



**CHAMPAIGN COUNTY BOARD  
ENVIRONMENT and LAND USE COMMITTEE AGENDA**

County of Champaign, Urbana, Illinois  
Thursday, May 4, 2023 - 6:30 p.m.

Shields-Carter Meeting Room  
Brookens Administrative Center, 1776 E. Washington St., Urbana

**Committee Members:**

Eric Thorsland – Chair  
Aaron Esry – Vice-Chair  
Jim Goss  
Kyle Patterson  
Emily Rodriguez  
Jilmala Rogers  
Chris Stohr

<b>Agenda</b>	<b>Page #'s</b>
I. Call to Order	
II. Roll Call	
III. Approval of Agenda/Addendum	
IV. Approval of Minutes	
A. April 6, 2023 – Regular Meeting	1 - 6
V. Public Participation	
VI. Communications	
VII. <b><u>New Business: Items for Information Only</u></b>	
A. <b>Online registration open for May 20, 2023, Residential Electronics Collection Event at Parkland College</b>	
B. <b>Illinois Environmental Protection Agency Notice of Application for a Construction Permit IL23040002 for a diesel emergency generator at the University of Illinois Advanced Computational Building at 1011 West Springfield Avenue, Urbana IL</b>	7 - 8
C. <b>Notice of Champaign County inclusion in Class Action Settlement in City of Long Beach, et al. v. Monsanto Company and receipt of funds</b>	9 - 16
D. <b>Illinois Environmental Protection Agency Notice of Proposed Renewal of the Clean Air Act Permit for the Peoples Gas Light and Coke Company Manlove Gas Storage Field</b>	17
VIII. <b><u>New Business: Items to be Recommended to the County Board</u></b>	
A. <b>Zoning Case 074-S-22.</b> A request by Medanos Solar LLC, PO Box 14055, Chicago, IL 60614, a subsidiary of Cultivate Power, LLC, owned by Brian Matthay, 2819 Buchanan St, San Francisco, CA 94123 and Noah Hyte, 321 Beloit Ave, Los Angeles, CA 90049; via agent Kiera Gavin, and participating landowner Terry Wolf, 1409 W Bridalveil Pl, Oro Valley, AZ 85737, to authorize a Community PV Solar Farm with a total nameplate capacity of 5 megawatts (MW), including access roads and wiring, in the AG-1 and AG-2 Agriculture Zoning Districts,	18 - 47

*All meetings are at Brookens Administrative Center – 1776 E Washington Street in Urbana – unless otherwise noted. To enter Brookens after 4:30 p.m., enter at the north (rear) entrance located off Lierman Avenue. Champaign County will generally, upon request, provide appropriate aids and services leading to effective communication for qualified persons with disabilities. Please contact Administrative Services, 217-384-3776, as soon as possible but no later than 48 hours before the scheduled meeting.*

**CHAMPAIGN COUNTY BOARD**  
**ENVIRONMENT and LAND USE COMMITTEE (ELUC)**  
**May 4, 2023 Agenda**

on a 48.64-acre tract in the Southeast Quarter of the Southwest Quarter and the Southwest Quarter of the Southeast Quarter and part of a 197.02-acre tract in the east half of Section 4, Township 18 North, Range 14 West of the Second Principal Meridian in South Homer Township, and commonly known as farmland owned by Terry Wolf on the north side of CR 1100N (County Highway 15) northeast of the Village of Homer, Illinois and including the following waivers of standard conditions:

Part A: A waiver for a distance of 0 feet between a PV Solar Farm and a municipal boundary in lieu of the minimum required one-half mile (2,640 feet), per Section 6.1.5 B.(2)a. of the Zoning Ordinance.

Part B: A waiver for not providing a Decommissioning and Site Reclamation Plan that includes cost estimates prepared by an Illinois Licensed Professional Engineer prior to consideration of the Special Use Permit by the Board, per Section 6.1.1 A.3. of the Zoning Ordinance.

Part C: A waiver for not entering into a Roadway Upgrade and Maintenance Agreement or waiver therefrom with the relevant local highway authority prior to consideration of the Special Use Permit by the Board, per Section 6.1.5 G. of the Zoning Ordinance.

Part D: A waiver for not completing consultation with the State Historic Preservation Officer of the Illinois Department of Natural Resources prior to consideration of the Special Use Permit by the Board, per Section 6.1.5 K. of the Zoning Ordinance.

- B. Decommissioning and Site Reclamation Plan for Zoning Case 074-S-22.** A request by Medanos Solar LLC, PO Box 14055, Chicago, IL 60614, a subsidiary of Cultivate Power, LLC, owned by Brian Matthay, 2819 Buchanan St, San Francisco, CA 94123 and Noah Hyte, 321 Beloit Ave, Los Angeles, CA 90049; via agent Kiera Gavin, and participating landowner Terry Wolf, 1409 W Bridalveil Pl, Oro Valley, AZ 85737, to approve the Decommissioning and Site Reclamation Plan for the PV Solar Farm in Zoning Case 074-S-22 with a total nameplate capacity of 5 megawatts (MW), including access roads and wiring, in the AG-1 and AG-2 Agriculture Zoning Districts, on a 48.64-acre tract in the Southeast Quarter of the Southwest Quarter and the Southwest Quarter of the Southeast Quarter and part of a 197.02-acre tract in the east half of Section 4, Township 18 North, Range 14 West of the Second Principal Meridian in South Homer Township, and commonly known as farmland owned by Terry Wolf on the north side of CR 1100N (County Highway 15) northeast of the Village of Homer, Illinois. 48 - 62
- C. Zoning Case 035-AM-21.** A request by Jeffrey Jenkins d.b.a Walnut Grove MHC to amend the Zoning Map to change the zoning district designation from the AG-1 Agriculture Zoning District to the R-5 Manufactured Home Park Zoning District in order to operate the proposed Special Use with waivers in related Zoning Case 036-S-21 for a proposed 8 lot expansion of a non-conforming manufactured home park on a 9.68-acre tract in the Northwest Quarter of the Northwest Quarter of Section 10, Township 20 North, Range 9 East of the Third 63 - 78

**CHAMPAIGN COUNTY BOARD  
ENVIRONMENT and LAND USE COMMITTEE (ELUC)  
May 4, 2023 Agenda**

Principal Meridian in Somer Township and commonly known as Walnut Grove MHC with an address of 1513 CR 2300N, Urbana.

- D. Approval of documents fulfilling special conditions for Zoning Case 898-S-18 (BayWa r.e.).** 79 - 86  
A request by Prairie Solar 1, LLC, a PV solar farm that was previously approved in Case 898-S-18 in Ordinance No.2019-1 on January 24, 2019, and that is wholly owned by BayWa r.e. Development, LLC, via agent Brandon Reinhardt, Associate Director of Development for BayWa r.e. Solar Projects LLC, 18575 Jamboree Road, Suite 850, Irvine, CA 92612, to authorize the following documents pursuant to special conditions in Case 898-S-18:
- 1. A Decommissioning and Site Reclamation Plan** 87 - 103
  - 2. Road use agreements with the Champaign County Highway Department, Sidney Township, and the Village of Homer** 104 - 106
  - 3. A revised noise analysis with a proposed revision of the special condition requiring noise reduction kits on the inverters** 107 - 154
  - 4. Vegetative screening around the relevant portions of the fenced area.** 155
- E. Annual Facility Inspection Report for the period 4/1/22 – 3/31/23 for Champaign County’s National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Storm Water Discharge Permit with the Illinois Environmental Protection Agency (IEPA)** 156 - 189
- IX. Other Business
- X. Chair’s Report
- XI. Designation of Items to be Placed on the Consent Agenda
- XII. Adjournment



**Champaign County Board  
Environment and Land Use Committee (ELUC)  
County of Champaign, Urbana, Illinois**

1 **MINUTES – Subject to Review and Approval**

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2 DATE: Thursday, April 6, 2023  
3 TIME: 6:30 p.m.  
4 PLACE: Shields-Carter Meeting Room  
5 Brookens Administrative Center  
6 1776 E Washington, Urbana, IL 61802

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7 **Committee Members**

Present	Absent
Aaron Esry (Vice-Chair)	
Jim Goss	
Kyle Patterson	
	Emily Rodriguez
	Jilmala Rogers
Chris Stohr	
Eric Thorsland (Chair)	

8  
9 **County Staff:** John Hall (Zoning Administrator) and Mary Ward (Recording Secretary)

10  
11 **Others Present:** Stan Harper, County Board Member

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12 **MINUTES**

13  
14 **I. Call to Order**

15 Committee Chair Thorsland called the meeting to order at 6:32 p.m.

16  
17 **II. Roll Call**

18 Roll call was taken, and a quorum was declared present.

19  
20 **III. Approval of Agenda/Addendum**

21  
22 **MOTION** by Mr. Goss to approve the agenda and addendum, seconded by Mr. Stohr. Upon voice vote, the  
23 **MOTION CARRIED** unanimously to approve the agenda and addendum.

24  
25 **IV. Approval of Minutes**

26 A. March 9, 2023 – Regular Meeting

27  
28 **MOTION** by Mr. Esry to approve the minutes of the March 9, 2023 regular meeting, seconded by Mr. Goss.  
29 Upon voice vote, the **MOTION CARRIED** unanimously to approve the minutes.

30  
31  
32  
33



34 **V. Public Participation**

35  
36 Peggy Huson, Urbana, spoke regarding some properties with nuisance lawns in the Edgewood subdivision.  
37 There are thistles and other weeds that grow extremely tall and, in some cases, overtake the sidewalk making it  
38 impassable. They also pose a safety problem at an intersection as the weeds are so big it's hard to see.  
39

40 Tony Grilo with IAG Investments LLC was here in support of Zoning Case 080-S-22. He will be available to answer  
41 any questions the committee may have.  
42

43 Steve Schmall, Urbana, Edgewood subdivision. Mr. Schmall spoke on the issues with some properties in the  
44 Subdivision. He is asking for amendment to the nuisance ordinance and that it match the City of Urbana and  
45 that of Champaign that grass may not be more than 8-inches tall.  
46

47 Tom Smith, Homer, spoke on the Medanos Solar project. He wanted to thank the ZBA for all their work on  
48 the solar farm case. He had a concern that the Decommissioning and Site Reclamation Plan was not presented  
49 to the Zoning Board of Appeals.  
50

51 Kiera Gavin, Chicago, - Agent for Medanos Solar – pointed out several changes that had been made between  
52 the time the original plan was presented and what it looks like now. Drainage was a big point of concern for  
53 the Village as a tile runs through the property that drains the northeast part of Homer. Changes have been  
54 made and a dedicated corridor for the tile will be mapped out in the final plan. She also addressed the concerns  
55 the Village had made in their resolution and changes they had made to address those concerns.  
56

57 Jim White, Homer – Mayor of Homer – Appreciates the ZBA and that they were not willing to grant the waiver  
58 and understands that the State is taking control of zoning in these cases. There are concerns if they sell to  
59 another developer that they should have to follow all the same covenants. The citizens of Homer are against  
60 this. It does not benefit Homer. They get no money off of this and does not bring in any jobs.  
61

62 **VI. Communications**

63  
64 Mr. Stohr reminded the Committee that the Household Hazardous Waste collection is coming up. There are  
65 still openings to sign up. The Urbana Sustainability Committee heard a preliminary report on the Aquifer  
66 Mapping project. The researcher working on this will come to the County Board sometime in June.  
67

68 Mr. Harper, Ogden, County Board District 3 member – disappointed that this Committee didn't take action  
69 when they had the opportunity on Wind Farm zoning. A 7-0 vote came from the ZBA on the Wind Farm zoning  
70 ordinance. People don't want the Wind Farm by Philo. Also, regarding aerial application on farms, some  
71 companies won't fly in wind farm areas and those that do, it will cost you a lot more. We had a chance to do  
72 something regardless of what the State says. He shared articles on wind turbines that have fallen over and ones  
73 that have caught fire. He feels prime farmland should not be taken out of production; projects should be put on  
74 marginal land. His job is to grow food. We will need to feed 10 billion people by 2050. Hopes Champaign County  
75 has the guts to fight the State on this issue.  
76

77 **VII. New Business: Items for Information Only**

78 A. Online registration still open for April 15, 2023, Household Hazardous Waste Collection Event at State Farm  
79 Center  
80

81 There are still hundreds of slots open to register for this event.  
82

83 **VIII. New Business: Items to Receive and Place on File by ELUC to Allow a 30-Day Review Period**

84 A. **Zoning Case 074-S-22.** A request by Medanos Solar LLC, PO Box 14055 Chicago, IL 60614, a subsidiary of  
85 Cultivate Power, LLC, owned by Brian Matthay, 2819 Buchanan St, San Francisco, CA 94123 and Noah HYTE,  
86 321 Beloit Ave, Los Angeles, CA 90049; via agent Kiera Gavin, and participating landowner Terry Wolf,  
87 1409 W Bridalveil Pl, Oro Valley, AZ 85737, to authorize a Community PV Solar Farm with a total nameplate  
88 capacity of 5 megawatts (MW), including access roads and wiring, in the AG-1 and AG-2 Agriculture Zoning  
89 Districts, on a 48.64-acre tract  
90 in the Southeast Quarter of the Southwest Quarter and the Southwest Quarter of the Southeast Quarter  
91 and part of a 197.02-acre tract in the east half of Section 4, Township 18 North, Range 14 West of the  
92 Second Principal Meridian in South Homer Township, and commonly known as farmland owned by Terry  
93 Wolf on the north side of CR 1100N (County Highway 15) northeast of the Village of Homer, Illinois, and  
94 including the following waivers of standard conditions:

95  
96 Part A: A waiver for a distance of 0 feet between a PV Solar Farm and a municipal boundary in lieu of the  
97 minimum required one-half mile (2,640 feet), per Section 6.1.5 B.(2)a. of the Zoning Ordinance.

98  
99 Part B: A waiver for not providing a Decommissioning and Site Reclamation Plan that includes cost  
100 estimates prepared by an Illinois Licensed Professional Engineer prior to consideration of the  
101 Special Use Permit by the Board, per Section 6.1.1 A.3. of the Zoning Ordinance.

102  
103 Part C: A waiver for not entering into a Roadway Upgrade and Maintenance Agreement or waiver there  
104 from with the relevant local highway authority prior to consideration of the Special Use Permit by  
105 the Board, per Section 6.1.5 G. of the Zoning Ordinance.

106  
107 Part D: A waiver for not completing consultation with the State Historic Preservation Officer of the Illinois  
108 Department of Natural Resources prior to consideration of the Special Use Permit by the Board,  
109 per Section 6.1.5 K. of the Zoning Ordinance.

110  
111 Mr. Hall stated that Part B, the waiver for the Decommissioning and Site Reclamation Plan, we now have  
112 that plan, and it is on the agenda. There is a condition that the State Historic Preservation review will  
113 happen before the Special Use Permit is granted. This is to sit at ELUC for a month, so residents will have  
114 time to look at and study the Decommissioning and Site Reclamation Plan. The Village of Homer is  
115 opposed to the Special Use Permit.

116  
117 Mr. Stohr asked about inverter placement and if there is a substation. Ms. Gavin explained the  
118 placement and said that the project does not have a dedicated substation and will interconnect to the  
119 existing overhead distribution scale line and then interconnect through the substation on the west side  
120 of Homer. There is capacity in the line to take that.

121  
122 Mr. Esry shared that there is another company looking to put in a large solar farm near Myra. They are  
123 looking to tie directly into a high voltage powerline that runs in that area. They call it a line-break and  
124 can do this if there is capacity.

125  
126 Mr. Goss is against this. The Village and people out there don't want it. Feels the State has disrespected  
127 the mile and a half and doesn't want that to become the norm. These projects do not belong on prime  
128 farmland.

129  
130 Mr. Thorsland addressed the changes in the site plan and that there was an effort to make changes to  
131 push everything back from the town hall and Ameren is going to move where the poles were. The

landowner has the right to use his land as he sees fit. He agrees that these should not be on prime farm ground. The ZBA was not unanimous in their vote to not recommend. Plus, we have lost control of this due to the new State regulations.

Mayor White, of Homer, was asked if the developers were accommodating in making changes and if they were happy with the changes made. Most of the changes made were common sense changes, like not building over the drainage tile. The main objection is the proximity to the Village. It could have been put farther away, but it all boils down to money. The previous zoning ordinance was a half-mile from the Village and if that were the case, they wouldn't have an objection to it at all.

This was received and placed on file with the Committee for 30 days.

**B. Decommissioning and Site Reclamation Plan for Zoning Case 074-S-22.** A request by Medanos Solar LLC, PO Box 14055, Chicago, IL 60614, a subsidiary of Cultivate Power, LLC, owned by Brian Matthay, 2819 Buchanan St, San Francisco, CA 94123 and Noah Hyte, 321 Beloit Ave, Los Angeles, CA 90049; via agent Kiera Gavin, and participating landowner Terry Wolf, 1409 W Bridalveil Pl, Oro Valley, AZ 85737, to approve the Decommissioning and Site Reclamation Plan for the PV Solar Farm in Zoning Case 074-S-22 with a total nameplate capacity of 5 megawatts (MW), including access roads and wiring, in the AG-1 and AG-2 Agriculture Zoning Districts, on a 48.64-acre tract in the Southeast Quarter of the Southwest Quarter and the Southwest Quarter of the Southeast Quarter and part of a 197.02-acre tract in the east half of Section 4, Township 18 North, Range 14 West of the Second Principal Meridian in South Homer Township, and commonly known as farmland owned by Terry Wolf on the north side of CR 1100N (County Highway 15) northeast of the Village of Homer, Illinois.

Mr. Hall stated that this plan is in line with other Decommissioning and Site Reclamation Plans. There is a concern when Decommissioning plans are not released for the public hearings and would always recommend that this Committee give the public as much time as they need to review the plans and there is still time to ask and research questions.

The plan was received and placed on file with the Committee for 30 days.

**IX. New Business: Items to be Recommended to the County Board**

**A. Zoning Case 080-S-22.** A request by Anthony Donato, d.b.a. IAG Investments LLC to authorize a Special Use Permit for a photovoltaic solar array with a total nameplate capacity of 6 megawatts (MW), including access roads and wiring, as a County Board Special Use Permit and as a second principal use in addition to a data center authorized by the ZBA in related Case 079-S-22, in the AG-2 Agriculture Zoning District on a 21-acre tract in the North Half of the Northeast Quarter of Section 27, Township 19 North, Range 9 East of the Third Principal Meridian in Urbana Township that is located west of the veterinary clinic with an address of 3003 East Windsor Road, Urbana and including the following waivers of standard conditions:

Part A: A waiver from providing a Decommissioning and Site Reclamation Plan that includes cost estimates prepared by an Illinois Licensed Professional Engineer prior to consideration of the Special Use Permit by the Board, per Section 6.1.1 A.3.

Part B: A waiver from locating the PV Solar Array less than one-half mile from an incorporated municipality with a zoning ordinance and within the contiguous urban growth area of a municipality per Section 6.1.5 B.(2)a.

181 Part C: A waiver for locating 32 feet from a non-participating existing dwelling on a lot that is 10 acres or  
182 less in area in lieu of the minimum required separation of 240 feet between the solar farm fencing  
183 and the property line, per Section 6.1.5 D.(3)a.  
184

185 Part D: A waiver from submitting a Roadway Upgrade and Maintenance Agreement prior to  
186 consideration of the Special Use Permit by the Board, per Section 6.1.5 G.(1).  
187

188 Mr. Hall said this is very close to the Veterinary Clinic and a rental house. The ZBA received a revised site  
189 plan the last night of the hearing. A berm has been added on the west and south sides. There is a unique  
190 condition in the Special Use Permit that requires the developer and the owner of the property to come to  
191 agreement on what the noise limit will be on that property. If the agreement isn't received, there will be  
192 no special use permit. Also, there will be annual studies to confirm that the noise limit is being followed.  
193 This is an unanimously recommended approval from ZBA, and the City of Urbana waived the need for  
194 having to be at two ELUC meetings.  
195

196 Mr. Goss recused himself due to a conflict of interest. Mr. Stohr asked if we should hold this over until  
197 the next meeting. Mr. Hall said that the ZBA passed unanimously, the adjacent owner is happy with the  
198 special condition and the City of Urbana waived the need for this. From a staff perspective, there is no  
199 need to hold this over. Mr. Esry asked if anyone else objected to this at the ZBA hearings. There were  
200 none.  
201

202 **MOTION** by Mr. Esry to approve Zoning Case 080-S-22. Seconded by Mr. Patterson. Upon voice vote,  
203 the **MOTION CARRIED** unanimously with one abstention by Mr. Goss.  
204

- 205 B. **Decommissioning and Site Reclamation Plan for Zoning Case 080-S-22.** A request by Anthony Donato,  
206 via IAG Investments LLC, to approve the Decommissioning and Site Reclamation Plan for the PV SOLAR  
207 ARRAY in Zoning Case 080-S-22 with a total nameplate capacity of 6 megawatts (MW), including access  
208 roads and wiring, on a 21-acre tract in the North Half of the Northeast Quarter of Section 27, Township  
209 19 North, Range 9 East of the Third Principal Meridian in Urbana Township that is located west of the  
210 veterinary clinic with an address of 3003 East Windsor Road, Urbana.  
211

212 Mr. Hall stated this is in line with the others; the costs are 8.5% less than previous projects.  
213

214 **MOTION** by Mr. Esry and seconded by Mr. Patterson to approve the Decommissioning and Site  
215 Reclamation Plan for Zoning Case 080-S-22. Upon voice vote, the **MOTION CARRIED** unanimously with  
216 an abstention by Mr. Goss  
217

- 218 C. **Zoning Case 087-AM-22.** A request by Brian and Lana Krutsinger to amend the Zoning Map to change  
219 the zoning district designation for approximately 18 acres of the 30.37-acre subject property from the CR  
220 Conservation Recreation Zoning District to the AG-2 Agriculture Zoning District on a 30.37-acre tract in  
221 the East Half of the Northeast Quarter of Section 10, Township 18N, Range 10 East of the Third Principal  
222 Meridian in Sidney Township and commonly known as the Krutsinger residence located at 2197 CR  
223 1100N, Sidney.  
224

225 Mr. Hall said that this was recommended unanimously by the ZBA. The only comments received were  
226 not against the rezoning but against a possible events center at this location once rezoned. The Village  
227 has approved the division of the property. Mr. Esry said in the event an events center goes in, it will  
228 create more traffic on Windsor Road extended. Mr. Stohr said he drove by the site and wondered if the  
229 road is up to very much traffic.

230  
231 **MOTION** by Mr. Goss and seconded by Mr. Stohr to approve Zoning Case 087-AM-22. Upon voice vote,  
232 the **MOTION CARRIED** unanimously.

233  
234 **D. County Board Resolution Authorizing Signature of County Executive for Extension of IHDA Strong**  
235 **Communities Program Grant.**

236  
237 We just received the information on Tuesday of what they wanted to the resolution to look like. They  
238 are working with us to give us time to get it approved by the County Board.

239  
240 **MOTION** by Mr. Esry and seconded by Mr. Patterson to approve the resolution. Upon voice vote, the  
241 **MOTION CARRIED** unanimously.

242  
243 **X. Other Business**

244 **A. Monthly Reports**

- 245 i. January 2023  
246 ii. February 2023

247  
248 The reports were received and placed on file.

249  
250 **XI. Chair's Report**

251  
252 There was no chair's report

253  
254 **XII. Designation of Items to be Placed on the Consent Agenda**

255  
256 Items to be placed on the Consent Agenda include items 9. A., B., C., and D.

257  
258 **XIII. Adjournment**

259  
260 Chair Thorsland adjourned the meeting at 7:52 p.m.



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

JB PRITZKER, GOVERNOR

JOHN J. KIM, DIRECTOR

April 18, 2023

Re: University of Illinois (Illinois EPA BOA ID# 019010ADA)  
Construction Permit (23040002)

To Distribution List:

In accordance with the Illinois EPA's Environmental Justice Policy, the Office of Environmental Justice wants to provide you with information about a potential action. The Illinois EPA is sending this letter to notify you of an application received by the Bureau of Air (BOA).

The Illinois EPA has received an application for a Construction Permit [23040002] for University of Illinois located at 1011 W Springfield Ave in Urbana. The application requests authorization to install a diesel emergency generator at their Advanced Computational Building.

The application is currently under review by the BOA.

If you are receiving paper notifications and would like to sign up to receive notifications by email instead, please visit the Illinois EPA Environmental Justice webpage:

<https://epa.illinois.gov/topics/environmental-justice.html>

If you have questions about the application, please contact Chris Pressnall, Environmental Justice Coordinator at (217) 524-1284, [chris.pressnall@illinois.gov](mailto:chris.pressnall@illinois.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Chris Pressnall".

Chris Pressnall  
Environmental Justice Coordinator

## **Distribution List**

University of Illinois - Dave Wilcoxon\*  
State Senator Paul Faraci - State Senate District # 52\*  
State Representative Carol Ammons - State Representative District #103\*  
U.S. Representative Nikki Budzinski - U.S. Congressional District #13\*  
U.S. Senator Richard J. Durbin\*  
U.S. Senator Tammy Duckworth\*  
City of Urbana – Diane Wolfe Marlin, Mayor\*  
City of Urbana – City Council\*  
Champaign County Board\*  
Champaign Branch NAACP - #3008 – Minnie Pearson, President\*  
Illinois NAACP – Gregory Norris\*  
Illinois NAACP – Teresa Haley\*  
American Lung Association of Illinois – Angela Tin\*  
Respiratory Health Association - Brian P. Urbaszewski\*  
Sierra Club – Jack Darin\*  
Sierra Club – Christine Nannicelli\*  
Sierra Club – Mila Marshall\*  
Sierra Club – Ryan Hidden\*  
Faith in Place – Rev. Brian Sauder\*  
Illinois Environmental Regulatory Group – Alec Davis\*  
Chemical Industry Council of Illinois – Lisa Frede\*  
United States EPA – Kathy Triantafillou\*  
IL Manufacturers' Association - Donovan Griffith\*  
Shawnee Hills & Hollers – Georgia de la Garza\*  
Shawnee Hills & Hollers – Sabrina Hardenbergh\*  
Illinois Environmental Council – Jennifer Walling\*  
LVEJO – Juliana Pino\*  
Illinois Farm Bureau – Lauren Lurkins\*  
Earthjustice – Jennifer Cassel\*  
Earthjustice – Debbie Chizewer\*  
Northwestern Pritzker School of Law – Robert A. Weinstock\*  
Great Rivers Environmental Law Center – Sarah Rubenstein\*  
Stericycle – Susan Olavarria\*  
University of Illinois - Prairie Research Institute – Debra Jacobson\*  
Illinois Attorney General's Office – Andrew Armstrong\*  
Council of State Governments - Midwest – Jess Lienhardt\*  
Exxon Mobil Corporation – Brad Sims\*  
Openlands – Molly Kordas\*  
Taft Law – Ryan Rudich\*  
Mostardi Platt – Jena DiFiore\*  
Community Development Services – Lily Wilcock\*  
City of Urbana – Nicholas Hanson\*  
Spotlight Air Environmental – Mai Pope\*  
CPI – Natalie Warkenthien\*  
Langan – Vinicius De Paula\*

**\*Receiving E-Notifications**

Champaign County  
Department of

**PLANNING &  
ZONING**

**Brookens Administrative  
Center**

1776 E. Washington Street  
Urbana, Illinois 61802

(217) 384-3708

zoningdept@co.champaign.il.us

www.co.champaign.il.us/zoning

TO: **Environment and Land Use Committee**

FROM: **John Hall, Zoning Administrator**

DATE: **April 24, 2023**

RE: **Champaign County included in Class Action Settlement in City of Long Beach, et al. v. Monsanto Company and receipt of funds**

---

## **BACKGROUND**

On April 18, 2023, Champaign County received a check for \$27,414.03 as Champaign County's share of a class action settlement in the legal case City of Long Beach, et al. v. Monsanto Company. Attachment A is a brief overview of the class action settlement.

Champaign County has no record of prior communications about this class action settlement.

Champaign County is part of the "monitoring fund group". The funds are apparently intended to be used as follows:

The funds are intended to pay for PCB sampling and/or any other mitigation efforts in the Settlement Class Member's sole discretion, as part of compliance with applicable law.

A link in the internet article to "Exhibit A" also includes an Exhibit B that lists the water bodies that the USEPA lists as impaired by PCBs. The stream segments in Champaign County listed in Exhibit B are the following:

- Kaskaskia River segment IL\_O-37 (7.93 miles)
- Boneyard Creek segment ILBPJC06\_BPJCA (3.28 miles)

Staff will keep on the lookout for additional information which may be forthcoming regarding appropriate uses of the funds.

In the meantime, the check will be treated as "deferred revenue" until such time as the Board decides how to spend it.

## **ATTACHMENTS**

- A Internet article regarding Monsanto Class Action Settlement  
(<https://pcbclassaction.com/>)



# In Re: Monsanto Class Action Settlement

*City of Long Beach, et al. v. Monsanto Company, et al.*

United States District Court, Central District of California -  
Western Division

Case No. 2:16-cv-03493-FMO-AS

MENU

**This proposed Class Action Settlement impacts all NPDES Phase I and II city, town, village, borough, township, and independent port district MS4 permittees with jurisdictional boundaries within a HUC 12 Watershed that contains and/or is immediately adjoining a 303(d) water body impaired by PCBs and all NPDES Phase I and II county MS4 permittees with urbanized, unincorporated boundaries within a HUC 12 Watershed that contains and/or is immediately adjoining a 303(d) water body impaired by PCBs, as of June 24, 2020 only, but not later.**

## **Important Dates**

**March 14, 2022** - Date of Entry of Order Certifying Settlement Class, Preliminarily Approving Class Action Settlement, Approving Notice Plan, Appointing Class Action Settlement Administrator, and Appointing Class Counsel.

**January 23, 2023** - Deadline to submit [Sediment Sites Application](#).

**January 23, 2023** - Deadline to submit Special Needs Fund, [Part A Application](#).

**1 year and 14 days after the Settlement Administrator's mailing of Monitoring Fund Payments** - Deadline to submit Special Needs Fund, [Part B Application](#).

**July 25, 2022** - All opt-outs must be postmarked and mailed to the Settlement Administrator.

**July 25, 2022** - Any objections must be hand-delivered or postmarked and mailed to the Court and hand-delivered or postmarked and mailed to Class Counsel and Defendant's Counsel.

**September 15, 2022** - Any notices of appearances and motions must be hand-delivered or postmarked and mailed to the Court and hand-delivered or postmarked and mailed to Class Counsel and Defendant's Counsel.

**September 15, 2022** - Any other motions or submissions concerning the Action of the Settlement must be properly filed with supporting documents with the Clerk of the Court and must be mailed or personally delivered to Class Counsel and Counsel for the Defendant.

**September 1, 2022** - Deadline for Plaintiffs' Motion For Final Approval.

**October 13, 2022** - Court Approval Hearing in the United States District Court, Central District of California – Western Division.

Plaintiffs City of Long Beach, Mayor and City Council of Baltimore, City of Berkeley, City of Chula Vista, County of Los Angeles, City of Oakland, City of Portland, Port of Portland, City of San Diego, City of San Jose, and City of Spokane filed lawsuits against Defendant in district courts in their respective jurisdictions. In their complaints, Plaintiffs asserted that Defendant manufactured a class of industrial chemicals called polychlorinated biphenyls ("PCBs") between the 1930s and 1977 and stated various causes of action against Defendant for alleged PCB-related impairments to the environment, including to water bodies. Plaintiffs alleged that PCBs are present at sites and public properties, including in stormwater, stormwater and wastewater systems, water bodies, sediment, natural resources, fish and wildlife. Plaintiffs sought compensatory damages and injunctive and equitable relief.



On March 14, 2022, the Court entered an order certifying the Action as a class action, and specifically certifying a Nationwide Class. If you received a [Notice of Pendency of Class-Action Proposed Settlement and Court-Approved Hearing](#) (the "Notice") in the mail, then you have been identified as an Initial Settlement Class Member according to the parties' records.

The claims certified for class-action treatment include claims that Monsanto's PCBs and PCB-containing products were defectively designed, that the risks of environmental harm associated with PCBs and PCB-containing products outweighed the benefits of their uses, that Monsanto failed to warn of the risks of harm associated with PCBs and PCB-containing products, and that Plaintiffs and the Settlement Class Members suffered property damage as a result of PCB contamination.

In the Class Action Settlement Agreement between the parties, Monsanto has agreed to pay up to five hundred and fifty million dollars (\$550,000,000) as the total and maximum dollar amount Monsanto will be obligated to pay as a net class benefit if the Court grants final approval and all other contingencies are met. This amount includes all payments (i) to Settlement Class Members in exchange for the Release as described in the Notice, and (ii) to the Plaintiffs as class-representative awards.

Monsanto denies that class certification was or remains appropriate (except for purposes of the proposed settlement), denies that its PCBs and PCB-containing products were defectively designed, denies that the risks of environmental harm associated with PCBs and PCB-containing products outweigh their benefits, denies that it acted unlawfully, and asserts various legal and factual defenses against Plaintiffs' claims.

The parties reached a settlement before the Court resolved the claims and defenses of the parties in the Action. Therefore, the Court never resolved whether Monsanto did anything wrong. The Notice should not be understood as an expression of any opinion by the Court as to the merits of the Plaintiffs' claims or Defendant's defenses. Plaintiffs and Defendant recognize that to resolve these and other important issues would be time-consuming, uncertain, and expensive, which is part of the reason for the Settlement.

Each Settlement Class Member who has not excluded itself from the Class will be eligible to receive a settlement check(s) from the Class Action Settlement Administrator based on the Settlement Class Allocation method developed by Lead Class Counsel, the Special Master, and the Named Class Plaintiffs' consulting experts, which has been approved by the Court as fair and reasonable.

The Settlement Amount will be allocated among four separate funds for Class Members. Any amount allocated to a Settlement Class Member in the Monitoring Fund or TMDL Fund that opts out of the

Settlement, will be reallocated to Settlement Class Members pursuant to the Settlement Agreement. **You may be eligible to receive a payment from one or more of these funds. You are required to apply to receive payment from certain funds.**

**SETTLEMENT FUNDS – DISTRIBUTION AND APPLICATION REQUIREMENTS**

<p><b>MONITORING FUND (\$42,895,000)</b></p>	<p>Every Settlement Class Member will receive a minimum payment from the Monitoring Fund as consideration for a Release. The funds are intended to pay for PCB sampling and/or any other mitigation efforts in the Settlement Class Member’s sole discretion, as part of compliance with applicable law.</p> <p>The amount of Monitoring Fund payments are based on each Settlement Class Member’s NPDES Permittee status as Phase I or Phase II and each Settlement Class Member’s population as follows:</p> <ol style="list-style-type: none"> <li>1. Phase I ≥ 100,000 pop. and Phase I independent port districts: 68 x \$32,024.47 = \$2,177,663.96</li> <li>2. Phase I &lt; 100,000 pop.: 68 x \$22,024.47 = \$1,497,663.96</li> <li>3. Phase II ≥ 100,000 pop. and Phase II independent port districts: 214 x \$27,024.47 = \$5,783,236.58</li> <li>4. Phase II &lt; 100,000 pop.: 1,956 x \$17,024.47 = \$33,299,863.32</li> </ol> <p>Monitoring Fund Partial Payments: TMDL Entities receiving TMDL Funds between fifty thousand dollars (\$50,000) and one hundred thousand dollars (\$100,000) will receive a Monitoring Fund Partial Payment. The fourteen (14) TMDL Entities receiving a Monitoring Fund Partial Payment are identified <a href="#">HERE</a>, for a total of \$136,565.61.</p> <p>Refer to the <a href="#">Class Action Settlement Agreement, Exhibit A – Initial Settlement Class Members</a> for the MS4 NPDES Phase I or II by Population identification and Settlement Amount under the Monitoring Fund.</p>
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<p><b>TMDL FUND</b> <b>(\$250,000,000)</b></p>	<p>A Settlement Class Member will receive a payment from the TMDL Fund if the Settlement Class Member is subject to and/or responsible for a TMDL, TMDL Alternative, or TMDL Direct-to-Implementation regulation, promulgated or updated after January 1, 2010, wherein PCB is a named constituent. <b>Not every Settlement Class Member is eligible to receive payment from the TMDL Fund.</b></p> <p>Refer to the <a href="#">Class Action Settlement Agreement, Exhibit D – TMDL Fund Entities List with Allocation</a> to determine if you are a TMDL Fund Entity and the TMDL Fund Allocation amount.</p>
<p><b>SEDIMENT SITES FUND</b> <b>(\$150,000,000)</b></p>	<p>The Sediment Sites Fund will be allocated among Qualifying Sediment Site Entities identified in Paragraph 79(c) of the Settlement Agreement, other than any Opt-Out Litigating Entity, by a court-appointed Special Master. <b>Not every Settlement Class Member is eligible to receive payment from the TMDL Fund.</b></p> <p>A Settlement Class Member will receive a payment from the Sediment Sites Fund if the Settlement Class Member is a Noticed Party/Potentially Responsible Party or named Responsible Party in at least one of three types of regulated Sediment Sites wherein PCBs have contaminated sediments due to stormwater contribution. The three types of Sediments Sites include only the following: (1) U.S. EPA Superfund Sites, (2) U.S. EPA Large Sediment Sites, and/or (3) Clean Water Act Category 4b Sites/Waters.</p> <p>Refer to the <a href="#">Notice</a> for a list of Sediment Sites wherein at least one Initial Settlement Class Member is a Noticed Party/Potentially Responsible Party or named Responsible Party due to stormwater contribution of PCBs. Class Members who are eligible for Sediment Sites Fund payments are “Qualifying Sediment Site Entities” and must complete and submit the <a href="#">Sediment Sites Application</a> within 65 days after the Final Approval Order or by January 23, 2023.</p>

<p style="text-align: center;"><b>SPECIAL NEEDS FUND, PART A (\$57,105,000)</b></p>	<p>Special Needs Fund, Part A will compensate and accommodate those Litigating Entities whose time, energy, effort, attorney work product, costs, expenses, and risk of litigation helped to cause the entire Class Settlement, for the benefit of all Initial Settlement Class Members.</p> <p>Payment from Special Needs Fund, Part A is available only to those Initial Settlement Class Members that are "Litigating Entities," i.e., Class Members that (1) have filed tort, public nuisance, and/or product liability lawsuits against Defendant for PCB contamination of stormwater and sediment, and/or (2) that are Named Class Members.</p> <p>Refer to the <a href="#">Notice</a> for a list of Litigating Entities and eligibility for payment from this Fund. Qualifying Litigating Entities must complete and submit the <a href="#">Special Needs Fund, Part A Application</a> within 65 days after the Final Approval Order or by January 23, 2023.</p>
<p style="text-align: center;"><b>SPECIAL NEEDS FUND, PART B (\$50,000,000)</b></p>	<p>Special Needs Fund, Part B will compensate those Settlement Class Members who apply and make a showing, in the discretion of the Special Master, of a significant regional, state, or national benefit, cost, or contribution regarding 303(d) bodies of water impaired by PCBs through stormwater and/or dry weather runoff, and such benefit, cost, or contribution is not otherwise encompassed within any other part of the Settlement Allocation.</p> <p>The Special Master will equitably and reasonably allocate Part B funds among only those Settlement Class Members who apply for funds. Settlement Class Members that do not timely return a completed application forfeit any right to Part B Funds. Application does not guarantee that the Special Master will allocate Part B Funds to the applicant. Some Part B applicants may not receive any Part B Funds.</p> <p>Refer to the <a href="#">Notice</a> for more information on applying for payment from this Fund. Applicants must complete and submit the <a href="#">Special Needs Fund, Part B Application</a> within 1 year and 14 days after the Settlement Administrator's mailing of Monitoring Fund payments.</p>

**DO NOT WRITE OR TELEPHONE THE COURT, THE CLERK'S OFFICE, OR DEFENDANT WITH ANY QUESTIONS ABOUT THIS NOTICE, THE SETTLEMENT, OR THE SETTLEMENT AGREEMENT.**

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# RECEIVED

APR 27 2023

Illinois Environmental Protection Agency

CHAMPAIGN CO. P & Z DEPARTMENT

## Public Notice

### Proposed Renewal of the Clean Air Act Permit Program Permit The Peoples Gas Light and Coke Company in Fisher

The Peoples Gas Light and Coke Company Manlove Storage Field has requested that the Illinois Environmental Protection Agency (Illinois EPA) renew the Clean Air Act Permit Program (CAAPP) permit regulating air emissions from its facility located at 230 County Road 2800 North in Fisher. The source is a natural gas storage and transmission facility. Based on its review of the application, the Illinois EPA has made a preliminary determination that the application meets the standards for issuance and has prepared a draft permit for public review.

The Illinois EPA is accepting comments on the draft permit. Comments must be received by 11:59 PM on May 21, 2023. If sufficient interest is expressed in the draft permit, a hearing or other informational meeting may be held. Requests for information, comments, and questions should be directed to Cassandra Metz, Office of Community Relations, Illinois Environmental Protection Agency, 1021 North Grand Ave. East, PO Box 19506, Springfield, Illinois 62794-9506, phone 217/785-7491, TDD phone number 866/273-5488, [Cassandra.Metz@Illinois.gov](mailto:Cassandra.Metz@Illinois.gov).

The repositories for the draft permit documents will be made available at the Illinois EPA's offices at 2125 South First Street in Champaign, 217/278-5800 and 1021 North Grand Avenue East, Springfield, 217/785-7491 (please call ahead to assure that someone will be available to assist you). Copies of the draft permit and other documents may also be available at <http://bit.ly/3ZGEy5c>. Copies of the documents will be made available upon request.

The CAAPP is Illinois' operating permit program for major sources of emissions, as required by Title V of the Clean Air Act (Act). The conditions of CAAPP permits are enforceable by the public, as well as by the USEPA and Illinois EPA. In addition to implementing Title V of the Act, CAAPP permits may contain "Title I Conditions," i.e., conditions established under the permit programs for new and modified emission units, pursuant to Title I of the Act. The permit contains no T1 conditions that are being newly established or revised by this application.

The beginning of this public comment period also serves as the beginning date of the U.S. EPA 45 day review period, provided the U.S. EPA does not seek a separate proposed period.



Champaign County  
Department of

**PLANNING &  
ZONING**

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zoningdept@co.champaign.il.us  
www.co.champaign.il.us/zoning

To: **Champaign County Environment & Land Use Committee**

From: **John Hall, Zoning Administrator  
Susan Burgstrom, Senior Planner**

Date: **March 27, 2023**

RE: **Recommendation for County Board Special Use Permit  
Case 074-S-22**

Request: **Authorize a Community PV Solar Farm with a total nameplate capacity of 5 megawatts (MW), including access roads and wiring, in the AG-1 and AG-2 Agriculture Zoning Districts, and including the following waivers of standard conditions:**

**Part A: A waiver for a distance of 0 feet between a PV Solar Farm and a municipal boundary in lieu of the minimum required one-half mile (2,640 feet), per Section 6.1.5 B.(2)a. of the Zoning Ordinance.**

**Part B: A waiver for not providing a Decommissioning and Site Reclamation Plan that includes cost estimates prepared by an Illinois Licensed Professional Engineer prior to consideration of the Special Use Permit by the Board, per Section 6.1.1 A.3. of the Zoning Ordinance.**

**Part C: A waiver for not entering into a Roadway Upgrade and Maintenance Agreement or waiver therefrom with the relevant local highway authority prior to consideration of the Special Use Permit by the Board, per Section 6.1.5 G. of the Zoning Ordinance.**

**Part D: A waiver for not completing consultation with the State Historic Preservation Officer of the Illinois Department of Natural Resources prior to consideration of the Special Use Permit by the Board, per Section 6.1.5 K. of the Zoning Ordinance.**

Petitioner: **Medanos Solar LLC, via agent Kiera Gavin**

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## **BACKGROUND**

The petitioner would like to construct a 5-megawatt (MW) PV Solar Farm, which requires a County Board Special Use Permit.

## **STATUS**

The Zoning Board of Appeals (ZBA) voted 4-3 to “RECOMMEND DENIAL” of this County Board Special Use Permit at its March 16, 2023 meeting.

- Those voting in opposition noted that the PV Solar Farm was too close to the Village of Homer and would not be compatible with adjacent uses and its proximity would be injurious to the neighborhood or to the public health, safety and welfare.

- Those voting in favor cited that the petitioner has made numerous changes to the Site Plan that mitigated concerns raised by the Village, including adding vegetative screening, noise reduction fencing around inverters, moving power poles away from the village hall, and moving the solar farm farther north away from the village.

The subject property is located within the one and one-half mile extraterritorial jurisdiction of the Village of Homer, a municipality with zoning. The subject property is located within South Homer Township, which does not have a Plan Commission.

A PV Solar Farm County Board Special Use Permit typically must go through two ELUC meetings before it can move on to final determination by the County Board. However, Section 6.1.5 B(2)(g) of the Zoning Ordinance allows the project to only have one ELUC meeting if the relevant municipality waives this requirement in writing. The Village of Homer has not waived this requirement, so two ELUC meetings are necessary.

There are 13 approved special conditions for case 074-S-22 listed below.

## **PUBLIC INPUT RECEIVED**

- (1) At the December 29, 2023 ZBA meeting, cross-examination of the petitioner's agent touched on concerns about noise, visual blight, the possibility of increasing setbacks to residential neighbors, property values, vegetation management, decommissioning plan, screening, and protection of drainage tile.
- (2) On January 26, 2023, Village of Homer Resolution 2023 – R-2 opposing the solar farm project was received (Attachment C). The Resolution listed the following reasons for opposing the development:
  - a. The Solar Project is in very close proximity to the Village precluding natural and desirable development in one of the limited directions for expansion for the Village and contrary to Village plans.
  - b. The Solar Project will create noise from its inverters and any transformer thereby being a nuisance.
  - c. Due to its proximity to the Village, the Solar Project will create visual blight reducing views, disrupt local habitat, and expose those in proximity to electromagnetic waves/radiation which do not already exist.
  - d. The Solar Project will negatively affect area property values.
- (3) At the February 16, 2023 ZBA meeting, the following testimony was received:
  - a. Ted Hartke testified regarding concerns about noise and the location of power poles adjacent to the Village Hall.
  - b. Jim White, Interim Mayor of Homer, testified regarding concerns about the location of the power poles adjacents to the Village Hall and screening for the solar farm.

- (4) At the March 2, 2023 ZBA meeting, the following testimony was received:
- a. Suzanne Smith said she appreciated all the proposed upgrades. She asked about the types of plants that would be used in the vegetative screening and asked if plants would be replaced if they die. She asked about the noise fence and its durability for the life of the project. She said she lives on a farm north of the subject property. She said she is an advocate for renewable energy but hopes that time will be taken to learn about the solar industry. She said our area is being inundated by wind and solar projects and she hopes we take time to understand these things prior to making decisions. She expressed concerns about waiving regulations such as the waiver for locating within one-half mile of a municipality. She said that decommissioning plans are very important and she hopes there will be a very thorough decommissioning plan so they will not be left with a mess of a retired solar array in the future.
- (5) At the March 16, 2023 ZBA meeting, the following testimony was received:
- a. Jim White, Mayor of Homer, said that he appreciated the changes that had been made to the site plan, but speaking on behalf of the Village, the proposed PV Solar Farm was not wanted. He cited continued concerns about visual blight, protection of drainage tile, and limiting the growth of the Village.

