

January 8, 2019

Ms. Susan Benz  
Enlighten Electric Company  
3090 County Road P  
Mt. Horeb, WI 53572

**RE: Preliminary Wetland Determination Summary – Benz Parcel, Town of Springdale, Dane County, Wisconsin**

Dear Ms. Benz:

Heartland Ecological Group, Inc. ("Heartland") completed a preliminary wetland determination within a portion of the Benz Parcel on December 13, 2018 at the request of Ms. Susan Benz. Fieldwork was completed by Jeff Kraemer, an assured delineator qualified via the Wisconsin Department of Natural Resources (WDNR) Wetland Delineation Assurance Program. The fieldwork was completed outside of the growing season, however no significant limitations were present that complicated the wetland determination. However this determination is considered preliminary since the work was completed outside of the growing season. The 0.96-acre site (the "Study Area") lies southeast of the intersection of County Trunk Highway (CTH) P and Military Ridge State Trail, in Section 4, T6N, R7E, Town of Springdale, Dane County, Wisconsin (Attachment 1, Figure 1). The purpose of the wetland determination was to identify the presence or absence of wetlands within the Study Area for the purpose of compliance with Dane County's 75 feet wetland setback. One wetland area was identified within the Study Area. (Attachment 1, Figure 5).

## **Methods**

Wetland determinations were based upon the criteria and methods described in the USACE Wetlands Delineation Manual, T.R. Y-87-1 ("1987 Corps Manual") and the applicable Regional Supplement to the Corps of Engineers Wetland Delineation Manual. In addition, the Guidance for Submittal of Delineation Reports to the St. Paul District USACE and the WDNR (WDNR, 2015) was followed in completing the wetland delineation and report.

Determinations and delineations utilized available resources including the U.S. Geological Survey (USGS) WI 7.5 Minute Series (Topographic) Map (Attachment 1, Figure 2), the Soil Survey Geographic (SSURGO) Database, Web Soil Survey (Attachment 1, Figure 3), the National Wetland Inventory mapping (Attachment 1, Figure 4), and aerial imagery available through the U.S. Department of Agriculture (USDA) Farm Service Agency's (FSA) National Agriculture Imagery Program (NAIP), Google Earth™, and Dane County's interactive mapping. The USGS National Hydrography Dataset is included on Figures 2 through 5

## **Results**

According to the WETS analysis using the previous three (3) months of precipitation data, conditions encountered at the time of the fieldwork were expected to be wet for the time of year. Site conditions observed during the field investigation were confirmed to be wetter



than normal, with precipitation amounts significantly above normal throughout the growing season.

The topography within the Study Area is relatively flat and slopes to the east towards off-site wetland areas and an unnamed tributary to the Sugar River. Land uses within the Study Area consist of an existing residential home and detached outbuilding. Surrounding areas are primarily undeveloped, agricultural lands.

Soils mapped by the NRCS Soil Survey within the Study Area and their hydric status are summarized in Table 1 and illustrated on Figure 3. Those areas of the Study Area with hydric or potentially hydric soils mapped on by the NRCS were the primary focus of the preliminary field wetland determination. The National Wetlands Inventory (NWI) mapping (Attachment 1, Figure 4) does not identify wetlands within the Study Area.

Table 1. Summary of NRCS Mapped Soils within the Study Area

Soil symbol: Soil Unit Name	Soil Unit Component	Soil Unit Component Percentage	Landform	Hydric status
DeA: Dells silt loam, 0 to 3 percent slopes	Dells	100	Stream terraces	No
	Marshan		Depressions	Yes
	Granby		Depressions	Yes
GaC2: Gale silt loam, 6 to 12 percent slopes, moderately eroded	Gale-Moderately eroded	80-100	Ridges	No
	Elevasil-Moderately eroded	0-10	Ridges	No
	Pepin-Moderately eroded	0-10	Ridges	No

Wetland determination sample points were completed however data forms were not completed based on the preliminary nature of the wetland determination. Attachment 3 provides photographs, typically at the sample point locations. The sample point locations are shown on Figure 5, specific field data is available upon request.

Vegetation at the upland sample point locations were comprised of mowed and maintained turf grass dominated by Kentucky blue grass (*Poa pratensis*). Wetland vegetation was not dominant. Therefore, the hydrophytic vegetation criteria was not satisfied. No field indicators of hydric soils or indicators of wetland hydrology were observed.

