

**BEFORE
THE OHIO POWER SITING BOARD**

In the Matter of the Application of)	
Kingwood Solar I LLC for a Certificate)	Case No. 21-0117-EL-BGN
of Environmental Compatibility and)	
Public Need)	

**NOTICE OF RESPONSES TO SECOND SET OF DATA REQUESTS FROM
THE STAFF OF THE OHIO POWER SITING BOARD**

On June 1, 2021 and June 3, 2021, Staff of the Ohio Power Siting Board (the “Board”) provided Kingwood Solar I LLC (“Kingwood Solar”) with Data Requests pertaining to Kingwood Solar’s Application. Attached to this notice are copies of Kingwood Solar’s responses, previously submitted to the Board’s Staff.

Respectfully submitted,

/s/ Michael J. Settineri
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Attorneys for Kingwood Solar I LLC

CERTIFICATE OF SERVICE

The Public Utilities Commission of Ohio's e-filing system will electronically serve notice of the filing of this document on the parties referenced on the service list of the docket card who have electronically subscribed to the case. In addition, the undersigned certifies that a courtesy copy of the foregoing document is also being sent via electronic mail on June 9, 2021 to:

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/s/ Michael J. Settineri
Michael J. Settineri

**BEFORE
THE OHIO POWER SITING BOARD**

In the Matter of the Application of Kingwood Solar I LLC for a Certificate of Environmental Compatibility and Public Need))))	Case No. 21-0117-EL-BGN
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**KINGWOOD SOLAR’S JUNE 8, 2021 RESPONSES
TO STAFF’S JUNE 1 AND JUNE 3 DATA REQUESTS**

1. *Figure 8-11 currently only delineates schools and residences. Amend Figure 8-11 to include the following structures depicted as points on the map, as per 4906-4-08(C)(1)(a): “...commercial centers or buildings, industrial buildings and installations,...hospitals, churches, civic buildings, and other occupied places”.*

A revised version of Figure 08-11 is attached that provides points on the maps for the requested features.

2. *Provide a more detailed “explanation of how such estimate was calculated” for the land use impact areas in section 4906-4-08(C)(1)(c).*

The estimated areas were calculated based on the layout shown in Figure 03-3 and Appendix A, using an overlay of the layout on existing aerial imagery. As depicted on the layout, a width of 20 feet was assumed for access roads and a width of 70 feet was assumed for temporary impact associated with installation of the collection lines, although actual impacts for each may be smaller. For the solar panels, the estimated impact was generally assumed to be the entire area within the woven -wire agricultural fence proposed around each array area (rather than simply the array areas), in recognition that the fenced Project area would curtail active agricultural land uses for the Project’s operational life. Although active agricultural uses would be reduced in those areas, many areas within the fence line will continue to be vegetated, including with pollinator-friendly species. Small areas of impact to “infrastructure” are likely to be overstated due to scaling; Project features would not be located within active utility rights-of-way except for limited locations where collection lines may need to cross such features.

3. *Provide a more detailed plan or approach to the commitment made in section 4906-4-08(C)(4)(c)(iii) & (v) and 4906-4-08(C)(4)(d) as quoted here: “The Project Should not have a significant effect on the surrounding municipalities, as local employees will be hired to the extent possible.” and “Local employees will be hired, to the extent possible. Hiring of non-residents will only occur when residents with the required skills are not available or competitive.” and “The Project will also have positive impacts on the local economy, offering opportunity for the use of local goods and services. Furthermore, jobs and economic opportunities while retaining existing opportunities.”*

By seeking full-time employees that already reside in the area, Kingwood Solar is not expected to have a significant effect on municipalities, meaning limited required relocation and increases to the local population and municipal school services.

Kingwood Solar, as indicated in Appendix D - Economic Impact Study, has the potential to create significant direct and indirect economic output through goods and services consumed by the 300 +/- construction workers, as well as direct increases in permanent annual labor income during operations. This economic activity may help to support existing, and/or drive additional job and economic growth of service providers directly and indirectly impacted by Kingwood Solar construction and operation.

- 4. In reference to the above question, please define what a “local employee” and “resident” means. Please specify what distance in relation to the project area counts as “local” or “resident”.***

These terms are intended to be relatively interchangeable referencing workers who would not require relocation or temporary accommodations if hired to work on the Kingwood Solar Project. Depending on the type of work scope and duration of employment, these workers may reside outside of Greene County. However, a “local” or “resident” employee is not expected to reside outside of the State of Ohio and would reside in relative proximity to the Project Area.

5. *In section 4906-4-08(C)(4)(e), population density is denoted in “person per acre”. Please provide population density in people per square mile. Please also provide alternative of Table 08-10 in this people per square mile notation as well.*

Population density on a per-square-mile basis is reflected in Revised Table 08-10.

**REVISED TABLE 08-10
POPULATION DENSITY**

Populated Place	(Estimated) 2019 Population	Total Land Area (sq. mile)	2019 Population Density (pp/sq. mile¹)
Cedarville Township	5,925	39.2	151.2
Miami Township	5,083	27.5	184.8
New Jasper Township	2,867	21.4	134.0
Xenia Township	6,402	43.6	146.8
Green Township (Clark County)	2,686	35.6	75.5
Mad River Township (Clark County)	10,830	33.5	323.3
City of Fairborn	33,876	14.6	2,320.3
City of Xenia	26,947	13.0	2,072.9
Village of Cedarville	4,320	1.3	3,323.1
Village of Clifton	147	0.2	735.0
Village of Yellow Springs	3,744	2.7	1,386.7
Wilberforce CDP	2,271	3.1	732.6

As noted, the average local population density is 445.9 people per square mile, with the highest densities located within the Village of Cedarville and City of Fairborn and the lowest densities located within Green Township (Clark County) and New Jasper Township.

6. *The USFWS, in the coordination letter provided in the Exhibit N, does not provide a date of receipt, but does state that the project may result in indirect adverse effects to Indiana bats, even if tree clearing is conducted during the winter season. The USFWS recommends a summer survey be conducted to determine presence/absence of Indiana bats at the project site (between June 1 and August 15). Has this survey been conducted? If yes, have the results been shared with the UWFWS and has a response been received? If not, please detail your plan for avoiding impacts to the Indiana bat based off of USFWS’ recommendations. Also, in Exhibit N, a second coordination letter is provided from the USFWS, dated March 24, 2021, in which the recommendation for conducting these surveys is eliminated. If this letter was updated from the previous letter, please*

provide proof of the date on which it was coordinated so Staff can verify the recommendation for presence/absence surveys for the Indiana bat are not warranted.

Appendix N of the Application provides the following communication between Project representatives and the USFWS:

- 4/27/2020 letter from Lynn Gresock to the USFWS requesting initial review consultation
- 5/4/2020 response email from USFWS (attached to this data response for clarity, as the date was separated from the response in the Application), where the potential for summer surveys was noted
- 5/5/2021 email consultation providing details of proposed tree clearing to the USFWS and requesting feedback as to whether seasonal clearing restrictions would be sufficient without the need for summer surveys
- 5/24/21 email response from USFWS confirming that seasonal clearing will be sufficient for the Project as proposed (also attached to this data response)

7. Portions of the project will occur in a 100-year floodplain. Will a floodplain permit be necessary for this project? If so, where are you in the process of obtaining the permit?

As noted in Section 4906-4-08(A)(4)(e), no solar panels are proposed in areas of mapped floodplain. The only Project-related features proposed in mapped floodplain areas are underground electrical collection lines, which will not increase the potential for flooding. In accordance with Section 101.03.9 of the Greene County Flood Damage Reduction Resolution, major utility facilities permitted by the Ohio Power Siting Board under Section 4906 of the Ohio Revised Code are exempt from the requirement to file a floodplain development permit.

8. The application states that the planned project fencing would be of a chain-link type construction. Other projects have stated that National Electrical Safety Code (Article 110) and the National Electric Code (Article 110.31 Enclosure of Electrical Installations) shows that utilization of a 'Deer Fence' fence is acceptable. The openings in such a woven metal fencing can be potentially bigger than traditional chain link and can also incorporate various ground tunnel attachments to reportedly aid in the small animal crossings like turtles, coyotes, etc. Further, other projects have proposed wooden rail-type fences. Is the Applicant willing to commit to incorporating an alternate fence that aids in resolving wildlife access/crossing and viewshed concerns for the project? If not, please explain, quantify and qualify any rationale for not employing fencing that is less aesthetically intrusive and more wildlife friendly.

The Application states that the Project plans the use of woven-wire fencing consistent with or similar to that described above and with the agricultural character of the Project Area. The only area where a more traditional chain-link fence may be required would be around the Utility Switchyard; this will be known once final PJM studies are completed.

9. What is the proposed total length of access roads?

Access roads within the Project Area total approximately 60,000 linear feet, or 11.3 miles.

10. What is the proposed total length of collection lines?

Collection lines, including those both inside and outside of panel array areas, are expected to total approximately 30,000 linear feet, or 5.7 miles; approximately 17,000 linear feet, or 3.2 miles, inside the array areas and approximately 13,000 linear feet, or 2.5 miles, outside the array areas.

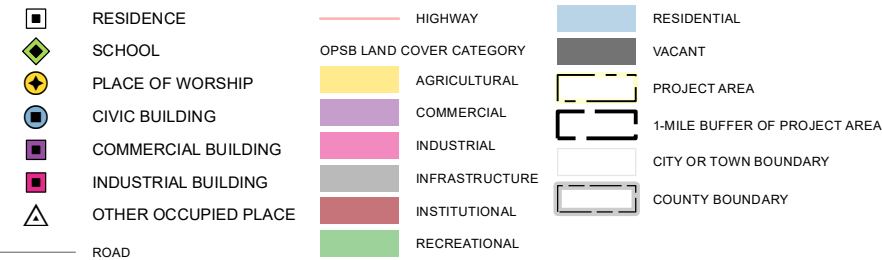
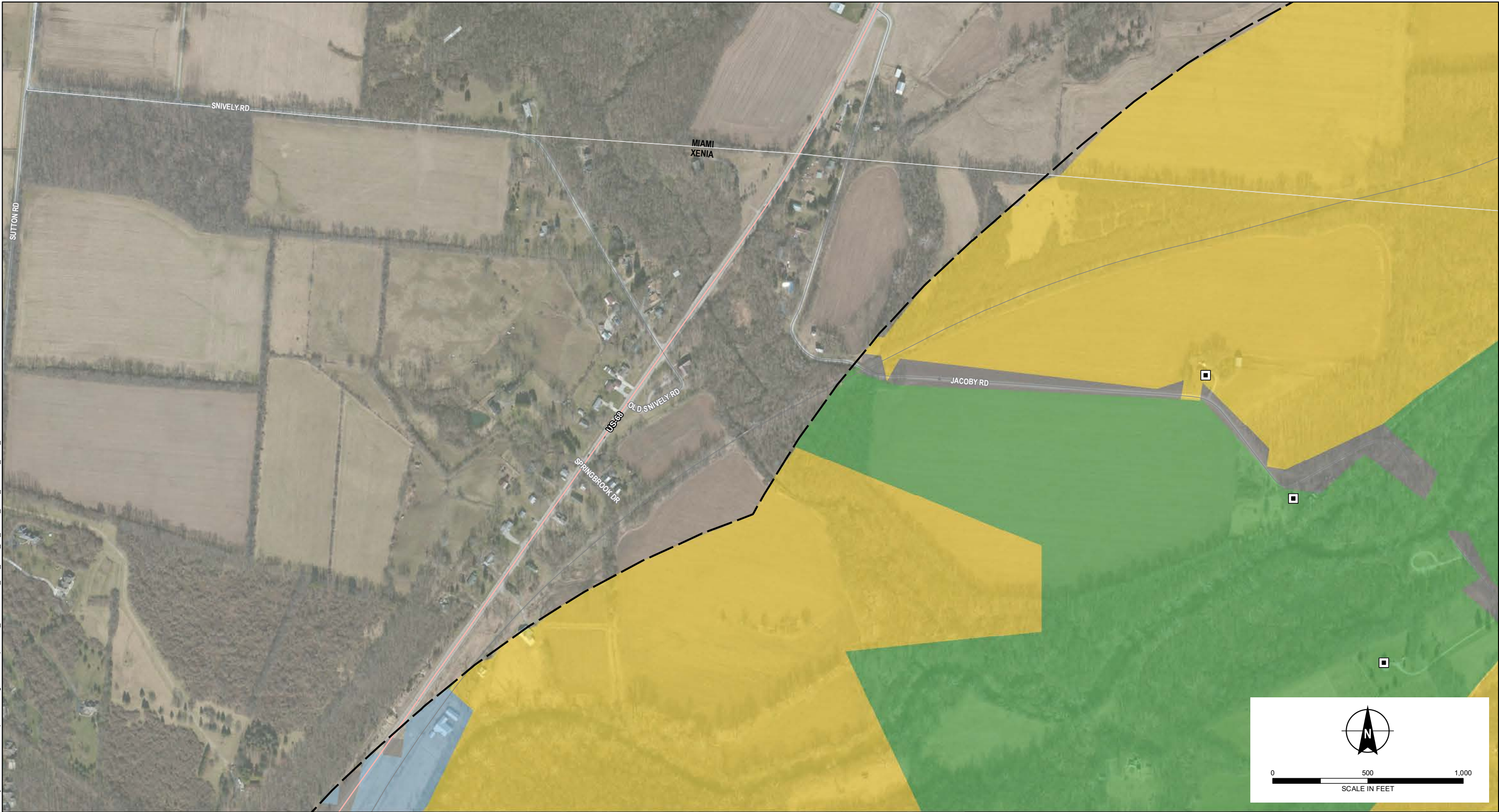
11. Please provide an estimate in cubic yards of the amount of solid waste that would be produced during construction.

Kingwood Solar, at 175 MW system capacity, is expected to generate approximately 6,825 cubic yards of solid waste during construction.

12. Please provide a buffer layer(s), in the form of shapefiles or .KMZ, of any setbacks applied to the project.

A shapefile package outlining the buffers around identified constraints is attached. In responding to this question, an error was identified on Figure DR1-13, which was provided with the responses to Data Request Set 1. A revised version of this figure is attached correctly illustrating a consistent 25-foot setback from the Project Area boundary. The shapefiles were also revised accordingly.