#### APPROVED SPECIAL CONDITIONS FOR CASE 074-S-22

- A. **The approved site plan consists of the following documents:**
- **Revised Site Plan received February 28, 2023.**

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

**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 required 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 the Environment and Land Use Committee 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 special condition stated above is required to ensure the following:

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

- F. *(Note: not needed if a waiver is received from the Village)* **A Roadway Upgrade and Maintenance Agreement signed by the Village of Homer and approved by the Environment and Land Use Committee, shall be submitted at the time of application for a Zoning Use Permit.**

The special condition stated above is required 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 with a 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 or a rating of “A-” by Kroll’s 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. *(Note: not needed if a waiver is received)* **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. **An agency action report from the State Historic Preservation Office regarding historic and archaeological resources review, as required by 6.1.5 K.**
8. **The telephone number for the complaint hotline required by 6.1.5 S.**
9. **Any updates to the approved Site Plan from Case 074-S-22 per the Site Plan requirements provided in Section 6.1.5 U.1.c.**

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

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

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

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

- J. **The PV SOLAR FARM COUNTY Board SPECIAL USE Permit designation shall expire in 10 years if no Zoning Use Permit is granted.**

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

**The PV SOLAR FARM is constructed in compliance with the Ordinance requirements.**

- K. **The owners of the subject property hereby recognize and provide for the right of agricultural activities to continue on adjacent land consistent with the Right to Farm Resolution 3425.**

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

**Conformance with Policy 4.2.3 of the Land Resource Management Plan.**

- L. **Within the boundary of the solar farm, the petitioner shall:**
1. **Complete a survey identifying all drainage tile and stake off all tile encountered prior to construction;**
  2. **Replace or repair all privately owned underground drainage tile that are identified and encountered consistent with both the Champaign County Storm Water Management and Erosion Control Ordinance and with the Agriculture Impact Mitigation Agreement; and**
  3. **No Zoning Compliance Certificate shall be authorized by the Zoning Administrator until all required “as-built” drawings showing the location of all drainage tile within the boundary of the solar farm have been filed with the**

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**Illinois Department of Agriculture and the Champaign County Soil and Water Conservation District.**

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

**To ensure conformance with all relevant requirements for replacement of underground drainage tile within the area of the special use permit.**

- M. **The petitioner shall maintain the privately owned underground drainage tiles within the boundary of the solar farm for the lifetime of the special use permit including any repairs that may be necessary for up to one year after decommissioning and site reclamation.**

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

**To ensure maintenance of underground drainage tile within the area of the special use permit for the lifetime of the special use permit.**

**ATTACHMENTS**

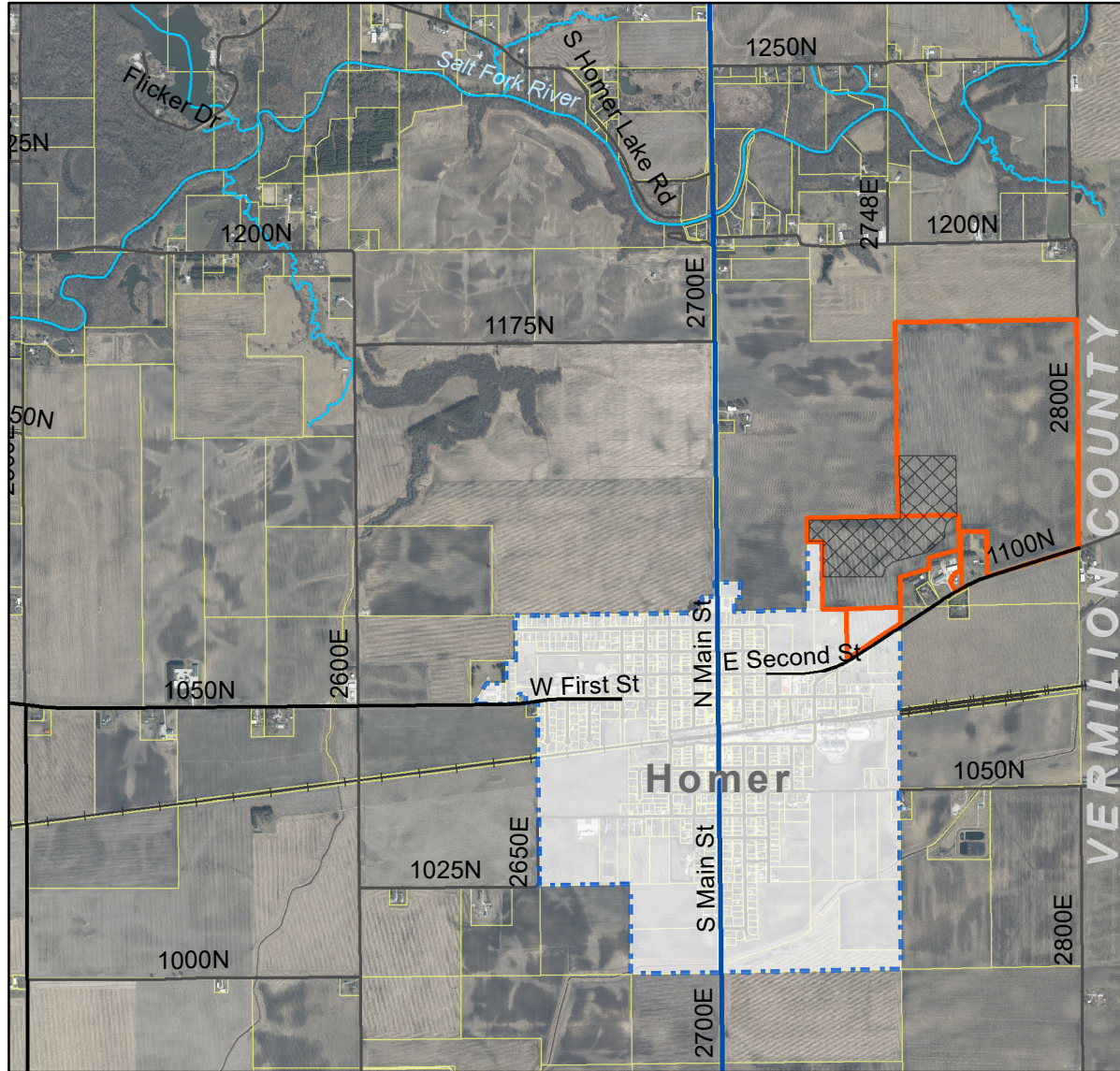
- A Case Maps (Location, Land Use, Zoning)
- B Revised Site Plan received February 28, 2023
- C Village of Homer Resolution of Protest received January 26, 2023
- D Finding of Fact and Final Determination for Case 074-S-22 as approved by the ZBA on March 16, 2023







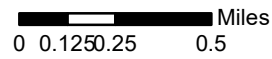
# Location Map

Case 074-S-22  
December 29, 2022

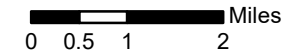
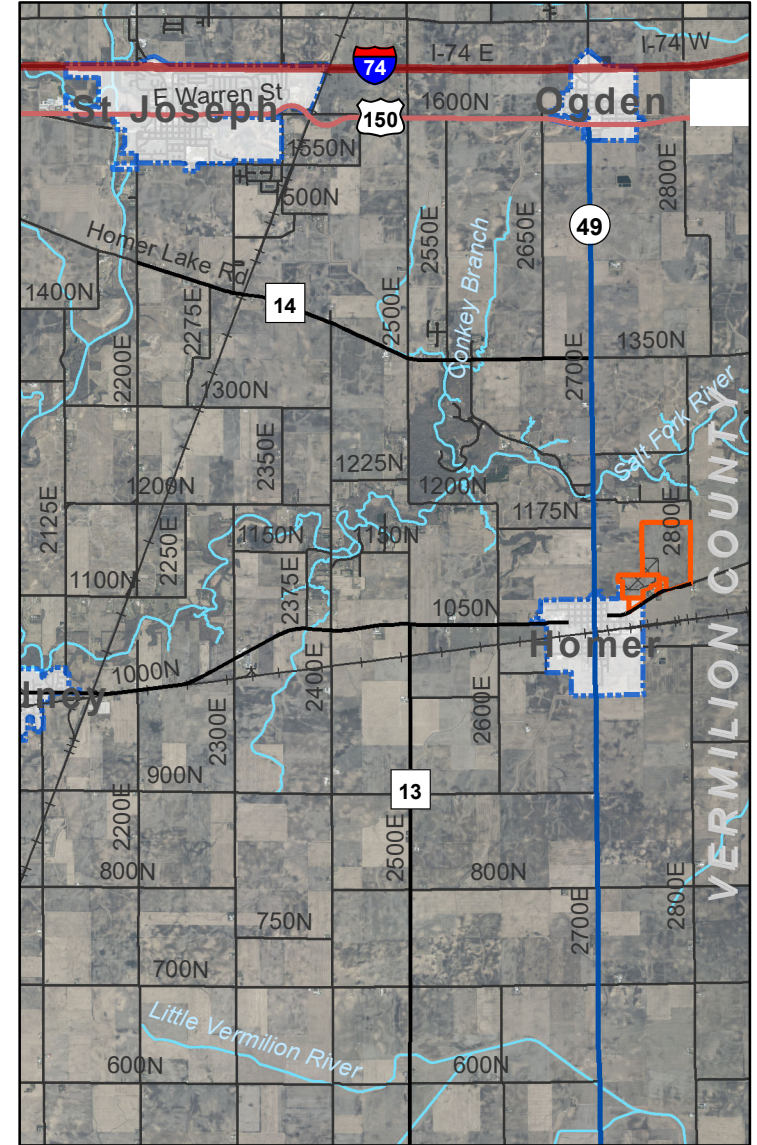
Subject Property



-  Subject Properties
-  Parcels
-  Municipal Boundary
-  Fenced solar area (approx)



Property location in Champaign County

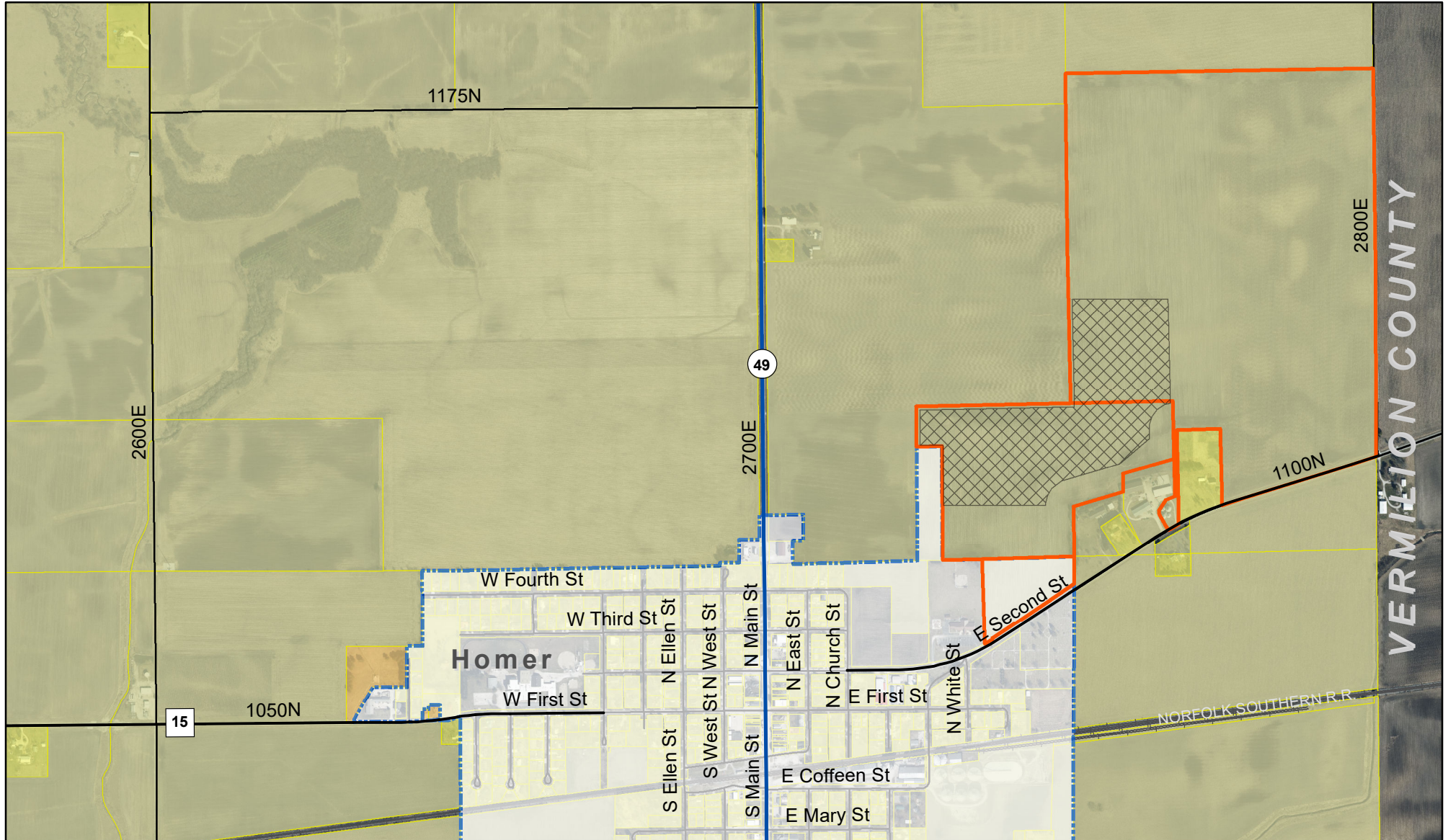


Champaign County  
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ZONING



# Land Use Map

Case 074-S-22  
December 29, 2022



- Subject Properties
- Municipal Boundary
- Parcels
- Fenced solar area (approx)
- Agriculture
- Residential
- Utility

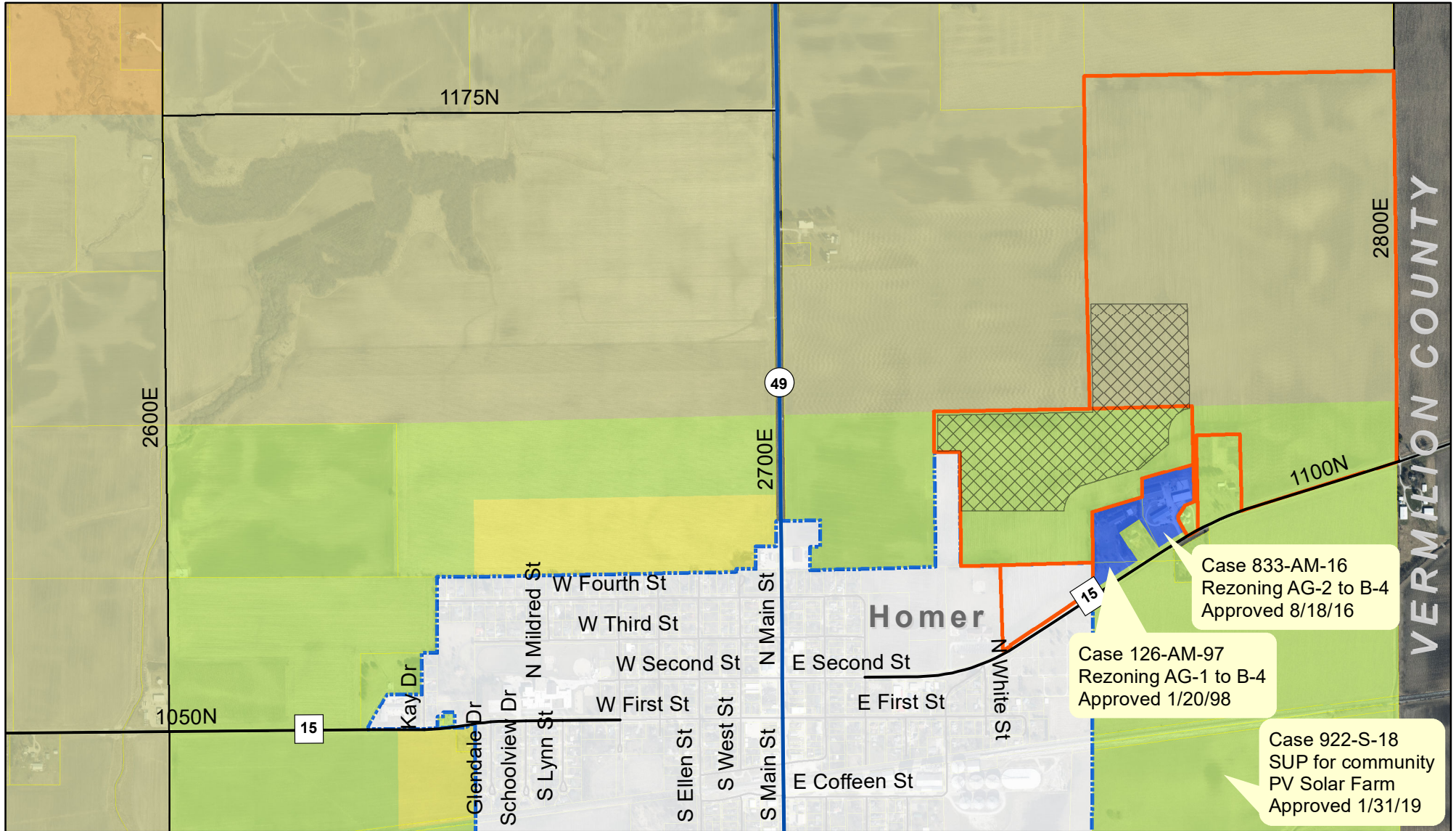
0 300 600 1,200 Feet





# Zoning Map

Case 074-S-22  
December 29, 2022



- Subject Properties
- Municipal Boundary
- Fenced solar area (approx)
- CR Conservation Recreation
- AG-1 Agriculture
- R-1 Single Family Residence
- B-4 General Business
- AG-2 Agriculture

Champaign County  
Department of  
**PLANNING &  
ZONING**

Feet  
0 300 600 1,200

N







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Website: [homervillage.com](http://homervillage.com)

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RECEIVED

JAN 26 2023

CHAMPAIGN CO. P & Z DEPARTMENT

January 24, 2023

Dear Mr. Hall,

Enclosed is a Resolution that was passed on January 23, 2023 by the Village of Homer Board of Trustees in opposition of the proposed solar farm North East of the Village adjacent to Village Property.

Sincerely,

A handwritten signature in blue ink that reads "Jim White".

Jim White, Mayor

**VILLAGE OF HOMER  
CHAMPAIGN COUNTY, ILLINOIS**

**RECEIVED**

**JAN 26 2023**

CHAMPAIGN CO. P & Z DEPARTMENT

**RESOLUTION NO. 2023 – R-2**

**A RESOLUTION OBJECTING TO A PROPOSED SOLAR FARM PURSUANT TO  
55 ILCS 5/5-120/4 AND OTHER APPLICABLE LAW**

Adopted by the  
Board of Trustees of the Village of Homer  
this 23rd day of January 2023

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Published in pamphlet form by authority of the President and the Board of Trustees of the Village of Homer, Champaign County, Illinois, this 23rd day of January 2023.

**VILLAGE OF HOMER  
CHAMPAIGN COUNTY, ILLINOIS**

**Resolution No. 2023-R-2**

**January 23, 2023**

**A RESOLUTION OBJECTING TO A PROPOSED SOLAR FARM PURSUANT TO  
55 ILCS 5/5-120/4 AND OTHER APPLICABLE LAW**

WHEREAS, the Village of Homer, Champaign County, State of Illinois (the “Village”) is a duly organized and existing Village created under the provisions of the laws of the State of Illinois, and is now operating under the provisions of the Illinois Municipal Code, and all laws amendatory thereof and supplementary thereto with full powers to enact ordinances and resolutions for the benefit of the residents of the Village; and

WHEREAS, the Village of Homer previously established the Village of Homer Zoning Ordinance, the Village of Homer Subdivision Ordinance and a Village Comprehensive Plan encompassing the one-and-a-half-mile area outside of the Village; and

WHEREAS, pursuant to ILCS 5/11-12-4, the Illinois Constitution, applicable case law and all other laws, the Village has extra-territorial jurisdiction over the territory extending 1.5 miles from the Village corporate limits; and

WHEREAS, pursuant to a meetings held by the Champaign County ELUC in 2022 with plans for upcoming meetings in 2023 all relating to a proposed SOLAR GARDEN/SOLAR FARM/SOLAR DEVELOPMENT (“Solar Project”) located within the Village of Homer extraterritorial jurisdiction; and

WHEREAS, the Solar Project is also located within the ½ mile perimeter of the Village and is almost contiguous to the Village boundaries; and

WHEREAS, approval of the Solar Project by the County of Champaign may require potential text amendments and/or other processes of approval by the County; and

WHEREAS, 55 ILCS 5/5-12014 (b) provides that text amendments to a County Zoning Ordinance must be approved by a “...favorable vote of ¾ of all the members of the county board...in the case of a proposed text amendment to the Zoning Ordinance, by resolution of the corporate authorities of the zoned municipality with limits nearest adjacent, filed with the county clerk...”; and

WHEREAS, the Village of Homer desires to put on record its objection to said Solar Project; and

WHEREAS, pursuant to 55 ILCS 5/5-12014 and other applicable law, the Village of Homer is entitled, by the within Resolution, to provide this written protest of any approval of said Solar Project and its written protest of any proposed text amendment or other amendment related thereto thereby triggering said ¾ vote of all of the members of the County Board to approve any such amendment; and



WHEREAS, the public address for Champaign County is listed as 1779 E. Washington Street, Urbana, Illinois 61802; and

WHEREAS, the Attorney representing Champaign County is its State's Attorney, JULIA RIETZ with a publicly posted address of 101 E. Main Street #2, Urbana, Illinois 61801; and

WHEREAS, in support of the within Village of Homer objection to the above referenced Solar Project and any related amendments and/or zoning changes, the Village asserts that:

- A. The Solar Project is in very close proximity to the Village precluding natural and desirable development in one of the limited directions for expansion for the Village and contrary to Village plans.
- B. The Solar Project will create noise from its inverters and any transformer thereby being a nuisance.
- C. Due to its proximity to the Village, the Solar Project will create visual blight reducing views, disrupt local habitat, and expose those in proximity to electromagnetic waves/radiation which do not already exist.
- D. The Solar Project will negatively affect area property values.

**NOW THEREFORE, BE IT RESOLVED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF HOMER, CHAMPAIGN COUNTY, ILLINOIS, AS FOLLOWS:**

- 1. The President and Board of Trustees of the Village of Homer hereby find that all recitals hereinbefore stated as contained in the preambles to this Resolution are full, true and correct and do hereby, by reference, incorporate and make them part of this Resolution.
- 2. The President and Board of Trustees of the Village of Homer hereby decree, pursuant to 55 ILCS 5/5-12014, County ordinances, and other applicable law, that the Village of Homer and its Board of Trustees objects to approval of the Solar Project and any text, ordinance or other amendment to the Champaign County Zoning Ordinance.
- 3. This Resolution shall be in full force and effect upon passage and approval, as provided by the Illinois Municipal Code, as amended.
- 4. The Village Clerk is hereby directed and authorized to file a copy of the within Resolution with the Champaign County Clerk with a copy to be sent to JOHN HALL, Zoning Administrator as Petitioner/Applicant by certified mail at 1776 E. Washington Street, Urbana, Illinois 61802 with an informational copy to also be mailed to him by USPS First Class Mail with an informational copy to also be sent to JULIA REITZ as his attorney as being JULIA REITZ, State's Attorney, 101 E. Main Street #2, Urbana, Illinois 61801 by certified mail and also by USPS First Class Mail.
- 5. The Village Board President is further authorized to direct, carry out, and/or perform such actions as are necessary, in his opinion, to carry out this Resolution and its underlying intent.

The foregoing Resolution was moved by Mike Johnson, seconded by Skip James and approved by roll call vote:

Trustee	Aye	Nay
Guy James, Trustee	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Skip James, Trustee	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mike Johnson, Trustee	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ray Ryerson, Trustee	<input checked="" type="checkbox"/>	<input type="checkbox"/>
John Dodd, Trustee	<input type="checkbox"/>	<input type="checkbox"/>
Herb Lacey, Trustee	<input checked="" type="checkbox"/>	<input type="checkbox"/>
President, Jim White	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Approved this 23rd day of January 2023.

APPROVED:

Jim White  
Jim White  
Village President

ATTEST:

Sharon Jeffers  
Sharon Jeffers  
Village Clerk



STATE OF ILLINOIS )  
 ) SS  
COUNTY OF CHAMPAIGN )

**CERTIFICATE**

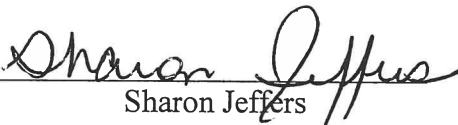
I, Sharon Jeffers, certify that I am the duly appointed and acting municipal clerk of the Village of Homer, Champaign County Illinois.

I further certify that on January 23, 2023 the Corporate Authorities of such municipality passed and approved Resolution No. 2023-R-2 entitled:

**A RESOLUTION OBJECTING TO A PROPOSED SOLAR FARM PURSUANT TO  
55 ILCS 5/5-120/4 AND OTHER APPLICABLE LAW**

I further certify that the attached copy of said resolution is a true and correct copy of said resolution, as appears from the records of the Village of Homer, Illinois.

DATED at Homer, Illinois, this 23rd day of January 2023.

  
\_\_\_\_\_  
Sharon Jeffers  
Village Clerk  
Village of Homer, Illinois

**FINDINGS OF FACT AND FINAL DETERMINATION FOR CASE 074-S-22**

*As approved by the ZBA on March 16, 2023*

**FINDINGS OF FACT**

From the documents of record and the testimony and exhibits received at the public hearing for zoning case **074-S-22** held on **December 29, 2022, February 16, 2023, March 2, 2023 and March 16, 2023**, the Zoning Board of Appeals of Champaign County finds that:

1. The requested Special Use Permit **IS** necessary for the public convenience at this location because: 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. The Illinois Future Energy Jobs Act requires installation of 3,000 MW of new solar capacity by the year 2030. There is an existing power line along the south side of CR 1100N (County Highway 15) where they can attach themselves to the grid.
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** 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** traffic capacity and the entrance location has **ADEQUATE** visibility.
  - b. Emergency services availability is **ADEQUATE** because: the subject properties are approximately 0.5 mile from the Village of Homer fire station. In an email received November 21, 2022, Fire Chief Don Happ acknowledged receipt of the site plan for the proposed PV Solar Farm. The Homer Fire Protection District was notified of this case and no comments have been received.
  - c. The Special Use **WILL NOT** be compatible with adjacent uses because: a resolution of protest was received from the Village of Homer on January 26, 2023, citing incompatibility concerns with the proximity of the project to the village. Input received at public hearings everyone voiced concerns about that.
  - d. Surface and subsurface drainage will be **ADEQUATE** because: no part of the subject property is in the Special Flood Hazard Area. The proposed project must comply with the Storm Water Management and Erosion Control Ordinance. The petitioners, in coordination with the Village of Homer, have established a drain tile corridor and setback for the village tile that crosses the subject property.
  - e. Public safety will be **ADEQUATE** because: Homer Fire Protection District has already been working and has their comments as far as training and what they're asking for.
  - f. The provisions for parking will be **ADEQUATE** because: no parking is required for a PV SOLAR FARM.
  - g. The property **IS NOT WELL SUITED OVERALL** for the proposed improvements due to its proximity to the Village of Homer.

**FINDINGS OF FACT AND FINAL DETERMINATION FOR CASE 074-S-22**

*As approved by the ZBA on March 16, 2023*

- h. Existing public services **ARE** available to support the proposed SPECIAL USE without undue public expense because: no additional public services are necessary for the proposed development.
- i. Existing public infrastructure together with the proposed development **IS** adequate to support the proposed development effectively and safely without undue public expense because: no new public infrastructure is required for the proposed development.

*(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** conform to the applicable regulations and standards of the DISTRICT in which it is located, subject to approval of the requested waivers.
- 3b. The requested Special Use Permit, **SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN, DOES** preserve the essential character of the DISTRICT in which it is located because:
  - a. The Special Use will be designed to **CONFORM** to all relevant County ordinances and codes.
  - b. The Special Use **WILL** be compatible with adjacent uses.
  - c. Public safety will be **ADEQUATE**.
- 4. The requested Special Use Permit, **SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN, IS** 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 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 NOT** be injurious to the district in which it shall be located or otherwise detrimental to the public health, safety, and welfare.
  - d. The requested Special Use Permit, **SUBJECT TO THE SPECIAL CONDITIONS IMPOSED HEREIN, DOES** 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 0 feet between a PV Solar Farm and a municipal boundary in lieu of the minimum required one-half mile (2,640 feet):
  - (1) The waiver **IS NOT** in accordance with the general purpose and intent of the Zoning Ordinance and **WILL** be injurious to the neighborhood or to the public

**FINDINGS OF FACT AND FINAL DETERMINATION FOR CASE 074-S-22**

*As approved by the ZBA on March 16, 2023*

health, safety, and welfare because: the petitioners have held public meetings with the Village of Homer Board of Trustees, and concerns have not been resolved.

- (2) Special conditions and circumstances **DO** 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: on January 26, 2023, Village of Homer Resolution 2023 – R-2 opposing the solar farm project was received. At ZBA meetings, testimony touched on concerns about noise, visual blight, the possibility of increasing setbacks to residential neighbors, property values, vegetation management, decommissioning plan, screening, power pole locations, and protection of drainage tile.
  - (3) 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 because: without Part A of the proposed waivers, the applicant would have to consider a different configuration for the PV SOLAR FARM only on the eastern 197-acre subject property. Without the waiver, the applicant would not have restrictions according to Public Act 102-1123.
  - (4) The special conditions, circumstances, hardships, or practical difficulties **DO** result from actions of the applicant because: the petitioners have held public meetings with the Village of Homer Board of Trustees, and the petitioners have made adjustments to their site plan based on concerns raised by the Village Board. The petitioner has also held meetings at the ZBA. The solar array could be moved to a location farther away from the Village of Homer.
  - (5) The requested waiver, **SUBJECT TO THE PROPOSED SPECIAL CONDITION, IS NOT** the minimum variation that will make possible the reasonable use of the land/structure because: the solar array can be moved farther away from the Village boundaries.
- B. Regarding Part B of the proposed waivers, for not providing a Decommissioning and Site Reclamation Plan that includes cost estimates prepared by an Illinois Licensed Professional Engineer prior to consideration of the Special Use Permit by the Board:
- (1) The waiver **IS** in accordance with the general purpose and intent of the Zoning Ordinance and **WILL NOT** be injurious to the neighborhood or to the public health, safety, and welfare because: the petitioner will still need to provide this document prior to receiving a Zoning Use Permit.
  - (2) Special conditions and circumstances **DO** 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: cost estimates for the DSRP are unique to each solar project.
  - (3) 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 because: the Special Use Permit process might have to be extended in order to have sufficient time to prepare these

**FINDINGS OF FACT AND FINAL DETERMINATION FOR CASE 074-S-22***As approved by the ZBA on March 16, 2023*

documents, and they might lack the accuracy that can only be secured in the construction permitting phase.

- (4) The special conditions, circumstances, hardships, or practical difficulties **DO NOT** result from actions of the applicant because: some details such as cost estimates are not available until closer to construction.
  - (5) The requested waiver, **SUBJECT TO THE PROPOSED SPECIAL CONDITION, IS** the minimum variation that will make possible the reasonable use of the land/structure.
- C. Regarding Part C of the proposed waivers, for not entering into a Roadway Upgrade and Maintenance Agreement or waiver therefrom with the relevant local highway authority prior to consideration of the Special Use Permit by the Board:
- (1) The waiver **IS** in accordance with the general purpose and intent of the Zoning Ordinance and **WILL NOT** be injurious to the neighborhood or to the public health, safety, and welfare because: the petitioner will still need to provide this documentation prior to receiving a Zoning Use Permit.
  - (2) Special conditions and circumstances **DO** 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: the petitioner has been working with the Village of Homer on either a waiver or a Roadway Upgrade and Maintenance Agreement. A special condition has been added requiring the applicant to submit a Roadway Upgrade and Maintenance Agreement or waiver therefrom and approved by ELUC at the time of application for a Zoning Use Permit from the Village of Homer.
  - (3) 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 because: the Special Use Permit process might have to be extended in order to have sufficient time to prepare these documents, and they might lack the accuracy that can only be secured in the construction permitting phase.
  - (4) The special conditions, circumstances, hardships, or practical difficulties **DO NOT** result from actions of the applicant because: the petitioner is working with the Village of Homer to receive either an agreement or a waiver from the Village.
  - (5) The requested waiver, **SUBJECT TO THE PROPOSED SPECIAL CONDITION, IS** the minimum variation that will make possible the reasonable use of the land/structure.
- D. Regarding Part D of the proposed waivers, for not completing consultation with the State Historic Preservation Officer of the Illinois Department of Natural Resources prior to consideration of the Special Use Permit by the Board:
- (1) The waiver **IS** in accordance with the general purpose and intent of the Zoning Ordinance and **WILL NOT** be injurious to the neighborhood or to the public

**FINDINGS OF FACT AND FINAL DETERMINATION FOR CASE 074-S-22**

*As approved by the ZBA on March 16, 2023*

health, safety, and welfare because: a special condition has been added that the petitioner must submit this information as part of their Zoning Use Permit application.

- (2) Special conditions and circumstances **DO** 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: the State Historic Preservation Office is experiencing a backlog.
- (3) 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 because: without the waiver, the Special Use Permit process would have to be extended until the State Historic Preservation Office overcomes its backlog.
- (4) The special conditions, circumstances, hardships, or practical difficulties **DO NOT** result from actions of the applicant because: the State Historic Preservation Office is experiencing a backlog.
- (5) The requested waiver, **SUBJECT TO THE PROPOSED SPECIAL CONDITION, IS** the minimum variation that will make possible the reasonable use of the land/structure.

**7. THE SPECIAL CONDITIONS IMPOSED HEREIN ARE REQUIRED TO ENSURE COMPLIANCE WITH THE CRITERIA FOR SPECIAL USE PERMITS AND FOR THE PARTICULAR PURPOSES DESCRIBED BELOW:**

- A. **The approved site plan consists of the following documents:**
  - **Revised Site Plan received February 28, 2023.**

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

**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 required to ensure the following:

**FINDINGS OF FACT AND FINAL DETERMINATION FOR CASE 074-S-22**

*As approved by the ZBA on March 16, 2023*

**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 the Environment and Land Use Committee 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 special condition stated above is required to ensure the following:

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

- F. *(Note: not needed if a waiver is received)* **A Roadway Upgrade and Maintenance Agreement or waiver therefrom signed by the Village of Homer and approved by the Environment and Land Use Committee, shall be submitted at the time of application for a Zoning Use Permit.**

The special condition stated above is required 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 with a 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 or a rating of "A-" by Kroll's within 200 miles of Urbana or reasonable anticipated travel costs shall be added to the amount of the letter of credit.**

**FINDINGS OF FACT AND FINAL DETERMINATION FOR CASE 074-S-22**

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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. ***(Note: not needed if a waiver is received)* 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. **An agency action report from the State Historic Preservation Office regarding historic and archaeological resources review, as required by 6.1.5 K.**
8. **The telephone number for the complaint hotline required by 6.1.5 S.**
9. **Any updates to the approved Site Plan from Case 074-S-22 per the Site Plan requirements provided in Section 6.1.5 U.1.c.**

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

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

**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.**



**FINDINGS OF FACT AND FINAL DETERMINATION FOR CASE 074-S-22**

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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 special condition stated above is required to ensure the following:

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

- J. **The PV SOLAR FARM COUNTY Board SPECIAL USE Permit designation shall expire in 10 years if no Zoning Use Permit is granted.**

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

**The PV SOLAR FARM is constructed in compliance with the Ordinance requirements.**

- K. **The owners of the subject property hereby recognize and provide for the right of agricultural activities to continue on adjacent land consistent with the Right to Farm Resolution 3425.**

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

**Conformance with Policy 4.2.3 of the Land Resource Management Plan.**

- L. **Within the boundary of the solar farm, the petitioner shall:**

1. **Complete a survey identifying all drainage tile and stake off all tile encountered prior to construction;**
2. **Replace or repair all privately owned underground drainage tile that are identified and encountered consistent with both the Champaign County Storm Water Management and Erosion Control Ordinance and with the Agriculture Impact Mitigation Agreement; and**

**FINDINGS OF FACT AND FINAL DETERMINATION FOR CASE 074-S-22**

*As approved by the ZBA on March 16, 2023*

3. **No Zoning Compliance Certificate shall be authorized by the Zoning Administrator until all required “as-built” drawings showing the location of all drainage tile within the boundary of the solar farm have been filed with the Illinois Department of Agriculture and the Champaign County Soil and Water Conservation District.**

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

**To ensure conformance with all relevant requirements for replacement of underground drainage tile within the area of the special use permit.**

- M. **The petitioner shall maintain the privately owned underground drainage tiles within the boundary of the solar farm for the lifetime of the special use permit including any repairs that may be necessary for up to one year after decommissioning and site reclamation.**

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

**To ensure maintenance of underground drainage tile within the area of the special use permit for the lifetime of the special use permit.**

**FINDINGS OF FACT AND FINAL DETERMINATION FOR CASE 074-S-22**

*As approved by the ZBA on March 16, 2023*

**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 NOT** been met, and pursuant to the authority granted by Section 9.1.6 B. of the Champaign County Zoning Ordinance, recommends that:

The Special Use requested in Case **074-S-22** is hereby **DENIED** to the applicant, **Medanos Solar LLC**, to authorize the following as a Special Use on land in the AG-1 and AG-2 Agriculture Zoning Districts:

**Authorize a Community PV Solar Farm with a total nameplate capacity of 5 megawatts (MW), including access roads and wiring, and**

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

- Part A: A waiver for a distance of 0 feet between a PV Solar Farm and a municipal boundary in lieu of the minimum required one-half mile (2,640 feet), per Section 6.1.5 B.(2)a. of the Zoning Ordinance.
- Part B: A waiver for not providing a Decommissioning and Site Reclamation Plan that includes cost estimates prepared by an Illinois Licensed Professional Engineer prior to consideration of the Special Use Permit by the Board, per Section 6.1.1 A.3. of the Zoning Ordinance.
- Part C: A waiver for not entering into a Roadway Upgrade and Maintenance Agreement or waiver therefrom with the relevant local highway authority prior to consideration of the Special Use Permit by the Board, per Section 6.1.5 G. of the Zoning Ordinance.
- Part D: A waiver for not completing consultation with the State Historic Preservation Officer of the Illinois Department of Natural Resources prior to consideration of the Special Use Permit by the Board, per Section 6.1.5 K. of the Zoning Ordinance.

**SUBJECT TO THE FOLLOWING SPECIAL CONDITIONS:**

- A. **The approved site plan consists of the following documents:**
  - **Revised Site Plan received February 28, 2023.**
- 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.**
- 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.**
- D. **The Zoning Administrator shall not authorize a Zoning Use Permit until the petitioner submits a copy of an executed Agricultural Impact Mitigation Agreement**

**FINDINGS OF FACT AND FINAL DETERMINATION FOR CASE 074-S-22**

*As approved by the ZBA on March 16, 2023*

**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 the Environment and Land Use Committee 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. *(Note: not needed if a waiver is received)* **A Roadway Upgrade and Maintenance Agreement or waiver therefrom signed by the Village of Homer 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 with a 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 or a rating of "A-" by Kroll's 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. *(Note: not needed if a waiver is received)* **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. **An agency action report from the State Historic Preservation Office regarding historic and archaeological resources review, as required by 6.1.5 K.**
  8. **The telephone number for the complaint hotline required by 6.1.5 S.**

**FINDINGS OF FACT AND FINAL DETERMINATION FOR CASE 074-S-22***As approved by the ZBA on March 16, 2023*

9. **Any updates to the approved Site Plan from Case 074-S-22 per the Site Plan requirements provided in Section 6.1.5 U.1.c.**
- 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 PV SOLAR FARM COUNTY Board SPECIAL USE Permit designation shall expire in 10 years if no Zoning Use Permit is granted.**

**FINDINGS OF FACT AND FINAL DETERMINATION FOR CASE 074-S-22**

*As approved by the ZBA on March 16, 2023*

- K. The owners of the subject property hereby recognize and provide for the right of agricultural activities to continue on adjacent land consistent with the Right to Farm Resolution 3425.**
- L. Within the boundary of the solar farm, the petitioner shall:**
  - 1. Complete a survey identifying all drainage tile and stake off all tile encountered prior to construction;**
  - 2. Replace or repair all privately owned underground drainage tile that are identified and encountered consistent with both the Champaign County Storm Water Management and Erosion Control Ordinance and with the Agriculture Impact Mitigation Agreement; and**
  - 3. No Zoning Compliance Certificate shall be authorized by the Zoning Administrator until all required “as-built” drawings showing the location of all drainage tile within the boundary of the solar farm have been filed with the Illinois Department of Agriculture and the Champaign County Soil and Water Conservation District.**
- M. The petitioner shall maintain the privately owned underground drainage tiles within the boundary of the solar farm for the lifetime of the special use permit including any repairs that may be necessary for up to one year after decommissioning and site reclamation.**

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

SIGNED:

ATTEST:

Ryan Elwell, Chair  
Champaign County Zoning Board of Appeals

Secretary to the Zoning Board of Appeals

Date

Champaign County  
Department of

**PLANNING &  
ZONING**

Brookens Administrative  
Center  
1776 E. Washington Street  
Urbana, Illinois 61802

(217) 384-3708  
zoningdept@co.champaign.il.us  
www.co.champaign.il.us/zoning

To: **Champaign County Environment & Land Use Committee**

From: **John Hall, Zoning Administrator  
Susan Burgstrom, Senior Planner**

Date: **March 27, 2023**

RE: **Medanos Solar LLC document requiring ELUC approval from  
Zoning Case 074-S-22**

Request: **ELUC approval of a Decommissioning and Site Reclamation Plan  
including cost estimates for the 5 MW PV Solar Farm that is the  
subject of Zoning Case 074-S-22**

Petitioner: **Medanos Solar LLC, via agent Kiera Gavin**

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## BACKGROUND

The petitioner, Medanos Solar LLC, seeks Special Use Permit approval from the Champaign County Board at its May 18, 2023 meeting to construct a 5-megawatt (MW) Photovoltaic (PV) Solar Farm northeast of the Village of Homer.

There is one document required by the Zoning Ordinance that could only be completed closer to construction time and therefore was not included in the initial Special Use Permit approval. The Zoning Board of Appeals approved a special condition as part of Case 074-S-22 to ensure that this document would be reviewed and approved by ELUC at a later date.

- Special Condition E. states: “**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.**”

## DECOMMISSIONING AND SITE RECLAMATION PLAN

P&Z Staff reviewed the Decommissioning and Site Reclamation Plan (DSRP) received on March 24, 2023 against the Zoning Ordinance requirements in Section 6.1.5 Q. Staff found the narrative in the DSRP to be in compliance with the Zoning Ordinance.

Staff reviewed the cost estimates in the DSRP and compared them with previously approved cost estimates from Zoning Cases 064-S-22 and 080-S-22. The cost estimates from 064-S-22 were approved by ELUC in November 2022 and the costs for 080-S-22 seek approval at the April 6, 2023 ELUC meeting. Staff found that the cost estimates for the current case 074-S-22 were approximately 12% less per megawatt than those in case 064-S-22, and the cost estimates for case 080-S-22 were approximately 8.5% less per megawatt than those in case 064-S-22.

## ATTACHMENTS

- A Case 074-S-22 Decommissioning and Site Reclamation Plan with decommissioning cost estimate received March 24, 2023

**Medanos Solar**  
**DECOMMISSIONING AND SITE RECLAMATION PLAN**  
**March 2023**

## Purpose

This decommissioning and site reclamation plan is provided by Medanos Solar, LLC (the “Project Company”) and will detail the projected decommissioning demands associated with the proposed project.

The purpose of this decommissioning plan is to provide procedures and an approximate opinion of probable construction cost for partial or full closure of the solar facility. Champaign County Zoning Ordinance requires a decommissioning plan and performance guarantees to supplement plans submitted as part of the Special Use Permit Package. This decommissioning plan details provisions for facility deconstruction and site restoration to satisfy the specific guidelines set forth in the Project’s Special Use Permit. This decommissioning plan shall take effect upon facility abandonment, discontinuation of operation, or expiration of the use permit as defined by Champaign County Zoning Ordinance.

## Site Location

Medanos Solar proposes to build a photovoltaic (PV) solar facility (“Solar Facility”) with a nameplate capacity of approximately 5 MW<sub>AC</sub> (“Project”), in Champaign County, IL. The Facility is located 2710 County Road 1100 N, Homer, IL 61849, Champaign County and within tax parcel identification numbers 26-30-04-300-005, 26-30-04-400-019, and 26-30-04-126-003 (“Property”).

## Anticipated Service Life of the Project

The facility shall be decommissioned in accordance with this Decommissioning Plan (“Plan”), restoring the site to its agreed-upon post-decommissioned state upon expiration or termination of the Power Purchase Agreement or within twelve (12) months after the end of the useful life of the facility. It is anticipated the Solar Facility will have a maturity date of twenty (20) years but carries an expected useful lifetime of 40 years.

Decommissioning responsibilities include the removal of any perimeter fences, any concrete pads, all metal structures (mounting racks and trackers), all photovoltaic (PV) modules, pipelines, alternators, generators, aboveground and underground cables, transformers, inverters, fans, switch boxes, fixtures, etc. and otherwise restoring the premises to its original condition or mutually agreed upon state. Other Plan activities include the management of materials and waste, projected costs, and a decommissioning fund agreement overview.

**RECEIVED**  
**MAR 24, 2023**  
**CHAMPAIGN COUNTY**  
**PLANNING & ZONING**



## Decommissioning Risk Over the Lifecycle of a Project

The probability of an event that would lead to abandonment or long-term interruption is extremely low during the first 15 to 20 years of the Project life. Accordingly, the risk of decommissioning the Project is extremely low during this time frame. The reasons why the risk to decommission the Project is extremely low in the early phases of the Project include, but are not limited to:

- Project owners have sophisticated financing structures that allow the lender or tax equity partner to step in and rectify the event that may lead to abandonment.
- Most critical solar components have original equipment manufacturer (OEM) warranties with terms exceeding five years that include labor and parts. A warranty is an agreement or guarantee outlined by a manufacturer to a customer that defines performance requirements for a product or service. Warranties give customers a form of insurance if the purchased product or service does not adhere to quality standards. These warranties assure the Project owner, financing parties, and other stakeholders, that equipment will perform as expected which minimizes the risk of a decommissioning event. Average warranty lengths for critical solar components range from 5 to 10 years, with production warranties on solar panels extending to 20 to 25 years.
- Solar projects consist of many networked components designed to convert solar radiation into electrical energy. The failure of any single component will not result in a substantial reduction of energy generation that could lead to a decommissioning event.
- Solar projects are required to maintain replacement value property damage insurance coverage and business interruption insurance coverage. Business interruption insurance covers the loss of income that a business suffers after a disaster or equipment failure. Typical solar business interruption insurance covers income loss for twelve months from the date of the event triggering the loss.
- The replacement costs of solar components will typically decline over time, and accordingly, costs to replace failed or damaged equipment after lapsed OEM warranties will not create large financial hurdles for the Project.
- In the early stages of the Project, the resale value of the equipment is significantly higher than the decommissioning costs, resulting in a net positive (revenue).

Considering the reasons stated above, a decommissioning bond early in the life of a solar project life is not required to assure the coverage facility removal and site restoration costs. However, it is noted that the Champaign County Zoning Ordinance requires Financial Assurance be provided to the County.

Solar power is an increasingly popular form of renewable energy around the world and as an alternative to the burning of fossil fuels, solar ranks alongside wind and hydropower as essential energy options for the future of the planet. Solar also offers the additional benefit of being easier to build, operate, and decommission with minimal environmental risks. Recent rises in popularity and use can be linked to lower installation and operation costs and it is expected that this pattern will continue, further reducing the risk of a decommissioning event.

Per Champaign County Zoning Ordinance Section 6.1.1A.4a-d, 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
- d) Provision and maintenance of a letter of credit, as set forth in Section 6.1.1A.5

### Financial Assurance

To maintain compliance with section 6.1.1A.5 of the Champaign County Zoning Ordinance, the applicant must maintain an irrevocable letter of Credit (LOC) as a form of financial assurance. The Owner shall deliver the LOC to Champaign County prior to project approval.

Per Champaign County Zoning Ordinance Section 6.1.5Q.4a(a-c), no zoning permit to authorize construction of the PV SOLAR FARM shall be authorized until the PV SOLAR FARM owner shall provide the Champaign County with financial assurance to cover 12.5% of the decommissioning cost. On or before the sixth anniversary of the Commercial Operation Date, the PV SOLAR FARM Owner shall provide the Champaign County with Financial Assurance to cover 62.5% of the decommissioning cost, and on or before the eleventh anniversary of the Commercial Operation Date, shall provide Champaign County with Financial Assurance to cover 125% of the decommissioning cost. The decommissioning cost is determined as the independent engineer's cost estimate to complete the decommissioning work described in Sections 6.1.1A.4a. and 6.1.1A.4b. and 6.1.1A.4c. and otherwise compliant with Section 6.1.1A.5.

Per Champaign County Zoning Ordinance Section 6.1.5Q.4d(a), the Applicant shall provide financial assurance in the form of an irrevocable letter of credit as follows: 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 PV SOLAR FARM modules have an unlimited warranty of a 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, 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.

The Decommissioning and Site Reclamation Plan must also include provisions for anticipated repairs to any public STREET that is used during the reclamation process, in accordance with Section 6.1.5Q.2. No negative impacts to public streets is anticipated; per 6.1.5G.3, when decommissioning takes place, the Applicant or its successors in interest shall enter into a Roadway Use and Repair Agreement with the appropriate highway authority.

Champaign County Zoning Ordinance Section 6.1.5Q.4b(f), notes that salvage values must be capped at 70% of the total net estimated salvage value when considering deducting salvage value from the total estimated decommissioning cost. In the event that decommissioning is required, the full salvage value shall be available.

As required by Champaign County Zoning Ordinance Section 6.1.1A.3, Exhibit A, The Engineer's Cost Estimate, outlines itemized costs that include separate estimates for the items in Sections 6.1.1A.4a-c.

### Further Stipulations for Decommissioning

Champaign County Zoning Ordinance section 6.1.1A and 6.1.5Q contains additional stipulations and requirements regarding the decommissioning process. Per 6.1.5Q.3, the decommissioning and site reclamation plan required in paragraph 6.1.1A. 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 proceeding.
- 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 the 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 fees; and, the costs of preparing requests for proposals and bidding documents required to comply with State law or Champaign COUNTY purchasing policies.

- 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 of 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 of 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.
- 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 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.

Additionally, per Champaign County Zoning Ordinance Section 6.1.5Q.4b(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.

Champaign County Zoning Ordinance Section 6.1.1A.9 states that the Zoning Administrator may draw on the funds to have said NON-ADAPTABLE STRUCTURE removed as per Section 6.1.1A.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 6.1.1A.8.;
- c) any breach or performance failure of any provision of the decommissioning and site reclamation plan;
- d) the owner of record has filed a bankruptcy petition, or compromised the COUNTY's interest in the letter of credit in any way not 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 6.1.1A.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.

According to Section 6.1.5Q.5, in addition to the conditions listed in subparagraph 6.1.1A.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 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 6.1.5D. 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.

### **Decommissioning Cost Estimate and Bonding**

An engineer's opinion of probable construction cost and analysis of material salvage value were prepared as part of this decommissioning plan. Exhibit A summarizes probable costs associated with decommissioning including the allowable deduction of salvage values.

Per Champaign County Zoning Ordinance Section 6.1.1A.2, the decommissioning and site reclamation plan shall be binding upon all successors of title, lessees, to any operator and/or owner of Medanos Solar, LLC, and to all parties to the decommissioning and site reclamation plan. Prior to the issuance of a SPECIAL USE Permit, 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.

Champaign County Zoning Ordinance requires Medanos Solar, LLC to provide a faithful performance bond as a financial guarantee for proper decommissioning. Per Champaign County Zoning Ordinance Section 6.1.5Q.4a(c), the irrevocable letter of credit shall be in the amount of one hundred twenty five percent (125%) of an independent engineer's cost estimate. Furthermore, Medanos Solar, LLC will be required to submit detailed engineering plans at the time of decommissioning, and obtain construction permits as required by appropriate authorities.

Expenses associated with decommissioning the Project will be dependent on labor costs at the time of decommissioning. For the purposes of this report, current RSMeans data was used to estimate labor, material, and equipment expenses.



As required by Champaign County Zoning Ordinance Section 6.1.1A.3, Exhibit A (estimate including salvage) outline itemized costs that include separate estimates for the items in Sections 6.1.1A.4a-c. Exhibits B and C show 5-year average salvage values for steel and copper wire.

Total probable cost of decommissioning in Year 20 (including salvage) is estimated to be **\$169,929**.

Irrevocable Letter of Credit per Champaign County Zoning Ordinance Section 6.1.5Q.4a(c) for decommissioning in Year 20 (including salvage) is estimated to be **\$212,412**.



**EXHIBIT A**



Item	Quantity	Unit	Unit Price	Salvage Deduction (70% of Total)	Total Price (incl. markups)	Total Price	
<b>Medanos Solar</b>							
<b>Champaign County, Illinois</b>							
<b>Decommissioning Estimate Pro Forma w/ Salvage</b>							
The Engineer has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Engineer at this time and represent only the Engineer's judgment as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs. LS = Lump Sum, HR = Hours, EA = Each, LF = Linear Feet.							
<b>General Items</b>							
Mobilization	1	LS		\$ -	\$16,540.00	\$ (16,540.00)	
Supervision	210	HR	\$ 96.00000	\$ -	\$20,160.00	\$ (20,160.00)	
Temporary Facilities	1	LS		\$ -	\$2,010.00	\$ (2,010.00)	
Safety	1	LS		\$ -	\$1,360.00	\$ (1,360.00)	
Legal Expenses	1	LS		\$ -	\$360.00	\$ (360.00)	
General Liability Insurance	1	LS		\$ -	\$1,460.00	\$ (1,460.00)	
Contractor's G&A	1	LS		\$ -	\$2,760.00	\$ (2,760.00)	
<b>General Items Subtotal</b>						<b>\$ (44,650.00)</b>	
<b>Civil Items</b>							
SWPPP, Erosion Control Measures (Disturbed Area)	53	Ac	\$670.00000	\$ -	\$35,175.00	\$ (35,175.00)	
Seeding	3	Ac	\$1,932.45200	\$ -	\$5,797.36	\$ (5,797.36)	
Tilling 6" topsoil/scarifying access road and rough grading existing soil	1	Ac	\$9,229.41000	\$ -	\$9,229.41	\$ (9,229.41)	
Remove and Recycle Chainlink Fence, 8' High	7,364	LF	\$5.51329	\$ 4,330.03	\$40,599.84	\$ (36,269.81)	
Remove Power Pole	5	EA	\$869.53000	\$ -	\$4,347.65	\$ (4,347.65)	
<b>Civil Items Subtotal</b>						<b>\$ (90,819.23)</b>	
<b>Electrical Items</b>							
Removal and Recycle AC Cables	1,799	LF	\$0.95983	\$ 54.78	\$1,726.74	\$ (1,671.96)	
Removal and Recycle DC Cables	171,173	LF	\$0.25764	\$ 5,212.23	\$44,101.90	\$ (38,889.67)	
Backfill AC and DC trenches	104,358	LF	\$0.32658	\$ -	\$34,081.24	\$ (34,081.24)	
Remove and Recycle Inverters	2	EA	\$2,346.040000	\$ 7,560.00	\$4,692.08	\$ 2,867.92	
Removed and Recycle Photovoltaic Modules	17,400	EA	\$6.11000	\$ 161,251.80	\$106,314.00	\$ 54,937.80	
<b>Electrical Items Subtotal</b>						<b>\$ (16,837.16)</b>	
<b>Structural Items</b>							
Remove and Recycle Piles (10' W6x7 piles @ 25' OC assumed )	3,171	EA	\$6.5800	\$ 37,290.96	\$20,865.18	\$ 16,425.78	
Remove and Recycle Support Assemblies	385,809	LB	\$0.043618	\$ 40,509.95	\$16,828.26	\$ 23,681.69	
<b>Structural Items Subtotal</b>						<b>\$ 40,107.47</b>	
<b>Reclamation Items</b>							
Contaminated Soils Testing	1	LS		\$ -	\$2,000.00	\$ (2,000.00)	
Reclamation Monitoring and Maintenance	1	LS		\$ -	\$5,000.00	\$ (5,000.00)	
<b>Reclamation Items Subtotal</b>						<b>\$ (7,000.00)</b>	
				<b>Subtotal:</b>	<b>\$ 256,209.74</b>	<b>\$375,408.66</b>	<b>\$ (119,198.92)</b>
					<b>Inflation (1.5%/year):</b>	<b>\$ (41,344.74)</b>	
					<b>County Administration Costs (2.5% before Salvage)</b>	<b>\$ (9,385.22)</b>	
					<b>Total:</b>	<b>\$ (169,928.88)</b>	
					<b>Total Cost/MW:</b>	<b>\$ (33,985.78)</b>	

- Notes:**
1. A site of similar size was used to derive potential quantities for erosion and sediment control (scaling from 36 MW to 5 MW). Quantities were determined by comparing "unit/MW" quantities directly.
  2. Labor productivity and unit rates were derived from RSMean Online (Heavy Construction, 2022 data).
  3. Labor, material, and equipment rates are based on the RSMean City Cost Index (CCI) for Champaign, IL.
  4. Material salvage values were based off of current US salvage exchange rates.
  5. Equipment rental rates were determined from local rental facilities.
  6. Photovoltaic Module material salvage rate is based on straight-line depreciation of modules (-0.5% per year).
  7. For PV Module Removal/Recycle labor and equipment costs are computed at present values, while salvage value is computed at 20 year depreciated values.
  8. Material salvage values were determined using the most prevalent salvageable metal in each component. Copper Wire @\$0.87/LB (AC and DC Cables) and Steel @0.84/LF of fence, @\$1.05/pile, and @\$0.15/LB.
  9. Inverter resale value is dependent on the assumption that all inverters will be decommissioned and resold half way through their useful life (every 5 years).
  10. Decommissioning quantities determined on 02/15/2023.



