

CITY OF ELKHORN  
WALWORTH COUNTY, WISCONSIN

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ARCHITECTURAL REVIEW BOARD & CITY PLAN COMMISSION MEETING NOTICE

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Thursday, February 15, 2024 @ 6:00 PM  
Council Chambers, City Administration Offices, 311 Seymour Court, Elkhorn,  
Wisconsin

**AGENDA**

- 1) Call to Order**
- 2) Pledge of Allegiance**
- 3) Roll Call**
- 4) Approve Minutes**
  - a) February 1, 2024
- 5) Plan Commission Items**
  - a) Neal Gill (Applicant), Elkhorn Travel Center, LLC (Owner), Joe Kopecky (Agent) – 195 Commerce Drive (Tax Key: YA238500003)
    - i) Conditional Use Permit– Public Hearing and Recommendation
- 6) General Discussion Items**
  - a) Solar Requirements/Solar Ordinances
  - b) Updates
- 7) Review Upcoming Meeting Dates & Times**
  - a) March 7, 2024, at 6:00 PM
  - b) March 21, 2024, at 6:00 PM
- 8) Adjournment**

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SHOULD YOU HAVE ANY QUESTIONS OR COMMENTS REGARDING ANY ITEMS ON THIS AGENDA, PLEASE CONTACT THE BUILDING AND ZONING OFFICE AT (262) 741-5124. UPON REASONABLE NOTICE TO THE CITY CLERK AT (262) 723-2219, EFFORTS WILL BE MADE TO ACCOMMODATE THE NEEDS OF DISABLED INDIVIDUALS THROUGH APPROPRIATE AIDS AND SERVICES.

NOTICE IS HEREBY GIVEN THAT A MAJORITY OF THE MEMBERS OF THE COMMON COUNCIL MAY ATTEND THIS MEETING TO GATHER INFORMATION ABOUT A SUBJECT OVER WHICH THEY HAVE THE DECISION MAKING RESPONSIBILITY. THE ONLY ACTION TO BE TAKEN AT THE ABOVE ANNOUNCED MEETING WILL BE ACTION OF THE PLAN COMMISSION.

**CITY OF ELKHORN**  
**ARCHITECTURAL REVIEW BOARD/CITY PLAN COMMISSION MEETING**  
**Council Chambers, 311 Seymour Ct., Elkhorn, WI**  
**February 1, 2024**

The Architectural Review Board/City Plan Commission Meeting was called to order at 6:00 p.m. by Vice-Chairman Meinel followed by the Pledge of Allegiance and Roll Call.

**ROLL CALL**

Present: Geaslen, Boardman, Stotko, Hunter, Wuttke, Meinel  
Absent: Lechner  
Also Present: Schwark, Rauch, Phillips, Ekes, Lindstrom  
Visitors: Warren Hansen, Joe Koepecky, Other Unidentified Persons

**APPROVAL OF MINUTES**

Motion (Stotko/Hunter) to approve the minutes of the Architectural Review Board and Plan Commission meetings of January 4, 2024. Motion carried unanimously.

**SITE PLAN/ARCHITECTURAL REVIEW/195 COMMERCE DR./ELKHORN TRAVEL CENTER**

Warren Hansen, Farris, Hansen & Associates, presented the site plan and architectural review for the proposed 3,106 square foot addition to the existing 2,394 square foot building to incorporate a drive-thru lane and fast service restaurant, parking lot improvements, and reconfiguration of landscape beds for property located at 195 Commerce Drive (Tax Key No. YA238500003). Joe Koepecky, Architect, representing the applicant explained this project was discussed two years ago with the Plan Commission but now there are some slight alterations to the original site plan for the gas station remodel. Members wondered if the gas station will continue to be open during the construction and Mr. Koepecky responded that it would. Discussion on traffic, parking, and sidewalks.

The Zoning Administrator provided the Staff Report dated January 26, 2024. The applicant is requesting site plan, and architectural review of a proposed 3,106 square feet addition to the existing 2394 square foot building to incorporate a drive-thru lane and fast service restaurant, parking lot improvements, and reconfiguration of landscape beds. **Staff Review Summary:** Area, Yard & Height Requirements: The site plan appears to be in compliance with Section 17.5 of the Municipal Code. Traffic, Loading, Parking and Access: The site plan is in compliance with Section 17.6 of the Municipal Code. The schedule of parking requirements calls for 4 parking spaces per 1,000 square feet of gross floor area. Based on a total of 5,500 square feet, 21 parking spaces meet the requirements with 1 minimum accessible parking space required. City Engineer Review: See Kapur memo dated January 22, 2024 regarding concerns with traffic flow including queuing, ingress and egress, and trip generation estimates. **Staff Recommendations:** 1) Staff recommends that the Plan Commission **approve** the Site Plan and Architectural Review at this time with the following conditions: a) The project shall be developed in accordance with the approved site plan. Any deviation from the approved plans shall require zoning administrator and/or Plan Commission approval. b) Subject to the conditions listed in the Kapur memo dated January 22, 2024. c) Subject to the Conditional Use Permit for the property being heard on February 15, 2024 and approved.

The City Engineer presented the Memorandum dated January 22, 2024. Kapur has reviewed the site plan application materials for an addition and parking lot improvements to the Mobil Station. Based on the information reviewed, we **recommend approval** conditional upon the following: 1) Dunkin has provided the following information with respect to the addition of the donut store to the existing convenience store / gas station based on actual data from nearby comparable stores: a) The average car staking during the AM (busiest) is 3.5 cars with an average time of 127 seconds (34 seconds at menu board +57 seconds in line +36 seconds at the window).

**CITY OF ELKHORN  
ARCHITECTURAL REVIEW BOARD/  
CITY PLAN COMMISSION MEETING  
FEBRUARY 1, 2024  
PAGE 2**

b) During the peak hour 7am-8am the average service is 31 cars with a total of 146 cars during 5 am to 10 am. A Kapur traffic engineer has reviewed the data provided by the applicant and concurs that the que storage length provided on-site would accommodate the estimated vehicle and service times provided by the applicant. 2) The site plan has been revised to include ingress only at the western access. This revision allows for cars to bypass the queuing at the order window and park. Appropriate signage and pavement markings must be provided to restrict access as proposed. The striping arrows at the north parking directing traffic west shall be removed and the right “turn in” arrow should be removed at the East entrance. 3) At a minimum, sidewalk, with ADA ramp on East side of Tasch Drive, shall be provided from Tasch Drive into the site. 4) Comments from our previous correspondence have not been addressed. The plans shall be revised to address the following: a) City Ordinance requires handicap accessible spaces shall be at least 12-ft wide. The site plan shows one handicap stall less than 12-ft. This handicap stall must be van accessible and thus an 8-ft wide access aisle is required. b) Details for silt fence installation shall be included on the construction plans.

Motion (Geaslen/Boardman) to approve the site plan to construct a 3,106 square foot addition to the existing 2,394 square foot building to incorporate a drive-thru lane and fast service restaurant, parking lot improvements, and reconfiguration of landscape beds for property located at 195 Commerce Drive (Tax Key No. YA238500003) submitted by Elkhorn Travel Center subject to the Zoning Administrator’s Staff Report of January 26, 2024, the City Engineer’s Memorandum dated January 22, 2024, and the approval of the Conditional Use Permit to be presented at the February 15, 2024 Plan Commission meeting. Roll Call Vote: Wuttke-Yes; Hunter-Yes; Stotko-Yes; Boardman-Yes; Geaslen-Yes; Meinel-Yes. Motion carried unanimously.

Motion (Boardman./Geaslen) to approve the architectural review for the construction of a 3,106 square foot addition to the existing 2,394 square foot building to incorporate a drive-thru lane and fast service restaurant, parking lot improvements, and reconfiguration of landscape beds for property located at 195 Commerce Drive (Tax Key No. YA238500003) submitted by Elkhorn Travel Center subject to the Zoning Administrator’s Staff Report of January 26, 2024, the City Engineer’s Memorandum dated January 22, 2024, and the approval of the Conditional Use Permit to be presented at the February 15, 2024 Plan Commission meeting. Roll Call Vote: Wuttke-Yes; Hunter-Yes; Stotko-Yes; Boardman-Yes; Geaslen-Yes; Meinel-Yes. Motion carried unanimously.

**GENERAL DISCUSSION**

Members suggested researching how other municipalities address residential solar installation in order to create and/or adopt an ordinance to permit same.

**MEETING DATES**

The next Plan Commission meeting may be scheduled for Thursday, March 7, 2024.

**ADJOURNMENT**

Motion (Boardman/Geaslen) to adjourn. Motion carried unanimously. Meeting adjourned at 6:15 p.m.

Shari McKinney  
Plan Commission Secretary

**CITY OF ELKHORN  
NOTICE OF PUBLIC HEARING**

**CONDITIONAL USE PERMIT**

Notice is hereby given that a public hearing will be held before the Plan Commission of the City of Elkhorn on February 15, 2024, at 6:00 P.M. or soon thereafter as the matter may be heard in the Council Chambers, City Administration Offices, 311 Seymour Court, Elkhorn, WI for the purpose of hearing all interested parties, their attorneys or agents with respect to the application submitted by Neal Gill and Kopecky Architects for a Conditional Use Permit to allow for an addition and renovation of an existing gas station with car wash located at 195 E. Commerce Drive. The property is more precisely identified by the following tax parcel ID:

**YA238500003**

The City of Elkhorn will attempt to accommodate anyone with special needs if requests are made a sufficient time in advance. The City Clerk can be reached at: (262) 723-2219.

Dated this 24th day of January 2024

Allison Schwark  
Zoning Administrator

Publish 2x: 02/01/24 & 02/08/24  
Elkhorn Independent

# PLANNING REQUEST

FOR OFFICE USE ONLY

PC# \_\_\_\_\_

## CITY OF ELKHORN - DEPARTMENT OF BUILDING AND ZONING

311 SEYMOUR COURT., P.O. BOX 920 • ELKHORN, WI 53121

PHONE: (262)741-5124 • FAX: (262) 741-5135

Notice: This document is an Official City of Elkhorn Document. All submittals must be made on Official City of Elkhorn Documents.

### 1. General Project Information:

Project Tax Key #: YA23850003 Project Address: 195 COMMERCE DR.

Project Title (if any): ELKHORN MOBIL

### 2. Applicant, Agent & Property Owner Information:

Applicant's Name: NEAL GILL Company: \_\_\_\_\_

Street Address: 195 COMMERCE City/State: ELKHORN WI Zip: 53121

X Telephone: (262) Fax: ( ) Email: nealgill@gmail.com

Agent: JOE KOPECKY Company: KOPECKY ARCHITECTS

Street Address: 236C HWY 50 City/State: DELAWAN WI Zip: 53115

Telephone: (262) 740 9175 Fax: ( ) Email: kopeckyarchitects@gmail.com

Owner, if different from Applicant: \_\_\_\_\_

Street Address: \_\_\_\_\_ City/State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone: ( ) Fax: ( ) Email: \_\_\_\_\_

### 3. Planning Request (Check all that apply)

- Site Plan and Architectural Review \_\_\_\_\_ \$175.00 plus  $\frac{+ 125.68}{}$  per sq. ft. (Floor Area)<sup>2</sup> 300.68
  - Conditional Use Permit \_\_\_\_\_ \$275.00
  - Rezone \_\_\_\_\_ \$325.00
  - Land Use Amendment \_\_\_\_\_ \$350.00
  - Planned Unit Development \_\_\_\_\_ \$325.00
  - Preliminary Plan \_\_\_\_\_ \$200.00 plus \$20.00 per lot
  - Final Plat \_\_\_\_\_ \$200.00 plus \$20.00 per lot
  - Certified Survey Map \_\_\_\_\_ \$200.00 plus \$20.00 per lot
  - Project Concept Review \_\_\_\_\_ \$150.00
  - Conceptual Land Division \_\_\_\_\_ \$100.00 plus \$3.00 per acre
  - Joint Conditional Use & Rezoning \_\_\_\_\_ \$575.00
  - Joint Rezoning & Certified Survey Map \_\_\_\_\_ \$500.00 plus \$20.00 per each new lot
  - Zoning Board of Appeals/Adjustment \_\_\_\_\_ \$325.00
- TOTAL 575.68

REVISION/PLOT DATE:

# ELKHORN MOBIL TRAVEL CENTER

195 COMMERCE DRIVE  
ELKHORN, WISCONSIN 53121

**ARCHITECT**

JOSEPH F. KOPECKY, R.A.-NCARB  
KopeckyArchitects + Associates  
236 HWY 50  
DELAVAN, WI 53115  
PHONE: (262) 740-9175  
TEXT: (262) 740-9175  
EMAIL: kopeckyarchitects@gmail.com

**OWNER / DEVELOPER**

MR. NEAL GILL  
N & J INVESTMENTS  
N3323 LAKE FOREST DRIVE  
LAKE GENEVA, WI 53147

**STRUCTURAL ENGINEER**

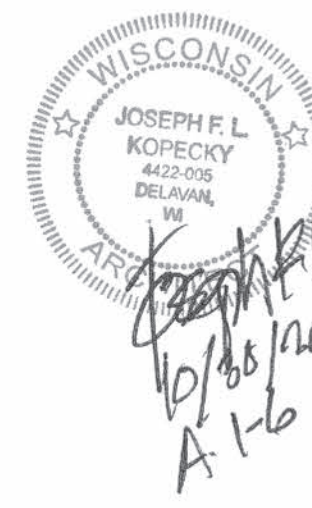
WARREN HANSEN, P.E.  
FERRIS, HANSEN & ASSOCIATES INC.  
7 RIDGWAY COURT - P.O. BOX 437  
ELKHORN, WI 53121  
PHONE: (262) 723-2098  
EMAIL: warren@farrishansen.com

**SITE ENGINEER**

WARREN HANSEN, P.E.  
FERRIS, HANSEN & ASSOCIATES INC.  
7 RIDGWAY COURT - P.O. BOX 437  
ELKHORN, WI 53121  
PHONE: (262) 723-2098  
EMAIL: warren@farrishansen.com

**PLUMBING DESIGNER**

ADAMS PLUMBING  
801 N. WISCONSIN STREET  
ELKHORN, WI 53121  
PHONE: (262) 723-6565  
EMAIL: info@adamspower.com



**Conditionally APPROVED**  
DEPT. OF SAFETY AND PROFESSIONAL SERVICES  
DIVISION OF INDUSTRY SERVICES

*M. Neal & P. J. Gill*

SEE CORRESPONDENCE

Building Addition  
DIS-052322094  
CB-012400032-PRB  
01/05/2024

**SHEET INDEX**

**ARCHITECTURAL**

1. A-1.01 SITE PLANS / INDEX / 3D VIEW
2. A-2.01 FLOOR PLAN
3. A-3.01 BUILDING EXTERIOR ELEVATIONS
4. A-4.01 SECTIONS / DETAILS
5. A-4.02 SECTIONS / DETAILS
6. A-5.01 DETAILS

**CIVIL**

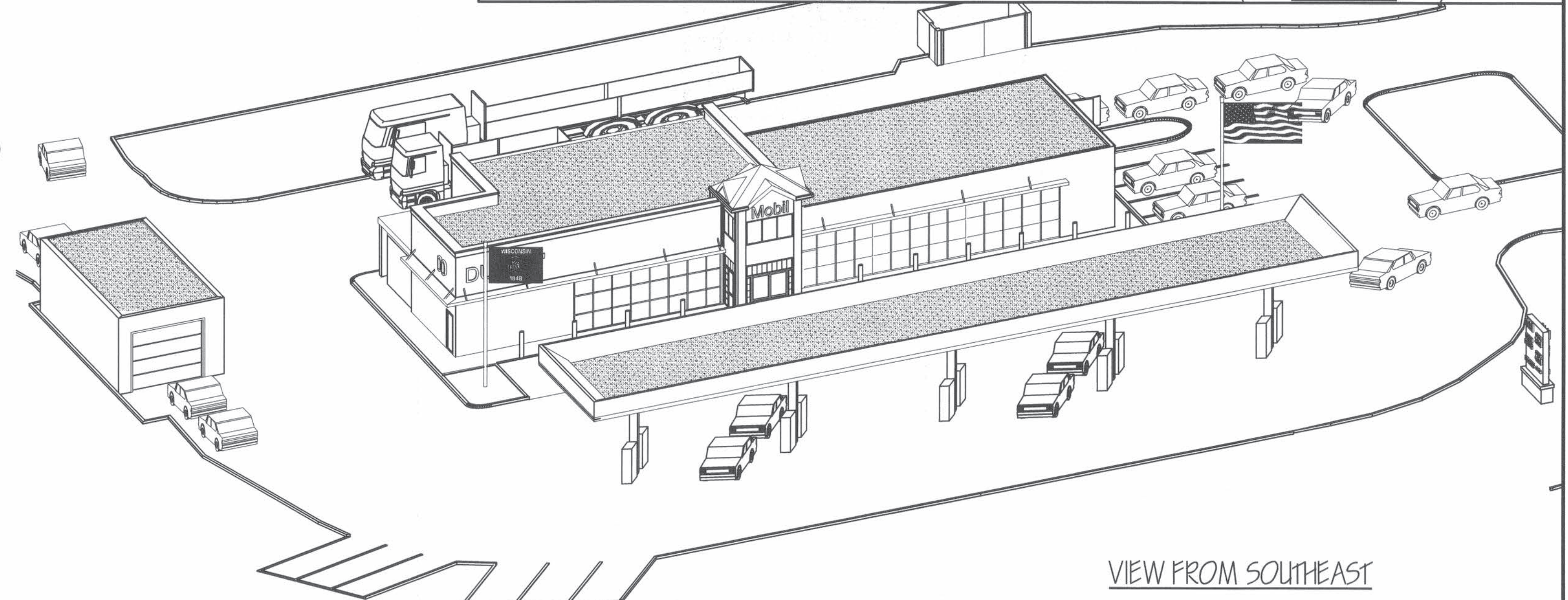
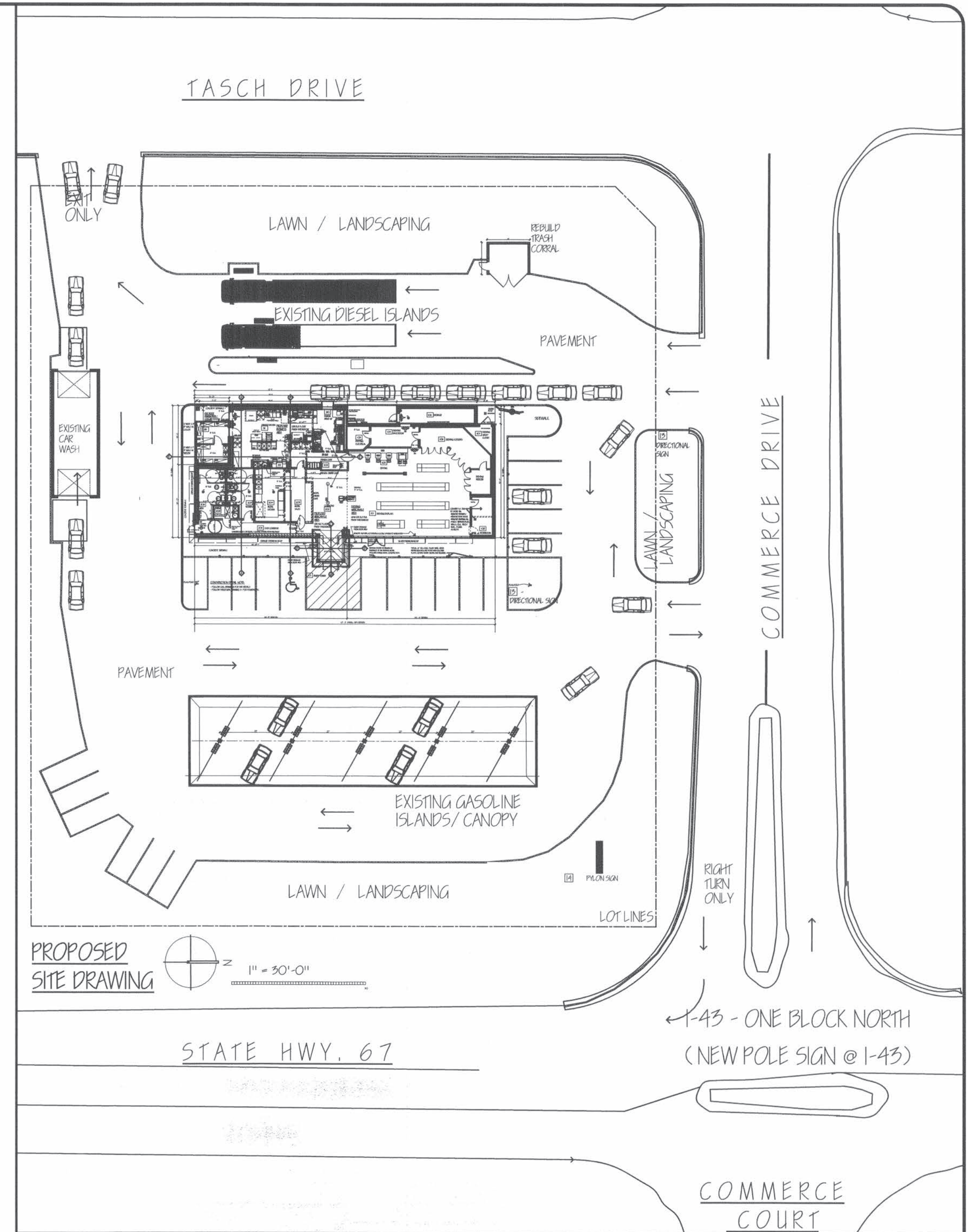
- C-1. SURVEY, DRAINAGE, EROSION CONTROL
- C-2. CONCRETE, PAVING, LANDSCAPING PLANS
- C-3. SITE DETAILS / SPECIFICATIONS

**STRUCTURAL**

- S-1. FOUNDATION PLAN
- S-2. ROOF FRAMING PLAN
- S-3. BEAM, COLUMN, FOUNDATION DETAILS
- S-4. CONCRETE & STEEL SPECS. & DETAILS

**PLUMBING**

- P-1. P-100 PLUMBING FOUNDATION PLANS
- P-2. P-101 PLUMBING FIRST FLOOR PLANS
- P-3. P-200 ISOMETRIC DIAGRAMS
- P-4. P-300 SCHEDULES AND DETAILS



**PROJECT INFORMATION** (2015 INTERNATIONAL BUILDING CODE BASIS)

PROJECT:	ELKHORN MOBIL TRAVEL CENTER -- 195 COMMERCE DRIVE -- 53121
OWNER:	N&J INVESTMENTS -- N3323 LAKE FOREST DRIVE -- LAKE GENEVA 53147
PROJECT NUMBER:	20210004
PROJECT LOCATION:	CITY OF ELKHORN, WALWORTH CNTY, WI 53121
TOTAL BUILDING S.F.:	2,394 S.F. EXISTING CONVENIENCE STORE / 3,106 S.F. ADDITION = 5,500 S.F. TOTAL
NO. OF STORIES:	ONE STORY - (IBC 504.3 AND 504.4) FOR IIIB MAX 55 FT ALLOWED / 25' PROPOSED
PROJECT S.F.:	1,800 S.F. (M) (PER IBC TABLE 506.2, 12,500 S.F. (M) ALLOWED W/ O SPRINKLERS) 1,306 S.F. (B) (PER IBC TABLE 506.2, 19,000 S.F. (B) ALLOWED W/ O SPRINKLERS)
FIRE PROTECTION:	NON-SPRINKLERED - CITY FIRE SERVICES
OCCUPANCY:	MOBIL EXISTING AND ADDITION M-MERCANTILE (CONVENIENCE/ FUEL/ RETAIL) DUNKIN ADDITION B- (RESTAURANT A-2 UNDER 50 OCCUPANTS = B)
CONSTRUCTION CLASS:	EXISTING IIIB - EXTERIOR MASONRY NEW - IIIB - EXTERIOR MASONRY
AREA ALLOWED:	CLASS M TYPE IIIB (2 STORIES - 12,500 S.F) NON-SPRINKLERED (TABLE 506.2) CLASS B TYPE IIIB (3 STORIES - 19,000 S.F) NON-SPRINKLERED (TABLE 506.2) FRONTAGE INCREASE ALLOWED = (K F) = (294' / 352' - 10" - .25) (1) = 0.59 THEREFORE 12,500 S.F X 1.59 = 19,875 S.F. ALLOWED (PER 506.3.3) PER TABLE 508.4, NO SEPARATION REQUIRED BETWEEN M AND B OCCUPANCIES
PARKING SPACES PROVIDED:	WITH 21 SPACES, 1 MINIMUM ACCESSIBLE SPACE REQ'D. (PER TABLE 1106.1)

REVISIONS	BY
	JFK

DRAWN BY	JFK
CHECKED BY	JFK
DATE	10-30-23
SCALE	VARIABLES

**ELKHORN TRAVEL CENTER MOBIL**  
195 COMMERCE DRIVE  
CITY OF ELKHORN, WISCONSIN 53121

**KopeckyArchitects + Associates**  
236 HWY 50 --- Delavan, WI 53115  
(262) 740-9175 Voice --- (262) 740-9175 Text

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PROJECT NO.	2021004
SHEET NO.	1 OF 6
PAGE NO.	A-1.01
FILE NO.	F-2021004/M-001

REVISION/PLOT DATE:

REVISIONS	BY
	JFK

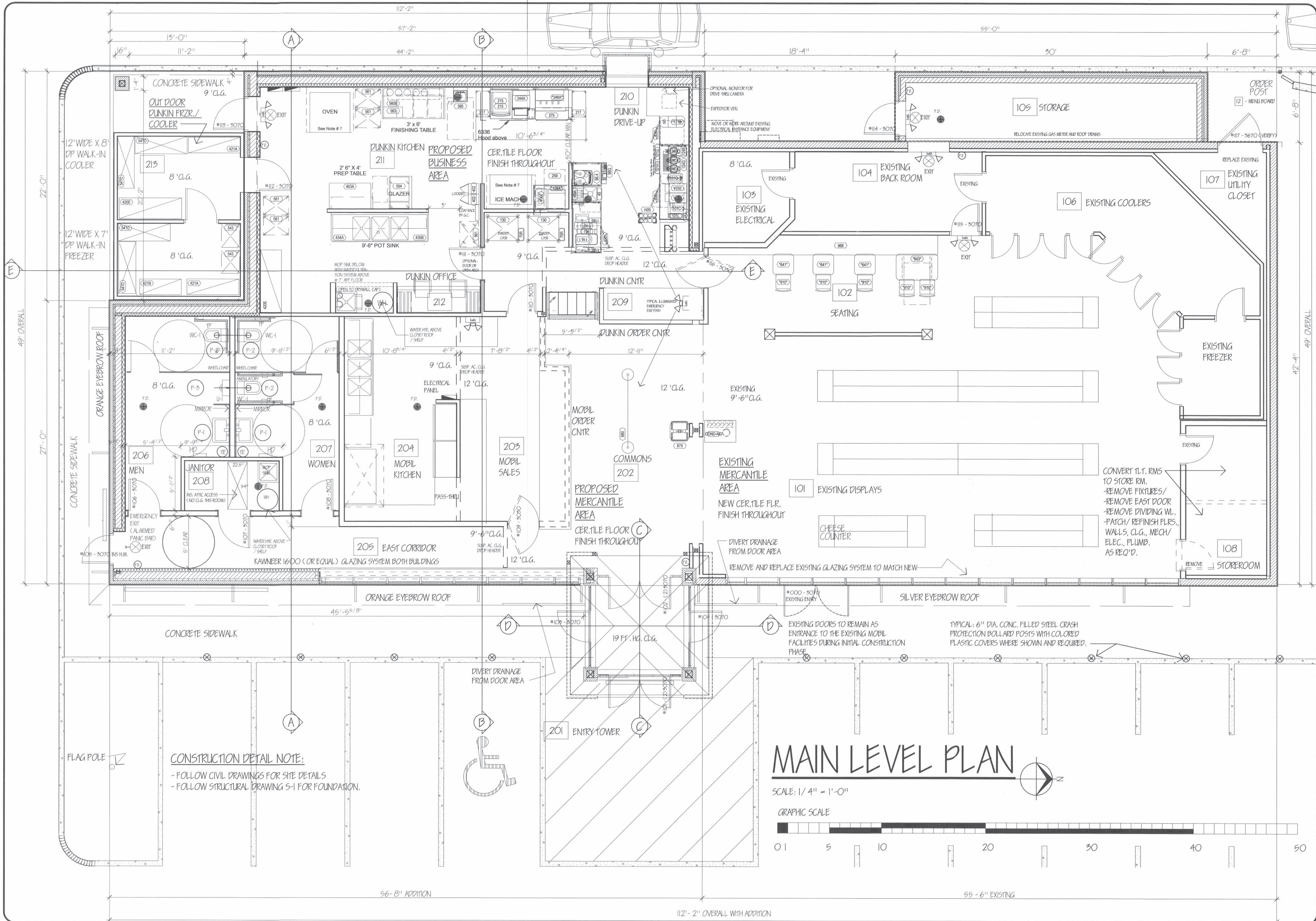
DRAWN BY JFK
CHECKED BY JFK
DATE 10-30-23
SCALE 1/4" = 1'-0"

**ELKHORN TRAVEL  
CENTER MOBIL**  
195 COMMERCE DRIVE  
CITY OF ELKHORN, WISCONSIN 53121

**KopecyArchitects + Associates**  
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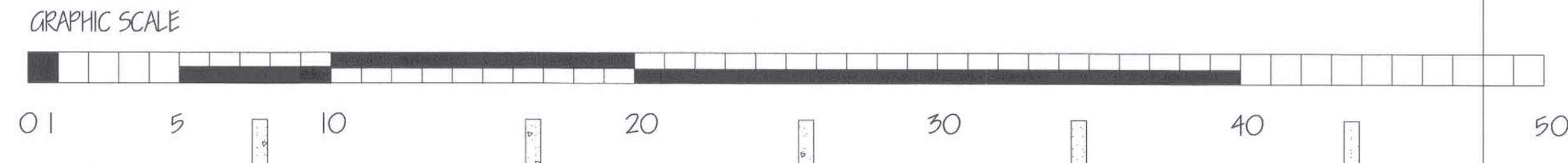
PROJECT NO. 2021004
SHEET NO. 2 OF 6
PAGE NO. A-2.01
FILE NO. F-2021004/M-002



**CONSTRUCTION DETAIL NOTE:**  
- FOLLOW CIVIL DRAWINGS FOR SITE DETAILS  
- FOLLOW STRUCTURAL DRAWING S-1 FOR FOUNDATION.

# MAIN LEVEL PLAN

SCALE: 1/4" = 1'-0"



56'-8" ADDITION

55'-6" EXISTING

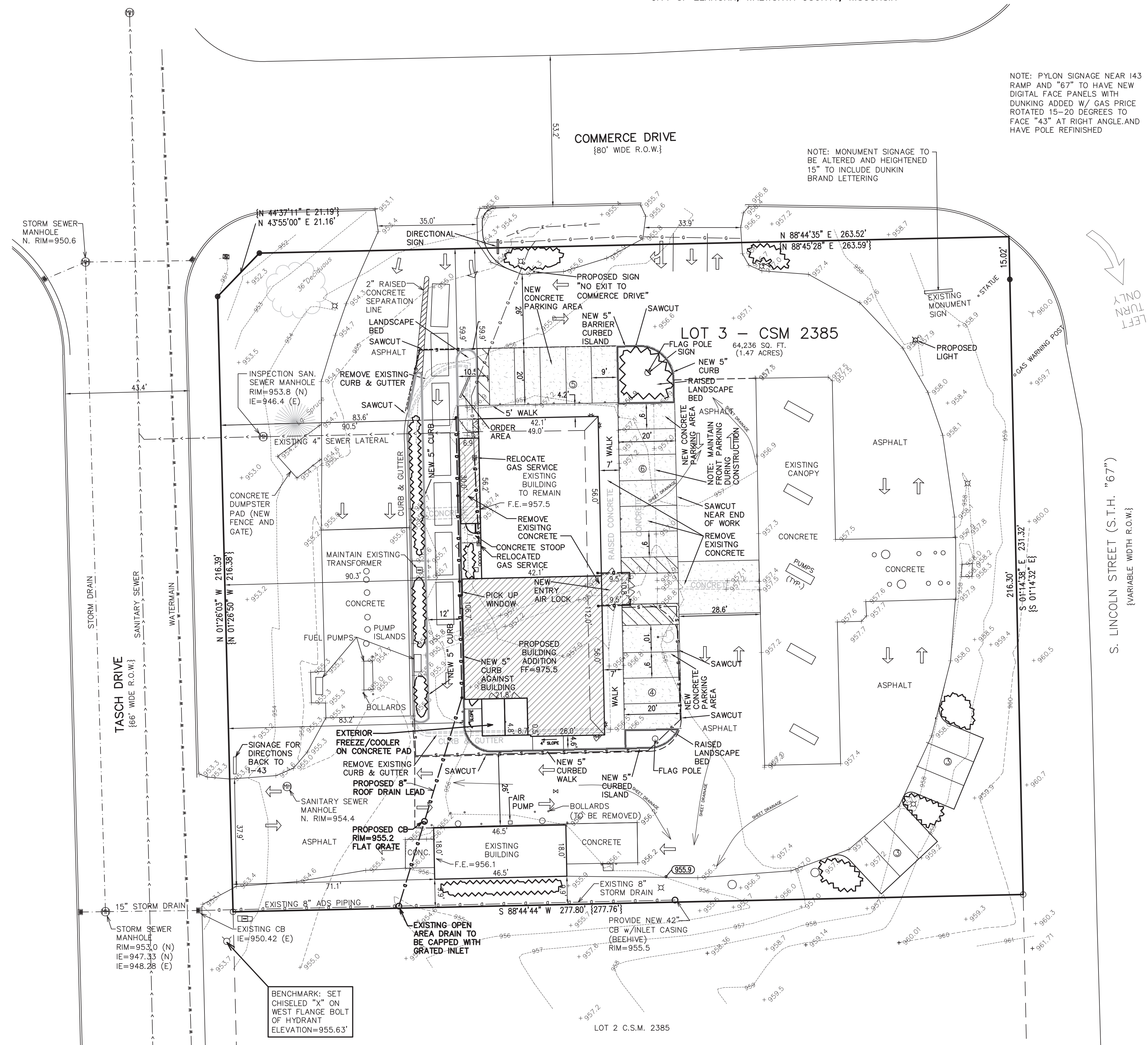
112'-2" OVERALL WITH ADDITION

# PLAT OF SURVEY & SITE, GRADING, DRAINAGE AND EROSION CONTROL PLAN

## LOT 3 OF CERTIFIED SURVEY MAP NO. 2385 – ELKHORN MOBIL

LOCATED IN PART OF THE NE 1/4 & SE 1/4 OF THE NE 1/4  
OF SECTION 12, TOWN 2 NORTH, RANGE 16 EAST,  
CITY OF ELKHORN, WALWORTH COUNTY, WISCONSIN

ASSIGNED THE SURVEYED BOUNDARY OF LOT 3  
S 88°44'44" W PER RECORDED C.S.M.



### LEGEND

- = FOUND REBAR STAKE
- = FOUND IRON PIPE STAKE
- ⊕ = HYDRANT
- ⊗ = WATER VALVE
- = CATCH BASIN
- ⊠ = TELEPHONE BOX
- = ELECTRIC METER
- ⊞ = GAS METER
- ⊞ = ELECTRIC TRANSFORMER
- ⊞ = LIGHT POST
- = ELECTRIC LINE
- = GAS LINE
- {XXX} = RECORDED AS
- F.E. = FLOOR ELEVATION
- +XXXX = EXISTING GROUND ELEVATION
- = EXISTING LAND CONTOURS
- XXX--- = PROPOSED LAND CONTOURS
- XXX--- = EXCAVATING CONSTRUCTION FENCING
- XXXXXX = PROPOSED FINISHED GRADE/ELEVATION
- F.F. = FIRST FLOOR ELEVATION

### SHEET INDEX

- SHEET 1 – OVERALL SITE PLAN
  - SHEET 2 – PARKING PLAN & DETAILED GRADING
  - SHEET 3 – DETAILS AND SPECIFICATIONS
- SEE PLANS FROM JOSEPH KOPECKY FOR BUILDING ELEVATIONS AND FLOOR PLANS

### SITE SUMMARY

LOT AREA= 64,236 SQ. FT.  
DISTURBED AREA=16,000 SQ. FT.

### AREA SUMMARY

LOT AREA= 64,236 SQ. FT.  
EXISTING BUILDING AREA=3,198 SQ. FT. (4.9%)  
EXISTING PAVEMENT/ OTHER IMPERVIOUS= 38,642 SQ. FT. (60.2%)  
EXISTING GREEN SPACE= 22,396 SQ. FT. (34.9%)  
PROPOSED BUILDING AREA= 6,342 SQ. FT. (9.9%)  
PROPOSED PAVEMENT/ OTHER IMPERVIOUS= 40,211 SQ. FT. (62.6%)  
PROPOSED GREEN SPACE= 17,683 SQ. FT. (27.5%)

### PARKING CALCULATIONS

TOTAL FLOOR AREA=5,292 SF.  
(4/1000 SF.) 5,250SF.=21 CARS REQUIRED

NOTE: COPIES OF THIS MAP TO WHICH THE FOLLOWING CERTIFICATE WILL APPLY SHOW THE SURVEYOR'S ORIGINAL SEAL AND SIGNATURE IN RED INK. COPIES BY ANY OTHER MEANS MAY HAVE ALTERATIONS WHICH DO NOT REPRESENT THE SURVEYOR'S WORK PRODUCT.

I HEREBY CERTIFY THAT THE ABOVE DESCRIBED PROPERTY HAS BEEN SURVEYED UNDER MY DIRECTION AND THAT THE ABOVE MAP IS A TRUE REPRESENTATION THEREOF AND SHOWS THE SIZE AND LOCATION OF THE PROPERTY AND ITS EXTERIOR BOUNDARIES. THIS SURVEY IS MADE FOR THE USE OF THE PRESENT OWNERS OF THE PROPERTY, AND ALSO THOSE WHO PURCHASE, MORTGAGE, OR GUARANTEE THE TITLE THERETO WITHIN ONE YEAR FROM THE DATE HEREOF.

DATE: \_\_\_\_\_  
CHRISTOPHER A. HODGES P.L.S. 2760

NOTE: PYLON SIGNAGE NEAR 143 RAMP AND "67" TO HAVE NEW DIGITAL FACE PANELS WITH DUNKING ADDED W/ GAS PRICE ROTATED 15-20 DEGREES TO FACE "43" AT RIGHT ANGLE AND HAVE POLE REFINISHED

NOTE: MONUMENT SIGNAGE TO BE ALTERED AND HEIGHTENED 15" TO INCLUDE DUNKIN BRAND LETTERING

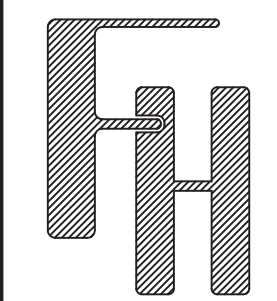
LANDSCAPER PLAN NOTES:  
LANDSCAPE BEDS TO HAVE MIXED PERENNIAL FLOWERS, DAY LILIES, PURPLE PHLOX, COMPACT PURPLE CONE FLOWERS ALONG WITH ORNAMENTAL LOW GRASSES. ALL PERIMETER AREAS OUTSIDE OF THE RECONSTRUCTION AREA SHALL BE CLEANED, TRIMMED AND MAINTAINED.

NOTE: PLACE STRAW 8" WATTLES ON ALL SAW CUT LINES TO ISOLATE NEW WORK AREAS. PLACE DRAINAGE BARRIER FABRIC UNDER ALL INLET CASTINGS

NOTE: PLACE STRAW 8" WATTLES ON ALL SAW CUT LINES TO ISOLATE NEW WORK AREAS. PLACE DRAINAGE BARRIER FABRIC UNDER ALL INLET CASTINGS

NOTE: MAINTAIN EXISTING BUILDING AND PUMPING OPERATIONS THROUGHOUT CONSTRUCTION OF NEW BUILDING ADDITION

NOTE: LIGHTING PLANS BY ELECTRICAL CONTRACTOR



**SITE PLAN**  
ELKHORN MOBIL  
195 COMMERCE DRIVE  
ELKHORN, WI 53121

WORK ORDERED BY --  
NEAL GILL  
W3323 LAKE FOREST ROAD  
LAKE GENEVA, WI 53147

**FARRIS, HANSEN & ASSOCIATES, INC.**  
ENGINEERING – ARCHITECTURE – SURVEYING  
7 RIDGWAY COURT P.O. BOX 437  
ELKHORN, WISCONSIN 53121  
OFFICE: (262) 723-2098 FAX: (262) 723-5886

REVISIONS	
03/10/2021 – LK	TOPO SURVEY
03/29/2021 – LK	ADDITIONAL TOPO
04/09/2021 – LB	PADE SETUP
04/12/2021 – LB	SDGDCP UPDATE
04/15/2021 – LB	SDGDCP UPDATE
05/06/2021 – LB	SDGDCP UPDATE
06/29/2021 – TS	ADVANCE
08/27/2021 – TS	ADVANCE
09/13/2021 – TS	ADVANCE
10/14/2021 – TS	ADVANCE
10/29/2021 – TS	ACCESSIBLE PARKING
11/29/2021 – TS	ADVANCE
3/13/2023 – DHC	FREEZER/COOLER ADV.
4/11/2023 – DHC	GRABES

PROJECT NO. 3922.21
DATE 03/10/2021
SHEET NO. 1 OF 3

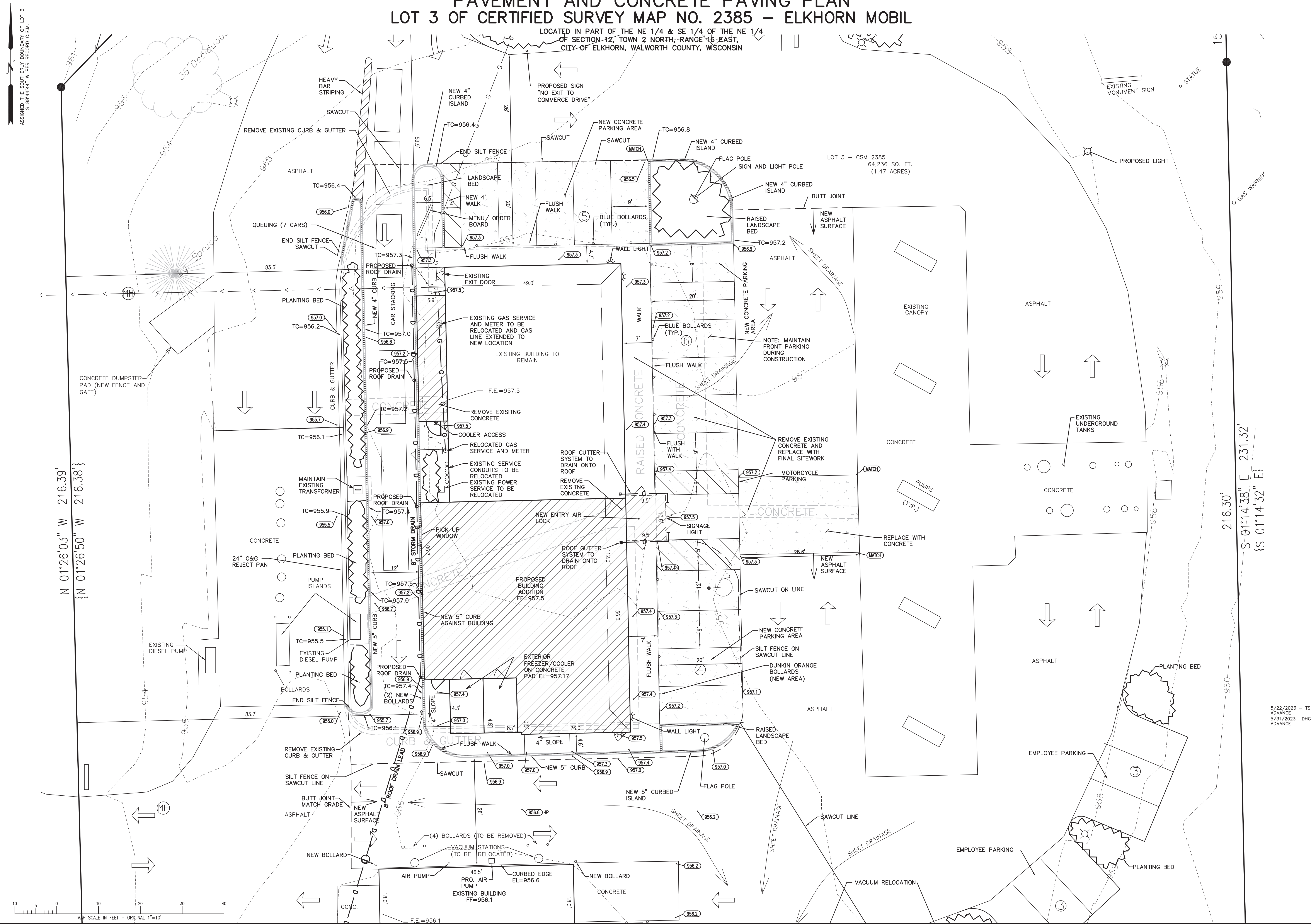
X:\PROJECTS\3922\3922\_21\ACAD\3922\_21.DWG



# PAVEMENT AND CONCRETE PAVING PLAN

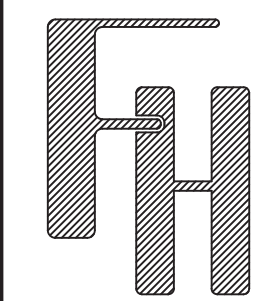
## LOT 3 OF CERTIFIED SURVEY MAP NO. 2385 - ELKHORN MOBIL

LOCATED IN PART OF THE NE 1/4 & SE 1/4 OF THE NE 1/4  
OF SECTION 12, TOWN 2 NORTH, RANGE 16 EAST,  
CITY OF ELKHORN, WALWORTH COUNTY, WISCONSIN



ASSIGNED THE SURVEY BOUNDARY OF LOT 3  
S 88°44'44" W PER RECORD C.S.M.

MAP SCALE IN FEET - ORIGINAL 1"=10'



**PAVING PLAN**  
ELKHORN MOBIL  
195 COMMERCE DRIVE  
ELKHORN, WI 53121

WORK ORDERED BY -  
NEAL GILL  
W3323 LAKE FOREST ROAD  
LAKE GENEVA, WI 53147

**FARRIS, HANSEN & ASSOCIATES, INC.**  
ENGINEERING - ARCHITECTURE - SURVEYING  
7 RIDGWAY COURT P.O. BOX 437  
ELKHORN, WISCONSIN 53121  
OFFICE: (262) 723-2098 FAX: (262) 723-5886

REVISIONS	
03/10/2021 - LK	TOPO SURVEY
03/28/2021 - LK	ADDITIONAL TOPO
04/09/2021 - LB	PAGE SETUP
04/12/2021 - LB	50%DCP
04/15/2021 - LB	50%DCP UPDATE
05/06/2021 - LB	50%DCP UPDATE
06/29/2121 - TS	ADVANCE
08/27/2021 - TS	ADVANCE
09/13/2021 - TS	ADVANCE
10/14/2021 - TS	ADVANCE
11/29/2021 - TS	ACCESSIBLE PARKING
11/29/2021 - TS	ADVANCE
3/13/2023 - DHC	FREZZER/COOLER ADV.
4/11/2023 - DHC	GRADES

PROJECT NO.	3922.21
DATE	03/10/2021
SHEET NO.	2 OF 3

216.30' S-01°14'38" E 231.32'  
{ S 01°14'32" E }

5/22/2023 - TS  
ADVANCE  
5/31/2023 - DHC  
ADVANCE

**TO:** Plan Commission – City of Elkhorn      **FROM:** Department of Building and Zoning  
**PC Meeting: Thursday, February 15, 2024 at 6:00 pm**

**Elkhorn Travel Center, LLC**  
**Conditional Use Permit**  
**PC Action: E24.01.001**

**General Information:**

Applicant(s): Neal Gill (Applicant), Elkhorn Travel Center LLC (Owner), Joe Kopecky (Agent)  
Requested Action: Conditional Use Permit

**Site Information:**

Location: 195 Commerce Dr  
Tax Key: YA238500003

**Zoning & Land Use:**

Zoning: B-5 Highway Business District  
2040 Land Use Plan: Highway Oriented Commercial

**Project History:**

The applicant is requesting a conditional use permit for an addition and renovation of an existing gas station with car wash to include a drive through lane and fast service restaurant. The gas station is already operational with adequate space for the addition.

**Staff Recommendations:**

1. Staff recommends that the Plan Commission **APPROVE** the conditional use for an addition and renovation of an existing gas station with car wash to include drive thru lane and fast service restaurant with the following conditions:
  - a. The project shall be developed in accordance with the plan of operations. Any deviation from the approved plans shall require zoning administrator and/or Plan Commission approval.
  - b. Construction shall begin within one year of approval.



# Municipal Regulation of Solar Energy Systems

Eric B. Hagen, Attorney, Boardman & Clark LLP

Over the past decade, Wisconsin has seen a huge increase in the development of solar energy systems,<sup>1</sup> with Wisconsin's solar capacity increasing from 21.1 megawatts (MW) in 2012 to 837 MW in 2021. With the continued growth of solar, municipalities should understand their role in the regulation of solar development.

Wisconsin has enacted statutes that protect solar development and limit municipal oversight. Wisconsin Statute § 66.0401 explicitly limits the authority of municipalities to regulate solar energy systems. Under Wis. Stat. § 66.0401(1m), municipalities may not place any restriction on the installation or use of solar energy systems unless the restriction satisfies one of the following conditions:

- Serves to preserve or protect the public health or safety;
- Does not significantly increase system cost or decrease efficiency; or
- Allows for an alternative system of comparable costs and efficiency.

This statute is not superseded by municipal zoning or conditional use powers. The three conditions listed above constitute the only standards that municipalities may consider when regulating solar projects. In the absence of enforceable municipal restrictions, a developer may construct a solar energy system even without prior municipal

approval.<sup>2</sup> Moreover, the courts have upheld these statutes, barring municipalities from making restrictions contrary to the state's expressed policy.<sup>3</sup>

In addition, municipalities are not permitted to make general policies applicable to all solar energy systems. Rather, permissible restrictions may only be made on a case-by-case basis, similar to a conditional use permit process. Municipalities must hear the specifics of the particular solar project and then decide whether a restriction is warranted. A municipality may not promulgate an ordinance in order to establish an arbitrary, one-size-fits-all scheme of requirements applicable to all solar projects.

Wisconsin Statute § 66.0403 does allow municipalities to grant solar access permits to the owners of solar energy systems. While a solar access permit is not required to install a solar energy system,<sup>4</sup> such a permit allows an owner to prevent the blockage of solar energy generation by an interfering structure or vegetation. A solar access permit may only be granted if:

- The permit will not unreasonably interfere with the orderly land use and development plans of the municipality;
- No one has demonstrated that they have already made substantial progress toward planning or constructing a

structure that would create a blockage;<sup>5</sup> and

- The benefits to the applicant will exceed the burdens.

Once a permit is granted, notice of it must be recorded against each property restricted by the permit. A solar access permit only prevents blockages erected or planted after the notice was recorded. Any person who erects or plants a blockage after notice is recorded may be liable to the permit holder for damages for any loss due to the blockage, court costs, and reasonable attorney's fees. A permit holder is also entitled to an injunction to require the trimming of any vegetation that would cause a blockage.

Municipal review is further curtailed for large solar projects of 100 MW or more. Under Wis. Stat. § 196.491, such solar projects are required to obtain a certificate of public convenience and necessity (CPCN) from the Public Service Commission of Wisconsin (PSCW). Solar projects granted a CPCN can proceed with installation and utilization even if they would otherwise be precluded or inhibited by local ordinance. Effectively, municipalities cannot impose ordinances to limit or control the development of solar energy projects of 100 MW or greater. However, municipalities can intervene in PSCW proceedings in order to ensure that they have some measure of input and control over project development, maintenance,

1. "Solar energy system" means "equipment which directly converts and then transfers or stores solar energy into usable forms of thermal or electrical energy." Wis. Stat. § 13.48(2)(h)1.g.

2. See *State ex rel. Numrich v. City of Mequon Board of Zoning Appeals*, 2001 WI App 88, 242 Wis. 2d 677, 626 N.W. 2d 366, 00-1643.

3. See *Ecker Brothers v. Calumet County*, 2009 WI App 112, 321 Wis. 2d 51, 772 N.W.2d 240.

4. See Wis. Stat. § 66.0403(12)(a).

5. See Wis. Stat. § 66.0403(5)(a).

and decommissioning. Municipalities can also appeal PSCW decisions to grant a CPCN.

While the granting of a CPCN effectively preempts the applicability of local ordinances, through intervention and otherwise, municipalities often enter into project development agreements with solar project developers. Negotiations with the developer should take place as early in the project development process as possible, preferably before PSCW hearings begin. Joint development agreements typically address:

- Road use, maintenance, and repair obligation, including proposed equipment haul routes.
- Drainage repair obligations.
- Allocation of utility shared revenue proceeds between local governments.
- Restoration and decommissioning obligations.

For projects 50 MW and larger, the private land leased to a solar developer becomes exempt from local property taxes. Although this land will no longer be subject to property taxes, the owners of such solar projects pay annually into a utility aid fund which is shared with

the local governments where the solar project is located. Under the revenue sharing formula currently in place under the statutes, a qualifying solar project will contribute \$4,000 per MW per year. If the solar facility is located in a village or city, the village or city receives \$2,333 and the county \$1,667; if it is located in a town, the town receives \$1,667 and the county \$2,333. Generally, the net gain to municipalities from utility revenue sharing is estimated to be at least 10 times higher than the lost property taxes. Notably, school districts are not included in this revenue sharing scheme nor compensated for the lost property tax revenue.

While the legislature has significantly curtailed municipal regulation of solar energy systems, municipalities can still play a meaningful role in ensuring that the development of solar projects can be a net positive for the community.

