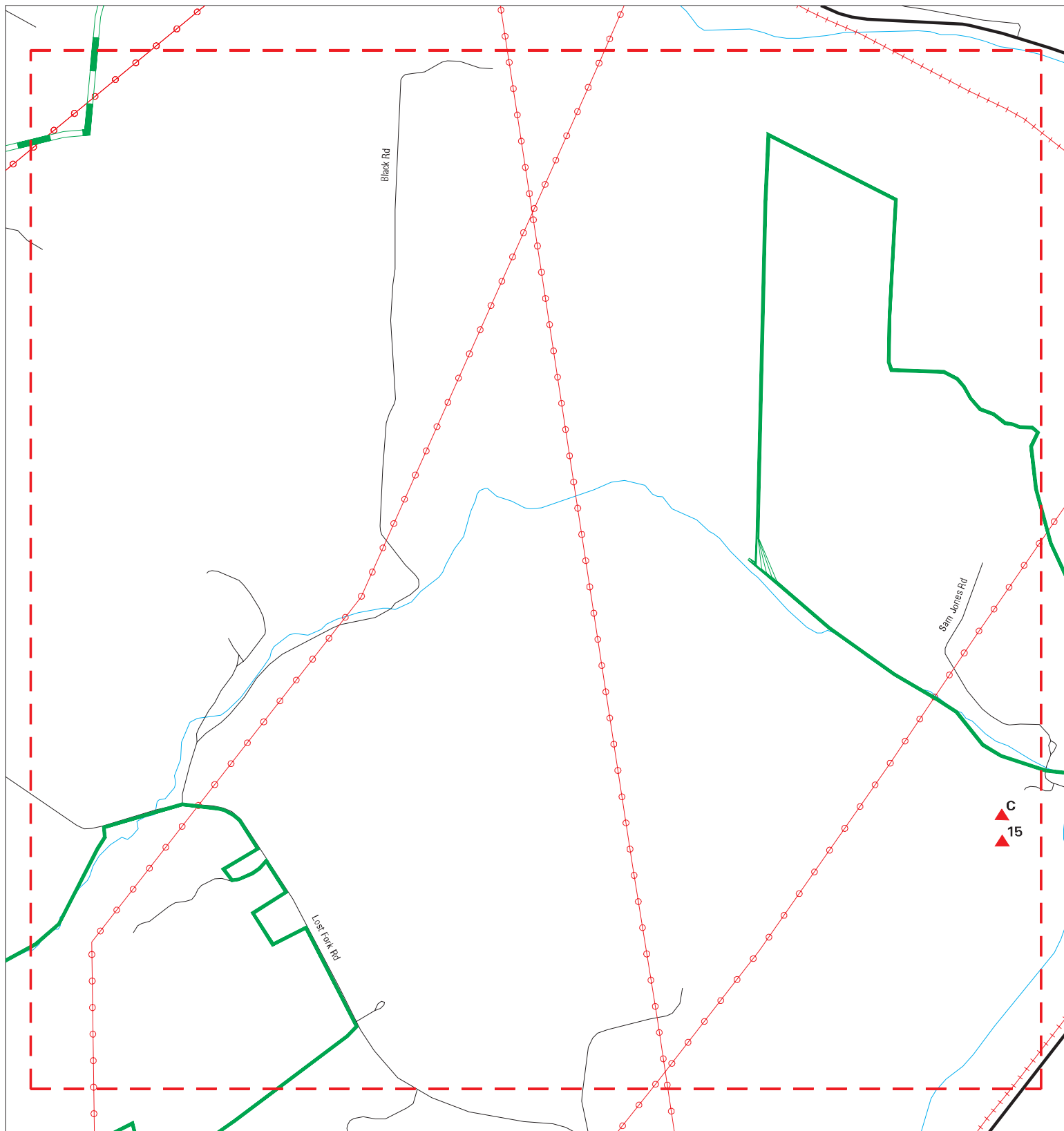
MAPPED SITES SUMMARY - FOCUS MAP 3

Target Property:
MADISON SOLAR
RICHMOND, KY 40475

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
-----------------------	-----------	---------	-------------------	-------------------------------

NO MAPPED SITES FOUND

Focus Map - 4 - 6106593.2s



- ▲ Sites
- ▬ Target Property
- ▬ Search Buffer
- ▬ Focus Map - No Sites
- ▬ Focus Map - Sites
- ▬ Power Line
- ▬ National Priority List Sites
- ▬ Dept. Defense Sites
- ▬ Indian Reservations BIA



SITE NAME: Madison Solar
ADDRESS: Madison Solar
CITY/STATE: Richmond KY
ZIP: 40475

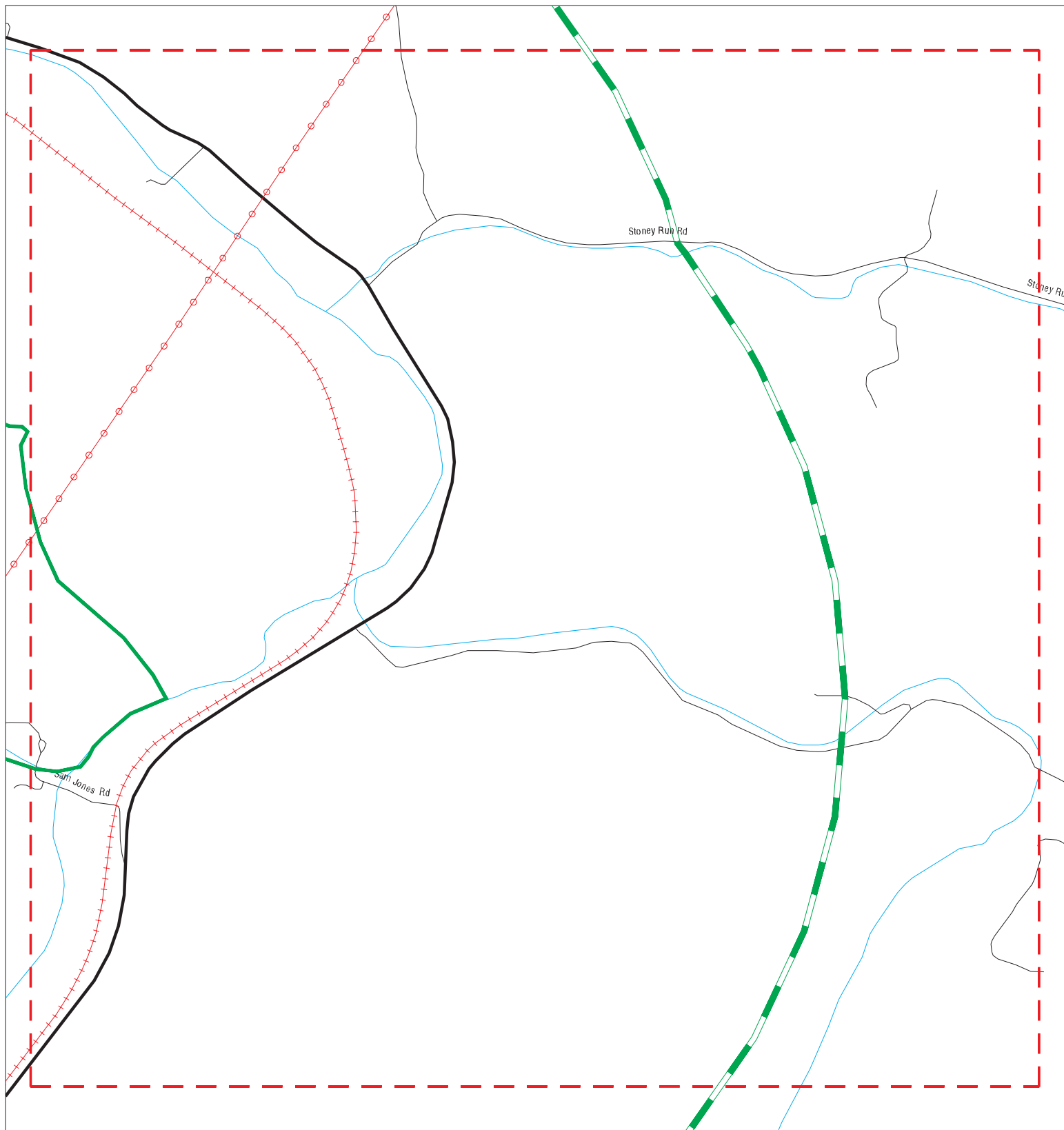
CLIENT: Tetra Tech MM
CONTACT: David Hermance
INQUIRY #: 6106593.2s
DATE: 06/30/20










MAPPED SITES SUMMARY - FOCUS MAP 4

Target Property:
 MADISON SOLAR
 RICHMOND, KY 40475

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
C10 / 4	D G S COAL COMPANY I		US MINES	429 0.081 SSW
C11 / 4	TENKILLER MINING SER		US MINES	525 0.099 SSW
C12 / 4	NO 2 TIPPLE		ABANDONED MINES	543 0.103 SSW
15 / 4	JASPER & ASSOCIATES		US MINES	621 0.118 SSW

Focus Map - 5 - 6106593.2s



- | | | | | | |
|--|----------------------|---|---------------------|---|------------------------------|
|  | Sites |  | Focus Map - Sites |  | Indian Reservations BIA |
|  | Target Property |  | Power Line |  | National Priority List Sites |
|  | Search Buffer |  | Dept. Defense Sites | | |
|  | Focus Map - No Sites | | | | |



SITE NAME: Madison Solar
 ADDRESS: Madison Solar
 CITY/STATE: Richmond KY
 ZIP: 40475

CLIENT: Tetra Tech MM
 CONTACT: David Hermance
 INQUIRY #: 6106593.2s
 DATE: 06/30/20

MAPPED SITES SUMMARY - FOCUS MAP 5










Target Property:
MADISON SOLAR
RICHMOND, KY 40475

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
-----------------------	-----------	---------	-------------------	-------------------------------

NO MAPPED SITES FOUND

Focus Map - 6 - 6106593.2s



- | | | | | | |
|--|----------------------|---|---------------------|---|------------------------------|
|  | Sites |  | Focus Map - Sites |  | Indian Reservations BIA |
|  | Target Property |  | Power Line |  | National Priority List Sites |
|  | Search Buffer |  | Dept. Defense Sites | | |
|  | Focus Map - No Sites | | | | |



SITE NAME: Madison Solar
 ADDRESS: Madison Solar
 CITY/STATE: Richmond KY
 ZIP: 40475

CLIENT: Tetra Tech MM
 CONTACT: David Hermance
 INQUIRY #: 6106593.2s
 DATE: 06/30/20

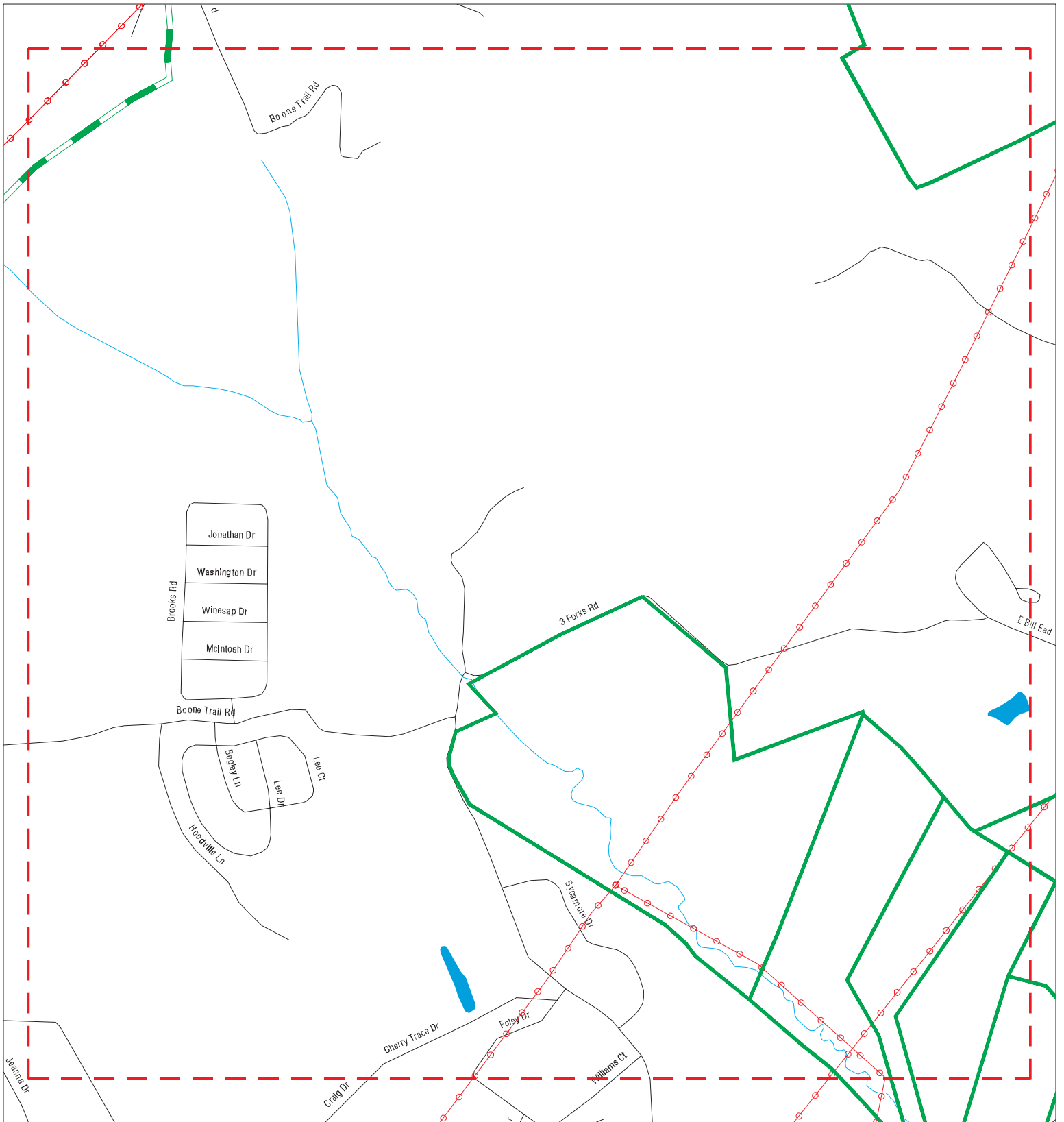
MAPPED SITES SUMMARY - FOCUS MAP 6

Target Property:
MADISON SOLAR
RICHMOND, KY 40475

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
-----------------------	-----------	---------	-------------------	-------------------------------

NO MAPPED SITES FOUND

Focus Map - 7 - 6106593.2s



SITE NAME: Madison Solar
 ADDRESS: Madison Solar
 CITY/STATE: Richmond KY
 ZIP: 40475

CLIENT: Tetra Tech MM
 CONTACT: David Hermance
 INQUIRY #: 6106593.2s
 DATE: 06/30/20

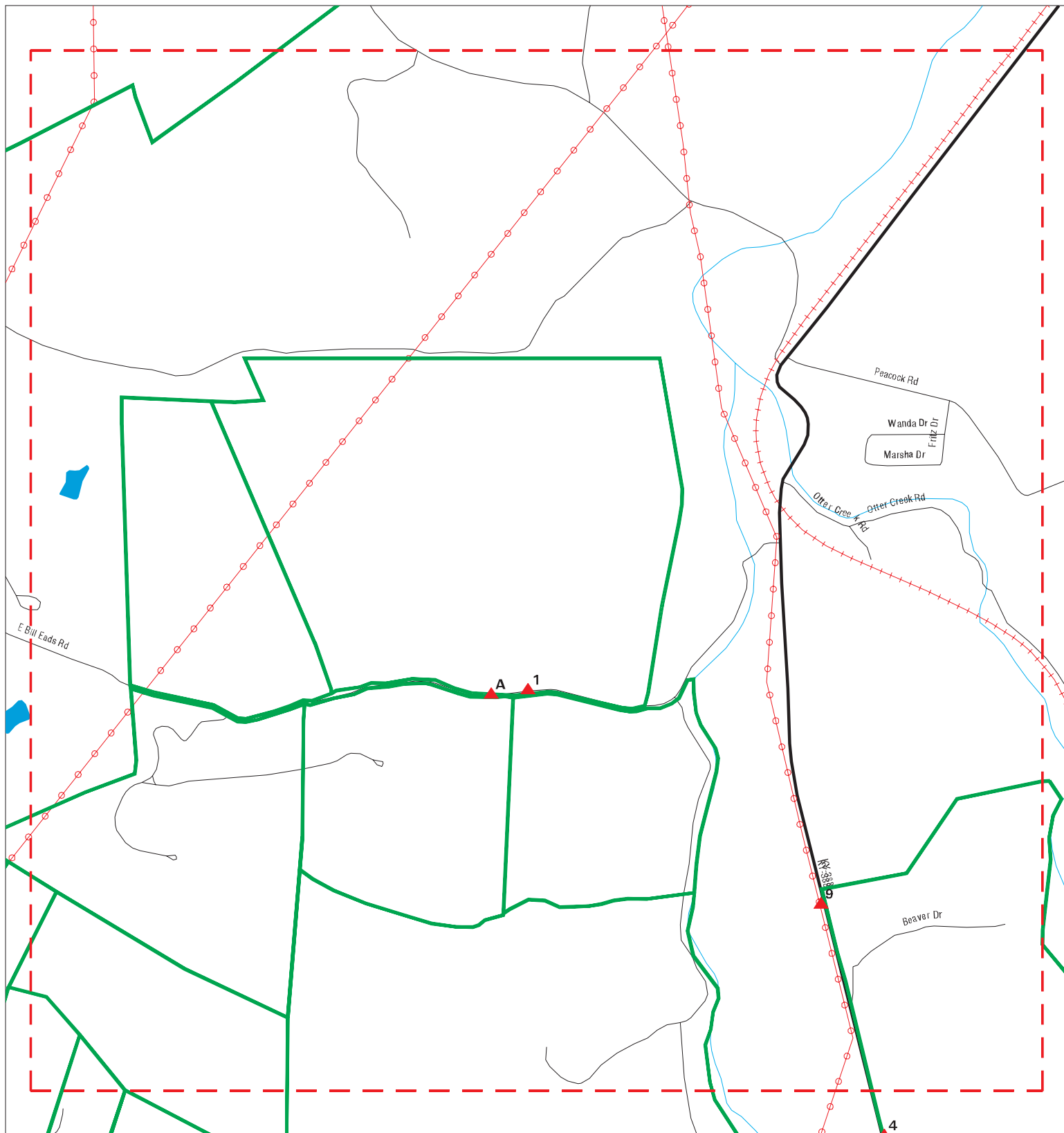
MAPPED SITES SUMMARY - FOCUS MAP 7










Target Property:
MADISON SOLAR
RICHMOND, KY 40475

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
-----------------------	-----------	---------	-------------------	-------------------------------

NO MAPPED SITES FOUND

Focus Map - 8 - 6106593.2s



-  Sites
-  Focus Map - Sites
-  Indian Reservations BIA
-  Target Property
-  Power Line
-  Search Buffer
-  National Priority List Sites
-  Focus Map - No Sites
-  Dept. Defense Sites



SITE NAME: Madison Solar
 ADDRESS: Madison Solar
 CITY/STATE: Richmond KY
 ZIP: 40475

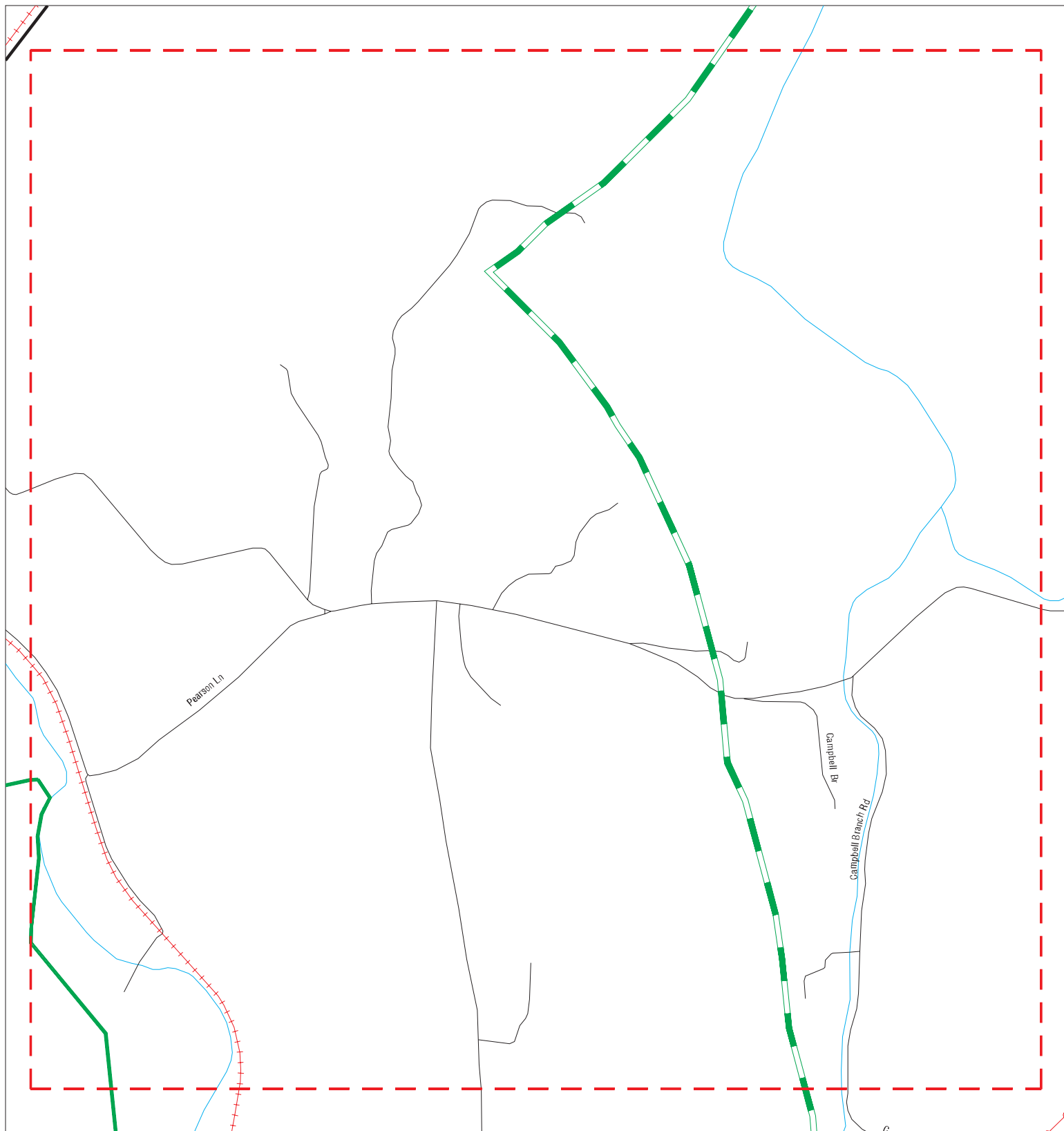
CLIENT: Tetra Tech MM
 CONTACT: David Hermance
 INQUIRY #: 6106593.2s
 DATE: 06/30/20

MAPPED SITES SUMMARY - FOCUS MAP 8

Target Property:
 MADISON SOLAR
 RICHMOND, KY 40475

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
1 / 8	AT&T MOBILITY	297 E BILL EADS RD	AST	TP
A2 / 8	VERIZON WIRELESS	285 E BILL EADS RD	AST	TP
A3 / 8	AT&T MOBILITY - BILL	BILL EADS RD	AIRS	TP
9 / 8	REDHOUSE COUNTRY STO	2550 RED HOUSE RD	SB193, UST	31 0.006 WSW

Focus Map - 9 - 6106593.2s



- | | | | | | |
|---|--|---|---|-----|-----------|
|  Sites |  Focus Map - Sites |  Indian Reservations BIA | 0 | 1/8 | 1/4 Miles |
|  Target Property |  Power Line | |  | | |
|  Search Buffer |  National Priority List Sites | | | | |
|  Focus Map - No Sites |  Dept. Defense Sites | | | | |

SITE NAME: Madison Solar
ADDRESS: Madison Solar
CITY/STATE: Richmond KY
ZIP: 40475

CLIENT: Tetra Tech MM
CONTACT: David Hermance
INQUIRY #: 6106593.2s
DATE: 06/30/20

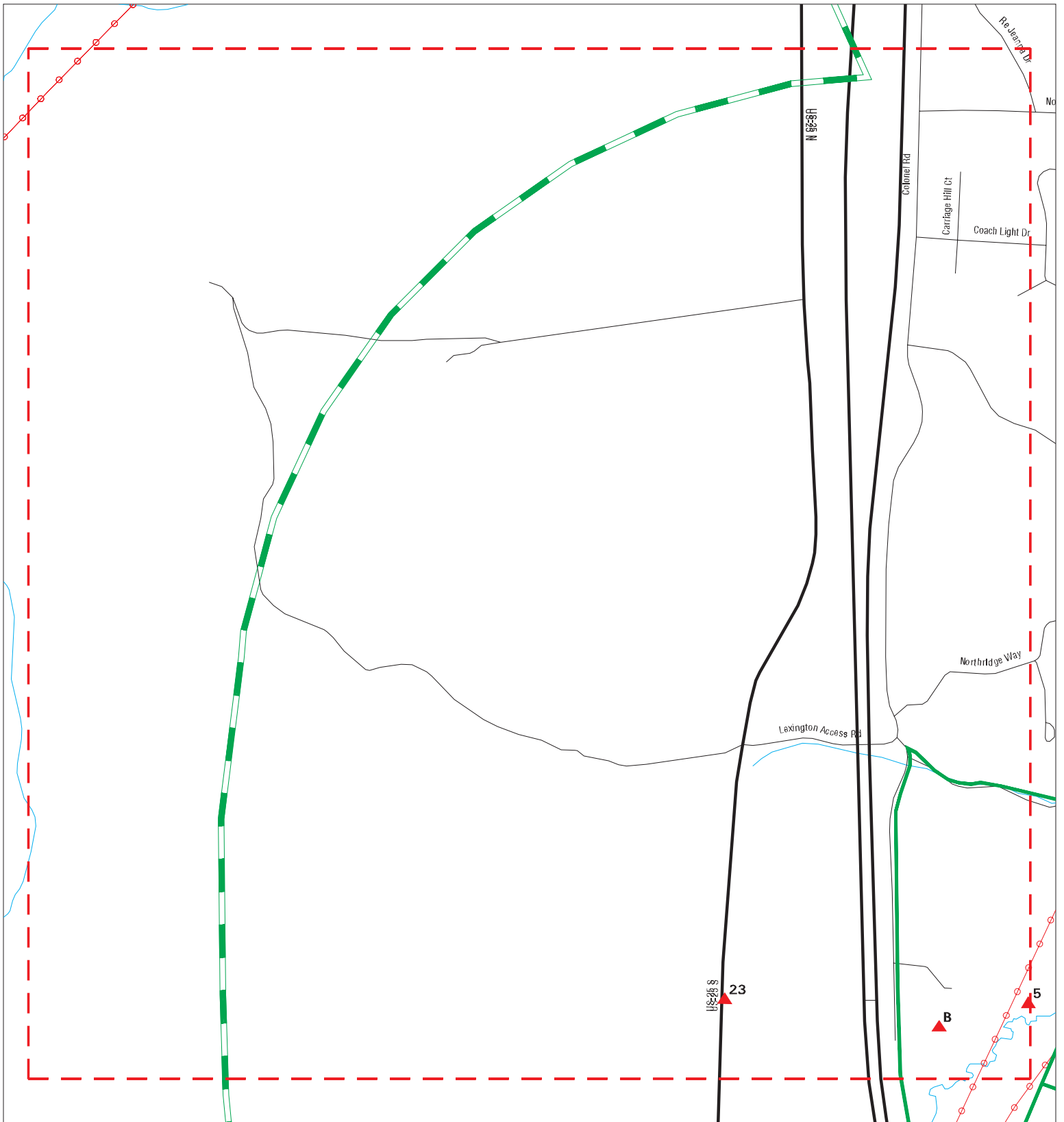
MAPPED SITES SUMMARY - FOCUS MAP 9

Target Property:
MADISON SOLAR
RICHMOND, KY 40475

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
-----------------------	-----------	---------	-------------------	-------------------------------

NO MAPPED SITES FOUND

Focus Map - 10 - 6106593.2s



- ▲ Sites
- - - Target Property
- - - Search Buffer
- - - Focus Map - No Sites
- - - Focus Map - Sites
- - - Power Line
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA



SITE NAME: Madison Solar
 ADDRESS: Madison Solar
 CITY/STATE: Richmond KY
 ZIP: 40475

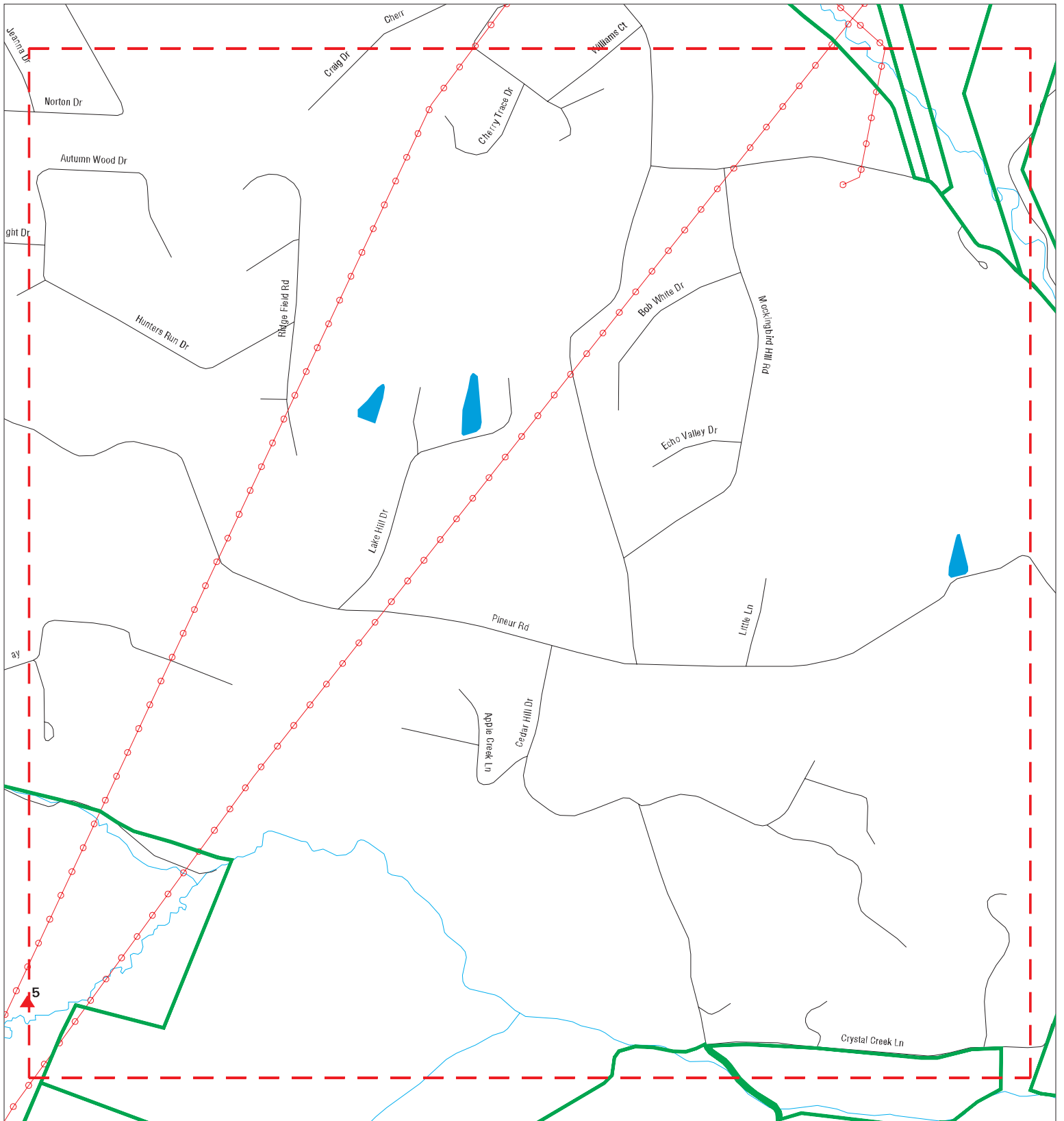
CLIENT: Tetra Tech MM
 CONTACT: David Hermance
 INQUIRY #: 6106593.2s
 DATE: 06/30/20

MAPPED SITES SUMMARY - FOCUS MAP 10

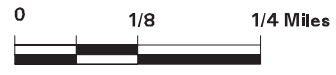
Target Property:
 MADISON SOLAR
 RICHMOND, KY 40475

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
5 / 10			SPILLS	TP
B6 / 10			SPILLS	TP
B7 / 10			SPILLS	TP
B8 / 10			SPILLS	TP
23 / 10	KTC MADISON CO MAINT	2441 LEXINGTON RD	SHWS, INST CONTROL, NPDES	1355 0.257 West

Focus Map - 11 - 6106593.2s



- | | | | | | |
|--|----------------------|---|---------------------|---|------------------------------|
|  | Sites |  | Focus Map - Sites |  | Indian Reservations BIA |
|  | Target Property |  | Power Line |  | National Priority List Sites |
|  | Search Buffer |  | Dept. Defense Sites | | |
|  | Focus Map - No Sites | | | | |



SITE NAME: Madison Solar
ADDRESS: Madison Solar
CITY/STATE: Richmond KY
ZIP: 40475

CLIENT: Tetra Tech MM
CONTACT: David Hermance
INQUIRY #: 6106593.2s
DATE: 06/30/20

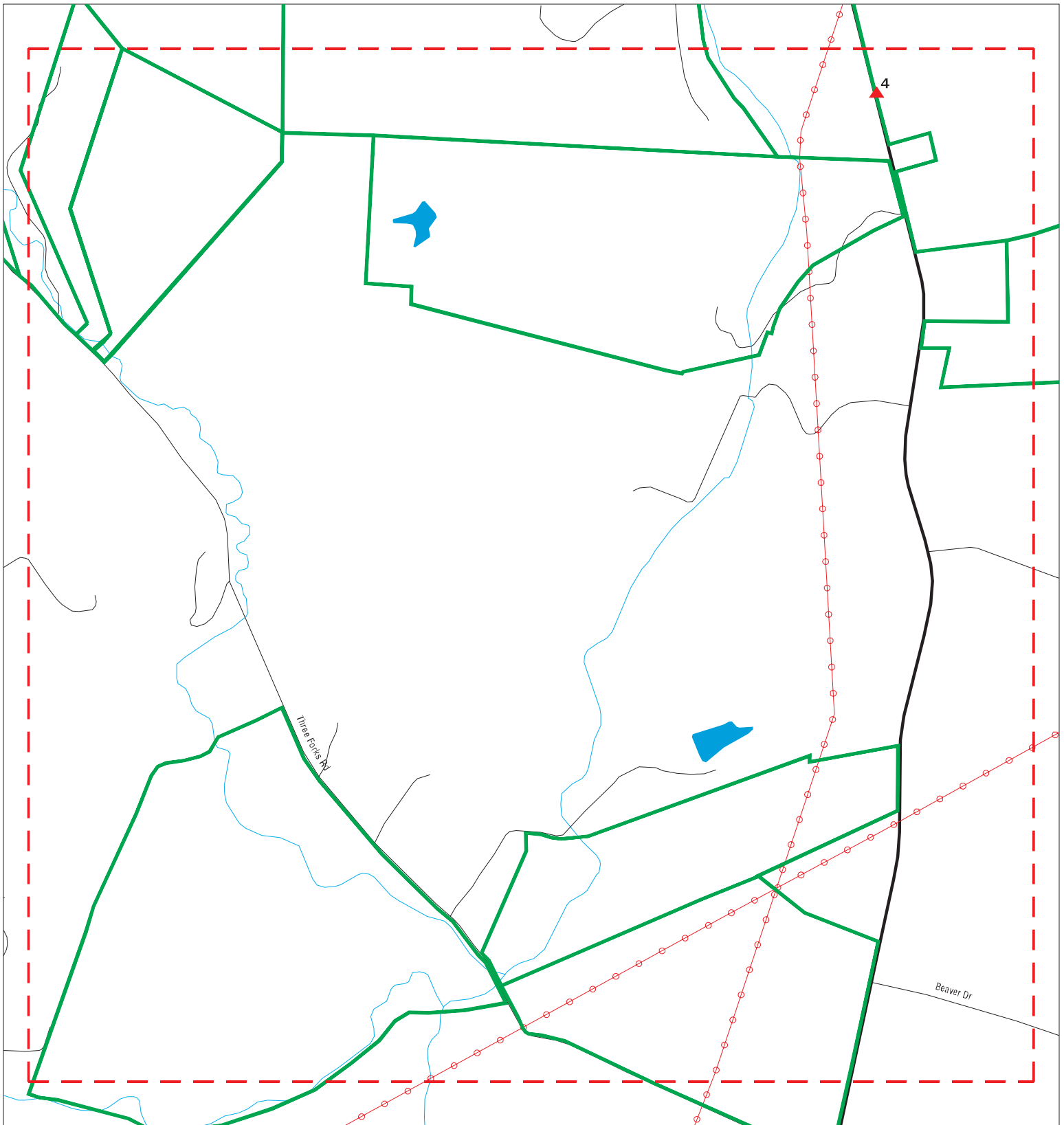
MAPPED SITES SUMMARY - FOCUS MAP 11

Target Property:
MADISON SOLAR
RICHMOND, KY 40475

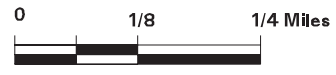
MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
-----------------------	-----------	---------	-------------------	-------------------------------

NO MAPPED SITES FOUND

Focus Map - 12 - 6106593.2s



- | | | |
|----------------------|------------------------------|-------------------------|
| Sites | Focus Map - Sites | Indian Reservations BIA |
| Target Property | Power Line | |
| Search Buffer | National Priority List Sites | |
| Focus Map - No Sites | Dept. Defense Sites | |



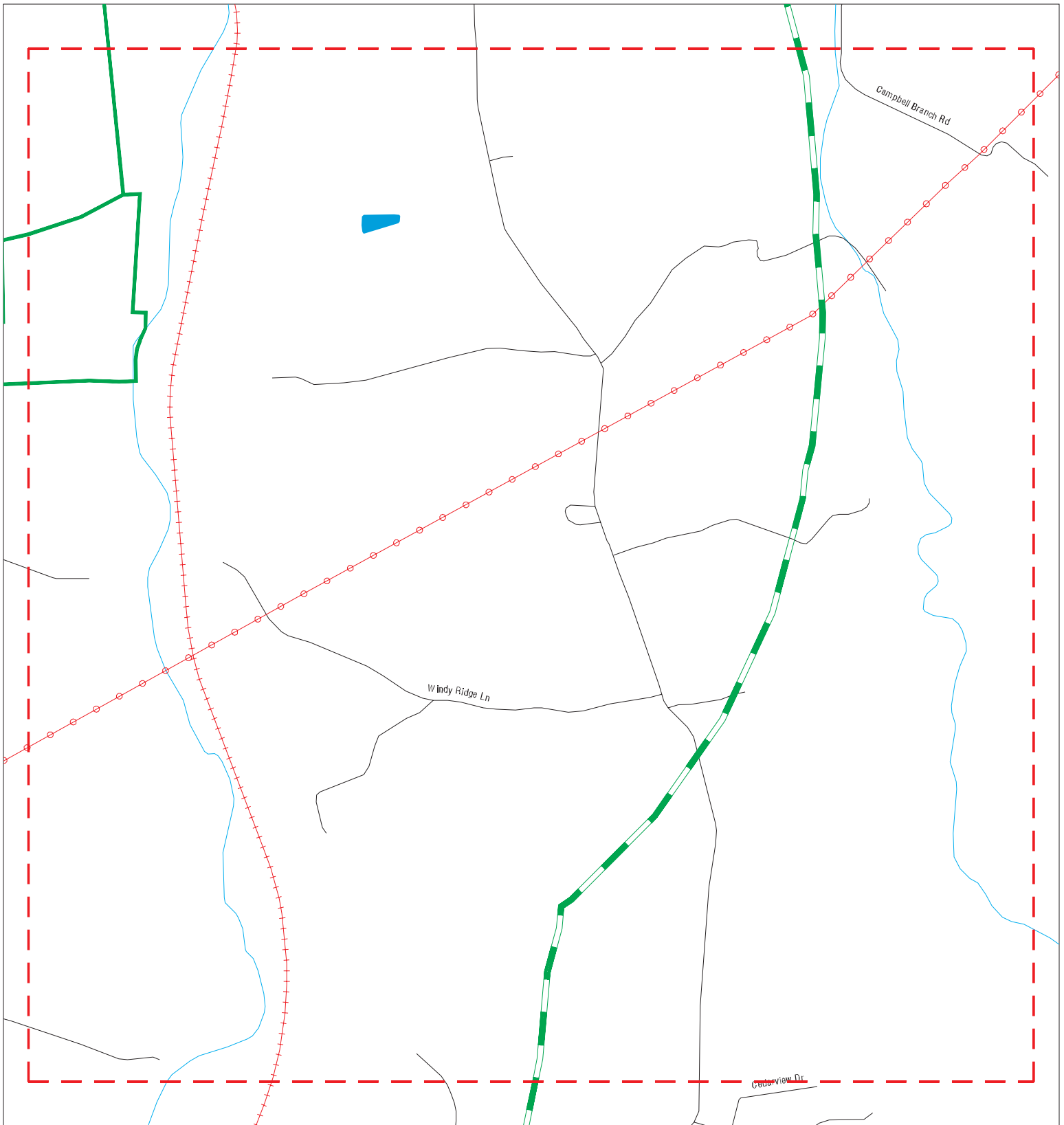
SITE NAME: Madison Solar ADDRESS: Madison Solar CITY/STATE: Richmond KY ZIP: 40475	CLIENT: Tetra Tech MM CONTACT: David Hermance INQUIRY #: 6106593.2s DATE: 06/30/20
---	---

MAPPED SITES SUMMARY - FOCUS MAP 12

Target Property:
MADISON SOLAR
RICHMOND, KY 40475

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS SPILLS	DIST (ft. & mi.) DIRECTION TP
-----------------------	-----------	---------	-----------------------------	-------------------------------------

Focus Map - 13 - 6106593.2s



SITE NAME: Madison Solar
ADDRESS: Madison Solar
CITY/STATE: Richmond KY
ZIP: 40475

CLIENT: Tetra Tech MM
CONTACT: David Hermance
INQUIRY #: 6106593.2s
DATE: 06/30/20

MAPPED SITES SUMMARY - FOCUS MAP 13

Target Property:
MADISON SOLAR
RICHMOND, KY 40475

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
-----------------------	-----------	---------	-------------------	-------------------------------

NO MAPPED SITES FOUND

Focus Map - 14 - 6106593.2s



Sites	Focus Map - Sites	Indian Reservations BIA
Target Property	Power Line	National Priority List Sites
Search Buffer	Dept. Defense Sites	
Focus Map - No Sites		



<p>SITE NAME: Madison Solar ADDRESS: Madison Solar CITY/STATE: Richmond KY ZIP: 40475</p>	<p>CLIENT: Tetra Tech MM CONTACT: David Hermance INQUIRY #: 6106593.2s DATE: 06/30/20</p>
--	--

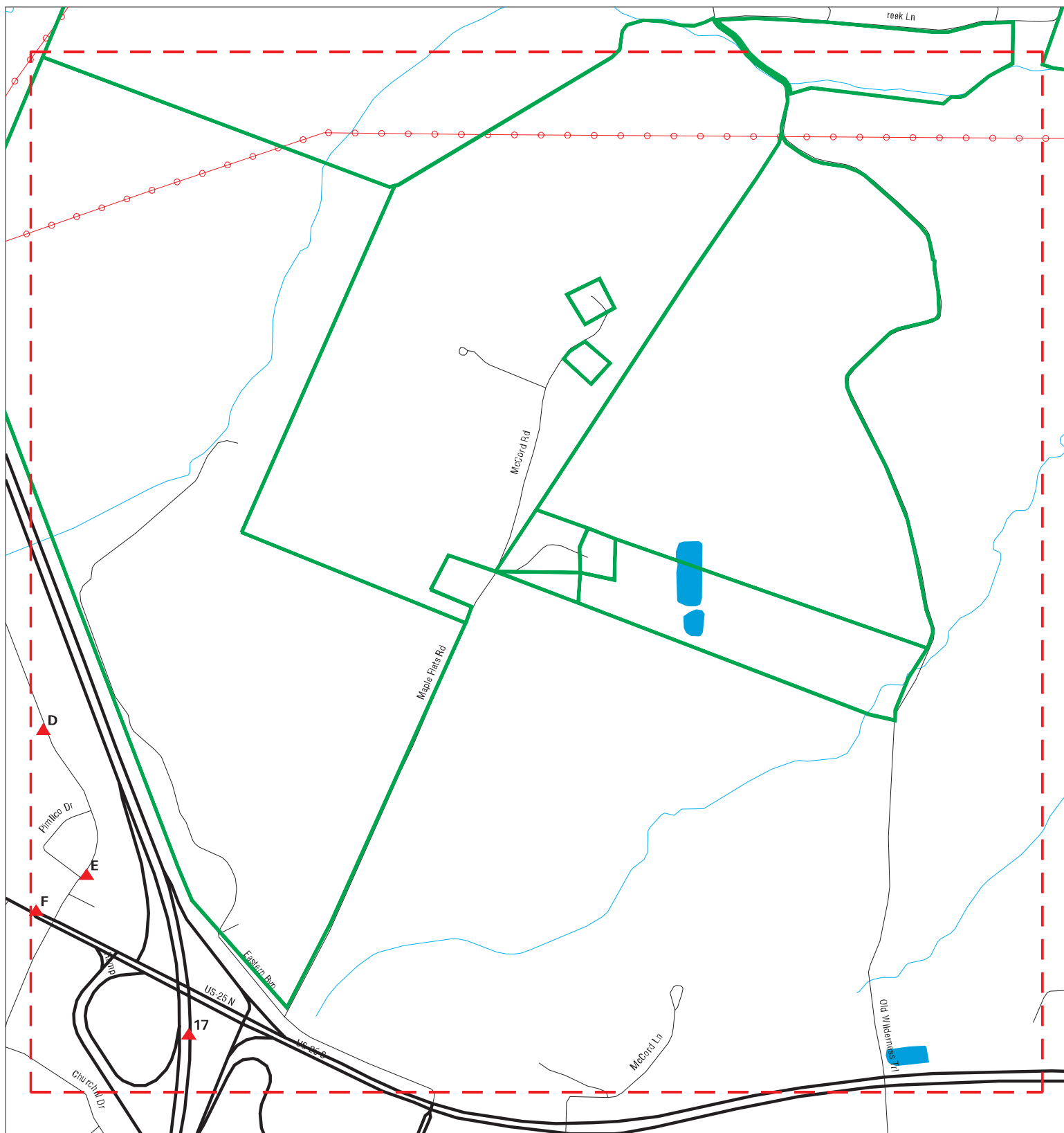
MAPPED SITES SUMMARY - FOCUS MAP 14

Target Property:
MADISON SOLAR
RICHMOND, KY 40475

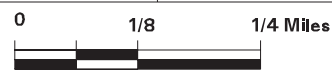
MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
-----------------------	-----------	---------	-------------------	-------------------------------

NO MAPPED SITES FOUND

Focus Map - 15 - 6106593.2s



- ▲ Sites
- ▬ Target Property
- ▬ Search Buffer
- ▬ Focus Map - No Sites
- ▬ Focus Map - Sites
- ⚡ Power Line
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA



SITE NAME: Madison Solar
ADDRESS: Madison Solar
CITY/STATE: Richmond KY
ZIP: 40475

