SUNVEST SOLAR LLC

www.sunvest.com

June 27, 2025

Keri Nusbaum
Piatt County Zoning Officer
101 W. Washington St. Room 105
Monticello, IL 61856

RE: Commercial Solar Energy Facility – SV CSG Madden Creek, LLC

Ms. Nusbaum,

SunVest Solar, LLC, doing business as SV CSG Madden Creek, LLC submits the following information for consideration by Piatt County.

Special Use Permit Application to allow a Commercial Solar Energy Facility
Survey
Project Summary
Proof of Site Control & Legal Description
Site Plan
FEMA / FIRM
NRI Soil Report
Vegetative Management Plan
IDNR EcoCAT
USFW IPaC
Geotechnical Report with Engineered Stamp, Pile Load Testing, Drain Tile Exploration
Agricultural Impact Mitigation Agreement
Signed Interconnection Agreement
Survey and Topography
Decommissioning Plan
Protected Lands Map

Thank you and please let me know if you have any comments, questions or request additional information.

Regards,

Ryan Fulton
Project Developer
ryanf@sunvest.com
618-406-1562

APPLICATION FOR SPECIAL USE PERMIT

Attention: Piatt County, IL Zoning Officer
Date:

I hereby apply to the Zoning Board of Appeals of Piatt County, Illinois for a Special Use Permit, as authorized by Article IV A2d, of the Zoning Ordinance of Piatt County, Illinois dated July 13, 2004 as updated and amended, and in support thereof submit the following information:

1. Description of the property that is to be affected:
   Pin# 02-12-20-006-013-01 & 02-12-20-006-013-02

   Township: Blue Ridge

   Address: 1463 E 2850 North Rd. Mansfield, IL 61854

   Legal Description: Part of Lot 2 SE ¼ of Section 12, Township 20 N, Range 6 East Of the 3rd Principal Meridian, Piatt County, Illinois

2. Current Owner(s) of subject property: (if corporation, names and addresses of all board members must be provided)
   Kevin Cappo & Patricia Cappo, Trustees of Land Trust 5061 under provisions of trust agreement dated December 12, 1995.
3. Present Zoning: Ag
4. Proposed Change(s) to the Use of Property: Solar Energy System
5. Proposed Construction Description: None Solar Energy System

6. Names of adjacent land owners (Complete information required by Applicant):
   See Attached
7. Special Use Permit shall run with the Land or the Applicant? (Applicant unless special circumstances) With the Land

8. Fee Required: $300(under no condition shall said sum or any part thereof be refunded).

9. Attach a plat showing property to be used and location of any structures and proposed structures. See Attached

We being the applicant(s) and owners(s) hereby request that a special use be granted for the purpose of:

Applicant: SV CSG Madden Creek, LLC

Print Name	Signature
Ryan Fulton	

Address	Phone	Email
330 W State St. Suite 1 Geneva, IL 60134	618-406-1562	ryanf@sunvest.com

SUNVEST SOLAR LLC

www.sunvest.com

PROJECT SUMMARY

SV CSG Madden Creek, LLC, is requesting a Special Use Permit to construct a 5.0 MW community solar facility on approximately 37.78 acres located at 1463 E 2850 North Rd. Mansfield, IL 61854. The project footprint will span two parcels listed as PIN 02-12-20-006-013-01 and 02-12-20-006-013-02. Access to the site will be through an new commercial entrance on the southeast side of the property off N 1500 East Rd. A temporary construction laydown area and off-street parking will be provided for vehicles inside of the project area. Additional details are provided below and in supporting documentation.

(i) The project will have a nameplate rating of 5MW-ac
(ii) Potential equipment manufacturers include: Q cell modules, SMA inverters, Array Technology racking, Eaton transformers. – Subject to Chance with Market Availability
(iii) The project is expected to utilize close to 11,000 solar modules (panels)
(iv) The typical maximum height of a panel at full tilt is between 8-14' feet.
(v) There will be an equipment pad with a series of inverters to convert the electricity from DC to AC, a panel board and transformer to increase the voltage and connect to Ameren's existing electrical circuit running along the eastern property line.
(vi) Solar Arrays are generally quite during the day and near silent at night. The typical inverter has an operating noise of 69db at full power at a distance of 1 meter, dropping off quickly over distance.
(vii) The project company SV CSG Madden Creek, LLC is owned by SunVest New Energy, LLC.

PROJECT FEATURES

Site improvements will consist of photovoltaic solar panels installed on a single axis tracking system. The tracking system will be supported by galvanized steel beams, pile driven 8 – 15' into the ground. No concrete is anticipated to be used for the support system. The panels will be mounted on rows of trackers running North-South. Each day the panels will rotate East to West, tracking the sun during the day and return to their stowed position at night. The maximum height of the panels at full tilt is approximately 14' tall. During peak production hours, the panels are in their flat position. An access drive will provide year-round ingress/egress to all major equipment throughout the array. The solar facility will be screened by a row of evergreen and dogwood along the northern and eastern property lines. In addition, a 7-8' tall woven agricultural "Knot" fence, with a locked gate for security and safety. Excluding the fence, a minimum 50' setback to all components will be provided along all property lines and a 150' setback from residential dwellings of non-participating properties.

The entire site will be covered with diverse native vegetation specifically designed for this project. The vegetation will require minimal maintenance once established, and create habitat beneficial to bees, other insects, birds and other animal species.

Wooden electric support poles will be needed to transfer the power generated from the project to the local distribution lines located in the southeast corner of the project. These poles will be approximately 35' tall.

STORMWATER RUNOFF MANAGEMENT

Post construction management is developed to meet the spirit and intent of the performance standards set forth by the IDNR and Piatt County. The project will create an expansive densely vegetated buffer to all surrounding properties. Post construction storm water runoff is typically managed by means of this densely vegetated meadow / prairie planting under and surrounding all impervious areas. The solar panels will have a minimum ground clearance of 30-36".

CONSTRUCTION ACTIVITIES

It is anticipated that 10 to 20 full-time employees will be on site in the early stages of construction. This will reduce to a team of approximately 10 members toward the end of the construction activities. Typically, there will be a vehicle for each worker, approximately three (3) small vehicles for transferring equipment around the site, and temporary equipment needed to perform different construction tasks. Hours of operation will be within County Ordinance guidelines. The total construction is anticipated to take approximately 24-32 weeks. The first three (3) weeks will consist of civil work including access road and pile driving with the balance of the construction timeline used for erecting the racking, panels and electrical equipment. We anticipate starting construction as early as November 2025, possibly Spring 2026 to meet our Interconnection Service Date with Ameren Electric.

FACILITY SAFETY

The facility will be surrounded by a 7-8' tall woven agricultural "Knot" fence with a locked gate to prevent access from unauthorized persons. All major electrical equipment will be individually locked and warning signage is provided to identify specific dangers.

LIGHTING

No interior lighting is planned at this facility.

OPERATIONS & MAINTENANCE

The site will be monitored off-site via a Supervisory Control and Data Acquisition (SCADA) system and an internet connection. The site will typically be visited two times per year for

preventative maintenance of the electrical system. This will be limited to a crew of 1-4 electrical personnel in passenger vehicles performing routine maintenance checks and replacing equipment as needed. Corrective maintenance will be dispatched through our central office on an as needed basis.

VEGETATIVE MAINTENANCE

Once the native meadow / prairie vegetation is established, maintenance of the plantings will occur bi-annually and will consist of mowing and spot treating noxious weeds. Additional seeding will be done on an "as needed" basis to help maintain optimal vegetative cover. More information can be found in our Vegetative Management Plan.

APPLICANT INFORMATION

SV CSG Madden Creek, LLC – Operated by SunVest Solar, LLC. SunVest is a Mid-West based Solar Developer headquartered in Chicago, with Development Offices in Geneva, IL. SunVest started as a residential solar developer in Wisconsin and has grown to own and operate systems from Hawaii to Maine. The primary focus is on Community Solar and Utility Facing projects. Since 2019, SunVest has consistently been a market leader in developing Community Solar throughout Illinois. SunVest aims to build, own and operate the project long term.

APPLICANT CONTACT INFORMATION

SV CSG Madden Creek, LLC

c/o SunVest Solar, LLC

Attn: Ryan Fulton Project Developer

618-406-1562

330 W. State St. Suite 1

Geneva, IL 60134

PROPERTY OWNER

Kevin Cappo and Patricia Cappo as Trustees of Land Trust Number 5061 under the provisions of a trust agreement dated December 12, 1995

633 River Drive

Munster, IN 46321

381522
RECORDED ON:
10/27/2023 10:56:51 AM
RECORDING FEE 75.00
RHSP FEE 18.00
PIATT IL COUNTY RECORDER
JENNIFER HARPER, CLERK RECORDER
BY: SABINA DEPUTY

This instrument was prepared by,
and the original should be returned to:

SV CSG Madden Creek
c/o SunVest Solar, Inc.
Attn: Tim Polz
N27 W24025 Paul Ct., Suite 100
Pewaukee, WI 53072
(262) 547-1200

MEMORANDUM OF SOLAR OPTION AND LAND LEASE

THIS MEMORANDUM OF SOLAR OPTION AND LAND LEASE ("**Memorandum**") is entered into this 14 day of September, 2023 by between Chicago Title Land Trust, f/k/a Busey Trust Company, its successor or successors, as Trustee under the provisions of a trust agreement dated December 12, 1995, known as Trust Number 5061 ("**Owner**" or "**Grantor**"), and SV CSG Madden Creek, LLC, a Delaware limited liability company, and its successors and assigns ("**Project Company**" or "**Grantee**").

RECITALS:

A. Owner and Project Company have entered into a certain Solar Option and Land Lease dated September 14th, 2023 ("**Lease Agreement**"), whereby Owner, upon Project Company's exercise of the Option, has agreed to (i) lease to Project Company a portion of the real property legally described in Schedule A attached hereto ("**Property**"), such portion is more particularly described in Schedule B attached hereto ("**Leased Premises**") for Solar Energy Purposes, and (ii) to grant certain easements upon the Leased Premises (or, as applicable, the Property), including an Access Easement, a Transmission Easement, a Temporary Construction Easement, and a Solar Easement, for Solar Energy Purposes (collectively, the "**Easements**").

B. The Parties wish to give notice of the existence of such Lease Agreement.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the Parties hereto agree as follows:

1. Owner and Project Company have entered into the Lease Agreement dated Sep. 14, 2023 ("**Effective Date**"), in which Owner has granted to Project Company an Option to lease the Leased Premises. Pursuant to the Lease Agreement, Project Company has the exclusive right to use the Leased Premises for Solar Energy Purposes, together with certain other

rights related to the Property, all as more fully described in the Lease Agreement. As used in this Memorandum, "**Solar Energy Purposes**" means converting solar energy into electrical energy, and collecting and transmitting the electrical energy so converted, together with any and all activities related thereto.

2. The initial term of the Lease Agreement commences on the Effective Date and expires on the fourth anniversary of the Effective Date ("**Option Period**"). Throughout the Option Period, Project Company shall have the right to conduct certain studies and tests on the Property, including extracting soil samples, performing geotechnical tests, performing environmental assessments, surveying the Leased Premises, and conducting such other tests, studies, inspections and analyses on the Property as Project Company deems necessary, useful or appropriate.

3. Upon Project Company's delivery to Owner of written notice of its election to exercise the Option ("**Option Notice**"), the Lease Agreement shall automatically be extended for the Operating Term. The Operating Term of the Lease Agreement shall commence upon the expiration date of the Option Period, or upon such earlier date specified by Project Company in the Option Notice ("**Operating Term Commencement Date**") and shall expire on the 25th anniversary of the Commercial Operation Date, as defined therein, unless terminated earlier in accordance with the terms of the Lease Agreement ("**Operating Term**"). In addition, Project Company has a right to extend the Operating Term for two (2) additional periods of five (5) years each upon written notice to Owner (the "**Renewal Terms**"). The Option Period, and, as applicable, the Operating Term and any Renewal Term, shall collectively constitute the "**Term**" of the Lease Agreement.

4. Owner shall have no ownership or other interest in any Solar Facilities installed on the Leased Premises by Project Company and Project Company may remove any or all Solar Facilities at any time.

5. Upon exercising the Option, Owner has agreed to grant Project Company a solar easement ensuring access to direct sunlight, as more particularly described in the Agreement ("**Solar Easement**").

6. Project Company and any successor or assign of Project Company shall at all times have the right, without need for Owner's consent, to do any of the following, conditionally or unconditionally, with respect to the Lease Agreement or to all or any portion of the Leased Premises: grant co-leases, separate leases, subleases, easements, licenses or similar rights (however denominated) to one or more third parties; or sell, convey, assign, lease, mortgage, encumber or transfer to one or more third parties or to any affiliate of Project Company's the Lease Agreement, or any right or interest in the Lease Agreement, or any or all right or interest of Project Company in the Leased Premises or in any or all of the Solar Facilities that Project Company or any other party may now or hereafter install on

the Leased Premises; provided, that (i) any such assignment, transfer or conveyance shall not be for a period beyond the Term; (ii) the assignee or transferee shall be subject to all of the obligations, covenants and conditions applicable to Project Company; and (iii) Project Company shall not be relieved from liability for any of its obligations under the Lease Agreement by virtue of the assignment or conveyance unless Project Company assigns or conveys all of its interests under the Agreement to the assignee or transferee, in which event Project Company shall have no continuing liability.

7. Upon exercising the Option, the Lease and Easements granted pursuant to the Agreement, including the Solar Easement, and any other easements and rights granted Project Company therein shall run with the land. The Agreement shall inure to the benefit of and be binding upon Owner and Project Company and, to the extent provided in any assignment or other transfer under the Agreement, any assignee or Project Company, and their respective heirs, transferees, successors and assigns, and all persons claiming under them.

8. This Memorandum has been executed and delivered by the Parties for the purpose of recording and giving notice of the lease and easement rights in accordance with the terms, covenants and conditions of the Agreement.

9. The terms and conditions of the Agreement are incorporated by reference into this Memorandum as if set forth fully herein at length. In the event of any conflict between the terms and provisions of the Agreement and this Memorandum, the Agreement shall control. Any capitalized term used in this Memorandum but not defined herein shall have the meanings set forth in the Agreement.

Signature pages follow

IN WITNESS WHEREOF, the undersigned have caused this Memorandum to be executed as of the Effective Date.

OWNER (Grantor)

Land Trust Number 5061 under the provisions of a trust agreement dated December 12, 1995,

By: Kevin A. Cappo

Name: Kevin Cappo

Title: Trustee

By: Patricia Cappo

Name: Patricia Cappo

Title: Trustee

STATE OF IN)
) ss.
COUNTY OF Lake)

This record was acknowledged before me on this 24th day of August, 2023, by Kevin and Patricia Cappo, trustees of Land Trust 5061 under the provisions of a trust agreement dated December 12, 1995, its successor or successors, known as Trust Number 5061, a trust established under the laws of Illinois.

Witness my hand and official seal.

[*SEAL*]

Notary Public

My commission expires: Jan. 26 2025

Printed Name: Susan W. Wood

SUSAN W. WOOD
Lake County
My Commission Expires
January 26, 2025

IN WITNESS WHEREOF, the undersigned have caused this Memorandum to be executed as of the Effective Date.

PROJECT COMPANY (Grantee)

SV CSG Madden Creek, LLC,
a Delaware limited liability company

By: SV Development, LLC,
a Delaware limited liability company

By: SunVest Solar, LLC,
a Delaware limited liability company, its sole member

By: _____
Name: Timothy Polz
Title: Authorized Individual

STATE OF ILLINOIS
) ss.
COUNTY OF KANE

This record was acknowledged before me on this 14TH day of SEPTEMBER, 2023, by TIM POLZ, as an Authorized Individual of SunVest Solar, LLC, a Delaware limited liability company.

Witness my hand and official seal.

[*SEAL*]

OFFICIAL SEAL
PATRICK DALSETH
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES:09/11/24

_____
Notary Public

My commission expires: 9/11/2024

Printed Name: PATRICK DALSETH

SCHEDULE A
DESCRIPTION OF THE PROPERTY

Parcel No.(s): 02-12-20-006-013-01 (Alt PIN: 0412477005) and 02-12-20-006-013-02 (Alt PIN: 0412477006)

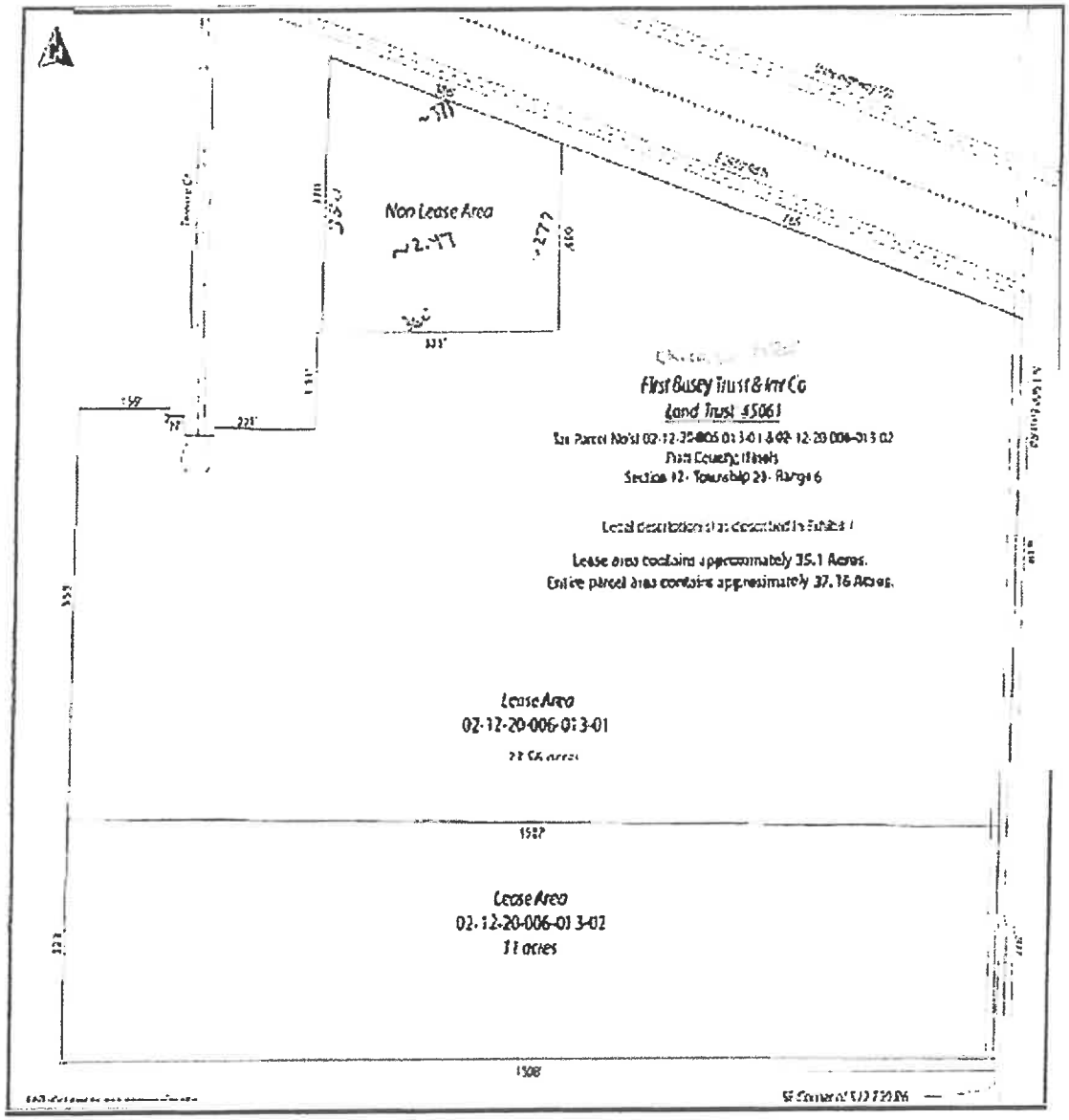
Lot 2 of the Southeast Quarter (SE ¼) of Section 12, Township 20 North, Range 6 East of the Third Principal Meridian, according to the survey and plat shown in Plat Record 1, on Page 66, of the records in the Recorder's Office, in Piatt County, Illinois, situated in Piatt County, Illinois, except the South eleven (11) acres thereof and except Lots 1, 2, 3, 4, 9, 10, 11, & 12 of Sunrise Terrace Subdivision, part of Section 12, Township 20, Range 6 East of the Third Principal Meridian located in Piatt County, Illinois.

The South eleven (11) acres of Lot 2 of the Southeast Quarter (SE ¼) of Section 12, Township 20 North, Range 6 East of the Third Principal Meridian, according to the survey and plat shown in Plat Record 1, on Page 66, of the records in the Recorder's Office, in Piatt County, Illinois, situated in Piatt County, Illinois.

The Property contains approximately 37.16 acres.

SCHEDULE **B**

DESCRIPTION OF THE LEASED PREMISES



SUNVEST SOLAR LLC

www.sunvest.com

NEIGHBORING PROPERTY OWNERS:

Barnhart Keller Partnership
PIN: 02-13-20-006-001-09
PO Box 702
Mahomet, IL 61853

Robert Wright, Trustee
PIN: 02-13-20-006-004-01
1336 Dickens Ct.
Monticello, IL 61856

John W. Scott Trust
PIN 02-12-20-006-014-00
4013 Danbury Dr.
Champaign, IL 62821

Kevin Augustine, Trustee
2806 Sunrise Terrace
Mahomet, IL 61853

Christine Gillmore
2804 Sunrise Terrace
Mahomet, IL 61853

Gerrib and Chrissy Douglas
2805 Sunrise Terrace
Mahomet, IL 61853

Matthew Cheek and Kelly White
2808 Sunrise Terrace
Mahomet, IL 61853

Scot Dobbins
2811 Sunrise Terrace
Mahomet, IL 61853

Catherine Howe Hunt
PIN 02-12-20-006-002-08
3516 Mcnair Way
Lexington KY, 40513

SUNVEST
SOLAR LLC

www.sunvest.com

Ameren Illinois Corporation
PIN 02-12-20-006-012-00
Attn: Thomas Carron
PO Box 66149
Saint Louis, MO 63166

Champaign County

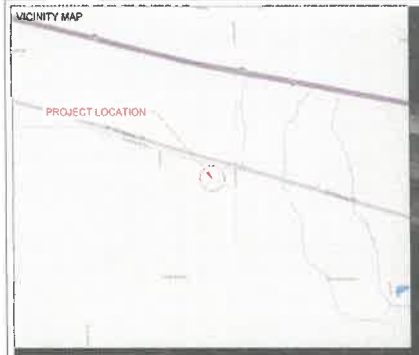
Joshua and Karen Hansen
2216 County Road 0E
Mahomet, IL 61853

Teri Talach
2210 County Road 0E
Mahomet, IL 61853

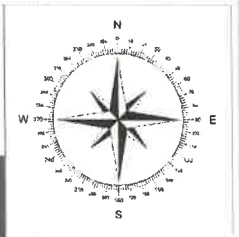
David Couch and Beth Ann Sweard-Couch
2206 County Road 0E
Mahomet, IL 61853

Christian Doenitz
PID 15-13-07-300-016
125 County Road 2300 N
Mahomet, IL 61853

VICINITY MAP



SPACE FOR PE STAMP:



SHEET NOTES:

UTILITY POLES ARE SHOWN FOR INDICATING LOCATIONS ONLY. SPACING BETWEEN POLES, PHYSICAL PROTECTION BARRIER FOR SWITCHBOARDS, ETC. WILL BE ADDED IN THE DRAWINGS PREPARED FOR THE CONSTRUCTION DOCUMENTS

LEGEND

- COMBINED SETBACKS:50' REAR & SIDE YARD SETBACK SETBACK; 100' FRONT YARD SETBACK
- PARCEL BOUNDARY (PID: 02-12-20-006-013-01, 02-12-20-006-013-02) LO: FIRST BUSEY TRUST & INV CO, 37.78 ACRES
- AREA M WETLAND DELINEATION
- EXISTING OVERHEAD UTILITY LINE (AMEREN) SUBSTATION/ POI FEEDER: MANSFIELD/P18-103 VOLTAGE: 12.47 kV
- PROPOSED OVERHEAD LINE EXTENSION
- PROPOSED NEW UNDERGROUND ELECTRICAL LINE
- 2 ROWS OF SCREENING EVERGREEN TREES & DOGWOOD SPACED 8' O.C.
- 1 ROW OF SCREENING EVERGREEN TREES & DOGWOOD SPACED 8' O.C.
- ARRAY FENCE LINE (~4692', ~26.11 ACRES)
- 15' ACCESS ROAD (~981', 14,715 SQFT)
- APPROXIMATE DRAIN TILE LOCATION
- LEASE AREA (37.78 ACRES)
- LAYDOWN YARD (10,000 SQFT)
- UTILITY EASEMENT (50' X 62', 3100 SQFT)
- LIMITS OF PERMITTING (37.78 ACRES)
- EXISTING SCREEN TO BE MAINTAIN

RAILROAD
OLD US HWY 150
EXISTING VEGETATION TO BE USED FOR NATURAL SCREENING. NO PARTS OF THE SOLAR SYSTEM OR FENCE WILL IMPACT EXISTING TREES. IN THE EVENT THIS VEGETATION DIES OVER THE COURSE OF PROJECT SERVICE LIFE, THE PROJECT OWNER WILL INSTALL & MAINTAIN NEW VEGETATIVE SCREENING IN THIS AREA
50' SIDE YARD SETBACK
E NEWTON ST
100' FRONT YARD SETBACK
RESIDENTIAL DWELLINGS ON NON PARTICIPATING PROPERTIES (OFFSET 150')
WETLAND DELINEATION
EXISTING 3-PHASE DISTRIBUTION LINE AMEREN
50' REAR YARD SETBACK
PARCEL BOUNDARY
~10,000ft² TEMPORARY LAYDOWN AREA
RESIDENTIAL DWELLING ON NON PARTICIPATING PROPERY (OFFSET 150')
ELECTRICAL EQUIPMENT CONCRETE PAD A INCLUDING SWITCHGEAR, AC COMBINER BOXES AND AUX XFMR: READILY ACCESSIBLE
MV TRANSFORMER A: READILY ACCESSIBLE
12' X 25' EQUIPMENT STORAGE AREA
50' REAR YARD SETBACK
MV TRANSFORMER B: READILY ACCESSIBLE
ELECTRICAL EQUIPMENT CONCRETE PAD B: INCLUDING SWITCHGEAR, AC COMBINER BOXES, AND AUX XFMR: READILY ACCESSIBLE
APPROXIMATE DRAIN TILE LOCATION
69 MODULE TRACKER (50)
46 MODULE TRACKER (31)
92 MODULE TRACKER (52)
23 MODULE TRACKER (9)
POINT OF INTERCONNECTION
UTILITY RECLOSER
PRIMARY BILLING METER
CUSTOMER GOAB DISCONNECT / CUSTOMER METERING
RISER POLE
LIMITS OF PERMITTING COVERS ENTIRITY OF PARCELS (PID: 02-12-20-006-013-01, 02-12-20-006-013-02); 37.78 acres

NEW ENERGY EQUITY

PROJECT ENTITY: GV CSG Madden Creek, LLC

NEW ENERGY EQUITY, LLC
2530 RIVA ROAD, SUITE 200
ANNAPOLIS, MD 21401
NEWENERGYEQUITY.COM
443-287-5012

PROJECT ADDRESS
1480 E 2850 NORTH RD
MAHOMET, IL 61853

LAT: 40.20176511
LONG: -88.46685889

SYSTEM SPECIFICATIONS

SYSTEM SIZE DC	5.1625 MW
SYSTEM SIZE AC	4.998 MW
DC/AC RATIO	1.231
AZIMUTH	180°
TILT	+/- 52°
MODULE COUNT	3844
MODULE TYPE	HANWA Q.TRON XL-G2 SERIES - 625
MODULE STC RATING	625 W
INVERTER COUNT	34
INVERTER TYPE	SMA SUNNY HIGHPOWER PEAK-3 150kW
INVERTER POWER	POWER LIMITED TO 147kW
RACKING	TBD
MONITORING	ALSO ENERGY

DESIGN CRITERIA

MIN/MAX TEMP.	-17°C / 34°C
WIND SPEED (ASCE 7-16)	105 MPH
BUILDING CATEGORY	I
EXPOSURE CATEGORY	C
GROUND SNOW LOAD	50 PSF
BUILDING HEIGHT	0'-0"

OTHER NOTES
CASE NUMBER: DER-33716
NO POSITION, DISTANCE, OR CLEARANCE ISSUES WITH OVERHEAD ELECTRIC SERVICE LINES OR OTHER UTILITIES IN RELATION TO THE PV PANELS.

