



AN ALLETE COMPANY

BOHREREAST COMMUNITY SOLAR PROJECT SUMMARY

1 MW COMMUNITY SOLAR GARDEN
23759 Third Ave, Mankato, MN 56001
PID: R40.04.29.100.007

Prepared for:

Lime Township Board
3030 N Airport Rd, Mankato, MN 56001

Prepared by:

MNCSG 2019-57 LLC
C/O New Energy Equity
2670 Patton Rd, Roseville, MN 55113

Introduction and Overview:

MNCSG 2019-57 LLC (Applicant) has prepared this Project Summary for the proposed development, installation, and operation of a 1MW AC community solar photovoltaic facility, including the proposed construction and operation of a permanent access road, interconnection poles and line, (the “Solar Facility”) for the purpose of obtaining a Interim Use Permit from the Lime Township Board.

It is the intent of the Applicant to meet or exceed the requirements of all the conditions of the applicable local laws and Zoning without any Variances. Should any misrepresentation or error be found within this project summary and associated exhibits, the Applicant will promptly provide update throughout the permit process.

The Lime Township Ordinance regulates Community Solar Energy Systems under Section 15. The subject property is located within the Rural Conservation zoning district. Pursuant to the Town Zoning Law, a Solar Facility of 1MW, such as this project, is allowed under an Interim Use Permit.

A copy of the completed Zoning Request Application form is attached as **Exhibit A**.

The Solar Facility final design will follow all regulatory, technical, and environmental guidance, requests, rules and requirements of the Utility, County, Involved Agencies, as well as following National Electrical Safety Code, the U.S. Department of Labor and Occupational Safety and Health Standards for the safety and protection of landowners, general public and property.

Interconnection: The Solar Facility will be grid connected to the Xcel service territory, on a distribution level three phase power line that has available hosting capacity and an approved interconnection queue position held by the Applicant. Proof of Project Interconnection Acceptance is attached as **Exhibit B**. The energy generated from the Solar Facility would be distributed to Xcel for daily electrical use by Xcel customers enrolled in the Community Solar Program. The final Solar Facility system size will be determined based on final system design as approved by MN CSG 2019-57 LLC and Xcel.

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1. Design and Interconnection

The proposed location for the Solar Facility is on approximately 7.2 acres of undeveloped land at 23759 Third Ave, Mankato, MN 56001 within the jurisdiction of Lime Township. The parcel is Blue Earth County PID: R40.04.29.200.017.

Applicant has provided a copy of the current Site Plan Set attached as **Exhibit E**. The Site Plan provided has been refined during the development process, working with the landowner, utility company, in consideration of the Town requirements and in recognition of the existing site conditions.

Overview of Solar Facility:

- Grid tied distributed generation system.
- Power generated from a renewable resource free of carbon emissions or any other air pollutants, helping to combat greenhouse gas emissions and reduces our collective dependence fossil fuel.
- The Solar Facility will not use any utility water for electrical power generation.
- Minimal noise generated during solar power generation, none outside project fence, none at night.
- No traffic disturbance during Project operation.
- Minimal visual impact, uniform solar arrays.
- Minimal ground disturbance to the Solar Site, including the surrounding environment.
- Solar panels secured to ground by use of a racking system to minimize ground grading.
- Specified pollinator habitat and fencing to incorporate best practices that ensure the Solar Facility is ready for potential vegetation management via grazing.

Project Description:

The Solar Facility is located on a property is currently used for solar and agricultural purposes.

Description	Total
Land owned by the Property Owner (Acreage)	84.22
Solar Facility Permitted Area (Acreage)	10.82
Modules Covered Area (Acreage)	1.99
Equipment Pads (#)	3

The project consists of 2,592 solar modules mounted to a driven pile, single axis tracker system. Both direct current (DC) and alternating current (AC) conductors will be trenched in conduit. After final circuit consolidation at the PV system pad mounted switchboard, the system's voltage will be stepped-up to distribution level at the Xcel owned transformer and interconnected, onto an existing utility distribution circuit.

The racking system manufacturer's engineer will provide certification that the design of the foundations and panels are within accepted professional standards, given local soil and climate controls. The

equipment is designed to withstand wind up to one hundred five MPH and fifty pounds per square foot of snow. Each Solar Facility will have one to two concrete equipment pads, to support interconnection and metering equipment, and above ground typical utility poles to support interconnection of the distribution powerline. Demonstrative equipment specifications are located within the Site Plan Set, and the Indicative Manufacturer Equipment Specification Sheets are attached as **Exhibit F**

The panels will be arranged into rows arranged from North to South. Rows of solar panels will connect to an inverter. The inverters will be connected by directionally bored underground conduit that is housed inside a PVC housing which will be installed two feet below the surface. The conduit will lead to the concrete equipment. The inverters transform the direct current power generated by the photovoltaic system to alternating current power, which is then connected to the existing distribution line at the point of interconnection. All electrical conduits within the array fence will be buried.

Proposed design will not have any adverse effects the neighboring properties, including no odors, dust, gas, smoke, fumes, vibrations, glare, or noise during operation. During construction we intend to follow general good practices and any recommendations from the County or any Involved Agencies. We do not request the county to provide any services or personnel to support the Solar Facility construction or operation.

There will be signage including utility hazard, company information, and contact information on the fence. No exterior lighting is proposed for the project. Due to the facilities size, wildlife corridors are not expected to be needed. The Solar Facility is small in scale and will not impact wildlife movement.

Construction is expected to start in early 2025. The duration of construction is expected to last three to six months, weather dependent.

Purpose:

The overall purpose of the Solar Facility is to provide customers with a cost-effective source of reliable renewable solar electricity. Additional Project objectives include:

- Develop a generation facility that is feasible, quick to construct and easy to operate while providing the local utility and its customers with a cost-effective, cleaner alternative.
- Establish emission-free solar electricity and reduce greenhouse gas (GHG) emissions while avoiding, minimizing, and mitigating the impacts to the environment.
- Generate electricity without utility water supply needs.
- Provide other important economic and environmental benefits to the local utility and the Municipality, including improving local air quality and public health, developing local energy sources, promoting local jobs and diversifying the energy supply; and
- Render solar energy to the community and meet the State's Energy Plan and Clean Energy Standard.

The Applicants preference would be for the residents and businesses of Lime Township to participate in the Applicants Community Solar Program and be the direct beneficiaries of reduced electricity rates.

2. Pre-development Site Conditions

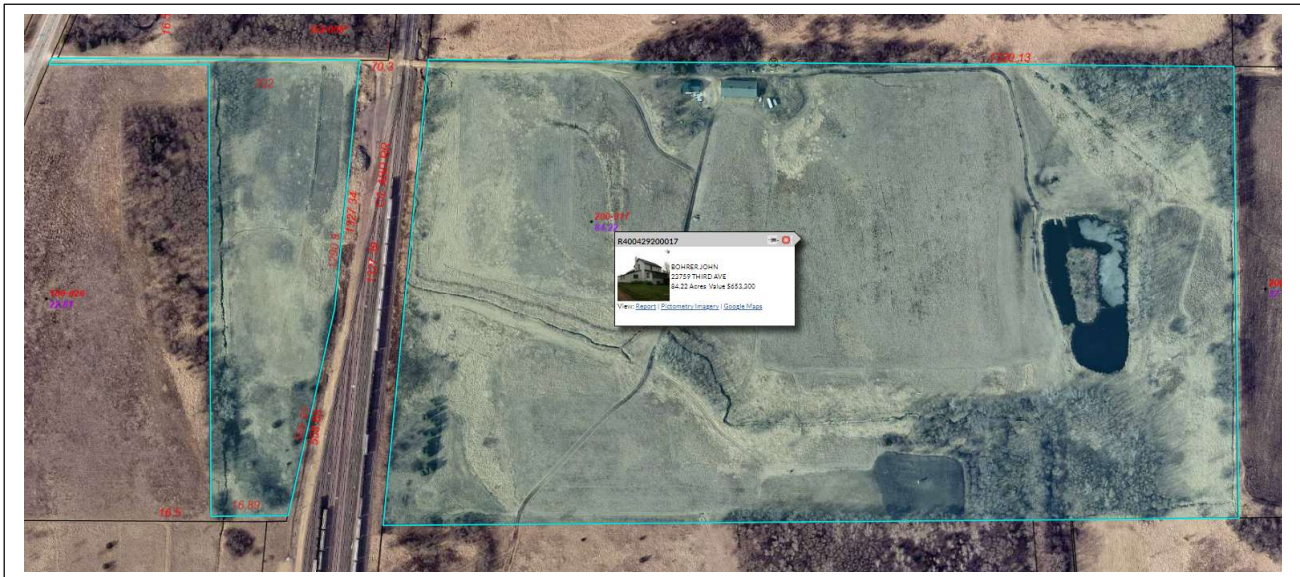


Figure of Aerial depicting Existing Conditions (source Blue Earth County GIS)



Figure of Project Location and adjacent parcels (source Paces.com).



Figure of Topography

Environmental Considerations:

During the planning and development process, the Applicant has completed desktop diligence utilizing internal resources and independent ecological consultants, state, and federal resources to identify Environmental Resources including, but not limited to:

- Significant locations of rare or high-quality wetlands, forests, grasslands, ponds, streams, and other types of habitats, ecosystems, and ecological areas.
- Unique or unusual geological features or landforms.
- Wetlands that are currently mapped under the state's Freshwater Wetlands Act and classified waterbodies.
- Wetlands that are currently mapped by the National Wetlands Inventory
- Animals and plants that are rare in Minnesota, including but not limited to those listed as Endangered and Threatened by the State of MN and/or the U.S. Fish and Wildlife Service.

The applicant involved an independent engineering firm to conduct a level 1 wetland delineation and MN DNR Natural Heritage Information System Review. Reports for both are included in **Exhibit C**. The current Site Plan Set utilizes this combination of data and expertise to avoid and/or minimize impacts, identify as well as identify and implement appropriate setbacks. The Solar Facility as current designed, avoids impact / disturbance of the bed or banks of protected streams, the excavation or placing of fill in navigable waters of the state and/or the U.S., impact of a rare animal or plant, and/or a significant natural community.

The NHIS review listed two State-Listed Species that may be present in the project area. The applicant agrees to comply with the recommendation of the MN DNR provided in the review as well as the MN DNR Rare Species Guide.

The Blue Earth Technical Evaluation Panel met on June 21st to review the submitted report as well as additional aerial imagery. The TEP found the wetland delineation report to be accurate. The property that the project area is on has been visited by the TEP two times in the past for other delineations. This project is to the east of the other delineations and the wetland boundary matches up with the past wetland delineations. Additionally, Blue Earth County did conduct a site visit and verified the boundary.

The TEP also discussed the No-Loss request by the applicant, based off the Bohrereast CSG Site Plan 5.13.24. The TEP determined that access to the project would be from an access road that would not impact the wetland basin identified in the wetland delineation report. The TEP is in concurrence that the project will not impact any wetlands based upon the site plan Bohrereast CSG Site Plan 5,13.24.

The TEP Notice of Decision report is included in Exhibit C

Cultural and Historical:

The applicant has engaged the services of an outside engineering firm to confirm the absence of items of cultural or historical significance on site. This firm has consulted with the MN State Historic Preservation Office (SHPO) to make help make this assessment. A report is included as **Exhibit D**. In addition to that, a field survey will be conducted if a need is indicated by the desktop assessment. It will be complete as soon as possible and prior to application for a building permit. Any cultural resource that would be directly or indirectly impacted, if any, would be subject to further evaluation following SHPO guidelines.

3. Storm Water Management Measures

Indicative stormwater measures are shown on the site plan. A licensed civil engineering firm will determine storm water management measures and a storm water pollution prevention plan (“SWPPP”) study will be conducted prior to the submission of the building permit.

Measures will include an analysis of the existing topography, the use of erosion control logs and silt fences where necessary, and establishment a germinated indigenous pollinator friendly vegetative base underneath the project site before construction begins to prevent erosion. The indigenous pollinator friendly seed mix will improve the quality of water and any wetlands nearby by slowing down the velocity of water runoff, improving the permeability of the soil, promoting insect and wildlife habitat, and not using row crop pesticides.

4. Visual Impact Analysis:

Current visual features of the property where the proposed Solar Facility is to be located consist of agricultural fields and rural residence. Adjacent uses consist of railroad lines, former agriculture fields that are now in reserve programs and rural residences.

Harmony with Nearby Residential and Agricultural Property:

- **Appearance:** Large solar projects have similar characteristics to a greenhouse or other agricultural facilities. Usually no more than 8-12 feet high, solar farms are enclosed by fencing and/or landscaping to minimize visual impacts.
- **Noise:** Solar projects are effectively silent. Tracking motors and inverters may produce an ambient hum that is not typically audible from outside the enclosure. There is no noise at night.
- **Odor:** Solar projects do not produce any byproduct or odor.
- **Traffic:** Solar projects do not attract high volumes of additional traffic as they do not require frequent maintenance after installation. The expected traffic volume is less than a single-family home.
- **Hazardous Material:** PV modules are constructed with the solar cells laminated with polymers and the minute amounts of heavy metals used in some panels cannot mix with water or vaporize into the air. Product Safety Data Sheets are included in Exhibit D.

Visual resources in the area of the Solar Facility have been affected by past and present actions including mining, active railroads, highway/roadway construction, utility power lines, sewage, utility water pipes and limited commercial and residential development. The existing terrain along with vegetation / tree lines will act as a visual barrier.

Locations of residential, historical or recreation, have been considered during the project planning and development. The combination of a perimeter Solar Facility fence, natural barrier of trees will mitigate views from surrounding roadways. No known inventoried aesthetic resources are located off-site within the potential visual field of the proposed solar arrays.

The project parcel is 84 acres and adjacent to a 57 acre parcel also owned by John Bohrer. There are significant areas of both properties that have dense existing forest that effectively blocks the view of the project from other adjacent parcels. The parcel is positioned well off any public roadways with over 1,400' to the closest road to the north or east and 2,200' to the west.

Due to the long distance to adjacent properties and the zoning classification of them, the applicant is not proposing to include any vegetative screening.



Figure of Road Views looking towards proposed Solar Facility Location

Glare:

In general, the concept of efficient solar power is to absorb as much light as possible while reflecting as little light as possible, standard solar panels produce less glare and reflectance than standard window glass. The solar panels will be coated with a anti reflective coating. We have included information in **Exhibit F** that shows the low reflective nature of the solar panels.

Considering the existing terrain and vegetation surrounding the Solar Facility as well anti reflective coatings on the solar panels, roadways, buildings, and flights paths will not be impacted by glare from the panels. A Forge Solar SGHAT glare analysis for several adjacent roads and residences is provided as **Exhibit G**. Due to the 2.6 mile distance from the Mankato Airport aviation glare analysis was not required.

5. Agricultural Soil Preservation:

Agricultural Soils:

When considering the design of this project we have put significant focus on minimizing potential project effects on future agricultural land use. This plan includes measures that have been developed to maintain and / or improve the quality of soil resource with the expectation that the site can be returned to row crop agricultural use at the end of the project operation. The Applicant's goal is to improve and maintain soil health during the operational phase of the project by sustaining soil functions including groundwater recharge, carbon sequestration, water quality and minimizing soil loss due to erosion. The Applicant lease has a 25-year standard operating term with the possibility of 10 years extension.

Allowing the land to rest for 35 years will provide an opportunity for it to regain the benefits of natural organic processes that don't happen when the land is constantly worked with modern farming practices.

Agricultural Soil Protection Practices:

- To the extent practical, the solar facility will be developed without modifying grades.
- Wherever possible facility roads are laid out over existing farm roads.
- While the entire site needs to be accessed during construction, routine access patterns will avoid crossing agriculture soils unless necessary.
- When practical, use lower ground pressure tracked equipment and farm carts to haul construction materials across fields.
- Pile drivers will be track mounted to lessen the soil compaction caused.
- Construction equipment travel will be limited in agricultural fields when soils are visibly saturated.
- Use perimeter roads around fields to avoid crossing fields with heavy equipment such as dump trucks or cement trucks.
- Cover crops and deep-rooted perennial vegetation will be used to promote the development of soil structure and reduce compaction potential.
- When trenches need to be installed across farmland, the topsoil will be segregated from the subsoil and substrata. When the trench is backfilled care will be taken to replace topsoil back at the top of the trench.

Temporary Vegetative Cover:

Vegetative cover is important to promote soil health and minimize erosion losses. Maintaining healthy vegetative cover will help reduce the proliferation of noxious and invasive weeds. The goals of maintaining vegetative cover are:

- Protect soils from erosion losses and promote healthy soil by establishing and maintaining a vegetated surface and healthy root zone during construction and throughout the operational phase.
- Increase organic matter content of the soil to improve soil structure, increase the pool of nutrients available for cycling and promote long term carbon sequestration.
- During construction temporary erosion control will be provided by mulching and the use of temporary vegetative cover as well as other measures outlined in the storm water management measures.

Permanent Vegetative Cover:

A properly designed and maintained vegetative cover will improve the surrounding agricultural community, surface, and ground water quality, increase biodiversity, and improve onsite soil health. The goal is to have a vegetative community that stabilizes the site to minimize erosion. The permanent vegetative cover is designed to be sustainable with low maintenance and high ecological and agricultural significance. The Applicant will utilize commercially reasonable efforts to contract with a local company to maintain the Solar Facility.

- The seed mix will be chosen to be consistent with Minnesota Statutes section 216B.1642 and using the guidance of the Minnesota State Board of Soil and Water Resources (Minnesota Habitat Friendly Solar Program) for the creation of native insect pollinator habitat, attached as **Exhibit J**.
- During establishment, mowing may be required to initially control undesirable species before they can become established.
- After successful establishment of the permanent vegetative community, mowing may be required for general maintenance and potential weed and shrub control. Mowing will be limited and only used when necessary. Mowing should not occur within 24 hours after a significant rainfall event when the soil would be susceptible to compaction.
- Ground cover within the fenced portion of the array will follow best management practices for the seed type and seasonal conditions but will not grow exceeding 48 inches at any time.

Perennials And Ornamental Grasses:

- Cut back to a few inches in late fall or early spring.

6. Construction:

Typical Process:

The construction process typically takes approximately three to six months, weather dependent to ensure safe site conditions for work personal. A licensed survey team, prior to any commencement of construction, will stake the Solar Site physical boundaries and construction footprints. The survey team will stake the path through any right of ways (“ROWS”) for the Interconnection Lines and/or provide a detailed map using GPS coordinates. Construction activities would include installation, operation and maintenance facility construction, road and access construction, Interconnection Line trenching, installation of a buried Interconnection Line, cleanup, and site reclamation.

Temporary construction staging areas, including material laydown, storage, equipment assembly, construction trailers, construction worker parking and portable toilet facilities are anticipated during the duration of construction activities. Construction Operating hours during construction will be 8am-6pm. No water supply will be required.

Applicant will use appropriate temporary (construction-related) erosion and sediment control best management practices through construction. Applicant agrees to the Site Rules attached as **Exhibit K**.

