

## CASE NO. 897-S-18

PRELIMINARY MEMORANDUM

August 24, 2018

**Petitioners: Community Power Group LLC, via agent Michael Borkowski, Owner of Community Power Group, and participating landowners Thomas and Debra Sutton**

**Request: Authorize a Community PV Solar Farm with a total nameplate capacity of 2 megawatts (MW), including access roads and wiring, in the AG-1 Agriculture Zoning District, and including the following waivers of standard conditions:**  
*Note: underlined or strikethrough text is new since the advertised legal notice*

**Part A: A waiver for a distance of ~~165~~ 153 feet in lieu of the minimum required 240 feet between the PV Solar Farm and non-participating properties 10 acres or less in area, per Section 6.1.5 D.(3)a. of the Zoning Ordinance.**

**Part B: A waiver for a separation distance of ~~30~~ 28 feet in lieu of 275 feet between a PV SOLAR FARM electrical inverter and the PV SOLAR FARM perimeter fence, per Section 6.1.5 D.(6) of the Zoning Ordinance.**

**Part C: A waiver for a 24 feet wide area for all necessary access lanes or driveways and any required new PRIVATE ACCESSWAYS in lieu of the minimum required 40 feet, per Section 6.1.5 B.(1)b. of the Zoning Ordinance.**

Other waivers may be necessary.

**Location: A 36.77-acre tract in the West Half of the North Half of the Northwest Quarter of Section 20 of Township 22 North, Range 9 East of the Third Principal Meridian in Ludlow Township, and commonly known as the farmland adjacent to the electric substation on the southeast corner of the intersection of CR 3300N and CR 1300E.**

**Site Area: PV Solar Farm Special Use Permit Area is about 15.48 acres**

**Time Schedule for Development: As soon as possible**

**Prepared by: Susan Burgstrom  
Senior Planner**

**John Hall  
Zoning Administrator**

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## BACKGROUND

The petitioners applied for a Special Use Permit to construct a 2 megawatt (MW) Photovoltaic (PV) Community Solar Farm on the 36.77-acre tract located on the southeast corner of the intersection of CR 3300N and CR 1300E. The "Champaign Solar 1" facility is proposed to have 7,857 solar modules and sixteen 125kW inverters surrounded by a 7-foot tall wire fence with a security gate. Access would be from CR 1300E via a 12-foot wide gravel access road.

The Illinois Future Energy Jobs Act (FEJA) went into effect on June 1, 2017. Solar farm developers have been establishing lease options with area landowners since that time. The owner of the subject property signed a Solar Facility Site Lease Agreement with Community Power Group LLC on June 30, 2017.

Champaign County began to draft a text amendment to allow solar farms in January 2018, and determined that all solar farm applications would be heard if the County adopted the text amendment. The County Board approved the text amendment at its meeting on August 23, 2018. Community Power Group LLC had no County zoning regulations to follow when they started their design process for the subject property, and they have worked closely with P&Z staff to provide information in response to proposed revisions made during the amendment process.

Case 897-S-18 will be the second PV Solar Farm Special Use Permit case to be heard in Champaign County. P&Z Staff believe the petitioners have provided sufficient evidence to begin a public hearing for this solar farm facility.

### **REQUESTED WAIVERS**

Waiver Part A is for a distance of ~~165~~ 153 feet in lieu of the minimum required 240 feet between the PV Solar Farm and non-participating properties 10 acres or less in area, per Section 6.1.5 D.(3)a. of the Zoning Ordinance. This waiver was added because there is a residence on a 5-acre lot to the west of the proposed solar farm. The owner of the property was notified of this case, but no comments have been received.

Waiver Part B is for a separation distance of 28 feet in lieu of 275 feet between a PV SOLAR FARM electrical inverter and the PV SOLAR FARM perimeter fence, per Section 6.1.5 D.(6) of the Zoning Ordinance. The applicant has placed the inverter at the farthest location from adjacent residences. South of the south fence, there is only land in agricultural production. The inverter is proposed to be located approximately 800 feet from the closest residential lot to the northwest, and approximately 870 feet from the closest residential lot to the northeast.

Waiver Part C is for a 24 feet wide area for all necessary access lanes or driveways and any required new PRIVATE ACCESSWAYS in lieu of the minimum required 40 feet, per Section 6.1.5 B.(1)b. of the Zoning Ordinance. The proposed private accessway will run on the south side of the solar panels and the applicant appears to believe that 24 feet is sufficient for this development.

### **UNCERTAINTIES REGARDING THE ROADWAY UPGRADE AND MAINTENANCE AGREEMENT AND THE DECOMMISSIONING AND SITE RECLAMATION PLAN**

#### *Roadway Upgrade and Maintenance Agreement*

Section 6.1.5 G.(1) states: “Prior to the close of the public hearing before the BOARD, the Applicant shall enter into a Roadway Upgrade and Maintenance agreement approved by the County Engineer and State's Attorney; or Township Highway Commissioner; or municipality where relevant, except for any COMMUNITY PV SOLAR FARM for which the relevant highway authority has agreed in writing to waive the requirements of subparagraphs 6.1.5 G.(1), (2), and (3).

While the petitioner has contacted Ludlow Township regarding a waiver for this agreement, a decision has not been made, but its board met to discuss the waiver on August 23, 2018. P&Z Staff request that the Board discuss how to include consideration for a response that might not arrive by the time they would like to make a determination on the case.

Special Condition G has been added and states that ELUC can approve the Agreement in the event that the Special Use Permit is granted prior to receiving the executed agreement.

*Decommissioning and Site Reclamation Plan*

Section 6.1.1 A. requires that the Applicant shall submit a Decommissioning and Site Reclamation plan to the BOARD for the subject site with specifications for the Plan outlined in Sections 6.1.1 A. and 6.1.5 Q. One of the specifications is to include cost estimates for decommissioning provided by an Illinois Licensed Professional Engineer.

The petitioner provided basic estimates for decommissioning in Exhibit G of the application received August 13, 2018, but the information does not include all the required information. The petitioner has indicated that such detailed estimates are typically provided at the Zoning Use Permit application phase rather than the Special Use Permit approval phase for their projects to date. P&Z Staff request that the Board discuss how to include consideration for a response that might not arrive by the time they would like to make a determination on the case.

Special Condition E has been added and states that ELUC can approve the DSR Plan in the event that the Special Use Permit is granted prior to receiving the Plan.

**SUMMARY OF COMPLIANCE WITH THE SOLAR ORDINANCE AS APPROVED BY THE COUNTY BOARD ON AUGUST 23, 2018**

The Summary of Evidence attached to this Preliminary Memorandum details how the proposed project conforms to the solar farm text amendment. The requirements have a variety of benchmarks, and some information is not required until the Zoning Use Permit phase should the Special Use Permit be approved. P&Z Staff created a draft checklist for solar farm applicants so they could be clear about what information is required at the time of application. The checklist was completed by P&Z staff for Case 897-S-18, and can be used to help guide the Board in its discussion of the Special Use Permit – see Attachment G to this memo.

**PROPOSED SPECIAL CONDITIONS**

The following special conditions, combined with the requested waivers, would ensure that the proposed solar farm is in compliance with the Zoning Ordinance.

- A. **The approved site plan consists of the following documents:**
- **Sheet T1.1: Permit Set Cover received August 13, 2018**
  - **Sheet L1.1: Site Layout received August 13, 2018**
  - **Sheet L2.1: Tracker System Detail received August 13, 2018**
  - **Sheet L2.3: Fence-Gate Detail received January 25, 2018**
  - **Sheet L2.3: Agricultural Fence Detail received August 13, 2018**
  - **Sheet E1.1: Single Line Diagram received January 25, 2018**
  - **Sheet E2.1: DC & AC Conductor Schedule received January 25, 2018**
  - **Sheet E4.1: Grounding Details received January 25, 2018**
  - **Sheet E9.1: Equipment Specification Sheets received August 13, 2018**

The above special condition is required to ensure that:

**The constructed PV SOLAR FARM is consistent with the special use permit approval.**

- B. The Zoning Administrator shall not authorize a Zoning Use Permit Application or issue a Zoning Compliance Certificate on the subject property until the lighting specifications in Paragraph 6.1.2.A. of the Zoning Ordinance have been met.**

The special condition stated above is required to ensure the following:

**That exterior lighting for the proposed Special Use meets the requirements established for Special Uses in the Zoning Ordinance.**

- C. The Zoning Administrator shall not issue a Zoning Compliance Certificate for the proposed PV SOLAR FARM until the petitioner has demonstrated that the proposed Special Use complies with the Illinois Accessibility Code, if necessary.**

The special condition stated above is necessary to ensure the following:

**That the proposed Special Use meets applicable state requirements for accessibility.**

- D. The Zoning Administrator shall not authorize a Zoning Use Permit until the petitioner submits a copy of an executed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture per the requirements established in Paragraph 6.1.5 R. of the Zoning Ordinance.**

The special condition stated above is required to ensure the following:

**That the land affected by PV SOLAR FARM is restored to its pre-construction capabilities.**

- E. A signed Decommissioning and Site Reclamation Plan that has been approved by ELUC is required at the time of application for a Zoning Use Permit that complies with Section 6.1.1 A. and Section 6.1.5 Q. of the Zoning Ordinance, including a decommissioning cost estimate prepared by an Illinois Professional Engineer.**

The above special conditions are required to ensure that:

**The Special Use Permit complies with Ordinance requirements and as authorized by waiver.**

- F. A Roadway Upgrade and Maintenance Agreement signed by the Highway Commissioner and approved by the Environment and Land Use Committee shall be submitted at the time of application for a Zoning Use Permit.**

The above special condition is necessary to ensure the following:

**To ensure full compliance with the intent of the Zoning Ordinance in a timely manner that meets the needs of the applicant.**

- G. The following submittals are required prior to the approval of any Zoning Use Permit for a PV SOLAR FARM:**
- 1. Documentation of the solar module's unlimited 10-year warranty and the 25-year limited power warranty.**

2. **Certification by an Illinois Professional Engineer that any relocation of drainage district tile conforms to the Champaign County Storm Water Management and Erosion Control Ordinance.**
3. **An irrevocable letter of credit to be drawn upon a federally insured financial institution within 200 miles of Urbana or reasonable anticipated travel costs shall be added to the amount of the letter of credit.**
4. **A permanent soil erosion and sedimentation plan for the PV SOLAR FARM including any access road that conforms to the relevant Natural Resources Conservation Service guidelines and that is prepared by an Illinois Licensed Professional Engineer.**
5. **Documentation regarding the seed to be used for the pollinator planting, per 6.1.5 F.(9).**
6. **A Transportation Impact Analysis provided by the applicant that is mutually acceptable to the Applicant and the County Engineer and State's Attorney; or Township Highway Commissioner; or municipality where relevant, as required by 6.1.5 G. 2.**
7. **The telephone number for the complaint hotline required by 6.1.5 S.**
8. **Any updates to the approved Site Plan from Case 897-S-18 per the Site Plan requirements provided in Section 6.1.5 U.1.c.**

The above special condition is required to ensure that:

**The PV SOLAR FARM is constructed consistent with the Special Use Permit approval and in compliance with the Ordinance requirements.**

- H. **A Zoning Compliance Certificate shall be required for the PV SOLAR FARM prior to going into commercial production of energy. Approval of a Zoning Compliance Certificate shall require the following:**
1. **An as-built site plan of the PV SOLAR FARM including structures, property lines (including identification of adjoining properties), as-built separations, public access road and turnout locations, substation(s), electrical cabling from the PV SOLAR FARM to the substations(s), and layout of all structures within the geographical boundaries of any applicable setback.**
  2. **As-built documentation of all permanent soil erosion and sedimentation improvements for all PV SOLAR FARM including any access road prepared by an Illinois Licensed Professional Engineer.**
  3. **An executed interconnection agreement with the appropriate electric utility as required by Section 6.1.5 B.(3)b.**

The above special condition is required to ensure that:

**The PV SOLAR FARM is constructed consistent with the special use permit approval and in compliance with the Ordinance requirements.**

- I. The Applicant or Owner or Operator of the PV SOLAR FARM shall comply with the following specific requirements that apply even after the PV SOLAR FARM goes into commercial operation:**
- 1. Maintain the pollinator plantings in perpetuity.**
  - 2. Cooperate with local Fire Protection District to develop the District's emergency response plan as required by 6.1.5 H.(2).**
  - 3. Cooperate fully with Champaign County and in resolving any noise complaints including reimbursing Champaign County any costs for the services of a qualified noise consultant pursuant to any proven violation of the I.P.C.B. noise regulations as required by 6.1.5 I.(4).**
  - 4. Maintain a current general liability policy as required by 6.1.5 O.**
  - 5. Submit annual summary of operation and maintenance reports to the Environment and Land Use Committee as required by 6.1.5 P.(1)a.**
  - 6. Maintain compliance with the approved Decommissioning and Site Reclamation Plan including financial assurances.**
  - 7. Submit to the Zoning Administrator copies of all complaints to the telephone hotline on a monthly basis and take all necessary actions to resolve all legitimate complaints as required by 6.1.5 S.**

The above special condition is required to ensure that:

**Future requirements are clearly identified for all successors of title, lessees, any operator and/or owner of the PV SOLAR FARM.**

- J. The Applicant or Owner or Operator of the PV SOLAR FARM shall plant and maintain in perpetuity a visual screen on the north, west, and east sides of the PV SOLAR FARM per Section 6.1.5 M. of the Zoning Ordinance.**

The above special condition is required to ensure that:

**Visual impacts of the PV SOLAR FARM are minimized for adjacent residents.**

## **ATTACHMENTS**

- A Case Maps (Location Map, Land Use, and Zoning)**
- B Site Plan sheets, reflecting the newest information received:**
- Sheet T1.1: Permit Set Cover received August 13, 2018
  - Sheet L1.1: Site Layout received August 13, 2018
  - Sheet L2.1: Tracker System Detail received August 13, 2018
  - Sheet L2.3: Fence-Gate Detail received January 25, 2018

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  - Sheet E1.1: Single Line Diagram received January 25, 2018
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  - Sheet E4.1: Grounding Details received January 25, 2018
  - Sheet E9.1: Equipment Specification Sheets received August 13, 2018
- C SUP Application Exhibits, reflecting the newest information received:  
*(Duplicate page lettering with a 1 refers to receipt on January 25, 2018 and 2 refers to receipt on August 13, 2018)*
- Exhibit B: Project Summary received August 13, 2018
  - Exhibit E(1): Minimizing Visual Impact received January 25, 2018
  - Exhibit E(2): Special Use Permit Area received August 13, 2018
  - Exhibit F(1): Impact on Wildlife received January 25, 2018
  - Exhibit F(2): Separation of Farm from Dwellings received August 13, 2018
  - Exhibit G(1): Stray Voltage, Broadcast Interference, and Noise received January 25, 2018
  - Exhibit G(2): Decommissioning / Site Reclamation Covenants & Letter of Credit received August 13, 2018
  - Exhibit H(1): Impact on Development, Property Values, and Aesthetic received January 25, 2018
  - Exhibit H(2): Interconnection Application received August 13, 2018
  - Exhibit I(1): Drainage received January 25, 2018
  - Exhibit I(2): Landscape Plan / Weed and Grass Control Plan received August 13, 2018
  - Exhibit J: Highway Requirements received August 13, 2018
  - Exhibit K: Cleaning Materials received August 13, 2018
- D Annotated Aerial: Separation Distances and Screening, created by P&Z Staff on August 23, 2018
- E Natural Resource Report by the Champaign County Soil and Water Conservation District received February 23, 2018
- F Email from Nick Mento received August 17, 2018, with attachments:
- Addendum to Champaign County Special Use Permit Applications for Community Solar Gardens – Champaign Solar
  - Letter from the Illinois State Historic Preservation Office dated May 16, 2018
- G Checklist for status of Special Use Permit application requirements created by P&Z Staff on August 22, 2018
- H Summary of Evidence, Finding of Fact and Final Determination dated August 30, 2018
- I Solar Farm Text Amendment as approved by the Champaign County Board on August 23, 2018

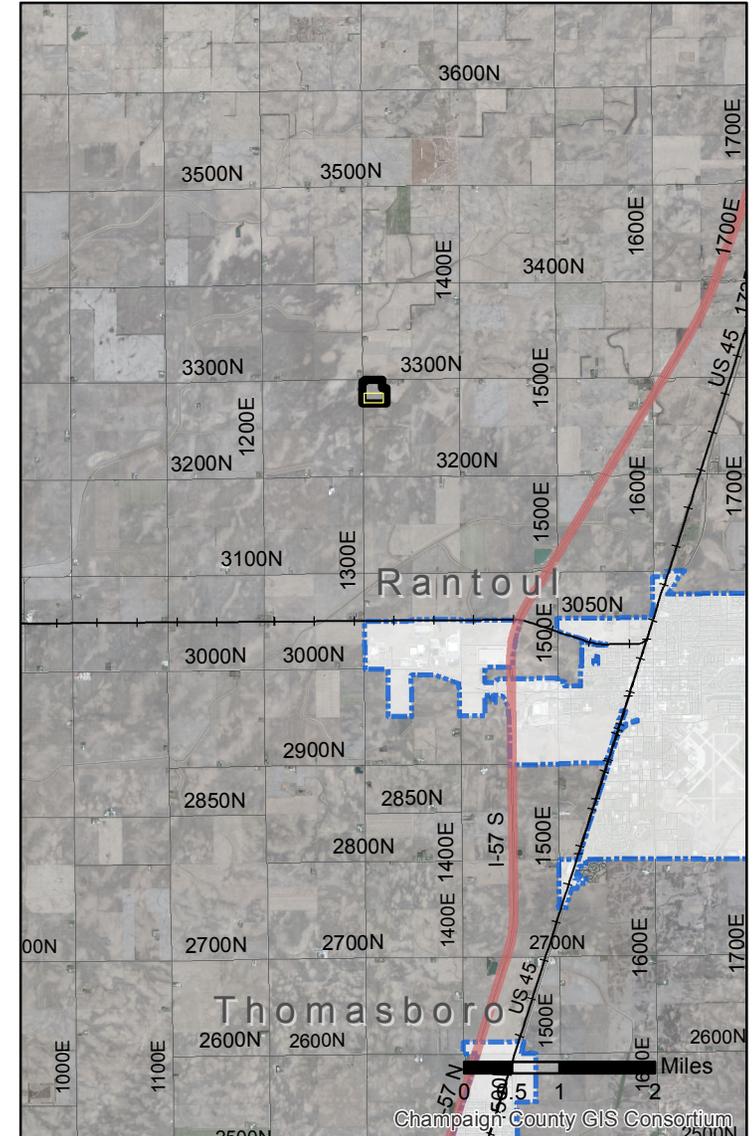
# Location Map

Case 897-S-18  
August 30, 2018

Subject Property



Property location in Champaign County



## Legend

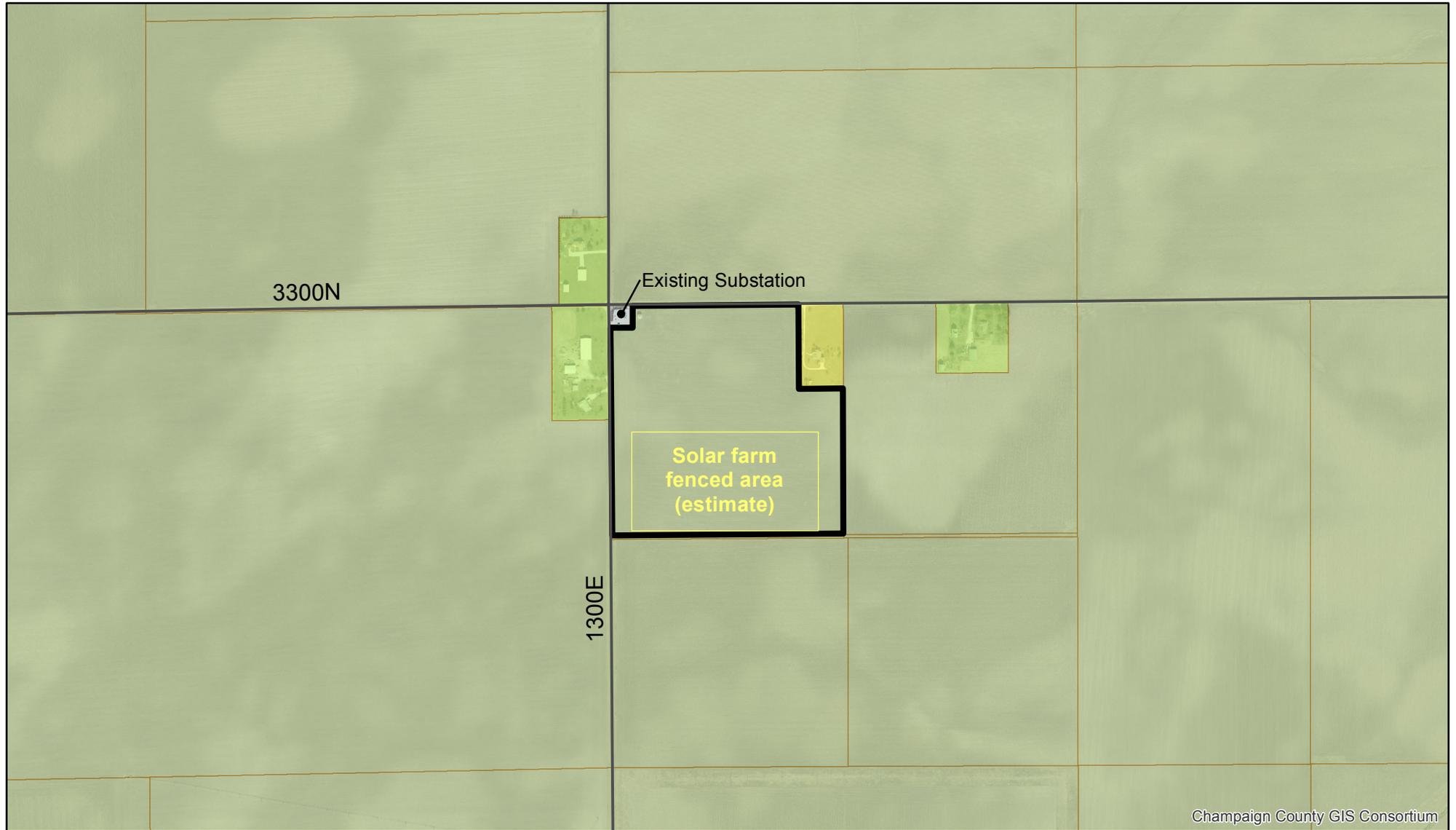
-  Subject Property
-  Parcels
-  Municipal Boundary
-  Streets



Champaign County  
Department of  
**PLANNING &  
ZONING**

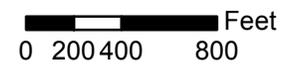
# Land Use Map

Case 897-S-18  
August 30, 2018



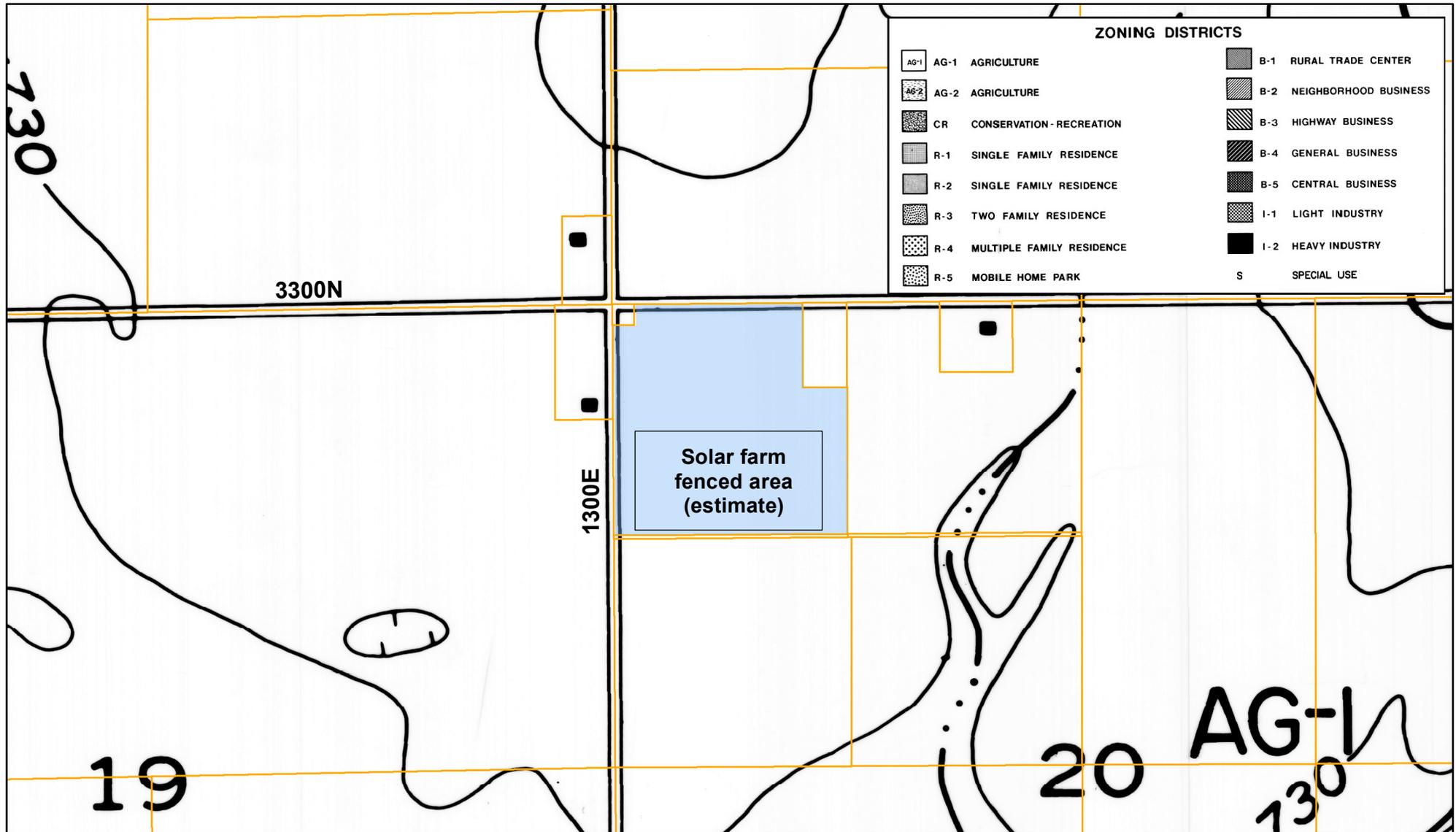
## Legend

-  Subject Property
-  Streets
-  Residential
-  Agriculture
-  Ag-Residential



# Zoning Map

Case 897-S-18  
August 30, 2018



**Legend**

- Subject Property
- Parcels

0 200 400 800 Feet

Champaign County  
Department of  
**PLANNING &  
ZONING**

# COMMUNITY POWER GROUP CHAMPAIGN SOLAR I PERMIT SET

2710.665 KW DC / 2000 KW AC GRID-TIED GROUND MOUNT  
PHOTOVOLTAIC ELECTRIC GENERATION SYSTEM



Community Power Group, LLC  
4849 Rugby Avenue, Suite 1000  
Bethesda, MD 20814  
Phone Main: +1 202 844 6423  
Fax: +1 301 657 4494  
Homepage: www.communitypowergroup.com

Professional Engineer

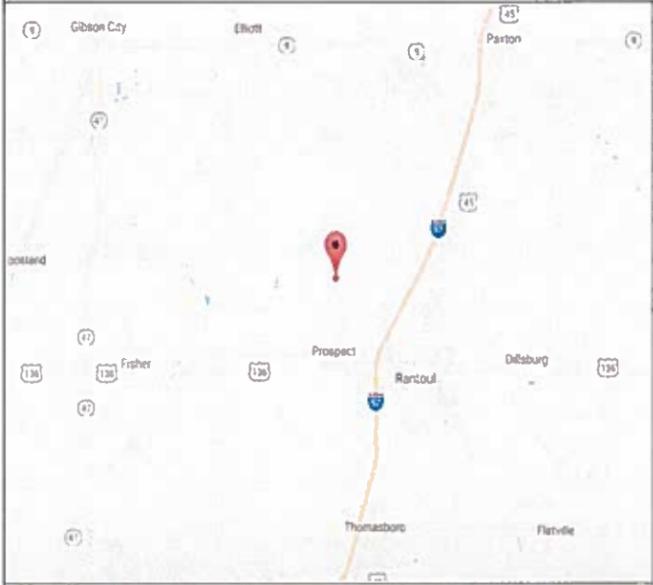
PE Seal

DRAWING ISSUE

- Preliminary  Construction  
 Customer Approval  As-built  
 Permitting  Other

REVISIONS

Rev	By	App	Description	Date
1	AS	AS	ISSUE FOR PERMITTING	7/26/2018
2	AS	AS	REVISIONS TO PERMITTING	7/26/2018
3	AS	AS	PERMITTING	7/26/2018



PROPOSED PHOTOVOLTAIC SYSTEM SUMMARY			PROJECT INFORMATION	
<b>PV MODULE MANUFACTURER &amp; MODEL</b> HANWHA QCELLS Q PLUS L-G4.2 345	<b>INVERTER MANUFACTURER</b> SUNGROW	<b>RACKING SYSTEM MANUFACTURER</b> ARRAY TECHNOLOGIES INC. (ATI)	<b>PROJECT NAME</b> CHAMPAIGN SOLAR I	<b>PROPERTY OWNER</b> COMMUNITY POWER GROUP, LLC
<b>PV MODULE OUTPUT</b> 345 WDC AT STC	<b>INVERTER MODELS &amp; COUNT</b> (16) SG125HV	<b>RACKING SYSTEM MODEL &amp; TYPE</b> DURATRACK HZ V3	<b>PROJECT ADDRESS</b> 40° 21' 11.42" N, 88° 12' 44.12" W RANTOUL, IL 61866	<b>GENERAL CONTRACTOR</b> M W GROUP 1095 MORRIS AVE, SUITE 102 UNION, NJ 07083 P (908) 219-4379 F (908) 219-4375
<b>PV MODULE COUNT</b> 7,857		<b>HORIZONTAL SINGLE AXIS TRACKER (SAT)</b> <b>PV ARRAY ORIENTATION</b> 180° TRUE SOUTH		

ABBREVIATIONS	APPLICABLE CODES AND STANDARDS	UTILITY SERVICE PROVIDER
1ST FIRST 2ND SECOND A, AMP AMPERE AC ALTERNATING CURRENT AL ALUMINUM AR ARRAY APPX APPENDIX AWG AMERICAN WIRE GAUGE CONED CONSOLIDATED EDISON (COMPANY OF NEW YORK) CONST CONSTRUCTION CU COPPER D DEPTH DAS DATA ACQUISITION SYSTEM DC DIRECT CURRENT DEG DEGREE DIA DIAMETER DOB DEPARTMENT OF BUILDING DOE DEPARTMENT OF ENERGY DSN DESIGN E EXISTING EGC EQUIPMENT GROUNDING CONDUCTOR ELEC ELECTRICAL EMT ELECTRICAL METALLIC TUBING ENCL ENCLOSURE EQUIV EQUIVALENT FIA FAST-ACTING FL FLOOR FT FOOT GND GROUND H HEIGHT HVAC HEATING VENTILATION AIR CONDITIONING IMC INTERMEDIATE METAL CONDUIT IN INCH LB CONDULET BODY MAX MAXIMUM MFR MANUFACTURER MIN MINIMUM MISC MISCELLANEOUS MSB MAIN SWITCHBOARD MDP MAIN DISTRIBUTION PANEL N NEW NO NUMBER NTS NOT TO SCALE NYC NEW YORK CITY O.C. ON CENTER OEM ORIGINAL EQUIPMENT MANUFACTURER PDC PUBLIC DESIGN COMMISSION PE PROFESSIONAL ENGINEER PV PHOTOVOLTAIC PVC POLYVINYL CHLORIDE PVI PHOTOVOLTAIC INVERTER RGC RIGID GALVANIZED CONDUIT RMC RIGID METAL CONDUIT RT RAIN-TIGHT SCH SCHEDULE SLA SHADE LIMITING ANGLE SLD SINGLE LINE DIAGRAM SS STAINLESS STEEL STC STANDARD TEST CONDITIONS STD STANDARD SWBD SWITCHBOARD SWGR SWITCHGEAR TYP TYPICAL UL UNDERWRITERS LABORATORY U.O.N. UNLESS OTHERWISE NOTED W WD WIDTH	STRUCTURAL: 2012 INTERNATIONAL BUILDING CODE  CIVIL: ASCE 7-05  ELECTRICAL: 2011 NFPA NATIONAL ELECTRICAL CODE  INTERCONNECTION: IEEE 1547  INVERTER: UL 1741  RACK GROUNDING: UL 2703	AMEREN ILLINOIS

DRAWING INDEX	
T1.1	TITLE SHEET
L1.1	SITE LAYOUT
L2.1	TRACKER SYSTEM DETAIL
L2.3	FENCE-GATE DETAIL
E9.1	EQUIPMENT SPECIFICATION SHEETS

**RECEIVED**  
AUG 13 2018  
CHAMPAIGN CO. P & Z DEPARTMENT

Project Name: COMMUNITY POWER GROUP - CHAMPAIGN SOLAR I  
Site Address: RANTOUL, IL 61866  
40°21'11.42"N, 88°12'44.12"W

Sheet Name: TITLE SHEET

Scale: Project ID: TBD  
Sheet No: T1.1

# RECEIVED

AUG 13 2018

CHAMPAIGN CO. P & Z DEPARTMENT



Community Power Group, LLC  
4849 Rugby Avenue, Suite 1000  
Bethesda, MD 20814  
Phone Main: +1 202 844 6423  
Fax: +1 301 657 4494  
Homepage: www.communitypowergroup.com

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Professional Engineer:

PE Seal:

DRAWING ISSUE

- Preliminary
- Construction
- Customer Approval
- As-built
- Permitting
- Other

REVISIONS

Rev	By	App	Description	Date



### SYSTEM SUMMARY

#### MODULE

MANUFACTURER: HANWHA QCELL  
MODULE MODEL: Q.PLUS L-G4.2 345  
MODULE OUTPUT: 345  
MODULE COUNT: 7,857  
STRING SIZE: 27  
NUMBER OF STRINGS: 291  
SYSTEM OUTPUT: 2,710.665 kW DC

#### INVERTER

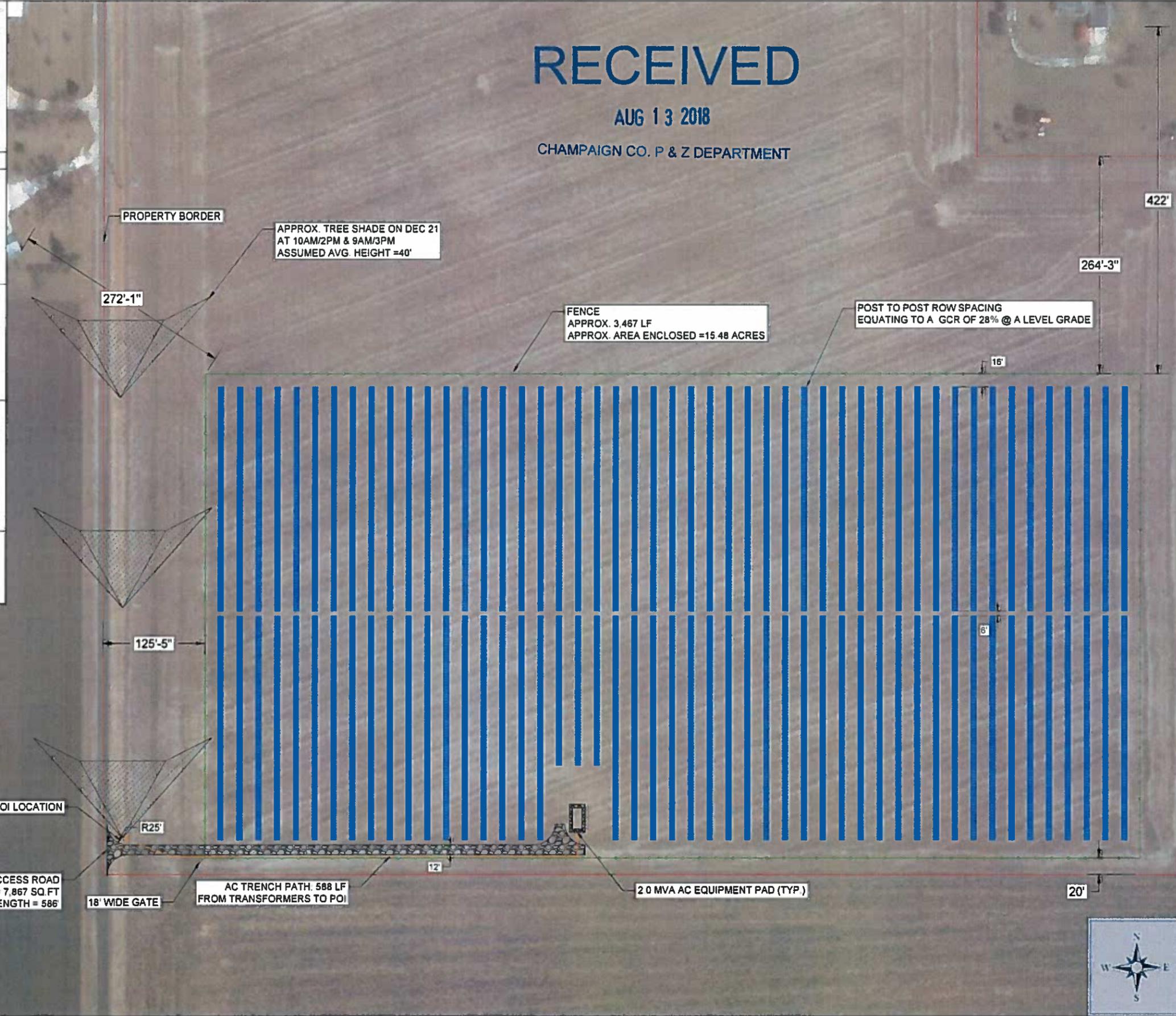
MANUFACTURER: SUNGROW  
INVERTER MODEL: SG125HV  
RATING: 125 kW  
QUANTITY: 16  
DC SYSTEM VOLTAGE: 1500 V  
SYSTEM OUTPUT: 2,000 kW AC  
DC: AC RATIO: 1.36

#### RACKING

MANUFACTURER: ATI  
GCR: 28%  
FOUNDATION: DRIVEN POST  
CONFIGURATION: 1P  
AZIMUTH: 180°  
MOTOR QUANTITY: 4  
MODULES PER TRACKER: 81; 64  
POST QUANTITY: TBD

#### BOS

TRANSFORMER RATING: 2000 KVA  
TRANSFORMER QTY: 1  
INTERCON. VOLTAGE: TBD  
AC PB RATING/QTY: 2500 A/1



Project Name: COMMUNITY POWER GROUP - CHAMPAIGN SOLAR I  
Site Address: RANTOUL, IL 61866  
40°21'11.42"N, 88°12'44.12"W

Sheet Name: SITE LAYOUT  
Scale: 0.001474 Project ID: TBD  
Sheet No: L1.1







### M+W GROUP

**M+W Energy, Inc.**  
 A Company of the M+W Group  
 1095 Morris Avenue, Suite 102, Union, NJ 07083  
 Phone Main: +1 908 219 4379  
 Toll Free: +1 877 844 9174  
 Fax: +1 908 219 4375  
 Homepage: www.mwgroup.net

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Professional Engineer:  
  
PE Seal:

DRAWING ISSUE  
 Preliminary     Construction  
 Customer Approval     As-built  
 Permitting     Other

REVISIONS

Rev	By	App	Description	Date
1	AW	AW	Final design and permit preparation	12/22/17
2	AW	AW	Final design and permit preparation	12/22/17

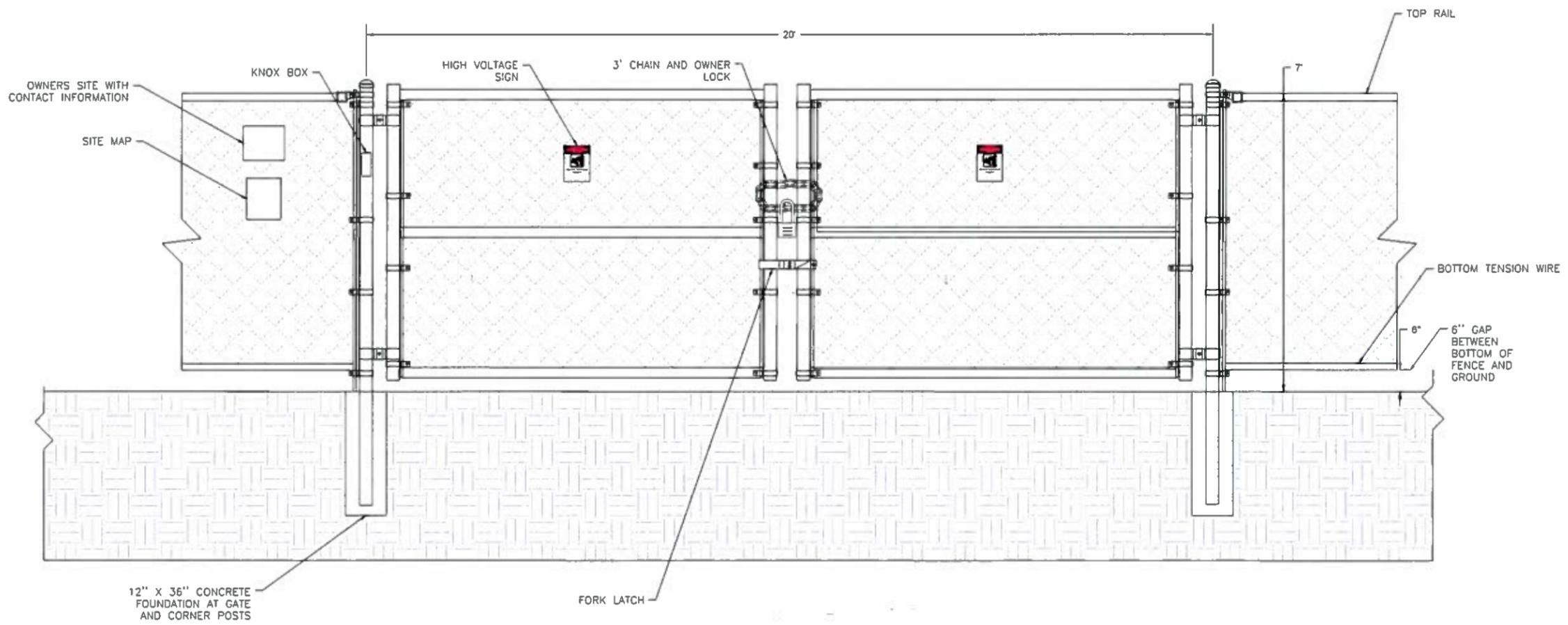
Project Name:  
COMMUNITY POWER GROUP -  
CHAMPAIGN SOLAR I

Site Address:  
RANTOUL, IL 61866  
40°21'11.42"N, 88°12'44.12"W

Sheet Name:  
FENCE-GATE  
DETAIL

Scale:    Project ID: TBD

Sheet No:  
L2.3



1 GATE ENTRANCE AND FENCE DETAIL  
 Scale: 3/4" = 1'-0"

**RECEIVED**

JAN 25 2018

CHAMPAIGN CO. P & Z DEPARTMENT

Professional Engineer

PE Seal

DRAWING ISSUE

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- As-built
- Permitting
- Other

REVISIONS

Rev	By	App	Description	Date

In-Line Brace Material Specifications		
Item	Quantity	Description
Brace Posts	3	11" x 7" Pressure Treated Wood Posts
Cross Members	2	12" x 6" Pressure Treated Wood Posts*
Brace Pins	2	1/2" x 4" Galvanized Pin
Brace Pins	2	1/2" x 10" Galvanized Pin
Brace Wire	2	Double Wrap 12 1/2 ga Class 3 High Tensile Wire
Wire Strainer	2	Ratchet Type In-Line Strainer
Staples	4	1 3/4" Class 3 Double Barbed

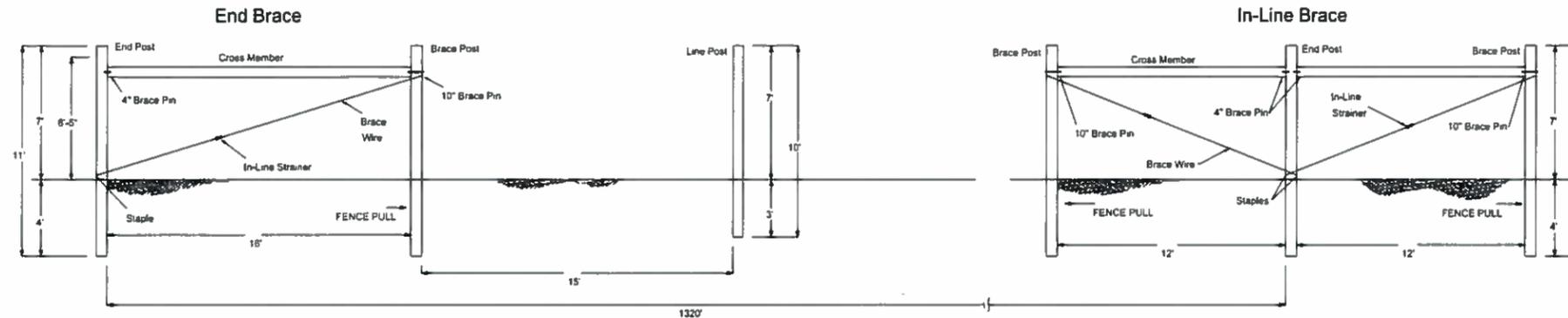
\*2 3/8" Sch 40 Galvanized Pipe may also be used for Cross Members.

