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June 23, 2023

Ms. Tanowa M. Troupe, Secretary
Public Utilities Commission of Ohio
180 E. Broad Street, 11th Floor
Columbus, OH 43215-3793

Re: Case No. 20-1380-EL-BGN, Ross County Solar, LLC
Certificate Compliance (Condition 7) and Engineering Layout Update

Dear Ms. Troupe:

In compliance with Condition 7 of the May 18, 2021 Joint Stipulation and Recommendation, as approved by the Board's October 21, 2021 Opinion, Order, and Certificate entered in this proceeding, Ross County Solar, LLC confirms that civil construction of the Ross County Solar Project will commence on or around July 17, 2023.

Additionally, Ross County Solar is also attaching a layout comparison that identifies modifications made to the preliminary facility layout, which was submitted as Exhibit A to the Application filed on October 20, 2020. Changes were made to the preliminary facility layout to optimize constructability and energy production, while reducing environmental impacts and the Project's overall footprint. Changes as a result of final engineering were anticipated in the Application on pages 3, 13, 20, and 29. Ross County Solar previously discussed this layout comparison with Board Staff during submission of the final Project design, in compliance with Condition 4.

Please call me if you have any questions.

Very truly yours,



Anna Sanyal
Attorney for Ross County Solar, LLC

AS/jaw
Attachment

cc: Mark Bellamy, OPSB Staff Project Manager

Post-Application Layout Comparison

Ross County Solar Project

Ross County, Ohio

Case Number 20-1380-EL-BGN

Prepared for:



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June 2023

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1.0 INTRODUCTION

In preparation for the pre-construction conference, Ross County Solar, LLC (the Applicant) has submitted engineering drawings of the Final Design for the Ross County Solar Project (the Project). This report summarizes the modifications to the facility layout, as shown in the previously submitted engineering drawings (referred to herein as the Final Design), that have been made since the Certificate Application was filed with the Ohio Power Siting Board (OPSB) in case number 20-1380-EL-BGN. The facility layout as presented in the Project's application for a Certificate of Environmental Compatibility and Public Need (Certificate Application) is referred to in this report as the Permitting Layout. This report also compares and discusses the impacts of the Final Design with the impacts of the Permitting Layout.

The landscape plan for the Project will be updated to accommodate these changes to the facility layout while meeting the visual screening goals presented in the Certificate Application. This update will be provided to OPSB staff prior to implementation of the landscape plan. In addition, the design of the gen-tie line and point of interconnection infrastructure is in progress and will be provided to OPSB staff prior to construction in those areas.

2.0 SUMMARY OF MODIFICATIONS

Modifications have been made to the facility layout to optimize the site plan for constructability and energy production, while reducing environmental impacts. These modifications are illustrated in the attached figures. Figure 1 shows the overall Permitting Layout, and Figure 2 shows the overall Final Design.

Figure 3 compares the footprints of the solar arrays and Project Area from the two layouts. The overall footprint has been reduced in the Final Design. Approximately 128 acres of the Project Area have been released back to the landowners, as these areas will not be used for construction or operation of the Project.

Figure 4 compares the access roads between the Permitting Layout and the Final Design. The total length of access roads has been reduced by nearly 17,000 feet from the Permitting Layout. In order to accommodate this significant reduction in road length, two access points have been added, while others have been redistributed more evenly throughout the site. For more information, see Section 4.3 of this report.

Figure 5 compares the inverters, collection lines, and facility substation between the Permitting Layout and the Final Design. All collection lines in the Permitting Layout and Final Design are belowground collection lines with temporary impacts. The overall length of collection line in the Final Design was reduced by over 7,500 feet from the Permitting Layout, and the Final Design also includes one less inverter. Additionally, the substation footprint was significantly reduced in the Final Design as compared to the Permitting Layout. For further discussion on the updated noise study based on the Final Design, see Section 4.4 of this report.

Figure 6 compares the fencelines, O&M building, and laydown yards between the Permitting Layout and the Final Design. The total area within the fenceline has been reduced by 175 acres. The O&M building location has shifted to utilize existing buildings south of the substation location and the footprint has been reduced from the Certificate Application. All laydown yards are temporary in the Final Design, and the total laydown yard footprint has increased from the Permitting Layout due to the inclusion of the laydown areas around the substation and O&M buildings that were previously included within the substation and O&M areas in the Permitting Layout calculations.

Table 1 compares the total dimensions of facility components between the Permitting Layout and the Final Design. As shown in the table, nearly all components have been reduced in quantity and/or overall size.

Table 1. Comparison of Layouts for Each Facility Component

Layout Version	Solar Array (Acres)	Access Roads (Feet)	Inverters (Quantity)	Belowground Collection Lines (Feet)	Collection Substation (Acres)	Temporary Laydown Yard (Acres)	Area Within Fenceline (Acres)	Project Area (Acres)
Permitting Layout	657	64,371	37	48,776	2.8	6.2	925	1,433
Final Design	601	47,481	36	41,217	1.0	13.5	750	1,305
Total Change	-56	-16,890	-1	-7,559	-1.8	+7.4	-175	-128

3.0 IMPACT ANALYSIS

In order to provide an “apples-to-apples” comparison with the Permitting Layout, impacts of the Final Design have been evaluated using the same methods as presented in the Certificate Application, to the extent possible.

3.1 Wetlands and Streams

Impacts to delineated wetlands and streams have been avoided to the maximum extent possible. All delineated wetlands are avoided in the Final Design. The Final Design access roads will cross perennial stream s006 at an existing crossing location, as proposed in the Certificate Application. The other four stream crossings proposed in the Certificate Application, which would have required new culverts, have been eliminated in the Final Design. The belowground collection line in the Final Layout crosses delineated streams in four locations, two of which are perennial, one intermittent, and one ephemeral. These will be belowground collection line crossings installed by horizontal directional drilling and will result in no impact to the stream.

3.2 Vegetation and Habitat

The Final Design avoids impacts to larger woodlots within the current Project Area. Tree clearing has been completed and was covered under a prior pre-construction conference. No additional threatened and endangered species or their habitat have been encountered since the filing of the Certificate Application.

3.3 Land Use

Facility-related impacts to land use were calculated based on the impact assumptions provided in Table 2 and the land use codes for each parcel, obtained from the Ross County Auditor’s Office and also used in the impact analysis for the Certificate Application. Using GIS software, facility components and their related impact areas were intersected with the parcel data, resulting in areas of impact to each land use associated with the respective facility components. The impact areas for these facility components were aggregated using GIS software and recorded in a spreadsheet, which was used to calculate the total impact area. In areas where features overlap, analyses using GIS were conducted to eliminate overlap in order to avoid overestimations of impacts. Table 2 presents the total land use impacts associated with the Final Design, and a comparison with the impacts of the Permitting Layout.

