



September 18, 2017

Ms. Melissa Clark
Director, Economic and Community Development
Gallia County
18 Locust Street – Room 1268
Gallipolis, Ohio 45631

RE: Surface Water Determination for the Proposed Dan Evans Industrial Park at 3350 State Route 850, Bidwell, Gallia County, Ohio; APG012.0002.

Dear Ms. Clark:

Jobes Henderson & Associates, Inc. (JHA) and Hull & Associates, Inc. (Hull), JHA's parent company, are pleased to present the results of the surface water determination study performed at the proposed Dan Evans Industrial Park (Site). On September 5, 2017, two Ecologists from JHA and Hull conducted fieldwork associated with the surface water determination on the Site, located at 3350 State Route 850, Bidwell, Gallia County, Ohio (38.89489°N, -82.30013°W; Figure 1). The purpose of this surface water determination is to map the approximate location and extent of wetlands, streams and other potentially jurisdictional surface waters identified through a desktop analysis of readily available secondary source data, supplemented by a brief field investigation. Impacts to identified jurisdictional resources may be regulated under federal and state law.

The approximately 75-acre Site is bounded to the north by Denney Cemetery Road, to the east by State Route 850, and to the southwest by Fairview Road (Figure 1). The Site is maintained as agricultural fields, currently covered in alfalfa (*Medicago sativa*; UPL). Roadside ditches located along the eastern Site boundary and in the southeastern corner of the Site separate the agricultural field from the adjacent roadways. A collection of storage facilities lies to the south of the Site on an adjacent parcel.

Methods

Prior to conducting the field investigation, Hull compiled and reviewed secondary source information that was used for screening and planning purposes. Secondary source information included, but was not limited to the following: U.S. Geological Survey (USGS) topographic maps, recent aerial photography, the National Wetlands Inventory (NWI) map, and the Natural Resources Conservation Service (NRCS) soils map (Figure 2). On September 5, 2017, JHA and Hull Ecologists performed an on-site determination of surface waters, including wetlands and streams.

The surface water determination survey consisted of walking the entire Site to verify areas where secondary source information and general field conditions suggested the possible presence of wetlands and streams. Hull preliminarily tested for the presence of field indicators of wetland hydrology, hydric soils, and wetland plant communities pursuant to the methods outlined in the U.S. Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual (Manual) and the 2012 Regional Supplement to the Manual for the Eastern Mountains and Piedmont Region. Hull also visually inspected the periphery of the Site. Wetland data sheets were not completed for the purposes of this determination.

Professional judgment (without quantification) was used to assign all identified wetlands to an Antidegradation Category of Ohio's Wetland Water Quality Standards (i.e., Category 1, 2, or 3). The locations of field-identified surface waters are presented on Figure 3; photographs are included in Attachment A.

Results

The NRCS soil survey of Gallia County, Ohio indicates three (3) soil map units within the Site boundary. The soil types indicated at the site include Omulga (OmB) with 2-6% slopes, Doles (DbA) with 0-2% slopes, and Omulga (OmC) with 6-12% slopes. All the soil units within the Site are classified as non-hydric soils. Soil map unit boundaries are presented in Figure 2. The Site lies within the Raccoon Creek below Little Raccoon Creek to above Indian Creek 14-Digit Hydrologic Unit Code (HUC14- 05090101060010).

JHA and Hull identified three (3) potentially jurisdictional ditches on the Site (J-1, J-2, and J-3). Ditch J-1 is maintained along the southeastern edge of the Site and flows south into a culvert. Ditch J-1 is an ephemeral tributary of Barren Creek. Barren Creek is a tributary of Raccoon Creek which is characterized as having warm water habitat (WWH) Ohio life use designation. Ditch J-2 is maintained along the southern edge of the Site and flows east to converge with Ditch J-1. Ditch J-2 is also an ephemeral tributary to Barren Creek. Ditch J-3 is maintained along the northeastern edge of the Site, and its ephemeral flow heads north into a culvert and enters into an unnamed tributary of Barren Creek to the north of the Site. Locations of each ditch are displayed on Figure 3.

JHA and Hull identified two (2) emergent wetlands on the Site (JA and JB). The area of Wetland JA is dominated by shallow sedge (*Carex lurida*; OBL), a sedge that almost always requires wetland conditions to flourish. The area is also characterized by standing water on the surface and a noticeable hydrogen sulfide odor in the soils. Wetland JA is characterized as a likely low-quality wetland due to its small size, narrow buffers, and lack of habitat development.