A small lobe of wet meadow (W-1) was identified and the boundary was surveyed (0.07 acre). The wetland consisted of a monoculture of reed canary grass (*Phalaris arundinacea*) and the boundary was defined by a distinct break in topography. The wetland lobe consisted of the northern extent of a larger wetland complex that extends south beyond the Study Area limits.



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Based on the results of the preliminary wetland determination, no wetlands are present within 75 feet of the proposed project limits and one (1) small wetland lobe was identified beyond the 75 feet setback.

Heartland recommends that all applicable regulatory agency reviews and permits are obtained prior to beginning work within the Study Area. Heartland can assist with evaluating the need for additional environmental reviews, surveys, or regulatory agency coordination in consideration of the proposed activity and land use as requested but is outside of the scope of the wetland determination.

Experienced and qualified professionals completed the wetland determination using standard practices and professional judgment. Wetland determinations may be affected by conditions present within the Study Area at the time of the fieldwork. All final decisions on wetlands are made by the USACE, the WDNR, and/or sometimes a local unit of government. Wetland determination reviews by regulatory agencies may result in modifications to the findings presented to the Client. These modifications may result from varying conditions between the time the wetland determination was completed and the time of the review. Factors that may influence the findings may include but not limited to precipitation patterns, drainage modifications, changes or modification to vegetation, and the time of year. This wetland determination is not considered an assured wetland determination and is required to be preliminary in nature due to the fact the work was completed outside of the growing season.

Please feel free to contact me if you have any questions regarding this wetland determination.

Regards,

Jeff Kraemer, Principal  
Heartland Ecological Group, Inc.  
[jeff@heartlandecological.com](mailto:jeff@heartlandecological.com)  
608.433.9864

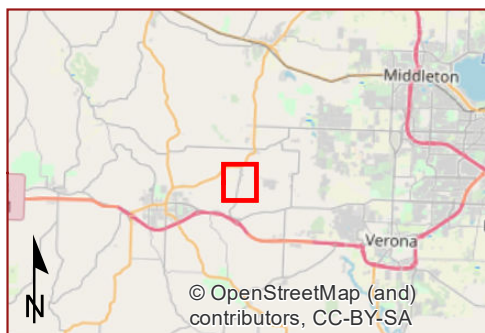
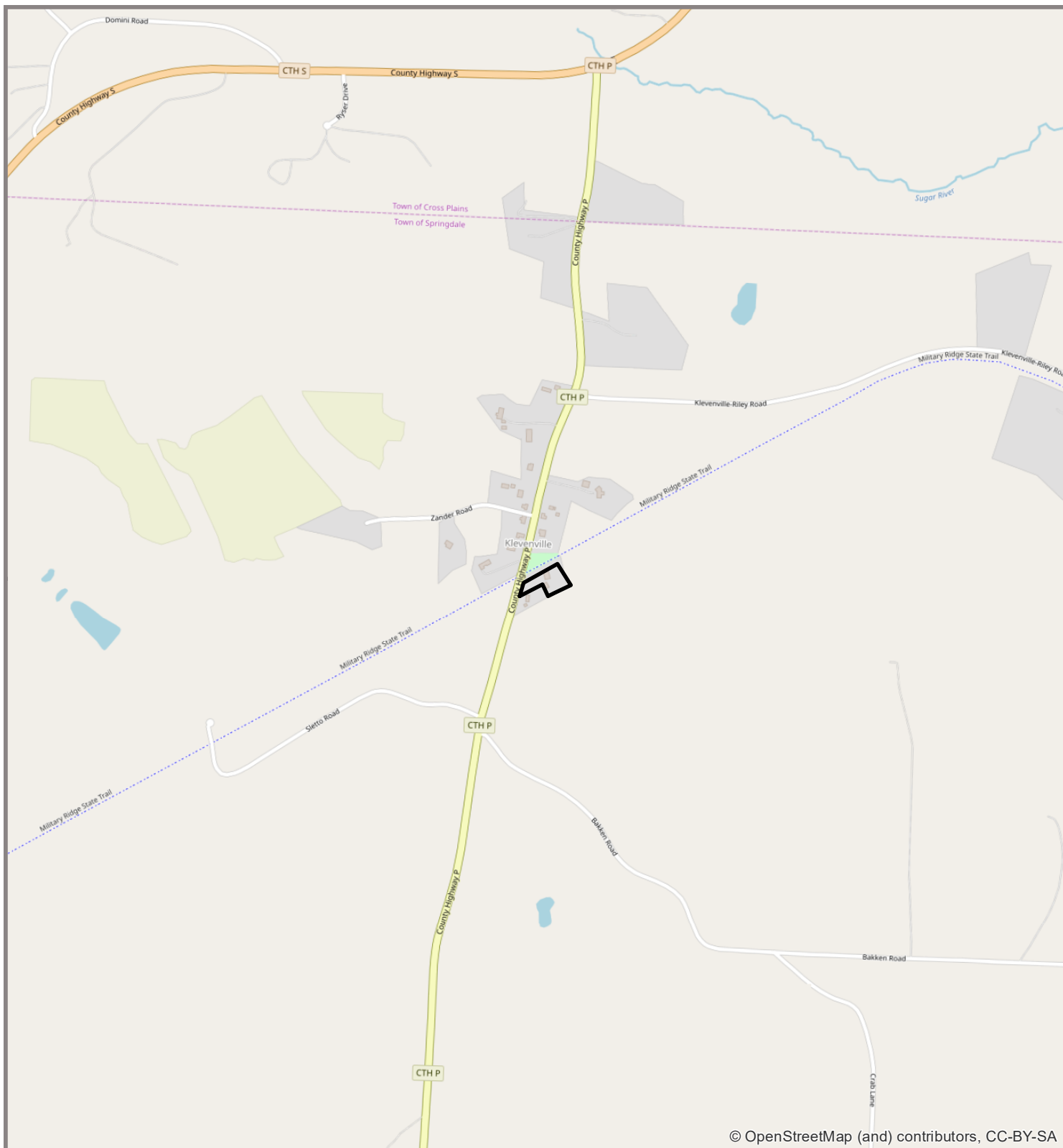
Attachments:

- 1 – Figures 1-5
- 2 – Site Photographs



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## Attachment 1 | Figures



 Study Area (0.96 ac)

0 500 1,000  
Ft

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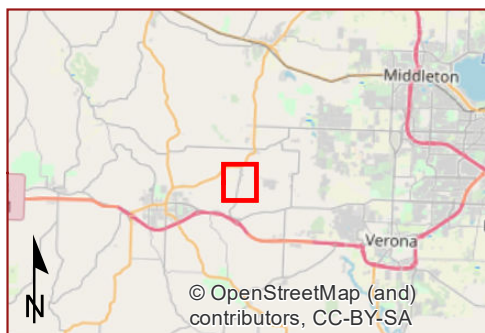
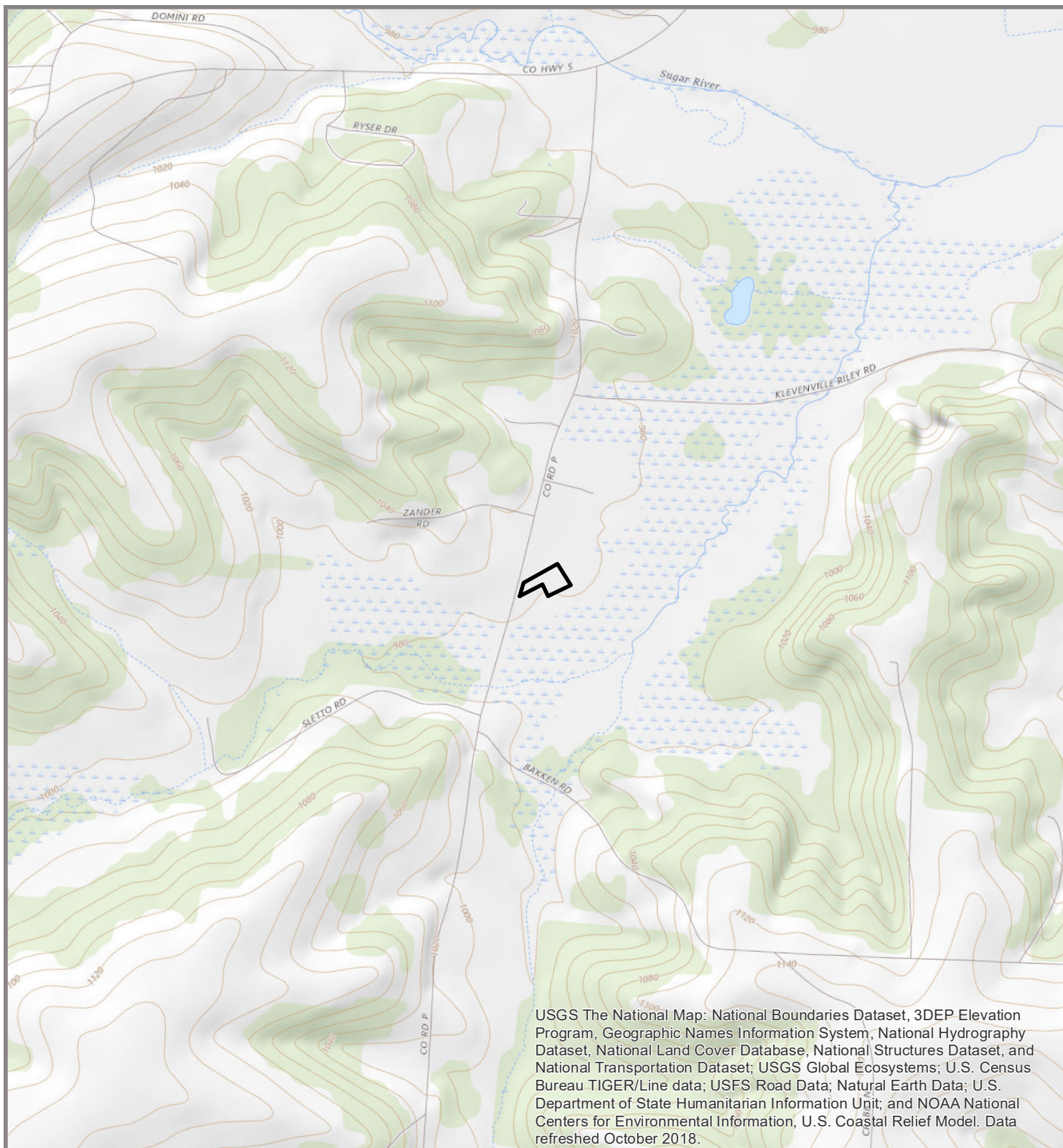
**Figure 1. Project Location**