Equipment:

Equipment will be used for construction, including but not limited to passenger vehicles, pickup trucks, excavator, road grader, dump trucks, compactor, trencher, skid steer track loader, piling and drilling machine and forklifts will be on site almost every day throughout the construction process.

Drain Tile:

Applicant will be responsible for maintaining any existing drain tile system underneath the array and replacing any damage to tile occurring during construction, or any time prior to or during

decommissioning.

The applicant has obtained a map of the known existing drain tile lines from the landowner. These drain tile lines will be identified upon the completion of the ALTA survey prior to construction.

Transportation Plan:

Multiple truckloads of equipment, gravel and aggregates will be delivered throughout the construction period. Materials would be sourced locally where available. Construction crews will access to the public roadway as depicted in the Site Plan Set, utilizing a permanent access entrance for operations, and a temporary construction entrance for mobilization and construction. To ensure safe access to the site during and after construction of the Solar Facility, Applicant is committed to incorporating all reasonable road improvements and traffic related recommendations from the Town and Involved Agencies. Construction will involve multiple semi-trailer deliveries. Road access will be controlled for erosion control during construction. Construction crew parking will be located entirely within the site. No additional permanent parking is required unless required by local regulations. Maintenance crews will park within the site access road and turnaround area.

Once installation is complete minimal low frequency access is required, as further described in the Operations and Maintenance Basic Scope of Services.

Legal access to the property across the adjacent rail track parcel owned by Union Pacific Railroad is secured in a deed included as **Exhibit H**. A letter supporting the validity of that crossing easement is also included in **Exhibit H**. The applicant is in process of obtaining a Crossing Agreement with Union Pacific as well.

There is an existing private road used to access the property from Third Ave on the west. This road is located along the centerline of parcels owned by John Bohrer and Avamar Properties LLC. There are existing access easements that total 33' wide that were granted to Union Pacific Railroad Company in 2011. John Bohrer and Avamar Properties have entered into a letter of intent to grant each other reciprocal access easements that are similar in nature to the existing ones granted to Union Pacific.

Temporary Roads and Parking Surfaces:

Existing roads will be utilized as much as possible for temporary access during construction. Temporary roads that are not located along existing roads and that require heavy equipment to cross agricultural fields during construction will use the following:

- Install geotextile matting designed for soil separation over exposed topsoil (or subsoil if topsoil is stripped) surface prior to placing a 4-inch layer of crushed rock for the road surface.
- Complete removal of the temporary access fill and geotextile required for temporary access during construction or decommissioning will be removed upon completion of task.
- The topsoil and subsoil shall be de-compacted by tillage after the roads are removed and seeded as described above.

Waste Materials:

The construction of the Solar Facility will generate a variety of non-hazardous wastes during construction, such as paper, cardboard, plastic, and wooden pallets. Any waste or debris will be the responsibility of the Applicant, gathered in a dumpster that will be removed during construction progress as necessary. A waste management plan will be implemented during construction.

7. Operations & Emergency Response:

General:

The Solar Facility site will operate 7 days a week, generating electricity during daylight hours by a qualified operations and maintenance provider, either internal or external and/or manufacturer warranty services, to be determined (the “Operator”).

Service	Description	Frequency
System Monitoring	Operator will monitor the System via the Applicant supplied DAS	Daily
Event Notification	Operator shall create an Event in the Enterprise Asset Management System (Bluepoint) and notify the Asset Manager when: the DAS generates a valid alarm, the System experiences an underperformance condition, or a deficiency is identified onsite during a site visit. Severity: • High Priority events represent conditions that are either causing damage to System or significantly reducing electrical output of System. - Upon Asset Manager approval, truck roll within 24 hours. • Medium Priority events affect System electrical output, but not to a significant degree. - Upon Asset Manager approval, truck roll within 72 hours. • Low Priority events do not impact System electrical output. - Upon Asset Manager approval, truck roll within 7 business days or combined with another previously scheduled visit.	As necessary per occurrence
Diagnostic and troubleshooting	Any diagnostic or troubleshooting work performed on site to develop the Corrective Action Plan, including travel time.	As needed
Equipment Warranty Maintenance and Enforcement	• Operator shall maintain System equipment warranty and perform all preventative maintenance as specified by System equipment manufacturer. • All warranty diagnostic and data collection for the purposes of	As necessary per occurrence

	submitting a system warranty claim included in basic services. • Operator shall perfect and enforce all System warranties and coordinate the corrective actions performed by the manufacturer under the warranty claim. • Operator work performed on System warranty not reimbursed by Manufacturer will be included in Basic Services. • Warranty Maintenance and enforcement that can't be completed due to the good standing and solvency of the System Equipment Manufacturer will be considered Additional Work.	
Warranty Repairs	All labor performed onsite to replace warrantied equipment and return the System to full electrical output.	As needed
Corrective Maintenance	All corrective action, including travel time, performed to complete the Corrective Action Plan.	As needed
Verification of Electric Revenue Meter	Operator shall verify that the electric revenue meter is operational with an accuracy tolerance band of plus or minus 5%. If the Electric Revenue Meter is outside this tolerance band, Operator shall promptly cause the meter to be repaired or replaced pursuant to "Equipment Warranty and Maintenance Enforcement" if considered a warranty claim, or as additional work if not considered a warranty claim.	Once every 5 years
Semi-Annual System Performance Report and Visual and Mechanical Inspection	Will consist of the following: • Performance report (Actual vs Forecast vs Weather adjusted output model) for the report period • List of Events for the report period pulled from Bluepoint • Operator will visit the System between no sooner than five (5) months and no later than seven (7) months after the previous Annual Preventative Maintenance Inspection was completed and complete a visual and mechanical inspection of the System, noting all non-conformances, and documenting through a checklist that will be provided as part of the Semi-Annual System Performance Report.	Once every 6 months
Annual Preventative Maintenance and Performance Report	Will Consist of the Following: TBD	Annually, as mutually agreed upon between Asset Manager and Operator
Annual Report –	Performance report (Actual vs Forecast vs Weather adjusted	Annually, as

Performance Summary	output model) for the report period.	mutually agreed upon between Asset Manager and Operator
Annual Report – Work Order Summary Report	List of Events for the report period from Bluepoint.	Annually, as mutually agreed upon between Asset Manager and Operator
Annual Report – Preventative Maintenance Visual & Mechanical Inspection and Checklist	Visual & Mechanical Inspection checklist which includes inspection and maintenance activities for the following: • General Site Observations • Array • Racking • Tracker (If applicable) • Conduit • Inverters • Accumulation Panel(s) • Disconnect(s) • Transformer(s) • DAS & Weather sensors • Equipment manufacturer warranty maintenance	Annually, as mutually agreed upon between Asset Manager and Operator
Annual Report - Infrared Thermal Imaging	Operator Shall perform infrared thermography of the following: • 25% of system PV modules if handheld IRT is performed. Shall otherwise be 100% completed by aerial drone as part of “Annual Report – System Performance Data” • Hand-held IRT imaging of Inverter enclosures, combiner boxes, accumulation panels, disconnects, and transformers.	Annually, as mutually agreed upon between Asset Manager and Operator
Annual Report - System Performance Data	Operator shall collect one of the following: • Perform I/V curve tracing on a random 25% of the PV Module strings. Comments will accompany any results that suggest there is a problem • Perform Aerial Drone Infrared Thermography of the entire System array. Thermography will be performed at a minimum of 500 w/m2. Drone analysis will be provided to the customer as both a printout and an interactive online report.	Annually, as mutually agreed upon between Asset Manager and Operator
System Performance Analysis	Any System performance analytics, configuration or assessment initiated by Asset Manager will be considered additional work.	As needed

General Requests for Information	Additional System tests, written reports, site visits and other related activities as requested by Asset Manager that are outside of the services detailed in this agreement.	As needed
Solar PV Module Cleaning	Cleaning of the PV Modules as requested by Asset Manager. Operator shall monitor and recommend any special cleaning needs that may be required as a result of System conditions.	As needed
Minimum Vegetation Management and Snow Plowing	Operator shall establish a timeframe for cutting the grass and maintaining other plant material growth in order to maintain the System to the Asset Manager's requirements. Upon Asset Manager's approval, Operator will execute the approved mowing plan.	As needed, estimated 3 x vegetative management trips per year

Emergency Response:

Solar Facility is monitored 24 hours a day, 365 days a year remotely through a computer data acquisition system (DAS) so that appropriate personnel can be dispatched to investigate potential problems.

In the event of an onsite emergency, an AC Generator Disconnect (Isolation) Switch provides 24-hour/7-day unlimited access and manual control. The disconnect switch must be rated for the voltage and current requirements of the installation. Disconnecting means shall be rated to interrupt the maximum generator output; meet applicable Underwriters Laboratories (UL), American National Standards Institute (ANSI), and IEEE standards; and shall be installed to meet the NEC and all applicable local, state, and federal codes. It will be clearly marked with permanent larger letters: "Generator Disconnect Switch".

A draft emergency response plan is attached as **Exhibit L**.

Site Security:

Limiting access to the Solar Facility to non-authorized persons is necessary both to ensure the safety of the public and to protect equipment from potential theft and vandalism. The perimeter of the Solar Facility will be fenced with an approximately eight-foot-high knotted wire fence. Surveillance methods such as security cameras, motion detector, or heat sensors may be installed at locations along the Solar Facility boundary as determined necessary. No lighting will be installed.

8. Decommissioning Plan:

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 grassy field.

Applicant has contractual obligations to the landowner regarding decommissioning arising out of Section 4.4 of the lease. These obligations include removal of all equipment, timelines for removal, owner's rights to remove the solar facility upon failure by the Project Company, and establishment of a monetary security for removal in the form of a bond, escrow, or letter of credit.

The purpose of the security is to ensure there is sufficient money available to return the project site to an appropriate condition at the end of the project's useful life, or earlier. The County will be the designated beneficiary of the fund and will be provided a copy of the document establishing the security before construction commences.

The decommissioning process for the Solar Facility is described below:

Summary Statement of Expected Decommissioning Cost:

The expected residual value of the solar facility is the difference between the removal/restoration cost and the salvage value. 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 decommissioning cost.

Basis of Decommissioning 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:

Civil Infrastructure

- Topsoil used to backfill excavations will be borrowed from onsite locations. No topsoil import is included.
- Remove rip rap at stormwater basins.
- 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.

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.

Electrical Infrastructure

- PV modules to be recycled. Assumption is that the modules are 72 cell polysilicon modules, having an approximate dimension of 6' x 3' in dimension.
- 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.
- On site riser or interconnection poles shall be removed.
- String inverters/combiner boxes are no more than 130 lbs. in weight and not more than 40" x 25" x 12" in dimension. 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 typically 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.

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 metal.

Schedule of Removal and Restoration Costs:

The Decommissioning Plan Estimate (the "Engineer's Estimate") is provided in **Exhibit M.** Costs associated with this Engineers Estimate represent a "turnkey" 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. "The service life of the facility is assumed to be 35 years. All dollar amounts are in net- present-value. It is assumed that all values will inflate/deflate at consistent with baseline inflation, therefore, the net-present-value comparison of removal cost to salvage value will remain relevant at the end of the service life.

9. Fire Prevention:

This solar array will meet the requirements of the 2012 International Fire Code, specifically to sections 605.11 – 605.11.2 for clearance, markings, and location of underground DC conductors. The Solar Facility will meet the international Building Code (IBC), National Electric Code (NEC), and local electric and fire code. NEC code is produced by the National Fire Protection Agency (NAPA) with safety of the public, contractors, and firefighters as the entire objective. Solar specific Code has been included in the NEC for over a decade. Safety is paramount in our solar PV facilities, as we need them to function optimally for their entire system life.

The local Fire Department will have 24 hour access to the site.

10. Insurance Information:

Applicant's or its successor will provide a certificate of insurance meeting the following requirements:

- Insurance provider must be rated B+ or better by "Best."
- Limits of \$2,000,000 for each occurrence.
- Coverage against claims for damages resulting from bodily injury, wrongful death, and property damage arising out of the Interconnection Customer's ownership and/or operating of the Generation System under the interconnection agreement.
- Contain a severability of interest clause of cross-liability insurance.

11. Economic Impact Analysis:

Benefits Summary:

The development of the typical Solar Facility invests approximately \$2 million dollars for every megawatt of AC capacity of the Solar Facility:

- Energy supply cost savings to subscribers, which will result in an average savings of 10% off the supply of energy on a subscribers existing energy bill. The estimated annual consumer savings is \$30,000 per megawatt AC capacity of the facility. The Applicants preference would be for the residents and businesses of Chippewa County to participate in the Applicants Community Solar Program and be the direct beneficiaries of reduced electricity rates.
- Generate lease dollars for the host landowner annually for the life of the Solar Facility.
- According to the Lawrence Berkeley National Laboratory an acre of solar panels producing zero-emissions electricity saves between 267,526 to 303,513 pounds, or 121 to 138 metric tons, of carbon dioxide per year compared to using a fossil fuel generation. By comparison, according to the EPA, the average acre of forest in the United States sequesters 0.84 metric tons of carbon dioxide per year. Thus, an acre of solar panels reduces approximately 144 to 166 times more carbon dioxide per year than an acre of forest.
- Create or sustain approximately 35 full-time-equivalent on site full-time temporary construction jobs and 2 permanent operations positions.
- The project will incur fees for required applications and construction-related permits.
- No capital expenditures will be required by the City or County to support the project due to the nature of solar facilities and the minimal impact to the regional infrastructure.

Economic Impact Overview:

This Solar Facility is a planned MN Community Solar project. Minnesota's Community Solar program is an effort, established in 2014, which seeks to make solar easier and more affordable through community-driven initiatives.

Community solar is a way of organizing the production and distribution of electricity from solar power.

Community solar refers to local solar facilities shared by multiple community subscribers who receive credit on their electricity bills for their share of the power produced. Community solar facilities provide a means for apartment dwellers, and others living in households without sufficient space to install their own solar panels to use this cleaner source of energy. Some facilities may have an ‘anchor’ customer who purchases 40% or more of the electricity, such as a business or other large user of electricity.

Development of community solar facilities will generate economic impacts in three distinct phases, each with their own unique set of economic impacts: (1) the development phase, when interested landowners are identified, diligence, planning and development of the Solar Facility occurs (2) the construction phase, when the Solar Facility is being created and being connected to the electrical grid and customers are being recruited; and (3) during the operation phase, when the Solar Facility is fully operational, and customers are receiving electricity.

Understanding Economic Impact:

An “economic impact” is a change in the employment, income, and output in an area based on an activity that affects the local economy, such as construction and operation of community solar facilities. Economic impact includes three components: direct impacts, indirect impacts, and induced impacts.

The direct impacts include the changes in employment, worker income, and total economic activity directly related to the community solar facilities.

- During the development phase these direct impacts will include outreach and identification of lease landowners, development payments received by owners of land where the facilities are desired to be studied, payments to the utility company to apply for and study the locations potential for viability, payments to architectural, engineering and related services, advertising, public relations and related services, real estate services, county clerk’s office, permitting and environmental consulting services.
- During the construction phase these direct impacts will include site preparation, installation of solar panels and other equipment onsite, upgrading of electrical lines and equipment to get the electricity produced into electrical networks, and advertising for and recruiting customers.
- During the operation phase, these direct impacts will include operation, maintenance, and repair of the facilities; advertising for and recruiting customers; lease payments received by owners of the land where the facilities are located; and savings accrued by customers of the facilities.

Indirect impacts measure the effect of these direct impacts on the businesses in the economy who sell products or services to the community solar facilities, such as equipment, accounting and legal services, and advertising.

The induced impacts are the effects resulting from changes in spending by employees of the community solar facilities, of employees in other businesses indirectly affected by these facilities, by landowners receiving lease payments, and by consumers who spend the money they saved by subscribing to community solar.

- For example, if employees at an advertising company work more hours because their firm was hired to work on community solar facility-related activities, they'll have more money to spend on things like groceries, clothing, local entertainment, and other household items.

The indirect and induced effects, which measure how money ripples through other sectors of the economy, is also referred to as the Economic Multiplier Effect. These impacts can be measured in three different ways: (1) employment, which reflects the change in full-time equivalent jobs as a result of the community solar facility construction and operation; (2) labor income, which measures the increase in wages, salaries and other remuneration due to these job gains; and (3) output, which reflects the total change in economic activity, including the value of sales and changes in inventory.

12. State Code Clarifications

Intentionally Omitted

13. Interim Use Permit Conditions

The Applicant has compiled this preliminary Project Summary with, to the best of its knowledge, based on the information currently available. The present document is subject to change and may be modified if new information becomes available and as design drawings are finalized prior to construction. The information contained in this document is preliminary and not intended to describe all the relevant information of the Project and is qualified in its entirety by the final application and site plans.

Prior to issuance of a building permit, the Applicant will adhere to the following typical conditions:

- Conduct additional research, studies and/or investigation, including but not limited to Wetlands, ESA, Geotechnical, Title, ALTA and final engineering to fully develop the final Site Plan Set and SWPPP.
- Provide decommissioning bond or surety as required by the local law governing the Interim Use Permit based on the final system size.
- Hold a preconstruction meeting with municipal staff, outside Involved Agencies (as applicable), Project Owner and Project Contractors.

At the request of the Town, additional information can be provided before issuance of the building permit.

We sincerely appreciate all the help we have received from your staff with regard to our application and we look forward to collaborating with you further to develop a great project that we can all be proud of.



EXHIBIT A



City of Mankato
Zoning request application

10 Civic Center Plaza ~ PO Box 3368, Mankato, MN 56002-3368
Phone 311 or 507-387-8600 FAX (507) 387-6845

Primary contact (Check one)	Site address and legal description: 23759 Third Ave, Mankato, MN 56001,(See attached for Legal Description)			
☒	Applicant MN CSG 2019-57 LLC	Address 2530 Riva Rd, Suite 200, Annapolis, MD 21041	Email briank@newenergyequity.com	Phone (612)469-3356
☐	Owner John Bohrer	Address 103 Crestwood Dr, North Mankato, MN 56003	Email johnbohrer6311@yahoo.com	Phone (507)382-7362
☐	Contractor	Address	Email	Phone
☐	Architect/Designer	Address	Email	Phone
☐	Engineer	Address	Email	Phone
☐	Developer New Energy Equity	Address 2530 Riva Rd, Suite 200, Annapolis, MD 21041	Email development@newenergyequity.com	Phone (443)267-5012
☒	Conditional Use Permit (CUP) (3104)	Include the items listed below.		\$335 plus \$2 per notice
☐	Planned Unit Development (PUD) (3154)	Include the items listed below.		\$335 plus \$2 per notice
☐	Variance residential (3132)	Indicate variance requested and practical difficulty making variance necessary. Also furnish a site plan on 8 1/2" X 11" paper showing size of lot, size of structure, and distance from lot lines. Site plan shall be drawn to a tenth scale (1:10, 1:20, etc.)		\$95 plus \$2 per notice
☐	Variance - non-residential (3133)	Indicate variance requested and practical difficulty making variance necessary. Also furnish a site plan on 8 1/2" X 11" paper showing size of lot, size of structure, and distance from lot lines. Site plan shall be drawn to tenth scale (1:10, 1:20, etc.)		\$325 plus \$2 per notice
☐	Rezoning (3108)	Please contact zoning administrator for submittal requirements.		\$335 plus \$2 per notice
☐	Ordinance Amendment	Please contact zoning administrator for submittal requirements.		
☐	Certificate of Design Compliance (CDC) (3152)	Include items listed below.		\$335 plus \$2 per notice
☐	Combined CUP and CDC (3156)	Include items listed below.		\$670 plus \$2 per notice

Zoning request fee: Payable with application (make check payable to City of Mankato):

Hearing notice fee: Payable prior to Planning Commission/Administrative Hearing: _____ notices X \$2/notice = \$ _____.