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NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. LAND COVER DATA SOURCES: ESRI, GREEN COUNTY, OHIO, UNITED STATES GEOLOGICAL SURVEY (USGS) PROTECTED AREAS DATABASE (PAD), USGS NATIONAL LAND COVER DATABASE (NLCD), 2016, AND OBSERVATIONS MADE BASED UPON AERIAL IMAGERY
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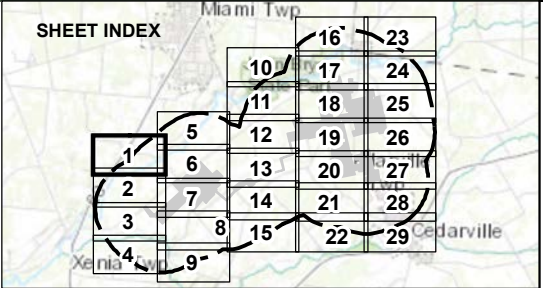
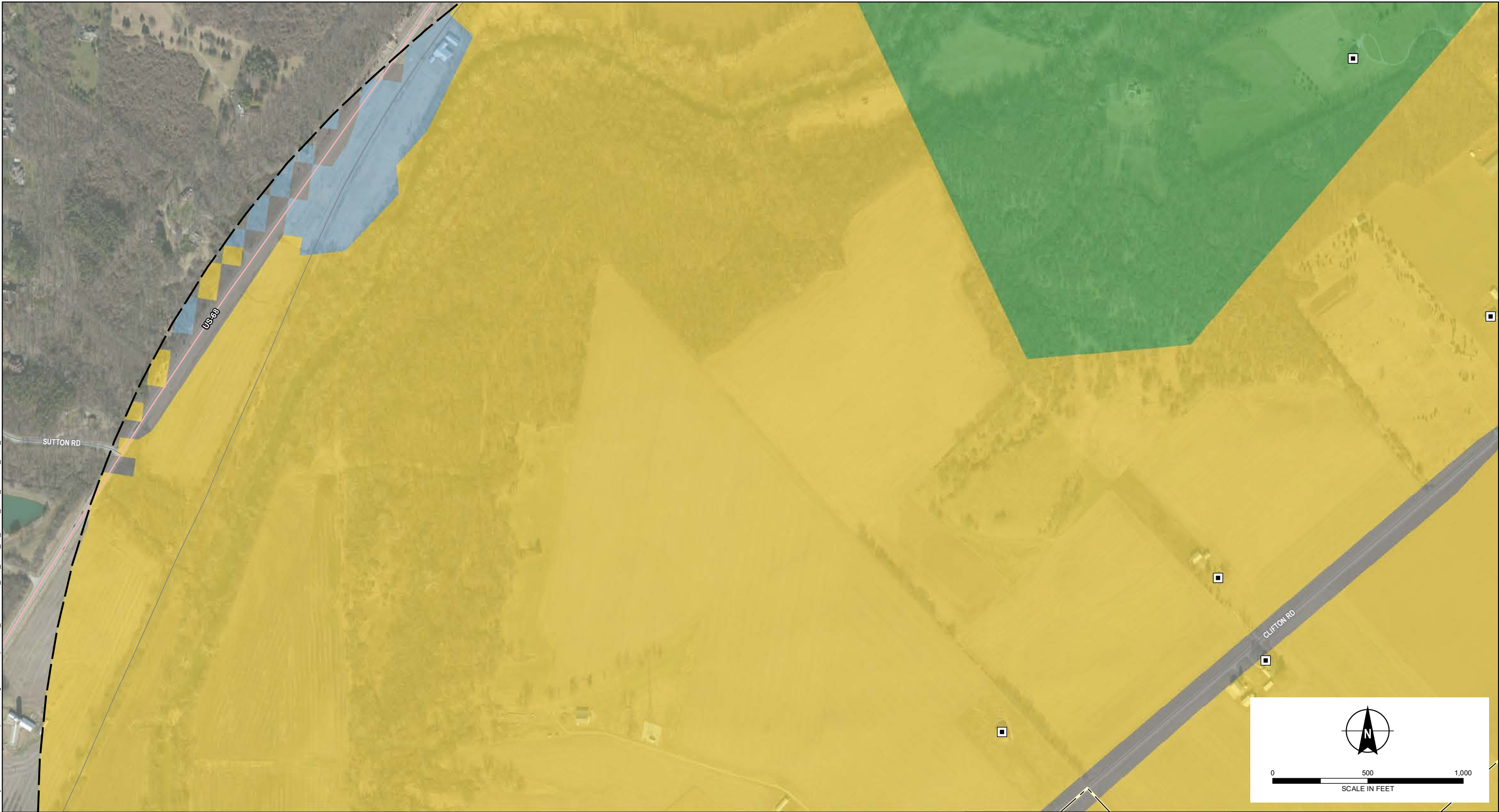


Figure 08-11
Land Use within One Mile
Sheet 1 of 29

Kingwood Solar
Greene County, Ohio

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| | RESIDENCE | | HIGHWAY | | RESIDENTIAL |
| | SCHOOL | | OPSB LAND COVER CATEGORY | | VACANT |
| | PLACE OF WORSHIP | | AGRICULTURAL | | PROJECT AREA |
| | CIVIC BUILDING | | COMMERCIAL | | 1-MILE BUFFER OF PROJECT AREA |
| | COMMERCIAL BUILDING | | INDUSTRIAL | | CITY OR TOWN BOUNDARY |
| | INDUSTRIAL BUILDING | | INFRASTRUCTURE | | COUNTY BOUNDARY |
| | OTHER OCCUPIED PLACE | | INSTITUTIONAL | | |
| | ROAD | | RECREATIONAL | | |

- NOTES**
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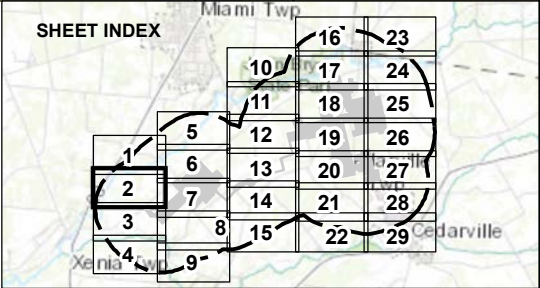


Figure 08-11
Land Use within One Mile
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Kingwood Solar
Greene County, Ohio

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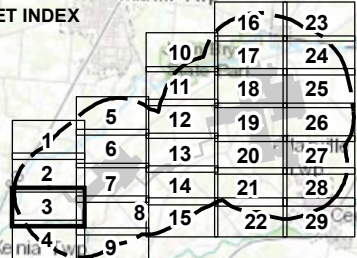
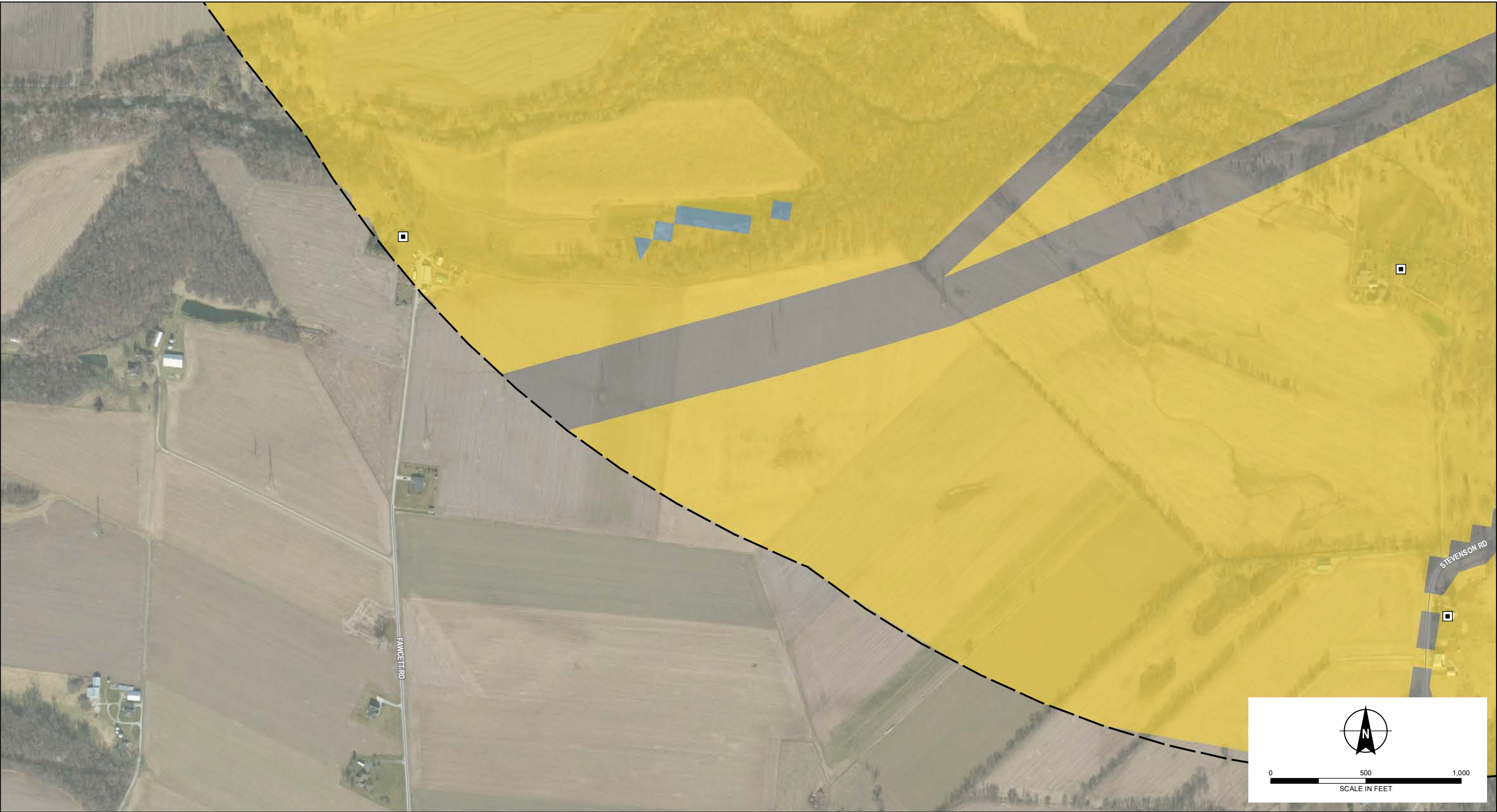


Figure 08-11
Land Use within One Mile
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Kingwood Solar
Greene County, Ohio



RESIDENCE

SCHOOL

PLACE OF WORSHIP

CIVIC BUILDING

COMMERCIAL BUILDING

INDUSTRIAL BUILDING

OTHER OCCUPIED PLACE

ROAD

HIGHWAY

OPSB LAND COVER CATEGORY

AGRICULTURAL

COMMERCIAL

INDUSTRIAL

INFRASTRUCTURE

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RECREATIONAL

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PROJECT AREA

1-MILE BUFFER OF PROJECT AREA

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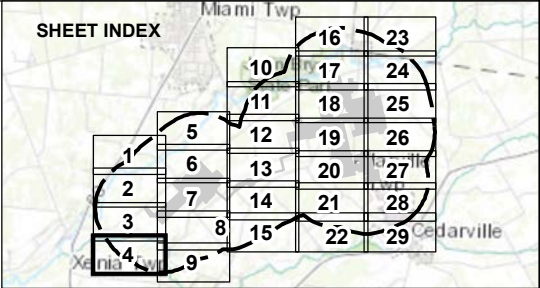


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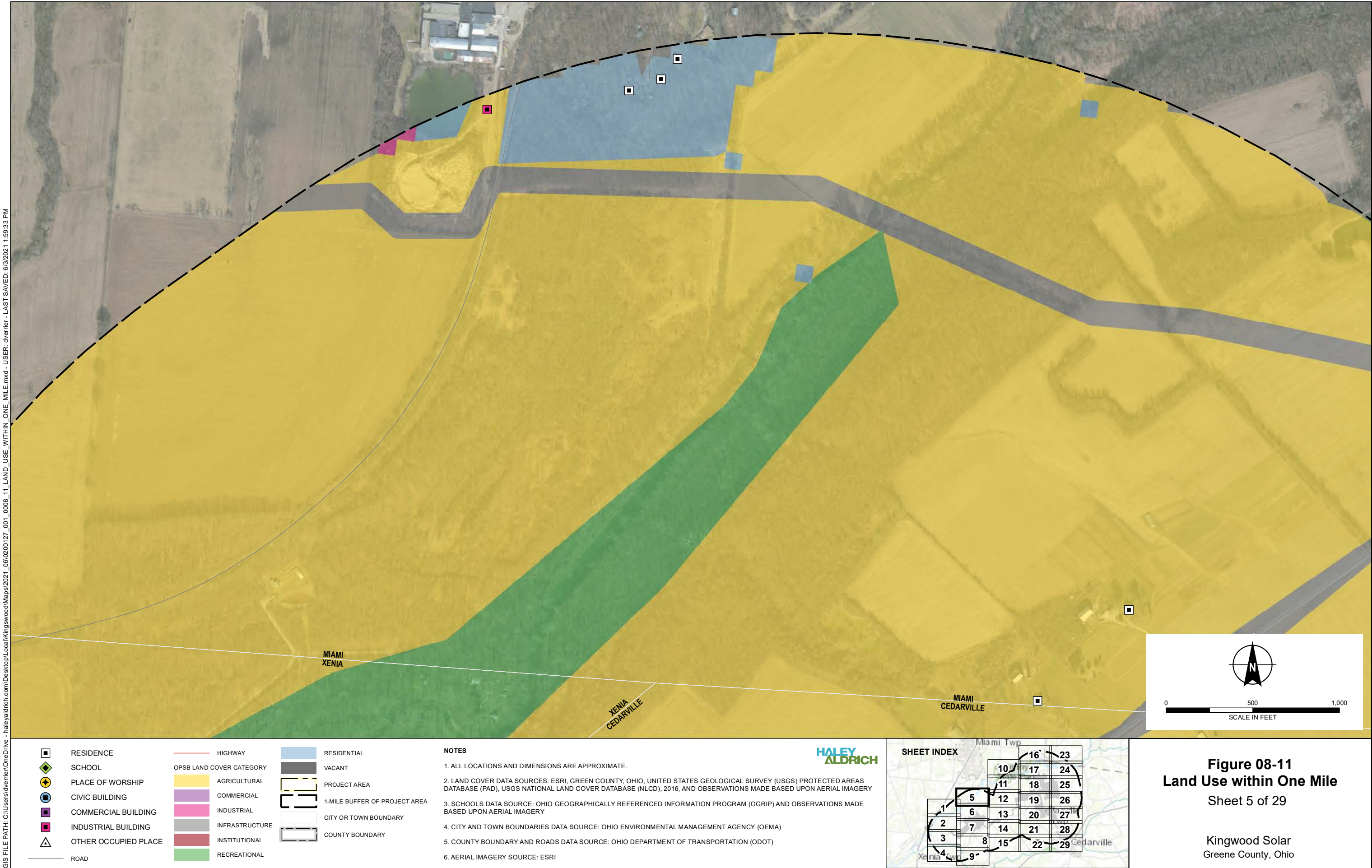
Land Use within One Mile

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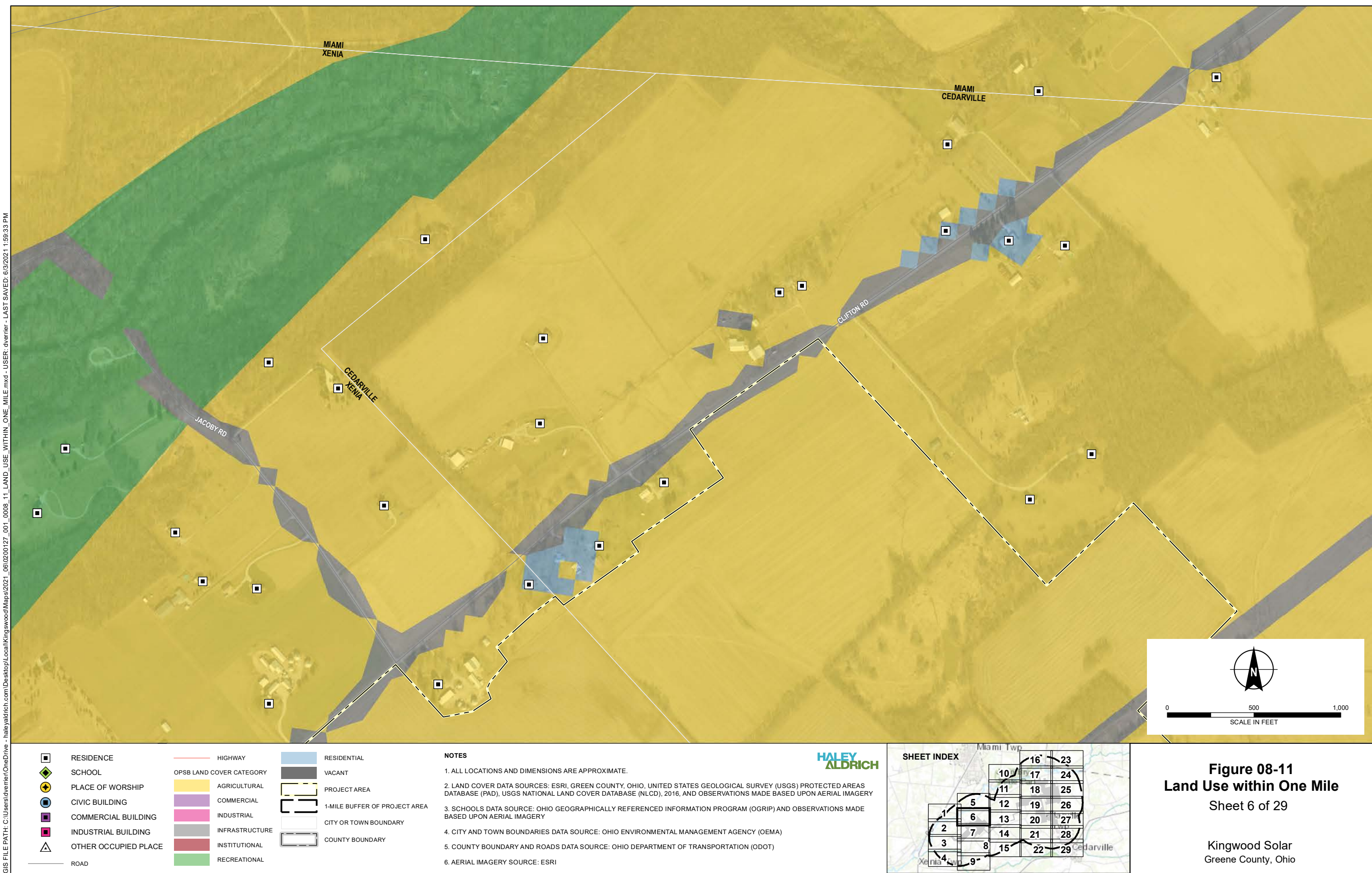
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Greene County, Ohio