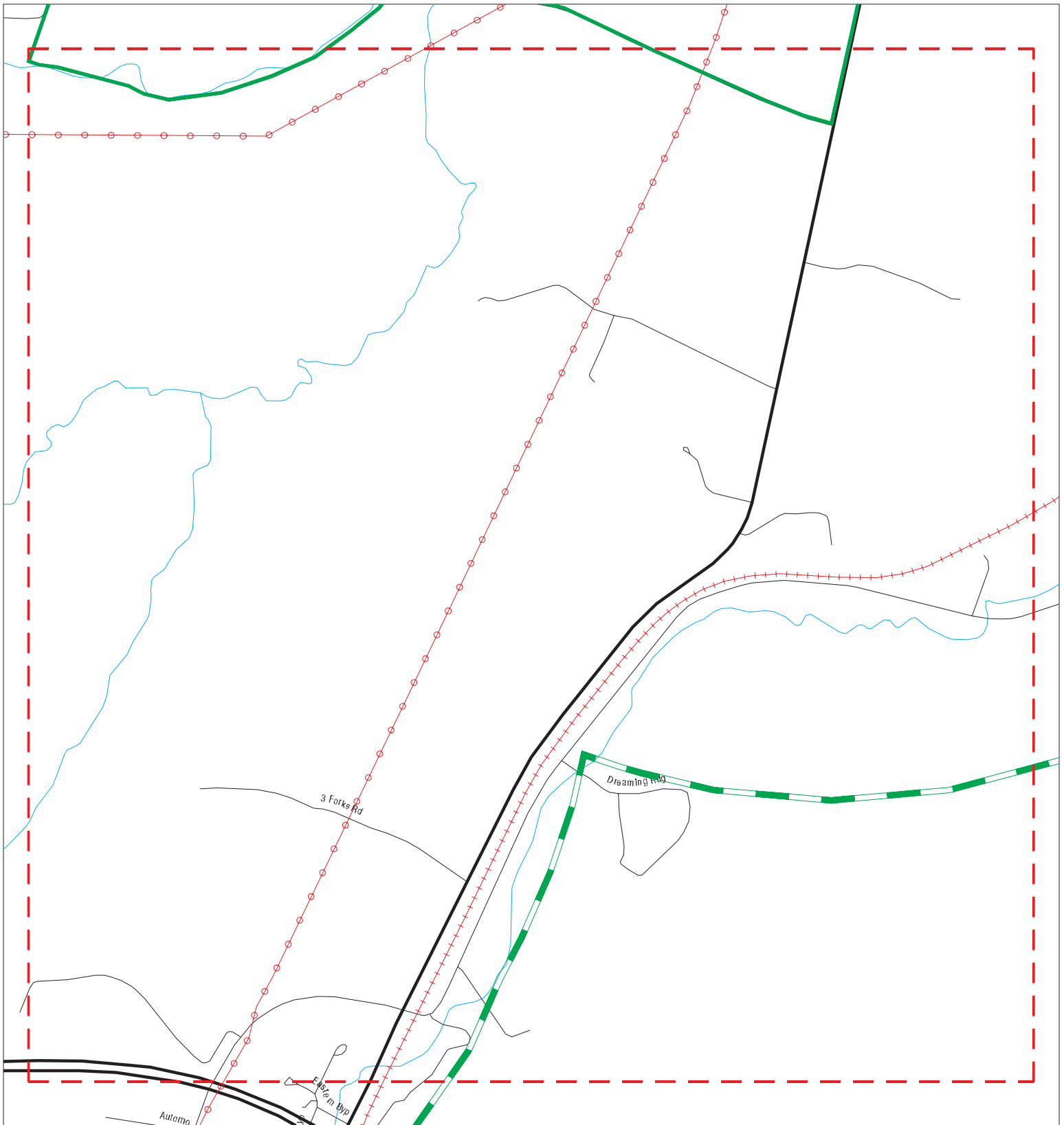
CLIENT: Tetra Tech MM
CONTACT: David Hermance
INQUIRY #: 6106593.2s
DATE: 06/30/20

MAPPED SITES SUMMARY - FOCUS MAP 15

Target Property:
MADISON SOLAR
RICHMOND, KY 40475

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
D13 / 15	MADISON CO BOARD OF	230 NORTH KEENELAND	SHWS	592 0.112 WSW
D14 / 15	AAMCO OF RICHMOND	240 N KEENELAND DR S	EDR Hist Auto	594 0.112 WSW
E16 / 15	NTW LLC #519	123 N. KEENELAND DRI	RCRA NonGen / NLR	681 0.129 WSW
17 / 15	MOTEL 6 (FORMER DAYS	I-75 & US 421	UST	705 0.134 SW
E18 / 15	TO GO VALERO	112 N KEENELAND DR	UST	814 0.154 WSW
F19 / 15	FRIENDLY MART EXXON	2121 LEXINGTON RD	UST	1090 0.206 WSW
F20 / 15	BMV ENTERPRISES/LEXI	2120 LEXINGTON ROAD	RCRA NonGen / NLR	1145 0.217 WSW
F21 / 15	LEXINGTON ROAD SHELL	2120 LEXINGTON RD	SB193, UST, Financial Assurance	1145 0.217 WSW
F22 / 15	HARDEES	107 S KEENELAND DR	UST	1221 0.231 WSW

Focus Map - 16 - 6106593.2s



- ▲ Sites
- █ Target Property
- - - Search Buffer
- - - Focus Map - No Sites
- - - Focus Map - Sites
- - - Power Line
- █ National Priority List Sites
- █ Dept. Defense Sites
- █ Indian Reservations BIA



<p>SITE NAME: Madison Solar ADDRESS: Madison Solar CITY/STATE: Richmond KY ZIP: 40475</p>	<p>CLIENT: Tetra Tech MM CONTACT: David Hermance INQUIRY #: 6106593.2s DATE: 06/30/20</p>
--	--

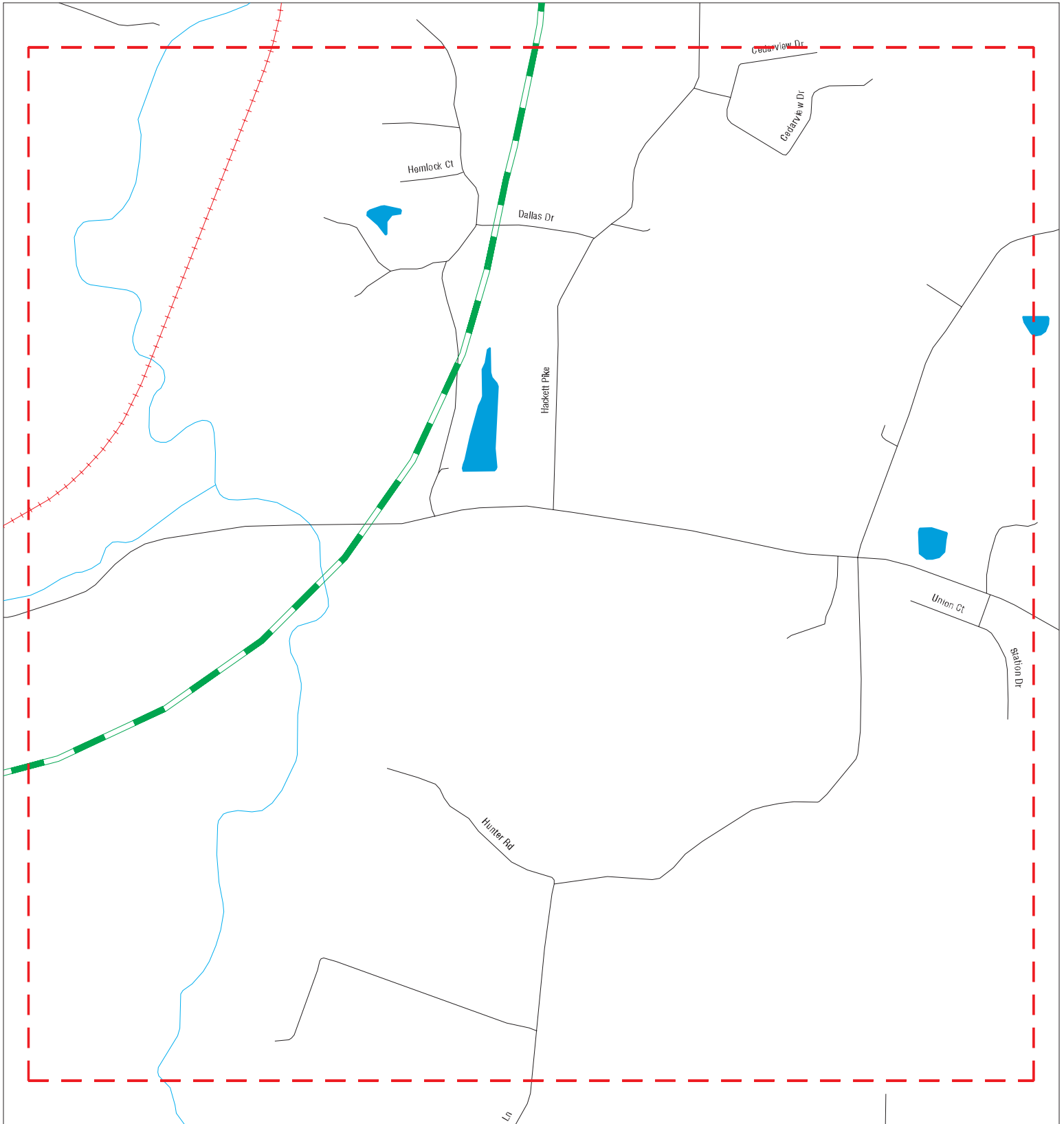
MAPPED SITES SUMMARY - FOCUS MAP 16

Target Property:
MADISON SOLAR
RICHMOND, KY 40475

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
-----------------------	-----------	---------	-------------------	-------------------------------

NO MAPPED SITES FOUND

Focus Map - 17 - 6106593.2s



- ▲ Sites
- - - Target Property
- Search Buffer
- - - Focus Map - No Sites
- - - Focus Map - Sites
- Power Line
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA



SITE NAME: Madison Solar
 ADDRESS: Madison Solar
 CITY/STATE: Richmond KY
 ZIP: 40475

CLIENT: Tetra Tech MM
 CONTACT: David Hermance
 INQUIRY #: 6106593.2s
 DATE: 06/30/20

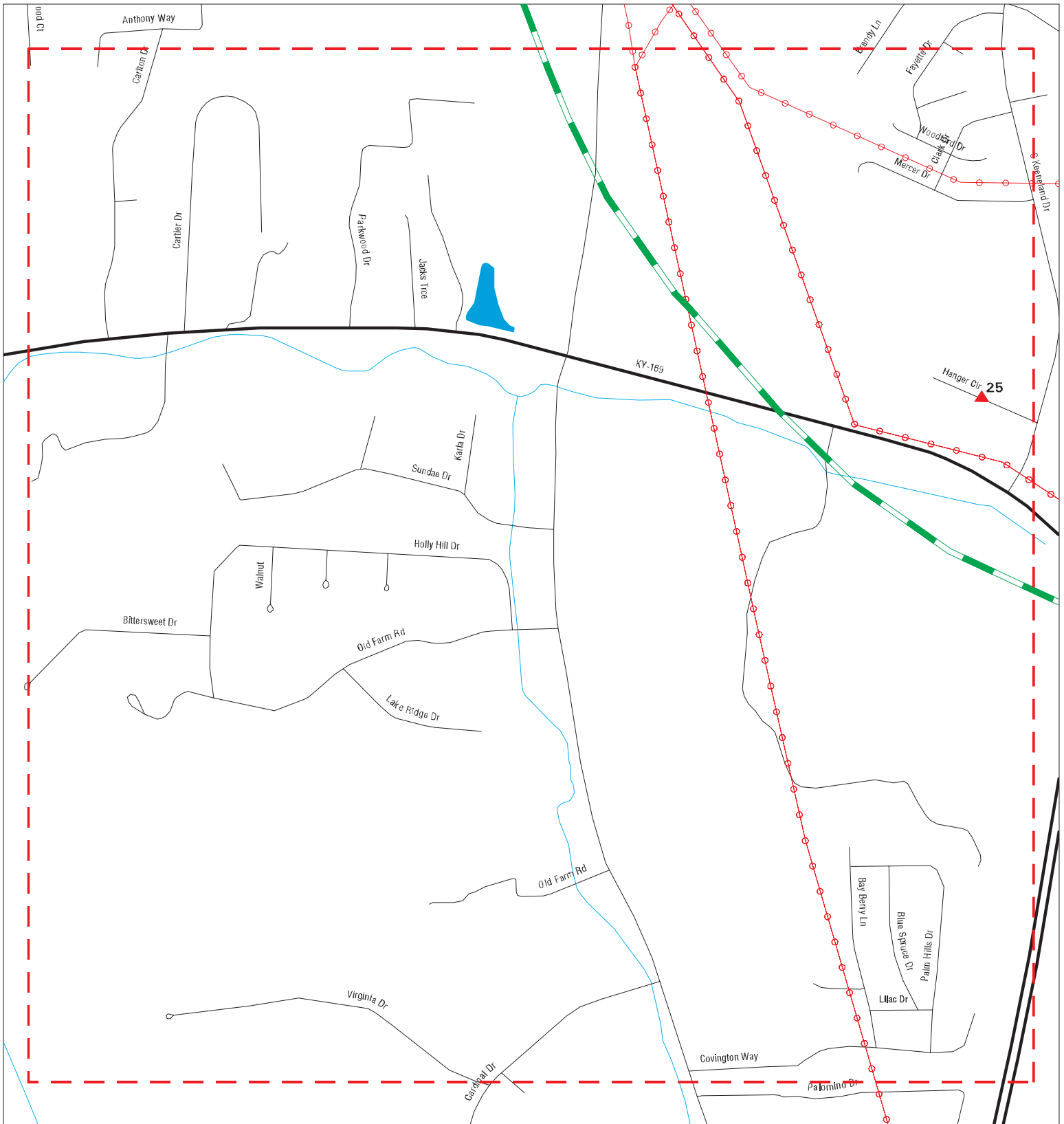
MAPPED SITES SUMMARY - FOCUS MAP 17

Target Property:
MADISON SOLAR
RICHMOND, KY 40475

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
-----------------------	-----------	---------	-------------------	-------------------------------

NO MAPPED SITES FOUND

Focus Map - 18 - 6106593.2s



- ▲ Sites
- ▬▬ Target Property
- ▬▬ Search Buffer
- ▬▬ Focus Map - No Sites
- ▬▬ Focus Map - Sites
- Power Line
- ▬▬ National Priority List Sites
- ▬▬ Dept. Defense Sites
- ▬▬ Indian Reservations BIA



SITE NAME: Madison Solar
 ADDRESS: Madison Solar
 CITY/STATE: Richmond KY
 ZIP: 40475

CLIENT: Tetra Tech MM
 CONTACT: David Hermance
 INQUIRY #: 6106593.2s
 DATE: 06/30/20

MAPPED SITES SUMMARY - FOCUS MAP 18

Target Property:
MADISON SOLAR
RICHMOND, KY 40475

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
25 / 18	KOKOKU RUBBER INC	120 HANGER CIRCLE	SHWS, AIRS	4126 0.781 SW

Focus Map - 19 - 6106593.2s



- ▲ Sites
- - - Target Property
- - - Search Buffer
- - - Focus Map - No Sites
- - - Focus Map - Sites
- - - Power Line
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA



<p>SITE NAME: Madison Solar ADDRESS: Madison Solar CITY/STATE: Richmond KY ZIP: 40475</p>	<p>CLIENT: Tetra Tech MM CONTACT: David Hermance INQUIRY #: 6106593.2s DATE: 06/30/20</p>
--	--

MAPPED SITES SUMMARY - FOCUS MAP 19

Target Property:
MADISON SOLAR
RICHMOND, KY 40475

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
24 / 19	NORTHGATE SHELL	120 NORTHGATE DR	SB193, UST	2568 0.486 South
26 / 19	JELEMIA SANDERS RESI	111 BELAIR ST.	SHWS	4612 0.873 SSE

Focus Map - 20 - 6106593.2s



- ▲ Sites
- ↗ Target Property
- ↗ Search Buffer
- - - Focus Map - No Sites
- - - Focus Map - Sites
- ⚡ Power Line
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA



SITE NAME: Madison Solar
ADDRESS: Madison Solar
CITY/STATE: Richmond KY
ZIP: 40475

CLIENT: Tetra Tech MM
CONTACT: David Hermance
INQUIRY #: 6106593.2s
DATE: 06/30/20

MAPPED SITES SUMMARY - FOCUS MAP 20

Target Property:
MADISON SOLAR
RICHMOND, KY 40475

MAP ID / FOCUS MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	DIST (ft. & mi.) DIRECTION
-----------------------	-----------	---------	-------------------	-------------------------------

NO MAPPED SITES FOUND

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

1
Target
Property

AT&T MOBILITY
297 E BILL EADS RD
RICHMOND, KY 40475

AST **A100451404**
N/A

Actual:
729 ft.
Focus Map:
8

AST:
Permit Number: PAG0004701
Name: AT&T MOBILITY
Address: 297 E BILL EADS RD
City,State,Zip: RICHMOND, KY 40475-9357
Permit Type: Private Use
Category: Other
Permit Status: Cancelled
Issue Date: 02/22/2013
Subdivision: Not reported
Last Inspection: Not reported
Installer: Westower Communications

A2
Target
Property

VERIZON WIRELESS
285 E BILL EADS RD
RICHMOND, KY 40475

AST **A100450249**
N/A

Site 1 of 2 in cluster A

Actual:
735 ft.
Focus Map:
8

AST:
Permit Number: PAG0003530
Name: VERIZON WIRELESS
Address: 285 E BILL EADS RD
City,State,Zip: RICHMOND, KY 40475-9357
Permit Type: Private Use
Category: Other
Permit Status: Completed
Issue Date: 05/03/2010
Subdivision: Not reported
Last Inspection: Not reported
Installer: BT Engineering Inc

A3
Target
Property

AT&T MOBILITY - BILL EADS RD CELL TOWER ENGINE
BILL EADS RD
RICHMOND, KY 40475

AIRS **S113882328**
N/A

Site 2 of 2 in cluster A

Actual:
735 ft.
Focus Map:
8

AIRS:
Name: AT&T MOBILITY - BILL EADS RD CELL TOWER ENGINE
Address: BILL EADS RD
City,State,Zip: RICHMOND, KY 40475
Facility: 2115100086
Mailing Address 3: Not reported
Emps: 1
Plant Class Description: R; Registered Source
Acreage: 1.00
Alternate Facility Name: New Cingular Wireless PCS LLC dba AT&T Mobility - Bill Eads
Alternate Facility End Date: Not reported
Principal Product: Communications
State Plant Class Code: R000
DAQ AI Type: INFO-Telecommunications (517)
DAQ Reg Comment: Not reported
Mailing Address Line 2: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AT&T MOBILITY - BILL EADS RD CELL TOWER ENGINE (Continued)

S113882328

Inspector Assigned AI: Amanda Mattingly
Last Inspection Lead: Not reported
Last Inspection Date: Not reported
Air Programs: 0-SIP Source; 9-NSPS; G-Area Source MACT
Air Subparts: Not Applicable; 9-IIII-Compression Ignition Int. Comb Eng;
G-ZZZZ-Recipro. Int. Comb Engine (RICE)

Emission:

Year: 2017
County: Madison
Facility ID: 2115100086
Facility Name: New Cingular Wireless PCS LLC - Bill Eads
AI ID: 119903
Pollutant: Acetaldehyde
Actual Emissions: 0

Year: 2017
County: Madison
Facility ID: 2115100086
Facility Name: New Cingular Wireless PCS LLC - Bill Eads
AI ID: 119903
Pollutant: Benzene
Actual Emissions: 0

Year: 2017
County: Madison
Facility ID: 2115100086
Facility Name: New Cingular Wireless PCS LLC - Bill Eads
AI ID: 119903
Pollutant: Carbon Dioxide
Actual Emissions: 0

Year: 2017
County: Madison
Facility ID: 2115100086
Facility Name: New Cingular Wireless PCS LLC - Bill Eads
AI ID: 119903
Pollutant: CO (Carbon Monoxide)
Actual Emissions: 0

Year: 2017
County: Madison
Facility ID: 2115100086
Facility Name: New Cingular Wireless PCS LLC - Bill Eads
AI ID: 119903
Pollutant: Formaldehyde
Actual Emissions: 0

Year: 2017
County: Madison
Facility ID: 2115100086
Facility Name: New Cingular Wireless PCS LLC - Bill Eads
AI ID: 119903
Pollutant: Methane
Actual Emissions: 0

Year: 2017
County: Madison

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AT&T MOBILITY - BILL EADS RD CELL TOWER ENGINE (Continued)

S113882328

Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	NO2 (Nitrogen Dioxide)
Actual Emissions:	0
Year:	2017
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	PM10 (Particulate Matter - 10 Microns Or Less)
Actual Emissions:	0
Year:	2017
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	PM2.5 (Particulate Matter - 2.5 Microns Or Less)
Actual Emissions:	0
Year:	2017
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	PT (Particulate Matter)
Actual Emissions:	0
Year:	2017
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	SO2 (Sulfur Dioxide)
Actual Emissions:	0
Year:	2017
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	Toluene
Actual Emissions:	0
Year:	2017
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	VOC (Volatile Organic Compounds)
Actual Emissions:	0
Year:	2017
County:	Madison
Facility ID:	2115100086

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AT&T MOBILITY - BILL EADS RD CELL TOWER ENGINE (Continued)

S113882328

Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	Xylenes (Total)
Actual Emissions:	0
Year:	2016
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	CO (Carbon Monoxide)
Actual Emissions:	0
Year:	2016
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	NO2 (Nitrogen Dioxide)
Actual Emissions:	0
Year:	2016
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	PM10 (Particulate Matter - 10 Microns Or Less)
Actual Emissions:	0
Year:	2016
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	PT (Particulate Matter)
Actual Emissions:	0
Year:	2016
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	SO2 (Sulfur Dioxide)
Actual Emissions:	0
Year:	2016
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	VOC (Volatile Organic Compounds)
Actual Emissions:	0
Year:	2013
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AT&T MOBILITY - BILL EADS RD CELL TOWER ENGINE (Continued)

S113882328

AI ID:	119903
Pollutant:	CO (Carbon Monoxide)
Actual Emissions:	0
Year:	2013
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	NO2 (Nitrogen Dioxide)
Actual Emissions:	0
Year:	2013
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	PM10 (Particulate Matter - 10 Microns Or Less)
Actual Emissions:	0
Year:	2013
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	PT (Particulate Matter)
Actual Emissions:	0
Year:	2013
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	SO2 (Sulfur Dioxide)
Actual Emissions:	0
Year:	2013
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	VOC (Volatile Organic Compounds)
Actual Emissions:	0
Year:	2014
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	CO (Carbon Monoxide)
Actual Emissions:	0
Year:	2014
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AT&T MOBILITY - BILL EADS RD CELL TOWER ENGINE (Continued)

S113882328

Pollutant:	NO2 (Nitrogen Dioxide)
Actual Emissions:	0
Year:	2014
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	PM10 (Particulate Matter - 10 Microns Or Less)
Actual Emissions:	0
Year:	2014
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	PT (Particulate Matter)
Actual Emissions:	0
Year:	2014
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	SO2 (Sulfur Dioxide)
Actual Emissions:	0
Year:	2014
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	VOC (Volatile Organic Compounds)
Actual Emissions:	0
Year:	2015
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	CO (Carbon Monoxide)
Actual Emissions:	0
Year:	2015
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	NO2 (Nitrogen Dioxide)
Actual Emissions:	0
Year:	2015
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	PM10 (Particulate Matter - 10 Microns Or Less)

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

AT&T MOBILITY - BILL EADS RD CELL TOWER ENGINE (Continued)

S113882328

Actual Emissions:	0
Year:	2015
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	PT (Particulate Matter)
Actual Emissions:	0
Year:	2015
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	SO2 (Sulfur Dioxide)
Actual Emissions:	0
Year:	2015
County:	Madison
Facility ID:	2115100086
Facility Name:	New Cingular Wireless PCS LLC - Bill Eads
AI ID:	119903
Pollutant:	VOC (Volatile Organic Compounds)
Actual Emissions:	0

4

**Target
 Property**

RICHMOND, KY

**SPILLS S122232124
 N/A**

SPILLS:

**Actual:
 860 ft.**

**Focus Map:
 12**

Name:	Not reported
Address:	Not reported
City,State,Zip:	RICHMOND, KY
Facility Status:	Env. Closed
Incident Type:	DW-LINE BREAK/LEAK
Program Code:	03
Received By Staff:	Not reported
Received Date:	09/16/2017
Report Date:	2017-09-18 09:38:04
Dispatch Description:	BWA issued due to a 4" line break. 40 customers affected, notified by door tags.
Source Name:	Madison County Utility District (AI ID: 34008)
Source Address:	1923 to 2388 Red House Rd.
Substances:	Population Affected:40
Other Substances Desc:	Not reported
Media Impacted:	Drinking Water
Inc ID:	2430339
Lead Invest Person ID:	Not reported
Compliance:	No
Notification:	Yes
Priority:	Routine
Incident End Date:	2017-09-19 00:00:00
Follow Up Priority Desc:	Not reported
Most Recent Comp Eval Activity:	Not reported
Most Recent ENF Activity:	Not reported
Begin Emergency Date:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

(Continued)

S122232124

End Emergency Date: Not reported
MARS Function Code: Not reported
Locked: No
Closure Type Desc: Env. Closed-Restored
Latitude: 37.74119
Longitude: -84.15869

5

SPILLS S117194514

Target

N/A

Property RICHMOND, KY

SPILLS:

Actual:
851 ft.

Focus Map:
10

Name: Not reported
Address: Not reported
City,State,Zip: RICHMOND, KY
Facility Status: Env. Closed
Incident Type: OPEN BURNING
Program Code: 01
Received By Staff: Wolfe, Stanley
Received Date: 06/20/2012
Report Date: 2012-06-20 11:06:19
Dispatch Description: Open burning illegal materials including 50 feet of treated fence posts and several tires

Source Name: David Durbin Property (AI ID: 105663)
Source Address: Richmond
Substances: PM2.5 (Particulate Matter - 2.5 Microns Or Less):
Other Substances Desc: Not reported
Media Impacted: Air
Inc ID: 2348197
Lead Invest Person ID: 39804
Compliance: Yes
Notification: No
Priority: Routine
Incident End Date: 2012-06-26 00:00:00
Follow Up Priority Desc: Not reported
Most Recent Comp Eval Activity: AI: 105663 CIV20120001
Most Recent ENF Activity: AI: 105663 ENV20120001
Begin Emergency Date: Not reported
End Emergency Date: Not reported
MARS Function Code: Not reported
Locked: Yes
Closure Type Desc: Env. Closed-Mitigated
Latitude: 37.79630
Longitude: -84.31991

B6

SPILLS S117152671

Target

N/A

Property RICHMOND, KY

Site 1 of 3 in cluster B

Actual:
879 ft.

Focus Map:
10

SPILLS:
Name: Not reported
Address: Not reported
City,State,Zip: RICHMOND, KY
Facility Status: Env. Closed

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

(Continued)

S117152671

Incident Type: NON-PERMITTED ACTIVITY; STREAM DEGRADATION; FLOODPLAIN
Program Code: 12
Received By Staff: Shoa, Massoud
Received Date: 09/08/2009
Report Date: 2009-09-08 10:37:29
Dispatch Description: Caller reports that he noticed a bulldozer in a creek, tributary to Muddy Creek, in Madison Co.
Source Name: David Durbin Property (AI ID: 105663)
Source Address: The site is noticeable from I 75 Northbound lane about 1/2 to 1 mile North of the Richmond Interchange. The site is to the drivers right if traveling northbound. There may also be access to the site off of Red House Road.
Substances: Best Management Practices:
Other Substances Desc: Not reported
Media Impacted: Water Quality
Inc ID: 2301007
Lead Invest Person ID: 8004
Compliance: Yes
Notification: No
Priority: Routine
Incident End Date: 2009-09-24 00:00:00
Follow Up Priority Desc: Not reported
Most Recent Comp Eval Activity: AI: 105663 CIV20090002
Most Recent ENF Activity: AI: 105663 ENV20090001
Begin Emergency Date: Not reported
End Emergency Date: Not reported
MARS Function Code: Not reported
Locked: Yes
Closure Type Desc: Env. Closed-Mitigated
Latitude: 37.79580
Longitude: -84.32233

B7
Target
Property

RICHMOND, KY

SPILLS S117152673
N/A

Site 2 of 3 in cluster B

Actual:
879 ft.

Focus Map:
10

SPILLS:
Name: Not reported
Address: Not reported
City,State,Zip: RICHMOND, KY
Facility Status: Env. Closed
Incident Type: NON-PERMITTED ACTIVITY
Program Code: 12
Received By Staff: Shoa, Massoud
Received Date: 09/08/2009
Report Date: 2009-09-08 10:38:00
Dispatch Description: Brent Herral with US Fish and Wildlife called to report that he noticed someone bulldozing in a stream. The stream is a tributary to Muddy Creek and the site is visible from the Northbound lane of I75 between one half and one mile north of the Richmond I
Source Name: David Durbin Property (AI ID: 105663)
Source Address: I 75 about 1/2 to 1 mile north of the Richmond Interchange.
Substances: Not reported
Other Substances Desc: Not reported
Media Impacted: Water Quality
Inc ID: 2301009

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

(Continued)

S117152673

Lead Invest Person ID: 8004
Compliance: Yes
Notification: No
Priority: Routine
Incident End Date: 2009-09-08 00:00:00
Follow Up Priority Desc: Not reported
Most Recent Comp Eval Activity: Not reported
Most Recent ENF Activity: Not reported
Begin Emergency Date: Not reported
End Emergency Date: Not reported
MARS Function Code: Not reported
Locked: Yes
Closure Type Desc: Env. Closed-Consolidated
Latitude: 37.79580
Longitude: -84.32233

B8
Target
Property

RICHMOND, KY

SPILLS S117152901
N/A

Site 3 of 3 in cluster B

Actual:
879 ft.

Focus Map:
10

SPILLS:
Name: Not reported
Address: Not reported
City,State,Zip: RICHMOND, KY
Facility Status: Env. Closed
Incident Type: STREAM DEGRADATION; FLOODPLAIN
Program Code: 13
Received By Staff: Shoa, Massoud
Received Date: 09/14/2009
Report Date: 2009-09-14 14:16:49
Dispatch Description: About one mile outside Richmond, KY off I-75 northbound the federal agent reports a lack of BMPs at a project along Muddy Creek which has impacted the waters of the Commonwealth.

Source Name: David Durbin Property (AI ID: 105663)
Source Address: Look on the east side of I-75 northbound about one mile north of Richmond, KY

Substances: Best Management Practices:
Other Substances Desc: Not reported
Media Impacted: Water Resources
Inc ID: 2301261
Lead Invest Person ID: 8004
Compliance: Yes
Notification: No
Priority: Routine
Incident End Date: 2009-09-24 00:00:00
Follow Up Priority Desc: Not reported
Most Recent Comp Eval Activity: Not reported
Most Recent ENF Activity: Not reported
Begin Emergency Date: Not reported
End Emergency Date: Not reported
MARS Function Code: Not reported
Locked: Yes
Closure Type Desc: Env. Closed-Consolidated
Latitude: 37.79580
Longitude: -84.32233

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

9
WSW
< 1/8
0.006 mi.
31 ft.

REDHOUSE COUNTRY STORE
2550 RED HOUSE RD
RICHMOND, KY 40475

SB193 **U001181964**
UST **N/A**

Actual:
838 ft.

KY SENATE BILL 193 INVENTORY:
KY SENATE BILL 193 INVENTORY: CAW
Facility ID: 3363076
Soil / Groundwater: Soil and Groundwater
Agency Interest Number: 59593

Focus Map:
8

UST:

Name: REDHOUSE COUNTRY STORE
Address: 2550 RED HOUSE RD
City,State,Zip: RICHMOND, KY 40475
Sequence Id: Not reported
Facility ID: 59593
Owner Name: Mandy McElwee
Owner Address: 601 Hunter Ln
Owner Address2: Not reported
Owner Address3: Not reported
Owner City,St,Zip: Richmond, KY 404759289
Internal Document ID: 0
Latitude: 37.831389
Longitude: -84.272778

Inert Material Code: OTH
Removed Date: Not reported
Change in Service Date: Not reported
Tank Pit Num: Not reported
Tank Mfg Code: STI
Tank Overfill Protection: ASD
Last Tank Test Date: 02/07/2006
Relined Date: Not reported
Lining Insp Date: Not reported
Pipe Release Detection: NON
Pipe Rel Detect Suc Code: CKV
Pipe Leak Detect Code: NA
Last Contained Date: Not reported
Pipe Mfg Code: Not reported
Last Pipe Test Date: Not reported
Last CP Test Date: 04/12/2010
Added To Flex Date: Not reported
Added To Piping Date: Not reported
Decode For Tstatus: Closed In Place
Decode For Inertmatcd: Other
Decode For Tmatcode: Double Wall Steel
Decode For Textcrprd: Coating & Cathodic Protection
Decode For Treltdcod: Manual Tank Gauging
Decode For Tintprotcd: Not Applicable
Decode For Tsplprevcd: Single Wall Spill Bucket
Decode For Tovflprvcd: Automatic Shutoff Device
Decode For Pmatcode: Single Wall Steel
Decode For Pextcoprcd: Other Please Specify
Decode For Ptypecode: Suction
Decode For Preldetcd: None
Decode For Preldetsuc: Check Valve
Decode For Plekdetcd: Not Applicable

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

REDHOUSE COUNTRY STORE (Continued)

U001181964

Decode For Tsubcd:	Gasoline
Decode For Tmancd:	STI-P3
Decode For Pmancd:	Not reported
Subject Item ID:	4
Tank Status:	TCP
Installation Date:	01/10/2000
Closed In Place Date:	Not reported
Capacity in Gallons:	2000
Compartment Number:	1
Piping Installation Date:	Not reported
Added To Tank Date:	01/10/2000
Inert Material Code:	Not reported
Removed Date:	01/11/1996
Change in Service Date:	Not reported
Tank Pit Num:	Not reported
Tank Mfg Code:	Not reported
Tank Overfill Protection:	UNK
Last Tank Test Date:	Not reported
Relined Date:	Not reported
Lining Insp Date:	Not reported
Pipe Release Detection:	UNK
Pipe Rel Detect Suc Code:	UNK
Pipe Leak Detect Code:	NA
Last Contained Date:	Not reported
Pipe Mfg Code:	Not reported
Last Pipe Test Date:	Not reported
Last CP Test Date:	Not reported
Added To Flex Date:	Not reported
Added To Piping Date:	Not reported
Decode For Tstatus:	Removed Tank Verified
Decode For Inertmatcd:	Not reported
Decode For Tmatcode:	Single Wall Steel
Decode For Textcrprcd:	Unknown
Decode For Treldecod:	None
Decode For Tintprotcd:	Unknown
Decode For Tsplprevcd:	Unknown
Decode For Tovflprvcd:	Unknown
Decode For Pmatcode:	Unknown
Decode For Pextcoprcd:	Unknown
Decode For Ptypecode:	Unknown
Decode For Preldecod:	Unknown
Decode For Preldecod:	Unknown
Decode For Plekdecod:	Not Applicable
Decode For Tsubcd:	Diesel
Decode For Tmancd:	Not reported
Decode For Pmancd:	Not reported
Subject Item ID:	3
Tank Status:	TRM
Installation Date:	01/01/1980
Closed In Place Date:	Not reported
Capacity in Gallons:	500
Compartment Number:	1
Piping Installation Date:	Not reported
Added To Tank Date:	Not reported
Inert Material Code:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

REDHOUSE COUNTRY STORE (Continued)

U001181964

Removed Date: 01/01/1980
Change in Service Date: Not reported
Tank Pit Num: Not reported
Tank Mfg Code: Not reported
Tank Overfill Protection: UNK
Last Tank Test Date: Not reported
Relined Date: Not reported
Lining Insp Date: Not reported
Pipe Release Detection: CKV
Pipe Rel Detect Suc Code: CKV
Pipe Leak Detect Code: NA
Last Contained Date: Not reported
Pipe Mfg Code: Not reported
Last Pipe Test Date: Not reported
Last CP Test Date: Not reported
Added To Flex Date: Not reported
Added To Piping Date: Not reported
Decode For Tstatus: Removed Prior to 1988
Decode For Inertmatcd: Not reported
Decode For Tmatcode: Single Wall Steel
Decode For Textcrprd: Coating & Cathodic Protection
Decode For Treltcd: Manual Tank Gauging
Decode For Tintprotcd: Not Applicable
Decode For Tsplprevcd: Unknown
Decode For Tovflprvcd: Unknown
Decode For Pmatcode: Single Wall Steel
Decode For Pextcoprcd: Other Please Specify
Decode For Ptypecode: Suction
Decode For Preldetcd: Check Valve
Decode For Preldetsuc: Check Valve
Decode For Plekdetcd: Not Applicable
Decode For Tsubcd: Gasoline
Decode For Tmancd: Not reported
Decode For Pmancd: Not reported
Subject Item ID: 2
Tank Status: TR8
Installation Date: 01/01/1980
Closed In Place Date: Not reported
Capacity in Gallons: 1120
Compartment Number: 1
Piping Installation Date: Not reported
Added To Tank Date: Not reported

Inert Material Code: Not reported
Removed Date: 01/11/1996
Change in Service Date: Not reported
Tank Pit Num: Not reported
Tank Mfg Code: Not reported
Tank Overfill Protection: UNK
Last Tank Test Date: Not reported
Relined Date: Not reported
Lining Insp Date: Not reported
Pipe Release Detection: CKV
Pipe Rel Detect Suc Code: CKV
Pipe Leak Detect Code: NA
Last Contained Date: Not reported
Pipe Mfg Code: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

REDHOUSE COUNTRY STORE (Continued)

U001181964

Last Pipe Test Date:	Not reported
Last CP Test Date:	Not reported
Added To Flex Date:	Not reported
Added To Piping Date:	Not reported
Decode For Tstatus:	Removed Tank Verified
Decode For Inertmatcd:	Not reported
Decode For Tmatcode:	Single Wall Steel
Decode For Textcrprd:	Coating & Cathodic Protection
Decode For Treltdetcod:	Manual Tank Gauging
Decode For Tintprotcd:	Not Applicable
Decode For Tsplprevcd:	Unknown
Decode For Tovflprvcd:	Unknown
Decode For Pmatcode:	Single Wall Steel
Decode For Pextcoprpd:	Other Please Specify
Decode For Ptypecode:	Suction
Decode For Preldetcod:	Check Valve
Decode For Preldetsuc:	Check Valve
Decode For Plekdetcod:	Not Applicable
Decode For Tsubcd:	Gasoline
Decode For Tmancd:	Not reported
Decode For Pmancd:	Not reported
Subject Item ID:	1
Tank Status:	TRM
Installation Date:	01/01/1980
Closed In Place Date:	Not reported
Capacity in Gallons:	2000
Compartment Number:	1
Piping Installation Date:	Not reported
Added To Tank Date:	Not reported

C10
SSW
 < 1/8
 0.081 mi.
 429 ft.

D G S COAL COMPANY INC
ROCKCASTLE (County), KY
Site 1 of 3 in cluster C

US MINES 1011163544
N/A

Actual:
713 ft.
Focus Map:
4

US MINES:	
Sic Code(s):	122200
Sic Code(s):	000000
Sic Code(s):	000000
Sic Code(s):	000000
Sic Code(s):	000000
Sic Code(s):	000000
Mine ID:	1512873
Entity Name:	NO 1 SURFACE MINE
Company:	D G S COAL COMPANY INC
Status:	D
Status Date:	19810917
Operation Class:	1
Number of Shops:	0
Number of Plants:	0
Latitude Degree:	00
Longitude Degree:	000
Latitude Minute:	00
Latitude Seconds:	00
Longitude Minutes:	00
Longitude Seconds:	00
Number of Pits:	000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

C11 **TENKILLER MINING SERVICES INC**
SSW
< 1/8 **ROCKCASTLE (County), KY**
0.099 mi.
525 ft. **Site 2 of 3 in cluster C**

US MINES **1016481853**
N/A

Actual: **US MINES:**
711 ft. Sic Code(s): 122200
Focus Map: Sic Code(s): 000000
4 Sic Code(s): 000000
 Sic Code(s): 000000
 Sic Code(s): 000000
 Sic Code(s): 000000
 Mine ID: 1510123
 Entity Name: PREP PLANT
 Company: TENKILLER MINING SERVICES INC
 Status: D
 Status Date: 19800730
 Operation Class: 1
 Number of Shops: 0
 Number of Plants: 0
 Latitude Degree: 00
 Longitude Degree: 000
 Latitude Minute: 00
 Latitude Seconds: 00
 Longitude Minutes: 00
 Longitude Seconds: 00
 Number of Pits: 000

C12 **NO 2 TIPPLE**
SSW
< 1/8 **, KY 42567**
0.103 mi.
543 ft. **Site 3 of 3 in cluster C**

ABANDONED MINES **1022852097**
N/A

Actual: **ABANDONED MINES:**
712 ft. Mine ID: 1512440
Focus Map: Mine Name: NO 2 TIPPLE
4 Mine Address: Not reported
 City,State,Zip: KY 42567
 Primary SIC Code: Not reported
 Mine Type: Facility
 Mine Status Description: Abandoned
 Mine Status Date: 6/1/1984
 Coal (C) or Metal (M) Mine: C
 Controller ID: C10330
 Controller Name: Danny Jasper
 Operator ID: P14185
 Operator name: Jasper & Associates Inc
 Address of Record Street: Rte 1 Box 308
 Address of Record PO Box: Not reported
 Address of Record City: EUBANK
 Address of Record State: KY
 Address of Record Zip Code: 42567
 Assessment Address Street: Rte 1 Box 308
 Assessment Address PO Box: Not reported
 Assessment Address City: EUBANK
 Assessment Address State: KY
 Assessment Address Zip Code: 42567
 Mine Health and Safety Address Street: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NO 2 TIPPLE (Continued)

1022852097

Mine Health and Safety Address PO Box: Not reported
Mine Health and Safety Address City: Not reported
Mine Health and Safety Address State: Not reported
Mine Health and Safety Address Zip Code: Not reported
Latitude: 37.8444
Longitude: -84.2667

D13
WSW
< 1/8
0.112 mi.
592 ft.

MADISON CO BOARD OF EDUCATION BUS GARAGE
230 NORTH KEENELAND DRIVE
RICHMOND, KY 40475

SHWS S111026348
N/A

Site 1 of 2 in cluster D

Actual:
945 ft.

SHWS:

Focus Map:
15

Name: MADISON CO BOARD OF EDUCATION BUS GARAGE
Address: 230 NORTH KEENELAND DRIVE
City,State,Zip: RICHMOND, KY 40475
Facility Id: 99640
Status: Closed
Description: Leaking dispenser
Closure Date: 03/26/2008
Longitude: -84.319229
Latitude: 37.779862
Subject Item County: Madison
Sub Item Longitude: -84.320552
Sub Item Latitude: 37.779569
Subject Item Address: 230 N Keeneland Dr
Subject Item Address2: Not reported
Subject Item City,St,Zip: Richmond, KY 40475
Regulatory Desc: Petroleum Cleanup
Closure Option: Option A No Action Necessary
Side SG: AST

D14
WSW
< 1/8
0.112 mi.
594 ft.

AAMCO OF RICHMOND
240 N KEENELAND DR STE 3
RICHMOND, KY 40475

EDR Hist Auto 1021882636
N/A

Site 2 of 2 in cluster D

Actual:
949 ft.