Public hearing notices are billed to applicant and **must** be paid prior to the Planning Commission/Administrative Hearing.

Summary of request - Attach additional sheets if necessary.

Interim Use Permit for 1MW Community Solar Garden - See attached

Signature of contractor or authorized agent

Dean Eastlake

Dean Eastlake (Feb 20, 2024 15:08 EST)

Signature of owner (if not same as above)

John Bohrer

John Bohrer (Feb 19, 2024 16:35 CST)

Date

02/20/2024

Date

02/19/2024

-
- ☐ a. The location, dimensions, floor area, type of construction and
 - ☐ b. Floor plan showing specific uses within the building.
 - ☐ c. The number, the size and type of dwelling units in each building, and the overall dwelling unit density.
 - ☐ d. The proposed treatment of open spaces and the exterior surfaces of all structures, with sketches of proposed landscaping and structures, including typical elevations.
 - ☐ e. Architectural graphics, including typical floor plans and elevations, profiles, and cross-sections.
 - ☐ f. The number, location, and dimensions of parking spaces and loading docks, with means of ingress and egress.
 - ☐ g. The proposed traffic circulation pattern within the area of the development, including the location and description of public improvements to be installed, including any streets and access easements.
 - ☐ h. The location of all fire hydrants on the property and the location of all fire hydrants within one-hundred fifty (150) feet of the property.

- ☐ i. The location and proposed treatment of all structures for fire and emergency vehicles.
- ☐ j. Statement of whether or not the building will be sprinkled and fire flow availability for the sprinkler system and fire hydrants.
- ☐ k. The location, intensity and design of exterior lighting.
- ☐ l. The location and purpose of any existing or proposed dedication or easement.
- ☐ m. The general drainage plan for the development tract.
- ☐ n. The location and dimensions of adjacent properties, abutting public right-of-ways and easements on the property.
- ☐ o. Significant topographical or physical features of the site including existing trees.
- ☐ p. Wetland delineations for all wetlands on the site.
- ☐ q. The location and proposed treatment of any historical structure or other historical design element or feature.
- ☐ r. Utility service plans (water, sewer, storm).
- ☐ s. Landscaping plans.

Note: All plans shall be drawn to a tenth scale (1:10, 1:20, etc.)

Note: All plans shall be drawn to a tenth scale (1:10, 1:20, etc.)

For staff use

Date received:

Application number: CY____-____

Parcel ID No.: R40.04.29.200.017

The Northeast Quarter of the Northwest Quarter, except railroad right of ways, and the Northwest Quarter of the Northeast Quarter, both in Section 29, Township 109, Range 26, excepting from said Northwest Quarter Northeast Quarter that part of said Northwest Quarter Northeast Quarter described as, beginning at a point 1315.8 feet South of the Northeast corner of Section 29-109-26, thence West 1808.8 feet to the East line of the Right of Way of the Chicago & Northwestern Railway, thence southwesterly along the said Right of Way line, 1264.6 feet, thence East 1692.3 feet to the East line of said Section 29, thence North along the section line 1249.8 feet to the place of beginning.

A strip of land one (1) rod wide now used as a road, extending from East to West upon, over and across the North side of the Northwest Quarter of the Northwest Quarter (NW1/4 NW1/4) of Section 29, Township 109 North of Range 26 West, beginning at or near the Northeast corner of said NW1/4 NW1/4 of Sec. 29, and thence West along or near the North line of said NW1/4 NW1/4 of said Sec. 29, to the public highway known as the Mankato and St. Peter Road.

The East 302.00 feet of the Northwest Quarter of the Northwest Quarter of Section 29, Township 109, Range 26, Blue Earth County, Minnesota, except the South 16.5 feet thereof.

Except therefrom: Part of the Northwest Quarter of the Northwest Quarter and part of the Northeast Quarter of the Northwest Quarter of Section 29, Township 109 North, Range 26 West, Blue Earth County, Minnesota described as: Commencing at the Southeast corner of said Northwest Quarter of the Northwest Quarter; thence North 89 degrees 41 minutes 42 seconds West (bearings are based on Blue Earth County Coordinates NAD83, 1996 Adjustment) on the south line of said Northwest Quarter of the Northwest Quarter, a distance of 78.00 feet; thence North 12 degrees 41 minutes 56 seconds East, a distance of 16.89 feet to the north line of the south 16.5 feet of said Northwest Quarter of the Northwest Quarter and the point of beginning; thence North 12 degrees 41 minutes 56 seconds East, a distance of 589.95 feet to the westerly right of way of the abandoned Chicago, Milwaukee, St. Paul and Pacific Railroad Company; thence South 05 degrees 40 minutes 37 seconds West on said westerly right of way, a distance of 558.85 feet to the east line of said Northwest Quarter of the Northwest Quarter; thence South 00 degrees 11 minutes 26 seconds West on said east line, a distance of 19.81 to the north line of the south 16.5 feet of said Northwest Quarter of the Northwest Quarter; thence North 89 degrees 41 minutes 42 seconds West on said north line, a distance of 74.34 feet to the point of beginning.

BohrerEast Solar Site Permit Application Form

Final Audit Report

2024-02-20

Created:	2024-02-19
By:	Brian Keenan (briank@newenergyequity.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAXWVkoO9omOYKlx0zrt_TxsFZTT0V4_eFw

"BohrerEast Solar Site Permit Application Form" History

-  Document created by Brian Keenan (briank@newenergyequity.com)
2024-02-19 - 9:47:23 PM GMT
-  Document emailed to John Bohrer (johnbohrer6311@yahoo.com) for signature
2024-02-19 - 9:47:27 PM GMT
-  Document emailed to Dean Eastlake (deastlake@newenergyequity.com) for signature
2024-02-19 - 9:47:27 PM GMT
-  Email viewed by John Bohrer (johnbohrer6311@yahoo.com)
2024-02-19 - 10:24:55 PM GMT
-  Document e-signed by John Bohrer (johnbohrer6311@yahoo.com)
Signature Date: 2024-02-19 - 10:35:09 PM GMT - Time Source: server
-  Email viewed by Dean Eastlake (deastlake@newenergyequity.com)
2024-02-20 - 8:07:59 PM GMT
-  Document e-signed by Dean Eastlake (deastlake@newenergyequity.com)
Signature Date: 2024-02-20 - 8:08:17 PM GMT - Time Source: server
-  Agreement completed.
2024-02-20 - 8:08:17 PM GMT



EXHIBIT B

January 30, 2024

Solar*Rewards Community Study Results

Customer Legal Name: MN CSG 2019-57 LLC

Service Address: 23759 Third Ave Mankato, Blue Earth, MN., 56001

Project Description: 1 MW SRC Project

Project Case Number: 05518220

The New Energy Equity MN CSG 2019-57 LLC project, located at 23759 Third Ave, Mankato, Blue Earth, Minnesota, 56001, is Q7 in feeder queue and Q14 in substation queue. There are 10 MWs ahead of this project in the feeder queue and 20.587 MWs ahead of this project in substation queue. The maximum generation possible at this location is 1.0MW at unity power factor. To achieve this amount of generation the following upgrades are required to mitigate steady state overvoltage:

Distribution:

System Upgrades / Right-of-Way:

- Replace existing fuse with a Viper recloser

Area EPS Interconnection / On-site:

- Distribution 3-phase Extension from PCC to POC Required: ~1,150' of 336AL based on developer site plan.
- Install Viper Recloser and Pole
- Install 277/480 pad-mount transformer

Substation:

- None Required

Transmission:

- None Required

DER Facilities Study Summary	
Disclaimer: The dollar amount shown is an estimate only and the amount owed will be the actual costs for this work to be determined and billed after the work is complete, with payment for actual costs due within 30 days after the final bill is sent.	
Summary of Cost Estimate	
Construction Type	Subtotal
Distribution	
System upgrade costs	\$67,600
Area EPS Interconnection Costs	\$161,300
Tariffed Metering	\$2,740
Substation	\$0
Transmission	\$0
Cost Estimate Total	\$231,640
Estimated Design and Construction Time	7-12 Months



EXHIBIT C

Minnesota Wetland Conservation Act Notice of Decision

Local Government Unit: Blue Earth County	County: Blue Earth
Applicant Name: Dean Eastlake – New Energy Equity Area M Consulting	Applicant Representative: Jonathan Knudsen –
Project Name: Bohrereast MN CSG 2019-57 Boundary/Type and No-Loss LGU Project No. (if any): PL2024070	
Date Application Received by LGU: 6/4/24	
Date of LGU Decision: 7/15/24	
Date this Notice was Sent: 7/15/24	

WCA Decision Type - check all that apply

☒ Wetland Boundary/Type	☐ Sequencing	☐ Replacement Plan	☐ Bank Plan (not credit purchase)
☒ No-Loss (8420.0415)	☐ Exemption (8420.0420)		
Part: ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H		Subpart: ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9	

Replacement Plan Impacts (replacement plan decisions only)

Total WCA Wetland Impact Area:	
Wetland Replacement Type:	☐ Project Specific Credits:
	☐ Bank Credits:
Bank Account Number(s):	

Technical Evaluation Panel Findings and Recommendations (attach if any)

☒ Approve ☐ Approve w/Conditions ☐ Deny ☐ No TEP Recommendation
--

LGU Decision

☐ Approved with Conditions (specify below) ¹ List Conditions:	☒ Approved ¹ ☐ Denied
Decision-Maker for this Application: ☒ Staff ☐ Governing Board/Council ☐ Other:	
Decision is valid for: ☒ 5 years (default) ☐ Other (specify):	

¹ Wetland Replacement Plan approval is not valid until BWSR confirms the withdrawal of any required wetland bank credits. For project-specific replacement a financial assurance per MN Rule 8420.0522, Subp. 9 and evidence that all required forms have been recorded on the title of the property on which the replacement wetland is located must be provided to the LGU for the approval to be valid.

LGU Findings – Attach document(s) and/or insert narrative providing the basis for the LGU decision¹.

☐ Attachment(s) (specify): ☒ Summary: The Blue Earth County Technical Evaluation Panel reviewed the request at the June 21st, 2024, Meeting. The TEP reviewed the submitted report and additional aerial imagery resources and found the wetland delineation report to be accurate. The property that the project area is on has been visited by the TEP two times in the past for other delineations. This project is to the east of the other delineations and the wetland boundary matches up with the past wetland delineations. Additional Blue Earth County did conduct a site visit and verified the boundary. The TEP also discussed the No-Loss request by the applicant, based off the Bohrereast CSG- Site Plan - 5.13.24 the TEP determined that access to the project would be from an access road on a separate solar lease site that would not impact the wetland basin identified in the wetland delineation report. The TEP is in concurrence that the project will not impact any wetlands based upon site plan Bohrereast CSG- Site Plan - 5.13.24.

For more information regarding this application go to:

<https://cityview.blueearthcountymn.gov/cityviewportal/Planning/Status?planningId=15086>

¹ Findings must consider any TEP recommendations.

Attached Project Documents

☐ Site Location Map ☒ Project Plan(s)/Descriptions/Reports (specify): Bohereeast MN CSG 2019-57
Boundary-type and No-Loss

Appeals of LGU Decisions

If you wish to appeal this decision, you must provide a written request within 30 calendar days of the date you received the notice. All appeals must be submitted to the Board of Water and Soil Resources Executive Director along with a check payable to BWSR for \$500 *unless* the LGU has adopted a local appeal process as identified below. The check must be sent by mail and the written request to appeal can be submitted by mail or e-mail. The appeal should include a copy of this notice, name and contact information of appellant(s) and their representatives (if applicable), a statement clarifying the intent to appeal and supporting information as to why the decision is in error. Send to:

Appeals & Regulatory Compliance Coordinator
Minnesota Board of Water & Soils Resources
520 Lafayette Road North
St. Paul, MN 55155
travis.germundson@state.mn.us

Does the LGU have a local appeal process applicable to this decision?

☒ Yes¹ ☐ No

¹If yes, all appeals must first be considered via the local appeals process.

Local Appeals Submittal Requirements (LGU must describe how to appeal, submittal requirements, fees, etc. as applicable)

Appeal of an LGU staff decision. Send petition and \$700.00 fee to:
Blue Earth County Property and Environmental Resources
PO BOX 3566
Mankato, MN 56002

Notice Distribution (include name)

Required on all notices:

☒ SWCD TEP Member: Jake Fritz	☒ BWSR TEP Member: Alyssa Core
☐ LGU TEP Member (if different than LGU contact):	
☒ DNR Representative: Erynn Jenzen	
☐ Watershed District or Watershed Mgmt. Org.:	
☒ Applicant (notice only): Dean Eastlake – New Energy Equity ☒ Agent/Consultant (notice only): Jonathan Knudsen – Area M Consulting	

Optional or As Applicable:

☒ Corps of Engineers: Corps of Engineers General Notification	
☐ BWSR Wetland Mitigation Coordinator (required for bank plan applications only):	
☐ Members of the Public (notice only):	☐ Other:

Signature:



Date:

7/15/24

This notice and accompanying application materials may be sent electronically or by mail. The LGU may opt to send a summary of the application to members of the public upon request per 8420.0255, Subp. 3.

PART ONE: Applicant Information

If applicant is an entity (company, government entity, partnership, etc.), an authorized contact person must be identified. If the applicant is using an agent (consultant, lawyer, or other third party) and has authorized them to act on their behalf, the agent's contact information must also be provided.

Applicant/Landowner Name: Dean Eastlake – New Energy Equity
Mailing Address: 2530 Riva Road, Suite 200, Annapolis, MD 21401
Phone: 443-267-5011
E-mail Address: deastlake@newenergyequity.com

Authorized Contact (do not complete if same as above):

Mailing Address:
Phone:
E-mail Address:

Agent Name: Jonathan Knudsen
Mailing Address: 2023 Alameda Street, Roseville, MN 55113
Phone: 208.241.5280
E-mail Address: jknudsen@areamconsulting.com

PART TWO: Site Location Information

County: Blue Earth **City/Township:** Mankato
Parcel ID and/or Address: 23759 THIRD AVE
MANKATO, MN 56001
Legal Description (Section, Township, Range): Section 29 T109N:R26W
Lat/Long (decimal degrees): LAT: 44.223832
LONG: -93.977617
Attach a map showing the location of the site in relation to local streets, roads, highways.
Approximate size of site (acres) or if a linear project, length (feet): 10.5

If you know that your proposal will require an individual Permit from the U.S. Army Corps of Engineers, you must provide the names and addresses of all property owners adjacent to the project site. This information may be provided by attaching a list to your application or by using block 25 of the Application for Department of the Army permit which can be obtained at:

http://www.mvp.usace.army.mil/Portals/57/docs/regulatory/RegulatoryDocs/engform_4345_2012oct.pdf

PART THREE: General Project/Site Information

If this application is related to a delineation approval, exemption determination, jurisdictional determination, or other correspondence submitted **prior to** this application then describe that here and provide the Corps of Engineers project number.

Describe the project that is being proposed, the project purpose and need, and schedule for implementation and completion. The project description must fully describe the nature and scope of the proposed activity including a description of all project elements that effect aquatic resources (wetland, lake, tributary, etc.) and must also include plans and cross section or profile drawings showing the location, character, and dimensions of all proposed activities and aquatic resource impacts.

The proposed project is a 1 MW AC community solar garden to be built 3 miles north of Mankato, MN. The Project includes a flat field, currently in CRP. One wetland is present within the review area as delineated by Area M Consulting but will be avoided by all permanent and temporary construction and Project components.

The final proposed Project consists of a short access road, solar array mounted on posts, equipment pads, infiltration basin, and a perimeter fence. The solar panels are made of glass and polysilicon which are fastened to steel racking members which are further attached to steel i-beams. The i-beams are driven into the ground at varying depths dependent on soil characteristics to provide support for the panels and will disturb approximately 3.3 inches of ground surface. A fence will be constructed around the perimeter of the entire area of disturbance. All Project components will avoid aquatic resources, as mapped.

During construction, the project shall utilize erosion control measures to mitigate any silt or material leaving the project site. Upon completion of the project, the site will be seeded using a native grass blend which will be consistent with other uncropped fields in the area. Consequently, the rate, volume, and quality of the surface water runoff is expected to be minimal when compared to runoff generated by a plowed field of row crops. If the project is approved after inspection, it will be operational for at least 35 years. Traffic to the community solar garden will be minimal upon completion of construction—mostly for the purposes of grounds maintenance and performance monitoring. At the completion of the project, once the community solar garden is decommissioned, all project-related fencing and equipment will be removed, and the grounds will be reasonably restored to its initial agricultural use.

PART FOUR: Aquatic Resource Impact¹ Summary

If your proposed project involves a direct or indirect impact to an aquatic resource (wetland, lake, tributary, etc.) identify each impact in the table below. Include all anticipated impacts, including those expected to be temporary. Attach an overhead view map, aerial photo, and/or drawing showing all of the aquatic resources in the project area and the location(s) of the proposed impacts. Label each aquatic resource on the map with a reference number or letter and identify the impacts in the following table.

Aquatic Resource ID (as noted on overhead view)	Aquatic Resource Type (wetland, lake, tributary etc.)	Type of Impact (fill, excavate, drain, or remove vegetation)	Duration of Impact Permanent (P) or Temporary (T) ¹	Size of Impact ²	Overall Size of Aquatic Resource ³	Existing Plant Community Type(s) in Impact Area ⁴	County, Major Watershed #, and Bank Service Area # of Impact Area ⁵

¹If impacts are temporary; enter the duration of the impacts in days next to the "T". For example, a project with a temporary access fill that would be removed after 220 days would be entered "T (220)".

²Impacts less than 0.01 acre should be reported in square feet. Impacts 0.01 acre or greater should be reported as acres and rounded to the nearest 0.01 acre. Tributary impacts must be reported in linear feet of impact and an area of impact by indicating first the linear feet of impact along the flowline of the stream followed by the area impact in parentheses). For example, a project that impacts 50 feet of a stream that is 6 feet wide would be reported as 50 ft (300 square feet).

³This is generally only applicable if you are applying for a de minimis exemption under MN Rules 8420.0420 Subp. 8, otherwise enter "N/A".