About the Author:

Eric Hagen is a graduate of the University of Wisconsin-Platteville and Marquette University Law School. He primarily practices municipal law, with a focus on general municipal law, real estate transactions, land use and development,

and the prosecution of municipal violations. He provides a wide range of services to municipal clients, including negotiating and drafting contracts, easements, ordinances, and other documents; enforcement and prosecution of ordinance violations, including zoning violations, public nuisances, and building code violations; and provides advice on land use and zoning matters. Eric also frequently attends common council and village board meetings, and provides advice to municipal commissions and committees. He has worked with municipalities to issue raze orders for dilapidated buildings, revised codes of ordinances, conducted eminent domain proceedings, assisted municipalities in the purchase and sale of real estate, provided general legal services, and prosecuted public nuisance violations. Contact Eric at [EHagen@boardmanclark.com](mailto:EHagen@boardmanclark.com)

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## Chapter 112 SOLAR AND WIND ENERGY SYSTEMS

### Sec. 112-1. Solar energy systems.

- (a) Height and setback requirements.
  - (1) Multiple ground-mounted and/or roof mounted solar energy systems may be permitted per parcel compliant with the standards of the zoning district they are allowed in.
  - (2) Height Limitations.
    - a. Building or roof-mounted solar energy systems shall not exceed the maximum allowed height in any zoning district.
    - b. Ground or pole-mounted solar energy systems shall not exceed 15 feet in height when oriented at maximum tilt.
  - (3) No solar energy system, at full tilt parallel to the ground, shall encroach into a required setback and shall not cause the property's total area of ground covered to exceed the maximum impervious coverage for the district in which the system is located. Ground-mounted systems impervious coverage shall be calculated by using the total square footage of the panel face.
  - (4) Ground-mounted and or pole-mounted solar energy systems shall not be allowed in residential districts between the front of the building and the public right-of-way without a conditional-use permit.
- (b) Ground-mounted solar energy system.
  - (1) All electrical wires associated with a solar energy system, other than wires necessary to connect the system, grounding wires, etc. shall be located underground.
  - (2) A ground-mounted solar energy system must comply with the accessory structure restrictions contained in the zoning district where the solar energy system is installed.
  - (3) All ground-mounted electrical and control equipment shall be labeled and secured to prevent unauthorized access.
- (c) Roof-mounted solar energy system.
  - (1) The collector surface and mounting devices for roof-mounted solar systems shall not extend beyond the exterior perimeter of the building roof and shall not exceed the highest point of the roof line on which the system is mounted or built. Exterior piping for solar hot water systems shall be allowed to extend beyond the perimeter of the building roof on a side yard exposure.
- (d) Code compliance.
  - (1) A solar energy system shall comply with all applicable state and local construction, electrical and plumbing codes, where applicable.
  - (2) Solar energy systems that connect to the electric utility shall comply with the Public Service Commission of Wisconsin's Rule 119, "Rules for Interconnecting Distributed Generation Facilities."
  - (3) The design of the solar energy system shall conform to applicable industry standards.
  - (4) No grid-intertie photovoltaic system shall be installed until evidence has been given to the Bonduel Building Inspector that the owner has submitted the required PSC6027 or PSC6028 to the local electrical service provider. Off-grid systems are exempt from this requirement.

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- (e) Site plan review and building plan and permit requirements.
    - (1) All applications for permits shall comply with the requirements of a site plan review, building plans and a building permit shall be required for the installation of a solar energy system.
    - (2) The site plan application shall include but not be limited to the following:
      - a. Property lines and physical dimensions of the property.
      - b. Location, dimensions, and types of existing major structures on the property.
      - c. Location of the proposed solar energy system(s) and any overhead utility lines.
      - d. The right-of-way of any public road that is contiguous with the property.
      - e. Solar energy system mounting plan and details of any support or structural components.
      - f. A written description of solar panel tracking mechanism and a detailed layout of orientation limits.
      - g. The applicant shall also provide evidence that notice of the permit application has been provided to all property owners owning property located within 100 feet of the boundary lines of the property which is the subject of the permit application.
  - (f) Abandonment.
    - (1) A solar energy system that is out-of-service for a continuous 12-month period will be deemed to have been abandoned. The director of municipal operations may issue a notice of abandonment to the owner of a solar energy system that is deemed to have been abandoned. The owner shall have the right to respond to the notice of abandonment within 30 days from notice receipt date. The director of municipal operations shall withdraw the notice of abandonment and notify the owner that the notice has been withdrawn if the owner provides information that demonstrates the solar energy system has not been abandoned.
    - (2) If the solar energy system is determined to be abandoned, the owner of the solar energy system shall remove the facility at the owner's sole expense within three months of receipt of notice of abandonment. If the owner fails to remove the solar energy system, the director may pursue a legal action to have the system removed at the owner's expense.
  - (g) This use shall meet the following performance standards:
    - (1) The requirements of Wisconsin Statutes, including but not limited to Wis. Stats. §§ 66.0401 and 66.0403, shall apply to all solar energy systems.

(Ord. No. 2017-01, 4-12-2017)

### **Sec. 112-2. Small wind energy system (land use).**

A wind energy system with an installed nameplate capacity of not more than 100 kilowatts each and a total installed nameplate capacity of not more than 300 kilowatts. The following performance standards shall apply to any new small wind energy system, and to any expansion or other material change to any existing small wind energy system:

- (a) Shall be subject to all definitions, provisions, and requirements of PSC 128, Wis. Admin. Code and Section 66.0401, Wisconsin Statutes that are applicable to small wind energy systems, including the owner's and Village of Bonduel's responsibilities under such requirements, except as limited by the standards below.

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- (b) Consistent with PSC 128.12(2), PSC 128.18(3)(am), and Wis. Stats. § 91.46(1)(f), in the district in which it is located, the small wind energy system shall be subject to the following additional standards:
    - (1) Village of Bonduel Zoning Ordinance.
    - (2) The use and its location are consistent with the purpose of the district in which it is located.
    - (3) The use and its location are reasonable and appropriate, considering alternative locations, or are specifically approved under state or federal law.
    - (4) The use is reasonably designed to minimize conversion of land, at and around the site of the use, from agricultural use or open space use.
    - (5) The use does not substantially impair or limit the current or future agricultural use of surrounding parcels of land that are zoned for or legally restricted to agricultural use.
  - (c) The height and setback of a small wind energy system near airports, heliports, or helipads shall be as follows:
    - (1) If near a public use airport, shall comply with Wis. Stats. §§ 114.135 or 114.136, or if no applicable height or setback provision is contained in such sections, shall comply with Federal Aviation Administration obstruction standards in 14 CFR Part 77.
    - (2) If near a private use airport or private heliport/helipad at a medical facility used for air ambulance service, shall comply with Federal Aviation Administration obstruction standards for private use airports or public use heliports/helipads, respectively.
  - (d) If the small wind energy system includes turbine-mounted lighting, such lighting shall include shielding or control systems approved by the Federal Aviation Administration to reduce visibility of lighting to individuals on the ground, to the extent determined practical by the director of municipal operations.
  - (e) No small wind energy system, or an expansion or material change to an existing System, shall be constructed prior to obtaining a land use permit under Shawano County Zoning Ordinance Section X.8.09. In addition to the land use permit application submittal requirements in Section X.8.09, the applicant shall submit all application materials required under PSC 128.30(2), as limited for small wind energy systems by PSC 128.60, along with information showing that the applicant has complied with the notice requirements in PSC 128.105 and PSC 128.30(5), with such notices also providing contact information for the director of municipal operations.
  - (f) After receiving an application for land use permit approval of a small wind energy system (or expansion or material change thereto), the director of municipal operations shall:
    - (1) Determine the completeness of the application, and notify the applicant in writing whether the application is complete or incomplete no later than 15 days after the day the application is filed.
    - (2) Publish a Class I notice per Wis. Stats. § 66.0401(4)(a)1, including a brief description of the proposed small wind energy system, its proposed location, the locations where the application is available for public review, the method and time period for the submission of public comments, and the approximate schedule for review of the application by the village.
    - (3) Make the application available for public review at the village hall.
    - (4) Accept written public comments on the application for 20 days after the class I notice is published or until the administrative hearing is held, whichever is later.
    - (5) Prior to action on the land use permit, conduct an administrative hearing to obtain comments on and to inform the public about the proposed small wind energy system.

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- (6) Either grant or deny the land use permit within 60 days of the submittal of a complete application.
  - (g) The Village may hire professional consultants to assist with the review and processing of the application. In addition to paying the required land use permit fee, the applicant for any small wind energy system shall reimburse the village for such consultant time, within 30 days of receipt of an invoice from the village, per the requirements and limitations in PSC 128.32(5)(b).
  - (h) Once granted, the work authorized by the land use permit must occur within the required timeframe under Shawano County Zoning Ordinance Section X.8.09(6).
  - (i) Per PSC 128.33(5), the director of municipal operations may require a written report from the owner of an approved small wind energy system, no greater than once per year, documenting compliance over the previous calendar year with the requirements of this chapter, PSC 128, Wis. Stats. § 66.0401, approved plans, conditions of approval, the requirement to maintain the system in good repair and operating condition; including all necessary state and federal permits and approvals; and including the maintenance log for each wind turbine. The log must contain the date and time maintenance was performed, the nature of the maintenance performed, and the reason for the maintenance. Such written report shall be provided within 60 days of director of municipal operations request.
  - (j) In the event that the village determines that a small wind energy system does not comply with the requirements of this chapter, PSC 128, Wis. Stats. § 66.0401, approved plans, conditions of approval, and the requirement to maintain the system in good repair and operating condition, the land use permit may be revoked per section 20-1(j) of this code.

(Ord. No. 2017-02, 4-12-2017)

### **Sec. 112-3. Large wind energy system (land use).**

A wind energy system that has an installed nameplate capacity of greater than 100 kilowatts per turbine and/or a total installed nameplate capacity of greater than 300 kilowatts. The following performance standards shall apply to any new large wind energy system, and to any expansion or other material change to any existing large wind energy system:

- (a) Shall be subject to all definitions, provisions, and requirements of PSC 128, Wis. Admin. Code and Wis. Stats. § 66.0401, including the owner's and Village of Bonduel's responsibilities under such requirements, except as limited by the standards below.
- (b) Shall minimize the conversion of land at and around the subject site from agricultural use; minimize and repair construction damage to land remaining in agricultural use; and implement best practices to minimize soil compaction, topsoil mixing, and damage to drainage systems on agricultural land.
- (c) Consistent with PSC 128.12(2), PSC 128.18(3)(am), and Wis. Stats. § 91.46(1)(f), in the district in which it is located, the large wind energy system shall be subject to the following additional standards:
  - (1) The use and its location are consistent with the purpose of the district.
  - (2) The use and its location are reasonable and appropriate, considering alternative locations, or are specifically approved under state or federal law.
  - (3) The use does not substantially impair or limit the current or future agricultural use of surrounding parcels of land that are zoned for or legally restricted to agricultural use.
- (d) The height and setback of a large wind energy system near airports, heliports, or helipads shall be as follows:



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- (1) If near a public use airport, shall comply with Wis. Stats. §§ 114.135 or 114.136, or if no applicable height or setback provision is contained in such sections, shall comply with Federal Aviation Administration obstruction standards in 14 CFR Part 77.
  - (2) If near a private use airport or private heliport/helipad at a medical facility used for air ambulance service, shall comply with Federal Aviation Administration obstruction standards for private use airports or public use heliports/helipads, respectively.
- (e) If the large wind energy system includes turbine-mounted lighting, such lighting shall include shielding or control systems approved by the Federal Aviation Administration to reduce visibility of lighting to individuals on the ground, to the extent determined practical by the director of municipal operations.
  - (f) No wind turbine shall be located within an emergency communication corridor, which is defined as the area within an existing line-of-sight communication path that is used by a government or military entity to provide services essential to protect public safety.
  - (g) Per PSC 128.16(3)(a), the owner of each large wind energy system shall use reasonable and commercially available technology to mitigate interference with personal communications that were not in use when the large wind energy system (or expansion material change to that system) began commercial operation, if the large wind energy system is causing the interference and the interference occurs at a location at least 0.5 mile from a wind turbine. The owner is required to implement a new mitigation solution that becomes commercially available before the large wind energy system is decommissioned to address interference for which mitigation is required under this subsection and PSC 128.16(2) and (4) and for which the original mitigation solution implemented is only partially effective, in the determination of the director of municipal operations.
  - (h) Per PSC 128.13(2)(a) and Wis. Stats. § 66.0401(4)(f)2, the county may deny an application for conditional use permit approval if the proposed large wind energy system both:
    - (1) Is proposed for an area planned for residential (including planned neighborhood) use or commercial (including downtown/unincorporated village) use on the future land use map of the village comprehensive plan.
    - (2) Has a nominal capacity of at least one megawatt.
  - (i) The director of municipal operations may require, as a condition of conditional use permit approval, that the owner provide annual training for fire, police, and other appropriate first responders regarding responding to a wind energy system emergency.
  - (j) Per PSC 128.19(2), the village planning commission may determine, via the same process required to grant a conditional use permit under Shawano County Zoning Ordinance Section X.8.08, when a large wind energy system has reached the end of its useful life and is therefore subject to decommissioning under PSC 128.19.
  - (k) Per PSC 128.19(3), the owner of the large wind energy system with a nameplate capacity of one megawatt or larger shall, prior to the issuance of a land use permit, be required to provide and continually maintain financial assurance of the owner's ability to pay for the actual and necessary cost to decommission the large wind energy system. Such financial assurance shall:
    - (1) Be approved by the village board prior to execution.
    - (2) Be in an amount equal to the estimated actual and necessary cost to decommission the large wind energy system, as determined by the average of three estimates prepared by third parties agreeable to both the owner and the director of municipal operations.
    - (3) Place the village in a secured position.

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- (4) Provide that the secured funds may only be used for decommissioning the wind energy system until such a time as the planning commission determines that the large wind energy system has been decommissioned, as provided for in PSC 128.30(5)(b), or approves the release of the funds, whichever occurs first.
  - (5) Provide that the village may access the funds for the purpose of decommissioning the large wind energy system if the owner does not decommission the system when decommissioning is required under PSC 128.19.
- (l) An owner shall provide the director of municipal of operations with notice of any change in ownership of the large wind energy system on or before the effective date of the change. A notice of change in ownership of the large wind energy system shall include information showing that the financial assurance requirements specified above will be met following the change in ownership.
  - (m) Per PSC 128.19(3)(f) and (g), during the useful life of a large wind energy system, the director of municipal of operations may periodically request information from the owner of the system regarding the cost for decommissioning the particular large wind energy system. Upon any such request, the procedure in subsection (k)2 shall be repeated. If such result indicates that the future anticipated cost to decommission the large wind energy system is at least ten percent more or less than the amount of financial assurance previously provided under subsection (k), the owner shall be required to increase or decrease the amount of financial assurance to the new amount. Further, if during the useful life of a large wind energy system, an event occurs that, in the opinion of the director of municipal operations or village counsel and/or village board, raises material concerns regarding the viability of the existing financial assurance, either may require the owner to submit a substitute financial assurance of the owner's choosing from among the options in PSC 128.19(3)(b).
  - (n) The applicant for a new large wind energy system, or an expansion or material change to an existing system, shall follow all procedures for a conditional use permit, including the public hearing and notice requirements in that section. In addition to the application requirements in PSC 128.30(2), the following materials shall be provided with each conditional use permit application:
    - (1) All conditional use permit application submittals required in this code.
    - (2) All land use permit application submittals required in this code.
    - (3) An initial draft of the proposed financial assurance.
    - (4) Information showing that the applicant has complied with the notice requirements in PSC 128.105 and PSC 128.30(5).
    - (5) Information prepared by a qualified professional showing that wind turbines and other wind energy system facilities will not be within existing line-of-sight communication paths that are used by government or military entities to provide services essential to protect public safety.
    - (6) Proposed best practices to minimize soil compaction, topsoil mixing and damage to drainage systems on agricultural land.
    - (7) Information about whether the applicant or owner has consulted with and received any non-binding recommendations for constructing, operating or decommissioning the large wind energy system from a state or federal agency, and whether and how the applicant or owner has incorporated such non-binding recommendations into the design of the large wind energy system.
    - (8) Proposed agreements (or signed agreements where available) that include annual monetary compensation to the owner of any nonparticipating residence within one-half mile of a proposed wind turbine, as the term nonparticipating residence is defined in PSC 128.01.

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- (9) A list of all necessary state and federal approvals, copies of applications for such approvals and such actual approvals if and when obtained.
  - (10) Any other information that the planning commission or director of municipal operations determines necessary to understand the proposed large wind energy system, either before or after the initial application submittal. If the owner fails to provide additional information requested within 30 days of such request, the village shall deem the application abandoned.
- (o) After receiving an application for conditional use permit approval of a large wind energy system (or expansion or material change thereto), the director of municipal operations shall:
    - (1) Determine the completeness of the application, and notify the applicant in writing whether the application is complete or incomplete no later than 45 days after the day the application is filed.
    - (2) Publish a class I notice per Wisconsin Statutes 66.0401(4)(a)1, including a brief description of the proposed large wind energy system, its proposed location, the locations where the application is available for public review, the method and time period for the submission of public comments and the approximate schedule for review of the application by the county.
    - (3) Make the application available for public review at the village hall.
    - (4) Accept written public comments on the application for 30 days after the class I notice is published, or until the public hearing is held, whichever is later.
    - (5) Adhere to other requirements in Shawano County Zoning Ordinance Section X.8.08 for the processing of the conditional use permit application.
  - (p) The village may hire professional consultants to assist with the review and processing of the application, and for inspection in the monitoring and reporting of the owner's compliance with permit requirements during construction. In addition to paying the required conditional use permit fee, the applicant for any large wind energy system shall reimburse the village for such consultant time, within 30 days of receipt of an invoice from the village, per the requirements and limitations in PSC 128.32(5)(b).
  - (q) Once granted, work on the conditional use permit must occur within the required timeframe in the permit. Following approval of a conditional use permit, the owner shall be required to obtain a land use permit and be subject to all applicable requirements for the permit.
  - (r) Per PSC 128.33(3), each owner of a large wind energy system shall offer an agreement that includes annual monetary compensation to the owner of a nonparticipating residence (as that term is defined in PSC 128.01), if such residence is located within one-half mile of a constructed wind turbine. For one turbine located within one-half mile of a nonparticipating residence, the initial annual monetary compensation may not exceed \$600.00. For two turbines located within one-half mile of a nonparticipating residence, the initial annual monetary compensation may not exceed \$800.00. For three or more turbines located within one-half mile of a nonparticipating residence, the initial annual monetary compensation may not exceed \$1,000.00.

The initial annual monetary compensation under this subsection shall apply to agreements entered into in 2014. For agreements entered into in 2015 and thereafter, the initial annual amounts shall increase each year by the greater of two percent or the increase in the Consumer Price Index, as described in Wis. Stats. § 196.374(5)(bm)2.b., from the previous year. An agreement offered under this subsection shall specify in writing any waiver of a requirement or right under PSC 128 and whether the landowner's acceptance of payment establishes the landowner's property as a participating property under PSC 128.

- (s) Per PSC 128.33(3m), each owner of a large wind energy system shall offer an agreement that includes monetary compensation to a farm operator farming on a nonparticipating property (as that term is

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defined in PSC 128.01) located within one-half mile of a constructed wind turbine, if the farm operator demonstrates all of the following:

- (1) Substantial evidence of a history, before the large wind energy system owner gives notice under PSC 128.105(1), of using aerial spraying for pest control or disease prevention for growing potatoes, peas, snap beans or sweet corn on all or part of a farm field located within one-half mile of a constructed wind turbine.
  - (2) A material reduction in potato, pea, snap bean or sweet corn production or a material increase in application costs on all or part of a farm field located within one-half mile of a constructed wind turbine as a result of the large wind energy system's effect on aerial spraying practices.
- (t) Per PSC 128.33(5), the planning commission or director of municipal operations may require a written report from the owner of an approved large wind energy system, no greater than once per year, documenting compliance over the previous calendar year with the requirements of this chapter, PSC 128, Wis. Stats. § 66.0401, approved plans, conditions of approval, the requirement to maintain the system in good repair and operating condition; including all necessary state and federal permits and approvals; and including the maintenance log for each wind turbine. The log must contain the date and time maintenance was performed, the nature of the maintenance performed, and the reason for the maintenance. Such written report shall be provided within 60 days of village board or director of municipal operations request.
- (u) In the event that the planning commission, following a public hearing and a recommendation of the director of municipal operations, determines that a large wind energy system does not comply with the requirements of this chapter, PSC 128, Wis. Stats. § 66.0401, approved plans, conditions of approval, and the requirement to maintain the system in good repair and operating condition, the committee may revoke the conditional use permit per section 20-1(j) of this code.

(Ord. No. 2017-03, 4-12-2017)

#### **Sec. 112-4. Miscellaneous rules come the following.**

Provisions apply to sections 112-1 through 112-3.

- (a) The Village shall not be responsible to enforce any claim of impermissible interference with the solar or wind energies systems. A civil suit shall be the remedy for anyone claiming impermissible interference with said systems.
- (b) Penalty. Any person who violates or fails to comply with the provisions of this chapter shall, upon conviction thereof, forfeit not less than \$100.00 nor more than \$500.00 plus the costs of prosecution for each offense and the penalty for default of payment of said forfeiture and costs shall be imprisonment in the county jail until such forfeiture is paid, but not exceeding six months. Each day a violation exists or continues shall constitute a separate offense.

(Ord. No. 2017-04, 4-12-2017)

**TOWN OF PLYMOUTH  
ROCK COUNTY, WISCONSIN  
ORDINANCE NO. 2022-3**

**AN ORDINANCE TO PROVIDE FOR THE REGULATION OF SOLAR ENERGY SYSTEMS.**

**RECITALS**

- A. Section 66.0401 of the Wisconsin Statutes limits and defines the ability of political subdivisions to regulate solar energy systems.
- B. The Wisconsin Public Service Commission has created regulations under said statutes which further limit and define the ability of political subdivisions to regulate solar energy systems.
- C. It is the desire of the Town Board of the Town of Plymouth to exercise such authority as it is permitted to exercise under Wisconsin law to regulate solar energy systems.

**NOW, THEREFORE**, the Town Board of the Town of Plymouth, County of Rock, State of Wisconsin, ordains as follows:

**SECTION I – TITLE AND PURPOSE**

The title of this Ordinance is the “Town of Plymouth Solar Energy Ordinance.” The purpose of this ordinance is to, within the limited authority granted to the Town Board as a political subdivision, establish regulations on the installation and use of Solar Energy Systems within the Town of Plymouth, and preserve and protect the public health and safety of the Town of Plymouth.

**SECTION II – AUTHORITY**

The Town Board of the Town of Plymouth has the specific authority under § 66.0401 Wis. Stats., and general authority under its village powers under § 60.22, Wis. Stats., to adopt this ordinance.

**SECTION III – INTENT, INTERPRETATION, ABROGATION AND LESSER RESTRICTIONS**

A. Intent

It is the general intent of this Ordinance to regulate, within the limited authority granted to the Town Board by the Sections 66.0401 and 66.0403 of the Wisconsin

Statutes, the installation and use of Solar Energy Systems within the Town of Plymouth.

B. Interpretation

The provisions of this Chapter shall be liberally construed in favor of the Town and public health and safety and shall not be deemed a limitation or repeal of any other power granted by the Wisconsin Statutes.

C. Abrogation and Lesser Restrictions

It is not intended by this Chapter to repeal, abrogate, annul, impair, or interfere with any existing easements, covenants, deed restrictions, agreements, or permits adopted or issued pursuant to law. If any specific provision of this Chapter is found to be a greater restriction than a specific restriction created by Wisconsin Statute Section 66.0401 and defined in Wisconsin Statute Section 13.48(2)(h)1.g., then the lesser restriction of Wisconsin Statute Section 66.0401 shall apply.

#### SECTION IV – DEFINITIONS

In this ordinance:

- A. "Applicant" means an Owner applying to the Town of Plymouth for approval of a Solar Energy System to be sited fully or partially within the Town of Plymouth and/or for a Permit.
- B. "Application" means an application to the Committee for approval of a Solar Energy System to be sited fully or partially within the Town of Plymouth, Rock County, Wisconsin.
- C. "Building-Integrated Solar Energy System" means a combination of building components integrated into any building envelope system such as vertical facades, including glass and other façade material, semitransparent skylight systems, roofing materials and shading over windows, rather than a separate mechanical device, for the purpose of producing electricity for on-site usage or consumption.
- D. "Commercial Communications" includes communications used by government and military entities for emergency purposes, licensed amateur radio service, and non-emergency communications used by agricultural, business, government, and military entities including aviation radar, commercial mobile radio service, fixed wireless service, global positioning, line-of-sight, microwave, Personal Communications service, weather radar, and wireless internet service.

- E. "Committee" means a Solar Energy committee composed of the members of the Town's planning and zoning committee, but excluding the member of the planning and zoning committee who is also a member of the Town Board, and adding a member of the Town's board of adjustment appointed by the Town Chair.
- F. "Community-Scale Solar Energy Systems" means a commercial Solar Energy System that converts sunlight into electricity for the primary purpose of serving electric demands off-site from the facility, either retail or wholesale. Community-Scale Solar Energy Systems are principal uses.
- G. "Decommissioning" means removing solar panels, buildings, cables, electrical components, roads, and any other facilities associated with a Solar Energy System that are located at the site of a Solar Energy System and restoring the site of the Solar Energy System, as close as reasonably possible, to the condition existing prior to installation of the Solar Energy System that was removed.
- H. "Glare" means the effect by reflections of light with intensity sufficient as determined in a commercially reasonable manner to cause annoyance, discomfort, or loss in visual performance and visibility in any material respects
- I. "Ground-Mounted Solar Energy System" means a solar energy system anchored to the ground and mounted on a rack or pole, detached from any other structure for the purpose of producing electricity for on-site or off-site usage or consumption of any kilowatt (kw) alternating current (ac) capacity.
- J. "Large-Scale Solar Energy System" means a solar energy system that is ground-mounted and produces energy for the purpose of on-site usage or consumption with system capacity of more than 25 kW AC and generates no more than 110% of the electricity consumed on the site over the previous 12 months.
- K. "Nonparticipating Property" means real property that is not a Participating Property.
- L. "Nonparticipating Residence" means a residence located on Nonparticipating Property.
- M. "Occupied Community Building" means a school, church or similar place of worship, daycare facility or public library.
- N. "Owner" means:

1. A person with a direct ownership interest in a Solar Energy System, regardless of whether the person was involved in acquiring the necessary rights, permits and approvals or otherwise planning for the construction and operation of a Solar Energy System.
  2. At the time a Solar Energy System is being developed, a person who is acting as a Solar Energy System developer by acquiring the necessary rights, permits and approvals for or by planning for the construction and operation of a Solar Energy System, regardless of whether the person will own or operate the Solar Energy System.
- O. "Participating Property" means any of the following:
1. Property on which a Solar Energy System is located.
  2. Real property that is the subject of an agreement that does all of the following: provides for the payment of monetary compensation to the landowner from an Owner regardless of whether any part of a Solar Energy System is constructed on the property; and specifies in writing any waiver of a requirement or right under this Ordinance and that the landowner's acceptance of payment establishes the landowner's property as a Participating Property.
- P. "Participating Residence" means a residence located on a Participating Property.
- Q. "Personal Communications" includes wireless telecommunications, Personal Communications service, radio, television, wireless internet service, and other systems used for personal use purposes.
- R. "Photovoltaic System" means a solar energy system that converts solar energy directly into electricity.
- S. "Residence" means an occupied primary or secondary personal residence including a manufactured home, a hospital, community-based residential facility, residential care apartment complex or similar facility, or a nursing home. "Residence" includes a temporarily unoccupied primary or secondary personal residence. "Residence" does not include any of the following: (a) recreational vehicles; (b) camping trailers; or (c) permanently abandoned personal residences.
- T. "Residential Solar Energy System" means a Roof-Mounted Solar Energy System located on a Residence.



- U. "Roof-Mounted Solar Energy System" means a solar panel system located on the roof of any legally permitted building or structure for the purpose of producing electricity for on-site usage or consumption of any kilowatt (kw) alternating current (ac) capacity.
- V. "Solar Access" means an unobstructed access to direct sunlight on a lot or building through the entire year, including access across adjacent parcel air rights, for the purpose of capturing direct sunlight to operate a solar energy system.
- W. "Solar Collector" means a device, structure or a part of a device or structure for which the primary purpose is to transform solar radiant energy into thermal, mechanical, chemical, or electrical energy.
- X. "Solar Energy Equipment" means electrical energy storage devices, material, hardware, inverters or other electrical equipment and conduit of photovoltaic devices associated with the production of electrical energy.
- Y. "Solar Energy System" means the components and subsystems required to convert solar energy into electric energy suitable for use and storage. The term includes, but is not limited to, solar panels and solar energy equipment. The area of a solar energy system includes all the land inside the perimeter of the solar energy system, which extends to any interconnection equipment.
- Z. "Solar Energy System Emergency" means a condition or situation at a Solar Energy System that presents a significant threat of physical danger to human life or a significant threat to property or a natural event that causes damage to Solar Energy System Facilities.
- AA. "Solar Farm" means the use of land where a series of one or more solar collectors are placed in an area on a parcel of land for the purpose of generating photovoltaic power and said series of one or more solar collectors placed in an area on a parcel of land collectively has nameplate generation capacity of more than 25 kW alternating current ("AC") or more when operating at maximum efficiency for the purpose of off-site sale, usage, and/or consumption. The term solar farm shall not be construed to include, so as to prohibit, or have the effect of prohibiting, the installation of a solar collector that gathers solar radiation as a substitute for traditional energy for water heating, active space heating and cooling, passive heating or generating electricity for a residential property. The term solar farm shall not be construed in such a way as to prohibit the installation or mounting of a series of one or more solar collectors upon the roofs of residential and/or commercial structures regardless of whether said series of one or more solar collectors collectively has a total nameplate generation more than 25kW AC when operating at maximum efficiency.

- BB. "Solar Panel" means a photovoltaic device capable of collecting and converting solar energy into electrical energy.
- CC. "Solar Thermal System" means a solar energy system that utilizes solar energy solely to heat water.
- DD. "Solar Storage Unit" means a component of a solar energy device that is used to store solar generated electricity or heat for later use.

## SECTION V – APPLICATION PROCEDURE

### A. Permits Required

No Owner may construct a Solar Energy System within the Town of Plymouth or expand an existing or previously approved Solar Energy System within the Town of Plymouth without first obtaining required permits.

### B. Reimbursement of Expenses

The Applicant shall reimburse the Town for all expenses incurred by the Town in conjunction with the review of an Application (including the fees of engineers, attorneys, planners, environmental specialists, and other consultants or experts retained by the Town).

### C. Application and Notice

1. Prior to the filing of an Application with the Town regarding a Solar Energy System, the Owner shall meet with the Town of Plymouth building inspector to discuss the application and the permit process.
2. A building and zoning permit is required for all Solar Energy Systems. Each Application for approval of Solar Energy System shall be filed with the Town Clerk and shall contain the following information:
  - a. To-scale horizontal and vertical elevation drawings signed by a professional engineer or registered architect. The drawings must show the location of the system on the building or on the property for a ground-mounted system, including the property lines.
    - (1) Pitched Roof Mounted Solar Energy Systems: For all roof-mounted systems other than a flat roof, the elevation must show the highest finished slope of the solar collector and the slope of the finished roof surface on which it is mounted. Solar Panels on pitched roofs must be mounted at the same angle as the roof's surface with a maximum distance of eight inches between the

roof and highest edge of system and not extend beyond the highest point of the roof system.

- (2) Flat Roof Mounted Solar Energy Systems: For flat roof applications, a drawing shall be submitted showing the distance to the roof edge and any parapets on the building and shall identify the height of the building on the street frontage side, the shortest distance of the system from the street frontage edge of the building, and the highest finished height of the solar collector above the finished surface of the roof. Solar Panels on flat roofs shall not extend above the top of the surrounding parapet, or more than 24 inches above the flat surface of the roof, whichever is higher.
- b. Technical description of solar panels and solar panel sites, including equipment specification sheets that document all photovoltaic panels, significant components, mounting systems and inverters that are to be installed.
- c. Timeline and process for constructing the Solar Energy System.
- d. Property operations and maintenance plan. Such plan shall describe continuing photovoltaic maintenance property upkeep, such as mowing and trimming.
- e. Information regarding anticipated impact of the Solar Energy System on local infrastructure.
- f. Information regarding anticipated Glare attributable to the Solar Energy System.
- g. Information regarding anticipated effects of the Solar Energy System on airports and airspace.
- h. A list of all state and federal permits required to construct and operate the Solar Energy System.
- i. Information regarding the planned use and modification of roads within the Town during the construction, operation, and Decommissioning of the Solar Energy System, including a process for assessing road damage caused by the Solar Energy System activities and for conducting road repairs at the Owner's expense.
- j. A Decommissioning site restoration plan providing reasonable assurances that the Owner will be able to comply with VI.
- k. A representative copy of all notices issued under this Section V.

- l. Any other information necessary to understand the construction, operation, or Decommissioning of the proposed Solar Energy System.
3. A conditional use permit is required for all Large-Scale Solar Energy Systems and Solar Farms. On the same day that an Application for a Large-Scale Solar Energy Systems or Solar Farms is filed with the Town Clerk, the Applicant shall mail or deliver written notice of the Application to the owners of land adjoining the site where the Applicant plans to install a Solar Energy System and the owners and residents of parcels adjacent to the proposed Solar Energy System.

## SECTION VI – PERMITTED ACCESSORY USE

Solar Energy Systems are a permitted accessory use in all zoning districts where structures of any sort are allowed, subject to certain requirements set forth below. Ground-Mounted Solar Energy Systems shall be an accessory building on lot or lots where there exists a primary structure. Solar Energy Systems that do not meet the following design standards will require a conditional use permit:

### A. Height

Solar Energy Systems must meet the following height requirements:

1. Building-Integrated or Roof-Mounted Solar Energy Systems shall not exceed the maximum allowed height in any zoning district. For purposes of height measurement, Solar Energy Systems other than Building-Integrated Solar Energy Systems shall be given an equivalent exception to height standards as building-mounted mechanical devices or equipment.
2. Ground-Mounted Solar Energy Systems shall not exceed 15 feet in height when oriented at maximum tilt.

### B. Setback

Solar Energy Systems must meet the accessory structure setback for the zoning district and primary land use associated with the property on which the system is located, except as allowed below:

1. Building-Integrated or Roof-Mounted Solar Energy Systems – the collector surface and mounting devices for Roof-Mounted Solar Energy Systems shall not extend beyond the exterior perimeter of the building on which the system is mounted or built, unless the collector and mounting system has been explicitly engineered to safely extend beyond the edge, and setback standards are not violated. Exterior piping for solar hot water systems shall be allowed to extend beyond the perimeter

of the building on a side-yard exposure. Solar Collectors mounted on the sides of buildings and serving as awnings are considered to be Building-Integrated Systems and are regulated as awnings.

2. Ground-Mounted Solar Energy Systems – the Solar Collector may not extend into the side-yard or rear setback when oriented at minimum design tilt, except as otherwise allowed for building mechanical systems.

#### C. Visibility

Solar Energy Systems in residential districts shall be designed to minimize visual impacts from the public from the public right-of-way, to the extent that doing so does not affect the cost or efficacy of the system, consistent with Wis. Stat. §66.0401.

1. Building-Integrated Solar Energy Systems – it is anticipated that Building-Integrated Solar Energy Systems shall be visible from the public right-of-way, but must still meet all required setbacks, land uses, or performance standards for the district in which the building is located.
2. Aesthetic Restrictions – Roof-Mounted or Ground-Mounted Solar Energy Systems shall not be restricted for aesthetic reasons if the system is not visible from the closest edge of any public-right-of-way other than an alley, or if the system meets the following standards:
  - a. Roof-Mounted Solar Energy Systems on pitched roofs that are visible from the nearest edge of the front right-of-way shall have the same finished pitch as the roof and be no more than ten (10) inches above the roof.
  - b. Roof-Mounted Solar Energy Systems on flat roofs that are visible from the nearest edge of the front right-of-way shall not be more than five feet above the finished roof and are exempt from any rooftop equipment or mechanical system screening.
3. Reflectors – All Solar Energy Systems using a reflector to enhance solar production shall minimize Glare from the reflector affecting adjacent or nearby properties.

#### D. Lot Coverage

Ground-Mounted Solar Energy Systems total collector area shall not exceed half the building footprint of the principal structure, if applicable.

1. Ground-Mounted Solar Energy Systems shall be exempt from lot coverage or impervious surface standards if the soil under the collector is maintained in vegetation and not compacted, and the system area is less than one acre in size.
2. Ground-Mounted Solar Energy Systems shall not count toward accessory structure limitations.
3. Solar carports in non-residential districts are exempt from lot coverage limits.

E. Approved Solar Components

Electric Solar Energy System components must have a UL or equivalent listing and solar hot water systems must have an ICC Evaluation Service Solar Rating & Certification Corporation rating.

F. Compliance with Building Code

All Solar Energy Systems shall meet approval of local building code officials, consistent with the State of Wisconsin Building Code, and solar thermal systems shall comply with HVAC-related requirements of the Energy Code.

G. Compliance with State Electric Code

All Photovoltaic Systems shall comply with the Wisconsin State Electric Code.

H. Compliance with State Plumbing Code

Solar Thermal Systems shall comply with the applicable Wisconsin state Plumbing Code requirements.

I. Utility Notification

All grid-intertie Solar Energy Systems shall comply with the interconnection requirements of the electric utility. Off-grid systems are exempt from this requirement.

## SECTION VII – PRINCIPAL USES

A. Principal Uses

The Town of Plymouth encourages the development of Community-Scale Solar Energy Systems where such systems present few land-use conflicts with current and future development patterns. Ground-Mounted Solar Energy Systems that are the principal use on the development lot or lots are conditional uses in all districts.

B. Principal Use General Standards

1. Site Design

- a. Setbacks – Community-Scale and Large-Scale Solar Energy Systems must meet the following setbacks:
  - (1) Property line setbacks for buildings or structures in the district in which the system is located.
  - (2) Roadway setback of 150 feet from the Right-of-way centerline of state and county highways, 100 feet for Town roads.
  - (3) Housing unit setback of 150 feet from any existing dwelling unit or more if set forth in this Zoning Ordinance.
  - (4) Setback distance should be measured from the edge of the Solar Energy System array, excluding security fencing, screening, or berm.
- b. Screening – Community-Scale and Large-Scale Solar Energy Systems shall be screened from existing Residences.
  - (1) A screening plan shall be submitted identifying the type and extent of screening.
  - (2) screening shall not be required along property lines within the same zoning district, except where the adjoining lot has an existing Residence.
  - (3) The Town may require screening where it determines there is a clear community interest in maintaining a viewshed.
- c. Ground cover and buffer areas – the following provisions shall apply to the clearing of existing vegetation and establishment of vegetated ground cover:
  - (1) Large-scale removal of mature trees on the site is discouraged; Owners shall take all reasonable steps to preserve mature trees.
  - (2) Applicant shall submit a vegetative management plan prepared by a qualified professional or reviewed and approved by a natural resource agency or authority, such as the Wisconsin Department of Natural Resources, County Land Conservation Department, or Natural Resource Conservation Service. The plan shall identify:

- i. The natural resource professionals consulted or responsible for the plan.
  - ii. The conservation, habitat, eco-system, or agricultural goals, which may include: providing habitat for pollinators such as bees and monarch butterflies, providing habitat for wildlife such as upland nesting birds and other wildlife, establishing vegetation for livestock grazing, reducing on-site soil erosion, and improving or protecting surface or ground-water quality.
  - iii. The intended mix of vegetation upon establishment.
  - iv. The management methods and schedules for how the vegetation will be managed on an annual basis, with particular attention given to the establishment period of approximately three years.
- (3) Soils shall be planted and maintained in perennial vegetation for the full operational life of the project, to prevent erosion, manage runoff and build soil.
- (4) Vegetative cover should include a mix of perennial grasses and wildflowers that will preferably result in a short stature prairie with a diversity of forbs or flowering plants that bloom throughout the growing season. Blooming shrubs may be used in buffer areas as appropriate for visual screening. Perennial vegetation (grasses and forbs) are preferably native to Wisconsin, but where appropriate to the vegetative management plan goals, may also include other naturalized and non-invasive species which provide habitat for pollinators and wildlife and/or other ecosystem services (i.e. clovers).
- (5) Plant material must not have been treated with systemic insecticides, particularly neonicotinoids.
- d. Foundations – a qualified engineer shall certify that the foundation and design of the Solar Panel racking and support is within accepted professional standards, given local soil and climate conditions.
  - e. Power and communication lines – power and communication lines running between banks of Solar Panels and to nearby electric substations or interconnections with buildings shall be buried underground. Exemptions may be granted by the Town in instances where shallow bedrock, water courses, or other elements of the natural landscape interfere with the ability to bury lines, or distance makes undergrounding infeasible, at the discretion of the Town Board.



2. Stormwater and NPDES

Solar farms are subject to the Rock County Stormwater Management and Erosion Control Ordinance and NPDES permit requirements.

3. Compliance

All Solar Farms shall be in compliance with all applicable local, state, and federal regulatory codes, including the State of Wisconsin Uniform Building Code, as amended, and the National Electric Code, as amended.

4. Site Plan Required

The applicant shall submit a detailed site plan for both existing and proposed conditions, showing locations of all solar arrays, other structures, property lines, right-of-way, service roads, floodplains, wetlands, and other protected natural resources, topography, electric equipment, and all other characteristics requested by the Town. This site plan shall show all zoning districts and overlay districts.

5. Aviation Protection

For Solar Farms located within approach zones of an airport, the Applicant must complete and provide the results of a glare analysis through a qualitative analysis of potential impact, field test demonstration, or geometric analysis of ocular impact in consultation with the Federal Aviation Administration ("FAA") Office of Airports, consistent with the Interim Policy, FAA Review of Solar Energy Projects on Federally Obligated Airports, or most recent version adopted by the FAA.

6. Agricultural Protection

Solar Farms must comply with site assessment or soil identification standards that are intended to identify agricultural soils. The Town may require mitigation for use of prime soils for solar array placement, including the following:

- a. Demonstrating co-location of agricultural uses (agrivoltaics) on the project site.
- b. The site shall be restored to agriculture at the end of life of the solar installment.
- c. Placing agricultural conservation easements on an equivalent number of prime soils acres adjacent to or surrounding the project site.

- d. Locating the project in a wellhead protection area for the purpose of removing agricultural uses from high-risk recharge areas.

## 7. Decommissioning

A Decommissioning plan shall be required to ensure that facilities are properly removed after their useful life.

- a. Decommissioning of the Solar Energy System must occur in the event the project is not in use for 12 consecutive months.
- b. The plan shall include provisions for removal of all structures and foundations, restoration of soil and vegetation, and assurances that financial resources will be available to fully decommission the site.
- c. The Town may require the posting of a bond, letter of credit, or the establishment of an escrow account to ensure proper Decommissioning.

## C. Community-Scale Solar Energy Systems

The Town permits the development of Community-Scale Solar Energy Systems, subject to the following standards and requirements:

1. Rooftop gardens permitted – rooftop Community-Scale Solar Energy Systems are permitted in all districts where buildings are permitted.
2. Community-scale uses – Ground-Mounted Community-Scale Solar Energy Systems must cover no more than one (1) acre, and are a permitted use in industrial and agricultural districts, and permitted with standards or conditional in all other non-residential districts. Ground-Mounted Solar Energy Systems covering more than one (1) acre shall be considered Large-Scale Solar Energy Systems.
3. Dimensional standards – all structures must comply with setbacks and height standards for the district in which the system is located.
4. Other standards – Ground-Mounted Solar Energy Systems must comply with all required standards for structures in the district in which the system is located.

## D. Large-Scale Solar Energy Systems

Ground-Mounted Solar Energy Systems that are the primary use on the Participating Property, designed for providing energy to off-site uses or export to the wholesale market, are conditional uses in agricultural districts, industrial districts, shoreland and

floodplain overlay districts, and in the landfill/brownfield overlay district for sites that have completed remediation.

#### SECTION VII – PENALTIES AND ENFORCEMENT

Any person who violates any of the prohibitions, restrictions and requirements set forth in this Ordinance or any conditions established under a permit issued under this Ordinance shall be in violation of this Ordinance and the Town Board may initiate action in any court of competent jurisdiction to impose a forfeiture and/or enjoin the violation. Any person shall, upon conviction of any such violation, forfeit not less than \$200 nor more than \$5,000 for each day the violation continues, together with the costs of prosecution, and, in default of payment, shall be imprisoned in the county jail until such forfeiture is paid, but not to exceed ninety (90) days.

#### SECTION IX – EFFECTIVE DATE

This Ordinance shall take effect and be in force from and after the day after passage and publication as required by law.

\_\_\_\_\_  
Donald Bomkamp, Chairperson

\_\_\_\_\_  
Benjamin Snare, Supervisor

\_\_\_\_\_  
Shawn Mielke, Supervisor

Attest:

\_\_\_\_\_  
Debbie Finnegan, Town Clerk



**ORDINANCE NO. 2023-14**

**VILLAGE OF YORKVILLE  
RACINE COUNTY, WISCONSIN**

**AN ORDINANCE AMENDING EXHIBIT A TO SECTION 55-1(A) OF THE VILLAGE OF YORKVILLE ZONING ORDINANCE BY REVISING THE TITLE AND DIVISION REFERENCES OF ARTICLE IX, CREATING DIVISION 2 OF ARTICLE IX ENTITLED “SOLAR ENERGY SYSTEMS,” AND CREATING SECTION 20-1475 PERTAINING TO SOLAR ENERGY SYSTEMS**

WHEREAS, the Village Board of the Village of Yorkville having determined that it is appropriate to amend the Village of Yorkville Zoning Ordinance to incorporate the requirements of Wis. Stat. §66.0401, and any applicable amendments thereto, as a local ordinance and to establish local regulations on the installation and use of large and small solar systems that are authorized by, compliant with, and no more restrictive than Wisconsin statutes and the rules of the Wisconsin Public Service Commission and that serve to preserve or protect the public health or safety, do not significantly increase the cost of the system or significantly decrease energy system efficiency; and

WHEREAS, the Village of Yorkville Plan Commission having held a duly noticed public hearing on the proposed creation of Section 20-1475 within Exhibit A to Section 55-1(a) of the Zoning Ordinance of the Village of Yorkville (“Section 20-1475”); and

WHEREAS, following said public hearing, the Plan Commission having found that the proposed provisions of Section 20-1475 are appropriate and in the best interests of the residents and owners of property within the Village of Yorkville and having recommended the creation of said proposed section of the Zoning Ordinance to the Village Board of the Village of Yorkville; and

WHEREAS, the Village Board of the Village of Yorkville having reviewed the proposed creation of Section 20-1475 of the Zoning Ordinance of the Village of Yorkville and having considered the recommendation of the Plan Commission and having determined that the creation of the proposed section to the Zoning Ordinance is in the best interests of the residents and owners of property within the Village of Yorkville.

NOW, THEREFORE, the Village Board of the Village of Yorkville. does hereby ordain as follows:

**SECTION I.**

Section 20-1475 of the Zoning Ordinance of the Village of Yorkville is hereby created to provide as follows:

**“Division 2. Solar Energy Systems**

## **Sec. 20-1475 Solar Energy Systems.**

### **(a) Definitions**

- (1) Agrivoltaics - A solar energy system co-located on the same parcel of land as agricultural production, including crop production, grazing, apiaries, or other agricultural products or services.
- (2) Building-integrated Solar Energy Systems - A solar energy system that is an integral part of a principal or accessory building, rather than a separate mechanical device, replacing or substituting for an architectural or structural component of the building. Building-integrated systems include but are not limited to photovoltaic or hot water solar energy systems that are contained within roofing materials, windows, skylights, and awnings.
- (3) Community-Scale Solar Energy System - A commercial solar energy system that converts sunlight into electricity for the primary purpose of serving electric demands off-site from the facility, either retail or wholesale. Community-scale systems are principal uses and projects typically cover less than 1 acre.
- (4) Community Solar Garden - A solar energy system that provides retail electric power (or a financial proxy for retail power) to multiple community members or businesses residing or located off-site from the location of the solar energy system. Also referred to as shared solar.
- (5) Grid-intertie Solar Energy System - A photovoltaic solar energy system that is connected to an electric circuit served by an electric utility company.
- (6) Ground-mount - A solar energy system mounted on a rack or pole that rests or is attached to the ground. Ground-mount systems can be either accessory or principal uses.
- (7) Large-Scale Solar Energy System - A commercial solar energy system that converts sunlight into electricity for the primary purpose of retail or wholesale sales of generated electricity to many customers and/or is not primarily for consumption of electricity on the property on which the system is located. A large-scale solar energy system will have a project size greater than 1 acre and is the principal land use for the parcel(s) on which it is located.
- (8) Off-grid Solar Energy System - A photovoltaic solar energy system in which the circuits energized by the solar energy system are not electrically connected in any way to electric circuits that are served by an electric utility company.

- (9) Passive Solar Energy System - A solar energy system that captures solar light or heat without transforming it to another form of energy or transferring the energy via a heat exchanger.
- (10) Photovoltaic System - A solar energy system that converts solar energy directly into electricity.
- (11) Renewable Energy Easement, Solar Energy Easement - An easement that limits the height or location, or both, of permissible development on the burdened land in terms of a structure or vegetation, or both, for the purpose of providing access for the benefited land to sunlight passing over the burdened land, consistent with Wis. Statutes 700.35.
- (12) Roof-mount - A solar energy system mounted on a rack that is fastened to or ballasted on a structure roof. Roof-mount systems are accessory to the principal use.
- (13) Roof Pitch - The final exterior slope of a roof calculated by the rise over the run, typically but not exclusively expressed in twelfths such as 3/12, 9/12, 12/12.
- (14) Solar Access - Unobstructed access to direct sunlight on a lot or building through the entire year, including access across adjacent parcel air rights, for the purpose of capturing direct sunlight to operate a solar energy system.
- (15) Solar Carport - A solar energy system of any size that is installed on a carport structure that is accessory to a parking area, and which may include electric vehicle supply equipment or energy storage facilities.
- (16) Solar Collector - A device, structure or a part of a device or structure for which the primary purpose is to transform solar radiant energy into thermal, mechanical, chemical, or electrical energy. The collector does not include frames, supports, or mounting hardware.
- (17) Solar Daylighting - Capturing and directing the visible light spectrum for use in illuminating interior building spaces in lieu of artificial lighting, usually by adding a device or design element to the building envelope.
- (18) Solar Energy - Radiant energy received from the sun that can be collected in the form of heat or light by a solar collector.
- (19) Solar Energy System - A device, array of devices, or structural design feature, the purpose of which is to provide for generation or storage of electricity from sunlight, or the collection, storage and distribution of solar energy for space heating or cooling, daylight for interior lighting, or water heating.

- (20) Solar Hot Air System - (also referred to as Solar Air Heat or Solar Furnace) - A solar energy system that includes a solar collector to provide direct supplemental space heating by heating and re-circulating conditioned building air. The most efficient performance includes a solar collector to preheat air or supplement building space heating, typically using a vertically mounted collector on a south-facing wall.
  - (21) Solar Hot Water System - A solar energy system that includes a solar collector and a heat exchanger that heats or preheats water for building heating systems or other hot water needs, including residential domestic hot water and hot water for commercial processes.
  - (22) Solar Mounting Devices - Racking, frames, or other devices that allow the mounting of a solar collector onto a roof surface or the ground.
  - (23) Solar Resource-A view of the sun from a specific point on a lot or building that is not obscured by any vegetation, building, or object for a minimum of four hours between the hours of 9:00 AM and 3:00 PM Standard time on all days of the year, and can be measured in annual watts per square meter.
  - (24) Viewshed - a natural or historic environment that is visible from a viewing point.
- (b) *Permits and Approvals.* The following permits, agreements and/or approvals are required for installation of any Solar Energy System:
- (1) A building permit, zoning permit and site plan are required for all Solar Energy Systems. The owner must pay any applicable fees, and provide any information specified in the Village zoning ordinance with permit applications. Site plans shall contain to-scale horizontal and vertical (elevation) drawings. The drawings must show the location of the system on the building or on the property for a ground-mount system, including the property lines
  - (2) A conditional use permit is required for all Large-Scale Solar Energy Systems designed for operation at a capacity of less than 100 megawatts. A conditional use permit application must be on a form approved or provided the Village and follow the regulations of the Village ordinance.
  - (3) Plan Approvals - Applications shall require review and recommendation by the Plan Commission and approval by the Village Board. Plan approval does not indicate compliance with Building Code or Electric Code. For Large-Scale Solar Energy Systems, written confirmation by the Union Grove – Yorkville Fire Department that the project site can be safely accessed for fire and rescue calls must be obtained by the applicant and



submitted to the Village.

- (4) Solar Energy Systems designed for operation at a capacity of 100 megawatts or more do not require a conditional use permit but shall follow the requirements of the Public Service Commission, and must enter into a Memorandum of Understanding with the Village on the specific matters set forth below in Subsection (d).
- (c) *Solar Energy System - Accessory Use.* Solar Energy systems which are not a principal use are a permitted accessory use in all zoning districts where structures of any sort are allowed, subject to certain requirements as set forth below. Solar carports and associated electric vehicle charging equipment are a permitted accessory use on surface parking lots in all districts regardless of the existence of another building. Solar Energy Systems that do not meet the following design standards will require a conditional use permit.
- (1) Height - Solar energy Systems must meet the following height requirements:
    - a. Building or roof-mounted solar energy systems shall not exceed the maximum allowed height in the underlying zoning district. For purposes of height measurement, solar energy systems other than building-integrated systems shall be given an equivalent exception to height standards as building-mounted mechanical devices or equipment.
    - b. Ground or pole-mounted solar energy systems shall not exceed 15 feet in height when oriented at maximum tilt.
  - (2) Setback. Solar Energy Systems must meet the accessory structure setback for the zoning district and primary land use associated with the lot on which the system is located, except as allowed below.
  - (3) Roof or Building-Mounted Solar Energy Systems. The collector surface and mounting devices for roof-mounted Solar Energy Systems shall not extend beyond the exterior perimeter of the building on which the system is mounted or built, unless the collector and mounting system has been explicitly engineered to safely extend beyond the edge, and setback standards are not violated. Exterior piping for solar hot water systems shall be allowed to extend beyond the perimeter of the building on a side-yard exposure. Solar collectors mounted on the sides of buildings and serving as awnings are considered to be building-integrated systems and are regulated as awnings.
  - (4) Ground-mounted Solar Energy Systems - Ground-mounted solar energy systems may not extend into the side-yard or rear-yard setback when

oriented at minimum design tilt, except as otherwise allowed for building mechanical systems.

