

**MANKATO TOWNSHIP PLANNING COMMISSION**  
**Regular Meeting September 18, 2024 - 6:00 p.m.**  
**Mankato Township Hall**  
**788 South Victory Drive, Mankato MN**

\*\*\*\*\*

Any person speaking to the Commission shall give to the Secretary of the  
Commission the NAME and HOME ADDRESS of such person prior to speaking.

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1. **CALL TO ORDER**

2. **APPROVAL OF AGENDA**

3. **APPROVAL OF MINUTES**

4. **BUSINESS ITEMS**

1. 

|                 |
|-----------------|
| <b>CYM06-24</b> |
|-----------------|

**Request of James and Beth Zarn for a preliminary plat for an adjustment of property lines that will create a new parcel aligning with the ¼ ¼ section. The subject property is described as Lot 11,17, and Lot 16, Auditor's plat Number 15, Section 35, Township 108 North, Range 27 West, Blue Earth County PID R430835452011).**

5. **MISCELLANEOUS**

6. **ADJOURNMENT**

**Meeting Date:** 09/18/2024

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**Title**

CYM06-24

**Request of James and Beth Zarn for a preliminary plat for an adjustment of property lines that will create a new parcel aligning with the ¼ ¼ section. The subject property is described as Lot 11,17, and Lot 16, Auditor's plat Number 15, Section 35, Township 108 North, Range 27 West, Blue Earth County PID R430835452011).**

**Applicant**

James and Beth Zarn are the applicants and property owners.

**Request**

James and Beth Zarn are requesting a preliminary plat for an adjustment of property lines that will create a new parcel aligning with the ¼ ¼ section.

**Location**

The subject property is located at 19519 Ivywood Lane and is legally described as Lot 11,17, and Lot 16, Auditor's plat Number 15, Section 35, Township 108 North, Range 27 West. The Blue Earth County Parcel Identification Number is R430835452011.

**Existing Land Use**

The land consists of two parcels, R430835452011 and R430835452008, consisting of 6.4 acres and 40 acres respectively. The first parcel, ending in 2011, currently has a shop house that is used a residential space as well as a garage shop for agricultural practices. The second parcel ending in 2008 Is currently a wooded, bluff area, contains a small wetland, and is also used for agricultural farming purposes.

**Zoning**

The site is zoned Conservation-1 by the Mankato Township Zoning Ordinance.

**Environmentally Sensitive Areas**

There are environmentally sensitive areas in both parcels of land. There is a shoreline district and a ravine showing on the environmental sensitive map for parcel R430835452011. The second parcel, R430835452008, is showing a ravine on the environmental sensitive map. The sites also contained delineated wetland areas.

**Review**

James and Beth Zarn are requesting a preliminary plat for an adjustment of property lines that will create a new parcel aligning with the ¼ ¼ section. The subject property is described as Lot 11,17, and Lot 16, Auditor's plat Number 15, Section 35, Township 108 North, Range 27 West, Blue Earth County PID R430835452011).

The applicant is proposing to adjust the property lines to create a new parcel. With the new plat, the east property line from its current location will be aligned with the ¼ ¼ section line that runs north to south of the property. The remaining portion of the easterly parcel will be considered an Outlot upon platting.

Lot 1, Block 1, Zarn Acres is a 45.98-acre lot. The lot contains one dwelling right. A conditional use permit was

approved by the Town Board on April 17th, 2024 to allow the movement of the development right on the newly created parcel from the current shed house, “shouse,” to a new residential house. Conditions were included with the approval that required that platting occur to officially change the property boundary and make this a developable parcel.

The proposed Lot 1, Block 1, will meet the Conservation District dimensions for residential purposes by obtaining a “lot or plot of land on which a single family dwelling is erected shall contain an area not less than two and one half (2.5) acres. Lot 1 Block 1, is a 5.98 acre lot exceeding the required 2.5 acres. The proposed 1.09 acres of buildable area conform to the Mankato Township conservation zoning district ordinance section 0100.0703, that states, “every lot of plot of land on which a single family dwelling is to be erected must have a buildable area of not less than one (1) acre”.

Lot 1, Block 1 contains two wetland areas, Wetland 2 and Wetland 3. Impacts to the wetland areas are not proposed or authorized. The applicant submitted a Notice of Decision from Blue Earth County that confirms that there are three Wetland areas located on the Zarn Acres property. Outlot A in the proposed Zarn Acres contains Wetland 1 near the bottom of the bluff. The second identified Wetland is located on the northeasterly corner of the  $\frac{1}{4}$   $\frac{1}{4}$  section located between Lot 1 and Outlot A. Lastly, Wetland 3 is located along Ivywood Lane in Outlot A. The owner of the land shall align with the Mankato Township Conservation District Ordinance and Blue Earth County standards to protect, preserve, and conserve the environmentally sensitive areas and natural resources of the Township.

Outlot A, Zarn Acres is the remaining portion of the subject platted area. The outlot does not contain a development right. The proposed platted lot in an outlot and, according to the Town Land Use Ordinance section 0100.0404, will not be developable, given the definition of outlot as “open space included in a plat, labeled Outlot, and not intended for use as a buildable lot”.

Access to the lot will remain the same as identified in the submitted preliminary plat, “Gravel”. The gravel access way to the proposed new dwelling structure will be through parcel ending in 2011, which is located to the south in the adjacent township, and owned by the applicant. The applicant has submitted an access easement which allows perpetual access through the adjacent southerly lot. The area noted on the preliminary plat as “existing trail” is not proposed to change. Changes to this area are prohibited without further review and approval by the Town Board as this area traverses a bluff and expansion will require additional engineering review. The plat will dedicate the southerly portion of Ivywood Lane for public purposes. The dedication will be from the Le Sueur River to the edge of the platted property. The dedication encompasses a 33’ section, which represents the southerly half of the current township road.

The preliminary plat concept plan for future development shows a proposed house and garage. The plans provided show a new 70’8” foot by 66’8” foot single family dwelling. The applicant has stated the height of the dwelling will not exceed the 35 feet height requirement found in Mankato Township Conservation zoning district ordinance. The house and garage are not located in the bluff area, and achieve the required Conservation zoning district setbacks. The proposed structure achieves both side setbacks of 50 feet and the bluff set back of 30 feet. The applicant will need to conform to the front setback of 65 feet.

A primary and secondary 40x80 Septic allotted space is shown on the concept plans. The septic locations are across the “existing trail” from the proposed house on the submitted plans. A recommended condition is included herein that requires the applicant to submit a septic design plan by a licensed septic contractor to Blue Earth County prior to the request of a construction permit. The applicant shall submit a “written report, prepared by an MPCA licensed individual sewage treatment systems designer, which shows the location of two sites suitable for on-site sewage treatments drainfields for each lot” prior to the final plat submission.

The plans submitted show a new well to be located near the south westerly corner of the proposed house. The applicant shall submit and provide Blue Earth County with well construction plans from a licensed well driller prior to the issuance of a construction permit.

The preliminary plat also shows the existing shed/house and the setbacks. The setbacks on the existing shouse, the structure for which the permit was issued November 5, 2021, do not achieve the required setbacks in the subject

zoning district.

A recommended condition is included herein that prior to construction beginning, but after BMP's are installed, an inspection occur. Protections shall be installed at the bluff, wetland and water body areas.

A completed Preliminary Title opinion letter and Final Title opinion letter, written by developer's attorney, shall be submitted in the final plat application.

A drainage report describing pre-development flows, expected post-development flows, and measures to be taken to ensure that post-development flows do not exceed pre-development flows shall be submitted in the final plat application. The report shall describe erosion control measures to be taken to prevent erosion and sedimentation both during and after development.

A previously placed monument was found and listed in the submitted preliminary plat. According to Blue Earth County Section 20-198 Monuments, "durable monuments (iron rods or T bars) shall be placed at all lot and block corners, at all angle points in any line". A recommended condition is included herein that requires the applicable monuments to be placed at the appropriate corners of the adjusted property lines per Blue Earth County's Land Division Code Section 20-198 Monuments.

It shall be the responsibility of the subdivider or developer to contact utility companies to determine the availability of services for the installation. The applicant shall submit written instruments from the appropriate utility companies showing all necessary arrangements with such companies for installation of such utilities have been made. The submitted utilities shall conform to the Blue Earth County Land Division Section 20-200 Utilities Ordinances and shall be placed and installed accordingly.

## **Findings**

Staff respectfully submits the following findings:

1. The proposed use will ensure that to the maximum extent possible, all lands will be developed with adequate protection provided for the health and safety of residents by requiring necessary services such as properly designed streets and adequate sewage and water service. The applicant will be submitting plans to Blue Earth County to approve proposed sewer and water services.
2. The applicant will be required to continually work with Blue Earth County and Minnesota Department of Natural Resources to ensure that effective protection is given to the natural resources of the community, especially groundwater and surface waters.
3. The proposed preliminary plat encourages a well-planned division of land through the establishment of adequate design standards. The applicant is requesting to relocate his current property line to align with the  $\frac{1}{4}$  section that runs north to south on the parcel.
4. The Preliminary Plat will not cause inferior developments that might adversely affect the local tax base.
5. The proposal does not place the cost of improvement against those not benefitting from their construction.
6. The Preliminary Plat's outcome will produce a single family dwelling that will contribute to the neighborhood which will be of lasting credit to the community.
7. The proposed use will not affect the township or county in facilitating adequate provisions for transportation and other public facilities.
8. The proposal does secure the rights of the public with respect to public lands and waters, and the dedication of the public way for transpiration purposes.
9. The approval of the preliminary plat will improve land records by the establishment of standards for land divisions, surveys, and plats.
10. The safeguard the interests of the public, the homeowner, the subdivider and local units of government will remain intact since the use will remain the same as the current only in a slightly different location.
11. The applicant will prevent, where possible, excessive governmental operating and maintenance costs.

## **Recommendation**



Staff recommends approval of the preliminary plat to adjust the property lines, creating a new larger parcel on the western side of the property with the following conditions:

1. An executed access easement shall be provided at the time of application for a permit.
2. The access easement shall be recorded in conjunction with the recording of the final plat.
3. The applicant shall provide a written verification from Blue Earth County that demonstrates that the existing wells on the site have been appropriately capped/abandoned and addressed in conformance with the applicable codes.
4. Septic design plans from a licensed septic contractor and well construction plans from a licensed well driller will need to be submitted prior to the approval of a construction permit. A septic permit shall be obtained from Blue Earth County for the installation prior to construction permit issuance.
5. The applicant shall comply with the flood plain standards and prior to any work taking place below the Ordinary High Water Level (OHWL) of the Le Sueur River will require a Public Waters Work Permit from the Department of Natural Resources (DNR) shall be in place, in accordance with the applicable DNR and Blue Earth County standards.
6. The applicant shall provide the staff with the OHWL and the proposed elevations for the structure.
7. All best management practices for the control of erosion and storage of stormwater shall be followed as set forth in the Minnesota Pollution Control Agencies "Protecting Water Quality in Urban Areas" manual.
8. The owner of the land shall align with the Mankato Township Conservation District Ordinance and Blue Earth County standards to protect, preserve, and conserve the environmentally sensitive areas and natural resources of the Township.
9. The applicant shall submit a "written report, prepared by an MPCA licensed individual sewage treatment systems designer, which shows the location of two sites suitable for on-site sewage treatments drainfields for each lot" prior to the final plat submission.
10. A completed Preliminary Title opinion letter and Final Title opinion letter, written by developer's attorney, shall be submitted in the final plat application.
11. A drainage report describing predevelopment flows, expected post-development flows, and measures to be taken to ensure that post-development flows do not exceed predevelopment flows shall be submitted in the final plat application.
12. The applicable monuments shall be placed in the appropriate corners that conform with Blue Earth County's Land Division Code.
13. The applicant shall submit written instruments from the appropriate utility companies showing all necessary arrangements with such companies for installation of such utilities have been made at the final plat review, and that utilities will not be allowed to impact environmentally sensitive areas.

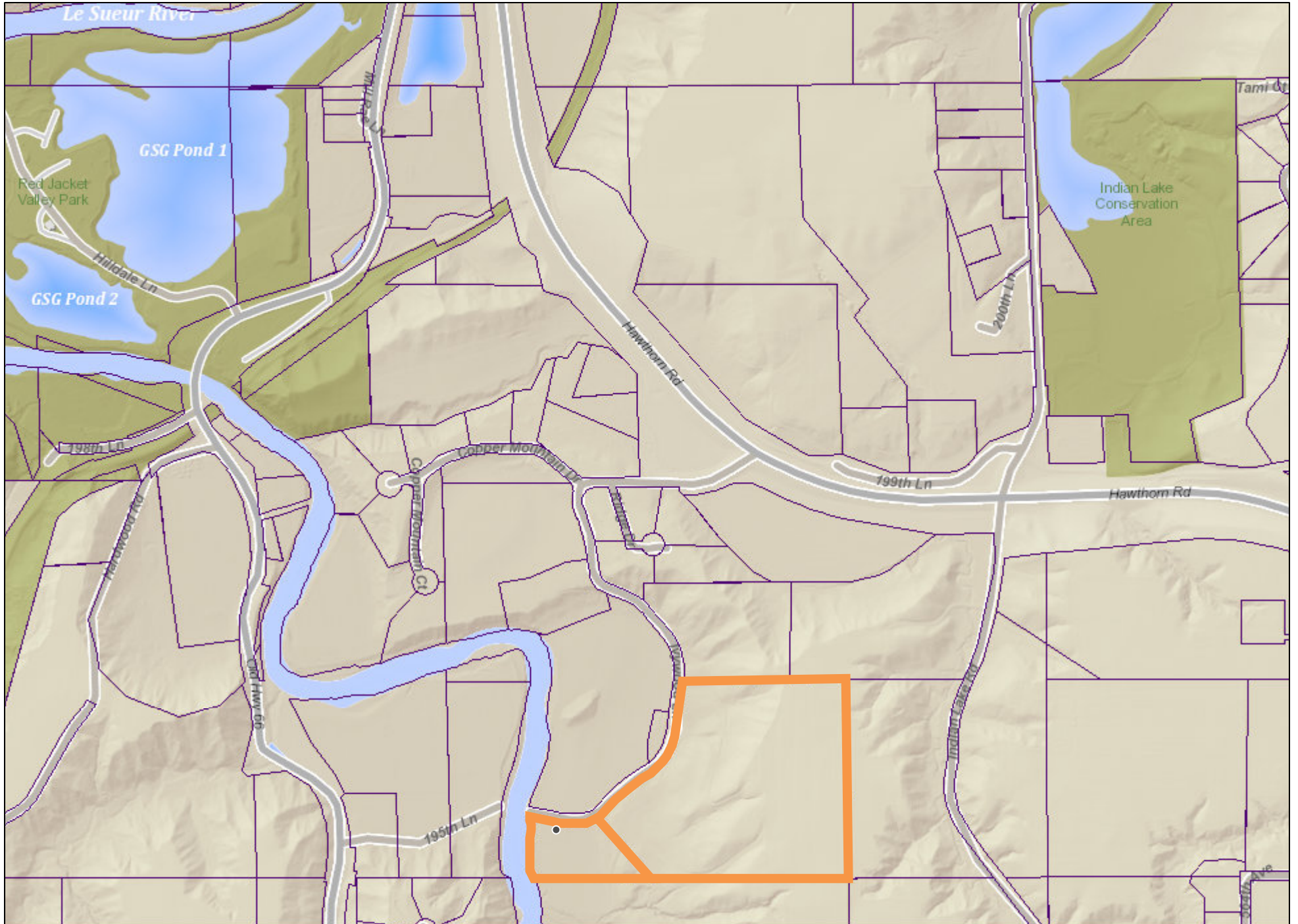
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### **Attachments**

General Location Map  
Aerial Map  
Preliminary Plat  
Access Easement Agreement  
Deed restriction  
Grading Plan  
WCA Determination  
NOD Wetland Delineation

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# General Location Map



Date: March 2024

Author:

This information is to be used for reference purposes only. The City of Mankato does not guarantee accuracy of the material contained herein and is not responsible for misuse or misinterpretation.





# Aerial Map



Date: March 2024

Author:

This information is to be used for reference purposes only. The City of Mankato does not guarantee accuracy of the material contained herein and is not responsible for misuse or misinterpretation.





ZARN ACRES  
PRELIMINARY PLAT

OWNER  
JIM & ELIZABETH ZARN  
19519 IVYWOOD LANE  
MANKATO, MN 56001

SURVEYOR  
Mike Eichers  
Bolton & Menk Inc.  
1960 Premier Drive  
Mankato, MN 56001  
1-(507)-625-4171

DESCRIPTION

Lot 11 and Lot 17, all in Auditor's Plat Number Fifteen of Section 35 Township 108N, Range 27W, on file and of record with the Blue Earth County Recorder, which lies easterly of the center line of Ivywood Lane and which lies westerly of the following described line:

Commencing at an iron pipe monument designating the South Quarter corner of Section 35, Township 108 North Range 27 West; thence North 89 degrees 44 minutes 20 seconds East, (assumed bearing), along the south line of said Lot 17, the same being the south line of the Southeast Quarter of said Section 35, a distance of 1300.44 feet to the point of beginning; thence North 01 degrees 24 minutes 16 seconds West, 1305.00 feet to a point on the north line of said Lot 17 and there terminating.

Said Parcel 2 contains 40 acres, more or less, subject to an easement for Ivywood Lane purposes over and across the westerly boundary. ALSO subject to any other easements of record.

Lot 16, Auditor's Plat Number Fifteen of Section 35 Township 108N, Range 27W, on file and of record with the Blue Earth County Recorder.

Containing 6.4 acres, more or less, subject to an easement for Ivywood Lane purposes over and across the northerly boundary. ALSO subject to any other easements of record.

SITE DATA

All Zoning and Setback information was obtained from Blue Earth County Zoning Code.

For detailed zoning information and specific interpretation of code requirements, contact Blue Earth County Environmental Services.

ZONING:

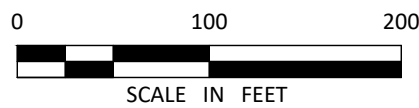
Subject property - Conservation 1

SETBACKS:

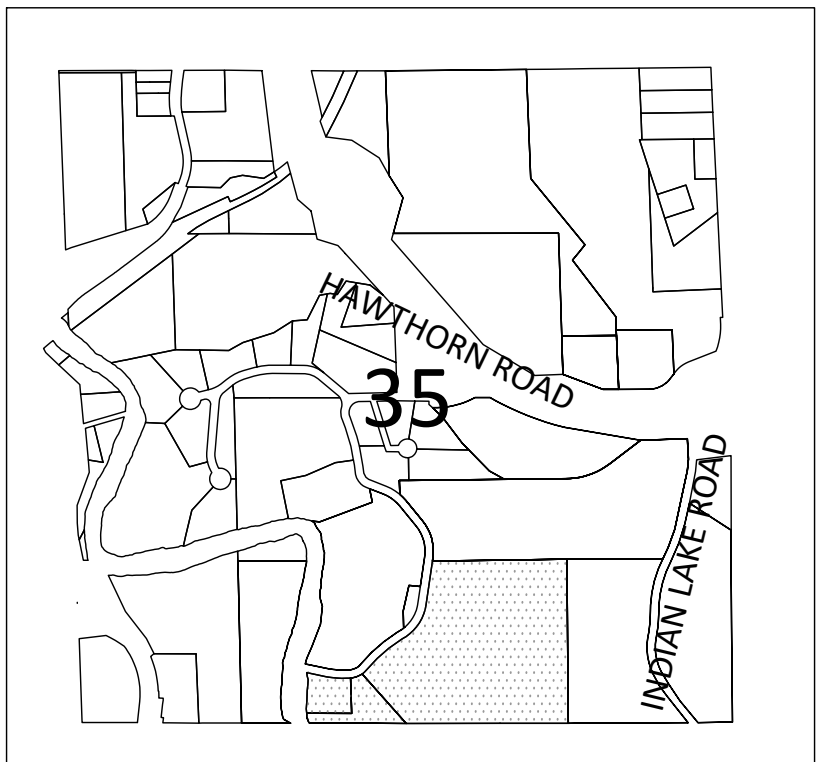
|               | Front                                                                                      | Side    | Rear    |
|---------------|--------------------------------------------------------------------------------------------|---------|---------|
| Main Building | 130 feet (from the centerline of all federal, state, county and county-state aid highways) | 50 feet | 50 feet |
|               | 65 feet (from the centerline of all other public rights-of-way and private roads)          |         |         |

LEGEND

- 3/4" IRON PIPE MONUMENT SET MARKED BY LIC. NO. 46564
- MONUMENT FOUND

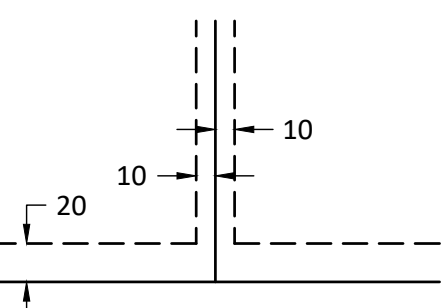


MANKATO TOWNSHIP  
BLUE EARTH COUNTY



VICINITY MAP  
SEC. 35-108-27  
NOT TO SCALE

DRAINAGE & UTILITY  
EASEMENTS ARE AS THUS:



BEING 10.0 FEET IN WIDTH, ADJOINING SIDE LOT LINES, AND 20.00 FEET IN WIDTH, ADJOINING STREET LINES AND REAR LOT LINES, UNLESS OTHERWISE INDICATED.