Table 2. Land Use Impacts

Facility Component	Temporary Impact of <i>Final Design</i> ⁶ (acres)	Permanent Impact of <i>Final Design</i> (acres)	Total Impact of <i>Final Design</i> (acres)	Total Impact of <i>Permitting Layout</i> (acres)	Change in Total Impact (acres)
Agricultural (100’s)					
Solar Array ¹	0.00	601.1	601.1	656.4	-55.3
Access Road ²	11.5	14.7	26.2	37.1	-10.9
Belowground Collection Line ³	11.1	0.0	11.1	11.3	-0.2
Temporary Laydown Yard	10.5	0.0	10.5	6.2	+4.3

Table 2. Land Use Impacts

Facility Component	Temporary Impact of Final Design ⁶ (acres)	Permanent Impact of Final Design (acres)	Total Impact of Final Design (acres)	Total Impact of Permitting Layout (acres)	Change in Total Impact (acres)
O&M Building	0.0	0.0	0.0	1.4	-1.4
Collection Substation	0.0	1.0	1.0	2.8	-1.8
Inverter Pad ⁴	0.0	0.1	0.1	2.4	-2.3
Gen-tie Line ⁵	0.0	0.4	0.4	0.4	0.0
Total Agricultural	21.6	617.3	650.4	718	-67.6
Commercial (400's)					
Gen-tie Line	0.0	0.2	0.2	0.2	0.0
Total Commercial	0.0	0.2	0.2	0.2	0.0
Residential (500s)					
Solar Array	0.0	0.1	0.1	1.0	-0.9
Belowground Collection Line	0.2	0.0	0.2	0.1	+0.2
Temporary Laydown Yard	3.0	0.0	3.10	0.0	+3.10
O&M Building	0.0	0.2	0.2	0.0	+0.2
Total Residential	3.2	0.3	3.5	1.1	2.4
Total Impact	24.8	617.8	654.1	719.3	-65.2

1. Permanent land use impacts from solar arrays include the entire area underneath and between the panels, because that area will be taken out of its current use for- the life of the facility.
2. Access roads will have a temporary width of approximately 25 feet, and a permanent width of 12 feet to the inverters and 20 feet at the substation. Calculations in the Certificate Application assumed a permanent road width of 16 feet. Turnaround areas at the ends of access roads have been incorporated into impact calculations.
3. A temporary, 15 foot wide work area will be required for belowground collection line installation. In areas where collection lines and access roads overlap, the impact area of the access road was used in the calculations, because it represents the larger, permanent impact.
4. Permitting Layout calculations included 37 inverter pads each with an approximate area of 2,800 square feet. Final Design calculations are based on the actual area of the 36 inverter pads included in the engineering drawings.
5. The gen-tie line will be located within a 50-foot wide right-of-way. While the exact location of the gen-tie line is not known at this time, impacts are anticipated to be similar to those presented in the Certificate Application.
6. Temporary impact areas represent only the additional impact area during construction and do not include the permanent impact area. The temporary and permanent impact areas are added together in the total impact column.

The total land use impact associated with the components of the Final Design includes approximately 654.1 acres, which represents approximately 50% of the 1,305-acre Project Area. In the Final Design, the footprint of the facility was reduced by approximately 65.2 acres. This reduction is due in large part to the reduction in the area of solar arrays, as shown on Figure 3.

4.0 DISTANCE ANALYSIS

Distances between structures and property lines and Final Design components are shown in the subsequent tables. This analysis shows that all of the Applicant's design setbacks in the Certificate Application have been met in the Final Design. A comparison with the distances from the Permitting Layout is included in the following discussion.

The Final Design requires the removal of a few dilapidated farm structures in addition to the structure that was planned to be removed or relocated on Rolfe Road, as discussed in the Certificate Application. These additional structures, located in the middle of a cultivated field in the northern part of the facility, are not in use and are partially collapsed. Trees growing through the structures were removed during the prior tree clearing activities for the Project. Also, a residence and barn at 1383 Rolfe Road have been purchased by the Applicant and will be used for the O&M building, rather than a new structure, as previously proposed.

4.1 Structures and Property Lines within 1,500 Feet of Solar Arrays

Table 3 identifies structures within 1,500 feet of a solar array and the lease status of the underlying parcel (i.e., participating or non-participating). There are 56 structures within 1,500 feet of a solar array, a decrease from 60 in the Permitting Layout. The closest distance between the nearest non-participating structure and a solar array has increased from 319.6 feet in the Permitting Layout to 333 feet in the Final Design, which is greater than the proposed setback of 300 feet.

Table 3. Structures Within 1,500 Feet of a Solar Array

Structure Type	Distance to Solar Array (Feet)	Lease Status of Underlying Parcel
Residence	407	Participating
Residence	408	Participating
Residence	429	Participating
Residence	533	Participating
Residence	596	Participating
Residence	604	Participating
Residence	628	Participating
Residence	644	Participating
Residence	653	Participating
Residence	706	Participating
Residence	754	Participating
Residence	771	Participating
Residence	796	Participating
Residence	905	Participating
Residence	923	Participating
Residence	1,005	Participating
Residence	1,025	Participating
Residence	1,049	Participating
Residence	1,168	Participating

Table 3. Structures Within 1,500 Feet of a Solar Array

Structure Type	Distance to Solar Array (Feet)	Lease Status of Underlying Parcel
Residence	1,188	Participating
Residence	1,192	Participating
Residence	1,238	Participating
Residence	1,269	Participating
Residence	1,344	Participating
Residence	1,344	Participating
Residence	1,344	Participating
Residence	1,352	Participating
Residence	1,448	Participating
Residence	333	Non-Participating
Residence	344	Non-Participating
Residence	349	Non-Participating
Residence	350	Non-Participating
Residence	354	Non-Participating
Residence	366	Non-Participating
Residence	384	Non-Participating
Residence	398	Non-Participating
Residence	403	Non-Participating
Residence	500	Non-Participating
Residence	775	Non-Participating
Residence	781	Non-Participating
Residence	837	Non-Participating
Residence	898	Non-Participating
Residence	953	Non-Participating
Residence	985	Non-Participating
Residence	1,097	Non-Participating
Residence	1,102	Non-Participating
Residence	1,129	Non-Participating
Residence	1,173	Non-Participating
Residence	1,191	Non-Participating
Residence	1,196	Non-Participating
Residence	1,238	Non-Participating
Residence	1,289	Non-Participating
Residence	1,298	Non-Participating
Residence	1,373	Non-Participating
Residence	1,455	Non-Participating
Residence	1,492	Non-Participating

Table 4 identifies parcels within 1,500 feet of a solar array and the lease status of each parcel. There are 146 parcels within 1,500 feet of a solar array, reduced from 169 for the Permitting Layout. The closest distance between a non-participating parcel and a solar array has increased from 22.4 feet in the Permitting Layout

to 82 feet in the Final Design, exceeding the setback distance of 50 feet. This evaluation was conducted using digital parcel data from the Ross County Auditor. Publicly available digital parcel data is not sufficiently accurate for precise measurement of distances. As such, these distance measurements may not precisely match distance measurements calculated from property surveys of parcels in the Project Area.