Date of Expiration: 11-30-23

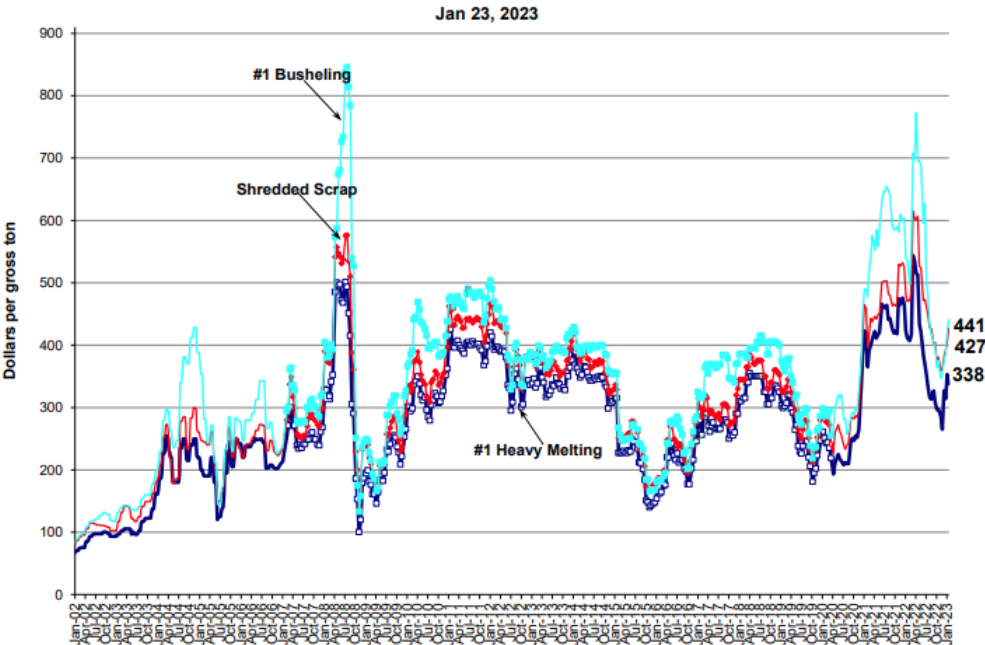


**EXHIBIT B**

**Steel Salvage:**  
 Source: SteelBenchmarker.com

**SteelBenchmarker™ Scrap Price**

USA, delivered to steel plant  
 (AMM scrap price data, Jan. 2002 - Jan. 2007; SteelBenchmarker data begins Feb. 2007)



<b>#1 Heavy Melting Steel (SteelBenchmarker, 5-year average)</b>		
	\$/gross ton	\$/lb
Max (approx.)	\$540.00	\$0.24
Min (approx.)	\$180.00	\$0.08
Avg (approx.)	\$360.00	\$0.15

**EXHIBIT C**

**Copper Salvage:**  
 Source: [Macrotrends.net](https://www.macrotrends.net), [iscrapapp.com](https://www.iscrapapp.com)



Item	Price	Unit	Notes
Copper (5-year average)	\$3.37	\$/lb	Source: <i>Macrotrends.net</i> (2/13/2023)
Copper Wire (Feb. 2023)	\$1.06	\$/lb	Source: <i>Iscrapapp.com</i> (2/14/2023)
Copper (Feb. 2023)	\$4.08	\$/lb	Source: <i>Macrotrends.net</i> (2/13/2023)
Copper Wire/Copper Ratio	0.260	-	Divided Feb. 2023 spot insulated copper wire price by copper Feb. 2023 spot price (\$1.06/\$4.08)
Copper Wire (5-year average)	\$0.87	\$/lb	Copper 5-year average multiplied by ratio

Champaign County  
Department of

**PLANNING &  
ZONING**

Brookens Administrative  
Center  
1776 E. Washington Street  
Urbana, Illinois 61802

(217) 384-3708  
zoningdept@co.champaign.il.us  
www.co.champaign.il.us/zoning

To: **Champaign County Environment & Land Use Committee**

From: **John Hall, Zoning Administrator  
Susan Burgstrom, Senior Planner**

Date: **April 24, 2023**

RE: **Recommendation for rezoning Case 035-AM-21**

Request: **Amend the Zoning Map to change the zoning district designation from the AG-1 Agriculture Zoning District to the R-5 Manufactured Home Park Zoning District in order to operate the proposed Special Use with waivers in related Zoning Case 036-S-21.**

Petitioner: **Jeffrey Jenkins, d.b.a. Walnut Grove MHC**

---

## **STATUS**

The Zoning Board of Appeals (ZBA) voted 7-0 to “RECOMMEND ENACTMENT” of this map amendment at its April 13, 2023 meeting. The ZBA found that the rezoning achieved all relevant Goals, Objectives, and Policies from the Champaign County Land Resource Management Plan.

There are three approved special conditions for the rezoning regarding acceptance of the Right to Farm Resolution 3425, that the map amendment approval is contingent upon related Special Use Permit case 036-S-21, and that the petitioner will achieve full compliance with Illinois Department of Public Health.

Related Special Use Permit Case 036-S-21 was approved at the April 13, 2023 ZBA meeting.

No negative comments were received from the public regarding the rezoning.

## **BACKGROUND**

Petitioner Jeffrey Jenkins purchased the Walnut Grove Manufactured Home Community in 2019. The original 12 home sites were authorized under a permit from the Illinois Department of Public Health (IDPH) in 1972, and the manufactured home park has been operating since then.

The petitioner received a license from IDPH to expand to 20 sites in 2021, but IDPH later corrected that only 12 sites are licensed, and any expansion would need to have a construction permit through IDPH. This has not yet occurred. In December 2021, IDPH sent a cease-and-desist letter to Mr. Jenkins indicating no additional homes could be placed without appropriate license and permits.

Similarly, the County only recognizes 12 home sites for this manufactured home park. In the last couple of years, four additional homes have been added without Planning & Zoning Department permits. On November 30, 2021, P&Z Staff sent a First Notice of Violation to Mr. Jenkins telling him that additional homes are not authorized and that he would either need to remove the unauthorized homes or apply for a Map Amendment and Special Use Permit. R-5 Manufactured Home Park zoning and a Special Use Permit are both required for a manufactured home park to expand.

Mr. Jenkins applied for the Map Amendment and Special Use Permit on December 20, 2021. Mr. Jenkins has maintained that he has successfully improved other manufactured home parks outside of Champaign

County, and simply was not aware of this County’s regulations. He seeks to bring Walnut Grove MHC into full compliance with the Zoning Ordinance.

The subject property is not located within the one and one-half mile extraterritorial jurisdiction of a municipality with zoning. Municipalities with zoning have protest rights in Map Amendment cases. The subject property is located within Somer Township, which does not have a Planning Commission.

**PROPOSED SPECIAL CONDITIONS**

- A. **The owners of the subject property hereby recognize and provide for the right of agricultural activities to continue on adjacent land consistent with the Right to Farm Resolution 3425.**

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

**Conformance with Policy 4.2.3 of the Land Resource Management Plan.**

- B. **The Map Amendment is contingent upon approval of Case 036-S-21.**

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

**That the Special Use is consistent with the Zoning Ordinance and ZBA recommendations.**

- C. **The petitioner shall achieve full compliance with the Illinois Department of Public Health within one year of approval of Map Amendment Case 035-AM-21 or the rezoning will be void.**

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

**To ensure compliance with IDPH regulations and licensing that provide a greater assurance of public health and safety and ensure that County regulations and IDPH regulations are coordinated in a reasonable manner.**

**ATTACHMENTS**

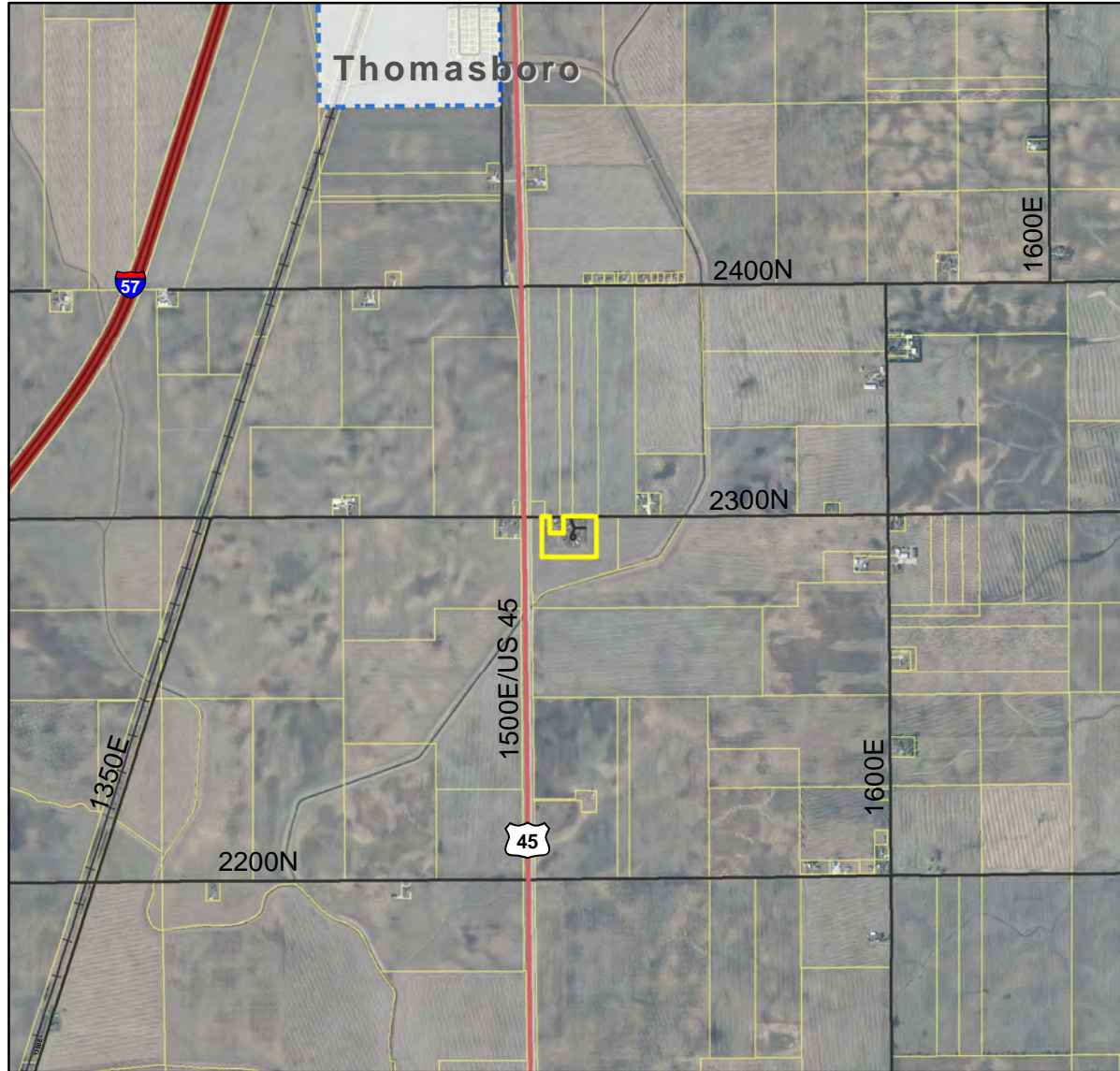
- A Case Maps (Location, Land Use, Zoning)
- B Four revised Site Plan sheets received March 13, 2023
- C 2020 aerial photo of Walnut Grove MHC
- D Copy of Right to Farm Resolution 3425
- E Summary Finding of Fact and Final Determination for Case 035-AM-21 as approved by the ZBA on April 13, 2023



# Location Map

Cases 035-AM-21, 036-S-21 & 041-V-22  
September 15, 2022

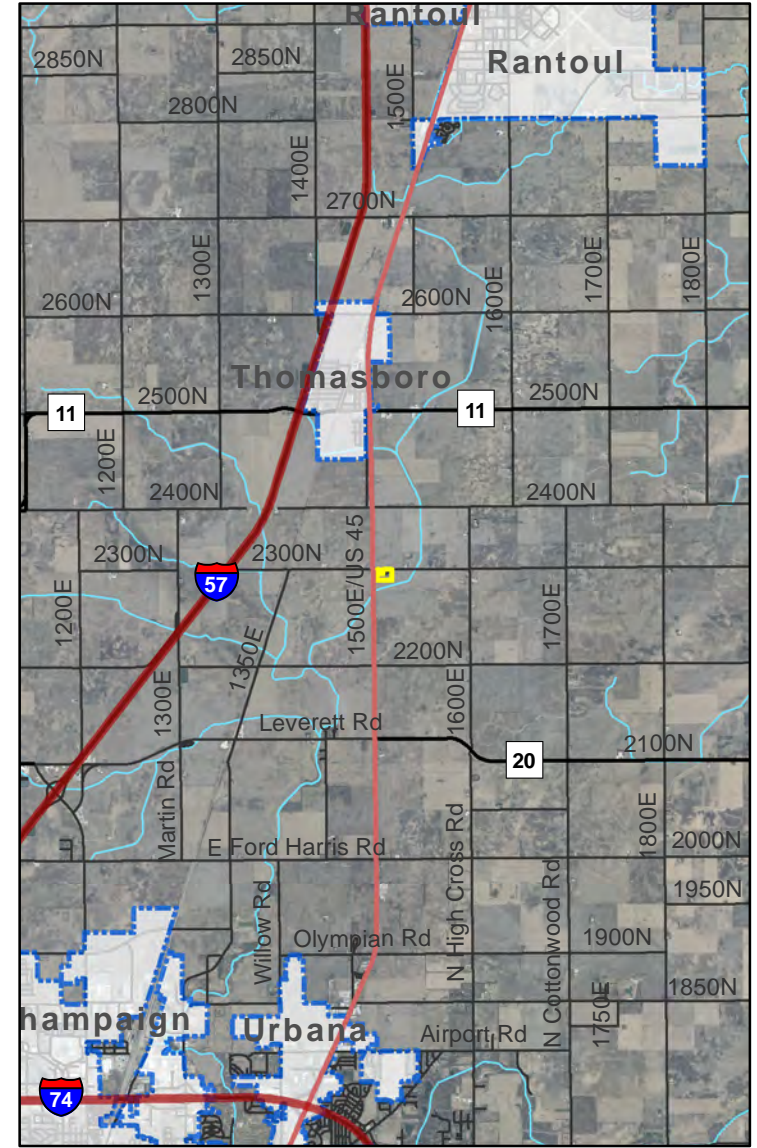
Subject Property



- Subject Property
- Parcels
- Municipal Boundary

0 0.125 0.25 0.5 Miles

Property location in Champaign County



0 0.5 1 2 Miles

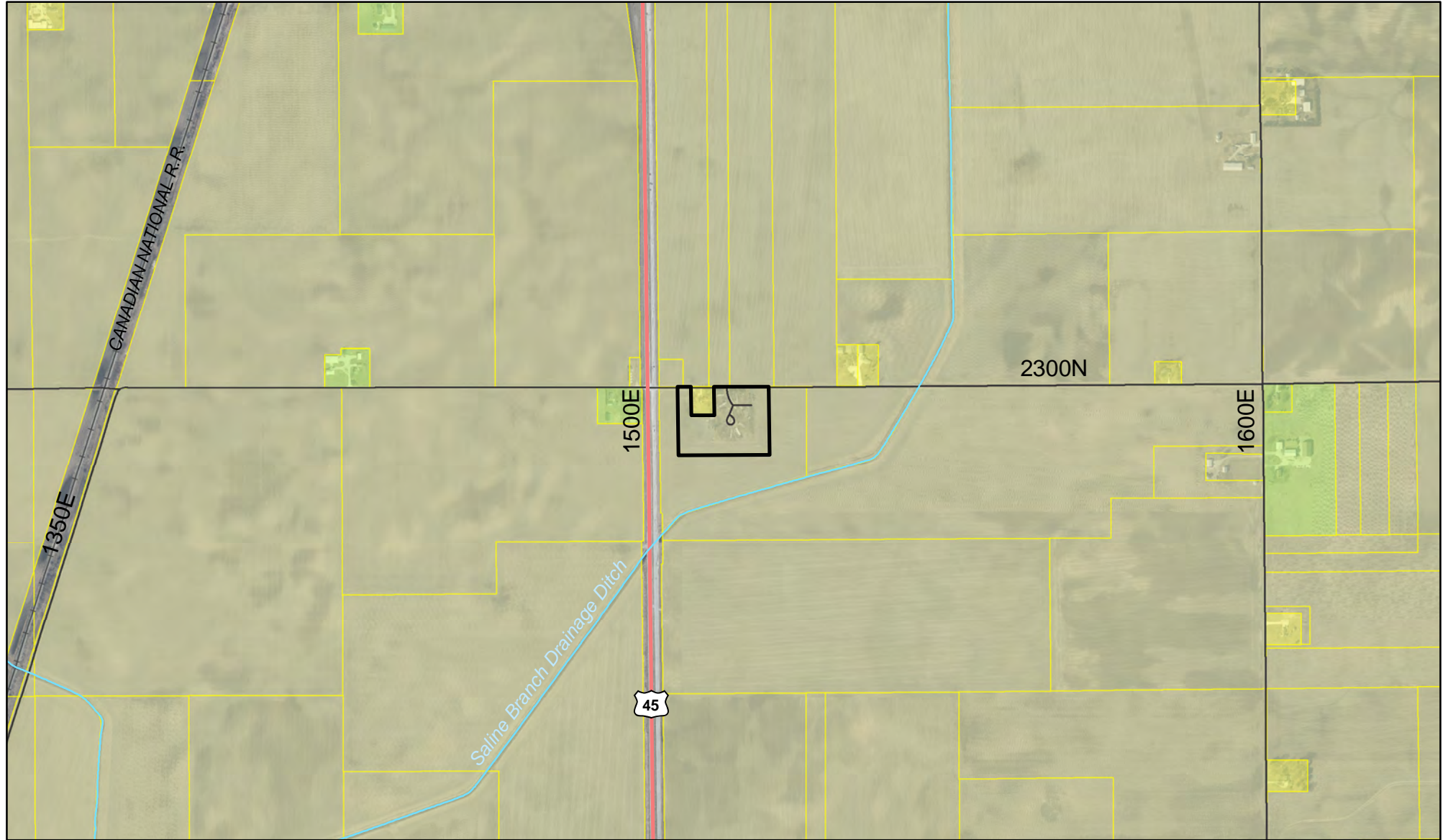


Champaign County  
Department of  
**PLANNING &  
ZONING**

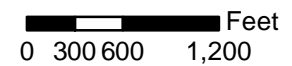


# Land Use Map

Cases 035-AM-21, 036-S-21 & 041-V-22  
September 15, 2022

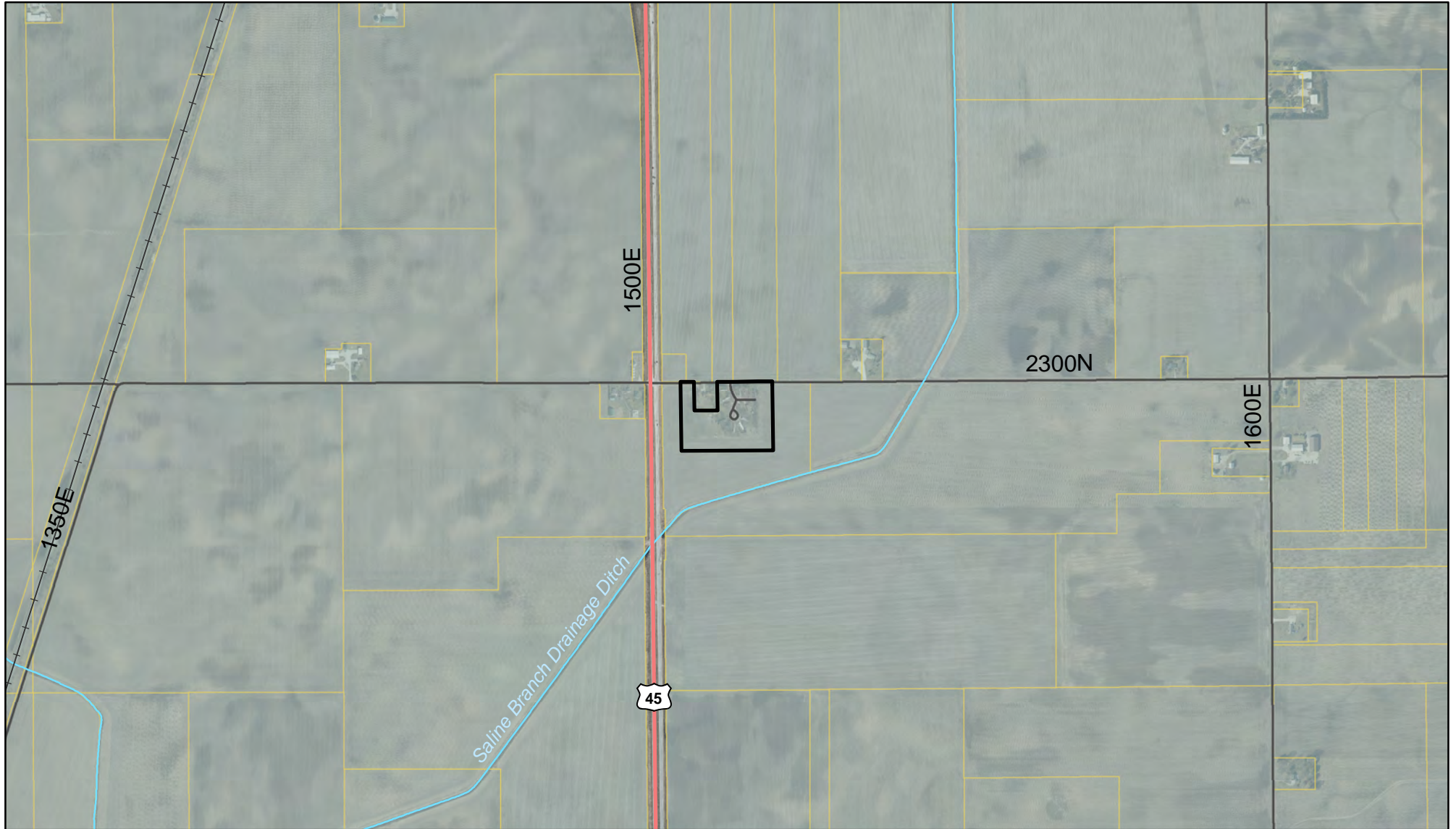





- |                  |                |             |
|------------------|----------------|-------------|
| County Highways  | Tax Exempt     | Residential |
| Subject Property | Agriculture    | Commercial  |
| Parcels          | Ag/Residential |             |



# Zoning Map

Cases 035-AM-21, 036-S-21 & 041-V-22  
September 15, 2022



-  Subject Property
-  Parcels
-  AG-1 Agriculture

0 300 600 1,200 Feet

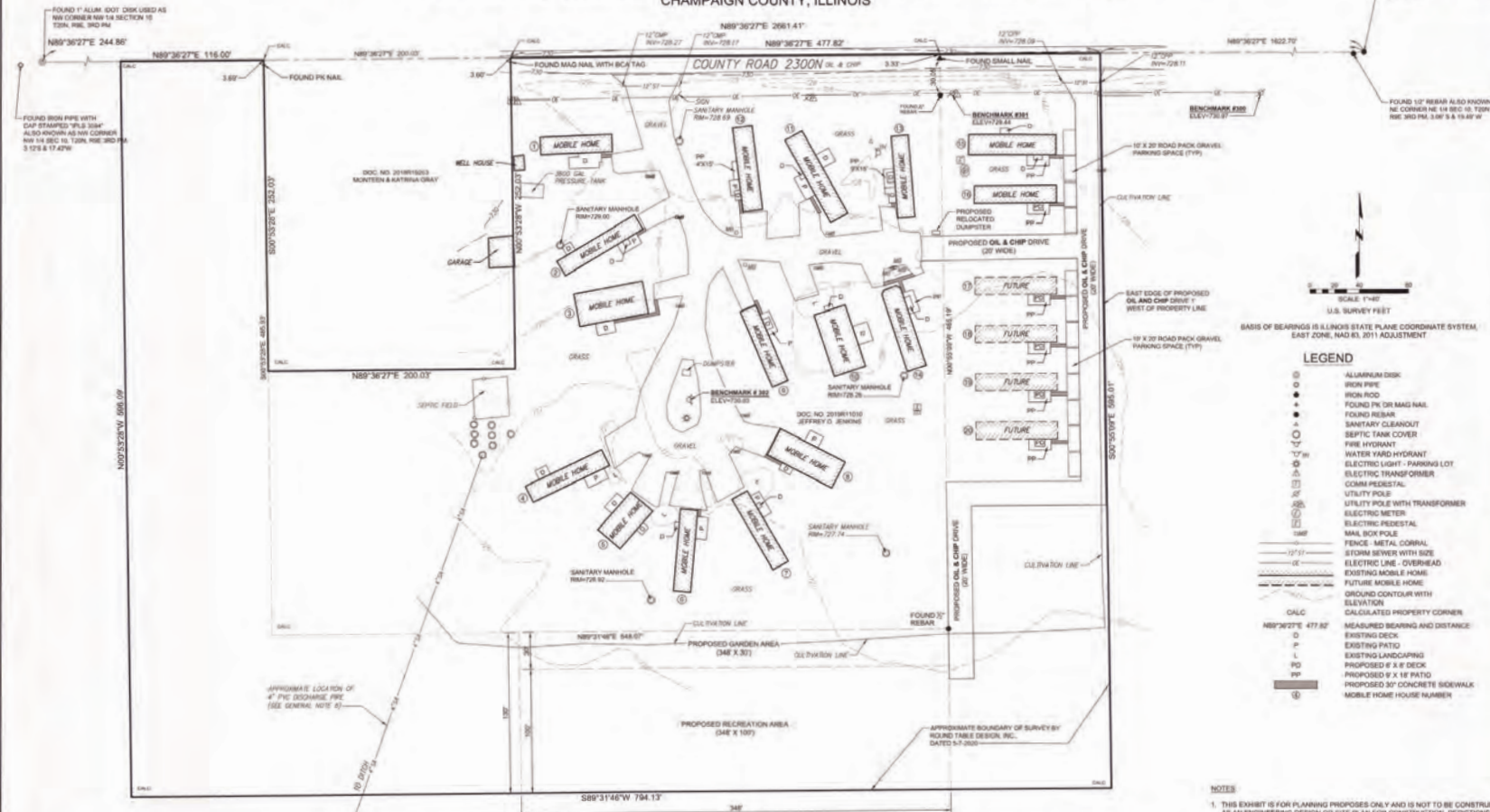


Champaign County  
Department of  
**PLANNING &  
ZONING**



# TOPOGRAPHIC CONCEPT PLAN AND EXHIBIT OF WALNUT GROVE MHC

PART OF THE NW 1/4 OF SECTION 10, TOWNSHIP 20 NORTH, RANGE 9 EAST OF THE 3RD PRINCIPAL MERIDIAN  
CHAMPAIGN COUNTY, ILLINOIS



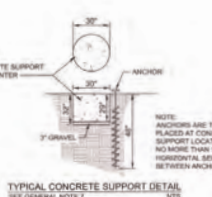
**LEGEND**

- ⊙ ALUMINUM DISK
- IRON PIVOT
- ▲ FOUND PIN OR MAG NAIL
- FOUND REBAR
- ▲ SANITARY CLEANOUT
- ⊙ SEPTIC TANK COVER
- ⊙ FIRE HYDRANT
- ⊙ WATER YARD HYDRANT
- ⊙ ELECTRIC LIGHT - PARKING LOT
- ⊙ ELECTRIC TRANSFORMER
- ⊙ COMM PEDESTAL
- ⊙ UTILITY POLE
- ⊙ UTILITY POLE WITH TRANSFORMER
- ⊙ ELECTRIC METER
- ⊙ ELECTRIC PEDESTAL
- ⊙ MAIL BOX POLE
- ⊙ FENCE - METAL CORRAL
- ⊙ STORM SEWER WITH SIZE
- ⊙ ELECTRIC LINE - OVERHEAD
- ⊙ EXISTING MOBILE HOME
- ⊙ FUTURE MOBILE HOME
- ⊙ GROUND CONTOUR WITH ELEVATION
- ⊙ CALCULATED PROPERTY CORNER
- ⊙ MEASURED BEARING AND DISTANCE
- ⊙ EXISTING DECK
- ⊙ EXISTING PATIO
- ⊙ EXISTING LANDSCAPING
- ⊙ PROPOSED 8" x 8" DECK
- ⊙ PROPOSED 8" x 16" PATIO
- ⊙ PROPOSED 30" CONCRETE SIDEWALK
- ⊙ MOBILE HOME HOUSE NUMBER

- NOTES**
- THIS EXHIBIT IS FOR PLANNING PURPOSES ONLY AND IS NOT TO BE CONSTRUED AS AN ENGINEERING DESIGN OR SITE PLAN FOR CONSTRUCTION. DEPICTIONS OF PROPOSED FEATURES ARE SHOWN HEREON BASED ON CLIENT'S DIRECTION.
  - THIS TOPOGRAPHIC PLAN OF THE EXISTING WALNUT GROVE MOBILE HOME COMMUNITY WAS PREPARED FROM FIELD DATA OBTAINED ON JUNE 8, 2022, BY FARNSWORTH GROUP, INC.
  - THIS PLAN DOES NOT REPRESENT A BOUNDARY SURVEY IN ACCORDANCE WITH ILLINOIS ADMINISTRATIVE CODES MINIMUM STANDARDS.
  - BEARINGS SHOWN ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83, 2011 ADJUSTMENT.
  - WALNUT GROVE MOBILE HOME COMMUNITY IS LOCATED WITHIN CHAMPAIGN COUNTY, ILLINOIS AND HAS A STREET ADDRESS OF 1513 COUNTY ROAD 2300 NORTH, URBANA, ILLINOIS 61802.
  - LOCATION OF THE 4" PVC DISCHARGE PIPE WAS PROVIDED BY OWNER, NO SURFACE EVIDENCE WAS FOUND TO VERIFY THIS LOCATION.
  - FUTURE HOMES 17 THROUGH 20 WILL HAVE CONCRETE SUPPORTS WITH NO MORE THAN 8" OF SEPARATION. SEE DETAIL FOR CONSTRUCTION DIMENSIONS. ANCHORS WILL BE INSTALLED ON S&G SUPPORTS WITH NO MORE THAN 16" OF SEPARATION. THESE SUPPORT LOCATIONS AND THE TYPICAL CONCRETE SUPPORT DETAIL SHOWN HEREON ARE BASED SOLELY ON CLIENT'S SPECIFICATIONS.

ADDRESS	EXISTING DECK SF	PROPOSED DECK SF	EXISTING PATIO SF	PROPOSED PATIO SF	PROPOSED WALK LENGTH
1	798	0	0	0	8
2	89	0	120	0	8
3	100	0	0	0	47
4	80	0	162	0	0
5	88	0	0	0	0
6	16	0	162	0	9
7	16	0	144	0	12
8	32	0	120	0	13
9	34	0	90	0	12
10	228	0	0	0	0
11	180	0	154	0	13
12	40	0	80	80	11
13	40	0	0	83	4
14	30	0	0	112	26
15	83	0	0	134	12
16 & FUTURE 17, 18, 19, 20	0 (TYP)	48 (TYP)	0 (TYP)	114 (TYP)	12 - 14

\*INCLUDES HANDICAP RAMP



- BENCHMARKS**
- BM #190:** RAILROAD SPIKE IN WEST FACE OF FIRST POWER POLE EAST OF EAST ENTRANCE TO MOBILE HOME PARK ELEV: 733.97
  - BM #201:** RAILROAD SPIKE IN WEST FACE OF FIRST POWER POLE WEST OF EAST ENTRANCE TO MOBILE HOME PARK ELEV: 729.44
  - BM #302:** TOP OF OPERATING NUT ON FIRE HYDRANT AT CIRCLE DRIVE IN CENTER OF MOBILE HOME PARK ELEV: 726.03

**Farnsworth GROUP**  
2211 WEST BRADLEY AVENUE  
CHAMPAIGN, ILLINOIS 61821  
(317) 352-7408 / info@f-w.com

www.f-w.com  
Engineers | Architects | Surveyors | Planners

#	DATE	DESCRIPTION
1	05/01/23	ADDED CLIENT COMMENTS
2	05/16/23	ADDED REVISION AREA
3	10/03/23	ADDED FEEDBACK FROM CLIENT REVIEW
4	10/09/23	ADDED FEEDBACK FROM CLIENT REVIEW
5	05/09/23	ADDED FEEDBACK FROM CLIENT REVIEW

**RECEIVED**  
MAR 13, 2023  
CHAMPAIGN COUNTY  
PLANNING & ZONING

**Walnut Grove MHC**

1513 County Rd 2300 N  
Urbana, IL 61802

DATE: 07/18/2022  
DESIGNED: WJM  
DRAWN: POM  
REVIEWED: JDA  
FIELD BOOK NO.: CHA 19006

**TOPOGRAPHIC CONCEPT PLAN AND EXHIBIT OF WALNUT GROVE MHC**

PROJECT NUMBER:  
**1**  
OF 1

PROJECT NO.: 0221011.00

# TOPOGRAPHIC CONCEPT PLAN AND EXHIBIT OF WALNUT GROVE MHC

PART OF THE NW 1/4 OF SECTION 10, TOWNSHIP 20 NORTH, RANGE 9 EAST OF THE 3RD PRINCIPAL MERIDIAN  
CHAMPAIGN COUNTY, ILLINOIS



**Farnsworth GROUP**

2713 WEST BRADLEY AVENUE  
CHAMPAIGN, ILLINOIS 61821  
(217) 352-7428 / info@fng.com

www.fng.com  
Engineering | Architecture | Surveying | Sciences

#	DATE	DESCRIPTION
1	08/05/22	ADDED CLIENT'S COMMENTS
2	08/05/22	ADDED RECREATION AREA
3	11/22/22	ADDED ITEMS PER CLIENT REVIEW
4	08/05/22	ADDED ITEMS PER CLIENT REVIEW
5	08/05/22	ADDED ITEMS PER CLIENT REVIEW

RECEIVED

MAR 13, 2023

CHAMPAIGN COUNTY  
PLANNING & ZONING

Jeff Jenkins

Walnut Grove MHC

1513 County Rd 2300 N  
Urbana, IL 61802

DATE:	07/18/2022
DESIGNED:	WJM
DRAWN:	PDW
REVIEWED:	JDA
FIELD BOOK NO.:	CHA 19008

TOPOGRAPHIC  
CONCEPT PLAN AND  
EXHIBIT OF WALNUT  
GROVE MHC

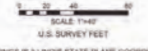
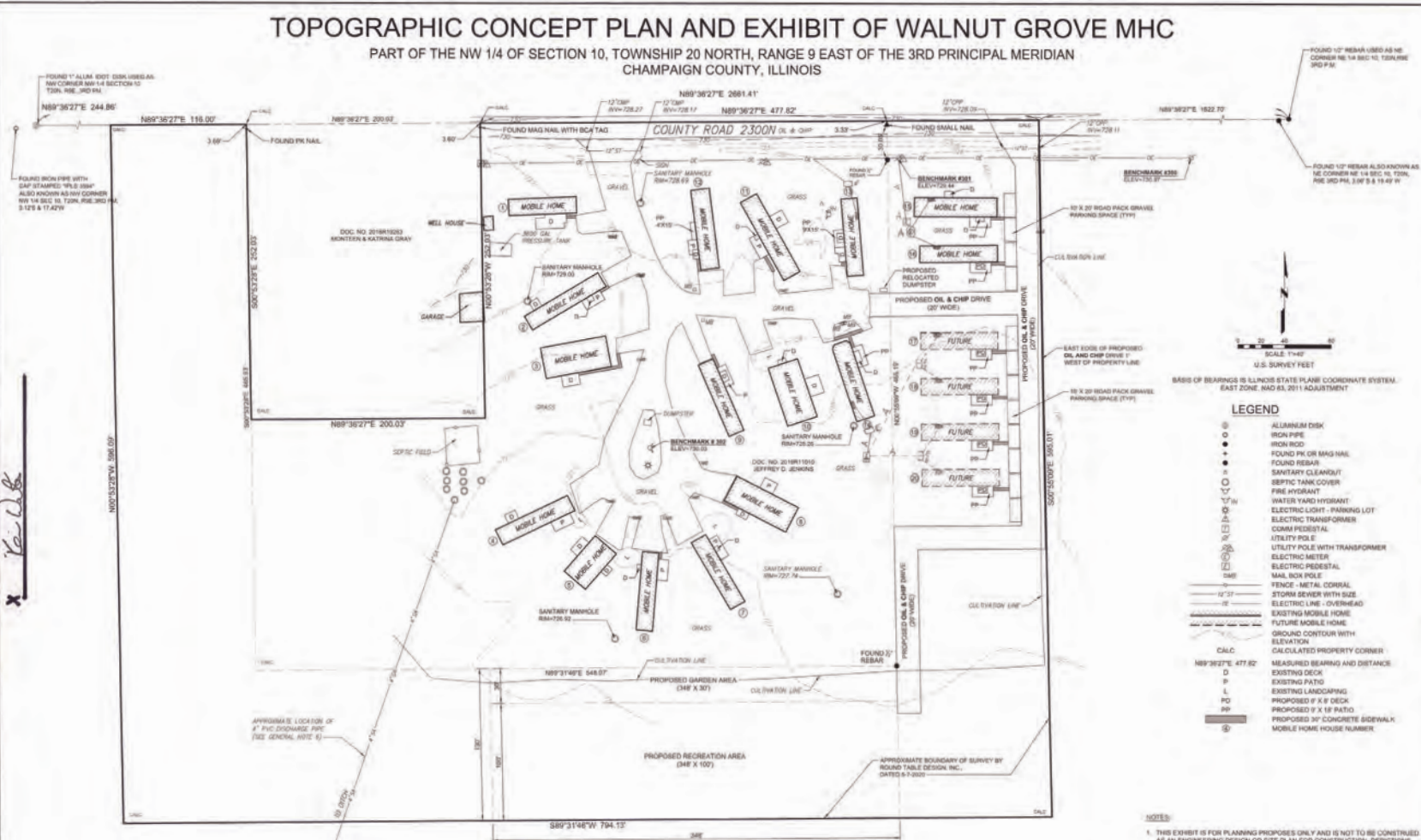
1

OF 1

PROJECT NO.: 022110.10

ELECTRIC

Farnsworth Group, Inc.  
3000 Woodmont  
Urbana, IL 61802



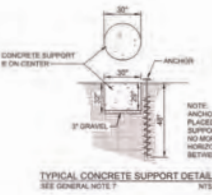
**LEGEND**

- ⊙ ALUMINUM DISK
- IRON PIPE
- IRON ROD
- FOUND PK OR MAG NAIL
- FOUND REBAR
- SANITARY CLEANOUT
- SEPTIC TANK COVER
- FIRE HYDRANT
- WATER TANK HYDRANT
- ELECTRIC LIGHT - PARKING LOT
- ELECTRIC TRANSFORMER
- COMM. PEDESTAL
- UTILITY POLE
- UTILITY POLE WITH TRANSFORMER
- ELECTRIC METER
- ELECTRIC PEDESTAL
- MAIL BOX POLE
- FENCE - METAL CORRAL
- STORM SEWER WITH GULLY
- ELECTRIC LINE - OVERHEAD
- EXISTING MOBILE HOME
- FUTURE MOBILE HOME
- GROUND CONTOUR WITH ELEVATION
- CALCULATED PROPERTY CORNER
- MEASURED BEARING AND DISTANCE
- EXISTING PATIO
- EXISTING LANDSCAPING
- PROPOSED 4" x 8" DECK
- PROPOSED 8" x 12" PATIO
- PROPOSED 3" CONCRETE SIDEWALK
- MOBILE HOME HOUSE NUMBER

- NOTES:**
- THIS EXHIBIT IS FOR PLANNING PURPOSES ONLY AND IS NOT TO BE CONSTRUED AS AN ENGINEERING DESIGN OR SITE PLAN FOR CONSTRUCTION. DIRECTIONS OF PROPOSED FEATURES ARE SHOWN HEREON BASED ON CLIENT'S DIRECTION.
  - THIS TOPOGRAPHIC PLAN OF THE EXISTING WALNUT GROVE MOBILE HOME COMMUNITY WAS PREPARED FROM FIELD DATA OBTAINED ON JUNE 6, 2022, BY FARNSWORTH GROUP, INC.
  - THIS PLAN DOES NOT REPRESENT A BOUNDARY SURVEY IN ACCORDANCE WITH ILLINOIS ADMINISTRATIVE CODE MINIMUM STANDARDS.
  - BEARINGS SHOWN ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83, 2011 ADJUSTMENT.
  - WALNUT GROVE MOBILE HOME COMMUNITY IS LOCATED WITHIN CHAMPAIGN COUNTY, ILLINOIS AND HAS A STREET ADDRESS OF 1513 COUNTY ROAD 2300, NORTH, URBANA, ILLINOIS 61802.
  - LOCATION OF THE 4" PVC DISCHARGE PIPE WAS PROVIDED BY OWNER, NO SURFACE EVIDENCE WAS FOUND TO VERIFY THIS LOCATION.
  - FUTURE HOMES 17 THROUGH 20 WILL HAVE CONCRETE SUPPORTS WITH NO MORE THAN 8" OF SEPARATION. SEE DETAIL FOR CONSTRUCTION DIMENSIONS. ANCHORS WILL BE INSTALLED ON SAID SUPPORTS WITH NO MORE THAN 18" OF SEPARATION. THESE SUPPORT LOCATIONS AND THE TYPICAL CONCRETE SUPPORT DETAIL SHOWN HEREON ARE BASED SOLELY ON CLIENT'S SPECIFICATIONS.