SURVEYOR'S CERTIFICATION

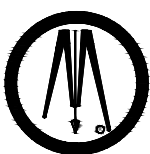
I hereby certify that this survey, plan, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

*Michael M. Eichers*  
Michael M. Eichers  
License Number 46564  
06/04/2024  
Date

REVISED ORIGINAL SURVEY: 9-12-2024 STREET DEDICATION

Horizontal Datum: Blue Earth County  
Coordinate System NAD83, 1996 Adjustment

PRELIMINARY PLAT  
BLUE EARTH COUNTY, MINNESOTA



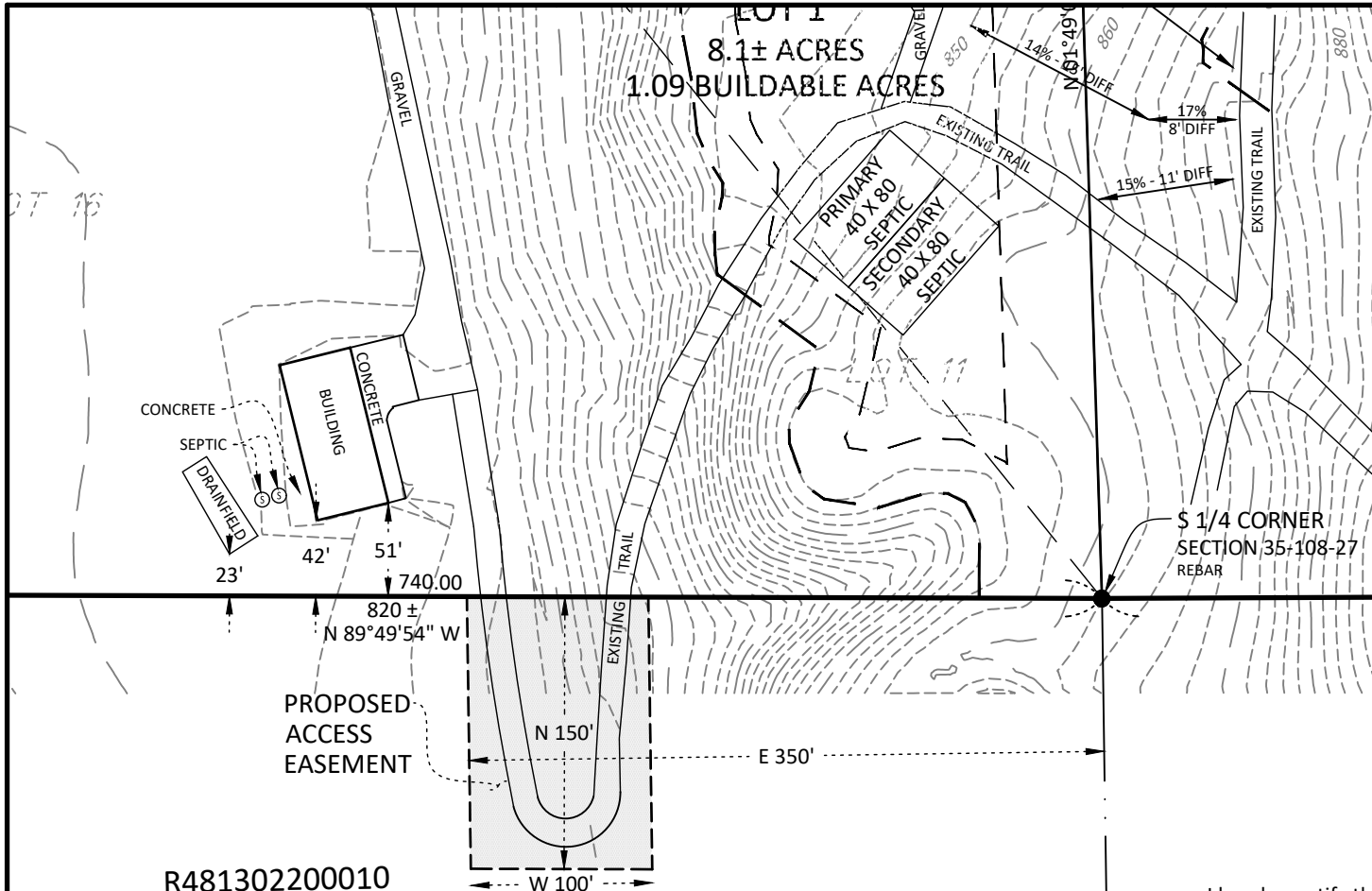
**BOLTON  
& MENK**

1960 PREMIER DRIVE  
MANKATO, MN 56001  
(507) 625-4171

LOT 11, 17 AND LOT 16, AUDITOR'S PLAT NUMBER FIFTEEN, SECTION 35, TOWNSHIP 108 NORTH, RANGE 27 WEST, BLUE EARTH COUNTY, MINNESOTA

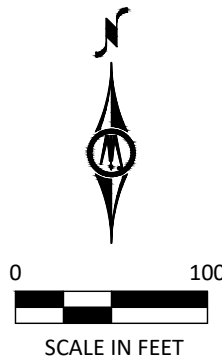
FOR: ZARN, JIM





**DESCRIPTION**

The North 150 of the West 100 feet of the East 350 feet of the Northeast Quarter of the Northwest Quarter of Section 2, Township 107 North, Range 27 West, Blue Earth County, Minnesota.



- 3/4" IRON PIPE MONUMENT SET MARKED BY LIC. NO. 46564
- MONUMENT FOUND

I hereby certify that this survey, plan, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

*Michael M. Eichers*

Michael M. Eichers  
License Number 46564

06/19/2024  
Date

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**EXHIBIT SKETCH**  
BLUE EARTH COUNTY, MINNESOTA



1960 PREMIER DRIVE  
MANKATO, MN 56001  
(507) 625-4171

THAT PART OF THE NE 1/4 OF THE NW 1/4 OF SECTION 2, TOWNSHIP 107 NORTH, RANGE 27 WEST, BLUE EARTH COUNTY, MINNESOTA

FOR: JIM ZARN

**DECLARATION OF COVENANTS  
(Deed Restriction)**

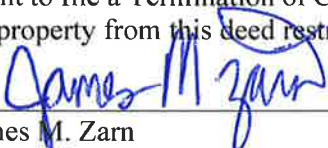
This Declaration is made in the County of Blue Earth, State of Minnesota, and shall be effective on this 22 day of July 2024.

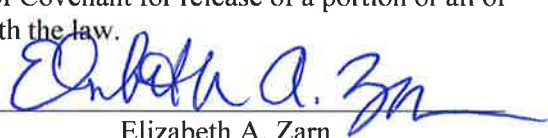
James M. Zarn and Elizabeth A. Zarn, husband and wife, do hereby declare that the real property described as follows is, and shall be held, transferred, sold and conveyed subject to the covenants and restrictions set forth herein.

See Exhibit "A" attached hereto and made a part hereof

1. Pursuant to the Land Division Ordinance of Mankato Township, the placement or construction of any structure that has plumbing fixtures and/or generates wastewater and/or a building or portion thereof designed for residential occupancy on this property is prohibited until such time as the subject property does meet the sewerability standards set forth in the Land Use Ordinance of Mankato Township, Minnesota Statutes, Minnesota Rules and other applicable law as amended.

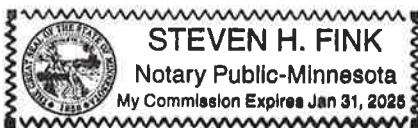
2. If the subject property does meet the sewerability standards set forth in the Land Use Ordinance of Mankato Township, Minnesota Statutes, Minnesota Rules and other applicable law, the landowner shall have the right to file a Termination of Covenant or Correction of Covenant for release of a portion or all of the subject property from this deed restriction in accordance with the law.

  
\_\_\_\_\_  
James M. Zarn

  
\_\_\_\_\_  
Elizabeth A. Zarn

State of Minnesota, County of BLUE EARTH

This instrument was acknowledged before me on July 22, 2024, by James M. Zarn and Elizabeth A. Zarn, husband and wife.



  
\_\_\_\_\_  
(signature of notarial officer)

THIS INSTRUMENT WAS DRAFTED BY:

Steven H. Fink (#0175328 )  
**FARRISH JOHNSON LAW OFFICE, CHTD.**  
1907 Excel Drive  
Mankato MN 56001  
Telephone: (507) 625-2525

## EXHIBIT "A"

### Parcel 1:

Lot 11 and Lot 17, all in Auditor's Plat Number Fifteen of Section 35 Township 108N, Range 27W, on file and of record with the Blue Earth County Recorder, which lies westerly of the center line of Ivywood Lane, **EXCEPT the following two parcels:**

**EXCEPTION NO. 1:** Commencing at a found iron pipe monument which point is 886.6 feet East and 552 feet South of the Northwest corner of the Northeast Quarter of the Southwest Quarter of Section 35, Township 108 North Range 27 West; thence South 79 degrees 00 minutes 00 seconds West, 534.00 feet to a found iron pipe monument; thence South 11 degrees 00 minutes 00 seconds East, 304.00 feet to the North Bank of the Lesueur River; thence South 87 degrees 55 minutes 00 seconds East, along said North Bank of the Lesueur River, 249.00 feet; thence North 71 degrees 00 minutes 00 seconds East, 449.00 feet to the point of beginning; thence South 71 degrees 00 minutes 00 seconds West, back along the previously described course, 449.00 feet; thence North 87 degrees 55 minutes 00 seconds West, 249.00 feet; thence North 11 degrees 00 minutes 00 seconds West, 304.00 feet; thence North 79 degrees 00 minutes 00 seconds East, 203.00 feet; thence North 67 degrees 30 minutes 00 seconds East, 260.00 feet; thence North 83 degrees 00 minutes 00 seconds East, 194.91 feet to a point on the westerly line of Lot No. 2, Block No. One, Van Guilders Subdivision, according to the plat thereof on file and of record with the Blue Earth County Recorder; thence South 05 degrees 53 minutes 57 seconds East, along said westerly line, 120.91 feet; thence South 28 degrees 53 minutes 57 seconds East, along said westerly line, 65.00 feet; thence South 57 degrees 53 minutes 57 seconds East, along said westerly line, 35.23 feet to the point of intersection with a line which bears North 11 degrees 00 minutes 00 seconds West from the point of beginning; thence South 11 degrees 00 minutes 00 seconds East, 129.76 feet to the point of beginning. Containing 5.42 acres.

**EXCEPTION NO. 2:** Commencing at a found iron pipe monument designating the South Quarter Corner of Section 35 Township 108 North Range 27 West; thence North 01 degrees 24 minutes 45 seconds West (assumed bearing) along the North - South centerline of Section 35 a distance of 716.50 feet to a point on the centerline of the Township Road, said point being the point of beginning; thence North 56 degrees 50 minutes 18 seconds East, along said Township Road Centerline, 27.80 feet; thence North 48 degrees 28 minutes 12 seconds East, along said Township Road Centerline, 117.96 feet; thence North 27 degrees 31 minutes 30 seconds East, along said Township Road Centerline, 114.91 feet; thence North 11 degrees 50 minutes 15 seconds East, along said Township Road Centerline, 61.00 feet; thence North 09 degrees 04 minutes 52 seconds East, along said Township Road Centerline, 119.20 feet; thence North 81 degrees 21 minutes 56 seconds West, 138.00 feet; thence South 13 degrees 00 minutes 04 seconds West, 278.24 feet to a point on the North - South Centerline of Section 35; thence South 01 degrees 24 minutes 45 seconds East, along said North - South Centerline, 122.39 feet to the point of beginning. Containing 1.08 acres.

Said Parcel 1 contains 38 acres, more or less, subject to an easement for Ivywood Lane purposes over and across the easterly boundary. ALSO subject to any other easements of record.

AND ALSO:

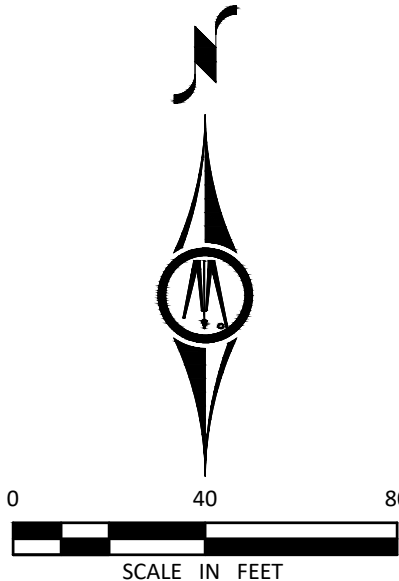
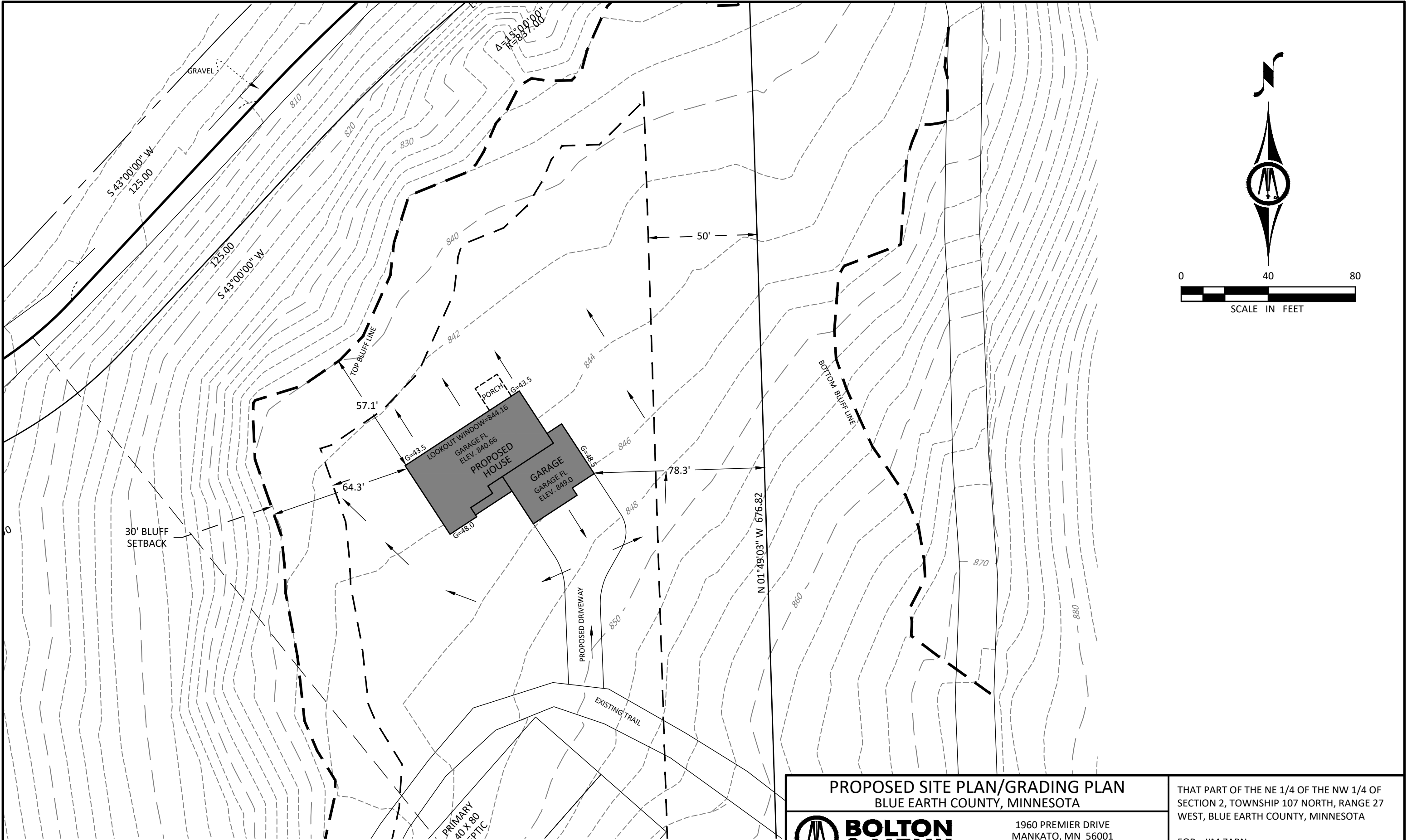
Parcel 2:

Lot 11 and Lot 17, all in Auditor's Plat Number Fifteen of Section 35 Township 108N, Range 27W, on file and of record with the Blue Earth County Recorder, which lies easterly of the center line of Ivywood Lane and which lies westerly of the following described line:

Commencing at an iron pipe monument designating the South Quarter corner of Section 35, Township 108 North Range 27 West; thence North 89 degrees 44 minutes 20 seconds East, (assumed bearing), along the south line of said Lot 17, the same being the south line of the Southeast Quarter of said Section 35, a distance of 1300.44 feet to the point of beginning; thence North 01 degrees 24 minutes 16 seconds West, 1305.00 feet to a point on the north line of said Lot 17 and there terminating.

Said Parcel 2 contains 40 acres, more or less, subject to an easement for Ivywood Lane purposes over and across the westerly boundary. ALSO subject to any other easements of record.





|                                                                                                                    |                                                           |                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| <b>PROPOSED SITE PLAN/GRADING PLAN</b><br>BLUE EARTH COUNTY, MINNESOTA                                             |                                                           | THAT PART OF THE NE 1/4 OF THE NW 1/4 OF<br>SECTION 2, TOWNSHIP 107 NORTH, RANGE 27<br>WEST, BLUE EARTH COUNTY, MINNESOTA |
|  <b>BOLTON<br/>&amp; MENK</b> | 1960 PREMIER DRIVE<br>MANKATO, MN 56001<br>(507) 625-4171 |                                                                                                                           |
|                                                                                                                    |                                                           | FOR: JIM ZARN                                                                                                             |



## Minnesota Wetland Conservation Act Determination Notice Form

This form can be used to provide notice on WCA-related *determinations*. DO NOT use this form for notices on WCA *decisions*. WCA decisions are replacement plans, wetland boundary/type, wetland banks, exemption, no-loss and sequencing. Some WCA determinations can be incorporated into a WCA decision, while others can or must be made separate from the associated decision.

|                                                 |                                                               |
|-------------------------------------------------|---------------------------------------------------------------|
| <b>Local Government Unit:</b> Blue Earth County | <b>County:</b> Blue Earth                                     |
| <b>Applicant Name:</b> Jim Zarn                 | <b>Applicant Representative:</b> Bolton & Menk-Addeline Theis |
| <b>Project Name:</b> Jim Zarn                   | <b>LGU Project No. (if any):</b>                              |
| <b>Date Request Received by LGU:</b> 5/17/24    |                                                               |
| <b>Date this Notice was Sent:</b> 8/14/24       |                                                               |

**Notice Type - check one**

|                                                                                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Notice of Determination Request. Determination has <i>not</i> been made.<br><input checked="" type="checkbox"/> Notice of Determination. Determination has been made. |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**WCA Determination Type - check all that apply**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Construction Certification <input type="checkbox"/> Incomplete Application <input type="checkbox"/> Local Govt. Road Repl. Program Qualification<br><input type="checkbox"/> Successful Replacement/End of Monitoring <input type="checkbox"/> Credit Deposit <input type="checkbox"/> ENRV/Preservation Eligibility<br><input type="checkbox"/> Financial Assurance Release <input type="checkbox"/> Partial Drainage Impacts <input type="checkbox"/> Sequencing Flexibility<br><input type="checkbox"/> Temp. Impacts Extension <input checked="" type="checkbox"/> Certificate of Successful Restoration <input type="checkbox"/> Other (specify): |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Note:** All listed determination types are either made by the TEP or require TEP concurrence except for Construction Certification, Incomplete Application, Certificate of Successful Restoration (issued by SWCD) and Financial Assurance Releases. Use "other" for determinations that are not listed.