- (5) Building Integrated Photovoltaic Systems - Building integrated photovoltaic solar energy systems shall be allowed provided the building component in which the system is integrated meets all required setbacks, land use, or performance standards for the district in which the building is located.
  - (6) Aesthetic restrictions - Roof-mount or ground-mount solar energy systems shall not be restricted for aesthetic reasons.
  - (7) Reflectors. All Solar Energy Systems using a reflector to enhance solar production shall minimize glare from the reflector affecting adjacent or nearby properties.
  - (8) Lot Coverage. Ground-mount systems total collector area shall not exceed half the building footprint of the principal structure if applicable.
    - a. Ground-mount systems shall be exempt from lot coverage or impervious surface standards if the soil under the collector is maintained in vegetation and not compacted, and the system area is less than one acre in size.
    - b. Ground-mounted systems shall not count toward accessory structure limitations.
    - c. Solar carports in non-residential districts are exempt from lot coverage limitations.
- (d) *Solar Energy System Principal Use - Large-Scale Solar Energy Systems designed for operation at a capacity of less than 100 megawatts.* The development of commercial or utility scale Solar Energy Systems are permitted where such systems present few land conflicts with current and future development patterns. Large-Scale Solar Energy Systems designed for operation at a capacity of less than 100 megawatts are conditional uses.
- (1) Principal Use General Standards.

Solar Energy System in the A-1, A-2, A-4, and I-1 Districts.

- a. Minimum lot size and frontage: 10 acres with 300 feet on a public street.
- b. Minimum setbacks: as measured from the foundation of any associated system building, the outer edge of battery storage system, converter or inverter or from the solar collector extended at

full tilt parallel to the ground:

1. Street yard - not less than 65 feet from the right-of-way of all Federal, State, and County Trunk highways and not less than 40 feet from the right-of-way of all other roads
  2. Side yard - not less than 50 feet from the property boundary lines of non- participating landowners and 100 feet from any adjacent landowner dwelling unit.
  3. Shore yard - not less than 75 feet
  4. For adjoining participating landowners, the setback requirement may be established pursuant to mutual agreement between Solar Energy System Owner and participating property owners.
- c. Maximum height for solar collectors: 15 feet in height when oriented at maximum tilt.
- d. Shall not be located within the 100-year floodplain.
- e. Shall not be located within a designated wetland.
- f. Any buildings associated with the Solar Energy System shall meet the building requirements specified in the underlying zoning district related to building size and height.
- g. Any Solar Energy System that is on-grid shall comply with the Public Service Commission of Wisconsin's Rule 119, Rules for Interconnecting Distributed Generation Facilities.
- h. Agreement Exhibits: The following exhibits shall be submitted:
1. Proposed Site Plan: Exhibit A is the proposed plan for above-ground facilities of the Solar Energy System.
  2. Proposed Haul Route: Exhibit B is a map depicting proposed Solar Energy System equipment Haul Routes.
  3. Construction Schedule: Exhibit C is the proposed Construction Schedule.
  4. Vegetation Management Plan: Exhibit D is the Vegetation Management Plan.

5. Drain Tile Management Plan: Exhibit E is the Drain Tile Management Plan.
  6. Decommissioning Plan: Exhibit F is the Decommissioning Plan.
- i. Archeology: Shall conduct an Archeological Site Assessment with review by the Wisconsin State Historical Preservation Office.
  - j. Fencing: Other than the fencing directly surrounding the Solar Energy System substation, O&M and BESS the Solar Energy System perimeter fencing shall consist of "deer fencing" (wire mesh), which can be described in greater detail as a six (6) to ten (10) foot in height woven wire partition with posts. Fences will be set within/inside property lines or rights-of-way edges unless otherwise requested from the landowner.
    1. Installed fencing shall be adequately maintained at all times during the Solar Energy System operation. The depths of the fence posts shall be installed per prudent engineering practice based on the height of the fence and the type and slope of the terrain. Impairments to either the woven wire or wooden posts shall be remedied within two weeks of written notification from the Village's Zoning Administrator, Code Enforcement Officer, or designee. "Leaning" of the fence shall not be allowed to exceed plus or minus 10 degrees of perpendicular. In the event leaning or tilting of the fence does occur, it will be corrected back to perpendicular within two weeks of receiving written notice on the issue.
  - k. Visual Considerations: The Solar Energy System shall not be used for any type of advertising. The Solar Energy System may erect and maintain a single Solar Energy System identification sign subject to sign requirements of Article IX of Exhibit A to Section 55-1(a). The Solar Energy System shall be minimally lighted so as not to disturb neighboring properties. Necessary lighting to provide safety and security of facilities shall meet the lighting requirements of Section 20-1065 of Exhibit A of the Municipal Code for the Village. Solar Energy System will provide the Village with a description of permanent Solar Energy System lighting plans as part of the conditional use process.
  - l. Drain Tile: Solar Energy System shall contract with an experienced and qualified regional drain tile contractor to gather information concerning participating landowner drain tile, avoid said tile where commercially reasonable, and mitigate the landowner and non-

participating landowners' drainage issues where significant impact is expected as a result of drain tile alteration. The Solar Energy System Owner agrees to discuss and address identified drain tile concerns at the post-construction meeting to finalize remedies to known drainage issues on either participating or non-participating property. Solar Energy System Owner shall receive, investigate, and remedy drain tile issues due to the Solar Energy System that arise subsequent to the post-construction meeting pursuant to the Drain Tile Management Plan attached hereto as Exhibit E.

1. If drainage infrastructure or systems are damaged by the Solar Energy System and the result is reduced drainage performance that adversely affects non-participating landowners, Solar Energy System Owner shall restore the drainage infrastructure or system to pre-existing condition or better in accordance with the Drain Tile Management Plan attached as Exhibit E. Pre-existing condition shall mean the flow capacity existing immediately prior to the Solar Energy System commencing construction. If previous flow capacity cannot be determined, Solar Energy System Owner and landowners agree to negotiate an adequate solution in good faith. Solar Energy System Owner is responsible for all expenses related to repairs, restoration, relocations, reconfigurations and replacements of drainage infrastructure and systems that are damaged by the Solar Energy System as provided in Exhibit E. The intent of this Section is to make landowners whole where drainage infrastructure or systems are damaged by the Solar Energy System. For example, and without limitation due to enumeration, if damage to drainage infrastructure or systems is caused by the Solar Energy System on a participating property ("Solar Energy System - related Damage"), and the Solar Energy System-related Damage causes damages to non-participating property owners upstream of the Solar Energy System-related Damage, including crop loss and/or blowout damage to the drain tile system on the non-participating owner's property, Solar Energy System Owner shall reasonably compensate the non-participating owner for crop loss and for repairs to the non-participating property owner's drain tile system. Solar Energy System Owner agrees to cooperate with non-participating landowners as outlined in Exhibit E that desire to repair or replace drainage tile affecting their properties to the extent that such work does not interfere with the Solar Energy System or its related facilities. Solar Energy System Owner will not unreasonably withhold approval for access to the Property that lies outside of any fenced solar collector area,

to the extent participating property owners also agree to such access.

2. For purposes of this agreement, participating landowner or property owner shall mean a property owner who has signed a solar lease and easement agreement, collection easement, or purchase option for the use of his or her property for solar generation, construction access, and/or placement of facilities associated with the Solar Energy System. Non-participating landowner or property owner shall mean a property owner who is not a participating landowner. A solar lease and easement agreement does not include a good neighbor agreement.
- m. Stormwater Management and Erosion Control: Solar Energy System Owner shall ensure compliance with Chapter 10, Article IX (“Erosion Control”) and Article X (Post-Construction Storm Water Management”) of the Municipal Code of Village of Yorkville, and shall ensure that a plan for compliance with said chapter is presented at the pre-construction meeting. Solar Energy System Owner will comply with stormwater and erosion control requirements imposed by the Wisconsin Department of Natural Resources (WDNR).
- n. Ground cover and buffer areas: The following provisions shall be met related to the clearing of existing vegetation and establishment of vegetated ground cover. Additional requirements and standards may apply as required by the Village.
1. Large-scale removal of mature trees on the site is discouraged. The Village may set additional restrictions on tree clearing or require mitigation for cleared trees.
  2. To the greatest extent possible, the topsoil shall not be removed during development, unless part of a remediation effort.
  3. Soils shall be planted and maintained for the duration of operation in perennial vegetation to prevent erosion, manage run off, and improve soil.
  4. Seeds should include a mix of grasses and wildflowers (pollinator habitat), exclusively native to the region of the Solar Energy System site that, which will result in a short stature prairie with a diversity of forbs or flowering plants that bloom throughout the growing season. Blooming shrubs may be used in buffer areas as appropriate for visual screening.

5. Seed mixes and maintenance practices shall be consistent with those recommendations made by the Village and/or Wisconsin DNR.
  6. The applicant shall submit a financial guarantee in the form of a letter of credit, cash deposit or bond in favor of the Village equal to one hundred twenty-five (125) percent of the costs to meet the ground cover and buffer area standard. The financial guarantee shall remain in effect until vegetation is 75% established.
  7. Solar Energy System Owner shall contact every owner of property with a residential dwelling immediately adjacent to solar collector and discuss in good faith a reasonable, strategically-located visual buffer of plants that, upon mutual agreement, shall be installed at Solar Energy System Owner's expense prior to the completion of construction of the Solar Energy System. Where the Solar Energy System Owner and the adjacent property owner are unable to agree on the type of visual buffer and the adjacent property owner makes a request in writing to Solar Energy System Owner to provide a visual buffer, the Solar Energy System owner shall install a vegetative buffer on the Solar Energy System site equal to the length of the non-participating residence and designed to achieve at least 50% opacity at ground level within 5 years. Proposals and plans for vegetative buffers will be finalized in writing by the pre-construction meeting with the Village.
  8. Solar Energy System Owner shall submit a vegetative buffer plan for a visual barrier along all roadways subject to approval by the Village.
- o. Road Use: The Solar Energy System Owner and its successors, assigns, contractors, agents and representatives may use public roads as part of the construction, operation, maintenance and repair of the Solar Energy System. The Solar Energy System Owner acknowledges that in connection with construction, operation and maintenance of electric collection lines, communications cables and other equipment, that Solar Energy System facilities may cross road rights-of-way and/or drainage systems. The Solar Energy System Owner agrees that it shall seek and obtain all permits typically required of others, including permits required under Section 38-81 of the Village's Code of Ordinances, entitled "Occupancy of public rights-of-way."

1. The Solar Energy System Owner further agrees that the construction process may cause wear, tear, and damage to the Haul Route roads identified in Exhibit B above. In addition to providing the Village engineer with a written description of the designated haul roads, vehicles to be utilized, and the type of materials being hauled to or removed from a project site, the engineer shall be provided sufficient time to inspect the designated haul roads before they are used. Said inspection shall include, if requested, a representative of the Solar Energy System Owner. The engineer will document any deficiencies or special conditions regarding the existing roads and structures. During the hauling operations, the Solar Energy System Owner and its contractors shall use only designated haul roads, observe legal weight and speed limits, provide an adequate water supply, applying water as needed to control dust, and shall perform minor preventative and repair maintenance as necessary (after giving reasonable notice to the Village engineer), to minimize damage to the haul roads. All haul roads must be maintained in a dust-controlled condition and any dust palliatives must be approved by the DNR prior to usage. The Solar Energy System Owner shall clean applicable rights-of-way of mud, dirt, stone or debris related to the project within twenty-four (24) hours after receiving verbal notice from the Village Engineer, or designee. If the rights-of-way are not cleaned up after notification, the Village reserves the right to do so at the expense of the Solar Energy System Owner. Prior to commencement of construction, the Solar Energy System Owner shall post a letter of credit in an amount approved by the Village Board, upon the recommendation of its engineer, taking into account the duration and nature of the project, haul route to be utilized and materials to be transported. All minor road repairs and general maintenance shall be inspected and approved by the Village engineer or designee to ensure that the repair or maintenance meets Village standards.
2. Throughout the construction of the Solar Energy System, the Solar Energy System Owner shall work cooperatively to maintain public road infrastructure in a safe condition for passage by the public. During the ongoing construction of the Solar Energy System, Solar Energy System Owner shall regularly monitor its designated haul roads, and at its expense, shall repair any significant damage that jeopardizes the safety of the travelling public. In the event the Village engineer or designee notifies the Solar Energy System Owner



of a safety concern to the traveling public the Solar Energy System Owner shall carry out the necessary repair to mitigate the unsafe road condition. In the event a unsafe road condition exists that presents a safety hazard to the public use of the road and is not promptly repaired by Solar Energy System Owner within one week after receipt of notice of the unsafe condition, the Village may make emergency road repairs, or order emergency road repairs to be performed by qualified contractors, and Solar Energy System Owner will promptly reimburse the Village for reasonable emergency road repairs. The Village reserves the right to access the letter of credit posted by the Solar Energy System Owner if reimbursement is not made within thirty (30) days of notice.

3. After the hauling operations are concluded, the Village engineer or designee, and Solar Energy System Owner's representative, if requested, shall jointly inspect the designated haul roads. The Village engineer will review the results of the initial and final inspections, and will consider the impacts of other parties that used the haul roads. Upon consideration of all pertinent factors, the engineer will determine the amount of restoration necessary to return the haul roads to their condition at the time of the initial inspection. The Village Board shall decide whether to permit the Solar Energy System Owner to undertake the necessary restoration, or to undertake the work as a publicly bid project, utilizing the Solar Energy System Owner's letter of credit toward the cost of the project. If there is a deficiency in the estimated cost of the project, less any proceeds posted by the Solar Energy System Owner, the Solar Energy System Owner shall submit the difference within thirty (30) days of notice.
4. Solar Energy System Owner shall be responsible for addressing applicable road use issues with other entities to the extent they have jurisdiction over roads to be used for the Solar Energy System.
  - p. Foundations: A qualified engineer shall certify, by sealed stamped and signed plans that the foundation and design of the solar panels racking and support is within accepted professional standards, given local soil and climate conditions.
  - q. Power and communication lines: Power and communication lines running between banks of solar panels and to nearby electric substations or interconnections with buildings shall be buried underground. Exemptions may be granted by the Village in instances

where shallow bedrock, water courses, or other elements of the natural landscape interfere with the ability to bury lines, or distance makes undergrounding infeasible, at the discretion of the Department as shown by adequate soil borings.

- r. Agricultural Protection: Commercial use Solar Energy Systems must comply with site assessment or soil identification standards that are intended to protect agricultural soils.
- s. Aviation Protection: For Solar Energy Systems located within 1,000 feet of an airport or within approach zones of an airport or landing strip, the applicant must complete and provide the results of the Solar Glare Hazard Analysis Tool (SGHAT) for the Airport Traffic Control Tower cab and final approach paths, consistent with the Interim Policy, FAA Review of Solar Energy Solar Energy Systems on Federally Obligated Airports, or most recent version adopted by the FAA.
- t. Decommissioning: Solar Energy System Owner shall implement the Decommissioning Plan attached as Exhibit F to this Agreement upon permanent cessation of the commercial operation of the Solar Energy System. For the purposes of this Agreement, permanent cessation of the commercial operation of the Solar Energy System shall mean that the entire Solar Energy System has ceased commercial operation for a consecutive period of twelve (12) months for reasons other than a force majeure event. The Solar Energy System shall be deemed to be in commercial operation if the Solar Energy System is under active construction activities including but not limited to construction activities in connection with Solar Energy System-wide replacements or upgrades.
  - 1. The Solar Energy System Owner acknowledges that a Decommissioning Plan shall be submitted that includes a detailed Decommissioning Cost Analysis and will provide such a plan to the Village when the analysis is available. The Solar Energy System Owner agrees that the Decommissioning Plan shall require Solar Energy System Owner to, at a minimum:
    - 2. Notify the Department when permanent cessation has been determined.
    - 3. Remove, at its expense, all Solar Energy System components including but not limited to solar collectors and associated facilities, buried wires and transmission lines, to a depth of 4 feet and properly dismantle all components that shall be

disposed of at a licensed solid waste disposal facility and/or otherwise in a manner consistent with federal, state, and local regulations;

4. Restore the land to a condition reasonably similar to pre-existing conditions, including de-compacting areas where Solar Energy System access roads were installed and any other areas of substantial soil compaction, and installing a new drainage system including drainage tile to the extent those facilities were present at the commencement of the project. The Solar Energy System's Access Roads can remain in place if requested by the property owner.
  5. Prior to the issuance of a zoning permit, the Solar Energy System owner shall post a commercially reasonable financial assurance (bond, letter of credit) in the amount of 120% of the reasonably estimated costs of decommissioning the Solar Energy System as determined by a the Village engineer, or designee. The costs of this determination are to be paid by the Solar Energy System Owner. The need for and amount of the financial assurance shall be reviewed by a qualified engineer, and if applicable, updated approximately every 5 years.
  6. All solar equipment shall be decommissioned and disposed of in accordance with State, Federal and local regulations.
- u. Replacement of Lost Property Tax Revenue: Properties hosting qualifying utility generating facilities under Chapter 76 Wis. Stats. and approved by the PSCW are removed from the local property tax roll. Solar Energy System Owner will establish a program (the "Lost Revenue Program") to reimburse the local school districts for lost revenue following completion of the Solar Energy System, when the specific, qualified utility properties are identified. The Lost Revenue Program will calculate the amount of lost revenue based on local tax rates for the land at the time the Solar Energy System is placed in service. Payment amount for each taxing authority will be increased annually by Two Percent (2%). Solar Energy System Owner will execute the Lost Revenue Program only to the extent the amount promised is recoverable by the Solar Energy System Owner through approval by the PSCW of rates under Wis. Stat. 196.20. The Solar Energy System Owner's obligation to make such payments shall be suspended if the State adopts or implements a new mechanism to replace the Utility Aid Shared Revenue payments, to the extent that the new payment system provides payments equal or greater than the payments provided herein. In such case of suspension of

payments, the Solar Energy System Owner's payment obligations as set forth herein will only be reinstated if such new payment system is eliminated by the Legislature.

v. Insurance for Solar Energy Systems as Principal Use: Large-Scale Solar Energy Systems designed for operation at a capacity of less than 100 megawatts

1. Solar Energy System Owner and its Contractors/Subcontractors:

- a) At all times during construction and operation Owner and its contractors/subcontractors shall maintain Commercial General Liability Coverage of: \$3,000,000 per occurrence; \$5,000,000 general aggregate; \$5,000,000 products-completed operations aggregate.
- b) Coverage shall list the Village as an additional insured.
- c) Coverage shall be primary and non-contributory to the insurance of the Village.
- d) Coverage shall provide a Waiver of Subrogation in favor of the Village.
- e) Umbrella/Excess Liability - \$3,000,000 each occurrence; \$5,000,000 annual aggregate; \$5,000,000 completed operations aggregate. The policy shall follow form to the Commercial General Liability policy
- f) Automobile Liability - \$1,000,000 Combined Single Limit
  - 1) Coverage shall list the Village as Additional Insureds.
- g) Workers Compensation - Workers Compensation as required by the State of Wisconsin Statute.

w. Limitations upon authority: The Village's review and action in the matter shall be subject to the limitations imposed by 66.0401, Wis. Stats. In the event the applicant believes the Village has exceeded its authority in this regard, the applicant shall notify the Village and it may reconsider the matter. In that event, the applicable permit authority of the Village may modify the requirements of this section as applied to that application, on a case-by-case basis if, and only to

the extent, such modification is necessary to ensure that applicable laws are followed. This section is intended to allow case-by-case consideration of the standards of § 66.0401(1m), Wis. Stats., as needed.

- (e) *Community-Scale Solar Energy System Standards:*
  - (1) Community-scale uses - Ground-mount Community Solar Energy Systems must cover no more than 1 acre (project boundaries) and are a conditional use in all districts. Ground-mount solar developments covering more than 1 acres shall be considered Large-Scale Solar Energy Systems.
  - (2) Dimensional standards - All structures must comply with setback and height standards for the district in which the system is located.
  - (3) Other standards - Ground-mount systems must comply with all required standards for structures in the district in which the system is located.
- (f) *Approved Solar Components.* Electric solar energy system components must have a UL or equivalent listing and solar hot water systems must have an SRCC rating.
- (g) *Compliance with Building Code.* All solar energy systems shall meet approval of the building inspector, consistent with the State of Wisconsin Building Code and solar thermal systems shall comply with HVAC related requirements of the Energy Code.
- (h) *Compliance with State Electric Code.* All photovoltaic systems shall comply with the Wisconsin State Electric Code.
- (i) *Compliance with State Plumbing Code.* Solar thermal systems shall comply with applicable Wisconsin State Plumbing Code requirements.
- (j) *Utility Notification.* All grid-intertie solar energy systems shall comply with the interconnection requirements of the electric utility. Off-grid systems are exempt from this requirement.
- (k) *Rooftop Community Solar Gardens.* Rooftop community solar garden systems are a permitted accessory use in all districts where buildings are permitted.
- (l) *Large-Scale Solar Energy Systems designed for operation at a capacity of 100 megawatts or more:* Ground-mount solar energy arrays that are the primary use on the lot, designed for providing energy to off-site uses or export to the retail or wholesale market, are permitted under the following requirements:
  - (1) Compliance with all requirements of the Public Service Commission.

- (2) Entering into a Memorandum of Understanding with the Village that addresses all areas set forth in Subsection (d).”

## SECTION II

Severability. The several sections of this ordinance are declared to be severable. If any section or portion thereof shall be declared by a court of competent jurisdiction to be invalid, unlawful or unenforceable, such decision shall apply only to the specific section or portion thereof directly specified in the decision and shall not affect the validity of any other provisions, sections or portions thereof of the ordinance. The remainder of the ordinance shall remain in full force and effect. Any other ordinance whose terms conflict with this ordinance are repealed as to those terms that conflict.

## SECTION III

Effective Date. This ordinance shall take effect immediately following passage and posting or publication as provided by law.

Adopted by the Village Board of the Village of Yorkville, Racine County, Wisconsin, this 13<sup>th</sup> day of November, 2023.

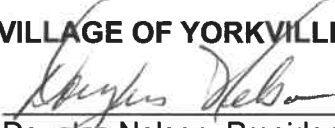
Ayes: 4

Nays: 0

Abstentions: 0

Absences: 1

### VILLAGE OF YORKVILLE

By:   
Douglas Nelson, President

Attest:   
Michael McKinney, Administrator/Clerk

**NOTICE OF PUBLIC HEARING  
VILLAGE OF YORKVILLE**

**PUBLIC NOTICE IS HEREBY GIVEN** that the Village Board and Plan Commission of the Village of Yorkville, Racine County, Wisconsin, shall hold a joint public hearing at 6:00 p.m. on Monday, November 13, 2023, in the Yorkville Village Board Room, located in the Union Grove Municipal Center, 925 15<sup>th</sup> Avenue, Union Grove, Wisconsin, regarding the following:

- Proposed revisions to Chapter 55 of the Village of Yorkville's Municipal Code of Ordinances related to solar energy facilities
- Proposed revisions to Chapter 55 of the Village of Yorkville's Municipal Code of Ordinances related to wind energy facilities

All interested parties will be heard. A copy of these proposed ordinances will be available for public inspection prior to the public hearing, beginning on Thursday, October 26, 2023, at the Village of Yorkville Administrator/Clerk's office, 925 15<sup>th</sup> Avenue, Union Grove, Wisconsin, weekdays from 8:00 a.m. to 4:30 p.m., before consideration and possible adoption by the Village Board. If you have any questions, please contact the Village Administrator/Clerk at (262) 878-2123; the e-mail for the Administrator/Clerk is [michael@villageofyorkville.com](mailto:michael@villageofyorkville.com).

Dated the 26<sup>th</sup> day of October and 2<sup>nd</sup> day of November, 2023.

Michael McKinney  
*Administrator/Clerk*

# Affidavit of Printing State of Wisconsin

County of Racine

City/Village of Union Grove

**Southern Lakes Newspapers, LLC**, certifies that it is the publisher of the Westine Report; that such paper is a secular newspaper of general circulation in said county; that it is printed and published in the village/city, county and state aforesaid. It hereby further certifies that a notice, of which the attached notice is a true copy, has been legally published in said newspaper 2 time(s) for 2 consecutive weeks(s); That the first publication was on the 26<sup>th</sup> day of October, 2023; The last publication was on the 2<sup>nd</sup> day of November, 2023.

Signed Amy Naber

By Amy Naber, for Southern Lakes Newspapers, LLC

Subscribed and sworn to before me this

2nd day of November 2023.

Karen Whittington

Notary Public, State of Wisconsin

My commission expires 1/20/26



## NOTICE OF PUBLIC HEARING VILLAGE OF YORKVILLE

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- Proposed revisions to Chapter 55 of the Village of Yorkville's Municipal Code of Ordinances related to solar energy facilities
- Proposed revisions to Chapter 55 of the Village of Yorkville's Municipal Code of Ordinances related to wind energy facilities

All interested parties will be heard. A copy of these proposed ordinances will be available for public inspection prior to the public hearing, beginning on Thursday, October 26, 2023, at the Village of Yorkville Administrator/Clerk's office, 925 15th Avenue, Union Grove, Wisconsin, weekdays from 8:00 a.m. to 4:30 p.m., before consideration and possible adoption by the Village Board. If you have any questions, please contact the Village Administrator/Clerk at (262) 878-2123; the e-mail for the Administrator/Clerk is [michael@villageofyorkville.com](mailto:michael@villageofyorkville.com).

Dated the 26th day of October and 2nd day of November, 2023.

Michael McKinney  
Administrator/Clerk

(Published in Westine Report  
Oct. 26 and Nov. 2, 2023  
WNAXLP - 446048)



**Village of Yorkville**  
**Notice of Newly Enacted Ordinances**

Please take notice that, on Monday, November 13, 2023, the Village Board of the Village of Yorkville adopted the following ordinances:

- Ordinance 2023-12, entitled "An Ordinance amending Article III of Chapter 38 of the Code of Ordinances of the Village of Yorkville, Racine County, Wisconsin, pertaining to driveways and culverts".
- Ordinance 2023-13, entitled "An Ordinance repealing and recreating Chapter 55, Article XI of the Code of Ordinances of the Village of Yorkville, Racine County, Wisconsin, pertaining to Wind Energy Facilities".
- Ordinance 2023-14, entitled "An Ordinance amending Exhibit A to Section 55-1(A) of the Village of Yorkville Zoning Ordinance by revising the title and division references of Article IX, creating Division 2 of Article IX entitled "Solar Energy Systems," and creating Section 20-1475 pertaining to Solar Energy Systems".
- Ordinance 2023-15, entitled "An Ordinance amending Chapter 56 of the Code of Ordinances of the Village of Yorkville, Racine County, Wisconsin, pertaining to floodplain regulations".

These ordinances take effect upon publication of this notice. The full text of these ordinances may be obtained from the Village of Yorkville Administrator/Clerk's office, 925 15<sup>th</sup> Avenue, Union Grove, Wisconsin 53182, or through the Village's website at [www.villageofyorkville.com](http://www.villageofyorkville.com). The phone number for the Administrator/Clerk is (262) 878-2123.

Michael McKinney  
*Administrator/Clerk*

**(4) DUTIES OF COUNCIL.** The council shall conduct an analysis of governmental services provided by the political subdivision with which the council is affiliated. In conducting such an analysis, the council shall do all of the following:

(a) Establish specific benchmarks for performance, including goals related to intergovernmental cooperation to provide governmental services.

(b) Conduct research and establish new methods to promote efficiency in the delivery of governmental services.

(c) Identify and recommend collaborative agreements to be developed with other political subdivisions to deliver governmental services.

**(5) DATA COLLECTION AND ANALYSIS.** (a) A council may conduct an analysis of a governmental service provided by the political subdivision with which the council is affiliated on its own or after receiving any of the following:

1. A written suggestion regarding delegating a governmental service to a private person.

2. A written complaint that a governmental service provided by the political subdivision is competing with the same or a similar service provided by a private person.

3. A written suggestion by a political subdivision employee or political subdivision employee labor organization to review a governmental service delegated to a private person.

(b) After receiving a suggestion or complaint under par. (a), the council shall meet to decide whether an analysis of the governmental service indicated in the suggestion or complaint is necessary. The council may hold hearings, conduct inquiries, and gather data to make its decision. If the council decides to analyze a governmental service under this paragraph, the council shall do all of the following:

1. Determine the costs of providing the governmental service, including the cost of personnel and capital assets used in providing the service.

2. Determine how often and to what extent the governmental service is provided and the quality of the governmental service provided.

3. Make a cost–benefit determination based on the findings under subs. 1. and 2.

4. Determine whether a private person can provide the governmental service at a cost savings to the political subdivision providing the service and at a quality at least equal to the quality of the service provided by the political subdivision.

5. If the council decides that a governmental service is not suitable for delegating to a private person, determine whether the governmental service should be retained in its present form, modified, or eliminated.

(c) After completing an analysis under par. (b), the council shall make a recommendation to the political subdivision providing the governmental service analyzed under par. (b) and publish the council’s recommendation. The recommendation shall specify the recommendation’s impact on the political subdivision and the political subdivision’s employees.

**(6) TRAINING AND ASSISTANCE.** The board of regents of the University of Wisconsin System shall direct the extension to assist councils created under this section in performing their duties under subs. (4) and (5). The board of regents shall ensure that council members are trained in how to do all of the following:

(a) Conduct an analysis of a governmental service.

(b) Determine ways to improve the efficiency of delivering a governmental service.

(c) Establish, quantify, and monitor performance standards.

(d) Prepare the reports required under sub. (7) (a) and (b).

**(7) REPORTS.** (a) On or before June 30, 2002, each council shall submit a report to the department describing the council’s activities.

(b) On or before June 30, 2003, each council shall submit a final report to the department describing the council’s activities and recommendations and the extent to which its recommendations have been adopted by the political subdivision with which the council is affiliated. A report submitted under this paragraph shall provide a detailed explanation of all analyses conducted under subs. (4) and (5).

(c) On or before July 31, 2003, the department shall submit a report concerning the activities and recommendations described in the reports submitted under pars. (a) and (b) to the legislature under s. 13.172 (2) and to the governor. The department’s report shall describe ways to implement such recommendations statewide.

**History:** 2001 a. 16.

**66.0317 Cooperation region. (1) DEFINITIONS.** In this section:

(a) “Cooperation region” means a federal standard metropolitan statistical area. For purposes of this section, if only a part of a county is located in a federal standard metropolitan statistical area the entire county is considered to be located in the federal standard metropolitan statistical area.

(b) “Governmental service” has the meaning given in s. 66.0316 (1) (e).

(d) “Municipality” means any city, village, or town.

**(2) AREA COOPERATION COMPACTS.** (a) 1. Except as provided in subd. 3., beginning in 2003, a municipality shall enter into an area cooperation compact with at least 2 municipalities or counties located in the same cooperation region as the municipality, or with any combination of at least 2 such entities, to perform at least 2 governmental services.

3. A municipality that is not adjacent to at least 2 other municipalities located in the same cooperation region as the municipality may enter into a cooperation compact with any adjacent municipality or with the county in which the municipality is located to perform the number of governmental services as specified under subd. 1.

(b) An area cooperation compact shall provide a plan for any municipalities or counties that enter into the compact to collaborate to provide governmental services. The compact shall provide benchmarks to measure the plan’s progress and provide outcome-based performance measures to evaluate the plan’s success. Municipalities and counties that enter into the compact shall structure the compact in a way that results in significant tax savings to taxpayers within those municipalities and counties.

**History:** 2001 a. 16, 106; 2005 a. 164; 2021 a. 238.

## SUBCHAPTER IV

### REGULATION

**66.0401 Regulation relating to solar and wind energy systems. (1e) DEFINITIONS.** In this section:

(a) “Application for approval” means an application for approval of a wind energy system under rules promulgated by the commission under s. 196.378 (4g) (c) 1.

(b) “Commission” means the public service commission.

(c) “Political subdivision” means a city, village, town, or county.

(d) “Wind energy system” has the meaning given in s. 66.0403 (1) (m).

**(1m) AUTHORITY TO RESTRICT SYSTEMS LIMITED.** No political subdivision may place any restriction, either directly or in effect, on the installation or use of a wind energy system that is more restrictive than the rules promulgated by the commission under s. 196.378 (4g) (b). No political subdivision may place any restriction, either directly or in effect, on the installation or use of a solar energy system, as defined in s. 13.48 (2) (h) 1. g., or a wind energy

system, unless the restriction satisfies one of the following conditions:

- (a) Serves to preserve or protect the public health or safety.
- (b) Does not significantly increase the cost of the system or significantly decrease its efficiency.
- (c) Allows for an alternative system of comparable cost and efficiency.

**(2) AUTHORITY TO REQUIRE TRIMMING OF BLOCKING VEGETATION.** Subject to sub. (6) (a), a political subdivision may enact an ordinance relating to the trimming of vegetation that blocks solar energy, as defined in s. 66.0403 (1) (k), from a collector surface, as defined under s. 700.41 (2) (b), or that blocks wind from a wind energy system. The ordinance may include a designation of responsibility for the costs of the trimming. The ordinance may not require the trimming of vegetation that was planted by the owner or occupant of the property on which the vegetation is located before the installation of the solar or wind energy system.

**(3) TESTING ACTIVITIES.** A political subdivision may not prohibit or restrict any person from conducting testing activities to determine the suitability of a site for the placement of a wind energy system. A political subdivision objecting to such testing may petition the commission to impose reasonable restrictions on the testing activity.

**(4) LOCAL PROCEDURE.** (a) 1. Subject to subd. 2., a political subdivision that receives an application for approval shall determine whether it is complete and, no later than 45 days after the application is filed, notify the applicant about the determination. As soon as possible after receiving the application for approval, the political subdivision shall publish a class 1 notice, under ch. 985, stating that an application for approval has been filed with the political subdivision. If the political subdivision determines that the application is incomplete, the notice shall state the reason for the determination. An applicant may supplement and refile an application that the political subdivision has determined to be incomplete. There is no limit on the number of times that an applicant may refile an application for approval. If the political subdivision fails to determine whether an application for approval is complete within 45 days after the application is filed, the application shall be considered to be complete.

2. If a political subdivision that receives an application for approval under subd. 1. does not have in effect an ordinance described under par. (g), the 45–day time period for determining whether an application is complete, as described in subd. 1., does not begin until the first day of the 4th month beginning after the political subdivision receives the application. A political subdivision may notify an applicant at any time, after receipt of the application and before the first day of the 4th month after its receipt, that it does not intend to enact an ordinance described under par. (g).

3. On the same day that an applicant makes an application for approval under subd. 1. for a wind energy system, the applicant shall mail or deliver written notice of the application to the owners of land adjoining the site of the wind energy system.

4. A political subdivision may not consider an applicant's minor modification to the application to constitute a new application for the purposes of this subsection.

(b) A political subdivision shall make a record of its decision making on an application for approval, including a recording of any public hearing, copies of documents submitted at any public hearing, and copies of any other documents provided to the political subdivision in connection with the application for approval. The political subdivision's record shall conform to the commission's rules promulgated under s. 196.378 (4g) (c) 2.

(c) A political subdivision shall base its decision on an application for approval on written findings of fact that are supported by the evidence in the record under par. (b). A political subdivision's procedure for reviewing the application for approval shall conform to the commission's rules promulgated under s. 196.378 (4g) (c) 3.

(d) Except as provided in par. (e), a political subdivision shall approve or disapprove an application for approval no later than 90 days after the day on which it notifies the applicant that the application for approval is complete. If a political subdivision fails to act within the 90 days, or within any extended time period established under par. (e), the application is considered approved.

(e) A political subdivision may extend the time period in par. (d) if, within that 90–day period, the political subdivision authorizes the extension in writing. Any combination of the following extensions may be granted, except that the total amount of time for all extensions granted under this paragraph may not exceed 90 days:

1. An extension of up to 45 days if the political subdivision needs additional information to determine whether to approve or deny the application for approval.

2. An extension of up to 90 days if the applicant makes a material modification to the application for approval.

3. An extension of up to 90 days for other good cause specified in writing by the political subdivision.

(f) 1. Except as provided in subd. 2., a political subdivision may not deny or impose a restriction on an application for approval unless the political subdivision enacts an ordinance that is no more restrictive than the rules the commission promulgates under s. 196.378 (4g) (b).

2. A political subdivision may deny an application for approval if the proposed site of the wind energy system is in an area primarily designated for future residential or commercial development, as shown in a map that is adopted, as part of a comprehensive plan, under s. 66.1001 (2) (b) and (f), before June 2, 2009, or as shown in such maps after December 31, 2015, as part of a comprehensive plan that is updated as required under s. 66.1001 (2) (i). This subdivision applies to a wind energy system that has a nominal capacity of at least one megawatt.

(g) A political subdivision that chooses to regulate wind energy systems shall enact an ordinance, subject to sub. (6) (b), that is no more restrictive than the applicable standards established by the commission in rules promulgated under s. 196.378 (4g).

**(5) PUBLIC SERVICE COMMISSION REVIEW.** (a) A decision of a political subdivision to determine that an application is incomplete under sub. (4) (a) 1., or to approve, disapprove, or impose a restriction upon a wind energy system, or an action of a political subdivision to enforce a restriction on a wind energy system, may be appealed only as provided in this subsection.

(b) 1. Any aggrieved person seeking to appeal a decision or enforcement action specified in par. (a) may begin the political subdivision's administrative review process. If the person is still aggrieved after the administrative review is completed, the person may file an appeal with the commission. No appeal to the commission under this subdivision may be filed later than 30 days after the political subdivision has completed its administrative review process. For purposes of this subdivision, if a political subdivision fails to complete its administrative review process within 90 days after an aggrieved person begins the review process, the political subdivision is considered to have completed the process on the 90th day after the person began the process.

2. Rather than beginning an administrative review under subd. 1., an aggrieved person seeking to appeal a decision or enforcement action of a political subdivision specified in par. (a) may file an appeal directly with the commission. No appeal to the commission under this subdivision may be filed later than 30 days after the decision or initiation of the enforcement action.

3. An applicant whose application for approval is denied under sub. (4) (f) 2. may appeal the denial to the commission. The commission may grant the appeal notwithstanding the inconsistency of the application for approval with the political subdivision's planned residential or commercial development if the commission determines that granting the appeal is consistent with the public interest.

(c) Upon receiving an appeal under par. (b), the commission shall notify the political subdivision. The political subdivision shall provide a certified copy of the record upon which it based its decision or enforcement action within 30 days after receiving notice. The commission may request of the political subdivision any other relevant governmental records and, if requested, the political subdivision shall provide such records within 30 days after receiving the request.

(d) The commission may confine its review to the records it receives from the political subdivision or, if it finds that additional information would be relevant to its decision, expand the records it reviews. The commission shall issue a decision within 90 days after the date on which it receives all of the records it requests under par. (c), unless for good cause the commission extends this time period in writing. If the commission determines that the political subdivision's decision or enforcement action does not comply with the rules it promulgates under s. 196.378 (4g) or is otherwise unreasonable, the political subdivision's decision shall be superseded by the commission's decision and the commission may order an appropriate remedy.

(e) In conducting a review under par. (d), the commission may treat a political subdivision's determination that an application under sub. (4) (a) 1. is incomplete as a decision to disapprove the application if the commission determines that a political subdivision has unreasonably withheld its determination that an application is complete.

(f) Judicial review is not available until the commission issues its decision or order under par. (d). Judicial review shall be of the commission's decision or order, not of the political subdivision's decision or enforcement action. The commission's decision or order is subject to judicial review under ch. 227. Injunctive relief is available only as provided in s. 196.43.

**(6) APPLICABILITY OF A POLITICAL SUBDIVISION OR COUNTY ORDINANCE.** (a) 1. A county ordinance enacted under sub. (2) applies only to the towns in the county that have not enacted an ordinance under sub. (2).

2. If a town enacts an ordinance under sub. (2) after a county has enacted an ordinance under sub. (2), the county ordinance does not apply, and may not be enforced, in the town, except that if the town later repeals its ordinance, the county ordinance applies in that town.

(b) 1. Subject to subd. 2., a county ordinance enacted under sub. (4) applies only in the unincorporated parts of the county.

2. If a town enacts an ordinance under sub. (4), either before or after a county enacts an ordinance under sub. (4), the more restrictive terms of the 2 ordinances apply to the town, except that if the town later repeals its ordinance, the county ordinance applies in that town.

(c) If a political subdivision enacts an ordinance under sub. (4) (g) after the commission's rules promulgated under s. 196.378 (4g) take effect, the political subdivision may not apply that ordinance to, or require approvals under that ordinance for, a wind energy system approved by the political subdivision under a previous ordinance or under a development agreement.

**History:** 1981 c. 354; 1981 c. 391 s. 210; 1993 a. 414; 1999 a. 150 ss. 78, 79, 84; Stats. 1999 s. 66.0401; 2001 a. 30; 2009 a. 40.

This section is a legislative restriction on the ability of municipalities to regulate solar and wind energy systems. The statute is not superseded by s. 66.0403 or municipal zoning or conditional use powers. A municipality's consideration of an application for a conditional use permit for a system under this section must be in light of the restrictions placed on local regulation by this section. *State ex rel. Numrich v. City of Mequon Board of Zoning Appeals*, 2001 WI App 88, 242 Wis. 2d 677, 626 N.W.2d 366, 00–1643.

Sub. (1) [now sub. (1m)] requires a case-by-case approach, such as a conditional use permit procedure, and does not allow political subdivisions to find legislative facts or make policy. The local governing arm must hear the specifics of the particular system and then decide whether a restriction is warranted. It may not promulgate an ordinance in which it arbitrarily sets a "one size fits all" scheme of requirements for any system. The conditions listed in sub. (1) (a) to (c) are the standards circumscribing the power of political subdivisions, not openings for them to make policy that is contrary to the state's expressed policy. *Ecker Brothers v. Calumet County*, 2009 WI App 112, 321 Wis. 2d 51, 772 N.W.2d 240, 07–2109.

**66.0403 Solar and wind access permits.** (1) **DEFINITIONS.** In this section:

(a) "Agency" means the governing body of a municipality which has provided for granting a permit or the agency which the governing body of a municipality creates or designates under sub. (2). "Agency" includes an officer or employee of the municipality.

(b) "Applicant" means an owner applying for a permit under this section.

(c) "Application" means an application for a permit under this section.

(d) "Collector surface" means any part of a solar collector that absorbs solar energy for use in the collector's energy transformation process. "Collector surface" does not include frames, supports and mounting hardware.

(e) "Collector use period" means 9 a.m. to 3 p.m. standard time daily.

(f) "Impermissible interference" means the blockage of wind from a wind energy system or solar energy from a collector surface or proposed collector surface for which a permit has been granted under this section during a collector use period if such blockage is by any structure or vegetation on property, an owner of which was notified under sub. (3) (b). "Impermissible interference" does not include:

1. Blockage by a narrow protrusion, including but not limited to a pole or wire, which does not substantially interfere with absorption of solar energy by a solar collector or does not substantially block wind from a wind energy system.

2. Blockage by any structure constructed, under construction or for which a building permit has been applied for before the date the last notice is mailed or delivered under sub. (3) (b).

3. Blockage by any vegetation planted before the date the last notice is mailed or delivered under sub. (3) (b) unless a municipality by ordinance under sub. (2) defines impermissible interference to include such vegetation.

(g) "Municipality" means any county with a zoning ordinance under s. 59.69, any town with a zoning ordinance under s. 60.61, any city with a zoning ordinance under s. 62.23 (7), any 1st class city or any village with a zoning ordinance under s. 61.35.

(h) "Owner" means at least one owner, as defined under s. 66.0217 (1) (d), of a property or the personal representative of at least one owner.

(i) "Permit" means a solar access permit or a wind access permit issued under this section.

(j) "Solar collector" means a device, structure or a part of a device or structure a substantial purpose of which is to transform solar energy into thermal, mechanical, chemical or electrical energy.

(k) "Solar energy" means direct radiant energy received from the sun.

(L) "Standard time" means the solar time of the ninetieth meridian west of Greenwich.

(m) "Wind energy system" means equipment and associated facilities that convert and then store or transfer energy from the wind into usable forms of energy.

**(2) PERMIT PROCEDURE.** The governing body of every municipality may provide for granting a permit. A permit may not affect any land except land which, at the time the permit is granted, is within the territorial limits of the municipality or is subject to an extraterritorial zoning ordinance adopted under s. 62.23 (7a), except that a permit issued by a city or village may not affect extraterritorial land subject to a zoning ordinance adopted by a county or a town. The governing body may appoint itself as the agency to process applications or may create or designate another agency to grant permits. The governing body may provide by ordinance that a fee be charged to cover the costs of processing applications.

The governing body may adopt an ordinance with any provision it deems necessary for granting a permit under this section, including but not limited to:

(a) Specifying standards for agency determinations under sub. (5) (a).

(b) Defining an impermissible interference to include vegetation planted before the date the last notice is mailed or delivered under sub. (3) (b), provided that the permit holder shall be responsible for the cost of trimming such vegetation.

**(3) PERMIT APPLICATIONS.** (a) In a municipality which provides for granting a permit under this section, an owner who has installed or intends to install a solar collector or wind energy system may apply to an agency for a permit.

(b) An agency shall determine if an application is satisfactorily completed and shall notify the applicant of its determination. If an applicant receives notice that an application has been satisfactorily completed, the applicant shall deliver by certified mail or by hand a notice to the owner of any property which the applicant proposes to be restricted by the permit under sub. (7). The applicant shall submit to the agency a copy of a signed receipt for every notice delivered under this paragraph. The agency shall supply the notice form. The information on the form may include, without limitation because of enumeration:

1. The name and address of the applicant, and the address of the land upon which the solar collector or wind energy system is or will be located.

2. That an application has been filed by the applicant.

3. That the permit, if granted, may affect the rights of the notified owner to develop his or her property and to plant vegetation.

4. The telephone number, address and office hours of the agency.

5. That any person may request a hearing under sub. (4) within 30 days after receipt of the notice, and the address and procedure for filing the request.

**(4) HEARING.** Within 30 days after receipt of the notice under sub. (3) (b), any person who has received a notice may file a request for a hearing on the granting of a permit or the agency may determine that a hearing is necessary even if no such request is filed. If a request is filed or if the agency determines that a hearing is necessary, the agency shall conduct a hearing on the application within 90 days after the last notice is delivered. At least 30 days prior to the hearing date, the agency shall notify the applicant, all owners notified under sub. (3) (b) and any other person filing a request of the time and place of the hearing.

**(5) PERMIT GRANT.** (a) The agency shall grant a permit if the agency determines that:

1. The granting of a permit will not unreasonably interfere with the orderly land use and development plans of the municipality;

2. No person has demonstrated that she or he has present plans to build a structure that would create an impermissible interference by showing that she or he has applied for a building permit prior to receipt of a notice under sub. (3) (b), has expended at least \$500 on planning or designing such a structure or by submitting any other credible evidence that she or he has made substantial progress toward planning or constructing a structure that would create an impermissible interference; and

3. The benefits to the applicant and the public will exceed any burdens.

(b) An agency may grant a permit subject to any condition or exemption the agency deems necessary to minimize the possibility that the future development of nearby property will create an impermissible interference or to minimize any other burden on any person affected by granting the permit. Such conditions or exemptions may include but are not limited to restrictions on the location of the solar collector or wind energy system and requirements for the compensation of persons affected by the granting of the permit.

**(6) RECORD OF PERMIT.** If an agency grants a permit:

(a) The agency shall specify the property restricted by the permit under sub. (7) and shall prepare notice of the granting of the permit. The notice shall include the identification required under s. 706.05 (2) (c) for the owner and the property upon which the solar collector or wind energy system is or will be located and for any owner and property restricted by the permit under sub. (7), and shall indicate that the property may not be developed and vegetation may not be planted on the property so as to create an impermissible interference with the solar collector or wind energy system which is the subject of the permit unless the permit affecting the property is terminated under sub. (9) or unless an agreement affecting the property is filed under sub. (10).

(b) The applicant shall record with the register of deeds of the county in which the property is located the notice under par. (a) for each property specified under par. (a) and for the property upon which the solar collector or wind energy system is or will be located.

**(7) REMEDIES FOR IMPERMISSIBLE INTERFERENCE.** (a) Any person who uses property which he or she owns or permits any other person to use the property in a way which creates an impermissible interference under a permit which has been granted or which is the subject of an application shall be liable to the permit holder or applicant for damages, except as provided under par. (b), for any loss due to the impermissible interference, court costs and reasonable attorney fees unless:

1. The building permit was applied for prior to receipt of a notice under sub. (3) (b) or the agency determines not to grant a permit after a hearing under sub. (4).

2. A permit affecting the property is terminated under sub. (9).

3. An agreement affecting the property is filed under sub. (10).

(b) A permit holder is entitled to an injunction to require the trimming of any vegetation which creates or would create an impermissible interference as defined under sub. (1) (f). If the court finds on behalf of the permit holder, the permit holder shall be entitled to a permanent injunction, damages, court costs and reasonable attorney fees.

**(8) APPEALS.** Any person aggrieved by a determination by a municipality under this section may appeal the determination to the circuit court for a review.

**(9) TERMINATION OF SOLAR OR WIND ACCESS RIGHTS.** (a) Any right protected by a permit under this section shall terminate if the agency determines that the solar collector or wind energy system which is the subject of the permit is:

1. Permanently removed or is not used for 2 consecutive years, excluding time spent on repairs or improvements.

2. Not installed and functioning within 2 years after the date of issuance of the permit.

(b) The agency shall give the permit holder written notice and an opportunity for a hearing on a proposed termination under par. (a).

(c) If the agency terminates a permit, the agency may charge the permit holder for the cost of recording and record a notice of termination with the register of deeds, who shall record the notice with the notice recorded under sub. (6) (b) or indicate on any notice recorded under sub. (6) (b) that the permit has been terminated.

**(10) WAIVER.** A permit holder by written agreement may waive all or part of any right protected by a permit. A copy of such agreement shall be recorded with the register of deeds, who shall record such copy with the notice recorded under sub. (6) (b).

**(11) PRESERVATION OF RIGHTS.** The transfer of title to any property shall not change the rights and duties under this section or under an ordinance adopted under sub. (2).

**(12) CONSTRUCTION.** (a) This section may not be construed to require that an owner obtain a permit prior to installing a solar collector or wind energy system.

(b) This section may not be construed to mean that acquisition of a renewable energy resource easement under s. 700.35 is in any way contingent upon the granting of a permit under this section.

**History:** 1981 c. 354; 1983 a. 189 s. 329 (14); 1983 a. 532 s. 36; 1993 a. 414; 1995 a. 201; 1999 a. 150 s. 82; Stats. 1999 s. 66.0403; 2007 a. 97; 2009 a. 40.

The common law right to solar access is discussed. *Prah v. Maretti*, 108 Wis. 2d 223, 321 N.W.2d 182 (1982).

The owner of an energy system does not need a permit under this section. Barring enforceable municipal restrictions, an owner may construct a system without prior municipal approval. This section benefits and protects the owner of the system by restricting the use of nearby property to prevent an interference with the system. *State ex rel. Numrich v. City of Mequon Board of Zoning Appeals*, 2001 WI App 88, 242 Wis. 2d 677, 626 N.W.2d 366, 00–1643.

Wisconsin recognizes the power of the sun: *Prah v. Maretti* and the solar access act. 1983 WLR 1263.

**66.0404 Mobile tower siting regulations. (1) DEFINITIONS.** In this section:

(a) “Antenna” means communications equipment that transmits and receives electromagnetic radio signals and is used in the provision of mobile services.

(b) “Application” means an application for a permit under this section to engage in an activity specified in sub. (2) (a) or a class 2 collocation.

(c) “Building permit” means a permit issued by a political subdivision that authorizes an applicant to conduct construction activity that is consistent with the political subdivision’s building code.

(d) “Class 1 collocation” means the placement of a new mobile service facility on an existing support structure such that the owner of the facility does not need to construct a free standing support structure for the facility but does need to engage in substantial modification.

(e) “Class 2 collocation” means the placement of a new mobile service facility on an existing support structure such that the owner of the facility does not need to construct a free standing support structure for the facility or engage in substantial modification.

(f) “Collocation” means class 1 or class 2 collocation or both.

(g) “Distributed antenna system” means a network of spatially separated antenna nodes that is connected to a common source via a transport medium and that provides mobile service within a geographic area or structure.

(h) “Equipment compound” means an area surrounding or adjacent to the base of an existing support structure within which is located mobile service facilities.

(i) “Existing structure” means a support structure that exists at the time a request for permission to place mobile service facilities on a support structure is filed with a political subdivision.

(j) “Fall zone” means the area over which a mobile support structure is designed to collapse.

(k) “Mobile service” has the meaning given in 47 USC 153 (33).

(L) “Mobile service facility” means the set of equipment and network components, including antennas, transmitters, receivers, base stations, power supplies, cabling, and associated equipment, that is necessary to provide mobile service to a discrete geographic area, but does not include the underlying support structure.

(m) “Mobile service provider” means a person who provides mobile service.

(n) “Mobile service support structure” means a freestanding structure that is designed to support a mobile service facility.

(o) “Permit” means a permit, other than a building permit, or approval issued by a political subdivision which authorizes any of the following activities by an applicant:

1. A class 1 collocation.
2. A class 2 collocation.
3. The construction of a mobile service support structure.

(p) “Political subdivision” means a city, village, town, or county.

(q) “Public utility” has the meaning given in s. 196.01 (5).

(r) “Search ring” means a shape drawn on a map to indicate the general area within which a mobile service support structure should be located to meet radio frequency engineering requirements, taking into account other factors including topography and the demographics of the service area.

(s) “Substantial modification” means the modification of a mobile service support structure, including the mounting of an antenna on such a structure, that does any of the following:

1. For structures with an overall height of 200 feet or less, increases the overall height of the structure by more than 20 feet.

2. For structures with an overall height of more than 200 feet, increases the overall height of the structure by 10 percent or more.

3. Measured at the level of the appurtenance added to the structure as a result of the modification, increases the width of the support structure by 20 feet or more, unless a larger area is necessary for collocation.

4. Increases the square footage of an existing equipment compound to a total area of more than 2,500 square feet.

(t) “Support structure” means an existing or new structure that supports or can support a mobile service facility, including a mobile service support structure, utility pole, water tower, building, or other structure.