The area of Wetland JB is dominated by the invasive plant species reed canary grass (*Phalaris arundinacea*; FACW). The area lacked standing water during the Site visit, but oxidation on living plant roots indicated periodic flooding of the area is likely. Wetland JB is likely a low-quality, isolated wetland due to its small size, narrow buffers, poor habitat development, and dominance by an invasive plant species.

Habitat

The majority of the Site consists of agricultural fields, drained by ditches on the periphery. These fields are dominated by alfalfa crops, while other upland areas are dominated by narrowleaf plantain (*Plantago lanceolata*; UPL) and white clover (*Trifolium repens*; FACU). No forested areas were identified by Hull on the Site.

Summary/Recommendations

Three (3) potentially jurisdictional ditches (J-1, J-2, and J-3) and two (2) potential wetlands (JA and JB) were identified during this surface water determination study. Based on the results of the field review, impacts to potentially jurisdictional surface waters requiring federal and/or state permits are possible as a result of future development activities.

Thank you for the opportunity to provide this information. Please feel free to contact me at Jhaynal@hullinc.com or (740)344-5451 if you have any questions and/or if you are interested in technical assistance as you develop the Site.

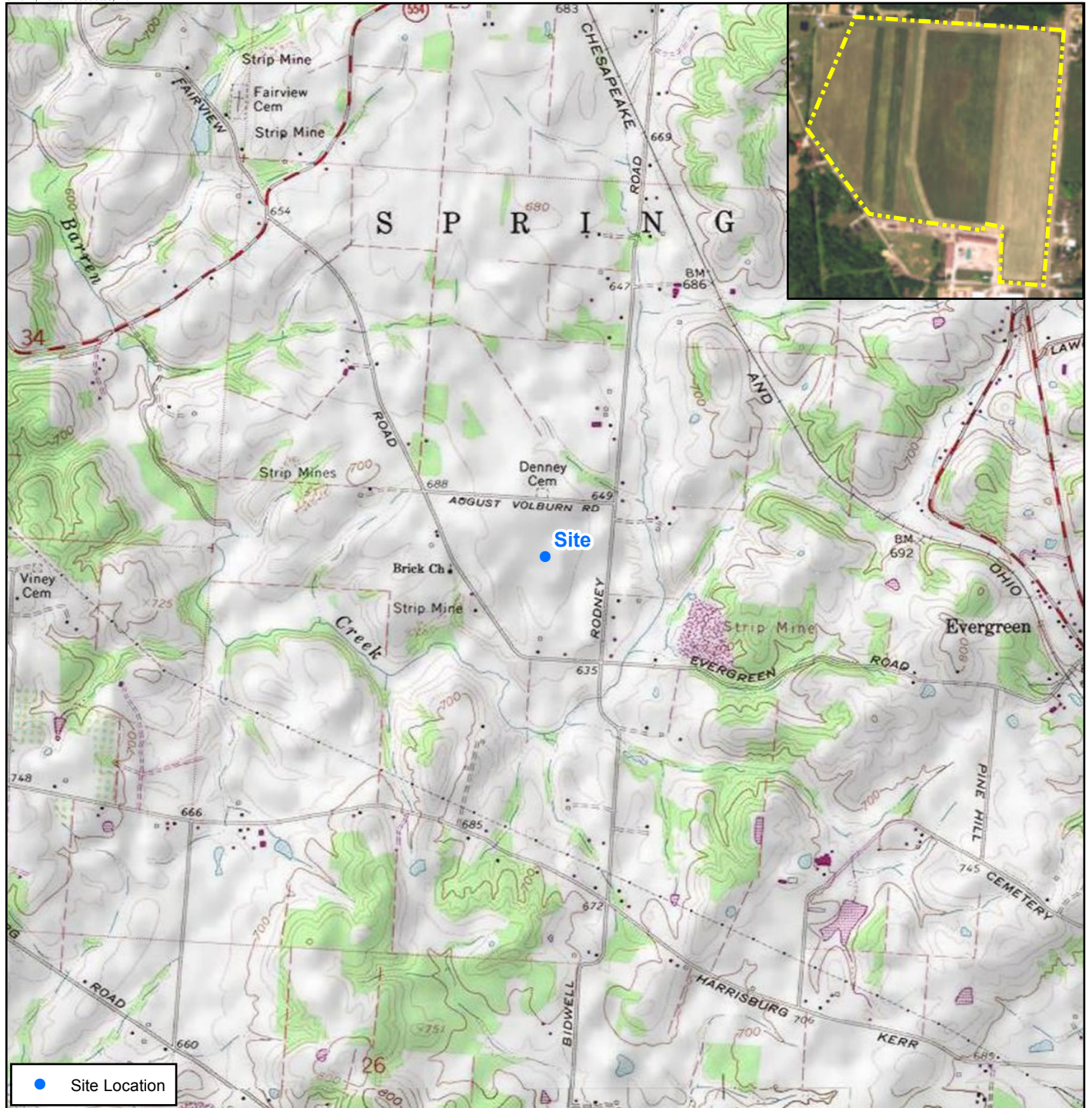
Sincerely,



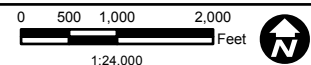
Jaclyn T. Haynal, WPIT, AWB®

Enclosures: Figure 1. Site Location Map
 Figure 2. National Wetlands Inventory and Soils Map
 Figure 3. Surface Water Determination Map
 Attachment A: Photolog

FIGURES



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Quad: Vinton

Source: The topographic map was acquired through the USGS Topographic Map web service.

The aerial photo in the inset was acquired through the ESRI Imagery web service. Aerial photography dated 2015.

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Dan Evans Industrial Park
 Surface Water Determination

Site Location Map

3350 State Route 850
 Bidwell, Gallia County, Ohio

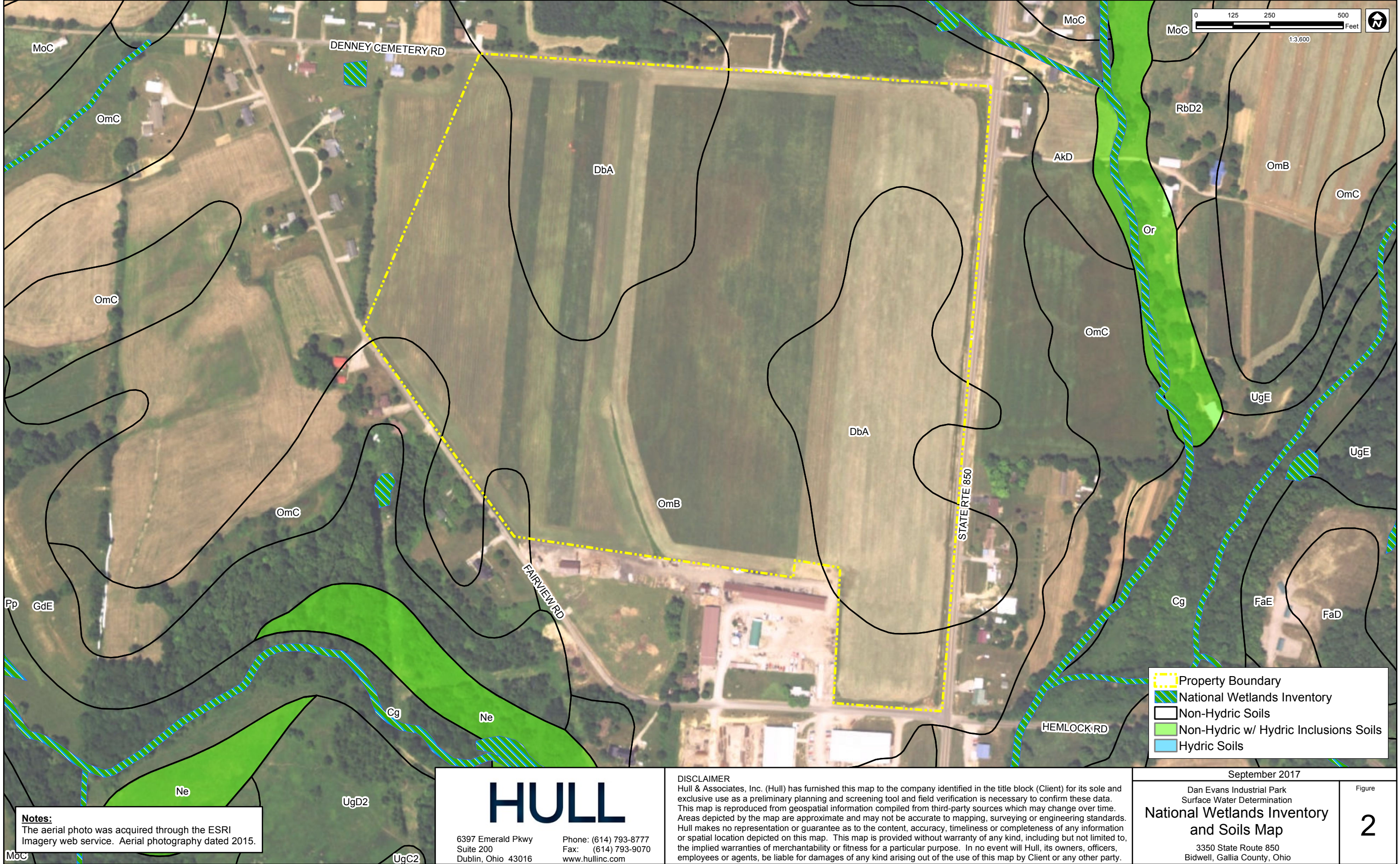
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September 2017

