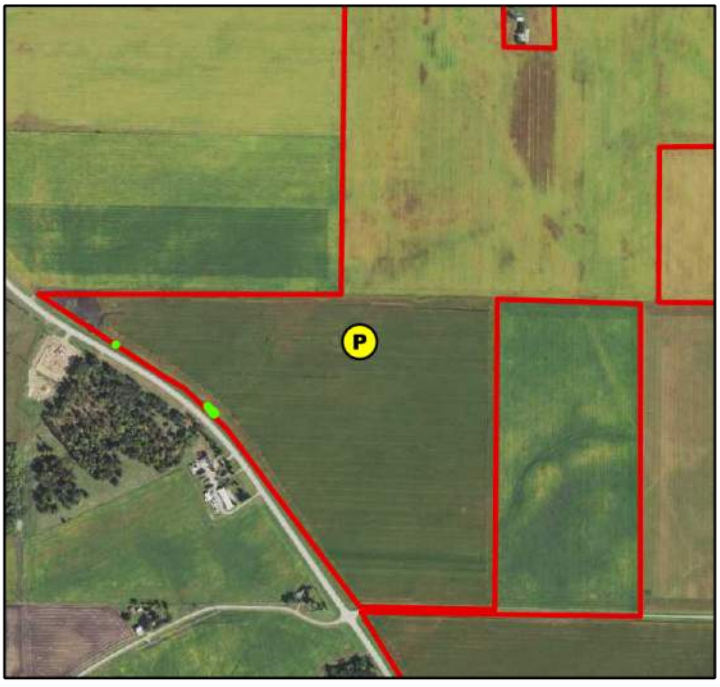
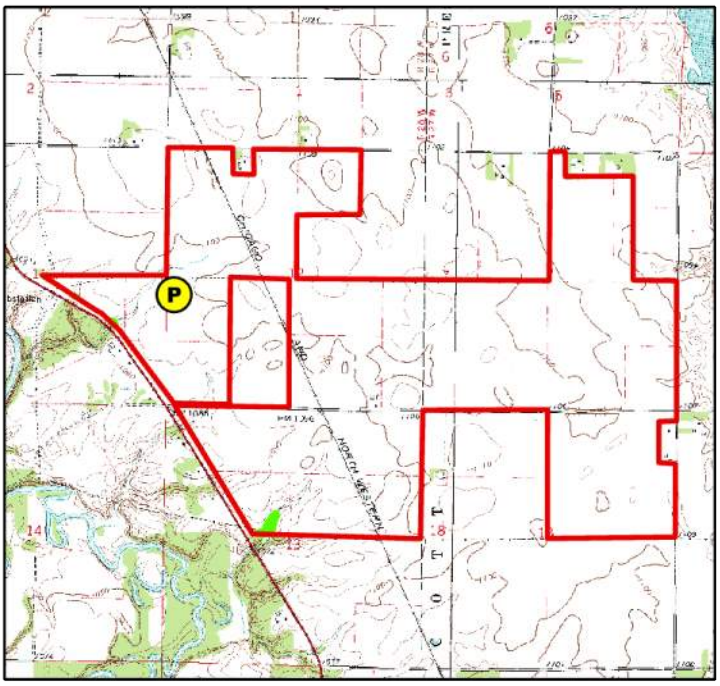
# Winnebago Solar and Storage Project
# Delineation Site Photograph

Westwood
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

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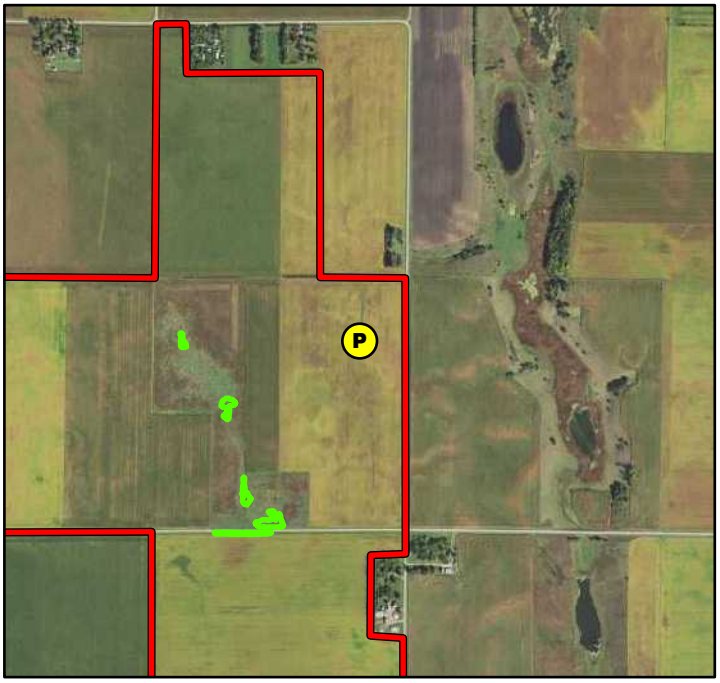


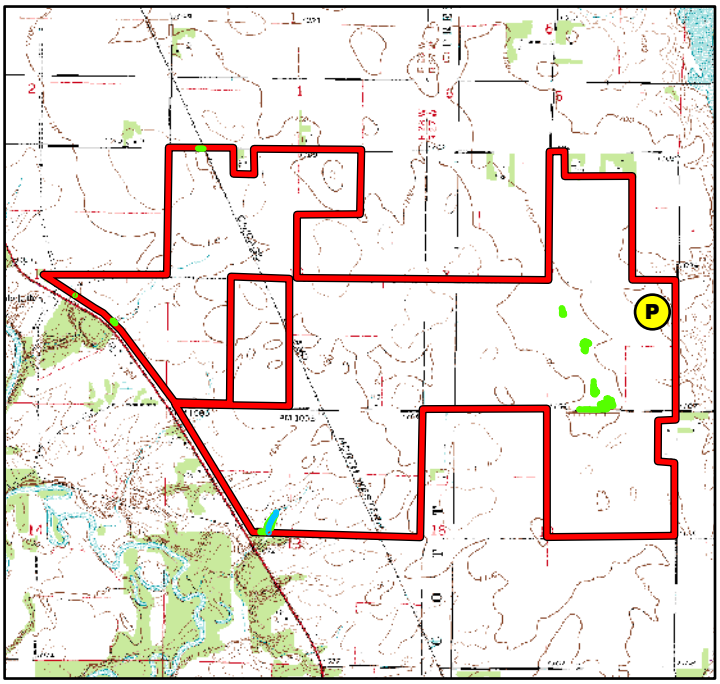

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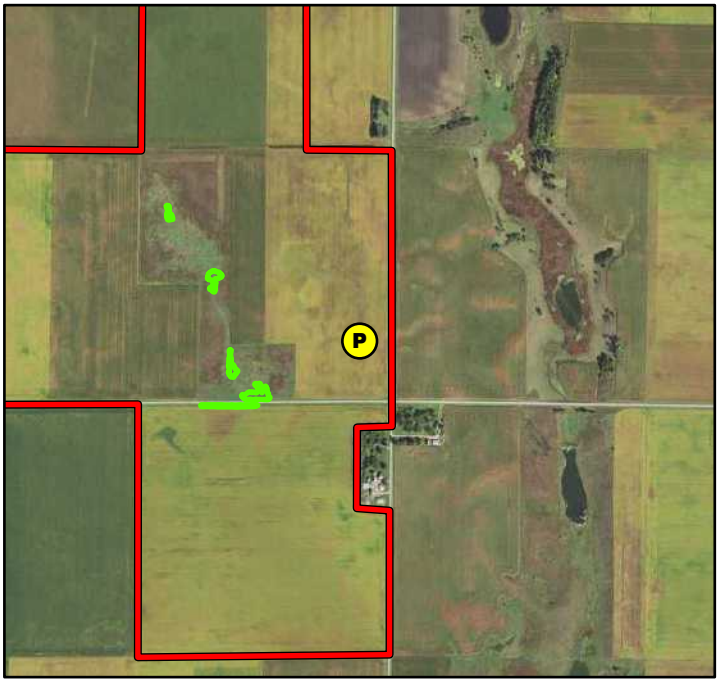


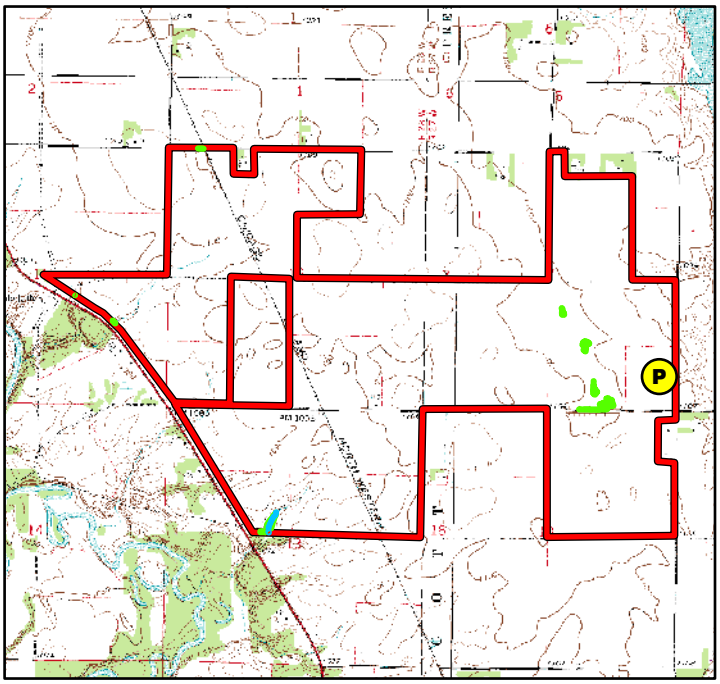

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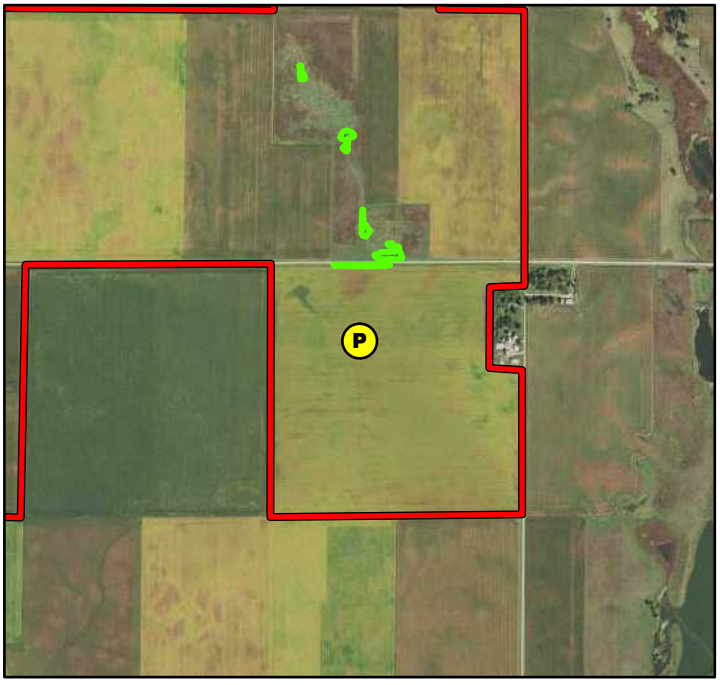


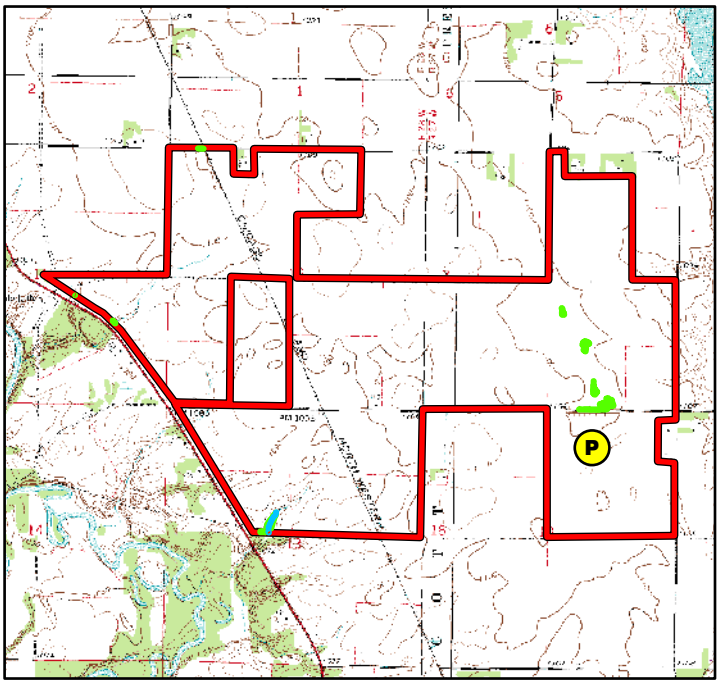

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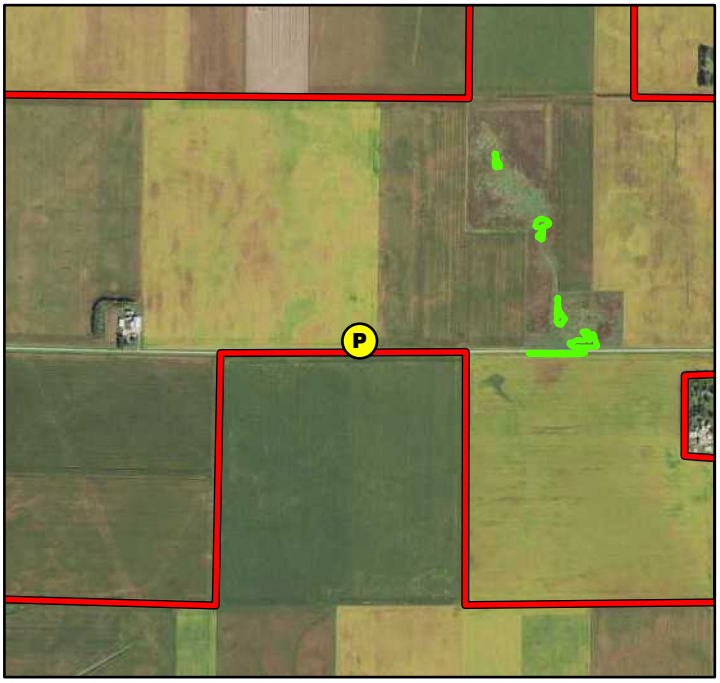