24/7 UNESCORTED KEYLESS ACCESS PROVIDED FOR ALL UTILITY ENERGY EQUIPMENT INCLUDING THE METERS AND AC DISCONNECT.

INTERCONNECTION TYPE: PRIMARY

REVISIONS

#	DESCRIPTION	BY	DATE
0	ORIGINAL DESIGN	JAT	8/30/2021
1	JINKO 525 2MW AC DESIGN	MPH	1/11/2022
2	1.849 DC/AC	MPH	1/13/2022
3	CUP PACKAGE	MPH	2/2/2022
4	COMBINED ARRAYS	FGL	11/28/2023
5	WETLANDS INSIDE FENCE	FGL	12/27/2023
6	INCREASE AC TO 4MW	MPH	1/11/2024
7	HANWHA 625 REDESIGN	MT	12/6/2024
8	UPDATED WETLAND	AMJ	3/13/2025
9	ALTA	AMJ	4/11/2025
10			
11			

PROJECT NAME
MADDEN CREEK

DRAWING TITLE
SITE PLAN

SCALE
1" = 100'
0 1" 2"

SHEET
ALTA 1

DRAWING SCALE ACCURATE WHEN THIS PAGE IS PRINTED ON 24"x36" PAPER.

National Flood Hazard Layer FIRMette

FEMA

88°28'16"W 40°12'21"N

88°27'39"W 40°11'53"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/4/2025 at 3:49 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Piatt County, Illinois

May 13, 2025

Contents

Preface 2
How Soil Surveys Are Made 5
Soil Map 8
Soil Map 9
Legend 10
Map Unit Legend 11
Map Unit Descriptions 11
Piatt County, Illinois 13
152A—Drummer silty clay loam, 0 to 2 percent slopes 13
154A—Flanagan silt loam, 0 to 2 percent slopes 14
198A—Elburn silt loam, 0 to 2 percent slopes 15
Soil Information for All Uses 18
Suitabilities and Limitations for Use 18
Building Site Development 18
Corrosion of Concrete 18
Corrosion of Steel 22
Land Management 25
Erosion Hazard (Off-Road, Off-Trail) 25
Erosion Hazard (Road, Trail) 29
References 34

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Piatt County, Illinois
Survey Area Data: Version 20, Aug 21, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 7, 2023—Aug 31, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

SUNVEST
SOLAR LLC

Agrivoltaics and Vegetation Management Plan for SV CSG Madden Creek, LLC

1. SV CSG Madden Creek, LLC Vegetation Management Plan (VMP) Overview

1.1. Site Developer

Sunvest Solar, LLC
330 W. State St. Suite 1
Geneva, IL 60134

1.2. Site Address

1463 E. 2850 NorthRd
Mansfield, IL

1.3. Vegetation Restoration Consultant

Natural Resource Services, Inc
2885 Quail Road NE
Sauk Rapids, MN 56379
320.290.5363

and

16425 W. State Route 90
Princeville, IL 61559

1.4. Project Description

The proposed Bourbonnais solar project is a 5 MW AC project planned for approximately 37.75 acres of land in Blue Ridge Township, Piatt County, Illinois. A Single Axis Tracker system will be installed with above ground drivelines on 37.75 acres of total gross land, with approximately 64% of the entire parcel area to be integrated into agrivoltaics. Posts are mounted with a leading edge of 30"– 36"; this height allows for continuous growth of crops underneath and between panels. Vegetative screening is proposed along the northern and upper-western borders of the fenced area. No wetlands have been delineated on site, and no stormwater basins are planned to be installed at this time.

The site is applying to the Adjustable Block Program as a Pollinator Friendly and Agrivoltaics site. The site will be planted with a native pollinator mix to achieve and maintain Pollinator Friendly status as defined in the Illinois Pollinator Friendly Solar Site Act (525 ILCS 55/) [1]. Agrivoltaics will also be incorporated into the long-term management plan during the lifetime of the project in the form of grazing to comply with the requirements of Appendix C of the Illinois Shines Program Guidebook.[2] Native pollinator habitat will be

[1] https://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=3900&ChapterID=44

[2] https://illinoisshines.com/wp-content/uploads/2024/04/PY2024-25-Program-Guidebook-4-18-24-FINAL.pdf

grown for dual use, to provide pollinator habitat for insects and butterflies and as native vegetation to be grazed. The system is designed and maintained with provisions for decommissioning to preserve the land's agricultural resources and utility during and after the project's designed lifetime. After decommissioning, the land can be returned to agricultural or other uses as appropriate.

1.5. VMP Use and Objectives

The VMP was written to provide a brief overview and description of the project and to act as a guide for vegetation installation and management. It has been custom-written based on information known at the time of writing. The VMP should be treated as a living document and adjusted as additional information about the site is gathered both pre and post construction. A qualified native vegetation contractor with a history of success working on native vegetation restorations should be contracted to implement the procedures outlined in this document and to provide feedback and suggestions for the VMP during the lifespan of the project.

2. Adjustable Block Program Requirements

2.1. This plan contains all the required information in the Adjustable Block Program – Appendix C. These requirements are listed below with the section of the plan referenced where the required information is found.

2.1.1. Agrivoltaics plans submitted in the Part I application should include documentation of the following:

1. Solar panels do not interfere with the continued use of land beneath the canopy for agricultural purposes; Section 4.1 and 6.5

2. The solar panels optimize a balance between electricity generation and agricultural production; Section 4.3 and 6.5

3. The system: a. Accommodates continuous growth of crops underneath or between the solar photovoltaic modules, with height enough for labor and/or machinery as it relates to tilling, cultivating, soil amendments, harvesting, etc. and grazing animals; Section 6.5

b. Maintains or enhances the agricultural productivity of the land and soil health throughout the lifetime of the system; Section 4.2

4. Crop(s) are compatible with the design of the agricultural solar system accounting for such factors as crop selection, sunlight percentage, etc.; Section 4.2 and 4.3

5. Commitment to the annual reporting of the productivity of the crop(s) and herd, including pounds harvested and/or grazed, herd size growth, success of the crop, potential changes, etc., shall be provided one year after project implementation and throughout the project's lifetime; Section 6.5.1 and 6.5.2

6. The system design information, shall include, but is not limited to: a. dual-use type, e.g., ground mount racking, pole towers, tracking, etc.; Section 1.3

b. total gross acres of open farmland to be integrated with the project; Section 1.3

c. type of crop(s) to be grown, including grazing crops; Section 1.3 and 4.1

d. pounds of crop(s) projected to be grown and harvested, or grazed; Section 6.5.1 and 6.5.2

e. animals to be grazed with herd size(s); and Section 6.5.1

f. design drawing including mounting system type (fixed, tracking), panel tilt, panel row spacing, individual panel spacing, for pole towers tower spacing and mounting height, etc.; Section 3.2

7. The system is designed and maintained with provisions for decommissioning to preserve the land's agricultural resources and utility during and after the project's lifetime; Section 1.3

8. The land is continuously used for agrivoltaics purposes through the duration of the REC Delivery Contract, while seasonally appropriate. Section 6.5

3. Site Information

3.1. Site Location

3.2. Map of Array Layout

3.3. Site Conditions

A review of historical aerial photos shows that the entire site has been in traditional agricultural row crops for the last 30 years. No ponding can be seen in the aerial photos. A review of the soils on the USDA/NRCS Web Soil Survey shows a mixture of moderately well drained and poorly drained soils.

4. Overview of Vegetation Establishment and Management

4.1. Vegetative Goals

The primary vegetative goal is to establish permanent vegetation throughout the site that does not interfere with solar production. This solar site is being planted with 100% native species chosen to avoid panel shading. The species chosen produce an emphasis on native pollinator habitat to achieve and maintain Pollinator Friendly status as defined in the Illinois Pollinator Friendly Solar Site Act (525 ILCS 55/) [3].

4.2. Contribution of Native Habitat on Solar Sites

Economical production of power is the foremost goal of solar sites. There is a parallel opportunity to provide critically important native pollinator-friendly habitat throughout the array while capitalizing on the long-term low maintenance needs of native vegetation.

Establishing prairies and other native plant communities within the confines of solar sites provides a tremendous opportunity to restore ecosystems that have been severely degraded or eliminated across all areas of the country.

Native plants have profound root systems, many reaching 12 or more feet deep into the soil. Rainwater follows those roots into the ground, helping to reduce water runoff and promote the drainage of standing water into an aquifer. Those deep roots also stabilize the soil, preventing erosion from rain and wind. The land under the panels will have improved soil health and vigor at the array life's end due to all the contributions of the native prairie plants. The plants provide seeds for songbirds, cover for game birds and, of course, provide blossoms and host plants for our beloved butterflies and other nectar-loving insects.

Native grasses and forbs will be selected based on their ecological appropriateness to the specific conditions of this site, with consideration to their mature height to not interfere with panel productivity. These species will not require irrigation, fertilizer, or other soil amendments.

The contribution to habitat restoration cannot be overstated given the acreage impacted and lifespan of the project.

[3] https://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=3900&ChapterID=44

4.3. Vegetation Installation Overview

The native mix planned for this array is selected for ecological appropriateness to the soil types, moisture and site conditions as well as the mature plant height of 24" to 36" so as to not interfere with panel productivity. The habitat provides low-maintenance vegetation that won't require fertilizer, amended soils or irrigation on this site.

It is important to note that the species selected for this site are based on their ability to successfully establish from seed and thrive within the unique conditions found on solar sites. From a practical standpoint, the species contained in these mixes are generally available in the marketplace and, as a whole, have reasonable price points. Ultimately, the list consists of well-performing, workhorse species coupled with smaller amounts of more unique species for a robust mixture.

4.4. Vegetation Management Overview

Maintenance plays a vital role in the eventual success of any native landscape installation, especially during the establishment period of years one through three. Active management is similar in all areas of the project site. All areas of the site are inspected annually followed by maintenance necessary to encourage healthy native species while discouraging non-native/invasive species. During the growing season of the first year of establishment, the site shall be inspected a minimum of three times.

5. Vegetation Installation Procedures

5.1. Site Inspections and Monitoring

Site inspections and monitoring throughout the installation process are vital to continually assess site conditions and determine what procedures are needed and the timing of those procedures. The pre-construction site inspection is particularly important to determine the need for any herbicide application or mowing prior to soil preparation and seeding.

5.2. Site Preparation Herbicide Application

A site preparation herbicide application, if deemed necessary, should be performed by a licensed, qualified contractor using appropriate herbicides to kill all actively growing weeds on the project site. Typically, only glyphosate herbicide is necessary, but if certain perennial weed species are present such as Canada thistle, a broadleaf additive may be necessary. The contractor should carefully select an herbicide with a short soil residual, such as Garlon 3A, to minimize the impact on germination of the permanent seeding. The vegetation should not be disturbed for a minimum of 14 days after an herbicide application to allow time for effective weed elimination.

5.3. Site Preparation Mowing

Site preparation mowing may be required to reset vegetative growth to prepare for an herbicide application. Additionally, site preparation mowing may be needed to cut and mulch vegetation to simplify the soil preparation and seeding process.

5.4. Soil and Seedbed Preparation

Soil and seedbed preparation is vital to the success of any planting. Disking and harrowing (or raking) the site is common and extremely effective. If extreme compaction is present on site, a ripper may be needed to mitigate the compaction. The seedbed should be relatively smooth and firm prior to seeding. Soil that is too clumpy or too fluffy may result in seeds being planted too deep in the soil to germinate and survive.

5.5. Seed and Seeding

A custom native pollinator seed mix has been designed for use on this project and is found in Section 9. Seeding will be completed through broadcasting by using a mechanical spreader appropriate for the specified seed mixes. Large and fluffy seeds (such as most grasses and cover crop) should be broadcast first and then lightly harrowed/raked into the soil. Following the harrowing, small seeds (such as most forbs, sedges, and rushes) should be broadcast on top of the soil.

5.6. Tree and Shrub Installation

Tree and shrub installation can occur either before or after permanent seeding depending on the preferences of the contractor, timing of seeding, and the site conditions. If installation occurs after permanent seeding, touchup seeding in the disturbed areas may need to be completed. All trees and shrubs should be watered at the time of installation and properly mulched. A watering plan should be in place in the event of inadequate rainfall.

5.7. Erosion control

Erosion control measures should be implemented as required after permanent seeding is completed.

6. Vegetation Management Procedures

6.1. Adaptive Management

An adaptive management strategy is vital to the success of any project, but especially so for native pollinator restorations. Adaptive management consists of continual monitoring and adjusting maintenance strategies based on the site conditions in order to achieve the best outcomes. No two sites are exactly the same and responding to changing site conditions, weed pressures, weather, and a multitude of other variables is essential to the success of the planting.

6.2. Complete Site Maintenance Mowing

Complete site maintenance mowing consists of mowing the entire project area during the growing season, including trimming as appropriate around equipment or in inaccessible areas. Complete site maintenance mowing is implemented primarily during the establishment phase of the restoration (years 1-3) for several reasons. First, if a closed canopy of vegetation develops, mowing is implemented to knock back the taller vegetation and allow sunlight to reach the native seedlings below. Second, if weed species are present and actively nearing their seed set, mowing is implemented to prevent those weeds from producing viable seed. Third, vegetation has become tall enough to shade the panels or impact other solar equipment on site and must be cut down.

6.3. Integrated Vegetation Maintenance

Integrated vegetation maintenance or IVM is a method using a combination of targeted mowing/trimming and herbicide application aimed at reducing or eliminating weed species and promoting the desired vegetation. IVM can also include grazing and other maintenance options as appropriate. IVM is implemented starting towards the end of the 2nd full growing season typically and is used throughout the life of the project. 3 IVM visits are typical on most sites until year 5 when a reduction to 1-2 visits per year can be made if site conditions allow.

6.4. Dormant Mowing

Dormant mowing is a type of complete site mow implemented when vegetation is not actively growing on site. This method is typically performed in early spring or fall. Oftentimes, dormant mows are completed in the fall to mulch up dead vegetation and encourage decomposition. This practice also has a dual purpose of cleaning up the site to make electrical maintenance easier and to reduce the chance of accidental fire.

6.5. Agrivoltaics

Agrivoltaics is the use of land cooperatively partnering solar and agriculture. The solar panels optimize a balance between electricity generation and agricultural production. The panels accommodate continuous growth of vegetation underneath and between the solar photovoltaic modules, with height enough for labor and/or machinery as it relates to tilling, cultivating, soil amendments, harvesting, etc. and grazing animals. The presence of solar panels will coexist with the continued agricultural use of land beneath the canopy throughout the life of the project. During the duration of the REC Delivery Contract, the land will be continuously used for agrivoltaics purposes, while seasonally appropriate.

Sheep grazing is one of the most common forms of agrivoltaics on solar sites. The seed mixes are designed specifically to avoid shading of the panels while simultaneously providing enough vegetation biomass for grazing. A report summarizing the agricultural outputs of the site will be completed on a yearly basis and provided to Illinois Shines for the entire lifespan of the project.

6.5.1. Grazing

Sheep grazing can be an extremely effective tool for weed management and thatch reduction on solar sites when used as a part of an IVM. In most cases, sheep grazing occurs beginning in the second or third growing season and can be used throughout the life of the project. Short-term grazing events lasting 7-14 days allow for sheep to thoroughly graze the site without overgrazing or causing too much soil disturbance. Having short duration events also minimizes the potential impact of predation on the sheep. Once native vegetation has become established, a report of herd sizes and growth and pounds grazed will be provided. This reporting will continue throughout the lifetime of the project.

7. Vegetation Installation and Management Timeline

7.1. Site Prep and Installation Phase

Site Preparation:

1. Prior to the start of construction, a cover crop may be seeded to aid in erosion control, soil moisture management, and weed suppression.
2. Inspection of the project area to assess site conditions and determine the need for any site prep mowing or spraying activities.
3. If necessary, an herbicide application will be completed using glyphosate (Round-up® or equivalent) as per manufacturer's directions in areas with actively growing vegetation. Allow a minimum of 14 days before disturbing the soil or completing seeding activities.
4. When perennial broadleaf vegetation is present a triclopyr herbicide will be added (Garlon 3A® or equivalent) as per manufacturer's directions. When a broadleaf herbicide is used allow a minimum of 30 days before disturbing the site or completing seeding.
5. Depending on the density and type of undesirable vegetation present (i.e., annual vs perennial) a complete site mowing might be advisable in lieu of an herbicide application. For instance, if the site is dominated by Foxtail (an annual), mowing would be preferrable to an herbicide application.

Soil Prep and Seeding:

1. Construction debris, garbage, and building materials will be removed and/or staged outside the intended seeding areas.
2. Disk soil within the project area in preparation for seeding. Harrow or rake the soil to achieve the proper seedbed.
3. Broadcast the large and fluffy seed (mostly grasses) along with a cover crop of winter wheat or oats.
4. Harrow or rake the soil to work the seed to a proper depth.
5. Broadcast the small seeds (forbs, sedges, rushes, small grass seeds) on top of the soil.

Vegetative Screening Installation

1. Prior to tree and shrub installation, planting locations should be marked to ensure proper placement and spacing of the trees and shrubs.
2. Install trees and shrubs using appropriate equipment and procedures, including watering at the time of installation, mulch rings, and staking or guying if necessary.
3. Implement a watering plan post-installation to ensure survival.

Installation Phase Maintenance

If the site is seeded in the summer or early fall, 1-2 complete site mowings may be needed during this first partial growing season.

7.2. Establishment Phase

Year 1 is defined as the 1st full growing season for the vegetation. A recommendation of 3 complete site mowings is most common for this phase. Depending on site conditions and vegetation growth, more or less may be needed.

Year 2 is the second full growing season. 3 total visits are typical with 2 complete site mowings and 1 Integrated Vegetation Maintenance visit the most likely combination. The site will be inspected at the end of year two to determine site establishment and readiness for grazing. A report summarizing the agricultural outputs will be submitted to Illinois Shines.

Year 3 typically requires 3 IVM site visits depending on vegetation status. Most sites will be ready for grazing by the third year. A grazing visit would take the place of an IVM visit. A report summarizing the agricultural outputs will be submitted to Illinois Shines.

7.3. Maintenance Phase

Year 4 – 34. During the maintenance phase, 2 IVM visits are typical. Grazing would take the place of either one or both of the IVM visits. Yearly reports summarizing the agricultural outputs will be submitted to Illinois Shines.

8. Monitoring

Consistent project monitoring is essential to evaluate vegetative establishment, weed presence, and possible erosion concerns. This information helps determine which management procedures to utilize, the proper timing for those procedures, and whether any other remedial action is required such as reseeding or replanting. As the site's vegetation matures, adaptive management should be utilized as previously described.

9. Seed Mix

Natural Resource Services

Madden Creek Solar Native Pollinator Mix

Seeding Rate - 12.5 lb/acre - 78.5 seed/ft²

Common Name	Scientific Name	Bloom Month	% of Mix by Weight	Lbs/Acre	Seeds per ft²	% of Mix by Seeds/ft²
Sideoats Grama	Bouteloua curtipendula		35.84%	4.48	9.87	12.57%
Plains Oval Sedge	Carex brevior		2.57%	0.32	3.42	4.35%
Bicknell's Sedge	Carex bicknellii		1.36%	0.17	1.06	1.35%
Troublesome Sedge	Carex molesta		1.28%	0.16	1.47	1.87%
Brown Fox Sedge	Carex vulpinoidea		2.00%	0.25	9.18	11.70%
Silky Wild Rye	Elymus villosus		6.00%	0.75	1.51	1.93%
Little Bluestem	Schizachyrium scoparium		26.95%	3.37	18.56	23.64%
Prairie Dropseed	Sporobolus heterolepis		0.40%	0.05	0.29	0.37%
Graminoid Total			**76.39%**	**9.55**	**45.37**	**57.78%**
Common Yarrow	Achillea millefolium	Jun-Aug	0.36%	0.05	2.98	3.79%
Lead Plant	Amorpha canescens	Jun-Aug	0.98%	0.12	0.72	0.92%
Canada Anemone	Anemone canadensis	May-Jun	0.04%	0.01	0.02	0.02%
Wild Columbine	Aquilegia canadensis	Apr-Jun	0.04%	0.01	0.07	0.09%
Common Milkweed	Asclepias syriaca	Jun-Aug	0.63%	0.08	0.12	0.15%
Butterfly Milkweed	Asclepias tuberosa	Jun-Aug	0.32%	0.04	0.06	0.08%
Canada Milkvetch	Astragalus canadensis	Jun-Aug	1.08%	0.14	0.84	1.08%
Partridge Pea	Chamaecrista fasciculata	Jul-Sep	3.18%	0.40	0.39	0.50%
White Prairie Clover	Dalea candida	Jun-Sep	4.08%	0.51	3.56	4.53%
Purple Prairie Clover	Dalea purpurea	Jul-Sep	6.02%	0.75	4.98	6.34%
Cream Gentian	Gentiana flavida	Aug-Sep	0.04%	0.01	0.27	0.34%
Prairie Blazing Star	Liatris pycnostachya	Jul-Sep	0.48%	0.06	0.24	0.31%
Great Blue Lobelia	Lobelia siphilitica	Jul-Oct	0.04%	0.01	0.96	1.22%
Seedbox	Ludwigia alternifolia	Jun-Sep	0.08%	0.01	4.78	6.08%
Virginia Mountain Mint	Pycnanthemum virginianum	Jun-Sep	0.09%	0.01	0.95	1.20%
Black-eyed Susan	Rudbeckia hirta	Jun-Oct	1.92%	0.24	8.13	10.35%
Calico Aster	Symphyotrichum lateriflorum	Aug-Oct	0.04%	0.01	0.48	0.61%
Sky Blue Aster	Symphyotrichum oolentangiense	Aug-Oct	0.16%	0.02	0.57	0.73%
Ohio Spiderwort	Tradescantia ohiensis	May-Jul	0.24%	0.03	0.09	0.11%
Hoary Vervain	Verbena stricta	Jun-Sep	1.36%	0.17	1.74	2.22%
Golden Alexanders	Zizia aurea	Apr-Jun	2.40%	0.30	1.21	1.55%
Forb Total			**23.61%**	**2.95**	**33.15**	**42.22%**
Mix Total			**100.00%**	**12.50**	**78.51**	**100.00%**

May 2025

Central IL moderately well and poorly drained loam soils mix

EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Applicant:	Area M Consulting	*IDNR Project Number:*	2511953
Contact:	Jonathan Knudsen	*Date:*	04/14/2025
Address:	2023 Alameda Street Roseville, MN 55113	*Alternate Number:*	2209283

Project: SV CSG Madden Creek, LLC
Address: 1499 E 2850 NORTH RD MAHOMET, MAHOMET

Description: 2-4 MW solar facility comprised of Ibeams supporting the array, an access road, various equpment pads, fencing, an infiltration pond, and vegetative screening. Trees will not be removed, and wetlands will be avoided.

Natural Resource Review Results

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

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

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

Location

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

County: Piatt

Township, Range, Section:
20N, 6E, 12

IL Department of Natural Resources Contact
Adam Rawe
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
Piatt County
Keri Nusbaum
Piatt County Courthouse
Room 105
Monticello, Illinois 61856

Disclaimer

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

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Illinois-Iowa Ecological Services Field Office
Illinois & Iowa Ecological Services Field Office
1511 47th Ave
Moline, IL 61265-7022
Phone: (309) 757-5800 Fax: (309) 757-5807

In Reply Refer To:
Project Code: 2025-0083155
Project Name: SV CSG Madden Creek, LLC

04/14/2025 20:28:15 UTC

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:

The attached species list identifies federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat, if present, within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Under 50 CFR 402.12(e) (the regulations that implement Section 7 of the Endangered Species Act) **the accuracy of this species list should be verified after 90 days**. This verification can be completed formally or informally. You may verify the list by visiting the ECOSPHERE Information for Planning and Consultation (IPaC) website https://ipac.ecosphere.fws.gov at regular intervals during project planning and implementation and completing the same process you used to receive the attached list.

Section 7 Consultation

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-federal representative) must consult with the U.S. Fish and Wildlife Service (Service) if they determine their project "may affect" listed species or designated critical habitat. Under the ESA, it is the responsibility of the Federal action agency or its designated representative to determine if a proposed action may affect endangered, threatened, or proposed species, or designated critical habitat, and if so, to consult with the Service further. Similarly, it is the responsibility of the Federal action agency or project proponent, not the Service to make "no effect" determinations. If you determine that your proposed action will have no effect on threatened or endangered species or their respective designated critical habitat, you do not need to seek concurrence with the Service.

Note: For some species or projects, IPaC will present you with *Determination Keys*. You may be able to use one or

more Determination Keys to conclude consultation on your action.

Technical Assistance for Listed Species

1. 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 information on the species life history, species status, current range, and other documents by selecting the species from the thumbnails or list view and visiting the species profile page.

