COUNTY OF KENOSHA

Division of Planning & Development

19600 75th Street, Suite 185-3
Bristol, WI 53104-9772
Phone: (262) 857-1895
Fax: (262) 857-1920

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Kenosha County
Planning and Development

KENOSHA COUNTY DEVELOPMENT APPLICATION

If you would rather apply for your project online and pay fees online without having to travel to and from this office to submit hardcopy documentation and physical payment, you can do so by visiting the Planning & Development Online Portal at the web address shown below, creating login credentials and logging in under said credentials in order to apply for your project. If you submit via the portal, you still need to complete this application, and upload it to the portal.

https://permitting.kenoshacounty.org/eTrakit/

1. Select all application types that apply:

☐Comprehensive Land Use Plan Map Amendment Application (COMP)

☐Rezoning Application (REZO)

☑Conditional Use Permit Application (CUP)

☐Affidavit of Correction (AFFC)

Land Division Applications

☐Certified Survey Map (CSM)

☐Preliminary Plat Application (PLAT)

☐Final Plat Application (PLAT)

2. Enter all contact information:

Property Owner Contact Information (1)
Company Name: J&S Real Estate Co LLC
Individual's Name: Jerry Warntjes
Mailing Address: 1440 MASTERS RD LAKE GENEVA, WI 53147-4910
Phone Number: (262) 492-9327
Email Address: jwarntjes@echolakefarms.com

Property Owner Contact Information (2)
Company Name:
Individual's Name:
Mailing Address:
Phone Number:
Email Address:

Property Owner Contact Information (3)
Company Name:
Individual's Name:
Mailing Address:
Phone Number:
Email Address:

Property Owner Contact Information (4)
Company Name:
Individual's Name:
Mailing Address:
Phone Number:
Email Address:

Architect Contact Information
Company Name:
Individual's Name:
Mailing Address:
Phone Number:
Email Address:

Engineer Contact Information
Company Name: OneEnergy Renewables
Individual's Name: Eric Udelhofen
Mailing Address: 834 E Washington Ave, Madison, WI 53703
Phone Number: 608.514.5378
Email Address: eric@oneenergyrenewables.com

Surveyor Contact Information
Company Name: R.A. Smith, Inc.
Individual's Name: Michael J. Ratzburg
Mailing Address: 16745 W Bluemound Rd. Brookfield, WI 53005
Phone Number: 262.781.1000
Email Address: michael.ratzburg@rasmith.com

Master Plumber/Soil Tester Contact Information
Company Name: Terracon
Individual's Name: Masrur Mahedi
Mailing Address: 9856 South 57th Street I Franklin, WI 53132
Phone Number: (414) 209-7641
Email Address: masrur.mahedi@terracon.com

3. List all subject properties by property address and/or tax key parcel number. If a full property address is not available including a house number, provide the tax key parcel number:

	Tax Key Parcel Number	Full Property Address
1.	95-4-119-014-0121	Geneva Rd.
2.	95-4-119-011-0600	60th Street
3.		
4.		

For Office Use Only: Applicants can track status on https://permitting.kenoshacounty.org/eTrakit/

Project Number(s):
CUP22-00014

4. Provide a written summary of your proposed project and reasons for pursuing said project:

   The proposed Salix Solar Project is a 7.5 Megawatt solar electric facility being developed by OneEnergy Development, LLC. The project will consist of solar panels mounted on racking built atop driven steel I-beams on approximately 34 acres within the larger combined 78 acre parcels. The project will be enclosed within an 8' tall woven wire deer-exclusion style fence similar to what you would see around an orchard. A gravel access drive would allow for access to the site from 60th Street. Electrical equipment will consist of inverters to transform DC to AC power, transformers, and a remote monitoring system. Both a Stormwater Management Permit and an Erosion Control Permit will be submitted because the project exceeds 0.5 acres of impervious surface and disturbance of land will be greater than 4,000 square feet.

5. If you are submitting a Comprehensive Land Use Plan Map Amendment Application (COMP), work with Planning & Development staff to prepare and attach a map of the subject area showing current land use plan map designations and a map of the subject area showing proposed land use plan map designations.

6. If you are submitting a Rezoning Application (REZO), work with Planning & Development staff to prepare and attach a map of the subject area showing current zoning map classifications and a map of the subject area showing proposed zoning map classifications.

   Note: Agricultural Use Conversion Charge

   The use value assessment system values agricultural land based on the income that would be generated from its rental for agricultural use rather than its fair market value. When a person converts agricultural land to a non-agricultural use (e.g. residential or commercial development), that person may owe a conversion charge. To obtain more information about the use value law or conversion charge, contact the Wisconsin Department of Revenue's Equalization Section at 608-266-2149 or visit https://www.revenue.wi.gov/Pages/SLF/useval-uvindx.aspx or https://www.revenue.wi.gov/Pages/FAQS/slf-usevalue.aspx.

   Note that the act of rezoning property from an agricultural zoning district to a non-agricultural zoning district does not necessarily trigger the agricultural use conversion charge. It is when the use of the property changes from agricultural that the conversion charge is assessed.

7. If you are submitting a Conditional use Permit Application (CUP), work with Planning & Development staff to prepare and attach a code excerpt from Section 12.29-8 of the Kenosha County General Zoning & Shoreland/Floodplain Zoning Ordinance regarding applicable standards to your proposed use. Any conditional use permit application is subject to formal site plan review pursuant to Section 12.08-2 of the Kenosha County General Zoning & Shoreland/Floodplain Ordinance.
   a. Proposed Use: Ground Mounted Solar Electric Project
   b. Hours of Operation: N/A
   c. Number of employees currently onsite during the largest work shift: N/A
   d. Number of employees that will be onsite during the largest work shift: ~50 at peak construction
   e. Will there be outside entertainment? No If so, draw and label total horizontal and vertical extent of proposed outside entertainment on site plan.
   f. Will there be outside storage? No If so, draw and label total horizontal and vertical extend of proposed outside storage on site plan.
   g. Attach professionally drawn to-scale plan sheets for each of the following as applicable:
      i. Building Plan (include floor plans and elevation drawings) N/A
      ii. Site Plan — Exhibit A — (Section 12.05-1(h)3 of zoning ordinance)
      iii. Traffic, Parking and Access Plan — Exhibit B — (Section 12.13 of zoning ordinance)
      iv. Landscape Plan — Exhibit D — (Section 12.16 of zoning ordinance)
      v. Lighting Plan (including photometrics) — N/A — (Section 12.15 of zoning ordinance)
      vi. Storm Water Management Plan — Forthcoming — (Division II of stormwater ordinance)
      vii. Utility Plan — N/A
      viii. Traffic Impact Analysis (TIA) Plan — N/A
      ix. Natural Resources Protection Plan — Attachment 4
      x. Signage Plan — Shall comply with NEC; also discussed in Exhibit D — (Section 12.14 of zoning ordinance)

8. If you are submitting an Affidavit of Correction (AFFC), attach the draft affidavit of correction document prepared by your hired professional surveyor.

9. If you are submitting a Certified Survey Map Application, Preliminary Plat Application or Final Plat Application, submit the draft certified survey map document, draft preliminary plat document or draft final plat document prepared by your hired professional surveyor. Draft certified survey map, preliminary plat and/or final plat should be prepared compliant with applicable requirements stated in the Kenosha County Land Division Ordinance.

10. If you are submitting a Comprehensive Land Use Plan Map Amendment (COMP), Rezoning Application (REZO), Land Division Application (CSM or PLAT) or a Conditional Use Permit Application (CUP) your project may be subject to sections of the Kenosha County Sanitary Code and Private Sewage System Ordinance that require a professional evaluation of existing private on-site wastewater treatment system(s) (POWTS) by a hired master plumber and/or professional soil borings by a hired professional soil tester in order to confirm site suitability for a future planned POWTS. Depending on the results of these required hired professional evaluations, existing non-compliant POWTS on the subject property may be required to be replaced or proposed lots may be deemed unbuildable and therefore not be able to be created as part of your land division application.

    Any required POWTS evaluations or required soil borings must be submitted to this office prior to or with the formal submittal of this application document. If an existing non-compliant POWTS must be replaced, then this application document will not be accepted until the required sanitary permit and associated application fees for said sanitary permit are submitted to this office.

    a. Number of lots/parcels being created (Do not include outlots or the remnant parcel unless it is 35 acres or less)

       _____.

    b. Review Fee = Number from above x $75

_____.

c. Does the original parcel have any existing dwellings or buildings served by private on-site wastewater treatment (septic) systems?

No

d. Are these systems older than July 1, 1980?

e. If you answered yes to questions 3 and 4, this existing septic system must go through an evaluation to determine compliance with SPS 383.32 of the Wisconsin Administrative Code or may need to replace the existing system with a code compliant one as part of this land division procedure. The Sanitary Permit for the replacement system must be issued prior to applying for approval of the land division with the Division of Planning & Development.

f. Certified Survey Maps (CSMs) must have complete soil and site evaluations for all proposed lots including any remnant parcel 35 acres or less. For CSMs involving structures served by private sewage systems the existing system and all treatment tanks shall be located and shown on the survey and must be evaluated for compliance with SPS 383.32, Wisconsin Administrative Code. Existing systems older than July 1, 1980 and in suitable soils shall be required to have a soil and site evaluation conducted to establish a replacement area for a future private sewage system. This area designated for a future system shall be shown on the survey and must meet all setback requirements and be within the boundaries of the newly proposed parcel.

g. Preliminary plats must follow the soil and site evaluation requirements as stated in Chapter 15.07 of the Kenosha County Sanitary Code and Private Sewage System Ordinance. Final plats on clayey glacial till soils will be required to have complete soil tests conducted and have the soil boring locations on the plat. 8. For further information and details of these procedures you may contact a sanitarian in the Division of Health Services or at 262/857-1910.

11. Application fees will be assessed at time of submittal. See Fee Schedule.

Development Disclosure

It is the property owner and applicant's responsibility to determine if additional permits from other agencies will be required, including but not limited to: Wisconsin State Building Codes, Wisconsin State Department of Natural Resources, FEMA, U.S. Army Corps of Engineers, Wisconsin State Department of Transportation and U.S. Fish and Wildlife. If additional permits are required, it is the responsibility of the property owner/applicant to obtain such permits and comply with their conditions of approval.

The applicant acknowledges that the County of Kenosha could incur substantial costs throughout the review process and that it is appropriate for the applicant to be financially responsible for costs related to the development process rather than the County residents. Thus the applicant agrees to pay to the County of Kenosha all reasonable costs for engineering, planning, legal and administrative expenses incurred by the County of Kenosha as a result of this application.

Both parties acknowledge that the payment of funds and executing this application does not imply any particular outcome or decision by the staff of the County of Kenosha, the Planning, Development & Extension Education Committee and/or the County Board.

It is the property owner/applicant's responsibility to provide the County of Kenosha all necessary legal documentation related to the property, including but not limited to: proof of ownership, receipts, surveys, deed restrictions, vacation records, easement records, etc.

I acknowledge, understand, and agree, that all relevant documentation will be provided to Kenosha County, and that all required permits and consent will be obtained prior to the start of construction, with all conditions of approval adhered to.

SIGNATURE OF ALL SUBJECT PROPERTY OWNERS (attach separate agent letter if necessary)

_____ **Signature**	_____ **Print Name**
_____ **Signature**	_____ **Print Name**
_____ **Signature**	_____ **Print Name**

SIGNATURE OF APPLICANT

_____ **Signature**	Eric Udelhofen - OneEnergy Development, LLC _____ **Print Name**

IMPORTANT TELEPHONE NUMBERS

Kenosha County Center
Department of Public Works & Development Services
19600 - 75th Street, Suite 185-3
Bristol, Wisconsin 53104

Division of Planning and Development (including Sanitation & Land Conservation) ..... (262) 857-1895
Facsimile # ..... (262) 857-1920

Public Works Division of Highways ..... (262) 857-1870

Kenosha County Administration Building
Register of Deeds ..... (262) 653-2444
Division of Land Information ..... (262) 653-2622

Wisconsin Department of Transportation, Southeast Region ..... (262) 548-5902
141 NW Barstow St.
Waukesha WI 53187-0798

Wisconsin Department of Natural Resources - Sturtevant Office ..... (262) 884-2300
9531 Rayne Rd., Suite 4
Sturtevant WI 53177

Brighton, Town of ..... (262) 878-2218
Paris, Town of ..... (262) 859-3006
Randall, Town of ..... (262) 877-2165
Somers Village/Town of ..... (262) 859-2822
Wheatland, Town of ..... (262) 537-4340
City of Kenosha Planning & Zoning ..... (262) 653-4030
City of Kenosha Water Utility ..... (262) 653-4300
City of Kenosha Airport ..... (262) 653-4160

Authorization Letter To Act On Behalf

Name of Authorizer: Jerry Warntjes

Authorizer's Address: 1045 Geneva National Ave N. Lake Geneva, WI 53147

Authorizer's Phone Number: (262) 492-9327

Date: 11/15/2022

Name of Person Being Authorized: Eric Udelhofen of OneEnergy Development, LLC

Address of Person Being Authorized: 834 E Washington Ave, Suite 257 Madison, WI 53703

Phone Number of Person Being Authorized: 608.514.5378

To Whom it May Concern,

I hereby authorize **OneEnergy Development, LLC** to act on my behalf in regards to permit applications regarding the Salix Solar Project. This authorization is valid from the following dates: **November 16, 2022 to December 31, 2023.**

Sincerely,

MANAGING PARTNER / CO-OWNER
J&S Real Estate Co, LLC

Jerry Warntjes

OneEnergy Renewables

Salix Solar Project

Kenosha County

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Exhibit B – Haul Route

Exhibit C – Construction Schedule

Exhibit D – Vegetation Plan

Exhibit E – Drain Tile Management Plan

Exhibit F – Decommissioning Plan

Attachment 1 – FAA Notice Criteria (Result Summary: project does not exceed notice criteria)

Attachment 2 – Module Specification Details

Attachment 3 – Inverter Specification Details

Attachment 4 – Natural Resources Plan

Attachment 5 – Glare Report (Result Summary: no glare predicted)

Attachment 6 – Certificate of Insurance (Kenosha County additional insured)

Attachment 7 – Cultural and Archaeological Review

Conditional Use Permit Application Addendum – Kenosha County, WI

Salix Solar Project

Applicant:
OneEnergy Development, LLC
834 E. Washington Ave., Suite 257
Madison, WI 53703

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Background

The Salix Solar Project (the "Project") is a proposed 7.5 Megawatt solar generation facility. OneEnergy is the Applicant, and will develop, engineer and construct the Project.

The Applicant has completed all environmental studies and surveys required to construct the Project including the following: wetland delineation, Phase I Environmental Site Assessment, geotechnical and soil analysis, and endangered resources review. The Project is not expected to impact natural resources. Three wetlands and a floodplain were delineated as noted on **Exhibit A: Proposed Site Plan** but are avoided.

In addition, a stormwater and erosion control plan is being developed and will be submitted to the Kenosha County Review Engineer and the Wisconsin Department of Natural Resources for approval prior to commencement of construction..

The Applicant intends to start construction on the Project in the summer of 2023, pending receipt of all required permits and approvals and availability of key equipment for the project. The Project is expected to take about five months to construct. Once complete, the Project will generate local power for local customers within We Energies' service territory. The Project is expected to create enough electricity to power 1,800 average Wisconsin households.

A. General Land Use Description

Location

The Salix Solar Project ("The Project") is located on approximately 40 acres of vacant land known as parcels #95-4-119-011-0600 & 95-4-119-014-0121 in the Town of Wheatland, Wisconsin, which is owned by J&S Real Estate Co LLC.

Zoning

The proposed Project is situated on land that is zoned A-1.

Setbacks

OneEnergy commits to following all applicable setbacks, as shown in the attached site plan, including:

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.

B. Description of Equipment

Racking and Panels

The racking for the proposed project consists of driven steel I-Beams that are embedded approximately 8’ into the ground, and extend approximately 5’ above ground. A torque tube connects to the top of the I-Beams, and the panels are mounted to the top of the torque tube. All structural components of the racking system are galvanized steel.

Below is a depiction of the horizontal profile view of the panels and racking, which will run in rows from north to south throughout the site and will track the sun from east to west throughout the day. At their maximum angle in morning and evening, the panels are 50 degrees from horizontal facing either east (morning) or west (evening). At mid-day, the panels are flat.

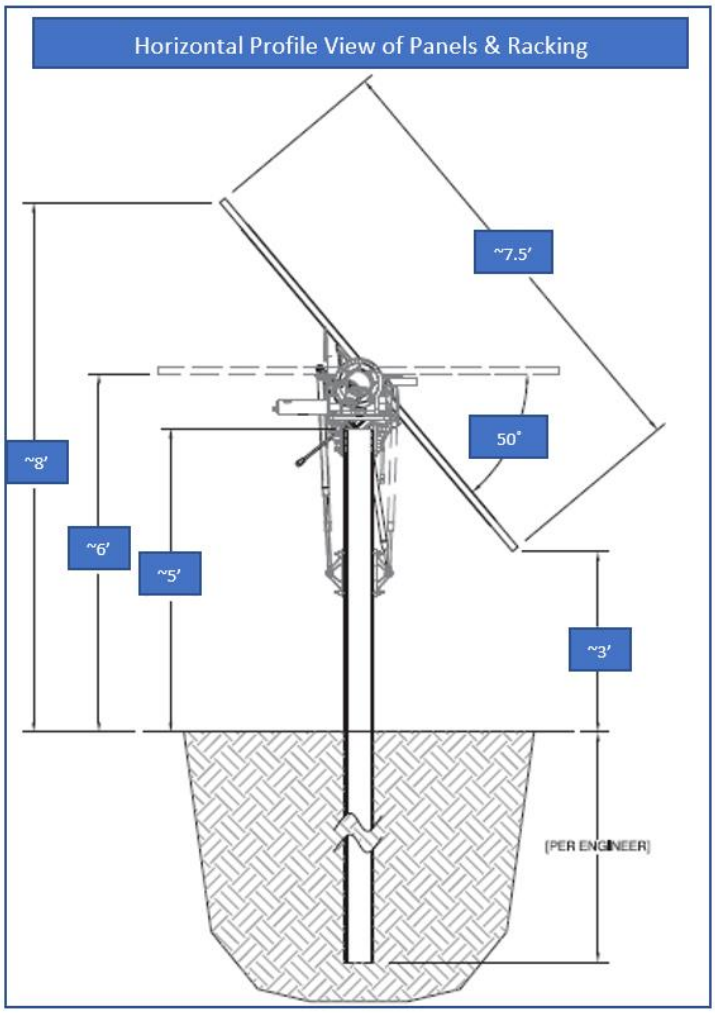


Figure 1 - Strobus Solar Project in Merrillan, WI

Figure 2 - Stockton Solar Project in Stockton, MN

Solar Panels

Crystalline silicon solar PV panels, which represent ~95% of the installed solar panels in the US, consist primarily of tempered glass, anodized aluminum frames, and wiring, all of which can recovered and recycled at the end of their useful life. PV panels are extremely durable and built for long service life, as indicated by their 30-year warranty.

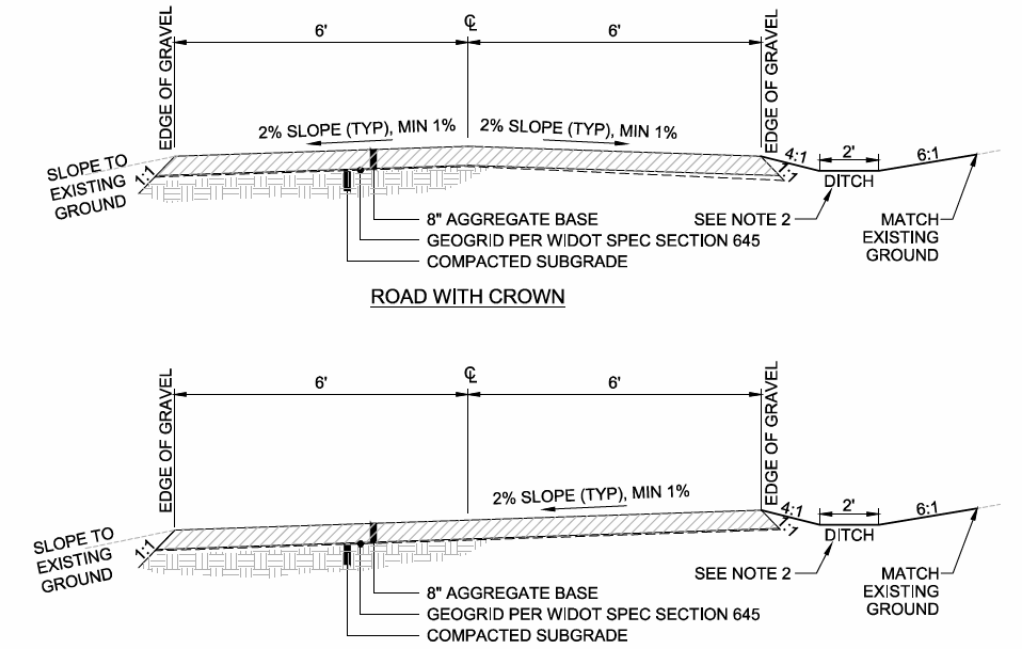
Inverters, Transformer, Electrical Rack

The inverters, electrical panels and transformers will be located in the middle of the project as depicted in the site plan. Most equipment (inverters, electrical panel, etc.) will be mounted on driven pilings similar to the pilings that support the solar panels and racking with a maximum height of 8 feet. The transformer and disconnect will be mounted on a concrete pad. These pieces of electrical equipment look similar to what you would see at a large load service like a grocery store.