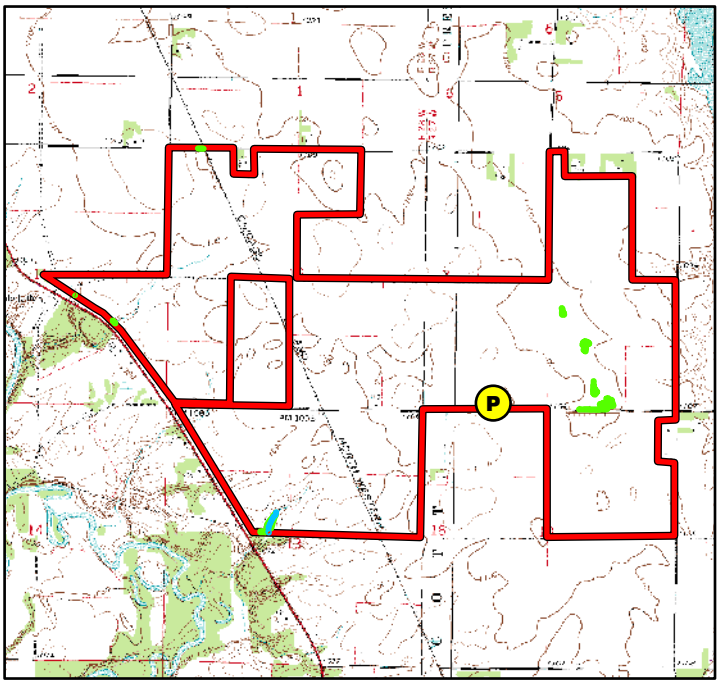

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# Delineation Site Photograph

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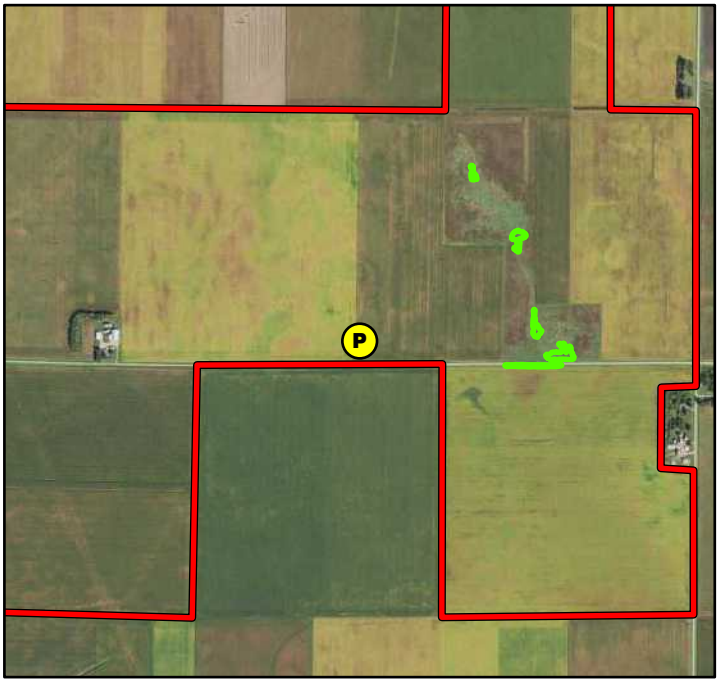


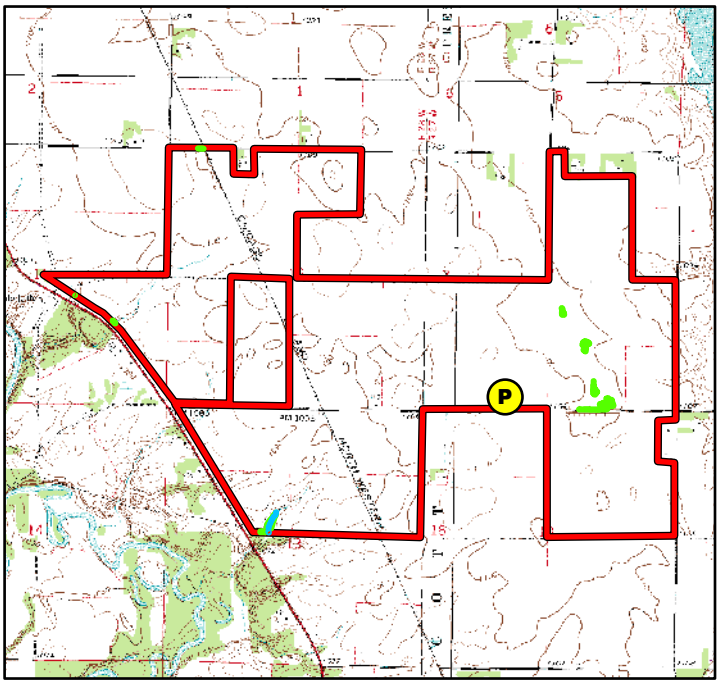

# Winnebago Solar and Storage
# Delineation Site Photograph

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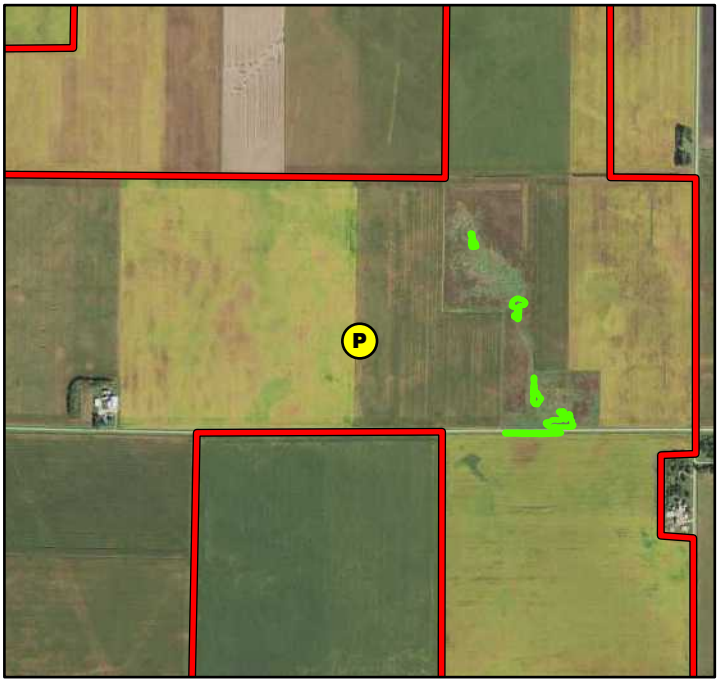


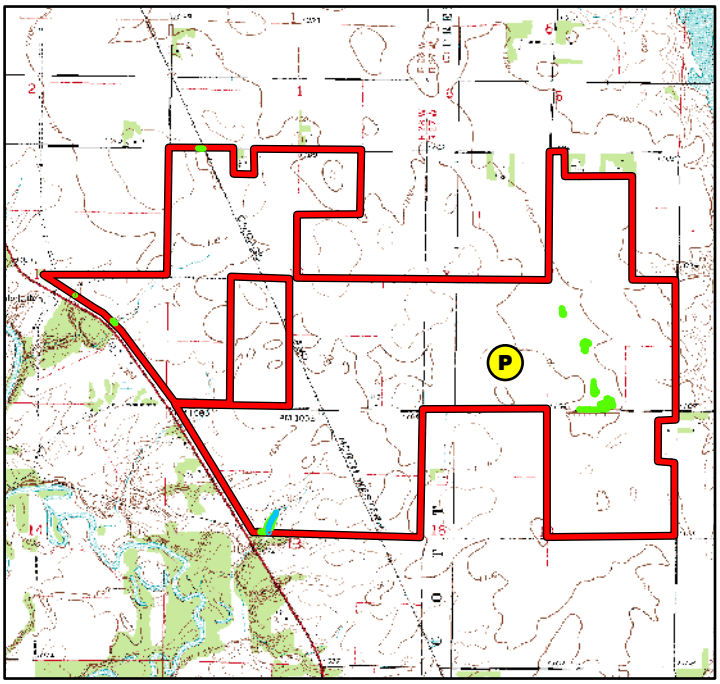

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# Delineation Site Photograph

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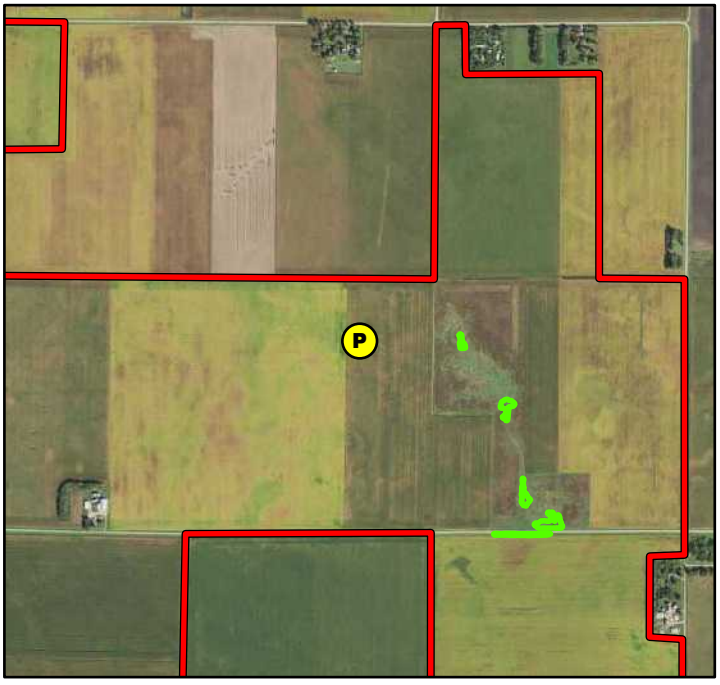


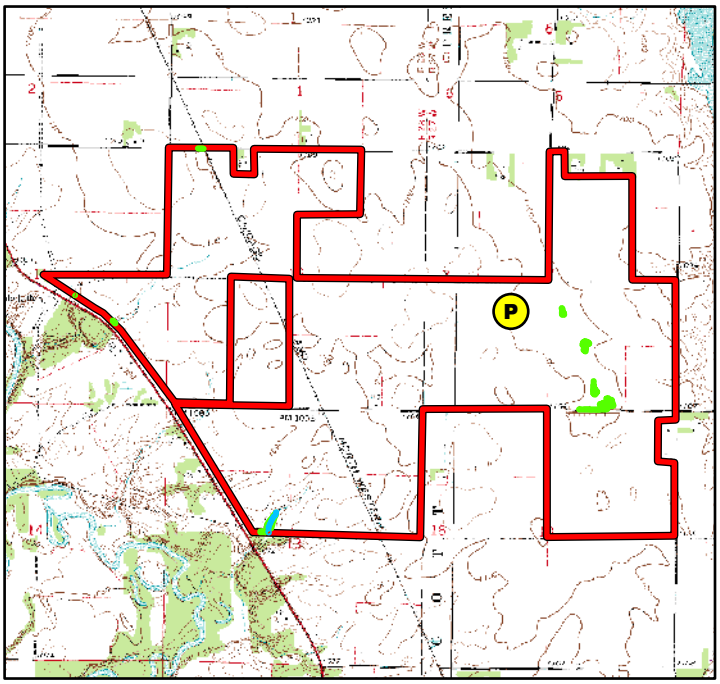

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# Delineation Site Photograph

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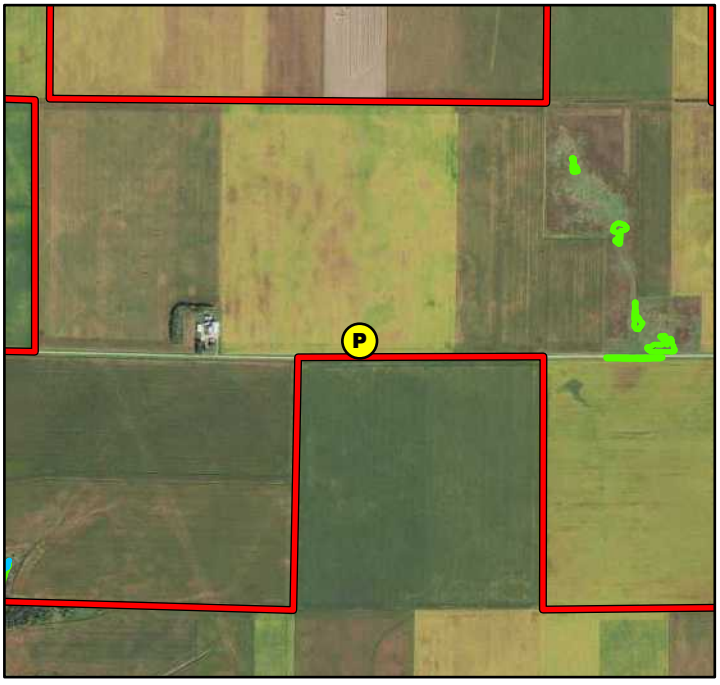


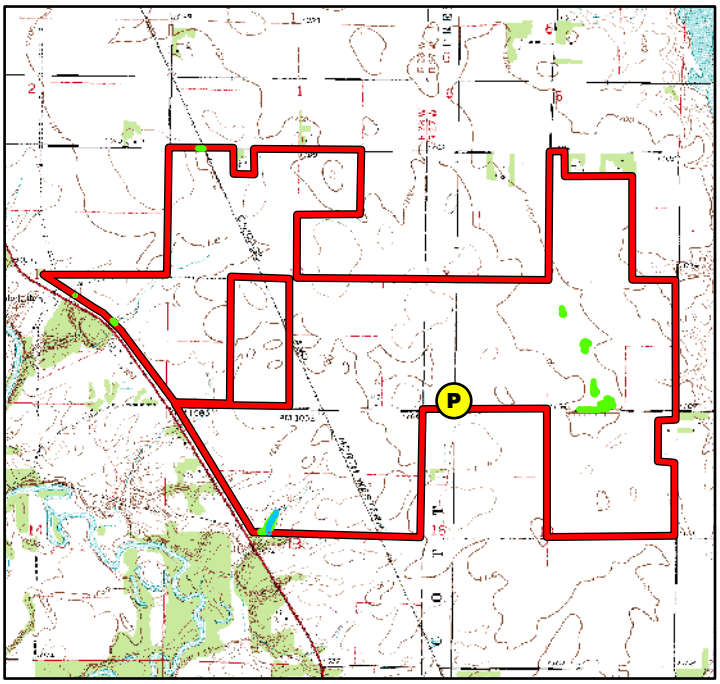

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# Delineation Site Photograph

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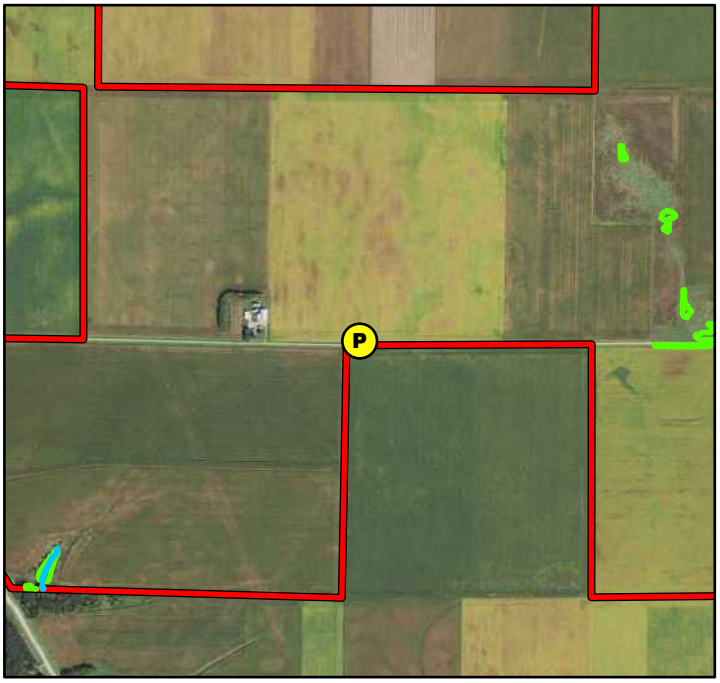