(u) “Utility pole” means a structure owned or operated by an alternative telecommunications utility, as defined in s. 196.01 (1d); public utility, as defined in s. 196.01 (5); telecommunications utility, as defined in s. 196.01 (10); political subdivision; or cooperative association organized under ch. 185; and that is designed specifically for and used to carry lines, cables, or wires for telecommunications service, as defined in s. 182.017 (1g) (cq); for video service, as defined in s. 66.0420 (2) (y); for electricity; or to provide light.

**(2) NEW CONSTRUCTION OR SUBSTANTIAL MODIFICATION OF FACILITIES AND SUPPORT STRUCTURES.** (a) Subject to the provisions and limitations of this section, a political subdivision may enact a zoning ordinance under s. 59.69, 60.61, or 62.23 to regulate any of the following activities:

1. The siting and construction of a new mobile service support structure and facilities.

2. With regard to a class 1 collocation, the substantial modification of an existing support structure and mobile service facilities.

(b) If a political subdivision regulates an activity described under par. (a), the regulation shall prescribe the application process which a person must complete to engage in the siting, construction, or modification activities described in par. (a). The application shall be in writing and shall contain all of the following information:

1. The name and business address of, and the contact individual for, the applicant.

2. The location of the proposed or affected support structure.

3. The location of the proposed mobile service facility.

4. If the application is to substantially modify an existing support structure, a construction plan which describes the proposed modifications to the support structure and the equipment and network components, including antennas, transmitters, receivers, base stations, power supplies, cabling, and related equipment associated with the proposed modifications.

5. If the application is to construct a new mobile service support structure, a construction plan which describes the proposed mobile service support structure and the equipment and network components, including antennas, transmitters, receivers, base stations, power supplies, cabling, and related equipment to be placed on or around the new mobile service support structure.

6. If an application is to construct a new mobile service support structure, an explanation as to why the applicant chose the proposed location and why the applicant did not choose collocation, including a sworn statement from an individual who has

STATE OF WISCONSIN

VILLAGE OF RAYMOND

RACINE COUNTY

**ORDINANCE NO. 22-11-28**  
**AN ORDINANCE CREATING SECTION 24-5 OF THE**  
**VILLAGE OF RAYMOND ZONING ORDINANCE (SOLAR REGULATIONS)**

**WHEREAS**, the Village Board of the Village of Raymond having determined that it is appropriate to amend the Village of Raymond Zoning Ordinance to incorporate the requirements of §66.0401, Wis. Stats., and any applicable amendments thereto, as a local ordinance and to establish local regulations on the installation and use of large and small solar systems that are authorized by, compliant with, and no more restrictive than Wisconsin statutes and the rules of the Wisconsin Public Service Commission and that serve to preserve or protect the public health or safety, do not significantly increase the cost of the system or significantly decrease energy system efficiency; and

**WHEREAS**, the Village of Raymond Plan Commission having held a duly noticed public hearing on the proposed amendment to Section 24-5 of the Zoning Ordinance of the Village of Raymond; and

**WHEREAS**, following said public hearing, the Plan Commission having found that the proposed Section 24-5 are appropriate and in the best interests of the residents and owners of property within the Village of Raymond and having recommended said proposed amendment and the creation of said proposed section of the Zoning Ordinance to the Village Board of the Village of Raymond; and

**WHEREAS**, the Village Board of the Village of Raymond having reviewed the proposed creation of Section 24-5 of the Zoning Ordinance of the Village of Raymond and having considered the recommendation of the Plan Commission and having determined that said proposed amendments and the creation of the proposed section to the Zoning Ordinance is in the best interests of the residents and owners of property within the Village of Raymond.

**NOW, THEREFORE**, the Village Board of the Village of Raymond does hereby ordain as follows:

**SECTION I.**

Section 24-5 of the Zoning Ordinance of the Village of Raymond is hereby created to provide:

(a) *Definitions*

**Agrivoltaics** — A solar energy system co-located on the same parcel of land as agricultural production, including crop production, grazing, apiaries, or other agricultural products or services.

**Building-integrated Solar Energy Systems** — A solar energy system that is an integral part of a principal or accessory building, rather than a separate mechanical device, replacing or substituting for an architectural or structural component of the building. Building-integrated systems include but are not limited to photovoltaic or hot water solar energy systems that are contained within roofing materials, windows, skylights, and awnings.

**Community-Scale Solar Energy System** — A commercial solar energy system that converts sunlight into electricity for the primary purpose of serving electric demands off-site from the facility, either retail or wholesale. Community-scale systems are principal uses and projects typically cover less than 1 acres.

**Community Solar Garden** — A solar energy system that provides retail electric power (or a financial proxy for retail power) to multiple community members or businesses residing or located off-site from the location of the solar energy system. Also referred to as shared solar.

**Grid-intertie Solar Energy System** — A photovoltaic solar energy system that is connected to an electric circuit served by an electric utility company.

**Ground-mount** — A solar energy system mounted on a rack or pole that rests or is attached to the ground. Ground-mount systems can be either accessory or principal uses.

**Large-Scale Solar Energy System** — A commercial solar energy system that converts sunlight into electricity for the primary purpose of wholesale sales of generated electricity. A large-scale solar energy system will have a project size greater than 1 acre and is the principal land use for the parcel(s) on which it is located.

**Off-grid Solar Energy System** — A photovoltaic solar energy system in which the circuits energized by the solar energy system are not electrically connected in any way to electric circuits that are served by an electric utility company.

**Passive Solar Energy System** — A solar energy system that captures solar light or heat without transforming it to another form of energy or transferring the energy via a heat exchanger.

**Photovoltaic System** — A solar energy system that converts solar energy directly into electricity.

**Renewable Energy Easement, Solar Energy Easement** — An easement that limits the height or location, or both, of permissible development on the burdened land in terms of a structure or vegetation, or both, for the purpose of providing access for the benefited land to wind or sunlight passing over the burdened land, consistent with Wis. Statutes 700.35.



Roof-mount — A solar energy system mounted on a rack that is fastened to or ballasted on a structure roof. Roof-mount systems are accessory to the principal use.

Roof Pitch — The final exterior slope of a roof calculated by the rise over the run, typically but not exclusively expressed in twelfths such as 3/12, 9/12, 12/12.

Solar Access — Unobstructed access to direct sunlight on a lot or building through the entire year, including access across adjacent parcel air rights, for the purpose of capturing direct sunlight to operate a solar energy system.

Solar Carport — A solar energy system of any size that is installed on a carport structure that is accessory to a parking area, and which may include electric vehicle supply equipment or energy storage facilities.

Solar Collector — A device, structure or a part of a device or structure for which the primary purpose is to transform solar radiant energy into thermal, mechanical, chemical, or electrical energy. The collector does not include frames, supports, or mounting hardware.

Solar Daylighting — Capturing and directing the visible light spectrum for use in illuminating interior building spaces in lieu of artificial lighting, usually by adding a device or design element to the building envelope.

Solar Energy — Radiant energy received from the sun that can be collected in the form of heat or light by a solar collector.

Solar Energy System — A device, array of devices, or structural design feature, the purpose of which is to provide for generation or storage of electricity from sunlight, or the collection, storage and distribution of solar energy for space heating or cooling, daylight for interior lighting, or water heating.

Solar Hot Air System — (also referred to as Solar Air Heat or Solar Furnace) — A solar energy system that includes a solar collector to provide direct supplemental space heating by heating and re-circulating conditioned building air. The most efficient performance includes a solar collector to preheat air or supplement building space heating, typically using a vertically mounted collector on a south-facing wall.

Solar Hot Water System — A system that includes a solar collector and a heat exchanger that heats or preheats water for building heating systems or other hot water needs, including residential domestic hot water and hot water for commercial processes.

Solar Mounting Devices — Racking, frames, or other devices that allow the mounting of a solar collector onto a roof surface or the ground.

Solar Resource — A view of the sun from a specific point on a lot or building that is not obscured by any vegetation, building, or object for a minimum of four hours between the hours of 9:00 AM

and 3:00 PM Standard time on all days of the year, and can be measured in annual watts per square meter.

Viewshed – a natural or historic environment that is visible from more or more viewing point.

(b) *Solar Systems.* The following permits are required for installation of any Solar Systems:

(1) A building permit is required for all solar energy systems. A zoning permit is also required for all solar energy systems. The owner must provide a site plan, any applicable fees, and any information specified in the Village zoning ordinance with permit applications.

(2) A conditional use permit is required for all large-scale solar systems. A conditional use permit application must be on a form approved or provided the Village and follow the regulations of the Village ordinance.

(c) *Solar Energy System – Accessory Use.* Solar energy systems which are not a principal use are a permitted accessory use in all zoning districts where structures of any sort are allowed, subject to certain requirements as set forth below. Solar carports and associated electric vehicle charging equipment are a permitted accessory use on surface parking lots in all districts regardless of the existence of another building. Solar energy systems that do not meet the following design standards will require a conditional use permit.

(1) Height – Solar energy systems must meet the following height requirements:

a. Building or roof-mounted solar energy systems shall not exceed the maximum allowed height in any zoning district. For purposes of height measurement, solar energy systems other than building-integrated systems shall be given an equivalent exception to height standards as building-mounted mechanical devices or equipment.

b. Ground or pole-mounted solar energy systems shall not exceed 15 feet in height when oriented at maximum tilt.

(2) Setback. Solar energy systems must meet the accessory structure setback for the zoning district and primary land use associated with the lot on which the system is located, except as allowed below.

(3) Roof or Building-Mounted Solar Energy Systems. The collector surface and mounting devices for roof-mounted solar energy systems shall not extend beyond the exterior perimeter of the building on which the system is mounted or built, unless the collector and mounting system has been explicitly engineered to safely extend beyond the edge, and setback standards are not violated. Exterior piping for solar hot water systems shall be allowed to extend beyond the perimeter of the building on a side-yard exposure. Solar collectors mounted on the sides of buildings and serving as awnings are considered to be building-integrated systems and are regulated as awnings.

(4) Ground-mounted Solar Energy Systems -- Ground-mounted solar energy systems may not extend into the side-yard or rear setback when oriented at minimum design tilt, except as otherwise allowed for building mechanical systems.

(5) Visibility. Solar energy systems in residential districts shall be designed to minimize visual impacts from the public right-of-way to the extent that doing so does not affect the cost or efficacy of the system, consistent with Wis. Statute §66.0401.

(6) Building Integrated Photovoltaic Systems - Building integrated photovoltaic solar energy systems shall be allowed regardless of whether the system is visible from the public right-of-way, provided the building component in which the system is integrated meets all required setbacks, land use, or performance standards for the district in which the building is located.

(7) Aesthetic restrictions -- Roof-mount or ground-mount solar energy systems shall not be restricted for aesthetic reasons if the system is not visible from the closest edge of any public right-of-way, or if the system meets the following standards:

a. Roof-mounted systems on pitched roofs that are visible from the nearest edge of the front right-of-way shall have the same finished pitch as the roof and be no more than ten inches above the roof.

b. Roof-mount systems on flat roofs that are visible from the nearest edge of the front right-of-way shall not be more than five feet above the finished roof and are exempt from any rooftop equipment or mechanical system screening.

(8) Reflectors. All solar energy systems using a reflector to enhance solar production shall minimize glare from the reflector affecting adjacent or nearby properties.

*(d) Lot Coverage.* Ground-mount systems total collector area shall not exceed half the building footprint of the principal structure if applicable.

(1) Ground-mount systems shall be exempt from lot coverage or impervious surface standards if the soil under the collector is maintained in vegetation and not compacted and the system area is less than one acre in size.

(2) Ground-mounted systems shall not count toward accessory structure limitations.

(3) Solar carports in non-residential districts are exempt from lot coverage limitations.

*(e) Plan Approval Required.* All applications for solar energy systems requiring a building permit, zoning permit or other permits shall include a site plan for review.

(1) Plan Applications -- Plan applications for solar energy systems shall be accompanied by to-scale horizontal and vertical (elevation) drawings. The drawings must show the

location of the system on the building or on the property for a ground-mount system, including the property lines.

(2) Plan Approvals — Applications that meet the design requirements of this ordinance shall be granted administrative approval by the zoning official and shall not require review by the Plan Commission. Plan approval does not indicate compliance with Building Code or Electric Code.

(f) *Approved Solar Components.* Electric solar energy system components must have a UL or equivalent listing and solar hot water systems must have an SRCC rating.

(g) *Compliance with Building Code.* All solar energy systems shall meet approval of the building inspector, consistent with the State of Wisconsin Building Code and solar thermal systems shall comply with HVAC related requirements of the Energy Code.

(h) *Compliance with State Electric Code.* All photovoltaic systems shall comply with the Wisconsin State Electric Code.

(i) *Compliance with State Plumbing Code.* Solar thermal systems shall comply with applicable Wisconsin State Plumbing Code requirements.

(j) *Utility Notification.* All grid-intertie solar energy systems shall comply with the interconnection requirements of the electric utility. Off-grid systems are exempt from this requirement.

(k) *Rooftop Gardens.* Rooftop community systems are a permitted accessory use in all districts where buildings are permitted.

(l) *Solar Energy System Principal Use.* The development of commercial or utility scale solar energy systems are encouraged where such systems present few land conflicts with current and future development patterns. Solar energy systems that are the principal use of the development lot or lots are conditional uses.

(1) Principal Use General Standards. (a) Site Design:

- a. Setbacks: Community and large-scale solar energy systems must meet the following setbacks:
- b. Property line setback for buildings or structures in the district in which the system is located.
- c. Roadway setback of 150 feet from the Right-of-Way centerline of State and County Highways, 100 feet for other roads.
  - i. Housing unit setback of 150 feet from any existing dwelling unit or more if set forth in the individual zoning ordinances.

- ii. Setback distance should be measured from the edge of the solar energy system array, excluding security fencing, screening, or berm.

(2) Screening: Community and large-scale solar shall be screened from existing residential dwellings.

- a. A Screening Plan shall be submitted that identifies the type and extent of screening.
- b. Screening shall not be required along property lines within the same zoning district, except where the adjoining lot has an existing residential use.
- c. The Village may require screening where it determines there is a clear community interest in maintaining a viewshed.

(3) Ground cover and buffer areas: the following provisions shall apply to the clearing of existing vegetation and establishment of vegetated ground cover; Additional site-specific conditions may apply as required by Village Board.

- a. Large-scale removal of mature trees on the site is discouraged.
- b. The applicant shall submit a vegetative management plan prepared by a qualified professional or reviewed and approved by a natural resource agency or authority, such as the Wisconsin Department of Natural Resources, County Land Conservation Department, or Natural Resource Conservation Service. The plan shall identify:
  - i. The natural resource professionals consulted or responsible for the plan.
  - ii. The conservation, habitat, eco-system, or agricultural goals, which may include providing habitat for pollinators such as bees and monarch butterflies, providing habitat for wildlife such as upland nesting birds and other wildlife, establishing vegetation for livestock grazing, reducing on-site soil erosion, and improving or protecting surface or ground-water quality.
  - iii. The intended mix of vegetation upon establishment.
  - iv. The management methods and schedules for how the vegetation will be managed on an annual basis, with particular attention given to the establishment period of approximately three years.
- c. Soils shall be planted and maintained in perennial vegetation for the full operational life of the project, to prevent erosion, manage run off and build soil.
- d. Vegetative cover should include a mix of perennial grasses and wildflowers that will preferably result in a short stature prairie with a diversity of forbs or flowering plants that bloom throughout the growing season. Blooming shrubs may be used in

buffer areas as appropriate for visual screening. Perennial vegetation (grasses and forbs) is preferably native to Wisconsin, but where appropriate to the vegetative management plan goals, may also include other naturalized and non-invasive species which provide habitat for pollinators and wildlife and/or other ecosystem services (i.e., clovers).

e. Plant material must not have been treated with systemic insecticides, particularly neonicotinoids.

- (4) Foundations: A qualified engineer shall certify that the foundation and design of the solar panel racking and support is within accepted professional standards, given local soil and climate conditions.
- (5) Power and communication lines: Power and communication lines running between banks of solar panels and to nearby electric substations or interconnections with buildings shall be buried underground. Exemptions may be granted by the Village Board in instances where shallow bedrock, water courses, or other elements of the natural landscape interfere with the ability to bury lines, or distance makes undergrounding infeasible.
- (6) Fencing: Perimeter fencing for the site shall not include barbed wire or woven wire designs and shall preferably use wildlife-friendly fencing standards that include clearance at the bottom. The applicant may request an exception to this standard if information is provided that confirms another regulator entity requires barbed or woven wire fence. Alternative fencing can be used if the site is incorporating agrivoltaics.
- (7) Stormwater and NPDES: Solar farms are subject to the Village Stormwater Management and Erosion Control Ordinance and NPDES permit requirements.
- (8) All solar energy systems shall be in compliance with all applicable local, state and federal regulatory codes, including the State of Wisconsin Uniform Building Code, as amended; and the National Electric Code, as amended.
- (9) Plan Approval: All solar energy systems shall require a building permit and zoning permit. The applicant shall submit a detailed site plan for both existing and proposed conditions, showing locations of all solar arrays, other structures, property lines, rights-of-way, service roads, floodplains, wetlands and other protected natural resources, topography, electric equipment, and all other characteristics requested by the Village. The site plan should show all zoning districts and overlay districts.
- (10) Aviation Protection: For solar farms located within 500 feet of an airport or within approach zones of an airport, the applicant must complete and provide the results of a glare analysis through a qualitative analysis of potential impact, field test demonstration, or geometric analysis of ocular impact in consultation with the Federal Aviation Administration (FAA) Office of Airports, consistent with the Interim Policy, FAA Review of Solar Energy Projects on Federally Obligated Airports, or most recent version adopted by the FAA.

(11) Agricultural Protection: Solar farms must comply with site assessment or soil identification standards that are intended to identify agricultural soils. The Village Board may require mitigation for use of prime soils for solar array placement, including the following:

- a. Demonstrating co-location of agricultural uses (agrivoltaics) on the project site.
- b. The site shall be restored to agriculture at the end of life of the solar installation.
- c. Placing agricultural conservation easements on an equivalent number of prime soil acres adjacent to or surrounding the project site.
- d. Locating the project in a wellhead protection area for the purpose of removing agricultural uses from high-risk recharge areas.

(12) Decommissioning: A decommissioning plan shall be required to ensure that facilities are properly removed after their useful life.

- a. Decommissioning of the system must occur in the event the project is not in use for 12 consecutive months.
- b. The plan shall include provisions for removal of all structures and foundations, restoration of soil and vegetation and assurances that financial resources will be available to fully decommission the site.
- c. The Village Board may require the posting of a bond, letter of credit or the establishment of an escrow account to ensure proper decommissioning.

*(m) Community-Scale Solar Energy System Standards:*

(1) Community-scale uses — Ground-mount community solar energy systems must cover no more than 1 acres (project boundaries) and are a conditional use in all districts. Ground-mount solar developments covering more than 1 acres shall be considered large-scale solar.

(2) Dimensional standards — All structures must comply with setback and height, standards for the district in which the system is located.

(3) Other standards — Ground-mount systems must comply with all required standards for structures in the district in which the system is located.

(n) *Large-Scale Solar*: Ground-mount solar energy arrays that are the primary use on the lot, designed for providing energy to off-site uses or export to the wholesale market, are permitted under the following standards:

- (1) Conditional use permit – large scale solar energy systems are conditional uses in agricultural districts, industrial districts, shoreland and floodplain overlay districts only, subject to all applicable provisions of this chapter.

**SECTION II**

**Severability.** The several sections of this ordinance are declared to be severable. If any section or portion thereof shall be declared by a court of competent jurisdiction to be invalid, unlawful or unenforceable, such decision shall apply only to the specific section or portion thereof directly specified in the decision and shall not affect the validity of any other provisions, sections or portions thereof of the ordinance. The remainder of the ordinance shall remain in full force and effect. Any other ordinance whose terms conflict with this ordinance are repealed as to those terms that conflict.

**SECTION III**

**Effective Date.** This ordinance shall take effect immediately following passage and posting or publication as provided by law.

Dated this 18 day of Nov, 2022.

BY THE VILLAGE BOARD:

Kari Morgan  
Kari Morgan, Village President

ATTEST:  
Linda M. Terry  
Linda M. Terry, Village Clerk

~~Published~~ <sup>POSTED</sup> this 19 day of Nov, 2022.



§ 420-88.2 **Solar energy systems.**

**[Added 5-3-2021 by Ord. No. 21-07]**

A. Purpose and intent. The Village Board finds the following:

- (1) The purpose of this section is to regulate solar energy systems subject to the provisions and limitations of this section and § 66.0401, Wis. Stats.
- (2) This section is intended to preserve or protect the public health or safety; does not significantly increase the cost of the system or significantly decrease its efficiency; and allows for an alternative system of comparable cost and efficiently.
- (3) This section provides a process for obtaining necessary permits while protecting the interests of Village residents and businesses.

B. Definitions. The definitions set out below shall apply to this section and shall control with respect to solar energy systems in the event of any inconsistency between these definitions and the definitions set forth in Article **XXI** of this chapter.

**SOLAR ENERGY SYSTEM**

Equipment that directly converts and then transfers or stores solar energy into usable forms of thermal or electrical energy. A solar energy system is either solar for individual users or a solar farm as defined in this section. A solar energy system includes solar collectors, frames, supports and any mounting hardware, battery storage equipment, converters or invertors.

**SOLAR FARM**

A solar energy system that generates enough electricity to serve many customers by wholesale or retail sale and not primarily for consumption on the property on which the system is located. The solar collectors are ground mounted on open land near an existing substation or electric transmission infrastructure.

**SOLAR ENERGY SYSTEM FOR INDIVIDUAL USERS**

Solar energy system that generates electricity for the individual property owner, with either building-mounted or ground-mounted solar collectors, as opposed to a solar farm which generates enough electricity to serve many off-site customers.

**SOLAR COLLECTOR**

A device that absorbs solar energy for use in the collector's energy transformation process.

C. Permit required. No person shall construct, repair, replace, install, enlarge, or alter any solar energy system, as defined by this section, unless a valid permit for said system has first been issued pursuant to this section and such permit has neither expired nor been suspended or revoked. If work has commenced or is completed without proper permits, the Village may take the appropriate action to prosecute the violation of this chapter. See § **420-22** of this chapter for additional information related to a zoning permit, including but not limited to preconditions, application requirements, incomplete applications, approval or denial of an application, issuance of a permit, binding nature of application, acceptance of permit conditions, time limits, assignment, inspections required, suspension, revocation or voiding a permit, circularity, plan changes, plans on file, invalid permits and disclaimer.

D. Solar energy system for individual users standards.

- (1) Building-mounted systems in any Agricultural, Residential or Upland Conservancy Zoning

District shall meet the following requirements:

- (a) The solar energy system shall not extend more than six inches from the original exterior perimeter of a principal or accessory building except as provided in Subsection **D(1)(b)** below.
  - (b) If the roof pitch is 2/12 or less, then the system shall not extend more than 18 inches from the original exterior perimeter of the principal or accessory building.
  - (c) The solar energy system shall not extend beyond the exterior perimeter of the building roof or wall.
  - (d) Any ground-mounted battery storage, converter or inverter shall be located inside a building; or located in the side, rear, rear street yards with proper screening as approved by the Zoning Administrator.
  - (e) The Village is not responsible to remove or force the removal of any structures or vegetation on adjacent properties that may exist at the time of installation or may be constructed/installed in the future to block any portion of the solar system.
- (2) Building-mounted systems in any Business, Manufacturing, Institutional or Park-Recreational Zoning Districts shall meet the following requirements:
- (a) The solar energy system shall not extend more than six inches from the original exterior perimeter of a principal or accessory building except as provided in Subsection **D(2)(b)** below.
  - (b) If the roof pitch is 2/12 or less, then the solar energy system shall not extend to a height that exceeds the height of an existing parapet wall or other screening as approved by the Zoning Administrator that screens the system from view from the adjacent right-of-way. A sight line plan is required to be submitted for review.
  - (c) The solar energy system shall not extend beyond the original exterior perimeter of the principal or accessory building.
  - (d) Any ground-mounted battery storage, converter or inverter shall be located inside a building; or located in the side, rear, rear street yards with proper screening as approved by the Zoning Administrator.
  - (e) The Village is not responsible for the removal or forcing the removal of any structures or vegetation on adjacent properties that may exist at the time of installation or that may be constructed/installed in the future to block any portion of the solar system.
- (3) Ground-mounted systems in any district shall meet the following minimum requirements:
- (a) Capacity of the system shall not exceed seven kilowatts in rated capacity for properties that are one acre or less in area.
  - (b) Capacity of the system shall not exceed 15 kilowatts in rated capacity for properties more than one acre.
  - (c) Height shall not exceed 10 feet when oriented at maximum tilt. The grades that surround the system shall not be artificially elevated to bring in fill as to elevate the system higher than the existing grades on the property.
  - (d) Shall not be located within a front street yard or side street yard as measured from the furthest extent of the solar collector at full tilt parallel to the ground.

- (e) Minimum setback requirements as measured from the furthest extent of the solar collector at full tilt parallel to the ground.
  - [1] Side and rear: a minimum of 25 feet.
  - [2] Rear street: a minimum of 50 feet.
  - [3] Wetland: a minimum of 10 feet from wetlands on the property.
  - [4] Shore: a minimum of 25 feet from the ordinary high-water mark of a navigable waterway.
- (f) Shall not be located within the 100-year floodplain as measured from the furthest extent of the solar collector at full tilt parallel to the ground.
- (g) Landscaping and/or screening will be required to screen the system from adjacent properties and public rights-of-way as approved by the Zoning Administrator on a case-by-case basis.
- (h) All electrical wires associated with the solar energy system, other than wires necessary to connect the system, grounding wires, etc., shall be located underground.
- (i) Shall be installed and securely attached to the ground pursuant to the manufacturer's requirements.
- (j) Land under and surrounding the system shall be properly manicured and maintained.
- (k) Any ground-mounted battery storage system, converter or inverter shall be located inside a building; or located in the side, rear, rear street yards with proper screening as approved by the Zoning Administrator.
- (l) The Village is not responsible to remove or force the removal of any structures or vegetation on adjacent properties that may exist now or that may be constructed/installed in the future to block any portion of the solar energy system.

E. A solar farm is allowed within any A-2, AGO or M-4 Zoning Districts with approval of a conditional use permit and pursuant to the requirements in § **420-148B(105)** of this chapter.

F. A solar farm shall be assessed to the extent required by law.

G. A solar farm shall pay as applicable the public utility distribution, license fee, state taxation, and other monetary obligations as and to the extent required by law.

H. The Village Zoning Administrator shall be notified, in writing, within 60 days of any ownership transfers or sales of a solar farm.

I. All solar farms are required to obtain a Village business license pursuant to this chapter.

J. Abandonment, removal and security for removal.

(1) Abandonment. When a solar energy system is no longer in operation or producing energy, the owner shall notify the Zoning Administrator in writing. Any solar energy system that has not operated for a continuous period of 12 months shall be considered abandoned. Time may be extended upon review and approval of the Zoning Administrator.

(2) Removal. It is the expressed policy of the Village and this section that a solar energy system be removed once it is no longer in use and not a functional part of providing the intended energy and

the site or building restored as necessary.

(3) Security for removal. The owner of a solar farm shall provide to the Village, prior to issuance of a solar farm permit, a performance bond or a surety bond equal to a written estimate to remove the solar farm when the system is no longer in operation. The Village will be named as the obligee in the bond, and the Village shall approve the bonding company and the bond format.

K. Limitations upon authority. The Village review and action in the matter shall be subject to the limitations imposed by § 66.0401, Wis. Stats. In the event the applicant believes the Village has exceeded its authority in this regard, the applicant shall notify the Village, and the Village may reconsider the matter. In that event, the applicable permit authority of the Village may modify the requirements of this section as applied to that application, on a case-by-case basis if, and only to the extent, such modification is necessary to ensure that applicable laws are followed. This section is intended to allow case-by-case consideration of the standards of § 66.0401(1m), Wis. Stats., as needed.

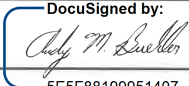
**Kenosha**



**County**

**BOARD OF SUPERVISORS**

**ORDINANCE NO. \_\_\_\_\_**

Subject: An Ordinance to Amend the text of the Kenosha County General Zoning and Shoreland/Floodplain Zoning Ordinance. The proposed text changes will create a Solar Energy Systems ordinance compliant with Section 66.0401 & 66.0403 of the Wisconsin State Statutes			
Original <input type="checkbox"/>	Corrected <input type="checkbox"/>	2nd Correction <input type="checkbox"/>	Resubmitted <input type="checkbox"/>
Date Submitted: October 18, 2022		Date Resubmitted:	
Submitted By: Planning, Development & Extension Education Committee			
Fiscal Note Attached <input type="checkbox"/>		Legal Note Attached <input type="checkbox"/>	
Prepared By: Andy M Buehler, Director Division of Planning Operations		Signature:  <small>5E5F88199951407...</small>	

WHEREAS, Kenosha County proposes to amend Chapter 12 Kenosha County General Zoning and Shoreland/Floodplain Zoning Ordinance to Amend to create a Solar Energy Systems ordinance compliant with Section 66.0401 & 66.0403 of the Wisconsin State Statutes, and;

WHEREAS, the Kenosha County Planning, Development and Extension Education Committee held a public hearing on the request on October 12, 2022.

NOW, THEREFORE BE IT RESOLVED that pursuant to the authority granted by Sections 59.69 and 59.594(2)(a) of the Wisconsin State Statutes, the Kenosha County Board of Supervisors does hereby ordain that Chapter 12 of the Municipal Code of Kenosha County entitled "Kenosha County General Zoning and Shoreland/Floodplain Zoning Ordinance" be and hereby is changed by the following additions, deletions and amendments and is amended to read as set forth in the attached Exhibit A, pertaining to text changes to Section 12.31.010, 12.31.020, 12.31.040, 12.35.010 and the creation of 12.27.010.

**EXHIBIT "A"**

# Solar Energy Systems (SES)

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**12.27.010 PURPOSE**

The purpose of this Chapter is to adopt and incorporate the requirements and standards of Wis. Stats., 66.0401 and 66.0403 to regulate Solar Energy Systems (hereinafter referred to as "SES") for the production of electricity and/or conversion of energy for uses on-site as well as those systems which produce electricity for off-site use and distribution. The regulations of this chapter have been established to ensure SES are sited, constructed, maintained, operated, and decommissioned in a manner that maximizes utilization of Kenosha County's solar energy resources, while also balancing the need for clean renewable energy and protecting the public health, safety and welfare of the community.

- (a) SES equal to 100 MW or greater shall follow the requirements of the PSC and must enter into a MOU with the County and the Town.
- (b) SES less than 100MW designed to provide energy to off-site uses and/or export to the wholesale or retail sale market, are considered a commercial use and are subject to the conditional use permit process as described in Section 12.40 of this Ordinance.
- (c) The Department will use the most recent industry accepted standards (U.S. Department of Energy) as it relates to average single-family electrical usage, daily watt hours formula, local peak sun hour numbers, or any other related standards for SES determinations.
- (d) Kenosha County is not responsible to remove or force the removal of any structures or vegetation on adjacent properties that may exist at the time of installation or may be constructed/installed in the future to block any portion of the SES.
- (e) All applications regulated by this chapter may be subject to additional conditions and restrictions consistent with but no more restrictive than those in Wis. Stats., 66.0401(1m). Where such conditions are considered and applied on a case-by-case basis; as well as satisfy one of the following:
  - 1. Serves to preserve or protect the public health or safety.
  - 2. Does not significantly increase the cost of the system or significantly decrease its efficiency.
  - 3. Allows for an alternative system of comparable cost and efficiency.

**12.27.020 DEFINITIONS**

Battery Energy Storage Systems (BESS)– device that enables stored energy to be

released when users need it most.

**Individual Use Solar Energy System** – a solar energy system, on-grid or off-grid, that generates electricity for the individual property owner with either building mounted or ground mounted solar collectors that are an accessory use for consumption to the principal use of the property not exceeding the capacity limits of this ordinance.

**Off-Grid Solar Energy System** – solar energy system that is not connected to an existing substation or electric transmission infrastructure.

**On-grid Solar Energy System** – solar energy system that is connected to an existing substation or electric transmission infrastructure

**Operation and Maintenance (O&M)** – a plan that details how the SES will be maintained and operated in a manner that maximizes utilization of Kenosha County’s solar energy resources, while also balancing the need for clean renewable energy and protecting the public health, safety and welfare of the community.

**Reflector or Reflector System** – used in SES to concentrate sunlight onto the solar structure.

**Solar Collector** – as defined in State Statute 66.0403(j): a device, structure or part of a structure whose substantial purpose is to transform solar energy into thermal, mechanical, chemical or electrical energy.

**Solar Farm** – a solar energy system that generates electricity to serve many customers by wholesale or retail sale and not primarily for consumption on the property on which the system is located and is on-grid. The main land use of the property is to the solar energy system, requiring conditional use approval.

**Solar Energy Systems (SES)** – equipment that directly converts and then transfers solar energy into usable forms of thermal or electrical energy. A solar energy system is either for individual users or a commercial user who develops a Solar Farm. A solar energy system includes solar collectors, frames, supports and any mounting hardware, battery storage equipment, converters or invertors.

**Operation and Maintenance (O&M)** – a plan that details how the SES will be maintained and operated in a manner that maximizes utilization of Kenosha County’s solar energy resources, while also balancing the need for clean renewable energy and protecting the public health, safety and welfare of the community.

**12.27.030 ZONING PERMIT REQUIRED**

(a) An owner must obtain the County’s approval before constructing a SES or expanding an existing or previously approved SES, and no SES may be installed, constructed, or expanded without a zoning permit issued by the Department of Planning & Development (hereinafter referred to as the “Department”) under Section 12.05.010 of this Ordinance.

(b) The owner must pay an application fee at the time the application for a SES is filed

with the Department.

(c) A zoning permit issued by the Department expires if construction of the SES is not commenced within 18 months from the date of the permit

**12.27.040 DISTRICTS**

(a) An Individual Use SES may be located, as an accessory use, in all zoning districts subject to the requirements, standards, and processes set forth in this Ordinance.

(b) A Solar Farm ground-mounted SES may be located in the A-1, A-2, A-4, and I-1 Districts as a conditional use, subject to the requirements set forth in Section 12.40 of this Ordinance and this SES Ordinance.

**12.27.050 APPLICATION REQUIREMENTS**

(a) Plan applications for an SES shall meet the requirements of Section 12.05-1(h) of this Ordinance, contain the information specified in Wis. Stat. § 66.0401 and § 66.0403 and be accompanied by to scale horizontal and vertical (elevation) drawings.

(b) Provide the Manufacturer name, model number and total capacity.

(c) Roof Mounted SES except flat roofs, the elevation drawing(s) must show the highest finished slope of the solar collector and the slope of the finished roof surface on which it is mounted.

(d) Flat Roof Mounted SES, a drawing shall be submitted showing the following:

1. The distance to the roof edge and any parapets on the building and shall identify the height of the building on the street frontage side.
2. The proposed distance to property lines, right-of-way, and/or easement.
3. The highest finished height of the solar collector as well as the finished surface of the roof.

**12.27.60 CONDITIONS REQUIRED FOR APPROVAL**

(a) Capacity:

1. Residential Districts:

- a. Less than 1 acre in area: capacity of the SES shall not exceed 7 kilowatts in rated capacity.
- b. Equal to or greater than 1 acre, but less than 10 acres in area: capacity of the SES shall not to exceed 15 kilowatts in rated capacity.

2. Agricultural, Commercial, Manufacturing, Institutional and Park-Recreational Districts: capacity of the SES shall not exceed over 110% of the electricity needs of the property. Property Owner shall furnish applicable data.

3. Solar Farm: capacity of the SES less than 100 MW.

(b) Height: SES must meet the following height requirements:



1. Roof mounted SES shall not exceed the maximum allowed height in any zoning district, unless the system extends less than one foot from the surface from which it is directly attached or if the roof pitch is 2/12 or less then the system shall not extend more than 6 feet.
  2. Ground or pole mounted SES shall not exceed 15 feet in height when oriented at maximum tilt.
- (c) Setback(s):
1. Roof mounted SES In addition to the structure setback, the collector surface and mounting devices shall not extend beyond the exterior perimeter of the building on which the system is mounted or built.
  2. Ground or pole mounted SES Ground or pole mounted SES may not extend into the required yard setbacks for the District when oriented at minimum design tilt.
- (d) Location:
1. Shall not be located in the 100-year floodplain.
  2. Shall not be located in a designated wetland.
- (e) Coverage: Roof mounted SES, excluding building-integrated systems, shall plan for adequate roof access for fire-fighting purposes to the south-facing or flat roof upon which the panels are mounted.
- (f) Grades: the area of the SES shall not be artificially elevated to bring fill as to elevate the SES area higher than the existing grades of the property.
- (g) Visibility: SES shall be designed to blend into the architecture of the building to the extent such provisions do not diminish solar production or increase costs, consistent with Wis. Stats., 66.0401.
- (h) Reflectors: All SES using a reflector to enhance solar production shall minimize reflected light from the reflector affecting adjacent or nearby properties. Measures to minimize reflected light include selective placement of the system, screening on the north side of the solar collector, modifying the orientation of the system, reducing use of the reflector system, or other remedies that limit reflected light.
- (i) Historic Buildings: SES on buildings within HO Historical Overlay District adopted under this Ordinance or on locally designated historic buildings (exclusive of State or Federal historic designation) must receive approval from the Advisory Historical Preservation Commission, consistent with the standards for SES on historically designated buildings published by the U.S. Department of Interior.
- (j) Other standards and codes: All commercial use SES shall be in compliance with all applicable local, state and federal regulatory codes, including the State of Wisconsin Uniform Building Code, as amended; and the National Electric Code, and if necessary the Wisconsin State Plumbing Code; as amended.

1. All roof mounted and/or integrated SES shall only be permitted if it determined the additional weight, infrastructure, and/or modifications will not

compromise the structural integrity of the building.

- (k) **Wires:** All electrical wires associated with a ground mounted solar energy system, other than wires necessary to connect the solar energy system to the tower wiring, the tower wiring to the disconnect junction box, and the grounding wires, must be located underground.
- (l) **Noise:** All converters and inverters shall be located away from adjacent residences.
- (m) **Good Repair:** An owner shall construct, operate, repair, maintain and replace solar energy system facilities as needed to keep the solar energy system in good repair and operating condition in a manner that protects the public health, safety, and welfare of the community.
- (n) **Utility Notification:** All on-grid SES shall comply with the interconnection requirements of the electric utility.

**12.40 CONDITIONAL USE**

138. Solar Farm in the A-1, A-2, A-4, and I-1 Districts.

- (a) **Minimum lot size and frontage:** 10 acres with 300 feet on a public street.
- (b) **Minimum setbacks:** as measured from the foundation of any associated system building, the outer edge of battery storage system, convertor or inverter or from the solar collector extended at full tilt parallel to the ground:
  - 1. Street yard - not less than 65 feet from the right-of-way of all Federal, State, and County Trunk highways and not less than 40 feet from the right-of-way of all other roads
  - 2. Side yard – not less than 50 feet from the property boundary lines of non-participating landowners and 100 feet from any adjacent landowner dwelling unit.
  - 3. Shore yard – not less than 75 feet
  - 4. For adjoining participating landowners, the setback requirement may be established pursuant to mutual agreement between Solar Farm Owner and participating property owners.
- (c) **Maximum height for solar collectors:** 15 feet in height when oriented at maximum tilt.
- (d) Shall not be located within the 100-year floodplain.
- (e) Shall not be located within a designated wetland.
- (f) Any buildings associated with the Solar Farm shall meet the building requirements specified in the underlying zoning district related to building size and height.
- (g) Any Solar Farm that is on-grid shall comply with the Public Service Commission of Wisconsin's Rule 119, Rules for Interconnecting Distributed Generation Facilities.
- (h) **Agreement Exhibits:** The following exhibits shall be submitted:

1. Proposed Site Plan: Exhibit A is the proposed plan for above-ground facilities of the Solar Farm.
2. Proposed Haul Route: Exhibit B is a map depicting proposed Solar Farm equipment Haul Routes.
3. Construction Schedule: Exhibit C is the proposed Construction Schedule.
4. Vegetation Management Plan: Exhibit D is the Vegetation Management Plan.
5. Drain Tile Management Plan: Exhibit E is the Drain Tile Management Plan.
6. Decommissioning Plan: Exhibit F is the Decommissioning Plan.

(i) Archeology: Shall conduct an Archeological Site Assessment with review by the Wisconsin State Historical Preservation Office.

(j) Fencing Other than the fencing directly surrounding the Solar Farm substation, O&M and BESS the Solar Farm's perimeter fencing shall consist of "deer fencing" (wire mesh), which can be described in greater detail as a six (6) to ten (10) foot in height woven wire partition with posts. Fences will be set within/inside property lines or rights-of-way edges unless otherwise requested from the landowner.

1. Installed fencing shall be adequately maintained at all times during the Solar Farm operation. The depths of the fence posts shall be installed per prudent engineering practice based on the height of the fence and the type and slope of the terrain. Impairments to either the woven wire or wooden posts shall be remedied within two weeks of written notification from the Department. "Leaning" of the fence shall not be allowed to exceed plus or minus 10 degrees of perpendicular. In the event leaning or tilting of the fence does occur, it will be corrected back to perpendicular within two weeks of receiving written notice on the issue.

(k) Visual Considerations: The Solar Farm shall not be used for any type of advertising. The Solar Farm may erect and maintain a single Solar Farm identification sign subject to sign requirements of section 12.14. The Solar Farm shall be minimally lighted so as not to disturb neighboring properties. Necessary lighting to provide safety and security of facilities shall meet the lighting requirements of Chapter 12.18.8-1, Municipal Code of Kenosha County. Solar Farm Owner will provide the County with a description of permanent Solar Farm lighting plans when available.

(l) Drain Tile: Solar Farm Owner shall contract with an experienced and qualified regional drain tile contractor to gather information concerning participating landowner drain tile, avoid said tile where commercially reasonable, and mitigate the landowner and non-participating landowners' drainage issues where significant impact is expected as a result of drain tile alteration. The Solar Farm Owner agrees to discuss and address identified drain tile concerns at the post-construction meeting to finalize remedies to known drainage issues on either participating or non-participating property. Solar Farm Owner shall receive, investigate, and remedy drain tile issues due to the Solar Farm that arise subsequent to the post-construction meeting pursuant to the Drain Tile Management Plan attached hereto as Exhibit E.

1. If drainage infrastructure or systems are damaged by the Solar Farm and the result is reduced drainage performance that adversely affects non-participating landowners, Solar Farm Owner shall restore the drainage infrastructure or system to pre-existing condition or better in accordance with the Drain Tile Management

Plan attached as Exhibit E. Pre-existing condition shall mean the flow capacity existing immediately prior to the Solar Farm commencing construction. If previous flow capacity cannot be determined, Solar Farm Owner and landowners agree to negotiate an adequate solution in good faith. Solar Farm Owner is responsible for all expenses related to repairs, restoration, relocations, reconfigurations and replacements of drainage infrastructure and systems that are damaged by the Solar Farm as provided in Exhibit E. The intent of this Section is to make landowners whole where drainage infrastructure or systems are damaged by the Solar Farm. For example, and without limitation due to enumeration, if damage to drainage infrastructure or systems is caused by the Solar Farm on a participating property ("Solar Farm-related Damage"), and the Solar Farm-related Damage causes damages to non-participating property owners upstream of the Solar Farm-related Damage, including crop loss and/or blowout damage to the drain tile system on the non-participating owner's property, Solar Farm Owner shall reasonably compensate the non-participating owner for crop loss and for repairs to the non-participating property owner's drain tile system. Solar Farm Owner agrees to cooperate with non-participating landowners as outlined in Exhibit E that desire to repair or replace drainage tile affecting their properties to the extent that such work does not interfere with the Solar Farm or its related facilities. Solar Farm Owner will not unreasonably withhold approval for access to the Property that lies outside of any fenced solar collector area, to the extent participating property owners also agree to such access.

2. For purposes of this agreement, participating landowner or property owner shall mean a property owner who has signed a solar lease and easement agreement, collection easement, or purchase option for the use of his or her property for solar generation, construction access, and/or placement of facilities associated with the Solar Farm. Non-participating landowner or property owner shall mean a property owner who is not a participating landowner. A solar lease and easement agreement does not include a good neighbor agreement.

(m) Stormwater Management and Erosion Control: Solar Farm Owner shall ensure compliance with Chapter 17, Municipal Code of Kenosha County, on stormwater management and shall ensure that a plan for compliance with said chapter is presented at the pre-construction meeting. Solar Farm Owner will comply with stormwater and erosion control requirements imposed by the Wisconsin Department of Natural Resources (WDNR).

(n) Ground cover and buffer areas: The following provisions shall be met related to the clearing of existing vegetation and establishment of vegetated ground cover. Additional requirements and standards may apply as required by the Department and/or Planning, Development and Extension Education Committee (PDEEC).

1. Large-scale removal of mature trees on the site is discouraged. The Department may set additional restrictions on tree clearing or require mitigation for cleared trees.

2. To the greatest extent possible, the topsoil shall not be removed during development, unless part of a remediation effort.

3. Soils shall be planted and maintained for the duration of operation in perennial vegetation to prevent erosion, manage run off, and improve soil.

4. Seeds should include a mix of grasses and wildflowers (pollinator habitat), exclusively native to the region of the solar Farm site that, which will result in a

short stature prairie with a diversity of forbs or flowering plants that bloom throughout the growing season. Blooming shrubs may be used in buffer areas as appropriate for visual screening.

5. Seed mixes and maintenance practices shall be consistent with those recommendations made by the Department and/or Wisconsin DNR.

6. The applicant shall submit a financial guarantee in the form of a letter of credit, cash deposit or bond in favor of the Community equal to one hundred twenty-five (125) percent of the costs to meet the ground cover and buffer area standard. The financial guarantee shall remain in effect until vegetation is 75% established.

7. Solar Farm Owner shall contact every owner of residential property immediately adjacent to solar collector and discuss in good faith a reasonable, strategically-located visual buffer of plants that, upon mutual agreement, shall be installed at Solar Farm Owner's expense prior to the completion of construction of the Solar Farm. Where the Solar Farm Owner and the adjacent property owner are unable to agree on the type of visual buffer and the adjacent property owner makes a request in writing to Solar Farm Owner to provide a visual buffer, the Solar Farm owner shall install a vegetative buffer on the Solar Farm site equal to the length of the non-participating residence and designed to achieve at least 50% opacity at ground level within 5 years. Proposals and plans for vegetative buffers will be finalized in writing by the pre-construction meeting with the Department.

8. Solar Farm Owner shall submit a vegetative buffer plan for a visual barrier along all roadways subject to approval by the Department .

(o) Road Use: The Solar Farm Owner and its successors, assigns, contractors, agents and representatives may use public roads as part of the construction, operation, maintenance and repair of the Solar Farm. The Solar Farm Owner acknowledge that in connection with construction, operation and maintenance of electric collection lines, communications cables and other equipment, that Solar Farm facilities may cross road rights-of-way and/or drainage systems. The Solar Farm Owner agrees that it shall seek and obtain all permits typically required of others, such as driveway permits and rights-of-way crossing permits. It is agreed that all road rights-of-way crossing shall be by underground borings perpendicular to the right-of-way, plus or minus 30 degrees. All underground borings shall commence and terminate outside of the road right-of-way.

1. The Solar Farm Owner further agrees that the construction process may cause wear, tear, and damage to the roads identified to be used, including the Haul Roads. The Solar Farm Owner agrees, in lieu of seeking repair, restoration, or reconstruction of these roads following the completion of the Solar Farm's construction, that the Solar Farm Owner shall provide the County compensation in the form of a lump sum payment in an amount to be determined by Solar Farm Owner's qualified third party engineer, based on pre-construction and post-construction road condition analysis's following general industry best practices, for the repair or reconstruction of the impacted roads. Pre-construction and post-construction analysis shall include review of the surface and subsurface of the road. The Solar Farm Owner's qualified third-party engineer shall be selected from a list of Kenosha County certified engineering consultants. The County shall provide the list of County certified engineering consultants at the request of the Solar Farm Owner. If the County elects to forego the lump sum payment, the Solar Farm Owner agree they may also utilize a contractor chosen and managed by the developer to complete necessary road repairs. All road repairs shall be inspected

and approved by the County superintendent to ensure that the repair meets County standards. The extent of such repair will be negotiated at the post-construction meeting and will be based on the road condition analysis of the third-party engineer. The County shall relieve the Solar Farm Owner of any other repair or reconstruction obligations or responsibilities upon receipt of such payment. The County shall determine, at its sole discretion, how to utilize those funds for the repair of the impacted roads after their use for construction traffic for the Solar Farm ends. The Solar Farm Owner shall negotiate in good faith a similar road use provision related to decommissioning, expansion or repowering of the Solar Farm.

2. Throughout the construction of the Solar Farm, the Solar Farm Owner shall work cooperatively to maintain public road infrastructure in a safe condition for passage by the public. During the ongoing construction of the Solar Farm, Solar Farm Owner, at its expense, shall repair any significant damage that jeopardizes the safety of the travelling public. The County superintendent shall continuously monitor County roads and shall notify the Solar Farm Owner of damages that presents safety concerns to the travelling public and shall require the Solar Farm Owner to carry out the necessary repair to mitigate the unsafe road condition. In the event a unsafe road condition exists that presents a safety hazard to the public use of the road and is not promptly repaired by Solar Farm Owner within one week after receipt of notice of the unsafe condition, the County may make emergency road repairs, or order emergency road repairs to be performed by qualified contractors, and Solar Farm Owner will promptly reimburse the County for reasonable emergency road repairs.

3. Solar Farm Owner shall be responsible for addressing applicable road use issues with other entities to the extent they have jurisdiction over roads to be used for the Solar Farm.

(p) Foundations: A qualified engineer shall certify, by sealed stamped and signed plans that the foundation and design of the solar panels racking and support is within accepted professional standards, given local soil and climate conditions.

(q) Power and communication lines: Power and communication lines running between banks of solar panels and to nearby electric substations or interconnections with buildings shall be buried underground. Exemptions may be granted by the Department in instances where shallow bedrock, water courses, or other elements of the natural landscape interfere with the ability to bury lines, or distance makes undergrounding infeasible, at the discretion of the Department as shown by adequate soil borings.

(r) Agricultural Protection: Commercial use SES must comply with site assessment or soil identification standards that are intended to protect agricultural soils.

(s) Aviation Protection: For Solar Farms located within 1,000 feet of an airport or within approach zones of an airport or landing strip, the applicant must complete and provide the results of the Solar Glare Hazard Analysis Tool (SGHAT) for the Airport Traffic Control Tower cab and final approach paths, consistent with the Interim Policy, FAA Review of Solar Energy Solar Farms on Federally Obligated Airports, or most recent version adopted by the FAA

(t) Decommissioning: Solar Farm Owner shall implement the Decommissioning Plan attached as Exhibit F to this Agreement upon permanent cessation of the commercial operation of the Solar Farm. For the purposes of this Agreement, permanent cessation of the commercial operation of the solar Farm shall mean that the entire Solar Farm has ceased commercial operation for a consecutive period of twelve (12) months for reasons other than a force majeure event. The Solar Farm shall be deemed to be in commercial operation if the Solar Farm is under active construction activities including but not limited to construction activities in connection with Solar Farm-wide replacements or upgrades.

1. The Solar Farm Owner acknowledge that the Decommissioning Plan shall be submitted that includes a detailed Decommissioning Cost Analysis and will provide such a plan to the County when the analysis is available. The Solar Farm Owner agrees that the Decommissioning Plan shall require Solar Farm Owner to, at a minimum:
2. Notify the Department when permanent cessation has been determined.
3. Remove, at its expense, all Solar Farm components including but not limited to solar collectors and associated facilities to a depth of 4 feet and properly dismantle all components that shall be disposed of at a licensed solid waste disposal facility and/or otherwise in a manner consistent with federal, state, and local regulations;
4. Restore the land to a condition reasonably similar to pre-existing conditions, including de-compacting areas where solar Farm access roads were installed and any other areas of substantial soil compaction. The Solar Farm's Access Roads can remain in place if requested by the property owner.
5. Prior to the issuance of a zoning permit, the Solar Farm owner shall post a commercially reasonable financial assurance (bond, letter of credit) in the amount of the difference between the reasonably estimated costs of decommissioning the Solar Farm and the reasonably estimated salvage value of the Solar Farm improvements, as determined by a qualified engineer. The costs of this determination are to be paid by the Solar Farm Owner. The need for and amount of the financial assurance shall be reviewed by a qualified engineer, and if applicable, updated approximately every 5 years.
6. All solar equipment shall be decommissioned and disposed of in accordance with State, Federal and local regulations.

(u) Replacement of Lost Property Tax Revenue: Properties hosting qualifying utility generating facilities under Chapter 76 Wis. Stats. and approved by the PSCW are removed from the local property tax roll. Solar Farm Owner will establish a program (the "Lost Revenue Program") to reimburse the local school districts for lost revenue following completion of the Solar Farm, when the specific, qualified utility properties are identified. The Lost Revenue Program will calculate the amount of lost revenue based on local tax rates for the land at the time the Solar Farm is placed in service. Payment amount for each taxing authority will be increased annually by Two Percent (2%). Solar Farm Owner will execute the Lost Revenue Program only to the extent the amount promised is recoverable by the Solar Farm Owner through approval by the PSCW of rates under Wis. Stat. 196.20. The Solar Farm Owner's obligation to make such payments shall be suspended if the State adopts or implements a new mechanism to replace the Utility Aid Shared Revenue payments, to the extent that the new payment system provides payments equal or greater than the payments provided herein. In such case of

suspension of payments, the Solar Farm Owner's payment obligations as set forth herein will only be reinstated if such new payment system is eliminated by the Legislature.