Figure 4 - Hodag Solar Project in Rhinelander, WI

Access Drive

The access drive is proposed to be ~12' wide and will come off of the existing gravel access drive that provides access to the farm fields from 60th Street. The access drive will be installed as shown below depending on the slope. The access drive is designed to avoid all delineated wetlands and will be installed at-grade to the maximum extent possible.



Fence

The fence will surround the solar field and will be an 8’ tall agricultural-style fixed knot wildlife exclusion fence similar to what you might see around an orchard. A detail is shown below.

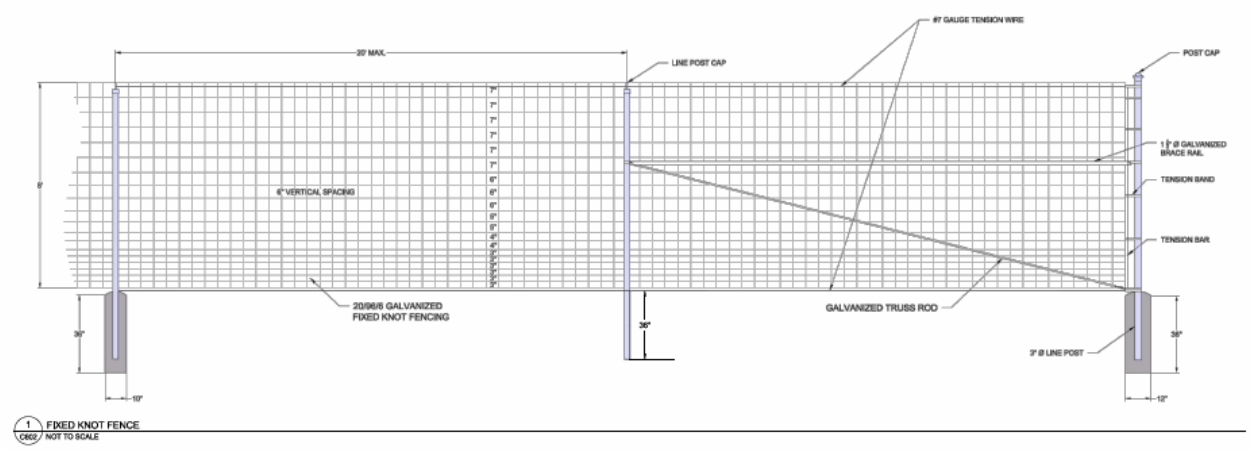


Figure 5 – Fence at Blue Prairie Solar Project in Black River Falls, WI

C. Scale Map of the Project Site

Please see the attached Site Plan for dimensions and location of proposed facilities. As proposed, the project is located ~750' (more than 2 football fields) from the nearest residence.

OneEnergy designs our projects to use the most modern and highly efficient bifacial solar panels and single-axis tracking racking. Using this equipment, a 7.5 Megawatt solar system would be located on approximately 34 acres of relatively flat topography and most importantly, consistent elevations in the north-south direction.

The proposed project is expected to produce over 15,000,000 kilowatt hours per year, enough electricity for approximately 1,800 average Wisconsin residences, or 150% of all the homes in the Town of Wheatland. As of the 2000 census, Town of Wheatland had about 1,200 households. For a map of the project, please see **Exhibit A - Proposed Site Plan**.

D. Landscaping

The project will be seeded to a low-growing perennial pollinator meadow that will cover all areas within the array area except for the access road. The final landscape plan will be approved by the Wisconsin DNR in compliance with recommended best practices and stormwater permitting requirements. By planting dense perennial vegetation beneath and around the solar panels, the project provides ecosystem services associated with pollinator benefits and reduced stormwater runoff compared to regularly tilled farmland.

E. Wetland and Drainage Facilities

The project is designed to minimize soil disturbance and drainage alterations as much as possible. OneEnergy anticipates limited ground disturbance for the installation of the solar array and will ensure all grading is done in compliance with recommended best practices for stormwater and sediment erosion control. Because the project will occupy more than one acre, OneEnergy will be required to comply with the Wisconsin Department of Natural Resources NPDES Construction General Permit, which has the following requirements:

- Implement Best Management Practices to control sedimentation during construction, i.e. silt fencing, fiber logs, temporary stabilization, etc.
- Submittal of a Water Resource Application for Project Permits (WRAPP)
- Develop a Stormwater Management Plan approved by the Wisconsin DNR prior to commencement of construction

Sedimentation will be controlled from leaving the project area after construction by changing the land use of the project area from cultivated agricultural land to nearly 100% vegetated ground cover. The pollinator meadow growing beneath and around the solar panels acts as a vegetative buffer that covers ~95% of the site. Runoff from the access roads and concrete pads will travel through the vegetative cover prior to leaving the project area. Water that runs off panels into the proposed dense pollinator planting below will act as a natural vegetative buffer which will increase infiltration and act as erosion control to help the site meet required standards.

The project will be required to submit a Stormwater Management Plan to the Wisconsin DNR in order to proceed to construction. In addition, both a Stormwater Management Permit and an Erosion Control Permit will be submitted to Kenosha County because the project exceeds 0.5 acres of impervious surface and disturbance of land will be greater than 4,000 square feet.

F. Construction Schedule

OneEnergy's goal is to finalize engineering in the winter of 2022-2023, to enable purchasing of long-lead equipment in early 2023 and construction during the months of June to November, 2023.

A project of this size typically takes 4-6 months to construct. The Project is intended to start construction in the summer of 2023 and be complete by the end of 2023. A tentative construction schedule is as follows:

Civil Work and Fencing Install	6/1/2023	6/30/2023
Pile Installation	7/1/2023	8/1/2023
Racking and Module delivery	7/31/2023	8/14/2023
Racking and Module Installation	8/1/2023	11/1/2023
Wiring and Transformer Installation	10/1/2023	11/15/2023
Target In-service Date	12/1/2023	
Pollinator Seeding and Revegetation	10/15/2023	11/15/2023

G. Vehicular Traffic Description

During construction, we anticipate that there will be 25-30 construction workers on-site for the 5-month period (May-October) during which the bulk of construction will take place. Adequate provision for parking of such construction staff has been included in the design of the laydown area within the site perimeter. Additionally, deliveries will be expected during business hours. It is not expected that more than 2-3 delivery trucks will arrive to the site per day during construction. Following construction, traffic will be very limited. We typically expect approximately one pickup truck to visit the site per month during the operational period for routine site maintenance and mowing. For a map of vehicular traffic, please see **Exhibit B – Proposed Haul Route**.

H. Decommissioning and Removal

OneEnergy has committed through its lease agreement with the landowner to remove the system at the end of the project life, including provisions to ensure that there is adequate financial security set aside to perform such decommissioning. Please see **Exhibit F - Decommissioning Plan**.

I. About OneEnergy

OneEnergy is the leading developer of community-scale solar projects in Wisconsin, having developed 15 projects totaling 50 MW in Wisconsin that are currently operating . Our regional team, based out of our Madison office, completed development, engineering and construction of 9 projects in 2021, including:

- A series of 8 projects totaling ~25MW for cooperative utilities in Western Wisconsin and Southeast Minnesota
- The 7.5 MW Hodag Solar Project near Rhinelander, which is the largest project in Northern Wisconsin.

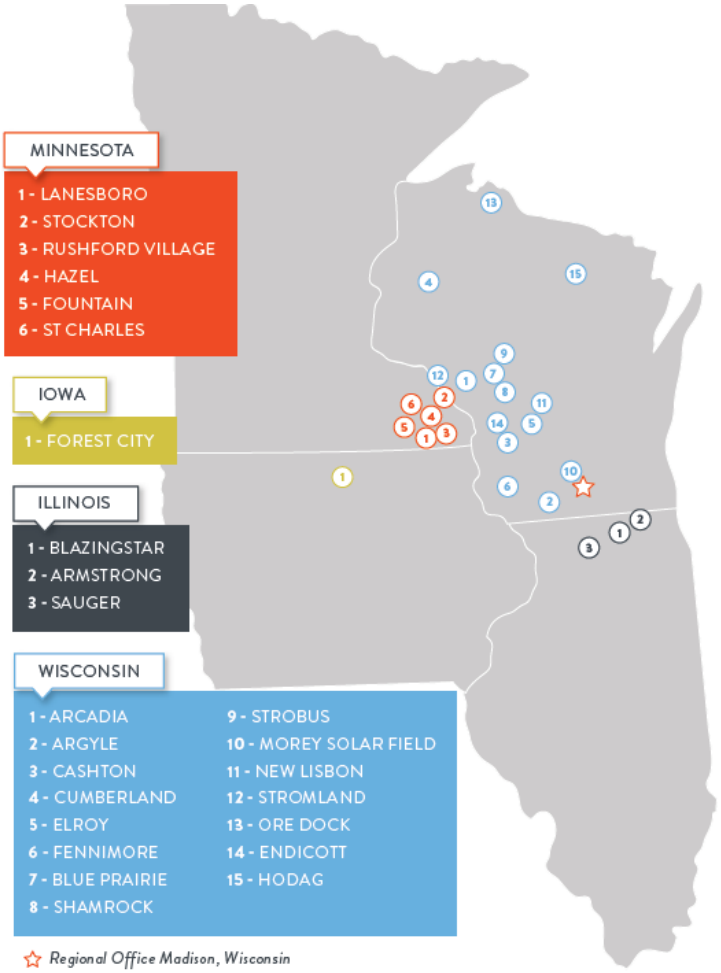


Figure 7 – OneEnergy Midwest Solar Projects

OneEnergy Renewables

Salix Solar Project

Kenosha County

Enclosed Exhibits

Exhibit A – Proposed Site Plan (see separate file)

Exhibit B – Haul Route

Exhibit C – Construction Schedule

Exhibit D – Vegetation Plan

Exhibit E – Drain Tile Management Plan

Exhibit F – Decommissioning Plan

OneEnergy Renewables

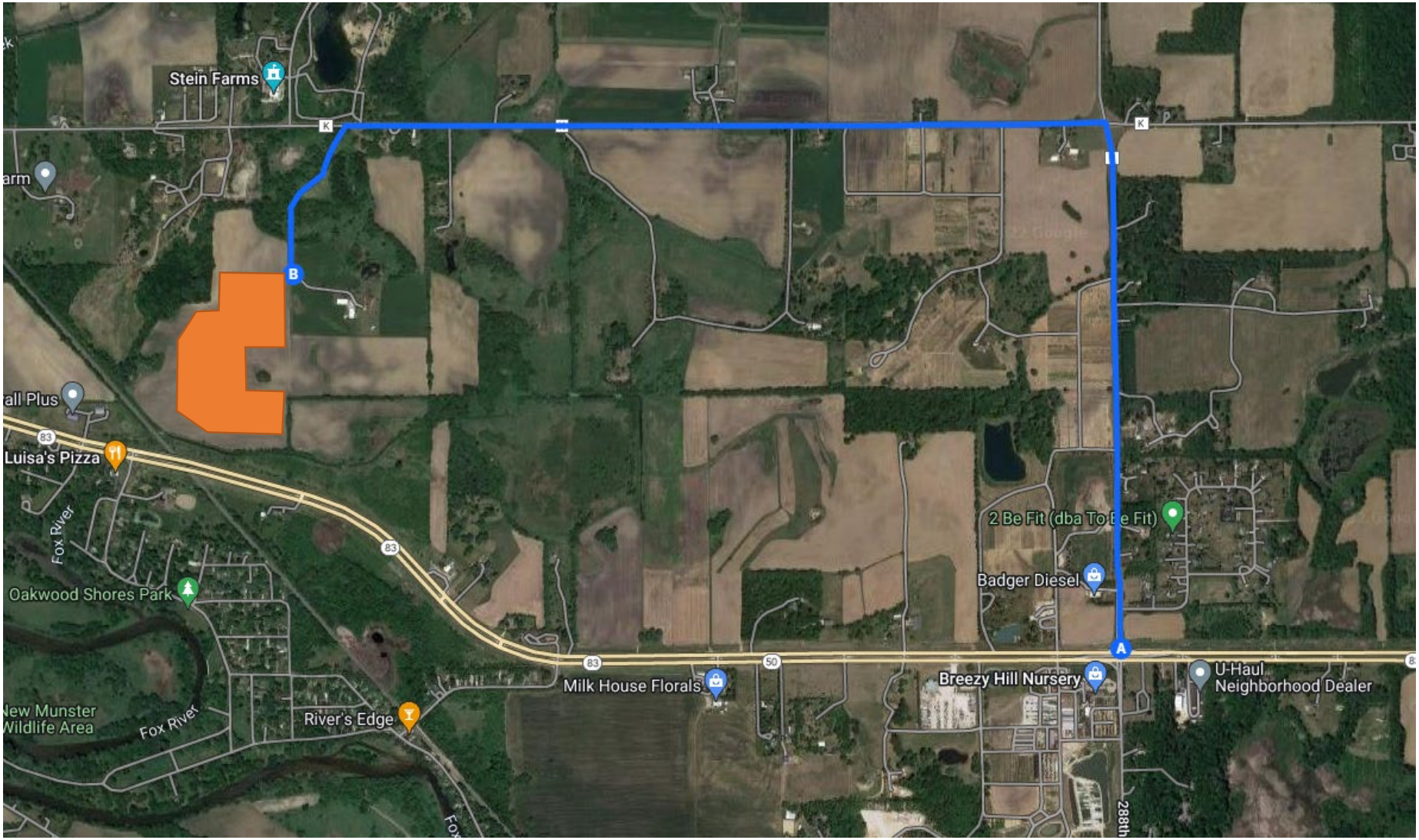
Salix Solar Project

Kenosha County

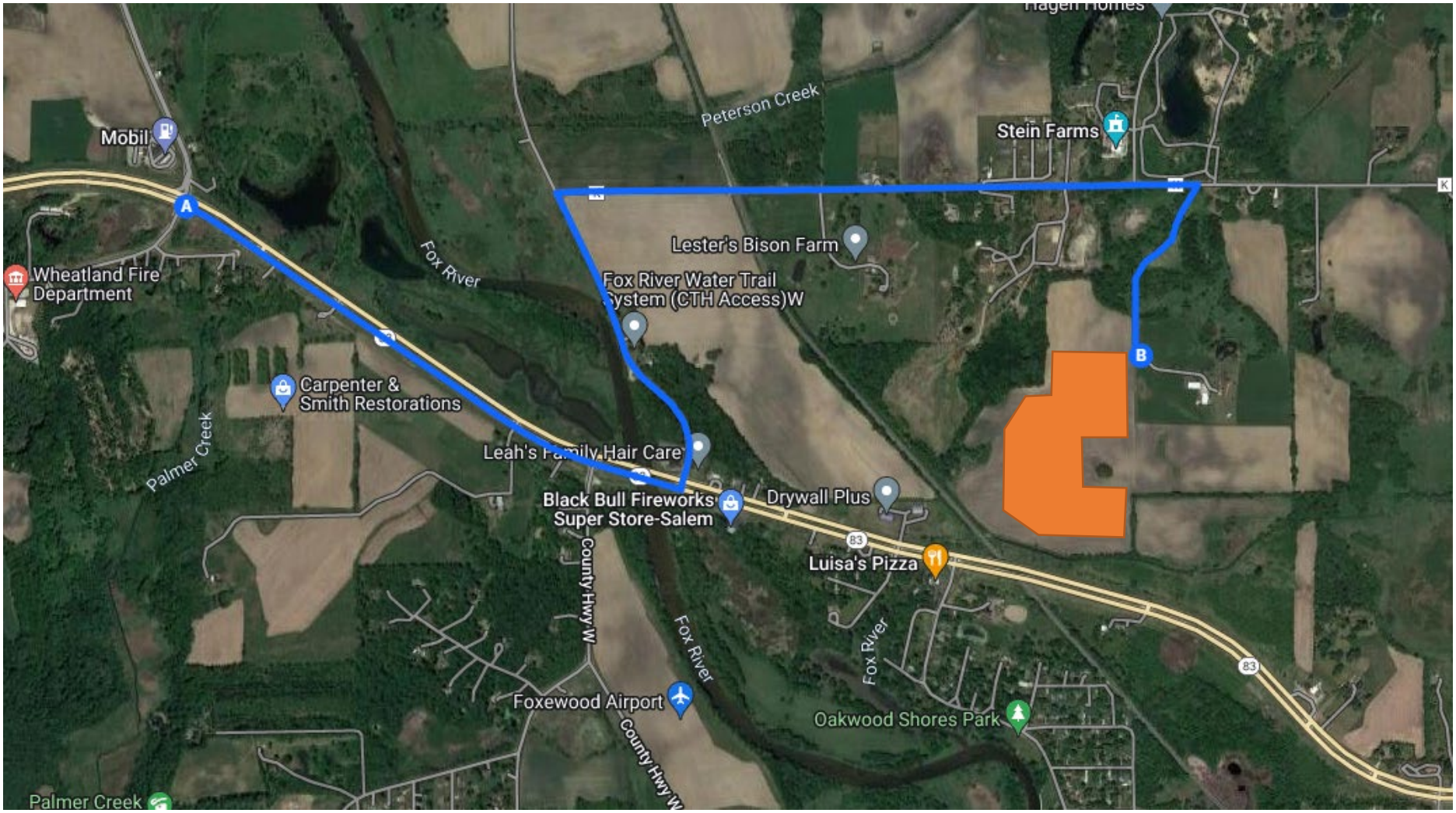
Exhibits

Exhibit B – Haul Route

Salix Solar proposed Haul Route (From East)



Salix Solar proposed Haul Route (From West)



OneEnergy Renewables

Salix Solar Project

Kenosha County

Exhibits

Exhibit C – Construction Schedule

Construction Schedule

OneEnergy's goal is to finalize engineering in the winter of 2022-2023, to enable purchasing of long-lead equipment in early 2023 and construction during the months of June through November, 2023.

A project of this size typically takes 4-6 months to construct. The Project is intended to start construction in the summer of 2023 and be complete by the end of 2023. A tentative construction schedule is as follows:

Civil Work and Fencing Install	6/1/2023	6/30/2023
Pile Installation	7/1/2023	8/1/2023
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Target In-service Date	12/1/2023	
Pollinator Seeding and Revegetation	10/15/2023	11/15/2023

OneEnergy Renewables

Salix Solar Project

Kenosha County

Exhibits

Exhibit D – Vegetation Plan

Salix Solar Project

Vegetation Installation and Management Plan

Date: 12/15/2022
Project: Salix Solar Project
Site Location: 42.575068° -88.178416°

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1 Site Overview

Salix Solar is a 7.5-Megawatt project located on a 34-acre site in Wheatland, WI (See Appendix A). The site has been in agricultural production and was most recently planted in corn. The land is gently sloped glacial moraine with well-drained silt loam soil. The site drains from east to west, with a floodplain at the southwest corner. The surrounding area is mainly agricultural land, with the highway and railroad to the southern border, a gravel pit to the west and one single-family residence to the east. Following construction of the solar array, the site will be managed for native pollinator habitat.