ADDRESS	EXISTING DECK SF	PROPOSED DECK SF	EXISTING PATIO SF	PROPOSED PATIO SF	PROPOSED WALK LENGTH
1	788	0	0	0	8
2	89	0	137	0	8
3	150	0	0	0	47
4	80	0	162	0	8
5	148	0	0	0	9
6	18	0	162	0	6
7	18	0	144	0	2
8	33	0	120	0	15
9	54	0	90	0	12
10	288	0	0	0	8
11	150	0	156	0	15
12	40	0	80	62	11
13	137	0	0	83	4
14	55	0	0	112	36
15	92	0	0	134	12
16 & FUTURE 17, 18, 19, 20	0 (TYP)	18 (TYP)	0 (TYP)	114 (TYP)	12-18

\*INCLUDES HANDICAP RAMP

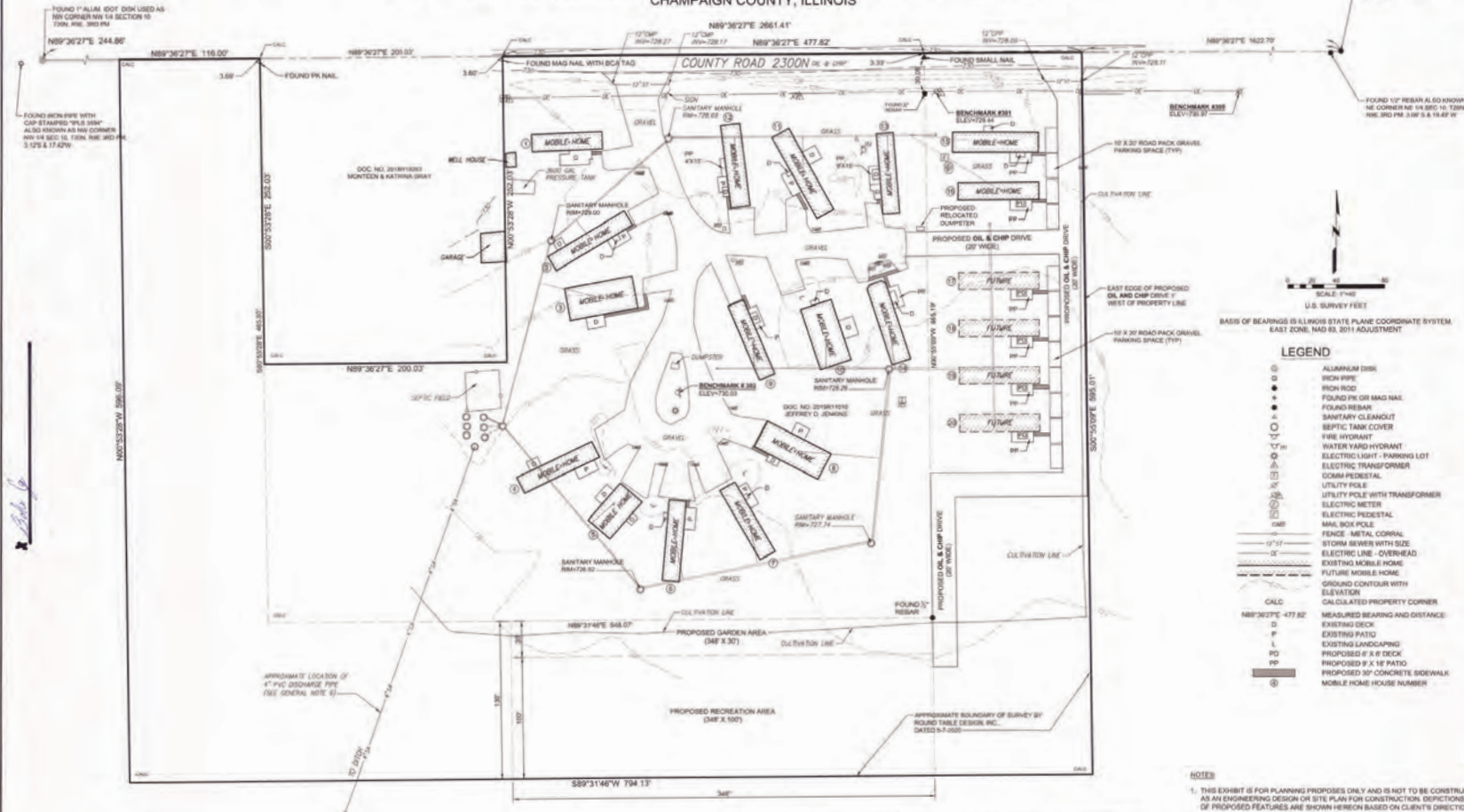


- BENCHMARKS:**
- BM #202: RAILROAD SPIKE IN WEST FACE OF FIRST POWER POLE EAST OF EAST ENTRANCE TO MOBILE HOME PARK. ELEVATION 81.87
  - BM #201: RAILROAD SPIKE IN WEST FACE OF FIRST POWER POLE WEST OF EAST ENTRANCE TO MOBILE HOME PARK. ELEVATION 79.44
  - BM #203: TOP OF OPERATING NUT ON FIRE HYDRANT AT CIRCLE DRIVE IN CENTER OF MOBILE HOME PARK. ELEVATION 79.03



# TOPOGRAPHIC CONCEPT PLAN AND EXHIBIT OF WALNUT GROVE MHC

PART OF THE NW 1/4 OF SECTION 10, TOWNSHIP 20 NORTH, RANGE 9 EAST OF THE 3RD PRINCIPAL MERIDIAN  
CHAMPAIGN COUNTY, ILLINOIS



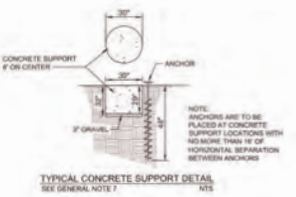
**LEGEND**

- ⊙ ALUMINUM DISK
- IRON PIPE
- IRON ROD
- FOUND PIN OR MAG NAIL
- FOUND REBAR
- SANITARY CLEANOUT
- SEPTIC TANK COVER
- FIRE HYDRANT
- WATER YARD HYDRANT
- ELECTRIC LIGHT - PARKING LOT
- ELECTRIC TRANSFORMER
- COMM PEDESTAL
- UTILITY POLE
- UTILITY POLE WITH TRANSFORMER
- ELECTRIC METER
- ELECTRIC PEDESTAL
- MHL BOX POLE
- FENCE - METAL CORRAL
- STORM SEWER WITH SIZE
- ELECTRIC LINE - OVERHEAD
- EXISTING MOBILE HOME
- FUTURE MOBILE HOME
- GROUND CONTOUR WITH ELEVATION
- CALCULATED PROPERTY CORNER
- MEASURED BEARING AND DISTANCE
- EXISTING DECK
- EXISTING PATIO
- EXISTING LANDSCAPING
- PROPOSED 8" X 8" DECK
- PROPOSED 3" X 18" PATIO
- PROPOSED 30" CONCRETE SIDEWALK
- MOBILE HOME HOUSE NUMBER

- NOTES**
- THIS EXHIBIT IS FOR PLANNING PURPOSES ONLY AND IS NOT TO BE CONSTRUED AS AN ENGINEERING DESIGN OR SITE PLAN FOR CONSTRUCTION. DEPICTIONS OF PROPOSED FEATURES ARE SHOWN HEREON BASED ON CLIENT'S DIRECTION.
  - THIS TOPOGRAPHIC PLAN OF THE EXISTING WALNUT GROVE MOBILE HOME COMMUNITY WAS PREPARED FROM FIELD DATA OBTAINED ON JUNE 8, 2022, BY FARNSWORTH GROUP, INC.
  - THIS PLAN DOES NOT REPRESENT A BOUNDARY SURVEY IN ACCORDANCE WITH ILLINOIS ADMINISTRATIVE CODE MINIMUM STANDARDS.
  - BEARINGS SHOWN ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83, 2011 ADJUSTMENT.
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  - LOCATION OF THE 4" PVC DISCHARGE PIPE WAS PROVIDED BY OWNER. NO SURFACE EVIDENCE WAS FOUND TO VERIFY THIS LOCATION.
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ADDRESS	EXISTING DECK SF	PROPOSED DECK SF	EXISTING PATIO SF	PROPOSED PATIO SF	PROPOSED WALK LENGTH
1	796	0	0	0	8
2	86	0	140	0	8
3	0	0	0	0	47
4	80	0	182	0	0
5	188	0	0	0	0
6	18	0	182	0	9
7	16	0	146	0	0
8	32	0	120	0	15
9	24	0	90	0	12
10	328	0	0	0	0
11	186	0	154	0	18
12	40	0	80	80	11
13	137	0	0	83	4
14	50	0	0	112	36
15	83	0	0	134	12
16 & FUTURE 17, 18, 19, 20	0 (TYP)	48 (TYP)	0 (TYP)	114 (TYP)	12 - 14

\*INCLUDED HARDSHIP RAMP



- BENCHMARKS**
- BM #30: RAILROAD SPIKE IN WEST FACE OF FIRST POWER POLE EAST OF EAST ENTRANCE TO MOBILE HOME PARK. ELEV=739.97
  - BM #31: RAILROAD SPIKE IN WEST FACE OF FIRST POWER POLE WEST OF EAST ENTRANCE TO MOBILE HOME PARK. ELEV=728.44
  - BM #32: TOP OF OPERATING NUT ON FIRE HYDRANT AT CIRCLE DRIVE IN CENTER OF MOBILE HOME PARK. ELEV=726.03

SEWER

**Farnsworth GROUP**  
2311 WEST BRADLEY AVENUE  
CHAMPAIGN, ILLINOIS 61821  
(217) 352-7408 / info@fw.com

www.fw.com  
Engineers | Architects | Surveyors | Scientists

#	DATE	DESCRIPTION
1	8/20/22	ADDED CLIENT'S COMMENTS
2	9/14/22	ADDED RESURFACING AREA
3	11/02/22	ADDED ITEMS PER CLIENT REVIEW
4	10/04/22	ADDED ITEMS PER CLIENT REVIEW
5	09/02/22	ADDED ITEMS PER CLIENT REVIEW

**RECEIVED**  
MAR 13, 2023  
CHAMPAIGN COUNTY  
PLANNING & ZONING

Prepared by:  
Jeff Jenkins

1513 County Rd 2300 N  
Urbana, IL 61802

DATE: 07/18/2022  
DESIGNED: WJM  
DRAWN: POM  
REVIEWED: JDA  
FIELD BOOK NO.: CHA 19006

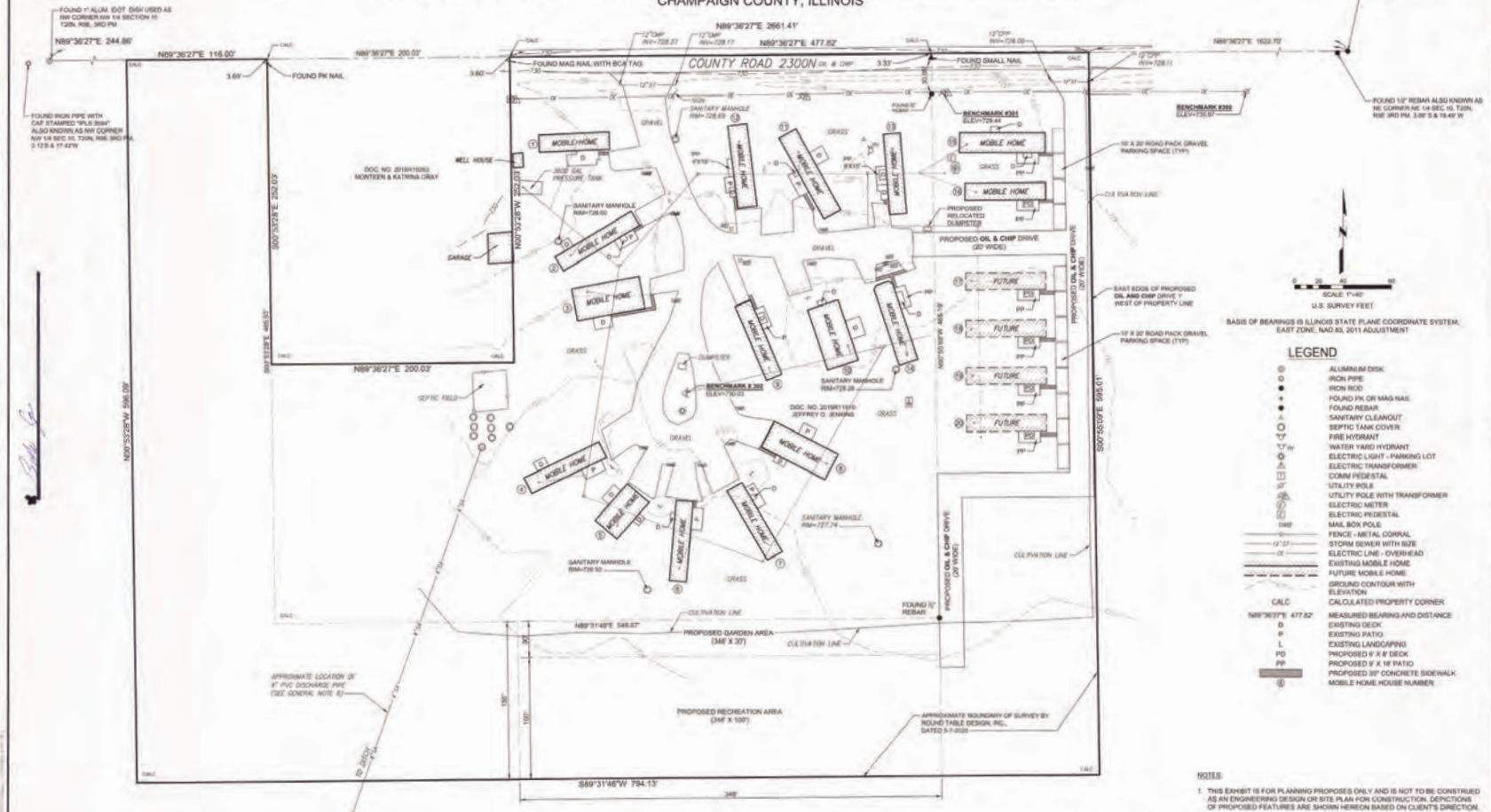
**TOPOGRAPHIC CONCEPT PLAN AND EXHIBIT OF WALNUT GROVE MHC**

1  
OF 1

PROJECT NO.: 0221011.00

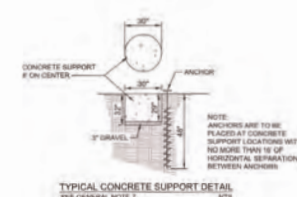
# TOPOGRAPHIC CONCEPT PLAN AND EXHIBIT OF WALNUT GROVE MHC

PART OF THE NW 1/4 OF SECTION 10, TOWNSHIP 20 NORTH, RANGE 9 EAST OF THE 3RD PRINCIPAL MERIDIAN  
CHAMPAIGN COUNTY, ILLINOIS



WATER

- BENCHMARKS:**
- BM #200: RAILROAD SPIKE IN WEST FACE OF FIRST POWER POLE EAST OF EAST ENTRANCE TO MOBILE HOME PARK ELEV=730.97
  - BM #201: RAILROAD SPIKE IN WEST FACE OF FIRST POWER POLE WEST OF EAST ENTRANCE TO MOBILE HOME PARK ELEV=729.44
  - BM #202: TOP OF OPERATING NUT ON FIRE HYDRANT AT CIRCLE DRIVE IN CENTER OF MOBILE HOME PARK ELEV=730.03



ADDRESS	EXISTING DECK SF	PROPOSED DECK SF	EXISTING PATIO SF	PROPOSED PATIO SF	PROPOSED WALK LENGTH
1	126	0	0	0	8
2	89	0	0	0	9
3	150	0	0	0	17
4	80	0	160	0	0
5	158	0	0	0	0
6	18	0	152	0	6
7	15	0	144	0	0
8	33	0	120	0	15
9	59	0	90	0	12
10	229	0	0	0	0
11	180	0	134	0	15
12	40	0	86	0	11
13	123	0	0	81	4
14	80	0	0	112	26
15	83	0	0	134	12
16 & FUTURE 17, 18, 19, 20	0 (TYP)	48 (TYP)	0 (TYP)	114 (TYP)	12-14

\*NO LEGS HANDICAP RAMP

- NOTES:**
- THIS EXHIBIT IS FOR PLANNING PURPOSES ONLY AND IS NOT TO BE CONSTRUED AS AN ENGINEERING DESIGN OR SITE PLAN FOR CONSTRUCTION. DEPICTIONS OF PROPOSED FEATURES ARE SHOWN HEREON BASED ON CLIENT'S DIRECTION.
  - THIS TOPOGRAPHIC PLAN OF THE EXISTING WALNUT GROVE MOBILE HOME COMMUNITY WAS PREPARED FROM FIELD DATA OBTAINED ON JUNE 6, 2022, BY FARNSWORTH GROUP, INC.
  - THIS PLAN DOES NOT REPRESENT A BOUNDARY SURVEY IN ACCORDANCE WITH ILLINOIS ADMINISTRATIVE CODE MINIMUM STANDARDS.
  - BEARINGS SHOWN ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83, 2011 ADJUSTMENT.
  - WALNUT GROVE MOBILE HOME COMMUNITY IS LOCATED WITHIN CHAMPAIGN COUNTY, ILLINOIS AND HAS A STREET ADDRESS OF 1513 COUNTY ROAD 2300 NORTH, URBANA, ILLINOIS 61802.
  - LOCATION OF THE 4" PVC DISCHARGE PIPE WAS PROVIDED BY OWNER. NO SURFACE EVIDENCE WAS FOUND TO VERIFY THIS LOCATION.
  - FUTURE HOMES 17 THROUGH 20 WILL HAVE CONCRETE SUPPORTS WITH NO MORE THAN 4" OF SEPARATION. SEE DETAIL FOR CONSTRUCTION DIMENSIONS. ANCHORS WILL BE INSTALLED ON SAND SUPPORTS WITH NO MORE THAN 10" OF SEPARATION. THESE SUPPORT LOCATIONS AND THE TYPICAL CONCRETE SUPPORT DETAILS SHOWN HEREON ARE BASED SOLELY ON CLIENT'S SPECIFICATIONS.
- EXISTING TAX ID NO. PARCEL: 25-15-10-00-015 NW 1/4, SEC 10, T20N, R9E, 3RD PM

**Farnsworth GROUP**  
2211 WEST BRADLEY AVENUE  
CHAMPAIGN, ILLINOIS 61821  
(317) 852-7409 / info@fng.com

www.fng.com  
Engineers | Architects | Surveyors | Scientists

#	DATE	DESCRIPTION
1	10/18/2022	ADDED CLIENT'S COMMENTS
2	10/18/2022	ADDED RECREATION AREA
3	11/03/2022	ADDED FENCE PER LOCAL LAW REVIEW
4	10/18/2022	ADDED ITEMS PER CLIENT REVIEW
5	10/18/2022	ADDED ITEMS PER CLIENT REVIEW

**RECEIVED**  
MAR 13, 2023  
CHAMPAIGN COUNTY  
PLANNING & ZONING

Walnut Grove MHC

1513 County Rd 2300 N  
Urbana, IL 61802

DATE: 07/18/2022  
DESIGNED: WJM  
DRAWN: PDM  
REVIEWED: JDA  
FIELD BOOK NO.: CHA 19008

**TOPOGRAPHIC CONCEPT PLAN AND EXHIBIT OF WALNUT GROVE MHC**

1  
OF 1

PROJECT NO.: 0221011.00





Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Champaign County GIS Consortium

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This map was prepared with geographic information system (GIS) data created by the Champaign County GIS Consortium (CCGISC), or other CCGISC member agency. These entities do not warrant or guarantee the accuracy or suitability of GIS data for any purpose. The GIS data within this map is intended to be used as a general index to spatial information and not intended for detailed, site-specific analysis or resolution of legal matters. Users assume all risk arising from the use or misuse of this map and information contained herein. The use of this map constitutes acknowledgement of this disclaimer.

72 NORTH

**RESOLUTION NO. 3425**

**A RESOLUTION PERTAINING TO THE  
RIGHT TO FARM IN CHAMPAIGN COUNTY**

**WHEREAS, the Chairman and the Board of Champaign County have determined that it is in the best interest of the residents of Champaign County to enact a Right to Farm Resolution which reflects the essence of the Farm Nuisance Suit Act as provided for in the Illinois Compiled Statutes, 740 ILCS 70 (1992); and**

**WHEREAS, the County wishes to conserve, protect, and encourage development and improvement of its agricultural land for the production of food and other agricultural products; and**

**WHEREAS, when nonagricultural land uses extend into agricultural areas, farms often become the subject of nuisance suits. As a result, farms are sometimes forced to cease operations. Others are discouraged from making investments in farm improvements.**

**NOW, THEREFORE, BE IT HEREBY RESOLVED by the Chairman and the Board of Champaign County as follows:**

**1. That the purpose of this resolution is to reduce the loss to the county of its agricultural resources by limiting the circumstances under which farming operations are deemed a nuisance.**

**2. That the term "farm" as used in this resolution means that part of any parcel of land used for the growing and harvesting of crops, for the feeding, breeding, and management of livestock; for dairying or other agricultural or horticultural use or combination thereof.**

**3. That no farm or any of its appurtenances should be or become a private or public nuisance because of any changed conditions in the surrounding area occurring after the farm has been in operation for more than one year, when such farm was not a nuisance at the time it began operation.**

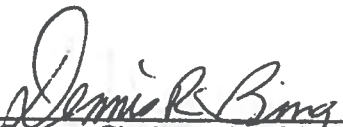
RESOLUTION NO. 3425

Page 2

4. That these provisions shall not apply whenever a nuisance results from the negligent or improper operation of any farm or its appurtenances.

PRESENTED, ADOPTED, APPROVED AND RECORDED this 24<sup>th</sup> day of May, A.D., 1994.

  
\_\_\_\_\_  
Chairman, County Board of the  
County of Champaign, Illinois

ATTEST:   
\_\_\_\_\_  
County Clerk and Ex-Officio  
Clerk of the County Board

**SUMMARY FINDING OF FACT AND FINAL DETERMINATION FOR CASE 035-AM-21***As approved by the ZBA on April 13, 2023***SUMMARY FINDING OF FACT**

From the documents of record and the testimony and exhibits received at the public hearing conducted on **September 15, 2022, December 1, 2022, February 16, 2023, March 16, 2023, and April 13, 2023**, the Zoning Board of Appeals of Champaign County finds that:

1. The proposed Zoning Ordinance map amendment will **HELP ACHIEVE** the Land Resource Management Plan because:
  - A. Regarding Goal 3 Prosperity:
    - (1) Although the proposed rezoning is **NOT DIRECTLY RELEVANT** to any of the Goal 3 objectives, the proposed rezoning will allow the petitioner to utilize the property somewhat more intensively and continue business operations in Champaign County.
    - (2) Based on achievement of the above and because it will either not impede or is not relevant to the other Objectives and Policies under this goal, the proposed map amendment **WILL HELP ACHIEVE** Goal 3 Prosperity.
  - B. Regarding Goal 4 Agriculture:
    - (1) It will **HELP ACHIEVE** Objective 4.1 requiring minimization of the fragmentation of farmland, conservation of farmland, and stringent development standards on best prime farmland because of the following:
      - a. Policy 4.1.1, which states that commercial agriculture is the highest and best use of land in the areas of Champaign County that are by virtue of topography, soil and drainage, suited to its pursuit. The County will not accommodate other land uses except under very restricted conditions or in areas of less productive soils (see Item 13.A.(1)).
      - b. Policy 4.1.6 requiring that the use, design, site and location are consistent with policies regarding suitability, adequacy of infrastructure and public services, conflict with agriculture, conversion of farmland, and disturbance of natural areas (see Item 13.A.(2)).
      - c. Policy 4.1.8 requiring that the County consider the LESA rating for farmland protection when making land use decisions regarding a discretionary development (see Item 13.A.(3)).
    - (2) It will **NOT IMPEDE** Objective 4.2 requiring discretionary development to not interfere with agriculture because of the following:
      - a. Policy 4.2.2 requiring discretionary development in a rural area to not interfere with agriculture or negatively affect rural infrastructure (see Item 13.B.(1)).
      - b. Policy 4.2.3 requiring that each proposed discretionary development explicitly recognize and provide for the right of agricultural activities to continue on adjacent land (see Item 13.B.(2)).

**SUMMARY FINDING OF FACT AND FINAL DETERMINATION FOR CASE 035-AM-21**

*As approved by the ZBA on April 13, 2023*

- c. Policy 4.2.4 requiring that all discretionary review consider whether a buffer between existing agricultural operations and the proposed development is necessary (see Item 13.B.(3)).
    - (3) It will **HELP ACHIEVE** Objective 4.3 requiring any discretionary development to be on a suitable site because of the following:
      - a. Policy 4.3.2 requiring a discretionary development on best prime farmland to be well-suited overall (see Item 13.C.(1)).
      - b. Policy 4.3.3 requiring existing public services be adequate to support the proposed development effectively and safely without undue public expense (see Item 13.C.(2)).
      - c. Policy 4.3.4 requiring existing public infrastructure be adequate to support the proposed development effectively and safely without undue public expense (see Item 13.C.(3)).
    - (4) It will **HELP ACHIEVE** Objective 4.7 requiring affirmation of the Champaign County Right to Farm Resolution (see Item 13.D.(1)).
    - (5) Based on achievement of the above Objectives and Policies, the proposed map amendment will **HELP ACHIEVE** Goal 4 Agriculture.
  - C Regarding Goal 6 Public Health and Public Safety:
    - (1) It will **HELP ACHIEVE** Objective 6.1 requiring that development in unincorporated areas of the County will not endanger public health or safety because of the following:
      - a. Policy 6.1.2 requiring sufficient and safe wastewater disposal (see Item 15.A.(1)).
  - D. Regarding Goal 7 Transportation:
    - (1) The proposed amendment will **HELP ACHIEVE** Goal 7 Transportation because it will **HELP ACHIEVE** the following:
      - a. Policy 7.1.1 requiring traffic impact analyses for projects with significant traffic generation. (see Item 16.A.(1)).
  - E. The proposed amendment **WILL NOT IMPEDE** the following LRMP goal(s):
    - Goal 1 Planning and Public Involvement
    - Goal 2 Governmental Coordination
    - Goal 5 Urban Land Use
    - Goal 8 Natural Resources
    - Goal 9 Energy Conservation
    - Goal 10 Cultural Amenities
  - F. Overall, the proposed map amendment will **HELP ACHIEVE** the Land Resource Management Plan.
2. The proposed Zoning Ordinance map amendment **IS CONSISTENT** with the LaSalle and Sinclair factors because of the following:



**SUMMARY FINDING OF FACT AND FINAL DETERMINATION FOR CASE 035-AM-21**

*As approved by the ZBA on April 13, 2023*

- A. It is impossible to establish property values without a formal real estate appraisal, which has not been requested nor provided, and so any discussion of values is necessarily general.
  - B. There has been no evidence submitted regarding property values. This area is primarily agricultural and residential in use, and the subject property has been a manufactured home park since 1972.
  - C. The gain to the public of the proposed rezoning would be allow the petitioner to provide lower cost housing for the community.
  - D. The subject property is occupied and in use as a manufactured home park.
  - E. The ZBA has recommended that the proposed rezoning will **HELP ACHIEVE** the Champaign County Land Resource Management Plan.
3. The proposed Zoning Ordinance map amendment will **HELP ACHIEVE** the purpose of the Zoning Ordinance because:
- A. Establishing the special use as proposed by the Petitioner, which requires rezoning to R-5, **WILL** lessen and avoid congestion in the public streets (Purpose 2.0 (c) see Item 21.C.).
  - B. Establishing the R-5 District at this location **WILL** help classify, regulate, and restrict the location of the uses authorized in the R-5 District (Purpose 2.0 (i) see Item 21.G.).
  - C. The proposed rezoning and proposed Special Use **WILL NOT** hinder the development of renewable energy sources (Purpose 2.0(r) Item 21.M).
4. The proposed Zoning Ordinance map amendment is subject to the following special conditions:
- A. **The owners of the subject property hereby recognize and provide for the right of agricultural activities to continue on adjacent land consistent with the Right to Farm Resolution 3425.**  
  
The special condition stated above is required to ensure the following:  
**Conformance with Policy 4.2.3 of the Land Resource Management Plan.**
  - B. **The Map Amendment is contingent upon approval of Case 036-S-21.**  
  
The special condition stated above is required to ensure the following:  
**That the Special Use is consistent with the Zoning Ordinance and ZBA recommendations.**
  - C. **The petitioner shall achieve full compliance with the Illinois Department of Public Health within one year of approval of Map Amendment Case 035-AM-21 or the rezoning will be void.**  
  
The special condition stated above is required to ensure the following:  
**To ensure compliance with IDPH regulations and licensing that provide a greater assurance of public health and safety and ensure that County regulations and IDPH regulations are coordinated in a reasonable manner.**



**SUMMARY FINDING OF FACT AND FINAL DETERMINATION FOR CASE 035-AM-21**

*As approved by the ZBA on April 13, 2023*

**FINAL DETERMINATION**

Pursuant to the authority granted by Section 9.2 of the Champaign County Zoning Ordinance, the Zoning Board of Appeals of Champaign County determines that:

The Zoning Ordinance Amendment requested in **Case 035-AM-21** should **BE ENACTED** by the County Board in the form attached hereto.

**SUBJECT TO THE FOLLOWING SPECIAL CONDITIONS:**

- A. **The owners of the subject property hereby recognize and provide for the right of agricultural activities to continue on adjacent land consistent with the Right to Farm Resolution 3425.**
- B. **The Map Amendment is contingent upon approval of Case 036-S-21.**
- C. **The petitioner shall achieve full compliance with the Illinois Department of Public Health within one year of approval of Map Amendment Case 035-AM-21 or the rezoning will be void.**

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

SIGNED:

ATTEST:

Ryan Elwell, Chair  
Champaign County Zoning Board of Appeals

Secretary to the Zoning Board of Appeals

Date

To: **Environment and Land Use Committee**

From: **John Hall, Director & Zoning Administrator**  
**Susan Burgstrom, Senior Planner**

Date: **April 24, 2023**

RE: **Prairie Solar 1 documents requiring ELUC approval**

Request: **ELUC acceptance of approval of three Roadway Upgrade and Maintenance Agreements, and ELUC approval of a Decommissioning and Site Reclamation Plan including cost estimates, vegetative screening, and an updated Noise Study for the 135 MW utility-scale solar farm to be located southeast of the Village of Sidney approved in Zoning Case 898-S-18**

---

## **BACKGROUND**

The petitioner, BayWa r.e. Solar Projects LLC, received Special Use Permit approval under Ordinance 2019-1 from the Champaign County Board at its January 24, 2019 meeting to construct a 150-megawatt (MW) Photovoltaic (PV) Utility-Scale Solar Farm southeast of the Village of Sidney on 22 participating properties totaling approximately 1,609 acres. Since that approval, BayWa has reduced the area of the solar farm. Attachment B is a revised Site Plan received April 25, 2023. Attachment C is a map comparing an approximation of the solar farm fenced area as approved in 2019 and the current configuration of solar arrays as of April 25, 2023.

There are several documents required by the Zoning Ordinance that could only be completed closer to construction time and therefore were not included in the initial Special Use Permit approval. The Zoning Board of Appeals approved special conditions as part of Case 898-S-18 to ensure that these documents would be reviewed and approved or accepted by ELUC at a later date.

- Special Condition E. states: “**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.**”
- Special Condition F. states: “**Roadway Upgrade and Maintenance Agreements signed by the County Highway Engineer, Sidney Township Highway Commissioner, and approved by the Environment and Land Use Committee, shall be submitted at the time of application for a Zoning Use Permit.**”
- Special Condition H. states, “**The petitioner shall install sound reduction kits from the inverter manufacturer to each of the inverters in the solar farm so that operational sound levels for the duration of the solar farm will be less than 39 dBA at all existing residential lots within 1,500 feet of the project site and 39 dBA shall be the sound level that shall be enforced by Champaign County subject to**

**the relevant standards of the Illinois Pollution Control Board and Illinois Environmental Protection Agency.”**

- Special Condition I. states: **“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: A noise study to verify that the required sound reduction kits for all inverters result in less than 39 dBA noise level at all existing residential lots within 1500 feet of the project site.”**
- Special Condition K. states: **“The petitioner will consult with all land owners and residents (both participating and non-participating in the solar farm project) whose residences are within 1,000 feet of the solar farm regarding the types of plantings to be used in the required vegetative screening to be planted along the nearest solar farm fence line to the residence to minimize harm to existing residential landscaping and the Environment and Land Use Committee shall approve the proposed screening prior to the approval of the Zoning Use Permit.”**

## **DECOMMISSIONING AND SITE RECLAMATION PLAN**

P&Z Staff reviewed the Decommissioning and Site Reclamation Plan received on April 14, 2023 against the Zoning Ordinance requirements in Section 6.1.5 Q. Staff found that estimated costs per megawatt are lower than other solar array projects that were recently approved, but given the larger scale of the Bay-wa project, it is difficult to compare with other smaller projects.

Staff recommends that ELUC approve the Decommissioning and Site Reclamation Plan.

## **ROADWAY UPGRADE AND MAINTENANCE AGREEMENTS**

P&Z Staff reviewed the Roadway Upgrade and Maintenance Agreements against the Zoning Ordinance requirements in Section 6.1.5 G. and found them to be in compliance with the Zoning Ordinance.

- Champaign County Highway Department agreement executed June 30, 2021
- Sidney Township agreement executed March 29, 2022
- Village of Homer agreement executed July 7, 2022

Staff recommends that ELUC accept these executed agreements.

## **NOISE STUDY**

An updated Noise Assessment Technical Report was prepared by Dudek in April 2023. The original report from October 2021 demonstrated that the inverters with sound reduction kits would generate noise that is below 39 dBA at sensitive receptor sites. Since that time, newer technology and a reduced project area have resulted in the use of fewer, quieter inverters. The updated report shows that noise levels with this newer inverter model will fall below 39 dBA at sensitive receptor sites even without using sound reduction kits.

Staff recommends that ELUC approve the updated noise study and revise special condition I in Case 898-S-18 in the following manner:

**“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: A noise study to verify that the noise level without the ~~required~~ sound reduction kits for all inverters ~~result in~~ is less than 39 dBA noise level at all existing residential lots within 1500 feet of the project site.”**

## **VEGETATIVE SCREENING**

P&Z Staff reviewed the vegetative screening plan received on April 14, 2023 against the Zoning Ordinance requirements in Section 6.1.5 M. The plan appears to comply with the Zoning Ordinance requirements.

### *Resident input*

On April 20, 2023, P&Z Staff sent all landowners within 1,000 feet of the PV solar farm fenced area (as shown on the vegetative screening plan received on April 14, 2023) the proposed vegetative screening plan. They were provided with upcoming meeting dates before which their comments should be received by the P&Z Department for consideration by ELUC.

Staff recommends that ELUC approve the vegetative screening plan.

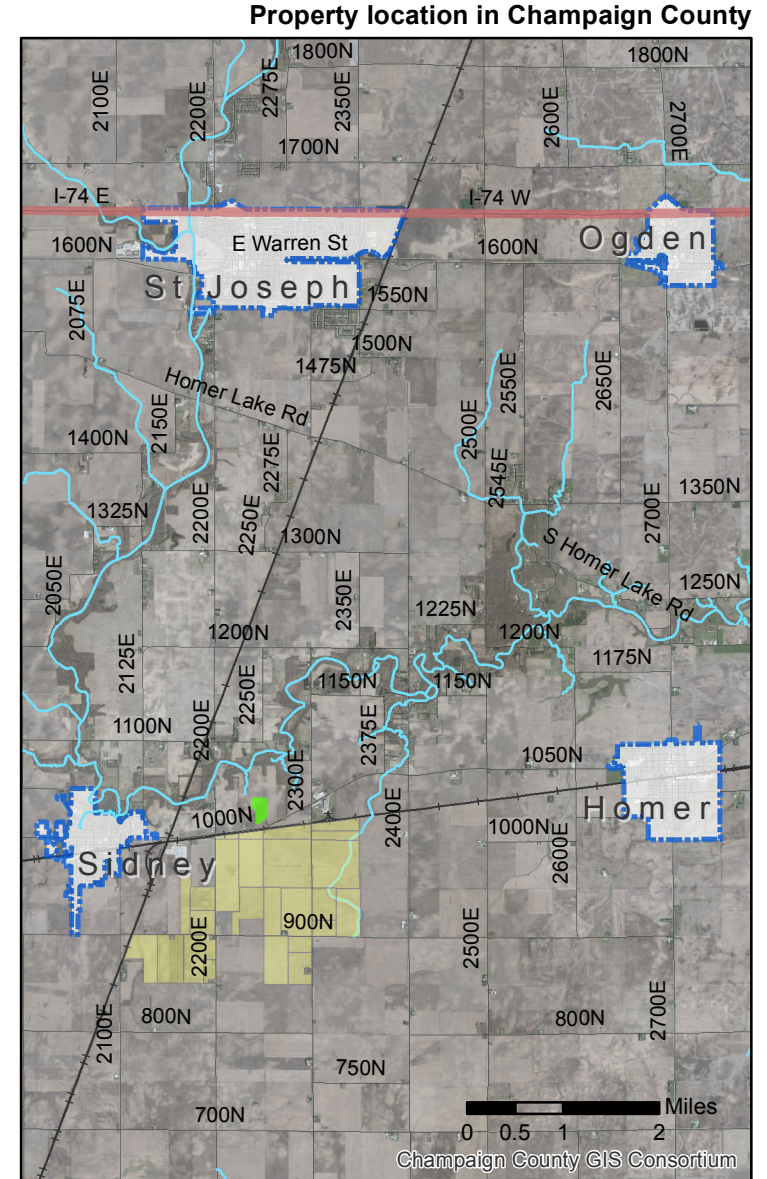
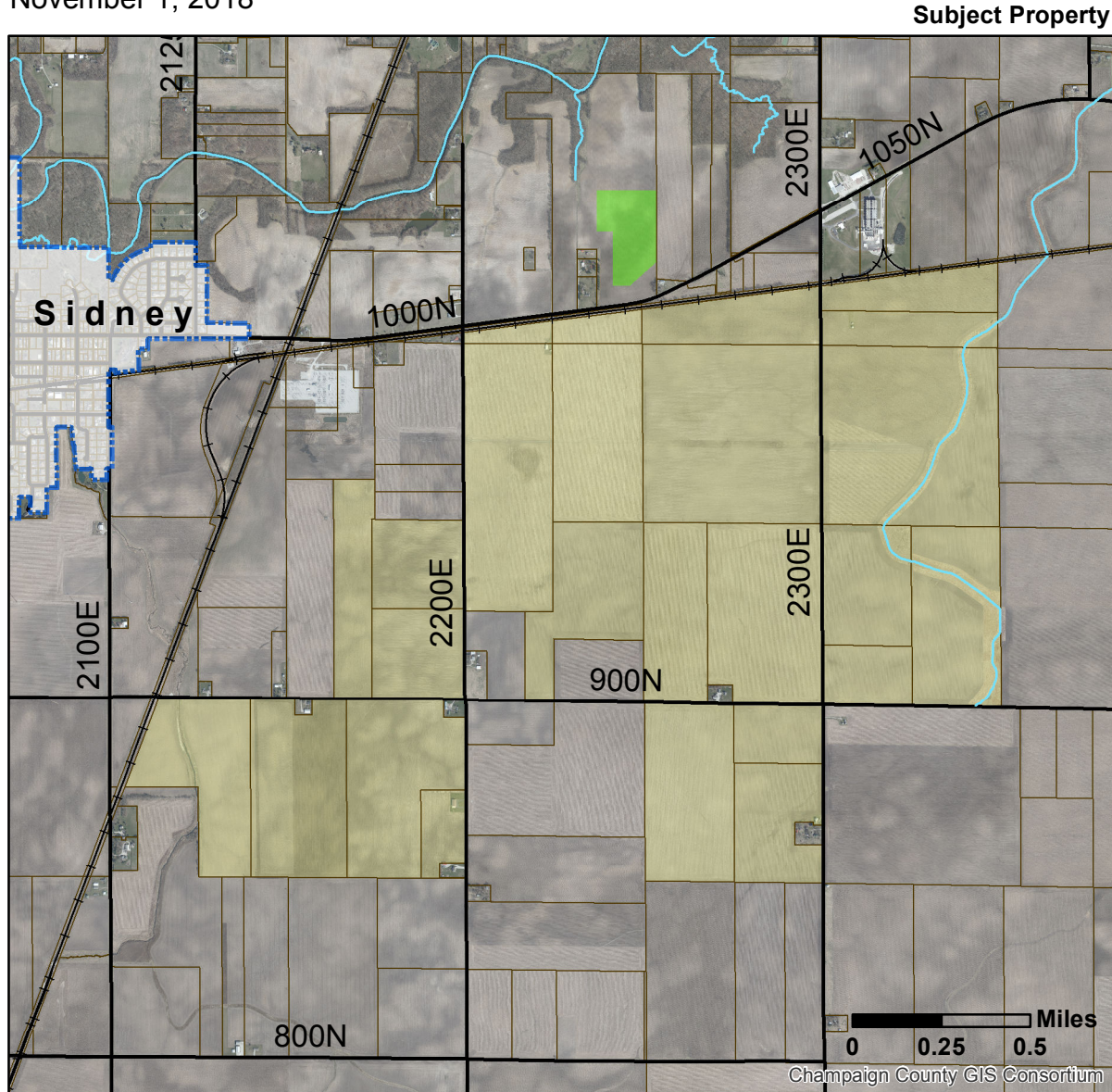
## **ATTACHMENTS**

- A Case Maps (Location Map, Land Use, and Zoning)
- B Revised Site Plan received April 25, 2023
- C Comparison map of solar farm fenced area approved in January 2019 with current configuration as of April 24, 2023
- D Revised Decommissioning and Site Reclamation Plan with decommissioning cost estimates received April 14, 2023
- E Roadway Upgrade and Maintenance Agreement executed by Champaign County  
*(on ELUC meetings website)*
- F Roadway Upgrade and Maintenance Agreement executed by Sidney Township  
*(on ELUC meetings website)*
- G Roadway Upgrade and Maintenance Agreement executed by Village of Homer  
*(on ELUC meetings website)*
- H Noise Assessment Technical Report prepared by Dudek received April 24, 2023
- I Vegetative Screening Plan received April 14, 2023



# Location Map

Case 898-S-18  
November 1, 2018



## Legend

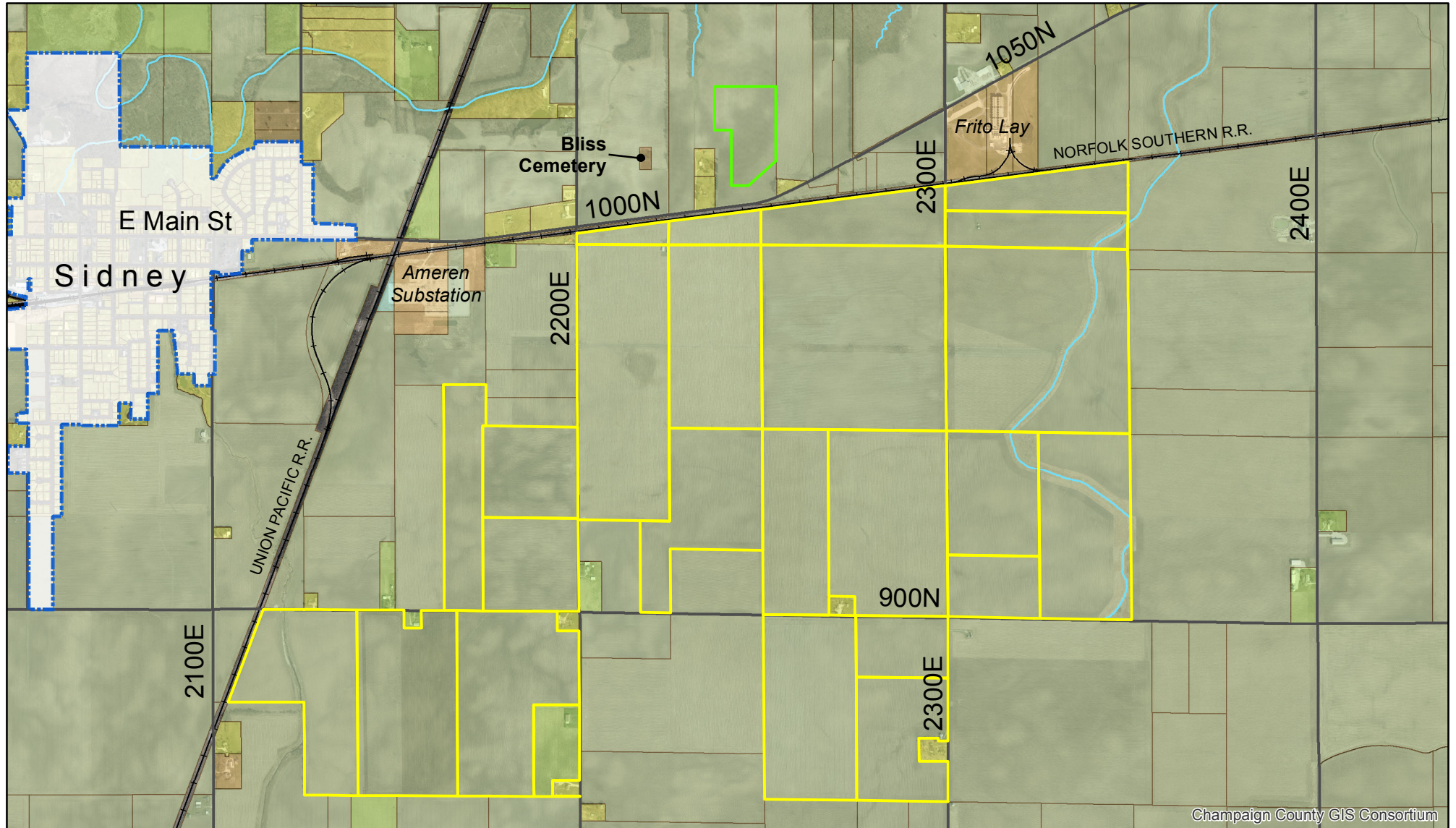
- BayWa Participating Properties
- Proposed Solar Farm Case 903-S-18
- Municipal Boundary
- Parcels
- Streams
- Streets
- Railroad





# Land Use Map

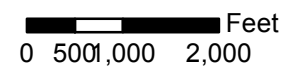
Case 898-S-18  
November 1, 2018



Champaign County GIS Consortium

## Legend

- |                                   |          |                |                       |
|-----------------------------------|----------|----------------|-----------------------|
| BayWa Participating Properties    | Streets  | Residential    | Commercial/Industrial |
| Proposed Solar Farm Case 903-S-18 | Railroad | Agriculture    | Utility               |
| Municipal Boundary                | Streams  | Ag-Residential | Cemetery              |

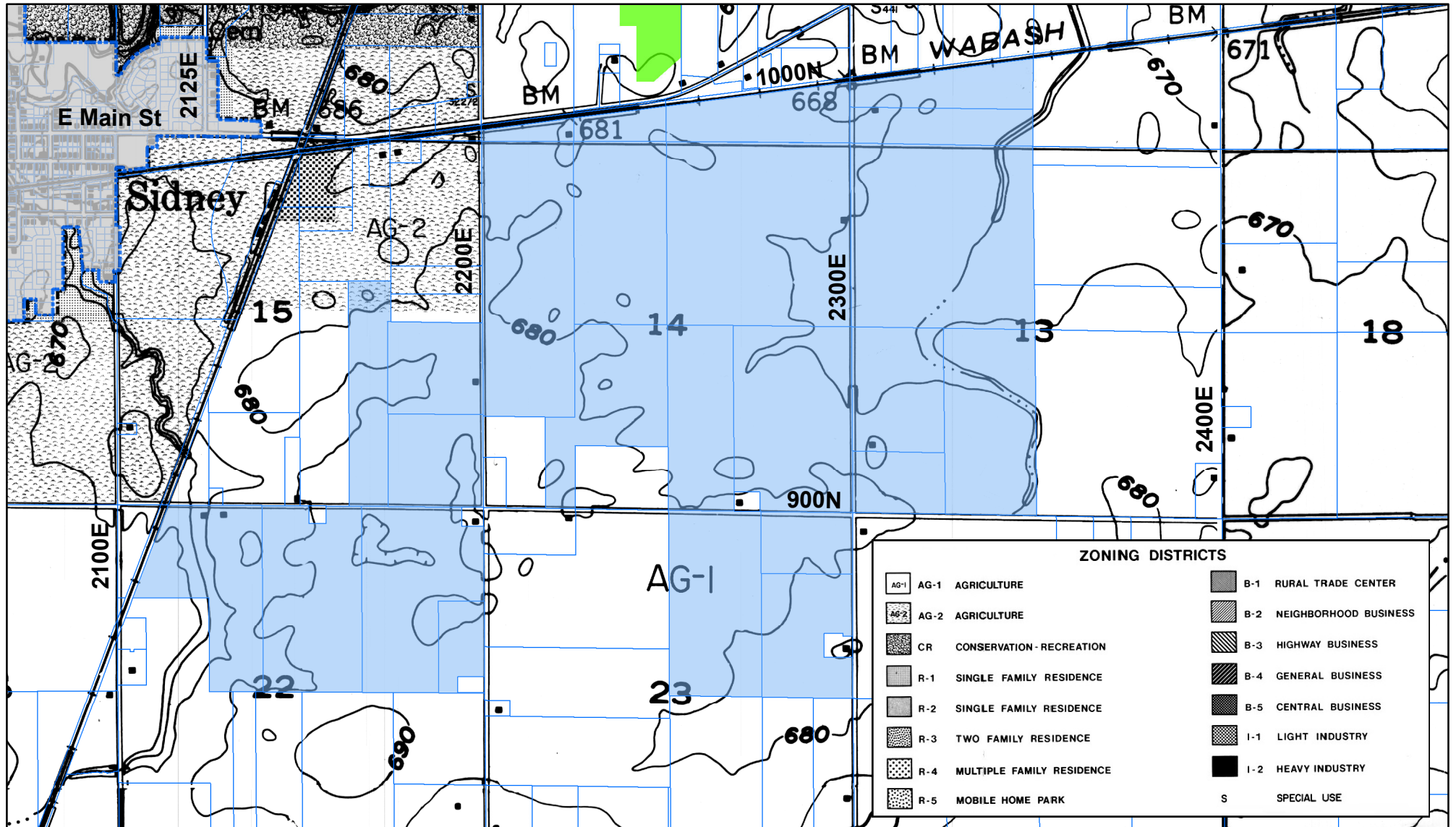


Champaign County  
Department of  
PLANNING &  
ZONING






















# Zoning Map

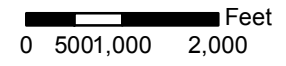
Case 898-S-18  
November 1, 2018



## Legend

-  Municipal Boundary
-  Proposed Solar Farm Case 903-S-18
-  BayWa Participating Properties
-  Parcels

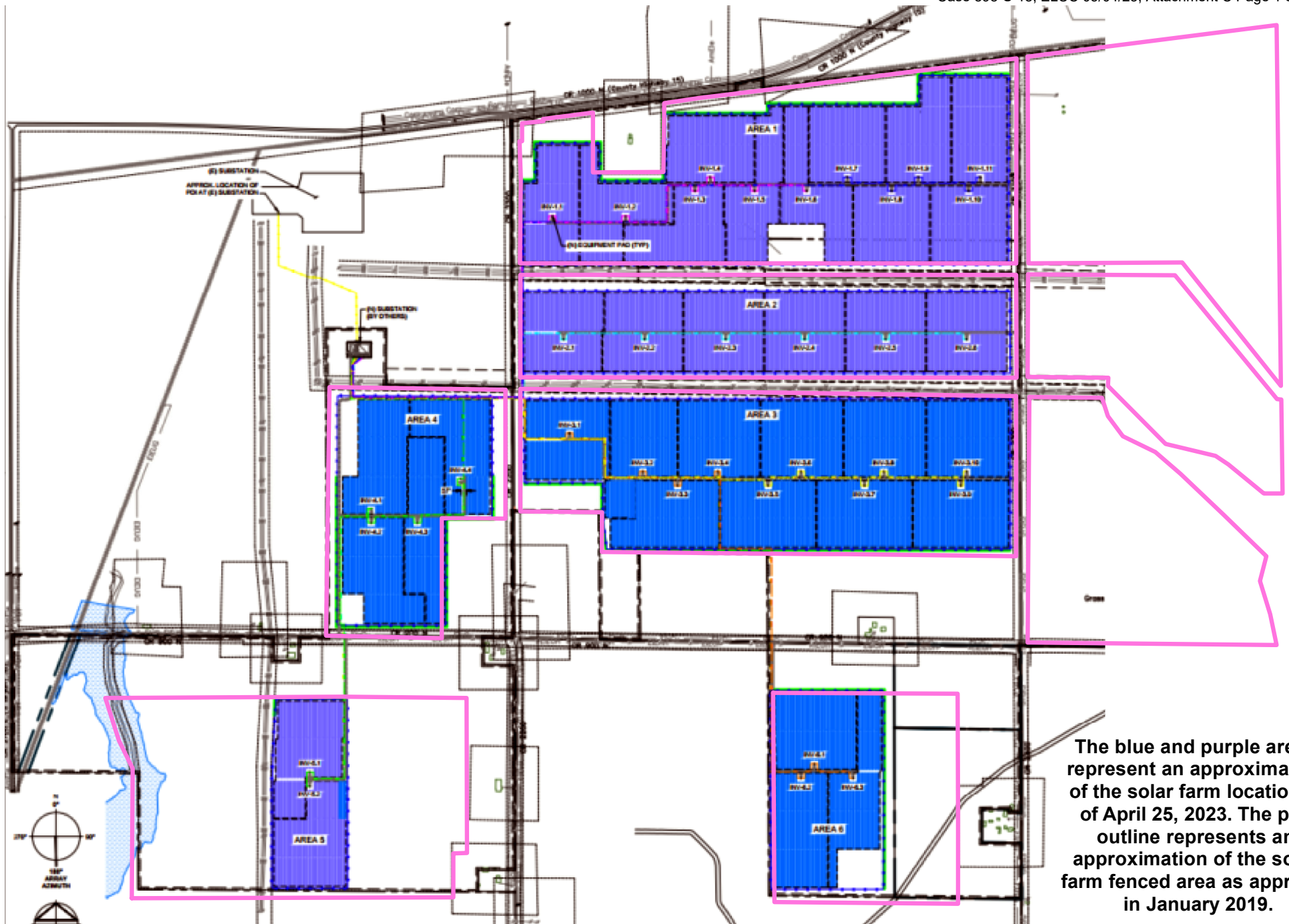
ZONING DISTRICTS			
	AG-1 AGRICULTURE		B-1 RURAL TRADE CENTER
	AG-2 AGRICULTURE		B-2 NEIGHBORHOOD BUSINESS
	CR CONSERVATION - RECREATION		B-3 HIGHWAY BUSINESS
	R-1 SINGLE FAMILY RESIDENCE		B-4 GENERAL BUSINESS
	R-2 SINGLE FAMILY RESIDENCE		B-5 CENTRAL BUSINESS
	R-3 TWO FAMILY RESIDENCE		I-1 LIGHT INDUSTRY
	R-4 MULTIPLE FAMILY RESIDENCE		I-2 HEAVY INDUSTRY
	R-5 MOBILE HOME PARK		S SPECIAL USE



Champaign County  
Department of  
PLANNING &  
ZONING







The blue and purple areas represent an approximation of the solar farm location as of April 25, 2023. The pink outline represents an approximation of the solar farm fenced area as approved in January 2019.

 Approximate Fenced Area Jan 2019



A DECOMMISSIONING PLAN FOR

# Prairie Solar 1

Champaign County, Illinois

APRIL 14, 2023

PREPARED FOR:



PREPARED BY:

**Westwood**

**Westwood**

---

# Decommissioning Plan

Prairie Solar Project

Champaign County, Illinois

Prepared for:

BayWa r.e. Solar Projects, LLC  
18575 Jamboree Road, Suite 850  
Irvine, CA 92612

Prepared by:

Westwood Professional Services  
12701 Whitewater Drive, Suite 300  
Minnetonka, MN 55343  
(952) 937-5150

Project Number: 0028288.00

Date: April 14, 2023

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## Attachments

Attachment A: Decommissioning Cost Estimate



## 1.0 Introduction / Project Description

### 1.1 Project Background

Prairie Solar 1 is a 135-megawatt (MW) alternating current (AC) solar facility (“Project”) proposed for Champaign County, Illinois, spanning approximately 750 acres. The solar photovoltaic power array owned by Prairie Solar 1, LLC (or “Applicant”) is anticipated to have a total operation period of 40 years. At the completion of its operating life, the Project will either be redeveloped with modern equipment, or it will be decommissioned and removed from the site in accordance with this Decommissioning Plan (“Plan”).

### 1.2 Objectives

The objective of this Plan is to provide the requisite financial surety to guarantee decommissioning of the Project in accordance with the Champaign County Zoning Ordinance (“Ordinance”).

### 1.3 Plan Conditions

Prior to commencing decommissioning activities in accordance with this Plan, Prairie Solar 1, LLC will provide documentation to process the appropriate permit(s). If the Project is to be redeveloped, a new building plan permit will be processed before any installation of new equipment. Decommissioning the Project will allow the parcels that were changed under the Project’s Special Use Permit (SUP) to be returned to their original zone classifications.

## 2.0 Decommissioning of Facility After Ceasing Operations

### 2.1 General Environmental Protection

During decommissioning and restoration activities, general environmental protection and mitigation measures will be implemented. Many activities during decommissioning will be comparable to the construction phase, including the use of heavy equipment on site, preparing staging areas, and restoring constructable areas.

### 2.2 Pre-Decommissioning Activities

Prior to engaging in decommissioning activities, Prairie Solar 1, LLC will provide documentation to process the appropriate permits in accordance with all relevant county, state, and federal statutes in place at the time of decommissioning.

Prior to any decommissioning or removal of equipment, staging areas will be delineated as appropriate. At the end of the Project’s useful life, it will first be de-energized and isolated from all external electrical lines. All decommissioning activities will be conducted within designated areas; this includes ensuring that vehicles and personnel stay within the demarcated areas. Work to decommission the collector lines and Project-owned transmission lines will be

conducted within the boundaries of the municipal road allowance and appropriate private lands.

### 2.3 Equipment Decommissioning and Removal

The components of the Project are photovoltaic (PV) modules, a mechanical racking system, electrical cabling, inverter racks, transformers, and concrete pads, as described below.