Table 4. Parcels Within 1,500 Feet of a PV Panel

Parcel ID	Distance to PV Panel (Feet) ¹	Lease Status ²
021211004000	0	Participating
021212030000	0	Participating
021212077000	0	Participating
021212079000	0	Participating
021212080000	0	Participating
021212090000	0	Participating
201003080000	0	Participating
201004009000	0	Participating
201004010000	0	Participating
201004011000	0	Participating
201004012000	0	Participating
201004013000	0	Participating
021212135000	56	Participating
201003043000	68	Participating
021211090000	81	Participating
021212089000	81	Participating
021211109000	89	Participating
021212093000	94	Participating
021212096000	105	Participating
021212025000	112	Participating
021212034000	117	Participating
021212028000	135	Participating
021212149000	140	Participating
201003042000	184	Participating
021211074000	263	Participating
021211082000	278	Participating
021211065000	342	Participating
021212094000	377	Participating
021211008000	447	Participating
021211059000	537	Participating
021211005600	539	Participating
021211054000	802	Participating
021212075000	832	Participating
021212147000	835	Participating
021211011000	980	Participating
021211010000	1,348	Participating

Table 4. Parcels Within 1,500 Feet of a PV Panel

Parcel ID	Distance to PV Panel (Feet)¹	Lease Status²
021211009000	1,349	Participating
021211103000	1,349	Participating
021211095000	1,386	Participating
201004059000	82	Non-Participating
021212127000	102	Non-Participating
021212036000	106	Non-Participating
021212119000	113	Non-Participating
021212118000	113	Non-Participating
021212134000	114	Non-Participating
021212114000	115	Non-Participating
021212035000	119	Non-Participating
021212129000	126	Non-Participating
021212121000	138	Non-Participating
201003074000	138	Non-Participating
201003041000	168	Non-Participating
021212029000	240	Non-Participating
021212078000	282	Non-Participating
201003035000	289	Non-Participating
201003036000	305	Non-Participating
201004048000	306	Non-Participating
021211096000	312	Non-Participating
021211097000	335	Non-Participating
201004015000	338	Non-Participating
021212027000	349	Non-Participating
021212026000	448	Non-Participating
201004014000	467	Non-Participating
021211073000	503	Non-Participating
021212145000	506	Non-Participating
021212033000	508	Non-Participating
021211081000	511	Non-Participating
021211064000	550	Non-Participating
021212136000	558	Non-Participating
021212023000	610	Non-Participating
201004008000	614	Non-Participating
021211058000	690	Non-Participating
021211001000	694	Non-Participating
201004066000	706	Non-Participating
201004017000	707	Non-Participating
021212072000	760	Non-Participating
021212021000	764	Non-Participating
021211072000	774	Non-Participating
021211080000	779	Non-Participating

Table 4. Parcels Within 1,500 Feet of a PV Panel

Parcel ID	Distance to PV Panel (Feet)¹	Lease Status²
021212024000	795	Non-Participating
021211068000	805	Non-Participating
021212115000	809	Non-Participating
021211063000	811	Non-Participating
021212076000	832	Non-Participating
201004072000	839	Non-Participating
021212137000	847	Non-Participating
201004061000	853	Non-Participating
201003037000	880	Non-Participating
021211057000	908	Non-Participating
021211053000	911	Non-Participating
201004071000	913	Non-Participating
021212032000	927	Non-Participating
021211071000	994	Non-Participating
201004070000	996	Non-Participating
021211079000	998	Non-Participating
021212074000	1,006	Non-Participating
021212148000	1,006	Non-Participating
021211067000	1,019	Non-Participating
021211062000	1,027	Non-Participating
021211003600	1,042	Non-Participating
021211048000	1,053	Non-Participating
021211047000	1,085	Non-Participating
021211052000	1,086	Non-Participating
201004069000	1,088	Non-Participating
021211056000	1,103	Non-Participating
201004067000	1,127	Non-Participating
021212063000	1,143	Non-Participating
021212064000	1,146	Non-Participating
021212122000	1,155	Non-Participating
021212128000	1,165	Non-Participating
021212065000	1,172	Non-Participating
201004065000	1,173	Non-Participating
021212146000	1,209	Non-Participating
021212073000	1,215	Non-Participating
021212066000	1,235	Non-Participating
021211046000	1,236	Non-Participating
021212151000	1,239	Non-Participating
021211051000	1,254	Non-Participating
021211076000	1,255	Non-Participating
021211070000	1,257	Non-Participating
201004077000	1,262	Non-Participating

Table 4. Parcels Within 1,500 Feet of a PV Panel

Parcel ID	Distance to PV Panel (Feet) ¹	Lease Status ²
021211078000	1,269	Non-Participating
021211061000	1,281	Non-Participating
201004018000	1,282	Non-Participating
201004075000	1,306	Non-Participating
021211006000	1,311	Non-Participating
021212062000	1,311	Non-Participating
021211055000	1,344	Non-Participating
021211107000	1,351	Non-Participating
021212061000	1,358	Non-Participating
021211042000	1,359	Non-Participating
201004068000	1,360	Non-Participating
021212132000	1,366	Non-Participating
021211045000	1,386	Non-Participating
201004060000	1,406	Non-Participating
021212051000	1,427	Non-Participating
201004074000	1,446	Non-Participating
021211106000	1,454	Non-Participating
021211041000	1,460	Non-Participating
021212053000	1,465	Non-Participating
201004006000	1,470	Non-Participating
021211050000	1,470	Non-Participating
021211069000	1,481	Non-Participating
021211066000	1,487	Non-Participating
021211075000	1,491	Non-Participating
021211060000	1,498	Non-Participating
021212085000	1,499	Non-Participating

1. Distances that equal zero represent parcels that contain solar arrays.

2. Landowners with parcels anticipated to be under a lease or easement agreement at the time of facility construction are identified as participating for the purposes of this report.

4.2 Structures and Property Lines within 250 Feet of Facility Components

There is only one residence within 250 feet of facility components, a decrease from two with the Permitting Layout. This residence is located on a participating parcel.

Table 5 identifies parcels within 250 feet of a facility component and the lease status of the parcel (i.e., participating or nonparticipating). There are 45 parcels within 250 feet of a facility component. Distances between property lines and facility components remain similar between the Permitting Layout and the Final Design.