2 Benefits of Pollinator-Friendly Solar

There are many benefits to installing native prairie plant communities on solar sites. Pollinator friendly solar sequesters carbon into the soil through plants, while carbon emissions are simultaneously reduced by using renewable solar energy. Planting native prairie species restores soil by preventing erosion, improving soil structure, increasing carbon storage, diversifying microbial communities, and increasing soil fertility. In addition to supporting native wildlife, these improvements to the soil will increase the value of the soil for future agricultural production once the solar panels are removed. Agricultural benefits are not limited to future land use. Supporting native pollinator populations can increase yields of nearby pollinator-dependent crops such as soybeans, apples and many vegetables.

The aesthetic benefits of pollinator habitat provide additional services to the local community for those who appreciate observing the wildflowers, birds, butterflies, and other species that are drawn to the solar site. Native prairie plants prevent stormwater runoff and improve surrounding water quality, which is an important consideration following the construction of solar projects. While the initial costs and amount of planning needed for installing and managing native pollinator habitat may be greater than turfgrass, the benefits outweigh the costs. Following the first five years of management, the hardier native plant communities should require little to no maintenance for the remainder of the time the solar array is in operation.

3 Site Preparation and Seeding

Construction debris and building materials will be cleared from the seeding area. An herbicide application of glyphosate or Triclopyr may be required to remove undesirable vegetation within the site depending on the previous land use and weed seed bank, which would necessitate a 10-day waiting period before disturbing the soil or seeding.

The soil will be disced and then either harrowed or raked to prepare the soil for seeding. Native grasses will be seeded using a mechanical broadcast spreader. Depending on site conditions, a cover crop of annual rye or oats will be seeded to stabilize the soil. Following grass seeding, the site will be raked and harrowed. Wildflowers and sedges will be seeded by hand or using a mechanical spreader. The plant species chosen for the seed mix are native prairie species that

reach heights below 3 feet so as not to shade the panels. This diverse mix of 30 species was designed to provide continuous forage and habitat for pollinators.

4 Vegetation Maintenance

Specific maintenance activities and timelines will depend on observations during yearly site inspections to determine vegetation growth progress and whether undesirable species are present. During the germination year, the site will be mowed to reduce competition and control weed growth. Additional mowing may be required to prevent weeds from setting seed. Vegetation will be mowed to a heigh of 8" and clippings will be finely mulched. During the establishment period, which spans 3-4 years, mowing should occur 2-3 times per year. Vegetation Maintenance Reports will be completed during each site visit to record the amount of vegetation cover, plant height, weeds present, and blooming species. Recommended next steps will be noted, and management plans remain flexible to reflect changes in vegetation and weed pressure.

5 Vegetation Management Timeline

Year 0: 2023		
Seedbed Preparation	Herbicide application, discing	October
Seeding	Site may be seeded with a temporary cover crop of annual rye or oats, followed by seeding with native grass and pollinator mix. Establishment Plan Scorecard will be completed.	November
Year 1: 2024		
Site Inspection	Site will be inspected, and Vegetation Maintenance Report (VMR) will be completed. Plant growth will be monitored, and plans will be made for any necessary reseeding, erosion mitigation, or weed management.	May
1st Mow	Mowing should occur when vegetation is approximately 8" tall. Site mowed to 8" height. Spot-treat weeds as needed.	Early July
2nd Mow	Site mowed to 8" height. Spot-treat weeds as needed.	Late August
Year 2: 2025		
Site Inspection	Monitor vegetation and complete VMR.	May
1st Mow	Site mowed to 8" height. Spot-treat weeds as needed.	Early July
2nd Mow	Site mowed to 8" height. Subsequent visits may be needed for weed control, which could include spot-treatment with herbicide or hand-pulling.	Late August
Year 3: 2026		
Site Inspection	Three site visits to monitor vegetation and complete VMR. Fill out Seasonal Assessment Scorecard once per season. Survey pollinators and native plants.	April, July, October

Year 4: 2027		
Dormant Mow	Mulch biomass by mowing in the spring to allow to reduce competition and encourage native plant growth.	April-May
Years 5-25		
Site Inspection	Annual visit to monitor vegetation in the spring. Spot-mowing or weed removal will be completed as needed based on inspections. If biomass removal is needed, sites can be mowed every three years using a flail mower. Site should not be mowed more than once per year, and mowing should occur from Mar-Apr or Sept-Oct to avoid disturbing nesting birds. Rotating halves or thirds of the site while mowing will increase plant diversity and structure and provide adjacent refuge for wildlife.	April

6 Weed Suppression

Plant species will be suppressed if they are likely to either outcompete the native species planted or grow to a height that would potentially shade the solar panels. Control of weeds and invasive species may include spot-spraying, spot-mowing, hand weeding, wicking, or other methods selected by contractors to suit site conditions. If herbicide use is necessary, glyphosate or triclopyr will be used for spot-treatment. Glyphosate is non-selective and remains in the soil for several weeks, and triclopyr targets broadleaved species and remains in the soil for 30 days.

In the following years, the site will be inspected annually each spring. Spot-mowing or weed removal will be completed as needed. If biomass removal is needed, sites can be mowed every three years using a flail mower. After the initial 3-year establishment period, the site should not be mowed more than once per year.

7 Pollinator Habitat Assessment

OneEnergy is committed to following best practice guidelines for pollinator-friendly solar and ensuring that the native vegetation managed at Salix Solar supports local pollinators. An Establishment Plan Scorecard and Seasonal Assessment Scorecard will be used to evaluate the quality of pollinator habitat (See Appendix C). These pollinator scorecards were developed by the University of Wisconsin – Madison as part of the Pollinator-Friendly Solar Certification Program.

An example of a pollinator seed mix can be found in Appendix B. The exact species included in the final seed mix for this project may differ depending on specific site conditions and will be modified based on input from ecologists and land management specialists. The diversity of species included and the quality of the mix will be maintained. This seed mix includes 9 native grasses and 21 forbs, with bloom times ranging from April to October to provide continuous forage of pollen and nectar for native bees and other pollinators. Seeds will be sourced within

175 miles of the site to prevent genetic contamination and ensure that the plants are adapted to local climate conditions.

A 24”x30” sign will be displayed at entrance gate of the site to inform community members about the purpose of the native vegetation and that the site is actively being managed (See Appendix D).

8 Vegetation Screening

A screening of Black Hills spruce or similar coniferous tree may be used to provide a barrier between the solar panels and the neighboring residence to the east. This screen will provide habitat for native birds and insects.

Trees will be planted with 10’ spacing. Trees will be watered and surrounded with a hardwood mulch ring to retain water. Several additional waterings will be needed before the first freeze of the season. The next watering will occur in the following summer, with 2-3 visits potentially needed. Annual inspections will ensure trees are healthy, and replacements can be planted as needed. Weeds or invasive species growing near the trees may be cut or sprayed with herbicide (glyphosate or triclopyr).

9 References

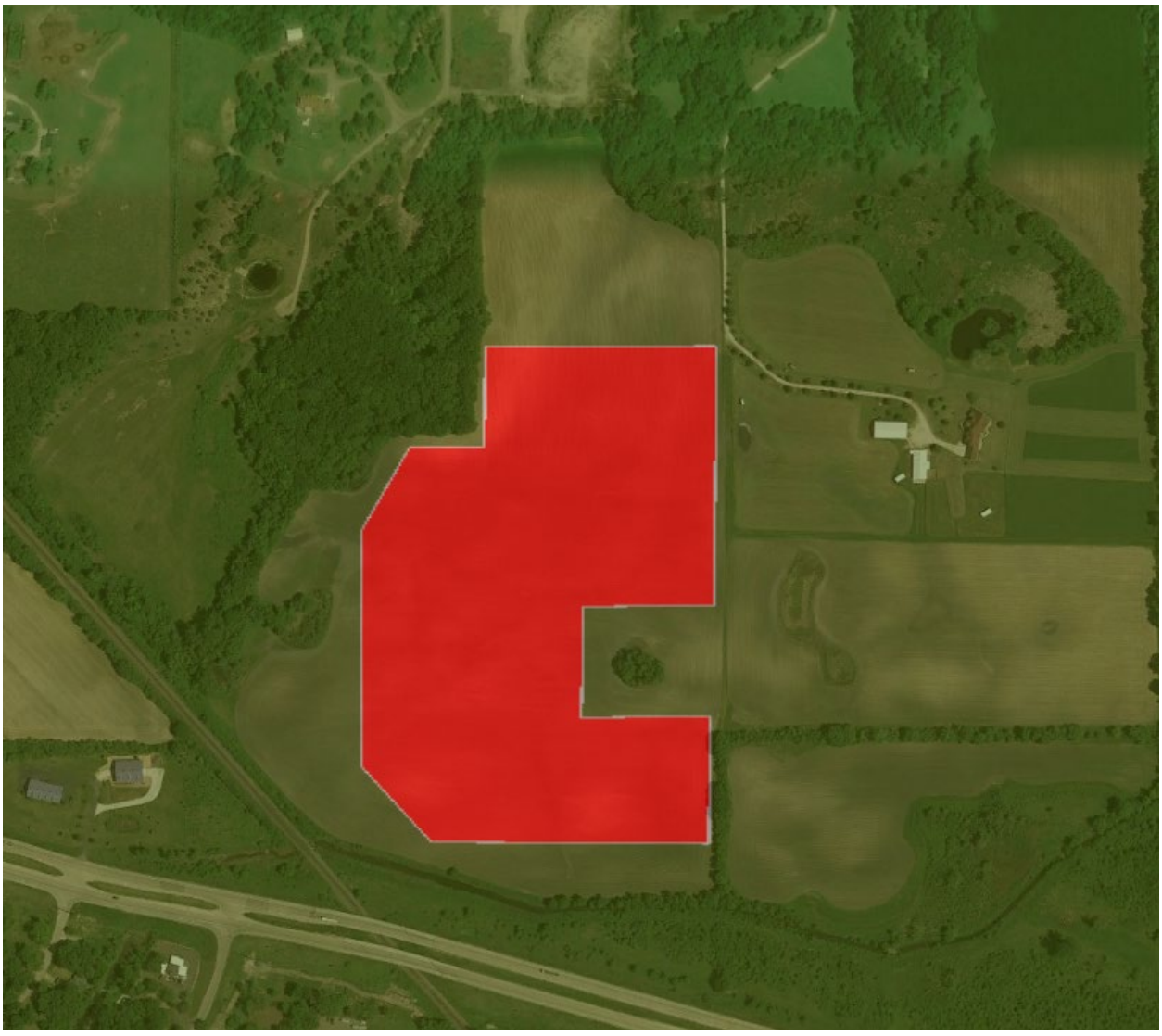
Siegner, K., Wentzell, S., Urrutia, M., Mann, W., & Kennan, H. Maximizing land use benefits from utility scale solar: A cost benefit analysis of pollinator-friendly solar in Minnesota. (2019). *Yale Center for Business and the Environment*. https://cbey.yale.edu/research/maximizing-land-use-benefits-from-utility-scale-solar.

Walston, L. et al. (2018). Examining the potential for agricultural benefits from pollinator habitat at solar facilities in the United States. *Environmental Science & Technology 52* (13), 7566-7576. https://doi.org/10.1021/acs.est.8b00020.

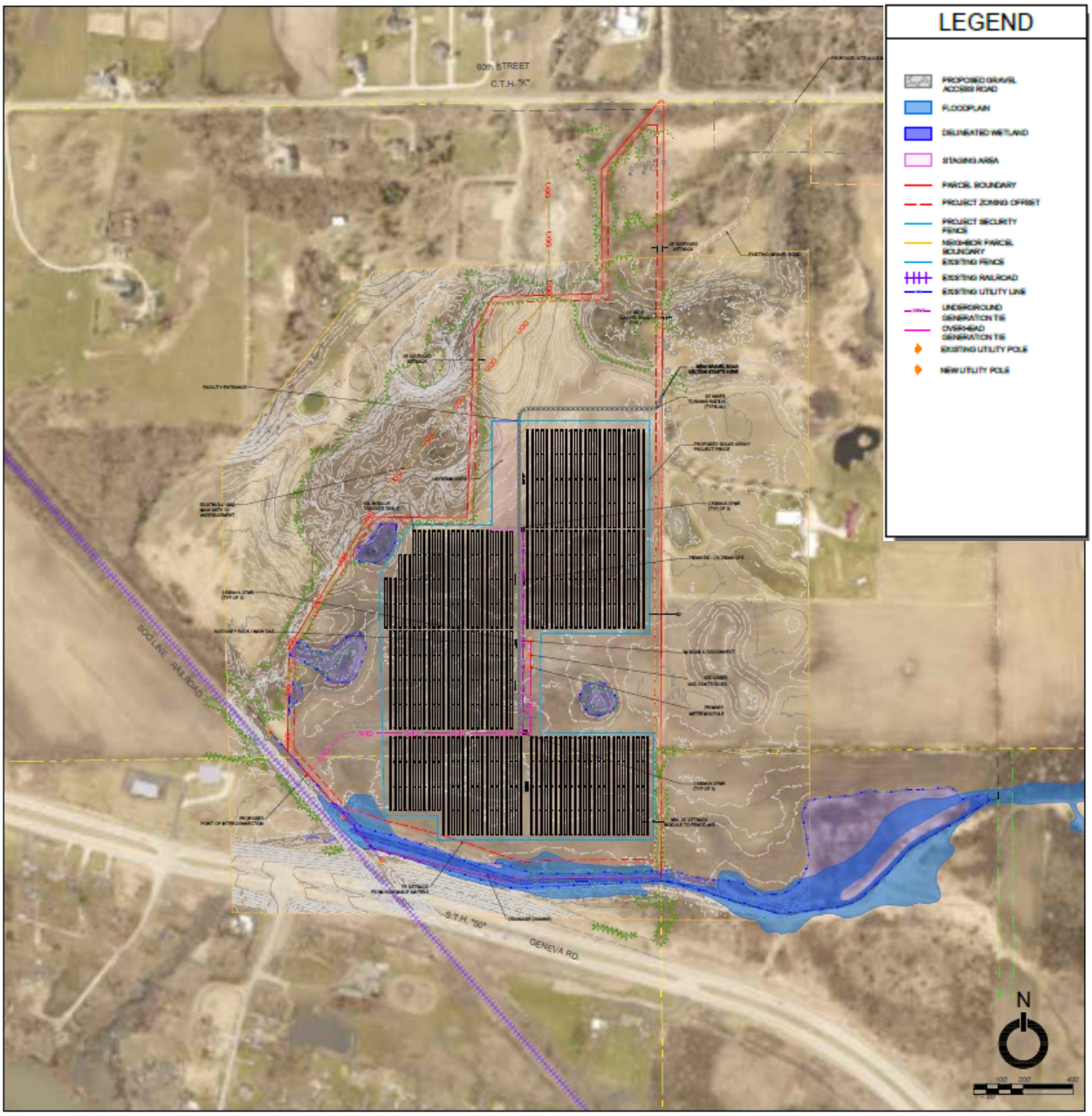
Walston, L. et al. (2020) Modeling the ecosystem services of native vegetation management practices at solar energy facilities in Midwestern United States. *Ecosystem Services* (47), 101227. https://doi.org/10.1016/j.ecoser.2020.101227.

10 Appendix A

10.1 Site Boundary



10.2 Project Design



11 Appendix B

Native Pollinator Seed Mix			
Common Name	**Scientific Name**	**% Of Mix**	**In Bloom**
Grasses			
Slender Wheatgrass	*Agropyron trachycaulum*	7.29	
Sideoats Grama	*Bouteloua curtipendula*	30.86	
Blue Grama	*Bouteloua gracilis*	1.71	
Plains Oval Sedge	*Carex brevior*	2.57	
Pointed-broom Sedge	*Carex scoparia*	0.86	
Brown Fox Sedge	*Carex vulpinoidea*	0.86	
Little Bluestem	*Schizachyrium scoparium*	38.57	
Silky Wild Rye	*Elymus villosus*	2.57	
Prairie Dropseed	*Sporobolus heterolepis*	0.43	
Forbs			
Western Yarrow	*Achillea millefolium*	0.36	Jul-Oct
Anise Hyssop	*Agastache foeniculum*	0.06	Jul-Sept
Leadplant	*Amorpha canescens*	0.82	Jul-Sept
Canada Anemone	*Anemone canadensis*	0.04	May-Aug
Columbine	*Aquilegia canadensis*	0.04	Apr-June
Common Milkweed	*Asclepias syriaca*	0.36	June-Aug
Butterfly Milkweed	*Asclepias tuberosa*	0.09	Jun-Aug
Canada Milk Vetch	*Astragalus canadensis*	0.86	July-Aug
Calico Aster	*Aster lateriflorus*	0.07	Sept-Oct
Partridge Pea	*Chamaecrista fasciculata*	1.43	Jul-Sept
Cream Gentian	*Gentiana flavida*	0.18	Aug-Sept
White Prairie Clover	*Dalea candida*	2.41	Jun-Sept
Purple Prairie Clover	*Dalea purpurea*	3.57	Jul-Sept
Prairie Blazing Star	*Liatris pycnostachya*	0.27	Jul-Sept
Mountain Mint	*Pycanthemum virginianum*	0.07	Jun-Sept
Long-headed Coneflower	*Ratibida columnifera*	0.29	Jun-Aug
Black-eyed Susan	*Rudbeckia hirta*	1.43	Jun-Oct
Gray Goldenrod	*Solidago nemoralis*	0.04	Aug-Sept
Ohio Spiderwort	*Tradescantia ohiensis*	0.06	May-Jul
Hoary Vervain	*Verbana stricta*	0.36	Jun-Sept
Golden Alexanders	*Zizia aurea*	1.5	Apr-Jun

12 Appendix C

Establishment Plan Scorecard for Pollinator-Friendly Solar Certification Program

□ **Site Preparation section completed** *10 points*
□ **Management plan completed** *10 points*

Buffer Habitat:

1. What percentage of site border is buffered*?
□ 0-49% *0 points*
□ 50-74% *5 points*
□ 75-100% *10 points*
What percentage of buffer is spatial*? _____%
What percentage of buffer is non-flowering vegetative*? _____%
2. How far away is the closest crop field to pollinator planting?
□ 0-30 feet *0 pts*
□ 30+ feet *5 pts*

Insecticide Use:

1. Planned on-site insecticide use (includes prior application to seeds/plants)
□ Yes *-40 points* □ No *0 points*

Seed Mix:

1. Percentage of site area to be seeded
□ 0-50 % *0 points*
□ 51-99% *5 points*
□ 100% *10 points*
2. Percent of perennial seed mix made up of native plant species
□ 0-50% *0 points*
□ 51-99% *5 points*
□ 100% *15 points*
3. Number of flowering (forb) species in seed mix
□ 1-9 species *5 points*
□ 10-19 species *10 points*
□ 20-39 species *15 points*
4. Anticipated seasons with 3+ blooming plant species (Select all that apply)
□ Spring (April-May) *5 points*
□ Summer (June-August) *5 points*
□ Fall (September-October) *5 points*
5. Milkweed present in seed mix
□ Yes *5 points* □ No *0 points*
6. Perennial seed mix supplemented with flowering annuals to provide pollinator forage in year 1:
□ Yes *5 points* □ No *0 point*

Total Score: _____

□ Bronze: 65-74
□ Silver: 75-84
□ Gold: 85-94
□ Platinum: 95+

Seasonal Assessment Scorecard for Pollinator-Friendly Solar Certification Program

1. How many plant species are in bloom or are expected to bloom within 1 - 2 weeks?
□ 0 (0 pt.) □ 1-3 (5 pt.) □ 4-6 (10 pt.) □ 7+ (15 pt.)
2. What percent of site area is in bloom or is expected to bloom within 1 - 2 weeks?
□ 0% (0 pt.) □ 1-50% (5 pt.) □ 51-99% (10 pt.) □ 100% (15 pt.)
3. How much of the pollinator habitat area is made up of native plant species (grasses and forbs)?
□ No natives (0 pt.) □ Some (5 pt.) □ Half (10 pt.) □ Most (15 pt.) □ All (20 pt.)
4. How much of the pollinator habitat area is made up of flowering plants (forbs)?
□ No forbs (0 pt.) □ Some (5 pt.) □ Half (10 pt.) □ Most (15 pt.) □ All (20 pt.)
5. How much of the pollinator habitat area is made up of grasses?
□ No grasses □ Some □ Half □ Most □ All
6. Weed pressure:
□ Low □ Medium □ High
7. Summer only: Milkweed present in pollinator habitat:
□ Yes (5 pt.) □ No (0 pt.)
8. Planned on-site insecticide use (includes prior application to seeds/plants)
□ Yes (-40 pt.) □ No (0 pt.)

