

Zoning Petition No. 4677

USS Rhea Solar LLC

Zoning Board of Appeals Meeting
Tuesday, February 3, 2026 at 7:00pm

Kane County Board District – 18 Rick Williams



KANE COUNTY, ILLINOIS

ESTABLISHED JANUARY 16, 1836

Petition Summary

Applicant

USS Rhea Solar LLC

Property Owner

SILVER BOTTOM LLC

Action Requested

A Special Use Permit in the F-Farming Zoning District to allow for the development of a Commercial Solar Energy Facility.

Subject Property

Approximately 53 acres of property located approximately $\frac{1}{2}$ mile west of Francis Road, $\frac{1}{2}$ mile south of Beith Road, in Virgil Township, Kane County, Illinois (PIN: 07-26-100-003, 07-26-300-004, 07-26-400-006)

County Board District 18 Rick Williams

Application

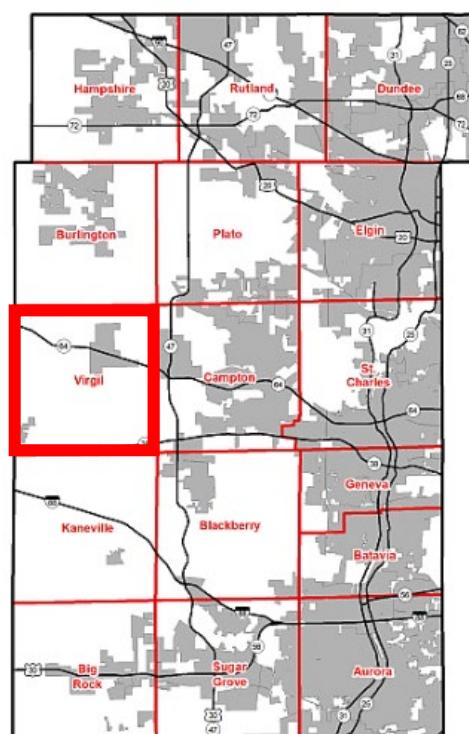
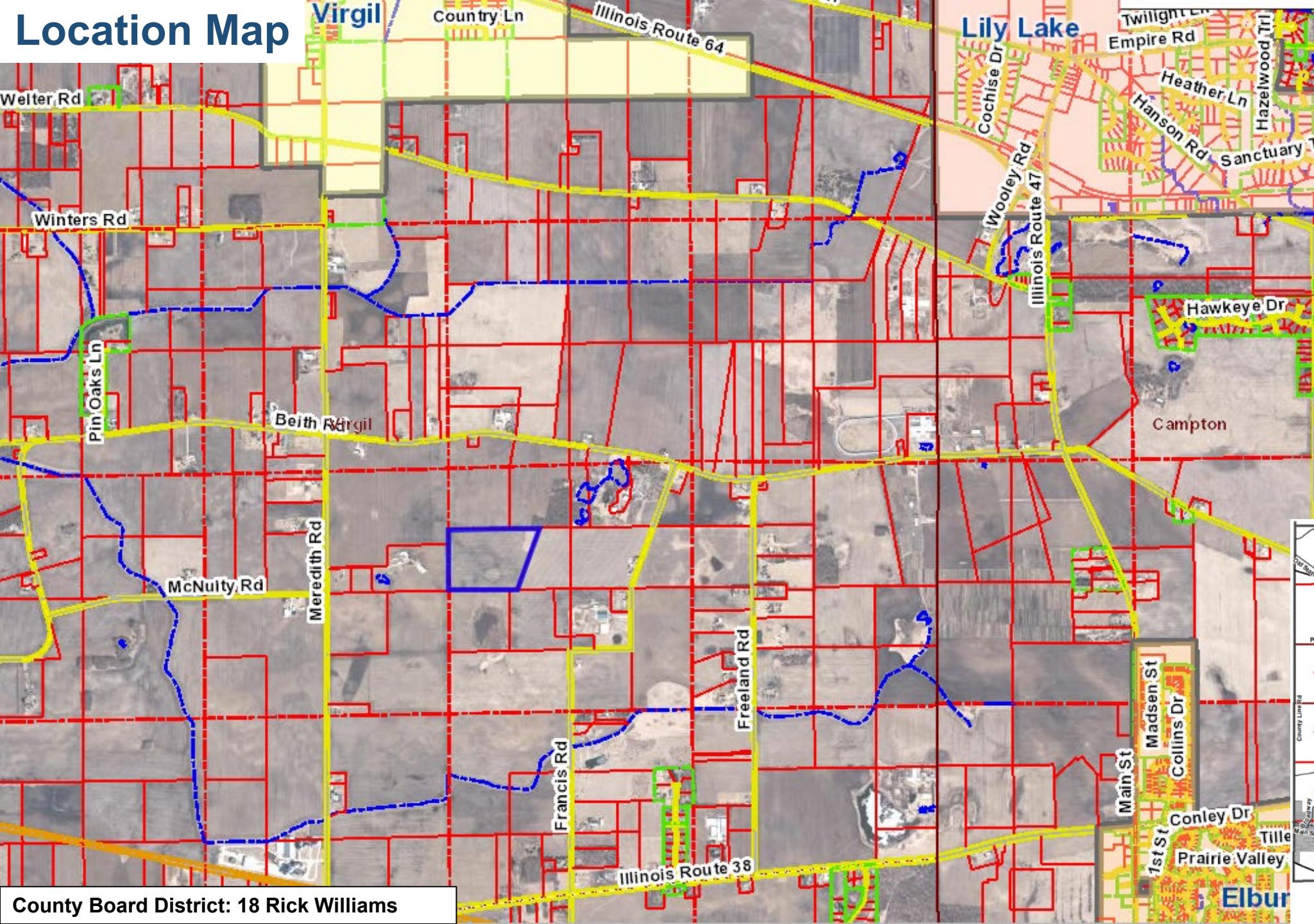
An application requesting the Special Use was received by the County on December 18, 2025. All received application documents for the Petition are available for review on the [Pending Zoning Petitions](#) page of the Kane County Website.