(v) Insurance

1. For Individual Use Solar Energy Systems

a. Owner

1) At all times during construction and operation owner shall maintain a current liability policy covering bodily injury and property damage in the form of a homeowners or other applicable policy providing liability coverage as approved by Kenosha County

a With the exception of homeowners coverage shall include:

1 Commercial General Liability - \$1,000,000 per occurrence; \$2,000,000 general aggregate; \$1,000,000 personal and advertising injury; \$2,000,000 products-completed operations aggregate; \$10,000 medical expense

2 Coverage shall list Kenosha County as Additional Insured

3 Coverage shall be primary and non-contributory to the insurance of Kenosha County

4 Coverage shall provide a Waiver of Subrogation in favor of Kenosha County

b. Contractor

1) At all times during construction and/or maintenance contractor and any subcontractor shall maintain insurance policies with the following listed minimum insurance coverages and minimum limits of liability from insurers licensed to do business in the State of Wisconsin and having at least an A.M. Best rating of A-

2) Commercial General Liability - \$1,000,000 per occurrence; \$2,000,000 general aggregate (on a per project basis); \$1,000,000 personal and advertising injury; \$2,000,000 products-completed operations aggregate; \$10,000 medical expense

a Coverage shall list the Owner and Kenosha County as Additional Insureds

b Coverage shall be primary and non-contributory to the insurance of Owner and Kenosha County

c Coverage shall provide a Waiver of Subrogation in favor of Owner and Kenosha County

d The products-completed operations coverage shall be maintained for the combined period of the limitation and repose statutes of the State of Wisconsin

e Policies may not contain any residential exclusions or limitations on height of work

3) Automobile Liability - \$1,000,000 Combined Single Limit

a Coverage shall list the Owner and Kenosha County as Additional Insureds



- 4) Workers Compensation & Employers Liability – Workers Compensation as required by the State of Wisconsin Statute. \$1,000,000 employers liability for each bodily injury by accident, bodily injury by disease and annual aggregate
    - a Coverage shall provide a Waiver of Subrogation in favor of Owner and Kenosha County
  - 5) Umbrella/Excess Liability - \$5,000,000 each occurrence; \$5,000,000 annual aggregate; \$5,000,000 completed operations aggregate
    - a The policy shall follow form to the Employers Liability, Commercial General Liability and Commercial Auto Liability policies
  - 6) Pollution Liability – \$1,000,000 per claim and \$1,000,000 annual aggregate
    - a Coverage shall list the Owner and Kenosha County as Additional Insureds
  - 7) Professional Liability - If architectural or engineering services are being performed by Contractor or Subcontractor coverage shall include limits of at least \$1,000,000 per claim and \$1,000,000 annual aggregate
  - 8) Unmanned Aircraft/Drone Liability – If drone is used with respect to construction and/or maintenance of the system coverage shall include a limit of at least \$1,000,000
2. For Solar Farms
- a. Owner
    - 1) At all times during construction and operation owner shall maintain Commercial General Liability - \$1,000,000 per occurrence; \$2,000,000 general aggregate; \$1,000,000 personal and advertising injury; \$2,000,000 products-completed operations aggregate; \$10,000 medical expense
    - 2) Coverage shall list Kenosha County as Additional Insured
    - 3) Coverage shall be primary and non-contributory to the insurance of Kenosha County
    - 4) Coverage shall provide a Waiver of Subrogation in favor of Kenosha County
  - b. Umbrella/Excess Liability - \$1,000,000 each occurrence; \$1,000,000 annual aggregate; \$1,000,000 completed operations aggregate
    - 1) The policy shall follow form to the Commercial General Liability policy
3. Contractor
- a. At all times during construction and/or maintenance contractor and any subcontractor shall maintain insurance policies with the following listed minimum insurance coverages and minimum limits of liability from insurers licensed to do business in the State of Wisconsin and having at least an A.M. Best rating of A-
    - 1) Commercial General Liability - \$1,000,000 per occurrence; \$2,000,000 general aggregate (on a per project basis); \$1,000,000

personal and advertising injury; \$2,000,000 products-completed operations aggregate; \$10,000 medical expense

- a Coverage shall list the Owner and Kenosha County as Additional Insureds
  - b Coverage shall be primary and non-contributory to the insurance of Owner and Kenosha County
  - c Coverage shall provide a Waiver of Subrogation in favor of Owner and Kenosha County
  - d The products-completed operations coverage shall be maintained for the combined period of the limitation and repose statutes of the State of Wisconsin
- 2) Automobile Liability - \$1,000,000 Combined Single Limit
- a Coverage shall list the Owner and Kenosha County as Additional Insureds
- 3) Workers Compensation & Employers Liability – Workers Compensation as required by the State of Wisconsin Statute. \$1,000,000 employers liability for each bodily injury by accident, bodily injury by disease and annual aggregate
- a Coverage shall provide a Waiver of Subrogation in favor of Owner and Kenosha County
- 4) Umbrella/Excess Liability - \$10,000,000 each occurrence; \$10,000,000 annual aggregate; \$10,000,000 completed operations aggregate
- a The policy shall follow form to the Employers Liability, Commercial General Liability and Commercial Auto Liability policies
- 5) Pollution Liability – \$2,000,000 per claim and \$2,000,000 annual aggregate
- a Coverage shall list the Owner and Kenosha County as Additional Insureds
- 6) Professional Liability - If architectural or engineering services are being performed by Contractor or Subcontractor coverage shall include limits of at least \$2,000,000 per claim and \$2,000,000 annual aggregate
- 7) Unmanned Aircraft/Drone Liability – If drone is used with respect to construction and/or maintenance of the system coverage shall include a limit of at least \$1,000,000

(w) Limitations upon authority: The Department review and action in the matter shall be subject to the limitations imposed by 66.0401, Wis. Stats. In the event the applicant believes the County has exceeded its authority in this regard, the applicant shall notify the County, and the Town may reconsider the matter. In that event, the applicable permit authority of the County may modify the requirements of this section as applied to that application, on a case-by-case basis if, and only to the extent, such modification is necessary to ensure that applicable laws are followed. This section is intended to allow case-by-case consideration of the standards of § 66.0401(1m), Wis. Stats., as needed.

~~Red Strikethrough~~ = Text Removed

Green Underline = New Text

12.31.010 A-1 agricultural preservation district.

(d) *Conditional Uses (see also section 12.40.080) (8/6/02).*

1. Air strips, landing fields and hangars for personal or agricultural related uses
2. Community living arrangements having 9 but not more than 15 persons and in conformance with all state statutory requirements
3. Concrete and asphalt batch plants temporarily located on a parcel
4. Event Barns
5. Gas and electric utility uses not requiring authorization under Wisconsin Statutes, section 196.491(3)
6. Housing for farm laborers or caretakers
7. Housing for seasonal or migratory farm workers
8. Kennels (Commercial or noncommercial)
9. A second single-family farm related residential dwelling
10. Large wind energy system

11. Solar Farm

- ~~41~~12. Storage of recreational vehicles, boats or snowmobiles
- ~~42~~13. Utility substation
- ~~43~~14. Bed and breakfast establishments (8/9/94)
- ~~44~~15. Riding stables and indoor riding arenas (public)
- ~~45~~16. Borrow pits (temporary); stockpiling or filling of clean fill materials

12.31.020 A-2 general agricultural district.

(d) *Conditional Uses (see also section 12.40.080) (8/6/02)*

1. Air strips, landing fields and hangars for personal or agricultural related uses

2. Assemblies over 5000 or more individuals
3. Community living arrangements having 9 but not more than 15 persons and in conformance with all state statutory requirements
4. Concrete and asphalt batch plant temporarily located on a parcel
5. Event Barns
6. Housing for farm laborers or caretakers
7. Kennels (commercial or noncommercial)
8. Large wind energy system
9. Storage of recreational vehicles, boats and snowmobiles
10. Utility substations
11. Bed and breakfast establishments (8/9/94)
12. Borrow pits (temporary); stockpiling or filling of clean fill materials
13. Riding stables and indoor riding arenas (public)

14. Solar Farm

12.31.040 A-4 agricultural land holding district.  
(d) *Conditional Uses (see also section 12.40.080).*

1. Air strips, landing fields and hangars for personal or agricultural related uses
2. Bed and breakfast establishments (8/9/94)
3. Borrow pits (temporary) stockpiling or filling of clean fill materials (8/6/02)
24. Community living arrangements having 9 but not more than 15 persons and in conformance with all state statutory requirements
35. Concrete and asphalt batch plants temporarily located on a parcel

~~46.~~ Gas and electric utility uses not requiring authorization under Wisconsin Statutes, section 196.491(3)

~~57.~~ Housing for farm laborers or caretakers (8/6/02)

~~68.~~ Housing for seasonal or migratory farm workers

~~9. Large wind energy systems~~

~~710. A-s~~Second single-family farm related residential dwelling

~~11. Solar Farm~~

~~812.~~ Storage of recreational vehicles, boats or snowmobiles

~~913.~~ Utility substation

~~10. Large wind energy systems~~

~~11. Bed and breakfast establishments (8/9/94)~~

~~12. Borrow pits (temporary); stockpiling or filling of clean fill materials (8/6/02)~~

~~1314.~~ Riding stables and indoor arenas (public) (8/6/02)

12.35.010 I-1 institutional district.

(d) *Conditional Uses (see also section 12.40.080) (8/6/02).*

1. Airport, heliport pads, aircraft hangars for storage and equipment maintenance; aircraft sales and service.
2. Bus terminals
3. Cemeteries
4. Large wind energy system
5. Penal, reform, disciplinary and mental institutions
6. Power and heat generating plants
7. Railroad depots

**8. Solar Farm**

**89.** School auditoriums, gymnasiums and stadiums

**910.** Utility substations

**1011.** Water storage tanks and towers and radio and television transmitting and receiving towers, microwave relay stations

**MEMORANDUM OF UNDERSTANDING  
BETWEEN PARIS SOLAR ENERGY CENTER LLC  
AND  
THE TOWN OF PARIS, WISCONSIN**

This Memorandum of Understanding (hereinafter referred to as “MOU” or “Agreement”) is made and entered into by and between **PARIS SOLAR ENERGY CENTER LLC (Project Owner)**, and **the Town of Paris, WISCONSIN (Town)**. Collectively the Project Owner and the Town are referred to as the Parties.

**Recitals**

1. Project Owner desires to develop, construct, and operate an up to 250 megawatt (MW) solar photovoltaic electrical generating facility along with all necessary associated facilities (the Facilities), such as underground collection lines, access roads, operating and maintenance facilities (O&M), substations, battery energy storage systems (BESS) and overhead transmission lines in the Town of Paris, Wisconsin (Project).
2. The Parties agree that it is in the best interest of each to memorialize the rights, obligations, and responsibilities of the Parties with respect to the Project’s use of Town roads, drainage systems, fencing, property management, and rights-of-way during construction, operation and decommissioning of the project.
3. The Parties agree that the Project is under the jurisdiction of the Public Service Commission of Wisconsin (PSCW). This Agreement is conditioned on Project Owner’s initial and maintained compliance with all applicable state and federal and local laws and permit or approval requirements, including any requirements associated with the Certificate of Public Convenience and Necessity (“CPCN”) issued by the PSCW and any requirements in permits issued by the Department of Natural Resources (“DNR”).
4. The Approval granted under this Agreement shall be concurrent with the Project’s CPCN, subject to the rights and remedies of the Town expressly provided in this Agreement.

**Agreement**

Now, therefore, in consideration of the mutual promises, covenants, and agreements contained herein, the Parties to this Agreement hereby stipulate and agree as follows.

1. **PSCW Approval.** The Parties understand and recognize that the Project is under the jurisdiction of the PSCW and that the Project must seek approval from the PSCW for substantive site design changes. At any time during the construction or operation of the Project, if Project Owner proposes modifications to the Project that requires an extension of the Project beyond the current private lease and easement terms, a material alteration of the Exhibits included in this Agreement, or expansion of the project beyond what is approved in the CPCN Order, Project Owner shall meet with the Town and negotiate in good faith any applicable changes to this Agreement that are requested by the Town due to such material modifications. To the extent

practicable, based on the information available at the time, such changes will be covered at either the Pre or Post Construction meetings.

2. **Agreement Exhibits.** The following exhibits (collectively, the “Exhibits”) are attached to this MOU:

- a. Proposed Site Plan: Exhibit A is the proposed plan for above-ground facilities of the Project.
- b. Proposed Haul Route: Exhibit B is a map depicting proposed Project equipment Haul Routes.
- c. Construction Schedule: Exhibit C is the proposed Construction Schedule.
- d. Vegetation Management Plan: Exhibit D is the Vegetation Management Plan.
- e. Drain Tile Management Plan: Exhibit E is the Drain Tile Management Plan.
- f. Decommissioning Plan: Exhibit F is the Decommissioning Plan.

All Exhibits to the Agreement are incorporated herein and made part of the Agreement, with the force and effect as though fully set forth herein. The Parties acknowledge that the Exhibits are part of the concurrent jurisdiction of the PSCW and are subject to change. Any modified Exhibits will be discussed at the pre and post-construction meetings.

3. **Coordination/Planning.** At least 60 days prior to the start of Project construction, Project Owner shall meet (the “pre-construction meeting”) with Town officials responsible for roads and drainage and local emergency responders to present final plans for use of public roads, location of equipment laydown yards, finalize construction scheduling and discuss safety practices and coordinate local emergency response capabilities, as well as vegetation management, drain tile avoidance and drainage issue mitigation, compaction mitigation, stormwater management and erosion control planning, engineering layouts, and general Project specifics. Project Owner shall advise attendees of planned equipment and material delivery types and schedules. The Parties shall identify safety concerns and structural issues of any road or structure and propose mutually acceptable alternative routes or remediation methods for alleviating such concerns and issues.

Project Owner and the Town agree to communicate and cooperate in good faith concerning the safe construction and operation of the Project and preventing or correcting any adverse conditions that may be created by the Project. Project Owner shall consult with the Town within one week of starting construction and shall also utilize all commercially reasonable efforts during construction so as to minimize resulting soil compaction.

At least 60 days following completion of construction, Project Owner shall meet (the “post-construction meeting”) with Town officials to discuss post-construction items including but not limited to necessary drain tile repairs and post-construction stormwater management.

4. **Fencing.** Other than the fencing directly surrounding the project substation, O&M and BESS the Project’s perimeter fencing shall consist of “deer fencing” (wire mesh), which can be described in greater detail as a six to ten foot tall woven wire partition with wooden posts. Where commercially reasonable, fences will be set within/inside property lines or rights-of-way edges unless otherwise requested from the landowner.



Installed fencing shall be adequately maintained at all times during the Project's operation. The depths of the fence posts shall be installed per prudent engineering practice based on the height of the fence and the type and slope of the terrain. Impairments to either the woven wire or wooden posts that are aesthetically displeasing shall be remedied within two weeks of written notification. "Leaning" of the fence shall not be allowed to exceed plus or minus 10 degrees of perpendicular. In the event leaning or tilting of the fence does occur, it will be corrected back to perpendicular within two weeks of receiving written notice on the issue.

For purposes of this Agreement, the term "commercially reasonable" shall mean done in good faith and corresponding to accepted commercial practices in the solar energy industry.

5. **Drain Tile.** Project Owner shall contract with an experienced and qualified regional drain tile contractor to gather information concerning participating landowner drain tile, avoid said tile where commercially reasonable, and mitigate the landowner and non-participating landowners' drainage issues where significant impact is expected as a result of drain tile alteration. The Parties agree to discuss and address identified drain tile concerns at the post-construction meeting to finalize remedies to known drainage issues on either participating or non-participating property. Project Owner shall receive, investigate, and remedy drain tile issues due to the Project that arise subsequent to the post-construction meeting pursuant to the Drain Tile Management Plan attached hereto as Exhibit E.

If drainage infrastructure or systems are damaged by the Project and the result is reduced drainage performance that adversely affects non-participating landowners, Project Owner shall restore the drainage infrastructure or system to pre-existing condition or better in accordance with the Drain Tile Management Plan attached as Exhibit E. Pre-existing condition shall mean the flow capacity existing immediately prior to the Project commencing construction. If previous flow capacity cannot be determined, Project Owner and landowners agree to negotiate an adequate solution in good faith. Project Owner is responsible for all expenses related to repairs, restoration, relocations, reconfigurations and replacements of drainage infrastructure and systems that are damaged by the Project as provided in Exhibit E. The intent of this Section is to make landowners whole where drainage infrastructure or systems are damaged by the Project. For example, and without limitation due to enumeration, if damage to drainage infrastructure or systems is caused by the Project on a participating property ("Project-related Damage"), and the Project-related Damage causes damages to non-participating property owners upstream of the Project-related Damage, including crop loss and/or blowout damage to the drain tile system on the non-participating owner's property, Project Owner shall reasonably compensate the non-participating owner for crop loss and for repairs to the non-participating property owner's drain tile system.

Project Owner agrees to cooperate with non-participating landowners as outlined in Exhibit E that desire to repair or replace drainage tile affecting their properties to the extent that such work does not interfere with the Project or its related facilities. Project Owner will not unreasonably withhold approval for access to the Property that lies outside of any fenced array area, to the extent participating property owners also agree to such access.

For purposes of this agreement, participating landowner or property owner shall mean a property owner who has signed a solar lease and easement agreement, collection easement, or purchase option with Paris Solar for the use of his or her property for solar generation,

construction access, and/or placement of facilities associated with the Project. Non-participating landowner or property owner shall mean a property owner who is not a participating landowner. A solar lease and easement agreement does not include a good neighbor agreement.

6. **Road Use.** The Parties agree that the Project Owner and its successors, assigns, contractors, agents and representatives may use public roads as part of the construction, operation, maintenance and repair of the Project. The Parties acknowledge that in connection with construction, operation and maintenance of electric collection lines, communications cables and other equipment, that Project facilities may cross road rights-of-way and/or drainage systems. The Project Owner agrees that it shall seek and obtain all permits typically required of others, such as driveway permits and rights-of-way crossing permits. It is agreed that all road rights-of-way crossing shall be by underground borings perpendicular to the right-of-way, plus or minus 30 degrees. All underground borings shall commence and terminate outside of the right-of-way.

The Parties further agree that the construction process may cause wear, tear, and damage to the roads identified to be used, including the Haul Roads. The parties agree, in lieu of seeking repair, restoration, or reconstruction of these roads following the completion of the Project's construction, that the Project Owner shall provide the Town compensation in the form of a lump sum payment in an amount to be determined by Project Owner's qualified third party engineer, based on pre-construction and post-construction road condition analysis's following general industry best practices, for the repair or reconstruction of the impacted roads. Pre-construction and post-construction analysis shall include review of the surface and subsurface of the road. If the Town elects to forego the lump sum payment, the parties agree they may also utilize a contractor chosen and managed by Paris Solar to complete necessary road repairs. The extent of such repair will be negotiated at the post-construction meeting and will be based on the road condition analysis of the third party engineer. The Town shall relieve the Project Owner of any other repair or reconstruction obligations or responsibilities upon receipt of such payment. The Town shall determine, at its sole discretion, how to utilize those funds for the repair of the impacted roads after their use for construction traffic for the Project ends. The Parties shall negotiate in good faith a similar road use provision related to decommissioning, expansion or repowering of the Project.

Throughout the construction of the Project, the Parties shall work cooperatively to maintain public road infrastructure in a safe condition for passage by the public. During the ongoing construction of the Project, Project Owner, at its expense, shall repair any significant damage that jeopardizes the safety of the travelling public. In the event a hazardous road condition exists that presents a safety hazard to the public use of the road and is not promptly repaired by Project Owner within one week after receipt of notice of the hazardous condition, the applicable road authority may make emergency road repairs, or order emergency road repairs to be performed by qualified contractors, and Project Owner will promptly reimburse the road authority for reasonable emergency road repairs.

Project Owner shall be responsible for addressing applicable road use issues with other entities to the extent they have jurisdiction over roads to be used for the Project.

7. **Vegetation Management Plan.** The Parties agree that the Project Owner has hired a regionally qualified consultant to create a ground cover and vegetation management plan for the construction and operation of the project, attached as Exhibit D. Consultation shall occur with the Town during the pre-construction meeting and post-construction meeting. Where commercially reasonable, the Project will utilize native plants and grasses across the project's developed area and incorporate pollinator habitat. During Project operation, the Project Owner will spray, mow, and otherwise maintain all developed acreage inside the fence.
8. **Replacement of Lost Property Tax Revenue.** Properties hosting qualifying utility generating facilities under Chapter 76 and approved by the PSCW are removed from the local property tax roll. The County and Town of Paris will receive Utility Aid payments through the state Shared Revenue program. However, other local taxing bodies, such as school districts and fire departments, are not provided alternative payments to compensate for lost property tax revenue. In the case of the Project, the following public institutions are currently receiving property tax revenue from land planned for inclusion in the Project:

- Gateway Technical College
- Paris Grade School
- Westosha Central High School
- Union Grove High School
- Union Grove Elementary School

Project Owner will establish a program (the "Lost Revenue Program") to reimburse the listed taxing bodies for lost revenue following completion of the Project, when the specific, qualified utility properties are identified. The Lost Revenue Program will calculate the amount of lost revenue based on local tax rates for the land at the time the Project is placed in service. Payment amount for each taxing authority will be increased annually by Two Percent (2%). Project Owner will execute the Lost Revenue Program only to the extent the amount promised is recoverable by the Project Owner through approval by the PSCW of rates under Wis. Stat. 196.20. The Project Owner's obligation to make such payments shall be suspended if the State adopts or implements a new mechanism to replace the Utility Aid Shared Revenue payments, to the extent that the new payment system provides payments equal or greater than the payments provided herein. In such case of suspension of payments, the Project Owner's payment obligations as set forth herein will only be reinstated if such new payment system is eliminated by the Legislature.

9. **Revenue Hold Harmless.** The Parties agree that the Utility Aid Shared Revenue payments payable to the Town under current state law may be revised or revoked by future Legislatures. In the event that the Utility Aid Shared Revenue payments payable to the Town are eliminated by the Legislature, the Project Owner will reimburse the Town at the rate of \$1,666.66 per installed megawatt but only to the extent the amount promised is recoverable by the Project Owner through approval by the PSCW of rates under Wis. Stat. 196.20. The Project Owner's obligation to make such payments shall be suspended if the State adopts or implements a new mechanism to replace the Utility Aid Shared Revenue payments, to the extent that the new payment system provides payments equal or greater than the payments produced under the Utility Aid Shared Revenue formula. In such case of suspension of payments, the Project

Owner's payment obligations as set forth herein will only be reinstated if such new payment system is eliminated by the Legislature.

10. **Public Safety and Emergency Medical Services.** Project Owner will require that all contractors on the site during construction meet all state, federal, and industry best practice standards for employee and public safety. Project Owner intends to request meetings with site area Emergency Response agencies to provide project and facility familiarization and establish communication channels. Should any aspect of the Project construction or operations present unfamiliar equipment or situations for responders, Project Owner will arrange for adequate professional training to deal with those concerns.
11. **Indemnification.** Project Owner agrees to defend, indemnify, and hold harmless the County and its supervisors, trustees, administrators, employees, and representatives (collectively the "Indemnified Parties") against any and all losses, damages, claims, expenses, including reasonable attorneys' fees, and liabilities for physical damage to the property of the Town and for physical injury to any person, to the extent the same is a result of any activities or operations of Project Owner, its agents and employees, for the performance or non-performance of its duties pursuant to this Agreement except to the extent caused by the negligence or intentional misconduct of the Town. Furthermore, Project Owner agrees to defend, indemnify, and hold harmless the Indemnified Parties from any third party claims arising out of terms and conditions of this Agreement, except to the extent that such claims are caused by the negligence or intentional misconduct of the Town. This indemnification obligation shall survive the termination of this Agreement.
12. **Insurance.** Project Owner shall maintain or cause to be maintained at all times during construction and operation of the Project insurance or self-insurance as follows:
  - a. General Liability - \$1M Per Occurrence / \$2M Aggregate (Primary and Noncontributory, Waiver of Subrogation, listing the County as additional insured);
  - b. Auto - \$1M;
  - c. Workers Comp - \$100/\$500/\$100K EL limits (need to provide a waiver of subrogation);
  - d. Umbrella Liability - \$10,000,000 Occurrence/Aggregate;
    - i. The Limits in (a-c) can be achieved through the combination of the underlying and the umbrella limits;
  - e. Pollution Liability - \$5M Occurrence/Aggregate.

Certificates of insurance or evidence of self-insurance will be provided to the Town upon written request.

13. **Compliance with Laws.** Project Owner shall at all times comply with all federal, state and local laws, statutes, ordinances, rules, regulations, judgments, and other valid orders of any government authority with respect to Project Owner's activities associated with the Project and shall obtain all permits, licenses, and orders required to conduct any and all such activities.
14. **Stormwater Management and Erosion Control.** Project Owner shall ensure compliance with Chapter 17, Municipal Code of Kenosha County, on stormwater management and shall ensure that a plan for compliance with said chapter is presented at the pre-construction meeting.

Project Owner will comply with stormwater and erosion control requirements imposed by the PSCW and/or the Wisconsin Department of Natural Resources (WDNR) to reduce stormwater runoff.

Project Owner acknowledges that the Town is undertaking ditch repair and restoration work in front of the Project parcel located in the 500 block of 172<sup>nd</sup> Avenue (the "Town Ditch") and that the Town Ditch will not be able to accommodate or transmit additional stormwater runoff. Paris Solar agrees that it shall not incorporate reliance on the Town Ditch into its stormwater management plan beyond existing flow or discharge patterns, or otherwise discharge additional stormwater into the Town Ditch, without first obtaining approval from the Town, which approval shall not be unreasonably withheld.

15. **Visual Considerations.** The Project shall not be used for any type of advertising. The Project may erect and maintain a single project identification sign. The Project shall be minimally lighted so as not to disturb neighboring properties. Necessary lighting to provide safety and security of facilities shall meet the lighting requirements of Chapter 12.18.8-1, Municipal Code of Kenosha County. Project Owner will provide the Town with a description of permanent Project lighting plans when available. Project Owner shall contact every owner of residential property immediately adjacent to solar arrays and discuss in good faith a reasonable, strategically-located visual buffer of plants that, upon mutual agreement, shall be installed at Project Owner's expense prior to the completion of construction of the Project. Where the Project Owner and the adjacent property owner are unable to agree on the type of visual buffer and the adjacent property owner makes a request in writing to Project Owner to provide a visual buffer, the Project owner shall install a vegetative buffer on the Project site equal to the length of the non-participating residence and designed to achieve at least 50% opacity at ground level within 5 years. Proposals and plans for vegetative buffers will be finalized by the post-construction meeting.
16. **Setbacks.** Project Owner agrees to install the solar arrays with a minimum setback of (i) sixty-five (65) feet from the edge of the right of way of public roads, (ii) fifty (50) feet from the property boundary lines of non-participating landowners, unless a smaller setback is permitted pursuant to an executed good neighbor agreement, in which case the setback shall be no less than twenty-five (25) feet, and (iii) one hundred (100) feet from any non-participating landowner dwelling unit. For adjoining participating landowners, the setback requirement may be established pursuant to mutual agreement between Project Owner and participating property owners.
17. **Decommissioning.** Project Owner shall implement the Decommissioning Plan attached as Exhibit F to this Agreement upon permanent cessation of the commercial operation of the Project. For the purposes of this Agreement, permanent cessation of the commercial operation of the project shall mean that the entire Project has ceased commercial operation for a consecutive period of twelve (12) months for reasons other than a force majeure event. The Project shall be deemed to be in commercial operation if the Project is under active construction activities including but not limited to construction activities in connection with Project-wide replacements or upgrades.

The Parties acknowledge that the Decommissioning Plan shall be submitted to PSCW for its approval. To the extent the PSCW imposes additional requirements not included in the Decommissioning Plan attached as Exhibit F, the Parties agree to substitute the existing Exhibit F so as to incorporate the final decommissioning requirements. Paris Solar will follow a substantially similar process to Badger Hollow (PSC Docket ID 9697-CE-100) by creating a detailed Decommissioning Cost Analysis and will provide such a plan to the Town when the analysis is available. The Parties agree that the Decommissioning Plan shall require Project Owner to, at a minimum:

- Remove, at its expense, all Project components including but not limited to solar arrays and associated facilities to a depth of 4 feet and properly dismantle all components;
- Restore the land to a condition reasonably similar to pre-existing conditions, including de-compacting areas where project access roads were installed and any other areas of substantial soil compaction. The Project's Access Roads can remain in place if requested by the property owner.
- At the latest, at the 15th anniversary of the commencement of operations, Paris Solar will post a commercially reasonable financial assurance in the amount of the difference between the reasonably estimated costs of decommissioning the Project and the reasonably estimated salvage value of the Project improvements, as determined by a qualified engineer. The costs of this determination are to be paid by the Project Owner. The need for and amount of the financial assurance shall be reviewed by a qualified engineer, and if applicable, updated approximately every 5 years following the 15<sup>th</sup> anniversary of the operations date.

Upon Project Owner's completion of the decommissioning obligations, this MOU shall automatically terminate and be of no further force and effect, except as otherwise provided herein.

18. **Relevant Law.** Any and all disputes arising under this MOU and/or relating to the actual development and/or construction of the Project shall be resolved pursuant to the laws of the State of Wisconsin and in the Circuit Courts of Kenosha County.
19. **Dispute Resolution.** In the event a dispute arises regarding the performance or interpretation of this Agreement, the parties shall negotiate in good faith to resolve the dispute. If the dispute is not resolved in thirty (30) days, the dispute shall be referred to mediation unless both parties agree to extend the dispute resolution process. If the dispute is referred to mediation, the parties shall name a mediator within fourteen (14) days of the expiration of the negotiation period. If no mediator is agreed upon within said 14 days, each party shall name a third party and the third parties shall pick a mediator within ten (10) days. The parties shall present their dispute to the mediator within sixty (60) days of the mediator being named. The mediator shall not have the authority to add, change, alter or modify any terms of the Agreement. The expense of the mediator shall be divided equally between the parties. In the event that the parties are unable to reach a resolution through mediation, the parties shall be entitled to seek any legal remedies available.
20. **Phasing.** The Parties acknowledge that the construction of the Project may take place through one or more phases at Project Owner's election. In the event Project Owner elects to construct

the Project in phases, the obligations of Project Owner hereunder will, to the extent applicable, relate only to the respective phase of the Project then being undertaken by Project Owner.

21. **Ownership.** Project Owner shall have the right to sell, assign, or lease all or portions of the Project or its Facilities to other parties and, in that event, such other parties shall, with Project Owner or, in the event of total assignment or transfer, in lieu of Project Owner, have the right, in the manner and to the same extent above, to operate the Facilities in, along, under, and across the same road rights-of-way and drainage systems. Project Owner, its successors or assigns, shall, at all times and at its sole expense, maintain the Facilities in good condition and repair. In the case of any such sale, assignment or lease of all or any portion of the Project or the Facilities, Project Owner shall have the right to assign its rights and obligations under this Agreement without obtaining the prior consent of the Town. Any such sale, assignment or lease of all or any portion of the Project or the Facilities shall include an explicit binding of any successors or assigns to any and all terms of this Agreement which continue to be active and applicable.
22. **Successors and Assigns.** This Agreement shall be binding upon and inure to the benefit of the parties and their successors and assigns.
23. **Severability.** If any provision of this Agreement is held to be unenforceable or invalid for any reason, the remaining provisions will continue in full force and effect with such unenforceable or invalid provision to be changed and interpreted to best accomplish its original intent and objectives.
24. **Notices.** Notices, requests, demands, and other communications shall be sent to the following addresses:

*If to Project Owner:*

Paris Solar Energy Center LLC  
c/o INVENERGY  
Attn: Mark D. Crowl  
One South Wacker Drive, Suite 1800  
Chicago, IL 60606  
mcrowl@invenergy.com

with a copy to:

Paris Solar Energy Center LLC  
Attn: General Counsel  
One South Wacker Drive, Suite 1800  
Chicago, IL 60606  
generalcounsel@invenergy.com

*If to the Town of Paris:*

Town Clerk  
Paris Town Hall  
16607 Burlington Road  
Union Grove, WI 53182

with a copy to:

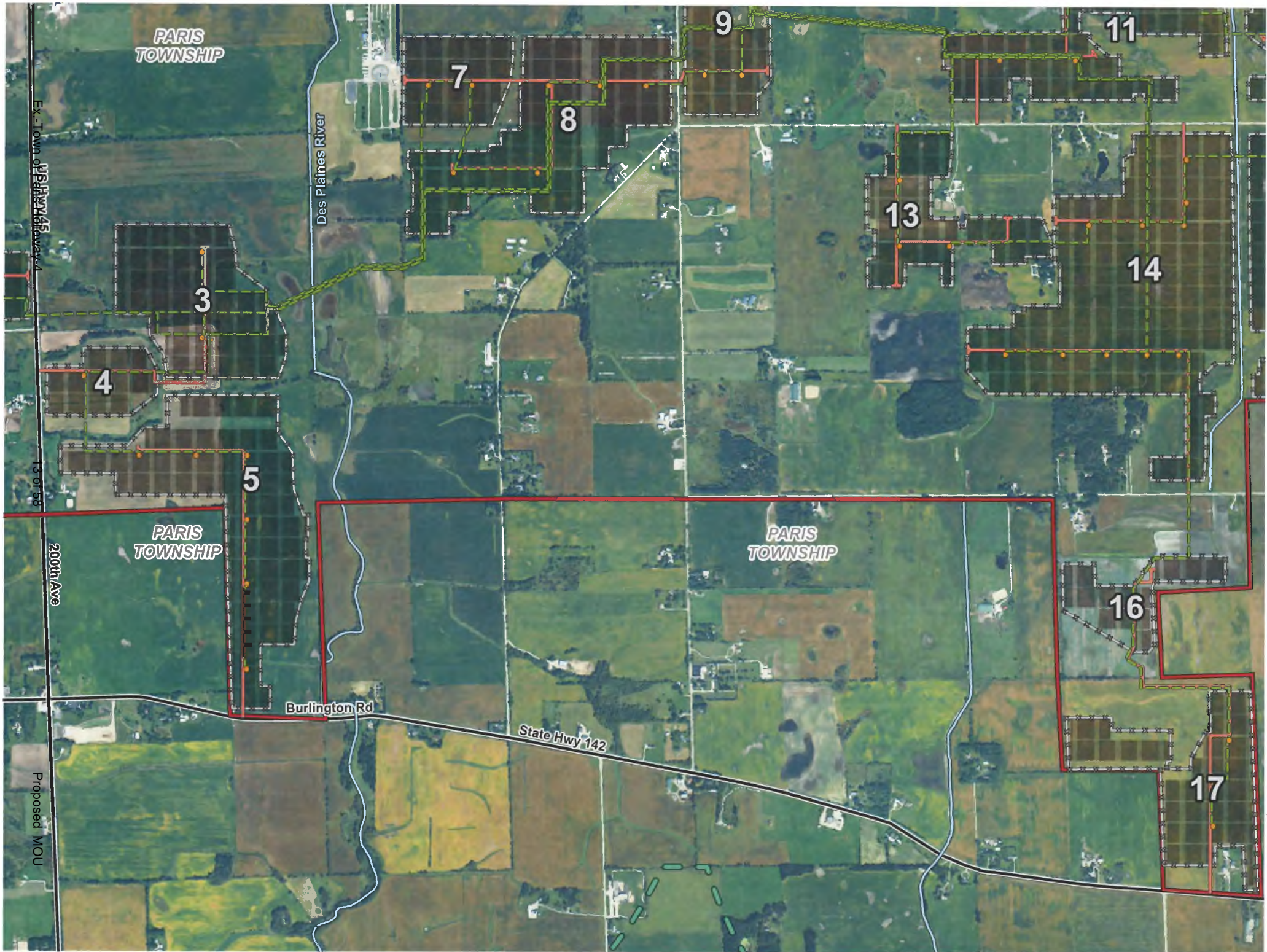
Pruitt, Ekes & Geary, S.C.  
245 Main Street, Suite 404  
Racine, WI 53403  
cgeary@peglawfirm.com

All notices shall be in writing. Any notice shall be deemed to be sufficiently given (i) on the date, if delivered in person; (ii) five (5) days after being sent by United States registered or certified mail, postage prepaid, return receipt requested; or (iii) on the next Business Day if sent by overnight delivery service (*e.g.* Federal Express) to the notified Party at its address set forth above. These addresses shall remain in effect unless another address is substituted by written notice. Notices may be sent via email transmission to the email addresses provided, however, notice sent via email shall be followed by notice delivered by personal service or by registered or certified mail, return receipt requested, or by overnight delivery.



**EXHIBIT A  
SITE PLAN**

**See Attachment**



PARIS TOWNSHIP

Des Plaines River

PARIS TOWNSHIP

PARIS TOWNSHIP

Burlington Rd

State Hwy 142

200th Ave

Proposed MOU

Ex-Town of Hawthorn

13 of 38

3

4

5

7

8

9

11

13

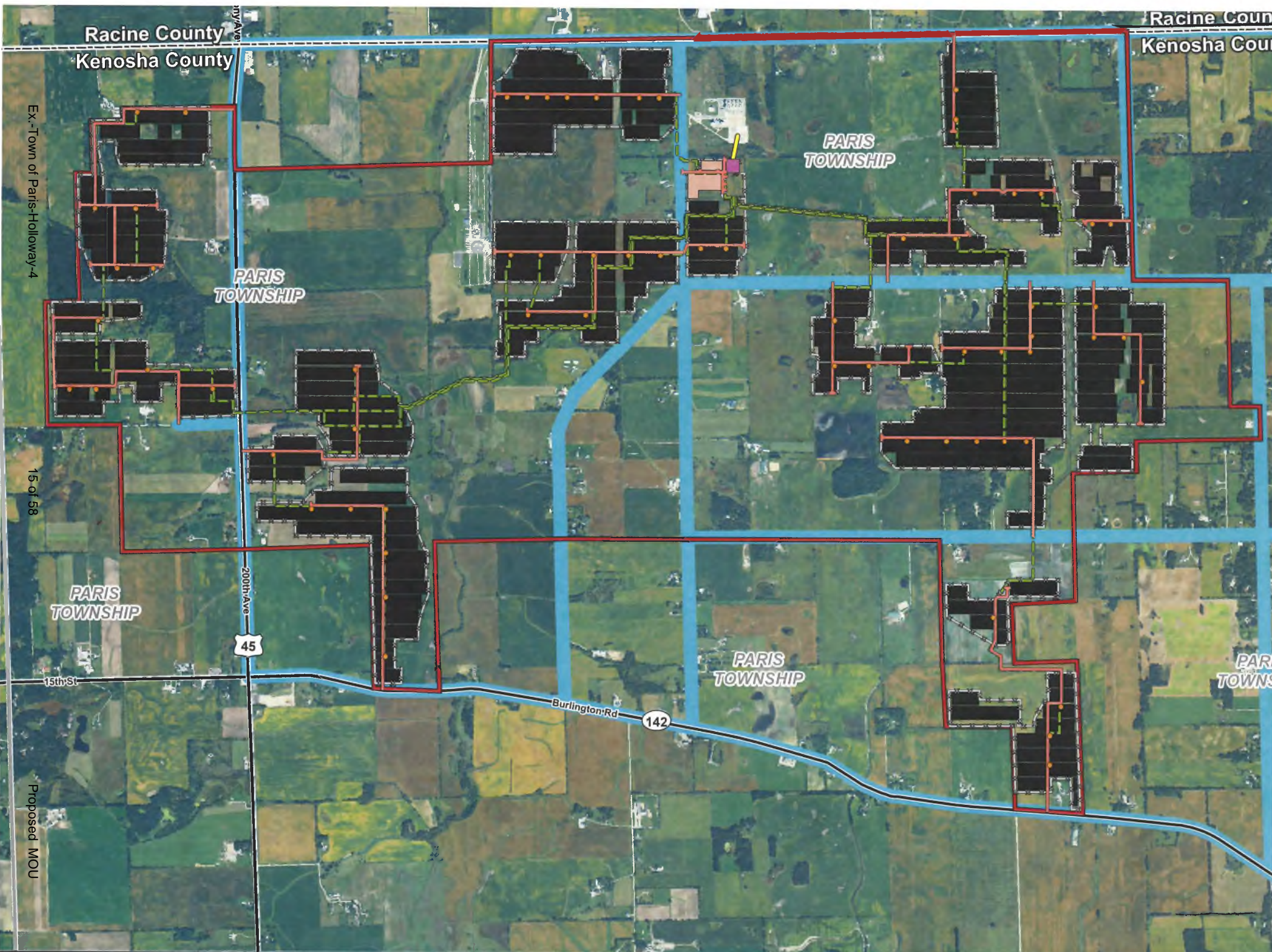
14

16

17

**EXHIBIT B  
HAUL ROUTES**

**See Attachment**



Racine County

Kenosha County

Racine County

Kenosha County

Ex-Town of Paris-Holloway-4

PARIS TOWNSHIP

PARIS TOWNSHIP

15 of 58

PARIS TOWNSHIP

200th Ave  
45

15th St

PARIS TOWNSHIP

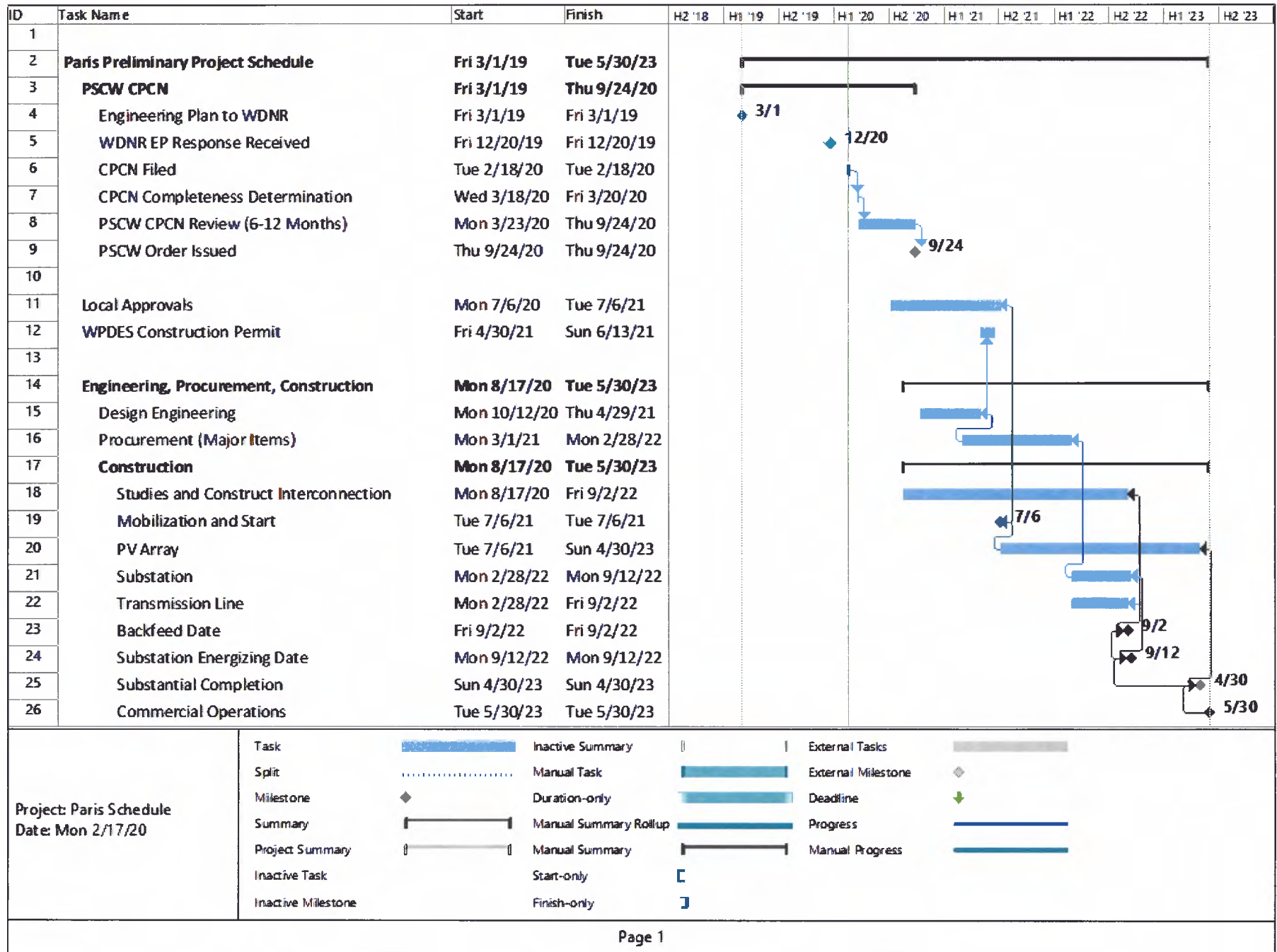
PARIS TOWNSHIP

Burlington Rd  
142

Proposed MOU

**EXHIBIT C  
CONSTRUCTION SCHEDULE**

**See Attachment**



**EXHIBIT D  
VEGETATION MANAGEMENT PLAN**

**See Attachment**

# *Ground Cover Strategy*



PARIS SOLAR FARM

Invenergy



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# 1.0 Executive Summary

Invenergy has prepared this Ground Cover Strategy (the “Strategy”) for the proposed Paris Solar Farm, a solar photovoltaic (PV) generation facility planned for approximately 1,500 acres in Kenosha County, Wisconsin (the “Site”). The Site is within a 5,350-acre Project Area. This document outlines the strategy Paris Solar Farm will use to develop its final Ground Cover Plan, the creation of which will be an evolving process as the site layout, schedule, costs, and other factors are finalized.

Prior to the development of this Strategy, the biophysical site conditions, including the current land cover types, soil classification, vegetation, slope, and other environmental factors were evaluated. The biophysical site conditions were used to inform where certain native species and species mixes would perform best. Local genetic native seed varieties as a seed source, if available, should be considered for use as they are more likely to germinate and persist compared to genetically similar specimens sourced from farther away.

The Strategy has been developed to achieve the following objectives:

- Maintain a high degree of weed control across the site
- Benefit the land, water, plants and wildlife
- Minimize soil stabilization and maintenance costs
- Use native species adapted to a range of soil moisture conditions onsite now or in the future.

The Strategy envisions a three-phase vegetation establishment process. In the first phase, site preparation for weed management will occur over varying timeframes depending on soil types, soil moisture regimes and construction schedule. In the second phase, a matrix of native sedges and grasses will be planted in much of the site. The advantages of establishing a native sedge and grass matrix is to control broadleaf weeds and aid in soil stabilization. After native sedges and grasses establish, additional native species adapted to the varying moisture regimes will be seeded into the native sedge and grass areas to increase plant community diversity and ecosystem functionality. Pollinator-friendly plant species to be included in the seed mixes will benefit bees, butterflies and other pollinators. The third phase provides a framework for a long-term vegetation management program.

There are numerous benefits of the Strategy, including but not limited to:

- Improved water quality due to reduced sediment and nutrient runoff, fertilizer application, herbicide and pesticide use.
- Improved stormwater storage and infiltration due to diverse and dense ground cover.
- Improved erosion control due to soil stabilization of deep rooted and dense fibrous rooted vegetation.
- Improved agricultural productivity due to progression and accumulation of native

bacteria, microbes, moisture content, and root network.

- Improved habitat for wildlife including pollinators and birds.
- Improved neighboring farm productivity due to increased pollinator activity.

Several different vegetation types will be planted because differing microhabitats in the solar farm will require different kinds of vegetation and management. Plant growth height is an important consideration in specific areas. For example, beneath and near PV panels vegetation height must remain below approximately 18 inches. Consequently, the species chosen for planting beneath and near PV panels must be low in stature or able to withstand periodic mowing.

The vegetation Zones that may be planted include:

- Sedge Grass Only Cover (SGO) Zones – A planted and maintained native Sedge and Grass Only Cover mix for Upland soils (SGOU) and Moist soils (SGOM). This zone would be suitable for grazing with some modification.
- Pollinator Habitat (PH) Zones – A Pollinator seed mix for upland soils (PHU) and moist soils (PHM).
- Monarch Corridor (MC) Zone – Favors monarch butterflies by featuring specific milkweed varieties selected to grow to approximately 18 inches maximum height for their food production and habitat creation.
- Diverse Habitat (DH) Zones – Adds more plant variety and high-quality pollinator and wildlife habitat to Upland soils (DHU) and Moist/hydric soils (DHM) Zones.
- Native Seed Production (NP) Zone – Potential areas for short stature native seed production.
- View Screening (VS) Zone – Limited areas within the site to obscure or soften solar farm views, as requested by neighbors or regulators.
- Familiar Crop Screening (FCS) Zone – Areas where familiar crops can help transition to native plantings, soften views or screen.

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## 2.0 Introduction

This document provides a strategy for establishing and managing vegetation at the proposed Paris Solar Farm in Kenosha County, Wisconsin. The Strategy first describes the biophysical attributes of the Paris Solar Farm Project Area. Next, it describes site preparation methods followed by a ground cover strategy and finally, the Strategy provides for the expected vegetation maintenance and monitoring requirements for the long-term persistence of the native vegetation. The Strategy emphasizes using native plants for both soil stabilization and as the primary pollinator plants.

The proposed 1,500-acre solar farm is in northern Kenosha County, Wisconsin, in Paris Township (Figure 1). The Project Area is north of and adjacent to State Hwy 142 and west of Interstate Hwy 94. The proposed Project Area encompasses 5,350 acres (8.35 square miles) of which 1,500 acres of potential solar arrays make up the Site. The land where construction is planned to occur is leased from private landowners.

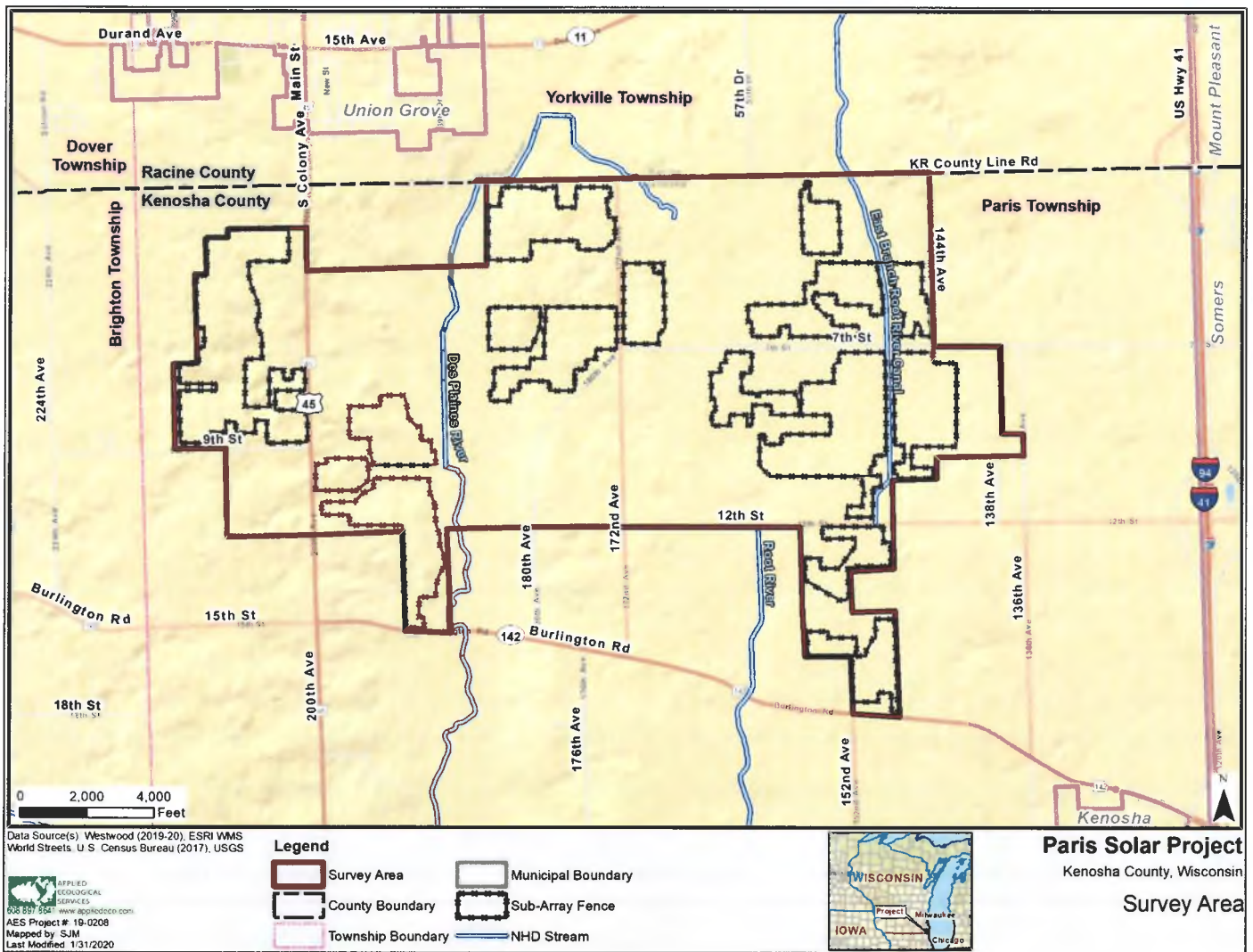


Figure 1. Location of the Paris Solar Farm Project Area.