**Technical Evaluation Panel**

|                                                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| TEP Has Concurred with Determination: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No; If yes, attach findings or other documentation |
| TEP Concurrence Needed: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No; If yes, specify deadline date for concurrence:               |

**Determination Materials and Findings**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Attachment(s) (specify): Map of fill & pictures of completed restoration.<br><br>Notes: Jim removed the fill to the best of his ability as I oversaw the work when it was taking place. Removal of fill was challenging due to the unevenness of fill dispersed throughout the basin. Due to time and weather constraints, I worked with the LGU and applicant to get this restored as soon as possible. It was then seeded down to a native vegetation mix after the fill was removed. |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Notice Distribution (Include name)**

|                                                                                                |                                                                                    |
|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> SWCD TEP Member: Jake Fritz                                | <input checked="" type="checkbox"/> BWSR TEP Member: Alyssa Core                   |
| <input checked="" type="checkbox"/> LGU TEP Member (if different than LGU contact): Dane Lynch |                                                                                    |
| <input checked="" type="checkbox"/> DNR Representative: Erynn Jenzen                           |                                                                                    |
| <input type="checkbox"/> Watershed District or Watershed Mgmt. Org.:                           |                                                                                    |
| <input checked="" type="checkbox"/> Applicant: Jim Zarn                                        | <input checked="" type="checkbox"/> Agent/Consultant: Bolton & Menk-Addeline Theis |
| <input checked="" type="checkbox"/> Other: Molly Westman-City of Mankato                       | <input type="checkbox"/> Army Corps:                                               |

|                                                                                                         |                        |
|---------------------------------------------------------------------------------------------------------|------------------------|
| <b>Signature</b><br> | <b>Date</b><br>8/14/24 |
|---------------------------------------------------------------------------------------------------------|------------------------|



## Minnesota Wetland Conservation Act Notice of Decision

|                                                  |                                                                           |
|--------------------------------------------------|---------------------------------------------------------------------------|
| <b>Local Government Unit:</b> Blue Earth County  | <b>County:</b> Blue Earth                                                 |
| <b>Applicant Name:</b> James Zarn                | <b>Applicant Representative:</b> Addeline Theis Paradis – Bolton and Menk |
| <b>Project Name:</b> Zarn Wetland Delineation    | <b>LGU Project No. (if any):</b> PL2024057                                |
| <b>Date Application Received by LGU:</b> 5/14/24 |                                                                           |
| <b>Date of LGU Decision:</b> 7/25/2024           |                                                                           |
| <b>Date this Notice was Sent:</b> 7/30/24        |                                                                           |

**WCA Decision Type - check all that apply**

|                                                                                                                                                                                                                               |                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Wetland Boundary/Type <input type="checkbox"/> Sequencing <input type="checkbox"/> Replacement Plan <input type="checkbox"/> Bank Plan (not credit purchase)                              |                                                                                                                                                                                                                                  |
| <input type="checkbox"/> No-Loss (8420.0415) <input type="checkbox"/> Exemption (8420.0420)                                                                                                                                   |                                                                                                                                                                                                                                  |
| Part: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F <input type="checkbox"/> G <input type="checkbox"/> H | Subpart: <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 |

**Replacement Plan Impacts (replacement plan decisions only)**

|                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------|
| <b>Total WCA Wetland Impact Area:</b>                                                                                         |
| <b>Wetland Replacement Type:</b> <input type="checkbox"/> Project Specific Credits:<br><input type="checkbox"/> Bank Credits: |
| <b>Bank Account Number(s):</b>                                                                                                |

**Technical Evaluation Panel Findings and Recommendations (attach if any)**

|                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Approve <input type="checkbox"/> Approve w/Conditions <input type="checkbox"/> Deny <input type="checkbox"/> No TEP Recommendation |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**LGU Decision**

|                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Approved with Conditions (specify below) <sup>1</sup> <input type="checkbox"/> Approved <sup>1</sup> <input type="checkbox"/> Denied<br>List Conditions: Wetland Violation on the site must be addressed with Blue Earth County and the Blue Earth County Soil and Water Conservation District by 12/31/2024. |
| <b>Decision-Maker for this Application:</b> <input checked="" type="checkbox"/> Staff <input type="checkbox"/> Governing Board/Council <input type="checkbox"/> Other:                                                                                                                                                                            |
| <b>Decision is valid for:</b> <input checked="" type="checkbox"/> 5 years (default) <input type="checkbox"/> Other (specify):                                                                                                                                                                                                                     |

<sup>1</sup> 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 decision<sup>1</sup>.**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Attachment(s) (specify):<br><input checked="" type="checkbox"/> Summary: The Blue Earth County Technical Evaluation Panel has been reviewing the submitted application since the May 15 <sup>th</sup> TEP meeting. On May 15 <sup>th</sup> the TEP met at the site to review the wetland boundary identified in the submitted wetland delineation report. The TEP reviewed the boundary in the agricultural field and found the boundary to be larger than what the TEP members determined it to be based off of the 3 parameters of a wetland. Addie collected the new wetland boundary. The TEP then went to evaluate 2 areas that had water seeping out of the hillside, these areas appeared to meet the standards to be wetland. The TEP performed soil borings in the southern area of interest and the soils had a mucky top layer before transitioning to a more rock substrate. The area is devoid of trees due to the ground being too saturated year-round to support trees. The TEP wanted this area to be further evaluated for wetland status. The TEP then moved to the northern hillside seep and began to evaluate it for wetland characteristics. The TEP observed |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



similar characteristics to the southern area and wanted the area to be further evaluated. This area appears to have been impacted by a recent project to expand an existing road up a bluff face. The existing portion of the road was there before the Wetland Conservation Act was passed in 1991 but the new work appears to be an impact to a wetland basin. Based on conditions observed at the site Addie was going to submit an updated report evaluating the two hill side seeps.

On May 17<sup>th</sup> Addie submitted an updated report identifying the side hill seeps as type 2 wetland and a revised boundary of the wetland in the agricultural field. This updated report was sent out to the TEP members. The revised report shows an area of unimpacted wetland and impacted wetland for the north side hill seep. The TEP needed to verify the potential wetland impacts and would discuss at the next TEP meeting. The next TEP meeting was June 21. For the June 21<sup>st</sup> TEP meeting the area was too wet to safely and accurately evaluate the area for wetland characteristics and the site visit was moved to the next TEP meeting once conditions had dried out. During the July 17<sup>th</sup> TEP meeting, the TEP met Addie at the site and verified the area of fill in the wetland and the wetland boundaries of the type 2 side hill seeps. The TEP is in concurrence with the boundaries of the May 17<sup>th</sup> wetland delineation report. The TEP discussed the wetland impacts and determined with soil borings where the existing road ended, and the new work started. The TEP discussed that the impacts must be addressed and that a notice of violation will be sent out to the property owner for unauthorized wetland impacts.

For more information regarding this application go to:

<https://cityview.blueearthcountymn.gov/cityviewportal/Planning/Status?planningId=15073>

<sup>1</sup> Findings must consider any TEP recommendations.

#### Attached Project Documents

☐ Site Location Map   ☒ Project Plan(s)/Descriptions/Reports (specify): Jim Zarn Wetland Delineation

#### 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](mailto:travis.germundson@state.mn.us)

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

☒ Yes<sup>1</sup>      ☐ No

<sup>1</sup>If 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:*



|                                                                                          |                                                                                              |
|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> SWCD TEP Member: Jake Fritz                          | <input checked="" type="checkbox"/> BWSR TEP Member: Alyssa Core                             |
| <input type="checkbox"/> LGU TEP Member (if different than LGU contact):                 |                                                                                              |
| <input checked="" type="checkbox"/> DNR Representative: Erynn Jenzen                     |                                                                                              |
| <input type="checkbox"/> Watershed District or Watershed Mgmt. Org.:                     |                                                                                              |
| <input checked="" type="checkbox"/> Applicant (notice only): Jim Zarn<br>Bolton and Menk | <input checked="" type="checkbox"/> Agent/Consultant (notice only): Addeline Theis Paradis – |

*Optional or As Applicable:*

|                                                                                                          |                                                                            |
|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Corps of Engineers: Corps of Engineers General Notification          |                                                                            |
| <input type="checkbox"/> BWSR Wetland Mitigation Coordinator (required for bank plan applications only): |                                                                            |
| <input type="checkbox"/> Members of the Public (notice only):                                            | <input checked="" type="checkbox"/> Other: Molly Westman – City of Mankato |

|                                                                                                        |                         |
|--------------------------------------------------------------------------------------------------------|-------------------------|
| <b>Signature:</b><br> | <b>Date:</b><br>7/30/24 |
|--------------------------------------------------------------------------------------------------------|-------------------------|

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.





# Zarn Property

## Joint Application

Jim Zarn  
May 16, 2024

**Submitted by:**  
Bolton & Menk, Inc.  
1960 Premier Drive  
Mankato, MN 56001  
P: (507) 625-4171  
F: (507) 625-4177



**BOLTON  
& MENK**

Real People. Real Solutions.



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## Appendix

WETLAND DELINEATION REPORT



## 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.

|                                  |                    |
|----------------------------------|--------------------|
| <b>Applicant/Landowner Name:</b> | Jim Zarn           |
| <b>Mailing Address:</b>          | N/A                |
| <b>Phone:</b>                    | N/A                |
| <b>E-mail Address:</b>           | echozarn@gmail.com |

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

**Mailing Address:**

**Phone:**

**E-mail Address:**

|                         |                                                                    |
|-------------------------|--------------------------------------------------------------------|
| <b>Agent Name:</b>      | Bolton & Menk, Inc.   Addeline Theis   Natural Resource Specialist |
| <b>Mailing Address:</b> | 1960 Premier Drive   Mankato, MN   56001                           |
| <b>Phone:</b>           | 507-625-4171 ext 3745                                              |
| <b>E-mail Address:</b>  | Addeline.theis@bolton-menk.com                                     |

## PART TWO: Site Location Information

**County:** Blue Earth

**City/Township:** Mankato TWP

**Parcel ID and/or Address:** R430835452008 (Refer to Exhibit A: Location Map)

**Legal Description (Section, Township, Range):** 35, 108N, 27W

**Lat/Long (decimal degrees):**

**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):** 40.0 acres

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](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.



## PART FOUR: Aquatic Resource Impact<sup>1</sup> 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) <sup>1</sup> | Size of Impact <sup>2</sup> | Overall Size of Aquatic Resource <sup>3</sup> | Existing Plant Community Type(s) in Impact Area <sup>4</sup> | County, Major Watershed #, and Bank Service Area # of Impact Area <sup>5</sup> |
|-------------------------------------------------|-------------------------------------------------------|--------------------------------------------------------------|----------------------------------------------------------------|-----------------------------|-----------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------------------------|
|                                                 |                                                       |                                                              |                                                                |                             |                                               |                                                              |                                                                                |
|                                                 |                                                       |                                                              |                                                                |                             |                                               |                                                              |                                                                                |
|                                                 |                                                       |                                                              |                                                                |                             |                                               |                                                              |                                                                                |
|                                                 |                                                       |                                                              |                                                                |                             |                                               |                                                              |                                                                                |
|                                                 |                                                       |                                                              |                                                                |                             |                                               |                                                              |                                                                                |

<sup>1</sup>If 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)".

<sup>2</sup>Impacts 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).

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

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

<sup>5</sup>Refer 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:

N/A

## 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: James Zarn Digitally signed by James Zarn  
Date: 2024.05.01 11:52:58 -05'00'

Date:

I hereby authorize **Bolton & Menk, Inc** 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.

<sup>1</sup> 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>

# Appendix





# Zarn Property

## Wetland Delineation Report

Jim Zarn  
May 16, 2024

**Submitted by:**  
Bolton & Menk, Inc.  
1960 Premier Drive  
Mankato, MN 56001  
P: (507) 625-4171  
F: (507) 625-4177



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## Exhibits

|                                           |   |
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| ANTECEDENT PRECIPITATION CONDITIONS ..... | 2 |

## Appendix

- Exhibit A: Site Location Map
- Exhibit B: 2-Foot LiDAR Contours Map
- Exhibit C: National Wetlands Inventory Map
- Exhibit D: Public Waters Inventory Map
- Exhibit E: Blue Earth County Soil Survey Map
- Exhibit F: Delineated Wetlands Map
- Exhibit G: Delineation Data Sheets



## I. INTRODUCTION

Jim Zarn, a private land owner, is proposing parceling and site improvements to their property located off Ivywood Lane found in Mankato Township, Blue Earth County, MN. This report details the findings of the field delineation completed on April 30, 2024. A TEP (Technical Evaluation Panel) met out on site on May 15, 2024. This updated report reflects the approved wetland boundaries.

The project is found in Section 35, in Township 108 North of Range 27 West.

## II. WETLAND DELINEATION METHODOLOGY

The wetland boundaries were delineated and staked in the field in April 2024, using methods described in the “Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)”. Wetlands identified were classified using “Classification of Wetlands and Deepwater Habitats of the United States (Cowardin, et al., 1979)”, “Wetlands of the United States (United States Fish and Wildlife Service Circular No. 39, 1971 edition)” and “Wetland Plants and Plant Communities of Minnesota and Wisconsin” (Eggers and Reed Third Edition). Subsequently, the three mandatory technical criteria for wetland determinations are as follows:

**Hydrophytic Vegetation.** A hydrophytic plant community is present when the dominant plant species present can endure prolonged inundation and/or soil saturation during the growing season. A plant’s Wetland Indicator Status is determined using the 2016 National Wetland Plant List for Minnesota, published by the Army Corp of Engineers.

**Hydric Soils.** A hydric soil is defined as a soil that is formed under conditions of saturation, flooding or ponding long enough during the growing season (the portion of the year when there is above ground growth and development of vascular plants and/or soil temperature at 12 inches below the soil surface is above 41 degrees Fahrenheit or higher) to develop anaerobic conditions in the upper part.

**Wetland Hydrology.** An area has wetland hydrology if it experiences 14 or more consecutive days of flooding, ponding or a water table within 12 inches of the surface during the growing season at a minimum frequency of five out of ten years. This is determined by using both primary and secondary Wetland Hydrology indicators.

## III. BACKGROUND INFORMATION

Prior to conducting a field investigation of this site, Exhibits A through E were used to complete a preliminary evaluation. The data gathered during the preliminary investigation was used as described below:

*Exhibit A* is a location map of the study area.

*Exhibits B* is an aerial photo with topographic information overlaid on it. This provides information regarding topography of the site, helping to identify areas that may have wetland characteristics.

*Exhibit C* is the National Wetlands Inventory of the site and surrounding properties. This information is used to complete a preliminary investigation of the wetlands that may or may not exist on the site.

*Exhibit D* is used to identify waters that are regulated by the DNR. This exhibit shows where there are DNR public waters relative to the site.

*Exhibit E* is the Blue Earth County Soil Survey and is used to identify hydric soils that may lie within the study area.

Delineation Exhibits F and G were prepared from the information gathered at the site.

*Exhibit F* is the site map showing the delineated aquatic resources.

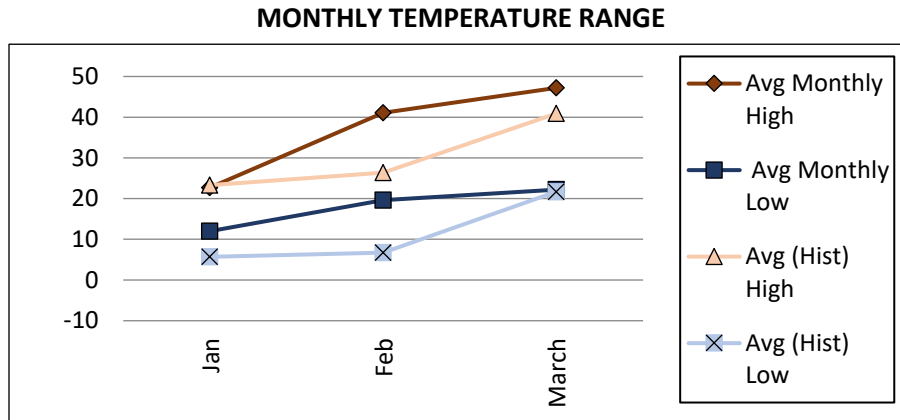
*Exhibit G* includes the wetland delineation data sheets.

*Exhibit H* is the off-site assessment datasheet used to determine farmed wetlands.

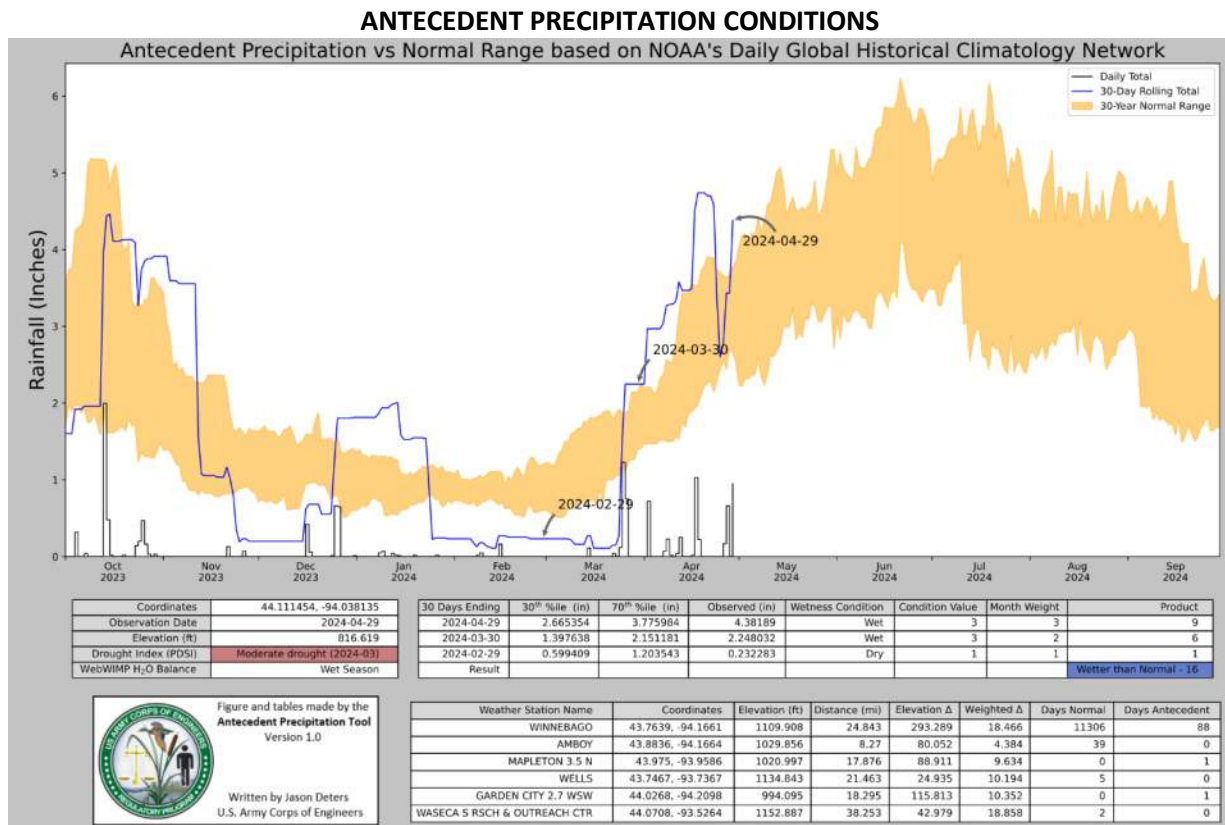
*Exhibit I* is the historical aerial imagery.

## IV. CLIMATE DATA

The monthly temperature table below shows the average high and low temperatures for the three months prior to the field delineation, along with the historical averages for these months. The monthly low and high temperatures have been above normal ranges for this period.



Antecedent precipitation was evaluated using a combination of the NRCS Method and the Rolling Totals Method. The analysis found that precipitation was above normal over the past two months.



This climatic data was gathered using the Climatology Working Group Website, <http://climate.umn.edu/> and the National Weather Service Forecast Office, <http://w2.weather.gov/climate/>. The information for the investigation was retrieved from the WETS Station in St. Peter (ID: 217405)



## V. FINDINGS

On April 28<sup>th</sup>, 2024 a field investigation was performed to evaluate and verify the existence and boundary of any aquatic resources located within the study area. On May 15, 2024, a TEP meeting met onsite to review limits. Three wetlands were found to exist within the study area. The following describes the aquatic resources identified, together with a brief description of wetland types and observations made during the field investigation.

### **Wetland 1 (W1-A & W1-B):**

**NWI Cowardin:** None

**PWI (Hydro) ID:** None

**Field Observation Circular 39:** Type 1

**Field Observation Eggers and Reed:**

Seasonally Flooded Basin

**Soil Mapping Unit(s):** 106B: Lester Loam & 239: Le Sueur Loam

Wetland 1 consists of a small depression in an agricultural landscape. Hydrology sits here before draining into a drainage feature down the ravine and into the Le Sueur River. This wetland is a seasonally flooded basin.