EDR Hist Auto

Focus Map:
15

Year:	Name:	Type:
2008	AAMCO OF RICHMOND	Automotive Transmission Repair Shops
2009	AAMCO OF RICHMOND	Automotive Transmission Repair Shops
2010	AAMCO OF RICHMOND	Automotive Transmission Repair Shops
2011	AAMCO OF RICHMOND	Automotive Transmission Repair Shops
2012	AAMCO OF RICHMOND	Automotive Transmission Repair Shops
2013	AAMCO OF RICHMOND	Automotive Transmission Repair Shops
2014	AAMCO OF RICHMOND	Automotive Transmission Repair Shops

MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance			
Elevation	Site	Database(s)	

15 SSW < 1/8 0.118 mi. 621 ft.	JASPER & ASSOCIATES INC ROCKCASTLE (County), KY	US MINES	1016482649 N/A
--	--	-----------------	---------------------------------

Actual: 709 ft. Focus Map: 4	<table border="0" style="width: 100%;"> <tr> <td style="width: 15%;">US MINES:</td> <td></td> </tr> <tr> <td>Sic Code(s):</td> <td>122200</td> </tr> <tr> <td>Sic Code(s):</td> <td>000000</td> </tr> <tr> <td>Sic Code(s):</td> <td>000000</td> </tr> <tr> <td>Sic Code(s):</td> <td>000000</td> </tr> <tr> <td>Sic Code(s):</td> <td>000000</td> </tr> <tr> <td>Sic Code(s):</td> <td>000000</td> </tr> <tr> <td>Mine ID:</td> <td>1512440</td> </tr> <tr> <td>Entity Name:</td> <td>NO 2 TIPPLE</td> </tr> <tr> <td>Company:</td> <td>JASPER & ASSOCIATES INC</td> </tr> <tr> <td>Status:</td> <td>D</td> </tr> <tr> <td>Status Date:</td> <td>19840601</td> </tr> <tr> <td>Operation Class:</td> <td>1</td> </tr> <tr> <td>Number of Shops:</td> <td>0</td> </tr> <tr> <td>Number of Plants:</td> <td>0</td> </tr> <tr> <td>Latitude Degree:</td> <td>37</td> </tr> <tr> <td>Longitude Degree:</td> <td>084</td> </tr> <tr> <td>Latitude Minute:</td> <td>50</td> </tr> <tr> <td>Latitude Seconds:</td> <td>39</td> </tr> <tr> <td>Longitude Minutes:</td> <td>16</td> </tr> <tr> <td>Longitude Seconds:</td> <td>00</td> </tr> <tr> <td>Number of Pits:</td> <td>000</td> </tr> </table>	US MINES:		Sic Code(s):	122200	Sic Code(s):	000000	Sic Code(s):	000000	Sic Code(s):	000000	Sic Code(s):	000000	Sic Code(s):	000000	Mine ID:	1512440	Entity Name:	NO 2 TIPPLE	Company:	JASPER & ASSOCIATES INC	Status:	D	Status Date:	19840601	Operation Class:	1	Number of Shops:	0	Number of Plants:	0	Latitude Degree:	37	Longitude Degree:	084	Latitude Minute:	50	Latitude Seconds:	39	Longitude Minutes:	16	Longitude Seconds:	00	Number of Pits:	000
US MINES:																																													
Sic Code(s):	122200																																												
Sic Code(s):	000000																																												
Sic Code(s):	000000																																												
Sic Code(s):	000000																																												
Sic Code(s):	000000																																												
Sic Code(s):	000000																																												
Mine ID:	1512440																																												
Entity Name:	NO 2 TIPPLE																																												
Company:	JASPER & ASSOCIATES INC																																												
Status:	D																																												
Status Date:	19840601																																												
Operation Class:	1																																												
Number of Shops:	0																																												
Number of Plants:	0																																												
Latitude Degree:	37																																												
Longitude Degree:	084																																												
Latitude Minute:	50																																												
Latitude Seconds:	39																																												
Longitude Minutes:	16																																												
Longitude Seconds:	00																																												
Number of Pits:	000																																												

E16 WSW 1/8-1/4 0.129 mi. 681 ft.	NTW LLC #519 123 N. KEENELAND DRIVE RICHMOND, KY 40475 Site 1 of 2 in cluster E	RCRA NonGen / NLR	1012179312 KYR000049742
---	--	--------------------------	--

Actual: 937 ft. Focus Map: 15	<table border="0" style="width: 100%;"> <tr> <td style="width: 15%;">RCRA NonGen / NLR:</td> <td></td> </tr> <tr> <td>Date form received by agency:</td> <td>2013-05-15 00:00:00.0</td> </tr> <tr> <td>Facility name:</td> <td>NTW LLC #519</td> </tr> <tr> <td>Facility address:</td> <td>123 N. KEENELAND DRIVE RICHMOND, KY 40475</td> </tr> <tr> <td>EPA ID:</td> <td>KYR000049742</td> </tr> <tr> <td>Mailing address:</td> <td>DONALD ROSS ROAD JUNO BEACH, FL 33408</td> </tr> <tr> <td>Contact:</td> <td>DAVID ZOLNOWSKI</td> </tr> <tr> <td>Contact address:</td> <td>DONALD ROSS ROAD JUNO BEACH, FL 33408</td> </tr> <tr> <td>Contact country:</td> <td>US</td> </tr> <tr> <td>Contact telephone:</td> <td>561-383-3000</td> </tr> <tr> <td>Contact email:</td> <td>Not reported</td> </tr> <tr> <td>EPA Region:</td> <td>04</td> </tr> <tr> <td>Land type:</td> <td>Private</td> </tr> <tr> <td>Classification:</td> <td>Non-Generator</td> </tr> <tr> <td>Description:</td> <td>Handler: Non-Generators do not presently generate hazardous waste</td> </tr> <tr> <td> </td> <td></td> </tr> <tr> <td>Owner/Operator Summary:</td> <td></td> </tr> <tr> <td>Owner/operator name:</td> <td>NTW LLC #519</td> </tr> <tr> <td>Owner/operator address:</td> <td>Not reported Not reported</td> </tr> <tr> <td>Owner/operator country:</td> <td>Not reported</td> </tr> </table>	RCRA NonGen / NLR:		Date form received by agency:	2013-05-15 00:00:00.0	Facility name:	NTW LLC #519	Facility address:	123 N. KEENELAND DRIVE RICHMOND, KY 40475	EPA ID:	KYR000049742	Mailing address:	DONALD ROSS ROAD JUNO BEACH, FL 33408	Contact:	DAVID ZOLNOWSKI	Contact address:	DONALD ROSS ROAD JUNO BEACH, FL 33408	Contact country:	US	Contact telephone:	561-383-3000	Contact email:	Not reported	EPA Region:	04	Land type:	Private	Classification:	Non-Generator	Description:	Handler: Non-Generators do not presently generate hazardous waste	 		Owner/Operator Summary:		Owner/operator name:	NTW LLC #519	Owner/operator address:	Not reported Not reported	Owner/operator country:	Not reported
RCRA NonGen / NLR:																																									
Date form received by agency:	2013-05-15 00:00:00.0																																								
Facility name:	NTW LLC #519																																								
Facility address:	123 N. KEENELAND DRIVE RICHMOND, KY 40475																																								
EPA ID:	KYR000049742																																								
Mailing address:	DONALD ROSS ROAD JUNO BEACH, FL 33408																																								
Contact:	DAVID ZOLNOWSKI																																								
Contact address:	DONALD ROSS ROAD JUNO BEACH, FL 33408																																								
Contact country:	US																																								
Contact telephone:	561-383-3000																																								
Contact email:	Not reported																																								
EPA Region:	04																																								
Land type:	Private																																								
Classification:	Non-Generator																																								
Description:	Handler: Non-Generators do not presently generate hazardous waste																																								
Owner/Operator Summary:																																									
Owner/operator name:	NTW LLC #519																																								
Owner/operator address:	Not reported Not reported																																								
Owner/operator country:	Not reported																																								

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NTW LLC #519 (Continued)

1012179312

Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 2005-11-01 00:00:00.
Owner/Op end date: Not reported

Owner/operator name: NTW LLC #519
Owner/operator address: DONALD ROSS ROAD
JUNO BEACH, FL 33408

Owner/operator country: US
Owner/operator telephone: 561-383-3000
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 2005-11-01 00:00:00.
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 2009-02-26 00:00:00.0
Site name: NTW LLC #519
Classification: Conditionally Exempt Small Quantity Generator

Hazardous Waste Summary:

. Waste code: D008
. Waste name: LEAD

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 2012-01-11 00:00:00.0
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NTW LLC #519 (Continued)

1012179312

Date achieved compliance: Not reported
Evaluation lead agency: State

17
SW
1/8-1/4
0.134 mi.
705 ft.

MOTEL 6 (FORMER DAYS INN)
I-75 & US 421
RICHMOND, KY 40478

UST **U000721576**
N/A

Actual:
929 ft.
Focus Map:
15

UST:
Name: MOTEL 6 (FORMER DAYS INN)
Address: I-75 & US 421
City,State,Zip: RICHMOND, KY 40478
Sequence Id: 6366076
Facility ID: 69463
Owner Name: Motel 6
Owner Address: Lexington Dr/Northgate Dr
Owner Address2: Not reported
Owner Address3: Not reported
Owner City,St,Zip: Richmond, KY 40478
Internal Document ID: 0
Latitude: 37.771938
Longitude: -84.314762

Inert Material Code: Not reported
Removed Date: 12/09/1988
Change in Service Date: Not reported
Tank Pit Num: Not reported
Tank Mfg Code: Not reported
Tank Overfill Protection: UNK
Last Tank Test Date: Not reported
Relined Date: Not reported
Lining Insp Date: Not reported
Pipe Release Detection: UNK
Pipe Rel Detect Suc Code: UNK
Pipe Leak Detect Code: NA
Last Contained Date: Not reported
Pipe Mfg Code: Not reported
Last Pipe Test Date: Not reported
Last CP Test Date: Not reported
Added To Flex Date: Not reported
Added To Piping Date: Not reported
Decode For Tstatus: Removed Tank Verified
Decode For Inertmatcd: Not reported
Decode For Tmatcode: Single Wall Steel
Decode For Textcrprcd: Unknown
Decode For Treltdetcd: None
Decode For Tintprotcd: Unknown
Decode For Tsplprevcd: Unknown
Decode For Tovflprvcd: Unknown
Decode For Pmatcode: Single Wall Steel
Decode For Pextcoprcd: Unknown
Decode For Ptypecode: Unknown
Decode For Preldetcd: Unknown
Decode For Preldetsuc: Unknown
Decode For Plekdetcd: Not Applicable
Decode For Tsubcd: Gasoline
Decode For Tmancd: Not reported
Decode For Pmancd: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MOTEL 6 (FORMER DAYS INN) (Continued)

U000721576

Subject Item ID: 2
Tank Status: TRM
Installation Date: 01/01/1972
Closed In Place Date: Not reported
Capacity in Gallons: 10000
Compartment Number: 1
Piping Installation Date: Not reported
Added To Tank Date: Not reported

Inert Material Code: Not reported
Removed Date: 12/09/1988
Change in Service Date: Not reported
Tank Pit Num: Not reported
Tank Mfg Code: Not reported
Tank Overfill Protection: UNK
Last Tank Test Date: Not reported
Relined Date: Not reported
Lining Insp Date: Not reported
Pipe Release Detection: UNK
Pipe Rel Detect Suc Code: UNK
Pipe Leak Detect Code: NA
Last Contained Date: Not reported
Pipe Mfg Code: Not reported
Last Pipe Test Date: Not reported
Last CP Test Date: Not reported
Added To Flex Date: Not reported
Added To Piping Date: Not reported
Decode For Tstatus: Removed Tank Verified
Decode For Inertmatcd: Not reported
Decode For Tmatcode: Single Wall Steel
Decode For Textcrpcd: Unknown
Decode For Treldecod: None
Decode For Tintprotcd: Unknown
Decode For Tsplprevcd: Unknown
Decode For Tovflprvcd: Unknown
Decode For Pmatcode: Single Wall Steel
Decode For Pextcoprcd: Unknown
Decode For Ptypecode: Unknown
Decode For Preldetcd: Unknown
Decode For Preldetsuc: Unknown
Decode For Plekdetcd: Not Applicable
Decode For Tsubcd: Gasoline
Decode For Tmancd: Not reported
Decode For Pmancd: Not reported
Subject Item ID: 1
Tank Status: TRM
Installation Date: 01/01/1972
Closed In Place Date: Not reported
Capacity in Gallons: 10000
Compartment Number: 1
Piping Installation Date: Not reported
Added To Tank Date: Not reported

Inert Material Code: Not reported
Removed Date: 12/09/1988
Change in Service Date: Not reported
Tank Pit Num: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MOTEL 6 (FORMER DAYS INN) (Continued)

U000721576

Tank Mfg Code: Not reported
Tank Overfill Protection: UNK
Last Tank Test Date: Not reported
Relined Date: Not reported
Lining Insp Date: Not reported
Pipe Release Detection: UNK
Pipe Rel Detect Suc Code: UNK
Pipe Leak Detect Code: NA
Last Contained Date: Not reported
Pipe Mfg Code: Not reported
Last Pipe Test Date: Not reported
Last CP Test Date: Not reported
Added To Flex Date: Not reported
Added To Piping Date: Not reported
Decode For Tstatus: Removed Tank Verified
Decode For Inertmatcd: Not reported
Decode For Tmatcode: Single Wall Steel
Decode For Textcrpcd: Unknown
Decode For Treltcd: None
Decode For Tintprotcd: Unknown
Decode For Tsplprevcd: Unknown
Decode For Tovflprvcd: Unknown
Decode For Pmatcode: Single Wall Steel
Decode For Pextcoprcd: Unknown
Decode For Ptypecode: Unknown
Decode For Preltcd: Unknown
Decode For Preltetsuc: Unknown
Decode For Plekdetcd: Not Applicable
Decode For Tsubcd: Gasoline
Decode For Tmancd: Not reported
Decode For Pmancd: Not reported
Subject Item ID: 3
Tank Status: TRM
Installation Date: 01/01/1972
Closed In Place Date: Not reported
Capacity in Gallons: 10000
Compartment Number: 1
Piping Installation Date: Not reported
Added To Tank Date: Not reported

E18 TO GO VALERO
WSW 112 N KEENELAND DR
1/8-1/4 RICHMOND, KY 40475
0.154 mi.
814 ft. Site 2 of 2 in cluster E

UST U003790318
N/A

Actual: 940 ft.
Focus Map: 15
UST:
Name: TO GO VALERO
Address: 112 N KEENELAND DR
City,State,Zip: RICHMOND, KY 40475
Sequence Id: 20080935
Facility ID: 57387
Owner Name: MS Oil LLC
Owner Address: 125 Tuscany Way
Owner Address2: Not reported
Owner Address3: Not reported
Owner City,St,Zip: Richmond, KY 40475
Internal Document ID: 0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TO GO VALERO (Continued)

U003790318

Latitude: 37.776944
Longitude: -84.319167

Inert Material Code: Not reported
Removed Date: Not reported
Change in Service Date: Not reported
Tank Pit Num: Not reported
Tank Mfg Code: Not reported
Tank Overfill Protection: FLR
Last Tank Test Date: Not reported
Relined Date: Not reported
Lining Insp Date: Not reported
Pipe Release Detection: LTT
Pipe Rel Detect Suc Code: NON
Pipe Leak Detect Code: MLD
Last Contained Date: Not reported
Pipe Mfg Code: ENV
Last Pipe Test Date: 01/15/2019
Last CP Test Date: Not reported
Added To Flex Date: Not reported
Added To Piping Date: Not reported
Decode For Tstatus: Active
Decode For Inertmatcd: Not reported
Decode For Tmatcode: Fiberglass Reinforced
Decode For Textcrprcd: Not Applicable
Decode For Treldecd: Automatic Tank Gauging
Decode For Tintprotcd: Not Applicable
Decode For Tsplprevcd: Single Wall Spill Bucket
Decode For Tovflprvcd: Flow Restrictor
Decode For Pmatcode: Flexible Wall
Decode For Pextcoprcd: Not Applicable
Decode For Ptypecode: Pressurized
Decode For Preldecd: Line Tightness Test
Decode For Preldecsuc: None
Decode For Plekdecd: Manual Line Leak Detection
Decode For Tsubcd: GAS-PRM-Prem Unl Gas
Decode For Tmancd: Not reported
Decode For Pmancd: Environ - Geoflex D
Subject Item ID: 2
Tank Status: TAC
Installation Date: 04/02/1997
Closed In Place Date: Not reported
Capacity in Gallons: 8000
Compartment Number: 1
Piping Installation Date: Not reported
Added To Tank Date: 04/02/1997

Inert Material Code: Not reported
Removed Date: Not reported
Change in Service Date: Not reported
Tank Pit Num: Not reported
Tank Mfg Code: Not reported
Tank Overfill Protection: FLR
Last Tank Test Date: 01/13/2015
Relined Date: Not reported
Lining Insp Date: Not reported
Pipe Release Detection: LTT

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

TO GO VALERO (Continued)

U003790318

Pipe Rel Detect Suc Code: NON
Pipe Leak Detect Code: MLD
Last Contained Date: Not reported
Pipe Mfg Code: ENV
Last Pipe Test Date: 01/15/2019
Last CP Test Date: Not reported
Added To Flex Date: Not reported
Added To Piping Date: Not reported
Decode For Tstatus: Active
Decode For Inertmatcd: Not reported
Decode For Tmatcode: Fiberglass Reinforced
Decode For Textcrprd: Not Applicable
Decode For Treltcd: Automatic Tank Gauging
Decode For Tintprotcd: Not Applicable
Decode For Tsplprevcd: Double Wall Spill Bucket
Decode For Tovflprvcd: Flow Restrictor
Decode For Pmatcode: Flexible Wall
Decode For Pextcprcd: Not Applicable
Decode For Ptypecode: Pressurized
Decode For Preltcd: Line Tightness Test
Decode For Preltcdsuc: None
Decode For Plekdetcd: Manual Line Leak Detection
Decode For Tsubcd: GAS-UNL-Reg Unl Gas
Decode For Tmancd: Not reported
Decode For Pmancd: Environ - Geoflex D
Subject Item ID: 1
Tank Status: TAC
Installation Date: 04/02/1997
Closed In Place Date: Not reported
Capacity in Gallons: 12000
Compartment Number: 1
Piping Installation Date: Not reported
Added To Tank Date: 04/02/1997

F19 FRIENDLY MART EXXON NO 12
WSW 2121 LEXINGTON RD
1/8-1/4 RICHMOND, KY 40475
0.206 mi.
1090 ft. Site 1 of 4 in cluster F

UST U003180430
N/A

Actual: 924 ft.
Focus Map: 15

UST:
Name: FRIENDLY MART EXXON NO 12
Address: 2121 LEXINGTON RD
City,State,Zip: RICHMOND, KY 40475
Sequence Id: 1034076
Facility ID: 59640
Owner Name: G & M Oil Co Inc
Owner Address: 76 Old US 25E
Owner Address2: Not reported
Owner Address3: Not reported
Owner City,St,Zip: Barbourville, KY 40906
Internal Document ID: 0
Latitude: 37.775833
Longitude: -84.32

Inert Material Code: Not reported
Removed Date: Not reported
Change in Service Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FRIENDLY MART EXXON NO 12 (Continued)

U003180430

Tank Pit Num:	Not reported
Tank Mfg Code:	XER
Tank Overfill Protection:	FLR
Last Tank Test Date:	Not reported
Relined Date:	Not reported
Lining Insp Date:	Not reported
Pipe Release Detection:	LTT
Pipe Rel Detect Suc Code:	NON
Pipe Leak Detect Code:	MLD
Last Contained Date:	Not reported
Pipe Mfg Code:	ENV
Last Pipe Test Date:	10/22/2019
Last CP Test Date:	Not reported
Added To Flex Date:	Not reported
Added To Piping Date:	Not reported
Decode For Tstatus:	Active
Decode For Inertmatcd:	Not reported
Decode For Tmatcode:	Double Wall Fiberglass
Decode For Textcrprcd:	Not Applicable
Decode For Treltdetcd:	Automatic Tank Gauging
Decode For Tintprotcd:	Not Applicable
Decode For Tsplprevcd:	Single Wall Spill Bucket
Decode For Tovflprvcd:	Flow Restrictor
Decode For Pmatcode:	Flexible Wall
Decode For Pextcoprcd:	Not Applicable
Decode For Ptypecode:	Pressurized
Decode For Preltdetcd:	Line Tightness Test
Decode For Preltdetsuc:	None
Decode For Plektdetcd:	Manual Line Leak Detection
Decode For Tsubcd:	GAS-PRM-Prem Unl Gas
Decode For Tmancd:	Xerxes
Decode For Pmancd:	Environ - Geoflex D
Subject Item ID:	2
Tank Status:	TAC
Installation Date:	03/01/1997
Closed In Place Date:	Not reported
Capacity in Gallons:	15000
Compartment Number:	1
Piping Installation Date:	Not reported
Added To Tank Date:	Not reported
Inert Material Code:	Not reported
Removed Date:	Not reported
Change in Service Date:	Not reported
Tank Pit Num:	Not reported
Tank Mfg Code:	XER
Tank Overfill Protection:	FLR
Last Tank Test Date:	Not reported
Relined Date:	Not reported
Lining Insp Date:	Not reported
Pipe Release Detection:	LTT
Pipe Rel Detect Suc Code:	NON
Pipe Leak Detect Code:	MLD
Last Contained Date:	Not reported
Pipe Mfg Code:	ENV
Last Pipe Test Date:	10/22/2019
Last CP Test Date:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FRIENDLY MART EXXON NO 12 (Continued)

U003180430

Added To Flex Date: Not reported
Added To Piping Date: Not reported
Decode For Tstatus: Active
Decode For Inertmatcd: Not reported
Decode For Tmatcode: Double Wall Fiberglass
Decode For Textcrprd: Not Applicable
Decode For Treltcd: Automatic Tank Gauging
Decode For Tintprotcd: Not Applicable
Decode For Tsplprevcd: Double Wall Spill Bucket
Decode For Tovflprvcd: Flow Restrictor
Decode For Pmatcode: Flexible Wall
Decode For Pextcoprcd: Not Applicable
Decode For Ptyecode: Pressurized
Decode For Preltcd: Line Tightness Test
Decode For Preltetsuc: None
Decode For Plekdetcd: Manual Line Leak Detection
Decode For Tsubcd: GAS-UNL-Reg Unl Gas
Decode For Tmancd: Xerxes
Decode For Pmancd: Environ - Geoflex D
Subject Item ID: 1
Tank Status: TAC
Installation Date: 03/01/1997
Closed In Place Date: Not reported
Capacity in Gallons: 15000
Compartment Number: 1
Piping Installation Date: Not reported
Added To Tank Date: Not reported

F20
WSW
1/8-1/4
0.217 mi.
1145 ft.

BMV ENTERPRISES/LEXINGTON ROAD SHELL
2120 LEXINGTON ROAD
RICHMOND, KY 40475
Site 2 of 4 in cluster F

RCRA NonGen / NLR **1012179407**
KYR000050690

Actual:
929 ft.

RCRA NonGen / NLR:

Focus Map:
15

Date form received by agency: 2009-08-18 00:00:00.0
Facility name: BMV ENTERPRISES/LEXINGTON ROAD SHELL
Facility address: 2120 LEXINGTON ROAD
RICHMOND, KY 40475
EPA ID: KYR000050690
Mailing address: P.O. BOX 1836
PETRO SERV
RICHMOND, KY 40476
Contact: ERIK WESLEY
Contact address: P.O. BOX 1836 PETRO SERV
RICHMOND, KY 40476
Contact country: US
Contact telephone: 859-623-8520
Contact email: Not reported
EPA Region: 04
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: PETER SHAH
Owner/operator address: LEXINGTON ROAD
RICHMOND, KY 40475

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BMV ENTERPRISES/LEXINGTON ROAD SHELL (Continued)

1012179407

Owner/operator country: US
Owner/operator telephone: 859-623-6592
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 2009-08-18 00:00:00.
Owner/Op end date: Not reported

Owner/operator name: LEXINGTON ROAD SHELL
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 2009-08-18 00:00:00.
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D008
. Waste name: LEAD

. Waste code: D018
. Waste name: BENZENE

Violation Status: No violations found

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

F21 **LEXINGTON ROAD SHELL**
WSW **2120 LEXINGTON RD**
1/8-1/4 **RICHMOND, KY 40475**
0.217 mi.
1145 ft. **Site 3 of 4 in cluster F**

SB193 **U001442478**
UST **N/A**
Financial Assurance

Actual: KY SENATE BILL 193 INVENTORY:
929 ft. KY SENATE BILL 193 INVENTORY: CLW
Focus Map: Facility ID: 0921076
15 Soil / Groundwater: Soil
 Agency Interest Number: 59610

UST:
Name: LEXINGTON ROAD SHELL
Address: 2120 LEXINGTON RD
City,State,Zip: RICHMOND, KY 40475
Sequence Id: Not reported
Facility ID: 59610
Owner Name: A & A Adhikari Corporation
Owner Address: 2120 Lexington Rd
Owner Address2: Not reported
Owner Address3: Not reported
Owner City,St,Zip: Richmond, KY 40475
Internal Document ID: 0
Latitude: 37.7765
Longitude: -84.319806

Inert Material Code: Not reported
Removed Date: Not reported
Change in Service Date: Not reported
Tank Pit Num: Not reported
Tank Mfg Code: XER
Tank Overfill Protection: Not reported
Last Tank Test Date: Not reported
Relined Date: Not reported
Lining Insp Date: Not reported
Pipe Release Detection: Not reported
Pipe Rel Detect Suc Code: Not reported
Pipe Leak Detect Code: Not reported
Last Contained Date: Not reported
Pipe Mfg Code: SMI
Last Pipe Test Date: 02/04/2019
Last CP Test Date: Not reported
Added To Flex Date: Not reported
Added To Piping Date: Not reported
Decode For Tstatus: Active
Decode For Inertmatcd: Not reported
Decode For Tmatcode: Fiberglass Reinforced
Decode For Textcrprcd: Not Applicable
Decode For Treldetcod: Not reported
Decode For Tintprotcd: Not Applicable
Decode For Tsplprevcd: Single Wall Spill Bucket
Decode For Tovflprvcd: Not reported
Decode For Pmatcode: Not reported
Decode For Pextcoprcd: Not reported
Decode For Ptypecode: Not reported
Decode For Preldetcod: Not reported
Decode For Preldetsuc: Not reported
Decode For Plekdetcod: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LEXINGTON ROAD SHELL (Continued)

U001442478

Decode For Tsubcd: GAS-PRM-Prem Unl Gas
Decode For Tmancd: Xerxes
Decode For Pmancd: Smith -- Fiberglass Systems
Subject Item ID: 8
Tank Status: TAC
Installation Date: 08/14/2009
Closed In Place Date: Not reported
Capacity in Gallons: 4000
Compartment Number: 1
Piping Installation Date: Not reported
Added To Tank Date: Not reported

Inert Material Code: Not reported
Removed Date: Not reported
Change in Service Date: Not reported
Tank Pit Num: Not reported
Tank Mfg Code: XER
Tank Overfill Protection: Not reported
Last Tank Test Date: Not reported
Relined Date: Not reported
Lining Insp Date: Not reported
Pipe Release Detection: Not reported
Pipe Rel Detect Suc Code: Not reported
Pipe Leak Detect Code: Not reported
Last Contained Date: Not reported
Pipe Mfg Code: SMI
Last Pipe Test Date: 02/04/2019
Last CP Test Date: Not reported
Added To Flex Date: Not reported
Added To Piping Date: Not reported
Decode For Tstatus: Active
Decode For Inertmatcd: Not reported
Decode For Tmatcode: Fiberglass Reinforced
Decode For Textcrprcd: Not Applicable
Decode For Treldecod: Not reported
Decode For Tintprotcd: Not Applicable
Decode For Tsplprvcd: Single Wall Spill Bucket
Decode For Tovflprvcd: Not reported
Decode For Pmatcode: Not reported
Decode For Pextcoprcd: Not reported
Decode For Ptypecode: Not reported
Decode For Preldetcod: Not reported
Decode For Preldetsuc: Not reported
Decode For Plekdetcod: Not reported
Decode For Tsubcd: GAS-PLS-Plus Unl Gas
Decode For Tmancd: Xerxes
Decode For Pmancd: Smith -- Fiberglass Systems
Subject Item ID: 7
Tank Status: TAC
Installation Date: 08/14/2009
Closed In Place Date: Not reported
Capacity in Gallons: 4000
Compartment Number: 1
Piping Installation Date: Not reported
Added To Tank Date: Not reported

Inert Material Code: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LEXINGTON ROAD SHELL (Continued)

U001442478

Removed Date:	Not reported
Change in Service Date:	Not reported
Tank Pit Num:	Not reported
Tank Mfg Code:	XER
Tank Overfill Protection:	Not reported
Last Tank Test Date:	Not reported
Relined Date:	Not reported
Lining Insp Date:	Not reported
Pipe Release Detection:	Not reported
Pipe Rel Detect Suc Code:	Not reported
Pipe Leak Detect Code:	Not reported
Last Contained Date:	Not reported
Pipe Mfg Code:	SMI
Last Pipe Test Date:	02/04/2019
Last CP Test Date:	Not reported
Added To Flex Date:	Not reported
Added To Piping Date:	Not reported
Decode For Tstatus:	Active
Decode For Inertmatcd:	Not reported
Decode For Tmatcode:	Fiberglass Reinforced
Decode For Textcrprcd:	Not Applicable
Decode For Treldecd:	Not reported
Decode For Tintprotcd:	Not Applicable
Decode For Tsplprevcd:	Single Wall Spill Bucket
Decode For Tovflprvcd:	Not reported
Decode For Pmatcode:	Not reported
Decode For Pextcoprcd:	Not reported
Decode For Ptypecode:	Not reported
Decode For Preldecd:	Not reported
Decode For Preldecsuc:	Not reported
Decode For Plekdecd:	Not reported
Decode For Tsubcd:	GAS-UNL-Reg Unl Gas
Decode For Tmancd:	Xerxes
Decode For Pmancd:	Smith -- Fiberglass Systems
Subject Item ID:	6
Tank Status:	TAC
Installation Date:	08/14/2009
Closed In Place Date:	Not reported
Capacity in Gallons:	10000
Compartment Number:	1
Piping Installation Date:	Not reported
Added To Tank Date:	Not reported
Inert Material Code:	Not reported
Removed Date:	10/06/1999
Change in Service Date:	Not reported
Tank Pit Num:	Not reported
Tank Mfg Code:	Not reported
Tank Overfill Protection:	UNK
Last Tank Test Date:	Not reported
Relined Date:	Not reported
Lining Insp Date:	Not reported
Pipe Release Detection:	UNK
Pipe Rel Detect Suc Code:	UNK
Pipe Leak Detect Code:	NA
Last Contained Date:	Not reported
Pipe Mfg Code:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LEXINGTON ROAD SHELL (Continued)

U001442478

Last Pipe Test Date:	Not reported
Last CP Test Date:	Not reported
Added To Flex Date:	Not reported
Added To Piping Date:	Not reported
Decode For Tstatus:	Removed Tank Verified
Decode For Inertmatcd:	Not reported
Decode For Tmatcode:	Single Wall Steel
Decode For Textcrpcd:	None
Decode For Treltcd:	Statistical Inventory Recon
Decode For Tintprotcd:	Unknown
Decode For Tsplprevcd:	Single Wall Spill Bucket
Decode For Tovflprvcd:	Unknown
Decode For Pmatcode:	Fiberglass Reinforced Plastic
Decode For Pextcoprcd:	Not Applicable
Decode For Ptypecode:	Suction
Decode For Preldtcd:	Unknown
Decode For Preldetsuc:	Unknown
Decode For Plekdetcd:	Not Applicable
Decode For Tsubcd:	Diesel
Decode For Tmancd:	Not reported
Decode For Pmancd:	Not reported
Subject Item ID:	5
Tank Status:	TRM
Installation Date:	01/01/1985
Closed In Place Date:	12/22/1998
Capacity in Gallons:	1120
Compartment Number:	1
Piping Installation Date:	Not reported
Added To Tank Date:	Not reported
Inert Material Code:	Not reported
Removed Date:	08/06/2009
Change in Service Date:	Not reported
Tank Pit Num:	Not reported
Tank Mfg Code:	Not reported
Tank Overfill Protection:	ASD
Last Tank Test Date:	Not reported
Relined Date:	12/07/1998
Lining Insp Date:	12/07/1998
Pipe Release Detection:	LTT
Pipe Rel Detect Suc Code:	ALT
Pipe Leak Detect Code:	ELD
Last Contained Date:	Not reported
Pipe Mfg Code:	Not reported
Last Pipe Test Date:	11/22/2008
Last CP Test Date:	Not reported
Added To Flex Date:	Not reported
Added To Piping Date:	Not reported
Decode For Tstatus:	Removed Tank Verified
Decode For Inertmatcd:	Not reported
Decode For Tmatcode:	Single Wall Steel
Decode For Textcrpcd:	Not Applicable
Decode For Treltcd:	Automatic Tank Gauging
Decode For Tintprotcd:	Interior Lining
Decode For Tsplprevcd:	Single Wall Spill Bucket
Decode For Tovflprvcd:	Automatic Shutoff Device
Decode For Pmatcode:	Fiberglass Reinforced Plastic

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LEXINGTON ROAD SHELL (Continued)

U001442478

Decode For Pextcoprcd: Not Applicable
Decode For Ptypecode: Pressurized
Decode For Preldetcod: Line Tightness Test
Decode For Prelketsuc: Annual Release Testing (historic)
Decode For Plekdetcod: Electronic Leak Detection
Decode For Tsubcd: GAS-UNL-Reg Unl Gas
Decode For Tmancd: Not reported
Decode For Pmancd: Not reported
Subject Item ID: 4
Tank Status: TRM
Installation Date: 01/01/1985
Closed In Place Date: Not reported
Capacity in Gallons: 10000
Compartment Number: 1
Piping Installation Date: Not reported
Added To Tank Date: Not reported

Inert Material Code: Not reported
Removed Date: 08/06/2009
Change in Service Date: Not reported
Tank Pit Num: Not reported
Tank Mfg Code: Not reported
Tank Overfill Protection: UNK
Last Tank Test Date: Not reported
Relined Date: Not reported
Lining Insp Date: 12/07/1998
Pipe Release Detection: UNK
Pipe Rel Detect Suc Code: UNK
Pipe Leak Detect Code: ELD
Last Contained Date: Not reported
Pipe Mfg Code: Not reported
Last Pipe Test Date: 11/10/2006
Last CP Test Date: Not reported
Added To Flex Date: Not reported
Added To Piping Date: Not reported
Decode For Tstatus: Removed Tank Verified
Decode For Inertmatcd: Not reported
Decode For Tmatcode: Single Wall Steel
Decode For Textcprcd: None
Decode For Trelketsuc: Statistical Inventory Recon
Decode For Tintprotcd: Unknown
Decode For Tsplprevcd: Single Wall Spill Bucket
Decode For Tovflprvcd: Unknown
Decode For Pmatcode: Fiberglass Reinforced Plastic
Decode For Pextcoprcd: Not Applicable
Decode For Ptypecode: Pressurized
Decode For Prelketsuc: Unknown
Decode For Pplekdetcod: Electronic Leak Detection
Decode For Tsubcd: Gasoline
Decode For Tmancd: Not reported
Decode For Pmancd: Not reported
Subject Item ID: 3
Tank Status: TRM
Installation Date: 01/01/1985
Closed In Place Date: 03/16/1998
Capacity in Gallons: 10000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LEXINGTON ROAD SHELL (Continued)

U001442478

Compartment Number: 1
Piping Installation Date: Not reported
Added To Tank Date: Not reported

Inert Material Code: Not reported
Removed Date: 08/06/2009
Change in Service Date: Not reported
Tank Pit Num: Not reported
Tank Mfg Code: Not reported
Tank Overfill Protection: ASD
Last Tank Test Date: Not reported
Relined Date: 12/07/1998
Lining Insp Date: 12/07/1998
Pipe Release Detection: LTT
Pipe Rel Detect Suc Code: ALT
Pipe Leak Detect Code: ELD
Last Contained Date: Not reported
Pipe Mfg Code: Not reported
Last Pipe Test Date: 11/22/2008
Last CP Test Date: Not reported
Added To Flex Date: Not reported
Added To Piping Date: Not reported
Decode For Tstatus: Removed Tank Verified
Decode For Inertmatcd: Not reported
Decode For Tmatcode: Single Wall Steel
Decode For Textcrprd: Not Applicable
Decode For Treltdetcd: Automatic Tank Gauging
Decode For Tintprotcd: Interior Lining
Decode For Tsplprevcd: Single Wall Spill Bucket
Decode For Tovflprvcd: Automatic Shutoff Device
Decode For Pmatcode: Fiberglass Reinforced Plastic
Decode For Pextcoprpd: Not Applicable
Decode For Ptypecode: Pressurized
Decode For Preldetcd: Line Tightness Test
Decode For Preldetsuc: Annual Release Testing (historic)
Decode For Plekdetcd: Electronic Leak Detection
Decode For Tsubcd: GAS-PRM-Prem Unl Gas
Decode For Tmancd: Not reported
Decode For Pmancd: Not reported
Subject Item ID: 2
Tank Status: TRM
Installation Date: 01/01/1985
Closed In Place Date: Not reported
Capacity in Gallons: 6000
Compartment Number: 1
Piping Installation Date: Not reported
Added To Tank Date: Not reported

Inert Material Code: Not reported
Removed Date: 08/06/2009
Change in Service Date: Not reported
Tank Pit Num: Not reported
Tank Mfg Code: Not reported
Tank Overfill Protection: ASD
Last Tank Test Date: Not reported
Relined Date: 12/07/1998
Lining Insp Date: 12/07/1998

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

LEXINGTON ROAD SHELL (Continued)

U001442478

Pipe Release Detection: LTT
Pipe Rel Detect Suc Code: ALT
Pipe Leak Detect Code: ELD
Last Contained Date: Not reported
Pipe Mfg Code: Not reported
Last Pipe Test Date: 11/22/2008
Last CP Test Date: Not reported
Added To Flex Date: Not reported
Added To Piping Date: Not reported
Decode For Tstatus: Removed Tank Verified
Decode For Inertmatcd: Not reported
Decode For Tmatcode: Single Wall Steel
Decode For Textcrpcd: Not Applicable
Decode For Treldecod: Automatic Tank Gauging
Decode For Tintprotcd: Interior Lining
Decode For Tsplprevcd: Single Wall Spill Bucket
Decode For Tovflprvcd: Automatic Shutoff Device
Decode For Pmatcode: Fiberglass Reinforced Plastic
Decode For Pextcoprcd: Not Applicable
Decode For Ptypecode: Pressurized
Decode For Prcldetcd: Line Tightness Test
Decode For Prcldetsuc: Annual Release Testing (historic)
Decode For Plekdetcd: Electronic Leak Detection
Decode For Tsubcd: GAS-PLS-Plus Unl Gas
Decode For Tmancd: Not reported
Decode For Pmancd: Not reported
Subject Item ID: 1
Tank Status: TRM
Installation Date: 01/01/1985
Closed In Place Date: Not reported
Capacity in Gallons: 6000
Compartment Number: 1
Piping Installation Date: Not reported
Added To Tank Date: Not reported

KY Financial Assurance 2:

Region: 2
Account: FRA
AI: 59610
cause: 104997
Approval Date: 08/03/2007
NFA Date: 10/19/2010
Coverage Amount: Up to 1 million dollar limit coverage
Effective Period: Would be from the time of the release to the end of the clean up

Region: 2
Account: FRA
AI: 59610
cause: 100168
Approval Date: 10/14/1992
NFA Date: 11/30/1992
Coverage Amount: Up to 1 million dollar limit coverage
Effective Period: Would be from the time of the release to the end of the clean up

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

F22 HARDEES
WSW 107 S KEENELAND DR
1/8-1/4 RICHMOND, KY 40475
0.231 mi.
1221 ft. Site 4 of 4 in cluster F

UST U003180293
N/A

Actual:
934 ft.

Focus Map:
15

UST:
Name: HARDEES
Address: 107 S KEENELAND DR
City,State,Zip: RICHMOND, KY 40475
Sequence Id: 1035076
Facility ID: 59645
Owner Name: Heritage Legacy LLC
Owner Address: 111 Midland Blvd
Owner Address2: Not reported
Owner Address3: Not reported
Owner City,St,Zip: Shelbyville, KY 40065
Internal Document ID: 0
Latitude: 37.775278
Longitude: -84.319722

Inert Material Code: Not reported
Removed Date: Not reported
Change in Service Date: Not reported
Tank Pit Num: Not reported
Tank Mfg Code: Not reported
Tank Overfill Protection: ASD
Last Tank Test Date: Not reported
Relined Date: Not reported
Lining Insp Date: Not reported
Pipe Release Detection: UNK
Pipe Rel Detect Suc Code: NON
Pipe Leak Detect Code: NA
Last Contained Date: Not reported
Pipe Mfg Code: TCE
Last Pipe Test Date: Not reported
Last CP Test Date: Not reported
Added To Flex Date: Not reported
Added To Piping Date: Not reported
Decode For Tstatus: Temporarily Closed
Decode For Inertmatcd: Not reported
Decode For Tmatcode: Steel Mix
Decode For Textcrpcd: Not Applicable
Decode For Treldetcod: Automatic Tank Gauging
Decode For Tintprotcd: Not Applicable
Decode For Tsplprevcd: Single Wall Spill Bucket
Decode For Tovflprvcd: Automatic Shutoff Device
Decode For Pmatcode: Fiberglass Reinforced Plastic
Decode For Pextcoprcd: Not Applicable
Decode For Ptypecode: Pressurized
Decode For Preldetcod: Unknown
Decode For Preldetsuc: None
Decode For Plekdetcod: Not Applicable
Decode For Tsubcd: GAS-UNL-Reg Unl Gas
Decode For Tmancd: Not reported
Decode For Pmancd: Total Containment - Enviroflex
Subject Item ID: 1
Tank Status: TTC
Installation Date: 01/02/1997

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HARDEES (Continued)

U003180293

Closed In Place Date: 01/01/2006
Capacity in Gallons: 12000
Compartment Number: 1
Piping Installation Date: Not reported
Added To Tank Date: Not reported

Inert Material Code: Not reported
Removed Date: Not reported
Change in Service Date: Not reported
Tank Pit Num: Not reported
Tank Mfg Code: Not reported
Tank Overfill Protection: ASD
Last Tank Test Date: Not reported
Relined Date: Not reported
Lining Insp Date: Not reported
Pipe Release Detection: UNK
Pipe Rel Detect Suc Code: NON
Pipe Leak Detect Code: NA
Last Contained Date: Not reported
Pipe Mfg Code: TCE
Last Pipe Test Date: Not reported
Last CP Test Date: Not reported
Added To Flex Date: Not reported
Added To Piping Date: Not reported
Decode For Tstatus: Temporarily Closed
Decode For Inertmatcd: Not reported
Decode For Tmatcode: Steel Mix
Decode For Textcrprd: Not Applicable
Decode For Treldecod: Automatic Tank Gauging
Decode For Tintprotcd: Not Applicable
Decode For Tsplprevcd: Single Wall Spill Bucket
Decode For Tovflprvcd: Automatic Shutoff Device
Decode For Pmatcode: Fiberglass Reinforced Plastic
Decode For Pextcoprcd: Not Applicable
Decode For Ptypecode: Pressurized
Decode For Preldecod: Unknown
Decode For Preldecod: None
Decode For Plekdecod: Not Applicable
Decode For Tsubcd: GAS-PRM-Prem Unl Gas
Decode For Tmancd: Not reported
Decode For Pmancd: Total Containment - Enviroflex
Subject Item ID: 1
Tank Status: TTC
Installation Date: 01/02/1997
Closed In Place Date: 01/01/2006
Capacity in Gallons: 8000
Compartment Number: 2
Piping Installation Date: Not reported
Added To Tank Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

23
West
1/4-1/2
0.257 mi.
1355 ft.

KTC MADISON CO MAINT GARAGE
2441 LEXINGTON RD
RICHMOND, KY 40356

SHWS S107865753
INST CONTROL N/A
NPDES

Actual:
918 ft.
Focus Map:
10

SHWS:
Name: MADISON CO STATE MAINTENANCE GARAGE & STORAGE FACILITY
Address: 2441 LEXINGTON RD
City,State,Zip: RICHMOND, KY 40475
Facility Id: 2830
Status: Managed
Description: Closed as managed 10/12/10.
Closure Date: 10/12/2010
Longitude: -84.326944
Latitude: 37.800556
Subject Item County: Madison
Sub Item Longitude: -84.326651
Sub Item Latitude: 37.797991
Subject Item Address: 2441 Lexington Rd
Subject Item Address2: Not reported
Subject Item City,St,Zip: Richmond, KY 40475
Regulatory Desc: State Superfund
Closure Option: Option B Contained/Managed
Side SG: Historical ops

KS INSTUTIONAL CONTROL:

Name: MADISON CO STATE MAINTENANCE GARAGE & STORAGE FACILITY
Address: 2441 LEXINGTON ROAD
City,State,Zip: RICHMOND, KY 40475
Incident Id: 2830
GARA Number: GARA0000000001
Facility Status: Not reported
Lat/Lon: 37.797991 -84.326652
Remedy: Not reported
Control Type: Restrictive Covenant
Program: Superfund
Date Filed: 07/07/2010
Date Removed: Not reported
Control Method: Capping (explain), Land Use Restrictions, Groundwater Use Restrictions
Acreage: 9.26

NPDES:

Name: KTC MADISON CO MAINT GARAGE
Address: 2441 LEXINGTON RD
City,State,Zip: RICHMOND, KY 40356
Federal Facility ID: Not reported
Facility Status: ACTIVE
KY DES #: KYG500077
Total App# Design Flow (MGD): Not reported
Horizontal Collect Method Desc: Not reported
Facility Addr 2: Not reported
Inactive Date: Not reported
Design Capacity: Not reported
Fee Category: Not reported
SIC Code: 4173
Lat/Long: +3748020 / -08419370
Lat/Long Method: U

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KTC MADISON CO MAINT GARAGE (Continued)

S107865753

USGS Hydrologic Basin Code: 05100205
Facility Stream Segment: Not reported
Facility Mileage Indicator: Not reported
Basin Code: 0514
Basin Code Description: OR/KENTUCKY R.
DMR Contact: CHIEF DISTRICT ENGINEER
Contact Telephone: 8592462355
Mailing Address: KY DEPT OF HWYS DISTRICT 7
Mailing Address 2: PO BOX 11127
Mailing City,St,Zip: LEXINGTON, KY 405121127
Permit Issued: 01/24/2003
Permit Expires: 03/31/2008
SIC Code Description: BUS TERMINAL & SERVICE FACILIT
Reveiving Waters: Not reported
Major/Minor: MINOR
Effective Date: Not reported
Affiliation Type Desc: Not reported
Organization Formal Name: Not reported
Facility Type Desc: Not reported
State Facility ID: Not reported
Original Issue Date: Not reported
Approved For Electronic DMR Submission: Not reported

24
South
1/4-1/2
0.486 mi.
2568 ft.

NORTHGATE SHELL
120 NORTHGATE DR
RICHMOND, KY 40475

SB193 **U001185084**
UST **N/A**

Actual:
945 ft.
Focus Map:
19

KY SENATE BILL 193 INVENTORY:
KY SENATE BILL 193 INVENTORY: SIW
Facility ID: 8210076
Soil / Groundwater: Soil and Groundwater
Agency Interest Number: 59580

UST:

Name: NORTHGATE SHELL
Address: 120 NORTHGATE DR
City,State,Zip: RICHMOND, KY 40475
Sequence Id: Not reported
Facility ID: 59580
Owner Name: Cumberland Lake Shell Inc
Owner Address: 150 Railroad Dr
Owner Address2: PO Box 430
Owner Address3: Not reported
Owner City,St,Zip: Somerset, KY 42502
Internal Document ID: 0
Latitude: 37.767591
Longitude: -84.311783

Inert Material Code: Not reported
Removed Date: Not reported
Change in Service Date: Not reported
Tank Pit Num: Not reported
Tank Mfg Code: ACT
Tank Overfill Protection: FLR
Last Tank Test Date: 08/07/2007

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NORTHGATE SHELL (Continued)

U001185084

Relined Date:	Not reported
Lining Insp Date:	Not reported
Pipe Release Detection:	LTT
Pipe Rel Detect Suc Code:	NON
Pipe Leak Detect Code:	MLD
Last Contained Date:	Not reported
Pipe Mfg Code:	ENV
Last Pipe Test Date:	01/21/2020
Last CP Test Date:	Not reported
Added To Flex Date:	Not reported
Added To Piping Date:	Not reported
Decode For Tstatus:	Active
Decode For Inertmatcd:	Not reported
Decode For Tmatcode:	Steel Mix
Decode For Textcrprcd:	Not Applicable
Decode For Treldecd:	Automatic Tank Gauging
Decode For Tintprotcd:	Not Applicable
Decode For Tsplprvcd:	Single Wall Spill Bucket
Decode For Tovflprvcd:	Flow Restrictor
Decode For Pmatcode:	Flexible Wall
Decode For Pextcoprpd:	Not Applicable
Decode For Ptypecode:	Pressurized
Decode For Preldetcd:	Line Tightness Test
Decode For Preldetsuc:	None
Decode For Plekdetcd:	Manual Line Leak Detection
Decode For Tsubcd:	Gasoline
Decode For Tmancd:	ACT 100
Decode For Pmancd:	Environ - Geoflex D
Subject Item ID:	6
Tank Status:	TAC
Installation Date:	09/15/2001
Closed In Place Date:	Not reported
Capacity in Gallons:	8000
Compartment Number:	1
Piping Installation Date:	Not reported
Added To Tank Date:	Not reported
Inert Material Code:	Not reported
Removed Date:	Not reported
Change in Service Date:	Not reported
Tank Pit Num:	Not reported
Tank Mfg Code:	ACT
Tank Overfill Protection:	FLR
Last Tank Test Date:	08/07/2007
Relined Date:	Not reported
Lining Insp Date:	Not reported
Pipe Release Detection:	LTT
Pipe Rel Detect Suc Code:	NON
Pipe Leak Detect Code:	MLD
Last Contained Date:	Not reported
Pipe Mfg Code:	ENV
Last Pipe Test Date:	01/21/2020
Last CP Test Date:	Not reported
Added To Flex Date:	Not reported
Added To Piping Date:	Not reported
Decode For Tstatus:	Active
Decode For Inertmatcd:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NORTHGATE SHELL (Continued)

U001185084

Decode For Tmatcode: Steel Mix
Decode For Textcrprd: Not Applicable
Decode For Treltdetcod: Automatic Tank Gauging
Decode For Tintprotcd: Not Applicable
Decode For Tsplprevcd: Single Wall Spill Bucket
Decode For Tovflprvcd: Flow Restrictor
Decode For Pmatcode: Flexible Wall
Decode For Pextcoprcd: Not Applicable
Decode For Ptypecode: Pressurized
Decode For Preltdetcod: Line Tightness Test
Decode For Preltdetsuc: None
Decode For Plekdtdetcod: Manual Line Leak Detection
Decode For Tsubcd: GAS-PLS-Plus Unl Gas
Decode For Tmancd: ACT 100
Decode For Pmancd: Environ - Geoflex D
Subject Item ID: 5
Tank Status: TAC
Installation Date: 09/15/2001
Closed In Place Date: Not reported
Capacity in Gallons: 8000
Compartment Number: 1
Piping Installation Date: Not reported
Added To Tank Date: Not reported

Inert Material Code: Not reported
Removed Date: Not reported
Change in Service Date: Not reported
Tank Pit Num: Not reported
Tank Mfg Code: ACT
Tank Overfill Protection: FLR
Last Tank Test Date: 08/07/2007
Relined Date: Not reported
Lining Insp Date: Not reported
Pipe Release Detection: LTT
Pipe Rel Detect Suc Code: NON
Pipe Leak Detect Code: MLD
Last Contained Date: Not reported
Pipe Mfg Code: ENV
Last Pipe Test Date: 01/21/2020
Last CP Test Date: Not reported
Added To Flex Date: Not reported
Added To Piping Date: Not reported
Decode For Tstatus: Active
Decode For Inertmatcd: Not reported
Decode For Tmatcode: Steel Mix
Decode For Textcrprd: Not Applicable
Decode For Treltdetcod: Automatic Tank Gauging
Decode For Tintprotcd: Not Applicable
Decode For Tsplprevcd: Single Wall Spill Bucket
Decode For Tovflprvcd: Flow Restrictor
Decode For Pmatcode: Flexible Wall
Decode For Pextcoprcd: Not Applicable
Decode For Ptypecode: Pressurized
Decode For Preltdetcod: Line Tightness Test
Decode For Preltdetsuc: None
Decode For Plekdtdetcod: Manual Line Leak Detection
Decode For Tsubcd: GAS-UNL-Reg Unl Gas

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NORTHGATE SHELL (Continued)

U001185084

Decode For Tmancd: ACT 100
Decode For Pmancd: Environ - Geoflex D
Subject Item ID: 4
Tank Status: TAC
Installation Date: 09/15/2001
Closed In Place Date: Not reported
Capacity in Gallons: 10000
Compartment Number: 1
Piping Installation Date: Not reported
Added To Tank Date: Not reported

Inert Material Code: Not reported
Removed Date: 09/05/2001
Change in Service Date: Not reported
Tank Pit Num: Not reported
Tank Mfg Code: Not reported
Tank Overfill Protection: ASD
Last Tank Test Date: Not reported
Relined Date: Not reported
Lining Insp Date: Not reported
Pipe Release Detection: ALD
Pipe Rel Detect Suc Code: ALD
Pipe Leak Detect Code: MLD
Last Contained Date: Not reported
Pipe Mfg Code: Not reported
Last Pipe Test Date: Not reported
Last CP Test Date: Not reported
Added To Flex Date: Not reported
Added To Piping Date: Not reported
Decode For Tstatus: Removed Tank Verified
Decode For Inertmatcd: Not reported
Decode For Tmatcode: Steel Mix
Decode For Textcrprcd: Not Applicable
Decode For Treldecd: Automatic Tank Gauging
Decode For Tintprotcd: Interior Lining
Decode For Tsplprevcd: Single Wall Spill Bucket
Decode For Tovflprvcd: Automatic Shutoff Device
Decode For Pmatcode: Single Wall Steel
Decode For Pextcoprcd: Field Installed Cathodic Prot
Decode For Ptypecode: Pressurized
Decode For Preldecd: Automatic Line Leak Detector
Decode For Preldecsuc: Automatic Line Leak Detector
Decode For Plekdecd: Manual Line Leak Detection
Decode For Tsubcd: Gasoline
Decode For Tmancd: Not reported
Decode For Pmancd: Not reported
Subject Item ID: 2
Tank Status: TRM
Installation Date: 01/01/1982
Closed In Place Date: Not reported
Capacity in Gallons: 6000
Compartment Number: 1
Piping Installation Date: Not reported
Added To Tank Date: Not reported

Inert Material Code: Not reported
Removed Date: 09/05/2001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NORTHGATE SHELL (Continued)

U001185084

Change in Service Date:	Not reported
Tank Pit Num:	Not reported
Tank Mfg Code:	Not reported
Tank Overfill Protection:	ASD
Last Tank Test Date:	Not reported
Relined Date:	Not reported
Lining Insp Date:	Not reported
Pipe Release Detection:	ALD
Pipe Rel Detect Suc Code:	ALD
Pipe Leak Detect Code:	MLD
Last Contained Date:	Not reported
Pipe Mfg Code:	Not reported
Last Pipe Test Date:	Not reported
Last CP Test Date:	Not reported
Added To Flex Date:	Not reported
Added To Piping Date:	Not reported
Decode For Tstatus:	Removed Tank Verified
Decode For Inertmatcd:	Not reported
Decode For Tmatcode:	Steel Mix
Decode For Textcrpcd:	Not Applicable
Decode For Treldetcd:	Automatic Tank Gauging
Decode For Tintprotcd:	Interior Lining
Decode For Tsplprevcd:	Single Wall Spill Bucket
Decode For Tovflprvcd:	Automatic Shutoff Device
Decode For Pmatcode:	Single Wall Steel
Decode For Pextcoprcd:	Field Installed Cathodic Prot
Decode For Ptypecode:	Pressurized
Decode For Preldetcd:	Automatic Line Leak Detector
Decode For Preldetsuc:	Automatic Line Leak Detector
Decode For Plekdetcd:	Manual Line Leak Detection
Decode For Tsubcd:	Gasoline
Decode For Tmancd:	Not reported
Decode For Pmancd:	Not reported
Subject Item ID:	1
Tank Status:	TRM
Installation Date:	01/01/1982
Closed In Place Date:	Not reported
Capacity in Gallons:	10000
Compartment Number:	1
Piping Installation Date:	Not reported
Added To Tank Date:	Not reported
Inert Material Code:	Not reported
Removed Date:	09/05/2001
Change in Service Date:	Not reported
Tank Pit Num:	Not reported
Tank Mfg Code:	Not reported
Tank Overfill Protection:	ASD
Last Tank Test Date:	Not reported
Relined Date:	Not reported
Lining Insp Date:	Not reported
Pipe Release Detection:	ALD
Pipe Rel Detect Suc Code:	ALD
Pipe Leak Detect Code:	MLD
Last Contained Date:	Not reported
Pipe Mfg Code:	Not reported
Last Pipe Test Date:	Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NORTHGATE SHELL (Continued)