⁴Use *Wetland Plants and Plant Community Types of Minnesota and Wisconsin* 3rd Ed. as modified in MN Rules 8420.0405 Subp. 2.

⁵Refer to Major Watershed and Bank Service Area maps in MN Rules 8420.0522 Subp. 7.

If any of the above identified impacts have already occurred, identify which impacts they are and the circumstances associated with each:

PART FIVE: Applicant Signature

☐ Check here if you are requesting a pre-application consultation with the Corps and LGU based on the information you have provided. Regulatory entities will not initiate a formal application review if this box is checked.

By signature below, I attest that the information in this application is complete and accurate. I further attest that I possess the authority to undertake the work described herein.

Signature: _____



Date: 5/20/2024

I hereby authorize _____ to act on my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this application.

¹ The term "impact" as used in this joint application form is a generic term used for disclosure purposes to identify activities that may require approval from one or more regulatory agencies. For purposes of this form it is not meant to indicate whether or not those activities may require mitigation/replacement.

Attachment A

Request for Delineation Review, Wetland Type Determination, or Jurisdictional Determination

By submission of the enclosed wetland delineation report, I am requesting that the U.S. Army Corps of Engineers, St. Paul District (Corps) and/or the Wetland Conservation Act Local Government Unit (LGU) provide me with the following (check all that apply):

☐ **Wetland Type Confirmation**

☒ **Delineation Concurrence.** Concurrence with a delineation is a written notification from the Corps and a decision from the LGU concurring, not concurring, or commenting on the boundaries of the aquatic resources delineated on the property. Delineation concurrences are generally valid for five years unless site conditions change. Under this request alone, the Corps will not address the jurisdictional status of the aquatic resources on the property, only the boundaries of the resources within the review area (including wetlands, tributaries, lakes, etc.).

☐ **Preliminary Jurisdictional Determination.** A preliminary jurisdictional determination (PJD) is a non-binding written indication from the Corps that waters, including wetlands, identified on a parcel may be waters of the United States. For purposes of computation of impacts and compensatory mitigation requirements, a permit decision made on the basis of a PJD will treat all waters and wetlands in the review area as if they are jurisdictional waters of the U.S. PJDs are advisory in nature and may not be appealed.

☐ **Approved Jurisdictional Determination.** An approved jurisdictional determination (AJD) is an official Corps determination that jurisdictional waters of the United States are either present or absent on the property. AJDs can generally be relied upon by the affected party for five years. An AJD may be appealed through the Corps administrative appeal process.

In order for the Corps and LGU to process your request, the wetland delineation must be prepared in accordance with the 1987 Corps of Engineers Wetland Delineation Manual, any approved Regional Supplements to the 1987 Manual, and the *Guidelines for Submitting Wetland Delineations in Minnesota* (2013).

<http://www.mvp.usace.army.mil/Missions/Regulatory/DelineationJDGuidance.aspx>

Attachment B

Supporting Information for Applications Involving Exemptions, No Loss Determinations, and Activities Not Requiring Mitigation

Complete this part ***if*** you maintain that the identified aquatic resource impacts in Part Four do not require wetland replacement/compensatory mitigation OR ***if*** you are seeking verification that the proposed water resource impacts are either exempt from replacement or are not under CWA/WCA jurisdiction.

Identify the specific exemption or no-loss provision for which you believe your project or site qualifies:

[MN Rule 8420.0415 Part A](#)

Provide a detailed explanation of how your project or site qualifies for the above. Be specific and provide and refer to attachments and exhibits that support your contention. Applicants should refer to rules (e.g. WCA rules), guidance documents (e.g. BWSR guidance, Corps guidance letters/public notices), and permit conditions (e.g. Corps General Permit conditions) to determine the necessary information to support the application. Applicants are strongly encouraged to contact the WCA LGU and Corps Project Manager prior to submitting an application if they are unsure of what type of information to provide:

All temporary and permanent disturbance associated with the Project, including posts, pads, access roads, and laydown areas, will avoid wetlands. Due to the absence of wetlands within the area of development, this Project meets the criteria of "No-Loss", as described in Part A of MN Rule 8420.0415. Project activities, including dredging or filling of wetlands, will not occur. Although posts and pilings may be excluded under the "fill" definition, under the WCA (Commercial Solar Siting Guidance, MDNR 2016), they will still be placed outside of wetlands to avoid potential future impacts. During construction, standard BMPs such as silt fences or waddles will be employed around surface disturbance to prevent run-off or sedimentation into adjacent wetlands/waterbodies. Due to the proposed array layout avoiding wetlands and the placement of run-off prevention BMPs, impacts to wetlands will not occur.

Level 2 Wetland Delineation Report
MN CSG 2019-57 LLC
Blue Earth County, Minnesota



Prepared for:

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Prepared by:

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Environmental Consultants
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Roseville, MN 55113
www.areasmconsulting.com*

AREAM

March 2024

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I certify that, to the best of my knowledge, this wetland delineation and report were completed following current wetland standards as set forth by the USACE and BWSR. Findings in this report represent Area M's best judgement based on conditions and information available at the time of the wetland delineation.

A handwritten signature in black ink, reading "Jonathan Knudsen", positioned above a horizontal line.

Jonathan Knudsen, WDC, MS
Principal Biologist/Wetland Specialist
MN Certified Wetland Delineator 1307

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INTRODUCTION

Area M Consulting (Area M) conducted a wetland delineation for the MN CSG 2019-57 LLC (Project) located within Blue Earth County, Minnesota. The Area M biologist conducted a routine Level 2 Delineation, as defined by the Board of Water and Soil Resources (BWSR), within the entire Project boundaries following procedures and methods outlined by the United States Army Corps of Engineers (USACE) Wetland Delineation Manual (USACE, 1987), Midwest Regional Supplement (USACE, 2012), and BWSR Guidance for Offsite Hydrology/Wetland Determinations (2016). This wetland delineation report is assembled to inform design and to assist the Client with meeting regulatory requirements necessary for permitting a community solar garden (CSG) in Blue Earth County.

PROJECT DESCRIPTION

The Project, encompassing approximately 10.5 acres, is located 3.3 miles north of Mankato, MN in Section 29, T109N:R26W (Study Area) (Appendix A). The Study Area encompasses a gently-rolling, agricultural field bounded to the south by a drainage ditch. The entire Study Area is typically cultivated annually, though the extent of successful crops within the wetland varies by year. This parcel was re-enrolled in CRP in 2024. Natural vegetation was present within the majority of the Study Area during the field survey, though mowed down to 2 inches. A conspicuous emergent wetland, mapped by Area M in 2023, is adjacent and to the west of the Study Area. Open fields border western and eastern boundaries of the Study Area. The surrounding landscape is a mosaic of farmland, gravel pits, wooded ravines, rivers, and infrastructure associated with Mankato. The entire Study Area is on private land.

OFF-SITE REVIEW

Prior to fieldwork, Area M conducted a comprehensive desktop review of data sources available within the public domain to identify the presence/absence and extent of wetlands that could occur within the Study Area. Areas with hydric signatures, suggesting potential wetland conditions, were evaluated in greater detail during the field investigation. The following data sources were reviewed; the analysis of each data set is discussed in greater detail later in this section.

- ☐ Hydrologic soil data
- ☐ Antecedent precipitation data
- ☐ Mapped Wetlands/Waterbodies
 - U.S. Fish and Wildlife Services (USFWS) National Wetland Inventory (NWI)
 - MNDNR updated NWI
 - MNDNR Public Waters Inventory (PWI)
 - National Hydrography Dataset (NHD)
- ☐ Elevation Data
 - MN Department of Natural Resources (MNDNR) Light Detection and Ranging (LiDAR) Data

-
- United States Geological Survey (USGS) topographic maps

Mapped Wetland Data

The NWI (USFWS, 2023), MN NWI update (MNDNR, 2023a), PWI (MNDNR, 2023b), and NHD data sets were reviewed for the presence of mapped wetlands and/or waterbodies within the Study Area. One NHD flowline intersects the southern boundary of the Study Area (Appendix A).

Soils

The Web Soil Survey (NRCS, 2023) was accessed to summarize mapped soil types which occur within the Study Area. Soil units with hydric components are present throughout the entire Study Area. The full list of hydric soils components and attributes is presented in Appendix B.

Topographic Data

Elevation and topographic data from the USGS and MNDNR were reviewed within the Study Area to identify potential basins and depressional areas which could be indicative of wetlands. The Study Area includes a concave area in the northwestern corner of the Study Area (Appendix A). The total topographic relief of the Study Area is approximately 10 feet.

Historic Aerial Photography Review

Historic aerial photographs were analyzed for hydric signatures in conjunction with antecedent precipitation, following the procedures outlined in the Guidance for Offsite Hydrology/Wetland Determinations (BWSR and USACE 2016). Upon review, three areas (Area 1, Area 2, and Area 3) showing potential wetland signatures in the historic imagery was identified within the Study Area; these areas correspond to the concave landforms and NWI features intersecting the northwestern, northern, and southern portions of the Study Area (Appendix C). Exhibit 1 and Exhibit 2, which summarize the data reviewed for the offsite evaluation, are presented in Appendix D. Based on the Decision Matrix in Exhibit 2, two wetlands and one potential wetland are present within the Study Area.

Off-site Summary

Overall, the off-site review suggests two wetlands are present within the Study Area (Appendix A). The entire Study Area was investigated in greater detail during the field survey.

FIELD DELINEATION

Methodology

Suspected wetlands identified during the off-site analysis were investigated in the field using routine on-site delineation methods in accordance with the USACE Wetlands Delineation Manual (USACE, 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0) (USACE, 2010). This included the characterization of vegetation, soils, and hydrology on-site. Wetlands are defined by the USACE as “areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” For an area to be delineated as a regulated wetland, the vegetative, hydrologic, and soil characteristics must all be present and consistent with federal and state classification criteria.

Transects were established in representative transition zones, perpendicular between suspected wetland and upland areas. Survey Points were recorded along each transect, moving from upland to wetland to identify the wetland boundary. Wetland criteria were evaluated at each Survey Point and a Wetland Determination Form – Midwest Region (Form) was completed. Additional Survey Points were collected within unique vegetation communities (if present) to document and characterize baseline hydrology, soils, and vegetation within the Study Area. Determination of wetland type was based on the classification system developed by Cowardin et al. (1979) and the USFWS Circular 39 system (Shaw & Fredine 1956). Plant communities were classified using Wetland Plants and Plant Communities of Minnesota and Wisconsin system (Eggers and Reed, 1997). The entire Study Area was surveyed in the field to confirm the absence of additional wetlands.

The location and boundaries of wetland features identified by Area M during field surveys were recorded in the field using a Trimble Geoexplorer 6000 which typically achieves accuracy within 2 feet. A map depicting wetland boundaries, survey points, and transects is included in Appendix A. Representative photographs of the Study Area are included in Appendix E. Field Forms are included in Appendix F.

Antecedent Precipitation Analysis

Antecedent Precipitation conditions were evaluated using the NRCS Method for Evaluating Antecedent Moisture Conditions. Data from the Minnesota Climatology Working Group and Natural Resources Conservation Service. WETS Tables suggest moisture conditions were wetter than normal during the field survey on March 7, 2024 (Table 1). These conditions were taken into consideration when conducting the delineation.

Table 1. Study Area precipitation data.

Value	First Prior Month February	Second Prior Month January	Third Prior Month December
estimated precipitation total for this location:	0.56	0.28	1.86
30% chance this location will have less than:	0.56	0.65	0.68
30% chance this location will have more than:	1.23	1.17	1.46
type of month			Wet
monthly score	3 * 2 = 6	2 * 1 = 2	1 * 3 = 3
Multi-Month Score:			10 (Normal)

Field Conditions

Area M conducted the field delineation on March 7, 2024. Field conditions were dry. The temperature was approximately 45 degrees Fahrenheit and mostly sunny with minimal wind. The ground was thawed enough to retrieve soil samples. The entire Study Area had been mowed late 2023 and vegetation was extremely difficult to discern, in addition to the survey being conducted outside of the growing season.

Field Review Summary

Based upon this routine Level 2 Wetland Delineation, it is the professional opinion of Area M that one wetland is present within the Study Area (Appendix A).

Wetland 1: Type 1/Type 2 - Fresh (Wet) Meadow/Seasonally Flooded Basin – 1.52 acres

Wetland 1, within Area 1 and 3, is a Type 1/Type 2 wetland located in a shallow depression in the northern portion of the Study Area. Area 1 and 3 were flagged as wetlands based on the off-site Hydrology Determination (BWSR 2016). At SP 1-1 and SP 2-1, located just inside of the Wetland 1 boundary, soils were hydric, with redox present within a 12-inch stratum (F6). Secondary hydrology indicators were present, including Saturation Visible on Aerial Imagery (C9), FAC-Neutral Test (D5), and Geomorphic Position (D2). The plant community was hydric and dominated by a monoculture of reed canary grass (*Phalaris arundinacea*) during the delineation in 2023. During the recent field visit on March 7, 2024, the plant community could not be evaluated due to it being outside of the growing season. However, reed canary grass could be identified despite being mowed, and was dominant. At SP 1-2 and SP 2-2, adjacent and upland of Wetland 1, the vegetation was evaluated as upland and dominated by reed canary grass, smooth brome (*Bromus inermis*), yarrow (*Achillea millefolium*), and dandelion (*Taraxacum officinale*) in 2023. The plant community was not evaluated in 2024 due to mowing and the survey being conducted outside of the growing season. Soils were non-hydric, with similar matrix coloration. Wetland hydrology indicators were absent. Wetland 1 was mapped by following the slight topographic transition between concave and convex landform and dominance of reed canary grass. The line was extended to include the current Study Area following the extent of wetland signatures and reed canary grass observed in the field. Aerial imagery and lidar review was used to amend the line to coincide with the average of wetland extent during years with normal antecedent precipitation.

Area 2 – Upland

Area 2, identified during off-site review, is located along an irrigation drainage on the southern boundary of the Study Area. Area 2 was flagged as a potential wetland based on the off-site Hydrology Determination (BWSR 2016) and keyed out as needing field verification. Area M determined that an on-site determination was required within Area 2 because the altered cropping patterns were difficult to verify via imagery and contributed to most of the wetland hydrology hits. Many of the images collected in May and June showed Area 2 as not planted yet, potentially due to typical soggy Spring conditions. At SP 4, collected in the center of Area 2, soils were hydric meeting the Depleted Below Dark Surface and Redox Dark Surface indicators (A11, F6). The plant community could not be evaluated due to time of year, but the adjacent Project to the west on the same contour was determined upland. Wetland hydrology indicators were absent. Therefore, Area 2 was confirmed as upland.

RESULTS AND RECOMMENDATIONS

Based upon this routine Level 2 Wetland Delineation, it is the professional opinion of Area M that the Study Area contains one feature (Wetland 1) that satisfies the criteria to be a wetland pursuant to the Army Corps of Engineers' 1987 Manual with subsequent clarification memoranda and pursuant to confirmation by the USACE (Appendix A). Activities impacting wetlands and waterways are regulated through both the Local Government Unit (LGU) and USACE, which administer the Wetland Conservation Act (WCA) and Clean Water Act (CWA), respectively. The wetlands and wetland boundaries described within this report are described based on the conditions in the field at the time of the survey and subject to verification by state, federal, and local agencies, which have final authority over wetland presence, extent, and jurisdictional status.

REFERENCES

Board of Water and Soil Resources. 2010. Wetland Conservation Act: Choosing the Appropriate Method. BWSR Technical Guidance July 1, 2010.

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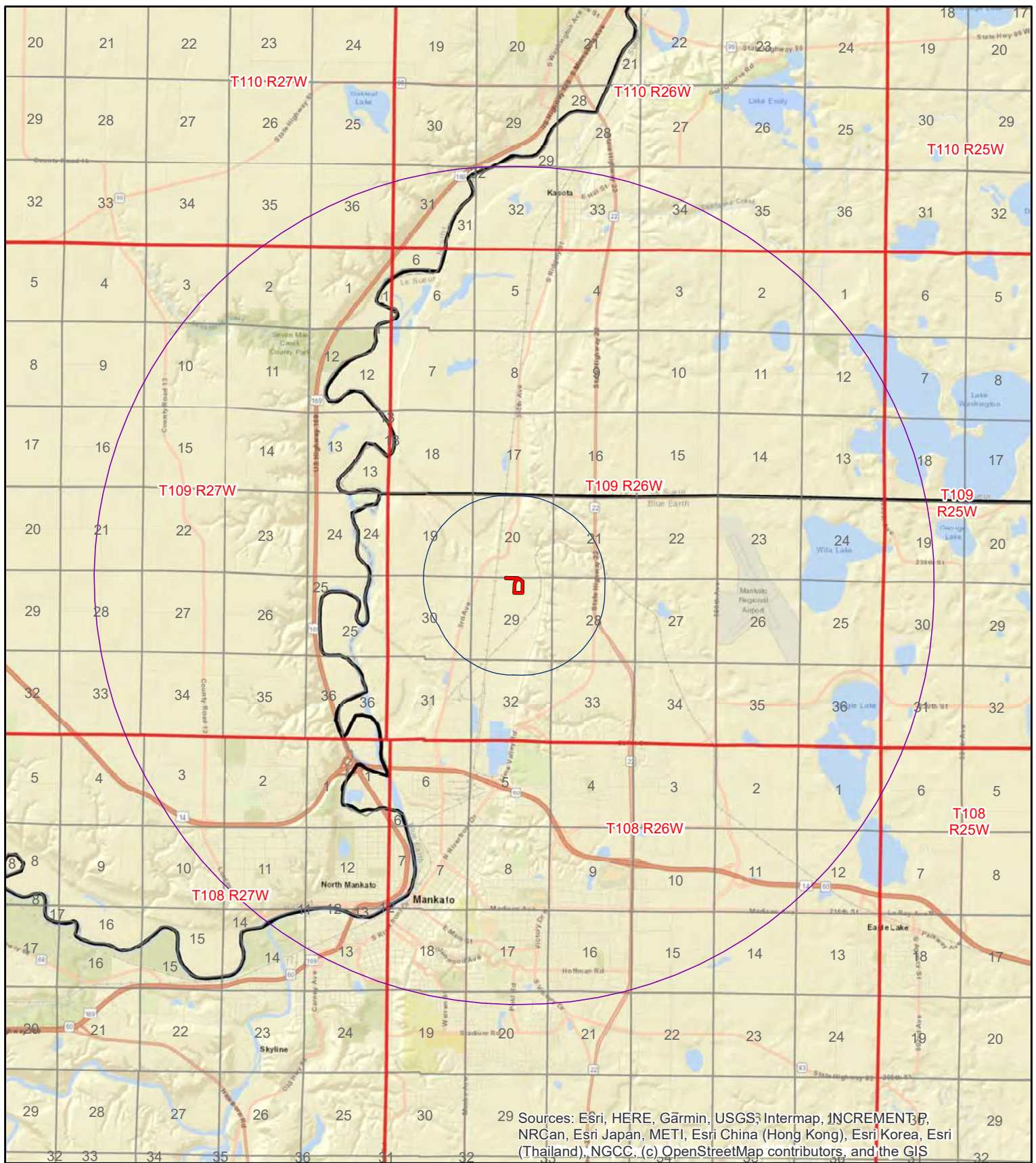
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Appendix A: Maps