*Photo 1: View of the wetland 1 looking south.*

The field investigation found that the site has met all three wetland indicators and this wetland complex should be considered a palustrine emergent persistent temporarily flooded (PEM1A) wetland. Two sample points were taken to determine the wetland boundary. The wetland boundary was largely drawn based on the changes in topography and slope in the depression.

At the W1-A wetland pit location and the W1-B upland pit location both had disturbed vegetation. Historically this area has been in row crop for the last two decades. At time of site visit, no vegetation was planted yet but small volunteers were growing. Only the wetland pit location met problematic hydrophytic vegetation due to the spraying and planted crops disturbing normal vegetation to grow. The W1-A wetland pit location met the hydric soil indicator F6-Redox Dark Surface. Soils in the W1-B upland pit location did not meet any of the hydric soil indicators. The W1-A wetland pit location met primary hydrology indicator of A3-Saturation, but due to the increased rainfall before site visit, two other secondary hydrology indicators were met, D2-Geomorphic Position & B10-Drainage Patterns. The W1-B upland pit location did not meet any of the hydrology indicators.

From these observations, it was determined that this depression meets the three parameters measured for a wetland system.





***Photo 2: Looking into potential wetland 1, looking east.***



***Photo 3: Looking into potential wetland 3, looking east.***



***Photo 4: Looking into offsite NWI historic wetland, looking south.***



***Photo 5: Looking into ravine that wetland 1 drains into. Facing west.***



***Photo 6: Looking into flat upland forest area, facing south.***



***Photo 7: Looking to upland forest area slight sloped, facing north.***





**Photo 8: Looking into open canopy section of upland forest, facing west.**



**Photo 9: Existing road up bluff, facing east.**



**Photo 10: Rubus dominated understory in upland forest area, facing north.**



**Photo 11: Cedar trees dominating upland forest area, facing south.**



**Photo 12: New road up bluff.**



**Photo 13: Very steep slope of upland forest area, facing east.**



**Wetland 2 (W2-A & W2-B):**

**NWI Cowardin:** None

**PWI (Hydro) ID:** None

**Field Observation Circular 39:** Type 2

**Field Observation Eggers and Reed:**

Hillside seep

**Soil Mapping Unit(s):** 106E-Lester loam  
(Slope 10-22%)

Wetland 2 is a small depression found within a concave slope of the bluff. Hydrology is fed from ground water coming out at the base of the bluff through a series of springs.

The field investigation found that the site has met all three wetland indicators and this wetland complex should be considered a palustrine emergent persistent temporarily flooded (PEM1C) wetland. Two sample points were taken to determine the wetland boundary. The wetland boundary was largely drawn based on the changes in topography and slope in the depression.

At the W2-A wetland pit location, jewelweed dominated the herb stratum. W2-A met the indicator for hydrophytic vegetation. At the W2-B upland pit location, vegetation was dominated by Maple and Boxelder in the tree stratum, buckthorn and black raspberry in the shrub stratum, and Virginia waterleaf and white bear sedge dominate the herb stratum. W2-B did not meet indicator for hydrophytic vegetation. The W2-A wetland pit location met the hydric soil indicator other for problematic hydric soil due to the restriction layer of bedrock found 6 inches into the soil profile. W2-B upland pit location did not meet any indicator for hydric soil. W1-A wetland pit location met primary hydrology with surface water present. W1-B upland pit location did not meet any hydrology indicator.

From these observations, it was determined that this depression meets the three parameters measured for a wetland system.



***Photo 14: Looking into wetland 2, hillside seep.***



**Wetland 3 (W3-A & W3-B):**

**NWI Cowardin:** None

**PWI (Hydro) ID:** None

**Field Observation Circular 39:** Type 2

**Field Observation Eggers and Reed:**

Hillside seep

**Soil Mapping Unit(s):** 106E-Lester loam  
(Slope 10-22%)

Wetland 2 is a small depression found within a concave slope of the bluff. Hydrology is fed from ground water coming out at the base of the bluff through a series of springs. Fill has been placed within the wetland, hindering the accuracy of wetland limits.

The field investigation found that the site has met all three wetland indicators and this wetland complex should be considered a palustrine emergent persistent temporarily flooded (PEM1C) wetland. Two sample points were taken to determine the wetland boundary. The wetland boundary was largely drawn based on the changes in topography and slope in the depression.

At the W3-A wetland pit location, red berried elder dominated the shrub layer, jewelweed dominated the herb stratum. W3-A met the indicator for hydrophytic vegetation. At the W3-B upland pit location, vegetation was dominated by Green Ash & Boxelder in the tree stratum, black raspberry in the shrub stratum, and wood nettle and hairy buttercup dominate the herb stratum. W3-B did not meet indicator for hydrophytic vegetation. The W3-A wetland pit location met the hydric soil indicator A10-2cm Muck. W2-B upland pit location did not meet any indicator for hydric soil. W1-A wetland pit location met primary hydrology with saturation present at 3inches. W1-B upland pit location did not meet any hydrology indicator.

From these observations, it was determined that this depression meets the three parameters measured for a wetland system.



***Photo 15: Looking into wetland 3, hillside seep.***



***Photo 16: Looking into wetland 3, hillside seep.***

## VI. CONCLUSION

The delineation was performed on April 30, 2024. A TEP evaluated the site on May 15, 2024. The boundaries of the wetlands were staked in the field with three foot "Wetland Delineation" pin flags. The location of the pin flags were surveyed by Bolton & Menk, Inc. using a Juniper Geode Data Collector and tied to the Blue Earth County system. The delineated limits are believed to be the upper limits of where all three of the required wetland criteria were present.

Bolton & Menk, Inc., was asked to determine the boundaries of those jurisdictional wetlands that exist upon this property as defined by the Wetland Conservation Act.

Based upon all available information, the existing conditions that currently prevail, and the on-site investigation, evidence supports the presence of one wetland complex within the boundaries of the study area.

### WETLAND SUMMARY

| Id #          | Wetland Type <sup>^</sup>         | Size*             |
|---------------|-----------------------------------|-------------------|
| W1            | Type 1 (Seasonally Flooded Basin) | 260 sf            |
| W2            | Type 2 (Hillside Seep)            | 1864.1 sf         |
| W3            | Type 2 (Hillside Seep)            | 3382.5 sf         |
| <b>Total:</b> |                                   | <b>5,506.6 sf</b> |

*\*size measured within study area.*

*^wetland type within study area*

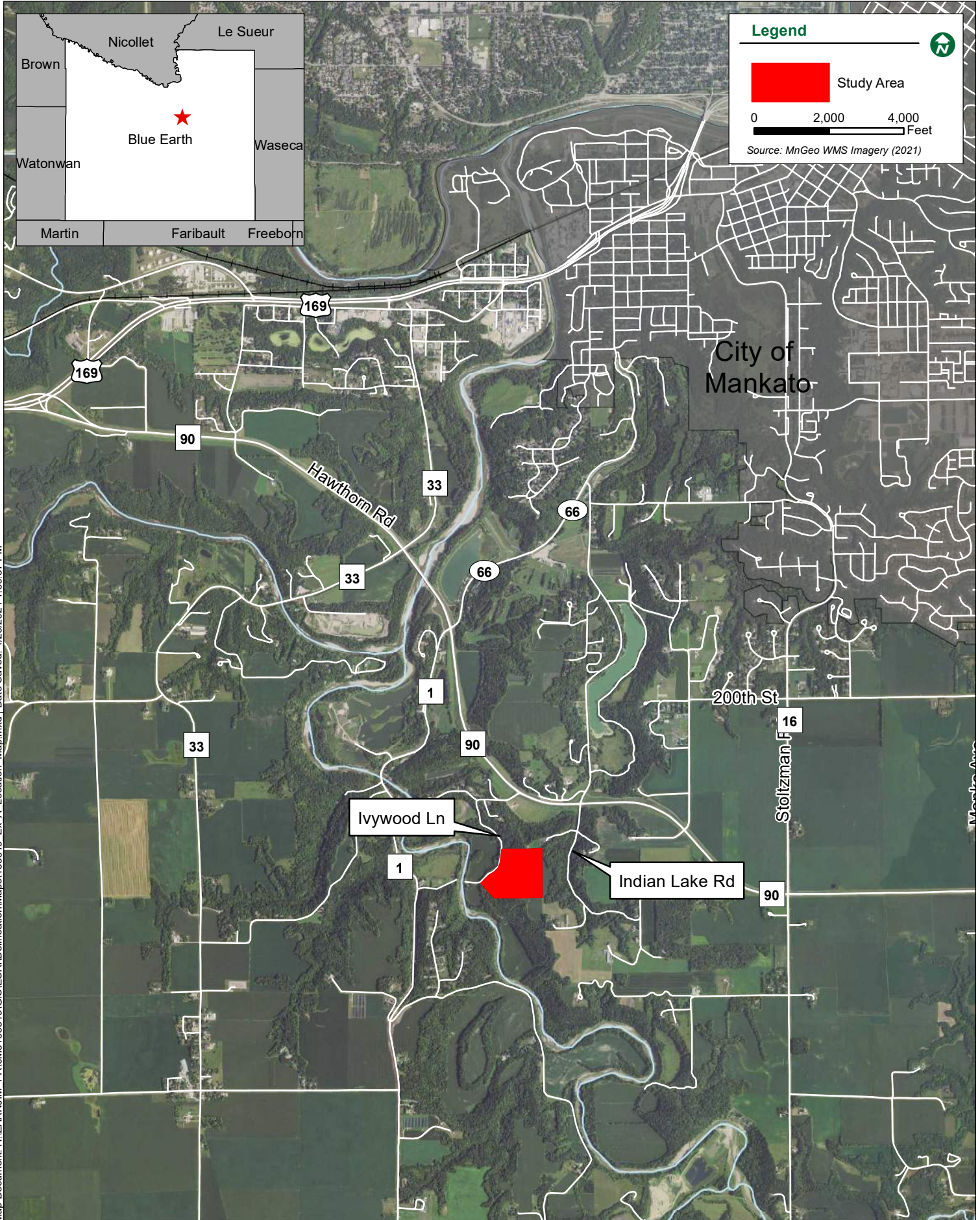
Sincerely,  
BOLTON & MENK, INC.



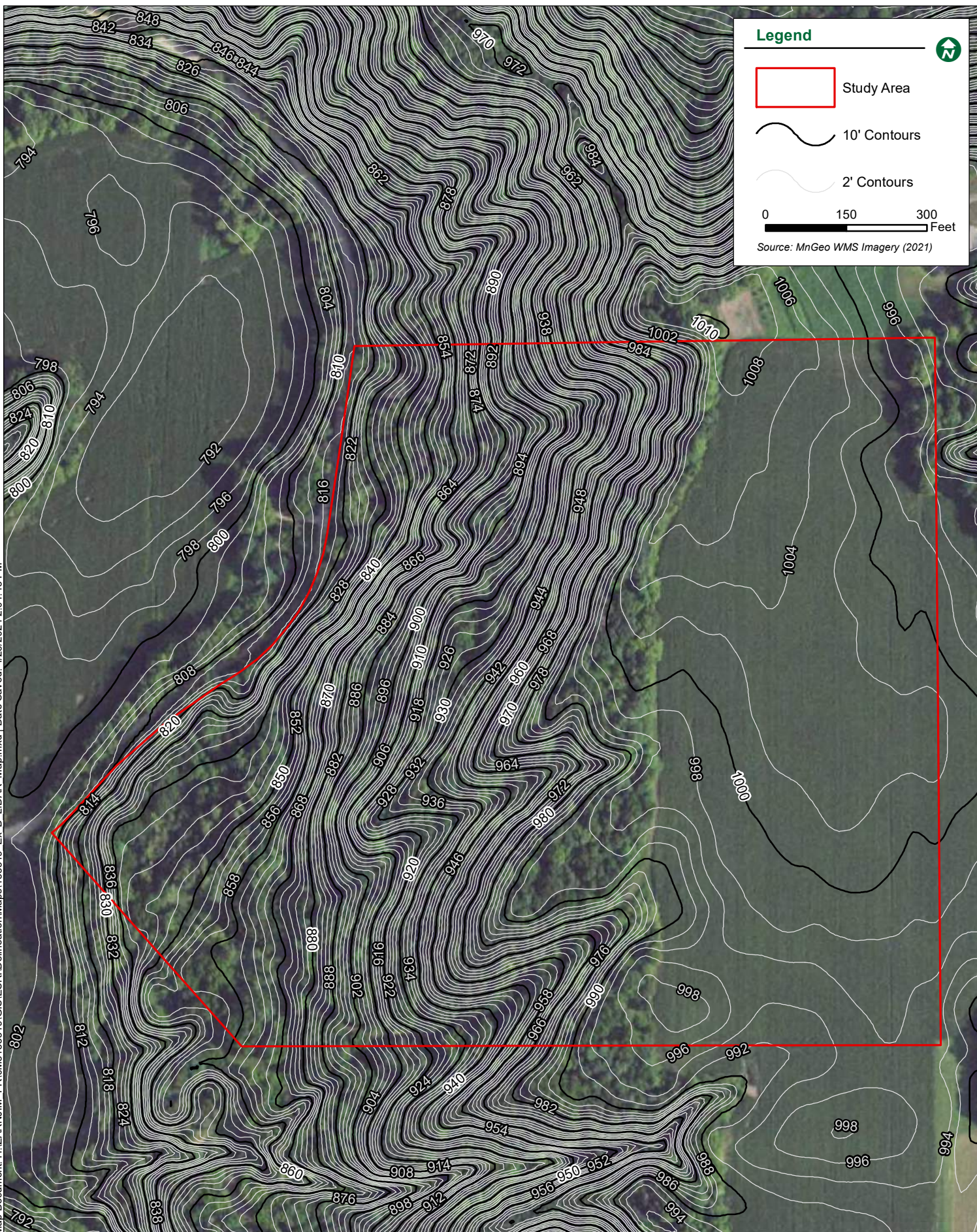
Addeline Theis  
Certified Wetland Delineator, No. 1434