Buffer Habitat
9. What percentage of site border is buffered*?
□ 0-49% (0 pt.) □ 50-74% (5 pt.) □ 75-100% (10 pt.)
10. Nearest crop field is 30+ feet away.
□ Yes (5 pt.) □ No (0 pt.)
□ **Attach site photo** (10 pt.)

*Pollinator-Friendly certification scores will be calculated by averaging the three Seasonal Assessment scores and include the points for buffer habitat in the Establishment Plan Score Card. Properties will be scored as bronze (65-74 points), silver (75-84 points), gold (85-94 points), or platinum (95+ points) pollinator habitat.

13 Appendix D

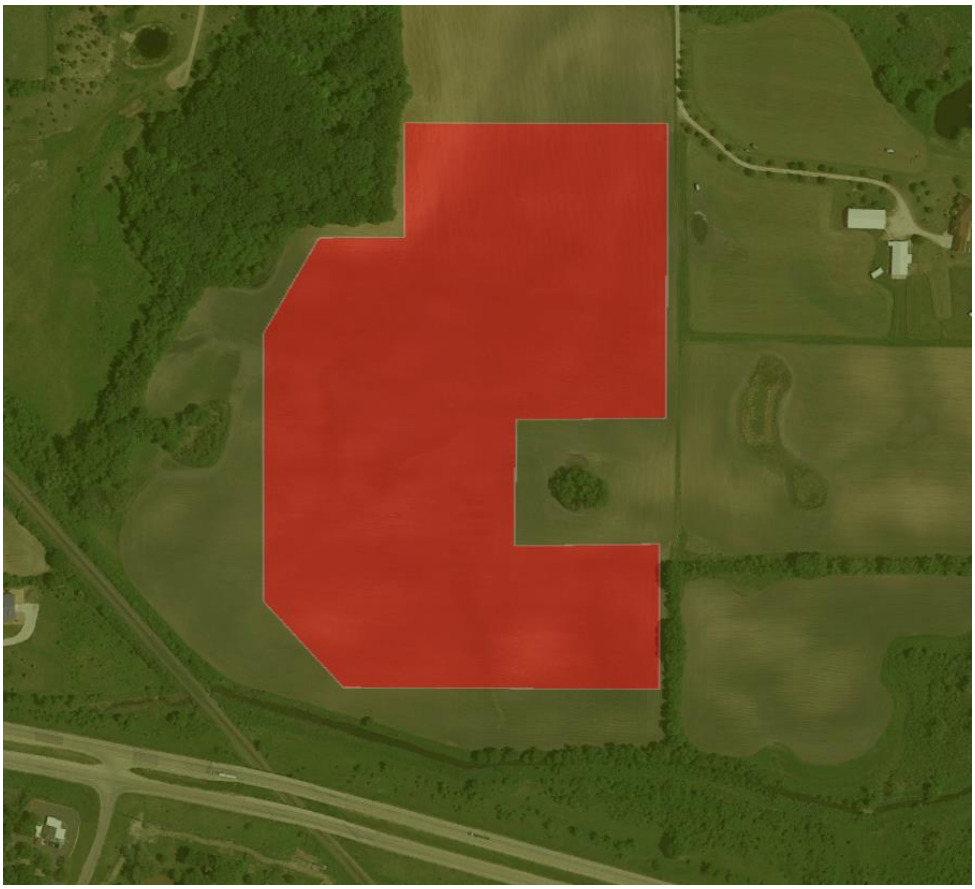
Exhibit E – Drain Tile Management Plan

Salix Solar Project

Applicant:
OneEnergy Development, LLC
1882 E. Main St. Suite 207
Madison, WI 53704

Drain Tile Identification

Prior to beginning construction work on the Project, OneEnergy Development, LLC ("OneEnergy") solicited records from the landowner on known drain tiles on the property, reviewed aerial photographs available on Google Earth, and studied the Project Area for evidence of drain tiles. OneEnergy then contracted JK Trenching, farm drainage specialists with over 25 years of experience, to evaluate the Project site for evidence of drain tiles. Based on all available information and JK Trenching's expert opinion, there are not expected to be drain tiles within the project area, shown below in red.



If a drain tile is found during construction, OneEnergy will treat this as evidence that there are likely more on site, and will attempt to locate the remaining tiles using the following approach:

1. The spacing of lateral drain tiles varies from 50 to 200 feet in most fields. Therefore, if a lateral tile is found during excavation, other tiles will be assumed to be present and the orientation and slope of the broken tile will be used to make best efforts to locate and avoid additional tiles in the field.
2. The lateral tiles usually have a four-inch inside diameter. If a tile is greater than four inches in diameter, it likely indicates a drain line that includes additional lateral drains. Tiles that are greater than four inches in diameter shall receive higher priority for repairs.

Drain Tile Damage Identification

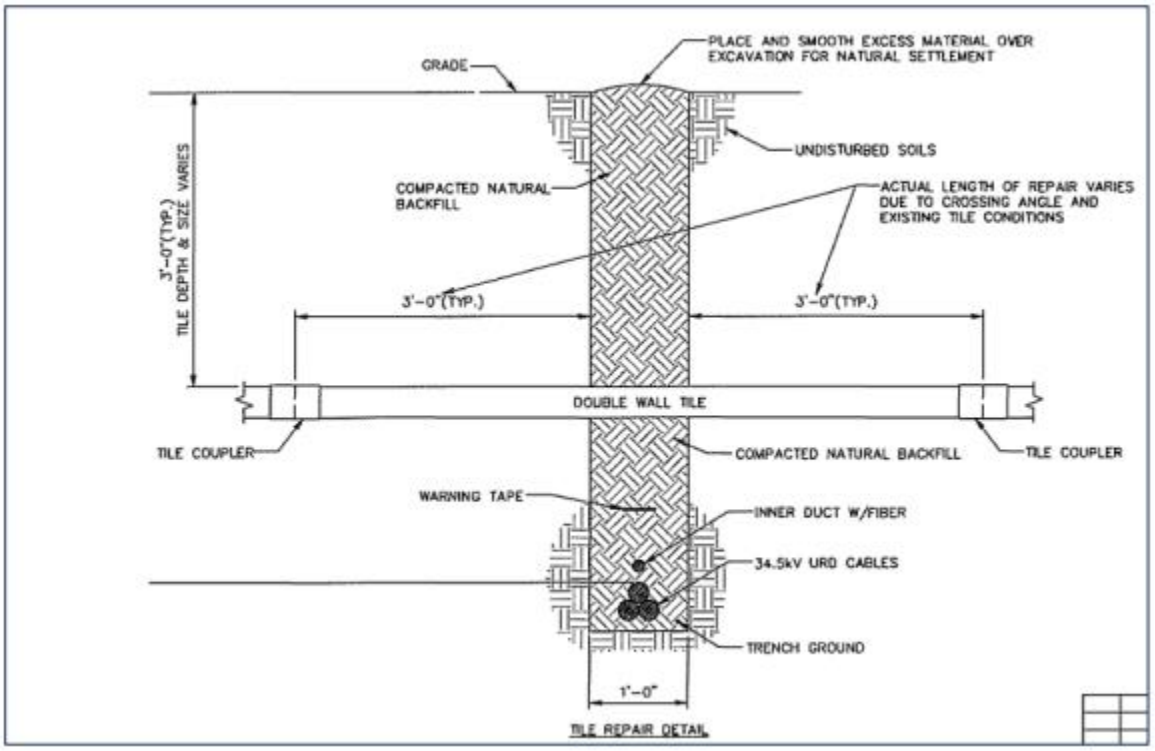
During construction, OneEnergy and its contractors will maintain vigilance for any evidence of damaged or broken drain tiles. Damage indicators include the following:

1. Broken pipe (e.g., clay, concrete, or plastic pieces with a smooth or corrugated rounded surface) excavated from the ground or discovered on the surface after excavating or grading;
2. Differential resistance during pile driving;
3. Unexpected flow of groundwater to the surface;
4. Ponding in areas (especially uphill) otherwise not previously observed as being wet; and
5. Sinkholes or voids in the surface especially after precipitation or snowmelt.

Drain Tile Repair Approach

OneEnergy will direct the implementation of the following protocols if broken drain tile is identified:

1. Underground drain tile that are severed or damaged due to construction activity will be repaired by a qualified contractor within 30 days of the discovery of damage, weather and soil conditions permitting.
2. Drain tile repair or replacement will be completed by a qualified contractor and will adhere to the following standards:
    a. Repairs to drain tile lines shall follow the procedure identified on the drawing on the next page;
    b. All subsurface drain tile main lines shall be repaired, or new drain tile lines of comparable or improved materials and similar or greater diameter will be installed at the appropriate depth and slope to maintain the drainage that was present prior to construction activities on the property; and
    c. Subsurface drain tile repair or replacement shall maintain the original alignment, gradient, and water flow to the greatest extent practical.



Complaint Resolution

OneEnergy Renewables is committed to being a good land steward by repairing or replacing any drain tile necessary for the continued existing agricultural or residential use of properties within and adjacent to the Project Area. Situations may occur in which drain tiles are inadvertently damaged by equipment without the awareness of OneEnergy Renewables personnel. Project neighbors or regulatory personnel should contact OneEnergy Renewables to make them aware of any new drainage issues that develop. As described above, drain tiles that are identified as damaged as a result of the construction of the Project will be repaired or replaced within 30 days of discovery, weather and soil conditions permitting.

OneEnergy Renewables

Salix Solar Project

Kenosha County

Exhibits

Exhibit F – Decommissioning Plan

Decommissioning Plan for proposed
Salix Solar Project

1. Introduction

The Decommissioning Plan provides an overview of activities that will occur during the decommissioning phase of the Salix Solar Project, the "Project," including activities related to the restoration of land and management of materials and waste.

The Project has an estimated useful lifetime of 40 years. This Decommissioning Plan assumes at the point it Is no longer economical or prudent to continue operating, the Project will be dismantled and the site restored to a state similar to its pre-construction condition.

Decommissioning activities include but are not limited to, disconnecting the Solar Facility from the electrical grid and removal of all components, including:

- Photovoltaic (PV) modules, panel racking, and supports
- Inverter units, transformers, and other electrical equipment
- Wiring cables, communications, and perimeter fence
- Concrete pads

The Decommissioning Plan is based on current best management practices and procedures. This Plan may be subject to revision based on new standards and best management practices at the time of decommissioning. Permits will be obtained as required and notification will be given to stakeholders prior to decommissioning.

Project Information

Address:

County: Kenosha, Wisconsin

Township: Wheatland

Project Size: 7.5 MWac

2. Decommissioning Process

At the time of decommissioning, the installed components will be removed, reused, disposed, and recycled where possible. The site will be restored to a state similar to its pre-construction condition. All removal of equipment will be done in accordance with any applicable regulations and manufacturer recommendations. All applicable permits will be acquired before decommissioning activities begin.

Equipment Dismantling and Removal

Generally, the decommissioning of a Solar Project proceeds in the reverse order of the installation.

1. The Project will be disconnected from the utility power grid.
2. PV modules will be disconnected, collected, and disposed at an approved solar module recycler or reused/resold on the market. Although the PV modules will not be cutting edge technology at the time of decommissioning, they will be producing approximately 80% of the original electricity output at year 40 and offer value for many years.
3. All aboveground and underground electrical interconnection and distribution cables will be removed and disposed off-site at an approved facility.
4. Galvanized steel PV module support and racking system support posts will be removed and disposed off-site at an approved facility.
5. Electrical and electronic devices, including transformers and inverters will be removed and disposed off-site at an approved facility.
6. Concrete pads will be removed and disposed off-site at an approved facility.
7. Fencing will be removed and disposed off-site at an approved facility.

Environmental Effects

Decommissioning activities, particularly the removal of project components, could result in environmental effects similar to construction such as ground disturbance (erosion/sedimentation). Mitigation measures employed during the construction phase of the Project will be implemented. These will remain in place to mitigate erosion and silt/sediment runoff and prevent any impact to the natural features located adjacent to the site.

Road traffic will temporarily increase due to the movement of decommissioning crews and equipment. Work will be undertaken during daylight hours to conform to any applicable restrictions.

Site Restoration

Upon completion of the decommissioning phase, the site will be restored to a state similar to its pre-construction condition. Rehabilitated lands may be seeded with native seed mixes to help stabilize soil conditions, enhance soil structure, and increase soil fertility.

Managing Materials and Waste

During the decommissioning phase, a variety of excess materials and wastes (listed in Table 1) will be generated. Most of the materials used in a Solar Project are reusable or recyclable and some equipment may have manufacturer take-back and recycling requirements. Any remaining materials will be removed and disposed of off site at an appropriate facility. Policies and procedures will be established to maximize recycling and reuse and project owners will work with manufacturers, local subcontractors, and waste firms to segregate material to be disposed of, recycled, or reused.

Solar module manufacturers are looking for ways to recycle and/or reuse solar modules when they have reached the end of their lifespan. OneEnergy works with The Retrofit Companies, Inc. (TRC) in Minnesota to recycle panels that are damaged during shipping or installation and intends to partner with TRC or another similar panel recycler to recycle any panels that require disposal in the future. Modules will be disposed in the best way possible using best management practices at the time of decommissioning.

Material / Waste	Means of Managing Excess Materials and Waste
PV Panels	If there is no possibility for reuse, the panels will either be returned to the manufacturer for appropriate disposal or will be transported to a recycling facility where the glass, metal, and semiconductor materials will be separated and recycled.
Mounting racks and supports	These steel and other metal materials will be disposed off-site at an approved facility
Transformer	The small amount of oil from the transformer will be removed on-site to reduce the potential for spills and will be transported to an approved facility for disposal. The transformers will be sent back to the manufacturer, recycled, reused, or safely disposed off-site in accordance with current standards of the day.
Inverters	The metal components of the inverters will be disposed of or recycled, where possible. Remaining components will be disposed of in accordance with the standards of the day.
Concrete Pad	Concrete pads will be broken down and transported by a certified and licensed contractor to a recycling or approved disposal facility.
Cables and Wiring	All electrical wiring will be disconnected and disposed of at an approved facility, associated electronic equipment (isolation switches, fuses, metering) will either be returned to the manufacturer for recycling or disposed off-site in accordance with current standards and best practices.
Fencing	Fencing will be removed and recycled at a metal recycling facility.
Debris	Any remaining debris on the site will be separated into recyclables/residual wastes and will be transported from the site and managed as appropriate.

Decommissioning Notification

Decommissioning activities will require the notification of stakeholders given the nature of the works at the site. Twelve months prior to the start of decommissioning activities the list of stakeholders will be

updated and notified. Federal, county, and local authorities will be notified as needed to discuss the potential approvals required to engage in decommissioning activities.

Approvals

Well-planned and well-managed renewable energy facilities are not expected to pose environmental risks at the time of decommissioning. Decommissioning of the Project will follow all standards of the day. Any required permits will be obtained prior to the start of any decommissioning activities.

This Decommissioning Report will be updated as necessary in the future to ensure that changes in technology and site restoration methods are taken into consideration.

OneEnergy Renewables

Salix Solar Project

Kenosha County

Attachments

Attachment 1 – FAA Notice Criteria (Result Summary: project does not exceed notice criteria)

Attachment 2 – Module Specification Details

Attachment 3 – Inverter Specification Details

Attachment 4 – Natural Resources Plan

Attachment 5 – Glare Report (Result Summary: no glare predicted)

Attachment 6 – Certificate of Insurance (Kenosha County additional insured)

OneEnergy Renewables

Salix Solar Project

Kenosha County

Attachments

Attachment 1 – FAA Notice Criteria

(Result Summary: project does not exceed notice criteria)

Federal Aviation Administration

« OE/AAA

Notice Criteria Tool

Notice Criteria Tool - Desk Reference Guide V_2018.2.0

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference CFR Title 14 Part 77.9.

You must file with the FAA at least 45 days prior to construction if:

- your structure will exceed 200ft above ground level
- your structure will be in proximity to an airport and will exceed the slope ratio
- your structure involves construction of a traverseway (i.e. highway, railroad, waterway etc...) and once adjusted upward with the appropriate vertical distance would exceed a standard of 77.9(a) or (b)
- your structure will emit frequencies, and does not meet the conditions of the FAA Co-location Policy
- your structure will be in an instrument approach area and might exceed part 77 Subpart C
- your proposed structure will be in proximity to a navigation facility and may impact the assurance of navigation signal reception
- your structure will be on an airport or heliport
- filing has been requested by the FAA

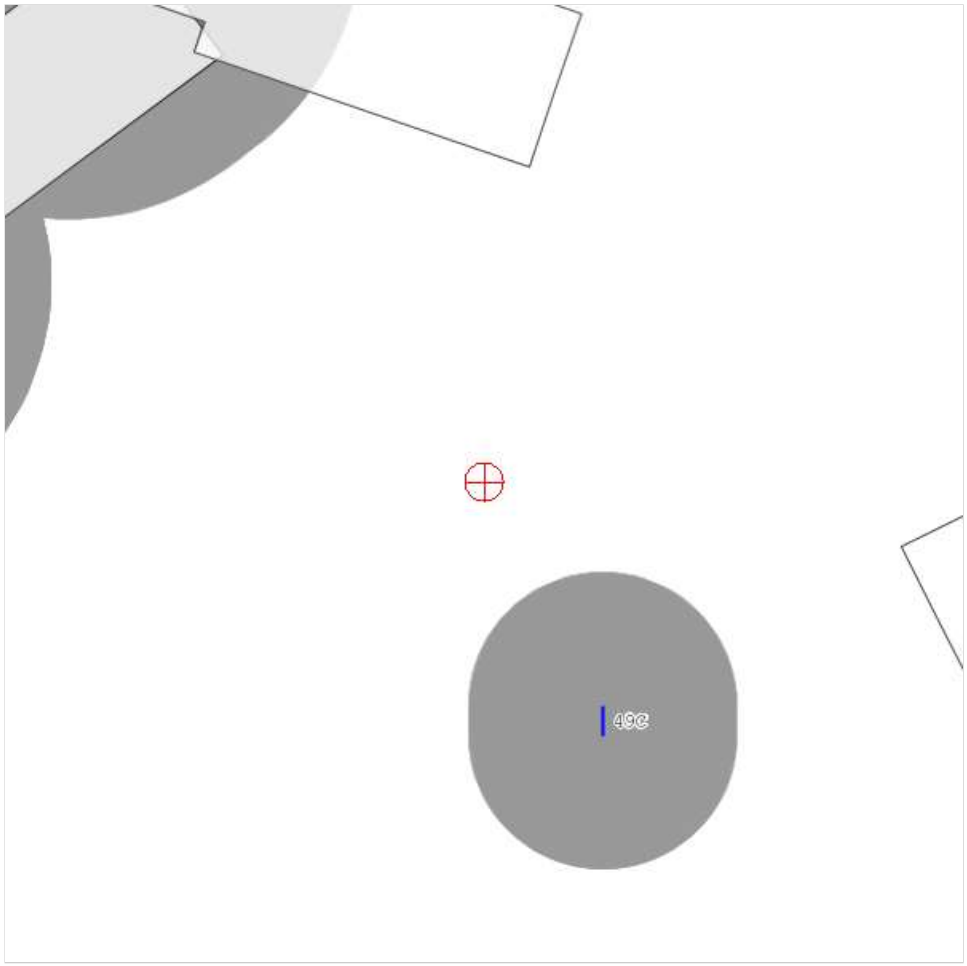
If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the Air Traffic Areas of Responsibility map for Off Airport construction, or contact the FAA Airports Region / District Office for On Airport construction.

The tool below will assist in applying Part 77 Notice Criteria.