- **Modules:** The modules will be removed by hand and loaded in a truck to be returned from recycling or disposal as described below in Section 2.4.
- **Mechanical Racking System:** The racking and posts will be removed by hand and with an excavator with a demolition thumb. The recyclable metal will be loaded onto trucks and hauled away in accordance with Section 2.9.
- **Inverter Racks and Inverters:** The inverters and their racks will be removed by hand and loaded onto trucks for recycling in accordance with Section 2.5.
- **Transformers:** Transformers will be removed in accordance with Section 2.5 and then loaded onto a truck with a crane and sent for recycling.
- **Concrete Pads:** The equipment will be disconnected and transported off site by truck. Per Section 6.1.5Q(3)h of the Ordinance, 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. The concrete foundations and support pads will be broken up by mechanical equipment (backhoe/hydraulic hammer/shovel, jackhammer), loaded onto dump trucks, and removed from the site. Smaller pre-cast concrete support pads and/or pre-manufactured metal skids will be removed intact by cranes and loaded onto trucks for reuse, or will be broken up and hauled away by dump trucks.

### 2.4 PV Module Collection and Recycling

All modules will be disconnected, removed from the trackers, packaged and transported to a designated location for resale, recycling, or disposal. Any disposal or recycling will be done in accordance with applicable laws and requirements. The connecting underground cables and the junction boxes will be de-energized, disconnected, and removed. The mechanical racking system supporting the PV modules will be unbolted and dismantled by laborers using standard hand tools, possible assisted by small portable cranes. All support structures will be completely removed by mechanical equipment and transported off site for salvage or reuse. Any demolition debris that is not salvageable will be transported by truck to an approved disposal area. Other salvageable equipment and/or material will be removed for the site for resale, scrap value, or disposal.

### 2.5 Electrical Equipment and Inverters

All decommissioning of electrical devices, equipment, and wiring/cabling will be in accordance with local, state, and federal laws. Any electrical decommissioning will include obtaining required permits and following applicable safety procedures before de-energizing, isolating, and disconnecting electrical devices, equipment, and cabling.

Decommissioning will require the removal of the electrical equipment, including inverters, transformers, underground/aboveground cables, and overhead lines. Per Section 6.1.5Q(3)i of

the Ordinance, underground electrical cables of a depth of 5 feet or greater may be left in place. The decommissioning cost estimate for this Project assumes that cables will be installed at a depth above 5 feet, therefore full removal of underground cables has been included.

Equipment and material may be salvaged for resale or scrap value depending on the market conditions.

## 2.6 Roads, Parking Area

Access roads and the parking area will be removed to allow for the complete rehabilitation of these areas, unless the landowner provides written consent to retain these features. Typically, the granular base covering these areas will be removed. A wheel loader will be used to strip off the material, and dump trucks will haul the aggregate to a recycling facility or approved disposal facility. The underlying subsoil, if exhibiting significant compaction (more likely for the site entrance than interior access roads), will then be diced using a tractor and disc attachment to restore the soil structure and to aerate the soil. Clean topsoil will be imported to the site by dump truck, replaced over the areas and leveled to match the existing grade.

## 2.7 Other Components

Unless retained for other purposes, removal of all other facility components from the site will be completed, including but not limited to surface drains, access road culvert crossings, and fencing. Anything deemed usable shall be recovered and reused elsewhere. All other remaining components will be considered as waste and managed according to local, state, and federal laws. For safety and security, the security fence will be dismantled and removed from the site after all major components, PV modules, tracker system, and foundations have been removed.

## 2.8 Site Restoration

### 2.8.1 General Restoration Activities

The following activities will be undertaken to restore the site substantially to its previous conditions:

- Soil testing will be performed to determine if any contaminants from equipment are present in the soil;
- The site will be cleaned up and regraded to its original contours and, if necessary, surface drainage swales and ditches will be restored;
- Trenches/drains excavated as part of the Project will be filled with suitable materials and leveled;
- Roads and parking areas will be removed completely, filled with suitable sub-grade materials and leveled;
- Compacted ground will be tilled, mixed with suitable sub-grade materials and leveled;
- Topsoil will be spread as necessary to ensure suitable conditions for vegetative re-growth and reseeded with native seed mix to promote vegetation.

The project fence and existing fire access roads may remain in place upon written consent of the landowner.

### **2.8.2 Backfill of Excavations**

Per Section 6.1.5Q(3)k of the Ordinance, the excavation resulting from the removal of foundation concrete shall be backfilled with subsoil and topsoil in similar depths and similar types as existed at the time of the original Project construction. 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. Native soils excavated during construction of the Project may be stockpiled and seeded throughout the operating lifetime of the Project. These native soils may then be used for backfill.

If the excavated native soils are not stored for use for backfilling the concrete foundation excavations, a qualified soil scientist of 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.

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.

## **2.9 Management of Wastes and Excess Materials**

All wastes and excess materials will be disposed of in accordance with local, state, and federal laws. Waste that can be recycled under municipal programs will be done accordingly. Waste that requires disposal will be disposed of in state licensed facility by a state licensed hauler.

## **2.10 Emergency Response and Communication Plans**

During decommissioning, Prairie Solar 1, LLC will coordinate with local authorities, the public, and others as required to provide them with information about the ongoing activities. Besides regular direct/indirect communication, signs will be posted at the Project facility to give information to the local public and visitors. The Prairie Solar 1, LLC contact information (telephone number, email, and mailing address) will be made public for those seeking more information about the decommissioning activities and/or reporting emergencies and complaints. All inquiries will be directed to the Prairie Solar 1, LLC representative who will respond to inquiries. In the event of an emergency, Prairie Solar 1, LLC will mobilize its resources to the site to respond to the event. Personnel involved in decommissioning will be trained in the emergency response and communication procedures. Emergency response procedures will be prepared prior to decommissioning.

# **3.0 Project Decommissioning Cost Estimate**

## **3.1 Cost Estimate**

Prairie Solar 1, LLC shall provide a detailed Decommissioning Cost Estimate, prepared by an Illinois Licensed Engineer, prior to the issuance of building permits, which shall include the following:

- a) Three (3) individual, gross estimated costs to perform decommissioning for: aboveground restoration, belowground restoration, and environmental remediation as set forth in Section 2 above (“Gross Cost”);
- b) An increase of the Gross Cost by 25% to eliminate any discrepancy in cost estimation techniques (“Contingency”);
- c) The estimated resale and salvage values associated with the Project equipment (“Salvage Value”);
- d) A reduction from the Salvage Value by 30%, such that only 70% of the Salvage Value can be used as a credit against the Gross Cost and Admin Factor. The Salvage Value multiplied by the 70% is the (“Salvage Credit”).

Thus, the Decommissioning Cost Estimate formula is:

Gross Cost + Contingency – Salvage Credit = the “**Decommissioning Cost Estimate**”

### 3.2 Security

Prairie Solar 1, LLC will provide an amount equal to the one hundred twenty-five percent (125%) the Decommissioning Cost Estimate (as determined by an Illinois-Licensed Engineer), (“Decommissioning Security”). All financial assurances required by the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture shall count towards the total financial assurance. Decommissioning Security shall be provided by Prairie Solar 1, LLC prior to the Commercial Operation Date.

The Decommissioning Security will be in the form of an irrevocable letter of credit and an escrow account with the Champaign County Board (“County”) as a beneficiary per Section 6.1.5 Q(4) of the Solar Ordinance. The County has the right to require multiple letters of credit based on the regulations governing federal insurance for deposits, and the Applicant, its successors in interests, and all parties to decommissioning shall adjust the amount of financial assurance in escrow to ensure that it reflects current and accurate information. Unless the County states otherwise, the Champaign County State’s Attorney’s Office shall review and approve every Letter of Credit prior to Zoning Administrator Acceptance. Decommissioning estimates will be updated once every three (3) years for the first twelve (12) years of operation, and every other year thereafter. Estimates will be created by an Independent Illinois Licensed Professional Engineer.

Payment of the Decommissioning Security is to be made in equal installments over the first thirteen (13) years of the facility’s life.

### 3.3 Use of Funds

Per Section 6.1.1A(9) of the Ordinance, the Zoning Administrator may draw on the funds for decommissioning of the solar facility when any of the following occur:

- a. No response is received from the landowner withing thirty (30) days from initial notification by the Zoning Administrator;
- b. The landowner does not enter, or breaches any term of a written agreement with the County to remove the Project;
- c. Any breach or performance failure of any provision of this Plan;
- d. The owner of record has filed a bankruptcy petition, or compromised the County’s interest in the letter of credit in any way not specifically allowed by this Plan;
- e. A court of law has made a finding that the Project 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 6.1.1A.6 of the Ordinance; or
- g. Any other conditions to which to the County and the landowner mutually agree;

Additionally, per Section 6.1.5Q(5) of the Ordinance, the Zoning Administrator may draw on the funds for decommissioning of the project when any of the following occur:

- a. In the event that the Project or component thereof ceases to be functional for more than six months after it starts producing electricity of the Owner is not diligently repairing the Project or component;
- b. In the event that the Owner declares the Project or any Project component to be functionally obsolete for tax purposes.
- c. There is a delay in the construction of the Project of more than 6 months after construction on that Project begins.
- d. The Project or any components 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. The Project or any components thereof that is otherwise derelict for a period of 6 months.
- f. The Project is in violation of the terms of the SUP for a period exceeding ninety (90) days.
- g. The Applicant, its successors in interest, and all parties to this Plan has failed to maintain financial assurance in the form and amount required by the SUP or compromised the County's interest in this Plan.
- h. The County discovers any material misstatement of fact of misleading omission of fact made by the Applicant in the course of the SUP Zoning Case.
- i. The Applicant has either failed to receive a copy of the certification of design compliance required by paragraph 6.1.5D. of the Ordinance 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.

### **3.4 Standard Conditions for Decommissioning**

The following conditions shall apply, per Section 6.1.5Q(3) of the Ordinance:

- a. The applicant or successor shall notify the County by certified mail of the commencement of voluntary or involuntary bankruptcy proceeding, naming the applicant as debtor, within ten days of commencement of proceeding.
- b. The applicant shall agree that the sale, assignment in fact or law, or such other transfer of applicant's financial interest in the Project shall in no way affect or change the applicant's obligation to continue to comply with the terms of this plan. Any successor in interest, assignee, and all parties to this Plan shall assume the terms, covenants, and obligations of this plan and agrees to assume all reclamation liability and responsibility for the Project.
- c. The County and its authorized representatives are authorized for right of entry onto the Project premises for the purpose of inspecting the methods of reclamation or for performing actual reclamation if necessary.
- d. At such time as decommissioning takes place, the Applicant, its successors in interest, and all parties to this Plan are required to enter into a Roadway Use and Repair



- Agreement with the relevant highway authority.
- e. The Applicant, its successors in interest, and all parties to this 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. The Applicant, its successors in interest, and all parties to this Plan shall be obliged to perform the work in this Plan before abandoning the Project or prior to ceasing production of electricity from the Project, 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. This 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 fees; and, the costs of preparing requests for proposals and bidding documents required to comply with State law or Champaign County purchasing policies.
  - 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 (see Section 2.3 of this Plan.)
  - i. Underground electrical cables of a depth of 5 feet or greater may be left in place (see Section 2.5 of this Plan).
  - j. The hole resulting from the removal of foundation concrete during decommissioning shall be backfilled as follows. Please see Section 2.8.2 of this Plan for this information as it pertains to site restoration:
    - 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 Project 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 Project 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 Project. The methods for storing the excavated native soils during the operating lifetime of the Project 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 of 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.

- k. Should this Plan be deemed invalid by a court of competent jurisdiction, the Project's SUP shall be deemed void.
- l. The Applicant's obligation to complete this Plan and to pay all associated costs shall be independent of the Applicant's obligation to provide financial assurance.
- m. The liability of the Applicant's failure to complete the decommissioning and site reclamation plan or any breach of this Plan's requirements shall not be capped by the amount of 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 Project 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.





# Attachment A

# Decommissioning Cost Estimate

Prairie Solar Decommissioning				
Project Size	176.23	MW-DC	135.00	MW-AC
Area within Fence	603.53	Acres		
	<b>Quantity</b>	<b>Unit</b>	<b>Unit Cost</b>	<b>Total Cost</b>
Mobilization/Demobilization	1	Lump Sum	\$621,000.00	\$621,000
<b>Subtotal Mobilization/Demobilization</b>				<b>\$621,000</b>
Mobilization was estimated to be approximately 7% of total cost of other items.				
<b>Permitting</b>				
State Permits	1	Lump Sum	\$10,000.00	\$10,000
<b>Subtotal Permitting</b>				<b>\$10,000</b>
Decommissioning will require a SWPPP and SPCC plan, cost is an estimate of the permit preparation cost				
<b>Civil Infrastructure</b>				
Removal Gravel Surfacing from Road	14,835	Cubic Yards (BV)	\$2.61	\$38,726
Haul Gravel Removed from Road (Urbana, IL)	18,543	Cubic Yards (LV)	\$24.90	\$461,718
Disposal of Gravel Removal from Road (Use as Daily Cover)	24,032	Tons	\$0.00	\$0
Removal Geotextile Fabric from Road Area	78,366	Square Yards	\$1.40	\$109,712
Haul Geotech Fabric Removed from Beneath Access Roads	22	Tons	\$1.50	\$32
Disposal of Geotech Fabric Removed from Beneath Access Roads	22	Tons	\$81.00	\$1,746
Remove and Load Culvert from Beneath Access Roads	25	Each	\$448.00	\$11,200
Haul Culvert Removed from Access Roads	8	Tons	\$1.50	\$11
Disposal of Culverts (Clifton, IL)	8	Tons	\$81.00	\$608
Removal Low Water Crossing from Road	10	Each	\$3,400.00	\$34,000
Haul Low Water Crossing Materials Removed from Access Road	400	Ton	\$1.50	\$600
Disposal of Low Water Crossing Materials	400	Ton	\$30.00	\$12,000
Grade Road Corridor (Re-spread Topsoil)	26,122	Linear Feet	\$2.08	\$54,206
Decompaction on Road Area	14.39	Acres	\$418.71	\$6,026
Removal of Security Fence (Agriculture Fence)	60,366	Linear Feet	\$3.17	\$191,480
Removal of Security Fence (Chain Link Fence)	850	Linear Feet	\$6.99	\$5,942
<b>Subtotal Civil Infrastructure</b>				<b>\$928,007</b>
Civil removal costs are a combination of IDOT unit costs where applicable, RS Means cost for Champaign, IL, and industry standards provided.				
<b>Structural Infrastructure</b>				
Towers)	190,585	Each	\$13.38	\$2,549,315
Haul Array Steel Post (Urbana, IL)	3,212	Tons	\$11.69	\$37,552
Removal of Tracker Racking per String	12,437	Each	\$96.49	\$1,200,052
Haul Tracker Racking (Urbana, IL)	18,181	Tons	\$11.69	\$212,576
<b>Subtotal Structural Infrastructure</b>				<b>\$3,999,494</b>
Steel removal costs were calculated by using RS Means information for demolition of steel members.				
Hauling calculations are based on the locations of metals recyclers.				
<b>Electrical Collection System</b>				
Removal of PV Panels	323,362	Each	\$5.27	\$1,704,387
Haul PV 95% of Panels to Reseller (We Recycle Solar, Kentucky)	10,700	Tons	\$90.70	\$970,558
Haul 5% of PV Panels for Disposal (Clifton, IL)	563	Tons	\$19.92	\$11,218
Disposal of PV Panels	563	Tons	\$81.00	\$45,618
Removal of Equipment Skids	33	Each	\$1,107.22	\$36,538
Remove Equipment Pad Frames and Pile Foundations	33	Each	\$0.00	\$0
Haul Equipment to Recycler (Urbana, IL)	33	Each	\$263.07	\$8,681
Removal of Scada Equipment	1	Each	\$5,253.13	\$5,253
Removal of DC Collector System Cables (MV)	94,373	Linear Feet	\$0.77	\$72,252
Removal of Fiber Optic Cable	50,485	Linear Feet	\$1.45	\$73,203
Removal of Underground (AC) Collector System Cables (HV)	52,901	Linear Feet	\$2.22	\$117,207
Load and Haul Cables for Recycling	256	Tons	\$11.69	\$2,998
<b>Subtotal Electrical Collection</b>				<b>\$3,047,914</b>
Electrical removal costs of PV Panels and Combiner Boxes were based industry standard installation rates. Equipment pads, MV Equipment and Scada Equipment removal cost are based on removal of equipment, concrete pads, and conduits using a truck mounted crane and RS Means information on crew production rates.				



<b>Transmission System</b>	<b>Quantity</b>	<b>Units</b>	<b>Unit Cost</b>	<b>Total Cost</b>
Removal of Overhead Cables (345 kV)	1,941	Feet	\$7.90	\$15,333
Loadout Overhead Cables	8.82	Tons	\$37.00	\$326
Haul Overhead Cables (345 kV)	8.82	Tons	\$11.69	\$103
Disposal of Overhead Cables (345 kV) (See Salvage Value)	8.82	Tons	\$0.00	\$0
Remove and Load Steel Transmission Poles	6.88	Each	\$931.86	\$6,413
Haul Steel Poles for Recycling	6.88	Each	\$146.25	\$1,006
Haul Hardware, Bracing, and Attachments for Disposal	6.88	Each	\$6.65	\$46
Transmission Pole Component Disposal	1.00	Tons	\$81.00	\$81
Topsoil and Revegetation at Removed Pole	6.88	Each	\$35.78	\$246
<b>Subtotal Transmission System</b>				<b>\$23,555</b>
<b>Substation</b>				
Disassembly and Removal of Main Power Transformer(s)	1	Each	\$4,500.00	\$4,500
Freight Transformer(s) Offsite	118	Tons	\$10.52	\$1,242
Freight Transformer Oil Offsite	12,830	Gallons	\$0.09	\$1,155
Disposal of Transformer (Including Oil) (Salvage Value)	1	Each	\$0.00	\$0
Excavate Around Transformer Foundation(s)	1	Each	\$2,146.32	\$2,146
Remove Complete Transformer Foundation(s)	140	Cubic Yards	\$93.88	\$13,143
Backfill Excavation Area from Transformer Foundation Removal	120	Cubic Yards	\$41.80	\$5,016
Haul Concrete (Foundations Transformer, Switch Gear, etc.)	284	Tons	\$19.92	\$5,661
Disposal of Concrete from Transformer Foundation	284	Tons	\$81.00	\$23,020
Demolish Substation Site Improvements (fences, etc)	1	LS	\$3,500.00	\$3,500
Demolish Control Building and Foundation	1	LS	\$12,000.00	\$12,000
Remove Medium/High Voltage Equipment	1	LS	\$3,500.00	\$3,500
Remove Structural Steel Substation Frame	1	LS	\$3,500.00	\$3,500
Remove Copper Ground Grid	1	LS	\$6,533.10	\$6,533
Load Copper Wire	20,000	Feet	\$0.70	\$13,972
Haul Copper Wire to Recycling	6.5	Tons	\$11.69	\$76
Haul - Demolition Materials, Removed Equipment & Structural Steel	10	Tons	\$11.69	\$117
Disposal of Demolition Materials & Removed Equipment	10	Tons	\$81.00	\$810
Remove and Load Gravel Surfacing from Substation Site	2,304	Cubic Yards (BV)	\$2.61	\$6,016
Haul Gravel Removed from Substation Site	2,881	Cubic Yards (LV)	\$24.90	\$71,724
Disposal of Gravel from Substation Site (Use as Daily Cover)	3,733	Tons	\$0.00	\$0
Grade Substation Site	93,330	SF	\$0.07	\$6,533
Erosion and Sediment Control at Substation Site	1,470	LF	\$3.73	\$5,483
Decompact Substation Site (Subsoiling)	2.1	Acres	\$418.71	\$897
Permanent Seeding at Substation Site	2.1	Acres	\$15,584.80	\$33,391
<b>Subtotal Substation</b>				<b>\$223,936</b>
<b>O&amp;M Building - Assume resale of building</b>				
<b>Site Restoration</b>				
Stabilized Construction Entrance	9	Each	\$2,000.00	\$18,000
Perimeter Controls (Erosion and Sediment Control)	60,366	Linear Feet	\$3.73	\$225,164
Permanent Seeding on roadway areas	14.39	Acres	\$15,584.80	\$224,301
Till to Farmable Condition on array areas	601.39	Acres	\$236.80	\$142,409
Vegetative Screening Removal (Clear and Grub)	7.4	Acres	\$3,800.00	\$28,120
<b>Subtotal Site Restoration</b>				<b>\$637,994</b>
<b>Public Roads Restoration (Chip Seal)</b>	5.0	Miles	\$30,000.00	<b>\$150,000</b>
<b>Project Management</b>				
Project Manager	52	Weeks	\$3,749.00	\$194,948
Superintendent	52	Weeks	\$3,525.00	\$183,300
Field Engineer (2)	52	Weeks	\$3,269.00	\$339,976
Clerk (2)	52	Weeks	\$750.00	\$78,000
<b>Subtotal Project Management</b>				<b>\$796,224</b>
Standard industry weekly rates from RS Means.				



<b>Subtotal Demolition/Removals</b>				<b>\$10,438,123</b>
<b>Administrative Costs (2.5%)</b>				<b>\$260,953</b>
<b>Contingency (25%)</b>				<b>\$2,609,531</b>
<b>Subtotal Demolition and Administration Costs</b>				<b>\$13,308,607</b>
<b>Salvage</b>	<b>Quantity</b>	<b>Units</b>	<b>Unit Cost*</b>	<b>Total Cost</b>
Fencing (Agricultural)	94	Tons	\$229.16	\$21,442
Fencing (Chain Link)	4	Tons	\$229.16	\$866
Steel Posts	3,212	Tons	\$229.16	\$736,010
Module Racking	18,181	Tons	\$229.16	\$4,166,461
PV Modules	307,194	Each	\$36.96	\$11,353,215
Transformers and Inverters	1,018,545	Pounds	\$0.29	\$290,285
Substation Transformers (Core and Coils)	141,018	Pounds	\$0.29	\$40,190
Substation Transformers (Tanks and Fittings)	47	Tons	\$229.16	\$10,879
Transformers (Oil)	43,520	Gallons	\$0.53	\$22,848
Substation Ground Grid (Copper)	13,060	Pounds	\$2.77	\$36,144
DC Collection Lines (Copper)	0	Pounds	\$1.03	\$0
AC Collection Lines (Aluminum)	0	Pounds	\$0.75	\$0
Steel Transmission Poles	0	Tons	\$229.16	\$0
Transmissions Line (Steel)	3	Tons	\$229.16	\$761
Transmission Lines (Aluminum)	11,007	Pounds	\$0.75	\$8,255
<b>Subtotal Salvage</b>				<b>\$16,678,340</b>
<b>70% of Net Salvage Value per Zoning Ordinance 6.5.1.Q.4.(b)(g)</b>				<b>\$11,674,838</b>
Salvage values are a combination of the following factors; current market metal salvage prices, current secondary market for solar panel module recycling, discussions with national companies that specialize in recycling and reselling electrical transformers and inverters, and the assumption that care is taken to prevent any damage or breakage of equipment.				
<b>Total Demolition Minus Salvage</b>				<b>\$1,633,769</b>
<b>Total Demolition Minus Salvage per acre</b>				<b>\$2,707.02</b>
<b>Minimum Financial Assurance</b>	604 Acres		\$1,000.00	<b>\$604,000</b>
<b>Notes:</b>				
<b>1. Prices used in analysis are estimated based on research of current average costs and salvage values.</b>				
<b>2. Prices provided are estimates and may fluctuate over the life of the project.</b>				
<b>3. Contractor means and methods may vary and price will be affected by these.</b>				

### Cost Estimate Assumptions

To develop a cost estimate for the decommissioning of the Project, following assumptions and pricing references were utilized: Costs were estimated based on current pricing, technology, and regulatory requirements. The assumptions are listed in order from top to bottom of the estimate spreadsheet. When publicly available bid prices or Department of Transportation (DOT) bid summaries were not available for particular work items, we developed time- and material-based estimates considering composition of work crews and equipment and material required using RS Means. When materials have a salvage value at the end of the project life, the construction activity costs and the hauling/freight cost are separated from the disposal costs or salvage value to make revisions to salvage values more transparent. Salvage and resale values are included in this estimate.

1. The Project is anticipated to have a total operation period of 40 years.
2. This Cost Estimate is based on Site Development Plan, dated August 19, 2022.
3. Decommissioning will utilize a full time Project manager or support staff.

4. Common labor will be used for most of the tasks except for heavy equipment operation.
5. Mobilization was estimated at approximately 7% of total cost of other items.
6. Permit applications required include the preparation of a Storm Water Pollution Protection Plan (SWPPP) and a Spill Prevention Control and Countermeasure (SPCC) Plan.
7. Road gravel removal was estimated on a time and material basis using a 23-foot width and an 8-inch thickness for the access roads. Substation aggregate is included in the substation quantities. Because the material will not remain on site, a hauling cost is added to the removal cost. Road aggregate can often be disposed of by giving to landowners for use on driveways and parking areas. Many landfills will accept clean aggregate for use as “daily cover” and do not charge for the disposal.
8. Grade Road Corridor reflects the cost of mobilizing and operating light equipment to spread and smooth the topsoil stockpiled on site to replace the aggregate removed from the road.
9. Erosion and sediment control along roads reflect the cost of silt fence on the downhill side of the roads and surrounding all on-site wetlands.
10. Topsoil is required to be stockpiled on the Project site during construction, therefore this topsoil is available to replace the road aggregate, once removed. Subsoiling cost to decompact roadway areas is estimated as \$418.71 per acre (based on DOT bid prices for similar items). Tilling to an agriculture ready condition is estimated as \$236.80 per acre (based on DOT bid prices for Soil Bed Preparation). The majority of the Project area is assumed to be tilled to an agriculture ready condition. Because decommissioning activities are expected to minimally impact the grasses and vegetation under the arrays or heavily compact the soils, the restoration effort is expected to be limited. Array areas left as pasture will require little restoration effort because the arrays will have been planted with native plants and pollinator seed mixes. As a result, the soils will have been rejuvenated by having been removed from intense farming.
11. Fence removal includes loading, hauling, and recycling or disposal. Fence and posts weigh approximately 10 pounds per foot.
12. Array support posts are generally lightweight “T” beam sections installed with a piece of specialized tracked equipment. Crew productivity is approximately 240 posts per day, and the same crew and equipment should have a similar productivity removing the posts, resulting in a per post cost of approximately \$13.38.
13. A metal recycling facility (Mervis Recycling) located in Urbana, IL is 17 miles from the Project site. Five-year average pricing for metals was obtained from Pricing was acquired from [www.SteelBenchmarker.com](http://www.SteelBenchmarker.com) and [www.scrapmonster.com](http://www.scrapmonster.com). The posts weigh approximately 150 pounds each, and hauling costs were estimated at approximately \$0.70 per ton mile. The pricing from Steel Benchmarker and Scrapmonster has been adjusted to 70 percent of the published price to reflect the processing required for the posts to fit recycling requirements and Mervis Recycling’s margin.
14. Based on the review of a manufacturer’s details of typical array support structures, the structures weigh approximately 15 pounds per linear foot or array. The facility has 323,363 modules, for a total module weight of 11,263 tons. The arrays are made of steel

pipes so a crew with hand tools can disassemble and cut the pieces to sizes for recycling at a rate of about 1800 pounds per person per hour, or about \$100 per ton.

15. Hauling the steel to Urbana, IL costs about \$6.76 per ton (at \$0.20 per ton mile).
16. The solar panels rated at 545 watts measure approximately 3.72 feet by 7.50 feet and weigh 69.67 pounds so they can easily be disconnected, removed, and packed by a three-person crew at a rate we estimate at 12 panels per hour
17. The solar panels will have a resale value in the early year of project life. Therefore, the salvage value has been estimated as \$0.07 per watt per recent decommissioning project estimate given by We Recycle Solar. At the end of project life, the solar panels should be hauled for disposal and the salvage value would be negligible. The panel resale value is estimate based on the DC output.
18. The equipment cabinets contain copper and/or aluminum windings that have significant salvage value. The transformers are typically oil filled, but most transformer recyclers will accept them with oil. The estimated costs include removal of the metal frames and conduits feeding the equipment. They must be lifted by a truck mounted crane for transport to the recycler.
19. Medium voltage (MV) equipment and SCADA equipment are mounted on the same equipment skid as the transformer and enclosed in weatherproof cabinets. Their size requires light equipment to remove them. The costs shown include the removal of the metal frame.
20. The underground collector system cables are placed in trenches with a minimum of five feet of cover.
21. To reduce tracking of sediment off-site by trucks removing materials, we have included a rock construction entrance priced based on state DOT bid prices for similar items.
22. Perimeter control pricing is based on a sediment fence placed on the downgrade side of the work area perimeters and protecting wetlands and drainage swales within the project area. Pricing is based on RS Means unit prices.
23. No topsoil will be removed from landowners' properties or used on other landowners' properties during decommissioning. The majority of the Project site is not anticipated to have been compacted by heavy truck or equipment traffic so no topsoil will need to be imported, and very few areas will need to be de-compacted.
24. According to Zoning ordinance section 6.15Q(4)b.(g), a financial assurance of \$1,000 per acre is required. Total area enclosed within the fence is approximately 603.53 acres.

**Attachment E: Champaign County Road Agreement**

can be found online at: [http://www.co.champaign.il.us/CountyBoard/meetings\\_ELUC.php](http://www.co.champaign.il.us/CountyBoard/meetings_ELUC.php)

**Attachment F: Sidney Township Road Agreement**

can be found online at: [http://www.co.champaign.il.us/CountyBoard/meetings\\_ELUC.php](http://www.co.champaign.il.us/CountyBoard/meetings_ELUC.php)



**Attachment G: Village of Homer Road Agreement**

can be found online at: [http://www.co.champaign.il.us/CountyBoard/meetings\\_ELUC.php](http://www.co.champaign.il.us/CountyBoard/meetings_ELUC.php)

**NOISE ASSESSMENT TECHNICAL REPORT**  
**for the**  
**Prairie Solar Energy Project Updated Site Layout,**  
**Sidney Area of Champagne County, Illinois**

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**APRIL 2023**



# Noise Assessment Technical Report

## Prairie Solar Energy Project Updated Site Layout – Sidney, Illinois

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### ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Meaning
AC	alternating current
ANSI	American National Standards Institute
CFR	Code of Federal Regulations
CNEL	community noise equivalent level
dB	decibel
dBA	A-weighted decibel
DC	direct current
gen-tie	generator tie-in
kV	kilovolt
L <sub>dn</sub>	day-night sound level
L <sub>eq</sub>	equivalent sound level
L <sub>max</sub>	maximum sound level
L <sub>min</sub>	minimum sound level
LT	long-term noise measurement location
L <sub>xx</sub>	percentile-exceeded sound levels
NSLU	noise-sensitive land use
O&M	operations and maintenance
OSHA	Occupational Safety and Health Act
PV	photovoltaic
SCADA	supervisory control and data acquisition



# Noise Assessment Technical Report

## Prairie Solar Energy Project Updated Site Layout – Sidney, Illinois

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## 1 INTRODUCTION

### 1.1 Report Purpose and Scope

The purpose of this technical report is to quantify the noise levels associated with operation of the updated site configuration layout for the previously approved project, and to compare these with restrictions established under the Illinois Pollution Control Board (IPCB) regulations (35 Illinois Administrative Code Subtitle H: Noise Parts 900, 901, 910). This introductory section provides a description of the updated site layout and the project location. Section 2 describes noise-sensitive receptors, regulatory setting, and existing ambient noise levels in the project vicinity. Section 3 describes noise levels that could result with project implementation, and compares these to applicable regulations. Section 4, References Cited, includes a list of the references cited.

### 1.2 Regional and Local Setting

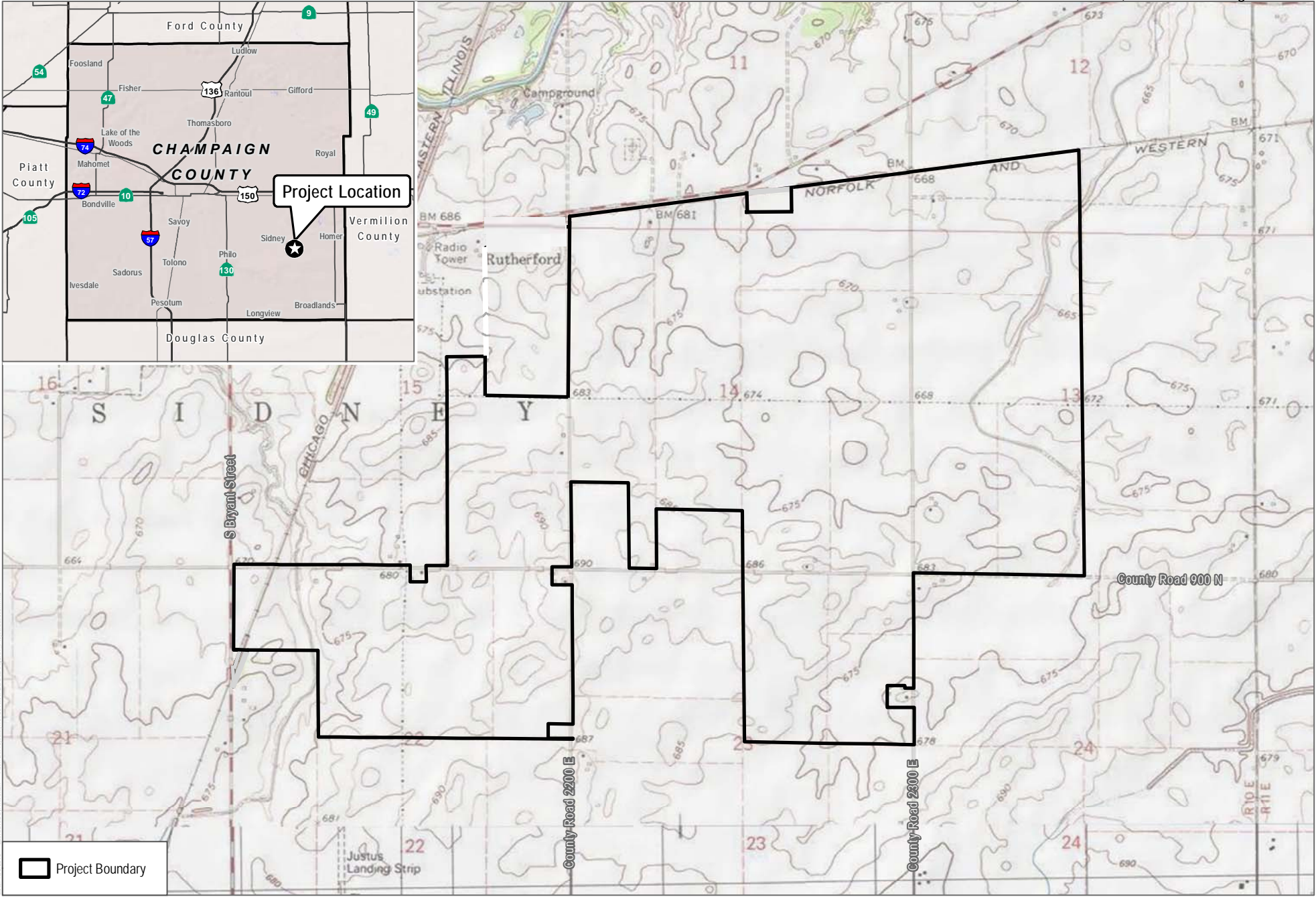
#### 1.2.1 Regional Location

The Project site is located in Sidney Township, in northeastern Champaign County (County) Illinois (Figure 1, Project Location). The Project site is approximately 9 miles southeast of the City of Champaign and 0.25 miles southeast of the city of Sidney, and intersects the unincorporated community of Rutherford. The Project site is located east of S. Bryant Road. County Road 900 traverses the site from east to west, and County Road 2200 E. and County Road 2300 E traverse the site from north to south. The Project site is located adjacent to the city of Sidney to the northwest, and agricultural operations to the north, east, south and west. A gen-tie line would extend west approximately 1,500 feet from the Project site to the existing Ameren Illinois substation located to the northwest of the project site.

The location of the Project was selected because of its proximity to the existing Ameren Illinois transmission corridor, the site's nearby access to existing roads, and the site's excellent solar irradiance. Locally, site access to the Project would be located at three different locations along County Road 900 N, and three locations along County Road 2200E.

#### 1.2.2 Project Setting

The Project site and surrounding properties are mostly composed of agricultural operations. An existing Ameren Illinois transmission line corridor exists along the northern edge of the project site, a second transmission corridor runs north to south along County Road 2200E, and two additional transmission corridors run east to west across the project site. There are scattered residential structures in the project vicinity, some of which are immediately adjacent to the project boundaries. Existing residences are depicted on report figures discussed below.



SOURCE: USGS 7.5-Minute Series St. Joseph Quadrangle



**FIGURE 1**  
**Project Location**  
 112 Prairie Solar Project

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## **Prairie Solar Energy Project Updated Site Layout – Sidney, Illinois**

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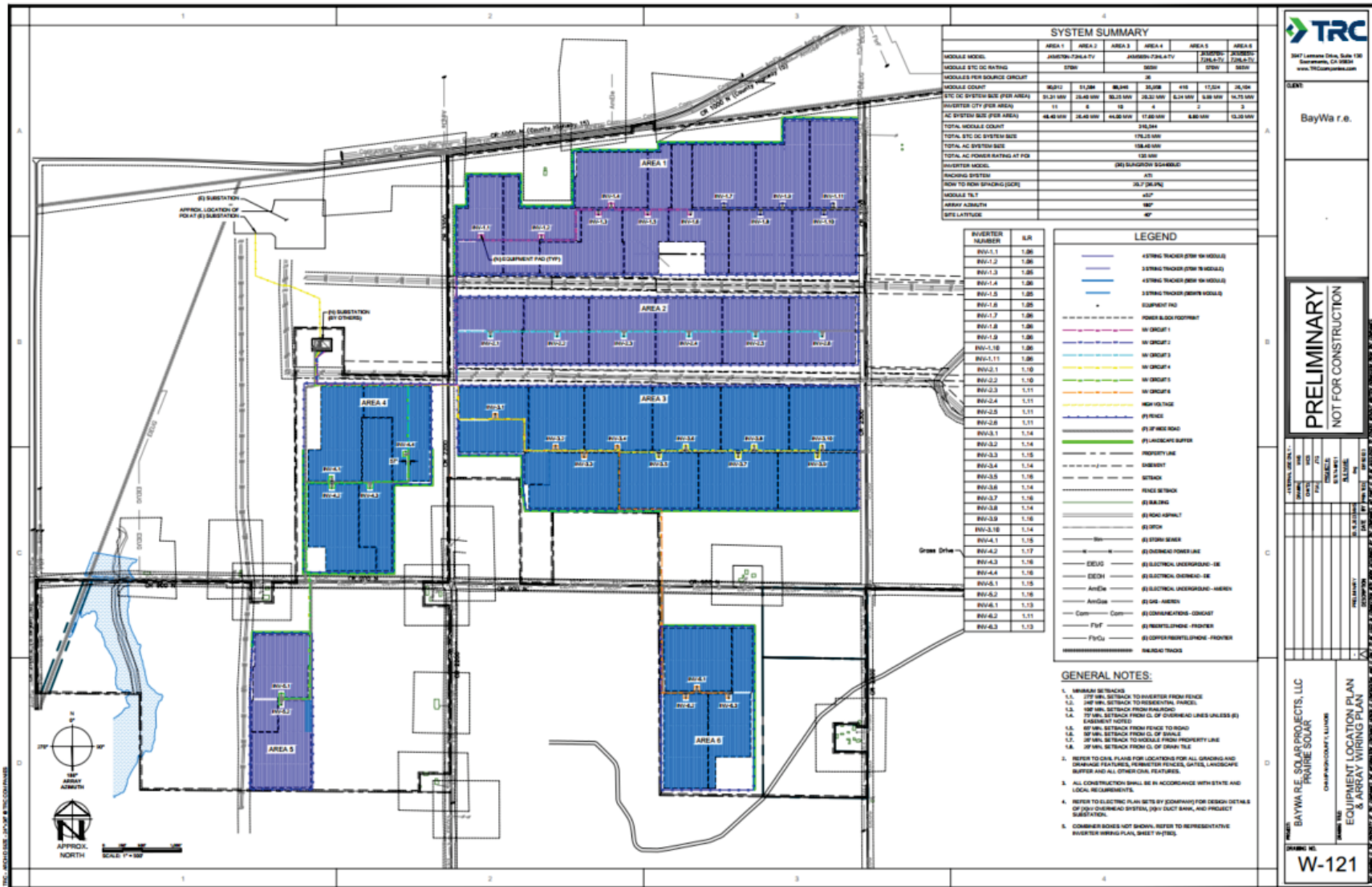
### **1.3 Project Description**

The Project includes up to a 135 MW solar power generating installation. The approximately 700-acre site would house all structures, including solar panels, fixed-tilt or single-axis tracking support structures, inverters, SCADA, and interconnection facilities (on-site substation), all of which would be enclosed by a perimeter security fence. The proposed site plan is shown on Figure 2. Solar energy would be captured by PV panels mounted to a single-axis racking system. The high-efficiency commercially available PV panels convert incoming sunlight to direct current (DC) electrical energy. The panels are arranged in series to effectively increase output voltage to approximately 1,500 volts. These series chains of panels are called “strings” in industry terms and provide the basic building block of power conversion in the solar array. The strings are combined in the solar field through an above- or belowground DC collection system, and then further ganged together at the inverter stations, where the energy is converted to AC and then stepped to an intermediate voltage, typically 34.5 kV. The chosen PV panel would be monocrystalline silicon and would be well suited for the environment due to their durability and reliability.

The racking system would be supported, when practical, by driven piers (piles) directly embedded into the ground, and would be parallel to the ground. Each rack would hold approximately 78 to 104 panels (depending on final configuration) and at its highest edge would have a maximum height up to 12 feet above grade, depending on the dimensions of the chosen panel and racking technology. The minimum clearance from the lower edge of the panel to ground level would be approximately 18 to 24 inches, pending final design. The single-axis tracking system would rotate slowly throughout the day at a range of +/- 60 degrees facing east to west to stay perpendicular to the incoming solar rays so that energy production would be optimized.

Inverter stations would consist of a prefabricated system contained in weather-proof cabinets, and would perform three critical functions for the solar facility: (1) collect DC power in a central location, (2) convert the DC power into AC power, and (3) convert low-voltage AC power to medium-voltage AC power. The inverter station cabinets would house DC collection equipment, utility-scale inverters, and a low- to medium-voltage transformer. The output power from the inverter stations is then fed to the AC collection system through an above- or belowground collection system. This AC collection system would deliver the electricity to the on-site substation, where the voltage would be stepped up through a transformer to the interconnection voltage.

Proposed inverters stations would be from Sungrow Power Supply Co., Ltd (SG4400UD-MV). The inverter stations are proposed to be distributed throughout the site, on a total of 36 small concrete foundation pads. The Site Plan (Figure 2) illustrates the locations of the inverter stations within the solar array fields.



SOURCE: Baywa 2023

FIGURE 2

DUDEK

Site Plan  
Prairie Solar Project

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## **Prairie Solar Energy Project Updated Site Layout – Sidney, Illinois**

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### **On-Site Collector Substation**

The Project on-site substation would be the termination point of the collection system for 34.5 kV electricity. The output of the entire field would be passed through a final interconnection step-up transformer to convert it to the grid tie voltage at 138 kV. Additionally the Project on-site substation would host the grid intertie safety equipment and switches required to interconnect to the Ameren Illinois high-voltage substation. The footprint of the on-site substation would be approximately 300 feet by 200 feet. The Project on-site substation would consist of components up to 55 feet in height, and feeders would be overhead lines constructed with 48-foot-tall and 70-foot-tall poles for the single and double circuits, respectively.

### **Generator Tie-In Line**

The energy generated would be transmitted from the on-site step-up conversion facilities directly to the Ameren Illinois substation located to the northwest of the project site. A project gen-tie line of approximately 1,500 feet in length would be constructed from the on-site collection substation to the Ameren Illinois substation.

## **1.4 Noise Background and Terminology**

### **Fundamentals of Environmental Noise**

Vibrations, traveling as waves through air from a source, exert a force perceived by the human ear as sound. Sound pressure level (referred to as sound level) is measured on a logarithmic scale in dB that represent the fluctuation of air pressure above and below atmospheric pressure. Frequency, or pitch, is a physical characteristic of sound and is expressed in units of cycles per second or hertz. The normal frequency range of hearing for most people extends from about 20 to 20,000 hertz. Sound pressure level may be measured in octave bands; an individual octave has a range of frequencies whose upper frequency limit is twice that of its lower frequency limit. For example, the 1000 Hertz octave band contains noise energy at all frequencies from 707 to 1414 Hertz. The center frequencies of these octave bands are defined by the International Standards Organization (ISO) - 31.5 Hz, 63 Hz, 125 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz, 8 kHz, 16 kHz to divide the audible spectrum into 10 equal parts.

The human ear is more sensitive to middle and high frequencies, especially when the noise levels are quieter. As noise levels get louder, the human ear starts to hear the frequency spectrum more evenly. To accommodate for this phenomenon, a weighting system to evaluate how loud a noise level is to a human was developed. The frequency weighting, called “A” weighting, de-emphasizes the low-frequency components of the sound in a manner similar to the response of a human ear. This A-weighted sound level is called the “noise level” and is referenced in units of



## Noise Assessment Technical Report

### Prairie Solar Energy Project Updated Site Layout – Sidney, Illinois

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dBA. Sound level meters make this adjustment automatically, adding or subtracting an appropriate value to each of the 10 octave bands.

Since sound is measured on a logarithmic scale, a doubling of sound energy results in a 3-dBA increase in the noise level. Changes in a community noise level of less than 3 dBA are not typically noticed by the human ear; changes from 3 to 5 dBA may be noticed by some individuals who are extremely sensitive to changes in noise; a 5-dBA increase is readily noticeable (U.S. Environmental Protection Agency [EPA] 1974). The human ear perceives a 10-dBA increase in sound level as a doubling of the sound level (i.e., 65 dBA sounds twice as loud as 55 dBA to a human ear).

An individual's noise exposure occurs over a period of time; however, noise level is a measure of noise at a given instant in time. Community noise sources vary continuously, being the product of many noise sources at various distances, all of which constitute a relatively stable background or ambient noise environment. The background, or ambient, noise level gradually changes throughout a typical day, corresponding to distant noise sources such as traffic volume and changes in atmospheric conditions.

Noise levels are generally higher during the daytime and early evening when traffic (including airplanes), commercial, and industrial activity is the greatest. However, noise sources experienced during night-time hours when background levels are generally lower can be potentially more conspicuous and irritating to the receiver. To evaluate noise in a way that considers periodic fluctuations experienced throughout the day and night, a concept termed the “day-night sound level” ( $L_{dn}$ ) was developed, wherein noise measurements are weighted, added, and averaged over a 24-hour period to reflect magnitude, duration, frequency, and time of occurrence.

Different types of measurements are used to characterize the time-varying nature of sound. These measurements include the equivalent sound level ( $L_{eq}$ ), the minimum and maximum sound levels ( $L_{min}$  and  $L_{max}$ , respectively), percentile-exceeded sound level ( $L_{xx}$ ), the day-night sound level ( $L_{dn}$ ), and CNEL. The following list provides brief definitions of noise terminology used in this report:

- **Daytime hours:** 7:00 am to 10:00 pm, local time.
- **Decibel (dB)** is a unitless measure of sound on a logarithmic scale, which indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micropascals.
- **A-weighted decibel (dBA)** is an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.

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- **Equivalent sound level** ( $L_{eq}$ ) is the constant level that, over a given time period, transmits the same amount of acoustic energy as the actual time-varying sound. Equivalent sound levels are the basis for the  $L_{dn}$  scale.
- **Highly Impulsive Sound:** either a single pressure peak or a single burst (multiple pressure peaks) for a duration usually less than one second. Examples of highly impulsive sound sources are drop forge hammer and explosive blasting.
- **Maximum sound level** ( $L_{max}$ ) is the maximum sound level measured during the measurement period.
- **Minimum sound level** ( $L_{min}$ ) is the minimum sound level measured during the measurement period.
- **Nighttime hours:** 10:00 pm to 7:00 am, local time.
- **Octave band sound pressure level:** the sound pressure level for the sound being measured contained within the specified octave band. The reference pressure is 20 micronewtons per square meter.
- **Percentile-exceeded sound level** ( $L_{xx}$ ) is the sound level exceeded X% of a specific time period.  $L_{10}$  is the sound level exceeded 10% of the time.
- **Day-Night Average Sound Level** ( $L_{dn}$ ) The  $L_{dn}$  is a 24-hour average A-weighted sound level with a 10 dB penalty added to the nighttime hours from 10:00 p.m. to 7:00 a.m. The 10 dB penalty is applied to account for increased noise sensitivity during the nighttime hours.

#### Exterior Noise Distance Attenuation

Noise sources are classified in two forms: (1) point sources, such as stationary equipment or a group of construction vehicles and equipment working within a spatially limited area at a given time; and (2) line sources, such as a roadway with a large number of pass-by sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6.0 dBA for each doubling of distance from the source to the receptor at acoustically “hard” sites and at a rate of 7.5 dBA for each doubling of distance from source to receptor at acoustically “soft” sites. Sound generated by a line source (i.e., a roadway) typically attenuates at a rate of 3 dBA and 4.5 dBA per doubling distance, for hard and soft sites, respectively. Sound levels can also be attenuated by man-made or natural barriers. For the purpose of a sound attenuation discussion, a hard or reflective site does not provide any excess ground-effect attenuation and is characteristic of asphalt or concrete ground surfaces, as well as very hard-packed soils. An acoustically soft or absorptive site is characteristic of unpaved loose soil or vegetated ground.

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### **Prairie Solar Energy Project Updated Site Layout – Sidney, Illinois**

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With respect to examples of this distance-attenuation relationship for exterior noise, a 60-dBA noise level measured at 50 feet from a transformer within a paved substation site would diminish to 54 dBA at 100 feet from the source, and to 48 dBA at 200 feet from the source. This scenario is addressed by the point source attenuation for a hard site (6 dBA with each doubling of the distance). For the scenario where soft-site conditions exist between the point source and receptor, represented by a corridor of vegetation or open ground along the substation perimeter, an attenuation rate of 7.5 dBA per doubling of distance would apply; the transformer noise measured as a 60 dBA at 50 feet would diminish to 52.5 dBA at 100 feet from the source and to 45 dBA at 200 feet from the source, where soft ground with or without vegetation exists between the sound source and the receptor location.

#### **Health Effects of Noise**

Noise is known to have a number of different adverse effects on humans. Based upon these recognized adverse effects of noise, criteria have been established to help protect the public health and safety and prevent disruption of certain human activities. These criteria are based on effects of noise on people such as hearing loss (not generally associated with community noise), communication interference, sleep interference, physiological responses, and annoyance.

## **1.5 Noise Regulation and Management**

### **1.5.1 State of Illinois**

#### **Illinois Pollution Control Board (IPCB) regulations**

**(35 Illinois Administrative Code Subtitle H: Noise Parts 900, 901, 910).**

The Illinois Pollution Control Board regulates the level of allowable noise generation on the basis of the classification of the source land use and the receiver land use. The land use classification system employed under Section 901 of Chapter 35, Subtitle H is the “Land-Based Classification Standards” [LBCS] published by the American Planning Association (APA 2001). The applicable language from Section 901 regarding land classification is provided below.

#### Section 901.101 Classification of Land According to Use

b) **Class A** land includes all land used as specified by LBCS Codes 1000 through 1340, 2410 through 2455, 5200 through 5230, 5500, 6100 through 6145, 6222, 6510 through 6530, 6568 through 6600.

d) **Class C** land includes all land used as specified by LBCS Codes 3100 through 3440, 4120 through 4180, 4210 through 4212, 4300 through 4347, 7400 through 7450, 8000 through 8500, and 9100 through 9520.