## 3.0 Biophysical Attributes of the Solar Farm

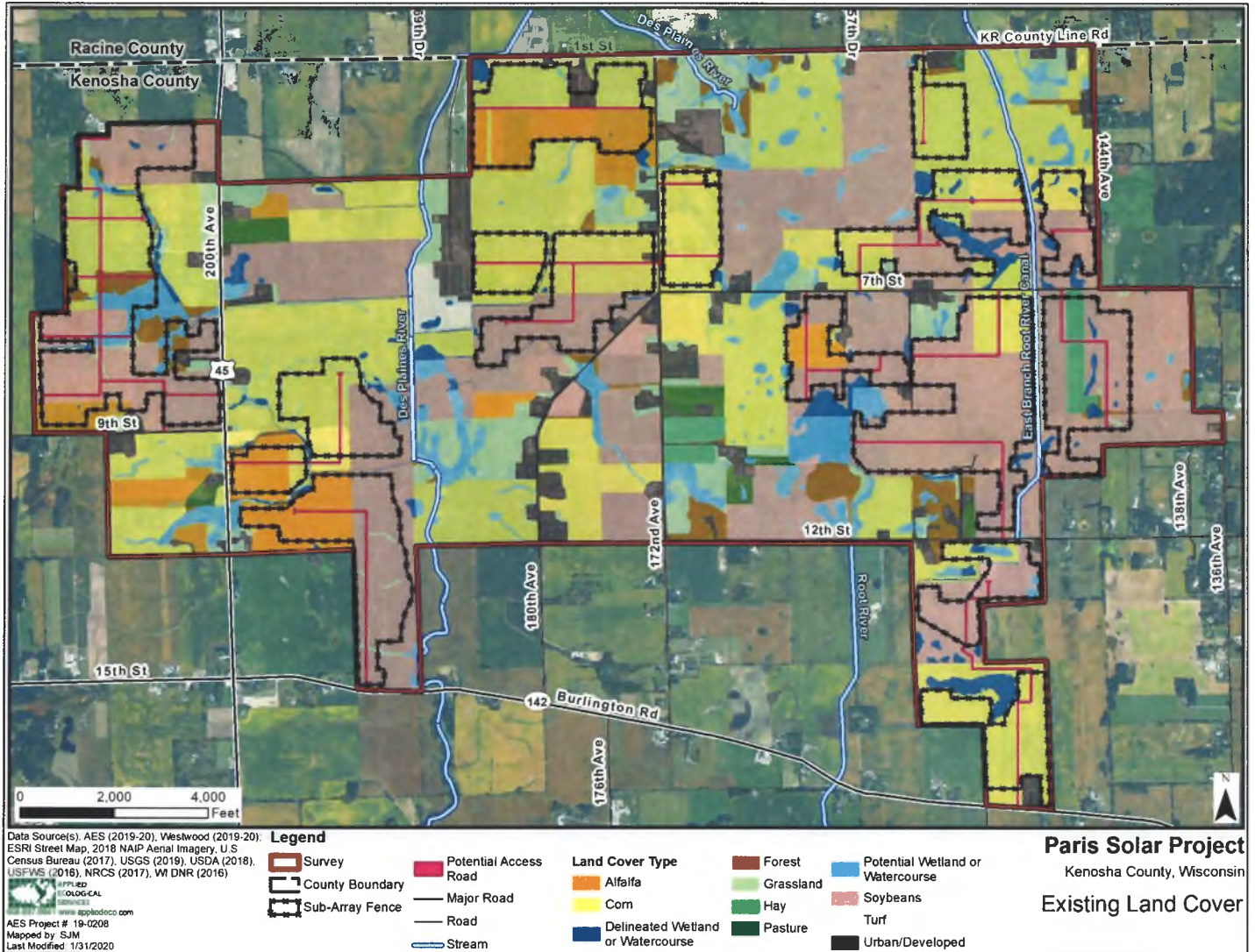
The Strategy incorporates analysis of existing land cover types, soils, topography, water, plant life, and other factors. The biophysical attributes of the 5,350-acre Project Area were used to inform the implementation methods, make recommendations for the potential planting zones and for the development of plant species mixes. An overview of the land cover was described and mapped by Westwood Professional Services with the mapping field checked by Applied Ecological Services (AES) for inclusion of additional data, such as 2018 crop history. AES refined Westwood's preliminary land cover mapping based on 2018 field conditions. The land cover classification scheme will be used to locate planting zones within the Project Area.

### 3.1 Land Cover Classification

Historically (i.e. pre-settlement), vegetation described by the early land surveyors, indicated that much of the 5,350-acre Project Area consisted of native prairie in the upland soils with marshes scattered throughout. Scattered with the upland prairie were bur oak and hickory trees. In some areas, prairie was expansive with few to no trees as evidenced by the lack of nearby marker trees. The upland soils containing native prairie were subsequently put under the plow and converted to agricultural lands which remain in place today.

Dominant land cover types in the 5,350-acre Project Area were refined, classified and mapped using field observations, aerial images and other available data (Figure 2). The land cover classification delineated land cover/uses by visually distinct ecotones. Pastures, for example, stand out in a farmed landscape and on an aerial photograph, as one land cover type regardless of the grass species present. Similarly, an agricultural field planted in soybeans was mapped as soybean field land cover type, regardless of other plant species present. Field data were collected by AES on April 11, 2019 at several areas within the Project Area to verify and refine the previously prepared land cover types. Some areas were not accessible in 2019 and these areas were mapped based on photo interpretation from 2018 satellite aerial imagery.

The previously classified land cover types were consistent with field observations. Cover type categories observed included alfalfa, corn, hay, oats, pasture, soybeans, trees, and wheat. Over 80% of the Project Area is in agricultural land use (Table 1, Figure 2). Soybeans and corn are the primary crops and occupy approximately 35% and 33% of the Project Area respectively. The third-most extensive land cover type is potential wetlands and watercourses at approximately 9% of the Project Area. Within approximately 2,000 acres of the Project Area, wetlands were field delineated (Figure 2). Wetlands were delineated in the entire 1,500-acre Site where the arrays are proposed as well as a few hundred acres adjacent to the arrays.



**Figure 2. Existing Land Cover at Paris Solar Farm Project Area.**

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**Table 1. Current Land Cover Types in the Paris Solar Farm Project Area.**

Land Cover Type	Acres	Percent
Alfalfa	310	6
Corn	1,778	33
Delineated Wetland or Watercourse	145	3
Forest	135	3
Grassland	307	6
Hay	49	1
Pasture	57	1
Potential Wetland or Watercourse	296	6
Soybeans	1,868	35
Turf	29	1
Urban/Developed	377	7
<b>Total</b>	<b>5,350</b>	<b>100</b>

### 3.2 Existing Field Conditions and Potential Herbicide Carryover

Herbicide carryover, or retention in the soil, is an important factor to consider prior to native seeding. This is especially important in the finer-grained soils present over much of the Project Area. Depending on the herbicide, carryover can last for up to 18 months or longer after the cessation of herbicide use. Seeding before herbicide carryover has ceased can result in an unsuccessful seeding. For this reason, data on crop history, tillage practices, herbicide and pesticide use, and the anticipated field conditions after harvest were collected, as available, by visual site survey and a phone or email survey for representative parcels in the Project Area. The resulting list of herbicides known to have been used, or potentially used in southern Wisconsin based on landowner surveys and research with their corresponding carryover times are shown in Table 2.

Data from Table 2 indicates most native sedges and grasses can be planted within 1-12 months of the last herbicide application for most herbicides listed in Table 2. Herbicides like 2,4-D and Glyphosate have a low residence time and most native grasses can be safely planted after 1 month from the date of last application (Table 2). Atrazine (and its derivatives) is being used as a weed killer on farm fields typically planted to corn within the Project Area. It is recommended that these areas apply a minimum 18-month wait period after last application prior to native seeding. Native forbs are less tolerant to most herbicides, with some requiring up to 18 months and some up to two years since the last herbicide application before they can be planted (Table 2). Planting dates for seed mixes will be scheduled after the risk of herbicide carryover has passed.

**Table 2. Commonly Used Agricultural Chemicals Based on Prior Research, Local Landowner Interviews and Recommended Waiting Times for Native Grass and Forb Plantings.**

Product Name	Agricultural Chemical	Months Before Select Native Grasses Can Be Planted	Months Before Select Native Forbs Can Be Planted
2,4-D	2,4-Dichlorophenoxyacetic Acid	1	3
Acuron	Atrazine, Bicyclopyrone, Mesotrione, S-Metolachlor	2	18
Aframe (fungicide)	Azoxystrobin	1	1
Ammonium sulphate additive	Ammonium Sulphate	0	0
Atrazine	Atrazine	12	18-24
Authority XL	Sulfentrazone, Chlorimuron Ethyl	4-12	10-36
Brawl II	S-Metolachlor	next spring	next spring
Callisto	Mesotrione	4	18
Canopy	Metribuzin, Chlorimuron Ethyl	12	30
Clethodim	Clethodim	1	1
Dimetric EXT	Metribuzin, 4-Amino-6-(1,1-Dimethylethyl)-3-(Methylthio)-1,2,4-Triazin-5(4H)-One	8	18
Dual II	S-Metolachlor	4	12
Durango	Glyphosate	1	1
Flexstar	Fomesafen	6	6
Halex GT	Mesotrione, S-Metolachlor, Glyphosate	6	18
Harness Xtra	Acetochlor, Atrazine	6	18
Hornet	Flumetsulam, Clopyralid	4	18
Impact	Topramezone [3-(4,5-Dihydro-3-Isoxazolyl)-2-Methyl-4- (Methylsulfonyl) Phenyl] (5-Hydroxy-1-Methyl-1H-Pyrazol-4-Yl) Methanone	3	18
Metribuzin dual	Metribuzin	8	18
Mustang (insecticide)	Zeta-Cypermethrin	0.5	0.5
Prefix	S-Metolachlor + Sodium Salt of Fomesafen	4	18
Province II (insecticide)	Lambda-Cyhalothrin	1	1
Resicore	Acetochlor, Mesotrione, Clopyralid MEA Salt	1	18
Roundup	Glyphosate	1	1
Sonic	Sulfentrazone, Cloransulam-Methl	12	12
Status	Dicanbra, Diflufenzopyr	4	4
Valor	Flumiozazin	12	12
Warrant	Acetochlor	6	18



### 3.3. Vegetation Characterization

Windshield surveys conducted by AES Ecologists on April 11, 2019 classified and updated land cover and identified some of the invasive and weedy species that may require future management. Ecologists observed the Project Area's land from abutting public Rights-of-Way (ROW). Land cover was determined at those farm fields that were visible from the road and labeled on an aerial map showing early 2018 growing season conditions (Figure 2). Cover type categories used in the field included alfalfa, corn, hay (grass), grass, pasture, and soybean. Where possible, notes were also taken regarding till or no-till practices, manure application, and the use of winter cover crops.

Satellite air photo interpretation was used to classify land cover across the remaining farm fields that were not observable from the ground. Additional observations noted during the field survey includes invasive species and weed populations and their locations, areas with significant ponding, and areas of significant erosion/sediment deposition.

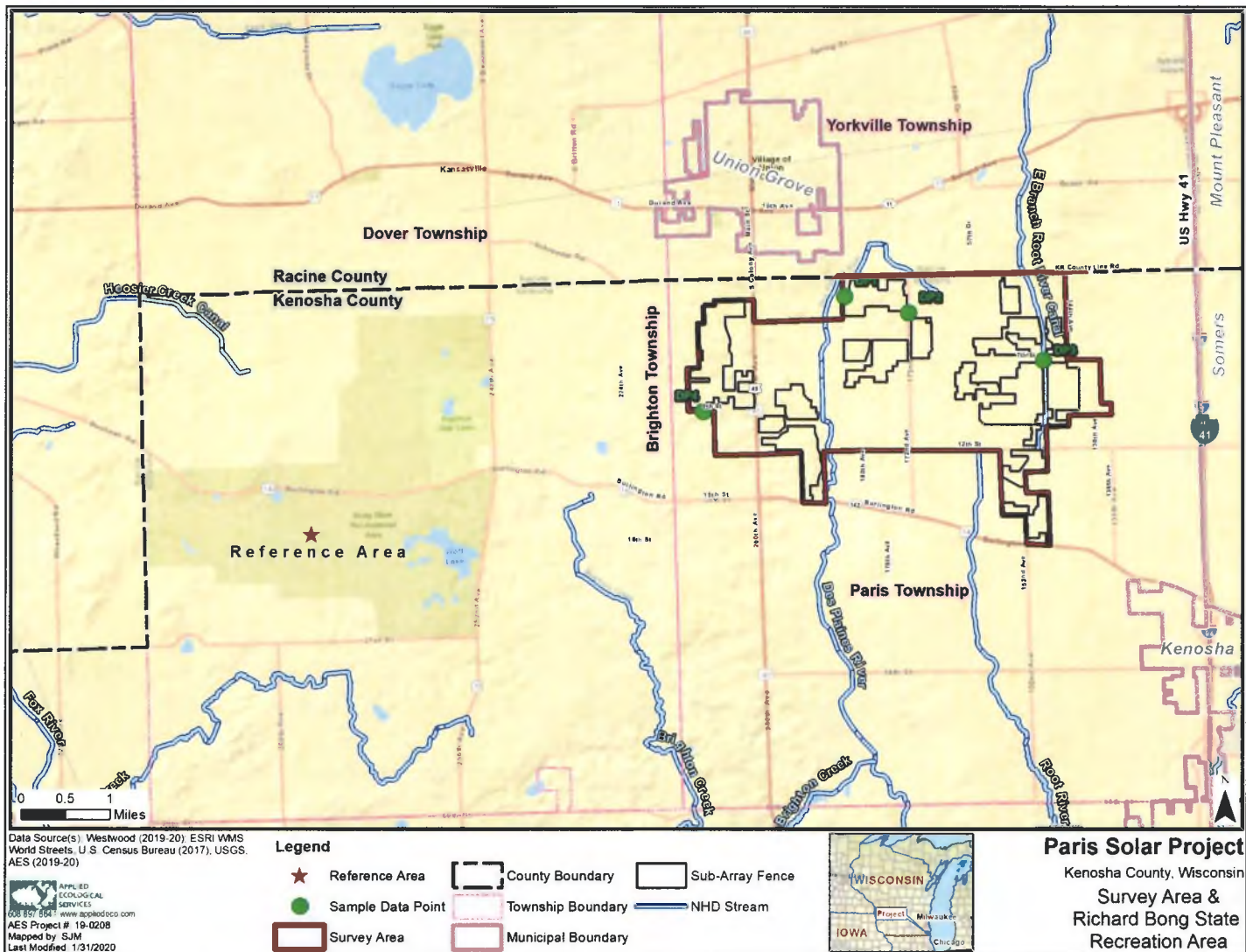
Four representative locations in the Project Area, as well as a relatively undisturbed nearby reference location (Richard Bong State Recreation Area) were assessed. As a result, lists of plant species were compiled at the four onsite locations (Figure 3) to understand the potential of invasive species and weeds occurring within the soil seed bank, in tree lines and in ROW. The reference location was investigated to learn what native and non-native plant species have established within the same general ecoregion as the Paris Solar Farm Project Area (Figure 3). A master plant list was created that includes the species identified in the five vegetation sampling locations as well as species not observed at sampling locations but observed elsewhere along the roadway within the Project Area (Appendix A). It is important to note that the survey was conducted during a time of year when many herbaceous species were still dormant and not observable. Therefore, the survey should be considered representative and adequate for project planning purposes but should not be considered comprehensive.

The spring 2019 survey documented 35 species (excluding agricultural crops) growing in the Project Area (Appendix A). Seventeen additional species were observed in the reference area only. Eighteen species were desirable native plants (most were found in the reference site) and 34 were non-native or invasive native species. The most common native species encountered were gray dogwood (*Cornus racemosa*), common milkweed (*Asclepias syriaca*), and black cherry (*Prunus serotina*). The most common non-native or invasive native species was smooth brome (*Bromus inermis*); followed by several other species including dandelion (*Tabacum officinal*), Kentucky bluegrass (*Poi pratensis*), white campion (*Selene latifoliata*), and white mulberry (*Murus alba*).

The invasive and weedy species most likely to be encountered during implementation and maintenance were determined based on what was observed during the windshield survey and knowledge of local plant species likely to be encountered in the soil seed bank. These invasive and weedy species include Eurasian cool-season grasses (such as smooth brome and Kentucky bluegrass) and broadleaf agricultural weeds (such as dandelion and white campion). The wetter portions of the Project Area are at risk for invasion by invasive wetland species such as narrow-leaved cattail (*Typha angustifolia*), reed canary grass (*Phalaris arundinacea*), common reed (*Phragmites australis*), purple loosestrife (*Lythrum salicaria*) and tall manna grass (*Glyceria maxima*). There are also several common agricultural weeds such as pigweed (*Amaranthus retroflexus*), giant ragweed (*Ambrosia trifida*), common ragweed (*A. artemisiifolia*), and velvetleaf (*Abutilon theophrasti*) that either were present in low abundance or did not show up at all in this early spring survey. However, if present, these species have a high probability to become more abundant in the Project Area as the season progresses. Weed management planning for this Project will anticipate the potential presence of these species.

Lastly, the native marsh, sedge meadow, and mesic and wet mesic prairie communities observed at the Richard Bong State Recreation Area reference site and known to occur within other areas of the Southern Lake Michigan Coastal Ecological Landscape were used to help inform some potential additional species for inclusion in the various seed mixes developed in Appendix B for ecological restoration of the Site. Species selections will ultimately be limited by commercially available native seed sources and supplies.

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**Figure 3. Four Sample Data Points Within the Project Area Where Plant Species Were Compiled and a Reference Area (Richard Bong State Recreation Area).**

### 3.4 Moist Soil Characterization

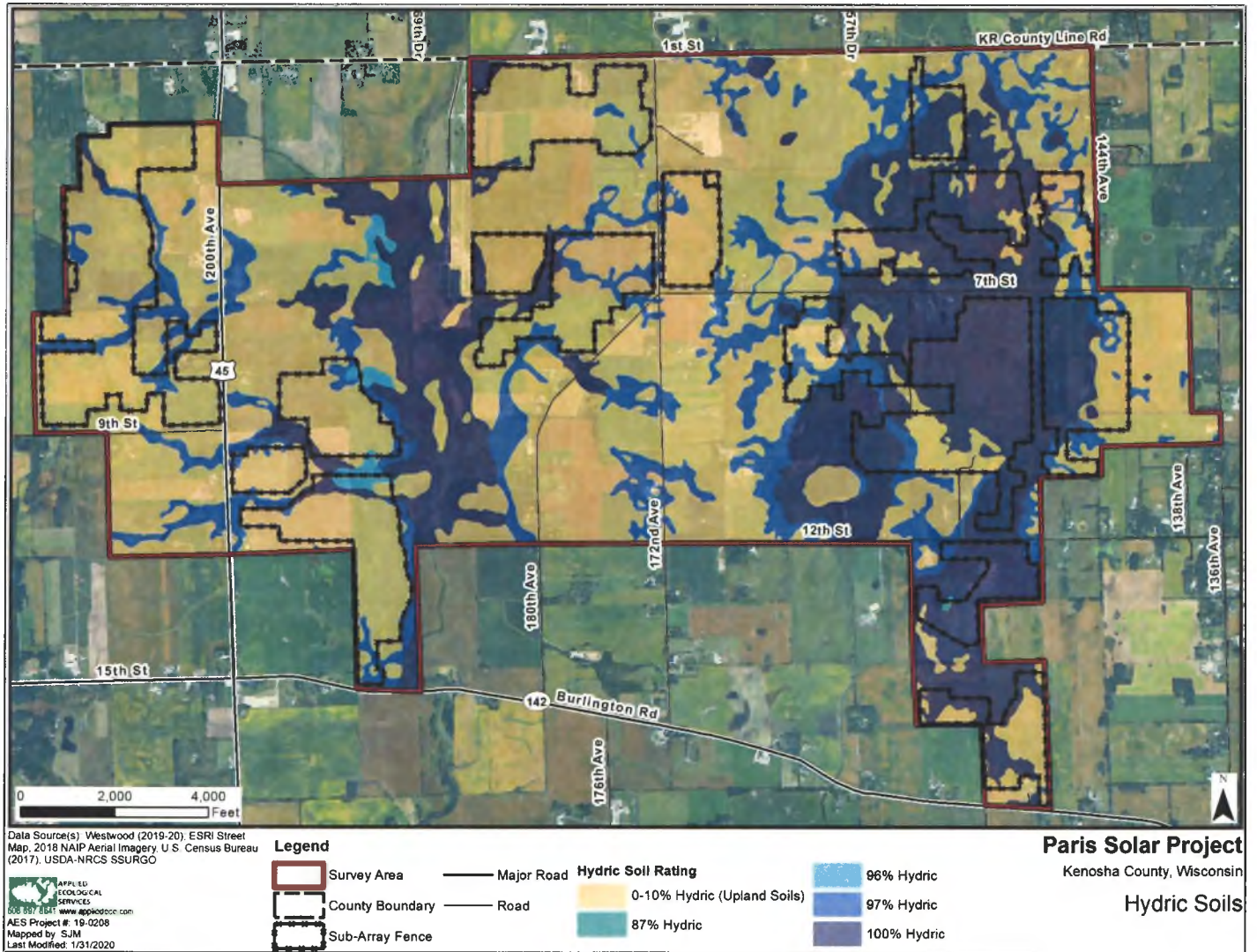
Moist Soil Types were characterized based on their hydric soil component percentages (Figure 4). Hydric soils are defined as soils that form under conditions of saturation, flooding, or ponding for long enough time during the growing season to develop low and no oxygen conditions. These soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation. Soils mapped as varying shades of blue by the NRCS have an 87% or greater hydric soil component and have few to no upland soil inclusions (Figure 4). Soils with less than 10% hydric inclusions are generally described as being upland soils with few to no hydric soil inclusions and are mapped

as yellow. Soils mapped as hydric include silt loams, silty clay loams and all muck soil types. Hydric soils are considered, in this document, to represent moist and wet soils and in an undrained condition are the most problematic for moisture and organic content. Hydric soils under agricultural production are typically drain tiled.

These hydric soils support or historically supported wetland conditions. The rating in Figure 4 indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor non-hydric components in the higher elevations on the landform, and map units that are made up dominantly of non-hydric soils may have small areas of minor hydric components in the lower elevations on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

Soils, such as, Ashkum silty clay loam, Muskego muck, Ogden muck, Houghton muck, Montgomery silty clay, Navan silt loam, Drummer silt loam and Sebewa silt loam are examples of hydric soil types found on the Paris Solar Farm Project Area. Hydric soils make up almost 50% of the soil types found in the 5,350-acre Project Area and are most abundant in the eastern portion and along the Des Plaines River corridor and tributaries on the west side. Hydric soils (either drain tiled or not) will require different site preparation approaches, seeding and management approaches as compared to upland soils. Using a suite of plant species adapted to a range of moisture regimes associated with the hydric soils are found in (Appendix B). The amount of hydric soil acreage is not likely to increase but these soils could become wetter with reduced tile functionality and a moist soil seeding and management approach could become more prominent if drain tile functionality diminishes over time within the hydric soil units.

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**Figure 4. Hydric & Non-Hydric Soils in the Paris Solar Farms 5,350 Acre Project Area.**

### 3.5 Soil Health

In most agricultural settings, the presence and prevalence of native plant species in the landscape is missing. The purposeful restoration of native plant biodiversity and productivity can improve soil health. This is important as native deep-rooted cool and warm season grasses and native nitrogen fixing legumes can lead to an acceleration of the benefits to the soils and to the larger ecosystem. Increased grass productivity and resilience to drought on native restored lands can also be realized.

In general, newly installed predominantly native grass pastures can be placed on a trajectory that will result in increased soil carbon levels and improved water infiltration rates. There is a lot of room for carbon storage from the conversion of

farmlands to native species-dominated grass pastures, simply because of the degraded nature of the regional agricultural soils. Overall benefits to retaining water and nutrients can be realized by improving soil organic carbon in native restored lands.

Large-scale prairie vegetation plantings in Solar facilities offer a new opportunity not recognized as a regional, national, and perhaps global value until recently. The restoration of these landscape islands that regain the soil microbial and fungal systems are associated with soil health. Controlling erosion and improving soil fertility are accelerated as the soil microbial life is restored, accomplishing significant improvements in soil health. The microbiology of a corn field and a prairie are profoundly different. The island of native species-dominated prairie vegetation allows the growth of many species of fungal dominated microbial communities and because soil fungi disperse from spores, the native vegetation areas can be useful as a center of origin to replenish the nearly depleted soil health of large acreages of surrounding farmlands. This is a heretofore not appreciated value of solar farms planted to large-scale prairie vegetation plantings.

## **4.0 Ground Cover Strategy**

The 2019 Biophysical conditions as described in Section 3 were used to develop the Strategy. A key aspect of the Strategy is to use native perennial plant species from upland prairie and moist soil prairie ecosystems of the region. Both the deep roots of native, perennial prairie plants (Figure 5) and the dense, shallow fibrous rooting of moist and wet soil prairie plants will stabilize the existing soil better than relatively shallow-rooted, non-native turf grasses, corn, and soybeans.

Annual agricultural crops cannot establish or are severely stressed in moist soils with low soil oxygen. The previous installation of drain tiles in some of these moist and wet soils has provided conditions allowing for successful row crop production. The Strategy assumes the function of existing drain tiles will not generally be impacted by the solar panel construction and operation of the Solar Farm. Existing tiles will be avoided when possible. If damaged, drain tiles will be replaced or repaired to maintain functionality, as necessary. Appropriate species from Tables in Appendix B can be selected to reflect degree of moisture of the drained hydric soil condition.

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**Figure 5. Selected Upland Native Prairie Plant Rooting Depths and Growth Heights.**

From left to right, the plants depicted are turf grass, corn, soybeans, native prairie grasses and forbs, and a solar racking system depicted in a 2x1 portrait configuration. Scale in feet. The racking system foundation will go below grade, but a final depth has not yet been determined so it is omitted from this illustrative figure.

#### 4.1 Phased Vegetation Establishment

Native perennial plantings can take several years to establish and while establishing they develop deep and fibrous root systems in the first year of planting and typically require another 1-2 years before flowering. Due to slow above ground growth of prairie plants and the potential for aggressive and tall native and non-native weeds to occur in moist soils, the ground must be properly prepared. Undesirable weeds must be diligently controlled before and after any planting. The Strategy’s phased approach begins with site soil preparation (Phase 1), followed by the establishment of a native sedge & grass ground cover only (Phase 2). This strategy will reduce the risk that plantings will be overtaken by weedy plants, leading to lower maintenance efforts in the long term.

Implementing Phase 1 and Phase 2 will best occur prior to solar facility construction. Depending on construction schedules, seasonality, soil preparation requirements and initial cover crop and/or native sedge and grass seeding, portions or all of Phase 1 and Phase 2 may occur concurrently with or immediately after construction. The third

Phase, Zone Establishment, will occur after solar facilities are constructed. This phased approach results in plantings that contain a greater diversity of species while minimizing disturbance and maximizing weed control. The location of the ecological communities proposed in the Zone Establishment section can be modified, if necessary, and these communities can adapt over time to environmental change with minimal impact to solar arrays.

**Phase 1 – Site Preparation.** The most critical aspect of preparing a site for native plants is to adequately prepare the soil. Specific steps during site preparation are tied directly to the land cover types and soil moisture conditions related to the PV panels and other features of the proposed solar farm.

Weed seeds can persist for years and dominate seed banks. Additionally, weed seeds typically germinate earlier and grow faster than the perennial native grasses and wildflowers. Weed species arising from the seed bank or through wind dispersal can especially be problematic in moist soils. Therefore, soil preparation is even more important in moist and wet soils as compared to drier soils. Tall-growing invasive species can dominate wet and moist soils and upon cessation of agricultural practices they will need to be managed.

Prior to seeding native plants, emerging weeds will need to be controlled by a variety of strategies. Cover crops (see Appendix B), herbicide treatment, and mowing are the most likely soil preparation methods. Depending on crop history, soil moisture regime, emerging weeds from the seed bank and wind-blown seeds will determine the most appropriate site preparation methods. Knowledge of row crop history and herbicide residence times will be used to determine areas to be seeded with a cover crop (Appendix B, Table 1). This initial cover crop seeding will be performed by broadcast or no-till drill methods to reduce surface soil disturbance. These methods minimize re-introduction of broadleaf weed species from the seed bank and surrounding areas. After cover crop seeding, mowing during the growing season may be enough to maintain a low vegetation profile before installing the native species. Installation and establishment of a cover crop will also help stabilize soils and reduce erosion potential during construction. Depending on construction scheduling, cover crop and native sedge and grass species installation may occur simultaneously.

Some broadleaf weeds arising after broadcasting or no-till drilling will need to be herbicide treated. One to two herbicide applications will likely be necessary as part of the seed bed preparation, either before or after cover crop installation.

Nearby grasslands, swales/ditches, Road/Utility ROW and agricultural lands within the Project Area will be assessed for the presence of undesirable native and non-native species. Mowing or spot spraying may be necessary if the occurrences are located in a way that facilitates plant encroachment and invasion into the solar facility areas.



Conversion of continuously covered fields, such as alfalfa, clover or pasture areas to Sedge Grass Only Upland (SGOU) and Moist (SGOM) community will begin with a species-specific herbicide treatment of the existing vegetation prior to site construction. Conversion to native upland or moist soil Sedge Grass Zones in the areas with an existing perennial crop (clover or alfalfa) could begin prior to site construction or could be delayed as to not impact construction schedules. The dead standing crop residue of the alfalfa, clover and pasture grass will remain in place and provide soil stabilization and will limit weed species germination until the native seed can be installed via no-till drilling or broadcasting. This will be followed by limited mowing until native seed installation occurs. Depending on the height of the existing pasture grass species, native forb seeds will be no-till drilled into the existing pasture grass matrix to increase native species diversity and provide pollinator habitat. Another option for pre-existing alfalfa, clover or pasture areas is for them to remain and could be used to support sheep grazing.

Once the seed bed has been adequately prepared, the remainder of the site preparation approach will be to perform broadcast methods for seed dispersal using low impact seeding equipment to minimize further soil disturbance. This is especially important for moist and wet soil areas. The low impact seeding equipment will be most effective in previous row crop (soybean and corn) fields. This method does not expose buried weed seeds to sunlight and these seeds remain as a seed bank component and thus do not hamper germination of the broadcast seeds. In some fields, no-till seed drilling will be used to minimize soil disturbance. For instance, in upland soils with little soil moisture, no-till drill seeding with standard farm equipment is an effective seeding method. While no-till drill seeding creates some soil disturbance, it is less disruptive than standard disking thereby reducing the germination of weeds present in the seed bank.

Vegetation in drainage areas where tall invasive species are not problematic will remain largely undisturbed to prevent erosion. However, where these drainage areas harbor tall, invasive, non-native species, such as giant ragweed, reed canary grass, Phragmites, stinging nettle and purple loosestrife, some management control (e.g. herbicide treatment and re-vegetation) will be required.

**Phase 2 – Ground Cover Establishment.** A ground cover of annual, biennial, and perennial plants will be established after site preparation. The initial establishment will consist of either a cover crop or a mix of native grasses and grass-like plants, such as sedges and rushes and a few non-native short-lived grasses. This “Sedge Grass Only Cover” will stabilize soils against erosion, control weeds, and act as a nurse crop for Phase 3 plantings. Surface broadcasting and no-till seed drilling of the Sedge Grass Only Cover will reduce topsoil disturbance. Mowing and spot spraying of tall native and non-native broadleaf species arising after seeding may need to occur prior to or during solar facility construction. Local farm equipment and/or modified lightweight and low

impact farm equipment for use in moist and wet soils will be used for some of these activities. Phase 2 ground cover establishment of either a cover crop and/or native grasses and sedges could be installed prior to, or concurrent with site construction.

**Phase 3 – Zone Establishment.** After the solar facilities are constructed, the Sedge Grass Only Cover has established, and broadleaf weeds controlled, an additional effort to plant pollinator and monarch-friendly species and other plant community zones, as practicable will occur. These additional species proposed for the zones may first be planted in smaller “test plot” areas to determine their resilience and compatibility with the Project prior to planting them throughout the Site. Re-seeding may be required to repair areas disturbed by installation of the solar facilities. Ten potential zone descriptions follow in section 4.2.

## 4.2 Zone Descriptions

### 4.2.1 Sedge Grass Only Cover for Upland (SGOU) and Moist Soil (SGOM) Zones

The Sedge Grass Only Cover Upland and Moist Soil (SGOU & SGOM) Zones will be the two dominant and preliminary vegetation zones seeded across the majority of the 1,500-acre Site (Appendix B, Table 2).

The SGOU and SGOM Zones will require the lowest level of maintenance because they will contain only grass and grass-like plants which can easily be treated with broadleaf herbicides to remove weedy colonizers such as: Canada thistle (*Cirsium arvense*), giant ragweed (*Ambrosia trifida*), sweet clovers (*Melilotus* spp.), tall and Canada goldenrods (*Solidago altissima* & *S. canadensis*), pokeweed (*Phytolacca americanum*), burdock (*Arctium minus*), purple loosestrife (*Lythrum salicaria*) cottonwood seedlings (*Populus deltoides*), and others. The rapid growth and a heavy seeding of the Sedge Grass Only Cover will effectively outcompete many weedy colonizers.

Diverse plantings of a variety of sedges, grasses and grass-like plants will provide numerous ecological benefits. Their root matrices are also expected to contribute agricultural benefits, such as carbon accrual and water infiltration. The Sedge Grass Only Cover will contain native grasses, sedges, rushes and a few naturalized grasses. Most of the grass species proposed are native to the prairie and moist soil areas of Wisconsin and were selected for short stature and bunch growth habit.

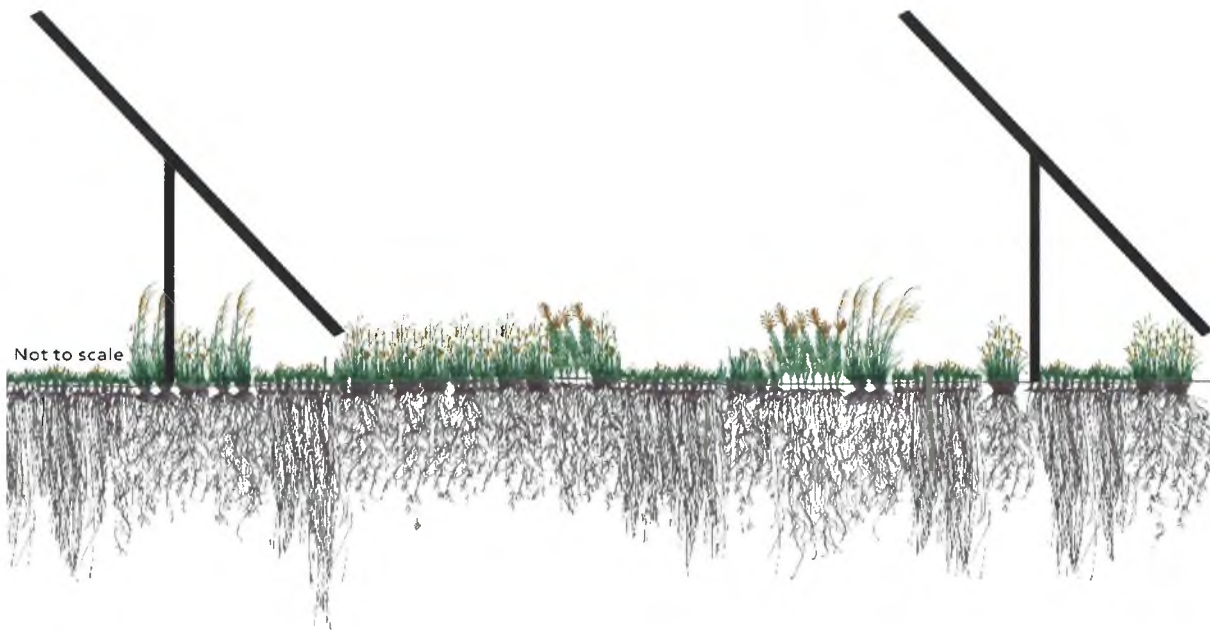
Beneath Sedge Grass Only Cover Upland Zones will be a dense network of fibrous and deep-rooted species (Figure 6), which are home to numerous beneficial organisms that play a key, yet often overlooked, role in soil-building, soil fertility, and plant health. Significant improvements are expected to the biodiversity of habitats and organisms in both the below ground and above ground biomass within these

areas. Moist soil sedge and grass will provide a dense fibrous matrix and will not be as deep rooted due to low oxygen conditions (Figure 7).

Sedge Grass Only Cover Zones will be planted in the following locations:

- Between and under solar arrays
- Buffer areas where weed invasion and colonization pressure are highest
- Rights-of-Way (ROW) and areas adjacent to ROW
- Unused areas next to fallow fields, pastures, and drainageways
- Areas next to cropland from which herbicides or pesticides could drift and damage other planting types
- Areas that may be used for grazing

If grazing (sheep) at the Paris solar facility is considered, a site-specific grazing plan will be developed which will include variations in the plant species to optimize sheep health.



**Figure 6. Sedge Grass Only Cover in Upland Soils in Relation to Solar Panels.**



**Figure 7. Sedge Grass Only Cover in Moist Soils in Relation to Solar Panels.**

#### *4.2.2 Pollinator Habitat for Upland (PHU) and Moist Soil (PHM) Zones*

The seed mix for the two potential Pollinator Habitats (Appendix B, Table 3): Uplands (PHU) and Moist soils (PHM) will be planted into the Sedge Grass Only Cover already established in Phase 2. The Pollinator Habitats provide corridors for pollinator faunal species to move across and through the solar farm landscape and adjacent areas; they will also connect Diverse Habitat and Monarch Corridor Zones that will be placed in both upland and moist soil conditions.

Pollinator Habitat Zones will be planted within the following locations:

- Areas with low risk of herbicide/insecticide drift from neighboring properties (PHU and PHM)
- Areas with low to moderate risk of weedy species invasion (PHU and PHM)
- Areas with infrequent mowing activities in PHU and PHM
- Areas where soil moisture conditions limit management activities

#### *4.2.3 Monarch Habitat (MH) Zone*

Like the PHU and PHM Zones, the Monarch Habitat (MH) Zone seed mix will be planted into the Sedge Grass Only Cover established in Phase 2 and will include low-growing, non-aggressive milkweed species (Appendix B, Table 4). Monarch caterpillars depend on milkweed species as host plants, and usually move from their milkweed host plant on which they are feeding to other vegetation to avoid predators. Common milkweed (*Asclepias syriaca*) in upland soils and marsh milkweed (*Asclepias incarnata*) in moist soils are too tall for use within the solar fields and have been excluded from this zone. The MH areas will be seeded either by broadcast method, seed drill, or plugs of live plants.

Monarch Habitat Zones will be planted within the following locations:

- Upland areas with low risk of herbicide/insecticide drift from neighboring properties
- Upland areas with low to moderate risk of weedy species invasion
- Upland areas with low risk of mowing between May 1 and October 1
- Upland areas within 1,640 feet of Pollinator Habitats
- Diverse Habitat Zone for Uplands (See Section 4.2.4, below) so that adult monarchs can find flowers and the nectar they provide

#### *4.2.4 Diverse Habitat for Upland (DHU) and Moist Soil (DHM) Zones*

The Diverse Habitat Zone will provide the most benefits for wildlife by providing host plants and habitat for a variety of pollinators and other beneficial native species. The Diverse Habitat seed mixes (Appendix B, Table 5) will feature a range of short and moderate statured plant species and display the greatest variety of plant life and color of all the plantings. Depending on soil moisture conditions, a subset of species will be selected for development of the Diverse mix for Upland (DHU) and a Diverse Habitat for Moist soil conditions (DHM).

Diverse Habitat Zones will be installed within the following locations:

- Areas with low risk of herbicide/insecticide drift from neighboring properties
- Areas within 1,640 feet of other Diverse Habitat Zones, Pollinator Habitats, or Monarch Habitats
- Areas with moderate to low risk of invasion by difficult-to-control perennials, such as thistle and Canada goldenrod
- Areas visible to the public, so enthusiasts of native wildflower and grass plantings can readily view them.

#### *4.2.5 Native Seed Production (NP) Zone*

Native Seed Production Zones may be selected as areas for growing native upland and moist soil plants for seed harvesting and future use on the Site. An experienced grower of native seeds and plants could be retained by the Project to establish and manage the Native Seed Production operations. Native seed is in high demand and availability of species is uncertain. Volatility in native seed availability is expected to continue for several years. Establishment of Native Seed Production Zones for onsite seed collection could help to alleviate the lack of availability of some native species.

Native Seed Production Zones are only suitable in the following locations:

- Areas with low risk of herbicide/insecticide drift from neighboring properties
- Open areas that are relatively flat
- Open areas that are 2.5 acres or larger
- Open areas next to access roads
- Open areas at a distance from places where weedy species are growing
- Areas not expected to be disturbed by solar facility maintenance activities

#### 4.2.6 View Screening (VS) Zone

Identified View Screening Zones will be planted into the Sedge Grass Only Cover with a few native wildflowers beneath the woody species used for visual screening. This zone will screen or soften views of solar facilities with colorful, native vegetation (Appendix B, Tables 6a and 6b). While completely blocking views of solar arrays may not be possible, commonly used landscaping plants can soften or obscure the view of the Project by an observer standing at ground level.

#### 4.2.7 Familiar Crop Screening (FCS) Zone

In some areas, installation of a tall familiar looking crop will be installed as part of site screening. Corn, for instance, may be installed in some edge areas to serve as a screen to portions of the site.

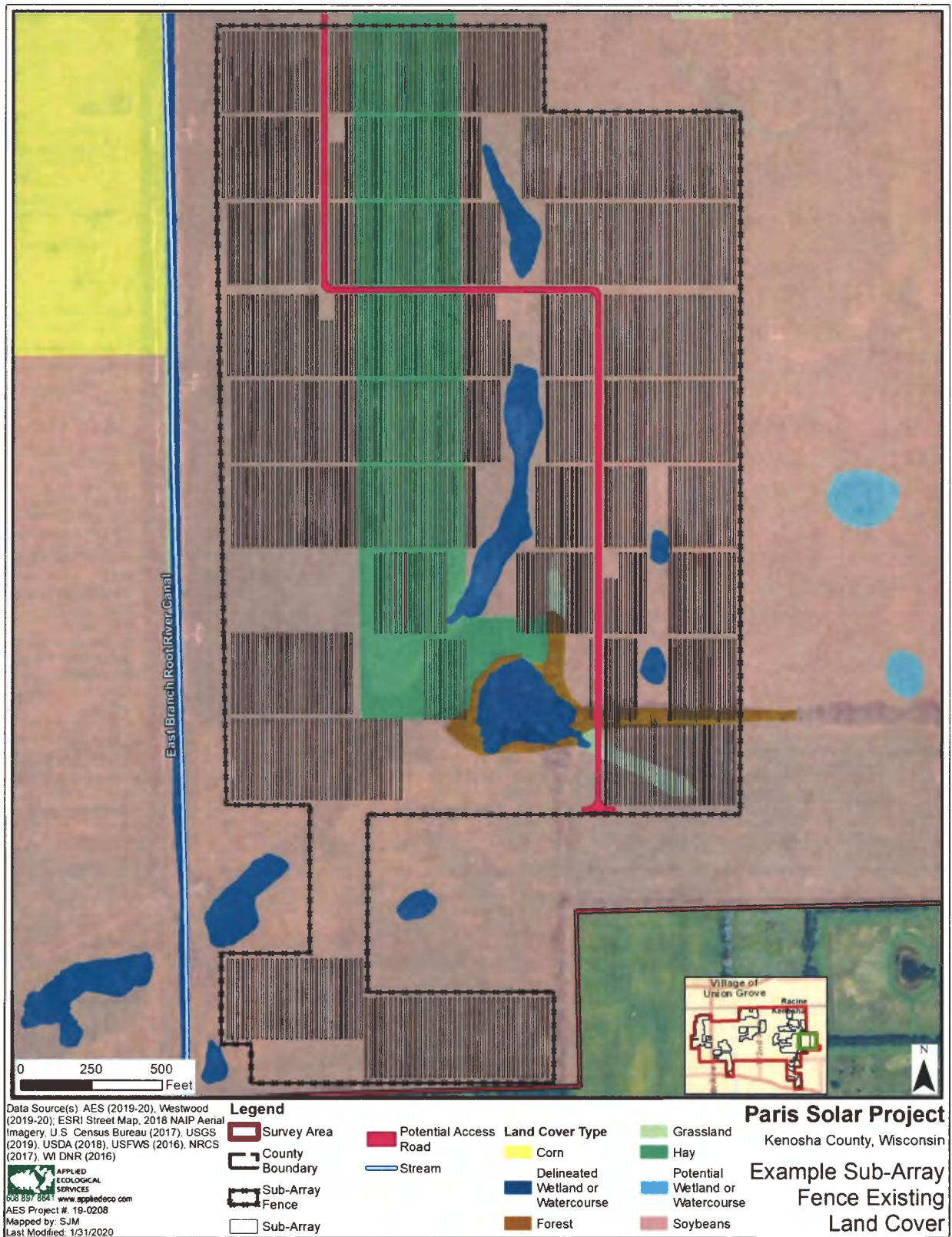
The percentage of the Paris Solar Farm proposed to be planted to the various zones is shown in Table 3.

**Table 3. Proposed Ground Cover Percentages for Habitat Zones.**

Proposed Ground Cover Plan	Typical % of Solar Field Sub-Array Area
Sedge Grass Only Cover (SGO)	75+%
Pollinator Habitat (PH)	20-30%
Monarch Corridor (MC)	2-5%
Diverse Habitat (DH)	1-3%
Native Seed Production (NP)	TBD
View Screening (VS)	TBD
Familiar Crop (FC)	TBD

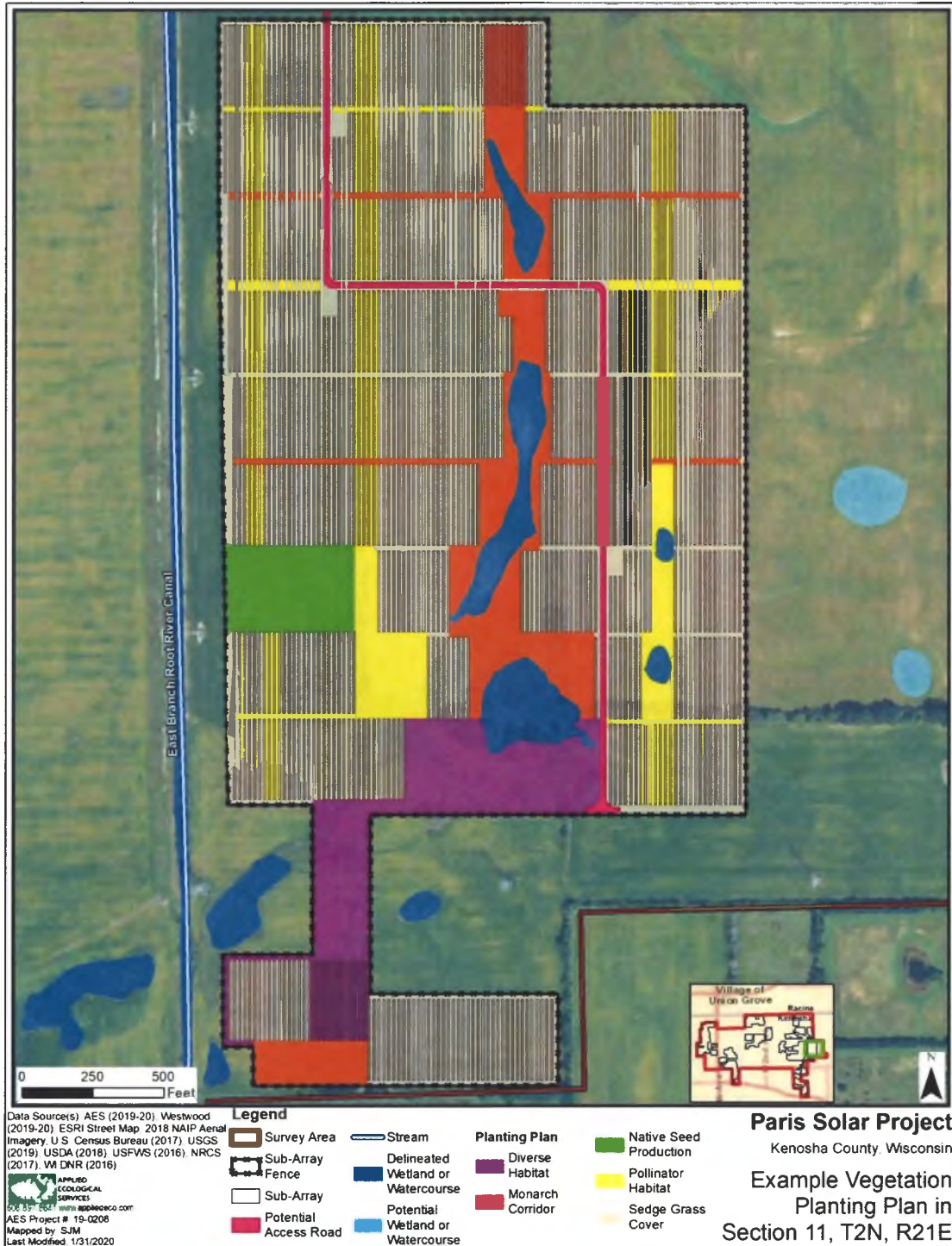
### 4.3 Example Zone Planting Plan

Figures 8 & 9 offer an illustrative representation of how different seed mix zones may be located throughout the Site depending on existing land cover types, using a portion of Section 11 of T2N, R21E in the Town of Paris as an example. This area was chosen as it offers a selection of the different existing land use types and soil conditions that will be encountered across the entire site.



**Figure 8. Existing Land Cover in a Portion of Section 11, T2N, R21E Paris Township.**

**PARIS SOLAR FARM: Ground Cover Strategy**



**Figure 9. Example of a Vegetation Planting Plan for a Portion of Section 11, T2N, R21E Paris Township.**

Note: Monarch, Diverse Habitat and Pollinator Habitat seeding will occur between, not under the panels.



## 5.0 Vegetation Establishment and Maintenance

Native plants require up to three years to mature and establish and depend on site preparation, their colonization ability and their management strategy. During the initial two years of plant growth, native perennial seedlings develop slowly compared to weeds that grow rapidly, emphasizing the importance of soil preparation and vegetation management during their establishment period. The resource allocation of native perennial plants is mostly into root development during the initial years, while annual weeds (by their very nature) allocate their resources into stems, leaves, flowers and seed production. The management techniques and schedules employed recognize these different growth strategies to leverage the resource allocation differences of the species. The vegetation establishment period for this Strategy focuses on ensuring the Sedge Grass Only Cover seed mixes for Upland and Moist soil areas (SGOU and SGOM) develop relatively quickly, stabilize the soil and create a favorable environment for potential over-seeding of the other seed mixes.

Vegetation maintenance begins in the first year of native plant installation and will last for the life of the Solar Farm with the most intense maintenance period occurring in the first 3-5 years. Maintenance will focus on invasive plant control, especially tall invasive native and non-native annuals, perennials and woody species. Prevention of tree and shrub invasion and establishment of weeds from surrounding outside sources will need to be a management focus. Proper timing of maintenance activities is essential to minimize the development and spread of weed and woody species seeds. The maintenance activities include the following:

**Mowing.** During Year 3 and beyond, mowing will take place in mid-summer (~mid-July) or later to maintain vegetation height under 18 inches to avoid shading the PV panels and to avoid disturbing ground nesting birds and their young as well as avoid peak monarch butterfly movements. Alternately, the mowing schedule may be adjusted across zones in any year (e.g., mowing of Monarch Habitat Zone to align with peak benefit to monarch butterflies). A second mowing in fall or winter, if necessary, will be scheduled. Annual mowing will prevent woody species establishment. In areas of high soil moisture, mowing may need to be scheduled when ground is dry enough to prevent tire rutting or when the moist soil areas are frozen. Specialized mowing equipment, such as a tractor with low impact tires, may need to be implemented at times in high moisture areas.

**Spot-Herbicide Treatments.** A limited application of herbicides to individual plants and groups of plants will be used one or more times per year, as needed.

**Outside ROW and Tree Line Management.** Weedy herbaceous and woody plant species will likely enter the solar farm from Rights-of-Way (ROW) and tree lines crossing through the Site. ROW and tree lines will be a top priority for monitoring high potential of invading species through seed dispersal, with spot-herbicide treatments to be performed as-needed. Removal of the mother plants of the problematic species in the tree lines and ROW should be considered. Seed production and seed dispersal by native and non-native trees, shrubs and herbaceous species from nearby and adjacent ditches, woodlots and treelines will need to be

monitored prior to and after the solar arrays have been installed. The dense root and stem matrix of the Sedge Grass Only Cover in upland soil areas will limit or prevent some woody and herbaceous species seed from establishing. However, moist and wet soil areas will be more susceptible to invasion and establishment of some wind dispersed woody and tall herbaceous species such as cottonwood, cattail and Phragmites.

**Monitoring.** Periodic inspections of the establishing and established vegetation will be made to detect both native and non-native invasive species issues, ensure plant growth is not shading part of the panel array, and identify erosion and soil stabilization issues. The results of the inspections will provide recommendations on management methods, erosion and soil stabilization issues and recommendations on additional seeding.

**Remedial Seeding.** Areas damaged by construction activities or otherwise failing to meet vegetation performance standards will require supplemental seeding alongside the mix applicable to the final planting plan.

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## Appendix A. Vegetation Sampling Points at the Paris Solar Farm

Scientific Name	Common Name	Vegetation Sample Point ID					Reference Area	Frequency (%)
		P1	P2	P3	P4			
<b>Desirable Native Species</b>								
Apocynum sp.	Dogbane					1	20%	
Asclepias syriaca	Common milkweed			1		1	40%	
Carex scoparia	Broom sedge					1	20%	
Carex sp.	Sedge					1	20%	
Cornus amomum	Silky dogwood					1	20%	
Cornus racemosa	Gray dogwood		1	1		1	60%	
Echinocystis lobata	Wild cucumber	1					20%	
Galium triflorum	Fragrant bedstraw	1					20%	
Helianthus grosseserratus	Saw-tooth sunflower					1	20%	
Helianthus sp.	Sunflower					1	20%	
Panicum virgatum	Switch grass					1	20%	
Physocarpus opulifolius	Common ninebark					1	20%	
Prunus americana	Wild plum					1	20%	
Prunus serotina	Black cherry		1		1		40%	
Schizachyrium scoparium	Little bluestem					1	20%	
Solidago altissima	Late goldenrod					1	20%	
Solidago riddellii	Riddell's goldenrod					1	20%	
Sorghastrum nutans	Indian grass					1	20%	
<b>Non-native &amp; Invasive Native Species</b>								
Acer negundo	Boxelder		1				20%	
Arctium minus	Common burdock	1					20%	
Artemisia trifida	Giant ragweed						0%	
Barbarea vulgaris	Yellow rocket	1					20%	
Bromus inermis	Smooth brome	1	1	1	1	1	100%	
Cichorium intybus	Chicory			1			20%	
Crataegus sp.	Hawthorn		1				20%	
Daucus carota	Queen Anne's lace					1	20%	
Dipsacus sp.	Teasel						0%	
Hemerocallis sp.	Day-lily		1				20%	
Hesperis matronalis	Dame's rocket				1		20%	
Juniperus virginiana	Red cedar					1	20%	
Leonurus cardiaca	Motherwort	1					20%	
Lolium arundinaceum	Tall fescue		1				20%	
Malva neglecta	Common mallow	1					20%	
Melilotus officinalis	Yellow sweet-clover			1			20%	
Morus alba	White mulberry	1			1		40%	
Panicum dichotomiflorum	Fall panic grass		1				20%	
Phalaris arundinacea	Reed canary grass					1	20%	
Phragmites australis	Common reed					1	20%	
Plantago lanceolata	Narrow-leaved plantain		1				20%	
Poa pratensis	Kentucky bluegrass			1		1	40%	

Scientific Name	Common Name	Vegetation Sample Point ID					Reference Area	Frequency (%)
		P1	P2	P3	P4			
Rhamnus cathartica	Common buckthorn		1				1	40%
Rubus idaeus	Red raspberry			1				20%
Rubus occidentalis	Black raspberry	1						20%
Salix interior	Sandbar willow			1				20%
Setaria faberi	Giant foxtail	1						20%
Setaria pumila	Yellow foxtail		1					20%
Silene latifolia	White campion	1			1			40%
Taraxacum officinale	Dandelion	1	1					40%
Trifolium pratense	Red clover	1	1					40%
Typha angustifolia	Narrow-leaved cattail							0%
Vitis riparia	Riverbank grape		1					20%
Xanthoxylum americanum	Prickly ash					1		20%
<b>Total Number of Desirable Native Species</b>		<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>		<b>15</b>	
<b>Total Number of Non-native &amp; Invasive Native Species</b>		<b>13</b>	<b>12</b>	<b>6</b>	<b>5</b>		<b>7</b>	
<b>Total Number of Species</b>		<b>15</b>	<b>14</b>	<b>8</b>	<b>6</b>		<b>22</b>	

Note: Species with 0% frequency were inventoried during the roadside survey of the entire site but we're not found in any of the five sampling locations.