**IN-LINE BRACE CONSTRUCTION**

- DRIVE OR AUGER AND TAMP END POST ALONG GUIDE WIRE TO DEPTH SHOWN IN DETAIL.
- SET BRACE POSTS ALONG GUIDE WIRE 17 ON EITHER SIDE OF END POST.
- TO ESTABLISH LOCATION OF CROSS MEMBERS, MEASURE THE DISTANCE FROM THE BOTTOM OF FENCE FABRIC TO A POINT MIDWAY BETWEEN 2ND AND 3RD WIRE FROM THE TOP (APPROX. 67 1/2"). USING THIS MEASUREMENT, MARK THE INSIDE OF END POST AND BOTH BRACE POSTS.
- AT MARKINGS, DRILL A 1/2" HOLE 2" DEEP ON BOTH SIDES OF END POST AND DRILL A 1/2" HOLE THROUGH BOTH BRACE POSTS. SET ONE 4" BRACE PIN IN EACH HOLE IN END POST AND START 10" BRACE PINS IN BRACE POSTS.
- DRILL PILOT HOLES IN ENDS OF CROSS MEMBERS. SET ONE END OF CROSS MEMBER ON 4" PIN, THEN LIFT OPPOSITE END TO ALIGN WITH 10" PIN. USING A HAMMER, DRIVE THE 10" PIN INTO BRACE POST, LEAVING 1" EXPOSED FOR INSTALLATION OF BRACE WIRE. REPEAT THIS STEP FOR SECOND CROSS MEMBER.
- DRIVE A BARBED STAPLE PARTIALLY IN AT GROUND LEVEL ON BOTH SIDES OF END POST. HANG ANOTHER STAPLE OVER TOP LEG OF EACH DRIVEN STAPLE TO PREVENT BRACE WIRE FROM BINDING AND BITING INTO END POST.
- GUIDE BRACE WIRE THROUGH DRIVEN STAPLE AND UP AND OVER 10" BRACE PIN, BACK DOWN THROUGH STAPLE AND OVER 10" PIN AGAIN. THIS IS THE DOUBLE WRAP FOR THE BRACE WIRE.
- INSTALL WIRE STRAINER ON BRACE WIRE ON OPPOSITE SIDE OF BRACE AWAY FROM STAY-TUFF. USE STRAINER TO TIGHTEN BRACE WIRE UNTIL BRACE POST MOVES ABOUT 1/2" AWAY FROM SOIL.

**LINE POST CONSTRUCTION**

- SET LINE POSTS ALONG GUIDE WIRE USING A 15' SPACING.
- USE 15' POST SPACING AS A GUIDELINE. IN ROUGH TERRAIN A CLOSER POSTS SPACING WILL BE REQUIRED.
- A LINE POST SHOULD BE PLACED ON TOP OF HIPS AND IN BOTTOM OF ALL DIPS.



End Brace Material Specifications		
Item	Quantity	Description
Brace Posts	2	11" x 7" Pressure Treated Wood Posts
Cross Members	1	16" x 5" Pressure Treated Wood Posts*
Brace Pins	1	1/2" x 4" Galvanized Pin
Brace Pins	2	1/2" x 10" Galvanized Pin
Brace Wire	2	Double Wrap 12 1/2 ga Class 3 High Tensile Wire
Wire Strainer	1	Ratchet Type In-Line Strainer
Staples	2	1 3/4" Class 3 Double Barbed

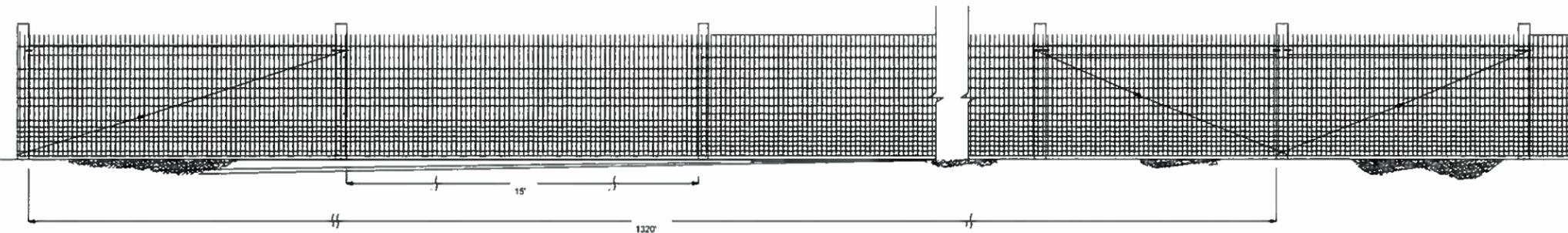
\*2 3/8" Sch 40 Galvanized Pipe may also be used for Cross Members.

**END BRACE CONSTRUCTION**

- DRIVE IN OR AUGER AND TAMP END POST TO DEPTH SHOWN IN DETAIL.
- TIE OFF A GUIDE WIRE TO END POST AT GROUND LEVEL. PULL WIRE TO END POST OF NEXT BRACE AND TIE OFF AT GROUND LEVEL. SET ALL OTHER T-POSTS, LINE POSTS, BRACE POSTS AND END POSTS ALONG THIS GUIDE WIRE.
- SET OTHER BRACE POST OF THE END BRACE AT A MINIMUM OF 16" FROM END POST.
- TO ESTABLISH LOCATION OF CROSS MEMBER, MEASURE THE DISTANCE FROM THE BOTTOM OF FENCE FABRIC TO A POINT MIDWAY BETWEEN 2ND AND 3RD WIRE FROM THE TOP (APPROX. 67 1/2"). USING THIS MEASUREMENT, MARK THE INSIDE OF BOTH BRACE POSTS.
- AT MARKINGS, DRILL A 1/2" HOLE 2" DEEP ON INSIDE OF END POST AND DRILL A 1/2" HOLE THROUGH THE OPPOSITE BRACE POST. SET 4" BRACE PIN IN END POST AND START 10" BRACE PIN IN BRACE POST.
- DRILL PILOT HOLES IN ENDS OF CROSS MEMBER. SET ONE END OF CROSS MEMBER ON 4" PIN, THEN LIFT OPPOSITE END TO ALIGN WITH 10" PIN. USING A HAMMER, DRIVE THE 10" PIN INTO BRACE POST, LEAVING 1" EXPOSED FOR INSTALLATION OF BRACE WIRE.
- DRIVE A BARBED STAPLE PARTIALLY IN AT GROUND LEVEL ON THE BACK SIDE OF END POST. HANG ANOTHER STAPLE OVER TOP LEG OF DRIVEN STAPLE TO PREVENT BRACE WIRE FROM BINDING AND BITING INTO END POST.
- GUIDE BRACE WIRE THROUGH DRIVEN STAPLE AND UP AND OVER 10" BRACE PIN, BACK DOWN THROUGH STAPLE AND OVER 10" PIN AGAIN. THIS IS THE DOUBLE WRAP FOR THE BRACE WIRE.
- INSTALL WIRE STRAINER ON BRACE WIRE ON OPPOSITE SIDE OF BRACE AWAY FROM STAY-TUFF. USE STRAINER TO TIGHTEN BRACE WIRE UNTIL BRACE POST MOVES ABOUT 1/2" AWAY FROM SOIL.

Line Post Specifications	
Line Posts	10" x 6" Pressure Treated Wood Posts

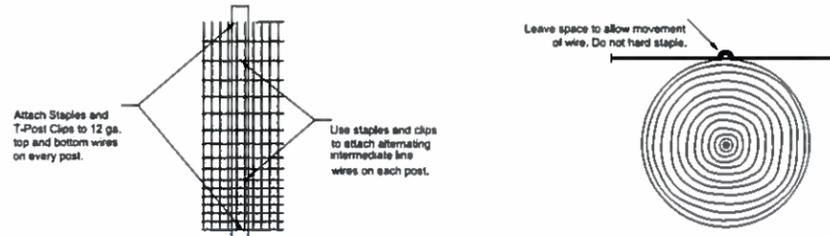
1 STAY-TUFF FENCE 1775-3 WOOD BRACE CONSTRUCTION  
NOT TO SCALE



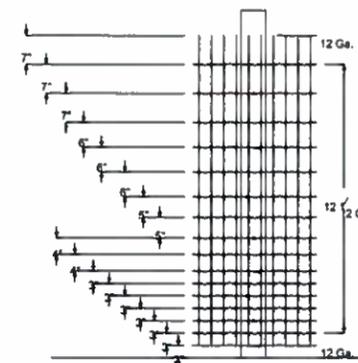
2 STAY-TUFF FENCE 1775-3 FIXED KNOT FENCE  
NOT TO SCALE

**GENERAL NOTES**

- ALL WOVEN WIRE FENCE FABRIC SHALL BE CONTINUOUS STAY FIXED KNOT JOINT STYLE FABRIC
- DESIGN NO. 1775-3 AND SHALL MEET OR EXCEED ASTM A 116 FOR NO. 12 1/2 GRADE 175.
- TOP AND BOTTOM LINE WIRES SHALL BE 12 GAGE GRADE 175 AND INTERMEDIATE LINE WIRES SHALL BE 12 1/2 GAGE GRADE 175. VERTICAL STAY WIRES SHALL BE 12 1/2 GAGE GRADE 125. KNOT WIRES SHALL BE 13 GAGE GRADE 80. ALL WIRES SHALL HAVE TYPE 2 CLASS 3 COATING.
- VERTICAL STAY WIRES SHOULD BE SPACED EVERY 3' AND HORIZONTAL LINE WIRES SHOULD BE SPACED AS SHOWN IN DETAIL.
- INSTALL 1775-6 FABRIC SO THAT 3"X3" OPENINGS ARE ON BOTTOM.
- ATTACH FENCE FABRIC ON INSIDE OF BRACES AND POSTS. FABRIC SHALL BE ATTACHED TO END POSTS OF END BRACES AND IN-LINE BRACES BY WRAPPING AND TIEING WIRE WITH A HIGH TENSILE SUIP KNOT.
- TENSION FABRIC BY PULLING TO CENTER OF PULL USING STRETCHER BARS AND STRETCHER BAR PULLERS. TENSION FABRIC UNTIL TENSION CRIMPS ARE FLATTENED 25 TO 50% FROM ORIGINAL HEIGHT. DO NOT OVER TENSION.
- SPLICES IN FABRIC SHALL BE MADE WITH 12 1/2-16 GAGE LONG CRIMP SLEEVES WITH STATED HOLDING STRENGTH OF 1500 LBS MINIMUM. SLEEVES SHOULD BE CRIMPED USING APPROVED CRIMP TOOL.
- SLEEVES SHOULD BE CRIMPED WORKING FROM END CLOSEST TO THE KNOT OUTWARD AND COMPRESSED ALONG ENTIRE LENGTH OF SLEEVE.
- FINISHED WIRE SPLICES SHALL NOT HAVE LOOSE WIRE TAILS EXTENDING MORE THAN 1/2" IN LENGTH.
- FENCE SHALL GENERALLY FOLLOW THE CONTOUR OF THE GROUND. BOTTOM WIRE OF FENCE SHOULD BE NO MORE THAN 3" ABOVE GROUND LEVEL.
- ATTACH FABRIC TO WOODEN POSTS USING 1 1/2" DOUBLE BARBED STAPLES. STAPLES SHALL BE MADE OF 8 GAGE CLASS 3 GALVANIZED WIRE AND SHALL BE DOUBLE BARBED.
- STAPLE 12 GAGE TOP AND BOTTOM WIRES TO EVERY POST. STAPLE EVERY OTHER INTERMEDIATE LINE WIRE AND ALTERNATE LINE WIRES ON EACH POST AS SHOWN IN DETAIL. STAPLES SHALL BE DRIVEN INTO POSTS WITH THE TOP STAPLE LEG ANGLED TO THE RIGHT AS SHOWN. STAGGER STAPLES ACROSS WOODEN POSTS AS SHOWN IN DETAIL. STAPLES SHOULD NOT BE HARD DRIVEN AGAINST FENCE WIRE. LEAVE A 1/4" TO 1/2" GAP BETWEEN STAPLE AND FENCE WIRE TO ALLOW FOR WIRE MOVEMENT.
- CONTRACTOR TO PROVIDE A 24" WIDE DOUBLE SWING GATE TO MATCH THE FENCE.



3 WIRE ATTACHMENT TO WOODEN POSTS  
NOT TO SCALE



4 WIRE SPACING AND GAGES  
NOT TO SCALE

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 AUG 13 2018  
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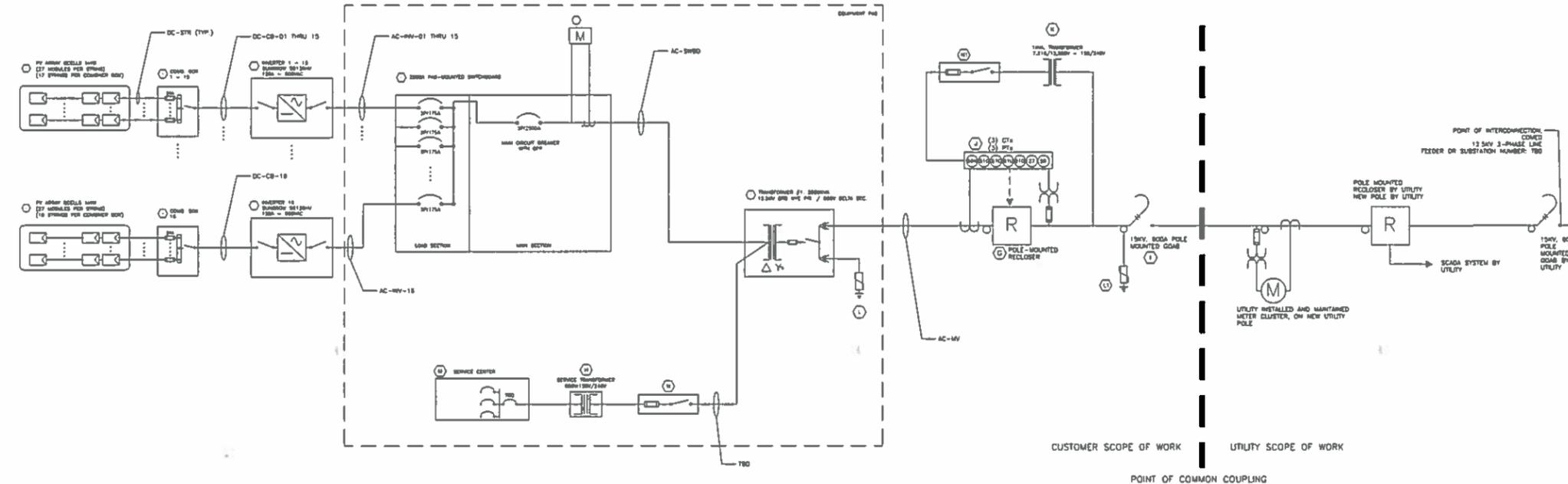
Project Name:  
**COMMUNITY POWER GROUP -  
 CHAMPAIGN SOLAR 1**

Site Address:  
**RANTOUL, IL 61866  
 40°21'11.42"N, 88°12'44.12"W**

Sheet Name:  
**AGRICULTURAL  
 FENCE DETAIL**

Scale: Project ID: TBD  
 Sheet No:  
**L2.3**

**SYSTEM SIZE:**  
2506.14 KW DC / 2000 KW  
AC



**SYMBOL LEGEND**

(E)	EXISTING		TRANSFORMER		LOAD-BREAK ELBOW (200A)
(N)	NEW		NEUTRAL GROUNDING REACTOR		METER
	FUSE		CIRCUIT BREAKER / VACUUM FAULT INTERRUPTER (VFI)		UTILITY RECLOSER
	LOAD-BREAK DISCONNECT		CURRENT TRANSFORMER		LIGHTNING ARRESTER
	FUSED DISCONNECT		POTENTIAL TRANSFORMER		PV MODULES
	INVERTER				

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ITEM	EQUIPMENT SPECIFICATIONS
A	<b>MODULES</b> COUNT 27 MANUFACTURER HANWHA-CELLS MODEL NUMBER CUP18-60T-144 POWER PER MODULE 348 W VOLTAGE 31.0 V WATT 12.0 A VOC 47.45 V VMP 30.8 V ISC 9.94 A
B	<b>DC COMBINER BOX (CB)</b> COUNT 15 MANUFACTURER MICHAEL OER EQUIVALENT MODEL NUMBER 150 DISCONNECT RATINGS 1500 V DC MAX. DC VOLTAGE 1500 V DC NO. INPUTS 18 NO. OUTPUTS 18 INPUT TERMINALS FUSE 8 AWG FUSE BK 20 A DC OUTPUT TERMINALS 2 + 750 ICHL, MAX DIMENSIONS 3.1 x 14 x 15
C	<b>INVERTER</b> COUNT 15 MANUFACTURER SUNGROW MODEL NUMBER SGI-20KW OUTPUT POWER 12.5 kW MAX DC VOLTAGE 1500 V DC NOMINAL AC VOLTAGE 208 V AC MAX AC CURRENT 120 A  <b>INVERTER SPECIFICATIONS</b> TYPE SUNGROW 27.2 120V (80%) 120 (1%) 80.1 80W (10%) 80 C/C 80.2 72W (10%) 81 C/C 81.1 87.5W 88 C/C 81.2 87.5W 88 C/C 81.3 87.5W 88 C/C
D	<b>CUSTOMER SERVICE METER</b> COUNT 1 MANUFACTURER TSD MODEL NUMBER TSD
E	<b>AC SWITCHBOARD</b> COUNT 1 MANUFACTURER TSD MODEL NUMBER TSD BUS RATINGS 2000A 800V 3P-3W MAIN CIRCUIT BREAKER 2000A NO. OF LOAD CIRCUITS 18 CIRCUIT BREAKER RATINGS 175A (CITY) 150A (SUBURBAN) NEMA RATING 3R SHORT CIRCUIT 65 KVAIC
F	<b>TRANSFORMER</b> COUNT 1 MANUFACTURER COPPER OR SIMILAR RVA 2.000 KVA PRIMARY 15KV 3PH 3WYE SECONDARY 208V DELTA 44T 3P WINDING AL
G	<b>RELAY PROTECTION</b> COUNT 1 RELAY MANUFACTURER SCHIEDT 89 MODEL NUMBER 89L314 PF RATIO TSD CT RATIO TSD  <b>RELAY PROTECTION SPECIFICATIONS</b> MODEL 89L314 27.2 30% 89 C/C 80.1 10% 89 C/C 80.2 12% 89 C/C 80.3 10% 89 C/C 81.1 87.5W 88 C/C 81.2 87.5W 88 C/C 81.3 87.5W 88 C/C 81 150 81 150 79 LOCKOUT ON 80S1 150
H	<b>RECLOSER POLE MOUNTED</b> COUNT 1 MANUFACTURER TSD DESCRIPTION TSD MODEL NUMBER TSD VFI SWITCHES & CABINET RATINGS 1500 V FAULT WITHSTAND RATINGS 12.5 KVA SIL RATING 100 VV
I	<b>NEVA TRANSFORMER</b> COUNT 1 MANUFACTURER TSD DESCRIPTION SINGLE PHASE OVERHEAD RVA 1 3P/3W PRIMARY - SECONDARY 7.2/207.1 800V 1200KVA PHASE SINGLE PHASE NEMA RATING 3R
J	<b>SERVICE CENTER TRANSFORMER</b> COUNT 1 MANUFACTURER TSD MODEL NUMBER TSD RVA 1 3P/3W PRIMARY - SECONDARY 800V 1200KVA PHASE SINGLE PHASE NEMA RATING 3R
K	<b>800A SWITCH (POLE MOUNTED)</b> COUNT 1 MANUFACTURER TSD DESCRIPTION TSD MODEL NUMBER TSD VOLTAGE 800V VOLTAGE 800V CONTINUOUS CURRENT RATINGS 800A
L	<b>LOADING METER</b> COUNT 3 MANUFACTURER TSD MODEL NUMBER TSD VOLTAGE RATINGS 150V DUTY CYCLE 150V MCOV RATINGS 127V
M	<b>LOADING METER</b> COUNT 3 MANUFACTURER TSD MODEL NUMBER TSD VOLTAGE RATINGS 150V DUTY CYCLE 150V MCOV RATINGS 127V
N	<b>SERVICE CENTER PANEL</b> COUNT 1 MANUFACTURER TSD MODEL NUMBER TSD VOLTAGE RATINGS 1200V CURRENT RATINGS TSD NUMBER OF POLES 3 RVA 1 FUSE RATINGS TSD
O	<b>AC DISCONNECT</b> COUNT 1 MANUFACTURER TSD MODEL NUMBER TSD VOLTAGE RATINGS 1500V CURRENT RATINGS TSD NUMBER OF POLES 3 RVA 1 FUSE RATINGS TSD
P	<b>AC DISCONNECT</b> COUNT 1 MANUFACTURER TSD MODEL NUMBER TSD VOLTAGE RATINGS 1500V CURRENT RATINGS TSD NUMBER OF POLES 3 RVA 1 FUSE RATINGS TSD

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Professional Engineer

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PE Seal

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**DRAWING ISSUE**

<input type="checkbox"/> Preliminary	<input type="checkbox"/> Construction
<input type="checkbox"/> Customer Approval	<input type="checkbox"/> As-built
<input type="checkbox"/> Permitting	<input type="checkbox"/> Other

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**REVISIONS**

Rev	By	App	Description	Date
1	AL	AL	Final Design	12/15/17
2	AL	AL	Final Design	12/15/17
3	AL	AL	Final Design	12/15/17

---

Project Name: **COMMUNITY POWER GROUP - CHAMPAIGN SOLAR I**

Site Address: **RANTOUL, IL 61866  
40°21'11.42"N, 88°12'44.12"W**

Sheet Name: **SINGLE LINE DIAGRAM**

Scale: Project ID: TBD

Sheet No: **E1.1**



M+W GROUP

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Table 1 - DC String Wire Ampacity Calculation

Table 1: DC String Wire Ampacity Calculation. Includes Design Criteria, Module Summary, and a detailed table with columns for Circuit #, Distance (ft), Number of Strings, Number of Modules, Vmp (Vdc), Imp (A), Voc (Vdc), Isc (Adc), Conductor Size, Conductor Type, Continuous Current, Capacity at Terminal Rating, Status, Max Current, Capacity @ 90C (A), Temp Derate, Multi-Conductor Derate, Final Capacity (A), Status, DC PD (A), Status, Vmp (Vdc), Vdrop (%), EGC (AWG Cu), Number of Conductors, Conduit Type, and Conduit Qty.

\*All Terminals Rated 75C
\*\*DC Voltage Drop % = [DC Current \* 2 \* Conductor Length \* ResistancePer1000R/1000]/DC Voltage

Professional Engineer

PE Seal:

DRAWING ISSUE
Preliminary Construction
Customer Approval As-built
Permitting Other

REVISIONS table with columns: Rev, By, App, Description, Date

Table 2 - LV AC Wire & Conduit Schedule

Table 2: LV AC Wire & Conduit Schedule. Table with columns: Circuit #, Inverter Model/Type, AC Power (kW), AC Output Voltage (V), Max Operating Current per Phase (A), Distance (ft), Design Current (A), AC Disconnect Rating (A), FOC (Du), Parallel Sets, Number of Conductors, Conductor, Conductor Type, Capacity @ 75°, Max Capacity (A) @ 90°, Ambient Temp (deg F), Temp Derate, Final Capacity (A), AC Voltage Drop (V), AC Voltage Drop %, Max Distance (ft), Conduit Section, Conduit Type, and Conduit Qty.

AVERAGE AC VOLTAGE DROP
\*AC Voltage Drop % = [AC Current \* 0.866 \* 2 \* Conductor Length \* ResistancePer1000R/1000]/AC Voltage

Table 3: MV Conductor Schedule

Table 3: MV Conductor Schedule. Table with columns: Circuit #, AC Output Voltage (V), Max Operating Current per Phase (A), Distance (ft), Design Current (A), AC Disconnect Rating (A), Parallel Sets, Conductor Size, Number of Conductors, Conductor Type, Max Capacity (A) Table 310.60(C)(8)1, Ambient Temp (deg F), Temp Derate, Final Capacity (A), Status, AC Voltage Drop (V), AC Voltage Drop (%), Conduit Section, Stubup Size / Type, and Conduit Qty.

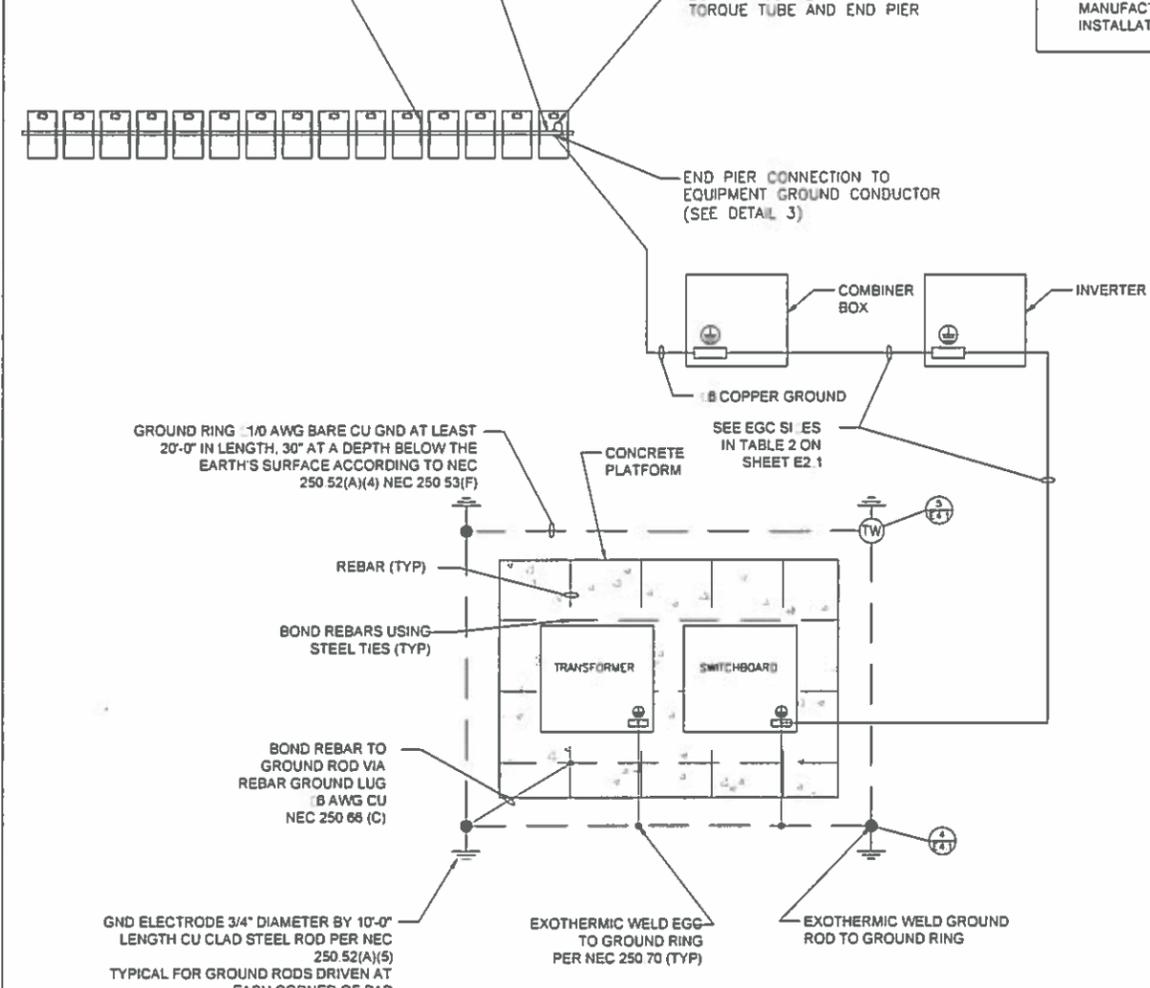
\*AC Voltage Drop % = [AC Current \* 0.866 \* 2 \* Conductor Length \* ResistancePer1000R/1000]/AC Voltage

Project Name: COMMUNITY POWER GROUP - CHAMPAIGN SOLAR I
Site Address: RANTOUL, IL 61866
40°21'11.42"N, 88°12'44.12"W

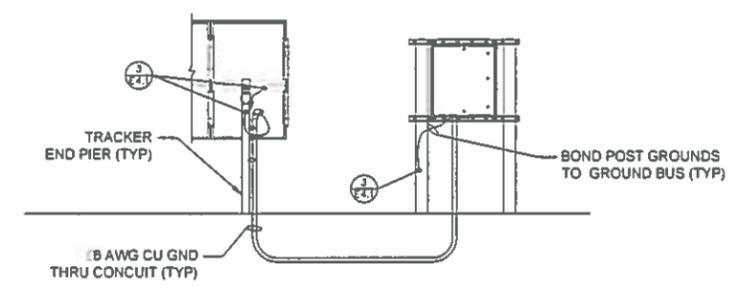
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Sheet Name: DC & AC CONDUCTOR SCHEDULE
Scale: Project ID TBD
Sheet No: E2.1

(TYP) STAR WASHER CREATES EGC BOND BETWEEN MODULE FRAME AND TORQUE TUBE (SEE DETAIL 6)



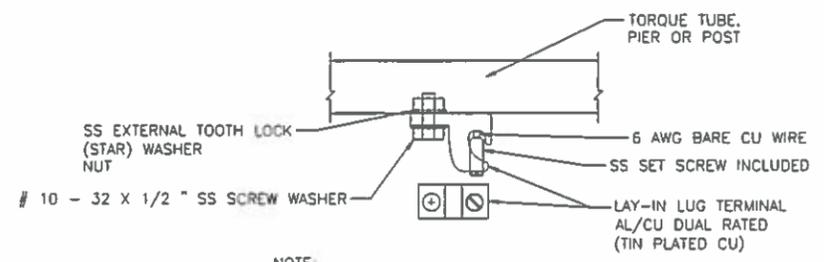
1 ARRAY AND TRANSFORMER GROUNDING (TYP) SCALE: NTS



2 GROUNDING OF ROWS BACK TO INVERTER SCALE: NTS

**NOTE:**

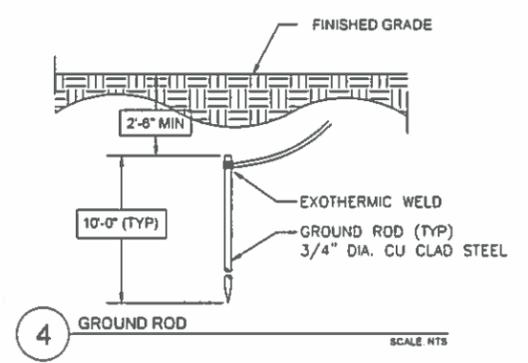
- ALL EQUIPMENT USED FOR BONDING AND GROUND CONNECTIONS SHALL BE UL LISTED APPROPRIATELY FOR THE APPLICATION
- ALL FIELD INSTALLED CONNECTORS TO MATCH FACTORY MODULE CONNECTORS BRAND AND TYPE
- RACKING TO BE GROUNDED PER MANUFACTURER DRAWINGS AND INSTALLATION MANUAL



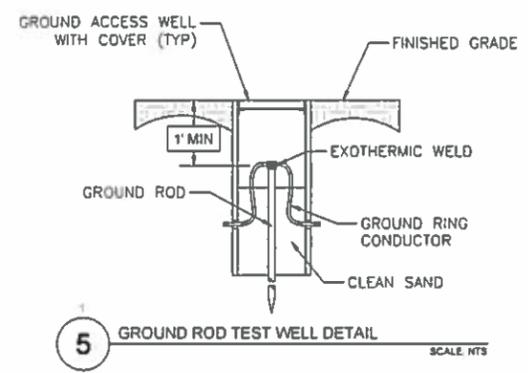
**NOTE:**

- REMOVAL OF PAINT IS NOT NEEDED PER UL 1703.11.3 AND 1703.11.4
- ATTACH THE GROUND TO THE PURLIN.
- TORQUE SCREW TO 5 ft-lbs.
- GROUNDING LUGS TO BE RATED FOR DIRECT BURIAL AND UL2703 LISTED

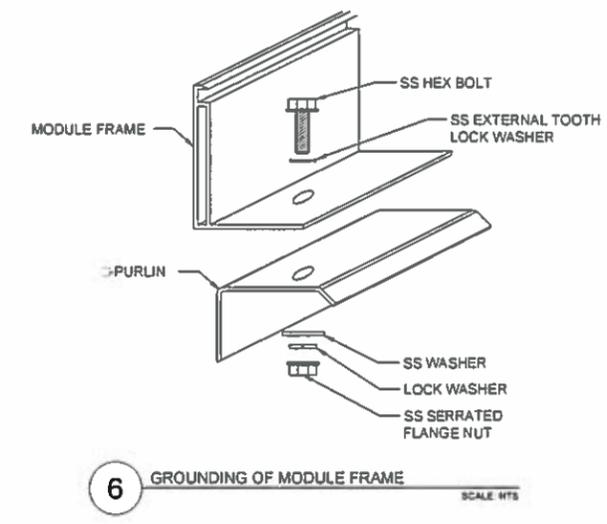
3 GROUND LUG CONNECTION DETAIL SCALE: NTS



4 GROUND ROD SCALE: NTS



5 GROUND ROD TEST WELL DETAIL SCALE: NTS



6 GROUNDING OF MODULE FRAME SCALE: NTS

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 PE Seal

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<input type="checkbox"/> Preliminary	<input type="checkbox"/> Construction
<input type="checkbox"/> Customer Approval	<input type="checkbox"/> As-built
<input type="checkbox"/> Permitting	<input type="checkbox"/> Other

**REVISIONS**

Rev	By	App	Description	Date
1	AK	AK	DETAILS DRAWING	1/25/2018
2	AK	AK	EXOTHERMIC WELD TO GROUND RING CONDUCTOR	1/25/2018
3	AK	AK	REMOVE 2"	1/25/2018

Project Name: COMMUNITY POWER GROUP - CHAMPAIGN SOLAR I  
 Site Address: RANTOUL, IL 61866  
 40°21'11.42"N, 88°12'44.12"W

Sheet Name: GROUNDING DETAILS

Scale: Project ID: TBD

Sheet No: E4.1

**Q ANTUM**

# Q.PLUS L-G4.2 345-355

**Q.ANTUM SOLAR MODULE**

The Q ANTUM solar module Q.PLUS L-G4.2 is the strongest module of its type on the market globally. Powered by 72 Q CELLS solar cells Q.PLUS L-G4.2 was specially designed for large solar power plants to reduce BOS costs. Only Q CELLS offers German engineering quality with our unique triple Yield Security.

- Q ANTUM TECHNOLOGY LOW LEVELED COST OF ELECTRICITY**  
Higher yield per surface area and lower BOS costs and higher power classes
- INNOVATIVE ALL WEATHER TECHNOLOGY**  
Optimal cells, whatever the weather with excellent low light and temperature behavior
- ENDURING HIGH PERFORMANCE**  
Long term yield security with A to P-D Technology, Hot Spot Protection and Trackable Quality Tri-Q™
- EXTREME WEATHER RATING**  
High tech aluminum alloy frame, certified for high winds (5400 Pa) and wind loads (2400 Pa)
- A RELIABLE INVESTMENT**  
Includes 12 year product warranty and 25 year linear performance warranty!

**THE IDEAL SOLUTION FOR**

Engineered in Germany

**Q CELLS**

**MECHANICAL SPECIFICATION**

Module: 1794 mm x 1000 mm x 35 mm (including frame)  
Weight: 21 kg  
Frame: 2.7 mm aluminum alloy structural plate with anodized surface for strength  
Back Cover: Composite foil  
Glass: 4 mm  
Cell: 17.2 x 8.8 mm solar cells  
Interlines: 95.1 x 90.8 mm (11.1 mm) Frameless (no cell P-D)  
Junction Box: 4 mm x 4 mm x 1.2 mm (1.2 mm) x 1.2 mm  
Cable: DC 11 mm x 2.0 mm (1.2 mm) x 1.2 mm

**ELECTRICAL CHARACTERISTICS**

POWER CLASS	1000 W	1050 W	1100 W
Power at STC	345	360	375
Short Circuit Current	8.8	9.0	9.2
Open Circuit Voltage	47.4	47.7	48.0
Current at MPPT	9.0	9.1	9.2
Voltage at MPPT	37.9	38.2	38.5
Efficiency	17.3	17.6	17.8

**PERFORMANCE AT STANDARD TEST CONDITIONS, STC (POWER TOLERANCE ± 0.5%)**

POWER CLASS	1000 W	1050 W	1100 W
Power at STC	345	360	375
Short Circuit Current	8.8	9.0	9.2
Open Circuit Voltage	47.4	47.7	48.0
Current at MPPT	9.0	9.1	9.2
Voltage at MPPT	37.9	38.2	38.5
Efficiency	17.3	17.6	17.8

**PERFORMANCE AT 1000 W**

**PERFORMANCE AT 1050 W**

**PERFORMANCE AT 1100 W**

**TEMPERATURE COEFFICIENTS**

Parameter	Value	Unit
Temperature Coefficient of $P_{max}$	-0.54	1/°C
Temperature Coefficient of $V_{oc}$	-0.42	1/°C
Temperature Coefficient of $I_{sc}$	0.29	1/°C

**PROPERTIES FOR SYSTEM DESIGN**

Parameter	Value	Unit
Maximum System Voltage	1500 (IEC) / 1500 (UL)	V
Maximum System Current	20	A
Maximum Power Current	20	A
Maximum Power Voltage	38.5	V
Maximum Power Voltage at STC	38.5	V
Maximum Power Voltage at 25°C	38.5	V
Maximum Power Voltage at 40°C	38.5	V
Maximum Power Voltage at 55°C	38.5	V
Maximum Power Voltage at 70°C	38.5	V
Maximum Power Voltage at 85°C	38.5	V
Maximum Power Voltage at 100°C	38.5	V

**QUALIFICATIONS AND CERTIFICATES**

CE, TUV, IEC, UL, VDE, etc.

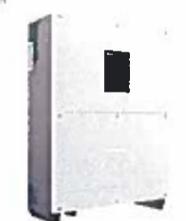
Engineered in Germany

**Q CELLS**

**SUNGROW**

# SG125HV

String Inverter for 1500 Vdc System



- High Yield**  
Power five-wire topology, max. efficiency 98.9%, DC-DC efficiency 98.8%, full power operation without derating at 40°C
- Easy O&M**  
Virtual center, auto-align, easy for O&M, compact design and light weight for easy installation
- Saved Investment**  
DC 1500 V, AC 690 V, low system cost, 1 to 8 MW power range, design for lower AC transformer and cable cost, Max. DC/AC ratio up to 1.5
- Grid Support**  
Compliance with standards: UL 1741, UL 1741 SA, IEEE 1547, IEEE 1547.1, IEEE 1547.2, IEEE 1547.4, IEEE 1547.5, IEEE 1547.6, IEEE 1547.7, IEEE 1547.8, IEEE 1547.9, IEEE 1547.10, IEEE 1547.11, IEEE 1547.12, IEEE 1547.13, IEEE 1547.14, IEEE 1547.15, IEEE 1547.16, IEEE 1547.17, IEEE 1547.18, IEEE 1547.19, IEEE 1547.20, IEEE 1547.21, IEEE 1547.22, IEEE 1547.23, IEEE 1547.24, IEEE 1547.25, IEEE 1547.26, IEEE 1547.27, IEEE 1547.28, IEEE 1547.29, IEEE 1547.30, IEEE 1547.31, IEEE 1547.32, IEEE 1547.33, IEEE 1547.34, IEEE 1547.35, IEEE 1547.36, IEEE 1547.37, IEEE 1547.38, IEEE 1547.39, IEEE 1547.40, IEEE 1547.41, IEEE 1547.42, IEEE 1547.43, IEEE 1547.44, IEEE 1547.45, IEEE 1547.46, IEEE 1547.47, IEEE 1547.48, IEEE 1547.49, IEEE 1547.50, IEEE 1547.51, IEEE 1547.52, IEEE 1547.53, IEEE 1547.54, IEEE 1547.55, IEEE 1547.56, IEEE 1547.57, IEEE 1547.58, IEEE 1547.59, IEEE 1547.60, IEEE 1547.61, IEEE 1547.62, IEEE 1547.63, IEEE 1547.64, IEEE 1547.65, IEEE 1547.66, IEEE 1547.67, IEEE 1547.68, IEEE 1547.69, IEEE 1547.70, IEEE 1547.71, IEEE 1547.72, IEEE 1547.73, IEEE 1547.74, IEEE 1547.75, IEEE 1547.76, IEEE 1547.77, IEEE 1547.78, IEEE 1547.79, IEEE 1547.80, IEEE 1547.81, IEEE 1547.82, IEEE 1547.83, IEEE 1547.84, IEEE 1547.85, IEEE 1547.86, IEEE 1547.87, IEEE 1547.88, IEEE 1547.89, IEEE 1547.90, IEEE 1547.91, IEEE 1547.92, IEEE 1547.93, IEEE 1547.94, IEEE 1547.95, IEEE 1547.96, IEEE 1547.97, IEEE 1547.98, IEEE 1547.99, IEEE 1547.100

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### Exhibit B – Project Summary

The following describes Community Power Group’s proposed community solar garden (“Champaign Solar”) located on County Road 1300E in Rantoul, Illinois 61866:

- **Approximate DC and AC Generating Capacity:**
  - o 2,710.665kWdc / 2,000kWac
- **Maximum number of solar devices:**
  - o Using the panels listed in the site plan (Exhibit D) and the aforementioned generating capacity, 7,857 panels are required.
- **Type of Solar Devices**
  - o Panels: (7,857) Hanwha Q.CELL 345W panels
  - o Inverter: (16) Sungrow SG125HV 125kW inverters
  - o Racking: Array Technologies, Inc. Duratrack HZ V3 Single-Axis Tracking
- **Potential Equipment Manufacturer:**
  - o See above descriptions.

**Specific Proposed Location of the PV Solar Farm / Location of all tax parcels required to be included in the PV SOLAR FARM County Board SPECIAL USE Permit:**



Tax parcel 14-03-20-100-009 will be the only one utilized. The approximate project area is outlined in red.

#### Owner/Operator and Applicant Description:

- Community Power Group is the Applicant and will be the owner/operator of Champaign Solar. Community Power Group is a privately-held Limited Liability Company.

**EXHIBIT E – MINIMIZING VISUAL IMPACT**

The only property near the project location that may be affected is directly northeast and adjacent to the project parcel. To minimize visual impact, screening will be put in place on the northern side of the project to minimize negative effects to the local viewshed. The existing electric substation will continue to be the primary structure in the viewshed of other possible neighbors.

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**JAN 25 2018**

**CHAMPAIGN CO. P & Z DEPARTMENT**

### Exhibit E – Special Use Permit Area



**Footnote:** Photo taken from Champaign County GIS.

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AUG 13 2018

CHAMPAIGN CO. P & Z DEPARTMENT

**EXHIBIT F – IMPACT ON WILDLIFE**

Attached below is an EcoCAT report completed through the Illinois Department of Natural Resources which is a common tool used to determine impact on sensitive natural resources including wildlife. While this was done to ensure no sensitive species were in the area, solar poses no threat to wildlife or natural resources in general.

**RECEIVED**

**JAN 25 2018**

**CHAMPAIGN CO. P & Z DEPARTMENT**



**Applicant:** Community Power Group, LLC  
**Contact:** Nick Mento  
**Address:** 4849 Rugby Avenue  
Suite 1000  
Bethesda, MD 20814

**IDNR Project Number:** 1805069  
**Date:** 12/18/2017

**Project:** Champaign Solar I  
**Address:** SE Corner of County Road 3300N/1300E, Rantoul

**Description:** Installing a 2MW ground-mounted community solar garden on approximately 12.6 acres of land.

### Natural Resource Review Results

#### Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

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.** This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Termination does not imply IDNR's authorization or endorsement.

#### Location

The applicant is responsible for the accuracy of the location submitted for the project.

**County:** Champaign

**Township, Range, Section:**  
22N, 9E, 20



**IL Department of Natural Resources**  
**Contact**  
Natalia Jones  
217-785-5500  
Division of Ecosystems & Environment

**Government Jurisdiction**  
Champaign County Planning and Zoning  
John Hall  
1776 East Washington Street  
Urbana, Illinois 61802

#### Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

**RECEIVED**

**JAN 25 2018**

IDNR Project Number: 1805069

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1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

### **Security**

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

### **Privacy**

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.

**Exhibit F – Separation of Farm from Dwellings**



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**EXHIBIT G – STRAY VOLTAGE, BROADCAST INTERFERENCE, AND NOISE**

Stray voltage is not an issue during solar development and operation. However, the one spot where stray voltage could occur, is where the inverter connects to the grid. The inverter's performance is monitored with technology that would detect the problem immediately allowing the problem to be fixed immediately as well. Solar does not have any recorded effect on broadcast signals and do not foresee that being a problem. Finally, solar facilities are virtually silent, with the only noise generated coming from a quiet buzz from the inverters. While levels can range depending on inverters, the string inverters being used in this project would likely generate between 20-40 decibels (similar to a fridge).

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**JAN 25 2018**

**CHAMPAIGN CO. P & Z DEPARTMENT**

**Exhibit G – Decommissioning / Site Reclamation Covenants & Letter of Credit**

Community Power Group will accept recording a covenant incorporating the above decommissioning plan provisions on the deed subject to the lot as a condition of special use permit approval.

Furthermore, Community Power Group will accept providing cost estimates from an Illinois Licensed Professional Engineer for the decommissioning / site reclamation as a condition of the special use permit.

Finally, Community Power Group will accept, as a condition of the special use permit, to be required to provide an irrevocable letter of credit from a federally insured financial institution within 200 miles of Urbana.

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**CHAMPAIGN CO. P & Z DEPARTMENT**

# DECOMMISSIONING PLAN CHAMPAIGN SOLAR FARM

CHAMPAIGN COUNTY, ILLINOIS



Prepared By:



August 2018

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**AUG 13 2018**

CHAMPAIGN CO. P & Z DEPARTMENT

**Champaign Solar Farm – Decommissioning Plan**

**1. EXECUTIVE SUMMARY**

The Champaign Solar Farm is proposed to be a 2 Megawatt (MW) solar energy conversion system located on ~36 acres on County Road 1300E and County Road 3300N in Champaign County, Illinois. The facility will use solar photovoltaic technology and a single axis tracking racking system. The project will cover approximately 13 acres as noted in the attached site plan. As noted in this report the salvage value of the raw materials of \$42,456 will exceed the estimated cost of decommissioning the system of \$40,976. These amounts do not include the value of the solar panels (which have an 80% production guarantee at 25 years) or the other electric equipment. If counted, the value of the panels and electrical equipment would result in a salvage value that would far exceed the cost of removing the facility. However, to provide the land owner with additional surety beyond the salvage value, the Community Power Group is providing the landowner a corporate guarantee for the removal of the facility and that corporate guarantee will survive or be transferred in a sale of the asset or in bankruptcy. Petitioner will provide a financial surety of \$1,000/acre in addition to the salvage value described below. The Petitioner expects to record a covenant incorporating the provisions of this decommissioning plan on the deed subject to the lot as a condition of special use permit approval.