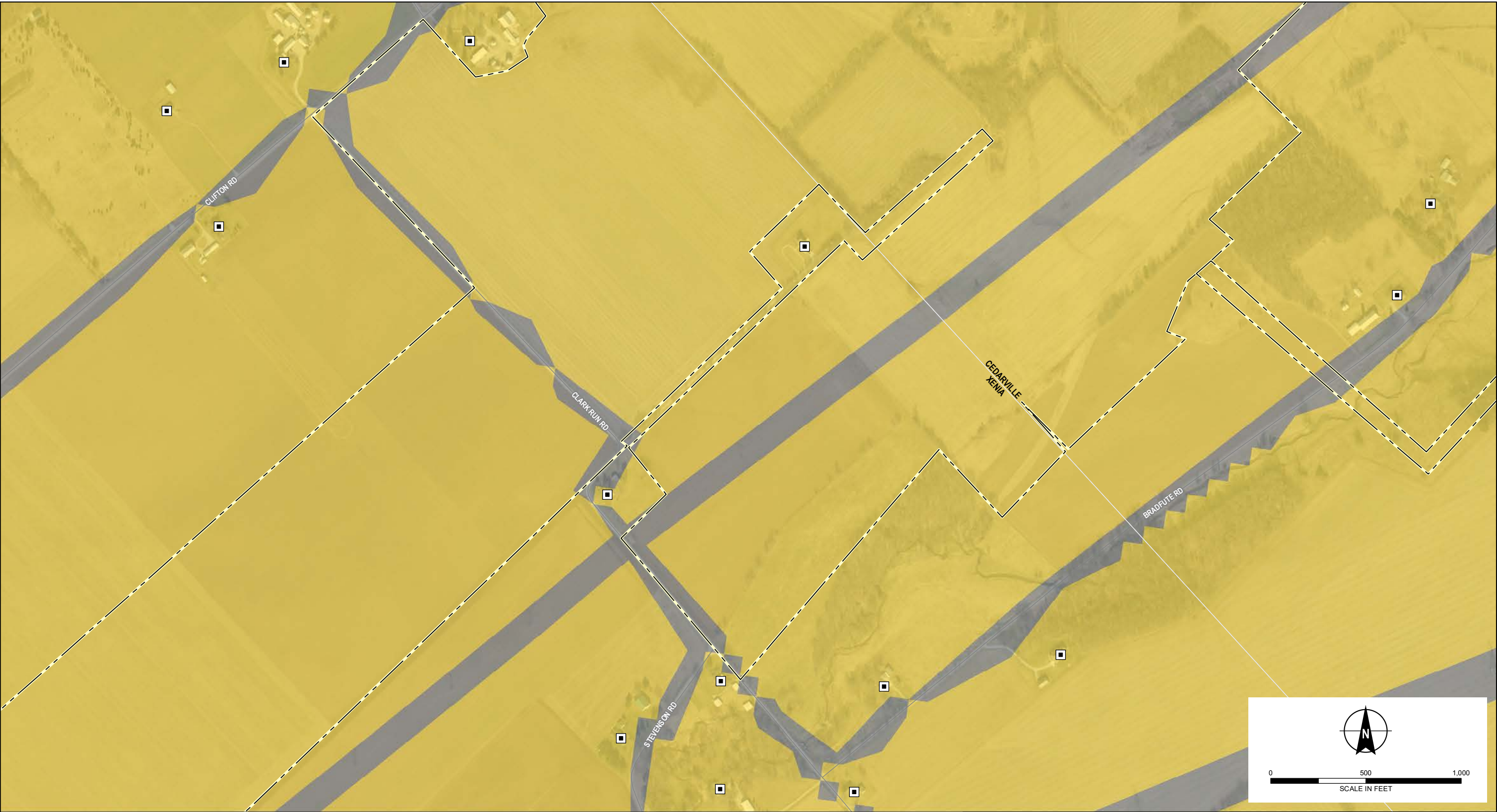
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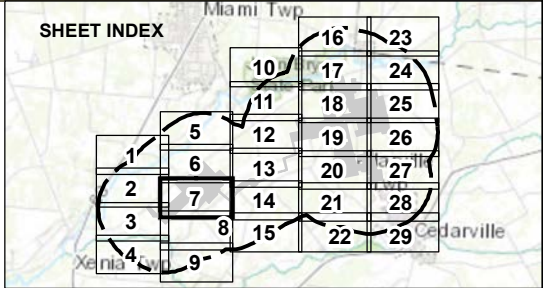


Figure 08-11
Land Use within One Mile
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Kingwood Solar
Greene County, Ohio

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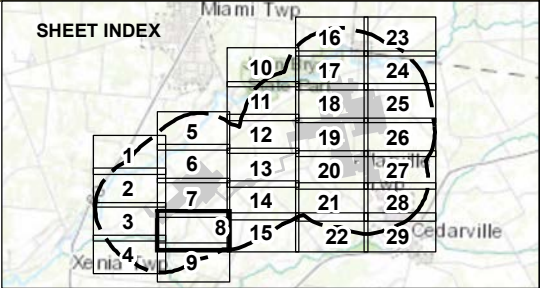


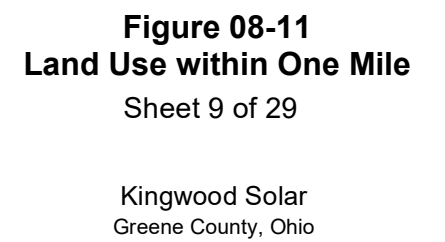
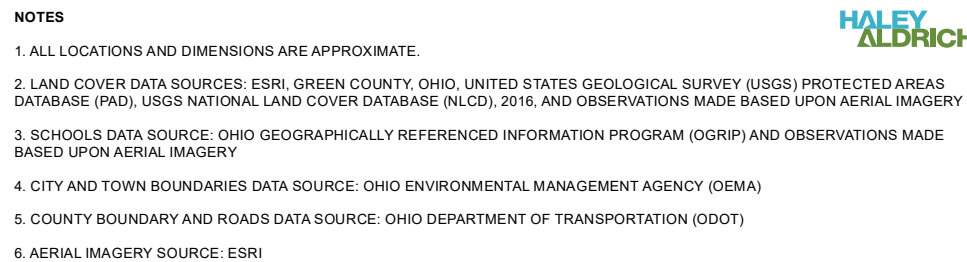
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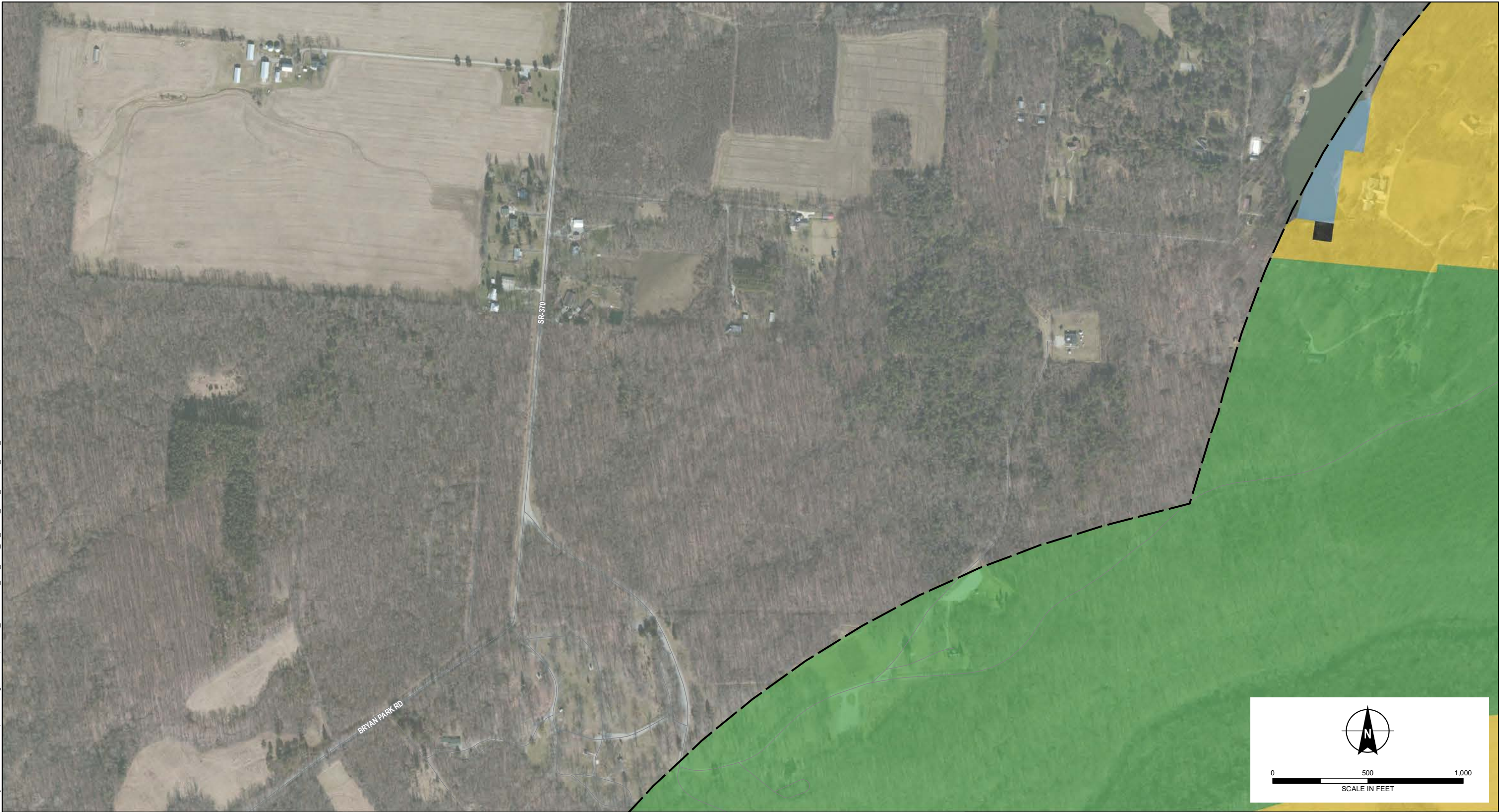
Land Use within One Mile

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Kingwood Solar

Greene County, Ohio





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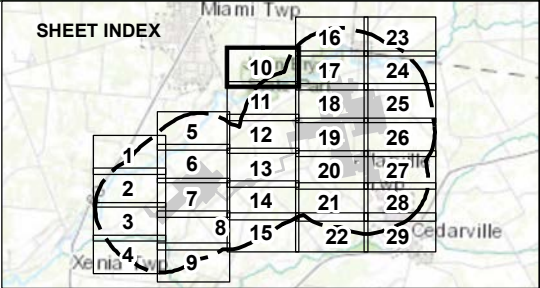


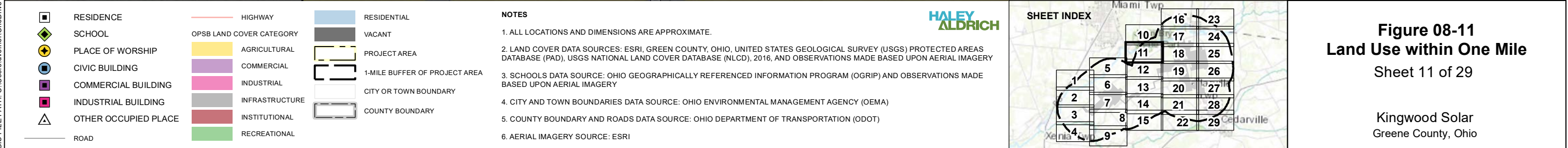
Figure 08-11

Land Use within One Mile

Sheet 10 of 29

Kingwood Solar

Greene County, Ohio



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INDUSTRIAL

INFRASTRUCTURE

INSTITUTIONAL

RECREATIONAL

RESIDENTIAL

VACANT

PROJECT AREA

1-MILE BUFFER OF PROJECT AREA

CITY OR TOWN BOUNDARY

COUNTY BOUNDARY

HALEY
ALDRICH

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. LAND COVER DATA SOURCES: ESRI, GREEN COUNTY, OHIO, UNITED STATES GEOLOGICAL SURVEY (USGS) PROTECTED AREAS DATABASE (PAD), USGS NATIONAL LAND COVER DATABASE (NLCD), 2016, AND OBSERVATIONS MADE BASED UPON AERIAL IMAGERY

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5. COUNTY BOUNDARY AND ROADS DATA SOURCE: OHIO DEPARTMENT OF TRANSPORTATION (ODOT)