Benz Parcel  
Project #20180153  
T6N, R7E, S04  
T Springdale, Dane Co, WI

OpenStreetMap  
Data: HEG

1/8/2019





 Study Area (0.96 ac)

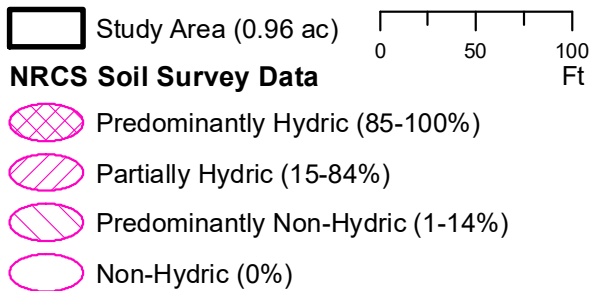
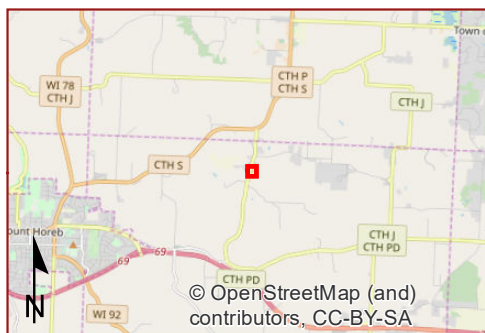
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### Figure 2. USGS Topography

Benz Parcel  
Project #20180153  
T6N, R7E, S04  
T Springdale, Dane Co, WI

USGS Topo  
Data: USGS, HEG 1/8/2019



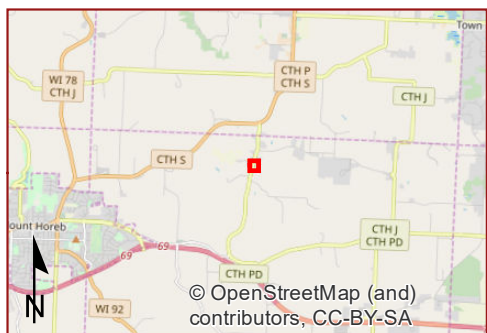
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**Figure 3. NRCS  
Hydric Soils**

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T6N, R7E, S04  
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2017 NAIP  
Data: NRCS, HEG 1/8/2019