Notice

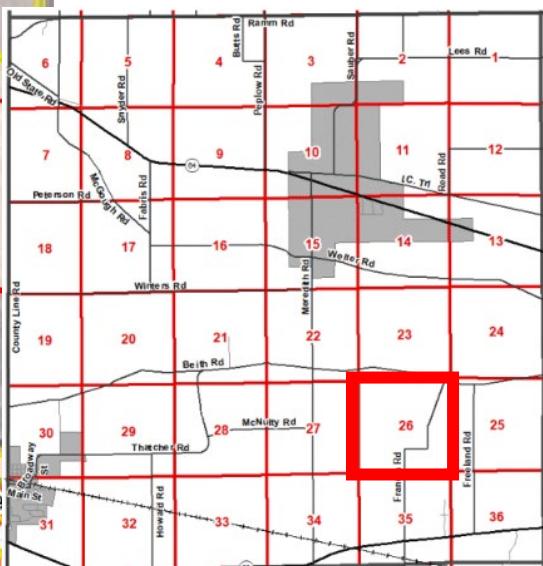
A Notice Letter was sent to all adjacent property owners within 250' of the subject property on January 16, 2026. Notice was published in the Daily Herald newspaper on January 17, 2026. And a public hearing sign was posted on the subject property on January 16, 2026.

In addition to adjacent property owners, notice of this Petition was also sent to Kane County staff, Kane County Forest Preserve, Virgil Township Supervisor and Township Highway Commissioner, the Village of Virgil, the Village of Lily Lake, KDOT, School District 302, and the Maple Park & Countryside Fire District.

Location Map



VIRGIL TWP

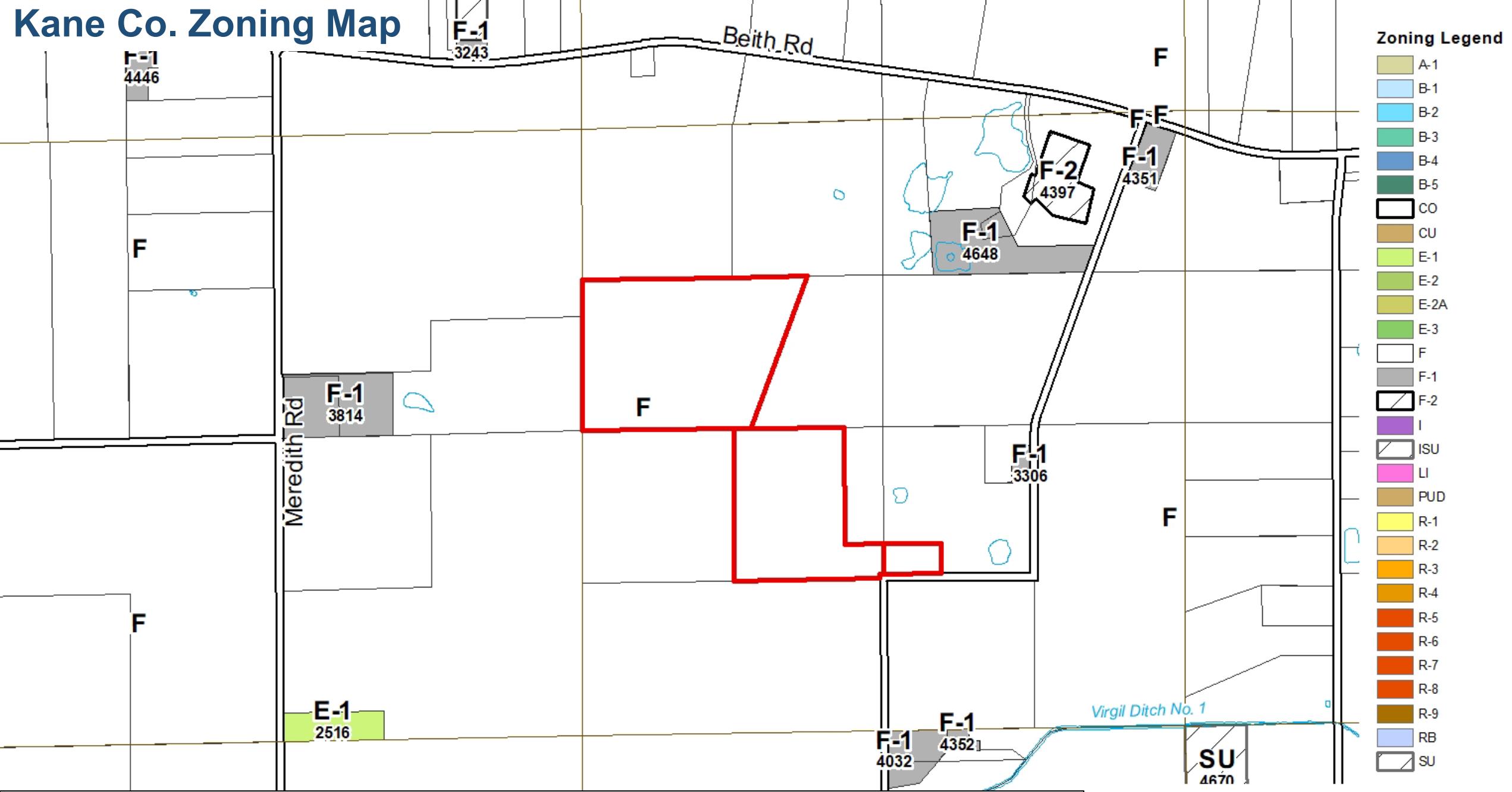


SECTION 26

Aerial View (10-02-2025)



Kane Co. Zoning Map



The subject property is currently zoned F-Farming District. Section 25-8-1-2 of the Kane County Zoning Ordinance provides that "Solar Utility" is a Special Use in the F-Farming District.