Table 5. Property Lines within 250 Feet of Facility Components

Parcel ID	Distance ¹	Facility Component	Lease Status ²
021211004000	0	Collection Line	Participating
	0	Fenceline	
	0	Inverters	
021211074000	238	Fenceline	Participating
021211090000	18	Temporary Laydown Yard	Participating
	53	Fenceline	
	58	Access Road	
021211109000	48	Fenceline	Participating
	57	Access Road	
021212025000	48	Temporary Laydown Yard	Participating
	92	Fenceline	
	243	O&M Building	
021212028000	107	Fenceline	Participating
021212030000	0	Access Road	Participating
	0	Collection Line	
	0	Collection Substation	
	0	Fenceline	
	0	Inverters	
	0	Temporary Laydown Yard	
021212034000	14	O&M Building	Participating
	3	Collection Line	
	14	Access Road	
	39	Fenceline	
	39	Temporary Laydown Yard	
021212077000	191	Collection Substation	Participating
	0	Access Road	
	0	Collection Line	
	0	Fenceline	
	0	Inverters	
021212079000	0	Temporary Laydown Yard	Participating
	0	Access Road	
	0	Collection Line	
	0	Fenceline	
021212080000	0	Inverters	Participating
	0	Access Road	
	0	Collection Line	
	93	Fenceline	
	95	Temporary Laydown Yard	
021212089000	210	O&M Building	Participating
	48	Fenceline	
	61	Collection Line	
021212090000	87	Access Road	Participating
	0	Access Road	
	0	Collection Line	
021212093000	0	Fenceline	Participating
	61	Fenceline	
021212094000	43	Access Road	Participating
021212096000	79	Fenceline	Participating

Table 5. Property Lines within 250 Feet of Facility Components

Parcel ID	Distance ¹	Facility Component	Lease Status ²
021212135000	0 0 0 108	Fenceline O&M Building Temporary Laydown Yard Collection Line	Participating
021212149000	18 32 111 140	Access Road Temporary Laydown Yard Fenceline Collection Line	Participating
201003042000	163	Fenceline	Participating
201003043000	43 152 216	Fenceline Access Road Collection Line	Participating
201003080000	0 0 0 0	Access Road Collection Line Fenceline Inverters	Participating
201004009000	0 0 0 0	Access Road Collection Line Fenceline Inverters	Participating
201004010000	0 0 0 0	Access Road Collection Line Fenceline Inverters	Participating
201004011000	0 0 0 0	Access Road Collection Line Fenceline Inverters	Participating
201004012000	0 112	Fenceline Access Road	Participating
201004013000	0 0 0 0	Access Road Collection Line Fenceline Inverters	Participating
021212029000	220	Fenceline	Non-Participating
021212033000	129	Temporary Laydown Yard	Non-Participating
021212035000	99	Fenceline	Non-Participating
021212036000	80	Fenceline	Non-Participating
021212063000	97	Access Road	Non-Participating
021212114000	87	Fenceline	Non-Participating
021212118000	76 143	Fenceline Access Road	Non-Participating
021212119000	84	Fenceline	Non-Participating
021212121000	80 103	Fenceline Access Road	Non-Participating
021212127000	74	Fenceline	Non-Participating
021212128000	140	Access Road	Non-Participating
021212129000	100	Fenceline	Non-Participating

Table 5. Property Lines within 250 Feet of Facility Components

Parcel ID	Distance ¹	Facility Component	Lease Status ²
021212134000	87 178	Fenceline Access Road	Non-Participating
021212145000	48 129 191 191	Temporary Laydown Yard Access Road Collection Substation Fenceline	Non-Participating
201003041000	147	Fenceline	Non-Participating
201003043000	108 127	Fenceline Access Road	Non-Participating
201003074000	112	Fenceline	Non-Participating
201004013000	41	Access Road	Non-Participating
201004059000	62	Fenceline	Non-Participating

1. Distances that equal zero represent parcels that contain facility components.

2. Landowners with parcels anticipated to be under a lease or easement agreement at the time of facility construction are identified as participating for the purposes of this report.

4.3 Access Driveway Locations

During the final engineering design of the access roads, the number of access driveways from public roads was limited to the extent practical, and driveways were kept at similar distances from non-participating residences as in the Permitting Layout. As shown in Table 6, the nearest driveway to a non-participating residence in the Final Design is 316 feet, while in the Permitting Layout the nearest driveway was 438 feet. The average distance from a driveway to an adjacent, non-participating residence has increased in the Final Design by 30 feet.

Two access point locations were added in the Final Design, and others were distributed more evenly throughout the site, allowing for a significant reduction in the total length of access roads for the Project. The additional access points allow the Project to eliminate all wetland crossings and all but one of the five previously proposed access road stream crossings; the remaining crossing location is at an existing stream crossing. Furthermore, the new access point from State Route 41 on the northern edge of the Project uses a former township road driveway and connects this access point to a previously disturbed railroad right-of-way, reducing the amount of access road to be constructed on cultivated land and improving traffic circulation through the site. All driveway locations will be permitted through the County Engineer and/or other jurisdictional authority prior to construction.

Table 6. Comparison of Access Points/Driveways

Layout Version	Number of Access Points	Nearest Distance to Adjacent, Non-Participating Residence (Feet)¹	Average Distance to Adjacent, Non-Participating Residences (Feet)¹
Permitting Layout	11	438	765
Final Design	13	316	795
Total Change	+2	-122	+30

1. As measured from the approximate center of the driveway where it meets the edge of the road pavement to the approximate center of the residence