Latitude:	42 Deg 34 M 35.97 S N
Longitude:	88 Deg 11 M 21.38 S W
Horizontal Datum:	NAD83
Site Elevation (SE):	752 (nearest foot)
Structure Height :	14 (nearest foot)
Traverseway:	No Traverseway (Additional height is added to certain structures under 77.9(c)) User can increase the default height adjustment for Traverseway, Private Roadway and Waterway
Is structure on airport:	(•) No ( ) Yes

Results

You do not exceed Notice Criteria.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OneEnergy Renewables

Salix Solar Project

Kenosha County

Attachments

Attachment 2 – Module Specification Details

VSUN
Innovative & Smart

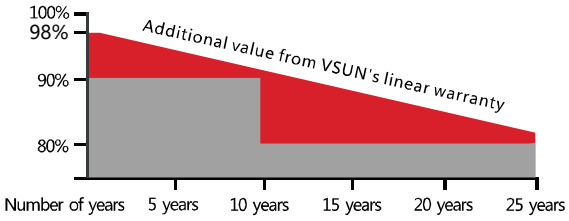
VSUN550-144MH

550W
Highest power output

21.52%
Module efficiency

12years
Material & Workmanship warranty

25years
Linear power output warranty



Munich RE

VSUN550-144MH VSUN545-144MH
VSUN540-144MH VSUN535-144MH

- PERC cell technology
- Higher output power
- Lower risk of micro-crack
- Positive tolerance offer
- Lower risk of hot spot
- Better shading tolerance
- Certified for salt/ammonia corrosion resistance
- Load certificates: wind to 2400Pa and snow to 5400Pa
- Lower LCOE

VSUN, a BNEF Tier-1 PV module manufacturer invested by Fuji Solar, has been committed to providing greener, cleaner and more intelligent renewable energy solutions. VSUN is dedicated to bringing reliable, customized and high-efficient products into various markets and customers worldwide

Engineered in Japan
www.vsun-solar.com

Electrical Characteristics at Standard Test Conditions(STC)

Module Type	VSUN550-144MH	VSUN545-144MH	VSUN540-144MH	VSUN535-144MH
Maximum Power - Pmax (W)	550	545	540	535
Open Circuit Voltage - Voc (V)	49.92	49.81	49.65	49.5
Short Circuit Current - Isc (A)	13.99	13.92	13.85	13.78
Maximum Power Voltage - Vmpp (V)	42	41.8	41.65	41.5
Maximum Power Current - Impp (A)	13.1	13.04	12.97	12.9
Module Efficiency	21.52%	21.32%	21.13%	20.93%

Standard Test Conditions (STC): irradiance 1,000 W/m²; AM 1,5; module temperature 25°C. Pmax Sorting : 0~5W. Measuring Tolerance: ±3%.

Remark: Electrical data do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.

Electrical Characteristics at Normal Operating Cell Temperature(NOCT)

Module Type	VSUN550-144MH	VSUN545-144MH	VSUN540-144MH	VSUN535-144MH
Maximum Power - Pmax (W)	412.4	408.3	404.6	400.9
Open Circuit Voltage - Voc (V)	46.8	46.7	46.5	46.4
Short Circuit Current - Isc (A)	11.3	11.24	11.19	11.13
Maximum Power Voltage - Vmpp (V)	38.6	38.5	38.3	38.2
Maximum Power Current - Impp (A)	10.67	10.61	10.55	10.49

Normal Operating Cell Temperature((NOCT) : irradiance 800W/m^2; wind speed 1 m/s ; ambient temperature 20/℃. Measuring Tolercance: ±3%.

Temperature Characteristics

NOCT	45℃ (±2℃)
Voltage Temperature Coefficient	-0.27%/℃
Current Temperature Coefficient	+0.048%/℃
Power Temperature Coefficient	-0.32%/℃

Maximum Ratings

Maximum System Voltage [V]	1500
Series Fuse Rating [A]	30

Material Characteristics

Dimensions	2256×1133×35mm (L×W×H)
Weight	28.6kg
Frame	Silver anodized aluminum profile
Front Glass	White toughened safety glass, 3.2 mm
Cell Encapsulation	EVA (Ethylene-Vinyl-Acetate)
Back Sheet	Composite film
Cells	12×12 pieces monocrystalline solar cells series strings
Junction Box	IP68, 3 diodes
Cable&Connector	Potrait: 500 mm (cable length can be customized) , 1×4 mm2, compatible with MC4

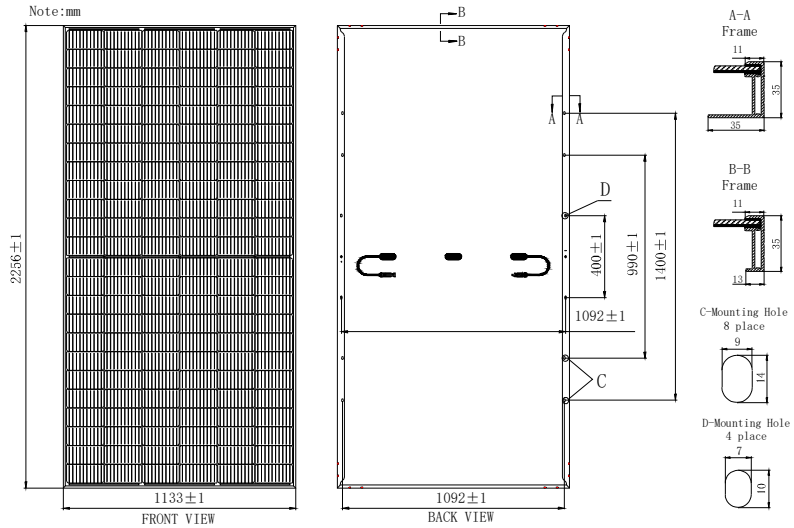
Packaging

Dimensions(L×W×H)	2290×1125×1253mm
Container20'	155
Container40'	310
Container40'HC	620

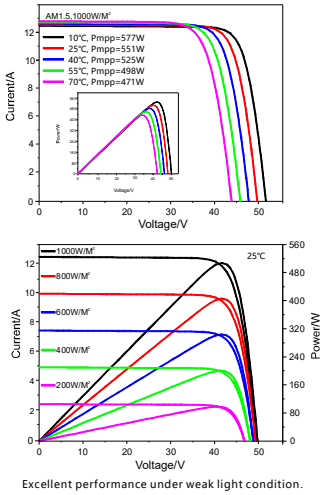
System Design

Temperature Range	-40 °C to + 85 °C
Withstanding Hail	Maximum diameter of 25 mm with impact speed of 23 m·s-1
Maximum Surface Load	5,400 Pa
Application class	class A

Dimensions



IV-Curves



Excellent performance under weak light condition.

OneEnergy Renewables

Salix Solar Project

Kenosha County

Attachments

Attachment 3 – Inverter Specification Details

275kW/275kVA, 1500Vdc String Inverters for North America

CPS SCH275KTL-DO/US-800

The 275kW high power CPS three phase string inverters are designed for ground mount applications. The units are high performance, advanced and reliable inverters designed specifically for the North American environment and grid. High efficiencies, wide operating voltages, broad temperature ranges and NEMA Type 4X enclosure enable this inverter platform to operate at high performance across many applications. The SCH275KTL inverters include 12 MPPTs and are available with either 36 fused PV string inputs or 24 unfused PV string inputs. The CPS FlexOM solution enables communication, controls and remote product upgrades.

Key Features

- NFPA 70, NEC 2017 compliant
- Touch safe DC Fuse holders adds convenience and safety
- CPS FlexOM Gateway enables remote FW upgrades
- Integrated DC disconnect switch
- Protection Functions for enhanced reliability and safety
- Selectable Max AC Active Power of 250kW or 275kW
- 12 MPPTs with 36 fused inputs or 24 unfused inputs
- Copper and Aluminum compatible AC connections
- NEMA Type 4X outdoor rated, tough tested enclosure
- Full power capacity up to 42°C
- Standard 5 year warranty with extensions to 20 years
- Supported comm protocols (Modbus RTU, TCP/IP, PLC, CAN)

Chint Power Systems America
6800 Koll Center Parkway, Suite 235 Pleasanton, CA 94566
Tel: 855-584-7168 Mail: AmericaSales@chintpower.com Web: www.chintpowersystems.com

Model Name	CPS SCH275KTL-DO/US-800
DC Input	
Max. DC Input Voltage	1500V
Operating DC Input Voltage Range	500-1500Vdc
Start-up DC Input Voltage / Power	600Vdc / 300W
Number of MPP Trackers	12
MPPT Voltage Range @ PF>0.99[1]	900-1300Vdc
Max. PV Short-Circuit Current	600A, 50A per MPPT
Number of DC Inputs	36 Fused Inputs, 3 per MPPT or 24 Non-Fused Inputs, 2 per MPPT (determined by SKU)
DC Disconnection Type	Load-rated DC switches
DC Surge Protection	Type II
AC Output	
Max AC Output Power (Selectable) @ PF>0.99	250kW / 275kW
Max. AC Apparent Power	275kVA
Rated Output Voltage	800Vac
Output Voltage Range[2]	704-880Vac
Grid Connection Type	3-Phase / PE
Max. AC Output Current @800Vac	198.5A
Rated Output Frequency	60Hz
Output Frequency Range[2]	57 - 63Hz
Power Factor	>0.99 (±0.8 adjustable)
Current THD @ Rated Load	<3%
Max. Fault Current Contribution (1 Cycle RMS)	215.2A
Max. OCPD Rating	250A
AC Surge Protection	Type II
System and Performance	
Max. Efficiency	99.0%
CEC Efficiency	98.5%
Stand-by / Night Consumption	5W
Environment	
Enclosure Protection Degree	NEMA Type 4X
Cooling Method	Variable speed cooling fans
Operating Temperature Range[3]	-22°F to +140°F / -30°C to +60°C (derating from +107°F / +42°C)
Operating Humidity	0 to 100%
Operating Altitude	8202ft / 2500m (no derating)
Audible Noise	<80dBA @ 1m and 25°C
Display and Communication	
User Interface and Display	LED indicators, WiFi + APP
Inverter Monitoring	Modbus RS485 / Ethernet TCP/IP / PLC / CAN
Site Level Monitoring	CPS FlexOM (1 per 32 inverters)
Modbus Data Mapping	SunSpec / CPS
Remote Diagnostics / FW Upgrade Functions	Standard / (with FlexOM Gateway)
Mechanical	
Dimensions (HxWxD)	26.8 x 41.3 x 15.7in (680 x 1050 x 400mm)
Weight	Approx. 260lbs / 118kg
Mounting / Installation Angle	Vertical installation
AC Termination	Stud Type Terminal (Wire range: 3/0AWG – 600kcmil AL/CU, Lugs not supplied)
DC Termination	36 Fused Input: Screw Clamp Fuse Holder (Wire range: #14 - #6 AWG CU) 24 Non-Fused Input: Screw Clamp Terminal (Wire range: #14 - #8 and #6 - #4 AWG CU)
Fused String Inputs (3 per MPPT)[4]	20A fuses provided (Fuse values up to 30A acceptable)
Safety	
Certifications and Standards	UL1741SA-2018, CSA-22.2 NO.107.1-01, IEEE1547-2018, FCC PART15
Selectable Grid Standard	IEEE 1547-2018, CA Rule 21, ISO-NE, HECO Rule 14H
Smart-Grid Features	Volt-RideThru, Freq-RideThru, Ramp-Rate, Specified-PF, Volt-Var, Freq-Watt, Volt-Watt
Protection Functions	
Reactive Power at Night	Yes
IV Curve Tracing	Yes
Insulation Resistance Monitoring	Yes
Onboard Fault Oscillography	Yes
PV String Current Monitoring	Yes
Residual Current Monitoring	Yes
Input Reverse Polarity Protection	Yes
Output Overcurrent Protection	Yes
Output Short-Circuit Protection	Yes
Output Overvoltage Protection	Yes
Warranty	
Standard	5 Years
Extended Terms	10, 15 and 20 years

1) See user manual for further information regarding MPPT Voltage Range when operating at non-unity PF
2) The "Output Voltage Range" and "Output Frequency Range" may differ according to the specific grid standard.
3) See user manual for further requirements regarding non-operating conditions.
4) Fused string inputs only applicable to the SCH275KTL 36 input model.

Attachment 4 – Natural Resources Plan

Salix Solar Project

Applicant:
OneEnergy Development, LLC
1882 E. Main St. Suite 207
Madison, WI 53704

The project as designed is not expected to have any impacts to natural resources including wetlands, wildlife or environmental corridors.

Wetlands

OneEnergy contracted with a qualified Wisconsin DNR Wetland Delineator – EOR, Inc., to perform an on-site wetland delineation. The layout as proposed avoids all delineated wetlands.

Wildlife

On June 25, 2021 OneEnergy conducted an Endangered Resources Preliminary Assessment to screen the property for potential threatened and endangered species. Based on this assessment, no further action was deemed necessary, and the Project as proposed is covered by the Broad Incidental Take Permit/Authorization for No/Low Impact Activities. Please see Appendix 1 for the full report.

OneEnergy also filed an IPAC report with the US Fish and Wildlife which found that no critical habitat for threatened or endangered species are present on-site. Please see Appendix 2 for the full report.

Environmental Corridors

The project is located outside of environmental corridors identified using the Kenosha County GIS portal.

Appendices:

Appendix 1 - Endangered Resources Preliminary Assessment
Appendix 2 - US Fish and Wildlife Service Information, Planning and Conservation (IPaC) Report

Appendix 1 – Endangered Resources Preliminary Assessment

Endangered Resources Preliminary Assessment

Created on **6/25/2021**. This report is good for one year after the created date.

DNR staff will be reviewing the ER Preliminary Assessments to verify the results provided by the Public Portal. ER Preliminary Assessments are only valid if the project habitat and waterway-related questions are answered accurately based on current site conditions. If an assessment is deemed invalid, a full ER review may be required even if the assessment indicated otherwise.

Results

A search was conducted of the NHI Portal within a 1-mile buffer (for terrestrial and wetland species) and a 2-mile buffer (for aquatic species) of the project area. Based on these search results, below are your follow-up actions.

No further action is necessary.

This project is covered by the Broad Incidental Take Permit/Authorization for No/Low Impact Activities (No/Low BITP/A) (https://dnr.wi.gov/topic/ERReview/ITNoLowImpact.html). This BITP/A covers projects that the DNR has determined will have no impact or a minimal impact to endangered and threatened species in the state. Due to this coverage under the No/Low BITP/A, a formal review letter is not needed and there are no actions that need to be taken to comply with state and/or federal endangered species laws, any take that may result from the proposed project is permitted/authorized.

A copy of this document can be kept on file and submitted with any other necessary DNR permit applications to show that the need for an ER Review has been met. This notice only addresses endangered resources issues. This notice does not constitute DNR authorization of the proposed project and does not exempt the project from securing necessary permits and approvals from the DNR and/or other permitting authorities.

Project Information

Landowner name	**Salix LLC**
Project address	**42.576233° -88.188595°**
Project description	**Ground Mount Solar Array**

Project Questions

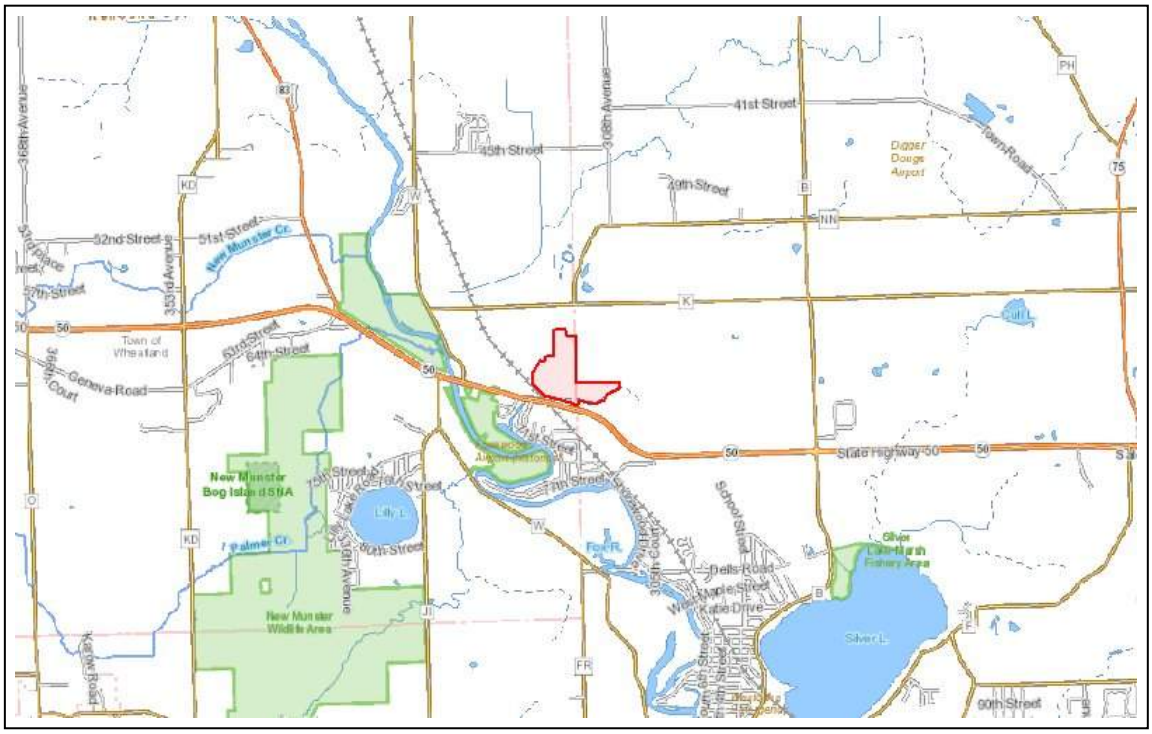
Does the project involve a public property?	**No**
Is there any federal involvement with the project?	**No**
Is the project a utility, agricultural, forestry or bulk sampling (associated with mining) project?	**Yes**
Is the project property in Managed Forest Law or Managed Forest Tax Law?	**No**
Project involves tree removal?	**No**
Is project near (within 300 ft) a waterbody or a shoreline?	**No**
Is project within a waterbody or along the shoreline?	**No**

Does the project area (including access routes, staging areas, laydown yards, select sites, source/fill sites, etc.) occur **entirely within** one or more of the following habitats?

Urban/residential	**No**
Manicured lawn	**No**

Artificial/paved surface	**No**
Agricultural land	**Yes**
Areas covered in crushed stone or gravel	**No**

Project Area Maps



Appendix 2 – US Fish and Wildlife Service Information, Planning and Conservation (IPaC) Report

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Green Bay Ecological Services Field Office
2661 Scott Tower Drive
New Franken, WI 54229-9565
Phone: (920) 866-1717 Fax: (920) 866-1710

In Reply Refer To: April 22, 2021
Consultation Code: 03E17000-2021-SLI-1165
Event Code: 03E17000-2021-E-03939
Project Name: Salix Solar

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

This response has been generated by the Information, Planning, and Conservation (IPaC) system to provide information on natural resources that could be affected by your project. The U.S. Fish and Wildlife Service (Service) provides this response under the authority of the Endangered Species Act of 1973 (16 U.S.C. 1531-1543), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d), the Migratory Bird Treaty Act (16 U.S.C. 703-712), and the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*).

Threatened and Endangered Species

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and may be affected by your proposed project. The species list fulfills the requirement for obtaining a Technical Assistance Letter from the U.S. Fish and Wildlife Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the ECOS IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS IPaC system by completing the same process used to receive the enclosed list.

Consultation Technical Assistance

Please refer to the Midwest Region S7 Technical Assistance website for step-by-step instructions for making species determinations and for specific guidance on the following types of projects: projects in developed areas, HUD, CDBG, EDA, pipelines, buried utilities, telecommunications, and requests for a Conditional Letter of Map Revision (CLOMR) from FEMA.

Using the IPaC Official Species List to Make No Effect and May Affect Determinations for Listed Species

1. If IPaC returns a result of "There are no listed species found within the vicinity of the project," then project proponents can conclude the proposed activities will have **no effect** on any federally listed species under Service jurisdiction. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records. An example "No Effect" document also can be found on the S7 Technical Assistance website.
2. If IPaC returns one or more federally listed, proposed, or candidate species as potentially present in the action area of the proposed project – other than bats (see below) – then project proponents must determine if proposed activities will have **no effect** on or **may affect** those species. For assistance in determining if suitable habitat for listed, candidate, or proposed species occurs within your project area or if species may be affected by project activities, you can obtain Life History Information for Listed and Candidate Species through the S7 Technical Assistance website. If no impacts will occur to a species on the IPaC species list (e.g., there is no habitat present in the project area), the appropriate determination is **No Effect**. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records. An example "No Effect" document also can be found on the S7 Technical Assistance website.
3. Should you determine that project activities **may affect** any federally listed, please contact our office for further coordination. Letters with requests for consultation or correspondence about your project should include the Consultation Tracking Number in the header. Electronic submission is preferred.

Northern Long-Eared Bats

Northern long-eared bats occur throughout Minnesota and Wisconsin and the information below may help in determining if your project may affect these species.

This species hibernates in caves or mines only during the winter. In Minnesota and Wisconsin, the hibernation season is considered to be November 1 to March 31. During the active season (April 1 to October 31) they roost in forest and woodland habitats. Suitable summer habitat for northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥3 inches dbh for northern long-eared bat that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat and evaluated for use by bats. If your project will impact caves or mines or will involve clearing forest or woodland habitat containing suitable roosting habitat, northern long-eared bats could be affected.