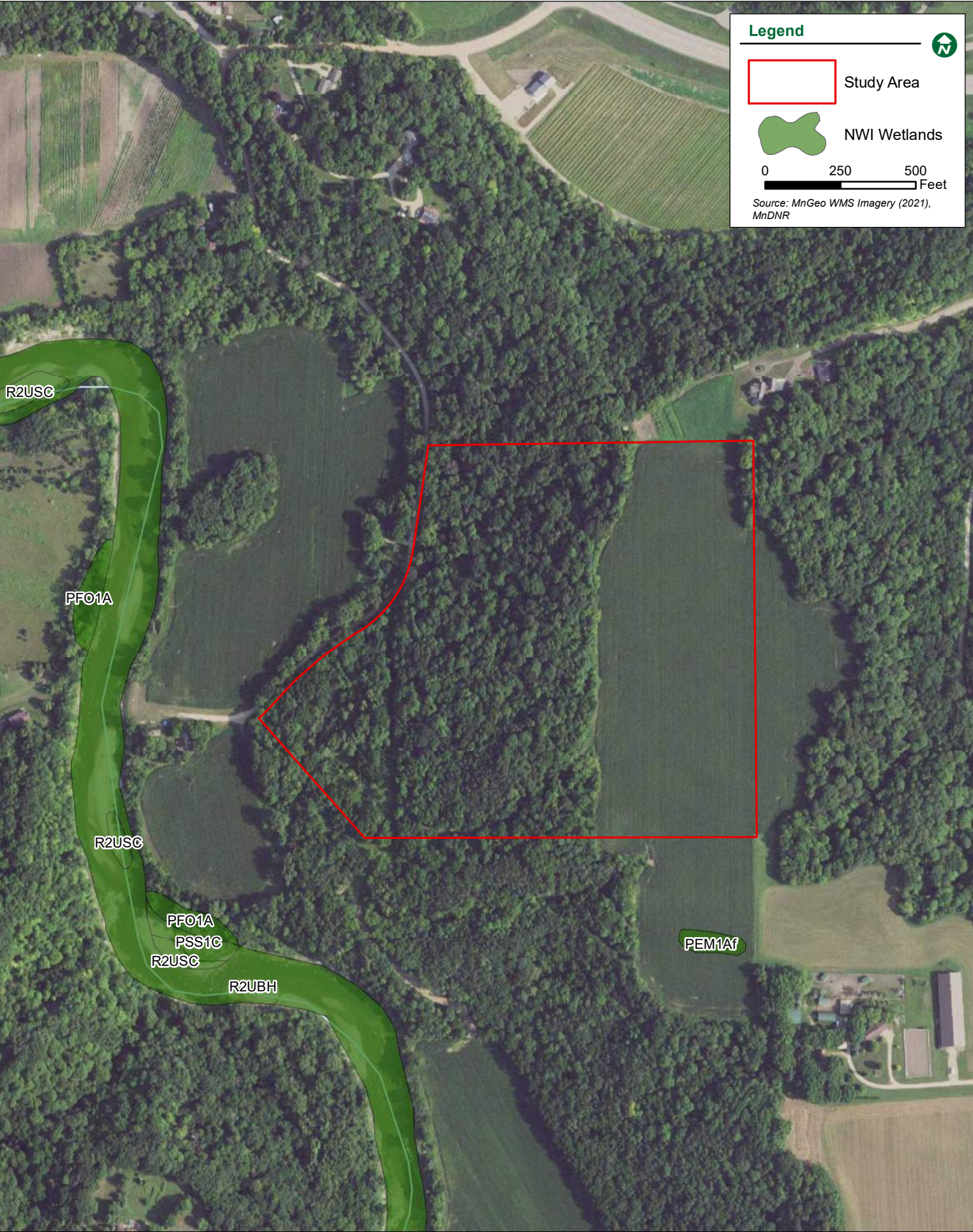
# APPENDIX



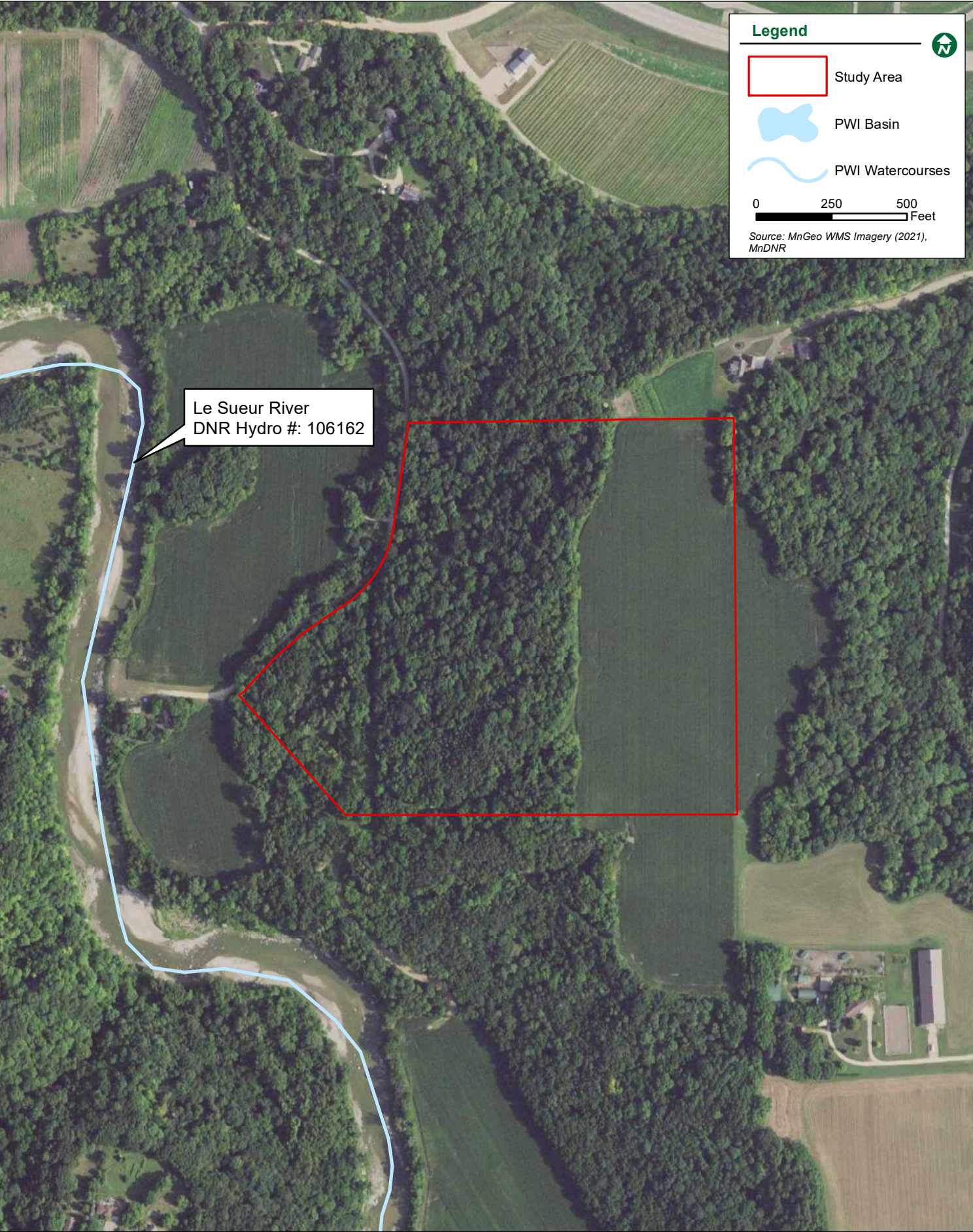




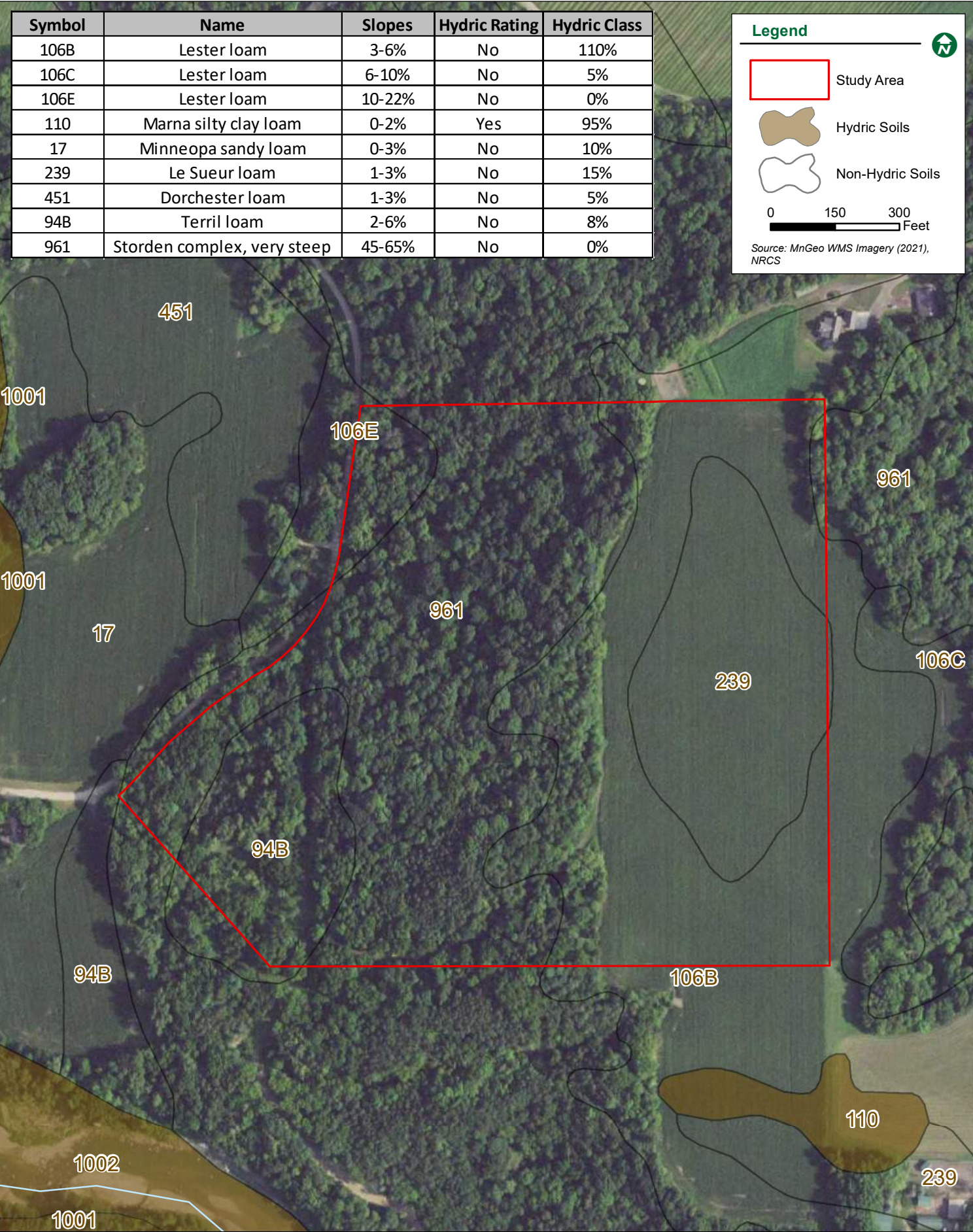






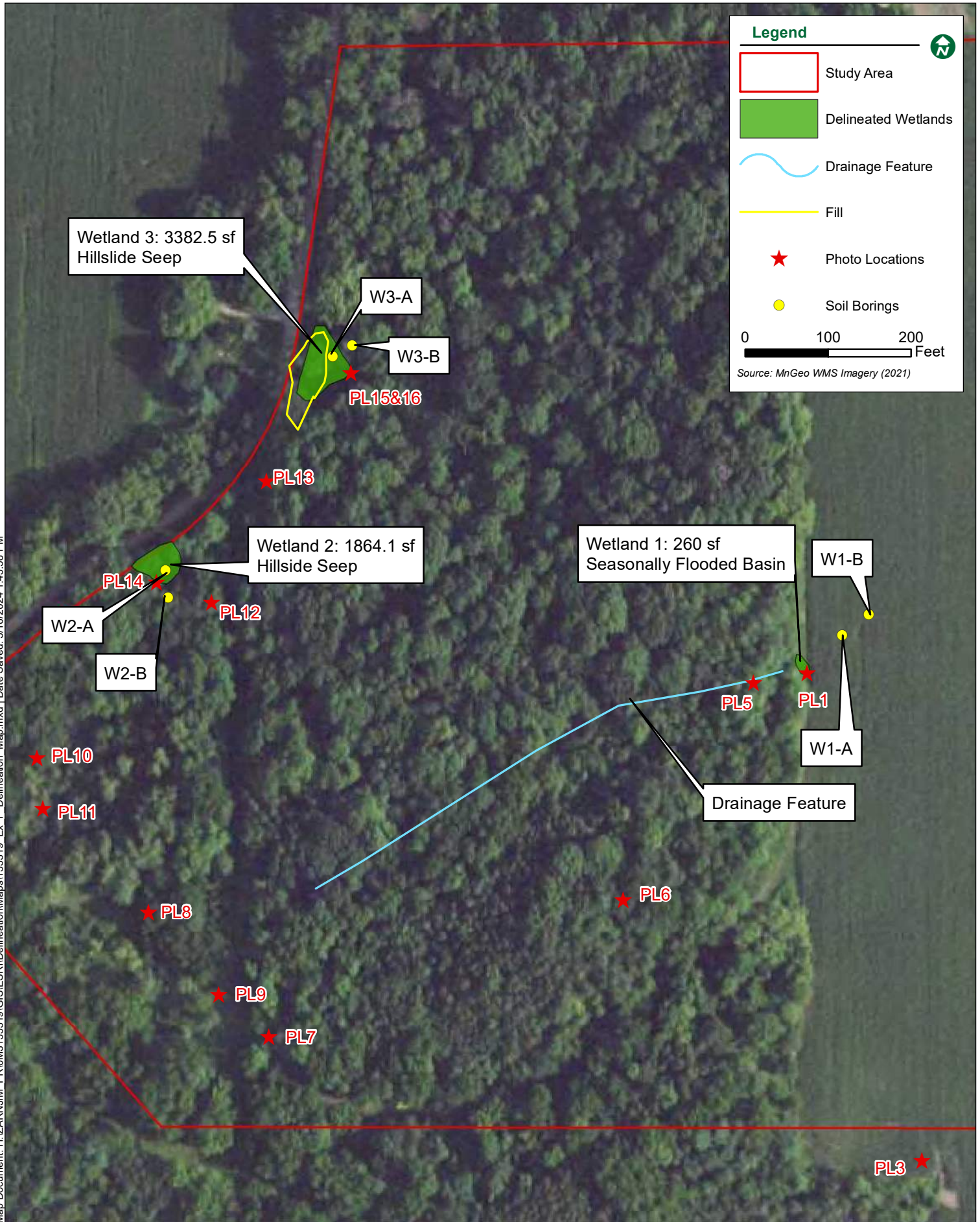








Map Document: H:\ZARN\JIM PROJ\03133319\GIS\ESRI\Map\133319 Ex F Delineation Map.mxd | Date Saved: 5/16/2024 1:43:58 PM





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# EXHIBIT G: WETLAND DETERMINATION DATA FORM

(Midwest Region)

|                                                                               |                         |                                       |                                       |                                             |                                   |
|-------------------------------------------------------------------------------|-------------------------|---------------------------------------|---------------------------------------|---------------------------------------------|-----------------------------------|
| Project/Site:                                                                 | <u>Zarn Property</u>    | City/County:                          | <u>Mankato Twp/ Blue Earth County</u> | Sampling Date:                              | <u>4/30/2024</u>                  |
| Applicant/Owner:                                                              | <u>Jim Zarn</u>         | State:                                | <u>Minnesota</u>                      | Sample Point:                               | <u>W1-A</u>                       |
| Investigator(s):                                                              | <u>Addeline Theis</u>   | Section, Township, Range:             | <u>Sec 35, T108N, R27W</u>            |                                             |                                   |
| Landforms (hillside, terrace, etc.):                                          | <u>Deprerssion</u>      | Local Relief (concave, convex, none): | <u>Concave</u>                        |                                             |                                   |
| Slope (%):                                                                    | <u>0-2%</u>             | Latitude:                             |                                       | Longitude:                                  |                                   |
|                                                                               |                         |                                       |                                       | Datum:                                      | <u>Blue Earth</u>                 |
| Soil Map Unit Name:                                                           | <u>106B-Lester Loam</u> | NWI Classification:                   | <u>None</u>                           |                                             |                                   |
| Are climatic/hydrologic conditions of the site typical for this time of year? |                         | <u>No</u>                             | (If no, explain in remarks)           |                                             |                                   |
| Are vegetation                                                                | <u>X</u>                | , soils                               |                                       | , or hydrology                              |                                   |
|                                                                               |                         |                                       |                                       | significantly disturbed?                    | Are normal circumstances present? |
| Are vegetation                                                                |                         | , soils                               |                                       | naturally problematic?                      | <u>No</u>                         |
|                                                                               |                         |                                       |                                       | (If needed, explain any answers in Remarks) |                                   |

## SUMMARY OF FINDINGS

|                                 |                                                                                                                                                                       |                                       |            |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|------------|
| Hydrophytic vegetation present? | <u>Yes</u>                                                                                                                                                            | Is the sampled area within a wetland? | <u>Yes</u> |
| Hydric soils present?           | <u>Yes</u>                                                                                                                                                            |                                       |            |
| Wetland hydrology present?      | <u>Yes</u>                                                                                                                                                            |                                       |            |
| Remarks:                        | <u>Antecedent precipittion conditions were above norrmal at time of site visit. High and low temperatures have been above historic ranges at time of site visit .</u> |                                       |            |

## VEGETATION - Use scientific names of plants

| Tree Stratum          | (Plot size: <u>30 feet</u> ) | Absolute % Cover | Dominant Species | Indicator Status | Dominance Test Worksheet                                                                          |  |
|-----------------------|------------------------------|------------------|------------------|------------------|---------------------------------------------------------------------------------------------------|--|
| 1                     |                              |                  |                  |                  | Number of dominant species that are OBL, FACW, or FAC: <u>          </u> (A)                      |  |
| 2                     |                              |                  |                  |                  | Total number of dominant species across all strata: <u>          </u> (B)                         |  |
| 3                     |                              |                  |                  |                  | Percent of dominant species that are OBL, FACW or FAC: <u>          </u> (A/B)                    |  |
| 4                     |                              |                  |                  |                  |                                                                                                   |  |
| 5                     |                              |                  |                  |                  |                                                                                                   |  |
|                       |                              |                  |                  | =Total Cover     |                                                                                                   |  |
| Sapling/Shrub stratum | (Plot size: <u>15 feet</u> ) |                  |                  |                  | Prevalence Index Worksheet                                                                        |  |
| 1                     |                              |                  |                  |                  | Total % cover of:                                                                                 |  |
| 2                     |                              |                  |                  |                  | OBL Species: <u>          </u> x 1 = <u>          </u>                                            |  |
| 3                     |                              |                  |                  |                  | FACW Species: <u>          </u> x 2 = <u>          </u>                                           |  |
| 4                     |                              |                  |                  |                  | FAC Species: <u>          </u> x 3 = <u>          </u>                                            |  |
| 5                     |                              |                  |                  |                  | FACU species: <u>          </u> x 4 = <u>          </u>                                           |  |
|                       |                              |                  |                  | =Total Cover     | UPL Species: <u>          </u> x 5 = <u>          </u>                                            |  |
|                       |                              |                  |                  |                  | Totals: <u>          </u> (A) <u>          </u> (B)                                               |  |
|                       |                              |                  |                  |                  | Prevalence Index (B/A): <u>          </u>                                                         |  |
| Herb stratum:         | (Plot size: <u>5 feet</u> )  |                  |                  |                  | Hydrophytic Vegetation Indicators                                                                 |  |
| 1                     |                              |                  |                  |                  | Rapid test for hydrophytic vegetation                                                             |  |
| 2                     |                              |                  |                  |                  | Dominance test >50%                                                                               |  |
| 3                     |                              |                  |                  |                  | Prevalence index is ≤3.0*                                                                         |  |
| 4                     |                              |                  |                  |                  | Morphological adaptations* (Provide supporting data in remarks)                                   |  |
| 5                     |                              |                  |                  |                  | Problematic hydrophytic vegetation*                                                               |  |
| 6                     |                              |                  |                  |                  | <u>X</u> (Explain in remarks)                                                                     |  |
| 7                     |                              |                  |                  |                  |                                                                                                   |  |
| 8                     |                              |                  |                  |                  |                                                                                                   |  |
| 9                     |                              |                  |                  |                  |                                                                                                   |  |
| 10                    |                              |                  |                  |                  |                                                                                                   |  |
|                       |                              |                  |                  | =Total Cover     |                                                                                                   |  |
| Woody vine stratum:   | (Plot size: <u>15 feet</u> ) |                  |                  |                  | *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic |  |
| 1                     |                              |                  |                  |                  |                                                                                                   |  |
| 2                     |                              |                  |                  |                  |                                                                                                   |  |
|                       |                              |                  |                  | =Total Cover     | Hydrophytic vegetation present? <u>Yes</u>                                                        |  |

Remarks: Agricultural field with no seed planted yet for the season. Random volunteers have started to grow.





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EXHIBIT G:  
WETLAND DETERMINATION DATA FORM

(Midwest Region)

Sample Point: W1-A

SOILS

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)             |               |     |                                                             |    |       |                                                                                                              |           |         |
|---------------------------------------------------------------------------------------------------------------------------------|---------------|-----|-------------------------------------------------------------|----|-------|--------------------------------------------------------------------------------------------------------------|-----------|---------|
| Depth<br>(inches)                                                                                                               | Matrix        |     | Redox Features                                              |    |       |                                                                                                              | Texture   | Remarks |
|                                                                                                                                 | Color (moist) | %   | Color (moist)                                               | %  | Type* | Loc**                                                                                                        |           |         |
| 0-3                                                                                                                             | 10YR 2/1      | 100 |                                                             |    |       |                                                                                                              | Clay Loam |         |
| 3 to 11                                                                                                                         | 10YR 2/1      | 90  | 10YR 4/6                                                    | 10 | C     | M                                                                                                            | Clay Loam |         |
|                                                                                                                                 |               |     |                                                             |    |       |                                                                                                              |           |         |
|                                                                                                                                 |               |     |                                                             |    |       |                                                                                                              |           |         |
|                                                                                                                                 |               |     |                                                             |    |       |                                                                                                              |           |         |
|                                                                                                                                 |               |     |                                                             |    |       |                                                                                                              |           |         |
|                                                                                                                                 |               |     |                                                             |    |       |                                                                                                              |           |         |
|                                                                                                                                 |               |     |                                                             |    |       |                                                                                                              |           |         |
| *Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix |               |     |                                                             |    |       |                                                                                                              |           |         |
| Hydric Soil Indicators:                                                                                                         |               |     | Indicators for Problematic Hydric Soils*:                   |    |       |                                                                                                              |           |         |
| <input type="checkbox"/> Histisol (A1)                                                                                          |               |     | <input type="checkbox"/> Sandy Gleyed Matrix (S4)           |    |       | <input type="checkbox"/> Coast Prairie Redox (A16)(LRR K,L,R)                                                |           |         |
| <input type="checkbox"/> Histic Epipedon (A2)                                                                                   |               |     | <input type="checkbox"/> Sandy Redox (S5)                   |    |       | <input type="checkbox"/> Dark Surface (S7)(LRR K, L)                                                         |           |         |
| <input type="checkbox"/> Black Histic (A3)                                                                                      |               |     | <input type="checkbox"/> Stripped Matrix (S6)               |    |       | <input type="checkbox"/> Iron-Manganese Masses (F12)(LRR K, L, R)                                            |           |         |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                                                                                  |               |     | <input type="checkbox"/> Loamy Mucky Material (F1)          |    |       | <input type="checkbox"/> Very Shallow Dark Surface (TF12)                                                    |           |         |
| <input type="checkbox"/> Stratified Layers (A5)                                                                                 |               |     | <input type="checkbox"/> Loamy Gleyed Matrix (F2)           |    |       | <input type="checkbox"/> Other (Explain in remarks)                                                          |           |         |
| <input type="checkbox"/> 2 cm Muck (A10)                                                                                        |               |     | <input type="checkbox"/> Depleted Matrix (F3)               |    |       | *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic |           |         |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)                                                                      |               |     | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |    |       |                                                                                                              |           |         |
| <input type="checkbox"/> Thick Dark Surface (A12)                                                                               |               |     | <input type="checkbox"/> Depleted Dark Surface (F7)         |    |       |                                                                                                              |           |         |
| <input type="checkbox"/> Sandy Mucky Material (S1)                                                                              |               |     | <input type="checkbox"/> Redox Depressions (F8)             |    |       |                                                                                                              |           |         |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)                                                                           |               |     |                                                             |    |       |                                                                                                              |           |         |
| Restrictive Layer (if observed):                                                                                                |               |     |                                                             |    |       |                                                                                                              |           |         |
| Type: _____                                                                                                                     |               |     | Hydric Soils Present? <u>Yes</u>                            |    |       |                                                                                                              |           |         |
| Depth (inches): _____                                                                                                           |               |     |                                                             |    |       |                                                                                                              |           |         |
| Remarks: _____                                                                                                                  |               |     |                                                             |    |       |                                                                                                              |           |         |

HYDROLOGY

|                                                                       |                                                                     |                                                                    |
|-----------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------------|
| Wetland Hydrology Indicators:                                         |                                                                     |                                                                    |
| Primary Indicators (minimum of one is required; check all that apply) |                                                                     | Secondary Indicators (minimum of two required)                     |
| <input type="checkbox"/> Surface Water (A1)                           | <input type="checkbox"/> Water-Stained Leaves (B9)                  | <input type="checkbox"/> Surface Soil Crack (B6)                   |
| <input type="checkbox"/> High Water Table (A2)                        | <input type="checkbox"/> Aquatic Fauna (B13)                        | <input checked="" type="checkbox"/> Drainage Patterns (B10)        |
| <input checked="" type="checkbox"/> Saturation (A3)                   | <input type="checkbox"/> True Aquatic Plants (B14)                  | <input type="checkbox"/> Dry-Season Water Table (C2)               |
| <input type="checkbox"/> Water Marks (B1)                             | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                 | <input type="checkbox"/> Crayfish Burrows (C8)                     |
| <input type="checkbox"/> Sediment Deposits (B2)                       | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Drift Deposits (B3)                          | <input type="checkbox"/> Presence or Reduced Iron (C4)              | <input type="checkbox"/> Stunted or Stressed Plants (D1)           |
| <input type="checkbox"/> Algal Mat or Crust (B4)                      | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input checked="" type="checkbox"/> Geomorphic Position (D2)       |
| <input type="checkbox"/> Iron Deposits (B5)                           | <input type="checkbox"/> Thin Muck Surface (C7)                     | <input type="checkbox"/> FAC-Neutral Test (D5)                     |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)    | <input type="checkbox"/> Gauge or Well Data (C7)                    |                                                                    |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)      | <input type="checkbox"/> Other (Explain in Remarks)                 |                                                                    |
| Field Observations:                                                   |                                                                     | Indicators of Wetland Hydrology Present? <u>Yes</u>                |
| Surface Water Present? <u>No</u>                                      | Depth (inches): _____                                               |                                                                    |
| Water Table Present? <u>Yes</u>                                       | Depth (inches): <u>13</u>                                           |                                                                    |
| Saturation Present? <u>Yes</u>                                        | Depth (inches): <u>3</u>                                            |                                                                    |
| Remarks: _____                                                        |                                                                     |                                                                    |