4.4 Substation and Inverters

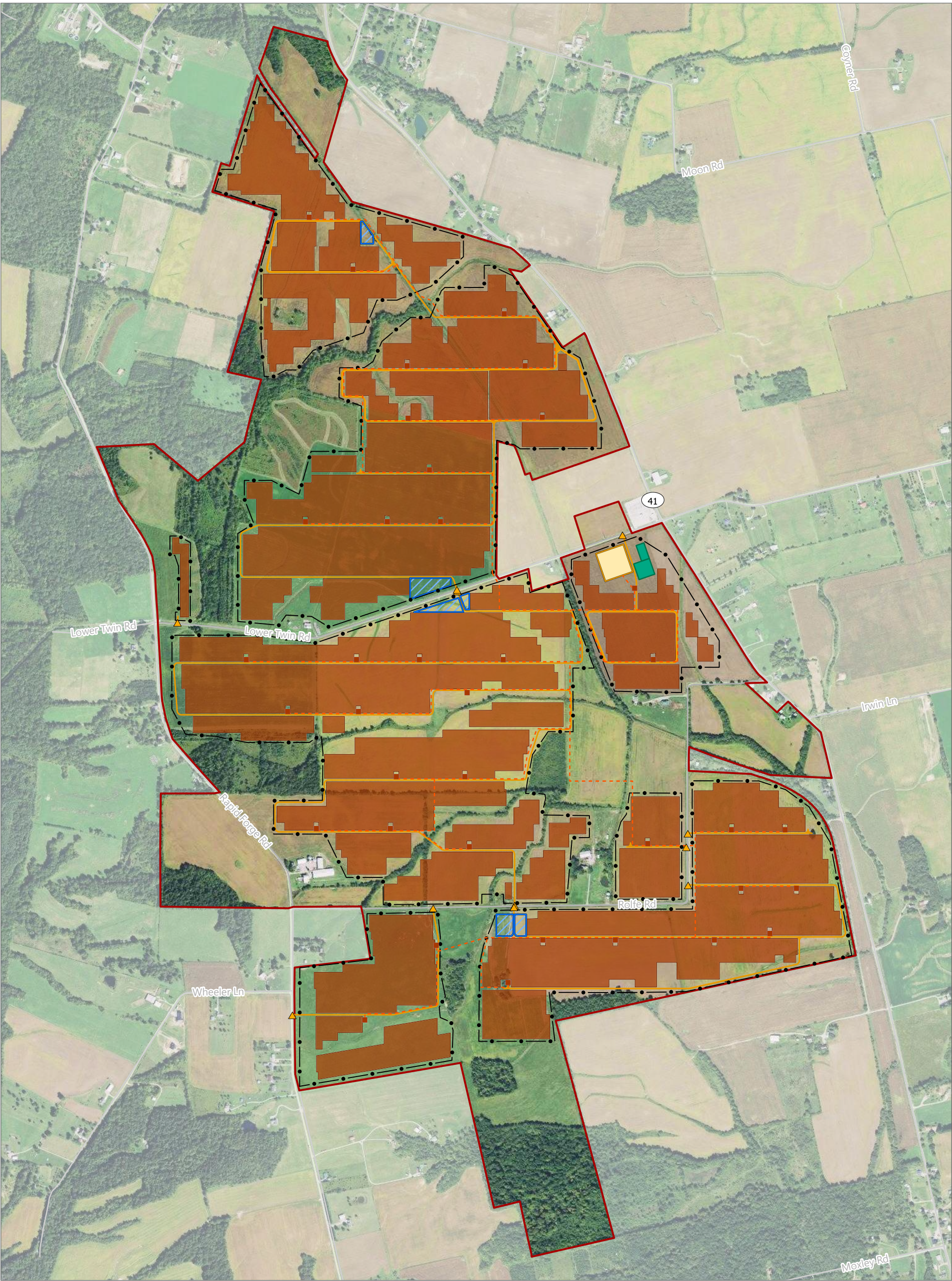
The substation area is approximately 580 feet from the nearest non-participating residence in the Final Design, which is approximately 120 feet closer than in the Permitting Layout. Inverters are still located within the interior of the solar arrays but are located slightly closer to non-participating residences in a few areas. The nearest non-participating residence to an inverter is along State Route 41 in the east-central portion of the project; this residence is approximately 485 feet from the nearest inverter and is located on the opposite side of the state highway.

On behalf of the Applicant, RSG completed an updated noise assessment for the Project based on the Final Design and the manufacturer's specifications for the selected inverter model and substation transformers.¹ The updated noise assessment demonstrates that Project's design goals for maximum noise levels at non-participating receptors are still met. Based on the updated noise assessment, the maximum modeled noise level at a non-participating receptor is 44 dBA, and the average modeled noise level is 28 dBA.

¹ Per Condition 16 of the Stipulation in this case, the noise model update is only required if the chosen inverter or substation transformer has a higher sound power output than originally modeled for the Certificate Application. The chosen inverter and transformer both have a lower sound power output than modelled for the Certificate Application; however, the noise model was updated to provide additional assurance that all noise design goals have been met with the Final Design.

Figures

Figure 1. Permitting Layout



Ross County Solar
Ross County, Ohio

**Post-Application Layout
Comparison**

- Permitting Layout**

 - Inverter
 - Access Point
 - Access Road
 - Fenceline
 - Collection Line
- Collection Substation
 - O&M Building
 - Laydown Yard
 - PV Panel Area
 - Project Area

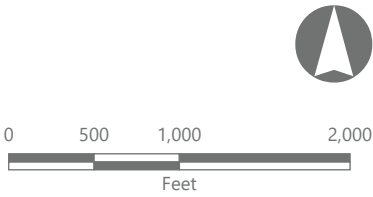
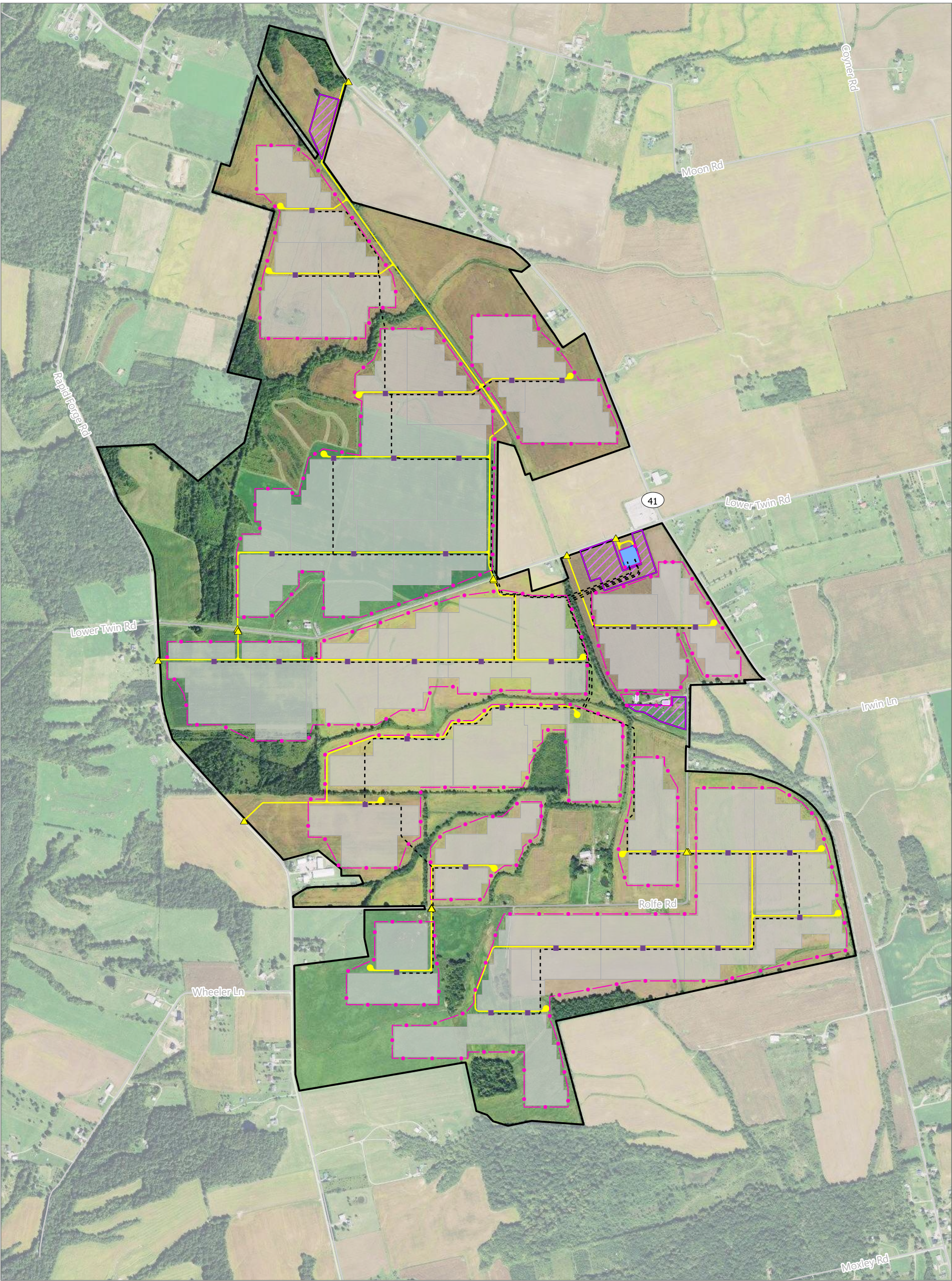