Examples of unsuitable habitat include:

- Individual trees that are greater than 1,000 feet from forested or wooded areas,
- Trees found in highly developed urban areas (e.g., street trees, downtown areas),
- A pure stand of less than 3-inch dbh trees that are not mixed with larger trees, and
- A stand of eastern red cedar shrubby vegetation with no potential roost trees.

If IPaC returns a result that northern long-eared bats are potentially present in the action area of the proposed project, project proponents can conclude the proposed activities **may affect** this species **IF** one or more of the following activities are proposed:

- Clearing or disturbing suitable roosting habitat, as defined above, at any time of year,
- Any activity in or near the entrance to a cave or mine,
- Mining, deep excavation, or underground work within 0.25 miles of a cave or mine,
- Construction of one or more wind turbines, or
- Demolition or reconstruction of human-made structures that are known to be used by bats based on observations of roosting bats, bats emerging at dusk, or guano deposits or stains.

If none of the above activities are proposed, project proponents can conclude the proposed activities will have **no effect** on the northern long-eared bat. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records. An example "No Effect" document also can be found on the S7 Technical Assistance website.

If any of the above activities are proposed, please use the northern long-eared bat determination key in IPaC. This tool streamlines consultation under the 2016 rangewide programmatic biological opinion for the 4(d) rule. The key helps to determine if prohibited take might occur and, if not, will generate an automated verification letter. No further review by us is necessary. Please visit the links below for additional information about "may affect" determinations for the northern long-eared bat.

NLEB Section 7 consultation

Key to the NLEB 4(d) rule for federal actions that may affect

Instructions for the NLEB 4(d) assisted d-key

Maternity tree and hibernaculum locations by state

Other Trust Resources and Activities

Bald and Golden Eagles - Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. Should bald or golden eagles occur within or near the project area please contact our office for further coordination. For communication and wind energy projects, please refer to additional guidelines below.

Migratory Birds - The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA to proactively prevent the mortality of migratory birds whenever possible and we encourage implementation of recommendations that minimize potential impacts to migratory birds. Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.

Communication Towers - Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds,

especially some 350 species of night-migrating birds. However, the Service has developed voluntary guidelines for minimizing impacts.

Transmission Lines - Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please refer to guidelines developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas that support large numbers of raptors and migratory birds.

Wind Energy - To minimize impacts to migratory birds and bats, wind energy projects should follow the Service's Wind Energy Guidelines. In addition, please refer to the Service's Eagle Conservation Plan Guidance, which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

State Department of Natural Resources Coordination

While it is not required for your Federal section 7 consultation, please note that additional state endangered or threatened species may also have the potential to be impacted. Please contact the Minnesota or Wisconsin Department of Natural Resources for information on state listed species that may be present in your proposed project area.

Minnesota

Minnesota Department of Natural Resources - Endangered Resources Review Homepage

Email: Review.NHIS@state.mn.us

Wisconsin

Wisconsin Department of Natural Resources - Endangered Resources Review Homepage

Email: DNRERReview@wi.gov

We appreciate your concern for threatened and endangered species. Please feel free to contact our office with questions or for additional information.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Green Bay Ecological Services Field Office
2661 Scott Tower Drive
New Franken, WI 54229-9565
(920) 866-1717

Project Summary

Consultation Code: 03E17000-2021-SLI-1165
Event Code: 03E17000-2021-E-03939
Project Name: Salix Solar
Project Type: POWER GENERATION
Project Description: Salix Solar will include approximately 84 acres of agricultural land in the city of Silver Lake, WI. Some light grading and clearing may take place but there will be little change to the quantity of impervious surface. It is expected that the project will generate 8 MW of power.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.57779875,-88.1902792067412,14z

Counties: Kenosha County, Wisconsin

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Birds

NAME	STATUS
Whooping Crane *Grus americana* Population: U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/758	Experimental Population, Non-Essential

Flowering Plants

NAME	STATUS
Eastern Prairie Fringed Orchid *Platanthera leucophaea* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/601	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

OneEnergy Renewables

Salix Solar Project

Kenosha County

Attachments

Attachment 5 – Glare Report

(Result Summary: no glare predicted)

FORGESOLAR GLARE ANALYSIS

Project: **Salix Solar**

Salix Solar will include approximately 34 acres of agricultural land in the Town of Wheatland, WI. Some light grading and clearing may take place but there will be little change to the quantity of impervious surface. It is expected that the project will generate 7.5 MW of power.

Site configuration: **Glare Report**

Created 11 Nov, 2022
Updated 11 Nov, 2022
Time-step 1 minute
Timezone offset UTC-6
Site ID 79314.14027
Category 5 MW to 10 MW
DNI peaks at 1,000.0 W/m^2
Ocular transmission coefficient 0.5
Pupil diameter 0.002 m
Eye focal length 0.017 m
Sun subtended angle 9.3 mrad
Methodology V2

Summary of Results No glare predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
PV array 1	SA tracking	SA tracking	0	0.0	0	0.0	22,780,000.0

Total annual glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0

Component Data

PV Arrays

Name: PV array 1
Axis tracking: Single-axis rotation
Backtracking: None
Tracking axis orientation: 180.0°
Tracking axis tilt: 0.0°
Tracking axis panel offset: 0.0°
Max tracking angle: 60.0°
Rated power: 7500.0 kW
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.578716	-88.188213	751.94	7.00	758.94
2	42.576519	-88.188170	750.13	7.00	757.13
3	42.576535	-88.189865	748.66	7.00	755.66
4	42.575382	-88.189865	748.86	7.00	755.86
5	42.575366	-88.188298	749.87	7.00	756.87
6	42.574355	-88.188255	747.26	7.00	754.26
7	42.574371	-88.191260	747.19	7.00	754.19
8	42.574702	-88.191260	748.18	7.00	755.18
9	42.574671	-88.192075	745.49	7.00	752.49
10	42.576915	-88.192118	747.65	7.00	754.65
11	42.577626	-88.191453	752.40	7.00	759.40
12	42.577626	-88.190165	750.99	7.00	757.99
13	42.578716	-88.190165	754.45	7.00	761.45

Discrete Observation Point Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
OP 1	1	42.573644	-88.192075	766.70	5.00
OP 2	2	42.573264	-88.190251	782.95	5.00
OP 3	3	42.572822	-88.188062	768.36	5.00
OP 4	4	42.577831	-88.185187	758.50	5.00
OP 5	5	42.577831	-88.185187	758.50	10.00
OP 6	6	42.577831	-88.185187	758.50	15.00
OP 7	7	42.583345	-88.188663	785.69	5.00
OP 8	8	42.583345	-88.188663	785.69	10.00
OP 9	9	42.583345	-88.188613	785.31	15.00

Glare Analysis Results

Summary of Results No glare predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
PV array 1	SA tracking	SA tracking	0	0.0	0	0.0	22,780,000.0

Total annual glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0

PV: PV array 1 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0

PV array 1 and OP 1

Receptor type: Observation Point
No glare found

PV array 1 and OP 2

Receptor type: Observation Point
No glare found

PV array 1 and OP 3

Receptor type: Observation Point
No glare found

PV array 1 and OP 4

Receptor type: Observation Point
No glare found

PV array 1 and OP 5

Receptor type: Observation Point
No glare found

PV array 1 and OP 6

Receptor type: Observation Point
No glare found

PV array 1 and OP 7

Receptor type: Observation Point
No glare found

PV array 1 and OP 8

Receptor type: Observation Point
No glare found

PV array 1 and OP 9

Receptor type: Observation Point
No glare found

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.
Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.
Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.
The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.
The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.
The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.
The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
Refer to the Help page at **www.forgesolar.com/help/** for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

OneEnergy Renewables

Salix Solar Project

Kenosha County

Attachments

Attachment 6 – Certificate of Insurance

(Kenosha County additional insured)

Client#: 1732528 ONEENERG

ACORD™ CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 11/14/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Lillian P. Benson	
USI Insurance Services NW CL1 825 NE Multnomah, Suite 1500 Portland, OR 97232 503 224-8390	PHONE (A/C, No, Ext): 503 224-8390	FAX (A/C, No): 610 362-8130
	E-MAIL ADDRESS: lillian.benson@usi.com	

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Travelers Indemnity Co of America	25666
INSURER B : Travelers Property Cas. Co. of America	25674
INSURER C : Travelers Indemnity Company of CT	25682
INSURER D :	
INSURER E :	
INSURER F :	

INSURED

OneEnergy, Inc.dba OneEnergy Renewables
2003 Western Ave. Suite 225
Seattle, WA 98121

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY			DTCO8P032075TIA22	03/18/2022	03/18/2023	EACH OCCURRENCE	$1,000,000
	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$300,000
							MED EXP (Any one person)	$5,000
							PERSONAL & ADV INJURY	$1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$2,000,000
	POLICY PRO-JECT LOC						PRODUCTS - COMP/OP AGG	$2,000,000
	OTHER:							$
C	AUTOMOBILE LIABILITY			BA8P0338462226G	03/18/2022	03/18/2023	COMBINED SINGLE LIMIT (Ea accident)	$1,000,000
	ANY AUTO						BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY X SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	X HIRED AUTOS ONLY X NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
B	UMBRELLA LIAB OCCUR			CUP8P0339142226	03/18/2022	03/18/2023	EACH OCCURRENCE	$3,000,000
	X EXCESS LIAB X CLAIMS-MADE						AGGREGATE	$3,000,000
	DED X RETENTION $10,000							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N						PER STATUTE OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?	N / A					E.L. EACH ACCIDENT	$
	(Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: Operations of the named insured.

The certificate holder has automatic additional insured status where required by written contract per the attached form.

CERTIFICATE HOLDER

Kenosha County
1010 56th Street
Kenosha, WI 53140

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Stephen S. Bunker

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

BLANKET ADDITIONAL INSURED
(Includes Products-Completed Operations If Required By Contract)

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

PROVISIONS

The following is added to **SECTION II – WHO IS AN INSURED**:

Any person or organization that you agree in a written contract or agreement to include as an additional insured on this Coverage Part is an insured, but only:

a. With respect to liability for "bodily injury" or "property damage" that occurs, or for "personal injury" caused by an offense that is committed, subsequent to the signing of that contract or agreement and while that part of the contract or agreement is in effect; and

b. If, and only to the extent that, such injury or damage is caused by acts or omissions of you or your subcontractor in the performance of "your work" to which the written contract or agreement applies. Such person or organization does not qualify as an additional insured with respect to the independent acts or omissions of such person or organization.

The insurance provided to such additional insured is subject to the following provisions:

a. If the Limits of Insurance of this Coverage Part shown in the Declarations exceed the minimum limits required by the written contract or agreement, the insurance provided to the additional insured will be limited to such minimum required limits. For the purposes of determining whether this limitation applies, the minimum limits required by the written contract or agreement will be considered to include the minimum limits of any Umbrella or Excess liability coverage required for the additional insured by that written contract or agreement. This provision will not increase the limits of insurance described in Section **III** – Limits Of Insurance.

b. The insurance provided to such additional insured does not apply to:

(1) Any "bodily injury", "property damage" or "personal injury" arising out of the providing, or failure to provide, any professional architectural, engineering or surveying services, including:

(a) The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders or change orders, or the preparing, approving, or failing to prepare or approve, drawings and specifications; and

(b) Supervisory, inspection, architectural or engineering activities.

(2) Any "bodily injury" or "property damage" caused by "your work" and included in the "products-completed operations hazard" unless the written contract or agreement specifically requires you to provide such coverage for that additional insured during the policy period.

c. The additional insured must comply with the following duties:

(1) Give us written notice as soon as practicable of an "occurrence" or an offense which may result in a claim. To the extent possible, such notice should include:

(a) How, when and where the "occurrence" or offense took place;

(b) The names and addresses of any injured persons and witnesses; and

(c) The nature and location of any injury or damage arising out of the "occurrence" or offense.

(2) If a claim is made or "suit" is brought against the additional insured:

(a) Immediately record the specifics of the claim or "suit" and the date received; and

(b) Notify us as soon as practicable and see to it that we receive written notice of the claim or "suit" as soon as practicable.

(3) Immediately send us copies of all legal papers received in connection with the claim or "suit", cooperate with us in the investigation or settlement of the claim or defense against the "suit", and otherwise comply with all policy conditions.

(4) Tender the defense and indemnity of any claim or "suit" to any provider of other insurance which would cover such additional insured for a loss we cover. However, this condition does not affect whether the insurance provided to such additional insured is primary to other insurance available to such additional insured which covers that person or organization as a named insured as described in Paragraph **4.**, Other Insurance, of Section **IV** – Commercial General Liability Conditions.

OneEnergy Renewables

Salix Solar Project

Kenosha County

Attachments

Attachment 7 – Cultural & Archaeological Review

UNIVERSITY of WISCONSIN
UWMILWAUKEE

Archaeological Research Laboratory Center
Cultural Resource Management

Sabin Hall, Rm 290
PO Box 413
Milwaukee, WI
53201-0413
414 229-3078
www.uwm.edu
www.uwm.edu/archaeology-laboratory/

November 29, 2022

Peter Murphy
OneEnergy Renewables
834 E. Washington Ave., Suite 257
Madison, WI 53204

RE: Cultural Resources Review TM#2022-0639
Salix Solar Farm
OneEnergy
Town of Wheatland, Kenosha County
T1N R19E Section 1
UWM-CRM Project 2022-0982

Dear Mr. Murphy,

The following presents the results of the cultural resources review for the above referenced project located north of WI-50/83 in the Town of Wheatland, Kenosha County, Wisconsin (Attachment 1).

Project Description

The project involves the development of a 31.3 acre solar farm in the Town of Wheatland, Kenosha County. The new solar farm will be located in an area currently used as an agricultural field, located north of WI-50/83 (Geneval Road), west of the Canadian National railroad corridor, and south of 60th Street (Attachment 2).

The project does not entail any state or federal permitting or funding. However, for due diligence the project was reviewed for compliance with Wisconsin Statute §44.40, Wisconsin Statute §157.70, and Section 106 of the National Historic Preservation Act (NHPA).

Architecture/History Review

As part of this review, UWM-CRM conducted searches of the Wisconsin Historic Preservation Database (WHPD) and the National Register of Historic Places (NRHP). The review did not identify any previously surveyed historic properties coincident with or immediately adjacent to the proposed project area. The closest previously surveyed historic property, AHI #12843, is located roughly 735 meters to the southeast of the project area (WHPD 2022a) (Attachment 3). Additionally, as the proposed work involves the development of a 31.3 acre agricultural

field into a solar farm, the project has little potential to impact any historic properties not currently recorded in the WHPD. No further work is recommended.

Archaeological Review

As part of this review, the Wisconsin Historic Preservation Database (WHPD) and the National Register of Historic Places (NRHP) were consulted, as well as relevant previous reporting and archival materials, to assess the presence of previously reported archaeological and/or burial sites within the proposed project area. The review identified thirteen previously reported archaeological sites within one mile of the project area (Table 1; Attachment 4 and 5). No previously reported archaeological sites are coincident with or immediately adjacent to the project area. The closest previously recorded archaeological site, non-burial site 47KN0376, is located 175 meters to the south, across WI-50/83 (WHPD 2022b). No further work is recommended.

Recommendations

1. Relative to architecture/history resources and Wisconsin Statute §44.40, there are no historic properties coincident with or immediately adjacent to the proposed project area. Therefore, no further investigations are required or recommended.

2. Relative to archaeological resources and Wisconsin Statutes §44.40 and §157.70, there are no previously recorded archaeological burial or non-burial sites coincident with or immediately adjacent to the proposed project area. Therefore, no further investigations are required or recommended.

3. Moreover, as the project lacks state or federal involvement, no further work is required pursuant to Section 106 of the National Historic Preservation Act (NHPA).

Please contact Zachary R. Stencil, at zstencil@uwm.edu or at (414) 229-5170, with any questions and/or concerns.

Sincerely,

Zachary R. Stencil MS, RPA
Principal Investigator

References Cited

WHPD

2022a *Architecture and History Inventory*. Electronic document, https://www.wisahrd.org/AHI/Properties/Primary.aspx?id=12843, accessed November 16, 2022.

2022b *Archaeological Site Inventory*. Electronic document, https://www.wisahrd.org/ASI/Sites/Primary.aspx?id=58941, accessed November 16, 2022.

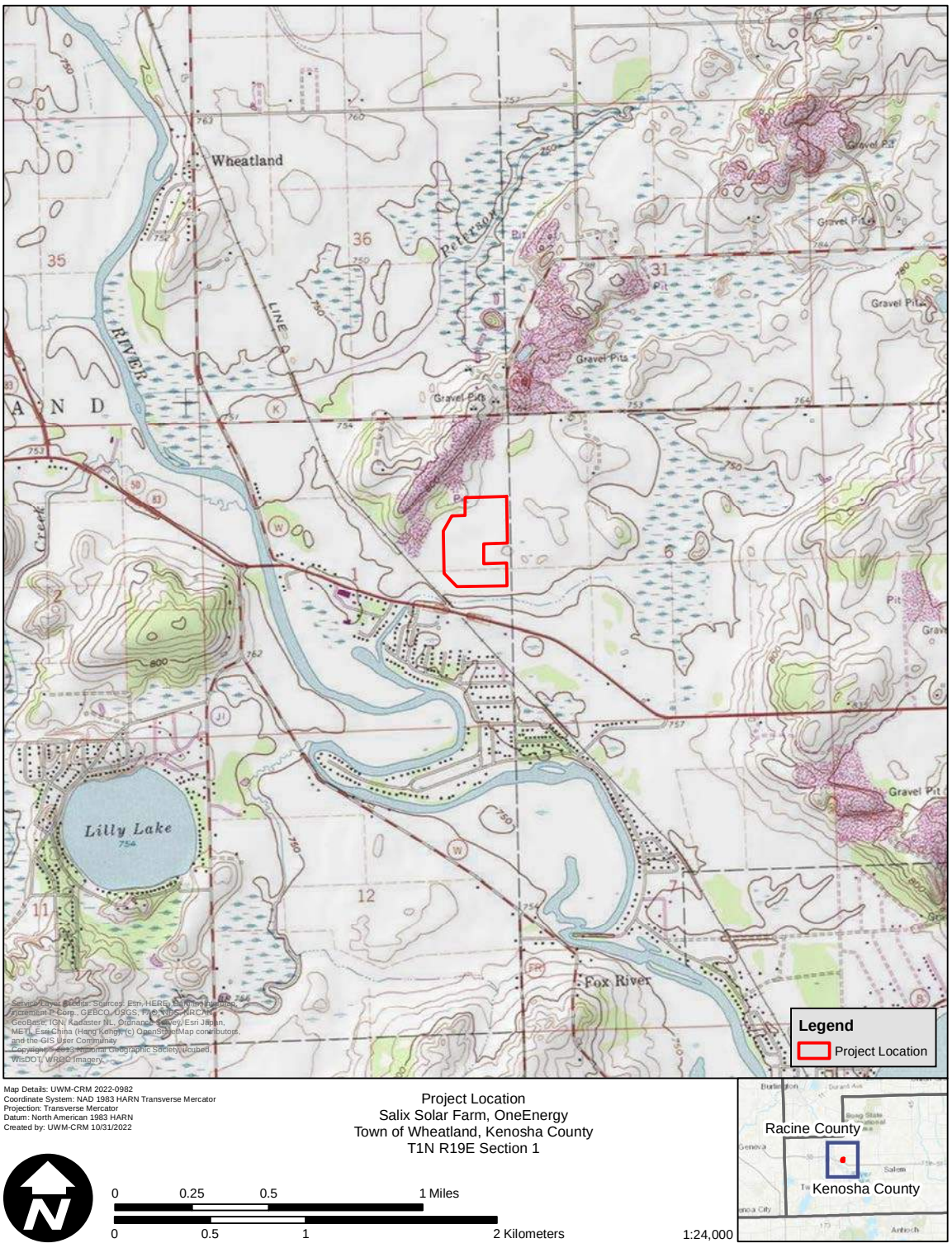
Table 1. Previously Recorded Archaeological Sites within One Mile of the Project Location.