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# EXHIBIT G: WETLAND DETERMINATION DATA FORM

(Midwest Region)

Project/Site: Zarn Property City/County: Mankato Twp/ Blue Earth County Sampling Date: 4/30/2024  
Applicant/Owner: Jim Zarn State: Minnesota Sample Point: W1-B  
Investigator(s): Addeline Theis Section, Township, Range: Sec 35, T108N, R27W  
Landforms (hillside, terrace, etc.): Toeslope Local Relief (concave, convex, none): Linear  
Slope (%): 2-5% Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_ Datum: Blue Earth  
Soil Map Unit Name: 106B-Lester Loam NWI Classification: None

Are climatic/hydrologic conditions of the site typical for this time of year? No (If no, explain in remarks)  
Are vegetation X, soils \_\_\_\_\_, or hydrology \_\_\_\_\_ significantly disturbed? Are normal circumstances present? No  
Are vegetation \_\_\_\_\_, soils \_\_\_\_\_, or hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks)

## SUMMARY OF FINDINGS

|                                                                                                                                                                                |           |                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------------------------------------------|
| Hydrophytic vegetation present?                                                                                                                                                | <u>No</u> | Is the sampled area within a wetland? <u>No</u> |
| Hydric soils present?                                                                                                                                                          | <u>No</u> |                                                 |
| Wetland hydrology present?                                                                                                                                                     | <u>No</u> |                                                 |
| Remarks: <u>Antecedent precipitation conditions were above normal at time of site visit. High and low temperatures have been above historic ranges at time of site visit .</u> |           |                                                 |

## VEGETATION - Use scientific names of plants

| Tree Stratum          | (Plot size: <u>30 feet</u> ) | Absolute % Cover | Dominant Species | Indicator Status | <b>Dominance Test Worksheet</b><br><br>Number of dominant species that are OBL, FACW, or FAC: _____ (A)<br><br>Total number of dominant species across all strata: _____ (B)<br><br>Percent of dominant species that are OBL, FACW or FAC: _____ (A/B)                                                                                                                                                                              |
|-----------------------|------------------------------|------------------|------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 3                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 4                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 5                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                       |                              |                  |                  |                  | =Total Cover                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Sapling/Shrub stratum | (Plot size: <u>15 feet</u> ) |                  |                  |                  | <b>Prevalence Index Worksheet</b><br><br>Total % cover of:<br>OBL Species: _____ x 1 = _____<br>FACW Species: _____ x 2 = _____<br>FAC Species: _____ x 3 = _____<br>FACU species: _____ x 4 = _____<br>UPL Species: _____ x 5 = _____<br>Totals: _____ (A) _____ (B)<br>Prevalence Index (B/A): _____                                                                                                                              |
| 1                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 3                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 4                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 5                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                       |                              |                  |                  |                  | =Total Cover                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Herb stratum:         | (Plot size: <u>5 feet</u> )  |                  |                  |                  | <b>Hydrophytic Vegetation Indicators</b><br>_____<br>Rapid test for hydrophytic vegetation<br>_____<br>Dominance test >50%<br>_____<br>Prevalence index is ≤3.0*<br>_____<br>Morphological adaptations* (Provide supporting data in remarks)<br>_____<br>Problematic hydrophytic vegetation* (Explain in remarks)<br>_____<br><br>*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic |
| 1                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 3                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 4                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 5                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 6                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 7                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 8                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 9                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 10                    |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                       |                              |                  |                  |                  | =Total Cover                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Woody vine stratum:   | (Plot size: <u>15 feet</u> ) |                  |                  |                  | <b>Hydrophytic vegetation present?</b> <u>No</u>                                                                                                                                                                                                                                                                                                                                                                                    |
| 1                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2                     |                              |                  |                  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                       |                              |                  |                  |                  | =Total Cover                                                                                                                                                                                                                                                                                                                                                                                                                        |

Remarks: Agricultural field with no seed planted yet for the season. Random volunteers have started to grow.





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**EXHIBIT G:**  
**WETLAND DETERMINATION DATA FORM**

(Midwest Region)

Sample Point: W1-B

**SOILS**

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) |               |     |                |   |       |       |           |         |
|---------------------------------------------------------------------------------------------------------------------|---------------|-----|----------------|---|-------|-------|-----------|---------|
| Depth<br>(inches)                                                                                                   | Matrix        |     | Redox Features |   |       |       | Texture   | Remarks |
|                                                                                                                     | Color (moist) | %   | Color (moist)  | % | Type* | Loc** |           |         |
| 0-15                                                                                                                | 10YR 2/1      | 100 |                |   |       |       | Clay Loam |         |
| 15 to 19                                                                                                            | 10YR 3/1      | 100 |                |   |       |       | Clay Loam |         |
|                                                                                                                     |               |     |                |   |       |       |           |         |
|                                                                                                                     |               |     |                |   |       |       |           |         |
|                                                                                                                     |               |     |                |   |       |       |           |         |
|                                                                                                                     |               |     |                |   |       |       |           |         |
|                                                                                                                     |               |     |                |   |       |       |           |         |
|                                                                                                                     |               |     |                |   |       |       |           |         |
|                                                                                                                     |               |     |                |   |       |       |           |         |

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

|                                                            |                                                     |                                                                   |
|------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------------------|
| <b>Hydric Soil Indicators:</b>                             | <b>Indicators for Problematic Hydric Soils*:</b>    |                                                                   |
| <input type="checkbox"/> Histisol (A1)                     | <input type="checkbox"/> Sandy Gleyed Matrix (S4)   | <input type="checkbox"/> Coast Prairie Redox (A16)(LRR K,L,R)     |
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Sandy Redox (S5)           | <input type="checkbox"/> Dark Surface (S7)(LRR K, L)              |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Stripped Matrix (S6)       | <input type="checkbox"/> Iron-Manganese Masses (F12)(LRR K, L, R) |
| <input type="checkbox"/> Hydrogen Sulfide (A4)             | <input type="checkbox"/> Loamy Mucky Material (F1)  | <input type="checkbox"/> Very Shallow Dark Surface (TF12)         |
| <input type="checkbox"/> Stratified Layers (A5)            | <input type="checkbox"/> Loamy Gleyed Matrix (F2)   | <input type="checkbox"/> Other (Explain in remarks)               |
| <input type="checkbox"/> 2 cm Muck (A10)                   | <input type="checkbox"/> Depleted Matrix (F3)       |                                                                   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6)    |                                                                   |
| <input type="checkbox"/> Thick Dark Surface (A12)          | <input type="checkbox"/> Depleted Dark Surface (F7) |                                                                   |
| <input type="checkbox"/> Sandy Mucky Material (S1)         | <input type="checkbox"/> Redox Depressions (F8)     |                                                                   |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)      |                                                     |                                                                   |

|                                         |                              |
|-----------------------------------------|------------------------------|
| <b>Restrictive Layer (if observed):</b> | <b>Hydric Soils Present?</b> |
| Type: _____                             | <u>No</u>                    |
| Depth (inches): _____                   |                              |

Remarks: \_\_\_\_\_

**HYDROLOGY**

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

|                                  |                                                 |
|----------------------------------|-------------------------------------------------|
| <b>Field Observations:</b>       | <b>Indicators of Wetland Hydrology Present?</b> |
| Surface Water Present? <u>No</u> | <u>No</u>                                       |
| Water Table Present? <u>No</u>   |                                                 |
| Saturation Present? <u>No</u>    |                                                 |
| Depth (inches): _____            |                                                 |
| Depth (inches): _____            |                                                 |
| Depth (inches): _____            |                                                 |

Remarks: \_\_\_\_\_



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**EXHIBIT G:  
WETLAND DETERMINATION DATA FORM**

(Midwest Region)

Project/Site: Zarn Property City/County: Mankato Twp/ Blue Earth County Sampling Date: 5/15/2024  
Applicant/Owner: Jim Zarn State: Minnesota Sample Point: W2-A  
Investigator(s): Addeline Theis Section, Township, Range: Sec 35, T108N, R27W  
Landforms (hillside, terrace, etc.): Hillside with small basin Local Relief (concave, convex, none): Concave  
Slope (%): 3-4% Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_ Datum: Blue Earth  
Soil Map Unit Name: 961-Storden complex, very steep NWI Classification: None  
Are climatic/hydrologic conditions of the site typical for this time of year? No (If no, explain in remarks)  
Are vegetation \_\_\_\_\_, soils \_\_\_\_\_, or hydrology \_\_\_\_\_ significantly disturbed? Are normal circumstances present? No  
Are vegetation \_\_\_\_\_, soils X, or hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks)

**SUMMARY OF FINDINGS**

|                                 |            |                                                  |
|---------------------------------|------------|--------------------------------------------------|
| Hydrophytic vegetation present? | <u>Yes</u> | Is the sampled area within a wetland? <u>Yes</u> |
| Hydric soils present?           | <u>Yes</u> |                                                  |
| Wetland hydrology present?      | <u>Yes</u> |                                                  |

Remarks: Antecedent precipitation conditions were above normal at time of site visit. High and low temperatures have been above historic ranges at time of site visit. Soils are naturally problematic due to bedrock close to surface.

**VEGETATION** - Use scientific names of plants

| Tree Stratum | (Plot size: <u>30 feet</u> ) | Absolute % Cover | Dominant Species | Indicator Status |
|--------------|------------------------------|------------------|------------------|------------------|
| 1            | _____                        | _____            | _____            | _____            |
| 2            | _____                        | _____            | _____            | _____            |
| 3            | _____                        | _____            | _____            | _____            |
| 4            | _____                        | _____            | _____            | _____            |
| 5            | _____                        | _____            | _____            | _____            |
|              |                              | =Total Cover     |                  |                  |

| Sapling/Shrub stratum | (Plot size: <u>15 feet</u> ) | Absolute % Cover | Dominant Species | Indicator Status |
|-----------------------|------------------------------|------------------|------------------|------------------|
| 1                     | _____                        | _____            | _____            | _____            |
| 2                     | _____                        | _____            | _____            | _____            |
| 3                     | _____                        | _____            | _____            | _____            |
| 4                     | _____                        | _____            | _____            | _____            |
| 5                     | _____                        | _____            | _____            | _____            |
|                       |                              | =Total Cover     |                  |                  |

| Herb stratum:              | (Plot size: <u>5 feet</u> ) | Absolute % Cover | Dominant Species | Indicator Status |
|----------------------------|-----------------------------|------------------|------------------|------------------|
| 1 <u>Impatiens pallida</u> |                             | <u>85%</u>       | <u>Yes</u>       | <u>FACW</u>      |
| 2 <u>Urtica dioica</u>     |                             | <u>10%</u>       | <u>No</u>        | <u>FACW</u>      |
| 3                          |                             | _____            | _____            | _____            |
| 4                          |                             | _____            | _____            | _____            |
| 5                          |                             | _____            | _____            | _____            |
| 6                          |                             | _____            | _____            | _____            |
| 7                          |                             | _____            | _____            | _____            |
| 8                          |                             | _____            | _____            | _____            |
| 9                          |                             | _____            | _____            | _____            |
| 10                         |                             | _____            | _____            | _____            |
|                            |                             | =Total Cover     |                  |                  |

| Woody vine stratum: | (Plot size: <u>15 feet</u> ) | Absolute % Cover | Dominant Species | Indicator Status |
|---------------------|------------------------------|------------------|------------------|------------------|
| 1                   | _____                        | _____            | _____            | _____            |
| 2                   | _____                        | _____            | _____            | _____            |
|                     |                              | =Total Cover     |                  |                  |

|                                                                          |  |
|--------------------------------------------------------------------------|--|
| <b>Dominance Test Worksheet</b>                                          |  |
| Number of dominant species that are OBL, FACW, or FAC: <u>1</u> (A)      |  |
| Total number of dominant species across all strata: <u>1</u> (B)         |  |
| Percent of dominant species that are OBL, FACW or FAC: <u>100%</u> (A/B) |  |

|                                     |                  |
|-------------------------------------|------------------|
| <b>Prevalence Index Worksheet</b>   |                  |
| Total % cover of:                   |                  |
| OBL Species: <u>0</u>               | x 1 = <u>0</u>   |
| FACW Species: <u>95</u>             | x 2 = <u>190</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>   |
| Totals: <u>95</u> (A)               | <u>190</u> (B)   |
| Prevalence Index (B/A): <u>2.00</u> |                  |

|                                                                                                   |                                       |
|---------------------------------------------------------------------------------------------------|---------------------------------------|
| <b>Hydrophytic Vegetation Indicators</b>                                                          |                                       |
| <u>X</u>                                                                                          | Rapid test for hydrophytic vegetation |
| <u>X</u>                                                                                          | Dominance test >50%                   |
| <u>X</u>                                                                                          | Prevalence index is ≤3.0*             |
| Morphological adaptations* (Provide supporting data in remarks)                                   |                                       |
| Problematic hydrophytic vegetation* (Explain in remarks)                                          |                                       |
| *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic |                                       |

|                                        |            |
|----------------------------------------|------------|
| <b>Hydrophytic vegetation present?</b> | <u>Yes</u> |
|----------------------------------------|------------|

Remarks: No trees growing within the wetland





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EXHIBIT G:  
WETLAND DETERMINATION DATA FORM

(Midwest Region)

Sample Point: W2-A

SOILS

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

| Depth<br>(inches) | Matrix        |     | Redox Features |   |       |       | Texture         | Remarks |
|-------------------|---------------|-----|----------------|---|-------|-------|-----------------|---------|
|                   | Color (moist) | %   | Color (moist)  | % | Type* | Loc** |                 |         |
| 0-6               | 10YR 2/1      | 100 |                |   |       |       | Silty Clay Loam |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |

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

Hydric Soil Indicators:

Histisol (A1)

Histic Epipedon (A2)

Black Histic (A3)

Hydrogen Sulfide (A4)

Stratified Layers (A5)

2 cm Muck (A10)

Depleted Below Dark Surface (A11)

Thick Dark Surface (A12)

Sandy Mucky Material (S1)

5 cm Mucky Peat or Peat (S3)

Sandy Gleyed Matrix (S4)

Sandy Redox (S5)

Stripped Matrix (S6)

Loamy Mucky Material (F1)

Loamy Gleyed Matrix (F2)

Depleted Matrix (F3)

Redox Dark Surface (F6)

Depleted Dark Surface (F7)

Redox Depressions (F8)

Indicators for Problematic Hydric Soils\*:

Coast Prairie Redox (A16)(LRR K,L,R)

Dark Surface (S7)(LRR K, L)

Iron-Manganese Masses (F12)(LRR K, L, R)

Very Shallow Dark Surface (TF12)

X

Other (Explain in remarks)

\*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: 

Bedrock

Depth (inches): 

6 inches

Hydric Soils Present?

Yes

Remarks:

Problematic hydric soil due to groundwater coming out at the base of the bluff. Bedrock is close to the surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

X

Surface Water (A1)

High Water Table (A2)

X

Saturation (A3)

Water Marks (B1)

Sediment Deposits (B2)

Drift Deposits (B3)

Algal Mat or Crust (B4)

Iron Deposits (B5)

Inundation Visible on Aerial Imagery (B7)

Sparsely Vegetated Concave Surface (B8)

Water-Stained Leaves (B9)

Aquatic Fauna (B13)

True Aquatic Plants (B14)

Hydrogen Sulfide Odor (C1)

Oxidized Rhizospheres on Living Roots (C3)

Presence or Reduced Iron (C4)

Recent Iron Reduction in Tilled Soils (C6)

Thin Muck Surface (C7)

Gauge or Well Data (C7)

Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

Surface Soil Crack (B6)

Drainage Patterns (B10)

Dry-Season Water Table (C2)

Crayfish Burrows (C8)

Saturation Visible on Aerial Imagery (C9)

Stunted or Stressed Plants (D1)

Geomorphic Position (D2)

FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?

Yes

Water Table Present?

Yes

Saturation Present?

Yes

Depth (inches):

0

Depth (inches):

5

Depth (inches):

0

Indicators of Wetland Hydrology Present?

Yes

Remarks:



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**EXHIBIT G:  
WETLAND DETERMINATION DATA FORM**

(Midwest Region)

|                                                                                |                         |                                       |                                             |                |                   |
|--------------------------------------------------------------------------------|-------------------------|---------------------------------------|---------------------------------------------|----------------|-------------------|
| Project/Site:                                                                  | <u>Zarn Property</u>    | City/County:                          | <u>Mankato Twp/ Blue Earth County</u>       | Sampling Date: | <u>4/30/2024</u>  |
| Applicant/Owner:                                                               | <u>Jim Zarn</u>         | State:                                | <u>Minnesota</u>                            | Sample Point:  | <u>W2-B</u>       |
| Investigator(s):                                                               | <u>Addeline Theis</u>   | Section, Township, Range:             | <u>Sec 35, T108N, R27W</u>                  |                |                   |
| Landforms (hillside, terrace, etc.):                                           | <u>Hillside</u>         | Local Relief (concave, convex, none): | <u>Linear</u>                               |                |                   |
| Slope (%):                                                                     | <u>6-10%</u>            | Latitude:                             |                                             | Longitude:     |                   |
|                                                                                |                         |                                       |                                             | Datum:         | <u>Blue Earth</u> |
| Soil Map Unit Name:                                                            | <u>106B-Lester Loam</u> | NWI Classification:                   | <u>None</u>                                 |                |                   |
| Are climatic/hydrologic conditions of the site typical for this time of year?  |                         | <u>No</u>                             | (If no, explain in remarks)                 |                |                   |
| Are vegetation _____, soils _____, or hydrology _____ significantly disturbed? |                         |                                       | Are normal circumstances present? <u>No</u> |                |                   |
| Are vegetation _____, soils _____, or hydrology _____ naturally problematic?   |                         |                                       | (If needed, explain any answers in Remarks) |                |                   |

**SUMMARY OF FINDINGS**

|                                 |                                                                                                                                                                       |                                       |           |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-----------|
| Hydrophytic vegetation present? | <u>No</u>                                                                                                                                                             | Is the sampled area within a wetland? | <u>No</u> |
| Hydric soils present?           | <u>No</u>                                                                                                                                                             |                                       |           |
| Wetland hydrology present?      | <u>No</u>                                                                                                                                                             |                                       |           |
| Remarks:                        | <u>Antecedent precipitation conditions were above normal at time of site visit. High and low temperatures have been above historic ranges at time of site visit .</u> |                                       |           |

**VEGETATION** - Use scientific names of plants

|                                                           |                                 |                  |           |                                          |            |
|-----------------------------------------------------------|---------------------------------|------------------|-----------|------------------------------------------|------------|
| <b>Tree Stratum</b> (Plot size: <u>30 feet</u> )          |                                 |                  |           | <b>Dominance Test Worksheet</b>          |            |
| 1                                                         | <u>Acer saccharum</u>           | Absolute % Cover | <u>30</u> | Dominant Species                         | <u>Yes</u> |
| 2                                                         | <u>Acer negundo</u>             |                  | <u>15</u> |                                          | <u>Yes</u> |
| 3                                                         |                                 |                  |           |                                          |            |
| 4                                                         |                                 |                  |           |                                          |            |
| 5                                                         |                                 |                  |           |                                          |            |
|                                                           |                                 |                  | <u>45</u> | =Total Cover                             |            |
| <b>Sapling/Shrub stratum</b> (Plot size: <u>15 feet</u> ) |                                 |                  |           | <b>Prevalence Index Worksheet</b>        |            |
| 1                                                         | <u>Rhamnus cathartica</u>       |                  | <u>35</u> |                                          | <u>Yes</u> |
| 2                                                         | <u>ribes cynosbati</u>          |                  | <u>10</u> |                                          | <u>Yes</u> |
| 3                                                         |                                 |                  |           |                                          |            |
| 4                                                         |                                 |                  |           |                                          |            |
| 5                                                         |                                 |                  |           |                                          |            |
|                                                           |                                 |                  | <u>45</u> | =Total Cover                             |            |
| <b>Herb stratum:</b> (Plot size: <u>5 feet</u> )          |                                 |                  |           | <b>Hydrophytic Vegetation Indicators</b> |            |
| 1                                                         | <u>Hydrophyllum virginianum</u> |                  | <u>35</u> |                                          | <u>Yes</u> |
| 2                                                         | <u>Carex albursina</u>          |                  | <u>25</u> |                                          | <u>Yes</u> |
| 3                                                         | <u>Erythronium albidum</u>      |                  | <u>15</u> |                                          | <u>No</u>  |
| 4                                                         | <u>Cystopteris tenuis</u>       |                  | <u>5</u>  |                                          | <u>No</u>  |
| 5                                                         |                                 |                  |           |                                          |            |
| 6                                                         |                                 |                  |           |                                          |            |
| 7                                                         |                                 |                  |           |                                          |            |
| 8                                                         |                                 |                  |           |                                          |            |
| 9                                                         |                                 |                  |           |                                          |            |
| 10                                                        |                                 |                  |           |                                          |            |
|                                                           |                                 |                  | <u>80</u> | =Total Cover                             |            |
| <b>Woody vine stratum:</b> (Plot size: <u>15 feet</u> )   |                                 |                  |           | <b>Hydrophytic vegetation present?</b>   |            |
| 1                                                         |                                 |                  |           |                                          | <u>No</u>  |
| 2                                                         |                                 |                  |           |                                          |            |
|                                                           |                                 |                  |           | =Total Cover                             |            |
| Remarks:                                                  |                                 |                  |           |                                          |            |





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EXHIBIT G:  
WETLAND DETERMINATION DATA FORM

(Midwest Region)

Sample Point: W2-B

SOILS

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

| Depth<br>(inches) | Matrix        |     | Redox Features |   |       |       | Texture         | Remarks |
|-------------------|---------------|-----|----------------|---|-------|-------|-----------------|---------|
|                   | Color (moist) | %   | Color (moist)  | % | Type* | Loc** |                 |         |
| 0-14              | 10YR 2/1      | 100 |                |   |       |       | Sandy Clay Loam |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |

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

Hydric Soil Indicators:

Histisol (A1)

Histic Epipedon (A2)

Black Histic (A3)

Hydrogen Sulfide (A4)

Stratified Layers (A5)

2 cm Muck (A10)

Depleted Below Dark Surface (A11)

Thick Dark Surface (A12)

Sandy Mucky Material (S1)

5 cm Mucky Peat or Peat (S3)

Sandy Gleyed Matrix (S4)

Sandy Redox (S5)

Stripped Matrix (S6)

Loamy Mucky Material (F1)

Loamy Gleyed Matrix (F2)

Depleted Matrix (F3)

Redox Dark Surface (F6)

Depleted Dark Surface (F7)

Redox Depressions (F8)

Indicators for Problematic Hydric Soils\*:

Coast Prairie Redox (A16)(LRR K,L,R)

Dark Surface (S7)(LRR K, L)

Iron-Manganese Masses (F12)(LRR K, L, R)

Very Shallow Dark Surface (TF12)

Other (Explain in remarks)

\*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soils Present?