Figure 2. Final Design



Ross County Solar
Ross County, Ohio

Post-Application Layout
Comparison

- Final Design**

 - Inverter
 - Access Point
 - Access Road
 - Fenceline
 - Collection Line
- Collection Substation
 - O&M Building
 - Laydown Yard
 - PV Panel Area
 - Project Area

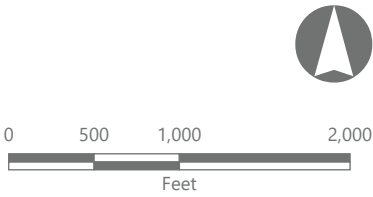
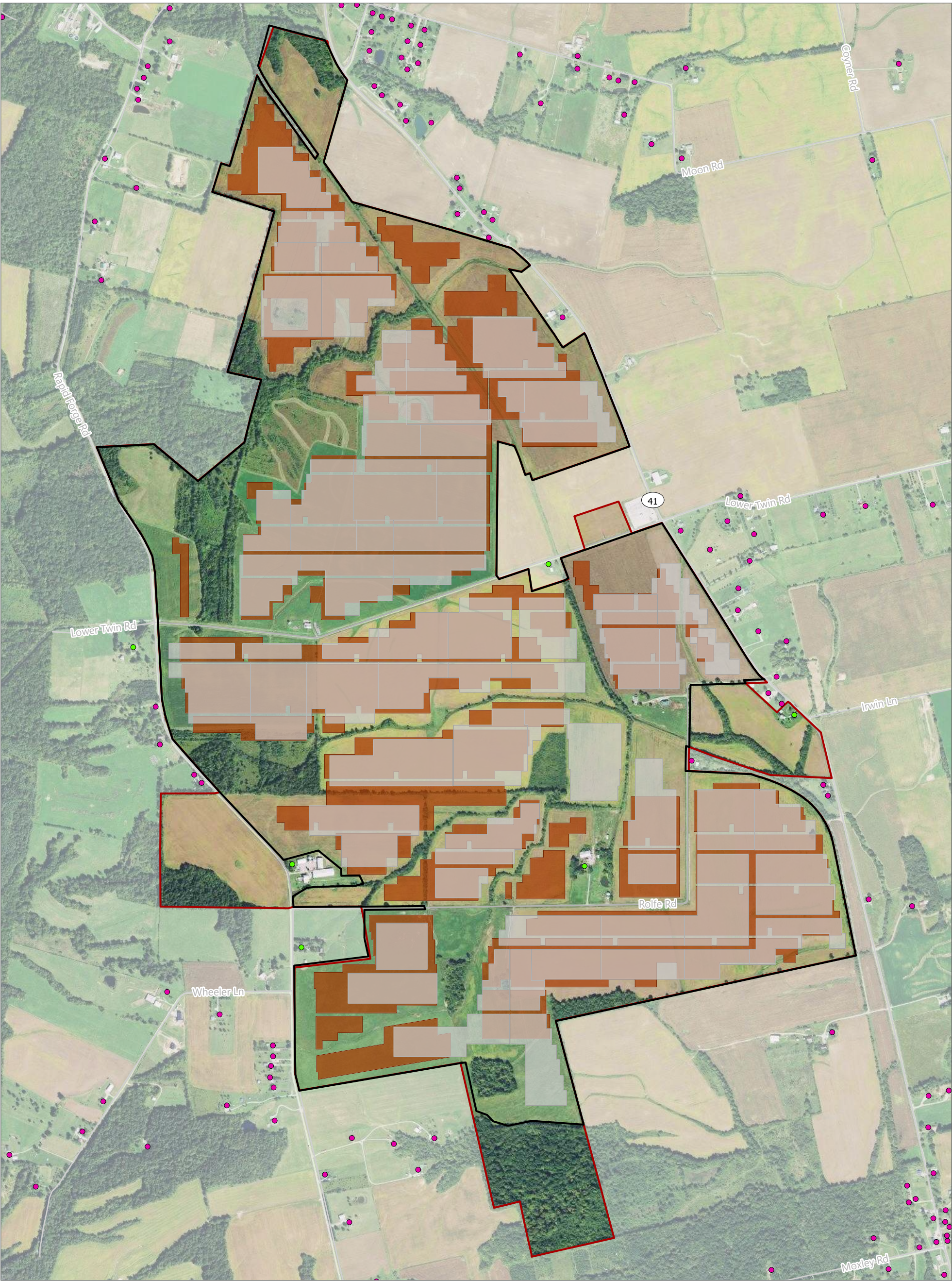