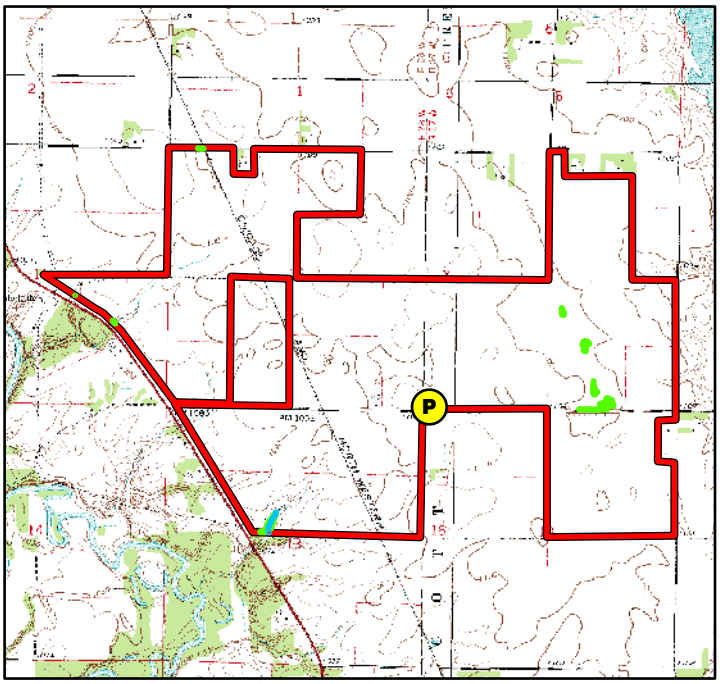

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# Delineation Site Photograph

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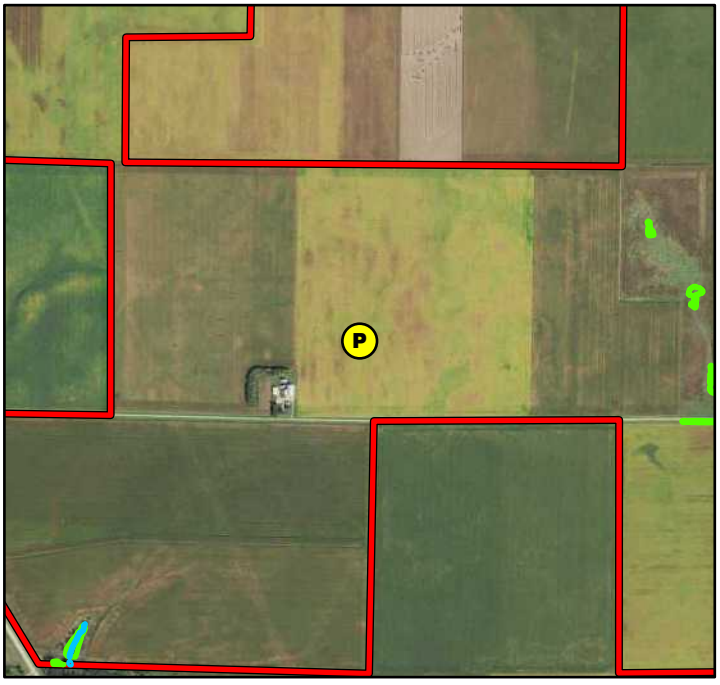


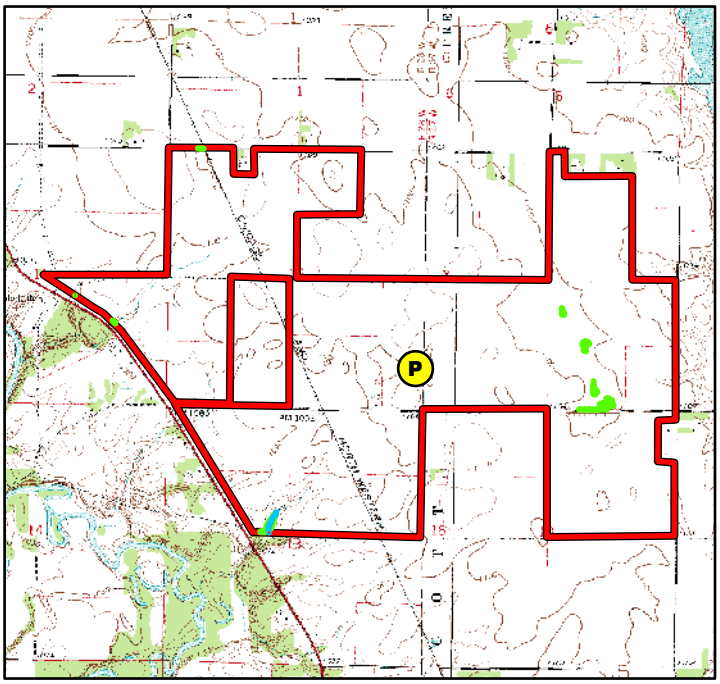

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# Delineation Site Photograph

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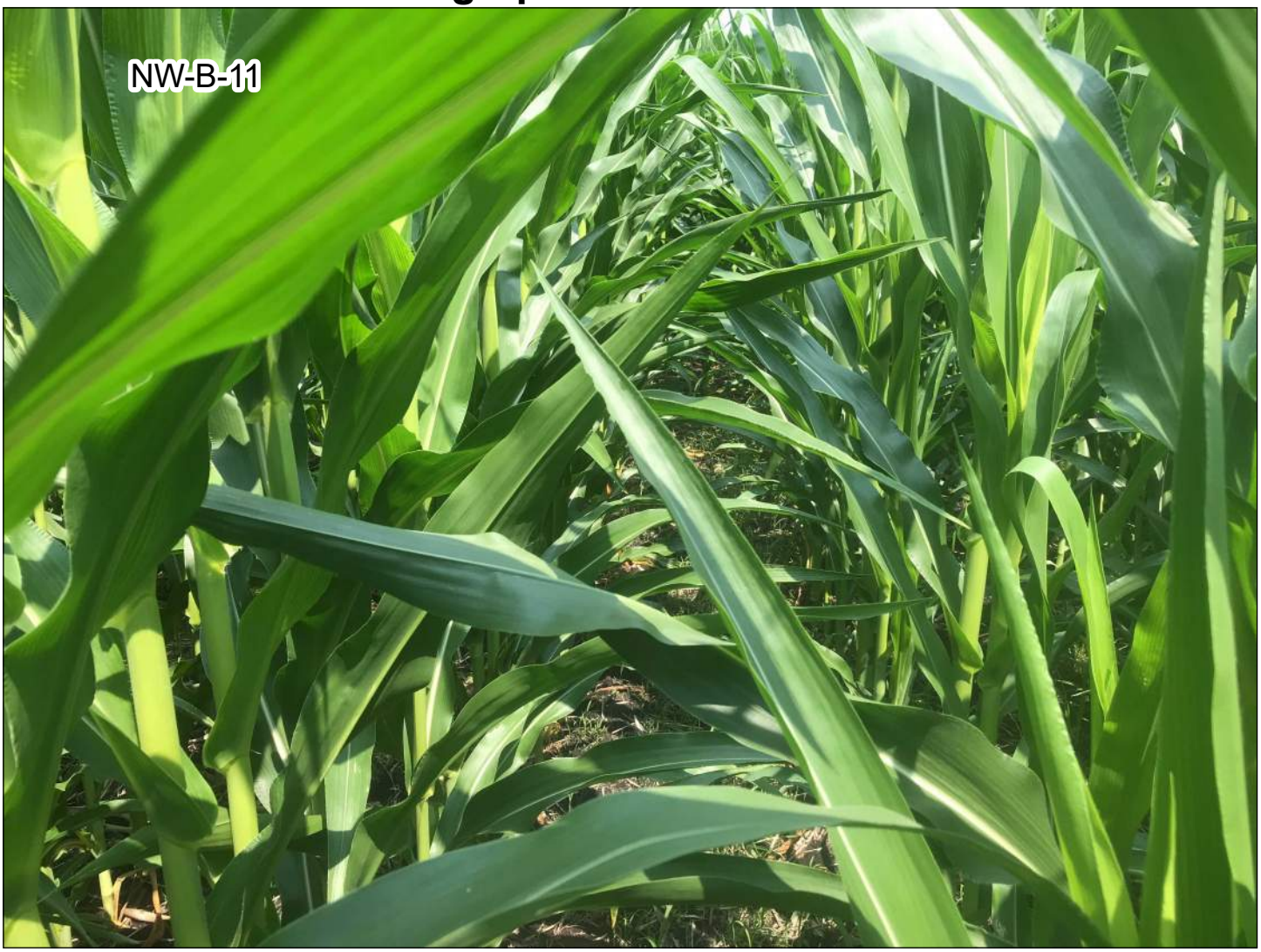


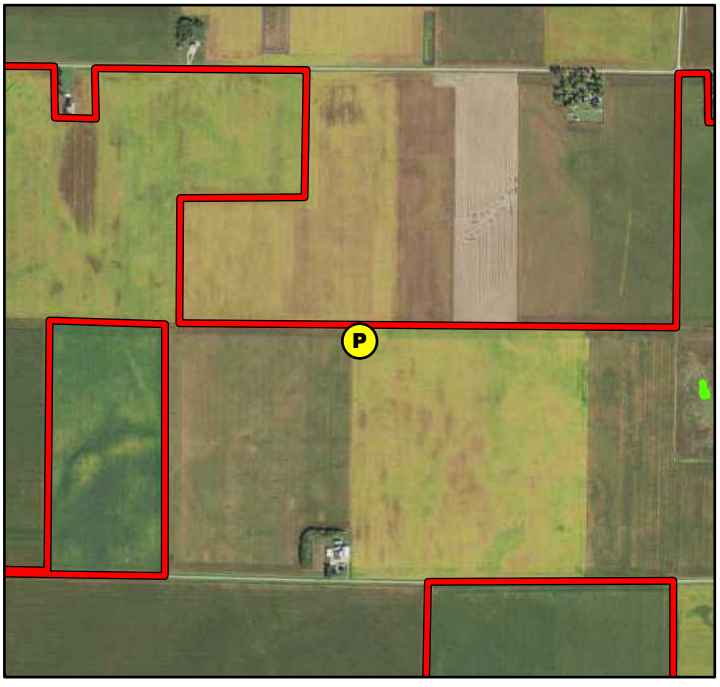


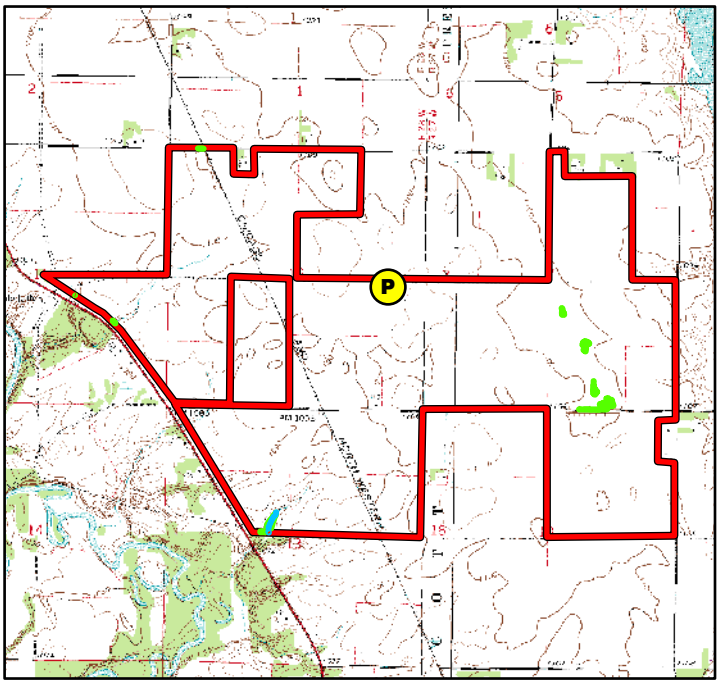

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# Delineation Site Photograph

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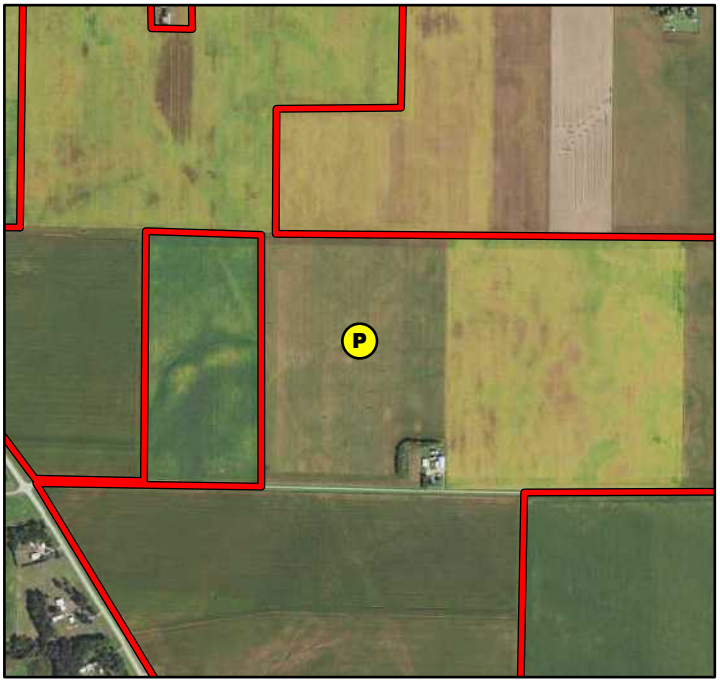