No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Surface Water (A1)

High Water Table (A2)

Saturation (A3)

Water Marks (B1)

Sediment Deposits (B2)

Drift Deposits (B3)

Algal Mat or Crust (B4)

Iron Deposits (B5)

Inundation Visible on Aerial Imagery (B7)

Sparsely Vegetated Concave Surface (B8)

Water-Stained Leaves (B9)

Aquatic Fauna (B13)

True Aquatic Plants (B14)

Hydrogen Sulfide Odor (C1)

Oxidized Rhizospheres on Living Roots (C3)

Presence or Reduced Iron (C4)

Recent Iron Reduction in Tilled Soils (C6)

Thin Muck Surface (C7)

Gauge or Well Data (C7)

Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

Surface Soil Crack (B6)

Drainage Patterns (B10)

Dry-Season Water Table (C2)

Crayfish Burrows (C8)

Saturation Visible on Aerial Imagery (C9)

Stunted or Stressed Plants (D1)

Geomorphic Position (D2)

FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?

No

Water Table Present?

No

Saturation Present?

No

Depth (inches):

Depth (inches):

Depth (inches):

Indicators of Wetland Hydrology Present?

No

Remarks:



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**EXHIBIT G:  
WETLAND DETERMINATION DATA FORM**

(Midwest Region)

|                                                                                |                                        |                                             |                                       |                |                   |
|--------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------|---------------------------------------|----------------|-------------------|
| Project/Site:                                                                  | <u>Zarn Property</u>                   | City/County:                                | <u>Mankato Twp/ Blue Earth County</u> | Sampling Date: | <u>5/15/2024</u>  |
| Applicant/Owner:                                                               | <u>Jim Zarn</u>                        | State:                                      | <u>Minnesota</u>                      | Sample Point:  | <u>W3-A</u>       |
| Investigator(s):                                                               | <u>Addeline Theis</u>                  | Section, Township, Range:                   | <u>Sec 35, T108N, R27W</u>            |                |                   |
| Landforms (hillside, terrace, etc.):                                           | <u>Hillside with small basin</u>       | Local Relief (concave, convex, none):       | <u>Concave</u>                        |                |                   |
| Slope (%):                                                                     | <u>3-4%</u>                            | Latitude:                                   |                                       | Longitude:     |                   |
|                                                                                |                                        |                                             |                                       | Datum:         | <u>Blue Earth</u> |
| Soil Map Unit Name:                                                            | <u>961-Storden complex, very steep</u> | NWI Classification:                         | <u>None</u>                           |                |                   |
| Are climatic/hydrologic conditions of the site typical for this time of year?  |                                        | <u>No</u>                                   | (If no, explain in remarks)           |                |                   |
| Are vegetation _____, soils _____, or hydrology _____ significantly disturbed? |                                        | Are normal circumstances present? <u>No</u> |                                       |                |                   |
| Are vegetation _____, soils _____, or hydrology _____ naturally problematic?   |                                        | (If needed, explain any answers in Remarks) |                                       |                |                   |

**SUMMARY OF FINDINGS**

|                                 |                                                                                                                                                                      |                                       |            |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|------------|
| Hydrophytic vegetation present? | <u>Yes</u>                                                                                                                                                           | Is the sampled area within a wetland? | <u>Yes</u> |
| Hydric soils present?           | <u>Yes</u>                                                                                                                                                           |                                       |            |
| Wetland hydrology present?      | <u>Yes</u>                                                                                                                                                           |                                       |            |
| Remarks:                        | <u>Antecedent precipitation conditions were above normal at time of site visit. High and low temperatures have been above historic ranges at time of site visit.</u> |                                       |            |

**VEGETATION** - Use scientific names of plants

|                                                              |                     |                     |                     |                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------|---------------------|---------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tree Stratum</b><br>(Plot size: <u>30 feet</u> )          | Absolute<br>% Cover | Dominant<br>Species | Indicator<br>Status | <b>Dominance Test Worksheet</b><br><br>Number of dominant species<br>that are OBL, FACW, or FAC: <u>1</u> (A)<br><br>Total number of dominant<br>species across all strata: <u>2</u> (B)<br><br>Percent of dominant species that<br>are OBL, FACW or FAC: <u>100%</u> (A/B)                                                                                                                                 |
| 1 _____                                                      | _____               | _____               | _____               |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 2 _____                                                      | _____               | _____               | _____               |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 3 _____                                                      | _____               | _____               | _____               |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 4 _____                                                      | _____               | _____               | _____               |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 5 _____                                                      | _____               | _____               | _____               |                                                                                                                                                                                                                                                                                                                                                                                                             |
| =Total Cover                                                 |                     |                     |                     |                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Sapling/Shrub stratum</b><br>(Plot size: <u>15 feet</u> ) |                     |                     |                     | <b>Prevalence Index Worksheet</b><br><br>Total % cover of:<br><br>OBL Species: <u>0</u> x 1 = <u>0</u><br>FACW Species: <u>90</u> x 2 = <u>180</u><br>FAC Species: <u>10</u> x 3 = <u>30</u><br>FACU species: <u>15</u> x 4 = <u>60</u><br>UPL Species: <u>0</u> x 5 = <u>0</u><br>Totals: <u>115</u> (A) <u>270</u> (B)<br>Prevalence Index (B/A): <u>2.35</u>                                             |
| 1 <u>Sambucus racemosa</u>                                   | <u>15%</u>          | <u>Yes</u>          | <u>FACU</u>         |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 2 _____                                                      | _____               | _____               | _____               |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 3 _____                                                      | _____               | _____               | _____               |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 4 _____                                                      | _____               | _____               | _____               |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 5 _____                                                      | _____               | _____               | _____               |                                                                                                                                                                                                                                                                                                                                                                                                             |
| =Total Cover                                                 |                     |                     |                     |                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Herb stratum:</b><br>(Plot size: <u>5 feet</u> )          |                     |                     |                     | <b>Hydrophytic Vegetation Indicators</b><br><br>Rapid test for hydrophytic vegetation<br>Dominance test >50%<br><u>X</u> Prevalence index is ≤3.0*<br><br>Morphological adaptations* (Provide<br>supporting data in remarks)<br><br>Problematic hydrophytic vegetation*<br>(Explain in remarks)<br><br>*Indicators of hydric soil and wetland hydrology<br>must be present, unless disturbed or problematic |
| 1 <u>Impatiens pallida</u>                                   | <u>75%</u>          | <u>Yes</u>          | <u>FACW</u>         |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 2 <u>Ranunculus recurvatus</u>                               | <u>15%</u>          | <u>No</u>           | <u>FACW</u>         |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 3 <u>Galium boreale</u>                                      | <u>10%</u>          | <u>No</u>           | <u>FAC</u>          |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 4 _____                                                      | _____               | _____               | _____               |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 5 _____                                                      | _____               | _____               | _____               |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 6 _____                                                      | _____               | _____               | _____               |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 7 _____                                                      | _____               | _____               | _____               |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 8 _____                                                      | _____               | _____               | _____               |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 9 _____                                                      | _____               | _____               | _____               |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 10 _____                                                     | _____               | _____               | _____               |                                                                                                                                                                                                                                                                                                                                                                                                             |
| =Total Cover                                                 |                     |                     |                     |                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Woody vine stratum:</b><br>(Plot size: <u>15 feet</u> )   |                     |                     |                     | <b>Hydrophytic vegetation<br/>present?</b> <u>Yes</u>                                                                                                                                                                                                                                                                                                                                                       |
| 1 _____                                                      | _____               | _____               | _____               |                                                                                                                                                                                                                                                                                                                                                                                                             |
| 2 _____                                                      | _____               | _____               | _____               |                                                                                                                                                                                                                                                                                                                                                                                                             |
| =Total Cover                                                 |                     |                     |                     |                                                                                                                                                                                                                                                                                                                                                                                                             |
| Remarks: <u>No trees growing within the wetland</u>          |                     |                     |                     |                                                                                                                                                                                                                                                                                                                                                                                                             |





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EXHIBIT G:  
WETLAND DETERMINATION DATA FORM

(Midwest Region)

Sample Point: W3-A

SOILS

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

| Depth<br>(inches) | Matrix        |     | Redox Features |    |       |       | Texture   | Remarks |
|-------------------|---------------|-----|----------------|----|-------|-------|-----------|---------|
|                   | Color (moist) | %   | Color (moist)  | %  | Type* | Loc** |           |         |
| 0-2               | 10YR 2/1      | 100 |                |    |       |       | Muck      |         |
| 2 to 20           | 10YR 2/1      | 100 |                |    |       |       | Clay Loam |         |
| 20-26             | 10YR 2/1      | 90  | 10YR 4/6       | 10 | C     | M     | Clay Loam |         |
|                   |               |     |                |    |       |       |           |         |
|                   |               |     |                |    |       |       |           |         |
|                   |               |     |                |    |       |       |           |         |
|                   |               |     |                |    |       |       |           |         |
|                   |               |     |                |    |       |       |           |         |

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

Hydric Soil Indicators:

Histisol (A1)

Histic Epipedon (A2)

Black Histic (A3)

Hydrogen Sulfide (A4)

Stratified Layers (A5)

X

2 cm Muck (A10)

Depleted Below Dark Surface (A11)

Thick Dark Surface (A12)

Sandy Mucky Material (S1)

5 cm Mucky Peat or Peat (S3)

Sandy Gleyed Matrix (S4)

Sandy Redox (S5)

Stripped Matrix (S6)

Loamy Mucky Material (F1)

Loamy Gleyed Matrix (F2)

Depleted Matrix (F3)

Redox Dark Surface (F6)

Depleted Dark Surface (F7)

Redox Depressions (F8)

Indicators for Problematic Hydric Soils\*:

Coast Prairie Redox (A16)(LRR K,L,R)

Dark Surface (S7)(LRR K, L)

Iron-Manganese Masses (F12)(LRR K, L, R)

Very Shallow Dark Surface (TF12)

Other (Explain in remarks)

\*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soils Present?

Yes

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Surface Water (A1)

High Water Table (A2)

X

Saturation (A3)

Water Marks (B1)

Sediment Deposits (B2)

Drift Deposits (B3)

Algal Mat or Crust (B4)

Iron Deposits (B5)

Inundation Visible on Aerial Imagery (B7)

Sparsely Vegetated Concave Surface (B8)

Water-Stained Leaves (B9)

Aquatic Fauna (B13)

True Aquatic Plants (B14)

Hydrogen Sulfide Odor (C1)

Oxidized Rhizospheres on Living Roots (C3)

Presence or Reduced Iron (C4)

Recent Iron Reduction in Tilled Soils (C6)

Thin Muck Surface (C7)

Gauge or Well Data (C7)

Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

Surface Soil Crack (B6)

Drainage Patterns (B10)

Dry-Season Water Table (C2)

Crayfish Burrows (C8)

Saturation Visible on Aerial Imagery (C9)

Stunted or Stressed Plants (D1)

Geomorphic Position (D2)

FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?

No

Water Table Present?

Yes

Saturation Present?

Yes

Depth (inches):

Depth (inches): 

15

Depth (inches): 

3

Indicators of Wetland Hydrology Present?

Yes

Remarks:



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**EXHIBIT G:  
WETLAND DETERMINATION DATA FORM**

(Midwest Region)

|                                                                                        |                         |                                             |                                       |                |                   |
|----------------------------------------------------------------------------------------|-------------------------|---------------------------------------------|---------------------------------------|----------------|-------------------|
| Project/Site:                                                                          | <u>Zarn Property</u>    | City/County:                                | <u>Mankato Twp/ Blue Earth County</u> | Sampling Date: | <u>4/30/2024</u>  |
| Applicant/Owner:                                                                       | <u>Jim Zarn</u>         | State:                                      | <u>Minnesota</u>                      | Sample Point:  | <u>W3-B</u>       |
| Investigator(s):                                                                       | <u>Addeline Theis</u>   | Section, Township, Range:                   | <u>Sec 35, T108N, R27W</u>            |                |                   |
| Landforms (hillside, terrace, etc.):                                                   | <u>Hillside</u>         | Local Relief (concave, convex, none):       | <u>Linear</u>                         |                |                   |
| Slope (%):                                                                             | <u>6-10%</u>            | Latitude:                                   | <u></u>                               | Longitude:     | <u></u>           |
|                                                                                        |                         |                                             |                                       | Datum:         | <u>Blue Earth</u> |
| Soil Map Unit Name:                                                                    | <u>106B-Lester Loam</u> | NWI Classification:                         | <u>None</u>                           |                |                   |
| Are climatic/hydrologic conditions of the site typical for this time of year?          |                         | <u>No</u> (If no, explain in remarks)       |                                       |                |                   |
| Are vegetation <u></u> , soils <u></u> , or hydrology <u></u> significantly disturbed? |                         | Are normal circumstances present? <u>No</u> |                                       |                |                   |
| Are vegetation <u></u> , soils <u></u> , or hydrology <u></u> naturally problematic?   |                         | (If needed, explain any answers in Remarks) |                                       |                |                   |

**SUMMARY OF FINDINGS**

|                                 |                                                                                                                                                                       |                                       |           |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-----------|
| Hydrophytic vegetation present? | <u>No</u>                                                                                                                                                             | Is the sampled area within a wetland? | <u>No</u> |
| Hydric soils present?           | <u>No</u>                                                                                                                                                             |                                       |           |
| Wetland hydrology present?      | <u>No</u>                                                                                                                                                             |                                       |           |
| Remarks:                        | <u>Antecedent precipitation conditions were above normal at time of site visit. High and low temperatures have been above historic ranges at time of site visit .</u> |                                       |           |

**VEGETATION** - Use scientific names of plants

|                                                           |                               |                             |                              |                                                  |                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------|-------------------------------|-----------------------------|------------------------------|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tree Stratum</b> (Plot size: <u>30 feet</u> )          |                               |                             |                              | <b>Dominance Test Worksheet</b>                  |                                                                                                                                                                                                                                                                                                                                                                               |
| 1                                                         | <u>Fraxinus pennsylvanica</u> | Absolute % Cover: <u>35</u> | Dominant Species: <u>Yes</u> | Indicator Status: <u>FACW</u>                    | Number of dominant species that are OBL, FACW, or FAC: <u>4</u> (A)                                                                                                                                                                                                                                                                                                           |
| 2                                                         | <u>Acer negundo</u>           | <u>25</u>                   | <u>Yes</u>                   | <u>FAC</u>                                       | Total number of dominant species across all strata: <u>5</u> (B)                                                                                                                                                                                                                                                                                                              |
| 3                                                         | <u></u>                       | <u></u>                     | <u></u>                      | <u></u>                                          | Percent of dominant species that are OBL, FACW or FAC: <u>80%</u> (A/B)                                                                                                                                                                                                                                                                                                       |
| 4                                                         | <u></u>                       | <u></u>                     | <u></u>                      | <u></u>                                          |                                                                                                                                                                                                                                                                                                                                                                               |
| 5                                                         | <u></u>                       | <u></u>                     | <u></u>                      | <u></u>                                          |                                                                                                                                                                                                                                                                                                                                                                               |
|                                                           |                               | <u>60</u> =Total Cover      |                              |                                                  |                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Sapling/Shrub stratum</b> (Plot size: <u>15 feet</u> ) |                               |                             |                              | <b>Prevalence Index Worksheet</b>                |                                                                                                                                                                                                                                                                                                                                                                               |
| 1                                                         | <u>Rubus occidentalis</u>     | <u>25</u>                   | <u>Yes</u>                   | <u>UPL</u>                                       | Total % cover of:                                                                                                                                                                                                                                                                                                                                                             |
| 2                                                         | <u></u>                       | <u></u>                     | <u></u>                      | <u></u>                                          | OBL Species: <u>0</u> x 1 = <u>0</u>                                                                                                                                                                                                                                                                                                                                          |
| 3                                                         | <u></u>                       | <u></u>                     | <u></u>                      | <u></u>                                          | FACW Species: <u>74</u> x 2 = <u>150</u>                                                                                                                                                                                                                                                                                                                                      |
| 4                                                         | <u></u>                       | <u></u>                     | <u></u>                      | <u></u>                                          | FAC Species: <u>60</u> x 3 = <u>180</u>                                                                                                                                                                                                                                                                                                                                       |
| 5                                                         | <u></u>                       | <u></u>                     | <u></u>                      | <u></u>                                          | FACU species: <u>34</u> x 4 = <u>136</u>                                                                                                                                                                                                                                                                                                                                      |
|                                                           |                               | <u>25</u> =Total Cover      |                              |                                                  | UPL Species: <u>25</u> x 5 = <u>125</u>                                                                                                                                                                                                                                                                                                                                       |
|                                                           |                               |                             |                              |                                                  | Totals: <u>193</u> (A) <u>591</u> (B)                                                                                                                                                                                                                                                                                                                                         |
| <b>Herb stratum:</b> (Plot size: <u>5 feet</u> )          |                               |                             |                              | Prevalence Index (B/A): <u>3.06</u>              |                                                                                                                                                                                                                                                                                                                                                                               |
| 1                                                         | <u>Laportea canadensis</u>    | <u>40</u>                   | <u>Yes</u>                   | <u>FACW</u>                                      | <b>Hydrophytic Vegetation Indicators</b><br>Rapid test for hydrophytic vegetation<br>Dominance test >50%<br>Prevalence index is ≤3.0*<br>Morphological adaptations* (Provide supporting data in remarks)<br>Problematic hydrophytic vegetation* (Explain in remarks)<br><br>*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic |
| 2                                                         | <u>Alliaria petiolata</u>     | <u>35</u>                   | <u>Yes</u>                   | <u>FAC</u>                                       |                                                                                                                                                                                                                                                                                                                                                                               |
| 3                                                         | <u>Osmorhizia claytonii</u>   | <u>20</u>                   | <u>No</u>                    | <u>FACU</u>                                      |                                                                                                                                                                                                                                                                                                                                                                               |
| 4                                                         | <u>Aquilegia canadensis</u>   | <u>7</u>                    | <u>No</u>                    | <u>FACU</u>                                      |                                                                                                                                                                                                                                                                                                                                                                               |
| 5                                                         | <u>Germanium maculatum</u>    | <u>7</u>                    | <u>No</u>                    | <u>FACU</u>                                      |                                                                                                                                                                                                                                                                                                                                                                               |
| 6                                                         | <u></u>                       | <u></u>                     | <u></u>                      | <u></u>                                          |                                                                                                                                                                                                                                                                                                                                                                               |
| 7                                                         | <u></u>                       | <u></u>                     | <u></u>                      | <u></u>                                          |                                                                                                                                                                                                                                                                                                                                                                               |
| 8                                                         | <u></u>                       | <u></u>                     | <u></u>                      | <u></u>                                          |                                                                                                                                                                                                                                                                                                                                                                               |
| 9                                                         | <u></u>                       | <u></u>                     | <u></u>                      | <u></u>                                          |                                                                                                                                                                                                                                                                                                                                                                               |
| 10                                                        | <u></u>                       | <u></u>                     | <u></u>                      | <u></u>                                          |                                                                                                                                                                                                                                                                                                                                                                               |
|                                                           |                               | <u>109</u> =Total Cover     |                              |                                                  |                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Woody vine stratum:</b> (Plot size: <u>15 feet</u> )   |                               |                             |                              | <b>Hydrophytic vegetation present?</b> <u>No</u> |                                                                                                                                                                                                                                                                                                                                                                               |
| 1                                                         | <u></u>                       | <u></u>                     | <u></u>                      | <u></u>                                          |                                                                                                                                                                                                                                                                                                                                                                               |
| 2                                                         | <u></u>                       | <u></u>                     | <u></u>                      | <u></u>                                          |                                                                                                                                                                                                                                                                                                                                                                               |
|                                                           |                               | <u></u> =Total Cover        |                              |                                                  |                                                                                                                                                                                                                                                                                                                                                                               |
| Remarks: <u></u>                                          |                               |                             |                              |                                                  |                                                                                                                                                                                                                                                                                                                                                                               |