U001185084

Last CP Test Date: Not reported
Added To Flex Date: Not reported
Added To Piping Date: Not reported
Decode For Tstatus: Removed Tank Verified
Decode For Inertmatcd: Not reported
Decode For Tmatcode: Steel Mix
Decode For Textcrprcd: Not Applicable
Decode For Tredetcd: Automatic Tank Gauging
Decode For Tintprotcd: Interior Lining
Decode For Tsplprevcd: Single Wall Spill Bucket
Decode For Tovflprvcd: Automatic Shutoff Device
Decode For Pmatcode: Single Wall Steel
Decode For Pextcoprcd: Field Installed Cathodic Prot
Decode For Ptypecode: Pressurized
Decode For Prcldetcd: Automatic Line Leak Detector
Decode For Prcldetsuc: Automatic Line Leak Detector
Decode For Plekdetcd: Manual Line Leak Detection
Decode For Tsubcd: Gasoline
Decode For Tmancd: Not reported
Decode For Pmancd: Not reported
Subject Item ID: 3
Tank Status: TRM
Installation Date: 01/01/1982
Closed In Place Date: Not reported
Capacity in Gallons: 6000
Compartment Number: 1
Piping Installation Date: Not reported
Added To Tank Date: Not reported

25
SW
1/2-1
0.781 mi.
4126 ft.

**KOKOKU RUBBER INC
120 HANGER CIRCLE
RICHMOND, KY 40475**

**SHWS S106886012
AIRS N/A**

**Actual:
877 ft.
Focus Map:
18**

SHWS:
Name: KOKOKU RUBBER INC
Address: 120 HANGER CIRCLE
City,State,Zip: RICHMOND, KY 404753246
Facility Id: 2829
Status: **Closed**
Description: KOKOKU RUBBER (Closed: Restored)
Closure Date: 02/23/1995
Longitude: -84.324167
Latitude: 37.765556
Subject Item County: Madison
Sub Item Longitude: -84.320496
Sub Item Latitude: 37.764992
Subject Item Address: 120 Hanger Cir
Subject Item Address2: Not reported
Subject Item City,St,Zip: Richmond, KY 404753246
Regulatory Desc: State Superfund
Closure Option: Option C Restored
Side SG: 31616

AIRS:
Name: KOKOKU RUBBER INC

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KOKOKU RUBBER INC (Continued)

S106886012

Address: 120 HANGER CIR
City,State,Zip: RICHMOND, KY 404753246
Facility: 2115100045
Mailing Address 3: Not reported
Emps: 10
Plant Class Description: R; Registered Source
Acreage: 17.80
Alternate Facility Name: Kokoku Rubber Inc
Alternate Facility End Date: Not reported
Principal Product: RUBBER CMP
State Plant Class Code: R000
DAQ AI Type: MFG- Plastics/Rubber Products Manufacturing (326)
DAQ Reg Comment: Not reported
Mailing Address Line 2: PO Box 206
Inspector Assigned AI: Bhargavi Bhagat
Last Inspection Lead: Not reported
Last Inspection Date: Not reported
Air Programs: 0-SIP Source
Air Subparts: Not Applicable

Emission:

Year: 2012
County: Madison
Facility ID: 2115100045
Facility Name: Kokoku Rubber Inc
AI ID: 2829
Pollutant: CO (Carbon Monoxide)
Actual Emissions: 2.7381079999999995

Year: 2012
County: Madison
Facility ID: 2115100045
Facility Name: Kokoku Rubber Inc
AI ID: 2829
Pollutant: NO2 (Nitrogen Dioxide)
Actual Emissions: 2.6499999999999999

Year: 2012
County: Madison
Facility ID: 2115100045
Facility Name: Kokoku Rubber Inc
AI ID: 2829
Pollutant: PM10 (Particulate Matter - 10 Microns Or Less)
Actual Emissions: 2.2455670799999998

Year: 2012
County: Madison
Facility ID: 2115100045
Facility Name: Kokoku Rubber Inc
AI ID: 2829
Pollutant: PT (Particulate Matter)
Actual Emissions: 2.2455670799999998

Year: 2012
County: Madison
Facility ID: 2115100045
Facility Name: Kokoku Rubber Inc
AI ID: 2829

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KOKOKU RUBBER INC (Continued)

S106886012

Pollutant:	SO2 (Sulfur Dioxide)
Actual Emissions:	1.5900000000000001E-2
Year:	2012
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	VOC (Volatile Organic Compounds)
Actual Emissions:	18.89122137
Year:	2017
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	Carbon Black
Actual Emissions:	0.022049
Year:	2017
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	Carbon Dioxide
Actual Emissions:	3180.000000
Year:	2017
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	CO (Carbon Monoxide)
Actual Emissions:	2.738108
Year:	2017
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	Glycol Ether
Actual Emissions:	0.148193
Year:	2017
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	Methane
Actual Emissions:	0.060950
Year:	2017
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	Nitrous Oxide

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KOKOKU RUBBER INC (Continued)

S106886012

Actual Emissions:	0.058300
Year:	2017
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	NO2 (Nitrogen Dioxide)
Actual Emissions:	2.650000
Year:	2017
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	PM10 (Particulate Matter - 10 Microns Or Less)
Actual Emissions:	2.245567
Year:	2017
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	PM2.5 (Particulate Matter - 2.5 Microns Or Less)
Actual Emissions:	1.316230
Year:	2017
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	PT (Particulate Matter)
Actual Emissions:	2.245567
Year:	2017
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	SO2 (Sulfur Dioxide)
Actual Emissions:	0.015900
Year:	2017
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	Styrene
Actual Emissions:	0.002550
Year:	2017
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	Tribromomethane
Actual Emissions:	0.000040

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KOKOKU RUBBER INC (Continued)

S106886012

Year:	2017
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	VOC (Volatile Organic Compounds)
Actual Emissions:	18.891221
Year:	2017
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	Zinc Oxide
Actual Emissions:	0.000260
Year:	2013
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	CO (Carbon Monoxide)
Actual Emissions:	2.7381079999999995
Year:	2013
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	NO2 (Nitrogen Dioxide)
Actual Emissions:	2.6499999999999999
Year:	2013
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	PM10 (Particulate Matter - 10 Microns Or Less)
Actual Emissions:	2.2455670799999998
Year:	2013
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	PT (Particulate Matter)
Actual Emissions:	2.2455670799999998
Year:	2013
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	SO2 (Sulfur Dioxide)
Actual Emissions:	1.5900000000000001E-2
Year:	2013

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KOKOKU RUBBER INC (Continued)

S106886012

County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	VOC (Volatile Organic Compounds)
Actual Emissions:	18.89122137
Year:	2014
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	CO (Carbon Monoxide)
Actual Emissions:	2.7381079999999995
Year:	2014
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	NO2 (Nitrogen Dioxide)
Actual Emissions:	2.6499999999999999
Year:	2014
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	PM10 (Particulate Matter - 10 Microns Or Less)
Actual Emissions:	2.2455670799999998
Year:	2014
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	PT (Particulate Matter)
Actual Emissions:	2.2455670799999998
Year:	2014
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	SO2 (Sulfur Dioxide)
Actual Emissions:	1.5900000000000001E-2
Year:	2014
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	VOC (Volatile Organic Compounds)
Actual Emissions:	18.89122137
Year:	2010
County:	Madison

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KOKOKU RUBBER INC (Continued)

S106886012

Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	CO (Carbon Monoxide)
Actual Emissions:	2.7381079999999995
Year:	2010
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	NO2 (Nitrogen Dioxide)
Actual Emissions:	2.6499999999999999
Year:	2010
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	PM10 (Particulate Matter - 10 Microns Or Less)
Actual Emissions:	2.2455670799999998
Year:	2010
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	PT (Particulate Matter)
Actual Emissions:	2.2455670799999998
Year:	2010
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	SO2 (Sulfur Dioxide)
Actual Emissions:	1.5900000000000001E-2
Year:	2010
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	VOC (Volatile Organic Compounds)
Actual Emissions:	18.89122137
Year:	2015
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	CO (Carbon Monoxide)
Actual Emissions:	2.7381079999999995
Year:	2015
County:	Madison
Facility ID:	2115100045

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KOKOKU RUBBER INC (Continued)

S106886012

Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	NO2 (Nitrogen Dioxide)
Actual Emissions:	2.6499999999999999
Year:	2015
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	PM10 (Particulate Matter - 10 Microns Or Less)
Actual Emissions:	2.2455670799999998
Year:	2015
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	PT (Particulate Matter)
Actual Emissions:	2.2455670799999998
Year:	2015
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	SO2 (Sulfur Dioxide)
Actual Emissions:	1.5900000000000001E-2
Year:	2015
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	VOC (Volatile Organic Compounds)
Actual Emissions:	18.89122137
Year:	2011
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	CO (Carbon Monoxide)
Actual Emissions:	2.7381079999999995
Year:	2011
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc
AI ID:	2829
Pollutant:	NO2 (Nitrogen Dioxide)
Actual Emissions:	2.6499999999999999
Year:	2011
County:	Madison
Facility ID:	2115100045
Facility Name:	Kokoku Rubber Inc

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KOKOKU RUBBER INC (Continued)

S106886012

AI ID: 2829
Pollutant: PM10 (Particulate Matter - 10 Microns Or Less)
Actual Emissions: 2.2455670799999998

Year: 2011
County: Madison
Facility ID: 2115100045
Facility Name: Kokoku Rubber Inc
AI ID: 2829
Pollutant: PT (Particulate Matter)
Actual Emissions: 2.2455670799999998

Year: 2011
County: Madison
Facility ID: 2115100045
Facility Name: Kokoku Rubber Inc
AI ID: 2829
Pollutant: SO2 (Sulfur Dioxide)
Actual Emissions: 1.5900000000000001E-2

Year: 2011
County: Madison
Facility ID: 2115100045
Facility Name: Kokoku Rubber Inc
AI ID: 2829
Pollutant: VOC (Volatile Organic Compounds)
Actual Emissions: 18.89122137

Year: 2016
County: Madison
Facility ID: 2115100045
Facility Name: Kokoku Rubber Inc
AI ID: 2829
Pollutant: CO (Carbon Monoxide)
Actual Emissions: 2.7381079999999995

Year: 2016
County: Madison
Facility ID: 2115100045
Facility Name: Kokoku Rubber Inc
AI ID: 2829
Pollutant: NO2 (Nitrogen Dioxide)
Actual Emissions: 2.6499999999999999

Year: 2016
County: Madison
Facility ID: 2115100045
Facility Name: Kokoku Rubber Inc
AI ID: 2829
Pollutant: PM10 (Particulate Matter - 10 Microns Or Less)
Actual Emissions: 2.2455670799999998

Year: 2016
County: Madison
Facility ID: 2115100045
Facility Name: Kokoku Rubber Inc
AI ID: 2829

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

KOKOKU RUBBER INC (Continued)

S106886012

Pollutant: PT (Particulate Matter)
Actual Emissions: 2.2455670799999998

Year: 2016
County: Madison
Facility ID: 2115100045
Facility Name: Kokoku Rubber Inc
AI ID: 2829
Pollutant: SO2 (Sulfur Dioxide)
Actual Emissions: 1.5900000000000001E-2

Year: 2016
County: Madison
Facility ID: 2115100045
Facility Name: Kokoku Rubber Inc
AI ID: 2829
Pollutant: VOC (Volatile Organic Compounds)
Actual Emissions: 18.89122137

26 **JELEMIA SANDERS RESIDENCE**
SSE 111 BELAIR ST.
1/2-1 RICHMOND, KY 40475
0.873 mi.
4612 ft.

SHWS S108910490
N/A

Actual: 954 ft.
Focus Map: 19

SHWS:
Name: JELEMIA SANDERS RESIDENCE
Address: 111 BELAIR ST.
City,State,Zip: RICHMOND, KY 40475
Facility Id: 98476
Status: **Closed**
Description: Heating oil tank
Closure Date: 04/17/2008
Longitude: -84.307761
Latitude: 37.762028
Subject Item County: Madison
Sub Item Longitude: -84.307760
Sub Item Latitude: 37.762028
Subject Item Address: 111 Belair Dr
Subject Item Address2: Not reported
Subject Item City,St,Zip: Richmond, KY 40475
Regulatory Desc: Petroleum Cleanup
Closure Option: Option A No Action Necessary
Side SG: Closure

Count: 15 records

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
MADISON COUNTY	S123238854	KY TRANSPORTATION CABINET (KYTC) (AI ID: 97745)	GARRARD/ MADISON CO LINE KY 52		ASBESTOS
MADISON COUNTY	S125982514	KY TRANSPORTATION CABINET (KYTC) (AI ID: 97745)	KY 627 OVER I-75 IN MADISON COUNTY.		ASBESTOS
RICHMOND	2011967161		BETWEEN THE MADISON AND FAYETTE COUNTY		ERNS
RICHMOND	98438646		MADISON COUNTY FIRE		ERNS
RICHMOND	S122374718	PATTIE A CLAY HOSPITAL	PATTIE A. CLAY HOSPITAL	40475	SHWS
RICHMOND	S118475296	BOB DAUGHERTY LANDFILL	US 25 LEXINGTON RD	40475	SWF/LF
RICHMOND	A100448799	MADISON COUNTY AIRPORT	124 MADISON AIRPORT RD	40475	AST
RICHMOND	1000263118	MADISON CO. AREA VOCATIONAL CENTER	RED HOUSE ROAD	40475	RCRA NonGen / NLR
RICHMOND	1014934558	RICHMOND OTTER CREEK STP	RED HOUSE RD	40475	EPA WATCH LIST
RICHMOND	S123234940	MADISON CENTRAL HIGH SCHOOL (AI ID: 45012)	MADISON CENTRAL HS		ASBESTOS
RICHMOND	S108019004	RED HOUSE GROCERY	RED HOUSE ROAD	40475	Financial Assurance
RICHMOND	S108901055	WATERFORD PLACE	COLONEL DR	40475	NPDES
RICHMOND	S108083449	STARLIN HOWELL ETAL	RED HOUSE RD	40475	NPDES
RICHMOND	S108901697	GREENS CROSSING WASTEWATER COL	NORTH MADISON CO SANITATION	40475	NPDES
THOMAS	1018323130	CZAR COAL CORP (880-5117)	RED HOUSE RD	40475	FINDS, ECHO

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/27/2020	Source: EPA
Date Data Arrived at EDR: 05/06/2020	Telephone: N/A
Date Made Active in Reports: 05/28/2020	Last EDR Contact: 06/03/2020
Number of Days to Update: 22	Next Scheduled EDR Contact: 07/13/2020
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/27/2020	Source: EPA
Date Data Arrived at EDR: 05/06/2020	Telephone: N/A
Date Made Active in Reports: 05/28/2020	Last EDR Contact: 06/03/2020
Number of Days to Update: 22	Next Scheduled EDR Contact: 07/13/2020
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 06/03/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/03/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/03/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 04/27/2020	Source: EPA
Date Data Arrived at EDR: 05/06/2020	Telephone: 800-424-9346
Date Made Active in Reports: 05/28/2020	Last EDR Contact: 06/03/2020
Number of Days to Update: 22	Next Scheduled EDR Contact: 07/27/2020
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/23/2020	Source: EPA
Date Data Arrived at EDR: 03/25/2020	Telephone: 800-424-9346
Date Made Active in Reports: 05/21/2020	Last EDR Contact: 06/22/2020
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/05/2020
	Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/23/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/25/2020	Telephone: (404) 562-8651
Date Made Active in Reports: 05/21/2020	Last EDR Contact: 06/22/2020
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/05/2020
	Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/23/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/25/2020	Telephone: (404) 562-8651
Date Made Active in Reports: 05/21/2020	Last EDR Contact: 06/22/2020
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/05/2020
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/23/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/25/2020	Telephone: (404) 562-8651
Date Made Active in Reports: 05/21/2020	Last EDR Contact: 06/22/2020
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/05/2020
	Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/23/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/25/2020	Telephone: (404) 562-8651
Date Made Active in Reports: 05/21/2020	Last EDR Contact: 06/22/2020
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/05/2020
	Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/15/2020	Source: Department of the Navy
Date Data Arrived at EDR: 05/19/2020	Telephone: 843-820-7326
Date Made Active in Reports: 06/18/2020	Last EDR Contact: 05/14/2020
Number of Days to Update: 30	Next Scheduled EDR Contact: 08/24/2020
	Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/13/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/20/2020	Telephone: 703-603-0695
Date Made Active in Reports: 05/15/2020	Last EDR Contact: 05/15/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 09/07/2020
	Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/13/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/20/2020	Telephone: 703-603-0695
Date Made Active in Reports: 05/15/2020	Last EDR Contact: 05/15/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 09/07/2020
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/22/2020
Date Data Arrived at EDR: 03/24/2020
Date Made Active in Reports: 06/18/2020
Number of Days to Update: 86

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

SHWS: State Leads List

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 05/15/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 06/03/2020
Number of Days to Update: 14

Source: Department of Environmental Protection
Telephone: 502-564-6716
Last EDR Contact: 05/19/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Facilities List

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/11/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/29/2020
Number of Days to Update: 69

Source: Department of Environmental Protection
Telephone: 502-564-6716
Last EDR Contact: 04/16/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Semi-Annually

State and tribal leaking storage tank lists

PSTEAF: Facility Ranking List

The Underground Storage Tank Branch (USTB) has ranked all PSTEAF reimbursable facilities requiring corrective action, in accordance with 401 KAR 42:290. Directive letters will be issued on the basis of facility ranking and available PSTEAF funding in sequential order as ranked. For example, Rank 2 facilities will be issued directives before Rank 3 facilities.

Date of Government Version: 03/01/2020
Date Data Arrived at EDR: 04/07/2020
Date Made Active in Reports: 06/22/2020
Number of Days to Update: 76

Source: Department of Environmental Protection
Telephone: 502-564-5981
Last EDR Contact: 04/07/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/15/2019
Date Data Arrived at EDR: 12/17/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 55

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/20/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/10/2019	Source: EPA Region 4
Date Data Arrived at EDR: 12/05/2019	Telephone: 404-562-8677
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 67	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/11/2019	Source: EPA Region 10
Date Data Arrived at EDR: 12/04/2019	Telephone: 206-553-2857
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/04/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/04/2019	Telephone: 415-972-3372
Date Made Active in Reports: 02/27/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/03/2019	Source: EPA Region 8
Date Data Arrived at EDR: 12/04/2019	Telephone: 303-312-6271
Date Made Active in Reports: 02/14/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 72	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/01/2019	Source: EPA Region 1
Date Data Arrived at EDR: 12/04/2019	Telephone: 617-918-1313
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/02/2019	Source: EPA Region 6
Date Data Arrived at EDR: 12/04/2019	Telephone: 214-665-6597
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/01/2019	Source: EPA, Region 5
Date Data Arrived at EDR: 12/04/2019	Telephone: 312-886-7439
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SB193: SB193 Branch Site Inventory List

The inventory indicates facilities that have performed permanent closure activities at a regulated underground storage tank facility and have known soil and/or groundwater contamination.

Date of Government Version: 09/05/2006	Source: Department of Environmental Protection
Date Data Arrived at EDR: 09/13/2006	Telephone: 502-564-5981
Date Made Active in Reports: 10/18/2006	Last EDR Contact: 04/08/2016
Number of Days to Update: 35	Next Scheduled EDR Contact: 07/25/2016
	Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 02/01/2020	Source: FEMA
Date Data Arrived at EDR: 03/19/2020	Telephone: 202-646-5797
Date Made Active in Reports: 06/09/2020	Last EDR Contact: 03/19/2020
Number of Days to Update: 82	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Varies

UST: Underground Storage Tank Database

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 02/04/2020	Source: Department of Environmental Protection
Date Data Arrived at EDR: 02/25/2020	Telephone: 502-564-5981
Date Made Active in Reports: 05/06/2020	Last EDR Contact: 05/26/2020
Number of Days to Update: 71	Next Scheduled EDR Contact: 09/07/2020
	Data Release Frequency: Quarterly

AST: Above Ground Storage Tanks

A listing of aboveground storage tank site locations.

Date of Government Version: 02/19/2020	Source: Office of State Fire Marshal
Date Data Arrived at EDR: 02/20/2020	Telephone: 502-564-4010
Date Made Active in Reports: 04/29/2020	Last EDR Contact: 05/19/2020
Number of Days to Update: 69	Next Scheduled EDR Contact: 09/07/2020
	Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/02/2019	Source: EPA Region 6
Date Data Arrived at EDR: 12/04/2019	Telephone: 214-665-7591
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/01/2019	Source: EPA Region 5
Date Data Arrived at EDR: 12/04/2019	Telephone: 312-886-6136
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/01/2019	Source: EPA, Region 1
Date Data Arrived at EDR: 12/04/2019	Telephone: 617-918-1313
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/11/2019	Source: EPA Region 10
Date Data Arrived at EDR: 12/04/2019	Telephone: 206-553-2857
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/10/2019	Source: EPA Region 4
Date Data Arrived at EDR: 12/05/2019	Telephone: 404-562-9424
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 67	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/04/2019	Source: EPA Region 9
Date Data Arrived at EDR: 12/04/2019	Telephone: 415-972-3368
Date Made Active in Reports: 02/27/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/03/2019	Source: EPA Region 8
Date Data Arrived at EDR: 12/04/2019	Telephone: 303-312-6137
Date Made Active in Reports: 02/14/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 72	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/11/2019	Source: EPA Region 7
Date Data Arrived at EDR: 12/04/2019	Telephone: 913-551-7003
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

State and tribal institutional control / engineering control registries

ENG CONTROLS: Engineering Controls Site Listing
A listing of sites that use engineering controls.

Date of Government Version: 05/19/2020	Source: Department of Environmental Protection
Date Data Arrived at EDR: 05/20/2020	Telephone: 502-564-6716
Date Made Active in Reports: 06/04/2020	Last EDR Contact: 05/19/2020
Number of Days to Update: 15	Next Scheduled EDR Contact: 09/07/2020
	Data Release Frequency: Varies

INST CONTROL: State Superfund Database

A list of closed sites in the State Superfund Database. Institutional controls would be in place at any site that uses Contained or Managed as a Closure Option.

Date of Government Version: 05/19/2020	Source: Department of Environmental Protection
Date Data Arrived at EDR: 05/20/2020	Telephone: 502-564-6716
Date Made Active in Reports: 06/03/2020	Last EDR Contact: 05/19/2020
Number of Days to Update: 14	Next Scheduled EDR Contact: 09/07/2020
	Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 06/17/2020
Number of Days to Update: 142	Next Scheduled EDR Contact: 10/05/2020
	Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Sites

Sites that have been accepted into the Voluntary Cleanup Program or have submitted an application.

Date of Government Version: 03/23/2020	Source: Department of Environmental Protection
Date Data Arrived at EDR: 03/24/2020	Telephone: 502-564-6716
Date Made Active in Reports: 06/04/2020	Last EDR Contact: 06/24/2020
Number of Days to Update: 72	Next Scheduled EDR Contact: 10/12/2020
	Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Kentucky Brownfield Inventory

The Kentucky Brownfield Program has created an inventory of brownfield sites in order to market the properties to those interested in brownfield redevelopment. The Kentucky Brownfield Program is working to promote the redevelopment of these sites by helping to remove barriers that prevent reuse, providing useful information to communities, developers and the public and encouraging a climate that fosters redevelopment of contaminated sites.

Date of Government Version: 02/10/2020	Source: Division of Compliance Assistance
Date Data Arrived at EDR: 02/11/2020	Telephone: 502-564-0323
Date Made Active in Reports: 04/20/2020	Last EDR Contact: 04/02/2020
Number of Days to Update: 69	Next Scheduled EDR Contact: 07/27/2020
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/01/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/02/2020	Telephone: 202-566-2777
Date Made Active in Reports: 06/09/2020	Last EDR Contact: 06/02/2020
Number of Days to Update: 7	Next Scheduled EDR Contact: 09/28/2020
	Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

HIST LF: Historical Landfills

This solid waste facility listing contains detail information that is not included in the landfill listing. A listing with detail information is no longer available by the Department of Environmental Protection.

Date of Government Version: 05/01/2003	Source: Department of Environmental Protection
Date Data Arrived at EDR: 03/30/2006	Telephone: 502-564-6716
Date Made Active in Reports: 05/01/2006	Last EDR Contact: 02/23/2009
Number of Days to Update: 32	Next Scheduled EDR Contact: 05/25/2009
	Data Release Frequency: No Update Planned

SWRCY: Recycling Facilities

A listing of recycling facilities located in the state of Kentucky.

Date of Government Version: 09/13/2019	Source: Department of Environmental Protection
Date Data Arrived at EDR: 10/23/2019	Telephone: 502-564-6716
Date Made Active in Reports: 01/03/2020	Last EDR Contact: 04/17/2020
Number of Days to Update: 72	Next Scheduled EDR Contact: 07/27/2020
	Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/03/2007	Telephone: 703-308-8245
Date Made Active in Reports: 01/24/2008	Last EDR Contact: 04/16/2020
Number of Days to Update: 52	Next Scheduled EDR Contact: 08/10/2020
	Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009	Source: EPA, Region 9
Date Data Arrived at EDR: 05/07/2009	Telephone: 415-947-4219
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 04/09/2020
Number of Days to Update: 137	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 05/01/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 03/18/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/18/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: No Update Planned

CDL: Clandestine Drug Lab Location Listing

Clandestine drug lab site locations.

Date of Government Version: 04/03/2020
Date Data Arrived at EDR: 04/08/2020
Date Made Active in Reports: 06/03/2020
Number of Days to Update: 56

Source: Department of Environmental Protection
Telephone: 502-564-6716
Last EDR Contact: 05/19/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 03/18/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/18/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Quarterly

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 06/03/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 02/27/2020
Date Data Arrived at EDR: 03/24/2020
Date Made Active in Reports: 06/18/2020
Number of Days to Update: 86

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 06/23/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

SPILLS: State spills

A listing of spill and/or release related incidents.

Date of Government Version: 04/02/2020
Date Data Arrived at EDR: 04/07/2020
Date Made Active in Reports: 06/23/2020
Number of Days to Update: 77

Source: DEP, Emergency Response
Telephone: 502-564-2380
Last EDR Contact: 04/02/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Varies

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/23/2020
Date Data Arrived at EDR: 03/25/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/28/2020
Date Data Arrived at EDR: 02/19/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 85

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/18/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/10/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018	Source: U.S. Geological Survey
Date Data Arrived at EDR: 04/11/2018	Telephone: 888-275-8747
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 04/06/2020
Number of Days to Update: 574	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/03/2017	Telephone: 615-532-8599
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 05/15/2020
Number of Days to Update: 63	Next Scheduled EDR Contact: 08/24/2020
	Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/23/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/24/2020	Telephone: 202-566-1917
Date Made Active in Reports: 06/18/2020	Last EDR Contact: 06/22/2020
Number of Days to Update: 86	Next Scheduled EDR Contact: 10/05/2020
	Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2014	Telephone: 617-520-3000
Date Made Active in Reports: 06/17/2014	Last EDR Contact: 05/04/2020
Number of Days to Update: 88	Next Scheduled EDR Contact: 08/17/2020
	Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/08/2018	Telephone: 703-308-4044
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 05/08/2020
Number of Days to Update: 73	Next Scheduled EDR Contact: 08/17/2020
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016	Source: EPA
Date Data Arrived at EDR: 06/21/2017	Telephone: 202-260-5521
Date Made Active in Reports: 01/05/2018	Last EDR Contact: 06/17/2020
Number of Days to Update: 198	Next Scheduled EDR Contact: 09/28/2020
	Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018	Source: EPA
Date Data Arrived at EDR: 02/05/2020	Telephone: 202-566-0250
Date Made Active in Reports: 04/24/2020	Last EDR Contact: 05/21/2020
Number of Days to Update: 79	Next Scheduled EDR Contact: 08/31/2020
	Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 05/01/2019	Source: EPA
Date Data Arrived at EDR: 10/23/2019	Telephone: 202-564-4203
Date Made Active in Reports: 01/15/2020	Last EDR Contact: 04/21/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/27/2020	Source: EPA
Date Data Arrived at EDR: 05/06/2020	Telephone: 703-416-0223
Date Made Active in Reports: 05/28/2020	Last EDR Contact: 06/03/2020
Number of Days to Update: 22	Next Scheduled EDR Contact: 09/14/2020
	Data Release Frequency: Annually

RMP: Risk Management Plans

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/05/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/20/2019	Telephone: 202-564-8600
Date Made Active in Reports: 04/17/2020	Last EDR Contact: 04/15/2020
Number of Days to Update: 149	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/27/2020	Source: EPA
Date Data Arrived at EDR: 05/06/2020	Telephone: 202-564-6023
Date Made Active in Reports: 06/09/2020	Last EDR Contact: 06/03/2020
Number of Days to Update: 34	Next Scheduled EDR Contact: 08/17/2020
	Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/09/2019	Source: EPA
Date Data Arrived at EDR: 10/11/2019	Telephone: 202-566-0500
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 04/10/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 03/26/2020
Number of Days to Update: 79	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/25/2019
Date Data Arrived at EDR: 10/25/2019
Date Made Active in Reports: 01/15/2020
Number of Days to Update: 82

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 04/10/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 01/15/2020
Number of Days to Update: 42

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 06/05/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/01/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/08/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 06/24/2020
Next Scheduled EDR Contact: 10/12/2020
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transportation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 04/28/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 01/17/2020
Date Made Active in Reports: 03/06/2020
Number of Days to Update: 49

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Biennially

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014	Source: USGS
Date Data Arrived at EDR: 07/14/2015	Telephone: 202-208-3710
Date Made Active in Reports: 01/10/2017	Last EDR Contact: 04/10/2020
Number of Days to Update: 546	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017	Source: Department of Energy
Date Data Arrived at EDR: 09/11/2018	Telephone: 202-586-3559
Date Made Active in Reports: 09/14/2018	Last EDR Contact: 04/29/2020
Number of Days to Update: 3	Next Scheduled EDR Contact: 08/17/2020
	Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019	Source: Department of Energy
Date Data Arrived at EDR: 11/15/2019	Telephone: 505-845-0011
Date Made Active in Reports: 01/28/2020	Last EDR Contact: 05/18/2020
Number of Days to Update: 74	Next Scheduled EDR Contact: 08/31/2020
	Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 04/27/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/06/2020	Telephone: 703-603-8787
Date Made Active in Reports: 05/28/2020	Last EDR Contact: 06/03/2020
Number of Days to Update: 22	Next Scheduled EDR Contact: 07/13/2020
	Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001	Source: American Journal of Public Health
Date Data Arrived at EDR: 10/27/2010	Telephone: 703-305-6451
Date Made Active in Reports: 12/02/2010	Last EDR Contact: 12/02/2009
Number of Days to Update: 36	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/11/2020
Date Data Arrived at EDR: 02/25/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 86

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/21/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 03/31/2020
Date Data Arrived at EDR: 04/01/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 50

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 01/16/2018
Date Data Arrived at EDR: 02/28/2020
Date Made Active in Reports: 05/22/2020
Number of Days to Update: 84

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/21/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/05/2020
Date Data Arrived at EDR: 03/06/2020
Date Made Active in Reports: 05/29/2020
Number of Days to Update: 84

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/19/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/03/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 86

Source: EPA
Telephone: (404) 562-9900
Last EDR Contact: 06/02/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 01/17/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 74

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/03/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 04/04/2020
Date Data Arrived at EDR: 04/07/2020
Date Made Active in Reports: 06/26/2020
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 04/07/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/18/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/18/2020
Date Data Arrived at EDR: 02/19/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 85

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/19/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Quarterly

AIRS: Permitted Airs Facility Listing

A listing of permitted Airs facilities.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/14/2020
Date Data Arrived at EDR: 02/14/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 70

Source: Department of Environmental Protection
Telephone: 502-573-3382
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Semi-Annually

ASBESTOS: Asbestos Notification Listing Asbestos sites

Date of Government Version: 05/28/2020
Date Data Arrived at EDR: 05/29/2020
Date Made Active in Reports: 06/04/2020
Number of Days to Update: 6

Source: Department of Environmental Protection
Telephone: 502-782-6780
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Varies

COAL ASH: Coal Ash Disposal Sites A listing of coal ash pond site locations.

Date of Government Version: 04/17/2020
Date Data Arrived at EDR: 04/20/2020
Date Made Active in Reports: 05/06/2020
Number of Days to Update: 16

Source: Department of Environmental Protection
Telephone: 502-564-6716
Last EDR Contact: 04/16/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: No Update Planned

DRYCLEANERS: Drycleaner Listing A listing of drycleaner facility locations.

Date of Government Version: 02/14/2020
Date Data Arrived at EDR: 02/14/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 70

Source: Department of Environmental Protection
Telephone: 502-573-3382
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Semi-Annually

Financial Assurance 1: Financial Assurance Information Listing A listing of financial assurance information.

Date of Government Version: 02/17/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/29/2020
Number of Days to Update: 69

Source: Department of Environmental Protection
Telephone: 502-564-6716
Last EDR Contact: 04/16/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing Financial Assurance information for underground storage tank facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 05/14/2014
Date Data Arrived at EDR: 06/06/2014
Date Made Active in Reports: 06/24/2014
Number of Days to Update: 18

Source: Department of Environmental Protection
Telephone: 502-564-5981
Last EDR Contact: 04/16/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Varies

Financial Assurance 3: Financial Assurance Information Listing A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/18/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/29/2020
Number of Days to Update: 69

Source: Department of Environmental Protection
Telephone: 502-564-6716
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LEAD: Environmental Lead Program Report Tracking Database

Lead Report Tracking Database

Date of Government Version: 01/27/2017
Date Data Arrived at EDR: 02/02/2017
Date Made Active in Reports: 08/21/2017
Number of Days to Update: 200

Source: Department of Public Health
Telephone: 502-564-4537
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Varies

NPDES: Permitted Facility Listing

A listing of permitted wastewater facilities.

Date of Government Version: 02/25/2020
Date Data Arrived at EDR: 02/26/2020
Date Made Active in Reports: 05/06/2020
Number of Days to Update: 70

Source: Department of Environmental Protection
Telephone: 502-564-3410
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Semi-Annually

UIC: UIC Information

A listing of wells identified as underground injection wells, in the Kentucky Oil & Gas Wells data base.

Date of Government Version: 12/04/2019
Date Data Arrived at EDR: 01/14/2020
Date Made Active in Reports: 03/13/2020
Number of Days to Update: 59

Source: Kentucky Geological Survey
Telephone: 859-323-0544
Last EDR Contact: 04/14/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Quarterly

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 06/08/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Semi-Annually

PCS INACTIVE: Listing of Inactive PCS Permits

An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Semi-Annually

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 05/21/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 186

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists.

Date of Government Version: N/A	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/15/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 198	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 01/30/2020	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 01/30/2020	Telephone: 860-424-3375
Date Made Active in Reports: 03/09/2020	Last EDR Contact: 05/12/2020
Number of Days to Update: 39	Next Scheduled EDR Contact: 08/24/2020
	Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018	Source: Department of Environmental Protection
Date Data Arrived at EDR: 04/10/2019	Telephone: N/A
Date Made Active in Reports: 05/16/2019	Last EDR Contact: 04/10/2020
Number of Days to Update: 36	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 05/01/2019	Telephone: 518-402-8651
Date Made Active in Reports: 06/21/2019	Last EDR Contact: 04/29/2020
Number of Days to Update: 51	Next Scheduled EDR Contact: 08/10/2020
	Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/19/2019	Telephone: 717-783-8990
Date Made Active in Reports: 09/10/2019	Last EDR Contact: 04/02/2020
Number of Days to Update: 53	Next Scheduled EDR Contact: 07/27/2020
	Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 10/02/2019
Date Made Active in Reports: 12/10/2019
Number of Days to Update: 69

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/14/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/04/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health
Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics
Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics
Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Certified Child Care Homes

Source: Cabinet for Families & Children
Telephone: 502-564-7130

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Environmental & Public Protection Cabinet

Telephone: 502-564-6736

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

APPENDIX C. EDR AERIAL PHOTO DECADE PACKAGE

APPENDIX D. EDR HISTORICAL TOPO MAP REPORT



Madison Solar

Madison Solar

Richmond, KY 40475

Inquiry Number: 6106593.5

July 01, 2020

EDR Historical Topo Map Report

with QuadMatch™



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

07/01/20

Site Name:

Madison Solar
Madison Solar
Richmond, KY 40475
EDR Inquiry # 6106593.5

Client Name:

Tetra Tech MM
6307 Center Street, Suite 210
Omaha, NE 68106
Contact: David Hermance



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Tetra Tech MM were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:**Coordinates:**

P.O.#	NA	Latitude:	37.791683 37° 47' 30" North
Project:	NA	Longitude:	-84.3313 -84° 19' 53" West
		UTM Zone:	Zone 16 North
		UTM X Meters:	734987.32
		UTM Y Meters:	4186057.15
		Elevation:	919.35' above sea level

Maps Provided:

2013
1993
1979
1965
1952
1897
1892

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2020 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2013 Source Sheets



Richmond North
2013
7.5-minute, 24000



Ford
2013
7.5-minute, 24000

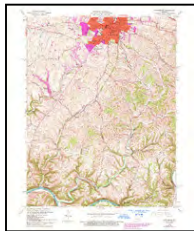


Union City
2013
7.5-minute, 24000

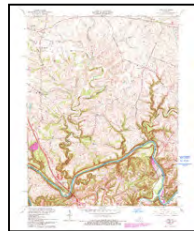


Winchester
2013
7.5-minute, 24000

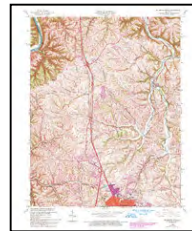
1993 Source Sheets



Winchester
1993
7.5-minute, 24000
Aerial Photo Revised 1988



Ford
1993
7.5-minute, 24000
Aerial Photo Revised 1988

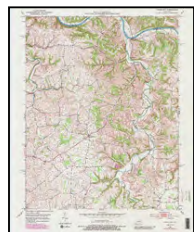


Richmond North
1993
7.5-minute, 24000
Aerial Photo Revised 1988

1979 Source Sheets



Richmond North
1979
7.5-minute, 24000
Aerial Photo Revised 1976



Union City
1979
7.5-minute, 24000
Aerial Photo Revised 1976

1965 Source Sheets



Richmond North
1965
7.5-minute, 24000
Aerial Photo Revised 1950



Winchester
1965
7.5-minute, 24000
Aerial Photo Revised 1950

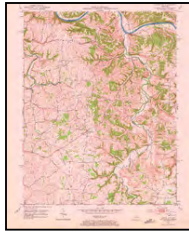


Ford
1965
7.5-minute, 24000
Aerial Photo Revised 1950

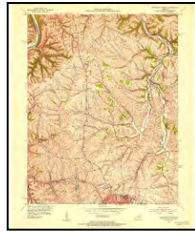
Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

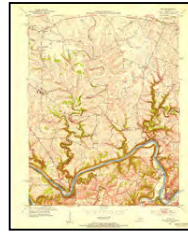
1952 Source Sheets



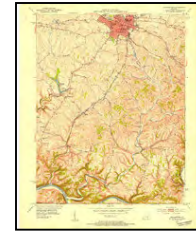
Union City
1952
7.5-minute, 24000
Aerial Photo Revised 1950



Richmond North
1952
7.5-minute, 24000
Aerial Photo Revised 1950



Ford
1952
7.5-minute, 24000
Aerial Photo Revised 1950



Winchester
1952
7.5-minute, 24000
Aerial Photo Revised 1950

1897 Source Sheets

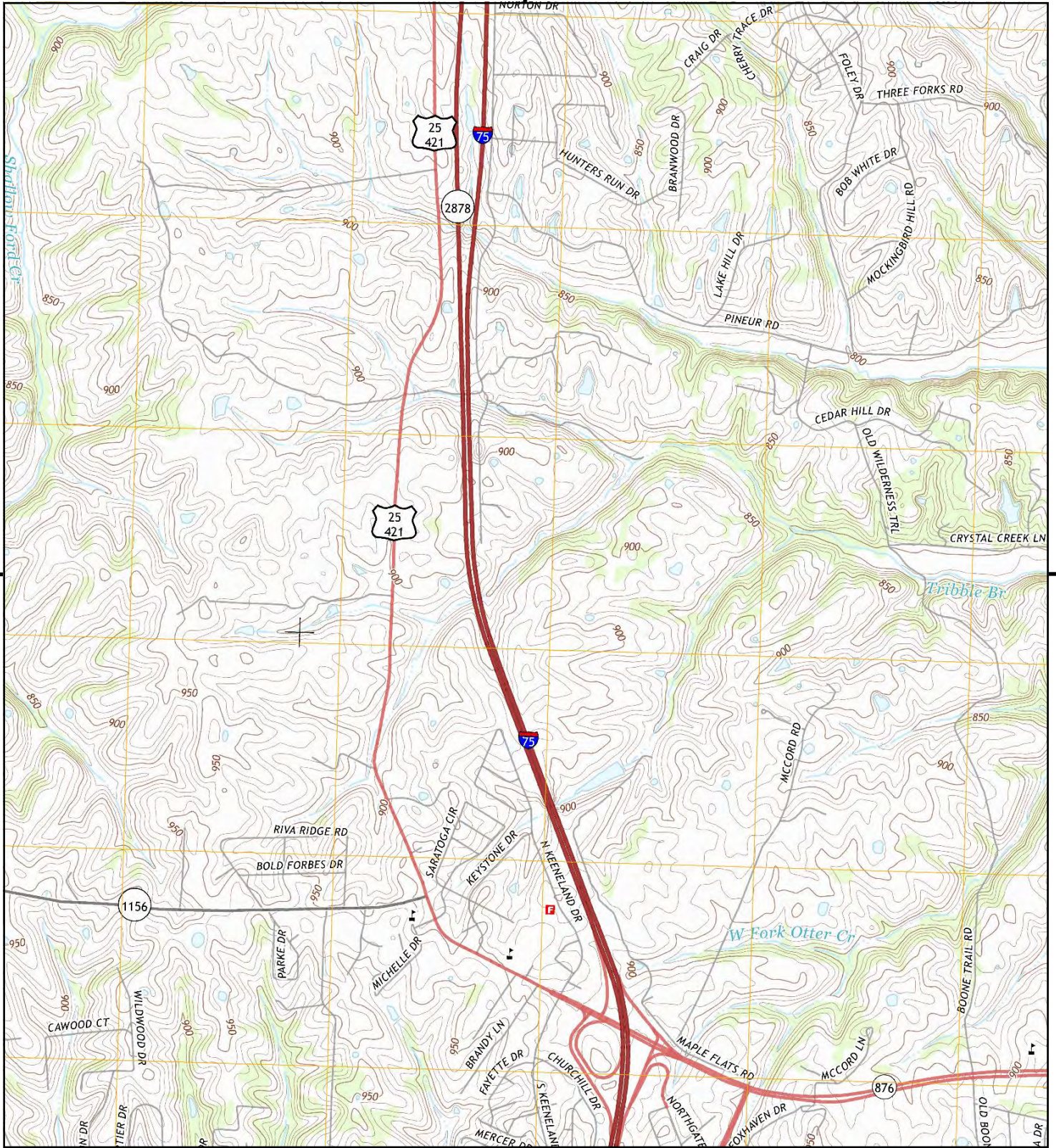


Richmond
1897
30-minute, 125000

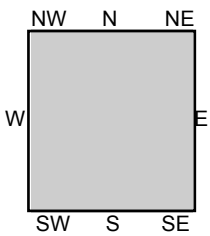
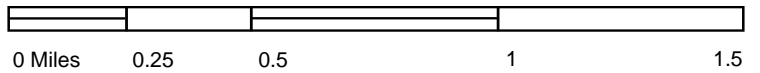
1892 Source Sheets



Richmond
1892
30-minute, 125000



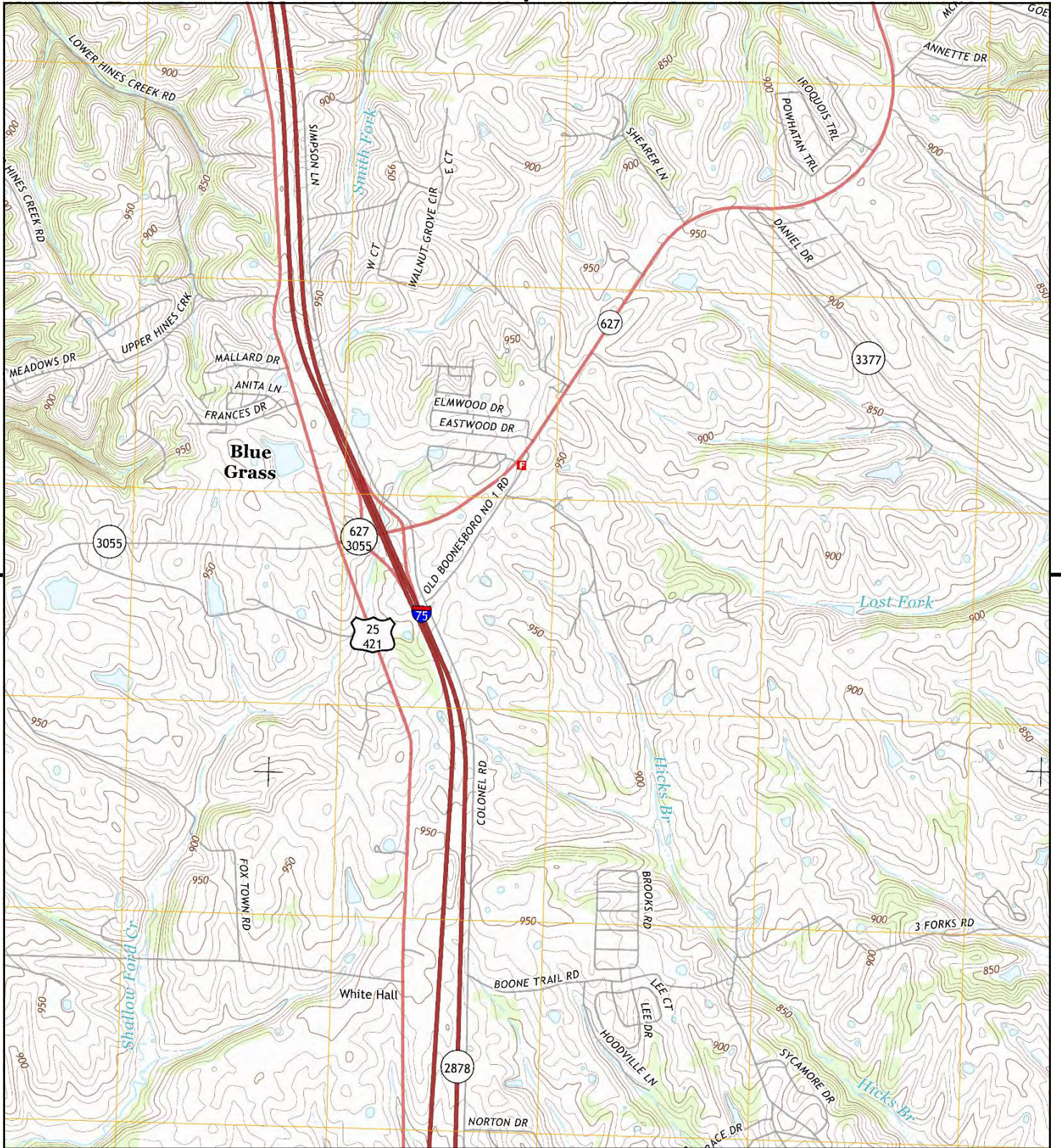
This report includes information from the following map sheet(s).