0 487.5 975 1,950 2,925 Feet

2040 Conceptual Land Use Strategy

41°55'8.0"N 88°31'26.0"W, Virgil Twp. - Petition #4677

Land Use Strategy Area: Agriculture / Food, Farm and Small Town Area

Core Themes

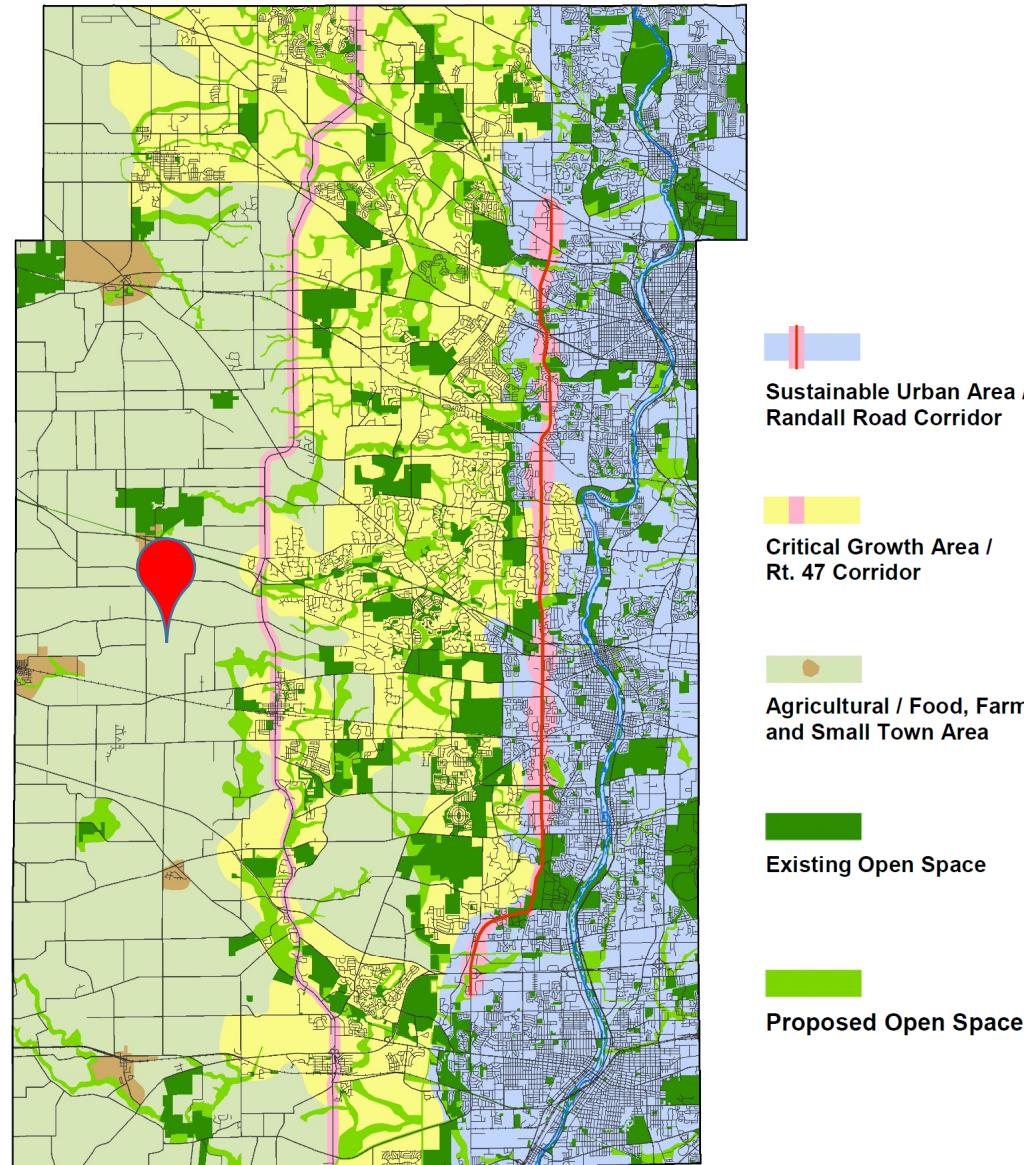
1. ***“Food and farm,”*** reflects the County’s policy of protecting productive farmland and promoting locally grown foods as a desirable goal.
2. ***“Small towns,”*** calls for awareness of and responsiveness to future development pressure around Kane County’s western communities

The Conceptual Land Use Strategy Map:

A general land use map that divides the county into 3 major geographic areas, each with unique land resources, development patterns, and planning opportunities.

2040 CONCEPTUAL LAND USE STRATEGY MAP

Adopted October 12, 2010



2040 Land Use Analysis

41°55'8.0"N 88°31'26.0"W, Virgil Twp. - Petition #4677

2040 Planned Use: Agriculture

Characteristics of Areas Planned for Agriculture

- Areas generally contain *prime farmland* or *farmland of statewide importance*.
- Farmsteads - low density residential uses or small specialty farms.
- Allow for limited agribusiness and farm support services.
- Includes areas used to grow fresh foods for farmers markets, grocery stores, restaurants, and on-farm sales.

2040 Plan Priority for Agriculture Land Use Areas:

To prevent the conversion of farmland to non-agricultural uses. Exceptions for non-agricultural uses may be considered due to soil productivity, topography, vegetation, manmade barriers, etc.