**2. SITE DESCRIPTION**

The Champaign Solar Farm is proposed to be a 2 Megawatt (MW) solar energy conversion system located on 36 acres on County Road 1300E and County Road 3300N in Champaign County, Illinois. See Appendix A for site plan. The proposed Solar Farm will consist of the following primary components:

SITE COMPONENTS			
ITEM	ENTIRE SITE	PER MW	UNIT
Structural Steel	169.77	84.89	Tons
Copper Wiring	1.84	0.92	Tons
Aluminum Frame & Wiring	8.34	4.17	Tons
Concrete Foundations / slabs	17.55	8.77	Cubic Yards
Solar Panel Modules	7,371	3,685	Each

**a. Decommissioning Sequence**

In the event the Champaign Solar Energy Project requires decommissioning, the following sequence for removal of the components will be used:

- Remove Solar Panel Modules
- Remove Structural Steel Framing
- Remove Concrete Foundations/ Slabs
- Remove Above and Below Ground Cable
- Reclaim Site to Pre-Construction Condition

## Champaign Solar Farm – Decommissioning Plan

**3. SOLAR PANELS AND RACKING****a. Solar Panel Technical Data**

The Champaign Solar Energy Project will have a system capacity of 2 Megawatts (MW) and will use a single axis tracker system. There will be 7,857 panels, with 95 rows each with 81 panels; 3 rows each with 54. There will be 1,365 steel driven post holding the racking.

**b. Solar Panel Decommissioning**

Assuming the steel framing, copper and aluminum wiring are salvageable and using current salvage values as of the date of this report, the salvage value for the solar farm is estimated as follows:

SALVAGE VALUE OF MATERIALS ESTIMATE		
Structural Steel Framing – 84.89 TONS / MW	\$175 / TON	\$14,855
Coated Copper Wiring (COATED) – 0.92 TONS / MW	\$3,300/ TON	\$3,040
Aluminum Framing & Wiring – 4.17 TONS / MW	\$800 / TON	\$3,334
Panels and Inverters		
	Per Megawatt Basis	TOTALS
	Total Estimate for 2MW	TOTALS
		\$21,229
		\$42,459

The solar panels would be salvageable for reuse or resale on other solar energy projects; the panels have a warranty to still be able to generate electricity at 80% of their original capacity after 25 years. The panels will be collected, hauled to a storage yard and assessed for value at the time of decommissioning. Inverters, transformers, and the switchgear will also retain value for reuse on other power generating projects and will be hauled to a storage facility for assessed value, functionality and potential reuse. For the purposes of this report, it has been conservatively estimated that the value of these components surpasses the cost of the disassembling and hauling processes.

Disassembly costs include all equipment, labor, and materials involved with taking apart the solar panel modules, and framing. Hauling costs assume a 10-mile radius hauling, and 15 Racks per load (45 Racks per MW). It is assumed that it will take 2 operators and 2 laborers to disassemble racks. Estimates per MW for disassembling racks and hauling salvageable materials and modules off site are as follows:

DISASSEMBLY COSTS OF SOLAR PANELS COST ESTIMATE		
Disassembly Framing Racks & Modules – 45 RACKS / MW	\$150 / HR	\$13,500
Hauling Structural Steel Framing Offsite – 45 RACKS / MW	\$75 / HR	\$3,375
Hauling Coated Copper Wiring (Coated) Offsite – .092 TONS / MW	\$75 / HR	\$600
Hauling Aluminum Framing & Wiring – 4.17 TONS / MW	\$75 / HR	\$600
Per Megawatt Basis	TOTALS	\$18,075
Total Estimate for 2 MW	TOTALS	\$36,150

**c. Site Foundations & Slabs**

Each concrete foundation will have to be completely removed and hauled off site to an approved fill site. The foundation can be removed by a jackhammer mounted on either a skid loader or excavator.

There is essentially no salvage value to the site's foundations and slabs. The foundation designs for the site consist of 1 Equipment Pad inverter slabs (10' x 8' x 2') amounting to 9 C.Y. of concrete. The removal and disposal of the foundations and slabs are estimated as follows:

## Champaign Solar Farm – Decommissioning Plan

CONCRETE FOUNDATION & SLAB REMOVAL COST ESTIMATE		
Mobilization, Excavation, & Removal	\$500 / DAY	\$500
Approved Site for Concrete Fill – Assume \$10 / C.Y.	9 C.Y.	\$90
Per Site Basis	TOTALS	\$590

#### 4. AGGREGATE ACCESS ROADS AND PADS

##### a. Description

The site decommissioning will involve the removal and transportation of the aggregate materials from the site to a nearby site where the aggregate can be placed as fill, or processed for salvage. It is possible that the local townships may accept this material without processing to use on their local roads; however, for the purpose of this report it is assumed that the materials will be removed and hauled to a fill/reprocessing site within 10 miles of the solar site. Permanent site roadways will be constructed in such a manner that topsoil will be bladed back from the roadway areas and blended into normal site grading; therefore no topsoil will need to be hauled in during decommissioning of the site. There are approximately 233,820 square yards of permanent access roads. Foundation/Pad construction will be performed in a similar manner. Costs for this are discussed above.

##### b. Aggregate Access Road Decommissioning

The total length of the site access roads is 534 linear feet by 12 feet wide. The average excavation depth of the roadways will be 12" of CA-6 aggregate materials and aggregate soil mixed materials. Using the designed roadway lengths, widths and depths, 213 cubic yards of material will need to be excavated and hauled away. Based on the current prices for excavation and hauling of materials the following unit prices are used to estimate the access road decommissioning costs:

REMOVAL OF ACCESS ROADS COST ESTIMATE		
Mobilization and Aggregate / Earth Excavation – 213C.Y.	\$11.50 / C.Y.	\$2,456
Re grading of Roadway Areas – 712 S.Y.	\$2.50 / S.Y.	\$1,780
Per Site Basis	TOTALS	\$4,236

#### 5. CABLES

##### a. Cable Wire and Trench Installation

This project will have cable both above ground and placed in below the ground surface. In all cable locations outside the access roads, the trenches are backfilled with on site earthen materials with at least 6 inches of topsoil. At roads, the cables will be in conduits and back filled to prevent rutting.

##### b. Cable Wire and Trench Decommissioning

All cables placed on this site will be salvaged. Below ground cables will be pulled and conduits will be removed during the decommissioning of this project. The cost for pulling cables is included with the disassembling of racks and panels cost per megawatt as noted above.

##### c. Earthwork and Topsoil Restoration

Once all the above ground improvements are removed, the remaining work to complete the decommissioning of the Champaign Solar Energy Project will consist of shaping and grading of the areas to as near as practicable ensure proper drainage of the project area. The initial site grading performed

**Champaign Solar Farm – Decommissioning Plan**

during the construction of the solar farm is design to be done in such a manner as to limit mass earth moving and only include efforts to ensure positive drainage of the site. This initial effort of maintaining much of the site original topography will allow for very limited grading to be required during decommissioning. It is expected that only the roadway areas, switch yard, and warehouse building area will require regarding and restoration.

The access roads are designed to simply move the topsoil to the side of the roads and be used as fill. This topsoil can easily be re graded back to create a usable condition and ensure proper drainage. Estimates of cost for this re grading were included in the aggregate access roads areas.

**6. SUMMARY OF DECOMMISSIONING COSTS**

The following is a summary of the total costs for the decommissioning of the Champaign Solar Farm. The table indicates the salvageable elements of this site are of greater value that the cost of restoring the property to its use for farming purposes. It is felt this estimate is conservative due to the value of the panels and other electrical components not being included. The total decommissioning costs of the Champaign Solar Farm can completely be recovered from salvageable materials on site.

TOTAL COST ESTIMATE		
DESCRIPTION	DEBIT	COST
SOLAR EQUIPMENT RECYCLING & SALVAGING \$57,475 x 2 MW	\$42,456	
DISASSEMBLING & HAULING SOLAR EQUIPMENT \$47,775 x 2 MW		\$36,150
SITE CONCRETE FOUNDATIONS & SLABS		\$590
AGGREGATE ACCESS ROADS & PADS REMOVAL		\$4,236
TOTALS	\$42,456	\$40,976
NET	\$1,480	

**EXHIBIT H – IMPACT ON DEVELOPMENT, PROPERTY VALUES AND  
AESTHETIC**

The location of this special use will not interfere in orderly development of the county. The site is surrounded by primarily farm land which would not experience a decrease in property value as a result of a nearby solar farm. The solar farm would have minimal effect on the aesthetic of the agricultural landscape and, in the case of the nearby residence, will have screening for part of the facility to block any negative effects on the viewshed.

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**Exhibit H – Interconnection Application**

The following interconnection application was sent to Ameren Illinois on December 22<sup>nd</sup>, 2017.

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**Level 2, Level 3 & Level 4  
Interconnection Request Application Form  
(Greater than 25 kW to 10 MVA or less)**

**Interconnection Customer Contact Information**

Name: Community Power Group, LLC  
Mailing Address: 4849 Rugby Avenue, Suite 1000  
City: Bethesda State: MD Zip Code: 20814  
Telephone (Daytime): (202) 844-6423 (Evening): \_\_\_\_\_  
Facsimile Number: (301) 657-4494 E-Mail Address: mborkowski@communitypowergroup.com

**Alternative Contact Information (if different from Customer Contact Information)**

Name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Telephone (Daytime): \_\_\_\_\_ (Evening): \_\_\_\_\_  
Facsimile Number: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

**Facility Address (if different from above):**

Field just west/south of 1321 3300N Road  
City: Rantoul State: IL Zip Code: 61866  
Electric Distribution Company (EDC) Serving Facility Site: Ameren  
Electric Supplier (if different from EDC): \_\_\_\_\_  
Account Number of Facility Site (existing EDC customers): N/A  
Inverter Manufacturer: Sungrow Model: SG125HV

**Equipment Contractor**

Name: Community Power Group, LLC  
Mailing Address: 4849 Rugby Avenue, Suite 1000  
City: Bethesda State: MD Zip Code: 20814  
Telephone (Daytime): (202) 844-6423 (Evening): \_\_\_\_\_  
Facsimile Number: (301) 657-4494 E-Mail Address: mborkowski@communitypowergroup.com

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**Electrical Contractor** (if different from Equipment Contractor)

Name: \_\_\_\_\_  
 Mailing Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
 Telephone (Daytime): \_\_\_\_\_ (Evening): \_\_\_\_\_  
 Facsimile Number: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_  
 License Number: \_\_\_\_\_

**Electric Service Information for Customer Facility Where Generator Will Be Interconnected**

Capacity: 9.4 (Amps) Voltage: 12,500 (Volts)  
 Type of Service: Single Phase Three Phase  
 If 3 Phase Transformer, Indicate Type:  
 Primary Winding Wye Delta  
 Secondary Winding Wye Delta  
 Transformer Size: 2,000kVA Impedance: 6.0

**Intent of Generation**

Offset Load (Unit will operate in parallel, but will not export power to EDC)

Net Meter (Unit will operate in parallel and will export power pursuant to Illinois Net Metering or other filed tariffs)

Wholesale Market Transaction (Unit will operate in parallel and participate in PJM or MISO markets pursuant to a PJM Wholesale Market Participation Agreement or MISO equivalent)

Back-up Generation (Units that temporarily operate in parallel with the electric distribution system for more than 100 milliseconds)

Note: Backup units that do not operate in parallel for more than 100 milliseconds do not need an interconnection agreement.

**Generator & Prime Mover Information**

ENERGY SOURCE (Hydro, Wind, Solar, Process Byproduct, Biomass, Oil, Natural Gas, Coal, etc.): Solar		
ENERGY CONVERTER TYPE (Wind Turbine, Photovoltaic Cell, Fuel Cell, Steam Turbine, etc.): Photovoltaic cell		
GENERATOR SIZE:  125 kW or kVA	NUMBER OF UNITS:  16	TOTAL CAPACITY:  2,000 kW or kVA
GENERATOR TYPE (Check one): Induction <input checked="" type="radio"/> Inverter    Synchronous    Other 14504 August 25, 2008 862 January 20, 2017		

**Requested Procedure Under Which to Evaluate Interconnection Request<sup>1</sup>**

Please indicate below which review procedure applies to the interconnection request. The review procedure used is subject to confirmation by the EDC.

**Level 2** – Lab-certified interconnection equipment with an aggregate electric nameplate capacity not exceeding the specifications in Section 466.90(b)(2). Lab-certified is defined in Section 466.30. (Application fee is \$100 plus \$1.00 per kVA.)

**Level 3** – Distributed generation facility does not export power. Nameplate capacity rating is less than or equal to 50 kW if connecting to area network or less than or equal to 10 MW if connecting to a radial distribution feeder. (Application fee amount is \$500 plus \$2.00 per kVA.)

**Level 4** – Nameplate capacity rating is less than or equal to 10 MVA and the distributed generation facility does not qualify for a Level 1, Level 2 or Level 3 review, or the distributed generation facility has been reviewed but not approved under a Level 1, Level 2 or Level 3 review. (Application fee amount is \$1,000 plus \$2.00 per kVA, to be applied toward any subsequent studies related to this application.)

<sup>1</sup> **Note:** Descriptions for interconnection review categories do not list all criteria that must be satisfied. For a complete list of criteria, please refer to 83 Ill. Adm. Code 466, Electric Interconnection of Distributed Generation Facilities.

**Distributed Generation Facility Information**

**Commissioning Date:** 03/31/2019

**List interconnection components/systems to be used in the distributed generation facility that are lab-certified.**

Component/System	NRTL Providing Label & Listing
1. <u>Sungrow SG125HV</u>	
2. _____	
3. _____	
4. _____	
5. _____	

Please provide copies of manufacturer brochures or technical specifications.

**Energy Production Equipment/Inverter Information:**

Synchronous \_\_\_\_\_ Induction \_\_\_\_\_ Inverter \_\_\_\_\_ Other \_\_\_\_\_  
 Rating: 125 kW Rating: 125 kVA  
 Rated Voltage: 600 Volts  
 Rated Current: 120 Amps  
 System Type Tested (Total System): Yes  No; attach product literature

**For Synchronous Machines:**

**Note: Contact EDC to determine if all the information requested in this section is required for the proposed distributed generation facility.**

Manufacturer: \_\_\_\_\_

Model No.: \_\_\_\_\_ Version No.: \_\_\_\_\_

Submit copies of the Saturation Curve and the Vee Curve

Salient Non-Salient

Torque: \_\_\_\_\_ lb/ft Rated RPM: \_\_\_\_\_ Field Amperes: \_\_\_\_\_ at rated generator  
voltage and current and \_\_\_\_\_ % PF over-excited

Type of Exciter: \_\_\_\_\_

Output Power of Exciter: \_\_\_\_\_

Type of Voltage Regulator: \_\_\_\_\_ Locked Rotor

Current: \_\_\_\_\_ Amps      Synchronous Speed: \_\_\_\_\_ RPM  
 Winding Connection: \_\_\_\_\_ Min. Operating Freq./Time: \_\_\_\_\_  
 Generator Connection:      Delta                      Wye                      Wye Grounded  
 Direct-axis Synchronous Reactance:      (Xd) \_\_\_\_\_ ohms  
 Direct-axis Transient Reactance:      (X'd) \_\_\_\_\_ ohms  
 Direct-axis Sub-transient Reactance:      (X''d) \_\_\_\_\_ ohms  
 Negative Sequence Reactance: \_\_\_\_\_ ohms  
 Zero Sequence Reactance: \_\_\_\_\_ ohms  
 Neutral Impedance or Grounding Resister (if any): \_\_\_\_\_ ohms

**For Induction Machines:**

**Note: Contact EDC to determine if all the information requested in this section is required for the proposed distributed generation facility.**

Manufacturer: \_\_\_\_\_  
 Model No.: \_\_\_\_\_ Version No.: \_\_\_\_\_  
 Locked Rotor Current: \_\_\_\_\_ Amps  
 Rotor Resistance (Rr): \_\_\_\_\_ ohms      Exciting Current: \_\_\_\_\_ Amps  
 Rotor Reactance (Xr): \_\_\_\_\_ ohms      Reactive Power Required: \_\_\_\_\_  
 Magnetizing Reactance (Xm): \_\_\_\_\_ ohms      \_\_\_\_\_ VARs (No Load)  
 Stator Resistance (Rs): \_\_\_\_\_ ohms      \_\_\_\_\_ VARs (Full Load)  
 Stator Reactance (Xs): \_\_\_\_\_ ohms  
 Short Circuit Reactance (X''d): \_\_\_\_\_ ohms  
 Phases:      Single      Three Phase  
 Frame Size: \_\_\_\_\_ Design Letter: \_\_\_\_\_ Temp. Rise: \_\_\_\_\_ °C.

**Reverse Power Relay Information (Level 3 Review Only)**

Manufacturer: \_\_\_\_\_  
 Relay Type: \_\_\_\_\_ Model Number: \_\_\_\_\_  
 Reverse Power Setting: \_\_\_\_\_  
 Reverse Power Time Delay (if any): \_\_\_\_\_

**Additional Information For Inverter-Based Facilities**

**Inverter Information:**

Manufacturer: Sungrow Model: SG125HV - UL1741  
 Type: Forced Commutated Line Commutated  
 Rated Output: 125,000 Watts 600 Volts  
 Efficiency: 98.5 % Power Factor: 100 %  
 Inverter UL 1741 Listed: Yes No

**DC Source / Prime Mover:**

Rating: 2,506.00 kW Rating: 2,506.00 kVA  
 Rated Voltage: 1,500 Volts  
 Open Circuit Voltage (if applicable): \_\_\_\_\_ Volts  
 Rated Current: 163 Amps  
 Short Circuit Current (if applicable): \_\_\_\_\_ Amps

**Other Facility Information:**

One Line Diagram attached: Yes

Plot Plan attached: Yes

**Customer Signature**

I hereby certify that all of the information provided in this Interconnection Request Application Form is true.

Applicant Signature: \_\_\_\_\_

Title: President

Date: 12/22/17

An application fee is required before the application can be processed. Please verify that the appropriate fee is included with the application:

Amount: 2100

**EDC Acknowledgement**

**Receipt of the application fee is acknowledged and this interconnection request is complete.**

EDC Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

(Source: Amended at 41 Ill. Reg. 862, effective January 20, 2017)

**EXHIBIT I – DRAINAGE**

Per historical landowner information and GIS analysis, drainage has historically not been an issue on the site of the project. In any case, solar does not alter the existing drainage profile of the area because the soil below the panels remain pervious, allowing proper drainage of the site.

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### **Exhibit I – Landscape Plan**

The following shows the landscaping that will be used primarily to screen the north portion of the solar facility. There is about 422' and 272' between the fence of the facility and the residence to the northeast and northwest, respectively. The screening will go along the north side of the fence and extend approximately 100ft along the east and west side. See Exhibit F for distances from dwellings.

Year-round pollinator friendly ground cover will be maintained within the facility.

See below for the Weed and Grass Control plan.

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# EXHIBIT I – LANDSCAPE PLAN

**Landscaping Considerations**  
**Screening #1**



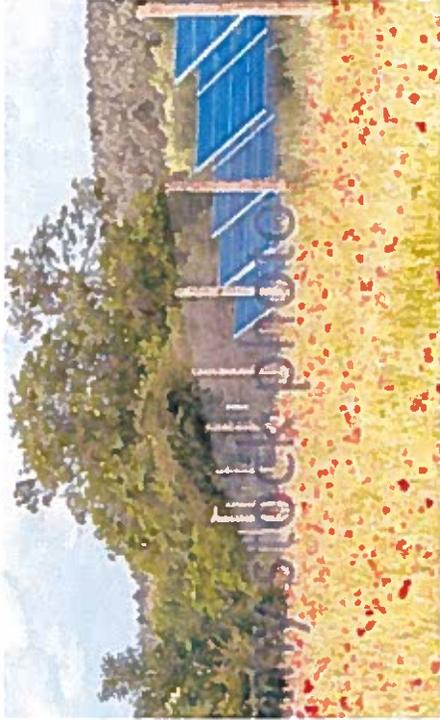
**Peking Cotoneaster – Planted at 4'; Grows 6-10' high**

**Screening #2**



**Wentworth American Cranberry Bush – Planted at 4'; Grows 10-12' high**

**Fence & Pollinator Cover**



**7' Game fence will be used to complement the aesthetics of the rural landscape**



**Pollinator-friendly ground cover can complement existing agriculture in the area – also helps combat excessive runoff**

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# Weed and Grass Control Plan

## CHAMPAIGN SOLAR SOLAR FARM

CHAMPAIGN COUNTY, ILLINOIS



Prepared By:



August 2018

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**AUG 13 2018**

CHAMPAIGN CO. P & Z DEPARTMENT

**Introduction**

Community Power Group approaches every local solar site as an opportunity to provide local renewable energy and to maintain or improve the local ecosystem. From a vegetation and weed management perspective, our goal is to stabilize the soil and to add to the health of the land on which the solar is located and the surrounding area.

In most instances there is a need to re-seed the portions of the property that may have been impacted by the installation of the community solar garden. While there is no single solution that works for all climates, we maintain a consistent approach in that there are certain factors that need to be addressed including:

- Preventing soil erosion and runoff;
- Providing pollination and other ecological services provided by insects;
- Invasive species and weed management

**Establishing Pollinator-Friendly Plantings**

Solar in open landscapes can be dominated by a diversity of grass and forb (wildflower) species. Prairie communities vary from site to site due to differences in slope (hills vs. lowlands) and soil types. Seed mixes can include a diversity of flowering plants that can:

- Provide food and habitat for butterflies, bees, and insects that pollinate flowering forbs and some commercial agricultural crops.
- Significantly reduce wind and surface water erosion.
- Significantly reduce fertilizer, herbicide, and pesticide applications, resulting improved water quality.
- Increase organic matter and water holding capacity of soils. The result is higher quality soils for farming when the site is decommissioned.
- Improve the aesthetic look of the solar facility.

**Seed Mix Development**

Seed mixes can be adapted to include only low-growing species that would not shade the solar panels or cause undue harm to their primary purpose of creating clean, renewable energy. There are many options when developing a native seed mix. The following is a framework we would consider when working with a local seed company to design a native seed mix.

*Seed Mix Cost*

Native seed mixes generally cost more than non-native seed mixes. However, the higher seed cost can be offset by the following:

- No fertilizer applications are needed prior to planting.
- Watering recently established native seed plantings is not necessary except in years of extreme drought.
- Participating in trading “Prairie” acres as carbon credits may be possible.

*Seed Source*

To the extent possible, plant vegetation or sow seeds that are sourced from Illinois using a high diversity of species. Seeds would be sourced from areas with similar site conditions that are native to the county or adjacent county where the project is being constructed.

Using local seed protects existing native prairies from genetic contamination and the spread of invasive/noxious species. Plants brought from different areas with significantly different climatic conditions may also not produce viable seed.

#### *Seed Specification/Diversity*

Diversity, meaning a variety of plant species in one place, is key to a planting's success. The more diverse a planting is, the better chance it has at long-term health and self-sustainability, which translates to lower management costs. Over the years, there would be variations in invasive species pressure, soil conditions, and climate, such as extreme drought or extreme moisture. Having a diversity of plants ensures that more species are able to adapt to these extremes and can therefore respond to changing environmental conditions. Pollinator seed mixes should include:

- Seed mixes would have a seeding rate of ~40 seeds/sq. ft.
- At least 40% of the total seeding rate should be composed of perennial forbs.
- 7 or more native grass/sedge species with at least 2 species of bunchgrass.
- 20 or more native forbs with at least 5 species in each bloom period: Early (April-May), Mid (June-August), and Late (August-October).
- Plant species under panel arrays should have a maximum height of 1.5 feet and would include shade-tolerant species.

#### Grass-only seed mixes:

- Seed mixes would have a seeding rate of ~40 seeds/sq. ft.
- 7 or more native grass/sedge species with at least 2 species of bunchgrass.
- Plant species under panel arrays should have a maximum height of 1.5 feet and would include shade-tolerant species.

#### Wetland/ Farmed wetland seed mixes to be used outside of panel areas:

- Work with a native seed company to select the appropriate seed mix or develop a custom seed mix, if applicable.

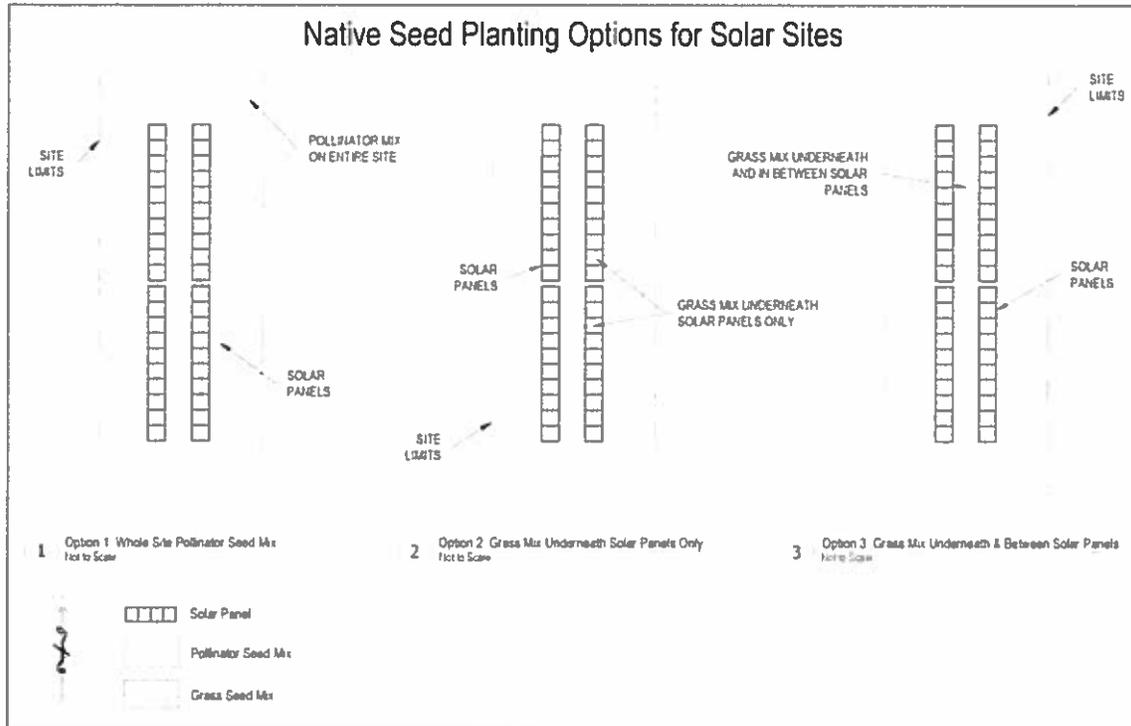
Note that any state-listed species (endangered, threatened, or special concern) seed would not be included in any of the mixes.

#### *Planting Layout Recommendations*

Below is a schematic of planting options and an example seed mix. The example seed mixes are short in stature and have some shade tolerance for species planted under the panels. The seed mixes may need to be modified to include species that naturally occur in the geographic area of the project and are suitable for the soil and site conditions.

There are three basic layout options that would work for this solar site, as would be determined at the time of planting:

- Option 1. Whole site planted with pollinator seed mix (grasses and forbs).
- Option 2. Grass only mix planted underneath solar panels. In between rows and perimeter planted with pollinator mix.
- Option 3. Grass only mix planted underneath and between solar panels. Perimeter planted to a pollinator mix.



**Planting Specifications**

The planting would occur post-construction of the solar field. Attempting to plant after grading and before post and panel installation would result in poor soil to seed contact due to equipment maneuvering.

Grasses/sedges would be broadcast seeded. The key to stand success is to maximize seed to soil contact during planting. Native-seed broadcasters (e.g., Vicon seeder) would be used as they are adapted to spread mixes with different sized seeds.

**Establishment and Maintenance Specifications**

Seed establishment in the first 2-3 years involves spot-spraying or mowing of invasive weeds. Removal of the invasive weeds would allow for the prairie plantings to become established and help prevent future weed growth.

*Spot-Mowing*

Spot-mowing involves mowing only in the areas with invasive or noxious plants. Spot-mowing slows the aggressive and fast growing invasive plants and allows the native species to become established. Spot-mowing would be done at a raised height (>5”) in order to target the invasive plants and to not damage the native species, especially during the establishment period. Spot-mowing for control of invasive or noxious weeds can be done every year to ensure planting health, even during establishment years. Repeated mowing would be avoided as it can cause the planting to fail.

*Spot-Spraying*

Spot-spraying would target only noxious/invasive weed species. A licensed applicator would be hired to apply the appropriate selective herbicide. Plantings that include both grasses and forbs should not be broadcast-sprayed.

*Long-Term Maintenance*

Long-term prairie maintenance usually begins in years 4-5 by introducing disturbance into the planting. The plan may include haying/mowing, or spraying to remove any unwanted trees/shrubs that may be present. After completing the selected maintenance activity in year 4-5, we repeat this maintenance approximately every 2-3 years, depending on tree/shrub encroachment, ratios of grasses to forbs, presence of noxious weeds, and overall planting health.

Haying/mowing would be done at a raised height of 5” or higher in the month of October or when prairie plants have gone dormant. Haying/mowing equipment would be cleaned prior to use on site to prevent the spread of non-native and invasive species into the planting.

### **Exhibit J – Highway Requirements**

Community Power Group is currently discussing a waiver for the requirements of subparagraphs 6.1.5 G.(1), (2) and (3) of Champaign County Zoning Ordinance for the Community PV Solar Farm proposed within this permit application. Kenneth During, Road Commissioner, is the point of contact with the Township of Ludlow regarding the waiver. Community Power Group will aim to have a signed waiver, pending discussions between Community Power Group and the Township regarding possible other conditions, by the County Board meeting that will discuss this special use application.

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**AUG 13 2018**

**CHAMPAIGN CO. P & Z DEPARTMENT**



August 13, 2018

Champaign County Board  
1776 East Washington Street  
Urbana, Illinois 61802

To Whom It May Concern,

I, Kenny During Road Commissioner for the Ludlow Township, am submitting this letter recognizing that the Ludlow Township is currently reviewing a waiver for the requirements of Champaign County Zoning Ordinance subparagraphs 6.1.5 G.(1), (2) and (3) related to Community Power Group's Special Use Permit for a Community PV Solar Farm in Ludlow Township.

Sincerely,

A handwritten signature in cursive script that reads "Kenneth During".

Kenneth During  
Road Commissioner

**RECEIVED**

**AUG 13 2018**

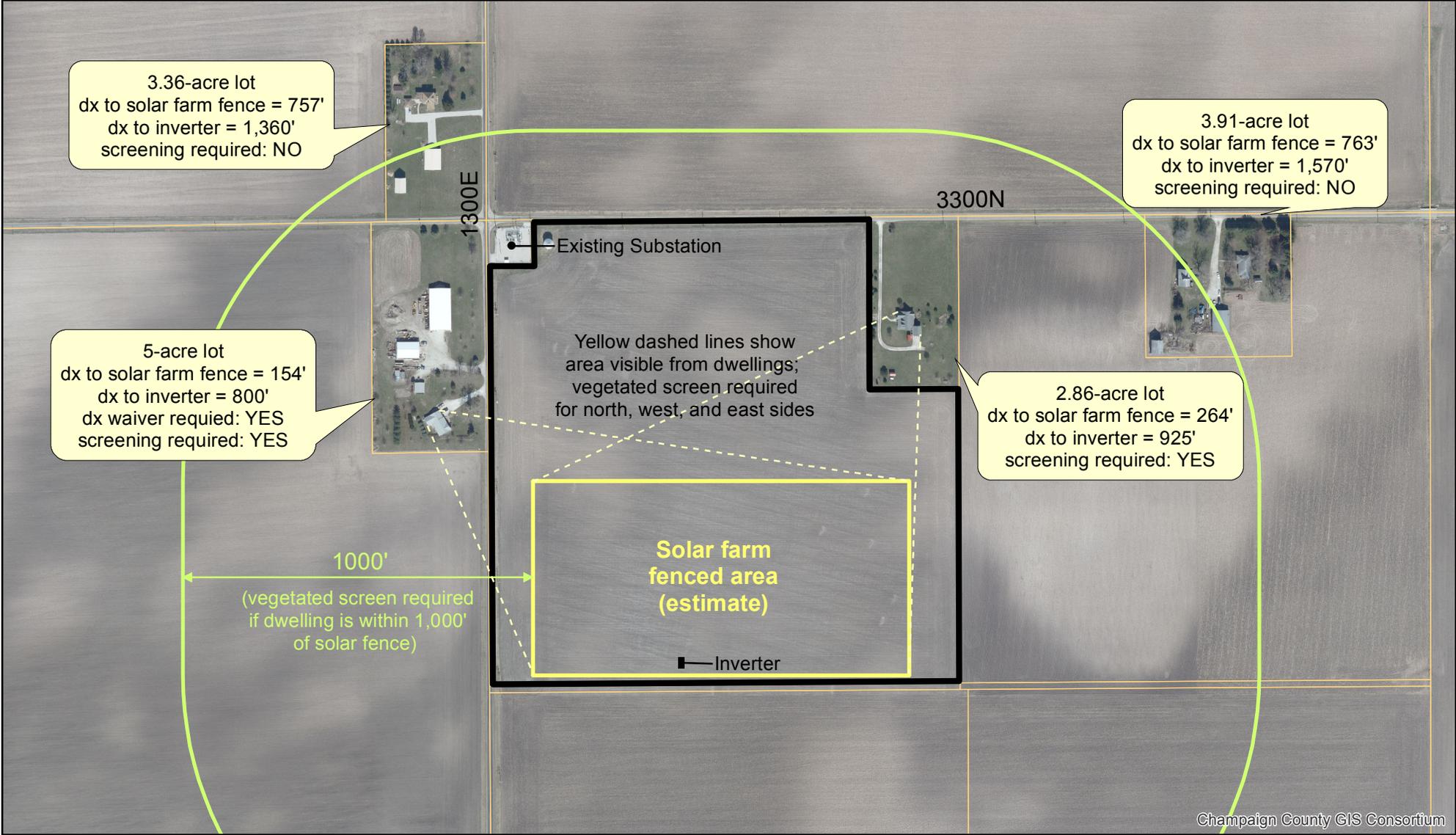
CHAMPAIGN CO. P & Z DEPARTMENT

### **Exhibit K – Cleaning Materials**

The solar panels will not be manually cleaned for a majority of the year with rain taking care of most dust. In other extraordinary circumstances where manual removal of material built up on solar panels is needed, water will be sufficient brought in from a water truck. The water used would be less than that typically used on the agricultural land. Furthermore, in cases of long-term snow build up (as snow will often remove itself from the panels, physical removal with brooms or other rudimentary equipment will be sufficient.

# Annotated Aerial: Separation Distances and Screening

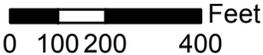
Case 897-S-18  
August 30, 2018



Champaign County GIS Consortium

### Legend

- Solar farm fenced area
- Subject Property
- 1,000 ft separation from solar fence
- Parcels





# Champaign County

Soil and Water Conservation District  
2110 West Park Court Suite C Champaign, IL 61821  
(217) 352-3536 Extension 3 --- [www.ccsxcd.com](http://www.ccsxcd.com)

## NATURAL RESOURCE REPORT

**Development Name: Community Power Group – Rantoul Solar I**

**Date Reviewed: February, 8th, 2018**

**Requested By: Michael Borkowski, Community Power Group, LLC**

**Address: 4849 Rugby Avenue, suite 1000  
Bethesda, MD 20814**

**Location of Property: part of the NW ¼ of sec.20 in T. 22 N., R.9 E., of the 3<sup>rd</sup>. P.M.**



The Resource Conservationist of the Champaign County Soil and Water Conservation District inspected this tract on February 8th, 2018.

**RECEIVED**

**FEB 23 2018**

**CHAMPAIGN CO. P & Z DEPARTMENT**

February 12, 2018



# Champaign County

Soil and Water Conservation District  
 2110 West Park Court Suite C Champaign, IL 61821  
 (217) 352-3536 Extension 3 --- www.ccsxcd.com

## SITE SPECIFIC CONCERNS

1. The area that is to be developed has 4 soil types (Drummer Silty Clay Loam 152A, Clare Silt Loam 663B, La Hogue Loam 102A, and Selma Loam 125A) that is severe wetness or ponding for dwellings with a basement.

## SOIL RESOURCE

### a) Prime Farmland:

This tract is considered best prime farmland for Champaign County by the LE calculation.

This tract has an L.E. Factor of 98; see the attached worksheet for this calculation.

### b) Soil Characteristics:

There are four (4) soil types on this site; see the attached soil map. The soil present has severe limitations for development in its natural, unimproved state. The possible limitations include severe wetness or ponding in shallow excavations. A development plan will have to take the soil characteristics into consideration.

Map Symbol	Name	Slope	Shallow			Septic	Steel	Concrete
			Excavations	Basements	Roads	Fields	Corrosion	Corrosion
152A	Drummer Silty Clay Loam	0-2%	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	high	moderate
663B	Clare Silt Loam	2-5%	Severe: cutbank ca	Severe: wetness	Severe: frost Acton	Severe: wetness	high	moderate
102A	LaHogue Loam	0-2%	Severe: wetness	Severe: wetness	Moderate: low strength	Severe: wetness	high	moderate
125 A	Selma Loam	0-2%	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	high	low

### c) Erosion:

This area to be developed, will be susceptible to erosion both during and after construction. Any areas left bare for more than 7 days, should be temporarily seeded or mulched and permanent vegetation established as soon as possible. The area has a very slight slope to the South and West which could allow erosion during construction and heavy rainfall events. The area is currently in corn residue, erosion control measures must be installed before construction starts.



# Champaign County

Soil and Water Conservation District  
 2110 West Park Court Suite C Champaign, IL 61821  
 (217) 352-3536 Extension 3 --- [www.ccswcd.com](http://www.ccswcd.com)

## **d) Sedimentation:**

A complete erosion and sedimentation control plan should be developed and implemented on this site prior to and during major construction activity. This plan should also have information for the land owner to continue sedimentation control after.

Example: When will inlets for storm drains need to be cleaned out or how often? All sediment-laden runoff should be routed through sediment basins before discharge. Silt fences should be used in flow areas with drainage areas that do not exceed 0.5 acres. Plans should be in conformance with the Illinois Urban Manual for erosion and sedimentation control. The website is: <http://www.aiswcd.org/IUM/>

This link has a resource to help develop a SWPPP for small lots:

<http://www.epa.gov/npdes/stormwater-discharges-construction-activities#resources>

## **WATER RESOURCE**

### **a) Surface Drainage:**

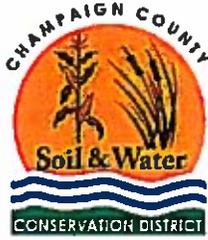
The site has a very slight slope to the South and West. The developed areas seem to have good drainage. The water from the site will leave by way of surface drainage.

Best Management Practices that minimize the volume of stormwater flowing offsite and attempt to filter it as much as possible should be considered for any future development.

### **b) Subsurface Drainage:**

It is likely that this site contains agricultural tile, if any tile is found care should be taken to maintain the tile in working order. Remember that tile in this area of the county maybe small, yet it may drain several miles of ground around the area to be developed.

Severe ponding, along with wetness may be a limitation associated with the soil types on the site. Installing a properly designed subsurface drainage system will minimize adverse effects. Reinforcing foundations helps to prevent the structural damage caused by shrinking and swelling of naturally wet soils.



# Champaign County

Soil and Water Conservation District  
 2110 West Park Court Suite C Champaign, IL 61821  
 (217) 352-3536 Extension 3 --- [www.ccsxcd.com](http://www.ccsxcd.com)

## c) Water Quality:

As long as adequate erosion and sedimentation control systems are installed as described above, the quality of water should not be significantly impacted.

*EPA Stormwater Pollution Prevention Plan Reference Tool:*

**EPA requires a plan to control stormwater pollution for all construction sites over 1 acre in size.** *A Guide for Construction Sites* is a reference tool for construction site operators who must prepare a SWPPP in order to obtain NPDES permit coverage for their stormwater discharges. The guide describes the SWPPP development process and provides helpful guidance and tips for developing and implementing an effective plan.

Two model plans, based on hypothetical sites, are now available as a supplement to the guide. The first example plan is for a medium-sized residential subdivision and the second is for a small commercial site. Both examples utilize the SWPPP template that is included in the guide. To view the guide, models and template, visit <http://www.epa.gov/npdes/swpppguide>.

A new small lots plan can be found at this website location:

<http://www.epa.gov/npdes/stormwater-discharges-construction-activities#resources>

## d) Low impact development:

The EPA's new report, "Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices." Provides ideas to improve water quality through unique designs. The report contains 17 case studies from across North America that show using LID practices in construction projects can lower costs while improving environmental results. LID practices are innovative stormwater management practices used to manage urban stormwater runoff at its source. The goal of LID practices is to mimic the way water moves through an area before development occurs, which is achieved using design techniques that infiltrate, evapotranspiration and reuse runoff close to its source. Some common LID practices include rain gardens, grassed swales, cisterns, rain barrels, permeable pavements and green roofs. LID practices increasingly are used by communities across the country to help protect and restore water quality. For a copy of the report, go to [www.epa.gov/owow/nps/lid/costs07](http://www.epa.gov/owow/nps/lid/costs07).



# Champaign County

Soil and Water Conservation District  
2110 West Park Court Suite C Champaign, IL 61821  
(217) 352-3536 Extension 3 --- www.ccsxcd.com

## CULTURAL, PLANT, AND ANIMAL RESOURCE

### a) Cultural:

The Illinois Historic Preservation Agency may require a Phase 1 Archeological Review to identify any cultural resources that may be on the site.

### b) Illinois Endangered Species Protection Act & Illinois Natural Areas Preservation Act:

State agencies or units of local government must consult the Department about proposed actions that they will authorize, fund or perform. Private parties do not have to consult, but they are liable for prohibited taking of state-listed plants or animals or for adversely modifying a Nature Preserve or a Land and Water Reserve.

Home rule governments may delegate this responsibility, through duly enacted ordinances, to the parties seeking authorization or funding of the action.

**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.**

### c) Plant:

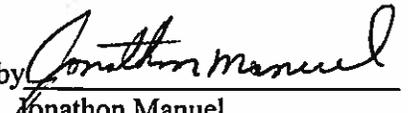
For eventual landscaping of the site, the use of native species is recommended whenever possible. The soil types will support trees such as Bur Oak, Norway Spruce, Black Oak, and Silky Dogwood. For areas to be restored to a more natural area several groups in the area may be able to help with seed.

If you have further questions, please contact the Champaign County Soil and Water Conservation District.