Figure 3. PV Panels and Project Area



Ross County Solar
Ross County, Ohio

Post-Application Layout
Comparison

- Non-Participating Receptor

● Participating Receptor
- Final Design**

■ PV Panel Area

▭ Project Area
- Permitting Layout**

■ PV Panel Area

▭ Project Area

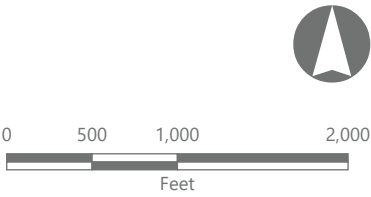
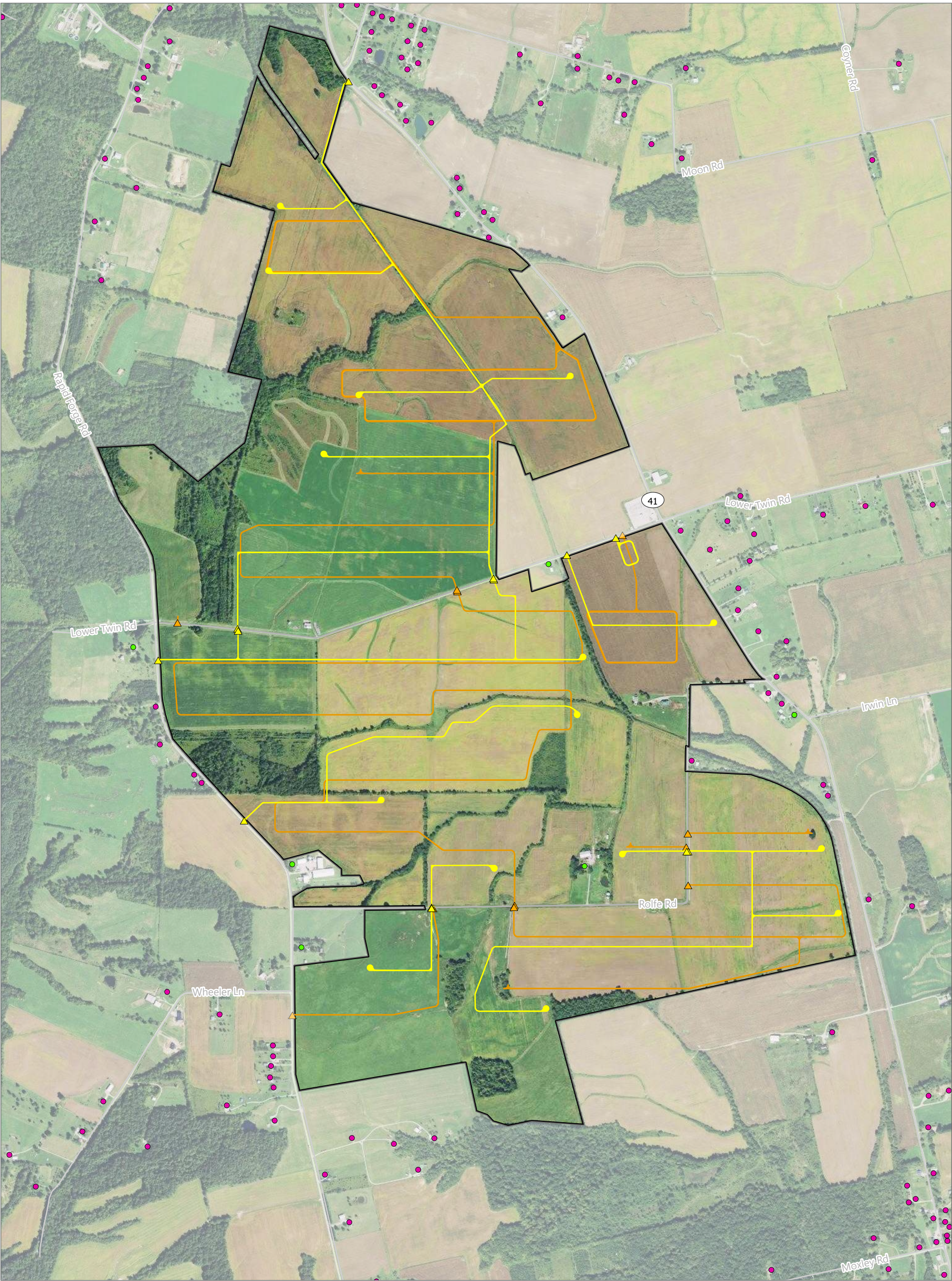


Figure 4. Access Roads



Ross County Solar
Ross County, Ohio

Post-Application Layout
Comparison

- | | | |
|------------------------------|---------------------|--------------------------|
| ● Non-Participating Receptor | Final Design | Permitting Layout |
| ● Participating Receptor | ▲ Access Point | ▲ Access Point |
| ▭ Project Area | — Access Road | — Access Road |

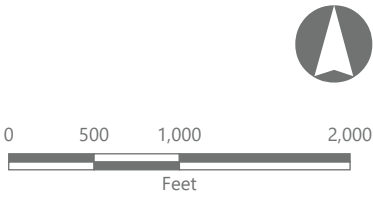
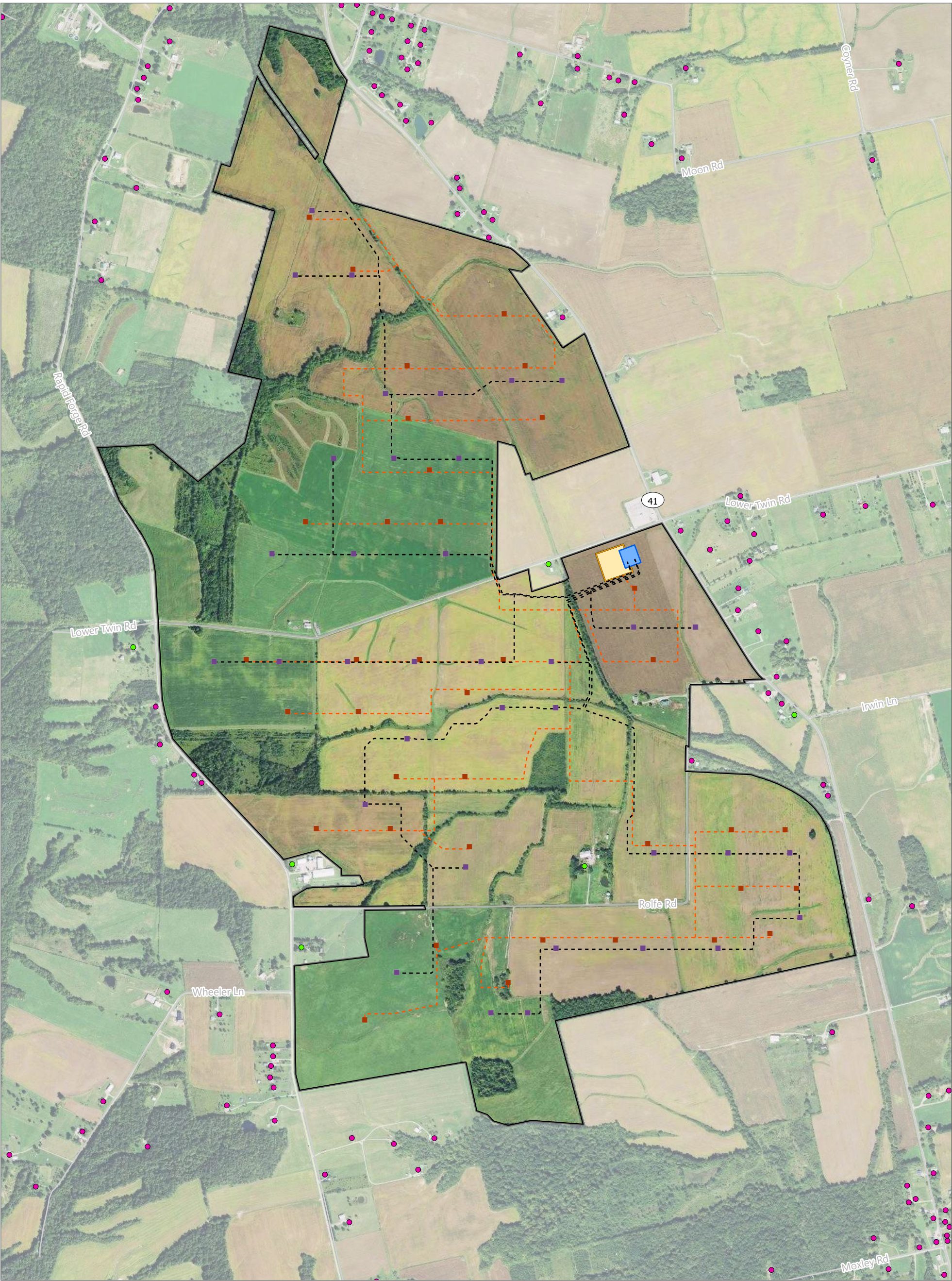