6. AERIAL IMAGERY SOURCE: ESRI

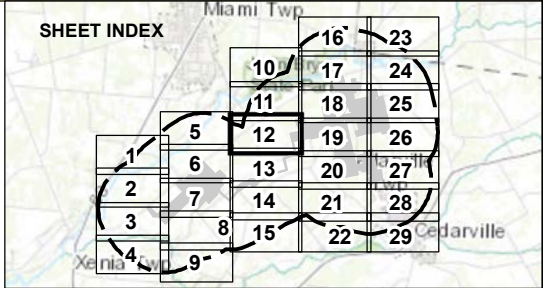
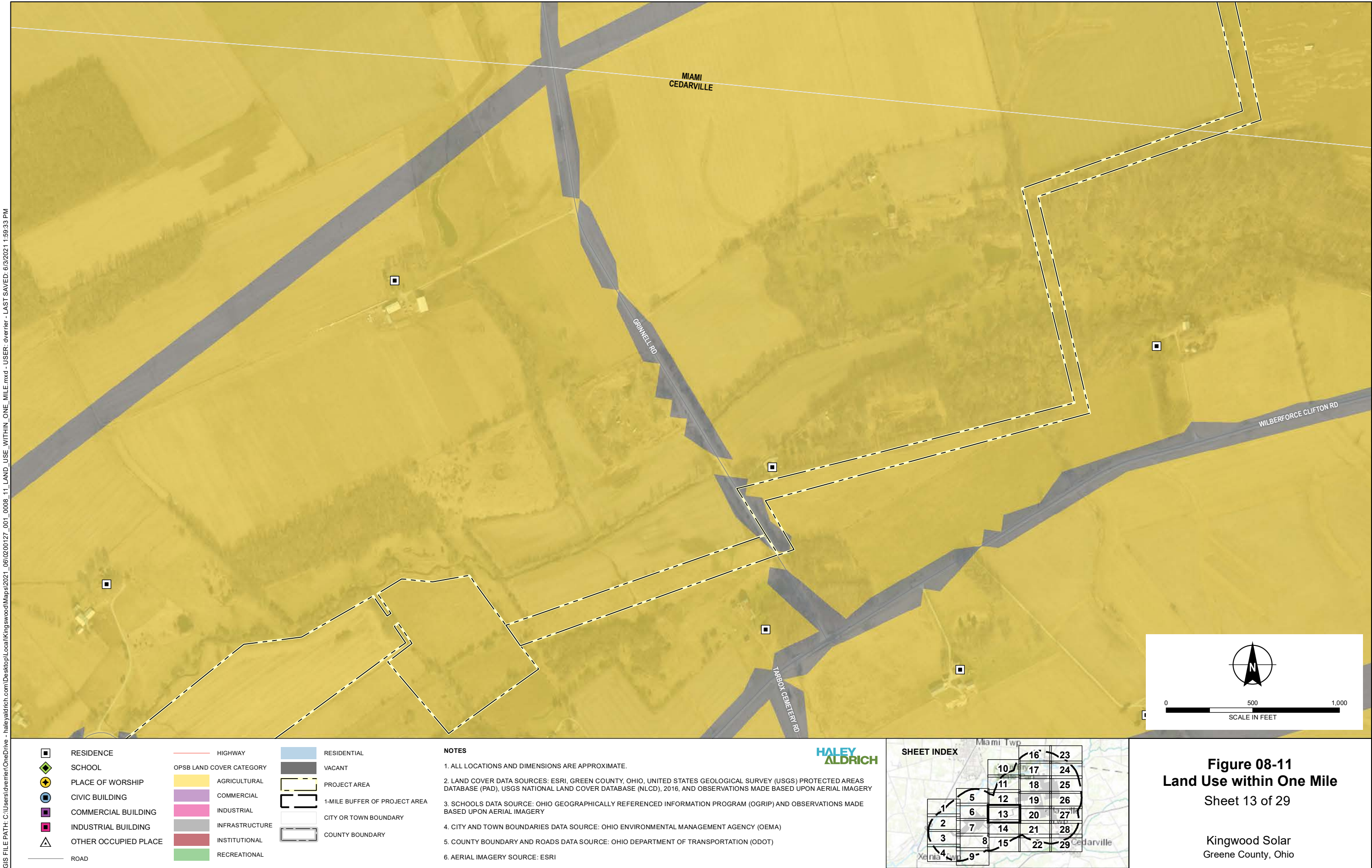
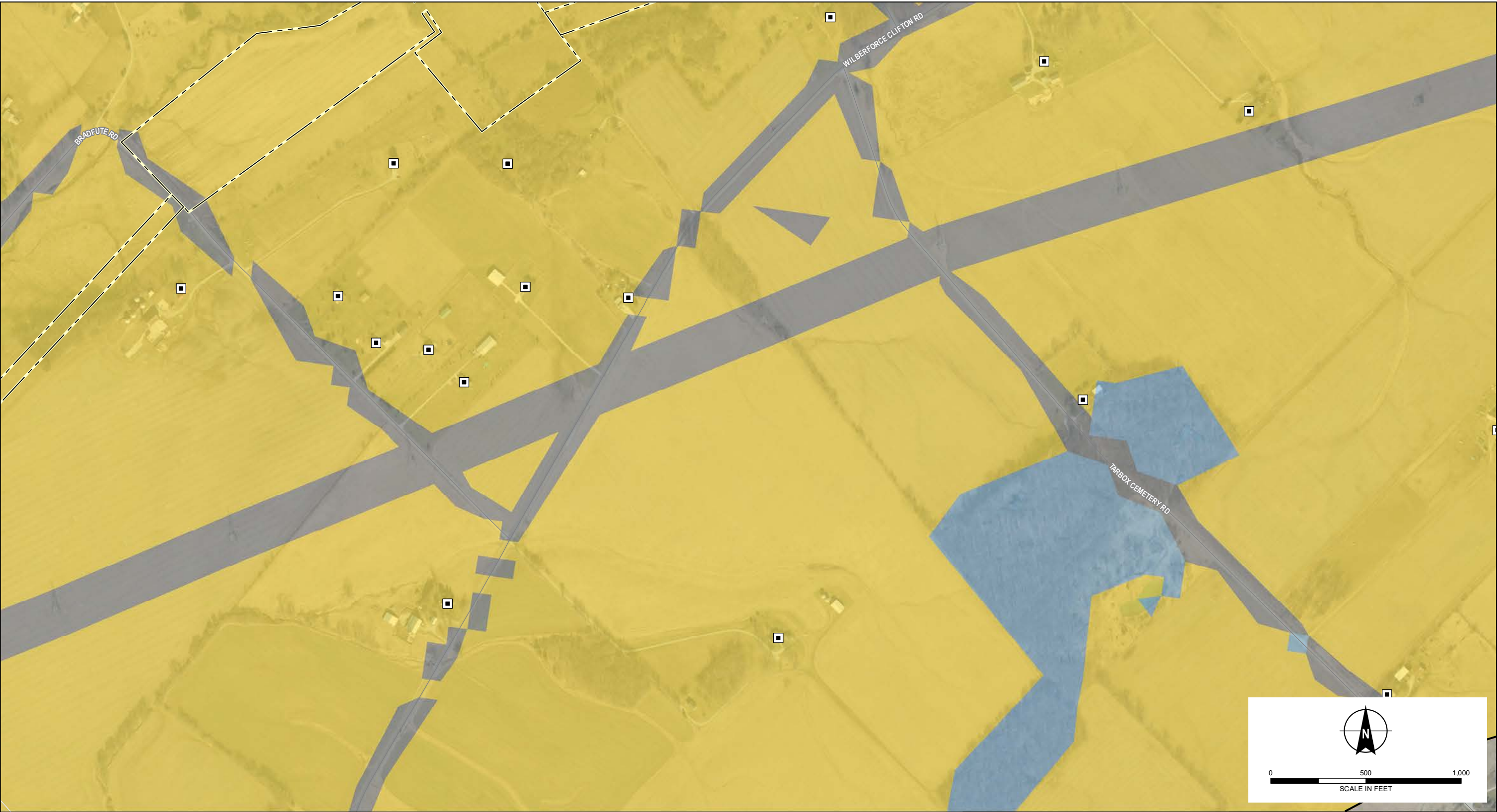


Figure 08-11
Land Use within One Mile
Sheet 12 of 29

Kingwood Solar
Greene County, Ohio



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- | | | | | | |
|--|----------------------|--|--------------------------|--|-------------------------------|
| | RESIDENCE | | HIGHWAY | | RESIDENTIAL |
| | SCHOOL | | OPSB LAND COVER CATEGORY | | VACANT |
| | PLACE OF WORSHIP | | AGRICULTURAL | | PROJECT AREA |
| | CIVIC BUILDING | | COMMERCIAL | | 1-MILE BUFFER OF PROJECT AREA |
| | COMMERCIAL BUILDING | | INDUSTRIAL | | CITY OR TOWN BOUNDARY |
| | INDUSTRIAL BUILDING | | INFRASTRUCTURE | | COUNTY BOUNDARY |
| | OTHER OCCUPIED PLACE | | INSTITUTIONAL | | |
| | ROAD | | RECREATIONAL | | |

NOTES

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HALEY
ALDRICH

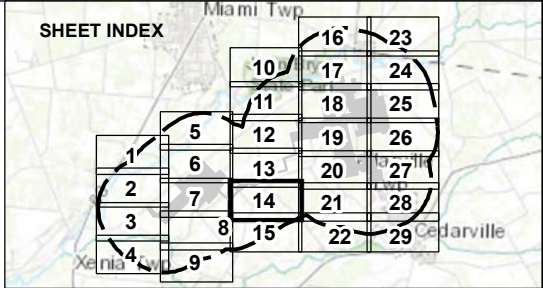
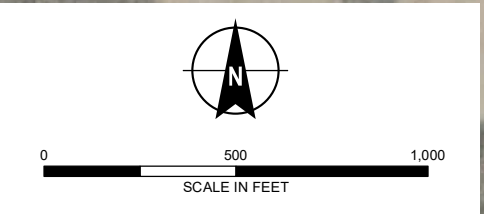
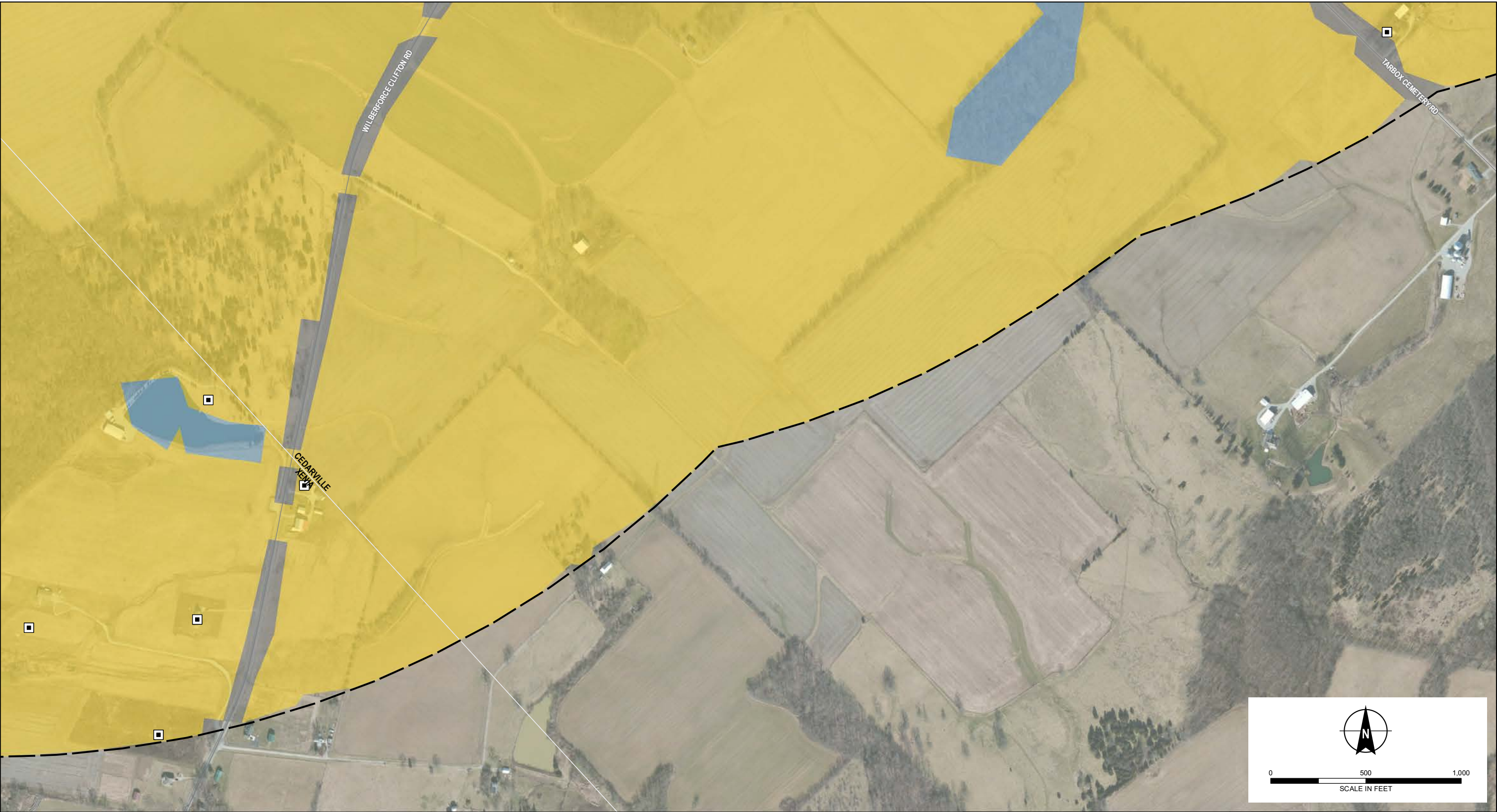


Figure 08-11
Land Use within One Mile
Sheet 14 of 29

Kingwood Solar
Greene County, Ohio

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|--|----------------------|--|--------------------------|--|-------------------------------|
| | RESIDENCE | | HIGHWAY | | RESIDENTIAL |
| | SCHOOL | | OPSB LAND COVER CATEGORY | | VACANT |
| | PLACE OF WORSHIP | | AGRICULTURAL | | PROJECT AREA |
| | CIVIC BUILDING | | COMMERCIAL | | 1-MILE BUFFER OF PROJECT AREA |
| | COMMERCIAL BUILDING | | INDUSTRIAL | | CITY OR TOWN BOUNDARY |
| | INDUSTRIAL BUILDING | | INFRASTRUCTURE | | COUNTY BOUNDARY |
| | OTHER OCCUPIED PLACE | | INSTITUTIONAL | | |
| | ROAD | | RECREATIONAL | | |

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- HALEY ALDRICH**

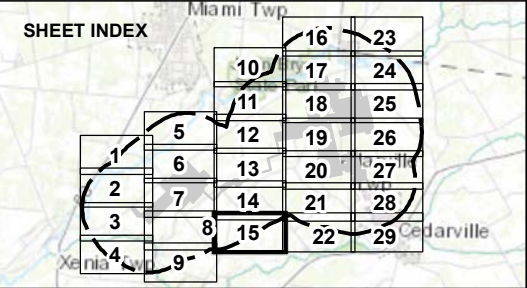
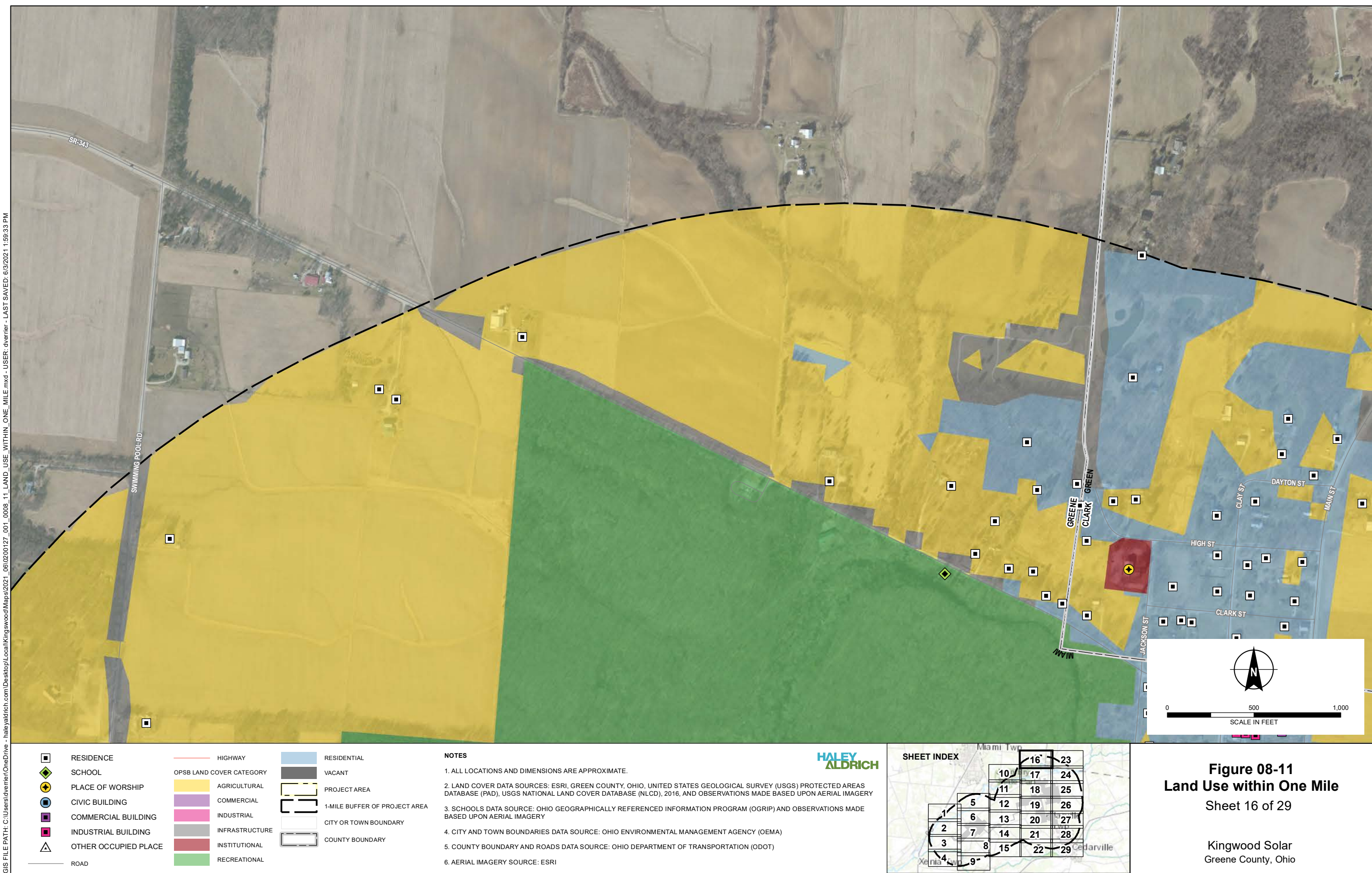
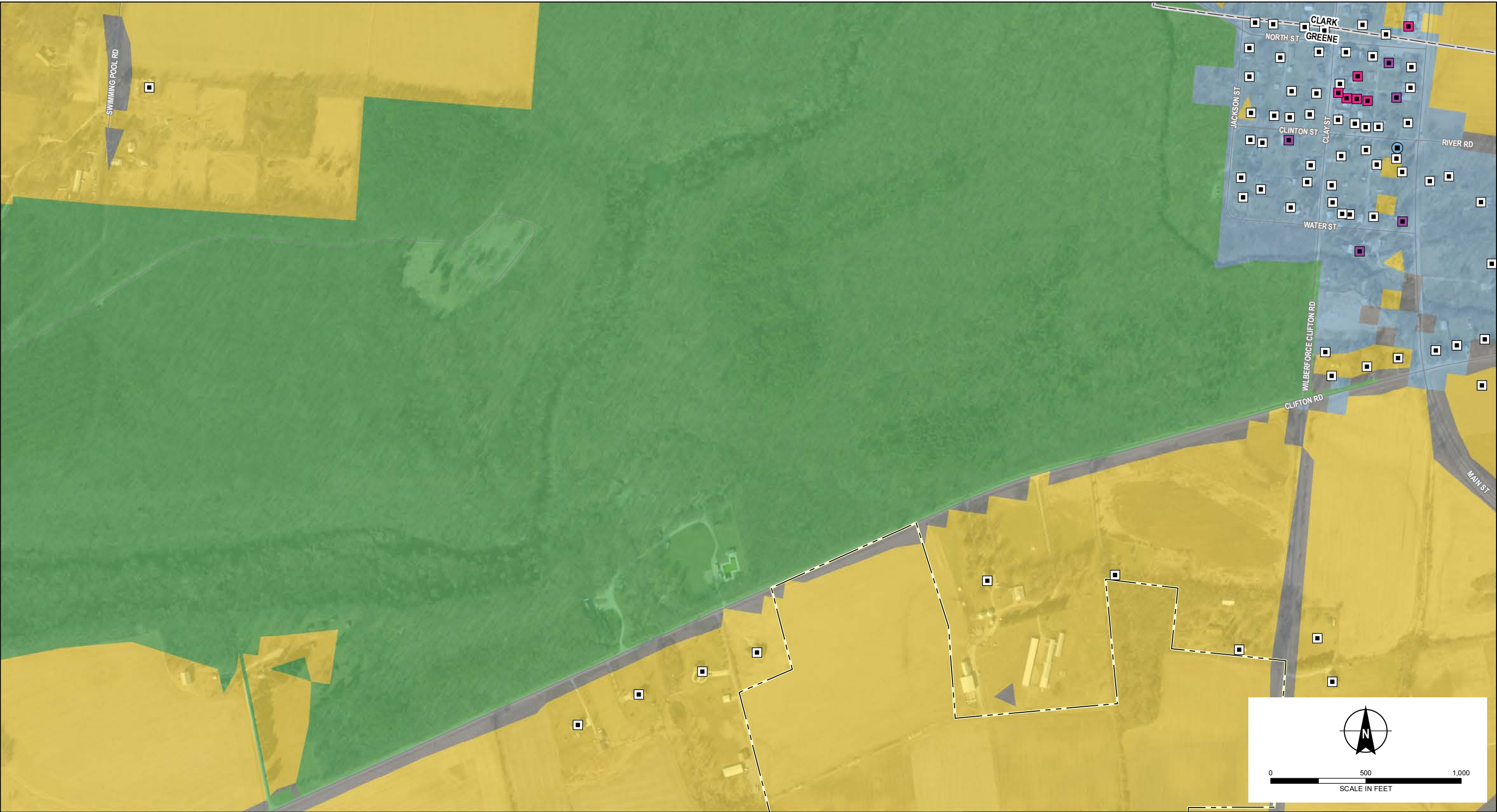