MN CSG 2019-57 LLC

Blue Earth County, MN

S29 T109N:R26W

10.5 Acres

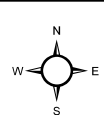
44.223832 Lat

-93.977617 Long

- ★ Project Location
- Study Area
- 1-Mile Buffer
- 5-Mile Buffer
- County Boundary
- Township Boundary
- Section Boundary

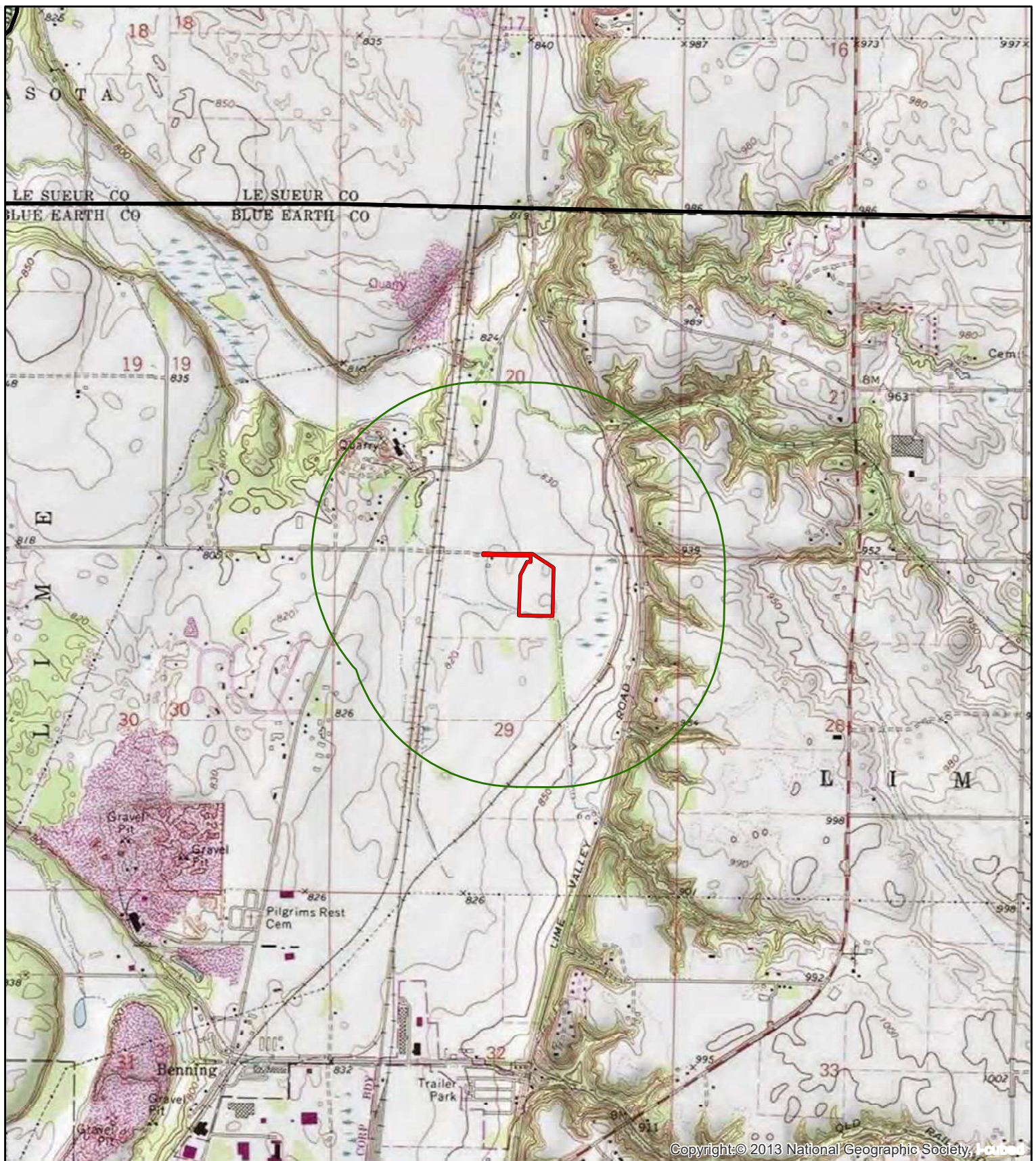


Map 1. Location Map



AREA M

0 2,600 5,200 10,400 feet
1:100,000



MN CSG 2019-57 LLC

Map 2. 1:24,000 Topographic Map

Blue Earth County, MN



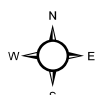
Study Area



County Boundary



0.5-Mile Buffer



AREAM

0 625 1,250 2,500
1:24,000
Feet



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

MN CSG 2019-57 LLC

Map 3. Wetland Resources Map

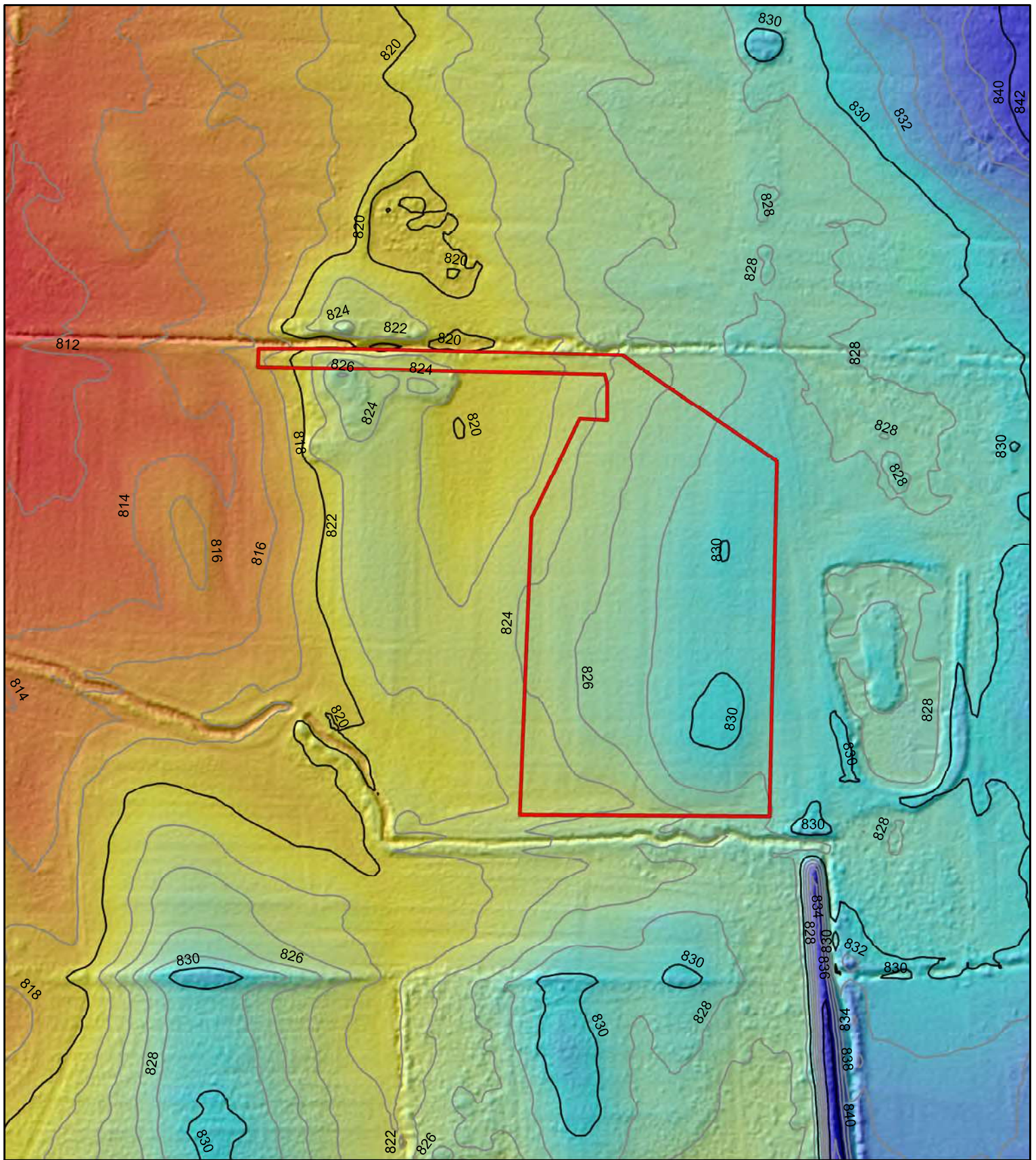
Blue Earth County, MN

- | | | |
|---|---|--|
|  Study Area |  NWI |  Floodway |
|  NHD Flowline |  PWI Flowline |  100-Year Floodplain |
|  NHD Waterbody |  PWI Waterbody | |



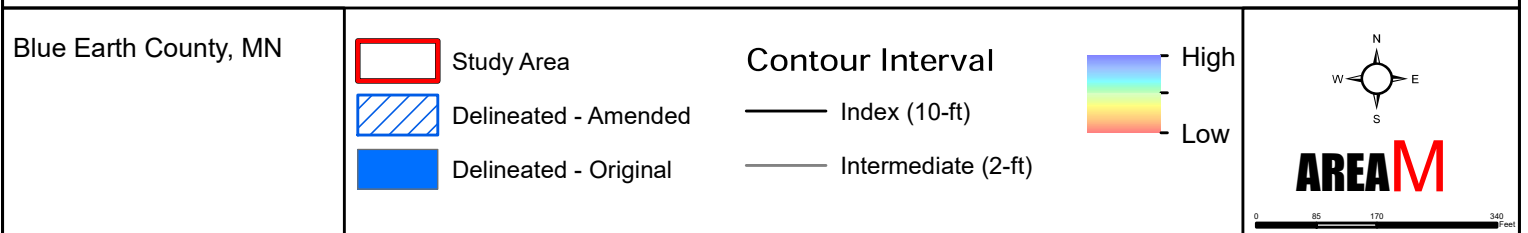
AREAM

0 62.5 125 250 Feet



MN CSG 2019-57 LLC

Map 4. Lidar Map





Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

MN CSG 2019-57 LLC

Map 5. Delineation Map

Blue Earth County, MN	Study Area Previously-Delineated Wetland Delineated Wetland Upland Sampling Point Wetland Sampling Point Wetland Transect	AREAM
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Appendix B: Soils Report

Hydric Rating by Soils Unit and Hydric Soil List – All components

Hydric Rating by Map Unit—Blue Earth County, Minnesota (Bohrereast_PA)



Hydric Rating by Map Unit—Blue Earth County, Minnesota (Bohrereast_PA)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 Hydric (100%)
 Hydric (66 to 99%)
 Hydric (33 to 65%)
 Hydric (1 to 32%)
 Not Hydric (0%)
 Not rated or not available

Soil Rating Lines

 Hydric (100%)
 Hydric (66 to 99%)
 Hydric (33 to 65%)
 Hydric (1 to 32%)
 Not Hydric (0%)
 Not rated or not available

Soil Rating Points

 Hydric (100%)
 Hydric (66 to 99%)
 Hydric (33 to 65%)
 Hydric (1 to 32%)
 Not Hydric (0%)
 Not rated or not available

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: Blue Earth County, Minnesota
 Survey Area Data: Version 21, Sep 10, 2023

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

Date(s) aerial images were photographed: Jul 2, 2023—Aug 8, 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.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
35	Blue Earth mucky silt loam, 0 to 1 percent slopes	100	0.3	2.7%
85	Calco silty clay loam, 0 to 2 percent slopes, occasionally flooded	95	7.1	70.1%
160	Fieldon loam, 0 to 2 percent slopes	100	0.1	0.9%
181	Litchfield loamy fine sand, 1 to 3 percent slopes	4	0.1	0.8%
1001	Alluvial land, occasionally flooded	100	2.6	25.5%
Totals for Area of Interest			10.2	100.0%

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

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Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Hydric Soil List - All Components

This table lists the map unit components and their hydric status in the survey area. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 2002).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The criteria for hydric soils are represented by codes in the table (for example, 2). Definitions for the codes are as follows:

1. All Histels except for Folistels, and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
 - B. Show evidence that the soil meets the definition of a hydric soil;
3. Soils that are frequently ponded for long or very long duration during the growing season.
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
 - B. Show evidence that the soil meets the definition of a hydric soil;
4. Map unit components that are frequently flooded for long duration or very long duration during the growing season that:
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
 - B. Show evidence that the soil meets the definition of a hydric soil;

Hydric Condition: Food Security Act information regarding the ability to grow a commodity crop without removing woody vegetation or manipulating hydrology.

References:

- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. Doc. 2012-4733 Filed 2-28-12. February, 28, 2012. Hydric soils of the United States.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.
- Vasilas, L.M., G.W. Hurt, and C.V. Noble, editors. Version 7.0, 2010. Field indicators of hydric soils in the United States.

Report—Hydric Soil List - All Components

Hydric Soil List - All Components—MN013-Blue Earth County, Minnesota					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
35: Blue Earth mucky silt loam, 0 to 1 percent slopes	Blue Earth	75-90	Depressions	Yes	2
	Canisteo	5-15	Rims on depressions, ground moraines	Yes	2
	Harps	1-8	Rims on depressions	Yes	2
	Lemond	0-2	Outwash plains, terraces	Yes	2
85: Calco silty clay loam, 0 to 2 percent slopes, occasionally flooded	Calco-Occasionally flooded	75-95	Flood plains	Yes	2
	Colo-Occasionally flooded	5-15	Flood plains	Yes	2
	Spillville-Occasionally flooded	0-10	Flood plains	No	—
160: Fieldon loam, 0 to 2 percent slopes	Fieldon	75-95	Lake plains, outwash plains, terraces	Yes	2
	Biscay	5-15	Outwash plains, terraces	Yes	2
	Okoboji	0-10	Lake plains, depressions	Yes	2
181: Litchfield loamy fine sand, 1 to 3 percent slopes	Litchfield	90	Outwash plains	No	—
	Darfur	4	Flats	Yes	2
	Dickinson	3	Outwash plains	No	—
	Estherville	3	Outwash plains	No	—
1001: Alluvial land, occasionally flooded	Alluvial land-Occasionally flooded	90	Flood plains	Yes	2
	Comfrey	10	Flood plains	Yes	2

Data Source Information

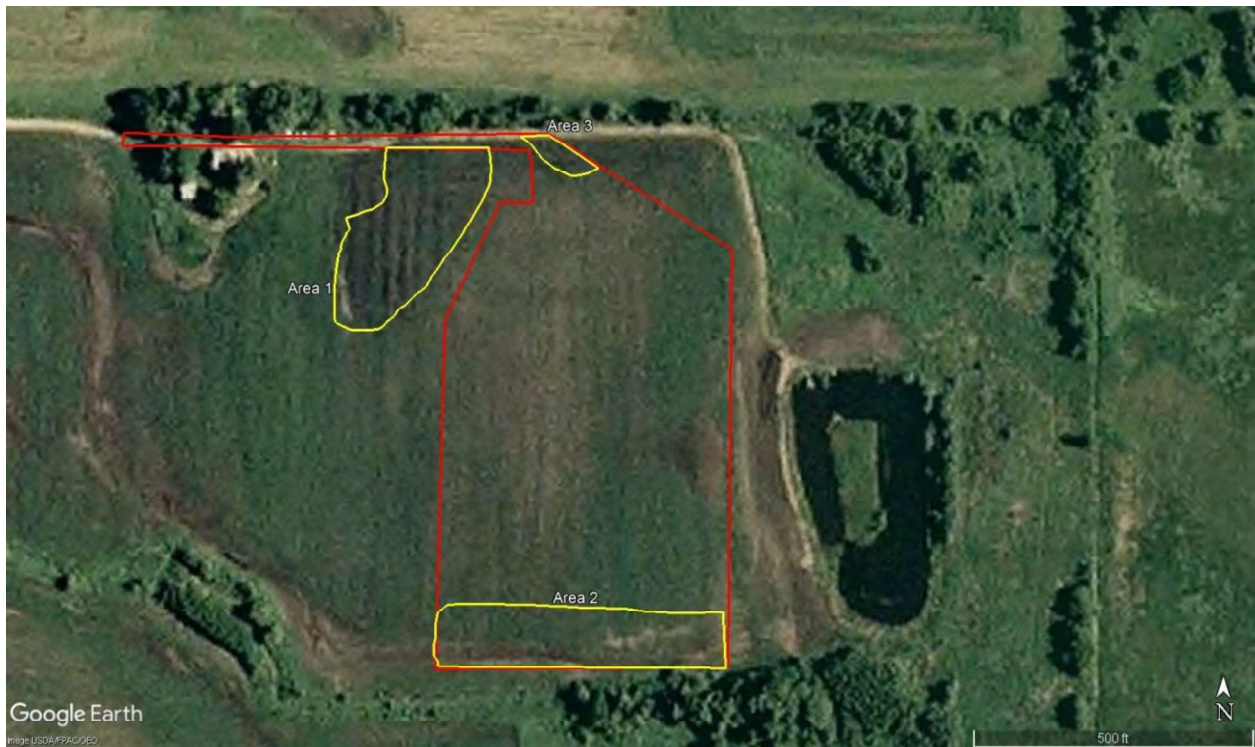
Soil Survey Area: Blue Earth County, Minnesota