No Effect Determinations for Listed Species

1. If there are *no* species or designated critical habitats on the Endangered Species portion of the species list: conclude "no species and no critical habitat present" and document your finding in your project records. No consultation under ESA section 7(a)(2) is required if the action would result in no effects to listed species or critical habitat. Maintain a copy of this letter and IPaC official species list for your records.
2. If any species or designated critical habitat are listed as potentially present in the **action area** of the proposed project the project proponents are responsible for determining if the proposed action will have "no effect" on any federally listed species or critical habitat. No effect, with respect to species, means that no individuals of a species will be exposed to any consequence of a federal action or that they will not respond to such exposure.
3. If the species habitat is not present within the action area or current data (surveys) for the species in the action area are negative: conclude "no species habitat or species present" and document your finding in your project records. For example, if the project area is located entirely within a "developed area" (an area that is already graveled/paved or supports structures and the only vegetation is limited to frequently mowed grass or conventional landscaping, is located within an existing maintained facility yard, or is in cultivated cropland conclude no species habitat present. Be careful when assessing actions that affect: 1) rights-of-ways that contains natural or semi-natural vegetation despite periodic mowing or other management; structures that have been known to support listed species (example: bridges), and 2) surface water or groundwater. Several species inhabit rights-of-ways, and you should carefully consider effects to surface water or groundwater, which often extend outside of a project's immediate footprint.
4. Adequacy of Information & Surveys - Agencies may base their determinations on the best evidence that is available or can be developed during consultation. Agencies must give the benefit of any doubt to the species when there are any inadequacies in the information. Inadequacies may include uncertainty in any step of the analysis. To provide adequate information on which to base a determination, it may be appropriate to conduct surveys to determine whether listed species or their habitats are present in the action area. Please contact our office for more information or see the survey guidelines that the Service has made available in IPaC.

May Effect Determinations for Listed Species

1. If the species habitat is present within the action area and survey data is unavailable or inconclusive: assume the species is present or plan and implement surveys and interpret results in coordination with our office. If assuming species present or surveys for the species are positive continue with the may affect determination process. May affect, with respect to a species, is the appropriate conclusion when a species might be exposed to a consequence of a federal action and could respond to that exposure. For critical habitat, 'may affect' is the appropriate conclusion if the action area overlaps with mapped areas of critical habitat and an essential physical or biological feature may be exposed to a consequence of a federal action and could change in response to that exposure.
2. Identify stressors or effects to the species and to the essential physical and biological features of critical habitat that overlaps with the action area. Consider all consequences of the action and assess the potential for each life stage of the species that occurs in the action area to be exposed to the stressors. Deconstruct the action into its component parts to be sure that you do not miss any part of the action that could cause effects to the species or physical and biological features of critical habitat. Stressors that affect species' resources may have consequences even if the species is not present when the project is implemented.
3. If no listed or proposed species will be exposed to stressors caused by the action, a 'no effect' determination may be appropriate – be sure to separately assess effects to critical habitat, if any overlaps with the action

area. If you determined that the proposed action or other activities that are caused by the proposed action may affect a species or critical habitat, the next step is to describe the manner in which they will respond or be altered. Specifically, to assess whether the species/critical habitat is "not likely to be adversely affected" or "likely to be adversely affected."

4. Determine how the habitat or the resource will respond to the proposed action (for example, changes in habitat quality, quantity, availability, or distribution), and assess how the species is expected to respond to the effects to its habitat or other resources. Critical habitat analyses focus on how the proposed action will affect the physical and biological features of the critical habitat in the action area. If there will be only beneficial effects or the effects of the action are expected to be insignificant or discountable, conclude "may affect, not likely to adversely affect" and submit your finding and supporting rationale to our office and request concurrence.
5. If you cannot conclude that the effects of the action will be wholly beneficial, insignificant, or discountable, check IPaC for species-specific Section 7 guidance and conservation measures to determine whether there are any measures that may be implemented to avoid or minimize the negative effects. If you modify your proposed action to include conservation measures, assess how inclusion of those measures will likely change the effects of the action. If you cannot conclude that the effects of the action will be wholly beneficial, insignificant, or discountable, contact our office for assistance.
6. Letters with requests for consultation or correspondence about your project should include the Consultation Tracking Number in the header. Electronic submission is preferred.

For additional information on completing Section 7 Consultation including a Glossary of Terms used in the Section 7 Process, information requirements for completing Section 7, and example letters visit the Midwest Region Section 7 Consultations website at: https://www.fws.gov/office/midwest-region-headquarters/midwest-section-7-technical-assistance.

You may find more specific information on completing Section 7 on communication towers and transmission lines on the following websites:

- Incidental Take Beneficial Practices: Power Lines - https://www.fws.gov/story/incidental-take-beneficial-practices-power-lines
- Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning. - https://www.fws.gov/media/recommended-best-practices-communication-tower-design-siting-construction-operation

Tricolored Bat Update

On September 14, 2022, the Service published a proposal in the Federal Register to list the tricolored bat (Perimyotis subflavus) as endangered under the Endangered Species Act (ESA). The Service has up to 12-months from the date the proposal published to make a final determination, either to list the tricolored bat under the Act or to withdraw the proposal. The Service determined the bat faces extinction primarily due to the rangewide impacts of white-nose syndrome (WNS), a deadly fungal disease affecting cave-dwelling bats across North America. Because tricolored bat populations have been greatly reduced due to WNS, surviving bat populations are now more vulnerable to other stressors such as human disturbance and habitat loss. Species proposed for listing are not afforded protection under the ESA; however, as soon as a listing becomes effective (typically 30 days after publication of the final rule in the Federal Register), the prohibitions against jeopardizing its continued existence and "take" will apply. Therefore, if your future or existing project has the potential to adversely affect tricolored bats after the potential new listing goes into effect, we recommend that the effects of the project on tricolored bat and their habitat be analyzed to determine whether authorization under ESA section 7 or 10 is necessary. Projects with an existing section 7 biological opinion may require

reinitiation of consultation, and projects with an existing section 10 incidental take permit may require an amendment to provide uninterrupted authorization for covered activities. Contact our office for assistance.

Other Trust Resources and Activities

Bald and Golden Eagles

Although no longer protected under the Endangered Species Act, be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act, as are golden eagles. Projects affecting these species may require measures to avoid harming eagles or may require a permit. If your project is near an eagle nest or winter roost area, please contact our office for further coordination. For more information on permits and other eagle information visit our website https://www.fws.gov/library/collections/bald-and-golden-eagle-management.
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
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

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:

Illinois-Iowa Ecological Services Field Office
Illinois & Iowa Ecological Services Field Office
1511 47th Ave
Moline, IL 61265-7022
(309) 757-5800

PROJECT SUMMARY

Project Code: 2025-0083155
Project Name: SV CSG Madden Creek, LLC
Project Type: Power Gen - Solar
Project Description: 2-5 MW community solar facility proposed for construction in 2025.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.20153775,-88.4661391725306,14z

Counties: Piatt County, Illinois

ENDANGERED SPECIES ACT SPECIES

There is a total of 8 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.

---

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
Indiana Bat *Myotis sodalis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

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

REPTILES

NAME	STATUS
Eastern Massasauga (=rattlesnake) *Sistrurus catenatus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2202	Threatened

CLAMS

NAME	STATUS
Salamander Mussel *Simpsonaias ambigua* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6208	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

FLOWERING PLANTS

NAME	STATUS
Eastern Prairie Fringed Orchid *Platanthera leucophaea*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/601

CRITICAL HABITATS

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

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

---

1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act (MBTA). Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their nests, should follow appropriate regulations and implement required avoidance and minimization measures, as described in the various links on this page.

The data in this location indicates that no eagles have been observed in this area. This does not mean eagles are not present in your project area, especially if the area is difficult to survey. Please review the 'Steps to Take When No Results Are Returned' section of the Supplemental Information on Migratory Birds and Eagles document to determine if your project is in a poorly

surveyed area. If it is, you may need to rely on other resources to determine if eagles may be present (e.g. your local FWS field office, state surveys, your own surveys).

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

---

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

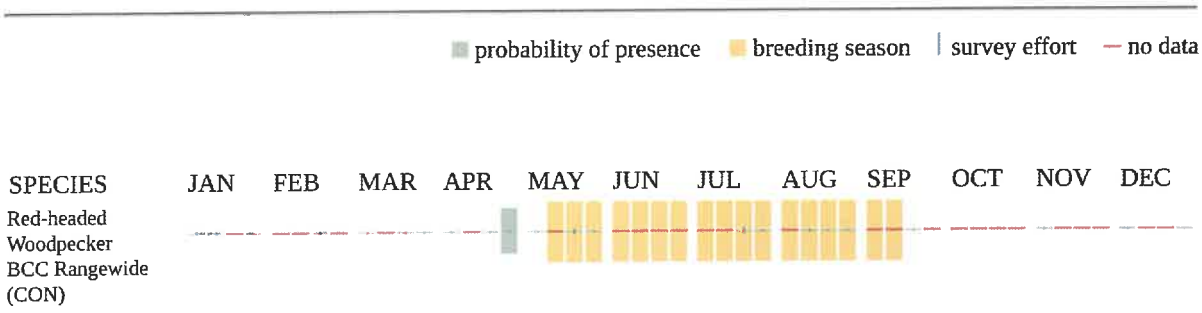
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Jonathan Knudsen
Address: 2023 Alameda Street
City: Roseville
State: MN
Zip: 55113
Email jknudsen@areamconsulting.com
Phone: 2082415280

Geotechnical Investigation Report - Final

Proposed Solar Array - Madden Creek CSG
1499 E 2850 North Road
Mahomet, Illinois

Project Number:
25-0063-151

Date Submitted:
April 22, 2025

Prepared for:
Sunvest Solar LLC
330 West State Street, Suite 1
Geneva, Illinois 60134
Attn: Timothy Polz

PIONEER
Engineering & Environmental Services, LLC

2753 West 31st Street | Chicago, IL 60608 | phone: 773.722.9200 | fax: 773.722.9201 | pioneerees.com

PIONEER
Engineering & Environmental Services, LLC

Geotechnical Investigation Report - Final

Proposed Solar Array - Madden Creek CSG
1499 E 2850 North Road
Mahomet, Illinois

Prepared For:
Sunvest Solar LLC
330 West State Street, Suite 1
Geneva, Illinois 60134
Attn: Timothy Polz

Project Number:
25-0063-151

Date Submitted:
April 22, 2025

Kevin Gosiewski
Project Geologist
Report Author

Alex Barlan, P.E.
Sr. Geotechnical Engineer
Report Author / Reviewer

ALEX U BARLAN
062-062481
LICENSED
PROFESSIONAL
ENGINEER
STATE OF ILLINOIS
AB 11/30/25

North

FIGURE 1
Soil Boring Location & Site Diagram
1715 South Ruble Street
Chicago, IL

Scale:
1" = 200'
0' 200'

Drawn by:
M. S. Valadez

Job No.
25-0063-151

Date:
April 2025

Checked by:
Kevin Gosiewski

Legend: Approximate Property Line

Geotechnical Soil Boring Location

PIONEER
Engineering & Environmental Services, LLC

PIONEER
Engineering & Environmental Services, LLC

CONTENTS

1.0 INTRODUCTION
- 1.1 Project Background 3
- 1.2 Geologic Setting 3
- 1.3 Project Overview and Objectives 4

2.0 EXPLORATION PROCEDURES
- 2.1 Soil Boring Sampling 5
- 2.2 Laboratory Testing 5

3.0 RESULTS OF EXPLORATION
- 3.1 Subsurface Conditions 6
- 3.2 Groundwater Observations 7
- 3.3 Outside Laboratory Test Results 7
- 3.4 Field Resistivity Testing 8

4.0 EVALUATIONS AND RECOMMENDATIONS
- 4.1 Site Preparation 9
- 4.2 Solar Panel Foundation System Design Criteria 9
- 4.3 Equipment Support Slabs 12
- 4.4 Pavement Design Considerations 14
- 4.5 Seismic Design Criteria 16
- 4.6 Construction Considerations 16

5.0 REPORT LIMITATIONS
- 5.1 General Considerations 18
- 5.2 Closing Remarks 18

TABLES
Table 1: General Laboratory Testing Results
Table 2: Corrosivity and Electrical Resistivity Testing Results
Table 3: Field Resistivity Testing Results
Table 4: Summary of Soil Properties
Table 5: Skin Friction Values for Pile Design
Table 6: Summary of Modulus of Lateral Subgrade Reaction
Table 7: Pavement Section Recommendations
Table 8: Seismic Site Class
Table 9: Structural Fill Material Requirements
Table 10: Fill Placement and Compaction Requirements

FIGURES
Figure 1: Boring Location Diagram
Figure 2: LiDAR Map

APPENDICES
Appendix A: Soil Boring Logs
Appendix B: Laboratory Testing Results
Appendix C: Soil Classification System

1.0 INTRODUCTION

Pioneer Engineering & Environmental Services, LLC (Pioneer) was contracted by Sunvest Solar LLC to conduct a geotechnical investigation for the construction of the proposed Madden Creek CSG Solar Array to be located at 1499 E 2850 North Road in Mahomet, Illinois. The investigation was performed in general accordance with Pioneer Proposal No. 21462 dated November 20, 2024.

As requested by the Client, the scope of the investigation included drilling, sampling, and laboratory testing of soil at fourteen soil borings (Borings B-01 through B-14) in order to provide a geotechnical engineering evaluation of the subsurface materials. The information provided in this report should be evaluated by and the structural site improvements should be designed by a licensed structural engineer and/or architect.

1.1 Project Background

The proposed facility is a 25.7-acre (approximate) irregular-shaped parcel located near 1499 E 2850 North Road in Mahomet, Illinois. The Project Site is located approximately 3 miles west of downtown Mahomet, Illinois. The Site is bounded by agricultural farmland on all sides with a small residential neighborhood adjacent to the northwest corner of the site. The Site appears to be relatively flat, generally sloping towards the creek that runs through the site. The approximate Elevations at the site range from 725 to 730 feet MSL (Median Sea Level).

Current plans include constructing a Solar Array within the Site. A series of solar panels will cover the majority of the site. The panels are expected to be supported by a grid of steel H piles that are driven or vibrated into the earth. Slab-on-grade equipment pads will be constructed for support of transformers and electrical switchgear. A paved access road will provide support vehicle access from the adjacent public road. Unpaved access roads will be provided within the site.

1.2 Geologic Setting

The surficial geology of the Site consists of a surface cover of Parkland/Roxana Silt Loess over Wisconsin-age glacial deposits of the Piatt Till Member of the Wedron Formation. The Loess, which is characterized as wind-blown Silt and Clay containing little to no coarse sand or gravel, if encountered can extend up to depths of 5 feet below existing grade. The underlying Wedron Formation is generally comprised of mostly glacial till with lenses of sand, gravel, and silt with a surface often mantled with silt. Specifically, the Piatt Till member consists of gray silty till that oxidizes to olive brown with some sandy till and lenses of sand and gravel, predominately sandy and silty gray till.

Available geologic maps indicate that the underlying bedrock consists of the Shelburn-Patoka Formation belonging to the Pennsylvanian Age and is comprised of mainly sandstone, siltstone, shale, limestone, and thick coal. The bedrock in the vicinity is recorded as shale and was not encountered in the borings as it is expected to be encountered below a depth of 350 feet below the existing grade.

The Site is not located within a part of Illinois that has been historically active with coal mining activities. A review of the ISGS (Illinois State Geological Survey) Coal Industry Map (2013) and Directory of Coal Mines in Illinois online database indicates that there are no historic or active coal mines in the vicinity of the Site. Also reviewed were ISGS maps detailing Karst Topography in Illinois. Based on these maps, the Site is not located near any of the know mapped areas, therefore is not located within a known karst-susceptible region. Overall, based on the review of available ISGS maps and databases, the Site is not located over a former or active coal mine or within a karst-susceptible region.

1.3 Project Overview and Objectives

The purpose of this study was to:

- Explore the subsurface conditions across the Site including the type, extent and engineering characteristics of the in-situ soils and groundwater conditions.
- Provide recommendations for the design of the foundation.
- Provide recommendations for placement and compaction of backfill.

2.0 EXPLORATION PROCEDURES

2.1 Soil Boring Sampling

Fourteen soil borings (B-01 to B-14) were performed at the locations as shown on the attached Boring Location Diagram, Figure 1. The borings were located in the field using a Trimble R1 hand-held GPS device. GPS latitude and longitude coordinates for each boring were obtained from the Google Earth website. The surface elevation of each boring was interpolated from Google Earth Pro Satellite Images.

The field work was performed on March 17 through 19, 2025. All borings were performed using a track-mounted Geoprobe 7822DT drill rig and the borings were advanced to a depth of 20 feet below the existing surface elevation using 3 ¼-inch diameter Hollow Stem Augers (HSAs) at Borings B-05 through B-14, a depth of 15 feet at B-03 and B-04, and a depth of 10 feet at B-01 and B-02.

Representative soil samples were obtained using the split barrel sampling procedure in accordance with ASTM Standard D 1586, "Method for Penetration Test and Split Barrel Sampling of Soils". In the split barrel sampling procedure, a 140-pound hammer falls 30 inches and drives a two-inch (outer diameter) split barrel sampler 18 inches into the soil. The number of blows required to drive the barrel sampler the final 12 inches is the Standard Penetration Resistance (SPT N-value) for that interval. This test result indicates the soil's relative density and comparative consistency, and provides a basis for estimating the relative strength and compressibility of soil. Samples were obtained at 2.5-foot intervals to a depth of 15 feet and at 5-foot intervals thereafter to boring termination.

The soil samples obtained from each interval were logged in the field according to their predominant geological characteristics. These field logs were used to prepare the Boring Logs which are included in the Appendix of this report. Representative soil from each sample was delivered to Pioneer's laboratory for further examination and testing. Upon completion of the drilling, the boreholes were backfilled with auger cuttings to the existing ground surface.

2.2 Laboratory Testing

The soil samples were analyzed for physical parameters including natural moisture content and unconfined compressive strength. The soil samples, which were not altered by laboratory testing, will be retained for approximately 30 days from the date of this report and then discarded.

A natural moisture content test was conducted for each sampling interval and/or stratum in accordance with ASTM Standard D 2216. Additional estimated unconfined compressive strength values for cohesive soil samples were obtained by using a spring-loaded pocket penetrometer and/or Rimac machine. After completion of the laboratory testing, an experienced soil engineer visually classified each soil sample in accordance with the Unified Soil Classification System (ASTM Standards D 2487 and D 2488). A brief description of the Unified Soil Classification System has been included in Appendix C of this report.

3.0 RESULTS OF EXPLORATION

3.1 Subsurface Conditions

The following generalized soil profile was encountered in the borings.

- *Black Silty Clay Topsoil.* The surface cover at the site consists of an approximate 11-inch to 1-foot layer of Black Silty Clay Topsoil. The Topsoil possesses moisture content percents ranging from 29.0 to 36.1 percent.

- *Stiff to Very Tough Brown and Gray Silty Clay*. The topsoil layer is underlain by stiff to very tough Brown and Gray Silty Clay which extends to depths of 3 to 10.5 feet below existing grade. This deposit possesses unconfined compressive strengths ranging from 0.5 to 3.4 tons per square foot (tsf) and moisture contents between 11.7 and 29.7 percent with exceptions in Borings B-05 and B-14 at a depth of 1 to 2.5 feet, possessing moisture contents of 33.3 and 36.2 percent.

- *Loose to Medium Dense Brown Sand.* In all borings except B-04, B-06, B-08, B-09, B-12, and B-13, loose to medium dense Brown Sand is encountered between depths of 3 to 10.5 feet below grade. Borings B-01 and B-02 were terminated within this deposit at a depth of 10 feet below grade. The Brown sand is encountered with trace amounts of gravel and clay and is generally in a moist to wet condition. This deposit possesses Standard Penetration Test (SPT) N-values of 4 to 16 blows per foot (bpf) with exceptions in Borings B-01 and B-14 at depths of 8.5 to 10 and 3.5 to 5 feet respectively, possessing SPT N-values of 60 and 3 bpf. The Sand also possesses moisture contents between 11.9 and 25.1 percent.

- *Very Loose to Loose Brown Clayey Sand.* In Borings B-04, B-08 through B-10, and B-12, very loose to loose Brown Clayey Sand is encountered between depths of 3 and 5.5 feet except in B-04 where it is encountered between depths of 8 to 10.5 feet below grade. The Clayey Sand is encountered with trace amounts of gravel and typically in a moist to wet condition. This deposit possesses SPT N-values of 2 to 4 bpf and moisture contents of 16.9 to 24.9 percent.

- *Loose to Medium Dense Gray Sand*. In Borings B-04, B-05, B-07, B-09 through B-11, and B-14, loose to medium dense Gray Sand is encountered between depths of 13 and 17 feet below grade. This stratum is typically encountered with trace amounts of gravel. This deposit possesses SPT N-values of 4 to 18 bpf with an exception of B-14 possessing an N-value of 50 bpf. The Gray Sand possesses moisture contents between 10.5 to 19.3 percent.

- *Stiff to Hard Gray Silty Clay*. Below a depth of 10.5 feet and extending to the boring termination depths of 15 to 20 feet below existing surface grade is stiff to hard Gray Silty Clay with trace to little amounts of sand and gravel. This deposit possesses unconfined compressive strengths ranging between 0.5 and 7.3 tsf and moisture contents of 8.9 to 14.4 percent.

The subsurface description is of a generalized nature to highlight the major subsurface stratification features and material characteristics. The boring logs included in the Appendix should be reviewed for

specific information at individual boring locations. These records include soil descriptions, stratifications, penetration resistance, locations of the samples and laboratory test data. The stratifications shown on the boring logs represent the conditions only at the actual boring locations. Variations may occur and should be expected between boring locations. The stratification represents the approximate boundary between subsurface materials and the actual transition may be gradual.

3.2 Groundwater Observations

Groundwater was encountered in all borings at depths of 5 to 10 feet below existing grade during drilling operations. Based on the coloration change from Brown and Gray to Gray, the long-term groundwater level is estimated to be at an approximate depth of 5 feet below the existing grade. Seasonal and yearly fluctuations in the water table can be expected due to variations in precipitation, evaporation, and surface runoff. Also, it is likely that pockets of perched groundwater may occur after precipitation events.

3.3 Outside Laboratory Test Results

The results of the outside laboratory testing are presented below in the following tables and are included in Appendix B.

Table 1 - General Laboratory Test Results

Location/ Boring No.	Sample Depth (ft)	USCS Symbol	Passing #200 Sieve (%)	Liquid Limit	Plastic Limit	Plasticity Index	Thermal Resistivity (°C-cm/W)	
							Initial Conditions	Dry
B-03	3 - 5	CL	74.3	30	16	14	69	175

Note: Thermal resistivity specimen reconstituted to approximate 85% of maximum standard proctor density near the optimum moisture content.

Table 2 - Corrosivity & Electrical Resistivity Testing Results

Location Boring No.	Sample Depth (ft)	USCS Symbol	pH	Redox (mV)	Sulfate Ion (mg/kg)	Chloride Ion (mg/kg)	Sulfide Ion (mg/kg)	Electrical Resistivity (ohm-cm)	
								As Received	Saturated
B-03	3 - 5	CL	8.1	175	ND	ND	ND	2,875	SC

Note: SC = Sample received in Saturated Condition. ND = Not detected at the Reporting Limit.

3.4 Field Resistivity Testing

Field resistivity testing was performed near the proposed equipment pad along two perpendicular traverse lines. The soil resistivity testing was performed using the Wenner four-electrode method in general accordance with ASTM G 57. The testing along each traverse line was performed with electrodes evenly spaced at intervals of 2.3, 5, 10, and 25 feet. Variations in the recorded resistivity may be encountered due to changing weather conditions.

Table 3 - Field Resistivity Testing Results

Electrodes Spacing (Feet)	Direction	Resistivity (ρ) ohm-cm	
		B-03	B-04
2.3	N - S	2,970	3,440
	E - W	3,140	3,230
5	N - S	2,790	3,820
	E - W	2,860	3,520
10	N - S	4,040	5,780
	E - W	4,520	5,910
25	N - S	5,360	6,270
	E - W	5,680	6,790

*Resistivity was completed on March 18, 2025 with an ambient temperature of approximately 51 degrees Fahrenheit.

4.0 EVALUATIONS AND RECOMMENDATIONS

4.1 Site Preparation

Site Earthwork. It is anticipated that a minimal amount of earthwork will be required to prepare the Site for construction. The ground surface at the Site is mostly in the range from approximately Elev. 725 to 730 feet MSL. Based on the Google Earth topographic information, the site appears to be relatively flat, generally sloping inward to the creek. Earthwork and preparation will be required for the access roads (both paved and gravel), equipment support pads and the solar panel area.

Topsoil Stripping. The Site is covered with grass and farmland vegetation. An approximate 1-foot thick surface cover of Black Silty Clay Topsoil was encountered in all of the borings. The Topsoil and vegetation root mat should be removed to the depth encountered from the limits of the proposed roadways and equipment support slabs.

4.2 Solar Panel Foundation System Design Criteria

Design Information. Pioneer understands that the foundation system for the solar panels will likely consist of a grid of H piles. The solar arrays are lightly loaded structures and the design is typically controlled by the uplift loads. For discussion purposes, it is assumed that the piles will be embedded a minimum depth of 10 feet below existing grade.

Soil Conditions. For driven or vibrated steel H piles, the axial resistance is developed through skin friction between the sides of the pile and the surrounding soils. The allowable side friction (or adhesion) value for a deep foundation design is dependent on the depth, soil friction angle, and average undrained shear strength of the soils. The following soil properties were used to develop the recommended design parameters.

Table 4 - Summary of Soil Properties

Depth from Ground Surface (ft)	Soil Type	Estimated Unit Weight (pcf)	Moisture Content (%)	Average SPT N-Values (blows per foot)	Estimated Angle of Internal Friction (degrees)	Undrained Shear Strength (psf)
0 - 1.0	Black Silty Clay Topsoil	110	33	-	-	-
1.0 - 3.0	Stiff to Very Tough Brown & Gray Silty Clay	125	25	5	-	1,000
3.0 - 5.5	Loose to Medium Dense Brown Sand	130	18	6	30	-
5.5 - 13.0	Stiff to Very Tough Gray Silty Clay (Mainly Southern half)	125	12	6	-	1,500
5.5 - 13.0 (B-1, B-2, B-3, B-5, B-7, B-14)	Loose to Medium Dense Brown Sand (Mainly northern half)	120	15	6	30	-
13.0 - 17.0	Loose to Medium Dense Gray Sand	120	13	12	32	-
17.0 - 20.0	Very Stiff to Hard Gray Silty Clay	130	12	16	-	3,500

Allowable Side Friction Recommendations. The following table provides recommended allowable side friction values for the soils that were encountered in the borings. These values include a factor of safety of 2.0.