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 Edited: 9/13/2017 By: jhaynal

Figure

1



Notes:
The aerial photo was acquired through the ESRI Imagery web service. Aerial photography dated 2015.

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September 2017	
Dan Evans Industrial Park Surface Water Determination	
National Wetlands Inventory and Soils Map	
3350 State Route 850 Bidwell, Gallia County, Ohio	
Figure	2



- Property Boundary
- Wetland
- Ditch
- Wetland Data Point
- Upland Data Point

Notes:
The aerial photo was acquired through the ESRI Imagery web service. Aerial photography dated 2015.

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Dan Evans Industrial Park
Surface Water Determination
**Surface Water
Determination Map**
3350 State Route 850
Bidwell, Gallia County, Ohio

Figure
3

ATTACHMENT A

Photolog



PHOTO 1: Photo taken from the north side of the site facing south showing typical upland habitat. Storage facilities can be seen in the distance.



PHOTO 2: Ditch J-1 facing south along State Route 850.



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PHOTO 3: Ditch J-2 facing east along Fairview Road.



PHOTO 4: Ditch J-3 facing north. Wetland JA is visible on the left (west) side of the ditch.



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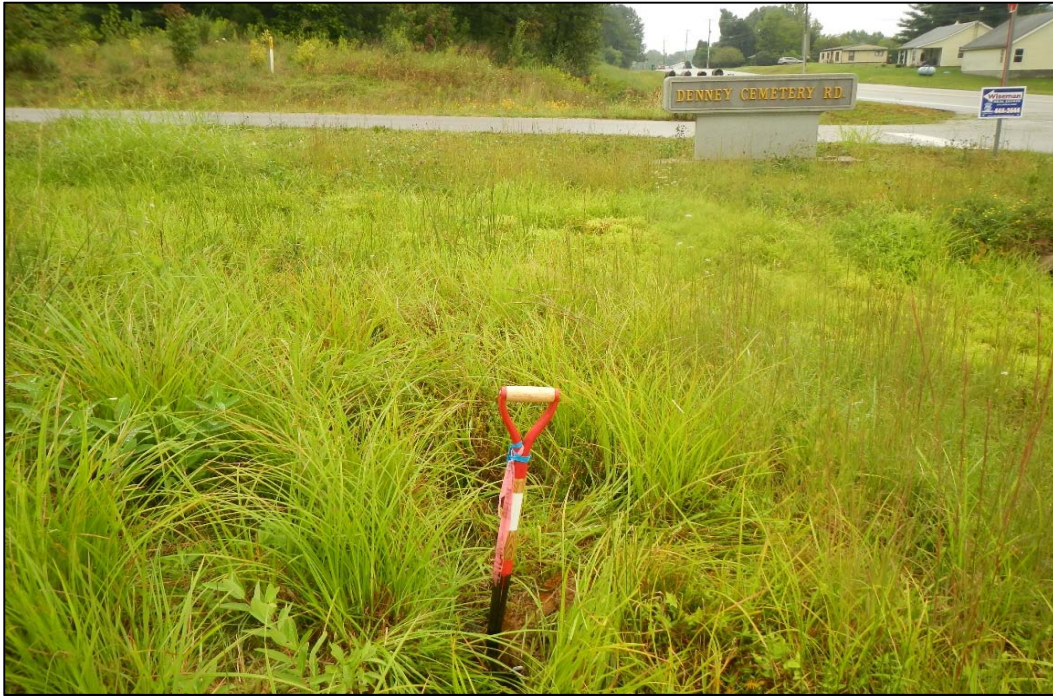


PHOTO 5: Representative view of Wetland JA facing north toward Denney Cemetery Road.



PHOTO 6: Representative view of Wetland JB facing north as it extends into the area between alfalfa fields.



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