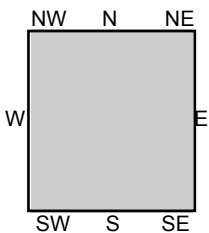
TP, Richmond North, 2013, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
 Richmond, KY 40475
CLIENT: Tetra Tech MM





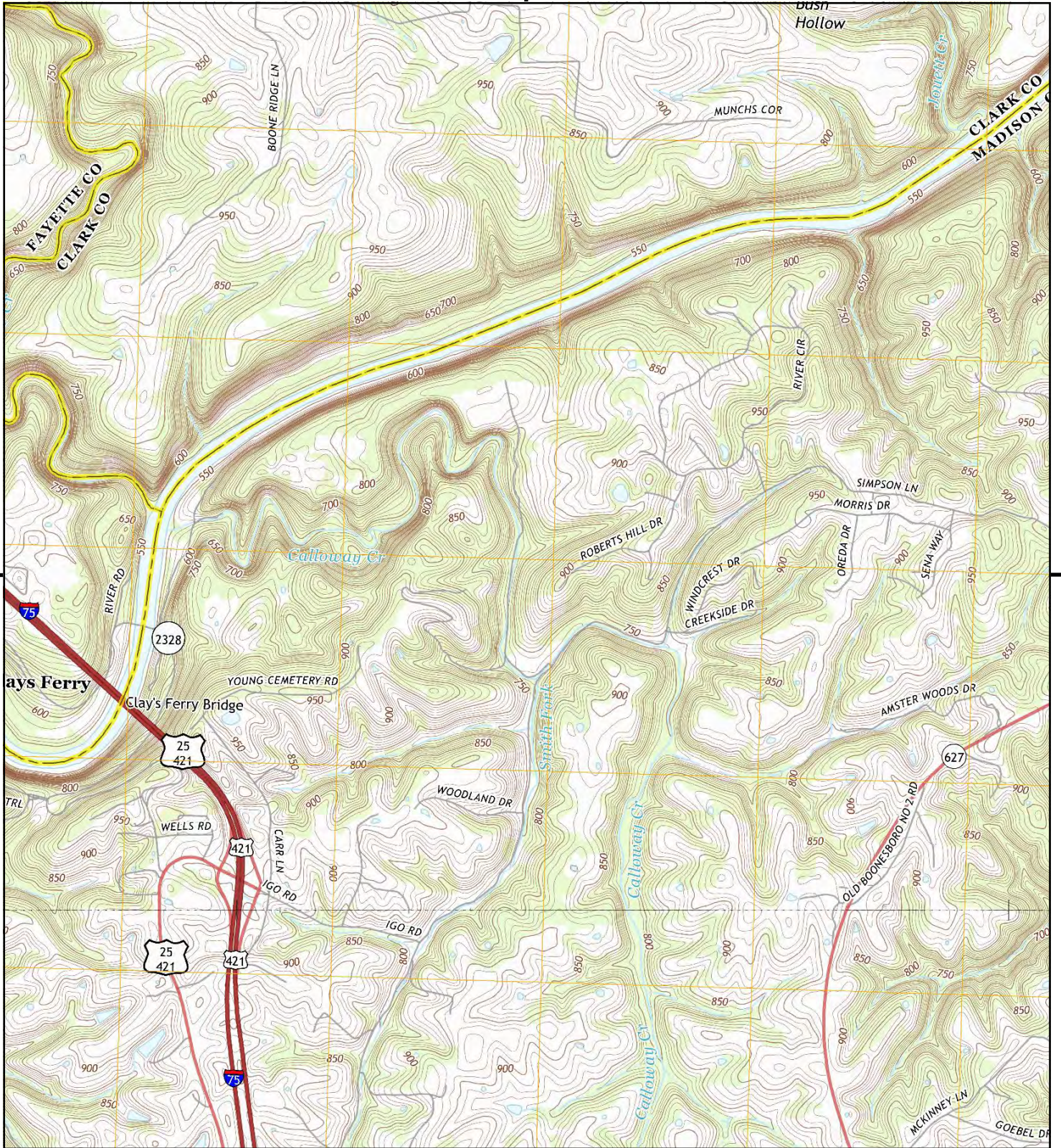
This report includes information from the following map sheet(s).



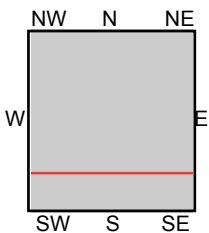
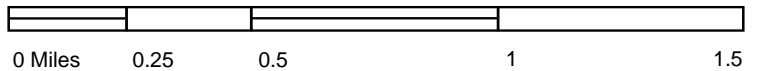
TP, Richmond North, 2013, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
 Richmond, KY 40475
CLIENT: Tetra Tech MM





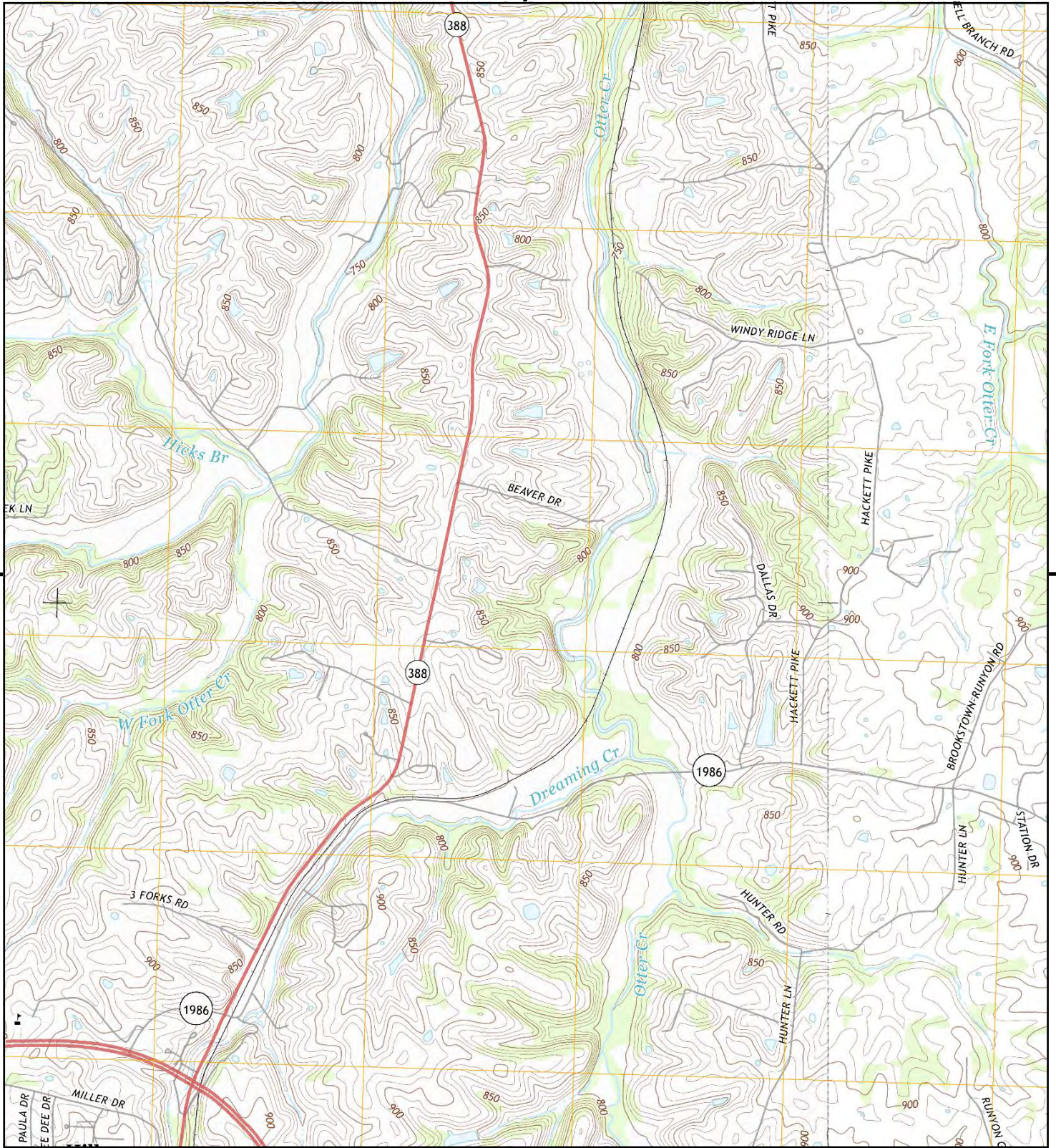
This report includes information from the following map sheet(s).



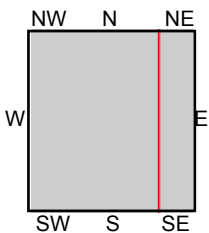
TP, Ford, 2013, 7.5-minute
S, Richmond North, 2013, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





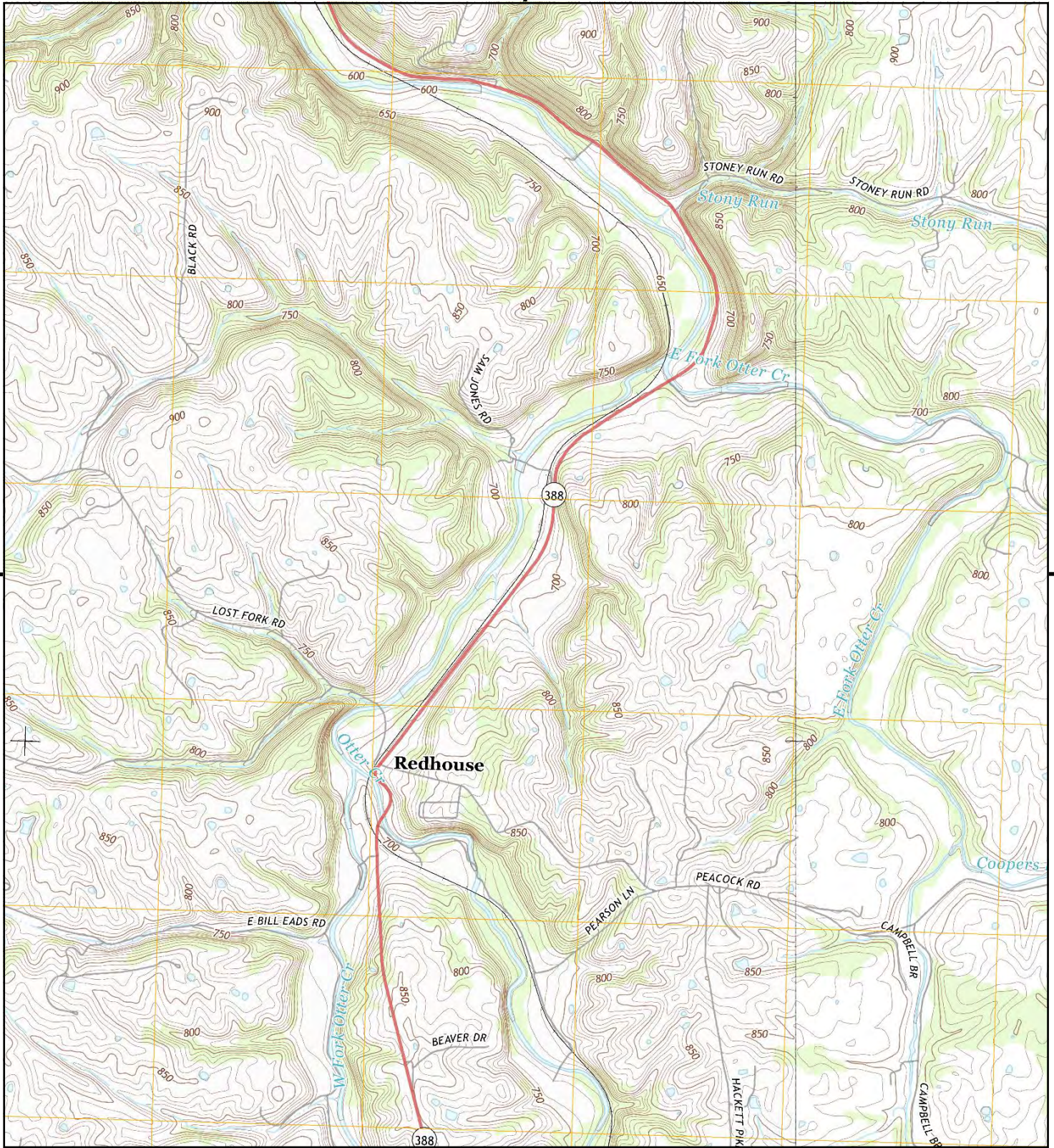
This report includes information from the following map sheet(s).



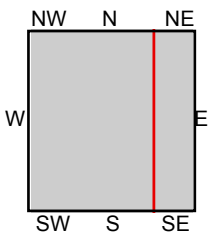
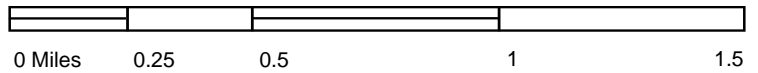
TP, Richmond North, 2013, 7.5-minute
E, Union City, 2013, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





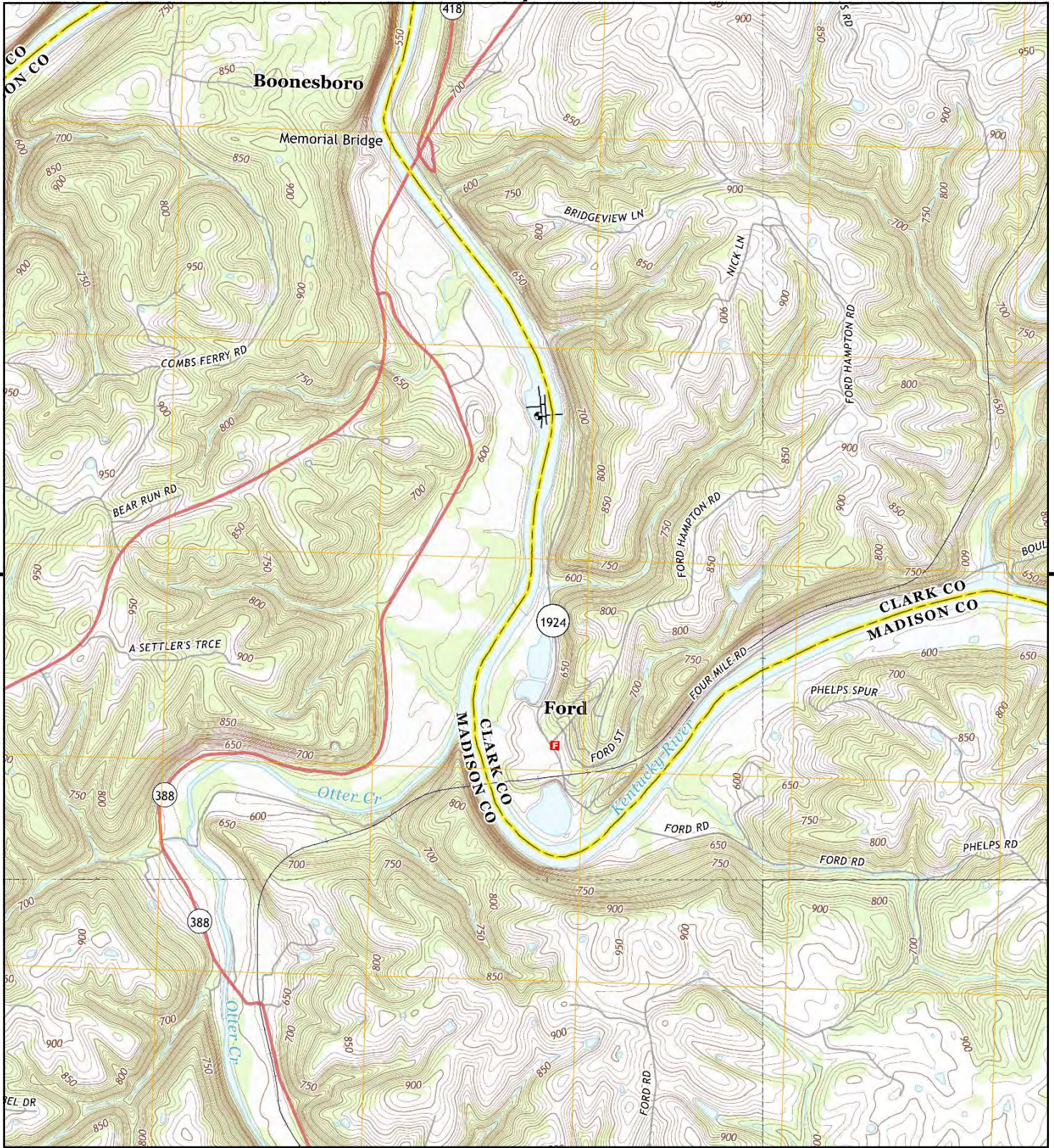
This report includes information from the following map sheet(s).



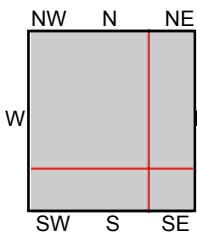
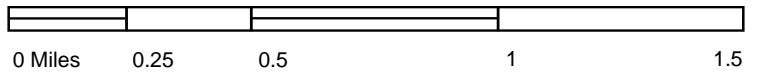
TP, Richmond North, 2013, 7.5-minute
SE, Union City, 2013, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





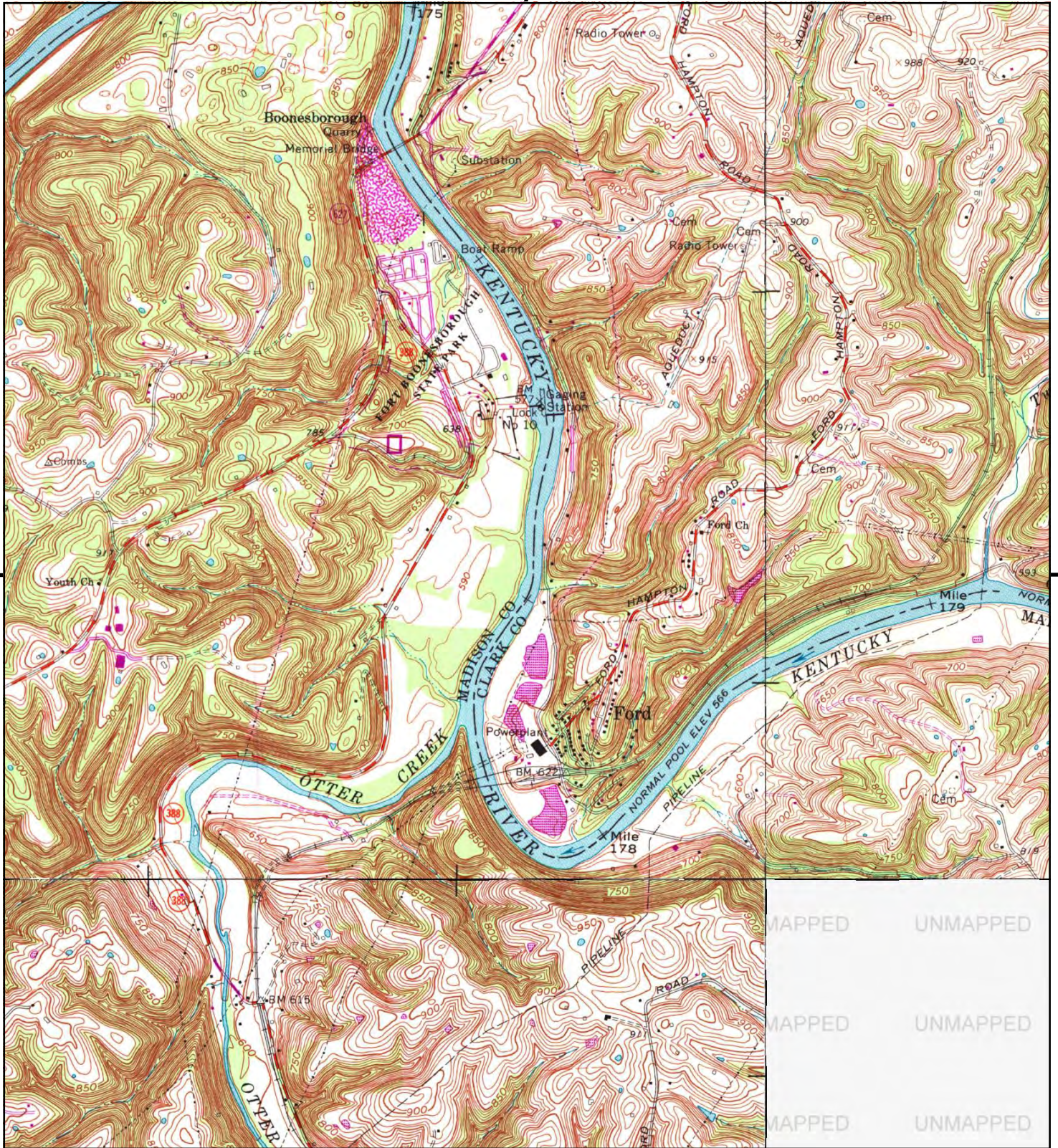
This report includes information from the following map sheet(s).



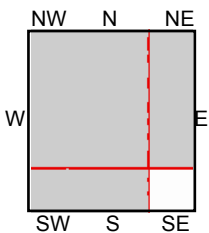
NE, Winchester, 2013, 7.5-minute
 SE, Union City, 2013, 7.5-minute
 SW, Richmond North, 2013, 7.5-minute
 T, Ford, 2013, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
 Richmond, KY 40475
CLIENT: Tetra Tech MM





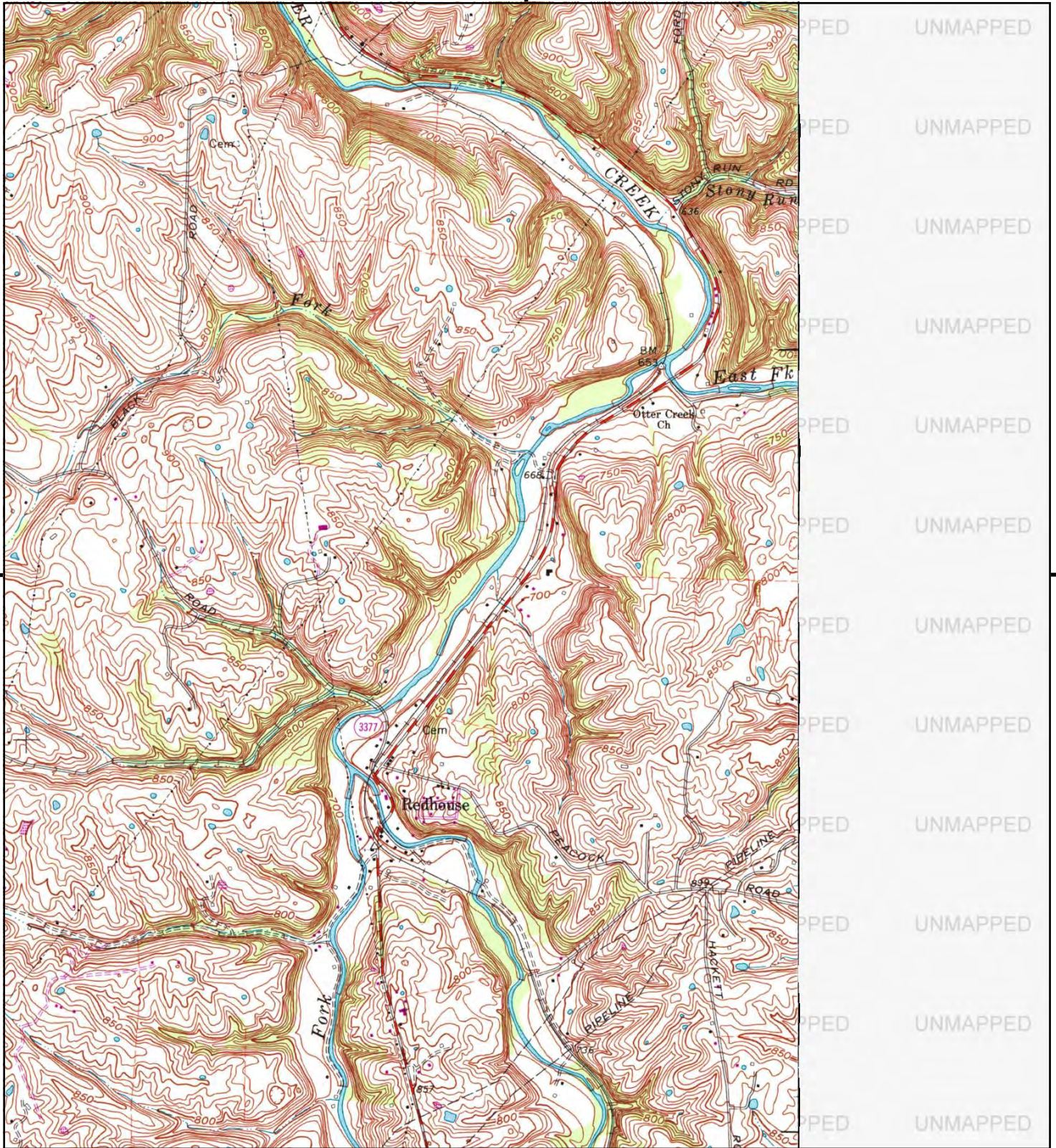
This report includes information from the following map sheet(s).



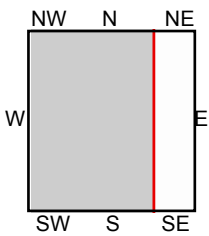
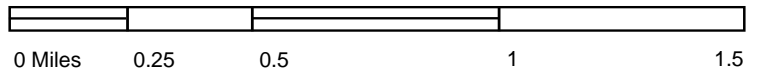
TP, Ford, 1993, 7.5-minute
 NE, Winchester, 1993, 7.5-minute
 SW, Richmond North, 1993, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
 Richmond, KY 40475
CLIENT: Tetra Tech MM





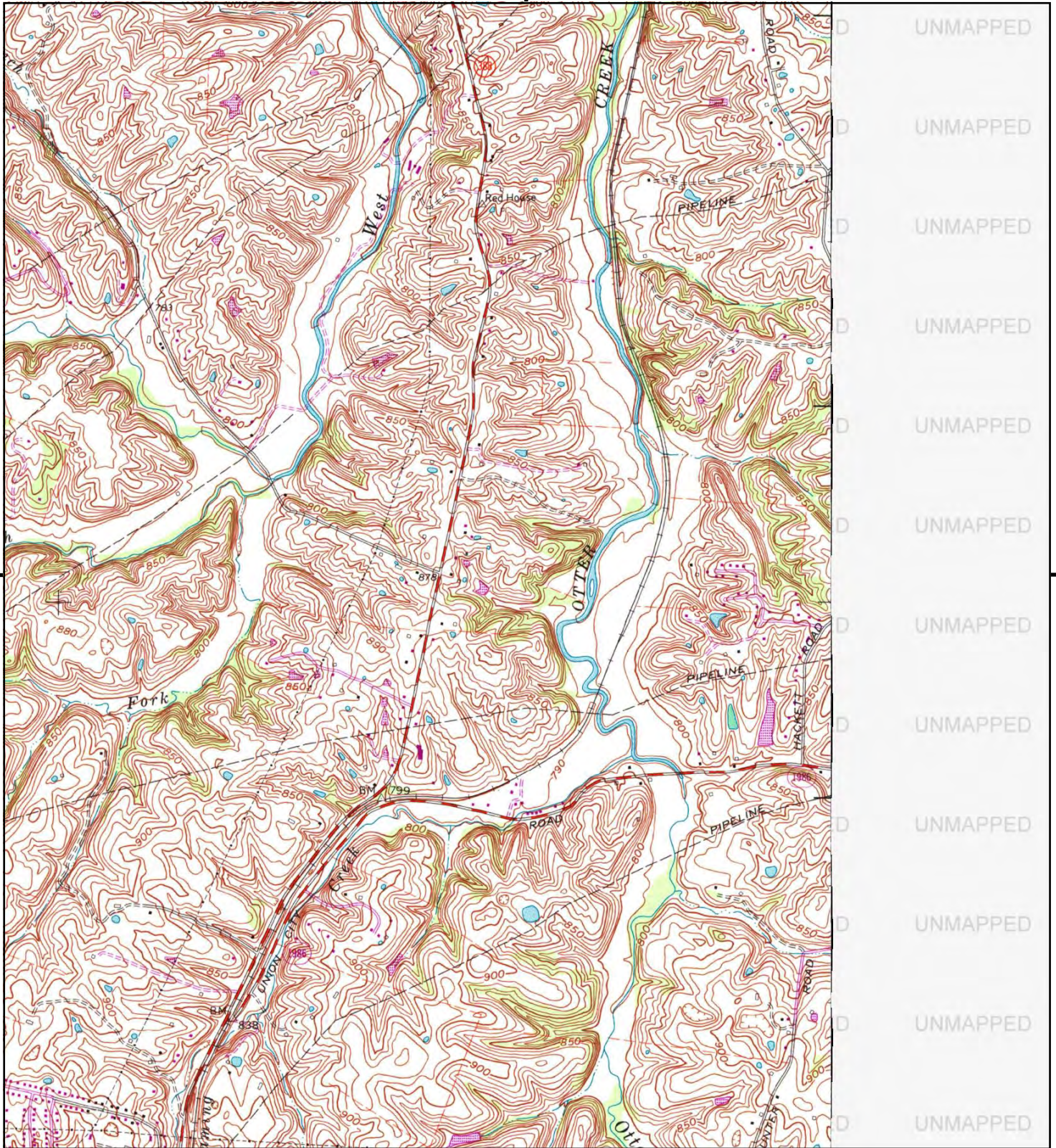
This report includes information from the following map sheet(s).



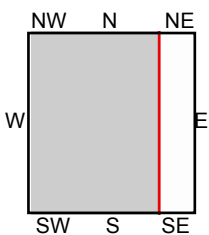
TP, Richmond North, 1993, 7.5-minute

SITE NAME: Madison Solar
 ADDRESS: Madison Solar
 Richmond, KY 40475
 CLIENT: Tetra Tech MM





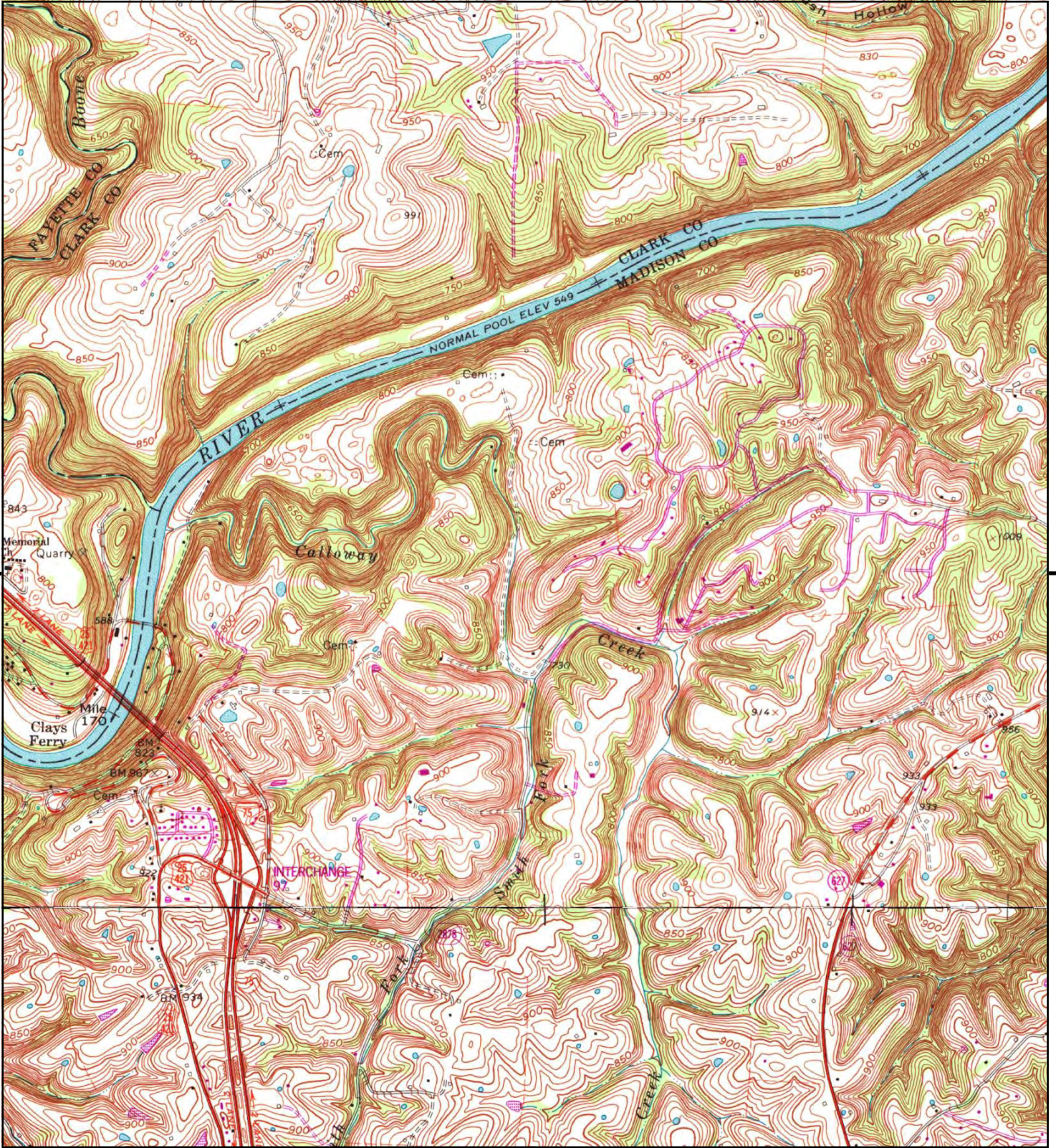
This report includes information from the following map sheet(s).



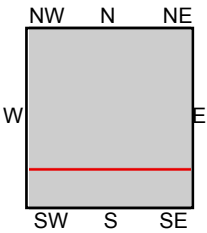
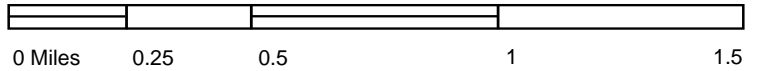
TP, Richmond North, 1993, 7.5-minute

SITE NAME: Madison Solar
 ADDRESS: Madison Solar
 Richmond, KY 40475
 CLIENT: Tetra Tech MM





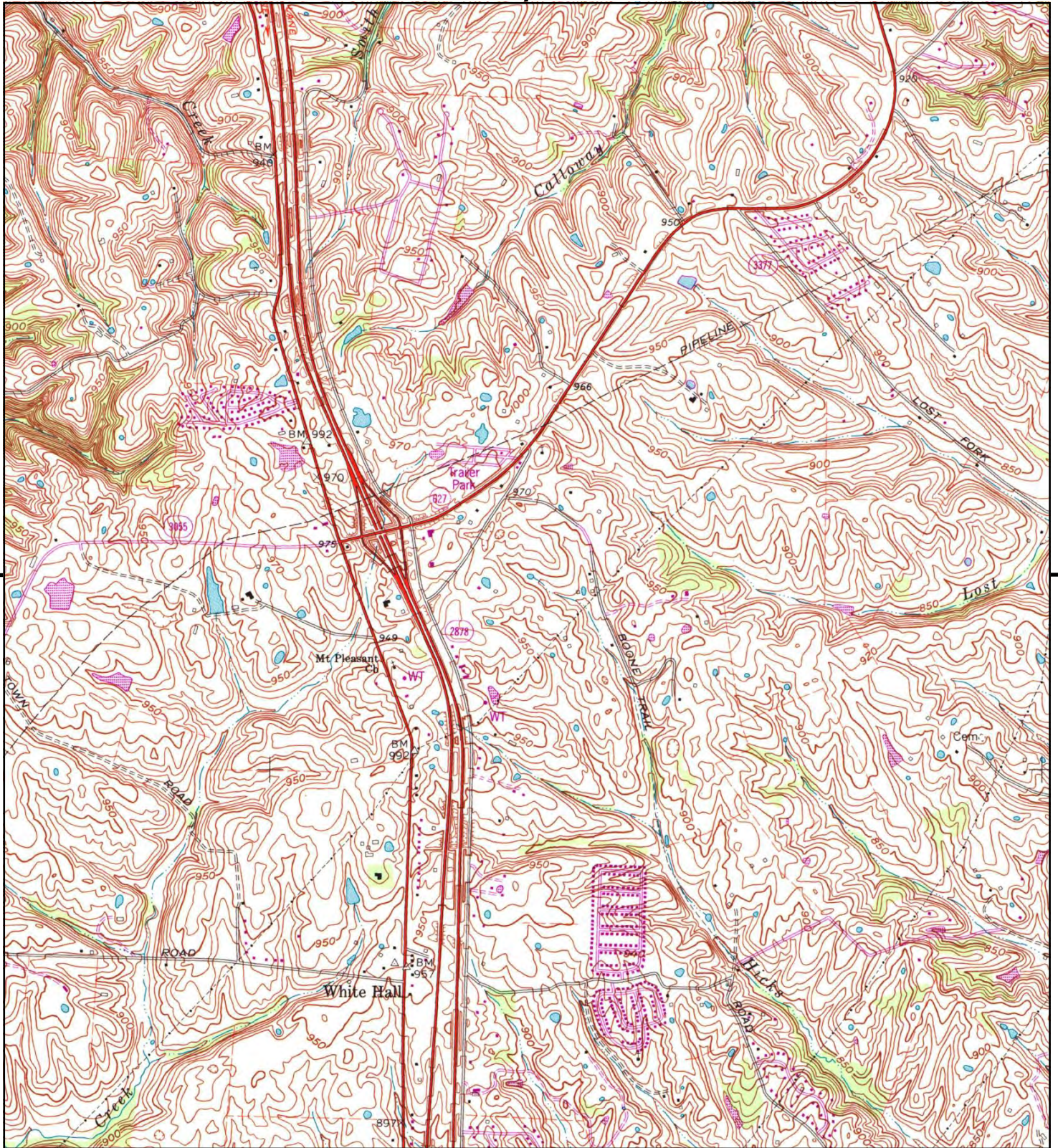
This report includes information from the following map sheet(s).



TP, Ford, 1993, 7.5-minute
S, Richmond North, 1993, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





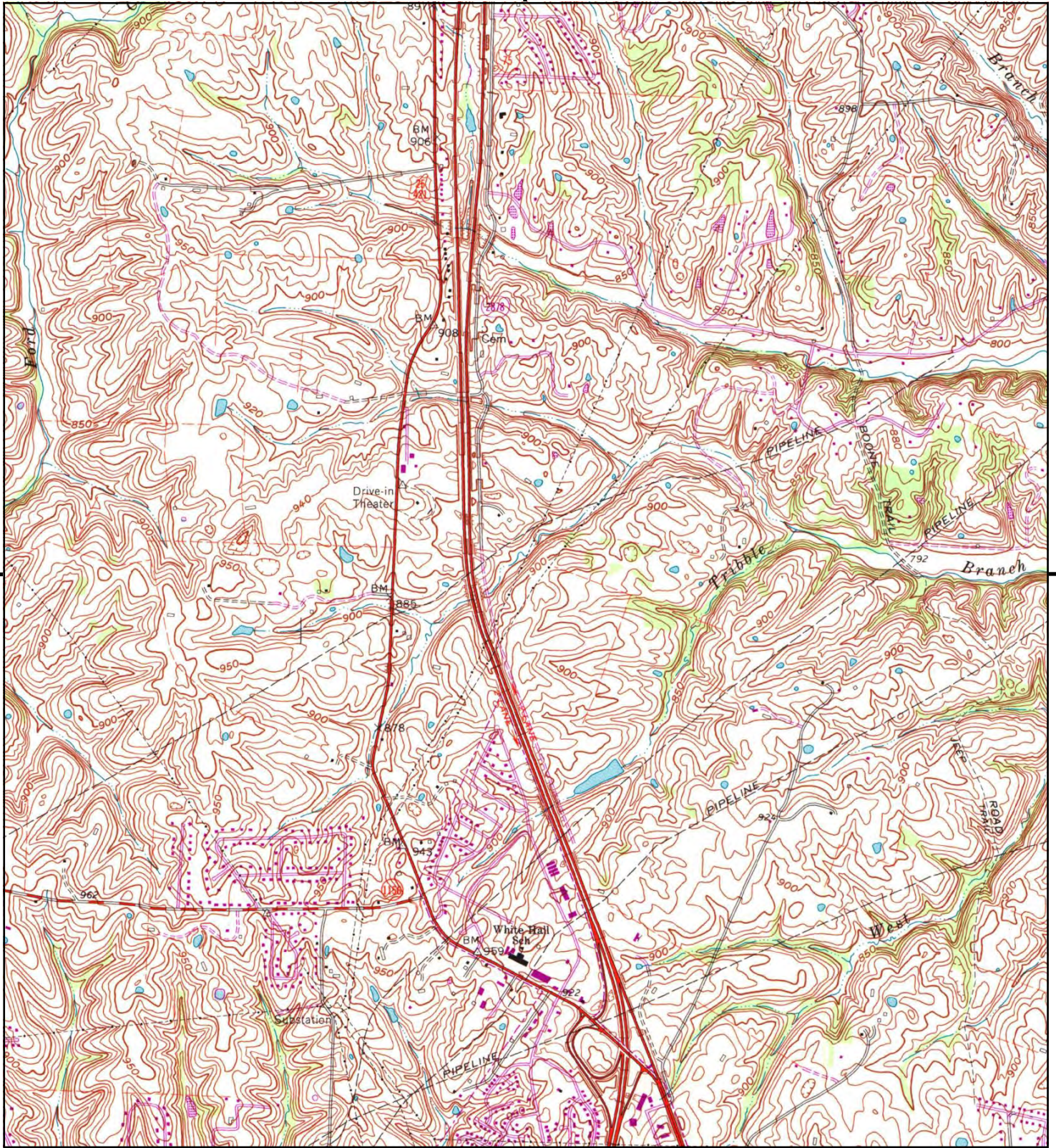
This report includes information from the following map sheet(s).



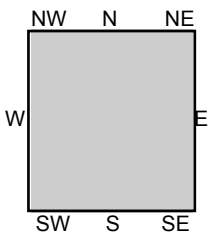
TP, Richmond North, 1993, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





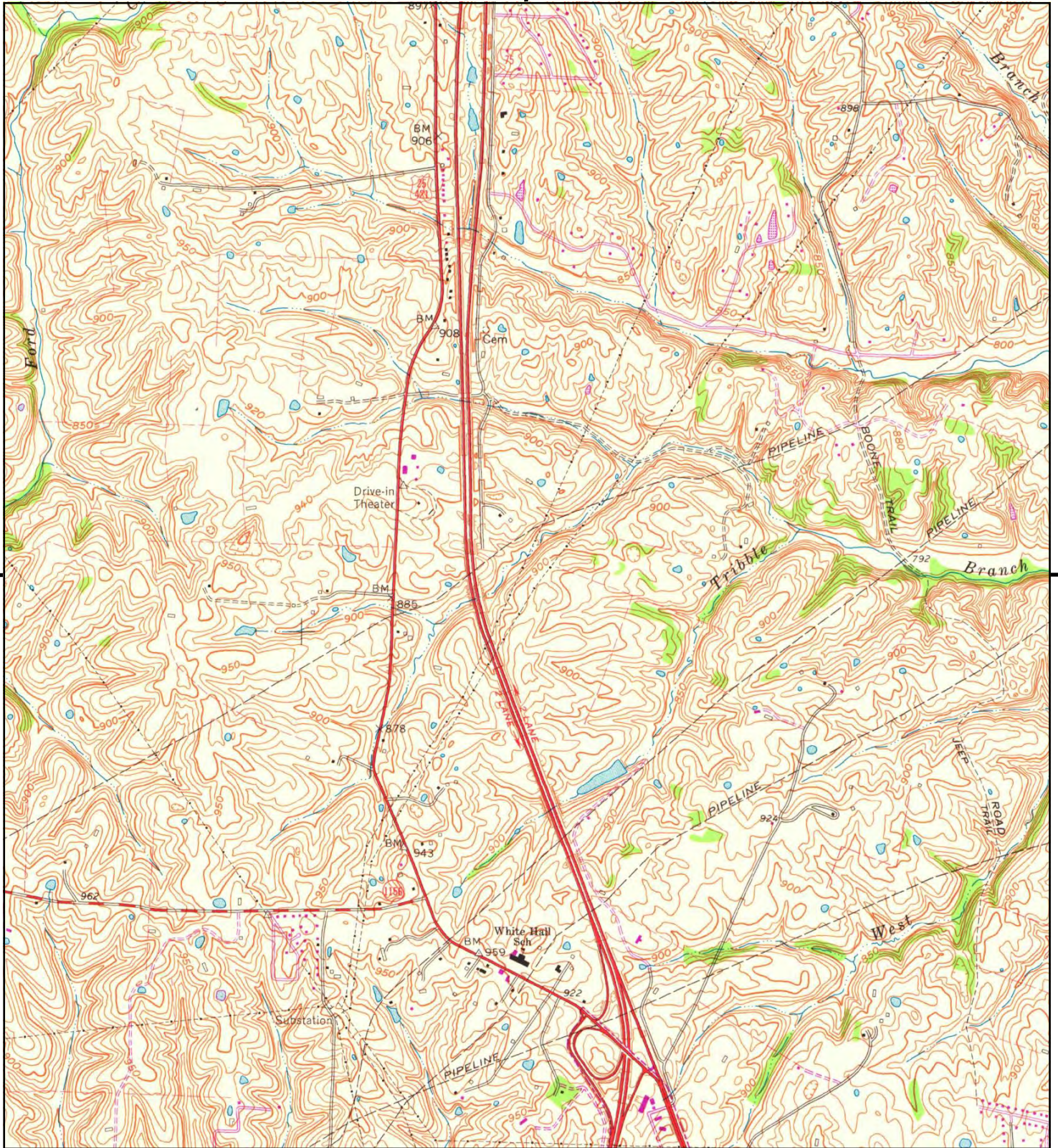
This report includes information from the following map sheet(s).



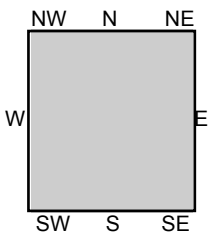
TP, Richmond North, 1993, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





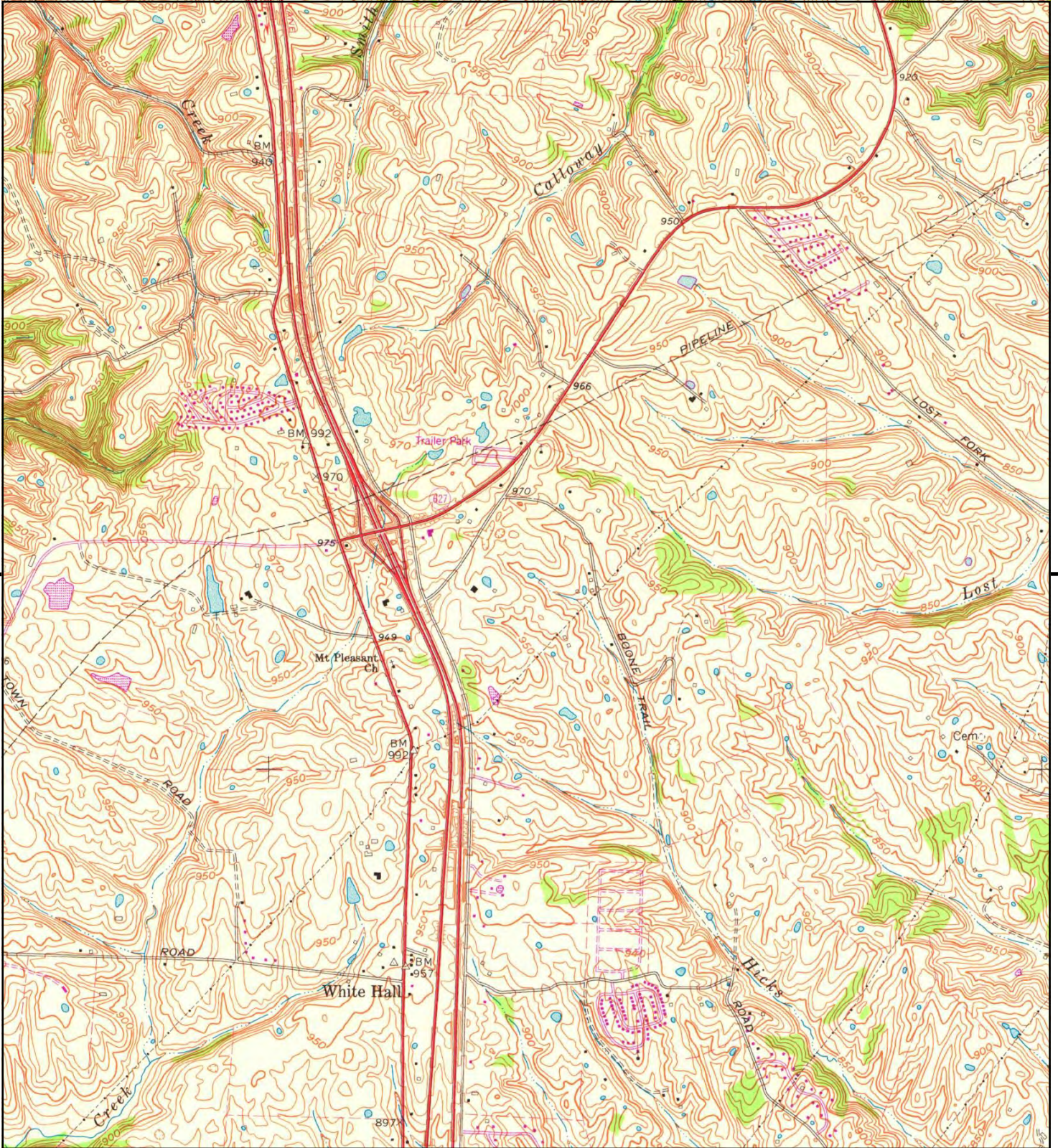
This report includes information from the following map sheet(s).