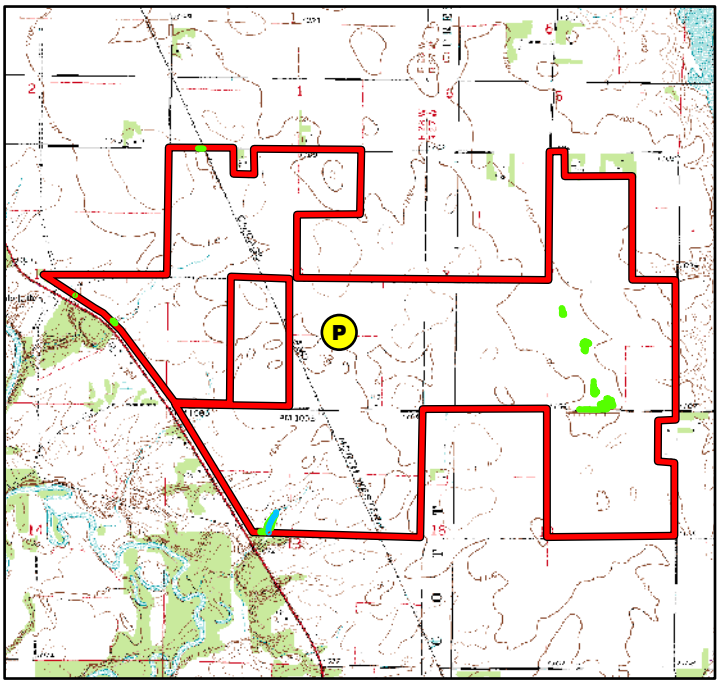

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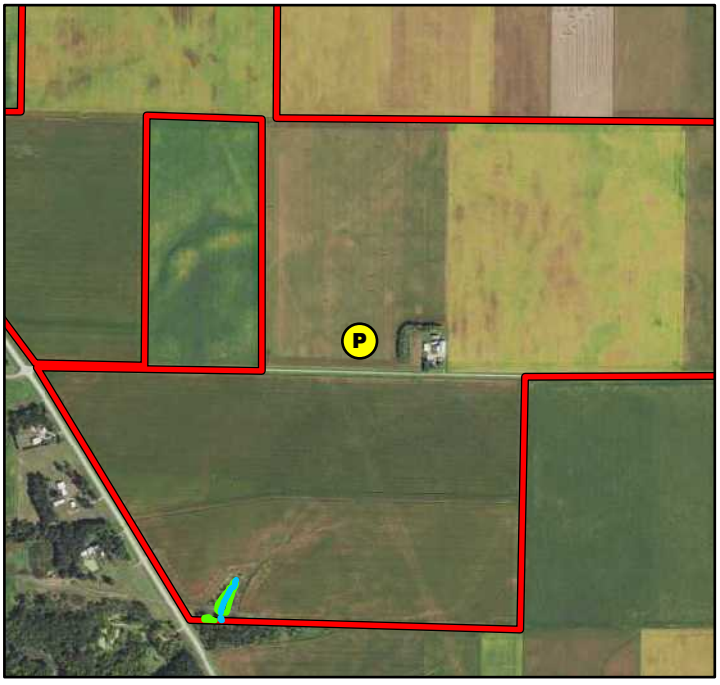


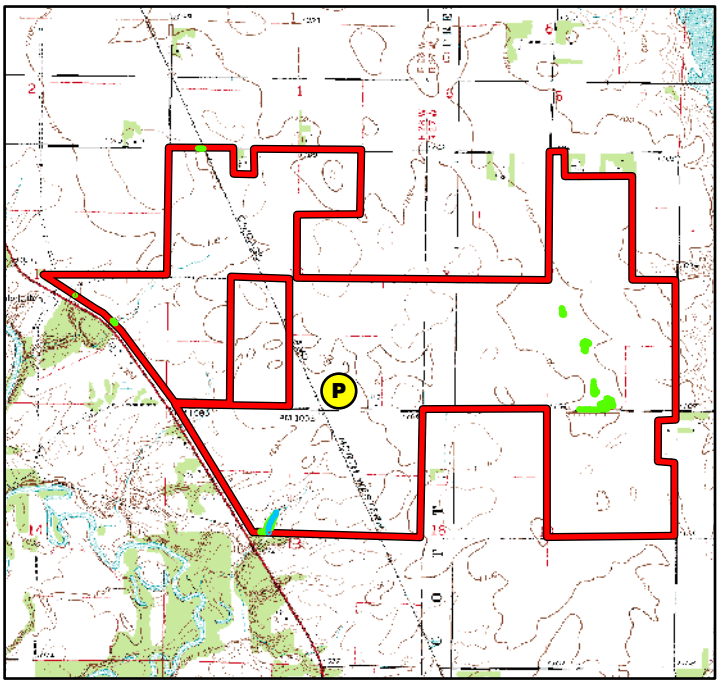

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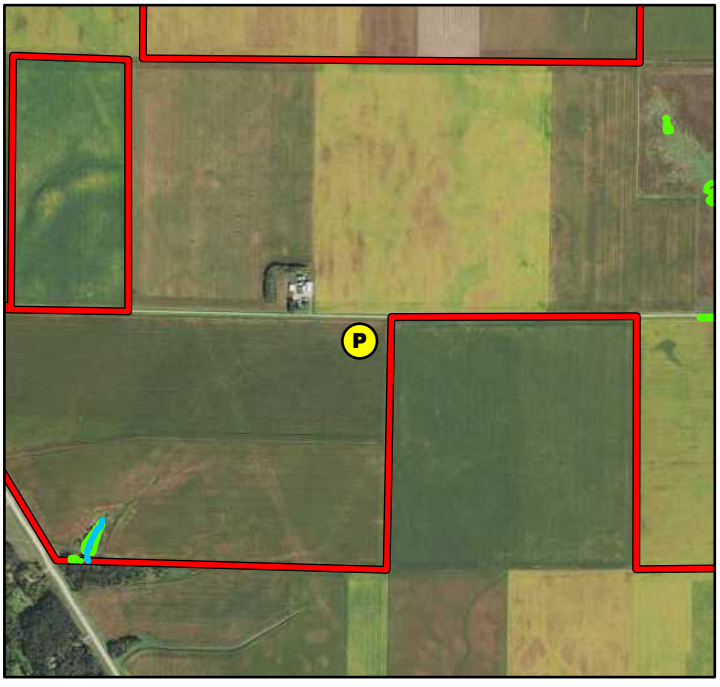


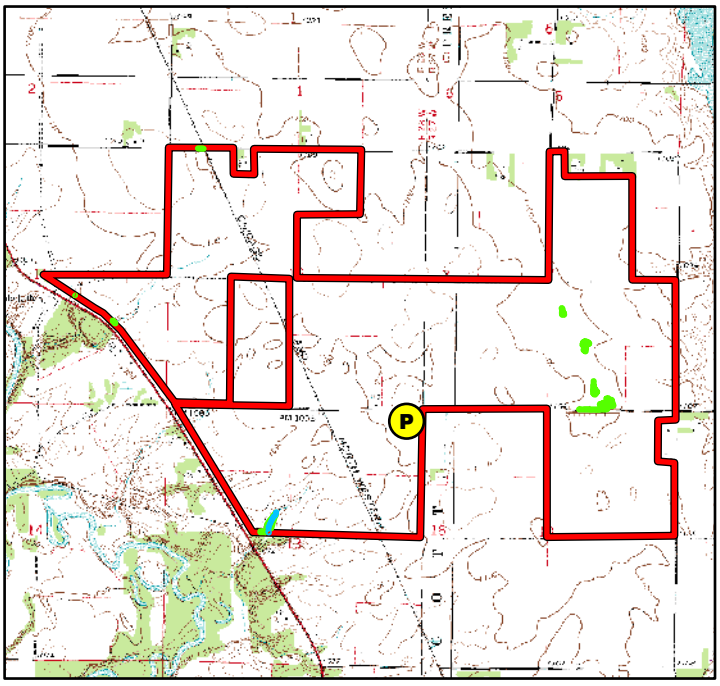

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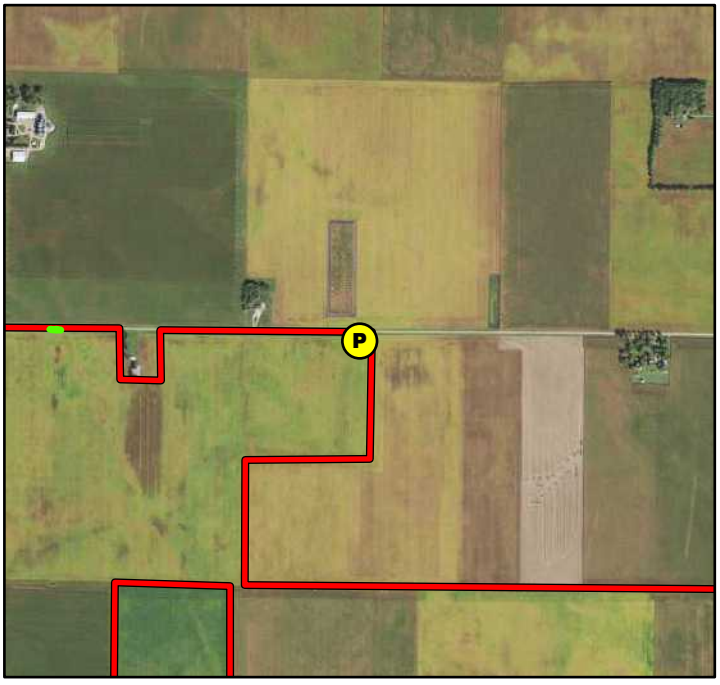


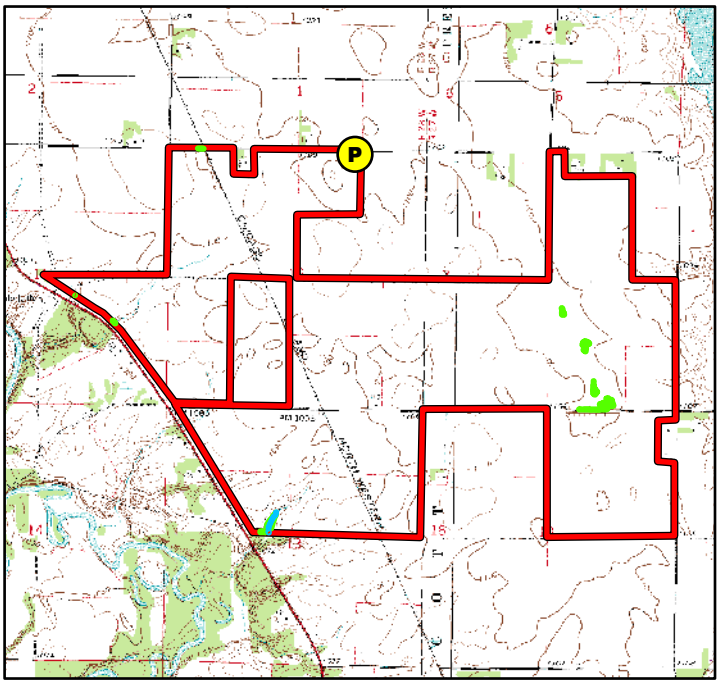

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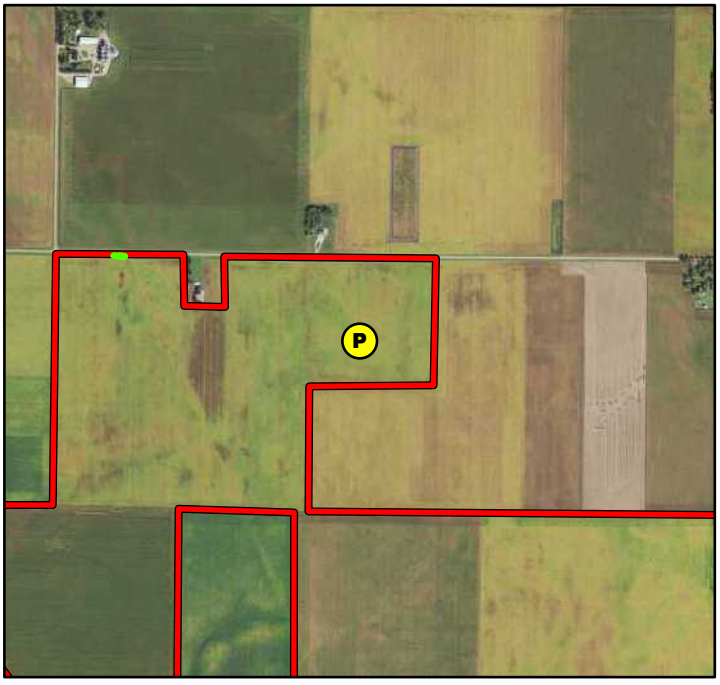


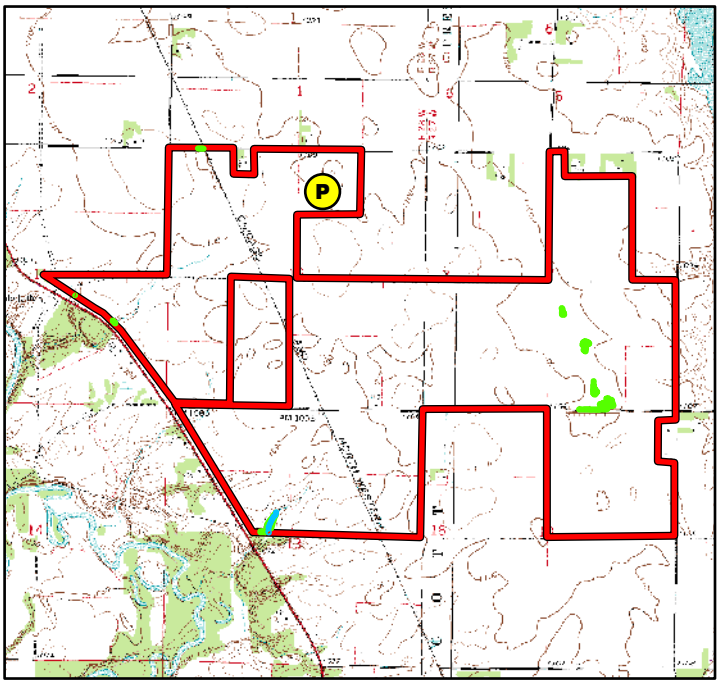

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# Delineation Site Photograph

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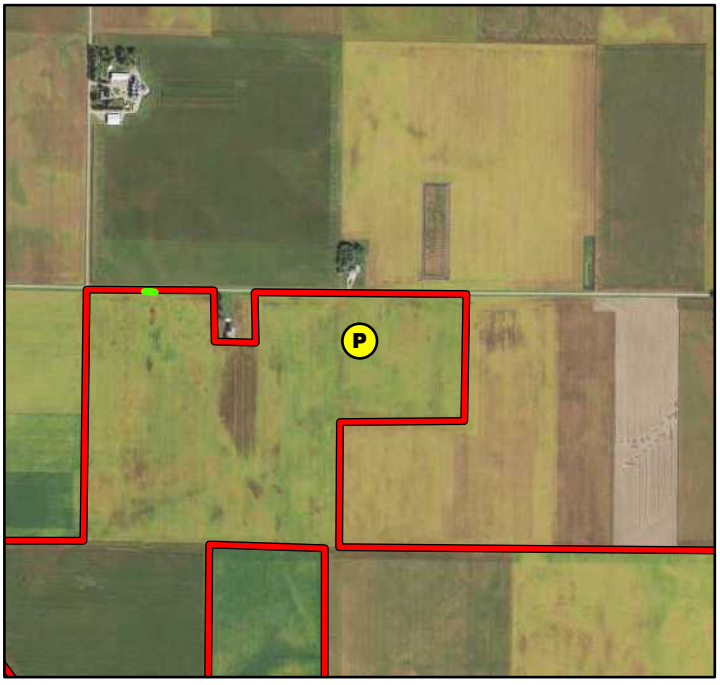