Signed by

  
Joe Rothermel  
Board Chairman

Prepared by

  
Jonathon Manuel  
Resource Conservationist

# Community Power Group - Rantoul

Date: 1/31/2018

Field Office: CHAMPAIGN SERVICE CENTER

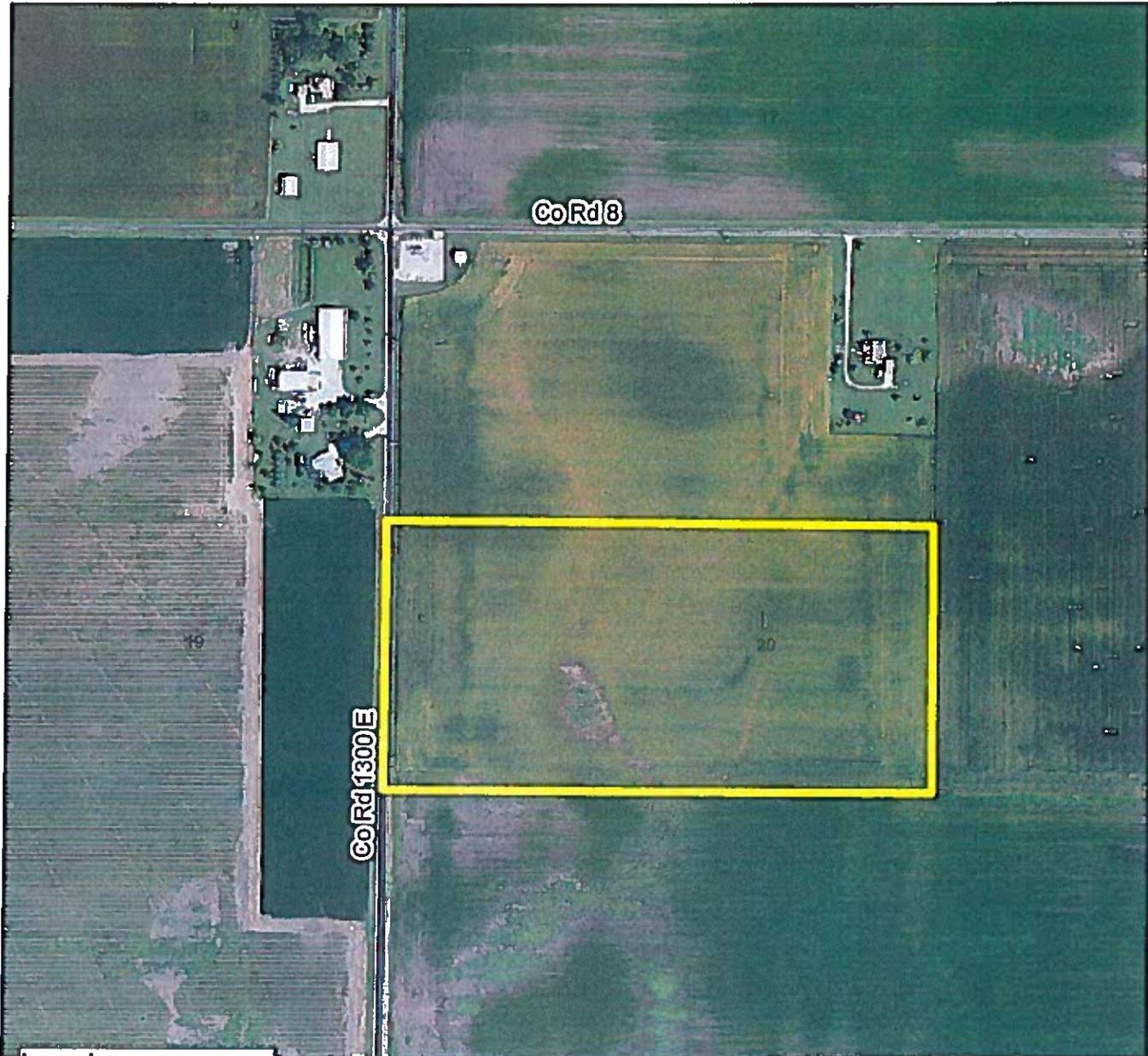
District: CHAMPAIGN COUNTY SOIL & WATER CONSERVATION DISTRICT

Assisted By: JONATHON MANUEL

State and County: IL, Champaign County, Illinois

Legal Description: NW 1.4 of Section 20, T22N, R9E

Aerial 2015



### Legend

-  Rantoul Solar
-  champsections01v1  
fe\_2007\_17019\_edg

Prepared with assistance from USDA-Natural Resources Conservation Service



# Community Power Group - Rantoul

Date: 1/31/2018

Field Office: CHAMPAIGN SERVICE CENTER

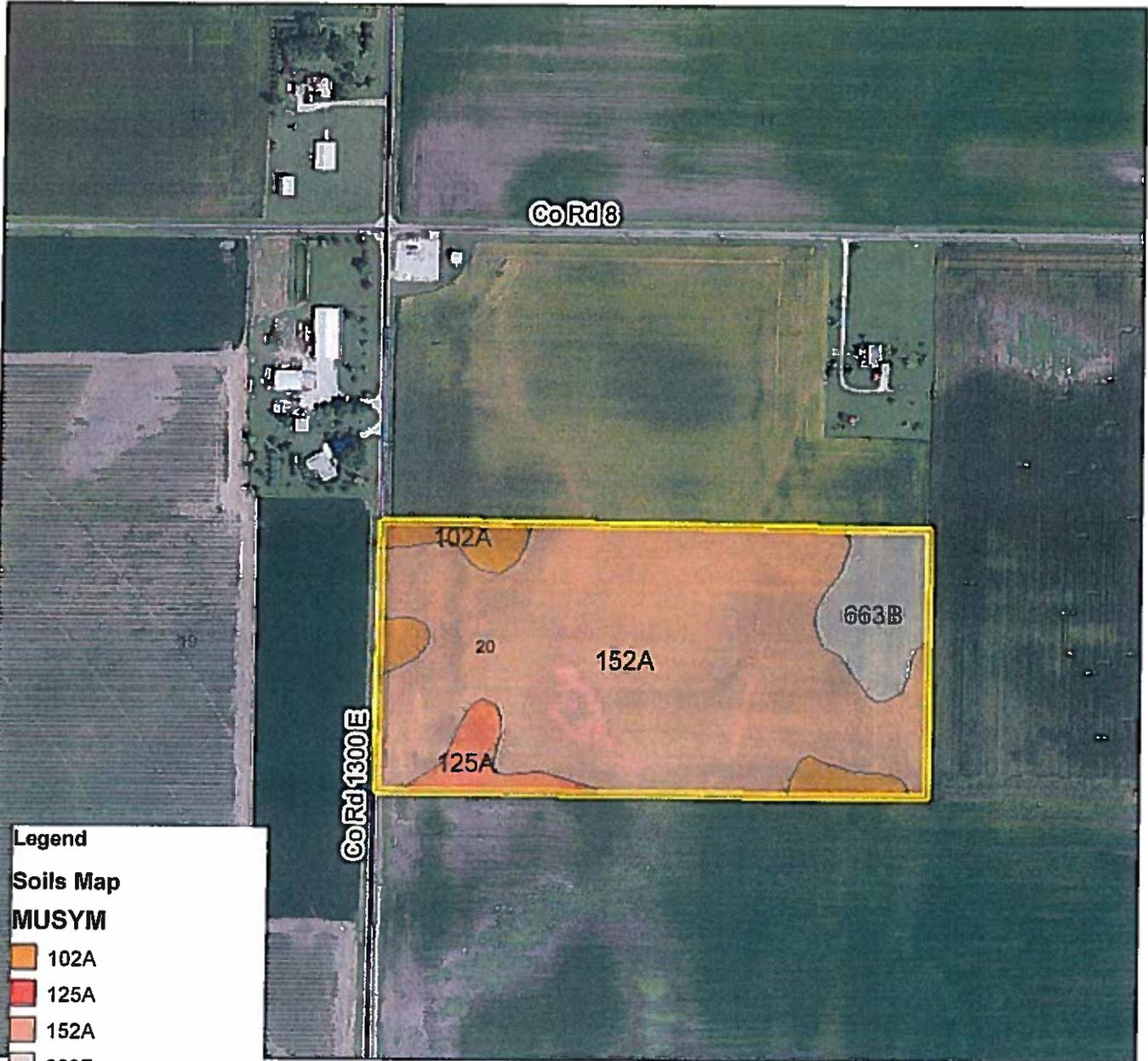
District: CHAMPAIGN COUNTY SOIL & WATER CONSERVATION DISTRICT

Assisted By: JONATHON MANUEL

Legal Description: NW 1.4 of Section 20, T22N, R9E

Aerial 2015

State and County: IL, Champaign County, Illinois



**Legend**

**Soils Map**

**MUSYM**

-  102A
-  125A
-  152A
-  663B

 Rantoul Solar

 champsections01v1  
fe\_2007\_17019\_edg

Prepared with assistance from USDA-Natural Resources Conservation Service



## LAND EVALUATION WORKSHEET

Soil Type	Soil Name	Ag Group	Relative Value	Acres	Land Evaluation Score
152A	Drummer	2	100	15.9	1590.0
663B	Clare	4	91	2	182.0
102A	LaHogue	7	85	1.4	119.0
125A	Selma	4	91	0.9	81.9
					0.0
					0.0
					0.0

acreage for calculation slightly larger than tract acreage due to rounding of soils program

**Total LE Weighted Factor= 1972.9**

**Acreage= 20.2**

**Land Evaluation Factor For Site=**

<b>98</b>
-----------

Note: A Soil Classifier could be hired for additional accuracy if desired

Data Source: Champaign County Digital Soil Survey

# Community Power Group - Rantoul

Date: 1/31/2018

Field Office: CHAMPAIGN SERVICE CENTER

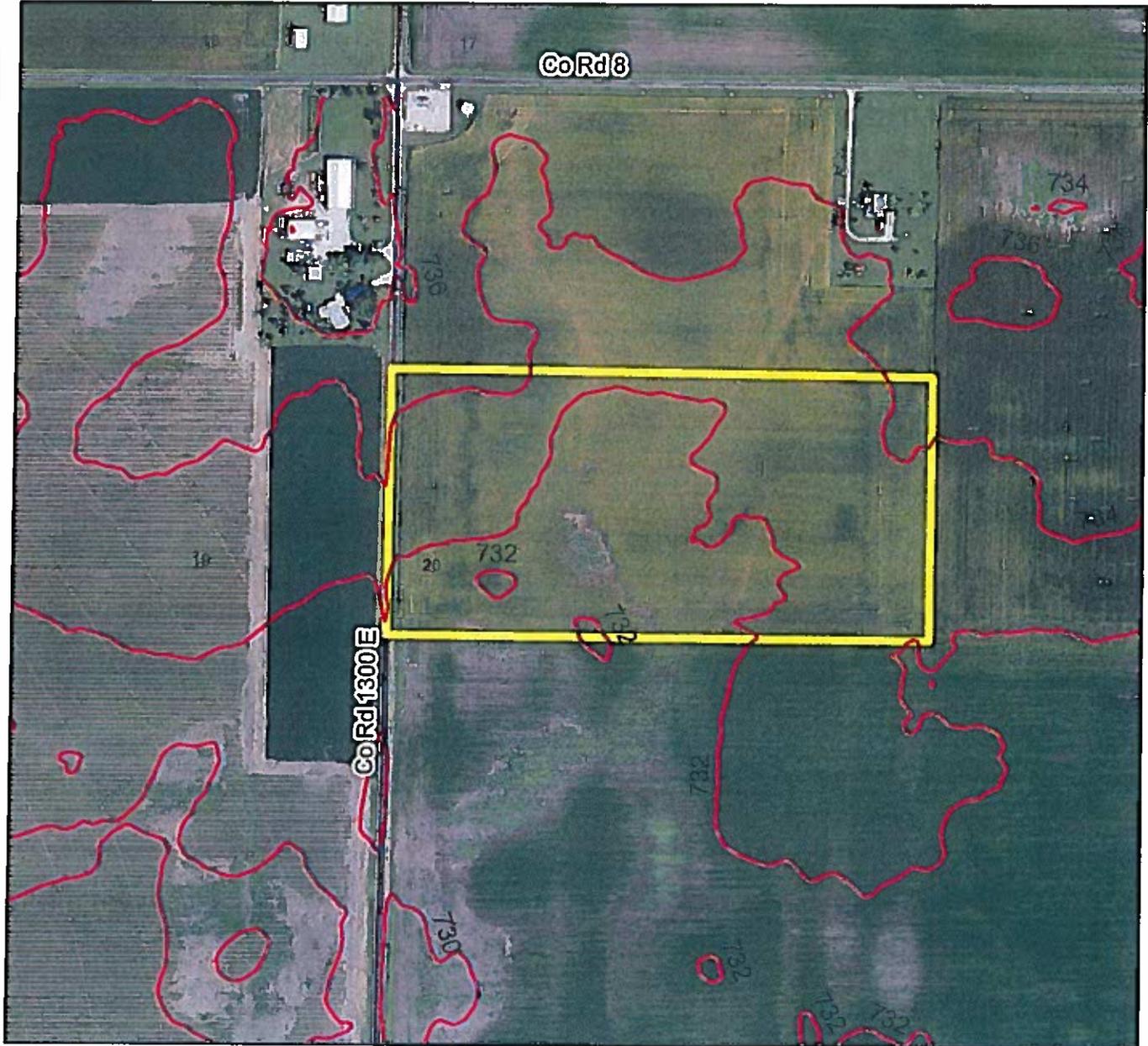
District: CHAMPAIGN COUNTY SOIL & WATER CONSERVATION DISTRICT

Assisted By: JONATHON MANUEL

State and County: IL, Champaign County, Illinois

Legal Description: NW 1.4 of Section 20, T22N, R9E

Aerial 2015



Prepared with assistance from USDA-Natural Resources Conservation Service

### Legend

- 3\_T22N\_R09E\_SEC19
- 3\_T22N\_R09E\_SEC20
- Rantoul Solar
- champsections01v1
- fe\_2007\_17019\_edges





**Applicant:** Champaign County Soil & Water Conservation District    **IDNR Project Number:** 1807335  
**Contact:** Jonathon Manuel    **Date:** 02/09/2018  
**Address:** 2110 West Park Court  
 Suite C  
 Champaign, IL 61821

**Project:** Solar farm Rantoul  
**Address:** 2110 West park Court, Suite C, Champaign

**Description:** new solar farm

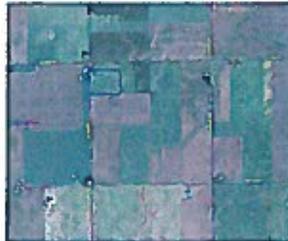
### Natural Resource Review Results

*This project was submitted for information only. It is not a consultation under Part 1075.*

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.

#### Location

The applicant is responsible for the accuracy of the location submitted for the project.



**County:** Champaign

**Township, Range, Section:**

22N, 9E, 19  
22N, 9E, 20

**IL Department of Natural Resources**  
**Contact**  
 Impact Assessment Section  
 217-785-5500  
 Division of Ecosystems & Environment

#### **Disclaimer**

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

#### **Terms of Use**

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

*IDNR Project Number: 1807335*

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

#### **Security**

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

#### **Privacy**

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.

# Community Power Group - Rantoul

Date: 1/31/2018

Field Office: CHAMPAIGN SERVICE CENTER

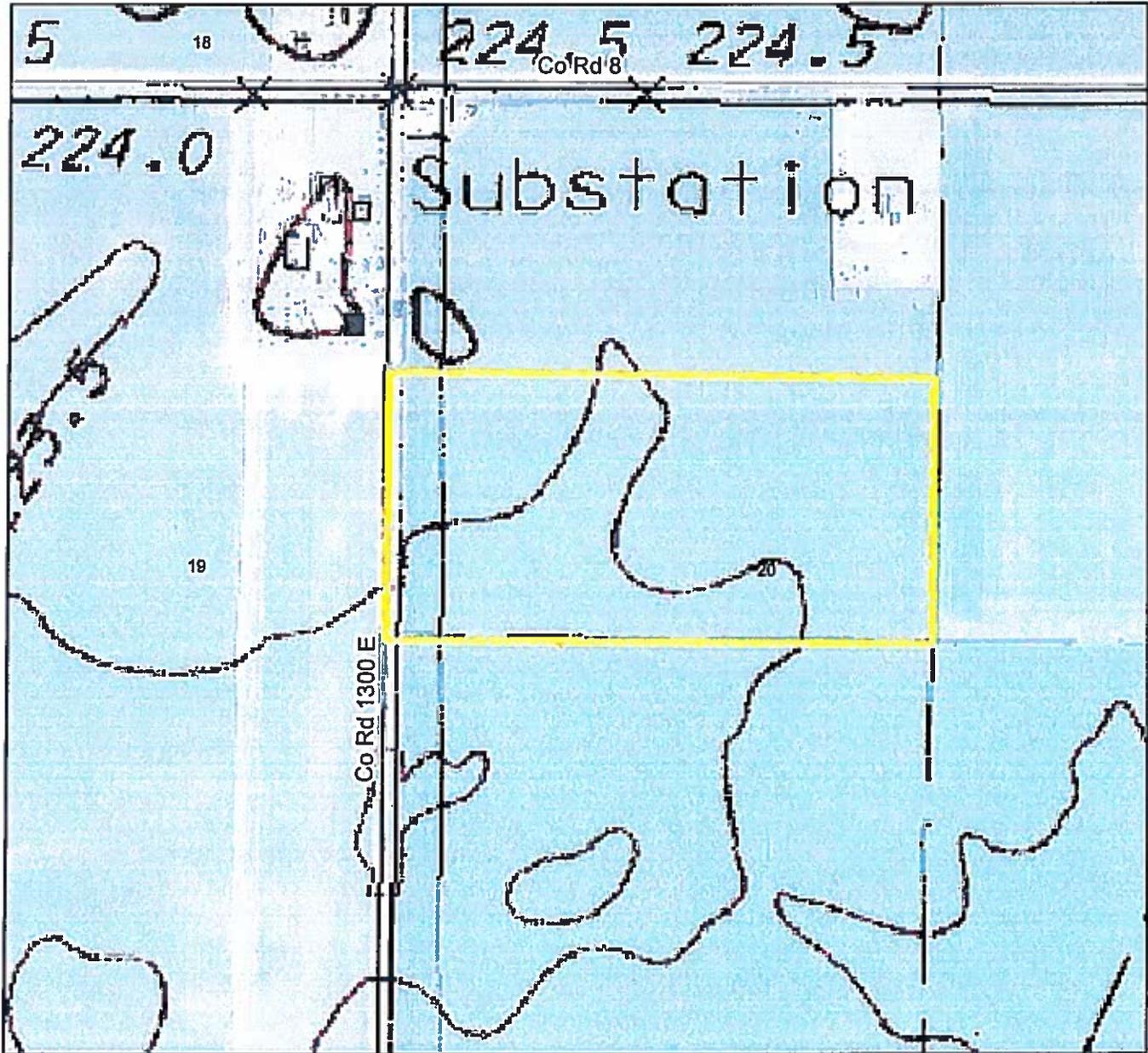
District: CHAMPAIGN COUNTY SOIL & WATER CONSERVATION DISTRICT

Assisted By: JONATHON MANUEL

Legal Description: NW 1.4 of Section 20, T22N, R9E

Aerial 2010

State and County: IL, Champaign County, Illinois



Prepared with assistance from USDA-Natural Resources Conservation Service

### Legend

-  Rantoul Solar
-  champsections01v1
- fe\_2007\_17019\_edges



# Community Power Group - Rantoul

Date: 1/31/2018

Field Office: CHAMPAIGN SERVICE CENTER

District: CHAMPAIGN COUNTY SOIL & WATER CONSERVATION DISTRICT

Assisted By: JONATHON MANUEL

Legal Description: NW 1.4 of Section 20, T22N, R9E

Aerial 2010

State and County: IL, Champaign County, Illinois



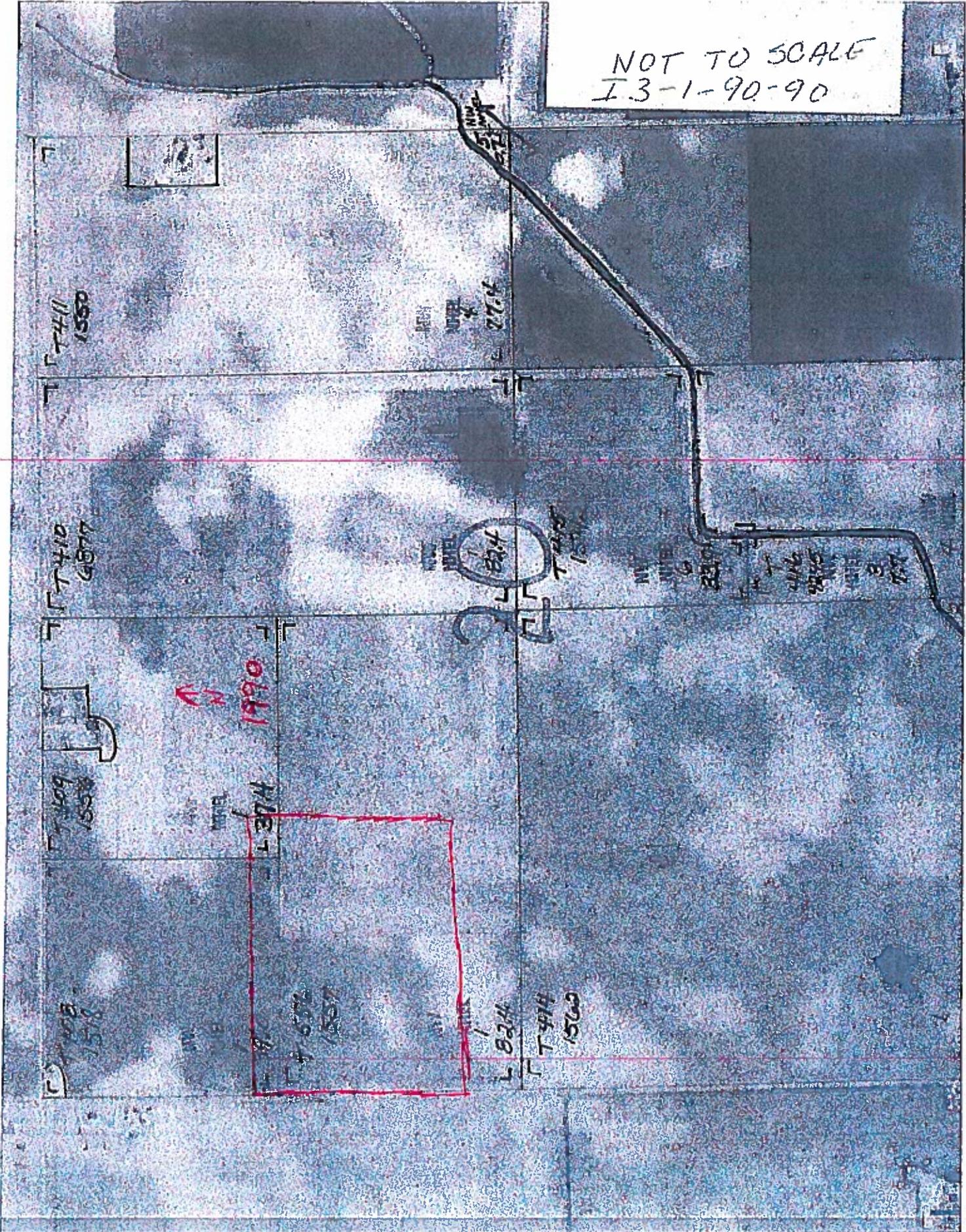
Prepared with assistance from USDA-Natural Resources Conservation Service

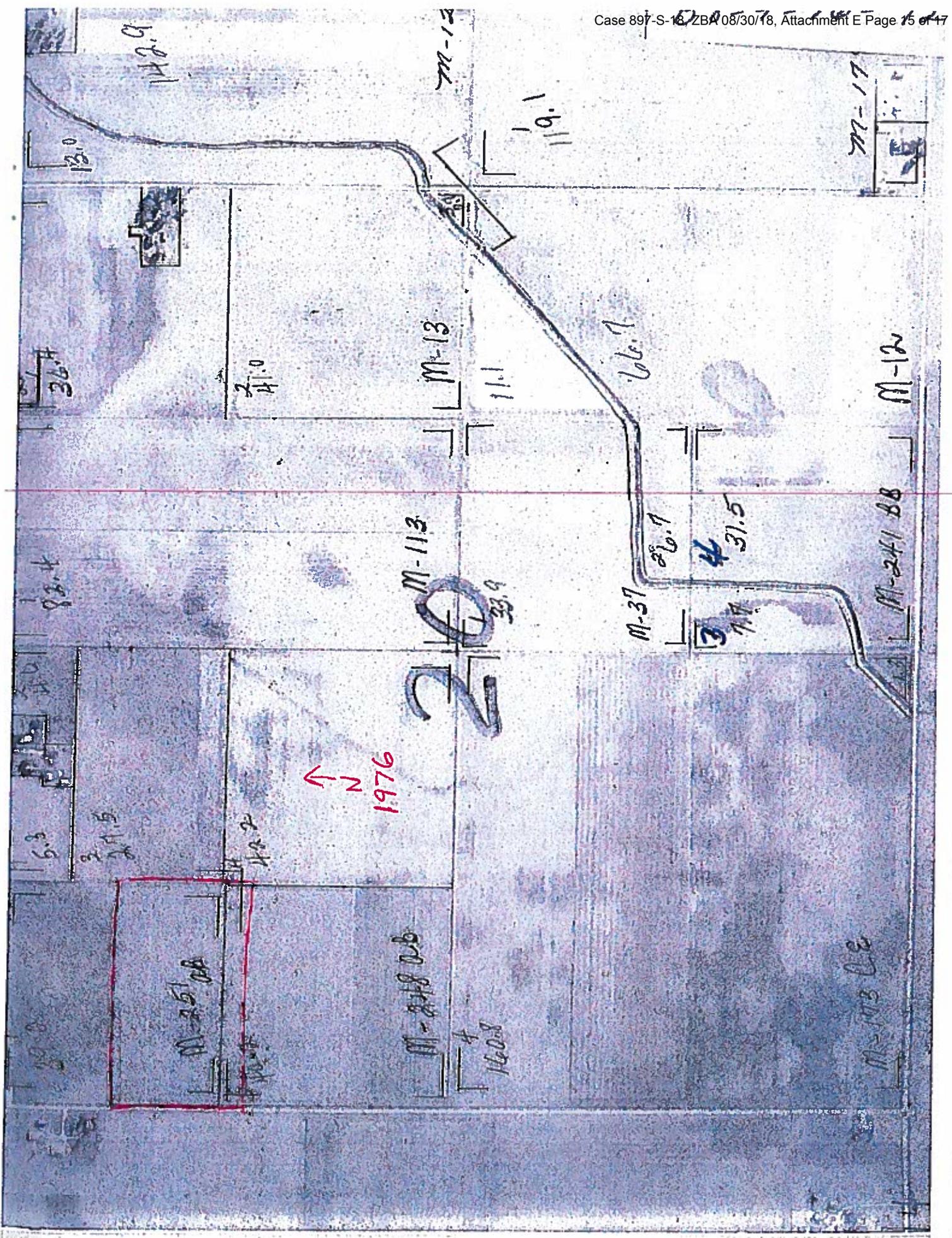
### Legend

-  Rantoul Solar
-  champsections01v1
- fe\_2007\_17019\_edges



NOT TO SCALE  
I3-1-90-90





↑ N  
1976

20

M-251 AB

M-248 AB

160.8

M-113

33.9

M-13

111

M-37

26.7

3

4

31.5

M-241 BB

M-12

M-113

M-17

148.9

M-12

119.1

106.7

13.0

141.0

36.4

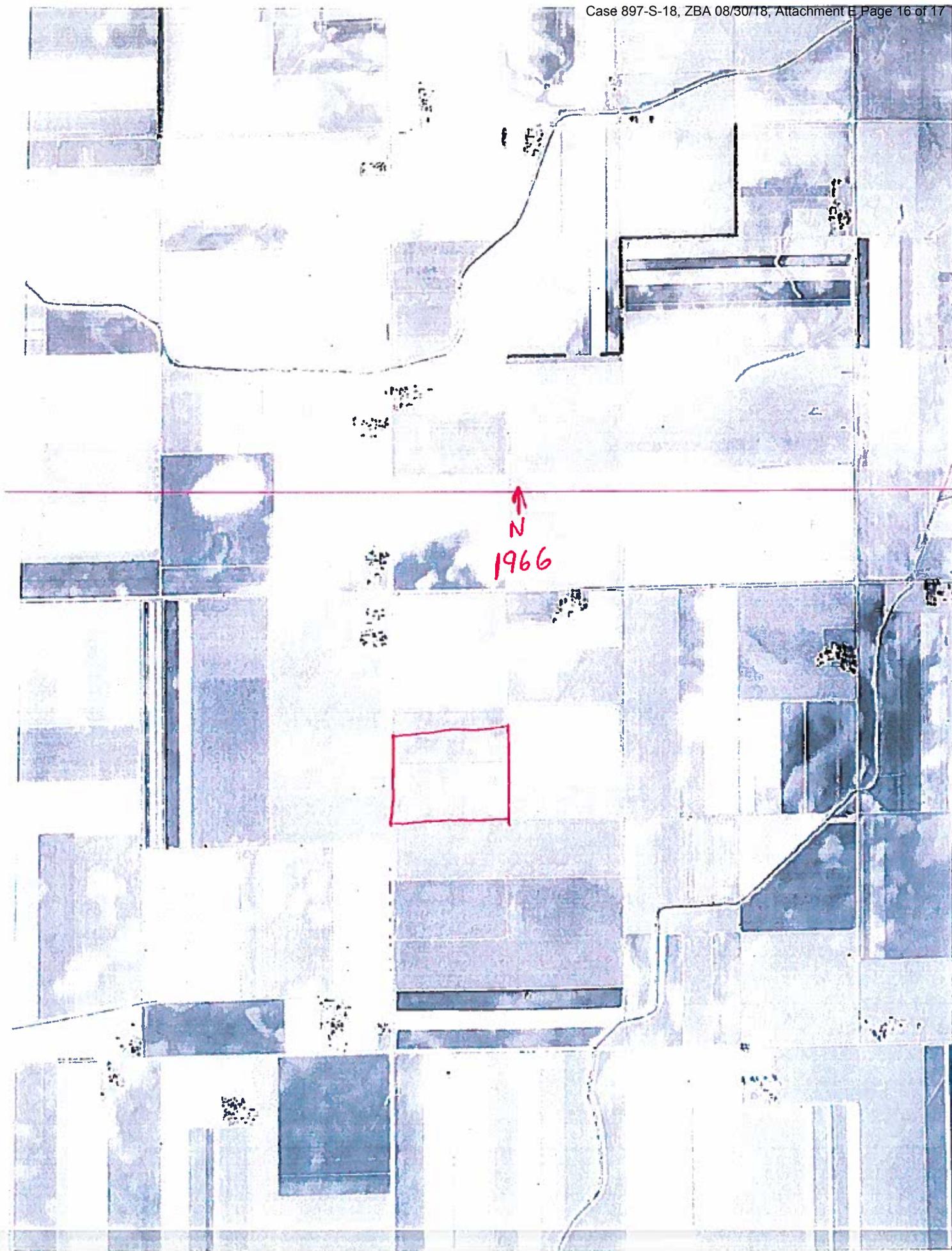
88.4

5.3

21.5

142.2

11.7





**Susan Burgstrom**

---

**From:** Nick Mento <nmento@communitypowergroup.com>  
**Sent:** Friday, August 17, 2018 10:37 AM  
**To:** Susan Burgstrom  
**Subject:** Re: Updated Permit Packages  
**Attachments:** Addendum to Champaign Permits.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Hello Susan,

Per our discussion, please see the attached in response to our conversation/questions posed regarding our two community solar garden permit packages. Please let us know if anything additional is needed or if there are remaining questions.

Thank you,  
Nick

Nick Mento  
Project Manager  
Community Power Group  
(o) 202-844-6424  
(c) 443-878-8296  
[nmento@communitypowergroup.com](mailto:nmento@communitypowergroup.com)  
[www.communitypowergroup.com](http://www.communitypowergroup.com)

**RECEIVED**

**AUG 17 2018**

**CHAMPAIGN CO. P & Z DEPARTMENT**

This message is for the named person's use only. It may contain confidential, proprietary, or legally privileged information. No confidentiality or privilege is waived or lost by any mis-transmission. If you receive this message in error, please immediately delete it and all copies of it from your system, destroy any hard copies of it, and notify the sender. You must not, directly or indirectly, use, disclose, distribute, print, or copy any part of this message if you are not the intended recipient. The Host System reserves the right to monitor all e-mail communications through its networks. Any views expressed in this message are those of the individual sender, except where the message states otherwise and the sender is authorized to state them to be the views of any such entity. Neither this e-mail nor any attachment(s) establish an attorney-client relationship, constitute an electronic signature, or provide consent to contract electronically, unless expressly stated by an authorized sender in writing in the body of this email or an attachment

---

**From:** Susan Burgstrom <sburgstrom@co.champaign.il.us>  
**Sent:** Thursday, August 16, 2018 3:18:02 PM  
**To:** Nick Mento  
**Subject:** RE: Updated Permit Packages

Hi Nick,

Thanks for all the information you have provided to date. I have some questions...

1. Noting the expanded area, could you please tell me what the nameplate capacity is for this larger area?
2. The "Weed and Grass Control Plan" and some other parts of the packet say that it is private and confidential on the footer – is it ok if we reference required information in our evidence packet? Is it correct that we cannot distribute these parts of the application?

3. For both projects, could you please let me know where there is information about the width allowed for underground cable installations in your application?

Item 6.1.5 B.(1)c. requires that the area include all necessary PV SOLAR FARM STRUCTURES and ACCESSORY STRUCTURES including electrical distribution lines, inverters, transformers, common switching stations, and substations not under the ownership of a PUBLICLY REGULATED UTILITY and all waterwells that will provide water for the PV SOLAR FARM, allowing a minimum 40 feet wide area for underground cable installations.

4. What is the maximum height of the tallest equipment?
5. Do you have any information on archaeological and historic preservation review by the State of Illinois?

6.1.5 K.: "The Applicant shall apply for consultation with the State Historic Preservation Officer of the Illinois Department of Natural Resources. The Application shall include a copy of the Agency Action Report from the State Historic Preservation Officer of the Illinois Department of Natural Resources.

6. I'm not finding reference in the Site Plan about the location of all below-ground wiring and the location, height, and appearance of all above-ground wiring and wiring structures...could you please let me know where this is?
7. Do you have an "estimation of the daily and annual gallons of water used and the source of the water and the management of wastewater" per 6.1.5 P regarding cleaning the modules? I note that some information was provided in your Exhibit K, but this part is missing.
8. Will you be able to provide the complete, signed Site Reclamation and Decommissioning Plan prior to County Board consideration of the Special Use Permit, including estimates by a licensed Illinois Professional Engineer, and other requirements or do we need to add a waiver that will result in adding a special condition that sets a timeline for receipt of this information?

Thanks for your time,  
Susan

**Susan Burgstrom, AICP**  
Senior Planner  
Champaign County Department of Planning & Zoning  
1776 East Washington Street  
Urbana, IL 61802

P: 217-384-3708  
F: 217-819-4021

**RE: Addendum to Champaign County Special Use Permit Applications for Community Solar Gardens – Champaign Solar & St. Joseph Solar**

This document is additional information as requested by Champaign County regarding the aforementioned special use permit applications.

1. *Noting the expanded area, could you please tell me what the nameplate capacity is for this larger area?*
  - The landowner has expressed interest in the possibility of a second community solar garden on his property and so in the interest of efficiency we wanted to apply this permit to a greater area due to its optimal location and landowner interest. Currently the nameplate for the area within the special use area is 2MWac as there are no concrete plans for an additional site yet.
2. *The "Weed and Grass Control Plan" and some other parts of the packet say that it is private and confidential on the footer – is it ok if we reference required information in our evidence packet? Is it correct that we cannot distribute these parts of the application?*
  - CPG would allow the distribution of the Weed and Grass Control Plan to relevant parties as necessary.
3. *For both projects, could you please let me know where there is information about the width allowed for underground cable installations in your application?*
  - Width requirements for underground cables are more relevant to wind installations than solar. Solar will have minor cabling underground in between rows of panels to connect them. Final drawings of those cables are typical of building permit applications as these types of plans are not finalized prior to the zoning permit.
4. *What is the maximum height of the tallest equipment?*
  - The panels and the fencing will be the tallest pieces of equipment. The fence will be approximately 7 feet tall with the panels reaching approximately 7-8 feet.
5. *Do you have any information on archaeological and historic preservation review by the State of Illinois?*
  - See attached IDNR letters in e-mail. No archaeological or historic preservation concerns were raised after IDNR review.
6. *I'm not finding reference in the Site Plan about the location of all below-ground wiring and the location, height, and appearance of all above-ground wiring and wiring structures. Could you please let me know where this is?*
  - As previously discussed, there are only minor below ground wiring to connect rows of panels which will not be finalized until the building permit stage. Above-ground wiring, when it comes to solar, have utility-standard setups that are identical to the poles present on the side of streets that have wires running along them. All solar facilities of similar size will employ near identical telephone poles to run wires from the inverter to the pre-existing poles on the side of the road.
7. *Do you have an "estimation of the daily and annual gallons of water used and the source*

*of the water and the management of wastewater” per 6.1.5 P regarding cleaning the modules? I note that some information was provided in your Exhibit K, but this part is missing.*

- Any water being used will be from an off-site source. No wells or on-site water sources will be utilized or installed. Any water will be transported from off-site. However, most panel cleaning can be done by rainwater and the most we could expect off-site water to be used (from a water truck) would be twice a year in the case of little rain and dust concerns.
8. *Will you be able to provide the complete, signed Site Reclamation and Decommissioning Plan prior to County Board consideration of the Special Use Permit, including estimates by a licensed Illinois Professional Engineer, and other requirements or do we need to add a waiver that will result in adding a special condition that sets a timeline for receipt of this information?*
- As in other counties, CPG would request that these are added as a special condition of the special use permit to be finalized in coordination with the issuance of a building permit.

**RECEIVED**

**AUG 17 2018**

**CHAMPAIGN CO. P & Z DEPARTMENT**



# Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271  
www.dnr.illinois.gov

Bruce Rauner, Governor  
Wayne A. Rosenthal, Director

Champaign County  
Rantoul  
SE of County Roads 3300N & 1300E  
Section:20-Township:22N-Range:9E  
CH-SUP  
New construction, Community Solar Garden

PLEASE REFER TO: SHPO LOG #006031618

May 16, 2018

Nick Mento  
Community Power Group  
4849 Rugby Avenue, Suite 1000  
Bethesda, MD 20814

Dear Mr. Mento:

The Illinois State Historic Preservation Office is required by the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420, as amended, 17 IAC 4180) to review all state funded, permitted or licensed undertakings for their effect on cultural resources. Pursuant to this, we have received information regarding the referenced project for our comment.

Our staff has reviewed the specifications under the state law and assessed the impact of the project as submitted by your office. We have determined, based on the available information, that no significant historic, architectural or archaeological resources are located within the proposed project area.

According to the information you have provided concerning your proposed project, apparently there is no federal involvement in your project. However, please note that the state law is less restrictive than the federal cultural resource laws concerning archaeology. If your project will use federal loans or grants, need federal agency permits, use federal property, or involve assistance from a federal agency, then your project must be reviewed under the National Historic Preservation Act of 1966, as amended. Please notify us immediately if such is the case.

This clearance remains in effect for two (2) years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the IL Human Skeletal Remains Protection Act (20 ILCS 3440).

Please retain this letter in your files as evidence of compliance with the Illinois State Agency Historic Resources Preservation Act.

If further assistance is needed please contact my office at 217/782-4836.

Sincerely,

Rachel Leibowitz, Ph.D.  
Deputy State Historic  
Preservation Officer

# RECEIVED

AUG 17 2018

CHAMPAIGN CO. P & Z DEPARTMENT

**Checklist for status of Special Use Permit application requirements**  
**Case 897-S-18**

Ordinance Section	Required Items	Status	
U.(1)	SUP complete application, signed	✓	
U.(1)a.	PV Solar Farm project summary	✓	
	<ul style="list-style-type: none"> <li>• Project description with: <ul style="list-style-type: none"> <li>• approximate DC and AC generating capacity</li> <li>• maximum number of solar devices</li> <li>• type of solar devices</li> <li>• potential equipment manufacturer(s)</li> </ul> </li> </ul>	✓	
	<ul style="list-style-type: none"> <li>• The specific proposed location of the PV SOLAR FARM including all tax parcels on which the PV SOLAR FARM will be constructed</li> </ul>	✓	
	<ul style="list-style-type: none"> <li>• The specific proposed location of all tax parcels required to be included in the PV SOLAR FARM County Board SPECIAL USE Permit</li> </ul>	✓	
	<ul style="list-style-type: none"> <li>• A description of the Applicant; Owner and Operator, including their respective business structures</li> </ul>	✓	
	U.(1)b.	The name(s), address(es), and phone number(s) of the Applicant(s), Owner and Operator, and all property owner(s)	✓
	U.(1)c.	Site Plan, including:	✓
		<ul style="list-style-type: none"> <li>• The approximate planned location of: <ul style="list-style-type: none"> <li>○ all PV SOLAR FARM STRUCTURES</li> <li>○ property lines (including identification of adjoining properties)</li> <li>○ required separations</li> <li>○ public access roads and turnout locations</li> <li>○ access driveways</li> <li>○ to the extent possible, solar devices, electrical inverter(s), electrical transformer(s), cabling, switching station, electrical cabling from the PV SOLAR FARM to the Substations(s), ancillary equipment, screening and fencing, third party transmission lines, meteorological station, maintenance and management facilities, and layout of all structures within the geographical boundaries of any applicable setback</li> </ul> </li> </ul>	✓
U.(1)c.(a)	<ul style="list-style-type: none"> <li>○ all PV SOLAR FARM STRUCTURES</li> <li>○ property lines (including identification of adjoining properties)</li> <li>○ required separations</li> <li>○ public access roads and turnout locations</li> <li>○ access driveways</li> <li>○ to the extent possible, solar devices, electrical inverter(s), electrical transformer(s), cabling, switching station, electrical cabling from the PV SOLAR FARM to the Substations(s), ancillary equipment, screening and fencing, third party transmission lines, meteorological station, maintenance and management facilities, and layout of all structures within the geographical boundaries of any applicable setback</li> </ul>	✓	
U.(1)c.(b)	<ul style="list-style-type: none"> <li>• Area of the proposed PV SOLAR FARM County Board SPECIAL USE Permit as required by subparagraph 6.1.5 A.(1)</li> </ul>	✓	
U.(1)c.(c)	<ul style="list-style-type: none"> <li>• The location of all below-ground wiring</li> </ul>	Not applicable to this case – all below ground wiring is entirely within the PV solar farm area and not on other parts of the property	
U.(1)c.(d)	<ul style="list-style-type: none"> <li>• The location, height, and appearance of all above-ground wiring and wiring structures</li> </ul>	Drawings provided in Permit Set. Location details will not be finalized until the Zoning Use Permit phase	

**Checklist for status of Special Use Permit application requirements  
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<b>U.(1)c.(e)</b>	<ul style="list-style-type: none"> <li>The separation of all PV SOLAR FARM structures from adjacent DWELLINGS and/or PRINCIPAL BUILDINGS or uses shall be dimensioned on the approved site plan and that dimension shall establish the effective minimum separation that shall be required for any Zoning Use Permit.</li> </ul>	✓
<b>U.(1)d.</b>	All other required studies, reports, certifications, and approvals demonstrating compliance with the provisions of this Ordinance:	See line items below
6.1.1 A.1.	<ul style="list-style-type: none"> <li>Decommissioning and Site Reclamation Plan</li> </ul>	See attached Plan; Special Condition added
6.1.1 A.2.	<ul style="list-style-type: none"> <li>the landowner or applicant shall also record a covenant incorporating the provisions of the decommissioning and site reclamation plan on the deed subject to the LOT, requiring that the reclamation work be performed and that a letter of credit be provided for financial assurance</li> </ul>	Special Condition added
6.1.1 A.3.	<ul style="list-style-type: none"> <li>Separate cost estimates for Section 6.1.1 A.4.a., 6.1.1 A.4.b., and 6.1.1 A.4.c. shall be provided by an Illinois Licensed Professional Engineer.</li> </ul>	Special Condition added
6.1.1 A.5.	<ul style="list-style-type: none"> <li>Irrevocable letter of credit to be drawn upon a federally insured financial institution within 200 miles of Urbana or reasonable anticipated travel costs shall be added to the amount of the letter of credit</li> </ul>	Special Condition added
6.1.5 B.(3)a.	<ul style="list-style-type: none"> <li>Documentation that the applicant or PV SOLAR FARM is in the queue to acquire an interconnection agreement to the power grid</li> </ul>	Application submitted, Special Condition added
6.1.5 F.(9)a.(b)iv.	<ul style="list-style-type: none"> <li>The plan to establish and maintain a vegetative ground cover that includes native plant species as much as possible shall be detailed in a landscape plan included in the PV SOLAR FARM SPECIAL USE permit application. The landscape plan shall include the weed control plan required by Section 6.1.5 P.(3) and the vegetative screen buffer required by Section 6.1.5 M.(2)a.</li> </ul>	✓
6.1.5 G.(1)	<ul style="list-style-type: none"> <li>Prior to the close of the public hearing before the BOARD, the Applicant shall enter into a Roadway Upgrade and Maintenance agreement approved by...the Township Highway Commissioner...except for any COMMUNITY PV SOLAR FARM for which the relevant highway authority has agreed in writing to waive the requirements of subparagraphs 6.1.5 G.(1), (2), and (3)</li> </ul>	Waiver requested from Ludlow Township; decision pending.
6.1.5 I.(3)a.	<ul style="list-style-type: none"> <li>The SPECIAL USE permit application for other than a COMMUNITY PV SOLAR FARM shall include a noise analysis per the requirements of Section 6.1.5 I.(3)a. For a COMMUNITY PV SOLAR FARM the Board may require submission of a noise analysis that meets the standard of paragraph 6.1.5 I.(3)a.</li> </ul>	Not required with application because this is a Community solar farm; Board can require
6.1.5 P.(1)a.(c)	<ul style="list-style-type: none"> <li>The Application shall explain methods and materials used to clean the PV SOLAR FARM equipment including an estimation of the daily and annual gallons of water used and the source of the water and the management of wastewater. The BOARD may request copies of well records from the Illinois State Water Survey and may require an estimate by a qualified hydrogeologist of the likely impact on adjacent waterwells.</li> </ul>	✓
<b>U.(1)e.</b>	Documentation that the applicant has provided a complete copy of the SPECIAL USE permit application to any municipality within one-and-one-half miles of the proposed PV SOLAR FARM as required by Section 6.1.5 B.(2)a.(b)	Not applicable for this case
<b>U.(1)f.</b>	If no municipal resolution regarding the PV SOLAR FARM is received from any municipality located within one-and-one-half miles of the PV SOLAR FARM prior to the consideration of the PV SOLAR FARM SPECIAL USE permit by the Champaign County Board, the ZONING ADMINISTRATOR shall provide documentation to the County Board that any municipality within one-and-one-half miles of the PV SOLAR FARM was provided notice of the meeting dates for consideration of the proposed PV SOLAR FARM SPECIAL USE Permit for both the Environment and Land Use Committee and the County Board, as required by Section 6.1.5 B.(2)a.(c)	Not applicable for this case

**PRELIMINARY DRAFT**

**897-S-18**

**SUMMARY OF EVIDENCE, FINDING OF FACT  
AND FINAL DETERMINATION**

**of  
Champaign County Zoning Board of Appeals**

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Final Determination: ***{RECOMMEND APPROVAL / RECOMMEND DENIAL}***

Date: ***August 30, 2018***

Petitioners: **Community Power Group LLC, via agent Michael Borkowski, Owner of Community Power Group, and participating landowners Thomas and Debra Sutton**

Request: **Authorize a Community PV Solar Farm with a total nameplate capacity of 2 megawatts (MW), including access roads and wiring, in the AG-1 Agriculture Zoning District, and including the following waivers of standard conditions (other waivers may be necessary):**

*Note: underlined or strikethrough text is new since the advertised legal notice*

Part A: A waiver for a distance of ~~165~~ 153 feet in lieu of the minimum required 240 feet between the PV Solar Farm and non-participating properties 10 acres or less in area, per Section 6.1.5 D.(3)a. of the Zoning Ordinance.

Part B: A waiver for a separation distance of ~~30~~ 28 feet in lieu of 275 feet between a PV SOLAR FARM electrical inverter and the PV SOLAR FARM perimeter fence, per Section 6.1.5 D.(6) of the Zoning Ordinance.

Part C: A waiver for a 24 feet wide area for all necessary access lanes or driveways and any required new PRIVATE ACCESSWAYS in lieu of the minimum required 40 feet, per Section 6.1.5 B.(1)b. of the Zoning Ordinance.

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**PRELIMINARY DRAFT****SUMMARY OF EVIDENCE**

From the documents of record and the testimony and exhibits received at the public hearing conducted on **August 30, 2018**, the Zoning Board of Appeals of Champaign County finds that:

1. The Petitioners are Community Power Group LLC, with agent Michael Borkowski, owner and sole officer of Community Power Group, and participating landowners Thomas and Debra Sutton, 306 E Sherwin Circle, Urbana. Regarding the petitioners:
  - A. Champaign Solar 1 is the name of the proposed solar farm, which is wholly owned by Community Power Group LLC, 4849 Rugby Avenue, Suite 1000, Bethesda, MD 20814.
  - B. The participating landowners, Thomas and Debra Sutton, signed agreements with Community Power Group LLC on June 30, 2017, for the use of their property for the proposed PV solar farm.
2. The subject property is a 36.77-acre tract in the West Half of the North Half of the Northwest Quarter of Section 20 of Township 22 North, Range 9 East of the Third Principal Meridian in Ludlow Township, and commonly known as the farmland adjacent to the electric substation on the southeast corner of the intersection of CR 3300N and CR 1300E. The petitioners anticipate using approximately 15.48 acres of the subject property as the Special Use Permit area, per the application received August 13, 2018.
3. Regarding municipal extraterritorial jurisdiction and township planning jurisdiction:
  - A. The subject property is not located within the one and one-half mile extraterritorial jurisdiction of a municipality with zoning. Municipalities with zoning are notified of Special Use Permit cases, but do not have protest rights in these cases.
  - B. The subject property is located within Ludlow Township, which does not have a Planning Commission. Townships with Planning Commissions are notified of Special Use Permit cases, but do not have protest rights in these cases.

**GENERALLY REGARDING LAND USE AND ZONING IN THE IMMEDIATE VICINITY**

4. Regarding land use and zoning on the subject property and in the vicinity of the subject property:
  - A. The subject property is zoned AG-1 Agriculture and is currently in agricultural production.
  - B. Land northwest of the subject property is zoned AG-1 Agriculture and is in use as an electric substation that was constructed prior to the adoption of the Zoning Ordinance on October 10, 1973.
  - C. Land at the northwest corner of the intersection of CR 3300N and CR 1300E is zoned AG-1 Agriculture and is residential in use.
  - D. Land at the southwest corner of the intersection of CR 3300N and CR 1300E is zoned AG-1 Agriculture and is residential and agricultural in use.
  - E. Land west of the subject property is zoned AG-1 Agriculture and is in agricultural production.