Table 5 - Skin Friction Values for Pile Design

Depth from Ground Surface (ft)	Soil Type	Allowable Side Friction or Adhesion (psf)	Allowable Adhesion for Uplift (psf)
0 - 1.0	Black Silty Clay Topsoil	-	-
1.0 - 3.0	Stiff to Very Tough Brown & Gray Silty Clay	275	181
3.0 - 5.5	Loose to Medium Dense Brown Sand	110	72
5.5 - 13.0	Stiff to Very Tough Gray Silty Clay (Mainly Southern half)	412	272
5.5 - 13.0 (B-1, B-2, B-3, B-5, B-7, B-14)	Loose to Medium Dense Brown Sand (Mainly northern half)	250	165
13.0 - 17.0	Loose to Medium Dense Gray Sand	418	275
17.0 - 20.0	Very Stiff to Hard Gray Silty Clay	935	617

The allowable skin friction quoted above should be used for compressive loading only. In designing to resist uplift loading, two-thirds of the allowable skin friction value quoted above should be used in the design. The upper 20-inches of profile should be ignored for skin friction due to frost action.

Lateral Load Design. Resistance to lateral loads can be developed from passive pressure of the soil against the pile. For lateral load analysis, the following subgrade resistance profile may be used.

Table 6 - Summary of Modulus of Lateral Subgrade Reaction

Depth from Ground Surface (ft)	Soil Type	Lateral Subgrade Modulus (pci)	Soil Strain Parameter (ε_{50})
0 - 1.0	Black Silty Clay Topsoil	-	-
1.0 - 3.0	Stiff to Very Tough Brown & Gray Silty Clay	230	0.009
3.0 - 5.5	Loose to Medium Dense Brown Sand	25*	-
5.5 - 13.0	Stiff to Very Tough Gray Silty Clay (Mainly Southern half)	500	0.007
5.5 - 13.0 (B-1, B-2, B-3, B-5, B-7, B-14)	Loose to Medium Dense Brown Sand (Mainly northern half)	20*	-
13.0 - 17.0	Loose to Medium Dense Gray Sand	60*	-
17.0 - 20.0	Very Stiff to Hard Gray Silty Clay	1,160	0.005
* For granular soils, the lateral modulus of subgrade reaction is assumed to increase linearly with depth			

Anticipated Settlement. Based on the subsurface conditions, laboratory testing and past experience, Pioneer anticipates that properly designed and constructed pile foundations should experience a maximum total settlement of less than 1/4-inch. Differential settlements ranging from 1/2 to 2/3 the total settlement are possible across the Site area due to variations in subsurface conditions and foundation loadings.

Design to Resist Frost Heave. Driven piles may be affected by uplift forces caused by frost heave. Frozen soil will adhere to embedded surfaces such as the steel perimeter of the drive piles. The soil will also expand in volume causing an upward heave of the ground surface. The combination of the uplift forces and the adherence to the embedded piles or anchors can result in upward movement of the pile and solar array. This will cause distortion and damage to the array.

For design purposes, the amount of uplift forces due to frost heave can be calculated using the following parameters.

- Depth of Maximum Frost Penetration of 20 inches
- Adhesion Uplift Force of 1,500 psf
- Outer perimeter of pile

For driven piles, the frost heave forces are resisted by the skin friction at the soil/pile interface as discussed in Allowable Side Friction Recommendations. This resistance for the embedded pile surface below the frost level is calculated by multiplying the Allowable Side Friction of Adhesion by the outer perimeter of pile by the embedment of pile below the frost line.

Remedial Measures to Resist Frost Heave. The following measures can be considered to minimize the amount of frost heave forces of the driven piles.

- Pre-drilling each pile location to the depth of frost penetration. The diameter of the hole should be several inches greater than largest diagonal dimension of the pile. After completion of pile driving, the annulus should be filled with coarse sand or gravel.
- Installing a low friction coating or sleeve to the section of pile within the frost depth.

Frost Depth analysis was performed with reference to A Ground Frost Climatology for Illinois, Illinois State Academy of Science, Wendland 1998.

4.3 Equipment Support Slabs

Equipment Support Slabs. Reinforced concrete slabs are typically used to support transformers and other electrical equipment. The slabs are most often ground-supported with no foundations. Although not common, equipment slabs supported on frost depth footings can also be used. Recommendations for both options are presented below.

Slab-on-Grade. If nominal slab movement from frost heave can be tolerated, the slab can be designed as a slab-on-grade using the following procedures. The Root Mat and Topsoil as discussed above should be removed to the depth encountered to a distance of 2 feet outside the limits of the slab. The Topsoil should be replaced with granular Structural Fill to design subgrade. The equipment slab should be supported by a minimum 8-inch thick granular base course of IDOT CA-6 Crushed Stone or equivalent. The slab should be suitably reinforced to make it as rigid as practical to reduce the effects of any potential frost related movements.

If minor frost related movements are not desirable, the Topsoil and underlying Silty Clay and Sandy Soils can be undercut to a minimum depth of 3.5 feet below the lowest adjacent grade and replaced with granular Structural Fill (IDOT CA-6 gradation). The following procedures should be used for support and to help minimize settlement of the at-grade floor slabs.

Once the equipment slab areas are excavated to the design subgrade, the subgrade should be inspected for unsuitable soils. If encountered, highly organic material should be removed to the depth encountered and replaced with Structural Fill. The exposed subgrade should be inspected for stability by proofrolling, if possible. Granular soils, if encountered, should be thoroughly densified using a vibratory compactor. Unstable areas should be removed to a depth of 2 feet below slab subgrade and replaced with Structural Fill.

The Structural Fill should be an approved granular soil equivalent to an IDOT CA-6 gradation. This engineered fill should be placed and compacted in lifts with a maximum lift thickness of 6 inches. Each lift should be compacted to a minimum of 95% of the maximum density in accordance with ASTM D1557.

If the slab subgrade is prepared in the winter during freezing conditions, any exposed subgrade soils should be protected from freezing, typically with blankets. Engineered fill should not be placed on frozen soils.

Assuming the slab subgrade is prepared as recommended, a modulus of subgrade reaction of 100 pounds per cubic inch (pci) should be used.

Continuous/Spread Footings For Structural Slabs. Conventional foundations of continuous footings can also be used to support any equipment structural slabs.

Frost-depth footings founded at a depth of approximately 3.5 feet below existing grade and supported on the native Sandy Soils or on a pad of Structural Fill can be dimensioned using a net allowable bearing capacity of 2,000 psf. As the footings are anticipated to be on Sandy Soils, upon release of the overburden pressure, the Sandy Soils may become in a loose state. It is highly recommended the contractor has equipment to compact the Sandy Soils before forming the footing. The net allowable soil bearing pressure refers to that pressure which may be imposed on the foundation soils in excess of the final minimum surrounding overburden pressure.

Undercut/Replacement of Unsuitable Soil. The following should be used where unsuitable soil is encountered below the design footing subgrade and an undercut-replacement scheme is used for footing support. Any unsuitable soils, such as highly organic material or Silty Clay that has unconfined compressive strengths less than 1.25 tsf, that are encountered at the design footing subgrade should be removed to the depth encountered and replaced with Structural Fill. Typical Structural Fill, such as 3-inch Crushed Limestone or Crushed Concrete choked with 1-inch nominal granular material (IDOT CA-7 gradation), should be placed in 18-inch lifts and compacted by use of a vibratory compactor or through the force of a backhoe's bucket to seat the stone. The width of the excavation should extend at least one foot horizontally beyond the perimeter of the footing on all sides for each one foot of vertical undercut below the bottom of the footing, thus providing for adequate lateral distribution of the foundation stresses.

An additional discussion of the placement and compaction of Structural Fill is included in the Earthwork Controls section of this report.

Additional Footing Design Criteria. All footings should be founded a minimum of 3.5 feet below final exterior grade to eliminate the effects of frost on footing behavior. In order to prevent a local bearing failure, isolated column footings should have a minimum lateral dimension of 24-inches and continuous footings should have a minimum width of 18-inches. If the structures are constructed during winter months or if the footings will likely be subjected to freezing temperatures after construction is completed, then the footings should be protected from freezing.

In order to limit the effects of differential movement that may occur due to variations in the character of the supporting soils and variations in seasonal moisture contents, Pioneer recommends that the continuous footings be suitably reinforced to make them as rigid as practical.

Excavation Stability. Groundwater was encountered in all borings between depths of 5 to 10 feet below surface grade during drilling operations. Groundwater is not expected to be a concern during construction. However, spread footings for electrical pads are anticipated to be founded on Sandy Soils. In the event of heavy precipitation and high groundwater, the contractor should be prepared to dewater the Sandy Soils before compacting the Sand subgrade.

During rainy seasons and under normal conditions, surface runoff and seepage water that may accumulate overnight or momentarily in foundation excavations should be promptly removed through standard perimeter ditch, sump, and pump procedures. Water, as well as loosened or disturbed materials, should be removed from the base of excavations immediately prior to the placement of concrete. The soil base of the excavations should also be protected during construction from deterioration or softening caused by frost and construction activity.

Pioneer recommends sloping the sides of the excavation in accordance with local ordinances and OSHA regulations. Materials removed from the excavation should not be stockpiled immediately adjacent to the excavation, since this surcharge load may cause a sudden collapse of the slope.

4.4 Pavement Design Considerations

Pavement Type. It is anticipated that most of the Site access roads will be paved with an aggregate surface. Access roads between the Public Road and the site property line may require a bituminous concrete or concrete paved surface, depending on the local government requirements. The following recommendations can be used for the selected pavement type.

Pavement Support. The proposed pavement areas should be excavated to design subgrade to outside the limits of the paved area. Any Topsoil or root mat should be removed from the pavement area to a maximum depth of 2 feet below design subgrade and replaced with Structural Fill. Uniformity in support characteristics for the pavement can be attained by using the following procedures.

After excavating to pavement design subgrade, the exposed soil should be proofrolled with a vibratory steel drum roller or fully loaded truck. The subgrade should also be visually inspected for unsuitable soils. As previously stated, if encountered upon excavation, Sandy Soils may become in a loose state, and it highly recommended that the contractor have equipment to compact the Sandy Soils before any paving operations. Any Fill containing a high content of topsoil, organic material or wood debris should be removed to the depth encountered to a maximum depth of 2 feet below design subgrade.

All unsuitable soils, if any, should be replaced with compacted Structural Fill. Structural Fill should be an approved granular soil equivalent to an IDOT CA-6 or CA-7 gradation. If highly unstable areas are encountered, the Structural Fill should be IDOT CA-1 (3-inch nominal size) gradation. Use of a woven geotextile fabric should be considered for additional stability. Engineered fill should be placed and compacted in lifts with a maximum lift thickness of 8 inches. Each lift of IDOT CA-1 or CA-7 open graded granular soil should be compacted to a minimum of 75 percent of the relative density in accordance with ASTM Standards D 4253 and D 4254. If IDOT CA-6 granular material is used, the soil should be compacted to a minimum of 95 percent of the maximum density per ASTM D 1557 (Modified Proctor).

Pavement Section. Pioneer recommends a flexible pavement section be designed according to the State of Illinois Department of Transportation, Division of Highways, Highway Design Manual using AASHTO-H-20 loading as a maximum. The AASTHO design method takes into consideration the structural design traffic, the subgrade support value, and the structural layer coefficients for each component of the pavement system. Local pavement design practices are presented in the IDOT publication "Pavement Design Procedure" dated August 31, 1995.

The following pavement sections are considered the minimum pavement sections to be used for this project and are typically recommended in local practice, and are in general accordance with IDOT's "Pavement Design Procedures", for similar structures. It is recommended that the completed site plan be analyzed to determine the most likely traffic patterns for heavy service trucks. The recommended Heavy-Duty Pavement section should be used in these traffic corridors.

Table 7 - Pavement Section Recommendations

Pavement Material	Compacted Material Thickness (Inches)			
	Flexible Pavement (Light Duty)	Flexible Pavement (Heavy Duty)	Rigid Pavement (Heavy Duty)	Aggregate Access Road
Portland Cement Concrete	—	—	6.5	—
Bituminous Surface Coarse	1.5	2	—	—
Bituminous Binder Coarse	1.5	3	—	—
Type B Granular Base Coarse (IDOT CA-6)	8	10	6	6[1]
Total Pavement Section Thickness	11	15	12.5	6

Notes: [1]The use of a woven geotextile is recommended beneath the Aggregate Surface Course

The bituminous concrete binder and surface courses should consist of fine, dense, graded aggregate, Class I as defined in the IDOT Standard Specifications for Road and Bridge Construction. All placement and compaction activities should meet the requirements of the IDOT Standard Specifications.

For aggregate surfaced accessed roads, the use of a woven geotextile is recommended beneath the Aggregate Surface Course to help stabilize the subgrade, and prevent ruts and potholes.

The design of pavements should incorporate provisions for drainage of both the pavement surface and the base course layer. Should standing water be allowed to accumulate on the pavement surface or within the base course, the sub-grade will soften and it is likely that the pavement will deteriorate. The base course should be protected from water inflow along drainage paths. The base course should extend beyond the edges of the pavement in low areas to allow any water that enters the base course a path for exit.

4.5 Seismic Design Criteria

The Site Classification is based on the upper 100 feet of the site profile defined by a weighted average value of either shear wave velocity, standard penetration resistance, or undrained shear strength in accordance with ASCE 7-16 and the International Building Code (IBC).

Based on the soil properties encountered at the site and as described on the boring logs, it is our professional opinion that the Seismic Site Classification is D ("Stiff Soil") as detailed in the table below. Subsurface explorations at the site were extended to a depth of 20 feet. Available geologic data was used to estimate the soil properties below this depth.

Table 8 - Seismic Site Class

Description	Type	Value
Site Classification	Stiff Soil	D
Seismic Design Category	SDC	C
MCE_R Ground Motion (0.2 Sec Period)	S_S	0.164
MCE_R Ground Motion (1.0 Sec Period)	S_1	0.089
MCE_G Peak Ground Acceleration	PGA	0.079

Although the Site has a Seismic Design Category of C, the soil profile consists of a predominately silty clay profile, which is considered not liquefiable. For the Sandy Soils, a liquefaction analysis has been run and indicates a minimum factor of safety of 1.77.

4.6 Construction Considerations

Earthwork Controls. Structural Fill should meet the following properties for use as footing, floor slab, or pavement support soils.

Table 9 - Structural Fill Material Requirements

Fill Type	USCS Classification	Acceptable Location for Placement
Cohesive	CL, CL-ML	Below floor slabs and pavement
Granular	GW, GP, GM, GC SW, SP, SM, SC	Below floor slabs, pavement and foundations
Unsuitable	CH, MH, ML, OL, OH, PT	Non-structural areas

Structural Fill should be placed and compacted in accordance with the following requirements.

Table 10 - Fill Placement and Compaction Requirements

Description	Requirement
Fill Lift Thickness	10 inches loose measurement when sheepsfoot or steel drum rollers are used 6 inches loose measurement when jumping jacks or plate compactors are used
Minimum Compaction Requirement Below Foundations and Slabs-on-Grade and Upper 12 Inches of Paved Areas	95% of the maximum dry density per ASTM D-1557 (Modified Proctor)
Minimum Compaction Requirement Below 12 Inches of Paved Areas and Landscaped Areas	90% of the maximum dry density per ASTM D 1557 (Modified Proctor)
Moisture Content of Cohesive Soils	-2% to +3 % of optimum moisture content per ASTM D 1557
Open-graded Aggregate including IDOT CA-1 and CA-7 Gradations	Compact in 8-inch thick lifts loose measure to achieve stability through particle interlock

All subgrade surfaces should be protected during construction from deterioration or softening caused by frost or ponding of water. Water should not be allowed to stand in the excavations for a sustained period of time. All soft, loose, or disturbed soils should be removed to competent support materials. If any floor slab or pavement subgrade is prepared in the winter, exposed subgrade soils should be protected from freezing. Structural Fill should not be placed on frozen soils.

5.0 REPORT LIMITATIONS

5.1 General Considerations

This geotechnical investigation report has been prepared to aid in the evaluation and design of this project. As a result, this report has provided generalized guidelines to be considered during the actual design and construction phases of the project. The information provided in this report should be evaluated by and the structural site improvements should be designed by a licensed professional engineer, structural engineer, or architect. Should deviations from the noted subsurface conditions be encountered during construction, this information should be brought to Pioneer's attention. If you wish, Pioneer would welcome the opportunity to provide field construction services for this project.

The analysis and recommendations submitted in this report are based upon the data obtained from the soil borings performed at the locations indicated on the location diagram. It should be understood that these locations were approximate, since no survey was performed for the boring location sites. This report does not reflect any variations that may occur between or beyond these borings. The soil borings drilled at the site were backfilled with soil cuttings mixed with bentonite chips. Even though this backfill was compacted, some settlement can be expected due to the dead weight of the soil. Please note that it is the property owner's responsibility to maintain the boreholes' fill elevation.

The scope of services did not include any environmental assessment for the presence of wetlands or hazardous or toxic materials in the soil, surface water, groundwater, or air that was on, below or around this site. Statements in this report or on the boring logs regarding odors, colors, or unusual or suspicious items or conditions (if any are encountered during the performance of this sub-surface investigation) are strictly for the client's information.

5.2 Closing Remarks

This report has been prepared for the sole use of the Client and cannot be relied upon by other persons or entities without Pioneer's permission. The observations and conclusions contained herein are limited by the scope and intent of the work mutually agreed upon by the client and Pioneer and the work actually performed. There are no warranties, implied or expressed, concerning the integrity of the areas and/or mediums not analytically tested.

Engineering Testing, Inc.

9530 James Ave. South
Bloomington, MN 55431

Billing Information:
John Whelan
9530 James Ave. South
Bloomington, MN 55431

Report to:

Email To:

Project Description: MADDEN CREEK SEWER MAINTENANCE

City/State Collected:

Please Circle: PT MT CT ET

Phone: 952-884-6833

Client Project # 15718

Lab Project #

Collected by (print):

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N X Y ___

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	SULFATE	CHLORIDE	SULFIDE	OAR										
B-3		SS	3-5	4/1/25	15:00	1	X	X	X	X										-01

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1843267
A182

Acctnum: SOIENGBMN
Template:
Prelogin:
PM: 341 - John Hawkins
PB:

Shipped Via:

Remarks | Sample # (lab only)

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 741451772960

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	4/1/25	15:00	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			Dewanta

Trip Blank Received: Yes (No) HCL / MeoH TBR

Temp: 11.4°C Bottles Received: AMB to 4-AMB 1

Date: 4.1.25 Time: 2015

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

ANS GEO

PILE LOAD TESTING REPORT

SUNVEST SOLAR LLC

Madden Creek Solar Project
Piatt County, Illinois May

15, 2025

Table of Contents

1 Executive Summary 1
2 Project Understanding 1
3 Methodology 2
3.1 Pile Installation 2
3.2 Lateral Load Testing 2
3.3 Compression Testing 2
3.4 Uplift Load Testing 3
3.5 Extraction and Disposal 3
4 Results 3
5 Limitations 4

Tables

Table 1 – Final Embedment Depth Summary 2
Table 2 – Summary of Lateral Load Test Capacities 3
Table 3 – Summary of Compression Load Test Capacities 3
Table 4 – Summary of Uplift Load Test Capacities 4

Attachments

Attachment A – Location Plan
Attachment B – Pile Load Testing Logs
Attachment C – Photographic Log

1 Executive Summary

ANS Geo, LLC. was retained by Sunvest Solar, LLC (Sunvest) to conduct a pile load testing program for the Madden Creek project (approximately 27.3 buildable acres, east parcel only) in Piatt County, Illinois. The purpose of this Pile Load Testing (PLT) Data Report is to provide data collected from our pile load testing program to Sunvest Solar for the evaluation of driven pile foundation system.

This Data Report summarizes the information gathered during our pile load testing program conducted during April 17, 2025, through April 27, 2025. Pile design parameters are not presented in this Data Report, as engineering analysis was not part of the authorized scope. If desired, we may be retained to provide geotechnical design parameters on the basis of pile load testing results presented herein.

The investigation location plan identifying our testing locations is provided as **Attachment A**. The results of the pile testing program are presented as **Attachment B**. A Photographic Log depicting pile installation and testing is provided at **Attachment C.**

2 Project Understanding

ANS Geo received the *Pile Testing Memorandum* specification for the project prepared by RP Construction Services (RPCS) dated February 21, 2025. Specification defined the proposed scope of work and testing locations. Testing was conducted as described in our proposal for Pile Load Testing Services at Madden Creek Solar Project, addressed to Sunvest Solar dated March 14, 2025. As part of our work, the following activities were completed:

- Pile installation was carried out and overseen by an ANS Geo representative in which 12 piles were installed across 6 locations (2 piles installed at each location) in accordance with our specified procedures.
    - "A" Pile (W6x9x13) – Each pile installed and embedded to 7 feet below grade; tested for uplift, lateral, and compression capacities.
    - "B" Pile (W6x9x15) – Each pile installed and embedded to 9 feet below grade; tested for uplift, lateral, and compression capacities.
- All 12 piles reached their target embedment depths.
- Piles were installed on April 17, 2025, then allowed to rest at least 24-hours to allow soil "setup" around the piles. Piles were tested between April 26, 2025, and April 27, 2025.
- Each lateral load was applied in 500 lb. increments and cycled back to zero for every 1,000 lbs. up to the target maximum load, 3,000 lbs., or failure (greater than 6-inches of lateral displacement at the point of load application), whichever comes first.
- During lateral testing, lateral loads were applied at 66 inches (5.5 feet) above grade, and deflections were measured at six (6) inches above grade and at load application height (66 inches).
- Each compressive and axial load was applied in increments equal to 500 lb. up to the target maximum load (10,000 lbs.) or failure (greater than 2-inch vertical displacement for compression and greater than 1-inch vertical displacement for uplift), whichever comes first.
- At the conclusion of the program, all piles were extracted and removed from the site.

3 Methodology

3.1 Pile Installation

ANS Geo installed W6x9 steel sections piles at selected locations across the proposed solar array areas on April 17, 2025. A total of 6 test locations were considered. At each test location, two (2) piles were installed. Piles were conventionally driven and intended for lateral, compression and uplift testing. ANS Geo installed each W6x9 to a target depth of seven (7) feet below grade ("A" pile) or to a target depth of nine (9) feet below grade ("B" pile).

All piles were installed via direct push to the weight of hammer resistance, then driven to their targeted depths using a Gayk 4000 HRE Pile Driver. The installation program was overseen and logged by an ANS Geo geotechnical representative.

Table 1 – Final Embedment Depth Summary

Load Test ID	Pile Coordinates	Target Embedment Depth (ft)	Installed Depth Below Ground Surface (ft)	Pushed-to Depth (ft)	Total Drive Time (sec.)	Average Pile Installation Rate (sec./ft)
PT-1A	40.200915°, -88.467318°	7.0	7.0	1.0	17.0	2.8
PT-1B		9.0	9.0	2.0	21.9	3.1
PT-2A	40.201731°, -88.468425°	7.0	7.0	1.0	18.2	3.0
PT-2B		9.0	9.0	1.0	26.2	3.3
PT-3A	40.202007°, -88.466672°	7.0	7.0	1.0	16.7	2.8
PT-3B		9.0	9.0	1.0	22.6	2.8
PT-4A	40.202840°, -88.465457°	7.0	7.0	1.0	17.1	2.8
PT-4B		9.0	9.0	1.0	24.3	3.0
PT-5A	40.200862°, -88.464688°	7.0	7.0	2.0	11.0	2.2
PT-5B		9.0	9.0	1.0	16.6	2.1
PT-6A	40.202060°, -88.463920°	7.0	7.0	2.0	13.6	2.7
PT-6B		9.0	9.0	2.0	19.5	2.8

3.2 Lateral Load Testing

Once installed to the targeted embedment depth, A lateral load test was performed on each pile in accordance with ASTM D3966 (lateral) test method. Lateral loads were applied at approximately 66 inches (5.5 feet) above grade on each pile with the pulling force of a Sany SY1550 excavator in line with the hydraulic ram acting as reaction.

Lateral loads were applied for 15 seconds, targeted load of 3,000-pounds for all piles. Additional test criteria to limit maximum lateral displacement of approximately 6.0 inches at the load application point (pile failure criteria) was not reached for any test piles. Additionally, deflections for each lateral test were recorded at 6.0 inches above ground level. Each lateral load was applied in 500-pound increments and cycled back to zero (0), such that three (3) cycles of loading occurred up to 3,000-pounds in accordance with the Lateral Load Sequencing reference agreed upon by Sunvest Solar. This process was repeated until the maximum load or pile failure was achieved, after which, the load was released, and the residual deflection was recorded.

3.3 Compression Testing

A compression load test was then performed on each pile across the project site and was performed in accordance with the ASTM D1143 (compression) test method. The compression load was applied using a Sany SY1550 excavator which applied the load concentrically to the pile by using an Enerpac hydraulic jack.

Compression testing was applied in 15 seconds, targeted load increments of 500-pounds, as agreed upon by Sunvest Solar. Loads were applied until the maximum target load of 10,000-pounds was reached or until a maximum vertical displacement of approximately 2.0 inches (pile failure criteria) was achieved. Following maximum load or pile failure, the load was released, and the final residual displacement was recorded.

3.4 Uplift Load Testing

An uplift load test was performed on each test pile in accordance with the ASTM D3689 (uplift) test method. The tension load was applied using a Sany SY1550 excavator which applied the load concentrically to the pile by using a hydraulic ram attached to a dynamometer, as well as a "pacman" clamp attachment to secure the assembly to the pile.

Tension loads were applied in 15 seconds, targeted load increments of 500-pounds, as agreed upon by Sunvest Solar. Loads were applied until the maximum target load of 10,000-pounds was reached or until a maximum vertical displacement of approximately 1.0 inch (pile failure criteria) was achieved, and the final movement was recorded. Following maximum load or pile failure, the load was released, and the residual deflection was recorded.

3.5 Extraction and Disposal

At the conclusion of the program, all test piles were fully extracted. All scrap material was disposed of off-site, and all test locations were backfilled and graded to match the original grade to the best possible extent.

4 Results

Complete pile load testing logs are provided as **Attachment B**. A summary of the recorded data is provided in **Table 2, Table 3,** and **Table 4,** presented below.