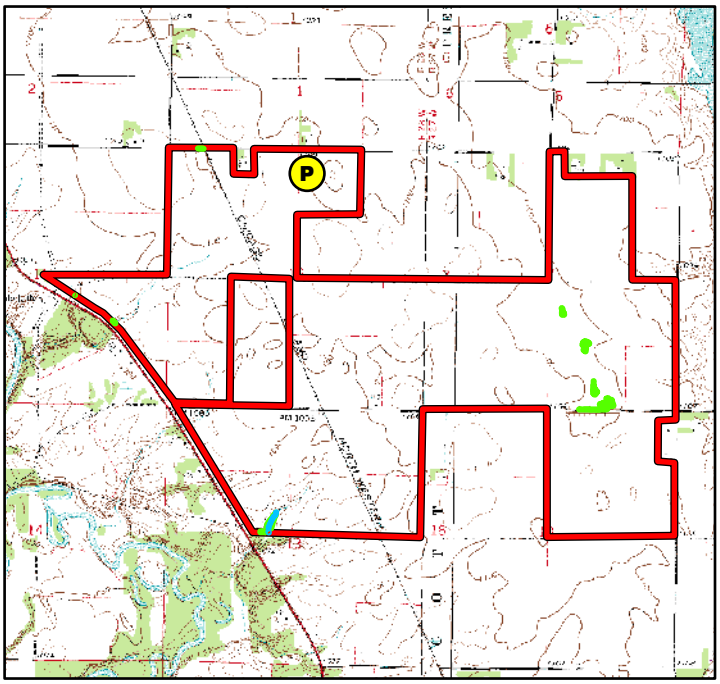

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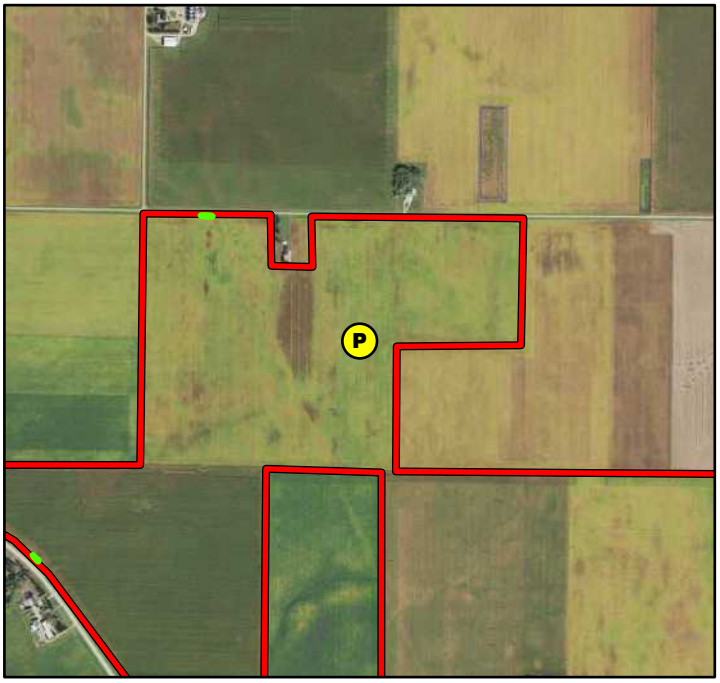


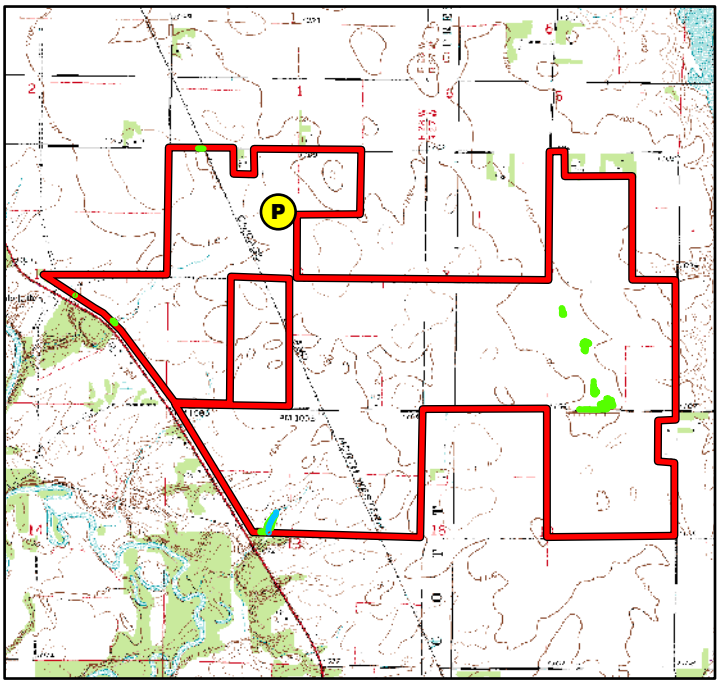

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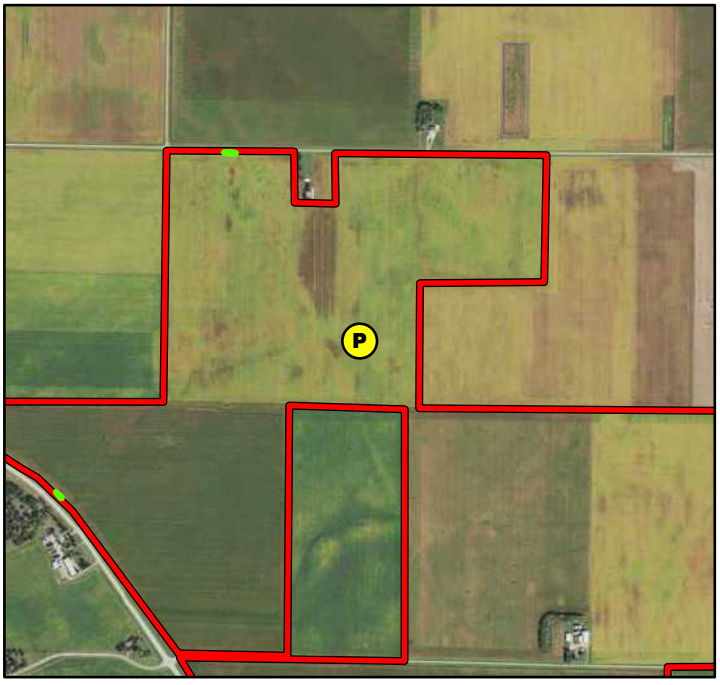


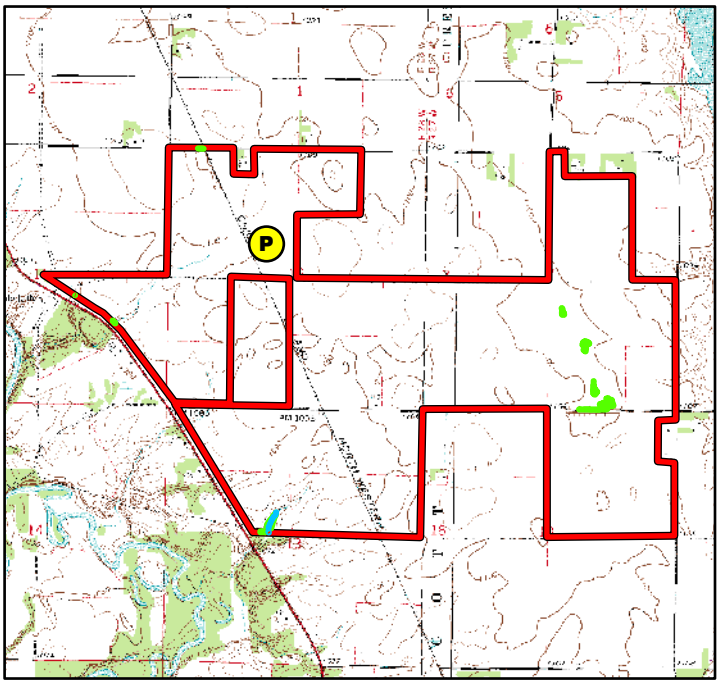

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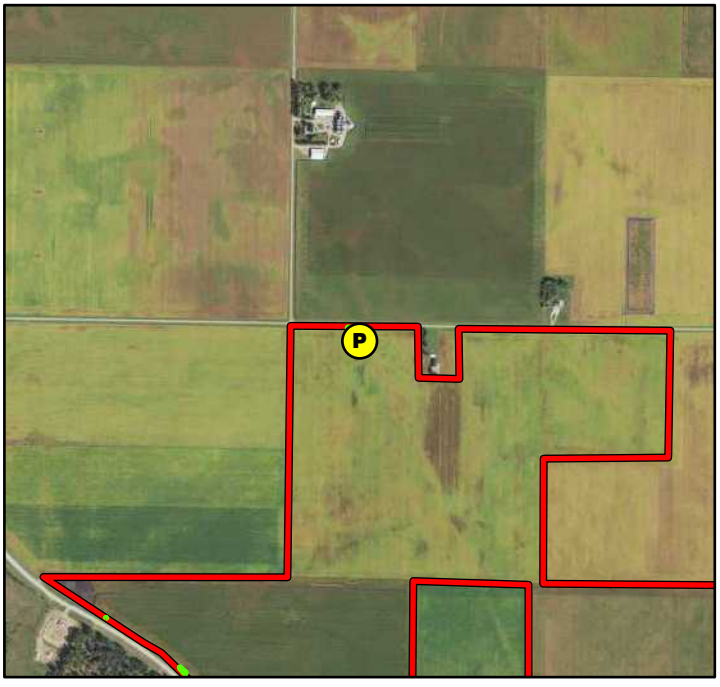


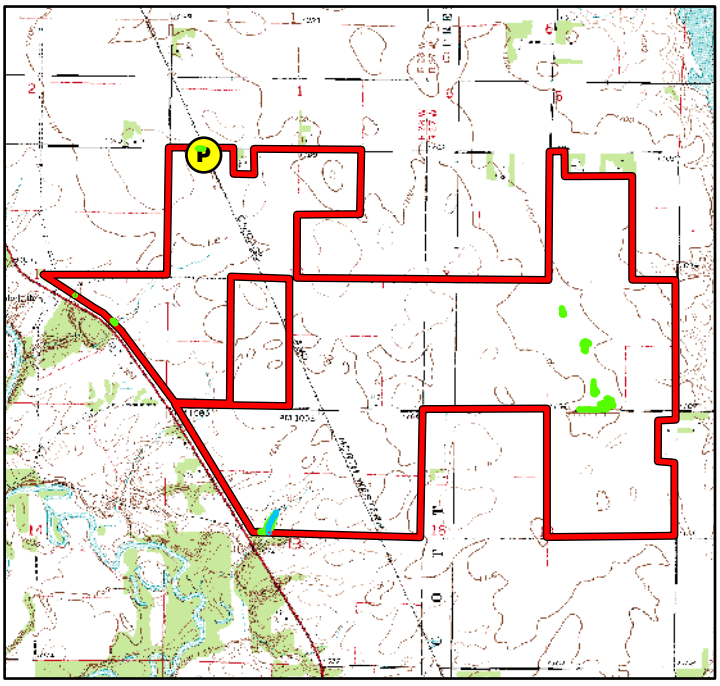

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# Appendix C

## Watercourse Delineation Photographs and Data Forms

**Winnebago Solar and Storage Project**

Faribault County, Minnesota

# Winnebago Solar and Storage Project
# Delineation Site Photograph

Westwood
Toll Free (888) 937-5150 westwoodps.com
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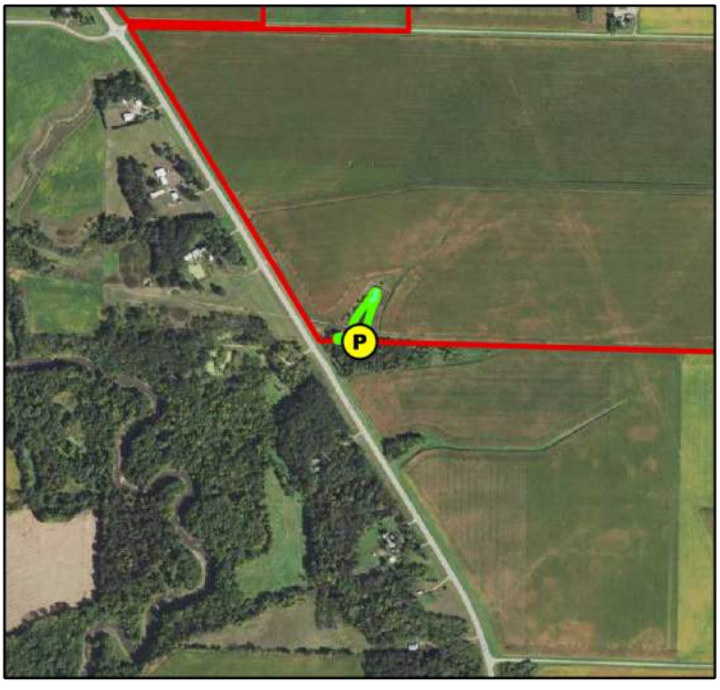
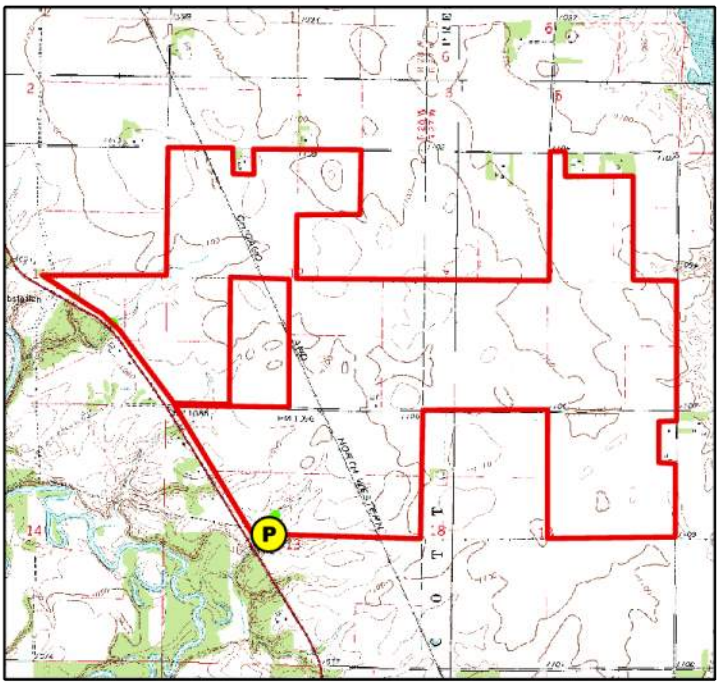
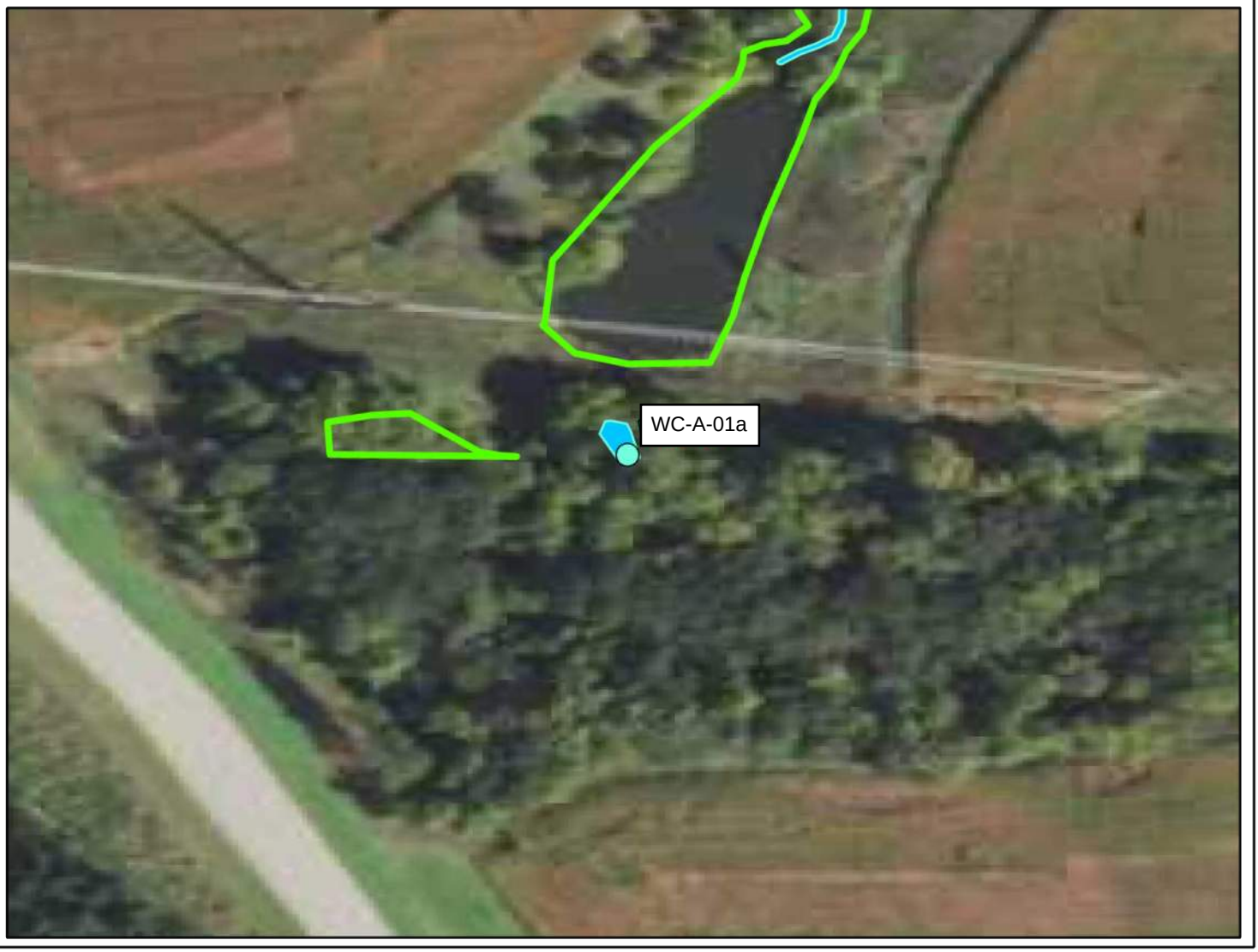