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Residences are included in LBCS codes 1000 to 1340, and are therefore considered a **Class A** land use. Agricultural land and activity are included in codes 9100 to 9520; alternative energy production facilities are included in codes 4300 to 4347. Consequently, the existing and proposed uses within the project site boundaries are considered **Class C** land uses. Under these provisions of Section 901.101, the project sound emission would be from “Class C” land and the most restrictive limits would be applied to project noise at “Class A” land. Since residences exist in the project vicinity, these receivers are afforded the most protection under Section 901, as compared to land uses defined as belonging to Class B or Class C. The pertinent noise level limitations for project-generated noise at vicinity residences is contained in Section 901.102.

#### Section 901.102 Sound Emitted to Class A Land

- a) Except as elsewhere provided in this Part, no person shall cause or allow the emission of sound during daytime hours from any property-line-noise-source located on any Class A, B or C land to any receiving Class A land which exceeds any allowable octave band sound pressure level specified in the following table, when measured at any point within such receiving Class A land, provided, however, that no measurement of sound pressure levels shall be made less than 25 feet from such property-line-noise-source.

#### Daytime Limits

Octave Band Center Frequency (Hertz)	Allowable Octave Band Sound Pressure Levels (dB) of Sound Emitted to any Receiving Class A Land from Class C Land
31.5	75
63	74
125	69
250	64
500	58
1000	52
2000	47
4000	43
8000	40

## Noise Assessment Technical Report Prairie Solar Energy Project Updated Site Layout – Sidney, Illinois

- b) Except as provided elsewhere in this Part, no person shall cause or allow the emission of sound during nighttime hours from any property-line-noise-source located on any Class A, B or C land to any receiving Class A land which exceeds any allowable octave band sound pressure level specified in the following table, when measured at any point within such receiving Class A land, provided, however, that no measurement of sound pressure levels shall be made less than 25 feet from such property-line-noise-source.

### Nighttime Limits

Octave Band Center Frequency (Hertz)	Allowable Octave Band Sound Pressure Levels (dB) of Sound Emitted to any Receiving Class A Land from Class C Land
31.5	69
63	67
125	62
250	54
500	47
1000	41
2000	36
4000	32
8000	32

### Section 901.104 Highly-Impulsive Sound

Except as provided elsewhere in this Part, no person shall cause or allow the emission of highly-impulsive sound from any property-line-noise-source located on any Class A, B, or C land to any receiving Class A or B land which exceeds the allowable A-weighted sound levels, measured with fast dynamic characteristic, specified in the following table when measured in accordance with the procedure of 35 Ill. Adm. Code 900.103 at any point within such receiving Class A or B land, provided, however, that no measurement of sound levels shall be made less than 25 feet from such property-line-noise-source.

### Highly Impulsive Sound Limits

Allowable A-weighted Sound Levels in Decibels of Highly-Impulsive Sound Emitted from Class C to Receiving Class A	
Daytime	Nighttime
53	43



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### **Prairie Solar Energy Project Updated Site Layout – Sidney, Illinois**

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#### **1.5.1 Champagne County**

##### **Zoning Ordinance Solar Farm Text Amendment**

On August 23, 2018 the Champaign County Board approved an amendment to the zoning ordinance to allow photovoltaic solar farms on certain agricultural properties. Sub-section I of the text amendment addresses noise limitations (presented below).

##### 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.
    - (c) Results of the ambient background sound level monitoring and the modeling of anticipated sound levels shall be clearly stated in the application and the application shall include a map of the modeled noise contours within 1,500 feet of the proposed PV SOLAR FARM.
    - (d) The application shall also clearly state the assumptions of the computer model's construction and algorithms so that a competent and objective third party can as simply as possible verify the anticipated sound data and sound levels.

## **Noise Assessment Technical Report Prairie Solar Energy Project Updated Site Layout – Sidney, Illinois**

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### **Special Use Permit for Prairie Solar 1 (Ordinance No. 2019-1)**

On January 24, 2019, the Champaign County Board approved a Special Use Permit for the Prairie Solar 1 Project (adopted as Ordinance No. 2019-1). The conditions of approval for Ordinance No. 2019-1 would also govern the currently proposed project re-configuration; specifically, the following noise condition applies.

4. That the granting of the Special Use Permit in Zoning Case 898-S-18 include the following special conditions of approval:

H. The petitioner shall install sound reduction kits from the inverter manufacturer to each of the inverters in the solar farm so that operational sound levels for the duration of the solar farm will be less than 39 dBA at all existing residential lots within 1,500 feet of the project site and the 39 dBA shall be the sound level that shall be enforced by Champagne County subject to the relevant standards of the Illinois Pollution Control Board and Illinois Environmental Protection Agency.

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## 2 EXISTING NOISE ENVIRONMENT

### 2.1 Noise Levels

Existing (pre-project) noise conditions present in the study area were inventoried by Dudek in September 2018 for the original project. Recent aerial imagery (Google EarthPro 2023) indicates there has been no new development in the project area since 2018, and therefore local ambient noise levels documented in 2018 would also exist currently (in 2023).

Sound-level measurements were performed using four SoftdB Piccolo Models, which are ANSI Type II. ANSI Type II sound-level meters have sufficient accuracy to be used for environmental noise evaluation. Sound level meters were operated on tri-pods at a height of 5 feet above ground level, consistent with standards for environmental noise assessment. The sound-level meters were calibrated before and after measurements using a Rion Laboratory Model NC-74 calibrator.

The four selected locations for 24-hour measurements are depicted on Figure 3 as LT1 to LT4. Each measurement site was located on an existing residential property, between the residence and adjacent roadway. A description of the measurement locations is provided below.

**Table 1 – Ambient Noise Measurement Locations**

Site	Adjacent Road	Measurement Site Description
LT1	S. Bryant Street	Closest residence to the west of the project boundaries, receiver R11 for modelling.
LT2	E. Main Street	Closest residence to the north of the project boundaries, receiver R15 for modelling.
LT3	County Rd. 2400 E	Closest residence to the east, not included in noise modelling (approximately 2500 feet from project boundary)
LT4	County Rd. 2200 E	Closest residence to the south of the project boundaries, receiver R3 for modelling.

A 24-hour measurement captures the fluctuations in sound levels throughout the daytime and overnight period, providing a good representation of the typical ambient noise conditions for these existing residential uses and the project vicinity in general. Table 2 summarizes the range of daytime and nighttime hourly average values ( $L_{eq}$ ), minimum ( $L_{min}$ ) and maximum ( $L_{max}$ ) sound levels recorded for each monitor location during the 24-hour measurement, as well as the calculated 24-hour weighted

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average noise level ( $L_{dn}$ ). The dates of the measurement and primary sound sources affecting the measurement are also provided in Table 5 for each long-term monitor location. Appendix A contains the field data and  $L_{dn}$  calculations regarding the noise measurement program.

**Table 2 - Ambient Sound Level Measurement Results (dBA)**

Site	Noise Sources	Dates	Day $L_{eq}$ Range	Night $L_{eq}$ Range	$L_{dn}$	$L_{max}$	$L_{min}$
LT1	Traffic on S. Bryant Street, harvest activity	09.26.18 – 09.27.18	60 - 65	54 - 64	66	92	46
LT2	Traffic on E. Main Street	09.26.18 – 09.27.18	67 - 73	64 - 72	74	94	33
LT3	Traffic on County Rd. 2400 E, harvesting	09.26.18 – 09.27.18	49 - 59	39 - 56	58	85	36
LT4	Traffic on County Rd. 2200 E	09.26.18 – 09.27.18	48 - 63	41 - 55	58	85	37

**Notes:** dBA = decibel; LT = long-term roadway noise measurement location;  $L_{eq}$  = equivalent sound level (hourly average);  $L_{dn}$  = day-night sound level;  $L_{max}$  = maximum sound level;  $L_{min}$  = minimum sound level.

The results of the ambient noise survey from long-term measurements reflect daytime noise levels that range between 48 and 63 dBA  $L_{eq}$  in the vicinity of existing noise-sensitive receptors along the two less-travelled roadways (LT3 and LT4). Higher daytime noise levels, ranging from 60 to 73 dBA  $L_{eq}$  were recorded at LT1 and LT2, locations adjacent to highly-travelled roadways. The day-night average noise levels were 58 dBA  $L_{dn}$  at LT3 and LT4, representative of areas influenced by both roadway traffic and light agricultural activity. LT1 has a day-night average of 66 dBA  $L_{dn}$  which is reflective of moderate levels of roadway traffic along S. Bryan Street. LT2 has a day-night average of 74 dBA  $L_{dn}$  which is reflective of heavy levels of roadway traffic along E. Main Street.

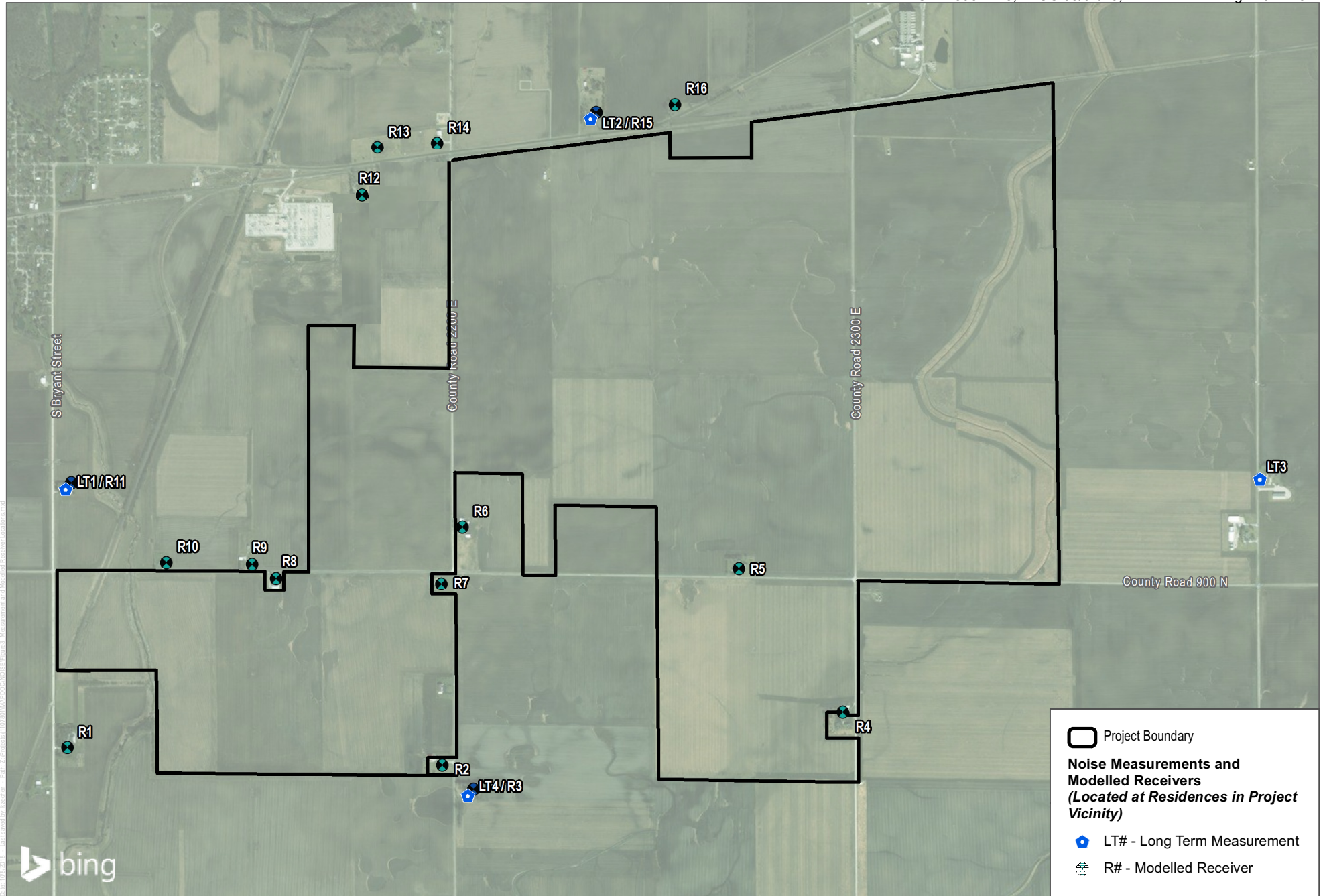
Noise measurement data and existing  $L_{dn}$  calculation worksheets are provided in Appendix A.

## 2.2 Sensitive Receptors - Residences

Residences exist in the project vicinity, which are considered a noise sensitive land use. Residences fall under “Class A” land uses with respect to the Illinois Pollution Control Board (IPCB) regulations (35 Illinois Administrative Code Subtitle H: Noise Parts 900, 901, 910). The noise limits are more stringent at Class A lands than at Class B or Class C lands, with respect to noise emanating from activities adjacent to such residences.

Existing residences proximate to the project boundaries are illustrated on Figure 3. Each of the existing residences in the project vicinity is identified with an “R” designation on Figure 3, which denotes that project operational noise has been modeled at this “Receiver” location.

These closest residences to the project boundaries were selected for specific noise modeling, as being representative of the worst-case noise exposure levels from the proposed project.



SOURCE: BING

**DUDEK**

0 1,000 2,000 Feet

**FIGURE 3**  
Measurement and Modelled Receiver Locations

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### **3 PROJECT NOISE LEVELS**

#### **3.1 Equipment Noise Source Descriptions**

On-site noise sources associated with the project would include inverter stations (each a prefabricated system consisting of DC collector, inverter, and transformer contained in weather-proof cabinets), and a step-up transformer in the on-site sub-station. Inverter stations would be distributed throughout the site among the PV modules; the sub-station would be located at the western edge of the array area. These improvements are illustrated on Figure 2 (Site Plan).

A description of each of the project components and noise-generating characteristics is provided below.

##### **Inverter Stations**

The PV panels would be electrically connected to adjacent panels to efficiently increase the output voltage to 1,500 volts. An above- or below-ground DC collection system will deliver the electricity to an inverter station, where the electricity is converted into AC and then fed into a field transformer to achieve an intermediate voltage, typically 34.5kV. From the inverter stations an above- or below-ground AC collection system will deliver the electricity to the on-site substation, where the voltage will be stepped-up to the interconnection voltage.

The inverter stations are proposed to be located on 36 pads located throughout the project site. Proposed inverter stations would be from Sungrow Power Supply Co., Ltd (SG4400UD-MV). Sound level testing by the manufacturer for model SG4400UD-MV indicates a sound pressure level of 72 dBA at 5 meter (16.4 feet). The noise assessment was performed using the published sound level results for the SG4400UD-MV (72 dBA at 16.4 feet).

##### **Step-up Transformer (at Substations)**

The output from the solar field would be passed through a final interconnection step-up transformer at the sub-station to convert it to the grid tie voltage at 138-kV. A typical step-up transformer that might be used for the sub-stations has a sound rating of 60 dB at 5 feet based on National Electric Manufacturers Association ratings for the size of transformer anticipated to be used.

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### 3.2 Octave-Band Sound Levels Conversion to dBA

Unfortunately, Sungrow Power Co. Ltd and other manufacturers of central inverter equipment do not provide sound level data broken into octave band frequencies. The specification sheet from Sungrow Power Supply Co., Ltd for the SG4400UD-MV is included in Appendix B and demonstrates that sound level values are reported only as single value A-weighted decibels.

The single value dBA sound pressure level is derived by adding an adjustment factor to each octave band, and then summing the energy (sound pressure) from each octave band into a single value (using logarithmic addition). The adjustments per octave band level from ISO are provided in the table below.

**Table 3 – Octave Band Adjustments for A-Weighted Spectrum**

Octave-band frequencies, Hz With dB Adjustments per Band									
Band	31.5	63	125	250	500	1000	2000	4000	8000
dB Adjustment	-39.4	-26.2	-16.1	-8.6	-3.2	0.0	1.2	1.0	-1.1

If we use the maximum allowable sound pressure per octave band as specified in Section 901.102, and apply the above A-weighting adjustments, we arrive at a single value dBA pressure level. Since inverter and transformer noise levels are reported in dBA pressure levels, dBA becomes the most appropriate/practical metric to use for sound level compliance evaluation. Appendix C provides worksheets for the conversion into single value dBA pressure levels of the daytime and nighttime noise limits from Class C lands to Class A lands (which the regulation expresses according to octave band pressure levels).

Applying the A-weighting conversion to the limits in Section 901.102 results in the limits expressed as single value dBA pressure levels, in Table 4.

**Table 4 – Section 109.102 Class C to Class A Land Use Noise Limits Converted to dBA**

Applicable Time Period	Limit
Daytime	60.7 dBA
Nighttime	51.2 dBA

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Highly impulsive sounds, characterized by a spike of sound occurring with less than one second duration, can be highly annoying. Because of this potential annoyance, a separate (lower) limit is established in Section 109.103 for highly impulsive sound sources, expressed as a dBA pressure level (no conversion required). The highly impulsive sound level limits are a useful reference in comparing the appropriateness of the conversion of Section 109.102 limits into dBA limits.

**Table 5 – Section 109.103 Highly Impulsive Sound Limits**

Allowable A-weighted Sound Levels in Decibels of Highly-Impulsive Sound Emitted from Class C to Receiving Class A	
Daytime	Nighttime
53	43

In many community noise ordinances, a penalty of 5 dB is added to highly impulsive sound sources (which is the equivalent of enforcing a sound limit 5 dBA lower than for non-impulsive sound sources). In comparing the converted noise limits from Section 109.102 with the Section 109.103 highly impulsive noise source limits, there is a difference of 8 dBA between the non-impulsive and impulsive sound source limits. This suggests that the converted non-impulsive limits are more conservative than the octave-band based restrictions native to Section 109.103.

In this analysis, compliance with restrictions found in Section 109.102 is on the basis of the converted, single value dBA pressure level for daytime and nighttime.

### 3.3 Equipment Noise Levels at Existing Sensitive Receptors

Figure 3 depicts the existing residences within 1500 feet of the project boundaries, which were also selected for modeling of operational noise levels from on-site operations. The existing residences are represented by an “R” designation on Figure 3.

With respect to the selection of receivers for the noise modeling, Section 901.102 of the Illinois Pollution Code specifies that property-line sound may not exceed certain specified sound levels with respect to a Class A, B, or C land use sound source and a receiving Class A land use. The land use of the involved properties, and not underlying zoning, is the basis of the noise restrictions. The solar project land use is classified as Class C, while residences are classified as Class A. Thus operational noise levels of the proposed project are appropriately calculated or modeled at the property line separating the project from any immediately adjacent residences. The Illinois Pollution Code also requires the calculation of noise level contours up to 1,500 feet from project boundaries. For residences

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which are separated from the project site by multiple property boundaries, the noise level was calculated near the residence itself, and not at the property boundary for that residence. Accordingly, Figure 3 illustrates that for each residence immediately adjacent to the project boundary, the receptor point is on the project property boundary; for residences not immediately adjacent to the subject property boundary (out to the 1,500 foot radius) the receptor is located at the residence (because there is a closer property line that was evaluated under the "adjacent" scenario). The analysis of project operational noise levels also included calculation of composite noise levels at a distance of up to a minimum of 1,500 feet from each of the project boundaries (i.e, north, east, south, west). The results of the noise level calculations are presented graphically as noise contours on Figure 4.

To summarize, Illinois Pollution Code Section 901.102 requires calculation of project noise levels at the property boundary separating a source property and a receiver property. This study provides calculation of Project operational noise levels at the property line of each residence immediately adjacent to the project boundaries, and therefore the study is in compliance with Illinois Pollution Code.

The provided site plan and noise specifications for the noise-generating equipment anticipated to be employed in the proposed facility was utilized to model the operational noise from the proposed solar project. The resulting project operational noise level at the identified proximate noise sensitive receivers was modeled based upon the published sound level for each piece of equipment, standard outdoor distance attenuation rates for point sources and hard-site conditions applied to the distance between each equipment location and the receiver locations, and the logarithmic sum of individual equipment noise levels at each of the separate receivers.

As described in Section 1.4, outdoor attenuation at an acoustically hard site is characterized by a 6 dBA loss with each doubling of distance from source to receiver, whereas the rate at an acoustically soft site is a loss of 7.5 dBA for each doubling of distance. Using the hard site attenuation rate for the project is conservative (over-estimates sound levels at receivers) because ground surface within the facility and between the facility and receivers is likely to be covered in vegetation or tilled earth. Calculated noise levels at receivers are therefore considered conservative and worst-case.

Sound attenuation due to distance, for a point source (which is applicable to each piece of equipment in the proposed solar facility) under hard site conditions is calculated with the equation:

$$SPL_1 = SPL_2 - 20\log(D_2/D_1)$$

Where:

- $SPL_1$  is the calculated sound pressure level (in dB) at specified distance [ $D_2$ ]
- $SPL_2$  is a known (measured) sound pressure level at a known distance [ $D_1$ ]
- $D_1$  is distance from source to measured sound pressure level
- $D_2$  is distance from source to location of calculated sound pressure level

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Sound levels are expressed in decibels, which are a logarithmic function. The formula to add one sound level (LA) to another sound level (LB) expressed in dB is:

$$LA + LB = 10\log_{10} (10LA/10 + 10LB/10) \text{ dB}$$

Applying the above equations, and based upon supplied sound energy levels for each piece of equipment proposed throughout the project, Dudek created an excel-based model to predict composite noise levels from simultaneous use of all of the equipment at each of the existing residential locations within 1500 feet of the project boundaries.

The noise levels from all the noted equipment were combined and calculated at each of the receptor locations, assuming no shielding would be present (i.e., an absence of structures, barriers, or berms between the equipment locations and the receptor locations). The inverter containers would each provide some shielding between certain equipment noise sources and selected receptors, but this shielding effect was ignored to provide a conservative assessment of total operational noise levels at each receptor. The results of the operation noise analysis are presented in Table 6.

**Table 6 - Project Operational Noise Level Summary for Existing Sensitive Receptors**

Receptor ID	Predicted Noise Level (dBA Leq)	Limit Daytime (dBA Leq)	Limit Exceeded?	Limit Nighttime (dBA Leq)	Limit Exceeded?
R1	23	61	NO	51	NO
R2	28		NO		NO
R3	27		NO		NO
R4	30		NO		NO
R5	35		NO		NO
R6	35		NO		NO
R7	33		NO		NO
R8	33		NO		NO
R9	32		NO		NO
R10	28		NO		NO
R11	24		NO		NO
R12	30		NO		NO
R13	29		NO		NO
R14	32		NO		NO
R15	35		NO		NO
R16	35		NO		NO

**Notes:** dBA = A-weighted decibel; Leq = equivalent sound level over a given period.

As illustrated in Table 6, the one-hour average sound levels would range up to 35 dBA Leq at the worst-case receptors (R5, R6, R16). This would be the highest combined operational level for all equipment at any receptor location. The facility would almost exclusively operate during daytime hours, when sunlight is available. However, at certain times of the year, the sun would rise before 7



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AM, and inverters could therefore operate for a portion of the nighttime period. Nonetheless, operational noise levels would be no greater than 35 dBA  $L_{eq}$  at the worst-case receptor, which is 16 dBA lower than even the more restrictive night-time limit.

Modeling points were also placed at each of the long-term noise measurement locations (LT1 – LT4) so that project operational noise levels could be compared against ambient noise levels measured for this noise study. Table 7 compares predicted project operational noise levels to ambient noise levels measured at LT1 – LT4.

**Table 7 - Comparison of Project Operational Noise Levels to Ambient ( $L_{eq}$  dBA)**

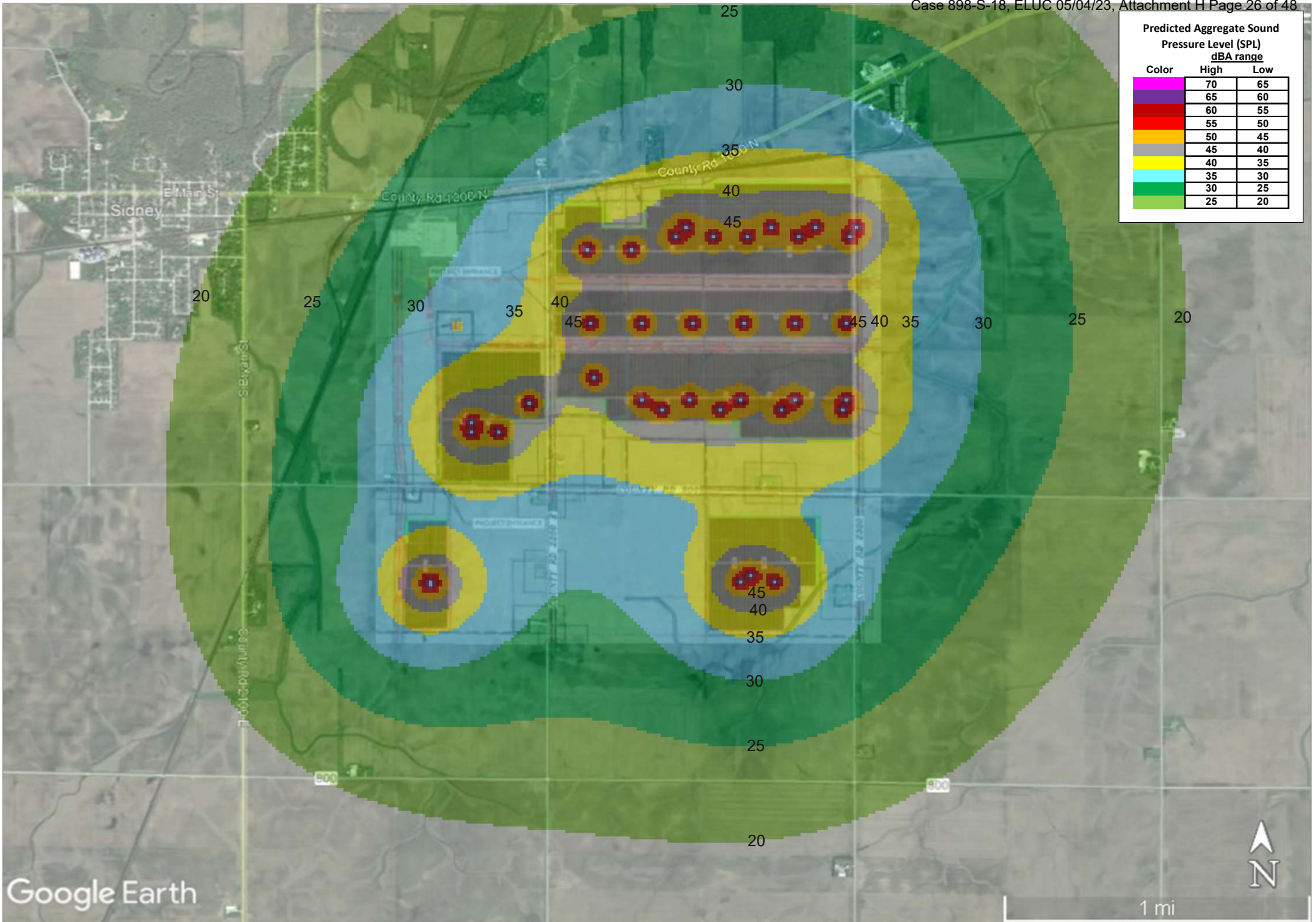
Site	Day $L_{eq}$ Range	Night $L_{eq}$ Range	Predicted Project Operational Noise Level	Exceeds Ambient?
LT1	60 - 65	54 - 64	24	NO
LT2	67 - 73	64 - 72	35	NO
LT3	49 - 59	39 - 56	19	NO
LT4	48 - 63	41 - 55	27	NO

**Notes:** dBA = decibel; LT = long-term roadway noise measurement location;  $L_{eq}$  = equivalent sound level (hourly average).

As can be seen in Table 7, predicted project noise levels would be well below the measured ambient average daytime and nighttime levels at each of the noise measurement locations. Because the project operational noise levels would in each case be less than the ambient level by at least 10 dBA, the addition of project noise would not increase the existing ambient noise level.<sup>1</sup>

Figure 4 provides the noise contours from facility operation, including the boundary for predicted operational noise levels down to 20 dBA  $L_{eq}$ . As illustrated in Table 7, 20 dBA  $L_{eq}$  would fall at least 19 dBA lower than the lowest recorded ambient noise level in the project vicinity, and therefore the extent of lower noise level contours (below 20 dBA  $L_{eq}$ ) was not necessary to illustrate. These illustrated noise contours apply to operational noise levels with all of the facility equipment in full operation.

<sup>1</sup> Decibels express a logarithmic value, for which specific equations must be used for addition or subtraction. With respect to addition, when two decibel values differ by 10 or more, their sum is simply equal to the larger of the two values being added.



**FIGURE 4**  
**Operational Noise Levels**  
 Prairie Solar Project

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#### 3.3.1 Operation Noise Levels Compared to October 2018 Project

Champagne County indicated that operational noise levels from the new site configuration layout would need to be no greater than those from the approved October 2018 project. Table 8 presents the predicted sound levels from the currently proposed (2023) site configuration layout, compared to the approved 2018 project. The noise levels in Table 8 for the 2018 project are those with the required incorporation of noise reduction kits for all of the inverters.

**Table 8 - Project Operational Noise Level Compared to 2018 Project**

Receptor ID	Predicted Noise Level Current Project (dBA Leq)	2018 Project Levels (dBA Leq)	Difference in Noise Level New Layout vs. Original (dBA Leq)
R1	23	30	-7
R2	28	34	-6
R3	27	33	-6
R4	30	34	-4
R5	35	37	-2
R6	35	38	-3
R7	33	36	-3
R8	33	36	-3
R9	32	35	-3
R10	28	33	-5
R11	24	31	-7
R12	30	38	-8
R13	29	36	-7
R14	32	37	-5
R15	35	37	-2
R16	35	36	-1

Notes: dBA = A-weighted decibel;  $L_{eq}$  = equivalent sound level over a given period.

As illustrated in Table 8, the currently proposed site layout configuration would generate operational noise levels that are below the noise levels predicted for the approved October 2018 project (with noise reduction kits installed on each of the inverters in the 2018 configuration of the project).

#### 3.3.2 Conclusions

1. Predicted sound levels from the currently proposed reconfigured Prairie Solar facility would fall well below limits specified under 35 Illinois Administrative Code Subtitle H: Noise Parts 900, 901, 910, with conversion of these octave-band based limits to single value dBA pressure levels. Reference to the highly intrusive sound limits in Section 901.103 which are expressed in dBA provides confidence the Section 901.102 limits converted to dBA sound pressure limits are appropriate and reasonable, and probably represent more stringent restrictions with regard to allowable sound levels.

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2. Predicted sound levels from the currently proposed reconfigured Prairie Solar facility at each existing residence within 1,500 feet of the project would be lower than those from the approved 2018 configuration of the project.
  
3. Given the inclusion of newer inverter technology with lower operational noise levels, the project as currently proposed would generate operational sound levels for the duration of the solar farm that are less than 39 dBA at all existing residential lots within 1,500 feet of the project site. The substitution of proposed inverter equipment with lower sound generation in the project design therefore achieves the same objective as the condition of approval requiring a sound reduction kit for each of the louder inverters initially included in the project, namely that project operational noise levels would be less than 39 dBA at all existing residences within 1,500 feet of the project.

The proposed updated site configuration layout for Prairie Solar project would therefore comply with noise regulations and sound level restrictions applicable to the project.

## **Noise Assessment Technical Report Prairie Solar Energy Project Updated Site Layout – Sidney, Illinois**

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### **4 REFERENCES CITED**

EPA (U.S. Environmental Protection Agency). 1974. *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*. Washington, D.C. March 1974.

Illinois Pollution Control Board (IPCB). *35 Illinois Administrative Code Subtitle H: Noise Parts 900, 901, 910*.

NEMA (National Electric Manufacturers Association). 2013. *NEMA TR 1-2013 Transformers, Step Voltage Regulators and Reactors*.

Sungrow Power Supply Co. Ltd. 2023. *Noise Test Report for Model SG4400UD-MV Rev. 1.0 RZ2023040702*. April 7, 2023.



**APPENDIX A**  
*Noise Measurement Data*

&

*LDN Calculations*

Piccolo #8007 - Site LTI		Slow Response		dBA weighting		2.0 dB resolution stats												
Rec 1 to 24	LeqPeriod	SEL	Lmax	Lmin	L1%	L5%	L10%	L50%	L90%	L95%	L99%	Lmedian	Lmean	StdDev	L2%	L8%	L25%	
Date hh:mm:ss	Leq	Leq	Leq	Leq	Leq	Leq	Leq	Leq	Leq	Leq	Leq	Leq	Leq	Leq	Leq	Leq	Leq	
9/26/2018 8:54	1.0 hour	65.2	100.8	91.8	53.1	75	69	63	57	55	55	53	57	58.2	4.52	73	65	59
9/26/2018 9:54	1.0 hour	61.9	97.5	84.1	53.1	73	65	61	55	53	53	53	55	57.1	3.99	71	63	59
9/26/2018 10:54	1.0 hour	62.4	98	85.2	52.5	73	67	61	55	55	53	53	55	57.1	4.06	71	63	57
9/26/2018 11:54	1.0 hour	62.7	98.3	92.5	53.4	71	63	59	55	55	53	53	55	56.3	3.47	69	61	57
9/26/2018 12:54	1.0 hour	61.8	97.4	87.7	51.3	73	65	61	55	53	53	51	55	55.7	4.12	71	61	55
9/26/2018 13:54	1.0 hour	62.1	97.7	86.8	49.2	73	67	61	51	51	49	49	51	53.6	5.16	71	63	53
9/26/2018 14:54	1.0 hour	61.6	97.2	82.6	49.9	73	67	63	53	51	51	51	53	54.4	5.23	71	65	55
9/26/2018 15:54	1.0 hour	62.4	98	80.8	49.2	73	69	65	53	51	51	49	53	54.7	5.79	71	65	55
9/26/2018 16:54	1.0 hour	62.1	97.7	81.6	47.9	73	69	63	53	51	49	49	53	54.7	5.54	71	65	55
9/26/2018 17:54	1.0 hour	61.5	97.1	80.1	49.2	73	67	61	53	51	51	49	53	54.6	5.13	71	63	55
9/26/2018 18:54	1.0 hour	62.6	98.2	83.8	51.5	73	67	63	55	53	53	51	55	56.8	4.73	71	65	57
9/26/2018 19:54	1.0 hour	60.3	95.9	78.6	53.8	71	61	59	57	55	55	53	53	56.9	2.98	69	59	57
9/26/2018 20:54	1.0 hour	59.7	95.3	79.5	53.2	69	61	59	57	55	55	53	57	56.9	2.52	65	59	57
9/26/2018 21:54	1.0 hour	59.8	95.4	77.9	52.8	71	63	59	57	53	53	53	57	56.5	3.16	67	61	57
9/26/2018 22:54	1.0 hour	57	92.6	78.8	52.2	65	57	57	55	53	53	53	55	54.7	2.14	61	57	55
9/26/2018 23:54	1.0 hour	58.9	94.5	80.6	52.6	69	63	57	55	53	53	53	55	55.3	3.06	65	61	55
9/26/2018 0:54	1.0 hour	53.7	89.3	62.7	49.5	59	55	53	53	51	51	49	53	52.4	1.58	57	53	53
9/26/2018 1:54	1.0 hour	56.4	92	77.7	49.3	67	57	53	51	51	51	49	51	52.4	2.89	63	55	53
9/27/2018 2:54	1.0 hour	59.4	95	79.9	46.6	73	63	57	51	49	49	47	51	52.2	4.72	69	59	53
9/27/2018 3:54	1.0 hour	54.2	89.8	75.8	47	61	53	53	51	49	49	47	51	51.1	2.41	59	53	51
9/27/2018 4:54	1.0 hour	60.3	95.9	83.3	45.9	73	61	57	51	49	49	47	51	52.6	4.59	69	59	53
9/27/2018 5:54	1.0 hour	62.7	98.3	87.2	46.8	75	67	61	51	47	47	47	51	52.8	6.18	73	63	55
9/27/2018 6:54	1.0 hour	63.9	99.5	83.2	45.8	75	71	65	51	49	47	47	51	54.3	6.85	75	67	57
9/27/2018 7:54	1.0 hour	63.4	99	84.7	46.3	75	69	63	51	47	47	47	51	53	6.81	73	65	55

Piccolo #1200 - Site LT2

Number	Start Date	Start Time	Duration	SPL Time Weight	LN% Freq Weight	LAeq	LAmx	LAmin	LAE	LApeak	L1%	L5%	L10%	L50%	L90%	L95%	L99%
1	9/26/2018	9:00:00 AM	60.00	Slow	dB	65.7	89.6	38.9	101.3	106.6	77.7	72.2	67.8	52.8	47.3	46	43.4
2	9/26/2018	10:00:00 AM	60.00	Slow	dB	69.5	91.5	40.2	105.1	104.5	84.1	72.5	66.2	55.1	48.2	46.4	44.6
3	9/26/2018	11:00:00 AM	60.00	Slow	dB	71.7	93.5	41.5	107.3	106.2	84.6	79	71.1	52.7	46.3	45.2	43.4
4	9/26/2018	12:00:00 PM	60.00	Slow	dB	69.2	86.4	38.9	104.8	103.7	82.8	76.4	70.7	51.7	44.7	43.6	41.7
5	9/26/2018	1:00:00 PM	60.00	Slow	dB	71.2	93.8	35.8	106.8	106.6	83.5	79.7	72.1	50.1	41.7	40.3	38.3
6	9/26/2018	2:00:00 PM	60.00	Slow	dB	68.8	88.4	35	104.4	102.4	81.9	75.2	71.2	49.3	41	39.4	37.5
7	9/26/2018	3:00:00 PM	60.00	Slow	dB	69.2	88.6	33.5	104.8	103.8	81.3	77.5	72	49.3	40.2	37.9	35.4
8	9/26/2018	4:00:00 PM	60.00	Slow	dB	67.1	88.7	37.1	102.7	104.8	79.3	73.4	71	50.4	41.1	39.9	38.2
9	9/26/2018	5:00:00 PM	60.00	Slow	dB	67.6	88.8	33.7	103.2	107.1	79.7	73.7	71.4	52.1	41	39.3	35.4
10	9/26/2018	6:00:00 PM	60.00	Slow	dB	68.8	89.4	33.9	104.4	106	80.3	75.8	72.4	52.7	40.4	38.2	35.6
11	9/26/2018	7:00:00 PM	60.00	Slow	dB	69.5	89.1	33.3	105.1	103.7	83.8	73.6	69.5	48.9	38.5	36.5	34.8
12	9/26/2018	8:00:00 PM	60.00	Slow	dB	62.4	84.7	42.1	98	100.1	74.8	69.6	63	53	46.3	45.3	43.7
13	9/26/2018	9:00:00 PM	60.00	Slow	dB	71.7	89.7	50.2	107.3	104	87.3	71.2	61.2	54.7	53.1	52.3	51.2
14	9/26/2018	10:00:00 PM	60.00	Slow	dB	67.9	89.8	51.7	103.5	103	82.8	67.1	59.4	54.3	53.4	53.2	52.8
15	9/26/2018	11:00:00 PM	60.00	Slow	dB	65.6	84.9	51	101.2	98.3	80	65.5	55.7	53.3	52.6	52.4	51.9
16	9/26/2018	12:00:00 PM	60.00	Slow	dB	72	91.4	49.7	107.6	105	86.6	65.8	55.1	52.4	51.4	51.1	50.6
17	9/26/2018	1:00:00 AM	60.00	Slow	dB	63.7	83.5	48.5	99.3	99.5	78	61	52.9	51.3	50.6	50.4	50
18	9/27/2018	2:00:00 AM	60.00	Slow	dB	64.2	84.8	46.8	99.8	102.3	75.1	70.6	67.5	52.3	49.8	49.5	48.6
19	9/27/2018	3:00:00 AM	60.00	Slow	dB	69.1	96.6	45	104.7	111.4	75.5	56.8	52.7	49.1	48.1	47.8	47.1
20	9/27/2018	4:00:00 AM	60.00	Slow	dB	67.2	91.6	43.3	102.8	107.5	81.4	60.4	53	49.8	47.4	46.8	45.6
21	9/27/2018	5:00:00 AM	60.00	Slow	dB	67.7	87.2	42.7	103.3	107.6	80.3	76	68	52.5	47.6	46.1	45
22	9/27/2018	6:00:00 AM	60.00	Slow	dB	66.1	88	41.5	101.7	102.5	77.7	74.1	70.5	48.8	43.8	42.7	42
23	9/27/2018	7:00:00 AM	60.00	Slow	dB	69.6	90.5	42.5	105.2	107.5	81.1	76.3	73.8	53	45.7	45.1	44.4
24	9/27/2018	8:00:00 AM	60.00	Slow	dB	72.5	93.2	40.3	108.1	111.8	84.4	79.1	74.1	48.9	44.2	43.5	42.6

Piccolo #1008 - Site LT3

Rec 109 to 133		Slow Response		dBa weighting		2.0 dB resolution stats															
Date	hh:mm:ss	Leq	Period	Leq	SEL	Lmax	Lmin	L1%	L5%	L10%	L50%	L90%	L95%	L99%	Lmedian	Lmean	StdDev	L2%	L8%	L25%	
9/26/2018	8:30	1.0	hour	57.6	93.2	79.9	43.1	69	59	55	47	45	45	45	43	47	48.9	4.89	65	55	51
9/26/2018	9:30	1.0	hour	55.8	91.4	82.7	45.1	65	55	53	49	47	45	45	45	49	49.4	3.71	59	53	51
9/26/2018	10:30	1.0	hour	58	93.6	81.3	44.6	69	57	55	49	47	45	45	49	49	50.5	4.53	65	57	53
9/26/2018	11:30	1.0	hour	56.4	92	79	43.1	69	57	53	47	45	45	45	43	47	48.4	4.48	63	53	49
9/26/2018	12:30	1.0	hour	56.6	92.2	77.7	43	69	57	53	47	45	43	43	43	47	48	4.69	65	53	49
9/26/2018	13:30	1.0	hour	58.7	94.3	83	40.7	71	59	53	47	43	43	43	41	47	47.6	5.57	67	55	49
9/26/2018	14:30	1.0	hour	58.5	94.1	84.9	39.9	71	57	49	43	41	41	41	39	43	44.7	5.56	65	51	45
9/26/2018	15:30	1.0	hour	59.3	94.9	83	39.9	73	59	53	45	41	41	41	39	45	45.8	6.19	69	55	47
9/26/2018	16:30	1.0	hour	56	91.6	81.7	40.6	69	53	49	43	41	41	41	39	43	45.2	5.19	63	51	47
9/26/2018	17:30	1.0	hour	52.6	88.2	81	39.7	59	47	45	43	41	41	41	39	43	43.1	3.43	53	45	43
9/26/2018	18:30	1.0	hour	55.4	91	82.1	41.8	65	51	47	43	43	43	41	41	43	44.9	4.16	59	49	45
9/26/2018	19:30	1.0	hour	53	88.6	79.3	43.2	61	51	47	45	43	43	43	43	45	45.1	3.56	57	49	45
9/26/2018	20:30	1.0	hour	48.8	84.4	75.7	43.3	55	45	45	45	43	43	43	43	45	45	2.12	51	45	45
9/26/2018	21:30	1.0	hour	49.8	85.4	68.7	43.3	61	55	45	45	43	43	43	43	45	45	3.64	59	49	45
9/26/2018	22:30	1.0	hour	47.5	83.1	67.5	41.9	57	51	45	43	43	43	41	41	43	43.9	3	55	47	43
9/26/2018	23:30	1.0	hour	49.8	85.4	73.4	41.3	59	57	53	43	41	41	41	41	43	44.2	4.86	57	55	45
9/26/2018	0:30	1.0	hour	46	81.6	65.8	39.9	57	51	43	41	39	39	39	39	41	41.9	3.28	53	45	41
9/26/2018	1:30	1.0	hour	48.4	84	72.9	39.7	61	49	45	39	39	39	39	39	39	40.7	4.08	57	47	41
9/27/2018	2:30	1.0	hour	48.1	83.7	73.2	38.9	59	49	43	39	39	39	39	39	39	40.6	4.09	57	43	41
9/27/2018	3:30	1.0	hour	39.2	74.8	42.8	37.7	41	39	39	39	37	37	37	37	39	38.4	0.98	39	39	39
9/27/2018	4:30	1.0	hour	50.7	86.3	76.5	37.7	63	53	49	39	37	37	37	37	39	40.9	5.56	59	51	41
9/27/2018	5:30	1.0	hour	48.7	84.3	74.5	36	59	49	41	37	37	37	37	37	37	38.8	4.5	57	43	39
9/27/2018	6:30	1.0	hour	55.9	91.5	80.6	37.2	67	53	49	43	39	39	37	37	43	43.4	5.52	61	51	45
9/27/2018	7:30	1.0	hour	56	91.6	81	36.8	67	57	53	43	39	39	37	37	43	44.3	6.27	61	53	47

Piccolo #11 - Site LT4		2.0 dB resolution stats																
Rec 3 to 26		dBA weighting					L5%											
Date	hh:mm:ss	SEL	Lmax	Lmin	L1%	L5%	L10%	L50%	L90%	L95%	L99%	Lmedian	Lmean	StdDev	L2%	L8%	L25%	
9/26/2018	8:40 1.0 hour	60.4	96	72.6	45.7	67	65	63	57	51	49	47	57	57.1	4.61	67	63	61
9/26/2018	9:40 1.0 hour	62.9	98.5	74.8	48.5	69	67	65	59	55	53	49	59	59.8	4.43	69	67	63
9/26/2018	10:40 1.0 hour	60.5	96.1	78	44.9	67	65	63	57	49	49	45	57	56.7	5.05	67	63	61
9/26/2018	11:40 1.0 hour	55.1	90.7	75.2	44.5	63	59	57	49	45	45	45	49	50.7	4.86	61	59	53
9/26/2018	12:40 1.0 hour	55.5	91.1	76.6	44.5	63	61	59	49	45	45	45	49	50.2	5.3	63	59	53
9/26/2018	13:40 1.0 hour	53.9	89.5	77.1	43.5	63	59	55	49	45	45	43	49	49.4	4.54	61	57	51
9/26/2018	14:40 1.0 hour	47.5	83.1	60.9	42.3	53	51	49	45	43	43	43	45	45.6	2.58	53	49	47
9/26/2018	15:40 1.0 hour	51.4	87	70.6	42.7	59	57	53	47	43	43	43	47	47.9	4.07	59	55	51
9/26/2018	16:40 1.0 hour	53.1	88.7	81.5	41.3	59	55	53	47	43	41	41	47	47.2	4.15	57	53	49
9/26/2018	17:40 1.0 hour	48.7	84.3	70.7	40.2	57	51	51	43	41	41	39	43	44.6	4.11	53	51	47
9/26/2018	18:40 1.0 hour	54.4	90	73	42.1	63	55	53	51	51	51	47	51	51.9	2.35	59	53	53
9/26/2018	19:40 1.0 hour	53.3	88.9	56.1	45.3	53	53	53	53	51	51	47	53	52.2	1.21	53	53	53
9/26/2018	20:40 1.0 hour	53.1	88.7	64.8	47.9	55	53	53	53	51	51	49	53	52.1	1.25	55	53	53
9/26/2018	21:40 1.0 hour	54	89.6	70.7	43.9	65	57	53	51	49	49	47	51	51.2	2.86	61	55	51
9/26/2018	22:40 1.0 hour	54.2	89.8	83.4	40.5	63	57	51	47	43	41	41	47	47.2	4.33	61	53	49
9/26/2018	23:40 1.0 hour	49	84.6	70.6	40.4	59	51	51	43	39	39	39	43	44.4	4.33	55	51	47
9/26/2018	0:40 1.0 hour	45.1	80.7	69.7	39.2	51	47	45	39	39	39	39	39	41.1	3.05	47	45	43
9/26/2018	1:40 1.0 hour	42	77.6	61.8	39.2	51	43	39	39	39	39	39	39	39.5	2.12	49	41	39
9/27/2018	2:40 1.0 hour	49	84.6	73	37.6	61	53	47	39	37	37	37	39	40.7	4.97	57	49	41
9/27/2018	3:40 1.0 hour	40.9	76.5	52.9	37.5	49	45	43	37	37	37	37	37	38.2	2.88	49	43	37
9/27/2018	4:40 1.0 hour	47.6	83.2	73.9	37.5	59	49	45	39	37	37	37	39	40.2	4.59	55	47	41
9/27/2018	5:40 1.0 hour	50.3	85.9	81.5	37.5	57	49	47	37	37	37	37	37	39.9	4.78	55	47	41
9/27/2018	6:40 1.0 hour	55	90.6	85.4	37.3	61	49	45	37	37	37	37	37	39.4	4.67	53	45	39
9/27/2018	7:40 1.0 hour	51.1	86.7	83	37.5	49	47	45	41	37	37	37	41	41.1	3.43	47	45	43



Leq	Time	Adjustment				
58.9	Midnight	10	68.9	68.9		
53.7	1	10	63.7	63.7		
56.4	2	10	66.4	66.4		
59.4	3	10	69.4	69.4		
54.2	4	10	64.2	64.2		
60.3	5	10	70.3	70.3		
62.7	6	10	72.7	72.7		
63.9	7am		63.9	63.9		
63.4	8		63.4	63.4		
65.2	9		65.2	65.2		
61.9	10		61.9	61.9		
62.4	11		62.4	62.4		
62.7	noon		62.7	62.7		
61.8	1		61.8	61.8		
62.1	2		62.1	62.1		
61.6	3		61.6	61.6		
62.4	4		62.4	62.4		
62.1	5		62.1	62.1		
61.5	6		61.5	61.5		
62.6	7	5	67.6	62.6		
60.3	8	5	65.3	60.3		
59.7	9	5	64.7	59.7		
59.8	10	10	69.8	69.8		
57	11	10	67	67		
			66.4	66.0		
			CNEL	LDN		

Leq	Time	Adjustment					
72	Midnight	10	82	82			
63.7	1	10	73.7	73.7			
64.2	2	10	74.2	74.2			
69.1	3	10	79.1	79.1			
67.2	4	10	77.2	77.2			
67.7	5	10	77.7	77.7			
66.1	6	10	76.1	76.1			
69.6	7am		69.6	69.6			
72.5	8		72.5	72.5			
65.7	9		65.7	65.7			
69.5	10		69.5	69.5			
71.7	11		71.7	71.7			
69.2	noon		69.2	69.2			
71.2	1		71.2	71.2			
68.8	2		68.8	68.8			
69.2	3		69.2	69.2			
67.1	4		67.1	67.1			
67.6	5		67.6	67.6			
68.8	6		68.8	68.8			
69.5	7	5	74.5	69.5			
62.4	8	5	67.4	62.4			
71.7	9	5	76.7	71.7			
67.9	10	10	77.9	77.9			
65.6	11	10	75.6	75.6			
			74.8	74.5			
			CNEL	LDN			





# **APPENDIX B**

## *Octave Band to A-Weighted Spectrum*

### *Worksheets*

**A-WEIGHTING SPECTRUM CONVERSION**

This spreadsheet takes unweighted octave-band sound pressure levels and applies the A-weighting correction values, then gives the overall dBA level.

Section 901.102 Sound Emitted to Class A Land from Class C Limits: DAYTIME

		Octave-band frequencies, Hz								Overall (Linear)	
		31.5	63	125	250	500	1000	2000	4000	8000	
Octave-band level:		75	74	69	64	58	52	47	43	40	78.3

		Octave-band frequencies, Hz									
		31.5	63	125	250	500	1000	2000	4000	8000	
A-weighted correction:		-39.4	-26.2	-16.1	-8.6	-3.2	0.0	1.2	1.0	-1.1	

		Octave-band frequencies, Hz								Overall (dBA)	
		31.5	63	125	250	500	1000	2000	4000	8000	
Sound Level, dBA		35.6	47.8	52.9	55.4	54.8	52.0	48.2	44.0	38.9	60.7

DAYTIME LIMIT expressed in dBA: **60.7**



Nighttime C Land to A Land

**A-WEIGHTING SPECTRUM CONVERSION**

This spreadsheet takes unweighted octave-band sound pressure levels and applies the A-weighting correction values, then gives the overall dBA level.