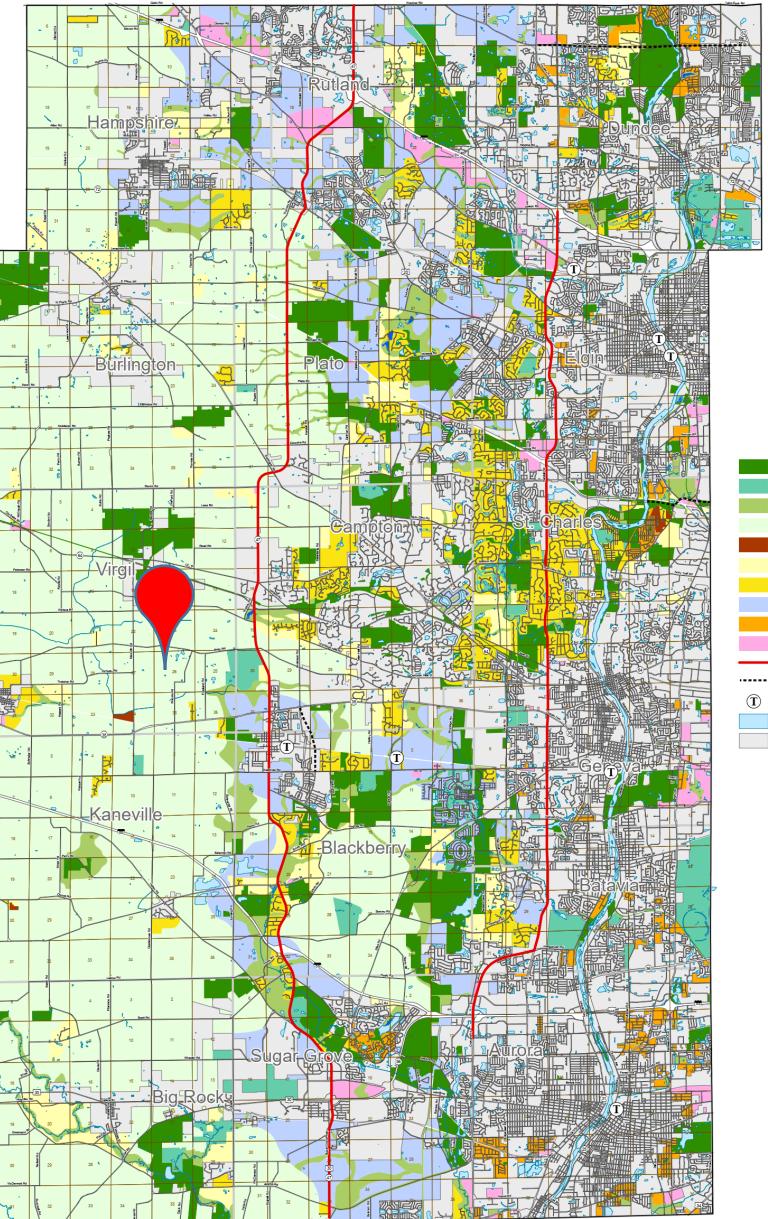
Prime Farmland:

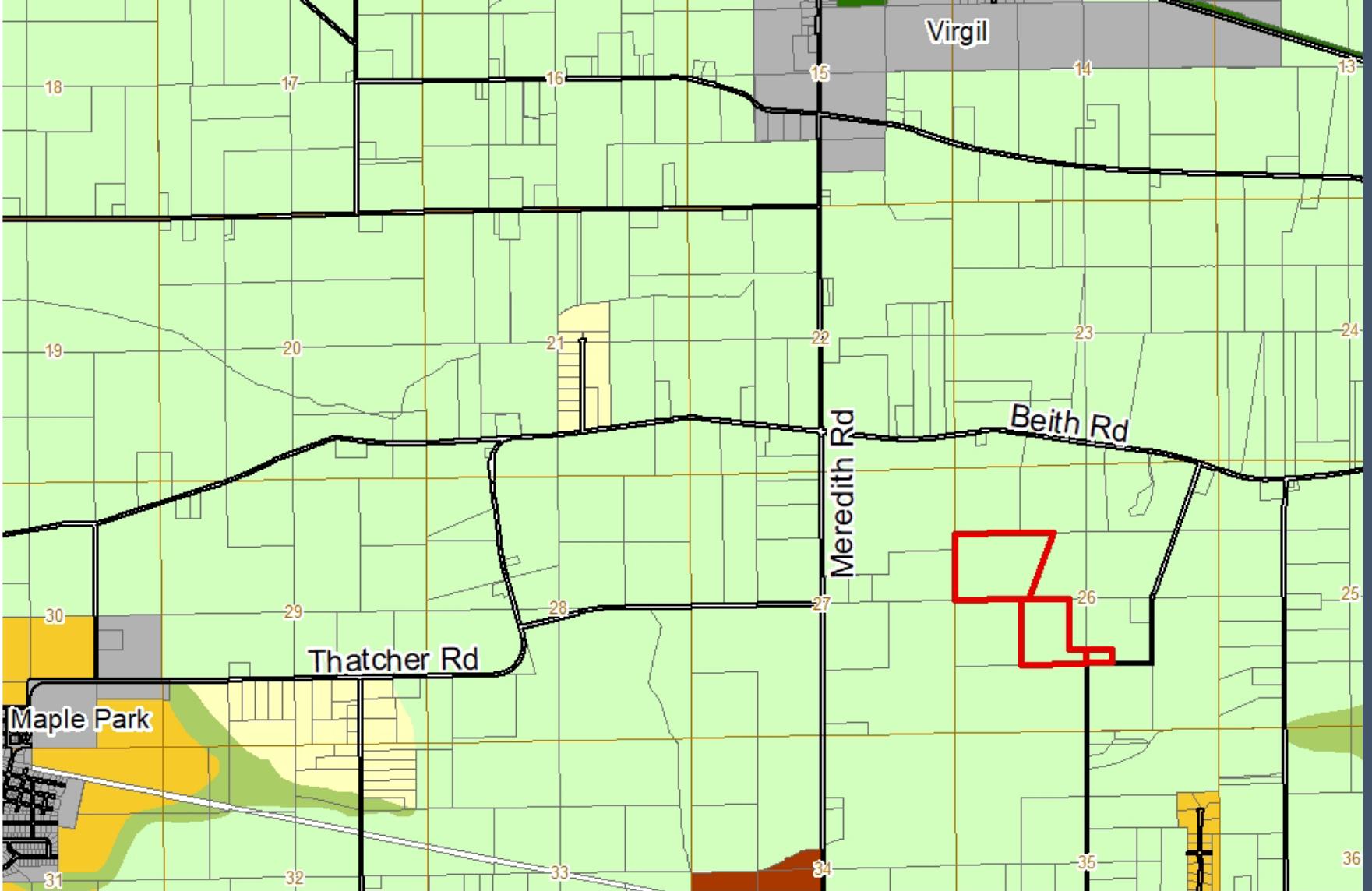
Areas with the best physical and chemical characteristics for producing food, feed, forage crops

Farmland of Statewide Importance:

Highly productive farmland which excludes areas of Prime Farmland

2040 LAND USE





Analysis

- The Kane County 2040 Plan recognizes solar power as an emerging source of renewable energy, but does not specify whether it is more or less suitable for particular land use areas.
- The proposed installation falls within the Agriculture area of the Kane County 2040 Land Use Map. This land use category denotes areas that are well suited for production agriculture. The Plan recognizes that some areas designated for agriculture may not be suitable for farming. Significant portions of the subject site are impacted by hydric soils, which could diminish the land's agricultural productivity.
- A portion of the site (5-10 acres) falls within the land use jurisdiction of the Village of Virgil, which classifies the area as Agriculture / Open Space. It is not likely that the properties in question would be annexed by the Village of Virgil or another municipality within the near future. Virgil is the closest municipality to the site at just under 1.5 miles from its corporate boundary.