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EXHIBIT G:  
WETLAND DETERMINATION DATA FORM

(Midwest Region)

Sample Point: W3-B

SOILS

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

| Depth<br>(inches) | Matrix        |     | Redox Features |   |       |       | Texture         | Remarks |
|-------------------|---------------|-----|----------------|---|-------|-------|-----------------|---------|
|                   | Color (moist) | %   | Color (moist)  | % | Type* | Loc** |                 |         |
| 0-19              | 10YR 2/1      | 100 |                |   |       |       | Sandy Clay Loam |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |
|                   |               |     |                |   |       |       |                 |         |

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

Hydric Soil Indicators:

Histisol (A1)

Histic Epipedon (A2)

Black Histic (A3)

Hydrogen Sulfide (A4)

Stratified Layers (A5)

2 cm Muck (A10)

Depleted Below Dark Surface (A11)

Thick Dark Surface (A12)

Sandy Mucky Material (S1)

5 cm Mucky Peat or Peat (S3)

Sandy Gleyed Matrix (S4)

Sandy Redox (S5)

Stripped Matrix (S6)

Loamy Mucky Material (F1)

Loamy Gleyed Matrix (F2)

Depleted Matrix (F3)

Redox Dark Surface (F6)

Depleted Dark Surface (F7)

Redox Depressions (F8)

Indicators for Problematic Hydric Soils\*:

Coast Prairie Redox (A16)(LRR K,L,R)

Dark Surface (S7)(LRR K, L)

Iron-Manganese Masses (F12)(LRR K, L, R)

Very Shallow Dark Surface (TF12)

Other (Explain in remarks)

\*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soils Present?

No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Surface Water (A1)

High Water Table (A2)

Saturation (A3)

Water Marks (B1)

Sediment Deposits (B2)

Drift Deposits (B3)

Algal Mat or Crust (B4)

Iron Deposits (B5)

Inundation Visible on Aerial Imagery (B7)

Sparsely Vegetated Concave Surface (B8)

Water-Stained Leaves (B9)

Aquatic Fauna (B13)

True Aquatic Plants (B14)

Hydrogen Sulfide Odor (C1)

Oxidized Rhizospheres on Living Roots (C3)

Presence or Reduced Iron (C4)

Recent Iron Reduction in Tilled Soils (C6)

Thin Muck Surface (C7)

Gauge or Well Data (C7)

Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

Surface Soil Crack (B6)

Drainage Patterns (B10)

Dry-Season Water Table (C2)

Crayfish Burrows (C8)

Saturation Visible on Aerial Imagery (C9)

Stunted or Stressed Plants (D1)

Geomorphic Position (D2)

FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?

No

Water Table Present?

No

Saturation Present?

No

Depth (inches):

Depth (inches):

Depth (inches):

Indicators of Wetland Hydrology Present?

No

Remarks:

EXHIBIT H:  
OFF-SITE HYDROLOGY ASSESSMENT  
RECORDING FORM

Project/Site:

Jim Zarn Sec 35-108-27

Applicant/Owner:

Jim Zarn

Investigator(s):

Cortiney Galuska & Addie Theis

WETS Station ID:

Gridded Database

City/County:

Blue Earth County

State:

Minnesota

Sec, Twp, Ran:

35, 108, 27

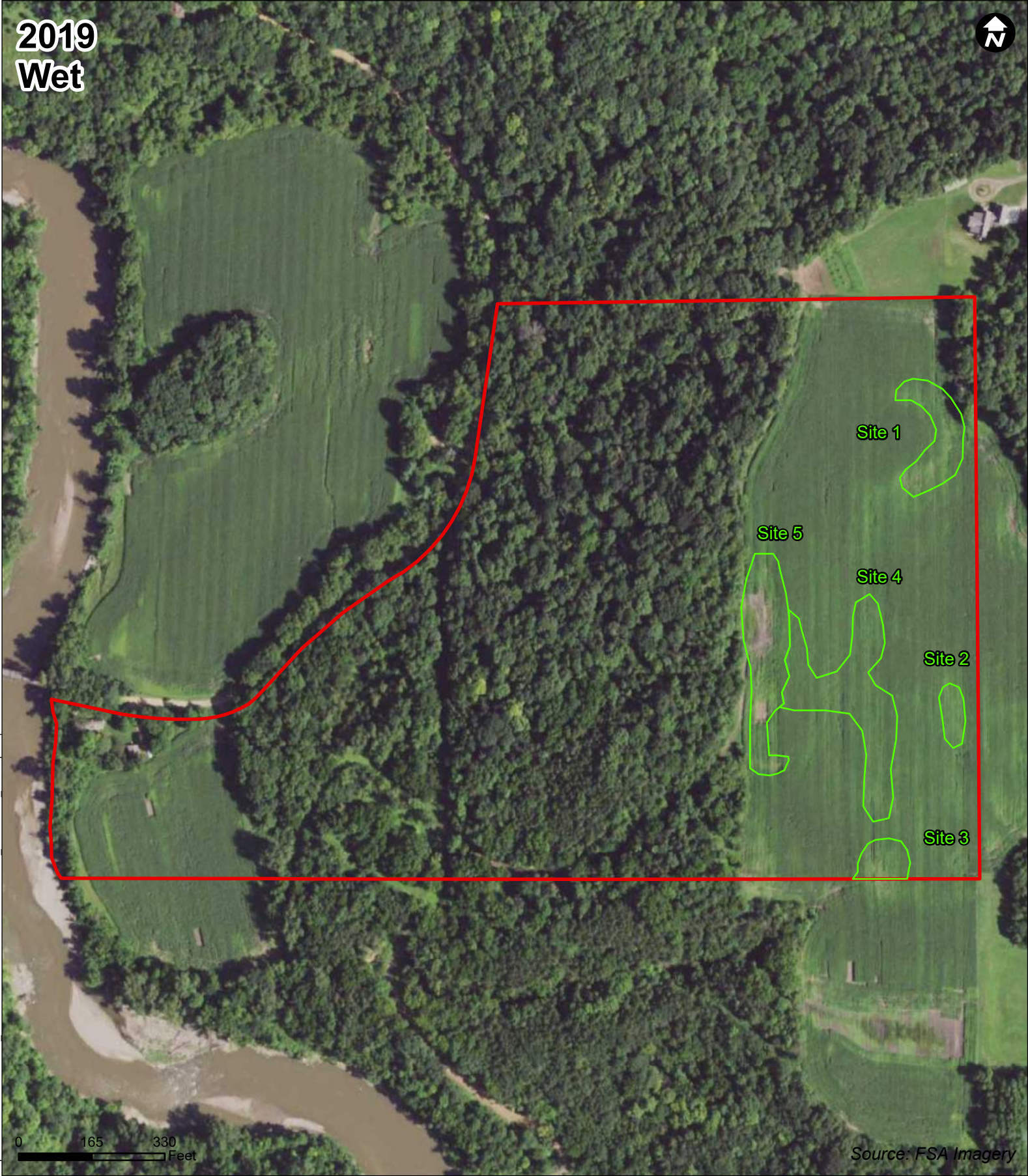
Date:

4/2/2024

| Date:                                                                                                                                                          | Source:   | Assumed Month: | Climatic Condition: | Image Interpretations |        |        |        |        |                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------------|---------------------|-----------------------|--------|--------|--------|--------|----------------------|
|                                                                                                                                                                |           |                |                     | Site 1                | Site 2 | Site 3 | Site 4 | Site 5 | Notes                |
| 2019                                                                                                                                                           | MnGeo WMS | May            | Wet                 | CS                    | CS     | CS     | NV     | DO     |                      |
| 2017                                                                                                                                                           | MnGeo WMS | May            | Normal              | DO                    | DO     | DO     | CS     | DO     | Wet Winter           |
| 2015                                                                                                                                                           | MnGeo WMS | June           | Normal              | NV                    | NV     | NV     | NV     | CS     |                      |
| 2013                                                                                                                                                           | MnGeo WMS | July           | Normal              | SS                    |        | SS     |        |        | Field Recently Mowed |
| 2010                                                                                                                                                           | MnGeo WMS | September      | Normal              | CS                    | NV     | NV     | NV     | CS     |                      |
| 2009                                                                                                                                                           | MnGeo WMS | July           | Dry                 | NV                    | NV     | NV     | NV     | NV     |                      |
| 2008                                                                                                                                                           | MnGeo WMS | July           | Dry                 | SS                    |        |        |        |        | Field Recently Mowed |
| 2003                                                                                                                                                           | MnGeo WMS | June           | Normal              | NV                    | NV     | NV     | NV     | NV     |                      |
| Hydric Soil                                                                                                                                                    |           |                |                     | No                    | No     | No     | No     | No     |                      |
| NWI                                                                                                                                                            |           |                |                     | No                    | No     | No     | No     | No     |                      |
| Normal Years                                                                                                                                                   |           |                |                     | 5                     | 5      | 5      | 5      | 5      |                      |
| Wet Signatures                                                                                                                                                 |           |                |                     | 3                     | 1      | 2      | 1      | 3      |                      |
| Percent Wet Signatures                                                                                                                                         |           |                |                     | 60%                   | 20%    | 40%    | 20%    | 60%    |                      |
| NV - Normal Vegetation, WS - Wetland Signature, CS - Crop Stress, DO - Drown Out, SW - Standing Water, AP - Altered Pattern, NC - Not Cropped, SS-Soil Wetness |           |                |                     |                       |        |        |        |        |                      |

| Decision Matrix |     |        |        |              |                    | Results     |
|-----------------|-----|--------|--------|--------------|--------------------|-------------|
| Hydric Soil     | NWI | % Wet  | % Wet  | Field visit? | Wetland?           |             |
| Yes             | Yes | >50%   | >50%   | No           | Yes                |             |
| Yes             | Yes | 30-50% | 30-50% | No           | Yes                |             |
| Yes             | Yes | <30%   | <30%   | Yes          | Yes, w/field hydro |             |
| Yes             | No  | >50%   | >50%   | No           | Yes                |             |
| Yes             | No  | 30-50% | 30-50% | Yes          | Yes, w/field hydro |             |
| Yes             | No  | <30%   | <30%   | No           | No                 |             |
| No              | Yes | >50%   | >50%   | No           | Yes                |             |
| No              | Yes | 30-50% | 30-50% | No           | Yes                |             |
| No              | Yes | <30%   | <30%   | No           | No                 |             |
| No              | No  | >50%   | >50%   | Yes          | Yes, w/field hydro | Sites 1 & 5 |
| No              | No  | 30-50% | 30-50% | Yes          | Yes, w/field hydro | Site 3      |
| No              | No  | <30%   | <30%   | No           | No                 | Sites 2 & 4 |

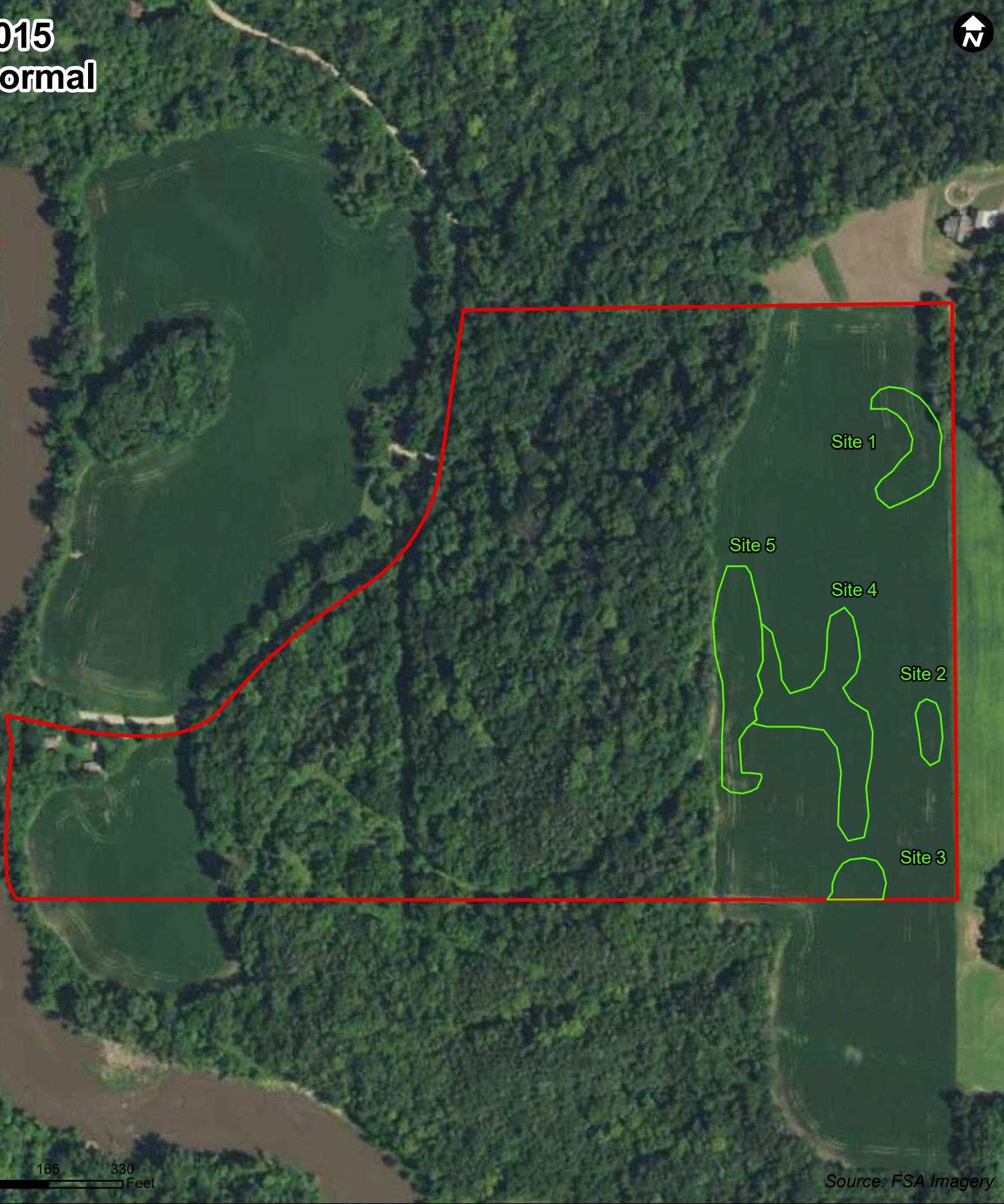




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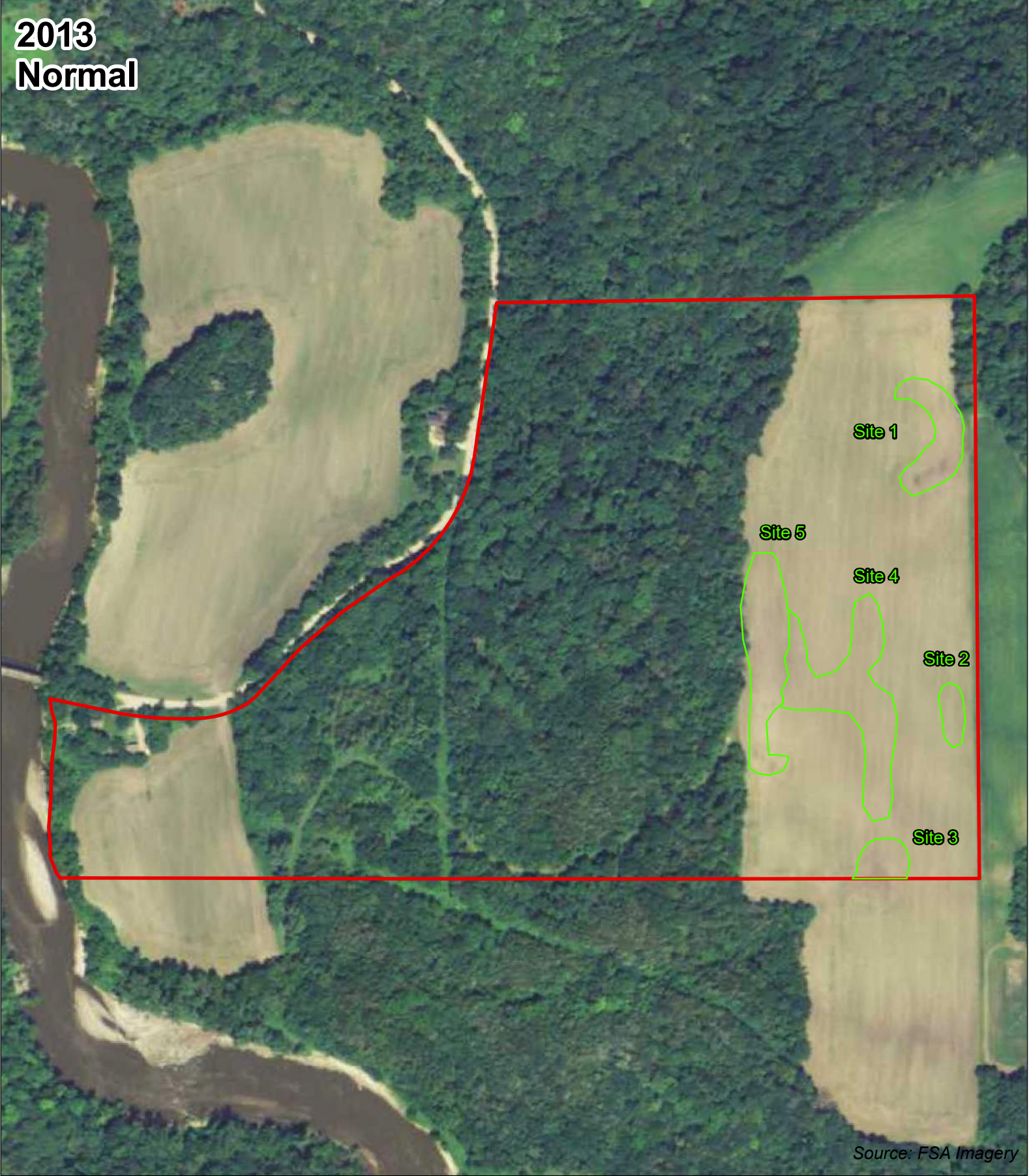


2015  
Normal



Source: FSA Imagery

2013  
Normal



Source: FSA Imagery



2010  
Normal



Site 1

Site 5

Site 4

Site 2

Site 3

0 165 330 Feet

Source: FSA Imagery

2009  
Dry

Site 1

Site 5

Site 4

Site 2

Site 3

Source: FSA Imagery



2008  
Dry



2003  
Normal

0 165 330 Feet

Source: FSA Imagery

Source: FSA Imagery

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