# Winnebago Solar and Storage Project
# Watercourse Data Form

Westwood
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

| Attributes | |
|---|---|
| Feature ID | WC-A-01a |
| Defined Bed & Bank | Yes |
| Waters of the US | No |
| Mapped on NHD | Yes |
| Mapped on NWI | No |
| Investigator | ALM |
| Flow Characteristics | Intermittent |
| Direction of the Flow | SW |
| Water Width at Observation Point (ft) | 4 |
| Water Depth at Observation Point (ft) | 0.5 |
| Left Bank Height (ft) - Looking Downstream | 4.5 |
| Right Bank Height (ft) - Looking Downstream | 4.5 |
| OHWM Width (ft) | 8 |
| OHWM Height (ft from Substrate) | 2.5 |
| Evidence of Scour or Erosion | Yes |
| OHWM Criteria | natural_line,bed_bank,plant_community_change,scour |
| Pools, Riffles, Runs Present? | pools,runs |
| Substrate | Silt |



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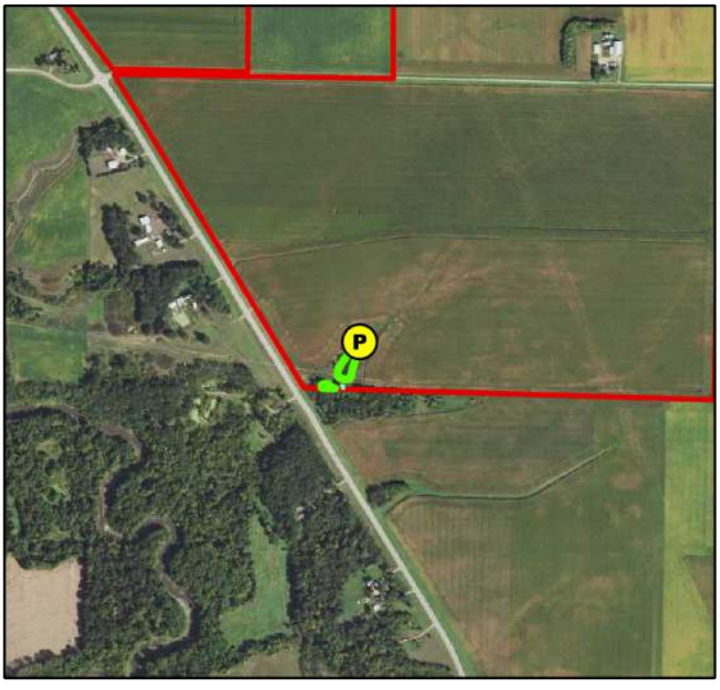
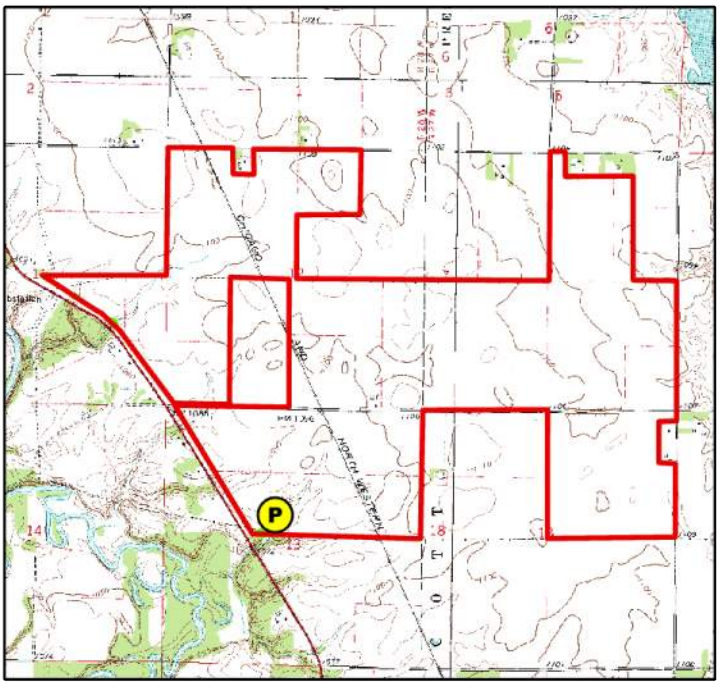


# Winnebago Solar and Storage Project
# Watercourse Data Form

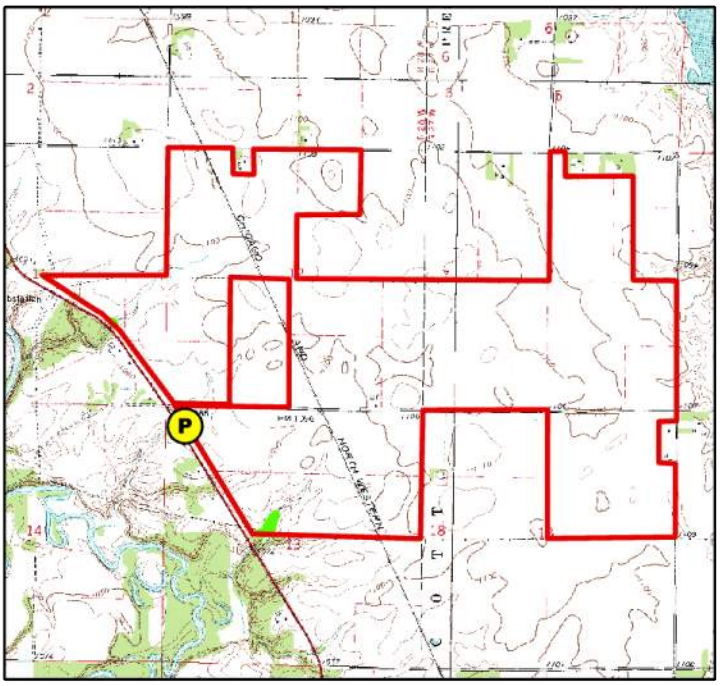
Westwood
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

| Attributes | |
|---|---|
| Feature ID | WC-A-01b |
| Defined Bed & Bank | Yes |
| Waters of the US | No |
| Mapped on NHD | Yes |
| Mapped on NWI | No |
| Investigator | ALM |
| Flow Characteristics | Intermittent |
| Direction of the Flow | SW |
| Water Width at Observation Point (ft) | 4 |
| Water Depth at Observation Point (ft) | 3.5 |
| Left Bank Height (ft) - Looking Downstream | 4 |
| Right Bank Height (ft) - Looking Downstream | 4 |
| OHWM Width (ft) | 4 |
| OHWM Height (ft from Substrate) | 4 |
| Evidence of Scour or Erosion | No |
| OHWM Criteria | bed_bank,plant_community_change |
| Pools, Riffles, Runs Present? | pools,runs |
| Substrate | Silt |

# Winnebago Solar and Storage Project
# Delineation Site Photograph

Westwood
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

NWC-A-01

# Winnebago Solar and Storage Project
# Watercourse Data Form

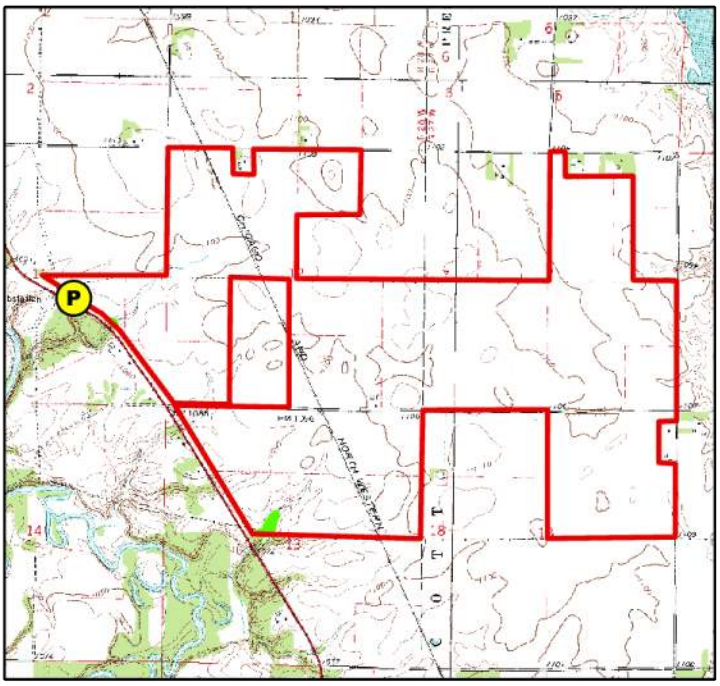
Westwood
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

| Attributes | |
|---|---|
| Feature ID | NWC-A-01 |
| Defined Bed & Bank | No |
| Waters of the US | No |
| Mapped on NHD | Yes |
| Mapped on NWI | No |
| Investigator | ALM |
| Flow Characteristics | N/A - no feature at sample point |
| Direction of the Flow | |
| Water Width at Observation Point (ft) | |
| Water Depth at Observation Point (ft) | |
| Left Bank Height (ft) - Looking Downstream | |
| Right Bank Height (ft) - Looking Downstream | |
| OHWM Width (ft) | |
| OHWM Height (ft from Substrate) | |
| Evidence of Scour or Erosion | |
| OHWM Criteria | |
| Pools, Riffles, Runs Present? | |
| Substrate | |

# Winnebago Solar and Storage Project
# Delineation Site Photograph

Westwood
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

NWC-A-02

# Winnebago Solar and Storage Project
# Watercourse Data Form

Westwood
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

| Attributes | |
|---|---|
| Feature ID | NWC-A-02 |
| Defined Bed & Bank | No |
| Waters of the US | No |
| Mapped on NHD | Yes |
| Mapped on NWI | No |
| Investigator | ALM |
| Flow Characteristics | N/A - no feature at sample point |
| Direction of the Flow | |
| Water Width at Observation Point (ft) | |
| Water Depth at Observation Point (ft) | |
| Left Bank Height (ft) - Looking Downstream | |
| Right Bank Height (ft) - Looking Downstream | |
| OHWM Width (ft) | |
| OHWM Height (ft from Substrate) | |
| Evidence of Scour or Erosion | |
| OHWM Criteria | |
| Pools, Riffles, Runs Present? | |
| Substrate | |

Westwood

# Appendix D

## Offsite Hydrology Review

**Winnebago Solar and Storage Project**

Faribault County, Minnesota

# Hydrology Assessment with Aerial Imagery-Recording Form[1]

Project Name: Winnebago Solar Facility and Battery Storage Date: 6/17/2020 County: Faribault

Investigator: R.Cress Legal Description (S, T, R): T103N R28W Sec 11, 12, 13, 14/ T103N R27W Sec 7

## Summary Table

| Photo Year[2] | Image Source[2] | Actual/ Estimated Photo Date[3] | Climate condition (wet, dry, normal)[4,5] | Interpretation (list hydrology indicators observed, e.g. crop stress, drowned out, etc.)[6] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SA1 | SA2 | SA3 | SA4 | SA5 | SA6 | SA7 |
| 2017 | WMS (FSA) | 9/20 | Dry | CS | NV | NV | NV | NV | NV | DO |
| 2015 | WMS (FSA) | 8/1 | Normal | NV | NV | NV | NV | NV | NV | CS |
| 2013 * | WMS (FSA) | 7/12 | Wet | SWS | SWS | DO | CS | SWS | SWS | CS |
| 2011 | WMS (DNR) | 4/15 | Wet | SWS | NV | SWS | NV | NV | SWS (sm) | SWS |
| 2010 | WMS (FSA) | 7/1 | Normal | NV | NV | SWS | NV | NV | NV | SWS |
| 2009 | WMS (FSA) | 7/25 | Dry | NV | NV | NV | DP | NV | NV | CS |
| 2008 | WMS (FSA) | 7/5 | Normal | CS | NV | CS | NV | NV | NV | NV |
| 2006 | Google Earth | 5/31 | Wet | NV | NV | NV | NV | NV | NV | CS |
| 2004 | Google Earth | 8/2 | Normal | NV | NV | SWS | NV | NV | NV | CS |
| 2003 | WMS (FSA) | 9/25 | Dry | NV | NV | NV | CS | NV | NV | NV |
| 1991 | WMS (USGS) | 4/15 | Normal | SWS | NV | NV | NV | NV | NV | SWS |

## Summary Table

| | SA1 | SA2 | SA3 | SA4 | SA5 | SA6 | SA7 |
|---|---|---|---|---|---|---|---|
| # Years of aerial photography | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| # Normal Years (1991-2018) | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| # signatures in Normal years | 2 | 0 | 3 | 0 | 0 | 0 | 4 |
| # signatures in Wet years | 2 | 1 | 2 | 1 | 1 | 2 | 3 |
| # Signatures in Dry years | 1 | 0 | 0 | 2 | 0 | 0 | 2 |
| # signatures in all years | 5 | 1 | 5 | 3 | 1 | 2 | 9 |
| % Usable Yrs with wet signatures[7] | 2/5= 40% | 0/5=0% | 3/5=60% | 0/5=0% | 0/5=0% | 0/5=0% | 4/5=80% |

(sm)= smaller area than whole area showed signature

[1] Form adapted from BWSR/USACE Technical Guidance, July 1, 2016.