Proposed Site Plan

The Commercial Solar Energy Facility shall be sited as follows, with **setback distances** measured from the nearest edge of any component of the facility:

- 1) Occupied Community Buildings and Dwellings on Nonparticipating Properties: one hundred fifty (**150**) feet to the nearest point on the outside wall of the structure.
- 2) Boundary Lines of Participating Property: **None**.
- 3) Boundary Lines of Nonparticipating Property: fifty (**50**) feet to the nearest point on the property line of the nonparticipating property.
- 4) Public Road Rights-of-Way: fifty (**50**) feet to the nearest edge of the public road right-of-way.





LEGEND:

PROJECT BOUNDARY	NONPARTICIPATING PROPERTY
PARCEL LINES	
SECTION LINES	
RIGHT-OF-WAY LINES	
EASEMENT LINES	
EX. INDEX CONTOUR	
EX. INTERVAL CONTOUR	
EX. PUBLIC ROAD CENTERLINE	
EX. HAZARDOUS LIQUID PIPELINE	
EX. GAS PIPELINE	
EX. TELEPHONE LINE	
EX. FLOOD AREA	
EX. NWI WETLAND	
EX. FEMA FLOODPLAIN	
PROPOSED MODULE SETBACK	
PROPOSED SOLAR ARRAY	
PROPOSED ELECTRICAL EQUIPMENT	
PROPOSED INVERTER	
PROPOSED BATTERY	
PROPOSED OVERHEAD COLLECTION	
PROPOSED ACCESS ROAD	
PROPOSED SECURITY FENCE	
PROPOSED CULVERT	

PREPARED FOR:

US\$SOLAR

323 Washington Ave. N., Suite 350
Minneapolis, MN 55401

REVISIONS:

DATE	COMMENT
A 10/10/23	Conditional Use Permit
B 12/13/23	Conditional Use Permit

SYSTEM SPECIFICATIONS

SYSTEM SIZE DC (kW)	9,033.5
SYSTEM SIZE AC (kW)	4,482.0
DC/AC RATIO	2.016
INVERTER MANUFACTURER/MAKE	YASKAWA SOLECTRA - (3 X XG1 1500/166)
INVERTER RATING (kW / kVA)	166 / 166
INVERTER QUANTITY	37
MODULE MANUFACTURER/MAKE	JINKO JKMS80N-72HL4-B0V
MODULE RATING (W)	580
TOTAL MODULE QTY	15,575
100-MODULE TRACKER QTY	101
75-MODULE TRACKER QTY	73
INTER-ROW SPACING (FT)	12.2
PITCH (FT)	19.7
GCR (ft)	38.0
FENCED AREA (AC)	36.0

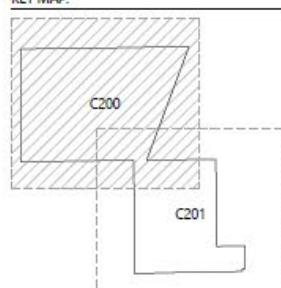
STRUCTURAL SETBACKS

YARD	COUNTY ORDINANCE SETBACK (FT)	PROVIDED (FT)
NORTH	50	97
SOUTH	50	78
EAST	50	58
WEST	50	262

NOTES:

1. CONSTRUCTION TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND NATIONAL CODES OF REGULATIONS.
2. EQUIPMENT SHALL BE LABELED PER NEC 690 AND COMED ENERGY REGULATIONS.
3. 12' ACCESS ROADS SHALL BE DESIGNED TO ACCOMMODATE ALL CONSTRUCTION, OPERATIONAL, MAINTENANCE, AND UTILITY TRAFFIC THROUGHOUT THE SITE.
4. THE ENTIRETY OF THE SITE REQUIRES VEGETATION ESTABLISHMENT PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES TO REDUCE DISTURBANCE. VEGETATION MUST BE ESTABLISHED WITH A DENSITY OF 70% COVERAGE AND VEGETATION COULD BE DESTROYED FOR PROJECT DURATION LESS THAN ONE GROWING SEASON. PERENNIAL VEGETATION ESTABLISHMENT IS NEEDED FOR PROJECT DURATIONS GREATER THAN ONE GROWING SEASON.

KEY MAP:



**USS Rhea
Solar LLC**

Kane County, Illinois

PV Site Plan

NOT FOR CONSTRUCTION

DATE: 12/12/2025

SHEET: C200

REV: B



LEGEND:

PROJECT BOUNDARY
NONPARTICIPATING PROPERTY
PARCEL LINES
SECTION LINES
RIGHT-OF-WAY LINES
EASEMENT LINES
EX. INDEX CONTOUR
EX. INTERVAL CONTOUR
EX. PUBLIC ROAD CENTERLINE
EX. HAZARDOUS LIQUID PIPELINE
EX. GAS PIPELINE
EX. TELEPHONE LINE
EX. FIBER OPTICA
EX. NINI WETLAND
EX. FEMA FLOODPLAIN
PROPOSED MODULE SETBACK
PROPOSED SOLAR ARRAY
PROPOSED ELECTRICAL EQUIPMENT
PROPOSED INVERTER
PROPOSED BATTERY
PROPOSED UNDERGROUND COLLECTION
PROPOSED OVERHEAD COLLECTION
PROPOSED ACCESS ROAD
PROPOSED SECURITY FENCE
PROPOSED CULVERT