Table 2 – Summary of Lateral Load Test Capacities

Pile ID	Installation Depth (ft)	0.25" Deflection (lbs.)	0.5" Deflection (lbs.)	0.75" Deflection (lbs.)	1" Deflection* (lbs.)	Max Load (lbs.)	Residual Displacement (in.)
PT-1A	7.0	650	1,450	1,900	2,200	3,004	0.771
PT-1B	9.0	550	1,350	2,100	2,450	3,003	0.277
PT-2A	7.0	1,000	1,950	2,300	2,700	3,000	0.395
PT-2B	9.0	850	1,550	1,800	2,200	3,004	0.290
PT-3A	7.0	1,400	1,850	2,200	2,500	3,007	0.567
PT-3B	9.0	1,100	1,750	2,100	2,350	3,013	0.067
PT-4A	7.0	800	1,550	1,850	2,150	3,007	1.012
PT-4B	9.0	700	1,350	2,000	2,550	3,009	0.149
PT-5A	7.0	850	1,500	1,850	2,050	2,230	0.432
PT-5B	9.0	900	1,550	2,350	2,700	3,001	0.167
PT-6A	7.0	950	1,650	2,050	2,250	2,503	0.459
PT-6B	9.0	800	1,650	2,400	2,600	3,081	0.166

*Presented values for lateral loads for 0.25-inch, 0.5-inch, 0.75-inch and 1.0-inch deflection are interpolated from nearest 50 lbs. from the nearest measured values during testing.

Table 3 – Summary of Compression Load Test Capacities

Pile ID	Installation Depth (ft)	0.25" Deflection (lbs.)	0.5" Deflection (lbs.)	0.75" Deflection (lbs.)	1" Deflection* (lbs.)	Max Load (lbs.)	Residual Displacement (in.)
PT-1A	7.0	4,650	5,100	5,300	5,500	5,833	1.836
PT-1B	9.0	10,000	>10,000	>10,000	>10,000	10,000	0.236
PT-2A	7.0	5,050	5,100	5,150	5,250	5,500	2.000
PT-2B	9.0	5,550	6,000	6,500	6,650	7,280	2.000
PT-3A	7.0	7,550	8,250	9,450	9,900	10,000	0.977
PT-3B	9.0	>10,000	>10,000	>10,000	>10,000	10,000	0.000
PT-4A	7.0	>10,000	>10,000	>10,000	>10,000	10,000	0.000
PT-4B	9.0	5,300	5,500	5,600	5,700	6,001	2.000
PT-5A	7.0	4,550	5,000	5,050	5,100	5,275	1.554
PT-5B	9.0	7,650	8,150	8,500	8,550	8,754	2.000
PT-6A	7.0	4,600	5,050	5,050	5,100	5,268	2.000
PT-6B	9.0	8,150	8,700	9,000	9,050	9,276	2.000

*Presented values for compression loads for 0.25-inch, 0.5-inch, 0.75-inch and 1.0-inch deflection are interpolated from nearest 50 lbs. from the nearest measured values during testing. In cases where the maximum load capacity of the equipment was reached before the target displacement was achieved, a greater than sign (>) is presented.

Table 4 – Summary of Uplift Load Test Capacities

Pile ID	Installation Depth (ft)	0.25" Deflection (lbs.)	0.5" Deflection (lbs.)	0.75" Deflection (lbs.)	1" Deflection* (lbs.)	Max Load (lbs.)	Residual Displacement (in.)
PT-1A	7.0	2,250	2,750	3,150	3,550	3,825	1.140
PT-1B	9.0	4,150	5,350	6,100	6,550	6,635	1.118
PT-2A	7.0	2,000	2,400	2,650	2,900	3,014	1.079
PT-2B	9.0	1,550	2,050	2,550	2,850	3,009	0.970
PT-3A	7.0	2,650	3,550	3,700	3,850	4,000	0.887
PT-3B	9.0	8,200	8,850	8,900	8.950	9,006	1.130
PT-4A	7.0	4,650	5,850	6,450	6,650	6,739	0.943
PT-4B	9.0	1,600	2,100	2,350	2,650	3,013	1.209
PT-5A	7.0	1,600	2,350	2,700	2,900	3,021	0.922
PT-5B	9.0	3,450	4,550	5,050	5,350	5,518	1.070
PT-6A	7.0	1,650	2,100	2,400	2,800	2,980	1.033
PT-6B	9.0	2,950	3,850	4,300	4,850	5,420	1.209

*Presented values for uplift loads for 0.25-inch, 0.5-inch, 0.75-inch and 1.0-inch deflection are interpolated from nearest 50 lbs. from the nearest measured values during testing.

5 Limitations

ANS Geo notes that the findings presented within this Pull-out Testing Data Report are based on our limited investigation programs conducted in April 2025. Should the scope of the project or proposed site layout change, or more investigation areas become available, ANS Geo should be given the opportunity to review the applicability of the collected information and modify our recommendations, as needed. If actual site subsurface conditions differ from the inferred conditions on which ANS Geo has based our confirmation-dependent recommendations, ANS Geo will need to modify our confirmation-dependent recommendations to develop final recommendations. If ANS Geo's limited investigation is used for final design, our recommendations shall only be valid for the exact and specific locations at which field investigations were completed. Validity of the current data for all other areas and regions of the site outside of the current scope will be at risk of the individual or entity using this Report.

Attachment A

Investigation Location Plan

ANS GEO

Client:

SUNVEST SOLAR LLC

INVESTIGATION LOCATION PLAN

SUNVEST SOLAR
MADDEN CREEK SOLAR PROJECT
CHAMPAIGN COUNTY, ILLINOIS

Legend

- Project Boudary
- Pile Load Testing Locations

0 300 600 ft

Absolute Scale: 1 inch = 300 feet
Scale at 11" x 17" AS SHOWN

Prepared by: Danielle Todd
Date: May 13, 2025
Drawing Number: ILP-1 Rev.0

ANS GEO

May 15, 2025

Sunvest Solar LLC – Madden Creek – Drain Tile Investigation & Data Memorandum

Dear Sunvest Solar:

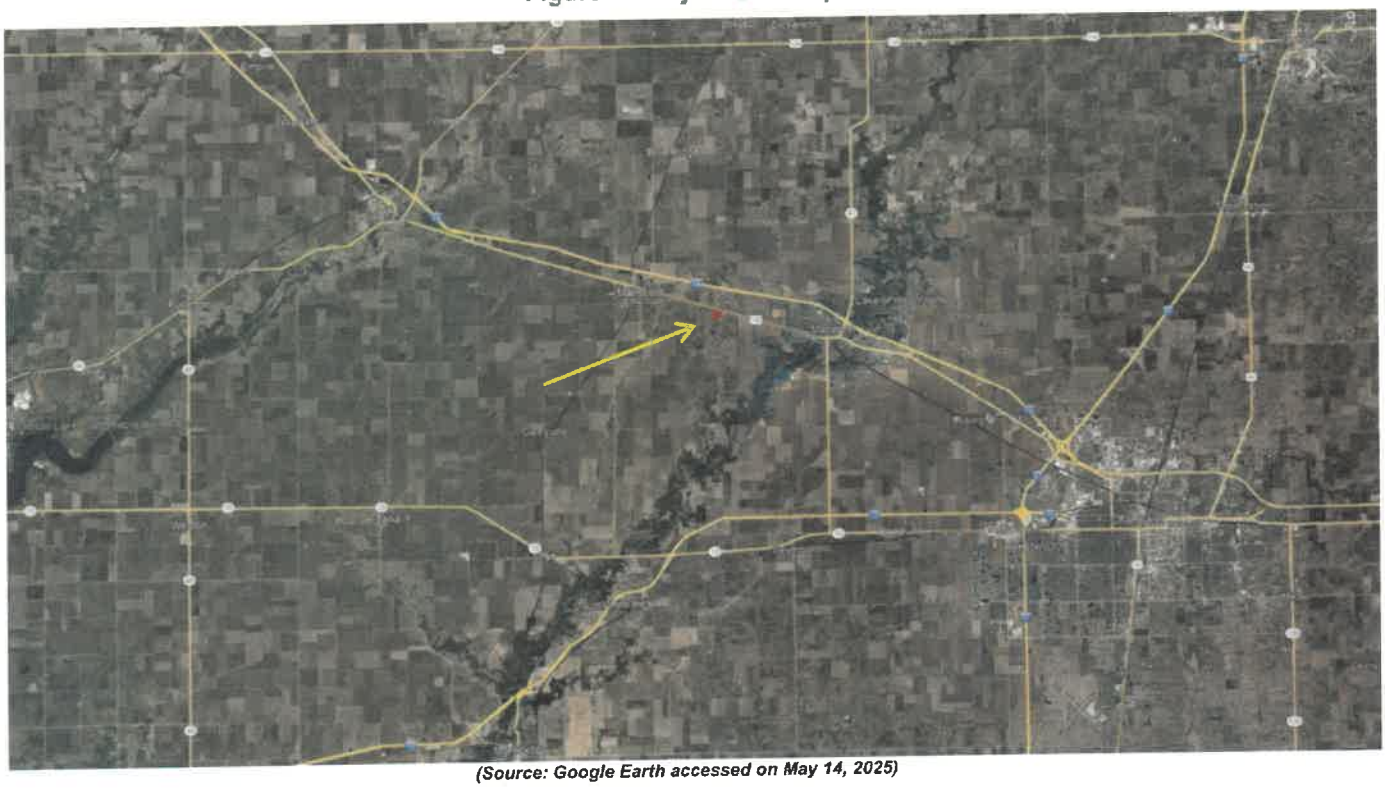
ANS Geo, Inc. is pleased to provide this Drain Tile Investigation and Data Memorandum (memo) to you to summarize the results of our Drain Tile Investigation in support of the proposed identification and subsequent mapping of existing drain tile at the Madden Creek project site located in Champaign County, Illinois. The contents of this memo summarize the surface and subsurface drainage data collected from our investigation consisting of excavating and mapping of existing drain tiles at the project site from April 28, 2025 to May 1, 2025.

1 Introduction

Drain tile identification and mapping was performed based on Sunvest Solar's request at Madden Creek. It was determined that 32 acres of land would be investigated and documented for the presence of locatable, existing drain tile within the 33.8 acre array boundary. Sunvest provided ANS Geo with the project boundary to be investigated along with necessary CAD files. ANS Geo performed a general study of aerial imagery to identify potential locations of the existing drain tile and access paths into the project area.

ANS Geo excavated a total of 23 investigation trenches within the proposed array area in an attempt to locate and physically confirm the depth, size, quality, and functionality of subsurface drain tile. ANS Geo located and mapped an extensive network of drainage lines throughout the Madden Creek project site. Drain tiles are typically identified in highly saturated and/or low-lying areas of a field, or located by vents, surface inlets or outlets across the field. The data within this memo corresponds to the investigation performed by ANS Geo in April and May 2025. This investigation program included aerial imagery analysis, exploratory trenching, tile location mapping and tile repairs as needed. An as-completed Mapped Drainage Tile Location Plan is provided as **Attachment A.**

Figure 1: Project Site Map



(Source: Google Earth accessed on May 14, 2025)

2 Methodology

2.1 Investigation Trench Excavation

ANS Geo excavated 23 trenches to various depths at select locations at the project site with a start date of April 28th, 2025.

All investigation trenches were excavated using a Takeuchi TB-145 excavator to a depth of 3-4 feet below ground surface (BGS) or until Drain Tile was located, whichever is encountered first, as shown in **Figure 2**. Trench locations were carefully chosen by an ANS Geo representative prior to and during field work based off historical satellite images, topography, and/or existing drainage outlets within the project area. Depth and length of trench varies depending on the location and any distinguishing features found within the investigation area. The typical investigation trench was 10 to 50 feet long and the equivalent of one bucket in width, 2 feet. All trenches were overseen and documented by an ANS Geo geotechnical representative. Trenches were documented during each excavation, and the details are presented within the photo logs provided as **Attachment B**. Trenches were excavated to various depths across the site as per **Table 1** below. Upon completion, each trench excavation was backfilled with native soil cuttings, bucket-tamped, and tracked over with the excavator to minimize post-excavation settlement. All locations were backfilled in an attempt to minimize loss of topsoil.

Figure 2: Trench Excavation

(Source: Madden Creek Drain Tile Investigation Dated May 1, 2025)

Table 1: Trench Investigation Summary

Investigation Trench ID	Starting Coordinates (WGS 84)	Ending Coordinates (WGS 84)	Completed Depth (in.)	Depth Tile Encountered (in.)
IT-01	40.20288316 -88.46411972	40.20296373 -88.46427198	42	42
IT-02	40.2027828 -88.46458444	40.20296222 -88.46441291	36	24
IT-03	40.202812 -88.464376	40.202776 -88.464237	36	36
IT-04	40.20107222 -88.4660517	40.20113026 -88.46616717	30	48
IT-05	40.20100264 -88.46620789	40.20101996 -88.4662495	24	48
IT-06	40.2018365 -88.46404654	40.20176114 -88.46407059	30	36
IT-07	40.20258761 -88.4638347	40.2027682 -88.46394376	30	30
IT-08	40.20267192 -88.46391742	40.20264498 -88.46391385	18	30
IT-09	40.20175511 -88.46780936	40.20180731 -88.46788817	30	30

IT-10	40.20169 -88.46819	40.201779 -88.468187	30	30
IT-11	40.20117658 -88.46786668	40.20117241 -88.46798841	24	24
IT-12	40.20197861 -88.46699526	40.20202255 -88.46700742	30	24
IT-13	40.20286773 -88.46571495	40.20301722 -88.46570446	30	30
IT-14	40.20089711 -88.46416235	40.20075442 -88.46417232	18	NE*
IT-15	40.20278255 -88.46572903	40.20263357 -88.4655832	24	NE*
IT-16	40.20238529 -88.46553616	40.20214402 -88.46564933	24	NE*
IT-17	40.20076892 -88.4650181	40.20061501 -88.46502227	24	NE*
IT-18	40.20064562 -88.4648261	40.2008632 -88.46452403	24	NE*
IT-19	40.20068078 -88.46465303	40.200643 -88.4646486	24	24
IT-20	40.20069351 -88.46458253	40.20064971 -88.46459559	24	24
IT-21	40.20066428 -88.46450311	40.20069203 -88.46449837	24	24
IT-22	40.20066863 -88.4637938	40.20063901 -88.46380091	24	30
IT-23	40.2006285 -88.46355889	40.20054491 -88.46355835	24	30

** Not Encountered*

2.2 Tile Mapping

ANS Geo mapped multiple individual investigation lines of subsurface drain tile using a Traceable Duct Rodder and handheld utility locator. To facilitate this, an ANS Geo representative either cut open or removed a section of the exposed line using either a hole saw or a reciprocating saw to insert the traceable rod. Using the handheld utility locator, the traceable rod is located marking out the location, length, and depth of the drainage line. On occasions where lines are blocked and could not be located with the tracer, a general trajectory was inferred based on the data collected from the investigation trench. These lines are clearly indicated in the location plan.

It should be understood that small diameter drains may exist within the project area that have not been discovered during our site investigation. All investigation trenches advanced, and tile lines located in the project area, were marked and mapped using a Trimble Geo7x with sub-meter post-processed accuracy. The results from the mapping program conducted are depicted within **Attachment A** and **Table 2** below.

Table 2: Drain Tile Mapping Results

Investigation ID	Drain Tile Type	Size (in.)	Depth to Drain Tile (in.)	Quality*	Blockage %/ Material Type	Key Notes
IT-01	Clay	42	42	Poor/ Abandoned	N/A**	Flooded trench
IT-02	Clay	36	24	Poor/ Abandoned	N/A**	Backed up with water
IT-03	Clay	36	36	Moderate	15% Clay	6" Clay
IT-04	Clay	30	48	Poor/ Abandoned	N/A**	6" Clay - Probed
IT-05	Clay	24	48	Poor/ Abandoned	N/A**	6" Clay - Probed
IT-06	Clay	30	36	Poor/ Abandoned	N/A**	6" Clay - Probed
IT-07	Clay	30	30	Poor/ Abandoned	N/A**	6" Clay - Probed
IT-08	Clay	18	30	Poor/ Abandoned	N/A**	6" Clay - Probed
IT-09	Clay	30	30	Fair	<5% Clay	6" Clay
IT-10	Clay	30	30	Poor	100% Clay	4" Clay - Probed
IT-11	Clay	24	24	Fair	25% Clay	4" Clay
IT-12	Clay	30	24	Fair	<5% Clay	6" Clay
IT-13	Clay	30	30	Poor/ Abandoned	N/A**	6" Clay
IT-19	Clay	24	24	Poor	0%	-
IT-20	Clay	24	24	Poor	0%	-
IT-21	Clay	24	24	Poor	0%	-
IT-22	Clay	24	30	Poor	0%	3" Clay

IT-23	Clay	24	30	Poor	0%	3" Clay – Continues to road

*Good: Functioning with full efficiency; **Fair**: Functioning with less efficiency; **Poor**: Risk of failure/total blockage

**Heavy flooding from backed up lines prevented observation of blockages. Assumed poor.

Any tiles that were damaged during the investigation were repaired in accordance with NRCS Code 606 after locating was completed. Examples of these repairs and the drain tile conditions can be seen in the photo log included in **Attachment B.**

3 Surficial Geology and Observed Surface Conditions

The NRCS survey was initially created for agricultural purposes and is generally limited to the upper five feet BGS; however, the resource provides generalized information pertaining to the soil chemistry and properties of the near-surface soil within this zone. The NRCS mapping indicates the array boundary to be 55.8% Drummer silty clay loam, 37.1% Flanagan silt loam, and 7.1% Elburn silt loam. The Drummer series consists of very deep, poorly drained soils formed in loess or other silty material and in the underlying loamy stratified outwash on nearly level or depressional parts of outwash plains, stream terraces, and till plains. Slope ranges from 0 to 2 percent. The Flanagan series consists of very deep, somewhat poorly drained soils that formed in loess or other silty material and the underlying loamy calcareous till on till plains and moraines. Slope ranges from 0 to 7 percent. The Elburn series consists of very deep, somewhat poorly drained soils on outwash plains, stream terraces, and till plains. These soils formed in loess or other silty material and in the underlying loamy stratified outwash. Slope ranges from 0 to 5 percent. The full NRCS soil report is provided as **Attachment C**.

The topography of the project site was relatively flat within the array boundary with gentle slopes down towards the pond in the center of the project site. Flooding was observed near many of the investigation trenches that took place near the retention pond. Temperatures ranged from the mid 50's to high 60's with scattered showers common. Based on publicly available maps (Google Earth), historical imagery shows that the area around the retention pond has been an agriculture field since the 1990's.

4 Generalized Subsurface Profile

The findings of our investigation regarding the site conditions are summarized in the tables below. The stratum profile in **Table 3** is **highly** generalized and trench location specific.

Table 3: Generalized Subsurface Profile

Material	Observations
TOPSOIL	Given the site's history of agricultural use, a thin layer of topsoil should be anticipated throughout the project boundary. While we anticipate this will be approximately 1 foot thick, on average, the depth of topsoil may be greater.
Clay/Silt	A brownish yellow to brown clay and silt was generally classified directly beneath the topsoil layer. The soil was observed to have varying amounts of coarse to fine gravel.

The available USGS geological data indicates that the site is located within the Tradewater Formations undivided that consists of predominantly shale and sandstone with minor constituents of coal and limestone observed throughout the rock mass.

Table 4: Ground Water

Location ID	Depth to Groundwater (in.)
IT-01	42
IT-02	36
IT-03	N/A
IT-04	30
IT-05	24
IT-06	30
IT-07	30
IT-08	18
IT-09	N/A
IT-10	N/A
IT-11	N/A
IT-12	N/A
IT-13	30
IT-14	N/A
IT-15	N/A
IT-16	N/A
IT-17	N/A
IT-18	N/A
IT-19	N/A
IT-20	N/A
IT-21	N/A
IT-22	N/A
IT-23	N/A

**N/A = Static groundwater was not observed within any investigation location depth explored*

At the time of our investigation program, groundwater was observed in eight (8) of the 23 investigation trenches advanced, shown in **Table 4**. Due to the low permeability of the soils encountered, a relatively long period of time may be necessary for a groundwater level to develop and stabilize. It is possible that snow melts, and seasonal conditions may cause the groundwater table to fluctuate as depth to groundwater is ephemeral and may be influenced by precipitation, temperature, or seasonal variations. Perched groundwater may be present in soils where a low-permeability layer exists above a higher-permeability layer, causing water to accumulate and form a saturated zone that is isolated from the main water table, especially during wet seasons.

5 Limitations

ANS Geo notes that the findings presented within this Drain Tile Investigation and Data Memorandum are based on our limited drain tile mapping program conducted in April and May 2025. ANS Geo has followed typical industry-standard level of efforts as part of our mapping and investigation scope. Should the scope of the project or proposed site layout change, or additional data regarding unmarked/unmapped drains or laterals be identified, ANS Geo should be given the opportunity to review the applicability of the collected information and modify our observations, as needed.

We sincerely appreciate the opportunity to assist with this project. Please feel free to contact us if you have any questions regarding the findings of this Drain Tile Investigation and Data Memorandum.

Yours Truly,

Logan Campbell
Geologist III - Geotechnical
ANS Geo
(419) 571-4314
Logan.campbell@ansgeo.com

Attachments

Attachment A – Mapped Drainage Tile Investigation Location Plan

Attachment B – Photo Log

Attachment C – NRCS Soil Survey Report

MAPPED DRAIN TILE INVESTIGATION LOCATION PLAN

EXISTING AGRICULTURAL DRAIN TILE INVESTIGATION PLAN

MADDEN CREEK

PREPARED FOR: SUNVEST SOLAR LLC
PIATT COUNTY, ILLINOIS

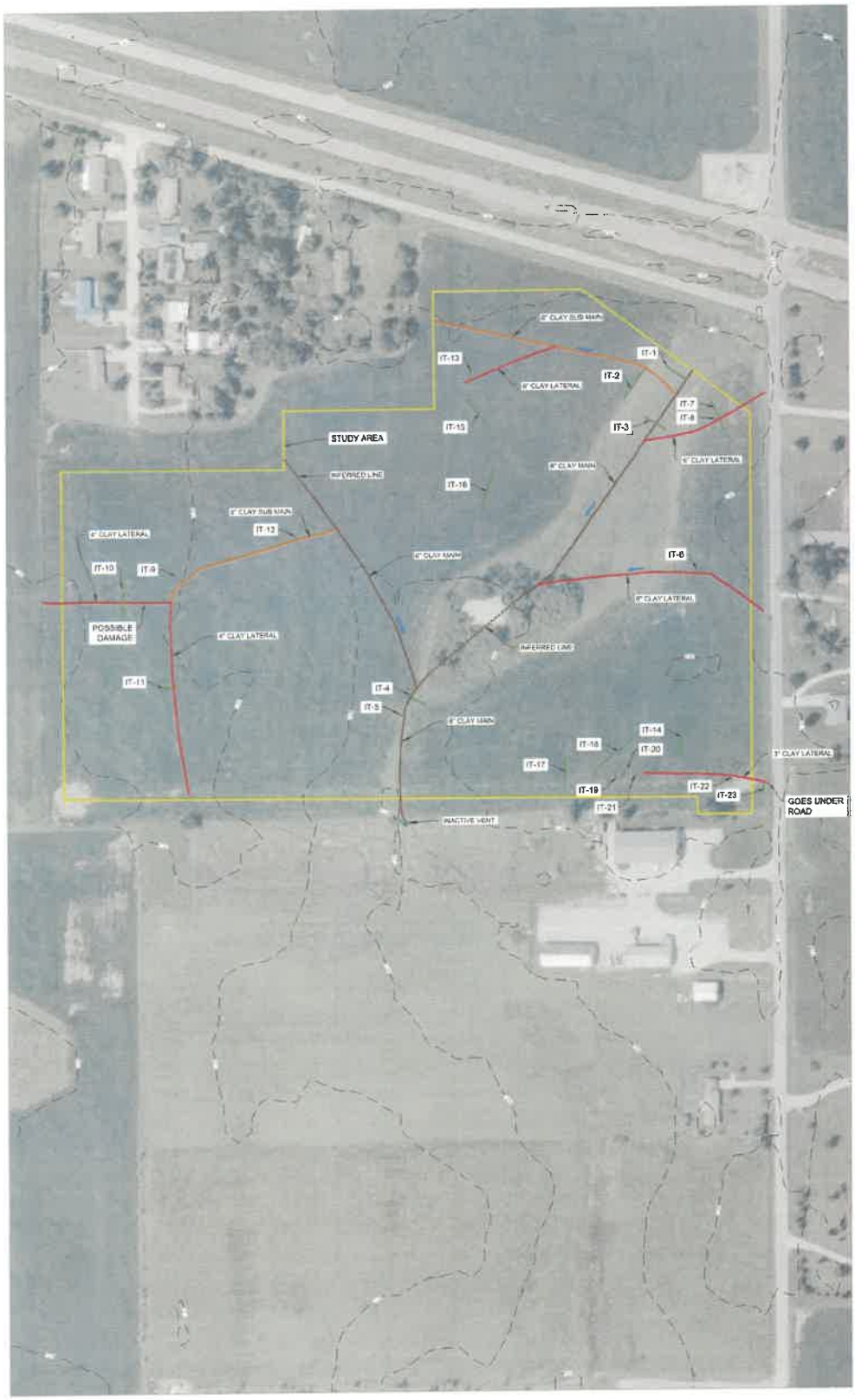
MAP LEGEND:

REPORT LEGEND:

SPECIAL NOTES:

MAPPING PREPARED BY:

MAPPING REVIEWED BY:



SUNVEST SOLAR LLC
CHICAGO, ILLINOIS

SCALE: 1"=100'

NORTH

LC 05/30/2025
ANS GEO
KS 05/09/2025

05/01/2025
05/09/2025
CLOUDY/OVERCAST

1" = 100'
1 OF 1

DRAIN TILE MAP

ANS GEO

STANDARD AGRICULTURAL IMPACT MITIGATION AGREEMENT
between
SV CSG Madden Creek, LLC

and the
ILLINOIS DEPARTMENT OF AGRICULTURE
Pertaining to the Construction of a Commercial Solar Energy Facility
in
Piatt County, Illinois

Pursuant to the Renewable Energy Facilities Agricultural Impact Mitigation Act (505 ILCS 147), the following standards and policies are required by the Illinois Department of Agriculture (IDOA) to help preserve the integrity of any Agricultural Land that is impacted by the Construction and Deconstruction of a Commercial Solar Energy Facility. They were developed with the cooperation of agricultural agencies, organizations, Landowners, Tenants, drainage contractors, and solar energy companies to comprise this Agricultural Impact Mitigation Agreement (AIMA).

SV CSG Madden Creek, LLC, hereafter referred to as Commercial Solar Energy Facility Owner, or simply as Facility Owner, plans to develop and/or operate a 3.25 MW Commercial Solar Energy Facility in Piatt County [GPS Coordinates: 40.201889,-88.466111], which will consist of up to 33.7 acres that will be covered by solar facility related components, such as solar panel arrays, racking systems, access roads, an onsite underground collection system, inverters and transformers and any affiliated electric transmission lines. This AIMA is made and entered between the Facility Owner and the IDOA.