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- F. Land northeast of the subject property is zoned AG-1 Agriculture and is residential in use.
- G. Land east of the subject property is zoned AG-1 Agriculture and is in agricultural production.
- H. Land south of the subject property is zoned AG-1 Agriculture and is in agricultural production.

**GENERALLY REGARDING THE PROPOSED SPECIAL USE**

- 5. Regarding the site plan for the proposed Special Use:
  - A. The applicant has submitted two packets, which together comprise the Special Use Permit application.
    - (1) Special Use Permit application received January 25, 2018, which includes the following Permit Sheet Set in Exhibit B:
      - a. Sheet T1.1: Permit Set Cover
      - b. Sheet L1.1: Site Layout
      - c. Sheet L2.1: Tracker System Detail
      - d. Sheet L2.3: Fence-Gate Detail
      - e. Sheet E1.1: Single Line Diagram
      - f. Sheet E2.1: DC & AC Conductor Schedule
      - g. Sheet E4.1: Grounding Details
      - h. Sheet E9.1: Equipment Specification Sheets
    - (2) Special Use Permit application received August 13, 2018, which includes the following additional Permit Set sheets:
      - a. Sheet T1.1: Permit Set Cover
      - b. Sheet L1.1: Site Layout (revised)
      - c. Sheet L2.1: Tracker System Detail
      - d. Sheet L2.3: Agricultural Fence Detail (note sheet numbering was used before, but sheet has different information)
      - e. Sheet E9.1: Equipment Specification Sheets
    - (3) The Site Plan will include the following sheets, reflecting the newest information received:
      - a. Sheet T1.1: Permit Set Cover received August 13, 2018
      - b. Sheet L1.1: Site Layout received August 13, 2018
      - c. Sheet L2.1: Tracker System Detail received August 13, 2018
      - d. Sheet L2.3: Fence-Gate Detail received January 25, 2018
      - e. Sheet L2.3: Agricultural Fence Detail received August 13, 2018 (note sheet numbering was used before, but sheet has different information)
      - f. Sheet E1.1: Single Line Diagram received January 25, 2018
      - g. Sheet E2.1: DC & AC Conductor Schedule received January 25, 2018
      - h. Sheet E4.1: Grounding Details received January 25, 2018
      - i. Sheet E9.1: Equipment Specification Sheets received August 13, 2018
  - B. The permit sheets listed in Item 5.A.(3) above will be the Site Plan for the Special Use Permit. The Site Plan indicates the following existing and proposed features:
    - (1) There are no existing features on the 36.77-acre subject property.

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- (2) Proposed features include:
- a. A 2-megawatt (MW) COMMUNITY PV SOLAR FARM comprised of 7,857 modules and sixteen 125kW inverters; and
  - b. Approximately 3,467 linear feet of 7-foot tall perimeter fence; and
  - c. One 8 feet by 10 feet inverter pad, located approximately 540 feet east of the CR1300 street centerline and approximately 47 feet north of the south property line; and
    - (1) Note that Permit Set sheet L1.1: Site Layout received August 13, 2018, shows the inverter scaling to approximately 18 feet by 34 feet, while Exhibit G: Decommissioning Plan states that the inverter pad would be 8 feet by 10 feet.
  - d. A 12 feet wide access road extending approximately 586 feet east of CR 1300E; and
  - e. An 18 feet wide security gate; and
  - f. A presumed Point of Interconnection (POI) located just north of the access road entrance and approximately 20 feet east of the CR1300E street centerline.
  - g. A trenched power line runs to the inverter.
  - h. The solar farm is proposed to be located on soils that are Best Prime Farmland.
- C. There are no previous Zoning Use Permits for the subject property.
- D. There are no previous Zoning Cases for the subject property.

**GENERALLY REGARDING SPECIFIC ORDINANCE REQUIREMENTS**

6. Regarding authorization for a “COMMUNITY PV SOLAR FARM” in the AG-1 Agriculture Zoning District in the *Zoning Ordinance*:
- A. The County Board amended the Zoning Ordinance by adopting PV SOLAR FARM requirements when it adopted Ordinance No. 2018-4 on August 23, 2018.
  - B. The following definitions from the *Zoning Ordinance* are especially relevant to the requested Special Use Permit (capitalized words are defined in the Ordinance):
    - (1) “ACCESS” is the way MOTOR VEHICLES move between a STREET or ALLEY and the principal USE or STRUCTURE on a LOT abutting such STREET or ALLEY.
    - (2) “BEST PRIME FARMLAND” is Prime Farmland Soils identified in the Champaign County Land Evaluation and Site Assessment (LESA) System that under optimum management have 91% to 100% of the highest soil productivities in Champaign County, on average, as reported in the *Bulletin 811 Optimum Crop Productivity Ratings for Illinois Soils*. Best Prime Farmland consists of the following:

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- a. Soils identified as Agriculture Value Groups 1, 2, 3 and/or 4 in the Champaign County LESA system;
  - b. Soils that, in combination on a subject site, have an average LE of 91 or higher, as determined by the Champaign County LESA system;
  - c. Any development site that includes a significant amount (10% or more of the area proposed to be developed) of Agriculture Value Groups 1, 2, 3 and/or 4 soils as determined by the Champaign County LESA system.
- (3) "BUFFER STRIP" is an area, PROPERTY, LOT or tract of land or portion thereof, either vacant or landscaped with SCREEN PLANTING as herein specified, which shall serve as a separating space between dissimilar USES or DISTRICTS.
  - (4) "DWELLING OR PRINCIPAL BUILDING, PARTICIPATING" is a DWELLING on land that is leased to a WIND FARM or a PV SOLAR FARM.
  - (5) "DWELLING OR PRINCIPAL BUILDING, NON- PARTICIPATING" is a DWELLING on land that is not leased to a WIND FARM or a PV SOLAR FARM.
  - (6) "LOT" is a designated parcel, tract or area of land established by PLAT, SUBDIVISION or as otherwise permitted by law, to be used, developed or built upon as a unit.
  - (7) "LOT LINE, FRONT" is a line dividing a LOT from a STREET or easement of ACCESS. On a CORNER LOT or a LOT otherwise abutting more than one STREET or easement of ACCESS only one such LOT LINE shall be deemed the FRONT LOT LINE.
  - (8) "LOT LINE, REAR" is any LOT LINE which is generally opposite and parallel to the FRONT LOT LINE or to a tangent to the midpoint of the FRONT LOT LINE. In the case of a triangular or gore shaped LOT or where the LOT comes to a point opposite the FRONT LOT LINE it shall mean a line within the LOT 10 feet long and parallel to and at the maximum distance from the FRONT LOT LINE or said tangent.
  - (9) "LOT LINES" are the lines bounding a LOT.
  - (10) "PRIVATE ACCESSWAY" is a service way providing ACCESS to one or more LOTS which has not been dedicated to the public.
  - (11) "NON-ADAPTABLE STRUCTURE" is any STRUCTURE or physical alteration to the land which requires a SPECIAL USE permit, and which is likely to become economically unfeasible to remove or put to an alternate USE allowable in the DISTRICT (by right or by SPECIAL USE).
  - (12) "NOXIOUS WEEDS" are any of several plants designated pursuant to the Illinois Noxious Weed Law (505 ILCS 100/1 et seq.) and that are identified in 8 Illinois Administrative Code 220.
  - (13) "PHOTOVOLTAIC (PV)" is a type of solar energy system that produces electricity by the use of photovoltaic cells that generate electricity when struck by light.

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- (14) “PV SOLAR FARM” is a unified development intended to convert sunlight into electricity by photovoltaic (PV) devices for the primary purpose of wholesale sales of generated electricity. A PV SOLAR FARM is under a common ownership and operating control even though parts of the PV SOLAR FARM may be located on land leased from different owners. A PV SOLAR FARM includes all necessary components including access driveways, solar devices, electrical inverter(s), electrical transformer(s), cabling, a common switching station, maintenance and management facilities, and waterwells. PV SOLAR FARM should be understood to include COMMUNITY PV SOLAR FARM unless specified otherwise in the relevant section or paragraph.
- (15) “PV SOLAR FARM, COMMUNITY” is a PV SOLAR FARM of not more than 2,000 kilowatt nameplate capacity that meets the requirements of 20 ILCS 3855/1-10 for a “community renewable generation project” and provided that two COMMUNITY PV SOLAR FARMS may be co-located on the same or contiguous parcels as either a) two 2-MW projects on one parcel, or b) one 2-MW project on each of two contiguous parcels, as authorized by the Illinois Commerce Commission in Final Order 17-0838 on April 3, 2018.
- (16) “PRIVATE WAIVER” is a written statement asserting that a landowner has agreed to waive a specific WIND FARM or PV SOLAR FARM standard condition and has knowingly agreed to accept the consequences of the waiver. A PRIVATE WAIVER must be signed by the landowner.
- (17) “RIGHT-OF-WAY” is the entire dedicated tract or strip of land that is to be used by the public for circulation and service.
- (18) “SCREEN” is a STRUCTURE or landscaping element of sufficient opaqueness or density and maintained such that it completely obscures from view throughout its height the PREMISES upon which the screen is located.
- (19) “SCREEN PLANTING” is a vegetative material of sufficient height and density to filter adequately from view, in adjoining DISTRICTS, STRUCTURES, and USES on the PREMISES upon which the SCREEN PLANTING is located.
- (20) “SETBACK LINE” is the BUILDING RESTRICTION LINE nearest the front of and across a LOT establishing the minimum distance to be provided between a line of a STRUCTURE located on said LOT and the nearest STREET RIGHT-OF-WAY line.
- (21) “SPECIAL CONDITION” is a condition for the establishment of a SPECIAL USE.
- (22) “SPECIAL USE” is a USE which may be permitted in a DISTRICT pursuant to, and in compliance with, procedures specified herein.
- (23) “STREET” is a thoroughfare dedicated to the public within a RIGHT-OF-WAY which affords the principal means of ACCESS to abutting PROPERTY. A STREET may be designated as an avenue, a boulevard, a drive, a highway, a lane, a

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parkway, a place, a road, a thoroughfare, or by other appropriate names. STREETS are identified on the Official Zoning Map according to type of USE, and generally as follows:

- (a) MAJOR STREET: Federal or State highways.
- (b) COLLECTOR STREET: COUNTY highways and urban arterial STREETS.
- (c) MINOR STREET: Township roads and other local roads.

- (24) “VARIANCE” is a deviation from the regulations or standards adopted by this ordinance which the Hearing Officer or the Zoning BOARD of Appeals are permitted to grant.
- C. Section 5.2 only authorizes a “PV SOLAR FARM” in the AG-1 or AG-2 Zoning Districts and requires a Special Use Permit authorized by the County Board.
- D. Paragraph 6.1.2 A. indicates that all Special Use Permits with exterior lighting shall be required to minimize glare on adjacent properties and roadways by the following means:
- (1) All exterior light fixtures shall be full-cutoff type lighting fixtures and shall be located and installed so as to minimize glare and light trespass. Full cutoff means that the lighting fixture emits no light above the horizontal plane.
  - (2) No lamp shall be greater than 250 watts and the Board may require smaller lamps when necessary.
  - (3) Locations and numbers of fixtures shall be indicated on the site plan (including floor plans and building elevations) approved by the Board.
  - (4) The Board may also require conditions regarding the hours of operation and other conditions for outdoor recreational uses and other large outdoor lighting installations.
  - (5) The Zoning Administrator shall not approve a Zoning Use Permit without the manufacturer’s documentation of the full-cutoff feature for all exterior light fixtures.
- E. Section 6.1.5 contains the standard conditions for any PV SOLAR FARM which are as follows (capitalized words are defined in the Ordinance):
- (1) Requirements for what must be included in the area of the PV SOLAR FARM are in 6.1.5 B.(1).
  - (2) Requirements for where a PV SOLAR FARM cannot be located are in 6.1.5 B.(2).
  - (3) Paragraph 6.1.5 C. eliminates LOT AREA, AVERAGE LOT WIDTH, SETBACK, YARD, and maximum LOT COVERAGE requirements from applying to a PV SOLAR FARM.
  - (4) Paragraph 6.1.5 D. contains minimum separations for PV SOLAR FARMS from adjacent USES and STRUCTURES.
  - (5) Paragraph 6.1.5 E. contains standard conditions for the design and installation of PV SOLAR FARMS.

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- (6) Paragraph 6.1.5 F. contains standard conditions to mitigate damage to farmland.
  - (7) Paragraph 6.1.5 G. contains standard conditions for use of public streets.
  - (8) Paragraph 6.1.5 H. contains standard conditions for coordination with local fire protection districts.
  - (9) Paragraph 6.1.5 I. contains standard conditions for the allowable noise level.
  - (10) Paragraph 6.1.5 J. contains standard conditions for endangered species consultation.
  - (11) Paragraph 6.1.5 K. contains standard conditions for historic and archaeological resources review.
  - (12) Paragraph 6.1.5 L. contains standard conditions for acceptable wildlife impacts from PV SOLAR FARM construction and ongoing operations.
  - (13) Paragraph 6.1.5 M. contains standard conditions for screening and fencing of PV SOLAR FARMS.
  - (14) Paragraph 6.1.5 N. contains standard conditions to minimize glare from PV SOLAR FARMS.
  - (15) Paragraph 6.1.5 O. contains standard conditions for liability insurance.
  - (16) Paragraph 6.1.5 P. contains other standard conditions for operation of PV SOLAR FARMS.
  - (17) Paragraph 6.1.5 Q. contains standard conditions for a decommissioning plan and site reclamation agreement for PV SOLAR FARMS and modifies the basic site reclamation requirements in paragraph 6.1.1 A.
  - (18) Paragraph 6.1.5 R. contains standard conditions for securing an Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture.
  - (19) Paragraph 6.1.5 S. contains standard conditions for a complaint hotline for complaints related to PV SOLAR FARM construction and ongoing operations.
  - (20) Paragraph 6.1.5 T. contains the standard condition for expiration of the PV SOLAR FARM County Board Special Use Permit.
  - (21) Paragraph 6.1.5 U. contains standard conditions establishing additional requirements for application for a PV SOLAR FARM County Board Special Use Permit that supplement the basic requirements for a special use permit application.
- F. Section 9.1.11 requires that a Special Use Permit shall not be granted by the Zoning Board of Appeals unless the public hearing record and written application demonstrate the following:
- (1) That the Special Use is necessary for the public convenience at that location;

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- (2) That the Special Use is so designed, located, and proposed as to be operated so that it will not be injurious to the DISTRICT in which it shall be located or otherwise detrimental to the public welfare except that in the CR, AG-1, and AG-2 DISTRICTS the following additional criteria shall apply:
    - a. The property is either BEST PRIME FARMLAND and the property with proposed improvements in WELL SUITED OVERALL or the property is not BEST PRIME FARMLAND and the property with proposed improvements is SUITED OVERALL.
    - b. The existing public services are available to support the proposed SPECIAL USE effectively and safely without undue public expense.
    - c. The existing public infrastructure together with proposed improvements is adequate to support the proposed development effectively and safely without undue public expense.
  - (3) That the Special Use conforms to the applicable regulations and standards of and preserves the essential character of the DISTRICT in which it shall be located, except where such regulations and standards are modified by Section 6.
  - (4) That the Special Use is in harmony with the general purpose and intent of this ordinance.
  - (5) That in the case of an existing NONCONFORMING USE, it will make such USE more compatible with its surroundings.
- G. Paragraph 9.1.11.D.1. states that a proposed Special Use that does not conform to the standard conditions requires only a waiver of that particular condition and does not require a variance. Regarding standard conditions:
- (1) The Ordinance requires that a waiver of a standard condition requires the following findings:
    - a. that the waiver is in accordance with the general purpose and intent of the ordinance; and
    - b. that the waiver will not be injurious to the neighborhood or to the public health, safety, and welfare.
  - (2) However, a waiver of a standard condition is the same thing as a variance and Illinois law (55ILCS/ 5-12009) requires that a variance can only be granted in accordance with general or specific rules contained in the Zoning Ordinance and the VARIANCE criteria in paragraph 9.1.9 C. include the following in addition to criteria that are identical to those required for a waiver:
    - a. Special conditions and circumstances exist which are peculiar to the land or structure involved, which are not applicable to other similarly situated land and structures elsewhere in the same district.

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- b. Practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied will prevent reasonable or otherwise permitted use of the land or structure or construction.
  - c. The special conditions, circumstances, hardships, or practical difficulties do not result from actions of the applicant.
- (3) Including findings based on all of the criteria that are required for a VARIANCE for any waiver of a standard condition will eliminate any concern related to the adequacy of the required findings for a waiver of a standard condition and will still provide the efficiency of not requiring a public hearing for a VARIANCE, which was the original reason for adding waivers of standard conditions to the Ordinance.
- H. Paragraph 9.1.11.D.2. states that in granting any SPECIAL USE permit, the BOARD may prescribe SPECIAL CONDITIONS as to appropriate conditions and safeguards in conformity with the Ordinance. Violation of such SPECIAL CONDITIONS when made a party of the terms under which the SPECIAL USE permit is granted, shall be deemed a violation of this Ordinance and punishable under this Ordinance.

**GENERALLY REGARDING WHETHER THE SPECIAL USE IS NECESSARY FOR THE PUBLIC CONVENIENCE AT THIS LOCATION**

7. Generally regarding the *Zoning Ordinance* requirement that the proposed Special Use is necessary for the public convenience at this location:
- A. The Petitioner has testified on the application, **“Illinois utilities are required to acquire 3,000 MW of solar by the year 2030 and agriculturally zoned properties are ideal locations due to its traditionally flat topography and access to sunlight. This solar farm will not hinder or harm any surrounding land uses including current farming practices on the rest of the parcel owned by the host landowner.”**
  - B. The State of Illinois has adopted a Renewable Portfolio Standard that established a goal of 25% of the State’s energy coming from renewable sources by the year 2025.
  - C. The Illinois Future Energy Jobs Act requires installation of 3,000 MW of new solar capacity by the year 2030.
  - D. There is an existing Illini Electric Coop substation located at the southeast corner of the intersection of CR 3300N at CR 1300E.

**GENERALLY REGARDING WHETHER THE SPECIAL USE WILL BE INJURIOUS TO THE DISTRICT OR OTHERWISE INJURIOUS TO THE PUBLIC WELFARE**

8. Generally regarding the *Zoning Ordinance* requirement that the proposed Special Use be designed, located, and operated so that it will not be injurious to the District in which it shall be located, or otherwise detrimental to the public welfare:
- A. The Petitioner has testified on the application, **“Solar farms are installed and decommissioned in a way to ensure that the land it is installed on will not be degraded. The solar farm is monitored remotely and does not cause any harm to the surrounding land. A decommissioning plan is attached as Exhibit G.”**

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- B. Regarding surface drainage, the Natural Resource Report by the Champaign County Soil and Water Conservation District received February 23, 2018, states: “The site has a very slight slope to the South and West. The developed areas seem to have good drainage. The water from the site will leave by way of surface drainage. Best Management Practices that minimize the volume of stormwater flowing offsite and attempt to filter it as much as possible should be considered for any future development.”
- C. Regarding traffic in the subject property area:
- (1) The proposed solar farm would have one access on CR 1300E.
  - (2) CR 1300E is approximately 20 feet wide and is comprised of oil and chip.
  - (3) The Illinois Department of Transportation measures traffic on various roads throughout the County and determines the annual average 24-hour traffic volume for those roads and reports it as Average Daily Traffic (ADT). The most recent ADT data is from 2016 near the subject property. CR 1300E had an ADT of 350 west of the subject property. CR 3300N had an ADT of 100 north of the subject property.
  - (4) No significant increase in traffic is expected.
  - (5) The Ludlow Township Highway Commissioner has been notified of this case and no comments have been received.
  - (6) The petitioner is finalizing a waiver of a Road Use Agreement with Ken During, Ludlow Township Highway Commissioner. See the discussion under item 9.B.(11)a.
- D. Regarding fire protection, see the discussion under item 9.B.(12).
- E. The subject property is not located within a Special Flood Hazard Area, per FEMA Panel 17019CO200D, effective date October 2, 2013.
- F. The 36.77-acre subject property is considered Best Prime Farmland. The soil on the subject property consists of 152A Drummer silty clay loam, 663B Clare silt loam, 102A La Hogue loam, and 125A Selma loam, and the proposed solar farm area soils have an average LE score of 99.
- G. Regarding outdoor lighting on the subject property, the Permit Set received August 13, 2018, does not indicate outdoor lighting. A special condition has been added to ensure compliance for any future outdoor lighting installation.
- H. Regarding wastewater treatment and disposal on the subject property, there is no wastewater treatment and disposal required or planned for the proposed PV SOLAR FARM.
- I. Regarding neighborhood concerns, the following testimony was received at the August 30, 2018 ZBA meeting: (*placeholder*)
- J. Regarding parking, there is no required parking for the proposed PV SOLAR FARM.

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- K. Other than as reviewed elsewhere in this Summary of Evidence, there is no evidence to suggest that the proposed Special Use will generate either nuisance conditions such as odor, noise, vibration, glare, heat, dust, electromagnetic fields or public safety hazards such as fire, explosion, or toxic materials release, that are in excess of those lawfully permitted and customarily associated with other uses permitted in the zoning district.

**GENERALLY REGARDING WHETHER THE SPECIAL USE CONFORMS TO APPLICABLE REGULATIONS AND STANDARDS AND PRESERVES THE ESSENTIAL CHARACTER OF THE DISTRICT**

9. Generally regarding the *Zoning Ordinance* requirement that the proposed Special Use conforms to all applicable regulations and standards and preserves the essential character of the District in which it shall be located, except where such regulations and standards are modified by Section 6 of the Ordinance:
- A. The Petitioner has testified on the application, **“The proposed use does not interfere or affect the essential character or primary use of the district in which land is located. The proposed use may conform to pending ordinance.”**
- B. Regarding compliance with the *Zoning Ordinance*, the following evidence was provided:
- (1) Section 5.2 authorizes a PV SOLAR FARM only by a County Board Special Use Permit in the AG-1 and AG-2 Agriculture Zoning Districts. It is not permitted by right in any district.
  - (2) There is no required parking.
  - (3) Requirements for what must be included in the area of the PV SOLAR FARM Special Use Permit are in subparagraph 6.1.5 B.(1).
    - a. Item 6.1.5 B.(1)a. requires that the area include all land that will be exposed to a noise level greater than that authorized to Class A land as established by 35 Ill. Admin. Code Parts 900, 901 and 910 under paragraph 6.1.5 I.
      - (1) Exhibit E of the Special Use Permit application received August 13, 2018, shows a 16.20-acre Special Use Permit area on the subject property. No noise analysis is required for a COMMUNITY PV SOLAR FARM unless specified by the ZBA.
    - b. Item 6.1.5 B.(1)b. requires that the area include all necessary access lanes or driveways and any required new PRIVATE ACCESSWAYS, allowing a minimum 40 feet wide area for each.
      - (1) In the application received August 13, 2018, the Site Layout on sheet L1.1 shows a 12 feet wide private access within a 24 feet wide area.
      - (2) Waiver Part D was added regarding the 40 feet wide minimum area.
    - c. Item 6.1.5 B.(1)c. requires that the area include all necessary PV SOLAR FARM STRUCTURES and ACCESSORY STRUCTURES including electrical distribution lines, inverters, transformers, common switching stations, and substations not under the ownership of a PUBLICLY REGULATED UTILITY and all waterwells that will provide water for the PV SOLAR FARM.

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- (1) The application received August 13, 2018, appears to be in compliance.
- d. Item 6.1.5 B.(1)d. requires that the area include all aboveground STRUCTURES and facilities shall be of a type and shall be located in a manner that is consistent with the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture as required by paragraph 6.1.5 R.
- (1) Per Section 6.1.5 R.(3), all requirements of the signed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture shall become requirements of the County Board SPECIAL USE Permit.
  - (2) Per Section 6.1.5 U.(3), the applicant shall include a copy of the signed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture with the Zoning Use Permit Application to authorize construction. A special condition has been added to ensure compliance.
- (4) Requirements which identify certain areas where a PV SOLAR FARM Special Use Permit shall not be located can be found in Subparagraph 6.1.5 B.(2).
- a. Item 6.1.5 B.(2)a. requires a PV SOLAR FARM to be more than one and one half miles from an incorporated municipality with a zoning ordinance, unless the following is provided:
    - (a) No part of a PV SOLAR FARM shall be located within a contiguous urban growth area (CUGA) as indicated in the most recent update of the CUGA in the Champaign County Land Resource Management Plan, and there shall be a separation of one-half mile from a proposed PV SOLAR FARM to a municipal boundary at the time of application for the SPECIAL USE Permit, except for any power lines of 34.5 kVA or less and except for any proposed PV SOLAR FARM substation and related proposed connection to an existing substation.
      - i. The proposed PV SOLAR FARM is over 2 miles from the Village of Rantoul and over 4 miles from the Village of Ludlow.
    - (b) The PV SOLAR FARM SPECIAL USE permit application shall include documentation that the applicant has provided a complete copy of the SPECIAL USE permit application to any municipality within one-and-one-half miles of the proposed PV SOLAR FARM.
      - i. There are no municipalities within one-and-one-half miles of the proposed PV SOLAR FARM.
    - (c) If no municipal resolution regarding the PV SOLAR FARM is received from any municipality located within one-and-one-half miles of the PV SOLAR FARM prior to the consideration of the PV SOLAR FARM SPECIAL USE permit by the Champaign County Board, the ZONING ADMINISTRATOR shall provide documentation to the

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County Board that any municipality within one-and-one-half miles of the PV SOLAR FARM was provided notice of the meeting dates for consideration of the proposed PV SOLAR FARM SPECIAL USE Permit for both the Environment and Land Use Committee and the County Board.

- i. There are no municipalities within one-and-one-half miles of the proposed PV SOLAR FARM.
  - b. Item 6.1.5 B.2.(b) requires PV SOLAR FARMS to be a minimum of one-half mile from the CR Conservation Recreation District.
    - (a) The nearest CR District is over 4 miles from the subject property.
- (5) Requirements regarding interconnection to the power grid can be found in Subparagraph 6.1.5 B.(3):
- a. The PV SOLAR FARM SPECIAL USE permit application shall include documentation that the applicant or PV SOLAR FARM is in the queue to acquire an interconnection agreement to the power grid.
    - (a) Exhibit H of the application received August 13, 2018, includes an Interconnection Request Application which was sent to Ameren Illinois on December 22, 2017.
  - b. Documentation of an executed interconnection agreement with the appropriate electric utility shall be provided prior to issuance of a Zoning Compliance Certificate to authorize operation of the PV SOLAR FARM.
    - (a) A special condition has been added to ensure compliance.
- (6) Requirements regarding Right to Farm can be found in Subparagraph 6.1.5 B.(4): “The owners of the subject property and the Applicant, its successors in interest, and all parties to the decommissioning plan and site reclamation plan hereby recognize and provide for the right of agricultural activities to continue on adjacent land consistent with the Right to Farm Resolution 3425.”
- (7) Requirements regarding minimum lot standards can be found in Subparagraph 6.1.5 C.: Subparagraph 6.1.5 C. eliminates LOT AREA, AVERAGE LOT WIDTH, SETBACK, YARD, maximum LOT COVERAGE, or maximum LOT AREA requirements on BEST PRIME FARMLAND requirements for a PV SOLAR FARM or for LOTS for PV SOLAR FARM substations and/ or PV SOLAR FARM maintenance and management facilities.
- (8) Requirements regarding minimum separations for PV SOLAR FARMS from other STRUCTURES, BUILDINGS, and USES can be found in Subparagraph 6.1.5 D.
- a. Exhibit F of the application received August 13, 2018, shows the separations between the solar farm fence and the nearest residences.
  - b. The proposed PV SOLAR FARM complies with all minimum separations in paragraph 6.1.5 D. in the following manner:

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- (a) Subparagraph 6.1.5 D.(1) requires PV SOLAR FARM fencing to be set back from the street centerline a minimum of 40 feet from a MINOR STREET and a minimum of 55 feet from a COLLECTOR STREET and a minimum of 60 feet from a MAJOR STREET unless a greater separation is required for screening pursuant to Section 6.1.5 M.(2)a., but in no case shall the perimeter fencing be less than 10 feet from the RIGHT OF WAY of any STREET.
  - i. Both CR 1300E and CR 3300N are MINOR STREETS, and the Site Plan received on August 13, 2018, shows that fencing is set back approximately 125 feet from the closest street centerline on CR 1300E.
  
- (b) Subparagraph 6.1.5 D.(2) states that for properties participating in the solar farm, there is no required separation from any existing DWELLING or existing PRINCIPAL BUILDING except as required to ensure that a minimum zoning lot is provided for the existing DWELLING or PRINCIPAL BUILDING.
  - i. There are no buildings on the subject property.
  
- (c) Subparagraph 6.1.5 D.(3)a. states that for any adjacent LOT that is 10 acres or less in area (not including the STREET RIGHT OF WAY):
  - i. For any adjacent LOT that is bordered (directly abutting and/or across the STREET) on no more than two sides by the PV SOLAR FARM, the separation shall be no less than 240 feet from the property line. Attachment D of the Preliminary Memorandum dated August 24, 2018 shows these separations.
    - (i) There is a 5-acre lot across the street to the west of the proposed solar farm. The lot is approximately 153 feet from the PV SOLAR FARM perimeter fence. Part A of the waiver addresses this separation distance.
    - (ii) The distance between the proposed inverter and the 5-acre residential property is approximately 800 feet.
    - (iii) The 2.86-acre lot to the northeast of the proposed solar farm is approximately 264 feet from the PV SOLAR FARM perimeter fence.
    - (iv) The distance between the proposed inverter and the 2.86-acre residential property is approximately 925 feet.
    - (v) The 3.36-acre lot to the northwest of the proposed solar farm is approximately 757 feet from the PV SOLAR FARM perimeter fence.
    - (vi) The distance between the proposed inverter and the 3.36-acre residential property is approximately 1,360 feet.

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- (vii) The 3.91-acre lot to the northeast of the proposed solar farm is approximately 763 feet from the PV SOLAR FARM perimeter fence.
    - (viii) The distance between the proposed inverter and the 3.91-acre residential property is approximately 1,570 feet.
  - ii. For any adjacent LOT that is bordered (directly abutting and/or across the STREET) on more than two sides by the PV SOLAR FARM, the separation shall exceed 240 feet as deemed necessary by the BOARD.
    - (i) There are no LOTS bordered on more than two sides by the PV SOLAR FARM.
- (d) Subparagraph 6.1.5 D.(3)b. states that for any adjacent LOT that is more than 10 acres in area (not including the STREET RIGHT OF WAY), the separation shall be no less than 255 feet from any existing DWELLING or existing PRINCIPAL BUILDING and otherwise the perimeter fencing shall be a minimum of 10 feet from a SIDE or REAR LOT LINE. This separation distance applies to properties that are adjacent to or across a STREET from a PV SOLAR FARM.
  - i. The property is surrounded by lots more than 10 acres in area, but none of them have residences.
  - ii. The closest separation between the perimeter fencing and a SIDE or REAR LOT LINE is 20 feet.
- (e) Subparagraph 6.1.5 D.(3)c. states that additional separation may be required to ensure that the noise level required by 35 Ill. Admin. Code Parts 900, 901 and 910 is not exceeded or for other purposes deemed necessary by the BOARD.
- (f) Subparagraph 6.1.5 D.(4) states that there must be a separation of at least 500 feet from any of the following unless the SPECIAL USE permit application includes results provided from an analysis using the Solar Glare Hazard Analysis Tool (SGHAT) for the Airport Traffic Control Tower cab and final approach paths, consistent with the Interim Policy, Federal Aviation Administration (FAA) Review of Solar Energy Projects on Federally Obligated Airports, or the most recent version adopted by the FAA, and the SGHAT results show no detrimental affect with less than a 500 feet separation from any of the following:
  - i. Any AIRPORT premises or any AIRPORT approach zone within five miles of the end of the AIRPORT runway; or
    - (i) The closest Rantoul Municipal Airport runway is approximately 4.7 miles from the subject property.

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- ii. Any RESTRICTED LANDING AREA that is NONCONFORMING or which has been authorized by SPECIAL USE permit and that existed on or for which there had been a complete SPECIAL USE permit application received by April 22, 2010, or any approach zone for any such RESTRICTED LANDING AREA; or
  - (i) The closest RESTRICTED LANDING AREA is approximately 10 miles from the subject property.
  
- iii. Any RESIDENTIAL AIRPORT that existed on or for which there had been a complete SPECIAL USE permit application received by April 22, 2010, or any approach zone for any such RESIDENTIAL AIRPORT.
  - (i) The closest RESIDENTIAL AIRPORT is approximately 18 miles from the subject property.
  
- (g) Subparagraph 6.1.5 D.(5) requires a separation of at least 500 feet between substations and transmission lines of greater than 34.5 kVA to adjacent dwellings and residential DISTRICTS.
  - i. There are no substations or transmission lines of greater than 34.5 kVA within 500 feet of adjacent dwellings or residential DISTRICTS.
  
- (h) Subparagraph 6.1.5 D.(6) states that electrical inverters shall be located as far as possible from property lines and adjacent DWELLINGS consistent with good engineering practice. Inverter locations that are less than 275 feet from the perimeter fence shall require specific approval and may require special sound deadening construction and noise analysis.
  - i. Exhibit B of the application received August 13, 2018, shows 16 inverters located on an equipment pad on the south end of the PV SOLAR FARM, approximately 28 feet from the south perimeter fence. Waiver Part B relates to this reduced separation distance.
  
  - ii. Regarding the distance between the inverter pad and nearby dwellings:
    - (i) The distance between the proposed inverter and the dwelling on the 5-acre property to the west is approximately 915 feet.
  
    - (ii) The distance between the proposed inverter and the dwelling on the 2.86-acre residential property to the northeast is approximately 1,100 feet.

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- (iii) The distance between the proposed inverter and the dwelling on the 3.36-acre residential property is approximately 1,700 feet.
  - (iv) The distance between the proposed inverter and the dwelling on the 3.91-acre residential property is approximately 1,915 feet.
  - (v) The 40-acre property to the south could establish by-right lots outside of a 515 feet radius of the proposed inverters.
- (i) Subparagraph 6.1.5 D.(7) states that separation distances for any PV SOLAR FARM with solar equipment exceeding 8 feet in height, with the exception of transmission lines which may be taller, shall be determined by the BOARD on a case-by-case basis.
    - i. The Special Use Permit application packet received August 13, 2018, includes a spec sheet for the proposed racking system that indicates a standard 54-inch height.
    - ii. In an email received August 17, 2018, Nick Mento from Community Power Group responded to questions from Susan Burgstrom, and stated that the panels would reach approximately 7 to 8 feet.
  - (j) Subparagraph 6.1.5 D.(8) states that PV SOLAR FARM solar equipment other than inverters shall be no less than 26 feet from the property line of any lot more than 10 acres in area.
    - i. The Special Use Permit application packet received August 13, 2018, shows that there is a 40 feet separation between the south property line and the nearest PV SOLAR FARM module.
- (9) Paragraph 6.1.5 E. contains standard conditions for the design and installation of PV SOLAR FARMS. Compliance with paragraph 6.1.5 E. can be summarized as follows:
- a. Subparagraph 6.1.5 E.(1) requires certification by an Illinois Professional Engineer or Illinois Licensed Structural Engineer or other qualified professional that that the constructed building conforms to Public Act 96-704 regarding building code compliance and conforms to the Illinois Accessibility Code.
    - (a) The Special Use Permit application packet received August 13, 2018, does not include any buildings.
  - b. Subparagraph 6.1.5 E.(2) establishes minimum requirements for electrical components.
    - (a) Part 6.1.5 E.(2)a. states that all electrical components of the PV SOLAR FARM shall conform to the National Electrical Code as

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amended and shall comply with Federal Communications Commission (FCC) requirements.

- i. The Special Use Permit application packet received August 13, 2018, states that the developer will follow the 2011 NFPA National Electrical Code.
- (b) Part 6.1.5 E.(2)b. states that burying power and communication wiring underground shall be minimized consistent with best management practice regarding PV solar farm construction and minimizing impacts on agricultural drainage tile.
  - i. On page 4 of the Decommissioning Plan received with the SUP application on August 13, 2018, the petitioner states: “This project will have cable both above ground and placed below the ground surface.”
- c. Subparagraph 6.1.5 E.(3) states that the height limitation established in Section 5.3 shall not apply to a PV SOLAR FARM, and requires the maximum height of all above ground STRUCTURES to be identified in the application and as approved in the SPECIAL USE permit.
  - (a) In an email received August 17, 2018, Nick Mento from Community Power Group responded to questions from Susan Burgstrom, and stated that the panels would reach approximately 7 to 8 feet.
- d. Subparagraph 6.1.5 E.(4) requires that a reasonably visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and substations.
  - (a) The draft Permit Set received January 25, 2018, illustrates on sheet L2.3 that the perimeter fence gate will have high voltage warning signs.
- e. Subparagraph 6.1.5 E.(5) requires that no PV SOLAR FARM construction may intrude on any easement or right of way for a GAS PIPELINE or HAZARDOUS LIQUID PIPELINE, an underground water main or sanitary sewer, a drainage district ditch or tile, or any other public utility facility unless specifically authorized by a crossing agreement that has been entered into with the relevant party.
  - (a) No information was required or submitted for the Special Use Permit application.
  - (b) The subject property does not have a connection to public sewer or water.
  - (c) Champaign County Geographic Information Systems data does not show any gas or hazardous liquid lines on the subject property.
- (10) Paragraph 6.1.5 F. contains standard conditions to mitigate damage to farmland.
  - a. The 36.77-acre subject property is considered Best Prime Farmland. The soil on the subject property consists of 152A Drummer silty clay loam,

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663B Clare silt loam, 102A La Hogue loam, and 125A Selma loam, and the proposed solar farm area soils have an average LE score of 99.

- b. The Applicant anticipates signing an Agricultural Impact Mitigation Agreement, which would include requirements to mitigate damage to farmland per 505 ILCS 147/15(b), effective June 29, 2018.
  - c. Regarding pollinator friendly ground cover in the mitigation of damage to farmland, Exhibit I: Landscape Plan received August 13, 2018 states:
    - (a) Year-round pollinator friendly ground cover can complement existing agriculture in the area and also helps combat excessive runoff.
    - (b) Seed mixes can include a diversity of flowering plants that can:
      - i. Provide food and habitat for butterflies, bees, and insects that pollinate flowering forbs (wildflowers) and some commercial agricultural crops;
      - ii. Significantly reduce wind and surface water erosion;
      - iii. Significantly reduce fertilizer, herbicide, and pesticide applications, resulting in improved water quality;
      - iv. Increase organic matter and water holding capacity of soils. The result is higher quality soils for farming when the site is decommissioned;
      - v. Improve the aesthetic look of the solar facility.
  - d. A special condition has been added to ensure compliance with Champaign County Ordinances.
- (11) Paragraph 6.1.5 G. contains standard conditions for use of public streets.
- a. Paragraph 6.1.5 G.(1) requires the Applicant to enter into a signed Roadway Upgrade and Maintenance agreement approved by the County Engineer and State's Attorney and/or any relevant Township Highway Commissioner prior to the close of the public hearing for the use of public streets, except for any COMMUNITY PV SOLAR FARM for which the relevant highway authority has agreed in writing to waive the requirements, and the signed and executed Roadway Upgrade and Maintenance agreements must provide for certain conditions.
    - (a) Exhibit J of the application received August 13, 2018, states:
 

“Community Power Group is currently discussing a waiver for the requirements of subparagraphs 6.1.5 G.(1), (2) and (3) of Champaign County Zoning Ordinance for the Community PV Solar Farm proposed within this permit application. Kenneth During, Road Commissioner, is the point of contact with the Township of Ludlow regarding the waiver. Community Power Group will aim to have a

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signed waiver pending discussions between Community Power Group and the Township regarding possible other conditions, by the County Board meeting that will discuss this special use application.

- b. Paragraph 6.1.5 G.(2) requires that the County Engineer and State's Attorney, or Township Highway Commissioner, or municipality where relevant, has approved a Transportation Impact Analysis provided by the Applicant and prepared by an independent engineer that is mutually acceptable to the Applicant and the County Engineer and State's Attorney, or Township Highway Commissioner, or municipality.
    - (a) No information was required or submitted for the Special Use Permit application.
  - c. Paragraph 6.1.5 G.(3) requires the Applicant or its successors in interest to enter into a Roadway use and Repair Agreement with the appropriate highway authority for decommissioning the PV SOLAR FARM.
    - (a) No information was required or submitted for the Special Use Permit application.
- (12) Paragraph 6.1.5 H. contains standard conditions for coordination with local fire protection districts.
- a. No information was provided in the application received August 13, 2018, regarding whether the applicant has submitted a copy of the Site Plan to the local Fire Protection District. There is no timeline for completing this requirement.
  - b. The Ludlow Fire Protection District was notified of this case and no comments have been received.
- (13) Paragraph 6.1.5 I. contains standard conditions for the allowable noise level.
- a. Subparagraph 6.1.5 I.(1) requires the noise level from each PV SOLAR FARM to be in compliance with the applicable Illinois Pollution Control Board (IPCB) regulations (*35 Illinois Administrative Code* Subtitle H: Noise Parts 900, 901, 910).
    - (a) A Special Use Permit application for a Community PV Solar Farm does not require a noise level analysis unless the Board requires one.
    - (b) Specification sheets for the proposed inverter to be used were included in Exhibit D of the application received August 13, 2018.
    - (c) Distances from adjacent residences were provided in Exhibit F of the application received August 13, 2018.
- (14) Paragraph 6.1.5 J. contains standard conditions for endangered species consultation.
- a. An Ecological Compliance Assessment Tool (EcoCAT) consultation report received January 24, 2018, stated: "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

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registered Land and Water Reserves in the vicinity of the project location. No action is required, and the consultation is valid for 2 years.”

- (15) Paragraph 6.1.5 K. contains standard conditions for historic and archaeological resources review. Regarding compliance with 6.1.5 K.:
- a. In a letter received August 17, 2018, The Illinois State Historic Preservation Office states: “We have determined, based on the available information, that no significant historic, architectural or archaeological resources are located within the proposed project area. This clearance remains in effect for two (2) years from the date issuance. It does not pertain to discovery during construction.”
- (16) Paragraph 6.1.5 L. states: “The PV SOLAR FARM shall be located, designed, constructed, and operated so as to avoid and if necessary mitigate the impacts to wildlife to a sustainable level of mortality.”
- a. Exhibit F of the Special Use Permit application packet received in the Special Use Permit application on January 25, 2018, refers to the EcoCAT report that was provided with the application, and also states that “solar poses no threat to wildlife or natural resources in general.”
- (17) Paragraph 6.1.5 M. contains standard conditions for screening and fencing.
- a. Subparagraph 6.1.5 M.(1) requires the PV SOLAR FARM to have perimeter fencing that is at least 7 feet tall, with Knox boxes and keys provided at locked entrances, and a vegetation management plan included in the application to control NOXIOUS WEEDS.
    - (a) Sheet L2.3 of the Permit Set received January 25, 2018, shows a 7-foot tall fence with Knox boxes, which conforms to the Zoning Ordinance.
    - (b) Regarding noxious weed control, Exhibit I to the application received August 13, 2018, includes a Weed and Grass Control Plan, which conforms to the Zoning Ordinance.
      - i. Noxious weed control is discussed on pages 4 and 5 of the Weed and Grass Control Plan.
  - b. Subparagraph 6.1.5 M.(2) requires a visual screen around the perimeter of the PV SOLAR FARM.
    - (a) Subparagraph 6.1.5 M.(2)a.(a) requires that a visual screen be provided for any part of the PV SOLAR FARM that is visible to and located within 1,000 feet of an existing DWELLING or residential DISTRICT.
    - (b) Exhibit F of the application received August 13, 2018, shows that the nearest existing DWELLING is approximately 275 feet from the proposed solar farm perimeter fence and approximately 264 feet from the nearest existing residential DISTRICT.

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- (c) A vegetated screen will be required on the north, west, and east sides of the PV SOLAR FARM. Attachment D to the Preliminary Memorandum dated August 24, 2018, shows the 1,000 foot area surrounding the PV SOLAR FARM fence and which properties require screening.
- (18) Paragraph 6.1.5 N. contains standard conditions to minimize glare from the PV SOLAR FARM. Subparagraph 6.1.5 N.(1) requires that the design and construction of the PV SOLAR FARM shall minimize glare that may affect adjacent properties and the application shall include an explanation of how glare will be minimized.

No information was provided in the application received August 13, 2018.

- (19) Paragraph 6.1.5 O. contains standard conditions for the minimum liability insurance for the PV SOLAR FARM.
- a. Subparagraph 6.1.5 O.(1) states: “The Owner or Operator of the PV SOLAR FARM shall maintain a current general liability policy covering bodily injury and property damage with minimum limits of a least \$5 million per occurrence and \$5 million in the aggregate.”
    - (a) Community Power Group (CPG) has an insurance clause in its Solar Facility Site Lease Agreement with landowners which stipulates that CPG will have insurance below what is required by law, unless the law states a greater amount is required, in which case CPG will comply with what is required.
  - b. Subparagraph 6.1.5 O.(2) states: “The general liability policy shall identify landowners in the SPECIAL USE permit as additional insured.”
    - (a) Community Power Group (CPG) has a clause in its Solar Facility Site Lease Agreement with landowners which states that landowners in the SPECIAL USE permit are additional insured.
- (20) Paragraph 6.1.5 P. contains other standard conditions for operation of the PV SOLAR FARM.
- a. Subparagraph 6.1.5 P.(1)c. states: “The Application shall explain methods and materials used to clean the PV SOLAR FARM equipment including an estimation of the daily and annual gallons of water used and the source of the water and the management of wastewater. The BOARD may request copies of well records from the Illinois State Water Survey and may require an estimate by a qualified hydrogeologist of the likely impact on adjacent waterwells.”
    - (a) Exhibit K of the application received August 13, 2018, states: “The solar panels will not be manually cleaned for a majority of the year with rain taking care of most dust. In other extraordinary circumstances where manual removal of material built up on solar panels is needed, water will be sufficient brought in from a water truck. The water used would be less than that typically used on the

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agricultural land. Furthermore, in cases of long term snow build up (as snow will often remove itself from the panels, physical removal with brooms or other rudimentary equipment will be sufficient).”