Figure 08-11
Land Use within One Mile
Sheet 15 of 29

Kingwood Solar
Greene County, Ohio





- | | | | | | |
|--|----------------------|--|----------------|--|-------------------------------|
| | RESIDENCE | | HIGHWAY | | RESIDENTIAL |
| | SCHOOL | | AGRICULTURAL | | VACANT |
| | PLACE OF WORSHIP | | COMMERCIAL | | PROJECT AREA |
| | CIVIC BUILDING | | INDUSTRIAL | | 1-MILE BUFFER OF PROJECT AREA |
| | COMMERCIAL BUILDING | | INFRASTRUCTURE | | CITY OR TOWN BOUNDARY |
| | INDUSTRIAL BUILDING | | INSTITUTIONAL | | COUNTY BOUNDARY |
| | OTHER OCCUPIED PLACE | | RECREATIONAL | | |
| | ROAD | | | | |

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- HALEY ALDRICH**

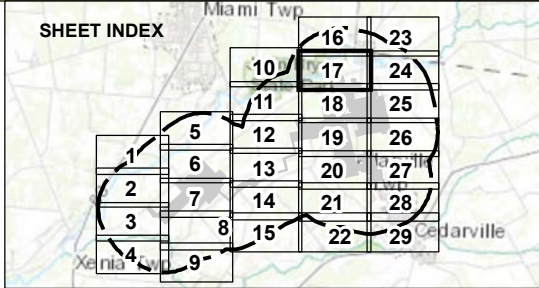


Figure 08-11
Land Use within One Mile
Sheet 17 of 29

Kingwood Solar
Greene County, Ohio

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RESIDENCE

SCHOOL

PLACE OF WORSHIP

CIVIC BUILDING

COMMERCIAL BUILDING

INDUSTRIAL BUILDING

OTHER OCCUPIED PLACE

ROAD

HIGHWAY

OPSB LAND COVER CATEGORY

AGRICULTURAL

COMMERCIAL

INDUSTRIAL

INFRASTRUCTURE

INSTITUTIONAL

RECREATIONAL

RESIDENTIAL

VACANT

PROJECT AREA

1-MILE BUFFER OF PROJECT AREA

CITY OR TOWN BOUNDARY

COUNTY BOUNDARY

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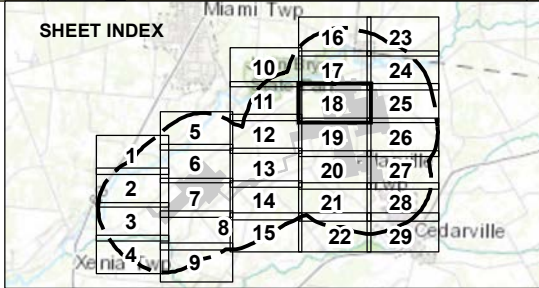
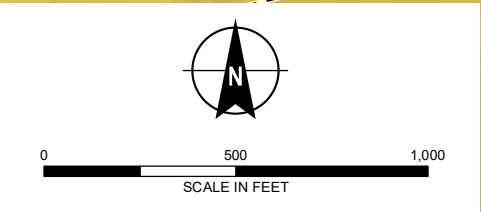
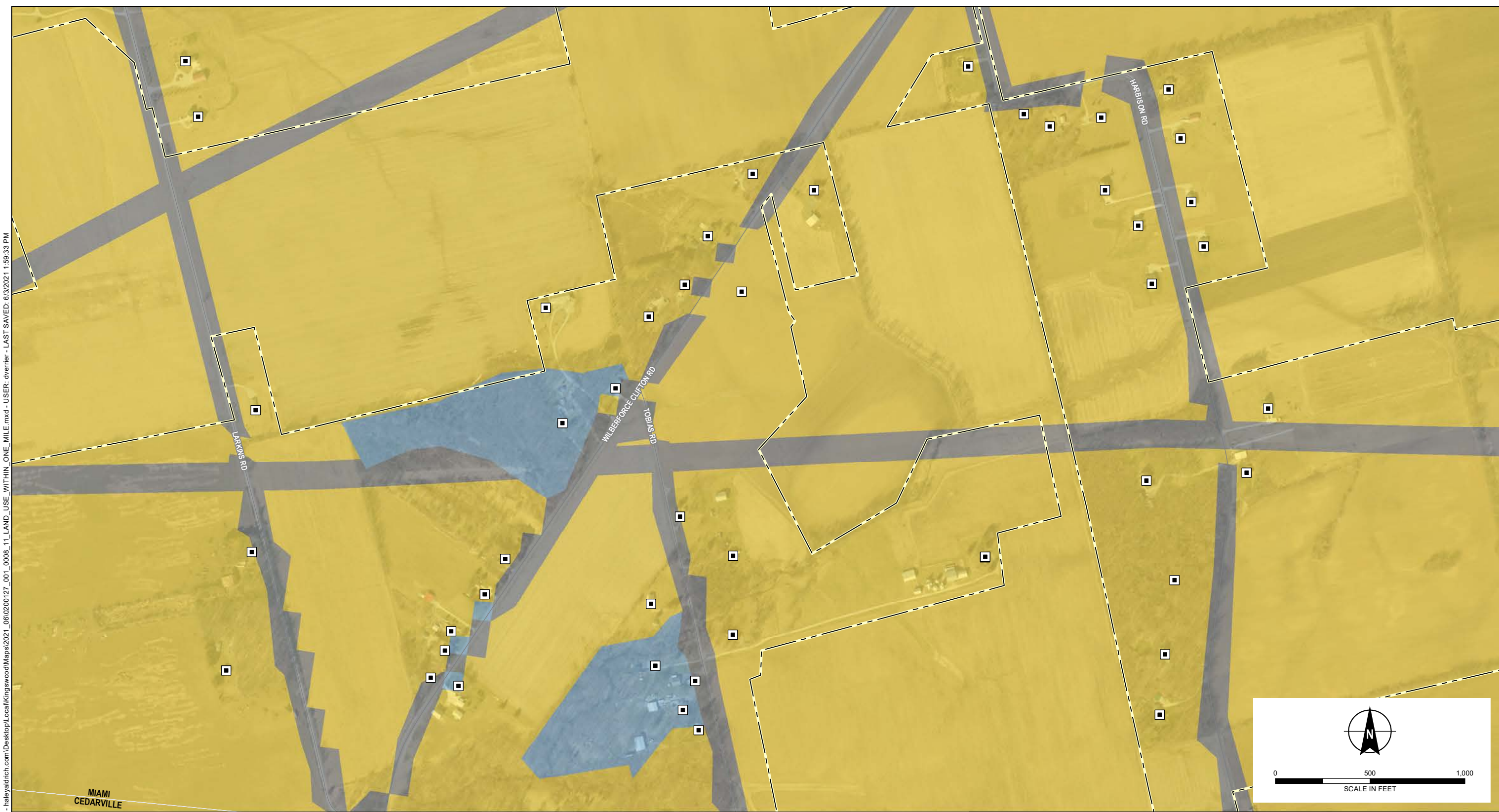


Figure 08-11
Land Use within One Mile
Sheet 18 of 29

Kingwood Solar
Greene County, Ohio

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- | | | |
|----------------------|--------------------------|-------------------------------|
| RESIDENCE | HIGHWAY | RESIDENTIAL |
| SCHOOL | OPSB LAND COVER CATEGORY | VACANT |
| PLACE OF WORSHIP | AGRICULTURAL | PROJECT AREA |
| CIVIC BUILDING | COMMERCIAL | 1-MILE BUFFER OF PROJECT AREA |
| COMMERCIAL BUILDING | INDUSTRIAL | CITY OR TOWN BOUNDARY |
| INDUSTRIAL BUILDING | INFRASTRUCTURE | COUNTY BOUNDARY |
| OTHER OCCUPIED PLACE | INSTITUTIONAL | |
| ROAD | RECREATIONAL | |

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HALEY
ALDRICH

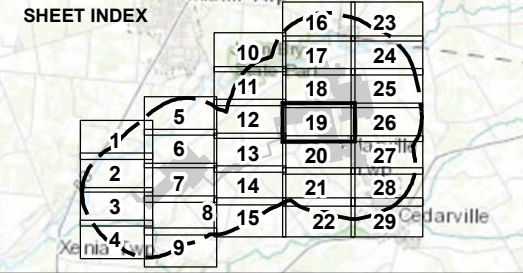
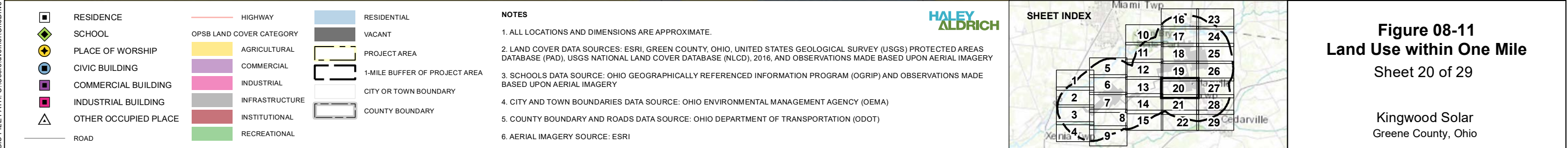
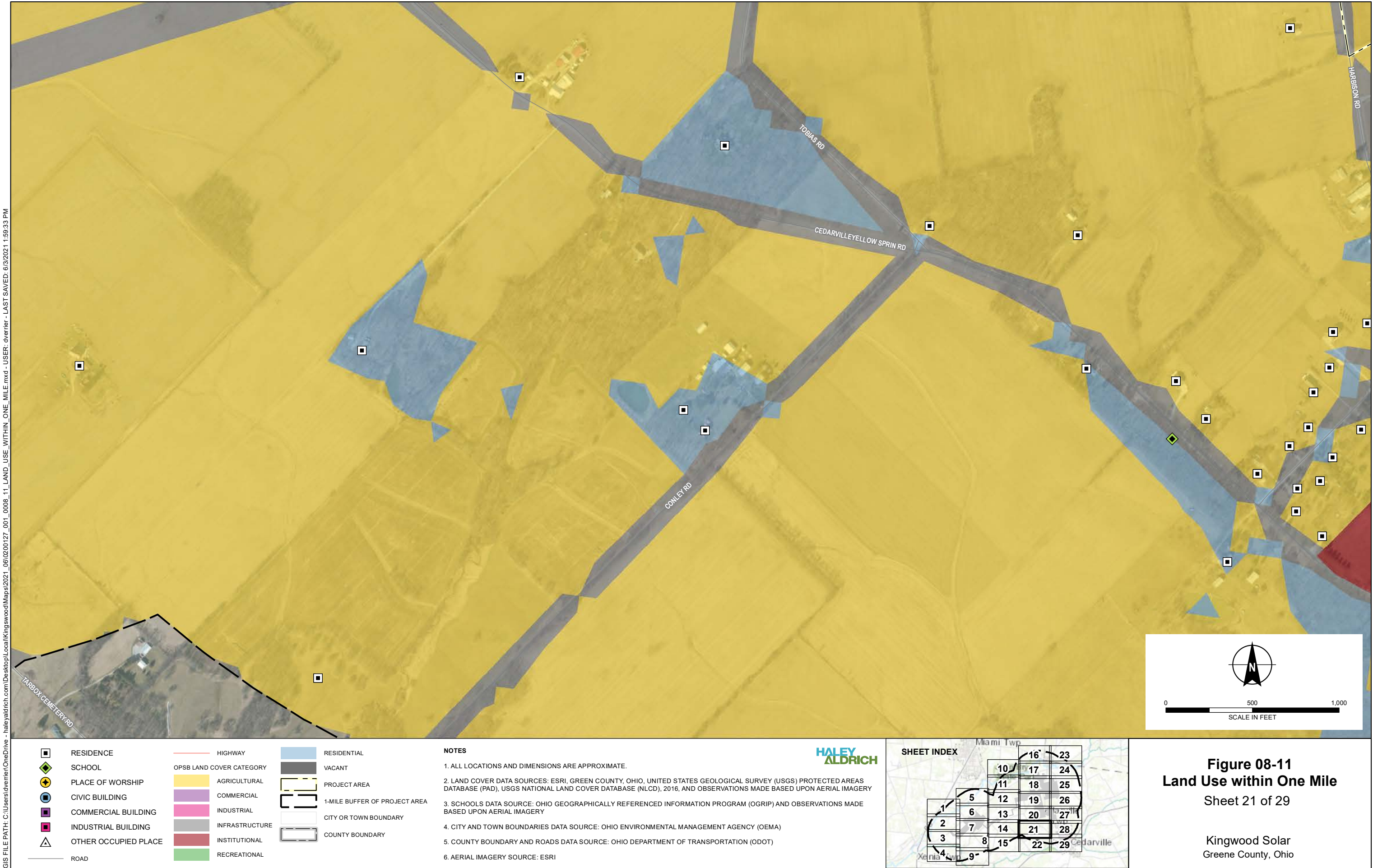


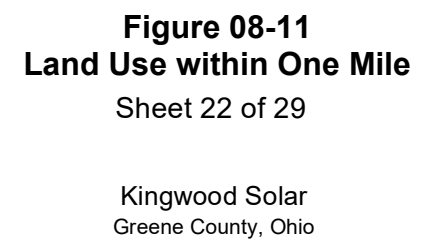
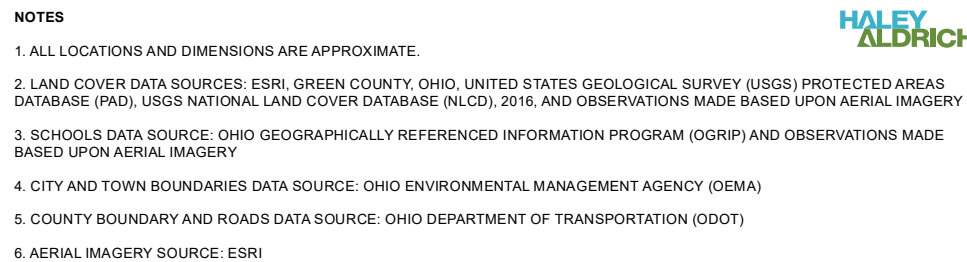
Figure 08-11
Land Use within One Mile
Sheet 19 of 29