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## Appendix B. Proposed Seed Mixes

(These or similar species, depending on availability)

**Table 1. Temporary Cover Crops for Use in the Paris Solar Farm Project. Apply at a rate of 20-50 lbs./acre as a single species or mix of species, depending on site conditions.**

Botanical Name	Common Name	Soil Condition (mesic, moist, wet)
<i>Avena sativa</i> *	Oats	Mesic
<i>Dactylis glomerata</i> *	Orchard grass	Mesic
<i>Echinochloa crusgalli</i>	Barnyard grass	Moist, Wet
<i>Elymus virginicus</i>	Virginia wild rye	Moist, Wet
<i>Hordeum jubatum</i> *	Squirrel tail barley	Mesic
<i>Lolium multiflorum</i> *	Annual rye	Mesic, Moist
<i>Panicum capillare</i>	Common witch grass	Moist, Wet
<i>Panicum dichotomiflorum</i>	Knee grass	Moist, Wet
<i>Phleum pretense</i> *	Timothy	Mesic
<i>Secale cereale</i> *	Winter rye	Mesic, Moist

\*Non-native species

**Table 2. Moist and Upland Sedge Grass Only Cover (SGOM & SGOU) Plant Species for Use in the Paris Solar Farm Project.**

For moist and wet soil conditions (SGOM) select FAC, FACW and OBL species. For upland soil conditions (SGOU) select FAC, FACU and UPL species. Use these mixes for establishment over the entire solar field.

Botanical Name	Common Name	Wetland Category	Functional Group	Form
<i>Anthoxanthum hirta</i>	Sweet vernal grass	FACU 7*	Perennial cool season grass	Rhizomatous
<i>Bouteloua curtipendula</i>	Side oats grama	UPL 8	Perennial warm season grass	Rhizomatous
<i>Bromus ciliata</i>	Fringed brome	FACW 7	Perennial cool season grass	Rhizomatous
<i>Bromus kalmia</i>	Kalm's brome	FACU 8	Perennial cool season grass	Rhizomatous
<i>Carex bebbii</i>	Bebb's sedge	OBL 4	Perennial sedge	Bunch
<i>Carex bicknellii</i>	Bicknell's sedge	UPL 6	Perennial sedge	Bunch
<i>Carex blanda</i>	Wood sedge	FAC 1	Perennial sedge	Bunch
<i>Carex brevior</i>	Short beak sedge	FACU 4	Perennial sedge	Bunch
<i>Carex cristatella</i>	Crested oval sedge	FACW 4	Perennial sedge	Bunch
<i>Carex normalis</i>	Spreading oval sedge	FAC 5	Perennial sedge	Bunch
<i>Carex pellita</i>	Wooly sedge	OBL 4	Perennial sedge	Rhizomatous
<i>Carex scoparia</i>	Broom sedge	OBL 4	Perennial sedge	Bunch
<i>Carex stipata</i>	Awl Fruited sedge	OBL 2	Perennial sedge	Bunch
<i>Carex vulpinoidea</i>	Brown fox sedge	OBL 2	Perennial sedge	Bunch
<i>Eleocharis erythropoda</i>	Red rooted spikerush	OBL 6	Perennial spikerush	Rhizomatous
<i>Eleocharis obtusa</i>	Blunt spikerush	OBL 8	Annual spikerush	Bunch
<i>Elymus virginicus</i>	Virginia wild rye	FACW 4	Perennial cool season grass	Bunch
<i>Glyceria striata</i>	Fowl manna grass	OBL 4	Perennial cool season grass	Bunch
<i>Hordeum jubatum</i>	Squirrel-tail barley	FAC 0	Perennial cool season grass	Bunch
<i>Juncus acuminatus</i>	Tufted rush	OBL 6	Perennial rush	Bunch
<i>Juncus canadensis</i>	Canada rush	OBL 7	Perennial rush	Bunch

<b>Table 2. Continued Botanical Name</b>	<b>Common Name</b>	<b>Wetland Category</b>	<b>Functional Group</b>	<b>Form</b>
Juncus dudleyi	Dudley's rush	FACW 4	Perennial rush	Bunch
Juncus effusus	Common rush	OBL 4	Perennial rush	Bunch
Juncus tenuis	Path rush	FACU 1	Perennial rush	Bunch
Juncus torreyi	Torrey's rush	FACW 4	Perennial rush	Rhizomatous
Koeleria micrantha	June grass	UPL 7	Perennial cool season grass	Bunch
Leersia oryzoides	Rice cut grass	OBL 3	Perennial cool season grass	Rhizomatous
Muhlenbergia mexicana	Muhly grass	FACW 4	Perennial cool season grass	Bunch
Phleum pratense	Timothy	UPL	Perennial non-native cool season grass	Bunch
Sporobolus heterolepis	Prairie Dropseed	FACU 10	Perennial cool season grass	Bunch

\*Number represents Native Coefficient of Conservatism

**Table 3. Moist and Upland Pollinator Habitat (PHM and PHU) Plant Species for Use in the Paris Solar Farm Project.**

Each area will contain at least 3 species each early, mid and late season, and an annual for 1<sup>st</sup> season forage. For moist soil mixes (PHM) select FAC, FACW and OBL species and for upland soil mixes (PHU) select FAC, FACU and UPL species.

<b>Botanical Name</b>	<b>Common Name</b>	<b>Wetland Category</b>	<b>Functional Group</b>	<b>Bloom Time Season</b>
Allium cernuum	Nodding wild onion	FAC 7*	Perennial forb	Summer
Anemone canadensis	Meadow anemone	FACW 4	Perennial forb	Spring
Annuals for Sun	Annual mix	n/a	Annual forb	Summer, Fall
Asclepias tuberosa	Butterfly milkweed	UPL 6	Perennial forb	Summer
Chamaecrista fasciculata	Partridge pea	FACU 5	Annual forb, legume	Summer, Fall
Coreopsis lanceolata	Sand coreopsis	FACU 5	Perennial forb	Spring, Summer
Dalea candida	White prairie clover	UPL 8	Perennial forb, legume	Summer
Dalea purpurea	Purple prairie clover	UPL 9	Perennial forb, legume	Summer, Fall
Lobelia cardinalis	Cardinal flower	OBL 7	Perennial forb	Summer
Lobelia siphilitica	Great blue lobelia	FACW 5	Perennial forb	Summer
Lythrum alatum	Winged loosestrife	OBL 6	Perennial forb	Summer
Oligoneuron album	Stiff aster (goldenrod)	FACU 10	Perennial forb	Fall
Rudbeckia hirta	Black-eyed Susan	FACU 1	Biennial forb	Summer, Fall
Solidago nemoralis	Dyer's weed	UPL 4	Perennial forb	Summer
Tradescantia ohiensis	Spiderwort	FACU 5	Perennial forb	Spring, Summer
Trifolium pratense L.	Red clover	UPL	Perennial non-native forb, legume	Spring

\*Number represents Coefficient of Conservatism

**Table 4. Monarch Corridor (MCU) Plant Species for Use in the Paris Solar Farm Project.**

Contains at least one milkweed species and an annual for 1<sup>st</sup> season forage.

<b>Botanical Name</b>	<b>Common Name</b>	<b>Wetland Category</b>	<b>Functional Group</b>	<b>Bloom Time Season</b>
Annuals for Sun	Annual mix	n/a	Annual forb	Summer, Fall
Asclepias tuberosa	Butterfly weed	UPL 7*	Perennial forb	Summer
Asclepias verticillata	Whorled milkweed	UPL 1	Perennial forb	Summer, Fall

\*Number represents Native Coefficient of Conservatism.

**Table 5. Moist Soil and Upland Soil and Diverse Habitat (DHM and DHU) Plant Species for Use in the Paris Solar Farm Project.**

For upland soil areas (DHU) select up to 20 species of mixed heights for those listed as FAC, FACU, and UPL. For wet and moist soil areas (DHM) select up to 20 species of those listed as FAC, FACW and OBL. For wetland areas select only FACW or OBL species. One or more representatives from these key groups; legumes, sedges, grasses, umbels, mints, asters, and sunflowers. Three or more blooming species in each spring, summer and fall.

Botanical Name	Common Name	Wetland Category	Functional Group	Bloom Time Season
Annuals for Sun	Annual mix	n/a	Annual forb	Summer, Fall
<i>Asclepias incarnata</i>	Swamp milkweed	OBL 4*	Perennial forb	Summer, Fall
<i>Anemone canadensis</i>	Meadow anemone	FACW 4	Perennial forb	Spring, Summer
<i>Antennaria plantaginifolia</i>	Plantain pussy toes	UPL 3	Perennial forb	Spring
<i>Asclepias tuberosa</i>	Butterfly milkweed	UPL 6	Perennial forb	Summer
<i>Baptisia leucophaea</i>	Cream wild indigo	UPL 7	Perennial forb	Spring
<i>Bidens aristosa</i> or <i>cernua</i>	Bearded beggar's ticks	FACW 3	Perennial forb	Summer
<i>Bouteloua curtipendula</i>	Side oats grama	UPL 8	Perennial warm season grass	N/A
<i>Comandra umbellata</i>	False toadflax	FACU 6	Perennial forb	Spring, Summer
<i>Coreopsis lanceolata</i>	Sand tickseed	FACU 8	Perennial forb	Spring
<i>Coreopsis palmata</i>	Prairie coreopsis	UPL 8	Perennial forb	Summer
<i>Dalea candidum</i>	White prairie clover	UPL 8	Perennial forb	Summer
<i>Dalea purpureum</i>	Violet prairie clover	UPL 7	Perennial forb	Summer
<i>Dodecatheon meadia</i>	Shooting star	FACU 6	Perennial forb	Spring
<i>Echinacea purpurea</i>	Purple coneflower	UPL 3	Perennial forb	Summer
<i>Elymus canadensis</i>	Canada wild rye	FAC 4	Perennial cool season grass	N/A
<i>Epilobium coloratum</i>	Cinnamon willow herb	OBL 3	Perennial forb	Summer
<i>Eupatorium perfoliatum</i>	Common boneset	FACW 6	Perennial forb	Summer
<i>Gentiana alba</i>	Yellowish gentian	FACU 9	Perennial forb	Summer, Fall
<i>Gentiana andrewsii</i>	Bottle gentian	FACW 6	Perennial forb	Summer
<i>Iris virginica</i>	Blue flag	OBL 5	Perennial forb	Spring, Summer
<i>Liatris cylindracea</i>	Cylindrical blazing star	UPL 9	Perennial forb	Summer
<i>Liatris pycnostachya</i>	Prairie blazing star	FAC 8	Perennial forb	Summer, Fall
<i>Lobelia cardinalis</i>	Cardinal flower	OBL 7	Perennial forb	Summer
<i>Lobelia siphilitica</i>	Great blue lobelia	FACW 5	Perennial forb	Summer
<i>Lobelia spicata</i>	Pale spiked lobelia	FAC 6	Perennial forb	Summer
<i>Lupinus perennis</i>	Wild lupine	UPL 7	Perennial forb, legume	Summer, Fall
<i>Lythrum alatum</i>	Winged loosestrife	OBL 6	Perennial forb	Summer
<i>Mimulus ringens</i>	Monkey flower	OBL 6	Perennial forb	Summer
<i>Monarda fistulosa</i>	Wild bergamot	FACU 4	Perennial forb	Summer, Fall
<i>Monarda punctata</i>	Horse mint	UPL 3	Perennial forb	Summer
<i>Oenothera biennis</i>	Evening primrose	FACU 0	Biennial forb	Spring, Summer
<i>Oligoneuron riddellii</i>	Riddell's goldenrod	OBL 7	Perennial forb	Summer
<i>Oligoneuron rigidum</i>	Stiff goldenrod	FACU 5	Perennial forb	Summer
<i>Panicum capillare</i>	Old witch grass	FAC 1	Annual grass	N/A
<i>Panicum dichotomiflorum</i>	Knee grass	FACW 0	Annual grass	N/A
<i>Parthenium integrifolium</i>	Wild quinine	UPL 8	Perennial forb	Summer, Fall
<i>Penstemon calycosus</i>	Small beardtongue	FACU 7	Perennial forb	Spring, Summer

<b>Table 5 Continued Botanical Name</b>	<b>Common Name</b>	<b>Wetland Category</b>	<b>Functional Group</b>	<b>Bloom Time Season</b>
Penstemon digitalis	Beardtongue	FAC 4	Perennial forb	Spring, Summer
Penstemon grandiflorus	Large Beardtongue	UPL 4	Perennial forb	Spring, Summer
Penthorum sedoides	Ditch stonecrop	OBL 3	Perennial forb	Summer
Ratibida pinnata	Yellow coneflower	UPL 4	Perennial Forb	Summer, Fall
Rudbeckia hirta	Black-eyed Susan	FACU 1	Biennial forb	Summer, Fall
Rudbeckia triloba	Brown-eyed Susan	FACU 3	Perennial forb	Summer, Fall
Schizachyrium scoparium	Little bluestem	FACU 5	Perennial warm season grass	N/A
Senecio plattensis	Prairie groundsel	FAC 6	Perennial forb	Spring, Summer
Senna hebecarpa	Wild senna	FACW 9	Perennial forb, legume	Summer, Fall
Sisyrinchium albidum	Blue-eyed grass	FACU 7	Perennial forb	Spring, Summer
Solidago nemoralis	Old-field goldenrod	UPL 4	Perennial forb	Summer, Fall
Solidago speciosa	Showy goldenrod	FACU 5	Perennial forb	Summer, Fall
Symphotrichum ericoides	Heath aster	FACU 4	Perennial forb	Fall
Symphotrichum laeve	Smooth blue aster	FACU 6	Perennial forb	Summer, Fall
Symphotrichum oolentangiense	Sky blue aster	UPL 8	Perennial forb	Summer
Symphotrichum sericeus	Silky aster	UPL 5	Perennial forb	Fall
Tradescantia ohiensis	Common spiderwort	FACU 5	Perennial forb	Summer
Veronicastrum virginicum	Culver's root	FAC 7	Perennial forb	Spring, Summer
Zizia aptera	Heart-leaved meadow parsnips	FACU 9	Perennial forb	Spring, Summer
Zizia aurea	Golden alexanders	FAC 7	Perennial forb	Spring, Summer

\*Number represents native Coefficient of Conservatism

**Table 6a. View Screen Perennial Plant Species for use in the Paris Solar Farm Project.**  
Species selected for optional screening and selective herbicide control.

<b>Botanical Name</b>	<b>Common Name</b>	<b>Wetland Category</b>	<b>Herbicide Tolerance</b>	<b>Stature</b>
Allium canadense	Wild garlic	FACU 2*	Low tolerance	Short
Asclepias tuberosa	Butterfly milkweed	UPL 6	Moderate tolerance	Medium
Bouteloua curtipendula	Side oats grama	UPL 8	Moderate tolerance	Short
Chamaecrista fasciculata	Partridge pea	FACU 5	High tolerance	Short
Coreopsis lanceolata	Sand coreopsis	FACU 5	High tolerance	Short
Dalea purpurea	Purple prairie clover	UPL 9	High tolerance	Short
Echinacea purpurea	Purple coneflower	UPL 3	Moderate tolerance	Medium
Elymus canadensis	Canada wild rye	FAC 4	Low tolerance	Medium
Liatris aspera	Rough blazing star	UPL 6	Moderate tolerance	Medium
Monarda fistulosa	Wild bergamot	FACU 4	Low tolerance	Medium
Penstemon digitalis	Beardtongue	FAC 4	Low tolerance	Medium
Ratibida pinnata	Yellow coneflower	UPL 4	Low tolerance	Medium
Rudbeckia hirta	Black-eyed Susan	FACU 1	Moderate tolerance	Short
Schizachyrium scoparium	Little bluestem	FACU 5	High tolerance	Short
Solidago nemoralis	Old-field goldenrod	UPL 4	Moderate tolerance	Short
Verbena hastata	Blue vervain	FACW 4	Low tolerance	Medium

\*Number represents Native Coefficient of Conservatism



**Table 6b. View Screen Small Trees and Shrubs.**

Species selected for low risk of invasion and moderate maximum height and width.

Botanical Name	Common Name	Wetland Category	Height (feet)	Width (feet)
Amelanchier laevis	Serviceberry	UPL 8*	15	15
Aronia prunifolia	Chokeberry	FACW 7	4	2
Carpinus caroliniana	Hornbeam	FAC 6	15	10
Ceanothus americanus	New Jersey tea	UPL 6	2	2
Corylus americana	American hazelnut	FACU 5	10	4
Hamamelis virginiana	Witch hazel	FACU 8	10	10
Hypericum prolificum	Shrubby St. John's wort	FACU 9	4	4
Ilex verticillata	Winterberry	FACW 10	6	3
Malus ioensis	Prairie crabapple	UPL 3	15	10
Rosa blanda	Early wild rose	FACU 5	4	4
Rosa carolina	Carolina rose	FACU 5	2	2
Rosa setigera	Savanna rose	FACU 7	5	6
Salix humilis	Prairie willow	FACU 6	4	2
Spiraea alba	Meadowsweet	FACW 4	3	2
Spiraea tomentosa	Steeple bush	FACW 6	3	2
Vaccinium spp.	Blueberry	FACW 6-10	3	2
Viburnum prunifolium	Black haw viburnum	FACU 5	12	10
Viburnum acerifolium	Maple leaf viburnum	UPL 7	6	6
Viburnum trilobum	Highbush cranberry	FACW 6	8	4

\*Number represents Native Coefficient of Conservatism

\*The Coefficient of Conservatism is a number from 0-10 given to each native species occurring in a regional flora. It represents an estimated probability that a species is likely to occur in a landscape relatively unaltered from what is believed to be a pre-settlement condition. The most conservative species (numbers 9-10) require a narrow range of ecological conditions, are intolerant of disturbance and are unlikely to be found outside undegraded remnant natural areas. The least conservative species (numbers 0-3) can be found in a wide variety of settings and thrive on disturbance.

*Space intentionally left blank.*

**EXHIBIT E**  
**DRAIN TILE MANAGEMENT PLAN**

1. **Impact on Drain Tile.** Due to the prevalence of poorly drained soils and installed agricultural drain tiles, it is expected that Project construction may impact drain tiles within the Project Area. Paris Solar engaged Ellingson Technology and Engineering, a qualified and experienced drain tile expert, to proactively enact a multi-faceted approach to identify the locations of drain tile within the Project Area. First, Paris Solar reviewed historical satellite imagery of the Project Area to better identify drain tile locations. Next, Paris Solar reached out to all participating landowners to ask for their assistance in locating tile; requesting drain tile maps, personal general knowledge of their property, and knowledge of existing tile that was placed without written record. Paris Solar will continue communication with landowners within the Project Area on a parcel by parcel basis as construction approaches, utilizing field location services when necessary.
2. **Stormwater Management Practices.** Contrary to typical agriculture and farming activities, where drain tile is the primary solution to drainage issues, Paris Solar maintains the ability to utilize a host of stormwater best management practices such as infiltration basins, filtration basins, stormwater berms, rock checked dams, rock lined diversion channels, and vegetation management that adequately address runoff from fenced project areas. Given that stormwater runoff is predicted to be equal to or less than pre-construction and operation conditions, all of the above stormwater practices may be utilized and deemed adequate.
3. **Identification of Drain Tiles.** Paris Solar will continue to take a proactive approach to identify the location of drain tiles, in an effort to mitigate damage to existing tile. Paris Solar will make commercially reasonable efforts to prevent damage to drain tile mains through locating the mains prior to construction and to the maximum extent practicable incorporating the identified locations into engineering designs. In the event damage to a drain tile main is unavoidable and such damage would result in increased stormwater runoff to participating or non-participating property outside of the fenced array area, Paris Solar may use one or more of the approaches noted below:
  - a) Approved stormwater best management practices to reduce runoff equal to or less than pre-construction and operation conditions;
  - b) Re-route impacted drain tile outside of the fenced array boundary; or
  - c) Repair the existing drain tile main inside of the fenced boundary.
4. **Landowner Complaint Process.** If any drainage issue is identified within three years after construction is completed, and thought to result from the construction of the Project, that issue may be brought to the attention of the Paris Solar and addressed using the following procedure:
  - a. If any non-participating landowner identifies drainage issues on their property that are thought to be attributable to damage to drainage infrastructure caused by the Project, the landowner may file a complaint regarding such issue with the Paris Solar Operations Manager, or an interim contact person, which contact information shall be provided to the Town at the preconstruction meeting. Paris Solar shall keep up to date information as to appropriate contact information and shall provide that information to the Town.

- b. Any landowner complaints of drainage issues appearing on any property that are plausibly associated with the Project in Paris Solar’s reasonable judgment shall be investigated by Paris Solar within two weeks following issuance of the complaint.
  - c. If during that two-week review window it is confirmed by Paris Solar that the drainage issue is indeed caused by the Project, Paris Solar will confirm such with the complainant in writing and enter into a written agreement with the complainant as to repair work. In determining whether the drainage issue is resulting from the Project’s construction, Paris Solar shall review and consider any evidence presented by a landowner and/or the Town.
  - d. Paris Solar shall make commercially reasonable efforts to complete any agreed upon repair work within two weeks after the written agreement is obtained.
  - e. Paris Solar shall be responsible for all expenses, identified and agreed to in writing and incurred directly by Paris Solar, relating to repairs, restoration, relocations, reconfigurations and replacements of drainage infrastructure and systems that are damaged and result in adverse drainage conditions to non-participating property as a result of Project construction.
  - f. If Paris Solar fails to undertake repair work that is deemed to be caused by the Project within thirty (30) days of entering into a written agreement, the Town may provide notice to Paris Solar with a request to comply with this provision.
  - g. Paris Solar shall notify the Town when a complaint is filed, upon completion of the two-week review, and upon completion of repair work if such repair work is determined necessary.
  - h. Paris Solar agrees that it shall reasonably cooperate with investigations of damaged drain tile or drainageways conducted by participating or non-participating landowners.
5. **Long Term Drainage Concerns.** Following the three year post-construction window, non-participating landowners may continue to bring complaints regarding drainage issues to the Paris Solar Operations Manager. Paris Solar will continue to review and reasonably comply with drainage related complaints brought to the Operations Manager on an as-needed basis throughout the operating life of the project. Regardless of the date of the complaint, if drainage infrastructure or systems are damaged by any cause thoroughly reviewed and determined to be the direct result of the Project and the result is reduced drainage performance that adversely affects landowners, Project Owner shall restore the drainage infrastructure or system to pre-existing condition or better pursuant to Section 5 of the Agreement and shall negotiate the terms of the repairs in good faith.
  6. **Coordination.** Following the Post-Construction meeting, Paris Solar will meet with the Town of Paris on an as-needed basis to discuss drainage related issues.
  7. **Funds for Drainage Tile Repairs.** Paris Solar shall ensure adequate funds are allotted and budgeted for drainage mitigation and repair activities during both the Project’s construction phase and through the operating life of the Project.
  8. **Other Remedies.** Nothing in this Exhibit E shall be construed to limit the Town’s ability to seek relief as otherwise provided by law.

**EXHIBIT F  
DECOMMISSIONING PLAN**

1. At the cessation of commercial operation, Paris Solar shall, at its expense, remove all Project components including solar arrays and associated facilities to a depth of four feet below ground and restore the land to a condition reasonably similar to pre-existing conditions, including de-compacting areas where project access roads were installed and any other areas of substantial soil compaction. The Project's Access Roads can remain in place if requested by the property owner. Removal and disposal of all Project components shall include the following:

- Modules will be inspected for physical damage, tested for functionality, and removed from racking. Functioning modules will be packed and stored for reuse. Non-functioning modules will be sent to the manufacturer or a third party for recycling or other appropriate disposal method.
- Racking, poles, and fencing will be dismantled/removed and will be sent to a metal recycling facility. Holes will be backfilled.
- Project facilities will be removed to a depth of four feet as part of decommissioning.
- Aboveground wire will be sent to a facility for proper disposal and/or recycling. Belowground wire will be cut back to a depth of four feet and abandoned in place.
- Aboveground conduit will be disassembled onsite and sent to a recycling facility.
- Junction boxes, combiner boxes, and external disconnect boxes will be sent to an electronics recycler.
- Inverters will be sent to the manufacturer or an electronics recycler as applicable and functioning parts will be reused.
- Material from concrete pads will be removed and sent to a concrete recycler.
- Computers, monitors, hard drives, and other components will be sent to an electronics recycler and functioning parts will be reused.

Unless otherwise requested by the landowner, permanent access roads constructed for the Project will be removed.

2. Decommissioning is estimated to take approximately twelve months to complete and the decommissioning crew will ensure that all equipment is recycled or disposed of properly.

3. To facilitate a return to agricultural use following decommissioning, the land would be tilled to break the new vegetative growth, which will have enhanced the topsoil condition through its operating life.

4. Paris Solar will be responsible for decommissioning the Project and associated facilities. Paris Solar has included an obligation to decommission the Project components in the Project's solar lease and easement agreements with participating landowners. At the 15th anniversary of the commencement of operations, Paris Solar will post a commercially reasonable financial assurance, such as a surety bond, letter of credit, escrow account, reserve fund, parent guarantee or other suitable financial mechanism, in the amount of the difference between the reasonably estimated costs of decommissioning the Project and the reasonably estimated salvage value of the Project improvements, as determined by an independent engineer.

Upon receipt of a CPCN and evaluation of all permit conditions, Paris Solar will prepare a site-specific decommissioning cost estimate. In advance of this, Paris Solar has conducted further research of third-party projects and expects the total cost of decommissioning of Paris Solar at the end of its useful life would be in the range of \$0 to \$8.9 million net of salvage value.

**SERVICE DATE**  
**Dec 29, 2020**

PSC REF#: 402226

Public Service Commission of Wisconsin  
RECEIVED: 12/29/2020 8:15:01 AM

**PUBLIC SERVICE COMMISSION OF WISCONSIN**

Application for a Certificate of Public Convenience and Necessity of  
Paris Solar Farm, LLC, to Construct a Solar Electric Generation Facility  
in the Town of Paris, Kenosha County, Wisconsin

9801-CE-100

**FINAL DECISION**

On February 19, 2020, pursuant to Wis. Stat. § 196.491 and Wis. Admin. Code chs. PSC 4 and 111, Paris Solar, LLC (Paris Solar) filed with the Commission an application for a Certificate of Public Convenience and Necessity (CPCN) to construct a new solar photovoltaic (PV) electric generation facility. On February 28, 2020, Paris Solar filed a revised application to redact certain information pertaining to endangered species and other items. Paris Solar's proposed generation facility would be a wholesale merchant plant as defined by Wis. Stat. 196.491(1)(w), and would have a generating capacity of up to 300 megawatts (MW) direct current (DC) and up to 200 MW alternating current (AC). The application showed the proposed and alternate project arrays on approximately 2,700 acres of primarily agricultural land in Kenosha County, Wisconsin. The project is expected to use approximately 1,500 acres of this land to generate 200 MW AC. The major components of the proposed project include the PV panels, inverters, collector circuits, and a collector substation.

The CPCN application is APPROVED subject to conditions and as modified by this Final Decision.

**Introduction**

The Commission determined Paris Solar's application was complete on March 27, 2020. ([PSC REF#: 386527.](#)) The Commission issued a Notice of Proceeding on April 30, 2020. ([PSC REF#: 388462.](#)) Wisconsin Stat. § 196.491(3)(g) requires that the Commission take final action

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within 180 days after it finds a CPCN application complete unless an extension of no more than 180 days is granted by the Commission Chairperson. On July 1, 2020 the Commission Chairperson signed a 180-day extension. ([PSC REF#: 393158.](#)) The Commission must take final action on or before March 22, 2021 or the application is approved by operation of law. *See* Wis. Stat. § 196.491(3)(g).

The Administrative Law Judge issued a Notice of Prehearing Conference on May 13, 2020. ([PSC REF#: 389417.](#)) All parties agreed to a schedule and other stipulations, obviating the need for a Prehearing Conference. The Administrative Law Judge granted requests to intervene to American Transmission Company LLC (ATC), Kenosha County Land Venture Group, the Town of Paris, and Renew Wisconsin. ([PSC REF#: 392454.](#)) The parties, for the purposes of review under Wis. Stat. §§ 227.47 and 227.53, are listed in Appendix A.

The Commission's action regarding a solar electric generation facility is considered a Type III action under Wis. Admin. Code § PSC 4.10(3). Type III actions normally do not require preparation of an environmental assessment (EA) or an environmental impact statement (EIS) under Wis. Admin. Code § PSC 4.10(3). However, an evaluation of a specific Type III proposal may indicate that the preparation of an EA or EIS is warranted for that proposal. In addition, Paris Solar is seeking approval to construct a battery energy storage system (BESS) which is a Type II action under Wis. Admin. Code § PSC 4.10(2). The Commission prepared an EA for the proposed project due to the size and amount of land that would be covered by the proposed project and the ability to use the EA process to seek public comments on the proposal.

Commission staff worked jointly with the Wisconsin Department of Natural Resources (DNR), and on April 15, 2020 issued an EA scoping letter to accept comments from the public to determine the scope of the EA. ([PSC REF#: 387536.](#)) On July 9, 2020, Commission staff,

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working jointly with DNR, produced a preliminary determination that no significant environmental effects are expected to result from the proposed project. The preliminary determination letter summarized some of the environmental impacts. ([PSC REF#: 393308](#).) The Commission took comments on this preliminary determination, and on July 31, 2020, issued the EA regarding the proposed project, which was entered as an exhibit into the record pursuant to Wis. Stat. § 1.11 and Wis. Admin. Code chs. NR 150 and PSC 4. ([PSC REF#: 394640](#).) As a result of the EA, the Commission determined that the preparation of an EIS was not required.

The Commission issued a Notice of Hearing on August 7, 2020. ([PSC REF#: 395043](#).) The Commission held technical hearing sessions over an audio/visual connection on September 16, 2020. At the technical sessions, expert witnesses offered testimony and exhibits on behalf of Paris Solar, the Town of Paris, and Commission staff.<sup>1</sup> Public comment hearing sessions were held audio only on September 16, 2020. At the public comment hearing sessions, the Commission accepted oral testimony from members of the public.<sup>2</sup> The Commission also accepted comments from members of the public through its website.<sup>3</sup> The Commission conducted its hearings as Class 1 contested case proceedings, pursuant to Wis. Stat. §§ 196.491(3)(b), 227.01(3)(a), and 227.44.

The issue for hearing, as agreed by the parties, was:

Does the project comply with the applicable standards under Wis. Stat. §§ 1.11, 1.12, 196.025, and 196.491, and Wis. Admin. Code chs. PSC 4 and 111?

Paris Solar filed its initial brief on October 7, 2020. ([PSC REF#: 397963](#).) No other parties filed briefs.

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<sup>1</sup> [PSC REF#: 398324; Tr. 01-34 Party Hearing Session - PSC REF#: 397361](#)

<sup>2</sup> [Tr. 35-50 Public Hearing Session - PSC REF#: 397362](#)

<sup>3</sup> [PSC REF#: 398324](#)



The Commission discussed the record in this matter at its open meeting of December 3, 2020.

### **Findings of Fact**

1. Paris Solar is a wholly-owned subsidiary of Invenergy, LLC (Invenergy). Paris Solar proposes to construct a solar electric generation facility as a wholesale merchant plant as defined by Wis. Stat. § 196.491(1)(w), with a generating capacity of up to 300 MW DC and 200 MW AC.

2. The proposed project is a solar electric generation facility and a “noncombustible renewable energy resource” under Wis. Stat. §§ 1.12 and 196.025 and is entitled to the highest priority of all energy generation resources under the priorities listed. It is uncontested that energy and capacity from the proposed project cannot be replaced by energy conservation and efficiency.

3. The facility design and location approved by this Final Decision are in the public interest considering alternative locations or routes, individual hardships, safety, reliability, and environmental factors. Wis. Stat. § 196.491(3)(d)3.

4. The facilities approved by this Final Decision will not have undue adverse impacts on environmental values including ecological balance, public health and welfare, historic sites, geological formations, aesthetics of land and water, and recreational use. Wis. Stat. § 196.491(3)(d)4.

5. The facilities approved by this Final Decision will not unreasonably interfere with the orderly land use and development plans for the area. Wis. Stat. § 196.491(3)(d)6.

6. The facilities approved by this Final Decision will not have a material adverse impact on competition in the relevant wholesale electric service market. Wis. Stat. § 196.491(3)(d)7.

7. A brownfield site for Paris Solar's proposed project is not practicable. Wis. Stat. § 196.491(3)(d)8.

8. The facilities approved by this Final Decision will affect local farmland, but Paris Solar does not have condemnation authority. As there will be no potential to acquire farmland through eminent domain for the proposed project, the Wisconsin Department of Agriculture, Trade and Consumer Protection did not issue an agricultural impact statement.

9. The facilities approved by this Final Decision will affect state highways and will require permits from the Wisconsin Department of Transportation.

10. The facilities approved by this Final Decision will affect waterways and wetlands, and will require permits from DNR for construction in waterways and wetlands, construction site erosion control, and storm water handling.

11. The facilities approved by this Final Decision may affect endangered and threatened species, and Paris Solar will need to consult with the DNR Bureau of Natural Heritage Conservation to ensure compliance with the state's endangered species law.

12. The facilities approved by this Final Decision will require Paris Solar to obtain permits from, provide notifications to, and coordinate with various federal agencies, *e.g.*, U.S. Army Corps of Engineers and U.S. Fish and Wildlife Service (USFWS).

13. Critical proposed facilities that could be damaged by flooding are not located in the 100-year flood plain. Consequently, there is no flood risk to the project per 1985 Executive Order 73 (Order 73).

14. Approval of the proposed project is in the public interest.

### **Conclusions of Law**

1. The Commission has jurisdiction under Wis. Stat. §§ 1.11, 1.12, 44.40, 196.02, 196.025, 196.395, and 196.491, and Wis. Admin. Code chs. PSC 4 and 111, to issue a CPCN authorizing Paris Solar to construct and place in operation the proposed electric generation facilities described in this Final Decision and to impose the conditions specified in this Final Decision.

2. The Paris Solar solar electric generation facility is a wholesale merchant plant, as defined in Wis. Stat. § 196.491(1)(w).

3. The proposed electric generation facility complies with the Energy Priorities Law as required under Wis. Stat. § 1.12 and 196.025(1).

4. In issuing a CPCN, the Commission has the authority under Wis. Stat. § 196.491(3)(e) to include such conditions as are necessary to comply with the requirements of Wis. Stat. § 196.491(3)(d).

5. The construction of a solar electric generation facility is a Type III action under Wis. Admin. Code § PSC 4.10(3), and typically requires neither an EIS under Wis. Stat. § 1.11 nor an EA; however, an evaluation of this specific Type III action indicated that an EA was warranted for the proposed project. The construction of an energy storage system is a Type II action under Wis. Admin. Code § 4.10(2) and requires the production of an EA to determine whether an EIS is required.

6. The Commission prepared an EA and made a finding that no significant impacts to the environment would result from construction of the solar facilities.

## **Opinion**

### **Project Description**

Paris Solar proposes to construct a new solar electric generation facility as a wholesale merchant plant as defined by Wis. Stat. § 196.491(1)(w), with a generating capacity of up to 300 MW DC and up to 200 MW AC. The proposed project would be located in the Town of Paris, in Kenosha County, Wisconsin. The major components of the proposed project include the PV panels, inverters, collector circuits, and a collector substation.

The proposed project would use either polycrystalline, monocrystalline, or bi-facial PV modules, the specific model of which is to be evaluated and selected closer to the time of construction. A variety of panels were considered, ranging from 350 to 550 watts per panel, requiring from 550,000 to 750,000 total panels for the 200 MWAC. The selected panels would connect to a single-axis tracking system that would allow the PV panels to follow the sun from east to west, throughout the day. Inverters and pad-mounted transformers would be required to convert the generated DC power into AC power and step-up the voltage to 34.5 kilovolts (kV). The underground AC collector circuits would carry the power generated by the PV panels to the collector substation. The collector circuits would total approximately 32 miles and would converge into approximately 10 total circuits as they approach the project collector substation. The solar PV array would connect to a new 34.5 kV/138 kV project collector substation. A short generator tie line would connect the new collector substation to an existing ATC substation.

Paris Solar is also seeking approval to install up to a 50 MW BESS at a later time. Paris Solar is investigating two options, including batteries being distributed around the project site paired with inverters, or a centralized BESS building located near the project collector substation, in one or more buildings.

Paris Solar intends to sell the project's energy output through a purchase power agreement, or alternatively may sell some or all of the site to utility ownership. Under this intended ownership arrangement, it remains appropriate to evaluate the proposed project as a wholesale merchant plant.

The evaluation of technical and complex projects, such as the one proposed in this docket, is an area in which the Commission has special expertise. Since 1907, the Commission has regulated public utilities to ensure that "reasonably adequate service and facilities" are available to the public at rates that are "reasonable and just." Wis. Stat. § 196.03(1). The Commission's expertise in administering Wis. Stat. § 196.491 to determine what proposed projects are appropriate additions and in the public interest has long been recognized by Wisconsin courts. *Wisconsin Power & Light Co. v. Pub. Serv. Comm'n of Wisconsin*, 148 Wis. 2d 881, 888, 437 N.W.2d 888, 891 (Ct. App. 1989); *see also Clean Wisconsin, Inc. v. Public Service Commission of Wisconsin*, 2005 WI 93, 282 Wis. 2d 250, 700 N.W.2d 768 (recognizing the Commission's expertise in reviewing proposed construction projects under Wis. Stat. § 196.491).

Determining whether a proposed project is in the public interest often requires a high degree of discretion, judgment, and technical analysis. Such decisions involve intertwined legal, factual, value, and public policy determinations. The Commission, as the finder of fact, is charged with evaluating all of the information and applying the statutory criteria to reach a well-reasoned decision. In doing so, the Commission uses its experience, technical competence, and specialized knowledge to determine the credibility of each witness and the persuasiveness of the highly technical evidence presented on each issue. The Commission's expertise is particularly important in cases such as this where the proposed project utilizes technology that does not have a significant presence in the state yet.

### **Interconnection of the Facility to the Existing Electric Transmission System**

The transmission interconnection facilities requirements for the proposed project are being determined through the Midcontinent Independent System Operator, Inc. (MISO) Generator Interconnection Queue study process. Paris Solar filed an Interconnection Request with MISO and is in the MISO August 2017 definitive planning phase (DPP) Study Cycle, with the assigned queue position of J878. Phase 1, Phase 2, and Phase 3 of the MISO study process are complete and Paris Solar was waiting to execute a Generator Interconnection Agreement. The BESS system is in the MISO 2019 study cluster with queue position J1316.

### **Energy Priorities Law**

When reviewing a CPCN application, the Commission considers Wis. Stat. § 1.12 and 196.025(1), known as the Energy Priorities Law, which establishes the preferred means of meeting Wisconsin's energy demands. The Energy Priorities Law creates the following priorities:

**1.12 State energy policy. (4) PRIORITIES.** In meeting energy demands, the policy of the state is that, to the extent cost-effective and technically feasible, options be considered based on the following priorities, in the order listed:

- (a) Energy conservation and efficiency.
- (b) Noncombustible renewable energy resources.
- (c) Combustible renewable energy resources.
- (cm) Advanced nuclear energy using a reactor design or amended reactor design approved after December 31, 2010, by the U.S. Nuclear Regulatory Commission.
- (d) Nonrenewable combustible energy resources, in the order listed:
  - 1. Natural gas.
  - 2. Oil or coal with a Sulphur content of less than 1%.
  - 3. All other carbon-based fuels.

In addition, Wis. Stat. § 196.025(1) declares that the Commission shall implement these priorities in making all energy-related decisions to the extent they are cost-effective, technically feasible, and environmentally sound.

The Commission has an obligation to consider these priorities in all energy related decisions including construction of new electric generation facilities.<sup>4</sup> The Energy Priorities Law instructs the Commission to implement the energy priorities to the extent they are environmentally sound, and the Commission must assess the environmental impacts of a wholesale merchant plant under Wis. Stat. § 196.491(3)(d)3.

The proposed project will be a new solar electric generation facility. As such, it is a “noncombustible renewable energy resource” and is entitled to the highest priority of all energy generation resources under the Energy Priorities Law. It is uncontested that energy and capacity from the proposed project cannot be replaced by energy conservation and efficiency, the highest priority alternative. The EA for the proposed project concluded that “approval and construction of this project is unlikely to have a significant impact on the human environment...” ([PSC REF#: 394640](#) at 64.) Additionally, the objective of the law<sup>5</sup> is to deploy environmentally preferable options first when meeting Wisconsin’s energy needs, not require that measures such as conservation or energy efficiency displace a project if not obviously technically feasible or more cost-effective. This project aligns with that objective. Therefore, the proposed project satisfies the requirements of the Energy Priorities Law.

### **Siting Process**

The Commission must consider alternative locations when determining whether a proposed generation facility is in the public interest. Wis. Stat. § 196.491(3)(d)3. A CPCN

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<sup>4</sup> Wis. Stat. § 196.025(1)(ar) provides:

To the extent cost-effective, technically feasible and environmentally sound, the commission shall implement the priorities under s. 1.12(4) in making all energy-related decisions and orders, including advance plan, rate setting and rule-making orders.

<sup>5</sup> See also Wis. Stat. §§ 1.12(3)(b) and 196.377.

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application must describe the siting process, identify the factors considered in choosing the alternative sites, and include specific site-related information for each site. Wis. Admin. Code § PSC 111.53(1)(e)-(f). The Paris Solar CPCN application complies with these requirements. It explains a process used to screen areas in Wisconsin based upon the solar resource, land area, and access to electric transmission infrastructure. It also describes how specific solar siting areas were selected and how Paris Solar confirmed the suitability of these locations. The record reflects examination of each of the solar siting areas.

A CPCN for a large electric generation facility requires the submittal of “site-related information for each of two proposed power plant sites.” Wis. Admin. Code ch. PSC 111.53(1)(f). The Commission’s standard for reviewing proposed siting areas is to determine whether each proposed site is “reasonable,” *i.e.*, is it a feasible location for the project that would not directly conflict with any of the statutory criteria for granting a CPCN, and whether the sites are sufficiently distinct to offer different packages of benefits that present the Commission with a choice. The Wisconsin Supreme Court affirmed this standard in *Clean Wisconsin et al. v. Public Service Commission of Wisconsin and Wisconsin Department of Natural Resources*, 2005 WI 93, ¶¶ 66-70. In a previous docket concerning a wind farm,<sup>6</sup> the Commission found that the project applicant met the requirement to offer site alternatives by identifying 25 percent more turbine locations than it proposed to develop. On appeal, the Dodge County Circuit Court affirmed this method of offering site alternatives for a wind farm.<sup>7</sup> The Commission has interpreted the alternative site requirement for solar electric generation facilities to be a requirement for the applicant to provide 25 percent

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<sup>6</sup> *Application of Forward Energy LLC for a Certificate of Public Convenience and Necessity to Construct a Wind Electric Generation Facility and Associated High Voltage Electric Transmission Facilities, to be Located in Dodge and Fond du Lac Counties*, docket 9300-CE-100 (July 14, 2005).

<sup>7</sup> *Horicon Marsh Systems Advocates and Joe M. Breaden v. Public Service Commission of Wisconsin and Forward Energy LLC*, Dodge County Case No. 05-CV-539; “Memorandum Decision and Order” of Circuit Judge John R. Storck (March 23, 2006).



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additional siting areas (alternative arrays) with the project application. The applicant typically determines the percentage based on 25 percent of the proposed nameplate capacity of the project and the additional acreage necessary to provide those generation facilities.

As part of the application and consistent with the alternative location requirement included in Wis. Stat. § 196.491(3)(d)3, Paris Solar included additional sites for 25 percent additional MW for solar panels beyond the minimum necessary for the desired project size of 200 MW AC. Paris Solar identified which of the arrays were proposed (also referred to as ‘preferred’) and alternative in the response to data request PSCW-1. ([PSC REF#: 386502.](#)) The proposed and alternative arrays are siting areas that Paris Solar has identified meet its siting criteria, and Paris Solar has secured land rights to these areas. The different arrays provide differing environmental and participant impacts.

### **Authorized Project Site**

The Commission authorizes Paris Solar to use any of the proposed and alternate solar array sites, with two identified exceptions, to construct a 200 MW AC solar electric generation facility. The Commission finds that the proposed array that overlaps with an historic site (archaeological site 47KN-18) as discussed in Commission staff testimony and the EA is not in the public interest to use for the proposed project. An additional forested area in alternative array #1, also referred to as subarray #1b would have greater environmental impacts than other sites. Paris Solar agreed to avoid siting project facilities in these two areas in responses to data requests and in Rebuttal-Paris Solar-Crowl-r. ([PSC REF#: 396771.](#)) The Commission affirmatively removes these two areas from the authorized project site due to the potential impacts and Paris Solar’s agreement to avoid them.

Commission Huebner dissented on this issue, in part, as he would not have excluded the forested area from consideration.

With those exceptions, the rest of the proposed and alternative arrays and other project facility locations meet the siting criteria of Wis. Stat. §§ 196.491(3)(d)3. or 4. and would not cause undue individual hardships or adverse impacts on the environment. The Commission further directs Paris Solar to continue to work with non-participating landowner, Carol Surowy, who provided comments regarding the potential impacts to her property ([PSC REF#: 397085](#)) near array #10 (power block LL), regarding the potential use of alternative arrays or to consider mitigation measures to address her concerns to the extent practicable.

The developer prefers the proposed arrays because the alternative arrays may have additional impacts to the environment or higher construction costs. The Commission finds it reasonable to allow the developer flexibility to use the proposed sites as needed to accommodate environmental, technical, and landowner issues as they arise during construction of the project, provided, however, that the project size shall remain at a nameplate capacity of 200 MW AC. Adjustments that alter the boundaries of the proposed or alternative arrays depicted in the application materials may impact resources not described in the application or EA, and are subject to further review as described in the Minor Siting Flexibility section of this Final Decision.

The relevant inquiry is whether the proposed project site will cause undue individual hardships or undue adverse impact on other environmental values. The Commission appreciates the expressed concerns of some landowners, in particular the concerns related to the transfer of land use from farming to solar electric generation. Many other comments the Commission received from landowners are addressed by the conditions the Commission adopts. As the

remainder of this Final Decision demonstrates, the Commission conducted a robust analysis of the potential impacts both to the surrounding landowners and community and to the environment. The Commission also takes note of and appreciates the efforts of Paris Solar and the Town of Paris in negotiating a Memorandum of Understanding (MOU) that addresses some of the concerns raised by local residents and landowners. The Commission finds the design and location as modified above is in the public interest considering alternatives and its assessment of individual hardship and environmental impacts. To the extent there are some impacts, these impacts can be mitigated through the conditions to be imposed by the Commission and further discussed below.

### **Brownfield Sites**

Wisconsin Stat. § 196.491(3)(d)8. requires the Commission determine that a CPCN generation project must be sited in a brownfield area “to the extent practicable.” The proposed project requires over 1,500 acres of nearly contiguous developable land in close proximity to existing transmission facilities. There were no brownfield sites identified in Wisconsin that met these siting requirements. The Commission therefore finds that the proposed project satisfies the requirement under Wis. Stat. § 196.491(3)(d)8.

### **Material Adverse Impact on the Wholesale Electric Market**

Under Wis. Stat. § 196.491(3)(d)7., the Commission may only issue a CPCN for a project that “will not have a material adverse impact on competition in the relevant wholesale electric service market.” The proposed project would inject additional energy into the wholesale market and is anticipated to have a positive impact on the market. As a wholesale merchant plant, concerns regarding horizontal market power are not an issue. If the solar facilities are purchased

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by Wisconsin utilities, the concern remains unchanged as capacity and energy from the project would be subject to market mitigation measures and oversight of MISO's independent market monitor that restricts any ability to raise prices above competitive levels.<sup>8</sup> As such, the Commission finds that the proposed project meets the requirements of Wis. Stat. § 196.491(3)(d)7.

### **Land Use and Development Plans**

Wisconsin Stat. § 196.491(3)(d)6. requires that a proposed generation facility not “unreasonably interfere with the orderly land use and development plans for the area involved.” A utility infrastructure project will have some impact on land use and development plans for the area involved. The question is whether the project will “unreasonably interfere” and must also take into account the benefits of the proposed project. Kenosha County does not have specific zoning requirements or limitations applicable to solar generating facilities. The land where the proposed project would be constructed falls into the designation of “Agricultural Preservation” in local land use plans. Comments were received from members of the public during the EA scoping and during the public hearings that discussed the impacts to farmland as a result of the proposed project. A number of participating agricultural landowners provided comments in favor of the project. The Commission takes seriously that areas within the fenced solar arrays would be taken out of agricultural production for the life of the project and appreciates all comments that it received.

Paris Solar is not a public utility and does not possess statutory eminent domain authority. Paris Solar must secure long-term lease agreements with landowners in the project area to acquire

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<sup>8</sup> *Application of Wisconsin Electric Power Company for a Certificate of Public Convenience and Necessity to Construct a Wind Electric Generation Facility and Associated Electric Facilities, to be located in the Towns of Randolph and Scott, Columbia County, Wisconsin*, docket 6630-CE-302 (January 22, 2012). ([PSC REF#: 126124 at 20.](#))

the property for the generation facility. The changes to land use are agreed to by the landowners that have signed leases with Paris Solar, and after decommissioning, the land may return to agricultural land use. An MOU between Paris Solar and the Town of Paris was agreed upon and submitted to the Commission in October 2020, with conditions that address many local land use concerns. The Commission recognizes that the proposed project will create impacts on the land use in the project area but finds that the proposed project will not unreasonably interfere with the orderly land use and development plans of the project area and will have an extremely minimal impact on agricultural land in the state as a whole.

### **Public Health and Welfare**

As the Wisconsin Supreme Court has declared, issuing a CPCN is a legislative determination involving public policy and statecraft. *Clean Wisconsin, Inc. v. Pub. Serv. Comm'n of Wisconsin*, 2005 WI 93, ¶ 35, 282 Wis. 2d 250, 700 N.W.2d 768. Wisconsin Stat. § 196.491 assigns to the Commission the role of weighing and balancing many conflicting factors. In order to determine whether construction of a new electric generating facility is reasonable and in the public interest, the Commission must not just apply the priority list in Wis. Stat. § 1.12(4), but also must examine the conditions written into that law and consider the purpose of the legislation.

These statutes require that when the Commission reviews a CPCN application for a wholesale merchant plant generating facility, it must consider alternatives, individual hardships, safety, reliability, a host of environmental factors, any interference with orderly local land use and development plans, and potential impacts to wholesale electric competition. Ultimately, the Commission must determine whether granting or denying a CPCN applicant's request will promote the public health and welfare.

In preparing the EA for this project, Commission staff reviewed the information from Paris Solar's CPCN application, responses to Commission staff data requests, maps, GIS data, aerial imagery, and reports from consultants. Commission staff assessed information from other sources including comments from individuals, state and federal agency information, local officials, field visits, and scientific literature. Commission staff also coordinated review with DNR to assess wetland, waterway, and endangered resource impacts. Paris Solar agreed to incorporate recommendations from the Commission and DNR into their project to mitigate environment impacts, and the Commission imposed additional conditions as described in this decision. The Commission also notes minimal public opposition to the proposed project as compared to other facilities.

The record before the Commission reflects an expectation that if these facilities are decommissioned in the projected 30-40 year life span of the project, the land could be returned to agricultural use. Because of the passive nature of solar energy generation, operations activities at the site will be minimal. The facilities can be operated with, in addition to remote monitoring, four full-time equivalent employees on-site. The proposed project will not require any municipal water or sewer services and with the exception of requirements for a future BESS, will not require any unique fire, police, or rescue services. There are no additional impacts to public health or welfare associated with the solar facilities identified in the record that are not otherwise mitigated or addressed by the conditions of this Final Decision such as noise studies, stray voltage testing, and other conditions.

Approval of the proposed project will provide 200 MW of noncombustible renewable energy to the state of Wisconsin. The Commission has previously held that renewable

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generation projects promote public health and welfare by generally avoiding most of the impacts created by other types of electric generation.<sup>9</sup>

After weighing all of these factors and all of the conditions it is imposing, the Commission finds, for the reasons set forth in this Final Decision and administrative record developed for this proceeding, that issuing a CPCN for the proposed project promotes the public health and welfare and is in the public interest.

### **Conditions Related to Project Construction**

Commission staff reviewed the proposed project and developed suggested order conditions related to the proposed project construction. For the reasons discussed below, the Commission finds that the conditions adopted are reasonable and in the public interest.

#### **Battery Energy Storage System**

As part of its application, Paris Solar is seeking approval to construct a BESS with 50 MW AC capacity. However, certain details regarding the proposed facilities, as well as an interconnection agreement from MISO are not available with the project application. These facilities are new to Wisconsin and Commission review, and the Commission recognizes there may be issues relating to safety or public impacts not described or analyzed fully in the Commission review.