Survey Area Data: Version 21, Sep 10, 2023

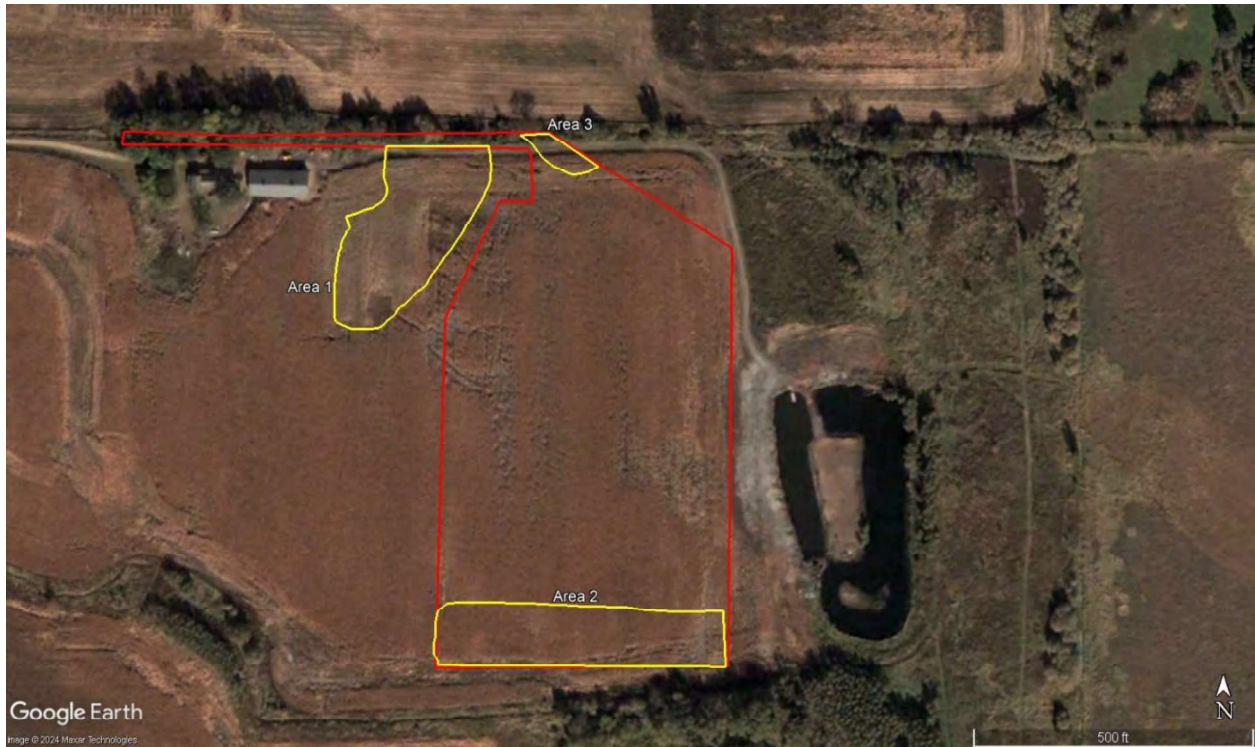
Appendix C: Aerial Imagery Slides



April 1991



June 2003



September 2003



August 2004



May 2006



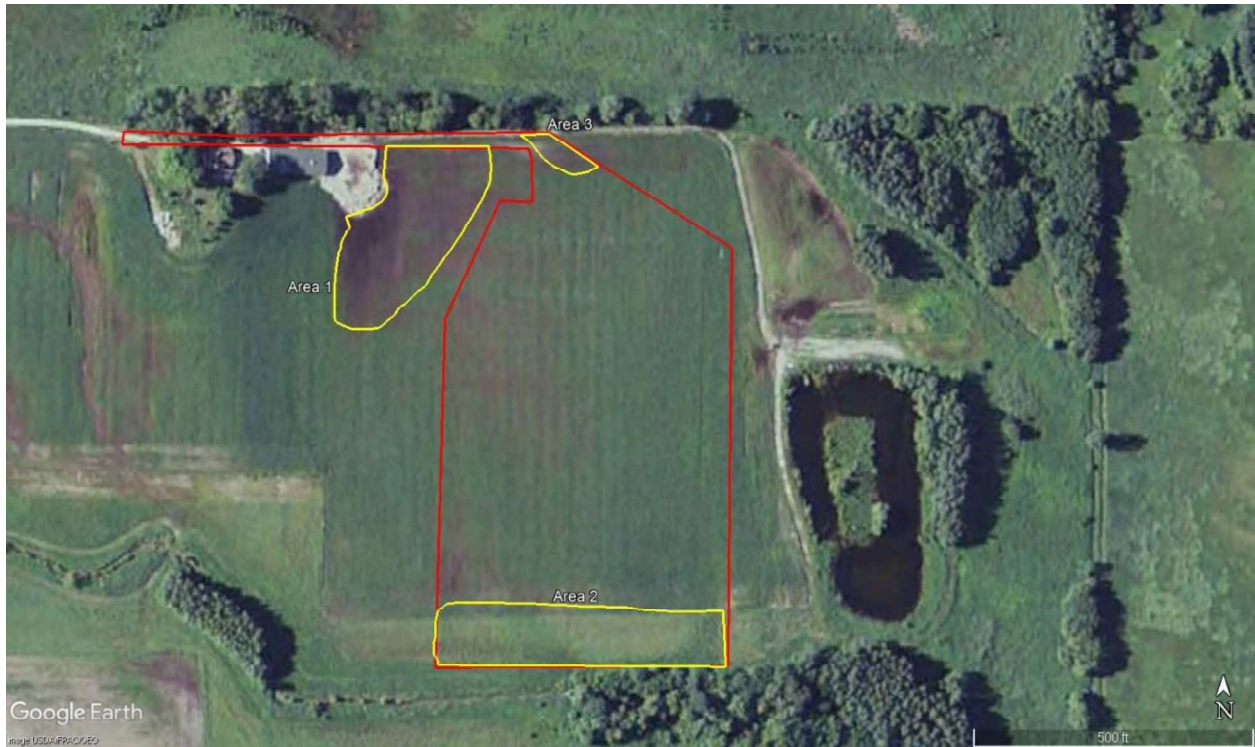
June 2008



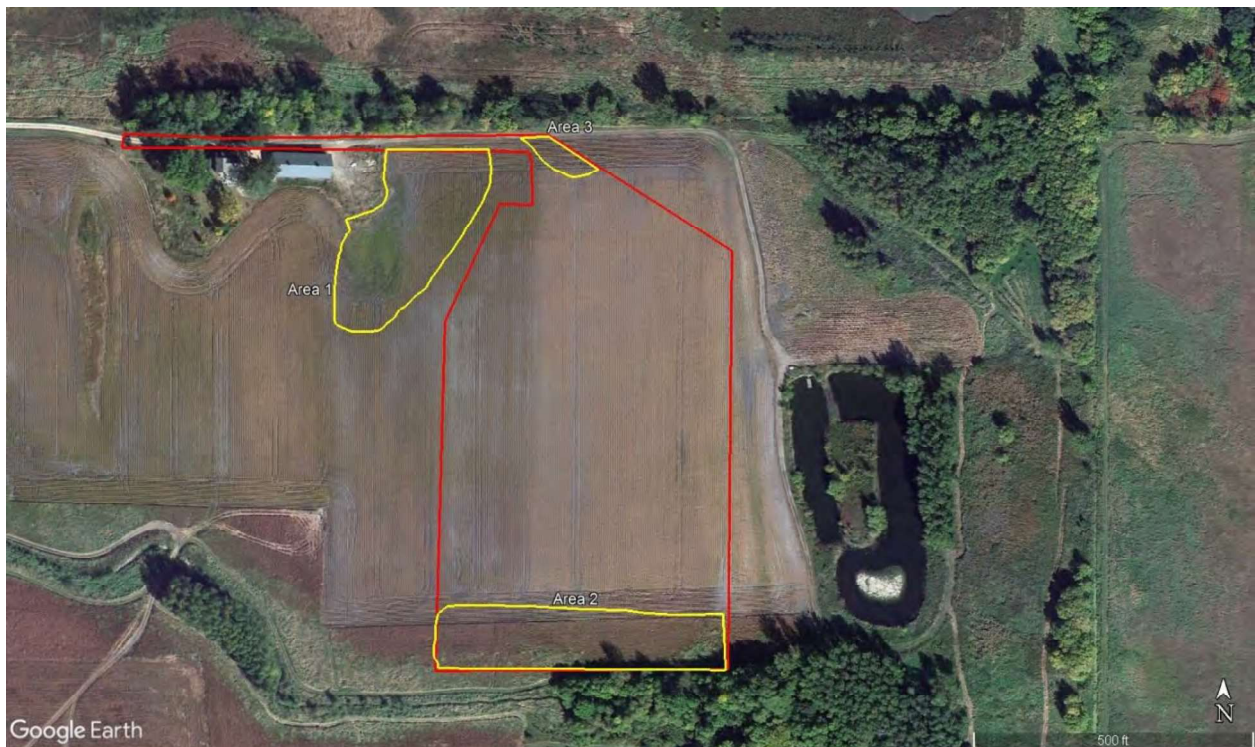
June 2009



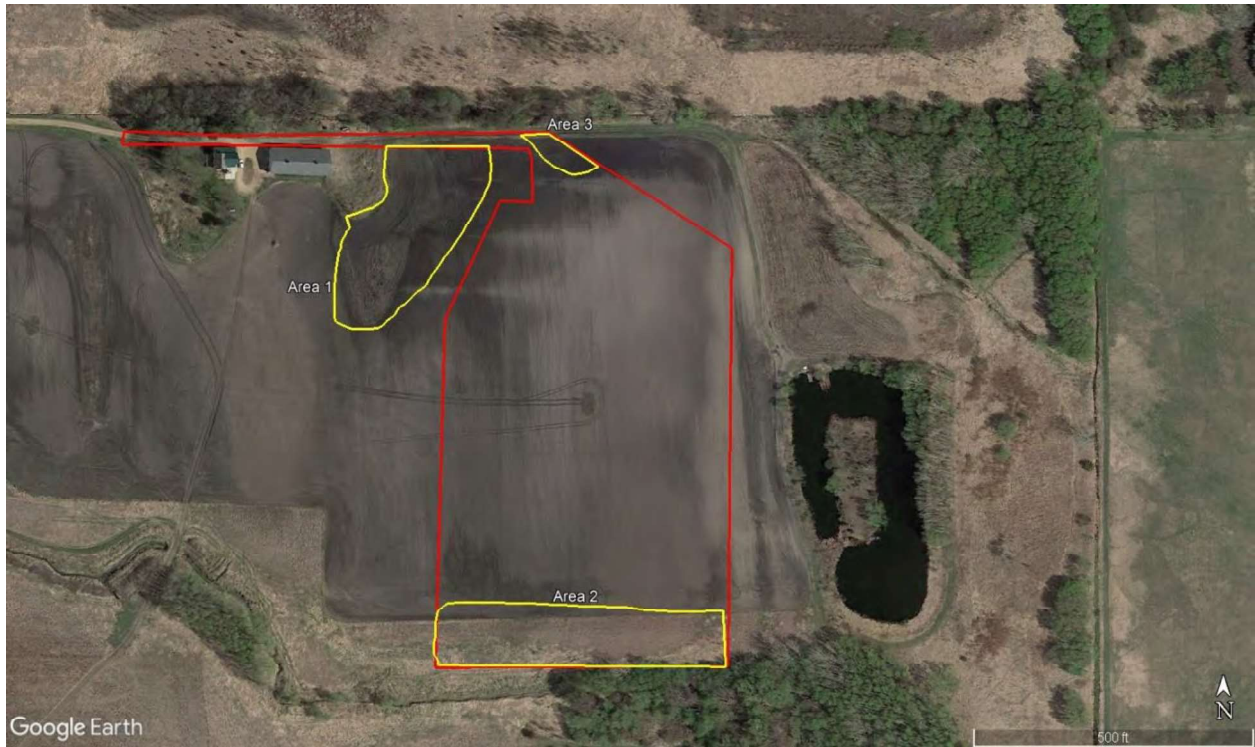
May 2010



June 2010



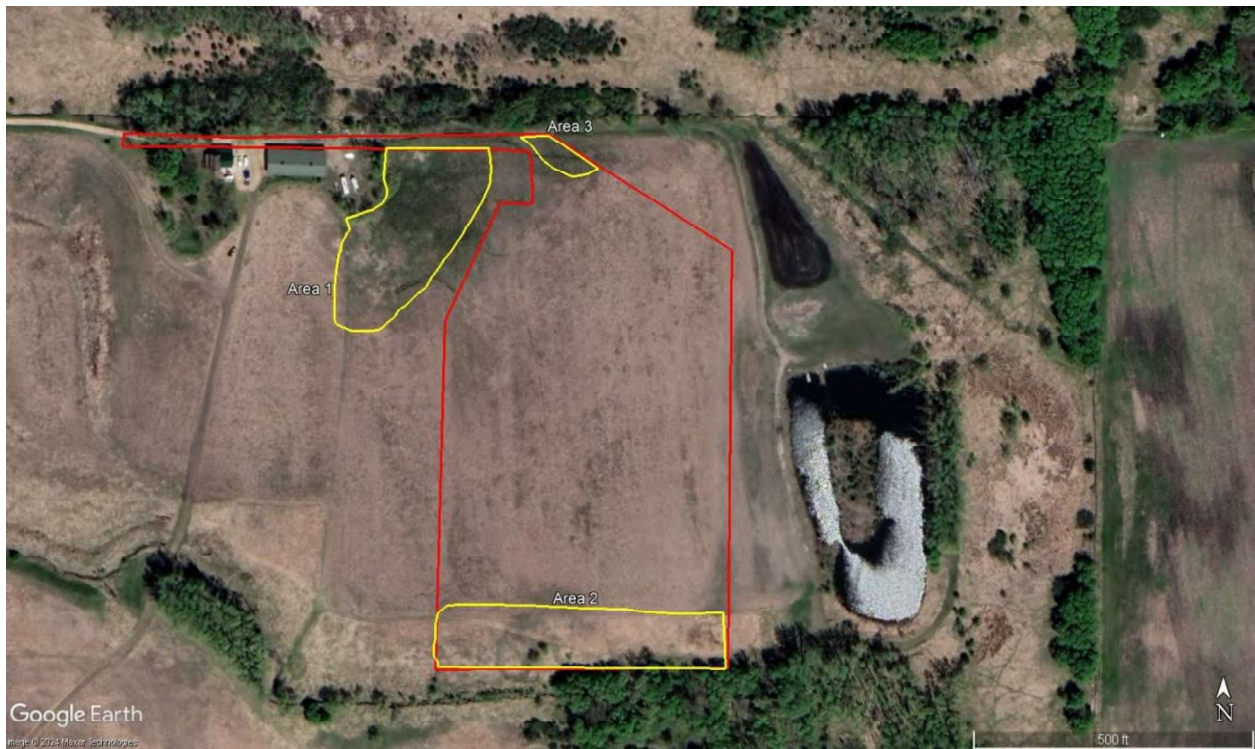
September 2011



April 2015



August 2020



May 2021



June 2023

Appendix D: Wetland Hydrology from Aerial Imagery – Recording Form

Exhibits 1 & 2

Field data sheet reference (if applicable): _____

Project Name: MN CSG 2019-57 LLC Date: 1/30/2024 County: Blue Earth

Investigator: J Knudsen	Legal Description (T, R, S):	109N	26W	29
-------------------------	------------------------------	------	-----	----

Date Image Taken (M-D-Y)	Image Source	Climate Condition (wet, dry, normal) ⁱ	Image Interpretation(s)				
			Area: 1	Area: 2	Area: 3	Area:	Area:
4/1991	USGS	Normal	NV	NV	NV		
6/2003	USDA	Normal	CS	CS	WS		
11/03	Google Earth	Dry	NV	CS	NV		
8/2004	USDA	Wet	CS	NV	NV		
5/2006	USDA	Normal	CS	NV	CS		
6/2008	USDA	Normal	DO	CP	NV		
6/2009	USDA	Dry	WS	CP	NV		
5/2010	USDA	Dry	SS	CP	SS		
6/2010	USDA	Normal	DO	CP	CS		
9/2011	Google Earth	Normal	CS	CP	NV		
4/2015	Google Earth	Dry	WS	CP	NV		
8/2020	Google Earth	Wet	DO	NV	CP		
5/2021	Google Earth	Normal	WS	NV	WS		
6/2021	Google Earth	Dry	WS	NV	NV		
6/2023	Google Earth	Wet	WS	CP	CP		
Normal Climate Condition			Area: 1	Area: 2	Area:	Area:	Area:
Number			7	7	7		
Number with wet signatures			6	5	4		
Percent with wet signatures			86	71	57		

KEY		
WS - wetland signature	SS - soil wetness signature	CS - crop stress
NC - not cropped	AP - altered pattern	NV - normal vegetative cover
DO - drowned out	SW - standing water	NSS - no soil wetness signature
Other labels or comments:		

- Use above key to label image interpretations. It is imperative that the reviewer read and understand the guidance associated with the use of these labels. If alternate labels are used, indicate in box above.
- If less than five (5) images taken during normal climate conditions are available, use an equal number of images taken during wet and dry climate conditions and use as many images as you have available. Describe the results using this methodology in your report.

ⁱ Use [MN State Climatology website](#) to determine climate condition when image was taken.

Wetland Determination from Aerial Imagery – Recording Form

Project Name: MN CSG 2019-57 LLCDate: 1/30/2024County: Blue Earth

Investigator: J KnudsenLegal Description (T, R, S): 109N26W29

Use the Decision Matrix below to complete Table 1.

Hydric Soils present ¹	Identified on NWI or other wetland map ²	Percent with wet signatures from Exhibit 1	Field verification required ³	Wetland?
Yes	Yes	>50%	No	Yes
Yes	Yes	30-50%	No	Yes
Yes	Yes	<30%	Yes	Yes, if other hydrology indicators present
Yes	No	>50%	No	Yes
Yes	No	30-50%	Yes	Yes, if other hydrology indicators present
Yes	No	<30%	No	No
No	Yes	>50%	No	Yes
No	Yes	30-50%	No	Yes
No	Yes	<30%	No	No
No	No	>50%	Yes	Yes, if other hydrology indicators present
No	No	30-50%	Yes	Yes, if other hydrology indicators present
No	No	<30%	No	No

¹ The presence of hydric soils can be determined from the “Hydric Rating by Map Unit Feature” under “Land Classifications” from the Web Soil Survey. “Not Hydric” is the only category considered to not have hydric soils. Field sampling for the presence/absence of hydric soil indicators can be used in lieu of the hydric rating if appropriately documented by providing completed field data sheets.

² At minimum, the most updated NWI data available for the area must be reviewed for this step. Any and all other local or regional wetland maps that are publically available should be reviewed.

³ Area should be reviewed in the field for the presence/absence of wetland hydrology indicators per the applicable 87 Manual Regional Supplement, including the D2 indicator (geomorphic position).

Table 1.

Area	Hydric Soils Present	Identified on NWI or other wetland map	Percent with wet signatures from Exhibit 1	Other hydrology indicators present ¹	Wetland?
1	Yes	No	86	N/A	Yes
2	Yes	No	71	N/A	Field req.
3	Yes	No	57	N/A	Field req.

¹ Answer “N/A” if field verification is not required and was not conducted.