Study Area (0.96 ac)  
 NWI Wetlands

0 50 100  
 Ft

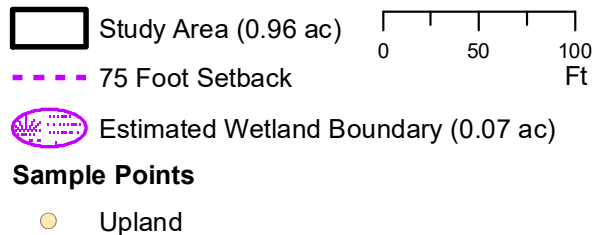
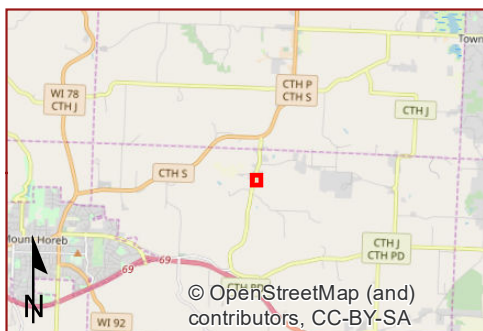
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**Figure 4. National  
 Wetland Inventory**

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2017 NAIP  
 Data: USGS, HEG 1/8/2019





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**Figure 5. Wetland Boundary & Setback**

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2017 NAIP  
Data: HEG

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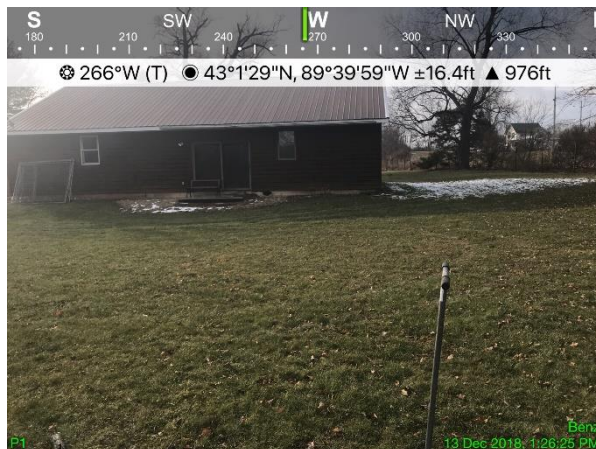
## Attachment 2 | Site Photographs



**Photo #1** Sample point P1



**Photo #2** Sample point P1



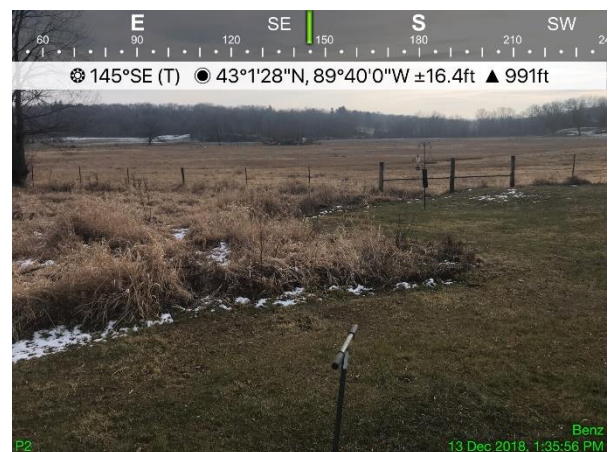
**Photo #3** Sample point P1



**Photo #4** Sample point P1

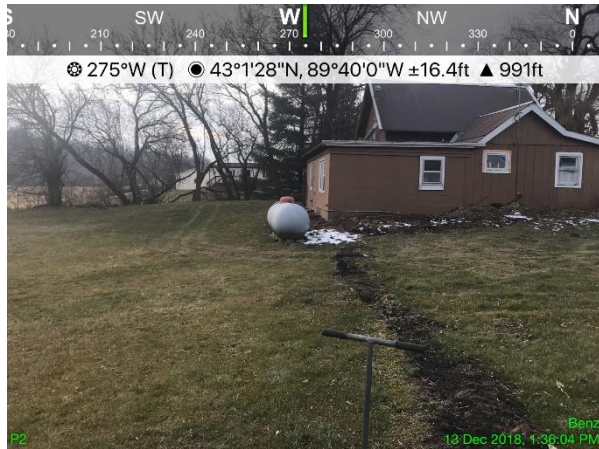


**Photo #5** Sample point P2



**Photo #6** Sample point P2





**Photo #7** Sample point P2



**Photo #8** Sample point P2