The Commission conditionally authorizes inclusion of a BESS as part of the project. As agreed to by Paris Solar and as necessary to ensure safety and the minimization of potential public impacts not otherwise able to be analyzed fully by the Commission, it is reasonable to require Paris

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<sup>9</sup> *Application of Wisconsin Electric Power Company for a Certificate of Public Convenience and Necessity to Construct a Wind Electric Generation Facility and Associated Electric Facilities, to be located in the Towns of Randolph and Scott, Columbia County, Wisconsin, docket 6630-CE-302 (January 22, 2010).* ([PSC REF#: 126124.](#))

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Solar to update the Commission with a report on all MISO DPP studies and shall provide the Commission with final detailed engineering plans for the BESS prior to its construction. If Commission staff, upon review of the plans and report, identifies concerns regarding safety, reliability, final location, individual hardship, or environmental factors, then the matter shall be returned to the Commission.

### **Decommissioning Plan**

Paris Solar stated that at the end of the project's useful life, the project will cease operation and the facilities will be decommissioned and the site restored to pre-construction condition. Paris Solar included a preliminary discussion of its decommissioning plan in its application materials. The plan provided details regarding how decommissioning would be triggered, the actions and sequence of decommissioning, the actions expected to restore the site to pre-construction condition, and estimated decommissioning expenses. Also in the decommissioning plan, Paris Solar stated that it would post financial security in the form of a performance bond, letter of credit, or cash, 15 years into the operation of the facility to cover the net estimated cost to decommission the project. Paris Solar agreed to submit a detailed decommissioning plan when final design is complete and prior to the commencement of construction for Commission staff to review and approve, including final layout and updated estimated costs of decommissioning. (Rebuttal-Paris Solar-Crowl-r-11, [PSC REF#: 396771](#).) Further details on decommissioning, including financial assurances, were agreed to in the MOU between Paris Solar and the Town of Paris. ([PSC REF#: 397697](#).) The Commission does not specify any edits to the decommissioning plan details agreed to in the MOU, including financial details or its schedule. Paris Solar and the Town of Paris negotiated the MOU including the requirements for decommissioning and the Commission recognizes the parties' participation in this proceeding



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and negotiation throughout. The Commission therefore finds it reasonable that Paris Solar shall implement a formal decommissioning plan in accordance with the requirements agreed to in the MOU between Paris Solar and the Town of Paris.

### **Electric Code Compliance**

In general, the National Electrical Code (NEC) applies to non-supply facilities owned by non-utility entities, and the National Electrical Safety Code (NESC) applies to supply facilities owned by utilities. Based on response from testimony by Mark Crowl for Paris Solar, the project will comply with NEC or NESC, as appropriate. (Rebuttal-Paris Solar-Crowl-r-4, [PSC REF#: 396771](#).) Previous Commission final decisions, including for Glacier Hills Wind Park,<sup>10</sup> Badger Hollow Solar,<sup>11</sup> Two Creeks Solar,<sup>12</sup> Point Beach Solar,<sup>13</sup> and Badger State Solar<sup>14</sup> have included language with compliance of NEC or NESC, as appropriate.

The Commission finds it reasonable to require Paris Solar to construct, maintain, and operate all applicable project facilities to comply with NEC or NESC and Wis. Admin. Code ch. PSC 114, as appropriate. In case of conflict or overlap between code requirements, Paris Solar shall construct, maintain, and operate all applicable project facilities to comply with the more stringent code requirement. This will ensure public safety. Absent such a condition, as a wholesale merchant facility the applicable codes and enforcement necessary to ensure public safety would be unclear. Further, this condition will ensure that if Wisconsin public utilities do purchase the facilities in the future, such facilities will not require additional code upgrades that could be an unnecessary cost.

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<sup>10</sup> See docket 6630-CE-302.

<sup>11</sup> See docket 9697-CE-100.

<sup>12</sup> See docket 9696-CE-100.

<sup>13</sup> See docket 9802-CE-100.

<sup>14</sup> See docket 9800-CE-100.

### **Stray Voltage Testing**

Specific concerns about stray voltage were raised in previous Commission authorized utility-scale solar CPCN dockets, specifically dockets 9696-CE-100, 9697-CE-100, 9800-CE-100, and 9802-CE-100. Wisconsin Admin. Code § PSC 128.17 deals with stray voltage testing associated with wind energy systems, but the Commission has also employed the language of the code to address stray voltage concerns in utility-scale solar CPCN dockets. Previous Commission final decisions, including for: Glacier Hills Wind Park,<sup>15</sup> Badger Hollow Solar,<sup>16</sup> Two Creeks Solar,<sup>17</sup> Point Beach Solar,<sup>18</sup> and Badger State Solar<sup>19</sup> have included language requiring stray voltage testing. Stray voltage has the potential to cause adverse impacts on agricultural property. Commission staff suggested that any Final Decision language requiring pre- and post-construction stray voltage testing be consistent with Wis. Admin. Code § PSC 128.17 and previous Commission decisions on solar electric generation facilities. These previous decisions required that stray voltage testing be offered to agricultural properties with confined animal operations within a half-mile of project facilities.

However, Paris Solar provided testimony that described why it did not anticipate stray voltage to be an impact on local agricultural operations with confined animals. It agreed to offer stray voltage testing, but at a reduced distance of 300 feet from project facilities.

Based on Paris Solar's un rebutted testimony and its agreement regarding stray voltage testing, the Commission finds it reasonable to require Paris Solar to work with the applicable distribution utility to make available the testing for stray voltage at each agricultural confined

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<sup>15</sup> See docket 6630-CE-302.

<sup>16</sup> See docket 9697-CE-100.

<sup>17</sup> See docket 9696-CE-100.

<sup>18</sup> See docket 9802-CE-100.

<sup>19</sup> See docket 9800-CE-100.

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animal operation within 300 feet of project facilities, prior to construction and after the project is energized. Paris Solar shall work with the distribution utility and farm owner to rectify any identified stray voltage problem arising from the construction or operation of the project. Prior to testing, Paris Solar shall work with the applicable distribution utility and Commission staff to determine where and how it will conduct the stray voltage measurements. Paris Solar shall report the results of its testing to Commission staff.

### **Post-Construction Noise Study**

There has been long-standing Commission precedent of requiring pre-construction and post-construction noise studies for any new proposed electric generation facility, for both renewable and conventional electric generation resources. Previous Commission decisions have included language that required noise studies by a project developer. Paris Solar completed and submitted an initial pre-construction noise study report.

The Commission finds it reasonable that Paris Solar perform pre-construction and post-construction noise studies as described in the most current version of the Commission's Noise Measurement Protocol. This will ensure that any noise created by the solar facilities will be identified and mitigated in accordance with the Commission's standards. In the event of a substantial change to the proposed facility layout, Paris Solar should confer with Commission staff to determine if a new pre-construction noise study must be completed. Paris Solar shall file a copy of the post-construction noise study report with the Commission.

### **Environmental Review**

The proposed electric generation project was reviewed by the Commission for environmental impacts. Wisconsin Admin. Code ch. PSC 4, Table 3, identifies construction of a solar-powered electric generation facility as a Type III action. However, Wis. Admin. Code

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§ 4.10 specifically provides that while Type III actions do not normally require preparation of an EA or an EIS, “[a]n evaluation of a specific Type III proposal, however, may indicate that preparation of an EA or EIS is warranted for that proposal...”

An EA was warranted for the proposed project due to the novelty of the proposed project in this state, as well as the size and amount of land that would be covered by the proposed project. The environmental review focused primarily on impacts to wildlife, including rare or endangered species, aesthetics, historic resources, wetlands and waterways, and local landowner impacts. The EA concluded that “approval and construction of this project is unlikely to have a significant impact on the human environment...” ([PSC REF#: 394640](#) at 64.)

#### **Historic Resource Review**

Paris Solar hired Westwood Consulting Services (Westwood) to conduct a review of historic resources within the project study area. The study area for direct impacts included all areas where there could be ground disturbance for all possible solar facilities (proposed and alternative arrays), totaling 2,897 acres. An evaluation of visual impacts was extended, and included a 1,800-foot buffer to the project construction areas. A desktop review included a review of the Wisconsin Historical Society’s (WHS) Wisconsin Historic Preservation Database, GIS data provided by WHS, and information from the National Register of Historic Places (NRHP). This review identified 14 archaeological sites and 2 burial sites (one of which is also one of the archaeological sites). A review of a one-mile buffer around the project area found an additional 23 archaeological sites and 5 burial sites, of which 2 are also included in the archaeological sites. A review of architectural historic sites found 22 historic resources in the study area, with 4 sites located in the direct ‘area of potential effect’ (APE), and the rest found in the area of indirect APE (considered visual impacts).

This project area has more recorded historic sites found through the desktop review than other similar sized solar projects the Commission has approved to date. The desktop review indicated the general project area has significant recorded archaeological sites and the potential for additional, unrecorded sites. Therefore, Westwood conducted an archaeological survey using pedestrian survey methods over the entirety of the project area. The archaeological survey identified one newly recorded prehistoric archaeological site, one historic archaeological site, and four isolated finds. Fifteen previously recorded sites were also revisited during the course of the survey.

A report detailing the findings of Westwood's survey and research efforts is provided as Appendix J to the application. The report stated that the project has avoided impacts to most sites through avoiding siting solar construction areas in areas with historic resources. There are some sites within the project area that are considered significant, or NRHP-eligible, where construction would occur, but impacts are not considered significant or would be avoided.

For significant archaeological sites located outside the arrays or construction areas, Paris Solar states in the response to data request item 4.03 ([PSC REF#: 391179](#)) that it would create a map of the project area that denotes archaeological sites in a manner that highlights their sensitivity, without releasing their confidential nature. Copies of the map would be provided to the construction site manager and/or superintendent to disperse to the larger workforce as a way to reinforce avoidance of these areas. In addition to the map, Paris Solar would use temporary fencing to clearly demarcate areas of high sensitivity that should be avoided, as well as a buffer to further reinforce avoidance of these sensitive areas.

Although the siting and described actions will avoid impacts to most historic sites in the project area, there is one site, archaeological site 47-KN-18, which would be negatively affected

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by construction of the project as it was initially proposed. Just prior to the submission of Paris Solar's CPCN application, Wisconsin's State Historic Preservation Office (SHPO) revised archaeological boundaries for one site based on data available since the 1930s, resulting in a significant expansion of the archeologically sensitive area. The Commission's Historic Preservation Officer (HPO) consulted with the SHPO at WHS in accordance with Wis. Stat. § 44.40. The SHPO stated that the site has the potential to yield information important to the study of human history and should be avoided by the project.

Paris Solar staff stated in rebuttal testimony that Paris Solar would not have proposed placing arrays on any known archeological site if the boundary of 47-KN-18 had been expanded prior to initial project planning. ([PSC REF#: 396771](#) at 10.) In Ex.-PSC-Data Request Response PSCW-3.01, Paris Solar committed to remove the solar array areas located within the archaeologically significant boundary of 47-KN-18 from its Preferred Array Area designation. While the Commission recognizes Paris Solar's agreement to avoid this area, it also affirmatively determines that the overlapping area would not be in the public interest to utilize for the project facilities, and as such, removes it from the authorized project site.

Based upon the historic resource survey work, subsequent investigation, stated avoidance actions by Paris Solar in the application and data requests, and removal of the project arrays that overlap with archaeological site 47-KN-18, the Commission finds that construction of the proposed facilities is not expected to affect any historic properties under Wis. Stat. § 44.40.

### **Aesthetics and Fencing**

Approximately 1,500 acres would be converted from agricultural land to the solar facility, for at least 30 years. The addition of hundreds of acres of solar panels, grouped in arrays that are fenced off for security requirements, would be a change from the current agricultural

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landscape. Because of their relatively low height, the solar facilities would not be visible at a great distance from the project. Most aesthetic impacts would occur to nearby road users and local residents. In the application provided to the Commission, Paris Solar proposed using up to 8-foot deer exclusion fence around the array areas. The use of this type of deer exclusion or agricultural fencing mitigates the change to the aesthetics of the area, is less hazardous to wildlife, and meets the necessary requirements of electric codes under both NEC and NESC for the array sites.

A chain link fence with barbed wire would still be necessary around the collector substation to meet applicable code requirements. These impacts may be lessened by the substation being set back from the road at least 800 feet, particularly if Paris Solar can maintain or create buffer vegetation along the roadside. The existing Paris Generation Facility is visible from the road to the north of the new collector substation location. This results in existing aesthetic impacts, which depending on the viewer, may mitigate new impacts resulting from the Paris Solar facilities.

### **Threatened and Endangered Species Review**

A certified Endangered Resources (ER) Review, which included a review of the DNR Natural Heritage Inventory (NHI) database for endangered and threatened species and species of special concern, was conducted for the proposed project. The NHI database is updated regularly, and as construction of the proposed project would not start until after a year from the date of the ER Review, the Commission finds it reasonable to require Paris Solar to conduct an updated review closer to the construction start date and no more than one year prior to commencement of construction.

The ER Review identified one special concern bird species, one special concern plant species, and one special concern crustacean species in the project area, as well as two natural habitat communities that are tracked by the NHI database. No required actions were described in the ER Review for the resources in the project area. A recommended action of checking for areas of suitable habitat for the bird species was provided in the ER Review. The species does use hay fields, pastures, open grasslands and prairies. Paris Solar reviewed the project area already and stated that there is not suitable habitat in the agricultural row crop fields proposed for the project and does not expect the condition of those fields to change between the time of the review and the start of construction. Paris Solar stated it is in communication with the agricultural landowners in the project footprint and plans to monitor for any changes to the project fields that would potentially create suitable habitat for the species of concern.

Some federally protected species, such as northern long-eared bats, might use parts of the project area for summer habitat, particularly areas with trees. As described in the EA, there are avoidance measures that can reduce potential for impacts to northern long-eared and other bat species, including a time of year restriction on tree clearing activities. Potentially, it would be beneficial for bats, as well as nesting birds, for tree clearing to occur outside of the summer avoidance period of June 1–August 15. The time of year tree clearing would occur is not stated in the application, with the application stating that a site-specific construction specification and schedule would be developed after a contractor was selected. The application states that tree clearing in the project area would be limited, with most located in subarray #1b, which Paris Solar agreed to avoid in rebuttal testimony and its initial brief.

Based on the information available from DNR and USFWS, the project layout, the described activities in the application, and the removal of the use of subarray #1b as described



above, the construction of the proposed facilities is not expected to affect any endangered or threatened species under Wis. Stat. § 29.604(6r).

### **Other Wildlife Impacts**

Commission staff recommended an order condition that would require Paris Solar to work with Commission and DNR staff on developing and conduct a post-construction avian mortality study. Paris Solar objected to the imposition of this condition primarily on the grounds of cost. Commission staff stated that Paris Solar does not currently appear to have any established plan for addressing wildlife observations or incidents, and suggested that Paris Solar develop such a system to address incidental wildlife observations. The Commission finds that a post-construction avian mortality study is unnecessary, but does find it reasonable and sufficient to require Paris Solar to develop and implement a training, response, and reporting system for any incidental wildlife observations and for five years, to provide an annual report of any incidents recorded by the system to Commission staff.

Chairperson Valcq dissents in part and would have also required a post-construction avian mortality study.

### **Wetlands and Waterways**

DNR participated in the review process with the Commission as required under Wis. Stat. § 30.025. As part of its review, DNR determines if the proposed project is in compliance with applicable state water quality standards. Wis. Admin. Code chs. NR 102, 103, and 299. If the project is found to be in compliance with state standards, DNR issues a waterway permit to Paris Solar, as promulgated under Wis. Stat. ch. 30, and/or a wetland permit, as promulgated under Wis. Stat. § 281.36.

### *Wetlands and Potential Impacts*

Wetlands within the proposed project study area were identified through a combination of desktop determinations and field delineations. All wetlands within the proposed project facilities footprint were identified through field delineations. A total of 258 wetlands were identified within the project study area of which 29 are within proposed project facilities. Twenty-four wetlands are within the proposed (Paris Solar-preferred) arrays, four in the primary alternative arrays, none are in secondary alternative arrays, and one located in a common area (to be utilized regardless of array selected).

The project's impact to all but one of the identified wetlands would be avoided by siting project components outside of wetlands and by utilizing construction practices that avoid wetland impact. The proposed site layout would avoid direct wetland impacts for all inverter pads, solar arrays, substation, driveways, and buildings. Fencing would be installed across one wetland in the proposed (Paris Solar-preferred) array #11. A total of three fence posts and associated footings would be installed within the wetland for a total of 4.5 square feet of permanent wetland fill. A total of 414 square feet of construction matting would be placed in wetlands in the same array to facilitate the fence installation. No forested wetland clearing would occur.

A total of 18 collector circuits would cross 7 wetlands using horizontal directional drilling (HDD). Trenching of wetlands would not occur for any wetland collector circuit crossing. Of the 7 identified wetland crossings, 5 wetlands would be crossed by 15 collector circuits in the proposed arrays and 2 wetlands would be crossed by 3 collector circuits in the primary alternative arrays. No wetlands would be crossed by collector circuits in secondary alternative arrays or common areas of the project. Collector circuits would be installed a minimum of five feet below the wetland surface. Entry points and exit points of the bore would

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be positioned at least ten feet outside of the established wetland boundaries and would be moved further away when appropriate to achieve the proper depth required for each bore and to avoid tree lines or other obstacles. Temporary staging and equipment storage would be located in uplands.

*Waterways and Potential Impacts*

Waterways were identified using the 24K hydro layer of the DNR Surface Water Data Viewer and during field investigations conducted by Paris Solar. Thirty-six waterways are located within the overall project study area. Of these 36 waterways, ten waterways are associated with the primary arrays, one waterway is associated with the common area of the project (used regardless of array selection), one waterway is associated with the primary and primary alternative arrays, and one waterway is associated with the common areas and primary arrays. No waterways are associated with the secondary alternative arrays. The other 23 waterways are located within the overall project study area but are not impacted by or crossed by the project facilities or construction areas. Commission staff assumed all waterways navigable unless determined otherwise by DNR. None of the waterways are designated as Outstanding or Exceptional, Trout Streams or Wild or Scenic Rivers.

A total of four waterways would be crossed by permanent access roads. Proposed waterway crossings include three culvert crossings and one ford crossing. Three of the crossings are associated with the proposed arrays and one crossing is associated with areas common to the project regardless of array choice. There are no waterway crossings associated with the alternative arrays. The proposed roads would be used during construction activities, as well as after construction to access the array areas, project substation, and operation and maintenance (O&M) facility. Culverts and fords would be located to avoid unique or sensitive portions of

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waterways and installation should avoid fish spawning timing restriction periods, which are March 1 to June 15 for the waterways within this project area. Culverts and fords would be properly designed and maintained to prevent washout and flooding.

Collector circuits would cross waterways utilizing trenchless construction techniques. Construction activities associated with the collector circuits would occur outside of the waterways. The proposed collection route includes 12 waterways with a total of 28 collector circuit bores. The use of proposed arrays includes 27 collector circuit bores of 12 waterways. The primary alternative arrays include one collector circuit bore of one waterway. There are no collector circuit crossings of waterways associated with the secondary alternative arrays or common project areas. Collector circuits would be installed a minimum of five feet below the bed of waterways. Entry points and exit points of the bore would be positioned at least ten feet outside of the established wetland and waterway boundaries and would be moved further away when appropriate to achieve the proper depth required for each bore and to avoid tree lines or other obstacles. Temporary staging and equipment storage would be located in uplands.

One stormwater pond would be constructed within 500 feet of an unnamed tributary to the Des Plaines River. The stormwater pond would be constructed to meet post-construction performance standards. The pond would receive run off from the proposed substation, O&M facility, and driveway. No fence crossings of waterways would occur with this project.

DNR staff testified that the project, as currently proposed, would be considered permissible under Wis. Stat. § 30.025 and that compensatory wetland mitigation would not be required for this project, per Wis. Stat. § 281.36(3n)(d)2. ([PSC REF#: 394607](#) at 5.)

### **Flood Hazard Review**

The proposed project was reviewed for potential flood hazard exposure per Order 73. As no flood-sensitive facilities are to be located in or near any designated floodplain or flood prone areas, there is no significant flood risk to the proposed project.

### **Local Landowner Impacts**

Some non-participating landowners voiced concerns regarding the potential impacts of the facility being constructed in their area. The potential for changes in property values, increased noise, glare from the panels, and the change of land use from a rural farmed landscape to many acres of panels and fencing were discussed in comments provided by landowners.

While some landowners expressed concerns that construction of the proposed project would reduce their property values, these concerns were not substantiated with credible evidence. As discussed in the EA, noise and visual impacts could negatively impact property value. However, unlike fossil-fueled electric generation facilities, the proposed facilities would have no emissions and minimal anticipated noise impacts to adjacent land uses during operations. The proposed facilities would also likely have minimal visual impact given the limited height of the solar panels. The EA also indicated that a review of the literature found no research specifically aimed at quantifying impacts to property values based solely on the proximity to utility-scale solar facilities. For these reasons, the EA concluded that “[w]idespread negative impacts to property values are not anticipated.” ([PSC REF#: 394640](#) at 44.)

As noted previously, Paris Solar conducted pre-construction ambient noise studies. The studies were conducted in accordance with the Commission’s Noise Protocols. The studies recorded noise levels that would be typical for a rural environment with sources including vehicular traffic and farm machinery during daytime periods and insect noise during nighttime

periods. The studies evaluated the predicted noise levels from solar facilities and the proximity to residences and concluded that construction and operation of the proposed project would not result in any significant adverse noise impacts. For non-participating residences, the loudest predicted noise levels at night occur at a group of residences located approximately 1,000 feet to the west of a proposed BESS location along 172nd Avenue, and one other residence located north of the substation. These locations have predicted nighttime levels of 36 to 37 dBA. ([PSC REF#: 394640](#) at 52.) The noise analysis states that given the assumed location and noise emissions of the BESS and the substation, some degree of noise mitigation (reduction) is necessary to ensure noise levels are at or below nighttime levels of 45 dBA. As part of the final design process, the noise analysis and any resulting noise mitigation recommendations should be updated as equipment selections and locations are finalized. This information would be updated and provided with final designs and construction plans for the BESS.

Paris Solar also performed a Glint and Glare Analysis for the proposed project. The results concluded that there would be no glint or glare at any of the residences, roadways, or airports examined. The EA also noted that the solar panels are designed to absorb light and have an anti-reflective coating that reduces the risk of glint or glare to vehicles or residents. (*Id.* at 56.)

As for the other concerns raised by non-participating landowners, the Commission finds those concerns have been addressed to the extent practicable through the other conditions imposed on Paris Solar in this Final Decision.

### **Federal, State, and Local Permits**

Under Wis. Stat. § 196.491(3)(e), before issuing a CPCN, the Commission must determine that DNR can grant the permits that have been identified under Wis. Stat. § 196.49(3)(a)3.a. as required for the construction or operation of the facility. The Commission has no jurisdiction over

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DNR permits, but it remains aware of the status of DNR permits that are required before any construction may begin and those that are of significant importance to the ability of the plant to operate if it receives a CPCN. As described in the EA, DNR participated in the environmental review of this project, and it is anticipated that this project, as currently proposed, would meet permit requirements.

A list of all anticipated permits is included in the application and the EA. The Commission frequently requires in final decisions authorizing construction projects that an applicant obtain all necessary federal, state, and local permits prior to commencement of construction. Commission staff suggested a similar condition in this docket. Paris Solar stated that it will obtain necessary federal, state, and local permits prior to beginning construction on the portion of the project requiring the permit. The Commission finds this modification to the commonly used order condition reasonable, given the coordination involved in a project of this size and complexity, and therefore orders the condition as such.

### **Pre-Construction Meeting**

There are a number of topics that require additional documentation subsequent to the Commission's decision, including the final design layout, the status of any permit conditions, and the provision of construction plan details and MISO studies pertaining to the BESS. Final engineering for projects often will establish the details of construction and mitigation methods that will actually be instituted by the applicants. Paris Solar agreed to meet with Commission and DNR staff once project designs and construction plans are complete, and prior to construction, in order to review planned actions and ensure their compliance with permit and order conditions. The Commission finds it reasonable to require Paris Solar and its selected contractor to participate in a pre-construction meeting with Commission and DNR staff to

discuss construction plans and/or final site designs, permits, and associated requirements and Best Management Practices (BMP). Plans shall be provided to Commission and DNR staff before the meeting to allow time for review, a minimum of 14 days prior to the meeting.

**Minor Siting Flexibility**

The Commission recognizes that detailed engineering is not complete prior to it authorizing the project, and that minor siting adjustments may be needed to accommodate the final design of the project. Situations may be discovered in the field that were not apparent based on the information available to Paris Solar in development of the proposed project or to the Commission in making its decision. When Paris Solar identifies such situations, it shall consult with Commission staff familiar with the project to determine whether the change rises to the level where Commission review and approval is appropriate. If Commission review is appropriate, Paris Solar shall request Commission authorization. A request for a minor siting adjustment shall take the form of a letter to the Commission describing:

1. The nature of the requested change;
2. The reason for the requested change;
3. The incremental difference in any environmental impacts;
4. Communications with potentially affected landowners regarding the change;
5. Documentation of discussions with other agencies regarding the change; and
6. A map showing the approved route and the proposed modification, property boundaries, relevant natural features such as woodlands, wetlands, waterways, and other sensitive areas.

These requests will be reviewed by Commission staff knowledgeable about the project. Approval of the requests is delegated to the Administrator of the Division of Energy Regulation and Analysis with the advice and consent of the Administrator of the Division of Digital Access, Consumer and Environmental Affairs.



The requested change may be granted if the proposed change:

1. Does not affect new landowners who have not been given proper notice and hearing opportunity;
2. Does not impact new resources or cause additional impacts that were not described in the EA; and,
3. Is agreed to by affected landowners, and agreement is affirmed in writing.

Changes that do not meet all three of the criteria listed above would require reopening of the docket.

For any minor siting adjustment, the Commission typically also requires that the applicant:

- Obtain all necessary permits;
- Comply with all requirements included in agreements with local units of government, such as MOUs;
- Comply with all landowner agreements;
- Avoid of any part of the project area that the Commission finds unacceptable; and,
- Comply with the applicant's own environmental siting criteria.

The Commission finds that it is reasonable that Paris Solar be granted minor siting flexibility for adjusting project locations (up to the authorized nameplate capacity) during final design. The Commission spends considerable time reviewing and selecting areas for a generation project layout, and it is therefore of utmost importance that if the chosen project layout must be changed, the Commission must receive appropriate notification. Paris Solar shall follow the described process to obtain authorization for any minor siting adjustments.

### **Compliance with the Wisconsin Environmental Policy Act**

Under Wis. Stat. § 196.491(3)(d)3., the Commission must find that the proposed project is in the public interest considering environmental factors. Similarly, under Wis. Stat.

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§ 196.491(3)(d)4., before issuing a CPCN, the Commission must find that the proposed project will not have an undue adverse impact on environmental values.

The Commission finds that no EIS is required and that the environmental review conducted in this proceeding complies with the requirements of Wis. Stat. § 1.11 and Wis. Admin. Code ch. PSC 4.

### **Project Construction Schedule**

Paris Solar provided a construction schedule as part of its application, which is summarized as follows:

Construction is proposed to begin in July 2021, including mobilization of workers. PV panels would begin to be installed starting in July 2021 and installation would likely continue until April 2023, just before the start of commercial operations. The collector substation would be constructed from February to September 2022. The generator tie line would be built from February to September 2022. The in-service date for this project is estimated to be in May 2023. The total construction duration is estimated to be nearly two years, from site mobilization to commercial operation. Some construction timelines could be affected by weather conditions, particularly winter weather conditions.

<b>Activity</b>	<b>Estimated Start</b>	<b>Estimated Completion</b>
Construction Begins	July 2021	
Mobilization	July 2021	
Install Racking	July 2021	April 2023
Install Modules	July 2021	April 2023
Construct Project Substation	March 2022	September 2022
Construct Gen-Tie Line	March 2022	September 2022
In-Service Date		May 2023

### **Assignment of Rights**

Commission staff proposed a possible order condition that would require that Paris Solar and its contractors, successors, assigns, and corporate affiliates comply with all the commitments included in its application and subsequent filings, and the provisions of this Final Decision. The Commission finds the order condition reasonable to protect the public interest by ensuring the commitments and conditions reflected in this Final Decision continue. The Paris Solar facility may in the future be acquired by a regulated utility. If that happens, without a condition similar to that described, any condition attached to the Commission's approval of the Paris Solar facility may not be enforceable by the Commission after transfer of ownership of the facility. A similar condition has been included in previous orders authorizing wholesale merchant plants.

### **Certificate**

The Commission grants Paris Solar a CPCN for construction of the proposed solar PV electric generation facility, as described in the application and as modified by this Final Decision.

### **Order**

1. Paris Solar is authorized to and shall construct the proposed solar PV electric generation facility, as described in the application, data requests, and as modified by this Final Decision.

2. As a condition of approval, the Commission modified the application to exclude from consideration as proposed or alternative project arrays the areas that would impact a historic site (archaeological site 47-KN-18) and the forested area (an area of array #1 also referred to as subarray #1b). In addition, Paris Solar shall work with the landowner adjacent to

part of array #10 (power block LL) regarding the potential use alternative arrays or consideration of mitigation measures to address the landowners concerns to the extent practicable.

3. Should the scope, design, or location of the project change significantly, Paris Solar shall notify the Commission within 30 days of becoming aware of possible changes. Paris Solar shall obtain approval from the Commission before proceeding with any substantial change in project scope, design, size, or location.

4. If Paris Solar cancels the project or enters into any arrangement with another party regarding ownership or operation of the proposed facilities, Paris Solar shall provide prior notice to the Commission.

5. Paris Solar shall obtain all necessary federal, state, and local permits prior to commencement of construction on the portion of the project requiring the permit.

6. Paris Solar shall provide an updated ER Review to Commission and DNR staff if the commencement of construction occurs greater than one year after the initial ER Review and at any point the ER Review is greater than one-year old while construction is still taking place.

7. Beginning with the quarter ending September 30, 2021, and within 30 days of the end of each quarter thereafter and continuing until the authorized facilities are fully operational, Paris Solar shall submit quarterly progress reports to the Commission that include all of the following:

- a. The date that construction commences;
- b. Major construction and environmental milestones, including permits obtained, by agency, subject, and date;
- c. Summaries of the status of construction, the anticipated in service date, and the overall percent of physical completion; and

d. The date that the facilities are placed in service.

8. The CPCN is valid only if construction commences no later than one year after the latest of the following dates:

a. The date this Final Decision is served.

b. The date when Paris Solar has received every federal and state permit, approval, and license that is required prior to commencement of construction by construction spread under the CPCN.

c. The date when the deadlines expire for requesting administrative review or reconsideration of the CPCN and of the permits, approvals, and licenses described in par. (b.)

d. The date when Paris Solar receives the Final Decision, after exhaustion of judicial review, in every proceeding for judicial review concerning the CPCN and the permits, approvals, and licenses described in par. (b.)

9. If Paris Solar does not begin on-site physical construction of the authorized project within one year of the effective date of this Final Decision, the Certificate authorizing the approved project for which construction has not commenced shall become void unless Paris Solar:

a. files a written request for an extension of time with the Commission before the effective date on which the Certificate becomes void, and

b. is granted an extension by the Commission.

10. If Paris Solar has not begun on-site physical construction of the authorized project and has not filed a written request for an extension before the date that this Certificate becomes void, Paris Solar shall inform the Commission of those facts within 20 days after the date on which the Certificate becomes void.

11. Paris Solar may propose minor adjustments in the approved project layout for the protection of social, cultural, or environmental resources (up to the authorized nameplate capacity), but any changes from the approved layout may not affect resources or cause impacts not discussed in the EA, nor may they affect new landowners who have not been given proper notice and hearing opportunity. Paris Solar shall consult with Commission staff regarding whether the change rises to the level where Commission review and approval is appropriate. For each proposed adjustment for which Commission review is appropriate, Paris Solar shall submit for Commission staff review and approval a letter describing: the nature of the requested change; the reason for the requested change; the incremental difference in any environmental impacts; communications with potentially affected landowners regarding the change; documentation of discussions with other agencies regarding the change; and, a map showing the approved route and the proposed modification, property boundaries, relevant natural features such as woodlands, wetlands, waterways, and other sensitive areas. Approval of the requests is delegated to the Administrator of the Division of Energy Regulation and Analysis with advice and consent from the Administrator of the Division of Digital Access, Environmental and Consumer Affairs.

12. Paris Solar and its selected contractor shall participate in a pre-construction meeting with Commission and DNR staff to discuss construction plans and/or final site designs, permits, and associated requirements and BMPs. Plans shall be provided to Commission and DNR staff 14 days prior to the meeting to allow time for review.

13. Paris Solar shall provide a report when any MISO studies are complete on the inclusion of a BESS. Paris Solar shall update the Commission with a report on all MISO DPP studies and shall provide the Commission with final detailed engineering plans for the BESS. If

Commission staff identifies safety or reliability issues upon review of the plans and report, when considering safety and reliability, final location, individual hardships, and environmental factors, then the matter shall be returned to the Commission.

14. Paris Solar shall implement a formal decommissioning plan consistent with the requirements agreed to in the MOU between Paris Solar and the Town of Paris.

15. Paris Solar shall implement a wildlife monitoring system, and, for the first five years of operation, shall provide an annual report regarding the result of its monitoring to Commission staff. Paris Solar shall work with work with Commission staff on the content of those reports.

16. Paris Solar shall work with the applicable distribution utility to make available stray voltage testing at each agricultural confined animal operation within 300 feet of the project infrastructure, prior to construction and after the project is energized. Paris Solar shall work with the distribution utility and farm owner to rectify any identified stray voltage problem arising from the construction or operation of the project. Prior to testing, Paris Solar shall work with the applicable distribution utility and Commission staff to determine where and how it will conduct the stray voltage measurements. Paris Solar shall report the results of its testing to Commission staff.

17. Paris Solar shall perform post-construction noise studies as described in the current version of the PSC Noise Measurement Protocol. When the project is operational and in accordance with the steps described in the Protocol, Paris Solar shall repeat the noise measurements conducted as the pre-construction noise study, shall measure the maximum noise created at the solar facility with all equipment and inverters on and while the panels auto-rotate, and shall measure the noise at the site with all units off. Paris Solar shall report its findings to the Commission using the same format as the pre-construction noise studies.

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18. Paris Solar shall comply with NEC or NESC and Wis. Admin. Code ch. PSC 114, as appropriate. In case of conflict or overlap between code requirements, Paris Solar shall comply with the more stringent code requirement.

19. All commitments made by Paris Solar in its application, subsequent filings, and the provisions of this Final Decision shall apply to Paris Solar, any agents, contractors, successors, assigns, corporate affiliates, and any future owners or operators of the project.

20. This Final Decision takes effect one day after the date of service.

21. Jurisdiction is retained.

Dated at Madison, Wisconsin, the 29<sup>th</sup> day of December, 2020.

By the Commission:

A handwritten signature in black ink that reads "Steffany Powell Coker". The signature is written in a cursive, flowing style.

Steffany Powell Coker  
Secretary to the Commission

SPC:DG:jlt:DL:01775565

Attachments

See attached Notice of Rights



PUBLIC SERVICE COMMISSION OF WISCONSIN  
4822 Madison Yards Way  
P.O. Box 7854  
Madison, Wisconsin 53707-7854

**NOTICE OF RIGHTS FOR REHEARING OR JUDICIAL REVIEW, THE  
TIMES ALLOWED FOR EACH, AND THE IDENTIFICATION OF THE  
PARTY TO BE NAMED AS RESPONDENT**

The following notice is served on you as part of the Commission's written decision. This general notice is for the purpose of ensuring compliance with Wis. Stat. § 227.48(2), and does not constitute a conclusion or admission that any particular party or person is necessarily aggrieved or that any particular decision or order is final or judicially reviewable.

*PETITION FOR REHEARING*

If this decision is an order following a contested case proceeding as defined in Wis. Stat. § 227.01(3), a person aggrieved by the decision has a right to petition the Commission for rehearing within 20 days of the date of service of this decision, as provided in Wis. Stat. § 227.49. The date of service is shown on the first page. If there is no date on the first page, the date of service is shown immediately above the signature line. The petition for rehearing must be filed with the Public Service Commission of Wisconsin and served on the parties. An appeal of this decision may also be taken directly to circuit court through the filing of a petition for judicial review. It is not necessary to first petition for rehearing.

*PETITION FOR JUDICIAL REVIEW*

A person aggrieved by this decision has a right to petition for judicial review as provided in Wis. Stat. § 227.53. In a contested case, the petition must be filed in circuit court and served upon the Public Service Commission of Wisconsin within 30 days of the date of service of this decision if there has been no petition for rehearing. If a timely petition for rehearing has been filed, the petition for judicial review must be filed within 30 days of the date of service of the order finally disposing of the petition for rehearing, or within 30 days after the final disposition of the petition for rehearing by operation of law pursuant to Wis. Stat. § 227.49(5), whichever is sooner. If an *untimely* petition for rehearing is filed, the 30-day period to petition for judicial review commences the date the Commission serves its original decision.<sup>20</sup> The Public Service Commission of Wisconsin must be named as respondent in the petition for judicial review.

If this decision is an order denying rehearing, a person aggrieved who wishes to appeal must seek judicial review rather than rehearing. A second petition for rehearing is not permitted.

Revised: March 27, 2013

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<sup>20</sup> See *Currier v. Wisconsin Dep't of Revenue*, 2006 WI App 12, 288 Wis. 2d 693, 709 N.W.2d 520.

# In the Board Room

with *Attorney Andy Phillips* and

**ATTOLLES**  
LAW, S.C.

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WISCONSIN COUNTIES  
ASSOCIATION

## A County's Role in Regulating Large Solar Projects

February 22, 2022

Andy Phillips and Jake Curtis

## Agenda

- General County Regulatory Authority Over Solar Energy Systems
- Specific Restrictions on County Regulatory Authority
- Permissive Regulatory Authority for Counties: So What May a County Adopt?



▼ County Regulatory Authority Over Solar Energy Systems

# County Authority to Regulate: Statutory Restrictions

- County authority comes from Wis. Stat. Chapter 59.
- Counties are a body corporate that can sue and be sued.
- Powers are limited by state statute.
- Home Rule: Wis. Stat. § 59.03(1) - Every county may exercise any organizational or administrative power, subject only to the constitution and to any enactment of the Legislature which is of statewide concern ***and*** which uniformly affects every county.
- Counties are governed by a board of supervisors.

# County Authority to Regulate: Preemption

*\*Key Point: County may not regulate on issues that are preempted by Federal and State law.*

*Lake Beulah Mgmt. Dist. v. E. Troy*, the Wisconsin Supreme Court established a four-factor test to determine whether a local regulation is preempted by state law:

- Has the state legislation expressly withdrawn the powers of municipalities to act?
- Does the local regulation logically conflict with state legislation?
- Does the local regulation defeat the purpose of the state legislation?
- Does the local regulation violate the spirit of the state legislation?

# County Authority to Regulate

- Political subdivisions (counties, cities, villages, and towns) in Wisconsin possess unique, and somewhat limited, authority to regulate solar and wind energy systems.
- “Solar energy system” means “equipment which directly converts and then transfers or stores solar energy into usable forms of thermal or electrical energy.” Wis. Stat. § 13.48(2)(h)1.g.
- “Wind energy system” means “equipment and associated facilities that convert and then store or transfer energy from the wind into usable forms of energy.” Wis. Stat. § 66.0403(1)(m).

## County Authority to Regulate: Siting and Approval

Wis. Stat. § 66.0401: Sets forth statute for siting and approval process, thereby preempting county regulation unless expressly stated.

*\*Key point: Wis. Stat. § 66.0401 explicitly limits the authority of political subdivisions to regulate solar energy systems.*



## County Authority to Regulate: Siting and Approval

“The conditions (that may be used) are the standards circumscribing [i.e. constricting] the power of political subdivisions, not openings for them to make policy that is contrary to the state’s expressed policy.”

*Ecker Bros. v. Calumet County*, 2009 WI App. 112, 321 Wis. 2d 51, 772 N.W.2d 240



▼ Specific Restrictions on County  
Regulatory Authority

## Restriction on Regulatory Authority

- Wis. Stat. § 66.0401 (1m): A county may only place a restriction (either directly or in effect, i.e. BROADLY Interpreted) on the installation or use of a solar energy system (as defined in Wis. Stat. § 13.48(2)(h)1.g.) or a wind energy system if the restriction satisfies at least one of the following conditions:
  - The restriction serves to preserve or protect the public health or safety;
  - The restriction does not significantly increase the cost of the system or significantly decrease its efficiency; or
  - The restriction allows for an alternative system of comparable cost and efficiency.

# Restriction on Regulatory Authority

- Note that counties *are not* permitted to make general policies applicable to all solar energy systems.
- Rather, permissible restrictions may only be made on a case-by-case basis.
- *See Ecker Brothers:*
  - The county must hear the specifics of the particular system and then decide whether a restriction is warranted.
  - **It may not promulgate an ordinance in which it arbitrarily sets a “one size fits all” scheme of requirements for any system.**
  - “Standards circumscribing the power of political subdivisions, not openings for them to make policy that is contrary to the state's expressed policy.”

## Restriction on Regulatory Authority: PSC

- No person may commence the construction of a facility unless the person has applied for and received a certificate of public convenience and necessity (“CPCN”) from the PSC. See Wis. Stat. § 196.491(2r).
- Facility means a “large electric generating facility” designed for nominal operation at a capacity of 100 megawatts or more.
- ***\*Key point: If installation or utilization of a facility (i.e. ≥ 100 MW) for which a CPCN has been granted is precluded or inhibited by a local ordinance, the installation and utilization of the facility may nevertheless proceed. Wis. Stat. 196.491(3)(i).***
- PSC must then hold a public hearing on an application and **shall approve** an application for a certificate of public convenience and necessity if all 8 statutory factors are met, which include:

# Restriction on Regulatory Authority: PSC Factors

- The proposed facility satisfies the reasonable needs of the public for an adequate supply of electric energy.
- The design and location or route is in the public interest considering alternative sources of supply, alternative locations or routes, individual hardships, engineering, economic, safety, reliability and environmental factors.
- The proposed facility will not have undue adverse impact on other environmental values such as, but not limited to, ecological balance, public health and welfare, historic sites, geological formations, the aesthetics of land and water and recreational use.
- The proposed facility will not unreasonably interfere with the orderly land use and development plans for the area involved.
- The proposed facility will not have a material adverse impact on competition in the relevant wholesale electric service market.

## Restriction on Regulatory Authority: County Role in PSC Process?

- No local ordinance may prohibit or restrict testing activities undertaken by an electric utility for purposes of determining the suitability of a site for the placement of a facility. Any local unit of government objecting to such testing may petition the commission to impose reasonable restrictions on such activity.
- **If installation or utilization of a facility for which a certificate of convenience and necessity has been granted is precluded or inhibited by a local ordinance, the installation and utilization of the facility may nevertheless proceed.**
  - This expressly withdraws the power of municipalities to act, once the PSC has issued a certificate of public convenience and necessity, on any matter that the PSC has addressed or could have addressed in that administrative proceeding. *American Transmission Co., LLC v. Dane County*, 2009 WI App 126, 321 Wis. 2d 138, 772 N.W.2d 731.

## How has this statutory framework been applied? *Numrich*

- In *State ex rel. Numrich v. City of Mequon Bd. of Zoning Appeals*, the Court addressed a situation where two lot owners wished to construct a wind energy system on their respective lots and applied for conditional use permits for construction of the systems. 2001 WI App 88, ¶2, 242 Wis.2d 677, 626 N.W.2d 366.
- First, the Court concluded “the owner of an energy system does not need a permit under § 66.032 to construct such a system. Therefore, barring any other enforceable municipal restrictions, an owner may construct such a system without prior municipal approval.”
- Second, it noted the unique nature of the statute, which “serves to *benefit and protect* the owner of a solar or wind energy system permit by *restricting* users or owners of nearby property from creating an ‘impermissible interference’ with the energy system.”
- Third, it observed “§ 66.031 represents a legislative restriction on the ability of local governments to regulate solar and wind energy systems ... The statute is not trumped, qualified or limited by § 66.032 or by a municipality’s zoning and conditional use powers.”



## How has this statutory framework been applied? *Ecker Brothers*

- *Ecker Brothers v. Calumet County* involved a challenge by property owners against the County, arguing that the county ordinance restricting construction of wind energy turbines was ultra vires under state statute. 2009 WI App 112, 321 Wis.2d 51, 772 N.W.2d 240.
- The Court didn't "buy" the County's argument that "the legislature actually authorized localities to make their own policy regarding alternative energy systems."
- the Court observed "[w]e are unconvinced that just because the legislature provided for three conditions under which political subdivisions can restrict a wind energy system, that it granted political subdivisions the authority to determine *as a matter of legislative fact* a "cart before the horse" method of local control."

## How has this statutory framework been applied? *Ecker Brothers*

- The scope of this exercise is narrow and must be conducted through a conditional use process. The Court found:

*WIS. STAT. § 66.0401(1) requires a case-by-case approach, such as a conditional use permit procedure, and does not allow political subdivisions to find legislative facts or make policy. The conditions listed in § 66.0401(1) (a)-(c) are the standards circumscribing the power of political subdivisions, **not openings for them to make policy that is contrary to the State's expressed policy.***

## How has this statutory framework been applied? *Ecker Brothers*

- The Court concluded by focusing on the partnering role of the County and by pointing out if a county wished to alter the relationship, it could lobby the Legislature:

*These strategies indicate that the legislature determined it appropriate to give political subdivisions the power to assist in the creation of renewable energy systems and thus become an integral and effective factor in the State's renewable energy goal. But, this history does not indicate that the State intended to delegate the power of policymaking. Instead, the evidence is that the State delegated the authority to execute and administer its established policy of favoring wind energy systems, and the statutory scheme was intended to create **avenues for political subdivisions to assist the State**. If the County and other similarly situated localities believe that localities should be able to decide for themselves whether and to what extent wind systems are welcome in their geographical area, **their argument is best made to the legislature**.*

## How has this statutory framework been applied? *American Transmission*

- After the first of the three PSC certificates were issued, Dane County took the position that construction could not begin until ATC obtained a shoreland erosion control permit.
- ATC did not apply for the permits because of its view the County process would “inhibit” the construction of the projects within the meaning of Wis. Stat. § 196.491(3)(i).
- The Court in *American Transmission Co., LLC v. Dane County* found “in Wis. Stat. § 196.491(3)(i), the legislature has expressly withdrawn the power of municipalities to act, once the PSC has issued a certificate of public convenience and necessity, on any matter that the PSC has addressed or could have addressed in that administrative proceeding.”
- In addition, “the local power that is withdrawn by the statute includes requiring the application for local permits of the type that are in dispute in this case.”

## How has this statutory framework been applied? *American Transmission*

- The Court agreed that *RURAL* does not hold that all local regulations are preempted but in so doing focused on the similarity between “impede” and “inhibit.” The Court:

*presume[d] “inhibit” does not have the same meaning as “preclude” in § 196.491(3)(i). The phrase “preclude or inhibit” conveys the legislature’s intent that a certificate of public convenience and necessity preempts not only those local ordinances that would prevent the project entirely (“preclude”) but also those that would only hinder (“inhibit”) the project.*

- Therefore:

*The only reasonable reading of *RURAL* is that WIS. STAT. § 196.491(3)(i) “abrogates,” in the court’s own words, local regulations that govern the same subject matter that the PSC is required by statute to consider in granting a certificate for public convenience and necessity. *Id.*, ¶¶ 65–68. The necessary implication of the court’s analysis is that any enforcement of local regulations governing those matters impedes or inhibits the project.*



▼ Permissive Regulatory Authority for  
Counties

## So What May A County Adopt?

- Counties may choose to enact policies consistent with Wis. Stat. § 66.0403 to promote siting of renewable energy systems within their jurisdiction by enacting an ordinance relating to:
  - The trimming of vegetation that blocks solar energy from a collector surface.
  - Access permit requirements (not your traditional “access” permit).
  - Zoning permits.

*\*Key point: all ordinances are subject to preemption requirements.*

Example: A county may not curtail the requirements and limitations set forth in Wis. Stat. § 66.0401 and Wis. Stat. § 66.0403 by adopting a conditional use permit requirement that will regulate in a more restrictive fashion.

## Permissive Regulatory Authority: Trimming

- Counties may adopt an ordinance relating to the trimming of vegetation that blocks solar energy from a collector surface.
- The ordinance may include a designation of responsibility for the costs of the trimming.
- The ordinance may not require the trimming of vegetation that was planted by the owner or occupant of the property on which the vegetation is located *before* the installation of the solar energy system.



## Permissive Authority: Solar Access Permits

- Counties with zoning ordinance under Wis. Stat. § 59.69 may also choose to grant permits for solar access (*i.e.*, to preserve access to sunlight).
- A permit may only affect land which, at the time the permit is granted, is within the territorial limits of the municipality or is subject to an extraterritorial zoning ordinance adopted under Wis. Stat. § 62.23(7a).
- A permit issued by a city or village may not affect extraterritorial land subject to a zoning ordinance adopted by a county or a town.
- The county board may appoint itself as the “agency” to process applications or may create or designate another agency to grant permits.

## Permissive Authority: Solar Access Permits

- The county board may require a fee to cover the costs of processing applications. The fee must be prescribed in ordinance.
- The ordinance may also contain any provision the board deems necessary for granting a solar access permit, including but not limited to:
  - Specifying standards for permit approvals.
  - Defining an impermissible interference to include vegetation planted before the date the application is determined to be completed (provided that the permit holder shall be responsible for the cost of trimming such vegetation).

## Permissive Authority: Solar Access Permits

- Wis. Stat. § 66.0403(3)(b): The county agency responsible for the application process must determine if a submitted application is satisfactorily completed and must notify the applicant of its determination.
- If an applicant receives notice that an application has been satisfactorily completed, the *applicant must then deliver a notice* to the owner of any property which the applicant proposes to be restricted by the permit.
- The applicant must also submit a copy of a signed receipt from every property owner to whom notice is delivered to the agency.

# Solar Access Permits: Notice Form

- The agency must supply the property owner notice form.
- The information on the form may include (without limitation):
  1. The name and address of the applicant, and the address of the land upon which the solar collector or wind energy system is or will be located.
  2. That an application has been filed by the applicant.
  3. That the permit, if granted, may affect the rights of the notified owner to develop his or her property and to plant vegetation.
  4. The telephone number, address and office hours of the agency.
  5. That any person may request a hearing within 30 days after receipt of the notice, and the address and procedure for filing the request.

## Solar Access Permits: Unique Hearing Process

- Any person receiving a notice for an access permit may request a hearing on the granting of a permit within 30 days after receipt of the notice.
- Likewise, the county agency may determine that a hearing is necessary even if no request is filed.
- If a request is filed or if the agency determines that a hearing is necessary, the agency must conduct a hearing on the application within 90 days after the last notice is delivered.
- The agency must notify the applicant and all persons receiving the notice at least 30 days prior to the hearing date, and any other person filing a request of the time and place of the hearing.

# Solar Access Permits: Granting the Permit

- Wis. Stat. § 66.0403(5)(a): The agency ***shall*** grant a permit if the agency determines that:
  - The granting of a permit will not unreasonably interfere with the orderly land use and development plans of the county;
  - No person has demonstrated that she or he has present plans to build a structure that would create an impermissible interference; and
  - The benefits to the applicant and the public will exceed any burdens.
- Note: Any person aggrieved by a determination by a county to grant an access permit may appeal the determination to the circuit court for a review.

## Solar Access Permits: Permit Conditions

- An agency may grant a permit subject to any condition or exemption the agency deems *necessary* to minimize the possibility that the future development of nearby property will create an impermissible interference or to minimize any other burden on any person affected by granting the permit.
- Such conditions or exemptions may include (but are not limited to) restrictions on the location of the solar collector and requirements for the compensation of persons affected by the granting of the permit.

## Solar Access Permits: Record of Permit

- Wis. Stat. § 66.04003(6): If an agency grants a permit, the agency must specify the property restricted by the permit and must prepare notice of the granting of the permit.
- The notice must include certain required identifications for the permit for the owner and the property upon which the solar collector is or will be located and for any owner and property restricted by the permit.
- The notice must also indicate that the property may not be developed and vegetation may not be planted on the property so as to create an impermissible interference with the solar collector unless the permit is terminated or unless an agreement affecting the property is filed.



## Solar Access Permits: Record of Permit

- The applicant must then record with the register of deeds of the county in which the property is located:
  - The notice for each property receiving the notice of application; and
  - For the property upon which the solar collector is or will be located.

## Solar Access Permits: Remedies for Impermissible Interference

- Any person who uses property which he or she owns or permits any other person to use the property in a way which creates an impermissible interference under a permit which has been granted or which is the subject of an application is liable to the permit holder or applicant for damages.
- Damages include any loss due to the impermissible interference, court costs and reasonable attorney fees unless:
  - The building permit was applied for prior to receipt of an application notice or the agency determines not to grant a permit after a hearing.
  - A permit affecting the property is terminated.
  - An agreement affecting the property is filed.



## Solar Access Permits: Remedies for Impermissible Interference

- A permit holder is entitled to an injunction to require the trimming of any vegetation which creates or would create an impermissible interference.
- If the court finds on behalf of the permit holder, the permit holder shall be entitled to a permanent injunction, damages, court costs and reasonable attorney fees.

# Solar Access Permits: Termination of Rights

- Any right protected by a permit under this section is terminated if the agency determines that the solar collector which is the subject of the permit is:
  - Permanently removed or is not used for 2 consecutive years (excluding time spent on repairs or improvements).
  - Not installed and functioning within 2 years after the date of issuance of the permit.
- However, the agency must give the permit holder written notice and an opportunity for a hearing on a proposed termination.
- If the agency terminates a permit, the agency may charge the permit holder for the cost of recording and record a notice of termination with the register of deeds.



## Solar Access Permits: Waiver of Rights by Agreement

- A permit holder may waive all or part of any right protected by a permit.
- A waiver must be evidenced by written agreement.
- A copy of such agreement shall be recorded with the register of deeds, who shall record such copy with the recorded notice.

## Solar Access Permits: Important Caveats

- A county *may not* require an owner to obtain a permit prior to installing a solar collector.
  - Rather, the permit is a benefit to property owners and intended to promote investment in solar energy systems.
- The acquisition of a renewable energy resource easement under Wis. Stat. § 700.35 is not contingent upon the granting of a solar energy access permit.



# QUESTIONS & ANSWERS

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