PREPARED FOR

US/SOLAR

323 Washington Ave. N, Suite 350
Minneapolis, MN 55401

REVISIONS

#	DATE	COMMENT
A	10/9/2025	Conditional Use Permit
B	12/12/2025	Conditional Use Permit

SYSTEM SPECIFICATIONS

SYSTEM SIZE DC (kW)	9,033.5
SYSTEM SIZE AC (kW)	4,482.0
DC/AC RATIO	2.016
INVERTER MANUFACTURER/MAKE	YASKAWA SOLECTRA (D-X300 1500-160)
INVERTER RATING (kW / kVA)	166 / 166
INVERTER QUANTITY	27
MODULE MANUFACTURER/MAKE	JINKO JKMS80N-72H14-BDV
MODULE RATING (W)	580
TOTAL MODULE QTY	15,575
100-MODULE TRACKER QTY	101
75-MODULE TRACKER QTY	73
INTER-ROW SPACING (ft)	12.2
PITCH (ft)	19.7
GCR (%)	38.0
FENCED AREA (ac)	36.0

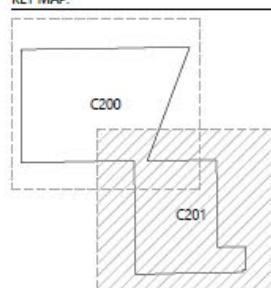
STRUCTURAL SETBACKS

YARD	COUNTY ORDINANCE SETBACK (ft)	PROVIDED (ft)
NORTH	50	97
SOUTH	50	78
EAST	50	58
WEST	50	262

NOTES:

1. EQUIPMENT SHALL BE INSTALLED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND NATIONAL CODES OF REGULATIONS.
2. EQUIPMENT SHALL BE LABELED PER NEC 690 AND COMED ENERGY REGULATIONS.
3. 12' ACCESS ROADS SHALL BE DESIGNED TO ACCOMMODATE ALL CONSTRUCTION, OPERATION, MAINTENANCE, AND UTILITY TRAFFIC THROUGHOUT THE SITE.
4. THE ENTIRETY OF THE SITE REQUIRES VEGETATION ESTABLISHMENT PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES TO REDUCE DISTURBANCE. VEGETATION MUST BE ESTABLISHED WITH A DENSITY OF 70% COVER AND ANNUAL VEGETATION COVER IS USED FOR PROJECT DURATION LESS THAN ONE GROWING SEASON. PERENNIAL VEGETATION ESTABLISHMENT IS NEEDED FOR PROJECT DURATIONS GREATER THAN ONE GROWING SEASON.

KEY MAP:



**USS Rhea
Solar LLC**

Kane County, Illinois

PV Site Plan

NOT FOR CONSTRUCTION

DATE: 12/12/2025

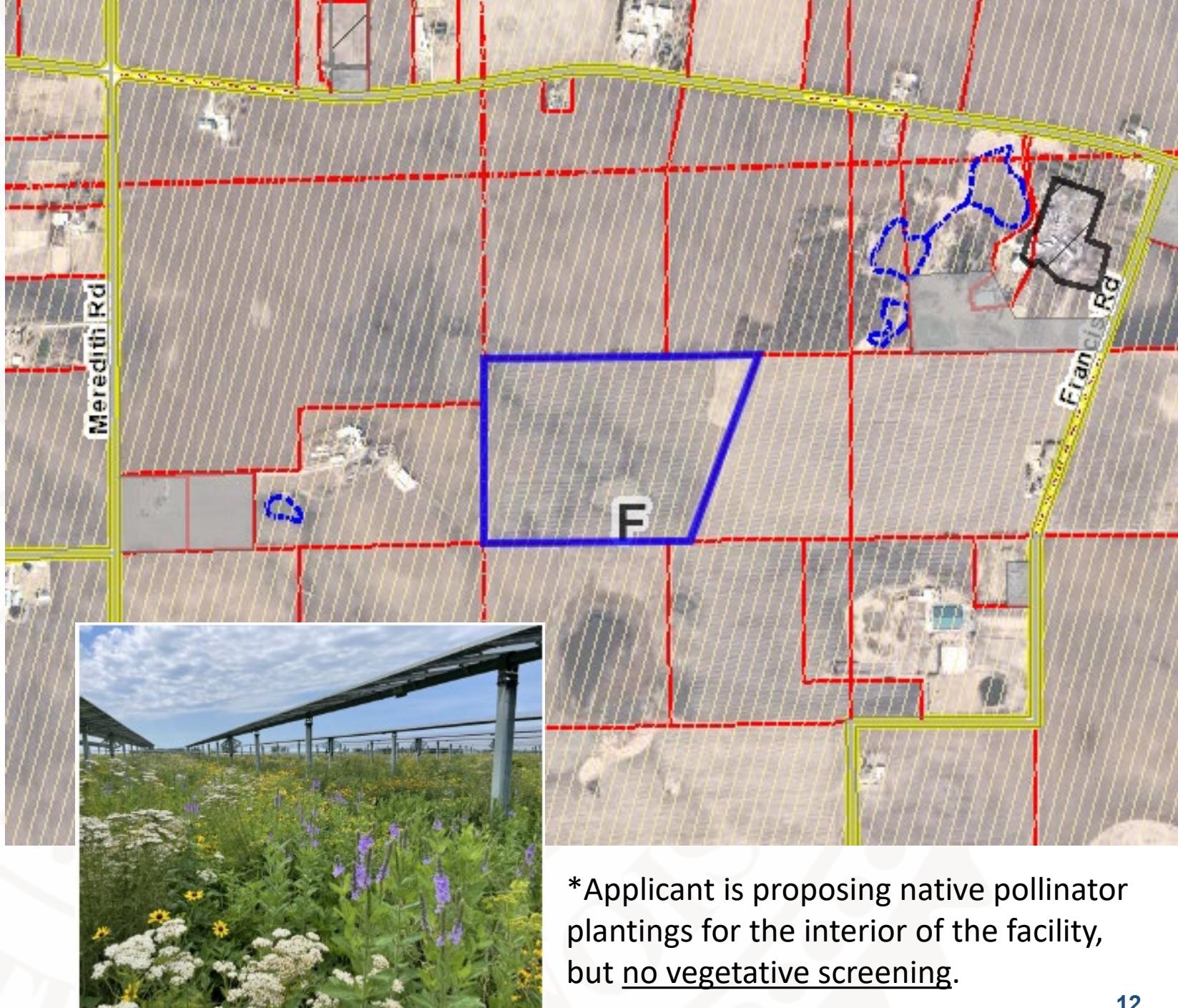
SHEET: C201

REV:

B

Landscape Screening

- A vegetative screen shall be provided for any part of the Commercial Solar Energy Facility that is visible to Non-participating Residence(s).
- The landscaping screen shall be located between the required fencing and the property line of the participating parcel upon which the facility sits.
- The vegetative screening shall include a continuous line of native evergreen foliage and/or native shrubs and/or native trees and/or any existing wooded area and/or plantings of tall native grasses and other native flowering plants.



*Applicant is proposing native pollinator plantings for the interior of the facility, but no vegetative screening.

Fence Detail

Fencing: A fence of at least eight (8) feet and not more than twenty-five (25) feet in height shall enclose and secure the Commercial Solar Energy Facility.

*Fence detail not provided in application.

MUNICIPALITIES

From the Village of Lily Lake: “This matter is not within the jurisdiction of the Village of Lily Lake.”

From the Village of Virgil: No comments received as of 01/28/2026.

FOREST PRESERVE

The Kane County Forest Preserve District does not have any comments to offer on this project.

SCHOOL DISTRICT

The District has no objection in principle to the proposed Special Use Permit for a Commercial Solar Facility. At this time, our primary considerations are limited to confirming the following as part of the County’s review and approval process:

- The anticipated treatment and impact on Equalized Assessed Valuation (EAV) for taxing bodies
- Whether the project includes any battery energy storage components
- Construction traffic coordination to minimize impacts during school transportation hours

Subject to these considerations, the District has no additional comments at this time.

TRANSPORTATION

The Kane County Department of Transportation (KDOT) reviewed this Petition and provided that, "The Petitioner shall obtain a temporary and final access permit from Virgil Township."

ENVIRONMENTAL HEALTH

The Kane County Forest Preserve District does not have any comments to offer on this project.

FIRE PROTECTION DISTRICT

No comments received as of 01/27/2026.

Water Resources

The Water Resources department reviewed the Zoning Petition and provides the following comments:

- This site contains Zone A floodplain which is unstudied. A Base Flood Elevation will need to be determined for the site.
- The applicant intends to avoid placement of the Solar Panels in the Floodplain. A preliminary Wetland Delineation was completed. A Wetland Delineation will be required prior to permitting any development.
- Drain tiles are likely present on the site. No development will be permitted until a complete field investigation of the site has been completed.
- The proposed site plan includes a long drive. It is assumed that the drive will be constructed as a pervious surface. This will need to be demonstrated at the time of permitting and the surface for the drive must be acceptable to the applicable Fire District.

Water Resources

The Water Resources department recommends the following stipulations for approval:

1. This site contains a flood route. All panels within the flood route will need to be Flood Protected to 2 feet above the Base Flood Elevation. Survey and Engineering Study will be needed to delineate the flood route on the site.
2. Water Resources will require a stormwater permit for this development. All submittals must be prepared by Professional Engineer licensed in the State of Illinois.
3. An Engineer's report will be required. Should the site introduce more than 25,000 sq ft of impervious area or more than 3 acres of disturbance, stormwater detention will be required. This impervious area is calculated cumulatively since 2002 for a site as per the Stormwater Ordinance. The Engineer's report must demonstrate that the peak flow for the site with the proposed development is not increased, stormwater detention may be required for the development to ensure this. Any required Stormwater Detention Management will require a viable outfall and may require off-site work.
4. Should the site introduce more than 5,000 sq ft of impervious, a BMP will be required for all impervious surfaces.
5. A calculation for disconnected impervious area, created by the panels, will be required. A Best Management Practice will be required to encourage infiltration of runoff within the site.
6. The configuration of the solar panels shall be evaluated to identify any potential erosion concerns. Particular attention shall be given to erosion risks at the drip edges of the panels and in sloped areas. Appropriate best management practices must be implemented to mitigate these risks. BMPs may include, but are not limited to, pre-seeding or pre-vegetation of the site prior to panel installation to establish ground cover and reduce soil displacement.
7. A Wetland Delineation will be required. The Wetland Delineation shall meet the requirements of the Ordinance as described in Article VII Section 9-169 Requirements for a Wetland Delineation. Any Wetland Impacts must be mitigated.
8. A drain tile study will be required, including upstream and downstream tile systems that rely on the drain tiles within the site. Water Resources is looking for the protection of the tile system that is in place, including but not limited to replacement in kind and observation and cleanout structures.
9. Plantings within the development will not interfere with drain tiles. Planting plan should address the placement of vegetation and trees with long root systems that can interfere with tile systems and cause off site issues including surcharged drain tiles and blow outs of the drain tile systems.
10. Soil samples shall be taken every 5 years from the site and analyzed for physical, chemical, and biological properties to demonstrate the soil health within the solar installations.
11. 80% vegetative coverage for plantings will be a requirement for the site.
12. A Wetland Delineation will be required. The Wetland Delineation shall meet the requirements of the Ordinance as described in Article VII Section 9-169 Requirements for a Wetland Delineation. Any Wetland Impacts must be mitigated.
13. Floodplain, Wetland, Compensatory Storage, BMPs and Stormwater Management must be placed in a Conservation or Drainage Easement.

EcoCAT Report

Illinois Department of Natural Resources (IDNR)

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location. Consultation is terminated.

NRI Report

Kane-DuPage Soil & Water Conservation District (SWCD)

Of this parcel, 6.1 percent or 3.2 acres are considered Farmland of Statewide Importance.

The LE value for this site is 30 and the SA value is 49 for a total LESA score of 79. This score represents Moderate Protection effort warranted.