Appendix E: Field Photographs



General upland Project landscape viewed to the east from the western boundary of the Study Area



Wetland 1, viewed to the north from the southern extent of the feature



Wetland 1 (background), viewed to the northwest from the eastern boundary of the Study Area



Northern extent of Wetland 1, a farm road, viewed to the west along the northern boundary of the Study Area



Area 2, viewed to the east along the southern boundary of the Study Area



Excavated pond, viewed to the east from beyond the eastern boundary of the Study Area

Appendix F: Wetland Data Sheets

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: SV CSG Mankato North 1 City/County: Blue Earth Sampling Date: 6/20/2023
 Applicant/Owner: Sunvest Solar State: MN Sampling Point: SP 1-1
 Investigator(s): J Knudsen Section, Township, Range: 20, 109N, 26W
 Landform (hillside, terrace, etc.): Depressional Local relief (concave, convex, none): concave
 Slope (%): 2 Lat: 44.224221 Long: -93.979026 Datum: NAD 83
 Soil Map Unit Name: 85 - Calco silty clay loam, 0-2 percent slopes, occasionally flooded NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in Remarks.)
 Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	
Remarks: SP within Area 2 in a depression. Climactic conditions were wetter than normal.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>15ft</u>)			
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Herb Stratum	(Plot size: <u>5ft</u>)			
1.	<u>Phalaris arundinacea</u>	<u>70</u>	<u>Yes</u>	<u>FACW</u>
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
		<u>70</u> =Total Cover		
Woody Vine Stratum	(Plot size: <u>30ft</u>)			
1.				
2.				
		=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>70</u>	x 2 = <u>140</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>70</u> (A)	<u>140</u> (B)
Prevalence Index = B/A = <u>2.00</u>	

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is >50%

☒ 3 - Prevalence Index is ≤3.0¹

☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: (Include photo numbers here or on a separate sheet.)
monoculture

SOIL

Sampling Point: SP 1-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10YR 2/1	95	10YR 5/6	5	C	M	silty loam	Redox in shallow strata
10-20	10YR 3/1	98	10YR 5/6	2	C	M	Silty loam	Slightly lighter - fewer redox

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1)	☐ Coast Prairie Redox (A16)
☐ Histic Epipedon (A2)	☐ Iron-Manganese Masses (F12)
☐ Black Histic (A3)	☐ Red Parent Material (F21)
☐ Hydrogen Sulfide (A4)	☐ Very Shallow Dark Surface (F22)
☐ Stratified Layers (A5)	☐ Other (Explain in Remarks)
☐ 2 cm Muck (A10)	
☐ Depleted Below Dark Surface (A11)	
☐ Thick Dark Surface (A12)	
☐ Sandy Mucky Mineral (S1)	
☐ 5 cm Mucky Peat or Peat (S3)	
☐ Sandy Gleyed Matrix (S4)	
☐ Sandy Redox (S5)	
☐ Stripped Matrix (S6)	
☐ Dark Surface (S7)	
☐ Loamy Mucky Mineral (F1)	
☐ Loamy Gleyed Matrix (F2)	
☐ Depleted Matrix (F3)	
☒ Redox Dark Surface (F6)	
☐ Depleted Dark Surface (F7)	
☐ Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes ☒ No ☐
---	---

Remarks:
Redox at surface

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry-Season Water Table (C2)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☒ Saturation Visible on Aerial Imagery (C9)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)	
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☒ Geomorphic Position (D2)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☒ FAC-Neutral Test (D5)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)		
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)		

Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes ☒ No ☐
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
offsite aerial review indicated this area is a wetland.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: SV CSG Mankato North 1 City/County: Blue Earth Sampling Date: 6/20/2023
 Applicant/Owner: Sunvest Solar State: MN Sampling Point: SP 1-2
 Investigator(s): J Knudsen Section, Township, Range: 20, 109N, 26W
 Landform (hillside, terrace, etc.): Flat Local relief (concave, convex, none): None
 Slope (%): 1 Lat: 44.224128 Long: -93.979066 Datum: NAD 83
 Soil Map Unit Name: 85 - Calco silt clay loams, 0-2 percent slopes, occasionally flooded NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in Remarks.)
 Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	
Remarks: SP on edge of Area 2 adjacent to monoculture of reed canary grass. Antecedent precipitation condition were wetter than normal.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>15ft</u>)			
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Herb Stratum	(Plot size: <u>5ft</u>)			
1.	<u>Phalaris arundinacea</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>
2.	<u>Bromus inermis</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>
3.	<u>Achillea millefolium</u>	<u>10</u>	<u>No</u>	<u>FACU</u>
4.	<u>Taraxacum officinale</u>	<u>10</u>	<u>No</u>	<u>FACU</u>
5.				
6.				
7.				
8.				
9.				
10.				
		<u>80</u> =Total Cover		
Woody Vine Stratum	(Plot size: <u>30ft</u>)			
1.				
2.				
		=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>30</u>	x 2 = <u>60</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>50</u>	x 4 = <u>200</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>80</u> (A)	<u>260</u> (B)
Prevalence Index = B/A = <u>3.25</u>	

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is >50%

☐ 3 - Prevalence Index is ≤3.0¹

☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: SP 1-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10YR 2/1	100					Silty loam	No redox here
10-20	10YR 3/1	100					Silty loam	No redox here

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1)	☐ Coast Prairie Redox (A16)
☐ Histic Epipedon (A2)	☐ Iron-Manganese Masses (F12)
☐ Black Histic (A3)	☐ Red Parent Material (F21)
☐ Hydrogen Sulfide (A4)	☐ Very Shallow Dark Surface (F22)
☐ Stratified Layers (A5)	☐ Other (Explain in Remarks)
☐ 2 cm Muck (A10)	
☐ Depleted Below Dark Surface (A11)	
☐ Thick Dark Surface (A12)	
☐ Sandy Mucky Mineral (S1)	
☐ 5 cm Mucky Peat or Peat (S3)	
☐ Sandy Gleyed Matrix (S4)	
☐ Sandy Redox (S5)	
☐ Stripped Matrix (S6)	
☐ Dark Surface (S7)	
☐ Loamy Mucky Mineral (F1)	
☐ Loamy Gleyed Matrix (F2)	
☐ Depleted Matrix (F3)	
☐ Redox Dark Surface (F6)	
☐ Depleted Dark Surface (F7)	
☐ Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes ☐ No ☒
Remarks: Mucky	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry-Season Water Table (C2)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)	
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Geomorphic Position (D2)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ FAC-Neutral Test (D5)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)		
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)		

Field Observations: Surface Water Present? Yes ☐ No ☐ Depth (inches): _____ Water Table Present? Yes ☐ No ☐ Depth (inches): _____ Saturation Present? Yes ☐ No ☐ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes ☐ No ☒
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: Mucky, greasy soils	

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: MN CSG 2019-57 LLC City/County: Blue Earth Sampling Date: 3/12/2024
 Applicant/Owner: NEE State: MN Sampling Point: SP 2-1
 Investigator(s): J Knudsen Section, Township, Range: 29, 109N, 26W
 Landform (hillside, terrace, etc.): Depressional Local relief (concave, convex, none): concave
 Slope (%): 2 Lat: 44.224933 Long: -93.977857 Datum: NAD 83
 Soil Map Unit Name: 85 - Calco silty clay loam, 0-2 percent slopes, occassionally flooded NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present? Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	
Remarks: SP within Area 1 in a depression. Portion already delineated in 2023 for adjacent Project. Climactic conditions were normal. Not in growing season..	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>15ft</u>)			
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Herb Stratum	(Plot size: <u>5ft</u>)			
1.	<u>Phalaris arundinacea</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
		<u>30</u> =Total Cover		
Woody Vine Stratum	(Plot size: <u>30ft</u>)			
1.				
2.				
		=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>30</u>	x 2 = <u>60</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>30</u> (A)	<u>60</u> (B)
Prevalence Index = B/A = <u>2.00</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)
RCG could be identified, even though mowed, by color and leaf thickness.

SOIL

Sampling Point: SP 2-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10YR 2/1	95	10YR 5/6	5	C	M	Clay loam	Redox close to surface
10-20	10YR 4/1	95	10YR 5/6	5	C	M	Clay loam	Lighter stratum with redox

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1)	☐ Coast Prairie Redox (A16)
☐ Histic Epipedon (A2)	☐ Iron-Manganese Masses (F12)
☐ Black Histic (A3)	☐ Red Parent Material (F21)
☐ Hydrogen Sulfide (A4)	☐ Very Shallow Dark Surface (F22)
☐ Stratified Layers (A5)	☐ Other (Explain in Remarks)
☐ 2 cm Muck (A10)	
☒ Depleted Below Dark Surface (A11)	
☐ Thick Dark Surface (A12)	
☐ Sandy Mucky Mineral (S1)	
☐ 5 cm Mucky Peat or Peat (S3)	
☐ Sandy Gleyed Matrix (S4)	
☐ Sandy Redox (S5)	
☐ Stripped Matrix (S6)	
☐ Dark Surface (S7)	
☐ Loamy Mucky Mineral (F1)	
☐ Loamy Gleyed Matrix (F2)	
☐ Depleted Matrix (F3)	
☒ Redox Dark Surface (F6)	
☐ Depleted Dark Surface (F7)	
☐ Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes ☒ No ☐
Remarks: Redox at surface	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry-Season Water Table (C2)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☒ Saturation Visible on Aerial Imagery (C9)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)	
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☒ Geomorphic Position (D2)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☒ FAC-Neutral Test (D5)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)		
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)		

Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? Yes ☒ No ☐ Depth (inches): 3 (includes capillary fringe)	Wetland Hydrology Present? Yes ☒ No ☐
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: offsite aerial review indicated this area is a wetland.	

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: MN CSG 2019-57 LLC City/County: Blue Earth Sampling Date: 3/12/2024
 Applicant/Owner: NEE State: MN Sampling Point: SP 2-2
 Investigator(s): J Knudsen Section, Township, Range: 29, 109N, 26W
 Landform (hillside, terrace, etc.): Depressional Local relief (concave, convex, none): None
 Slope (%): 3 Lat: 44.224933 Long: -93.977857 Datum: NAD 83
 Soil Map Unit Name: 85 - Calco silty clay loam, 0-2 percent slopes, occassionally flooded NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: SP outside boundary of aerial imagery wetland signatures. Climactic conditions were normal. Not in growing season..	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> </u> (A) Total Number of Dominant Species Across All Strata: <u> </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u> </u> (A/B)																
2.																					
3.																					
4.																					
5.																					
		=Total Cover																			
Sapling/Shrub Stratum		(Plot size: <u>15ft</u>)			Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u> </u></td> <td>x 1 = <u> </u></td> </tr> <tr> <td>FACW species <u> </u></td> <td>x 2 = <u> </u></td> </tr> <tr> <td>FAC species <u> </u></td> <td>x 3 = <u> </u></td> </tr> <tr> <td>FACU species <u> </u></td> <td>x 4 = <u> </u></td> </tr> <tr> <td>UPL species <u> </u></td> <td>x 5 = <u> </u></td> </tr> <tr> <td>Column Totals: <u> </u> (A)</td> <td><u> </u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u> </u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u> </u>	x 1 = <u> </u>	FACW species <u> </u>	x 2 = <u> </u>	FAC species <u> </u>	x 3 = <u> </u>	FACU species <u> </u>	x 4 = <u> </u>	UPL species <u> </u>	x 5 = <u> </u>	Column Totals: <u> </u> (A)	<u> </u> (B)	Prevalence Index = B/A = <u> </u>	
Total % Cover of:	Multiply by:																				
OBL species <u> </u>	x 1 = <u> </u>																				
FACW species <u> </u>	x 2 = <u> </u>																				
FAC species <u> </u>	x 3 = <u> </u>																				
FACU species <u> </u>	x 4 = <u> </u>																				
UPL species <u> </u>	x 5 = <u> </u>																				
Column Totals: <u> </u> (A)	<u> </u> (B)																				
Prevalence Index = B/A = <u> </u>																					
1.																					
2.																					
3.																					
4.																					
5.																					
		=Total Cover																			
Herb Stratum		(Plot size: <u>5ft</u>)			Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1.																					
2.																					
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4.																					
5.																					
6.																					
7.																					
8.																					
9.																					
10.																					
		=Total Cover																			
Woody Vine Stratum		(Plot size: <u>30ft</u>)			Hydrophytic Vegetation Present? Yes <u> </u> No <u> </u>																
1.																					
2.																					
		=Total Cover																			

Remarks: (Include photo numbers here or on a separate sheet.)
 Vegetation not evaluated or used as wetland criteria due to growing season

SOIL

Sampling Point: SP 2-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-11	10YR 2/1	95	10YR 5/6	5	C	M	Clay loam	Redox close to surface
11-15	10YR 4/1	95	10YR 5/6	5	C	M	Clay loam	Lighter stratum with redox

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1)	☐ Coast Prairie Redox (A16)
☐ Histic Epipedon (A2)	☐ Iron-Manganese Masses (F12)
☐ Black Histic (A3)	☐ Red Parent Material (F21)
☐ Hydrogen Sulfide (A4)	☐ Very Shallow Dark Surface (F22)
☐ Stratified Layers (A5)	☐ Other (Explain in Remarks)
☐ 2 cm Muck (A10)	
☒ Depleted Below Dark Surface (A11)	
☐ Thick Dark Surface (A12)	
☐ Sandy Mucky Mineral (S1)	
☐ 5 cm Mucky Peat or Peat (S3)	
☐ Sandy Gleyed Matrix (S4)	
☐ Sandy Redox (S5)	
☐ Stripped Matrix (S6)	
☐ Dark Surface (S7)	
☐ Loamy Mucky Mineral (F1)	
☐ Loamy Gleyed Matrix (F2)	
☐ Depleted Matrix (F3)	
☒ Redox Dark Surface (F6)	
☐ Depleted Dark Surface (F7)	
☐ Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes ☒ No ☐
Remarks: Redox at surface	

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry-Season Water Table (C2)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)	
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Geomorphic Position (D2)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ FAC-Neutral Test (D5)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)		
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)		

Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes ☐ No ☒
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: offsite aerial review indicated this area beyond wetland boundary.	

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: MN CSG 2019-57 LLC City/County: Blue Earth Sampling Date: 3/12/2024
 Applicant/Owner: NEE State: MN Sampling Point: SP 3
 Investigator(s): J Knudsen Section, Township, Range: 29, 109N, 26W
 Landform (hillside, terrace, etc.): Field Local relief (concave, convex, none): None
 Slope (%): 3 Lat: 44.224165 Long: -93.976633 Datum: NAD 83
 Soil Map Unit Name: 1001 - Alluvial land, occassoinally flooded NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: SP on edge of Project area neare excavated pond. Climactic conditions were normal. Not in growing season..	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> </u> (A) Total Number of Dominant Species Across All Strata: <u> </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u> </u> (A/B)																
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2.																					
3.																					
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5.																					
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Total % Cover of:	Multiply by:																				
OBL species <u> </u>	x 1 = <u> </u>																				
FACW species <u> </u>	x 2 = <u> </u>																				
FAC species <u> </u>	x 3 = <u> </u>																				
FACU species <u> </u>	x 4 = <u> </u>																				
UPL species <u> </u>	x 5 = <u> </u>																				
Column Totals: <u> </u> (A)	<u> </u> (B)																				
Prevalence Index = B/A = <u> </u>																					
		=Total Cover																			
Sapling/Shrub Stratum (Plot size: <u>15ft</u>)																					
1.																					
2.																					
3.																					
4.																					
5.																					
		=Total Cover																			
Herb Stratum (Plot size: <u>5ft</u>)																					
1.																					
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7.																					
8.																					
9.																					
10.																					
		=Total Cover																			
Woody Vine Stratum (Plot size: <u>30ft</u>)																					
1.																					
2.																					
		=Total Cover																			
Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																					
Hydrophytic Vegetation Present? Yes <u> </u> No <u> </u>																					
Remarks: (Include photo numbers here or on a separate sheet.) Vegetation not evaluated or used as wetland criteria due to growing season																					

SOIL

Sampling Point: SP 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 2/1	95	10YR 5/6	5	C	M	Clay loam	Redox close to surface
8-10	10YR 4/1	95	10YR 5/6	5	C	M	Clay loam	Lighter stratum with redox

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1)	☐ Coast Prairie Redox (A16)
☐ Histic Epipedon (A2)	☐ Iron-Manganese Masses (F12)
☐ Black Histic (A3)	☐ Red Parent Material (F21)
☐ Hydrogen Sulfide (A4)	☐ Very Shallow Dark Surface (F22)
☐ Stratified Layers (A5)	☐ Other (Explain in Remarks)
☐ 2 cm Muck (A10)	
☒ Depleted Below Dark Surface (A11)	
☐ Thick Dark Surface (A12)	
☐ Sandy Mucky Mineral (S1)	
☐ 5 cm Mucky Peat or Peat (S3)	
☐ Sandy Gleyed Matrix (S4)	
☐ Sandy Redox (S5)	
☐ Stripped Matrix (S6)	
☐ Dark Surface (S7)	
☐ Loamy Mucky Mineral (F1)	
☐ Loamy Gleyed Matrix (F2)	
☐ Depleted Matrix (F3)	
☒ Redox Dark Surface (F6)	
☐ Depleted Dark Surface (F7)	
☐ Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes ☒ No ☐
---	---

Remarks:
Redox at surface

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry-Season Water Table (C2)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)	
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Geomorphic Position (D2)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ FAC-Neutral Test (D5)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)		
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)		

Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes ☐ No ☒
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
offsite aerial review indicated this area is upland

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: MN CSG 2019-57 LLC City/County: Blue Earth Sampling Date: 3/12/2024
 Applicant/Owner: NEE State: MN Sampling Point: SP 4
 Investigator(s): J Knudsen Section, Township, Range: 29, 109N, 26W
 Landform (hillside, terrace, etc.): Field - mowed Local relief (concave, convex, none): None
 Slope (%): 3 Lat: 44.224165 Long: -93.97663 Datum: NAD 83
 Soil Map Unit Name: 85 - Calco silty clay loam, 0-2 percent slopes, occasionally flooded NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: SP on edge of area that is is plowed. Climactic conditions were normal. Not in growing season..	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> </u> (A) Total Number of Dominant Species Across All Strata: <u> </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u> </u> (A/B)
2.					
3.					
4.					
5.					
		=Total Cover			
Sapling/Shrub Stratum		(Plot size: <u>15ft</u>)			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1.					
2.					
3.					
4.					
		=Total Cover			
Herb Stratum		(Plot size: <u>5ft</u>)			Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
		=Total Cover			
Woody Vine Stratum		(Plot size: <u>30ft</u>)			Hydrophytic Vegetation Present? Yes <u> </u> No <u> </u>
1.					
2.					
		=Total Cover			
Remarks: (Include photo numbers here or on a separate sheet.) Vegetation not evaluated or used as wetland criteria due to growing season					

SOIL

Sampling Point: SP 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10YR 2/1	95	10YR 5/6	5	C	M	Clay loam	Redox close to surface
10-15	10YR 4/1	95	10YR 5/6	5	C	M	Clay loam	Lighter stratum with redox
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.							² Location: PL=Pore Lining, M=Matrix.	
Hydric Soil Indicators:							Indicators for Problematic Hydric Soils³:	
☐ Histosol (A1)			☐ Sandy Gleyed Matrix (S4)				☐ Coast Prairie Redox (A16)	
☐ Histic Epipedon (A2)			☐ Sandy Redox (S5)				☐ Iron-Manganese Masses (F12)	
☐ Black Histic (A3)			☐ Stripped Matrix (S6)				☐ Red Parent Material (F21)	
☐ Hydrogen Sulfide (A4)			☐ Dark Surface (S7)				☐ Very Shallow Dark Surface (F22)	
☐ Stratified Layers (A5)			☐ Loamy Mucky Mineral (F1)				☐ Other (Explain in Remarks)	
☐ 2 cm Muck (A10)			☐ Loamy Gleyed Matrix (F2)					
☒ Depleted Below Dark Surface (A11)			☐ Depleted Matrix (F3)					
☐ Thick Dark Surface (A12)			☒ Redox Dark Surface (F6)				³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	
☐ Sandy Mucky Mineral (S1)			☐ Depleted Dark Surface (F7)					
☐ 5 cm Mucky Peat or Peat (S3)			☐ Redox Depressions (F8)					
Restrictive Layer (if observed):								
Type: _____								
Depth (inches): _____						Hydric Soil Present? Yes ☒ No ☐		
Remarks: Redox at surface								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ True Aquatic Plants (B14)	☐ Dry-Season Water Table (C2)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Crayfish Burrows (C8)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Stunted or Stressed Plants (D1)	
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Geomorphic Position (D2)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ FAC-Neutral Test (D5)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Gauge or Well Data (D9)		
☐ Sparsely Vegetated Concave Surface (B8)	☐ Other (Explain in Remarks)		
Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): Water Table Present? Yes ☐ No ☒ Depth (inches): Saturation Present? Yes ☐ No ☒ Depth (inches): (includes capillary fringe)		Wetland Hydrology Present? Yes ☐ No ☒	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: offsite aerial review indicated this area is upland			



Formal Natural Heritage Review - Cover Page

See next page for results of review. A draft watermark means the project details have not been finalized and the results are not official.