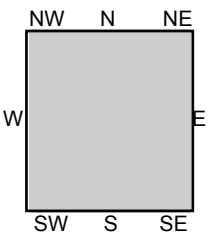
TP, Richmond North, 1979, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
 Richmond, KY 40475
CLIENT: Tetra Tech MM





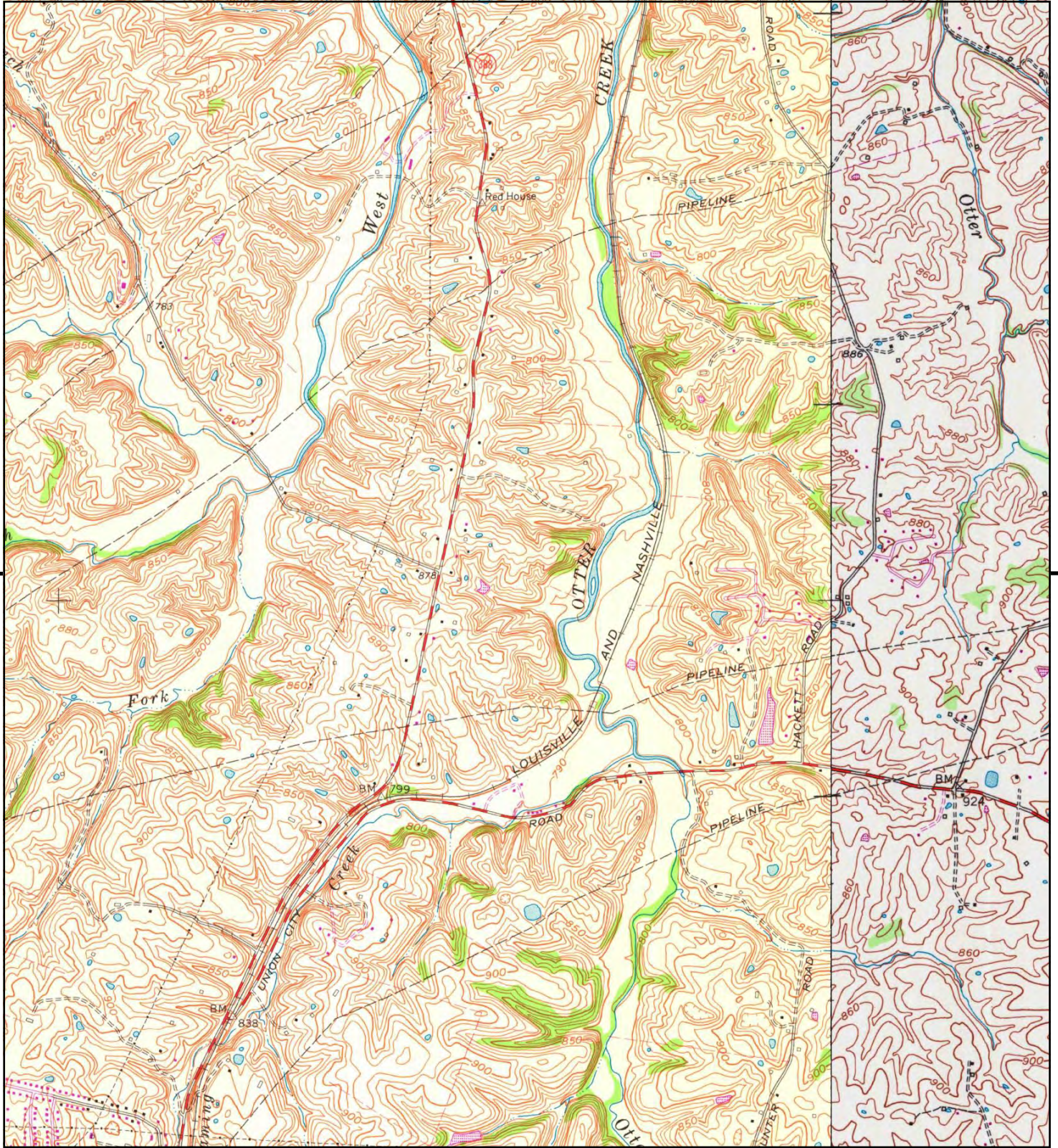
This report includes information from the following map sheet(s).



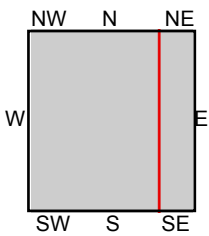
TP, Richmond North, 1979, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
 Richmond, KY 40475
CLIENT: Tetra Tech MM





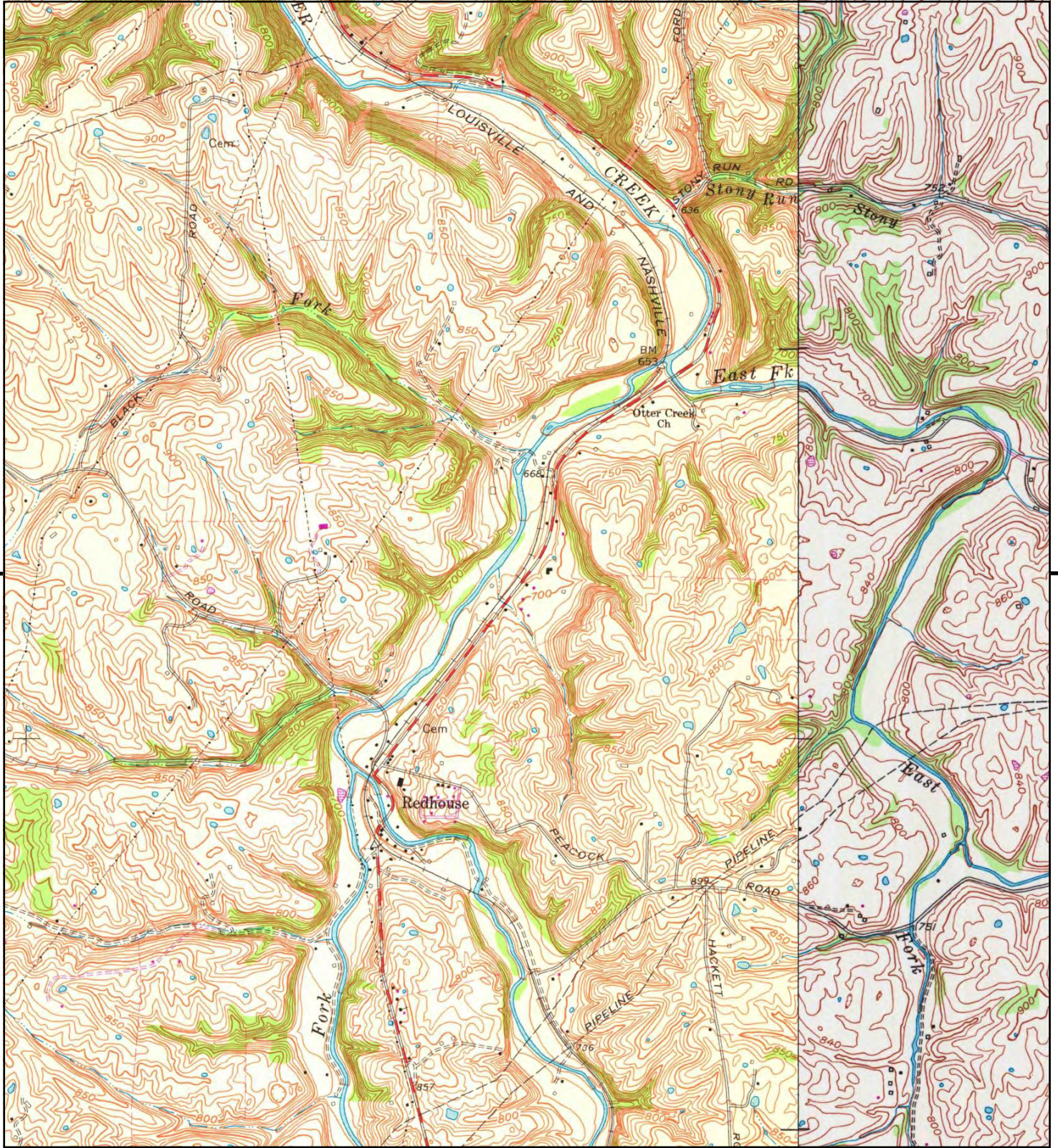
This report includes information from the following map sheet(s).



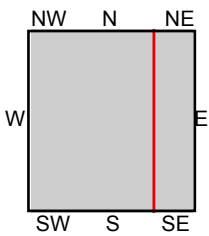
TP, Richmond North, 1979, 7.5-minute
E, Union City, 1979, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





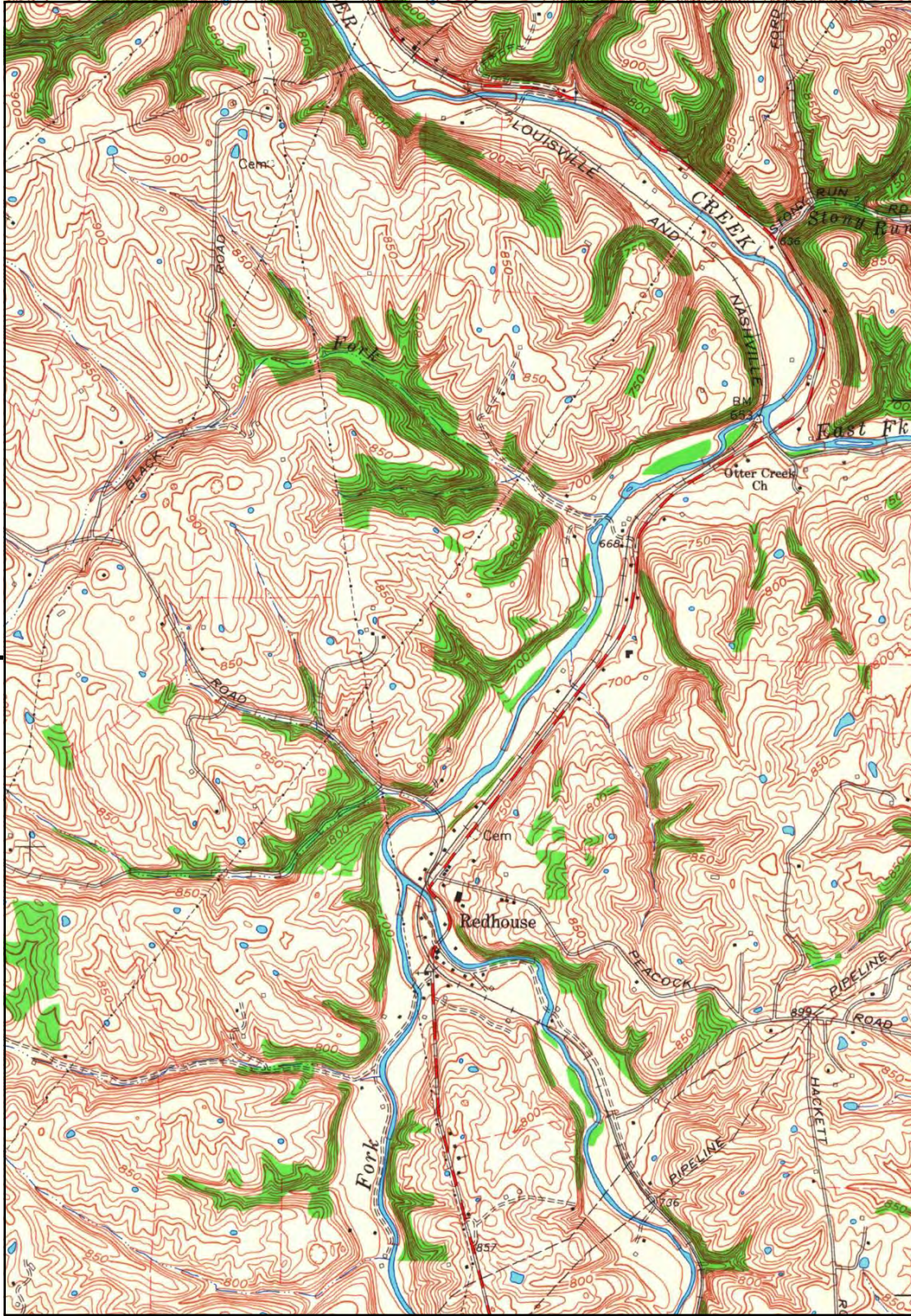
This report includes information from the following map sheet(s).



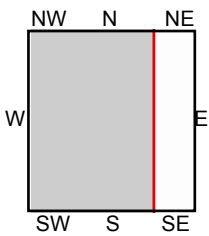
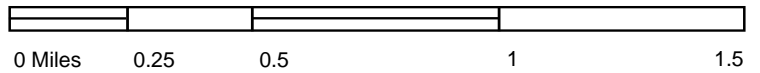
TP, Richmond North, 1979, 7.5-minute
SE, Union City, 1979, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





This report includes information from the following map sheet(s).



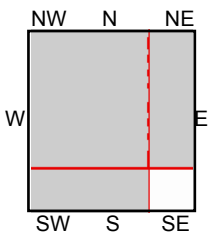
TP, Richmond North, 1965, 7.5-minute

SITE NAME: Madison Solar
 ADDRESS: Madison Solar
 Richmond, KY 40475
 CLIENT: Tetra Tech MM





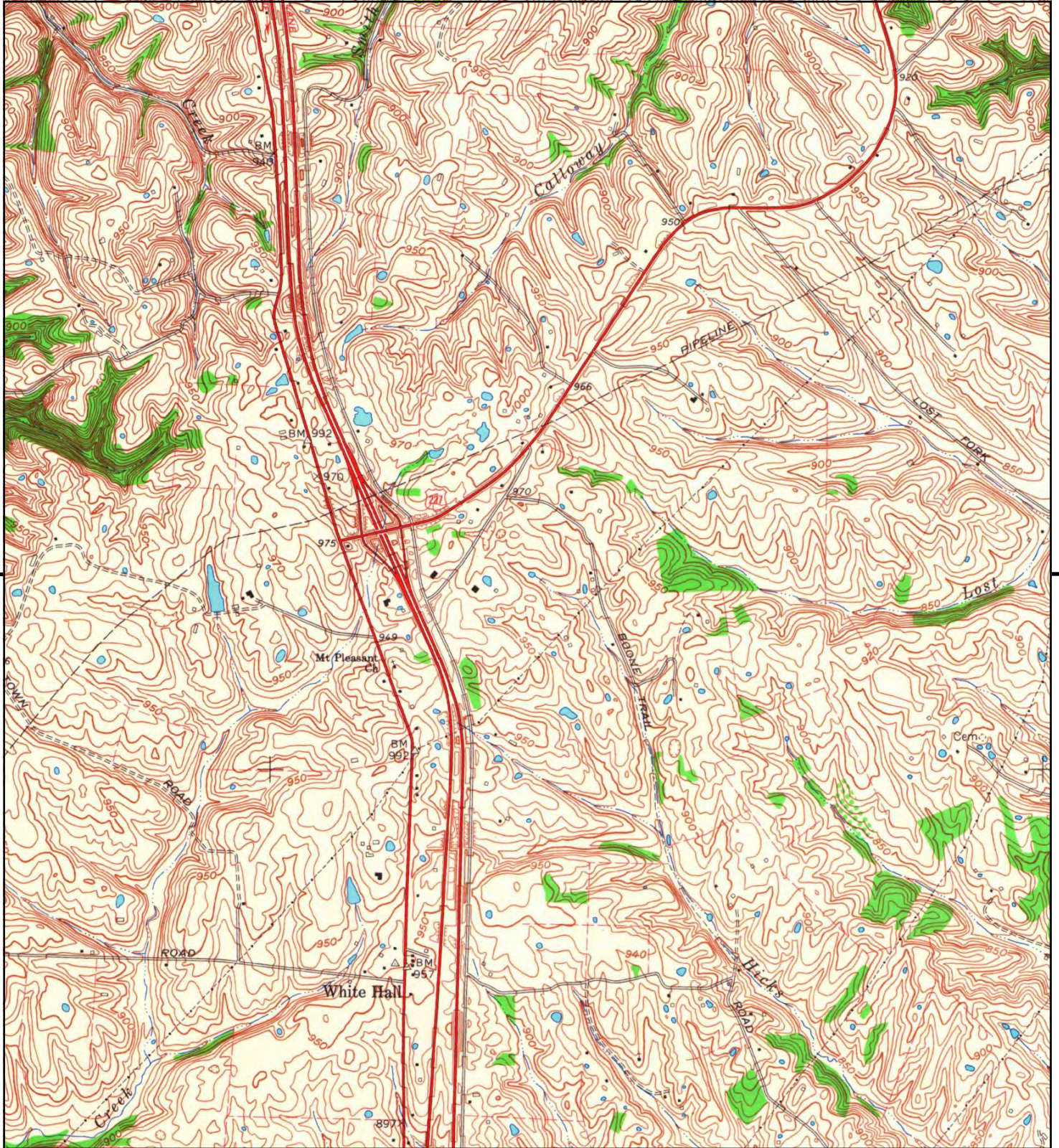
This report includes information from the following map sheet(s).



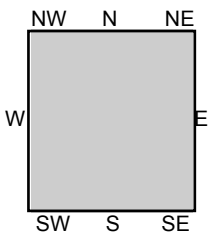
TP, Ford, 1965, 7.5-minute
 NE, Winchester, 1965, 7.5-minute
 SW, Richmond North, 1965, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
 Richmond, KY 40475
CLIENT: Tetra Tech MM





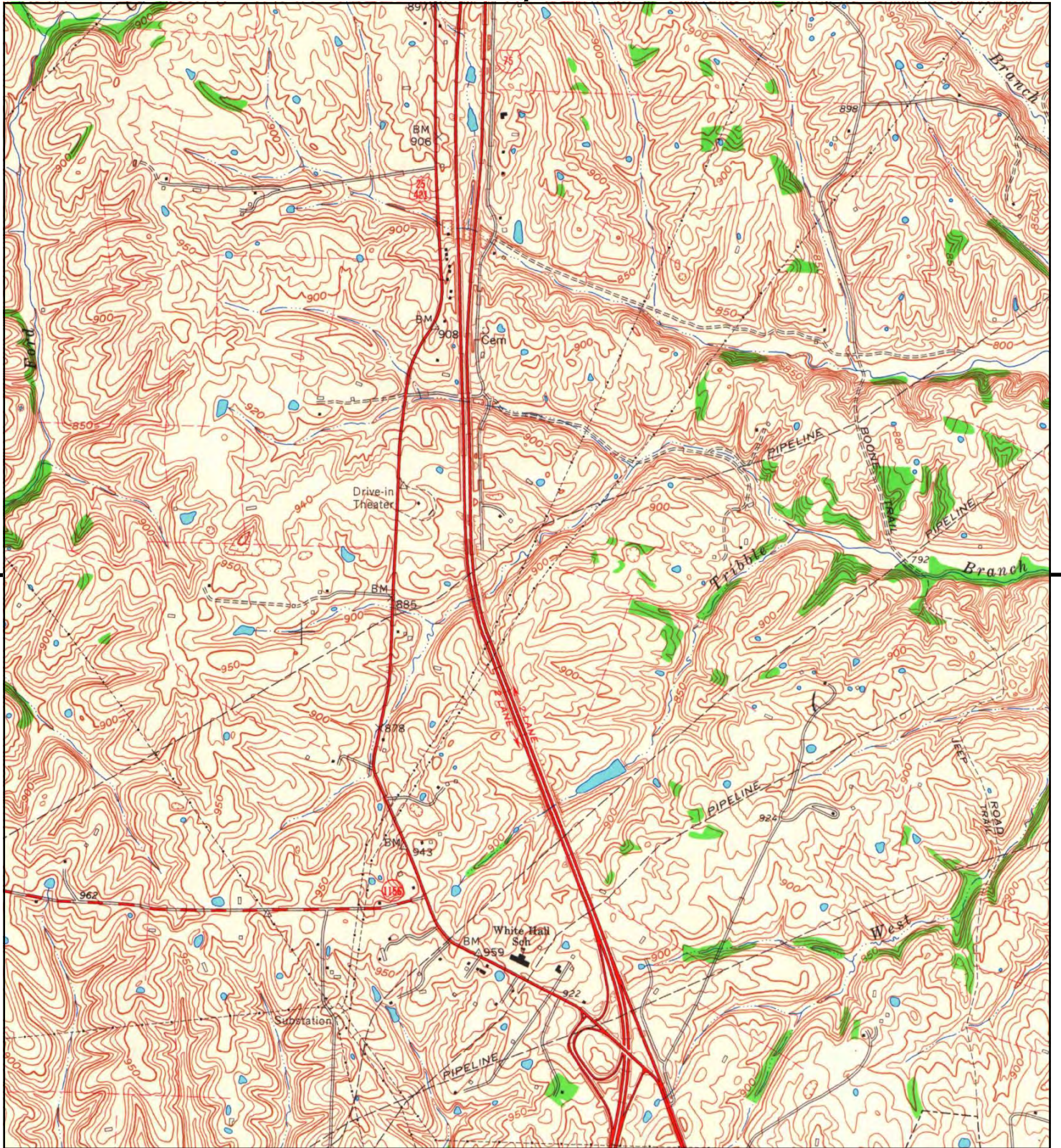
This report includes information from the following map sheet(s).



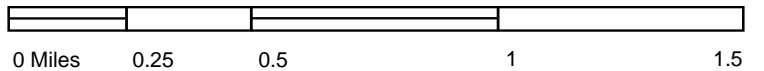
TP, Richmond North, 1965, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





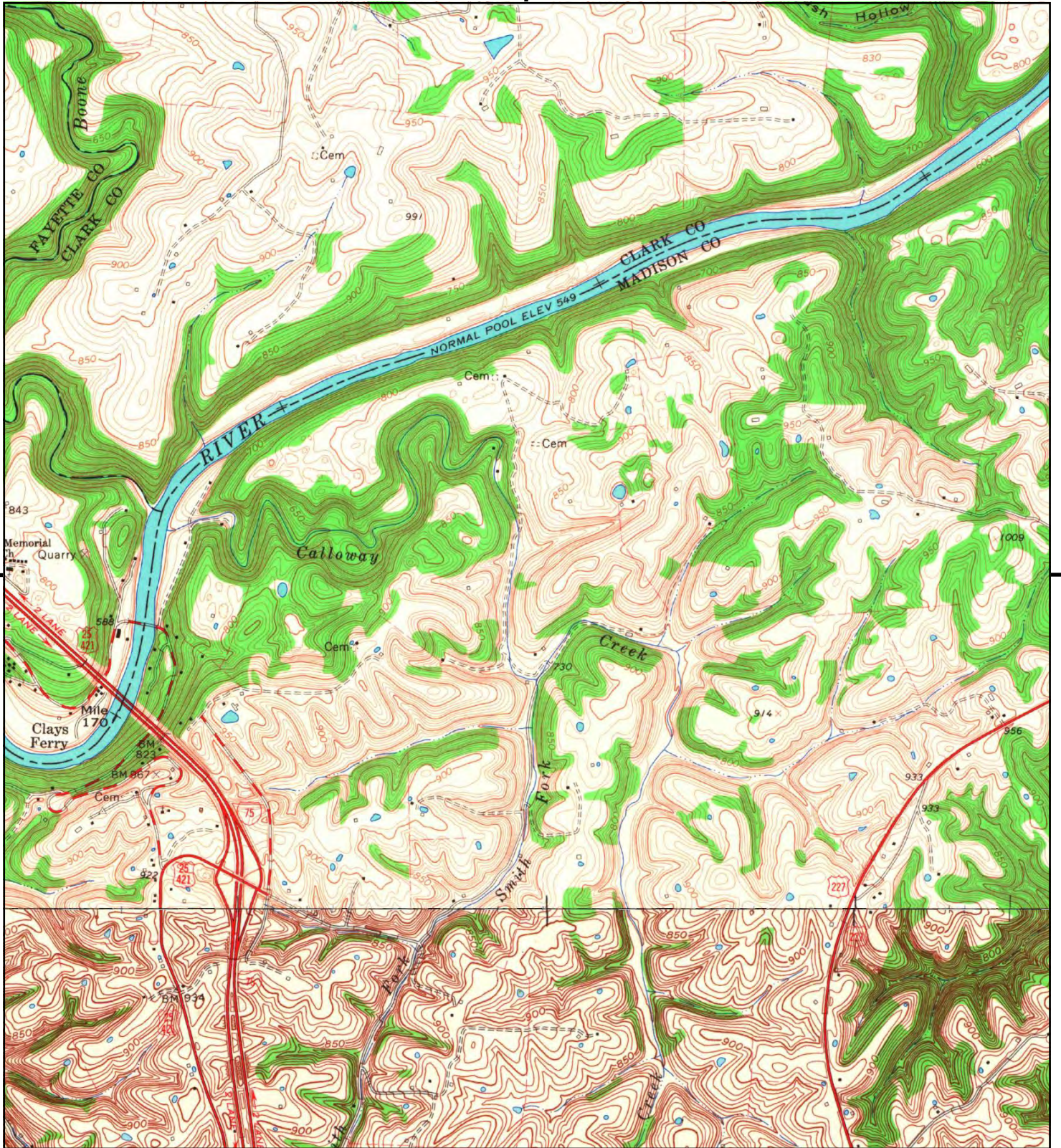
This report includes information from the following map sheet(s).



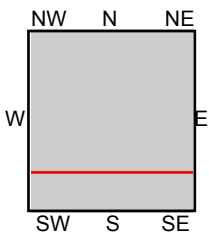
TP, Richmond North, 1965, 7.5-minute

SITE NAME: Madison Solar
 ADDRESS: Madison Solar
 Richmond, KY 40475
 CLIENT: Tetra Tech MM





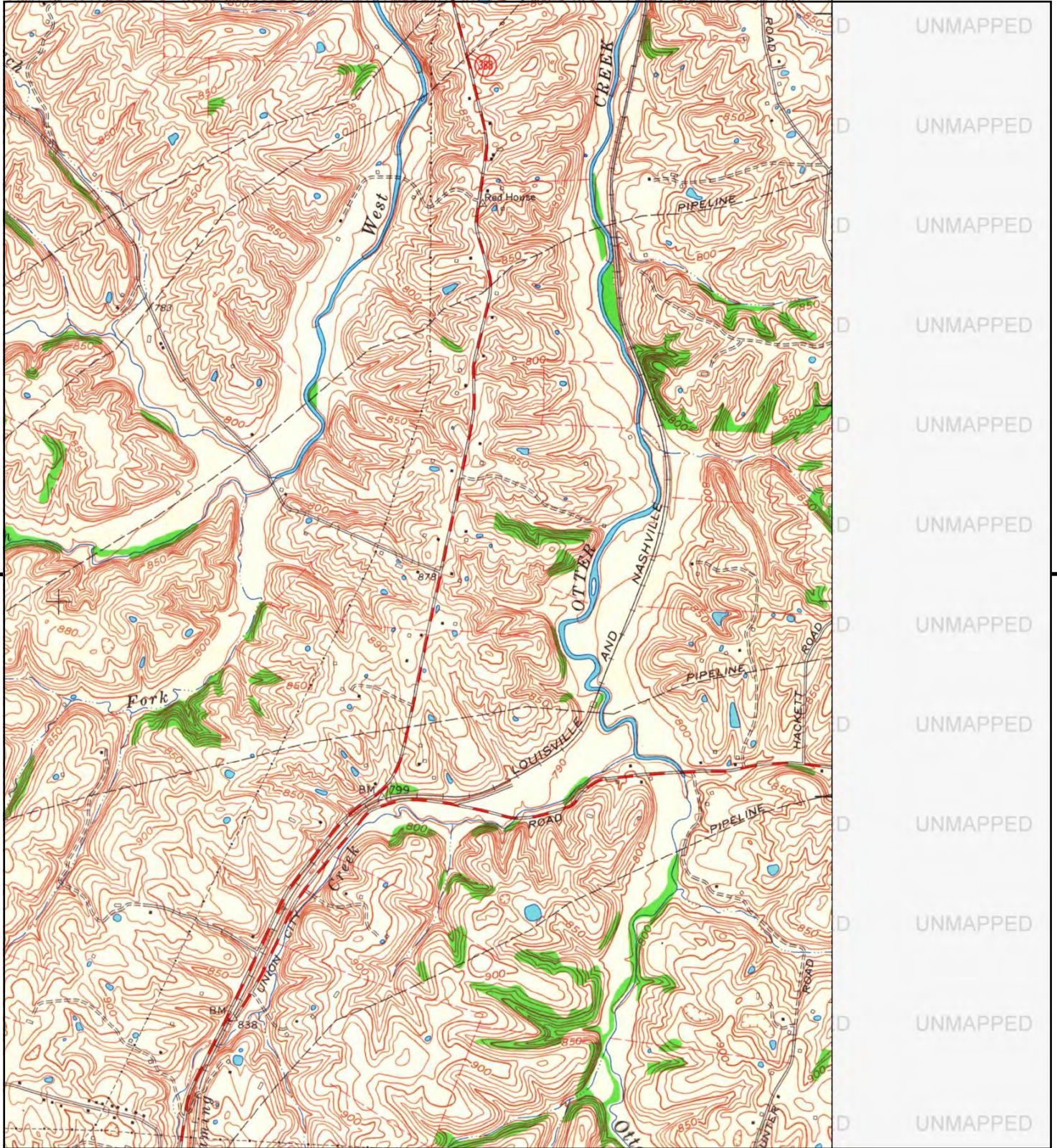
This report includes information from the following map sheet(s).



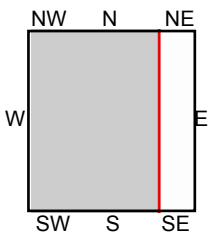
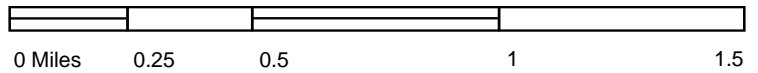
TP, Ford, 1965, 7.5-minute
S, Richmond North, 1965, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





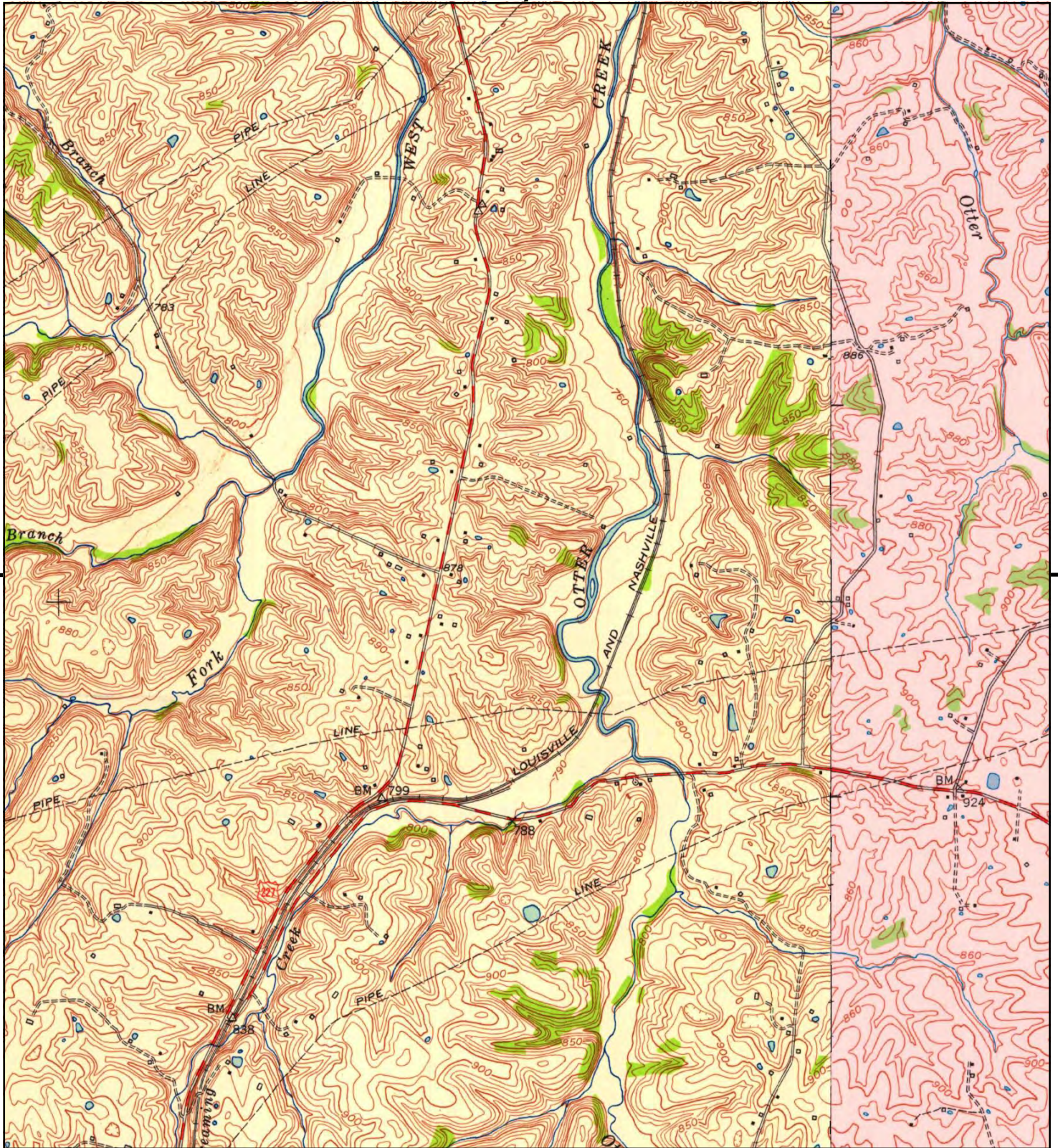
This report includes information from the following map sheet(s).



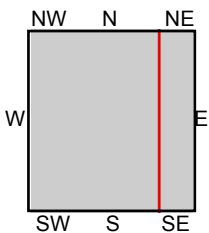
TP, Richmond North, 1965, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
 Richmond, KY 40475
CLIENT: Tetra Tech MM





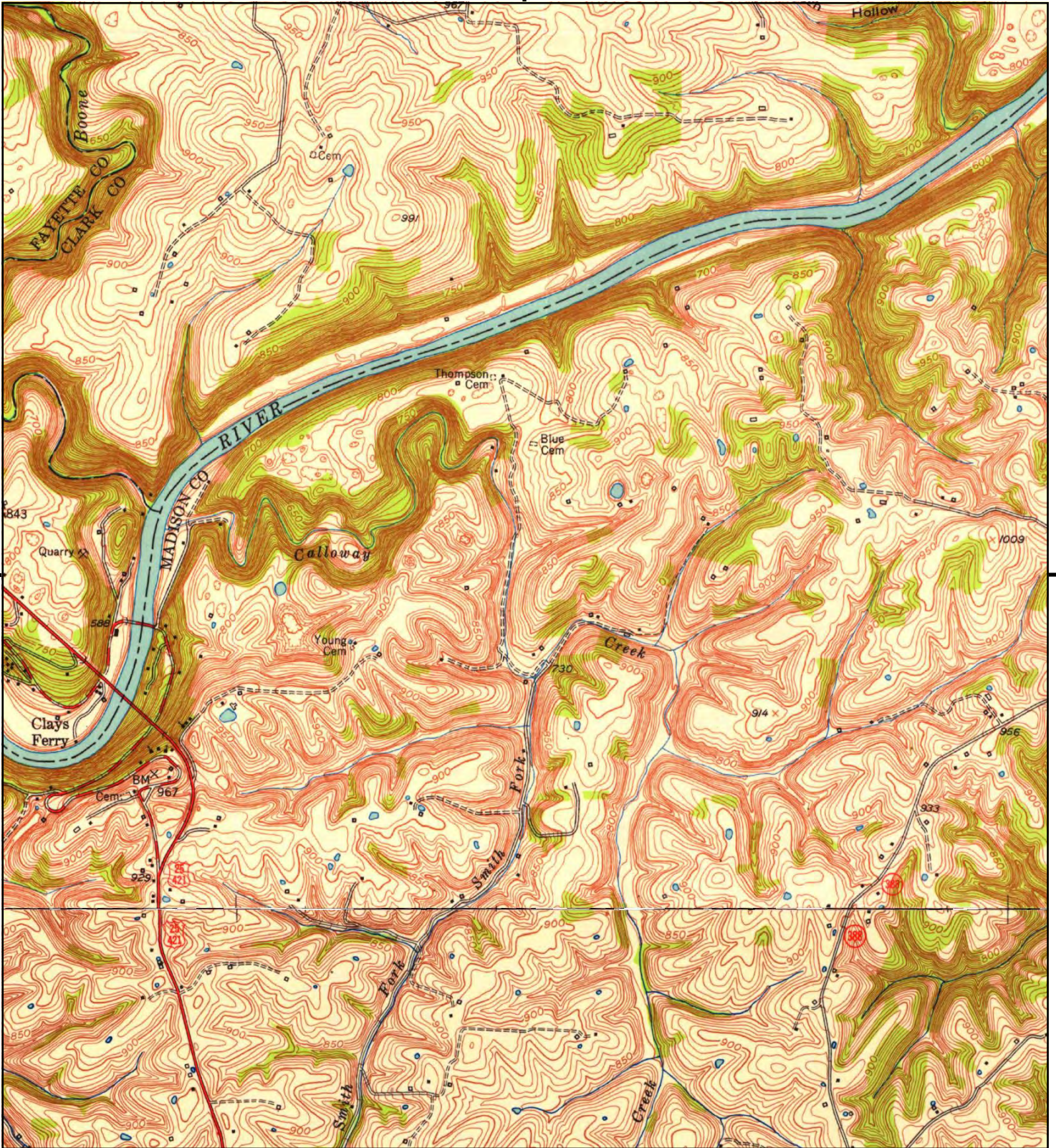
This report includes information from the following map sheet(s).



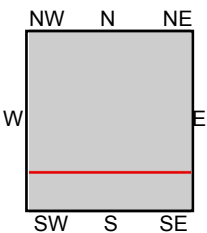
TP, Richmond North, 1952, 7.5-minute
E, Union City, 1952, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





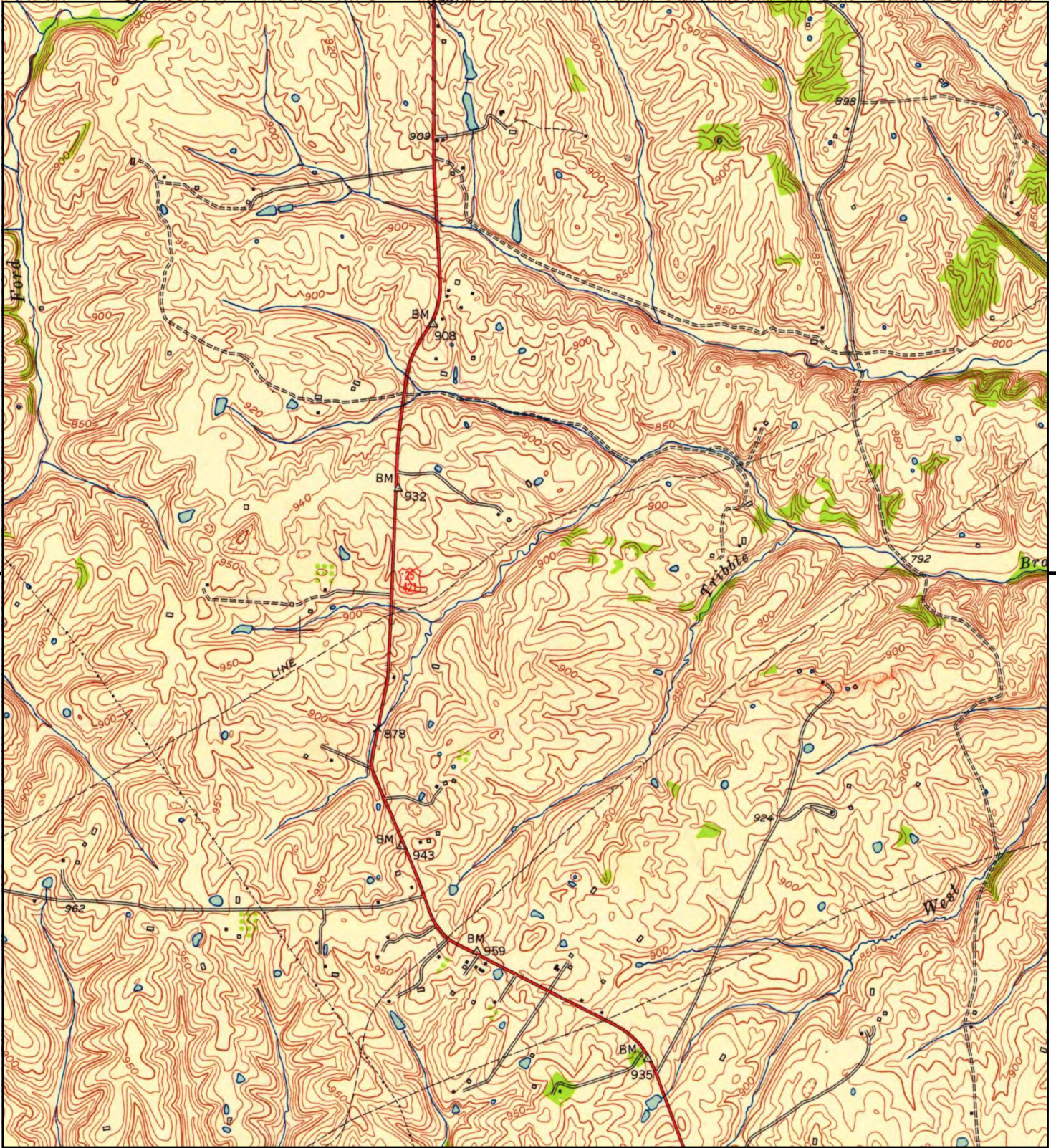
This report includes information from the following map sheet(s).



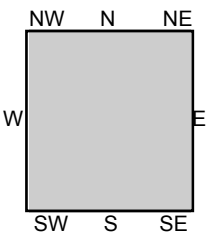
TP, Ford, 1952, 7.5-minute
S, Richmond North, 1952, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





This report includes information from the following map sheet(s).



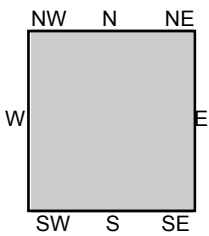
TP, Richmond North, 1952, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





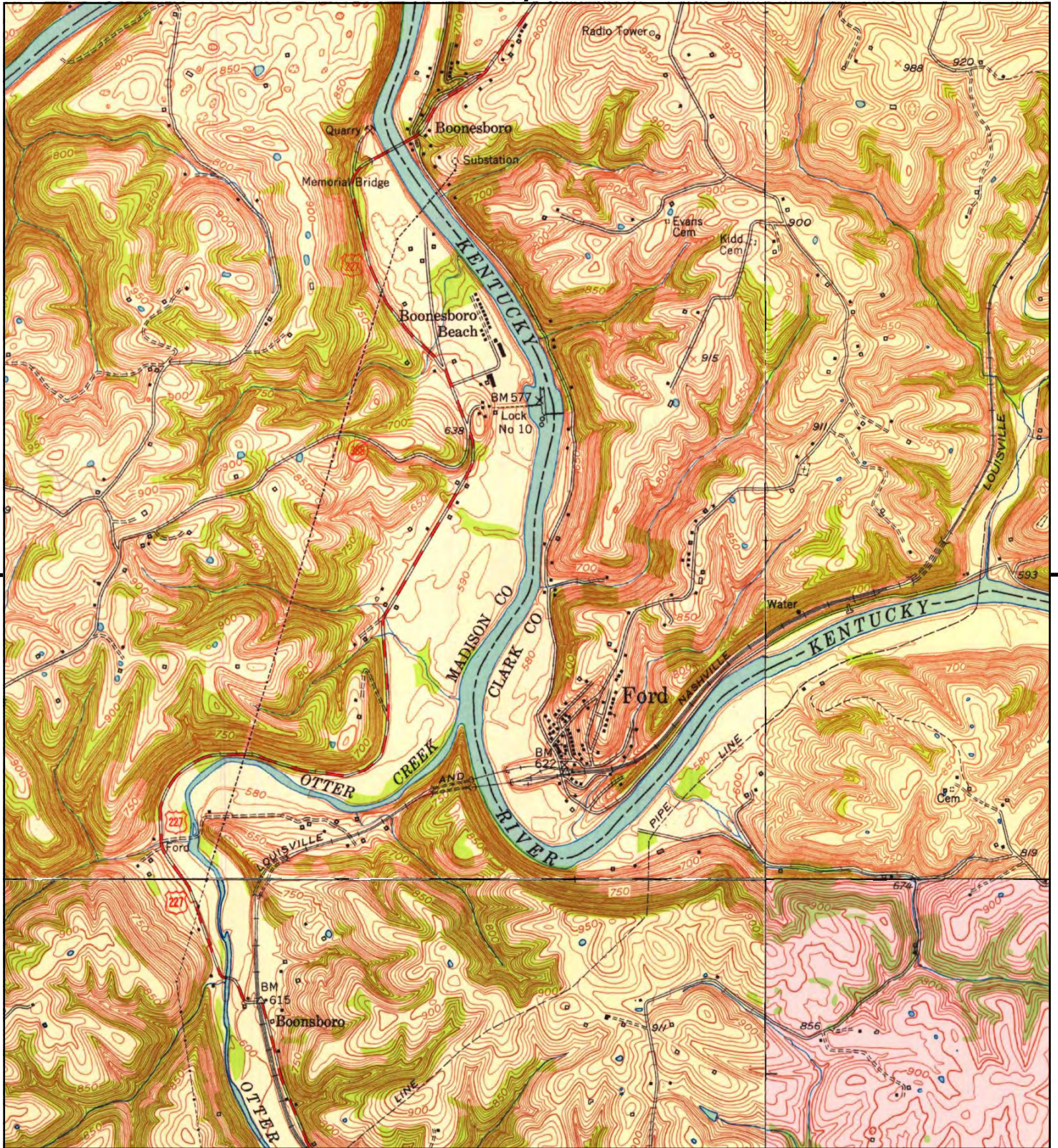
This report includes information from the following map sheet(s).



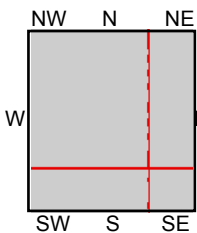
TP, Richmond North, 1952, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





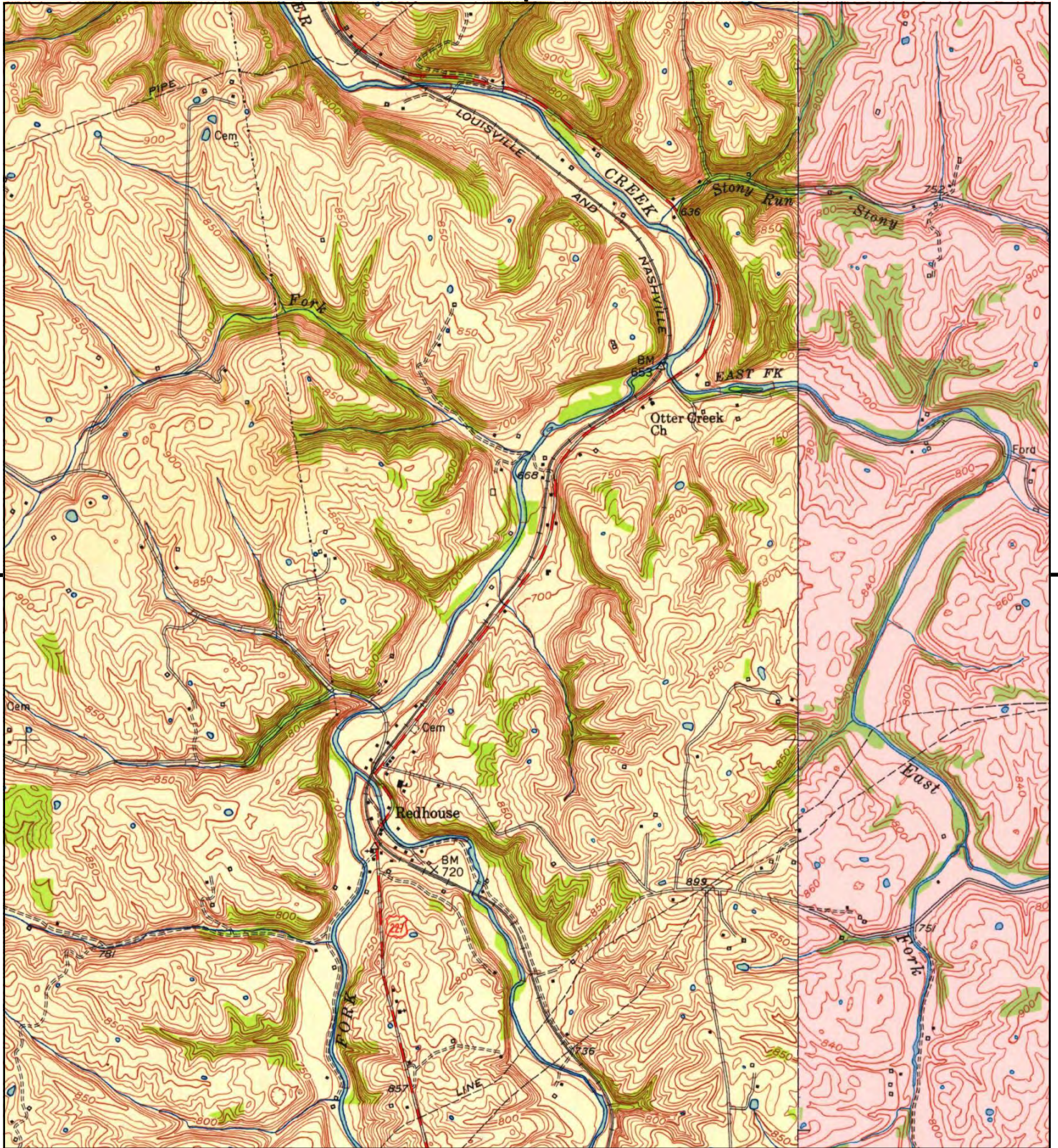
This report includes information from the following map sheet(s).