Additional Reviews/Analysis

- **United States Fish & Wildlife Service (USFWS) Section 7 Consultation**
 - Letter from the USFWS indicated that there are no critical habitats within the project area under this office's jurisdiction. It also suggests that for projects other than major Federal construction activities, a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat.
- **Illinois State Historic Preservation Office (IL SHPO)**
 - Determined that no significant historic, architectural, or archaeological resources will be affected within the proposed project area.
- **United States Army Corps of Engineers (USACE)**
 - The USACE Letter is not included in this special use application because of the preliminary results showing the lack of wetlands on site and the avoidance of areas perceived as less suitable for solar energy systems.
- **Illinois Nature Preserves Commission (INPC)**
 - The solar facility will avoid all protected lands.
- **Illinois Department of Agriculture (IDOA)**
 - Executed AIMA Agreement was received.

Public Comment

Copies of any submitted public comments will be uploaded to the Kane County website under the applicable petition number on the Pending Zoning Petitions page.

No public comments received as of 01/28/2026.

All Recommended Stipulations of Approval

1. (Water Resources) This site contains a flood route. All panels within the flood route will need to Flood Protected to 2 feet above the Base Flood Elevation. Survey and Engineering Study will be needed to delineate the flood route on the site.
2. (Water Resources) Water Resources will require a stormwater permit for this development. All submittals must be prepared by Professional Engineer licensed in the State of Illinois.
3. (Water Resources) An Engineer's report will be required. Should the site introduce more than 25,000 sq ft of impervious area or more than 3 acres of disturbance, stormwater detention will be required. This impervious area is calculated cumulatively since 2002 for a site as per the Stormwater Ordinance. The Engineer's report must demonstrate that the peak flow for the site with the proposed development is not increased, stormwater detention may be required for the development to ensure this. Any required Stormwater Detention Management will require a viable outfall and may require off-site work.
4. (Water Resources) Should the site introduce more than 5,000 sq ft of impervious, a BMP will be required for all impervious surfaces.
5. (Water Resources) A calculation for disconnected impervious area, created by the panels, will be required. A Best Management Practice will be required to encourage infiltration of runoff within the site.
6. (Water Resources) The configuration of the solar panels shall be evaluated to identify any potential erosion concerns. Particular attention shall be given to erosion risks at the drip edges of the panels and in sloped areas. Appropriate best management practices must be implemented to mitigate these risks. BMPs may include, but are not limited to, pre-seeding or pre-vegetation of the site prior to panel installation to establish ground cover and reduce soil displacement.
7. (Water Resources) A Wetland Delineation will be required. The Wetland Delineation shall meet the requirements of the Ordinance as described in Article VII Section 9-169 Requirements for a Wetland Delineation. Any Wetland Impacts must be mitigated.
8. (Water Resources) A drain tile study will be required, including upstream and downstream tile systems that rely on the drain tiles within the site. Water Resources is looking for the protection of the tile system that is in place, including but not limited to replacement in kind and observation and cleanout structures.
9. (Water Resources) Plantings within the development will not interfere with drain tiles. Planting plan should address the placement of vegetation and trees with long root systems that can interfere with tile systems and cause off site issues including surcharged drain tiles and blow outs of the drain tile systems.
10. (Water Resources) Soil samples shall be taken every 5 years from the site and analyzed for physical, chemical, and biological properties to demonstrate the soil health within the solar installations.
11. (Water Resources) 80% vegetative coverage for plantings will be a requirement for the site.
12. (Water Resources) A Wetland Delineation will be required. The Wetland Delineation shall meet the requirements of the Ordinance as described in Article VII Section 9-169 Requirements for a Wetland Delineation. Any Wetland Impacts must be mitigated.
13. (Water Resources) Floodplain, Wetland, Compensatory Storage, BMPs and Stormwater Management must be placed in a Conservation or Drainage Easement.
14. (Transportation) The Petitioner shall obtain a temporary and final access permit from Virgil Township.
15. (Zoning) Vegetative screening consistent with the Kane County Zoning Ordinance shall be provided for any part of the commercial solar energy facility that is visible to non-participating residence(s) and shall include at minimum a continuous line of evergreen trees with a minimum planting height of 5 feet and a maximum separation distance of 15 feet on center.

Special Use Standards / ZBA Findings

Section 25-4-8-2 of the Kane County Zoning Ordinance provides Standards for Special Use Permits; responses to these Standards have been provided by the Petitioner with their Zoning Application. **The Zoning Board of Appeals shall not recommend approval of a special use unless it finds:**

- A. That the establishment, maintenance or operation of the special use will not be unreasonably detrimental to or endanger the public health, safety, morals, comfort or general welfare;
- B. That the special use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood;
- C. That the establishment of the special use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district;
- D. That adequate utility, access roads, drainage and/or other necessary facilities have been or are being provided;
- E. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets and roads;
- F. That the special use shall in all other respects conform to the applicable regulations of the district in which it is located, except as such regulations may in each instance be modified by the county board pursuant to the recommendations of the zoning board of appeals.

Zoning Entitlement Process

DEVELOPMENT COMMITTEE

This Petition will be considered by the Development Committee at its meeting currently scheduled for **10:30 a.m., Tuesday, February 17, 2026** in the County Board Meeting Room, Building A, 2nd Floor, of the Kane County Government Center, 719 S. Batavia Ave., Geneva, Illinois.

Persons in favor of or in opposition to this petition who wish to speak before the Development Committee should register to speak by submitting a [Request to Speak Form](#) on the Kane County website no later than 12:00pm on the day prior to the meeting.

KANE COUNTY BOARD

This Petition will be considered by the full Kane County Board at its meeting currently set for **9:45 a.m., Tuesday, March 10, 2026** in the County Board Meeting Room, Building A, 2nd Floor, of the Kane County Government Center, 719 S. Batavia Ave., Geneva, Illinois.

Persons in favor of or in opposition to this petition who wish to speak before the Development Committee should register to speak by submitting a [Request to Speak Form](#) on the Kane County website no later than 12:00pm on the day prior to the meeting.