- (b) Regarding an estimation of the daily and annual gallons of water used and the source of the water, in an email received August 17, 2018, Nick Mento from Community Power Group responded to questions from Susan Burgstrom, and stated: “Any water being used will be from an off-site source. No wells or on-site water sources will be utilized or installed. Any water will be transported from off-site. However, most panel cleaning can be done by rainwater and the most we could expect off-site water to be used (from a water truck) would be twice a year in the case of little rain and dust concerns.”
- b. Subparagraph 6.1.5 P.(3) states: “The PV SOLAR FARM SPECIAL USE permit application shall include a weed control plan for the total area of the SPECIAL USE permit including areas both inside of and outside of the perimeter fencing. The weed control plan shall ensure the control and/or eradication of NOXIOUS WEEDS consistent with the Illinois Noxious Weed Law (505 ILCS 100/1 et seq.). The weed control plan shall be explained in the application.
    - (a) Exhibit I of the application received August 13, 2018, includes a Weed and Grass Control Plan, and the information conforms to the Zoning Ordinance.
  - c. All other requirements in Paragraph 6.1.5 P. do not have to be submitted as part of the Special Use Permit application; rather, they will be required during construction, operations, and/or decommissioning phases of the project.
- (21) Paragraph 6.1.5 Q. contains standard conditions for a Decommissioning and Site Reclamation Plan for the PV SOLAR FARM and modifies the basic site reclamation requirements in paragraph 6.1.1 A. Compliance with paragraph 6.1.5 Q. can be summarized as follows:
- a. Subparagraph 6.1.5 Q.(1) of the Ordinance requires a signed Decommissioning and Site Reclamation Plan conforming to the requirements of paragraph 6.1.1 A. of the Ordinance and the remainder of 6.1.5 Q. of the Ordinance. Compliance with the requirements of paragraph 6.1.1 A. of the Ordinance can be summarized as follows:
    - (a) Subparagraph 6.1.1 A.1. of the Ordinance requires the petitioner to submit a Decommissioning and Site Reclamation Plan for consideration by the Board.
      - i. Exhibit G of the application received August 13, 2018, is a Decommissioning Plan for the proposed PV SOLAR FARM.
    - (b) Subparagraph 6.1.1 A.2. of the Ordinance requires that the decommissioning and site reclamation plan shall be binding upon all successors of title, lessees, to any operator and/or owner of a NON-

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ADAPTABLE STRUCTURE, and to all parties to the decommissioning and site reclamation plan. Prior to the issuance of a SPECIAL USE Permit for such NON-ADAPTABLE STRUCTURES, the landowner or applicant shall also record a covenant incorporating the provisions of the decommissioning and site reclamation plan on the deed subject to the LOT, requiring that the reclamation work be performed and that a letter of credit be provided for financial assurance.

- i. Exhibit G of the application received August 13, 2018, demonstrates conformance to the Zoning Ordinance.
- (c) Subparagraph 6.1.1 A.3. of the Ordinance requires that separate cost estimates for Section 6.1.1 A.4.a., 6.1.1 A.4.b., and 6.1.1 A.4.c. shall be provided by an Illinois Licensed Professional Engineer and are subject to approval of the BOARD.
- i. Section 6.1.1 A.4.a. is for removal of the above-ground portion of any STRUCTURE on the subject site; site grading; and interim soil erosion control.
    - (i) Exhibit G of the application received August 13, 2018, includes estimates for decommissioning the solar panels.
    - (ii) No reference was made to interim soil erosion control; however, the Weed and Grass Control Plan received August 13, 2018, considers erosion and runoff and offers mitigation measures.
    - (iii) Regarding estimates being made by an Illinois Licensed Professional Engineer, Exhibit G states: “Community Power Group will accept providing cost estimates from an Illinois Licensed Professional Engineer for the decommissioning/site reclamation as a condition of the special use permit.”
    - (iv) A special condition has been added to ensure compliance.
  - ii. Section 6.1.1 A.4.b. is for below-ground restoration, including final grading and surface treatment.
    - (i) No reference was found for site grading for the actual panel post locations or interim soil erosion control.
    - (ii) Final grading and surface treatment estimates were provided only for the aggregate access roads and pads.
  - iii. Section 6.1.1 A.4.c. is for any environmental remediation required by State or Federal law.
    - (i) No reference was found for environmental remediation.

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- iv. Section 6.1.1 A.4.d. is for provision and maintenance of a letter of credit, as set forth in Section 6.1.1 A.5.
  - (i) Exhibit G of the application received August 13, 2018, states: “Community Power Group will accept, as a condition of the special use permit, to be required to provide an irrevocable letter of credit from a federally insured financial institution within 200 miles of Urbana.”
- (d) All other requirements in Paragraph 6.1.5 Q.(1) do not have to be submitted as part of the Special Use Permit application; rather, they will be required during construction, operations, and/or decommissioning phases of the project.
- b. Subparagraph 6.1.5 Q.(2) of the Ordinance requires that in addition to the costs listed in subparagraph 6.1.1 A.4. of the Ordinance, the decommissioning and site reclamation plan shall also include provisions for anticipated repairs to any public STREET used for the purpose of reclamation of the PV SOLAR FARM and all costs related to removal of access driveways.
  - (a) The costs reported in the Decommissioning Plan received August 13, 2018, do not include the costs for any street repairs but do include the cost of removing access driveways.
- c. Subparagraph 6.1.5 Q.(3) of the Ordinance requires the Decommissioning and Site Reclamation Plan to also include the following:
  - (a) Subparagraph 6.1.5 Q.(3)a. of the Ordinance requires a stipulation that the applicant or successor shall notify the GOVERNING BODY by certified mail of the commencement of voluntary or involuntary bankruptcy proceeding, naming the applicant as debtor, within ten days of commencement of the proceeding.
    - i. The Decommissioning Plan received August 13, 2018, does not include information about this requirement.
  - (b) Subparagraph 6.1.5 Q.(3)b. of the Ordinance requires a stipulation that the Applicant shall agree that the sale, assignment in fact or law, or such other transfer of applicant’s financial interest in the PV SOLAR FARM shall in no way affect or change applicant’s obligation to continue to comply with the terms of this plan. Any successor in interest, assignee, and all parties to the decommissioning and site reclamation plan shall assume the terms, covenants, and obligations of this plan and agrees to assume all reclamation liability and responsibility for the PV SOLAR FARM.
    - i. The Decommissioning Plan received August 13, 2018, does not include information about this requirement.
  - (c) Subparagraph 6.1.5 Q.(3)c. of the Ordinance requires authorization for the GOVERNING BODY and its authorized representatives for

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- right of entry onto the PV SOLAR FARM premises for the purpose of inspecting the methods of reclamation or for performing actual reclamation if necessary.
- i. The Decommissioning Plan received August 13, 2018, does not include information about this requirement.
- (d) Subparagraph 6.1.5 Q.(3)d. of the Ordinance requires a stipulation that at such time as decommissioning takes place the applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan are required to enter into a Roadway Use and Repair Agreement with the relevant highway authority.
- i. The Decommissioning Plan received August 13, 2018, does not include information about this requirement.
  - ii. The Applicant has requested a waiver from requiring a Roadway Use and Repair Agreement from Ludlow Township.
- (e) Subparagraph 6.1.5 Q.(3)e. of the Ordinance requires a stipulation that the Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall provide evidence of any new, additional, or substitute financing or security agreement to the Zoning Administrator throughout the operating lifetime of the project.
- i. The Decommissioning Plan received August 13, 2018, does not include information about this requirement.
- (f) Subparagraph 6.1.5 Q.(3)f. of the Ordinance requires a stipulation that the Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall be obliged to perform the work in the decommissioning and site reclamation plan before abandoning the PV SOLAR FARM or prior to ceasing production of electricity from the PV SOLAR FARM, after it has begun, other than in the ordinary course of business. This obligation shall be independent of the obligation to pay financial assurance, and shall not be limited by the amount of financial assurance. The obligation to perform the reclamation work shall constitute a covenant running with the land.
- i. The Decommissioning Plan received August 13, 2018, does not include information about this requirement.
- (g) Subparagraph 6.1.5 Q.(3)g. of the Ordinance requires payment of any associated costs that Champaign County may incur in the event that decommissioning is actually required. Associated costs include all administrative and ancillary costs associated with drawing upon the financial assurance and performing the reclamation work and shall include but not be limited to attorney's fees; construction management and other professional service fees; and the costs of

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- preparing requests for proposals and bidding documents required to comply with state law or Champaign County purchasing policies.
- i. The Decommissioning Plan received August 13, 2018, does not include information about this requirement.
- (h) Subparagraph 6.1.5 Q.(3)h. of the Ordinance requires that depth of removal of foundation concrete below ground shall be a minimum of 54 inches. The depth of removal of foundation concrete shall be certified in writing by an Illinois Licensed Professional Engineer and the certification shall be submitted to the Zoning Administrator.
    - i. The Decommissioning Plan received August 13, 2018, does not include information about this requirement.
  - (i) Subparagraph 6.1.5 Q.(3)i. of the Ordinance states that underground electrical cables at a depth of 5 feet or greater may be left in place.
    - i. Page 4 of the Decommissioning Plan received August 13, 2018, demonstrates compliance with the following: “All cables placed on this site will be salvaged. Below ground cables will be pulled and conduits will be removed during the decommissioning of the project.”
  - (j) Subparagraph 6.1.5 Q.(3)j. of the Ordinance states that the hole resulting from the removal of foundation concrete during decommissioning shall be backfilled as follows:
    - i. Section 6.1.5 Q.(3)j.(a) requires that the excavation resulting from the removal of foundation concrete shall only be backfilled with subsoil and topsoil in similar depths and similar types as existed at the time of the original PV SOLAR FARM construction except that a lesser quality topsoil or a combination of a lesser quality topsoil and a subsoil that is similar to the native subsoil may be used at depths corresponding to the native subsoil but not less than 12 inches below grade.
      - (i) The Decommissioning Plan received August 13, 2018, states: “In all cable locations outside the access roads, the trenches are backfilled with onsite earthen materials with at least 6 inches of topsoil. At roads, the cables will be in conduits and back filled to prevent rutting.”
    - ii. Section 6.1.5 Q.(3)j.(b) requires that the native soils excavated at the time of the original PV SOLAR FARM construction may be used to backfill the concrete foundation excavations at the time of decommissioning provided that the soils are adequately stored throughout the operating lifetime of the PV SOLAR FARM. The methods for storing the excavated native soils during the operating lifetime of

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the PV SOLAR FARM shall be included in the decommissioning and site reclamation plan.

- (i) The Decommissioning Plan received August 13, 2018, states: “The access roads are designed to simply move the topsoil to the side of the roads and be used as fill. This topsoil can easily be regraded back to create a usable condition and ensure proper drainage.”
  
- iii. Section 6.1.5 Q.(3)j.(c) requires that if the excavated native soils are not stored for use for backfilling the concrete foundation excavations, a qualified soil scientist or Illinois Licensed Professional Engineer shall certify that the actual soils used to backfill the concrete foundation excavations are of equal or greater quality than the native soils or that, in the case of subsoil, the backfill soil meets the requirements of this paragraph. The certification shall be submitted to the Zoning Administrator.
  - (i) The Decommissioning Plan received August 13, 2018, does not include information about this requirement.
  
- iv. Section 6.1.5 Q.(3)j.(d) requires that an Illinois Licensed Professional Engineer shall certify in writing that the concrete foundation excavations have been backfilled with soil to such a depth and with a minimum of compaction that is consistent with the restoration of productive agricultural use such that the depth of soil is expected to be no less than 54 inches within one year after backfilling.
  - (i) The Decommissioning Plan received August 13, 2018, does not include information about this requirement.
  
- (k) Subparagraph 6.1.5 Q.(3)k. of the Ordinance requires a stipulation that should the decommissioning and site reclamation plan be deemed invalid by a court of competent jurisdiction the PV SOLAR FARM SPECIAL USE permit shall be deemed void.
  - i. The Decommissioning Plan received August 13, 2018, does not include information about this requirement.
  
- (l) Subparagraph 6.1.5 Q.(3)l. of the Ordinance requires a stipulation that the Applicant’s obligation to complete the decommissioning and site reclamation plan and to pay all associated costs shall be independent of the Applicant’s obligation to provide financial assurance.
  - i. The Decommissioning Plan received August 13, 2018, does not include information about this requirement.

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- (m) Subparagraph 6.1.5 Q.(3)m. of the Ordinance requires a stipulation that the liability of the Applicant's failure to complete the decommissioning and site reclamation plan or any breach of the decommissioning and site reclamation plan requirement shall not be capped by the amount of the financial assurance.
  - i. The Decommissioning Plan received August 13, 2018, does not include information about this requirement.
  
- (n) Subparagraph 6.1.5 Q.(3)n. of the Ordinance requires that if the Applicant desires to remove equipment or property credited to the estimated salvage value without the concurrent replacement of the property with property of equal or greater salvage value, or if the Applicant installs equipment or property increasing the cost of decommissioning after the PV SOLAR FARM begins to produce electricity, at any point, the Applicant shall first obtain the consent of the Zoning Administrator. If the Applicant's lien holders remove equipment or property credited to the salvage value, the Applicant shall promptly notify the Zoning Administrator. In either of these events, the total financial assurance shall be adjusted to reflect any change in total salvage value and total decommissioning costs resulting from any such removal or installation.
  - i. The Decommissioning Plan received August 13, 2018, does not include information about this requirement.
  
- d. Subparagraph 6.1.5 Q.(4) of the Ordinance requires that the Applicant shall provide financial assurance in the form of an irrevocable letter of credit as required in paragraph 6.1.1 A.5. of the Ordinance as follows:
  - (a) Subparagraph 6.1.4 Q.4.(a) of the Ordinance requires that at the time of Special Use Permit approval, the amount of financial assurance to be provided for the decommissioning and site reclamation plan shall be 125% of the decommissioning cost as determined in the independent engineer's cost estimate to complete the decommissioning work described in Sections 6.1.1 A.4.a. and 6.1.1 A.4.b. and 6.1.1 A.4.c. and shall otherwise be compliant with Section 6.1.1.A.5. except that if the SOLAR PV modules have an unlimited warranty of at least 10 years and also have a limited power warranty to provide not less than 80% nominal power output up to 25 years and proof of that warranty is provided at the time of Zoning Use Permit approval, financial assurance may be provided for the decommissioning and site reclamation plan as follows:
    - i. No Zoning Use Permit to authorize construction of the SOLAR FARM shall be authorized by the Zoning Administrator until the SOLAR FARM owner shall provide the County with Financial Assurance to cover 12.5% of the decommissioning cost as determined in the independent engineer's cost estimate to complete the decommissioning work described in Sections

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- 6.1.1 A.4.a. and 6.1.1 A.4.b. and 6.1.1 A.4.c. and otherwise compliant with Section 6.1.1 A.5.
- ii. On or before the sixth anniversary of the Commercial Operation Date, the SOLAR FARM Owner shall provide the County with Financial Assurance to cover 62.5% of the decommissioning cost as determined in the independent engineer's cost estimate to complete the decommissioning work described in Sections 6.1.1 A.4.a. and 6.1.1 A.4.b. and 6.1.1 A.4.c. and otherwise compliant with Section 6.1.1 A.5.
- iii. On or before the eleventh anniversary of the Commercial Operation Date, the SOLAR FARM Owner shall provide the County with Financial Assurance to cover 125% of the decommissioning cost as determined in the independent engineer's cost estimate to complete the decommissioning work described in Sections 6.1.1 A.4.a. and 6.1.1 A.4.b. and 6.1.1 A.4.c. and otherwise compliant with Section 6.1.1 A.5.
- (i) The applicant proposes using SOLAR PV modules which have an unlimited warranty of at least 10 years and also have a limited power warranty to provide not less not than 80% nominal power output up to 25 years.
- (ii) If the applicant provides proof of that warranty, cost estimates and financial assurances can be determined as part of the Zoning Use Permit process rather than as part of the Special Use Permit process. A special condition has been added.
- (b) Subparagraph 6.1.5 Q.(4)b. of the Ordinance states that net salvage value may be deducted from decommissioning costs under certain conditions.
- i. Exhibit G of the application received August 13, 2018 includes the minimum \$1,000 per acre financial assurance required by Section 6.1.5 Q.(4)b.(g).
- (c) Subparagraph 6.1.5 Q.(4)c. of the Ordinance states that the GOVERNING BODY has the right to require multiple letters of credit based on the regulations governing federal insurance for deposits.
- i. No specifics were required or submitted for approval of the Special Use Permit regarding net salvage value.
- (d) Subparagraph 6.1.5 Q.(4)d. of the Ordinance states that the Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall adjust the amount

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- of the financial assurance to ensure that it reflects current and accurate information.
- i. No specifics were required or submitted for approval of the Special Use Permit regarding net salvage value.
- (e) Subparagraph 6.1.5 Q.(4)e. of the Ordinance requires that the long term corporate debt (credit) rating of the letter of credit issuing financial institution by both Standard & Poor's Financial Services LLC (S&P) and Moody's Investors Service (Moody's) shall be equal to or greater than the minimum acceptable long term corporate debt (credit) rating.
- i. No specifics were required or submitted for approval of the Special Use Permit regarding this requirement.
- (f) Subparagraph 6.1.5 Q.(4)f. of the Ordinance requires that at all times the value of the irrevocable letter of credit shall be increased annually as necessary to reflect actual rates of inflation over the life span of the PV SOLAR FARM and the amount shall be equal to or exceed 125% of the amount of the independent engineer's cost estimate as increased by known and documented rates of inflation since the PV SOLAR FARM was approved.
- i. No specifics were required or submitted for approval of the Special Use Permit regarding the value of the letter of credit.
- (g) Subparagraph 6.1.5 Q.(4)g. of the Ordinance states that should the salvage value of components be adjusted downward or the decommissioning costs adjusted upward pursuant to paragraph 6.1.5 Q.(4)d., the amount of the irrevocable letter of credit pursuant to this paragraph 6.1.5 Q.(4) shall be increased to reflect the adjustment, as if the adjusted estimate were the initial estimate
- i. No specifics were required or submitted for approval of the Special Use Permit regarding net salvage value.
- (h) Subparagraph 6.1.5 Q.(4)h. of the Ordinance requires that any financial assurance required per the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture as required by paragraph 6.1.5 R. shall count towards the total financial assurance required for compliance with paragraph 6.1.1 A.5.
- i. No specifics were required or submitted for approval of the Special Use Permit regarding financial assurance.
- (i) Subparagraph 6.1.5 Q.(4)i. of the Ordinance requires that unless the Governing Body approves otherwise, the Champaign County State's Attorney's Office shall review and approve every Letter of Credit prior to acceptance by the Zoning Administrator.
- i. No specifics were required or submitted for approval of the Special Use Permit regarding financial assurance.

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- e. Subparagraph 6.1.5 Q.(5) of the Ordinance states that in addition to the conditions listed in subparagraph 6.1.1 A.9. the Zoning Administrator may also draw on the funds for a myriad of reasons.
  - (a) No information regarding this standard condition is required as part of the Special Use Permit application unless the Petitioner seeks a waiver of any part or all of this standard condition, and no waiver request has been received.
  
- f. Subparagraph 6.1.5 Q.(6) of the Ordinance states that the Zoning Administrator may, but is not required to, deem the PV SOLAR FARM abandoned, or the standards set forth in Section 6.1.5 Q.(5) met, with respect to some, but not all, of the PV SOLAR FARM. In that event, the Zoning Administrator may draw upon the financial assurance to perform the reclamation work as to that portion of the PV SOLAR FARM only. Upon completion of that reclamation work, the salvage value and reclamation costs shall be recalculated as to the remaining PV SOLAR FARM.
  - (a) No information regarding this standard condition is required as part of the Special Use Permit application unless the Petitioner seeks a waiver of any part or all of this standard condition, and no waiver request has been received.
  
- g. Subparagraph 6.1.5 Q.(7) of the Ordinance states that the Decommissioning and Site Reclamation Plan shall be included as a condition of approval by the BOARD and the signed and executed irrevocable letter of credit must be submitted to the Zoning Administrator prior to any Zoning Use Permit approval.
  - (a) A special condition has been added to ensure compliance.
  
- (22) Paragraph 6.1.5 R. contains standard conditions for securing an Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture.
  - a. No information regarding this standard condition is required as part of the Special Use Permit application unless the Petitioner seeks a waiver of any part or all of this standard condition, and no waiver request has been received. A special condition has been added to ensure compliance.
  
- (23) Paragraph 6.1.5 S. contains standard conditions for a complaint hotline for complaints related to PV SOLAR FARM construction and ongoing operations.
  - a. No information regarding this standard condition is required as part of the Special Use Permit application unless the Petitioner seeks a waiver of any part or all of this standard condition, and no waiver request has been received. A special condition has been added to ensure compliance.
  
- (24) Paragraph 6.1.5 T. contains a standard condition stating that the PV SOLAR FARM County Board SPECIAL USE Permit designation shall expire in 10 years if no Zoning Use Permit is granted.

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- (25) Paragraph 6.1.5 U. contains standard conditions establishing additional requirements for application for a PV SOLAR FARM County Board Special Use Permit that supplement the basic requirements for a special use permit application.
- a. Subparagraph 6.1.5 U.(1)a. requires a PV SOLAR FARM Project Summary.
    - (a) The Special Use Permit application received August 13, 2018, demonstrates compliance with this requirement.
  - b. Subparagraph 6.1.5 U.(1)b. requires the name(s), address(es), and phone number(s) of the Applicant(s), Owner and Operator, and all property owner(s) for the PV SOLAR FARM County Board SPECIAL USE permit.
    - (a) The PV SOLAR FARM Special Use Permit application received August 13, 2018, demonstrates compliance with this requirement.
  - c. Subparagraph 6.1.5 U.(1)c. requires a site plan for the SOLAR FARM which includes the following:
    - (a) The approximate planned location of all PV SOLAR FARM STRUCTURES, property lines (including identification of adjoining properties), required separations, public access roads and turnout locations, access driveways, solar devices, electrical inverter(s), electrical transformer(s), cabling, switching station, electrical cabling from the PV SOLAR FARM to the Substations(s), ancillary equipment, screening and fencing, third party transmission lines, meteorological station, maintenance and management facilities, and layout of all structures within the geographical boundaries of any applicable setback.
      - i. The PV SOLAR FARM Special Use Permit application received August 13, 2018, demonstrates compliance with this requirement.
    - (b) The site plan shall clearly indicate the area of the proposed PV SOLAR FARM County Board SPECIAL USE Permit as required by subparagraph 6.1.5 A.(1).
      - i. The PV SOLAR FARM Special Use Permit application received August 13, 2018, demonstrates compliance with this requirement.
    - (c) The location of all below-ground wiring.
      - i. No information was found in the Special Use Permit application received January 25, 2018, or the amended application received August 13, 2018.
      - ii. In an email received August 17, 2018, Nick Mento responded to questions from Susan Burgstrom, and stated: “there are only minor below ground wiring to connect rows of panels which will not be finalized until the building permit stage.

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- (d) The location, height, and appearance of all above-ground wiring and wiring structures.
  - i. No information was found in the Special Use Permit application received January 25, 2018, or the amended application received August 13, 2018.
  - ii. In an email received August 17, 2018, Nick Mento responded to questions from Susan Burgstrom, and stated: “Above-ground wiring, when it comes to solar, have utility-standard setups that are identical to the poles present on the side of streets that have wires running along them. All solar facilities of similar size will employ near identical telephone poles to run wires from the inverter to the pre-existing poles on the side of the road.”
- (e) The separation of all PV SOLAR FARM structures from adjacent DWELLINGS and/or PRINCIPAL BUILDINGS or uses shall be dimensioned on the approved site plan and that dimension shall establish the effective minimum separation that shall be required for any Zoning Use Permit. Greater separation and somewhat different locations may be provided in the approved site plan for the Zoning Use Permit provided that that the greater separation does not increase the noise impacts and/or glare that were approved in the PV SOLAR FARM County Board SPECIAL USE Permit. PV SOLAR FARM structures includes substations, third party transmission lines, maintenance and management facilities, or other significant structures.
  - i. The PV SOLAR FARM Special Use Permit application received August 13, 2018, demonstrates compliance with this requirement.
- d. Subparagraph 6.1.5 U.(1)d. requires submittal of all other required studies, reports, certifications, and approvals demonstrating compliance with the provisions of this Ordinance.
  - (a) Compliance with this subparagraph has been shown in previous sections of this Summary of Evidence.
- e. Subparagraph 6.1.5 U.(1)e. requires that the PV SOLAR FARM SPECIAL USE permit application shall include documentation that the applicant has provided a complete copy of the SPECIAL USE permit application to any municipality within one-and-one-half miles of the proposed PV SOLAR FARM as required by Section 6.1.5 B.(2)a.(b).
  - (a) There is no municipality within one-and-one-half miles of the proposed PV SOLAR FARM.
- f. Subparagraph 6.1.5 U.(1)f. requires that a municipal resolution regarding the PV SOLAR FARM by any municipality located within one-and-one-half miles of the PV SOLAR FARM must be submitted to the ZONING

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ADMINISTRATOR prior to the consideration of the PV SOLAR FARM SPECIAL USE permit by the Champaign County Board or, in the absence of such a resolution, the ZONING ADMINISTRATOR shall provide documentation to the County Board that any municipality within one-and-one-half miles of the PV SOLAR FARM was provided notice of the meeting dates for consideration of the proposed PV SOLAR FARM SPECIAL USE Permit for both the Environment and Land Use Committee and the County Board as required by Section 6.1.5 B.(2)a.(c).

- (a) There is no municipality within one-and-one-half miles of the proposed PV SOLAR FARM.
- g. Subparagraph 6.1.5 U.(1)g. requires that documentation of an executed interconnection agreement with the appropriate electric utility shall be provided prior to issuance of a Zoning Compliance Certificate to authorize operation of the PV SOLAR FARM as required by Section 6.1.5 B.(3)b.
    - (a) Exhibit H of the application received August 13, 2018, includes an Interconnection Request Application which was sent to Ameren Illinois on December 22, 2017.
    - (b) A special condition has been added to ensure that an executed agreement has been provided prior to issuance of a Zoning Compliance Certificate.
  - h. Subparagraph 6.1.5 U.(2) requires that the Applicant shall notify the COUNTY of any changes to the information provided above that occurs while the County Board SPECIAL USE permit application is pending.
    - (a) On August 13, 2018, the Petitioner submitted revisions to the PV SOLAR FARM Special Use Permit application received January 25, 2018. Updated information has been listed under Item 5 of this Summary of Evidence and discussed in further detail when relevant under Items 7 through 9.
  - i. Subparagraph 6.1.5 U.(2) requires that the Applicant shall include a copy of the signed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture with the Zoning Use Permit Application to authorize construction. A special condition has been added to ensure compliance.
- C. Regarding compliance with the *Stormwater Management and Erosion Control Ordinance*:
- (1) The proposed PV SOLAR FARM is not exempt from the SWMEC Ordinance.
  - (2) Regarding the SWMEC requirement for a Storm Water Drainage Plan, the subject property is exempt from the Storm Water Drainage Plan requirement because it has less than 16% impervious area with that part containing no more than 1 acre of impervious area within a rectangular area of 90,000 square feet:
    - a. The Permit Set received August 13, 2018, refers to the solar panels having a Ground Coverage Ratio (GCR) of 28%, referring to post to post row

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spacing. The permit set also establishes that there will be approximately 7,867 square feet (0.18 ac) of access road and approximately 80 square feet (0.002 ac) of inverter pad.

- b. Using the 90,000 square feet rectangle that would include the most impervious area, staff calculated that less than 1 acre (43,560 square feet) would be impervious area (~25,200 square feet).
- (3) Regarding the SWMEC requirement to protect agricultural field tile, see the review of compliance with paragraph 6.1.5 F. that contains standard conditions to mitigate damage to farmland.
- D. Regarding the Special Flood Hazard Areas Ordinance, no portion of the subject property is located within the mapped floodplain.
- E. Regarding the Subdivision Regulations, the 36.77-acre subject property is located in Champaign County subdivision jurisdiction and the subject property is in compliance.
- F. Regarding the requirement that the Special Use preserve the essential character of the AG-1 Agriculture Zoning District:
  - (1) The proposed use is a PV SOLAR FARM that is consistent with the essential character of the AG-1 Agriculture District because it is only authorized in the AG-1 and AG-2 Districts.
- G. The proposed Special Use must comply with the Illinois Accessibility Code which is not a County ordinance or policy and the County cannot provide any flexibility regarding that Code. A Zoning Use Permit cannot be issued for any part of the proposed Special Use until full compliance with the Illinois Accessibility Code has been indicated in drawings.

**GENERALLY REGARDING WHETHER THE SPECIAL USE IS IN HARMONY WITH THE GENERAL PURPOSE AND INTENT OF THE ORDINANCE**

- 10. Regarding the *Zoning Ordinance* requirement that the proposed Special Use is in harmony with the general intent and purpose of the Ordinance:
  - A. A PV SOLAR FARM may be authorized by the County Board in the AG-1 or AG-2 Agriculture Zoning Districts as a Special Use provided all other zoning requirements and standard conditions are met or waived.
    - (1) A proposed Special Use that does not conform to the standard conditions requires only a waiver of that particular condition and does not require a variance. Waivers of standard conditions are subject to the following findings:
      - a. that the waiver is in accordance with the general purpose and intent of the ordinance; and
      - b. that the waiver will not be injurious to the neighborhood or to the public health, safety, and welfare.
  - B. See Section 12 for a summary of evidence regarding whether any requested waiver of standard conditions will be in harmony with the general intent and purpose of the Ordinance.

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C. Regarding whether the proposed Special Use Permit is in harmony with the general intent of the Zoning Ordinance:

- (1) Subsection 5.1.1 of the Ordinance states the general intent of the AG-1 District and states as follows (capitalized words are defined in the Ordinance):

The AG-1, Agriculture DISTRICT is intended to protect the areas of the COUNTY where soil and topographic conditions are best adapted to the pursuit of AGRICULTURAL USES and to prevent the admixture of urban and rural USES which would contribute to the premature termination of AGRICULTURAL pursuits.

- (2) The types of uses authorized in the AG-1 District are in fact the types of uses that have been determined to be acceptable in the AG-1 District. Uses authorized by Special Use Permit are acceptable uses in the districts provided that they are determined by the ZBA to meet the criteria for Special Use Permits established in paragraph 9.1.11 B. of the Ordinance.
- (3) Paragraph 2.0(a) of the Ordinance states that one purpose of the Ordinance is securing adequate light, pure air, and safety from fire and other dangers. This purpose is directly related to the limits on building coverage and the minimum yard requirements in the Ordinance and the proposed site plan appears to be in compliance with those requirements.
- (4) Paragraph 2.0(b) of the Ordinance states that one purpose of the Ordinance is conserving the value of land, BUILDINGS, and STRUCTURES throughout the COUNTY.
- a. Regarding the value of nearby properties, the ZBA reviewed two property value impact studies during the public hearings for the PV SOLAR FARM text amendment approved on August 23, 2018, and found no direct evidence indicating that solar farms have a negative effect on property values.
  - b. Regarding the value of the subject property, during the public hearings for the PV SOLAR FARM text amendment approved on August 23, 2018, ZBA found that the land owner receives an annual payment from the PV SOLAR FARM operator far in excess of the value of a crop from that land.
  - c. Section 6.1.5 Q. of the PV SOLAR FARM text amendment approved on August 23, 2018, includes a standard condition requiring a Decommissioning and Site Reclamation Plan that is intended to ensure there is adequate financial assurance for removal of a PV SOLAR FARM at the end of its useful life. Ensuring adequate site reclamation is one method of protecting surrounding property values.
- (5) Paragraph 2.0(c) of the Ordinance states that one purpose of the Ordinance is lessening and avoiding congestion in the public STREETS.

Other than additional traffic during construction and/or decommissioning of the PV SOLAR FARM, no significant increase in traffic is anticipated.

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- (6) Paragraph 2.0(d) of the Ordinance states that one purpose of the Ordinance is lessening and avoiding the hazards to persons and damage to PROPERTY resulting from the accumulation of runoff from storm or flood waters.
- a. The requested Special Use Permit is outside of the Special Flood Hazard Area.
  - b. Impervious area is within the limits of not requiring a Storm Water Management Plan.
  - c. The Decommissioning Plan received August 13, 2018, states: “The initial site grading performed during the construction of the solar farm is designed to be done in such a manner as to limit mass earth moving and only include efforts to ensure positive drainage of the site.”
- (7) Paragraph 2.0(e) of the Ordinance states that one purpose of the Ordinance is promoting the public health, safety, comfort, morals, and general welfare.
- a. In regards to public safety, this purpose is similar to the purpose established in paragraph 2.0 (a) and is in harmony to the same degree.
  - b. In regards to public comfort and general welfare, this purpose is similar to the purpose of conserving property values established in paragraph 2.0 (b) and is in harmony to the same degree.
- (8) Paragraph 2.0 (f) states that one purpose of the Ordinance is regulating and limiting the height and bulk of BUILDINGS and STRUCTURES hereafter to be erected; and paragraph 2.0 (g) states that one purpose is establishing, regulating, and limiting the BUILDING or SETBACK lines on or along any STREET, trafficway, drive or parkway; and paragraph 2.0 (h) states that one purpose is regulating and limiting the intensity of the USE of LOT AREAS, and regulating and determining the area of OPEN SPACES within and surrounding BUILDINGS and STRUCTURES.

These three purposes are directly related to the limits on building height and building coverage and the minimum setback and yard requirements in the Ordinance and the proposed site plan appears to be in compliance with those limits.

- (9) Paragraph 2.0(i) of the Ordinance states that one purpose of the Ordinance is classifying, regulating, and restricting the location of trades and industries and the location of BUILDINGS, STRUCTURES, and land designed for specified industrial, residential, and other land USES; and paragraph 2.0(j.) states that one purpose is dividing the entire COUNTY into DISTRICTS of such number, shape, area, and such different classes according to the USE of land, BUILDINGS, and STRUCTURES, intensity of the USE of LOT AREA, area of OPEN SPACES, and other classification as may be deemed best suited to carry out the purpose of the ordinance; and paragraph 2.0(k) states that one purpose is fixing regulations and standards to which BUILDINGS, STRUCTURES, or USES therein shall conform; and paragraph 2.0(l) states that one purpose is prohibiting USES, BUILDINGS, OR STRUCTURES incompatible with the character of such DISTRICT.

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Harmony with these four purposes requires that the special conditions of approval sufficiently mitigate or minimize any incompatibilities between the proposed Special Use Permit and adjacent uses, and that the special conditions adequately mitigate nonconforming conditions.

- (10) Paragraph 2.0(m) of the Ordinance states that one purpose of the Ordinance is preventing additions to and alteration or remodeling of existing BUILDINGS, STRUCTURES, or USES in such a way as to avoid the restrictions and limitations lawfully imposed under this ordinance.

This purpose is not relevant to the proposed Special Use Permit because it relates to nonconforming buildings, structures, or uses that existed on the date of the adoption of the Ordinance and none of the current structures or the current use existed on the date of adoption.

- (11) Paragraph 2.0(n) of the Ordinance states that one purpose of the Ordinance is protecting the most productive AGRICULTURAL lands from haphazard and unplanned intrusions of urban USES.

The subject property is located in the AG-1 Agriculture District and is, by definition, a rural use.

- (12) Paragraph 2.0(o) of the Ordinance states that one purpose of the Ordinance is protecting natural features such as forested areas and watercourses.

The subject property does not contain any natural features and there are no natural features in the vicinity of the subject property.

- (13) Paragraph 2.0(p) of the Ordinance states that one purpose of the Ordinance is encouraging the compact development of urban areas to minimize the cost of development of public utilities and public transportation facilities.

The subject property is located in the AG-1 Agriculture District and is, by definition, a rural use.

- (14) Paragraph 2.0(q) of the Ordinance states that one purpose of the Ordinance is encouraging the preservation of AGRICULTURAL belts surrounding urban areas, to retain the AGRICULTURAL nature of the COUNTY, and the individual character of existing communities.

The entire subject property is located in the AG-1 Agriculture District and is, by definition, a rural use.

- (15) Paragraph 2.0(r) of the Ordinance states that one purpose of the Ordinance is to provide for the safe and efficient development of renewable energy sources in those parts of the COUNTY that are most suited to their development.

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The entire project area is located in an Agriculture zoning district, which is the only zoning DISTRICT in which a PV SOLAR FARM is authorized.

**GENERALLY REGARDING WHETHER THE SPECIAL USE IS AN EXISTING NONCONFORMING USE**

11. The proposed Special Use is not an existing NONCONFORMING USE.

**RELATED TO THE WAIVERS, GENERALLY REGARDING SPECIAL CONDITIONS THAT MAY BE PRESENT**

12. Generally regarding the Zoning Ordinance requirement of a finding that special conditions and circumstances exist which are peculiar to the land or structure involved which are not applicable to other similarly situated land or structures elsewhere in the same district:
- A. Regarding Part A of the proposed waivers, for a distance of 153 feet in lieu of the minimum required 240 feet between the PV SOLAR FARM and non-participating properties 10 acres or less in area:
- (1) The only property 10 acres or less in area within 240 feet of the proposed PV SOLAR FARM is a 5-acre lot with agricultural and residential uses across the street to the west of the proposed solar farm. The owner has been notified of this case and no comments have been received.
  - (2) The PV SOLAR FARM inverter is proposed to be located approximately 800 feet from this residential lot.
- B. Regarding Part B of the proposed waivers, for a separation distance of 28 feet in lieu of 275 feet between a PV SOLAR FARM electrical inverter and the PV SOLAR FARM perimeter fence:
- (1) The applicant has placed the inverter approximately 28 feet from the south fence; this is the farthest location from adjacent residences.
  - (2) South of the south fence, there is only land in agricultural production.
  - (3) The inverter is proposed to be located approximately 800 feet from the closest residential lot to the northwest, and approximately 870 feet from the closest residential lot to the northeast.
- C. Regarding Part C of the proposed waivers, for a 24-foot area for all necessary access lanes or driveways and any required new PRIVATE ACCESSWAYS in lieu of the minimum required 40 feet:
- (1) The proposed private accessway will run along the south fence, and the applicant appears to believe that 24 feet is sufficient for this development.

**RELATED TO THE WAIVERS, GENERALLY REGARDING ANY PRACTICAL DIFFICULTIES OR HARDSHIPS RELATED TO CARRYING OUT THE STRICT LETTER OF THE ORDINANCE**

13. Generally regarding the Zoning Ordinance requirement of a finding that practical difficulties or hardships related to carrying out the strict letter of the regulations sought to be varied prevent reasonable and otherwise permitted use of the land or structures or construction on the lot:
- A. Without Part A of the proposed waivers, the PV solar farm would have to reduce its size or be located on another property.

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- (1) The property owner signed a Solar Facility Site Lease Agreement with Community Power Group on June 30, 2017.
- B. Without Part B of the proposed waivers, the applicant would need to move the inverter toward the center of the PV SOLAR FARM, which would place it closer to the nearest residences.
- C. Without Part C of the proposed waivers, the applicant would need to increase the accessway path by 16 feet, which would reduce the number of panels they could install and impact the feasibility of the project.

**RELATED TO THE WAIVERS, GENERALLY PERTAINING TO WHETHER OR NOT THE PRACTICAL DIFFICULTIES OR HARDSHIPS RESULT FROM THE ACTIONS OF THE APPLICANT**

14. Generally regarding the Zoning Ordinance requirement for a finding that the special conditions, circumstances, hardships, or practical difficulties do not result from the actions of the Applicant:
  - A. Regarding Part A of the proposed waivers, for a distance of 153 feet in lieu of the minimum required 240 feet between the PV SOLAR FARM and non-participating properties 10 acres or less in area:
    - (1) The Illinois Future Energy Jobs Act went into effect on June 1, 2017.
    - (2) Solar farm developers have been establishing lease options with area landowners since that time. The owner of the subject property signed a Solar Facility Site Lease Agreement with Community Power Group LLC on June 30, 2017.
    - (3) Champaign County began to draft a text amendment to allow solar farms in January 2018, and determined that all solar farm applications would be heard if the County adopted the text amendment.
    - (4) Community Power Group LLC had no County zoning regulations to follow when they started their design process for the subject property.
  - B. Regarding Part B of the proposed waivers, for a separation distance of 28 feet in lieu of 275 feet between a PV SOLAR FARM electrical inverter and the PV SOLAR FARM perimeter fence: the applicant was not responsible for requiring this waiver for the same reasons detailed for waiver Part A.
  - C. Regarding Part C of the proposed waivers, for a 24-foot area for all necessary access lanes or driveways and any required new PRIVATE ACCESSWAYS in lieu of the minimum required 40 feet: the applicant was not responsible for requiring this waiver for the same reasons detailed for waiver Part A.

**GENERALLY PERTAINING TO WHETHER OR NOT THE WAIVERS ARE IN HARMONY WITH THE GENERAL PURPOSE AND INTENT OF THE ORDINANCE**

15. Regarding the *Zoning Ordinance* requirement that the waivers of standard conditions of the Special Use will be in harmony with the general purpose and intent of the ordinance:
  - A. Regarding Part A of the proposed waivers, for a distance of 153 feet in lieu of the minimum required 240 feet between the PV SOLAR FARM and non-participating

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properties 10 acres or less in area, the requested waiver (variance) is 64% of the minimum required, for a variance of 36%.

- B. Regarding Part B of the proposed waivers, for a separation distance of ~~30~~ 28 feet in lieu of 275 feet between a PV SOLAR FARM electrical inverter and the PV SOLAR FARM perimeter fence, the requested waiver (variance) is 10% of the minimum required, for a variance of 90%.
- C. Regarding Part C of the proposed waivers, for a 24-foot area for all necessary access lanes or driveways and any required new PRIVATE ACCESSWAYS in lieu of the minimum required 40 feet, the requested waiver (variance) is 60% of the minimum required, for a variance of 40%.

**RELATED TO THE WAIVERS, GENERALLY PERTAINING TO THE EFFECTS OF THE REQUESTED WAIVERS ON THE NEIGHBORHOOD AND THE PUBLIC HEALTH, SAFETY, AND WELFARE**

- 16. Regarding the Zoning Ordinance requirement for a finding that the granting of the waiver (variance) will not be injurious to the neighborhood, or otherwise detrimental to the public health, safety, or welfare:
  - A. The Ludlow Township Highway Commissioner has been notified of this case, and no comments have been received.
  - B. The Ludlow Fire Protection District has been notified of this case, and no comments have been received.
  - C. The Drainage Districts for the subject property have been notified of this case, and no comments have been received.
  - D. Considerations of public health, safety, and welfare for the proposed special use are discussed under Item 8 and are also applicable to the proposed waivers.