[2]Photo selection for historical aerial photography review are from the MnGEO WMS GIS server, Google Earth, and GIS sources such as County, watersheds, or cities.

[3]July 1 was used as the date for aerial photographs when determining antecedent precipitation when an actual date could not be determined. Other aerial photography from County GIS, Google imagery, NAIP, etc. was dated based on available information.

[4]MN State Climatology website used to produce three-prior-month (NRCS) method for parcel being investigated.

[5]Photo dates at the end of the month were advanced to the next month to determine climate conditions using the NRCS/3-prior-month method if the daily precipitation data from that month warranted it.

[6]Key below is used label photo interpretations. It is imperative the reviewer read and understand the guidance associated with the use of the labels.

[7]Equal number of most recent wet and dry years used if 5 normal years were not available. Otherwise only Normal years.

*Base photo for suspect areas

## Definitions

| | | | |
|---|---|---|---|
| WS-wetland signature<br>CS-crop stress<br>SGO-something going on | DO-drowned out<br>NC-not cropped<br>SS- soil wetness signature | SW-standing water<br>AP-altered pattern<br>DP-drainage pattern | NV-normal vegetative cover<br>DNC-dry not cropped<br>NSS- no soil wetness<br>(sm)- smaller area |
| WS is typically used for interpretation in non-cropped areas or contrasting green areas in dry conditions | | | |

## Summary Notes:

Field data sheet reference (if applicable): _____

# Wetland Determination from Aerial Imagery – Recording Form

Project Name: Winnebago Solar Facility and Battery Storage  Date: 6/17/2020  County: Faribault

Investigator: R.Cress  Legal Description (T, R, S): T103 R28/27 S11/12/13/14/7

Use the Decision Matrix below to complete Table 1.

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

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

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

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

**Table 1.**

| Area | Hydric Soils Present | Identified on NWI or other wetland map | Percent with wet signatures from Exhibit 1 | Other hydrology indicators present[1] | Wetland? |
|---|---|---|---|---|---|
| 1 | Yes | No | 40 | | Yes, if other hydrology indicators present |
| 2 | Yes | No | 0 | | No |
| 3 | Yes | No | 60 | | Yes |
| 4 | Yes | No | 0 | | No |
| 5 | Yes | No | 0 | | No |
| 6 | Yes | No | 0 | | No |
| 7 | Yes | No | 80 | | Yes |
| | | | | | |
| | | | | | |
| | | | | | |

[1] Answer "N/A" if field verification is not required and was not conducted.

*See Summary Notes on Page 1.

# Hydrology Assessment with Aerial Imagery-Recording Form[1]

Project Name: Winnebago Solar Facility and Battery Storage Date: 6/17/2020 County: Faribault

Investigator: R.Cress Legal Description (S, T, R): T103N R28W Sec 11, 12, 13, 14/ T103N R27W Sec 7

## Summary Table

| Photo Year[2] | Image Source[2] | Actual/ Estimated Photo Date[3] | Climate condition (wet, dry, normal)[4,5] | Interpretation (list hydrology indicators observed, e.g. crop stress, drowned out, etc.)[6] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SA8 | SA9 | SA10 | SA11 | SA12 | SA13 | SA14 |
| 2017 | WMS (FSA) | 9/20 | Dry | CS | CS | NV | NV | NV | CS | NV |
| 2015 | WMS (FSA) | 8/1 | Normal | NV | NV | NV | NV | NV | NV | NV |
| 2013 * | WMS (FSA) | 7/12 | Wet | CS | SWS | SWS | SWS | SWS | SWS | SWS |
| 2011 | WMS (DNR) | 4/15 | Wet | DP | NV | NV | NV | DP | SWS | NV |
| 2010 | WMS (FSA) | 7/1 | Normal | DP | NV | NV | NV | NV | NV | NV |
| 2009 | WMS (FSA) | 7/25 | Dry | NV | NV | NV | CS | NV | NV | NV |
| 2008 | WMS (FSA) | 7/5 | Normal | CS | NV | NV | NV | NV | NV | NV |
| 2006 | Google Earth | 5/31 | Wet | NV | NV | NV | NV | NV | NV | NV |
| 2004 | Google Earth | 8/2 | Normal | NV | NV | NV | NV | NV | NV | NV |
| 2003 | WMS (FSA) | 9/25 | Dry | DP | NV | NV | NV | CS | CS | NV |
| 1991 | WMS (USGS) | 4/15 | Normal | DP | SWS | SWS | SWS | SWS | SWS | SWS |

## Summary Table

| | SA8 | SA9 | SA10 | SA11 | SA12 | SA13 | SA14 |
|---|---|---|---|---|---|---|---|
| # Years of aerial photography | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| # Normal Years (1991-2018) | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| # signatures in Normal years | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| # signatures in Wet years | 2 | 1 | 1 | 1 | 2 | 2 | 1 |
| # Signatures in Dry years | 2 | 1 | 0 | 1 | 1 | 2 | 0 |
| # signatures in all years | 7 | 3 | 2 | 3 | 4 | 5 | 2 |
| % Usable Yrs with wet signatures[7] | 3/5=60% | 1/5=20% | 1/5=20% | 1/5=20% | 1/5=20% | 1/5=20% | 1/5=20% |

(sm)= smaller area than whole area showed signature

[1] Form adapted from BWSR/USACE Technical Guidance, July 1, 2016.

[2]Photo selection for historical aerial photography review are from the MnGEO WMS GIS server, Google Earth, and GIS sources such as County, watersheds, or cities.

[3]July 1 was used as the date for aerial photographs when determining antecedent precipitation when an actual date could not be determined. Other aerial photography from County GIS, Google imagery, NAIP, etc. was dated based on available information.

[4]MN State Climatology website used to produce three-prior-month (NRCS) method for parcel being investigated.

[5]Photo dates at the end of the month were advanced to the next month to determine climate conditions using the NRCS/3-prior-month method if the daily precipitation data from that month warranted it.

[6]Key below is used label photo interpretations. It is imperative the reviewer read and understand the guidance associated with the use of the labels.

[7]Equal number of most recent wet and dry years used if 5 normal years were not available. Otherwise only Normal years.

*Base photo for suspect areas

## Definitions

| | | | |
|---|---|---|---|
| WS-wetland signature<br>CS-crop stress<br>SGO-something going on | DO-drowned out<br>NC-not cropped<br>SS- soil wetness signature | SW-standing water<br>AP-altered pattern<br>DP-drainage pattern | NV-normal vegetative cover<br>DNC-dry not cropped<br>NSS- no soil wetness<br>(sm)- smaller area |
| WS is typically used for interpretation in non-cropped areas or contrasting green areas in dry conditions | | | |

## Summary Notes:

Field data sheet reference (if applicable): _____

# Wetland Determination from Aerial Imagery – Recording Form

Project Name: Winnebago Solar Facility and Battery Storage  Date: 6/17/2020  County: Faribault

Investigator: R.Cress  Legal Description (T, R, S): T103 R28/27 S11/12/13/14/7

Use the Decision Matrix below to complete Table 1.

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

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

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

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

**Table 1.**

| Area | Hydric Soils Present | Identified on NWI or other wetland map | Percent with wet signatures from Exhibit 1 | Other hydrology indicators present[1] | Wetland? |
|---|---|---|---|---|---|
| 8 | Yes | Yes | 60 | | Yes |
| 9 | Yes | No | 20 | | No |
| 10 | Yes | No | 20 | | No |
| 11 | Yes | No | 20 | | No |
| 12 | Yes | No | 20 | | No |
| 13 | Yes | No | 20 | | No |
| 14 | Yes | No | 20 | | No |
| | | | | | |
| | | | | | |
| | | | | | |

[1] Answer "N/A" if field verification is not required and was not conducted.

*See Summary Notes on Page 1.

# Hydrology Assessment with Aerial Imagery-Recording Form[1]

Project Name: Winnebago Solar Facility and Battery Storage Date: 6/17/2020 County: Faribault

Investigator: R.Cress Legal Description (S, T, R): T103N R28W Sec 11, 12, 13, 14/ T103N R27W Sec 7

## Summary Table

| Photo Year[2] | Image Source[2] | Actual/ Estimated Photo Date[3] | Climate condition (wet, dry, normal)[4,5] | Interpretation (list hydrology indicators observed, e.g. crop stress, drowned out, etc.)[6] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SA15 | SA16 | SA17 | SA18 | SA19 | SA20 | SA21 |
| 2017 | WMS (FSA) | 9/20 | Dry | CS | NV | NV | NV | CS | NV | NV |
| 2015 | WMS (FSA) | 8/1 | Normal | NV | NV | CS | CS | NV | NV | NV |
| 2013 * | WMS (FSA) | 7/12 | Wet | DO/DP | CS | CS | CS | CS | CS | CS |
| 2011 | WMS (DNR) | 4/15 | Wet | DP | NV | AP | NV | NV | SWS | SWS |
| 2010 | WMS (FSA) | 7/1 | Normal | NV | NV | NV | NV | NV | CS | NV |
| 2009 | WMS (FSA) | 7/25 | Dry | CS (sm) | NV | CS | CS | NV | CS | NV |
| 2008 | WMS (FSA) | 7/5 | Normal | NV | NV | AP | AP | NV | NV | NV |
| 2006 | Google Earth | 5/31 | Wet | NV | NV | NV | NV | NV | NV | NV |
| 2004 | Google Earth | 8/2 | Normal | NV | NV | NV | NV | NV | NV | NV |
| 2003 | WMS (FSA) | 9/25 | Dry | DP | NV | NV | NV | CS | NV | NV |
| 1991 | WMS (USGS) | 4/15 | Normal | SWS | SWS | NV | NV | SWS | SWS | NV |

## Summary Table

| | SA15 | SA16 | SA17 | SA18 | SA19 | SA20 | SA21 |
|---|---|---|---|---|---|---|---|
| # Years of aerial photography | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| # Normal Years (1991-2018) | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| # signatures in Normal years | 1 | 1 | 2 | 2 | 1 | 2 | 0 |
| # signatures in Wet years | 2 | 1 | 2 | 1 | 1 | 2 | 2 |
| # Signatures in Dry years | 3 | 0 | 1 | 1 | 2 | 1 | 0 |
| # signatures in all years | 6 | 2 | 5 | 4 | 4 | 5 | 2 |
| % Usable Yrs with wet signatures[7] | 1/5= 20% | 1/5=20% | 2/5= 40% | 2/5= 40% | 1/5=20% | 2/5= 40% | 0/5=0% |

(sm)= smaller area than whole area showed signature

[1] Form adapted from BWSR/USACE Technical Guidance, July 1, 2016.

[2]Photo selection for historical aerial photography review are from the MnGEO WMS GIS server, Google Earth, and GIS sources such as County, watersheds, or cities.

[3]July 1 was used as the date for aerial photographs when determining antecedent precipitation when an actual date could not be determined. Other aerial photography from County GIS, Google imagery, NAIP, etc. was dated based on available information.

[4]MN State Climatology website used to produce three-prior-month (NRCS) method for parcel being investigated.

[5]Photo dates at the end of the month were advanced to the next month to determine climate conditions using the NRCS/3-prior-month method if the daily precipitation data from that month warranted it.

[6]Key below is used label photo interpretations. It is imperative the reviewer read and understand the guidance associated with the use of the labels.

[7]Equal number of most recent wet and dry years used if 5 normal years were not available. Otherwise only Normal years.

*Base photo for suspect areas

## Definitions

| | | | |
|---|---|---|---|
| WS-wetland signature<br>CS-crop stress<br>SGO-something going on | DO-drowned out<br>NC-not cropped<br>SS- soil wetness signature | SW-standing water<br>AP-altered pattern<br>DP-drainage pattern | NV-normal vegetative cover<br>DNC-dry not cropped<br>NSS- no soil wetness<br>(sm)- smaller area |
| WS is typically used for interpretation in non-cropped areas or contrasting green areas in dry conditions | | | |

## Summary Notes:

Field data sheet reference (if applicable): _____

# Wetland Determination from Aerial Imagery – Recording Form

Project Name: Winnebago Solar Facility and Battery Storage  Date: 6/17/2020  County: Faribault

Investigator: R.Cress  Legal Description (T, R, S): T103 R28/27 S11/12/13/14/7

Use the Decision Matrix below to complete Table 1.

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

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

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

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

**Table 1.**

| Area | Hydric Soils Present | Identified on NWI or other wetland map | Percent with wet signatures from Exhibit 1 | Other hydrology indicators present[1] | Wetland? |
|---|---|---|---|---|---|
| 15 | Yes | Yes | 20 | | Yes, if other hydrology indicators present |
| 16 | Yes | No | 20 | | No |
| 17 | Yes | No | 40 | | Yes, if other hydrology indicators present |
| 18 | Yes | No | 40 | | Yes, if other hydrology indicators present |
| 19 | Yes | No | 20 | | No |
| 20 | Yes | No | 40 | | Yes, if other hydrology indicators present |
| 21 | Yes | No | 0 | | No |
| | | | | | |
| | | | | | |
| | | | | | |

# Hydrology Assessment with Aerial Imagery-Recording Form[1]

Project Name: Winnebago Solar Facility and Battery Storage Date: 6/17/2020 County: Faribault

Investigator: R.Cress Legal Description (S, T, R): T103N R28W Sec 11, 12, 13, 14/ T103N R27W Sec 7

## Summary Table

| Photo Year[2] | Image Source[2] | Actual/ Estimated Photo Date[3] | Climate condition (wet, dry, normal)[4,5] | Interpretation (list hydrology indicators observed, e.g. crop stress, drowned out, etc.)[6] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SA22 | SA23 | SA24 | | | | |
| 2017 | WMS (FSA) | 9/20 | Dry | NV | NV | CS | | | | |
| 2015 | WMS (FSA) | 8/1 | Normal | NV | NV | NV | | | | |
| 2013 * | WMS (FSA) | 7/12 | Wet | CS | CS | CS | | | | |
| 2011 | WMS (DNR) | 4/15 | Wet | NV | CS | CS | | | | |
| 2010 | WMS (FSA) | 7/1 | Normal | CS | NV | CS | | | | |
| 2009 | WMS (FSA) | 7/25 | Dry | NV | NV | NV | | | | |
| 2008 | WMS (FSA) | 7/5 | Normal | NV | NV | NV | | | | |
| 2006 | Google Earth | 5/31 | Wet | CS | NV | CS | | | | |
| 2004 | Google Earth | 8/2 | Normal | NV | NV | NV | | | | |
| 2003 | WMS (FSA) | 9/25 | Dry | NV | NV | NV | | | | |
| 1991 | WMS (USGS) | 4/15 | Normal | NV | SWS | SWS | | | | |

## Summary Table

| | SA22 | SA23 | SA24 | SA25 | | | |
|---|---|---|---|---|---|---|---|
| # Years of aerial photography | 11 | 11 | 11 | 11 | | | |
| # Normal Years (1991-2018) | 5 | 5 | 5 | 5 | | | |
| # signatures in Normal years | 1 | 1 | 2 | | | | |
| # signatures in Wet years | 2 | 2 | 3 | | | | |
| # Signatures in Dry years | 0 | 0 | 1 | | | | |
| # signatures in all years | 3 | 3 | 6 | | | | |
| % Usable Yrs with wet signatures[7] | 1/5=20% | 1/5=20% | 2/5=40% | | | | |

(sm)= smaller area than whole area showed signature

[1] Form adapted from BWSR/USACE Technical Guidance, July 1, 2016.