Figure 5. Inverters, Collection Line, and Substations



Ross County Solar
Ross County, Ohio

Post-Application Layout
Comparison

- | | | |
|------------------------------|-------------------------|--------------------------|
| ● Non-Participating Receptor | Final Design | Permitting Layout |
| ● Participating Receptor | ■ Inverter | ■ Inverter |
| ▭ Project Area | --- Collection Line | --- Collection Line |
| | ■ Collection Substation | ■ Collection Substation |

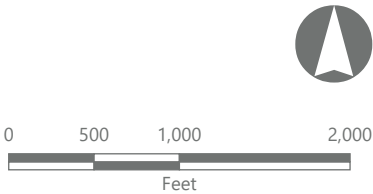
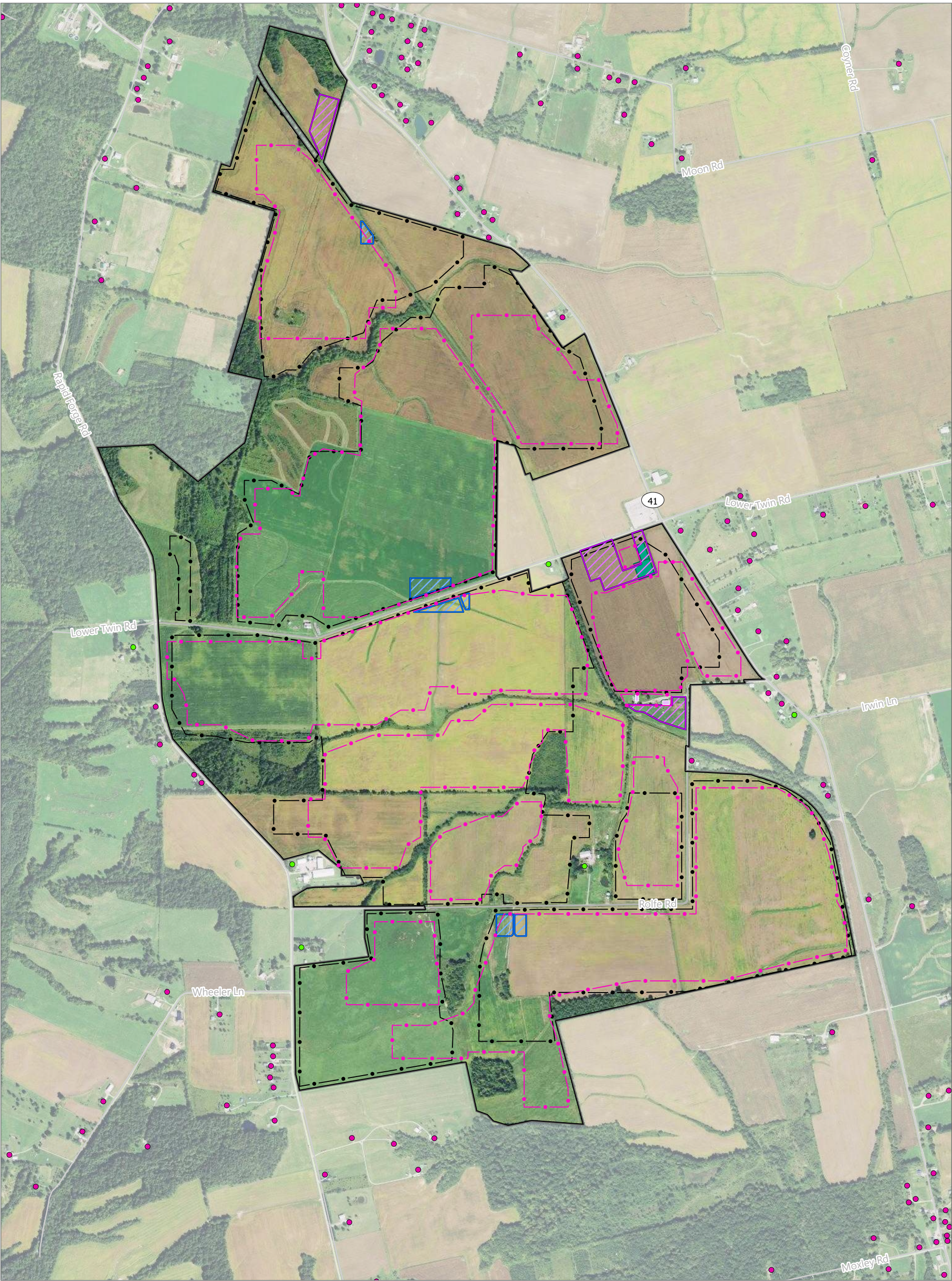


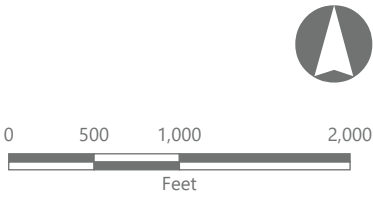
Figure 6. Fenceline, O&M Building, and Laydown Yards



Ross County Solar
Ross County, Ohio

Post-Application Layout
Comparison

- | | | |
|------------------------------|---------------------|--------------------------|
| ● Non-Participating Receptor | Final Design | Permitting Layout |
| ● Participating Receptor | — Fenceline | — Fenceline |
| ▭ Project Area | ▭ O&M Building | ▭ O&M Building |
| | ▨ Laydown Yard | ▨ Laydown Yard |



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in

Case No(s). 20-1380-EL-BGN

Summary: Correspondence Correspondence Regarding Compliance with
Certificate Condition 7 and Engineering Layout Update electronically filed by Ms.
Anna Sanyal on behalf of ROSS COUNTY SOLAR LLC.