If Construction does not commence within four years after this AIMA has been fully executed, this AIMA shall be revised, with the Facility Owner's input, to reflect the IDOA's most current Solar Farm Construction and Deconstruction Standards and Policies. This AIMA, and any updated AIMA, shall be filed with the County Board by the Facility Owner prior to the commencement of Construction.

The below prescribed standards and policies are applicable to Construction and Deconstruction activities occurring partially or wholly on privately owned agricultural land.

Conditions of the AIMA

The mitigative actions specified in this AIMA shall be subject to the following conditions:

A. All Construction or Deconstruction activities may be subject to County or other local requirements. However, the specifications outlined in this AIMA shall be the minimum standards applied to all Construction or Deconstruction activities. IDOA may utilize any legal means to enforce this AIMA.

B. Except for Section 17. B. through F., all actions set forth in this AIMA are subject to modification through negotiation by Landowners and the Facility Owner, provided such changes are negotiated in advance of the respective Construction or Deconstruction activities.

C. The Facility Owner may negotiate with Landowners to carry out the actions that Landowners wish to perform themselves. In such instances, the Facility Owner shall offer Landowners the area commercial rate for their machinery and labor costs.

D. All provisions of this AIMA shall apply to associated future Construction, maintenance, repairs, and Deconstruction of the Facility referenced by this AIMA.

E. The Facility Owner shall keep the Landowners and Tenants informed of the Facility's Construction and Deconstruction status, and other factors that may have an impact upon their farming operations.

F. The Facility Owner shall include a statement of its adherence to this AIMA in any environmental assessment and/or environmental impact statement.

G. Execution of this AIMA shall be made a condition of any Conditional/Special Use Permit. Not less than 30 days prior to the commencement of Construction, a copy of this AIMA shall be provided by the Facility Owner to each Landowner that is party to an Underlying Agreement. In addition, this AIMA shall be incorporated into each Underlying Agreement.

H. The Facility Owner shall implement all actions to the extent that they do not conflict with the requirements of any applicable federal, state and local rules and regulations and other permits and approvals that are obtained by the Facility Owner for the Facility.

I. No later than 45 days prior to the Construction and/or Deconstruction of a Facility, the Facility Owner shall provide the Landowner(s) with a telephone number the Landowner can call to alert the Facility Owner should the Landowner(s) have questions or concerns with the work which is being done or has been carried out on his/her property.

J. If there is a change in ownership of the Facility, the Facility Owner assuming ownership of the Facility shall provide written notice within 90 days of ownership transfer, to the Department, the County, and to Landowners of such change. The Financial Assurance requirements and the other terms of this AIMA shall apply to the new Facility Owner.

K. The Facility Owner shall comply with all local, state and federal laws and regulations, specifically including the worker protection standards to protect workers from pesticide exposure.

L. Within 30 days of execution of this AIMA, the Facility Owner shall use Best Efforts to provide the IDOA with a list of all Landowners that are party to an Underlying Agreement and known Tenants of said Landowner who may be affected by the Facility. As the list of Landowners and Tenants is updated, the Facility Owner shall notify the IDOA of any additions or deletions.

M. If any provision of this AIMA is held to be unenforceable, no other provision shall be affected by that holding, and the remainder of the AIMA shall be interpreted as if it did not contain the unenforceable provision.

Definitions

Abandonment	When Deconstruction has not been completed within 12 months after the Commercial Solar Energy Facility reaches the end of its useful life. For purposes of this definition, a Commercial Solar Energy Facility shall be presumed to have reached the end of its useful life if the Commercial Solar Energy Facility Owner fails, for a period of 6 consecutive months, to pay the Landowner amounts owed in accordance with an Underlying Agreement.

Aboveground Cable	Electrical power lines installed above ground surface to be utilized for conveyance of power from the solar panels to the solar facility inverter and/or point of interconnection to utility grid or customer electric meter.
Agricultural Impact Mitigation Agreement (AIMA)	The Agreement between the Facility Owner and the Illinois Department of Agriculture (IDOA) described herein.
Agricultural Land	Land used for Cropland, hayland, pastureland, managed woodlands, truck gardens, farmsteads, commercial ag-related facilities, feedlots, livestock confinement systems, land on which farm buildings are located, and land in government conservation programs used for purposes as set forth above.
Best Efforts	Diligent, good faith, and commercially reasonable efforts to achieve a given objective or obligation.
Commercial Operation Date	The calendar date of which the Facility Owner notifies the Landowner, County, and IDOA in writing that commercial operation of the facility has commenced. If the Facility Owner fails to provide such notifications, the Commercial Operation Date shall be the execution date of this AIMA plus 6 months.
Commercial Solar Energy Facility (Facility)	A solar energy conversion facility equal to or greater than 500 kilowatts in total nameplate capacity, including a solar energy conversion facility seeking an extension of a permit to construct granted by a county or municipality before June 29, 2018. "Commercial solar energy facility" does not include a solar energy conversion facility: (1) for which a permit to construct has been issued before June 29, 2018; (2) that is located on land owned by the commercial solar energy facility owner; (3) that was constructed before June 29, 2018; or (4) that is located on the customer side of the customer's electric meter and is primarily used to offset that customer's electricity load and is limited in nameplate capacity to less than or equal to 2,000 kilowatts.
Commercial Solar Energy Facility Owner deemed (Facility Owner)	A person or entity that owns a commercial solar energy facility. A Commercial Solar Energy Facility Owner is not nor shall it be to be a public utility as defined in the Public Utilities Act.
County	The County or Counties where the Commercial Solar Energy Facility is located.
Construction	The installation, preparation for installation and/or repair of a Facility.
Cropland	Land used for growing row crops, small grains or hay; includes land which was formerly used as cropland, but is currently enrolled in a government conservation program; also includes pastureland that is classified as Prime Farmland.

Deconstruction	The removal of a Facility from the property of a Landowner and the restoration of that property as provided in the AIMA.
Deconstruction Plan	A plan prepared by a Professional Engineer, at the Facility's expense, that includes: (1) the estimated Deconstruction cost, in current dollars at the time of filing, for the Facility, considering among other things: i. the number of solar panels, racking, and related facilities involved; ii. the original Construction costs of the Facility; iii. the size and capacity, in megawatts of the Facility; iv. the salvage value of the facilities (if all interests in salvage value are subordinate to that of the Financial Assurance holder if abandonment occurs); v. the Construction method and techniques for the Facility and for other similar facilities; and (2) a comprehensive detailed description of how the Facility Owner plans to pay for the Deconstruction of the Facility.
Department	The Illinois Department of Agriculture (IDOA).
Financial Assurance	A reclamation or surety bond or other commercially available financial assurance that is acceptable to the County, with the County or Landowner as beneficiary.
Landowner	Any person with an ownership interest in property that is used for agricultural purposes and that is party to an Underlying Agreement.
Prime Farmland	Agricultural Land comprised of soils that are defined by the USDA Natural Resources Conservation Service (NRCS) as "Prime Farmland" (generally considered to be the most productive soils with the least input of nutrients and management).
Professional Engineer	An engineer licensed to practice engineering in the State of Illinois.
Soil and Water Conservation District (SWCD)	A unit of local government that provides technical and financial assistance to eligible Landowners for the conservation of soil and water resources.
Tenant	Any person, apart from the Facility Owner, lawfully residing or leasing/renting land that is subject to an Underlying Agreement.
Topsoil	The uppermost layer of the soil that has the darkest color or the highest content of organic matter; more specifically, it is defined as the "A" horizon.
Underlying Agreement	The written agreement between the Facility Owner and the Landowner(s) including, but not limited to, an easement, option, lease, or license under the terms of which another person has constructed, constructs, or intends to construct a Facility on the property of the Landowner.

Underground Cable	Electrical power lines installed below the ground surface to be utilized for conveyance of power within a Facility or from a Commercial Solar Energy Facility to the electric grid.
USDA Natural Resources Conservation Service (NRCS)	An agency of the United States Department of Agriculture that provides America's farmers with financial and technical assistance to aid with natural resources conservation.

Construction and Deconstruction Standards and Policies

1. Support Structures

A. Only single pole support structures shall be used for the Construction and operation of the Facility on Agricultural Land. Other types of support structures, such as lattice towers or H-frames, may be used on nonagricultural land.

B. Where a Facility's Aboveground Cable will be adjacent and parallel to highway and/or railroad right-of-way, but on privately owned property, the support structures shall be placed as close as reasonably practicable and allowable by the applicable County Engineer or other applicable authorities to the highway or railroad right-of-way. The only exceptions may be at jogs or weaves on the highway alignment or along highways or railroads where transmission and distribution lines are already present.

C. When it is not possible to locate Aboveground Cable next to highway or railroad right-of-way, Best Efforts shall be expended to place all support poles in such a manner to minimize their placement on Cropland (i.e., longer than normal above ground spans shall be utilized when traversing Cropland).

2. Aboveground Facilities

Locations for facilities shall be selected in a manner that is as unobtrusive as reasonably possible to ongoing agricultural activities occurring on the land that contains or is adjacent to the Facility.

3. Guy Wires and Anchors

Best Efforts shall be made to place guy wires and their anchors, if used, out of Cropland, pastureland and hayland, placing them instead along existing utilization lines and on land other than Cropland. Where this is not feasible, Best Efforts shall be made to minimize guy wire impact on Cropland. All guy wires shall be shielded with highly visible guards.

4. Underground Cabling Depth

A. Underground electrical cables located outside the perimeter of the (fence) of the solar panels shall be buried with:

1. a minimum of 5 feet of top cover where they cross Cropland.
2. a minimum of 5 feet of top cover where they cross pastureland or other non-Cropland classified as Prime Farmland.
3. a minimum of 3 feet of top cover where they cross pastureland and other Agricultural Land not classified as Prime Farmland.

4. a minimum of 3 feet of top cover where they cross wooded/brushy land.

B. Provided that the Facility Owner removes the cables during Deconstruction, underground electric cables may be installed to a minimum depth of 18 inches:

1. Within the fenced perimeter of the Facility; or

2. When buried under an access road associated with the Facility provided that the location and depth of cabling is clearly marked at the surface.

C. If Underground Cables within the fenced perimeter of the solar panels are installed to a minimum depth of 5 feet, they may remain in place after Deconstruction.

5. Topsoil Removal and Replacement

A. Any excavation shall be performed in a manner to preserve topsoil. Best Efforts shall be made to store the topsoil near the excavation site in such a manner that it will not become intermixed with subsoil materials.

B. Best Efforts shall be made to store all disturbed subsoil material near the excavation site and separate from the topsoil.

C. When backfilling an excavation site, Best Efforts shall be used to ensure the stockpiled subsoil material will be placed back into the excavation site before replacing the topsoil.

D. Refer to Section 7 for procedures pertaining to rock removal from the subsoil and topsoil.

E. Refer to Section 8 for procedures pertaining to the repair of compaction and rutting of the topsoil.

F. Best Efforts shall be performed to place the topsoil in a manner so that after settling occurs, the topsoil's original depth and contour will be restored as close as reasonably practicable. The same shall apply where excavations are made for road, stream, drainage ditch, or other crossings. In no instance shall the topsoil materials be used for any other purpose unless agreed to explicitly and in writing by the Landowner.

G. Based on the mutual agreement of the landowner and Facility Owner, excess soil material resulting from solar facility excavation shall either be removed or stored on the Landowner's property and reseeded per the applicable National Pollution Discharge Elimination System (NPDES) permit/Stormwater Pollution Prevention Plan (SWPPP). After the Facility reaches the end of its Useful Life, the excess subsoil material shall be returned to an excavation site or removed from the Landowner's property, unless otherwise agreed to by Landowner.

6. Rerouting and Permanent Repair of Agricultural Drainage Tiles

The following standards and policies shall apply to underground drainage tile line(s) directly or indirectly affected by Construction and/or Deconstruction:

A. Prior to Construction, the Facility Owner shall work with the Landowner to identify drainage tile lines traversing the property subject to the Underlying Agreement to the extent reasonably practicable. All drainage tile lines identified in this manner shall be shown on the Construction and Deconstruction Plans.

B. The location of all drainage tile lines located adjacent to or within the footprint of the Facility shall be recorded using Global Positioning Systems (GPS) technology. Within 60 days after Construction is complete, the Facility Owner shall provide the Landowner, the IDOA, and the respective County Soil and Water Conservation District (SWCD) with "as built" drawings (strip maps) showing the location of all drainage tile lines by survey station encountered in the Construction of the Facility, including any tile line repair location(s), and any underground cable installed as part of the Facility.

C. **Maintaining Surrounding Area Subsurface Drainage**

If drainage tile lines are damaged by the Facility, the Facility Owner shall repair the lines or install new drainage tile line(s) of comparable quality and cost to the original(s), and of sufficient size and appropriate slope in locations that limit direct impact from the Facility. If the damaged tile lines cause an unreasonable disruption to the drainage system, as determined by the Landowner, then such repairs shall be made promptly to ensure appropriate drainage. Any new line(s) may be located outside of, but adjacent to the perimeter of the Facility. Disrupted adjacent drainage tile lines shall be attached thereto to provide an adequate outlet for the disrupted adjacent tile lines.

D. **Re-establishing Subsurface Drainage Within Facility Footprint**

Following Deconstruction and using Best Efforts, if underground drainage tile lines were present within the footprint of the facility and were severed or otherwise damaged during original Construction, facility operation, and/or facility Deconstruction, the Facility Owner shall repair existing drainage tiles or install new drainage tile lines of comparable quality and cost to the original, within the footprint of the Facility with sufficient capacity to restore the underground drainage capacity that existed within the footprint of the Facility prior to Construction. Such installation shall be completed within 12 months after the end of the useful life of the Facility and shall be compliant with Figures 1 and 2 to this Agreement or based on prudent industry standards if agreed to by Landowner.

E. If there is any dispute between the Landowner and the Facility Owner on the method of permanent drainage tile line repair, the appropriate County SWCD's opinion shall be considered by the Facility Owner and the Landowner.

F. During Deconstruction, all additional permanent drainage tile line repairs beyond those included above in Section 6.D. must be made within 30 days of identification or notification of the damage, weather and soil conditions permitting. At other times, such repairs must be made at a time mutually agreed upon by the Facility Owner and the Landowner. If the Facility Owner and Landowner cannot agree upon a reasonable method to complete this restoration, the Facility Owner may implement the recommendations of the appropriate County SWCD and such implementation constitutes compliance with this provision.

G. Following completion of the work required pursuant to this Section, the Facility Owner shall be responsible for correcting all drainage tile line repairs that fail due to Construction and/or Deconstruction for one year following the completion of Construction or Deconstruction, provided those repairs were made by the Facility Owner. The Facility Owner shall not be responsible for drainage tile repairs that the Facility Owner pays the Landowner to perform.

7. Rock Removal

With any excavations, the following rock removal procedures pertain only to rocks found in the uppermost 42 inches of soil, the common freeze zone in Illinois, which emerged or were brought to the site as a result of Construction and/or Deconstruction.

A. Before replacing any topsoil, Best Efforts shall be taken to remove all rocks greater than 3 inches in any dimension from the surface of exposed subsoil which emerged or were brought to the site as a result of Construction and/or Deconstruction.

B. If trenching, blasting, or boring operations are required through rocky terrain, precautions shall be taken to minimize the potential for oversized rocks to become interspersed in adjacent soil material.

C. Rocks and soil containing rocks removed from the subsoil areas, topsoil, or from any excavations, shall be removed from the Landowner's premises or disposed of on the Landowner's premises at a location that is mutually acceptable to the Landowner and the Facility Owner.

8. Repair of Compaction and Rutting

A. Unless the Landowner opts to do the restoration work on compaction and rutting, after the topsoil has been replaced post-Deconstruction, all areas within the boundaries of the Facility that were traversed by vehicles and Construction and/or Deconstruction equipment that exhibit compaction and rutting shall be restored by the Facility Owner. All prior Cropland shall be ripped at least 18 inches deep or to the extent practicable, and all pasture and woodland shall be ripped at least 12 inches deep or to the extent practicable. The existence of drainage tile lines or underground utilities may necessitate less ripping depth. The disturbed area shall then be disked.

B. All ripping and disking shall be done at a time when the soil is dry enough for normal tillage operations to occur on Cropland adjacent to the Facility.

C. The Facility Owner shall restore all rutted land to a condition as close as possible to its original condition upon Deconstruction, unless necessary earlier as determined by the Landowner.

D. If there is any dispute between the Landowner and the Facility Owner as to what areas need to be ripped/disked or the depth at which compacted areas should be ripped/disked, the appropriate County SWCD's opinion shall be considered by the Facility Owner and the Landowner.

9. Construction During Wet Weather

Except as provided below, construction activities are not allowed on agricultural land during times when normal farming operations, such as plowing, disking, planting or harvesting, cannot take place due to excessively wet soils. With input from the landowner, wet weather conditions may be determined on a field by field basis.

A. Construction activities on prepared surfaces, surfaces where topsoil and subsoil have been removed, heavily compacted in preparation, or otherwise stabilized (e.g. through cement mixing) may occur at the discretion of the Facility Owner in wet weather conditions.

B. Construction activities on unprepared surfaces will be done only when work will not result in rutting which may mix subsoil and topsoil. Determination as to the potential of subsoil and topsoil mixing will be made in consultation with the underlying Landowner, or, if approved by the Landowner, his/her designated tenant or designee.

10. Prevention of Soil Erosion

A. The Facility Owner shall work with Landowners and create and follow a SWPPP to prevent excessive erosion on land that has been disturbed by Construction or Deconstruction of a Facility.

B. If the Landowner and Facility Owner cannot agree upon a reasonable method to control erosion on the Landowner's property, the Facility Owner shall consider the recommendations of the appropriate County SWCD to resolve the disagreement.

C. The Facility Owner may, per the requirements of the project SWPPP and in consultation with the Landowner, seed appropriate vegetation around all panels and other facility components to prevent erosion. The Facility Owner must utilize Best Efforts to ensure that all seed mixes will be as free of any noxious weed seeds as possible. The Facility Owner shall consult with the Landowner regarding appropriate varieties to seed.

11. Repair of Damaged Soil Conservation Practices

Consultation with the appropriate County SWCD by the Facility Owner shall be carried out to determine if there are soil conservation practices (such as terraces, grassed waterways, etc.) that will be damaged by the Construction and/or Deconstruction of the Facility. Those conservation practices shall be restored to their preconstruction condition as close as reasonably practicable following Deconstruction in accordance with USDA NRCS technical standards. All repair costs shall be the responsibility of the Facility Owner.

12. Compensation for Damages to Private Property

The Facility Owner shall reasonably compensate Landowners for damages caused by the Facility Owner. Damage to Agricultural Land shall be reimbursed to the Landowner as prescribed in the applicable Underlying Agreement.

13. Clearing of Trees and Brush

A. If trees are to be removed for the Construction or Deconstruction of a Facility, the Facility Owner shall consult with the Landowner to determine if there are trees of commercial or other value to the Landowner.

B. If there are trees of commercial or other value to the Landowner, the Facility Owner shall allow the Landowner the right to retain ownership of the trees to be removed and the disposition of the removed trees shall be negotiated prior to the commencement of land clearing.

14. Access Roads

A. To the extent practicable, access roads shall be designed to not impede surface drainage and shall be built to minimize soil erosion on or near the access roads.

B. Access roads may be left intact during Construction, operation or Deconstruction through mutual agreement of the Landowner and the Facility Owner unless otherwise restricted by federal, state, or local regulations.

C. If the access roads are removed, Best Efforts shall be expended to assure that the land shall be restored to equivalent condition(s) as existed prior to their construction, or as otherwise agreed to by the Facility Owner and the Landowner. All access roads that are removed shall be ripped to a depth of 18 inches. All ripping shall be performed consistent with Section 8.

15. Weed/Vegetation Control

A. The Facility Owner shall provide for weed control in a manner that prevents the spread of weeds. Chemical control, if used, shall be done by an appropriately licensed pesticide applicator.

B. The Facility Owner shall be responsible for the reimbursement of all reasonable costs incurred by owners of agricultural land where it has been determined by the appropriate state or county entity that weeds have spread from the Facility to their property. Reimbursement is contingent upon written notice to the Facility Owner. Facility Owner shall reimburse the property owner within 45 days after notice is received.

C. The Facility Owner shall ensure that all vegetation growing within the perimeter of the Facility is properly and appropriately maintained. Maintenance may include, but not be limited to, mowing, trimming, chemical control, or the use of livestock as agreed to by the Landowner.

D. The Deconstruction plans must include provisions for the removal of all weed control equipment used in the Facility, including weed-control fabrics or other ground covers.

16. Indemnification of Landowners

The Facility Owner shall indemnify all Landowners, their heirs, successors, legal representatives, and assigns from and against all claims, injuries, suits, damages, costs, losses, and reasonable expenses resulting from or arising out of the Commercial Solar Energy Facility, including Construction and Deconstruction thereof, and also including damage to such Facility or any of its appurtenances, except where claims, injuries, suits, damages, costs, losses, and expenses are caused by the negligence or intentional acts, or willful omissions of such Landowners, and/or the Landowners heirs, successors, legal representatives, and assigns.

17. Deconstruction Plans and Financial Assurance of Commercial Solar Energy Facilities

A. Deconstruction of a Facility shall include the removal/disposition of all solar related equipment/facilities, including the following utilized for operation of the Facility and located on Landowner property:

1. Solar panels, cells and modules;
2. Solar panel mounts and racking, including any helical piles, ground screws, ballasts, or other anchoring systems;
3. Solar panel foundations, if used (to depth of 5 feet);

4. Transformers, inverters, energy storage facilities, or substations, including all components and foundations; however, Underground Cables at a depth of 5 feet or greater may be left in place;
5. Overhead collection system components;
6. Operations/maintenance buildings, spare parts buildings and substation/switching gear buildings unless otherwise agreed to by the Landowner;
7. Access Road(s) unless Landowner requests in writing that the access road is to remain;
8. Operation/maintenance yard/staging area unless otherwise agreed to by the Landowner; and
9. Debris and litter generated by Deconstruction and Deconstruction crews.

B. The Facility Owner shall, at its expense, complete Deconstruction of a Facility within twelve (12) months after the end of the useful life of the Facility.

C. During the County permit process, or if none, then prior to the commencement of construction, the Facility Owner shall file with the County a Deconstruction Plan. The Facility Owner shall file an updated Deconstruction Plan with the County on or before the end of the tenth year of commercial operation.

D. The Facility Owner shall provide the County with Financial Assurance to cover the estimated costs of Deconstruction of the Facility. Provision of this Financial Assurance shall be phased in over the first 11 years of the Project's operation as follows:

1. On or before the first anniversary of the Commercial Operation Date, the Facility Owner shall provide the County with Financial Assurance to cover ten (10) percent of the estimated costs of Deconstruction of the Facility as determined in the Deconstruction Plan.
2. On or before the sixth anniversary of the Commercial Operation Date, the Facility Owner shall provide the County with Financial Assurance to cover fifty (50) percent of the estimated costs of Deconstruction of the Facility as determined in the Deconstruction Plan.
3. On or before the eleventh anniversary of the Commercial Operation Date, the Facility Owner shall provide the County with Financial Assurance to cover one hundred (100) percent of the estimated costs of Deconstruction of the Facility as determined in the updated Deconstruction Plan provided during the tenth year of commercial operation.

The Financial Assurance shall not release the surety from liability until the Financial Assurance is replaced. The salvage value of the Facility may only be used to reduce the estimated costs of Deconstruction if the County agrees that all interests in the salvage value are subordinate or have been subordinated to that of the County if Abandonment occurs.

E. The County may, but is not required to, reevaluate the estimated costs of Deconstruction of any Facility after the tenth anniversary, and every five years thereafter, of the Commercial Operation Date. Based on any reevaluation, the County may require changes in the level of Financial Assurance used to calculate the phased Financial Assurance levels described in Section 17.D. required from the Facility Owner. If the County is unable to its satisfaction to perform the investigations necessary to approve the Deconstruction Plan filed by the Facility Owner, then the County and Facility may mutually agree on the selection of a Professional Engineer independent of the Facility Owner to conduct any necessary investigations. The Facility Owner shall be responsible for the cost of any such investigations.

F. Upon Abandonment, the County may take all appropriate actions for Deconstruction including drawing upon the Financial Assurance.

Concurrence of the Parties to this AIMA

The Illinois Department of Agriculture and SV CSG Madden Creek, LLC concur that this AIMA is the complete AIMA governing the mitigation of agricultural impacts that may result from the Construction and Deconstruction of the solar farm project in Piatt County within the State of Illinois.

The effective date of this AIMA commences on the date of execution.

STATE OF ILLINOIS
DEPARTMENT OF AGRICULTURE

Jerry Costello II

By: Jerry Costello II, Director

Clay Nordsiek

By Clay Nordsiek, Deputy General Counsel

801 E. Sangamon Avenue,
State Fairgrounds, POB 19281
Springfield, IL 62794-9281

4/16, 2025

SV CSG Madden Creek, LLC

By Tim Polz

330 W State St Suite 1, Geneva IL 60134

Address

April 4th, 2025

STANDARD AGREEMENT FOR INTERCONNECTION OF DISTRIBUTED ENERGY RESOURCES FACILITIES WITH A CAPACITY LESS THAN OR EQUAL TO 10 MVA

This agreement (together with all attachments, the "Agreement") is made and entered into this 17 day of Feburary 2025, by and between Madden Creek Solar, LLC ("interconnection customer"), as a limited liability company organized and existing under the laws of the State of Delaware and Ameren Illinois Company, ("Electric Distribution Company" or "EDC"), a corporation existing under the laws of the State of Illinois. Interconnection customer and EDC each may be referred to as a "Party", or collectively as the "Parties".

Recitals:

Whereas, interconnection customer is proposing to install or direct the installation of a distributed energy resources (DER) facility, or is proposing a generating capacity addition to an existing distributed energy resources (DER) facility, consistent with the interconnection request application form completed by interconnection customer on 2/2/2024; and

Whereas, the interconnection customer will operate and maintain, or cause the operation and maintenance of, the DER facility; and

Whereas, interconnection customer desires to interconnect the DER facility with EDC's electric distribution system.

Now, therefore, in consideration of the premises and mutual covenants set forth in this Agreement, and other good and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, the Parties covenant and agree as follows:

Article 1. Scope and Limitations of Agreement

1.1 This Agreement shall be used for all approved interconnection requests for DER facilities that fall under Levels 2, 3 and 4 according to the procedures set forth in Part 466 of the Commission's rules (83 Ill. Adm. Code 466) (referred to as the Illinois Distributed Energy Resources Interconnection Standard).

1.2 This Agreement governs the terms and conditions under which the DER facility will interconnect to, and operate in parallel with, the EDC's electric distribution system.