**GENERALLY REGARDING PROPOSED SPECIAL CONDITIONS OF APPROVAL**

- 17. Regarding proposed special conditions of approval:
  - A. **The approved site plan consists of the following documents:**
    - **Sheet T1.1: Permit Set Cover received August 13, 2018**
    - **Sheet L1.1: Site Layout received August 13, 2018**
    - **Sheet L2.1: Tracker System Detail received August 13, 2018**
    - **Sheet L2.3: Fence-Gate Detail received January 25, 2018**
    - **Sheet L2.3: Agricultural Fence Detail received August 13, 2018**
    - **Sheet E1.1: Single Line Diagram received January 25, 2018**
    - **Sheet E2.1: DC & AC Conductor Schedule received January 25, 2018**
    - **Sheet E4.1: Grounding Details received January 25, 2018**
    - **Sheet E9.1: Equipment Specification Sheets received August 13, 2018**

The above special condition is required to ensure that:

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**The constructed PV SOLAR FARM is consistent with the special use permit approval.**

- B. The Zoning Administrator shall not authorize a Zoning Use Permit Application or issue a Zoning Compliance Certificate on the subject property until the lighting specifications in Paragraph 6.1.2.A. of the Zoning Ordinance have been met.**

The special condition stated above is required to ensure the following:

**That exterior lighting for the proposed Special Use meets the requirements established for Special Uses in the Zoning Ordinance.**

- C. The Zoning Administrator shall not issue a Zoning Compliance Certificate for the proposed PV SOLAR FARM until the petitioner has demonstrated that the proposed Special Use complies with the Illinois Accessibility Code.**

The special condition stated above is necessary to ensure the following:

**That the proposed Special Use meets applicable state requirements for accessibility.**

- D. The Zoning Administrator shall not authorize a Zoning Use Permit until the petitioner submits a copy of an executed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture per the requirements established in Paragraph 6.1.5 R. of the Zoning Ordinance.**

The special condition stated above is required to ensure the following:

**That the land affected by PV SOLAR FARM is restored to its pre-construction capabilities.**

- E. A signed Decommissioning and Site Reclamation Plan that has been approved by ELUC is required at the time of application for a Zoning Use Permit that complies with Section 6.1.1 A. and Section 6.1.5 Q. of the Zoning Ordinance, including a decommissioning cost estimate prepared by an Illinois Professional Engineer.**

The above special conditions are required to ensure that:

**The Special Use Permit complies with Ordinance requirements and as authorized by waiver.**

- F. A Roadway Upgrade and Maintenance Agreement signed by the Highway Commissioner and approved by the Environment and Land Use Committee shall be submitted at the time of application for a Zoning Use Permit.**

The above special condition is necessary to ensure the following:

**To ensure full compliance with the intent of the Zoning Ordinance in a timely manner that meets the needs of the applicant.**

- G. The following submittals are required prior to the approval of any Zoning Use Permit for a PV SOLAR FARM:**

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1. **Documentation of the solar module's unlimited 10-year warranty and the 25-year limited power warranty.**
2. **Certification by an Illinois Professional Engineer that any relocation of drainage district tile conforms to the Champaign County Storm Water Management and Erosion Control Ordinance.**
3. **An irrevocable letter of credit to be drawn upon a federally insured financial institution within 200 miles of Urbana or reasonable anticipated travel costs shall be added to the amount of the letter of credit.**
4. **A permanent soil erosion and sedimentation plan for the PV SOLAR FARM including any access road that conforms to the relevant Natural Resources Conservation Service guidelines and that is prepared by an Illinois Licensed Professional Engineer.**
5. **Documentation regarding the seed to be used for the pollinator planting, per 6.1.5 F.(9).**
6. **A Transportation Impact Analysis provided by the applicant that is mutually acceptable to the Applicant and the County Engineer and State's Attorney; or Township Highway Commissioner; or municipality where relevant, as required by 6.1.5 G. 2.**
7. **The telephone number for the complaint hotline required by 6.1.5 S.**
8. **Any updates to the approved Site Plan from Case 897-S-18 per the Site Plan requirements provided in Section 6.1.5 U.1.c.**

The above special condition is required to ensure that:

**The PV SOLAR FARM is constructed consistent with the Special Use Permit approval and in compliance with the Ordinance requirements.**

- H. **A Zoning Compliance Certificate shall be required for the PV SOLAR FARM prior to going into commercial production of energy. Approval of a Zoning Compliance Certificate shall require the following:**
1. **An as-built site plan of the PV SOLAR FARM including structures, property lines (including identification of adjoining properties), as-built separations, public access road and turnout locations, substation(s), electrical cabling from the PV SOLAR FARM to the substations(s), and layout of all structures within the geographical boundaries of any applicable setback.**
  2. **As-built documentation of all permanent soil erosion and sedimentation improvements for all PV SOLAR FARM including any access road prepared by an Illinois Licensed Professional Engineer.**

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3. **An executed interconnection agreement with the appropriate electric utility as required by Section 6.1.5 B.(3)b.**

The above special condition is required to ensure that:

**The PV SOLAR FARM is constructed consistent with the special use permit approval and in compliance with the Ordinance requirements.**

- I. **The Applicant or Owner or Operator of the PV SOLAR FARM shall comply with the following specific requirements that apply even after the PV SOLAR FARM goes into commercial operation:**
  1. **Maintain the pollinator plantings in perpetuity.**
  2. **Cooperate with local Fire Protection District to develop the District's emergency response plan as required by 6.1.5 H.(2).**
  3. **Cooperate fully with Champaign County and in resolving any noise complaints including reimbursing Champaign County any costs for the services of a qualified noise consultant pursuant to any proven violation of the I.P.C.B. noise regulations as required by 6.1.5 I.(4).**
  4. **Maintain a current general liability policy as required by 6.1.5 O.**
  5. **Submit annual summary of operation and maintenance reports to the Environment and Land Use Committee as required by 6.1.5 P.(1)a.**
  6. **Maintain compliance with the approved Decommissioning and Site Reclamation Plan including financial assurances.**
  7. **Submit to the Zoning Administrator copies of all complaints to the telephone hotline on a monthly basis and take all necessary actions to resolve all legitimate complaints as required by 6.1.5 S.**

The above special condition is required to ensure that:

**Future requirements are clearly identified for all successors of title, lessees, any operator and/or owner of the PV SOLAR FARM.**

- J. **The Applicant or Owner or Operator of the PV SOLAR FARM shall plant and maintain in perpetuity a visual screen on the north, west, and east sides of the PV SOLAR FARM per Section 6.1.5 M. of the Zoning Ordinance.**

The above special condition is required to ensure that:

**Visual impacts of the PV SOLAR FARM are minimized for adjacent residents.**

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1. Special Use Permit Application received January 25, 2018, with attachments:
  - a. Exhibit A - Legal Description
  - b. Exhibit B – Permit Set, including:
    - Sheet T1.1: Permit Set Cover
    - Sheet L1.1: Site Layout
    - Sheet L2.1: Tracker System Detail
    - Sheet L2.3: Fence-Gate Detail
    - Sheet E1.1: Single Line Diagram
    - Sheet E2.1: DC & AC Conductor Schedule
    - Sheet E4.1: Grounding Details
    - Sheet E9.1: Equipment Specification Sheets
  - c. Exhibit C – Surrounding Land Uses
  - d. Exhibit D – Surrounding Topography
  - e. Exhibit E – Minimizing Visual Impact
  - f. Exhibit F – Impact on Wildlife
  - g. Exhibit G – Stray Voltage, Broadcast Interference, and Noise
  - h. Exhibit H – Impact on Development, Property Values, and Aesthetic
  1. Exhibit I – Drainage
  - i. Exhibit J – Decommissioning Plan
  
2. Special Use Permit application received August 13, 2018, which includes the following additional Permit Set sheets:
  - a. Exhibit A - Legal Description
  - b. Exhibit B - Project Summary
  - c. Exhibit C - Project Contacts
  - d. Exhibit D - Site Plans, including:
    - Sheet T1.1: Permit Set Cover
    - Sheet L1.1: Site Layout (revised)
    - Sheet L2.1: Tracker System Detail
    - Sheet L2.3: Agricultural Fence Detail (note sheet numbering was used before, but sheet has different information)
    - Sheet E9.1: Equipment Specification Sheets
  - e. Exhibit E - Special Use Permit Area
  - f. Exhibit F - Separation of Farm from Dwellings
  - g. Exhibit G - Decommissioning / Site Reclamation Covenants & Letter of Credit
  - h. Exhibit H - Interconnection Application
  - i. Exhibit I - Landscape Plan
    - Landscape Plan
    - Weed and Grass Control Plan
  - j. Exhibit J - Highway Requirements
  - k. Exhibit K - Cleaning Materials
  
3. Preliminary Memorandum dated August 24, 2018, with attachments:
  - A Case Maps (Location Map, Land Use, and Zoning)

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- B Site Plan sheets, reflecting the newest information received:
- Sheet T1.1: Permit Set Cover received August 13, 2018
  - Sheet L1.1: Site Layout received August 13, 2018
  - Sheet L2.1: Tracker System Detail received August 13, 2018
  - Sheet L2.3: Fence-Gate Detail received January 25, 2018
  - Sheet L2.3: Agricultural Fence Detail received August 13, 2018
  - Sheet E1.1: Single Line Diagram received January 25, 2018
  - Sheet E2.1: DC & AC Conductor Schedule received January 25, 2018
  - Sheet E4.1: Grounding Details received January 25, 2018
  - Sheet E9.1: Equipment Specification Sheets received August 13, 2018
- C SUP Application Exhibits, reflecting the newest information received:  
*(Duplicate page lettering with a 1 refers to receipt on January 25, 2018 and 2 refers to receipt on August 13, 2018)*
- Exhibit B: Project Summary received August 13, 2018
  - Exhibit E(1): Minimizing Visual Impact received January 25, 2018
  - Exhibit E(2): Special Use Permit Area received August 13, 2018
  - Exhibit F(1): Impact on Wildlife received January 25, 2018
  - Exhibit F(2): Separation of Farm from Dwellings received August 13, 2018
  - Exhibit G(1): Stray Voltage, Broadcast Interference, and Noise received January 25, 2018
  - Exhibit G(2): Decommissioning / Site Reclamation Covenants & Letter of Credit received August 13, 2018
  - Exhibit H(1): Impact on Development, Property Values, and Aesthetic received January 25, 2018
  - Exhibit H(2): Interconnection Application received August 13, 2018
  - Exhibit I(1): Drainage received January 25, 2018
  - Exhibit I(2): Landscape Plan / Weed and Grass Control Plan received August 13, 2018
  - Exhibit J: Highway Requirements received August 13, 2018
  - Exhibit K: Cleaning Materials received August 13, 2018
- D Annotated Aerial: Separation Distances and Screening, created by P&Z Staff on August 23, 2018
- E Natural Resource Report by the Champaign County Soil and Water Conservation District received February 23, 2018
- F Email from Nick Mento received August 17, 2018, with attachments:
- Addendum to Champaign County Special Use Permit Applications for Community Solar Gardens – Ludlow Solar
  - Letter from the Illinois State Historic Preservation Office dated May 16, 2018
- G Checklist for status of Special Use Permit application requirements created by P&Z Staff on August 23, 2018
- H Summary of Evidence, Finding of Fact and Final Determination dated August 30, 2018
- I Solar Farm Text Amendment as approved by the Champaign County Board on August 23, 2018

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**FINDINGS OF FACT**

From the documents of record and the testimony and exhibits received at the public hearing for zoning case **897-S-18** held on **August 30, 2018**, the Zoning Board of Appeals of Champaign County finds that:

1. The requested Special Use Permit *{IS / IS NOT}* necessary for the public convenience at this location because:
  
2. The requested Special Use Permit *{SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN}* is so designed, located, and proposed to be operated so that it *{WILL NOT / WILL}* be injurious to the district in which it shall be located or otherwise detrimental to the public health, safety, and welfare because:
  - a. The street has *{ADEQUATE / INADEQUATE}* traffic capacity and the entrance location has *{ADEQUATE / INADEQUATE}* visibility.
  - b. Emergency services availability is *{ADEQUATE / INADEQUATE}* *{because\*}*:
  - c. The Special Use *{WILL / WILL NOT}* be compatible with adjacent uses *{because\*}*: it is bordered on 2 sides by commercial uses, on the 3<sup>rd</sup> side by the Interstate highway spur, and the 4<sup>th</sup> side will be screened from adjacent residential use.
  - d. Surface and subsurface drainage will be *{ADEQUATE / INADEQUATE}* *{because\*}*:
  - e. Public safety will be *{ADEQUATE / INADEQUATE}* *{because\*}*:
  - f. The provisions for parking will be *{ADEQUATE / INADEQUATE}* *{because\*}*: additional off-street parking will be provided to meet the requirements of the ordinance.
  - g. The property *{IS/IS NOT}* WELL SUITED OVERALL for the proposed improvements *{because\*}*:
  - h. Existing public services *{ARE/ARE NOT}* available to support the proposed SPECIAL USE without undue public expense *{because\*}*:
  - i. Existing public infrastructure together with the proposed development *{IS/IS NOT}* adequate to support the proposed development effectively and safely without undue public expense *{because\*}*:

*(Note the Board may include other relevant considerations as necessary or desirable in each case.)*

\*The Board may include additional justification if desired, but it is not required.

- 3a. The requested Special Use Permit *{SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN}* *{DOES / DOES NOT}* conform to the applicable regulations and standards of the DISTRICT in which it is located because:
  
- 3b. The requested Special Use Permit *{SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN}* *{DOES / DOES NOT}* preserve the essential character of the DISTRICT in which it is located because:
  - a. The Special Use will be designed to *{CONFORM / NOT CONFORM}* to all relevant County ordinances and codes.
  - b. The Special Use *{WILL / WILL NOT}* be compatible with adjacent uses.
  - c. Public safety will be *{ADEQUATE / INADEQUATE}*.

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4. The requested Special Use Permit ***{SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN} {IS / IS NOT}*** in harmony with the general purpose and intent of the Ordinance because:
  - a. The Special Use is authorized in the District.
  - b. The requested Special Use Permit ***{IS/ IS NOT}*** necessary for the public convenience at this location.
  - c. The requested Special Use Permit ***{SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN}*** is so designed, located, and proposed to be operated so that it ***{WILL / WILL NOT}*** be injurious to the district in which it shall be located or otherwise detrimental to the public health, safety, and welfare because:
  - d. The requested Special Use Permit ***{SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN} {DOES / DOES NOT}*** preserve the essential character of the DISTRICT in which it is located.
5. The requested Special Use **IS NOT** an existing nonconforming use.
6. Regarding necessary waivers of standard conditions:

Per Section 7.15 of the Champaign County ZBA Bylaws, “waivers may be approved individually or *en masse* by the affirmative vote of a majority of those members voting on the issue, and shall be incorporated into the Findings of Fact with the reason for granting each waiver described”.

- A. Regarding Part A of the proposed waivers, for a distance of 153 feet in lieu of the minimum required 240 feet between the PV Solar Farm and non-participating properties 10 acres or less in area:
  - (1) The waiver ***{IS/ IS NOT}*** in accordance with the general purpose and intent of the Zoning Ordinance and ***{WILL/ WILL NOT}*** be injurious to the neighborhood or to the public health, safety, and welfare because:
  - (2) Special conditions and circumstances ***{DO / DO NOT}*** exist which are peculiar to the land or structure involved, which are not applicable to other similarly situated land and structures elsewhere in the same district because:
  - (3) Practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied ***{WILL / WILL NOT}*** prevent reasonable or otherwise permitted use of the land or structure or construction because:
  - (4) The special conditions, circumstances, hardships, or practical difficulties ***{DO / DO NOT}*** result from actions of the applicant because:
  - (5) The requested waiver ***{SUBJECT TO THE PROPOSED SPECIAL CONDITION} {IS / IS NOT}*** the minimum variation that will make possible the reasonable use of the land/structure because:
- B. Regarding Part B of the proposed waivers, for a separation distance of 28 feet in lieu of 275 feet between a PV SOLAR FARM electrical inverter and the PV SOLAR FARM perimeter fence:

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- (1) The waiver *{IS/ IS NOT}* in accordance with the general purpose and intent of the Zoning Ordinance and *{WILL/ WILL NOT}* be injurious to the neighborhood or to the public health, safety, and welfare because:
- (2) Special conditions and circumstances *{DO / DO NOT}* exist which are peculiar to the land or structure involved, which are not applicable to other similarly situated land and structures elsewhere in the same district because:
- (3) Practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied *{WILL / WILL NOT}* prevent reasonable or otherwise permitted use of the land or structure or construction because:
- (4) The special conditions, circumstances, hardships, or practical difficulties *{DO / DO NOT}* result from actions of the applicant because:
- (5) The requested waiver *{SUBJECT TO THE PROPOSED SPECIAL CONDITION} {IS / IS NOT}* the minimum variation that will make possible the reasonable use of the land/structure because:

C. Regarding Part C of the proposed waivers, for a 24 feet wide area for all necessary access lanes or driveways and any required new PRIVATE ACCESSWAYS in lieu of the minimum required 40 feet:

- (1) The waiver *{IS/ IS NOT}* in accordance with the general purpose and intent of the Zoning Ordinance and *{WILL/ WILL NOT}* be injurious to the neighborhood or to the public health, safety, and welfare because:
- (2) Special conditions and circumstances *{DO / DO NOT}* exist which are peculiar to the land or structure involved, which are not applicable to other similarly situated land and structures elsewhere in the same district because:
- (3) Practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied *{WILL / WILL NOT}* prevent reasonable or otherwise permitted use of the land or structure or construction because:
- (4) The special conditions, circumstances, hardships, or practical difficulties *{DO / DO NOT}* result from actions of the applicant because:
- (5) The requested waiver *{SUBJECT TO THE PROPOSED SPECIAL CONDITION} {IS / IS NOT}* the minimum variation that will make possible the reasonable use of the land/structure because:

7. ***{NO SPECIAL CONDITIONS ARE HEREBY IMPOSED / THE SPECIAL CONDITIONS IMPOSED HEREIN ARE REQUIRED TO ENSURE COMPLIANCE WITH THE CRITERIA FOR SPECIAL USE PERMITS AND FOR THE PARTICULAR PURPOSES DESCRIBED BELOW:***

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- A. **The approved site plan consists of the following documents:**
- **Sheet T1.1: Permit Set Cover received August 13, 2018**
  - **Sheet L1.1: Site Layout received August 13, 2018**
  - **Sheet L2.1: Tracker System Detail received August 13, 2018**
  - **Sheet L2.3: Fence-Gate Detail received January 25, 2018**
  - **Sheet L2.3: Agricultural Fence Detail received August 13, 2018**
  - **Sheet E1.1: Single Line Diagram received January 25, 2018**
  - **Sheet E2.1: DC & AC Conductor Schedule received January 25, 2018**
  - **Sheet E4.1: Grounding Details received January 25, 2018**
  - **Sheet E9.1: Equipment Specification Sheets received August 13, 2018**

The above special condition is required to ensure that:

**The constructed PV SOLAR FARM is consistent with the special use permit approval.**

- B. **The Zoning Administrator shall not authorize a Zoning Use Permit Application or issue a Zoning Compliance Certificate on the subject property until the lighting specifications in Paragraph 6.1.2.A. of the Zoning Ordinance have been met.**

The special condition stated above is required to ensure the following:

**That exterior lighting for the proposed Special Use meets the requirements established for Special Uses in the Zoning Ordinance.**

- C. **The Zoning Administrator shall not issue a Zoning Compliance Certificate for the proposed PV SOLAR FARM until the petitioner has demonstrated that the proposed Special Use complies with the Illinois Accessibility Code.**

The special condition stated above is necessary to ensure the following:

**That the proposed Special Use meets applicable state requirements for accessibility.**

- D. **The Zoning Administrator shall not authorize a Zoning Use Permit until the petitioner submits a copy of an executed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture per the requirements established in Paragraph 6.1.5 R. of the Zoning Ordinance.**

The special condition stated above is required to ensure the following:

**That the land affected by PV SOLAR FARM is restored to its pre-construction capabilities.**

- E. **A signed Decommissioning and Site Reclamation Plan that has been approved by ELUC is required at the time of application for a Zoning Use Permit that complies with Section 6.1.1 A. and Section 6.1.5 Q. of the Zoning Ordinance, including a decommissioning cost estimate prepared by an Illinois Professional Engineer.**

The above special conditions are required to ensure that:

**The Special Use Permit complies with Ordinance requirements and as authorized by waiver.**

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- F. A Roadway Upgrade and Maintenance Agreement signed by the Highway Commissioner and approved by the Environment and Land Use Committee shall be submitted at the time of application for a Zoning Use Permit.**

The above special condition is necessary to ensure the following:

**To ensure full compliance with the intent of the Zoning Ordinance in a timely manner that meets the needs of the applicant.**

- G. The following submittals are required prior to the approval of any Zoning Use Permit for a PV SOLAR FARM:**

- 1. Documentation of the solar module's unlimited 10-year warranty and the 25-year limited power warranty.**
- 2. Certification by an Illinois Professional Engineer that any relocation of drainage district tile conforms to the Champaign County Storm Water Management and Erosion Control Ordinance.**
- 3. An irrevocable letter of credit to be drawn upon a federally insured financial institution within 200 miles of Urbana or reasonable anticipated travel costs shall be added to the amount of the letter of credit.**
- 4. A permanent soil erosion and sedimentation plan for the PV SOLAR FARM including any access road that conforms to the relevant Natural Resources Conservation Service guidelines and that is prepared by an Illinois Licensed Professional Engineer.**
- 5. Documentation regarding the seed to be used for the pollinator planting, per 6.1.5 F.(9).**
- 6. A Transportation Impact Analysis provided by the applicant that is mutually acceptable to the Applicant and the County Engineer and State's Attorney; or Township Highway Commissioner; or municipality where relevant, as required by 6.1.5 G. 2.**
- 7. The telephone number for the complaint hotline required by 6.1.5 S.**
- 8. Any updates to the approved Site Plan from Case 897-S-18 per the Site Plan requirements provided in Section 6.1.5 U.1.c.**

The above special condition is required to ensure that:

**The PV SOLAR FARM is constructed consistent with the Special Use Permit approval and in compliance with the Ordinance requirements.**

- H. A Zoning Compliance Certificate shall be required for the PV SOLAR FARM prior to going into commercial production of energy. Approval of a Zoning Compliance Certificate shall require the following:**

**PRELIMINARY DRAFT**

1. **An as-built site plan of the PV SOLAR FARM including structures, property lines (including identification of adjoining properties), as-built separations, public access road and turnout locations, substation(s), electrical cabling from the PV SOLAR FARM to the substations(s), and layout of all structures within the geographical boundaries of any applicable setback.**
2. **As-built documentation of all permanent soil erosion and sedimentation improvements for all PV SOLAR FARM including any access road prepared by an Illinois Licensed Professional Engineer.**
3. **An executed interconnection agreement with the appropriate electric utility as required by Section 6.1.5 B.(3)b.**

The above special condition is required to ensure that:

**The PV SOLAR FARM is constructed consistent with the special use permit approval and in compliance with the Ordinance requirements.**

- I. **The Applicant or Owner or Operator of the PV SOLAR FARM shall comply with the following specific requirements that apply even after the PV SOLAR FARM goes into commercial operation:**
  1. **Maintain the pollinator plantings in perpetuity.**
  2. **Cooperate with local Fire Protection District to develop the District's emergency response plan as required by 6.1.5 H.(2).**
  3. **Cooperate fully with Champaign County and in resolving any noise complaints including reimbursing Champaign County any costs for the services of a qualified noise consultant pursuant to any proven violation of the I.P.C.B. noise regulations as required by 6.1.5 I.(4).**
  4. **Maintain a current general liability policy as required by 6.1.5 O.**
  5. **Submit annual summary of operation and maintenance reports to the Environment and Land Use Committee as required by 6.1.5 P.(1)a.**
  6. **Maintain compliance with the approved Decommissioning and Site Reclamation Plan including financial assurances.**
  7. **Submit to the Zoning Administrator copies of all complaints to the telephone hotline on a monthly basis and take all necessary actions to resolve all legitimate complaints as required by 6.1.5 S.**

The above special condition is required to ensure that:

**Future requirements are clearly identified for all successors of title, lessees, any operator and/or owner of the PV SOLAR FARM.**

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- J. **The Applicant or Owner or Operator of the PV SOLAR FARM shall plant and maintain in perpetuity a visual screen on the north, west, and east sides of the PV SOLAR FARM per Section 6.1.5 M. of the Zoning Ordinance.**

The above special condition is required to ensure that:

**Visual impacts of the PV SOLAR FARM are minimized for adjacent residents.**

**PRELIMINARY DRAFT****FINAL DETERMINATION**

The Champaign County Zoning Board of Appeals finds that, based upon the application, testimony, and other evidence received in this case, that the requirements for approval of Section 9.1.11B. **{HAVE / HAVE NOT}** been met, and pursuant to the authority granted by Section 9.1.6 B. of the Champaign County Zoning Ordinance, determines that:

The Special Use requested in Case **897-S-18** is hereby **{GRANTED/ GRANTED WITH SPECIAL CONDITIONS / DENIED}** to the applicant, **Community Power Group LLC**, to authorize the following as a Special Use on land in the AG-1 Agriculture Zoning District:

**Authorize a Community PV Solar Farm with a total nameplate capacity of 2 megawatts (MW), including access roads and wiring, and**

***{ SUBJECT TO THE FOLLOWING WAIVERS OF STANDARD CONDITIONS: }***

Part A: A waiver for a distance of 153 feet in lieu of the minimum required 240 feet between the PV Solar Farm and non-participating properties 10 acres or less in area, per Section 6.1.5 D.(3)a. of the Zoning Ordinance.

Part B: A waiver for a separation distance of 28 feet in lieu of 275 feet between a PV SOLAR FARM electrical inverter and the PV SOLAR FARM perimeter fence, per Section 6.1.5 D.(6) of the Zoning Ordinance.

Part C: A waiver for a 24 feet wide area for all necessary access lanes or driveways and any required new PRIVATE ACCESSWAYS in lieu of the minimum required 40 feet, per Section 6.1.5 B.(1)b. of the Zoning Ordinance.

***{ SUBJECT TO THE FOLLOWING SPECIAL CONDITIONS: }***

- A. **The approved site plan consists of the following documents:**
- **Sheet T1.1: Permit Set Cover received August 13, 2018**
  - **Sheet L1.1: Site Layout received August 13, 2018**
  - **Sheet L2.1: Tracker System Detail received August 13, 2018**
  - **Sheet L2.3: Fence-Gate Detail received January 25, 2018**
  - **Sheet L2.3: Agricultural Fence Detail received August 13, 2018**
  - **Sheet E1.1: Single Line Diagram received January 25, 2018**
  - **Sheet E2.1: DC & AC Conductor Schedule received January 25, 2018**
  - **Sheet E4.1: Grounding Details received January 25, 2018**
  - **Sheet E9.1: Equipment Specification Sheets received August 13, 2018**
- B. **The Zoning Administrator shall not authorize a Zoning Use Permit Application or issue a Zoning Compliance Certificate on the subject property until the lighting specifications in Paragraph 6.1.2.A. of the Zoning Ordinance have been met.**

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- C. **The Zoning Administrator shall not issue a Zoning Compliance Certificate for the proposed PV SOLAR FARM until the petitioner has demonstrated that the proposed Special Use complies with the Illinois Accessibility Code.**
- D. **The Zoning Administrator shall not authorize a Zoning Use Permit until the petitioner submits a copy of an executed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture per the requirements established in Paragraph 6.1.5 R. of the Zoning Ordinance.**
- E. **A signed Decommissioning and Site Reclamation Plan that has been approved by ELUC is required at the time of application for a Zoning Use Permit that complies with Section 6.1.1 A. and Section 6.1.5 Q. of the Zoning Ordinance, including a decommissioning cost estimate prepared by an Illinois Professional Engineer.**
- F. **A Roadway Upgrade and Maintenance Agreement signed by the Highway Commissioner and approved by the Environment and Land Use Committee shall be submitted at the time of application for a Zoning Use Permit.**
- G. **The following submittals are required prior to the approval of any Zoning Use Permit for a PV SOLAR FARM:**
1. **Documentation of the solar module's unlimited 10-year warranty and the 25-year limited power warranty.**
  2. **Certification by an Illinois Professional Engineer that any relocation of drainage district tile conforms to the Champaign County Storm Water Management and Erosion Control Ordinance.**
  3. **An irrevocable letter of credit to be drawn upon a federally insured financial institution within 200 miles of Urbana or reasonable anticipated travel costs shall be added to the amount of the letter of credit.**
  4. **A permanent soil erosion and sedimentation plan for the PV SOLAR FARM including any access road that conforms to the relevant Natural Resources Conservation Service guidelines and that is prepared by an Illinois Licensed Professional Engineer.**
  5. **Documentation regarding the seed to be used for the pollinator planting, per 6.1.5 F.(9).**
  6. **A Transportation Impact Analysis provided by the applicant that is mutually acceptable to the Applicant and the County Engineer and State's Attorney; or Township Highway Commissioner; or municipality where relevant, as required by 6.1.5 G. 2.**
  7. **The telephone number for the complaint hotline required by 6.1.5 S.**
  8. **Any updates to the approved Site Plan from Case 897-S-18 per the Site Plan requirements provided in Section 6.1.5 U.1.c.**

**PRELIMINARY DRAFT**

- H. **A Zoning Compliance Certificate shall be required for the PV SOLAR FARM prior to going into commercial production of energy. Approval of a Zoning Compliance Certificate shall require the following:**
1. **An as-built site plan of the PV SOLAR FARM including structures, property lines (including identification of adjoining properties), as-built separations, public access road and turnout locations, substation(s), electrical cabling from the PV SOLAR FARM to the substations(s), and layout of all structures within the geographical boundaries of any applicable setback.**
  2. **As-built documentation of all permanent soil erosion and sedimentation improvements for all PV SOLAR FARM including any access road prepared by an Illinois Licensed Professional Engineer.**
  3. **An executed interconnection agreement with the appropriate electric utility as required by Section 6.1.5 B.(3)b.**
- I. **The Applicant or Owner or Operator of the PV SOLAR FARM shall comply with the following specific requirements that apply even after the PV SOLAR FARM goes into commercial operation:**
1. **Maintain the pollinator plantings in perpetuity.**
  2. **Cooperate with local Fire Protection District to develop the District's emergency response plan as required by 6.1.5 H.(2).**
  3. **Cooperate fully with Champaign County and in resolving any noise complaints including reimbursing Champaign County any costs for the services of a qualified noise consultant pursuant to any proven violation of the I.P.C.B. noise regulations as required by 6.1.5 I.(4).**
  4. **Maintain a current general liability policy as required by 6.1.5 O.**
  5. **Submit annual summary of operation and maintenance reports to the Environment and Land Use Committee as required by 6.1.5 P.(1)a.**
  6. **Maintain compliance with the approved Decommissioning and Site Reclamation Plan including financial assurances.**
  7. **Submit to the Zoning Administrator copies of all complaints to the telephone hotline on a monthly basis and take all necessary actions to resolve all legitimate complaints as required by 6.1.5 S.**
- J. **The Applicant or Owner or Operator of the PV SOLAR FARM shall plant and maintain in perpetuity a visual screen on the north, west, and east sides of the PV SOLAR FARM per Section 6.1.5 M. of the Zoning Ordinance.**

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The foregoing is an accurate and complete record of the Findings and Determination of the Zoning Board of Appeals of Champaign County.

SIGNED:

Catherine Capel, Chair  
Champaign County Zoning Board of Appeals

ATTEST:

Secretary to the Zoning Board of Appeals  
Date

**Solar Farm Text Amendment as Approved by County Board**

August 23, 2018

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**1. Add the following to Section 3.0 Definitions (somewhat similar to the definition of WIND FARM):**

NOXIOUS WEEDS: any of several plants designated pursuant to the Illinois Noxious Weed Law (505 ILCS 100/1 et seq.) and that are identified in 8 Illinois Administrative Code 220.

PHOTOVOLTAIC (PV): A type of solar energy system that produces electricity by the use of photovoltaic cells that generate electricity when struck by light.

PV SOLAR FARM: A unified development intended to convert sunlight into electricity by photovoltaic (PV) devices for the primary purpose of wholesale sales of generated electricity. A PV SOLAR FARM is under a common ownership and operating control even though parts of the PV SOLAR FARM may be located on land leased from different owners. A PV SOLAR FARM includes all necessary components including access driveways, solar devices, electrical inverter(s), electrical transformer(s), cabling, a common switching station, maintenance and management facilities, and waterwells. PV SOLAR FARM should be understood to include COMMUNITY PV SOLAR FARM unless specified otherwise in the relevant section or paragraph.

PV SOLAR FARM, COMMUNITY: A PV SOLAR FARM of not more than 2,000 kilowatt nameplate capacity that meets the requirements of 20 ILCS 3855/1-10 for a “community renewable generation project” and provided that two COMMUNITY PV SOLAR FARMS may be co-located on the same or contiguous parcels as either a) two 2-MW projects on one parcel, or b) one 2-MW project on each of two contiguous parcels, as authorized by the Illinois Commerce Commission in Final Order 17-0838 on April 3, 2018.

**2. Add new subparagraph 4.2.1 C.4. as follows:**

4. A PV SOLAR FARM may be authorized as a County Board SPECIAL USE permit in the AG-1, Agriculture Zoning District or the AG-2 Agriculture Zoning District as a second PRINCIPAL USE on a LOT with another PRINCIPAL USE.

**3. Add new subparagraph 4.3.4 H.4.i. as follows (similar to existing 4.3.4 H.4.h. for wind farms):**

- i. PV SOLAR FARM except as PIPELINE IMPACT RADIUS regulations are required in Subsection 6.1.5.

**4. Amend Section 5.2 as follows (similar to existing WIND FARM designation):**

Add “PV SOLAR FARM” as a COUNTY BOARD Special Use Permit in the AG-1 District and AG-2 District by a “B”.

**5. Add the following as footnote 15 under the Special Provisions for the AG-1 District in Section 5.3 (similar to existing footnote 14 for LOTS in a WIND FARM):**

15. LOTS in a PV SOLAR FARM County Board SPECIAL USE Permit and intended for PV SOLAR FARM, related substations, and PV SOLAR FARM maintenance and management

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facilities are exempt from the requirements of Section 5.3 except as such regulations are required by Subsection 6.1.5.

**6. Add new paragraph 5.4.3 F. as follows:**

- F. The Rural Residential Overlay Zoning District is prohibited from being established within a PV SOLAR FARM County Board SPECIAL USE Permit.

**7. Amend Section 6.1.1 to read as follows:**

- A. Decommissioning and Site Reclamation Plan for NON-ADAPTABLE STRUCTURES
  - 1. In the course of BOARD review of a SPECIAL USE request, the BOARD may find that a proposed STRUCTURE is a NON-ADAPTABLE STRUCTURE. Any WIND FARM and any PV SOLAR FARM shall be a NON-ADAPTABLE STRUCTURE. The Applicant for the SPECIAL USE request for a NON-ADAPTABLE STRUCTURE shall submit a decommissioning and site reclamation plan to the BOARD for the subject site.
  - 2. The decommissioning and site reclamation plan shall be binding upon all successors of title, lessees, to any operator and/or owner of a NON-ADAPTABLE STRUCTURE, and to all parties to the decommissioning and site reclamation plan. Prior to the issuance of a SPECIAL USE Permit for such NON-ADAPTABLE STRUCTURES, the landowner or applicant shall also record a covenant incorporating the provisions of the decommissioning and site reclamation plan on the deed subject to the LOT, requiring that the reclamation work be performed and that a letter of credit be provided for financial assurance.
  - 3. Separate cost estimates for Section 6.1.1 A.4.a., 6.1.1 A.4.b., and 6.1.1 A.4.c. shall be provided by an Illinois Licensed Professional Engineer.
    - a. Cost estimates provided shall be subject to approval of the BOARD.
    - b. Except as provided in Section 6.1.4 P. and Section 6.1.5 Q., the salvage value of the components of the NON-ADAPTABLE STRUCTURE shall not be credited to the cost estimates.
  - 4. The decommissioning and site reclamation plan shall provide for:
    - a. removal of above-ground portion of any STRUCTURE on the subject site; site grading; and interim soil erosion control;
    - b. below-ground restoration, including final grading and surface treatment;
    - c. any environmental remediation required by State or Federal law;

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- d. provision and maintenance of a letter of credit, as set forth in Section 6.1.1 A.5.
5. No Zoning Use Permit for such SPECIAL USE will be issued until the applicant provides the COUNTY with an irrevocable letter of credit to be drawn upon a federally insured financial institution within 200 miles of Urbana or reasonable anticipated travel costs shall be added to the amount of the letter of credit.
- a. Unless specified elsewhere in this Ordinance, the irrevocable letter of credit shall be in the amount of one hundred fifty percent (150%) of an independent engineer's cost estimate to complete the work described in Section 6.1.1 A.4.a., Section 6.1.1 A.4.b., and Section 6.1.1 A.4.c.
  - b. The provisions of this subparagraph notwithstanding, a different amount may be required as a special condition.
  - c. The letter of credit, or a successor letter of credit pursuant to Section 6.1.1 A.6. or 6.1.1 A.14., shall remain in effect and shall be made available to the COUNTY for a term specified as a standard condition elsewhere in this ordinance, an indefinite term, or for a different term that may be required as a special condition.
6. One hundred eighty (180) days prior to the expiration date of an irrevocable letter of credit submitted pursuant to this Section, the Zoning Administrator shall notify the landowner or applicant in writing and request information about the landowner or applicant's intent to renew the letter of credit, or remove the NON-ADAPTABLE STRUCTURE. The landowner or applicant shall have thirty (30) days to respond in writing to this request. If the landowner or applicant's intention is to remove the NON-ADAPTABLE STRUCTURE, the landowner or applicant will have a total of ninety (90) days from the date of response to remove it in accordance with Section 6.1.1 A.4.a. At the end of ninety (90) days, the Zoning Administrator shall have a period of sixty (60) days to either:
- a. confirm that the bank has renewed the letter of credit; or
  - b. inspect the subject property for compliance with Section 6.1.1 A.4.a.;
  - c. draw on the letter of credit and commence the bid process to have a contractor remove the NON-ADAPTABLE STRUCTURE pursuant to Section 6.1.1 A.4.a.
7. The Zoning Administrator may find a NON-ADAPTABLE STRUCTURE abandoned in place. Factors to be considered in making this finding include, but are not limited to:
- a. the nature and frequency of use as set forth in the application for SPECIAL USE;

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- b. the current nature and frequency of use;
  - c. whether the NON-ADAPTABLE STRUCTURE has become a public nuisance, or otherwise poses a risk of harm to public health or safety;
  - d. whether the NON-ADAPTABLE STRUCTURE has been maintained in a manner which allows it to be used for its intended purpose, with no greater effects on surrounding properties and the public as a whole than was originally intended.
  - e. A court of law, an arbitrator, mediator, or any state or Federal agency charged with enforcing State or Federal law has made a finding that either said NON-ADAPTABLE STRUCTURE or the structures supporting said NON-ADAPTABLE STRUCTURE and/or any related site grading and soil erosion controls or lack of same, constitutes a public nuisance or otherwise violates State or Federal law, or any State or Federal agency charged with enforcing State or Federal law has made a final determination either imposing an administrative sanction on any person associated with the NON-ADAPTABLE STRUCTURE relating to its use or denying the NON-ADAPTABLE STRUCTURE a permit necessary for its lawful operation.
8. Once the Zoning Administrator has made a finding that a NON-ADAPTABLE STRUCTURE is abandoned in place, the Zoning Administrator shall issue notice to the land owner at the owner's last known address, lessees, any operator and/or owner of a NON-ADAPTABLE STRUCTURE, and to all parties to the decommissioning and site reclamation plan, that the COUNTY will draw on the performance guarantee within thirty (30) days unless the owner appeals the Zoning Administrator's finding, pursuant to Section 9.1.8 or enters into a written agreement with the COUNTY to remove such NON-ADAPTABLE STRUCTURE in accordance with Section 6.1.1 A.4. within ninety (90) days and removes the NON-ADAPTABLE STRUCTURE accordingly.
9. The Zoning Administrator may draw on the funds to have said NON-ADAPTABLE STRUCTURE removed as per Section 6.1.1 A.4. of the decommissioning and site reclamation plan when any of the following occur:
- a. no response is received from the land owner within thirty (30) days from initial notification by the Zoning Administrator;
  - b. the land owner does not enter, or breaches any term of a written agreement with the COUNTY to remove said NON-ADAPTABLE structure as provided in Section 6.1.1 A.8.;
  - c. any breach or performance failure of any provision of the decommissioning and site reclamation plan ;

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- d. the owner of record has filed a bankruptcy petition, or compromised the COUNTY's interest in the letter of credit in any way specifically allowed by the decommissioning and site reclamation plan ;
  - e. a court of law has made a finding that a NON-ADAPTABLE STRUCTURE constitutes a public nuisance;
  - f. the owner of record has failed to replace an expiring letter of credit within the deadlines set forth in Section 6.1.1 A.6.; or
  - g. any other conditions to which the COUNTY and the land owner mutually agree, as set forth in the decommissioning and site reclamation plan .
10. Once the letter of credit has been drawn upon, and the site has been restored to its original condition, as certified by the Zoning Administrator, the covenant entered into pursuant to Section 6.1.1. A.2. shall expire, and the COUNTY shall act to remove said covenant from the record of the property at the Recorder of Deeds within forty-five (45) days.
  11. The proceeds of the letter of credit may only be used by the COUNTY to:
    - a. remove the NON-ADAPTABLE STRUCTURE and return the site to its condition prior to the placement of the NON-ADAPTABLE STRUCTURE, in accordance with the most recent decommissioning and site reclamation plan submitted and accepted in relation to the NON-ADAPTABLE STRUCTURE;
    - b. pay all administrative and ancillary costs associated with drawing upon the financial assurance and performing the reclamation work, which shall include, but not be limited to, attorney's fees; construction management and other professional service fees; and the costs of preparing request for proposal and bidding documents required to comply with state law or Champaign County purchasing policies; and
    - c. remove any covenants placed on the title in conjunction with Section 6.1.1. A.2.

The balance of any proceeds remaining after the site has been reclaimed shall be returned to the issuer of the letter of credit.

12. No dispute as to the necessity or reasonableness of any costs of performing the site reclamation work identified in Section 6.1.1 A.11. shall impair the ability of Champaign County to draw on the Financial Assurance.
13. In accordance with the provisions of the Illinois Mechanic's Lien Act, 770 ILCS 60/1 and 60/7, the Applicant or successors in interest agree that any contractor retained by Champaign County to perform the decommissioning

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and site reclamation work in Section 6.1.1 A.11. shall have a lien upon the Project to the full extent of all costs of performing the decommissioning and site reclamation work identified in Section 6.1.1 A.11., and that such lien shall be superior to any claim or lien of any other creditor, incumbrancer or purchaser.

14. Upon transfer of any property subject to a letter of credit pursuant to this Section, the new owner or applicant of record shall submit a new irrevocable letter of credit of same or greater value to the Zoning Administrator, prior to legal transfer of title, and shall submit a new decommissioning and site reclamation plan, pursuant to Section 6.1.1 A.4.a., and, for WIND FARMS, Section 6.1.4 P., and for PV SOLAR FARMS, 6.1.5 Q. Once the new owner or applicant of record has done so, the letter of credit posted by the previous owner or applicant shall be released, and the previous owner shall be released from any further obligations under the decommissioning and site reclamation plan.
15. The Applicant shall provide evidence of any new, additional, or substitute financial assurance to the Zoning Administrator throughout the operating lifetime of the NON-ADAPTABLE STRUCTURE.
16. Should the decommissioning and site reclamation plan, or any part of it, be deemed invalid by a court of competent jurisdiction, the associated SPECIAL USE permit shall be deemed void.

**8. Add new subsection 6.1.5 as follows (NOTE: the following new subsection is based on the existing subsection 6.1.4 for “WIND FARM”):**

**6.1.5 PHOTOVOLTAIC (PV) SOLAR FARM County Board SPECIAL USE permit**

A PHOTOVOLTAIC (PV) SOLAR FARM County Board SPECIAL USE permit may only be authorized in the AG-1 Zoning District or the AG-2 Agriculture Zoning District subject to the following standard conditions.

- A. In what follows, PV SOLAR FARM should be understood to include COMMUNITY PV SOLAR FARM unless specified otherwise in the relevant section or paragraph.
- B. General Standard Conditions
  - (1) The area of the PV SOLAR FARM County Board SPECIAL USE permit must include the following minimum areas:
    - a. All land that will be exposed to a noise level greater than that authorized to Class A land as established by 35 Ill. Admin. Code Parts 900, 901 and 910 under paragraph 6.1.5 I.
    - b. All necessary access lanes or driveways and any required new PRIVATE ACCESSWAYS. For purposes of determining the

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- minimum area of the special use permit, access lanes or driveways shall be provided a minimum 40 feet wide area.
- c. All necessary PV SOLAR FARM STRUCTURES and ACCESSORY STRUCTURES including electrical distribution lines, inverters, transformers, common switching stations, and substations not under the ownership of a PUBLICLY REGULATED UTILITY and all waterwells that will provide water for the PV SOLAR FARM. For purposes of determining the minimum area of the special use permit, underground cable installations shall be provided a minimum 40 feet wide area.
  - d. All aboveground STRUCTURES and facilities shall be of a type and shall be located in a manner that is consistent with the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture as required by paragraph 6.1.5 R.
- (2) The PV SOLAR FARM County Board SPECIAL USE permit shall not be located in the following areas:
- a. Less than one-and-one-half miles from an incorporated municipality that has a zoning ordinance unless the following is provided:
    - (a) No part of a PV SOLAR FARM shall be located within a contiguous urban growth area (CUGA) as indicated in the most recent update of the CUGA in the Champaign County Land Resource Management Plan, and there shall be a separation of one-half mile from a proposed PV SOLAR FARM to a municipal boundary at the time of application for the SPECIAL USE Permit, except for any power lines of 34.5 kVA or less and except for any proposed PV SOLAR FARM substation and related proposed connection to an existing substation.
    - (b) The PV SOLAR FARM SPECIAL USE permit application shall include documentation that the applicant has provided a complete copy of the SPECIAL USE permit application to any municipality within one-and-one-half miles of the proposed PV SOLAR FARM.
    - (c) If no municipal resolution regarding the PV SOLAR FARM is received from any municipality located within one-and-one-half miles of the PV SOLAR FARM prior to the consideration of the PV SOLAR FARM SPECIAL USE permit by the Champaign County Board, the ZONING ADMINISTRATOR shall provide documentation to the County Board that any municipality within one-and-one-half miles of the PV SOLAR FARM was provided notice of the meeting dates for consideration of the proposed PV SOLAR

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FARM SPECIAL USE Permit for both the Environment and Land Use Committee and the County Board.

- b. Less than one-half mile from the CR Conservation Recreation Zoning District.
- (3) Interconnection to the power grid
- a. The PV SOLAR FARM SPECIAL USE permit application shall include documentation that the applicant or PV SOLAR FARM is in the queue to acquire an interconnection agreement to the power grid.
  - b. Documentation of an executed interconnection agreement with the appropriate electric utility shall be provided prior to issuance of a Zoning Compliance Certificate to authorize operation of the PV SOLAR FARM.
- (4) Right to farm
- a. The owners of the subject property and the Applicant, its successors in interest, and all parties to the decommissioning plan and site reclamation plan hereby recognize and provide for the right of agricultural activities to continue on adjacent land consistent with the Right to Farm Resolution 3425.

**C. Minimum Lot Standards**

- (1) There are no minimum LOT AREA, AVERAGE LOT WIDTH, SETBACK, YARD, or maximum LOT COVERAGE requirements for a PV SOLAR FARM or for LOTS for PV SOLAR FARM substations and/ or PV SOLAR FARM maintenance and management facilities.
- (2) There is no maximum LOT AREA requirement on BEST PRIME FARMLAND.

**D. Minimum Standard Conditions for Separations for PV SOLAR FARM from adjacent USES and STRUCTURES**

The location of each PV SOLAR FARM shall provide the following required separations as measured from the exterior of the above ground portion of the PV SOLAR FARM STRUCTURES and equipment including fencing:

- (1) PV SOLAR FARM fencing shall be set back from the street centerline a minimum of 40 feet from a MINOR STREET and a minimum of 55 feet from a COLLECTOR STREET and a minimum of 60 feet from a MAJOR STREET unless a greater separation is required for screening pursuant to Section 6.1.5 M.(2)a., but in no case shall the perimeter fencing be less than 10 feet from the RIGHT OF WAY of any STREET.

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- (2) For properties participating in the solar farm: No required separation from any existing DWELLING or existing PRINCIPAL BUILDING except as required to ensure that a minimum zoning lot is provided for the existing DWELLING or PRINCIPAL BUILDING.
- (3) For properties not participating in the solar farm:
- a. For any adjacent LOT that is 10 acres or less in area (not including the STREET RIGHT OF WAY):
    - (a) For any adjacent LOT that is bordered (directly abutting and/or across the STREET) on no more than two sides by the PV SOLAR FARM, the separation shall be no less than 240 feet from the property line.
    - (b) For any adjacent LOT that is bordered (directly abutting and/or across the STREET) on more than two sides by the PV SOLAR FARM, the separation shall exceed 240 feet as deemed necessary by the BOARD.
  - b. For any adjacent LOT that is more than 10 acres in area (not including the STREET RIGHT OF WAY), the separation shall be no less than 255 feet from any existing DWELLING or existing PRINCIPAL BUILDING and otherwise the perimeter fencing shall be a minimum of 10 feet from a SIDE or REAR LOT LINE. This separation distance applies to properties that are adjacent to or across a STREET from a PV SOLAR FARM.
  - c. Additional separation may be required to ensure that the noise level required by 35 Ill. Admin. Code Parts 900, 901 and 910 is not exceeded or for other purposes deemed necessary by the BOARD.
- (4) A separation of at least 500 feet from any of the following unless the SPECIAL USE permit application includes results provided from an analysis using the Solar Glare Hazard Analysis Tool (SGHAT) for the Airport Traffic Control Tower cab and final approach paths, consistent with the Interim Policy, Federal Aviation Administration (FAA) Review of Solar Energy Projects on Federally Obligated Airports, or the most recent version adopted by the FAA, and the SGHAT results show no detrimental affect with less than a 500 feet separation from any of the following:
- a. any AIRPORT premises or any AIRPORT approach zone within five miles of the end of the AIRPORT runway; or
  - b. any RESTRICTED LANDING AREA that is NONCONFORMING or which has been authorized by SPECIAL USE permit and that existed on or for which there had been a complete SPECIAL USE permit application received by April 22, 2010, or any approach zone for any such RESTRICTED LANDING AREA; or

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- c. any RESIDENTIAL AIRPORT that existed on or for which there had been a complete SPECIAL USE permit application received by April 22, 2010, or any approach zone for any such RESIDENTIAL AIRPORT.
  - (5) A separation of at least 500 feet between substations and transmission lines of greater than 34.5 kVA to adjacent dwellings and residential DISTRICTS.
  - (6) Electrical inverters shall be located as far as possible from property lines and adjacent DWELLINGS consistent with good engineering practice. Inverter locations that are less than 275 feet from the perimeter fence shall require specific approval and may require special sound deadening construction and noise analysis.
  - (7) Separation distances for any PV SOLAR FARM with solar equipment exceeding 8 feet in height, with the exception of transmission lines which may be taller, shall be determined by the BOARD on a case-by-case basis.
  - (8) PV SOLAR FARM solar equipment other than inverters shall be no less than 26 feet from the property line of any lot more than 10 acres in area.
- E. Standard Conditions for Design and Installation of any PV SOLAR FARM.
- (1) Any building that is part of a PV SOLAR FARM shall include as a requirement for a Zoning Compliance Certificate a certification by an Illinois Professional Engineer or Illinois Licensed Structural Engineer or other qualified professional that the constructed building conforms to Public Act 96-704 regarding building code compliance and conforms to the Illinois Accessibility Code.
  - (2) Electrical Components
    - a. All electrical components of the PV SOLAR FARM shall conform to the National Electrical Code as amended and shall comply with Federal Communications Commission (FCC) requirements.
    - b. Burying power and communication wiring underground shall be minimized consistent with best management practice regarding PV solar farm construction and minimizing impacts on agricultural drainage tile.
  - (3) Maximum height. The height limitation established in Section 5.3 shall not apply to a PV SOLAR FARM. The maximum height of all above ground STRUCTURES shall be identified in the application and as approved in the SPECIAL USE permit.