Section 901.102 Sound Emitted to Class A Land from Class C Limits: NIGHTTIME

	Octave-band frequencies, Hz									Overall (Linear)
Octave-band level:	31.5	63	125	250	500	1000	2000	4000	8000	
	69	67	62	54	47	41	36	32	32	71.7

	Octave-band frequencies, Hz								
A-weighted correction:	31.5	63	125	250	500	1000	2000	4000	8000
	-39.4	-26.2	-16.1	-8.6	-3.2	0.0	1.2	1.0	-1.1

	Octave-band frequencies, Hz									Overall (dBA)
Sound Level, dBA	31.5	63	125	250	500	1000	2000	4000	8000	
	29.6	40.8	45.9	45.4	43.8	41.0	37.2	33.0	30.9	51.2

NIGHTTIME LIMIT expressed in dBA: **51.2**


# **APPENDIX C**

## *Mechanical Equipment Specification Sheets*

**SUNGROW POWER SUPPLY CO., LTD**  
 No.1699 Xiyou Rd.,New & High Technology Industrial  
 Development Zone, 230088, Hefei, P. R. China.  
 Tel: +86-551-65327878  
 E-mail: \_\_\_\_\_  
 www.sungrowpower.com

## Noise Test Report

### TYPE TEST SHEET

This Type Test sheet shall be used to record the results of the type testing of Generating Unit			
Report reference number	RZ2023040702		
Report version	V1.0		
Date of issue	2023-04-07		
Standard reference	IEC 62109-1_2010		
Generating Unit technology	Grid-connected PV Inverter		
Inverter Type	SG4400UD-MV		
Rated power (KW)	4400		
Rated AC voltage (V)	630		
System supplier name	Sungrow Power Supply Co., Ltd.		
Address	No.1699 Xiyou Rd., New & High Technology Industrial Development Zone, Hefei, P.R. China		
Compiled by	张文明	Approved by	
<p>Note that testing can be done by the manufacturer of an individual component, by an external test house, or by the supplier of the complete system, or any combination of them as appropriate.</p> <p>Where parts of the testing are carried out by persons or organisations other than the supplier then the supplier shall keep copies of all test records and results supplied to them to verify that the testing has been carried out by people with sufficient technical competency to carry out the tests.</p>			
Report Version	Description		
V1.0	Initial		

The aim of this test is to determine the noise level when the PV Grid inverter in rated working condition.

Standard requirements: If equipment produces noise at a level that could cause a hazard, the noise shall be measured to determine the maximum sound pressure level that the equipment can produce (except that sound from alarms and from parts located remotely is not included). If the measured sound pressure exceeds 80dBA above a reference sound pressure of 20 (P, at a measurement distance of 1 m, the instructions shall include information regarding the sound pressure level and how to reduce the risk of hearing damage to safe levels, and the product shall be marked with symbol 22 of Annex C.

● **Used settings of the measurement device for Noise measurement:**

Measurement device	Calibration Date	Expire Date
AWA6228+	2023-01-02	2024-01-01

● **The condition s during testing are specified below:**

PGU operation mode	Rated working condition
Voltage range	895-1300V
Grid frequency range	50Hz
Distance	5m、 10 m
Date	2023-04-07

● **The system noise level please check the table below:**

1) Rated working condition ( 5m )

Orientation	Noise (dB)_5m
Front	73.0
Behind	76.0
Left	73.0
Right	69.0
Maximum Noise	76.0

2) Rated working condition ( 10m )

Orientation	Noise (dB)_10m
Front	64.0
Behind	72.0
Left	66.0
Right	63.0
Maximum Noise	72.0

# **APPENDIX D**

## *NoisePro Model Inputs and Outputs*

### Technical Basis of Dudek’s “NoisePro” Excel-based Outdoor Sound Propagation Prediction Model

In summary, the Microsoft Excel-based **NoisePro** outdoor sound propagation model developed by Dudek calculates the aggregate sound pressure level (SPL) received by each and every cell within a two-dimensional (2D) array (a product of X columns of cells by Y rows of cells). The quantity of this received SPL, in A-weighted decibels (dBA), is the logarithmic sum of acoustical contribution from each of “n” user-input sound emitting point sources located on the same 2D array, which may be written as follows:

$$SPL_{X,Y} = 10 * \log \sum_{i=1}^n 10^{0.1[L_i - A_i]}$$

where each individual source sound level ( $L_i$ ) is attenuated by an algebraic sum of three attenuation factors ( $A_i = A_{div} + A_{atm} + A_{gr}$ ) that are each dependent on the distance between the sound source position on the X by Y array and the receiving  $SPL_{X,Y}$  position on a different position in the same 2D array of worksheet cells, where each cell is defined by the user as representing the center of a square area having equal sides of user-defined length in feet. The above expression is based on Equation 5 from the International Organization for Standardization (ISO) 9613-2 “Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation”, and the individual attenuation factors used by **NoisePro** emulate those in Equation 4 and may be summarized as follows:

- $A_{div}$  = attenuation due to *geometrical divergence* (i.e., pure distance), equating to  $20 * \text{LOG}(d/d_{ref})$ ; and where  $d$  is the horizontal distance between a source and a receiver position, while  $d_{ref}$  is the reference distance at which the sound source  $L_i$  is defined.
- $A_{atm}$  = attenuation due to *atmospheric absorption*, which for 1,000 Hz (1 kHz) =  $4.16 * d / 3280$  and is derived from Equation 5.7 in Noise & Vibration Control Engineering (Beranek and Ver, 1992).
- $A_{gr}$  = attenuation due to *ground effects*, appearing as Equation 10 in ISO 9613-2 and can be expressed with the following Excel formula:

$$A_{gr} = \text{MAX}(0, 4.8 - [h_s + h_r] / d * [17 + 984 / d])$$

where  $h_s$  and  $h_r$  are the heights (in feet) of the sound source and receiver positions above grade, respectively. This means that for small distances, attenuation from ground effects will be small or essentially zero; and, even at great distances, the attenuation from ground effects is effectively capped at 4.8 dB.

The Excel workbook comprising **NoisePro** calculates  $SPL_{X,Y}$  by using a coding loop to evaluate the acoustic contribution from each attenuated sound source ( $L_i - A_i$ ) in sequence, and logarithmically adding the new evaluation to the previous total in a cumulative manner. When all sources have been evaluated, the loop terminates and yields an aggregate or log-summed total  $SPL_{X,Y}$  value that is thus unique to a position in the 2D array of cells represented by X and Y, and can thus be “mapped”. If the user has defined a particular cell in the X by Y array as a uniquely tagged Receiver, then the corresponding  $SPL_{X,Y}$  value can be indexed and displayed accordingly.

The resulting output array of cells, each having an individually calculated  $SPL_{X,Y}$  numerical value, is then filled with a color (from a user-defined palette) by application of a Conditional Formatting rules set (an Excel formatting feature) that compares the dB quantity with user-defined “high” and “low” dB ranges for each available color. Each colored cell can thus be likened to a “pixel” within a 2D array that forms a composite image representing—visually—the sound propagation from all modeled sound sources.



### GRID CALCULATION WORKSHEET

Example Portion of Concluded Calculations Loop

grid size (ft)	x 58.7	<b>Source</b>	<b>38</b>
	y 58.7	Source Tag	<b>I036</b>
rcvr plane height (ft)	z 5	Source X-coordinate	12893.6
		Source Y-coordinate	10280.8
		Source Z-coordinate	6
		Source Reference SPL	72
		Source Ref. Distance (ft.)	16.4
		Source height above grade (ft.)	6

Grid Upper Left (C,R)

1 1

Grid Lower Right (C,R)

384 288

Receiver Location					<b>Cumulative + Source SPL</b>
Column	Row	X-coord	Y-coord	Z-coord	
1	1	56.8	56.8	5	9.4
1	2	56.8	113.6	5	9.5
1	3	56.8	170.4	5	9.5
1	4	56.8	227.2	5	9.6
1	5	56.8	284	5	9.6
1	6	56.8	340.8	5	9.7
1	7	56.8	397.6	5	9.7
1	8	56.8	454.4	5	9.8
1	9	56.8	511.2	5	9.8
1	10	56.8	568	5	9.9
1	11	56.8	624.8	5	9.9
1	12	56.8	681.6	5	10.0
1	13	56.8	738.4	5	10.0
1	14	56.8	795.2	5	10.1
1	15	56.8	852	5	10.1
1	16	56.8	908.8	5	10.2
1	17	56.8	965.6	5	10.2
1	18	56.8	1022.4	5	10.3
1	19	56.8	1079.2	5	10.3
1	20	56.8	1136	5	10.4
1	21	56.8	1192.8	5	10.4
1	22	56.8	1249.6	5	10.5
1	23	56.8	1306.4	5	10.5
1	24	56.8	1363.2	5	10.6
1	25	56.8	1420	5	10.6
1	26	56.8	1476.8	5	10.6
1	27	56.8	1533.6	5	10.7
1	28	56.8	1590.4	5	10.7
1	29	56.8	1647.2	5	10.8

grid axis      feet  
 x                56.8  
 y                56.8

### Source Inventory With Model Grid Coordinate Locations and Sound Pressure Reference Levels

	<u>Custom Source Description</u>			<u>Tag</u>	<u>SPL(dBA) Notes</u>	
	this is intended to "clear" the cumulative+source on a "Reset" click			CLEAR	-40 additional notes below for Custom sources:	
	Battery Storage Component			BAT	0 Not Used	
	Substation Transformer			SUB	60 @3.28 feet	
	electrical inverter			INV	72 @16.4 feet (5 m)	
	Custom #4 (user input)			CUS4	0 Not Used	
	Custom #5 (user input)			CUS5	0 Not Used	

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Source Tag	ULC	S001	I001	I002	I003	I004	I005	I006	I007	I008	I009	I010	I011	I012	I013	I014	I015	I016	I017	I018
Source X-coordinate (feet)	56.8	7611.2	9769.6	10508	11246.4	11871.2	12439.2	13291.2	14143.2	14256.8	13575.2	12836.8	11416.8	9826.4	10678.4	11530.4	12382.4	13234.4	14086.4	9883.2
Source Y-coordinate (feet)	56.8	5736.8	4373.6	4373.6	4146.4	4146.4	4146.4	4146.4	4146.4	3976	3976	3976	3976	5680	5680	5680	5680	5680	5680	6645.6
Source Z-coordinate (feet)	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Source Type (enter abbrev.)	CLEAR	SUB	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV
Source Reference SPL	-40	60	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
Source Reference Distance (ft.)	3.28	5	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4
Source Height Above Grade (ft.)	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Source Tag	I019	I020	I021	I022	I023	I024	I025	I026	I027	I028	I029	I030	I031	I032	I033	I034	I035	I036
Source X-coordinate (feet)	10678.4	11473.6	12325.6	13234.4	14086.4	14029.6	13007.2	11984.8	11019.2	8804	8292.8	7838.4	7838.4	7156.8	7156.8	12325.6	12496	12893.6
Source Y-coordinate (feet)	7043.2	7043.2	7043.2	7043.2	7043.2	7213.6	7213.6	7213.6	7213.6	7100	7611.2	7611.2	7440.8	10280.8	10337.6	10280.8	10167.2	10280.8
Source Z-coordinate (feet)	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Source Type (enter abbrev.)	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV
Source Reference SPL	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
Source Reference Distance (ft.)	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4
Source Height Above Grade (ft.)	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

### Receiver Inventory With Model Grid Coordinate Locations and Predicted Operational Sound Level Exposure

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Receiver Tag	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15	R16	LT1	LT2	LT3	LT4
Receiver X-coordinate (feet)	4203.2	9201.6	9428.8	14427.2	13177.6	9372	9144.8	6929.6	6475.2	5282.4	4203.2	7952	8008.8	9088	10905.6	11871.2	4260	10905.6	19880	9428.8
Receiver Y-coordinate (feet)	10792	11416.8	11757.6	10792	8747.2	8349.6	8974.4	8917.6	8633.6	8633.6	7668	3748.8	3294.4	3067.2	2840	2726.4	7724.8	2896.8	7497.6	11814.4
SPL Predicted at Receiver (dBA)	23.42	28.22	27.28	30.16	35.40	35.28	33.34	33.44	31.93	27.62	23.91	29.98	29.21	31.95	35.17	35.49	24.10	35.48	19.30	27.14

**PLANT LEGEND**

EVERGREEN SHRUB	BOTANICAL NAME / COMMON NAME	SIZE	SPACING
	JUNIPERUS VIRGINIANA / EASTERN RED CEDAR	6' C.G.	6'
NATIVE GRASS	BOTANICAL NAME / COMMON NAME	SIZE	SPACING
	ANDROPOGON GERARDI / BIG BLUESTEM GRASS	3 GAL	4'
	PANICUM VIRGATUM / SWITCH GRASS	3 GAL	4'
GROUNDCOVER	BOTANICAL NAME / COMMON NAME	SIZE	SPACING
	SEE GROUNDCOVER SEED MIX SCHEDULE BELOW	SEED	NA

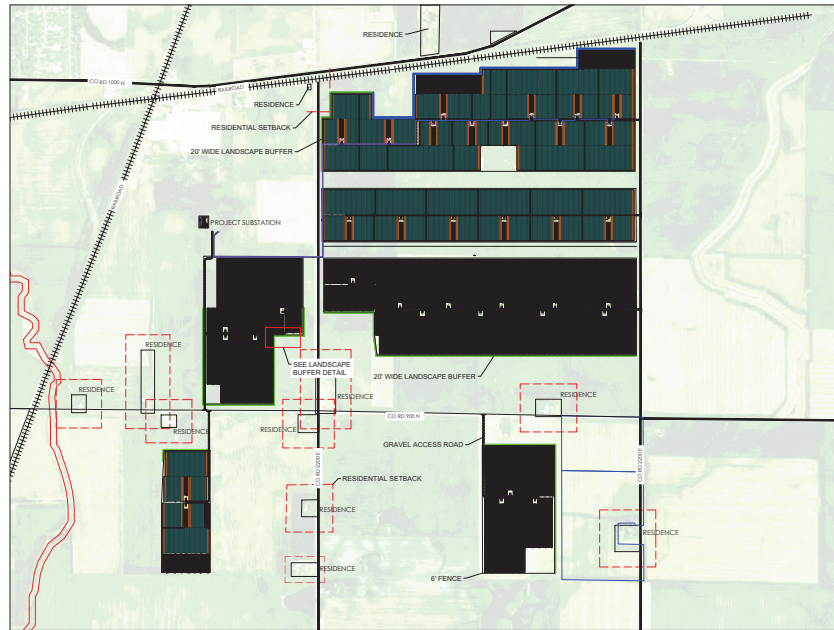
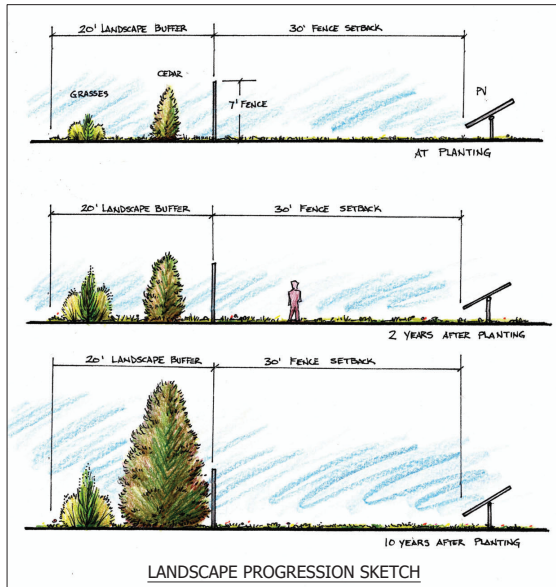
**MAINTENANCE PLAN**

**SHRUBS/GRASSES**

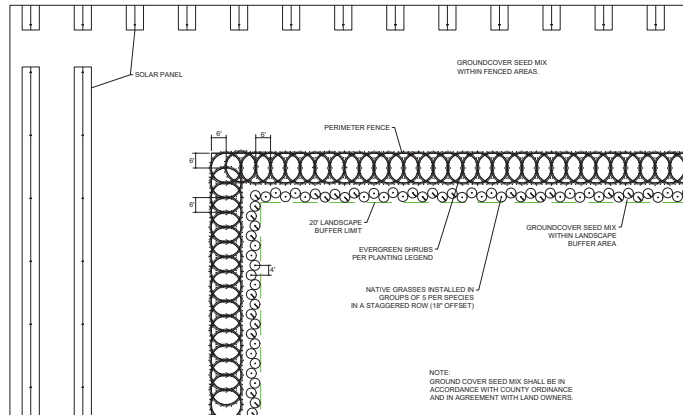
- IRRIGATE NEWLY PLANTED SHRUBS AND GRASSES WITH AN AUTOMATIC DRIP SYSTEM OR REGULAR WATERING VIA PORTABLE WATER TANK DURING THE FIRST GROWING SEASON.
- STAKE SHRUBS WITH 2 STEEL T-POSTS EACH SHRUB. PROVIDE NON-ABRASIVE RUBBER TIES.
- PROVIDE 2"-3" THICK SHREDDED BARK MULCH RING, 4' WIDE AT BASE OF EACH SHRUB.
- PROVIDE 2"-3" THICK SHREDDED BARK MULCH RING, 2' WIDE AT BASE OF EACH GRASS.
- REMOVE DEAD OR DISEASED SHRUB/GRASS FROM SITE AND REPLACE WITH NEW SHRUB/GRASS PER PLANT LEGEND.

**GROUNDCOVER**

- GROUND COVER INSIDE THE FENCE AND IN THE LANDSCAPE BUFFER SHALL BE MOWED PERIODICALLY TO MAINTAIN A HEIGHT OF 8"-10".
- APPLY BROAD SPECTRUM HERBICIDE ALONG FENCE AND AROUND PANEL SUPPORTS TO CONTROL PLANT GROWTH NOT SUPPRESSED BY MOWING.
- CONDUCT REGULAR INSPECTIONS THROUGHOUT THE GROWING SEASON. SELECTIVELY APPLY HERBICIDE TO CONTROL PATCHES OF NOXIOUS WEED GROWTH.
- SUPPLEMENTAL SEEDING (OVERSEEDING) MAY BE NECESSARY TO PROMOTE DENSE PLANT GROWTH. TYPICALLY THIS IS CONDUCTED IN THE SECOND GROWING SEASON AFTER INSTALLATION.



- 20' WIDE LANDSCAPE BUFFER W/ CEDAR
- 20' WIDE LANDSCAPE BUFFER W/ ARBORVITAE



**RECEIVED**  
 APR 14, 2023  
 CHAMPAIGN COUNTY  
 PLANNING & ZONING

**General Notes**

**Finish Grading** - The soil shall be conditioned by loosening and finely pulverizing the soil to a depth of three inches. The fine grading and soil conditioning will be done just prior to groundcover seeding.

**Groundcover** - Apply groundcover seed mix by hand-crank, tow-behind broadcaster, or no-till seed drill (see below). When broadcasting, start with half of the seed and try to cover a measured area with that amount of seed. Take the remaining half of the seed, go to the opposite end of the site and cover it again. This approach helps prevent running out of seed, a common occurrence. After broadcasting is complete, it is important to use a cultipacker or roller over the area to make good seed-to-soil contact. If a roller is not available, tractor tires can be used instead. Do not cover seed more than 1/4-inch deep.

**No-Till Drill** - For large groundcover areas and areas of existing vegetation, use a no-till seed drill, which does not require the soil to be tilled before planting, resulting in minimal soil disturbance. No-till drills plant seed in rows by opening slits in the soil, into which seed is deposited. If using a no-till drill, follow the specific manufacturer's recommendations.

**Plants** - All shrubs & grasses shall be container grown.

**Compliance** - Information & drawings contained in this plan sheet are based on National Resource Conservation Service (NRCS) Conservation Practice Standard Windscreen/Shelterbelt Established Code 380.



No.	Revision/Issue	Date
1.	ISSUED	03.24.18
2.	PERMIT REVISION	11.25.18
3.	PERMIT REVISION, ENTRENCHED BUFFER ALONG NORTH BOUNDARY	11.28.18
4.	SCHEMATIC LANDSCAPE PLAN REVISION	03.08.21
5.	ADDED BUFFER ALONG CE ROW'S. SCHEMATIC LANDSCAPE PLAN REVISION TO SHOW LOCATION OF CE ROW'S & ARBORVITAE PLANTING.	06.17.21
6.	REVISION SITE PLAN	06.18.21
7.	REVISION SITE PLAN	06.28.21
8.	REVISION SITE PLAN	04.09.23



**PRAIRIE SOLAR 1**  
 SIDNEY, CHAMPAIGN COUNTY,  
 IL 61877

Drawn By: PL	Sheet
Checked By: JB	<b>L1</b>
Sheet Size: 42" x 30"	

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
ANNUAL FACILITY INSPECTION REPORT

April 1, 2023

N.P.D.E.S. PHASE II PERMIT FOR STORMWATER DISCHARGES  
from  
MUNICIPAL SEPARATE STORM SEWER SYSTEMS

**Champaign County, Illinois**  
**NPDES Permit No. ILR40 00256**

**REPORTING PERIOD:**

Year 4 is April 1, 2022 through March 31, 2023

**MS4 OPERATOR INFORMATION:**

County of Champaign, Illinois  
Brookens Administrative Center  
1776 East Washington Street  
Urbana, IL, 61802  
Contact person: John Hall, Director of Planning and Zoning

**GOVERNMENTAL ENTITY IN WHICH MS4 IS LOCATED:**

Champaign County, Illinois

**INTRODUCTION**

Champaign County was identified as a small Municipal Separate Storm Sewer System (MS4) in March 2003 as part of the expanded Phase II of the National Pollutant Discharge Elimination System (NPDES) Storm Water Program.

Mandated by Congress under the Clean Water Act, the NPDES Storm Water Program is a comprehensive two-phased national program for addressing the non-agricultural sources of storm water discharges which adversely affect the quality of our nation's waters. The Clean Water Act prohibits anybody from discharging pollutants through a point source into a water of the United States unless they have an NPDES permit. A point source is any discernible, confined, and discrete conveyance, such as a pipe, ditch, channel, or container.

Phase II required small MS4s in urbanized areas to obtain NPDES permits and implement six minimum control measures by using selected best management practices (BMPs).

Urbanized areas are delineated by the Census Bureau and are defined as a central place or places and the adjacent densely settled surrounding area, that together have a residential population of at least 50,000 people and an overall population density of at least 500 people per square mile. About 47 square miles (about 4.7%) of the approximately 1,000 square miles that make up Champaign County are included in the urbanized area (see the attached map).

Champaign County is not a municipality but the regulatory definition of MS4 also includes any County owned roads with a drainage system. County Highway roadside ditches are currently the only point source discharges in the urbanized area maintained by Champaign County.

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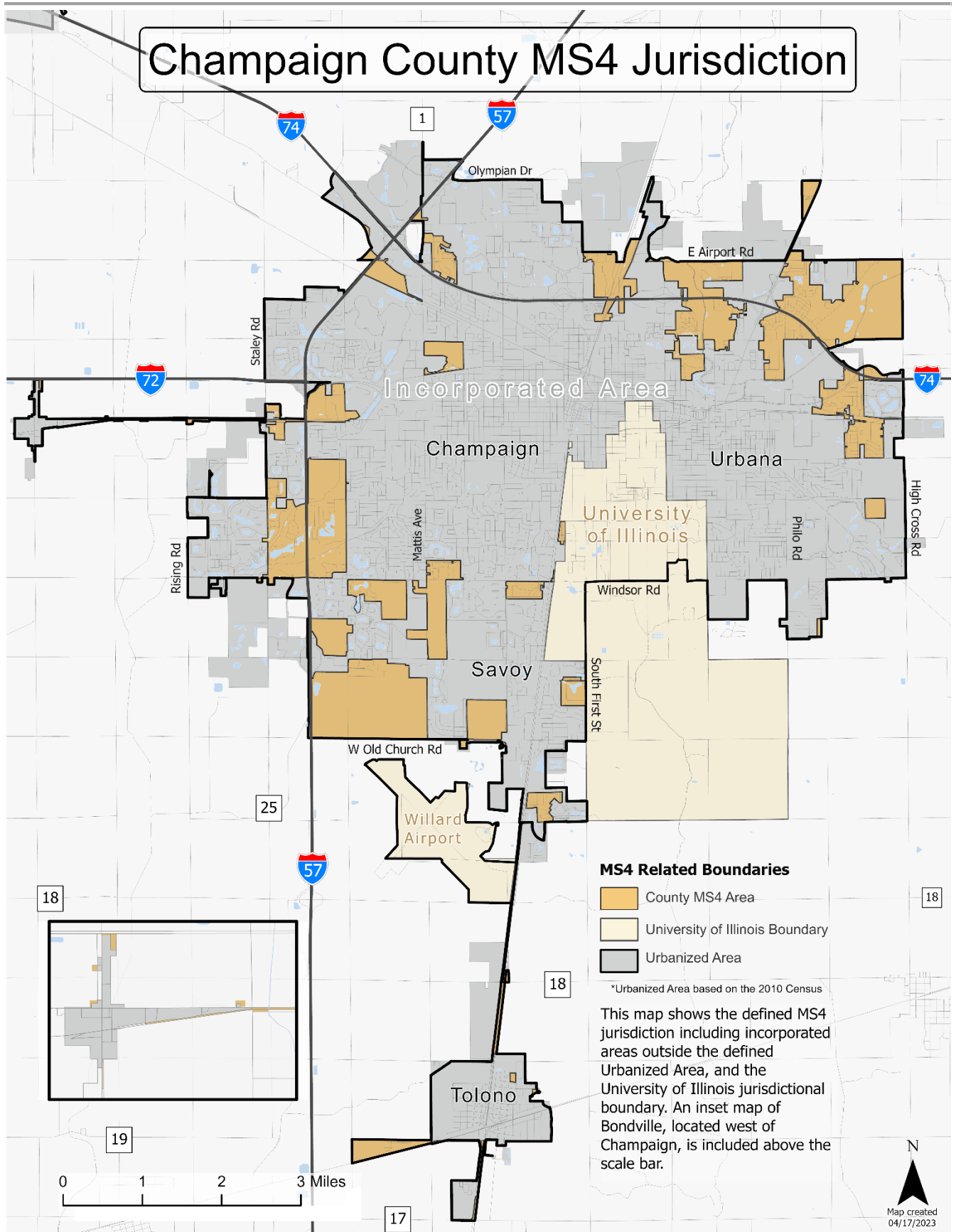
Champaign County must maintain compliance with the MS4 requirements of the NPDES Storm Water Program. MS4 compliance requires that an updated Notice of Intent (NOI) be on file at all times with the Illinois Environmental Protection Agency (IEPA). The NOI must explain which best management practices Champaign County will use to implement the six required minimum control measures. The six required minimum control measures are the following:

- **Public Education and Outreach.** Selected BMPs should educate the public on the various ways to reduce storm water pollution.
- **Public Participation and Involvement.** Selected BMPs should involve the public in developing, implementing, and reviewing MS4 best management practices.
- **Illicit Discharge Detection and Elimination.** Selected BMPs should identify improper discharges and spills to drainage systems and include enforcement mechanisms.
- **Construction Site Runoff Control.** Selected BMPs should enable construction site operators (builders and MS4s) to manage storm water runoff to reduce pollution.
- **Post-Construction Runoff Control.** Selected BMPs should enable property owners (developers and MS4s) to manage storm water runoff to reduce pollution from a site after construction activities have ended.
- **Pollution Prevention and Good Housekeeping.** Selected BMPs should enable the MS4 entity to minimize pollution from its own property and facilities by reducing pollution from streets, parking lots, open spaces and storage and vehicle maintenance areas and is discharged into local waterways or that results poor maintenance of storm sewer systems.

Champaign County has worked in cooperation with the other MS4s in the Champaign County Urbanized Area to share costs and expertise and common efforts to develop a regional consistency towards fulfilling the NPDES Phase II MS4 requirements.

Champaign County has sought to develop a plan suited to the MS4 requirements but also tailored to the abilities of an Illinois county. The NPDES Phase II MS4 requirements were included as a formal County land use policy in the Champaign County Land Resource Management Plan that was adopted in April 2010.

Champaign County filed a fourth NOI with IEPA to include the five-year period of April 1, 2019, to March 31, 2024. This document serves as the annual report for Year 4 activities.





## **B.M.P. MONITORING AND ASSESSMENT PROGRAM**

Effective 3/1/16, each Small MS4 is required to implement a monitoring and assessment program to evaluate the effectiveness of selected best management practices (BMPs) at reducing pollutant loadings and water quality impacts. The monitoring and assessment program may include evaluation of BMPs and/or direct water quality monitoring, at the discretion of each Small MS4, but the program should be tailored to the size and characteristics of the Small MS4 and the relevant watersheds.

### **Outfall/Discharge Monitoring and Physical Stream Assessment**

The Champaign County Unincorporated MS4 will collaborate with the municipal MS4 jurisdictions in Champaign County in developing a monitoring and assessment program for the Champaign County Unincorporated MS4 that matches as closely as possible the municipal MS4 monitoring and assessment programs. Municipal MS4 agencies in the Champaign-Urbana Urbanized Area rely on a combination of outfall/discharge monitoring and assessment of physical/habitat characteristics such as stream bank erosion caused by storm water discharges.

Methods and practices used for the Champaign County Unincorporated MS4 Monitoring and Assessment program will be based on municipal MS4 practices and methods as much as possible and will be supplemented as necessary by practices described in the following documents:

- *Illicit Discharge Detection and Elimination A Guidance Manual for Program Development and Technical Assessments*, published by the Center for Watershed Protection and Robert Pitt, University of Alabama, October 2004.
- *UNIFIED STREAM ASSESSMENT: A USER'S MANUAL Version 2.0, Urban Subwatershed Restoration Manual No. 10*, published by the Center for Watershed Protection, February 2005.
- *Stream Visual Assessment Protocol*, published by the United States Department of Agriculture Natural Resources Conservation Service National Water and Climate Center, Technical Note 99-1, December 1998.

### **Justification**

The unincorporated Champaign County MS4 Area is highly interconnected with the municipal MS4 Area and using the same (or nearly the same) monitoring and assessment (M&A) methods to evaluate the effectiveness of storm water best management practices (BMPs) in the unincorporated MS4 Area may help minimize the overall costs of implementing and conducting the M&A program in the unincorporated MS4 Area; and should eliminate confusion that could otherwise result if a different approach were used than is used in the municipal MS4s; and may provide a more accurate overall understanding of the effectiveness of BMPS for the entire Champaign County urbanized area.

The *Unified Stream Assessment* (USA) is a continuous stream walk method that systematically evaluates stream conditions and that can be applied to both rural and urban streams. Staff can perform the USA with relatively minimal training. USA protocols should be adapted to meet agency needs and skills and to address regional stream conditions.

The USA includes specific protocols and model forms for documenting the assessments of Storm Water Outfalls and Severe Bank Erosion. The USA assessment for Storm Water Outfalls is very similar to the Outfall Reconnaissance Inventory (ORI) used in *Illicit Discharge Detection and Elimination*. Including ORI methods in

the USA Storm Water Outfall assessments can improve the overall assessment of storm water outfalls and discharges.

Severe bank erosion caused by storm water discharges can be accurately identified only after identifying the average erosion condition for a particular stream reach. The USA includes a Reach Level Assessment to characterize overall conditions within each reach of the stream. Guidance is included in the USA assessment of Severe Bank Erosion to help identify locations with more severe erosion. The *Stream Visual Assessment Protocol (SVAP)* also provides useful additional guidance for making the assessment of Severe Bank Erosion.

The USA protocols assume identification of uniform stream reaches. Stream reaches will be identified and mapped prior to actual field investigations. During the field investigation the various stream reaches will be identified using GIS locators. Standard worksheets will be completed for each reach for the entire length of stream in the MS4 Area. Streams (miles) to be assessed are as follows:

- Vermilion Watershed:
  - Saline Branch Drainage Ditch (3.2 miles)
- Upper Kaskaskia Watershed:
  - Copper Slough (1.6 miles)
  - Phinney Branch (1.1miles)
- Upper Embarras Watershed
  - An unnamed tributary near Lake Park (.6 mile).

Gaining access to streams in the unincorporated MS4 Area will be a significant challenge because all the streams are on private property.

Annual monitoring is planned to occur during August through October. Annual monitoring will note the conditions for the current year and identify changes from previous years. The results will be reported in the Annual Update.

Follow up investigations may be necessary based on observed changes.

Outfalls were identified per the IEPA 4/22/16 Acceptance of Response to Noncompliance Advisory Letter.

### **SELF-ASSESSMENT OF PERMIT COMPLIANCE**

Tables 1 through 6 summarize Champaign County Unincorporated MS4 Storm Water Program activities from April 1, 2022 through March 31, 2023. Table 7 identifies BMPs that were started and still in progress and Table 8 identifies BMPs still pending.

**Table 1: Public Education and Outreach Activities 4/1/22 – 3/31/23**

BMP ID	Activities
A.1.1. - Flyers and information sheets at permit counter.	Handouts are displayed and available at Planning and Zoning permit counter.
A.2.1. - Inform business groups about MS4, NPDES, and BMPs.	No requests for presentations about MS4, NPDES and BMPs were made from business groups.
A.2.2. - Inform developer, contractor, engineering, and architecture groups about MS4, NPDES, and BMPs.	No requests for presentations about MS4, NPDES and BMPs were made from developer, contractor, engineering, or architecture groups.
A.2.3. - Inform environmental groups about MS4, NPDES, and BMPs.	No requests for presentations about MS4, NPDES and BMPs were made from environmental groups.
A.6.1. - Educational and informational material on web page.	The MS4 Annual Facility Inspection Report was posted to the County website and to the collaborative MS4 website the Champaign County Stormwater Partnership ( <a href="http://www.ccstormwater.org">www.ccstormwater.org</a> ).

**Champaign County, Illinois**  
**MS4 ANNUAL FACILITY INSPECTION REPORT**  
 REPORTING PERIOD YEAR 4 (4/1/22 – 3/31/23) APRIL 1, 2023

**Table 2: Public Participation and Involvement Activities 4/1/22 – 3/31/23**

BMP ID	Activities
B.4.1. - Comply with applicable state and local public notice requirements.	All public hearings and meetings are noticed as required by state law and local ordinances and policies.
B.6.1. - Intergovernmental Storm Water Management group meetings (coordination meeting for all Champaign County MS4 jurisdictions).	During the program year County staff attended and participated in meetings with other MS4 jurisdictions on 6/14/22; 9/13/22; 11/2/22; 12/13/22; 3/14/23
B.6.2. - Prepare a storm water survey that can be used annually to capture public comment on the MS4 Storm Water Program.	The MS4 Storm Water Survey is on the County website at <a href="https://docs.google.com/forms/d/e/1FAIpQLSd5hbzMASGpKgPWU3kr8gmQJ-w0ZorXoCFWUddjbMyI8P3Mg/viewform?c=0&amp;w=1">https://docs.google.com/forms/d/e/1FAIpQLSd5hbzMASGpKgPWU3kr8gmQJ-w0ZorXoCFWUddjbMyI8P3Mg/viewform?c=0&amp;w=1</a>
B.6.3. - Hold Annual Public Storm Water Meeting at the Champaign County Board’s Environment and Land Use Committee (ELUC) Meeting to receive public comments regarding the Champaign County Unincorporated MS4 Area Storm Water Program.	There was no Annual Public Storm Water Meeting at the Champaign County Board’s Environment and Land Use Committee (ELUC) in the reporting period year.
B.6.4. - Identify Environmental Justice areas within the Unincorporated Champaign County MS4 Area and provide appropriate public participation.	The Environmental Justice Areas for the reporting year have been identified and mapped.
B.7.1. – Fund aspects of NPDES MS4 implementation in the County’s Land Resource Management Plan implementation budget including public involvement when appropriate.	Funding for MS4 projects were included in the Work Plan for 2023.

**Table 3: Illicit Discharge Detection and Elimination Activities 4/1/22 – 3/31/23**

BMP ID	Activities
C.1.1. - Map drainage system outfalls into streams and rivers.	The up-to-date storm sewer system map for the unincorporated Champaign County MS4 Area is mapped to 100% completion including the storm sewer system map for County Highways outside the MS4 Area.
C.3.1. - Establish and maintain citizen complaint phone line for illegal dumping and illicit discharges into drainage systems.	The Department of Planning and Zoning phone line is maintained for citizen complaints regarding illegal dumping and illicit discharges.
C.3.2. - Establish citizen complaint phone line for non-complying and/or non-functioning private sewage treatment systems.	The Department of Planning and Zoning phone line is maintained for citizen complaints regarding non-complying and/or non-functioning private sewage treatment systems.
C.6.1. - Annual Report to the Environment and Land Use Committee (ELUC) of the Champaign County Board.	The MS4 Annual Report was prepared and presented to the Environment and Land Use Committee (ELUC) on May 5, 2022. and approved by the Champaign County Board on May 19, 2022.

**Champaign County, Illinois**  
**MS4 ANNUAL FACILITY INSPECTION REPORT**  
 REPORTING PERIOD YEAR 4 (4/1/22 – 3/31/23)

APRIL 1, 2023

**Table 4: Construction Site Runoff Control Activities 4/1/22 – 3/31/23**

BMP ID	Activities
D.1.1. - Soil erosion and sediment control regulations.	Soil erosion and sediment control regulations in the Champaign County Storm Water Management and Erosion Control Ordinance were enforced for all Land Disturbance Erosion Control (LDEC) Permits.
D.2.1. - Erosion and sediment control BMPs.	All Land Disturbance Erosion Control (LDEC) Permits were reviewed for use of appropriate BMPs.
D.4.1. - Develop processes and procedures to evaluate proposed construction site runoff mechanisms.	Procedures to evaluate proposed construction site runoff mechanisms are refined in the review of LDEC Permits.
D.4.2. - Training class or workshop for evaluating and inspecting construction site runoff control mechanisms.	Staff completed EPA Construction General Permit (CGP) Site Inspector Training Course.
D.6.1. - Develop procedures and processes to inspect construction sites for compliance with construction site runoff mechanisms.	Procedures were refined as more experience was gained in the review of LDEC Permits.

**Table 5: Post-Construction Runoff Control Activities 4/1/22 – 3/31/23**

BMP ID	Activities
E.3.3. - Provide annual training in green infrastructure and/or low impact design techniques for all MS4 employees who manage or are directly involved in (or who retain others who manage or are directly involved in) the routine maintenance, repair, or replacement of public exterior surfaces. Require that contractors who are retained to manage or carry out the kinds of maintenance and relevant contractor employees also have annual training.	Staff from the Champaign County Department of Planning and Zoning Department attended the Macon County Soil & Water Conservation District Stormwater Workshop on November 11 <sup>th</sup> , 2022.  The Champaign County Stormwater Partnership has begun preparation for the biennial Illinois Green Infrastructure & Erosion Control Conference which takes place October 24 <sup>th</sup> , 2023.
E.4.1. - Training class or workshop for evaluating and inspecting construction site runoff control mechanisms (post-construction).	Staff completed EPA Construction General Permit (CGP) Site Inspector Training Course.

**Table 6: Pollution Prevention / Good Housekeeping Activities 4/1/22 – 3/31/23**

BMP ID	Activities
F.1.1. - Spill prevention protocol.	The Champaign County Emergency Management Agency (CCEMA) conducted or participated in the following trainings in the program year: <ul style="list-style-type: none"> <li>● July 28<sup>th</sup>, 2022, attended International Association of Fire Chief’s Hazmat Outreach Workgroup</li> <li>● January 11<sup>th</sup>, 2023 Attended local Canadian National Railroad Safety Summit</li> <li>● January 25<sup>th</sup>, 2023, Attended local Pipeline Safety Program</li> </ul>
F.1.2. - Spill Response Protocol.	The Champaign County Emergency Management Agency (CCEMA) conducted or participated in the following trainings in the program year: <ul style="list-style-type: none"> <li>● July 28<sup>th</sup>, 2022, attended International Association of Fire Chief’s Hazmat Outreach Workgroup</li> <li>● August 18<sup>th</sup>, 2022, hosted two sessions of “How to use Emergency Response Guidebook and the NIOSH Pocket Guide” training through</li> </ul>

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- the UIUC Hazardous Materials Training Program
- October 20<sup>th</sup>, 2022, supported annual UIUC Facilities & Services Hazmat drill with mobile command post
- January 11<sup>th</sup>, 2023 Attended local Canadian National Railroad Safety Summit
- January 25<sup>th</sup>, 2023, Attended local Pipeline Safety Program
- March 22<sup>nd</sup>, 2023, Participated in FEMA Virtual Tabletop Exercise with a hazmat scenario

F.1.3. - Hazardous material and storage management training.	All relevant hazardous materials storage and handling reviewed with Facilities Director.
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**Table 7: BMPs in Progress**

BMP ID	Status
C.2.1. - Prohibit illegal dumping and illicit discharges into drainage system through Nuisance Ordinance.	Preliminary Ordinance language has been drafted regarding illegal dumping and illicit discharges into drainage systems but was not adopted in the program year.
C.3.3. - Create a database of existing private sewage treatment systems and develop management plan to bring non-compliant systems into compliance.	Records of private sewage treatment systems obtained from Public Health Department; GIS database is under development.
D.3.1. - Prohibit illegal dumping and illicit discharges into storm drainage system from construction activities.	The Storm Water Management and Erosion Control Ordinance includes a prohibition of illegal dumping and illicit discharges from construction activities. Preliminary Nuisance Ordinance language has been drafted regarding illegal dumping and illicit discharges into drainage systems but has not yet been adopted.
E.1.1. - Implement a public education program about the benefits of green infrastructure and green housekeeping in minimizing the volume of storm water runoff and pollutants from privately-owned developed property.	Development of a Green Infrastructure & Green Housekeeping web page has begun by department staff.
E.1.2. - Implement a public education program about the water quality impacts of overuse of fertilizers and pesticides in non-agricultural uses.	Development of a Sustainable Lawn Care web page has begun by department staff.
E.3.1. - Develop procedures to ensure that storm water management facilities are maintained to function as designed (post-construction).	The Storm Water Management and Erosion Control Ordinance requires ongoing maintenance of storm water management facilities.
E.5.1. - Develop procedures and processes to inspect construction sites for compliance with post-construction runoff control mechanisms.	The Storm Water Management and Erosion Control Ordinance requires “as-built” documentation.

**Table 8: BMPs Pending**

BMP ID	Explanation of Pending Status
E.2.1. - Require annual inspections of publicly owned storm water management facilities (post-construction).	Expected to be included in the SWPPP that was supposed to be completed in 2021 but has not yet been completed.
F.2.1. - Prepare a Storm Water Pollution Prevention Plan (SWPPP) for County owned facilities.	Expected to be included in the SWPPP that was supposed to be completed in 2022 but has not yet been completed.

### **CHANGES TO BEST MANAGEMENT PRACTICES**

Attachment A summarizes that no changes were made to the BMPs in the reporting year.

### **STATUS OF COMPLIANCE**

Attachment B reviews the status of compliance for all BMPs.

### **INFORMATION COLLECTED AND ANALYZED IN YEAR 3**

Attachment C summarizes that there were no observations or reports made or received during the reporting year.

### **STORMWATER PROGRAM ACTIVITIES PROPOSED FOR NEXT PROGRAM YEAR APRIL 1, 2023 – MARCH 31, 2024**

The activities proposed for next Program Year April 1, 2023 – March 31, 2024, are summarized in Attachment D.

### **RELIANCE ON OTHER GOVERNMENTAL ENTITY**

Champaign County does and will continue to participate in and share resources with the Cooperative MS4 Group, the Champaign County Stormwater Partnership; however, it does not rely on another governmental entity to satisfy its permit obligations.

### **YEAR 4 CONSTRUCTION PROJECTS**

Champaign County construction projects may be authorized under the Facilities Department or the Highway Department.

Projects and details of Highway Construction Projects in the program year are provided in Table 9.

Projects and details of County Facilities Construction Projects in the program year are provided in Table 10.

### **ATTACHMENTS**

- A Changes to Best Management Practices
- B Status of Compliance with N.P.D.E.S. Permit Conditions for Year 4
- C Information Collected for Year 4
- D Proposed NPDES Permit Activities for next Program Year April 1, 2023 - March 31, 2024
- E Champaign County Unincorporated MS4 Area Environmental Justice Areas May 25, 2022



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**Table 9: Highway Construction Projects<sup>1</sup> from April 1, 2022 through March 31, 2023**

Section Number	Road District	Project Type	Area of Disturbance	Status
20-00102-00-BR	Champaign County	Bridge Rehab	<1 acre	Completed in 2022
20-12104-00-BR	Hensley Township	Culvert Replacement	<1 acre	Completed in 2022
21-18110-00-BR	Village of Pesotum	Bridge Replacement	<1 acre	Completed in 2022
19-00452-00-SP	Somer Township	RR Xing Rehab	<1 acre	Completed in 2022
20-00453-00-RS	Champaign County	Resurfacing/Widening	<1 acre	Completed in 2022
20-00455-00-RS	Champaign County	Resurfacing/Widening	<1 acre	Completed in 2022
21-07112-00-BR	Condit Township	Culvert Replacement	<1 acre	Completed in 2022
21-07113-00-BR	Condit Township	Culvert Replacement	<1 acre	Completed in 2022
21-28114-00-BR	Stanton Township	Culvert Replacement	<1 acre	Completed in 2022
21-29115-00-BR	Village of Tolono	Culvert Replacement	<1 acre	Completed in 2022
21-14116-00-BR	Ludlow Township	Culvert Replacement	<1 acre	Completed in 2022
21-18117-00-BR	Pesotum Township	Culvert Replacement	<1 acre	Completed in 2022
21-17459-00-SP	Ogden Township	RR Xing Rehab	<1 acre	Expected completion in 2023
21-17460-00-SP	Ogden Township	RR Xing Rehab	<1 acre	Expected completion in 2023
21-17461-00-SP	Ogden Township	RR Xing Rehab	<1 acre	Expected completion in 2023
21-18110-00-BR	Pesotum Township	Bridge Replacement	<1 acre	Completed in 2022
21-21111-00-BR	Rantoul Township	Culvert Replacement	<1 acre	Completed in 2022
21-28114-00-BR	Stanton Township	Culvert Replacement	<1 acre	Completed in 2022
21-08118-00-BR	Crittenden Township	Culvert Replacement	<1 acre	Completed in 2022
21-08-11900-BR	Crittenden Township	Culvert Replacement	<1 acre	Completed in 2022
22-14120-00-BR	Ludlow Township	Bridge Rehab	<1 acre	Expected completion in 2024
22-00121-00-BR	Champaign County	Bridge Rehab	<1 acre	Completed in 2022
22-03122-00-BR	Champaign Township	Bridge Rehab	<1 acre	Completed in 2022
22-03123-00-BR	Champaign Township	Bridge Rehab	<1 acre	Completed in 2022
22-26124-00-BR	South Homer Township	Guardrail Repair	<1 acre	Expected completion in 2022
22-00460-00-RS	Champaign County	Resurfacing/Widening	<1 acre	Expected completion in 2024
22-08462-00-SP	Crittenden Township	RR Xing Rehab	<1 acre	Expected completion in 2024
22-08463-00-SP	Crittenden Township	RR Xing Rehab	<1 acre	Expected completion in 2024
22-24464-00-SP	Sidney Township	RR Xing Rehab	<1 acre	Expected completion in 2024
22-27465-00-SP	St Joseph Township	RR Xing Rehab	<1 acre	Expected completion in 2024
22-10125-00-BR	East Bend Township	Culvert Replacement	<1 acre	Completed in 2022

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**Table 9: Highway Construction Projects<sup>1</sup> from April 1, 2022 through March 31, 2023**

Section Number	Road District	Project Type	Area of Disturbance	Status
22-17126-00-BR	Ogden Township	Culvert Replacement	<1 acre	Completed in 2022
22-11127-00-BR	Harwood Township	Culvert Replacement	<1 acre	Completed in 2022
22-30128-00-BR	Urbana Township	Bridge Rehab	<1 acre	Expected completion in 2024
22-14129-00-BR	Ludlow Township	Bridge Rehab	<1 acre	Expected completion in 2024
22-28130-00-BR	Rantoul/Stanton Townships	Bridge Rehab	<1 acre	Expected completion in 2024
23-00466-00-SP	Champaign County	Resurfacing / Widening	>5 acre	Expected completion in 2024
23-17131-00-BR	Ayers Township	Bridge Rehab	<1 acre	Expected completion in 2024
23-17132-00-BR	Ogden Township	Bridge Rehab	<1 acre	Expected completion in 2024
23-17133-00-BR	Ogden Township	Bridge Rehab	<1 acre	Expected completion in 2024
23-14134-00-BR	Ludlow Township	Bridge Rehab	<1 acre	Expected completion in 2024
23-30135-00-BR	Urbana Township	Culvert Replacement	<1 acre	Expected completion in 2024
23-27136-00-BR	St Joseph Township	Culvert Replacement	<1 acre	Expected completion in 2024
23-08137-00-BR	Crittenden Township	Culvert Replacement	<1 acre	Expected completion in 2024
NOTES				
1. All construction projects during this period were roadway projects.				