State Site	Burial Site	Site name	Site Type	Culture
KN-0091	n/a	TOELLE-ROSE	Campsite/village, Workshop site	Late Woodland, Middle Archaic
KN-0097	n/a	WILSON #1	Campsite/village, Workshop site	Unknown Prehistoric
KN-0098	n/a	WILSON #2	Campsite/village, Workshop site	Late Archaic, Woodland
KN-0099	n/a	WILSON-VOSS	Workshop site, Campsite/village	Late Archaic, Middle Woodland
KN-0104	n/a	VOSS #2	Campsite/village, Workshop site	Unknown Prehistoric
KN-0105	n/a	VOSS #3	Workshop site, Campsite/village	Early Archaic, Early Woodland
KN-0106	n/a	VOSS #4	Workshop site, Campsite/village	Unknown Prehistoric
KN-0107	n/a	TOELLE #1	Campsite/village, Workshop site	Unknown Prehistoric
KN-0108	n/a	TOELLE #2	Workshop site, Campsite/village	Early Archaic
KN-0109	n/a	TOELLE #3	Workshop site, Campsite/village	Unknown Prehistoric
KN-0110	n/a	TOELLE #4	Campsite/village, Workshop site	Unknown Prehistoric
KN-0123	n/a	Wolford	Isolated finds	Unknown Prehistoric
KN-0376	n/a	Fox River Camp	Campsite/village	Historic Indian

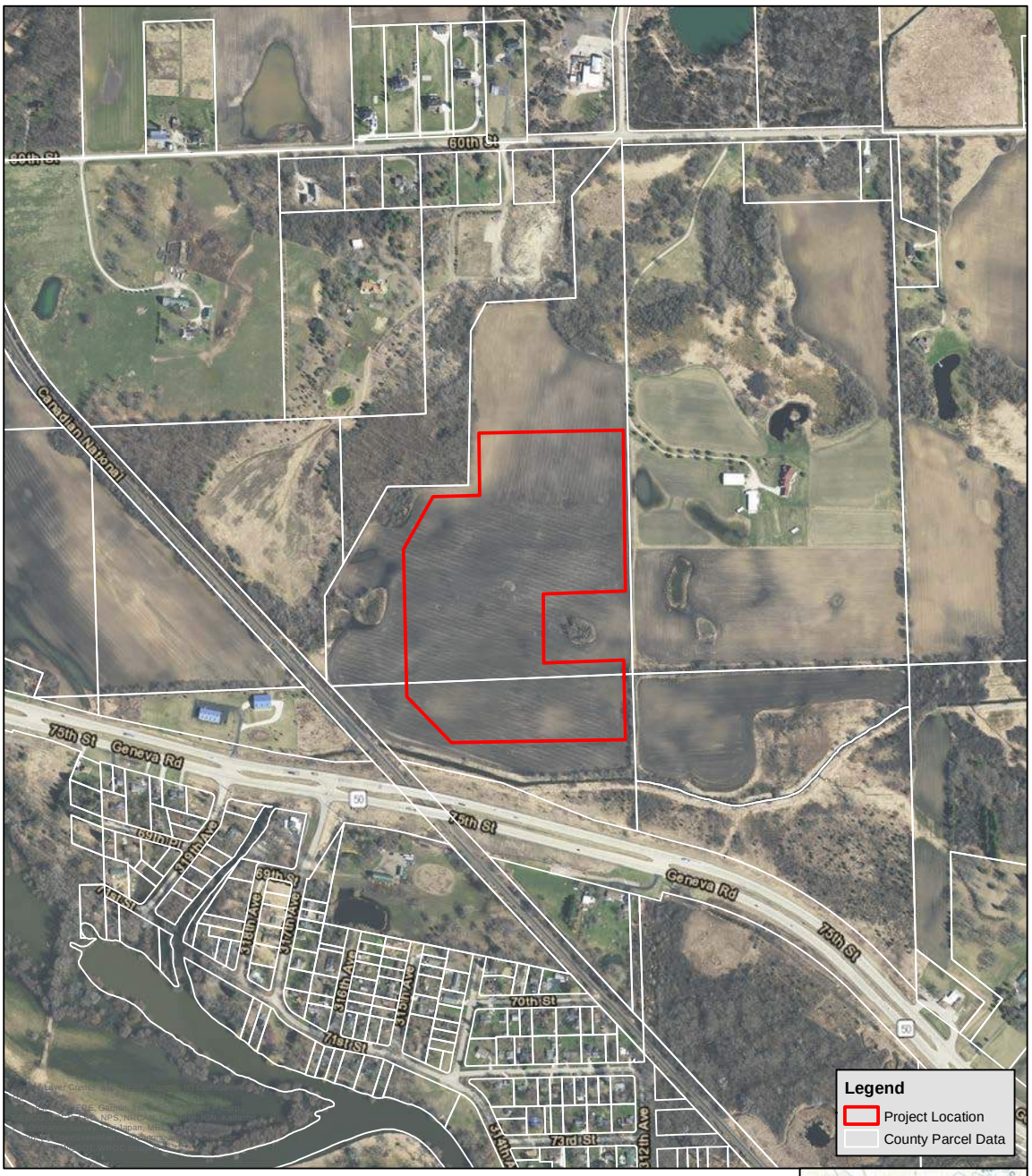
List of Attachments

Attachment 1. Project location (topographic)..... **5**
Attachment 2. Project location (aerial). **6**
Attachment 3. Previously surveyed historic properties relative to the project location (aerial)..... **7**
Attachment 4. Previously recorded archaeological sites within one mile of the project location (topographic). **8**
Attachment 5. Project location relative to previously recorded archaeological sites (aerial)..... **9**
Attachment 6. Project location relative to previous archaeological survey (aerial). **10**
Attachment 7. LIDAR hillshade overlay relative to project location (aerial)..... **11**
Attachment 8. 1937 aerial imagery of the project location (aerial). **12**
Attachment 9. Historic plat maps. **13**

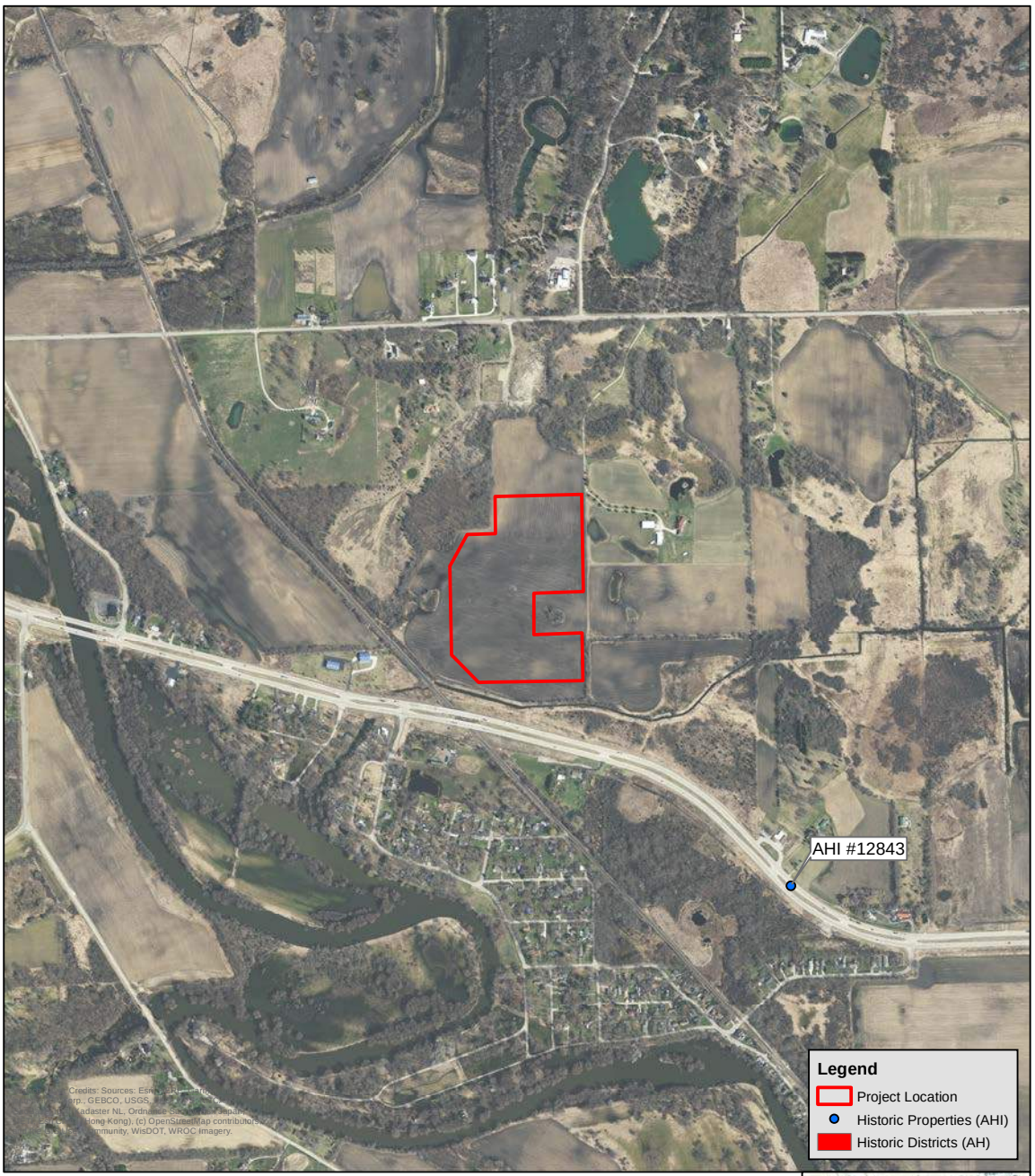
Attachment 1. Project location (topographic).



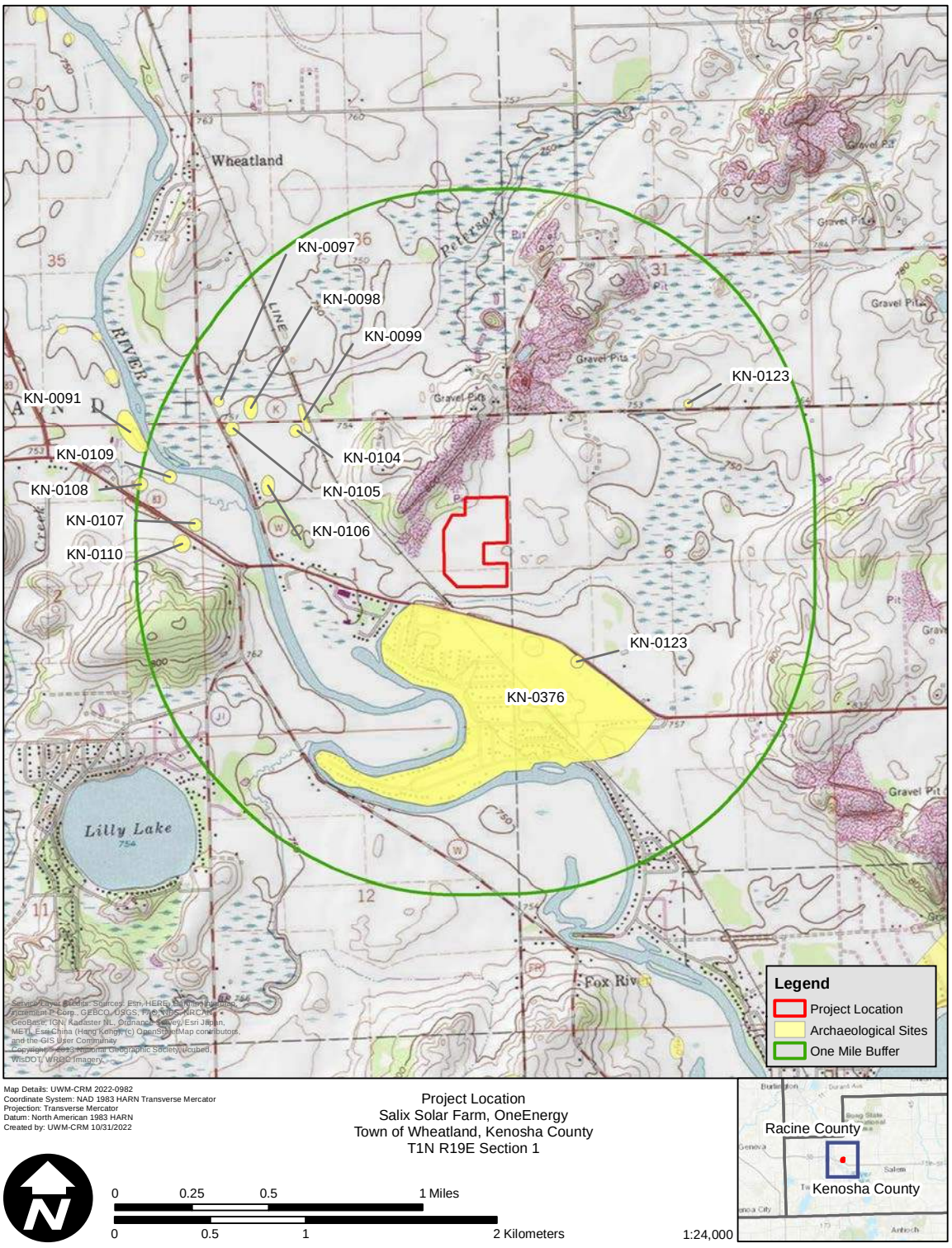
Attachment 2. Project location (aerial).



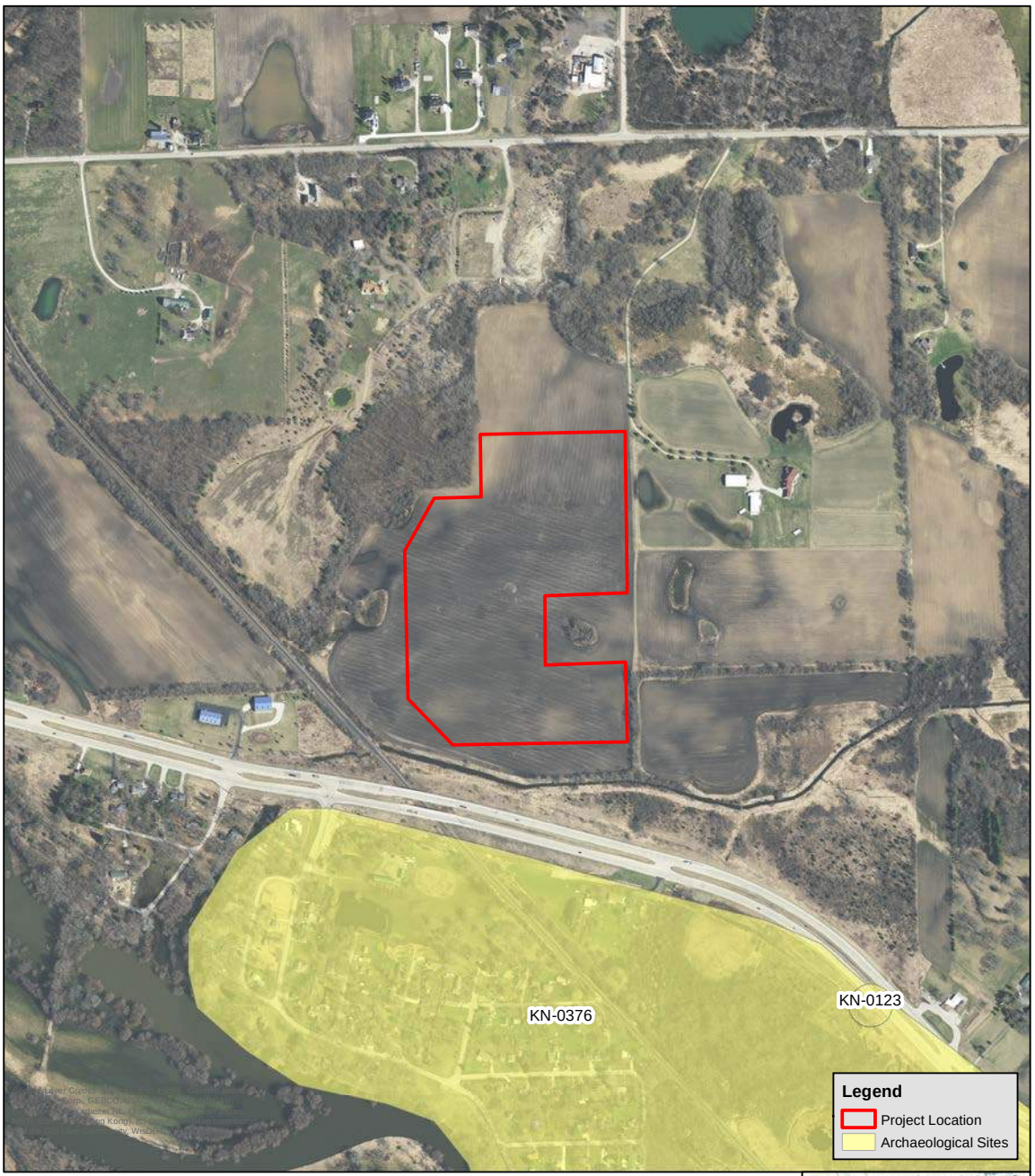
Attachment 3. Previously surveyed historic properties relative to the project location (aerial).



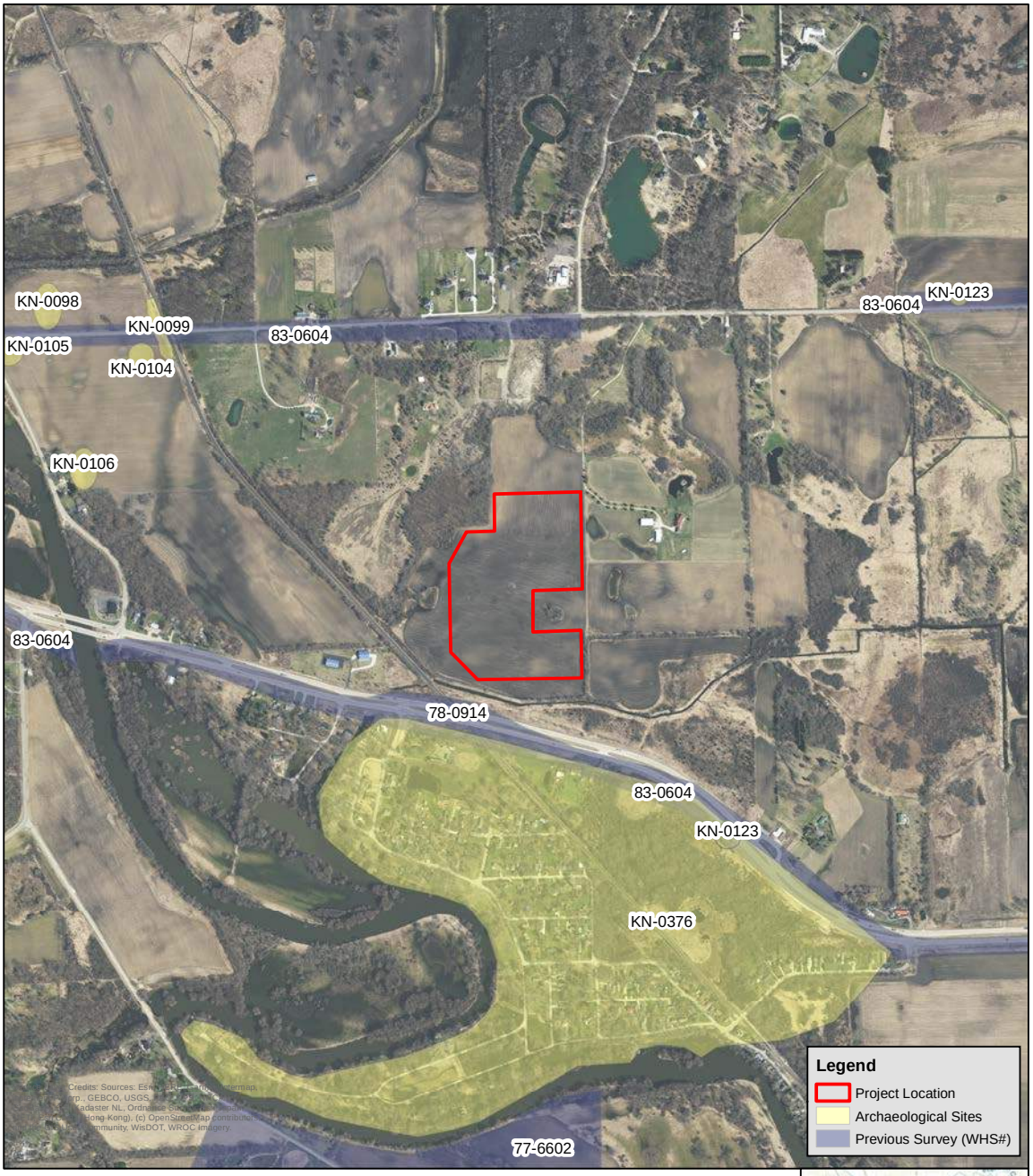
Attachment 4. Previously recorded archaeological sites within one mile of the project location (topographic).