[2] Photo selection for historical aerial photography review are from the MnGEO WMS GIS server, Google Earth, and GIS sources such as County, watersheds, or cities.

[3] July 1 was used as the date for aerial photographs when determining antecedent precipitation when an actual date could not be determined. Other aerial photography from County GIS, Google imagery, NAIP, etc. was dated based on available information.

[4] MN State Climatology website used to produce three-prior-month (NRCS) method for parcel being investigated.

[5] Photo dates at the end of the month were advanced to the next month to determine climate conditions using the NRCS/3-prior-month method if the daily precipitation data from that month warranted it.

[6] Key below is used label photo interpretations. It is imperative the reviewer read and understand the guidance associated with the use of the labels.

[7] Equal number of most recent wet and dry years used if 5 normal years were not available. Otherwise only Normal years.

* Base photo for suspect areas

## Definitions

| | | | |
|---|---|---|---|
| WS-wetland signature<br>CS-crop stress<br>SGO-something going on | DO-drowned out<br>NC-not cropped<br>SS- soil wetness signature | SW-standing water<br>AP-altered pattern<br>DP-drainage pattern | NV-normal vegetative cover<br>DNC-dry not cropped<br>NSS- no soil wetness<br>(sm)- smaller area |
| WS is typically used for interpretation in non-cropped areas or contrasting green areas in dry conditions | | | |

## Summary Notes:

Field data sheet reference (if applicable): _____

# Wetland Determination from Aerial Imagery – Recording Form

Project Name: Winnebago Solar Facility and Battery Storage  Date: 6/17/2020  County: Faribault

Investigator: R.Cress  Legal Description (T, R, S): T103 R28/27 S11/12/13/14/7

Use the Decision Matrix below to complete Table 1.

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

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

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

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

**Table 1.**

| Area | Hydric Soils Present | Identified on NWI or other wetland map | Percent with wet signatures from Exhibit 1 | Other hydrology indicators present[1] | Wetland? |
|---|---|---|---|---|---|
| 22 | Yes | No | 20 | | No |
| 23 | Yes | No | 20 | | No |
| 24 | Yes | No | 40 | | Yes, if other hydrology indicators present |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

[1] Answer "N/A" if field verification is not required and was not conducted.

*See Summary Notes on Page 1.


Data Source(s): Westwood (2021); .

## Legend

- Delineation Area
- Desktop Wetland
- Suspect Area

# Winnebago Solar Facility and Battery Storage

Faribault County, MN

N

0 750 Feet

Aerial Review

2017

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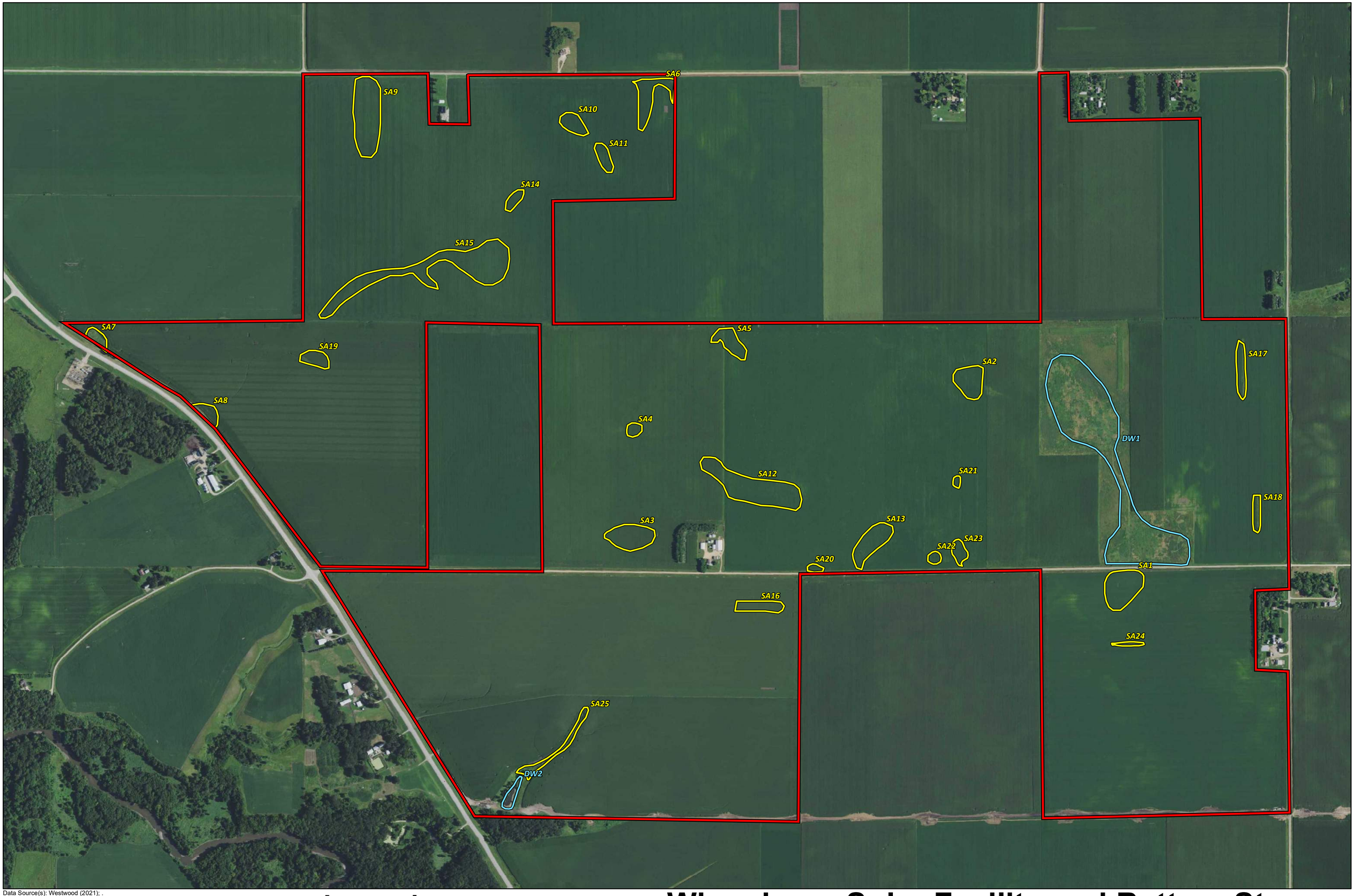
Map Document: N:\0027810.00\GIS\Aerial Review Exhibits_200617\Winnebago_AerialReviewExhibit_2017_200617.mxd 7/19/2021 2:41:30 PM RJCress




Data Source(s): Westwood (2021); .

## Legend

- Delineation Area
- Desktop Wetland
- Suspect Area

# Winnebago Solar Facility and Battery Storage

Faribault County, MN

N

0 750 Feet

Aerial Review

2015

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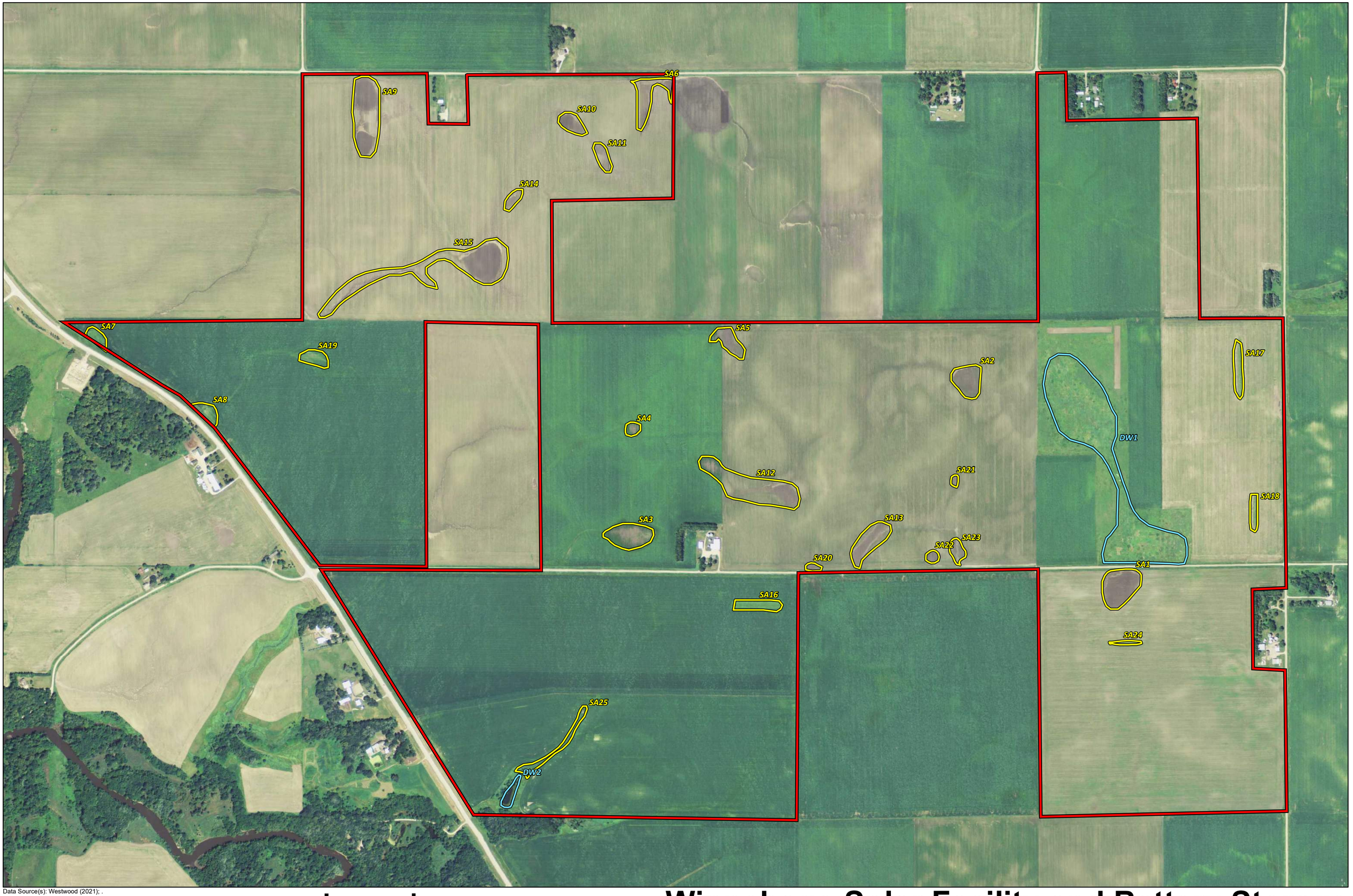


Data Source(s): Westwood (2021); .

## Legend

- Delineation Area
- Desktop Wetland
- Suspect Area

# Winnebago Solar Facility and Battery Storage

Faribault County, MN

N

0 750 Feet

Aerial Review

2013

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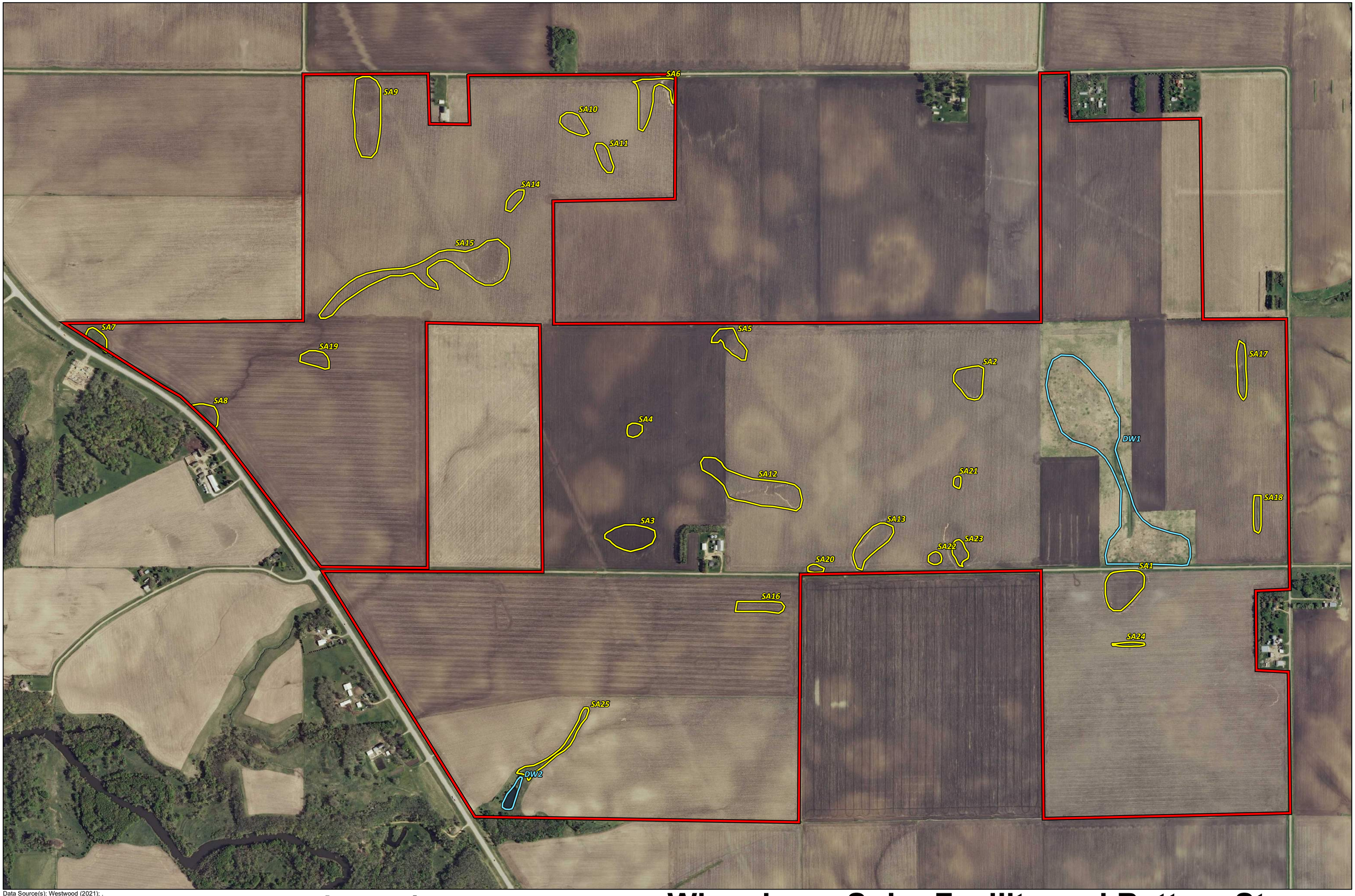


Data Source(s): Westwood (2021); .

## Legend

- Delineation Area
- Desktop Wetland
- Suspect Area

# Winnebago Solar Facility and Battery Storage

Faribault County, MN

N

0 750 Feet

Aerial Review

2011

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