Kingwood Solar
Greene County, Ohio



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RESIDENCE

SCHOOL

PLACE OF WORSHIP

CIVIC BUILDING

COMMERCIAL BUILDING

INDUSTRIAL BUILDING

OTHER OCCUPIED PLACE

ROAD

HIGHWAY

OPSB LAND COVER CATEGORY

AGRICULTURAL

COMMERCIAL

INDUSTRIAL

INFRASTRUCTURE

INSTITUTIONAL

RECREATIONAL

RESIDENTIAL

VACANT

PROJECT AREA

1-MILE BUFFER OF PROJECT AREA

CITY OR TOWN BOUNDARY

COUNTY BOUNDARY

HALEY
ALDRICH

NOTES

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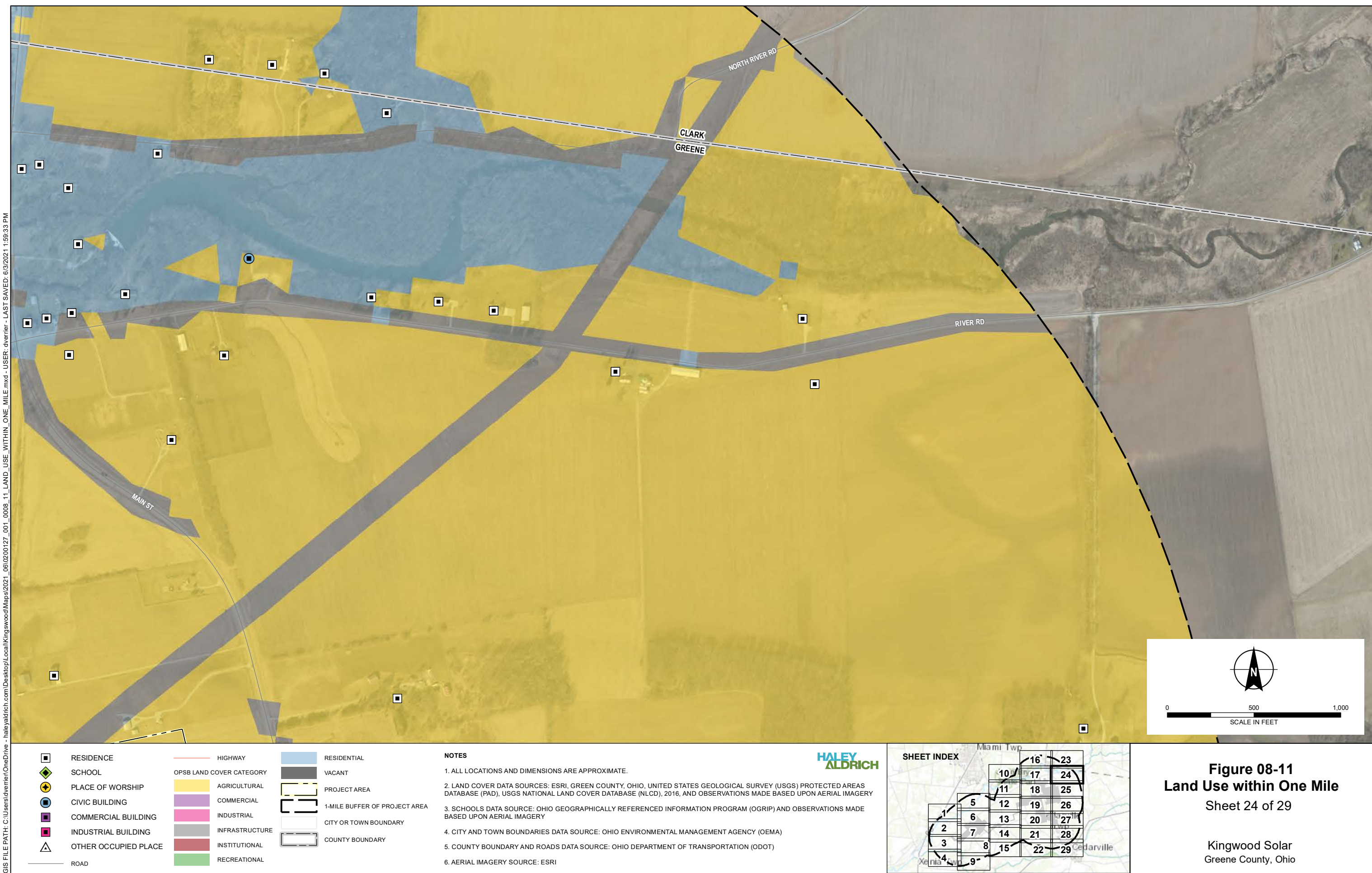
5. COUNTY BOUNDARY AND ROADS DATA SOURCE: OHIO DEPARTMENT OF TRANSPORTATION (ODOT)

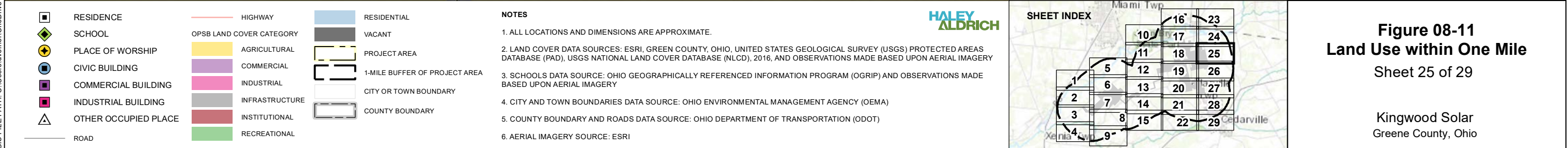
6. AERIAL IMAGERY SOURCE: ESRI

Figure 08-11
Land Use within One Mile
Sheet 23 of 29

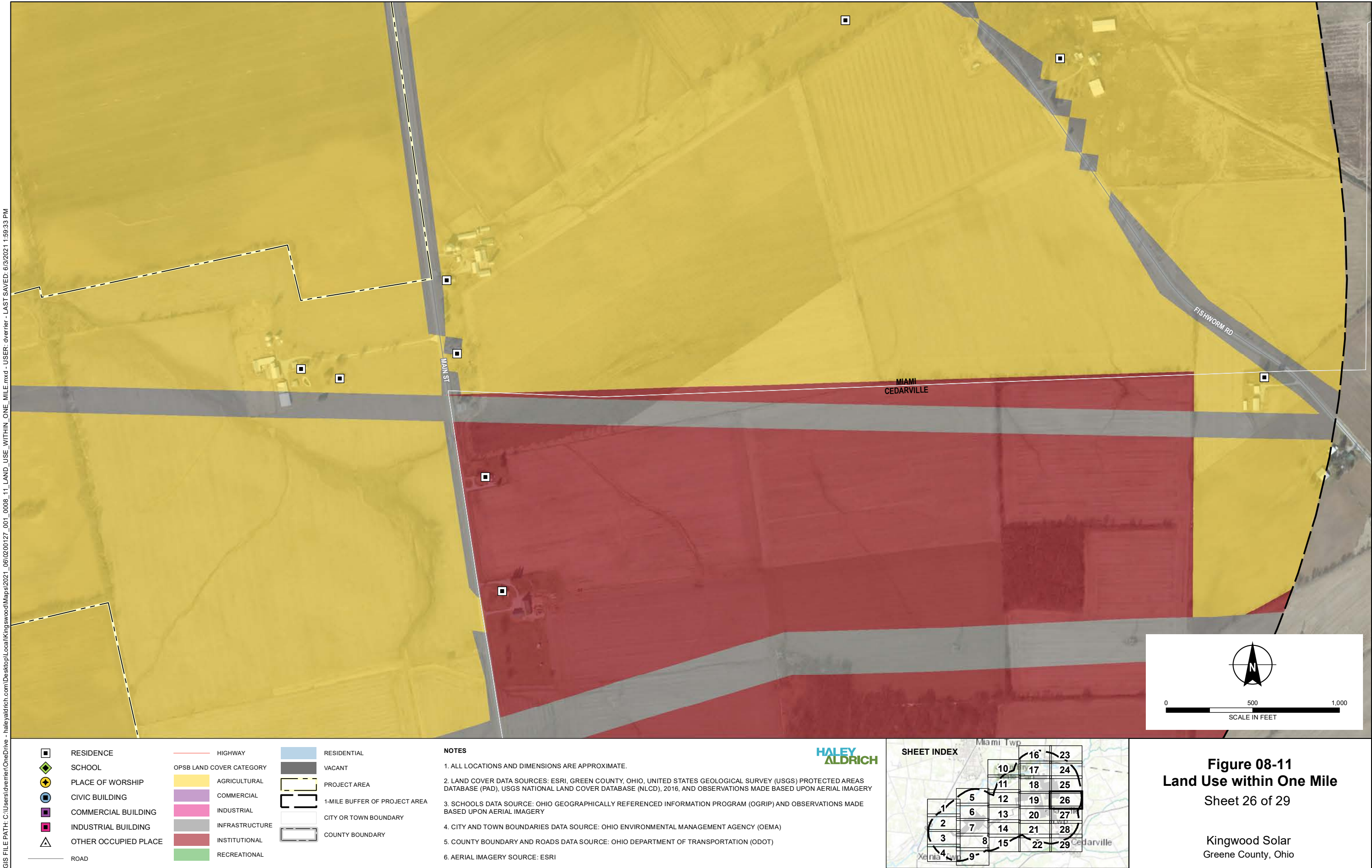
Kingwood Solar
Greene County, Ohio

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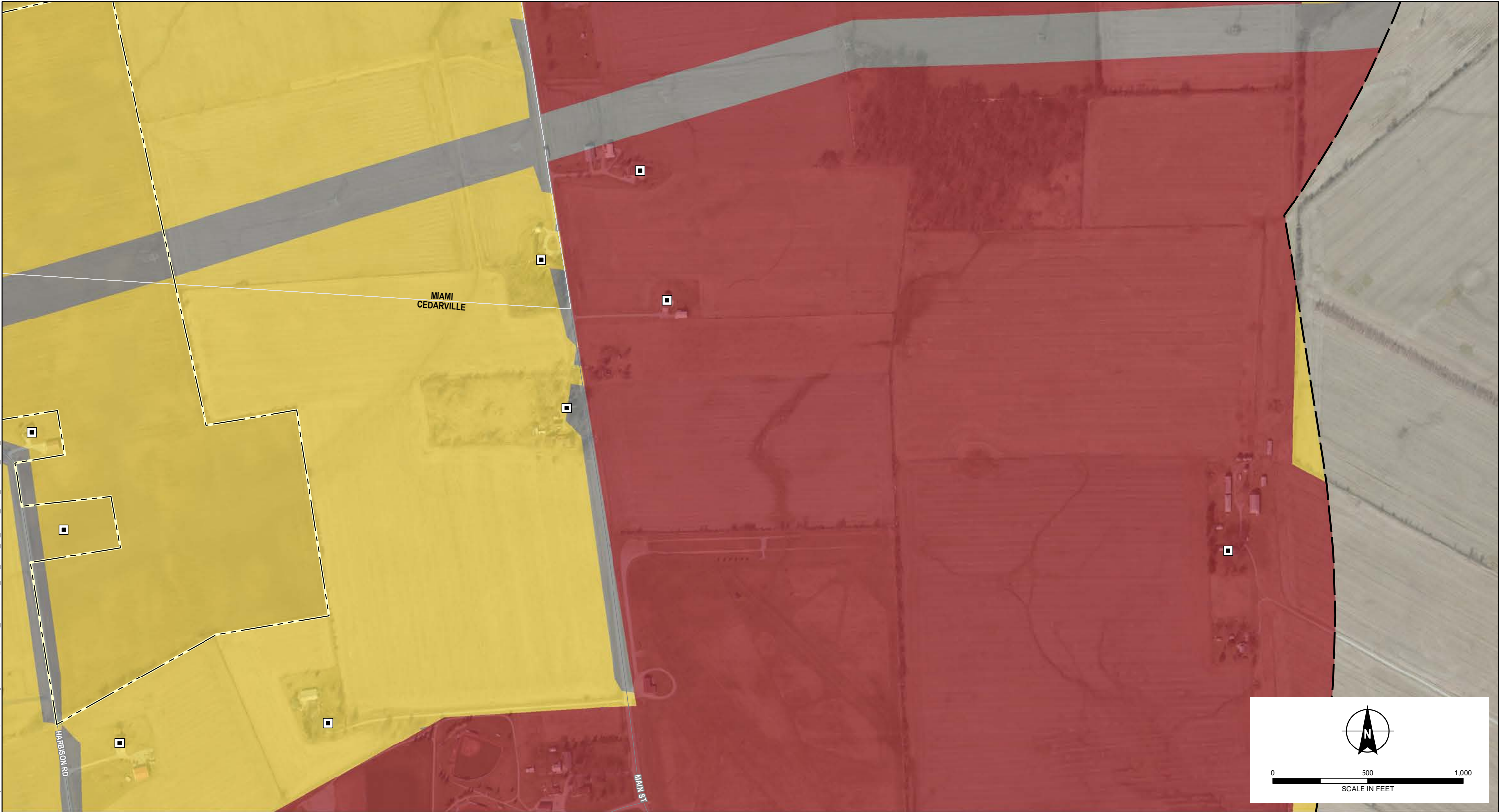




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- RESIDENCE

SCHOOL

PLACE OF WORSHIP

CIVIC BUILDING

COMMERCIAL BUILDING

INDUSTRIAL BUILDING

OTHER OCCUPIED PLACE

ROAD
- HIGHWAY

OPSB LAND COVER CATEGORY

AGRICULTURAL

COMMERCIAL

INDUSTRIAL

INFRASTRUCTURE

INSTITUTIONAL

RECREATIONAL
- RESIDENTIAL

VACANT

PROJECT AREA

1-MILE BUFFER OF PROJECT AREA

CITY OR TOWN BOUNDARY

COUNTY BOUNDARY

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HALEY
ALDRICH

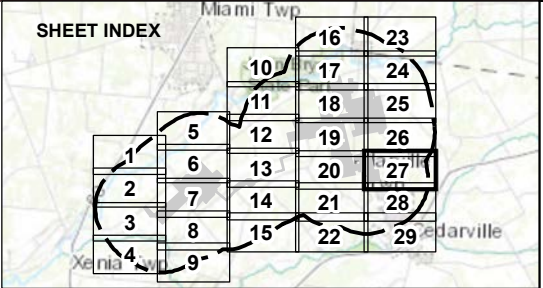
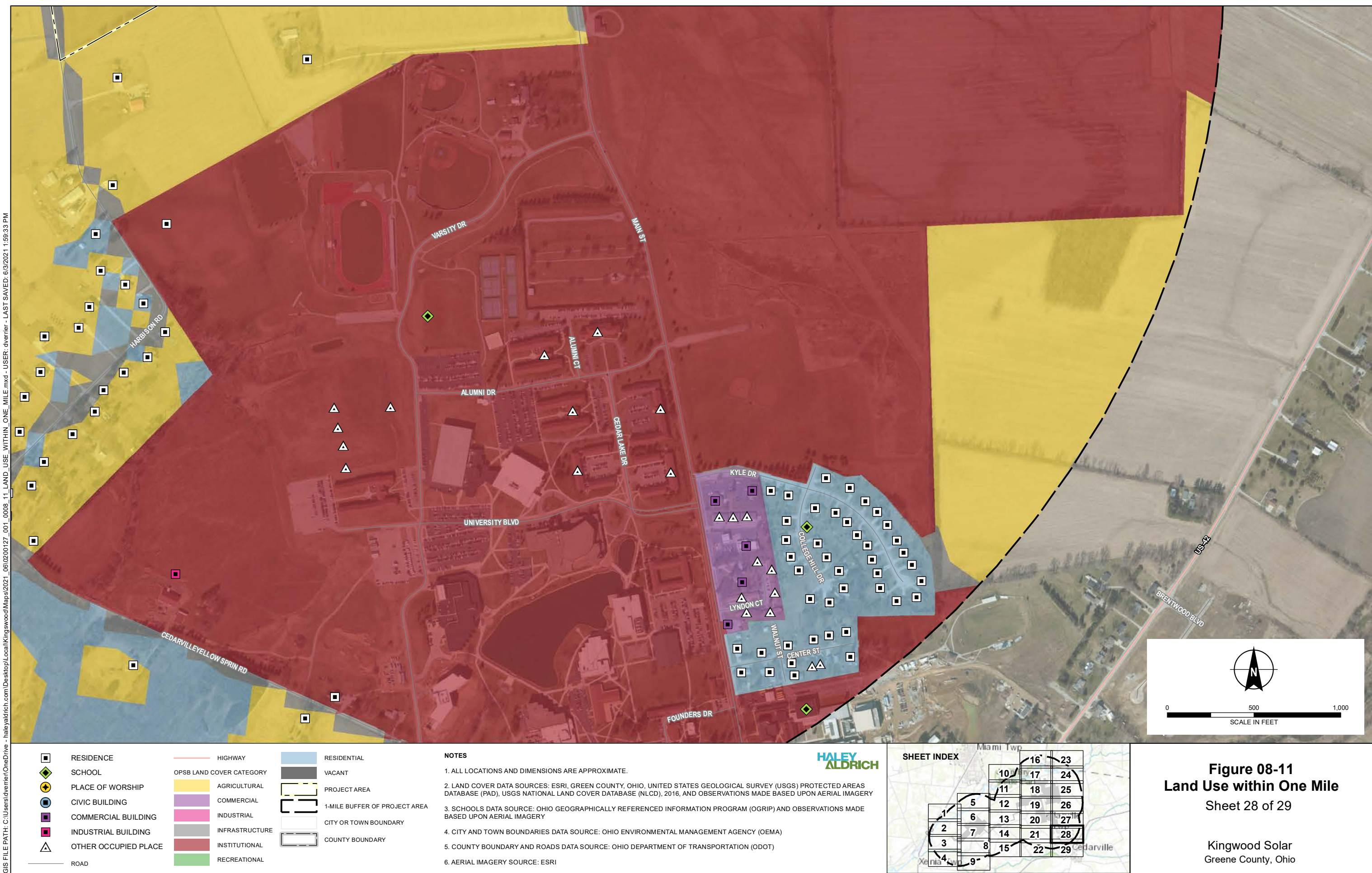