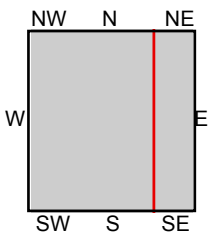
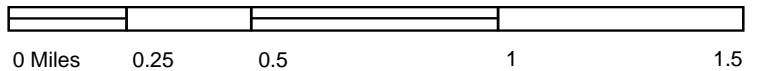
TP, Ford, 1952, 7.5-minute
 NE, Winchester, 1952, 7.5-minute
 SE, Union City, 1952, 7.5-minute
 S, Richmond North, 1952, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
 Richmond, KY 40475
CLIENT: Tetra Tech MM





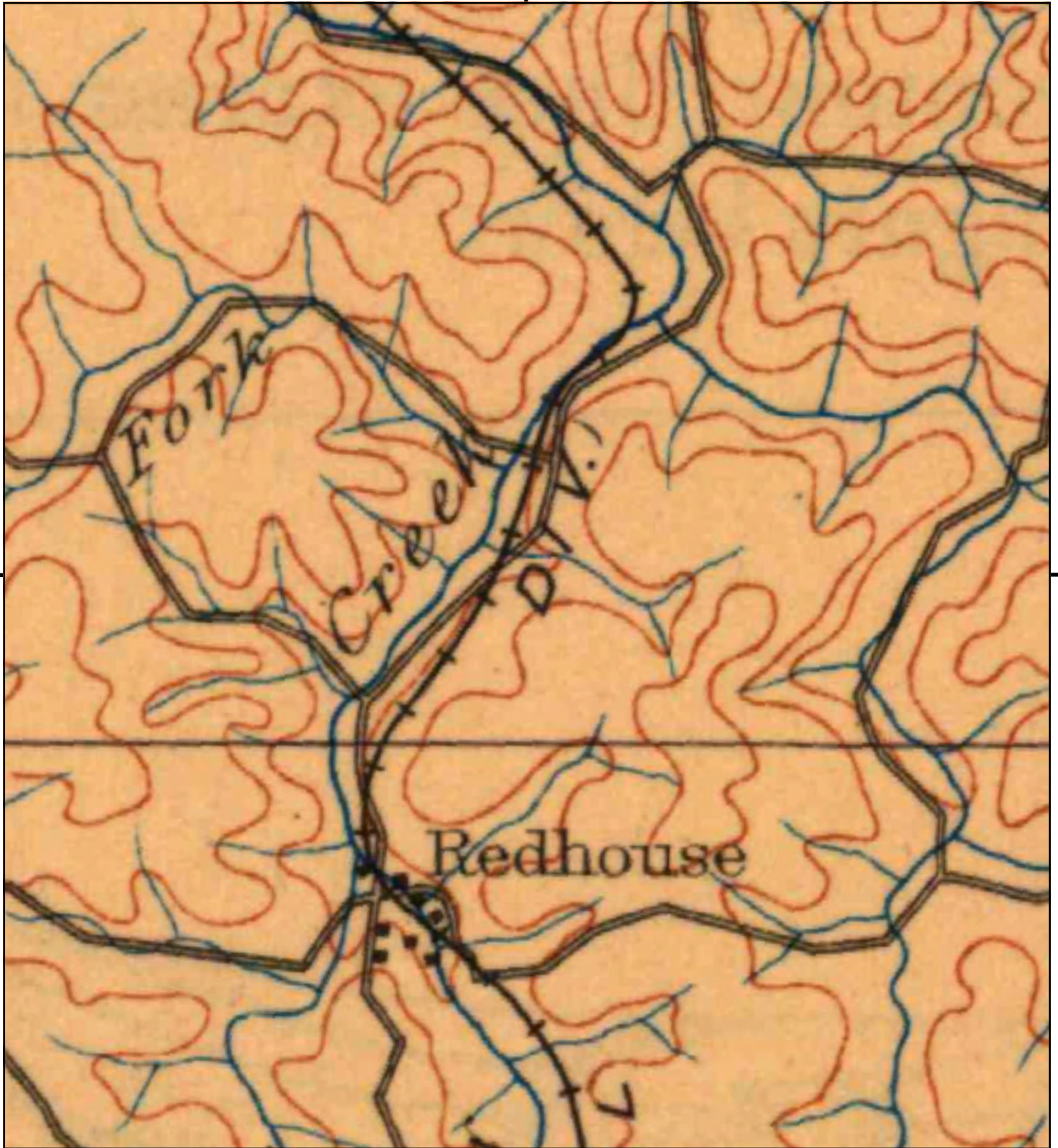
This report includes information from the following map sheet(s).



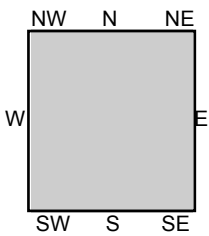
TP, Richmond North, 1952, 7.5-minute
SE, Union City, 1952, 7.5-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





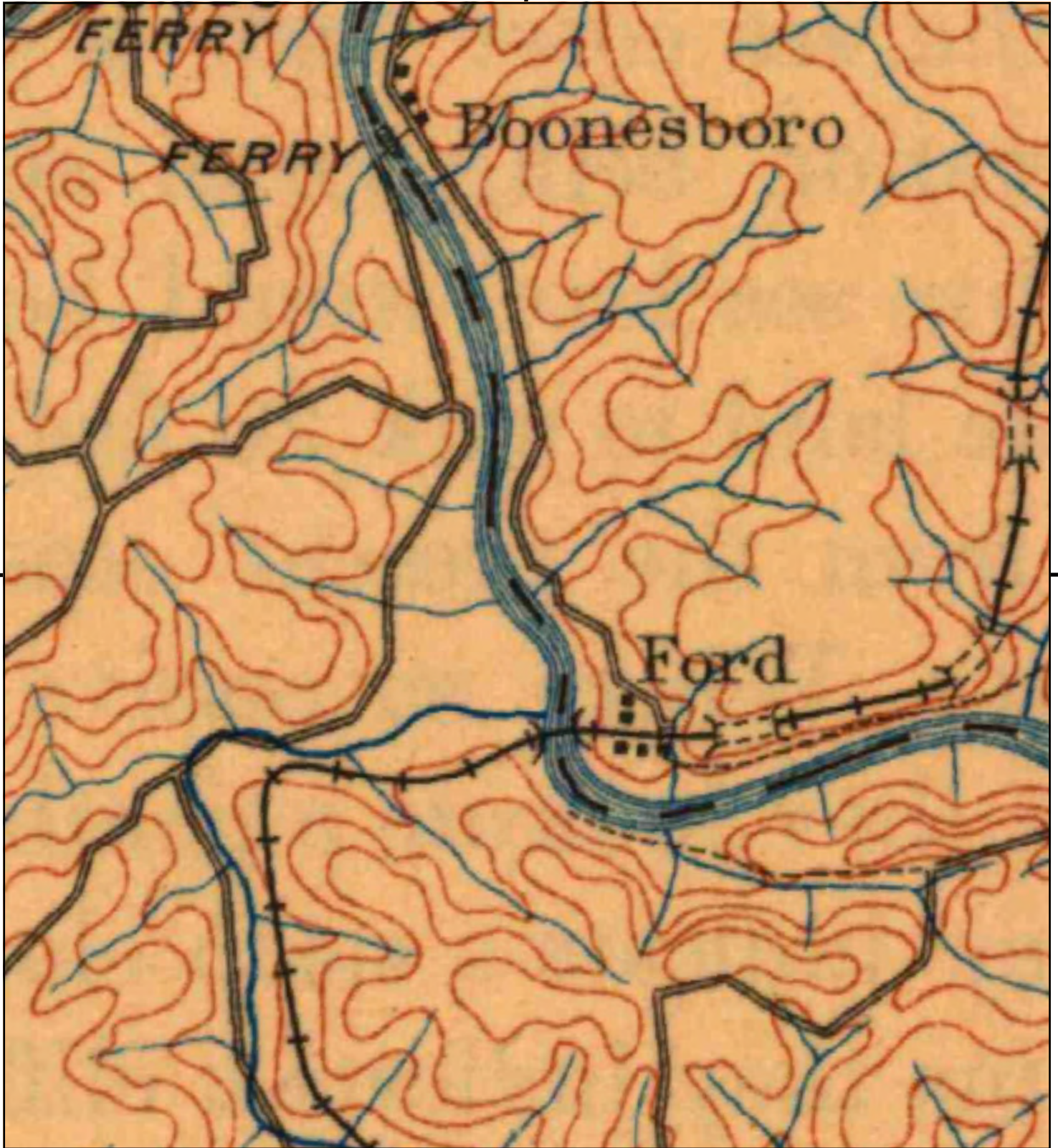
This report includes information from the following map sheet(s).



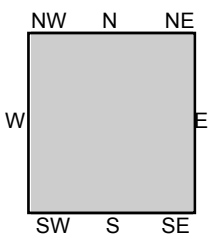
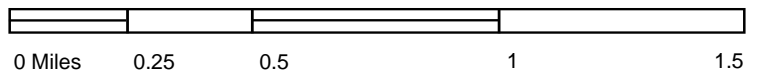
TP, Richmond, 1897, 30-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





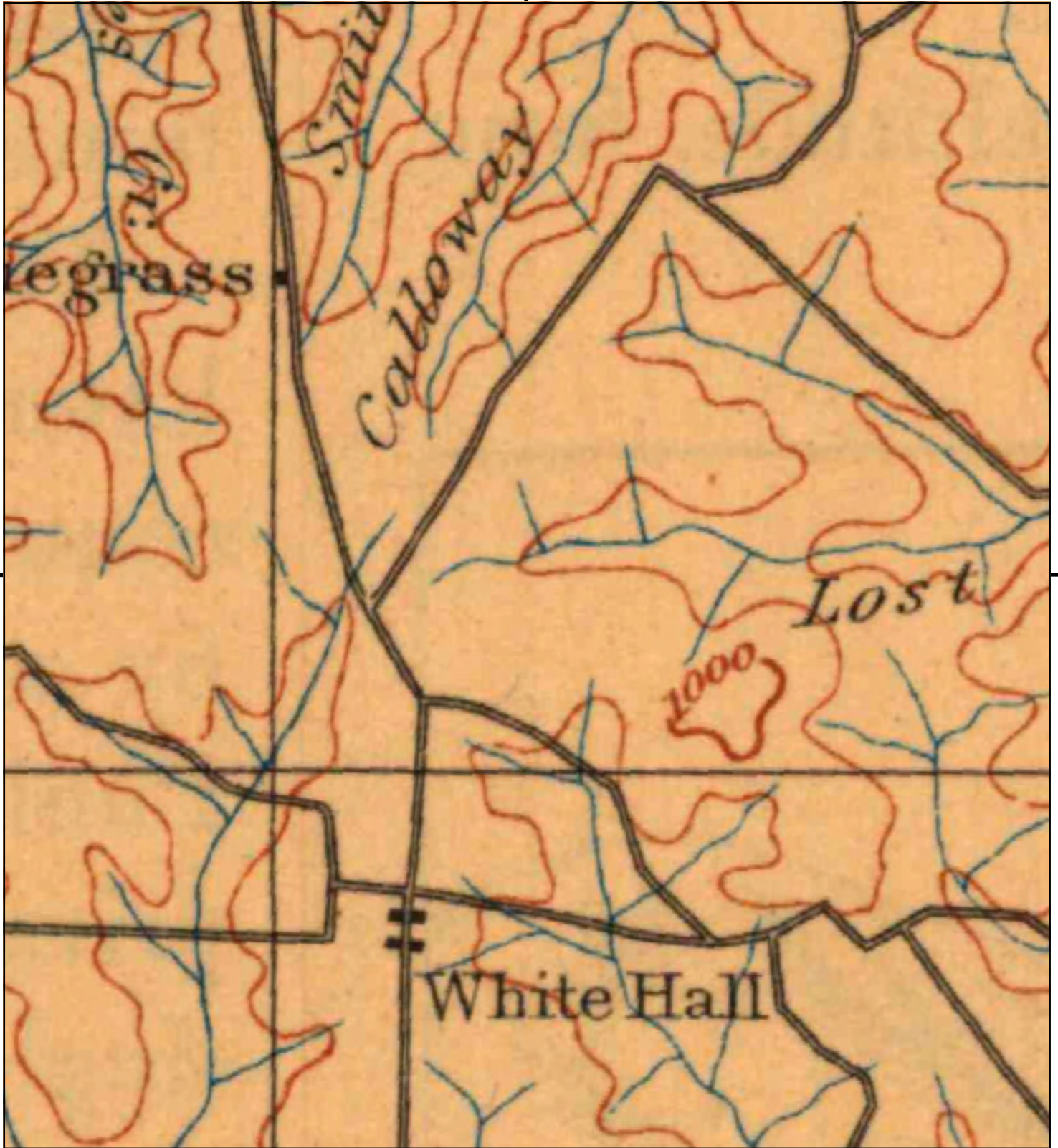
This report includes information from the following map sheet(s).



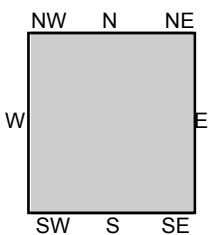
TP, Richmond, 1897, 30-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





This report includes information from the following map sheet(s).



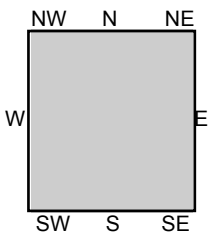
TP, Richmond, 1897, 30-minute

SITE NAME: Madison Solar
 ADDRESS: Madison Solar
 Richmond, KY 40475
 CLIENT: Tetra Tech MM





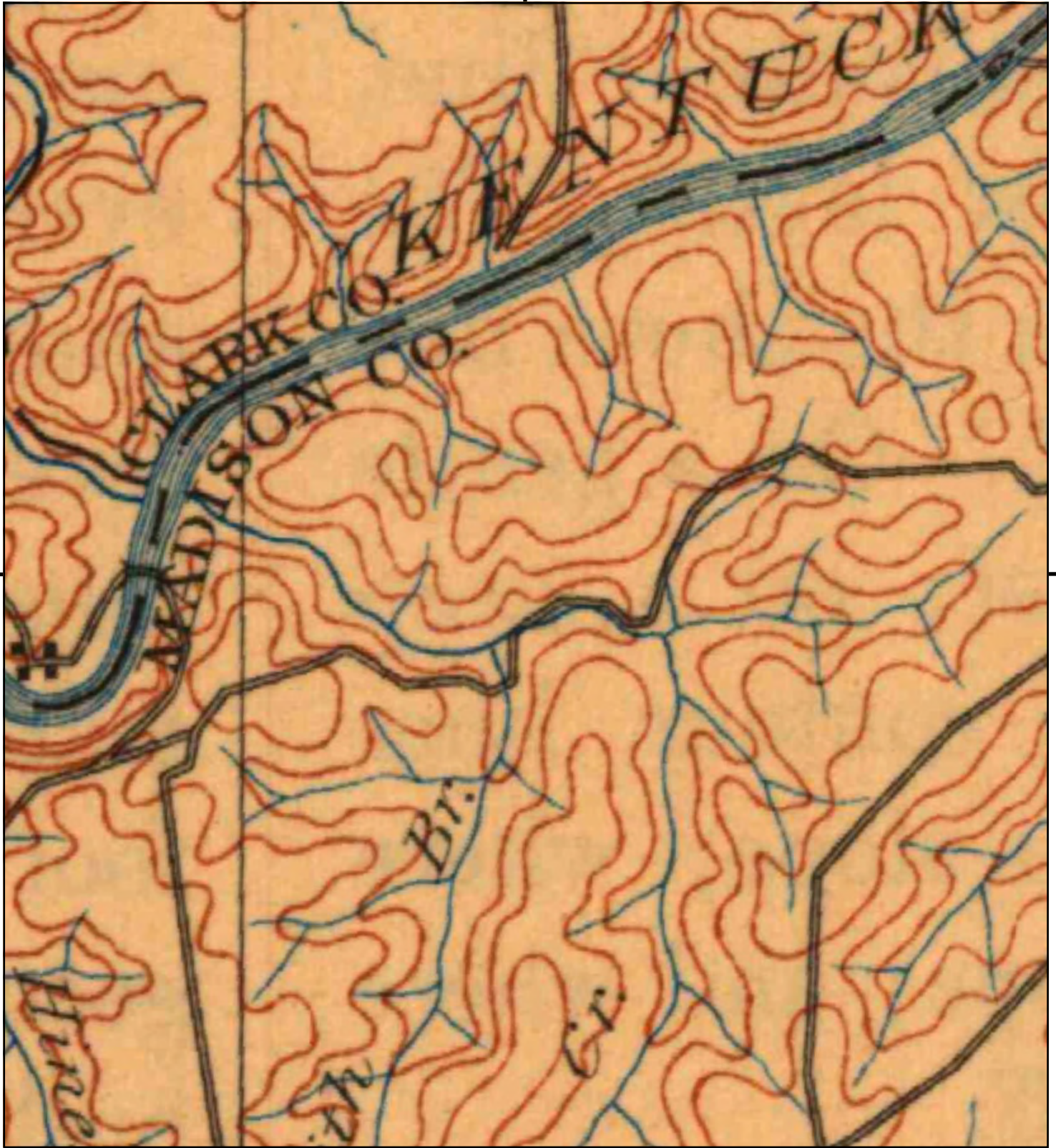
This report includes information from the following map sheet(s).



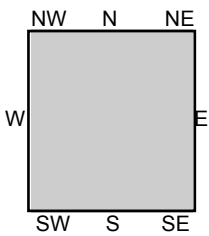
TP, Richmond, 1897, 30-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





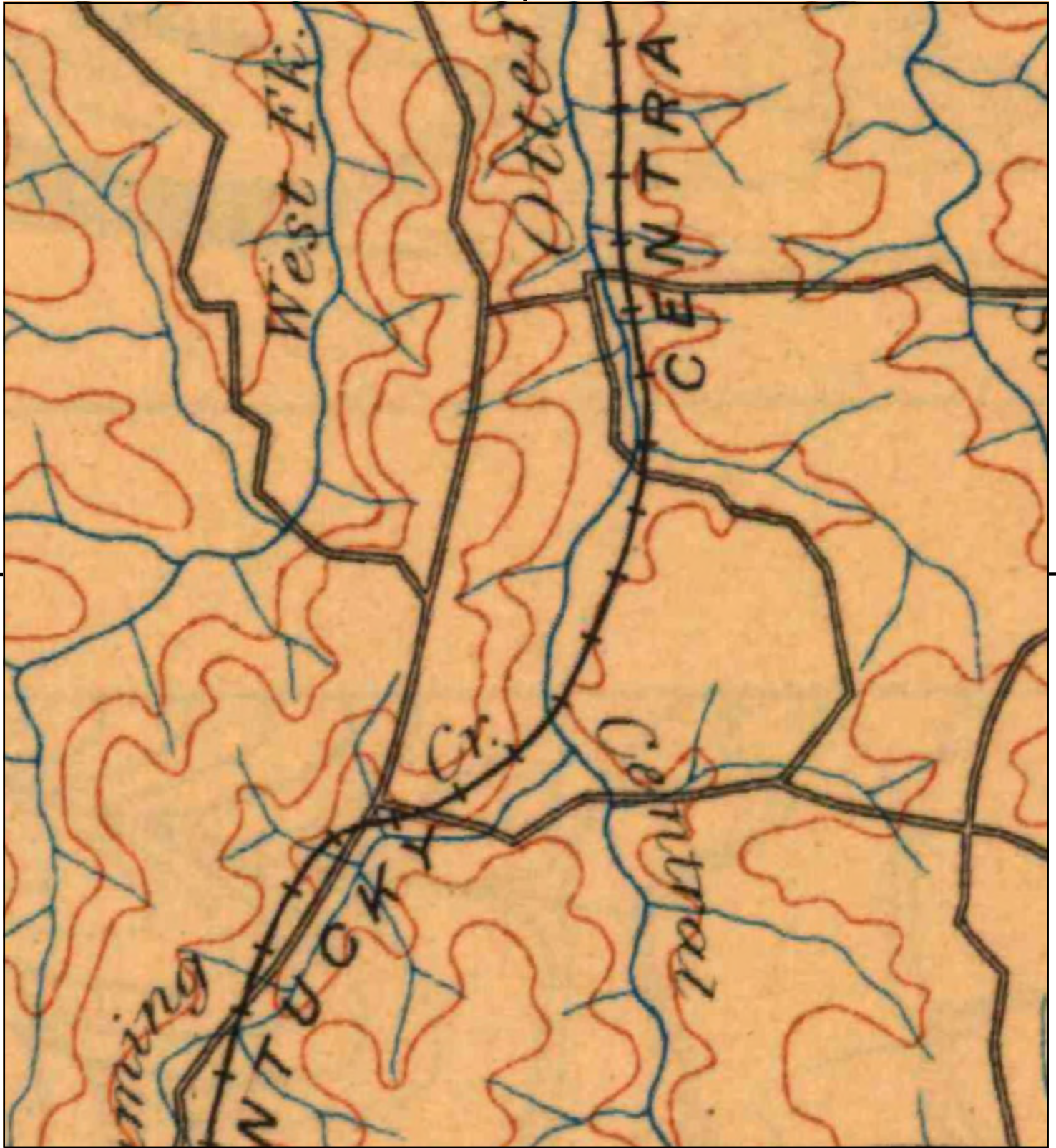
This report includes information from the following map sheet(s).



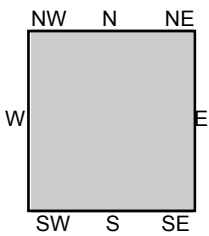
TP, Richmond, 1897, 30-minute

SITE NAME: Madison Solar
 ADDRESS: Madison Solar
 Richmond, KY 40475
 CLIENT: Tetra Tech MM





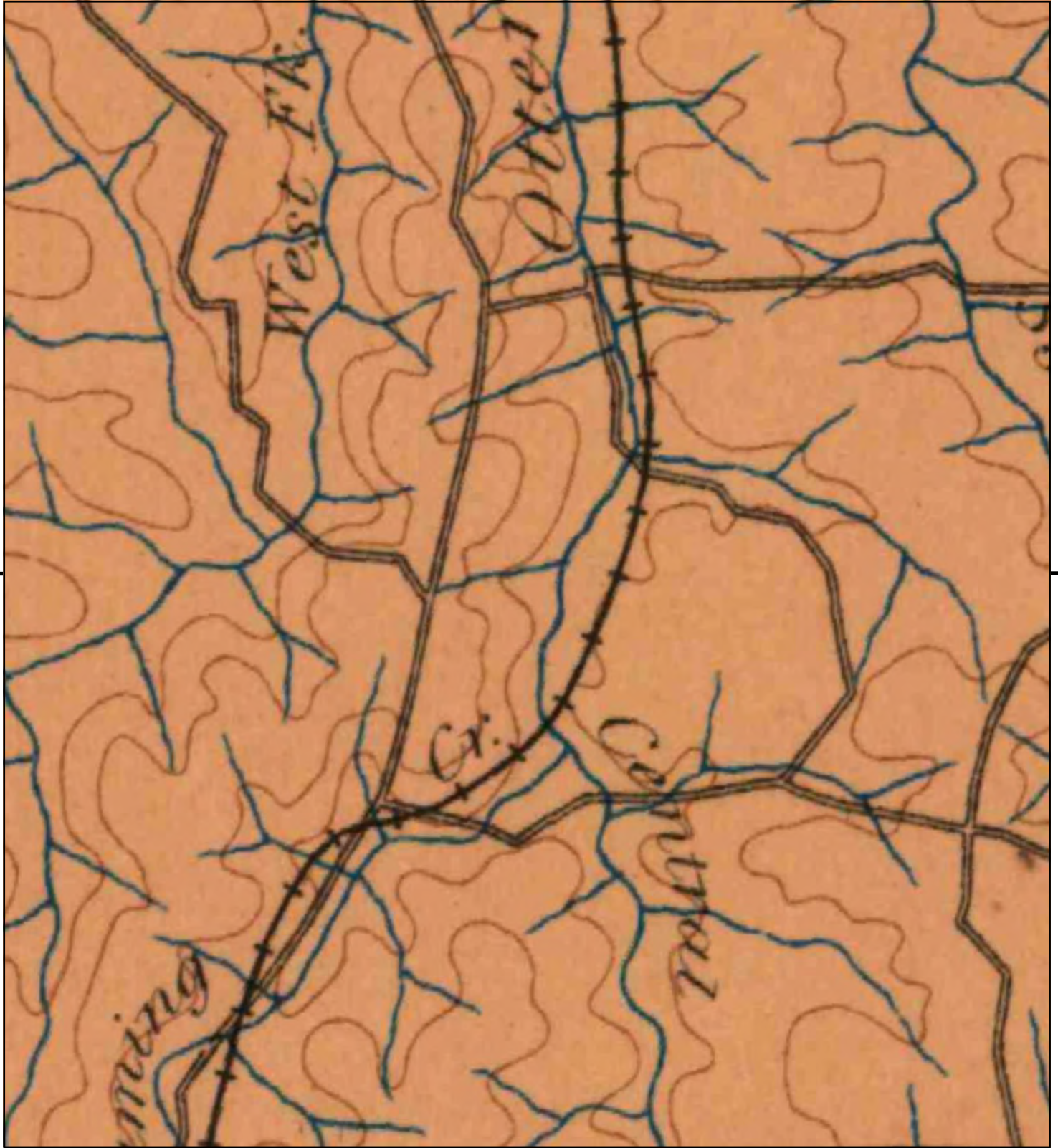
This report includes information from the following map sheet(s).



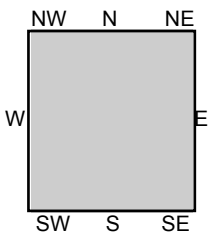
TP, Richmond, 1897, 30-minute

SITE NAME: Madison Solar
 ADDRESS: Madison Solar
 Richmond, KY 40475
 CLIENT: Tetra Tech MM





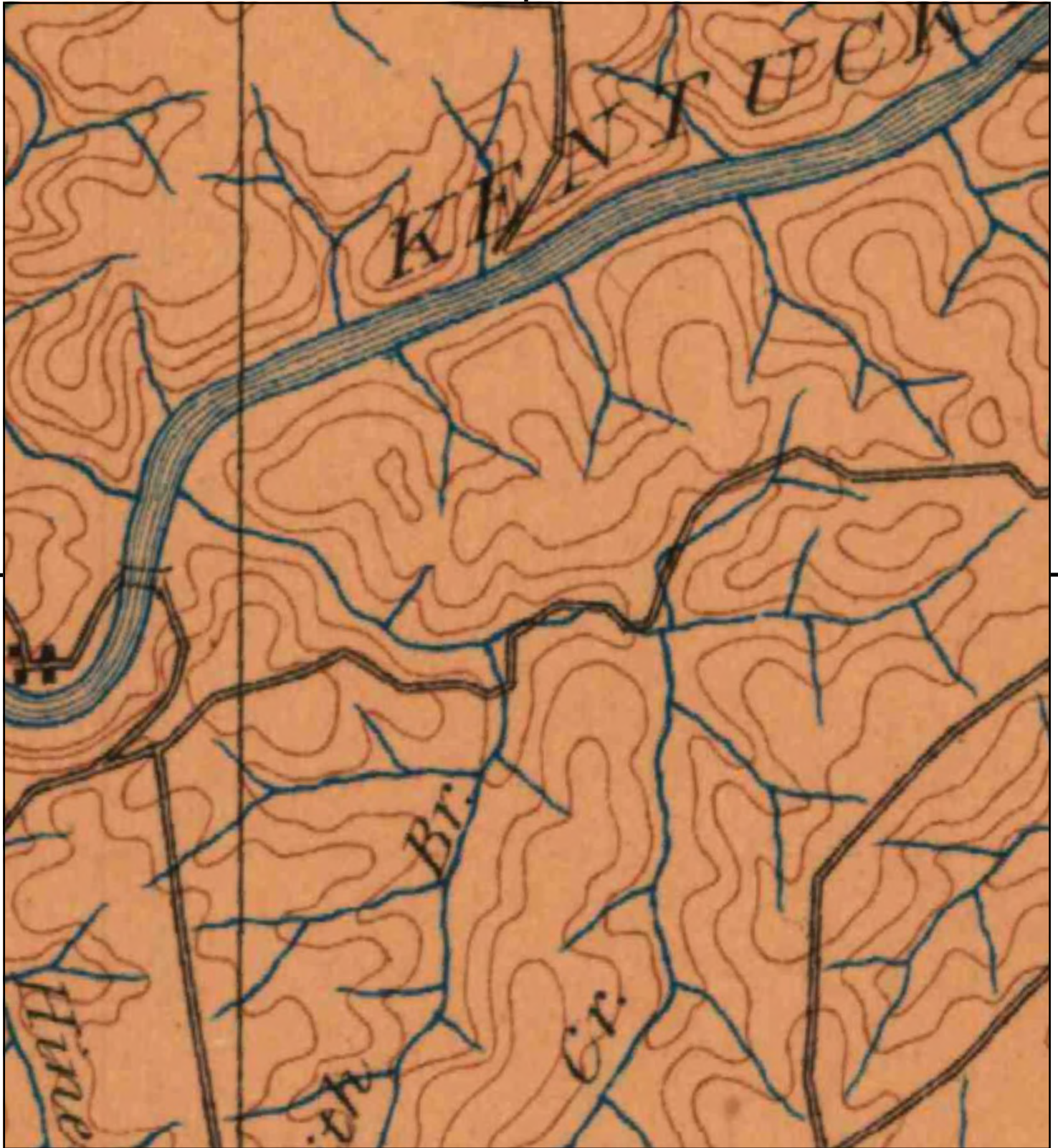
This report includes information from the following map sheet(s).



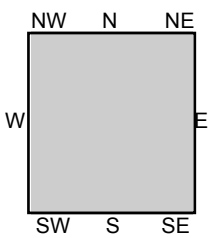
TP, Richmond, 1892, 30-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





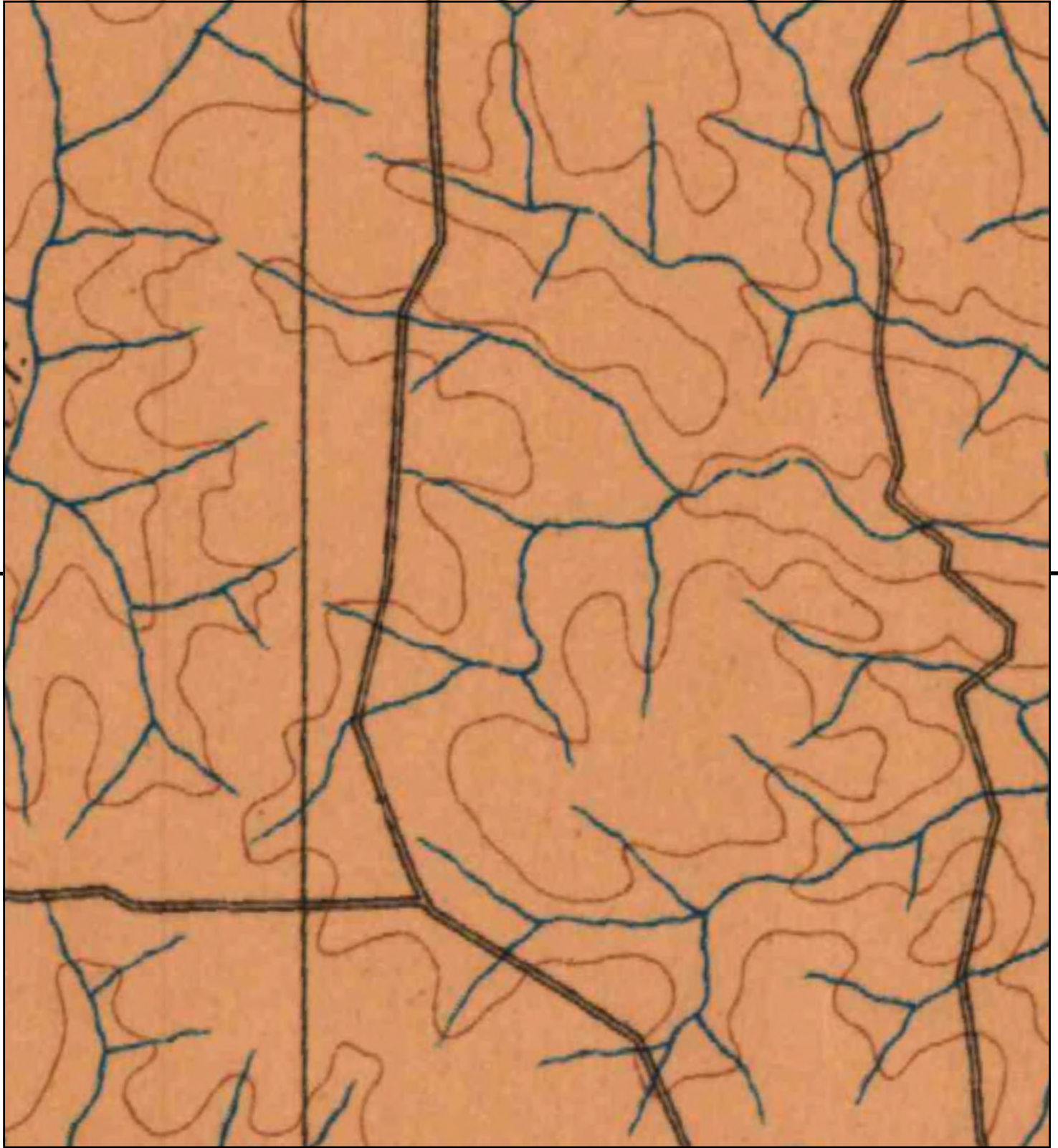
This report includes information from the following map sheet(s).



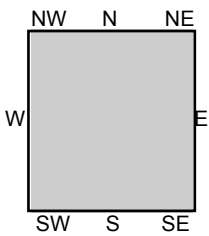
TP, Richmond, 1892, 30-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





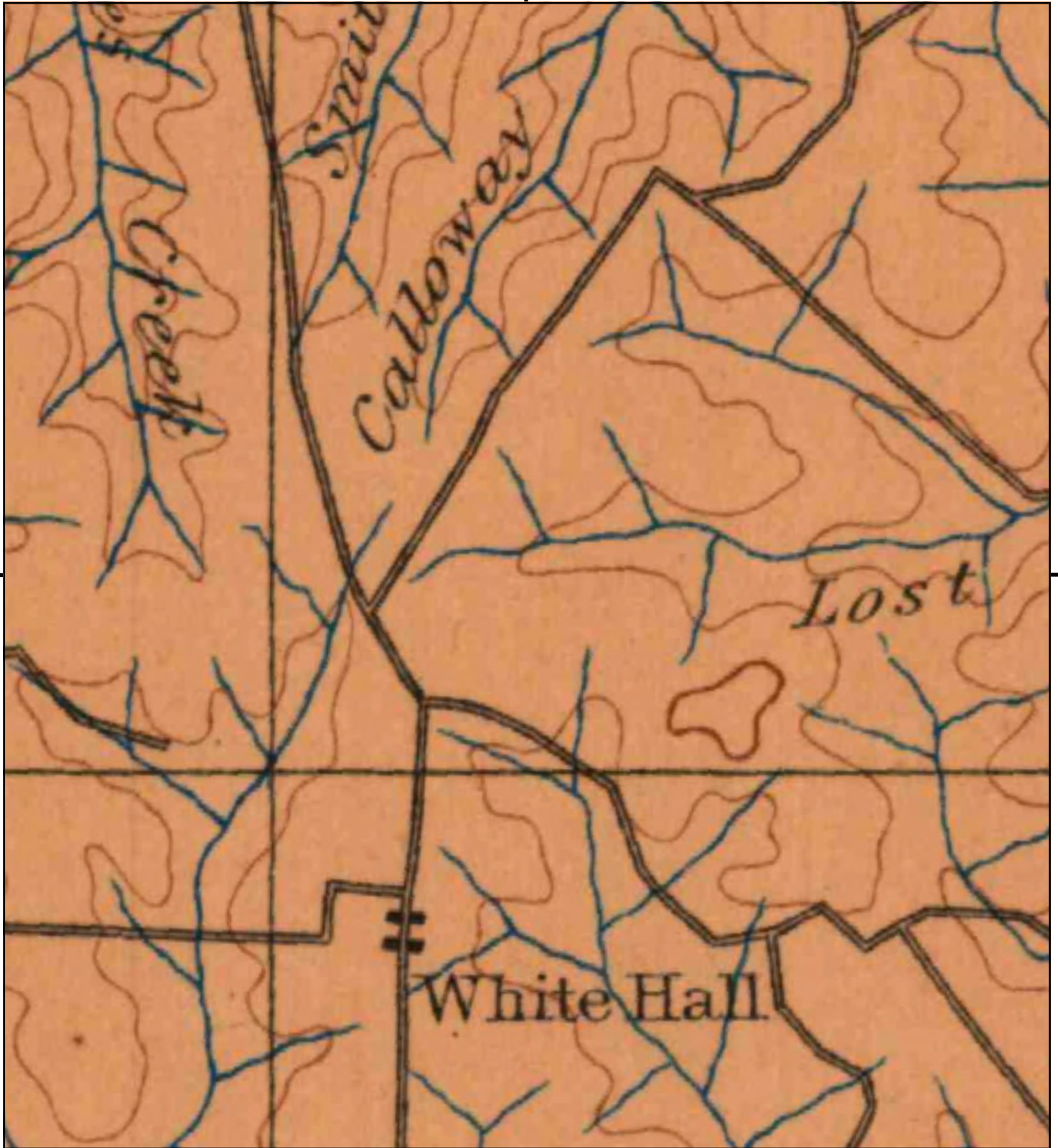
This report includes information from the following map sheet(s).



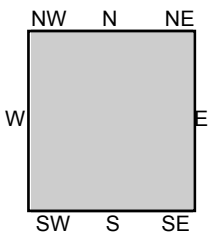
TP, Richmond, 1892, 30-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





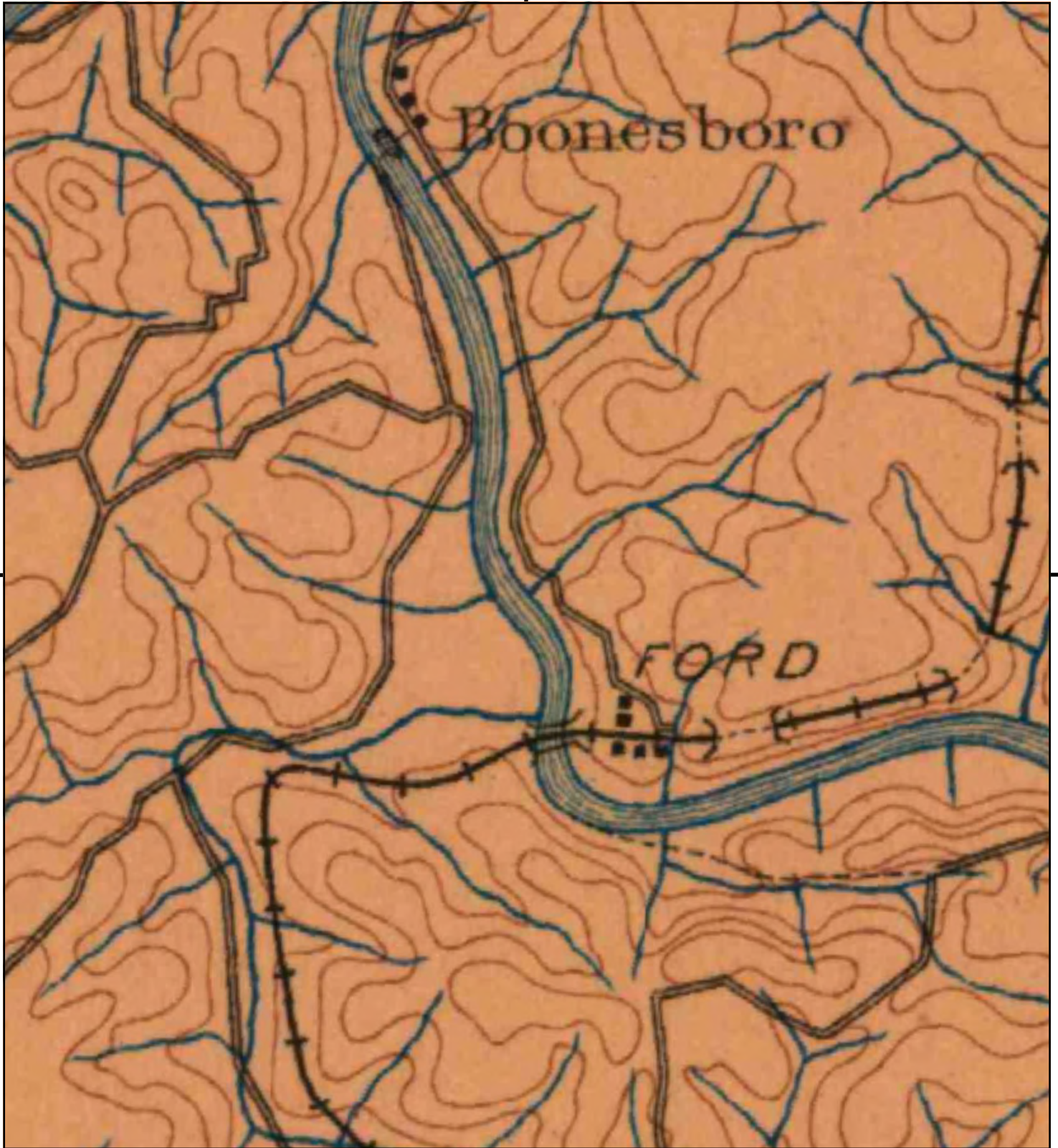
This report includes information from the following map sheet(s).



TP, Richmond, 1892, 30-minute

SITE NAME: Madison Solar
 ADDRESS: Madison Solar
 Richmond, KY 40475
 CLIENT: Tetra Tech MM





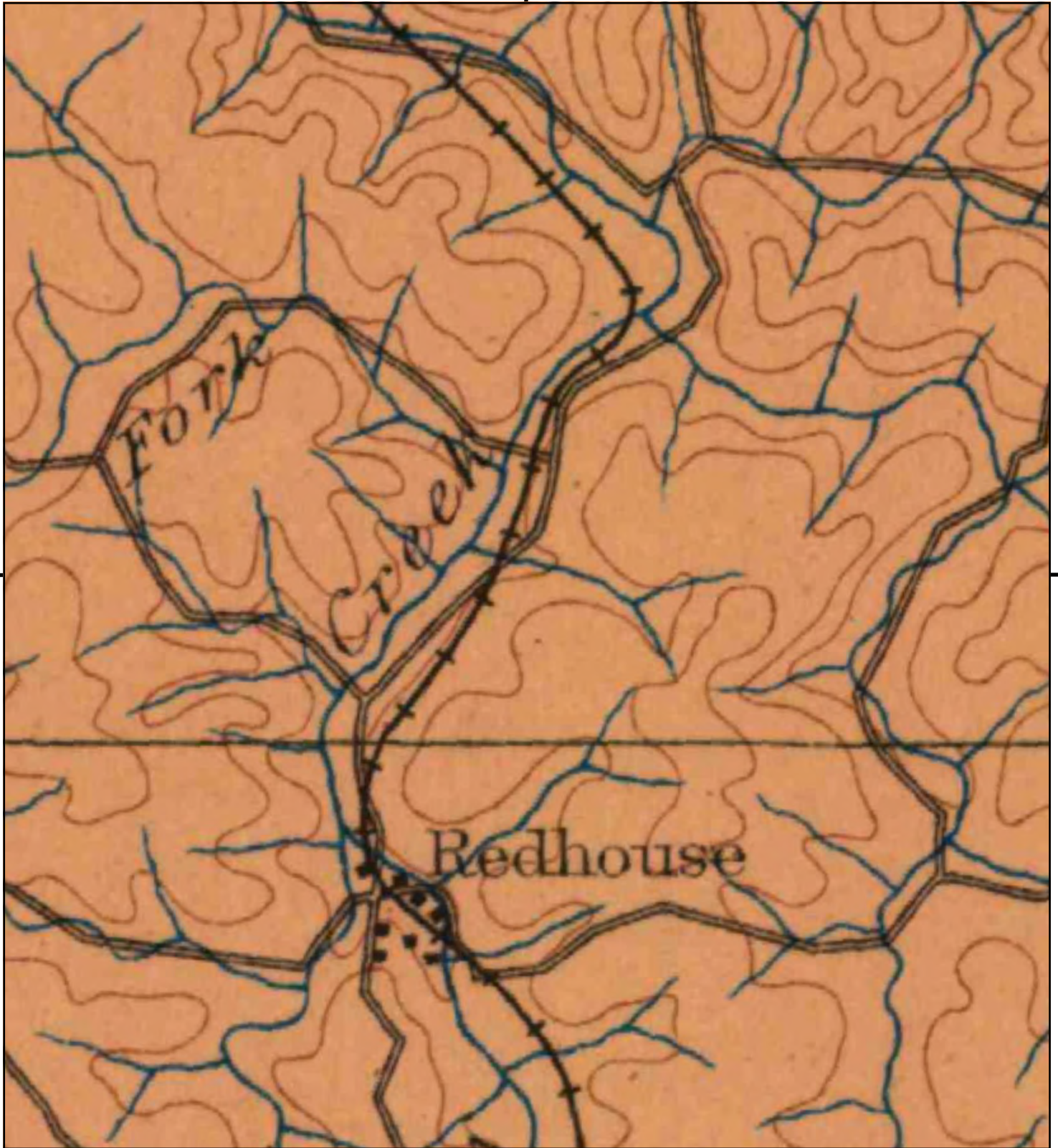
This report includes information from the following map sheet(s).



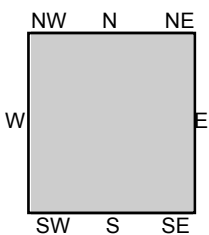
TP, Richmond, 1892, 30-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM





This report includes information from the following map sheet(s).