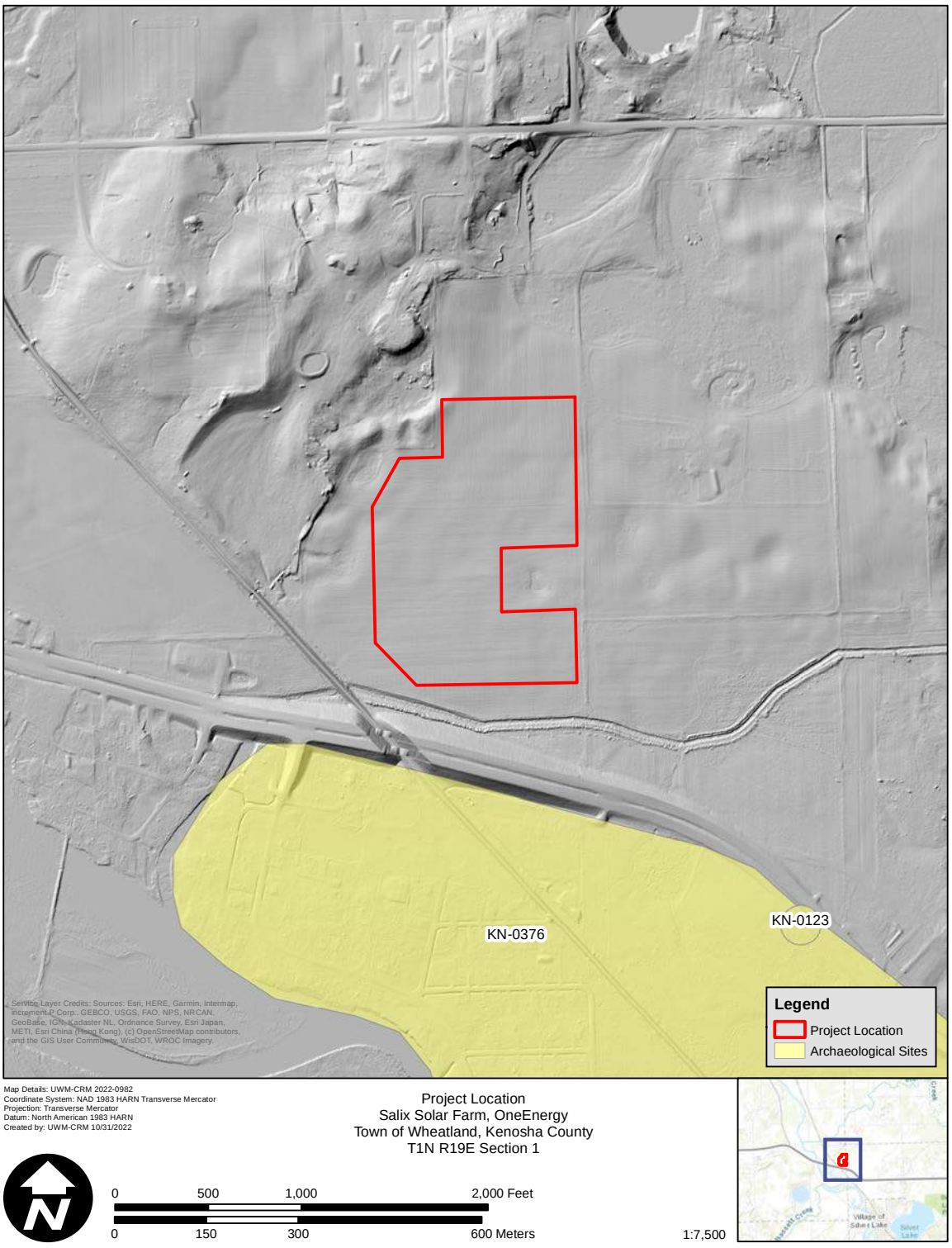
Attachment 5. Project location relative to previously recorded archaeological sites (aerial).



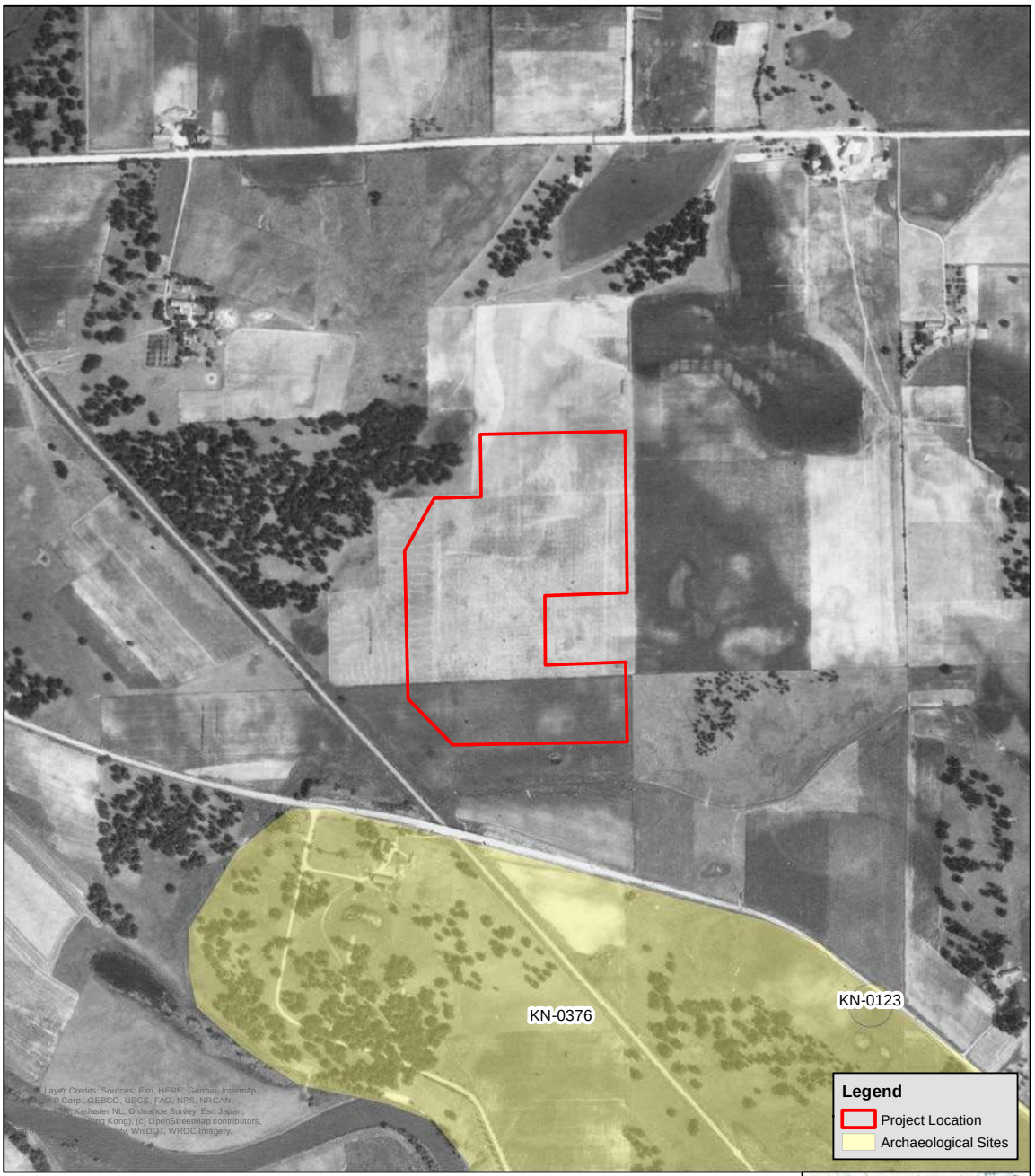
Attachment 6. Project location relative to previous archaeological survey (aerial).



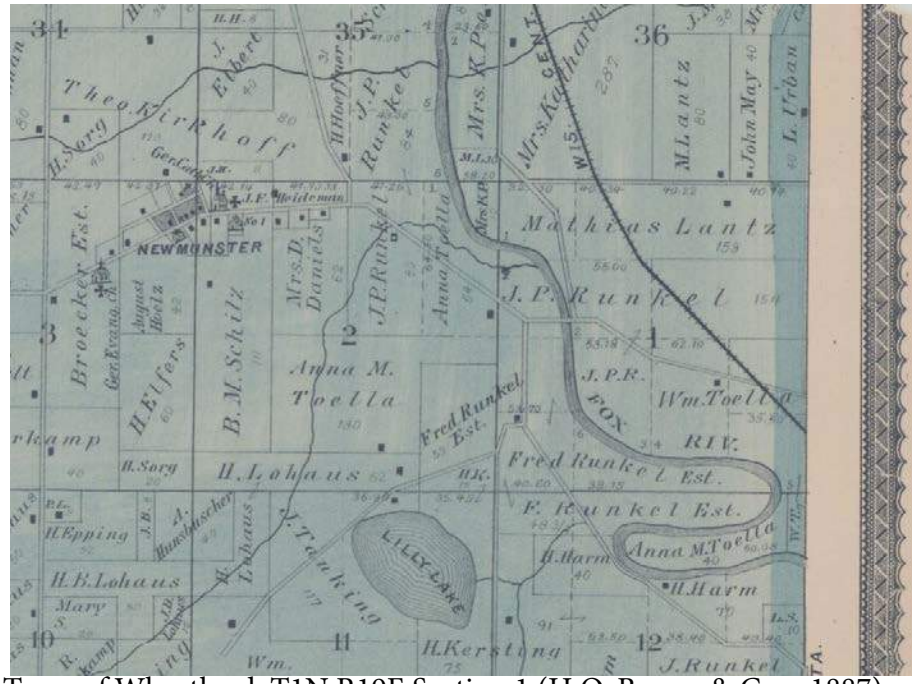
Attachment 7. LIDAR hillshade overlay relative to project location (aerial).



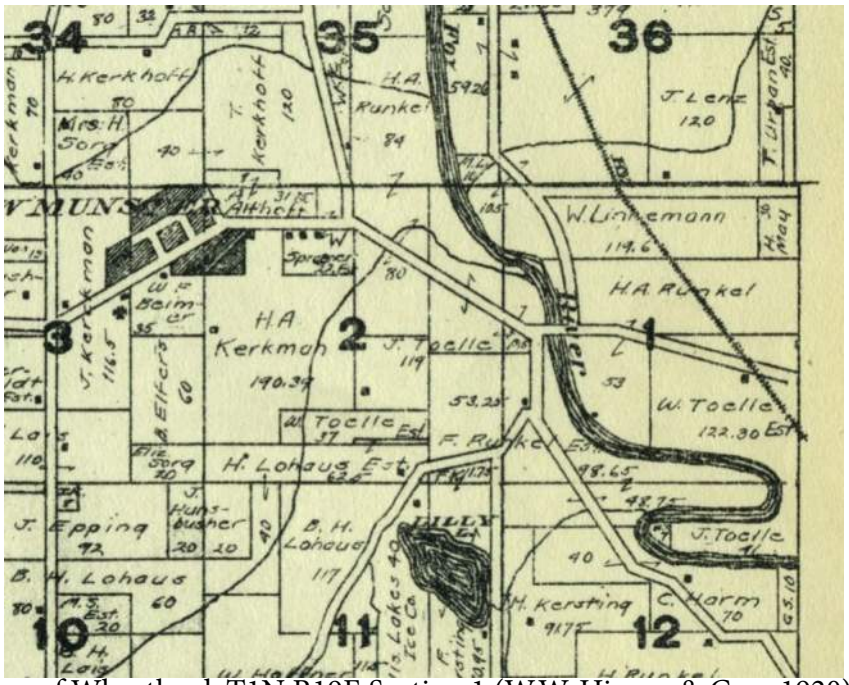
Attachment 8. 1937 aerial imagery of the project location (aerial).



Attachment 9. Historic plat maps.



Town of Wheatland, T1N R19E Section 1 (H.O. Brown & Co. - 1887)

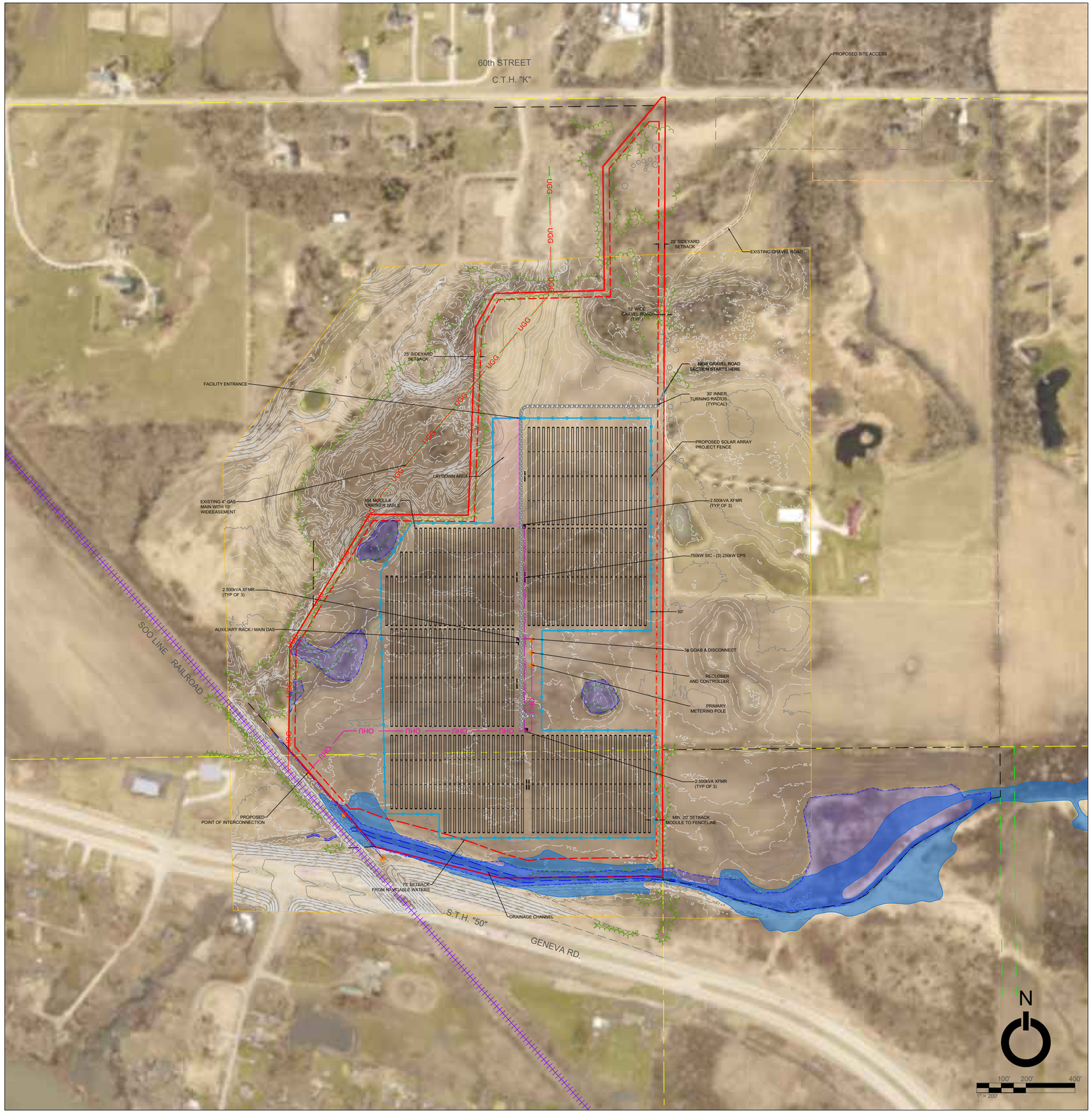


Town of Wheatland, T1N R19E Section 1 (W.W. Hixson & Co. - 1920)

SALIX SOLAR

60TH STREET, SALEM, KENOSHA COUNTY, WI 53168

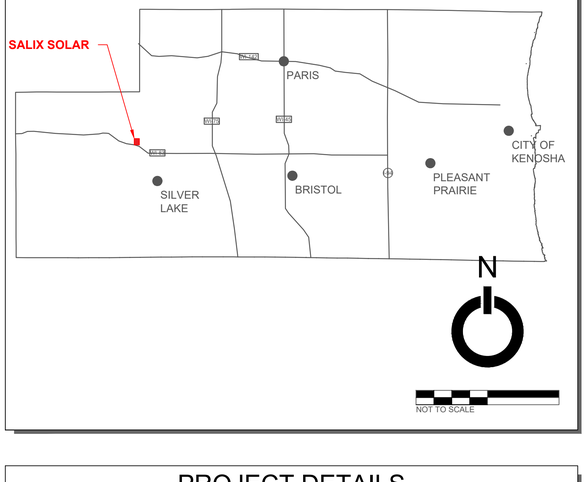
SOLAR PV PROJECT
9.009 MWDC / 7.500 MWAC



LEGEND

- PROPOSED GRAVEL ACCESS ROAD
- FLOODPLAIN
- DELINEATED WETLAND
- STAGING AREA
- PARCEL BOUNDARY
- PROJECT ZONING OFFSET
- PROJECT SECURITY FENCE
- NEIGHBOR PARCEL BOUNDARY EXISTING FENCE
- EXISTING RAILROAD
- EXISTING UTILITY LINE
- UGM UNDERGROUND GENERATION TIE
- OVERHEAD GENERATION TIE
- EXISTING UTILITY POLE
- NEW UTILITY POLE

KENOSHA COUNTY MAP



PROJECT DETAILS

THIS PROJECT CONSISTS OF THE DESIGN AND INSTALLATION OF 7.500 MWAC SOLAR PHOTOVOLTAIC SYSTEM. MODULES ARE TO BE MOUNTED IN A SINGLE AXIS TRACKERS, WHICH FOLLOW THE SUN FROM EAST TO WEST THROUGHOUT THE DAY OR MOUNTED AT A FIXED TILT FACING SOUTH.

SITE DETAILS:

PARCEL ID	A: 95-4-119-011-0600
	B: 95-4-119-014-0121
OWNER:	J&S REAL ESTATE CO LLC
ACREAGE:	A - 51.3; B - 16.5
EXISTING ZONE:	PARCEL A: A-1 AND A-2
	PARCEL B: A-1 ONLY

LAND USE SUMMARY:

TOTAL PARCEL AREA (ACRES):	67.80
TOTAL LEASED AREA (ACRES):	TBD
TOTAL FENCED AREA (ACRES):	33.59
GRAVEL ACCESS ROAD (ACRES):	0.56
STAGING AREA (ACRES):	1.03

DESIGN SUMMARY:

MODULE POWER:	550 W
MODULE COUNT:	15,704
ARRAY DC VOLTAGE:	1500 V
INVERTER SIZE:	250 kVA
INVERTER COUNT:	30
DC SIZE:	8.637 MWdc
AC SIZE:	7.500 MWac
DC/AC RATIO:	1.152
GROUND COVERAGE RATIO:	38.0 %
ASCE 7-22 GSL:	42 PSF
ASCE 7-22 WIND SPEED:	100 MPH

ADDITIONAL NOTES:

- BASEMAP DEVELOPED FROM ALTA SURVEY
- WETLAND BOUNDARIES SHOWN WERE FIELD DELINEATED BY EOR INC.
- 100 YEAR FLOODPLAIN IS VIA THE FEMA NATIONAL FLOOD HAZARD VIEWER

OneEnergy RENEWABLES
2003 Western Ave, Suite 225
Seattle, WA 98121
oneenergyrenewables.com
206 922 7072

PRELIMINARY

NOT FOR CONSTRUCTION

REVISION LOG

REV	DESCRIPTION	DATE	BY	CK'D	PM
1	5% LAYOUT FOR PERMITTING	08.22.2022	AK	IR	FH
2	30% LAYOUT FOR BIDDING	11.03.2022	AK	IR	PM

SALIX SOLAR

60TH STREET, SALEM, KENOSHA COUNTY
WI 53168

SHEET TITLE: DEV LAYOUT

DATE: 11.03.2022

PM: PM ENG: IR

SHEET NO: D-100