1.3 This Agreement does not constitute an agreement to purchase or deliver the interconnection customer's power.

1.4 Nothing in this Agreement is intended to affect any other agreement between the EDC and the interconnection customer.

10.4 Changes to the Notice Information
Either Party may change this notice information by giving five business days written notice before the effective date of the change.

Article 11. Signatures

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For the Interconnection Customer: -

DocuSigned by:
Name: Tim Poly
C1A893203060445...
Title: Authorized Person
Date: 2/17/2025

For EDC:

Name: Jason Klein
Title: Sr. Director, Distrib Ops, Eng & Plng
Date: 2/21/2025

Attachment 3

Description, Costs and Time Required to Build and Install the EDC's Interconnection Facilities

This attachment is to be completed by the EDC and shall include the following:

1. Required interconnection facilities, including any required metering.

   Per the prior studies - EDC shall build the substation facilities as required to support the interconnection of the interconnection customer proposed facility up to the point of disconnect. The interconnection would consist of switches, intellirupter, reconductor, substation recloser, VT, DA Metering. The interconnection customer would be responsible for construction to the point of disconnect. All costs shall be paid for and/or reimbursed by the interconnection customer pursuant to Article 5 of this agreement. The interconnection customer is required to construct all facilities which connect to EDC's facilities or otherwise interface with EDC's facilities, all as determined by EDC's final, detailed engineering, in accordance with EDC's published standards.

   Additional required interconnection facilities and system upgrades may be identified while completing Detailed Engineering.

2. An estimate of itemized costs charged by the EDC for interconnection, including overheads, based on results from prior studies.

   Madden Creek: 1499 E 2850 North Rd Mahomet, IL- **4998 KW**

   (PowerClerk DER-33716)

Queue Position:4

NOTE: *THE COST ESTIMATE PROVIDED FOR YOUR PROJECT IN THE NEXT SECTION IS CONTINGENT UPON CONSTRUCTION COMPLETION OF ALL SYSTEM UPGRADES REQUIRED OF PROJECT(S) AHEAD OF YOUR PROJECT IN THE QUEUE THAT HAVE AN IMPACT ON THE CONNECTION OF YOUR PROJECT. SHOULD ANY ONE OR MORE OF SUCH PROJECTS WITHDRAW FOR ANY REASON, THE COSTS ASSOCIATED WITH YOUR PROJECT MAY CHANGE TO REFLECT THE COST IMPACT OF SYSTEM UPGRADES THAT NOW MAY BE REQUIRED TO CONNECT YOUR PROJECT AS A RESULT OF THE WITHDRAWAL OF SUCH HIGHER QUEUED PROJECTS.*

ALTA/NSPS LAND TITLE SURVEY

FOR **Ecoplexus, Inc.**

LOCATED IN THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 12, TOWNSHIP 20 NORTH, RANGE 6 EAST OF THE THIRD PRINCIPAL MERIDIAN

BLUE RIDGE TOWNSHIP, PIATT COUNTY, ILLINOIS

SITE INFORMATION

N/F: FIRST BUSEY TRUST & INV CO
1463 E 2850 NORTH RD, BLUE RIDGE, ILLINOIS 61853
APN: 02-12-20-006-013-01 AND 02-12-20-006-013-02
PARCEL 1 AREA: 1,026,068 SQ. FEET, OR 23.601 ACRES ±
PARCEL 2 AREA: 479,182 SQ. FEET, OR 11.001 ACRES ±
TOTAL AREA: 548,884 SQUARE FEET, OR 34.602 ACRES ±

TITLE COMMITMENT INFORMATION

THE PROPERTY HEREON DESCRIBED IS THE SAME AS THE PROPERTY DESCRIBED IN STEWART TITLE GUARANTY COMPANY, REPORT OF TITLE ORDER NO.# 22000370338-03 BEARING AN ISSUE DATE OF FEBRUARY 11, 2025, AT 8:00 A.M.

SCHEDULE A DESCRIPTION

PARCEL 1
PARCEL ID NO.: 02-12-20-006-013-01

LOT 2 OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 12, TOWNSHIP 20 NORTH, RANGE 6 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE SURVEY AND PLAT SHOWN IN PLAT RECORD 1, ON PAGE 66, OF THE RECORDS IN THE RECORDER'S OFFICE, IN PIATT COUNTY, ILLINOIS. SITUATED IN PIATT COUNTY, ILLINOIS, EXCEPT THE SOUTH ELEVEN (11) ACRES THEREOF AND EXCEPT LOTS 1, 2, 3, 4, 9, 10, 11 & 12 OF SUNRISE TERRACE SUBDIVISION, PART OF SECTION 12, TOWNSHIP 20, RANGE 6 EAST OF THE THIRD PRINCIPAL MERIDIAN LOCATED IN PIATT COUNTY, ILLINOIS AND EXCEPT A TRACT OF LAND BEING PART OF LOT 2 IN THE SOUTHEAST QUARTER OF A SUBDIVISION OF THE SOUTH HALF OF SECTION 12, TOWNSHIP 20 NORTH, RANGE 6 EAST OF THE THIRD PRINCIPAL MERIDIAN, PIATT COUNTY, ILLINOIS. THE BOUNDARY OF WHICH IS MORE PARTICULARLY DESCRIBED AS BEGINNING AT THE NORTHEAST CORNER OF LOT 9 OF THE FIRST PLAT OF SUNRISE TERRACE SUBDIVISION AS SURVEYED BY JOHN M NEARY, JR., ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2318 ON JUNE 25 1981 AND RECORDED AS DOCUMENT NUMBER 255082 IN PLAT BOOK 11 AT PAGE 76 IN THE OFFICE OF THE PIATT COUNTY RECORDER. SAID POINT ALSO BEING ON THE NORTHERLY LINE OF LOT 2 IN THE SOUTHEAST QUARTER OF A SUBDIVISION OF THE SOUTH HALF OF SECTION 12, TOWNSHIP 20 NORTH, RANGE 6 EAST OF THE THIRD PRINCIPAL MERIDIAN, AS SURVEYED BY W. J. DAY, SURVEYOR OF PIATT COUNTY, ON OCTOBER 1, 1903 AND RECORDED IN PLAT BOOK 1 AT PAGE 66 IN THE OFFICE OF THE PIATT COUNTY RECORDER, PROCEED ON A RECORD BEARING OF SOUTH 00° 15' 00" WEST ALONG THE EAST LINE OF THE FIRST PLAT OF SAID SUNRISE TERRACE SUBDIVISION A DISTANCE OF 380.00 FEET; THENCE SOUTH 89° 45' 00" EAST PERPENDICULAR TO SAID EAST LINE A DISTANCE OF 360.00 FEET; THENCE NORTH 00° 15' 00" EAST PARALLEL WITH SAID EAST LINE A DISTANCE OF 254.52 FEET TO A POINT ON THE NORTHERLY LINE OF SAID LOT 2, SAID LINE ALSO BEING THE SOUTHERLY RIGHT-OF-WAY LINE OF A PUBLIC ROAD; THENCE NORTH 73° 25' 00" WEST ALONG THE NORTHERLY LINE OF SAID LOT 2 A DISTANCE OF 375.14 FEET TO THE POINT OF BEGINNING, SITUATED IN BLUE RIDGE TOWNSHIP, PIATT COUNTY, ILLINOIS

PARCEL 2
PARCEL ID NO.: 02-12-20-006-013-02

THE SOUTH ELEVEN (11) ACRES OF LOT 2 OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 12, TOWNSHIP 20 NORTH, RANGE 6 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE SURVEY AND PLAT SHOWN IN PLAT RECORD 1, ON PAGE 66, OF THE RECORDS IN THE RECORDER'S OFFICE, IN PIATT COUNTY, ILLINOIS. SITUATED IN PIATT COUNTY, ILLINOIS

NOTES CORRESPONDING TO SCHEDULE B

(12) -- MATTERS AS SHOWN ON THE SURVEY RECORDED JANUARY 7, 1904 IN BOOK 1, PAGE 66 OFFICIAL PUBLIC RECORDS, PIATT COUNTY, ILLINOIS. (PARCEL 1 AND 2) (AFFECTS: PLOTTED AND SHOWN)

(13) -- EASEMENT IN FAVOR OF ILLINOIS POWER COMPANY DATED APRIL 27, 1958, RECORDED MAY 2, 1958 IN BOOK 224, PAGE 314 OFFICIAL PUBLIC RECORDS, PIATT COUNTY, ILLINOIS. (PARCEL 1 AND 2) (AFFECTS: PLOTTED AND SHOWN)

(14) -- EASEMENT IN FAVOR OF ILLINOIS POWER COMPANY DATED JANUARY 19, 1980, RECORDED JANUARY 25, 1980 IN BOOK 182, PAGE 1325. OFFICIAL PUBLIC RECORDS PIATT COUNTY, ILLINOIS. (PARCEL 1 AND 2) (AFFECTS: APPROXIMATE LOCATION PLOTTED AND SHOWN)

(15) -- PERMIT IN FAVOR OF ILLINOIS POWER COMPANY DATED AUGUST 23, 1980, RECORDED SEPTEMBER 23, 1980 IN BOOK 227, PAGE 666, OFFICIAL PUBLIC RECORDS, PIATT COUNTY, ILLINOIS. (PARCEL 1 AND 2) (AFFECTS BOTH PARCELS: BLANKET IN NATURE)

(16) -- ILLINI ELECTRIC COOPERATIVE EASEMENT IN FAVOR OF ILLINOIS POWER COMPANY DATED JANUARY 20, 1983, RECORDED FEBRUARY 2, 1983 IN BOOK 314, PAGE 337, OFFICIAL PUBLIC RECORDS, PIATT COUNTY, ILLINOIS. (PARCEL 1 AND 2) (AFFECTS: PLOTTED AND SHOWN)

(17) -- ILLINI ELECTRIC COOPERATIVE EASEMENT IN FAVOR OF ILLINOIS POWER COMPANY DATED JANUARY 7, 1983, RECORDED JANUARY 21, 1983 IN BOOK 315, PAGE 273 OFFICIAL PUBLIC RECORDS, PIATT COUNTY, ILLINOIS. (PARCEL 1 AND 2) (AFFECTS: PLOTTED AND SHOWN)

(18) -- EASEMENT IN FAVOR OF ILLINOIS POWER COMPANY DATED OCTOBER 9, 1991, RECORDED FEBRUARY 3, 1992 IN BOOK 382, PAGE 966, OFFICIAL PUBLIC RECORDS, PIATT COUNTY, ILLINOIS. (PARCEL 1 AND 2) (AFFECTS: PLOTTED AND SHOWN)

(19) -- JOINT WELL USE AND EASEMENT AGREEMENT BY AND BETWEEN KEVIN A. CAPPO AND PATRICIA S. CAPPO AND JUDITH EVANS DATED MAY 21, 1993, RECORDED MAY 28, 1993 IN BOOK 398, PAGE 389 OFFICIAL PUBLIC RECORDS, PIATT COUNTY, ILLINOIS. (PARCEL 1 AND 2) (AFFECTS: ASSUMED ASSOCIATED INFRASTRUCTURE INDICATED HEREON)

(20) -- EASEMENT IN FAVOR OF ILLINOIS POWER COMPANY DATED OCTOBER 8, 1991, RECORDED DECEMBER 23, 1992 IN BOOK 393, PAGE 801 OFFICIAL PUBLIC RECORDS, PIATT COUNTY, ILLINOIS. (PARCEL 1 AND 2) (AFFECTS: PLOTTED AND SHOWN)

(21) -- MEMORANDUM OF LAND LEASE AND SOLAR EASEMENT BY AND BETWEEN BUSEY TRUST COMPANY F/K/A FIRST BUSEY TRUST & INVESTMENT CO., ITS SUCCESSOR OR SUCCESSORS, AS TRUSTEE UNDER THE PROVISIONS OF A TRUST AGREEMENT DATED DECEMBER 12, 1995, KNOWN AS TRUST NUMBER 5061 AND GERONIMO SOLAR ENERGY, LLC, A MINNESOTA LIMITED LIABILITY COMPANY DATED JUNE 18, 2018, RECORDED JULY 16, 2018 IN BOOK 616, PAGE 721 OFFICIAL PUBLIC RECORDS PIATT COUNTY, ILLINOIS. (PARCEL 1 AND 2)

NOTE: ASSIGNMENT AND ASSUMPTION OF REAL PROPERTY INTERESTS BY AND BETWEEN GERONIMO SOLAR ENERGY, LLC AND MADDEN CREEK SOLAR, LLC DATED JULY 25, 2018, RECORDED AUGUST 2, 2018 IN BOOK 618, PAGE 190 OFFICIAL PUBLIC RECORDS, PIATT COUNTY, ILLINOIS. (PARCEL 1 AND 2) (AFFECTS: CONTAINS NO PLOTTABLE EASEMENT ITEMS)

(22) -- MEMORANDUM OF SOLAR OPTION AND LAND LEASE BY AND BETWEEN CHICAGO TITLE LAND TRUST, F/K/A BUSEY TRUST COMPANY, ITS SUCCESSOR OR SUCCESSORS, AS TRUSTEE UNDER THE PROVISIONS OF A TRUST AGREEMENT DATED DECEMBER 12, 1995, KNOWN AS TRUST NUMBER 5061 AND SV CSG MADDEN CREEK, LLC, A DELAWARE LIMITED LIABILITY COMPANY DATED SEPTEMBER 14, 2023, RECORDED OCTOBER 27, 2023 AS DOCUMENT NO. 341533, PUBLIC RECORDS, PIATT COUNTY, ILLINOIS. (PARCEL 1 AND 2) (AFFECTS: NON-LEASE AREA SHOWN HEREON)

ZONING INFORMATION

ZONING INFORMATION TO BE ADDED TO SURVEY UPON RECEIPT OF CLIENT PROVIDING ZONING REPORT OR LETTER.

SIGNIFICANT OBSERVATIONS

NONE OBSERVED AT THE TIME OF THE ALTA/NSPS SURVEY.

UTILITY INFORMATION

THE UTILITIES SHOWN ON THIS DRAWING HEREON HAVE BEEN LOCATED BY FIELD MEASUREMENTS. THE CLIENT HAS NOT PROVIDED UTILITY MAP DRAWINGS. BLEW & ASSOCIATES MAKES NO WARRANTY TO THE EXACT LOCATION OF ANY UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THIS DRAWING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ANY AND ALL UTILITIES PRIOR TO CONSTRUCTION. CALL ILLINOIS ONE-CALL (J.U.L.I.E.) AT (800) 892-0123 OR DIAL 811 FOR FIELD LOCATIONS (REQUEST FOR GROUND MARKINGS) OF UNDERGROUND UTILITY LINES BEFORE DIGGING.

FLOOD ZONE INFORMATION

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS IN ZONE "X" OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 17147C0125D, WHICH BEARS AN EFFECTIVE DATE OF 5/16/2011 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA.

ZONE "X" - AREA OF MINIMAL FLOOD HAZARD. USUALLY DEPICTED ON FIRMS AS ABOVE THE 500-YEAR FLOOD LEVEL. ZONE "X" IS THE AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOOD AND PROTECTED BY LEVEE FROM 100-YEAR FLOOD.

BASIS OF BEARING

THE BASIS OF BEARING OF THIS SURVEY IS GRID NORTH BASED ON THE SOUTH LINE OF SECTION 12. THE BEARING IS DENOTED AS N 89°19'27" E PER GPS COORDINATE OBSERVATIONS ILLINOIS STATE PLANE EAST ZONE NAD83
LATITUDE = 40°12'01.3717"
LONGITUDE = -88°28'07.7060"
CONVERGENCE ANGLE = 00°05'14.6549"

ADJOINER INFORMATION

(1) — LOT 4, SUNRISE TERRACE SUBDIVISION (PLAT BOOK 11, PAGE 76)
N/F ALBLINGER, KEVIN AUGUSTINE TRUSTEE, KEVIN AUGUSTINE ALBLINGER TRUST
2806 SUNRISE TERRACE, MAHOMET, IL, 61853
DOCUMENT NO. 355857
APN: 02-12-20-006-013-06

(2) — LOT 11, SUNRISE TERRACE SUBDIVISION (PLAT BOOK 11, PAGE 76)
N/F GERRIB, DOUGLAS A & CHRISSY
2808 SUNRISE TERRACE, MAHOMET, IL, 61853-0000
DOCUMENT NO. 2003000503
APN: 02-12-20-006-013-09

(3) — LOT 12, SUNRISE TERRACE SUBDIVISION (PLAT BOOK 11, PAGE 76)
N/F GILLMORE, CHRISTINE E
801 S POPLAR ST, URBANA, IL 61802
DOCUMENT NO. 021378334
APN: 02-12-20-006-013-10

LEGEND OF SYMBOLS & ABBREVIATIONS

ALTA/NSPS SURVEY OBSERVATIONS & EXISTING IMPROVEMENTS:

SYMBOLS & ABBREVIATIONS:

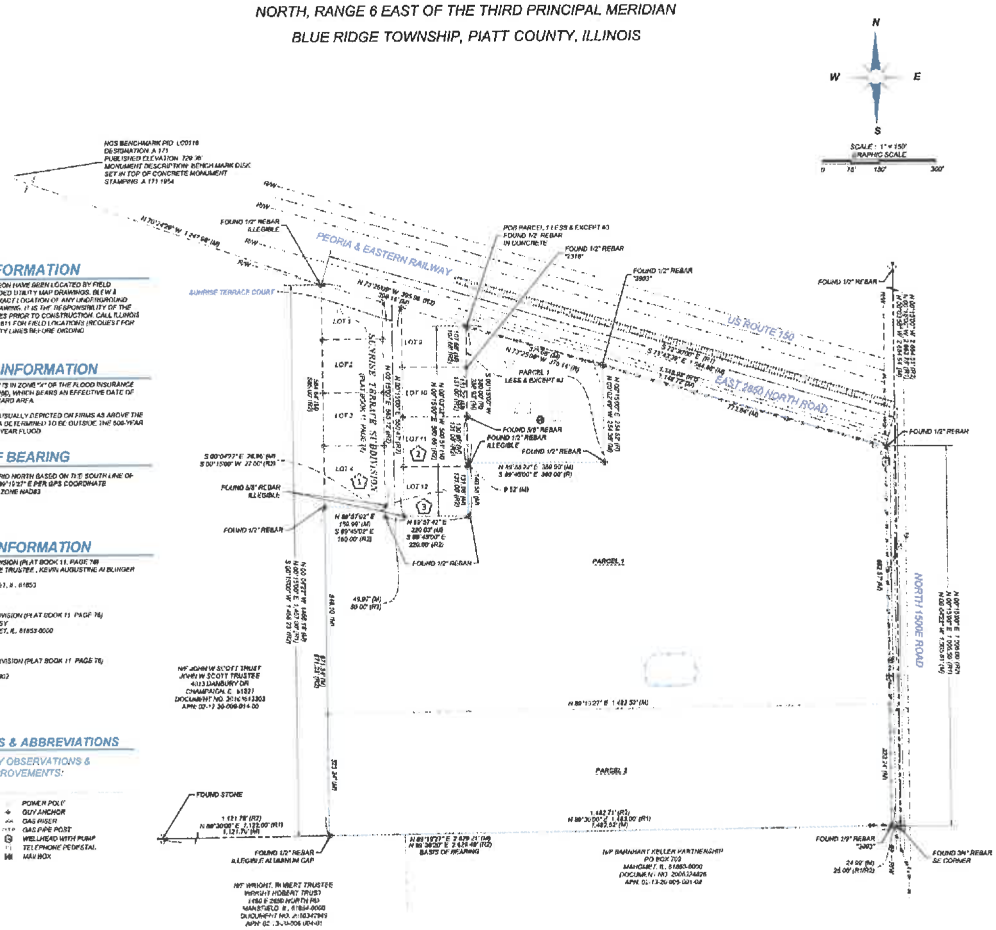
- FOUND MONUMENT AS NOTED
- COMPUTED POINT
- BENCHMARK (BM)
- SECTION CORNER
- SECTION CORNER
- (M) MEASURED/CALCULATED DIMENSION
- (R) RECORD DIMENSION PER TITLE COMMITMENT
- (R1) RECORD DIMENSION PER PLAT BOOK 1, PAGE 66
- (R2) RECORD DIMENSION PER PLAT BOOK 11, PAGE 76
- N/F NOW OR FORMERLY
- POB POINT OF BEGINNING
- POWER POLE
- GUY ANCHOR
- GAS RISER
- GAS PIPE POST
- WELLHEAD WITH PUMP
- TELEPHONE PEDESTAL
- MAILBOX

LINETYPES & HATCHES

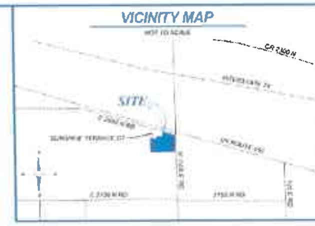
- PROPERTY LINE
- INTERNAL PARCEL LINE
- SECTION LINE
- ADJACENT PROPERTY LINES
- R/W RIGHT-OF-WAY LINE
- C/L CENTERLINE
- FENCE LINE
- OVERHEAD POWER LINE
- EDGE OF WATER
- RAILROAD

BENCHMARK INFORMATION

BENCHMARK #1 (BM #1) SET 5/8" REBAR		BENCHMARK #2 (BM #2) FOUND 1/2" REBAR	
ELEVATION:	731.98'	ELEVATION:	727.68'
NORTHING:	1288290.62	NORTHING:	1296450.88
EASTING:	948844.16	EASTING:	947882.78



VICINITY MAP



GENERAL NOTES

1. SOME FEATURES SHOWN ON THIS PLAT MAY BE SHOWN OUT OF SCALE FOR CLARITY.
2. DIMENSIONS ON THIS PLAT ARE EXPRESSED IN FEET AND DECIMAL PARTS THEREOF UNLESS OTHERWISE NOTED. MONUMENTS WERE FOUND AT POINTS WHERE INDICATED.
3. THE DISTANCES SHOWN HEREON ARE UNITS OF GROUND MEASUREMENT.
4. IN REGARD TO TABLE A ITEM 8, ALL SUBSTANTIAL FEATURES OBSERVED DURING THE FIELDWORK ARE PLOTTED HEREON, INCLUDING ANY ABOVE-GROUND UTILITIES.
5. REGARD TO ALTA/NSPS TABLE A ITEM 9, AT THE TIME OF THE ALTA/NSPS SURVEY THERE WERE NO OBSERVED DESIGNATED STRIPED PARKING SPACES AT THE TIME OF THE SURVEY.
6. IN REGARD TO ALTA/NSPS TABLE A ITEM 14, THE NEAREST INTERSECTING STREET IS THE INTERSECTION OF EAST 2850 NORTH ROAD AND NORTH 1500 EAST ROAD, WHICH ABUTS THE NORTHEAST CORNER OF THE SUBJECT PROPERTY.
7. IN REGARD TO ALTA/NSPS TABLE A ITEM 16, THERE WAS NO OBSERVABLE EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR ADDITIONS EXCEPT AS SHOWN HEREON.
8. IN REGARD TO ALTA/NSPS TABLE A ITEM 17, THERE WERE NO KNOWN PROPOSED CHANGES IN RIGHT OF WAY LINES. RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS EXCEPT AS SHOWN HEREON.
9. AT THE TIME OF THE ALTA/NSPS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP, OR SANITARY LANDFILL.
10. AT THE TIME OF THE ALTA/NSPS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF SITE USE AS A CEMETERY, ISOLATED GRAVE SITE OR BURIAL GROUNDS.
11. SURVEYOR NOTES THAT THE PROPERTY ABUTS THE RIGHTS-OF-WAY OF EAST 2850 NORTH ROAD AND NORTH 1500E ROAD. ALL BEING DEDICATED PUBLIC RIGHTS-OF-WAY. ACCESS TO THE RIGHT-OF-WAY MAY BE SUBJECT TO OTHER AGREEMENTS OR PROPER GOVERNMENTAL APPROVALS.
12. EXCEPT AS SPECIFICALLY STATED OR SHOWN ON THIS PLAT, THIS SURVEY DOES NOT PURPORT TO REFLECT ANY OF THE FOLLOWING WHICH MAY BE APPLICABLE TO THE SUBJECT PROPERTY: EASEMENTS, OTHER THAN POSSIBLE EASEMENTS WHICH WERE VISIBLE AT THE TIME OF SURVEY; RESTRICTIVE COVENANTS; SUBDIVISION RESTRICTIONS OR OTHER LAND USE REGULATIONS; AND ANY OTHER FACTS WHICH AN ACCURATE TITLE SEARCH MAY DISCLOSE.
13. NO SURVEYOR OR ANY OTHER PERSON OTHER THAN A LICENSED ILLINOIS ATTORNEY MAY PROVIDE LEGAL ADVICE CONCERNING THE STATUS OF TITLE TO THE PROPERTY DESCRIBED IN THIS SURVEY ("THE SUBJECT PROPERTY"). THE PURPOSE OF THIS SURVEY, AND THE COMMENTS RELATED TO THE SCHEDULE B-II EXCEPTIONS, IS ONLY TO SHOW THE LOCATION OF BOUNDARIES AND PHYSICAL OBJECTIONS IN RELATION THERETO. TO THE EXTENT THAT THE SURVEY INDICATES THAT THE LEGAL INSTRUMENT "AFFECTS" THE SUBJECT PROPERTY, SUCH STATEMENT IS ONLY INTENDED TO INDICATE THAT PROPERTY BOUNDARIES INCLUDED IN SUCH INSTRUMENT INCLUDE SOME OR ALL OF THE SUBJECT PROPERTY. THE SURVEYOR DOES NOT PURPORT TO DESCRIBE HOW SUCH INSTRUMENT AFFECTS THE SUBJECT PROPERTY OR THE ENFORCEABILITY OR LEGAL CONSEQUENCES OF SUCH INSTRUMENT.
14. NAMES AND ADDRESSES OF ADJOINING PROPERTY OWNERS WERE TAKEN FROM THE PIATT COUNTY ASSESSORS WEBSITE (https://piatt.devnetwedge.com/)
15. THE SUBJECT PROPERTY SHOWN HEREON FORMS A MATHEMATICALLY CLOSED FIGURE AND IS CONTIGUOUS WITH THE ADJOINING PUBLIC RIGHT-OF-WAY AND/OR ADJOINING PARCELS WITH NO GAPS OR OVERLAPS.
16. IN REGARD TO ALTA/NSPS TABLE A ITEM 18, ANY PLOTTABLE OFFSITE (I.E., APPURTENANT) EASEMENTS DISCLOSED IN DOCUMENTS PROVIDED TO OR OBTAINED BY THE SURVEYOR HAVE BEEN SHOWN AND/OR NOTED HEREON.
17. IN REGARD TO TABLE A ITEM 20, THERE WAS NO EVIDENCE OF WETLAND AREAS WITHIN THE SUBJECT PROPERTY, SHOWN ON THE U.S. FISH & WILDLIFE SERVICE NATIONAL WETLANDS INVENTORY WEBSITE ONLY. NO WETLAND FLAGS OR MARKERS WERE OBSERVED ON THE SUBJECT PROPERTY AT THE TIME THE ALTA/NSPS FIELDWORK WAS COMPLETED.
18. ELEVATIONS ESTABLISHED WITH GPS OBSERVATIONS UTILIZING VRS NETWORK WITH ORIGINATING BENCHMARK (PID: KS0774). VERTICAL DATUM BASED UPON NORTH AMERICAN VERTICAL DATUM (NAVD88) IN US SURVEY FEET. CONTOURS SHOWN ARE 1 FOOT INTERVALS.
BENCHMARK PID: LC0118
DESIGNATION: A 171
PUBLISHED ELEVATION: 729.38'
MONUMENT DESCRIPTION: BENCH MARK DISK, SET IN TOP OF CONCRETE MONUMENT STAMPING: A 171 1954

SURVEYOR'S CERTIFICATE

TO: BUSEY BANK, AN ILLINOIS BANKING CORPORATION, AS SUCCESSOR TRUSTEE UNDER THE PROVISIONS OF A TRUST AGREEMENT DATED DECEMBER 12, 1995 KNOWN AS TRUST NUMBER 5061; STEWART TITLE GUARANTY COMPANY:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 7, 8, 9, 11(A), 13, 14, 16, 17, 18, 19 AND 20 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON 03/18/2025.