**Table 10: Facilities Construction Projects from April 1, 2022 through March 31, 2023**

NPDES ID	Township and Section	Location	Project Type	Area of Disturbance	Status
ILR10ZCLW	Urbana/16	502 S Lierman Ave. Urbana, IL	Building Expansion	3.09 acres	Expected completion in 2024

There were no proposed changes to the BMPs between April 1, 2022 and March 31, 2023.s

**Attachment B. Status of Compliance with N.P.D.E.S. Permit Conditions for Year 4**  
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	BMP No.	Brief Description of Best Management Practice (BMP)	Status	Measurable Goal	Year 4 Milestone	Description of Activities
1	<b>A.1.1</b>	Flyers and information sheets at permit counter.	<i>COMPLETE</i>	Develop and distribute one new educational material handout.	Distribute handout.	Handouts are displayed and available at the service counter.
2	<b>A.2.1</b>	Inform business groups about MS4, NPDES, and BMPs.	<i>COMPLETE</i>	Conduct one presentation per year upon request.	Conduct one presentation upon request.	No requests for presentations about MS4, NPDES and BMPs were made from business groups.
3	<b>A.2.2</b>	Inform developer, contractor, engineering, and architecture groups about MS4, NPDES, and BMPs.	<i>COMPLETE</i>	Conduct one presentation per year upon request.	Conduct one presentation upon request.	No requests for presentations about MS4, NPDES and BMPs were made from developer, contractor, engineering, and architecture groups.
4	<b>A.2.3</b>	Inform environmental groups about MS4, NPDES, and BMPs.	<i>COMPLETE</i>	Conduct one presentation per year upon request.	Conduct one presentation upon request.	No requests for presentations about MS4, NPDES and BMPs were made from environmental groups.
6	<b>A.6.1</b>	Educational and informational material on web page.	<i>COMPLETE</i>	Develop web page with annual updates on informational and educational materials.	Update web page.	The MS4 Annual Facility Inspection Report was posted to the County website and to the collaborative MS4 website the Champaign County Stormwater Partnership ( <a href="http://www.ccstormwater.org">www.ccstormwater.org</a> ).
7	<b>B.4.1</b>	Comply with applicable state and local public notice requirements.	<i>COMPLETE</i>	Annual number of meetings with MS4 related topics. Maintain electronic records of notices, agendas, and public participation.	Provide notice of MS4 related meetings and provide opportunity for public input.	All public hearings and meetings are noticed as required by state law and local ordinances and policies.
8	<b>B.6.1</b>	Intergovernmental Storm Water Management group meetings (coordination meeting for all Champaign County MS4 jurisdictions).	<i>COMPLETE</i>	Hold at least 4 coordination meetings each year.	Attend meetings.	During the program year County staff attended and participated in meetings with other MS4 jurisdictions on 6/14/22; 9/13/22; 11/2/22; 12/13/22; 3/14/23
9	<b>B.6.2</b>	Prepare a storm water survey that can be used annually to capture public comment on the MS4 Storm Water Program.	<i>COMPLETE</i>	Conduct the annual MS4 Storm Water Survey on the County website.	Make the MS4 Area Storm Water Survey available on the County	The MS4 Storm Water Survey is on the County website at <a href="https://docs.google.com/forms/d/e/">https://docs.google.com/forms/d/e/</a>

**Attachment B. Status of Compliance with N.P.D.E.S. Permit Conditions for Year 4**  
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BMP No.	Brief Description of Best Management Practice (BMP)	Status	Measurable Goal	Year 4 Milestone	Description of Activities
				website.	<a href="https://www.champaigncountyil.gov/1FAIpQLSd5hbzMASGpKgPWU3kr8gmQJ-w0ZorXoCFWUUddjbMyI8P3Mg/viewform?c=0&amp;w=1">1FAIpQLSd5hbzMASGpKgPWU3kr8gmQJ-w0ZorXoCFWUUddjbMyI8P3Mg/viewform?c=0&amp;w=1</a>
10	<b>B.6.3</b> Hold Annual Public Storm Water Meeting at the Champaign County Board’s Environment and Land Use Committee (ELUC) to receive public comments regarding the Champaign County Unincorporated MS4 Area Storm Water Program.	<i>INCOMPLETE</i>	Have the Champaign County Unincorporated MS4 Area Storm Water Program as an Agenda item at one ELUC Meeting each year.	Have the Champaign County Unincorporated MS4 Area Storm Water Program as an Agenda item at the May ELUC meeting.	There was no Annual Public Storm Water Meeting at the Champaign County Board’s Environment and Land Use Committee (ELUC) in the program year.
11	<b>B.6.4</b> Identify Environmental Justice areas within the Unincorporated Champaign County MS4 Area and provide appropriate public participation.	<i>COMPLETE</i>	Identify Environmental Justice (EJ) areas within the Unincorporated Champaign County MS4 Area based on most current state economic data and randomly sample the EJ area population for storm water concerns via postal mail with prepaid reply envelopes. Review annual survey results at the Annual Public Storm Water Meeting at the Champaign County Board’s Environment and Land Use Committee (ELUC).	Identify Environmental Justice (EJ) areas within the Unincorporated Champaign County MS4 Area based on most current state economic data and randomly sample the EJ area population for storm water concerns via postal mail with prepaid reply envelopes and review annual survey results at the Annual Public Storm Water Meeting the Champaign County Board’s Environment and Land Use Committee (ELUC).	The Environmental Justice Areas for the reporting year have been identified and mapped.
12	<b>B.7.1</b> Fund aspects of NPDES MS4 implementation in the County’s Land Resource Management Plan implementation budget including public	<i>COMPLETE</i>	Include NPDES MS4 requirements in the County’s Land Resource Management Plan and include in annual	Include MS4 in work plan for FY23.	Funding for MS4 projects were included in the Work Plan for 2023.

**Attachment B. Status of Compliance with N.P.D.E.S. Permit Conditions for Year 4**  
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	BMP No.	Brief Description of Best Management Practice (BMP)	Status	Measurable Goal	Year 4 Milestone	Description of Activities
		involvement when appropriate.		long-range work plan as required.		
13	<b>C.1.1</b>	Map drainage system outfalls into streams and rivers.	<b>COMPLETED</b>	Complete a system wide updated every three years.	System wide update of Champaign County Unincorporated MS4 Area storm sewer system map.	The up-to-date storm sewer system map for the unincorporated Champaign County MS4 Area is mapped to 100% completion including the storm sewer system map for County Highways outside the MS4 Area.
14	<b>C.2.1</b>	Prohibit illegal dumping and illicit discharges into drainage system through Nuisance Ordinance.	<b>IN PROGRESS</b>	Review existing Nuisance Ordinance and revise to include illegal dumping and illicit discharges into drainage systems.	Amend Nuisance Ordinance with new language prohibiting illegal dumping and illicit discharges into drainage system.	Preliminary Ordinance language regarding illegal dumping and illicit discharges into drainage systems had been previously drafted but has not yet been adopted.
15	<b>C.3.1</b>	Establish and maintain citizen complaint phone line for illegal dumping and illicit discharge into drainage systems.	<b>COMPLETE</b>	Maintain phone line.	Maintain complaint phone line and record of complaints.	The Department of Planning and Zoning phone line is maintained for citizen complaints regarding illegal dumping and illicit discharges.
16	<b>C.3.2</b>	Establish citizen complaint phone line for non-complying and/or non-functioning private sewage treatment systems.	<b>COMPLETE</b>	Develop and maintain phone line.	Maintain complaint phone line and record of complaints.	The Department of Planning and Zoning phone line is maintained for citizen complaints regarding non-complying and/or non-functioning private sewage treatment systems.
17	<b>C.3.3</b>	Create a database of existing private sewage treatment systems and develop a management plan to bring non-compliant systems into compliance.	<b>IN PROGRESS</b>	Create database and develop, adopt, and implement management plan.	Create database and develop management plan.	Records of private sewage treatment systems obtained from Public Health Department; GIS database is under development.



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	BMP No.	Brief Description of Best Management Practice (BMP)	Status	Measurable Goal	Year 4 Milestone	Description of Activities
18	<b>C.6.1</b>	Annual Report to the Environment and Land Use Committee (ELUC) of the Champaign County Board.	<i>COMPLETE</i>	Present Annual Report and place on file.	Complete Annual Report and place on file.	The MS4 Annual Report was prepared and presented to the Environment and Land Use Committee (ELUC) on May 5, 2022 and approved by the Champaign County Board on May 19, 2022.
19	<b>D.1.1</b>	Soil erosion and sediment control regulations.	<i>COMPLETE</i>	Review existing erosion and sediment control regulations. Prepare draft regulations for County Board adoption and enforce adopted regulations.	Enforce soil erosion and sediment control ordinance (Storm Water Management and Erosion Control Ordinance).	Soil erosion and sediment control regulations in the Champaign County Storm Water Management and Erosion Control Ordinance were enforced for all Land Disturbance Erosion Control (LDEC) Permits.
20	<b>D.2.1</b>	Erosion and sediment control BMPs.	<i>COMPLETE</i>	Review and evaluate existing BMPs to determine which should be included in the erosion and sediment control ordinance. Review existing regulations and develop new regulations for ordinance.	Review plans and development for appropriate use of BMPs as required by adopted ordinance (Storm Water Management and Erosion Control Ordinance).	All Land Disturbance Erosion Control (LDEC) Permits were reviewed for use of appropriate BMPs.
21	<b>D.3.1</b>	Prohibit illegal dumping and illicit discharges into storm drainage system from construction activities.	<i>IN PROGRESS</i>	Enforce Storm Water Management and Erosion Control (SWMEC) Ordinance prohibition on illegal dumping and illicit discharge into drainage systems from construction activities. Review existing Nuisance Ordinance and, if needed, revise to prohibit illegal dumping and illicit discharge into drainage systems from construction	Enforce SWMEC Ordinance prohibition on illegal dumping and illicit discharge into drainage systems from construction activities.	The Storm Water Management and Erosion Control Ordinance includes a prohibition of illegal dumping and illicit discharges from construction activities. Preliminary Nuisance Ordinance language has been drafted regarding illegal dumping and illicit discharges into drainage systems but has not yet been adopted.

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BMP No.	Brief Description of Best Management Practice (BMP)	Status	Measurable Goal	Year 4 Milestone	Description of Activities
			activities, same as SWMEC Ordinance.		
22	<b>D.4.1</b> Develop processes and procedures to evaluate proposed construction site runoff mechanisms.	<b>COMPLETE</b>	Develop procedures and processes to evaluate proposed construction site runoff mechanisms.	Develop, implement and refine review procedures to evaluate proposed construction site runoff mechanisms.	Procedures to evaluate proposed construction site runoff mechanisms are refined in the review of LDEC Permits.
23	<b>D.4.2</b> Training class or workshop for evaluating and inspecting construction site runoff control mechanisms.	<b>COMPLETE</b>	Zoning Officer (or Director's designee) attendance at training class or workshop for evaluating and inspecting construction site runoff control mechanisms.	Director's designee attends training.	Staff completed EPA Construction General Permit (CGP) Site Inspector Training Course.
24	<b>D.6.1</b> Develop procedures and processes to inspect construction sites for compliance with construction site runoff mechanisms.	<b>COMPLETE</b>	Develop procedures and processes to inspect construction sites for compliance with construction site runoff mechanisms.	Develop and implement procedures and processes to inspect construction sites for compliance with construction site runoff mechanisms.	Procedures were refined as more experience was gained in the review of LDEC.
25	<b>E.1.1</b> Implement a public education program about the benefits of green infrastructure and green housekeeping in minimizing the volume of storm water runoff and pollutants from privately owned developed property.	<b>IN PROGRESS</b>	Add a Green Infrastructure page to the Champaign County website to educate landowners about the benefits of green infrastructure and green housekeeping in minimizing the volume of storm water runoff and pollutants from privately owned developed property.	Develop, implement, and maintain Champaign County Green Infrastructure & Green Housekeeping web page	Development of a Green Infrastructure & Green Housekeeping web page has begun by department staff.
26	<b>E.1.2</b> Implement a public education program about the water quality impacts of overuse of fertilizers and pesticides in non-agricultural uses.	<b>IN PROGRESS</b>	Add a Sustainable Lawn Care page to the Champaign County website to educate landowners about the water	Develop and implement a Champaign County Sustainable Lawn Care web page.	Development of a Sustainable Lawn Care web page has begun by department staff.

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BMP No.	Brief Description of Best Management Practice (BMP)	Status	Measurable Goal	Year 4 Milestone	Description of Activities
			quality impacts of overuse of fertilizers and pesticides in non-agricultural uses.		
27	<b>E.2.1</b> Require annual inspections of publicly owned storm water management facilities (post-construction).	<i>INCOMPLETE</i>	Procedures for maintenance of publicly owned storm water management facilities (post-construction) should be established in the Champaign County SWPPP.	Develop and implement procedures for maintenance of publicly owned storm water management facilities (post-construction) in the Champaign County SWPPP.	NONE
28	<b>E.3.1</b> Develop procedures to ensure that storm water management facilities are maintained to function as designed (post-construction).	<i>IN PROGRESS</i>	Develop and implement procedures to ensure that storm water facilities are maintained to function as designed (post-construction).	Develop and implement procedures to ensure that storm water facilities are maintained to function as designed (post-construction).	The Storm Water Management and Erosion Control Ordinance requires ongoing maintenance of storm water management facilities.
29	<b>E.3.3</b> Provide annual training in green infrastructure and/or low impact design techniques for all MS4 employees who manage or are directly involved in (or who retain others who manage or are directly involved in) the routine maintenance, repair, or replacement of public exterior surfaces. Require that contractors who are retained to manage or carry out the kinds of maintenance and relevant contractor employees also have annual training	<i>COMPLETE</i>	Provide annual training in green infrastructure and/or low impact design techniques for all MS4 employees who manage or are directly involved in (or who retain others who manage or are directly involved in) the routine maintenance, repair, or replacement of public exterior surfaces. Require that contractors who are retained to manage or carry out the kinds of maintenance and relevant contractor employees also have annual training.	Provide annual training in green infrastructure and/or low impact design techniques for all relevant managers, employees, and/or contractors and contractor employees.	Staff from the Champaign County Department of Planning and Zoning Department attended the Macon County Soil & Water Conservation District Stormwater Workshop on November 11 <sup>th</sup> , 2022.  The Champaign County Stormwater Partnership has begun preparation for the biennial Illinois Green Infrastructure & Erosion Control Conference which takes place October 24 <sup>th</sup> , 2023.

**Attachment B. Status of Compliance with N.P.D.E.S. Permit Conditions for Year 4**  
**CHAMPAIGN COUNTY, ILLINOIS MS4 ANNUAL FACILITY INSPECTION REPORT**  
 REPORTING PERIOD YEAR 4 (4/1/22 – 3/31/23) APRIL 1, 2023

	BMP No.	Brief Description of Best Management Practice (BMP)	Status	Measurable Goal	Year 4 Milestone	Description of Activities
30	<b>E.4.1</b>	Training class or workshop for evaluating and inspecting construction site runoff control mechanisms (post-construction).	<i>COMPLETE</i>	Director's designee attendance at training class or workshop for evaluating and inspecting construction site runoff control mechanisms (post-construction).	Director's designee attends training.	Staff completed EPA Construction General Permit (CGP) Site Inspector Training Course.
31	<b>E.5.1</b>	Develop procedures and processes to inspect construction sites for compliance with post-construction runoff control mechanisms.	<i>IN PROGRESS</i>	Develop procedures and processes to inspect construction sites for compliance with approved post-construction site runoff control mechanisms.	Develop and implement procedures to inspect construction sites for compliance with post-construction runoff control mechanisms.	The Storm Water Management and Erosion Control Ordinance requires "as-built" documentation.
32	<b>F.1.1</b>	Spill prevention protocol.	<i>COMPLETE</i>	Conduct annual spill prevention training with appropriate County staff. Track meeting agenda, materials, and attendee sign-in sheet.	Complete annual spill prevention training with appropriate County staff.	The Champaign County Emergency Management Agency (CCEMA) conducted or participated in the following trainings in the program year: <ul style="list-style-type: none"> <li>● July 28<sup>th</sup>, 2022, attended International Association of Fire Chief's Hazmat Outreach Workgroup</li> <li>● January 11<sup>th</sup>, 2023 Attended local Canadian National Railroad Safety Summit</li> <li>● January 25<sup>th</sup>, 2023, Attended local Pipeline Safety Program</li> </ul>
33	<b>F.1.2</b>	Spill response protocol.	<i>COMPLETE</i>	Conduct annual spill response training with appropriate County staff. Track meeting agenda, materials, and	Complete annual spill response training with appropriate County staff.	The Champaign County Emergency Management Agency (CCEMA) conducted or

**Attachment B. Status of Compliance with N.P.D.E.S. Permit Conditions for Year 4**  
**CHAMPAIGN COUNTY, ILLINOIS MS4 ANNUAL FACILITY INSPECTION REPORT**  
 REPORTING PERIOD YEAR 4 (4/1/22 – 3/31/23) APRIL 1, 2023

	BMP No.	Brief Description of Best Management Practice (BMP)	Status	Measurable Goal	Year 4 Milestone	Description of Activities
				attendee sign-in sheet.		participated in the following trainings in the program year: <ul style="list-style-type: none"> <li>● July 28<sup>th</sup>, 2022, attended International Association of Fire Chief’s Hazmat Outreach Workgroup</li> <li>● August 18<sup>th</sup>, 2022, hosted two sessions of “How to use Emergency Response Guidebook and the NIOSH Pocket Guide” training through the UIUC Hazardous Materials Training Program</li> <li>● October 20<sup>th</sup>, 2022, supported annual UIUC Facilities &amp; Services Hazmat drill with mobile command post</li> <li>● January 11<sup>th</sup>, 2023 Attended local Canadian National Railroad Safety Summit</li> <li>● January 25<sup>th</sup>, 2023, Attended local Pipeline Safety Program</li> <li>● March 22<sup>nd</sup>, 2023, Participated in FEMA Virtual Tabletop Exercise with a hazmat scenario</li> </ul>
34	<b>F.1.3</b>	Hazardous material and storage management training.	<b>COMPLETE</b>	Conduct annual hazardous material and storage management training with appropriate staff. Track meeting agenda, materials, and attendee sign-in sheet.	Complete annual hazardous material and storage management training with appropriate County staff.	All relevant hazardous materials storage and handling reviewed with Facilities Director.

**Attachment B. Status of Compliance with N.P.D.E.S. Permit Conditions for Year 4**  
**CHAMPAIGN COUNTY, ILLINOIS MS4 ANNUAL FACILITY INSPECTION REPORT**  
 REPORTING PERIOD YEAR 4 (4/1/22 – 3/31/23) APRIL 1, 2023

	BMP No.	Brief Description of Best Management Practice (BMP)	Status	Measurable Goal	Year 4 Milestone	Description of Activities
35	<b>F.2.1</b>	Prepare a Storm Water Pollution Prevention Plan (SWPPP) for County owned facilities.	<i>INCOMPLETE</i>	Prepare SWPPP for all County owned facilities.	Begin developing the Draft SWPPP for all County owned facilities.	None.



There was no information collected between April 1, 2022 and March 31, 2023.

**Attachment D. N.P.D.E.S. Permit Activities for Next Reporting Year 1 April 1, 2023 – March 31, 2024**  
**CHAMPAIGN COUNTY, ILLINOIS MS4 ANNUAL FACILITY INSPECTION REPORT**  
 REPORTING PERIOD YEAR 4 (4/1/22 – 3/31/23) APRIL 1, 2023

BMP No.	Brief Description of Best Management Practice (BMP)	Measurable Goal	Year 4 Milestone (4/1/22-3/31/23)	Proposed Activity Next Program Year 4/1/23-3/31/24
<b>A.1.1</b>	Flyers and information sheets at permit counter.	Develop and distribute one new educational material handout.	Distribute handout.	Distribute handout.
<b>A.2.1</b>	Inform business groups about MS4, NPDES, and BMPs.	Conduct one presentation per year upon request.	Conduct one presentation upon request.	Conduct one presentation upon request.
<b>A.2.2</b>	Inform developer, contractor, engineering, and architecture groups about MS4, NPDES, and BMPs.	Conduct one presentation per year upon request.	Conduct one presentation upon request.	Conduct one presentation upon request.
<b>A.2.3</b>	Inform environmental groups about MS4, NPDES, and BMPs.	Conduct one presentation per year upon request.	Conduct one presentation upon request.	Conduct one presentation upon request.
<b>A.6.1</b>	Educational and informational material on web page.	Develop web page with annual updates on informational and educational materials.	Update web page.	Update web page.
<b>B.4.1</b>	Comply with applicable state and local public notice requirements.	Annual number of meetings with MS4 related topics. Maintain electronic records of notices, agendas, and public participation.	Provide notice of MS4 related meetings and provide opportunity for public input.	Provide notice of MS4 related meetings and provide opportunity for public input.
<b>B.6.1</b>	Intergovernmental Storm Water Management group meetings (coordination meetings for all Champaign County MS4 jurisdictions)	Hold at least 4 coordination meetings each year.	Attend meetings.	Attend meetings.
<b>B.6.2</b>	Prepare a storm water survey that can be used annually to capture public comment on the MS4 Storm Water Program.	Conduct the annual MS4 Storm Water Survey on the County website.	Make the MS4 Storm Water Survey available on the Champaign County website.	Make the MS4 Storm Water Survey available on the Champaign County website.
<b>B.6.3</b>	Hold Annual Public Storm Water Meeting at the Champaign County Board's Environment and Land Use Committee (ELUC) Meeting to receive public comments regarding the Champaign County Unincorporated MS4 Area Storm Water Program.	Have the Champaign County Unincorporated MS4 Area Storm Water Program as an Agenda item at one ELUC Meeting each year.	Have the Champaign County Unincorporated MS4 Area Storm Water Program as an Agenda item at the May ELUC Meeting.	Have the Champaign County Unincorporated MS4 Area Storm Water Program as an Agenda item at the May ELUC Meeting.

**Attachment D. N.P.D.E.S. Permit Activities for Next Reporting Year 1 April 1, 2023 – March 31, 2024**  
**CHAMPAIGN COUNTY, ILLINOIS MS4 ANNUAL FACILITY INSPECTION REPORT**  
 REPORTING PERIOD YEAR 4 (4/1/22 – 3/31/23) APRIL 1, 2023

BMP No.	Brief Description of Best Management Practice (BMP)	Measurable Goal	Year 4 Milestone (4/1/22-3/31/23)	Proposed Activity Next Program Year 4/1/23-3/31/24
<b>B.6.4</b>	Identify Environmental Justice areas within the Unincorporated Champaign County MS4 Area and provide appropriate public participation.	Identify Environmental Justice (EJ) areas within the Unincorporated Champaign County MS4 Area based on most current state economic data and randomly sample the EJ area population for storm water concerns via postal mail with prepaid reply envelopes. Review annual survey results at the Annual Public Storm Water Meeting at the Champaign County Board’s Environment and Land Use Committee (ELUC).	Identify Environmental Justice (EJ) areas within the Unincorporated Champaign County MS4 Area based on most current state economic data and randomly sample the EJ area population for storm water concerns via postal mail with prepaid reply envelopes and review annual survey results at the Annual Public Storm Water Meeting the Champaign County Board’s Environment and Land Use Committee (ELUC).	Identify Environmental Justice (EJ) areas within the Unincorporated Champaign County MS4 Area based on most current state economic data and randomly sample the EJ area population for storm water concerns via postal mail with prepaid reply envelopes and review annual survey results at the Annual Public Storm Water Meeting at the Champaign County Board’s Environment and Land Use Committee (ELUC).
<b>B.7.1</b>	Fund aspects of NPDES MS4 implementation in the County’s Land Resource Management Plan implementation budget including public involvement when appropriate.	Include NPDES MS4 requirements in the County’s Land Resource Management Plan and include in annual long-range work plan as required.	Include MS4 in work plan for FY22.	Include MS4 in work plan for FY23.
<b>C.1.1</b>	Map drainage system outfalls into streams and rivers.	Complete a system wide update every 3 years.	Update Champaign County Unincorporated MS4 Area storm sewer system map as new information becomes available.	System wide update of the Champaign County Unincorporated MS4 Area storm sewer system map.

**Attachment D. N.P.D.E.S. Permit Activities for Next Reporting Year 1 April 1, 2023 – March 31, 2024**  
**CHAMPAIGN COUNTY, ILLINOIS MS4 ANNUAL FACILITY INSPECTION REPORT**  
**REPORTING PERIOD YEAR 4 (4/1/22 – 3/31/23) APRIL 1, 2023**

BMP No.	Brief Description of Best Management Practice (BMP)	Measurable Goal	Year 4 Milestone (4/1/22-3/31/23)	Proposed Activity Next Program Year 4/1/23-3/31/24
<b>C.2.1</b>	Prohibit illegal dumping and illicit discharges into drainage systems through Nuisance Ordinance.	Review existing Nuisance Ordinance and revise to include illegal dumping and illicit discharges into drainage systems.	Amend Nuisance Ordinance with new language prohibiting illegal dumping and illicit discharges into drainage system. <b>MILESTONE NOT ACHIEVED</b> – Draft has not been adopted yet.	Amend Nuisance Ordinance with new language prohibiting illegal dumping and illicit discharges into drainage system.
<b>C.3.1</b>	Establish and maintain citizen complaint phone line for illegal dumping and illicit discharges into drainage systems.	Maintain phone line.	Maintain complaint phone line and record of complaints.	Maintain complaint phone line and record of complaints.
<b>C.3.2</b>	Establish citizen complaint phone line for non-complying and/or non-functioning private sewage treatment systems.	Develop and maintain phone line.	Maintain complaint phone line and record of complaints.	Maintain complaint phone line and record of complaints.
<b>C.3.3</b>	Create a database of existing private sewage treatments systems and develop a management plan to bring non-compliant systems into compliance.	Create database and develop, adopt and implement management plan.	Create database and develop management plan. <b>MILESTONE NOT ACHIEVED</b>	Create database and develop management plan.
<b>C.6.1</b>	Annual report to the Environment and Land Use Committee (ELUC) of the Champaign County Board.	Present Annual Report and place on file.	Complete Annual Report and place on file.	Complete Annual Report and place on file.
<b>D.1.1</b>	Soil erosion and sediment control regulations.	Review existing erosion and sediment control regulations. Prepare draft regulations for County Board adoption and enforce adopted regulations.	Enforce Soil Erosion and Sediment Control Ordinance (Storm Water Management and Erosion Control Ordinance).	Enforce Soil Erosion and Sediment Control Ordinance (Storm Water Management and Erosion Control Ordinance).
<b>D.2.1</b>	Erosion and sediment control BMPs.	Review and evaluate existing BMPs to determine which should be included in the erosion and sediment control ordinance. Review existing regulations and develop new regulations for the ordinance.	Review plans and development for appropriate use of BMPs as required by adopted ordinance (Storm Water Management and Erosion Control Ordinance).	Review plans and development for appropriate use of BMPs as required by adopted ordinance (Storm Water Management and Erosion Control Ordinance).

**Attachment D. N.P.D.E.S. Permit Activities for Next Reporting Year 1 April 1, 2023 – March 31, 2024**  
**CHAMPAIGN COUNTY, ILLINOIS MS4 ANNUAL FACILITY INSPECTION REPORT**  
 REPORTING PERIOD YEAR 4 (4/1/22 – 3/31/23) APRIL 1, 2023

BMP No.	Brief Description of Best Management Practice (BMP)	Measurable Goal	Year 4 Milestone (4/1/22-3/31/23)	Proposed Activity Next Program Year 4/1/23-3/31/24
<b>D.3.1</b>	Prohibit illegal dumping and illicit discharges into storm drainage system from construction activities.	Enforce Storm Water Management and Erosion Control (SWMEC) Ordinance prohibition on illegal dumping and illicit discharge into drainage systems from construction activities. Review existing Nuisance Ordinance and, if needed, revise to prohibit illegal dumping and illicit discharge into drainage systems from construction activities, same as SWMEC Ordinance.	Enforce SWMEC Ordinance prohibition on illegal dumping and illicit discharges into drainage systems from construction activities. <b>MILESTONE NOT ACHIEVED</b> – Draft has not been adopted yet.	Enforce SWMEC Ordinance prohibition on illegal dumping and illicit discharges into drainage systems from construction activities.
<b>D.4.1</b>	Develop procedures and processes to evaluate proposed construction site runoff mechanisms.	Develop procedures and processes to evaluate proposed construction site runoff mechanisms.	Develop, implement and refine review procedures to evaluate proposed construction site runoff mechanisms.	Develop, implement and refine review procedures to evaluate proposed construction site runoff mechanisms.
<b>D.4.2</b>	Training class/workshop for evaluating and inspecting construction site runoff control mechanism.	Zoning Officer (or Director’s designee) attendance at training class or workshop for evaluating and inspecting construction site runoff control mechanisms.	Director’s designee attends training.	Director’s designee attends training.
<b>D.6.1</b>	Develop procedures and processes to inspect construction sites for compliance with construction site runoff mechanisms.	Develop procedures and processes to inspect construction sites for compliance with construction site runoff mechanisms.	Develop and implement procedures and processes to inspect construction sites for compliance with construction site runoff mechanisms.	Develop and implement procedures and processes to inspect construction sites for compliance with construction site runoff mechanisms.
<b>E.1.1</b>	Implement a public education program about the benefits of green infrastructure and green housekeeping in minimizing the volume of storm water runoff and pollutants from existing privately owned developed property.	Add a Green Infrastructure page to the Champaign County website to educate landowners about the benefits of green infrastructure and green housekeeping in minimizing the volume of storm water runoff and pollutants from existing privately-owned developed property.	Develop and implement a Champaign County Green Infrastructure & Green Housekeeping web page.	Develop and implement a Champaign County Green Infrastructure & Green Housekeeping web page.

**Attachment D. N.P.D.E.S. Permit Activities for Next Reporting Year 1 April 1, 2023 – March 31, 2024**  
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 REPORTING PERIOD YEAR 4 (4/1/22 – 3/31/23) APRIL 1, 2023

BMP No.	Brief Description of Best Management Practice (BMP)	Measurable Goal	Year 4 Milestone (4/1/22-3/31/23)	Proposed Activity Next Program Year 4/1/23-3/31/24
E.1.2	Implement a public education program about the water quality impacts of overuse of fertilizers and pesticides in non-agricultural uses.	Add a Sustainable Lawn Care page to the Champaign County website to educate landowners about the water quality impacts of overuse of fertilizers and pesticides in non-agricultural uses.	Develop and implement a Champaign County Sustainable Lawn Care web page.	Develop and implement a Champaign County Sustainable Lawn Care web page.
E.2.1	Require annual inspection of publicly owned storm water management facilities (post-construction).	Procedures for maintenance of publicly owned storm water management facilities (post-construction) should be established in the Champaign County SWPPP.	Develop and implement procedures for maintenance of publicly owned storm water management facilities (post-construction) in the Champaign County SWPPP. <b>MILESTONE NOT ACHIEVED</b>	Develop and implement procedures for maintenance of publicly owned storm water management facilities (post-construction) in the Champaign County SWPPP.
E.3.1	Develop procedures to ensure that storm water facilities are maintained to function as designed (post- construction).	Develop and implement procedures to ensure that storm water facilities are maintained to function as designed (post-construction).	Develop and implement procedures to ensure that storm water facilities are maintained to function as designed (post-construction). <b>MILESTONE NOT ACHIEVED</b>	Develop and implement procedures to ensure that storm water facilities are maintained to function as designed (post-construction).
E.3.3	Provide annual training in green infrastructure and/or low impact design techniques for all MS4 employees who manage or are directly involved in (or who retain others who manage or are directly involved in) the routine maintenance, repair, or replacement of public exterior surfaces. Require that contractors who are retained to manage or carry out the kinds of maintenance and relevant contractor employees also have annual training.	Provide annual training in green infrastructure and/or low impact design techniques for all MS4 employees who manage or are directly involved in (or who retain others who manage or are directly involved in) the routine maintenance, repair, or replacement of public exterior surfaces. Require that contractors who are retained to manage or carry out the kinds of maintenance and relevant contractor employees also have annual training.	Provide annual training in green infrastructure and/or low impact design techniques for all relevant managers, employees, and/or contractor employees.	Provide annual training in green infrastructure and/or low impact design techniques for all relevant managers, employees, and/or contractors and contractor employees.



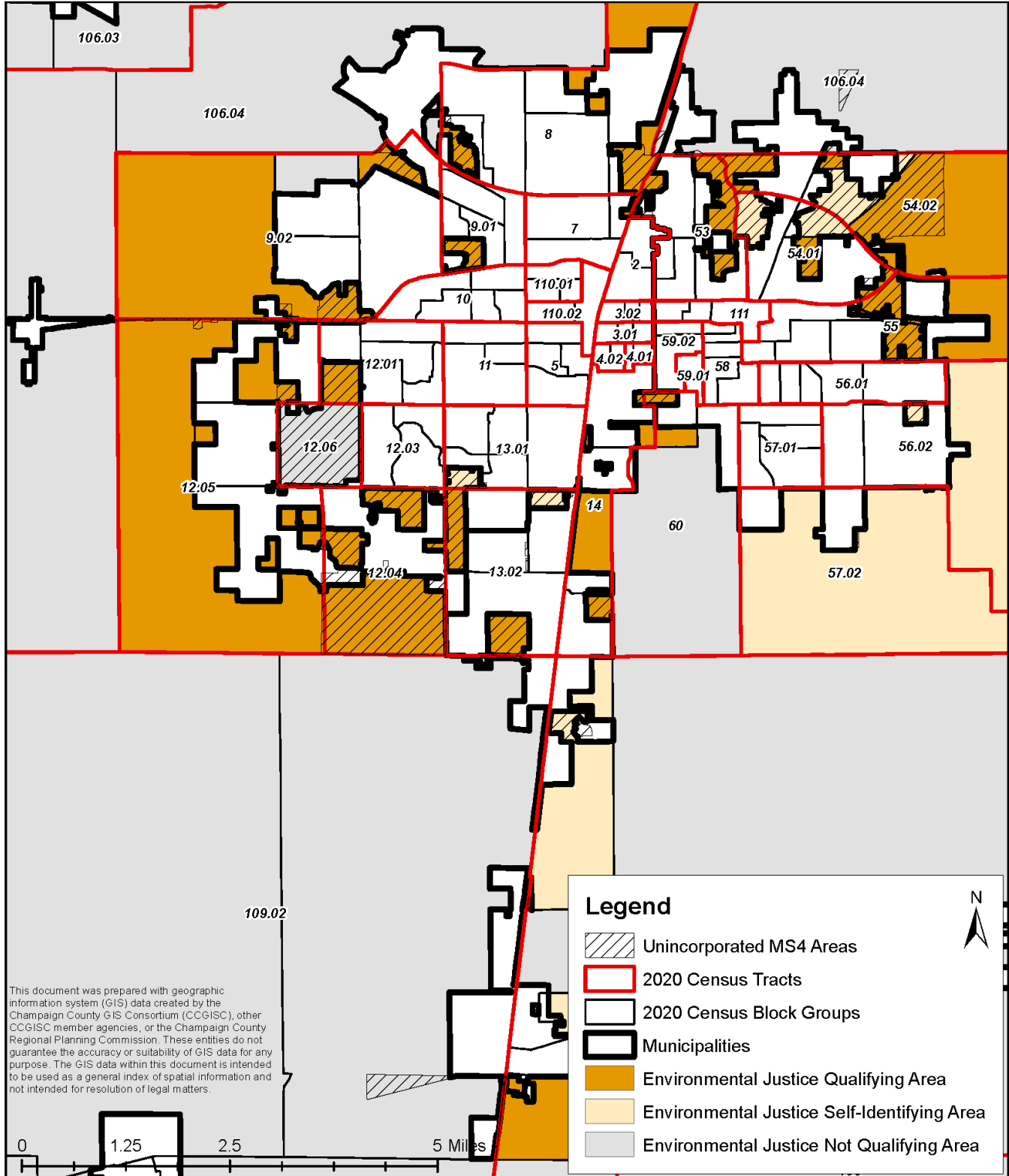
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BMP No.	Brief Description of Best Management Practice (BMP)	Measurable Goal	Year 4 Milestone (4/1/22-3/31/23)	Proposed Activity Next Program Year 4/1/23-3/31/24
E.4.1	Training class or workshop for evaluating and inspecting construction site runoff control mechanisms (post-construction).	Director’s designee attendance at training class or workshop for evaluating and inspecting construction site runoff control mechanisms (post-construction).	Director’s designee attends training.	Director’s designee attends training.
E.5.1	Develop procedures and processes to inspect construction sites for compliance with post-construction runoff control mechanisms.	Develop procedures and processes to inspect construction sites for compliance with approved post-construction runoff control mechanisms.	Develop and implement procedures to inspect construction sites for compliance with approved post-construction runoff control mechanisms. <b>MILESTONE NOT ACHIEVED</b>	Develop and implement procedures to inspect construction sites for compliance with approved post-construction runoff control mechanisms.
F.1.1	Spill prevention protocol.	Conduct annual spill prevention training with appropriate County staff. Track meeting agenda, materials, and attendee sign-in sheet.	Complete annual spill prevention training with appropriate County staff.	Complete annual spill prevention training with appropriate County staff.
F.1.2	Spill response protocol.	Conduct annual spill response training with appropriate County staff. Track meeting agenda, materials and attendee sign-in sheet.	Complete annual spill response training with appropriate County staff.	Complete annual spill response training with appropriate County staff.
F.1.3	Hazardous material and storage management training.	Conduct annual hazardous material and storage management training with appropriate County staff. Track meeting agenda, materials and attendee sign-in sheet.	Complete annual hazardous material and storage management training with appropriate County staff.	Complete annual hazardous material and storage management training with appropriate County staff.
F.2.1	Prepare a Storm Water Pollution Prevention Plan (SWPPP) for County owned facilities.	Prepare SWPPP for all County owned facilities.	Begin developing the Draft SWPPP for all County owned facilities. <b>MILESTONE NOT ACHIEVED</b>	Begin developing the Draft SWPPP for all County owned facilities.

## MS4 Environmental Justice Areas: Unincorporated Champaign County

Prepared 25 May 2022

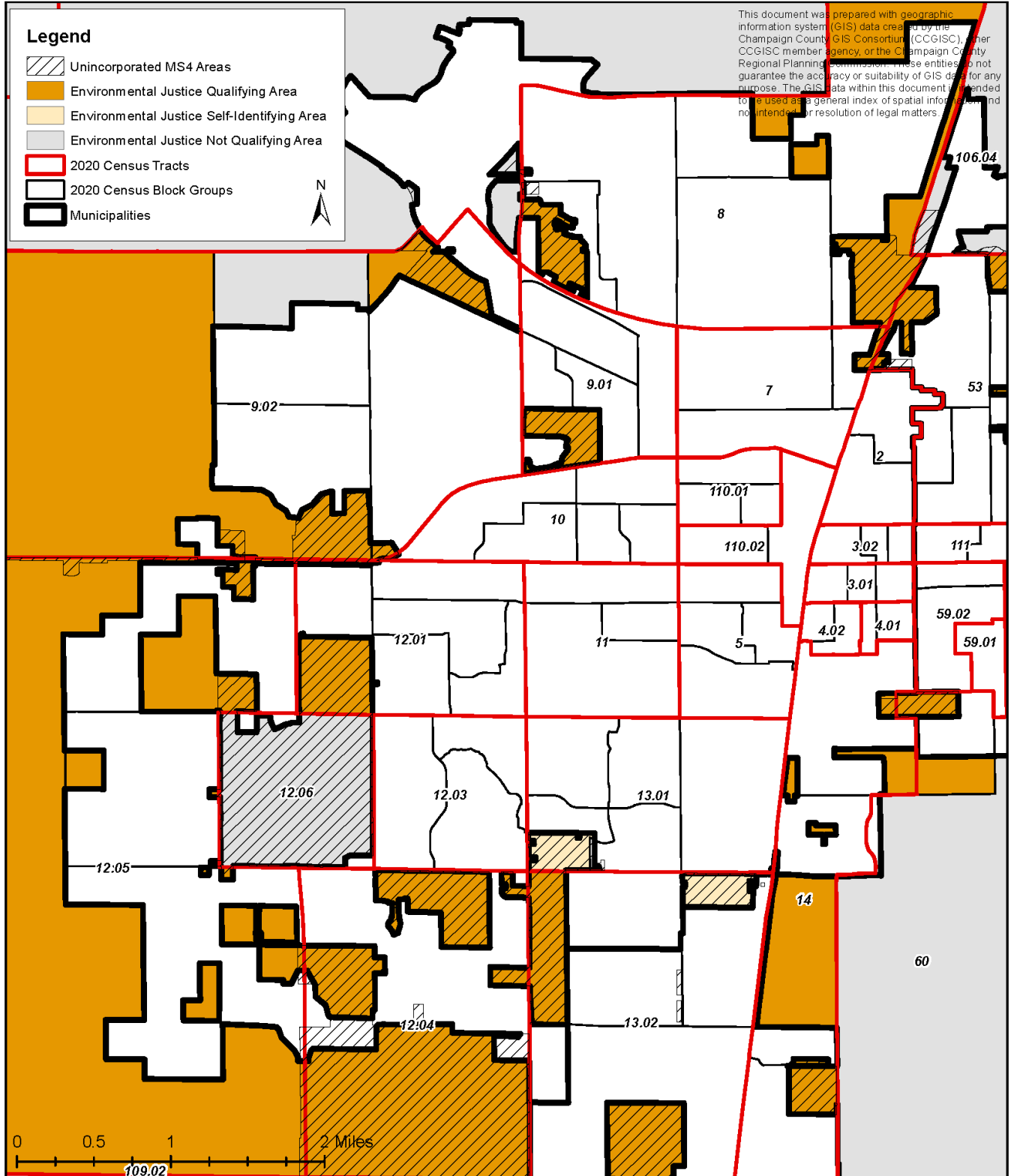
Source: U.S. Census Bureau; 2016-2020 American Community Survey



## MS4 Environmental Justice Areas: Champaign Area Detailed Map

Prepared 25 May 2022

Source: U.S. Census Bureau; 2016-2020 American Community Survey



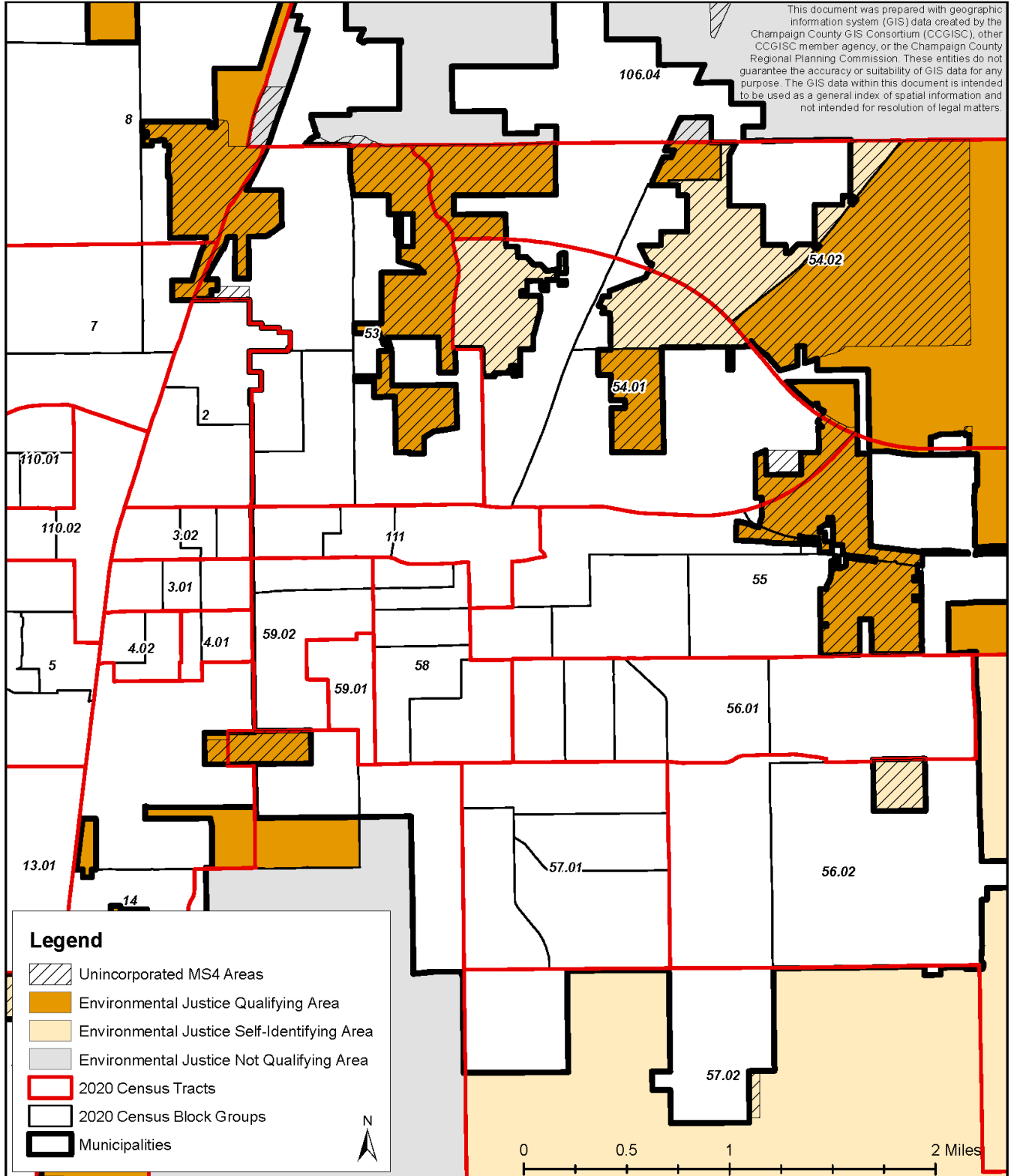
## MS4 Environmental Justice Areas: Urbana Area Detailed Map

Prepared 25 May 2022

Source: U.S. Census Bureau; 2016-2020 American Community Survey



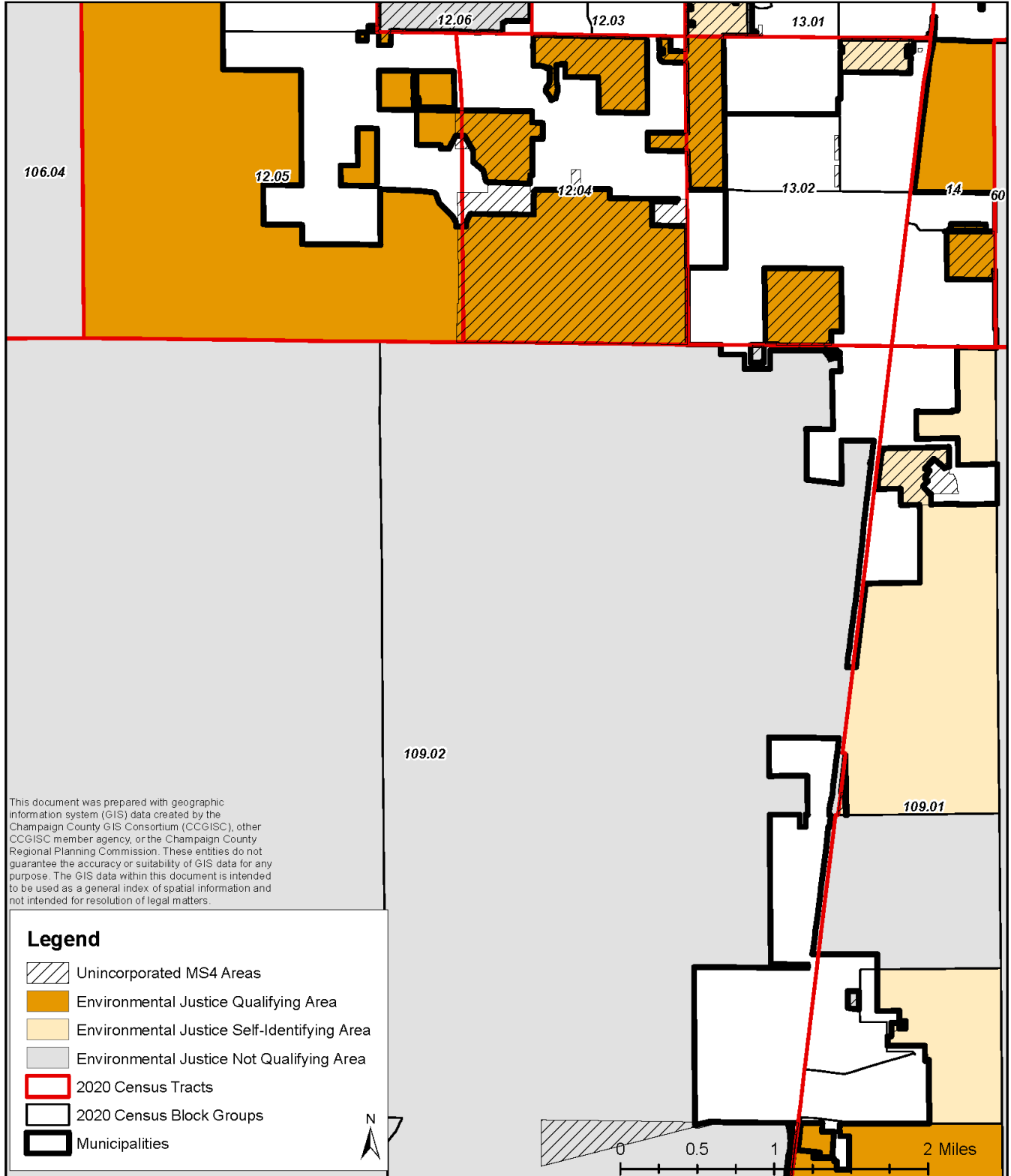
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## MS4 Environmental Justice Areas: Savoy Area Detailed Map

Prepared 25 May 2022

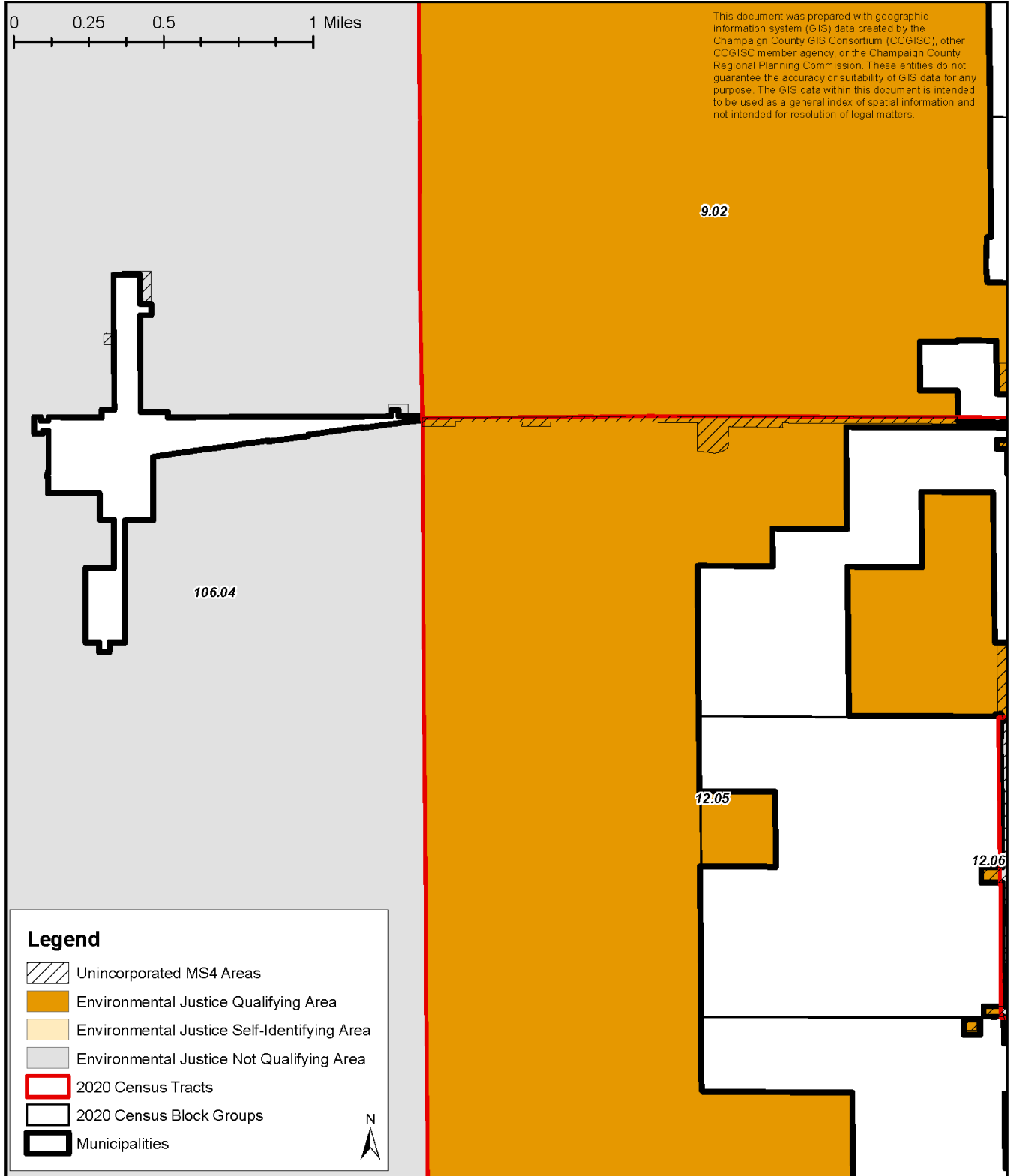
Source: U.S. Census Bureau; 2016-2020 American Community Survey



# MS4 Environmental Justice Areas: Bondville Area Detailed Map

Prepared 26 May 2022

Source: U.S. Census Bureau; 2016-2020 American Community Survey



## MS4 Areas: Unincorporated Champaign County

Prepared 25 May 2022