Project Name: MN CSG 2019-57 LLC

Project Proposer: Area M Consulting, LLC

Project Type: Power, Solar

Project Type Activities: Wetland impacts (e.g., dewatering, tiling, drainage, discharge, excavation, fill, runoff, sedimentation, changes in hydrology)

TRS: T109 R26 S29

County(s): Blue Earth

DNR Admin Region(s): South

Reason Requested: Other

Project Description: 1-2 MW community solar garden consisting of I-beams supporting the array, and access road, various equipment pads, an infiltration pond, fencing, and vegetative ...

Existing Land Uses: Agricultural, but the parcel has been in CRP until 2023.

Landcover / Habitat Impacted: Cropland and disturbed prairie

Waterbodies Affected: There is a PEM wetland in the northwest corner of the Review Area. There may be additional wetlands, but they have not been delineated at this point.

Groundwater Resources Affected: None - appropriate BMPs will be employed, and wetlands will be avoided where possible.

Previous Natural Heritage Review: No

Previous Habitat Assessments / Surveys: No

SUMMARY OF AUTOMATED RESULTS

Category	Results	Response By Category
Project Details	No Comments	No Further Review Required
Ecologically Significant Area	Comments	Protected Wetlands: Calcareous Fens
State-Listed Endangered or Threatened Species	Needs Further Review	State-protected Species in Vicinity
State-Listed Species of Special Concern	Comments	Recommendations
Federally Listed Species	No Records	Visit IPaC For Federal Review



February 14, 2024

Project Name: MN CSG 2019-57 LLC

Project Proposer: Area M Consulting, LLC

Project Type: Power, Solar

Project ID: MCE #2024-00184

AUTOMATED RESULTS: FURTHER REVIEW IS NEEDED

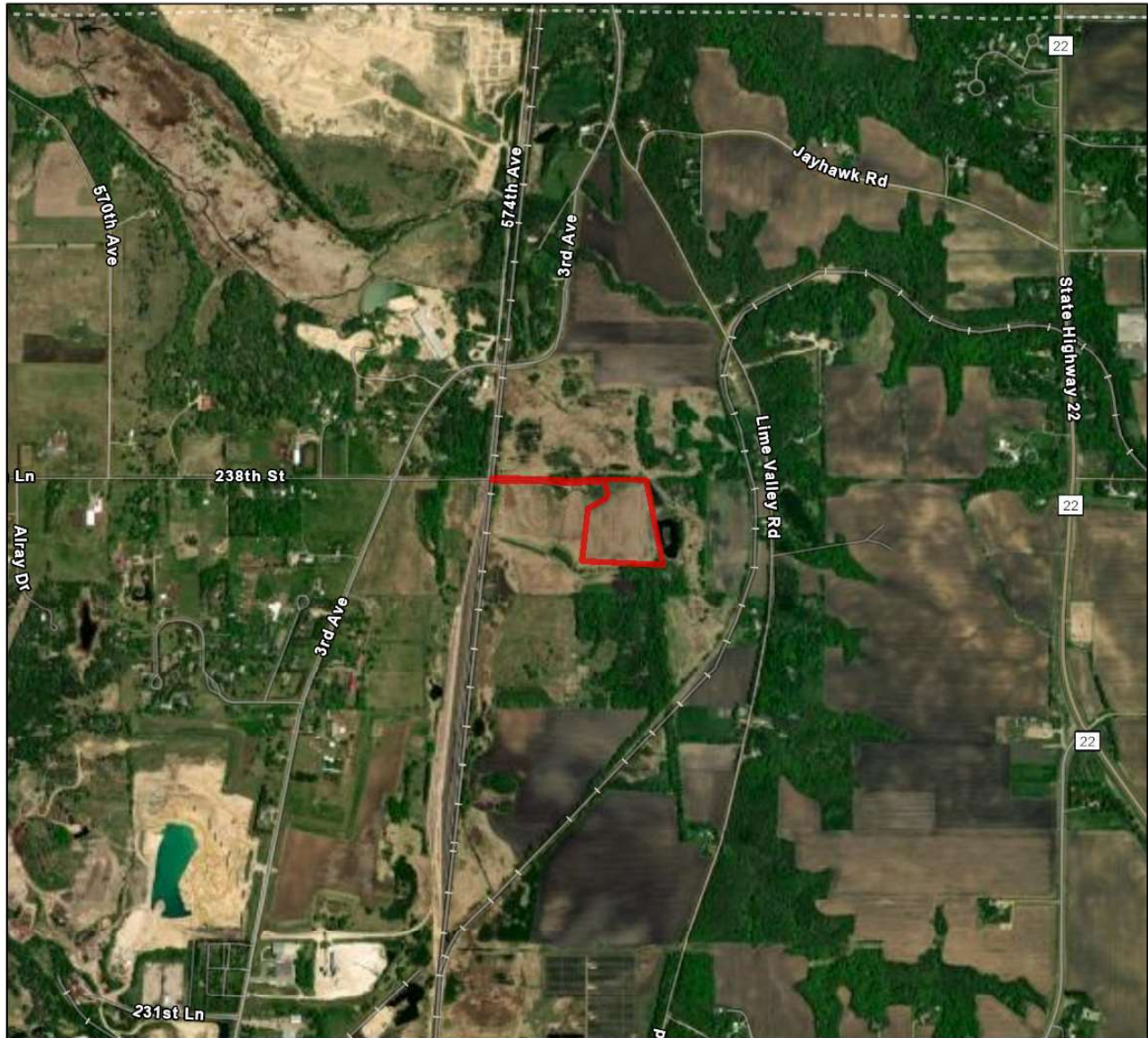
As requested, the above project has undergone an automated review for potential impacts to rare features. Based on this review, one or more rare features may be impacted by the proposed project and further review by the Natural Heritage Review Team is needed. You will receive a separate notification email when the review process is complete and the Natural Heritage Review letter has been posted.

Please refer to the table on the cover page of this report for a summary of potential impacts to rare features. For additional information or planning purposes, use the Explore Page in Minnesota Conservation Explorer to view the potentially impacted rare features or to create a Conservation Planning Report for the proposed project.

If you have additional information to help resolve the potential impacts listed in the summary results, please attach related project documentation in the Edit Details tab of the Project page. Relevant information includes, but is not limited to, additional project details, completed habitat assessments, or survey results. This additional information will be considered during the project review.

MN CSG 2019-57 LLC

Aerial Imagery With Locator Map



0 0.130.25 0.5 0.75 1 Miles

 Project_Boundary

Project Type: Power, Solar

Project Size (acres): 16.11

County(s): Blue Earth

TRS: T109 R26 S29

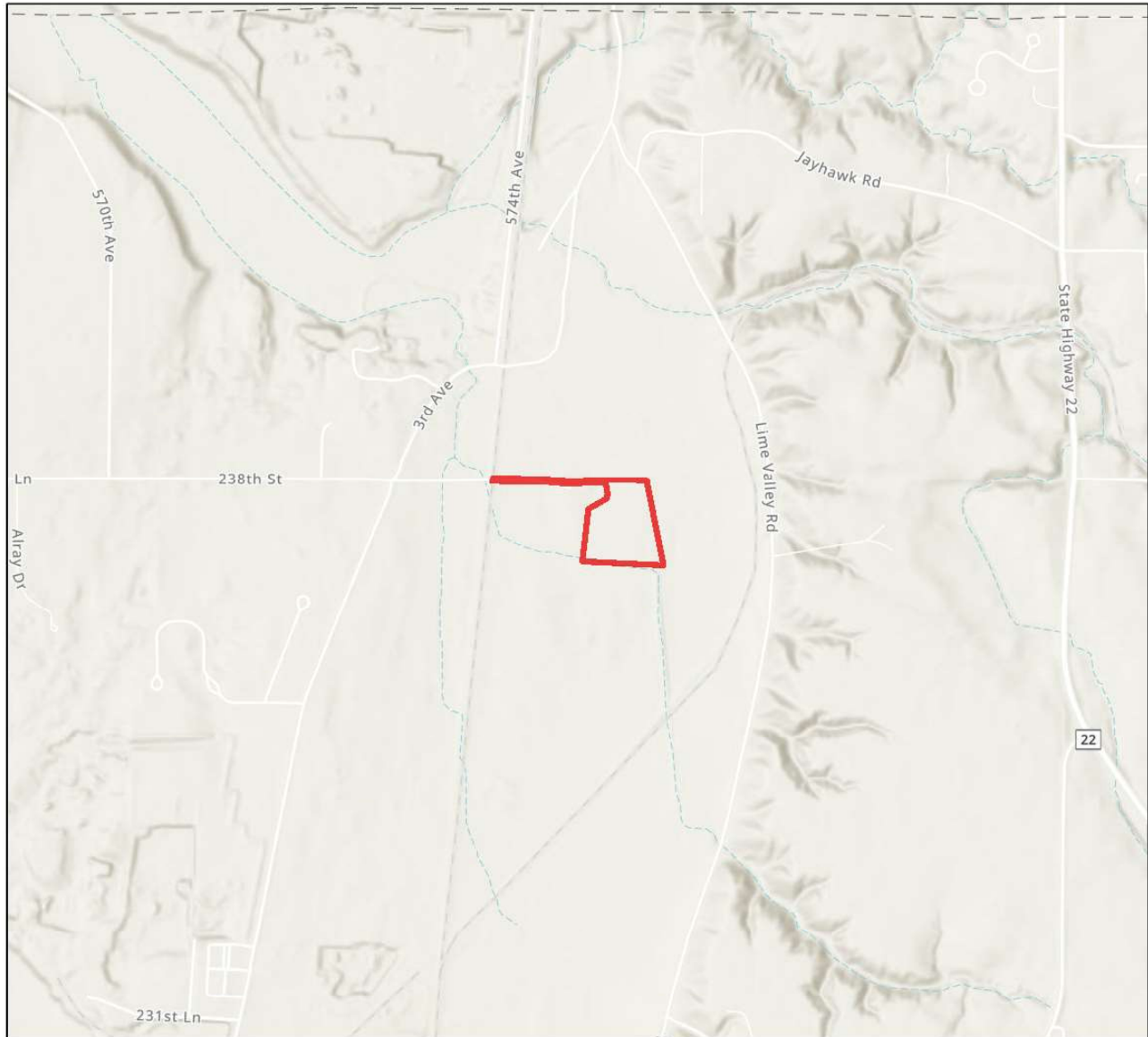
Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
Maxar

Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS,



MN CSG 2019-57 LLC

USA Topo Basemap With Locator Map



0 0.130.25 0.5 0.75 1 Miles

 Project_Boundary

Project Type: Power, Solar

Project Size (acres): 16.11

County(s): Blue Earth

TRS: T109 R26 S29

Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
Esri, NASA, NGA, USGS, FEMA
Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS,





Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

April 15, 2024

Jonathan Knudsen
Area M Consulting

RE: Natural Heritage Review of the proposed MN CSG 2019-57 LLC,
T109N R26W Section 29; Blue Earth County

Dear Jonathan Knudsen,

For all correspondence regarding the Natural Heritage Review of this project please include the project ID **MCE-2024-00** in the email subject line.

As requested, the [Minnesota Natural Heritage Information System](#) has been reviewed to determine if the proposed project has the potential to impact any rare species or other significant natural features. Based on the project details provided with the request, the following rare features may be impacted by the proposed project:

State-listed Species

- The lark sparrow (*Chondestes grammacus*), a state-listed bird species of special concern, has been documented in the vicinity of the project. This bird species is found in open, dry grassland areas with scattered trees and shrubs. They build their nest on the ground, in a shrub or a small tree. **If feasible, avoid initial disturbance to grassland areas and tree/shrub removal from May 15th through August 15th to avoid disturbance of nesting birds.**
- The North American racer (*Coluber constrictor*), a state-listed species of special concern, has been documented in the vicinity of the proposed project and may be encountered on site. These snakes occupy a variety of habitats in the deciduous forest region including forested hillsides, bluff prairies, grasslands, and open woods. Woodland margins and field edges are the preferred summer habitat. During winter months, North American racers hibernate in mammal burrows, caves, rock crevices, gravel banks, stone foundations, and old wells. North American racers have relatively large home ranges, making long-distance movements to and from their hibernacula each year. The North American racer emerges from hibernation in late April. Given the presence

of these rare snakes, the DNR recommends that the use of erosion control mesh, if any, be limited to [wildlife-friendly materials](#).

- Please visit the [DNR Rare Species Guide](#) for more information on the habitat use of these species and recommended measures to avoid or minimize impacts.

Federally Protected Species

- To ensure compliance with federal law, conduct a federal regulatory review using the U.S. Fish and Wildlife Service's (USFWS) online [Information for Planning and Consultation \(IPaC\) tool](#).

Environmental Review and Permitting

- Please include a copy of this letter and the MCE-generated Final Project Report in any state or local license or permit application. Please note that measures to avoid or minimize disturbance to the above rare features may be included as restrictions or conditions in any required permits or licenses.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available and is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities, and other natural features. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location and project description provided with the request. If project details change or the project has not occurred within one year, please resubmit the project for review within one year of initiating project activities.

The Natural Heritage Review does not constitute project approval by the Department of Natural Resources. Instead, it identifies issues regarding known occurrences of rare features and potential impacts to these rare features. Visit the [Natural Heritage Review website](#) for additional information regarding this process, survey guidance, and other related information. For information on the environmental review process or other natural resource concerns, you may contact your [DNR Regional Environmental Assessment Ecologist](#).

Thank you for consulting us on this matter and for your interest in preserving Minnesota's rare natural resources.

Sincerely,

A handwritten signature in cursive script that reads "James Drake".

James Drake
Natural Heritage Review Specialist
James.F.Drake@state.mn.us

Cc: Haley Byron



EXHIBIT D



July 23, 2024

New Energy Equity, LLC
2530 Riva Road, Suite 200
Annapolis, Maryland 21401

Subject: No MN SHPO Comment for MN CSG 2019-57, LLC's *Phase I Archaeological Reconnaissance Survey for the Bohrereast Community Solar Project - MN CSG 2019-57*, Blue Earth County, Minnesota

To Whom it May Concern,

Area M Consulting, LLC (Area M) has completed the *Phase I Archaeological Reconnaissance Survey for the Bohrereast Community Solar Project - MN CSG 2019-57* (April 2024) on behalf of MN CSG 2019-57, LLC in Blue Earth County, Minnesota; this cultural resources study was conducted in accordance with appropriate Minnesota State Historic Preservation Office (SHPO) and Minnesota Office of the State Archaeologist (OSA) guidelines. Based on the results of this study, Area M recommends:

...the Project may proceed as planned with no negative impact to cultural resources

As currently defined, the Project is not considered a federal undertaking as defined by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations (36 CFR 800); Community Solar projects are typically subject to municipal-level or county-level permitting only.

The Minnesota State Historic Preservation Office (MN SHPO), charged with assisting *federal and state agencies in meeting their responsibility to take historic properties into account in planning and carrying out their projects*, as set forth in Section 101b of the National Historic Preservation Act of 1966.

As such, MN SHPO is obligated to comment on all Projects with a Federal nexus or when MN State land, permits, or oversight are required. MN SHPO are not obligated to issue comment on projects which require only county-level or municipal-level oversight which occur on privately-owned, County-owned, or Municipal-owned land. This has been confirmed through multiple phone calls with various MN SHPO staff over the previous 12 month, email correspondence (see Exhibit A), and published review policy changes (<https://content.govdelivery.com/accounts/MNADMIN/bulletins/395fc82>).

Area M attests — based on knowledge at the time this is written — that the study, standards, and recommendations contained herein for the Bohrereast Community Solar Project - MN CSG 2019-57 LLC are valid, satisfy local permitting requirements for Project construction, and constitute comprehensive de-risking and due diligence efforts with respect to cultural resources. Accordingly, based on the foregoing, MN SHPO concurrence and/or comment is not and will not be required for the Bohrereast Community

Solar Project - MN CSG 2019-57 LLC; if official comment becomes available, Area M will seek and transmit any correspondence immediately.

If you have any questions, or need additional information, please contact me as needed.

Sincerely,

A handwritten signature in black ink, appearing to be 'G. Knudsen', written in a cursive style.

Garrett L. Knudsen
Executive Director & Principal Investigator

AREAM

651.802.8323

gknudsen@areaMconsulting.com

EXHIBIT A

SUPPORTING MN SHPO EMAIL CORRESPONDENCE

From: GraggJohnson, Kelly (ADM) <kelly.graggjohnson@state.mn.us>
Sent: Tuesday, April 30, 2024 2:21 PM
To: Joe Pnewski <jpnewski@areamconsulting.com>; Harrington, Lucy (She/Her/Hers) (ADM) <Lucy.Harrington@state.mn.us>
Subject: RE: Questions on Review of Private Solar Developments

Hi Joe – Given our current staffing constraints and given that these projects are on private land and are not receiving federal or state funding (or permitting), we will not be providing formal comments on these projects as they are not subject to review under state or federal preservation laws. We don't have the capacity right now to provide technical assistance. If the projects are subject to review under state or federal preservation laws, we will provide comments. Please let me know if you have any additional questions.

Thanks,

Kelly



Kelly Gragg-Johnson (she/her/hers) | **Environmental Review Program Specialist**

50 Sherburne Avenue, Suite 203

Saint Paul, MN 55155

(651) 201-3285 | kelly.graggjohnson@state.mn.us

Please reference this [SHPO Environmental Review Program Update](#) regarding current project review timelines and staffing changes for the Environmental Review Program.



EXHIBIT E

Please find Exhibit E Site Plan Set attached as a separate document file.