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- (4) Warnings
- a. A reasonably visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and substations.

- (5) No construction may intrude on any easement or right of way for a GAS PIPELINE or HAZARDOUS LIQUID PIPELINE, an underground water main or sanitary sewer, a drainage district ditch or tile, or any other public utility facility unless specifically authorized by a crossing agreement that has been entered into with the relevant party.

## F. Standard Conditions to Mitigate Damage to Farmland

- (1) All underground wiring or cabling for the PV SOLAR FARM shall be at a minimum depth of 5 feet below grade or deeper if required to maintain a minimum one foot of clearance between the wire or cable and any agricultural drainage tile or a lesser depth if so authorized by the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture as required by paragraph 6.1.5 R.
- (2) Protection of agricultural drainage tile
- a. The applicant shall endeavor to locate all existing agricultural drainage tile prior to establishing any construction staging areas, construction of any necessary PV SOLAR FARM access lanes or driveways, construction of any PV SOLAR FARM STRUCTURES, any common switching stations, substations, and installation of underground wiring or cabling. The applicant shall contact affected landowners and tenants and the Champaign County Soil and Water Conservation District and any relevant drainage district for their knowledge of tile line locations prior to the proposed construction. Drainage districts shall be notified at least two weeks prior to disruption of tile.
- b. The location of drainage district tile lines shall be identified prior to any construction and drainage district tile lines shall be protected from disturbance as follows:
- (a) All identified drainage district tile lines and any known existing drainage district tile easement shall be staked or flagged prior to construction to alert construction crews of the presence of drainage district tile and the related easement.
- (b) Any drainage district tile for which there is no existing easement shall be protected from disturbance by a 30-foot wide no-construction buffer on either side of the drainage district tile. The no-construction buffer shall be staked or flagged prior to the start of construction and shall remain valid for the lifetime of the PV SOLAR FARM SPECIAL USE Permit and during

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any deconstruction activities that may occur pursuant to the PV SOLAR FARM SPECIAL USE Permit.

- (c) Construction shall be prohibited within any existing drainage district easement and also prohibited within any 30-foot wide no-construction buffer on either side of drainage district tile that does not have an existing easement unless specific construction is authorized in writing by all commissioners of the relevant drainage district. A copy of the written authorization shall be provided to the Zoning Administrator prior to the commencement of construction.
- c. Any agricultural drainage tile located underneath construction staging areas, access lanes, driveways, any common switching stations, and substations shall be replaced as required in Section 6.3 of the Champaign County Storm Water Management and Erosion Control Ordinance.
- d. Any agricultural drainage tile that must be relocated shall be relocated as required in the Champaign County Storm Water Management and Erosion Control Ordinance.
- e. Conformance of any relocation of drainage district tile with the Champaign County Storm Water Management and Erosion Control Ordinance shall be certified by an Illinois Professional Engineer. Written approval by the drainage district shall be received prior to any backfilling of the relocated drain tile and a copy of the approval shall be submitted to the Zoning Administrator. As-built drawings shall be provided to both the relevant drainage district and the Zoning Administrator of any relocated drainage district tile.
- f. All tile lines that are damaged, cut, or removed shall be staked or flagged in such manner that they will remain visible until the permanent repairs are completed.
- g. All exposed tile lines shall be screened or otherwise protected to prevent the entry into the tile of foreign materials, loose soil, small mammals, etc.
- h. Permanent tile repairs shall be made within 14 days of the tile damage provided that weather and soil conditions are suitable or a temporary tile repair shall be made. Immediate temporary repair shall also be required if water is flowing through any damaged tile line. Temporary repairs are not needed if the tile lines are dry and water is not flowing in the tile provided the permanent repairs can be made within 14 days of the damage. All permanent and temporary tile repairs shall be made as detailed in the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture as

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required by paragraph 6.1.5 R. and shall not be waived or modified except as authorized in the SPECIAL USE Permit.

- i. All damaged tile shall be repaired so as to operate as well after construction as before the construction began.
  - j. Following completion of the PV SOLAR FARM construction, the applicant shall be responsible for correcting all tile line repairs that fail, provided that the failed repair was made by the Applicant.
- (3) All soil conservation practices (such as terraces, grassed waterways, etc.) that are damaged by PV SOLAR FARM construction and/or decommissioning shall be restored by the applicant to the pre-PV SOLAR FARM construction condition in a manner consistent with the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture as required by paragraph 6.1.5 R.

(4) Topsoil replacement

For any open trenching required pursuant to PV SOLAR FARM construction, the topsoil shall be stripped and replaced as follows:

- a. The top 12 inches of topsoil shall first be stripped from the area to be trenched and from an adjacent area to be used for subsoil storage. The topsoil shall be stored in a windrow parallel to the trench in such a manner that it will not become intermixed with subsoil materials.
  - b. All subsoil material that is removed from the trench shall be placed in the second adjacent stripped windrow parallel to the trench but separate from the topsoil windrow.
  - c. In backfilling the trench, the stockpiled subsoil material shall be placed back into the trench before replacing the topsoil.
  - d. The topsoil must be replaced such that after settling occurs, the topsoil's original depth and contour (with an allowance for settling) will be restored.
  - e. All topsoil shall be placed in a manner consistent with the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture as required by paragraph 6.1.5 R.
- (5) Mitigation of soil compaction and rutting
- a. The Applicant shall not be responsible for mitigation of soil compaction and rutting if exempted by the PV SOLAR FARM lease.
  - b. Unless specifically provided for otherwise in the PV SOLAR FARM lease, the Applicant shall mitigate soil compaction and rutting for all

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areas of farmland that were traversed with vehicles and construction equipment or where topsoil is replaced in open trenches.

- c. All mitigation of soil compaction and rutting shall be consistent with the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture as required by paragraph 6.1.5 R.

(6) Land leveling

- a. The Applicant shall not be responsible for leveling of disturbed land if exempted by the PV SOLAR FARM lease.
- b. Unless specifically provided for otherwise in the PV SOLAR FARM lease, the Applicant shall level all disturbed land as follows:
  - (a) Following the completion of any open trenching, the applicant shall restore all land to its original pre-construction elevation and contour.
  - (b) Should uneven settling occur or surface drainage problems develop as a result of the trenching within the first year after completion, the applicant shall again restore the land to its original pre-construction elevation and contour.
- c. All land leveling shall be consistent with the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture as required by paragraph 6.1.5 R.

(7) Permanent Erosion and Sedimentation Control Plan

- a. Prior to the approval of any Zoning Use Permit, the Applicant shall provide a permanent soil erosion and sedimentation plan for the PV SOLAR FARM including any access road that conforms to the relevant Natural Resources Conservation Service guidelines and that is prepared by an Illinois Licensed Professional Engineer.
- b. As-built documentation of all permanent soil erosion and sedimentation improvements for the PV SOLAR FARM including any access road prepared by an Illinois Licensed Professional Engineer shall be submitted and accepted by the Zoning Administrator prior to approval of any Zoning Compliance Certificate.

(8) Retention of all topsoil

No topsoil may be removed, stripped, or sold from the proposed SPECIAL USE Permit site pursuant to or as part of the construction of the PV SOLAR FARM.

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- (9) Minimizing disturbance to BEST PRIME FARMLAND
- a. Any PV SOLAR FARM to be located on BEST PRIME FARMLAND shall minimize the disturbance to BEST PRIME FARMLAND as follows:
- (a) The disturbance to BEST PRIME FARMLAND caused by construction and operation of the PV SOLAR FARM shall be minimized at all times consistent with good engineering practice.
- (b) Disturbance to BEST PRIME FARMLAND shall be offset by establishment of a vegetative ground cover within the PV SOLAR FARM that includes the following:
- i. The vegetative ground cover shall use native plant species as much as possible and shall be based on a site assessment of the site geography and soil conditions.
- ii. The species selected shall serve a secondary habitat purpose as much as possible.
- iii. Maintenance of the vegetative ground cover shall use a combination of management approaches to ensure safe, cost-effective, reliable maintenance while minimizing environmental risks.
- iv. The plan to establish and maintain a vegetative ground cover that includes native plant species as much as possible shall be detailed in a landscape plan included in the PV SOLAR FARM SPECIAL USE permit application. The landscape plan shall include the weed control plan required by Section 6.1.5 P.(3).

G. Standard Conditions for Use of Public Streets

Any PV SOLAR FARM Applicant proposing to use any County Highway or a township or municipal STREET for the purpose of transporting PV SOLAR FARM or Substation parts and/or equipment for construction, operation, or maintenance of the PV SOLAR FARM or Substations(s), shall identify all such public STREETS and pay the costs of any necessary permits and the costs to repair any damage to the STREETS caused by the PV SOLAR FARM construction, as follows:

- (1) Prior to the close of the public hearing before the BOARD, the Applicant shall enter into a Roadway Upgrade and Maintenance agreement approved by the County Engineer and State's Attorney; or Township Highway Commissioner; or municipality where relevant, except for any COMMUNITY PV SOLAR FARM for which the relevant highway authority has agreed in writing to waive the requirements of subparagraphs 6.1.5 G.(1), (2), and (3), and the signed and

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executed Roadway Upgrade and Maintenance agreements must provide for the following minimum conditions:

- a. The applicant shall agree to conduct a pre-PV SOLAR FARM construction baseline survey to determine existing STREET conditions for assessing potential future damage including the following:
  - (a) A videotape of the affected length of each subject STREET supplemented by photographs if necessary.
  - (b) Pay for costs of the County to hire a consultant to make a study of any structure on the proposed route that the County Engineer feels may not carry the loads likely during the PV SOLAR FARM construction.
  - (c) Pay for any strengthening of STREET structures that may be necessary to accommodate the proposed traffic loads caused by the PV SOLAR FARM construction.
- b. The Applicant shall agree to pay for costs of the County Engineer to hire a consultant to make a study of any structure on the proposed route that the County Engineer feels may not carry the loads likely during the PV SOLAR FARM construction and pay for any strengthening of structures that may be necessary to accommodate the proposed traffic loads caused by the PV SOLAR FARM construction.
- c. The Applicant shall agree upon an estimate of costs for any other necessary roadway improvements prior to construction.
- d. The Applicant shall obtain any necessary approvals for the STREET improvements from the relevant STREET maintenance authority.
- e. The Applicant shall obtain any necessary Access Permits including any required plans.
- f. The Applicant shall erect permanent markers indicating the presence of underground cables.
- g. The Applicant shall install marker tape in any cable trench.
- h. The Applicant shall become a member of the Illinois state wide One-Call Notice System (otherwise known as the Joint Utility Locating Information for Excavators or "JULIE") and provide JULIE with all of the information necessary to update its record with respect to the PV SOLAR FARM.
- i. The Applicant shall use directional boring equipment to make all crossings of County Highways for the cable collection system.

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- j. The Applicant shall notify the STREET maintenance authority in advance of all oversize moves and crane crossings.
- k. The Applicant shall provide the County Engineer with a copy of each overweight and oversize permit issued by the Illinois Department of Transportation for PV SOLAR FARM construction.
- l. The Applicant shall transport the PV SOLAR FARM loads so as to minimize adverse impact on the local traffic including farm traffic.
- m. The Applicant shall schedule PV SOLAR FARM construction traffic in a way to minimize adverse impacts on emergency response vehicles, rural mail delivery, school bus traffic, and local agricultural traffic.
- n. The Applicant shall provide as much advance notice as is commercially reasonable to obtain approval of the STREET maintenance authority when it is necessary for a STREET to be closed due to a crane crossing or for any other reason. Notwithstanding the generality of the aforementioned, the Applicant will provide 48 hours notice to the extent reasonably practicable.
- o. The Applicant shall provide signs indicating all highway and STREET closures and work zones in accordance with the Illinois Department of Transportation Manual on Uniform Traffic Control Devices.
- p. The Applicant shall establish a single escrow account and a single Irrevocable Letter of Credit for the cost of all STREET upgrades and repairs pursuant to the PV SOLAR FARM construction.
- q. The Applicant shall notify all relevant parties of any temporary STREET closures.
- r. The Applicant shall obtain easements and other land rights needed to fulfill the Applicant's obligations under this Agreement.
- s. The Applicant shall agree that the County shall design all STREET upgrades in accordance with the most recent edition of the IDOT Bureau of Local Roads and Streets Manual.
- t. The Applicant shall provide written Notice to Proceed to the relevant STREET maintenance authority by December 31 of each year that identifies the STREETS to be upgraded during the following year.
- u. The Applicant shall provide dust control and grading work to the reasonable satisfaction of the County Engineer on STREETS that become aggregate surface STREETS.

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- v. The Applicant shall conduct a post-PV SOLAR FARM construction baseline survey similar to the pre-PV SOLAR FARM construction baseline survey to identify the extent of repairs necessary to return the STREETS to the pre-PV SOLAR FARM construction condition.
  - w. The Applicant shall pay for the cost of all repairs to all STREETS that are damaged by the Applicant during the construction of the PV SOLAR FARM and restore such STREETS to the condition they were in at the time of the pre-PV SOLAR FARM construction inventory.
  - x. All PV SOLAR FARM construction traffic shall exclusively use routes designated in the approved Transportation Impact Analysis.
  - y. The Applicant shall provide liability insurance in an acceptable amount to cover the required STREET construction activities.
  - z. The Applicant shall pay for the present worth costs of life consumed by the construction traffic as determined by the pavement management surveys and reports on the roads which do not show significant enough deterioration to warrant immediate restoration.
  - aa. Provisions for expiration date on the agreement.
  - bb. Other conditions that may be required.
- (2) A condition of the County Board Special Use Permit approval shall be that the Zoning Administrator shall not authorize a Zoning Use Permit for the PV SOLAR FARM until the County Engineer and State's Attorney; or Township Highway Commissioner; or municipality where relevant, has approved a Transportation Impact Analysis provided by the Applicant and prepared by an independent engineer that is mutually acceptable to the Applicant and the County Engineer and State's Attorney; or Township Highway Commissioner; or municipality where relevant, that includes the following:
- a. Identify all such public STREETS or portions thereof that are intended to be used by the Applicant during construction of the PV SOLAR FARM as well as the number of loads, per axle weight of each load; and type of equipment that will be used to transport each load.
  - b. A schedule of the across road culverts and bridges affected by the project and the recommendations as to actions, if any, required with respect to such culverts and bridges and estimated of the cost to replace such culverts and bridges;
  - c. A schedule of the anticipated STREET repair costs to be made in advance of the PV SOLAR FARM construction and following construction of the PV SOLAR FARM.

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- d. The Applicant shall reimburse the County Engineer; or Township Highway Commissioner; or municipality where relevant, for all reasonable engineering fees including the costs of a third party consultant, incurred in connection with the review and approval of the Transportation Impact Analysis.
  - (3) At such time as decommissioning takes place, the Applicant or its successors in interest shall enter into a Roadway use and Repair Agreement with the appropriate highway authority.
- H. Standard Conditions for Coordination with Local Fire Protection District
- (1) The Applicant shall submit to the local fire protection district a copy of the site plan.
  - (2) Upon request by the local fire protection district, the Owner or Operator shall cooperate with the local fire protection district to develop the fire protection district's emergency response plan.
  - (3) Nothing in this section shall alleviate the need to comply with all other applicable fire laws and regulations.
- I. Standard Conditions for Allowable Noise Level
- (1) Noise levels from any PV SOLAR FARM shall be in compliance with the applicable Illinois Pollution Control Board (IPCB) regulations (*35 Illinois Administrative Code* Subtitle H: Noise Parts 900, 901, 910).
  - (2) The Applicant shall submit manufacturer's sound power level characteristics and other relevant data regarding noise characteristics of proposed PV SOLAR FARM equipment necessary for a competent noise analysis.
  - (3) The Applicant, through the use of a qualified professional, as part of the siting approval application process, shall appropriately demonstrate compliance with the above noise requirements as follows:
    - a. The SPECIAL USE permit application for other than a COMMUNITY PV SOLAR FARM shall include a noise analysis that includes the following:
      - (a) The pre-development 24-hour ambient background sound level shall be identified at representative locations near the site of the proposed PV SOLAR FARM.
      - (b) Computer modeling shall be used to generate the anticipated sound level resulting from the operation of the proposed PV SOLAR FARM within 1,500 feet of the proposed PV SOLAR FARM.



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**L. Standard Conditions for Acceptable Wildlife Impacts**

The PV SOLAR FARM shall be located, designed, constructed, and operated so as to avoid and if necessary mitigate the impacts to wildlife to a sustainable level of mortality.

**M. Screening and fencing****(1) Perimeter fencing**

- a. PV SOLAR FARM equipment and structures shall be fully enclosed and secured by a fence with a minimum height of 7 feet.
- b. Knox boxes and keys shall be provided at locked entrances for emergency personnel access.
- c. Vegetation between the fencing and the LOT LINE shall be maintained such that NOXIOUS WEEDS are controlled or eradicated consistent with the Illinois Noxious Weed Law (505 ILCS 100/1 et seq.). Management of the vegetation shall be explained in the application.

**(2) Screening**

- a. A visual screen shall be provided around the perimeter of the PV SOLAR FARM as follows:
  - (a) The visual screen shall be provided for any part of the PV SOLAR FARM that is visible to and located within 1,000 feet of an existing DWELLING or residential DISTRICT except that the visual screen may not be required within the full 1,000 feet of an existing DWELLING or residential DISTRICT provided the applicant submits a landscape plan prepared by an Illinois Registered Landscape Architect and the BOARD finds that the visual screen in the landscape plan provides adequate screening. However, the visual screen shall not be required if the PV SOLAR FARM is not visible to a DWELLING or residential DISTRICT by virtue of the existing topography.
  - (b) The visual screen shall be waived if the owner(s) of a relevant DWELLING(S) have agreed in writing to waive the screening requirement and a copy of the written waiver is submitted to the BOARD or GOVERNING BODY.
  - (c) The visual screen shall be a vegetated buffer as follows:
    - i. A vegetated visual screen buffer that shall include a continuous line of native evergreen foliage and/or native shrubs and/or native trees and/or any existing

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- wooded area and/or plantings of tall native grasses and other native flowering plants and/or an area of agricultural crop production that will conceal the PV SOLAR FARM from view from adjacent abutting property may be authorized as an alternative visual screen subject to specific conditions.
- ii. Any vegetation that is part of the approved visual screen buffer shall be maintained in perpetuity of the PV SOLAR FARM. If the evergreen foliage below a height of 7 feet disappears over time, the screening shall be replaced.
  - iii. The continuous line of native evergreen foliage and/or native shrubs and/or native trees shall be planted at a minimum height of 5 feet tall and shall be planted in multiple rows as required to provide a 50% screen within 2 years of planting. The planting shall otherwise conform to Natural Resources Conservation Service Practice Standard 380 Windbreak/Shelterbreak Establishment except that the planting shall be located as close as possible to the PV SOLAR FARM fence while still providing adequate clearance for maintenance.
  - iv. A planting of tall native grasses and other native flowering plants may be used as a visual screen buffer for any PV module installation that is no more than 8 feet tall provided that the width of planting shall be as authorized by the BOARD and the planting shall otherwise be planted and maintained per the recommendations of the Natural Resources Conservation Service Practice Standard 327 Conservation Cover and further provided that the PV SOLAR FARM perimeter fence is opaque.
  - v. An area of agricultural crop production may also be authorized by the BOARD as an alternative visual screen buffer with a width of planting as authorized by the BOARD provided that the PV SOLAR FARM perimeter fence is opaque. Any area of crop production that is used as a vegetated visual screen shall be planted annually and shall be replanted as necessary to ensure a crop every year regardless of weather or market conditions.
  - vi. Any vegetated screen buffer shall be detailed in a landscape plan drawing that shall be included with the PV SOLAR FARM SPECIAL USE permit application.

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N. Standard Conditions to Minimize Glare

- (1) The design and construction of the PV SOLAR FARM shall minimize glare that may affect adjacent properties and the application shall include an explanation of how glare will be minimized.
- (2) After construction of the PV SOLAR FARM, the Zoning Administrator shall take appropriate enforcement action as necessary to investigate complaints of glare in order to determine the validity of the complaints and take any additional enforcement action as proves warranted to stop any significant glare that is occurring, including but not limited to the following:
  - a. The Zoning Administrator shall make the Environment and Land Use Committee aware of complaints about glare that have been received by the Complaint Hotline.
  - b. If the Environment and Land Use Committee determines that the glare is excessive, the Environment and Land Use Committee shall require the Owner or Operator to take reasonable steps to mitigate the excessive glare such as the installation of additional screening.

O. Standard Condition for Liability Insurance

- (1) The Owner or Operator of the PV SOLAR FARM shall maintain a current general liability policy covering bodily injury and property damage with minimum limits of a least \$5 million per occurrence and \$5 million in the aggregate.
- (2) The general liability policy shall identify landowners in the SPECIAL USE permit as additional insured.

P. Operational Standard Conditions

- (1) Maintenance
  - a. The Owner or Operator of the PV SOLAR FARM must submit, on an annual basis, a summary of operation and maintenance reports to the Environment and Land Use Committee and any other operation and maintenance reports as the Environment and Land Use Committee reasonably requests.
  - b. Any physical modification to the PV SOLAR FARM that increases the number of solar conversion devices or structures and/or the land area occupied by the PV SOLAR FARM shall require a new County Board SPECIAL USE Permit. Like-kind replacements shall not require re-certification nor will replacement of transformers, cabling, etc. provided replacement is done in a fashion similar to the original installation.

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- c. The Application shall explain methods and materials used to clean the PV SOLAR FARM equipment including an estimation of the daily and annual gallons of water used and the source of the water and the management of wastewater. The BOARD may request copies of well records from the Illinois State Water Survey and may require an estimate by a qualified hydrogeologist of the likely impact on adjacent waterwells.

(2) Materials Handling, Storage and Disposal

- a. All solid wastes related to the construction, operation and maintenance of the PV SOLAR FARM shall be removed from the site promptly and disposed of in accordance with all federal, state and local laws.
- b. All hazardous materials related to the construction, operation and maintenance of the PV SOLAR FARM shall be handled, stored, transported and disposed of in accordance with all applicable local, state and federal laws.

(3) Vegetation management

- a. The PV SOLAR FARM SPECIAL USE permit application shall include a weed control plan for the total area of the SPECIAL USE permit including areas both inside of and outside of the perimeter fencing.
- b. The weed control plan shall ensure the control and/or eradication of NOXIOUS WEEDS consistent with the Illinois Noxious Weed Law (505 ILCS 100/1 et seq.)
- c. The weed control plan shall be explained in the application.

Q. Standard Condition for Decommissioning and Site Reclamation Plan

- (1) The Applicant shall submit a signed decommissioning and site reclamation plan conforming to the requirements of paragraph 6.1.1 A.
- (2) In addition to the purposes listed in subparagraph 6.1.1 A.4. the decommissioning and site reclamation plan shall also include provisions for anticipated repairs to any public STREET used for the purpose of reclamation of the PV SOLAR FARM and all costs related to removal of access driveways.
- (3) The decommissioning and site reclamation plan required in paragraph 6.1.1 A. shall also include the following:
  - a. A stipulation that the applicant or successor shall notify the GOVERNING BODY by certified mail of the commencement of voluntary or involuntary bankruptcy proceeding, naming the applicant as debtor, within ten days of commencement of the proceeding.

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- b. A stipulation that the applicant shall agree that the sale, assignment in fact or law, or such other transfer of applicant's financial interest in the PV SOLAR FARM shall in no way affect or change applicant's obligation to continue to comply with the terms of this plan. Any successor in interest, assignee, and all parties to the decommissioning and site reclamation plan shall assume the terms, covenants, and obligations of this plan and agrees to assume all reclamation liability and responsibility for the PV SOLAR FARM.
  - c. Authorization for the GOVERNING BODY and its authorized representatives for right of entry onto the PV SOLAR FARM premises for the purpose of inspecting the methods of reclamation or for performing actual reclamation if necessary.
  - d. A stipulation that at such time as decommissioning takes place the applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan are required to enter into a Roadway Use and Repair Agreement with the relevant highway authority.
  - e. A stipulation that the Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall provide evidence of any new, additional, or substitute financing or security agreement to the Zoning Administrator throughout the operating lifetime of the project.
  - f. A stipulation that the Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall be obliged to perform the work in the decommissioning and site reclamation plan before abandoning the PV SOLAR FARM or prior to ceasing production of electricity from the PV SOLAR FARM, after it has begun, other than in the ordinary course of business. This obligation shall be independent of the obligation to pay financial assurance, and shall not be limited by the amount of financial assurance. The obligation to perform the reclamation work shall constitute a covenant running with the land.
  - g. The decommissioning and site reclamation plan shall provide for payment of any associated costs that Champaign County may incur in the event that decommissioning is actually required. Associated costs include all administrative and ancillary costs associated with drawing upon the financial assurance and performing the reclamation work and shall include but not be limited to attorney's fees; construction management and other professional service fees; and the costs of preparing requests for proposals and bidding documents required to comply with state law or Champaign County purchasing policies.

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- h. The depth of removal of foundation concrete below ground shall be a minimum of 54 inches. The depth of removal of foundation concrete shall be certified in writing by an Illinois Licensed Professional Engineer and the certification shall be submitted to the Zoning Administrator.
- i. Underground electrical cables at a depth of 5 feet or greater may be left in place.
- j. The hole resulting from the removal of foundation concrete during decommissioning shall be backfilled as follows:
  - (a) The excavation resulting from the removal of foundation concrete shall only be backfilled with subsoil and topsoil in similar depths and similar types as existed at the time of the original PV SOLAR FARM construction except that a lesser quality topsoil or a combination of a lesser quality topsoil and a subsoil that is similar to the native subsoil may be used at depths corresponding to the native subsoil but not less than 12 inches below grade.
  - (b) The native soils excavated at the time of the original PV SOLAR FARM construction may be used to backfill the concrete foundation excavations at the time of decommissioning provided that the soils are adequately stored throughout the operating lifetime of the PV SOLAR FARM. The methods for storing the excavated native soils during the operating lifetime of the PV SOLAR FARM shall be included in the decommissioning and site reclamation plan.
  - (c) If the excavated native soils are not stored for use for backfilling the concrete foundation excavations, a qualified soil scientist or Illinois Licensed Professional Engineer shall certify that the actual soils used to backfill the concrete foundation excavations are of equal or greater quality than the native soils or that, in the case of subsoil, the backfill soil meets the requirements of this paragraph. The certification shall be submitted to the Zoning Administrator.
  - (d) An Illinois Licensed Professional Engineer shall certify in writing that the concrete foundation excavations have been backfilled with soil to such a depth and with a minimum of compaction that is consistent with the restoration of productive agricultural use such that the depth of soil is expected to be no less than 54 inches within one year after backfilling.

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- k. A stipulation that should the decommissioning and site reclamation plan be deemed invalid by a court of competent jurisdiction the PV SOLAR FARM SPECIAL USE permit shall be deemed void.
  - l. A stipulation that the Applicant's obligation to complete the decommissioning and site reclamation plan and to pay all associated costs shall be independent of the Applicant's obligation to provide financial assurance.
  - m. A stipulation that the liability of the Applicant's failure to complete the decommissioning and site reclamation plan or any breach of the decommissioning and site reclamation plan requirement shall not be capped by the amount of the financial assurance.
  - n. If the Applicant desires to remove equipment or property credited to the estimated salvage value without the concurrent replacement of the property with property of equal or greater salvage value, or if the Applicant installs equipment or property increasing the cost of decommissioning after the PV SOLAR FARM begins to produce electricity, at any point, the Applicant shall first obtain the consent of the Zoning Administrator. If the Applicant's lien holders remove equipment or property credited to the salvage value, the Applicant shall promptly notify the Zoning Administrator. In either of these events, the total financial assurance shall be adjusted to reflect any change in total salvage value and total decommissioning costs resulting from any such removal or installation.
- (4) To comply with paragraph 6.1.1 A.5., the Applicant shall provide financial assurance in the form of an irrevocable letter of credit as follows:
- a. At the time of Special Use Permit approval, the amount of financial assurance to be provided for the decommissioning and site reclamation plan shall be 125% of the decommissioning cost as determined in the independent engineer's cost estimate to complete the decommissioning work described in Sections 6.1.1 A.4.a. and 6.1.1 A.4.b. and 6.1.1 A.4.c. and shall otherwise be compliant with Section 6.1.1.A.5. except that if the SOLAR PV modules have an unlimited warranty of at least 10 years and also have a limited power warranty to provide not less not than 80% nominal power output up to 25 years and proof of that warranty is provided at the time of Zoning Use Permit approval, financial assurance may be provided for the decommissioning and site reclamation plan as follows:
    - (a) No Zoning Use Permit to authorize construction of the SOLAR FARM shall be authorized by the Zoning Administrator until the SOLAR FARM owner shall provide the County with Financial Assurance to cover 12.5% of the decommissioning cost as determined in the independent

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- engineer's cost estimate to complete the decommissioning work described in Sections 6.1.1 A.4.a. and 6.1.1 A.4.b. and 6.1.1 A.4.c. and otherwise compliant with Section 6.1.1 A.5.
- (b) On or before the sixth anniversary of the Commercial Operation Date, the SOLAR FARM Owner shall provide the County with Financial Assurance to cover 62.5% of the decommissioning cost as determined in the independent engineer's cost estimate to complete the decommissioning work described in Sections 6.1.1 A.4.a. and 6.1.1 A.4.b. and 6.1.1 A.4.c. and otherwise compliant with Section 6.1.1 A.5.
- (c) On or before the eleventh anniversary of the Commercial Operation Date, the SOLAR FARM Owner shall provide the County with Financial Assurance to cover 125% of the decommissioning cost as determined in the independent engineer's cost estimate to complete the decommissioning work described in Sections 6.1.1 A.4.a. and 6.1.1 A.4.b. and 6.1.1 A.4.c. and otherwise compliant with Section 6.1.1 A.5.
- b. Net salvage value may be deducted from decommissioning costs as follows:
- (a) One of the following standards shall be met:
- i. The Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall maintain the PV SOLAR FARM free and clear of liens and encumbrances, including financing liens and shall provide proof of the same prior to issuance of the SPECIAL USE Permit; or
  - ii. The Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall deduct from the salvage value credit the amount of any lien or encumbrance on the PV SOLAR FARM; or
  - iii. Any and all financing and/or financial security agreements entered into by the Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall expressly provide that the agreements are subject to the covenant required by Section 6.1.1 A.2 that the reclamation work be done.
- (b) The Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall provide proof

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- of compliance with paragraph 6.1.5. Q.(4)b.(a) prior to issuance of any Zoning Use Permit and upon every renewal of the financial assurance and at any other time upon the request of the Zoning Administrator.
- (c) The Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall provide in the decommissioning and site reclamation plan for legal transfer of the STRUCTURE to the demolisher to pay the costs of reclamation work, should the reclamation work be performed.
  - (d) The net estimated salvage value that is deducted from the estimated decommissioning costs shall be the salvage value that results after all related costs for demolition and any required preparation for transportation for reuse or recycling or for simple disposal and other similar costs including but not limited to the decommissioning of the PV SOLAR FARM STRUCTURES, equipment, and access roads.
  - (e) Estimated salvage value shall be based on the average salvage price of the past five years as published in a reputable source for salvage values and shall reflect sound engineering judgment as to anticipated changes in salvage prices prior to the next update of estimated net salvage value.
  - (f) The deduction from the estimated decommissioning costs for net estimated salvage value shall be capped at 70% of the total net estimated salvage value even though the total actual salvage value shall be available in the event that decommissioning is actually required.
  - (g) The total financial assurance after deduction of the net estimated salvage value shall not be less than \$1,000 per acre.
  - (h) The credit for net estimated salvage value attributable to any PV SOLAR FARM may not exceed the estimated cost of removal of the above-ground portion of that PV SOLAR FARM on the subject site.
- c. The GOVERNING BODY has the right to require multiple letters of credit based on the regulations governing federal insurance for deposits.
  - d. The Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall adjust the amount of the financial assurance to ensure that it reflects current and accurate information as follows:

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- (a) At least once every three years for the first 12 years of the financial assurance and at least once every two years thereafter or, if the SOLAR PV modules have an unlimited warranty of at least 10 years and also have a limited power warranty to provide not less not than 80% nominal power output up to 25 years and proof of that warranty is provided at the time of Zoning Use Permit approval, then at least once every five years for the first 25 years of the financial assurance and at least once every two years thereafter, the Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall use an independent Illinois Licensed Professional Engineer to provide updated estimates of decommissioning costs and salvage value, by including any changes due to inflation and/or change in salvage price. The Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan shall, upon receipt, provide a copy of the adjusted Professional Engineer's report to the Zoning Administrator.
- (b) At all times, the value of the irrevocable letter of credit shall equal or exceed the amount of the independent engineer's cost estimate as increased by known and documented rates of inflation based on the Consumer Price Index since the PV SOLAR FARM was approved.
- e. The long term corporate debt (credit) rating of the letter of credit issuing financial institution by both Standard & Poor's Financial Services LLC (S&P) and Moody's Investors Service (Moody's) shall be equal to or greater than the minimum acceptable long term corporate debt (credit) rating, as follows:
- (a) The Zoning Administrator shall verify the long term corporate debt (credit) rating of the proposed financial institution by both Standard & Poor's Financial Services LLC (S&P) and Moody's Investors Service (Moody's).
- (b) The minimum acceptable long term corporate debt (credit) rating of the proposed financial institution shall be a rating of "A" by S&P or a rating of "A2" by Moody's.
- (c) Whenever the most current long term corporate debt (credit) rating of the proposed financial institution by either S&P or Moody's is lower than the minimum acceptable long term corporate debt (credit) rating, the letter of credit shall be replaced with a new irrevocable letter of credit from an issuing financial institution whose most current long term corporate debt (credit) rating by either S&P or Moody's meets or exceeds the minimum acceptable long term corporate debt (credit) rating,

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- f. At all times the value of the irrevocable letter of credit shall be increased annually as necessary to reflect actual rates of inflation over the life span of the PV SOLAR FARM and the amount shall be equal to or exceed 125% of the amount of the independent engineer's cost estimate as increased by known and documented rates of inflation since the PV SOLAR FARM was approved.
  - g. Should the salvage value of components be adjusted downward or the decommissioning costs adjusted upward pursuant to paragraph 6.1.5 Q.(4)d., the amount of the irrevocable letter of credit pursuant to this paragraph 6.1.5 Q.(4) shall be increased to reflect the adjustment, as if the adjusted estimate were the initial estimate.
  - h. Any financial assurance required per the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture as required by paragraph 6.1.5 R. shall count towards the total financial assurance required for compliance with paragraph 6.1.1 A.5.
  - i. Unless the Governing Body approves otherwise, the Champaign County State's Attorney's Office shall review and approve every Letter of Credit prior to acceptance by the Zoning Administrator.
- (5) In addition to the conditions listed in subparagraph 6.1.1 A.9. the Zoning Administrator may also draw on the funds for the following reasons:
- a. In the event that any PV SOLAR FARM or component thereof ceases to be functional for more than six consecutive months after it starts producing electricity and the Owner is not diligently repairing such PV SOLAR FARM or component.
  - b. In the event that the Owner declares the PV SOLAR FARM or any PV SOLAR FARM component to be functionally obsolete for tax purposes.
  - c. There is a delay in the construction of any PV SOLAR FARM of more than 6 months after construction on that PV SOLAR FARM begins.
  - d. Any PV SOLAR FARM or component thereof that appears in a state of disrepair or imminent collapse and/or creates an imminent threat to the health or safety of the public or any person.
  - e. Any PV SOLAR FARM or component thereof that is otherwise derelict for a period of 6 months.
  - f. The PV SOLAR FARM is in violation of the terms of the PV SOLAR FARM SPECIAL USE permit for a period exceeding ninety (90) days.
  - g. The Applicant, its successors in interest, and all parties to the decommissioning and site reclamation plan has failed to maintain

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- financial assurance in the form and amount required by the special use permit or compromised the COUNTY's interest in the decommissioning and site reclamation plan.
- h. The COUNTY discovers any material misstatement of fact or misleading omission of fact made by the Applicant in the course of the special use permit zoning case.
  - i. The Applicant has either failed to receive a copy of the certification of design compliance required by paragraph 6.1.5 D. or failed to submit it to the County within 12 consecutive months of receiving a Zoning Use Permit regardless of the efforts of the Applicant to obtain such certification.
- (6) The Zoning Administrator may, but is not required to, deem the PV SOLAR FARM abandoned, or the standards set forth in Section 6.1.5 Q.(5) met, with respect to some, but not all, of the PV SOLAR FARM. In that event, the Zoning Administrator may draw upon the financial assurance to perform the reclamation work as to that portion of the PV SOLAR FARM only. Upon completion of that reclamation work, the salvage value and reclamation costs shall be recalculated as to the remaining PV SOLAR FARM.
  - (7) The Decommissioning and Site Reclamation Plan shall be included as a condition of approval by the BOARD and the signed and executed irrevocable letter of credit and evidence of the escrow account must be submitted to the Zoning Administrator prior to any Zoning Use Permit approval.
- R. Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture.
- (1) If provided by state law, the Applicant shall enter into an Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture.
  - (2) The Applicant shall bear full responsibility for coordinating any special conditions required in the SPECIAL USE Permit in order to ensure compliance with the signed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture.
  - (3) All requirements of the signed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture shall become requirements of the County Board SPECIAL USE Permit.
  - (4) Champaign County shall have the right to enforce all requirements of the signed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture.

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S. Complaint Hotline

- (1) Prior to the commencement of construction on the PV SOLAR FARM and during the entire term of the County Board SPECIAL USE permit and any extension, the Applicant and Owner shall establish a telephone number hotline for the general public to call with any complaints or questions.
- (2) The telephone number hotline shall be publicized and posted at the operations and maintenance center and the construction marshalling yard.
- (3) The telephone number hotline shall be manned during usual business hours and shall be an answering recording service during other hours.
- (4) Each complaint call to the telephone number hotline shall be logged and identify the name and address of the caller and the reason for the call.
- (5) All calls shall be recorded and the recording shall be saved for transcription for a minimum of two years.
- (6) A copy of the telephone number hotline shall be provided to the Zoning Administrator on a monthly basis.
- (7) The Applicant and Owner shall take necessary actions to resolve all legitimate complaints.

T. Standard Condition for Expiration of PV SOLAR FARM County Board SPECIAL USE Permit

A PV SOLAR FARM County Board SPECIAL USE Permit designation shall expire in 10 years if no Zoning Use Permit is granted.

U. Application Requirements

- (1) In addition to all other information required on the SPECIAL USE Permit application and required by Section 9.1.11 A.2., the application shall contain or be accompanied by the following information:
  - a. A PV SOLAR FARM Project Summary, including, to the extent available:
    - (a) A general description of the project, including its approximate DC and AC generating capacity; the maximum number and type of solar devices; and the potential equipment manufacturer(s).
    - (b) The specific proposed location of the PV SOLAR FARM including all tax parcels on which the PV SOLAR FARM will be constructed.

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- (c) The specific proposed location of all tax parcels required to be included in the PV SOLAR FARM County Board SPECIAL USE Permit.
    - (d) A description of the Applicant; Owner and Operator, including their respective business structures.
  - b. The name(s), address(es), and phone number(s) of the Applicant(s), Owner and Operator, and all property owner(s) for the PV SOLAR FARM County Board SPECIAL USE permit.
  - c. A site plan for the SOLAR FARM indicating the following:
    - (a) The approximate planned location of all PV SOLAR FARM STRUCTURES, property lines (including identification of adjoining properties), required separations, public access roads and turnout locations, access driveways, solar devices, electrical inverter(s), electrical transformer(s), cabling, switching station, electrical cabling from the PV SOLAR FARM to the Substations(s), ancillary equipment, screening and fencing, third party transmission lines, meteorological station, maintenance and management facilities, and layout of all structures within the geographical boundaries of any applicable setback.
    - (b) The site plan shall clearly indicate the area of the proposed PV SOLAR FARM County Board SPECIAL USE Permit as required by subparagraph 6.1.5 A.(1).
    - (c) The location of all below-ground wiring.
    - (d) The location, height, and appearance of all above-ground wiring and wiring structures.
    - (e) The separation of all PV SOLAR FARM structures from adjacent DWELLINGS and/or PRINCIPAL BUILDINGS or uses shall be dimensioned on the approved site plan and that dimension shall establish the effective minimum separation that shall be required for any Zoning Use Permit. Greater separation and somewhat different locations may be provided in the approved site plan for the Zoning Use Permit provided that that the greater separation does not increase the noise impacts and/or glare that were approved in the PV SOLAR FARM County Board SPECIAL USE Permit. PV SOLAR FARM structures includes substations, third party transmission lines, maintenance and management facilities, or other significant structures.
  - d. All other required studies, reports, certifications, and approvals demonstrating compliance with the provisions of this Ordinance.

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- e. The PV SOLAR FARM SPECIAL USE permit application shall include documentation that the applicant has provided a complete copy of the SPECIAL USE permit application to any municipality within one-and-one-half miles of the proposed PV SOLAR FARM as required by Section 6.1.5 B.(2)a.(b).
  - f. A municipal resolution regarding the PV SOLAR FARM by any municipality located within one-and-one-half miles of the PV SOLAR FARM must be submitted to the ZONING ADMINISTRATOR prior to the consideration of the PV SOLAR FARM SPECIAL USE permit by the Champaign County Board or, in the absence of such a resolution, the ZONING ADMINISTRATOR shall provide documentation to the County Board that any municipality within one-and-one-half miles of the PV SOLAR FARM was provided notice of the meeting dates for consideration of the proposed PV SOLAR FARM SPECIAL USE Permit for both the Environment and Land Use Committee and the County Board.
  - g. Documentation of an executed interconnection agreement with the appropriate electric utility shall be provided prior to issuance of a Zoning Compliance Certificate to authorize operation of the PV SOLAR FARM as required by Section 6.1.5 B.(3)b.
- (2) The Applicant shall notify the COUNTY of any changes to the information provided above that occurs while the County Board SPECIAL USE permit application is pending.
  - (3) The Applicant shall include a copy of the signed Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture with the Zoning Use Permit Application to authorize construction.

**9. Add the following paragraph 9.3.1 J. for Zoning Use Permit fee:**

- J. PV SOLAR FARM with not more than 7.5 megawatt nameplate rating..... \$1,800 per megawatt (includes COMMUNITY PV SOLAR FARM)  
  
PV SOLAR FARM with nameplate rating of more than 7.5 megawatts.... \$13,500 plus \$1,260 for each megawatt more than 7.5 megawatts

**10. Revise subsection 9.3.3 as follows:**

**9.3.3 Zoning Case Filing Fees**

- A. General Provisions
  - (1) No zoning case filing shall be accepted until the filing fee has been paid.
  - (2) No zoning case filing fee shall be waived unless the Zoning Administrator determines that the petition is the only means reasonably available to bring a

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property into compliance with the provisions of this ordinance and the non-compliance is due solely to staff error.

- (3) No zoning case filing fee shall be refunded after required legal notice has been made by mail or publication unless the Zoning Administrator determines such filing to have been based solely upon staff error.
- (4) No amendment to any petition which requires new legal notice shall be considered until an amended petition fee has been received unless the Zoning Administrator determines such amendment to be required due solely to staff error.
- (5) The fee for SPECIAL USE permits shall be determined based on the larger of the following (except for County Board WIND FARM or PV SOLAR FARM SPECIAL USE Permits):
  - a. the area of farmland taken out of production as a result of the SPECIAL USE; or
  - b. when farmland will not be taken out of production as a result of the SPECIAL USE, the land area taken up by the existing STRUCTURES and all proposed CONSTRUCTION proposed in the SPECIAL USE application.
- (6) When some combination of VARIANCE, SPECIAL USE and Map Amendment cases is required simultaneously for the same property, the total filing fee shall include the following (except for County Board WIND FARM or PV SOLAR FARM Special Use Permits):
  - a. The standard fee for the most expensive individual zoning case; and
  - b. one-half of the standard fee for any other required VARIANCE, SPECIAL USE, or Map Amendment provided that
  - c. no additional fees shall be included for multiple zoning cases of the same type that can be advertised in the same legal advertisement.

**B. Fees**

(1) VARIANCES

a. ADMINISTRATIVE VARIANCES.. \$100

b. Minor or Major VARIANCES..... \$200

(2) SPECIAL USE permits and Map Amendments (except for County Board WIND FARM or PV SOLAR FARM Special Use Permit)

a. Two acres or less and Base Fee for larger areas .....\$400

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- b. More than two acres but no more than 12 acres. ....add \$40 per acre to Base Fee for each acre over two acres
  - c. More than 12 acres add \$10 per acre for each acre over 12 acres and add to fees in a. and b. above
- (3) Appeals and Interpretations.....\$200
  - (4) Change of Nonconforming Use.....\$100
  - (5) Amendment to Petitions (requiring new legal notice) .....\$100
  - (6) County Board WIND FARM Special Use Permit..... \$20,000 or \$440 per WIND FARM TURBINE TOWER, whichever is greater
  - (7) BIG WIND TURBINE TOWER SPECIAL USE Permit per BIG WIND ..... TURBINE TOWER.....\$3,300
  - (8) County Board PV SOLAR FARM Special Use Permit
    - PV SOLAR FARM with not more than 7.5 megawatt nameplate rating..... \$1,320 per megawatt (includes COMMUNITY PV SOLAR FARM)
    - PV SOLAR FARM with nameplate rating of more than 7.5 megawatts to 112.5 megawatts.....\$9,240 plus \$102 for each megawatt more than 7.5 megawatts and up to 112.5 megawatts
    - PV SOLAR FARM with more than 112.5 megawatt nameplate rating..... \$180 per megawatt