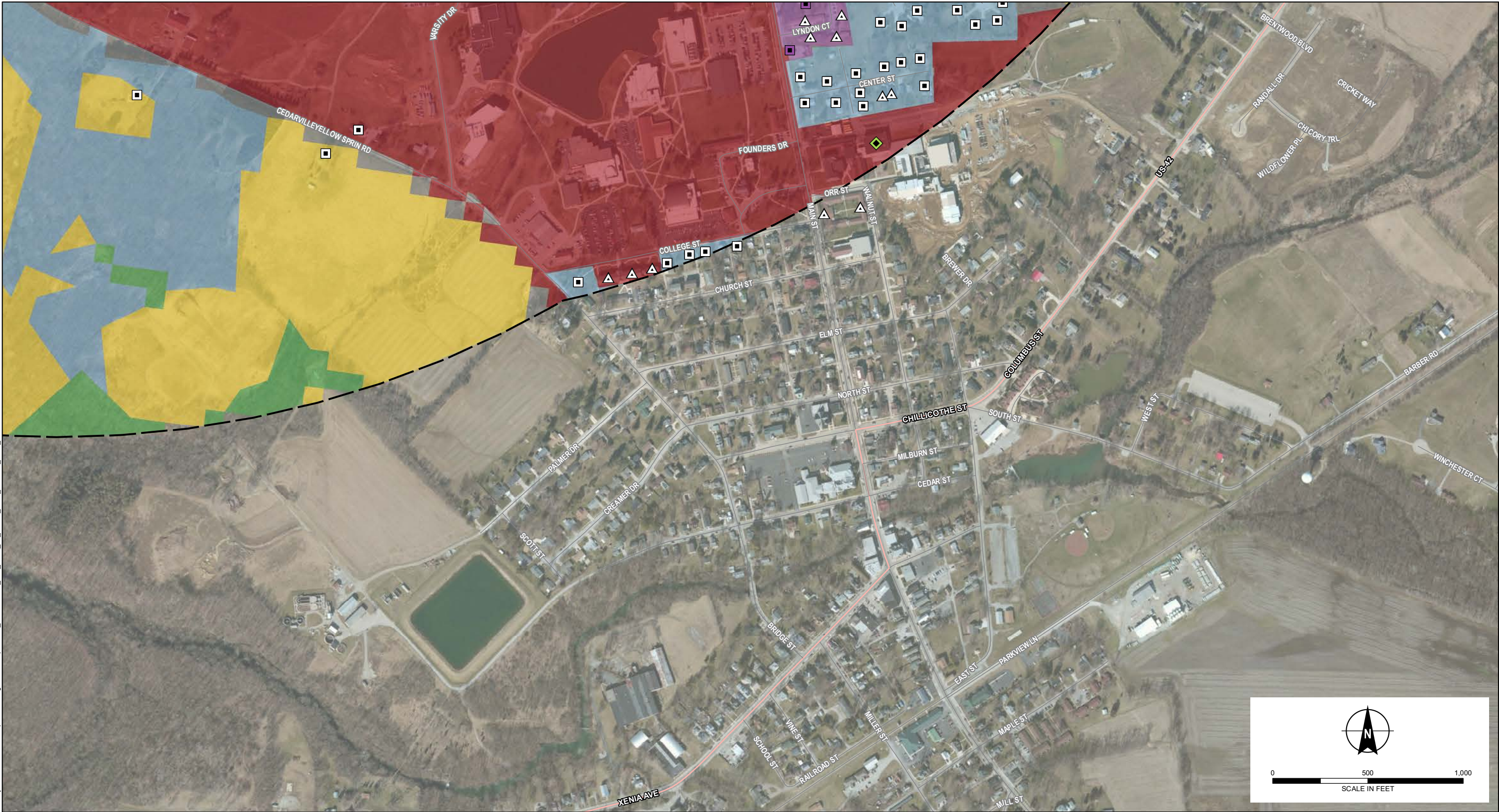
Figure 08-11
Land Use within One Mile
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Kingwood Solar
Greene County, Ohio

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RESIDENCE

SCHOOL

PLACE OF WORSHIP

CIVIC BUILDING

COMMERCIAL BUILDING

INDUSTRIAL BUILDING

OTHER OCCUPIED PLACE

ROAD

HIGHWAY

OPSB LAND COVER CATEGORY

AGRICULTURAL

COMMERCIAL

INDUSTRIAL

INFRASTRUCTURE

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PROJECT AREA

1-MILE BUFFER OF PROJECT AREA

CITY OR TOWN BOUNDARY

COUNTY BOUNDARY

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6. AERIAL IMAGERY SOURCE: ESRI

SHEET INDEX

Figure 08-11

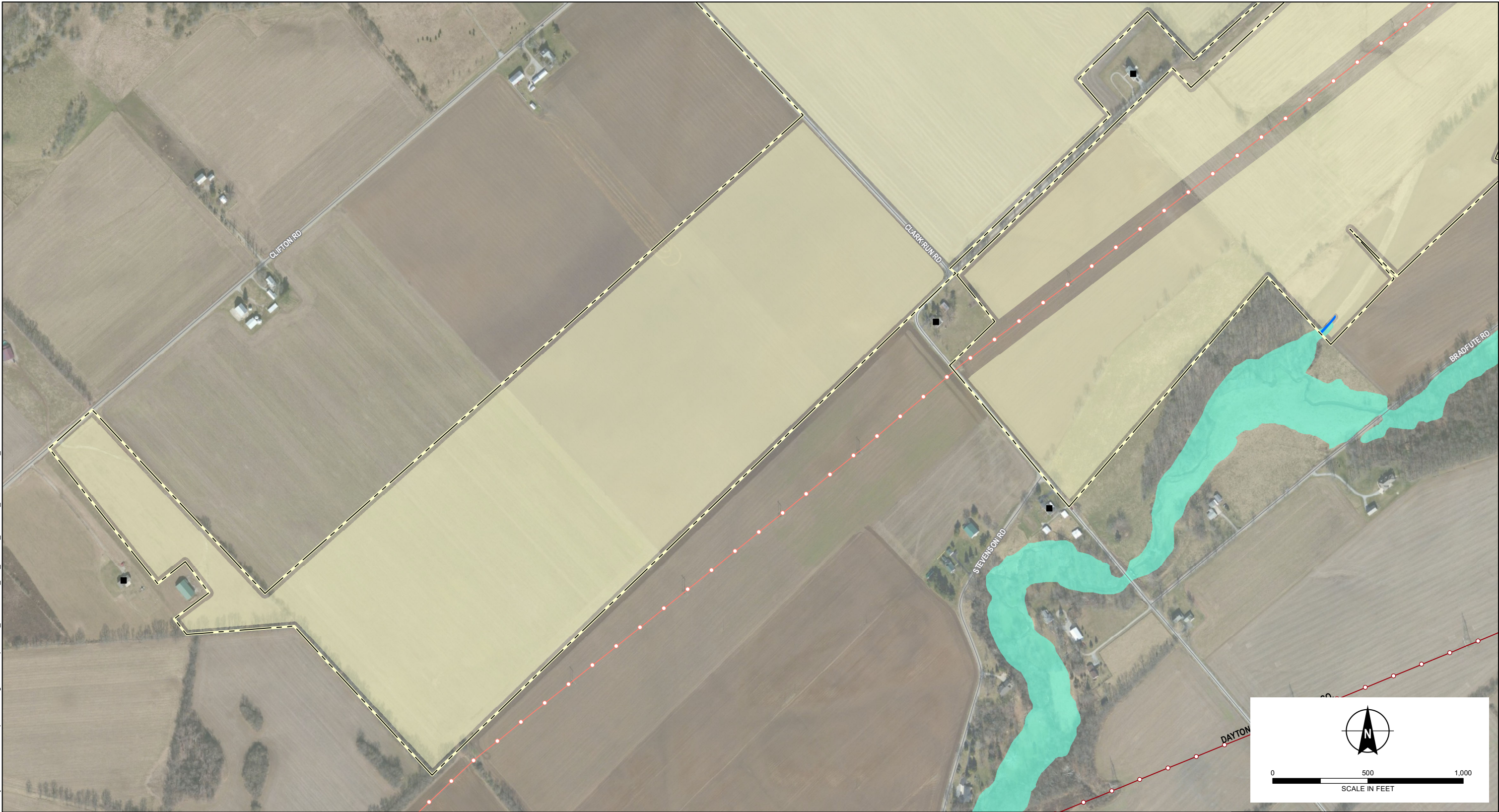
Land Use within One Mile

Sheet 29 of 29

Kingwood Solar

Greene County, Ohio

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LEGEND

- HOUSE

—○—

ELECTRIC TRANSMISSION LINE, BY VOLTAGE IN kV (KILOVOLTS)

—○—

138kV TRANSMISSION LINE

—○—

345kV TRANSMISSION LINE

—

NATURAL GAS PIPELINE

—

ROAD

—

HIGHWAY
- DELINEATED FEATURE

BUILDABLE AREA

1% ANNUAL CHANCE FLOOD HAZARD

PROJECT AREA

COUNTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. kV = KILOVOLTS

3. 1% ANNUAL FLOOD CHANCE HAZARD ZONES REPRESENT 100-YEAR FLOOD ZONES. 0.2% ANNUAL FLOOD CHANCE HAZARD ZONES REPRESENT 500-YEAR FLOOD ZONES.

4. ELECTRIC TRANSMISSION LINES DATA SOURCE: DEPARTMENT OF HOMELAND SECURITY (DHS) HOMELAND INFRASTRUCTURE FOUNDATION-LEVEL DATA (HIFLD)

5. NATURAL GAS PIPELINES DATA SOURCE: DIGITIZED AT 1:24,000 FROM UNITED STATES DEPARTMENT OF TRANSPORTATION (U.S. DOT) NATIONAL PIPELINE MAPPING SYSTEM (NPMS)

6. FLOOD ZONES DATA SOURCE: FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

7. DELINEATED STREAMS AND WETLANDS DATA SOURCE: FIELD OBSERVATIONS BY HALEY & ALDRICH.

8. ROADS DATA SOURCE: OHIO DEPARTMENT OF TRANSPORTATION (ODOT)

9. COUNTY BOUNDARY DATA SOURCE: OHIO DEPARTMENT OF TRANSPORTATION (ODOT)

10. AERIAL IMAGERY SOURCE: ESRI
-
- SHEET INDEX
-
- Figure DR1-13
Layout Constraint Considerations
- Sheet 1 of 9
- Kingwood Solar
Greene County, Ohio

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LEGEND

■

HOUSE

—○—

ELECTRIC TRANSMISSION LINE, BY VOLTAGE IN KV (KILOVOLTS)

—

138KV TRANSMISSION LINE

—

NATURAL GAS PIPELINE

—

ROAD

—

HIGHWAY

■

DELINEATED FEATURE

■

BUILDABLE AREA

■

1% ANNUAL CHANCE FLOOD HAZARD

■

0.2% ANNUAL CHANCE FLOOD HAZARD

■

PROJECT AREA

■

COUNTY BOUNDARY

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9. COUNTY BOUNDARY DATA SOURCE: OHIO DEPARTMENT OF TRANSPORTATION (ODOT)

10. AERIAL IMAGERY SOURCE: ESRI

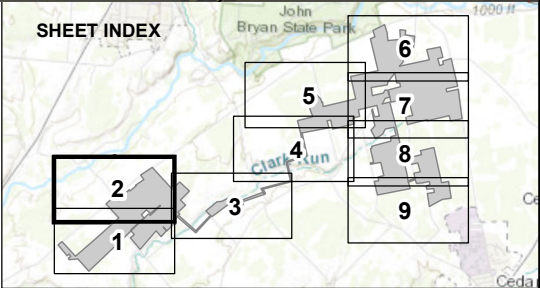


Figure DR1-13

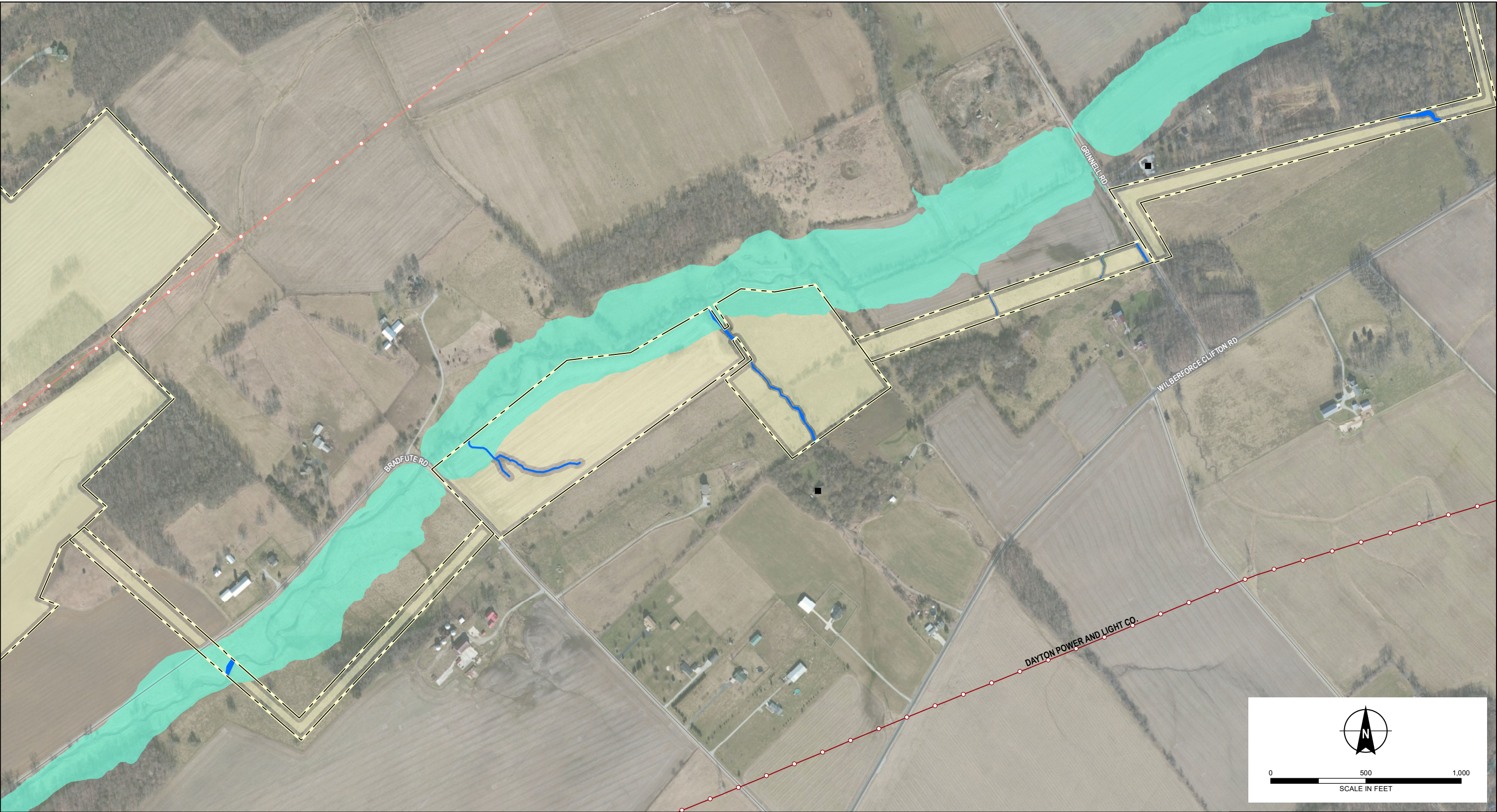
Layout Constraint Considerations

Sheet 2 of 9

Kingwood Solar

Greene County, Ohio

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LEGEND

- | | |
|--|---------------------------------|
| ■ HOUSE | ■ DELINEATED FEATURE |
| ELECTRIC TRANSMISSION LINE, BY VOLTAGE IN KV (KILOVOLTS) | ■ BUILDABLE AREA |
| —○— 138kV TRANSMISSION LINE | ■ 1% ANNUAL CHANCE FLOOD HAZARD |
| —●— 345kV TRANSMISSION LINE | ■ PROJECT AREA |
| — NATURAL GAS PIPELINE | ■ COUNTY BOUNDARY |
| — ROAD | |
| — HIGHWAY | |