TP, Richmond, 1892, 30-minute

SITE NAME: Madison Solar
ADDRESS: Madison Solar
Richmond, KY 40475
CLIENT: Tetra Tech MM



APPENDIX E. EDR DATAMAP™ WELL SEARCH REPORT

Madison Solar

Richmond, KY 40475

Inquiry Number: 6106593.2w

June 30, 2020

EDR DataMap™ Well Search Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2020 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

GEOCHECK VERSION 2.1 SUMMARY

FEDERAL DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>
1	USGS40000384625
1	USGS40000384624
6	USGS40000384346
10	USGS40000383957

STATE WATER WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>
2	KY6000000041490
3	KY6000000041919
4	KY6000000017698
5	KY6000000082309
6	KY6000000040664
6	KY6000000047165
6	KY6000000071080
6	KY6000000071081
6	KY6000000065125
6	KY6000000065127
6	KY6000000065126
7	KY600000001755
8	KY6000000042513
9	KY600000001777
11	KY6000000083687
11	KY6000000083688
11	KY6000000083689
12	KY6000000093142
12	KY6000000091634
12	KY6000000091028
12	KY6000000093143
12	KY6000000091635
12	KY6000000091589
13	KY6000000085133
13	KY6000000085132
13	KY6000000085141
13	KY6000000085140

PUBLIC WATER SUPPLY SYSTEM INFORMATION

NO WELLS FOUND

USGS TOPOGRAPHIC MAP(S)

37084-G2 UNION CITY, KY
37084-G3 RICHMOND NORTH, KY

AREA RADON INFORMATION

GEOCHECK VERSION 2.1 SUMMARY

AREA RADON INFORMATION

Federal Area Radon Information for Zip Code: 40475

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	3.233 pCi/L	67%	33%	0%

Federal EPA Radon Zone for MADISON County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for MADISON COUNTY, KY

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	3.233 pCi/L	67%	33%	0%

GEOCHECK VERSION 2.1 STATE DATABASE WELL INFORMATION

Water Well Information:

Map ID:	1		
Organization ID:	USGS-KY		
Organization Name:	USGS Kentucky Water Science Center		
Monitor Location:	F22D0002	Type:	Well
Description:	Not Reported	HUC:	05100205
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19300101
Well Depth:	22.5	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	1	Level reading date:	1954-03-09
Feet below surface:	13.09	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID:	1		
Organization ID:	USGS-KY		
Organization Name:	USGS Kentucky Water Science Center		
Monitor Location:	F22D0005	Type:	Well
Description:	Not Reported	HUC:	05100205
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19470101
Well Depth:	34	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	1	Level reading date:	1954-03-09
Feet below surface:	14.51	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID:	6		
Organization ID:	USGS-KY		
Organization Name:	USGS Kentucky Water Science Center		
Monitor Location:	F22D0008	Type:	Well
Description:	Not Reported	HUC:	05100205
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Leipers Limestone
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	65	Well Depth Units:	ft
Well Hole Depth:	65	Well Hole Depth Units:	ft

GEOCHECK VERSION 2.1 STATE DATABASE WELL INFORMATION

Map ID:	10		
Organization ID:	USGS-KY		
Organization Name:	USGS Kentucky Water Science Center		
Monitor Location:	F22D0006	Type:	Well
Description:	Not Reported	HUC:	05100205
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	17	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	1	Level reading date:	1954-03-16
Feet below surface:	13.93	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID:	2		
Fid:	41489	Akgwa:	30002295
Altid:	Not Reported	Latdecimal:	37.856682
Longdecima:	-84.260834	County:	Madison
Quadname:	Richmond North	Physiograp:	Outer Blue Grass
Type:	W	Surfaceele:	0
Usage:	Domestic - Single Household	Enddate:	Not Reported
Site id:	KY6000000041490		

Map ID:	3		
Fid:	41918	Akgwa:	30003191
Altid:	Not Reported	Latdecimal:	37.848579
Longdecima:	-84.300728	County:	Madison
Quadname:	Richmond North	Physiograp:	Outer Blue Grass
Type:	W	Surfaceele:	0
Usage:	Domestic - Single Household	Enddate:	Not Reported
Site id:	KY6000000041919		

Map ID:	4		
Fid:	17697	Akgwa:	29389
Altid:	Not Reported	Latdecimal:	37.84833333
Longdecima:	-84.25083333	County:	Madison
Quadname:	Richmond North	Physiograp:	Bluegrass
Type:	W	Surfaceele:	660
Usage:	Domestic - Single Household	Enddate:	16-JUN-93
Site id:	KY6000000017698		

Map ID:	5		
Fid:	82308	Akgwa:	80041671
Altid:	MW-07R	Latdecimal:	37.84361111
Longdecima:	-84.30833333	County:	Madison
Quadname:	Richmond North	Physiograp:	Bluegrass
Type:	M	Surfaceele:	950
Usage:	Monitoring Well - Ambient Monitoring		
Enddate:	14-AUG-01	Site id:	KY6000000082309

Map ID: 6

**GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION**

Fid:	40663	Akgwa:	30000465
Altid:	Not Reported	Latdecimal:	37.832081
Longdecima:	-84.27343	County:	Madison
Quadname:	Richmond North	Physiograp:	Outer Blue Grass
Type:	W	Surfaceele:	0
Usage:	Domestic - Single Household	Enddate:	Not Reported
Site id:	KY6000000040664		

Map ID:	6	Akgwa:	40001724
Fid:	47164	Latdecimal:	37.832024
Altid:	374955084162101	County:	Madison
Longdecima:	-84.27243	Physiograp:	Outer Blue Grass
Quadname:	Richmond North	Surfaceele:	715
Type:	W	Enddate:	Not Reported
Usage:	Domestic - Single Household		
Site id:	KY6000000047165		

Map ID:	6	Akgwa:	80023075
Fid:	71079	Latdecimal:	37.830956
Altid:	AW-07	County:	Madison
Longdecima:	-84.272127	Physiograp:	Bluegrass
Quadname:	Richmond North	Surfaceele:	695
Type:	M	Enddate:	29-NOV-10
Usage:	Remediation		
Site id:	KY6000000071080		

Map ID:	6	Akgwa:	80023076
Fid:	71080	Latdecimal:	37.830837
Altid:	AW-TP	County:	Madison
Longdecima:	-84.272064	Physiograp:	Bluegrass
Quadname:	Richmond North	Surfaceele:	695
Type:	M	Enddate:	29-NOV-10
Usage:	Remediation		
Site id:	KY6000000071081		

Map ID:	6	Akgwa:	80009911
Fid:	65124	Latdecimal:	37.83055556
Altid:	Not Reported	County:	Madison
Longdecima:	-84.27194444	Physiograp:	Bluegrass
Quadname:	Richmond North	Surfaceele:	700
Type:	M	Site id:	KY6000000065125
Usage:	Monitoring Well - Ambient Monitoring		
Enddate:	29-JUL-96		

Map ID:	6	Akgwa:	80009913
Fid:	65126	Latdecimal:	37.83055556
Altid:	Not Reported	County:	Madison
Longdecima:	-84.27194444	Physiograp:	Bluegrass
Quadname:	Richmond North	Surfaceele:	700
Type:	M	Site id:	KY6000000065127
Usage:	Monitoring Well - Ambient Monitoring		
Enddate:	29-JUL-96		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Fid:	65125	Akgwa:	80009912
Altid:	Not Reported	Latdecimal:	37.83055556
Longdecima:	-84.27194444	County:	Madison
Quadname:	Richmond North	Physiograp:	Bluegrass
Type:	M	Surfaceele:	700
Usage:	Monitoring Well - Ambient Monitoring	Site id:	KY6000000065126
Enddate:	29-JUL-96		

Map ID:	7	Akgwa:	1774
Fid:	1754	Latdecimal:	37.80888889
Altid:	Not Reported	County:	Madison
Longdecima:	-84.29833333	Physiograp:	Bluegrass
Quadname:	Richmond North	Surfaceele:	810
Type:	W	Enddate:	01-JAN-00
Usage:	Not Reported		
Site id:	KY6000000001755		

Map ID:	8	Akgwa:	30004467
Fid:	42512	Latdecimal:	37.804279
Altid:	Not Reported	County:	Madison
Longdecima:	-84.326035	Physiograp:	Outer Blue Grass
Quadname:	Richmond North	Surfaceele:	0
Type:	W	Enddate:	Not Reported
Usage:	Domestic - Single Household		
Site id:	KY6000000042513		

Map ID:	9	Akgwa:	1795
Fid:	1776	Latdecimal:	37.78277778
Altid:	Not Reported	County:	Madison
Longdecima:	-84.32722222	Physiograp:	Bluegrass
Quadname:	Richmond North	Surfaceele:	943
Type:	W	Enddate:	20-AUG-86
Usage:	Agriculture - Livestock Watering		
Site id:	KY6000000001777		

Map ID:	11	Akgwa:	80043535
Fid:	83686	Latdecimal:	37.77805556
Altid:	MW-01	County:	Madison
Longdecima:	-84.32361111	Physiograp:	Bluegrass
Quadname:	Richmond North	Surfaceele:	959
Type:	M	Site id:	KY6000000083687
Usage:	Monitoring Well - Ambient Monitoring		
Enddate:	13-DEC-01		

Map ID:	11	Akgwa:	80043536
Fid:	83687	Latdecimal:	37.77805556
Altid:	MW-02	County:	Madison
Longdecima:	-84.32361111	Physiograp:	Bluegrass
Quadname:	Richmond North	Surfaceele:	959
Type:	M	Site id:	KY6000000083688
Usage:	Monitoring Well - Ambient Monitoring		
Enddate:	13-DEC-01		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Fid:	83688	Akgwa:	80043537
Altid:	MW-03	Latdecimal:	37.77805556
Longdecima:	-84.32361111	County:	Madison
Quadname:	Richmond North	Physiograp:	Bluegrass
Type:	M	Surfaceele:	959
Usage:	Monitoring Well - Ambient Monitoring	Site id:	KY600000083689
Enddate:	20-DEC-01		

Map ID:	12	Akgwa:	80057566
Fid:	93141	Latdecimal:	37.776646
Altid:	MW-05	County:	Madison
Longdecima:	-84.319655	Physiograp:	Bluegrass
Quadname:	Richmond North	Surfaceele:	0
Type:	M	Enddate:	11-JAN-10
Usage:	Remediation		
Site id:	KY600000093142		

Map ID:	12	Akgwa:	80055168
Fid:	91633	Latdecimal:	37.776579
Altid:	MW-02	County:	Madison
Longdecima:	-84.319363	Physiograp:	E. Coal Field
Quadname:	Richmond North	Surfaceele:	935
Type:	M	Site id:	KY600000091634
Usage:	Monitoring Well - Ambient Monitoring		
Enddate:	24-FEB-08		

Map ID:	12	Akgwa:	80054299
Fid:	91027	Latdecimal:	37.776501
Altid:	MW-01	County:	Madison
Longdecima:	-84.31921	Physiograp:	Bluegrass
Quadname:	Richmond North	Surfaceele:	930
Type:	M	Site id:	KY600000091028
Usage:	Monitoring Well - Ambient Monitoring		
Enddate:	10-JAN-08		

Map ID:	12	Akgwa:	80057567
Fid:	93142	Latdecimal:	37.776471
Altid:	MW-06	County:	Madison
Longdecima:	-84.319676	Physiograp:	Bluegrass
Quadname:	Richmond North	Surfaceele:	0
Type:	M	Enddate:	11-JAN-10
Usage:	Remediation		
Site id:	KY600000093143		

Map ID:	12	Akgwa:	80055169
Fid:	91634	Latdecimal:	37.776446
Altid:	MW-03	County:	Madison
Longdecima:	-84.319464	Physiograp:	E. Coal Field
Quadname:	Richmond North	Surfaceele:	930
Type:	M	Site id:	KY600000091635
Usage:	Monitoring Well - Ambient Monitoring		
Enddate:	24-FEB-08		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Fid:	91588	Akgwa:	80055123
Altid:	MW-04	Latdecimal:	37.776368
Longdecima:	-84.319241	County:	Madison
Quadname:	Richmond North	Physiograp:	E. Coal Field
Type:	M	Surfaceele:	930
Usage:	Monitoring Well - Ambient Monitoring	Site id:	KY600000091589
Enddate:	24-FEB-08		

Map ID:	13	Akgwa:	80045550
Fid:	85132	Latdecimal:	37.7675
Altid:	MW-02	County:	Madison
Longdecima:	-84.31222222	Physiograp:	Bluegrass
Quadname:	Richmond North	Surfaceele:	950
Type:	M	Site id:	KY600000085133
Usage:	Monitoring Well - Ambient Monitoring		
Enddate:	30-OCT-02		

Map ID:	13	Akgwa:	80045549
Fid:	85131	Latdecimal:	37.7675
Altid:	MW-01	County:	Madison
Longdecima:	-84.31222222	Physiograp:	Bluegrass
Quadname:	Richmond North	Surfaceele:	950
Type:	M	Site id:	KY600000085132
Usage:	Monitoring Well - Ambient Monitoring		
Enddate:	30-OCT-02		

Map ID:	13	Akgwa:	80045558
Fid:	85140	Latdecimal:	37.7675
Altid:	MW-04	County:	Madison
Longdecima:	-84.31222222	Physiograp:	Bluegrass
Quadname:	Richmond North	Surfaceele:	950
Type:	M	Site id:	KY600000085141
Usage:	Monitoring Well - Ambient Monitoring		
Enddate:	30-OCT-02		

Map ID:	13	Akgwa:	80045557
Fid:	85139	Latdecimal:	37.7675
Altid:	MW-03	County:	Madison
Longdecima:	-84.31222222	Physiograp:	Bluegrass
Quadname:	Richmond North	Surfaceele:	950
Type:	M	Site id:	KY600000085140
Usage:	Monitoring Well - Ambient Monitoring		
Enddate:	30-OCT-02		

KENTUCKY GOVERNMENT WELL RECORDS SEARCHED

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

State Wetlands Data: Wetland Inventory

Source: Environmental & Public Protection Cabinet

Telephone: 502-564-6736

Kentucky Water Well Records Database

Source: Kentucky Geological Survey

Telephone: 859-257-5500

Water Wells in Kentucky. Data from the Kentucky Ground Water Data Repository.

Oil and Gas Well Locations

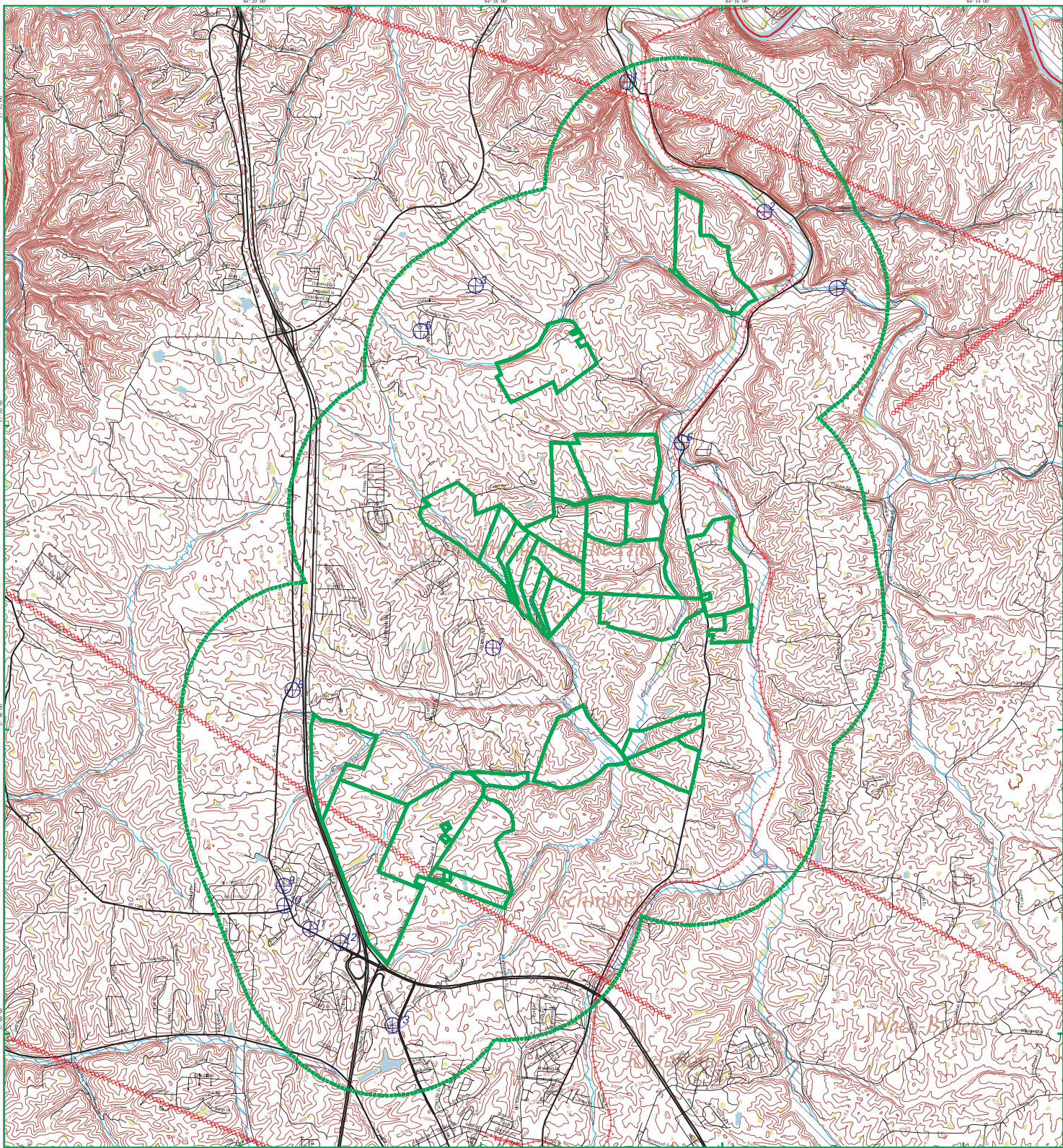
Source: Kentucky Geological Survey

Telephone: 859-257-5500

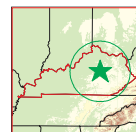
Oil and gas well locations in the state of Kentucky

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

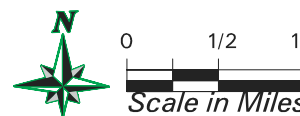


EDR DataMap® - Well Search Madison Solar



Richmond, KY

- | | | |
|--|--|--|
| | | |
| | | |
| | | |
| | | |



APPENDIX F. LANDOWNER QUESTIONNAIRES

LANDOWNER QUESTIONNAIRE
ACCIONA ENERGY USA GLOBAL, LLC
PHASE I – ENVIRONMENTAL SITE ASSESSMENT
MADISON SOLAR PROJECT
MADISON COUNTY, KENTUCKY

Landowner Name: Daniel Turner

Mailing Address: 285 E. Bill Eads Rd

Address/Location of Property: 285 E. Bill Eads Rd

Date: 7/6/2020

Phone Number: 859-66-0836

1) Approximately how long have you owned the property?

1981

2) What is the historical primary land use?

FARM / GRAZING PASTURE

3) Is the property enrolled in the Conservation Reserve Program (CRP), Grassland Reserve Program (GRP), or Wetlands Reserve Program (WRP), or financed by any United States Department of Agriculture (USDA) or other federal loan programs?

NO

4) Are you aware of any easements or land use restrictions on the property?

NO

5) If there are any aboveground storage tanks with a capacity greater than 55 gallons or underground storage tanks on the property, please provide information on the contents and capacity of each tank.

NO ON PROPERTY OWNED BY
MR. SUNDRA COOPER AND RUBY TOWARD

6) Do you have any knowledge or have you observed evidence of any use, above spills (chemicals, fertilizer, petroleum, etc.) on the subject or adjoining ground, property?

NO

- 7) Have you ever been cited by a regulatory agency for violations pertaining to environmental laws for the subject property?

NO

- 8) To your knowledge have agriculturally related chemicals, fertilizers, pesticides, etc. ever been applied in amounts or concentrations exceeding manufacturers recommended application rates? Please explain.

NO

- 9) Please indicate any areas of solid waste disposal on your property, if any, and explain what types of waste have been disposed there (appliances, brush, farm equipment, household trash, etc.).

*BURN BRUSH Piles. TREES THAT
HAVE died cut up, Piled And BURNED*

LANDOWNER QUESTIONNAIRE
ACCIONA ENERGY USA GLOBAL, LLC
PHASE I – ENVIRONMENTAL SITE ASSESSMENT
MADISON SOLAR PROJECT
MADISON COUNTY, KENTUCKY

Landowner Name: Hank and Nancy Ballinger

Mailing Address: 510 Three Forks Rd.
Richmond, KY 40475

Address/Location
of Property: 510 Three Forks Rd.

Date: 7-7-2020

Phone Number: 859-200-1456

- 1) Approximately how long have you owned the property?
4 years
- 2) What is the historical primary land use?
farming
- 3) Is the property enrolled in the Conservation Reserve Program (CRP), Grassland Reserve Program (GRP), or Wetlands Reserve Program (WRP), or financed by any United States Department of Agriculture (USDA) or other federal loan programs?
No
- 4) Are you aware of any easements or land use restrictions on the property?
No
- 5) If there are any aboveground storage tanks with a capacity greater than 55 gallons or underground storage tanks on the property, please provide information on the contents and capacity of each tank.
None
- 6) Do you have any knowledge or have you observed evidence of any spills (chemicals, fertilizer, petroleum, etc.) on the subject or adjoining property?
No

More questions on the back. Please continue responses that need more space on the back side.

- 7) Have you ever been cited by a regulatory agency for violations pertaining to environmental laws for the subject property?
No
- 8) To your knowledge have agriculturally related chemicals, fertilizers, pesticides, etc. ever been applied in amounts or concentrations exceeding manufacturers recommended application rates? Please explain.
No
- 9) Please indicate any areas of solid waste disposal on your property, if any, and explain what types of waste have been disposed there (appliances, brush, farm equipment, household trash, etc.).
None

LANDOWNER QUESTIONNAIRE
ACCIONA ENERGY USA GLOBAL, LLC
PHASE I – ENVIRONMENTAL SITE ASSESSMENT
MADISON SOLAR PROJECT
MADISON COUNTY, KENTUCKY

Landowner Name: EVAN & LILLIAN McCORD JOHN & NOBA McCORD

Mailing Address: 1271 McCORD LN Richmond, Ky, 40475

Address/Location
of Property: 1271 McCORD LN Richmond Ky

Date: 5-6-2020

Phone Number: 859-625-4756

- 1) Approximately how long have you owned the property?
Some of it 108 years
- 2) What is the historical primary land use?
Farm
- 3) Is the property enrolled in the Conservation Reserve Program (CRP), Grassland Reserve Program (GRP), or Wetlands Reserve Program (WRP), or financed by any United States Department of Agriculture (USDA) or other federal loan programs?
NO
- 4) Are you aware of any easements or land use restrictions on the property?
YES
- 5) If there are any aboveground storage tanks with a capacity greater than 55 gallons or underground storage tanks on the property, please provide information on the contents and capacity of each tank.
NO
- 6) Do you have any knowledge or have you observed evidence of any spills (chemicals, fertilizer, petroleum, etc.) on the subject or adjoining property?
NO

7) Have you ever been cited by a regulatory agency for violations pertaining to environmental laws for the subject property?

NO

8) To your knowledge have agriculturally related chemicals, fertilizers, pesticides, etc. ever been applied in amounts or concentrations exceeding manufacturers recommended application rates? Please explain.

NO

9) Please indicate any areas of solid waste disposal on your property, if any, and explain what types of waste have been disposed there (appliances, brush, farm equipment, household trash, etc.).

FENCE W/ IAE DRAIN ROOF METAL

LANDOWNER QUESTIONNAIRE
ACCIONA ENERGY USA GLOBAL, LLC
PHASE I – ENVIRONMENTAL SITE ASSESSMENT
MADISON SOLAR PROJECT
MADISON COUNTY, KENTUCKY

Landowner Name: Sondra Lee Coomer

Mailing Address: 2541 Eastridge Dr. Hamilton, Ohio 45011

Address/Location of Property: 285 E. Bill Eads Road. Richmond, Ky 40475

Date: July 8, 2020

Phone Number: 513 - 895 - 3484

1) Approximately how long have you owned the property?

1981

2) What is the historical primary land use?

FARMING

3) Is the property enrolled in the Conservation Reserve Program (CRP), Grassland Reserve Program (GRP), or Wetlands Reserve Program (WRP), or financed by any United States Department of Agriculture (USDA) or other federal loan programs?

NO

4) Are you aware of any easements or land use restrictions on the property?

NO

5) If there are any aboveground storage tanks with a capacity greater than 55 gallons or underground storage tanks on the property, please provide information on the contents and capacity of each tank.

NO

6) Do you have any knowledge or have you observed evidence of any spills (chemicals, fertilizer, petroleum, etc.) on the subject or adjoining property?

NO

- 7) Have you ever been cited by a regulatory agency for violations pertaining to environmental laws for the subject property?

NO

- 8) To your knowledge have agriculturally related chemicals, fertilizers, pesticides, etc. ever been applied in amounts or concentrations exceeding manufacturers recommended application rates? Please explain.

NO

- 9) Please indicate any areas of solid waste disposal on your property, if any, and explain what types of waste have been disposed there (appliances, brush, farm equipment, household trash, etc.).

*BRUSH Piles ONLY FROM DOWNED
trees!*

LANDOWNER QUESTIONNAIRE
ACCIONA ENERGY USA GLOBAL, LLC
PHASE I – ENVIRONMENTAL SITE ASSESSMENT
MADISON SOLAR PROJECT
MADISON COUNTY, KENTUCKY

Landowner Name: Harold & Jean Bucher

Mailing Address: 2815 Red House Road, Richmond, Ky 40475

Address/Location of Property: 2255 Red House Road, Richmond, Ky 40475

Date: July 5, 2020

Phone Number: cell 859-358-6801
Home 859-527-3571

- 1) Approximately how long have you owned the property?
27 years
- 2) What is the historical primary land use?
Cattle & Hay production
- 3) Is the property enrolled in the Conservation Reserve Program (CRP), Grassland Reserve Program (GRP), or Wetlands Reserve Program (WRP), or financed by any United States Department of Agriculture (USDA) or other federal loan programs?
NO
- 4) Are you aware of any easements or land use restrictions on the property?
2 Gas Pipe Line - 1 active & 1 inactive
- 5) If there are any aboveground storage tanks with a capacity greater than 55 gallons or underground storage tanks on the property, please provide information on the contents and capacity of each tank.
NONE
- 6) Do you have any knowledge or have you observed evidence of any spills (chemicals, fertilizer, petroleum, etc.) on the subject or adjoining property?
NONE

- 7) Have you ever been cited by a regulatory agency for violations pertaining to environmental laws for the subject property?
NO
- 8) To your knowledge have agriculturally related chemicals, fertilizers, pesticides, etc. ever been applied in amounts or concentrations exceeding manufacturers recommended application rates? Please explain.
NONE
- 9) Please indicate any areas of solid waste disposal on your property, if any, and explain what types of waste have been disposed there (appliances, brush, farm equipment, household trash, etc.).
NONE

Farm is in 2 Tracts - TOTAL 189 acres

CALL if you have questions.

Thanks

Harold Bucher

LANDOWNER QUESTIONNAIRE
ACCIONA ENERGY USA GLOBAL, LLC
PHASE I – ENVIRONMENTAL SITE ASSESSMENT
MADISON SOLAR PROJECT
MADISON COUNTY, KENTUCKY

Landowner Name: Harold & Jean Bucher

Mailing Address: 2815 Red House Road, Richmond, Ky 40475

Address/Location of Property: 196 Sam Jones Road, Richmond, Ky 40475

Date: July 5, 2020

Phone Number: Cell 859-358-6801
Home 859-527-3571

- 1) Approximately how long have you owned the property?
45 years
- 2) What is the historical primary land use?
Cattle & Hay production
- 3) Is the property enrolled in the Conservation Reserve Program (CRP), Grassland Reserve Program (GRP), or Wetlands Reserve Program (WRP), or financed by any United States Department of Agriculture (USDA) or other federal loan programs?
ND
- 4) Are you aware of any easements or land use restrictions on the property?
Kentucky Utilities Transmission Line
Clark Electric Line
- 5) If there are any aboveground storage tanks with a capacity greater than 55 gallons or underground storage tanks on the property, please provide information on the contents and capacity of each tank.
NONE
- 6) Do you have any knowledge or have you observed evidence of any spills (chemicals, fertilizer, petroleum, etc.) on the subject or adjoining property?
NONE

- 7) Have you ever been cited by a regulatory agency for violations pertaining to environmental laws for the subject property?
NO
- 8) To your knowledge have agriculturally related chemicals, fertilizers, pesticides, etc. ever been applied in amounts or concentrations exceeding manufacturers recommended application rates? Please explain.
NONE
- 9) Please indicate any areas of solid waste disposal on your property, if any, and explain what types of waste have been disposed there (appliances, brush, farm equipment, household trash, etc.).
NONE

Farm is in 2 Tracts - TOTAL 173 acres

CALL if you have questions

Thanks
Harold Bruner

LANDOWNER QUESTIONNAIRE
ACCIONA ENERGY USA GLOBAL, LLC
PHASE I – ENVIRONMENTAL SITE ASSESSMENT
MADISON SOLAR PROJECT
MADISON COUNTY, KENTUCKY

Landowner Name: Peyt's Place LLC

Mailing Address: 3104 Runnymede Rd. Louisville, KY 40222

Address/Location of Property: Madison County Richmond, KY

Date: 7/6/20

Phone Number: 502-897-1927

1) Approximately how long have you owned the property?

Family has owned property since 1906

2) What is the historical primary land use?

Farming

3) Is the property enrolled in the Conservation Reserve Program (CRP), Grassland Reserve Program (GRP), or Wetlands Reserve Program (WRP), or financed by any United States Department of Agriculture (USDA) or other federal loan programs?

no

4) Are you aware of any easements or land use restrictions on the property?

no

5) If there are any aboveground storage tanks with a capacity greater than 55 gallons or underground storage tanks on the property, please provide information on the contents and capacity of each tank.

Old Fuel tank buried next to the house per my tenant farmer. Not in use for last 25 yrs.

6) Do you have any knowledge or have you observed evidence of any spills (chemicals, fertilizer, petroleum, etc.) on the subject or adjoining property?

no

- 7) Have you ever been cited by a regulatory agency for violations pertaining to environmental laws for the subject property?

no

- 8) To your knowledge have agriculturally related chemicals, fertilizers, pesticides, etc. ever been applied in amounts or concentrations exceeding manufacturers recommended application rates? Please explain.

no

- 9) Please indicate any areas of solid waste disposal on your property, if any, and explain what types of waste have been disposed there (appliances, brush, farm equipment, household trash, etc.).

old fence line, nothing else to my
knowledge

LANDOWNER QUESTIONNAIRE
ACCIONA ENERGY USA GLOBAL, LLC
PHASE I – ENVIRONMENTAL SITE ASSESSMENT
MADISON SOLAR PROJECT
MADISON COUNTY, KENTUCKY

Landowner Name: Cardinal Valley Farms LLC (Vince & Ryan Vickers)

Mailing Address: 10405 Muskrfield Truce, Fishers, IN 46037

Address/Location of Property: 167 E. Bill Eades Rd., Richmond KY 40475

Date: 7-5-20

Phone Number: 317-331-6680

- 1) Approximately how long have you owned the property?
5 years, but inherited from my grand father who owned for 50+ years!
- 2) What is the historical primary land use?
originally a tobacco farm, then later used for cattle
- 3) Is the property enrolled in the Conservation Reserve Program (CRP), Grassland Reserve Program (GRP), or Wetlands Reserve Program (WRP), or financed by any United States Department of Agriculture (USDA) or other federal loan programs?
No
- 4) Are you aware of any easements or land use restrictions on the property?
No
- 5) If there are any aboveground storage tanks with a capacity greater than 55 gallons or underground storage tanks on the property, please provide information on the contents and capacity of each tank.
N/A
- 6) Do you have any knowledge or have you observed evidence of any spills (chemicals, fertilizer, petroleum, etc.) on the subject or adjoining property?
No

- 7) Have you ever been cited by a regulatory agency for violations pertaining to environmental laws for the subject property?
No
- 8) To your knowledge have agriculturally related chemicals, fertilizers, pesticides, etc. ever been applied in amounts or concentrations exceeding manufacturers recommended application rates? Please explain.
No
- 9) Please indicate any areas of solid waste disposal on your property, if any, and explain what types of waste have been disposed there (appliances, brush, farm equipment, household trash, etc.).
N/A

LANDOWNER QUESTIONNAIRE
ACCIONA ENERGY USA GLOBAL, LLC
PHASE I – ENVIRONMENTAL SITE ASSESSMENT
MADISON SOLAR PROJECT
MADISON COUNTY, KENTUCKY

Landowner Name: Delbert and Flora Day

Mailing Address: 2146 Red House Rd. Richmond, Ky.

Address/Location
of Property: 2146 Red House Rd. Richmond Ky

Date: 7-5-20

Phone Number: 859-624-8924 - 859-661-2119

- 1) Approximately how long have you owned the property? 25 yrs.
- 2) What is the historical primary land use? Farm
- 3) Is the property enrolled in the Conservation Reserve Program (CRP), Grassland Reserve Program (GRP), or Wetlands Reserve Program (WRP), or financed by any United States Department of Agriculture (USDA) or other federal loan programs? NO
- 4) Are you aware of any easements or land use restrictions on the property? NO
- 5) If there are any aboveground storage tanks with a capacity greater than 55 gallons or underground storage tanks on the property, please provide information on the contents and capacity of each tank. NO
- 6) Do you have any knowledge or have you observed evidence of any spills (chemicals, fertilizer, petroleum, etc.) on the subject or adjoining property? NO

- 7) Have you ever been cited by a regulatory agency for violations pertaining to environmental laws for the subject property? *NO*

- 8) To your knowledge have agriculturally related chemicals, fertilizers, pesticides, etc. ever been applied in amounts or concentrations exceeding manufacturers recommended application rates? Please explain. *NO*

- 9) Please indicate any areas of solid waste disposal on your property, if any, and explain what types of waste have been disposed there (appliances, brush, farm equipment, household trash, etc.). *None*

LANDOWNER QUESTIONNAIRE
ACCIONA ENERGY USA GLOBAL, LLC
PHASE I – ENVIRONMENTAL SITE ASSESSMENT
MADISON SOLAR PROJECT
MADISON COUNTY, KENTUCKY

Landowner Name: Four Star Development, Inc and Frazier Realty Co. LLC

Mailing Address: 1406 Barnes Mill Rd; Richmond, KY 40475

Address/Location of Property: 1650 Boone Trail Rd; Richmond, KY 40475

Date: 11-14-20

Phone Number: (859) 200-2252

1) Approximately how long have you owned the property? November 2019

2) What is the historical primary land use? farming

3) Is the property enrolled in the Conservation Reserve Program (CRP), Grassland Reserve Program (GRP), or Wetlands Reserve Program (WRP), or financed by any United States Department of Agriculture (USDA) or other federal loan programs? N/A

4) Are you aware of any easements or land use restrictions on the property? Power Line goes Across property

5) If there are any aboveground storage tanks with a capacity greater than 55 gallons or underground storage tanks on the property, please provide information on the contents and capacity of each tank.

Not to our Knowledge.

6) Do you have any knowledge or have you observed evidence of any spills (chemicals, fertilizer, petroleum, etc.) on the subject or adjoining property?

Not to our Knowledge

- 7) Have you ever been cited by a regulatory agency for violations pertaining to environmental laws for the subject property? *NO*
- 8) To your knowledge have agriculturally related chemicals, fertilizers, pesticides, etc. ever been applied in amounts or concentrations exceeding manufacturers recommended application rates? Please explain. *NOT to Our Knowledge*
- 9) Please indicate any areas of solid waste disposal on your property, if any, and explain what types of waste have been disposed there (appliances, brush, farm equipment, household trash, etc.).

NOT to Our Knowledge

LANDOWNER QUESTIONNAIRE
ACCIONA ENERGY USA GLOBAL, LLC
PHASE I – ENVIRONMENTAL SITE ASSESSMENT
MADISON SOLAR PROJECT
MADISON COUNTY, KENTUCKY

Landowner Name: Ford Spoon Farm, LLC

Mailing Address: 152 Edgemoor Drive, Lexington KY 40503

Address/Location of Property: 433 Lost Fork Road, Richmond KY 40475

Date: 7/12/20

Phone Number: 859-533-1296

1) Approximately how long have you owned the property?
It's been in "the family" for over 100 years, I believe.

2) What is the historical primary land use?
Farming

3) Is the property enrolled in the Conservation Reserve Program (CRP), Grassland Reserve Program (GRP), or Wetlands Reserve Program (WRP), or financed by any United States Department of Agriculture (USDA) or other federal loan programs?

No

4) Are you aware of any easements or land use restrictions on the property?

Yes - gas electric

5) If there are any aboveground storage tanks with a capacity greater than 55 gallons or underground storage tanks on the property, please provide information on the contents and capacity of each tank.

No

6) Do you have any knowledge or have you observed evidence of any spills (chemicals, fertilizer, petroleum, etc.) on the subject or adjoining property?

No

- 7) Have you ever been cited by a regulatory agency for violations pertaining to environmental laws for the subject property?

No

- 8) To your knowledge have agriculturally related chemicals, fertilizers, pesticides, etc. ever been applied in amounts or concentrations exceeding manufacturers recommended application rates? Please explain.

No

- 9) Please indicate any areas of solid waste disposal on your property, if any, and explain what types of waste have been disposed there (appliances, brush, farm equipment, household trash, etc.).

When I was young, my grand father would dispose of trash items that couldn't be burned at the tree line on the west side of the property.

LANDOWNER QUESTIONNAIRE
ACCIONA ENERGY USA GLOBAL, LLC
PHASE I – ENVIRONMENTAL SITE ASSESSMENT
MADISON SOLAR PROJECT
MADISON COUNTY, KENTUCKY

Landowner Name: Larry F. Jones

Mailing Address: 200 Bennett Ct. Richmond, Ky, 40475

Address/Location of Property: Red House Rd + Three Forks Rd. Madison County

Date: 7-11-20

Phone Number: (H) 859-624-8088 (W) 859-358-7200

- 1) Approximately how long have you owned the property?
30 years
- 2) What is the historical primary land use?
Cattle, tobacco, hay, corn, soy beans
- 3) Is the property enrolled in the Conservation Reserve Program (CRP), Grassland Reserve Program (GRP), or Wetlands Reserve Program (WRP), or financed by any United States Department of Agriculture (USDA) or other federal loan programs?

No

- 4) Are you aware of any easements or land use restrictions on the property?
Natural Gas Pipeline, Electrical Transmission Lines
Your People have been here to survey easements.
- 5) If there are any aboveground storage tanks with a capacity greater than 55 gallons or underground storage tanks on the property, please provide information on the contents and capacity of each tank.

No

- 6) Do you have any knowledge or have you observed evidence of any spills (chemicals, fertilizer, petroleum, etc.) on the subject or adjoining property?

No

- 7) Have you ever been cited by a regulatory agency for violations pertaining to environmental laws for the subject property?
No
- 8) To your knowledge have agriculturally related chemicals, fertilizers, pesticides, etc. ever been applied in amounts or concentrations exceeding manufacturers recommended application rates? Please explain. *No*
- 9) Please indicate any areas of solid waste disposal on your property, if any, and explain what types of waste have been disposed there (appliances, brush, farm equipment, household trash, etc.).
None

LANDOWNER QUESTIONNAIRE
ACCIONA ENERGY USA GLOBAL, LLC
PHASE I – ENVIRONMENTAL SITE ASSESSMENT
MADISON SOLAR PROJECT
MADISON COUNTY, KENTUCKY

Landowner Name: Charles Hamilton
Mailing Address: 1832 Red House Rd.
Address/Location of Property: Richmond, Ky. 40475
Date: 7-14-20
Phone Number: 859-358-7295

- 1) Approximately how long have you owned the property?
5 years
- 2) What is the historical primary land use?
Farm
- 3) Is the property enrolled in the Conservation Reserve Program (CRP), Grassland Reserve Program (GRP), or Wetlands Reserve Program (WRP), or financed by any United States Department of Agriculture (USDA) or other federal loan programs?
No.
- 4) Are you aware of any easements or land use restrictions on the property?
Power line easement
- 5) If there are any aboveground storage tanks with a capacity greater than 55 gallons or underground storage tanks on the property, please provide information on the contents and capacity of each tank.
No
- 6) Do you have any knowledge or have you observed evidence of any spills (chemicals, fertilizer, petroleum, etc.) on the subject or adjoining property?
No

- 7) Have you ever been cited by a regulatory agency for violations pertaining to environmental laws for the subject property?

No

- 8) To your knowledge have agriculturally related chemicals, fertilizers, pesticides, etc. ever been applied in amounts or concentrations exceeding manufacturers recommended application rates? Please explain.

No

- 9) Please indicate any areas of solid waste disposal on your property, if any, and explain what types of waste have been disposed there (appliances, brush, farm equipment, household trash, etc.).

None

LANDOWNER QUESTIONNAIRE
ACCIONA ENERGY USA GLOBAL, LLC
PHASE I – ENVIRONMENTAL SITE ASSESSMENT
MADISON SOLAR PROJECT
MADISON COUNTY, KENTUCKY

Landowner Name: Robert W. Busher

Mailing Address: 1594 Four Mile Road

Address/Location
of Property: 172 Bill Eades East Rd.

Date: 7.21.20

Phone Number: 859.200.2220

- 1) Approximately how long have you owned the property?
32 yrs
- 2) What is the historical primary land use?
Farming Cattle & Tobacco
- 3) Is the property enrolled in the Conservation Reserve Program (CRP), Grassland Reserve Program (GRP), or Wetlands Reserve Program (WRP), or financed by any United States Department of Agriculture (USDA) or other federal loan programs?
No
- 4) Are you aware of any easements or land use restrictions on the property?
Gas & Electric
- 5) If there are any aboveground storage tanks with a capacity greater than 55 gallons or underground storage tanks on the property, please provide information on the contents and capacity of each tank.
No
- 6) Do you have any knowledge or have you observed evidence of any spills (chemicals, fertilizer, petroleum, etc.) on the subject or adjoining property?
No

- 7) Have you ever been cited by a regulatory agency for violations pertaining to environmental laws for the subject property?
No
- 8) To your knowledge have agriculturally related chemicals, fertilizers, pesticides, etc. ever been applied in amounts or concentrations exceeding manufacturers recommended application rates? Please explain.
No
- 9) Please indicate any areas of solid waste disposal on your property, if any, and explain what types of waste have been disposed there (appliances, brush, farm equipment, household trash, etc.).

New Mailing Address
Robert Bucher
1594 Four Mile Rd.
Richmond, Ky.
40475

LANDOWNER QUESTIONNAIRE
ACCIONA ENERGY USA GLOBAL, LLC
PHASE I – ENVIRONMENTAL SITE ASSESSMENT
MADISON SOLAR PROJECT
MADISON COUNTY, KENTUCKY

Landowner Name: Garrett B. Parke

Mailing Address: 150 Lost Fork Rd.

Address/Location
of Property: Richmond, Ky, 40475
150 Lost Fork Rd.

Date: 9-14-20

Phone Number: 859-626-2250

- 1) Approximately how long have you owned the property?
69 yrs
- 2) What is the historical primary land use?
Tobacco, Corn, Hay
- 3) Is the property enrolled in the Conservation Reserve Program (CRP), Grassland Reserve Program (GRP), or Wetlands Reserve Program (WRP), or financed by any United States Department of Agriculture (USDA) or other federal loan programs?
NO
- 4) Are you aware of any easements or land use restrictions on the property?
NO
- 5) If there are any aboveground storage tanks with a capacity greater than 55 gallons or underground storage tanks on the property, please provide information on the contents and capacity of each tank.
Propane + Diesel tank at the Home
- 6) Do you have any knowledge or have you observed evidence of any spills (chemicals, fertilizer, petroleum, etc.) on the subject or adjoining property?
NO

7) Have you ever been cited by a regulatory agency for violations pertaining to environmental laws for the subject property?

NO

8) To your knowledge have agriculturally related chemicals, fertilizers, pesticides, etc. ever been applied in amounts or concentrations exceeding manufacturers recommended application rates? Please explain.

NO

9) Please indicate any areas of solid waste disposal on your property, if any, and explain what types of waste have been disposed there (appliances, brush, farm equipment, household trash, etc.).

NO

LANDOWNER QUESTIONNAIRE
ACCIONA ENERGY USA GLOBAL, LLC
PHASE I – ENVIRONMENTAL SITE ASSESSMENT
MADISON SOLAR PROJECT
MADISON COUNTY, KENTUCKY

Landowner Name: Big Wind, LLC

Mailing Address: 289 Blue Sky Parkway #2 Lexington, KY 40509

Address/Location of Property: 390 Three fork Road Richmond, KY 40475, and
2056 Red House Road Richmond, KY 40475.

Date: 9/11/2020

Phone Number: 859-684-0850, 859-327-7133

1) Approximately how long have you owned the property?

About one year

2) What is the historical primary land use?

Used for cattle pasture. Before cattle pasture was used for tobacco field.

3) Is the property enrolled in the Conservation Reserve Program (CRP), Grassland Reserve Program (GRP), or Wetlands Reserve Program (WRP), or financed by any United States Department of Agriculture (USDA) or other federal loan programs?

No

4) Are you aware of any easements or land use restrictions on the property?

No

5) If there are any aboveground storage tanks with a capacity greater than 55 gallons or underground storage tanks on the property, please provide information on the contents and capacity of each tank.

We did not see any aboveground tanks. we do not know any information of underground.

6) Do you have any knowledge or have you observed evidence of any spills (chemicals, fertilizer, petroleum, etc.) on the subject or adjoining property?

No

- 7) Have you ever been cited by a regulatory agency for violations pertaining to environmental laws for the subject property?

No

- 8) To your knowledge have agriculturally related chemicals, fertilizers, pesticides, etc. ever been applied in amounts or concentrations exceeding manufacturers recommended application rates? Please explain.

No.

- 9) Please indicate any areas of solid waste disposal on your property, if any, and explain what types of waste have been disposed there (appliances, brush, farm equipment, household trash, etc.).

In the northeast corner of the farm, there are several waste farm equipment in front of the bar.

There are two waste mattresses and bed frames about 100 feet south of front of the bar.

APPENDIX E

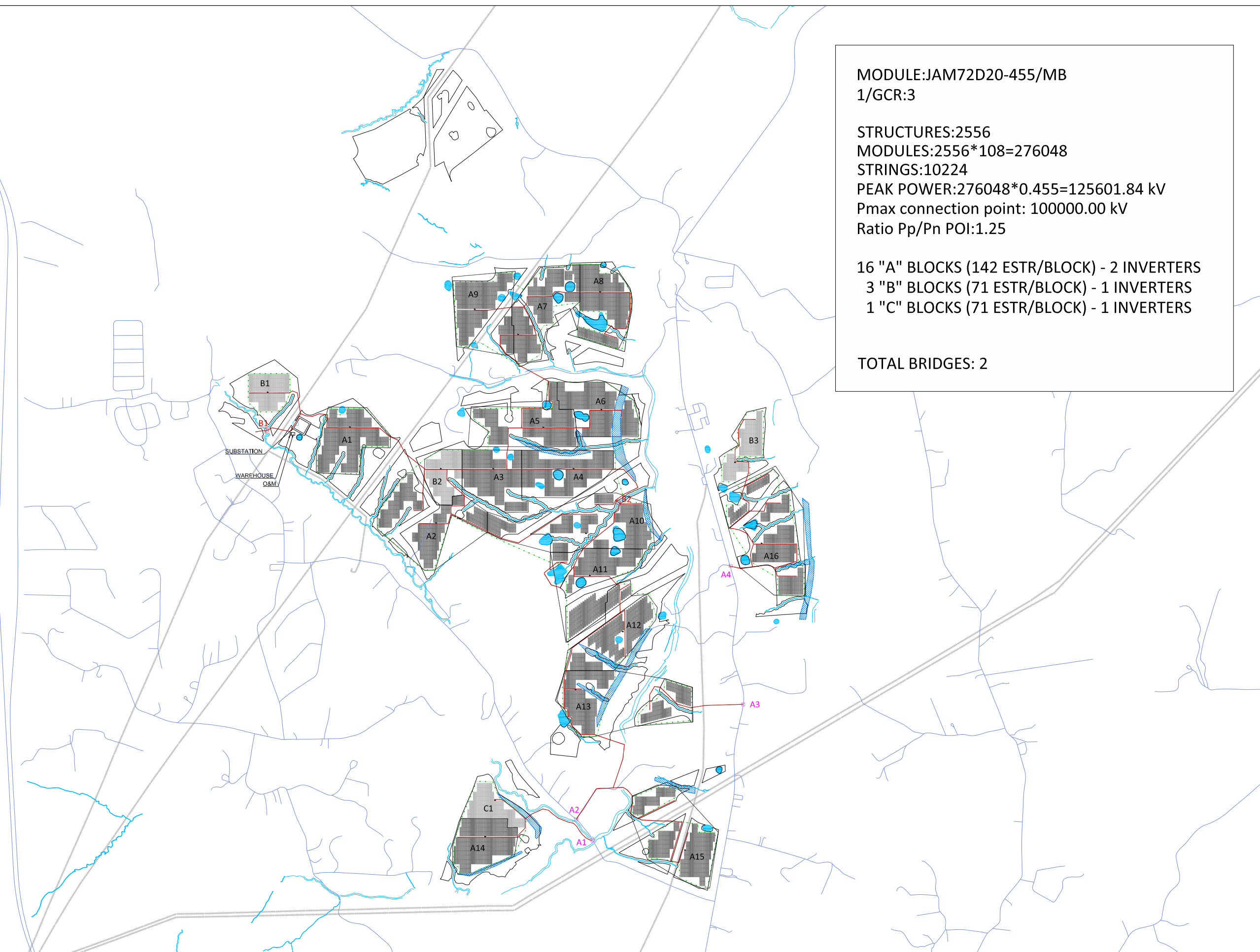
Preliminary Site Layout

MODULE:JAM72D20-455/MB
 1/GCR:3

STRUCTURES:2556
 MODULES:2556*108=276048
 STRINGS:10224
 PEAK POWER:276048*0.455=125601.84 kW
 Pmax connection point: 100000.00 kW
 Ratio Pp/Pn POI:1.25

16 "A" BLOCKS (142 ESTR/BLOCK) - 2 INVERTERS
 3 "B" BLOCKS (71 ESTR/BLOCK) - 1 INVERTERS
 1 "C" BLOCKS (71 ESTR/BLOCK) - 1 INVERTERS

TOTAL BRIDGES: 2



- LEGEND**
- PROJECT AREA
 - ROADS
 - STRUCTURES
 - POWER STATIONS
 - PLANT SUBSTATION
 - O&M BUILDING
 - WAREHOUSE
 - +—+—+—+— POWER LINES
 - ~ TOPOGRAPHIC RESTRICTION
 - WATER
 - +—+—+—+— FENCE
 - PROJECTED BRIDGES
 - ACCESS POINT

REV.	BASED ON LAYOUT	DATE	PURPOSE	DESCRIPTION	
1.7	C02172_P_AE_EN_CST_ERR_990000001	1.0	04/11/2020	FOR INFORMATION	PARCEL CHANGES
1.6	C02172_P_AE_EN_CST_ERR_990000001	1.0	27/10/2020	FOR INFORMATION	BLOCK AND PARCEL CHANGES
1.5	C02172_P_AE_EN_CST_ERR_990000001	1.0	18/09/2020	FOR INFORMATION	TOPOGRAPHY PARCEL CHANGES
1.0	C02172_P_AE_EN_CST_ERR_990000001	1.0	03/09/2020	FOR INFORMATION	BLOCK CHANGES
1.0	C02172_P_AE_EN_CST_ERR_990000001	1.0	24/07/2020	FOR INFORMATION	INITIAL EDITION



DATUM	PROJECT	DESIGNED	DRAWN	CHECKED	VERIFIED	APPROVED	
WGS84	MADISON SOLAR	N/A	P.G.B	N/A	N/A	N/A	
PROJECTION	TITLE	DRAW NUMBER	REVISION	SHEET	DATE	PAPER	
16N	GENERAL LAYOUT	N/A	1.7	01 OF 01	04/11/2020	A3	
SCALE	ACCIONA CODE	EXTERNAL CODE	DRAW NUMBER	REVISION	SHEET	DATE	PAPER
1/25000	C02245_P_AE_EN_LYT_CWS_980000001	N/A	N/A	1.7	01 OF 01	04/11/2020	A3

This page intentionally left blank.