DATE OF PLAT OR MAP: 03/20/2025

PRELIMINARY

ROBERT J. WINNICKI
PROFESSIONAL LAND SURVEYOR 035.003976
STATE OF ILLINOIS
LICENSE EXPIRES 11/30/2026
PROFESSIONAL DESIGN FIRM 184.008228-0010

SHEET 1 OF 3

MUNICIPALITY (AS APPLICABLE), STATE OF SURVEY

DRAWN BY: CW	CHECKED BY: DNC	JOB #: 25-1013	DATE: 03/20/2025
REVISED:		REVISED BY:	DATE:

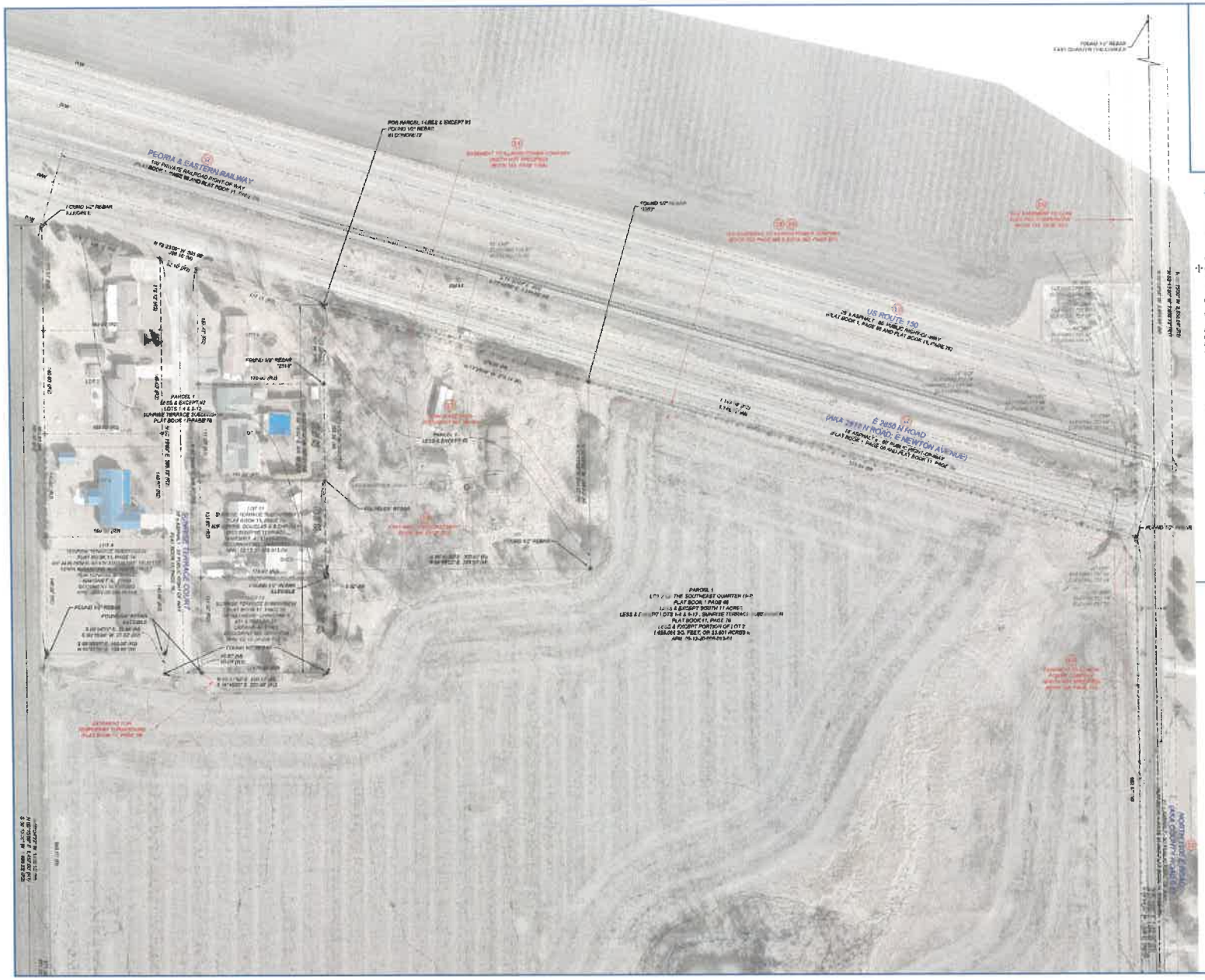
Coordinated by:
SunVest Solar LLC
N27 W24025 Paul Ct, Ste 100
Pewaukee, WI 53072
P: 262.547.1200
www.SunVest.com

SUNVEST SOLAR LLC

BLEW
Surveying | Engineering | Environmental

BLEW & ASSOCIATES, PA
3825 NORTH SHILOH DRIVE
FAYETTEVILLE, ARKANSAS 72703
OFFICE: 479.443.4506 FAX: 479.582.1883
www.BLEWINC.com

ALTA/NSPS LAND TITLE SURVEY
for Ecoplexus, Inc.



LEGEND OF SYMBOLS & ABBREVIATIONS

ALTA/NSPS SURVEY OBSERVATIONS & EXISTING IMPROVEMENTS.

SYMBOLS & ABBREVIATIONS

- FOUND MONUMENT AS NOTED
- COMPUTED POINT
- BENCHMARK (BM)
- SECTION CORNER
- SECTION CORNER
- (M) MEASURED/CALCULATED DIMENSION
- (R) RECORD DIMENSION PER TITLE COMMITMENT
- (R1) RECORD DIMENSION PER PLAT BOOK 1, PAGE 66
- (R2) RECORD DIMENSION PER PLAT BOOK 11, PAGE 70
- N/F NOW OR FORMERLY
- POB POINT OF BEGINNING
- CMP CORRUGATED METAL PIPE
- SMP SMOOTH METAL PIPE
- SCP SMOOTH CONCRETE PIPE
- POWER POLE
- GUY ANCHOR
- GAS RISER
- GAS PIPE POST
- WELLHEAD WITH PUMP
- DRAINAGE OUTLET AS NOTED
- TELEPHONE PEDESTAL
- MAILBOX

LINETYPES & HATCHES

- PROPERTY LINE
- INTERNAL PARCEL LINE
- SECTION LINE
- ADJACENT PROPERTY LINES
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- CENTERLINE
- FENCE LINE
- OVERHEAD POWER LINE
- UNDERGROUND GAS LINE (APPROXIMATE) LOCATION
- DRIP LINE
- INDEX CONTOUR (5' INTERVAL)
- INTERIOR CONTOUR (1' INTERVAL)
- EDGE OF WATER
- RAILROAD

BENCHMARK INFORMATION

BENCHMARK #1 (BM #1)
SET 5/8" REBAR
ELEVATION: 731.98'
NORTHING: 1261,266.52
EASTING: 648644.16

BENCHMARK #3 (BM #3)
FOUND 1/2" REBAR
ELEVATION: 737.58'
NORTHING: 1259850.88
EASTING: 647592.78

BLEW & ASSOCIATES, PA
3825 NORTH SHILOH DRIVE
FAYETTEVILLE, ARKANSAS 72703
OFFICE: 479.443.4506 FAX: 479.582.1883
www.BLEWINC.com

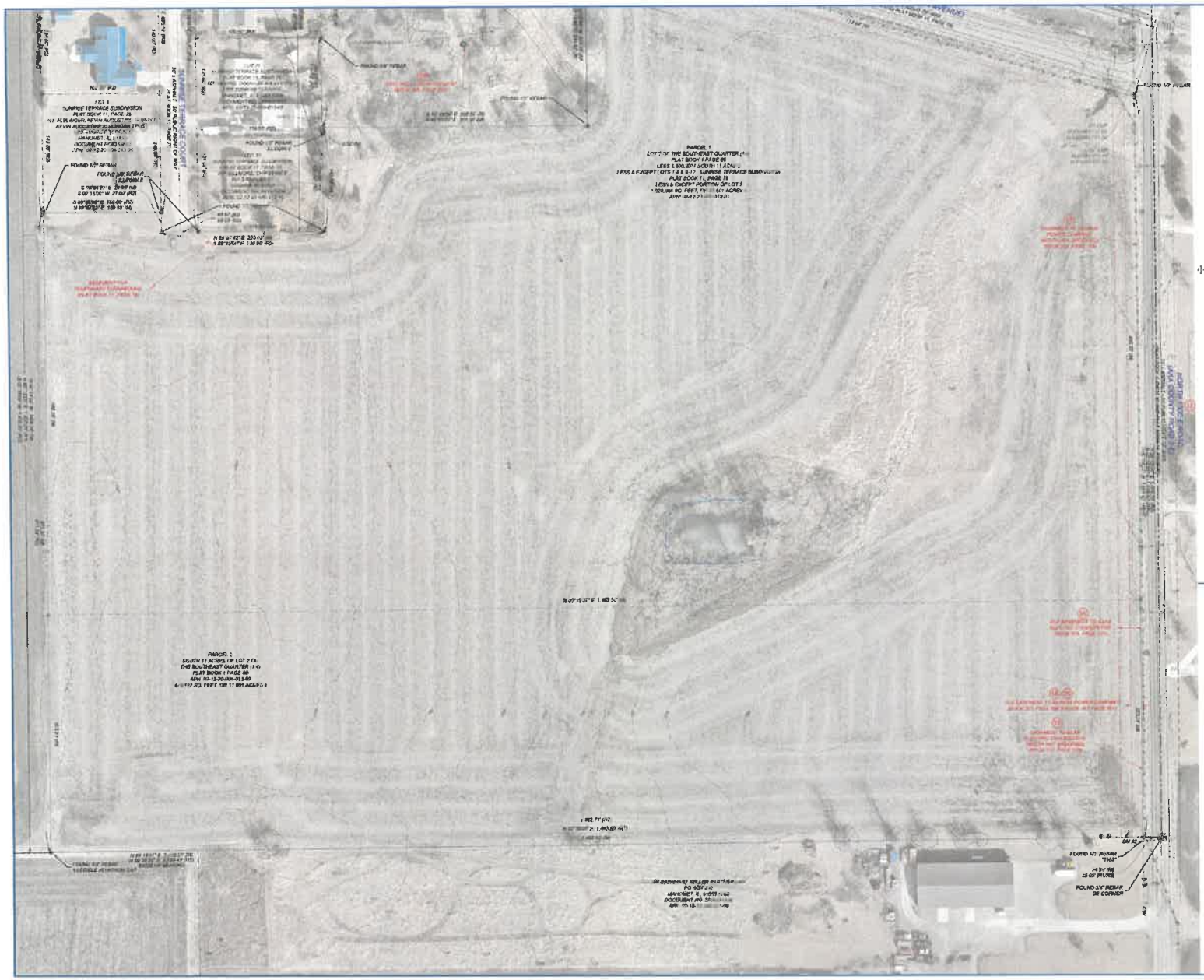
BLEW
Surveying | Engineering | Environmental

Coordinated by:
Sunvest Solar LLC
N27 W23957 Paul Road, Suite 100
Pewaukee, WI 53072
P: 262.547.1200
www.SunVest.com

SUNVEST SOLAR LLC®

ALTA/NSPS LAND TITLE SURVEY

for Ecoplexus, Inc.



N

W E

S

SCALE: 1" = 60'
GRAPHIC SCALE
0 30' 60' 120'

LEGEND OF SYMBOLS & ABBREVIATIONS

ALTA/NSPS SURVEY OBSERVATIONS & EXISTING IMPROVEMENTS

SYMBOLS & ABBREVIATIONS

- FOUND MONUMENT AS NOTED
- COMPUTED POINT
- BENCHMARK (BM)
- SECTION CORNER
- SECTION CORNER
- (M) MEASURED/CALCULATED DIMENSION
- (R) RECORD DIMENSION PER TITLE COMMITMENT
- (R1) RECORD DIMENSION PER PLAT BOOK 1 PAGE 66
- (R2) RECORD DIMENSION PER PLAT BOOK 11 PAGE 75
- N/F NOW OR FORMERLY
- POB POINT OF BEGINNING
- CMP CORRUGATED METAL PIPE
- SMP SMOOTH METAL PIPE
- SCP SMOOTH CONCRETE PIPE
- P POWER POLE
- GUY ANCHOR
- GAS RISER
- GAS PIPE POST
- WELLHEAD WITH PUMP
- DRAINAGE OUTLET AS NOTED
- TELEPHONE PEDESTAL
- MAILBOX

LINETYPES & HATCHES

- PROPERTY LINE
- INTERNAL PARCEL LINE
- SECTION LINE
- ADJACENT PROPERTY LINES
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- CENTER LINE
- FENCE LINE
- OVERHEAD POWER LINE
- UNDERGROUND GAS LINE (APPROXIMATE LOCATION)
- DRIP LINE
- INDEX CONTOUR (5' INTERVAL)
- INTERIOR CONTOUR (1' INTERVAL)
- EDGE OF WATER
- RAILROAD

BENCHMARK INFORMATION

BENCHMARK #1 (BM #1)		BENCHMARK #2 (BM #2)	
SET 5/8" REBAR		FOUND 1/2" REBAR	
ELEVATION:	731.98'	ELEVATION:	727.58'
NORTHING:	1116896.52	NORTHING:	1116940.38
EASTING:	946644.18	EASTING:	947889.78

BLEW & ASSOCIATES, P.A.
3825 NORTH BELLOH DRIVE
FAYETTEVILLE, ARKANSAS 72703
OFFICE: 479.443.4506 FAX: 479.582.1883
www.BLEWINC.com

BLEW
Surveying | Engineering | Environmental

Coordinated by:
Sunvest Solar LLC
N27 W23685 Paul Rd, Suite 100
Pewaukee, WI 53072
P: 262.547.1300
www.SunVest.com

SUNVEST SOLAR LLC

ALTA/NSPS LAND TITLE SURVEY

for Ecoplexus, Inc.

Madden Creek Solar Array

Decommissioning Plan

Prepared for:

SV CSG Madden Creek, LLC
N27 W24025 Paul Ct., Suite 100, Pewaukee, WI, 53072

Location: Mahomet, IL
June 30, 2025

NEW ENERGY EQUITY

Table of Contents

1 - Introduction..... 1

2 - Summary Statement of Expected Decomissioning Cost..... 1

3 - Basis of Plan Narrative..... 1-2

4 - Schedule of Removal and Restoration Costs..... 3

5 - Schedule of Summary..... 4

1.0 Introduction

The purpose of this report is to describe the decommissioning process for the Madden Creek solar photovoltaic generation facility ("the project") located at 1499 E 2850 North Rd, Mahomet, IL 61853. The project consists of 9844 solar modules mounted to a driven pile, Single Axis Tracker system. After final circuit consolidation at the equipment pad mounted switchboard, the system's voltage will be stepped-up to distribution level at a transformer and interconnected, onto an existing utility distribution circuit.

The project converts approximately 26.11 acres of agricultural land into a power generation facility. Construction includes solar modules mounted on driven steel piles, inverters, concrete transformer and equipment pads, and gravel access roads.

2.0 Summary Statement of Expected Decommissioning Cost

The decommissioning cost to remove the solar PV facility and reestablish the property back to a grassy field is not expected to exceed a net expenditure of $462,484.96.

3.0 Basis of Plan Narrative

The following is a list of assumptions and clarifications to further define the methodology used to establish the scope and values of the removal costs and salvage values.

3.1 General

- The intent of the decommissioning work will be to fully remove the solar facility, dispose of any components, and restore the site to a permanently stabilized grassed field.
- The service life of the facility is assumed to be 35 years. Because of this there is inherent uncertainty with pricing estimates that far into the future. All dollar amounts are in net present value (NPV). It is assumed that all values will inflate/deflate consistent with inflation, therefore, the NPV comparison of removal cost to salvage value will remain relevant at the end of the service life.
- Costs associated with this plan represent a "turn key" operation for a general contractor to be hired for this work, including permits, mobilization, contingency, etc.
- Haul costs assume a maximum distance of 60 miles between the project and nearest disposal or recycling facility.
- No maximum duration has been assigned for this work. It has been assumed that this work would be handled by a single crew without full time site personnel.

3.2 Civil Infrastructure

- Topsoil used to backfill excavations will be borrowed from onsite locations. No topsoil import is included.
- Removal of rip rap at stormwater basins is included.
- Aggregate removal will be the full depth of the aggregate section for roads, equipment pads, and other areas utilizing aggregate. No aggregate will be buried. Includes subgrade scarification prior to backfilling with topsoil.
- Turf establishment includes mulch, fertilizer, and water as necessary to achieve 70% ground cover as required to satisfy the NPDES Construction General Permit.
- Sediment control cost consists of silt fence but could also be fiber logs. Location of sediment control will be downslope from exposed soils only in areas where sedimentation offsite or into onsite water bodies can reasonably be expected.
- Trees and shrubs shall be protected and shall remain in place.

3.3 Structural Infrastructure

- Steel pile foundation removal is estimated at 25% the effort and cost as pile installation.
- Steel racking removal is estimated at 50% the effort and cost of racking installation.

3.4 Electrical Infrastructure

- PV modules to be recycled. Assumption is that the module value will be based off the module wattage. i.e. a higher wattage module will be worth more than a lower one.
- Switchgear including transformers will be removed from their respective concrete pads and recycled or returned to the manufacturer.
- Copper wiring will be dug up (if required) and recycled.
- Aluminum wiring will be dug up (if required) and recycled.
- Customer owned site riser or interconnection poles shall be removed.
- A two-person crew can dismantle a string inverter and recycle the components.
- Transformers are pad mounted and weigh approximately 8,500 pounds. These are dry type transformers, so there is no need for any oil disposal.
- Underground power and communication cables can be removed by excavating with a power trencher or excavator.

3.5 Recycling PV Modules

- Recycling solar modules have environmental benefits such as
    - Creating a useful and sustainable method of disposal
    - Providing raw materials for repurposing and reprocessing
    - Recovering up to 90% of the photovoltaic glass and up to 95% of the semiconductor material necessary for further production
    - Recycling of rare earth metals.

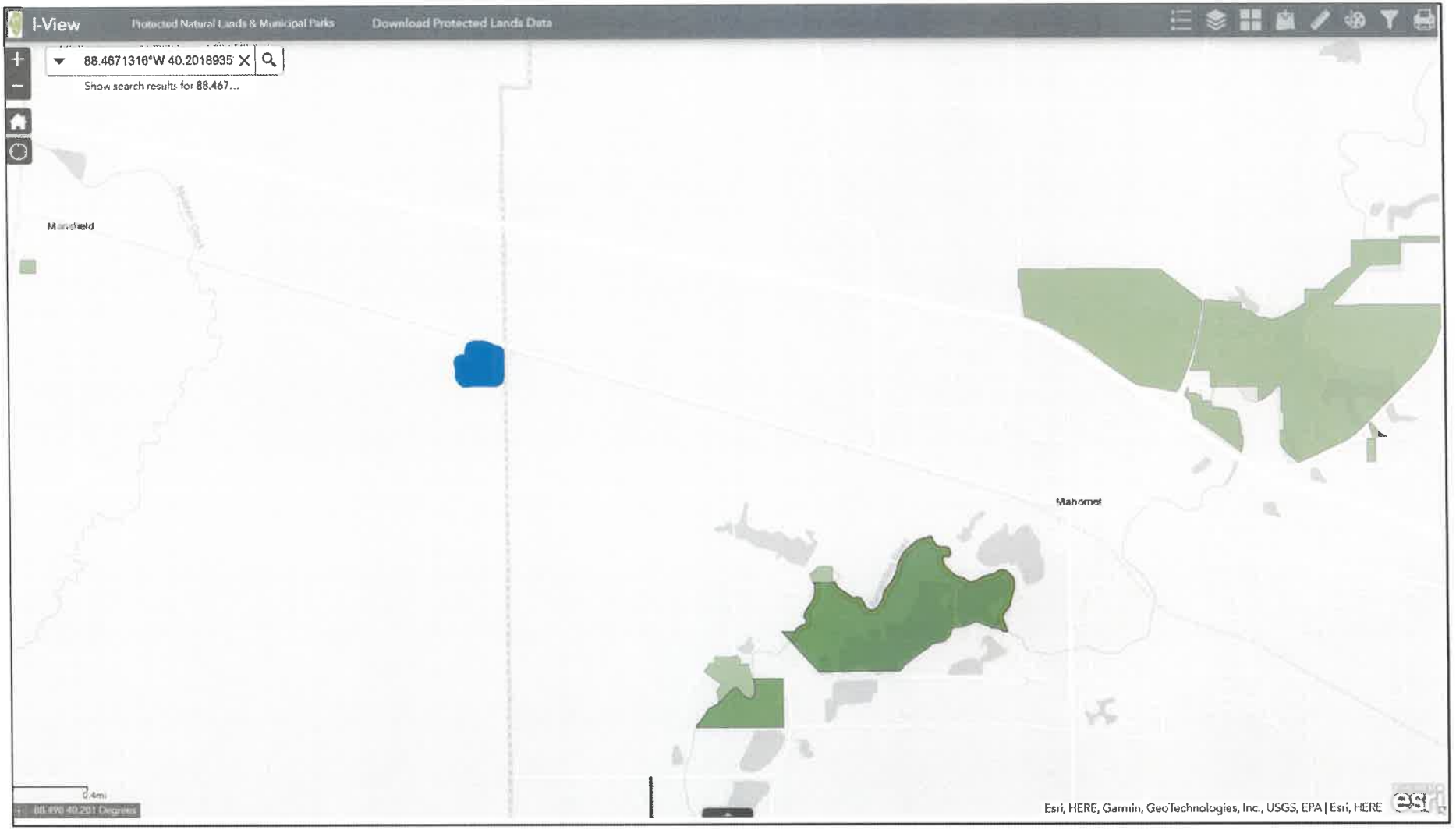
4.0 Schedule of Removal and Restoration Costs

Removal and Restoration Costs						
CIVIL INFRASTRUCTURE						
		QUANTITY	**UNITS**	**$/UNIT**	**COST**	**NOTES**
1	Road Aggregate, Rip Rap, and Geotextile Removal	7357.5	ft^3	$ 1.00	$ 7,357.50	Remove full section of aggregate road, rip rap, and geotextile fabrics
2	Road Aggregate, Rip Rap, and Geotextile Haul and Offsite Disposal	7357.5	ft^3	$ 3.26	$ 24,000.00	Hauling offsite
3	Topsoil Backfill	7500	ft^3	$ 1.00	$ 7,500.00	Onsite relocation of topsoil to backfill road and equipment pad excavations
4	Chainlink Fence Removal	4,692	ft	$ 1.00	$ 4,692.00	Includes fence mesh, post framing, concrete foundations, gates, etc.
5	Chainlink Fence Haul and Offsite Disposal	23,460	lbs	$ 0.03	$ 800.00	
6	Concrete Equipment Pad Removal	2	EA	$ 5,000.00	$ 10,000.00	
7	Concrete Waste Haul and Offsite Disposal	2	EA	$ 2,500.00	$ 5,000.00	
8	Site Grading	2.611	Acres	$ 5,000.00	$ 13,055.00	Grading smooth all areas disturbed by removals, excavations, etc, assumed (0.1 x project area) + Road Area + Equipment Pad Area
9	Turf Establishment	26.11	Acres	$ 1,500.00	$ 39,165.00	Hydroseed all areas disturbed by removals, excavations, etc
10	Sediment Control	1564	ft	$ 10.00	$ 15,640.00	Silt fence installation
Structural Infrastructure						
11	Foundation Removal	2166	EA	$ 20.18	$ 43,711.36	~25% of install cost
12	Foundation Haul and Offsite Disposal	2166	EA	$ 5.97	$ 12,928.40	
13	Racking Removal	305164	lbs	$ 0.35	$ 108,331.03	~50% of install cost
14	Racking Haul and Offsite Disposal	305164	lbs	$ 0.03	$ 9,320.47	
Electrical Infrastructure						
15	Removal of Solar Modules	9,844	EA	$ 5.00	$ 49,220.00	
16	Removal of String Inverters	34	EA	$ 1,000.00	$ 34,000.00	
17	Removal of Switchgear/Xfmr	2	EA	$ 5,000.00	$ 10,000.00	
18	Removal of Riser and Interconnection Poles	5	EA	$ 1,000.00	$ 5,000.00	
19	Removal of SCADA/Aux Panel/Weather Station	1	EA	$ 200.00	$ 200.00	
20	Removal of DC Copper Wire	6,153	lbs	$ 2.00	$ 12,305.00	
21	Removal of AC Aluminum Wires	8,996	lbs	$ 2.00	$ 17,992.80	
	Total Cost				**$ 430,218.57**	

5.0 Schedule of Summary

Summary		
Description	Cost	Units
Decommissioning Estimate (DE)	$ 430,218.57	$
Factor of Safety (FoS)	1.075	
DE with FoS	$ 462,484.96	$
Average Inflation rate	2.50%	%
Time Period	0	Years
Total Cost with FoS and Inflation after Time Period	$1,070,801.66	$

SV CSG Madden Creek, LLC - Protected Lands Map



Project is located over 11,000 feet from Parks and Protected lands

SV CSG Madden Creek,LLC

Conservation Areas

Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA

ArcGIS Web AppBuilder

Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA | The Nature Conservancy |