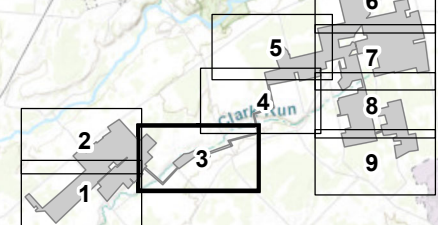
NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. KV = KILOVOLTS
3. 1% ANNUAL FLOOD CHANCE HAZARD ZONES REPRESENT 100-YEAR FLOOD ZONES. 0.2% ANNUAL FLOOD CHANCE HAZARD ZONES REPRESENT 500-YEAR FLOOD ZONES.
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6. FLOOD ZONES DATA SOURCE: FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)
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9. COUNTY BOUNDARY DATA SOURCE: OHIO DEPARTMENT OF TRANSPORTATION (ODOT)
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HALEY
ALDRICH

SHEET INDEX



**Figure DR1-13
Layout Constraint Considerations**

Sheet 3 of 9

Kingwood Solar
Greene County, Ohio

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LEGEND

- | | |
|--|---------------------------------|
| ■ HOUSE | ■ BUILDABLE AREA |
| — ELECTRIC TRANSMISSION LINE, BY VOLTAGE IN KV (KILOVOLTS) | ■ 1% ANNUAL CHANCE FLOOD HAZARD |
| — 138KV TRANSMISSION LINE | ■ PROJECT AREA |
| — NATURAL GAS PIPELINE | ■ COUNTY BOUNDARY |
| — ROAD | |
| — HIGHWAY | |
| ■ DELINEATED FEATURE | |

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SHEET INDEX

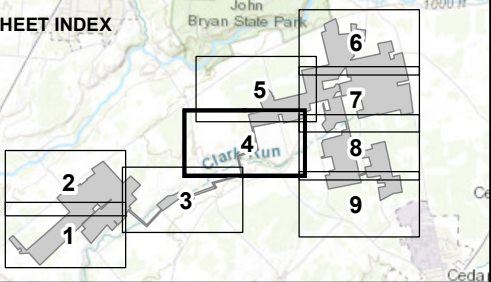


Figure DR1-13
Layout Constraint Considerations

Sheet 4 of 9

Kingwood Solar
Greene County, Ohio

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LEGEND

■

HOUSE

—○—

ELECTRIC TRANSMISSION LINE, BY VOLTAGE IN KV (KILOVOLTS)

—

138KV TRANSMISSION LINE

—

NATURAL GAS PIPELINE

—

ROAD

—

HIGHWAY

■

DELINEATED FEATURE

■

BUILDABLE AREA

■

1% ANNUAL CHANCE FLOOD HAZARD

—

PROJECT AREA

—

COUNTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

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HALEY
ALDRICH

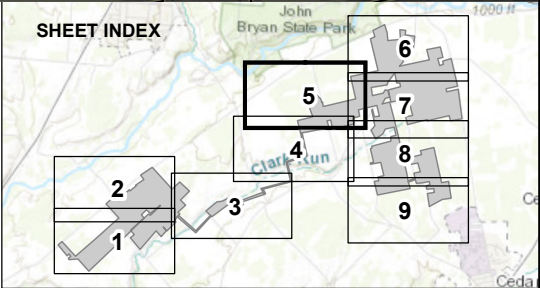


Figure DR1-13

Layout Constraint Considerations

Sheet 5 of 9

Kingwood Solar

Greene County, Ohio

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LEGEND

HOUSE

ELECTRIC TRANSMISSION LINE, BY VOLTAGE IN KV (KILOVOLTS)

138kV TRANSMISSION LINE

NATURAL GAS PIPELINE

ROAD

HIGHWAY

DELINEATED FEATURE

BUILDABLE AREA

1% ANNUAL CHANCE FLOOD HAZARD

0.2% ANNUAL CHANCE FLOOD HAZARD

PROJECT AREA

COUNTY BOUNDARY

NOTES

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HALEY

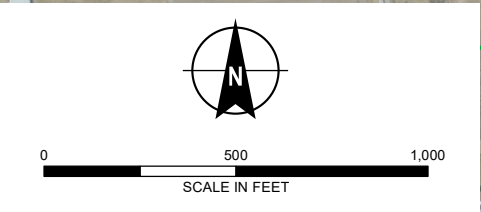
ALDRICH

Figure DR1-13
Layout Constraint Considerations

Sheet 6 of 9

Kingwood Solar
Greene County, Ohio

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LEGEND

HOUSE

ELECTRIC TRANSMISSION LINE, BY VOLTAGE IN KV (KILOVOLTS)

138KV TRANSMISSION LINE

NATURAL GAS PIPELINE

ROAD

HIGHWAY

DELINEATED FEATURE

BUILDABLE AREA

1% ANNUAL CHANCE FLOOD HAZARD

PROJECT AREA

COUNTY BOUNDARY

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HALEY

ALDRICH

Figure DR1-13
Layout Constraint Considerations

Sheet 7 of 9

Kingwood Solar
Greene County, Ohio

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LEGEND

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HOUSE

—○—

ELECTRIC TRANSMISSION LINE, BY VOLTAGE IN KV (KILOVOLTS)

—

345KV TRANSMISSION LINE

—

NATURAL GAS PIPELINE

—

ROAD

—

HIGHWAY

■

DELINEATED FEATURE

■

BUILDABLE AREA

■

1% ANNUAL CHANCE FLOOD HAZARD

■

PROJECT AREA

■

COUNTY BOUNDARY

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HALEYALDRICH

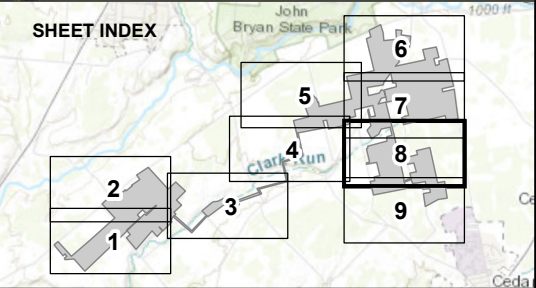


Figure DR1-13
Layout Constraint Considerations

Sheet 8 of 9

Kingwood Solar
Greene County, Ohio

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LEGEND

HOUSE

ELECTRIC TRANSMISSION LINE, BY VOLTAGE IN KV (KILOVOLTS)

NATURAL GAS PIPELINE

ROAD

HIGHWAY

DELINEATED FEATURE

BUILDABLE AREA

1% ANNUAL CHANCE FLOOD HAZARD

PROJECT AREA

COUNTY BOUNDARY

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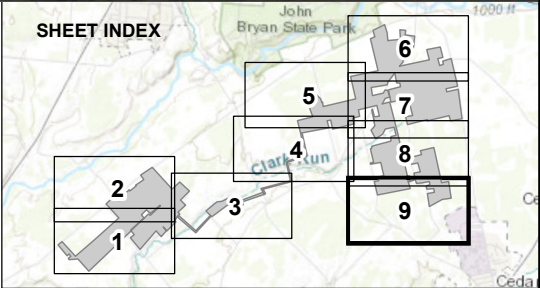


Figure DR1-13
Layout Constraint Considerations

Sheet 9 of 9

Kingwood Solar
Greene County, Ohio

From: [Ohio, FW3](#)
To: [Gresock, Lynn](#)
Cc: nathan.reardon@dnr.state.oh.us; [Parsons, Kate](#)
Subject: Kingwood Solar, Greene County Ohio
Date: Monday, May 4, 2020 9:42:15 AM
Attachments: [pastedImagebase640.png](#)
[pastedImagebase641.png](#)
[2020 USFWS Federally Listed Bat Permitees - Ohio.pdf](#)

CAUTION: External Email



TAILS# 03E15000-2020-TA-1336

Dear Ms. Gresock,

We have received your recent correspondence requesting information about the subject proposal. There are no federal wilderness areas, wildlife refuges or designated critical habitat within the vicinity of the project area. The following comments and recommendations will assist you in fulfilling the requirements for consultation under section 7 of the Endangered Species Act of 1973, as amended (ESA).

The U.S. Fish and Wildlife Service (Service) recommends that proposed developments avoid and minimize water quality impacts and impacts to high quality fish and wildlife habitat (e.g., forests, streams, wetlands). Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. All disturbed areas should be mulched and revegetated with native plant species. Prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

FEDERALLY LISTED SPECIES COMMENTS: All projects in the State of Ohio lie within the range of the federally endangered **Indiana bat** (*Myotis sodalis*) and the federally threatened **northern long-eared bat** (*Myotis septentrionalis*). In Ohio, presence of the Indiana bat and northern long-eared bat is assumed wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥ 3 inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves and abandoned mines.

Female Indiana bats exhibit strong site fidelity to summer roosting and foraging areas, meaning that they return to the same area, and often the same trees, to roost, year after year. Because the project will result in a large amount of forest clearing relative to the available habitat in the immediately surrounding area, habitat removal could result in significant impacts to Indiana bats. Because of this, the proposed project may result in indirect adverse effects to Indiana bats, even if tree clearing is conducted during the winter season when Indiana bats are not present. **Therefore, we recommend that a summer survey be conducted to determine presence or probable absence of Indiana bats at the project site.** The summer survey must be conducted by an approved surveyor (list attached) and be designed and conducted in coordination with the Endangered Species Coordinator for this office. In Ohio, summer mist net surveys must be conducted between June 1 and August 15. We recommend that any Indiana bats and northern long-eared bats captured, especially reproductively active females and juveniles, be monitored through radio-tracking to determine roost locations.

If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are also warranted. Portal surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Endangered Species Coordinator for this office.

Survey results should be coordinated with this office prior to initiation of any work. Based on the results of the survey(s), we will evaluate potential impacts to the Indiana bat from the proposed project. If a summer survey documents probable absence of Indiana bats, the 4(d) rule for the northern long-eared bat could be applied (see <http://www.fws.gov/midwest/endangered/mammals/nleb/index.html>).

If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend that the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, proposed, or candidate species. Should the project design change, or during the term of this action, additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, consultation with the Service should be initiated to assess any potential impacts.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the ESA, and are consistent with the intent of the National Environmental Policy Act of 1969 and the Service's Mitigation Policy. This letter provides technical assistance only and does not serve as a completed section 7 consultation document. We recommend that the project be coordinated with the Ohio Department of Natural Resources due to the potential for the project to affect state listed species and/or state lands. Contact Mike Pettegrew, Acting Environmental Services Administrator, at (614) 265-6387 or at mike.pettegrew@dnr.state.oh.us.

If you have questions, or if we can be of further assistance in this matter, please contact our

office at (614) 416-8993 or ohio@fws.gov.

Sincerely,

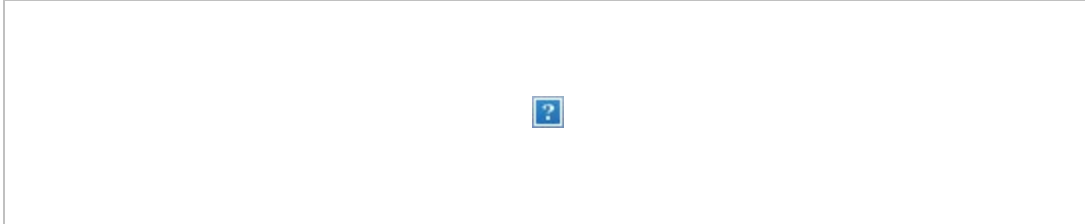


Patrice Ashfield
Ohio Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW
Kate Parsons, ODNR-DOW

From: [Ohio, FW3](#)
To: [Gresock, Lynn](#)
Cc: nathan.reardon@dnr.state.oh.us; [Parsons, Kate](#)
Subject: Kingwood Solar Project, Greene County Ohio
Date: Wednesday, March 24, 2021 3:01:36 PM
Attachments: [pastedImagebase640.png](#)
[pastedImagebase641.png](#)

CAUTION: External Email



TAILS# 03E15000-2020-TA-1336

Dear Ms. Gresock,

The U.S Fish and Wildlife Service (Service) has received your recent correspondence requesting information about the subject proposal. We offer the following comments and recommendations to assist you in minimizing and avoiding adverse impacts to threatened and endangered species pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq), as amended (ESA).

Federally Threatened and Endangered Species: The endangered Indiana bat (*Myotis sodalis*) and threatened northern long-eared bat (*Myotis septentrionalis*) occur throughout the State of Ohio. The Indiana bat and northern long-eared bat may be found wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and breed that may also include adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, woodlots, fallow fields, and pastures. Roost trees for both species include live and standing dead trees ≥ 3 inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities. These roost trees may be located in forested habitats as well as linear features such as fencerows, riparian forests, and other wooded corridors. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves, rock crevices and abandoned mines.

Seasonal Tree Clearing for Federally Listed Bat Species: Should the proposed project site contain trees ≥ 3 inches dbh, we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees ≥ 3 inches dbh cannot be avoided, we recommend removal of any trees ≥ 3 inches dbh only occur between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of

northern long-eared bats from most tree clearing is exempted by a 4(d) rule (see <http://www.fws.gov/midwest/endangered/mammals/nleb/index.html>), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is recommended where Indiana bats are assumed present.

If implementation of this seasonal tree cutting recommendation is not possible, a summer presence/absence survey may be conducted for Indiana bats. If Indiana bats are not detected during the survey, then tree clearing may occur at any time of the year. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Ohio Field Office. Surveyors must have a valid federal permit. Please note that in Ohio summer mist net surveys may only be conducted between June 1 and August 15.

Section 7 Coordination: If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), then no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence. This letter provides technical assistance only and does not serve as a completed section 7 consultation document.

Stream and Wetland Avoidance: Over 90% of the wetlands in Ohio have been drained, filled, or modified by human activities, thus it is important to conserve the functions and values of the remaining wetlands in Ohio (https://epa.ohio.gov/portals/47/facts/ohio_wetlands.pdf). We recommend avoiding and minimizing project impacts to all wetland habitats (e.g., forests, streams, vernal pools) to the maximum extent possible in order to benefit water quality and fish and wildlife habitat. Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the U.S. Army Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. Disturbed areas should be mulched and revegetated with native plant species. In addition, prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, or proposed species, or proposed or designated critical habitat. Should the project design change, or additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, coordination with the Service should be initiated to assess any potential impacts.

Thank you for your efforts to conserve listed species and sensitive habitats in Ohio. We recommend coordinating with the Ohio Department of Natural Resources due to the potential for the proposed project to affect state listed species and/or state lands. Contact Mike Pettegrew, Acting Environmental Services Administrator, at (614) 265-6387 or at mike.pettegrew@dnr.state.oh.us.

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or ohio@fws.gov.

Sincerely,



Patrice Ashfield
Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW
Kate Parsons, ODNR-DOW

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

6/9/2021 3:10:38 PM

in

Case No(s). 21-0117-EL-BGN

Summary: Notice Notice of Responses to Second Set of Data Requests from the Staff of the Ohio Power Siting Board electronically filed by Mr. Michael J. Settineri on behalf of Kingwood Solar I LLC